#### **ROOM BY ROOM**

By RLF

Room Description: 174-ENTRY/RECEPTION

Zone Description: No Zone

System Description: AHU

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Floor Area: 237 ft2 FIr-FIr Height: 10.0 ft Plenum Height: 2.0 ft Height Above Flr:

Slab Cnstr Type: 4\* LW Concrete

Room Mass: Time delay based on actual mass

Cpiling R-Value: 1.786 hr-ft2-°F/Btu

Is There Carpet?: YES

Design Clg DB / Drift Point: 75.0 °F / 81.0 °F Design Htg DB / Drift Point: 70.0 °F / 64.0 °F

Design Relative Humidity: Moisture Capacitance: Medium

Clg Tstat: None Htg Tstat: None

Thermostat Location: Room Humidistat Location:Room

CO2 Sensor Location:None Room Type:Conditioned

Floor Multiplier: 1

Room Multiplier: 1

**PEOPLE** 

People Type: General Office Space

# of People: 4 People People Sensible: 250 Btu/h People Latent : 200 Btu/h

People Schedule: Cooling Only (Design)

Workstation: 1.0 workstation/person

LIGHTS

Lighting Type: Recessed fluorescent, not vented, 80% load

to space

% Load to RA: 20 %

Fixture Type: RECFL-NV

Lighting Schedule: Cooling Only (Design) Lighting Amount: 1.000 W/sq ft

Ballast Factor: 1.0

**AIRFLOW INFORMATION** Heating

Cooling Vent Type: None None Vent Value: 0.06 cfm/sq ft 0.06 cfm/sq ft

Vent Schedule: Available (100%)

Infil Type: None None

Infil Value: 0.00 air changes/hr 0.00 air changes/hr Infil Schedule: Available (100%)

Vav Airflow:

Vav Sched: Available (100%)

Supply: To be calculated To be calculated Aux Supply: To be calculated To be calculated

Room Exhaust:

Rm Exh Sched: Available (100%)

								(	Glass			Adj — Temp/	Pct Sen/	Pct Rm/	Pct Ret/	Rad Frc/
Description	Area/ Amount	Dir	Const Type / Tilt Schedule	U Value Btu/h·ft²·°F	Alpha	Type / Energy Type	Area ft²	Shade Coef	U Value Btu/h·ft²·°F	External Shading	Internal Shading	Grnd Refl	Cool		Perm	Loss Coef
Roof - 1	237 ft²	0	90 Steel Sheet, 2* Ins	0.1247	0.90		0			Overhang - None	None					
Wall - 1	230 ft²	360	0 8* HW Block	0.4022	0.90											
Opening - 1			Window			Single Clear 1/4*	100	0.95	0.95	Overhang - None	None	0.00				
Misc Load 1	2.00 W/sq ft		Cooling Only (Design)			None							100	100	0	60.00
Partition - 1	155 ft²		8* HW Conc Block	0.4030								Constant	95	50		
Partition - 2	155 ft²		8* HW Conc Block	0.4030								Constant	95	50		
Floor - 1															19	0.50

Project Name: 22257 UCF B016A F&S Bldg Dept Reno

### **ROOM BY ROOM**

By RLF

Room Description: 174E-OFFICE

Zone Description: No Zone

System Description: AHU

ERAL		

FIr-FIr Height: 10.0 ft Floor Area: 157 ft2 Plenum Height: 2.0 ft Height Above Flr:

Slab Cnstr Type: 4\* LW Concrete

Room Mass: Time delay based on actual mass

Cpiling R-Value: 1.786 hr-ft2-°F/Btu

Is There Carpet?: YES

Design Clg DB / Drift Point: 75.0 °F / 81.0 °F Design Htg DB / Drift Point: 70.0 °F / 64.0 °F

Design Relative Humidity: Moisture Capacitance: Medium

Clg Tstat: None Htg Tstat: None

Thermostat Location: Room Floor Multiplier: 1 Humidistat Location:Room Room Multiplier: 1

CO2 Sensor Location:None

Room Type:Conditioned

People Type: General Office Space

# of People: 2 People People Sensible: 250 Btu/h People Latent : 200 Btu/h

People Schedule: Cooling Only (Design)

Workstation: 1.0 workstation/person

LIGHTS

**PEOPLE** 

Lighting Type: Recessed fluorescent, not vented, 80% load

to space Fixture Type: RECFL-NV

% Load to RA: 20 %

Lighting Schedule: Cooling Only (Design)

Lighting Amount: 1.000 W/sq ft

Ballast Factor: 1.0

**AIRFLOW INFORMATION** 

Cooling Heating Vent Type: None None Vent Value: 0.06 cfm/sq ft 0.06 cfm/sq ft

Vent Schedule: Available (100%)

Infil Type: None None

Infil Value: 0.00 air changes/hr 0.00 air changes/hr Infil Schedule: Available (100%)

Vav Airflow:

Vav Sched: Available (100%)

Supply: To be calculated To be calculated Aux Supply: To be calculated To be calculated

Room Exhaust:

Rm Exh Sched: Available (100%)

								(	Glass			Adj Temp/	Pct Sen/	Pct Rm/	Pct Ret/	Rad Frc/
Description	Area/ Amount	Dir	Const Type / Tilt Schedule	U Value Btu/h·ft²·°F	Alpha	Type / Energy Type	Area ft²	Shade Coef	U Value Btu/h·ft²·°F	External Shading	Internal Shading	Grnd Refl		Heat	Perm	
Roof - 1	157 ft²	0	90 Steel Sheet, 2* Ins	0.1247	0.90		0			Overhang - None	None					
Wall - 1	174 ft²	0	0 8* HW Block	0.4022	0.90											
Opening - 1			Door			Standard Door	24	0.00	0.40	Overhang - None	None	0.00				
Misc Load 1	2.00 W/sq ft		Cooling Only (Design)			None							100	100	0 (	60.00
Partition - 1	127 ft²		8* HW Conc Block	0.4030								Constant	95	50		
Floor - 1															15	0.50

Project Name: 22257 UCF B016A F&S Bldg Dept Reno

#### **ROOM BY ROOM**

By RLF

Room Description: 174F-CORRIDOR

Zone Description: No Zone

System Description: AHU

System Description: AHU

**GENERAL INFORMATION** Floor Area: 264 ft<sup>2</sup> FIr-FIr Height: 10.0 ft

Plenum Height: 2.0 ft Height Above FIr: Slab Cnstr Type: 4\* LW Concrete

Room Mass: Time delay based on actual mass

Ceiling R-Value: 1.786 hr·ft²-°F/Btu

Is There Carpet?: YES

Design Clg DB / Drift Point: 75.0 °F / 81.0 °F Design Htg DB / Drift Point: 70.0 °F / 64.0 °F

Design Relative Humidity: 50 % Moisture Capacitance: Medium

Clg Tstat: None Htg Tstat: None

Thermostat Location: Room Floor Multiplier: 1 Room Multiplier: 1 Humidistat Location:Room

**GENERAL INFORMATION** 

Room Mass: Time delay based on actual mass

Design Clg DB / Drift Point: 75.0 °F / 81.0 °F

Room Type:Conditioned

FIr-FIr Height: 10.0 ft

Floor Multiplier: 1

Room Multiplier: 1

8\* HW Conc Block

Height Above FIr:

70.0 °F / 64.0 °F

50 %

Medium

CO2 Sensor Location: None Room Type:Conditioned **PEOPLE** 

People Type: General Office Space

# of People: 0 People People Sensible: 250 Btu/h People Latent: 200 Btu/h

People Schedule: Cooling Only (Design)

Workstation: 1.0 workstation/person

LIGHTS

Lighting Type: Recessed fluorescent, not vented, 80% load

to space Fixture Type: RECFL-NV

% Load to RA: 20 %

Lighting Schedule: Cooling Only (Design)

Lighting Amount: 1.000 W/sq ft

Ballast Factor: 1.0

**AIRFLOW INFORMATION** 

Cooling Heating Vent Type: None None Vent Value: 0.06 cfm/sq ft 0.06 cfm/sq ft

Vent Schedule: Available (100%)

Infil Type: None None 0.00 air changes/hr

Infil Value: 0.00 air changes/hr Infil Schedule: Available (100%)

Vav Airflow:

Vav Sched: Available (100%)

Supply: To be calculated To be calculated Aux Supply: To be calculated To be calculated

Room Exhaust:

Rm Exh Sched: Available (100%)

					Adj	PCI PC	PCI Rad
			Glass		_ Temp/	Sen/ Rm	Ret/ Frc/
	Area/ Const Type /	U Value Type /	Area Shade U Value External	Internal	Grnd	Cool Hea	t Perm Loss
Description	Amount Dir Tilt Schedule	Btu/h·ft²-°F Alpha Energy Type	ft² Coef Btu/h·ft²·°F Shading	Shading	Refl	Tmp Tm	Len Coef
Roof - 1	264 ft <sup>2</sup> 0 90 Steel Sheet, 2* Ins	0.1247 0.90	0 Overhang - None	None			

Partition - 1 513 ft<sup>2</sup> 8\* HW Conc Block 0.4030 Constant 95 50

Room Description: 175A-OFFICE

Floor Area: 80 ft2

Design Htg DB / Drift Point:

Design Relative Humidity:

Thermostat Location:Room

Humidistat Location:Room

CO2 Sensor Location: None

Moisture Capacitance:

Slab Cnstr Type: 4\* LW Concrete

Ceiling R-Value: 1.786 hr-ft2-°F/Btu

Plenum Height: 2.0 ft

Is There Carpet?: YES

Clg Tstat: None

Htg Tstat: None

Partition - 1

Zone Description: No Zone

**PEOPLE AIRFLOW INFORMATION** People Type: General Office Space Cooling Heating

# of People: 1 People Vent Type: None People Sensible: 250 Btu/h Vent Value: 0.06 cfm/sq ft People Latent: 200 Btu/h Vent Schedule: Available (100%)

People Schedule: Cooling Only (Design)

Workstation: 1.0 workstation/person

LIGHTS Lighting Type: Recessed fluorescent, not vented, 80% load

to space Fixture Type: RECFL-NV

% Load to RA: 20 %

Lighting Schedule: Cooling Only (Design)

Lighting Amount: 1.000 W/sq ft

Ballast Factor: 1.0

0.4030

Vav Airflow: Vav Sched: Available (100%) Supply: To be calculated To be calculated

Aux Supply: To be calculated Room Exhaust:

Infil Type: None

Infil Value: 0.00 air changes/hr

Infil Schedule: Available (100%)

Rm Exh Sched: Available (100%)

Adj Pct Pct Pct Rad Glass Temp/ Sen/ Rm/ Ret/ Frc/ Shade U Value Const Type / U Value Type / Area External Area/ Internal Grnd Cool Heat Perm Loss Description Amount Dir Tilt Schedule Btu/h·ft2.°F Alpha Energy Type ft² Coef Btu/h·ft2.°F Shading Shading Refl Tmp Tmp Len Coef Roof - 1 80 ft2 90 Steel Sheet, 2\* Ins 0 1247 0.90 0 Overhang - None None 100 0 60.00 Misc Load 1 2.00 W/sq ft Cooling Only (Design) None 100

Project Name: 22257 UCF B016A F&S Bldg Dept Reno

I:\22257\ME\Calculations\Load Calculations\TRACE\22257.trc Dataset Name:

92 ft<sup>2</sup>

95

50

Constant

None

None

0.06 cfm/sq ft

0.00 air changes/hr

To be calculated

#### **ROOM BY ROOM**

By RLF

Room Description: 175B-OFFICE

Zone Description: No Zone

System Description: AHU **AIRFLOW INFORMATION** Heating

0.00 air changes/hr

0.06 cfm/sq ft

Floor Area: 80 ft2 FIr-FIr Height: 10.0 ft Plenum Height: 2.0 ft Height Above FIr:

**GENERAL INFORMATION** 

Slab Cnstr Type: 4\* LW Concrete

Room Mass: Time delay based on actual mass

Ceiling R-Value: 1.786 hr·ft²-°F/Btu

Is There Carpet?: YES

Design Clg DB / Drift Point: 75.0 °F / 81.0 °F Design Htg DB / Drift Point: 70.0 °F / 64.0 °F

Design Relative Humidity: Moisture Capacitance: Medium

Clg Tstat: None Htg Tstat: None

Thermostat Location: Room Floor Multiplier: 1 Humidistat Location: Room Room Multiplier: 1

CO2 Sensor Location: None Room Type:Conditioned PEOPLE

People Type: General Office Space

# of People: 1 People People Sensible: 250 Btu/h People Latent: 200 Btu/h

People Schedule: Cooling Only (Design)

Workstation: 1.0 workstation/person

LIGHTS

Lighting Type: Recessed fluorescent, not vented, 80% load

to space Fixture Type: RECFL-NV

% Load to RA: 20 % Lighting Schedule: Cooling Only (Design)

Lighting Amount: 1.000 W/sq ft

Ballast Factor: 1.0

None

Vent Value: 0.06 cfm/sq ft Vent Schedule: Available (100%)

> Infil Type: None None

Infil Value: 0.00 air changes/hr Infil Schedule: Available (100%)

Cooling

Vav Airflow:

Vent Type: None

Vav Sched: Available (100%)

Supply: To be calculated To be calculated Aux Supply: To be calculated To be calculated

Room Exhaust:

Rm Exh Sched: Available (100%)

						(	Glass			_ Temp/	Sen/	Rm/	Ret/ Frc/
Description	Area/ Amount	Const Type / Dir Tilt Schedule	U Value Btu/h·ft²·°F Alpi	Type /	Area ft²	Shade Coef	U Value Btu/h·ft²·°F	External Shading	Internal Shading	Grnd Refl	Cool		Perm Loss Len Coef
Roof - 1	80 ft²	0 90 Steel Sheet, 2* Ins	0.1247 0.9	37 71	0		214,	Overhang - None	None				
Misc Load 1	2.00 W/sq ft	Cooling Only (Design	1)	None							100	100	0 60.00
Partition - 1	91 ft²	8* HW Conc Block	0.4030							Constant	95	50	

Room Description: 175C-OFFICE

Zone Description: No Zone

**GENERAL INFORMATION** Floor Area: 80 ft2 FIr-FIr Height: 10.0 ft Plenum Height: 2.0 ft Height Above Flr:

Slab Cnstr Type: 4\* LW Concrete

Room Mass: Time delay based on actual mass

Ceiling R-Value: 1.786 hr-ft2-°F/Btu

Is There Carpet?: YES

Design Clg DB / Drift Point: 75.0 °F / 81.0 °F Design Htg DB / Drift Point: 70.0 °F / 64.0 °F

Design Relative Humidity: 50 % Moisture Capacitance: Medium

Cla Tstat: None Htg Tstat: None

Thermostat Location:Room Floor Multiplier: 1 Room Multiplier: 1 Humidistat Location:Room

CO2 Sensor Location: None Room Type:Conditioned **PEOPLE** 

People Type: General Office Space # of People: 1 People

People Sensible: 250 Btu/h People Latent: 200 Btu/h

People Schedule: Cooling Only (Design)

Workstation: 1.0 workstation/person

LIGHTS

Lighting Type: Recessed fluorescent, not vented, 80% load

to space

Fixture Type: RECFL-NV % Load to RA: 20 %

Lighting Schedule: Cooling Only (Design) Lighting Amount: 1.000 W/sq ft

Ballast Factor: 1.0

System Description: AHU

0.00 air changes/hr

To be calculated

To be calculated

Pct

Pct

Pct

Rad

None

Dot

Pct

Rad

**AIRFLOW INFORMATION** Cooling Heating Vent Type: None None

Vent Value: 0.06 cfm/sq ft 0.06 cfm/sq ft Vent Schedule: Available (100%)

Infil Type: None Infil Value: 0.00 air changes/hr

Infil Schedule: Available (100%)

Vav Airflow: Vav Sched: Available (100%)

Supply: To be calculated Aux Supply: To be calculated

Room Exhaust:

Rm Exh Sched: Available (100%)

Adj Glass Rm/ Ret/ Frc/ Temp/ Sen/ U Value Shade U Value External Area/ Const Type / Type / Area Internal Grnd Cool Heat Perm Loss Btu/h·ft².°F Alpha Energy Type Dir Tilt Schedule ft² Btu/h·ft2.°F Shading Shading Description Amount Coef Refl Tmp Tmp Len Coef Roof - 1 80 ft<sup>2</sup> 90 Steel Sheet, 2\* Ins 0.1247 0.90 Overhang - None None Misc Load 1 2.00 W/sa ft Cooling Only (Design) 100 100 0 60.00 None 8\* HW Conc Block 95 Partition - 1 92 ft<sup>2</sup> 0.4030 Constant 50

Project Name: 22257 UCF B016A F&S Bldg Dept Reno

I:\22257\ME\Calculations\Load Calculations\TRACE\22257.trc Dataset Name:

TRACE® 700 v6.3.4 calculated at 05:04 PM on 01/24/2023 Alternative - 1 Entered Values - Rooms Page 4 of 6

### **ROOM BY ROOM**

By RLF

Room Description: 175D-OFFICE

Zone Description: No Zone

System Description: AHU

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Floor Area: 80 ft<sup>2</sup> FIr-FIr Height: 10.0 ft Plenum Height: 2.0 ft Height Above Flr:

Slab Cnstr Type: 4\* LW Concrete

Room Mass: Time delay based on actual mass

Cpiling R-Value: 1.786 hr-ft2-°F/Btu

Is There Carpet?: YES

Design Clg DB / Drift Point: 75.0 °F / 81.0 °F Design Htg DB / Drift Point: 70.0 °F / 64.0 °F

Design Relative Humidity: Moisture Capacitance: Medium

Clg Tstat: None Htg Tstat: None

Thermostat Location: Room Floor Multiplier: 1 Humidistat Location:Room Room Multiplier: 1

CO2 Sensor Location: None

Room Type:Conditioned

People Type: General Office Space

# of People: 1 People People Sensible: 250 Btu/h People Latent: 200 Btu/h

People Schedule: Cooling Only (Design)

Workstation: 1.0 workstation/person

LIGHTS

**PEOPLE** 

Lighting Type: Recessed fluorescent, not vented, 80% load

to space

Fixture Type: RECFL-NV % Load to RA: 20 %

Lighting Schedule: Cooling Only (Design)

Lighting Amount: 1.000 W/sq ft

Ballast Factor: 1.0

**AIRFLOW INFORMATION** 

0.06 cfm/sq ft

Cooling Heating Vent Type: None None

Vent Value: 0.06 cfm/sq ft Vent Schedule: Available (100%)

Infil Type: None None

Infil Value: 0.00 air changes/hr 0.00 air changes/hr

Infil Schedule: Available (100%)

Vav Airflow:

Vav Sched: Available (100%)

Supply: To be calculated To be calculated Aux Supply: To be calculated To be calculated

Room Exhaust:

Rm Exh Sched: Available (100%)

									Adj	Pct	Pct	Pct	Rad
			_			Glass			_ Temp/	Sen/	Rm/	Ret/	Frc/
	Area/	Const Type /	U Value	Type /	Area Shad	e U Value	External	Internal	Grnd	Cool	Heat	Perm	Loss
Description	Amount	Dir Tilt Schedule	Btu/h·ft².°F Alpha	Energy Type	ft <sup>2</sup> Coef	Btu/h·ft².°F	Shading	Shading	Refl	Tmp	Tmp	Len	Coef
Roof - 1	80 ft²	0 90 Steel Sheet, 2* Ins	0.1247 0.90		0		Overhang - None	None					
Misc Load 1	2.00 W/sq ft	Cooling Only (Design)	N	None						100	100	0.6	00.00
Partition - 1	92 ft²	8* HW Conc Block	0.4030						Constant	95	50		

Project Name: 22257 UCF B016A F&S Bldg Dept Reno

### **ROOM BY ROOM**

By RLF

Room Description: 175-ELEC

Zone Description: No Zone

People Type: General Office Space

People Schedule: Cooling Only (Design)

# of People: 0 People

People Sensible: 250 Btu/h

People Latent: 200 Btu/h

System Description: AHU

GENERAL	. INFURIMATIO

Floor Area: 46 ft2 FIr-FIr Height: 10.0 ft Plenum Height: 2.0 ft Height Above Flr:

Slab Cnstr Type: 4\* LW Concrete

Room Mass: Time delay based on actual mass

Ceiling R-Value: 1.786 hr·ft²-°F/Btu

Is There Carpet?: YES

Design Clg DB / Drift Point: 75.0 °F / 81.0 °F Design Htg DB / Drift Point: 70.0 °F / 64.0 °F

Design Relative Humidity: 50 % Moisture Capacitance: Medium

Clg Tstat: None Htg Tstat: None

Thermostat Location: Room Floor Multiplier: 1 Humidistat Location:Room Room Multiplier: 1

CO2 Sensor Location: None Room Type:Conditioned

Workstation: 1.0 workstation/person

LIGHTS

**PEOPLE** 

Lighting Type: Recessed fluorescent, not vented, 80% load

to space Fixture Type: RECFL-NV

% Load to RA: 20 % Lighting Schedule: Cooling Only (Design)

Lighting Amount: 1.000 W/sq ft

Ballast Factor: 1.0

**AIRFLOW INFORMATION** 

Cooling Heating Vent Type: None None Vent Value: 0.06 cfm/sq ft 0.06 cfm/sq ft

Vent Schedule: Available (100%)

Infil Type: None None

Infil Value: 0.00 air changes/hr 0.00 air changes/hr

Infil Schedule: Available (100%) Vav Airflow:

Vav Sched: Available (100%)

Supply: To be calculated To be calculated Aux Supply: To be calculated To be calculated

Room Exhaust:

Rm Exh Sched: Available (100%)

							Glass			Temp/	Sen/	Rm/	Ret/ Fr	
Description	Area/ Amount I	Const Type / Dir Tilt Schedule	U Value Btu/h·ft².°F	Type / Alpha Energy Type	Area ft²	Shade Coef	U Value Btu/h·ft²·°F	External Shading	Internal Shading	Grnd Refl			Perm Lo Len Co	SS
Roof - 1	46 ft²	0 90 Steel Sheet, 2* Ins	0.1247	0.90	0			Overhang - None	None					
Wall - 1	47 ft²	0 0 Frame Wall, No Ins	0.4376	0.90										
Misc Load 1	2.00 W/sq ft	Cooling Only (Design)		None							100	100	0 60.0	)0
Partition - 1	128 ft²	8* HW Conc Block	0.4030							Hourly OAI	DB			
Floor - 1													5 0 5	50

Project Name: 22257 UCF B016A F&S Bldg Dept Reno