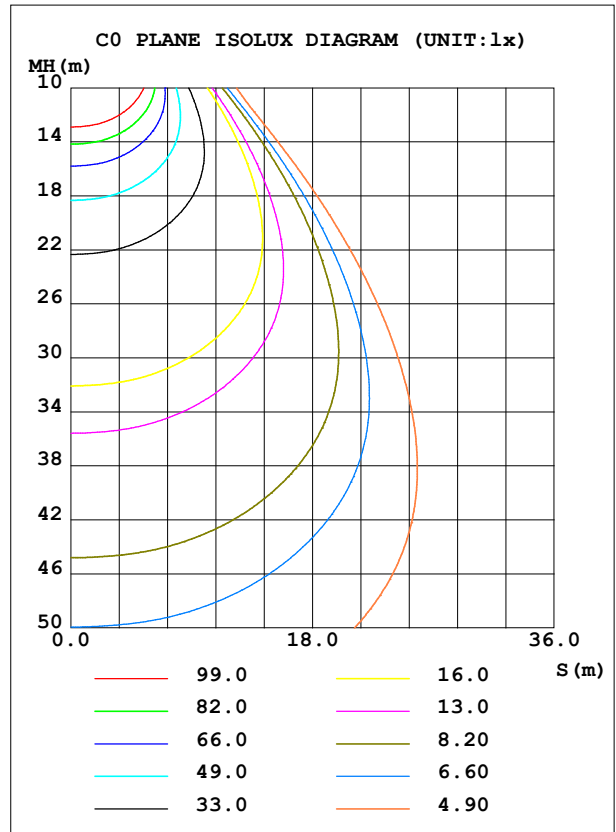
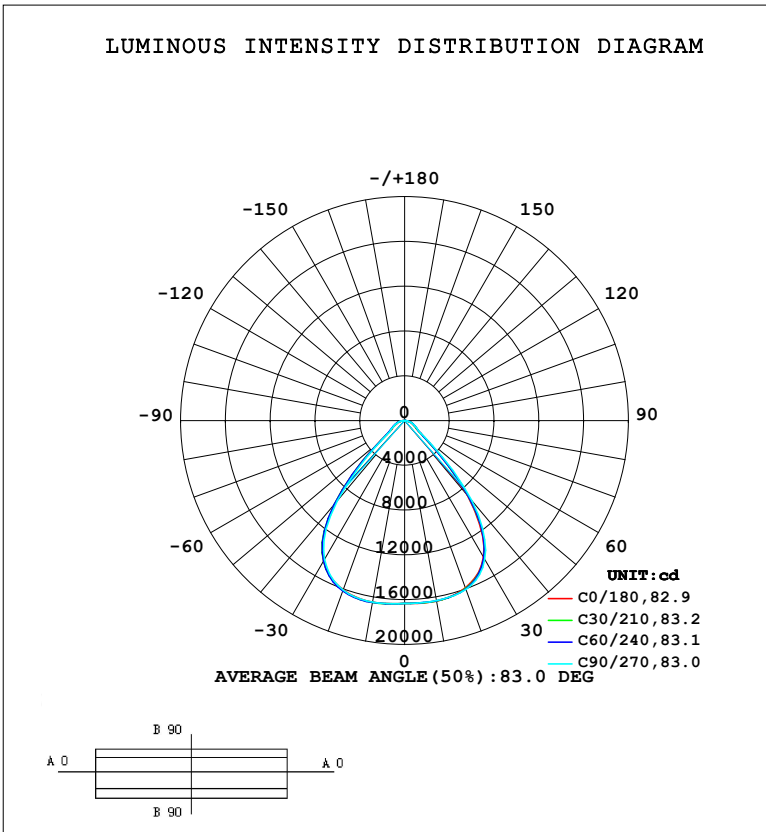


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.38V I:0.9165A P:198.41W PF:0.9823 Freq:49.99Hz Lamp Flux:28167.2x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	SYFLHLN200DL	Imax (cd)	16506	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)	28167	η UP, DN (C0-180)	0.0,49.5
NOMINAL FLUX (lm)	28167.2	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0,50.5
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	1637	1635	1633	1640	1647	1650	1647	1643	0- 10	1565	1565	5.56,5.56
20	1589	1598	1604	1608	1608	1618	1611	1598	10- 20	4614	6179	21.9,21.9
30	1410	1417	1431	1442	1450	1451	1432	1408	20- 30	7075	13254	47.1,47.1
40	872.2	892.7	934.8	965.0	970.7	979.7	935.0	884.8	30- 40	7574	20827	73.9,73.9
50	216.5	218.3	239.0	266.0	278.0	281.2	259.4	233.1	40- 50	4292	25120	89.2,89.2
60	107.2	111.9	116.7	122.2	118.8	127.8	127.8	120.0	50- 60	1440	26560	94.3,94.3
70	67.06	71.55	70.02	78.15	72.84	83.13	78.32	77.72	60- 70	949.1	27509	97.7,97.7
80	21.31	21.71	23.53	29.22	29.02	34.68	28.67	27.30	70- 80	557.4	28066	99.6,99.6
90	0.3134	0.3611	0.3695	0.3460	0.2563	0.2994	0.3074	0.3136	80- 90	101.1	28167	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): 23965 lm

%lum = 85.1%

%lamp = 85.1%

Conical surface Flux(130deg): 27171 lm

%lum = 96.5%

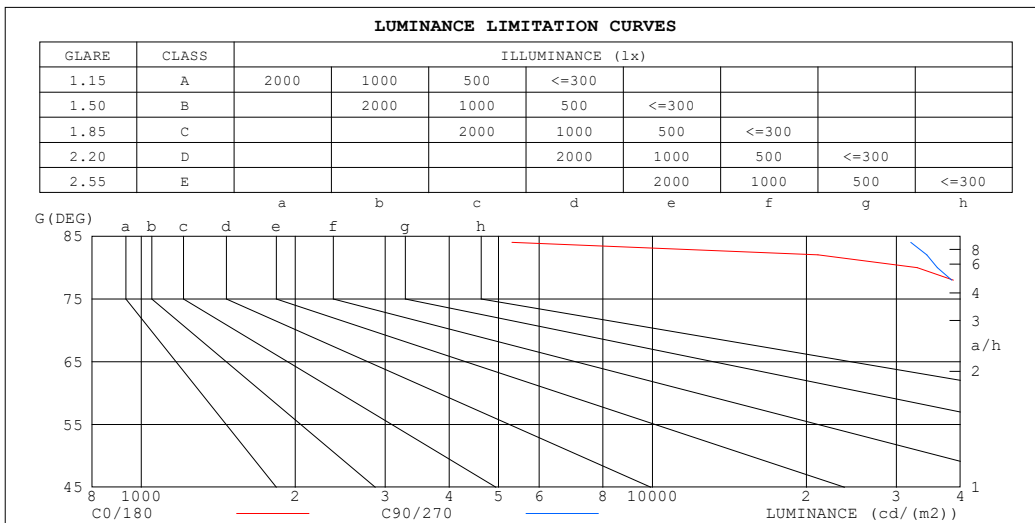
%lamp = 96.5%

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:220.38V I:0.9165A P:198.41W PF:0.9823 Freq:49.99Hz Lamp Flux:28167.2x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	6364	38412
80	32961	36066
75	47685	51370
70	52668	54499
65	55729	60614
60	57592	62133
55	67100	71535
50	90468	98966
45	216747	235789

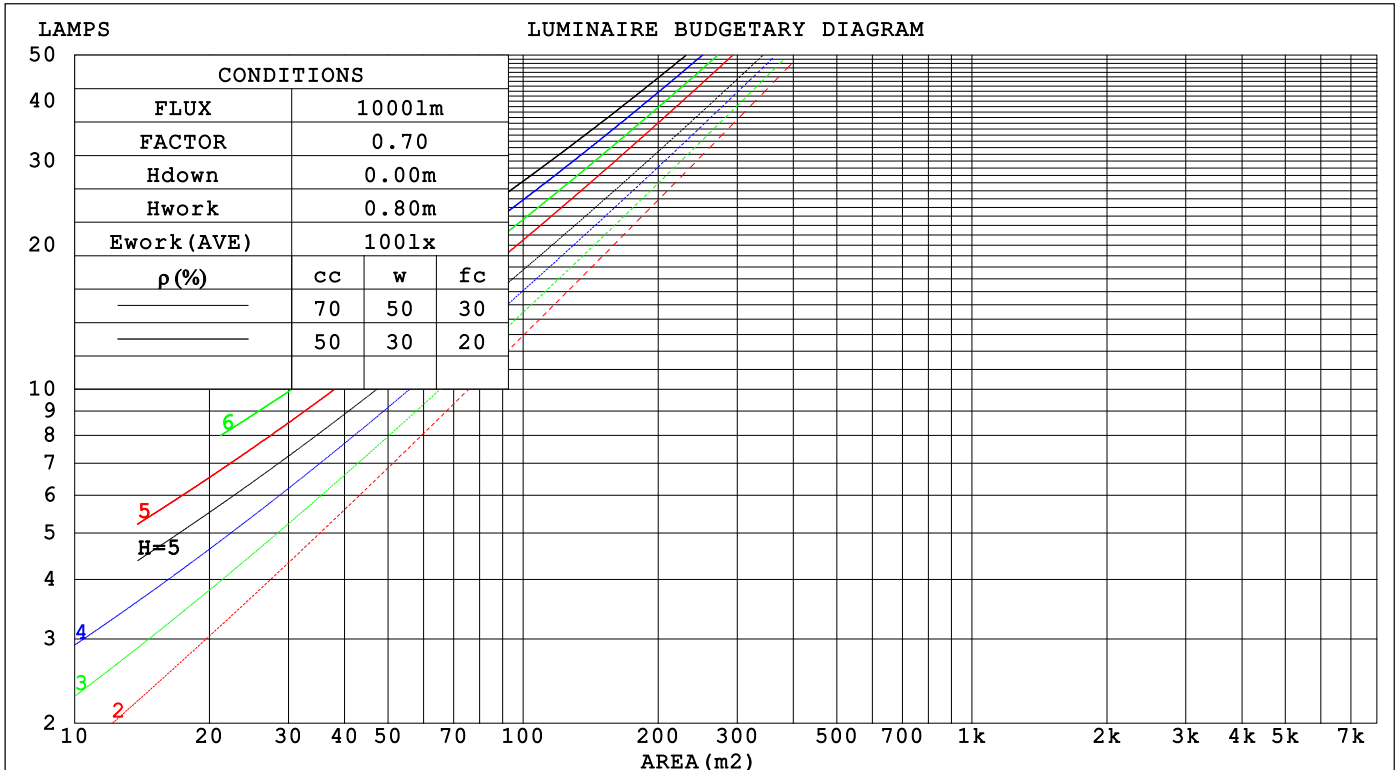
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3 °C
 Operators:
 Test Date:2023-07-31

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:220.38V I:0.9165A P:198.41W PF:0.9823 Freq:49.99Hz		
Lamp Flux:28167.2x1 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	1.08	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	.47	.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:220.38V I:0.9165A P:198.41W PF:0.9823 Freq:49.99Hz		
Lamp Flux:28167.2x1 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	.223	.127	.040	.217	.124	.039	.204	.117	.037	.192	.111	.036	.181	.105	.034	
2.0	.215	.118	.036	.209	.115	.036	.198	.110	.034	.188	.106	.033	.179	.101	.032	
3.0	.204	.109	.033	.199	.107	.032	.190	.103	.031	.181	.099	.030	.173	.096	.030	
4.0	.193	.100	.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	.079	.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	.069	.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	.122	.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	.070	.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:220.38V I:0.9165A P:198.41W PF:0.9823 Freq:49.99Hz										
Lamp Flux:28167.2x1 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	15.7	16.9	15.9	17.1	17.3	15.9	17.1	16.2	17.3	17.5
3H	16.0	17.1	16.3	17.3	17.5	16.2	17.3	16.5	17.5	17.8
4H	16.2	17.2	16.4	17.4	17.7	16.4	17.4	16.7	17.6	17.9
6H	16.2	17.2	16.5	17.4	17.7	16.4	17.4	16.7	17.7	17.9
8H	16.2	17.1	16.5	17.4	17.7	16.4	17.4	16.8	17.6	17.9
12H	16.1	17.0	16.5	17.3	17.6	16.4	17.3	16.8	17.6	17.9
4H 2H	15.7	16.7	16.0	16.9	17.2	15.9	16.9	16.2	17.1	17.4
3H	16.2	17.1	16.5	17.4	17.6	16.4	17.3	16.7	17.6	17.8
4H	16.4	17.2	16.8	17.5	17.9	16.6	17.5	17.0	17.8	18.1
6H	16.6	17.3	16.9	17.6	18.0	16.8	17.5	17.2	17.8	18.2
8H	16.5	17.2	16.9	17.6	17.9	16.8	17.5	17.2	17.8	18.2
12H	16.5	17.1	16.9	17.5	17.9	16.8	17.4	17.2	17.8	18.2
8H 4H	16.5	17.2	16.9	17.5	17.9	16.7	17.4	17.1	17.7	18.1
6H	16.7	17.2	17.1	17.6	18.0	16.9	17.4	17.3	17.8	18.2
8H	16.7	17.1	17.1	17.6	18.0	16.9	17.4	17.4	17.8	18.3
12H	16.6	17.0	17.1	17.5	17.9	17.0	17.4	17.4	17.8	18.3
12H 4H	16.5	17.1	16.9	17.4	17.8	16.7	17.3	17.1	17.6	18.0
6H	16.6	17.1	17.1	17.5	18.0	16.9	17.3	17.3	17.8	18.2
8H	16.6	17.0	17.1	17.5	18.0	16.9	17.3	17.4	17.8	18.2
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 1.5 / - 2.5					+ 1.4 / - 2.3				
1.5H	+ 2.7 / - 2.3					+ 2.7 / - 2.3				
2.0H	+ 3.4 / - 1.4					+ 3.5 / - 1.1				

CIE Pub.117, 28167 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 11.6)
 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:220.38V I:0.9165A P:198.41W PF:0.9823 Freq:49.99Hz Lamp Flux:28167.2x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

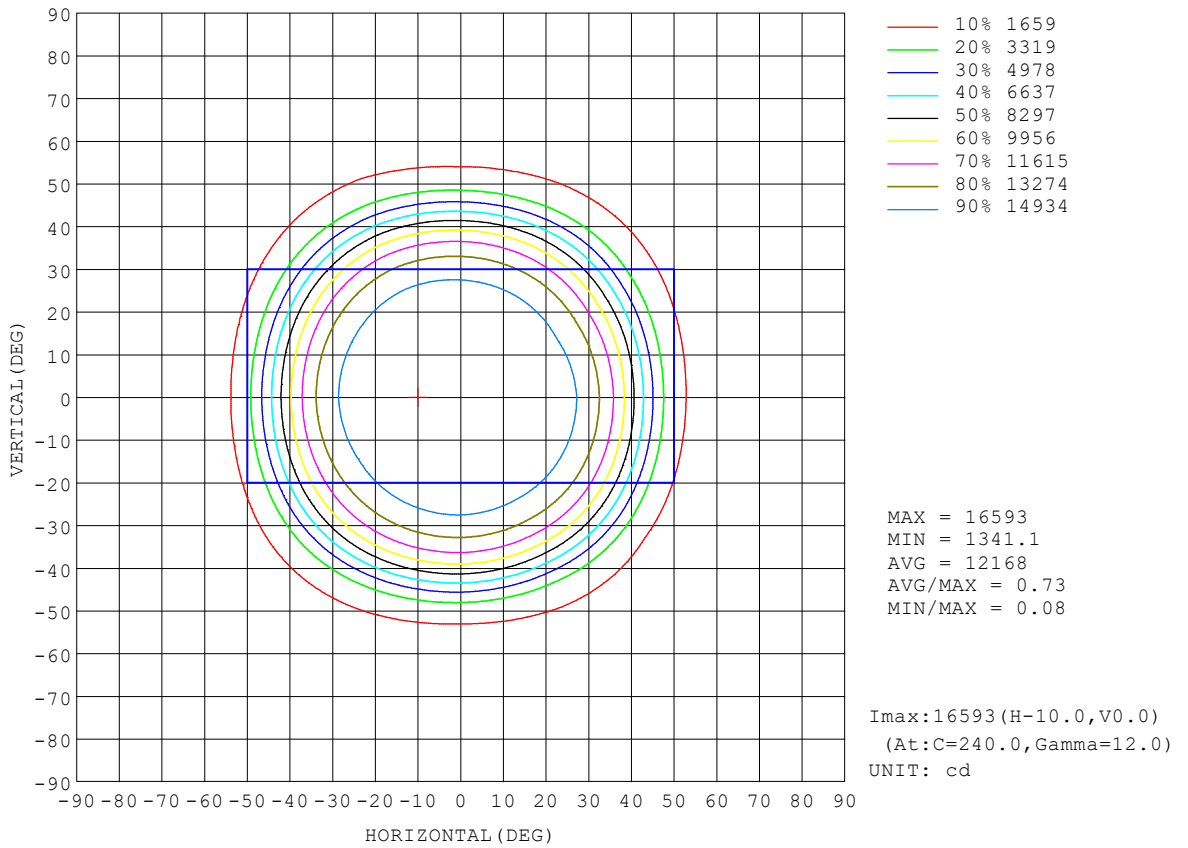
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	75	67	62	75	67	62	74	66	62	57
0.80	84	76	71	83	76	71	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	98	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:220.38V I:0.9165A P:198.41W PF:0.9823 Freq:49.99Hz Lamp Flux:28167.2x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

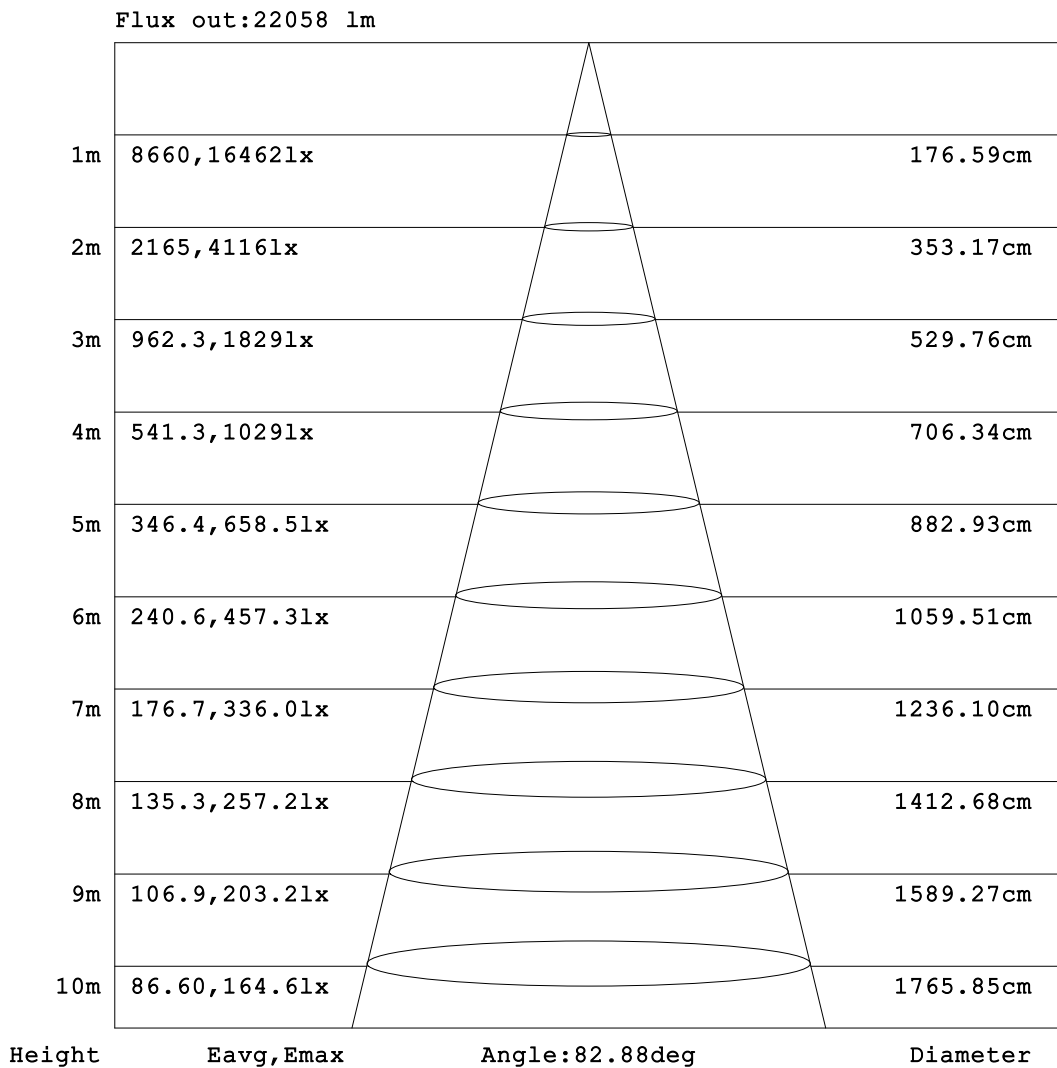


C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2023-07-31

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:220.38V I:0.9165A P:198.41W PF:0.9823 Freq:49.99Hz Lamp Flux:28167.2x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



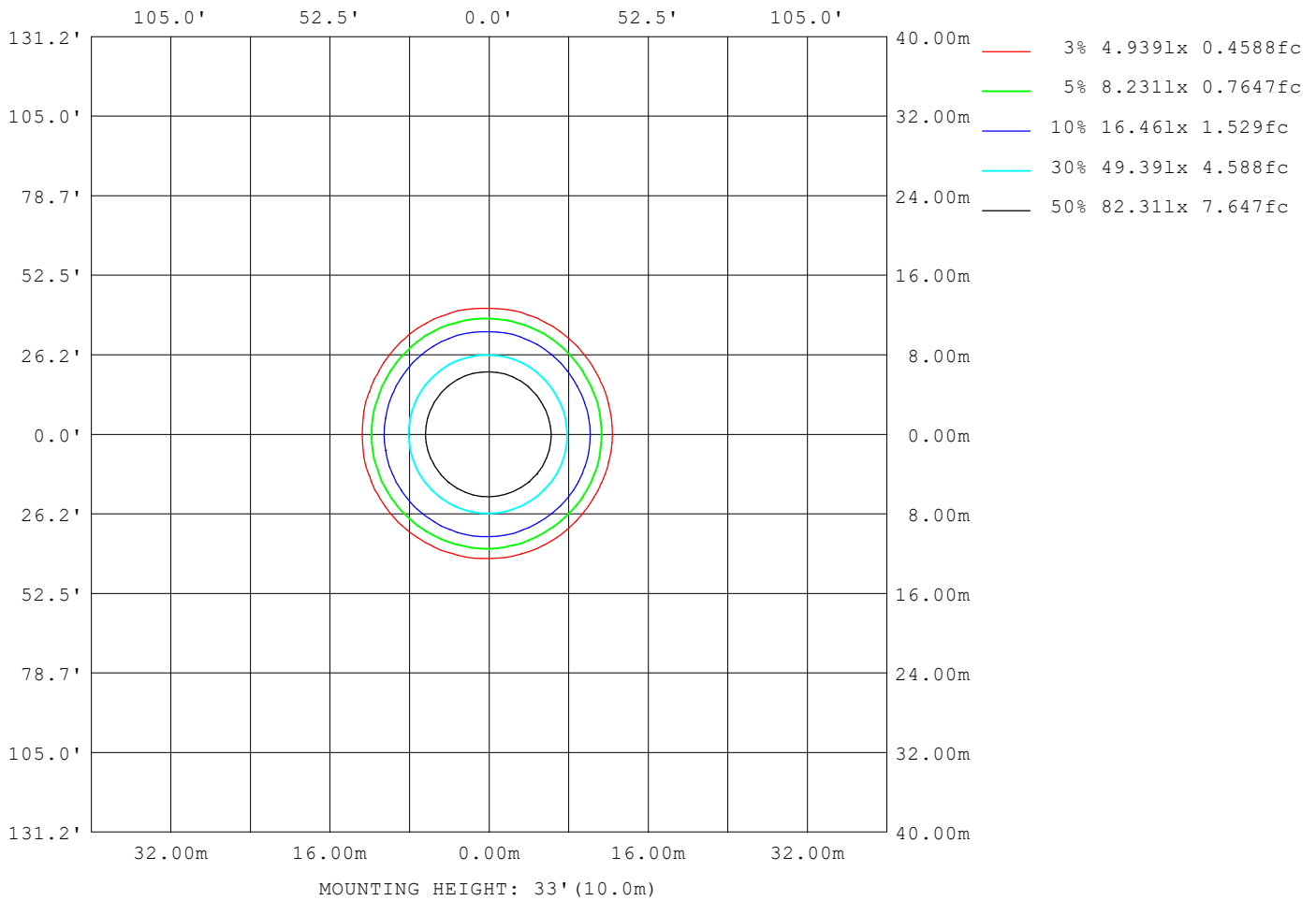
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:220.38V I:0.9165A P:198.41W PF:0.9823 Freq:49.99Hz Lamp Flux:28167.2x1 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:220.38V I:0.9165A P:198.41W PF:0.9823 Freq:49.99Hz Lamp Flux:28167.2x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

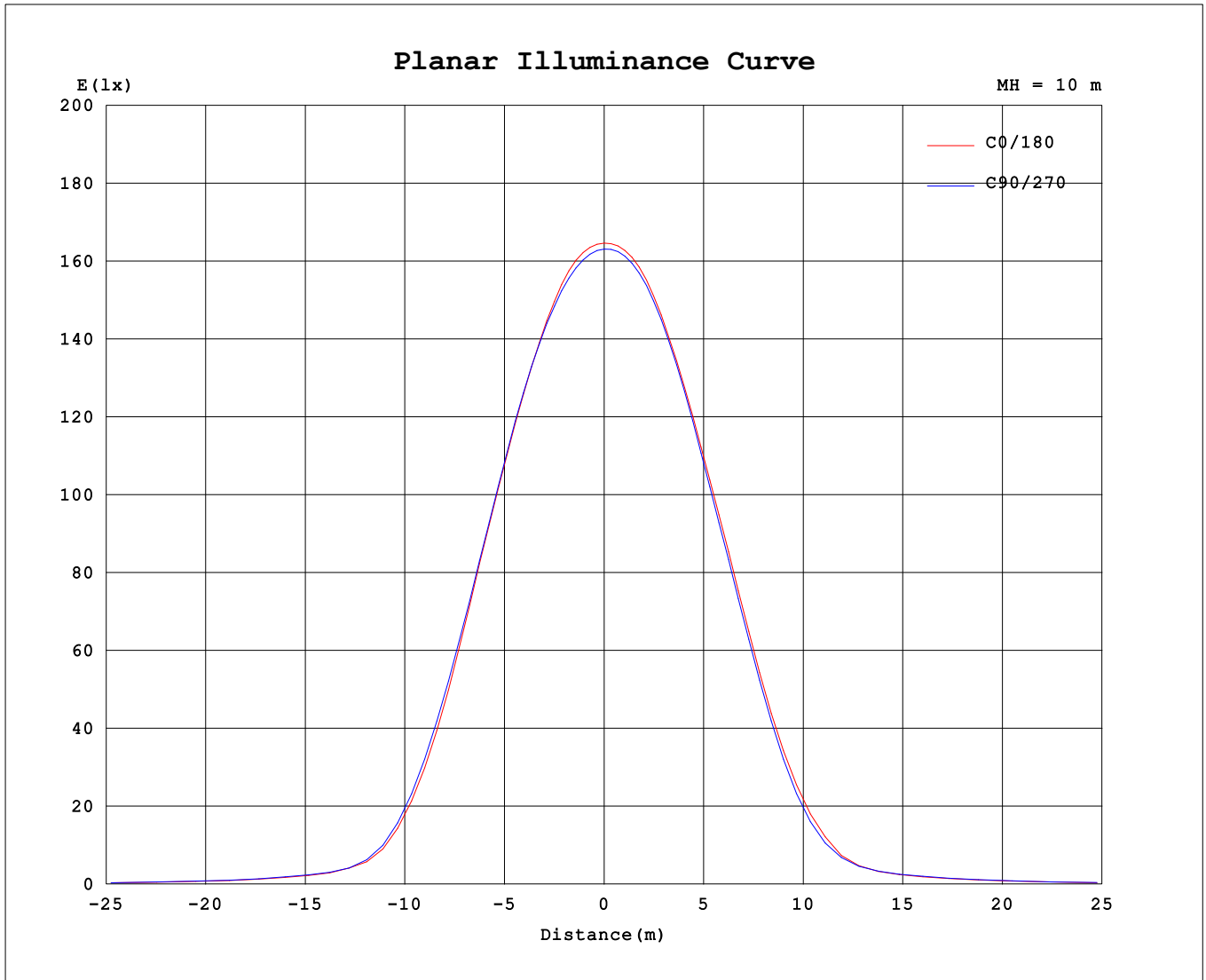
AvgL	cd/m2
L_0~180 (65) av	55440
L_0~180 (75) av	48601
L_0~180 (85) av	9006
L_90~270 (65) av	60697
L_90~270 (75) av	50337
L_90~270 (85) av	35938
L_45 (65) av	61191
L_45 (75) av	59380
L_45 (85) av	18189

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:

