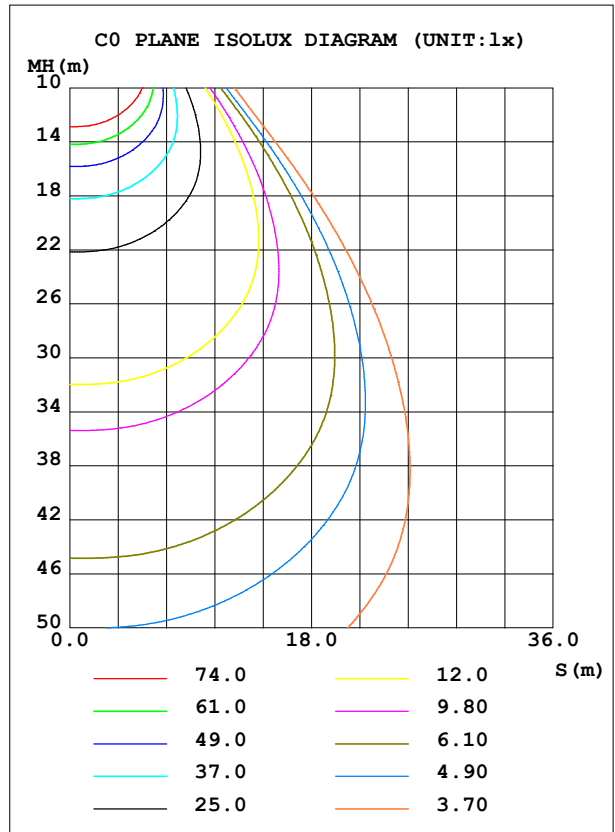
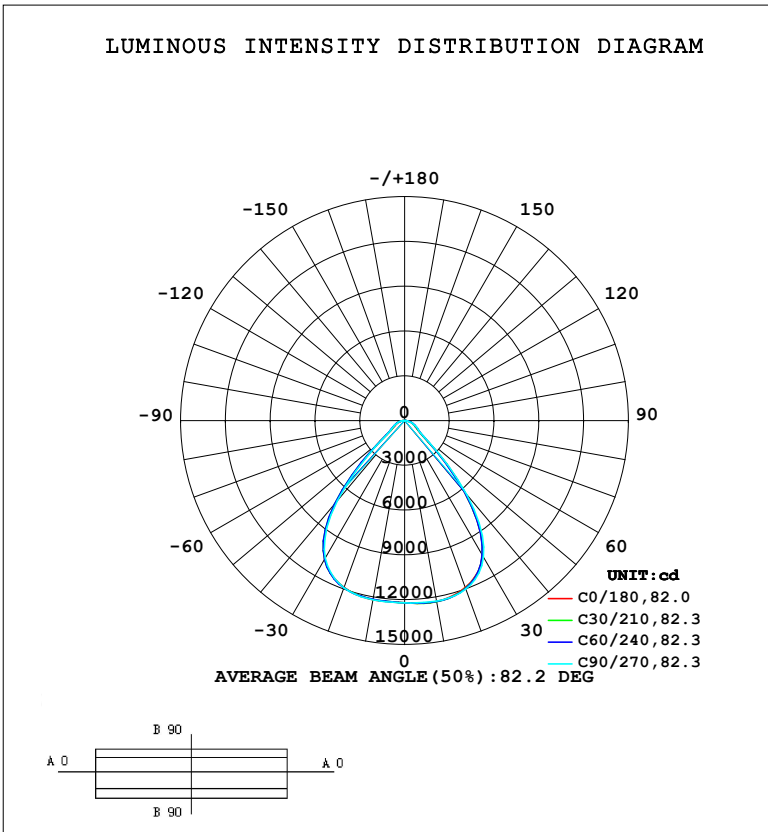


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.48V I:0.6861A P:149.21W PF:0.9864 Freq:49.99Hz Lamp Flux:20827.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	SYFLHLN150DL	Imax (cd)	12327	S/MH (C0/180)	1.21
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.20
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	20828	η UP, DN (C0-180)	0.0,49.4
NOMINAL FLUX (lm)	20827.8	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0,50.6
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220	η down (%)	100.0	CIBSE SHR MAX	1.25



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3 °C
 Operators:
 Test Date: 2023-07-31

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity: 65.0%
 Test Distance: 9.420m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	1230	1232	1227	1223	1219	1216	1219	1227	0- 10	1168	1168	5.61,5.61
20	1190	1196	1201	1199	1190	1192	1191	1190	10- 20	3437	4605	22.1,22.1
30	1044	1041	1055	1068	1072	1074	1063	1046	20- 30	5250	9855	47.3,47.3
40	624.8	621.8	652.4	693.0	714.5	731.7	700.5	649.7	30- 40	5551	15405	74,74
50	161.7	163.2	172.1	198.1	202.6	212.7	193.6	172.1	40- 50	3099	18504	88.8,88.8
60	86.54	92.02	94.27	93.44	86.21	92.41	93.67	91.86	50- 60	1092	19596	94.1,94.1
70	55.15	59.54	55.67	58.85	52.57	58.99	57.48	60.18	60- 70	727.6	20324	97.6,97.6
80	18.97	20.13	18.32	21.58	20.06	23.96	21.32	22.29	70- 80	426.4	20750	99.6,99.6
90	0.2243	0.2686	0.2654	0.2550	0.1909	0.2401	0.2344	0.2589	80- 90	77.39	20828	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:X10cd									UNIT:lm		

Conical surface Flux(90deg): 17668 lm

%lum = 84.8%

%lamp = 84.8%

Conical surface Flux(130deg): 20065 lm

%lum = 96.3%

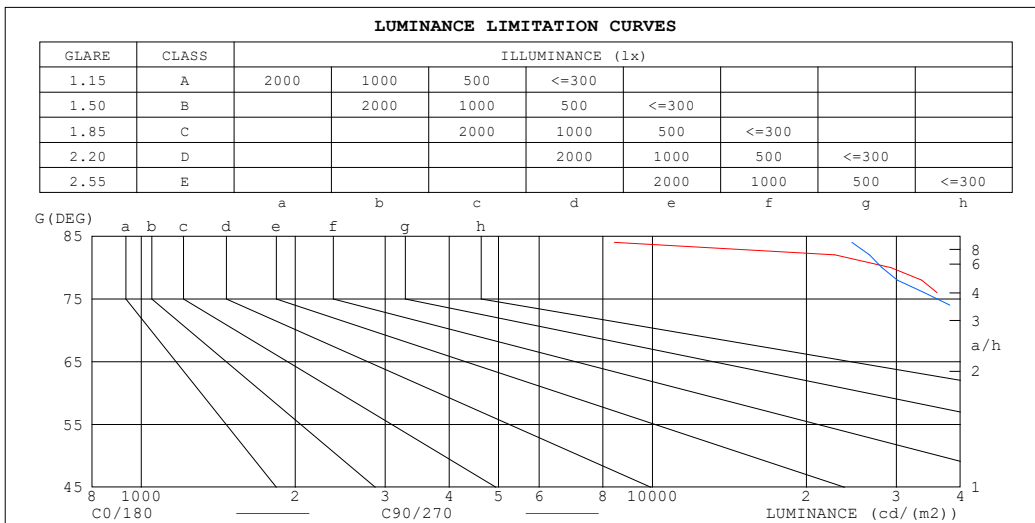
%lamp = 96.3%

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2023-07-31

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity:65.0%
 Test Distance:9.420m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.48V I:0.6861A P:149.21W PF:0.9864 Freq:49.99Hz Lamp Flux:20827.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	10104	29439
80	29254	28101
75	42748	40669
70	43178	43356
65	45323	48853
60	46345	50218
55	52040	57606
50	67361	71327
45	154217	160738

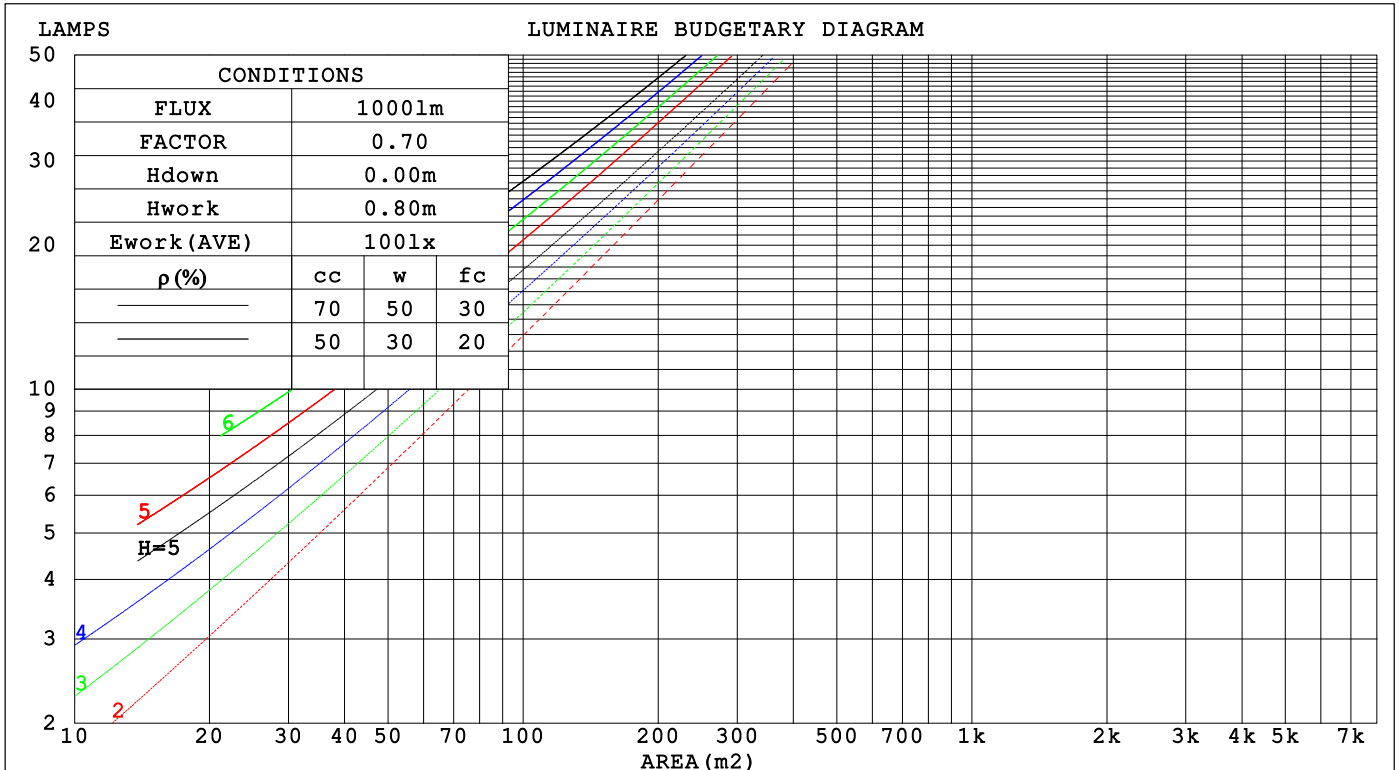
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3 °C
 Operators:
 Test Date:2023-07-31

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity:65.0%
 Test Distance:9.420m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.48V I:0.6861A P:149.21W PF:0.9864 Freq:49.99Hz		
Lamp Flux:20827.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio Coefficients of Utilization(CU)															
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.08	1.05	1.02	1.06	1.03	1.01	1.02	.90	.98	.98	.96	.95	.95	.93	.92	.90
2.0	.98	.93	.89	.97	.92	.88	.93	.89	.86	.90	.87	.84	.87	.85	.82	.81
3.0	.90	.83	.78	.88	.82	.78	.85	.80	.76	.83	.79	.75	.80	.77	.74	.72
4.0	.82	.75	.70	.81	.74	.69	.78	.73	.68	.76	.71	.68	.74	.70	.67	.65
5.0	.75	.68	.63	.74	.67	.62	.72	.66	.62	.70	.65	.61	.69	.64	.60	.59
6.0	.69	.62	.56	.68	.61	.56	.67	.60	.56	.65	.60	.55	.64	.59	.55	.53
7.0	.64	.56	.51	.63	.56	.51	.62	.55	.51	.60	.55	.51	.59	.54	.50	.49
8.0	.59	.52	.47	.58	.52	.47	.57	.51	.47	.56	.50	.46	.55	.50	.46	.44
9.0	.55	.48	.43	.54	.48	.43	.53	.47	.43	.52	.47	.43	.51	.46	.42	.41
10.0	.51	.44	.40	.51	.44	.40	.50	.44	.39	.49	.43	.39	.48	.43	.39	.38



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2023-07-31

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity:65.0%
 Test Distance:9.420m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:220.48V I:0.6861A P:149.21W PF:0.9864 Freq:49.99Hz								
Lamp Flux:20827.8x1 lm								
NAME:			TYPE:			WEIGHT:		
SPEC.:			DIM.:			SERIAL No.:		
MFR.:			SUR.:			Shielding Angle:		

ρ_{CC}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.224	.127	.040	.217	.124	.039	.204	.117	.037	.192	.111	.036	.182	.105	.034	
2.0	.216	.118	.036	.210	.116	.036	.199	.111	.034	.189	.106	.033	.179	.101	.032	
3.0	.205	.109	.033	.200	.107	.032	.190	.103	.031	.181	.099	.030	.173	.096	.030	
4.0	.193	.101	.030	.189	.099	.029	.181	.096	.029	.173	.093	.028	.166	.090	.027	
5.0	.183	.093	.027	.179	.092	.027	.172	.089	.026	.165	.087	.026	.158	.085	.025	
6.0	.173	.087	.025	.170	.086	.025	.163	.084	.024	.157	.082	.024	.151	.080	.024	
7.0	.164	.081	.023	.161	.080	.023	.155	.078	.023	.150	.077	.022	.145	.075	.022	
8.0	.156	.076	.021	.153	.075	.021	.148	.074	.021	.143	.072	.021	.138	.071	.021	
9.0	.148	.072	.020	.146	.071	.020	.141	.070	.020	.137	.068	.020	.132	.067	.019	
10.0	.141	.068	.019	.139	.067	.019	.135	.066	.019	.131	.065	.018	.127	.064	.018	

ρ_{CC}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.174	.157	.141	.149	.135	.121	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.162	.132	.107	.139	.114	.093	.095	.079	.065	.055	.046	.038	.018	.015	.012	
3.0	.152	.114	.084	.130	.098	.072	.089	.068	.051	.052	.040	.030	.017	.013	.010	
4.0	.143	.100	.067	.123	.086	.058	.084	.060	.041	.049	.035	.024	.016	.011	.008	
5.0	.135	.089	.054	.116	.077	.047	.080	.054	.033	.046	.031	.020	.015	.010	.007	
6.0	.129	.080	.045	.110	.069	.039	.076	.048	.028	.044	.028	.016	.014	.009	.005	
7.0	.122	.073	.038	.105	.063	.033	.073	.044	.023	.042	.026	.014	.014	.009	.005	
8.0	.117	.067	.032	.100	.058	.028	.069	.041	.020	.040	.024	.012	.013	.008	.004	
9.0	.111	.062	.028	.096	.054	.025	.067	.038	.017	.039	.022	.010	.013	.007	.003	
10.0	.107	.058	.025	.092	.050	.022	.064	.035	.015	.037	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2023-07-31

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity:65.0%
 Test Distance:9.420m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.48V I:0.6861A P:149.21W PF:0.9864 Freq:49.99Hz										
Lamp Flux:20827.8x1 lm										
NAME:			TYPE:			WEIGHT:				
SPEC.:			DIM.:			SERIAL No.:				
MFR.:			SUR.:			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	15.6	16.8	15.9	17.0	17.2	15.8	17.0	16.0	17.2	17.4
3H	16.1	17.2	16.3	17.4	17.6	16.2	17.3	16.5	17.5	17.8
4H	16.3	17.3	16.6	17.6	17.8	16.4	17.5	16.7	17.7	17.9
6H	16.4	17.4	16.7	17.6	17.9	16.5	17.5	16.8	17.7	18.0
8H	16.4	17.3	16.7	17.6	17.9	16.5	17.4	16.8	17.7	18.0
12H	16.3	17.2	16.7	17.5	17.8	16.5	17.4	16.8	17.7	18.0
4H 2H	15.7	16.7	16.0	17.0	17.2	15.8	16.9	16.1	17.1	17.3
3H	16.3	17.2	16.7	17.5	17.8	16.5	17.4	16.8	17.7	17.9
4H	16.7	17.5	17.1	17.8	18.1	16.8	17.6	17.2	17.9	18.2
6H	16.9	17.6	17.3	17.9	18.3	17.0	17.7	17.3	18.0	18.4
8H	16.9	17.6	17.3	17.9	18.3	17.0	17.7	17.4	18.0	18.4
12H	16.9	17.5	17.3	17.8	18.2	17.0	17.6	17.4	18.0	18.4
8H 4H	16.8	17.5	17.2	17.8	18.2	16.9	17.6	17.3	17.9	18.3
6H	17.1	17.6	17.5	18.0	18.4	17.1	17.7	17.6	18.1	18.5
8H	17.1	17.6	17.5	18.0	18.4	17.2	17.7	17.7	18.1	18.5
12H	17.0	17.5	17.5	17.9	18.4	17.2	17.6	17.7	18.1	18.6
12H 4H	16.8	17.4	17.2	17.8	18.1	16.9	17.5	17.3	17.9	18.2
6H	17.1	17.5	17.5	18.0	18.4	17.1	17.6	17.6	18.0	18.5
8H	17.1	17.5	17.5	17.9	18.4	17.2	17.6	17.7	18.1	18.5
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 1.3 / - 1.9					+ 1.2 / - 1.8				
1.5H	+ 2.4 / - 1.8					+ 2.5 / - 1.8				
2.0H	+ 2.8 / - 1.1					+ 2.7 / - 0.9				

CIE Pub.117, 20828 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 10.5)
 Area: 0.0375 m2

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2023-07-31

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity:65.0%
 Test Distance:9.420m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.48V I:0.6861A P:149.21W PF:0.9864 Freq:49.99Hz Lamp Flux:20827.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

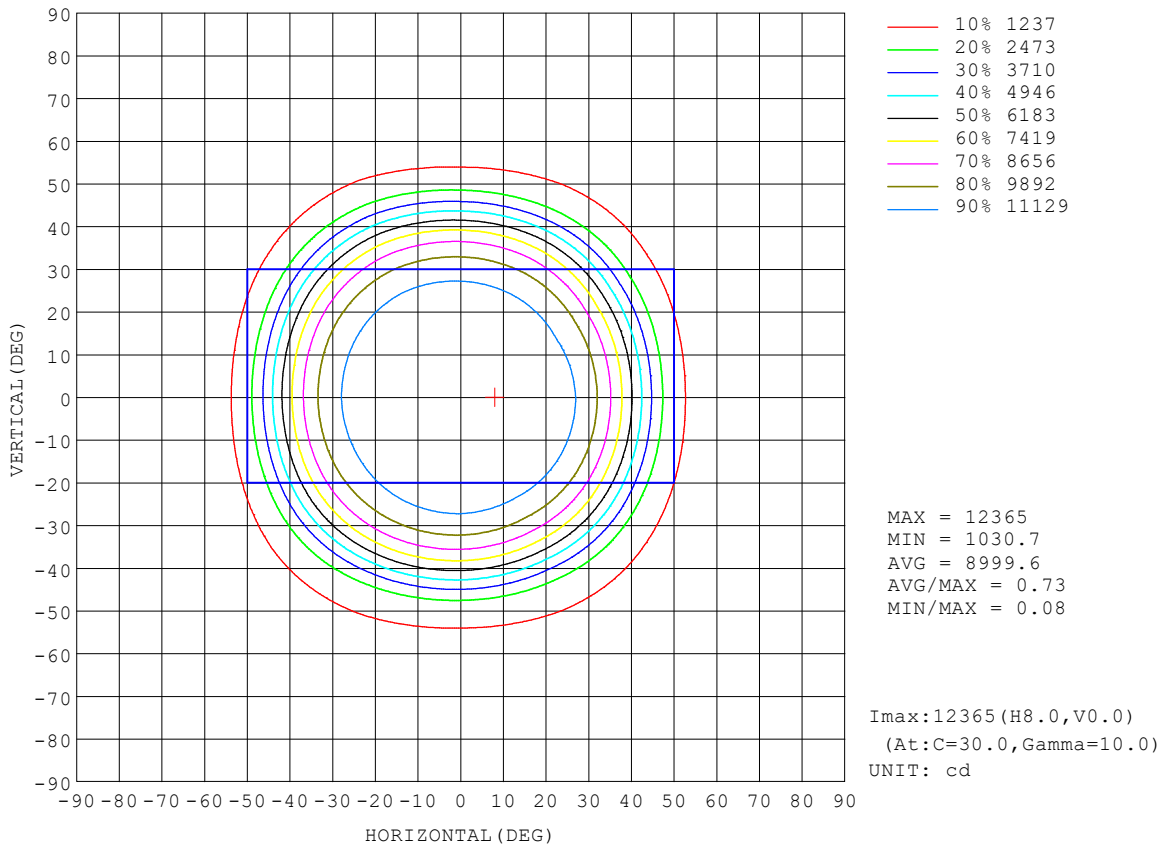
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	75	67	62	75	67	62	74	66	62	57
0.80	84	76	71	83	76	71	82	75	70	66
1.00	91	83	78	90	83	78	88	83	77	72
1.25	96	89	84	95	88	84	93	87	83	78
1.50	100	93	89	98	92	88	96	91	87	81
2.00	104	98	94	102	97	93	99	95	92	86
2.50	106	101	97	105	100	96	101	97	94	88
3.00	109	104	100	107	103	99	103	100	97	90
4.00	111	107	104	109	106	103	105	103	100	93
5.00	113	110	107	111	108	105	106	104	102	94
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2023-07-31

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity:65.0%
 Test Distance:9.420m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.48V I:0.6861A P:149.21W PF:0.9864 Freq:49.99Hz Lamp Flux:20827.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

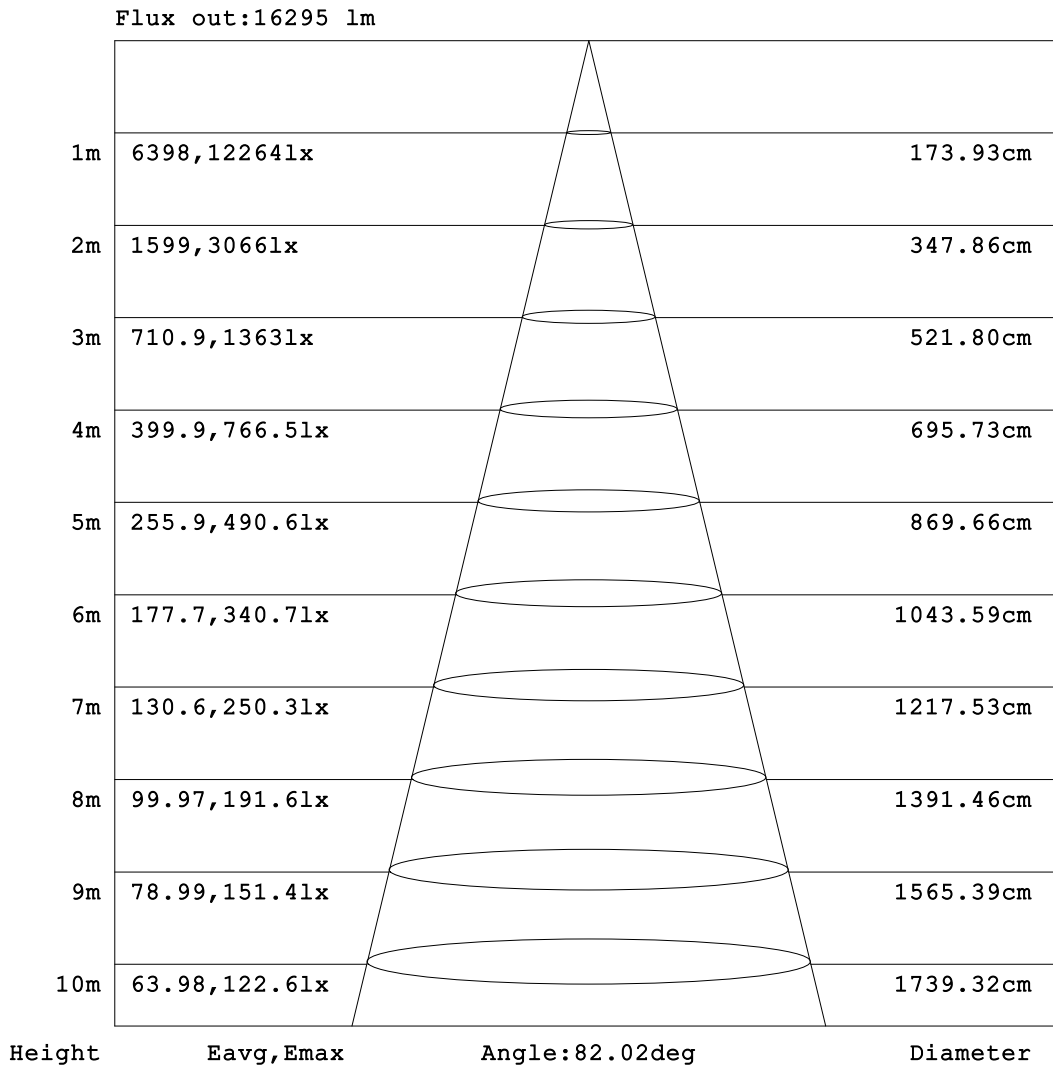


C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2023-07-31

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity:65.0%
 Test Distance:9.420m [K=1.0000]
 Remarks:

AAI Figure

Test:U:220.48V I:0.6861A P:149.21W PF:0.9864 Freq:49.99Hz Lamp Flux:20827.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



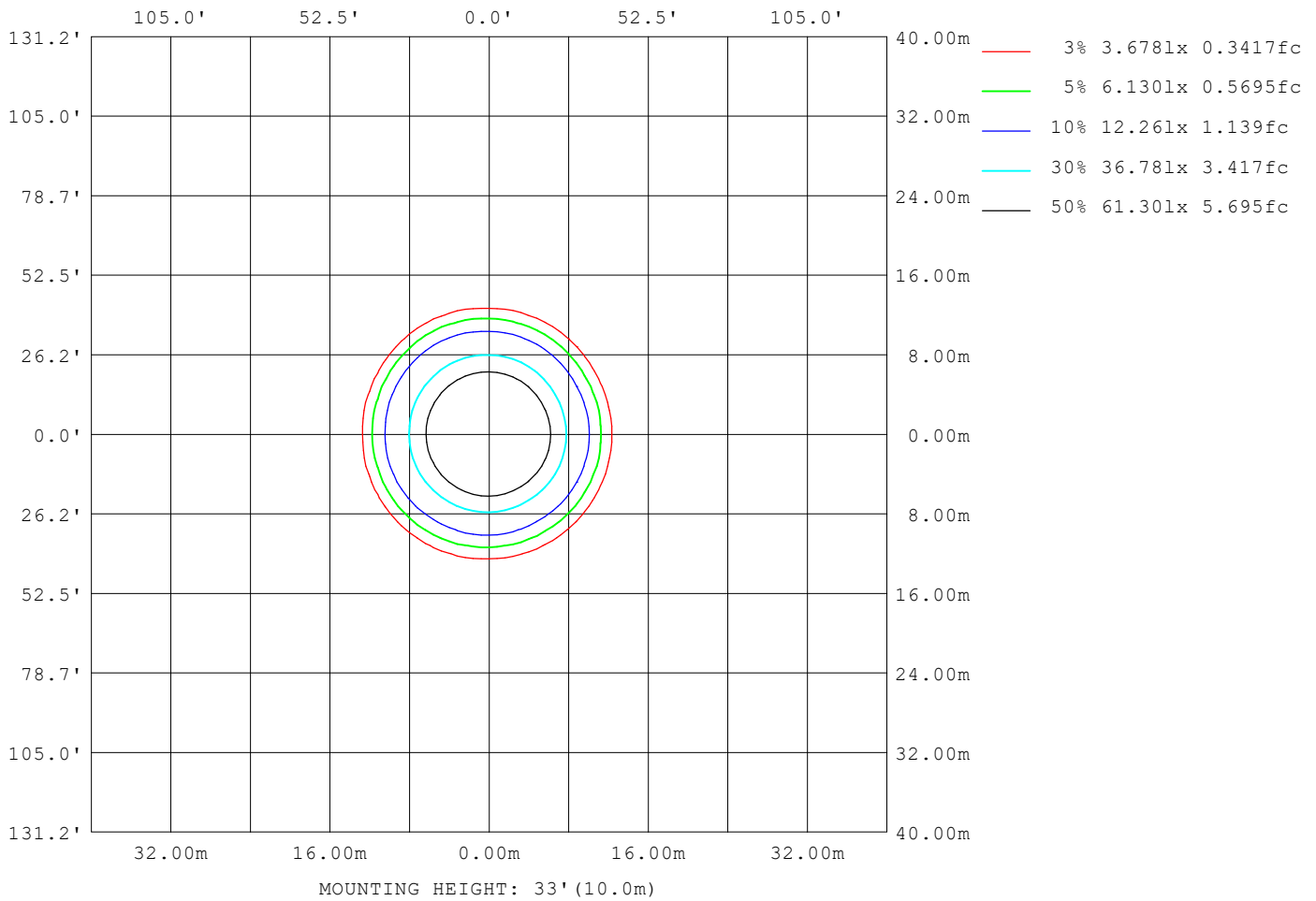
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3 °C
 Operators:
 Test Date:2023-07-31

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity:65.0%
 Test Distance:9.420m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:220.48V I:0.6861A P:149.21W PF:0.9864 Freq:49.99Hz Lamp Flux:20827.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2023-07-31

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity:65.0%
 Test Distance:9.420m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:220.48V I:0.6861A P:149.21W PF:0.9864 Freq:49.99Hz Lamp Flux:20827.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

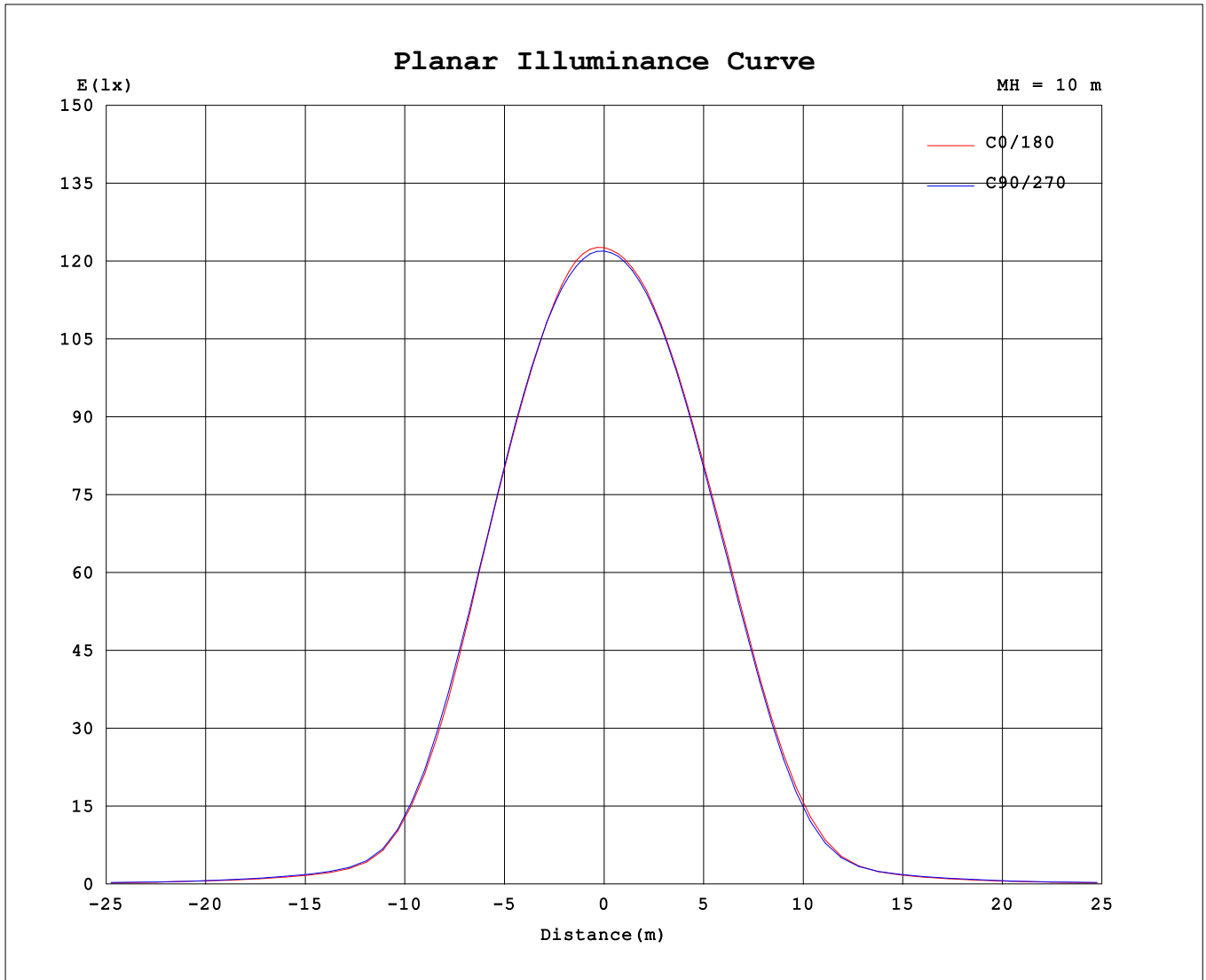
AvgL	cd/m2
L_0~180 (65) av	42411
L_0~180 (75) av	37959
L_0~180 (85) av	5780
L_90~270 (65) av	46635
L_90~270 (75) av	38095
L_90~270 (85) av	26871
L_45 (65) av	46952
L_45 (75) av	45227
L_45 (85) av	14206

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:
 Test Date:2023-07-31

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity:65.0%
 Test Distance:9.420m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3 °C
 Operators:
 Test Date: 2023-07-31

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity: 65.0%
 Test Distance: 9.420m [K=1.0000]
 Remarks:

