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Program Version:**EnergyPlus, Version 8.5.0-c87e61b44b, YMD=2019.12.07 18:08**

Tabular Output Report in Format: **HTML**

Building: **Building 1**

Environment: **RUN PERIOD 1 ** NEWARK NJ USA TMY2-14734 WMO#=725020**

Simulation Timestamp: **2019-12-07 18:09:37**

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Report: **Annual Building Utility Performance Summary**

For: **Entire Facility**

Timestamp: **2019-12-07 18:09:37 Values gathered over 8760.00 hours**

Site and Source Energy

	Total Energy [GJ]	Energy Per Total Building Area [MJ/m ²]	Energy Per Conditioned Building Area [MJ/m ²]
Total Site Energy	4725.95	549.83	1653.50
Net Site Energy	4725.95	549.83	1653.50
Total Source Energy	13388.22	1557.61	4684.22
Net Source Energy	13388.22	1557.61	4684.22

Site to Source Energy Conversion Factors

	Site=>Source Conversion Factor
Electricity	3.167
Natural Gas	1.084
District Cooling	1.056

District Heating	3.613
Steam	0.300
Gasoline	1.050
Diesel	1.050
Coal	1.050
Fuel Oil #1	1.050
Fuel Oil #2	1.050
Propane	1.050
Other Fuel 1	1.000
Other Fuel 2	1.000

Building Area

	Area [m2]
Total Building Area	8595.37
Net Conditioned Building Area	2858.15
Unconditioned Building Area	5737.21

End Uses

	Electricity [GJ]	Natural Gas [GJ]	Additional Fuel [GJ]	District Cooling [GJ]	District Heating [GJ]	Water [m3]
Heating	0.00	757.98	0.00	0.00	0.00	0.00
Cooling	518.81	0.00	0.00	0.00	0.00	0.00
Interior Lighting	1732.24	0.00	0.00	0.00	0.00	0.00
Exterior Lighting	0.00	0.00	0.00	0.00	0.00	0.00
Interior Equipment	1234.57	0.00	0.00	0.00	0.00	0.00
Exterior Equipment	0.00	0.00	0.00	0.00	0.00	0.00

Fans	40.76	0.00	0.00	0.00	0.00	0.00
Pumps	294.42	0.00	0.00	0.00	0.00	0.00
Heat Rejection	147.18	0.00	0.00	0.00	0.00	204677.80
Humidification	0.00	0.00	0.00	0.00	0.00	0.00
Heat Recovery	0.00	0.00	0.00	0.00	0.00	0.00
Water Systems	0.00	0.00	0.00	0.00	0.00	0.00
Refrigeration	0.00	0.00	0.00	0.00	0.00	0.00
Generators	0.00	0.00	0.00	0.00	0.00	0.00
Total End Uses	3967.97	757.98	0.00	0.00	0.00	204677.80

Note: Natural gas appears to be the principal heating source based on energy usage.

End Uses By Subcategory

	Subcategory	Electricity [GJ]	Natural Gas [GJ]	Additional Fuel [GJ]	District Cooling [GJ]	District Heating [GJ]	Water [m3]
Heating	Boiler	0.00	757.98	0.00	0.00	0.00	0.00
	Boiler Parasitic	0.00	0.00	0.00	0.00	0.00	0.00
Cooling	General	518.81	0.00	0.00	0.00	0.00	0.00
Interior Lighting	General	1732.24	0.00	0.00	0.00	0.00	0.00
Exterior Lighting	General	0.00	0.00	0.00	0.00	0.00	0.00
Interior Equipment	General	1234.57	0.00	0.00	0.00	0.00	0.00
Exterior Equipment	General	0.00	0.00	0.00	0.00	0.00	0.00
Fans	General	40.76	0.00	0.00	0.00	0.00	0.00
Pumps	General	294.42	0.00	0.00	0.00	0.00	0.00
Heat Rejection	General	147.18	0.00	0.00	0.00	0.00	204677.80
Humidification	General	0.00	0.00	0.00	0.00	0.00	0.00
Heat Recovery	General	0.00	0.00	0.00	0.00	0.00	0.00

Water Systems	General	0.00	0.00	0.00	0.00	0.00	0.00
Refrigeration	General	0.00	0.00	0.00	0.00	0.00	0.00
Generators	General	0.00	0.00	0.00	0.00	0.00	0.00

Normalized Metrics

Utility Use Per Conditioned Floor Area

	Electricity Intensity [MJ/m ²]	Natural Gas Intensity [MJ/m ²]	Additional Fuel Intensity [MJ/m ²]	District Cooling Intensity [MJ/m ²]	District Heating Intensity [MJ/m ²]	Water Intensity [m ³ /m ²]
Lighting	606.07	0.00	0.00	0.00	0.00	0.00
HVAC	350.28	265.20	0.00	0.00	0.00	71.61
Other	431.95	0.00	0.00	0.00	0.00	0.00
Total	1388.30	265.20	0.00	0.00	0.00	71.61

Utility Use Per Total Floor Area

	Electricity Intensity [MJ/m ²]	Natural Gas Intensity [MJ/m ²]	Additional Fuel Intensity [MJ/m ²]	District Cooling Intensity [MJ/m ²]	District Heating Intensity [MJ/m ²]	Water Intensity [m ³ /m ²]
Lighting	201.53	0.00	0.00	0.00	0.00	0.00
HVAC	116.48	88.19	0.00	0.00	0.00	23.81
Other	143.63	0.00	0.00	0.00	0.00	0.00
Total	461.64	88.19	0.00	0.00	0.00	23.81

Electric Loads Satisfied

	Electricity [GJ]	Percent Electricity [%]
Fuel-Fired Power Generation	0.000	0.00
High Temperature Geothermal*	0.000	0.00
Photovoltaic Power	0.000	0.00

Wind Power	0.000	0.00
Power Conversion	0.000	0.00
Net Decrease in On-Site Storage	0.000	0.00
Total On-Site Electric Sources	0.000	0.00
Electricity Coming From Utility	3967.970	100.00
Surplus Electricity Going To Utility	0.000	0.00
Net Electricity From Utility	3967.970	100.00
Total On-Site and Utility Electric Sources	3967.970	100.00
Total Electricity End Uses	3967.970	100.00

On-Site Thermal Sources

	Heat [GJ]	Percent Heat [%]
Water-Side Heat Recovery	0.00	
Air to Air Heat Recovery for Cooling	0.00	
Air to Air Heat Recovery for Heating	0.00	
High-Temperature Geothermal*	0.00	
Solar Water Thermal	0.00	
Solar Air Thermal	0.00	
Total On-Site Thermal Sources	0.00	

Water Source Summary

	Water [m3]	Percent Water [%]
Rainwater Collection	0.00	0.00
Condensate Collection	0.00	0.00
Groundwater Well	0.00	0.00
Total On Site Water Sources	0.00	0.00
-	-	-

	Initial Storage	0.00	0.00
	Final Storage	0.00	0.00
	Change in Storage	0.00	0.00
	-	-	-
	Water Supplied by Utility	204677.80	100.00
	-	-	-
Total On Site, Change in Storage, and Utility Water Sources	204677.80	100.00	
Total Water End Uses	204677.80	100.00	

Setpoint Not Met Criteria

	Degrees [deltaC]
Tolerance for Zone Heating Setpoint Not Met Time	0.20
Tolerance for Zone Cooling Setpoint Not Met Time	0.20

Comfort and Setpoint Not Met Summary

	Facility [Hours]
Time Setpoint Not Met During Occupied Heating	240.50
Time Setpoint Not Met During Occupied Cooling	4336.83
Time Not Comfortable Based on Simple ASHRAE 55-2004	5252.00

Note 1: An asterisk (*) indicates that the feature is not yet implemented.

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Report: **Input Verification and Results Summary**

For: **Entire Facility**

Timestamp: **2019-12-07 18:09:37 General**

	Value
Program Version and Build	EnergyPlus, Version 8.5.0-c87e61b44b, YMD=2019.12.07 18:08
RunPeriod	RUN PERIOD 1
Weather File	NEWARK NJ USA TMY2-14734 WMO#=725020
Latitude [deg]	40.70
Longitude [deg]	-74.2
Elevation [m]	9.00

Time Zone	-5.0
North Axis Angle [deg]	0.00
Rotation for Appendix G [deg]	0.00
Hours Simulated [hrs]	8760.00

ENVELOPE

Window-Wall Ratio

	Total	North (315 to 45 deg)	East (45 to 135 deg)	South (135 to 225 deg)	West (225 to 315 deg)
Gross Wall Area [m2]	2569.81	578.19	708.37	550.55	732.71
Above Ground Wall Area [m2]	2103.06	443.60	596.32	442.47	620.66
Window Opening Area [m2]	299.49	23.23	164.72	53.51	58.03
Gross Window-Wall Ratio [%]	11.65	4.02	23.25	9.72	7.92
Above Ground Window-Wall Ratio [%]	14.24	5.24	27.62	12.09	9.35

Conditioned Window-Wall Ratio

	Total	North (315 to 45 deg)	East (45 to 135 deg)	South (135 to 225 deg)	West (225 to 315 deg)
Gross Wall Area [m2]	1100.61	166.56	350.06	232.78	351.21
Above Ground Wall Area [m2]	1100.61	166.56	350.06	232.78	351.21
Window Opening Area [m2]	221.86	11.61	105.59	53.51	51.14
Gross Window-Wall Ratio [%]	20.16	6.97	30.16	22.99	14.56

Above Ground Window-Wall Ratio [%]	20.16	6.97	30.16	22.99	14.56
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Skylight-Roof Ratio

	Total
Gross Roof Area [m2]	2737.37
Skylight Area [m2]	0.00
Skylight-Roof Ratio [%]	0.00

PERFORMANCE

Zone Summary

	Area [m2]	Conditioned (Y/N)	Part of Total Floor Area a (Y/N)	Volume [m3]	Multipliers	Gross Wall Area [m2]	Window Glass Area [m2]	Lighting [W/m2]	People [m2 per person]	Plug and Process [W/m2]
THERMAL ZONE: 001 MECHANICAL EQUIPMENT ROOM	692.73	No	Yes	2111.45	1.00	26.50	0.00	25.3490		2.9063
THERMAL ZONE: 002 PLUMBING EQUIPMENT	50.70	No	Yes	154.54	1.00	70.78	0.00	13.6702		0.0000
THERMAL ZONE: 003 ELECTRICAL ROOM	45.75	No	Yes	139.43	1.00	68.38	0.00	25.3490		2.9063

THERMAL ZONE: 004 ELEV. MACH. ROOM	15.17	No	Yes	46.24	1.00	21.32	0.00	25.34 90		2.906 3
THERMAL ZONE: 006 CUSTODIAL STORAGE	16.80	Yes	Yes	51.19	1.00	35.33	0.00	13.67 02		0.000 0
THERMAL ZONE: 101 CONFERENCE	35.16	Yes	Yes	128.6 1	1.00	19.12	4.46	19.80 56	1.86	10.76 39
THERMAL ZONE: 102 OFFICE/LAB	24.29	Yes	Yes	88.85	1.00	13.21	4.46	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 103 OFFICE/LAB	27.94	Yes	Yes	102.1 9	1.00	21.87	8.92	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 104 SEC.	12.28	Yes	Yes	44.90	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 105 OFFICE/LAB	24.33	Yes	Yes	89.01	1.00	13.23	4.46	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 106 CONFERENCE	33.71	Yes	Yes	123.2 8	1.00	42.92	9.18	19.80 56	1.86	10.76 39
THERMAL ZONE: 107 I-1 SMALL SEM	25.60	Yes	Yes	93.63	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 108 OFFICE/LAB	21.87	Yes	Yes	79.97	1.00	19.44	2.32	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 109 I-2 S.E.M	34.61	Yes	Yes	126.5 9	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 110	39.42	Yes	Yes	144.2 0	1.00	23.22	4.65	18.58 93	19.5 6	9.364 6

GRAD/TECH STATIONS											
THERMAL ZONE: 111 I-3 SAMPLE PREP	24.71	Yes	Yes	90.38	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6	
THERMAL ZONE: 112 OFFICE/LAB	20.76	Yes	Yes	75.94	1.00	12.23	2.32	18.58 93	19.5 6	9.364 6	
THERMAL ZONE: 113 H-1 S.T.E.M.	33.37	Yes	Yes	122.0 4	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6	
THERMAL ZONE: 114 OFFICE/LAB	20.77	Yes	Yes	75.96	1.00	12.23	2.32	18.58 93	19.5 6	9.364 6	
THERMAL ZONE: 115 P-2 X-RAY	46.57	Yes	Yes	170.3 4	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6	
THERMAL ZONE: 116 OFFICE/LAB	20.97	Yes	Yes	76.68	1.00	12.35	2.32	18.58 93	19.5 6	9.364 6	
THERMAL ZONE: 117 U-2 MICROSCOPY	23.47	Yes	Yes	85.84	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6	
THERMAL ZONE: 118 SEC.	20.34	Yes	Yes	74.40	1.00	11.98	2.32	18.58 93	19.5 6	9.364 6	
THERMAL ZONE: 119 T-2 POLISHING	23.28	Yes	Yes	85.15	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6	
THERMAL ZONE: 120 GRAD/TECH STATIONS	30.68	Yes	Yes	112.2 0	1.00	18.07	2.32	18.58 93	19.5 6	9.364 6	
THERMAL ZONE: 121 T-1 GRINDING	23.92	Yes	Yes	87.50	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6	

THERMAL ZONE: 122 OFFICE/LAB	20.68	Yes	Yes	75.63	1.00	12.18	2.32	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 123 F-1B REACTIVE GAS	23.55	Yes	Yes	86.12	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 124 OFFICE/LAB	24.12	Yes	Yes	88.23	1.00	36.92	2.32	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 125 F-2 LARGE ELECTRIC FURNACE	23.82	Yes	Yes	87.14	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 126 CORRIDOR	243.8 3	No	Yes	891.8 5	1.00	73.89	11.61	8.449 7	92.9 0	3.121 5
THERMAL ZONE: 127 F-3A SMALL ELECTRIC FURNACE	23.93	Yes	Yes	87.54	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 129 OFFICE/LAB	22.39	Yes	Yes	81.90	1.00	13.31	2.18	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 130 S-2 GRAPHICS	23.12	Yes	Yes	84.56	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 130 S-2 TRIBOLOGY	25.21	Yes	Yes	92.21	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 131 SEC.	20.48	Yes	Yes	74.92	1.00	12.17	2.43	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 132 O-2 THERMO MECH. TESTING	30.93	Yes	Yes	113.1 1	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6

THERMAL ZONE: 132-A TECH.	7.14	Yes	Yes	26.11	1.00	0.00	0.00	13.67 02		0.000 0
THERMAL ZONE: 133 OFFICE/LAB	21.00	Yes	Yes	76.81	1.00	12.47	2.06	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 134 O-3 HARDNESS MOD. TEST	31.32	Yes	Yes	114.5 6	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 135 OFFICE/LAB	20.23	Yes	Yes	74.00	1.00	12.01	2.18	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 136 NONDESTRUCTIVE	22.30	Yes	Yes	81.58	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 137 GRAD/TECH STATIONS	30.67	Yes	Yes	112.2 0	1.00	18.19	2.42	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 138 O-1 UNIVERSAL TESTING	46.77	Yes	Yes	171.0 8	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 139 OFFICE/LAB	19.87	Yes	Yes	72.66	1.00	11.78	2.36	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 140 STORAGE	22.97	No	Yes	84.03	1.00	0.00	0.00	13.67 02		0.000 0
THERMAL ZONE: 141 OFFICE/LAB	20.87	Yes	Yes	76.32	1.00	12.36	2.42	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 142 A-3 PARTICULATE	46.28	Yes	Yes	169.2 7	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 143	29.83	Yes	Yes	109.1 0	1.00	17.65	0.00	18.58 93	19.5 6	9.364 6

GRAD/TECH STATIONS											
THERMAL ZONE: 144 V-2 CERAMICS MACHINING	23.56	Yes	Yes	86.16	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6	
THERMAL ZONE: 145 WOMENS RESTROOM	24.73	No	Yes	90.44	1.00	15.53	0.00	15.17 71	9.29	2.906 3	
THERMAL ZONE: 146 E DRYING	23.47	No	Yes	85.84	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6	
THERMAL ZONE: 147 MENS RESTROOM	25.03	No	Yes	91.56	1.00	15.71	2.26	15.17 71	9.29	2.906 3	
THERMAL ZONE: 148 CORRIDOR	66.55	Yes	Yes	243.4 2	1.00	10.47	2.24	8.449 7	92.9 0	3.121 5	
THERMAL ZONE: 149 RECEIVING	31.34	No	Yes	114.6 1	1.00	18.52	2.30	18.58 93	19.5 6	9.364 6	
THERMAL ZONE: 200 FIBER OP. DIRECTOR	38.28	Yes	Yes	140.0 0	1.00	30.50	4.65	18.58 93	19.5 6	9.364 6	
THERMAL ZONE: 201 CONFERENCE	58.85	Yes	Yes	215.2 5	1.00	32.34	8.92	19.80 56	1.86	10.76 39	
THERMAL ZONE: 202 EXECUTIVE OFFICER	24.64	Yes	Yes	90.11	1.00	13.54	4.46	18.58 93	19.5 6	9.364 6	
THERMAL ZONE: 203 SEC.	24.43	Yes	Yes	89.36	1.00	13.43	4.46	18.58 93	19.5 6	9.364 6	
THERMAL ZONE: 204	49.28	Yes	Yes	180.2 4	1.00	102.8 5	20.35	18.58 93	19.5 6	9.364 6	

DEPARTMENT CHAIR											
THERMAL ZONE: 205 G-3 SPECIALTY MEAS.	47.23	Yes	Yes	172.73	1.00	0.00	0.00	18.5893	19.56	9.3646	
THERMAL ZONE: 207 VEST.	4.93	Yes	Yes	18.02	1.00	0.00	0.00	16.8993	18.58	10.7639	
THERMAL ZONE: 207A A-3A POWDER SYNTHESIS	20.94	Yes	Yes	76.58	1.00	0.00	0.00	18.5893	19.56	9.3646	
THERMAL ZONE: 209 K-1 SPECTRO ANALYSIS	23.18	Yes	Yes	84.78	1.00	0.00	0.00	18.5893	19.56	9.3646	
THERMAL ZONE: 211 S-3 GRAD. PC.	23.04	Yes	Yes	84.26	1.00	0.00	0.00	18.5893	19.56	9.3646	
THERMAL ZONE: 212 OFFICE/LAB	59.35	Yes	Yes	217.07	1.00	37.03	6.97	18.5893	19.56	9.3646	
THERMAL ZONE: 213 M-1 THERMAL ANALYSIS	22.65	Yes	Yes	82.84	1.00	0.00	0.00	18.5893	19.56	9.3646	
THERMAL ZONE: 214 WORD PROCESSING	19.78	Yes	Yes	72.33	1.00	12.34	2.32	16.6841	9.29	58.1251	
THERMAL ZONE: 215 M-2 THERMAL ANALYSIS	17.41	Yes	Yes	63.66	1.00	0.00	0.00	18.5893	19.56	9.3646	
THERMAL ZONE: 216 FINANCE/ADMIN. CENTER	28.23	Yes	Yes	103.24	1.00	17.61	2.32	18.5893	19.56	9.3646	

THERMAL ZONE: 217 VEST.	4.20	Yes	Yes	15.35	1.00	0.00	0.00	16.89 93	18.5 8	10.76 39
THERMAL ZONE: 217A R-1 SPUTTER	26.59	Yes	Yes	97.24	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 217B L-3 ELECTRONIC S	21.21	Yes	Yes	77.56	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 218 SEC.	22.22	Yes	Yes	81.27	1.00	13.86	2.32	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 218A CENTER DIRECTOR	39.39	Yes	Yes	144.0 8	1.00	46.02	4.65	10.65 63	19.5 6	6.888 9
THERMAL ZONE: 220 CORRIDOR	243.6 8	Yes	Yes	891.3 0	1.00	74.33	11.61	8.449 7	92.9 0	3.121 5
THERMAL ZONE: 221 L-2 ELECTRONIC S	23.60	Yes	Yes	86.33	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 221 L-4 MAGNETICS	22.63	Yes	Yes	82.77	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 222 CORRIDOR	61.74	Yes	Yes	225.8 2	1.00	9.56	1.15	8.449 7	92.9 0	3.121 5
THERMAL ZONE: 223 M-3 THERMAL CONDUCTIVITY	23.35	Yes	Yes	85.41	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 225 FILE STORAGE	23.35	No	Yes	85.41	1.00	0.00	0.00	13.67 02		0.000 0

THERMAL ZONE: 226 D-3 TAPE CASTING	27.89	Yes	Yes	102.00	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 227 UNDERGRAD DIR.	24.90	Yes	Yes	91.06	1.00	14.27	1.56	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 228 B-2 POROSITY SURFACE	21.22	Yes	Yes	77.63	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 228A TECH	4.58	No	Yes	16.77	1.00	0.00	0.00	16.68 41	18.5 8	21.52 78
THERMAL ZONE: 229 SEC.	21.42	Yes	Yes	78.34	1.00	12.27	1.48	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 230 B-1 PARTICLE SIZE ANALYSIS	21.15	Yes	Yes	77.36	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 231 UNDERGRAD DIR.	21.49	Yes	Yes	78.62	1.00	12.31	1.61	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 232 C-4 COILOIDS ANALYSIS	23.60	Yes	Yes	86.31	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 233 OFFICE/LAB	21.41	Yes	Yes	78.31	1.00	12.26	1.88	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 234 C-3 CHEMICAL ANALYSIS	23.21	Yes	Yes	84.88	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6
THERMAL ZONE: 236 C-2	22.88	Yes	Yes	83.69	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6

SOL GEL FORMING											
THERMAL ZONE: 237 GRAD/TECH STATIONS	52.69	Yes	Yes	192.72	1.00	30.14	4.42	18.58 93	19.5 6	9.364 6	
THERMAL ZONE: 238 C-2 RHEOLOGY	23.71	Yes	Yes	86.72	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6	
THERMAL ZONE: 238A TECH	6.38	Yes	Yes	23.35	1.00	0.00	0.00	16.68 41	18.5 8	21.52 78	
THERMAL ZONE: 239 OFFICE/LAB	21.76	Yes	Yes	79.61	1.00	12.44	2.21	18.58 93	19.5 6	9.364 6	
THERMAL ZONE: 240 D-4 COMPOSITES	64.61	Yes	Yes	236.32	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6	
THERMAL ZONE: 241 GRAD/TECH STATIONS	30.78	Yes	Yes	112.59	1.00	17.58	0.00	18.58 93	19.5 6	9.364 6	
THERMAL ZONE: 242 D-2 PRESS FORM	23.71	Yes	Yes	86.73	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6	
THERMAL ZONE: 243 WOMENS RESTROOM	26.26	No	Yes	96.04	1.00	15.89	0.00	15.17 71	9.29	2.906 3	
THERMAL ZONE: 244 D-1 CASTING EXTRUSION	24.18	Yes	Yes	88.42	1.00	0.00	0.00	18.58 93	19.5 6	9.364 6	
THERMAL ZONE: 245 MENS RESTROOM	25.78	No	Yes	94.30	1.00	15.61	2.34	15.17 71	9.29	2.906 3	
THERMAL ZONE: 245A J.C.	3.17	No	Yes	11.60	1.00	0.00	0.00	13.67 02		0.000 0	

THERMAL ZONE: 247 GRAD/TECH STATIONS	33.21	Yes	Yes	121.49	1.00	18.93	2.40	18.5893	19.56	9.3646
THERMAL ZONE: 248 SERVICE CORRIDOR	105.97	No	Yes	387.61	1.00	0.00	0.00	8.4497	92.90	3.1215
THERMAL ZONE: E.S.1 1ST FLOOR	10.46	No	Yes	38.27	1.00	0.00	0.00	16.8993	18.58	10.7639
THERMAL ZONE: E.S.2 1ST FLOOR	9.49	No	Yes	34.71	1.00	0.00	0.00	16.8993	18.58	10.7639
THERMAL ZONE: E.S.3 1ST FLOOR	11.36	No	Yes	41.56	1.00	0.00	0.00	16.8993	18.58	10.7639
THERMAL ZONE: E.S.4 1ST FLOOR	11.48	No	Yes	41.99	1.00	0.00	0.00	16.8993	18.58	10.7639
THERMAL ZONE: ELEVATOR - 1ST FLOOR	10.62	No	Yes	38.83	1.00	10.39	0.00	16.8993	18.58	10.7639
THERMAL ZONE: ELEVATOR 2ND FLOOR	10.40	No	Yes	38.02	1.00	10.41	0.00	16.8993	18.58	10.7639
THERMAL ZONE: ELEVATOR BASEMENT	11.60	No	Yes	35.36	1.00	17.56	0.00	16.8993	18.58	10.7639
THERMAL ZONE: ES.1 2ND FLOOR	10.29	No	Yes	37.63	1.00	0.00	0.00	16.8993	18.58	10.7639
THERMAL ZONE: ES.2 2ND FLOOR	9.86	No	Yes	36.05	1.00	0.00	0.00	16.8993	18.58	10.7639

THERMAL ZONE: ES.3 2ND FLOOR	11.51	No	Yes	42.10	1.00	0.00	0.00	16.89 93	18.5 8	10.76 39
THERMAL ZONE: ES.4 2ND FLOOR	10.61	No	Yes	38.82	1.00	0.00	0.00	16.89 93	18.5 8	10.76 39
THERMAL ZONE: J.C. 1ST FLOOR	3.05	No	Yes	11.16	1.00	0.00	0.00	16.89 93	18.5 8	10.76 39
THERMAL ZONE: LOBBY 1ST FLOOR	187.6 9	Yes	Yes	686.4 9	1.00	142.2 8	59.14	21.95 84	9.29	2.906 3
THERMAL ZONE: LOBBY 2ND FLOOR	184.0 1	No	Yes	673.0 3	1.00	141.6 4	59.14	21.95 84	9.29	2.906 3
THERMAL ZONE: OPEN	23.84	No	Yes	87.21	1.00	0.00	0.00	16.89 93	18.5 8	10.76 39
THERMAL ZONE: SERVICE CORRIDOR - 1ST FLOOR	103.1 9	No	Yes	377.4 2	1.00	0.00	0.00	8.449 7	92.9 0	3.121 5
THERMAL ZONE: SPACE 101	1934. 96	No	Yes	1769. 33	1.00	175.9 2	0.00	16.89 93	18.5 8	10.76 39
THERMAL ZONE: SPACE 102	1934. 96	No	Yes	1918. 96	1.00	175.9 2	0.00	16.89 93	18.5 8	10.76 39
THERMAL ZONE: STAIRWELL - 1ST FLOOR	23.58	No	Yes	86.24	1.00	37.99	0.00	10.13 96		0.000 0
THERMAL ZONE: STAIRWELL - BASEMENT	22.78	No	Yes	69.42	1.00	52.51	0.00	10.13 96		0.000 0
THERMAL ZONE:	24.32	No	Yes	88.96	1.00	37.97	0.00	10.13 96		0.000 0

STAIRWELL 2ND FLOOR										
Total	8595. 37			20450 .54		2103. 06	299.4 9	17.35 74	18.7 4	8.423 3
Conditioned Total	2858. 15			10443 .74		1100. 61	221.8 6	17.37 19	14.0 2	8.447 0
Unconditioned Total	5737. 21			10006 .80		1002. 45	77.64	17.35 01	22.5 2	8.411 5
Not Part of Total	0.00			0.00		0.00	0.00			

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Report: **Demand End Use Components Summary**

For: **Entire Facility**

Timestamp: **2019-12-07 18:09:37 End Uses**

	Electricity [W]	Natural Gas [W]	Propane [W]	District Cooling [W]	Steam [W]	Water [m3/s]
Time of Peak	19-JUL- 16:49	02-JAN- 06:30	-	-	-	30-AUG- 13:00
Heating	0.00	339032.67	0.00	0.00	0.00	0.00
Cooling	38377.78	0.00	0.00	0.00	0.00	0.00
Interior Lighting	134273.63	0.00	0.00	0.00	0.00	0.00
Exterior Lighting	0.00	0.00	0.00	0.00	0.00	0.00
Interior Equipment	65161.20	0.00	0.00	0.00	0.00	0.00
Exterior Equipment	0.00	0.00	0.00	0.00	0.00	0.00
Fans	2174.14	0.00	0.00	0.00	0.00	0.00
Pumps	9445.91	0.00	0.00	0.00	0.00	0.00
Heat Rejection	7847.27	0.00	0.00	0.00	0.00	0.02
Humidification	0.00	0.00	0.00	0.00	0.00	0.00

Heat Recovery	0.00	0.00	0.00	0.00	0.00	0.00
Water Systems	0.00	0.00	0.00	0.00	0.00	0.00
Refrigeration	0.00	0.00	0.00	0.00	0.00	0.00
Generators	0.00	0.00	0.00	0.00	0.00	0.00
Total End Uses	257279.93	339032.67	0.00	0.00	0.00	0.02

End Uses By Subcategory

	Subcategory	Electricity [W]	Natural Gas [W]	Propane [W]	District Cooling [W]	Steam [W]	Water [m3/s]
Heating	Boiler	0.00	339032.67	0.00	0.00	0.00	0.00
	Boiler Parasitic	0.00	0.00	0.00	0.00	0.00	0.00
Cooling	General	38377.78	0.00	0.00	0.00	0.00	0.00
Interior Lighting	General	134273.63	0.00	0.00	0.00	0.00	0.00
Exterior Lighting	General	0.00	0.00	0.00	0.00	0.00	0.00
Interior Equipment	General	65161.20	0.00	0.00	0.00	0.00	0.00
Exterior Equipment	General	0.00	0.00	0.00	0.00	0.00	0.00
Fans	General	2174.14	0.00	0.00	0.00	0.00	0.00
Pumps	General	9445.91	0.00	0.00	0.00	0.00	0.00
Heat Rejection	General	7847.27	0.00	0.00	0.00	0.00	0.02
Humidification	General	0.00	0.00	0.00	0.00	0.00	0.00
Heat Recovery	General	0.00	0.00	0.00	0.00	0.00	0.00
Water Systems	General	0.00	0.00	0.00	0.00	0.00	0.00
Refrigeration	General	0.00	0.00	0.00	0.00	0.00	0.00
Generators	General	0.00	0.00	0.00	0.00	0.00	0.00

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Report: **Source Energy End Use Components Summary**

For: **Entire Facility**

Timestamp: **2019-12-07 18:09:37** Values gathered over **8760.00 hours**

Source Energy End Use Components Summary

	Source Electricity [GJ]	Source Natural Gas [GJ]	Source Additional Fuel [GJ]	Source District Cooling [GJ]	Source District Heating [GJ]
Heating	0.00	821.65	0.00	0.00	0.00
Cooling	1643.06	0.00	0.00	0.00	0.00
Interior Lighting	5486.00	0.00	0.00	0.00	0.00
Exterior Lighting	0.00	0.00	0.00	0.00	0.00
Interior Equipment	3909.88	0.00	0.00	0.00	0.00
Exterior Equipment	0.00	0.00	0.00	0.00	0.00
Fans	129.08	0.00	0.00	0.00	0.00
Pumps	932.43	0.00	0.00	0.00	0.00
Heat Rejection	466.12	0.00	0.00	0.00	0.00
Humidification	0.00	0.00	0.00	0.00	0.00
Heat Recovery	0.00	0.00	0.00	0.00	0.00
Water Systems	0.00	0.00	0.00	0.00	0.00
Refrigeration	0.00	0.00	0.00	0.00	0.00
Generators	0.00	0.00	0.00	0.00	0.00
Total Source Energy End Use Components	12566.56	821.65	0.00	0.00	0.00

Normalized Metrics

Source Energy End Use Components Per Conditioned Floor Area

	Source Electricity [MJ/m ²]	Source Natural Gas [MJ/m ²]	Source Additional Fuel [MJ/m ²]	Source District Cooling [MJ/m ²]	Source District Heating [MJ/m ²]
Heating	0.00	287.48	0.00	0.00	0.00
Cooling	574.87	0.00	0.00	0.00	0.00
Interior Lighting	1919.42	0.00	0.00	0.00	0.00
Exterior Lighting	0.00	0.00	0.00	0.00	0.00
Interior Equipment	1367.98	0.00	0.00	0.00	0.00
Exterior Equipment	0.00	0.00	0.00	0.00	0.00
Fans	45.16	0.00	0.00	0.00	0.00
Pumps	326.23	0.00	0.00	0.00	0.00
Heat Rejection	163.09	0.00	0.00	0.00	0.00
Humidification	0.00	0.00	0.00	0.00	0.00
Heat Recovery	0.00	0.00	0.00	0.00	0.00
Water Systems	0.00	0.00	0.00	0.00	0.00
Refrigeration	0.00	0.00	0.00	0.00	0.00
Generators	0.00	0.00	0.00	0.00	0.00
Total Source Energy End Use Components	4396.74	287.48	0.00	0.00	0.00

Source Energy End Use Components Per Total Floor Area

	Source Electricity [MJ/m ²]	Source Natural Gas [MJ/m ²]	Source Additional Fuel [MJ/m ²]	Source District Cooling [MJ/m ²]	Source District Heating [MJ/m ²]
Heating	0.00	287.48	0.00	0.00	0.00
Cooling	574.87	0.00	0.00	0.00	0.00

Interior Lighting	1919.42	0.00	0.00	0.00	0.00
Exterior Lighting	0.00	0.00	0.00	0.00	0.00
Interior Equipment	1367.98	0.00	0.00	0.00	0.00
Exterior Equipment	0.00	0.00	0.00	0.00	0.00
Fans	45.16	0.00	0.00	0.00	0.00
Pumps	326.23	0.00	0.00	0.00	0.00
Heat Rejection	163.09	0.00	0.00	0.00	0.00
Humidification	0.00	0.00	0.00	0.00	0.00
Heat Recovery	0.00	0.00	0.00	0.00	0.00
Water Systems	0.00	0.00	0.00	0.00	0.00
Refrigeration	0.00	0.00	0.00	0.00	0.00
Generators	0.00	0.00	0.00	0.00	0.00
Total Source Energy End Use Components	4396.74	287.48	0.00	0.00	0.00

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Report: **Climatic Data Summary**

For: **Entire Facility**

Timestamp: **2019-12-07 18:09:37** SizingPeriod:**DesignDay**

	Maximum Dry Bulb [C]	Daily Temperature Range [deltaC]	Humidity Value	Humidity Type	Wind Speed [m/s]	Wind Direction
NEWARK ANN CLG .4% CONDNS DB=>MWB	34.50	8.90	23.80	Wetbulb [C]	5.80	250.00
NEWARK ANN CLG .4% CONDNS DP=>MDB	27.80	8.90	23.70	Dewpoint [C]	5.80	250.00

NEWARK ANN CLG .4% CONDNS ENTH=>MDB	31.70	8.90	77500.00	Enthalpy [J/kg]	5.80	250.00
NEWARK ANN CLG .4% CONDNS WB=>MDB	31.50	8.90	25.40	Wetbulb [C]	5.80	250.00
NEWARK ANN HTG 99.6% CONDNS DB	-11.60	0.00	-11.60	Wetbulb [C]	6.20	320.00
NEWARK ANN HTG WIND 99.6% CONDNS WS=>MCDB	-1.20	0.00	-1.20	Wetbulb [C]	12.70	320.00
NEWARK ANN HUM_N 99.6% CONDNS DP=>MCDB	-9.80	0.00	-20.90	Dewpoint [C]	6.20	320.00

Weather Statistics File

	Value
None	

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Report: **Envelope Summary**

For: **Entire Facility**

Timestamp: **2019-12-07 18:09:37 Opaque Exterior**

	Construction	Reflectance	U-Factor with Film [W/m ² -K]	U-Factor no Film [W/m ² -K]	Gross Area [m ²]	Net Area [m ²]	Azimuth [deg]	Tilt [deg]	Cardinal Direction
SURFACE CE 1096	EXTSLABCAR PET 4IN	0.15	3.364	5.634	8.78	8.78	180.00	90.00	S

	CLIMATEZON E 1-8								
SURFA CE 1097	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	3.364	5.634	11.04	11.04	270.00	90.0 0	W
SURFA CE 1098	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	3.364	5.634	8.78	8.78	0.00	90.0 0	N
SURFA CE 1099	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	3.364	5.634	4.06	4.06	90.00	90.0 0	E
SURFA CE 1100	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	3.364	5.634	8.63	8.63	0.00	90.0 0	N
SURFA CE 1101	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	3.364	5.634	26.02	26.02	0.00	90.0 0	N
SURFA CE 1102	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	3.364	5.634	16.33	16.33	270.00	90.0 0	W
SURFA CE 1103	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	3.364	5.634	46.88	46.88	0.00	90.0 0	N
SURFA CE 1104	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	3.364	5.634	107.9 9	107.9 9	90.00	90.0 0	E
SURFA CE 1105	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	3.364	5.634	99.30	99.30	180.00	90.0 0	S
SURFA CE 1106	EXTSLABCAR PET 4IN	0.15	3.364	5.634	5.70	5.70	269.95	90.0 0	W

	CLIMATEZON E 1-8								
SURFA CE 1107	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	3.364	5.634	25.95	25.95	0.00	90.0 0	N
SURFA CE 1108	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	3.364	5.634	5.03	5.03	270.00	90.0 0	W
SURFA CE 1109	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	3.364	5.634	18.33	18.33	0.00	90.0 0	N
SURFA CE 1110	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	3.364	5.634	56.18	56.18	270.00	90.0 0	W
SURFA CE 1111	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	3.364	5.634	17.77	17.77	270.00	90.0 0	W
SURFA CE 1112	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	26.50	26.50	180.00	90.0 0	S
SURFA CE 1095	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	692.7 3	692.7 3	0.00	180. 00	
SURFA CE 1122	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	26.50	26.50	0.00	90.0 0	N
SURFA CE 1123	CBECS 1980- 2004 EXTWALL	0.08	0.568	0.621	17.77	17.77	90.00	90.0 0	E

	MASS CLIMATEZON E 4C-5A								
SURFA CE 1124	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	26.50	26.50	180.00	90.0 0	S
SURFA CE 1120	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	50.70	50.70	0.00	180. 00	
SURFA CE 1141	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	26.02	26.02	180.00	90.0 0	S
SURFA CE 1143	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	26.02	26.02	0.00	90.0 0	N
SURFA CE 1144	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	16.33	16.33	90.00	90.0 0	E
SURFA CE 1140	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	45.75	45.75	270.00	180. 00	
SURFA CE 1134	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	8.63	8.63	0.00	90.0 0	N

SURFA CE 1136	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	8.63	8.63	180.00	90.0 0	S
SURFA CE 1137	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	4.06	4.06	270.00	90.0 0	W
SURFA CE 1133	EXTSLABCAR PET 4IN CLIMATEZON E 1-8		0.15	2.945	5.634	15.17	15.17	0.00	180. 00	
SURFA CE 1115	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	17.77	17.77	270.00	90.0 0	W
SURFA CE 1116	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	8.78	8.78	0.00	90.0 0	N
SURFA CE 1118	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	8.78	8.78	180.00	90.0 0	S
SURFA CE 1114	EXTSLABCAR PET 4IN CLIMATEZON E 1-8		0.15	2.945	5.634	16.80	16.80	0.00	180. 00	
SURFA CE 186	CBECS 1980- 2004 EXTWALL MASS		0.08	0.568	0.621	19.12	14.66	180.00	90.0 0	S

	CLIMATEZON E 4C-5A								
SURFA CE 181	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	35.16	35.16	0.00	180. 00	
SURFA CE 179	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	13.21	8.75	180.00	90.0 0	S
SURFA CE 175	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	24.29	24.29	0.00	180. 00	
SURFA CE 171	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	21.87	12.95	180.00	90.0 0	S
SURFA CE 167	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	27.94	27.94	0.00	180. 00	
SURFA CE 208	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	12.28	12.28	0.00	180. 00	
SURFA CE 165	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	13.23	8.77	180.00	90.0 0	S
SURFA CE 160	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	24.33	24.33	0.00	180. 00	

SURFACE CE 155	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	24.60	19.88	269.95	90.0 0	W
SURFACE CE 158	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	18.32	13.86	180.00	90.0 0	S
SURFACE CE 154	EXTSLABCAR PET 4IN CLIMATEZON E 1-8		0.15	2.945	5.634	33.71	33.71	0.00	180. 00	
SURFACE CE 325	EXTSLABCAR PET 4IN CLIMATEZON E 1-8		0.15	2.945	5.634	25.60	25.60	0.00	180. 00	
SURFACE CE 1	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	13.11	10.79	90.00	90.0 0	E
SURFACE CE 404	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	6.33	6.33	180.00	90.0 0	S
SURFACE CE 1152	EXTSLABCAR PET 4IN CLIMATEZON E 1-8		0.15	2.945	5.634	0.06	0.06	90.00	180. 00	
SURFACE CE 344	EXTSLABCAR PET 4IN CLIMATEZON E 1-8		0.15	2.945	5.634	34.61	34.61	0.00	180. 00	

SURFA CE 443	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	23.22	18.58	90.00	90.0 0	E
SURFA CE 364	EXTSLABCAR PET 4IN CLIMATEZON E 1-8		0.15	2.945	5.634	24.71	24.71	0.00	180. 00	
SURFA CE 461	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	12.23	9.91	90.00	90.0 0	E
SURFA CE 1222	EXTSLABCAR PET 4IN CLIMATEZON E 1-8		0.15	2.945	5.634	21.74	21.74	0.00	180. 00	
SURFA CE 479	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	12.23	9.91	90.00	90.0 0	E
SURFA CE 505	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	12.35	10.03	90.00	90.0 0	E
SURFA CE 538	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	11.98	9.66	90.00	90.0 0	E
SURFA CE 550	CBECS 1980- 2004 EXTWALL MASS		0.08	0.568	0.621	18.07	15.75	90.00	90.0 0	E

	CLIMATEZON E 4C-5A								
SURFA CE 593	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	12.18	9.86	90.00	90.0 0	E
SURFA CE 612	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	14.21	11.89	90.00	90.0 0	E
SURFA CE 615	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	22.71	22.71	0.00	90.0 0	N
SURFA CE 280	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	73.89	62.28	0.00	90.0 0	N
SURFA CE 1227	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	31.97	31.97	0.00	180. 00	
SURFA CE 1228	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	42.07	42.07	0.00	180. 00	
SURFA CE 232	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	13.31	11.13	269.95	90.0 0	W

SURFACE CE 229	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	22.39	22.39	0.00	180. 00	
SURFACE CE 338	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	23.12	23.12	0.00	180. 00	
SURFACE CE 290	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	25.21	25.21	0.00	180. 00	
SURFACE CE 335	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	12.17	9.74	269.95	90.0 0	W
SURFACE CE 332	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	20.48	20.48	0.00	180. 00	
SURFACE CE 356	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	30.93	30.93	0.00	180. 00	
SURFACE CE 376	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	7.14	7.14	0.00	180. 00	
SURFACE CE 353	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	12.47	10.41	269.95	90.0 0	W
SURFACE CE 350	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	21.00	21.00	0.00	180. 00	

SURFA CE 1223	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	19.32	19.32	0.00	180. 00	
SURFA CE 373	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	12.01	9.83	269.95	90.0 0	W
SURFA CE 370	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	20.23	20.23	0.00	180. 00	
SURFA CE 436	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	19.29	19.29	0.00	180. 00	
SURFA CE 400	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	18.19	15.77	269.95	90.0 0	W
SURFA CE 1220	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	9.27	9.27	0.00	180. 00	
SURFA CE 1221	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	9.88	9.88	0.00	180. 00	
SURFA CE 1217	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	42.28	42.28	0.00	180. 00	
SURFA CE 433	CBECS 1980- 2004 EXTWALL MASS	0.08	0.568	0.621	11.78	9.42	269.95	90.0 0	W

	CLIMATEZON E 4C-5A								
SURFA CE 430	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	19.87	19.87	0.00	180. 00	
SURFA CE 1214	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	20.77	20.77	0.00	180. 00	
SURFA CE 451	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	12.36	9.94	269.95	90.0 0	W
SURFA CE 448	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	20.87	20.87	0.00	180. 00	
SURFA CE 516	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	33.13	33.13	0.00	180. 00	
SURFA CE 475	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	17.65	17.65	269.95	90.0 0	W
SURFA CE 472	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	29.83	29.83	0.00	180. 00	
SURFA CE 497	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	15.53	15.53	269.95	90.0 0	W

SURFACE CE 496	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	24.73	24.73	180.00	180. 00	
SURFACE CE 532	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	15.71	13.46	269.95	90.0 0	W
SURFACE CE 1209	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	20.56	20.56	180.00	180. 00	
SURFACE CE 227	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	10.47	8.23	269.95	90.0 0	W
SURFACE CE 214	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	66.55	66.55	0.00	180. 00	
SURFACE CE 558	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	18.52	16.22	269.95	90.0 0	W
SURFACE CE 1205	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	13.19	13.19	270.00	180. 00	
SURFACE CE 876	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	24.16	19.52	90.00	90.0 0	E

SURFACE CE 877	CBECS 1980- 2004 EXTWALL MASS CLIMATEZONE E 4C-5A		0.08	0.568	0.621	6.33	6.33	180.00	90.0 0	S
SURFACE CE 642	CBECS 1980- 2004 EXTWALL MASS CLIMATEZONE E 4C-5A		0.08	0.568	0.621	32.34	23.43	180.00	90.0 0	S
SURFACE CE 638	CBECS 1980- 2004 EXTWALL MASS CLIMATEZONE E 4C-5A		0.08	0.568	0.621	13.54	9.08	180.00	90.0 0	S
SURFACE CE 632	CBECS 1980- 2004 EXTWALL MASS CLIMATEZONE E 4C-5A		0.08	0.568	0.621	13.43	8.97	180.00	90.0 0	S
SURFACE CE 2	CBECS 1980- 2004 EXTWALL MASS CLIMATEZONE E 4C-5A		0.08	0.568	0.621	24.34	18.80	269.95	90.0 0	W
SURFACE CE 3	CBECS 1980- 2004 EXTWALL MASS CLIMATEZONE E 4C-5A		0.08	0.568	0.621	27.10	27.10	0.00	90.0 0	N
SURFACE CE 626	CBECS 1980- 2004 EXTWALL MASS CLIMATEZONE E 4C-5A		0.08	0.568	0.621	27.07	18.15	180.00	90.0 0	S

SURFACE CE 627	CBECS 1980- 2004 EXTWALL MASS CLIMATEZONE E 4C-5A		0.08	0.568	0.621	24.34	18.45	269.95	90.0 0	W
SURFACE CE 907	CBECS 1980- 2004 EXTWALL MASS CLIMATEZONE E 4C-5A		0.08	0.568	0.621	37.03	30.06	90.00	90.0 0	E
SURFACE CE 894	EXTSLABCAR PET 4IN CLIMATEZONE E 1-8		0.15	2.945	5.634	22.65	22.65	0.00	180. 00	
SURFACE CE 983	CBECS 1980- 2004 EXTWALL MASS CLIMATEZONE E 4C-5A		0.08	0.568	0.621	12.34	10.02	90.00	90.0 0	E
SURFACE CE 918	EXTSLABCAR PET 4IN CLIMATEZONE E 1-8		0.15	2.945	5.634	17.41	17.41	0.00	180. 00	
SURFACE CE 1010	CBECS 1980- 2004 EXTWALL MASS CLIMATEZONE E 4C-5A		0.08	0.568	0.621	17.61	15.29	90.00	90.0 0	E
SURFACE CE 959	EXTSLABCAR PET 4IN CLIMATEZONE E 1-8		0.15	2.945	5.634	4.20	4.20	0.00	180. 00	
SURFACE CE 931	EXTSLABCAR PET 4IN CLIMATEZONE E 1-8		0.15	2.945	5.634	26.59	26.59	180.00	180. 00	

SURFACE CE 966	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	21.21	21.21	0.00	180. 00	
SURFACE CE 1047	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	13.86	11.54	90.00	90.0 0	E
SURFACE CE 1084	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	24.58	19.93	90.00	90.0 0	E
SURFACE CE 1087	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	21.44	21.44	0.00	90.0 0	N
SURFACE CE 734	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	74.33	62.72	0.00	90.0 0	N
SURFACE CE 686	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	243.6 8	243.6 8	0.23	180. 00	
SURFACE CE 988	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	23.60	23.60	0.00	180. 00	
SURFACE CE 1021	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	22.63	22.63	0.00	180. 00	

SURFA CE 674	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	9.56	8.41	269.95	90.0 0	W
SURFA CE 1058	EXTSLABCAR PET 4IN CLIMATEZON E 1-8		0.15	2.945	5.634	23.35	23.35	0.00	180. 00	
SURFA CE 1064	EXTSLABCAR PET 4IN CLIMATEZON E 1-8		0.15	2.945	5.634	23.35	23.35	0.00	180. 00	
SURFA CE 681	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	14.27	12.72	269.95	90.0 0	W
SURFA CE 790	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	12.27	10.79	269.95	90.0 0	W
SURFA CE 818	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	12.31	10.70	269.95	90.0 0	W
SURFA CE 849	EXTSLABCAR PET 4IN CLIMATEZON E 1-8		0.15	2.945	5.634	23.60	23.60	0.00	180. 00	
SURFA CE 840	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	12.26	10.37	269.95	90.0 0	W

SURFACE CE 867	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	23.21	23.21	0.00	180. 00	
SURFACE CE 900	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	22.88	22.88	0.00	180. 00	
SURFACE CE 858	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	30.14	25.72	269.95	90.0 0	W
SURFACE CE 924	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	23.71	23.71	0.00	180. 00	
SURFACE CE 945	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	6.38	6.38	0.00	180. 00	
SURFACE CE 915	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	12.44	10.22	269.95	90.0 0	W
SURFACE CE 942	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	17.58	17.58	269.95	90.0 0	W
SURFACE CE 977	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	15.89	15.89	269.95	90.0 0	W

SURFA CE 1052	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	24.18	24.18	0.00	180. 00	
SURFA CE 1004	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	15.61	13.27	269.95	90.0 0	W
SURFA CE 1030	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	18.93	16.53	269.95	90.0 0	W
SURFA CE 747	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	105.9 7	105.9 7	0.00	180. 00	
SURFA CE 418	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	0.37	0.37	270.00	180. 00	
SURFA CE 618	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	10.39	10.39	0.00	90.0 0	N
SURFA CE 1090	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	10.41	10.41	0.00	90.0 0	N
SURFA CE 1148	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	8.78	8.78	180.00	90.0 0	S

SURFA CE 1150	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	8.78	8.78	0.00	90.0 0	N
SURFA CE 1146	EXTSLABCAR PET 4IN CLIMATEZON E 1-8		0.15	2.945	5.634	11.60	11.60	0.00	180. 00	
SURFA CE 1034	EXTSLABCAR PET 4IN CLIMATEZON E 1-8		0.15	2.945	5.634	10.29	10.29	0.00	180. 00	
SURFA CE 882	EXTSLABCAR PET 4IN CLIMATEZON E 1-8		0.15	2.945	5.634	11.51	11.51	0.00	180. 00	
SURFA CE 522	EXTSLABCAR PET 4IN CLIMATEZON E 1-8		0.15	2.945	5.634	3.05	3.05	0.00	180. 00	
SURFA CE 194	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	65.71	6.57	90.00	90.0 0	E
SURFA CE 195	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	12.21	8.46	0.00	90.0 0	N
SURFA CE 196	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	15.47	15.47	90.00	90.0 0	E

SURFA CE 197	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	12.33	8.43	180.00	90.0 0	S
SURFA CE 198	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	9.71	9.71	90.00	90.0 0	E
SURFA CE 199	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	26.87	26.87	180.00	90.0 0	S
SURFA CE 1234	EXTSLABCAR PET 4IN CLIMATEZON E 1-8		0.15	2.945	5.634	183.9 5	183.9 5	180.00	180. 00	
SURFA CE 653	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	65.71	6.57	90.00	90.0 0	E
SURFA CE 654	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	12.21	12.21	0.00	90.0 0	N
SURFA CE 655	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	15.47	15.47	90.00	90.0 0	E
SURFA CE 656	CBECS 1980- 2004		0.08	0.568	0.621	12.33	12.33	180.00	90.0 0	S

	EXTWALL MASS CLIMATEZON E 4C-5A								
SURFA CE 657	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	9.71	9.71	90.00	90.0 0	E
SURFA CE 658	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	26.23	26.23	180.00	90.0 0	S
SURFA CE 1070	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	23.84	23.84	0.00	180. 00	
SURFA CE 1224	EXTSLABCAR PET 4IN CLIMATEZON E 1-8	0.15	2.945	5.634	33.57	33.57	0.00	180. 00	
SURFA CE 120	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	32.40	32.40	90.00	90.0 0	E
SURFA CE 121	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	1.58	1.58	180.00	90.0 0	S
SURFA CE 122	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A	0.08	0.568	0.621	16.43	16.43	90.00	90.0 0	E

SURFA CE 123	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	3.05	3.05	0.00	90.0 0	N
SURFA CE 124	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	3.87	3.87	90.00	90.0 0	E
SURFA CE 125	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	3.08	3.08	180.00	90.0 0	S
SURFA CE 126	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	2.43	2.43	90.00	90.0 0	E
SURFA CE 127	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	28.15	28.15	180.00	90.0 0	S
SURFA CE 128	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	21.25	21.25	269.95	90.0 0	W
SURFA CE 129	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	19.01	19.01	269.95	90.0 0	W

SURFA CE 130	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	14.86	14.86	269.95	90.0 0	W
SURFA CE 131	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	29.82	29.82	0.00	90.0 0	N
SURFA CE 132	CBECS 1980- 2004 EXTROOF IEAD CLIMATEZON E 4C		0.30	0.371	0.391	1934. 96	1934. 96	180.00	0.00	
SURFA CE 134	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	32.40	32.40	90.00	90.0 0	E
SURFA CE 135	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	1.58	1.58	180.00	90.0 0	S
SURFA CE 136	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	16.43	16.43	90.00	90.0 0	E
SURFA CE 137	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	3.05	3.05	0.00	90.0 0	N

SURFA CE 138	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	3.87	3.87	90.00	90.0 0	E
SURFA CE 139	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	3.08	3.08	180.00	90.0 0	S
SURFA CE 140	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	2.43	2.43	90.00	90.0 0	E
SURFA CE 141	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	28.15	28.15	180.00	90.0 0	S
SURFA CE 142	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	21.25	21.25	269.95	90.0 0	W
SURFA CE 143	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	19.01	19.01	269.95	90.0 0	W
SURFA CE 144	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	14.86	14.86	269.95	90.0 0	W

SURFA CE 145	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	29.82	29.82	0.00	90.0 0	N
SURFA CE 1322	CBECS 1980- 2004 EXTROOF IEAD CLIMATEZON E 4C		0.30	0.371	0.391	802.4 1	802.4 1	180.00	0.00	
SURFA CE 605	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	12.28	12.28	0.00	90.0 0	N
SURFA CE 609	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	25.71	25.71	269.95	90.0 0	W
SURFA CE 1128	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	11.04	11.04	90.00	90.0 0	E
SURFA CE 1129	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	9.06	9.06	180.00	90.0 0	S
SURFA CE 1130	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	23.32	23.32	269.95	90.0 0	W

SURFA CE 1131	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	9.09	9.09	0.00	90.0 0	N
SURFA CE 1126	EXTSLABCAR PET 4IN CLIMATEZON E 1-8		0.15	2.945	5.634	22.78	22.78	0.00	180. 00	
SURFA CE 1077	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	13.09	13.09	0.00	90.0 0	N
SURFA CE 1081	CBECS 1980- 2004 EXTWALL MASS CLIMATEZON E 4C-5A		0.08	0.568	0.621	24.88	24.88	269.95	90.0 0	W

Exterior Fenestration

	Construction	Glass Area [m ²]	Frame area [m ²]	Divider area [m ²]	Area of One Opening [m ²]	Area of Multipli ed Openings [m ²]	Glass U-Factor [W/m ² -K]	Glass S-H-G C	Glass Visibility Transmission	Frame Conductance [W/m ² -K]	Divider Conductance [W/m ² -K]	Shade Control	Pendant Surface	Azimuth [deg]	Tilt [deg]	Cardin al Direction
SU B SU RF AC E 49	CBEC S 1980- 2004 EXTW INDO W	4. 4 00 6	0. 0 0	0.0 0	4.4 6	4.46	4.0 92	0. 39 2	0.250			No	SU RF AC E 186	18 0.0 0 0	9 0 0 0	S

	CLIM ATEZ ONE 4C														
SU B SU RF AC E 48	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	4. 4 6	0. 00	0.0 0	4.4 6	4.46	4.0 92	0. 39 2	0.250		No	SU RF AC E 179	18 0.0 0	9 0. 0 0	S
SU B SU RF AC E 46	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	4. 4 6	0. 00	0.0 0	4.4 6	4.46	4.0 92	0. 39 2	0.250		No	SU RF AC E 171	18 0.0 0	9 0. 0 0	S
SU B SU RF AC E 47	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	4. 4 6	0. 00	0.0 0	4.4 6	4.46	4.0 92	0. 39 2	0.250		No	SU RF AC E 171	18 0.0 0	9 0. 0 0	S
SU B SU RF AC E 45	CBEC S 1980- 2004 EXTW INDO W	4. 4 6	0. 00	0.0 0	4.4 6	4.46	4.0 92	0. 39 2	0.250		No	SU RF AC E 165	18 0.0 0	9 0. 0 0	S

	CLIM ATEZ ONE 4C														
SU B SU RF AC E 74	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 5 4	0. 00	0.0 0	2.5 4	2.54	4.0 92	0. 39 2	0.250		No	SU RF AC E 155	26 9.9 5	9 0. 0 0	W
SU B SU RF AC E 75	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 1 8	0. 00	0.0 0	2.1 8	2.18	4.0 92	0. 39 2	0.250		No	SU RF AC E 155	26 9.9 5	9 0. 0 0	W
SU B SU RF AC E 44	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	4. 4 6	0. 00	0.0 0	4.4 6	4.46	4.0 92	0. 39 2	0.250		No	SU RF AC E 158	18 0.0 0	9 0. 0 0	S
SU B SU RF AC E 24	CBEC S 1980- 2004 EXTW INDO W	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250		No	SU RF AC E 1	90. 00	9 0. 0 0	E

	CLIM ATEZ ONE 4C															
SU B SU RF AC E 25	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250			No	SU RF AC E 443	90. 00	9 0. 0 0	E
SU B SU RF AC E 26	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250			No	SU RF AC E 443	90. 00	9 0. 0 0	E
SU B SU RF AC E 27	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250			No	SU RF AC E 461	90. 00	9 0. 0 0	E
SU B SU RF AC E 28	CBEC S 1980- 2004 EXTW INDO W	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250			No	SU RF AC E 479	90. 00	9 0. 0 0	E

	CLIM ATEZ ONE 4C															
SU B SU RF AC E 29	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250			No	SU RF AC E 505	90. 00	9 0. 0 0	E
SU B SU RF AC E 30	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250			No	SU RF AC E 538	90. 00	9 0. 0 0	E
SU B SU RF AC E 31	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250			No	SU RF AC E 550	90. 00	9 0. 0 0	E
SU B SU RF AC E 32	CBEC S 1980- 2004 EXTW INDO W	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250			No	SU RF AC E 593	90. 00	9 0. 0 0	E

	CLIM ATEZ ONE 4C														
SU B SU RF AC E 33	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250		No	SU RF AC E 612	90. 00	9 0. 0 0	E
SU B SU RF AC E 10	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250		No	SU RF AC E 280	0.0 0	9 0. 0 0	N
SU B SU RF AC E 11	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250		No	SU RF AC E 280	0.0 0	9 0. 0 0	N
SU B SU RF AC E 12	CBEC S 1980- 2004 EXTW INDO W	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250		No	SU RF AC E 280	0.0 0	9 0. 0 0	N

	CLIM ATEZ ONE 4C														
SU B SU RF AC E 8	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250		No	SU RF AC E 280	0.0 0	9 0. 0 0	N
SU B SU RF AC E 9	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250		No	SU RF AC E 280	0.0 0	9 0. 0 0	N
SU B SU RF AC E 72	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 1 8	0. 00	0.0 0	2.1 8	2.18	4.0 92	0. 39 2	0.250		No	SU RF AC E 232	26 9.9 5	9 0. 0 0	W
SU B SU RF AC E 71	CBEC S 1980- 2004 EXTW INDO W	2. 4 3	0. 00	0.0 0	2.4 3	2.43	4.0 92	0. 39 2	0.250		No	SU RF AC E 335	26 9.9 5	9 0. 0 0	W

	CLIM ATEZ ONE 4C														
SU B SU RF AC E 70	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 0 6	0. 00	0.0 0	2.0 6	2.06	4.0 92	0. 39 2	0.250		No	SU RF AC E 353	26 9.9 5	9 0. 0 0	W
SU B SU RF AC E 69	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 1 8	0. 00	0.0 0	2.1 8	2.18	4.0 92	0. 39 2	0.250		No	SU RF AC E 373	26 9.9 5	9 0. 0 0	W
SU B SU RF AC E 68	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 4 2	0. 00	0.0 0	2.4 2	2.42	4.0 92	0. 39 2	0.250		No	SU RF AC E 400	26 9.9 5	9 0. 0 0	W
SU B SU RF AC E 67	CBEC S 1980- 2004 EXTW INDO W	2. 3 6	0. 00	0.0 0	2.3 6	2.36	4.0 92	0. 39 2	0.250		No	SU RF AC E 433	26 9.9 5	9 0. 0 0	W

	CLIM ATEZ ONE 4C														
SU B SU RF AC E 66	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 4 2	0. 00	0.0 0	2.4 2	2.42	4.0 92	0. 39 2	0.250		No	SU RF AC E 451	26 9.9 5	9 0. 0 0	W
SU B SU RF AC E 65	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 2 6	0. 00	0.0 0	2.2 6	2.26	4.0 92	0. 39 2	0.250		No	SU RF AC E 532	26 9.9 5	9 0. 0 0	W
SU B SU RF AC E 73	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 2 4	0. 00	0.0 0	2.2 4	2.24	4.0 92	0. 39 2	0.250		No	SU RF AC E 227	26 9.9 5	9 0. 0 0	W
SU B SU RF AC E 64	CBEC S 1980- 2004 EXTW INDO W	2. 3 0	0. 00	0.0 0	2.3 0	2.30	4.0 92	0. 39 2	0.250		No	SU RF AC E 558	26 9.9 5	9 0. 0 0	W

	CLIM ATEZ ONE 4C															
SU B SU RF AC E 13	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250			No	SU RF AC E 876	90. 00	9 0. 0 0	E
SU B SU RF AC E 14	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250			No	SU RF AC E 876	90. 00	9 0. 0 0	E
SU B SU RF AC E 42	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	4. 4 6	0. 00	0.0 0	4.4 6	4.46	4.0 92	0. 39 2	0.250			No	SU RF AC E 642	18 0.0 0	9 0. 0 0	S
SU B SU RF AC E 43	CBEC S 1980- 2004 EXTW INDO W	4. 4 6	0. 00	0.0 0	4.4 6	4.46	4.0 92	0. 39 2	0.250			No	SU RF AC E 642	18 0.0 0	9 0. 0 0	S

	CLIM ATEZ ONE 4C														
SU B SU RF AC E 41	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	4. 4 6	0. 00	0.0 0	4.4 6	4.46	4.0 92	0. 39 2	0.250		No	SU RF AC E 638	18 0.0 0	9 0. 0 0	S
SU B SU RF AC E 40	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	4. 4 6	0. 00	0.0 0	4.4 6	4.46	4.0 92	0. 39 2	0.250		No	SU RF AC E 632	18 0.0 0	9 0. 0 0	S
SU B SU RF AC E 50	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 7 7	0. 00	0.0 0	2.7 7	2.77	4.0 92	0. 39 2	0.250		No	SU RF AC E 2	26 9.9 5	9 0. 0 0	W
SU B SU RF AC E 51	CBEC S 1980- 2004 EXTW INDO W	2. 7 7	0. 00	0.0 0	2.7 7	2.77	4.0 92	0. 39 2	0.250		No	SU RF AC E 2	26 9.9 5	9 0. 0 0	W

	CLIM ATEZ ONE 4C															
SU B SU RF AC E 38	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	4. 4 6	0. 00	0.0 0	4.4 6	4.46	4.0 92	0. 39 2	0.250			No	SU RF AC E 626	18 0.0 0 0	9 0. 0 0	S
SU B SU RF AC E 39	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	4. 4 6	0. 00	0.0 0	4.4 6	4.46	4.0 92	0. 39 2	0.250			No	SU RF AC E 626	18 0.0 0 0	9 0. 0 0	S
SU B SU RF AC E 52	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 9 4	0. 00	0.0 0	2.9 4	2.94	4.0 92	0. 39 2	0.250			No	SU RF AC E 627	26 9.9 5	9 0. 0 0	W
SU B SU RF AC E 53	CBEC S 1980- 2004 EXTW INDO W	2. 9 4	0. 00	0.0 0	2.9 4	2.94	4.0 92	0. 39 2	0.250			No	SU RF AC E 627	26 9.9 5	9 0. 0 0	W

	CLIM ATEZ ONE 4C															
SU B SU RF AC E 15	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250			No	SU RF AC E 907	90. 00	9 0. 0 0	E
SU B SU RF AC E 16	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250			No	SU RF AC E 907	90. 00	9 0. 0 0	E
SU B SU RF AC E 17	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250			No	SU RF AC E 907	90. 00	9 0. 0 0	E
SU B SU RF AC E 18	CBEC S 1980- 2004 EXTW INDO W	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250			No	SU RF AC E 983	90. 00	9 0. 0 0	E

	CLIM ATEZ ONE 4C															
SU B SU RF AC E 19	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250			No	SU RF AC E 101 0	90. 00	9 0. 0 0	E
SU B SU RF AC E 20	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250			No	SU RF AC E 104 7	90. 00	9 0. 0 0	E
SU B SU RF AC E 21	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250			No	SU RF AC E 108 4	90. 00	9 0. 0 0	E
SU B SU RF AC E 22	CBEC S 1980- 2004 EXTW INDO W	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250			No	SU RF AC E 108 4	90. 00	9 0. 0 0	E

	CLIM ATEZ ONE 4C														
SU B SU RF AC E 3	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250		No	SU RF AC E 734	0.0 0	9 0. 0 0	N
SU B SU RF AC E 4	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250		No	SU RF AC E 734	0.0 0	9 0. 0 0	N
SU B SU RF AC E 5	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250		No	SU RF AC E 734	0.0 0	9 0. 0 0	N
SU B SU RF AC E 6	CBEC S 1980- 2004 EXTW INDO W	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250		No	SU RF AC E 734	0.0 0	9 0. 0 0	N

	CLIM ATEZ ONE 4C														
SU B SU RF AC E 7	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 2	0. 00	0.0 0	2.3 2	2.32	4.0 92	0. 39 2	0.250		No	SU RF AC E 734	0.0 0	9 0. 0 0	N
SU B SU RF AC E 54	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	1. 1 5	0. 00	0.0 0	1.1 5	1.15	4.0 92	0. 39 2	0.250		No	SU RF AC E 674	26 9.9 5	9 0. 0 0	W
SU B SU RF AC E 55	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	1. 5 6	0. 00	0.0 0	1.5 6	1.56	4.0 92	0. 39 2	0.250		No	SU RF AC E 681	26 9.9 5	9 0. 0 0	W
SU B SU RF AC E 56	CBEC S 1980- 2004 EXTW INDO W	1. 4 8	0. 00	0.0 0	1.4 8	1.48	4.0 92	0. 39 2	0.250		No	SU RF AC E 790	26 9.9 5	9 0. 0 0	W

	CLIM ATEZ ONE 4C														
SU B SU RF AC E 57	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	1. 6 1	0. 00	0.0 0	1.6 1	1.61	4.0 92	0. 39 2	0.250		No	SU RF AC E 818	26 9.9 5	9 0. 0 0	W
SU B SU RF AC E 58	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	1. 8 8	0. 00	0.0 0	1.8 8	1.88	4.0 92	0. 39 2	0.250		No	SU RF AC E 840	26 9.9 5	9 0. 0 0	W
SU B SU RF AC E 59	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 2 1	0. 00	0.0 0	2.2 1	2.21	4.0 92	0. 39 2	0.250		No	SU RF AC E 858	26 9.9 5	9 0. 0 0	W
SU B SU RF AC E 60	CBEC S 1980- 2004 EXTW INDO W	2. 2 1	0. 00	0.0 0	2.2 1	2.21	4.0 92	0. 39 2	0.250		No	SU RF AC E 858	26 9.9 5	9 0. 0 0	W

	CLIM ATEZ ONE 4C														
SU B SU RF AC E 61	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 2 1	0. 00	0.0 0	2.2 1	2.21	4.0 92	0. 39 2	0.250		No	SU RF AC E 915	26 9.9 5	9 0. 0 0	W
SU B SU RF AC E 62	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 3 4	0. 00	0.0 0	2.3 4	2.34	4.0 92	0. 39 2	0.250		No	SU RF AC E 100 4	26 9.9 5	9 0. 0 0	W
SU B SU RF AC E 63	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	2. 4 0	0. 00	0.0 0	2.4 0	2.40	4.0 92	0. 39 2	0.250		No	SU RF AC E 103 0	26 9.9 5	9 0. 0 0	W
SU B SU RF AC E 35	CBEC S 1980- 2004 EXTW INDO W	5 9. 1 4	0. 00	0.0 0	59. 14	59.1 4	4.0 92	0. 39 2	0.250		No	SU RF AC E 194	90. 00	9 0. 0 0	E

	CLIM ATEZ ONE 4C															
SU B SU RF AC E 34	CBEC S 1980- 2004 EXTW INDO W CLIM ATEZ ONE 4C	5 9. 1 4	0. 00	0.0 0	59. 14	59.1 4	4.0 92	0. 39 2	0.250		No	SU RF AC E 653	90. 00	9 0. 0 0	E	
Total or Average					299. 49	4.0 92	0. 39 2	0.250								
North Total or Average					23.2 3	4.0 92	0. 39 2	0.250								
Non - North Total or Average					276. 27	4.0 92	0. 39 2	0.250								

Interior Fenestration

	Construction	Area of One Opening [m ²]	Area of Openings [m ²]	Glass U-Factor [W/m ² -K]	Glass SHGC	Glass Visible Transmittance	Parent Surface
Total or Average			0.00	-	-	-	

Exterior Door

	Construction	U-Factor with Film [W/m ² -K]	U-Factor no Film [W/m ² -K]	Gross Area [m ²]	Parent Surface
SUB SURFACE 37	EXTERIOR DOOR 1	1.004	1.181	3.74	SURFACE 195
SUB SURFACE 36	EXTERIOR DOOR 2	1.004	1.181	3.90	SURFACE 197

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Report: Shading Summary

For: Entire Facility

Timestamp: 2019-12-07 18:09:37 Sunlit Fraction

SUB SURFACE 74	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
SUB SURFACE 75	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
SUB SURFACE 44	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SUB SURFACE 24	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
SUB SURFACE 25	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
SUB SURFACE 26	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
SUB SURFACE 27	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
SUB SURFACE 28	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
SUB SURFACE 29	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
SUB SURFACE 30	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
SUB SURFACE 31	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
SUB SURFACE 32	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
SUB SURFACE 33	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00

SUB SURFACE 10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUB SURFACE 11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUB SURFACE 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUB SURFACE 8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUB SURFACE 9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUB SURFACE 72	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
SUB SURFACE 71	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
SUB SURFACE 70	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
SUB SURFACE 69	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
SUB SURFACE 68	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
SUB SURFACE 67	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
SUB SURFACE 66	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
SUB SURFACE 65	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00

SUB SURFACE 73	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
SUB SURFACE 64	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
SUB SURFACE 13	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
SUB SURFACE 14	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
SUB SURFACE 42	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SUB SURFACE 43	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SUB SURFACE 41	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SUB SURFACE 40	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SUB SURFACE 50	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
SUB SURFACE 51	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
SUB SURFACE 38	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SUB SURFACE 39	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SUB SURFACE 52	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00

SUB SURFACE 7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUB SURFACE 54	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
SUB SURFACE 55	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
SUB SURFACE 56	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
SUB SURFACE 57	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
SUB SURFACE 58	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
SUB SURFACE 59	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
SUB SURFACE 60	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
SUB SURFACE 61	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
SUB SURFACE 62	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
SUB SURFACE 63	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
SUB SURFACE 35	0.89	0.61	0.00	0.98	0.88	0.00	0.81	0.18	0.00
SUB SURFACE 34	0.90	0.86	0.00	0.98	0.96	0.00	0.81	0.71	0.00

Window Control

	Name	Type	Shaded Construction	Control	Glare Control
None					

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Report: **Lighting Summary**

For: **Entire Facility**

Timestamp: **2019-12-07 18:09:37 Interior Lighting**

	Zone	Lig htin g Po wer De nsit y [W/ m2]	Zo ne Are a [m 2]	Tota l Pow er [W]	End Use Subc atego ry	Sch edu le Na me	Sche duled Hour s/We ek [hr]	Hour s/We ek > 1% [hr]	Full Load Hour s/We ek [hr]	Ret urn Air Fra ctio n	Cond itione d (Y/N)	Cons umpti on [GJ]
THERM AL ZONE: 218A CENTER DIRECT OR 189.1- 2009 - OFFICE - CLOSED OFFICE - CZ1-3 LIGHTS	THERM AL ZONE: 218A CENTER DIRECT OR	10. 656	39. 39	419. 77	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.87

THERM AL ZONE: 102 OFFICE/ LAB DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 102 OFFICE/ LAB	18. 589 3	24. 29	451. 57	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	5.24
THERM AL ZONE: 103 OFFICE/ LAB DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 103 OFFICE/ LAB	18. 589 3	27. 94	519. 34	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	6.03
THERM AL ZONE: 104 SEC. DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 104 SEC.	18. 589 3	12. 28	228. 19	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	2.65
THERM AL ZONE: 105 OFFICE/ LAB DOE REF	THERM AL ZONE: 105 OFFICE/ LAB	18. 589 3	24. 33	452. 37	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	5.25

1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS													
THERM AL ZONE: 107 I-1 SMALL SEM DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 107 I-1 SMALL SEM	18. 589 3	25. 60	475. 87	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	5.53	
THERM AL ZONE: 108 OFFICE/ LAB DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 108 OFFICE/ LAB	18. 589 3	21. 87	406. 46	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.72	
THERM AL ZONE: 109 I-2 S.E.M DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 109 I-2 S.E.M	18. 589 3	34. 61	643. 36	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	7.47	

THERM AL ZONE: 110 GRAD/T ECH STATIO NS DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 110 GRAD/T ECH STATIO NS	18. 589 3	39. 42	732. 88	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	8.51
THERM AL ZONE: 111 I-3 SAMPLE PREP DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 111 I-3 SAMPLE PREP	18. 589 3	24. 71	459. 37	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	5.33
THERM AL ZONE: 112 OFFICE /LAB DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 112 OFFICE /LAB	18. 589 3	20. 76	385. 97	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.48
THERM AL ZONE:	THERM AL ZONE:	18. 589 3	33. 37	620. 26	Gene ral	OF FIC E	61.85	168.0 0	61.85	0.0 000	Y	7.20

113 H-1 S.T.E.M. DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	113 H-1 S.T.E.M.					BL DG LIG HT							
THERM AL ZONE: 114 OFFICE/ LAB DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 114 OFFICE/ LAB	18. 589 3	20. 77	386. 08	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.48	
THERM AL ZONE: 115 P-2 X-RAY DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 115 P-2 X-RAY	18. 589 3	46. 57	865. 72	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	10.05	
THERM AL ZONE: 116 OFFICE/ LAB DOE REF 1980- 2004 - OFFICE -	THERM AL ZONE: 116 OFFICE/ LAB	18. 589 3	20. 97	389. 74	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.53	

CLOSED OFFICE LIGHTS													
THERM AL ZONE: 117 U-2 MICROS COPY DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 117 U-2 MICROS COPY	18. 589 3	23. 47	436. 26	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	5.07	
THERM AL ZONE: 118 SEC. DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 118 SEC.	18. 589 3	20. 34	378. 12	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.39	
THERM AL ZONE: 119 T-2 POLISHI NG DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 119 T-2 POLISHI NG	18. 589 3	23. 28	432. 76	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	5.02	
THERM AL ZONE: 120	THERM AL ZONE: 120	18. 589 3	30. 68	570. 27	Gene ral	OF FIC E BL	61.85	168.0 0	61.85	0.0 000	Y	6.62	

GRAD/T ECH STATIO NS DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	GRAD/T ECH STATIO NS					DG LIG HT						
THERM AL ZONE: 121 T-1 GRINDI NG DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 121 T-1 GRINDI NG	18. 589 3	23. 92	444. 72	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	5.16
THERM AL ZONE: 122 OFFICE/ LAB DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 122 OFFICE/ LAB	18. 589 3	20. 68	384. 36	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.46
THERM AL ZONE: 123 F-1B REACTI VE GAS DOE REF	THERM AL ZONE: 123 F-1B REACTI VE GAS	18. 589 3	23. 55	437. 71	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	5.08

1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS													
THERM AL ZONE: 124 OFFICE/ LAB DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 124 OFFICE/ LAB	18. 589 3	24. 12	448. 43	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	5.21	
THERM AL ZONE: 125 F-2 LARGE ELECTRI C FURNAC E DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 125 F-2 LARGE ELECTRI C FURNAC E	18. 589 3	23. 82	442. 86	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	5.14	
THERM AL ZONE: 127 F-3A SMALL ELECTRI C FURNAC E DOE	THERM AL ZONE: 127 F-3A SMALL ELECTRI C FURNAC E	18. 589 3	23. 93	444. 93	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	5.17	

REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS												
THERM AL ZONE: 129 OFFICE/ LAB DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 129 OFFICE/ LAB	18. 589 3	22. 39	416. 26	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.83
THERM AL ZONE: 130 S-2 GRAPHI CS DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 130 S-2 GRAPHI CS	18. 589 3	23. 12	429. 74	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.99
THERM AL ZONE: 130 S-2 TRIBOL OGY DOE REF 1980- 2004 - OFFICE - CLOSED	THERM AL ZONE: 130 S-2 TRIBOL OGY	18. 589 3	25. 21	468. 63	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	5.44

OFFICE LIGHTS													
THERM AL ZONE: 131 SEC. DOE REF 1980-2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 131 SEC.	18.5893	20.48	380.75	General	OF FICE BL DG LIG HT	61.85	168.00	61.85	0.000	Y	4.42	
THERM AL ZONE: 132 O-2 THERM O MECH. TESTING DOE REF 1980-2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 132 O-2 THERM O MECH. TESTING	18.5893	30.93	574.89	General	OF FICE BL DG LIG HT	61.85	168.00	61.85	0.000	Y	6.67	
THERM AL ZONE: 133 OFFICE/ LAB DOE REF 1980-2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 133 OFFICE/ LAB	18.5893	21.00	390.36	General	OF FICE BL DG LIG HT	61.85	168.00	61.85	0.000	Y	4.53	
THERM AL ZONE: 134 O-3	THERM AL ZONE: 134 O-3	18.5893	31.32	582.23	General	OF FICE BL	61.85	168.00	61.85	0.000	Y	6.76	

HARDNE SS MOD. TEST DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	HARDNE SS MOD. TEST					DG LIG HT						
THERM AL ZONE: 135 OFFICE/ LAB DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 135 OFFICE/ LAB	18. 589 3	20. 23	376. 11	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.37
THERM AL ZONE: 136 NONDES TRUCTI VE DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 136 NONDES TRUCTI VE	18. 589 3	22. 30	414. 61	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.81
THERM AL ZONE: 137 GRAD/T ECH STATIO	THERM AL ZONE: 137 GRAD/T ECH	18. 589 3	30. 67	570. 22	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	6.62

NS DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	STATIO NS												
THERM AL ZONE: 138 O-1 UNIVER SAL TESTING DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 138 O-1 UNIVER SAL TESTING	18. 589 3	46. 77	869. 50	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	10.10	
THERM AL ZONE: 139 OFFICE/ LAB DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 139 OFFICE/ LAB	18. 589 3	19. 87	369. 31	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.29	
THERM AL ZONE: 141 OFFICE/ LAB DOE REF 1980- 2004 -	THERM AL ZONE: 141 OFFICE/ LAB	18. 589 3	20. 87	387. 88	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.50	

OFFICE - CLOSED OFFICE LIGHTS												
THERM AL ZONE: 142 A-3 PARTIC ULATE DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 142 A-3 PARTIC ULATE	18. 589 3	46. 28	860. 30	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	9.99
THERM AL ZONE: 143 GRAD/T ECH STATIO NS DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 143 GRAD/T ECH STATIO NS	18. 589 3	29. 83	554. 48	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	6.44
THERM AL ZONE: 144 V-2 CERAMI CS MACHIN ING DOE REF 1980- 2004 - OFFICE -	THERM AL ZONE: 144 V-2 CERAMI CS MACHIN ING	18. 589 3	23. 56	437. 92	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	5.08

CLOSED OFFICE LIGHTS													
THERM AL ZONE: 146 E DRYING DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 146 E DRYING	18. 589 3	23. 47	436. 28	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	5.07	
THERM AL ZONE: 149 RECEIVI NG DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 149 RECEIVI NG	18. 589 3	31. 34	582. 51	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	6.76	
THERM AL ZONE: 200 FIBER OP. DIRECT OR DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 200 FIBER OP. DIRECT OR	18. 589 3	38. 28	711. 51	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	8.26	

THERM AL ZONE: 202 EXECUT IVE OFFICER DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 202 EXECUT IVE OFFICER	18. 589 3	24. 64	457. 98	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	5.32
THERM AL ZONE: 203 SEC. DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 203 SEC.	18. 589 3	24. 43	454. 16	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	5.27
THERM AL ZONE: 204 DEPART MENT CHAIR DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 204 DEPART MENT CHAIR	18. 589 3	49. 28	916. 06	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	10.64
THERM AL ZONE: 205 G-3 SPECIAL	THERM AL ZONE: 205 G-3 SPECIAL	18. 589 3	47. 23	877. 89	Gene ral	OF FIC E BL DG	61.85	168.0 0	61.85	0.0 000	Y	10.19

TY MEAS. DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	TY MEAS.					LIG HT							
THERM AL ZONE: 207A A- 3A POWDE R SYNTHE SIS DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 207A A- 3A POWDE R SYNTHE SIS	18. 589 3	20. 94	389. 18	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.52	
THERM AL ZONE: 209 K-1 SPECTR O ANALYS IS DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 209 K-1 SPECTR O ANALYS IS	18. 589 3	23. 18	430. 91	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	5.00	
THERM AL ZONE: 211 S-3	THERM AL ZONE: 211 S-3	18. 589 3	23. 04	428. 26	Gene ral	OF FIC E BL	61.85	168.0 0	61.85	0.0 000	Y	4.97	

GRAD. PC. DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	GRAD. PC.					DG LIG HT							
THERM AL ZONE: 212 OFFICE/ LAB DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 212 OFFICE/ LAB	18. 589 3	59. 35	110 3.23	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	12.81	
THERM AL ZONE: 213 M-1 THERM AL ANALYS IS DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 213 M-1 THERM AL ANALYS IS	18. 589 3	22. 65	421. 01	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.89	
THERM AL ZONE: 215 M-2 THERM AL ANALYS	THERM AL ZONE: 215 M-2 THERM AL	18. 589 3	17. 41	323. 56	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	3.76	

IS DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	ANALYS IS												
THERM AL ZONE: 216 FINANC E/ADMI N. CENTER DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 216 FINANC E/ADMI N. CENTER	18. 589 3	28. 23	524. 71	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	6.09	
THERM AL ZONE: 217A R-1 SPUTTE R DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 217A R-1 SPUTTE R	18. 589 3	26. 59	494. 22	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	5.74	
THERM AL ZONE: 217B L-3 ELECTR ONICS DOE REF 1980-	THERM AL ZONE: 217B L-3 ELECTR ONICS	18. 589 3	21. 21	394. 19	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.58	

2004 - OFFICE - CLOSED OFFICE LIGHTS												
THERM AL ZONE: 218 SEC. DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 218 SEC.	18. 589 3	22. 22	413. 02	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.80
THERM AL ZONE: 221 L-2 ELECTR ONICS DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 221 L-2 ELECTR ONICS	18. 589 3	23. 60	438. 75	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	5.09
THERM AL ZONE: 221 L-4 MAGNE TICS DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 221 L-4 MAGNE TICS	18. 589 3	22. 63	420. 66	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.88

THERM AL ZONE: 223 M-3 THERM AL CONDU CTIVITY DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 223 M-3 THERM AL CONDU CTIVITY	18. 589 3	23. 35	434. 07	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	5.04
THERM AL ZONE: 226 D-3 TAPE CASTIN G DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 226 D-3 TAPE CASTIN G	18. 589 3	27. 89	518. 39	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	6.02
THERM AL ZONE: 227 UNDERG RAD DIR. DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 227 UNDERG RAD DIR.	18. 589 3	24. 90	462. 82	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	5.37

THERM AL ZONE: 228 B-2 POROSIT Y SURFAC E DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 228 B-2 POROSIT Y SURFAC E	18. 589 3	21. 22	394. 53	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.58
THERM AL ZONE: 229 SEC. DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 229 SEC.	18. 589 3	21. 42	398. 17	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.62
THERM AL ZONE: 230 B-1 PARTICL E SIZE ANALYS IS DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 230 B-1 PARTICL E SIZE ANALYS IS	18. 589 3	21. 15	393. 17	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.56
THERM AL ZONE:	THERM AL ZONE:	18. 589 3	21. 49	399. 57	Gene ral	OF FIC E	61.85	168.0 0	61.85	0.0 000	Y	4.64

231 UNDERG RAD DIR. DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	231 UNDERG RAD DIR.					BL DG LIG HT						
THERM AL ZONE: 232 C-4 COILOID S ANALYS IS DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 232 C-4 COILOID S ANALYS IS	18. 589 3	23. 60	438. 66	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	5.09
THERM AL ZONE: 233 OFFICE/ LAB DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 233 OFFICE/ LAB	18. 589 3	21. 41	398. 02	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.62
THERM AL ZONE: 234 C-3 CHEMIC	THERM AL ZONE: 234 C-3 CHEMIC	18. 589 3	23. 21	431. 39	Gene ral	OF FIC E BL DG	61.85	168.0 0	61.85	0.0 000	Y	5.01

AL ANALYS IS DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	AL ANALYS IS					LIG HT							
THERM AL ZONE: 236 C-2 SOL GEL FORMIN G DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 236 C-2 SOL GEL FORMIN G	18. 589 3	22. 88	425. 34	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.94	
THERM AL ZONE: 237 GRAD/T ECH STATIO NS DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 237 GRAD/T ECH STATIO NS	18. 589 3	52. 69	979. 49	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	11.37	
THERM AL ZONE: 238 C-2 RHEOLO	THERM AL ZONE: 238 C-2	18. 589 3	23. 71	440. 75	Gene ral	OF FIC E BL DG	61.85	168.0 0	61.85	0.0 000	Y	5.12	

GY DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	RHEOLO GY					LIG HT						
THERM AL ZONE: 239 OFFICE/ LAB DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 239 OFFICE/ LAB	18. 589 3	21. 76	404. 59	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	4.70
THERM AL ZONE: 240 D-4 COMPOS ITES DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 240 D-4 COMPOS ITES	18. 589 3	64. 61	120 1.09	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	13.95
THERM AL ZONE: 241 GRAD/T ECH STATIO NS DOE REF 1980-	THERM AL ZONE: 241 GRAD/T ECH STATIO NS	18. 589 3	30. 78	572. 20	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	6.64

2004 - OFFICE - CLOSED OFFICE LIGHTS												
THERM AL ZONE: 242 D-2 PRESS FORM DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 242 D-2 PRESS FORM	18. 589 3	23. 71	440. 81	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	5.12
THERM AL ZONE: 244 D-1 CASTIN G EXTRUS ION DOE REF 1980- 2004 - OFFICE - CLOSED OFFICE LIGHTS	THERM AL ZONE: 244 D-1 CASTIN G EXTRUS ION	18. 589 3	24. 18	449. 41	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	5.22
THERM AL ZONE: 247 GRAD/T ECH STATIO NS DOE REF 1980- 2004 -	THERM AL ZONE: 247 GRAD/T ECH STATIO NS	18. 589 3	33. 21	617. 44	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	7.17

OFFICE - CLOSED OFFICE LIGHTS												
THERM AL ZONE: 101 CONFER ENCE DOE REF 1980- 2004 - OFFICE - CONFER ENCE LIGHTS	THERM AL ZONE: 101 CONFER ENCE	19. 805 6	35. 16	696. 41	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	8.09
THERM AL ZONE: 106 CONFER ENCE DOE REF 1980- 2004 - OFFICE - CONFER ENCE LIGHTS	THERM AL ZONE: 106 CONFER ENCE	19. 805 6	33. 71	667. 55	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	7.75
THERM AL ZONE: 201 CONFER ENCE DOE REF 1980- 2004 - OFFICE - CONFER ENCE LIGHTS	THERM AL ZONE: 201 CONFER ENCE	19. 805 6	58. 85	116 5.55	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	13.53

THERM AL ZONE: 126 CORRID OR DOE REF 1980- 2004 - OFFICE - CORRID OR LIGHTS	THERM AL ZONE: 126 CORRID OR	8.4 497	243 .83	206 0.31	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	23.92
THERM AL ZONE: 148 CORRID OR DOE REF 1980- 2004 - OFFICE - CORRID OR LIGHTS	THERM AL ZONE: 148 CORRID OR	8.4 497	66. 55	562. 34	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	6.53
THERM AL ZONE: 220 CORRID OR DOE REF 1980- 2004 - OFFICE - CORRID OR LIGHTS	THERM AL ZONE: 220 CORRID OR	8.4 497	243 .68	205 9.05	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	23.91
THERM AL ZONE: 222 CORRID	THERM AL ZONE: 222	8.4 497	61. 74	521. 68	Gene ral	OF FIC E BL DG	61.85	168.0 0	61.85	0.0 000	Y	6.06

OR DOE REF 1980- 2004 - OFFICE - CORRID OR LIGHTS	CORRID OR					LIG HT							
THERM AL ZONE: 248 SERVICE CORRID OR DOE REF 1980- 2004 - OFFICE - CORRID OR LIGHTS	THERM AL ZONE: 248 SERVICE CORRID OR	8.4 497	105 .97	895. 44	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	10.40	
THERM AL ZONE: SERVICE CORRID OR - 1ST FLOOR DOE REF 1980- 2004 - OFFICE - CORRID OR LIGHTS	THERM AL ZONE: SERVICE CORRID OR - 1ST FLOOR	8.4 497	103 .19	871. 90	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	10.12	
THERM AL ZONE: 001 MECHA NICAL EQUIPM ENT	THERM AL ZONE: 001 MECHA NICAL EQUIPM	25. 349 0	692 .73	175 60.0 6	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	203.8 8	

ROOM DOE REF 1980- 2004 - OFFICE - ELEC/M ECHROO M LIGHTS	ENT ROOM												
THERM AL ZONE: 003 ELECTRI CAL ROOM DOE REF 1980- 2004 - OFFICE - ELEC/M ECHROO M LIGHTS	THERM AL ZONE: 003 ELECTRI CAL ROOM	25. 349 0	45. 75	115 9.61	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	13.46	
THERM AL ZONE: 004 ELEV. MACH. ROOM DOE REF 1980- 2004 - OFFICE - ELEC/M ECHROO M LIGHTS	THERM AL ZONE: 004 ELEV. MACH. ROOM	25. 349 0	15. 17	384. 56	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	4.47	
THERM AL ZONE: 228A TECH	THERM AL ZONE: 228A TECH	16. 684 1	4.5 8	76.4 9	Gene ral	OF FIC E BL DG	61.85	168.0 0	61.85	0.0 000	N	0.89	

DOE REF 1980- 2004 - OFFICE - IT_ROO M LIGHTS						LIG HT							
THERM AL ZONE: 238A TECH DOE REF 1980- 2004 - OFFICE - IT_ROO M LIGHTS	THERM AL ZONE: 238A TECH	16. 684 1	6.3 8	106. 52	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	1.24	
THERM AL ZONE: LOBBY 1ST FLOOR DOE REF 1980- 2004 - OFFICE - LOBBY LIGHTS	THERM AL ZONE: LOBBY 1ST FLOOR	21. 958 4	187 .69	412 1.36	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	47.85	
THERM AL ZONE: LOBBY 2ND FLOOR DOE REF 1980- 2004 - OFFICE - LOBBY LIGHTS	THERM AL ZONE: LOBBY 2ND FLOOR	21. 958 4	184 .01	404 0.52	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	46.91	

THERM AL ZONE: 214 WORD PROCES SING DOE REF 1980- 2004 - OFFICE - PRINTR OOM LIGHTS	THERM AL ZONE: 214 WORD PROCES SING	16. 684 1	19. 78	329. 94	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	3.83
THERM AL ZONE: 145 WOMEN S RESTRO OM DOE REF 1980- 2004 - OFFICE - RESTRO OM LIGHTS	THERM AL ZONE: 145 WOMEN S RESTRO OM	15. 177 1	24. 73	375. 30	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	4.36
THERM AL ZONE: 147 MENS RESTRO OM DOE REF 1980- 2004 - OFFICE - RESTRO OM LIGHTS	THERM AL ZONE: 147 MENS RESTRO OM	15. 177 1	25. 03	379. 92	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	4.41

THERM AL ZONE: 243 WOMEN S RESTRO OM DOE REF 1980- 2004 - OFFICE - RESTRO OM LIGHTS	THERM AL ZONE: 243 WOMEN S RESTRO OM	15. 177 1	26. 26	398. 50	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	4.63
THERM AL ZONE: 245 MENS RESTRO OM DOE REF 1980- 2004 - OFFICE - RESTRO OM LIGHTS	THERM AL ZONE: 245 MENS RESTRO OM	15. 177 1	25. 78	391. 29	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	4.54
THERM AL ZONE: STAIRW ELL - 1ST FLOOR DOE REF 1980- 2004 - OFFICE - STAIR LIGHTS	THERM AL ZONE: STAIRW ELL - 1ST FLOOR	10. 139 6	23. 58	239. 09	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	2.78

THERM AL ZONE: STAIRW ELL - BASEME NT DOE REF 1980- 2004 - OFFICE - STAIR LIGHTS	THERM AL ZONE: STAIRW ELL - BASEME NT	10. 139 6	22. 78	230. 94	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	2.68
THERM AL ZONE: STAIRW ELL 2ND FLOOR DOE REF 1980- 2004 - OFFICE - STAIR LIGHTS	THERM AL ZONE: STAIRW ELL 2ND FLOOR	10. 139 6	24. 32	246. 62	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	2.86
THERM AL ZONE: 002 PLUMBI NG EQUIPM ENT DOE REF 1980- 2004 - OFFICE - STORAG E LIGHTS	THERM AL ZONE: 002 PLUMBI NG EQUIPM ENT	13. 670 2	50. 70	693. 13	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	8.05
THERM AL ZONE: 006	THERM AL ZONE: 006	13. 670 2	16. 80	229. 59	Gene ral	OF FIC E BL	61.85	168.0 0	61.85	0.0 000	Y	2.67

CUSTODIAL STORAGE E DOE REF 1980- 2004 - OFFICE - STORAG E LIGHTS	CUSTODIAL STORAGE E					DG LIG HT							
THERM AL ZONE: 132-A TECH. DOE REF 1980- 2004 - OFFICE - STORAG E LIGHTS	THERM AL ZONE: 132-A TECH.	13. 670 2	7.1 4	97.5 9	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	1.13	
THERM AL ZONE: 140 STORAG E DOE REF 1980- 2004 - OFFICE - STORAG E LIGHTS	THERM AL ZONE: 140 STORAG E	13. 670 2	22. 97	314. 07	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	3.65	
THERM AL ZONE: 225 FILE STORAG E DOE REF 1980-	THERM AL ZONE: 225 FILE STORAG E	13. 670 2	23. 35	319. 21	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	3.71	

2004 - OFFICE - STORAG E LIGHTS													
THERM AL ZONE: 245A J.C. DOE REF 1980- 2004 - OFFICE - STORAG E LIGHTS	THERM AL ZONE: 245A J.C.	13. 670 2	3.1 7	43.3 7	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	0.50	
THERM AL ZONE: 207 VEST. DOE REF 1980- 2004 - OFFICE - WHOLE BUILDIN G - MD OFFICE LIGHTS	THERM AL ZONE: 207 VEST.	16. 899 3	4.9 3	83.2 4	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	0.97	
THERM AL ZONE: 217 VEST. DOE REF 1980- 2004 - OFFICE - WHOLE BUILDIN G - MD OFFICE LIGHTS	THERM AL ZONE: 217 VEST.	16. 899 3	4.2 0	70.9 3	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	Y	0.82	

THERM AL ZONE: E.S.1 1ST FLOOR DOE REF 1980- 2004 - OFFICE - WHOLE BUILDIN G - MD OFFICE LIGHTS	THERM AL ZONE: E.S.1 1ST FLOOR	16. 899 3	10. 46	176. 84	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	2.05
THERM AL ZONE: E.S.2 1ST FLOOR DOE REF 1980- 2004 - OFFICE - WHOLE BUILDIN G - MD OFFICE LIGHTS	THERM AL ZONE: E.S.2 1ST FLOOR	16. 899 3	9.4 9	160. 36	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	1.86
THERM AL ZONE: E.S.3 1ST FLOOR DOE REF 1980- 2004 - OFFICE - WHOLE BUILDIN G - MD OFFICE LIGHTS	THERM AL ZONE: E.S.3 1ST FLOOR	16. 899 3	11. 36	192. 01	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	2.23

THERM AL ZONE: E.S.4 1ST FLOOR DOE REF 1980- 2004 - OFFICE - WHOLE BUILDIN G - MD OFFICE LIGHTS	THERM AL ZONE: E.S.4 1ST FLOOR	16. 899 3	11. 48	194. 01	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	2.25
THERM AL ZONE: ES.1 2ND FLOOR DOE REF 1980- 2004 - OFFICE - WHOLE BUILDIN G - MD OFFICE LIGHTS	THERM AL ZONE: ES.1 2ND FLOOR	16. 899 3	10. 29	173. 86	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	2.02
THERM AL ZONE: ES.2 2ND FLOOR DOE REF 1980- 2004 - OFFICE - WHOLE BUILDIN G - MD OFFICE LIGHTS	THERM AL ZONE: ES.2 2ND FLOOR	16. 899 3	9.8 6	166. 57	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	1.93

THERM AL ZONE: ES.3 2ND FLOOR DOE REF 1980- 2004 - OFFICE - WHOLE BUILDIN G - MD OFFICE LIGHTS	THERM AL ZONE: ES.3 2ND FLOOR	16. 899 3	11. 51	194. 52	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	2.26
THERM AL ZONE: ES.4 2ND FLOOR DOE REF 1980- 2004 - OFFICE - WHOLE BUILDIN G - MD OFFICE LIGHTS	THERM AL ZONE: ES.4 2ND FLOOR	16. 899 3	10. 61	179. 37	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	2.08
THERM AL ZONE: J.C. 1ST FLOOR DOE REF 1980- 2004 - OFFICE - WHOLE BUILDIN G - MD OFFICE LIGHTS	THERM AL ZONE: J.C. 1ST FLOOR	16. 899 3	3.0 5	51.5 8	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	0.60

THERM AL ZONE: SPACE 101 DOE REF 1980- 2004 - OFFICE - WHOLE BUILDIN G - MD OFFICE LIGHTS	THERM AL ZONE: SPACE 101	16. 899 3	193 4.9 6	326 99.5 5	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	379.6 7
THERM AL ZONE: SPACE 102 DOE REF 1980- 2004 - OFFICE - WHOLE BUILDIN G - MD OFFICE LIGHTS	THERM AL ZONE: SPACE 102	16. 899 3	193 4.9 6	326 99.5 5	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	379.6 7
THERM AL ZONE: ELEVAT OR - 1ST FLOOR DOE REF 1980- 2004 - OFFICE - WHOLE BUILDIN G - MD OFFICE LIGHTS	THERM AL ZONE: ELEVAT OR - 1ST FLOOR	16. 899 3	10. 62	179. 41	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	2.08

THERM AL ZONE: ELEVAT OR 2ND FLOOR DOE REF 1980- 2004 - OFFICE - WHOLE BUILDIN G - MD OFFICE LIGHTS	THERM AL ZONE: ELEVAT OR 2ND FLOOR	16. 899 3	10. 40	175. 68	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	2.04
THERM AL ZONE: ELEVAT OR BASEME NT DOE REF 1980- 2004 - OFFICE - WHOLE BUILDIN G - MD OFFICE LIGHTS	THERM AL ZONE: ELEVAT OR BASEME NT	16. 899 3	11. 60	196. 03	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	2.28
THERM AL ZONE: OPEN DOE REF 1980- 2004 - OFFICE - WHOLE BUILDIN G - MD OFFICE LIGHTS	THERM AL ZONE: OPEN	16. 899 3	23. 84	402. 96	Gene ral	OF FIC E BL DG LIG HT	61.85	168.0 0	61.85	0.0 000	N	4.68

Interior Lighting Total		17. 357 4	859 5.3 7	149 192. 92									1732. 24
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Daylighting

	Zone	Daylighting Type	Control Type	Fraction Controlled	Lighting Installed in Zone [W]	Lighting Controlled [W]
None						

Exterior Lighting

	Total Watts	Astronomical Clock/Schedule	Schedule Name	Scheduled Hours/Week [hr]	Hours/Week > 1% [hr]	Full Load Hours/Week [hr]	Consumption [GJ]
Exterior Lighting Total	0.00						0.00

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Report: Equipment Summary

For: Entire Facility

Timestamp: 2019-12-07 18:09:37 Central Plant

	Type	Nominal Capacity [W]	Nominal Efficiency [W/W]	IPLV in SI Units [W/W]	IPLV in IP Units [Btu/W-h]
CHILLER ELECTRIC EIR 1	Chiller:Electric:EIR	637100.03	5.50	6.11	20.85
COOLING TOWER SINGLE SPEED 1	CoolingTower:SingleSpeed	602349.12			

BOILER HOT WATER 1	Boiler:HotWater	442877.16	0.80		
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Cooling Coils

	Type	Design Coil Load [W]	Nominal Total Capacity [W]	Nominal Sensible Capacity [W]	Nominal Latent Capacity [W]	Nominal Sensible Heat Ratio	Nominal Efficiency [W/W]	Nominal Coil UA Value [W/C]	Nominal Coil Surface Area [m ²]
COIL COOLING WATER 1	Coil:Cooling: Water	125589.79	111077.66	72786.70	38290.95	0.66	-	14197.50	144.00
COIL COOLING WATER 2	Coil:Cooling: Water	110107.89	97384.71	63814.03	33570.69	0.66	-	12447.33	126.25
COIL COOLING WATER 3	Coil:Cooling: Water	401412.97	331066.11	215613.51	115452.60	0.65	-	41865.24	424.62

Nominal values are gross at rated conditions, i.e., the supply air fan heat and electric power NOT accounted for.

DX Cooling Coils

	DX Cooling Coil Type	Standard Rated Net Cooling Capacity [W]	Standard Rated Net COP [W/W]	EER [Btu/W-h]	SEER [Btu/W-h]	IEER [Btu/W-h]
None						

DX Cooling Coil ASHRAE 127 Standard Ratings Report

	DX Cooling Coil Type	Rated Net Cooling Capacity Test A [W]	Rated Electric Power Test A [W]	Rated Net Cooling Capacity Test B [W]	Rated Electric Power Test B [W]	Rated Net Cooling Capacity Test C [W]	Rated Electric Power Test C [W]	Rated Net Cooling Capacity Test D [W]	Rated Electric Power Test D [W]
None									

DX Heating Coils

	DX Heating Coil Type	High Temperature Heating (net) Rating Capacity [W]	Low Temperature Heating (net) Rating Capacity [W]	HSPF [Btu/W-h]	Region Number
None					

Heating Coils

	Type	Design Coil Load [W]	Nominal Total Capacity [W]	Nominal Efficiency [W/W]
COIL HEATING WATER 74	Coil:Heating:Water	3835.26	3232.06	-
COIL HEATING WATER 53	Coil:Heating:Water	2847.39	1928.27	-
COIL HEATING WATER 54	Coil:Heating:Water	4404.04	2766.09	-
COIL HEATING WATER 68	Coil:Heating:Water	512.29	485.03	-
COIL HEATING WATER 55	Coil:Heating:Water	2864.84	1932.87	-
COIL HEATING WATER 75	Coil:Heating:Water	6966.65	5006.93	-
COIL HEATING WATER 8	Coil:Heating:Water	964.51	913.68	-
COIL HEATING WATER 56	Coil:Heating:Water	3388.14	2512.61	-

COIL HEATING WATER 9	Coil:Heating:Water	1228.65	1163.92	-
COIL HEATING WATER 49	Coil:Heating:Water	4698.15	3830.58	-
COIL HEATING WATER 7	Coil:Heating:Water	929.36	880.40	-
COIL HEATING WATER 57	Coil:Heating:Water	2540.45	2101.59	-
COIL HEATING WATER 6	Coil:Heating:Water	1323.80	1254.19	-
COIL HEATING WATER 58	Coil:Heating:Water	2526.12	2091.28	-
COIL HEATING WATER 5	Coil:Heating:Water	2072.85	1963.98	-
COIL HEATING WATER 59	Coil:Heating:Water	2544.81	2106.43	-
COIL HEATING WATER 4	Coil:Heating:Water	1078.94	1022.36	-
COIL HEATING WATER 69	Coil:Heating:Water	2485.51	2059.17	-
COIL HEATING WATER 32	Coil:Heating:Water	1059.07	1003.53	-
COIL HEATING WATER 48	Coil:Heating:Water	3523.68	2890.00	-
COIL HEATING WATER 30	Coil:Heating:Water	1089.72	1032.57	-
COIL HEATING WATER 60	Coil:Heating:Water	2553.41	2107.62	-
COIL HEATING WATER 29	Coil:Heating:Water	1160.98	1100.10	-
COIL HEATING WATER 61	Coil:Heating:Water	5494.75	3409.57	-
COIL HEATING WATER 62	Coil:Heating:Water	2662.08	1862.85	-
COIL HEATING WATER 27	Coil:Heating:Water	951.27	901.13	-

COIL HEATING WATER 28	Coil:Heating:Water	1024.84	970.81	-
COIL HEATING WATER 70	Coil:Heating:Water	2518.78	1791.73	-
COIL HEATING WATER 26	Coil:Heating:Water	1213.93	1149.95	-
COIL HEATING WATER 31	Coil:Heating:Water	396.39	334.02	-
COIL HEATING WATER 63	Coil:Heating:Water	2533.11	1780.91	-
COIL HEATING WATER 25	Coil:Heating:Water	1356.93	1285.57	-
COIL HEATING WATER 81	Coil:Heating:Water	2472.22	1753.07	-
COIL HEATING WATER 3	Coil:Heating:Water	1036.62	981.99	-
COIL HEATING WATER 47	Coil:Heating:Water	3546.43	2588.54	-
COIL HEATING WATER 2	Coil:Heating:Water	1877.82	1778.83	-
COIL HEATING WATER 64	Coil:Heating:Water	2454.74	1754.51	-
COIL HEATING WATER 65	Coil:Heating:Water	2561.83	1809.84	-
COIL HEATING WATER 24	Coil:Heating:Water	2090.41	1980.23	-
COIL HEATING WATER 46	Coil:Heating:Water	3473.68	2332.28	-
COIL HEATING WATER 23	Coil:Heating:Water	1610.93	1526.21	-
COIL HEATING WATER 94	Coil:Heating:Water	3817.88	2586.39	-
COIL HEATING WATER 83	Coil:Heating:Water	7117.85	5479.81	-
COIL HEATING WATER 76	Coil:Heating:Water	9008.44	7931.41	-

COIL HEATING WATER 82	Coil:Heating:Water	3656.53	2908.28	-
COIL HEATING WATER 71	Coil:Heating:Water	3664.87	2893.54	-
COIL HEATING WATER 80	Coil:Heating:Water	17485.64	11007.71	-
COIL HEATING WATER 21	Coil:Heating:Water	3703.77	3508.51	-
COIL HEATING WATER 18	Coil:Heating:Water	733.00	671.92	-
COIL HEATING WATER 20	Coil:Heating:Water	1728.98	1637.86	-
COIL HEATING WATER 19	Coil:Heating:Water	1949.62	1846.85	-
COIL HEATING WATER 17	Coil:Heating:Water	2058.93	1950.39	-
COIL HEATING WATER 66	Coil:Heating:Water	8443.84	6859.22	-
COIL HEATING WATER 16	Coil:Heating:Water	1223.25	1126.04	-
COIL HEATING WATER 84	Coil:Heating:Water	2946.38	2749.66	-
COIL HEATING WATER 43	Coil:Heating:Water	870.95	796.84	-
COIL HEATING WATER 85	Coil:Heating:Water	3961.13	3257.89	-
COIL HEATING WATER 13	Coil:Heating:Water	245.65	224.95	-
COIL HEATING WATER 15	Coil:Heating:Water	1217.60	1118.78	-
COIL HEATING WATER 14	Coil:Heating:Water	1012.13	927.25	-
COIL HEATING WATER 72	Coil:Heating:Water	3256.48	2687.03	-
COIL HEATING WATER 86	Coil:Heating:Water	5044.04	4117.28	-

COIL HEATING WATER 92	Coil:Heating:Water	23788.22	14553.46	-
COIL HEATING WATER 12	Coil:Heating:Water	1109.11	1015.11	-
COIL HEATING WATER 11	Coil:Heating:Water	1159.86	1048.36	-
COIL HEATING WATER 93	Coil:Heating:Water	5544.02	4843.92	-
COIL HEATING WATER 10	Coil:Heating:Water	1322.60	1167.38	-
COIL HEATING WATER 44	Coil:Heating:Water	1800.61	1705.92	-
COIL HEATING WATER 78	Coil:Heating:Water	3300.37	2715.62	-
COIL HEATING WATER 42	Coil:Heating:Water	1479.21	1401.43	-
COIL HEATING WATER 73	Coil:Heating:Water	2893.82	2381.87	-
COIL HEATING WATER 41	Coil:Heating:Water	1437.16	1361.58	-
COIL HEATING WATER 79	Coil:Heating:Water	2918.77	2396.68	-
COIL HEATING WATER 40	Coil:Heating:Water	1135.35	1048.16	-
COIL HEATING WATER 87	Coil:Heating:Water	2967.02	2423.97	-
COIL HEATING WATER 36	Coil:Heating:Water	1190.65	1077.26	-
COIL HEATING WATER 38	Coil:Heating:Water	1177.87	1065.14	-
COIL HEATING WATER 50	Coil:Heating:Water	6943.69	5613.80	-
COIL HEATING WATER 37	Coil:Heating:Water	1139.77	1049.23	-
COIL HEATING WATER 39	Coil:Heating:Water	386.79	366.40	-

COIL HEATING WATER 67	Coil:Heating:Water	3073.43	2501.51	-
COIL HEATING WATER 35	Coil:Heating:Water	3838.33	3636.46	-
COIL HEATING WATER 51	Coil:Heating:Water	4371.03	3607.32	-
COIL HEATING WATER 34	Coil:Heating:Water	1692.95	1603.91	-
COIL HEATING WATER 33	Coil:Heating:Water	1419.57	1289.21	-
COIL HEATING WATER 52	Coil:Heating:Water	5463.93	4280.46	-
COIL HEATING WATER 77	Coil:Heating:Water	27985.06	20360.36	-
COIL HEATING WATER 1	Coil:Heating:Water	31799.17	22310.17	-
COIL HEATING WATER 22	Coil:Heating:Water	27879.17	19559.92	-
COIL HEATING WATER 45	Coil:Heating:Water	92929.54	65199.00	-

Nominal values are gross at rated conditions, i.e., the supply air fan heat and electric power NOT accounted for.

Fans

	Type	Total Efficiency [W/W]	Delta Pressure [pa]	Max Air Flow Rate [m ³ /s]	Rated Electric Power [W]	Rated Power Per Max Air Flow Rate [W-s/m ³]	Motor Heat In Air Fraction	End Use
ZONE EXHAUST FAN 12	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General

ZONE EXHAUST FAN	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General 1
ZONE EXHAUST FAN 13	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General 1
ZONE EXHAUST FAN 1	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General 1
ZONE EXHAUST FAN 14	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General 1
ZONE EXHAUST FAN 15	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General 1
ZONE EXHAUST FAN 16	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General 1
ZONE EXHAUST FAN 17	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General 1
ZONE EXHAUST FAN 18	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General 1
ZONE EXHAUST FAN 19	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General 1
ZONE EXHAUST FAN 20	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General 1
ZONE EXHAUST FAN 2	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General 1
ZONE EXHAUST FAN 11	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General 1
ZONE EXHAUST FAN 3	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General 1

ZONE EXHAUST FAN 21	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General 1
ZONE EXHAUST FAN 22	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General 1
ZONE EXHAUST FAN 4	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General 1
ZONE EXHAUST FAN 5	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General 1
ZONE EXHAUST FAN 23	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General 1
ZONE EXHAUST FAN 6	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General 1
ZONE EXHAUST FAN 7	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General 1
ZONE EXHAUST FAN 8	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General 1
ZONE EXHAUST FAN 9	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General 1
ZONE EXHAUST FAN 10	Fan:ZoneExhaust	0.60	0.00	0.00	0.00		1.00	General 1
FAN VARIABLE VOLUME 1	Fan:VariableVolume	0.60	500.00	3.59	2972.34	827.13	1.00	General 1
FAN VARIABLE VOLUME 2	Fan:VariableVolume	0.60	500.00	3.15	2605.93	827.13	1.00	General 1

FAN VARIABLE VOLUME 3	Fan:VariableVolume	0.60	500.00	10.50	8686.34	827.13	1.00	General
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Pumps

	Type	Control	Head [pa]	Water Flow [m3/s]	Electric Power [W]	Power Per Water Flow Rate [W-s/m3]	Motor Efficiency [W/W]
PUMP VARIABLE SPEED 2	Pump:VariableSpeed	Intermittent	179352.00	0.022756	5813.80	255487.18	0.90
PUMP VARIABLE SPEED 3	Pump:VariableSpeed	Intermittent	179352.00	0.032170	8219.02	255487.18	0.90
PUMP VARIABLE SPEED 1	Pump:VariableSpeed	Intermittent	179352.00	0.009584	2448.67	255487.18	0.90

Service Water Heating

	Type	Storage Volume [m3]	Input [W]	Thermal Efficiency [W/W]	Recovery Efficiency [W/W]	Energy Factor
None						

Table of Contents

Report: **HVAC Sizing Summary**

For: **Entire Facility**

Timestamp: 2019-12-07 18:09:37 Zone Sensible Cooling

	Calculated Design Load [W]	User Design Lo ad [W]	User Design Area [m ² /m ²]	Calculated Design Air Flow [m ³ /s]	User Design Air Flow [m ³ /s]	Date/Time Of Peak ESTA MP}	Thermostat at Setpoint Temperature at Peak Load [C]	Indoor Humidity Ratio at Peak Load [kgWater/kgAir]	Indoor Temperature at Peak Load [C]	Outdoor Humidity Ratio at Peak Load [kgWater/kgAir]	Outdoor Temperature at Peak Load [kgWater/kgAir]	Minimum Outdoor Air Flow Rate [m ³ /s]	Heat Gain Rate [W]
THERMAL ZONE: 101 CONFERENCE	260 3.2 0	29 93. 68	85. 14	0.2 12	0. 24 4	NE WA RK AN N CL G .4% CO ND NS DB=>M WB	7/21 13:10: 00	24.0 0	23.9 9	0.010 36	34.1 3	0.014 18	0.1 79 00
THERMAL ZONE: 102 OFFICE /LAB	115 1.3 6	13 24. 06	54. 51	0.0 94	0. 10 8	NE WA RK AN N CL G .4% CO ND	7/21 13:30: 00	24.0 0	24.0 0	0.008 96	34.2 8	0.014 18	0.0 12 00

							NS DB=>M WB										
THERM AL ZONE: 103 OFFICE /LAB	155 2.3 4	17 85. 19	63. 90	0.1 26	0. 14 5	NE WA RK AN N CL G .4% CO ND NS DB=>M WB	7/21 13:20: 00	24.0 0	24.0 0	0.008 96	34.2 0	0.014 18	0.0 13	0. 00			
THERM AL ZONE: 104 SEC.	553 .11	63 6.0 7	51. 82	0.0 44	0. 05 0	NE WA RK AN N CL G .4% CO ND NS DB=>M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 76	26.4 0	0.014 18	0.0 06	0. 00			
THERM AL ZONE: 105 OFFICE /LAB	115 0.1 7	13 22. 69	54. 35	0.0 94	0. 10 8	NE WA RK AN N CL G .4% CO ND NS DB=	7/21 13:30: 00	24.0 0	24.0 0	0.008 96	34.2 8	0.014 18	0.0 12	0. 00			

							>M WB												
THERM AL ZONE: 106 CONFERENCE	317 2.7 7	36 48. 69	10 8.2 5	0.2 59	0. 29 8	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 16:30: 00	24.0 0	23.9 9	0.010 07	33.6 1	0.014 18	0.1 71	0. 00					
THERM AL ZONE: 107 I-1 SMALL SEM	111 4.3 5	12 81. 50	50. 06	0.0 88	0. 10 1	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 77	26.4 0	0.014 18	0.0 12	0. 00					
THERM AL ZONE: 108 OFFICE /LAB	168 6.4 7	19 39. 44	88. 70	0.1 35	0. 15 5	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 92	26.4 0	0.014 18	0.0 11	0. 00					

THERM AL ZONE: 109 I-2 S.E.M	145 8.9 2	16 77. 76	48. 48	0.1 15	0. 13 2	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 77	26.4 0	0.014 18	0.0 17	0. 00
THERM AL ZONE: 110 GRAD/ TECH STATIO NS	296 0.5 3	34 04. 61	86. 36	0.2 36	0. 27 2	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 85	26.4 0	0.014 18	0.0 19	0. 00
THERM AL ZONE: 111 I-3 SAMPL E PREP	109 8.4 4	12 63. 20	51. 12	0.0 87	0. 10 0	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 76	26.4 0	0.014 18	0.0 12	0. 00

THERM AL ZONE: 112 OFFICE /LAB	166 6.0 6	19 15. 97	92. 28	0.1 33	0. 15 3	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 83	26.4 0	0.014 18	0.0 10	0. 00
THERM AL ZONE: 113 H-1 S.T.E.M .	170 4.5 5	19 60. 23	58. 75	0.1 35	0. 15 5	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 73	26.4 0	0.014 18	0.0 16	0. 00
THERM AL ZONE: 114 OFFICE /LAB	166 0.3 0	19 09. 35	91. 93	0.1 33	0. 15 3	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 83	26.4 0	0.014 18	0.0 10	0. 00

THERM AL ZONE: 115 P-2 X-RAY	302 4.3 1	34 77. 95	74. 68	0.2 41	0. 27 7	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 69	26.4 0	0.014 18	0.0 22	0. 00
THERM AL ZONE: 116 OFFICE /LAB	167 1.9 2	19 22. 71	91. 71	0.1 34	0. 15 4	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 83	26.4 0	0.014 18	0.0 10	0. 00
THERM AL ZONE: 117 U-2 MICRO SCOPY	159 5.0 5	18 34. 31	78. 16	0.1 27	0. 14 6	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 69	26.4 0	0.014 18	0.0 11	0. 00

THERM AL ZONE: 118 SEC.	163 6.8 9	18 82. 42	92. 55	0.1 31	0. 15 0	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 83	26.4 0	0.014 18	0.0 10	0. 00
THERM AL ZONE: 119 T-2 POLISH ING	157 3.9 1	18 09. 99	77. 75	0.1 25	0. 14 4	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 69	26.4 0	0.014 18	0.0 11	0. 00
THERM AL ZONE: 120 GRAD/ TECH STATIO NS	225 7.9 4	25 96. 63	84. 64	0.1 80	0. 20 7	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 86	26.4 0	0.014 18	0.0 15	0. 00

THERM AL ZONE: 121 T-1 GRINDI NG	161 9.0 3	18 61. 88	77. 83	0.1 29	0. 14 8	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 69	26.4 0	0.014 18	0.0 12	0. 00
THERM AL ZONE: 122 OFFICE /LAB	166 3.8 6	19 13. 44	92. 54	0.1 33	0. 15 3	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 83	26.4 0	0.014 18	0.0 10	0. 00
THERM AL ZONE: 123 F- 1B REACT IVE GAS	170 1.5 8	19 56. 82	83. 11	0.1 36	0. 15 6	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 68	26.4 0	0.014 18	0.0 11	0. 00

THERM AL ZONE: 124 OFFICE /LAB	193 3.5 3	22 23. 56	92. 18	0.1 55	0. 17 8	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.009 06	26.4 0	0.014 18	0.0 12	0. 00
THERM AL ZONE: 125 F-2 LARGE ELECT RIC FURNA CE	169 6.5 8	19 51. 06	81. 90	0.1 35	0. 15 6	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.017 63	26.4 0	0.014 18	0.0 11	0. 00
THERM AL ZONE: 127 F- 3A SMALL ELECT RIC FURNA CE	166 9.8 1	19 20. 28	80. 23	0.1 33	0. 15 3	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.017 61	26.4 0	0.014 18	0.0 12	0. 00

THERM AL ZONE: 129 OFFICE /LAB	114 8.3 5	13 20. 60	58. 98	0.0 94	0. 10 8	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 17:00: 00	24.0 0	24.0 0	0.008 94	33.2 5	0.014 18	0.0 11	0. 00
THERM AL ZONE: 130 S-2 GRAPH ICS	106 3.2 4	12 22. 72	52. 89	0.0 84	0. 09 7	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 76	26.4 0	0.014 18	0.0 11	0. 00
THERM AL ZONE: 130 S-2 TRIBO LOGY	114 0.6 7	13 11. 77	52. 03	0.0 90	0. 10 4	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 76	26.4 0	0.014 18	0.0 12	0. 00

THERM AL ZONE: 131 SEC.	112 3.7 3	12 92. 29	63. 09	0.0 92	0. 10 5	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 17:00: 00	24.0 0	24.0 0	0.008 91	33.2 5	0.014 18	0.0 10	0. 00
THERM AL ZONE: 132 O-2 THERM O MECH. TESTIN G	139 4.5 6	16 03. 75	51. 86	0.1 10	0. 12 7	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 76	26.4 0	0.014 18	0.0 15	0. 00
THERM AL ZONE: 133 OFFICE /LAB	110 3.1 5	12 68. 62	60. 41	0.0 90	0. 10 3	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 17:00: 00	24.0 0	24.0 0	0.008 93	33.2 5	0.014 18	0.0 10	0. 00

THERM AL ZONE: 134 O-3 HARDN ESS MOD. TEST	170 1.3 0	19 56. 50	62. 47	0.1 35	0. 15 5	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 72	26.4 0	0.014 18	0.0 15	0. 00
THERM AL ZONE: 135 OFFICE /LAB	109 5.7 7	12 60. 14	62. 28	0.0 89	0. 10 3	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 17:00: 00	24.0 0	24.0 0	0.008 92	33.2 5	0.014 18	0.0 10	0. 00
THERM AL ZONE: 136 NONDE STRUC TIVE	120 1.7 8	13 82. 05	61. 96	0.0 95	0. 11 0	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 73	26.4 0	0.014 18	0.0 11	0. 00

THERM AL ZONE: 137 GRAD/ TECH STATIO NS	167 1.3 6	19 22. 07	62. 66	0.1 36	0. 15 7	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 17:00: 00	24.0 0	24.0 0	0.008 92	33.2 5	0.014 18	0.0 15	0. 00
THERM AL ZONE: 138 O-1 UNIVE RSAL TESTIN G	210 5.4 7	24 21. 29	51. 77	0.1 66	0. 19 1	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 76	26.4 0	0.014 18	0.0 23	0. 00
THERM AL ZONE: 139 OFFICE /LAB	110 6.1 2	12 72. 03	64. 03	0.0 90	0. 10 4	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 17:00: 00	24.0 0	24.0 0	0.008 91	33.2 5	0.014 18	0.0 10	0. 00

THERM AL ZONE: 141 OFFICE /LAB	112 6.7 7	12 95. 78	62. 10	0.0 92	0. 10 6	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 17:00: 00	24.0 0	24.0 0	0.008 92	33.2 5	0.014 18	0.0 10	0. 00
THERM AL ZONE: 142 A-3 PARTIC ULATE	237 1.6 2	27 27. 36	58. 93	0.1 88	0. 21 6	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 73	26.4 0	0.014 18	0.0 22	0. 00
THERM AL ZONE: 143 GRAD/ TECH STATIO NS	142 2.6 5	16 36. 05	54. 85	0.1 13	0. 12 9	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.009 13	26.4 0	0.014 18	0.0 14	0. 00

THERM AL ZONE: 144 V-2 CERAM ICS MACHI NING	197 0.3 4	22 65. 89	96. 18	0.1 58	0. 18 1	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 65	26.4 0	0.014 18	0.0 11	0. 00
THERM AL ZONE: 148 CORRI DOR	163 1.6 4	18 76. 39	28. 19	0.1 26	0. 14 5	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.009 37	26.4 0	0.014 18	0.0 17	0. 00
THERM AL ZONE: 200 FIBER OP. DIREC TOR	385 1.8 1	44 29. 58	11 5.7 3	0.3 09	0. 35 5	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 79	26.4 0	0.014 18	0.0 18	0. 00

THERM AL ZONE: 201 CONFERENCE	704 4.3 0	81 00 94	13 7.6 5	0.5 74	0. 66 1	NE WA RK AN N CL G .4% CO ND NS DB=>M WB	7/21 13:20: 00	24.0 0	23.9 9	0.009 66	34.2 0	0.014 18	0.2 99	0. 00					
THERM AL ZONE: 202 EXECUTIVE OFFICE R	215 1.2 5	24 73. 94	10 0.4 2	0.1 72	0. 19 8	NE WA RK AN N CL G .4% CO ND NS DB=>M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 79	26.4 0	0.014 18	0.0 12	0. 00					
THERM AL ZONE: 203 SEC.	211 5.8 7	24 33. 25	99. 60	0.1 69	0. 19 5	NE WA RK AN N CL G .4% CO ND NS DB=>M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 79	26.4 0	0.014 18	0.0 12	0. 00					

THERM AL ZONE: 204 DEPAR TMENT CHAIR	618 7.4 4	71 15. 55	14 4.3 9	0.5 04	0. 58 0	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 16:40: 00	24.0 0	24.0 0	0.008 88	33.4 9	0.014 18	0.0 24	0. 00
THERM AL ZONE: 205 G-3 SPECIA LTY MEAS.	407 2.0 4	46 82. 84	99. 16	0.3 26	0. 37 5	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 65	26.4 0	0.014 18	0.0 23	0. 00
THERM AL ZONE: 207 VEST.	675 .47	77 6.7 9	15 7.7 0	0.0 54	0. 06 2	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 58	26.4 0	0.014 18	0.0 03	0. 00

THERM AL ZONE: 207A A- 3A POWDE R SYNTH ESIS	196 9.7 9	22 65. 26	10 8.2 0	0.1 58	0. 18 1	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 64	26.4 0	0.014 18	0.0 10	0. 00
THERM AL ZONE: 209 K-1 SPECT RO ANALY SIS	216 9.7 2	24 95. 18	10 7.6 4	0.1 74	0. 20 0	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 64	26.4 0	0.014 18	0.0 11	0. 00
THERM AL ZONE: 211 S-3 GRAD. PC.	226 8.1 7	26 08. 39	11 3.2 2	0.1 82	0. 20 9	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 63	26.4 0	0.014 18	0.0 11	0. 00

THERM AL ZONE: 212 OFFICE /LAB	525 4.5 1	60 42. 68	10 1.8 2	0.4 21	0. 48 4	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 80	26.4 0	0.014 18	0.0 29	0. 00					
THERM AL ZONE: 213 M-1 THERM AL ANALY SIS	116 3.3 3	13 37. 83	59. 07	0.0 92	0. 10 6	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 73	26.4 0	0.014 18	0.0 11	0. 00					
THERM AL ZONE: 214 WORD PROCE SSING	292 6.4 4	33 65. 40	17 0.1 8	0.2 35	0. 27 1	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 76	26.4 0	0.014 18	0.0 05	0. 00					

THERM AL ZONE: 215 M-2	810 .32	93 1.8 7	53. 54	0.0 64	0. 07 4	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 76	26.4 0	0.014 18	0.0 08	0. 00
THERM AL ZONE: 216 FINAN CE/AD MIN. CENTE R	255 0.7 4	29 33. 35	10 3.9 2	0.2 04	0. 23 5	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 79	26.4 0	0.014 18	0.0 14	0. 00
THERM AL ZONE: 217 VEST.	228 .38	26 2.6 3	62. 57	0.0 18	0. 02 1	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 70	26.4 0	0.014 18	0.0 02	0. 00

THERM AL ZONE: 217A R- 1 SPUTT ER	115 4.6 4	13 27. 84	49. 94	0.0 91	0. 10 5	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 77	26.4 0	0.014 18	0.0 13	0. 00
THERM AL ZONE: 217B L- 3 ELECT RONIC S	947 .79	10 89. 96	51. 40	0.0 75	0. 08 6	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 76	26.4 0	0.014 18	0.0 10	0. 00
THERM AL ZONE: 218 SEC.	211 4.8 0	24 32. 02	10 9.4 6	0.1 69	0. 19 5	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 77	26.4 0	0.014 18	0.0 11	0. 00

THERM AL ZONE: 218A CENTE R DIREC TOR	318 5.0 3	36 62. 78	92. 98	0.2 55	0. 29 3	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 75	26.4 0	0.014 18	0.0 19	0. 00
THERM AL ZONE: 220 CORRI DOR	833 9.8 2	95 90. 79	39. 36	0.6 53	0. 75 1	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.009 07	26.4 0	0.014 18	0.0 62	0. 00
THERM AL ZONE: 221 L-2 ELECT RONIC S	103 5.0 1	11 90. 26	50. 43	0.0 82	0. 09 4	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 77	26.4 0	0.014 18	0.0 11	0. 00

THERM AL ZONE: 221 L-4 MAGN ETICS	102 9.6 3	11 84. 08	52. 33	0.0 81	0. 09 4	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 76	26.4 0	0.014 18	0.0 11	0. 00					
THERM AL ZONE: 222 CORRI DOR	431 7.9 7	49 65. 66	80. 43	0.3 44	0. 39 6	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 60	26.4 0	0.014 18	0.0 16	0. 00					
THERM AL ZONE: 223 M-3 THERM AL CONDU CTIVIT Y	107 6.1 7	12 37. 59	53. 00	0.0 85	0. 09 8	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 76	26.4 0	0.014 18	0.0 11	0. 00					

THERM AL ZONE: 226 D-3 TAPE CASTI NG	226 9.3 3	26 09. 73	93. 58	0.1 81	0. 20 9	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 66	26.4 0	0.014 18	0.0 13	0. 00
THERM AL ZONE: 227 UNDER GRAD DIR.	212 9.6 8	24 49. 13	98. 37	0.1 70	0. 19 6	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 80	26.4 0	0.014 18	0.0 12	0. 00
THERM AL ZONE: 228 B-2 POROSI TY SURFA CE	187 5.0 9	21 56. 36	10 1.6 0	0.1 50	0. 17 3	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 65	26.4 0	0.014 18	0.0 10	0. 00

THERM AL ZONE: 229 SEC.	186 8.4 7	21 48. 74	10 0.3 2	0.1 49	0. 17 2	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 79	26.4 0	0.014 18	0.0 10	0. 00
THERM AL ZONE: 230 B-1 PARTIC LE SIZE ANALY SIS	179 1.4 1	20 60. 12	97. 40	0.1 43	0. 16 5	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 65	26.4 0	0.014 18	0.0 10	0. 00
THERM AL ZONE: 231 UNDER GRAD DIR.	187 1.9 6	21 52. 76	10 0.1 5	0.1 50	0. 17 2	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 79	26.4 0	0.014 18	0.0 10	0. 00

THERM AL ZONE: 232 C-4 COILOI DS ANALY SIS	109 5.5 1	12 59. 84	53. 39	0.0 87	0. 10 0	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 75	26.4 0	0.014 18	0.0 11	0. 00
THERM AL ZONE: 233 OFFICE /LAB	187 5.9 3	21 57. 32	10 0.7 6	0.1 50	0. 17 3	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 79	26.4 0	0.014 18	0.0 10	0. 00
THERM AL ZONE: 234 C-3 CHEMI CAL ANALY SIS	106 0.8 0	12 19. 92	52. 57	0.0 84	0. 09 6	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 76	26.4 0	0.014 18	0.0 11	0. 00

THERM AL ZONE: 236 C-2 SOL GEL FORMI NG	104 7.3 1	12 04. 41	52. 64	0.0 83	0. 09 5	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 76	26.4 0	0.014 18	0.0 11	0. 00
THERM AL ZONE: 237 GRAD/ TECH STATIO NS	419 0.6 0	48 19. 19	91. 46	0.3 41	0. 39 3	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 17:10: 00	24.0 0	24.0 0	0.008 78	33.1 1	0.014 18	0.0 25	0. 00
THERM AL ZONE: 238 C-2 RHEOL OGY	108 7.2 9	12 50. 38	52. 74	0.0 86	0. 09 9	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 76	26.4 0	0.014 18	0.0 11	0. 00

THERM AL ZONE: 238A TECH	445 .81	51 2.6 9	80. 30	0.0 36	0. 04 1	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 69	26.4 0	0.014 18	0.0 02	0. 00
THERM AL ZONE: 239 OFFICE /LAB	192 2.9 4	22 11. 38	10 1.6 0	0.1 54	0. 17 7	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 79	26.4 0	0.014 18	0.0 11	0. 00
THERM AL ZONE: 240 D-4 COMPO SITES	477 4.9 2	54 91. 16	84. 99	0.3 81	0. 43 8	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 67	26.4 0	0.014 18	0.0 31	0. 00

THERM AL ZONE: 241 GRAD/ TECH STATIO NS	284 1.5 6	32 67. 79	10 6.1 6	0.2 28	0. 26 2	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 77	26.4 0	0.014 18	0.0 15	0. 00
THERM AL ZONE: 242 D-2 PRESS FORM	208 9.5 8	24 03. 02	10 1.3 4	0.1 67	0. 19 2	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 65	26.4 0	0.014 18	0.0 11	0. 00
THERM AL ZONE: 244 D-1 CASTI NG EXTRU SION	127 8.1 3	14 69. 85	60. 80	0.1 01	0. 11 7	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 73	26.4 0	0.014 18	0.0 12	0. 00

THERM AL ZONE: 247 GRAD/ TECH STATIO NS	308 9.8 9	35 53. 37	10 6.9 8	0.2 47	0. 28 5	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 77	26.4 0	0.014 18	0.0 16	0. 00
THERM AL ZONE: LOBBY 1ST FLOOR	130 95. 27	15 05 9.5 6	80. 24	1.0 67	1. 22 7	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 08:50: 00	24.0 0	24.0 0	0.009 07	29.3 2	0.014 18	0.1 43	0. 00
THERM AL ZONE: 132-A TECH.	278 .69	32 0.4 9	44. 89	0.0 22	0. 02 5	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.008 50	26.4 0	0.014 18	0.0 02	0. 00

THERM AL ZONE: 006	503 .64	57 9.1	34. 49	0.0 40	0. 04	0. 5	NE WA RK AN N CL G .4% CO ND NS DB= >M WB	7/21 07:00: 00	24.0 0	24.0 0	0.014 18	26.4 0	0.014 18	0.0 04	0. 00
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The Design Load is the zone sensible load only. It does not include any system effects or ventilation loads.

Zone Sensible Heating

	Calculated Design Load [W]	User Design Load [W]	User Design Area [m ²]	Calculated Design Air Flow [m ³ /s]	User Design Air Flow [m ³ /s]	Date/Time Of Peak ESTA MP}	Thermostat Setpoint Temperature at Peak {TIME}	Indoor Temperature at Peak Load [C]	Indoor Humidity Ratio at Peak Load [kgWater/kgAir]	Outdoor Temperature at Peak Load [C]	Outdoor Humidity Ratio at Peak Load [kgWater/kgAir]	Minimum Outdoor Air Flow Rate [m ³ /s]	Heat Gain Rate [W]	
THERM AL ZONE: 101 CONFERENCE	210 9.8 1	263 7.2 6	75. 00	0.0 90	0. 17 9	NE WA RK AN N HT G	1/21 06:00: 00	21.0 0	20.9 9	0.006 60	- 11.6 0	0.001 39	0.1 79	0. 00

							99.6	%	CO	ND	NS	DB					
THERM AL ZONE: 102 OFFICE /LAB	156 6.2 9	195 7.8 6	80. 60	0.0 67	0. 08	HT G 99.6	1/21 06:00: 00	21.0 0	20.9 9	0.006 68	- 11.6 0	0.001 39	0.0 12	0. 00			
THERM AL ZONE: 103 OFFICE /LAB	242 2.9 7	302 8.7 1	10 8.4 1	0.1 04	0. 13 0	HT G 99.6	1/21 06:00: 00	21.0 0	20.9 9	0.006 61	- 11.6 0	0.001 39	0.0 13	0. 00			
THERM AL ZONE: 104 SEC.	281 .50	351 .87	28. 67	0.0 12	0. 01 5	HT G 99.6	1/21 07:40: 00	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 06	0. 00			

							NS DB									
THERM AL ZONE: 105 OFFICE /LAB	157 5.8 9	196 9.8 6	80. 95	0.0 68	0. 08 4	HT G 99.6 % CO ND NS DB	NE WA RK AN N 06:00: 00	1/21	21.0 0	20.9 9	0.006 68	- 11.6 0	0.001 39	0.0 12	0. 00	
THERM AL ZONE: 106 CONFE RENCE	383 4.3 7	479 2.9 6	14 2.2 0	0.1 64	0. 20 5	HT G 99.6 % CO ND NS DB	NE WA RK AN N 06:00: 00	1/21	21.0 0	20.9 9	0.006 36	- 11.6 0	0.001 39	0.1 71	0. 00	
THERM AL ZONE: 107 I-1 SMALL SEM	514 .67	643 .34	25. 13	0.0 22	0. 02 8	HT G 99.6 % CO ND NS DB	NE WA RK AN N 07:50: 00	1/21	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 12	0. 00	
THERM AL ZONE:	186 4.3 0	233 0.3 8	10 6.5 8	0.0 80	0. 10 0	NE WA RK	NE WA RK	1/21 06:00: 00	21.0 0	20.9 9	0.006 44	- 11.6 0	0.001 39	0.0 11	0. 00	

108 OFFICE /LAB						AN N HT G 99.6 % CO ND NS DB									
THERM AL ZONE: 109 I-2 S.E.M	647 .25	809 .07	23. 38	0.0 28	0. 03	NE WA RK AN N HT G 99.6 % CO ND NS DB	1/21 07:50: 00	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 17	0. 00	
THERM AL ZONE: 110 GRAD/ TECH STATIO NS	258 4.5 6	323 0.7 0	81. 95	0.1 11	0. 13	NE WA RK AN N HT G 99.6 % CO ND NS DB	1/21 06:00: 00	21.0 0	20.9 9	0.006 61	- 11.6 0	0.001 39	0.0 19	0. 00	
THERM AL ZONE: 111 I-3 SAMPL E PREP	490 .36	612 .95	24. 80	0.0 21	0. 02	NE WA RK AN N HT G 99.6	1/21 07:50: 00	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 12	0. 00	

							% CO ND NS DB									
THERM AL ZONE: 112 OFFICE /LAB	139 7.5 0	174 6.8 8	84. 13	0.0 60	0. 07	HT G 5	99.6 %	NE WA RK AN N	1/21 06:00: 00	21.0 0	20.9 9	0.006 64	- 11.6 0	0.001 39	0.0 10	0. 00
THERM AL ZONE: 113 H-1 S.T.E.M .	666 .44	833 .04	24. 97	0.0 29	0. 03	HT G 6	99.6 %	NE WA RK AN N	1/21 07:50: 00	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 16	0. 00
THERM AL ZONE: 114 OFFICE /LAB	138 9.6 2	173 7.0 3	83. 64	0.0 60	0. 07	HT G 4	99.6 %	NE WA RK AN N	1/21 06:00: 00	21.0 0	20.9 9	0.006 63	- 11.6 0	0.001 39	0.0 10	0. 00

THERM AL ZONE: 115 P-2 X-RAY	961 .83	120 2.2	25. 9	0.0 41	0. 05	HT G 99.6 % CO ND NS DB	NE WA RK AN N 1/21 07:20: 00	21.0 0	21.0 0	0.008 00	11.6 0	0.001 39	0.0 22	0. 00
THERM AL ZONE: 116 OFFICE /LAB	139 9.9 1	174 9.8 9	83. 46	0.0 60	0. 07	HT G 99.6 % CO ND NS DB	NE WA RK AN N 1/21 06:00: 00	21.0 0	20.9 9	0.006 63	11.6 0	0.001 39	0.0 10	0. 00
THERM AL ZONE: 117 U-2 MICRO SCOPY	495 .72	619 .65	26. 40	0.0 21	0. 02	HT G 99.6 % CO ND NS DB	NE WA RK AN N 1/21 07:20: 00	21.0 0	21.0 0	0.008 00	11.6 0	0.001 39	0.0 11	0. 00
THERM AL ZONE: 118 SEC.	136 7.2 8	170 9.1 0	84. 02	0.0 59	0. 07	NE WA RK AN N 1/21 06:00: 00	21.0 0	20.9 9	0.006 64	11.6 0	0.001 39	0.0 10	0. 00	

							HT G 99.6 % CO ND NS DB										
THERM AL ZONE: 119 T-2 POLISH ING	484 .79	605 .99	26. 03	0.0 21	0. 02	0. 6	NE WA RK AN N HT G 99.6 % CO ND NS DB	1/21 07:20: 00	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 11	0. 00		
THERM AL ZONE: 120 GRAD/ TECH STATIO NS	193 8.4 8	242 3.1 0	78. 99	0.0 83	0. 10	0. 4	NE WA RK AN N HT G 99.6 % CO ND NS DB	1/21 06:00: 00	21.0 0	20.9 9	0.006 57	- 11.6 0	0.001 39	0.0 15	0. 00		
THERM AL ZONE: 121 T-1 GRINDI NG	498 .92	623 .65	26. 07	0.0 21	0. 02	0. 7	NE WA RK AN N HT G 99.6 % CO	1/21 07:20: 00	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 12	0. 00		

							ND NS DB								
THERM AL ZONE: 122 OFFICE /LAB	140 4.6 2	175 5.7 8	84. 92	0.0 60	0. 07	HT 5	NE WA RK AN N 99.6 % CO ND NS DB	1/21 06:00: 00	21.0 0	20.9 9	0.006 65	11.6 -	0.001 39	0.0 10	0. 00
THERM AL ZONE: 123 F- 1B REACT IVE GAS	536 .37	670 .46	28. 47	0.0 23	0. 02	HT 9	NE WA RK AN N 99.6 % CO ND NS DB	1/21 07:30: 00	21.0 0	21.0 0	0.008 00	11.6 -	0.001 39	0.0 11	0. 00
THERM AL ZONE: 124 OFFICE /LAB	302 4.6 7	378 0.8 4	15 6.7 3	0.1 30	0. 16	HT 2	NE WA RK AN N 99.6 % CO ND NS DB	1/21 06:00: 00	21.0 0	20.9 8	0.006 25	11.6 -	0.001 39	0.0 12	0. 00

THERM AL ZONE: 125 F-2 LARGE ELECT RIC FURNA CE	554 .12	692 .65	29. 07	0.0 24	0. 03 0	HT G 99.6 % CO ND NS DB	NE WA RK AN N	1/21 07:30: 00	21.0 0	21.0 0	0.001 39	11.6 0	0.001 39	0.0 11	0. 00
THERM AL ZONE: 127 F- 3A SMALL ELECT RIC FURNA CE	673 .81	842 .27	35. 19	0.0 29	0. 03 6	HT G 99.6 % CO ND NS DB	NE WA RK AN N	1/21 07:00: 00	21.0 0	21.0 0	0.001 39	11.6 0	0.001 39	0.0 12	0. 00
THERM AL ZONE: 129 OFFICE /LAB	146 4.4 5	183 0.5 7	81. 75	0.0 63	0. 07 9	HT G 99.6 % CO ND NS DB	NE WA RK AN N	1/21 06:00: 00	21.0 0	20.9 9	0.006 60	11.6 0	0.001 39	0.0 11	0. 00
THERM AL ZONE: 130 S-2	515 .07	643 .83	27. 85	0.0 22	0. 02 8	NE WA RK AN N	1/21 07:20: 00	21.0 0	21.0 0	0.008 00	11.6 0	0.001 39	0.0 11	0. 00	

GRAPH ICS							HT G 99.6 % CO ND NS DB								
THERM AL ZONE: 130 S-2 TRIBO LOGY	556 .05	695 .06	27. 57	0.0 24	0. 03	NE WA RK AN N HT G 99.6 % CO ND NS DB	1/21 07:20: 00	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 12	0. 00	
THERM AL ZONE: 131 SEC.	138 5.5 9	173 1.9 9	84. 56	0.0 59	0. 07 4	NE WA RK AN N HT G 99.6 % CO ND NS DB	1/21 06:00: 00	21.0 0	20.9 9	0.006 64	- 11.6 0	0.001 39	0.0 10	0. 00	
THERM AL ZONE: 132 O-2 THERM O MECH. TESTIN G	649 .13	811 .41	26. 24	0.0 28	0. 03 5	NE WA RK AN N HT G 99.6 % CO	1/21 07:20: 00	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 15	0. 00	

							ND NS DB										
THERM AL ZONE: 133 OFFICE /LAB	139 3.4 8	174 1.8 6	82. 95	0.0 60	0. 07	HT 5	NE WA RK AN N 99.6 % CO ND NS DB	1/21 06:00: 00	21.0 0	20.9 9	0.006 62	- 11.6 0	0.001 39	0.0 10	0. 00		
THERM AL ZONE: 134 O-3 HARDN ESS MOD. TEST	692 .59	865 .74	27. 64	0.0 30	0. 03	HT 7	NE WA RK AN N 99.6 % CO ND NS DB	1/21 07:30: 00	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 15	0. 00		
THERM AL ZONE: 135 OFFICE /LAB	135 9.9 8	169 9.9 7	84. 02	0.0 58	0. 07	HT 3	NE WA RK AN N 99.6 % CO ND NS DB	1/21 06:00: 00	21.0 0	20.9 9	0.006 63	- 11.6 0	0.001 39	0.0 10	0. 00		

THERM AL ZONE: 136 NONDE STRUC TIVE	550 .73	688 .41	30. 86	0.0 24	0. 03	HT G 99.6 % CO ND NS DB	NE WA RK AN N 1/21 07:20: 00	21.0 0	21.0 0	0.008 00	11.6 0	0.001 39	0.0 11	0. 00
THERM AL ZONE: 137 GRAD/ TECH STATIO NS	195 1.0 0	243 8.7 5	79. 50	0.0 84	0. 10	HT G 99.6 % CO ND NS DB	NE WA RK AN N 1/21 06:00: 00	21.0 0	20.9 9	0.006 57	11.6 0	0.001 39	0.0 15	0. 00
THERM AL ZONE: 138 O-1 UNIVE RSAL TESTIN G	101 5.4 4	126 9.3 0	27. 14	0.0 44	0. 05	HT G 99.6 % CO ND NS DB	NE WA RK AN N 1/21 07:20: 00	21.0 0	21.0 0	0.008 00	11.6 0	0.001 39	0.0 23	0. 00
THERM AL ZONE: 139	135 0.3 5	168 7.9 3	84. 96	0.0 58	0. 07	NE WA RK AN N	NE WA RK AN N 1/21 06:00: 00	21.0 0	20.9 9	0.006 64	11.6 0	0.001 39	0.0 10	0. 00

OFFICE /LAB							HT G 99.6 % CO ND NS DB								
THERM AL ZONE: 141 OFFICE /LAB	140 9.2 7	176 1.5 9	84. 43	0.0 60	0. 07	HT G 99.6 % CO ND NS DB	NE WA RK AN N	1/21 06:00: 00	21.0 0	20.9 9	0.006 64	- 11.6 0	0.001 39	0.0 10	0. 00
THERM AL ZONE: 142 A-3 PARTIC ULATE	112 2.7 2	140 3.4 0	30. 32	0.0 48	0. 06	HT G 99.6 % CO ND NS DB	NE WA RK AN N	1/21 07:20: 00	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 22	0. 00
THERM AL ZONE: 143 GRAD/ TECH STATIO NS	191 0.9 6	238 8.7 0	80. 08	0.0 82	0. 10	HT G 99.6 % CO	NE WA RK AN N	1/21 06:00: 00	21.0 0	20.9 9	0.006 58	- 11.6 0	0.001 39	0.0 14	0. 00

							ND NS DB										
THERM AL ZONE: 144 V-2 CERAM ICS MACHI NING	829 .86	103 7.3	44. 03	0.0 36	0. 04	5	99.6 % CO ND NS DB	NE WA RK AN N HT G	1/21 07:40: 00	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 11	0. 00	
THERM AL ZONE: 148 CORRI DOR	209 9.1	262 3.9	39. 43	0.0 90	0. 11	3	99.6 % CO ND NS DB	NE WA RK AN N HT G	1/21 06:00: 00	21.0 0	21.0 0	0.007 15	- 11.6 0	0.001 39	0.0 17	0. 00	
THERM AL ZONE: 200 FIBER OP. DIREC TOR	391 5.8	489 4.7	12 7.8	0.1 68	0. 21	0	99.6 % CO ND NS DB	NE WA RK AN N HT G	1/21 06:00: 00	21.0 0	20.9 9	0.006 76	- 11.6 0	0.001 39	0.0 18	0. 00	

THERM AL ZONE: 201 CONFERENCE	495 4.8 3	619 3.5 4	10 5.2 4	0.2 13	0. 29 9	NE WA RK AN N HT G 99.6 % CO ND NS DB	1/21 06:00: 00	21.0 0	20.9 9	0.006 93	11.6 0	0.001 39	0.2 99	0. 00
THERM AL ZONE: 202 EXECUTIVE OFFICE R	201 1.1 4	251 3.9 3	10 2.0 4	0.0 86	0. 10 8	NE WA RK AN N HT G 99.6 % CO ND NS DB	1/21 06:00: 00	21.0 0	20.9 9	0.006 90	11.6 0	0.001 39	0.0 12	0. 00
THERM AL ZONE: 203 SEC.	201 5.7 2	251 9.6 5	10 3.1 3	0.0 86	0. 10 8	NE WA RK AN N HT G 99.6 % CO ND NS DB	1/21 06:00: 00	21.0 0	20.9 9	0.006 91	11.6 0	0.001 39	0.0 12	0. 00
THERM AL ZONE: 204 DEPAR	962 6.6 1	120 33. 26	24 4.1 9	0.4 13	0. 51 6	NE WA RK AN N	1/21 06:00: 00	21.0 0	20.9 8	0.006 41	11.6 0	0.001 39	0.0 24	0. 00

TMENT CHAIR							HT G 99.6 % CO ND NS DB								
THERM AL ZONE: 205 G-3 SPECIA LTY MEAS.	200 9.2 7	251 1.5 8	53. 18	0.0 86	0. 10 8	HT G 99.6 % CO ND NS DB	NE WA RK AN N	1/21 07:20: 00	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 23	0. 00
THERM AL ZONE: 207 VEST.	402 .78	503 .47	10 2.2 1	0.0 17	0. 02 2	HT G 99.6 % CO ND NS DB	NE WA RK AN N	1/21 07:00: 00	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 03	0. 00
THERM AL ZONE: 207A A- 3A POWDE R SYNTH ESIS	922 .12	115 2.6 5	55. 06	0.0 40	0. 04 9	HT G 99.6 % CO	NE WA RK AN N	1/21 07:30: 00	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 10	0. 00

							ND NS DB										
THERM AL ZONE: 209 K-1 SPECT RO ANALY SIS	105 1.2 6	131 4.0 8	56. 69	0.0 45	0. 05 6	HT G 99.6 % CO ND NS DB	NE WA RK AN N HT G 99.6 % CO ND NS DB	1/21 07:20: 00	21.0 0	21.0 0	0.008 00	11.6 0	0.001 39	0.0 11	0. 00		
THERM AL ZONE: 211 S-3 GRAD. PC.	111 5.0 5	139 3.8 1	60. 50	0.0 48	0. 06 0	HT G 99.6 % CO ND NS DB	NE WA RK AN N HT G 99.6 % CO ND NS DB	1/21 07:20: 00	21.0 0	21.0 0	0.008 00	11.6 0	0.001 39	0.0 11	0. 00		
THERM AL ZONE: 212 OFFICE /LAB	464 4.9 6	580 6.2 1	97. 83	0.1 99	0. 24 9	HT G 99.6 % CO ND NS DB	NE WA RK AN N HT G 99.6 % CO ND NS DB	1/21 06:00: 00	21.0 0	20.9 9	0.006 74	11.6 0	0.001 39	0.0 29	0. 00		

THERM AL ZONE: 213 M-1	672 .16	840 .20	37. 10	0.0 29	0. 03	HT G 99.6 %	NE WA RK AN N CO ND NS DB	1/21 08:00: 00	21.0 0	21.0 0	0.008 00	11.6 0	0.001 39	0.0 11	0. 00
THERM AL ZONE: 214 WORD PROCE SSING	162 0.7 1	202 5.8 8	10 2.4 4	0.0 70	0. 08 7	HT G 99.6 %	NE WA RK AN N CO ND NS DB	1/21 06:00: 00	21.0 0	20.9 9	0.006 78	11.6 0	0.001 39	0.0 05	0. 00
THERM AL ZONE: 215 M-2	478 .58	598 .22	34. 37	0.0 21	0. 02 6	HT G 99.6 %	NE WA RK AN N CO ND NS DB	1/21 07:50: 00	21.0 0	21.0 0	0.008 00	11.6 0	0.001 39	0.0 08	0. 00
THERM AL ZONE: 216 FINAN	217 8.9 9	272 3.7 4	96. 50	0.0 93	0. 11 7	NE WA RK AN N	1/21 06:00: 00	21.0 0	20.9 9	0.006 72	11.6 0	0.001 39	0.0 14	0. 00	

CE/AD MIN. CENTE R							HT G 99.6 % CO ND NS DB								
THERM AL ZONE: 217 VEST.	134 .98	168 .73	40. 20	0.0 06	0. 00	0. 7	NE WA RK AN N HT G 99.6 % CO ND NS DB	1/21 07:50: 00	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 02	0. 00
THERM AL ZONE: 217A R- 1 SPUTT ER	669 .06	836 .32	31. 46	0.0 29	0. 03	0. 6	NE WA RK AN N HT G 99.6 % CO ND NS DB	1/21 07:50: 00	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 13	0. 00
THERM AL ZONE: 217B L- 3 ELECT RONIC S	556 .16	695 .20	32. 78	0.0 24	0. 03	0. 0	NE WA RK AN N HT G 99.6 % CO	1/21 07:50: 00	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 10	0. 00

							ND NS DB										
THERM AL ZONE: 218 SEC.	179 1.3 1	223 9.1 3	10 0.7 8	0.0 77	0. 09 6	HT G 99.6 %	NE WA RK AN N CO ND NS DB	1/21 06:00: 00	21.0 0	20.9 9	0.006 77	- 11.6 0	0.001 39	0.0 11	0. 00		
THERM AL ZONE: 218A CENTE R DIREC TOR	277 3.4 4	346 6.8 0	88. 01	0.1 19	0. 14 9	HT G 99.6 %	NE WA RK AN N CO ND NS DB	1/21 06:00: 00	21.0 0	21.0 0	0.007 24	- 11.6 0	0.001 39	0.0 19	0. 00		
THERM AL ZONE: 220 CORRI DOR	130 80. 97	163 51. 21	67. 10	0.5 61	0. 70 1	HT G 99.6 %	NE WA RK AN N CO ND NS DB	1/21 06:00: 00	21.0 0	21.0 0	0.007 05	- 11.6 0	0.001 39	0.0 62	0. 00		

THERM AL ZONE: 221 L-2 ELECT RONIC S	609 .44	761 .81	32. 28	0.0 26	0. 03	HT G 99.6 % CO ND NS DB	NE WA RK AN N	1/21 07:50: 00	21.0 0	21.0 0	0.008 00	11.6 0	0.001 39	0.0 11	0. 00
THERM AL ZONE: 221 L-4 MAGN ETICS	637 .33	796 .67	35. 21	0.0 27	0. 03	HT G 99.6 % CO ND NS DB	NE WA RK AN N	1/21 07:50: 00	21.0 0	21.0 0	0.008 00	11.6 0	0.001 39	0.0 11	0. 00
THERM AL ZONE: 222 CORRI DOR	304 7.6 7	380 9.5 9	61. 70	0.1 31	0. 16	HT G 99.6 % CO ND NS DB	NE WA RK AN N	1/21 06:00: 00	21.0 0	21.0 0	0.007 44	11.6 0	0.001 39	0.0 16	0. 00
THERM AL ZONE: 223 M-3 THERM	726 .75	908 .44	38. 90	0.0 31	0. 03	NE WA RK AN N	1/21 08:00: 00	21.0 0	21.0 0	0.008 00	11.6 0	0.001 39	0.0 11	0. 00	

AL CONDU CTIVIT Y							HT G 99.6 % CO ND NS DB									
THERM AL ZONE: 226 D-3 TAPE CASTI NG	912 .93	114 1.1	40. 6	0.0 92	0. 39	0. 04	HT G 99.6 % CO ND NS DB	NE WA RK AN N	1/21 08:00: 00	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 13	0. 00
THERM AL ZONE: 227 UNDER GRAD DIR.	181 5.4 2	226 9.2 7	91. 15	0.0 78	0. 09	0. 7	HT G 99.6 % CO ND NS DB	NE WA RK AN N	1/21 06:00: 00	21.0 0	20.9 9	0.006 75	- 11.6 0	0.001 39	0.0 12	0. 00
THERM AL ZONE: 228 B-2 POROSI TY SURFA CE	747 .05	933 .81	44. 00	0.0 32	0. 04	0. 0	HT G 99.6 % CO	NE WA RK AN N	1/21 08:00: 00	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 10	0. 00

							ND NS DB										
THERM AL ZONE: 229 SEC.	159 1.7 6	198 9.7 0	92. 89	0.0 68	0. 08 5	HT G 99.6 %	NE WA RK AN N CO ND NS DB	1/21 06:00: 00	21.0 0	20.9 9	0.006 77	- 11.6 0	0.001 39	0.0 10	0. 00		
THERM AL ZONE: 230 B-1 PARTIC LE SIZE ANALY SIS	732 .79	915 .99	43. 31	0.0 31	0. 03 9	HT G 99.6 %	NE WA RK AN N CO ND NS DB	1/21 08:00: 00	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 10	0. 00		
THERM AL ZONE: 231 UNDER GRAD DIR.	160 5.4 8	200 6.8 5	93. 36	0.0 69	0. 08 6	HT G 99.6 %	NE WA RK AN N CO ND NS DB	1/21 06:00: 00	21.0 0	20.9 9	0.006 78	- 11.6 0	0.001 39	0.0 10	0. 00		

THERM AL ZONE: 232 C-4 COILOI DS ANALY SIS	623 .87	779 .83	33. 05	0.0 27	0. 03	HT G 99.6 % CO ND NS DB	NE WA RK AN N 1/21 07:50: 00	21.0 0	21.0 0	0.008 00	11.6 0	0.001 39	0.0 11	0. 00
THERM AL ZONE: 233 OFFICE /LAB	163 2.0 0	204 0.0 0	95. 28	0.0 70	0. 08	HT G 99.6 % CO ND NS DB	NE WA RK AN N 1/21 06:00: 00	21.0 0	20.9 9	0.006 80	11.6 0	0.001 39	0.0 10	0. 00
THERM AL ZONE: 234 C-3 CHEMI CAL ANALY SIS	654 .25	817 .81	35. 24	0.0 28	0. 03	HT G 99.6 % CO ND NS DB	NE WA RK AN N 1/21 07:50: 00	21.0 0	21.0 0	0.008 00	11.6 0	0.001 39	0.0 11	0. 00
THERM AL ZONE: 236 C-2 SOL	647 .23	809 .03	35. 36	0.0 28	0. 03	NE WA RK AN N 1/21 07:50: 00	21.0 0	21.0 0	0.008 00	11.6 0	0.001 39	0.0 11	0. 00	

GEL FORMI NG							HT G 99.6 % CO ND NS DB									
THERM AL ZONE: 237 GRAD/ TECH STATIO NS	381 9.5 9	477 4.4 9	90. 61	0.1 64	0. 20 5	NE WA RK AN N HT G 99.6 % CO ND NS DB	1/21 06:00: 00	21.0 0	20.9 9	0.006 75	- 11.6 0	0.001 39	0.0 25	0. 00		
THERM AL ZONE: 238 C-2 RHEOL OGY	626 .29	782 .87	33. 02	0.0 27	0. 03 4	NE WA RK AN N HT G 99.6 % CO ND NS DB	1/21 07:50: 00	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 11	0. 00		
THERM AL ZONE: 238A TECH	205 .53	256 .91	40. 24	0.0 09	0. 01 1	NE WA RK AN N HT G 99.6 % CO	1/21 08:00: 00	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 02	0. 00		

							ND NS DB										
THERM AL ZONE: 239 OFFICE /LAB	169 0.5 2	211 3.1 4	97. 09	0.0 73	0. 09 1	HT G 99.6 %	NE WA RK AN N HT G 99.6 %	1/21 06:00: 00	21.0 0	20.9 9	0.006 82	11.6 -	0.001 39	0.0 11	0. 00		
THERM AL ZONE: 240 D-4 COMPO SITES	196 1.7 0	245 2.1 2	37. 95	0.0 84	0. 10 5	HT G 99.6 %	NE WA RK AN N HT G 99.6 %	1/21 07:50: 00	21.0 0	21.0 0	0.008 00	11.6 -	0.001 39	0.0 31	0. 00		
THERM AL ZONE: 241 GRAD/ TECH STATIO NS	240 4.2 8	300 5.3 4	97. 64	0.1 03	0. 12 9	HT G 99.6 %	NE WA RK AN N HT G 99.6 %	1/21 06:00: 00	21.0 0	20.9 9	0.006 82	11.6 -	0.001 39	0.0 15	0. 00		

THERM AL ZONE: 242 D-2 PRESS FORM	867 .55	108 4.4 4	45. 73	0.0 37	0. 04 7	HT G 99.6 % CO ND NS DB	NE WA RK AN N 1/21 08:00: 00	21.0 0	21.0 0	0.008 00	11.6 0	0.001 39	0.0 11	0. 00
THERM AL ZONE: 244 D-1 CASTI NG EXTRU SION	780 .04	975 .05	40. 33	0.0 33	0. 04 2	HT G 99.6 % CO ND NS DB	NE WA RK AN N 1/21 08:00: 00	21.0 0	21.0 0	0.008 00	11.6 0	0.001 39	0.0 12	0. 00
THERM AL ZONE: 247 GRAD/ TECH STATIO NS	300 5.2 1	375 6.5 1	11 3.1 0	0.1 29	0. 16 1	HT G 99.6 % CO ND NS DB	NE WA RK AN N 1/21 06:00: 00	21.0 0	20.9 9	0.006 96	11.6 0	0.001 39	0.0 16	0. 00
THERM AL ZONE: LOBBY	153 98. 31	192 47. 89	10 2.5 5	0.6 60	0. 82 5	NE WA RK AN N	NE WA RK AN N 1/21 06:00: 00	21.0 0	20.9 9	0.006 52	11.6 0	0.001 39	0.1 43	0. 00

1ST FLOOR							HT G 99.6 % CO ND NS DB								
THERM AL ZONE: 132-A TECH.	217 .81	272 .26	38. 14	0.0 09	0. 01	2	NE WA RK AN N HT G 99.6 % CO ND NS DB	1/21 07:00: 00	21.0 0	21.0 0	0.008 00	- 11.6 0	0.001 39	0.0 02	0. 00
THERM AL ZONE: 006 CUSTO DIAL STORA GE	272 8.1 9	341 0.2 3	20 3.0 5	0.1 17	0. 14 6	NE WA RK AN N HT G 99.6 % CO ND NS DB	1/21 06:00: 00	21.0 0	21.0 0	0.001 39	- 11.6 0	0.001 39	0.0 04	0. 00	

The Design Load is the zone sensible load only. It does not include any system effects or ventilation loads.

System Design Air Flow Rates

	Calculated cooling [m ³ /s]	User cooling [m ³ /s]	Calculated heating [m ³ /s]	User heating [m ³ /s]
AHU_1	3.59	3.59	1.50	1.50
AHU_2	3.15	3.15	0.82	0.82

AHU_3	10.50	10.50	6.21	6.21
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Plant Loop Coincident Design Fluid Flow Rate Adjustments

Previous Design Volume Flow Rate [m ³ /s]	Algorithm Volume Flow Rate [m ³ /s]	Coincident Design Volume Flow Rate [m ³ /s]	Coincident Size Adjusted	Peak Sizing Period Name	Peak Day into Period {TIMESTAMP}[day]	Peak Hour Of Day {TIMESTAMP}[hr]	Peak Step Start Minute {TIMESTAMP}[min]
No ne							

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Report: System Summary

For: Entire Facility

Timestamp: **2019-12-07 18:09:37** Economizer

	High Limit Shutoff Control	Minimum Outdoor Air [m ³ /s]	Maximum Outdoor Air [m ³ /s]	Return Air Temp Limit	Return Air Enthalpy Limit	Outdoor Air Temperature Limit [C]	Outdoor Air Enthalpy Limit [C]
None							

Demand Controlled Ventilation using Controller:MechanicalVentilation

	Controller:MechanicalVentilation Name	Outdoor Air Per Person [m ³ /s-person]	Outdoor Air Per Area [m ³ /s-m ²]	Air Distribution Effectiveness in Cooling Mode	Air Distribution Effectiveness in Heating Mode	Air Distribution Effectiveness Schedule
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THERMAL ZONE: 101 CONFERENCE	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 102 OFFICE/LAB	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 103 OFFICE/LAB	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 104 SEC.	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 105 OFFICE/LAB	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 106 CONFERENCE	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 107 I-1 SMALL SEM	CONTROLLER MECHANICAL VENTILATION 1	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 108 OFFICE/LAB	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 109 I-2 S.E.M	CONTROLLER MECHANICAL VENTILATION 1	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 110 GRAD/TECH STATIONS	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 111 I-3 SAMPLE PREP	CONTROLLER MECHANICAL VENTILATION 1	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 112 OFFICE /LAB	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0

THERMAL ZONE: 113 H-1 S.T.E.M.	CONTROLLER MECHANICAL VENTILATION 1	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 114 OFFICE/LAB	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 115 P-2 X-RAY	CONTROLLER MECHANICAL VENTILATION 1	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 116 OFFICE/LAB	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 117 U-2 MICROSCOPY	CONTROLLER MECHANICAL VENTILATION 1	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 118 SEC.	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 119 T-2 POLISHING	CONTROLLER MECHANICAL VENTILATION 2	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 120 GRAD/TECH STATIONS	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 121 T-1 GRINDING	CONTROLLER MECHANICAL VENTILATION 2	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 122 OFFICE/LAB	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 123 F-1B REACTIVE GAS	CONTROLLER MECHANICAL VENTILATION 2	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 124 OFFICE/LAB	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0

THERMAL ZONE: 129 OFFICE/LAB	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 130 S-2 GRAPHICS	CONTROLLER MECHANICAL VENTILATION 2	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 130 S-2 TRIBOLOGY	CONTROLLER MECHANICAL VENTILATION 2	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 131 SEC.	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 132 O-2 THERMO MECH. TESTING	CONTROLLER MECHANICAL VENTILATION 2	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 133 OFFICE/LAB	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 134 O-3 HARDNESS MOD. TEST	CONTROLLER MECHANICAL VENTILATION 2	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 135 OFFICE/LAB	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 136 NONDESTRUCTIVE	CONTROLLER MECHANICAL VENTILATION 1	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 137 GRAD/TECH STATIONS	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 138 O-1 UNIVERSAL TESTING	CONTROLLER MECHANICAL VENTILATION 1	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0

THERMAL ZONE: 139 OFFICE/LAB	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 141 OFFICE/LAB	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 142 A-3 PARTICULATE	CONTROLLER MECHANICAL VENTILATION 2	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 143 GRAD/TECH STATIONS	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 144 V-2 CERAMICS MACHINING	CONTROLLER MECHANICAL VENTILATION 2	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 148 CORRIDOR	CONTROLLER MECHANICAL VENTILATION 3	0.0000 00	0.0002 54	1.00	1.00	Constant-0.0
THERMAL ZONE: 200 FIBER OP. DIRECTOR	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 201 CONFERENCE	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 202 EXECUTIVE OFFICER	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 203 SEC.	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 204 DEPARTMENT CHAIR	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0

THERMAL ZONE: 205 G-3 SPECIALTY MEAS.	CONTROLLER MECHANICAL VENTILATION 1	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 207 VEST.	CONTROLLER MECHANICAL VENTILATION 1	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 207A A-3A POWDER SYNTHESIS	CONTROLLER MECHANICAL VENTILATION 1	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 209 K-1 SPECTRO ANALYSIS	CONTROLLER MECHANICAL VENTILATION 1	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 211 S-3 GRAD. PC.	CONTROLLER MECHANICAL VENTILATION 1	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 212 OFFICE/LAB	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 213 M-1 THERMAL ANALYSIS	CONTROLLER MECHANICAL VENTILATION 1	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 214 WORD PROCESSING	CONTROLLER MECHANICAL VENTILATION 3	0.0000 00	0.0002 54	1.00	1.00	Constant-0.0
THERMAL ZONE: 215 M-2 THERMAL ANALYSIS	CONTROLLER MECHANICAL VENTILATION 2	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 216 FINANCE/AD MIN. CENTER	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 217 VEST.	CONTROLLER MECHANICAL VENTILATION 1	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0

THERMAL ZONE: 217A R-1 SPUTTER	CONTROLLER MECHANICAL VENTILATION 1	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 217B L-3 ELECTRONIC S	CONTROLLER MECHANICAL VENTILATION 1	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 218 SEC.	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 218A CENTER DIRECTOR	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 220 CORRIDOR	CONTROLLER MECHANICAL VENTILATION 1	0.0000 00	0.0002 54	1.00	1.00	Constant-0.0
THERMAL ZONE: 221 L-2 ELECTRONIC S	CONTROLLER MECHANICAL VENTILATION 1	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 221 L-4 MAGNETICS	CONTROLLER MECHANICAL VENTILATION 1	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 222 CORRIDOR	CONTROLLER MECHANICAL VENTILATION 3	0.0000 00	0.0002 54	1.00	1.00	Constant-0.0
THERMAL ZONE: 223 M-3 THERMAL CONDUCTIVITY	CONTROLLER MECHANICAL VENTILATION 1	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 226 D-3 TAPE CASTING	CONTROLLER MECHANICAL VENTILATION 2	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 227	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0

UNDERGRAD DIR.						
THERMAL ZONE: 228 B-2 POROSITY SURFACE	CONTROLLER MECHANICAL VENTILATION 2	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 229 SEC.	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 230 B-1 PARTICLE SIZE ANALYSIS	CONTROLLER MECHANICAL VENTILATION 2	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 231 UNDERGRAD DIR.	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 232 C-4 COILOIDS ANALYSIS	CONTROLLER MECHANICAL VENTILATION 2	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 233 OFFICE/LAB	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 234 C-3 CHEMICAL ANALYSIS	CONTROLLER MECHANICAL VENTILATION 2	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 236 C-2 SOL GEL FORMING	CONTROLLER MECHANICAL VENTILATION 2	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 237 GRAD/TECH STATIONS	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 238 C-2 RHEOLOGY	CONTROLLER MECHANICAL VENTILATION 2	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0

THERMAL ZONE: 238A TECH	CONTROLLER MECHANICAL VENTILATION 2	0.0000 00	0.0002 54	1.00	1.00	Constant-0.0
THERMAL ZONE: 239 OFFICE/LAB	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 240 D-4 COMPOSITES	CONTROLLER MECHANICAL VENTILATION 2	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 241 GRAD/TECH STATIONS	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 242 D-2 PRESS FORM	CONTROLLER MECHANICAL VENTILATION 2	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 244 D-1 CASTING EXTRUSION	CONTROLLER MECHANICAL VENTILATION 2	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 247 GRAD/TECH STATIONS	CONTROLLER MECHANICAL VENTILATION 3	0.0094 39	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: LOBBY 1ST FLOOR	CONTROLLER MECHANICAL VENTILATION 3	0.0070 79	0.0000 00	1.00	1.00	Constant-0.0
THERMAL ZONE: 132-A TECH.	CONTROLLER MECHANICAL VENTILATION 2	0.0000 00	0.0002 54	1.00	1.00	Constant-0.0

Time Not Comfortable Based on Simple ASHRAE 55-2004

	Winter Clothes [hr]	Summer Clothes [hr]	Summer or Winter Clothes [hr]
THERMAL ZONE: 101 CONFERENCE	1746.83	4832.50	1709.33
THERMAL ZONE: 102 OFFICE/LAB	2031.00	4939.00	2012.17
THERMAL ZONE: 103 OFFICE/LAB	2275.33	4683.67	2101.50

THERMAL ZONE: 104 SEC.	1751.33	5252.00	1751.33
THERMAL ZONE: 105 OFFICE/LAB	2053.83	4934.50	2039.50
THERMAL ZONE: 106 CONFERENCE	2730.17	4565.50	2310.00
THERMAL ZONE: 107 I-1 SMALL SEM	1554.50	5252.00	1554.50
THERMAL ZONE: 108 OFFICE/LAB	2712.83	4574.00	2338.67
THERMAL ZONE: 109 I-2 S.E.M	1435.83	5252.00	1435.83
THERMAL ZONE: 110 GRAD/TECH STATIONS	2693.50	4466.50	2249.17
THERMAL ZONE: 111 I-3 SAMPLE PREP	1464.67	5252.00	1464.67
THERMAL ZONE: 112 OFFICE /LAB	2627.33	4587.17	2258.17
THERMAL ZONE: 113 H-1 S.T.E.M.	1281.17	5204.17	1281.17
THERMAL ZONE: 114 OFFICE/LAB	2617.00	4599.00	2259.50
THERMAL ZONE: 115 P-2 X-RAY	1257.83	4675.83	1148.67
THERMAL ZONE: 116 OFFICE/LAB	2615.50	4599.00	2259.17
THERMAL ZONE: 117 U-2 MICROSCOPY	1347.00	4867.00	1324.50
THERMAL ZONE: 118 SEC.	2612.83	4606.83	2261.50
THERMAL ZONE: 119 T-2 POLISHING	1339.67	4879.83	1319.67
THERMAL ZONE: 120 GRAD/TECH STATIONS	2584.83	4551.17	2242.83
THERMAL ZONE: 121 T-1 GRINDING	1309.33	4835.33	1280.00
THERMAL ZONE: 122 OFFICE/LAB	2651.50	4606.83	2292.00
THERMAL ZONE: 123 F-1B REACTIVE GAS	1305.17	4567.17	1101.50
THERMAL ZONE: 124 OFFICE/LAB	2997.00	4551.83	2557.33
THERMAL ZONE: 125 F-2 LARGE ELECTRIC FURNACE	5239.17	5252.00	5239.17
THERMAL ZONE: 127 F-3A SMALL ELECTRIC FURNACE	5243.83	5252.00	5243.83
THERMAL ZONE: 129 OFFICE/LAB	2452.17	5074.33	2439.00
THERMAL ZONE: 130 S-2 GRAPHICS	1496.33	5252.00	1496.33

THERMAL ZONE: 130 S-2 TRIBOLOGY	1544.50	5252.00	1544.50
THERMAL ZONE: 131 SEC.	2499.83	5016.00	2471.00
THERMAL ZONE: 132 O-2 THERMO MECH. TESTING	1440.67	5252.00	1440.67
THERMAL ZONE: 133 OFFICE/LAB	2473.83	5042.33	2454.17
THERMAL ZONE: 134 O-3 HARDNESS MOD. TEST	1287.50	5177.00	1287.50
THERMAL ZONE: 135 OFFICE/LAB	2479.50	5017.67	2453.83
THERMAL ZONE: 136 NONDESTRUCTIVE	1383.17	5220.00	1383.17
THERMAL ZONE: 137 GRAD/TECH STATIONS	2396.50	4898.17	2349.17
THERMAL ZONE: 138 O-1 UNIVERSAL TESTING	1370.83	5252.00	1370.83
THERMAL ZONE: 139 OFFICE/LAB	2495.67	4997.00	2463.83
THERMAL ZONE: 141 OFFICE/LAB	2487.00	5030.83	2462.17
THERMAL ZONE: 142 A-3 PARTICULATE	1380.00	5178.00	1380.00
THERMAL ZONE: 143 GRAD/TECH STATIONS	2366.67	5221.67	2366.67
THERMAL ZONE: 144 V-2 CERAMICS MACHINING	1787.67	4599.50	1479.83
THERMAL ZONE: 148 CORRIDOR	2501.17	5249.67	2501.17
THERMAL ZONE: 200 FIBER OP. DIRECTOR	3208.33	4061.33	2299.17
THERMAL ZONE: 201 CONFERENCE	3000.17	3877.17	1868.33
THERMAL ZONE: 202 EXECUTIVE OFFICER	2934.33	4027.00	2029.00
THERMAL ZONE: 203 SEC.	2991.33	4054.17	2096.33
THERMAL ZONE: 204 DEPARTMENT CHAIR	3204.00	4241.67	2391.00
THERMAL ZONE: 205 G-3 SPECIALTY MEAS.	2677.67	4178.67	1928.00

THERMAL ZONE: 207 VEST.	2674.33	4321.50	2025.83
THERMAL ZONE: 207A A-3A POWDER SYNTHESIS	2494.83	4417.50	1971.50
THERMAL ZONE: 209 K-1 SPECTRO ANALYSIS	2562.00	4342.33	1955.83
THERMAL ZONE: 211 S-3 GRAD. PC.	2522.67	4300.50	1880.50
THERMAL ZONE: 212 OFFICE/LAB	3063.83	4185.83	2304.00
THERMAL ZONE: 213 M-1 THERMAL ANALYSIS	2002.50	5243.00	2002.50
THERMAL ZONE: 214 WORD PROCESSING	2633.67	3991.67	1859.50
THERMAL ZONE: 215 M-2 THERMAL ANALYSIS	2087.17	5252.00	2087.17
THERMAL ZONE: 216 FINANCE/ADMIN. CENTER	2906.50	4373.00	2306.50
THERMAL ZONE: 217 VEST.	2356.33	5252.00	2356.33
THERMAL ZONE: 217A R-1 SPUTTER	2040.50	5252.00	2040.50
THERMAL ZONE: 217B L-3 ELECTRONICS	2077.00	5252.00	2077.00
THERMAL ZONE: 218 SEC.	2905.33	4424.67	2341.83
THERMAL ZONE: 218A CENTER DIRECTOR	2999.33	4441.50	2423.17
THERMAL ZONE: 220 CORRIDOR	2719.83	5236.50	2719.83
THERMAL ZONE: 221 L-2 ELECTRONICS	2045.33	5252.00	2045.33
THERMAL ZONE: 221 L-4 MAGNETICS	2000.17	5252.00	2000.17
THERMAL ZONE: 222 CORRIDOR	2542.33	4655.50	2181.33
THERMAL ZONE: 223 M-3 THERMAL CONDUCTIVITY	2059.17	5252.00	2059.17
THERMAL ZONE: 226 D-3 TAPE CASTING	2235.00	4623.83	1903.67
THERMAL ZONE: 227 UNDERGRAD DIR.	2909.83	4410.67	2335.83

THERMAL ZONE: 228 B-2 POROSITY SURFACE	2166.00	4683.67	1874.67
THERMAL ZONE: 229 SEC.	2921.83	4411.00	2353.00
THERMAL ZONE: 230 B-1 PARTICLE SIZE ANALYSIS	2078.33	4765.67	1859.50
THERMAL ZONE: 231 UNDERGRAD DIR.	2942.00	4390.50	2353.33
THERMAL ZONE: 232 C-4 COILOIDS ANALYSIS	2021.50	5252.00	2021.50
THERMAL ZONE: 233 OFFICE/LAB	2980.67	4346.17	2353.00
THERMAL ZONE: 234 C-3 CHEMICAL ANALYSIS	1970.33	5252.00	1970.33
THERMAL ZONE: 236 C-2 SOL GEL FORMING	1972.00	5252.00	1972.00
THERMAL ZONE: 237 GRAD/TECH STATIONS	3099.17	4198.83	2334.67
THERMAL ZONE: 238 C-2 RHEOLOGY	2023.33	5252.00	2023.33
THERMAL ZONE: 238A TECH	2085.33	5247.67	2085.33
THERMAL ZONE: 239 OFFICE/LAB	3008.17	4321.33	2352.83
THERMAL ZONE: 240 D-4 COMPOSITES	2154.33	4463.00	1771.17
THERMAL ZONE: 241 GRAD/TECH STATIONS	2927.00	4377.50	2312.00
THERMAL ZONE: 242 D-2 PRESS FORM	2181.33	4594.00	1826.50
THERMAL ZONE: 244 D-1 CASTING EXTRUSION	1900.00	5209.83	1900.00
THERMAL ZONE: 247 GRAD/TECH STATIONS	3139.83	4186.00	2356.33
THERMAL ZONE: LOBBY 1ST FLOOR	2906.67	4748.17	2664.50
THERMAL ZONE: 132-A TECH.	0.00	0.00	0.00
THERMAL ZONE: 006 CUSTODIAL STORAGE	0.00	0.00	0.00

THERMAL ZONE: 001 MECHANICAL EQUIPMENT ROOM	0.00	0.00	0.00
THERMAL ZONE: 002 PLUMBING EQUIPMENT	0.00	0.00	0.00
THERMAL ZONE: 003 ELECTRICAL ROOM	0.00	0.00	0.00
THERMAL ZONE: 004 ELEV. MACH. ROOM	0.00	0.00	0.00
THERMAL ZONE: 126 CORRIDOR	3491.33	4435.17	2860.17
THERMAL ZONE: 140 STORAGE	0.00	0.00	0.00
THERMAL ZONE: 145 WOMENS RESTROOM	3501.33	4930.50	3282.17
THERMAL ZONE: 146 E DRYING	5246.50	5252.00	5246.50
THERMAL ZONE: 147 MENS RESTROOM	3789.33	4782.00	3446.33
THERMAL ZONE: 149 RECEIVING	3846.33	4563.00	3308.83
THERMAL ZONE: 225 FILE STORAGE	0.00	0.00	0.00
THERMAL ZONE: 228A TECH	5230.17	5252.00	5230.17
THERMAL ZONE: 243 WOMENS RESTROOM	4059.00	4653.33	3595.17
THERMAL ZONE: 245 MENS RESTROOM	4174.17	4667.50	3720.83
THERMAL ZONE: 245A J.C.	0.00	0.00	0.00
THERMAL ZONE: 248 SERVICE CORRIDOR	5212.50	5252.00	5212.50
THERMAL ZONE: E.S.1 1ST FLOOR	5245.67	5252.00	5245.67
THERMAL ZONE: E.S.2 1ST FLOOR	5241.67	5252.00	5241.67
THERMAL ZONE: E.S.3 1ST FLOOR	5239.00	5252.00	5239.00
THERMAL ZONE: E.S.4 1ST FLOOR	5239.33	5252.00	5239.33
THERMAL ZONE: ELEVATOR - 1ST FLOOR	4203.17	4603.50	3679.17
THERMAL ZONE: ELEVATOR 2ND FLOOR	4170.83	4620.00	3651.17

THERMAL ZONE: ELEVATOR BASEMENT	4053.17	4754.00	3687.33
THERMAL ZONE: ES.1 2ND FLOOR	5246.33	5252.00	5246.33
THERMAL ZONE: ES.2 2ND FLOOR	5244.83	5252.00	5244.83
THERMAL ZONE: ES.3 2ND FLOOR	5245.17	5252.00	5245.17
THERMAL ZONE: ES.4 2ND FLOOR	5245.00	5252.00	5245.00
THERMAL ZONE: J.C. 1ST FLOOR	5245.50	5252.00	5245.50
THERMAL ZONE: LOBBY 2ND FLOOR	4519.83	4708.17	4080.33
THERMAL ZONE: OPEN	5241.50	5252.00	5241.50
THERMAL ZONE: SERVICE CORRIDOR - 1ST FLOOR	5155.83	5252.00	5155.83
THERMAL ZONE: SPACE 101	4240.83	4649.17	3754.00
THERMAL ZONE: SPACE 102	4208.17	4202.50	3362.67
THERMAL ZONE: STAIRWELL - 1ST FLOOR	0.00	0.00	0.00
THERMAL ZONE: STAIRWELL - BASEMENT	0.00	0.00	0.00
THERMAL ZONE: STAIRWELL 2ND FLOOR	0.00	0.00	0.00
Facility	5252.00	5252.00	5252.00

Aggregated over the RunPeriods for Weather

Time Setpoint Not Met

	During Heating [hr]	During Cooling [hr]	During Occupied Heating [hr]	During Occupied Cooling [hr]
THERMAL ZONE: 101 CONFERENCE	42.00	0.00	42.00	0.00
THERMAL ZONE: 102 OFFICE/LAB	50.50	0.00	50.50	0.00
THERMAL ZONE: 103 OFFICE/LAB	43.67	0.00	43.67	0.00
THERMAL ZONE: 104 SEC.	187.33	0.00	187.33	0.00

THERMAL ZONE: 105 OFFICE/LAB	50.33	0.00	50.33	0.00
THERMAL ZONE: 106 CONFERENCE	35.83	0.00	35.83	0.00
THERMAL ZONE: 107 I-1 SMALL SEM	121.33	0.00	121.33	0.00
THERMAL ZONE: 108 OFFICE/LAB	33.67	0.00	33.67	0.00
THERMAL ZONE: 109 I-2 S.E.M	111.67	0.00	111.67	0.00
THERMAL ZONE: 110 GRAD/TECH STATIONS	34.67	0.00	34.67	0.00
THERMAL ZONE: 111 I-3 SAMPLE PREP	113.67	0.00	113.67	0.00
THERMAL ZONE: 112 OFFICE /LAB	37.17	0.00	37.17	0.00
THERMAL ZONE: 113 H-1 S.T.E.M.	92.50	0.00	92.50	0.00
THERMAL ZONE: 114 OFFICE/LAB	37.67	0.00	37.67	0.00
THERMAL ZONE: 115 P-2 X- RAY	81.67	0.00	81.67	0.00
THERMAL ZONE: 116 OFFICE/LAB	37.33	0.00	37.33	0.00
THERMAL ZONE: 117 U-2 MICROSCOPY	101.50	0.00	101.50	0.00
THERMAL ZONE: 118 SEC.	37.33	0.00	37.33	0.00
THERMAL ZONE: 119 T-2 POLISHING	103.00	0.00	103.00	0.00
THERMAL ZONE: 120 GRAD/TECH STATIONS	35.50	0.00	35.50	0.00
THERMAL ZONE: 121 T-1 GRINDING	100.50	0.00	100.50	0.00
THERMAL ZONE: 122 OFFICE/LAB	37.50	0.00	37.50	0.00

THERMAL ZONE: 123 F-1B REACTIVE GAS	77.33	0.00	77.33	0.00
THERMAL ZONE: 124 OFFICE/LAB	32.67	0.00	32.67	0.00
THERMAL ZONE: 125 F-2 LARGE ELECTRIC FURNACE	117.33	4949.33	87.33	4336.83
THERMAL ZONE: 127 F-3A SMALL ELECTRIC FURNACE	144.00	4640.67	105.67	4141.83
THERMAL ZONE: 129 OFFICE/LAB	38.67	0.00	38.67	0.00
THERMAL ZONE: 130 S-2 GRAPHICS	87.00	0.00	87.00	0.00
THERMAL ZONE: 130 S-2 TRIBOLOGY	90.83	0.00	90.83	0.00
THERMAL ZONE: 131 SEC.	37.83	0.00	37.83	0.00
THERMAL ZONE: 132 O-2 THERMO MECH. TESTING	83.83	0.00	83.83	0.00
THERMAL ZONE: 133 OFFICE/LAB	38.67	0.00	38.67	0.00
THERMAL ZONE: 134 O-3 HARDNESS MOD. TEST	76.17	0.00	76.17	0.00
THERMAL ZONE: 135 OFFICE/LAB	37.50	0.00	37.50	0.00
THERMAL ZONE: 136 NONDESTRUCTIVE	66.17	0.00	66.17	0.00
THERMAL ZONE: 137 GRAD/TECH STATIONS	36.33	0.00	36.33	0.00
THERMAL ZONE: 138 O-1 UNIVERSAL TESTING	66.50	0.00	66.50	0.00
THERMAL ZONE: 139 OFFICE/LAB	37.67	0.00	37.67	0.00
THERMAL ZONE: 141 OFFICE/LAB	37.83	0.00	37.83	0.00
THERMAL ZONE: 142 A-3 PARTICULATE	59.17	0.00	59.17	0.00

THERMAL ZONE: 143 GRAD/TECH STATIONS	38.50	0.00	38.50	0.00
THERMAL ZONE: 144 V-2 CERAMICS MACHINING	56.17	0.00	56.17	0.00
THERMAL ZONE: 148 CORRIDOR	81.17	0.00	81.17	0.00
THERMAL ZONE: 200 FIBER OP. DIRECTOR	30.67	0.00	30.67	0.00
THERMAL ZONE: 201 CONFERENCE	31.50	0.00	31.50	0.00
THERMAL ZONE: 202 EXECUTIVE OFFICER	32.83	0.00	32.83	0.00
THERMAL ZONE: 203 SEC.	32.83	0.00	32.83	0.00
THERMAL ZONE: 204 DEPARTMENT CHAIR	31.67	0.00	31.67	0.00
THERMAL ZONE: 205 G-3 SPECIALTY MEAS.	63.17	0.00	63.17	0.00
THERMAL ZONE: 207 VEST.	59.50	0.00	59.50	0.00
THERMAL ZONE: 207A A-3A POWDER SYNTHESIS	79.33	0.00	79.33	0.00
THERMAL ZONE: 209 K-1 SPECTRO ANALYSIS	69.50	0.00	69.50	0.00
THERMAL ZONE: 211 S-3 GRAD. PC.	60.00	0.00	60.00	0.00
THERMAL ZONE: 212 OFFICE/LAB	32.00	0.00	32.00	0.00
THERMAL ZONE: 213 M-1 THERMAL ANALYSIS	71.83	0.00	71.83	0.00
THERMAL ZONE: 214 WORD PROCESSING	21.33	0.00	21.33	0.00
THERMAL ZONE: 215 M-2 THERMAL ANALYSIS	99.67	0.00	99.67	0.00
THERMAL ZONE: 216 FINANCE/ADMIN. CENTER	33.17	0.00	33.17	0.00
THERMAL ZONE: 217 VEST.	164.67	0.00	164.67	0.00

THERMAL ZONE: 217A R-1 SPUTTER	91.17	0.00	91.17	0.00
THERMAL ZONE: 217B L-3 ELECTRONICS	97.67	0.00	97.67	0.00
THERMAL ZONE: 218 SEC.	33.50	0.00	33.50	0.00
THERMAL ZONE: 218A CENTER DIRECTOR	35.83	0.00	35.83	0.00
THERMAL ZONE: 220 CORRIDOR	66.00	0.00	66.00	0.00
THERMAL ZONE: 221 L-2 ELECTRONICS	90.33	0.00	90.33	0.00
THERMAL ZONE: 221 L-4 MAGNETICS	75.17	0.00	75.17	0.00
THERMAL ZONE: 222 CORRIDOR	65.50	0.00	65.50	0.00
THERMAL ZONE: 223 M-3 THERMAL CONDUCTIVITY	61.17	0.00	61.17	0.00
THERMAL ZONE: 226 D-3 TAPE CASTING	94.83	0.00	94.83	0.00
THERMAL ZONE: 227 UNDERGRAD DIR.	34.67	0.00	34.67	0.00
THERMAL ZONE: 228 B-2 POROSITY SURFACE	93.17	0.00	93.17	0.00
THERMAL ZONE: 229 SEC.	34.67	0.00	34.67	0.00
THERMAL ZONE: 230 B-1 PARTICLE SIZE ANALYSIS	91.67	0.00	91.67	0.00
THERMAL ZONE: 231 UNDERGRAD DIR.	34.67	0.00	34.67	0.00
THERMAL ZONE: 232 C-4 COILOIDS ANALYSIS	91.83	0.00	91.83	0.00
THERMAL ZONE: 233 OFFICE/LAB	33.83	0.00	33.83	0.00
THERMAL ZONE: 234 C-3 CHEMICAL ANALYSIS	75.00	0.00	75.00	0.00
THERMAL ZONE: 236 C-2 SOL GEL FORMING	75.17	0.00	75.17	0.00

THERMAL ZONE: 237 GRAD/TECH STATIONS	32.67	0.00	32.67	0.00
THERMAL ZONE: 238 C-2 RHEOLOGY	91.67	0.00	91.67	0.00
THERMAL ZONE: 238A TECH	109.67	0.00	109.67	0.00
THERMAL ZONE: 239 OFFICE/LAB	33.50	0.00	33.50	0.00
THERMAL ZONE: 240 D-4 COMPOSITES	78.17	0.00	78.17	0.00
THERMAL ZONE: 241 GRAD/TECH STATIONS	31.83	0.00	31.83	0.00
THERMAL ZONE: 242 D-2 PRESS FORM	77.83	0.00	77.83	0.00
THERMAL ZONE: 244 D-1 CASTING EXTRUSION	57.83	0.00	57.83	0.00
THERMAL ZONE: 247 GRAD/TECH STATIONS	30.67	0.00	30.67	0.00
THERMAL ZONE: LOBBY 1ST FLOOR	39.00	0.00	39.00	0.00
THERMAL ZONE: 132-A TECH.	83.17	0.00	0.00	0.00
THERMAL ZONE: 006 CUSTODIAL STORAGE	4653.33	758.67	0.00	0.00
THERMAL ZONE: 001 MECHANICAL EQUIPMENT ROOM	0.00	0.00	0.00	0.00
THERMAL ZONE: 002 PLUMBING EQUIPMENT	0.00	0.00	0.00	0.00
THERMAL ZONE: 003 ELECTRICAL ROOM	0.00	0.00	0.00	0.00
THERMAL ZONE: 004 ELEV. MACH. ROOM	0.00	0.00	0.00	0.00
THERMAL ZONE: 126 CORRIDOR	0.00	0.00	0.00	0.00
THERMAL ZONE: 140 STORAGE	0.00	0.00	0.00	0.00

THERMAL ZONE: 145 WOMENS RESTROOM	0.00	0.00	0.00	0.00
THERMAL ZONE: 146 E DRYING	0.00	0.00	0.00	0.00
THERMAL ZONE: 147 MENS RESTROOM	0.00	0.00	0.00	0.00
THERMAL ZONE: 149 RECEIVING	0.00	0.00	0.00	0.00
THERMAL ZONE: 225 FILE STORAGE	0.00	0.00	0.00	0.00
THERMAL ZONE: 228A TECH	0.00	0.00	0.00	0.00
THERMAL ZONE: 243 WOMENS RESTROOM	0.00	0.00	0.00	0.00
THERMAL ZONE: 245 MENS RESTROOM	0.00	0.00	0.00	0.00
THERMAL ZONE: 245A J.C.	0.00	0.00	0.00	0.00
THERMAL ZONE: 248 SERVICE CORRIDOR	0.00	0.00	0.00	0.00
THERMAL ZONE: E.S.1 1ST FLOOR	0.00	0.00	0.00	0.00
THERMAL ZONE: E.S.2 1ST FLOOR	0.00	0.00	0.00	0.00
THERMAL ZONE: E.S.3 1ST FLOOR	0.00	0.00	0.00	0.00
THERMAL ZONE: E.S.4 1ST FLOOR	0.00	0.00	0.00	0.00
THERMAL ZONE: ELEVATOR - 1ST FLOOR	0.00	0.00	0.00	0.00
THERMAL ZONE: ELEVATOR 2ND FLOOR	0.00	0.00	0.00	0.00
THERMAL ZONE: ELEVATOR BASEMENT	0.00	0.00	0.00	0.00
THERMAL ZONE: ES.1 2ND FLOOR	0.00	0.00	0.00	0.00
THERMAL ZONE: ES.2 2ND FLOOR	0.00	0.00	0.00	0.00

THERMAL ZONE: ES.3 2ND FLOOR	0.00	0.00	0.00	0.00
THERMAL ZONE: ES.4 2ND FLOOR	0.00	0.00	0.00	0.00
THERMAL ZONE: J.C. 1ST FLOOR	0.00	0.00	0.00	0.00
THERMAL ZONE: LOBBY 2ND FLOOR	0.00	0.00	0.00	0.00
THERMAL ZONE: OPEN	0.00	0.00	0.00	0.00
THERMAL ZONE: SERVICE CORRIDOR - 1ST FLOOR	0.00	0.00	0.00	0.00
THERMAL ZONE: SPACE 101	0.00	0.00	0.00	0.00
THERMAL ZONE: SPACE 102	0.00	0.00	0.00	0.00
THERMAL ZONE: STAIRWELL - 1ST FLOOR	0.00	0.00	0.00	0.00
THERMAL ZONE: STAIRWELL - BASEMENT	0.00	0.00	0.00	0.00
THERMAL ZONE: STAIRWELL 2ND FLOOR	0.00	0.00	0.00	0.00
Facility	4657.83	4949.33	240.50	4336.83

Aggregated over the RunPeriods for Weather

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Report: **Outdoor Air Summary**

For: **Entire Facility**

Timestamp: **2019-12-07 18:09:37** Average Outdoor Air During Occupied Hours

	Average Number of Occupants	Nominal Number of Occupants	Zone Volume [m ³]	Mechanical Ventilation [ach]	Infiltration [ach]	AFN Infiltration [ach]	Simple Ventilation [ach]
THERMAL ZONE: 101 CONFERENCE	7.28	18.92	128.61	0.882	0.203	0.000	0.000

THERMAL ZONE: 102 OFFICE/LAB	0.69	1.24	88.85	0.582	0.203	0.000	0.000
THERMAL ZONE: 103 OFFICE/LAB	0.80	1.43	102.19	0.685	0.292	0.000	0.000
THERMAL ZONE: 104 SEC.	0.35	0.63	44.90	0.528	0.000	0.000	0.000
THERMAL ZONE: 105 OFFICE/LAB	0.69	1.24	89.01	0.580	0.203	0.000	0.000
THERMAL ZONE: 106 CONFERENCE	6.98	18.14	123.28	1.102	0.474	0.000	0.000
THERMAL ZONE: 107 I-1 SMALL SEM	0.73	1.31	93.63	0.346	0.000	0.000	0.000
THERMAL ZONE: 108 OFFICE/LAB	0.62	1.12	79.97	0.877	0.332	0.000	0.000
THERMAL ZONE: 109 I-2 S.E.M	0.99	1.77	126.59	0.338	0.000	0.000	0.000
THERMAL ZONE: 110 GRAD/TECH STATIONS	1.13	2.02	144.20	0.854	0.220	0.000	0.000
THERMAL ZONE: 111 I-3 SAMPLE PREP	0.71	1.26	90.38	0.353	0.000	0.000	0.000
THERMAL ZONE: 112 OFFICE /LAB	0.59	1.06	75.94	0.908	0.220	0.000	0.000
THERMAL ZONE: 113 H-1 S.T.E.M.	0.95	1.71	122.04	0.408	0.000	0.000	0.000
THERMAL ZONE: 114 OFFICE/LAB	0.59	1.06	75.96	0.905	0.220	0.000	0.000

THERMAL ZONE: 115 P-2 X-RAY	1.33	2.38	170.34	0.516	0.000	0.000	0.000
THERMAL ZONE: 116 OFFICE/LAB	0.60	1.07	76.68	0.902	0.220	0.000	0.000
THERMAL ZONE: 117 U-2 MICROSCOPY	0.67	1.20	85.84	0.537	0.000	0.000	0.000
THERMAL ZONE: 118 SEC.	0.58	1.04	74.40	0.910	0.220	0.000	0.000
THERMAL ZONE: 119 T-2 POLISHING	0.66	1.19	85.15	0.522	0.000	0.000	0.000
THERMAL ZONE: 120 GRAD/TECH STATIONS	0.88	1.57	112.20	0.834	0.220	0.000	0.000
THERMAL ZONE: 121 T-1 GRINDING	0.68	1.22	87.50	0.523	0.000	0.000	0.000
THERMAL ZONE: 122 OFFICE/LAB	0.59	1.06	75.63	0.910	0.220	0.000	0.000
THERMAL ZONE: 123 F-1B REACTIVE GAS	0.67	1.20	86.12	0.559	0.000	0.000	0.000
THERMAL ZONE: 124 OFFICE/LAB	0.69	1.23	88.23	0.913	0.571	0.000	0.000
THERMAL ZONE: 125 F-2 LARGE ELECTRIC FURNACE	0.68	1.22	87.14	0.000	0.000	0.000	0.000
THERMAL ZONE: 127 F-3A SMALL ELECTRIC FURNACE	0.68	1.22	87.54	0.000	0.000	0.000	0.000

THERMAL ZONE: 129 OFFICE/LAB	0.64	1.14	81.90	0.603	0.222	0.000	0.000
THERMAL ZONE: 130 S-2 GRAPHICS	0.66	1.18	84.56	0.354	0.000	0.000	0.000
THERMAL ZONE: 130 S-2 TRIBOLOGY	0.72	1.29	92.21	0.349	0.000	0.000	0.000
THERMAL ZONE: 131 SEC.	0.58	1.05	74.92	0.645	0.222	0.000	0.000
THERMAL ZONE: 132 O-2 THERMO MECH. TESTING	0.88	1.58	113.11	0.348	0.000	0.000	0.000
THERMAL ZONE: 133 OFFICE/LAB	0.60	1.07	76.81	0.619	0.222	0.000	0.000
THERMAL ZONE: 134 O-3 HARDNESS MOD. TEST	0.89	1.60	114.56	0.419	0.000	0.000	0.000
THERMAL ZONE: 135 OFFICE/LAB	0.58	1.03	74.00	0.637	0.221	0.000	0.000
THERMAL ZONE: 136 NONDESTRUCTIVE	0.64	1.14	81.58	0.423	0.000	0.000	0.000
THERMAL ZONE: 137 GRAD/TECH STATIONS	0.88	1.57	112.20	0.641	0.221	0.000	0.000
THERMAL ZONE: 138 O-1 UNIVERSAL TESTING	1.34	2.39	171.08	0.360	0.000	0.000	0.000
THERMAL ZONE: 139 OFFICE/LAB	0.57	1.02	72.66	0.654	0.221	0.000	0.000

THERMAL ZONE: 141 OFFICE/LAB	0.60	1.07	76.32	0.635	0.221	0.000	0.000
THERMAL ZONE: 142 A-3 PARTICULATE	1.32	2.37	169.27	0.398	0.000	0.000	0.000
THERMAL ZONE: 143 GRAD/TECH STATIONS	0.85	1.53	109.10	0.542	0.221	0.000	0.000
THERMAL ZONE: 144 V-2 CERAMICS MACHINING	0.67	1.20	86.16	0.642	0.000	0.000	0.000
THERMAL ZONE: 148 CORRIDOR	0.40	0.72	243.42	0.277	0.059	0.000	0.000
THERMAL ZONE: 200 FIBER OP. DIRECTOR	1.09	1.96	140.00	1.153	0.297	0.000	0.000
THERMAL ZONE: 201 CONFERENCE	12.19	31.67	215.25	1.405	0.205	0.000	0.000
THERMAL ZONE: 202 EXECUTIVE OFFICER	0.70	1.26	90.11	1.017	0.205	0.000	0.000
THERMAL ZONE: 203 SEC.	0.70	1.25	89.36	1.011	0.205	0.000	0.000
THERMAL ZONE: 204 DEPARTMENT CHAIR	1.41	2.52	180.24	1.472	0.778	0.000	0.000
THERMAL ZONE: 205 G-3 SPECIALTY MEAS.	1.35	2.41	172.73	0.686	0.000	0.000	0.000
THERMAL ZONE: 207 VEST.	0.16	0.27	18.02	1.086	0.000	0.000	0.000

THERMAL ZONE: 207A A-3A POWDER SYNTHESIS	0.60	1.07	76.58	0.743	0.000	0.000	0.000
THERMAL ZONE: 209 K-1 SPECTRO ANALYSIS	0.66	1.19	84.78	0.740	0.000	0.000	0.000
THERMAL ZONE: 211 S-3 GRAD. PC.	0.66	1.18	84.26	0.778	0.000	0.000	0.000
THERMAL ZONE: 212 OFFICE/LAB	1.69	3.03	217.07	1.009	0.233	0.000	0.000
THERMAL ZONE: 213 M-1 THERMAL ANALYSIS	0.65	1.16	82.84	0.402	0.000	0.000	0.000
THERMAL ZONE: 214 WORD PROCESSING	0.82	2.13	72.33	1.776	0.233	0.000	0.000
THERMAL ZONE: 215 M-2 THERMAL ANALYSIS	0.50	0.89	63.66	0.356	0.000	0.000	0.000
THERMAL ZONE: 216 FINANCE/ADMIN. CENTER	0.81	1.44	103.24	1.024	0.233	0.000	0.000
THERMAL ZONE: 217 VEST.	0.13	0.23	15.35	0.431	0.000	0.000	0.000
THERMAL ZONE: 217A R-1 SPUTTER	0.76	1.36	97.24	0.341	0.000	0.000	0.000
THERMAL ZONE: 217B L-3 ELECTRONICS	0.61	1.08	77.56	0.350	0.000	0.000	0.000
THERMAL ZONE: 218 SEC.	0.63	1.14	81.27	1.078	0.233	0.000	0.000

THERMAL ZONE: 218A CENTER DIRECTOR	1.12	2.01	144.08	0.911	0.116	0.000	0.000
THERMAL ZONE: 220 CORRIDOR	1.46	2.62	891.30	0.271	0.114	0.000	0.000
THERMAL ZONE: 221 L-2 ELECTRONICS	0.67	1.21	86.33	0.344	0.000	0.000	0.000
THERMAL ZONE: 221 L-4 MAGNETICS	0.65	1.16	82.77	0.356	0.000	0.000	0.000
THERMAL ZONE: 222 CORRIDOR	0.37	0.66	225.82	0.788	0.058	0.000	0.000
THERMAL ZONE: 223 M-3 THERMAL CONDUCTIVITY	0.67	1.19	85.41	0.360	0.000	0.000	0.000
THERMAL ZONE: 226 D-3 TAPE CASTING	0.80	1.43	102.00	0.627	0.000	0.000	0.000
THERMAL ZONE: 227 UNDERGRAD DIR.	0.71	1.27	91.06	0.972	0.214	0.000	0.000
THERMAL ZONE: 228 B-2 POROSITY SURFACE	0.61	1.09	77.63	0.679	0.000	0.000	0.000
THERMAL ZONE: 229 SEC.	0.61	1.10	78.34	0.992	0.214	0.000	0.000
THERMAL ZONE: 230 B-1 PARTICLE SIZE ANALYSIS	0.60	1.08	77.36	0.650	0.000	0.000	0.000
THERMAL ZONE: 231	0.61	1.10	78.62	0.992	0.214	0.000	0.000

UNDERGRAD DIR.							
THERMAL ZONE: 232 C-4 COILOIDS ANALYSIS	0.67	1.21	86.31	0.357	0.000	0.000	0.000
THERMAL ZONE: 233 OFFICE/LAB	0.61	1.09	78.31	1.001	0.214	0.000	0.000
THERMAL ZONE: 234 C-3 CHEMICAL ANALYSIS	0.66	1.19	84.88	0.350	0.000	0.000	0.000
THERMAL ZONE: 236 C-2 SOL GEL FORMING	0.65	1.17	83.69	0.350	0.000	0.000	0.000
THERMAL ZONE: 237 GRAD/TECH STATIONS	1.50	2.69	192.72	0.930	0.214	0.000	0.000
THERMAL ZONE: 238 C-2 RHEOLOGY	0.68	1.21	86.72	0.352	0.000	0.000	0.000
THERMAL ZONE: 238A TECH	0.13	0.34	23.35	0.538	0.000	0.000	0.000
THERMAL ZONE: 239 OFFICE/LAB	0.62	1.11	79.61	1.010	0.213	0.000	0.000
THERMAL ZONE: 240 D-4 COMPOSITES	1.84	3.30	236.32	0.571	0.000	0.000	0.000
THERMAL ZONE: 241 GRAD/TECH STATIONS	0.88	1.57	112.59	1.043	0.213	0.000	0.000
THERMAL ZONE: 242 D-2 PRESS FORM	0.68	1.21	86.73	0.677	0.000	0.000	0.000

THERMAL ZONE: 244 D-1 CASTING EXTRUSION	0.69	1.24	88.42	0.405	0.000	0.000	0.000
THERMAL ZONE: 247 GRAD/TECH STATIONS	0.95	1.70	121.49	1.063	0.213	0.000	0.000
THERMAL ZONE: LOBBY 1ST FLOOR	7.77	20.20	686.49	0.804	0.297	0.000	0.000

Values shown for a single zone without multipliers

Minimum Outdoor Air During Occupied Hours

	Average Number of Occupants	Nominal Number of Occupants	Zone Volume [m ³]	Mechanical Ventilation [ach]	Infiltration [ach]	AFN Infiltration [ach]	Simple Ventilation [ach]
THERMAL ZONE: 101 CONFERENCE	7.28	18.92	128.61	0.313	0.003	0.000	0.000
THERMAL ZONE: 102 OFFICE/LAB	0.69	1.24	88.85	0.222	0.003	0.000	0.000
THERMAL ZONE: 103 OFFICE/LAB	0.80	1.43	102.19	0.235	0.004	0.000	0.000
THERMAL ZONE: 104 SEC.	0.35	0.63	44.90	0.274	0.000	0.000	0.000
THERMAL ZONE: 105 OFFICE/LAB	0.69	1.24	89.01	0.221	0.003	0.000	0.000
THERMAL ZONE: 106 CONFERENCE	6.98	18.14	123.28	0.340	0.006	0.000	0.000
THERMAL ZONE: 107 I-1 SMALL SEM	0.73	1.31	93.63	0.158	0.000	0.000	0.000

THERMAL ZONE: 108 OFFICE/LAB	0.62	1.12	79.97	0.324	0.004	0.000	0.000
THERMAL ZONE: 109 I-2 S.E.M	0.99	1.77	126.59	0.148	0.000	0.000	0.000
THERMAL ZONE: 110 GRAD/TECH STATIONS	1.13	2.02	144.20	0.463	0.003	0.000	0.000
THERMAL ZONE: 111 I-3 SAMPLE PREP	0.71	1.26	90.38	0.176	0.000	0.000	0.000
THERMAL ZONE: 112 OFFICE /LAB	0.59	1.06	75.94	0.495	0.003	0.000	0.000
THERMAL ZONE: 113 H-1 S.T.E.M.	0.95	1.71	122.04	0.200	0.000	0.000	0.000
THERMAL ZONE: 114 OFFICE/LAB	0.59	1.06	75.96	0.493	0.003	0.000	0.000
THERMAL ZONE: 115 P-2 X-RAY	1.33	2.38	170.34	0.213	0.000	0.000	0.000
THERMAL ZONE: 116 OFFICE/LAB	0.60	1.07	76.68	0.492	0.003	0.000	0.000
THERMAL ZONE: 117 U-2 MICROSCOPY	0.67	1.20	85.84	0.223	0.000	0.000	0.000
THERMAL ZONE: 118 SEC.	0.58	1.04	74.40	0.497	0.003	0.000	0.000
THERMAL ZONE: 119 T-2 POLISHING	0.66	1.19	85.15	0.259	0.000	0.000	0.000
THERMAL ZONE: 120	0.88	1.57	112.20	0.454	0.003	0.000	0.000

GRAD/TECH STATIONS							
THERMAL ZONE: 121 T-1 GRINDING	0.68	1.22	87.50	0.250	0.000	0.000	0.000
THERMAL ZONE: 122 OFFICE/LAB	0.59	1.06	75.63	0.497	0.003	0.000	0.000
THERMAL ZONE: 123 F-1B REACTIVE GAS	0.67	1.20	86.12	0.184	0.000	0.000	0.000
THERMAL ZONE: 124 OFFICE/LAB	0.69	1.23	88.23	0.333	0.007	0.000	0.000
THERMAL ZONE: 125 F-2 LARGE ELECTRIC FURNACE	0.68	1.22	87.14	0.000	0.000	0.000	0.000
THERMAL ZONE: 127 F-3A SMALL ELECTRIC FURNACE	0.68	1.22	87.54	0.000	0.000	0.000	0.000
THERMAL ZONE: 129 OFFICE/LAB	0.64	1.14	81.90	0.311	0.003	0.000	0.000
THERMAL ZONE: 130 S-2 GRAPHICS	0.66	1.18	84.56	0.140	0.000	0.000	0.000
THERMAL ZONE: 130 S-2 TRIBOLOGY	0.72	1.29	92.21	0.135	0.000	0.000	0.000
THERMAL ZONE: 131 SEC.	0.58	1.05	74.92	0.333	0.003	0.000	0.000
THERMAL ZONE: 132 O-2 THERMO MECH. TESTING	0.88	1.58	113.11	0.137	0.000	0.000	0.000

THERMAL ZONE: 133 OFFICE/LAB	0.60	1.07	76.81	0.318	0.003	0.000	0.000
THERMAL ZONE: 134 O-3 HARDNESS MOD. TEST	0.89	1.60	114.56	0.190	0.000	0.000	0.000
THERMAL ZONE: 135 OFFICE/LAB	0.58	1.03	74.00	0.328	0.003	0.000	0.000
THERMAL ZONE: 136 NONDESTRUCTIVE	0.64	1.14	81.58	0.174	0.000	0.000	0.000
THERMAL ZONE: 137 GRAD/TECH STATIONS	0.88	1.57	112.20	0.311	0.003	0.000	0.000
THERMAL ZONE: 138 O-1 UNIVERSAL TESTING	1.34	2.39	171.08	0.130	0.000	0.000	0.000
THERMAL ZONE: 139 OFFICE/LAB	0.57	1.02	72.66	0.318	0.003	0.000	0.000
THERMAL ZONE: 141 OFFICE/LAB	0.60	1.07	76.32	0.327	0.003	0.000	0.000
THERMAL ZONE: 142 A-3 PARTICULATE	1.32	2.37	169.27	0.140	0.000	0.000	0.000
THERMAL ZONE: 143 GRAD/TECH STATIONS	0.85	1.53	109.10	0.287	0.003	0.000	0.000
THERMAL ZONE: 144 V-2 CERAMICS MACHINING	0.67	1.20	86.16	0.202	0.000	0.000	0.000

THERMAL ZONE: 148 CORRIDOR	0.40	0.72	243.42	0.109	0.001	0.000	0.000
THERMAL ZONE: 200 FIBER OP. DIRECTOR	1.09	1.96	140.00	0.385	0.004	0.000	0.000
THERMAL ZONE: 201 CONFERENCE	12.19	31.67	215.25	0.643	0.003	0.000	0.000
THERMAL ZONE: 202 EXECUTIVE OFFICER	0.70	1.26	90.11	0.400	0.003	0.000	0.000
THERMAL ZONE: 203 SEC.	0.70	1.25	89.36	0.424	0.003	0.000	0.000
THERMAL ZONE: 204 DEPARTMENT CHAIR	1.41	2.52	180.24	0.447	0.010	0.000	0.000
THERMAL ZONE: 205 G-3 SPECIALTY MEAS.	1.35	2.41	172.73	0.254	0.000	0.000	0.000
THERMAL ZONE: 207 VEST.	0.16	0.27	18.02	0.325	0.000	0.000	0.000
THERMAL ZONE: 207A A-3A POWDER SYNTHESIS	0.60	1.07	76.58	0.276	0.000	0.000	0.000
THERMAL ZONE: 209 K-1 SPECTRO ANALYSIS	0.66	1.19	84.78	0.270	0.000	0.000	0.000
THERMAL ZONE: 211 S-3 GRAD. PC.	0.66	1.18	84.26	0.262	0.000	0.000	0.000
THERMAL ZONE: 212 OFFICE/LAB	1.69	3.03	217.07	0.455	0.003	0.000	0.000

THERMAL ZONE: 213 M-1 THERMAL ANALYSIS	0.65	1.16	82.84	0.164	0.000	0.000	0.000
THERMAL ZONE: 214 WORD PROCESSING	0.82	2.13	72.33	0.520	0.003	0.000	0.000
THERMAL ZONE: 215 M-2 THERMAL ANALYSIS	0.50	0.89	63.66	0.139	0.000	0.000	0.000
THERMAL ZONE: 216 FINANCE/ADMIN. CENTER	0.81	1.44	103.24	0.458	0.003	0.000	0.000
THERMAL ZONE: 217 VEST.	0.13	0.23	15.35	0.153	0.000	0.000	0.000
THERMAL ZONE: 217A R-1 SPUTTER	0.76	1.36	97.24	0.135	0.000	0.000	0.000
THERMAL ZONE: 217B L-3 ELECTRONICS	0.61	1.08	77.56	0.148	0.000	0.000	0.000
THERMAL ZONE: 218 SEC.	0.63	1.14	81.27	0.483	0.003	0.000	0.000
THERMAL ZONE: 218A CENTER DIRECTOR	1.12	2.01	144.08	0.389	0.001	0.000	0.000
THERMAL ZONE: 220 CORRIDOR	1.46	2.62	891.30	0.096	0.001	0.000	0.000
THERMAL ZONE: 221 L-2 ELECTRONICS	0.67	1.21	86.33	0.136	0.000	0.000	0.000
THERMAL ZONE: 221 L-4 MAGNETICS	0.65	1.16	82.77	0.130	0.000	0.000	0.000

THERMAL ZONE: 222 CORRIDOR	0.37	0.66	225.82	0.253	0.001	0.000	0.000
THERMAL ZONE: 223 M-3 THERMAL CONDUCTIVITY	0.67	1.19	85.41	0.121	0.000	0.000	0.000
THERMAL ZONE: 226 D-3 TAPE CASTING	0.80	1.43	102.00	0.264	0.000	0.000	0.000
THERMAL ZONE: 227 UNDERGRAD DIR.	0.71	1.27	91.06	0.390	0.003	0.000	0.000
THERMAL ZONE: 228 B-2 POROSITY SURFACE	0.61	1.09	77.63	0.287	0.000	0.000	0.000
THERMAL ZONE: 229 SEC.	0.61	1.10	78.34	0.421	0.003	0.000	0.000
THERMAL ZONE: 230 B-1 PARTICLE SIZE ANALYSIS	0.60	1.08	77.36	0.291	0.000	0.000	0.000
THERMAL ZONE: 231 UNDERGRAD DIR.	0.61	1.10	78.62	0.420	0.003	0.000	0.000
THERMAL ZONE: 232 C-4 COILOIDS ANALYSIS	0.67	1.21	86.31	0.133	0.000	0.000	0.000
THERMAL ZONE: 233 OFFICE/LAB	0.61	1.09	78.31	0.422	0.003	0.000	0.000
THERMAL ZONE: 234 C-3 CHEMICAL ANALYSIS	0.66	1.19	84.88	0.115	0.000	0.000	0.000

THERMAL ZONE: 236 C-2 SOL GEL FORMING	0.65	1.17	83.69	0.115	0.000	0.000	0.000
THERMAL ZONE: 237 GRAD/TECH STATIONS	1.50	2.69	192.72	0.391	0.003	0.000	0.000
THERMAL ZONE: 238 C-2 RHEOLOGY	0.68	1.21	86.72	0.132	0.000	0.000	0.000
THERMAL ZONE: 238A TECH	0.13	0.34	23.35	0.174	0.000	0.000	0.000
THERMAL ZONE: 239 OFFICE/LAB	0.62	1.11	79.61	0.407	0.003	0.000	0.000
THERMAL ZONE: 240 D-4 COMPOSITES	1.84	3.30	236.32	0.269	0.000	0.000	0.000
THERMAL ZONE: 241 GRAD/TECH STATIONS	0.88	1.57	112.59	0.367	0.003	0.000	0.000
THERMAL ZONE: 242 D-2 PRESS FORM	0.68	1.21	86.73	0.267	0.000	0.000	0.000
THERMAL ZONE: 244 D-1 CASTING EXTRUSION	0.69	1.24	88.42	0.127	0.000	0.000	0.000
THERMAL ZONE: 247 GRAD/TECH STATIONS	0.95	1.70	121.49	0.376	0.003	0.000	0.000
THERMAL ZONE: LOBBY 1ST FLOOR	7.77	20.20	686.49	0.293	0.004	0.000	0.000

Values shown for a single zone without multipliers

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Report: **Object Count Summary**

For: **Entire Facility**

Timestamp: **2019-12-07 18:09:37 Surfaces by Class**

	Total	Outdoors
Wall	776	134
Floor	276	66
Roof	212	2
Internal Mass	0	0
Building Detached Shading	0	0
Fixed Detached Shading	0	0
Window	70	70
Door	2	2
Glass Door	0	0
Shading	0	0
Overhang	0	0
Fin	0	0
Tubular Daylighting Device Dome	0	0
Tubular Daylighting Device Diffuser	0	0

HVAC

	Count
HVAC Air Loops	3
Conditioned Zones	90
Unconditioned Zones	36
Supply Plenums	0
Return Plenums	0

Input Fields

	Count
IDF Objects	3427
Defaulted Fields	3663
Fields with Defaults	10060
Autosized Fields	519
Autosizable Fields	641
Autocalculated Fields	3238
Autocalculatable Fields	3239

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Report: **Energy Meters**

For: **Entire Facility**

Timestamp: **2019-12-07 18:09:37 Annual and Peak Values - Electricity**

	Electricity Annual Value [GJ]	Electricity Minimum Value [W]	Timestamp of Minimum {TIMESTAMP}	Electricity Maximum Value [W]	Timestamp of Maximum {TIMESTAMP}
Electricity:Facility	3967.97	32856.77	07-JAN-03:00	257279.93	19-JUL-16:50
Electricity:Building	2966.81	29180.05	01-JAN-00:10	199434.83	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 218A CENTER DIRECTOR	9.50	102.40	01-JAN-00:10	622.03	02-JAN-08:10
InteriorLights:Electricity	1732.24	7459.65	01-JAN-00:10	134273.63	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 218A CENTER DIRECTOR	4.87	20.99	01-JAN-00:10	377.79	02-JAN-08:10
General:InteriorLights:Electricity	1732.24	7459.65	01-JAN-00:10	134273.63	02-JAN-08:10

Electricity:Zone:THERMAL ZONE: 102 OFFICE/LAB	9.12	90.82	01-JAN-00:10	611.16	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 102 OFFICE/LAB	5.24	22.58	01-JAN-00:10	406.42	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 103 OFFICE/LAB	10.49	104.46	01-JAN-00:10	702.87	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 103 OFFICE/LAB	6.03	25.97	01-JAN-00:10	467.41	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 104 SEC.	4.61	45.90	01-JAN-00:10	308.83	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 104 SEC.	2.65	11.41	01-JAN-00:10	205.37	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 105 OFFICE/LAB	9.14	90.98	01-JAN-00:10	612.23	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 105 OFFICE/LAB	5.25	22.62	01-JAN-00:10	407.13	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 107 I-1 SMALL SEM	9.61	95.71	01-JAN-00:10	644.03	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 107 I-1 SMALL SEM	5.53	23.79	01-JAN-00:10	428.28	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 108 OFFICE/LAB	8.21	81.75	01-JAN-00:10	550.10	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 108 OFFICE/LAB	4.72	20.32	01-JAN-00:10	365.81	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 109 I-2 S.E.M	13.00	129.40	01-JAN-00:10	870.72	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 109 I-2 S.E.M	7.47	32.17	01-JAN-00:10	579.02	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 110 GRAD/TECH STATIONS	14.80	147.40	01-JAN-00:10	991.87	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 110 GRAD/TECH STATIONS	8.51	36.64	01-JAN-00:10	659.59	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 111 I-3 SAMPLE PREP	9.28	92.39	01-JAN-00:10	621.70	02-JAN-08:10

InteriorLights:Electricity:Zone:THE RMAL ZONE: 111 I-3 SAMPLE PREP	5.33	22.97	01-JAN-00:10	413.43	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 112 OFFICE /LAB	7.80	77.63	01-JAN-00:10	522.37	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 112 OFFICE /LAB	4.48	19.30	01-JAN-00:10	347.37	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 113 H-1 S.T.E.M.	12.53	124.75	01-JAN-00:10	839.45	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 113 H-1 S.T.E.M.	7.20	31.01	01-JAN-00:10	558.23	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 114 OFFICE/LAB	7.80	77.65	01-JAN-00:10	522.51	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 114 OFFICE/LAB	4.48	19.30	01-JAN-00:10	347.47	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 115 P-2 X-RAY	17.49	174.12	01-JAN-00:10	1171.65	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 115 P-2 X-RAY	10.05	43.29	01-JAN-00:10	779.15	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 116 OFFICE/LAB	7.87	78.39	01-JAN-00:10	527.47	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 116 OFFICE/LAB	4.53	19.49	01-JAN-00:10	350.76	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 117 U-2 MICROSCOPY	8.81	87.75	01-JAN-00:10	590.43	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 117 U-2 MICROSCOPY	5.07	21.81	01-JAN-00:10	392.64	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 118 SEC.	7.64	76.05	01-JAN-00:10	511.74	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 118 SEC.	4.39	18.91	01-JAN-00:10	340.30	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 119 T-2 POLISHING	8.74	87.04	01-JAN-00:10	585.69	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 119 T-2 POLISHING	5.02	21.64	01-JAN-00:10	389.48	02-JAN-08:10

Electricity:Zone:THERMAL ZONE: 120 GRAD/TECH STATIONS	11.52	114.70	01-JAN-00:10	771.79	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 120 GRAD/TECH STATIONS	6.62	28.51	01-JAN-00:10	513.24	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 121 T-1 GRINDING	8.98	89.45	01-JAN-00:10	601.88	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 121 T-1 GRINDING	5.16	22.24	01-JAN-00:10	400.25	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 122 OFFICE/LAB	7.76	77.30	01-JAN-00:10	520.18	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 122 OFFICE/LAB	4.46	19.22	01-JAN-00:10	345.92	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 123 F-1B REACTIVE GAS	8.84	88.04	01-JAN-00:10	592.39	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 123 F-1B REACTIVE GAS	5.08	21.89	01-JAN-00:10	393.94	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 124 OFFICE/LAB	9.06	90.19	01-JAN-00:10	606.89	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 124 OFFICE/LAB	5.21	22.42	01-JAN-00:10	403.58	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 125 F-2 LARGE ELECTRIC FURNACE	8.95	89.07	01-JAN-00:10	599.37	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 125 F-2 LARGE ELECTRIC FURNACE	5.14	22.14	01-JAN-00:10	398.58	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 127 F-3A SMALL ELECTRIC FURNACE	8.99	89.49	01-JAN-00:10	602.16	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 127 F-3A SMALL ELECTRIC FURNACE	5.17	22.25	01-JAN-00:10	400.43	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 129 OFFICE/LAB	8.41	83.72	01-JAN-00:10	563.35	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 129 OFFICE/LAB	4.83	20.81	01-JAN-00:10	374.63	02-JAN-08:10

Electricity:Zone:THERMAL ZONE: 130 S-2 GRAPHICS	8.68	86.43	01-JAN-00:10	581.61	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 130 S-2 GRAPHICS	4.99	21.49	01-JAN-00:10	386.77	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 130 S-2 TRIBOLOGY	9.47	94.25	01-JAN-00:10	634.23	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 130 S-2 TRIBOLOGY	5.44	23.43	01-JAN-00:10	421.76	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 131 SEC.	7.69	76.58	01-JAN-00:10	515.30	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 131 SEC.	4.42	19.04	01-JAN-00:10	342.68	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 132 O-2 THERMO MECH. TESTING	11.61	115.63	01-JAN-00:10	778.05	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 132 O-2 THERMO MECH. TESTING	6.67	28.74	01-JAN-00:10	517.40	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 133 OFFICE/LAB	7.89	78.51	01-JAN-00:10	528.30	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 133 OFFICE/LAB	4.53	19.52	01-JAN-00:10	351.32	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 134 O-3 HARDNESS MOD. TEST	11.76	117.10	01-JAN-00:10	787.99	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 134 O-3 HARDNESS MOD. TEST	6.76	29.11	01-JAN-00:10	524.01	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 135 OFFICE/LAB	7.60	75.65	01-JAN-00:10	509.02	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 135 OFFICE/LAB	4.37	18.81	01-JAN-00:10	338.50	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 136 NONDESTRUCTIVE	8.38	83.39	01-JAN-00:10	561.13	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 136 NONDESTRUCTIVE	4.81	20.73	01-JAN-00:10	373.15	02-JAN-08:10

Electricity:Zone:THERMAL ZONE: 137 GRAD/TECH STATIONS	11.52	114.69	01-JAN-00:10	771.73	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 137 GRAD/TECH STATIONS	6.62	28.51	01-JAN-00:10	513.20	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 138 O-1 UNIVERSAL TESTING	17.56	174.88	01-JAN-00:10	1176.77	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 138 O-1 UNIVERSAL TESTING	10.10	43.48	01-JAN-00:10	782.55	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 139 OFFICE/LAB	7.46	74.28	01-JAN-00:10	499.82	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 139 OFFICE/LAB	4.29	18.47	01-JAN-00:10	332.38	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 141 OFFICE/LAB	7.84	78.01	01-JAN-00:10	524.95	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 141 OFFICE/LAB	4.50	19.39	01-JAN-00:10	349.09	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 142 A-3 PARTICULATE	17.38	173.03	01-JAN-00:10	1164.32	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 142 A-3 PARTICULATE	9.99	43.02	01-JAN-00:10	774.27	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 143 GRAD/TECH STATIONS	11.20	111.52	01-JAN-00:10	750.43	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 143 GRAD/TECH STATIONS	6.44	27.72	01-JAN-00:10	499.03	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 144 V-2 CERAMICS MACHINING	8.85	88.08	01-JAN-00:10	592.67	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 144 V-2 CERAMICS MACHINING	5.08	21.90	01-JAN-00:10	394.13	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 146 E DRYING	8.81	87.75	01-JAN-00:10	590.46	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 146 E DRYING	5.07	21.81	01-JAN-00:10	392.66	02-JAN-08:10

Electricity:Zone:THERMAL ZONE: 149 RECEIVING	11.77	117.16	01-JAN-00:10	788.37	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 149 RECEIVING	6.76	29.13	01-JAN-00:10	524.26	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 200 FIBER OP. DIRECTOR	14.37	143.11	01-JAN-00:10	962.95	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 200 FIBER OP. DIRECTOR	8.26	35.58	01-JAN-00:10	640.36	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 202 EXECUTIVE OFFICER	9.25	92.11	01-JAN-00:10	619.82	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 202 EXECUTIVE OFFICER	5.32	22.90	01-JAN-00:10	412.18	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 203 SEC.	9.17	91.34	01-JAN-00:10	614.65	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 203 SEC.	5.27	22.71	01-JAN-00:10	408.74	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 204 DEPARTMENT CHAIR	18.51	184.25	01-JAN-00:10	1239.78	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 204 DEPARTMENT CHAIR	10.64	45.80	01-JAN-00:10	824.45	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 205 G-3 SPECIALTY MEAS.	17.73	176.57	01-JAN-00:10	1188.12	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 205 G-3 SPECIALTY MEAS.	10.19	43.89	01-JAN-00:10	790.10	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 207A A-3A POWDER SYNTHESIS	7.86	78.28	01-JAN-00:10	526.72	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 207A A-3A POWDER SYNTHESIS	4.52	19.46	01-JAN-00:10	350.27	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 209 K-1 SPECTRO ANALYSIS	8.70	86.67	01-JAN-00:10	583.18	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 209 K-1 SPECTRO ANALYSIS	5.00	21.55	01-JAN-00:10	387.82	02-JAN-08:10

Electricity:Zone:THERMAL ZONE: 211 S-3 GRAD. PC.	8.65	86.14	01-JAN-00:10	579.60	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 211 S-3 GRAD. PC.	4.97	21.41	01-JAN-00:10	385.43	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 212 OFFICE/LAB	22.29	221.89	01-JAN-00:10	1493.09	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 212 OFFICE/LAB	12.81	55.16	01-JAN-00:10	992.90	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 213 M-1 THERMAL ANALYSIS	8.50	84.68	01-JAN-00:10	569.78	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 213 M-1 THERMAL ANALYSIS	4.89	21.05	01-JAN-00:10	378.90	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 215 M-2 THERMAL ANALYSIS	6.54	65.08	01-JAN-00:10	437.91	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 215 M-2 THERMAL ANALYSIS	3.76	16.18	01-JAN-00:10	291.21	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 216 FINANCE/ADMIN. CENTER	10.60	105.53	01-JAN-00:10	710.13	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 216 FINANCE/ADMIN. CENTER	6.09	26.24	01-JAN-00:10	472.24	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 217A R-1 SPUTTER	9.98	99.40	01-JAN-00:10	668.87	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 217A R-1 SPUTTER	5.74	24.71	01-JAN-00:10	444.80	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 217B L-3 ELECTRONICS	7.96	79.28	01-JAN-00:10	533.49	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 217B L-3 ELECTRONICS	4.58	19.71	01-JAN-00:10	354.77	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 218 SEC.	8.34	83.07	01-JAN-00:10	558.98	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 218 SEC.	4.80	20.65	01-JAN-00:10	371.72	02-JAN-08:10

Electricity:Zone:THERMAL ZONE: 221 L-2 ELECTRONICS	8.86	88.24	01-JAN-00:10	593.80	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 221 L-2 ELECTRONICS	5.09	21.94	01-JAN-00:10	394.87	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 221 L-4 MAGNETICS	8.50	84.61	01-JAN-00:10	569.31	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 221 L-4 MAGNETICS	4.88	21.03	01-JAN-00:10	378.59	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 223 M-3 THERMAL CONDUCTIVITY	8.77	87.30	01-JAN-00:10	587.47	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 223 M-3 THERMAL CONDUCTIVITY	5.04	21.70	01-JAN-00:10	390.66	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 226 D-3 TAPE CASTING	10.47	104.26	01-JAN-00:10	701.59	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 226 D-3 TAPE CASTING	6.02	25.92	01-JAN-00:10	466.56	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 227 UNDERGRAD DIR.	9.35	93.09	01-JAN-00:10	626.38	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 227 UNDERGRAD DIR.	5.37	23.14	01-JAN-00:10	416.54	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 228 B-2 POROSITY SURFACE	7.97	79.35	01-JAN-00:10	533.96	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 228 B-2 POROSITY SURFACE	4.58	19.73	01-JAN-00:10	355.08	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 229 SEC.	8.04	80.08	01-JAN-00:10	538.88	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 229 SEC.	4.62	19.91	01-JAN-00:10	358.35	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 230 B-1 PARTICLE SIZE ANALYSIS	7.94	79.08	01-JAN-00:10	532.11	02-JAN-08:10

InteriorLights:Electricity:Zone:THE RMAL ZONE: 230 B-1 PARTICLE SIZE ANALYSIS	4.56	19.66	01-JAN-00:10	353.85	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 231 UNDERGRAD DIR.	8.07	80.37	01-JAN-00:10	540.78	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 231 UNDERGRAD DIR.	4.64	19.98	01-JAN-00:10	359.61	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 232 C-4 COILOIDS ANALYSIS	8.86	88.23	01-JAN-00:10	593.68	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 232 C-4 COILOIDS ANALYSIS	5.09	21.93	01-JAN-00:10	394.80	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 233 OFFICE/LAB	8.04	80.05	01-JAN-00:10	538.68	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 233 OFFICE/LAB	4.62	19.90	01-JAN-00:10	358.22	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 234 C-3 CHEMICAL ANALYSIS	8.71	86.76	01-JAN-00:10	583.84	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 234 C-3 CHEMICAL ANALYSIS	5.01	21.57	01-JAN-00:10	388.25	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 236 C-2 SOL GEL FORMING	8.59	85.55	01-JAN-00:10	575.66	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 236 C-2 SOL GEL FORMING	4.94	21.27	01-JAN-00:10	382.81	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 237 GRAD/TECH STATIONS	19.79	197.00	01-JAN-00:10	1325.63	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 237 GRAD/TECH STATIONS	11.37	48.97	01-JAN-00:10	881.54	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 238 C-2 RHEOLOGY	8.90	88.65	01-JAN-00:10	596.50	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 238 C-2 RHEOLOGY	5.12	22.04	01-JAN-00:10	396.67	02-JAN-08:10

Electricity:Zone:THERMAL ZONE: 239 OFFICE/LAB	8.17	81.37	01-JAN-00:10	547.56	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 239 OFFICE/LAB	4.70	20.23	01-JAN-00:10	364.13	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 240 D-4 COMPOSITES	24.26	241.57	01-JAN-00:10	1625.53	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 240 D-4 COMPOSITES	13.95	60.05	01-JAN-00:10	1080.98	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 241 GRAD/TECH STATIONS	11.56	115.09	01-JAN-00:10	774.41	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 241 GRAD/TECH STATIONS	6.64	28.61	01-JAN-00:10	514.98	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 242 D-2 PRESS FORM	8.90	88.66	01-JAN-00:10	596.59	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 242 D-2 PRESS FORM	5.12	22.04	01-JAN-00:10	396.73	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 244 D-1 CASTING EXTRUSION	9.08	90.39	01-JAN-00:10	608.22	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 244 D-1 CASTING EXTRUSION	5.22	22.47	01-JAN-00:10	404.47	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 247 GRAD/TECH STATIONS	12.47	124.18	01-JAN-00:10	835.63	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 247 GRAD/TECH STATIONS	7.17	30.87	01-JAN-00:10	555.69	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 101 CONFERENCE	14.54	148.37	01-JAN-00:10	967.41	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 101 CONFERENCE	8.09	34.82	01-JAN-00:10	626.77	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 106 CONFERENCE	13.94	142.22	01-JAN-00:10	927.31	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 106 CONFERENCE	7.75	33.38	01-JAN-00:10	600.80	02-JAN-08:10

Electricity:Zone:THERMAL ZONE: 201 CONFERENCE	24.33	248.31	01-JAN-00:10	1619.11	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 201 CONFERENCE	13.53	58.28	01-JAN-00:10	1049.00	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 126 CORRIDOR	36.90	331.36	01-JAN-00:10	2539.30	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 126 CORRIDOR	23.92	103.02	01-JAN-00:10	1854.28	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 148 CORRIDOR	10.07	90.44	01-JAN-00:10	693.07	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 148 CORRIDOR	6.53	28.12	01-JAN-00:10	506.10	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 220 CORRIDOR	36.88	331.15	01-JAN-00:10	2537.74	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 220 CORRIDOR	23.91	102.95	01-JAN-00:10	1853.14	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 222 CORRIDOR	9.34	83.90	01-JAN-00:10	642.96	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 222 CORRIDOR	6.06	26.08	01-JAN-00:10	469.51	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 248 SERVICE CORRIDOR	16.04	144.01	01-JAN-00:10	1103.61	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 248 SERVICE CORRIDOR	10.40	44.77	01-JAN-00:10	805.89	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: SERVICE CORRIDOR - 1ST FLOOR	15.62	140.23	01-JAN-00:10	1074.60	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: SERVICE CORRIDOR - 1ST FLOOR	10.12	43.59	01-JAN-00:10	784.71	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 001 MECHANICAL EQUIPMENT ROOM	238.21	1481.98	01-JAN-00:10	17615.99	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 001 MECHANICAL EQUIPMENT ROOM	203.88	878.00	01-JAN-00:10	15804.06	02-JAN-08:10

Electricity:Zone:THERMAL ZONE: 003 ELECTRICAL ROOM	15.73	97.87	01-JAN-00:10	1163.31	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 003 ELECTRICAL ROOM	13.46	57.98	01-JAN-00:10	1043.65	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 004 ELEV. MACH. ROOM	5.22	32.46	01-JAN-00:10	385.79	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 004 ELEV. MACH. ROOM	4.47	19.23	01-JAN-00:10	346.11	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 228A TECH	2.57	33.44	01-JAN-00:10	157.68	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 228A TECH	0.89	3.82	01-JAN-00:10	68.84	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 238A TECH	3.58	46.56	01-JAN-00:10	219.56	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 238A TECH	1.24	5.33	01-JAN-00:10	95.86	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: LOBBY 1ST FLOOR	57.15	369.71	01-JAN-00:10	4200.15	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: LOBBY 1ST FLOOR	47.85	206.07	01-JAN-00:10	3709.22	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: LOBBY 2ND FLOOR	56.03	362.46	01-JAN-00:10	4117.76	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: LOBBY 2ND FLOOR	46.91	202.03	01-JAN-00:10	3636.46	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 214 WORD PROCESSING	23.43	361.34	01-JAN-00:10	1331.47	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 214 WORD PROCESSING	3.83	16.50	01-JAN-00:10	296.95	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 145 WOMENS RESTROOM	5.58	40.32	01-JAN-00:10	402.45	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 145 WOMENS RESTROOM	4.36	18.76	01-JAN-00:10	337.77	02-JAN-08:10

Electricity:Zone:THERMAL ZONE: 147 MENS RESTROOM	5.65	40.82	01-JAN-00:10	407.41	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 147 MENS RESTROOM	4.41	19.00	01-JAN-00:10	341.93	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 243 WOMENS RESTROOM	5.93	42.82	01-JAN-00:10	427.33	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 243 WOMENS RESTROOM	4.63	19.93	01-JAN-00:10	358.65	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 245 MENS RESTROOM	5.82	42.04	01-JAN-00:10	419.60	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 245 MENS RESTROOM	4.54	19.56	01-JAN-00:10	352.16	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: STAIRWELL - 1ST FLOOR	2.78	11.95	01-JAN-00:10	215.18	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: STAIRWELL - 1ST FLOOR	2.78	11.95	01-JAN-00:10	215.18	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: STAIRWELL - BASEMENT	2.68	11.55	01-JAN-00:10	207.85	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: STAIRWELL - BASEMENT	2.68	11.55	01-JAN-00:10	207.85	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: STAIRWELL 2ND FLOOR	2.86	12.33	01-JAN-00:10	221.96	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: STAIRWELL 2ND FLOOR	2.86	12.33	01-JAN-00:10	221.96	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 002 PLUMBING EQUIPMENT	8.05	34.66	01-JAN-00:10	623.81	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 002 PLUMBING EQUIPMENT	8.05	34.66	01-JAN-00:10	623.81	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 006 CUSTODIAL STORAGE	2.67	11.48	01-JAN-00:10	206.63	02-JAN-08:10

InteriorLights:Electricity:Zone:THE RMAL ZONE: 006 CUSTODIAL STORAGE	2.67	11.48	01-JAN-00:10	206.63	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 132-A TECH.	1.13	4.88	01-JAN-00:10	87.83	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 132-A TECH.	1.13	4.88	01-JAN-00:10	87.83	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 140 STORAGE	3.65	15.70	01-JAN-00:10	282.66	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 140 STORAGE	3.65	15.70	01-JAN-00:10	282.66	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 225 FILE STORAGE	3.71	15.96	01-JAN-00:10	287.29	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 225 FILE STORAGE	3.71	15.96	01-JAN-00:10	287.29	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 245A J.C.	0.50	2.17	01-JAN-00:10	39.03	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 245A J.C.	0.50	2.17	01-JAN-00:10	39.03	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 207 VEST.	1.87	20.07	01-JAN-00:10	122.64	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 207 VEST.	0.97	4.16	01-JAN-00:10	74.92	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: 217 VEST.	1.59	17.10	01-JAN-00:10	104.50	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: 217 VEST.	0.82	3.55	01-JAN-00:10	63.84	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: E.S.1 1ST FLOOR	3.97	42.63	01-JAN-00:10	260.53	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: E.S.1 1ST FLOOR	2.05	8.84	01-JAN-00:10	159.16	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: E.S.2 1ST FLOOR	3.60	38.66	01-JAN-00:10	236.24	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: E.S.2 1ST FLOOR	1.86	8.02	01-JAN-00:10	144.32	02-JAN-08:10

Electricity:Zone:THERMAL ZONE: E.S.3 1ST FLOOR	4.31	46.29	01-JAN-00:10	282.87	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: E.S.3 1ST FLOOR	2.23	9.60	01-JAN-00:10	172.80	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: E.S.4 1ST FLOOR	4.36	46.77	01-JAN-00:10	285.82	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: E.S.4 1ST FLOOR	2.25	9.70	01-JAN-00:10	174.61	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: ES.1 2ND FLOOR	3.91	41.91	01-JAN-00:10	256.14	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: ES.1 2ND FLOOR	2.02	8.69	01-JAN-00:10	156.47	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: ES.2 2ND FLOOR	3.74	40.16	01-JAN-00:10	245.40	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: ES.2 2ND FLOOR	1.93	8.33	01-JAN-00:10	149.91	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: ES.3 2ND FLOOR	4.37	46.90	01-JAN-00:10	286.57	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: ES.3 2ND FLOOR	2.26	9.73	01-JAN-00:10	175.07	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: ES.4 2ND FLOOR	4.03	43.24	01-JAN-00:10	264.26	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: ES.4 2ND FLOOR	2.08	8.97	01-JAN-00:10	161.44	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: J.C. 1ST FLOOR	1.16	12.43	01-JAN-00:10	75.99	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: J.C. 1ST FLOOR	0.60	2.58	01-JAN-00:10	46.42	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: SPACE 101	734.82	7883.3 0	01-JAN-00:10	48174.5 7	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: SPACE 101	379.67	1634.9 8	01-JAN-00:10	29429.6 0	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: SPACE 102	734.82	7883.3 0	01-JAN-00:10	48174.5 7	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: SPACE 102	379.67	1634.9 8	01-JAN-00:10	29429.6 0	02-JAN-08:10

Electricity:Zone:THERMAL ZONE: ELEVATOR - 1ST FLOOR	4.03	43.25	01-JAN-00:10	264.31	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: ELEVATOR - 1ST FLOOR	2.08	8.97	01-JAN-00:10	161.47	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: ELEVATOR 2ND FLOOR	3.95	42.35	01-JAN-00:10	258.82	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: ELEVATOR 2ND FLOOR	2.04	8.78	01-JAN-00:10	158.11	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: ELEVATOR BASEMENT	4.41	47.26	01-JAN-00:10	288.81	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: ELEVATOR BASEMENT	2.28	9.80	01-JAN-00:10	176.43	02-JAN-08:10
Electricity:Zone:THERMAL ZONE: OPEN	9.06	97.15	01-JAN-00:10	593.66	02-JAN-08:10
InteriorLights:Electricity:Zone:THE RMAL ZONE: OPEN	4.68	20.15	01-JAN-00:10	362.67	02-JAN-08:10
InteriorEquipment:Electricity	1234.57	21720.40	01-JAN-00:10	65161.20	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 218A CENTER DIRECTOR	4.63	81.41	01-JAN-00:10	244.23	02-JAN-08:10
General:InteriorEquipment:Electricity	1234.57	21720.40	01-JAN-00:10	65161.20	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 102 OFFICE/LAB	3.88	68.25	01-JAN-00:10	204.74	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 103 OFFICE/LAB	4.46	78.49	01-JAN-00:10	235.46	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 104 SEC.	1.96	34.49	01-JAN-00:10	103.46	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 105 OFFICE/LAB	3.89	68.37	01-JAN-00:10	205.10	02-JAN-08:10

InteriorEquipment:Electricity:Zone: THERMAL ZONE: 107 I-1 SMALL SEM	4.09	71.92	01-JAN-00:10	215.75	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 108 OFFICE/LAB	3.49	61.43	01-JAN-00:10	184.28	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 109 I-2 S.E.M	5.53	97.23	01-JAN-00:10	291.69	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 110 GRAD/TECH STATIONS	6.30	110.76	01-JAN-00:10	332.28	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 111 I-3 SAMPLE PREP	3.95	69.42	01-JAN-00:10	208.27	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 112 OFFICE /LAB	3.32	58.33	01-JAN-00:10	174.99	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 113 H-1 S.T.E.M.	5.33	93.74	01-JAN-00:10	281.22	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 114 OFFICE/LAB	3.32	58.35	01-JAN-00:10	175.04	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 115 P-2 X-RAY	7.44	130.84	01-JAN-00:10	392.51	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 116 OFFICE/LAB	3.35	58.90	01-JAN-00:10	176.70	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 117 U-2 MICROSCOPY	3.75	65.93	01-JAN-00:10	197.80	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 118 SEC.	3.25	57.14	01-JAN-00:10	171.43	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 119 T-2 POLISHING	3.72	65.40	01-JAN-00:10	196.21	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 120 GRAD/TECH STATIONS	4.90	86.18	01-JAN-00:10	258.55	02-JAN-08:10

InteriorEquipment:Electricity:Zone: THERMAL ZONE: 121 T-1 GRINDING	3.82	67.21	01-JAN-00:10	201.63	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 122 OFFICE/LAB	3.30	58.09	01-JAN-00:10	174.26	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 123 F-1B REACTIVE GAS	3.76	66.15	01-JAN-00:10	198.45	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 124 OFFICE/LAB	3.85	67.77	01-JAN-00:10	203.31	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 125 F-2 LARGE ELECTRIC FURNACE	3.80	66.93	01-JAN-00:10	200.79	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 127 F-3A SMALL ELECTRIC FURNACE	3.82	67.24	01-JAN-00:10	201.72	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 129 OFFICE/LAB	3.58	62.91	01-JAN-00:10	188.72	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 130 S-2 GRAPHICS	3.69	64.95	01-JAN-00:10	194.84	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 130 S-2 TRIBOLOGY	4.03	70.82	01-JAN-00:10	212.47	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 131 SEC.	3.27	57.54	01-JAN-00:10	172.63	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 132 O-2 THERMO MECH. TESTING	4.94	86.88	01-JAN-00:10	260.65	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 133 OFFICE/LAB	3.35	58.99	01-JAN-00:10	176.98	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 134 O-3 HARDNESS MOD. TEST	5.00	87.99	01-JAN-00:10	263.98	02-JAN-08:10

InteriorEquipment:Electricity:Zone: THERMAL ZONE: 135 OFFICE/LAB	3.23	56.84	01-JAN-00:10	170.52	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 136 NONDESTRUCTIVE	3.56	62.66	01-JAN-00:10	187.98	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 137 GRAD/TECH STATIONS	4.90	86.18	01-JAN-00:10	258.53	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 138 O-1 UNIVERSAL TESTING	7.47	131.41	01-JAN-00:10	394.22	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 139 OFFICE/LAB	3.17	55.81	01-JAN-00:10	167.44	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 141 OFFICE/LAB	3.33	58.62	01-JAN-00:10	175.86	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 142 A-3 PARTICULATE	7.39	130.02	01-JAN-00:10	390.05	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 143 GRAD/TECH STATIONS	4.76	83.80	01-JAN-00:10	251.39	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 144 V-2 CERAMICS MACHINING	3.76	66.18	01-JAN-00:10	198.55	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 146 E DRYING	3.75	65.94	01-JAN-00:10	197.81	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 149 RECEIVING	5.00	88.03	01-JAN-00:10	264.10	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 200 FIBER OP. DIRECTOR	6.11	107.53	01-JAN-00:10	322.59	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 202 EXECUTIVE OFFICER	3.93	69.21	01-JAN-00:10	207.64	02-JAN-08:10

InteriorEquipment:Electricity:Zone: THERMAL ZONE: 203 SEC.	3.90	68.64	01-JAN-00:10	205.91	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 204 DEPARTMENT CHAIR	7.87	138.44	01-JAN-00:10	415.33	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 205 G-3 SPECIALTY MEAS.	7.54	132.67	01-JAN-00:10	398.02	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 207A A-3A POWDER SYNTHESIS	3.34	58.82	01-JAN-00:10	176.45	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 209 K-1 SPECTRO ANALYSIS	3.70	65.12	01-JAN-00:10	195.37	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 211 S-3 GRAD. PC.	3.68	64.72	01-JAN-00:10	194.17	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 212 OFFICE/LAB	9.48	166.73	01-JAN-00:10	500.19	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 213 M-1 THERMAL ANALYSIS	3.62	63.63	01-JAN-00:10	190.88	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 215 M-2 THERMAL ANALYSIS	2.78	48.90	01-JAN-00:10	146.70	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 216 FINANCE/ADMIN. CENTER	4.51	79.30	01-JAN-00:10	237.90	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 217A R-1 SPUTTER	4.25	74.69	01-JAN-00:10	224.07	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 217B L-3 ELECTRONICS	3.39	59.57	01-JAN-00:10	178.72	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 218 SEC.	3.55	62.42	01-JAN-00:10	187.26	02-JAN-08:10

InteriorEquipment:Electricity:Zone: THERMAL ZONE: 221 L-2 ELECTRONICS	3.77	66.31	01-JAN-00:10	198.92	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 221 L-4 MAGNETICS	3.61	63.57	01-JAN-00:10	190.72	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 223 M-3 THERMAL CONDUCTIVITY	3.73	65.60	01-JAN-00:10	196.80	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 226 D-3 TAPE CASTING	4.45	78.34	01-JAN-00:10	235.03	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 227 UNDERGRAD DIR.	3.98	69.95	01-JAN-00:10	209.84	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 228 B-2 POROSITY SURFACE	3.39	59.63	01-JAN-00:10	178.88	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 229 SEC.	3.42	60.18	01-JAN-00:10	180.53	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 230 B-1 PARTICLE SIZE ANALYSIS	3.38	59.42	01-JAN-00:10	178.26	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 231 UNDERGRAD DIR.	3.43	60.39	01-JAN-00:10	181.16	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 232 C-4 COILOIDS ANALYSIS	3.77	66.30	01-JAN-00:10	198.89	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 233 OFFICE/LAB	3.42	60.15	01-JAN-00:10	180.46	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 234 C-3 CHEMICAL ANALYSIS	3.71	65.20	01-JAN-00:10	195.59	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 236 C-2 SOL GEL FORMING	3.65	64.28	01-JAN-00:10	192.85	02-JAN-08:10

InteriorEquipment:Electricity:Zone: THERMAL ZONE: 237 GRAD/TECH STATIONS	8.41	148.03	01-JAN-00:10	444.09	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 238 C-2 RHEOLOGY	3.79	66.61	01-JAN-00:10	199.83	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 239 OFFICE/LAB	3.48	61.15	01-JAN-00:10	183.44	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 240 D-4 COMPOSITES	10.32	181.52	01-JAN-00:10	544.56	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 241 GRAD/TECH STATIONS	4.92	86.48	01-JAN-00:10	259.43	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 242 D-2 PRESS FORM	3.79	66.62	01-JAN-00:10	199.86	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 244 D-1 CASTING EXTRUSION	3.86	67.92	01-JAN-00:10	203.76	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 247 GRAD/TECH STATIONS	5.30	93.31	01-JAN-00:10	279.94	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 101 CONFERENCE	6.45	113.55	01-JAN-00:10	340.64	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 106 CONFERENCE	6.19	108.84	01-JAN-00:10	326.52	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 201 CONFERENCE	10.80	190.04	01-JAN-00:10	570.11	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 126 CORRIDOR	12.98	228.34	01-JAN-00:10	685.02	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 148 CORRIDOR	3.54	62.32	01-JAN-00:10	186.97	02-JAN-08:10

InteriorEquipment:Electricity:Zone: THERMAL ZONE: 220 CORRIDOR	12.97	228.20	01-JAN-00:10	684.60	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 222 CORRIDOR	3.29	57.82	01-JAN-00:10	173.45	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 248 SERVICE CORRIDOR	5.64	99.24	01-JAN-00:10	297.72	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: SERVICE CORRIDOR - 1ST FLOOR	5.49	96.63	01-JAN-00:10	289.89	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 001 MECHANICAL EQUIPMENT ROOM	34.33	603.98	01-JAN-00:10	1811.93	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 003 ELECTRICAL ROOM	2.27	39.88	01-JAN-00:10	119.65	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 004 ELEV. MACH. ROOM	0.75	13.23	01-JAN-00:10	39.68	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 228A TECH	1.68	29.61	01-JAN-00:10	88.83	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 238A TECH	2.34	41.23	01-JAN-00:10	123.70	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: LOBBY 1ST FLOOR	9.30	163.64	01-JAN-00:10	490.93	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: LOBBY 2ND FLOOR	9.12	160.43	01-JAN-00:10	481.30	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 214 WORD PROCESSING	19.60	344.84	01-JAN-00:10	1034.53	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 145 WOMENS RESTROOM	1.23	21.56	01-JAN-00:10	64.68	02-JAN-08:10

InteriorEquipment:Electricity:Zone: THERMAL ZONE: 147 MENS RESTROOM	1.24	21.83	01-JAN- 00:10	65.48	02-JAN- 08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 243 WOMENS RESTROOM	1.30	22.89	01-JAN- 00:10	68.68	02-JAN- 08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 245 MENS RESTROOM	1.28	22.48	01-JAN- 00:10	67.44	02-JAN- 08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 207 VEST.	0.90	15.91	01-JAN- 00:10	47.72	02-JAN- 08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: 217 VEST.	0.77	13.55	01-JAN- 00:10	40.66	02-JAN- 08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: E.S.1 1ST FLOOR	1.92	33.79	01-JAN- 00:10	101.37	02-JAN- 08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: E.S.2 1ST FLOOR	1.74	30.64	01-JAN- 00:10	91.92	02-JAN- 08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: E.S.3 1ST FLOOR	2.09	36.69	01-JAN- 00:10	110.07	02-JAN- 08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: E.S.4 1ST FLOOR	2.11	37.07	01-JAN- 00:10	111.21	02-JAN- 08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: ES.1 2ND FLOOR	1.89	33.22	01-JAN- 00:10	99.67	02-JAN- 08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: ES.2 2ND FLOOR	1.81	31.83	01-JAN- 00:10	95.49	02-JAN- 08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: ES.3 2ND FLOOR	2.11	37.17	01-JAN- 00:10	111.51	02-JAN- 08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: ES.4 2ND FLOOR	1.95	34.28	01-JAN- 00:10	102.83	02-JAN- 08:10

InteriorEquipment:Electricity:Zone: THERMAL ZONE: J.C. 1ST FLOOR	0.56	9.86	01-JAN-00:10	29.57	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: SPACE 101	355.15	6248.32	01-JAN-00:10	18744.97	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: SPACE 102	355.15	6248.32	01-JAN-00:10	18744.97	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: ELEVATOR - 1ST FLOOR	1.95	34.28	01-JAN-00:10	102.84	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: ELEVATOR 2ND FLOOR	1.91	33.57	01-JAN-00:10	100.71	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: ELEVATOR BASEMENT	2.13	37.46	01-JAN-00:10	112.38	02-JAN-08:10
InteriorEquipment:Electricity:Zone: THERMAL ZONE: OPEN	4.38	77.00	01-JAN-00:10	231.00	02-JAN-08:10
ElectricityPurchased:Facility	3967.97	32856.77	07-JAN-03:00	257279.93	19-JUL-16:50
ElectricityPurchased:Plant	3967.97	32856.77	07-JAN-03:00	257279.93	19-JUL-16:50
Cogeneration:ElectricityPurchased	3967.97	32856.77	07-JAN-03:00	257279.93	19-JUL-16:50
ElectricitySurplusSold:Facility	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
ElectricitySurplusSold:Plant	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cogeneration:ElectricitySurplusSold	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
ElectricityNet:Facility	3967.97	32856.77	07-JAN-03:00	257279.93	19-JUL-16:50
ElectricityNet:Plant	3967.97	32856.77	07-JAN-03:00	257279.93	19-JUL-16:50
Cogeneration:ElectricityNet	3967.97	32856.77	07-JAN-03:00	257279.93	19-JUL-16:50

Electricity:HVAC	40.76	1228.0 6	10-FEB- 22:20	11286.3 5	02-JAN- 06:10
Fans:Electricity	40.76	1228.0 6	10-FEB- 22:20	11286.3 5	02-JAN- 06:10
General:Fans:Electricity	40.76	1228.0 6	10-FEB- 22:20	11286.3 5	02-JAN- 06:10
Electricity:Plant	960.41	2448.6 7	21-JAN- 18:20	55670.9 7	19-JUL- 16:50
Cooling:Electricity	518.81	0.00	01-JAN- 00:10	38393.4 6	19-JUL- 16:30
HeatRejection:Electricity	147.18	0.00	01-JAN- 00:10	7905.83	10-JAN- 15:20
Heating:Electricity	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
Boiler Parasitic:Heating:Electricity	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
Pumps:Electricity	294.42	2448.6 7	21-JAN- 18:20	11655.0 6	29-MAY- 06:10

Annual and Peak Values - Gas

	Gas Annual Value [GJ]	Gas Minimum Value [W]	Timestamp of Minimum {TIMESTAMP}	Gas Maximum Value [W]	Timestamp of Maximum {TIMESTAMP}
Gas:Facility	757.98	0.00	20-JAN-22:10	339032.67	02-JAN-06:30
Gas:Plant	757.98	0.00	20-JAN-22:10	339032.67	02-JAN-06:30
Heating:Gas	757.98	0.00	20-JAN-22:10	339032.67	02-JAN-06:30
Boiler:Heating:Gas	757.98	0.00	20-JAN-22:10	339032.67	02-JAN-06:30

Annual and Peak Values - Cooling

	Cooling Annual	Cooling Minimum	Timestamp of Minimum {TIMESTAMP}	Cooling Maximum Value [W]	Timestamp of Maximum {TIMESTAMP}

	Value [GJ]	Value [W]			
PlantLoopCoolingDemand:Facility	1277.96	0.00	01-JAN-00:10	181032.79	19-JUL-17:00
PlantLoopCoolingDemand:HVAC	1277.96	0.00	01-JAN-00:10	181032.79	19-JUL-17:00
CoolingCoils:PlantLoopCoolingDemand	1277.96	0.00	01-JAN-00:10	181032.79	19-JUL-17:00

Annual and Peak Values - Water

	Annual Value [m3]	Minimu m Value [m3/s]	Timestamp of Minimum {TIMESTAMP }	Maximu m Value [m3/s]	Timestamp of Maximum {TIMESTAMP }
Water:Facility	204677.80	0.00	01-JAN-00:10	0.02	30-AUG-14:00
Water:Plant	204677.80	0.00	01-JAN-00:10	0.02	30-AUG-14:00
HeatRejection:Water	204677.80	0.00	01-JAN-00:10	0.02	30-AUG-14:00
MainsWater:Facility	204677.80	0.00	01-JAN-00:10	0.02	30-AUG-14:00
MainsWater:Plant	204677.80	0.00	01-JAN-00:10	0.02	30-AUG-14:00
HeatRejection:MainsWat er	204677.80	0.00	01-JAN-00:10	0.02	30-AUG-14:00

Annual and Peak Values - Other by Weight/Mass

	Annua l Value [kg]	Minimu m Value [kg/s]	Timestamp of Minimum {TIMESTAM P}	Maximu m Value [kg/s]	Timestamp of Maximum {TIMESTAM P}
Carbon Equivalent:Facility	0.00	0.000	01-JAN-00:10	0.000	01-JAN-00:10
CarbonEquivalentEmissions:Car bon Equivalent	0.00	0.000	01-JAN-00:10	0.000	01-JAN-00:10

Annual and Peak Values - Other Volumetric

	Annual Value [m3]	Minimum Value [m3/s]	Timestamp of Minimum {TIMESTAMP}	Maximum Value [m3/s]	Timestamp of Maximum {TIMESTAMP}
None					

Annual and Peak Values - Other Liquid/Gas

	Annual Value [L]	Minimum Value [L]	Timestamp of Minimum {TIMESTAMP}	Maximum Value [L]	Timestamp of Maximum {TIMESTAMP}
None					

Annual and Peak Values - Other

	Annual Value [GJ]	Minimum Value [W]	Timestamp of Minimum {TIMESTAMP}	Maximum Value [W]	Timestamp of Maximum {TIMESTAMP}
EnergyTransfer:Facility	7822.31	42084.58	12-FEB-10:00	1011325.95	30-JAN-06:20
EnergyTransfer:Building	1374.85	7490.34	29-MAY-08:00	188223.43	02-JAN-06:10
EnergyTransfer:Zone:THERMAL ZONE: 001 MECHANICAL EQUIPMENT ROOM	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer	209.86	0.00	20-JAN-22:10	188223.43	02-JAN-06:10
Heating:EnergyTransfer:Zone:THERMAL ZONE: 001 MECHANICAL EQUIPMENT ROOM	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer	1164.99	0.00	02-JAN-06:10	106882.62	19-JUL-17:00

Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 001 MECHANICAL EQUIPMENT ROOM	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
EnergyTransfer:Zone:THERMAL ZONE: 002 PLUMBING EQUIPMENT	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 002 PLUMBING EQUIPMENT	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 002 PLUMBING EQUIPMENT	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
EnergyTransfer:Zone:THERMAL ZONE: 003 ELECTRICAL ROOM	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 003 ELECTRICAL ROOM	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 003 ELECTRICAL ROOM	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
EnergyTransfer:Zone:THERMAL ZONE: 004 ELEV. MACH. ROOM	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 004 ELEV. MACH. ROOM	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 004 ELEV. MACH. ROOM	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
EnergyTransfer:Zone:THERMAL ZONE: 006 CUSTODIAL STORAGE	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 006 CUSTODIAL STORAGE	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10

Cooling:EnergyTransfer:Zone:TH TERMAL ZONE: 006 CUSTODIAL STORAGE	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: 101 CONFERENCE	19.57	0.04	05-JAN-21:40	2441.90	20-FEB-06:10
Heating:EnergyTransfer:Zone:TH TERMAL ZONE: 101 CONFERENCE	1.87	0.00	02-JAN-08:10	2441.90	20-FEB-06:10
Cooling:EnergyTransfer:Zone:TH TERMAL ZONE: 101 CONFERENCE	17.70	0.00	01-JAN-00:10	1612.29	01-SEP-13:10
EnergyTransfer:Zone:THERMAL ZONE: 102 OFFICE/LAB	9.69	0.06	22-APR-08:40	1921.81	20-FEB-06:10
Heating:EnergyTransfer:Zone:TH TERMAL ZONE: 102 OFFICE/LAB	1.90	0.00	01-JAN-13:00	1921.81	20-FEB-06:10
Cooling:EnergyTransfer:Zone:TH TERMAL ZONE: 102 OFFICE/LAB	7.79	0.00	01-JAN-00:10	959.77	01-SEP-13:10
EnergyTransfer:Zone:THERMAL ZONE: 103 OFFICE/LAB	13.56	0.02	09-MAR-23:20	2617.11	20-FEB-06:10
Heating:EnergyTransfer:Zone:TH TERMAL ZONE: 103 OFFICE/LAB	3.82	0.00	01-JAN-12:10	2617.11	20-FEB-06:10
Cooling:EnergyTransfer:Zone:TH TERMAL ZONE: 103 OFFICE/LAB	9.75	0.00	01-JAN-00:10	1451.69	09-OCT-13:20
EnergyTransfer:Zone:THERMAL ZONE: 104 SEC.	4.32	0.01	24-JAN-21:10	390.63	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH TERMAL ZONE: 104 SEC.	0.31	0.00	01-JAN-00:10	390.63	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH TERMAL ZONE: 104 SEC.	4.02	0.00	01-JAN-03:10	301.15	01-SEP-16:00
EnergyTransfer:Zone:THERMAL ZONE: 105 OFFICE/LAB	9.66	0.00	14-DEC-02:40	1926.91	20-FEB-06:10
Heating:EnergyTransfer:Zone:TH TERMAL ZONE: 105 OFFICE/LAB	1.91	0.00	02-JAN-11:00	1926.91	20-FEB-06:10

Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 105 OFFICE/LAB	7.75	0.00	01-JAN-00:10	943.06	01-SEP-13:10
EnergyTransfer:Zone:THERMAL ZONE: 106 CONFERENCE	24.02	0.03	02-DEC-05:20	3344.08	25-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 106 CONFERENCE	6.42	0.00	02-JAN-11:00	3344.08	25-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 106 CONFERENCE	17.59	0.00	01-JAN-00:10	2137.36	19-JUL-16:40
EnergyTransfer:Zone:THERMAL ZONE: 107 I-1 SMALL SEM	8.72	0.02	02-JAN-21:20	700.97	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 107 I-1 SMALL SEM	0.36	0.00	01-JAN-00:10	700.97	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 107 I-1 SMALL SEM	8.35	0.00	02-JAN-06:10	600.98	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 108 OFFICE/LAB	11.87	0.00	19-DEC-21:10	2117.67	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 108 OFFICE/LAB	2.62	0.00	02-JAN-22:10	2117.67	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 108 OFFICE/LAB	9.25	0.00	01-JAN-00:10	950.78	19-JUL-16:40
EnergyTransfer:Zone:THERMAL ZONE: 109 I-2 S.E.M	11.63	0.05	04-MAR-17:40	875.63	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 109 I-2 S.E.M	0.39	0.00	01-JAN-00:10	875.63	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 109 I-2 S.E.M	11.24	0.00	02-JAN-06:10	815.15	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 110 GRAD/TECH STATIONS	20.46	0.01	16-DEC-21:20	3275.41	02-JAN-06:10

Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 110 GRAD/TECH STATIONS	2.74	0.00	02-JAN-15:00	3275.41	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 110 GRAD/TECH STATIONS	17.72	0.00	01-JAN-00:10	1665.98	19-JUL-16:40
EnergyTransfer:Zone:THERMAL ZONE: 111 I-3 SAMPLE PREP	8.64	0.00	04-MAR-17:30	663.09	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 111 I-3 SAMPLE PREP	0.31	0.00	01-JAN-00:10	663.09	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 111 I-3 SAMPLE PREP	8.33	0.00	02-JAN-06:10	586.77	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 112 OFFICE /LAB	11.28	0.05	02-DEC-17:20	1831.24	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 112 OFFICE /LAB	1.55	0.00	02-JAN-16:20	1831.24	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 112 OFFICE /LAB	9.74	0.00	01-JAN-00:10	897.13	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 113 H-1 S.T.E.M.	13.69	0.13	18-SEP-07:50	928.22	20-JUL-17:00
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 113 H-1 S.T.E.M.	0.29	0.00	01-JAN-00:10	875.40	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 113 H-1 S.T.E.M.	13.39	0.00	01-JAN-05:10	928.22	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 114 OFFICE/LAB	11.24	0.02	06-MAR-05:10	1824.99	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 114 OFFICE/LAB	1.54	0.00	02-JAN-16:10	1824.99	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 114 OFFICE/LAB	9.71	0.00	01-JAN-00:10	892.60	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 115 P-2 X-RAY	24.28	0.04	22-FEB-07:30	1615.24	20-JUL-17:00

Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 115 P-2 X-RAY	0.31	0.00	02-JAN-10:20	1227.75	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 115 P-2 X-RAY	23.98	0.00	01-JAN-00:10	1615.24	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 116 OFFICE/LAB	11.33	0.00	06-MAR-05:10	1837.73	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 116 OFFICE/LAB	1.54	0.00	02-JAN-16:10	1837.73	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 116 OFFICE/LAB	9.78	0.00	01-JAN-00:10	899.56	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 117 U-2 MICROSCOPY	12.39	0.00	30-JAN-04:00	797.60	20-JUL-17:00
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 117 U-2 MICROSCOPY	0.20	0.00	02-JAN-11:10	638.44	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 117 U-2 MICROSCOPY	12.20	0.00	01-JAN-00:10	797.60	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 118 SEC.	11.06	0.02	14-MAR-04:10	1796.06	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 118 SEC.	1.51	0.00	02-JAN-16:30	1796.06	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 118 SEC.	9.55	0.00	01-JAN-00:10	875.71	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 119 T-2 POLISHING	12.22	0.14	25-DEC-09:20	786.66	20-JUL-17:00
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 119 T-2 POLISHING	0.20	0.00	02-JAN-11:10	625.58	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 119 T-2 POLISHING	12.02	0.00	01-JAN-00:10	786.66	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 120 GRAD/TECH STATIONS	15.66	0.00	11-DEC-18:50	2513.65	02-JAN-06:10

Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 120 GRAD/TECH STATIONS	1.97	0.00	02-JAN-14:40	2513.65	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 120 GRAD/TECH STATIONS	13.70	0.00	01-JAN-00:10	1262.73	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 121 T-1 GRINDING	12.66	0.14	17-FEB-07:00	818.01	20-JUL-17:00
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 121 T-1 GRINDING	0.19	0.00	02-JAN-11:10	643.20	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 121 T-1 GRINDING	12.47	0.00	01-JAN-00:10	818.01	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 122 OFFICE/LAB	11.20	0.01	03-JAN-20:00	1841.61	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 122 OFFICE/LAB	1.60	0.00	02-JAN-17:00	1841.61	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 122 OFFICE/LAB	9.60	0.00	01-JAN-00:10	893.08	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 123 F-1B REACTIVE GAS	13.75	0.14	19-DEC-07:40	912.08	20-JUL-17:00
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 123 F-1B REACTIVE GAS	0.17	0.00	02-JAN-11:40	682.47	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 123 F-1B REACTIVE GAS	13.58	0.00	01-JAN-00:10	912.08	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 124 OFFICE/LAB	15.36	0.02	03-APR-19:30	2674.29	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 124 OFFICE/LAB	5.85	0.00	03-JAN-22:10	2674.29	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 124 OFFICE/LAB	9.51	0.00	01-JAN-00:10	1131.60	19-JUL-16:50

EnergyTransfer:Zone:THERMAL ZONE: 125 F-2 LARGE ELECTRIC FURNACE	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone: THERMAL ZONE: 125 F-2 LARGE ELECTRIC FURNACE	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone: THERMAL ZONE: 125 F-2 LARGE ELECTRIC FURNACE	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: 126 CORRIDOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone: THERMAL ZONE: 126 CORRIDOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone: THERMAL ZONE: 126 CORRIDOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: 127 F-3A SMALL ELECTRIC FURNACE	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone: THERMAL ZONE: 127 F-3A SMALL ELECTRIC FURNACE	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone: THERMAL ZONE: 127 F-3A SMALL ELECTRIC FURNACE	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: 129 OFFICE/LAB	8.67	0.00	12-FEB-09:20	1795.76	02-JAN-06:10
Heating:EnergyTransfer:Zone: THERMAL ZONE: 129 OFFICE/LAB	1.67	0.00	02-JAN-14:30	1795.76	02-JAN-06:10
Cooling:EnergyTransfer:Zone: THERMAL ZONE: 129 OFFICE/LAB	7.00	0.00	01-JAN-00:10	886.79	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 130 S-2 GRAPHICS	8.32	0.18	01-JAN-11:40	701.58	02-JAN-06:10
Heating:EnergyTransfer:Zone: THERMAL ZONE: 130 S-2 GRAPHICS	0.28	0.00	01-JAN-00:10	701.58	02-JAN-06:10

Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 130 S-2 GRAPHICS	8.04	0.00	01-JAN-11:40	559.80	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 130 S-2 TRIBOLOGY	8.93	0.11	01-JAN-11:10	759.81	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 130 S-2 TRIBOLOGY	0.32	0.00	01-JAN-00:10	759.81	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 130 S-2 TRIBOLOGY	8.60	0.00	01-JAN-09:40	612.01	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 131 SEC.	8.35	0.00	07-FEB-11:00	1712.97	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 131 SEC.	1.70	0.00	02-JAN-16:00	1712.97	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 131 SEC.	6.65	0.00	01-JAN-00:10	884.05	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 132 O-2 THERMO MECH. TESTING	11.03	0.30	14-DEC-07:50	881.52	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 132 O-2 THERMO MECH. TESTING	0.33	0.00	01-JAN-00:10	881.52	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 132 O-2 THERMO MECH. TESTING	10.70	0.00	02-JAN-06:10	753.91	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 132-A TECH.	1.91	0.02	23-NOV-09:30	339.87	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 132-A TECH.	0.30	0.00	02-JAN-22:10	339.87	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 132-A TECH.	1.61	0.00	01-JAN-00:10	97.60	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 133 OFFICE/LAB	8.32	0.00	10-DEC-09:10	1722.79	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 133 OFFICE/LAB	1.66	0.00	02-JAN-14:50	1722.79	02-JAN-06:10

Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 133 OFFICE/LAB	6.66	0.00	01-JAN-00:10	858.25	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 134 O-3 HARDNESS MOD. TEST	13.53	0.80	18-SEP-07:50	907.54	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 134 O-3 HARDNESS MOD. TEST	0.27	0.00	02-JAN-00:10	907.54	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 134 O-3 HARDNESS MOD. TEST	13.26	0.00	01-JAN-00:10	896.89	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 135 OFFICE/LAB	8.20	0.01	12-DEC-00:50	1690.83	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 135 OFFICE/LAB	1.64	0.00	02-JAN-15:50	1690.83	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 135 OFFICE/LAB	6.56	0.00	01-JAN-00:10	854.89	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 136 NONDESTRUCTIVE	9.46	0.01	23-DEC-17:00	727.46	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 136 NONDESTRUCTIVE	0.23	0.00	02-JAN-00:10	727.46	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 136 NONDESTRUCTIVE	9.23	0.00	01-JAN-00:10	618.99	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 137 GRAD/TECH STATIONS	12.65	0.01	26-JAN-10:00	2437.62	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 137 GRAD/TECH STATIONS	2.11	0.00	02-JAN-13:50	2437.62	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 137 GRAD/TECH STATIONS	10.54	0.00	01-JAN-00:10	1272.15	19-JUL-17:00

EnergyTransfer:Zone:THERMAL ZONE: 138 O-1 UNIVERSAL TESTING	17.09	0.26	04-SEP-06:50	1377.60	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 138 O-1 UNIVERSAL TESTING	0.42	0.00	01-JAN-00:10	1377.60	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 138 O-1 UNIVERSAL TESTING	16.67	0.00	01-JAN-07:20	1204.89	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 139 OFFICE/LAB	8.21	0.01	13-FEB-00:40	1682.09	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 139 OFFICE/LAB	1.66	0.00	02-JAN-16:10	1682.09	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 139 OFFICE/LAB	6.55	0.00	01-JAN-00:10	869.15	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 140 STORAGE	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 140 STORAGE	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 140 STORAGE	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: 141 OFFICE/LAB	8.42	0.01	16-FEB-18:40	1734.52	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 141 OFFICE/LAB	1.69	0.00	02-JAN-15:50	1734.52	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 141 OFFICE/LAB	6.73	0.00	01-JAN-00:10	879.44	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 142 A-3 PARTICULATE	19.06	0.57	18-JAN-07:40	1503.52	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 142 A-3 PARTICULATE	0.42	0.00	02-JAN-05:10	1503.52	02-JAN-06:10

Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 142 A-3 PARTICULATE	18.63	0.00	01-JAN-00:10	1325.10	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 143 GRAD/TECH STATIONS	10.65	0.01	21-FEB-09:30	2248.25	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 143 GRAD/TECH STATIONS	1.74	0.00	02-JAN-13:50	2248.25	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 143 GRAD/TECH STATIONS	8.90	0.00	01-JAN-00:10	848.05	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 144 V-2 CERAMICS MACHINING	14.85	0.13	09-JAN-09:10	1051.77	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 144 V-2 CERAMICS MACHINING	0.32	0.00	02-JAN-13:30	1051.77	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 144 V-2 CERAMICS MACHINING	14.54	0.00	01-JAN-00:10	1023.03	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 145 WOMENS RESTROOM	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 145 WOMENS RESTROOM	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 145 WOMENS RESTROOM	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: 146 E DRYING	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 146 E DRYING	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 146 E DRYING	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: 147 MENS RESTROOM	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10

Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 147 MENS RESTROOM	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 147 MENS RESTROOM	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
EnergyTransfer:Zone:THERMAL ZONE: 148 CORRIDOR	11.85	0.03	05-JAN- 11:20	3013.49	02-JAN- 06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 148 CORRIDOR	2.99	0.00	02-JAN- 22:10	3013.49	02-JAN- 06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 148 CORRIDOR	8.85	0.00	01-JAN- 00:10	781.28	19-JUL- 17:00
EnergyTransfer:Zone:THERMAL ZONE: 149 RECEIVING	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 149 RECEIVING	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 149 RECEIVING	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
EnergyTransfer:Zone:THERMAL ZONE: 200 FIBER OP. DIRECTOR	26.79	0.07	03-MAR- 04:40	4419.12	02-JAN- 06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 200 FIBER OP. DIRECTOR	5.70	0.00	02-JAN- 22:10	4419.12	02-JAN- 06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 200 FIBER OP. DIRECTOR	21.08	0.00	01-JAN- 00:10	2323.16	19-JUL- 17:00
EnergyTransfer:Zone:THERMAL ZONE: 201 CONFERENCE	50.58	0.00	23-APR- 06:30	5696.49	02-JAN- 06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 201 CONFERENCE	4.56	0.00	02-JAN- 11:30	5696.49	02-JAN- 06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 201 CONFERENCE	46.02	0.00	01-JAN- 00:10	4269.58	01-SEP- 13:10
EnergyTransfer:Zone:THERMAL ZONE: 202 EXECUTIVE OFFICER	16.19	0.08	09-OCT- 07:50	2619.25	02-JAN- 06:10

Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 202 EXECUTIVE OFFICER	2.36	0.00	02-JAN-22:10	2619.25	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 202 EXECUTIVE OFFICER	13.82	0.00	01-JAN-00:10	1525.44	01-SEP-13:20
EnergyTransfer:Zone:THERMAL ZONE: 203 SEC.	15.96	0.02	15-APR-15:10	2623.99	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 203 SEC.	2.50	0.00	02-JAN-22:10	2623.99	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 203 SEC.	13.46	0.00	01-JAN-00:10	1502.52	01-SEP-13:20
EnergyTransfer:Zone:THERMAL ZONE: 204 DEPARTMENT CHAIR	53.05	0.04	24-NOV-09:30	7896.84	25-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 204 DEPARTMENT CHAIR	23.83	0.00	06-JAN-12:00	7896.84	25-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 204 DEPARTMENT CHAIR	29.23	0.00	01-JAN-00:10	5027.26	19-JUL-16:50
EnergyTransfer:Zone:THERMAL ZONE: 205 G-3 SPECIALTY MEAS.	29.61	0.02	23-JAN-22:00	2644.32	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 205 G-3 SPECIALTY MEAS.	1.35	0.00	02-JAN-15:00	2644.32	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 205 G-3 SPECIALTY MEAS.	28.26	0.00	01-JAN-00:10	2372.54	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 207 VEST.	4.58	0.00	03-JAN-19:20	532.30	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 207 VEST.	0.45	0.00	02-JAN-22:10	532.30	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 207 VEST.	4.13	0.00	01-JAN-00:10	372.61	19-JUL-17:00

EnergyTransfer:Zone:THERMAL ZONE: 207A A-3A POWDER SYNTHESIS	13.88	0.01	10-APR-04:20	1214.20	02-JAN-06:10
Heating:EnergyTransfer:Zone: THERMAL ZONE: 207A A-3A POWDER SYNTHESIS	0.73	0.00	02-JAN-15:50	1214.20	02-JAN-06:10
Cooling:EnergyTransfer:Zone: THERMAL ZONE: 207A A-3A POWDER SYNTHESIS	13.16	0.00	01-JAN-00:10	1073.01	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 209 K-1 SPECTRO ANALYSIS	15.40	0.14	16-DEC-09:30	1382.04	02-JAN-06:10
Heating:EnergyTransfer:Zone: THERMAL ZONE: 209 K-1 SPECTRO ANALYSIS	0.79	0.00	02-JAN-16:00	1382.04	02-JAN-06:10
Cooling:EnergyTransfer:Zone: THERMAL ZONE: 209 K-1 SPECTRO ANALYSIS	14.61	0.00	01-JAN-00:10	1206.58	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 211 S-3 GRAD. PC.	16.11	0.08	21-FEB-09:50	1445.07	02-JAN-06:10
Heating:EnergyTransfer:Zone: THERMAL ZONE: 211 S-3 GRAD. PC.	0.76	0.00	02-JAN-16:10	1445.07	02-JAN-06:10
Cooling:EnergyTransfer:Zone: THERMAL ZONE: 211 S-3 GRAD. PC.	15.35	0.00	01-JAN-00:10	1260.17	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 212 OFFICE/LAB	35.76	0.01	25-FEB-01:00	5744.95	02-JAN-06:10
Heating:EnergyTransfer:Zone: THERMAL ZONE: 212 OFFICE/LAB	5.94	0.00	02-JAN-22:10	5744.95	02-JAN-06:10
Cooling:EnergyTransfer:Zone: THERMAL ZONE: 212 OFFICE/LAB	29.81	0.00	01-JAN-00:10	3042.27	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 213 M-1 THERMAL ANALYSIS	8.71	0.07	21-APR-07:00	945.09	02-JAN-06:10

Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 213 M-1 THERMAL ANALYSIS	0.46	0.00	02-JAN-11:10	945.09	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 213 M-1 THERMAL ANALYSIS	8.24	0.00	01-JAN-00:10	617.36	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 214 WORD PROCESSING	24.04	0.05	19-FEB-14:10	1891.16	19-JUL-17:00
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 214 WORD PROCESSING	0.69	0.00	02-JAN-08:10	1721.90	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 214 WORD PROCESSING	23.35	0.00	01-JAN-00:10	1891.16	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 215 M-2 THERMAL ANALYSIS	6.00	0.07	14-APR-08:00	686.02	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 215 M-2 THERMAL ANALYSIS	0.43	0.00	02-JAN-10:40	686.02	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 215 M-2 THERMAL ANALYSIS	5.57	0.00	01-JAN-00:10	412.46	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 216 FINANCE/ADMIN. CENTER	17.18	0.01	02-MAR-05:10	2815.45	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 216 FINANCE/ADMIN. CENTER	2.78	0.00	02-JAN-22:10	2815.45	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 216 FINANCE/ADMIN. CENTER	14.40	0.00	01-JAN-00:10	1435.38	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 217 VEST.	1.62	0.00	23-FEB-08:30	192.89	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 217 VEST.	0.18	0.00	02-JAN-13:10	192.89	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 217 VEST.	1.44	0.00	01-JAN-00:10	91.98	20-JUL-17:00

EnergyTransfer:Zone:THERMAL ZONE: 217A R-1 SPUTTER	8.69	0.02	28-JAN-13:10	959.56	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 217A R-1 SPUTTER	0.54	0.00	02-JAN-05:10	959.56	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 217A R-1 SPUTTER	8.15	0.00	01-JAN-00:10	626.19	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 217B L-3 ELECTRONICS	7.06	0.21	30-JAN-04:50	798.11	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 217B L-3 ELECTRONICS	0.48	0.00	02-JAN-05:10	798.11	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 217B L-3 ELECTRONICS	6.58	0.00	01-JAN-00:10	494.12	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 218 SEC.	13.99	0.02	16-OCT-05:30	2326.15	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 218 SEC.	2.42	0.00	02-JAN-22:10	2326.15	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 218 SEC.	11.57	0.00	01-JAN-00:10	1166.81	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 218A CENTER DIRECTOR	20.60	0.04	02-APR-17:00	3888.37	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 218A CENTER DIRECTOR	4.62	0.00	02-JAN-22:10	3888.37	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 218A CENTER DIRECTOR	15.98	0.00	01-JAN-00:10	1675.36	20-JUL-09:30
EnergyTransfer:Zone:THERMAL ZONE: 220 CORRIDOR	64.33	0.00	23-NOV-15:20	15451.27	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 220 CORRIDOR	25.75	0.00	02-JAN-22:10	15451.27	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 220 CORRIDOR	38.59	0.00	01-JAN-00:10	3311.62	19-JUL-17:00

EnergyTransfer:Zone:THERMAL ZONE: 221 L-2 ELECTRONICS	7.78	0.00	26-JAN-21:00	875.52	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 221 L-2 ELECTRONICS	0.50	0.00	02-JAN-05:10	875.52	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 221 L-2 ELECTRONICS	7.27	0.00	01-JAN-00:10	556.33	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 221 L-4 MAGNETICS	7.77	0.02	16-DEC-09:10	912.78	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 221 L-4 MAGNETICS	0.49	0.00	02-JAN-05:30	912.78	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 221 L-4 MAGNETICS	7.28	0.00	01-JAN-00:10	556.48	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 222 CORRIDOR	27.97	0.03	17-APR-05:40	4416.07	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 222 CORRIDOR	4.77	0.00	02-JAN-22:10	4416.07	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 222 CORRIDOR	23.20	0.00	01-JAN-00:10	2214.71	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 223 M-3 THERMAL CONDUCTIVITY	8.10	0.05	21-FEB-21:40	1046.33	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 223 M-3 THERMAL CONDUCTIVITY	0.52	0.00	02-JAN-11:00	1046.33	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 223 M-3 THERMAL CONDUCTIVITY	7.58	0.00	01-JAN-00:10	586.92	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 225 FILE STORAGE	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 225 FILE STORAGE	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10

Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 225 FILE STORAGE	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
EnergyTransfer:Zone:THERMAL ZONE: 226 D-3 TAPE CASTING	16.24	0.06	26-FEB- 22:30	1214.60	20-JUL- 17:00
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 226 D-3 TAPE CASTING	0.63	0.00	02-JAN- 13:40	1207.86	02-JAN- 06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 226 D-3 TAPE CASTING	15.62	0.00	01-JAN- 00:10	1214.60	20-JUL- 17:00
EnergyTransfer:Zone:THERMAL ZONE: 227 UNDERGRAD DIR.	14.70	0.02	06-DEC- 05:50	2448.06	02-JAN- 06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 227 UNDERGRAD DIR.	2.22	0.00	02-JAN- 22:10	2448.06	02-JAN- 06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 227 UNDERGRAD DIR.	12.48	0.00	01-JAN- 00:10	1429.21	19-JUL- 17:00
EnergyTransfer:Zone:THERMAL ZONE: 228 B-2 POROSITY SURFACE	13.26	0.02	24-DEC- 14:50	977.10	02-JAN- 06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 228 B-2 POROSITY SURFACE	0.51	0.00	02-JAN- 14:20	977.10	02-JAN- 06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 228 B-2 POROSITY SURFACE	12.75	0.00	01-JAN- 00:10	968.27	20-JUL- 17:00
EnergyTransfer:Zone:THERMAL ZONE: 228A TECH	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 228A TECH	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 228A TECH	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
EnergyTransfer:Zone:THERMAL ZONE: 229 SEC.	12.87	0.03	05-JAN- 03:00	2165.74	02-JAN- 06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 229 SEC.	2.04	0.00	02-JAN- 22:10	2165.74	02-JAN- 06:10

Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 229 SEC.	10.83	0.00	01-JAN-00:10	1271.38	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 230 B-1 PARTICLE SIZE ANALYSIS	12.71	0.04	16-FEB-08:00	959.32	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 230 B-1 PARTICLE SIZE ANALYSIS	0.49	0.00	02-JAN-14:00	959.32	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 230 B-1 PARTICLE SIZE ANALYSIS	12.22	0.00	01-JAN-00:10	913.93	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 231 UNDERGRAD DIR.	12.95	0.00	22-FEB-11:00	2181.93	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 231 UNDERGRAD DIR.	2.07	0.00	02-JAN-22:10	2181.93	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 231 UNDERGRAD DIR.	10.87	0.00	01-JAN-00:10	1299.92	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 232 C-4 COILOIDS ANALYSIS	8.24	0.13	01-APR-16:20	889.63	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 232 C-4 COILOIDS ANALYSIS	0.49	0.00	02-JAN-10:20	889.63	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 232 C-4 COILOIDS ANALYSIS	7.75	0.00	01-JAN-00:10	591.09	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 233 OFFICE/LAB	13.05	0.04	16-NOV-03:30	2200.69	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 233 OFFICE/LAB	2.14	0.00	02-JAN-22:10	2200.69	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 233 OFFICE/LAB	10.91	0.00	01-JAN-00:10	1351.23	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 234 C-3 CHEMICAL ANALYSIS	8.02	0.04	30-JAN-00:30	936.39	02-JAN-06:10

Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 234 C-3 CHEMICAL ANALYSIS	0.49	0.00	02-JAN-10:20	936.39	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 234 C-3 CHEMICAL ANALYSIS	7.52	0.00	01-JAN-00:10	575.61	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 236 C-2 SOL GEL FORMING	7.91	0.01	23-DEC-09:40	926.50	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 236 C-2 SOL GEL FORMING	0.49	0.00	02-JAN-10:20	926.50	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 236 C-2 SOL GEL FORMING	7.42	0.00	01-JAN-00:10	566.98	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 237 GRAD/TECH STATIONS	30.16	0.01	12-DEC-18:50	4922.80	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 237 GRAD/TECH STATIONS	4.62	0.00	02-JAN-22:10	4922.80	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 237 GRAD/TECH STATIONS	25.54	0.00	01-JAN-00:10	3147.19	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 238 C-2 RHEOLOGY	8.18	0.00	07-OCT-17:50	895.57	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 238 C-2 RHEOLOGY	0.50	0.00	02-JAN-10:10	895.57	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 238 C-2 RHEOLOGY	7.68	0.00	01-JAN-00:10	587.13	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 238A TECH	3.36	0.03	09-NOV-07:10	267.39	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 238A TECH	0.15	0.00	02-JAN-05:10	267.39	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 238A TECH	3.21	0.00	01-JAN-00:10	223.09	20-JUL-17:00

EnergyTransfer:Zone:THERMAL ZONE: 239 OFFICE/LAB	13.41	0.00	25-MAR-09:40	2260.50	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 239 OFFICE/LAB	2.22	0.00	02-JAN-22:10	2260.50	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 239 OFFICE/LAB	11.19	0.00	01-JAN-00:10	1414.79	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 240 D-4 COMPOSITES	35.33	0.26	22-JAN-08:10	2652.72	20-JUL-17:00
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 240 D-4 COMPOSITES	1.10	0.00	02-JAN-13:10	2595.96	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 240 D-4 COMPOSITES	34.23	0.00	01-JAN-00:10	2652.72	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 241 GRAD/TECH STATIONS	19.13	0.00	10-APR-10:40	3131.59	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 241 GRAD/TECH STATIONS	2.64	0.00	02-JAN-22:10	3131.59	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 241 GRAD/TECH STATIONS	16.49	0.00	01-JAN-00:10	1610.27	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 242 D-2 PRESS FORM	14.91	0.13	19-MAR-19:00	1129.11	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 242 D-2 PRESS FORM	0.54	0.00	02-JAN-14:30	1129.11	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 242 D-2 PRESS FORM	14.38	0.00	01-JAN-00:10	1096.42	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 243 WOMENS RESTROOM	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 243 WOMENS RESTROOM	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10

Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 243 WOMENS RESTROOM	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: 244 D-1 CASTING EXTRUSION	9.65	0.11	30-DEC-12:40	1090.83	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 244 D-1 CASTING EXTRUSION	0.48	0.00	02-JAN-11:10	1090.83	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 244 D-1 CASTING EXTRUSION	9.17	0.00	01-JAN-00:10	690.17	20-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 245 MENS RESTROOM	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 245 MENS RESTROOM	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 245 MENS RESTROOM	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: 245A J.C.	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 245A J.C.	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 245A J.C.	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: 247 GRAD/TECH STATIONS	21.49	0.01	27-FEB-13:30	3745.93	02-JAN-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 247 GRAD/TECH STATIONS	3.79	0.00	02-JAN-22:10	3745.93	02-JAN-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 247 GRAD/TECH STATIONS	17.70	0.00	01-JAN-00:10	2177.11	19-JUL-17:00
EnergyTransfer:Zone:THERMAL ZONE: 248 SERVICE CORRIDOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10

Heating:EnergyTransfer:Zone:TH ERMAL ZONE: 248 SERVICE CORRIDOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: 248 SERVICE CORRIDOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: E.S.1 1ST FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: E.S.1 1ST FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: E.S.1 1ST FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: E.S.2 1ST FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: E.S.2 1ST FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: E.S.2 1ST FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: E.S.3 1ST FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: E.S.3 1ST FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: E.S.3 1ST FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: E.S.4 1ST FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: E.S.4 1ST FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: E.S.4 1ST FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10

EnergyTransfer:Zone:THERMAL ZONE: ELEVATOR - 1ST FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: ELEVATOR - 1ST FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: ELEVATOR - 1ST FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: ELEVATOR 2ND FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: ELEVATOR 2ND FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: ELEVATOR 2ND FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: ELEVATOR BASEMENT	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: ELEVATOR BASEMENT	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: ELEVATOR BASEMENT	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: ES.1 2ND FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: ES.1 2ND FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: ES.1 2ND FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: ES.2 2ND FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: ES.2 2ND FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10

Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: ES.2 2ND FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: ES.3 2ND FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: ES.3 2ND FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: ES.3 2ND FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: ES.4 2ND FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: ES.4 2ND FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: ES.4 2ND FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: J.C. 1ST FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: J.C. 1ST FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: J.C. 1ST FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: LOBBY 1ST FLOOR	89.78	0.04	08-MAR-11:00	16498.07	20-FEB-06:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: LOBBY 1ST FLOOR	29.32	0.00	02-JAN-22:10	16498.07	20-FEB-06:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: LOBBY 1ST FLOOR	60.46	0.00	01-JAN-00:10	9636.93	28-JUL-08:30
EnergyTransfer:Zone:THERMAL ZONE: LOBBY 2ND FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: LOBBY 2ND FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10

Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: LOBBY 2ND FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: OPEN	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: OPEN	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: OPEN	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: SERVICE CORRIDOR - 1ST FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: SERVICE CORRIDOR - 1ST FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: SERVICE CORRIDOR - 1ST FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: SPACE 101	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: SPACE 101	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: SPACE 101	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: SPACE 102	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: SPACE 102	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: SPACE 102	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
EnergyTransfer:Zone:THERMAL ZONE: STAIRWELL - 1ST FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: STAIRWELL - 1ST FLOOR	0.00	0.00	01-JAN-00:10	0.00	01-JAN-00:10

Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: STAIRWELL - 1ST FLOOR	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
EnergyTransfer:Zone:THERMAL ZONE: STAIRWELL - BASEMENT	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: STAIRWELL - BASEMENT	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: STAIRWELL - BASEMENT	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
EnergyTransfer:Zone:THERMAL ZONE: STAIRWELL 2ND FLOOR	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
Heating:EnergyTransfer:Zone:TH ERMAL ZONE: STAIRWELL 2ND FLOOR	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
Cooling:EnergyTransfer:Zone:TH ERMAL ZONE: STAIRWELL 2ND FLOOR	0.00	0.00	01-JAN- 00:10	0.00	01-JAN- 00:10
EnergyTransfer:HVAC	1923. 79	7655.14	29-OCT- 07:10	365999.8 4	02-JAN- 06:20
HeatingCoils:EnergyTransfer	645.8 3	0.00	20-JAN- 22:10	294600.1 6	02-JAN- 06:10
PlantLoopHeatingDemand:Facility	645.8 3	0.00	20-JAN- 22:10	294600.1 6	02-JAN- 06:10
PlantLoopHeatingDemand:HVAC	645.8 3	0.00	20-JAN- 22:10	294600.1 6	02-JAN- 06:10
HeatingCoils:PlantLoopHeatingDe mand	645.8 3	0.00	20-JAN- 22:10	294600.1 6	02-JAN- 06:10
CoolingCoils:EnergyTransfer	1277. 96	0.00	01-JAN- 00:10	181032.7 9	19-JUL- 17:00
EnergyTransfer:Plant	4523. 67	13998.0 7	07-MAY- 06:20	488323.8 2	30-JAN- 06:20
Chillers:EnergyTransfer	1283. 03	0.00	01-JAN- 00:10	182047.5 4	19-JUL- 16:50

HeatRejection:EnergyTransfer	2634. 26	0.00	01-JAN- 00:10	220425.3 2	19-JUL- 16:50
Boilers:EnergyTransfer	606.3 9	0.00	20-JAN- 22:10	271226.1 4	02-JAN- 06:30

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For: Entire Facility

Timestamp: 2019-12-07 18:09:37 Annual Building Sensible Heat Gain Components

H V A C Zo ne Eq & Ot he r Se nsi bl e Ai r He ati ng [G J]	H V A C Zo ne Eq & Ot he r Se nsi bl e Ai r He ati ng [G J]	H V A C In pu t H ea t Un it Se nsi ble Ai r He ati ng [G J]	H V A C In pu t H ea t Un it Se nsi ble Ai r He ati ng [G J]	H V A C In pu t H ea t Un it Se nsi ble Ai r He ati ng [G J]	Pe op le Se nsi ble He at Ad dit io n [G J]	Li ght Se nsi ble He at Ad dit io n [G J]	Eq uipl ment Sen sible He at Ad dit io n [G J]	Int erz on Wi nd ow He at Re m ov al [G J]	Op aqu e Sur fac e Infi ltrat ion Wind ow Ai r Tran sfe r He at Ad dit io n [G J]	Op aqu e Sur fac e Infi ltrat ion Wind ow Ai r Tran sfe r He at Ad dit io n [G J]	Op aqu e Sur fac e Infi ltrat ion Wind ow Ai r Tran sfe r He at Ad dit io n [G J]	Op aqu e Sur fac e Infi ltrat ion Wind ow Ai r Tran sfe r He at Ad dit io n [G J]						
THER MAL ZONE: 101 CONF EREN CE	0. 00 0	0. 00 0	1.8 69	17. 70	0. 00 0	0. 00 0	7. 98	8.0 86	6.4 54	4. 55	0.0 00	0.4 51	0.0 00	0.0 00	- 2. 92	0.0 00	4.1 22	4.6 42

THER MAL ZONE: 102 OFFIC E/LAB	0. 00 0	0. 00 0	1.8 98	- 7.7 91	0. 00 0	0. 00 0	0. 90 4	5.2 43	3.8 79	4. 50 0	0.0 00	0.2 47	0.0 00	0.0 00	- 2. 94 1	0.0 00	- 2.8 94	- 3.0 45
THER MAL ZONE: 103 OFFIC E/LAB	0. 00 0	0. 00 0	3.8 16	- 9.7 48	0. 00 0	0. 00 0	1. 04 7	6.0 30	4.4 61	8. 88 7	0.0 00	0.4 02	0.0 01	0.0 00	- 5. 78 3	0.0 00	- 4.7 13	- 4.3 98
THER MAL ZONE: 104 SEC.	0. 00 0	0. 00 0	0.3 06	- 4.0 16	0. 00 0	0. 00 0	0. 46 0	2.6 49	1.9 60	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	- 1.3 60
THER MAL ZONE: 105 OFFIC E/LAB	0. 00 0	0. 00 0	1.9 12	- 7.7 50	0. 00 0	0. 00 0	0. 90 7	5.2 52	3.8 86	4. 50 2	0.0 00	0.2 45	0.0 00	0.0 00	- 2. 94 3	0.0 00	- 2.8 97	- 3.1 15
THER MAL ZONE: 106 CONF EREN CE	0. 00 0	0. 00 0	6.4 25	- 17. 59 4	0. 00 0	0. 00 0	7. 89 0	7.7 51	6.1 86	7. 91 1	0.0 00	0.9 48	0.0 00	0.0 00	- 5. 81 5	0.0 00	- 8.9 30	- 4.7 73
THER MAL ZONE: 107 I-1 SMAL L SEM	0. 00 0	0. 00 0	0.3 61	- 8.3 54	0. 00 0	0. 00 0	0. 94 9	5.5 25	4.0 88	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	- 2.5 69
THER MAL ZONE: 108 OFFIC E/LAB	0. 00 0	0. 00 0	2.6 23	- 9.2 49	0. 00 0	0. 00 0	0. 84 1	4.7 19	3.4 92	1. 78 6	0.0 00	0.3 32	1.3 38	0.0 00	- 1. 68 0	0.0 00	- 4.2 01	- 0.0 00

THER MAL ZONE: 109 I-2 S.E.M	0. 00 0 0	0. 00 0 0	0.3 88	- 11. 24	0. 00 0	0. 00 0	1. 27	27 0	7.4 70	5.5 26	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	- 3.4 14
THER MAL ZONE: 110 GRAD /TECH STATI ONS	0. 00 0 0	0. 00 0 0	2.7 40	- 17. 71	0. 00 0	0. 00 0	1. 50	50 6	8.5 09	6.2 95	3. 54	0.0 00	0.4 08	3.2 37	0.0 00	- 3. 43	0.0 00	- 5.0 86	0.0 00
THER MAL ZONE: 111 I-3 SAMP LE PREP	0. 00 0 0	0. 00 0 0	0.3 09	- 8.3	0. 00 0	0. 00 0	0. 91	91 4	5.3 34	3.9 46	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	- 2.1 70
THER MAL ZONE: 112 OFFIC E /LAB	0. 00 0 0	0. 00 0 0	1.5 46	- 9.7	0. 00 0	0. 00 0	0. 79	79 8	4.4 81	3.3 16	1. 78	0.0 00	0.2 17	2.0 09	0.0 00	- 1. 71	0.0 00	- 2.6 94	0.0 00
THER MAL ZONE: 113 H- 1 S.T.E. M.	0. 00 0 0	0. 00 0 0	0.2 93	- 13. 39	0. 00 0	0. 00 0	1. 22	22 8	7.2 02	5.3 28	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	- 0.6 58
THER MAL ZONE: 114 OFFIC E/LAB	0. 00 0 0	0. 00 0 0	1.5 37	- 9.7 07	0. 00 0	0. 00 0	0. 79	79 9	4.4 83	3.3 16	1. 78	0.0 00	0.2 17	1.9 85	0.0 00	- 1. 71	0.0 00	- 2.6 95	0.0 00
THER MAL ZONE:	0. 00 0 0	0. 00 0 0	0.3 10	- 23.	0. 00 0	0. 00 0	1. 72	72 6	10. 05	7.4 37	0. 00 0	0.0 00	0.0 00	4.4 52	0.0 00	0. 00 0	0.0 00	0.0 00	- 0.0 00

115 P- 2 X- RAY				97 5														
THER MAL ZONE: 116 OFFIC E/LAB	0. 00 0 0	0. 00 0 0	1.5 44	- 9.7 85	0. 00 0 0	0. 00 0 0	0. 80 6	4.5 25	3.3 48	1. 78 4	0.0 00	0.2 19	1.9 98	0.0 00	- 1. 71 9	0.0 00	- 2.7 21	0.0 00
THER MAL ZONE: 117 U- 2 MICR OSCO PY	0. 00 0 0	0. 00 0 0	0.1 98	- 12. 19 5	0. 00 0 0	0. 00 0 0	0. 88 3	5.0 65	3.7 48	0. 00 0	0.0 00	0.0 00	2.3 01	0.0 00	0. 00 0	0.0 00	0.0 00	- 0.0 00
THER MAL ZONE: 118 SEC.	0. 00 0 0	0. 00 0 0	1.5 12	- 9.5 47	0. 00 0 0	0. 00 0 0	0. 78 3	4.3 90	3.2 48	1. 78 4	0.0 00	0.2 13	1.9 76	0.0 00	- 1. 71 9	0.0 00	- 2.6 40	0.0 00
THER MAL ZONE: 119 T- 2 POLIS HING	0. 00 0 0	0. 00 0 0	0.1 96	- 12. 02 1	0. 00 0 0	0. 00 0 0	0. 87 6	5.0 25	3.7 17	0. 00 0	0.0 00	0.0 00	2.2 07	0.0 00	0. 00 0	0.0 00	0.0 00	- 0.0 00
THER MAL ZONE: 120 GRAD /TECH STATI ONS	0. 00 0 0	0. 00 0 0	1.9 66	- 13. 69 6	0. 00 0 0	0. 00 0 0	1. 17 3	6.6 21	4.8 99	1. 78 5	0.0 00	0.3 17	2.6 57	0.0 00	- 1. 73 0	0.0 00	- 3.9 92	0.0 00
THER MAL ZONE: 121 T- 1	0. 00 0 0	0. 00 0 0	0.1 94	- 12. 46 6	0. 00 0 0	0. 00 0 0	0. 89 9	5.1 64	3.8 20	0. 00 0	0.0 00	0.0 00	2.3 90	0.0 00	0. 00 0	0.0 00	0.0 00	- 0.0 00

GRIN DING																			
THER MAL ZONE: 122 OFFIC E/LAB	0. 00 0 0	0. 00 0 0	1.5 97	- 9.6 01	0. 00 0	0. 00 0	0. 79 6	4.4 63	3.3 02	1. 78 6	0.0 00	0.2 14	1.8 30	0.0 00	- 1. 71 2	0.0 00	- 2.6 75	- 0.0 00	
THER MAL ZONE: 123 F- 1B REAC TIVE GAS	0. 00 0 0	0. 00 0 0	0.1 74	- 13. 57 5	0. 00 0	0. 00 0	0. 88 1	5.0 82	3.7 60	0. 00 0	0.0 00	0.0 00	3.6 78	0.0 00	0. 00 0	0.0 00	0.0 00	- 0.0 00	
THER MAL ZONE: 124 OFFIC E/LAB	0. 00 0 0	0. 00 0 0	5.8 49	- 9.5 11	0. 00 0	0. 00 0	0. 93 3	5.2 07	3.8 52	1. 79 0	0.0 00	0.5 70	0.8 24	0.0 00	- 1. 65 7	0.0 00	- 7.8 56	- 0.0 00	
THER MAL ZONE: 125 F- 2 LARG E ELEC TRIC FURN ACE	0. 00 0 0	0. 00 0 0	0.0 00	0.0 00	0. 00 0	0. 00 0	0. 57 0	5.1 42	3.8 04	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	- 9.5 16	
THER MAL ZONE: 127 F- 3A SMAL L ELEC TRIC	0. 00 0 0	0. 00 0 0	0.0 00	0.0 00	0. 00 0	0. 00 0	0. 60 3	5.1 66	3.8 22	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	- 9.5 90	

FURN ACE																			
THER MAL ZONE: 129 OFFIC E/LAB	0. 00 0 0	0. 00 0 0	1.6 68	- 7.0 01	0. 00 0	0. 00 0	0. 85 5	4.8 33	3.5 76	1. 72 5	0.0 00	0.2 50	0.0 00	0.0 00	- 1. 60 3	0.0 00	- 2.9 08	- 1.3 95	
THER MAL ZONE: 130 S- 2 GRAP HICS	0. 00 0	0. 00 0	0.2 85	- 8.0 40	0. 00 0	0. 00 0	0. 86 0	4.9 90	3.6 92	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	- 1.7 87	
THER MAL ZONE: 130 S- 2 TRIBO LOGY	0. 00 0	0. 00 0	0.3 25	- 8.6 01	0. 00 0	0. 00 0	0. 93 8	5.4 41	4.0 26	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	- 2.1 29	
THER MAL ZONE: 131 SEC.	0. 00 0	0. 00 0	1.6 99	- 6.6 51	0. 00 0	0. 00 0	0. 78 4	4.4 21	3.2 71	1. 91 3	0.0 00	0.2 31	0.0 00	0.0 00	- 1. 77 2	0.0 00	- 2.6 46	- 1.2 50	
THER MAL ZONE: 132 O- 2 THER MO MECH .TESTI NG	0. 00 0	0. 00 0	0.3 25	- 10. 70 1	0. 00 0	0. 00 0	1. 14 4	6.6 75	4.9 38	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	- 2.3 82	
THER MAL ZONE: 133	0. 00 0	0. 00 0	1.6 61	- 6.6 57	0. 00 0	0. 00 0	0. 80 2	4.5 32	3.3 53	1. 62 4	0.0 00	0.2 33	0.0 00	0.0 00	- 1. 51 9	0.0 00	- 2.7 21	- 1.3 09	

THER MAL ZONE: 139 OFFIC E/LAB	0. 00 0	0. 00 0	1.6 58	- 6.5 50	0. 00 0	0. 00 0	0. 76 1	4.2 88	3.1 72	1. 85 2	0.0 00	0.2 21	0.0 00	0.0 00	- 1. 72 6	0.0 00	- 2.5 64	- 1.1 12
THER MAL ZONE: 141 OFFIC E/LAB	0. 00 0	0. 00 0	1.6 95	- 6.7 26	0. 00 0	0. 00 0	0. 79 8	4.5 04	3.3 32	1. 90 9	0.0 00	0.2 33	0.0 00	0.0 00	- 1. 77 3	0.0 00	- 2.6 94	- 1.2 77
THER MAL ZONE: 142 A- 3 PARTI CULA TE	0. 00 0	0. 00 0	0.4 24	- 18. 63 3	0. 00 0	0. 00 0	1. 70 6	9.9 89	7.3 90	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	- 0.8 76
THER MAL ZONE: 143 GRAD /TECH STATI ONS	0. 00 0	0. 00 0	1.7 41	- 8.9 05	0. 00 0	0. 00 0	1. 13 2	6.4 38	4.7 63	0. 00 0	0.0 00	0.3 22	0.0 00	0.0 00	0. 00 0	0.0 00	- 3.9 07	- 1.5 85
THER MAL ZONE: 144 V- 2 CERA MICS MACH INING	0. 00 0	0. 00 0	0.3 18	- 14. 53 7	0. 00 0	0. 00 0	0. 90 0	5.0 85	3.7 62	0. 00 0	0.0 00	0.0 00	4.4 73	0.0 00	0. 00 0	0.0 00	0.0 00	- 0.0 00
THER MAL ZONE: 148 CORRI DOR	0. 00 0	0. 00 0	2.9 93	- 8.8 53	0. 00 0	0. 00 0	0. 55 0	6.5 29	3.5 42	1. 80 5	0.0 00	0.2 12	0.0 00	0.0 00	- 1. 69 3	0.0 00	- 2.4 03	- 2.6 84

THER MAL ZONE: 200 FIBER OP. DIREC TOR	0. 00 0	0. 00 0	5.7 04	21. 08 3	0. 00 0	0. 00 0	1. 47 4	8.2 61	6.1 12	3. 38 8	0.0 00	0.4 61	5.8 38	0.0 00	- 3. 50 5	0.0 00	- 6.6 51	0.0 00
THER MAL ZONE: 201 CONF EREN CE	0. 00 0	0. 00 0	4.5 60	46. 01 8	0. 00 0	0. 00 0	13 .6	13. 53 3	10. 801	8. 50 1	0.0 00	0.5 91	7.8 74	0.0 00	- 6. 46 5	0.0 00	- 7.0 65	0.0 01
THER MAL ZONE: 202 EXEC UTIVE OFFIC ER	0. 00 0	0. 00 0	2.3 64	13. 82 4	0. 00 0	0. 00 0	0. 93 7	5.3 17	3.9 34	4. 26 4	0.0 00	0.1 92	3.0 96	0.0 00	- 3. 24 0	0.0 00	- 3.0 40	0.0 00
THER MAL ZONE: 203 SEC.	0. 00 0	0. 00 0	2.4 98	13. 46 3	0. 00 0	0. 00 0	0. 93 0	5.2 73	3.9 01	4. 26 8	0.0 00	0.1 84	2.6 24	0.0 00	- 3. 21 4	0.0 00	- 3.0 02	0.0 00
THER MAL ZONE: 204 DEPA RTME NT CHAI R	0. 00 0	0. 00 0	23. 82 8	29. 22 6	0. 00 0	0. 00 0	1. 91 7	10. 63 6	7.8 69	16. 0 35	0.0 00	1.4 59	2.6 27	0.0 00	- 13. .6 04	0.0 00	- 21. 54 1	0.0 00
THER MAL ZONE: 205 G- 3 SPECI	0. 00 0	0. 00 0	1.3 48	28. 26 2	0. 00 0	0. 00 0	1. 80 4	10. 19 3	7.5 41	0. 00 0	0.0 00	0.0 00	7.3 76	0.0 00	0. 00 0	0.0 00	0.0 00	- 0.0 00

ALTY MEAS.																		
THER MAL ZONE: 207 VEST.	0. 00 0 0	0. 00 0 0	0.4 54	- 4.1 29	0. 00 0	0. 00 0	0. 21 4	0.9 67	0.9 04	0. 00 0	0.0 00 00	0.0 00 00	1.5 90	0.0 00	0. 00 0	0.0 00 00	- 0.0 00	
THER MAL ZONE: 207A A-3A POWD ER SYNT HESIS	0. 00 0 0	0. 00 0 0	0.7 27	- 13. 15 8	0. 00 0	0. 00 0	0. 80 8	4.5 19	3.3 43	0. 00 0	0.0 00 00	0.0 00 00	3.7 61	0.0 00	0. 00 0	0.0 00 00	- 0.0 00	
THER MAL ZONE: 209 K- 1 SPECT RO ANAL YSIS	0. 00 0 0	0. 00 0 0	0.7 90	- 14. 60 8	0. 00 0	0. 00 0	0. 89 3	5.0 03	3.7 02	0. 00 0	0.0 00 00	0.0 00 00	4.2 21	0.0 00	0. 00 0	0.0 00 00	- 0.0 00	
THER MAL ZONE: 211 S- 3 GRAD. PC.	0. 00 0 0	0. 00 0 0	0.7 58	- 15. 35 0	0. 00 0	0. 00 0	0. 88 8	4.9 72	3.6 79	0. 00 0	0.0 00 00	0.0 00 00	5.0 52	0.0 00	0. 00 0	0.0 00 00	- 0.0 00	
THER MAL ZONE: 212 OFFIC E/LAB	0. 00 0 0	0. 00 0 0	5.9 44	- 29. 81 2	0. 00 0	0. 00 0	2. 28 0	12. 80 9	9.4 77	5. 12 9	0.0 00 00	0.6 00 00	6.9 50	0.0 00	- 5. 27 4	0.0 00 04	- 8.1 01	
THER MAL ZONE: 213 M- 1	0. 00 0 0	0. 00 0 0	0.4 65	- 8.2 44	0. 00 0	0. 00 0	0. 85 8	4.8 88	3.6 16	0. 00 0	0.0 00 00	0.0 00 00	0.0 00 00	0. 00 0	0.0 00 00	- 1.5 83		

THER MAL ANAL YSIS																		
THER MAL ZONE: 214 WORD PROC ESSIN G	0. 00 0 0	0. 00 0 0	0.6 87	- 23. 35	0. 00 0	0. 00 0	0. 89 6	3.8 31	19. 601	1. 69 9	0.0 00	0.1 85	1.1 31	0.0 00	- 1. 81 7	0.0 00	- 2.8 58	- 0.0 00
THER MAL ZONE: 215 M- 2 THER MAL ANAL YSIS	0. 00 0	0. 00 0	0.4 31	- 5.5 67	0. 00 0	0. 00 0	0. 66 3	3.7 57	2.7 79	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	- 2.0 63
THER MAL ZONE: 216 FINAN CE/AD MIN. CENT ER	0. 00 0	0. 00 0	2.7 76	- 14. 40	0. 00 0	0. 00 0	1. 08 9	6.0 92	4.5 07	1. 73 2	0.0 00	0.2 89	3.5 71	0.0 00	- 1. 76 7	0.0 00	- 3.8 86	- 0.0 00
THER MAL ZONE: 217 VEST.	0. 00 0	0. 00 0	0.1 80	- 1.4 37	0. 00 0	0. 00 0	0. 18 4	0.8 24	0.7 70	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	- 0.5 21
THER MAL ZONE: 217A R-1 SPUTT ER	0. 00 0	0. 00 0	0.5 44	- 8.1 46	0. 00 0	0. 00 0	1. 00 2	5.7 38	4.2 45	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	- 3.3 83

THER MAL ZONE: 217B L-3 ELEC TRONI CS	0. 00 0	0. 00 0	0.4 85	- 6.5 78	0. 00 0	0. 00 0	0. 80 4	4.5 77	3.3 86	0. 00 0	0.0 00 0	0.0 00 0	0.0 00 0	0.0 00 0	0. 00 0	0.0 00 0	0.0 00 0	- 2.6 74
THER MAL ZONE: 218 SEC.	0. 00 0	0. 00 0	2.4 22	- 11. 56 9	0. 00 0	0. 00 0	0. 86 0	4.7 95	3.5 48	1. 73 5	0.0 00 0	0.2 30	2.7 78	0.0 00	- 1. 75 2	0.0 00	- 3.0 47	0.0 00
THER MAL ZONE: 218A CENT ER DIREC TOR	0. 00 0	0. 00 0	4.6 16	- 15. 98 0	0. 00 0	0. 00 0	1. 53 8	4.8 74	4.6 27	3. 46 4	0.0 00 0	0.2 01	2.8 17	0.0 00	- 3. 45 5	0.0 00	- 2.7 03	0.0 00
THER MAL ZONE: 220 CORRI DOR	0. 00 0	0. 00 0	25. 74	- 38. 58 6	0. 00 0	0. 00 0	2. 03 2	23. 90 7	12. 971	3. 93 6	0.0 00 0	1.4 05	0.0 00	0.0 00	- 9. 44 1	0.0 00	- 16. 60 9	5.3 61
THER MAL ZONE: 221 L- 2 ELEC TRONI CS	0. 00 0	0. 00 0	0.5 03	- 7.2 75	0. 00 0	0. 00 0	0. 89 1	5.0 94	3.7 69	0. 00 0	0.0 00 0	0.0 00 0	0.0 00 0	0.0 00 0	0. 00 0	0.0 00 0	0.0 00 0	- 2.9 82
THER MAL ZONE: 221 L- 4 MAGN ETICS	0. 00 0	0. 00 0	0.4 86	- 7.2 83	0. 00 0	0. 00 0	0. 85 5	4.8 84	3.6 13	0. 00 0	0.0 00 0	0.0 00 0	0.0 00 0	0.0 00 0	0. 00 0	0.0 00 0	0.0 00 0	- 2.5 55

THER MAL ZONE: 222 CORRI DOR	0. 00 0 0 0	0. 00 0 0 0	4.7 71	- 23. 19 9	0. 00 0 0 0	0. 00 0 0 0	0. 51 2	6.0 57	3.2 86	0. 86 9	0.0 00	0.1 60	10. 702	0.0 00	- 0.94 9	0.0 00	- 2.2 09	- 0.0 00
THER MAL ZONE: 223 M- 3 THER MAL COND UCTIV ITY	0. 00 0 0 0	0. 00 0 0 0	0.5 20	- 7.5 79	0. 00 0 0 0	0. 00 0 0 0	0. 88 4	5.0 40	3.7 29	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	- 2.5 93
THER MAL ZONE: 226 D- 3 TAPE CASTI NG	0. 00 0 0 0	0. 00 0 0 0	0.6 26	- 15. 61 6	0. 00 0 0 0	0. 00 0 0 0	1. 07 3	6.0 19	4.4 53	0. 00 0	0.0 00	0.0 00	3.4 45	0.0 00	0. 00 0	0.0 00	0.0 00	- 0.0 00
THER MAL ZONE: 227 UNDE RGRA D DIR.	0. 00 0 0 0	0. 00 0 0 0	2.2 21	- 12. 47 8	0. 00 0 0 0	0. 00 0 0 0	0. 96 1	5.3 74	3.9 76	1. 16 2	0.0 00	0.2 28	3.0 00	0.0 00	- 1. 24 7	0.0 00	- 3.1 96	- 0.0 00
THER MAL ZONE: 228 B- 2 PORO SITY SURF ACE	0. 00 0 0 0	0. 00 0 0 0	0.5 06	- 12. 75 0	0. 00 0 0 0	0. 00 0 0 0	0. 82 1	4.5 81	3.3 89	0. 00 0	0.0 00	0.0 00	3.4 52	0.0 00	0. 00 0	0.0 00	0.0 00	- 0.0 00
THER MAL ZONE:	0. 00 0 0 0	0. 00 0 0 0	2.0 37	- 10.	0. 00 0 0 0	0. 00 0 0 0	0. 82 7	4.6 23	3.4 20	1. 10 6	0.0 00	0.1 95	2.5 59	0.0 00	- 1. 00	2.7 46	- 0.0 00	

229 SEC.				83 5												18 8				
THER MAL ZONE: 230 B- 1 PARTI CLE SIZE ANAL YSIS	0. 00 0	0. 00 0	0.4 89	12. 22 1	0. 00 0	0. 00 0	0. 81 7	4.5 65	3.3 77	0. 00 0	0.0 00 0	0.0 00 0	2.9 72	0.0 00	0. 00 0	0.0 00 0	0.0 00 0	- 0.0 00	- 0.0 00	
THER MAL ZONE: 231 UNDE RGRA D DIR.	0. 00 0	0. 00 0	2.0 74	10. 87 3	0. 00 0	0. 00 0	0. 83 0	4.6 39	3.4 32	1. 20 5	0.0 00	0.1 94	2.5 43	0.0 00	1. 29 1	0.0 00	2.7 54	- 0.0 00	- 0.0 00	
THER MAL ZONE: 232 C- 4 COILO IDS ANAL YSIS	0. 00 0	0. 00 0	0.4 90	- 7.7 45	0. 00 0	0. 00 0	0. 89 2	5.0 93	3.7 68	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	- 2.4 98		
THER MAL ZONE: 233 OFFIC E/LAB	0. 00 0	0. 00 0	2.1 39	- 10. 91 3	0. 00 0	0. 00 0	0. 82 6	4.6 21	3.4 19	1. 39 9	0.0 00	0.1 91	2.5 59	0.0 00	1. 50 1	0.0 00	2.7 40	- 0.0 00	- 0.0 00	
THER MAL ZONE: 234 C- 3 CHEM ICAL ANAL YSIS	0. 00 0	0. 00 0	0.4 94	- 7.5 22	0. 00 0	0. 00 0	0. 87 6	5.0 09	3.7 06	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	- 2.5 62		

THER MAL ZONE: 236 C- 2 SOL GEL FORM ING	0. 00 0	0. 00 0	0.4 91	- 7.4 19	0. 00 0	0. 00 0	0. 86 4	4.9 39	3.6 54	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	- 2.5 28
THER MAL ZONE: 237 GRAD /TECH STATI ONS	0. 00 0	0. 00 0	4.6 16	- 25. 54 0	0. 00 0	0. 00 0	2. 01 9	11. 37 3	8.4 14	3. 24 9	0.0 00	0.4 66	5.6 20	0.0 00	- 3. 52 1	0.0 00	- 6.6 96	0.0 01
THER MAL ZONE: 238 C- 2 RHEO LOGY	0. 00 0	0. 00 0	0.4 99	- 7.6 82	0. 00 0	0. 00 0	0. 89 6	5.1 17	3.7 86	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	- 2.6 16
THER MAL ZONE: 238A TECH	0. 00 0	0. 00 0	0.1 52	- 3.2 09	0. 00 0	0. 00 0	0. 15 0	1.2 37	2.3 44	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	- 0.6 72
THER MAL ZONE: 239 OFFIC E/LAB	0. 00 0	0. 00 0	2.2 23	- 11. 18 8	0. 00 0	0. 00 0	0. 83 9	4.6 98	3.4 75	1. 64 0	0.0 00	0.1 93	2.6 59	0.0 00	- 1. 76 0	0.0 00	- 2.7 79	0.0 00
THER MAL ZONE: 240 D- 4 COMP OSITE S	0. 00 0	0. 00 0	1.1 04	- 34. 23 1	0. 00 0	0. 00 0	2. 45 2	13. 94 5	10. 317	0. 00 0	0.0 00	0.0 00	6.4 12	0.0 00	0. 00 0	0.0 00	0.0 00	- 0.0 01

THERMAL ZONE: 241 GRAD /TECH STATI ONS	0. 00 0	0. 00 0	2.6 41	16. 49 2	0. 00 0	0. 00 0	1. 19 2	6.6 44	4.9 15	0. 00 0	0.0 00 0	0.2 88	4.7 59	0.0 00	0. 00 0	0.0 00 0	- 3.9 46	- 0.0 00
THERMAL ZONE: 242 D- 2 PRESS FORM	0. 00 0	0. 00 0	0.5 35	14. 37 6	0. 00 0	0. 00 0	0. 91 5	5.1 18	3.7 87	0. 00 0	0.0 00 0	0.0 00	4.0 21	0.0 00	0. 00 0	0.0 00 0	- 0.0 00	
THERMAL ZONE: 244 D- 1 CASTI NG EXTR USION	0. 00 0	0. 00 0	0.4 81	9.1 72	0. 00 0	0. 00 0	0. 91 3	5.2 18	3.8 60	0. 00 0	0.0 00 0	0.0 00	0.0 00	0. 00 0	0.0 00 0	- 1.3 00		
THERMAL ZONE: 247 GRAD /TECH STATI ONS	0. 00 0	0. 00 0	3.7 88	17. 70 1	0. 00 0	0. 00 0	1. 28 1	7.1 69	5.3 04	1. 76 5	0.0 00	0.2 87	4.2 34	0.0 00	- 1. 90 8	- 4.2 20	- 0.0 00	
THERMAL ZONE: LOBB Y 1ST FLOO R	0. 00 0	0. 00 0	29. 32	60. 46 1	0. 00 0	0. 00 0	8. 95 5	47. 85 2	9.3 01	41 .5 21	0.0 00	3.7 31	0.0 02	0.0 00	- 38 .2 61	- 0.0 00	- 30. 92 5	- 11. 034
THERMAL ZONE:	0. 00 0	0. 00 0	0.2 96	1.6 11	0. 00 0	0. 00 0	0. 00 0	1.1 33	0.0 00	0. 00 0	0.0 00 0	0.0 00	0.1 81	0.0 00	0. 00 0	0.0 00 0	- 0.0 00	

132-A TECH.																		
THER MAL ZONE: 006 CUST ODIA L STOR AGE	0. 00 0 0	0. 00 0 0	0.0 00 00	0. 00 0	0. 00 0	0. 00 0	2.6 66	0.0 00	0. 00 0	0.0 00 00	0.2 43	2.3 97	0.0 00	0. 00 0	0.0 00 00	- 5.3 06	0.0 00	
THER MAL ZONE: 001 MECH ANIC AL EQUIP MENT ROOM	0. 00 0	0. 00 0	0.0 00 00	0. 00 0	0. 00 0	0. 00 0	20 3.8 85	34. 330	0. 00 0	0.0 00 00	0.4 75	0.0 00	0.0 00	0. 00 0	0.0 00 00	- 7.0 82	231 .60 8	
THER MAL ZONE: 002 PLUM BING EQUIP MENT	0. 00 0	0. 00 0	0.0 00 00	0. 00 0	0. 00 0	0. 00 0	8.0 48	0.0 00	0. 00 0	0.0 00 00	0.6 25	2.8 79	0.0 00	0. 00 0	0.0 00 00	- 11. 55 2	0.0 00	
THER MAL ZONE: 003 ELEC TRICA L ROOM	0. 00 0	0. 00 0	0.0 00 00	0. 00 0	0. 00 0	0. 00 0	13. 46 4	2.2 67	0. 00 0	0.0 00 00	0.3 64	0.0 00	0.0 00	0. 00 0	0.0 00 00	- 12. 30 5	3.7 90	
THER MAL ZONE: 004 ELEV. MACH	0. 00 0	0. 00 0	0.0 00 00	0. 00 0	0. 00 0	0. 00 0	4.4 65	0.7 52	0. 00 0	0.0 00 00	0.1 36	0.0 00	0.0 00	0. 00 0	0.0 00 00	- 3.9 18	1.4 34	

ROOM																				
THER MAL ZONE: 126 CORRI DOR	0. 00 0 0	0. 00 0 0	0.0 00 00	0. 00 0	0. 00 0	1. 85 6	23. 92 2	12. 979	3. 25 9	0.0 00	0.5 12	0.0 01	0.0 00	- .0 41	10. 0 41	0.0 00	- 18. 71 9	- 13. 768		
THER MAL ZONE: 140 STOR AGE	0. 00 0	0. 00 0	0.0 00 00	0. 00 0	0. 00 0	0. 00 0	3.6 47	0.0 00	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	- 3.6 47			
THER MAL ZONE: 145 WOM ENS REST ROOM	0. 00 0	0. 00 0	0.0 00 00	0. 00 0	0. 00 0	1. 09 4	4.3 57	1.2 25	0. 00 0	0.0 00	0.1 23	0.0 00	0.0 00	0. 00 0	0.0 00	- 3.5 64	- 3.2 36			
THER MAL ZONE: 146 E DRYI NG	0. 00 0	0. 00 0	0.0 00 00	0. 00 0	0. 00 0	0. 64 5	5.0 66	3.7 48	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	- 9.4 59			
THER MAL ZONE: 147 MENS REST ROOM	0. 00 0	0. 00 0	0.0 00 00	0. 00 0	0. 00 0	1. 07 2	4.4 11	1.2 41	1. 64 3	0.0 00	0.0 75	0.0 00	0.0 00	- 1. 69 4	0.0 00	- 3.6 10	- 3.1 38			
THER MAL ZONE: 149 RECEI VING	0. 00 0	0. 00 0	0.0 00 00	0. 00 0	0. 00 0	0. 95 8	6.7 63	5.0 04	1. 58 7	0.0 00	0.0 46	0.0 00	0.0 00	- 1. 83 8	0.0 00	- 4.6 74	- 7.8 46			

THER MAL ZONE: 225 FILE STOR AGE	0. 00 0 0	0. 00 0 0	0.0 00 00	0. 00 0	0. 00 0	0. 00 0	3.7 06	0.0 00	0. 00 0	0.0 00 00	0.0 00 00	0.0 00 00	0. 00 0	0.0 00 00	0.0 00 00	0. 00 0	0.0 00 00	0.0 00 00	- 3.7 06
THER MAL ZONE: 228A TECH	0. 00 0 0	0. 00 0 0	0.0 00 00	0. 00 0	0. 00 0	0. 08 7	0.8 88	1.6 83	0. 00 0	0.0 00 00	0.0 00 00	0.0 00 00	0. 00 0	0.0 00 00	0.0 00 00	0. 00 0	0.0 00 00	0.0 00 00	- 2.6 58
THER MAL ZONE: 243 WOM ENS REST ROOM	0. 00 0 0	0. 00 0 0	0.0 00 00	0. 00 0	0. 00 0	1. 01 5	4.6 27	1.3 01	0. 00 0	0.0 00 00	0.0 00 36	0.0 00 00	0. 00 0	0.0 00 00	0.0 00 00	0. 00 0	0.0 00 00	0.0 00 00	- 4.2 13 2.7 67
THER MAL ZONE: 245 MENS REST ROOM	0. 00 0 0	0. 00 0 0	0.0 00 00	0. 00 0	0. 00 0	0. 99 1	4.5 43	1.2 78	1. 51 0	0.0 00 00	0.0 00 24	0.0 00 00	0. 00 0	0.0 00 00	0.0 00 00	- 2. 01 2	0.0 00 00	0.0 00 00	- 4.0 56 2.2 78
THER MAL ZONE: 245A J.C.	0. 00 0 0	0. 00 0 0	0.0 00 00	0. 00 0	0. 00 0	0. 00 0	0.5 04	0.0 00	0. 00 0	0.0 00 00	0.0 00 00	0.0 00 00	0. 00 0	0.0 00 00	0.0 00 00	0. 00 0	0.0 00 00	0.0 00 00	- 0.5 04
THER MAL ZONE: 248 SERVI CE CORRI DOR	0. 00 0 0	0. 00 0 0	0.0 00 00	0. 00 0	0. 00 0	0. 84 7	10. 39 7	5.6 41	0. 00 0	0.0 00 00	0.0 00 00	0.0 00 00	0. 00 0	0.0 00 00	0.0 00 00	0. 00 0	0.0 00 00	0.0 00 00	- 16. 884
THER MAL ZONE:	0. 00 0 0	0. 00 0 0	0.0 00 00	0. 00 0	0. 00 0	0. 37 6	2.0 53	1.9 21	0. 00 0	0.0 00 00	0.0 00 00	0.0 00 00	0. 00 0	0.0 00 00	0.0 00 00	0. 00 0	0.0 00 00	0.0 00 00	- 4.3 50

E.S.1 1ST FLOOR																		
THERMAL ZONE:																		
E.S.2 1ST FLOOR	0. 00 0	0. 00 0	0.0 00	0.0 00	0. 00 0	0. 00 0	0. 30 7	1.8 62	1.7 42	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	3.9 10
THERMAL ZONE:																		
E.S.3 1ST FLOOR	0. 00 0	0. 00 0	0.0 00	0.0 00	0. 00 0	0. 00 0	0. 40 5	2.2 29	2.0 85	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	4.7 20
THERMAL ZONE:																		
E.S.4 1ST FLOOR	0. 00 0	0. 00 0	0.0 00	0.0 00	0. 00 0	0. 00 0	0. 40 3	2.2 53	2.1 07	0. 00 0	0.0 00	0.0 00	0.0 00	0.0 00	0. 00 0	0.0 00	0.0 00	4.7 63
THERMAL ZONE:																		
ELEVATOR - 1ST FLOOR	0. 00 0	0. 00 0	0.0 00	0.0 00	0. 00 0	0. 00 0	0. 40 0	2.0 83	1.9 49	0. 00 0	0.0 00	0.0 27	0.0 00	0.0 00	0. 00 0	0.0 00	- 2.4 70	- 1.9 88
THERMAL ZONE:																		
ELEVATOR 2ND FLOOR	0. 00 0	0. 00 0	0.0 00	0.0 00	0. 00 0	0. 00 0	0. 39 3	2.0 40	1.9 08	0. 00 0	0.0 00	0.0 30	0.0 00	0.0 00	0. 00 0	0.0 00	- 2.4 72	- 1.8 99

THERMAL ZONE: ELEVATOR BASEMENT	0.000	0.000	0.000	0.000	0.000	0.000	0.487	2.276	2.129	0.000	0.000	0.092	0.000	0.000	0.000	0.000	-3.210	-1.774
THERMAL ZONE: ES.1 2ND FLOOR	0.000	0.000	0.000	0.000	0.000	0.000	0.409	2.019	1.888	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-4.316	-
THERMAL ZONE: ES.2 2ND FLOOR	0.000	0.000	0.000	0.000	0.000	0.000	0.359	1.934	1.809	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-4.102	-
THERMAL ZONE: ES.3 2ND FLOOR	0.000	0.000	0.000	0.000	0.000	0.000	0.454	2.259	2.113	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-4.825	-
THERMAL ZONE: ES.4 2ND FLOOR	0.000	0.000	0.000	0.000	0.000	0.000	0.381	2.083	1.948	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-4.412	-
THERMAL ZONE: J.C. 1ST FLOOR	0.000	0.000	0.000	0.000	0.000	0.000	0.121	0.599	0.560	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-1.280	-

THERMAL ZONE: LOBBY 2ND FLOOR	0.000	0.000	0.000	0.000	0.000	0.000	5.749	46.913	9.119	30.792	0.000	0.030	0.008	0.000	-46.087	0.000	-34.745	-11.772
THERMAL ZONE: OPEN	0.000	0.000	0.000	0.000	0.000	0.000	0.881	4.679	4.377	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-9.936
THERMAL ZONE: SERVICE CORRIDOR - 1ST FLOOR	0.000	0.000	0.000	0.000	0.000	0.000	0.763	10.123	5.492	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-16.379
THERMAL ZONE: SPACE 101	0.000	0.000	0.000	0.000	0.000	0.000	48.292	37.965	355.150	0.000	0.000	0.829	0.006	0.000	0.000	0.000	0.000	-277.644
THERMAL ZONE: SPACE 102	0.000	0.000	0.000	0.000	0.000	0.000	36.514	37.965	355.150	0.000	0.000	0.731	0.013	0.000	0.000	0.000	0.000	-463.930
THERMAL ZONE: STAIR WELL - 1ST FLOOR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.776	0.000	0.000	0.000	0.105	3.760	0.000	0.000	0.000	0.000	0.000
THERMAL ZONE: STAIR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.681	0.000	0.000	0.000	0.321	4.079	0.000	0.000	0.000	0.000	0.000

WELL - BASE MENT																		
THER MAL ZONE: STAIR WELL 2ND FLOO R	0. 00 0	0. 00 0	0.0 00	0.0 00	0. 00 0	0. 00 0	0. 00 0	2.8 63	0.0 00	0. 00 0	0.0 00	0.0 97	4.1 13	0.0 00	0. 00 0	0.0 00	7.0 74	0.0 00
Total Facility	0. 00 0	0. 00 0	20 9.8 59	11 64. 99	0. 00 0	0. 00 0	22 7. 86	17 32. 23	123 4.5 70	20 9. 46	0.0 00	23. 90 5	175 .10 0	0.0 00	21 7. 82	11 82. 40	124 7.7 49	

Peak Cooling Sensible Heat Gain Components

		[W]	[W]																			
THER MAL ZONE : 101 CONF EREN CE	01- SEP- 13:1 0	0. 00	0. 00	0. 00	- 16. 26	0. 00	0. 00	53 7. 67	62 6.7 7	34 0.6 4	96 9. 97	0. 00	20. 73	0.0 0	0.0 0	- 0. 00	0. 00	0. 00	0. 00	- 0. 00	88 3.5 0	
THER MAL ZONE : 102 OFFI CE/L AB	01- SEP- 13:1 0	0. 00	0. 00	0. 00	- 95. 9.8 0	0. 00	0. 00	75 .0 2	40 6.4 2	20 4.7 4	96 4. 26	0. 00	14. 34	0.0 0	0.0 0	- 0. 00	0. 00	0. 00	- 0. 00	70 4.9 7		
THER MAL ZONE : 103 OFFI CE/L AB	09- OCT- 13:2 0	0. 00	0. 00	0. 00	- 14. 51. 56	0. 00	0. 00	86 .2 7	46 7.4 1	23 5.4 6	24 29. 5 0	0. 00	13. 03	0.0 0	0.0 0	- 0. 00	0. 00	0. 00	- 0. 00	17 80. 11		
THER MAL ZONE : 104 SEC.	01- SEP- 16:0 0	0. 00	0. 00	0. 00	- 30. 1.1 5	0. 00	0. 00	37 .9 0	20 5.3 7	10 3.4 6	0. 00	0. 00	0.0 0	0.0 0	- 0. 00	0. 00	0. 00	- 0. 00	45. 58			
THER MAL ZONE : 105 OFFI CE/L AB	01- SEP- 13:1 0	0. 00	0. 00	0. 00	- 94. 3.0 9	0. 00	0. 00	75 .1 5	40 7.1 3	20 5.1 0	96 4. 97	0. 00	14. 37	0.0 0	0.0 0	- 0. 00	0. 00	0. 00	- 0. 00	72 3.6 3		
THER MAL ZONE : 106 CONF EREN CE	19- JUL- 16:4 0	0. 00	0. 00	0. 00	- 21. 37. 35	0. 00	0. 00	51 5. 29	60 0.8 0	32 6.5 2	17 05. 2 1	0. 00	11. 9.1 6	0.0 0	0.0 0	- 0. 00	0. 00	0. 00	- 0. 00	11 29. 62		

THER MAL ZONE : 107 I-1 SMA LL SEM	20- JUL- 17:0 0	0. 00	0. 00	0. 00	60 0.9 8	0. 00	0. 00	79 .0 5	42 8.2 8	21 5.7 5	0. 00	0. 00	0.0 0	0.0 0	0.0 0	- 0. 00	0. 00	0.0 0	12 2.1 0
THER MAL ZONE : 108 OFFI CE/L AB	19- JUL- 16:4 0	0. 00	0. 00	0. 00	95 0.7 8	0. 00	0. 00	67 .5 1	36 5.8 1	18 4.2 8	11 0. 07	0. 00	54. 02	16 9.0 9	0.0 0	- 0. 00	0. 00	0.0 0	0.0 0
THER MAL ZONE : 109 I-2 S.E.M	20- JUL- 17:0 0	0. 00	0. 00	0. 00	81 5.1 5	0. 00	0. 00	10 6. 87	57 9.0 2	29 1.6 9	0. 00	0. 00	0.0 0	0.0 0	0.0 0	- 0. 00	0. 00	0.0 0	16 2.4 3
THER MAL ZONE : 110 GRA D/TE CH STAT IONS	19- JUL- 16:4 0	0. 00	0. 00	0. 00	16 65. 98	0. 00	0. 00	12 1. 73	65 9.5 9	33 2.2 8	21 7. 45	0. 00	64. 52	27 0.4 0	0.0 0	- 0. 00	0. 00	0.0 0	0.0 0
THER MAL ZONE : 111 I-3 SAMP LE PREP	20- JUL- 17:0 0	0. 00	0. 00	0. 00	58 6.7 6	0. 00	0. 00	76 .3 1	41 3.4 3	20 8.2 7	0. 00	0. 00	0.0 0	0.0 0	0.0 0	- 0. 00	0. 00	0.0 0	11 1.2 4
THER MAL ZONE : 112 OFFI	19- JUL- 17:0 0	0. 00	0. 00	0. 00	89 7.1 3	0. 00	0. 00	64 .1 1	34 7.3 7	17 4.9 9	10 0. 87	0. 00	33. 19	17 6.5 9	0.0 0	- 0. 00	0. 00	0.0 0	0.0 0

CE /LAB																				
THER MAL ZONE : 113 H-1 S.T.E. M.	20- JUL- 17:0 0	0. 00	0. 00	0. 00	92 1	0. 0 0	0. 0 0	10 3. 03	55 8.2 3	28 1.2 2	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0. 00	- 0. 00	0. 00	0.0 0	14. 27
THER MAL ZONE : 114 OFFI CE/L AB	19- JUL- 17:0 0	0. 00	0. 00	0. 00	89 2.6 0	0. 0 0	0. 0 0	64 .1 3	34 7.4 7	17 5.0 4	10 0. 99	0. 00	33. 20	17 1.7 7	0.0 0	- 0. 00	0. 00	0.0 0	0.0 0	
THER MAL ZONE : 115 P-2 X- RAY	20- JUL- 17:0 0	0. 00	0. 00	0. 00	16 15. 23	0. 0 0	0. 0 0	14 3. 81	77 9.1 5	39 2.5 1	0. 00	0. 00	0.0 0	29 9.7 7	0.0 0	- 0. 00	0. 00	0.0 0	0.0 0	
THER MAL ZONE : 116 OFFI CE/L AB	19- JUL- 17:0 0	0. 00	0. 00	0. 00	89 9.5 6	0. 0 0	0. 0 0	64 .7 3	35 0.7 6	17 6.7 0	10 1. 00	0. 00	33. 52	17 2.8 4	0.0 0	- 0. 00	0. 00	0.0 0	0.0 0	
THER MAL ZONE : 117 U-2 MICR OSCO PY	20- JUL- 17:0 0	0. 00	0. 00	0. 00	79 7.6 0	0. 0 0	0. 0 0	72 .4 7	39 2.6 4	19 7.8 0	0. 00	0. 00	0.0 0	13 4.7 0	0.0 0	- 0. 00	0. 00	0.0 0	0.0 0	
THER MAL ZONE : 118 SEC.	19- JUL- 17:0 0	0. 00	0. 00	0. 00	87 5.7 1	0. 0 0	0. 0 0	62 .8 0	34 0.3 0	17 1.4 3	10 1. 02	0. 00	32. 52	16 7.6 3	0.0 0	- 0. 00	0. 00	0.0 0	0.0 0	

THERMAL ZONE : 119	20-JUL-17:00	0.00	0.00	0.00	-78.6	0.00	0.00	71.9	38.8	19.1	0.00	0.00	0.00	12.9	0.00	-0.00	0.00	0.00	0.00
THERMAL ZONE : 120	19-JUL-17:00	0.00	0.00	0.00	-12.62.73	0.00	0.00	94.2	51.4	25.5	10.86	0.00	49.04	24.1	0.00	-0.00	0.00	0.00	0.00
THERMAL ZONE : 121	20-JUL-17:00	0.00	0.00	0.00	-81.8.0	0.00	0.00	73.7	40.5	20.3	0.00	0.00	0.00	14.2	0.00	-0.00	0.00	0.00	0.00
THERMAL ZONE : 122	19-JUL-17:00	0.00	0.00	0.00	-89.3.0	0.00	0.00	63.4	34.2	17.6	10.89	0.00	33.06	17.1	0.00	-0.00	0.00	0.00	0.00
THERMAL ZONE : 123	20-JUL-17:00	0.00	0.00	0.00	-91.2.0	0.00	0.00	72.1	39.4	19.5	0.00	0.00	0.00	24.8	0.00	-0.00	0.00	0.00	0.00
THERMAL ZONE : 124	19-JUL-16:50	0.00	0.00	0.00	-11.31.60	0.00	0.00	74.7	40.8	20.1	10.17	0.00	10.7	24.0	0.00	-0.00	0.00	0.00	0.00

OFFICE/LAB																									
THERMAL ZONE : 125	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
F-2 LARG E																									
ELEC TRIC FURN ACE																									
THERMAL ZONE : 127	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
F-3A SMA LL																									
ELEC TRIC FURN ACE																									
THERMAL ZONE : 129	19-JUL-17:00	0.00	0.00	0.00	88.67	0.00	0.00	69.4	37.3	18.2	67.5	0.00	36.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.0	6.8	8	
OFFICE/LAB																									
THERMAL ZONE : 130	20-JUL-17:00	0.00	0.00	0.00	55.98	0.00	0.00	71.9	38.7	19.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	93.0	19		
S-2 GRAP HICS																									
THERMAL ZONE : 130	20-JUL-17:00	0.00	0.00	0.00	61.20	0.00	0.00	77.4	42.6	21.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	7		

S-2 TRIB OLO GY																				
THER MAL ZONE : 131 SEC.	19- JUL- 17:0 0	0. 00	0. 00	0. 00	88 4	0. 00	0. 00	63 .2 4	34 2.6 8	17 2.6 3	74 8. 23	0. 00	33. 02	0.0 0	0.0 0	0. 00	- 0. 00	0. 00	0. 00	47 5.7 6
THER MAL ZONE : 132 O-2 THER MO MEC H. TESTI NG	20- JUL- 17:0 0	0. 00	0. 00	0. 00	75 3.9 1	0. 00	0. 00	95 .5 0	51 7.4 0	26 0.6 5	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0. 00	0. 00	0. 00	11 9.6 4	
THER MAL ZONE : 133 OFFI CE/L AB	19- JUL- 17:0 0	0. 00	0. 00	0. 00	85 8.2 5	0. 00	0. 00	64 .8 4	35 1.3 2	17 6.9 8	63 6. 21	0. 00	33. 84	0.0 0	0.0 0	- 0. 00	0. 00	0. 00	40 4.9 5	
THER MAL ZONE : 134 O-3 HAR DNE S MOD. TEST	20- JUL- 17:0 0	0. 00	0. 00	0. 00	89 6.8 8	0. 00	0. 00	96 .7 2	52 4.0 1	26 3.9 8	0. 00	0. 00	0.0 0	12. 18	0.0 0	- 0. 00	0. 00	0. 00	0. 00	
THER MAL ZONE : 135 OFFI	19- JUL- 17:0 0	0. 00	0. 00	0. 00	85 4.8 8	0. 00	0. 00	62 .4 7	33 8.5 0	17 0.5 2	67 2. 50	0. 00	32. 59	0.0 0	0.0 0	- 0. 00	0. 00	0. 00	42 1.7 0	

CE/L AB																										
THER MAL ZONE : 136 NON DEST RUCT IVE	20- JUL- 17:0 0	0. 00	0. 00	0. 00	- 61 8.9 9	0. 0 0	0. 0 0	68 .8 7	37 3.1 5	18 7.9 8	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	- 0. 00	0. 00	0. 00	- 0. 00	0. 00	0. 00	11. 01	- -		
THER MAL ZONE : 137 GRA D/TE CH STAT IONS	19- JUL- 17:0 0	0. 00	0. 00	0. 00	- 12 72. 14	0. 0 0	0. 0 0	94 .7 1	51 3.2 0	25 8.5 3	74 4. 09	0. 00	49. 38	0. 00	0. 00	0. 00	- 0. 00	0. 00	0. 00	- 0. 00	0. 00	0. 00	38 7.7 7	- -		
THER MAL ZONE : 138 O-1 UNIV ERSA L TESTI NG	20- JUL- 17:0 0	0. 00	0. 00	0. 00	- 12 04. 89	0. 0 0	0. 0 0	14 4. 43	78 2.5 5	39 4.2 2	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	- 0. 00	0. 00	0. 00	- 0. 00	0. 00	0. 00	11. 6.3 2	- -		
THER MAL ZONE : 139 OFFI CE/L AB	19- JUL- 17:0 0	0. 00	0. 00	0. 00	- 86 9.1 4	0. 0 0	0. 0 0	61 .3 4	33 2.3 8	16 7.4 4	72 4. 93	0. 00	31. 96	0. 00	0. 00	0. 00	- 0. 00	0. 00	0. 00	- 0. 00	0. 00	0. 00	44. 8.9 0	- -		
THER MAL ZONE : 141 OFFI CE/L AB	19- JUL- 17:0 0	0. 00	0. 00	0. 00	- 87 9.4 4	0. 0 0	0. 0 0	64 .4 2	34 9.0 9	17 5.8 6	74 6. 88	0. 00	33. 55	0. 00	0. 00	0. 00	- 0. 00	0. 00	0. 00	- 0. 00	0. 00	0. 00	49. 0.3 6	- -		

THERMAL ZONE : 142 A-3 PART ICULATE	20-JUL-17:00	0.00	0.00	0.00	-13.25.	0.00	0.00	14.291	77.427	39.005	0.00	0.00	0.00	17.87	0.00	-0.00	0.00	0.00	0.00
THERMAL ZONE : 143 GRA/D/TECH STAT IONS	19-JUL-17:00	0.00	0.00	0.00	-84.804	0.00	0.00	92.10	49.903	25.139	0.00	0.00	0.00	47.900	0.00	-0.00	0.00	0.00	-42.38
THERMAL ZONE : 144 V-2 CERAMICS MAC HINI NG	20-JUL-17:00	0.00	0.00	0.00	-10.23.02	0.00	0.00	72.74	39.413	19.8.55	0.00	0.00	0.00	35.7.60	0.00	-0.00	0.00	0.00	0.00
THERMAL ZONE : 148 CORRIDOR	19-JUL-17:00	0.00	0.00	0.00	-78.1.27	0.00	0.00	43.27	50.6.10	18.6.97	69.8.51	0.00	28.420	0.00	0.00	-0.00	0.00	-68.2.00	
THERMAL ZONE : 200 FIBER OP. DIRECTOR	28-JUL-08:03	0.00	0.00	0.00	-24.29.99	0.00	0.00	12.055	64.0.36	32.2.59	13.45.91	0.00	6.7.80	0.00	0.00	-0.00	0.00	-6.20	

THERMAL ZONE : 201 CONFERENCE	01-SEP-13:10	0.00	0.00	0.00	-42.53	0.00	0.00	89.92	10.49.	57.01	18.58	0.50	34.75	0.00	0.00	-0.00	0.00	0.00	-14.27	4	
THERMAL ZONE : 202 EXECUTIVE OFFICER	01-SEP-13:20	0.00	0.00	0.00	-15.51	0.00	0.00	76.08	41.21	20.76	90.027	0.00	14.57	0.00	0.00	-0.00	0.00	0.00	-85.23		
THERMAL ZONE : 203 SEC.	01-SEP-13:20	0.00	0.00	0.00	-15.02.58	0.00	0.00	75.45	40.87	20.5.91	90.0.72	0.00	14.45	0.00	0.00	-0.00	0.00	0.00	-10.2.6	9	
THERMAL ZONE : 204 DEPARTMENT CHAIR	19-JUL-16:50	0.00	0.00	0.00	-50.27.25	0.00	0.00	15.2.13	82.4.45	41.5.33	36.98	0.72	0.00	28.1.38	0.00	0.00	-0.00	0.00	0.00	-34.4.7	7
THERMAL ZONE : 205 G-3 SPECIAL ALITY MEAS.	20-JUL-17:00	0.00	0.00	0.00	-23.72.54	0.00	0.00	14.5.83	79.0.10	39.8.02	0.00	0.00	0.00	10.38.	58	0.00	-0.00	0.00	0.00	0.00	
THERMAL ZONE	19-JUL-17:00	0.00	0.00	0.00	-37.2.61	0.00	0.00	17.51	74.92	47.72	0.00	0.00	0.00	23.2.46	0.00	-0.00	0.00	0.00	0.00	0.00	

: 207 VEST.																			
THER MAL ZONE : 207A A-3A POW DER SYNT HESI S	20- JUL- 17:0 0	0. 00	0. 00	0. 00	- 10 73. 01	0. 0 0	0. 0 0	64 .6 5	35 0.2 7	17 6.4 5	0. 00	0. 00	0.0 0	48 1.6 4	0.0 0	- 0. 00	0. 00	0.0 0	0.0 0
THER MAL ZONE : 209 K-1 SPEC TRO ANA LYSI S	20- JUL- 17:0 0	0. 00	0. 00	0. 00	- 12 06. 58	0. 0 0	0. 0 0	71 .5 8	38 7.8 2	19 5.3 7	0. 00	0. 00	0.0 0	55 1.8 2	0.0 0	- 0. 00	0. 00	0.0 0	0.0 0
THER MAL ZONE : 211 S-3 GRA D. PC.	20- JUL- 17:0 0	0. 00	0. 00	0. 00	- 12 60. 17	0. 0 0	0. 0 0	71 .1 4	38 5.4 3	19 4.1 7	0. 00	0. 00	0.0 0	60 9.4 3	0.0 0	- 0. 00	0. 00	0.0 0	0.0 0
THER MAL ZONE : 212 OFFI CE/L AB	28- JUL- 08:0 4	0. 00	0. 00	0. 00	- 33 14. 58	0. 0 0	0. 0 0	18 9. 91	99 2.9 0	50 0.1 9	20 28 .8 1	0. 00	8.2 3	0.0 0	0.0 0	- 0. 00	0. 00	0.0 0	40 5.4 6
THER MAL ZONE : 213 M-1 THER MAL	20- JUL- 17:0 0	0. 00	0. 00	0. 00	- 61 7.3 6	0. 0 0	0. 0 0	69 .9 3	37 8.9 0	19 0.8 8	0. 00	0. 00	0.0 0	0.0 0	- 0. 00	0. 00	0.0 0	- 22. 36	

NETI CS																			
THERMAL ZONE : 222 CORRIDOR		19-JUL-17:00	0.00	0.00	0.00	22.71	0.00	0.00	40.4	46.1	17.5	34.96	0.00	25.86	11.79	0.00	-0.00	0.00	0.00
THERMAL ZONE : 223 M-3 THERMAL CONDUCTIVITY		20-JUL-17:00	0.00	0.00	0.00	58.1	0.00	0.00	72.0	39.6	19.6	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	72.66
THERMAL ZONE : 226 D-3 TAPE CASTING		20-JUL-17:00	0.00	0.00	0.00	12.59	0.00	0.00	86.1	46.5	23.6	0.00	0.00	0.00	42.6.89	0.00	-0.00	0.00	0.00
THERMAL ZONE : 227 UNDERRAD DIR.		19-JUL-17:00	0.00	0.00	0.00	14.29.20	0.00	0.00	76.7	41.6.54	20.9.84	46.5.92	0.00	38.60	22.1.43	0.00	-0.00	0.00	0.00
THERMAL ZONE : 228 B-2 POROSITY SURFACE		20-JUL-17:00	0.00	0.00	0.00	96.8.27	0.00	0.00	65.54	35.5.08	17.8.88	0.00	0.00	0.00	36.8.77	0.00	-0.00	0.00	0.00

THERMAL ZONE : 229 SEC.	19-JUL-17:00	0.00	0.00	0.00	-12.71.	0.00	0.00	66.1	35.8.3	18.0.5	44.3.48	0.00	33.19	18.9.6	0.00	-0.00	0.00	0.00	0.00
THERMAL ZONE : 230 B-1 PARTICLE SIZE ANALYSIS	20-JUL-17:00	0.00	0.00	0.00	-91.3.9	0.00	0.00	65.3	35.3.8	17.8.2	0.00	0.00	0.00	31.6.5	0.00	-0.00	0.00	0.00	0.00
THERMAL ZONE : 231 UNKNOWN ERGRAD DIR.	19-JUL-17:00	0.00	0.00	0.00	-12.99.	0.00	0.00	66.3	35.9.6	18.1.1	48.3.35	0.00	33.29	17.6.1	0.00	-0.00	0.00	0.00	0.00
THERMAL ZONE : 232 C-4 COIL OIDS ANALYSIS	20-JUL-17:00	0.00	0.00	0.00	-59.1.0	0.00	0.00	72.8	39.4.8	19.8.8	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	75.46
THERMAL ZONE : 233 OFFICE/LAB	19-JUL-17:00	0.00	0.00	0.00	-13.51.	0.00	0.00	66.1	35.8.2	18.0.4	56.1.82	0.00	33.15	15.1.4	0.00	-0.00	0.00	0.00	0.00

THER MAL ZONE : 234 C-3 CHE MICA L ANA LYSI S	20- JUL- 17:0 0	0. 00	0. 00	0. 00	57 1	0. 00	0. 00	71 .6 6	38 8.2 5	19 5.5 9	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	0. 00	0. 00	0.0 0	79. 89
THER MAL ZONE : 236 C-2 SOL GEL FOR MING	20- JUL- 17:0 0	0. 00	0. 00	0. 00	56 8	0. 00	0. 00	70 .6 5	38 2.8 1	19 2.8 5	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	0. 00	0. 00	0.0 0	79. 34
THER MAL ZONE : 237 GRA D/TE CH STAT IONS	19- JUL- 17:0 0	0. 00	0. 00	0. 00	31 47. 18	0. 00	0. 00	16 2. 69	88 1.5 4	44 4.0 9	13 10 .2 5	0. 00	81. 50	26 7.1 1	0.0 0	0. 00	0. 00	0.0 0	0.0 0	
THER MAL ZONE : 238 C-2 RHEO LOG Y	20- JUL- 17:0 0	0. 00	0. 00	0. 00	58 7.1 3	0. 00	0. 00	73 .2 1	39 6.6 7	19 9.8 3	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0. 00	0. 00	0.0 0	82. 59	
THER MAL ZONE : 238A TECH	20- JUL- 17:0 0	0. 00	0. 00	0. 00	22 3.0 9	0. 00	0. 00	9. 77	95. 86	12 3.7 0	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0. 00	0. 00	0.0 0	6.2 4	

THERMAL ZONE : 239 OFFICE/LAB	19-JUL-17:00	0.00	0.00	0.00	-14.78	0.00	0.00	67.0	36.3	18.4	65.91	0.00	33.64	10.747	0.00	-0.00	0.00	0.00	0.00
THERMAL ZONE : 240 D-4 COMPOSITES	20-JUL-17:00	0.00	0.00	0.00	-26.52.71	0.00	0.00	19.9.52	10.80.98	54.4.56	0.00	0.00	0.00	82.7.66	0.00	-0.00	0.00	0.00	0.00
THERMAL ZONE : 241 GRADE/TECH STATIONS	20-JUL-17:00	0.00	0.00	0.00	-16.10.27	0.00	0.00	95.0.5	51.4.98	25.9.43	0.00	0.00	2.19	73.8.63	0.00	-0.00	0.00	0.00	0.00
THERMAL ZONE : 242 D-2 PRESSES FORM	20-JUL-17:00	0.00	0.00	0.00	-10.96.42	0.00	0.00	73.2.3	39.6.73	19.9.86	0.00	0.00	0.00	42.6.60	0.00	-0.00	0.00	0.00	0.00
THERMAL ZONE : 244 D-1 CASTING EXTRUSION	20-JUL-17:00	0.00	0.00	0.00	-69.0.17	0.00	0.00	74.6.5	40.4.47	20.3.76	0.00	0.00	0.00	7.29	0.00	-0.00	0.00	0.00	0.00

: 228A TECH																									
THER MAL ZONE : 243 WOM ENS REST ROO M	-	0. 00	0. 00	0. 00	0.0 0	0. 0 0	0. 0 0	0. 00	0.0 0	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	
THER MAL ZONE : 245 MEN S REST ROO M	-	0. 00	0. 00	0. 00	0.0 0	0. 0 0	0. 0 0	0. 00	0.0 0	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	
THER MAL ZONE : 245A J.C.	-	0. 00	0. 00	0. 00	0.0 0	0. 0 0	0. 0 0	0. 00	0.0 0	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	
THER MAL ZONE : 248 SERV ICE CORR IDOR	-	0. 00	0. 00	0. 00	0.0 0	0. 0 0	0. 0 0	0. 00	0.0 0	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	
THER MAL ZONE : E.S.1 1ST FLOO R	-	0. 00	0. 00	0. 00	0.0 0	0. 0 0	0. 0 0	0. 00	0.0 0	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	
THER MAL ZONE	-	0. 00	0. 00	0. 00	0.0 0	0. 0 0	0. 0 0	0. 00	0.0 0	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	

Peak Heating Sensible Heat Gain Components

		ib le	ib le	He at i ng	r C oo lin g	H ea ti ng	C o ol in g	W]	W]		iti on		at Ad diti on		ov al		at Re mo val	
		Ai r	Ai r	[W]							[W]		[W]		[W]		[W]	
THER MAL ZONE : 101	24- JAN - 06:0 1	0. 00	0. 00	37 48. 73	- 0. 00	0. 0	0. 0	19 9. 70	69 .6 4	15 1.3 9	0. 00	0. 00	0.0 0	0.0 0	- 48 6. 28	0. 00	23 3.9 3	34 49. 26
THER MAL ZONE : 102	20- FEB - 06:0 1	0. 00	0. 00	24 56. 54	- 0. 00	0. 0	0. 0	13 .1 1	45 .1 6	90. 99	0. 00	0. 00	0.0 0	0.0 0	- 43 6. 93	0. 00	15 3.2 3	20 15. 64
THER MAL ZONE : 103	02- JAN - 06:0 1	0. 00	0. 00	33 01. 13	- 0. 00	0. 0	0. 0	15 .0 7	51 .9 3	10 4.6 5	0. 00	0. 00	0.0 0	0.0 0	- 57 5. 97	0. 00	17 4.6 5	27 22. 17
THER MAL ZONE : 104	30- JAN - 06:0 1	0. 00	0. 00	49 4.1 2	- 0. 00	0. 0	0. 0	6. 62	22 .8 2	45. 98	0. 00	0. 00	0.0 0	0.0 0	- 0. 00	0. 00	0.0 0	56 9.5 4
THER MAL ZONE : 105	16- JAN - 06:0 1	0. 00	0. 00	24 54. 88	- 0. 00	0. 0	0. 0	13 .1 3	45 .2 4	91. 15	0. 00	0. 00	0.0 0	0.0 0	- 35 3. 62	0. 00	12 5.6 2	21 25. 16

CE/L AB																				
THER MAL ZONE : 106 CONF EREN CE	25- JAN - 06:0 1	0. 00	0. 00	65 76. 21	- 0. 00	0. 00	0. 00	19 1. 42	66 .7 6	14 5.1 2	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	- 90 7. 10	0. 00	53 5.9 1	55 36. 49
THER MAL ZONE : 107 I-1 SMAL L SEM	02- JAN - 06:0 1	0. 00	0. 00	89 4.5 8	- 0. 00	0. 00	0. 00	13 .8 1	47 .5 9	95. 89	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	- 0. 00	0. 00	0.0 0	10 51. 86
THER MAL ZONE : 108 OFFI CE/L AB	20- FEB - 06:0 1	0. 00	0. 00	32 95. 43	- 0. 00	0. 00	0. 00	11 .8 0	40 .6 5	81. 90	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	- 23 5. 97	0. 00	22 7.7 1	29 66. 09
THER MAL ZONE : 109 I-2 S.E.M	02- JAN - 06:0 1	0. 00	0. 00	11 20. 19	- 0. 00	0. 00	0. 00	18 .6 5	64 .3 4	12 9.6 4	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	- 0. 00	0. 00	0.0 0	13 32. 82
THER MAL ZONE : 110 GRA D/TE CH STAT IONS	20- FEB - 06:0 1	0. 00	0. 00	46 14. 64	- 0. 00	0. 00	0. 00	21 .2 7	73 .2 9	14 7.6 8	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	- 47 1. 62	0. 00	27 0.2 8	41 14. 98
THER MAL ZONE : 111	02- JAN - 06:0 1	0. 00	0. 00	85 1.8 4	- 0. 00	0. 00	0. 00	13 .3 3	45 .9 4	92. 56	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	- 0. 00	0. 00	0.0 0	10 03. 67

I-3 SAMP LE PREP	06:0 1																		
THER MAL ZONE : 112 OFFI CE /LAB	20- FEB - 06:0 1	0. 00	0. 00	24 87. 46	- 0. 00	0. 0	0. 0	11 .2 0	38 .6 0	77. 78	0. 00	0. 00	0.0 0	0.0 0	0.0 0	23 6. 63	0. 00	14 2.3 8	22 36. 02
THER MAL ZONE : 113 H-1 S.T.E. M.	30- JAN - 06:0 1	0. 00	0. 00	11 57. 43	- 0. 00	0. 0	0. 0	18 .0 0	62 .0 3	12 4.9 9	0. 00	0. 00	0.0 0	0.0 0	0.0 0	- 0. 00	0. 00	0.0 0	13 62. 44
THER MAL ZONE : 114 OFFI CE/L AB	20- FEB - 06:0 1	0. 00	0. 00	24 73. 79	- 0. 00	0. 0	0. 0	11 .2 1	38 .6 1	77. 80	0. 00	0. 00	0.0 0	0.0 0	0.0 0	- 23 6. 71	0. 00	14 2.4 0	22 22. 29
THER MAL ZONE : 115 P-2 X- RAY	25- DEC - 06:0 1	0. 00	0. 00	16 83. 79	- 0. 00	0. 0	0. 0	25 .1 3	86 .5 7	17 4.4 5	0. 00	0. 00	0.0 0	0.0 0	0.0 0	- 0. 00	0. 00	0.0 0	19 69. 94
THER MAL ZONE : 116 OFFI CE/L AB	20- FEB - 06:0 1	0. 00	0. 00	24 92. 34	- 0. 00	0. 0	0. 0	11 .3 1	38 .9 7	78. 53	0. 00	0. 00	0.0 0	0.0 0	0.0 0	- 23 6. 72	0. 00	14 3.7 4	22 40. 69
THER MAL ZONE : 117 U-2	20- MA R- 06:0 1	0. 00	0. 00	86 9.2 7	- 0. 00	0. 0	0. 0	12 .6 6	43 .6 3	87. 91	0. 00	0. 00	0.0 0	0.0 0	0.0 0	- 0. 00	0. 00	0.0 0	- 10 13. 47

MICR OSCO PY																				
THER MAL ZONE : 118 SEC.	20- FEB - 06:0 1	0. 00	0. 00	24 33. 55	- 0. 00	0. 00	0. 00	10 .9 8	37 .8 1	76. 19	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	- 23 6. 74	0. 00	- 13 9.4 6	- 21 82. 33
THER MAL ZONE : 119 T-2 POLIS HING	20- MA R- 06:0 1	0. 00	0. 00	86 0.8 4	- 0. 00	0. 00	0. 00	12 .5 6	43 .2 8	87. 20	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	- 0. 00	0. 00	0. 00	- 10 03. 88
THER MAL ZONE : 120 GRA D/TE CH STAT IONS	20- FEB - 06:0 1	0. 00	0. 00	34 61. 42	- 0. 00	0. 00	0. 00	16 .5 5	57 .0 3	11 4.9 1	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	- 23 6. 99	0. 00	- 21 0.2 1	- 32 02. 71
THER MAL ZONE : 121 T-1 GRIN DING	20- MA R- 06:0 1	0. 00	0. 00	88 5.6 7	- 0. 00	0. 00	0. 00	12 .9 1	44 .4 7	89. 61	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	- 0. 00	0. 00	0. 00	- 10 32. 67
THER MAL ZONE : 122 OFFI CE/L AB	20- FEB - 06:0 1	0. 00	0. 00	24 99. 82	- 0. 00	0. 00	0. 00	11 .1 5	38 .4 4	77. 45	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	- 23 6. 52	0. 00	- 14 1.8 2	- 22 48. 52
THER MAL ZONE : 123 F-1B	25- DEC - 06:0 1	0. 00	0. 00	94 4.6 6	- 0. 00	0. 00	0. 00	12 .7 0	43 .7 7	88. 20	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	- 0. 00	0. 00	0. 00	- 10 89. 33

REACTIVE GAS																			
THERMAL ZONE : 124 OFFICE/LAB	02-JAN-06:01	0.00	0.00	39.27	-0.00	0.00	0.00	13.2	44.4	90.36	0.00	0.00	0.00	0.00	0.00	-14.97	0.00	29.80	-36.92.51
THERMAL ZONE : 125 F-2 LARGE ELECTRIC FURNACE	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
THERMAL ZONE : 127 F-3A SMALL ELECTRIC FURNACE	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
THERMAL ZONE : 129 OFFICE/LAB	06-MAR-06:01	0.00	0.00	24.45.74	-0.00	0.00	0.00	12.8	41.3	83.88	0.00	0.00	0.00	0.00	0.00	-65.14	0.00	44.32	-24.73.87
THERMAL ZONE : 130	02-JAN-	0.00	0.00	89.84.6	-0.00	0.00	0.00	12.7	42.7	86.60	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	-10.40.50

S-2 GRAP HICS	06:0 1																		
THER MAL ZONE : 130 S-2 TRIB OLOG Y	02- JAN 06:0 1	0. 00	0. 00	97 0.5 8	- 0. 00	0. 00	0. 00	13 .6 0	46 .8 6	94. 43	0. 00	0. 00	0.0 0	0.0 0	0.0 0	- 0. 00	0. 00	0.0 0	11 25. 47
THER MAL ZONE : 131 SEC.	16- JAN 06:0 1	0. 00	0. 00	23 83. 97	- 0. 00	0. 00	0. 00	11 .0 5	38 .0 8	76. 72	0. 00	0. 00	0.0 0	0.0 0	0.0 0	- 19. 2. 64	0. 00	11 6.0 2	22 01. 16
THER MAL ZONE : 132 O-2 THER MO MEC H. TESTI NG	02- JAN 06:0 1	0. 00	0. 00	11 33. 15	- 0. 00	0. 00	0. 00	16 .6 9	57 .4 9	11 5.8 4	0. 00	0. 00	0.0 0	0.0 0	0.0 0	- 0. 00	0. 00	0.0 0	13 23. 17
THER MAL ZONE : 133 OFFI CE/L AB	06- MA R- 06:0 1	0. 00	0. 00	23 44. 22	- 0. 00	0. 00	0. 00	11 .3 3	39 .0 4	78. 66	0. 00	0. 00	0.0 0	0.0 0	0.0 0	- 61. 4 6	0. 00	41. 58	23 70. 21
THER MAL ZONE : 134 O-3 HAR DNES S	30- JAN 06:0 1	0. 00	0. 00	12 07. 59	- 0. 00	0. 00	0. 00	16 .9 0	58 .2 2	11 7.3 2	0. 00	0. 00	0.0 0	0.0 0	0.0 0	- 0. 00	0. 00	0.0 0	14 00. 04

MOD. TEST																									
THER MAL ZONE : 135 OFFI CE/L AB	02- JAN - 06:0 1	0. 00	0. 00	23 28. 59	- 0. 00	0. 00	0. 00	10 .9 2	37 .6 1	75. 79	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	- 14 5. 22	0. 00	- 96. 01	- 22 11. 67					
THER MAL ZONE : 136 NON DEST RUCT IVE	02- JAN - 06:0 1	0. 00	0. 00	95 1.7 5	- 0. 00	0. 00	0. 00	12 .0 3	41 .4 6	83. 55	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	- 0. 00	0. 00	0.0 0	10 88. 79					
THER MAL ZONE : 137 GRA D/TE CH STAT IONS	16- JAN - 06:0 1	0. 00	0. 00	34 77. 79	- 0. 00	0. 00	0. 00	16 .5 5	57 .0 2	11 4.9 0	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	- 19 1. 96	0. 00	- 17 3.3 9	- 33 00. 92					
THER MAL ZONE : 138 O-1 UNIV ERSA L TESTI NG	02- JAN - 06:0 1	0. 00	0. 00	17 63. 94	- 0. 00	0. 00	0. 00	25 .2 4	86 .9 5	17 5.2 1	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	- 0. 00	0. 00	0.0 0	20 51. 33					
THER MAL ZONE : 139 OFFI CE/L AB	16- JAN - 06:0 1	0. 00	0. 00	23 45. 20	- 0. 00	0. 00	0. 00	10 .7 2	36 .9 3	74. 42	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	- 18 7. 17	0. 00	- 11 2.3 2	- 21 67. 78					

THER MAL ZONE : 141 OFFI CE/L AB	20- FEB - 06:0 1	0. 00	0. 00	23 90. 26	- 0. 00	0. 00	0. 00	11 .2 6	38 .7 9	78. 16	0. 00	0. 00	0. 00	0. 00	0. 00	- 23 8. 32	0. 00	- 14 0	- 21 36. 25
THER MAL ZONE : 142 A-3 PART ICUL ATE	30- JAN - 06:0 1	0. 00	0. 00	19 55. 46	- 0. 00	0. 00	0. 00	24 .9 7	86 .0 3	17 3.3 6	0. 00	0. 00	0. 00	0. 00	0. 00	- 0. 00	0. 00	0. 00	- 22 39. 81
THER MAL ZONE : 143 GRA D/TE CH STAT IONS	02- JAN - 06:0 1	0. 00	0. 00	29 46. 00	- 0. 00	0. 00	0. 00	16 .0 9	55 .4 5	11 1.7 3	0. 00	0. 00	0. 00	0. 00	0. 00	- 0. 00	0. 00	- 14 0.5 6	- 29 88. 71
THER MAL ZONE : 144 V-2 CERA MICS MAC HINI NG	13- MA R- 06:0 1	0. 00	0. 00	14 32. 79	- 0. 00	0. 00	0. 00	12 .7 1	43 .7 9	88. 24	0. 00	0. 00	0. 00	0. 00	0. 00	- 0. 00	0. 00	0. 00	- 15 77. 54
THER MAL ZONE : 148 CORR IDOR	13- MA R- 06:0 1	0. 00	0. 00	33 48. 49	- 0. 00	0. 00	0. 00	7. 56	56 .2 3	83. 10	0. 00	0. 00	0. 00	0. 00	0. 00	- 10 1. 13	0. 00	- 53. 60	- 33 40. 65
THER MAL ZONE	02- JAN -	0. 00	0. 00	68 92. 58	- 0. 00	0. 00	0. 00	20 .6 5	71 .1 5	14 3.3 7	0. 00	0. 00	0. 00	0. 00	0. 00	- 28	0. 00	- 24	- 65

: 200 FIBE R OP. DIRE CTOR	06:0 1															2. 25		7.2 4	98. 27
THER MAL ZONE : 201 CONF EREN CE	02- JAN - 06:0 1	0. 00	0. 00	85 20. 19	- 0. 00	0. 00	0. 00	33 4. 23	11 6. 56	25 3.3 8	0. 00	0. 00	0.0 00	0.0 00	0.0 00	- 53 4. 84	0. 00	- 26 0.2 8	84 29. 24
THER MAL ZONE : 202 EXEC UTIV E OFFI CER	20- FEB - 06:0 1	0. 00	0. 00	35 77. 88	- 0. 00	0. 00	0. 00	13 .2 9	45 .8 0	92. 29	0. 00	0. 00	0.0 00	0.0 00	0.0 00	- 43 0. 35	0. 00	- 15 8.2 8	31 40. 61
THER MAL ZONE : 203 SEC.	20- FEB - 06:0 1	0. 00	0. 00	35 86. 95	- 0. 00	0. 00	0. 00	13 .1 8	45 .4 2	91. 52	0. 00	0. 00	0.0 00	0.0 00	0.0 00	- 42 9. 73	0. 00	- 15 6.9 9	31 50. 35
THER MAL ZONE : 204 DEPA RTME NT CHAI R	25- JAN - 06:0 1	0. 00	0. 00	12 73 4.3 5	- 0. 00	0. 00	0. 00	26 .5 9	91 .6 1	18 4.5 9	0. 00	0. 00	0.0 00	0.0 00	0.0 00	- 19 76 .8 2	0. 00	- 12 89. 51	97 70. 81
THER MAL ZONE : 205 G-3 SPECI ALTY	25- JAN - 06:0 1	0. 00	0. 00	34 50. 76	- 0. 00	0. 00	0. 00	25 .4 8	87 .7 9	17 6.9 0	0. 00	0. 00	0.0 00	0.0 00	0.0 00	- 0. 00	0. 00	0.0 00	- 37 40. 93

MEAS .																			
THER MAL ZONE : 207 VEST.	02- JAN - 06:0 1	0. 00	0. 00	68 8.0 8	- 0. 00	0. 00	0. 00	2. 69	8. 32	21. 21	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0. 00	0. 00	0.0 0	72 0.3 0
THER MAL ZONE : 207A A-3A POW DER SYNT HESIS	02- JAN - 06:0 1	0. 00	0. 00	15 78. 50	- 0. 00	0. 00	0. 00	11. .3 0	38. .9 2	78. 42	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0. 00	0. 00	0.0 0	17 07. 14
THER MAL ZONE : 209 K-1 SPEC TRO ANAL YSIS	02- JAN - 06:0 1	0. 00	0. 00	17 99. 54	- 0. 00	0. 00	0. 00	12. .5 1	43 .0 9	86. 83	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0. 00	0. 00	0.0 0	19 41. 97
THER MAL ZONE : 211 S-3 GRA D. PC.	02- JAN - 06:0 1	0. 00	0. 00	19 02. 62	- 0. 00	0. 00	0. 00	12. .4 3	42 .8 3	86. 30	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0. 00	0. 00	0.0 0	20 44. 17
THER MAL ZONE : 212 OFFI CE/L AB	02- JAN - 06:0 1	0. 00	0. 00	82 49. 43	- 0. 00	0. 00	0. 00	32 .0 2	11 0. 32	22 2.3 1	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0. 43 1. 21	0. 00	29 7.4 1	78 85. 46
THER MAL ZONE : 213	20- FEB -	0. 00	0. 00	11 84. 27	- 0. 00	0. 00	0. 00	12 .2 2	42 .1 0	84. 83	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0. 00	0. 00	0.0 0	13 23. 42

M-1	06:0 1																		
THER MAL ZONE : 214	20- FEB - 06:0 1	0. 00	0. 00	26 81. 90	- 0. 00	0. 00	0. 00	22 .4 6	32 .9 9	45 9.7 9	0. 00	0. 00	0. 00	0. 00	0. 00	- 23 9. 09	0. 00	14 4.5 9	28 13. 46
THER MAL ZONE : 215	20- FEB - 06:0 1	0. 00	0. 00	85 1.9 9	- 0. 00	0. 00	0. 00	9. 39	32 .3 6	65. 20	0. 00	0. 00	0. 00	0. 00	0. 00	- 0. 00	0. 00	0.0 0	95 8.9 3
THER MAL ZONE : 216	02- JAN - 06:0 1	0. 00	0. 00	38 65. 44	- 0. 00	0. 00	0. 00	15 .2 3	52 .4 7	10 5.7 3	0. 00	0. 00	0. 00	0. 00	0. 00	- 14 6. 24	0. 00	14 1.3 6	37 51. 27
THER MAL ZONE : 217	20- FEB - 06:0 1	0. 00	0. 00	23 7.7 8	- 0. 00	0. 00	0. 00	2. 29	7. 09	18. 07	0. 00	0. 00	0. 00	0. 00	0. 00	- 0. 00	0. 00	0.0 0	26 5.2 4
THER MAL ZONE : 217A	20- FEB - 06:0 1	0. 00	0. 00	11 85. 79	- 0. 00	0. 00	0. 00	14 .3 4	49 .4 2	99. 59	0. 00	0. 00	0. 00	0. 00	0. 00	- 0. 00	0. 00	0.0 0	13 49. 14

SPUTTER																				
THERMAL ZONE : 217B L-3 ELETTRONICS	20-FEB-06:01	0.00	0.00	98.9	-0.00	0.00	0.00	11.4	39.2	79.43	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00	11.88
THERMAL ZONE : 218 SEC.	20-FEB-06:01	0.00	0.00	31.70.67	-0.00	0.00	0.00	11.9	41.3	83.23	0.00	0.00	0.00	0.00	0.00	-23.8.93	0.00	16.2.2	29.06.24	
THERMAL ZONE : 218A CENTER DIRECTOR	02-JAN-06:01	0.00	0.00	49.68.23	-0.00	0.00	0.00	21.2	41.9	10.8.5	0.00	0.00	0.00	0.00	0.00	-28.5.31	0.00	97.96	47.56.74	
THERMAL ZONE : 220 CORRIDOR	30-JAN-06:01	0.00	0.00	17.33.5.88	-0.00	0.00	0.00	27.6	20.5.	30.4.2	0.00	0.00	0.00	0.00	0.00	-73.3.45	0.00	57.4.5	16.56.5.73	
THERMAL ZONE : 221 L-2 ELETTRONICS	20-FEB-06:01	0.00	0.00	10.80.96	-0.00	0.00	0.00	12.7	43.8	88.41	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	12.25.98	
THERMAL ZONE : 221 L-4 MAG	20-FEB-06:01	0.00	0.00	11.31.59	-0.00	0.00	0.00	12.2	42.0	84.76	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	12.70.63	

NETI CS																				
THERMAL ZONE : 222 CORRIDOR	02-JAN-06:01	0.00	0.00	54.77	-0.00	0.00	0.00	7.01	52.17	77.09	0.00	0.00	0.00	0.00	0.00	0.00	-76.47	0.00	75.56	-54.34.01
THERMAL ZONE : 223 M-3 THERMAL CONDUCTIVITY	20-FEB-06:01	0.00	0.00	12.94.67	-0.00	0.00	0.00	12.60	43.41	87.47	0.00	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	-14.38.14
THERMAL ZONE : 226 D-3 TAPE CASTING	25-JAN-06:01	0.00	0.00	15.91.13	-0.00	0.00	0.00	15.05	51.84	10.44.6	0.00	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	-17.62.47
THERMAL ZONE : 227 UNDERRGRADE DIR.	02-JAN-06:01	0.00	0.00	32.31.28	-0.00	0.00	0.00	13.43	46.28	93.26	0.00	0.00	0.00	0.00	0.00	0.00	-10.210	0.00	11.43.1	-31.67.85
THERMAL ZONE : 228 B-2 POROSITY SURFACE	27-NOV-06:01	0.00	0.00	12.95.02	-0.00	0.00	0.00	11.45	39.45	79.50	0.00	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	-14.25.43

THER MAL ZONE : 229 SEC.	02- JAN - 06:0 1	0. 00	0. 00	28 30. 53	- 0. 00	0. 00	0. 00	11 .5 6	39 .8 2	80. 23	0. 00	0. 00	0. 00	0. 00	0. 00	- 97 .9 5	0. 00	- 98. 34	- 27 65. 84
THER MAL ZONE : 230 B-1 PART ICLE SIZE ANAL YSIS	27- MA R- 06:0 1	0. 00	0. 00	12 70. 59	- 0. 00	0. 00	0. 00	11 .4 1	39 .3 2	79. 23	0. 00	0. 00	0. 00	0. 00	0. 00	- 0. 00	0. 00	0. 00	- 14 00. 54
THER MAL ZONE : 231 UNDE RGRA D DIR.	02- JAN - 06:0 1	0. 00	0. 00	28 56. 02	- 0. 00	0. 00	0. 00	11 .6 0	39 .9 6	80. 52	0. 00	0. 00	0. 00	0. 00	0. 00	- 10 6. 39	0. 00	- 98. 65	- 27 83. 06
THER MAL ZONE : 232 C-4 COIL OIDS ANAL YSIS	20- FEB - 06:0 1	0. 00	0. 00	11 08. 40	- 0. 00	0. 00	0. 00	12 .7 3	43 .8 7	88. 39	0. 00	0. 00	0. 00	0. 00	0. 00	- 0. 00	0. 00	0. 00	- 12 53. 39
THER MAL ZONE : 233 OFFI CE/L AB	02- JAN - 06:0 1	0. 00	0. 00	29 03. 22	- 0. 00	0. 00	0. 00	11 .5 5	39 .8 0	80. 20	0. 00	0. 00	0. 00	0. 00	0. 00	- 12 3. 54	0. 00	- 98. 27	- 28 12. 96
THER MAL ZONE : 234	20- FEB - 06:0	0. 00	0. 00	11 67. 34	- 0. 00	0. 00	0. 00	12 .5 2	43 .1 4	86. 93	0. 00	0. 00	0. 00	0. 00	0. 00	- 0. 00	0. 00	0. 00	- 13 09. 92

C-3 CHE MICA L ANAL YSIS	06:0 1																			
THER MAL ZONE : 236 C-2 SOL GEL FOR MING	20- FEB - 06:0 1	0. 00	0. 00	11 54. 74	- 0. 00	0. 0	0. 0	12 .3 5	42 .5 3	85. 71	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	- 0. 00	0. 00	0.0 0	12 95. 32
THER MAL ZONE : 237 GRA D/TE CH STAT IONS	02- JAN - 06:0 1	0. 00	0. 00	68 12. 39	- 0. 00	0. 0	0. 0	28 .4 3	97 .9 5	19 7.3 7	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	- 28 4. 05	0. 00	24 1.4 6	66 10. 63
THER MAL ZONE : 238 C-2 RHEO LOGY	20- FEB - 06:0 1	0. 00	0. 00	11 14. 14	- 0. 00	0. 0	0. 0	12 .7 9	44 .0 7	88. 81	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	- 0. 00	0. 00	0.0 0	12 59. 82
THER MAL ZONE : 238A TECH	20- FEB - 06:0 1	0. 00	0. 00	35 5.2 8	- 0. 00	0. 0	0. 0	3. 63	10 .6 5	54. 98	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	- 0. 00	0. 00	0.0 0	42 4.5 3
THER MAL ZONE : 239 OFFI CE/L AB	02- JAN - 06:0 1	0. 00	0. 00	30 07. 19	- 0. 00	0. 0	0. 0	11 .7 4	40 .4 6	81. 53	0. 00	0. 00	0.0 0	0.0 0	0.0 0	0.0 0	- 14 4. 36	0. 00	99. 77	28 96. 79

THERMAL ZONE : 240	27-MA R-06:01	0.00	0.00	34.28.	-0.26	0.00	0.00	34.86	12.011	24.203	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	38.25.25
THERMAL ZONE : 241	02-JAN-06:01	0.00	0.00	42.63.	-0.49	0.00	0.00	16.61	57.22	11.530	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	14.1.6	43.11.56
THERMAL ZONE : 242	13-MA R-06:01	0.00	0.00	15.00.	-0.02	0.00	0.00	12.79	44.08	88.83	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	16.45.72
THERMAL ZONE : 244	20-FEB-06:01	0.00	0.00	13.83.	-0.91	0.00	0.00	13.04	44.94	90.56	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	15.32.45
THERMAL ZONE : 247	02-JAN-06:01	0.00	0.00	53.28.	-0.86	0.00	0.00	17.92	61.74	12.4.2	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	15.2.6	52.29.80

ROO M																						
THER MAL ZONE : 146 E DRYI NG	-	0. 00	0. 00	0.0 0	0. 00	0. 00	0. 00	0. 00	0. 00	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0.0 0	0. 00	0. 00	0. 00	0.0 0	0.0 0	
THER MAL ZONE : 147 MENS REST ROO M	-	0. 00	0. 00	0.0 0	0. 00	0. 00	0. 00	0. 00	0. 00	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0.0 0	0. 00	0. 00	0. 00	0.0 0	0.0 0	
THER MAL ZONE : 149 RECE IVIN G	-	0. 00	0. 00	0.0 0	0. 00	0. 00	0. 00	0. 00	0. 00	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0.0 0	0. 00	0. 00	0. 00	0.0 0	0.0 0	
THER MAL ZONE : 225 FILE STOR AGE	-	0. 00	0. 00	0.0 0	0. 00	0. 00	0. 00	0. 00	0. 00	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0.0 0	0. 00	0. 00	0. 00	0.0 0	0.0 0	
THER MAL ZONE : 228A TECH	-	0. 00	0. 00	0.0 0	0. 00	0. 00	0. 00	0. 00	0. 00	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0.0 0	0. 00	0. 00	0. 00	0.0 0	0.0 0	
THER MAL ZONE : 243 WOM ENS REST	-	0. 00	0. 00	0.0 0	0. 00	0. 00	0. 00	0. 00	0. 00	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0.0 0	0. 00	0. 00	0. 00	0.0 0	0.0 0	

THER MAL ZONE : SERV ICE CORR IDOR - 1ST FLOO R	-	0. 00	0. 00	0.0 0	0. 00	0. 00	0. 00	0. 00	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0. 00	0. 00	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0.0 0
THER MAL ZONE : SPAC E 101	-	0. 00	0. 00	0.0 0	0. 00	0. 00	0. 00	0. 00	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0. 00	0. 00	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0.0 0
THER MAL ZONE : SPAC E 102	-	0. 00	0. 00	0.0 0	0. 00	0. 00	0. 00	0. 00	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0. 00	0. 00	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0.0 0
THER MAL ZONE : STA I RWE LL - 1ST FLOO R	-	0. 00	0. 00	0.0 0	0. 00	0. 00	0. 00	0. 00	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0. 00	0. 00	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0.0 0
THER MAL ZONE : STA I RWE LL - BASE MEN T	-	0. 00	0. 00	0.0 0	0. 00	0. 00	0. 00	0. 00	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0. 00	0. 00	0.0 0	0. 00	0. 00	0.0 0	0. 00	0.0 0	0.0 0

THERMAL ZONE : STAIRWE LL 2ND FLOOR	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Facility	02-JAN-06:01	0.00	0.27	26.24.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.41.	0.00	21.13	27.42

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Report: **Standard 62.1 Summary**

For: **Entire Facility**

Timestamp: **2019-12-07 18:09:37 System Ventilation Requirements for Cooling**

	Sum of Zone Primary Air Flow - Vpz-sum [m3/s]	System Population - Ps	Sum of Zone Population - Pz-sum	Occupant Diversity - D	Uncorrected Outdoor Air Intake Airflow - Vou [m3/s]	System Primary Airflow - Vps [m3/s]	Average Outdoor Air Fraction - Xs	System Ventilation Efficiency - Ev	Outdoor Air Intake Flow - Vot [m3/s]	Percent Outdoor Air - %OA
AHU_1	3.594	29.28	29.28	1.00	0.3135	3.594	1.000	1.000	0.3135	0.09
AHU_2	3.151	28.19	28.19	1.00	0.2663	3.151	1.000	1.000	0.2663	0.08
AHU_3	10.502	143.95	143.95	1.00	1.3155	10.502	1.000	1.000	1.3155	0.13

System Ventilation Requirements for Heating

	Sum of Zone Primary Air Flow - Vpz-sum [m3/s]	System Population - Ps	Sum of Zone Population - Pz-sum	Occupant Diversity - D	Uncorrected Outdoor Air Intake Airflow - Vou [m3/s]	System Primary Airflow - Vps [m3/s]	Average Outdoor Air Fraction - Xs	System Ventilation Efficiency - Ev	Outdoor Air Intake Flow Vot [m3/s]	Percent Outdoor Air - %OA
AHU _1	1.498	29.28	29.28	1.00	0.3135	1.498	0.220	1.000	0.3135	0.21
AHU _2	0.823	28.19	28.19	1.00	0.2663	0.823	0.340	1.000	0.2663	0.32
AHU _3	6.211	143.95	143.95	1.00	1.3155	6.211	0.223	1.000	1.3155	0.21

Zone Ventilation Parameters

	AirLoop Name	People Outdoor Air Rate - Rp [m3/s - person]	Zone Population - Pz	Area Outdoor Air Rate - Ra [m3/s - m2]	Zone Area a - Az [m2]	Breathing Zone Outdoor Airflow w - Vbz [m3/s]	Cooling Zone Air Distribution Effectiveness - Ez-clg	Cooling Zone Outdoor Airflow - Voz-clg [m3/s]	Heating Zone Air Distribution Effectiveness - Ez-htg	Heating Zone Outdoor Airflow - Voz-htg [m3/s]
THERMAL ZONE: 101 CONFERENCE	AHU _3	0.009439	18.92	0.00000	35.16	0.1786	1.000	0.1786	1.000	0.1786
THERMAL ZONE: 102 OFFICE/LAB	AHU _3	0.009439	1.24	0.00000	24.29	0.0117	1.000	0.0117	1.000	0.0117

THERMAL ZONE: 103 OFFICE/LAB	AHU _3	0.009 439	1.43	0.000 000	27.9 4	0.013 5		1.000	0.01 35	1.000	0.01 35
THERMAL ZONE: 104 SEC.	AHU _3	0.009 439	0.63	0.000 000	12.2 8	0.005 9		1.000	0.00 59	1.000	0.00 59
THERMAL ZONE: 105 OFFICE/LAB	AHU _3	0.009 439	1.24	0.000 000	24.3 3	0.011 7		1.000	0.01 17	1.000	0.01 17
THERMAL ZONE: 106 CONFERENCE	AHU _3	0.009 439	18.14	0.000 000	33.7 1	0.171 2		1.000	0.17 12	1.000	0.17 12
THERMAL ZONE: 107 I-1 SMALL SEM	AHU _1	0.009 439	1.31	0.000 000	25.6 0	0.012 4		1.000	0.01 24	1.000	0.01 24
THERMAL ZONE: 108 OFFICE/LAB	AHU _3	0.009 439	1.12	0.000 000	21.8 7	0.010 6		1.000	0.01 06	1.000	0.01 06
THERMAL ZONE: 109 I-2 S.E.M	AHU _1	0.009 439	1.77	0.000 000	34.6 1	0.016 7		1.000	0.01 67	1.000	0.01 67
THERMAL ZONE: 110 GRAD/TECH STATIONS	AHU _3	0.009 439	2.02	0.000 000	39.4 2	0.019 0		1.000	0.01 90	1.000	0.01 90
THERMAL ZONE: 111 I-3 SAMPLE PREP	AHU _1	0.009 439	1.26	0.000 000	24.7 1	0.011 9		1.000	0.01 19	1.000	0.01 19
THERMAL ZONE: 112 OFFICE /LAB	AHU _3	0.009 439	1.06	0.000 000	20.7 6	0.010 0		1.000	0.01 00	1.000	0.01 00
THERMAL ZONE: 113 H-1 S.T.E.M.	AHU _1	0.009 439	1.71	0.000 000	33.3 7	0.016 1		1.000	0.01 61	1.000	0.01 61

THERMAL ZONE: 114 OFFICE/LAB	AHU -3	0.009 439	1.06	0.000 000	20.7 7	0.010 0		1.000	0.01 00	1.000	0.01 00
THERMAL ZONE: 115 P-2 X-RAY	AHU -1	0.009 439	2.38	0.000 000	46.5 7	0.022 5		1.000	0.02 25	1.000	0.02 25
THERMAL ZONE: 116 OFFICE/LAB	AHU -3	0.009 439	1.07	0.000 000	20.9 7	0.010 1		1.000	0.01 01	1.000	0.01 01
THERMAL ZONE: 117 U-2 MICROSCOP Y	AHU -1	0.009 439	1.20	0.000 000	23.4 7	0.011 3		1.000	0.01 13	1.000	0.01 13
THERMAL ZONE: 118 SEC.	AHU -3	0.009 439	1.04	0.000 000	20.3 4	0.009 8		1.000	0.00 98	1.000	0.00 98
THERMAL ZONE: 119 T-2 POLISHING	AHU -2	0.009 439	1.19	0.000 000	23.2 8	0.011 2		1.000	0.01 12	1.000	0.01 12
THERMAL ZONE: 120 GRAD/TECH STATIONS	AHU -3	0.009 439	1.57	0.000 000	30.6 8	0.014 8		1.000	0.01 48	1.000	0.01 48
THERMAL ZONE: 121 T-1 GRINDING	AHU -2	0.009 439	1.22	0.000 000	23.9 2	0.011 5		1.000	0.01 15	1.000	0.01 15
THERMAL ZONE: 122 OFFICE/LAB	AHU -3	0.009 439	1.06	0.000 000	20.6 8	0.010 0		1.000	0.01 00	1.000	0.01 00
THERMAL ZONE: 123 F-1B REACTIVE GAS	AHU -2	0.009 439	1.20	0.000 000	23.5 5	0.011 4		1.000	0.01 14	1.000	0.01 14
THERMAL ZONE: 124 OFFICE/LAB	AHU -3	0.009 439	1.23	0.000 000	24.1 2	0.011 6		1.000	0.01 16	1.000	0.01 16

THERMAL ZONE: 129 OFFICE/LAB	AHU _3	0.009 439	1.14	0.000 000	22.3 9	0.010 8		1.000	0.01 08	1.000	0.01 08
THERMAL ZONE: 130 S-2 GRAPHICS	AHU _2	0.009 439	1.18	0.000 000	23.1 2	0.011 2		1.000	0.01 12	1.000	0.01 12
THERMAL ZONE: 130 S-2 TRIBOLOGY	AHU _2	0.009 439	1.29	0.000 000	25.2 1	0.012 2		1.000	0.01 22	1.000	0.01 22
THERMAL ZONE: 131 SEC.	AHU _3	0.009 439	1.05	0.000 000	20.4 8	0.009 9		1.000	0.00 99	1.000	0.00 99
THERMAL ZONE: 132 O-2 THERMO MECH. TESTING	AHU _2	0.009 439	1.58	0.000 000	30.9 3	0.014 9		1.000	0.01 49	1.000	0.01 49
THERMAL ZONE: 133 OFFICE/LAB	AHU _3	0.009 439	1.07	0.000 000	21.0 0	0.010 1		1.000	0.01 01	1.000	0.01 01
THERMAL ZONE: 134 O-3 HARDNESS MOD. TEST	AHU _2	0.009 439	1.60	0.000 000	31.3 2	0.015 1		1.000	0.01 51	1.000	0.01 51
THERMAL ZONE: 135 OFFICE/LAB	AHU _3	0.009 439	1.03	0.000 000	20.2 3	0.009 8		1.000	0.00 98	1.000	0.00 98
THERMAL ZONE: 136 NONDESTR UCTIVE	AHU _1	0.009 439	1.14	0.000 000	22.3 0	0.010 8		1.000	0.01 08	1.000	0.01 08
THERMAL ZONE: 137 GRAD/TECH STATIONS	AHU _3	0.009 439	1.57	0.000 000	30.6 7	0.014 8		1.000	0.01 48	1.000	0.01 48
THERMAL ZONE: 138	AHU _1	0.009 439	2.39	0.000 000	46.7 7	0.022 6		1.000	0.02 26	1.000	0.02 26

O-1 UNIVERSAL TESTING											
THERMAL ZONE: 139 OFFICE/LAB	AHU _3	0.009 439	1.02	0.000 000	19.8 7	0.009 6		1.000	0.00 96	1.000	0.00 96
THERMAL ZONE: 141 OFFICE/LAB	AHU _3	0.009 439	1.07	0.000 000	20.8 7	0.010 1		1.000	0.01 01	1.000	0.01 01
THERMAL ZONE: 142 A-3 PARTICULA TE	AHU _2	0.009 439	2.37	0.000 000	46.2 8	0.022 3		1.000	0.02 23	1.000	0.02 23
THERMAL ZONE: 143 GRAD/TECH STATIONS	AHU _3	0.009 439	1.53	0.000 000	29.8 3	0.014 4		1.000	0.01 44	1.000	0.01 44
THERMAL ZONE: 144 V-2 CERAMICS MACHINING	AHU _2	0.009 439	1.20	0.000 000	23.5 6	0.011 4		1.000	0.01 14	1.000	0.01 14
THERMAL ZONE: 148 CORRIDOR	AHU _3	0.000 000	0.72	0.000 254	66.5 5	0.016 9		1.000	0.01 69	1.000	0.01 69
THERMAL ZONE: 200 FIBER OP. DIRECTOR	AHU _3	0.009 439	1.96	0.000 000	38.2 8	0.018 5		1.000	0.01 85	1.000	0.01 85
THERMAL ZONE: 201 CONFERENC E	AHU _3	0.009 439	31.67	0.000 000	58.8 5	0.299 0		1.000	0.29 90	1.000	0.29 90
THERMAL ZONE: 202 EXECUTIVE OFFICER	AHU _3	0.009 439	1.26	0.000 000	24.6 4	0.011 9		1.000	0.01 19	1.000	0.01 19

THERMAL ZONE: 203 SEC.	AHU -3	0.009 439	1.25	0.000 000	24.4 3	0.011 8		1.000	0.01 18	1.000	0.01 18
THERMAL ZONE: 204 DEPARTMENT CHAIR	AHU -3	0.009 439	2.52	0.000 000	49.2 8	0.023 8		1.000	0.02 38	1.000	0.02 38
THERMAL ZONE: 205 G-3 SPECIALTY MEAS.	AHU -1	0.009 439	2.41	0.000 000	47.2 3	0.022 8		1.000	0.02 28	1.000	0.02 28
THERMAL ZONE: 207 VEST.	AHU -1	0.009 439	0.27	0.000 000	4.93	0.002 5		1.000	0.00 25	1.000	0.00 25
THERMAL ZONE: 207A A-3A POWDER SYNTHESIS	AHU -1	0.009 439	1.07	0.000 000	20.9 4	0.010 1		1.000	0.01 01	1.000	0.01 01
THERMAL ZONE: 209 K-1 SPECTRO ANALYSIS	AHU -1	0.009 439	1.19	0.000 000	23.1 8	0.011 2		1.000	0.01 12	1.000	0.01 12
THERMAL ZONE: 211 S-3 GRAD. PC.	AHU -1	0.009 439	1.18	0.000 000	23.0 4	0.011 1		1.000	0.01 11	1.000	0.01 11
THERMAL ZONE: 212 OFFICE/LAB	AHU -3	0.009 439	3.03	0.000 000	59.3 5	0.028 6		1.000	0.02 86	1.000	0.02 86
THERMAL ZONE: 213 M-1 THERMAL ANALYSIS	AHU -1	0.009 439	1.16	0.000 000	22.6 5	0.010 9		1.000	0.01 09	1.000	0.01 09
THERMAL ZONE: 214 WORD PROCESSING	AHU -3	0.000 000	2.13	0.000 254	19.7 8	0.005 0		1.000	0.00 50	1.000	0.00 50

THERMAL ZONE: 215 M-2 THERMAL ANALYSIS	AHU _2	0.009 439	0.89	0.000 000	17.4 1	0.008 4	1.000	0.00 84	1.000	0.00 84
THERMAL ZONE: 216 FINANCE/A DMIN. CENTER	AHU _3	0.009 439	1.44	0.000 000	28.2 3	0.013 6	1.000	0.01 36	1.000	0.01 36
THERMAL ZONE: 217 VEST.	AHU _1	0.009 439	0.23	0.000 000	4.20	0.002 1	1.000	0.00 21	1.000	0.00 21
THERMAL ZONE: 217A R-1 SPUTTER	AHU _1	0.009 439	1.36	0.000 000	26.5 9	0.012 8	1.000	0.01 28	1.000	0.01 28
THERMAL ZONE: 217B L-3 ELECTRONI CS	AHU _1	0.009 439	1.08	0.000 000	21.2 1	0.010 2	1.000	0.01 02	1.000	0.01 02
THERMAL ZONE: 218 SEC.	AHU _3	0.009 439	1.14	0.000 000	22.2 2	0.010 7	1.000	0.01 07	1.000	0.01 07
THERMAL ZONE: 218A CENTER DIRECTOR	AHU _3	0.009 439	2.01	0.000 000	39.3 9	0.019 0	1.000	0.01 90	1.000	0.01 90
THERMAL ZONE: 220 CORRIDOR	AHU _1	0.000 000	2.62	0.000 254	243. 68	0.061 9	1.000	0.06 19	1.000	0.06 19
THERMAL ZONE: 221 L- 2 ELECTRONI CS	AHU _1	0.009 439	1.21	0.000 000	23.6 0	0.011 4	1.000	0.01 14	1.000	0.01 14
THERMAL ZONE: 221 L- 4 MAGNETICS	AHU _1	0.009 439	1.16	0.000 000	22.6 3	0.010 9	1.000	0.01 09	1.000	0.01 09

THERMAL ZONE: 222 CORRIDOR	AHU _3	0.000 000	0.66	0.000 254	61.7 4	0.015 7	1.000	0.01 57	1.000	0.01 57
THERMAL ZONE: 223 M-3 THERMAL CONDUCTIVITY	AHU _1	0.009 439	1.19	0.000 000	23.3 5	0.011 3	1.000	0.01 13	1.000	0.01 13
THERMAL ZONE: 226 D-3 TAPE CASTING	AHU _2	0.009 439	1.43	0.000 000	27.8 9	0.013 5	1.000	0.01 35	1.000	0.01 35
THERMAL ZONE: 227 UNDERGRA D DIR.	AHU _3	0.009 439	1.27	0.000 000	24.9 0	0.012 0	1.000	0.01 20	1.000	0.01 20
THERMAL ZONE: 228 B-2 POROSITY SURFACE	AHU _2	0.009 439	1.09	0.000 000	21.2 2	0.010 2	1.000	0.01 02	1.000	0.01 02
THERMAL ZONE: 229 SEC.	AHU _3	0.009 439	1.10	0.000 000	21.4 2	0.010 3	1.000	0.01 03	1.000	0.01 03
THERMAL ZONE: 230 B-1 PARTICLE SIZE ANALYSIS	AHU _2	0.009 439	1.08	0.000 000	21.1 5	0.010 2	1.000	0.01 02	1.000	0.01 02
THERMAL ZONE: 231 UNDERGRA D DIR.	AHU _3	0.009 439	1.10	0.000 000	21.4 9	0.010 4	1.000	0.01 04	1.000	0.01 04
THERMAL ZONE: 232 C-4 COILOIDS ANALYSIS	AHU _2	0.009 439	1.21	0.000 000	23.6 0	0.011 4	1.000	0.01 14	1.000	0.01 14
THERMAL ZONE: 233 OFFICE/LAB	AHU _3	0.009 439	1.09	0.000 000	21.4 1	0.010 3	1.000	0.01 03	1.000	0.01 03

THERMAL ZONE: 234 C-3 CHEMICAL ANALYSIS	AHU _2	0.009 439	1.19	0.000 000	23.2 1	0.011 2		1.000	0.01 12	1.000	0.01 12
THERMAL ZONE: 236 C-2 SOL GEL FORMING	AHU _2	0.009 439	1.17	0.000 000	22.8 8	0.011 0		1.000	0.01 10	1.000	0.01 10
THERMAL ZONE: 237 GRAD/TECH STATIONS	AHU _3	0.009 439	2.69	0.000 000	52.6 9	0.025 4		1.000	0.02 54	1.000	0.02 54
THERMAL ZONE: 238 C-2 RHEOLOGY	AHU _2	0.009 439	1.21	0.000 000	23.7 1	0.011 4		1.000	0.01 14	1.000	0.01 14
THERMAL ZONE: 238A TECH	AHU _2	0.000 000	0.34	0.000 254	6.38	0.001 6		1.000	0.00 16	1.000	0.00 16
THERMAL ZONE: 239 OFFICE/LAB	AHU _3	0.009 439	1.11	0.000 000	21.7 6	0.010 5		1.000	0.01 05	1.000	0.01 05
THERMAL ZONE: 240 D-4 COMPOSITE S	AHU _2	0.009 439	3.30	0.000 000	64.6 1	0.031 2		1.000	0.03 12	1.000	0.03 12
THERMAL ZONE: 241 GRAD/TECH STATIONS	AHU _3	0.009 439	1.57	0.000 000	30.7 8	0.014 9		1.000	0.01 49	1.000	0.01 49
THERMAL ZONE: 242 D-2 PRESS FORM	AHU _2	0.009 439	1.21	0.000 000	23.7 1	0.011 4		1.000	0.01 14	1.000	0.01 14
THERMAL ZONE: 244 D-1 CASTING EXTRUSION	AHU _2	0.009 439	1.24	0.000 000	24.1 8	0.011 7		1.000	0.01 17	1.000	0.01 17

THERMAL ZONE: 247 GRAD/TECH STATIONS	AHU_3	0.009439	1.70	0.000000	33.21	0.0160	1.000	0.0160	1.000	0.0160
THERMAL ZONE: LOBBY 1ST FLOOR	AHU_3	0.007079	20.20	0.000000	187.69	0.1430	1.000	0.1430	1.000	0.1430
THERMAL ZONE: 132-A TECH.	AHU_2	0.000000	0.00	0.000254	7.14	0.0018	1.000	0.0018	1.000	0.0018

System Ventilation Parameters

	People Outdoor Air Rate - Rp [m3/s-person]	Sum of Zone Population - Pz-sum	Area Outdoor Air Rate - Ra [m3/s-m2]	Sum of Zone Floor Area - Az-sum [m2]	Breathing Zone Outdoor Airflow - Vbz [m3/s]	Cooling Zone Outdoor Airflow - Voz-clg [m3/s]	Heating Zone Outdoor Airflow - Voz-htg [m3/s]
AHU_1	0.008593	29.28	0.000081	764.61	0.3135	0.3135	0.3135
AHU_2	0.009324	28.19	0.000006	558.25	0.2663	0.2663	0.2663
AHU_3	0.008878	143.95	0.000026	1470.74	1.3155	1.3155	1.3155

Zone Ventilation Calculations for Cooling Design

Air Loop Name	Box Type	Zone Primary Airflow - Vpz [m3/s]	Zone Secondary Airflow - Vsz [m3/s]	Minimum Zone Primary Airflow - Vpz-min [m3/s]	Zone Primary Airflow Fraction - Zpz	Primary Outside Air Fraction - Ep	Secondary Outside Air Fraction - Zpz	Supply Air Fraction - Fb	Mixed Air Fraction - Fc	Outer Zone Ventilation Efficiency - Evz
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107 I-1 SMALL SEM	U_1												
THERM AL ZONE: 108 OFFICE /LAB	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.155	0.1549	0.0167	0.0106	0.000	1.000	0.000	0.000	0.000	0.000	1.000
THERM AL ZONE: 109 I-2 S.E.M	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.132	0.1322	0.0264	0.0167	0.000	1.000	0.000	0.000	0.000	0.000	1.000
THERM AL ZONE: 110 GRAD/ TECH STATIO NS	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.272	0.2718	0.0300	0.0190	0.000	1.000	0.000	0.000	0.000	0.000	1.000
THERM AL ZONE: 111 I-3 SAMPL E PREP	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.100	0.0997	0.0188	0.0119	0.000	1.000	0.000	0.000	0.000	0.000	1.000
THERM AL ZONE: 112 OFFICE /LAB	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.153	0.1531	0.0158	0.0100	0.000	1.000	0.000	0.000	0.000	0.000	1.000
THERM AL ZONE: 113 H-1 S.T.E.M .	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.155	0.1553	0.0254	0.0161	0.000	1.000	0.000	0.000	0.000	0.000	1.000

THERM AL ZONE: 114 OFFICE /LAB	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 53	0.1 526	0.0 158	0.0 10 0	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 115 P-2 X-RAY	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.2 77	0.2 770	0.0 355	0.0 22 5	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 116 OFFICE /LAB	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 54	0.1 536	0.0 160	0.0 10 1	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 117 U-2 MICRO SCOPY	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 46	0.1 462	0.0 179	0.0 11 3	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 118 SEC.	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 50	0.1 504	0.0 155	0.0 09 8	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 119 T-2 POLISH ING	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 44	0.1 443	0.0 177	0.0 11 2	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 120 GRAD/ TECH STATIO NS	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.2 07	0.2 073	0.0 234	0.0 14 8	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0

THERM AL ZONE: 121 T-1 GRINDI NG	A H U_2	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 48	0.1 484	0.0 182	0.0 11 5	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 122 OFFICE /LAB	A H U_3	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 53	0.1 529	0.0 158	0.0 10 0	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 123 F- 1B REACTI VE GAS	A H U_2	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 56	0.1 561	0.0 179	0.0 11 4	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 124 OFFICE /LAB	A H U_3	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 78	0.1 777	0.0 184	0.0 11 6	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 129 OFFICE /LAB	A H U_3	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 08	0.1 076	0.0 171	0.0 10 8	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 130 S-2 GRAPH ICS	A H U_2	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.0 97	0.0 966	0.0 176	0.0 11 2	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 130 S-2 TRIBOL OGY	A H U_2	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 04	0.1 036	0.0 192	0.0 12 2	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0

THERM AL ZONE: 131 SEC.	A H U_3	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 05	0.1 053	0.0 156	0.0 09 9	0.0 00	1.0 00	0.00 0	0.00 0	0.00 0	0.00 0	1.00 0
THERM AL ZONE: 132 O-2 THERM O MECH. TESTIN G	A H U_2	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 27	0.1 267	0.0 236	0.0 14 9	0.0 00	1.0 00	0.00 0	0.00 0	0.00 0	0.00 0	1.00 0
THERM AL ZONE: 133 OFFICE /LAB	A H U_3	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 03	0.1 033	0.0 160	0.0 10 1	0.0 00	1.0 00	0.00 0	0.00 0	0.00 0	0.00 0	1.00 0
THERM AL ZONE: 134 O-3 HARDN ESS MOD. TEST	A H U_2	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 55	0.1 553	0.0 239	0.0 15 1	0.0 00	1.0 00	0.00 0	0.00 0	0.00 0	0.00 0	1.00 0
THERM AL ZONE: 135 OFFICE /LAB	A H U_3	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 03	0.1 026	0.0 154	0.0 09 8	0.0 00	1.0 00	0.00 0	0.00 0	0.00 0	0.00 0	1.00 0
THERM AL ZONE: 136 NONDE STRUC TIVE	A H U_1	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 10	0.1 097	0.0 170	0.0 10 8	0.0 00	1.0 00	0.00 0	0.00 0	0.00 0	0.00 0	1.00 0

THERM AL ZONE: 137 GRAD/ TECH STATIO NS	A H U_ 3	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 57	0.1 566	0.0 234	0.0 14 8	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 138 O-1 UNIVE RSAL TESTIN G	A H U_ 1	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 91	0.1 913	0.0 356	0.0 22 6	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 139 OFFICE /LAB	A H U_ 3	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 04	0.1 036	0.0 151	0.0 09 6	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 141 OFFICE /LAB	A H U_ 3	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 06	0.1 056	0.0 159	0.0 10 1	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 142 A-3 PARTIC ULATE	A H U_ 2	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.2 16	0.2 161	0.0 353	0.0 22 3	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 143 GRAD/ TECH STATIO NS	A H U_ 3	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 29	0.1 294	0.0 227	0.0 14 4	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0

THERM AL ZONE: 144 V-2 CERAM ICS MACHI NING	A H U_ 2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 81	0.1 812	0.0 180	0.0 11 4	0.0 00	1.0 00	0.00 0	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 148 CORRI DOR	A H U_ 3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 45	0.1 447	0.0 507	0.0 16 9	0.0 00	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 200 FIBER OP. DIRECT OR	A H U_ 3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.3 55	0.3 551	0.0 292	0.0 18 5	0.0 00	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 201 CONFE RENCE	A H U_ 3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.6 61	0.6 605	0.0 448	0.2 99 0	0.0 00	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 202 EXECU TIVE OFFICE R	A H U_ 3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 98	0.1 979	0.0 188	0.0 11 9	0.0 00	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 203 SEC.	A H U_ 3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 95	0.1 947	0.0 186	0.0 11 8	0.0 00	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	0.00 00	1.00 0

THERM AL ZONE: 204 DEPAR TMENT CHAIR	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.5 80	0.5 797	0.0 376	0.0 23 8	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 205 G-3 SPECIA LTY MEAS.	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.3 75	0.3 746	0.0 360	0.0 22 8	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 207 VEST.	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 62	0.0 624	0.0 038	0.0 02 5	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 207A A- 3A POWDE R SYNTH ESIS	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 81	0.1 814	0.0 160	0.0 10 1	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 209 K-1 SPECT RO ANALY SIS	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.2 00	0.1 998	0.0 177	0.0 11 2	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 211 S-3 GRAD. PC.	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.2 09	0.2 090	0.0 176	0.0 11 1	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0

THERM AL ZONE: 212 OFFICE /LAB	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.4 84	0.4 836	0.0 452	0.0 28 6	0.0 00	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 213 M-1 THERM AL ANALY SIS	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 06	0.1 060	0.0 173	0.0 10 9	0.0 00	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 214 WORD PROCE SSING	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.2 71	0.2 707	0.0 151	0.0 05 0	0.0 00	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 215 M-2 THERM AL ANALY SIS	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 74	0.0 736	0.0 133	0.0 08 4	0.0 00	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 216 FINAN CE/AD MIN. CENTE R	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.2 35	0.2 348	0.0 215	0.0 13 6	0.0 00	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 217 VEST.	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 21	0.0 208	0.0 032	0.0 02 1	0.0 00	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0

THERM AL ZONE: 217A R- 1 SPUTT ER	A H U_1	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 05	0.1 047	0.0 203	0.0 12 8	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 217B L- 3 ELECT RONIC S	A H U_1	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.0 86	0.0 860	0.0 162	0.0 10 2	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 218 SEC.	A H U_3	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 95	0.1 948	0.0 169	0.0 10 7	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 218A CENTE R DIRECT OR	A H U_3	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.2 93	0.2 927	0.0 300	0.0 19 0	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 220 CORRI DOR	A H U_1	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.7 51	0.7 511	0.1 857	0.0 61 9	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 221 L-2 ELECT RONIC S	A H U_1	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.0 94	0.0 939	0.0 180	0.0 11 4	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0

THERM AL ZONE: 221 L-4 MAGNE TICS	A H U_1	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.0 94	0.0 935	0.0 172	0.0 10 9	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 222 CORRI DOR	A H U_3	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.3 96	0.3 959	0.0 470	0.0 15 7	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 223 M-3 THERM AL CONDU CTIVIT Y	A H U_1	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.0 98	0.0 978	0.0 178	0.0 11 3	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 226 D-3 TAPE CASTIN G	A H U_2	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.2 09	0.2 086	0.0 212	0.0 13 5	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 227 UNDER GRAD DIR.	A H U_3	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 96	0.1 959	0.0 190	0.0 12 0	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 228 B-2 POROSI TY SURFA CE	A H U_2	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 73	0.1 725	0.0 162	0.0 10 2	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0

THERM AL ZONE: 229 SEC.	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 72	0.1 719	0.0 163	0.0 10 3	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 230 B-1 PARTICLE SIZE ANALYSIS	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 65	0.1 647	0.0 161	0.0 10 2	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 231 UNDER GRAD DIR.	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 72	0.1 722	0.0 164	0.0 10 4	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 232 C-4 COILOIDS ANALYSIS	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 00	0.0 996	0.0 180	0.0 11 4	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 233 OFFICE /LAB	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 73	0.1 726	0.0 163	0.0 10 3	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 234 C-3 CHEMICAL ANALYSIS	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 96	0.0 964	0.0 177	0.0 11 2	0.0 00	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0

THERM AL ZONE: 236 C-2 SOL GEL FORMI NG	A H U_ 2	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.0 95	0.0 951	0.0 174	0.0 11 0	0.0 00	1.0 00	0.00 0	0.00 0	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 237 GRAD/ TECH STATIO NS	A H U_ 3	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.3 93	0.3 926	0.0 402	0.0 25 4	0.0 00	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 238 C-2 RHEOL OGY	A H U_ 2	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.0 99	0.0 988	0.0 181	0.0 11 4	0.0 00	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 238A TECH	A H U_ 2	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.0 41	0.0 409	0.0 049	0.0 01 6	0.0 00	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 239 OFFICE /LAB	A H U_ 3	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 77	0.1 770	0.0 166	0.0 10 5	0.0 00	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 240 D-4 COMPO SITES	A H U_ 2	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.4 38	0.4 381	0.0 492	0.0 31 2	0.0 00	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 241	A H U_ 3	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.2 62	0.2 616	0.0 235	0.0 14 9	0.0 00	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0

GRAD/ TECH STATIO NS													
THERM AL ZONE: 242 D-2 PRESS FORM	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 92	0.1 923	0.0 181	0.0 11 4	0.0 00	1.0 00	0.00 0	0.00 0	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 244 D-1 CASTIN G EXTRU SION	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 17	0.1 166	0.0 184	0.0 11 7	0.0 00	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 247 GRAD/ TECH STATIO NS	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.2 85	0.2 845	0.0 253	0.0 16 0	0.0 00	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: LOBBY 1ST FLOOR	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	1.2 27	1.2 269	0.1 430	0.1 43 0	0.0 00	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 132-A TECH.	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 25	0.0 252	0.0 054	0.0 01 8	0.0 00	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0

System Ventilation Calculations for Cooling Design

	Sum of Zone Primary	System Primary	Sum of Zone Discharge	Sum of Min Zone	Zone Outdoor	Zone Ventilation
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	Primary Airflow - Vpz-sum [m3/s]	Airflow - Vps [m3/s]	Airflow - Vdz-sum [m3/s]	Primary Airflow - Vpz-min [m3/s]	Airflow Cooling - Voz-clg [m3/s]	Efficiency - Evz-min
AHU_1	3.59	3.594	3.59	0.5826	0.3135	1.000
AHU_2	3.15	3.151	3.15	0.4254	0.2663	1.000
AHU_3	10.50	10.502	10.50	1.1207	1.3155	1.000

Zone Ventilation Calculations for Heating Design

Air Loop Name	Box Type	Zone Primary Airflow - Vpz [m3/s]	Zone Charge Airflow w-Vdz [m3/s]	Minimum Zone Airflow w-Vpz [m3/s]	Zone Outdoor Airflow - Vpz [m3/s]	Primary Outdoors Airflow - Vpz [m3/s]	Primary Indoor Airflow - Vpz [m3/s]	Secondary Recirculation Fraction - Fracton-Er	Supplementary Air Fraction-Fa	Mixed Air Fraction - Fb	Outdoors Air Fraction - Fc	Zone Ventilation Efficiency - Evz
		Zone Primary Airflow - Vpz [m3/s]	Zone Charge Airflow w-Vdz [m3/s]	Minimum Zone Airflow w-Vpz [m3/s]	Zone Outdoor Airflow - Vpz [m3/s]	Primary Outdoors Airflow - Vpz [m3/s]	Primary Indoor Airflow - Vpz [m3/s]	Secondary Recirculation Fraction - Fracton-Er	Supplementary Air Fraction-Fa	Mixed Air Fraction - Fb	Outdoors Air Fraction - Fc	Zone Ventilation Efficiency - Evz
THERMAL ZONE: 101 CONFERENCE	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.179	0.179	0.179	0.1786	1.000	1.000	0.000	0.000	0.000	1.000
THERMAL ZONE: 102 OFFICE /LAB	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.084	0.084	0.084	0.0117	0.140	1.000	0.000	0.000	0.000	1.000

THERM AL ZONE: 103 OFFICE /LAB	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 30	0.1 30	0.1 30	0.0 13 5	0.1 04	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 104 SEC.	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 15	0.0 15	0.0 15	0.0 05 9	0.3 92	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 105 OFFICE /LAB	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 84	0.0 84	0.0 84	0.0 11 7	0.1 39	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 106 CONF ERENCE	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.2 05	0.2 05	0.2 05	0.1 71 2	0.8 33	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 107 I-1 SMALL SEM	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 28	0.0 28	0.0 28	0.0 12 4	0.4 48	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 108 OFFICE /LAB	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 00	0.1 00	0.1 00	0.0 10 6	0.1 06	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 109 I-2 S.E.M	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 35	0.0 35	0.0 35	0.0 16 7	0.4 81	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0

THERM AL ZONE: 110 GRAD/ TECH STATIO NS	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 39	0.1 39	0.1 39	0.0 19 0	0.1 37	1.0 00	0.00 0	0.00 0	0.00 0	0.00 0	1.00 0
THERM AL ZONE: 111 I-3 SAMPL E PREP	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 26	0.0 26	0.0 26	0.0 11 9	0.4 53	1.0 00	0.00 0	0.00 0	0.00 0	0.00 0	1.00 0
THERM AL ZONE: 112 OFFICE /LAB	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 75	0.0 75	0.0 75	0.0 10 0	0.1 34	1.0 00	0.00 0	0.00 0	0.00 0	0.00 0	1.00 0
THERM AL ZONE: 113 H-1 S.T.E.M .	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 36	0.0 36	0.0 36	0.0 16 1	0.4 51	1.0 00	0.00 0	0.00 0	0.00 0	0.00 0	1.00 0
THERM AL ZONE: 114 OFFICE /LAB	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 74	0.0 74	0.0 74	0.0 10 0	0.1 35	1.0 00	0.00 0	0.00 0	0.00 0	0.00 0	1.00 0
THERM AL ZONE: 115 P-2 X-RAY	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 52	0.0 52	0.0 52	0.0 22 5	0.4 36	1.0 00	0.00 0	0.00 0	0.00 0	0.00 0	1.00 0
THERM AL ZONE: 116 OFFICE /LAB	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 75	0.0 75	0.0 75	0.0 10 1	0.1 35	1.0 00	0.00 0	0.00 0	0.00 0	0.00 0	1.00 0

THERM AL ZONE: 117 U-2 MICRO SCOPY	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 27	0.0 27	0.0 27	0.0 11 3	0.4 26	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 118 SEC.	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 73	0.0 73	0.0 73	0.0 09 8	0.1 34	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 119 T-2 POLISH ING	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 26	0.0 26	0.0 26	0.0 11 2	0.4 32	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 120 GRAD/ TECH STATIO NS	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 04	0.1 04	0.1 04	0.0 14 8	0.1 42	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 121 T-1 GRINDI NG	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 27	0.0 27	0.0 27	0.0 11 5	0.4 31	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 122 OFFICE /LAB	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 75	0.0 75	0.0 75	0.0 10 0	0.1 33	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 123 F- 1B	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 29	0.0 29	0.0 29	0.0 11 4	0.3 95	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0

REACTIVE GAS													
THERMAL ZONE: 124 OFFICE /LAB	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.162	0.162	0.162	0.0116	0.072	1.000	0.000	0.000	0.000	0.000	1.000
THERMAL ZONE: 129 OFFICE /LAB	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.079	0.079	0.079	0.0108	0.138	1.000	0.000	0.000	0.000	0.000	1.000
THERMAL ZONE: 130 S-2 GRAPHICS	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.028	0.028	0.028	0.0112	0.404	1.000	0.000	0.000	0.000	0.000	1.000
THERMAL ZONE: 130 S-2 TRIBOLOGY	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.030	0.030	0.030	0.0122	0.408	1.000	0.000	0.000	0.000	0.000	1.000
THERMAL ZONE: 131 SEC.	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.074	0.074	0.074	0.0099	0.133	1.000	0.000	0.000	0.000	0.000	1.000
THERMAL ZONE: 132 O-2 THERMO MECH. TESTING	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.035	0.035	0.035	0.0149	0.429	1.000	0.000	0.000	0.000	0.000	1.000

THERM AL ZONE: 133 OFFICE /LAB	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 75	0.0 75	0.0 75	0.0 10 1	0.1 36	1.0 00	0.00 0	0.00 0	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 134 O-3 HARDN ESS MOD. TEST	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 37	0.0 37	0.0 37	0.0 15 1	0.4 07	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 135 OFFICE /LAB	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 73	0.0 73	0.0 73	0.0 09 8	0.1 34	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 136 NONDE STRUC TIVE	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 30	0.0 30	0.0 30	0.0 10 8	0.3 64	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 137 GRAD/ TECH STATIO NS	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 05	0.1 05	0.1 05	0.0 14 8	0.1 42	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 138 O-1 UNIVE RSAL TESTIN G	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 54	0.0 54	0.0 54	0.0 22 6	0.4 15	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0

THERM AL ZONE: 139 OFFICE /LAB	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 72	0.0 72	0.0 72	0.0 09 6	0.1 32	1.0 00	0.00 0	0.00 0	0.00 0	0.00 0	1.00 0
THERM AL ZONE: 141 OFFICE /LAB	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 76	0.0 76	0.0 76	0.0 10 1	0.1 33	1.0 00	0.00 0	0.00 0	0.00 0	0.00 0	1.00 0
THERM AL ZONE: 142 A-3 PARTIC ULATE	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 60	0.0 60	0.0 60	0.0 22 3	0.3 71	1.0 00	0.00 0	0.00 0	0.00 0	0.00 0	1.00 0
THERM AL ZONE: 143 GRAD/ TECH STATIO NS	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 02	0.1 02	0.1 02	0.0 14 4	0.1 41	1.0 00	0.00 0	0.00 0	0.00 0	0.00 0	1.00 0
THERM AL ZONE: 144 V-2 CERAM ICS MACHI NING	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 45	0.0 45	0.0 45	0.0 11 4	0.2 55	1.0 00	0.00 0	0.00 0	0.00 0	0.00 0	1.00 0
THERM AL ZONE: 148 CORRI DOR	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 13	0.1 13	0.1 13	0.0 16 9	0.1 50	1.0 00	0.00 0	0.00 0	0.00 0	0.00 0	1.00 0
THERM AL ZONE:	A H	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.2 10	0.2 10	0.2 10	0.0 18 5	0.0 88	1.0 00	0.00 0	0.00 0	0.00 0	0.00 0	1.00 0

200 FIBER OP. DIRECT OR	U_3													
THERM AL ZONE: 201 CONFE RENCE	A H U_3	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.2 99	0.2 99	0.2 99	0.2 99 0	1.0 00	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 202 EXECU TIVE OFFICE R	A H U_3	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 08	0.1 08	0.1 08	0.0 11 9	0.1 10	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 203 SEC.	A H U_3	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 08	0.1 08	0.1 08	0.0 11 8	0.1 09	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 204 DEPAR TMENT CHAIR	A H U_3	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.5 16	0.5 16	0.5 16	0.0 23 8	0.0 46	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 205 G-3 SPECIA LTY MEAS.	A H U_1	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 08	0.1 08	0.1 08	0.0 22 8	0.2 12	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 207 VEST.	A H U_1	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.0 22	0.0 22	0.0 22	0.0 02 5	0.1 16	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	0.00 00	1.00 0

THERM AL ZONE: 207A A- 3A POWDE R SYNT ESIS	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 49	0.0 49	0.0 49	0.0 10 1	0.2 04	1.0 00	0.00 0	0.00 0	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 209 K-1 SPECT RO ANALY SIS	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 56	0.0 56	0.0 56	0.0 11 2	0.1 98	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 211 S-3 GRAD. PC.	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 60	0.0 60	0.0 60	0.0 11 1	0.1 86	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 212 OFFICE /LAB	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.2 49	0.2 49	0.2 49	0.0 28 6	0.1 15	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 213 M-1 THERM AL ANALY SIS	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 36	0.0 36	0.0 36	0.0 10 9	0.3 03	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 214 WORD	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 87	0.0 87	0.0 87	0.0 05 0	0.0 58	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0

PROCESSING													
THERMAL ZONE: 215 M-2 THERMAL ANALYSIS	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.026	0.026	0.026	0.084	0.327	1.000	0.000	0.000	0.000	0.000	1.000
THERMAL ZONE: 216 FINANCIAL/ADMIN. CENTER	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.117	0.117	0.117	0.0136	0.117	1.000	0.000	0.000	0.000	0.000	1.000
THERMAL ZONE: 217 VEST.	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.007	0.007	0.007	0.0021	0.295	1.000	0.000	0.000	0.000	0.000	1.000
THERMAL ZONE: 217A R-1 SPUTTER	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.036	0.036	0.036	0.0128	0.358	1.000	0.000	0.000	0.000	0.000	1.000
THERMAL ZONE: 217B L-3 ELECTRONICS	A H U_1	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.030	0.030	0.030	0.0102	0.343	1.000	0.000	0.000	0.000	0.000	1.000
THERMAL ZONE:	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.096	0.096	0.096	0.0107	0.112	1.000	0.000	0.000	0.000	0.000	1.000

218 SEC.													
THERM AL ZONE: 218A CENTE R DIRECT OR	A H U_3	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 49	0.1 49	0.1 49	0.0 19 0	0.1 28	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 220 CORRI DOR	A H U_1	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.7 01	0.7 01	0.7 01	0.0 61 9	0.0 88	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 221 L-2 ELECT RONIC S	A H U_1	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.0 33	0.0 33	0.0 33	0.0 11 4	0.3 48	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 221 L-4 MAGNE TICS	A H U_1	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.0 34	0.0 34	0.0 34	0.0 10 9	0.3 20	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 222 CORRI DOR	A H U_3	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.1 63	0.1 63	0.1 63	0.0 15 7	0.0 96	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 223 M-3 THERM AL CONDU	A H U_1	AIRTERMINAL:SI NGLEDUCT:VAV: REHEAT	0.0 39	0.0 39	0.0 39	0.0 11 3	0.2 89	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0

CTIVITY													
THERMAL ZONE: 226 D-3 TAPE CASTING	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 49	0.0 49	0.0 49	0.0 13 5	0.2 75	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERMAL ZONE: 227 UNDER GRAD DIR.	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 97	0.0 97	0.0 97	0.0 12 0	0.1 23	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERMAL ZONE: 228 B-2 POROSITY SURFACE	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 40	0.0 40	0.0 40	0.0 10 2	0.2 56	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERMAL ZONE: 229 SEC.	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 85	0.0 85	0.0 85	0.0 10 3	0.1 21	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERMAL ZONE: 230 B-1 PARTICLE SIZE ANALYSIS	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 39	0.0 39	0.0 39	0.0 10 2	0.2 60	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERMAL ZONE: 231 UNDER	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 86	0.0 86	0.0 86	0.0 10 4	0.1 21	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0

GRAD DIR.													
THERM AL ZONE: 232 C-4 COILOI DS ANALY SIS	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 33	0.0 33	0.0 33	0.0 11 4	0.3 40	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 233 OFFICE /LAB	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 87	0.0 87	0.0 87	0.0 10 3	0.1 18	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 234 C-3 CHEMI CAL ANALY SIS	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 35	0.0 35	0.0 35	0.0 11 2	0.3 19	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 236 C-2 SOL GEL FORMING	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 35	0.0 35	0.0 35	0.0 11 0	0.3 18	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 237 GRAD/ TECH STATIO NS	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.2 05	0.2 05	0.2 05	0.0 25 4	0.1 24	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE:	A H	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 34	0.0 34	0.0 34	0.0 11 4	0.3 41	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	1.00 0

238 C-2 RHEOL OGY	U_2													
THERM AL ZONE: 238A TECH	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 11	0.0 11	0.0 11	0.0 01 6	0.1 47	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 239 OFFICE /LAB	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 91	0.0 91	0.0 91	0.0 10 5	0.1 16	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 240 D-4 COMPO SITES	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 05	0.1 05	0.1 05	0.0 31 2	0.2 96	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 241 GRAD/ TECH STATIO NS	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 29	0.1 29	0.1 29	0.0 14 9	0.1 15	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 242 D-2 PRESS FORM	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 47	0.0 47	0.0 47	0.0 11 4	0.2 46	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	0.0 00	1.00 0
THERM AL ZONE: 244 D-1 CASTIN G EXTRU SION	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 42	0.0 42	0.0 42	0.0 11 7	0.2 79	1.0 00	0.00 0	0.0 00	0.0 00	0.0 00	0.0 00	1.00 0

THERM AL ZONE: 247 GRAD/ TECH STATIO NS	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.1 61	0.1 61	0.1 61	0.0 16 0	0.0 99	1.0 00	0.00 0	0.00 0	0.00 00	0.00 00	1.00 0
THERM AL ZONE: LOBBY 1ST FLOOR	A H U_3	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.8 25	0.8 25	0.8 25	0.1 43 0	0.1 73	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0
THERM AL ZONE: 132-A TECH.	A H U_2	AIRTERMINAL:SINGLEDUCT:VAV: REHEAT	0.0 12	0.0 12	0.0 12	0.0 01 8	0.1 55	1.0 00	0.00 0	0.00 00	0.00 00	0.00 00	1.00 0

System Ventilation Calculations for Heating Design

	Sum of Zone Primary Airflow - Vpz-sum [m3/s]	System Primary Airflow - Vps [m3/s]	Sum of Zone Discharge Airflow - Vdz-sum [m3/s]	Sum of Min Zone Primary Airflow - Vpz-min [m3/s]	Zone Outdoor Airflow Heating - Voz-htg [m3/s]	Zone Ventilation Efficiency - Evz-min
AHU_1	1.50	1.498	1.50	1.50	0.3135	1.000
AHU_2	0.82	0.823	0.82	0.82	0.2663	1.000
AHU_3	6.21	6.211	6.21	6.21	1.3155	1.000

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Report: **LEED Summary**

For: **Entire Facility**

Timestamp: **2019-12-07 18:09:37 Sec1.1A-General Information**

	Data
Weather File	RUN PERIOD 1 ** NEWARK NJ USA TMY2-14734 WMO#=725020
HDD and CDD data source	Weather File Stat
Total gross floor area [m2]	8595.37
Principal Heating Source	Natural Gas

EAp2-1. Space Usage Type

	Space Area [m2]	Regularly Occupied Area [m2]	Unconditioned Area [m2]	Typical Hours/Week in Operation [hr/wk]
THERMAL ZONE: 101 CONFERENCE	35.16	35.16	0.00	100.72
THERMAL ZONE: 102 OFFICE/LAB	24.29	24.29	0.00	100.72
THERMAL ZONE: 103 OFFICE/LAB	27.94	27.94	0.00	100.72
THERMAL ZONE: 104 SEC.	12.28	12.28	0.00	100.72
THERMAL ZONE: 105 OFFICE/LAB	24.33	24.33	0.00	100.72
THERMAL ZONE: 106 CONFERENCE	33.71	33.71	0.00	100.72
THERMAL ZONE: 107 I-1 SMALL SEM	25.60	25.60	0.00	100.72
THERMAL ZONE: 108 OFFICE/LAB	21.87	21.87	0.00	100.72
THERMAL ZONE: 109 I-2 S.E.M	34.61	34.61	0.00	100.72
THERMAL ZONE: 110 GRAD/TECH STATIONS	39.42	39.42	0.00	100.72
THERMAL ZONE: 111 I-3 SAMPLE PREP	24.71	24.71	0.00	100.72

THERMAL ZONE: 112 OFFICE /LAB	20.76	20.76	0.00	100.72
THERMAL ZONE: 113 H-1 S.T.E.M.	33.37	33.37	0.00	100.72
THERMAL ZONE: 114 OFFICE/LAB	20.77	20.77	0.00	100.72
THERMAL ZONE: 115 P-2 X-RAY	46.57	46.57	0.00	100.72
THERMAL ZONE: 116 OFFICE/LAB	20.97	20.97	0.00	100.72
THERMAL ZONE: 117 U-2 MICROSCOPY	23.47	23.47	0.00	100.72
THERMAL ZONE: 118 SEC.	20.34	20.34	0.00	100.72
THERMAL ZONE: 119 T-2 POLISHING	23.28	23.28	0.00	100.72
THERMAL ZONE: 120 GRAD/TECH STATIONS	30.68	30.68	0.00	100.72
THERMAL ZONE: 121 T-1 GRINDING	23.92	23.92	0.00	100.72
THERMAL ZONE: 122 OFFICE/LAB	20.68	20.68	0.00	100.72
THERMAL ZONE: 123 F-1B REACTIVE GAS	23.55	23.55	0.00	100.72
THERMAL ZONE: 124 OFFICE/LAB	24.12	24.12	0.00	100.72
THERMAL ZONE: 125 F-2 LARGE ELECTRIC FURNACE	23.82	23.82	0.00	100.72
THERMAL ZONE: 127 F-3A SMALL ELECTRIC FURNACE	23.93	23.93	0.00	100.72
THERMAL ZONE: 129 OFFICE/LAB	22.39	22.39	0.00	100.72
THERMAL ZONE: 130 S-2 GRAPHICS	23.12	23.12	0.00	100.72
THERMAL ZONE: 130 S-2 TRIBOLOGY	25.21	25.21	0.00	100.72

THERMAL ZONE: 131 SEC.	20.48	20.48	0.00	100.72
THERMAL ZONE: 132 O-2 THERMO MECH. TESTING	30.93	30.93	0.00	100.72
THERMAL ZONE: 133 OFFICE/LAB	21.00	21.00	0.00	100.72
THERMAL ZONE: 134 O-3 HARDNESS MOD. TEST	31.32	31.32	0.00	100.72
THERMAL ZONE: 135 OFFICE/LAB	20.23	20.23	0.00	100.72
THERMAL ZONE: 136 NONDESTRUCTIVE	22.30	22.30	0.00	100.72
THERMAL ZONE: 137 GRAD/TECH STATIONS	30.67	30.67	0.00	100.72
THERMAL ZONE: 138 O-1 UNIVERSAL TESTING	46.77	46.77	0.00	100.72
THERMAL ZONE: 139 OFFICE/LAB	19.87	19.87	0.00	100.72
THERMAL ZONE: 141 OFFICE/LAB	20.87	20.87	0.00	100.72
THERMAL ZONE: 142 A-3 PARTICULATE	46.28	46.28	0.00	100.72
THERMAL ZONE: 143 GRAD/TECH STATIONS	29.83	29.83	0.00	100.72
THERMAL ZONE: 144 V-2 CERAMICS MACHINING	23.56	23.56	0.00	100.72
THERMAL ZONE: 148 CORRIDOR	66.55	66.55	0.00	100.72
THERMAL ZONE: 200 FIBER OP. DIRECTOR	38.28	38.28	0.00	100.72
THERMAL ZONE: 201 CONFERENCE	58.85	58.85	0.00	100.72
THERMAL ZONE: 202 EXECUTIVE OFFICER	24.64	24.64	0.00	100.72
THERMAL ZONE: 203 SEC.	24.43	24.43	0.00	100.72
THERMAL ZONE: 204 DEPARTMENT CHAIR	49.28	49.28	0.00	100.72

THERMAL ZONE: 205 G-3 SPECIALTY MEAS.	47.23	47.23	0.00	100.72
THERMAL ZONE: 207 VEST.	4.93	4.93	0.00	100.72
THERMAL ZONE: 207A A- 3A POWDER SYNTHESIS	20.94	20.94	0.00	100.72
THERMAL ZONE: 209 K-1 SPECTRO ANALYSIS	23.18	23.18	0.00	100.72
THERMAL ZONE: 211 S-3 GRAD. PC.	23.04	23.04	0.00	100.72
THERMAL ZONE: 212 OFFICE/LAB	59.35	59.35	0.00	100.72
THERMAL ZONE: 213 M-1 THERMAL ANALYSIS	22.65	22.65	0.00	100.72
THERMAL ZONE: 214 WORD PROCESSING	19.78	19.78	0.00	100.72
THERMAL ZONE: 215 M-2 THERMAL ANALYSIS	17.41	17.41	0.00	100.72
THERMAL ZONE: 216 FINANCE/ADMIN. CENTER	28.23	28.23	0.00	100.72
THERMAL ZONE: 217 VEST.	4.20	4.20	0.00	100.72
THERMAL ZONE: 217A R- 1 SPUTTER	26.59	26.59	0.00	100.72
THERMAL ZONE: 217B L-3 ELECTRONICS	21.21	21.21	0.00	100.72
THERMAL ZONE: 218 SEC.	22.22	22.22	0.00	100.72
THERMAL ZONE: 218A CENTER DIRECTOR	39.39	39.39	0.00	100.72
THERMAL ZONE: 220 CORRIDOR	243.68	243.68	0.00	100.72
THERMAL ZONE: 221 L-2 ELECTRONICS	23.60	23.60	0.00	100.72
THERMAL ZONE: 221 L-4 MAGNETICS	22.63	22.63	0.00	100.72

THERMAL ZONE: 222 CORRIDOR	61.74	61.74	0.00	100.72
THERMAL ZONE: 223 M-3 THERMAL CONDUCTIVITY	23.35	23.35	0.00	100.72
THERMAL ZONE: 226 D-3 TAPE CASTING	27.89	27.89	0.00	100.72
THERMAL ZONE: 227 UNDERGRAD DIR.	24.90	24.90	0.00	100.72
THERMAL ZONE: 228 B-2 POROSITY SURFACE	21.22	21.22	0.00	100.72
THERMAL ZONE: 229 SEC.	21.42	21.42	0.00	100.72
THERMAL ZONE: 230 B-1 PARTICLE SIZE ANALYSIS	21.15	21.15	0.00	100.72
THERMAL ZONE: 231 UNDERGRAD DIR.	21.49	21.49	0.00	100.72
THERMAL ZONE: 232 C-4 COILOIDS ANALYSIS	23.60	23.60	0.00	100.72
THERMAL ZONE: 233 OFFICE/LAB	21.41	21.41	0.00	100.72
THERMAL ZONE: 234 C-3 CHEMICAL ANALYSIS	23.21	23.21	0.00	100.72
THERMAL ZONE: 236 C-2 SOL GEL FORMING	22.88	22.88	0.00	100.72
THERMAL ZONE: 237 GRAD/TECH STATIONS	52.69	52.69	0.00	100.72
THERMAL ZONE: 238 C-2 RHEOLOGY	23.71	23.71	0.00	100.72
THERMAL ZONE: 238A TECH	6.38	6.38	0.00	100.72
THERMAL ZONE: 239 OFFICE/LAB	21.76	21.76	0.00	100.72
THERMAL ZONE: 240 D-4 COMPOSITES	64.61	64.61	0.00	100.72
THERMAL ZONE: 241 GRAD/TECH STATIONS	30.78	30.78	0.00	100.72

THERMAL ZONE: 242 D-2 PRESS FORM	23.71	23.71	0.00	100.72
THERMAL ZONE: 244 D-1 CASTING EXTRUSION	24.18	24.18	0.00	100.72
THERMAL ZONE: 247 GRAD/TECH STATIONS	33.21	33.21	0.00	100.72
THERMAL ZONE: LOBBY 1ST FLOOR	187.69	187.69	0.00	100.72
THERMAL ZONE: 132-A TECH.	7.14	7.14	0.00	0.00
THERMAL ZONE: 006 CUSTODIAL STORAGE	16.80	16.80	0.00	0.00
THERMAL ZONE: 001 MECHANICAL EQUIPMENT ROOM	692.73	0.00	692.73	0.00
THERMAL ZONE: 002 PLUMBING EQUIPMENT	50.70	0.00	50.70	0.00
THERMAL ZONE: 003 ELECTRICAL ROOM	45.75	0.00	45.75	0.00
THERMAL ZONE: 004 ELEV. MACH. ROOM	15.17	0.00	15.17	0.00
THERMAL ZONE: 126 CORRIDOR	243.83	0.00	243.83	100.72
THERMAL ZONE: 140 STORAGE	22.97	0.00	22.97	0.00
THERMAL ZONE: 145 WOMENS RESTROOM	24.73	0.00	24.73	100.72
THERMAL ZONE: 146 E DRYING	23.47	0.00	23.47	100.72
THERMAL ZONE: 147 MENS RESTROOM	25.03	0.00	25.03	100.72
THERMAL ZONE: 149 RECEIVING	31.34	0.00	31.34	100.72
THERMAL ZONE: 225 FILE STORAGE	23.35	0.00	23.35	0.00
THERMAL ZONE: 228A TECH	4.58	0.00	4.58	100.72

THERMAL ZONE: 243 WOMENS RESTROOM	26.26	0.00	26.26	100.72
THERMAL ZONE: 245 MENS RESTROOM	25.78	0.00	25.78	100.72
THERMAL ZONE: 245A J.C.	3.17	0.00	3.17	0.00
THERMAL ZONE: 248 SERVICE CORRIDOR	105.97	0.00	105.97	100.72
THERMAL ZONE: E.S.1 1ST FLOOR	10.46	0.00	10.46	100.72
THERMAL ZONE: E.S.2 1ST FLOOR	9.49	0.00	9.49	100.72
THERMAL ZONE: E.S.3 1ST FLOOR	11.36	0.00	11.36	100.72
THERMAL ZONE: E.S.4 1ST FLOOR	11.48	0.00	11.48	100.72
THERMAL ZONE: ELEVATOR - 1ST FLOOR	10.62	0.00	10.62	100.72
THERMAL ZONE: ELEVATOR 2ND FLOOR	10.40	0.00	10.40	100.72
THERMAL ZONE: ELEVATOR BASEMENT	11.60	0.00	11.60	100.72
THERMAL ZONE: ES.1 2ND FLOOR	10.29	0.00	10.29	100.72
THERMAL ZONE: ES.2 2ND FLOOR	9.86	0.00	9.86	100.72
THERMAL ZONE: ES.3 2ND FLOOR	11.51	0.00	11.51	100.72
THERMAL ZONE: ES.4 2ND FLOOR	10.61	0.00	10.61	100.72
THERMAL ZONE: J.C. 1ST FLOOR	3.05	0.00	3.05	100.72
THERMAL ZONE: LOBBY 2ND FLOOR	184.01	0.00	184.01	100.72
THERMAL ZONE: OPEN	23.84	0.00	23.84	100.72

THERMAL ZONE: SERVICE CORRIDOR - 1ST FLOOR	103.19	0.00	103.19	100.72
THERMAL ZONE: SPACE 101	1934.96	0.00	1934.96	100.72
THERMAL ZONE: SPACE 102	1934.96	0.00	1934.96	100.72
THERMAL ZONE: STAIRWELL - 1ST FLOOR	23.58	0.00	23.58	0.00
THERMAL ZONE: STAIRWELL - BASEMENT	22.78	0.00	22.78	0.00
THERMAL ZONE: STAIRWELL 2ND FLOOR	24.32	0.00	24.32	0.00
Totals	8595.37	2858.15	5737.21	

EAp2-2. Advisory Messages

	Data
Number of hours heating loads not met	240.50
Number of hours cooling loads not met	4336.83
Number of hours not met	4546.00

EAp2-3. Energy Type Summary

	Utility Rate	Virtual Rate [\$/unit energy]	Units of Energy	Units of Demand
None				

EAp2-4/5. Performance Rating Method Compliance

	Electric Energy Use [GJ]	Electric Demand [W]	Natural Gas Energy Use [GJ]	Natural Gas Demand [W]	Additional Energy Use [GJ]	Additional Demand [W]
Interior Lighting	1732.24	134273.63	0.00	0.00	0.00	0.00

Exterior Lighting	0.00	0.00	0.00	0.00	0.00	0.00
Space Heating	0.00	0.00	757.98	339032.67	0.00	0.00
Space Cooling	518.81	38377.78	0.00	0.00	0.00	0.00
Pumps	294.42	9445.91	0.00	0.00	0.00	0.00
Heat Rejection	147.18	7847.27	0.00	0.00	0.00	0.00
Fans-Interior	40.76	2174.14	0.00	0.00	0.00	0.00
Fans-Parking Garage	0.00	0.00	0.00	0.00	0.00	0.00
Service Water Heating	0.00	0.00	0.00	0.00	0.00	0.00
Receptacle Equipment	1234.57	65161.20	0.00	0.00	0.00	0.00
Interior Lighting (process)	0.00	0.00	0.00	0.00	0.00	0.00
Refrigeration Equipment	0.00	0.00	0.00	0.00	0.00	0.00
Cooking	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Process	0.00	0.00	0.00	0.00	0.00	0.00
Elevators and Escalators	0.00	0.00	0.00	0.00	0.00	0.00
Total Line	3967.97		757.98		0.00	

EAp2-6. Energy Use Summary

	Process Subtotal [GJ]	Total Energy Use [GJ]
Electricity	1234.57	3967.97
Natural Gas	0.00	757.98
Additional	0.00	0.00
Total	1234.57	4725.95

EAp2-7. Energy Cost Summary

	Process Subtotal [\$]	Total Energy Cost [\$]
Electricity	0.00	
Natural Gas	0.00	
Additional	0.00	
Total	0.00	

Process energy cost based on ratio of process to total energy.

L-1. Renewable Energy Source Summary

	Rated Capacity [kW]	Annual Energy Generated [GJ]
Photovoltaic	0.00	0.00
Wind	0.00	0.00

EAp2-17a. Energy Use Intensity - Electricity

	Electricity [MJ/m ²]
Interior Lighting	201.53
Space Heating	0.00
Space Cooling	60.36
Fans-Interior	4.74
Service Water Heating	0.00
Receptacle Equipment	143.63
Miscellaneous	51.38
Subtotal	461.64

EAp2-17b. Energy Use Intensity - Natural Gas

	Natural Gas [MJ/m ²]
Space Heating	88.19
Service Water Heating	0.00
Miscellaneous	0.00
Subtotal	88.19

EAp2-17c. Energy Use Intensity - Additional

	Additional [MJ/m ²]
Miscellaneous	0.00
Subtotal	0.00

EAp2-18. End Use Percentage

	Percent [%]
Interior Lighting	36.65
Space Heating	16.04
Space Cooling	10.98
Fans-Interior	0.86
Service Water Heating	0.00
Receptacle Equipment	26.12
Miscellaneous	9.34

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Report: **Component Sizing Summary**

For: **Entire Facility**

Timestamp: **2019-12-07 18:09:37** AirTerminal:SingleDuct:VAV:Reheat

Design Size Maximum Air Flow Rate [m ³ /s]	Design Size Maximum Flow per Zone Floor Area during Reheat [m ³ /s-m ²]	Design Size Maximum Flow Fraction during Reheat []	Design Size Maximum Reheat Water Flow Rate [m ³ /s]	Design Size Reheat Coil Sizing Air Volume Flow Rate [m ³ /s]	Design Size Reheat Coil Sizing Inlet Air Temperature [C]	Design Size Reheat Coil Sizing Inlet Air Humidity Ratio [kgWater/kgDryAir]

AIR TERMIN AL SINGLE DUCT VAV REHEAT 71	0.24412 6	0.00208 3	0.30000 0	0.00008 3	0.11310 8		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 50	0.10785 6	0.00203 2	0.45766 3	0.00006 2	0.08397 1		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 51	0.14542 4	0.00203 2	0.39037 4	0.00009 6	0.12988 2		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 65	0.05020 4	0.00203 2	0.49683 8	0.00001 1	0.01509 7		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 52	0.10774 5	0.00203 2	0.45894 2	0.00006 2	0.08448 5		12.80	0.008000
AIR TERMIN AL	0.29753 0	0.00264 8	0.30000 0	0.00015 1	0.20548 6		12.80	0.008000

SINGLE DUCT VAV REHEAT 72								
AIR TERMIN AL SINGLE DUCT VAV REHEAT 7	0.10108 9	0.00203 2	0.51456 7	0.00002 1	0.03032 7		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 53	0.15493 2	0.00212 6	0.30000 0	0.00007 4	0.09993 1		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 8	0.13223 8	0.00203 2	0.53181 1	0.00002 7	0.03967 2		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 46	0.27183 2	0.00206 8	0.30000 0	0.00010 2	0.13855 5		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV	0.09970 6	0.00203 2	0.50361 4	0.00002 0	0.02991 2		12.80	0.008000

REHEAT 6								
AIR TERMIN AL SINGLE DUCT VAV REHEAT 54	0.15311 7	0.00221 2	0.30000 0	0.00005 5	0.07492 0		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 5	0.15529 5	0.00203 2	0.43659 1	0.00002 9	0.04658 9		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 55	0.15257 8	0.00220 4	0.30000 0	0.00005 5	0.07449 8		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 4	0.27700 8	0.00203 2	0.34162 2	0.00004 5	0.08310 2		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 56	0.15363 9	0.00219 8	0.30000 0	0.00005 5	0.07505 0		12.80	0.008000

AIR TERMINAL SINGLE DUCT VAV REHEAT	0.146224	0.002032	0.326130	0.000023	0.043867	12.80	0.008000
AIR TERMINAL SINGLE DUCT VAV REHEAT	0.150443	0.002219	0.300000	0.000054	0.073300	12.80	0.008000
AIR TERMINAL SINGLE DUCT VAV REHEAT	0.144275	0.002032	0.327879	0.000023	0.043283	12.80	0.008000
AIR TERMINAL SINGLE DUCT VAV REHEAT	0.207259	0.002032	0.300763	0.000077	0.103921	12.80	0.008000
AIR TERMINAL SINGLE DUCT VAV REHEAT	0.148412	0.002032	0.327552	0.000024	0.044524	12.80	0.008000
AIR TERMINAL	0.152922	0.002219	0.300000	0.000055	0.075302	12.80	0.008000

SINGLE DUCT VAV REHEAT 57								
AIR TERMIN AL SINGLE DUCT VAV REHEAT 27	0.15611 9	0.00203 2	0.30647 2	0.00002 5	0.04683 6	12.80		0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 58	0.17770 6	0.00221 0	0.30000 0	0.00011 9	0.16208 1	12.80		0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 59	0.10757 5	0.00203 2	0.42297 1	0.00005 8	0.07850 9	12.80		0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 25	0.09661 3	0.00203 2	0.48622 2	0.00002 1	0.02898 4	12.80		0.008000
AIR TERMIN AL SINGLE DUCT VAV	0.10360 7	0.00203 2	0.49442 4	0.00002 2	0.03108 2	12.80		0.008000

REHEAT 26								
AIR TERMIN AL SINGLE DUCT VAV REHEAT 67	0.10526 8	0.00203 2	0.39537 0	0.00005 5	0.07428 2		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 24	0.12666 5	0.00203 2	0.49612 3	0.00002 6	0.03800 0		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 29	0.02521 5	0.00203 2	0.57532 7	0.00009 9	0.01168 1		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 60	0.10334 1	0.00203 2	0.41290 7	0.00005 5	0.07470 5		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 23	0.15525 7	0.00203 2	0.40992 7	0.00002 9	0.04657 7		12.80	0.008000

AIR TERMINAL SINGLE DUCT VAV REHEAT 78	0.102649	0.002032	0.400516	0.000054	0.072909		12.80	0.008000
AIR TERMINAL SINGLE DUCT VAV REHEAT 2	0.109651	0.002032	0.413326	0.000023	0.032895		12.80	0.008000
AIR TERMINAL SINGLE DUCT VAV REHEAT 44	0.156570	0.002032	0.398104	0.000077	0.104592		12.80	0.008000
AIR TERMINAL SINGLE DUCT VAV REHEAT 1	0.191256	0.002032	0.496955	0.000041	0.057377		12.80	0.008000
AIR TERMINAL SINGLE DUCT VAV REHEAT 61	0.103618	0.002032	0.389595	0.000053	0.072393		12.80	0.008000
AIR TERMINAL	0.105553	0.002032	0.401685	0.000056	0.075551		12.80	0.008000

SINGLE DUCT VAV REHEAT 62								
AIR TERMIN AL SINGLE DUCT VAV REHEAT 22	0.21608 8	0.00203 2	0.43519 2	0.00004 5	0.06482 6	12.80	0.008000	
AIR TERMIN AL SINGLE DUCT VAV REHEAT 43	0.12944 1	0.00203 2	0.46825 0	0.00007 5	0.10244 6	12.80	0.008000	
AIR TERMIN AL SINGLE DUCT VAV REHEAT 21	0.18116 3	0.00230 7	0.30000 0	0.00003 5	0.05434 9	12.80	0.008000	
AIR TERMIN AL SINGLE DUCT VAV REHEAT 91	0.14470 5	0.00203 2	0.93453 6	0.00008 3	0.11256 2	12.80	0.008000	
AIR TERMIN AL SINGLE DUCT VAV	0.35509 8	0.00278 3	0.30000 0	0.00015 5	0.20989 9	12.80	0.008000	

REHEAT 80								
AIR TERMIN AL SINGLE DUCT VAV REHEAT 73	0.66051 0	0.00336 7	0.30000 0	0.00019 6	0.26562 6		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 79	0.19794 1	0.00241 0	0.30000 0	0.00007 9	0.10781 9		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 68	0.19466 2	0.00239 0	0.30000 0	0.00008 0	0.10806 5		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 77	0.57970 8	0.00352 9	0.30000 0	0.00038 0	0.51573 3		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 20	0.37456 0	0.00237 9	0.30000 0	0.00008 0	0.11236 8		12.80	0.008000

AIR TERMIN AL SINGLE DUCT VAV REHEAT 17	0.06244 3	0.00380 3	0.30000 0	0.00001 6	0.02160 1		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 19	0.18141 3	0.00260 0	0.30000 0	0.00003 8	0.05442 4		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 18	0.19981 0	0.00258 6	0.30000 0	0.00004 2	0.05994 3		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 16	0.20900 5	0.00272 2	0.30000 0	0.00004 5	0.06270 2		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 63	0.48360 3	0.00244 5	0.30000 0	0.00018 3	0.24900 4		12.80	0.008000
AIR TERMIN AL	0.10600 5	0.00203 2	0.43413 3	0.00002 7	0.03604 8		12.80	0.008000

SINGLE DUCT VAV REHEAT 15								
AIR TERMIN AL SINGLE DUCT VAV REHEAT 81	0.27072 2	0.00410 7	0.30000 0	0.00006 4	0.08688 5	12.80	0.008000	
AIR TERMIN AL SINGLE DUCT VAV REHEAT 41	0.07362 5	0.00203 2	0.48039 0	0.00001 9	0.02566 6	12.80	0.008000	
AIR TERMIN AL SINGLE DUCT VAV REHEAT 82	0.23482 6	0.00249 6	0.30000 0	0.00008 6	0.11681 2	12.80	0.008000	
AIR TERMIN AL SINGLE DUCT VAV REHEAT 12	0.02084 0	0.00203 2	0.40925 1	0.00000 5	0.00723 9	12.80	0.008000	
AIR TERMIN AL SINGLE DUCT VAV	0.10472 8	0.00203 2	0.51584 6	0.00002 6	0.03588 1	12.80	0.008000	

REHEAT 14								
AIR TERMIN AL SINGLE DUCT VAV REHEAT 13	0.08602 4	0.00203 2	0.50089 9	0.00002 2	0.02982 6		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 69	0.19483 2	0.00263 1	0.30000 0	0.00007 1	0.09603 0		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 83	0.29271 7	0.00222 9	0.30000 0	0.00011 0	0.14870 5		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 89	0.75107 5	0.00203 2	0.65927 6	0.00051 7	0.70138 2		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 11	0.09389 9	0.00203 2	0.51075 8	0.00002 4	0.03268 4		12.80	0.008000

AIR TERMIN AL SINGLE DUCT VAV REHEAT 10	0.09351 3	0.00203 2	0.49172 1	0.00002 5	0.03418 0		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 90	0.39590 5	0.00203 2	0.31687 9	0.00012 0	0.16342 7		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 9	0.09778 1	0.00203 2	0.48525 6	0.00002 9	0.03897 6		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 42	0.20855 9	0.00224 4	0.30000 0	0.00003 9	0.06256 8		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 75	0.19589 3	0.00236 0	0.30000 0	0.00007 2	0.09732 5		12.80	0.008000
AIR TERMIN AL	0.17254 5	0.00243 9	0.30000 0	0.00003 2	0.05176 4		12.80	0.008000

SINGLE DUCT VAV REHEAT 40								
AIR TERMIN AL SINGLE DUCT VAV REHEAT 70	0.17191 8	0.00240 8	0.30000 0	0.00006 3	0.08533 6	12.80		0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 39	0.16474 5	0.00233 7	0.30000 0	0.00003 1	0.04942 3	12.80		0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 76	0.17223 5	0.00240 4	0.30000 0	0.00006 3	0.08607 1	12.80		0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 38	0.09957 1	0.00203 2	0.48157 2	0.00002 5	0.03345 8	12.80		0.008000
AIR TERMIN AL SINGLE DUCT VAV	0.17261 5	0.00241 9	0.30000 0	0.00006 4	0.08749 3	12.80		0.008000

REHEAT 84								
AIR TERMIN AL SINGLE DUCT VAV REHEAT 34	0.09635 8	0.00203 2	0.48937 4	0.00002 6	0.03508 7		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 36	0.09513 6	0.00203 2	0.48871 9	0.00002 6	0.03471 1		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 47	0.39256 2	0.00223 5	0.30000 0	0.00015 1	0.20476 4		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 35	0.09878 5	0.00203 2	0.48770 6	0.00002 5	0.03358 8		12.80	0.008000
AIR TERMIN AL SINGLE DUCT VAV REHEAT 37	0.04089 6	0.00203 2	0.31721 6	0.00000 8	0.01226 9		12.80	0.008000

AIR TERMINAL SINGLE DUCT VAV REHEAT 64	0.176962	0.002439	0.300000	0.000067	0.090630	12.80	0.008000
AIR TERMINAL SINGLE DUCT VAV REHEAT 33	0.438106	0.002034	0.300000	0.000083	0.131432	12.80	0.008000
AIR TERMINAL SINGLE DUCT VAV REHEAT 48	0.261643	0.002550	0.300000	0.000095	0.128893	12.80	0.008000
AIR TERMINAL SINGLE DUCT VAV REHEAT 32	0.192272	0.002432	0.300000	0.000037	0.057682	12.80	0.008000
AIR TERMINAL SINGLE DUCT VAV REHEAT 31	0.116558	0.002032	0.421463	0.000031	0.041833	12.80	0.008000
AIR TERMINAL	0.284539	0.002570	0.300000	0.000119	0.161109	12.80	0.008000

SINGLE DUCT VAV REHEAT 49								
AIR TERMIN AL SINGLE DUCT VAV REHEAT 74	1.23	0.00203	0.31086	0.00060	0.82536	12.80	0.008000	

User-Specified values were used. Design Size values were used if no User-Specified values were provided.

Coil:Heating:Water

	Design Size Design Coil Load [W]	Design Size Maximum Water Flow Rate [m ³ /s]	Design Size U-Factor Times Area Value [W/K]
COIL HEATING WATER 74	3835.26	0.000083	80.30
COIL HEATING WATER 53	2847.39	0.000062	59.62
COIL HEATING WATER 54	4404.04	0.000096	92.21
COIL HEATING WATER 68	512.29	0.000011	10.73
COIL HEATING WATER 55	2864.84	0.000062	59.99
COIL HEATING WATER 75	6966.65	0.000151	145.87
COIL HEATING WATER 8	964.51	0.000021	19.82
COIL HEATING WATER 56	3388.14	0.000074	70.94
COIL HEATING WATER 9	1228.65	0.000027	25.07

COIL HEATING WATER 49	4698.15	0.000102	98.37
COIL HEATING WATER 7	929.36	0.000020	18.98
COIL HEATING WATER 57	2540.45	0.000055	53.19
COIL HEATING WATER 6	1323.80	0.000029	26.45
COIL HEATING WATER 58	2526.12	0.000055	52.89
COIL HEATING WATER 5	2072.85	0.000045	40.30
COIL HEATING WATER 59	2544.81	0.000055	53.28
COIL HEATING WATER 4	1078.94	0.000023	20.93
COIL HEATING WATER 69	2485.51	0.000054	52.04
COIL HEATING WATER 32	1059.07	0.000023	20.52
COIL HEATING WATER 48	3523.68	0.000077	73.78
COIL HEATING WATER 30	1089.72	0.000024	21.12
COIL HEATING WATER 60	2553.41	0.000055	53.46
COIL HEATING WATER 29	1160.98	0.000025	22.55
COIL HEATING WATER 61	5494.75	0.000119	115.04
COIL HEATING WATER 62	2662.08	0.000058	55.74
COIL HEATING WATER 27	951.27	0.000021	19.72
COIL HEATING WATER 28	1024.84	0.000022	21.28

COIL HEATING WATER 70	2518.78	0.000055	52.74
COIL HEATING WATER 26	1213.93	0.000026	24.98
COIL HEATING WATER 31	396.39	0.000009	8.30
COIL HEATING WATER 63	2533.11	0.000055	53.04
COIL HEATING WATER 25	1356.93	0.000029	27.27
COIL HEATING WATER 81	2472.22	0.000054	51.76
COIL HEATING WATER 3	1036.62	0.000023	21.25
COIL HEATING WATER 47	3546.43	0.000077	74.26
COIL HEATING WATER 2	1877.82	0.000041	38.90
COIL HEATING WATER 64	2454.74	0.000053	51.40
COIL HEATING WATER 65	2561.83	0.000056	53.64
COIL HEATING WATER 24	2090.41	0.000045	43.13
COIL HEATING WATER 46	3473.68	0.000075	72.73
COIL HEATING WATER 23	1610.93	0.000035	32.51
COIL HEATING WATER 94	3817.88	0.000083	79.95
COIL HEATING WATER 83	7117.85	0.000155	149.04
COIL HEATING WATER 76	9008.44	0.000196	188.63
COIL HEATING WATER 82	3656.53	0.000079	76.57

COIL HEATING WATER 71	3664.87	0.000080	76.74
COIL HEATING WATER 80	17485.64	0.000380	366.11
COIL HEATING WATER 21	3703.77	0.000080	76.89
COIL HEATING WATER 18	733.00	0.000016	15.35
COIL HEATING WATER 20	1728.98	0.000038	35.52
COIL HEATING WATER 19	1949.62	0.000042	40.32
COIL HEATING WATER 17	2058.93	0.000045	42.70
COIL HEATING WATER 66	8443.84	0.000183	176.81
COIL HEATING WATER 16	1223.25	0.000027	25.62
COIL HEATING WATER 84	2946.38	0.000064	61.69
COIL HEATING WATER 43	870.95	0.000019	18.24
COIL HEATING WATER 85	3961.13	0.000086	82.94
COIL HEATING WATER 13	245.65	0.000005	5.14
COIL HEATING WATER 15	1217.60	0.000026	25.50
COIL HEATING WATER 14	1012.13	0.000022	21.20
COIL HEATING WATER 72	3256.48	0.000071	68.19
COIL HEATING WATER 86	5044.04	0.000110	105.63
COIL HEATING WATER 92	23788.22	0.000517	498.13

COIL HEATING WATER 12	1109.11	0.000024	23.23
COIL HEATING WATER 11	1159.86	0.000025	24.29
COIL HEATING WATER 93	5544.02	0.000120	116.10
COIL HEATING WATER 10	1322.60	0.000029	27.70
COIL HEATING WATER 44	1800.61	0.000039	36.08
COIL HEATING WATER 78	3300.37	0.000072	69.11
COIL HEATING WATER 42	1479.21	0.000032	29.59
COIL HEATING WATER 73	2893.82	0.000063	60.59
COIL HEATING WATER 41	1437.16	0.000031	28.87
COIL HEATING WATER 79	2918.77	0.000063	61.12
COIL HEATING WATER 40	1135.35	0.000025	23.78
COIL HEATING WATER 87	2967.02	0.000064	62.13
COIL HEATING WATER 36	1190.65	0.000026	24.94
COIL HEATING WATER 38	1177.87	0.000026	24.67
COIL HEATING WATER 50	6943.69	0.000151	145.39
COIL HEATING WATER 37	1139.77	0.000025	23.87
COIL HEATING WATER 39	386.79	0.000008	7.93
COIL HEATING WATER 67	3073.43	0.000067	64.36

COIL HEATING WATER 35	3838.33	0.000083	77.17
COIL HEATING WATER 51	4371.03	0.000095	91.53
COIL HEATING WATER 34	1692.95	0.000037	34.08
COIL HEATING WATER 33	1419.57	0.000031	29.73
COIL HEATING WATER 52	5463.93	0.000119	114.41
COIL HEATING WATER 77	27985.06	0.000608	585.96
COIL HEATING WATER 1	31799.17	0.000691	432.00
COIL HEATING WATER 22	27879.17	0.000606	378.75
COIL HEATING WATER 45	92929.54	0.002019	1262.49

User-Specified values were used. Design Size values were used if no User-Specified values were provided.

Branch

	Maximum Flow Rate [m ³ /s]
AHU_1 MAIN BRANCH	3.59
AHU_2 MAIN BRANCH	3.15
AHU_3 MAIN BRANCH	10.50

User-Specified values were used. Design Size values were used if no User-Specified values were provided.

AirLoopHVAC

	Design Supply Air Flow Rate [m ³ /s]
AHU_1	3.59
AHU_2	3.15
AHU_3	10.50

User-Specified values were used. Design Size values were used if no User-Specified values were provided.

Controller:OutdoorAir

	Maximum Outdoor Air Flow Rate [m3/s]	Minimum Outdoor Air Flow Rate [m3/s]
CONTROLLER OUTDOOR AIR 1	3.59	0.313527
CONTROLLER OUTDOOR AIR 2	3.15	0.266318
CONTROLLER OUTDOOR AIR 3	10.50	1.32

User-Specified values were used. Design Size values were used if no User-Specified values were provided.

Coil:Cooling:Water

	Design Size Design Coil Load [W]	Design Size Design Water Flow Rate [m3/s]	Design Size Design Inlet Air Temperature [C]	Design Size Design Inlet Water Temperature [C]	Design Size Design Outlet Air Temperature [C]	Design Size Design Inlet Air Humidity Ratio	Design Size Design Outlet Air Humidity Ratio
COIL COOLING WATER 1	125589.79	0.004486	3.59	26.40	7.22	12.80	0.014179
COIL COOLING WATER 2	110107.89	0.003933	3.15	26.40	7.22	12.80	0.014179
COIL COOLING WATER 3	401412.97	0.014337	10.50	29.04	7.22	12.80	0.014179

User-Specified values were used. Design Size values were used if no User-Specified values were provided.

Fan:VariableVolume

	Design Size Maximum Flow Rate [m3/s]
FAN VARIABLE VOLUME 1	3.59
FAN VARIABLE VOLUME 2	3.15
FAN VARIABLE VOLUME 3	10.50

User-Specified values were used. Design Size values were used if no User-Specified values were provided.

Controller:WaterCoil

	Maximum Actuated Flow [m3/s]	Controller Convergence Tolerance
CONTROLLER WATER COIL 2	0.004486	0.000106
CONTROLLER WATER COIL 1	0.000691	0.000689
CONTROLLER WATER COIL 3	0.003933	0.000121
CONTROLLER WATER COIL 4	0.000606	0.000786
CONTROLLER WATER COIL 6	0.014337	0.000033
CONTROLLER WATER COIL 5	0.002019	0.000236

User-Specified values were used. Design Size values were used if no User-Specified values were provided.

PlantLoop

	Maximum Loop Flow Rate [m3/s]	Plant Loop Volume [m3]
CHILLED WATER LOOP	0.022756	17.07
CONDENSER WATER LOOP	0.032170	24.13
HOT WATER LOOP	0.009584	7.19

User-Specified values were used. Design Size values were used if no User-Specified values were provided.

Pump:VariableSpeed

	Design Flow Rate [m ³ /s]	Design Power Consumption [W]
PUMP VARIABLE SPEED 2	0.022756	5813.80
PUMP VARIABLE SPEED 3	0.032170	8219.02
PUMP VARIABLE SPEED 1	0.009584	2448.67

User-Specified values were used. Design Size values were used if no User-Specified values were provided.

Chiller:Electric:EIR

	Design Size Reference Chilled Water Flow Rate [m ³ /s]	Design Size Reference Capacity [W]	Design Size Reference Condenser Water Flow Rate [m ³ /s]
CHILLER ELECTRIC EIR 1	0.022756	637100.03	0.032170

User-Specified values were used. Design Size values were used if no User-Specified values were provided.

CoolingTower:SingleSpeed

	Design Water Flow Rate [m ³ /s]	Fan Power at Design Air Flow Rate [W]	Design Air Flow Rate [m ³ /s]	U-Factor Times Area Value at Design Air Flow Rate [W/C]	Free Convection Regime Air Flow Rate [m ³ /s]	Free Convection U-Factor Times Area Value [W/K]
COOLING TOWER SINGLE SPEED 1	0.032170	7905.83	20.83	47054.00	2.08	4705.40

User-Specified values were used. Design Size values were used if no User-Specified values were provided.

Boiler:HotWater

	Design Size Nominal Capacity [W]	Design Size Design Water Flow Rate [m ³ /s]

BOILER HOT WATER 1	442877.16	0.009584
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User-Specified values were used. Design Size values were used if no User-Specified values were provided.

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Report: Surface Shadowing Summary

For: **Entire Facility**

Timestamp: **2019-12-07 18:09:37** Surfaces (Walls, Roofs, etc) that may be Shadowed by Other Surfaces

	Possible Shadow Receivers
SURFACE 1122	SURFACE 1141 SURFACE 1136 SURFACE 1148 SURFACE 1128
SURFACE 1123	SURFACE 1141 SURFACE 195 SURFACE 654 SURFACE 123 SURFACE 137
SURFACE 1124	SURFACE 3 SURFACE 195 SURFACE 654 SURFACE 123 SURFACE 137
SURFACE 1141	SURFACE 1122 SURFACE 1123 SURFACE 1116 SURFACE 3 SURFACE 195 SURFACE 654 SURFACE 123 SURFACE 137 SURFACE 1128
SURFACE 1144	SURFACE 195 SURFACE 654 SURFACE 123 SURFACE 137
SURFACE 1136	SURFACE 1122 SURFACE 1116 SURFACE 3 SURFACE 195 SURFACE 654 SURFACE 123 SURFACE 137 SURFACE 1128
SURFACE 1137	SURFACE 1116 SURFACE 3 SURFACE 1148 SURFACE 1128
SURFACE 1115	SURFACE 3 SURFACE 1129
SURFACE 1116	SURFACE 1141 SURFACE 1136 SURFACE 1137 SURFACE 1148 SURFACE 1128
SURFACE 1118	SURFACE 3 SURFACE 195 SURFACE 654 SURFACE 123 SURFACE 137
SURFACE 1	SURFACE 195 SURFACE 654 SURFACE 123 SURFACE 137

SURFACE 404	SURFACE 3 SURFACE 194 SURFACE 195 SURFACE 198 SURFACE 653 SURFACE 654 SURFACE 657 SURFACE 122 SURFACE 123 SURFACE 126 SURFACE 136 SURFACE 137 SURFACE 140
SURFACE 443	SURFACE 195 SURFACE 654 SURFACE 123 SURFACE 137
SURFACE 461	SURFACE 195 SURFACE 654 SURFACE 123 SURFACE 137
SURFACE 479	SURFACE 195 SURFACE 654 SURFACE 123 SURFACE 137
SURFACE 505	SURFACE 195 SURFACE 654 SURFACE 123 SURFACE 137
SURFACE 538	SURFACE 195 SURFACE 654 SURFACE 123 SURFACE 137
SURFACE 550	SURFACE 195 SURFACE 654 SURFACE 123 SURFACE 137
SURFACE 593	SURFACE 195 SURFACE 654 SURFACE 123 SURFACE 137
SURFACE 612	SURFACE 195 SURFACE 654 SURFACE 123 SURFACE 137
SURFACE 876	SURFACE 654 SURFACE 123
SURFACE 877	SURFACE 3 SURFACE 653 SURFACE 654 SURFACE 657 SURFACE 122 SURFACE 123 SURFACE 126
SURFACE 3	SURFACE 877 SURFACE 121
SURFACE 907	SURFACE 654 SURFACE 123
SURFACE 983	SURFACE 654 SURFACE 123
SURFACE 1010	SURFACE 654 SURFACE 123
SURFACE 1047	SURFACE 654 SURFACE 123
SURFACE 1084	SURFACE 654 SURFACE 123

SURFACE 1148	SURFACE 1122 SURFACE 1137 SURFACE 1116 SURFACE 3 SURFACE 195 SURFACE 654 SURFACE 123 SURFACE 137 SURFACE 1128
SURFACE 194	SURFACE 404 SURFACE 877 SURFACE 195 SURFACE 654 SURFACE 121 SURFACE 123 SURFACE 135 SURFACE 137
SURFACE 195	SURFACE 1 SURFACE 404 SURFACE 443 SURFACE 461 SURFACE 479 SURFACE 505 SURFACE 538 SURFACE 550 SURFACE 593 SURFACE 612 SURFACE 876 SURFACE 877 SURFACE 907 SURFACE 983 SURFACE 1010 SURFACE 1047 SURFACE 1084 SURFACE 194 SURFACE 653 SURFACE 120 SURFACE 121 SURFACE 122 SURFACE 134 SURFACE 135 SURFACE 136
SURFACE 197	SURFACE 198 SURFACE 657 SURFACE 126 SURFACE 140
SURFACE 198	SURFACE 404 SURFACE 877 SURFACE 197 SURFACE 656 SURFACE 121 SURFACE 125 SURFACE 135 SURFACE 139
SURFACE 653	SURFACE 877 SURFACE 654 SURFACE 121 SURFACE 123
SURFACE 654	SURFACE 876 SURFACE 877 SURFACE 907 SURFACE 983 SURFACE 1010 SURFACE 1047 SURFACE 1084 SURFACE 653 SURFACE 120 SURFACE 121 SURFACE 122
SURFACE 656	SURFACE 657 SURFACE 126
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SURFACE 134	SURFACE 654 SURFACE 123 SURFACE 137

SURFACE 135	SURFACE 3 SURFACE 653 SURFACE 654 SURFACE 657 SURFACE 122 SURFACE 123 SURFACE 126 SURFACE 136 SURFACE 137 SURFACE 140
SURFACE 136	SURFACE 877 SURFACE 654 SURFACE 121 SURFACE 123 SURFACE 135 SURFACE 137
SURFACE 137	SURFACE 876 SURFACE 877 SURFACE 907 SURFACE 983 SURFACE 1010 SURFACE 1047 SURFACE 1084 SURFACE 653 SURFACE 120 SURFACE 121 SURFACE 122 SURFACE 134 SURFACE 135 SURFACE 136
SURFACE 139	SURFACE 657 SURFACE 126 SURFACE 140
SURFACE 140	SURFACE 877 SURFACE 656 SURFACE 121 SURFACE 125 SURFACE 135 SURFACE 139
SURFACE 1128	SURFACE 1122 SURFACE 1141 SURFACE 1136 SURFACE 1137 SURFACE 1116 SURFACE 3 SURFACE 1148 SURFACE 195 SURFACE 654 SURFACE 123 SURFACE 137
SURFACE 1129	SURFACE 1115 SURFACE 3 SURFACE 195 SURFACE 654 SURFACE 123 SURFACE 137

Subsurfaces (Windows and Doors) that may be Shadowed by Surfaces

	Possible Shadow Receivers
SURFACE 186	SUB SURFACE 49
SURFACE 179	SUB SURFACE 48
SURFACE 171	SUB SURFACE 46 SUB SURFACE 47
SURFACE 165	SUB SURFACE 45
SURFACE 155	SUB SURFACE 74 SUB SURFACE 75
SURFACE 158	SUB SURFACE 44
SURFACE 1	SUB SURFACE 24
SURFACE 443	SUB SURFACE 25 SUB SURFACE 26

SURFACE 461	SUB SURFACE 27
SURFACE 479	SUB SURFACE 28
SURFACE 505	SUB SURFACE 29
SURFACE 538	SUB SURFACE 30
SURFACE 550	SUB SURFACE 31
SURFACE 593	SUB SURFACE 32
SURFACE 612	SUB SURFACE 33
SURFACE 280	SUB SURFACE 10 SUB SURFACE 11 SUB SURFACE 12 SUB SURFACE 8 SUB SURFACE 9
SURFACE 232	SUB SURFACE 72
SURFACE 335	SUB SURFACE 71
SURFACE 353	SUB SURFACE 70
SURFACE 373	SUB SURFACE 69
SURFACE 400	SUB SURFACE 68
SURFACE 433	SUB SURFACE 67
SURFACE 451	SUB SURFACE 66
SURFACE 532	SUB SURFACE 65
SURFACE 227	SUB SURFACE 73
SURFACE 558	SUB SURFACE 64

SURFACE 876	SUB SURFACE 13 SUB SURFACE 14
SURFACE 642	SUB SURFACE 42 SUB SURFACE 43
SURFACE 638	SUB SURFACE 41
SURFACE 632	SUB SURFACE 40
SURFACE 2	SUB SURFACE 50 SUB SURFACE 51
SURFACE 626	SUB SURFACE 38 SUB SURFACE 39
SURFACE 627	SUB SURFACE 52 SUB SURFACE 53
SURFACE 907	SUB SURFACE 15 SUB SURFACE 16 SUB SURFACE 17
SURFACE 983	SUB SURFACE 18
SURFACE 1010	SUB SURFACE 19
SURFACE 1047	SUB SURFACE 20
SURFACE 1084	SUB SURFACE 21 SUB SURFACE 22
SURFACE 734	SUB SURFACE 3 SUB SURFACE 4 SUB SURFACE 5 SUB SURFACE 6 SUB SURFACE 7
SURFACE 674	SUB SURFACE 54
SURFACE 681	SUB SURFACE 55
SURFACE 790	SUB SURFACE 56
SURFACE 818	SUB SURFACE 57
SURFACE 840	SUB SURFACE 58

SURFACE 858	SUB SURFACE 59 SUB SURFACE 60			
SURFACE 915	SUB SURFACE 61			
SURFACE 1004	SUB SURFACE 62			
SURFACE 1030	SUB SURFACE 63			
SURFACE 194	SUB SURFACE 35			
SURFACE 195	SUB SURFACE 37			
SURFACE 197	SUB SURFACE 36			
SURFACE 653	SUB SURFACE 34			

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Report: **Adaptive Comfort Summary**

For: **Entire Facility**

Timestamp: **2019-12-07 18:09:37** Time Not Meeting the Adaptive Comfort Models during Occupied Hours

ASHRAE55 90% Acceptability Limits [Hours]	ASHRAE55 80% Acceptability Limits [Hours]	CEN15251 Category I Acceptability Limits [Hours]	CEN15251 Category II Acceptability Limits [Hours]	CEN15251 Category III Acceptability Limits [Hours]

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Report: **BUILDING ENERGY PERFORMANCE - ELECTRICITY**

For: **Meter**

Timestamp: **2019-12-07 18:09:37** Custom Monthly Report

		EXT ERI ORL IGH TS:E PME NT:E LECT RICIT Y	INT ERI ORL IGH TS:E PME NT:E LECT RICI TY	EXTE RIOR EQUI PME NT:E LECT RICIT Y	FA NS .E LE CT RI CI TY	PU MP S:E LE CT RI CI TY	HE ATI :EL EC TRI CIT Y	CO OLI NG :EL EC TRI CIT Y	HEA TRE TRE JEC TIO N:E LEC TRI CIT Y	HU MI DIF IER: ELE CT RIC ITY [Inv alid/ Und efin ed]	HEA TRE COV ERY :ELE CTR ICIT Y	WA TER SYS TEM S:EL ECT RICI TY [Inva lid/U ndefi ned]	COG ENE RAT ION: ELE CTR ICIT Y	REF RIG ERA TIO N:E LEC TRI CIT Y	[Inva lid/U ndefi ned]
J a n u a r y	0.14 5982 E+12	0.00	0.104 519E +12	0.00	0.3 63 43 8E +1 0	0.2 120 70 E+ 11	0.0 0	0.7 966 07E +10	0.15 6159 E+10	0.00	0.00	0.00	0.00	0.00	
F e b r u a r y	0.13 3199 E+12	0.00	0.948 226E +11	0.00	0.3 23 19 2E +1 0	0.2 132 72 E+ 11	0.0 0	0.8 751 66E +10	0.19 2495 E+10	0.00	0.00	0.00	0.00	0.00	
M a r c h	0.15 1407 E+12	0.00	0.106 552E +12	0.00	0.3 47 56 7E +1 0	0.2 644 01 E+ 11	0.0 0	0.1 817 31E +11	0.58 0800 E+10	0.00	0.00	0.00	0.00	0.00	
A p r il	0.13 6153 E+12	0.00	0.989 799E +11	0.00	0.3 30 81 2E +1 0	0.2 611 29 E+ 11	0.0 0	0.2 954 37E +11	0.11 6051 E+11	0.00	0.00	0.00	0.00	0.00	
M a y	0.15 1407 E+12	0.00	0.106 552E +12	0.00	0.3 38 38	0.2 515 11	0.0 0	0.5 763	0.18 4520 E+11	0.00	0.00	0.00	0.00	0.00	

					6E+10	E+11		59E+11						
J u n e	0.14 5338 E+12	0.00	0.102 642E +12	0.00	0.3 27 34 2E +1 0	0.2 365 41 E+ 11	0.0 0	0.7 630 75E +11	0.19 7146 E+11	0.00	0.00	0.00	0.00	0.00
J u l y	0.14 2223 E+12	0.00	0.102 890E +12	0.00	0.3 46 48 6E +1 0	0.2 454 26 E+ 11	0.0 0	0.8 474 37E +11	0.20 1622 E+11	0.00	0.00	0.00	0.00	0.00
A u g u s t	0.15 1407 E+12	0.00	0.106 552E +12	0.00	0.3 48 04 9E +1 0	0.2 445 01 E+ 11	0.0 0	0.8 510 43E +11	0.20 4285 E+11	0.00	0.00	0.00	0.00	0.00
S e p t e m b e r	0.14 1578 E+12	0.00	0.101 013E +12	0.00	0.3 26 70 2E +1 0	0.2 379 49 E+ 11	0.0 0	0.6 822 47E +11	0.19 2987 E+11	0.00	0.00	0.00	0.00	0.00
O c t o b e r	0.14 5982 E+12	0.00	0.104 519E +12	0.00	0.3 38 11 9E +1 0	0.2 634 21 E+ 11	0.0 0	0.4 875 67E +11	0.16 9611 E+11	0.00	0.00	0.00	0.00	0.00
N o v e m b	0.14 5338 E+12	0.00	0.102 642E +12	0.00	0.3 33 86 0E +1 0	0.2 684 20 E+ 11	0.0 0	0.2 300 69E +11	0.88 1668 E+10	0.00	0.00	0.00	0.00	0.00

Year	Period	Period	Period	Period	Period	Period	Period	Period	Period	Period	Period	Period	Period	Period
December	0.14 2223 E+12	0.00	0.102 890E +12	0.00	0.3 51 67 5E +1 0	0.2 455 62 E+ 11	0.0 0	0.1 059 08E +11	0.24 4787 E+10	0.00	0.00	0.00	0.00	0.00
Annual Sum or Average	0.17 3224 E+13	0.00	0.123 457E +13	0.00	0.4 07 56 3E +1 1	0.2 944 20 E+ 12	0.0 0	0.5 188 05E +12	0.14 7181 E+12	0.00	0.00	0.00	0.00	0.00
Minimum of Month	0.13 3199 E+12	0.00	0.948 226E +11	0.00	0.3 23 19 2E +1 0	0.2 120 70 E+ 11	0.0 0	0.7 966 07E +10	0.15 6159 E+10	0.00	0.00	0.00	0.00	0.00

h s														
M a x i m u m o f M o n t h s	0.15 1407 E+12	0.00	0.106 552E +12	0.00	0.3 63 43 8E +1 0	0.2 684 20 E+ 11	0.0 0	0.8 510 43E +11	0.20 4285 E+11	0.00	0.00	0.00	0.00	0.00

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Report: BUILDING ENERGY PERFORMANCE - NATURAL GAS

For: Meter

Timestamp: 2019-12-07 18:09:37 Custom Monthly Report

	INTERIOREQU IPMENT:GAS [Invalid/Undefin ed]	EXTERIOREQ UIPMENT:GAS [Invalid/Undefin ed]	HEATI NG:GA S [J]	COOLIN G:GAS [Invalid/U ndefined]	WATERSYS TEMS:GAS [Invalid/U ndefined]	COGENER ATION:GA S [Invalid/U ndefined]
Janu ary	0.00	0.00	0.20117 6E+12	0.00	0.00	0.00
Febr uary	0.00	0.00	0.13973 5E+12	0.00	0.00	0.00
Marc h	0.00	0.00	0.94029 3E+11	0.00	0.00	0.00
April	0.00	0.00	0.52079 3E+11	0.00	0.00	0.00

May	0.00	0.00	0.15630 3E+11	0.00	0.00	0.00
June	0.00	0.00	0.57485 8E+10	0.00	0.00	0.00
July	0.00	0.00	0.38100 2E+10	0.00	0.00	0.00
August	0.00	0.00	0.28056 6E+10	0.00	0.00	0.00
September	0.00	0.00	0.90330 2E+10	0.00	0.00	0.00
October	0.00	0.00	0.24708 8E+11	0.00	0.00	0.00
November	0.00	0.00	0.70214 9E+11	0.00	0.00	0.00
December	0.00	0.00	0.13901 3E+12	0.00	0.00	0.00
Annual Sum or Average	0.00	0.00	0.75798 4E+12	0.00	0.00	0.00
Minimum of Months	0.00	0.00	0.28056 6E+10	0.00	0.00	0.00
Maximum of Months	0.00	0.00	0.20117 6E+12	0.00	0.00	0.00

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Report: **BUILDING ENERGY PERFORMANCE - ELECTRICITY PEAK DEMAND**

For: Meter

Timestamp: 2019-12-07 18:09:37 Custom Monthly Report

	EL EC TR ICI TY :FA CI LIT Y {M axi mu m}[W]	EL EC TR ICI TY :FA CI LIT Y {TI ME ST A IN} MP } [W]	INT ERI ORL IGH TS:E FA CI LIT Y {AT MA X/M IN} MP } [W]	EXT ERI ORL IGH TS:E LEC LEC TRI CIT Y [Inva lid/U ndefi ned] [W]	INTE RIOR EQUI PME NT:E MEN T:EL ECT RICI ITY {AT MAX /MIN } [W]	EXT ERIO REQ UIP MEN T:EL ECT RICI ITY {AT MAX /MIN } [W]	FA NS :E PS: LE CT RI CI TY {A T M A X/ MI N} [W]	PU M PS: LE EL EC TR ICI TY {A T M A X/ MI N} [W]	HE AT IN G: EL EC TR ICI TY {A T M A X/ MI N} [W]	CO OL IN G: EL EC TR ICI TY {A T M A X/ MI N} [W]	HEA TRE JEC TIO N:E LEC TRI CIT Y {AT MA X/M IN} [W]	HU MI DIF IER :EL EC TRI CIT Y [Inv alid/ Und efine d]	HEA TRE CO VER :EL EC TRI CIT Y [Inv alid/ Und efine d]	WA TER SYS TE MS: ELE CTR CIT Y [Inv alid/ Und efine d]	CO GEN ERA TIO N:E LEC TRI CIT Y [Inv alid/ Und efine d]
J a n u a r y	237 755 .65	20-JA N-13: 00	1342 73.6 3	0.00	6516 1.20	0.00	12 28. 06	10 95 2.5 5	0.0 0 0	186 90. 11	7450 .11	0.00	0.00	0.00	0.00
F e b r u a r y	234 501 .31	14-FE B-15: 00	1342 73.6 3	0.00	6516 1.20	0.00	12 28. 06	10 84 7.7 4	0.0 0 0	150 84. 86	7905 .83	0.00	0.00	0.00	0.00
M a r c h	252 211 .84	28-M AR -10: 30	1342 73.6 3	0.00	6516 1.20	0.00	12 28. 22	11 22 2.7 4	0.0 0 0	324 20. 22	7905 .83	0.00	0.00	0.00	0.00

A p r il	251 930 .62	19- AP R- 08: 20	1342 73.6 3	0.00	6516 1.20	0.00	12 28. 06	11 19 5.7 2	0.0 0	322 98. 73	7773 .28	0.00	0.00	0.00	0.00
M a y	252 663 .57	17- M AY - 15: 09	1342 73.6 3	0.00	6516 1.20	0.00	17 78. 23	92 22. 06	0.0 0	344 42. 47	7785 .99	0.00	0.00	0.00	0.00
J u n e	252 511 .28	30- JU N- 16: 49	1342 73.6 3	0.00	6516 1.20	0.00	16 86. 44	92 29. 27	0.0 0	345 38. 23	7622 .51	0.00	0.00	0.00	0.00
J u l y	257 279 .93	19- JU L- 16: 49	1342 73.6 3	0.00	6516 1.20	0.00	21 74. 14	94 45. 91	0.0 0	383 77. 78	7847 .27	0.00	0.00	0.00	0.00
A u g u s t	253 405 .84	29- AU G- 15: 20	1342 73.6 3	0.00	6516 1.20	0.00	15 22. 59	92 58. 95	0.0 0	358 24. 43	7365 .04	0.00	0.00	0.00	0.00
S e p t e m b e r	252 260 .86	18- SE P- 13: 00	1342 73.6 3	0.00	6516 1.20	0.00	12 28. 53	11 27 1.4 6	0.0 0	324 20. 22	7905 .83	0.00	0.00	0.00	0.00
O c t o b e r	252 309 .61	09- OC T- 13: 30	1342 73.6 3	0.00	6516 1.20	0.00	12 90. 07	11 25 8.6 7	0.0 0	324 20. 22	7905 .83	0.00	0.00	0.00	0.00

N o v e m b e r	249 445 .81	03- NO V- 16: 30	1342 73.6 3	0.00	6516 1.20	0.00	12 36. 56	11 08 6.2 7	0.0 0	297 82. 31	7905 .83	0.00	0.00	0.00	0.00
D e c e m b e r	242 724 .88	04- DE C- 11: 20	1342 73.6 3	0.00	6516 1.20	0.00	12 28. 06	11 13 4.8 3	0.0 0	230 21. 33	7905 .83	0.00	0.00	0.00	0.00
A n n u a 1 S u m o r A v e r a g e				0.00		0.00						0.00	0.00	0.00	0.00
M i n i m u m	234 501 .31		1342 73.6 3	0.00	6516 1.20	0.00	12 28. 06	92 22. 06	0.0 0	150 84. 86	7365 .04	0.00	0.00	0.00	0.00

o f M o n t h s													
M a x i m u m o f M o n t h s	257 279 .93	1342 73.6 3	0.00	6516 1.20	0.00	21 74. 14	11 27 1.4 6	0.0 0	383 77. 78	7905 .83	0.00	0.00	0.00

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Report: BUILDING ENERGY PERFORMANCE - NATURAL GAS PEAK DEMAND

For: Meter

Timestamp: 2019-12-07 18:09:37 Custom Monthly Report

	GAS:FACTILTY {Maximum}[W]	GAS:FACTILTY {TIMESTAMP}	INTERIOREQUIPMENT :GAS [Invalid/Undefined]	EXTERIOR EQUIPMENT:T:GAS [Invalid/Undefined]	HEATING:GAS {AT MAX/MIN} [W]	COOLING:GAS [Invalid/Undefined]	WATERSYSTEMS:GAS [Invalid/Undefined]	COGENERATION:GAS [Invalid/Undefined]
January	33903 2.67	02-JAN-06:30	0.00	0.00	33903 2.67	0.00	0.00	0.00

Februar y	33504 6.21	20-FEB-06:19	0.00	0.00	33504 6.21	0.00	0.00	0.00
March	28749 1.98	20-MAR-06:19	0.00	0.00	28749 1.98	0.00	0.00	0.00
April	26403 3.77	10-APR-06:19	0.00	0.00	26403 3.77	0.00	0.00	0.00
May	21677 5.73	08-MAY-06:19	0.00	0.00	21677 5.73	0.00	0.00	0.00
June	15006 2.79	05-JUN-06:19	0.00	0.00	15006 2.79	0.00	0.00	0.00
July	15465 2.63	10-JUL-06:19	0.00	0.00	15465 2.63	0.00	0.00	0.00
August	82195. 24	07-AUG-06:10	0.00	0.00	82195. 24	0.00	0.00	0.00
September	17743 2.08	18-SEP-06:19	0.00	0.00	17743 2.08	0.00	0.00	0.00
October	22800 0.99	16-OCT-06:19	0.00	0.00	22800 0.99	0.00	0.00	0.00
November	27165 1.76	27-NOV-06:19	0.00	0.00	27165 1.76	0.00	0.00	0.00
December	29568 9.07	25-DEC-06:19	0.00	0.00	29568 9.07	0.00	0.00	0.00
Annual Sum or			0.00	0.00		0.00	0.00	0.00

Average								
Minimum of Months	82195.24		0.00	0.00	82195.24	0.00	0.00	0.00
Maximum of Months	33903.267		0.00	0.00	33903.267	0.00	0.00	0.00

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Report: **Life-Cycle Cost Report**

For: **Entire Facility**

Timestamp: **2019-12-07 18:09:37** Life-Cycle Cost Parameters

	Value
Name	{5BE60AD2-8552-4100-8BDA-9E47551E82A9}
Discounting Convention	EndOfYear
Inflation Approach	ConstantDollar
Real Discount Rate	0.0300
Nominal Discount Rate	-- N/A --
Inflation	-- N/A --
Base Date	January 2011
Service Date	January 2011
Length of Study Period in Years	25
Tax rate	0.0000
Depreciation Method	None

Use Price Escalation

	U.S. AVG COMMERCIAL-ELECTRICITY	U.S. AVG COMMERCIAL-DISTILLATE OIL	U.S. AVG COMMERCIAL-RESIDUAL OIL	U.S. AVG COMMERCIAL-NATURAL GAS	U.S. AVG COMMERCIAL-COAL
Resource	Electricity	FuelOil#1	FuelOil#2	Gas	Coal
Start Date	January 2011	January 2011	January 2011	January 2011	January 2011
1	0.983800	0.971400	0.846900	0.982300	0.997000
2	0.973000	0.973000	0.825700	0.955700	1.008900
3	0.963200	0.994200	0.868100	0.927900	1.008900
4	0.961100	1.016400	0.898800	0.925700	0.994100
5	0.957100	1.054100	0.928900	0.934600	0.994100
6	0.955300	1.092800	0.960400	0.941200	1.000000
7	0.953900	1.126700	0.989700	0.951200	1.003000
8	0.952100	1.158000	1.007500	0.964500	1.005900
9	0.954600	1.179200	1.031400	0.985600	1.008900
10	0.955000	1.196700	1.055400	1.006700	1.011900
11	0.955300	1.220000	1.086100	1.022200	1.014800
12	0.956400	1.233300	1.127800	1.041000	1.017800
13	0.957500	1.256600	1.149700	1.061000	1.020800
14	0.959600	1.270900	1.162000	1.078700	1.026700
15	0.961800	1.282600	1.174300	1.094200	1.029700
16	0.961400	1.298500	1.185200	1.109800	1.035600
17	0.961800	1.310200	1.194800	1.122000	1.041500
18	0.961800	1.325000	1.203700	1.130800	1.053400
19	0.959300	1.326100	1.207100	1.138600	1.056400
20	0.958900	1.328200	1.211900	1.148600	1.059300

21	0.960700	1.332400	1.213900	1.161900	1.065300
22	0.962500	1.335600	1.219400	1.176300	1.071200
23	0.965000	1.343100	1.227600	1.191800	1.074200
24	0.970800	1.351000	1.236500	1.211800	1.080100
25	0.975100	1.356800	1.242000	1.228400	1.083100

Cash Flow for Recurring and Nonrecurring Costs (Without Escalation)

	DEFAULT COST
	Nonrecurring
January 2011	0.00
January 2012	0.00
January 2013	0.00
January 2014	0.00
January 2015	0.00
January 2016	0.00
January 2017	0.00
January 2018	0.00
January 2019	0.00
January 2020	0.00
January 2021	0.00
January 2022	0.00
January 2023	0.00
January 2024	0.00
January 2025	0.00
January 2026	0.00
January 2027	0.00
January 2028	0.00
January 2029	0.00
January 2030	0.00

January 2031	0.00
January 2032	0.00
January 2033	0.00
January 2034	0.00
January 2035	0.00

Energy Cost Cash Flows (Without Escalation)

January 2011	
January 2012	
January 2013	
January 2014	
January 2015	
January 2016	
January 2017	
January 2018	
January 2019	
January 2020	
January 2021	
January 2022	
January 2023	
January 2024	
January 2025	
January 2026	
January 2027	
January 2028	
January 2029	
January 2030	
January 2031	

January 2032	
January 2033	
January 2034	
January 2035	

Capital Cash Flow by Category (Without Escalation)

	Construction	Salvage	OtherCapital	Total
January 2011	0.00	0.00	0.00	0.00
January 2012	0.00	0.00	0.00	0.00
January 2013	0.00	0.00	0.00	0.00
January 2014	0.00	0.00	0.00	0.00
January 2015	0.00	0.00	0.00	0.00
January 2016	0.00	0.00	0.00	0.00
January 2017	0.00	0.00	0.00	0.00
January 2018	0.00	0.00	0.00	0.00
January 2019	0.00	0.00	0.00	0.00
January 2020	0.00	0.00	0.00	0.00
January 2021	0.00	0.00	0.00	0.00
January 2022	0.00	0.00	0.00	0.00
January 2023	0.00	0.00	0.00	0.00
January 2024	0.00	0.00	0.00	0.00
January 2025	0.00	0.00	0.00	0.00
January 2026	0.00	0.00	0.00	0.00
January 2027	0.00	0.00	0.00	0.00
January 2028	0.00	0.00	0.00	0.00
January 2029	0.00	0.00	0.00	0.00
January 2030	0.00	0.00	0.00	0.00
January 2031	0.00	0.00	0.00	0.00
January 2032	0.00	0.00	0.00	0.00

January 2033	0.00	0.00	0.00	0.00
January 2034	0.00	0.00	0.00	0.00
January 2035	0.00	0.00	0.00	0.00

Operating Cash Flow by Category (Without Escalation)

Monthly Total Cash Flow (Without Escalation)

2024	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2025	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2026	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2027	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2028	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2029	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2031	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2032	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2033	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2034	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2035	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Present Value for Recurring, Nonrecurring and Energy Costs (Before Tax)

	Category	Kind	Cost	Present Value	Present Value Factor
DEFAULT COST	Construction	Nonrecurring	0.00	0.00	-
TOTAL				0.00	

Present Value by Category

	Present Value
Construction	0.00

Salvage	0.00
Other Capital	0.00
Energy	0.00
Water	0.00
Maintenance	0.00
Repair	0.00
Operation	0.00
Replacement	0.00
Minor Overhaul	0.00
Major Overhaul	0.00
Other Operational	0.00
Total Energy	0.00
Total Operation	0.00
Total Capital	0.00
Grand Total	0.00

Present Value by Year

	Total Cost	Present Value of Costs
January 2011	0.00	0.00
January 2012	0.00	0.00
January 2013	0.00	0.00
January 2014	0.00	0.00
January 2015	0.00	0.00
January 2016	0.00	0.00
January 2017	0.00	0.00
January 2018	0.00	0.00
January 2019	0.00	0.00
January 2020	0.00	0.00
January 2021	0.00	0.00

January 2022	0.00	0.00
January 2023	0.00	0.00
January 2024	0.00	0.00
January 2025	0.00	0.00
January 2026	0.00	0.00
January 2027	0.00	0.00
January 2028	0.00	0.00
January 2029	0.00	0.00
January 2030	0.00	0.00
January 2031	0.00	0.00
January 2032	0.00	0.00
January 2033	0.00	0.00
January 2034	0.00	0.00
January 2035	0.00	0.00
TOTAL		0.00