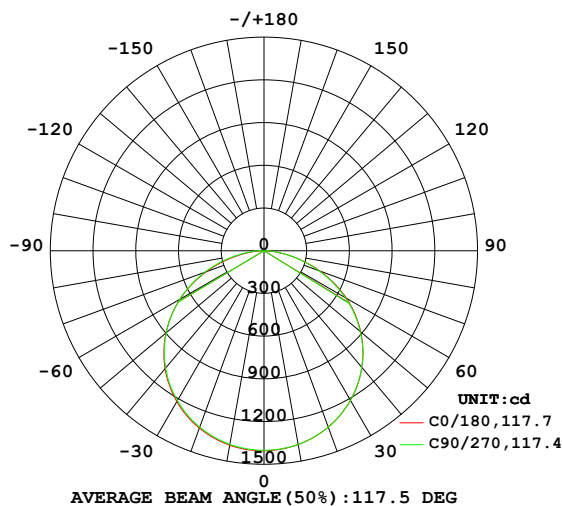


LUMINAIRE PHOTOMETRIC TEST REPORT

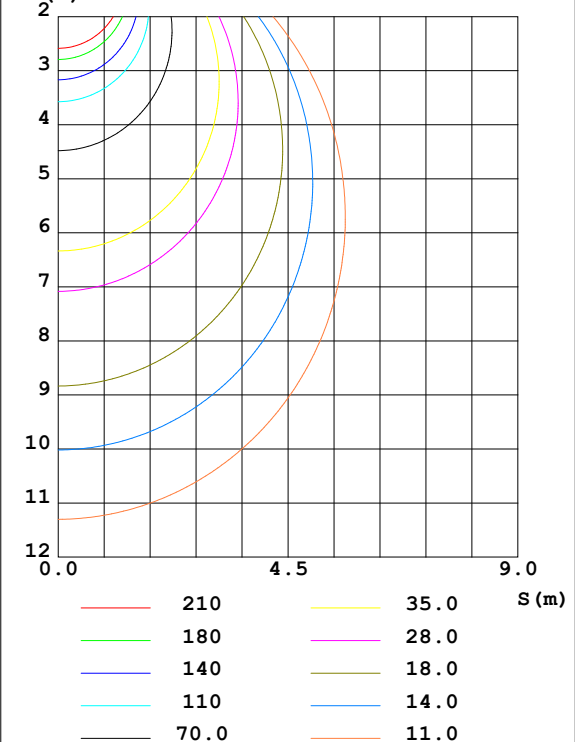
Test:U:24.001V I:0.8988A P:21.572W PF:1.0000 Freq:0Hz Lamp Flux:4264.46x1 lm		
NAME: GL-24-L643	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: THE SMART LIGHTING COMPANY	SUR.: 0.01*1	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 197.69 lm/W			
MODEL		I _{max} (cd)	1405	S/MH (C0/180)	1.29
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.29
RATED VOLTAGE (V)		TOTAL FLUX (lm)	4264.5	η UP, DN (C0-180)	0.3, 49.1
NOMINAL FLUX (lm)	4264.46	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.3, 50.2
LAMPS INSIDE	1	η up (%)	0.6	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)		η down (%)	99.4	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JZ
Test Date: 2024-01-24

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity: 65.0%
Test Distance: 8.700m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

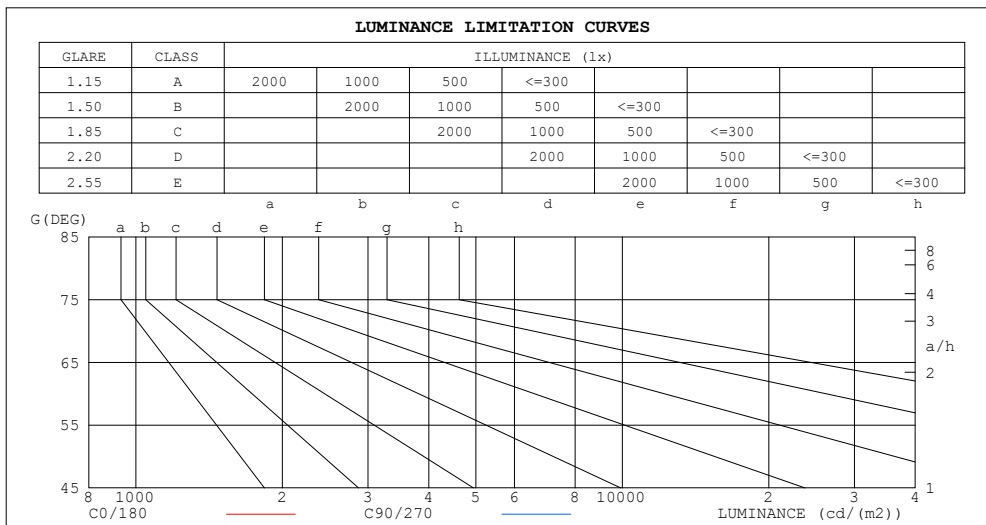
γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	1382	1381	1386	1381					0- 10	133.0	133.0	3.12, 3.12
20	1318	1318	1326	1318					10- 20	383.1	516.0	12.1, 12.1
30	1214	1214	1223	1216					20- 30	587.3	1103	25.9, 25.9
40	1070	1068	1081	1074					30- 40	719.5	1823	42.7, 42.7
50	886.8	882.4	898.5	895.3					40- 50	761.0	2584	60.6, 60.6
60	668.9	659.4	681.3	682.1					50- 60	702.3	3286	77.1, 77.1
70	418.2	409.6	430.4	443.1					60- 70	545.1	3831	89.8, 89.8
80	166.2	166.5	177.0	200.7					70- 80	315.5	4147	97.2, 97.2
90	8.290	17.32	5.401	28.93					80- 90	90.70	4237	99.4, 99.4
100	1.797	2.278	1.885	2.938					90-100	5.776	4243	99.5, 99.5
110	2.696	2.587	2.710	2.413					100-110	2.398	4246	99.6, 99.6
120	3.669	3.412	3.573	3.312					110-120	3.018	4249	99.6, 99.6
130	4.568	4.250	4.422	4.174					120-130	3.522	4252	99.7, 99.7
140	5.320	5.001	5.149	4.950					130-140	3.660	4256	99.8, 99.8
150	5.923	5.691	5.937	5.603					140-150	3.428	4259	99.9, 99.9
160	6.343	6.233	6.417	6.170					150-160	2.791	4262	99.9, 99.9
170	6.675	6.675	6.749	6.638					160-170	1.837	4264	100, 100
180	6.860	6.872	6.872	6.872					170-180	0.6446	4264	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2024-01-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:8.700m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:24.001V I:0.8988A P:21.572W PF:1.0000 Freq:0Hz Lamp Flux:4264.46x1 lm		
NAME: GL-24-L643	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*1	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	74508	84726
80	95700	95904
75	111562	109773
70	122274	119749
65	129136	126891
60	133778	131883
55	136464	135211
50	137963	137283
45	138977	138658

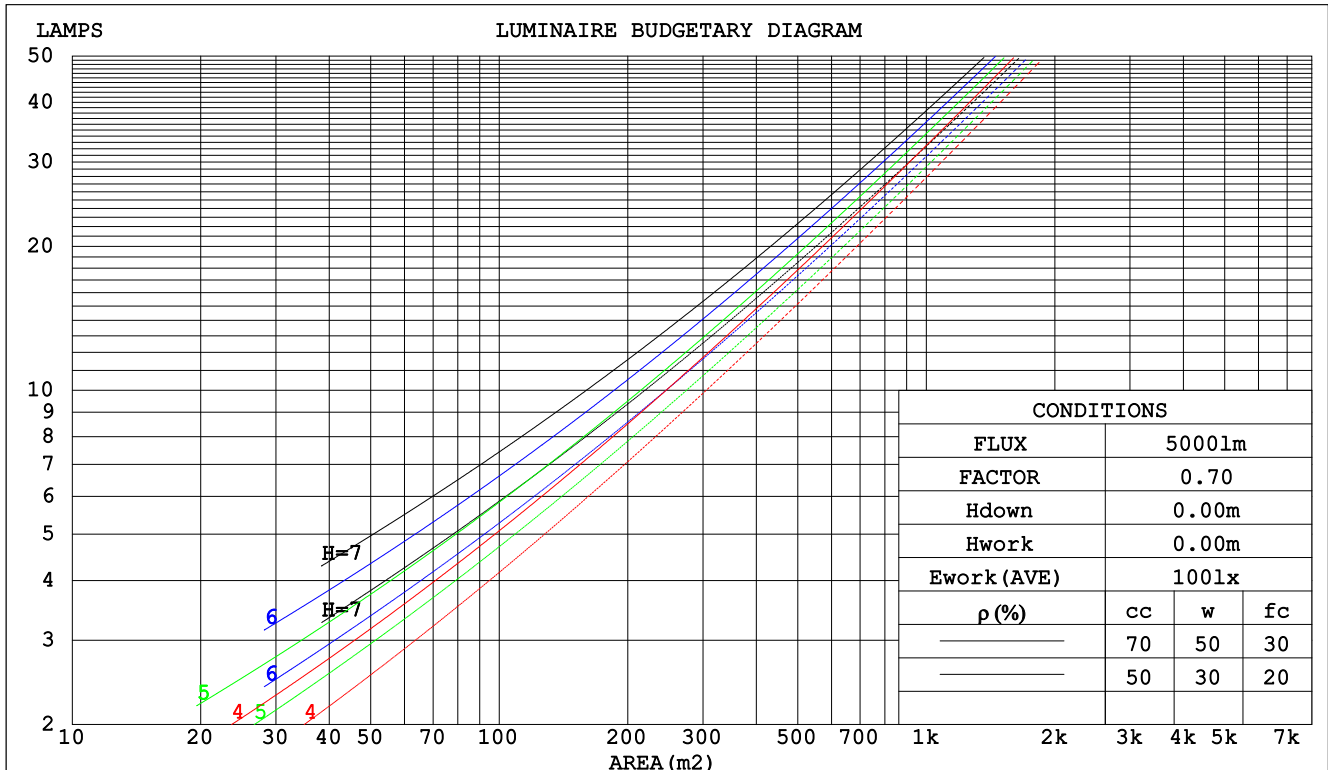
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2024-01-24

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:8.700m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.001V I:0.8988A P:21.572W PF:1.0000 Freq:0Hz Lamp Flux:4264.46x1 lm		
NAME: GL-24-L643	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*1	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2024-01-24

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:8.700m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:24.001V I:0.8988A P:21.572W PF:1.0000 Freq:0Hz		
Lamp Flux:4264.46x1 lm		
NAME: GL-24-L643	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*1	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.317	.180	.057	.309	.177	.056	.296	.170	.054	.283	.163	.052	.272	.157	.051		
2.0	.297	.163	.050	.291	.160	.049	.279	.155	.048	.267	.150	.047	.257	.145	.046		
3.0	.274	.146	.044	.269	.144	.043	.258	.140	.042	.248	.136	.042	.239	.132	.041		
4.0	.253	.131	.039	.248	.130	.038	.238	.126	.038	.229	.123	.037	.221	.120	.037		
5.0	.233	.119	.034	.229	.117	.034	.220	.115	.034	.212	.112	.033	.205	.110	.033		
6.0	.216	.108	.031	.212	.107	.031	.204	.105	.030	.197	.103	.030	.191	.100	.030		
7.0	.201	.099	.028	.197	.098	.028	.191	.096	.028	.184	.094	.027	.178	.093	.027		
8.0	.187	.092	.026	.184	.091	.026	.178	.089	.025	.172	.087	.025	.167	.086	.025		
9.0	.175	.085	.024	.173	.084	.024	.167	.083	.023	.162	.081	.023	.157	.080	.023		
10.0	.165	.079	.022	.162	.078	.022	.157	.077	.022	.153	.076	.022	.148	.075	.021		

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)										
0.0	.195	.195	.195	.167	.167	.167	.114	.114	.114	.065	.065	.065	.021	.021	.021		
1.0	.186	.161	.139	.159	.138	.119	.109	.095	.083	.063	.055	.048	.020	.018	.016		
2.0	.178	.137	.102	.152	.118	.088	.104	.081	.062	.060	.047	.036	.019	.015	.012		
3.0	.170	.119	.079	.146	.103	.068	.100	.071	.048	.058	.042	.028	.019	.014	.009		
4.0	.163	.106	.063	.140	.092	.055	.096	.064	.038	.056	.037	.023	.018	.012	.007		
5.0	.155	.096	.052	.133	.083	.045	.092	.058	.032	.053	.034	.019	.017	.011	.006		
6.0	.148	.087	.044	.127	.076	.038	.088	.053	.027	.051	.031	.016	.016	.010	.005		
7.0	.141	.080	.038	.121	.070	.033	.084	.049	.023	.049	.029	.014	.016	.009	.005		
8.0	.135	.075	.033	.116	.065	.029	.080	.045	.021	.047	.027	.012	.015	.009	.004		
9.0	.129	.070	.030	.111	.061	.026	.077	.043	.019	.045	.025	.011	.014	.008	.004		
10.0	.123	.065	.027	.106	.057	.024	.073	.040	.017	.043	.024	.010	.014	.008	.003		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2024-01-24

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:8.700m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:24.001V I:0.8988A P:21.572W PF:1.0000 Freq:0Hz Lamp Flux:4264.46x1 lm											
NAME: GL-24-L643					TYPE:			WEIGHT:			
SPEC.:					DIM.:			SERIAL No.:			
MFR.:					SUR.: 0.01*1			Shielding Angle:			
ceiling/cavity	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 dimensions		Viewed crosswise					Viewed endwise				
x = 2H y = 2H		24.9	26.5	25.2	26.7	26.9	24.9	26.4	25.2	26.6	26.8
3H		26.5	27.9	26.8	28.1	28.4	26.4	27.8	26.7	28.1	28.3
4H		27.1	28.4	27.4	28.7	29.0	27.0	28.3	27.3	28.6	28.9
6H		27.5	28.7	27.8	29.0	29.3	27.4	28.7	27.7	28.9	29.2
8H		27.6	28.8	27.9	29.1	29.4	27.5	28.7	27.9	29.0	29.3
12H		27.6	28.8	28.0	29.1	29.4	27.6	28.8	27.9	29.1	29.4
4H 2H		25.5	26.9	25.9	27.1	27.4	25.5	26.9	25.8	27.1	27.4
3H		27.3	28.4	27.6	28.8	29.1	27.2	28.4	27.6	28.7	29.0
4H		28.0	29.1	28.4	29.4	29.7	27.9	29.0	28.3	29.3	29.7
6H		28.5	29.5	28.9	29.8	30.2	28.4	29.4	28.8	29.8	30.1
8H		28.7	29.5	29.1	29.9	30.3	28.6	29.5	29.0	29.9	30.3
12H		28.7	29.6	29.2	30.0	30.4	28.7	29.5	29.2	29.9	30.4
8H 4H		28.2	29.1	28.7	29.5	29.9	28.2	29.1	28.6	29.4	29.8
6H		28.9	29.6	29.3	30.0	30.5	28.8	29.6	29.3	30.0	30.4
8H		29.1	29.8	29.6	30.2	30.7	29.1	29.7	29.5	30.2	30.6
12H		29.3	29.8	29.8	30.3	30.8	29.3	29.8	29.8	30.3	30.8
12H 4H		28.2	29.1	28.7	29.5	29.9	28.2	29.0	28.6	29.4	29.8
6H		28.9	29.6	29.4	30.0	30.5	28.9	29.5	29.4	30.0	30.4
8H		29.2	29.8	29.7	30.2	30.7	29.2	29.7	29.7	30.2	30.7
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H		+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				

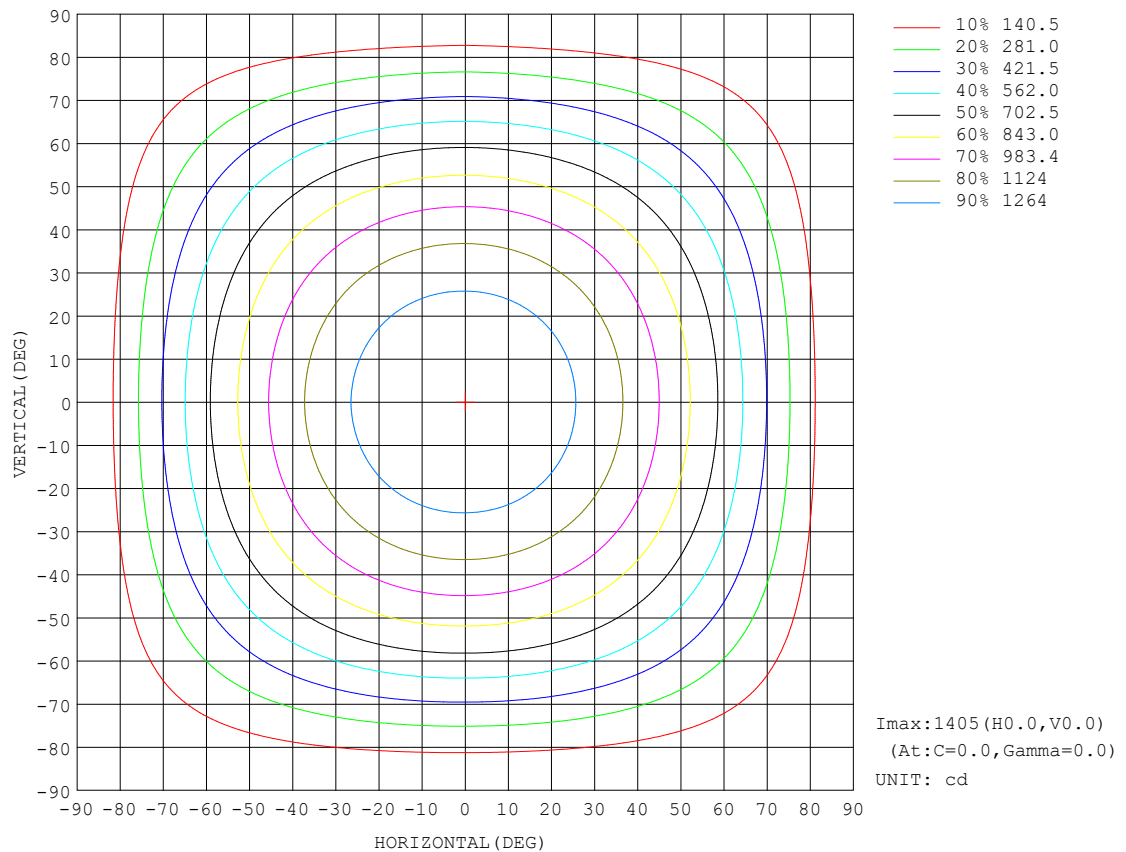
CIE Pub.117, 4264 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 5.0)
Area: 0.01 m2

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2024-01-24

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:8.700m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:24.001V I:0.8988A P:21.572W PF:1.0000 Freq:0Hz Lamp Flux:4264.46x1 lm		
NAME: GL-24-L643	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*1	Shielding Angle:

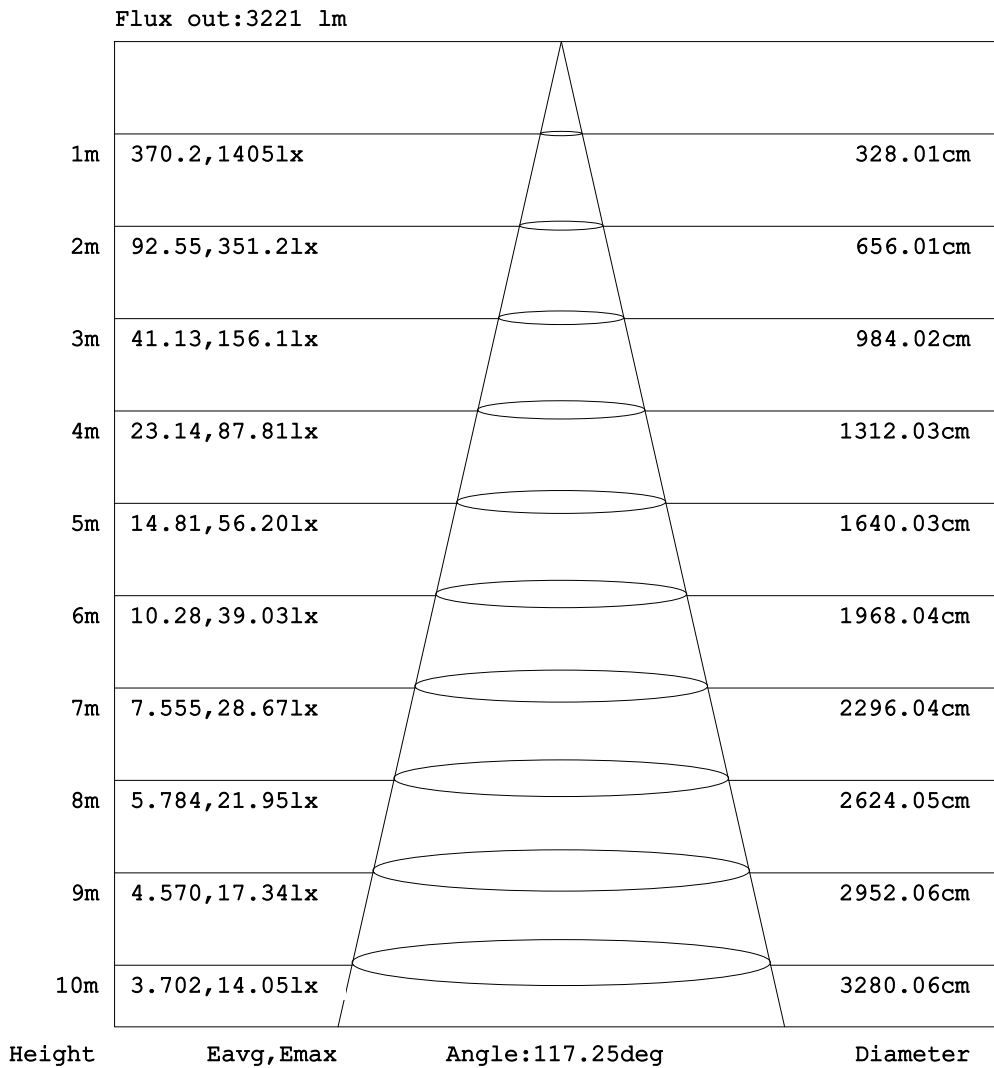


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2024-01-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:8.700m [K=1.0000]
Remarks:

AAI Figure

Test:U:24.001V I:0.8988A P:21.572W PF:1.0000 Freq:0Hz Lamp Flux:4264.46x1 lm		
NAME: GL-24-L643	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*1	Shielding Angle:



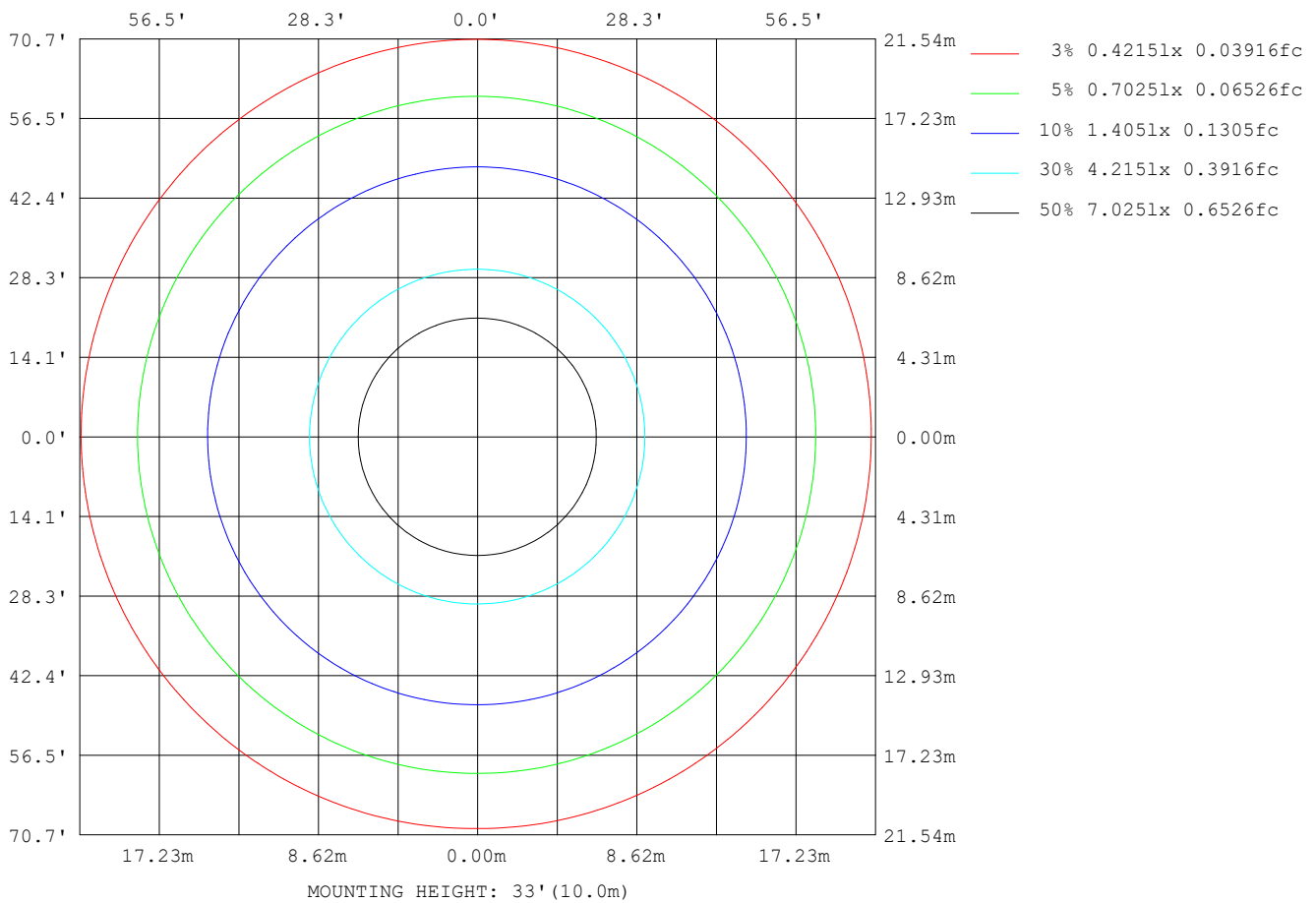
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2024-01-24

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:8.700m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:24.001V I:0.8988A P:21.572W PF:1.0000 Freq:0Hz Lamp Flux:4264.46x1 lm		
NAME: GL-24-L643	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*1	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2024-01-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:8.700m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:24.001V I:0.8988A P:21.572W PF:1.0000 Freq:0Hz Lamp Flux:4264.46x1 lm		
NAME: GL-24-L643	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*1	Shielding Angle:

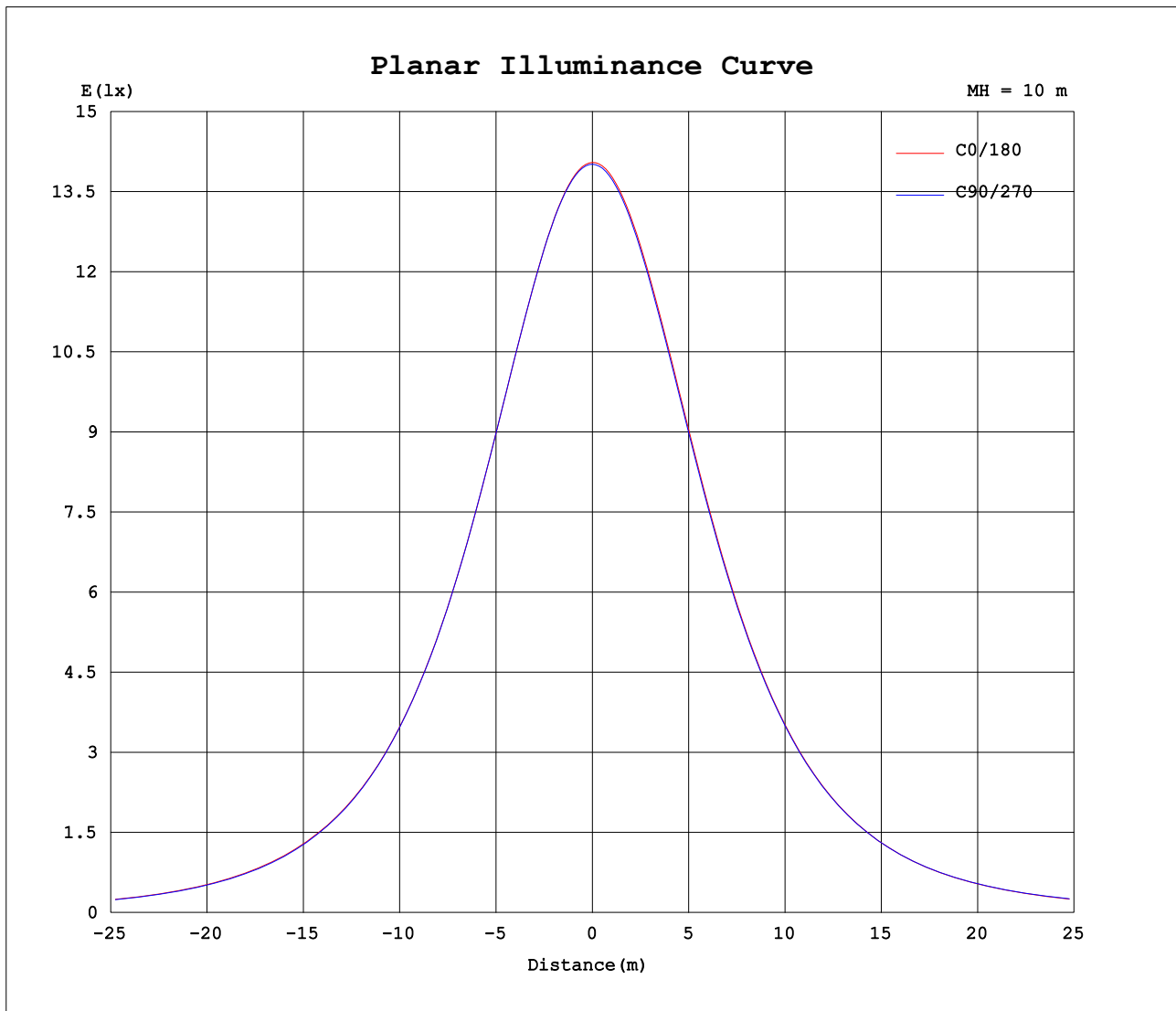
AvgL	cd/m2
L_0~180 (65) av	130851
L_0~180 (75) av	113778
L_0~180 (85) av	78707
L_90~270 (65) av	130281
L_90~270 (75) av	116690
L_90~270 (85) av	97170
L_45 (65) av	130602
L_45 (75) av	115736
L_45 (85) av	90509

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2024-01-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:8.700m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JZ
Test Date: 2024-01-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity: 65.0%
Test Distance: 8.700m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.001V I:0.8988A P:21.572W PF:1.0000 Freq:0Hz Lamp Flux:4264.46x1 lm		
NAME: GL-24-L643	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*1	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270														
0	1405	1401	1405	1401														
5	1399	1396	1401	1396														
10	1382	1381	1386	1381														
15	1355	1355	1361	1355														
20	1318	1318	1326	1318														
25	1271	1271	1280	1272														
30	1214	1214	1223	1216														
35	1147	1146	1157	1150														
40	1070	1068	1081	1074														
45	983	980	994	990														
50	887	882	899	895														
55	783	776	794	793														
60	669	659	681	682														
65	546	536	560	565														
70	418	410	430	443														
75	289	284	300	320														
80	166	167	177	201														
85	64.9	73.8	72.3	95.5														
90	8.29	17.3	5.40	28.9														
95	1.62	3.37	1.60	9.85														
100	1.80	2.28	1.89	2.94														
105	2.29	2.25	2.32	2.04														
110	2.70	2.59	2.71	2.41														
115	3.19	3.01	3.13	2.88														
120	3.67	3.41	3.57	3.31														
125	4.14	3.86	4.00	3.77														
130	4.57	4.25	4.42	4.17														
135	4.96	4.63	4.79	4.57														
140	5.32	5.00	5.15	4.95														
145	5.65	5.36	5.65	5.28														
150	5.92	5.69	5.94	5.60														
155	6.15	6.01	6.17	5.89														
160	6.34	6.23	6.42	6.17														
165	6.54	6.49	6.58	6.42														
170	6.68	6.68	6.75	6.64														
175	6.75	6.77	6.85	6.76														
180	6.86	6.87	6.87	6.87														

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2024-01-24

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
γ Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:8.700m [K=1.0000]
Remarks: