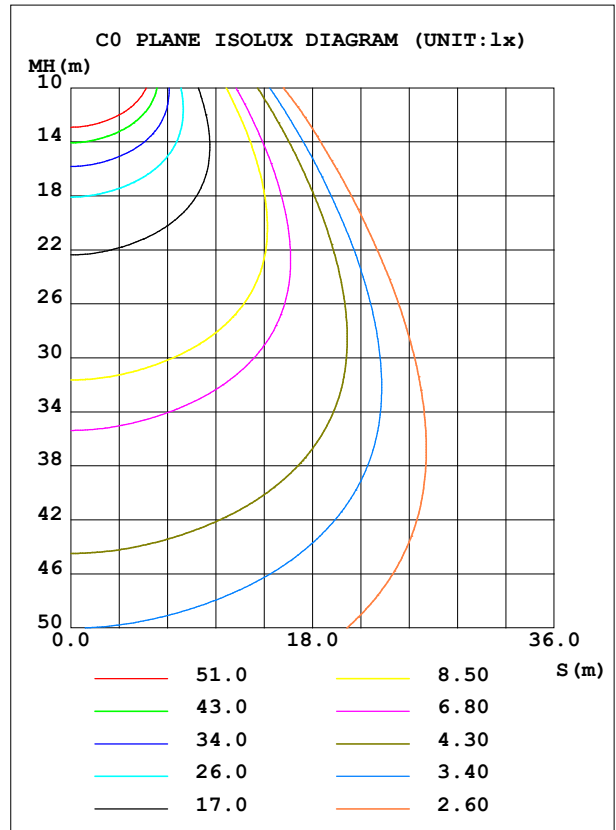
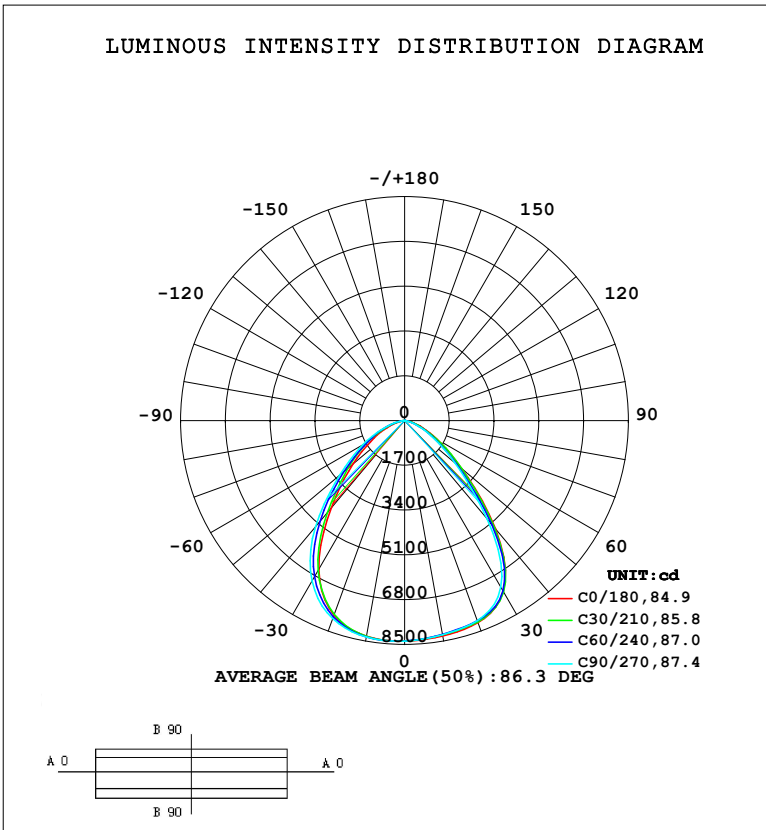


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.49V I:0.5562A P:119.29W PF:0.9727 Freq:49.99Hz Lamp Flux:16656.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	SYLHBU100DL	Imax (cd)	8385	S/MH (C0/180)	1.16
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.24
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	16657	η UP, DN (C0-180)	0.0,48.7
NOMINAL FLUX (lm)	16656.8	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0,51.3
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	8299	8249	8256	8287	8317	8330	8347	8343	0- 10	795.8	795.8	4.78,4.78
20	8160	8107	8078	7958	7857	7873	7996	8110	10- 20	2317	3113	18.7,18.7
30	7497	7491	7310	6784	6520	6706	7031	7317	20- 30	3517	6629	39.8,39.8
40	5367	5246	4887	4486	4336	4780	5262	5484	30- 40	3817	10446	62.7,62.7
50	2836	2697	2494	2479	2562	2895	3207	3216	40- 50	2938	13384	80.3,80.3
60	1437	1304	1153	1245	1353	1617	1836	1728	50- 60	1863	15247	91.5,91.5
70	633.3	517.0	444.4	489.4	594.3	752.7	824.3	781.2	60- 70	999.0	16246	97.5,97.5
80	130.6	63.84	25.02	47.77	99.17	176.6	214.4	206.0	70- 80	376.0	16622	99.8,99.8
90	2.326	2.733	2.961	2.826	2.059	1.915	1.716	1.775	80- 90	34.61	16657	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:cd									UNIT:lm		

Conical surface Flux(90deg): 12351 lm

%lum = 74.2%

%lamp = 74.2%

Conical surface Flux(130deg): 15934 lm

%lum = 95.7%

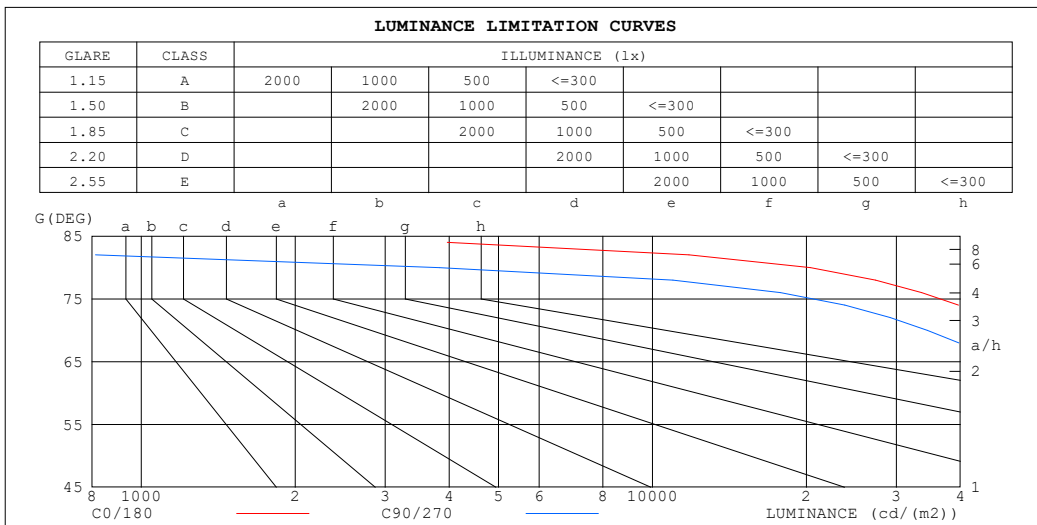
%lamp = 95.7%

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:220.49V I:0.5562A P:119.29W PF:0.9727 Freq:49.99Hz Lamp Flux:16656.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	4759	724
80	20395	3826
75	42235	25328
70	50223	34503
65	68367	51857
60	77939	61229
55	102605	87289
50	119662	103037
45	163017	140866

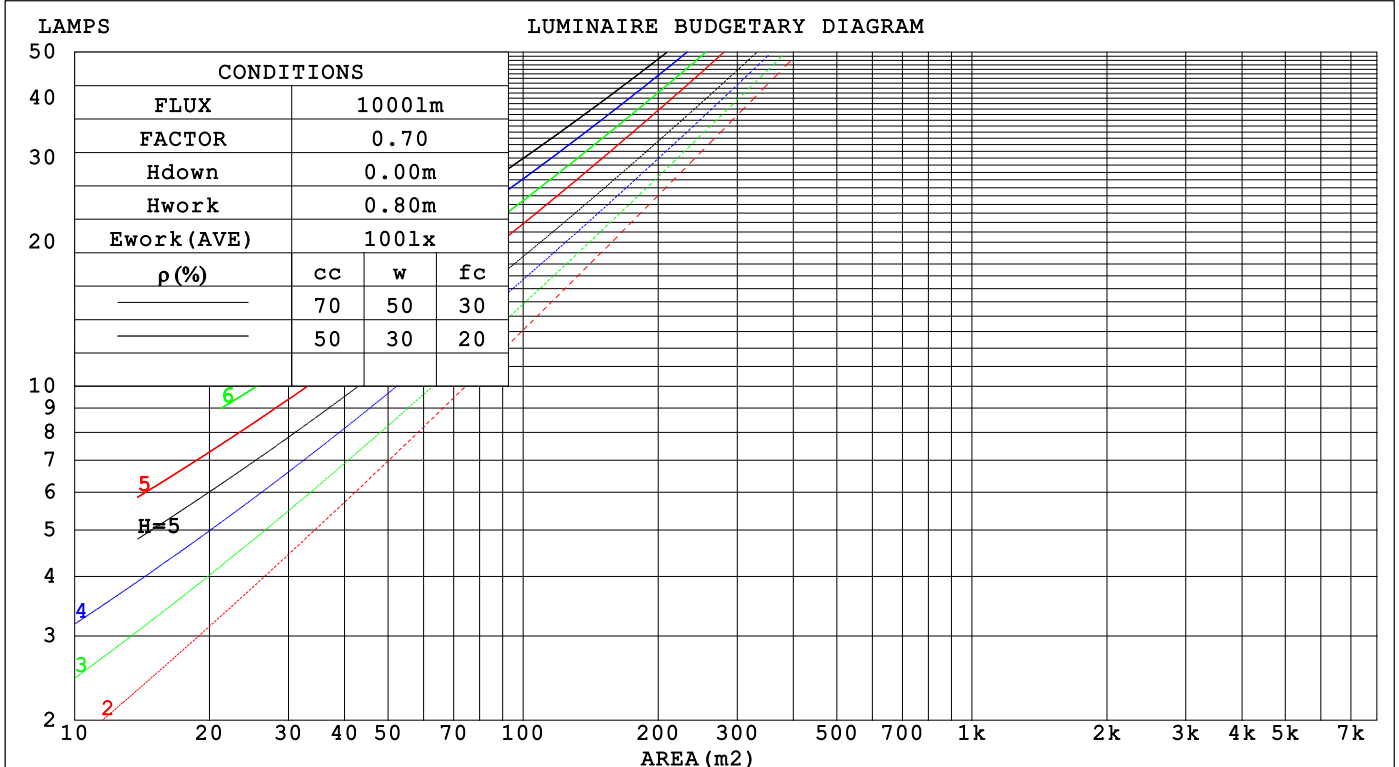
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3 °C
 Operators:
 Test Date:2023-07-31

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:220.49V I:0.5562A P:119.29W PF:0.9727 Freq:49.99Hz Lamp Flux:16656.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
	ρw	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	.95	.90	.85	.91	.87	.83	.88	.85	.81	.85	.82	.80	.78
3.0	.87	.80	.75	.85	.79	.74	.82	.77	.73	.80	.75	.71	.77	.74	.70	.68
4.0	.78	.71	.65	.77	.70	.65	.75	.69	.64	.73	.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	.59	.52	.46	.59	.51	.46	.57	.51	.46	.56	.50	.45	.55	.49	.45	.43
8.0	.55	.47	.42	.54	.47	.42	.53	.46	.41	.52	.46	.41	.51	.45	.41	.39
9.0	.51	.43	.38	.50	.43	.38	.49	.42	.38	.48	.42	.38	.47	.41	.37	.36
10.0	.47	.40	.35	.46	.39	.35	.46	.39	.35	.45	.39	.35	.44	.38	.34	.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:220.49V I:0.5562A P:119.29W PF:0.9727 Freq:49.99Hz								
Lamp Flux:16656.8x1 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	.241	.137	.043	.234	.133	.042	.221	.127	.041	.209	.121	.039	.198	.115	.037	
2.0	.235	.129	.039	.229	.126	.039	.217	.121	.038	.207	.116	.036	.198	.112	.035	
3.0	.223	.119	.036	.218	.117	.035	.208	.113	.034	.199	.109	.033	.190	.105	.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	.187	.094	.027	.183	.092	.027	.176	.090	.026	.170	.088	.026	.164	.086	.026	
7.0	.176	.087	.025	.173	.086	.025	.167	.084	.024	.161	.083	.024	.156	.081	.024	
8.0	.166	.081	.023	.163	.080	.023	.158	.079	.023	.153	.077	.022	.148	.076	.022	
9.0	.157	.076	.021	.155	.075	.021	.150	.074	.021	.145	.073	.021	.141	.072	.021	
10.0	.149	.072	.020	.147	.071	.020	.142	.070	.020	.138	.069	.020	.134	.068	.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	.155	.114	.081	.133	.098	.070	.091	.068	.049	.053	.040	.029	.017	.013	.010	
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	.037	.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	.011	.014	.008	.004	
9.0	.115	.063	.027	.099	.054	.024	.069	.038	.017	.040	.023	.010	.013	.007	.003	
10.0	.110	.059	.024	.095	.051	.021	.066	.036	.015	.039	.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:220.49V I:0.5562A P:119.29W PF:0.9727 Freq:49.99Hz										
Lamp Flux:16656.8x1 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	18.3	19.6	18.6	19.8	20.0	17.6	18.9	17.8	19.1	19.3
3H	18.8	20.0	19.0	20.2	20.4	17.8	19.0	18.1	19.3	19.5
4H	18.9	20.0	19.2	20.2	20.5	17.8	19.0	18.1	19.2	19.5
6H	18.8	19.9	19.2	20.2	20.4	17.8	18.8	18.1	19.1	19.3
8H	18.8	19.8	19.1	20.1	20.4	17.7	18.7	18.0	19.0	19.3
12H	18.7	19.7	19.1	20.0	20.3	17.7	18.6	18.0	18.9	19.2
4H 2H	18.4	19.5	18.7	19.8	20.0	17.7	18.9	18.0	19.1	19.4
3H	18.9	19.9	19.3	20.2	20.5	18.1	19.1	18.4	19.4	19.7
4H	19.1	20.0	19.5	20.3	20.6	18.1	19.0	18.5	19.3	19.7
6H	19.1	19.9	19.5	20.2	20.6	18.1	18.9	18.5	19.2	19.6
8H	19.1	19.8	19.5	20.2	20.5	18.0	18.8	18.4	19.1	19.5
12H	19.0	19.7	19.5	20.1	20.5	18.0	18.6	18.4	19.0	19.4
8H 4H	19.0	19.8	19.4	20.1	20.5	18.1	18.8	18.5	19.2	19.6
6H	19.1	19.7	19.5	20.1	20.5	18.1	18.6	18.5	19.0	19.5
8H	19.0	19.6	19.5	20.0	20.4	18.0	18.5	18.5	19.0	19.4
12H	19.0	19.4	19.5	19.9	20.4	18.0	18.4	18.4	18.9	19.3
12H 4H	19.0	19.7	19.4	20.0	20.4	18.1	18.7	18.5	19.1	19.5
6H	19.0	19.5	19.5	20.0	20.4	18.0	18.5	18.5	19.0	19.4
8H	19.0	19.4	19.5	19.9	20.4	18.0	18.4	18.4	18.9	19.3
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.8 / - 1.2					+ 1.1 / - 1.6				
1.5H	+ 0.9 / - 0.6					+ 1.1 / - 0.9				
2.0H	+ 1.9 / - 1.8					+ 2.0 / - 1.9				

CIE Pub.117, 16657 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 9.8)
 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:220.49V I:0.5562A P:119.29W PF:0.9727 Freq:49.99Hz Lamp Flux:16656.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

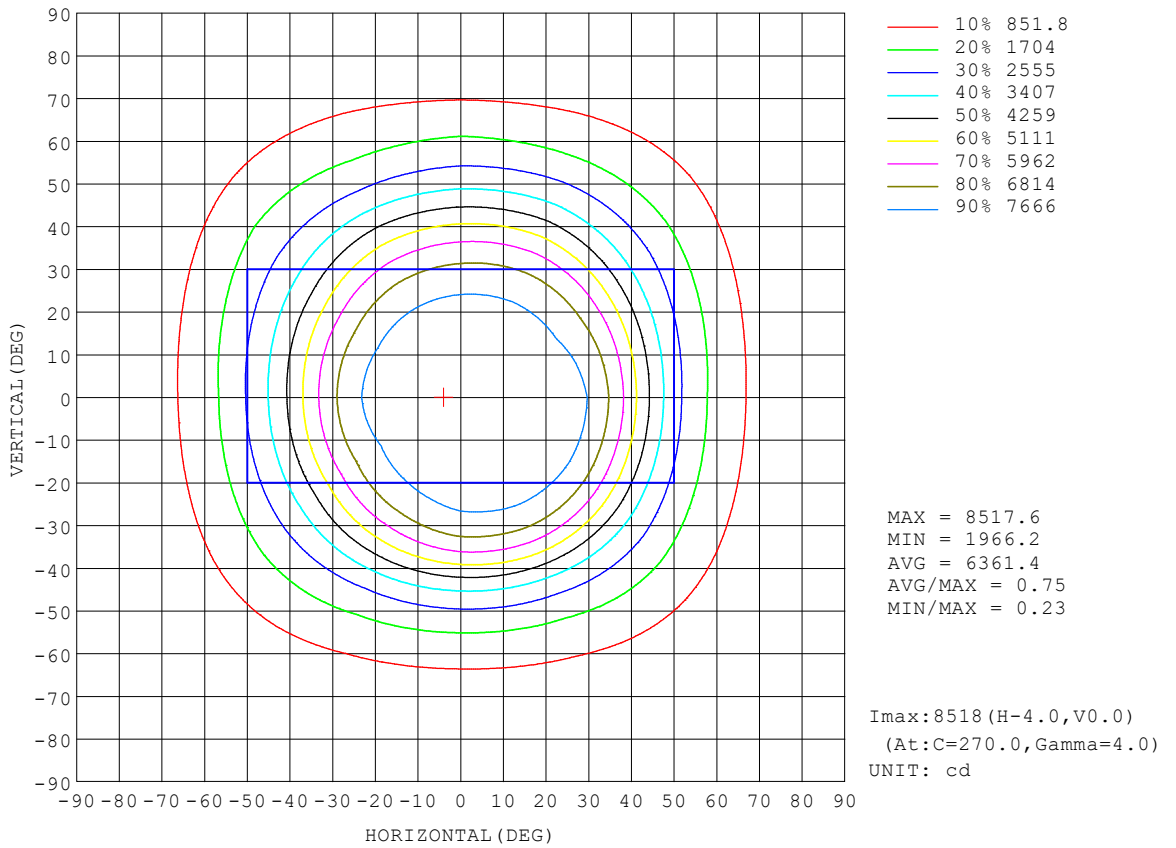
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	68	58	52	67	58	52	66	58	52	47
0.80	78	68	62	77	68	62	75	67	62	56
1.00	86	77	71	84	76	71	82	77	70	64
1.25	92	84	78	91	83	78	88	82	77	71
1.50	96	88	83	95	88	83	92	86	81	75
2.00	101	95	90	100	94	89	97	92	88	81
2.50	104	98	94	102	97	93	99	95	91	84
3.00	107	102	97	105	100	96	101	97	94	87
4.00	110	106	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:220.49V I:0.5562A P:119.29W PF:0.9727 Freq:49.99Hz Lamp Flux:16656.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

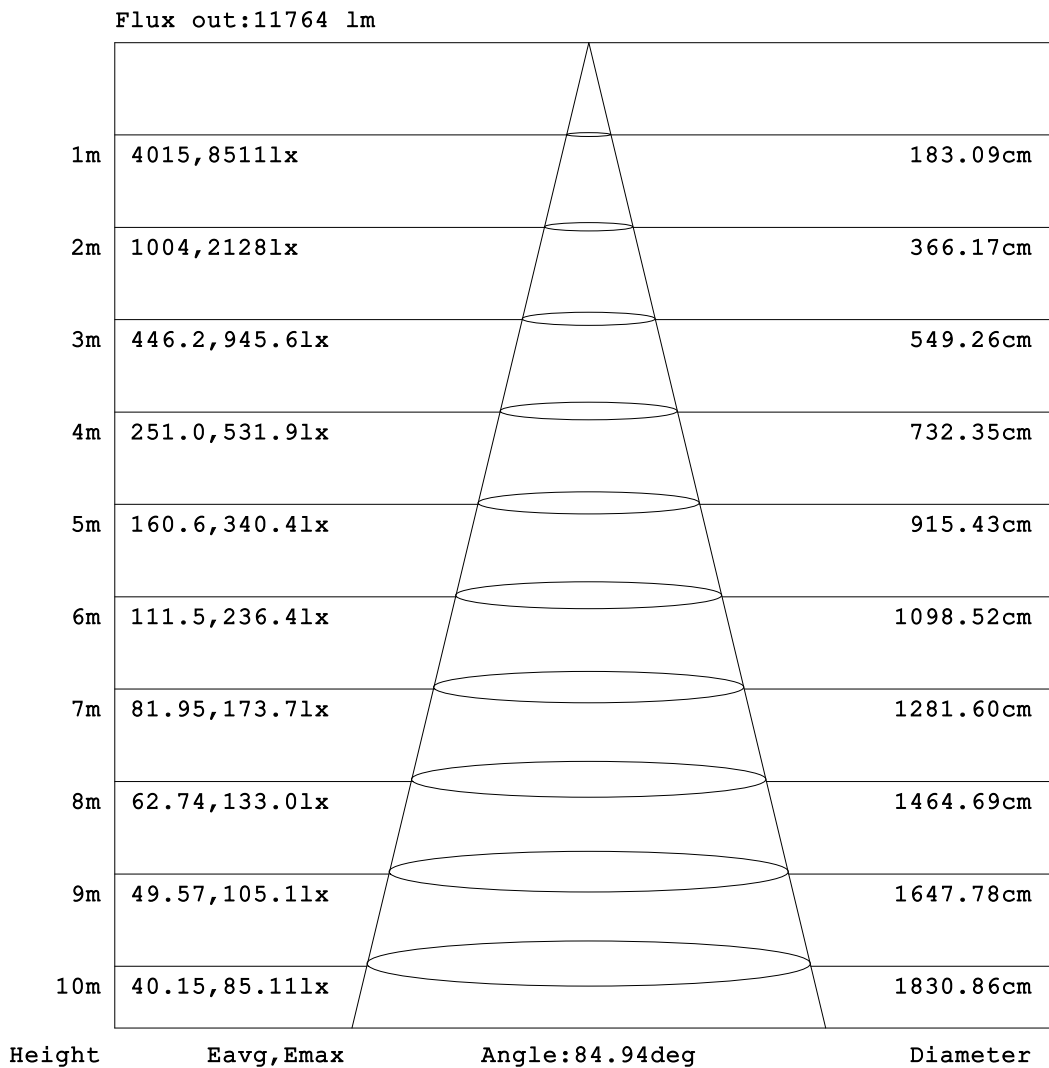


C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2023-07-31

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:220.49V I:0.5562A P:119.29W PF:0.9727 Freq:49.99Hz Lamp Flux:16656.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



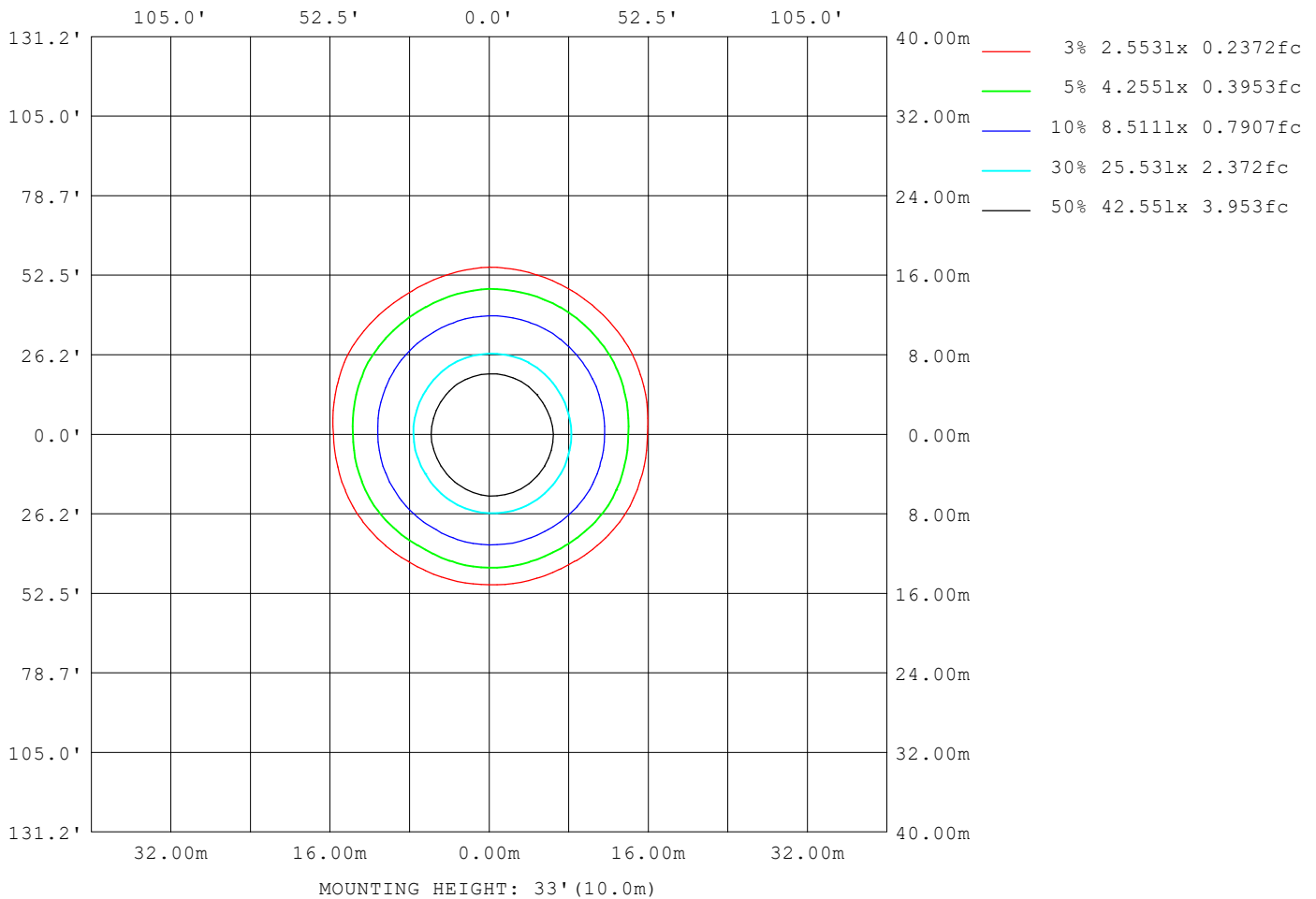
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:220.49V I:0.5562A P:119.29W PF:0.9727 Freq:49.99Hz Lamp Flux:16656.8x1 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:220.49V I:0.5562A P:119.29W PF:0.9727 Freq:49.99Hz Lamp Flux:16656.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

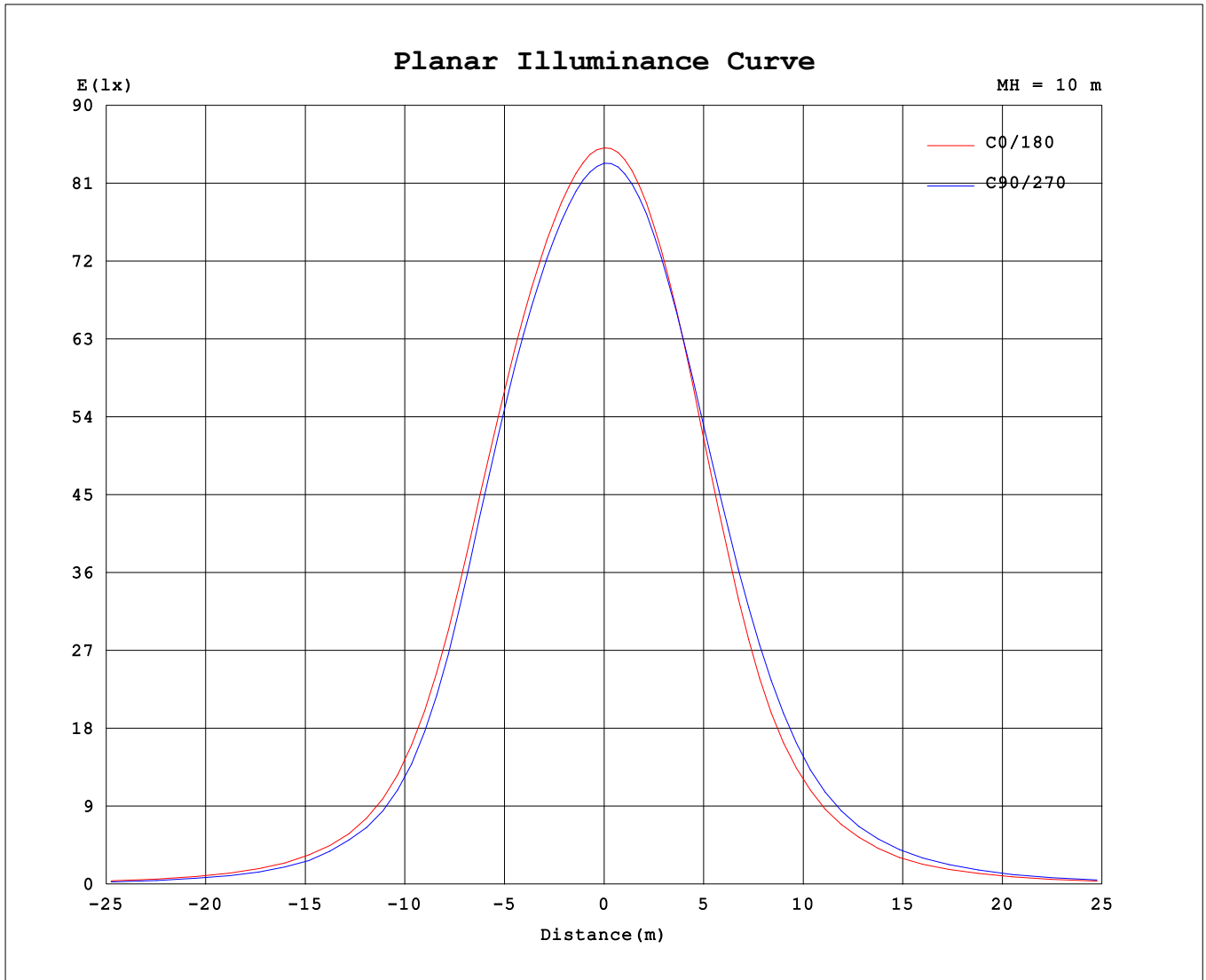
AvgL	cd/m2
L_0~180 (65) av	60554
L_0~180 (75) av	34183
L_0~180 (85) av	1191
L_90~270 (65) av	63532
L_90~270 (75) av	35519
L_90~270 (85) av	4344
L_45 (65) av	62965
L_45 (75) av	36451
L_45 (85) av	5697

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:

