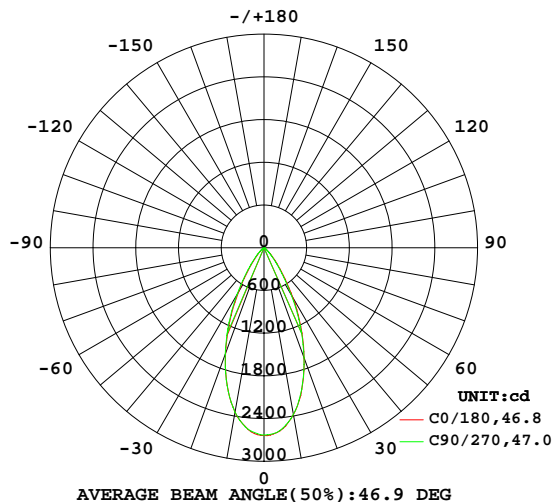


LUMINAIRE PHOTOMETRIC TEST REPORT

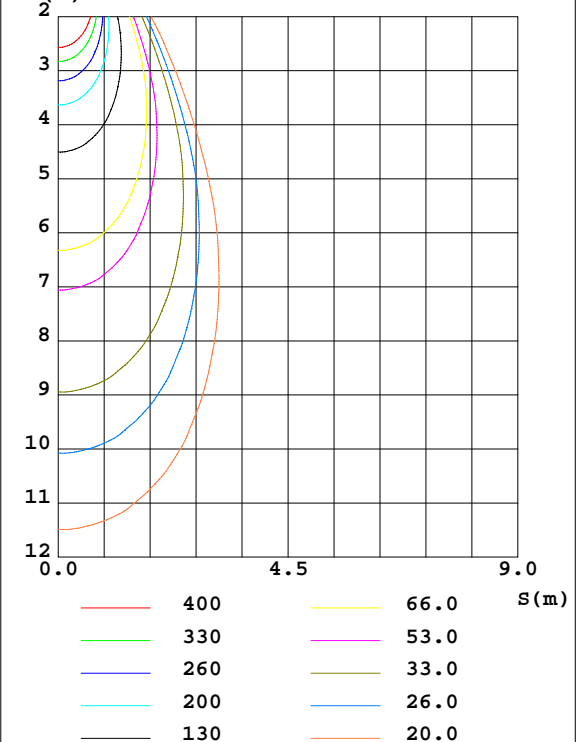
Test:U:229.84V I:0.1106A P:24.973W PF:0.9824 Freq:49.99Hz Lamp Flux:1746.17x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 69.92 lm/W			
MODEL		Imax(cd)	2641	S/MH(C0/180)	0.75
NOMINAL POWER(W)	25	LOR(%)	100.0	S/MH(C90/270)	0.75
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	1746.2	η UP,DN(C0-180)	0.0,50.8
NOMINAL FLUX(lm)	1746.17	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.2
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	230.0	η down(%)	100.0	CIBSE SHR MAX	0.75

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-07-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

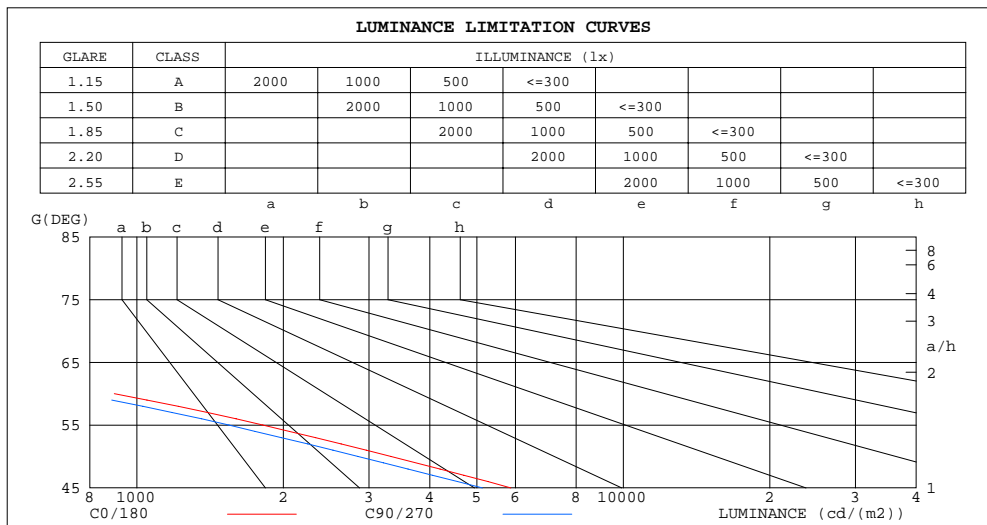
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	2380	2390	2379	2356	2344	2336	2346	2362	0- 10	238.3	238.3	13.6,13.6
20	1648	1656	1645	1610	1577	1567	1593	1626	10- 20	559.1	797.4	45.7,45.7
30	817.5	800.8	776.1	738.3	710.4	706.8	755.7	804.7	20- 30	536.3	1334	76.4,76.4
40	265.3	247.8	237.1	220.1	205.6	202.5	230.3	259.4	30- 40	279.6	1613	92.4,92.4
50	71.20	65.00	60.92	56.81	52.33	51.42	60.14	71.28	40- 50	98.60	1712	98,98
60	14.97	13.75	12.55	10.99	9.878	9.934	11.84	14.61	50- 60	28.16	1740	99.7,99.7
70	1.582	1.612	1.500	1.323	1.227	1.305	1.338	1.478	60- 70	4.790	1745	99.9,99.9
80	0.6702	0.6790	0.5930	0.5509	0.4631	0.4886	0.5138	0.5755	70- 80	0.9896	1746	100,100
90	0.1117	0.1031	0.0687	0.0773	0.1546	0.1460	0.1460	0.1289	80- 90	0.3218	1746	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		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2022-07-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
 Humidity:65.0%
 Test Distance:11.700m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:229.84V I:0.1106A P:24.973W PF:0.9824 Freq:49.99Hz Lamp Flux:1746.17x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	Shielding Angle:



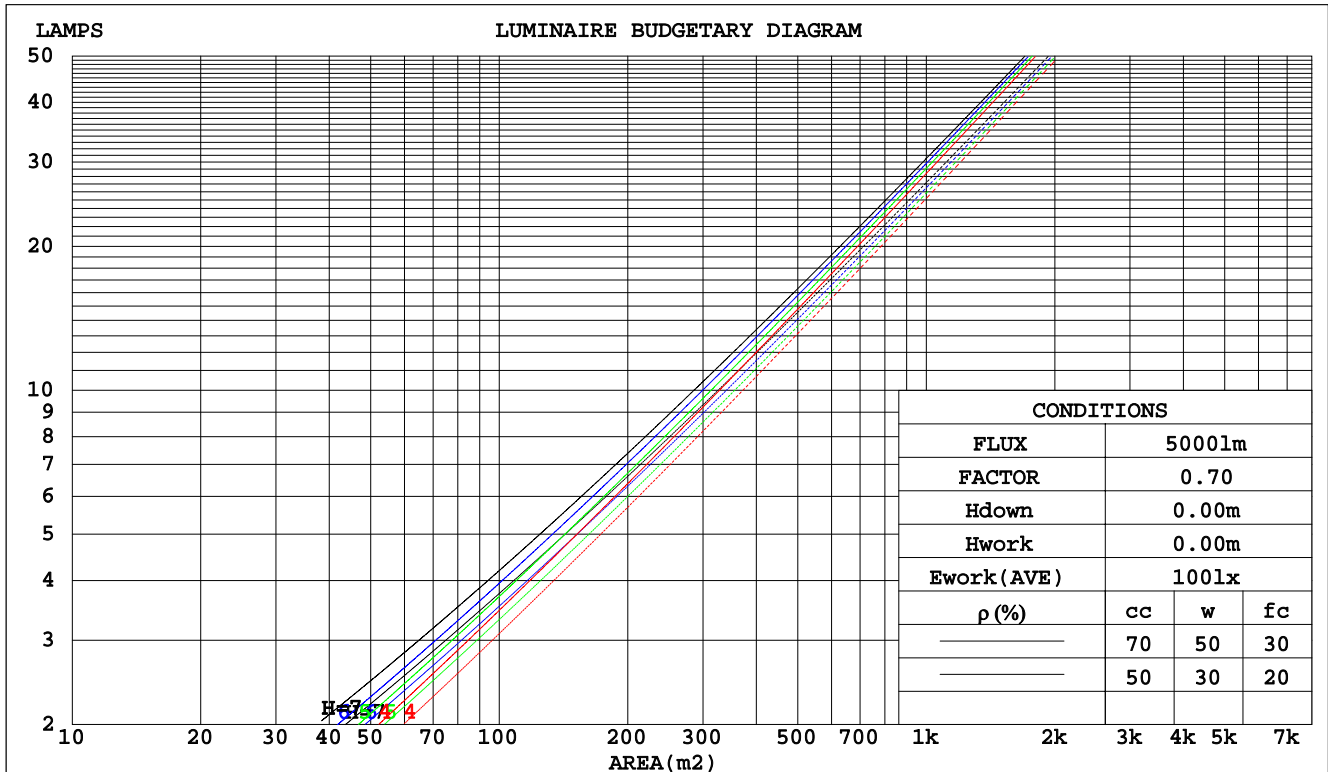
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2022-07-20

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity: 65.0%
Test Distance: 11.700m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:229.84V I:0.1106A P:24.973W PF:0.9824 Freq:49.99Hz Lamp Flux:1746.17x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	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	1.11	1.09	1.07	1.09	1.07	1.05	1.05	1.03	1.02	1.01	.00	.99	.98	.97	.96	.94
2.0	1.04	.00	.97	1.02	.99	.96	.99	.96	.93	.96	.94	.91	.93	.91	.90	.88
3.0	.97	.92	.89	.96	.91	.88	.93	.90	.86	.91	.88	.85	.89	.86	.84	.82
4.0	.91	.86	.82	.90	.85	.81	.88	.84	.80	.86	.82	.80	.84	.81	.79	.77
5.0	.86	.80	.76	.85	.80	.76	.83	.79	.75	.81	.78	.74	.80	.77	.74	.72
6.0	.81	.75	.71	.80	.75	.71	.79	.74	.70	.77	.73	.70	.76	.72	.69	.68
7.0	.76	.71	.67	.76	.70	.67	.75	.70	.66	.73	.69	.66	.72	.68	.66	.64
8.0	.72	.67	.63	.72	.66	.63	.71	.66	.62	.70	.65	.62	.69	.65	.62	.61
9.0	.69	.63	.59	.68	.63	.59	.67	.62	.59	.66	.62	.59	.66	.62	.59	.57
10.0	.65	.60	.56	.65	.60	.56	.64	.59	.56	.63	.59	.56	.63	.59	.56	.54



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2022-07-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
 Humidity:65.0%
 Test Distance:11.700m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:229.84V I:0.1106A P:24.973W PF:0.9824 Freq:49.99Hz Lamp Flux:1746.17x1 lm					
NAME:		TYPE:		WEIGHT:	
SPEC.:		DIM.: 228*48		SERIAL No.:	
MFR.:		SUR.:3.14*0.0.103*0.103		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	.172	.098	.031	.165	.094	.030	.152	.087	.028	.141	.081	.026	.130	.075	.024	
2.0	.164	.090	.028	.158	.087	.027	.148	.082	.026	.138	.077	.024	.129	.073	.023	
3.0	.156	.083	.025	.151	.081	.024	.142	.077	.023	.134	.073	.023	.126	.070	.022	
4.0	.148	.077	.023	.144	.076	.022	.137	.072	.022	.129	.070	.021	.123	.067	.020	
5.0	.141	.072	.021	.138	.071	.021	.131	.068	.020	.125	.066	.020	.119	.064	.019	
6.0	.135	.068	.019	.132	.067	.019	.126	.065	.019	.120	.063	.018	.115	.061	.018	
7.0	.129	.064	.018	.126	.063	.018	.121	.061	.018	.116	.060	.017	.111	.058	.017	
8.0	.123	.060	.017	.121	.060	.017	.116	.058	.017	.112	.057	.016	.108	.055	.016	
9.0	.118	.057	.016	.116	.057	.016	.112	.055	.016	.108	.054	.015	.104	.053	.015	
10.0	.113	.054	.015	.111	.054	.015	.108	.053	.015	.104	.052	.015	.101	.051	.015	

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.171	.157	.145	.146	.135	.125	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.155	.133	.113	.133	.114	.098	.091	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.143	.114	.090	.122	.098	.078	.084	.068	.055	.048	.040	.032	.016	.013	.011	
4.0	.132	.099	.073	.113	.085	.064	.078	.059	.045	.045	.035	.027	.015	.011	.009	
5.0	.123	.087	.060	.106	.075	.053	.073	.053	.037	.042	.031	.022	.014	.010	.007	
6.0	.116	.078	.050	.099	.067	.044	.069	.047	.031	.040	.028	.018	.013	.009	.006	
7.0	.109	.070	.043	.094	.061	.037	.065	.043	.026	.038	.025	.016	.012	.008	.005	
8.0	.103	.064	.037	.089	.055	.032	.062	.039	.023	.036	.023	.014	.012	.008	.004	
9.0	.098	.059	.032	.085	.051	.028	.059	.036	.020	.034	.021	.012	.011	.007	.004	
10.0	.094	.054	.028	.081	.047	.024	.056	.033	.017	.033	.020	.010	.011	.006	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-07-20

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:229.84V I:0.1106A P:24.973W PF:0.9824 Freq:49.99Hz Lamp Flux:1746.17x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:					DIM.: 228*48			SERIAL No.:			
MFR.:					SUR.:3.14*0.0.103*0.103			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	2H	13.6	14.5	13.8	14.7	14.9	13.2	14.1	13.5	14.3	14.5
	3H	13.5	14.3	13.7	14.5	14.7	13.1	13.9	13.3	14.1	14.3
	4H	13.4	14.2	13.7	14.4	14.6	13.0	13.8	13.3	14.0	14.2
	6H	13.3	14.0	13.6	14.3	14.5	12.9	13.6	13.2	13.9	14.1
	8H	13.2	14.0	13.6	14.2	14.5	12.9	13.6	13.2	13.8	14.1
	12H	13.2	13.9	13.5	14.1	14.4	12.8	13.5	13.1	13.8	14.0
4H	2H	13.4	14.2	13.7	14.4	14.6	13.0	13.8	13.3	14.0	14.2
	3H	13.2	13.9	13.5	14.2	14.5	12.8	13.5	13.2	13.8	14.1
	4H	13.1	13.8	13.5	14.0	14.4	12.8	13.4	13.1	13.7	14.0
	6H	13.0	13.6	13.4	13.9	14.3	12.7	13.2	13.0	13.5	13.9
	8H	13.0	13.5	13.4	13.8	14.2	12.6	13.1	13.0	13.5	13.8
	12H	12.9	13.4	13.3	13.8	14.2	12.6	13.0	13.0	13.4	13.8
8H	4H	13.0	13.5	13.4	13.8	14.2	12.6	13.1	13.0	13.5	13.8
	6H	12.9	13.3	13.3	13.7	14.1	12.5	12.9	12.9	13.3	13.7
	8H	12.8	13.2	13.3	13.6	14.1	12.5	12.8	12.9	13.2	13.7
	12H	12.8	13.1	13.2	13.5	14.0	12.4	12.7	12.9	13.1	13.6
12H	4H	12.9	13.4	13.3	13.8	14.2	12.6	13.0	13.0	13.4	13.8
	6H	12.8	13.2	13.3	13.6	14.1	12.5	12.8	12.9	13.2	13.7
	8H	12.8	13.1	13.2	13.5	14.0	12.4	12.7	12.9	13.1	13.6
Variations with the observer position at spacings:											
S = 1.0H		+ 3.0 / - 8.6					+ 2.8 / - 9.0				
1.5H		+ 4.5 / - 6.2					+ 4.4 / - 6.0				
2.0H		+ 5.6 / - 9.5					+ 5.3 / - 9.2				

CIE Pub.117, 1746 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 1.9$)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2022-07-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
 Humidity:65.0%
 Test Distance:11.700m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:229.84V I:0.1106A P:24.973W PF:0.9824 Freq:49.99Hz Lamp Flux:1746.17x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	Shielding Angle:

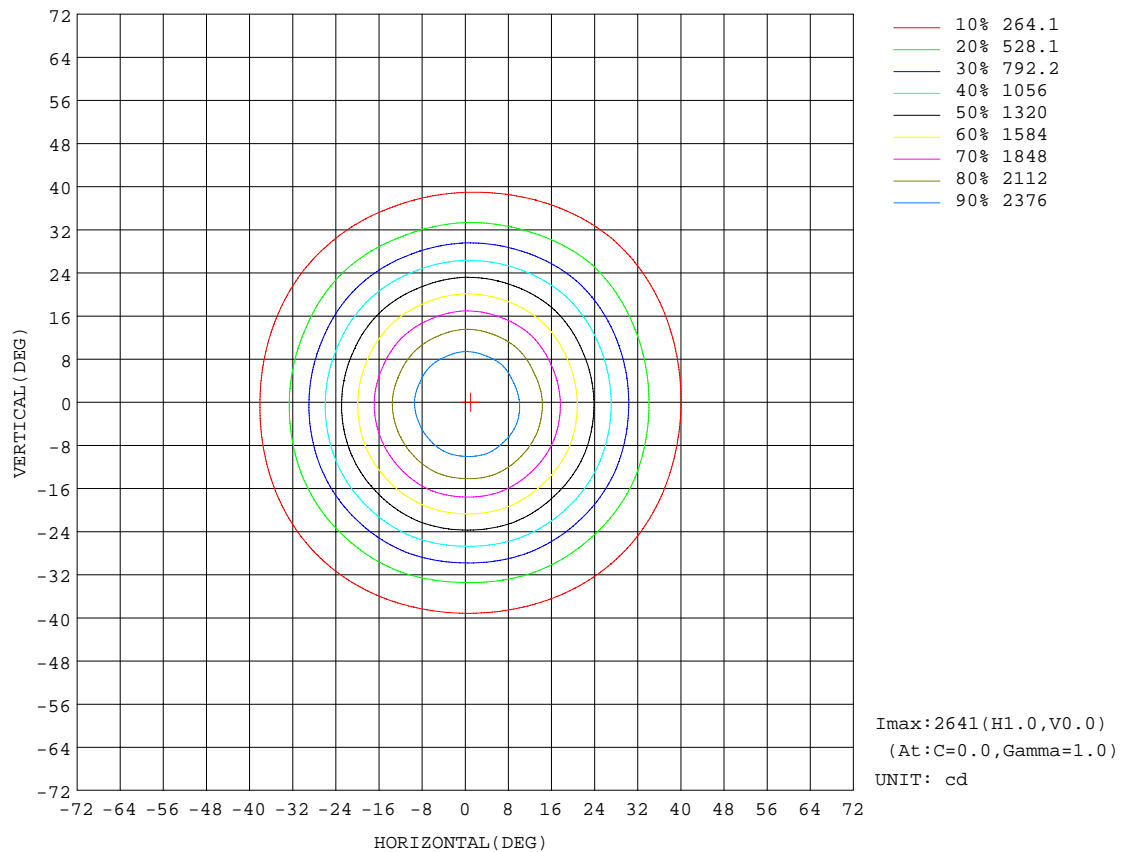
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	87	80	76	86	80	76	85	80	76	73
0.80	94	88	85	94	88	84	92	87	84	80
1.00	99	93	90	98	93	89	97	93	89	85
1.25	103	98	94	102	97	94	100	96	93	89
1.50	106	101	98	105	100	97	102	99	96	92
2.00	109	104	101	107	103	100	104	101	99	94
2.50	110	106	103	109	105	103	106	103	101	95
3.00	112	108	106	110	107	105	107	104	102	96
4.00	114	111	109	112	109	107	108	106	105	98
5.00	115	113	111	113	111	109	109	107	106	99
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-07-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:229.84V I:0.1106A P:24.973W PF:0.9824 Freq:49.99Hz Lamp Flux:1746.17x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	Shielding Angle:

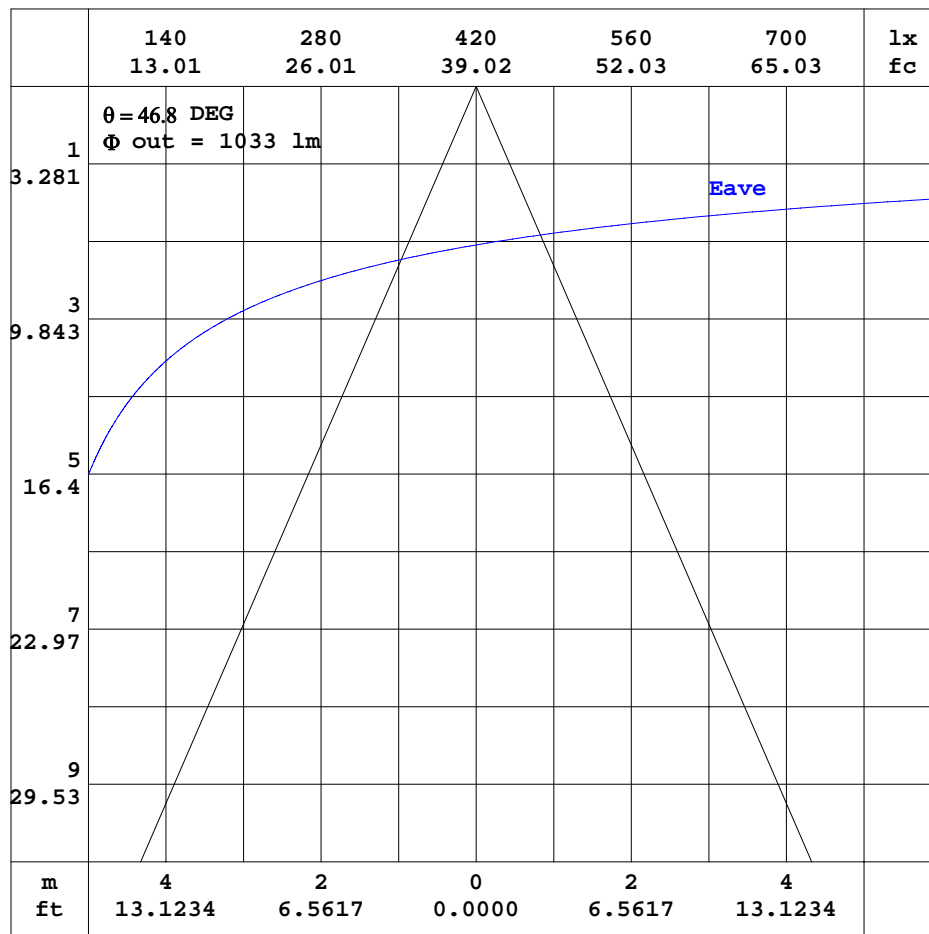


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-07-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

AAI CURVES

Test:U:229.84V I:0.1106A P:24.973W PF:0.9824 Freq:49.99Hz Lamp Flux:1746.17x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	Shielding Angle:



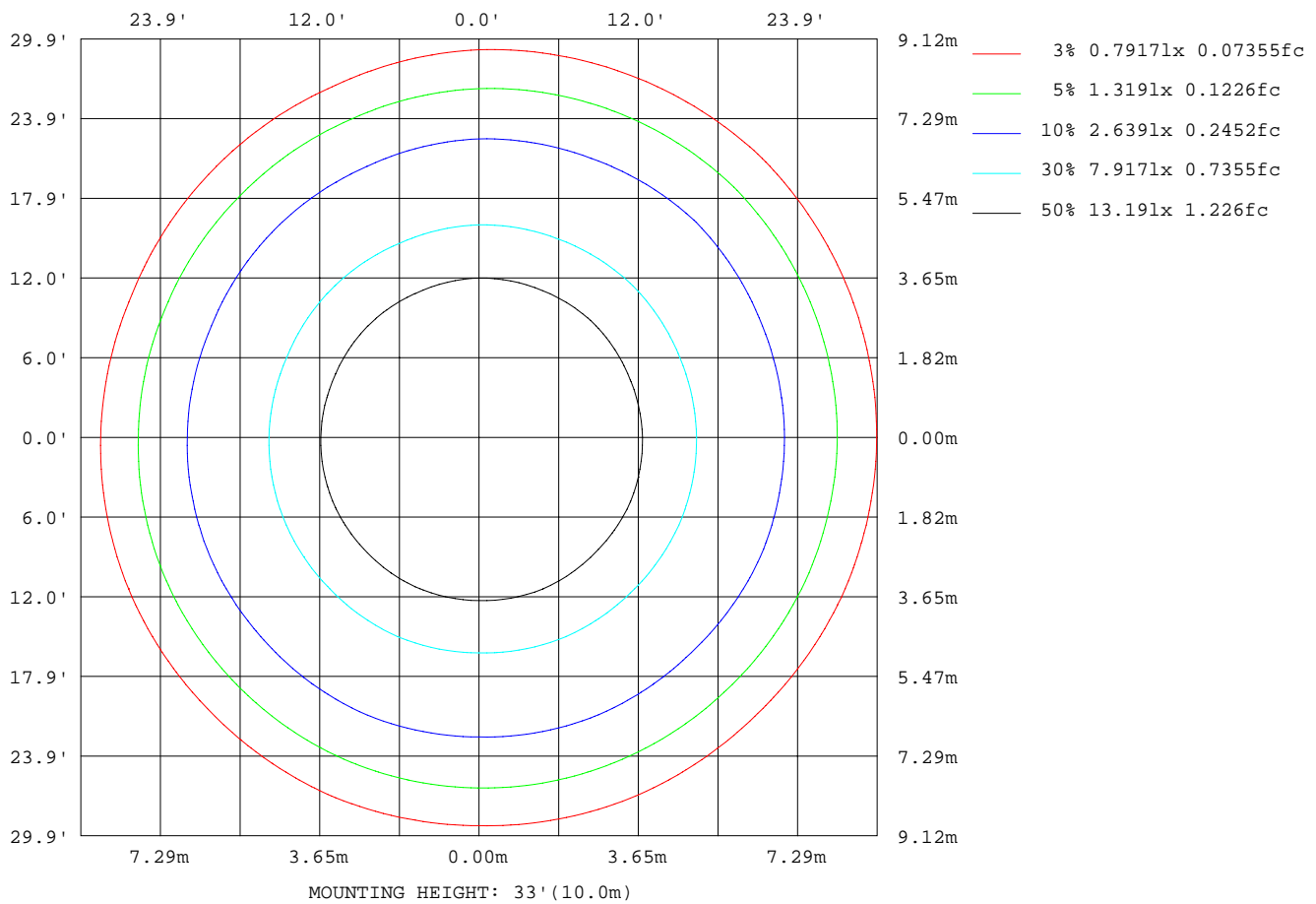
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2022-07-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
 Humidity: 65.0%
 Test Distance: 11.700m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:229.84V I:0.1106A P:24.973W PF:0.9824 Freq:49.99Hz Lamp Flux:1746.17x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2022-07-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity: 65.0%
Test Distance: 11.700m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:229.84V I:0.1106A P:24.973W PF:0.9824 Freq:49.99Hz Lamp Flux:1746.17x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	Shielding Angle:

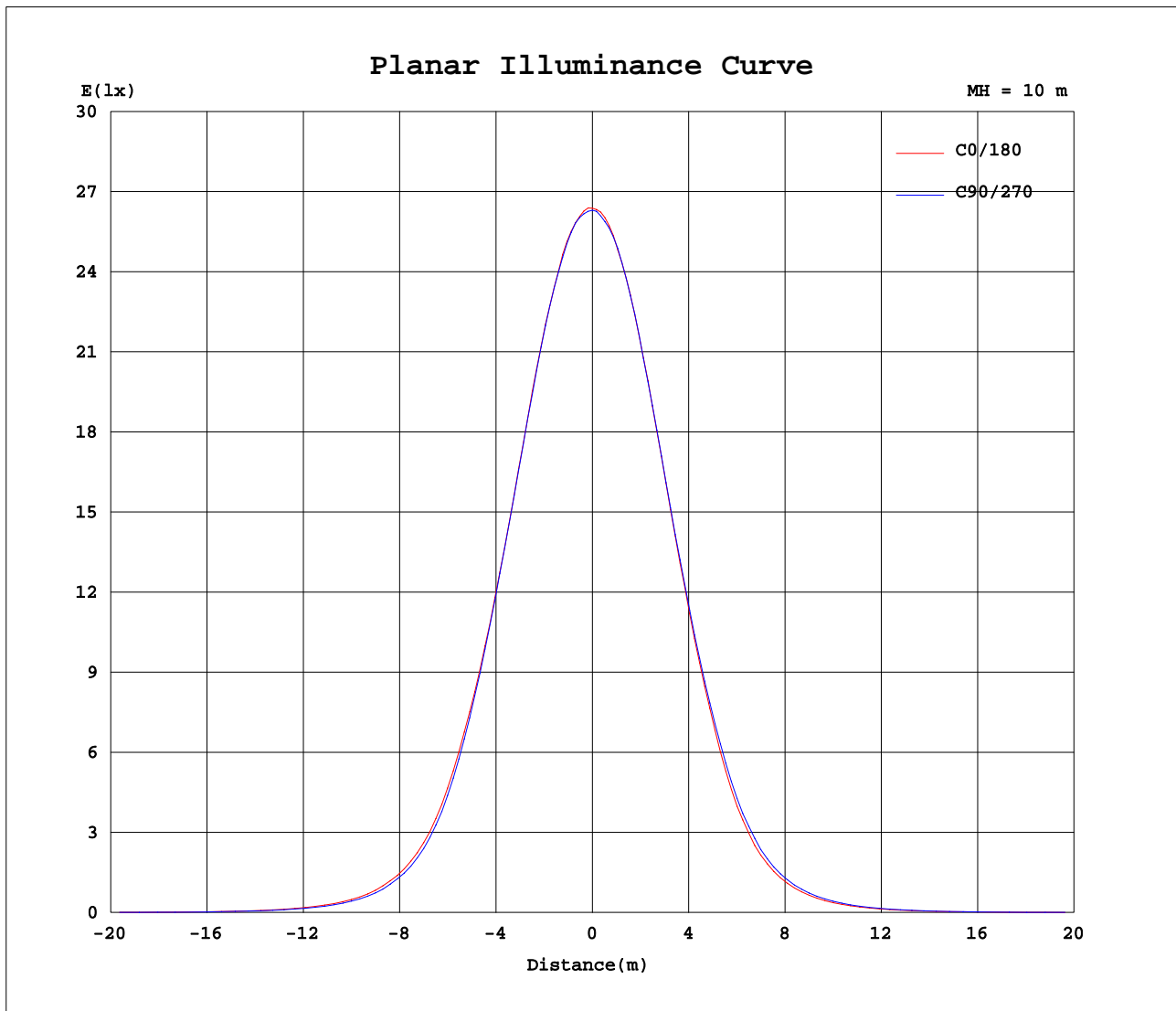
AvgL	cd/m2
L_0~180(65)av	278
L_0~180(75)av	106
L_0~180(85)av	95
L_90~270(65)av	274
L_90~270(75)av	105
L_90~270(85)av	99
L_45(65)av	277
L_45(75)av	108
L_45(85)av	91

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-07-20

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2022-07-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity: 65.0%
Test Distance: 11.700m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

```