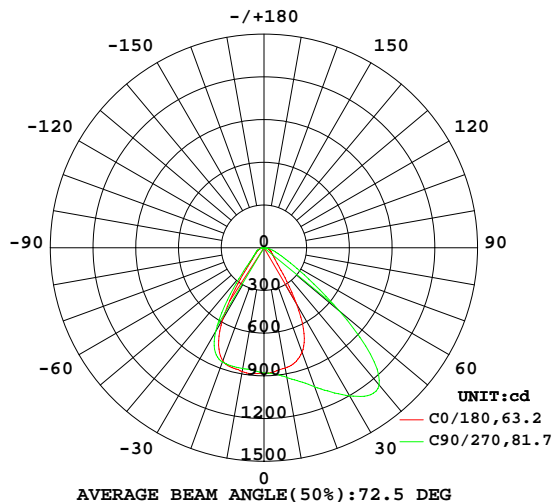


LUMINAIRE PHOTOMETRIC TEST REPORT

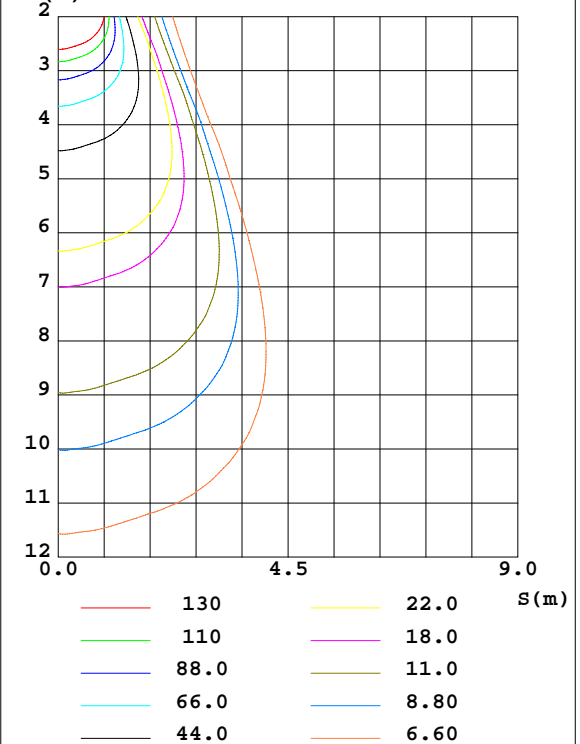
Test:U:229.64V I:0.4348A P:98.446W PF:0.9860 Freq:49.99Hz Lamp Flux:1623.39x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*160*28	SERIAL No.:
MFR.:	SUR.:0.4*0.12	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 16.49 lm/W			
MODEL		Imax(cd)	1279	S/MH(C0/180)	0.96
NOMINAL POWER(W)	12	LOR(%)	100.0	S/MH(C90/270)	1.02
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	1623.4	η UP,DN(C0-180)	0.0,61.8
NOMINAL FLUX(lm)	1623.39	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,38.2
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	230.0	η down(%)	100.0	CIBSE SHR MAX	1.10

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:2024-08-26

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:

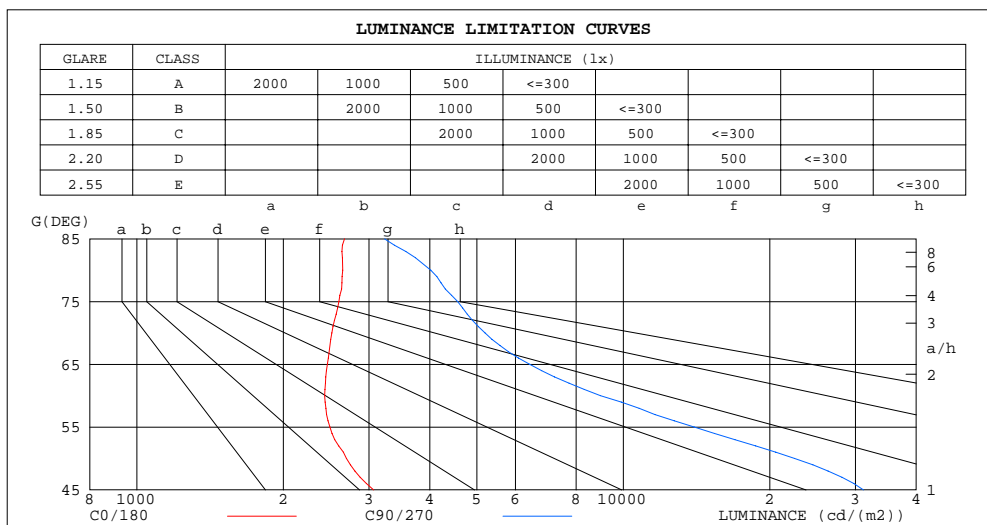
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	$\%lum, lamp$
10	858.1	896.4	924.9	903.9	882.4	864.4	862.5	845.6	0- 10	83.76	83.76	5.16,5.16
20	780.9	920.0	1039	961.9	846.4	833.6	853.7	805.2	10- 20	249.9	333.7	20.6,20.6
30	459.1	885.3	1201	1004	581.2	720.3	680.1	643.7	20- 30	387.8	721.5	44.4,44.4
40	146.8	550.9	1257	777.9	193.9	353.4	248.0	295.5	30- 40	390.5	1112	68.5,68.5
50	83.16	174.7	693.4	273.1	92.01	125.3	99.88	110.3	40- 50	264.6	1377	84.8,84.8
60	58.38	83.16	215.3	100.2	59.73	62.63	66.43	61.53	50- 60	127.1	1504	92.6,92.6
70	41.31	51.79	85.34	54.91	40.64	43.46	44.49	43.94	60- 70	67.74	1571	96.8,96.8
80	22.09	25.47	33.51	25.45	20.93	21.05	20.32	21.82	70- 80	39.42	1611	99.2,99.2
90	0.9966	0.7045	0.3780	0.3007	0.4983	0.8333	1.340	1.426	80- 90	12.59	1623	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:2024-08-26

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:229.64V I:0.4348A P:98.446W PF:0.9860 Freq:49.99Hz Lamp Flux:1623.39x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*160*28	SERIAL No.:
MFR.:	SUR.:0.4*0.12	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	2672	3230
80	2650	4021
75	2602	4564
70	2516	5198
65	2464	6422
60	2433	8973
55	2493	13987
50	2695	22474
45	3066	31160

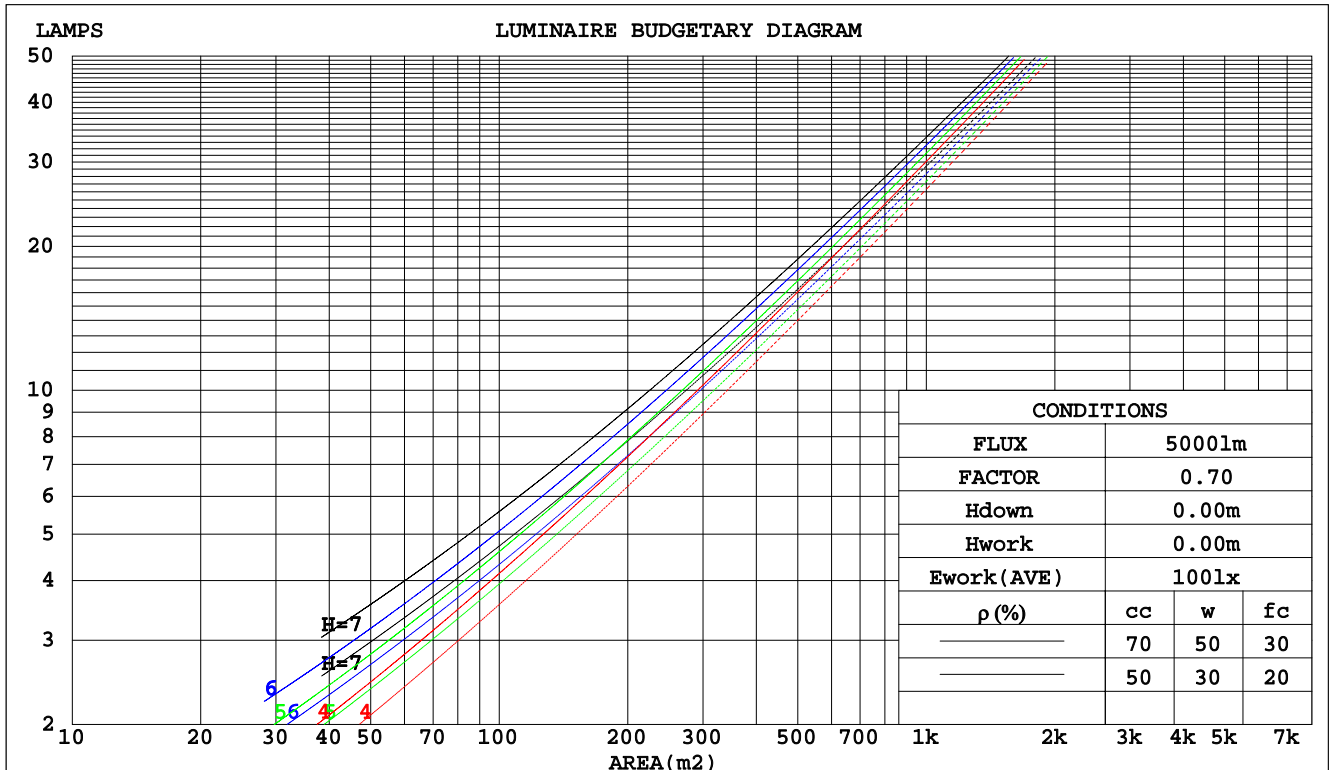
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-08-26

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:229.64V I:0.4348A P:98.446W PF:0.9860 Freq:49.99Hz Lamp Flux:1623.39x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*160*28	SERIAL No.:
MFR.:	SUR.:0.4*0.12	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	1.04	1.01	1.05	1.02	.00	1.01	.99	.97	.98	.96	.94	.94	.92	.91	.89
2.0	.97	.92	.87	.95	.91	.86	.92	.88	.84	.89	.86	.83	.86	.83	.81	.79
3.0	.88	.82	.76	.87	.81	.76	.84	.79	.74	.81	.77	.73	.79	.75	.72	.70
4.0	.80	.73	.67	.79	.72	.67	.77	.71	.66	.74	.69	.65	.72	.68	.65	.63
5.0	.73	.66	.60	.72	.65	.60	.70	.64	.59	.68	.63	.59	.67	.62	.58	.56
6.0	.67	.60	.54	.66	.59	.54	.65	.58	.53	.63	.57	.53	.62	.57	.53	.51
7.0	.62	.54	.49	.61	.54	.49	.60	.53	.48	.58	.52	.48	.57	.52	.48	.46
8.0	.57	.50	.45	.56	.49	.44	.55	.49	.44	.54	.48	.44	.53	.48	.44	.42
9.0	.53	.46	.41	.52	.45	.41	.51	.45	.41	.50	.44	.40	.49	.44	.40	.39
10.0	.49	.42	.37	.49	.42	.37	.48	.42	.37	.47	.41	.37	.46	.41	.37	.35



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-08-26

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:229.64V I:0.4348A P:98.446W PF:0.9860 Freq:49.99Hz Lamp Flux:1623.39x1 lm								
NAME:			TYPE:			WEIGHT:		
SPEC.:			DIM.: 620*160*28			SERIAL No.:		
MFR.:			SUR.:0.4*0.12			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	.237	.135	.043	.230	.131	.042	.217	.125	.040	.205	.118	.038	.194	.113	.036	
2.0	.227	.124	.038	.221	.122	.037	.210	.117	.036	.199	.112	.035	.190	.107	.034	
3.0	.214	.114	.034	.209	.112	.034	.199	.108	.033	.190	.104	.032	.182	.101	.031	
4.0	.202	.105	.031	.197	.103	.031	.189	.100	.030	.181	.097	.029	.174	.094	.029	
5.0	.190	.097	.028	.186	.096	.028	.179	.093	.027	.172	.091	.027	.165	.088	.027	
6.0	.179	.090	.026	.176	.089	.026	.169	.087	.025	.163	.085	.025	.157	.083	.025	
7.0	.170	.084	.024	.167	.083	.024	.161	.081	.023	.155	.079	.023	.150	.078	.023	
8.0	.161	.078	.022	.158	.078	.022	.153	.076	.022	.147	.075	.022	.143	.073	.021	
9.0	.152	.074	.021	.150	.073	.020	.145	.072	.020	.141	.070	.020	.136	.069	.020	
10.0	.145	.069	.019	.143	.069	.019	.138	.068	.019	.134	.067	.019	.130	.066	.019	

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	.175	.157	.140	.150	.135	.121	.103	.093	.083	.059	.054	.049	.019	.017	.016	
2.0	.164	.132	.106	.140	.114	.092	.096	.079	.064	.055	.046	.037	.018	.015	.012	
3.0	.154	.114	.082	.132	.098	.071	.090	.068	.050	.052	.040	.029	.017	.013	.010	
4.0	.145	.100	.065	.125	.086	.057	.086	.060	.040	.050	.035	.024	.016	.011	.008	
5.0	.138	.089	.053	.118	.077	.046	.081	.054	.033	.047	.032	.019	.015	.010	.006	
6.0	.131	.080	.044	.112	.069	.038	.077	.049	.027	.045	.029	.016	.015	.009	.005	
7.0	.124	.073	.037	.107	.063	.032	.074	.044	.023	.043	.026	.014	.014	.009	.005	
8.0	.119	.067	.032	.102	.058	.028	.071	.041	.020	.041	.024	.012	.013	.008	.004	
9.0	.113	.062	.028	.098	.054	.024	.068	.038	.017	.039	.022	.010	.013	.007	.003	
10.0	.108	.058	.024	.093	.050	.021	.065	.035	.015	.038	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-08-26

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:229.64V I:0.4348A P:98.446W PF:0.9860 Freq:49.99Hz Lamp Flux:1623.39x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:					DIM.: 620*160*28			SERIAL No.:			
MFR.:					SUR.:0.4*0.12			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	14.7	15.9	14.9	16.1	16.3	23.1	24.3	23.3	24.5	24.7
	3H	15.4	16.6	15.7	16.8	17.0	23.2	24.4	23.5	24.6	24.8
	4H	15.8	16.9	16.1	17.2	17.4	23.3	24.4	23.6	24.6	24.9
	6H	16.2	17.3	16.6	17.5	17.8	23.4	24.4	23.7	24.6	24.9
	8H	16.4	17.4	16.7	17.7	17.9	23.4	24.3	23.7	24.6	24.9
	12H	16.5	17.5	16.9	17.7	18.0	23.3	24.3	23.7	24.6	24.9
4H	2H	15.4	16.5	15.7	16.7	17.0	22.9	24.0	23.2	24.2	24.4
	3H	16.3	17.3	16.6	17.5	17.8	23.1	24.1	23.5	24.3	24.6
	4H	16.9	17.7	17.2	18.0	18.3	23.3	24.1	23.6	24.4	24.7
	6H	17.4	18.1	17.8	18.5	18.8	23.4	24.1	23.8	24.5	24.8
	8H	17.6	18.3	18.0	18.6	19.0	23.4	24.1	23.8	24.5	24.9
	12H	17.8	18.4	18.2	18.8	19.2	23.4	24.1	23.9	24.5	24.9
8H	4H	17.2	17.9	17.6	18.2	18.6	23.2	23.9	23.6	24.2	24.6
	6H	17.9	18.4	18.3	18.8	19.3	23.4	24.0	23.8	24.4	24.8
	8H	18.2	18.7	18.6	19.1	19.6	23.5	24.0	23.9	24.4	24.8
	12H	18.4	18.9	18.9	19.3	19.8	23.5	24.0	24.0	24.4	24.9
12H	4H	17.2	17.9	17.7	18.3	18.7	23.2	23.8	23.6	24.2	24.6
	6H	18.0	18.5	18.4	18.9	19.3	23.4	23.9	23.8	24.3	24.7
	8H	18.3	18.8	18.8	19.2	19.7	23.5	23.9	23.9	24.4	24.8
Variations with the observer position at spacings:											
S = 1.0H	+ 0.9 / - 0.7					+ 1.1 / - 1.4					
1.5H	+ 1.2 / - 0.8					+ 2.2 / - 3.7					
2.0H	+ 0.6 / - 0.5					+ 4.4 / - 4.3					

CIE Pub.117, 1623 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 1.7$)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-08-26

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:229.64V I:0.4348A P:98.446W PF:0.9860 Freq:49.99Hz Lamp Flux:1623.39x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*160*28	SERIAL No.:
MFR.:	SUR.:0.4*0.12	Shielding Angle:

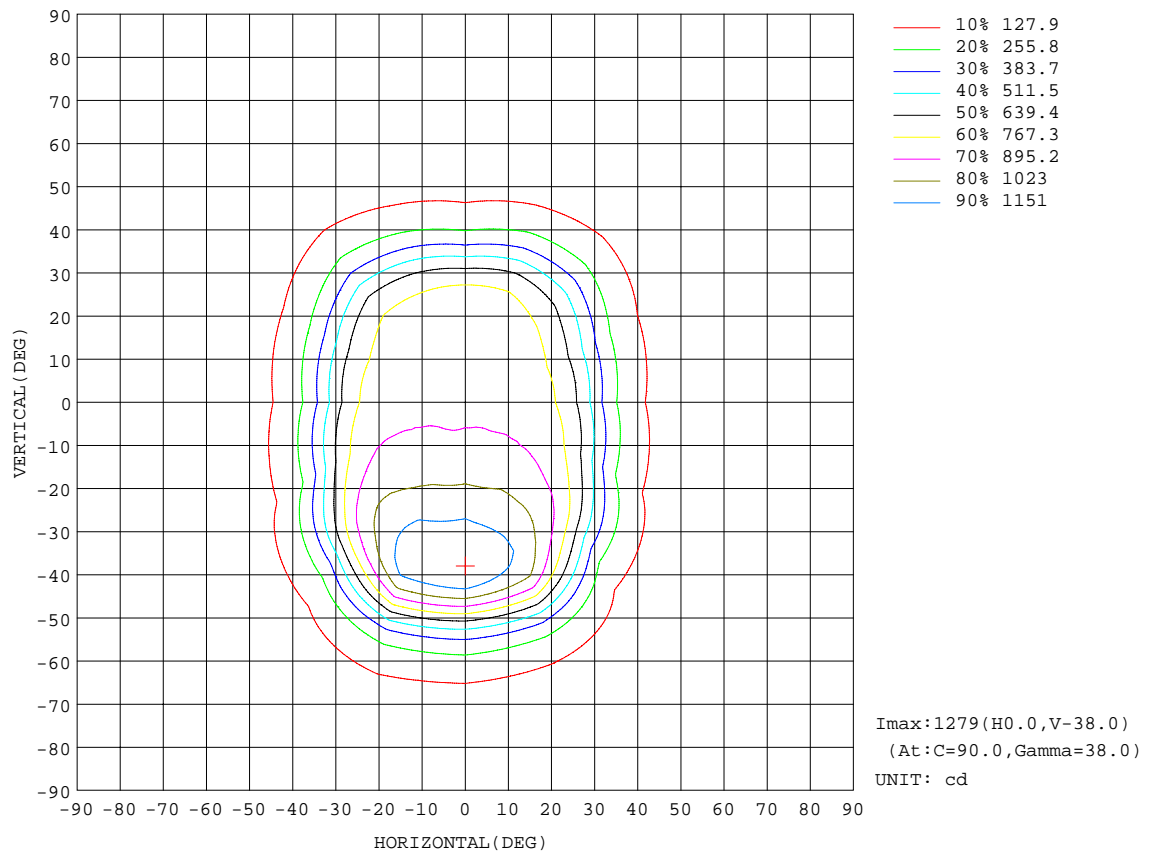
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	72	63	57	71	62	57	70	62	57	52
0.80	81	72	67	80	72	67	79	71	66	61
1.00	88	80	75	87	79	74	85	80	74	68
1.25	94	86	81	93	86	81	90	84	80	74
1.50	98	91	86	96	90	85	94	88	84	78
2.00	103	96	92	101	95	91	98	93	90	83
2.50	105	100	95	103	98	94	100	96	92	85
3.00	108	103	99	106	101	98	102	98	95	88
4.00	110	106	103	108	105	102	104	101	99	91
5.00	112	109	106	110	107	104	105	103	101	93
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:2024-08-26

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:229.64V I:0.4348A P:98.446W PF:0.9860 Freq:49.99Hz Lamp Flux:1623.39x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*160*28	SERIAL No.:
MFR.:	SUR.:0.4*0.12	Shielding Angle:

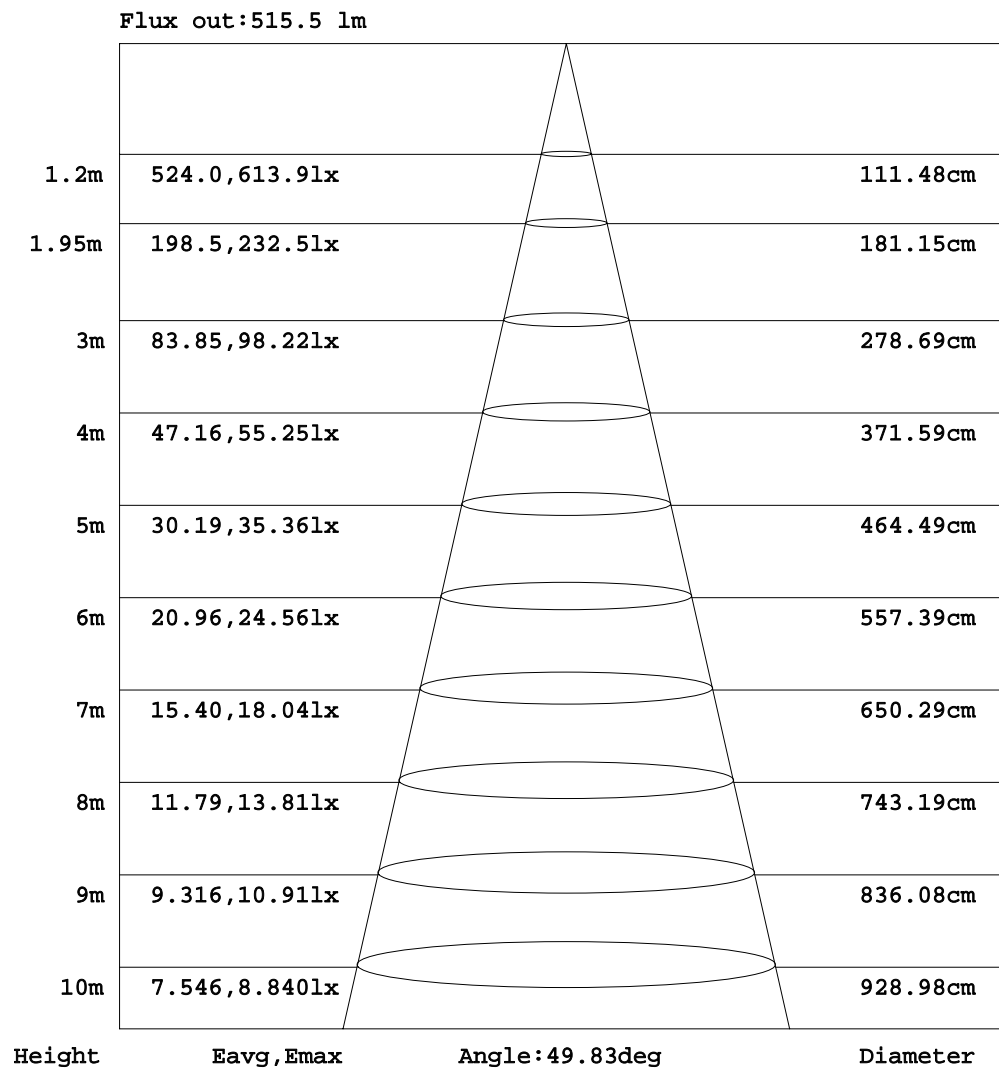


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-08-26

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 Figure

Test:U:229.64V I:0.4348A P:98.446W PF:0.9860 Freq:49.99Hz Lamp Flux:1623.39x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*160*28	SERIAL No.:
MFR.:	SUR.:0.4*0.12	Shielding Angle:



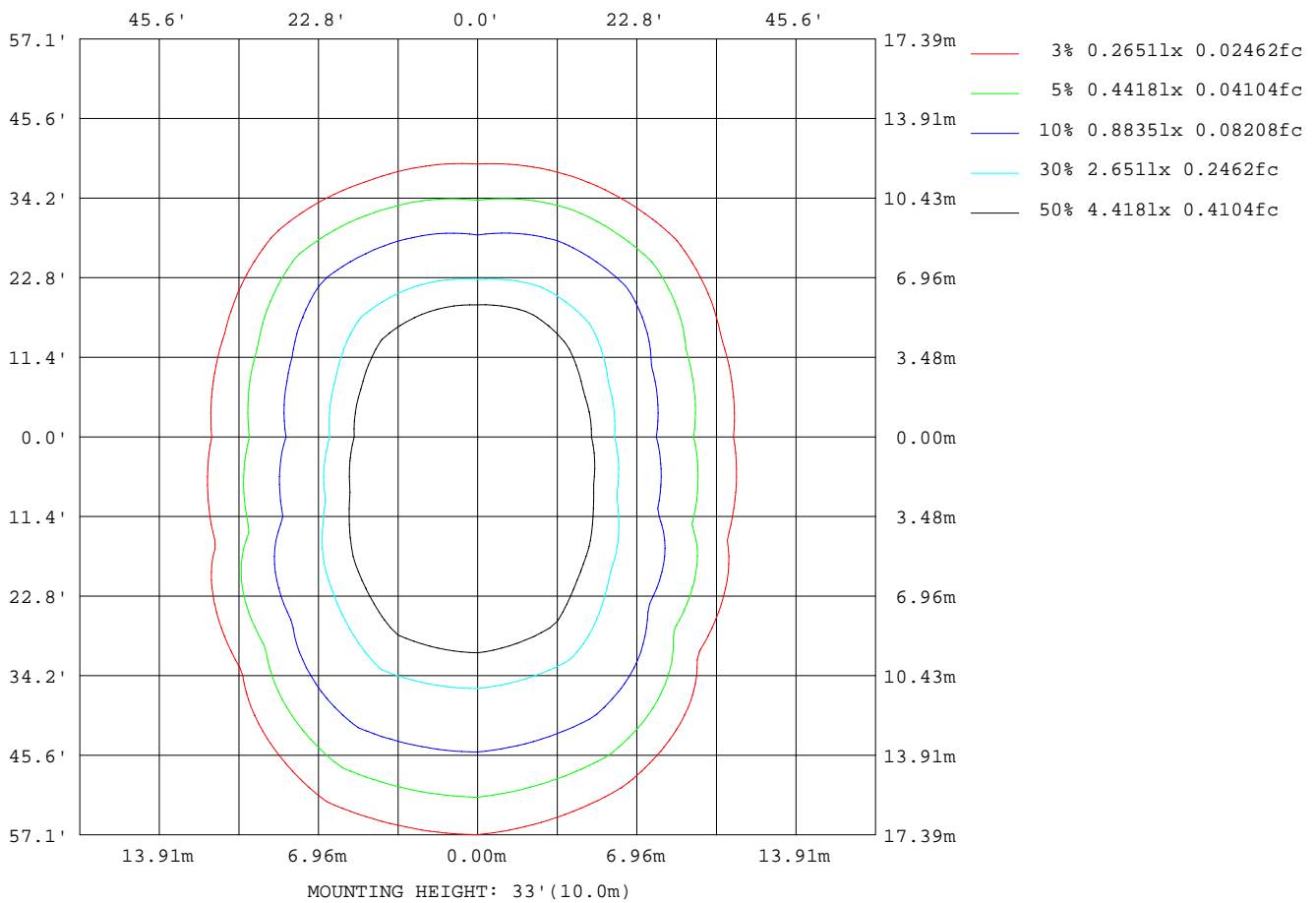
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-08-26

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:229.64V I:0.4348A P:98.446W PF:0.9860 Freq:49.99Hz Lamp Flux:1623.39x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*160*28	SERIAL No.:
MFR.:	SUR.:0.4*0.12	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-08-26

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:229.64V I:0.4348A P:98.446W PF:0.9860 Freq:49.99Hz Lamp Flux:1623.39x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*160*28	SERIAL No.:
MFR.:	SUR.:0.4*0.12	Shielding Angle:

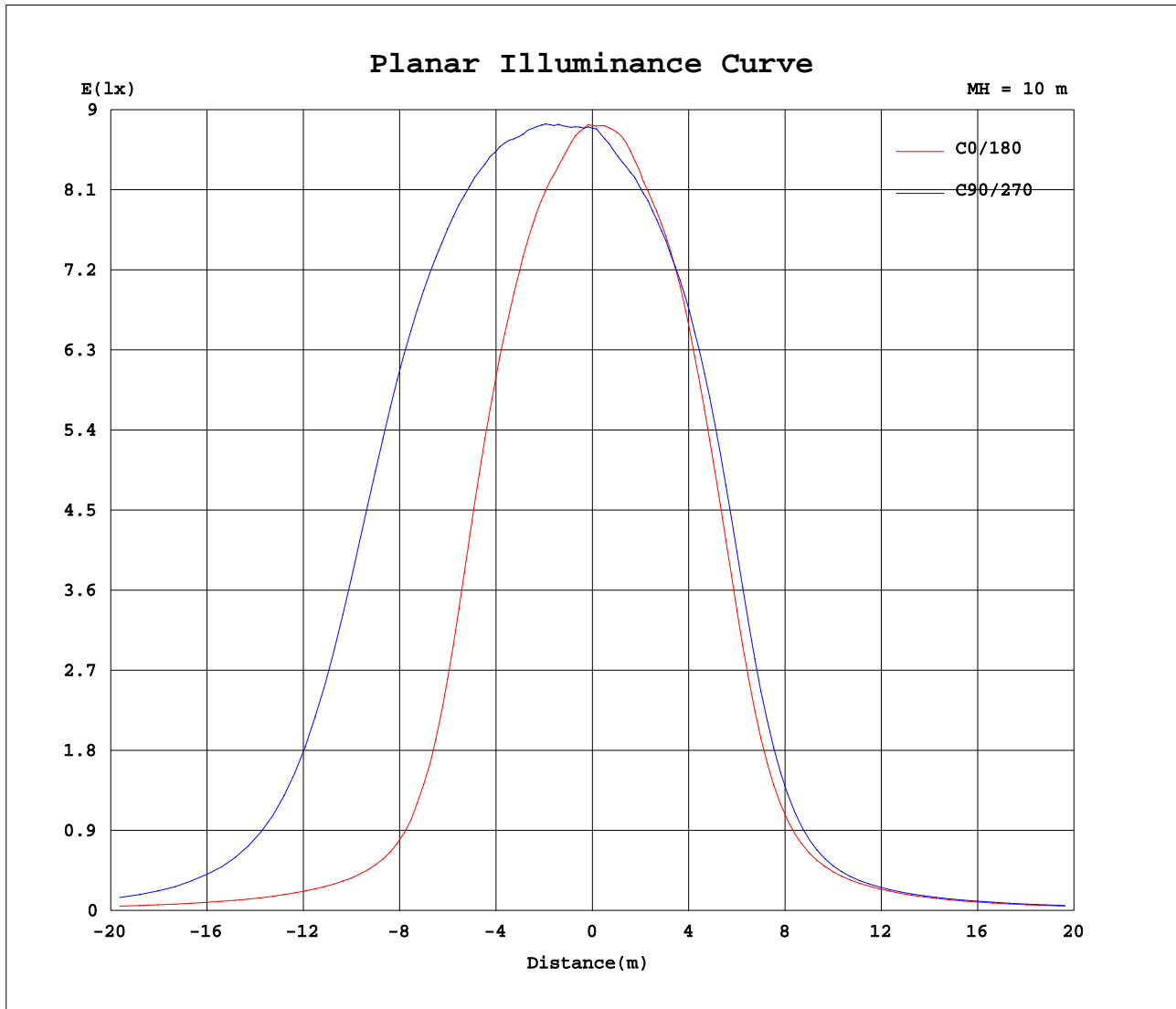
AvgL	cd/m2
L_0~180(65)av	2465
L_0~180(75)av	2561
L_0~180(85)av	2544
L_90~270(65)av	4587
L_90~270(75)av	3571
L_90~270(85)av	2768
L_45(65)av	3009
L_45(75)av	2910
L_45(85)av	2661

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-08-26

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: 2024-08-26

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:

```

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