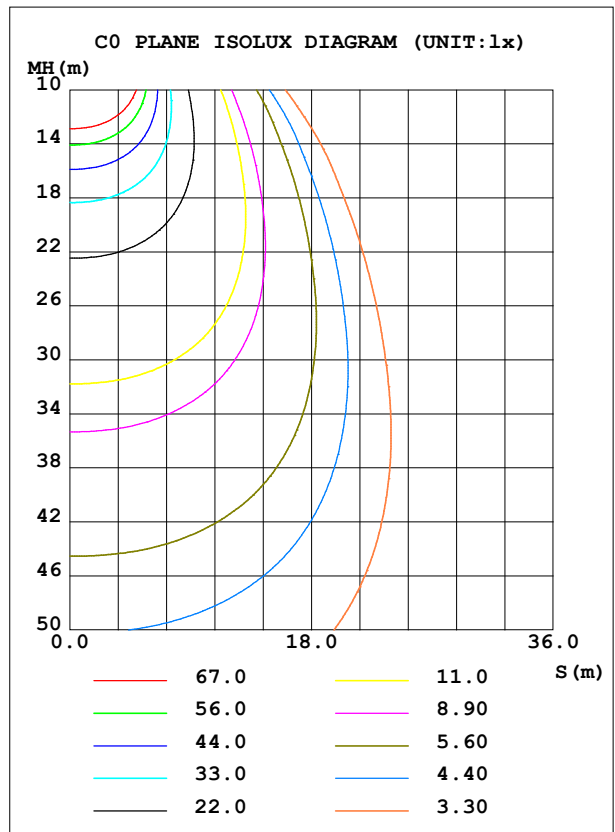
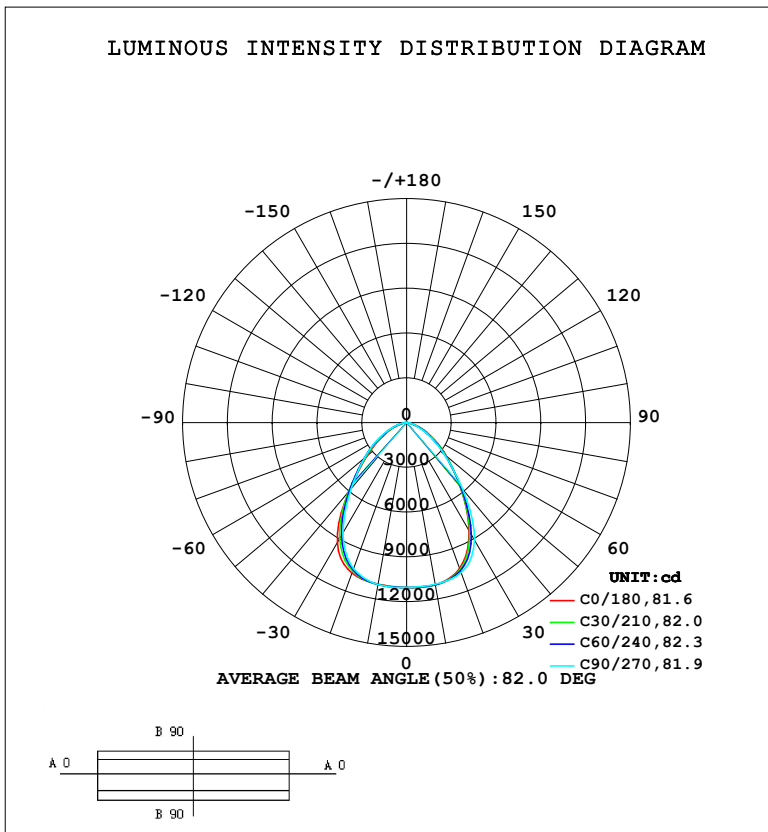


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.44V I:0.6903A P:148.36W PF:0.9750 Freq:49.99Hz Lamp Flux:21095.6x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	SYLHBU150DL	Imax (cd)	11079	S/MH (C0/180)	1.18
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.16
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	21096	η UP, DN (C0-180)	0.0,49.2
NOMINAL FLUX (lm)	21095.6	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0,50.8
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	220	η down (%)	100.0	CIBSE SHR MAX	1.15



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	1104	1104	1100	1097	1099	1102	1102	1101	0- 10	1054	1054	4.99,4.99
20	1040	1052	1069	1078	1073	1055	1040	1035	10- 20	3067	4121	19.5,19.5
30	837.6	856.8	909.9	947.1	929.5	885.9	852.9	849.4	20- 30	4524	8645	41,41
40	556.6	564.7	583.9	610.6	602.8	602.7	578.7	577.6	30- 40	4608	13253	62.8,62.8
50	345.9	338.8	327.7	329.0	344.2	363.1	368.0	362.0	40- 50	3513	16766	79.5,79.5
60	197.4	185.7	173.1	173.4	184.8	203.3	219.4	210.0	50- 60	2383	19149	90.8,90.8
70	90.88	82.58	74.86	75.05	84.08	95.17	100.4	105.1	60- 70	1364	20513	97.2,97.2
80	21.41	14.58	9.623	10.85	15.39	22.03	26.19	25.59	70- 80	535.4	21048	99.8,99.8
90	0.3257	0.3671	0.3781	0.3728	0.2917	0.2891	0.2647	0.2729	80- 90	47.43	21096	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): 15506 lm

%lum = 73.5%

%lamp = 73.5%

Conical surface Flux(130deg): 20077 lm

%lum = 95.2%

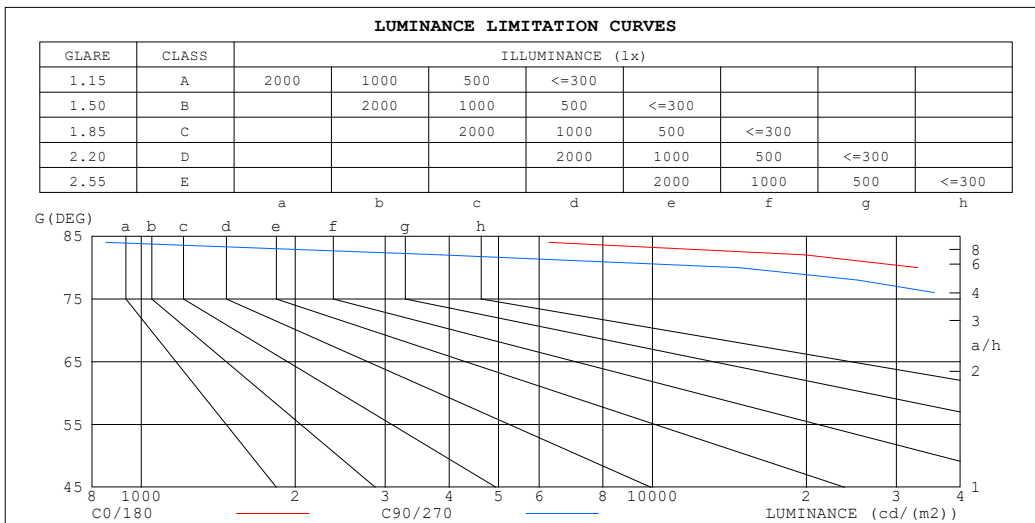
%lamp = 95.2%

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:220.44V I:0.6903A P:148.36W PF:0.9750 Freq:49.99Hz Lamp Flux:21095.6x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	7526	1022
80	33025	14763
75	61091	46574
70	71168	58311
65	95765	82588
60	105754	92224
55	133032	120101
50	144127	135839
45	174616	173730

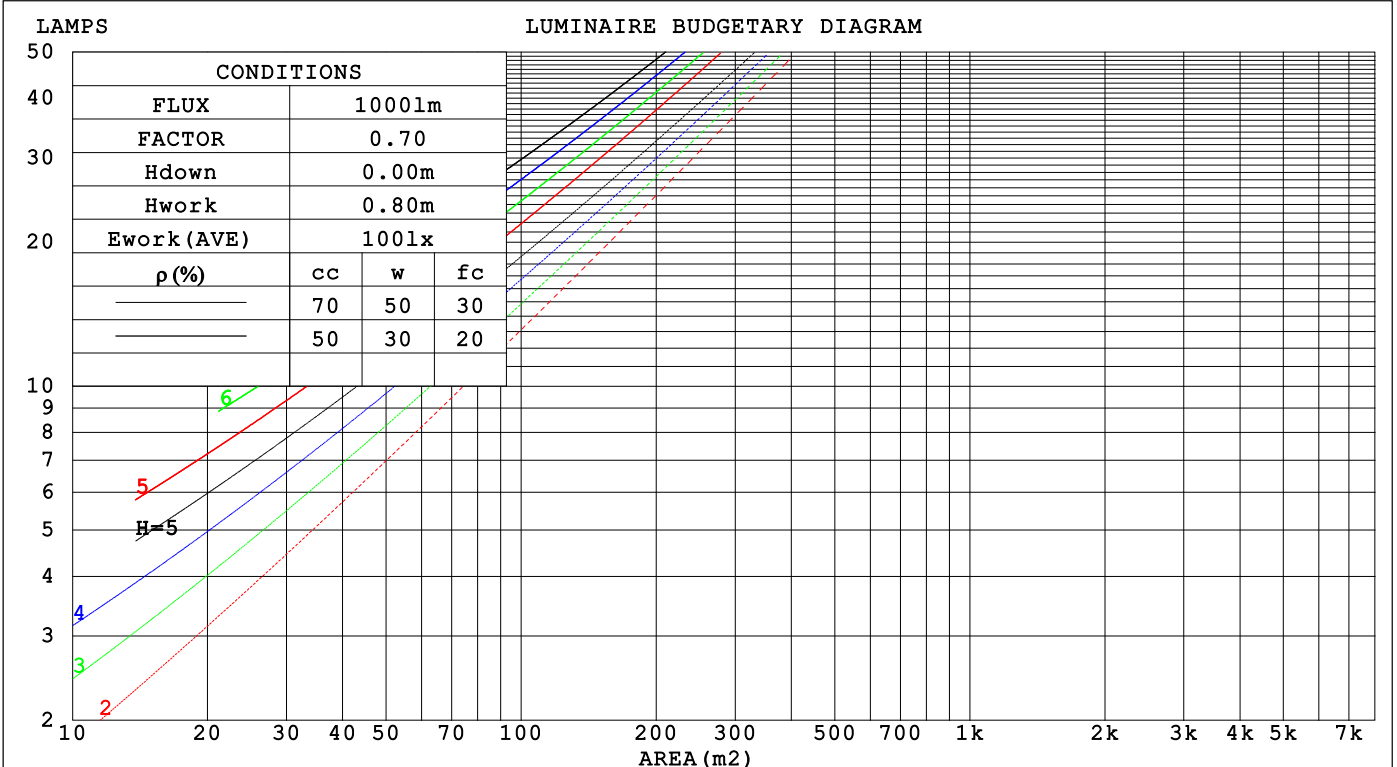
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3 °C
 Operators:
 Test Date: 2023-07-31

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:220.44V I:0.6903A P:148.36W PF:0.9750 Freq:49.99Hz Lamp Flux:21095.6x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	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 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	1.07	1.04	1.01	1.05	1.02	.99	1.01	.99	.96	.97	.95	.93	.94	.92	.91	.89
2.0	.96	.91	.86	.94	.89	.85	.91	.87	.83	.88	.84	.81	.85	.82	.80	.78
3.0	.87	.80	.74	.85	.79	.74	.82	.77	.73	.80	.75	.71	.77	.73	.70	.68
4.0	.78	.71	.65	.77	.70	.65	.75	.69	.64	.72	.67	.63	.70	.66	.62	.60
5.0	.71	.63	.58	.70	.63	.57	.68	.62	.57	.66	.61	.56	.64	.60	.56	.54
6.0	.65	.57	.51	.64	.57	.51	.62	.56	.51	.61	.55	.50	.59	.54	.50	.48
7.0	.60	.52	.46	.59	.51	.46	.57	.51	.46	.56	.50	.46	.55	.49	.45	.44
8.0	.55	.47	.42	.54	.47	.42	.53	.46	.42	.52	.46	.42	.51	.45	.41	.40
9.0	.51	.43	.38	.50	.43	.38	.49	.43	.38	.48	.42	.38	.47	.42	.38	.36
10.0	.47	.40	.35	.47	.40	.35	.46	.39	.35	.45	.39	.35	.44	.39	.35	.33



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:220.44V I:0.6903A P:148.36W PF:0.9750 Freq:49.99Hz																	
Lamp Flux:21095.6x1 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	.242	.138	.044	.236	.134	.043	.223	.128	.041	.211	.122	.039	.200	.116	.037		
2.0	.236	.129	.040	.230	.126	.039	.218	.121	.038	.208	.117	.037	.199	.112	.035		
3.0	.223	.119	.036	.218	.117	.035	.208	.113	.034	.199	.109	.034	.191	.106	.033		
4.0	.210	.109	.032	.206	.108	.032	.197	.105	.031	.189	.102	.031	.182	.099	.030		
5.0	.198	.101	.029	.194	.100	.029	.186	.097	.029	.179	.095	.028	.173	.092	.028		
6.0	.186	.093	.027	.183	.092	.027	.176	.090	.026	.170	.088	.026	.164	.086	.026		
7.0	.176	.087	.025	.172	.086	.024	.166	.084	.024	.161	.082	.024	.155	.081	.024		
8.0	.166	.081	.023	.163	.080	.023	.157	.079	.022	.152	.077	.022	.148	.076	.022		
9.0	.157	.076	.021	.154	.075	.021	.149	.074	.021	.145	.073	.021	.140	.071	.021		
10.0	.149	.071	.020	.146	.071	.020	.142	.070	.020	.138	.068	.019	.134	.067	.019		

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	.176	.157	.140	.150	.135	.120	.103	.093	.083	.059	.054	.048	.019	.017	.016		
2.0	.165	.132	.105	.141	.114	.091	.097	.079	.063	.056	.046	.037	.018	.015	.012		
3.0	.156	.114	.081	.133	.098	.070	.092	.068	.049	.053	.040	.029	.017	.013	.009		
4.0	.147	.100	.064	.126	.087	.056	.087	.060	.039	.050	.035	.023	.016	.011	.008		
5.0	.140	.089	.052	.120	.077	.045	.083	.054	.032	.048	.032	.019	.015	.010	.006		
6.0	.133	.081	.043	.114	.070	.038	.079	.049	.027	.046	.029	.016	.015	.009	.005		
7.0	.127	.074	.036	.109	.064	.032	.075	.045	.022	.044	.026	.013	.014	.009	.004		
8.0	.121	.068	.031	.104	.059	.027	.072	.041	.019	.042	.024	.012	.014	.008	.004		
9.0	.115	.063	.027	.099	.054	.024	.069	.038	.017	.040	.023	.010	.013	.007	.003		
10.0	.110	.058	.024	.095	.051	.021	.066	.036	.015	.038	.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:220.44V I:0.6903A P:148.36W PF:0.9750 Freq:49.99Hz										
Lamp Flux:21095.6x1 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	18.1	19.4	18.3	19.6	19.7	17.8	19.1	18.0	19.2	19.4
3H	18.7	19.9	19.0	20.1	20.4	18.3	19.5	18.5	19.7	19.9
4H	18.9	20.0	19.2	20.3	20.5	18.4	19.5	18.7	19.7	20.0
6H	18.9	20.0	19.2	20.2	20.5	18.3	19.4	18.6	19.6	19.9
8H	18.9	19.9	19.2	20.2	20.4	18.3	19.3	18.6	19.6	19.8
12H	18.8	19.8	19.2	20.1	20.4	18.2	19.2	18.6	19.5	19.8
4H 2H	18.3	19.4	18.6	19.7	19.9	18.0	19.2	18.3	19.4	19.6
3H	19.1	20.1	19.4	20.3	20.6	18.7	19.6	19.0	19.9	20.2
4H	19.3	20.2	19.7	20.5	20.8	18.8	19.7	19.2	20.0	20.3
6H	19.4	20.2	19.8	20.5	20.9	18.8	19.6	19.2	19.9	20.3
8H	19.4	20.1	19.8	20.4	20.8	18.7	19.5	19.1	19.8	20.2
12H	19.3	20.0	19.7	20.4	20.7	18.7	19.4	19.1	19.7	20.1
8H 4H	19.3	20.0	19.7	20.4	20.8	18.8	19.5	19.2	19.9	20.3
6H	19.4	20.0	19.8	20.4	20.8	18.8	19.4	19.3	19.8	20.2
8H	19.4	19.9	19.8	20.3	20.8	18.8	19.3	19.2	19.7	20.2
12H	19.3	19.8	19.8	20.2	20.7	18.7	19.2	19.2	19.6	20.1
12H 4H	19.3	19.9	19.7	20.3	20.7	18.8	19.4	19.2	19.8	20.2
6H	19.4	19.9	19.8	20.3	20.8	18.8	19.3	19.2	19.7	20.2
8H	19.3	19.8	19.8	20.2	20.7	18.7	19.2	19.2	19.6	20.1
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.5 / - 0.7					+ 0.7 / - 1.0				
1.5H	+ 0.3 / - 0.3					+ 0.5 / - 0.5				
2.0H	+ 1.1 / - 1.1					+ 1.3 / - 1.2				

CIE Pub.117, 21096 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 10.6)
 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:220.44V I:0.6903A P:148.36W PF:0.9750 Freq:49.99Hz Lamp Flux:21095.6x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

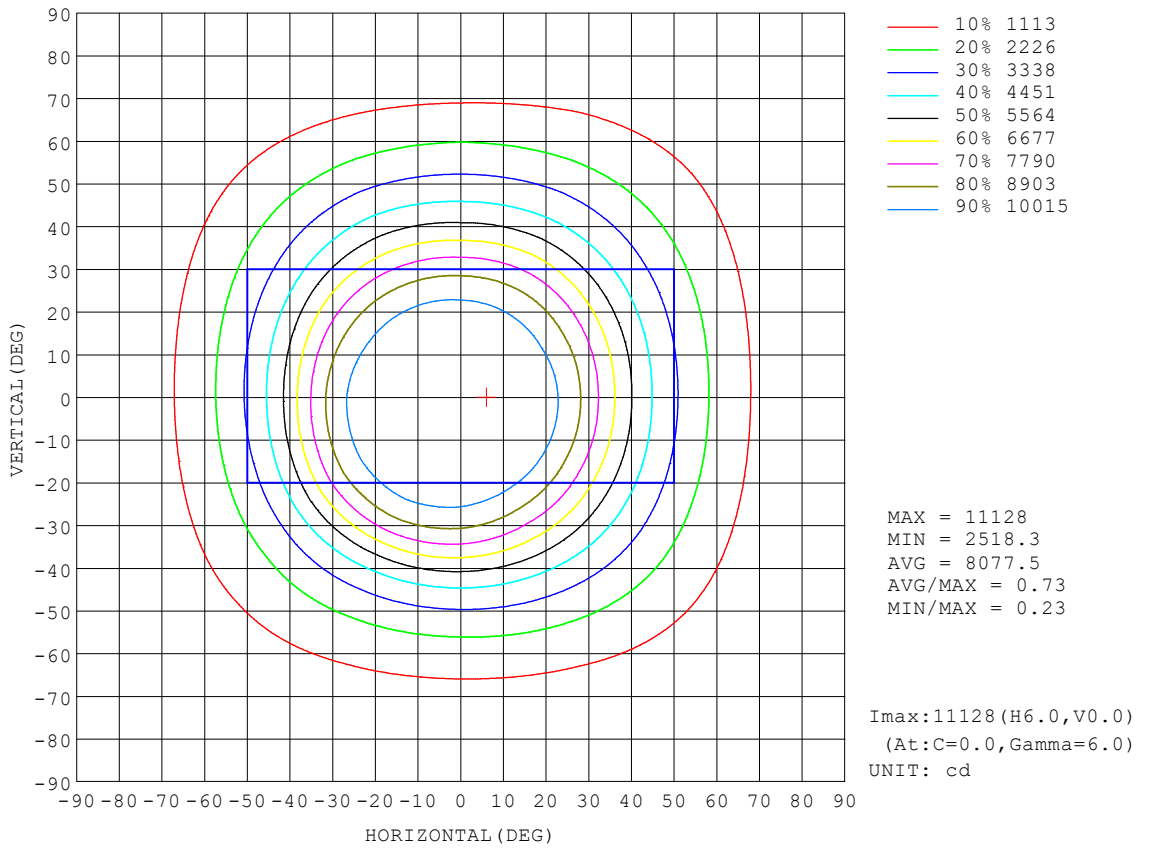
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	68	58	53	68	58	52	66	58	52	47
0.80	78	68	62	77	68	62	75	67	62	56
1.00	85	77	71	84	76	70	82	77	70	64
1.25	92	83	78	90	83	77	88	81	77	71
1.50	96	88	83	94	87	82	92	86	81	75
2.00	101	95	90	100	94	89	96	91	87	81
2.50	104	98	94	102	97	93	99	94	91	84
3.00	107	102	97	105	100	96	101	97	94	87
4.00	110	105	102	108	104	101	104	101	98	90
5.00	112	108	105	109	106	103	105	103	100	92
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:220.44V I:0.6903A P:148.36W PF:0.9750 Freq:49.99Hz Lamp Flux:21095.6x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

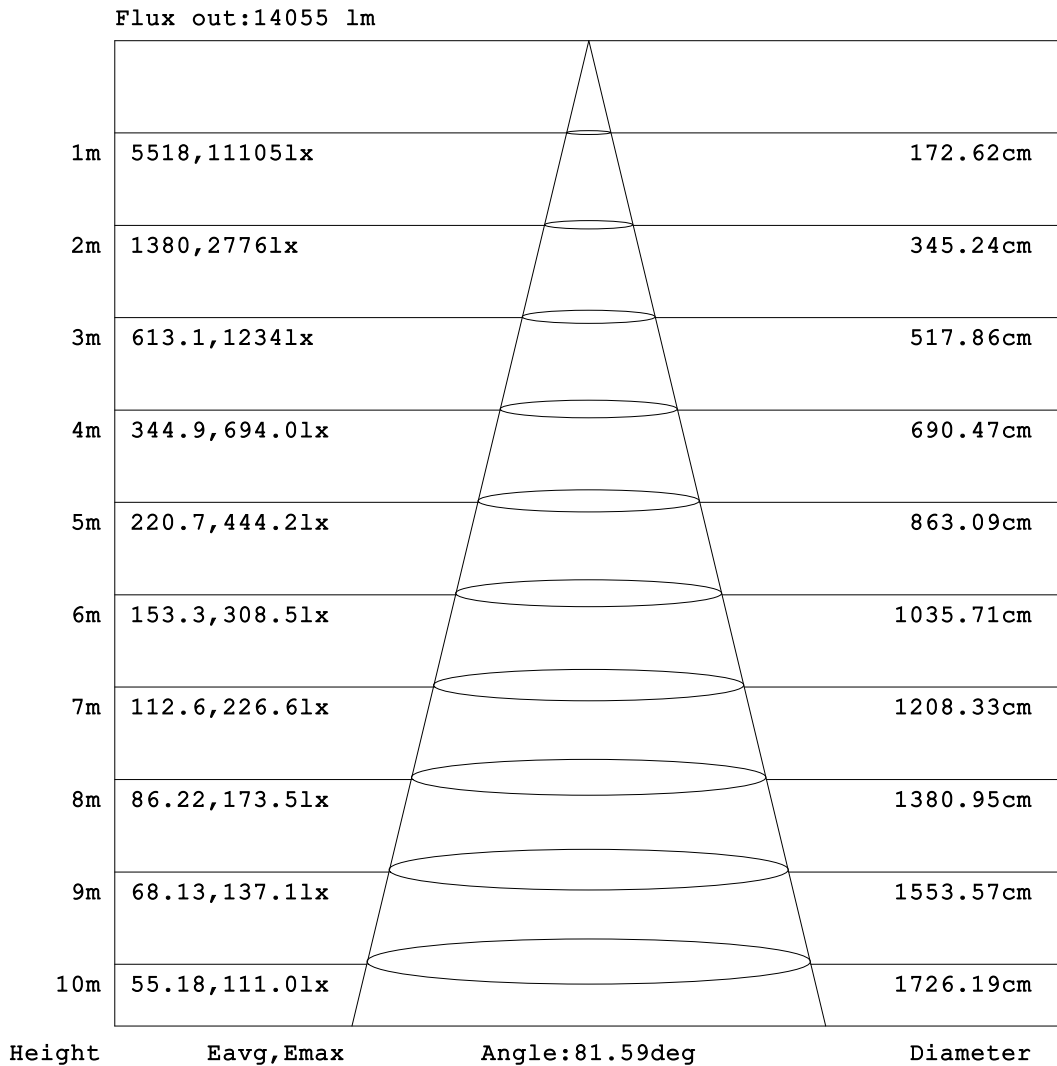


C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2023-07-31

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:220.44V I:0.6903A P:148.36W PF:0.9750 Freq:49.99Hz Lamp Flux:21095.6x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



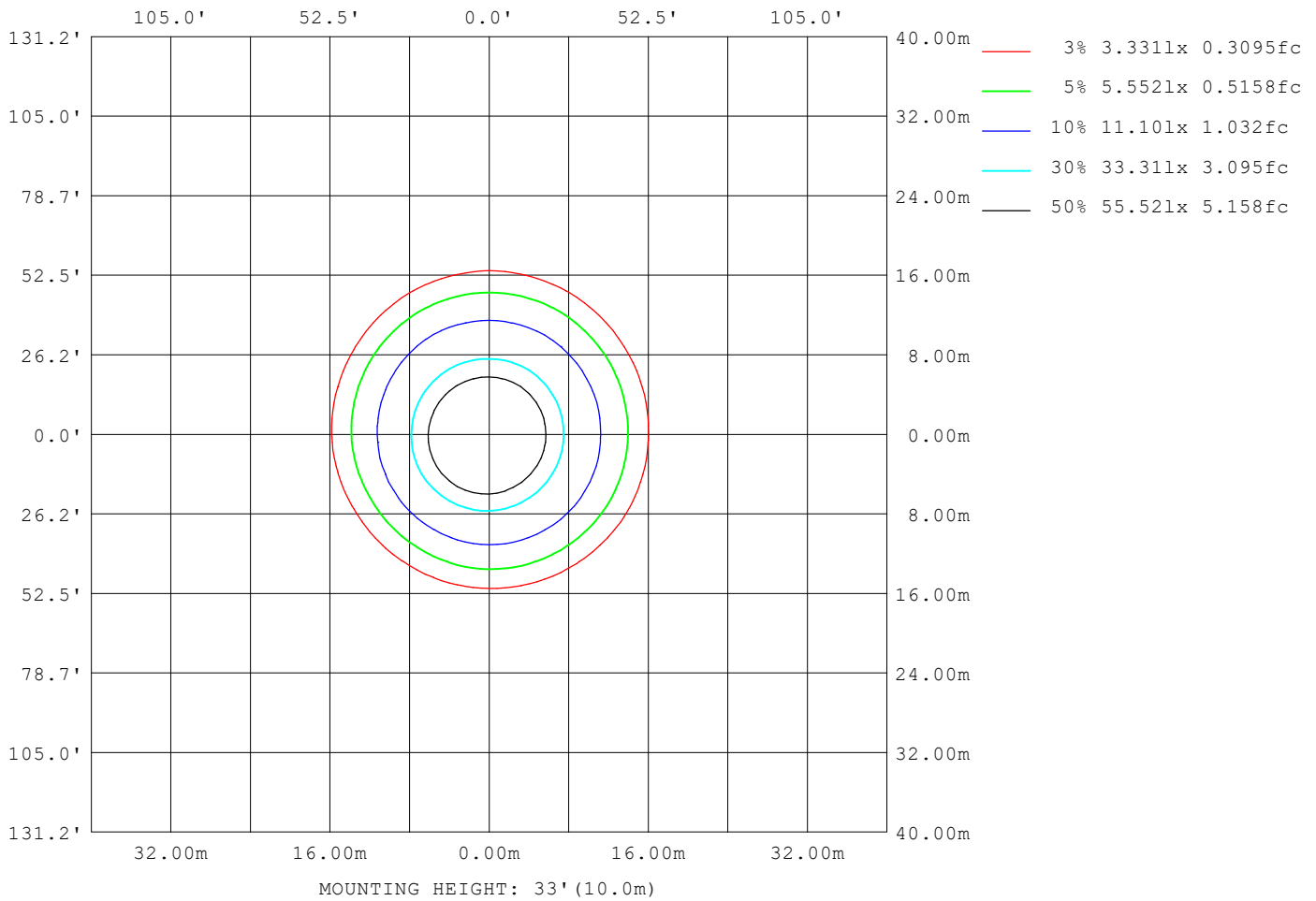
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:220.44V I:0.6903A P:148.36W PF:0.9750 Freq:49.99Hz Lamp Flux:21095.6x1 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:220.44V I:0.6903A P:148.36W PF:0.9750 Freq:49.99Hz Lamp Flux:21095.6x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

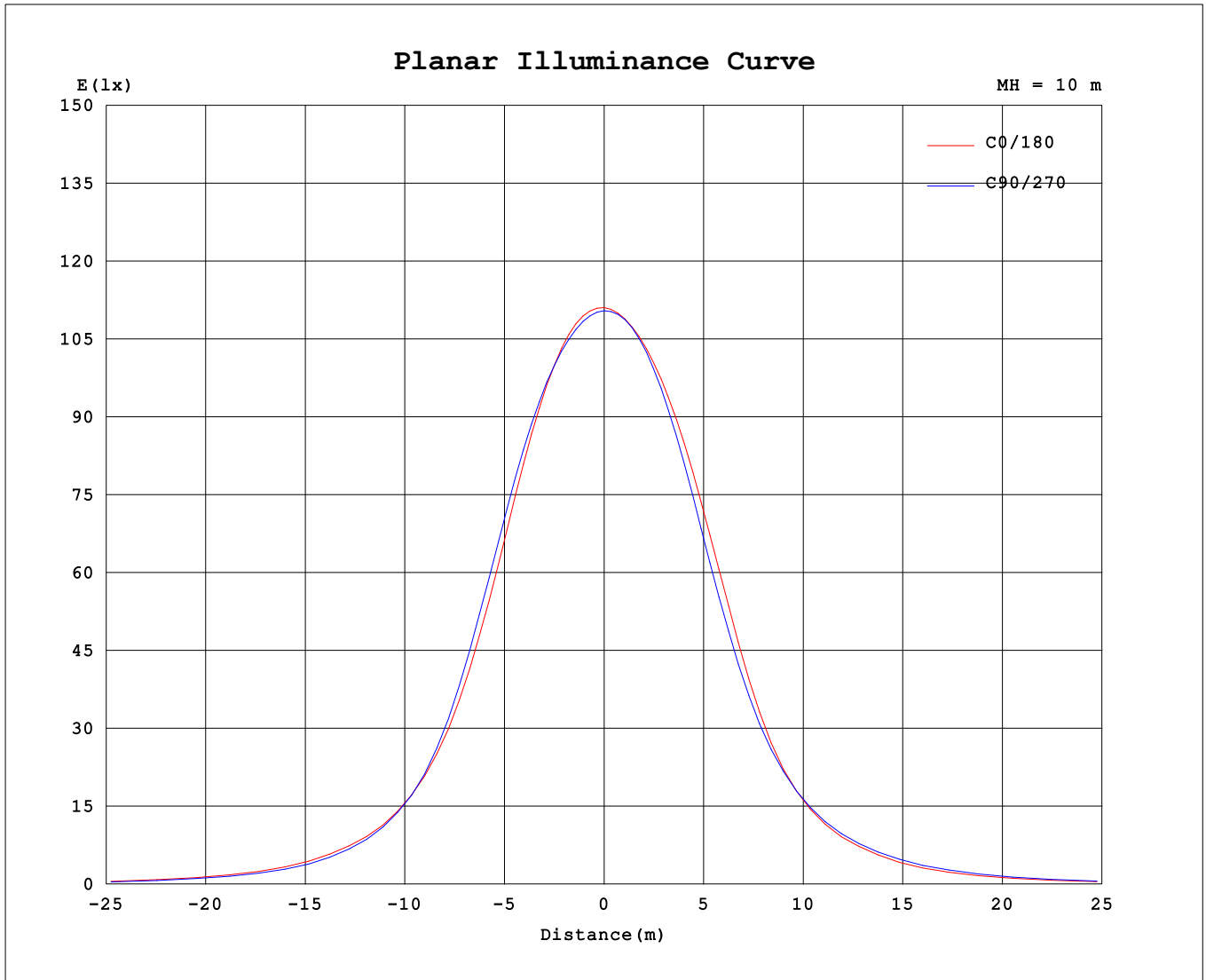
AvgL	cd/m2
L_0~180 (65) av	85645
L_0~180 (75) av	50421
L_0~180 (85) av	1633
L_90~270 (65) av	87459
L_90~270 (75) av	50109
L_90~270 (85) av	4000
L_45 (65) av	85634
L_45 (75) av	51296
L_45 (85) av	4659

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:

