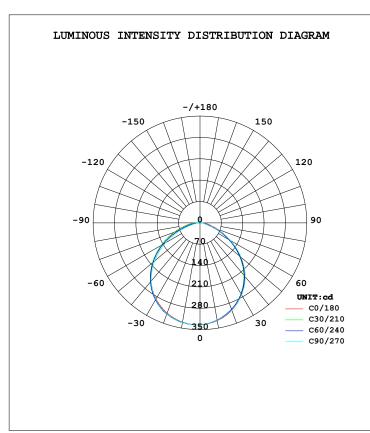
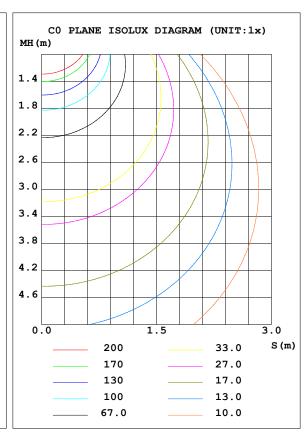


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: X-Glo-UL-60	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

DATA OF LAM	I P	PHOTOMETRIC DATA Eff: 98.14							
MODEL	5050	Imax (cd)	334.3	S/MH (CO/180)	1.28				
NOMINAL POWER (W)	9	LOR(%)	88.3	S/MH (C90/270)	1.28				
RATED VOLTAGE (V)	36	TOTAL FLUX(lm)	883.24	η UP,DN(C0-180)	0.0,45.5				
NOMINAL FLUX(lm)	1000	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,42.8				
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25				
TEST VOLTAGE (V)	36	η down(%)	88.3	CIBSE SHR MAX	1.35				





C Range: 0 - 360DEG C Interval: 5.0DEG Test Speed: HIGH Temperature: 28.5DEG

Operators: Test Date:

γ Range: 0 - 90DEG

γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257

Humidity:56%

Test Distance: 6.810m [K=0.8223]



ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

									1			1
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
5	333.5	334.1	333.9	332.6	331.3	330.1	330.5	331.8	0- 5	7.960	7.960	0.90,0.80
10	330.2	331.6	331.7	328.7	325.5	323.2	324.4	326.9	5- 10	23.60	31.56	3.57,3.16
15	323.8	326.5	325.9	322.0	316.6	313.4	314.9	319.4	10- 15	38.43	70.00	7.92,7
20	314.6	317.9	317.6	312.3	304.8	301.1	304.0	308.6	15- 20	51.94	121.9	13.8,12.2
25	302.7	306.4	305.3	299.3	290.0	286.0	289.7	295.6	20- 25	63.65	185.6	21,18.6
30	287.7	291.8	290.2	283.3	272.2	268.1	273.1	279.8	25- 30	73.09	258.7	29.3,25.9
35	270.1	274.0	270.9	264.1	251.1	247.5	253.2	261.4	30- 35	79.86	338.5	38.3,33.9
40	249.7	253.4	248.5	241.5	227.7	224.0	231.0	240.5	35- 40	83.58	422.1	47.8,42.2
45	226.4	229.2	222.4	215.4	201.5	197.6	205.1	216.6	40- 45	83.99	506.1	57.3,50.6
50	200.8	203.1	193.9	185.9	173.4	168.5	176.8	190.8	45- 50	80.99	587.1	66.5,58.7
55	173.7	173.8	162.4	154.6	144.0	138.4	146.0	162.4	50- 55	74.67	661.8	74.9,66.2
60	145.6	143.4	129.1	122.2	114.5	107.4	114.5	133.6	55- 60	65.42	727.2	82.3,72.7
65	117.4	112.1	94.43	90.84	85.90	77.54	83.19	105.0	60- 65	53.89	781.1	88.4,78.1
70	89.88	81.69	61.76	61.29	60.37	50.86	53.74	78.50	65- 70	41.13	822.2	93.1,82.2
75	64.81	54.05	35.54	37.78	40.61	29.00	30.84	56.73	70- 75	28.55	850.7	96.3,85.1
80	44.13	33.49	14.95	22.01	26.46	16.27	13.75	40.15	75- 80	18.06	868.8	98.4,86.9
85	29.07	19.21	2.819	13.07	16.35	11.45	3.365	26.22	80- 85	10.94	879.7	99.6,88
90	19.56	0	0	0	10.79	0	0	0	85- 90	3.502	883.2	100,88.3
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180						1			175-180			
DEG		1	1	LUMINO	US INTENSI	TY:cd	-			ידותן	r:1m	

γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257

Humidity:56%

Test Distance: 6.810m [K=0.8223]

Remarks:

C Range: 0 - 360DEG C Interval: 5.0DEG Test Speed: HIGH Temperature:28.5DEG Operators:

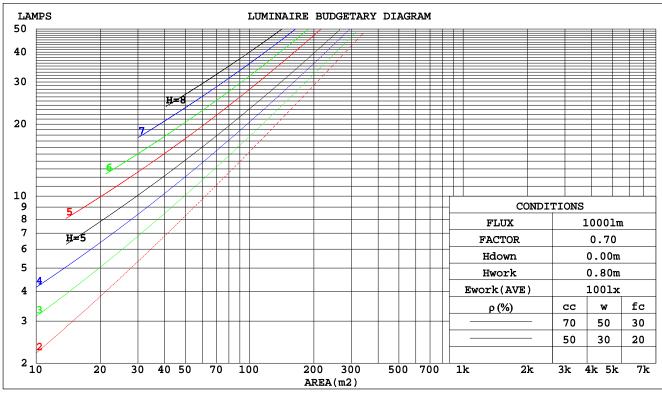
Test Date:



CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: HALO-UL-60	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

ραα		80%			70%			50%			30%			10%		0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc		20%			20%			20%			20%			20%		0
RCR	RCR:R	oom Cav	ity Rat	io		Coe	fficier	ts of	Utiliza	tion(C	U)					
0.0	1.05	1.05	1.05	1.03	1.03	1.03	.98	.98	.98	.94	.94	.94	.90	.90	.90	.88
1.0	.92	.89	.86	.90	.87	.84	.87	.84	.82	.83	.81	.79	.80	.78	.77	.75
2.0	.81	.75	.70	.79	.74	.70	.76	.72	.68	.73	.70	.66	.71	.68	.65	.63
3.0	.72	.65	.59	.70	.64	.58	.68	.62	.57	.65	.60	.56	.63	.59	.56	.54
4.0	.64	.56	.50	.62	.55	.50	.60	.54	.49	.58	.53	.49	.56	.52	.48	.46
5.0	.57	.49	.43	.56	.49	.43	.54	.48	.43	.52	.47	.42	.51	.46	.42	.40
6.0	.51	.44	.38	.51	.43	.38	.49	.42	.38	.47	.42	.37	.46	.41	.37	.35
7.0	.47	.39	.34	.46	.39	.34	.45	.38	.33	.43	.37	.33	.42	.37	.33	.31
8.0	.43	.35	.30	.42	.35	.30	.41	.34	.30	.40	.34	.30	.39	.33	.29	.28
9.0	.39	.32	.27	.39	.32	. 27	.38	.31	.27	.37	.31	.27	.36	.30	.27	.25
10.0	.36	. 29	. 25	.36	. 29	. 25	.35	. 29	. 24	.34	.28	. 24	.33	.28	.24	.23



C Range: 0 - 360DEG C Interval: 5.0DEG Test Speed: HIGH Temperature: 28.5DEG

Operators: Test Date:

γ Range: 0 - 90DEG

γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257

Humidity:56%

Test Distance: 6.810m [K=0.8223]



WEC AND CCEC

NAME: HALO-UL-60	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

ραα		80%			70%			50%			30%			10%		0
ρW	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc		20%			20%			20%			20%			20%		0
RCR	RCR: F	oom C	avity	Ratio				Wall	Exitar	nce Co	effci	ents(W	IEC)			
0.0																
1.0	.259	.147	.047	.253	.144	.046	.241	.139	.044	.231	.133	.043	.221	.128	.041	
2.0	.246	.135	.041	.240	.132	.041	.230	.128	.040	.221	.124	.039	.212	.120	.038	
3.0	.229	.122	.037	.224	.120	.036	.215	.117	.035	.207	.113	.035	.199	.110	.034	
4.0	.213	.111	.032	.208	.109	.032	.200	.106	.032	.193	.104	.031	.186	.101	.031	
5.0	.198	.101	.029	.194	.099	.029	.187	.097	.029	.180	.095	.028	.174	.093	.028	
6.0	.184	.092	.026	.181	.091	.026	.174	.089	.026	.168	.087	.026	.163	.086	.025	
7.0	.172	.085	.024	.169	.084	.024	.163	.082	.024	.158	.081	.024	.153	.079	.023	
8.0	.161	.079	.022	.158	.078	.022	.153	.076	.022	.148	.075	.022	.144	.074	.022	
9.0	.151	.073	.020	.149	.072	.020	.144	.071	.020	.140	.070	.020	.136	.069	.020	
10.0	.142	.068	.019	.140	.068	.019	.136	.067	.019	.132	.066	.019	.128	.065	.019	

ραα		80%			70%			50%			30%			10%		0
ρ w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc		20%			20%			20%			20%			20%		0
RCR	RCR:R	oom C	avity	Ratio		C	Ceilin	g Cav	ty Ex	itance	e Coef	ficie	nts(CC	CEC)		
0.0	.168	.168	.168	.144	.144	.144	.098	.098	.098	.056	.056	.056	.018	.018	.018	
1.0	.158	.138	.120	.135	.118	.103	.093	.082	.071	.053	.047	.041	.017	.015	.013	
2.0	.151	.117	.088	.129	.100	.076	.088	.069	.053	.051	.040	.031	.016	.013	.010	
3.0	.143	.101	.067	.123	.087	.058	.084	.060	.041	.049	.035	.024	.016	.011	.008	
4.0	.137	.089	.053	.117	.077	.046	.081	.054	.032	.047	.031	.019	.015	.010	.006	
5.0	.130	.080	.043	.112	.069	.037	.077	.048	.026	.045	.028	.016	.014	.009	.005	
6.0	.124	.072	.035	.107	.063	.031	.074	.044	.022	.043	.026	.013	.014	.008	.004	
7.0	.118	.066	.030	.102	.057	.026	.070	.040	.018	.041	.024	.011	.013	.008	.004	
8.0	.113	.061	.026	.097	.053	.022	.067	.037	.016	.039	.022	.009	.013	.007	.003	
9.0	.107	.057	.023	.092	.049	.020	.064	.035	.014	.037	.020	.008	.012	.007	.003	
10.0	.102	.053	.020	.088	.046	.018	.061	.032	.012	.036	.019	.007	.012	.006	.002	

C Range: 0 - 360DEG C Interval: 5.0DEG Test Speed: HIGH Temperature: 28.5DEG

Operators: Test Date: γ Range: 0 - 90DEG γ Interval: 0.5DEG

γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257

Humidity:56%

Test Distance: 6.810m [K=0.8223]



Uncorrected UGR Table

NAME: HALO-UL-60						TYPE:			WEIGHT:			
DIM.:					s	SPEC.:			SERIAL	No.:		
MFR.:					S	SUR.:			PROTECTION ANGLE:			
ceiling/c	avity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3	
	walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3	
working	plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Room dimer	nsions		Viewe	d crossw	ise			Vi	ewed endwi	se		
x = 2H y	= 2H	16.4	17.9	16.7	18.1	18.3	16.0	17.5	16.3	17.7	17.9	
	3н	17.9	19.2	18.2	19.5	19.7	17.0	18.4	17.3	18.6	18.8	
	4 H	18.5	19.8	18.8	20.0	20.3	17.3	18.6	17.6	18.8	19.1	
	6н	19.0	20.2	19.3	20.5	20.7	17.4	18.6	17.7	18.9	19.1	
	8н	19.2	20.4	19.5	20.7	20.9	17.4	18.5	17.7	18.8	19.1	
	12H	19.4	20.6	19.8	20.9	21.2	17.3	18.5	17.7	18.8	19.1	
4H	2Н	16.9	18.2	17.2	18.5	18.7	16.6	17.9	16.9	18.2	18.4	
	3н	18.6	19.7	18.9	20.0	20.3	17.8	18.9	18.2	19.2	19.5	
	4 H	19.3	20.3	19.7	20.7	21.0	18.2	19.2	18.6	19.5	19.9	
	6н	20.0	20.9	20.4	21.2	21.6	18.4	19.3	18.8	19.6	20.0	
	8н	20.3	21.1	20.7	21.5	21.9	18.4	19.3	18.8	19.6	20.0	
	12H	20.6	21.4	21.0	21.8	22.2	18.4	19.2	18.8	19.6	20.0	
8н	4H	19.5	20.3	19.9	20.7	21.1	18.5	19.3	18.9	19.7	20.1	
	6н	20.3	21.0	20.7	21.4	21.8	18.8	19.5	19.2	19.9	20.3	
	8н	20.7	21.3	21.2	21.8	22.2	18.9	19.5	19.3	19.9	20.4	
	12H	21.2	21.7	21.7	22.2	22.7	18.9	19.5	19.4	19.9	20.4	
12H	4H	19.5	20.2	19.9	20.6	21.0	18.5	19.3	18.9	19.7	20.1	
	6н	20.3	21.0	20.8	21.4	21.8	18.9	19.5	19.4	19.9	20.4	
	8н	20.8	21.3	21.3	21.8	22.3	19.0	19.6	19.5	20.0	20.5	
Variations	Variations with the observer position at space				spacings:							
S = 1.	S = 1.0H + 0.2 / - 0.2						+ 0.2 / - 0.3					
1.5H + 0.2 / - 0.3					.3		+ 0.2 / - 0.4					
2.	2.0H + 0.2 / - 0.3				.3		+ 0.3 / - 0.5					

CIE Pub.117 Corrected 1000 lm Total Lamp Luminous Flux.($8\log(F/F0) = 0.0$)

C Range: 0 - 360DEG C Interval: 5.0DEG Test Speed: HIGH

Temperature: 28.5DEG

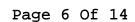
Operators: Test Date:

γ Range: 0 - 90DEG

γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257

Humidity:56%

Test Distance: 6.810m [K=0.8223]





UTILIZATION FACTORS TABLE

NAME: HALO-UL-60	TYPE:	WEIGHT:	
DIM.:	SPEC.:	SERIAL No.:	
MFR.:	SUR.:	PROTECTION ANGLE:	

				REFLEC	TANCE					
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5										
k = 0.60	52	42	36	52	42	36	51	42	36	30
0.80	61	51	45	60	51	45	59	50	45	39
1.00	69	59	53	68	59	53	66	60	52	46
1.25	75	66	60	74	65	60	71	64	59	53
1.50	79	71	65	78	70	65	75	69	64	57
2.00	85	78	73	84	77	72	81	75	71	64
2.50	88	82	77	87	81	76	83	78	74	67
3.00	91	85	81	89	84	80	86	82	78	71
4.00	95	90	86	92	88	85	89	85	82	75
5.00	97	92	89	94	91	88	90	88	85	77
ROOM INDEX		1	1	UF(to	tal)	1	1	1	1	Direct
According to D	IN EN 13032	2-2 2004			Susp	ended			SHRNOM =	1.25

C Range: 0 - 360DEG C Interval: 5.0DEG Test Speed: HIGH

Temperature: 28.5DEG Operators:

Test Date:

γ Range: 0 - 90DEG

γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257

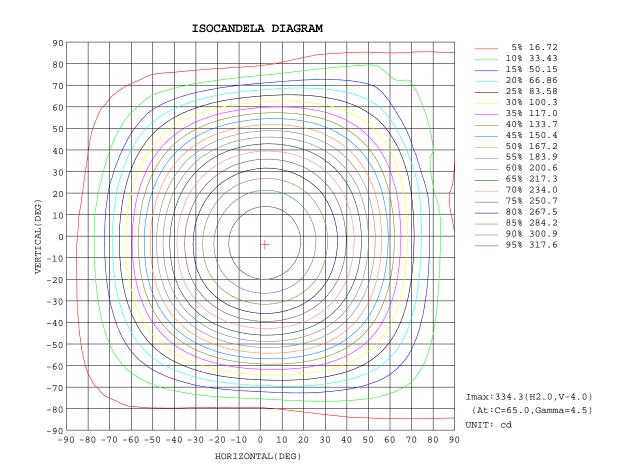
Humidity:56%

Test Distance: 6.810m [K=0.8223]



ISOCANDELA DIAGRAM

NAME: HALO-UL-60	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG C Interval: 5.0DEG Test Speed: HIGH Temperature: 28.5DEG

Operators: Test Date:

γ Range: 0 - 90DEG

γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257

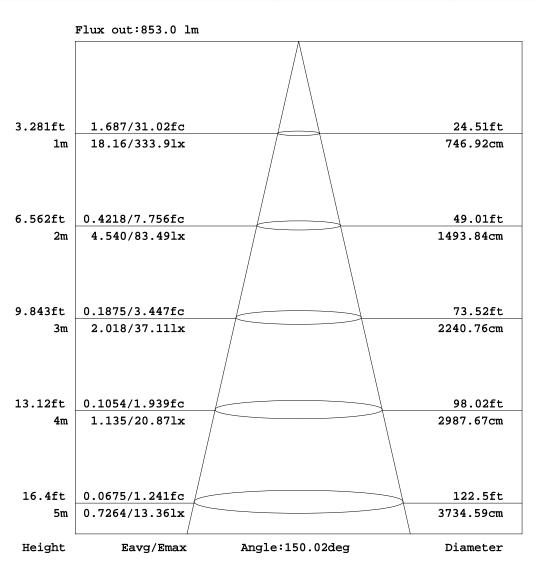
Humidity:56%

Test Distance: 6.810m [K=0.8223]



AAI Figure

NAME: HALO-UL-60	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:



Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG C Interval: 5.0DEG Test Speed: HIGH

Temperature: 28.5DEG

Operators: Test Date:

γ Range: 0 - 90DEG

γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257

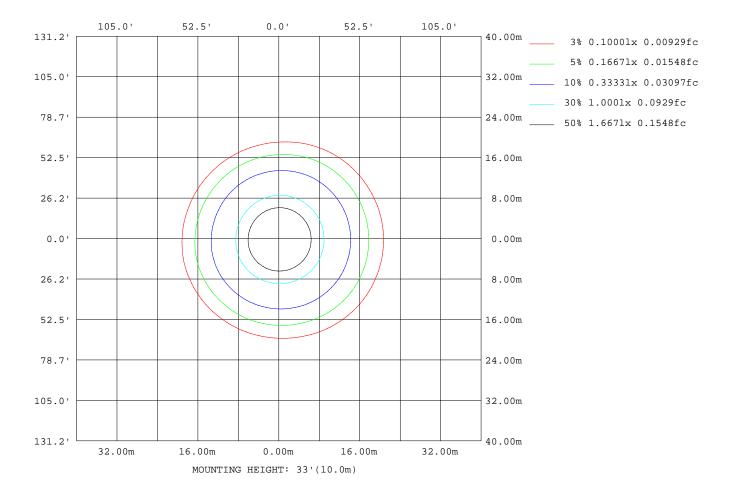
Humidity:56%

Test Distance: 6.810m [K=0.8223]



ISOLUX DIAGRAM

NAME: HALO-UL-60	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG C Interval: 5.0DEG Test Speed: HIGH Temperature: 28.5DEG

Operators: Test Date:

γ Range: 0 - 90DEG

γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257

Humidity:56%

Test Distance: 6.810m [K=0.8223]



Average Luminance Table (CIBSE)

NAME: HALO-UL-60	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

Parameter description for average Luminance	Symbol	Value	Unit
Luminance in Azimuth Plane	Вс	refer Table 2	cd/sq.m.
Intensity at angle Gamma in given azimuth plane	I	from data	cd/klm
Number of lamps	N	1	
Output of each lamp(initial lumens as specified)	F	1000	lm
Multiplying factor	K	1	
Luminous area in horizontal plane used in calculations	A	0.12	sq.m.
Angle to the downward vertical from light centre	Gamma	from data	deg

Table 1. Calculation parameters for determination of CIBSE LG3:1996 Average Luminance

G								Ср	lane (deg)									
deg	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
55	2524	2536	2546	2548	2536	2512	2481	2439	2397	2359	2328	2303	2279	2254	2232	2211	2186	2140	2093
60	2427	2434	2442	2432	2405	2366	2316	2257	2200	2151	2117	2091	2069	2049	2029	2010	1988	1954	1909
65	2314	2323	2308	2281	2239	2178	2099	2008	1924	1862	1826	1809	1797	1789	1790	1780	1766	1741	1694
70	2190	2181	2158	2112	2038	1934	1827	1712	1595	1505	1467	1469	1480	1479	1504	1519	1518	1514	1471
75	2087	2071	2027	1946	1820	1673	1547	1395	1255	1144	1109	1113	1158	1192	1247	1295	1324	1321	1308
80	2118	2074	1994	1853	1694	1519	1316	1089	878	717	714	814	922	1023	1106	1191	1249	1272	1270
85	2780	2633	2476	2253	1994	1662	1185	697	407	270	329	533	880	1204	1307	1519	1588	1720	1563

Table 2. Average Luminance(cd/sq.m.) for defined C plane, Gamma angle

CIBSE	Gamma	Average 1	Luminance	Patch Luminance					
Category	(deg)	maximum	specified	maximum	specified				
		calculated	maximum	measured	maximum				
Category 1	55 to 90	2780	200		500				
Category 2	65 to 90	2780	200		500				
Category 3	75 to 90	2780	200		500				

Table 3. Tabulation of Average and Patch Luminance(cd/sq.m.) for defined CIBSE categories

No match

C Range: 0 - 360DEG C Interval: 5.0DEG Test Speed: HIGH Temperature: 28.5DEG

Test Date:

Operators:

γ Range: 0 - 90DEG

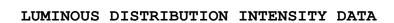
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257

Humidity:56%

Test Distance: 6.810m [K=0.8223]



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NAME: HALO-UL-60	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

Table1																UNI	T: cd		
C (DEG)																			
γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334
5	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334
10	330	330	330	331	331	331	331	331	332	332	332	332	332	332	332	332	332	332	332
15	324	324	324	325	325	325	325	326	326	326	326	326	327	327	327	326	326	326	326
20	315	315	315	316	316	317	317	317	318	318	318	318	318	318	318	318	318	318	318
25	303	303	303	304	305	305	306	306	306	306	307	307	307	307	306	306	306	306	305
30	288	288	289	290	290	291	291	291	292	292	292	292	292	292	291	291	291	291	290
35	270	270	271	272	272	273	274	274	274	274	274	274	274	273	273	273	272	272	271
40	250	250	251	251	252	253	253	253	253	253	253	253	252	252	251	251	250	249	248
45	226	227	228	228	229	229	229	230	229	229	229	229	228	227	226	225	224	223	222
50	201	201	202	202	203	203	204	203	203	203	202	201	201	199	198	197	196	195	194
55	174	174	175	175	175	175	175	175	175	174	173	172	171	169	168	166	165	164	162
60	146	146	146	146	147	146	146	145	144	143	142	141	139	137	135	134	132	130	129
65	117	117	118	117	117	116	116	115	114	112	110	109	106	104	102	99.6	97.6	95.8	94.4
70	89.9	89.6	89.5	89.2	88.6	87.9	86.7	85.4	83.6	81.7	79.4	77.1	75.0	72.7	70.3	67.8	65.4	63.3	61.8
75	64.8	64.5	64.3	63.6	63.0	61.6	60.4	58.7	56.5	54.1	52.0	50.2	48.0	45.7	43.3	41.2	39.0	37.0	35.5
80	44.1	43.7	43.2	42.5	41.6	40.4	38.6	37.0	35.3	33.5	31.7	29.6	27.4	25.0	22.7	20.5	18.3	16.3	14.9
85	29.1	28.1	27.5	26.8	25.9	24.8	23.6	22.3	20.9	19.2	17.4	15.5	12.4	9.51	7.29	5.58	4.25	3.32	2.82
90	19.6	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
																			1

C Range: 0 - 360DEG C Interval: 5.0DEG Test Speed: HIGH

Temperature: 28.5DEG

Operators: Test Date:

γ Range: 0 - 90DEG

γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257

Humidity:56%

Test Distance: 6.810m [K=0.8223]



LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: HALO-UL-60	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

Table2																UNI	T: cd		
C (DEG)																			
γ (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334
5	334	334	334	333	333	333	333	333	333	332	332	332	332	332	331	331	331	331	331
10	332	331	331	331	330	330	329	329	329	328	328	328	327	327	326	326	326	325	325
15	326	325	325	325	324	324	323	322	322	322	321	320	320	319	318	318	317	317	316
20	317	317	316	315	315	314	314	313	312	311	311	310	309	308	307	306	305	305	304
25	305	304	304	303	302	302	301	300	299	299	297	296	295	294	293	292	291	290	289
30	290	289	288	287	287	286	285	284	283	282	281	280	279	277	276	275	273	272	271
35	270	270	269	268	268	267	266	265	264	263	262	260	259	257	256	254	252	251	250
40	248	247	246	245	245	244	243	242	242	240	239	238	236	234	232	230	229	228	227
45	221	221	220	219	218	218	217	216	215	214	213	212	210	208	207	205	203	201	200
50	193	192	191	190	189	189	188	187	186	185	184	183	182	180	179	177	175	173	172
55	161	160	159	159	158	157	156	155	155	154	153	152	151	150	149	147	146	144	143
60	128	127	126	125	125	124	124	123	122	122	121	121	120	119	119	117	116	115	113
65	93.3	92.6	92.1	91.7	91.4	91.1	90.7	90.7	90.8	90.8	90.5	90.3	89.9	89.6	89.2	88.3	87.2	85.9	84.8
70	60.7	60.2	60.1	60.3	60.5	60.7	60.7	60.7	61.3	61.7	62.4	62.4	62.7	62.3	62.4	62.2	61.4	60.4	59.3
75	34.7	34.4	34.4	34.6	35.2	36.0	36.6	37.0	37.8	38.7	39.4	40.2	40.7	41.1	41.0	41.0	41.0	40.6	38.6
80	14.6	14.9	15.8	17.0	18.1	19.2	20.4	21.3	22.0	23.1	24.1	24.8	25.6	26.0	26.3	26.5	26.7	26.5	21.4
85	2.93	3.44	4.34	5.58	7.20	9.20	11.5	12.6	13.1	13.7	14.5	15.9	16.3	16.6	17.3	18.0	18.2	16.3	13.3
90	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	10.8	0.00

C Range: 0 - 360DEG C Interval: 5.0DEG Test Speed: HIGH Temperature: 28.5DEG

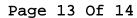
Temperature: 28.5DEG
Operators:

Operators: Test Date: γ Range: 0 - 90DEG

γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257

Humidity:56%

Test Distance: 6.810m [K=0.8223]





LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: HALO-UL-60	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

Table3																UNI	T: cd		
C (DEG)																			
γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334
5	331	331	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	331	331
10	325	324	324	324	324	324	323	323	323	323	323	323	323	324	324	324	324	325	325
15	315	315	315	314	314	314	314	313	313	313	313	314	314	314	314	315	315	315	316
20	303	303	302	302	302	301	301	301	301	301	301	302	302	303	303	303	304	304	305
25	288	288	287	287	286	286	286	286	286	286	287	287	288	288	289	289	290	290	291
30	270	269	269	268	268	268	268	268	268	269	269	269	270	271	271	272	273	274	275
35	249	248	248	247	247	247	247	247	248	248	249	249	250	251	252	252	253	254	255
40	225	224	224	223	223	223	223	224	224	225	226	226	227	228	229	230	231	232	233
45	199	198	197	197	197	197	197	198	198	198	199	200	201	202	203	204	205	206	208
50	171	170	169	169	168	168	168	169	169	170	170	171	172	173	174	175	177	178	180
55	141	140	139	138	138	138	138	138	139	139	140	140	141	142	143	144	146	148	150
60	112	110	109	109	108	108	107	107	108	108	108	109	109	110	111	113	114	116	119
65	83.5	82.2	81.0	79.8	79.4	78.5	78.0	77.5	77.1	76.8	77.1	77.7	78.3	78.9	79.8	81.2	83.2	85.5	88.1
70	56.7	53.5	51.9	51.4	52.1	52.5	51.7	50.9	50.1	49.4	49.1	49.1	49.1	49.5	50.5	51.8	53.7	56.3	59.4
75	33.6	31.7	31.3	31.3	31.0	31.5	30.7	29.0	27.9	27.5	27.0	26.7	26.6	27.0	27.9	29.1	30.8	33.1	36.1
80	19.5	18.9	18.9	18.1	17.3	17.2	17.2	16.3	15.7	15.0	14.2	13.5	12.9	12.5	12.4	12.7	13.7	15.8	18.5
85	12.9	12.5	11.6	11.6	11.1	10.8	11.6	11.5	10.8	9.93	8.01	6.20	5.02	4.07	3.45	3.20	3.37	4.09	5.38
90	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

C Range: 0 - 360DEG C Interval: 5.0DEG Test Speed: HIGH Temperature: 28.5DEG

Operators:

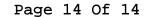
Test Date:

γ Range: 0 - 90DEG

γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257

Humidity:56%

Test Distance: 6.810m [K=0.8223]





LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: HALO-UL-60	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

Table4																UNI	T: cd	
C (DEG)																		
γ (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355			
0	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334			
5	331	331	331	331	332	332	332	332	332	332	332	333	333	333	333			
10	325	325	326	326	326	327	327	327	328	328	328	329	329	329	330			
15	316	317	317	317	318	319	319	320	320	321	321	322	322	323	323			
20	305	306	306	307	307	308	309	309	310	311	311	312	313	313	314			
25	292	292	293	293	294	295	296	296	297	298	299	300	300	301	302			
30	275	276	277	277	278	279	280	281	282	282	283	284	285	286	287			
35	256	257	258	259	260	260	261	262	263	265	265	266	267	268	269			
40	234	235	236	237	238	239	241	241	242	244	245	245	246	247	248			
45	209	210	212	213	214	216	217	218	219	220	221	222	223	224	225			
50	182	183	185	186	188	189	191	192	193	194	196	197	197	199	200			
55	152	154	156	158	160	161	162	164	165	167	168	169	171	171	172			
60	121	123	126	128	130	132	134	135	137	138	140	142	142	143	145			
65	90.7	93.4	96.1	98.6	101	103	105	107	108	110	111	113	115	116	117			
70	62.7	65.9	68.9	71.7	74.0	76.4	78.5	80.2	81.7	83.2	84.6	85.5	87.3	88.7	89.3			
75	39.6	42.9	46.2	49.4	52.3	54.7	56.7	58.4	59.4	58.5	56.1	53.1	53.0	57.9	64.8			
80	21.5	24.6	27.7	31.2	34.5	37.5	40.2	42.4	43.3	39.7	36.8	37.1	39.1	38.2	35.3			
85	7.12	9.41	12.5	16.5	20.8	23.6	26.2	28.2	28.5	26.2	29.1	31.4	31.1	28.9	27.6			
90	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			

C Range: 0 - 360DEG C Interval: 5.0DEG Test Speed: HIGH

Temperature: 28.5DEG

Operators: Test Date: γ Range: 0 - 90DEG

γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257

Humidity:56%

Test Distance:6.810m [K=0.8223]