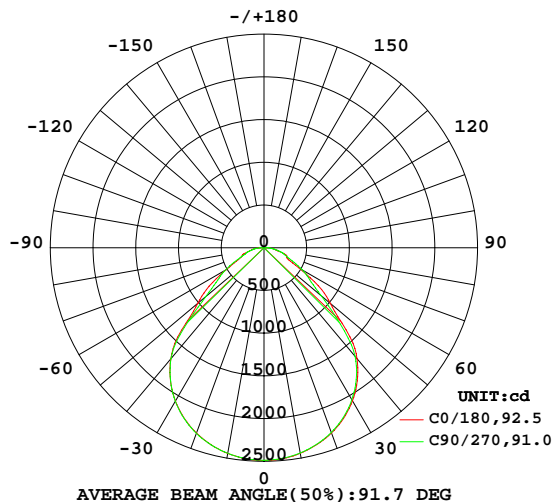


LUMINAIRE PHOTOMETRIC TEST REPORT

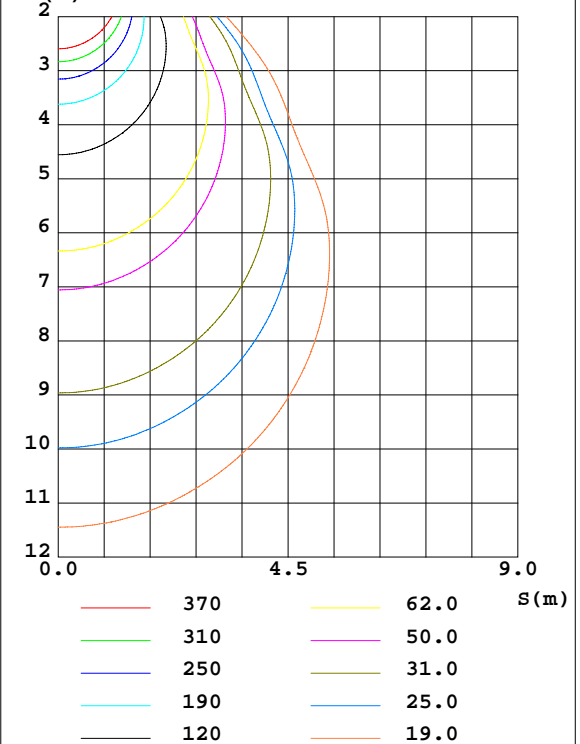
Test:U:229.67V I:0.1782A P:39.784W PF:0.9720 Freq:49.99Hz Lamp Flux:5411.16x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 600*82	SERIAL No.:
MFR.:	SUR.:3.14*0.286*0.286	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 136.01 lm/W			
MODEL		Imax(cd)	2490	S/MH(C0/180)	1.24
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH(C90/270)	1.24
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	5411.2	η UP,DN(C0-180)	0.0,49.9
NOMINAL FLUX(lm)	5411.16	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.1
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230.0	η down(%)	100.0	CIBSE SHR MAX	1.35

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:2024-01-09

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:

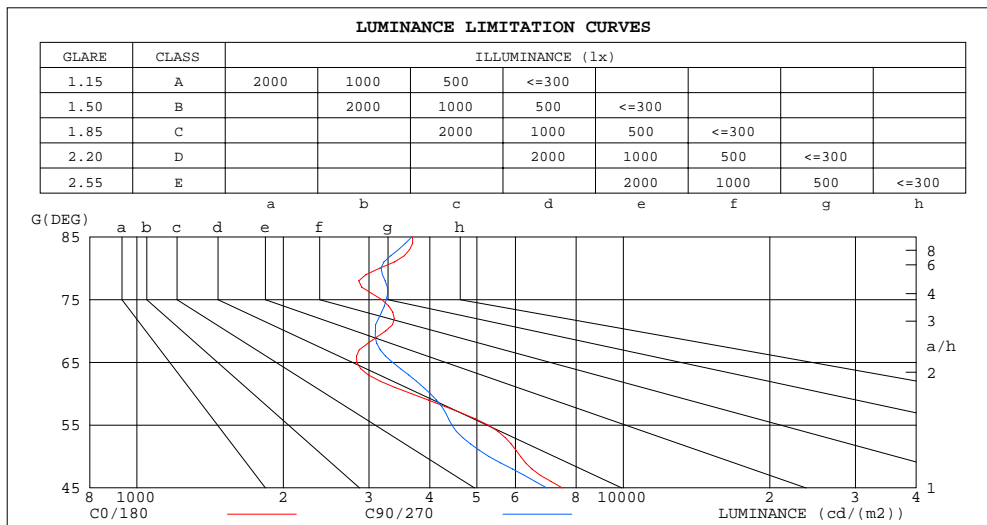
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	$\%lum, lamp$
10	2443	2440	2438	2439	2444	2444	2443	2442	0- 10	235.2	235.2	4.35,4.35
20	2307	2305	2302	2303	2309	2313	2312	2311	10- 20	673.1	908.3	16.8,16.8
30	2070	2061	2056	2065	2073	2076	2075	2077	20- 30	1014	1922	35.5,35.5
40	1694	1673	1659	1677	1698	1695	1693	1698	30- 40	1184	3106	57.4,57.4
50	1015	890.6	872.9	958.7	1011	937.9	888.3	971.0	40- 50	1016	4122	76.2,76.2
60	470.9	544.0	515.1	445.3	509.5	545.8	520.8	438.7	50- 60	632.7	4754	87.9,87.9
70	285.1	247.4	271.5	260.3	272.4	262.8	251.8	281.0	60- 70	350.2	5105	94.3,94.3
80	140.7	140.4	141.6	153.5	145.1	136.4	135.9	143.4	70- 80	217.9	5323	98.4,98.4
90	4.699	4.794	5.893	7.096	6.779	5.515	5.790	6.048	80- 90	88.63	5411	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:2024-01-09

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:229.67V I:0.1782A P:39.784W PF:0.9720 Freq:49.99Hz Lamp Flux:5411.16x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 600*82	SERIAL No.:
MFR.:	SUR.:3.14*0.286*0.286	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	3687	3677
80	3156	3176
75	3188	3256
70	3246	3092
65	2831	3354
60	3667	4012
55	5270	4443
50	6151	5288
45	7491	6961

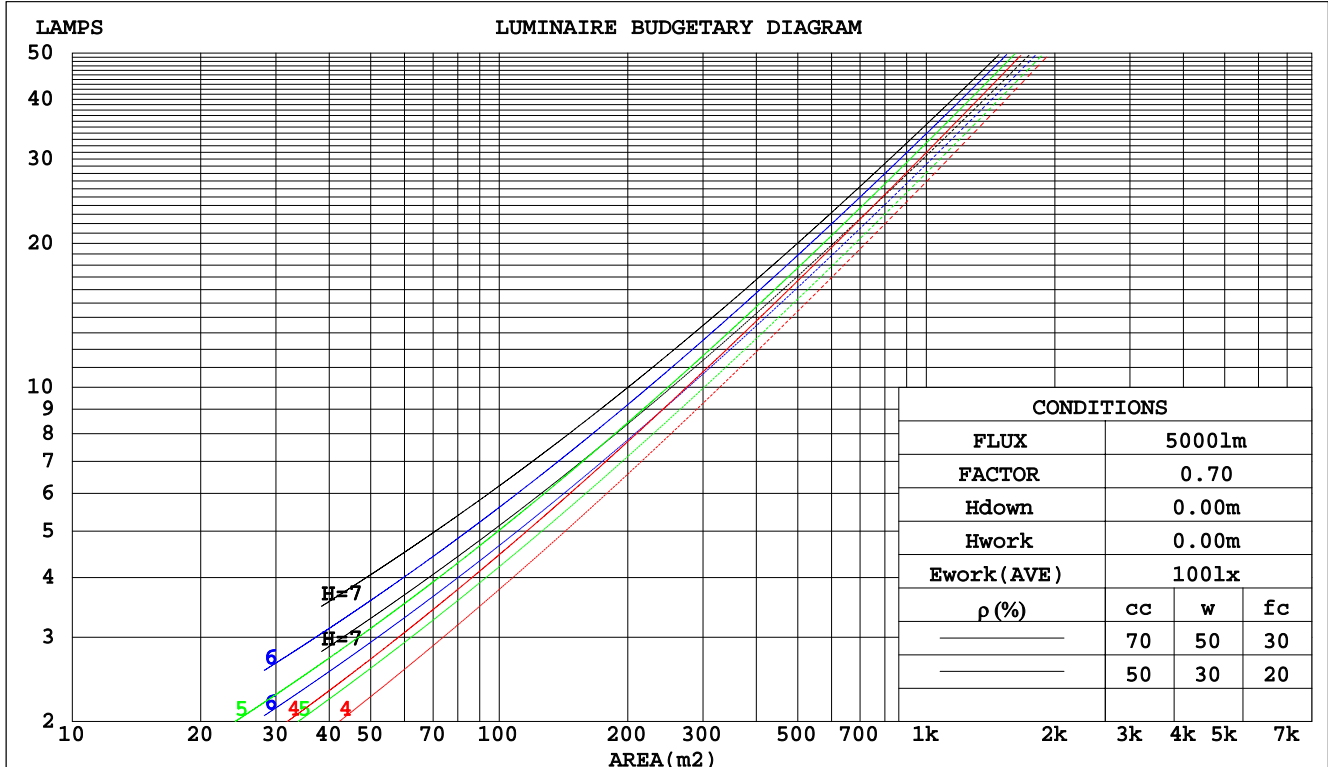
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-01-09

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:229.67V I:0.1782A P:39.784W PF:0.9720 Freq:49.99Hz Lamp Flux:5411.16x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 600*82	SERIAL No.:
MFR.:	SUR.:3.14*0.286*0.286	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	.00
1.0	1.06	1.02	.99	1.04	1.00	.97	.00	.97	.94	.96	.93	.91	.92	.90	.89	.87
2.0	.94	.88	.83	.92	.87	.82	.89	.84	.80	.86	.82	.79	.83	.80	.77	.75
3.0	.84	.77	.71	.83	.76	.71	.80	.74	.70	.77	.72	.68	.75	.71	.67	.65
4.0	.76	.68	.62	.75	.67	.62	.72	.66	.61	.70	.64	.60	.68	.63	.59	.57
5.0	.69	.60	.54	.68	.60	.54	.66	.59	.54	.64	.58	.53	.62	.57	.53	.51
6.0	.62	.54	.48	.61	.54	.48	.60	.53	.48	.58	.52	.47	.57	.51	.47	.45
7.0	.57	.49	.43	.56	.49	.43	.55	.48	.43	.53	.47	.43	.52	.46	.42	.40
8.0	.52	.44	.39	.52	.44	.39	.50	.44	.39	.49	.43	.38	.48	.42	.38	.36
9.0	.48	.41	.35	.48	.40	.35	.47	.40	.35	.46	.39	.35	.45	.39	.35	.33
10.0	.45	.37	.32	.44	.37	.32	.43	.37	.32	.42	.36	.32	.41	.36	.32	.30



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-01-09

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:229.67V I:0.1782A P:39.784W PF:0.9720 Freq:49.99Hz Lamp Flux:5411.16x1 lm								
NAME:			TYPE:			WEIGHT:		
SPEC.:			DIM.: 600*82			SERIAL No.:		
MFR.:			SUR.:3.14*0.286*0.286			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	.269	.153	.049	.262	.150	.048	.249	.143	.046	.237	.137	.044	.226	.131	.042		
2.0	.254	.139	.043	.248	.137	.042	.237	.132	.041	.226	.127	.040	.217	.123	.039		
3.0	.238	.127	.038	.233	.125	.037	.223	.121	.037	.213	.117	.036	.205	.113	.035		
4.0	.222	.115	.034	.217	.114	.034	.209	.111	.033	.201	.108	.032	.193	.105	.032		
5.0	.208	.106	.031	.204	.104	.030	.196	.102	.030	.189	.099	.030	.182	.097	.029		
6.0	.195	.098	.028	.191	.096	.028	.184	.094	.027	.177	.092	.027	.171	.090	.027		
7.0	.183	.090	.026	.179	.089	.025	.173	.088	.025	.167	.086	.025	.162	.084	.025		
8.0	.172	.084	.024	.169	.083	.024	.164	.082	.023	.158	.080	.023	.153	.079	.023		
9.0	.162	.079	.022	.160	.078	.022	.155	.076	.022	.150	.075	.022	.146	.074	.021		
10.0	.154	.074	.020	.151	.073	.020	.147	.072	.020	.142	.071	.020	.138	.070	.020		

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	.178	.156	.138	.152	.134	.118	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.167	.132	.103	.143	.114	.089	.098	.079	.062	.057	.046	.036	.018	.015	.012	
3.0	.158	.114	.079	.136	.098	.068	.093	.068	.048	.054	.040	.028	.017	.013	.009	
4.0	.150	.100	.062	.129	.087	.054	.089	.060	.038	.051	.035	.023	.016	.012	.007	
5.0	.143	.090	.051	.123	.078	.044	.084	.054	.031	.049	.032	.018	.016	.010	.006	
6.0	.136	.081	.042	.117	.070	.036	.081	.049	.026	.047	.029	.015	.015	.009	.005	
7.0	.129	.074	.035	.111	.064	.031	.077	.045	.022	.045	.027	.013	.014	.009	.004	
8.0	.123	.068	.030	.106	.059	.027	.073	.042	.019	.043	.025	.011	.014	.008	.004	
9.0	.118	.063	.027	.101	.055	.023	.070	.039	.016	.041	.023	.010	.013	.007	.003	
10.0	.112	.059	.024	.097	.051	.021	.067	.036	.015	.039	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-01-09

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:229.67V I:0.1782A P:39.784W PF:0.9720 Freq:49.99Hz Lamp Flux:5411.16x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:					DIM.: 600*82			SERIAL No.:			
MFR.:					SUR.:3.14*0.286*0.286			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	17.9	19.2	18.1	19.4	19.6	17.6	19.0	17.9	19.2	19.3
	3H	18.6	19.9	18.9	20.1	20.3	18.2	19.5	18.5	19.7	19.9
	4H	19.0	20.2	19.3	20.4	20.7	18.7	19.9	19.0	20.2	20.4
	6H	19.3	20.4	19.6	20.7	20.9	19.1	20.3	19.5	20.5	20.8
	8H	19.5	20.5	19.8	20.8	21.1	19.3	20.4	19.6	20.7	21.0
	12H	19.6	20.7	20.0	21.0	21.3	19.5	20.5	19.8	20.8	21.1
4H	2H	18.1	19.3	18.4	19.5	19.8	17.8	19.0	18.1	19.3	19.5
	3H	19.1	20.1	19.4	20.4	20.7	18.7	19.8	19.1	20.0	20.3
	4H	19.6	20.6	20.0	20.9	21.2	19.4	20.4	19.8	20.7	21.0
	6H	20.0	20.9	20.4	21.2	21.6	20.0	20.8	20.4	21.2	21.6
	8H	20.3	21.1	20.7	21.4	21.8	20.3	21.1	20.7	21.4	21.8
	12H	20.5	21.3	21.0	21.6	22.0	20.5	21.2	21.0	21.6	22.0
8H	4H	19.8	20.6	20.2	20.9	21.3	19.6	20.4	20.0	20.8	21.1
	6H	20.3	21.0	20.8	21.4	21.8	20.4	21.1	20.9	21.5	21.9
	8H	20.7	21.3	21.2	21.7	22.2	20.8	21.4	21.3	21.8	22.3
	12H	21.1	21.6	21.6	22.1	22.5	21.2	21.7	21.7	22.1	22.6
12H	4H	19.8	20.5	20.2	20.9	21.3	19.6	20.3	20.1	20.7	21.1
	6H	20.4	21.0	20.9	21.4	21.9	20.5	21.0	20.9	21.5	21.9
	8H	20.9	21.4	21.4	21.8	22.3	21.0	21.4	21.4	21.9	22.4
Variations with the observer position at spacings:											
S = 1.0H	+ 0.4 / - 0.4					+ 0.4 / - 0.5					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.4					
2.0H	+ 0.8 / - 1.0					+ 0.8 / - 0.9					

CIE Pub.117, 5411 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 5.9$)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-01-09

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:229.67V I:0.1782A P:39.784W PF:0.9720 Freq:49.99Hz Lamp Flux:5411.16x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 600*82	SERIAL No.:
MFR.:	SUR.:3.14*0.286*0.286	Shielding Angle:

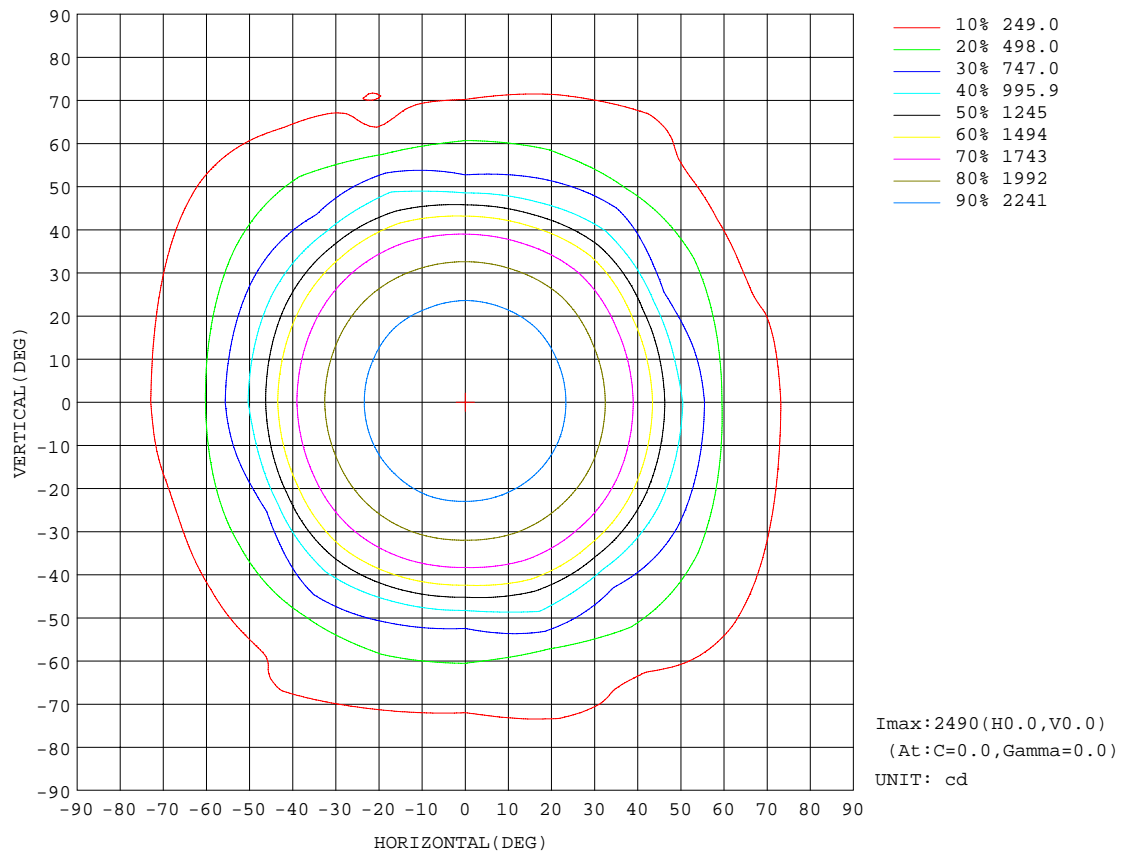
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	65	55	48	64	54	48	63	54	48	42
0.80	75	65	58	74	64	58	72	64	58	52
1.00	83	73	67	82	73	67	80	74	66	60
1.25	89	80	74	88	80	74	85	78	73	67
1.50	94	85	79	92	84	79	89	83	78	71
2.00	99	92	87	98	91	86	94	89	84	77
2.50	102	96	91	101	95	90	97	92	88	80
3.00	105	99	95	103	98	94	99	95	91	84
4.00	108	104	100	106	102	98	102	99	96	87
5.00	110	106	103	108	104	101	104	101	98	89
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:2024-01-09

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:229.67V I:0.1782A P:39.784W PF:0.9720 Freq:49.99Hz Lamp Flux:5411.16x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 600*82	SERIAL No.:
MFR.:	SUR.:3.14*0.286*0.286	Shielding Angle:

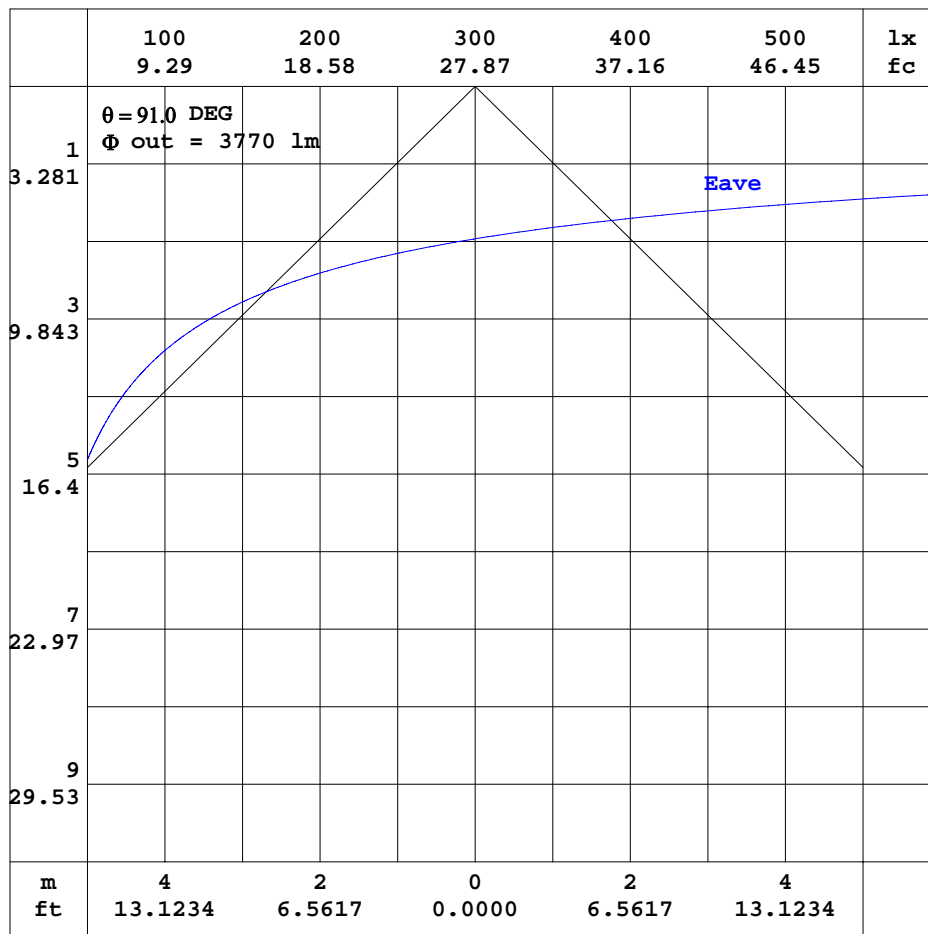


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-01-09

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:229.67V I:0.1782A P:39.784W PF:0.9720 Freq:49.99Hz Lamp Flux:5411.16x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 600*82	SERIAL No.:
MFR.:	SUR.:3.14*0.286*0.286	Shielding Angle:



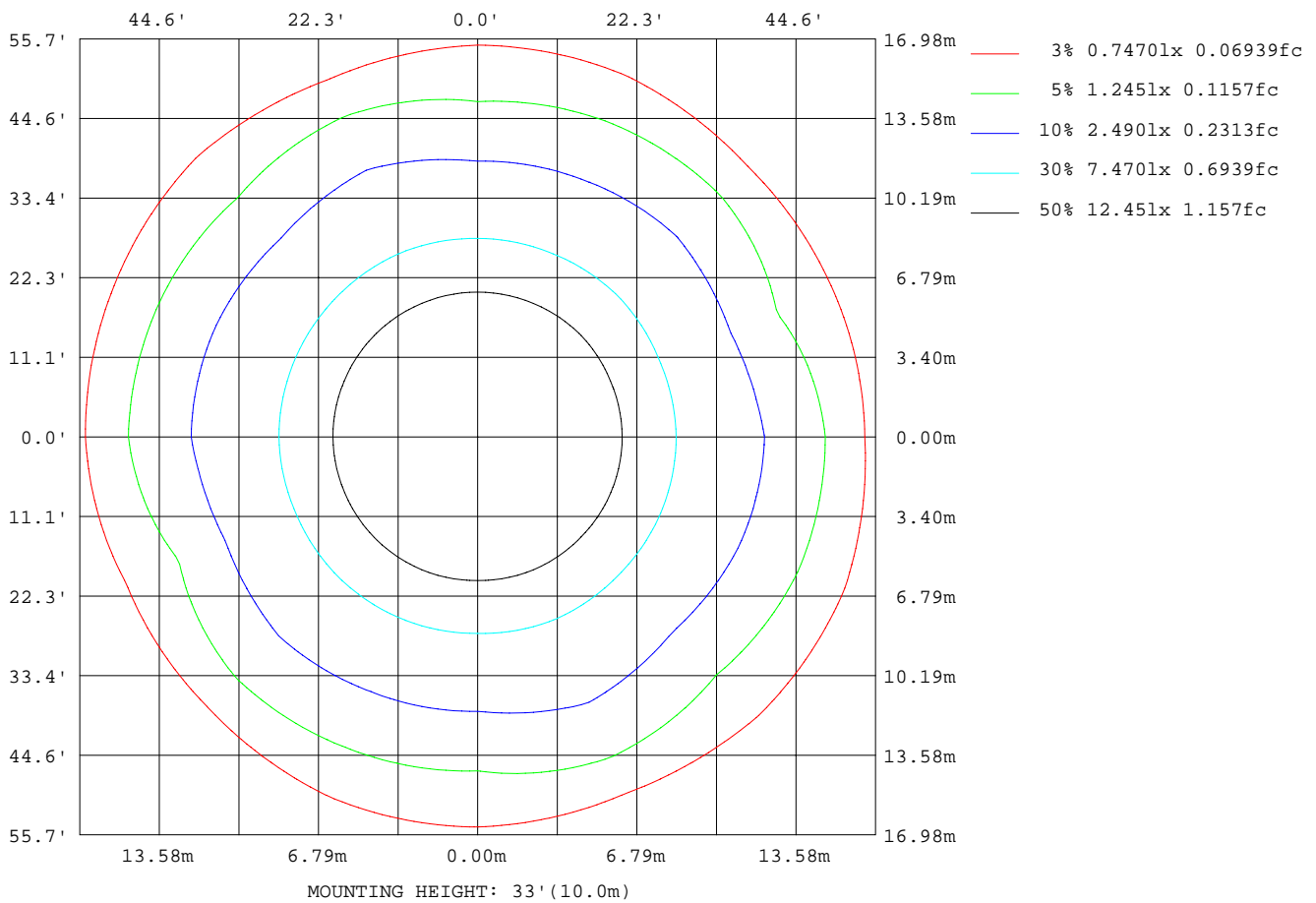
Note: The Curves indicate the illuminated area and the average illuminance when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-01-09

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 γ 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:229.67V I:0.1782A P:39.784W PF:0.9720 Freq:49.99Hz Lamp Flux:5411.16x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 600*82	SERIAL No.:
MFR.:	SUR.:3.14*0.286*0.286	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-01-09

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:229.67V I:0.1782A P:39.784W PF:0.9720 Freq:49.99Hz Lamp Flux:5411.16x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 600*82	SERIAL No.:
MFR.:	SUR.:3.14*0.286*0.286	Shielding Angle:

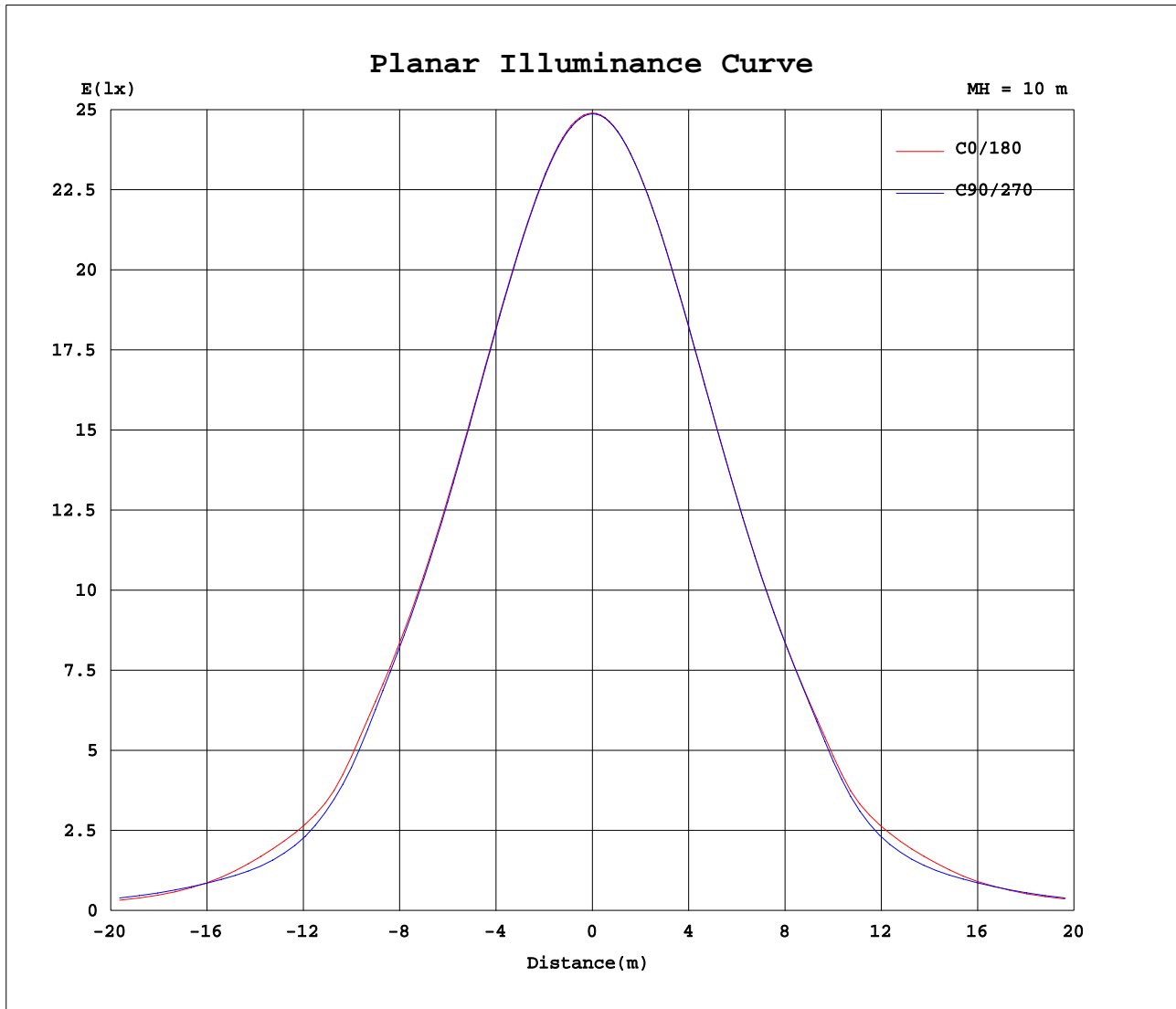
AvgL	cd/m2
L_0~180(65)av	2962
L_0~180(75)av	3193
L_0~180(85)av	3840
L_90~270(65)av	3357
L_90~270(75)av	3134
L_90~270(85)av	3700
L_45(65)av	3079
L_45(75)av	3223
L_45(85)av	3811

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-01-09

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: 2024-01-09

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
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Humidity: 65.0%
Test Distance: 11.700m [K=1.0000]
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