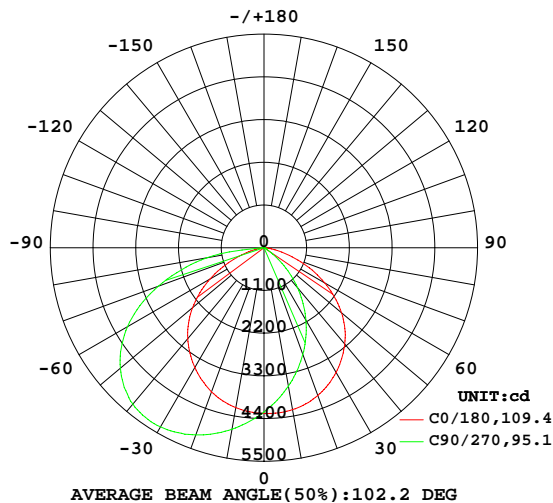


LUMINAIRE PHOTOMETRIC TEST REPORT

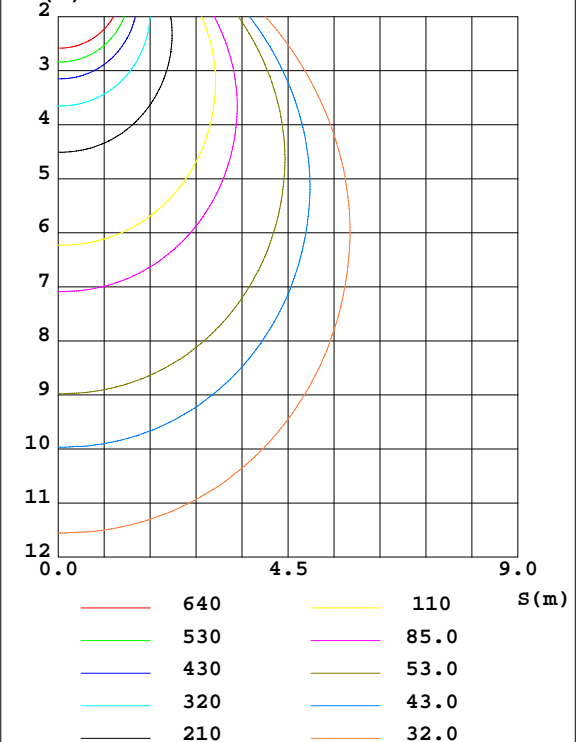
Test:U:229.66V I:0.4378A P:99.172W PF:0.9862 Freq:49.99Hz Lamp Flux:12249.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*160*28	SERIAL No.:
MFR.:	SUR.:0.4*0.126	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 123.52 lm/W			
MODEL		I _{max} (cd)	5342	S/MH(C0/180)	1.24
NOMINAL POWER(W)	88	LOR(%)	100.0	S/MH(C90/270)	1.81
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	12249	η UP,DN(C0-180)	0.0,27.8
NOMINAL FLUX(lm)	12249.3	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,72.2
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:2024-08-26

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:

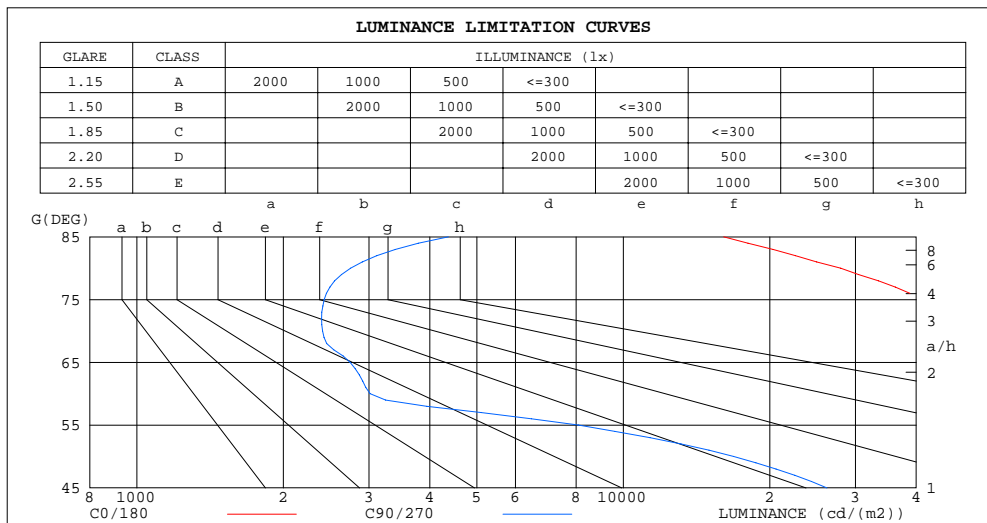
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	$\%lum, lamp$
10	4231	3811	3620	3747	4181	4571	4744	4581	0- 10	401.9	401.9	3.28,3.28
20	4048	3263	2924	3176	3953	4756	5129	4804	10- 20	1161	1563	12.8,12.8
30	3709	2614	2160	2506	3561	4745	5325	4840	20- 30	1780	3343	27.3,27.3
40	3234	1876	1347	1752	3053	4504	5249	4637	30- 40	2166	5509	45,45
50	2605	1097	545.6	977.5	2399	4005	4828	4156	40- 50	2241	7750	63.3,63.3
60	1806	390.9	76.01	305.4	1599	3198	4054	3382	50- 60	1977	9727	79.4,79.4
70	931.4	66.08	41.52	63.01	757.2	2111	2894	2285	60- 70	1475	11201	91.4,91.4
80	244.9	35.01	24.07	34.72	164.8	883.9	1498	1017	70- 80	845.3	12047	98.3,98.3
90	7.655	10.46	13.68	12.77	7.972	3.076	3.935	11.55	80- 90	202.6	12249	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:229.66V I:0.4378A P:99.172W PF:0.9862 Freq:49.99Hz Lamp Flux:12249.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*160*28	SERIAL No.:
MFR.:	SUR.:0.4*0.126	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	16081	4368
80	27988	2750
75	41528	2426
70	54032	2409
65	64458	2744
60	71648	3016
55	76700	8083
50	80400	16840
45	82681	26227

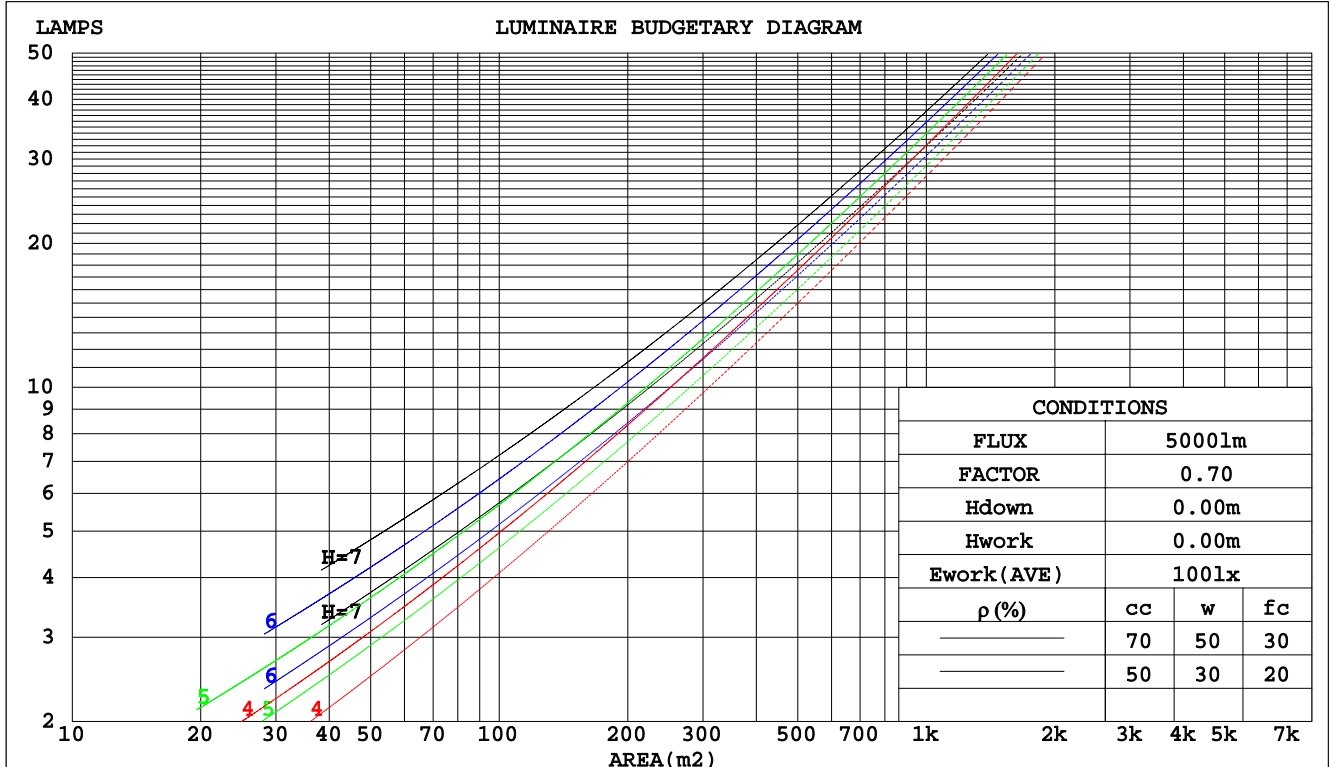
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-08-26

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:229.66V I:0.4378A P:99.172W PF:0.9862 Freq:49.99Hz Lamp Flux:12249.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*160*28	SERIAL No.:
MFR.:	SUR.:0.4*0.126	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	1.04	.00	.96	1.02	.98	.94	.98	.94	.91	.94	.91	.89	.90	.88	.86	.84
2.0	.91	.84	.78	.89	.83	.77	.85	.80	.75	.82	.78	.74	.79	.75	.72	.70
3.0	.80	.71	.65	.78	.70	.64	.75	.69	.63	.72	.67	.62	.70	.65	.61	.59
4.0	.70	.62	.55	.69	.61	.55	.67	.59	.54	.64	.58	.53	.62	.57	.52	.50
5.0	.63	.54	.47	.62	.53	.47	.60	.52	.46	.58	.51	.46	.56	.50	.45	.43
6.0	.57	.48	.41	.56	.47	.41	.54	.46	.41	.52	.45	.40	.51	.45	.40	.38
7.0	.51	.43	.36	.51	.42	.36	.49	.41	.36	.48	.41	.36	.46	.40	.35	.33
8.0	.47	.38	.32	.46	.38	.32	.45	.37	.32	.44	.37	.32	.42	.36	.32	.30
9.0	.43	.35	.29	.42	.34	.29	.41	.34	.29	.40	.33	.29	.39	.33	.29	.27
10.0	.40	.32	.26	.39	.31	.26	.38	.31	.26	.37	.31	.26	.36	.30	.26	.24



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:229.66V I:0.4378A P:99.172W PF:0.9862 Freq:49.99Hz Lamp Flux:12249.3x1 lm								
NAME:			TYPE:			WEIGHT:		
SPEC.:			DIM.: 620*160*28			SERIAL No.:		
MFR.:			SUR.:0.4*0.126			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	.306	.174	.055	.299	.171	.054	.286	.164	.052	.274	.158	.051	.263	.152	.049	
2.0	.289	.159	.049	.283	.156	.048	.272	.151	.047	.261	.146	.046	.251	.142	.045	
3.0	.268	.143	.043	.263	.141	.042	.253	.137	.042	.243	.133	.041	.234	.130	.040	
4.0	.248	.129	.038	.243	.127	.038	.234	.124	.037	.226	.121	.037	.218	.118	.036	
5.0	.230	.117	.034	.225	.116	.034	.217	.113	.033	.210	.111	.033	.202	.108	.033	
6.0	.213	.107	.031	.209	.106	.030	.202	.104	.030	.195	.101	.030	.189	.099	.030	
7.0	.198	.098	.028	.195	.097	.028	.189	.095	.027	.182	.094	.027	.177	.092	.027	
8.0	.185	.091	.025	.182	.090	.025	.177	.088	.025	.171	.087	.025	.166	.085	.025	
9.0	.174	.084	.023	.171	.083	.023	.166	.082	.023	.161	.081	.023	.156	.079	.023	
10.0	.163	.078	.022	.161	.078	.022	.156	.077	.022	.152	.075	.021	.148	.074	.021	

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	.180	.156	.135	.154	.134	.116	.105	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.172	.132	.098	.147	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.164	.114	.075	.141	.099	.065	.097	.068	.045	.056	.040	.027	.018	.013	.009	
4.0	.157	.101	.058	.134	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.149	.091	.047	.128	.078	.041	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.142	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.135	.075	.033	.116	.065	.029	.080	.046	.021	.047	.027	.012	.015	.009	.004	
8.0	.129	.069	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.004	
9.0	.123	.065	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.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:229.66V I:0.4378A P:99.172W PF:0.9862 Freq:49.99Hz Lamp Flux:12249.3x1 lm											
NAME:			TYPE:			WEIGHT:					
SPEC.:			DIM.: 620*160*28			SERIAL No.:					
MFR.:			SUR.:0.4*0.126			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	25.5	27.0	25.8	27.2	27.4	18.3	19.8	18.5	20.0	20.2
	3H	26.6	28.0	26.9	28.3	28.5	18.1	19.5	18.4	19.7	20.0
	4H	27.0	28.3	27.3	28.6	28.8	18.0	19.4	18.3	19.6	19.9
	6H	27.1	28.4	27.5	28.6	28.9	18.0	19.2	18.3	19.5	19.8
	8H	27.1	28.3	27.5	28.6	28.9	17.9	19.1	18.3	19.4	19.7
	12H	27.1	28.3	27.5	28.6	28.9	17.9	19.1	18.3	19.4	19.7
4H	2H	25.3	26.6	25.6	26.8	27.1	18.8	20.1	19.1	20.3	20.6
	3H	26.4	27.6	26.8	27.9	28.2	18.6	19.8	19.0	20.1	20.4
	4H	26.8	27.8	27.2	28.2	28.5	18.6	19.6	18.9	20.0	20.3
	6H	27.0	27.9	27.4	28.3	28.6	18.5	19.5	18.9	19.8	20.2
	8H	27.0	27.9	27.4	28.3	28.7	18.5	19.4	18.9	19.8	20.2
	12H	27.0	27.8	27.5	28.2	28.6	18.5	19.3	19.0	19.7	20.1
8H	4H	26.6	27.5	27.1	27.9	28.3	18.6	19.5	19.0	19.8	20.2
	6H	26.9	27.6	27.3	28.0	28.4	18.6	19.3	19.0	19.7	20.2
	8H	26.9	27.6	27.4	28.0	28.4	18.6	19.3	19.1	19.7	20.2
	12H	27.0	27.5	27.4	28.0	28.4	18.7	19.2	19.2	19.7	20.2
12H	4H	26.6	27.4	27.0	27.8	28.2	18.6	19.4	19.0	19.8	20.2
	6H	26.8	27.5	27.3	27.9	28.3	18.6	19.2	19.1	19.7	20.1
	8H	26.9	27.4	27.4	27.9	28.4	18.6	19.2	19.1	19.7	20.1
Variations with the observer position at spacings:											
S = 1.0H	+ 0.6 / - 0.5					+ 2.0 / - 4.2					
1.5H	+ 1.5 / - 1.8					+ 1.2 / - 2.6					
2.0H	+ 2.5 / - 3.8					+ 3.2 / - 5.9					

CIE Pub.117, 12249 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 8.7$)

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:229.66V I:0.4378A P:99.172W PF:0.9862 Freq:49.99Hz Lamp Flux:12249.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*160*28	SERIAL No.:
MFR.:	SUR.:0.4*0.126	Shielding Angle:

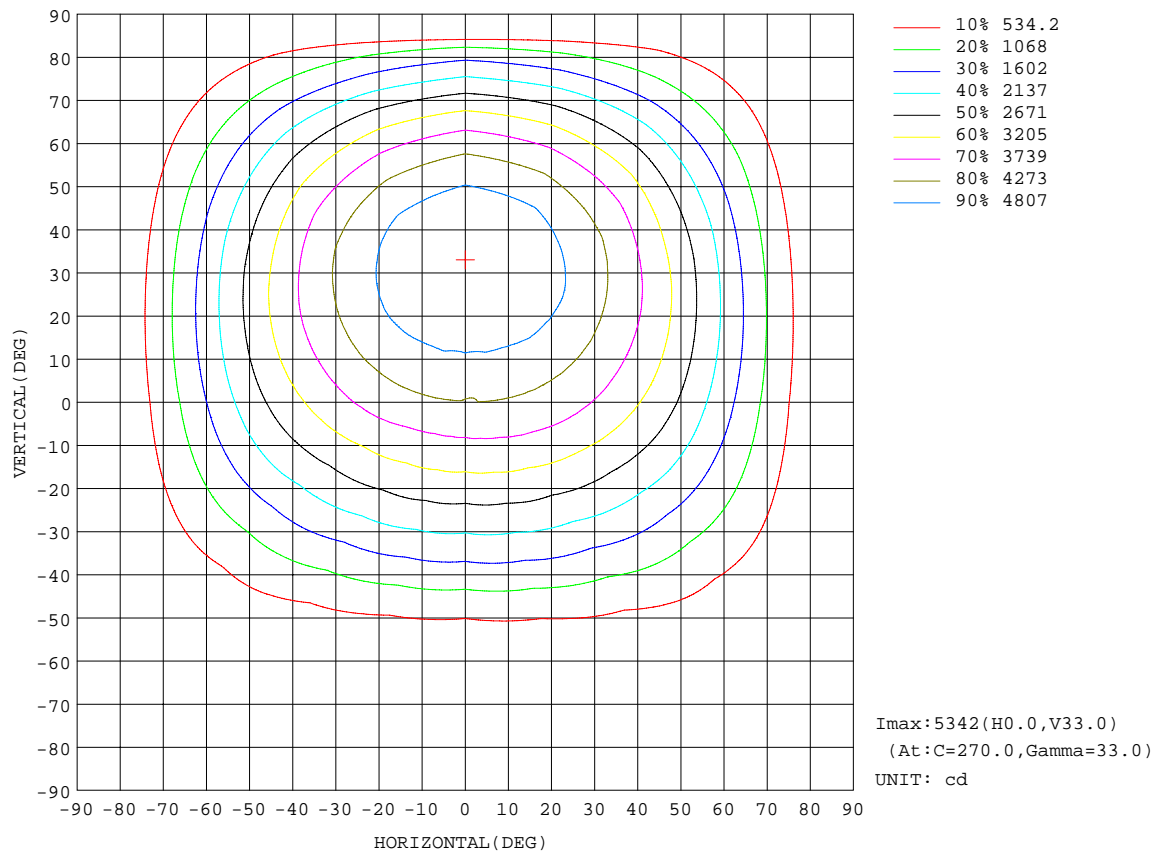
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	58	46	39	57	46	39	56	45	39	32
0.80	68	56	49	67	56	49	65	55	48	41
1.00	76	65	58	75	65	58	73	66	57	50
1.25	83	73	66	82	72	65	79	71	65	57
1.50	88	79	72	87	78	71	84	76	70	62
2.00	95	87	80	93	85	80	90	83	78	70
2.50	99	91	85	97	90	84	93	87	83	74
3.00	102	96	90	100	94	89	96	91	87	78
4.00	106	101	96	104	99	95	100	96	92	83
5.00	109	104	100	106	102	98	102	98	95	86
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:229.66V I:0.4378A P:99.172W PF:0.9862 Freq:49.99Hz Lamp Flux:12249.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*160*28	SERIAL No.:
MFR.:	SUR.:0.4*0.126	Shielding Angle:

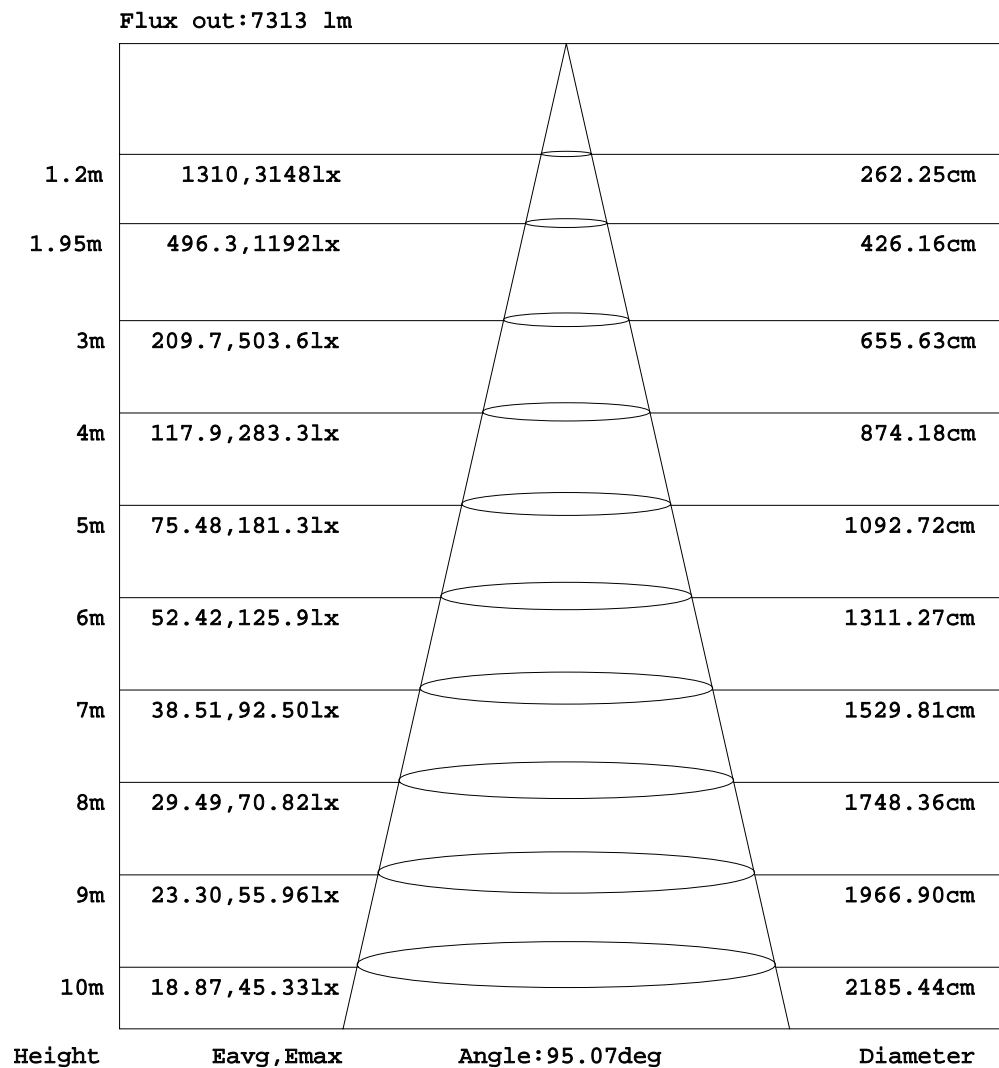


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-08-26

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:229.66V I:0.4378A P:99.172W PF:0.9862 Freq:49.99Hz Lamp Flux:12249.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*160*28	SERIAL No.:
MFR.:	SUR.:0.4*0.126	Shielding Angle:



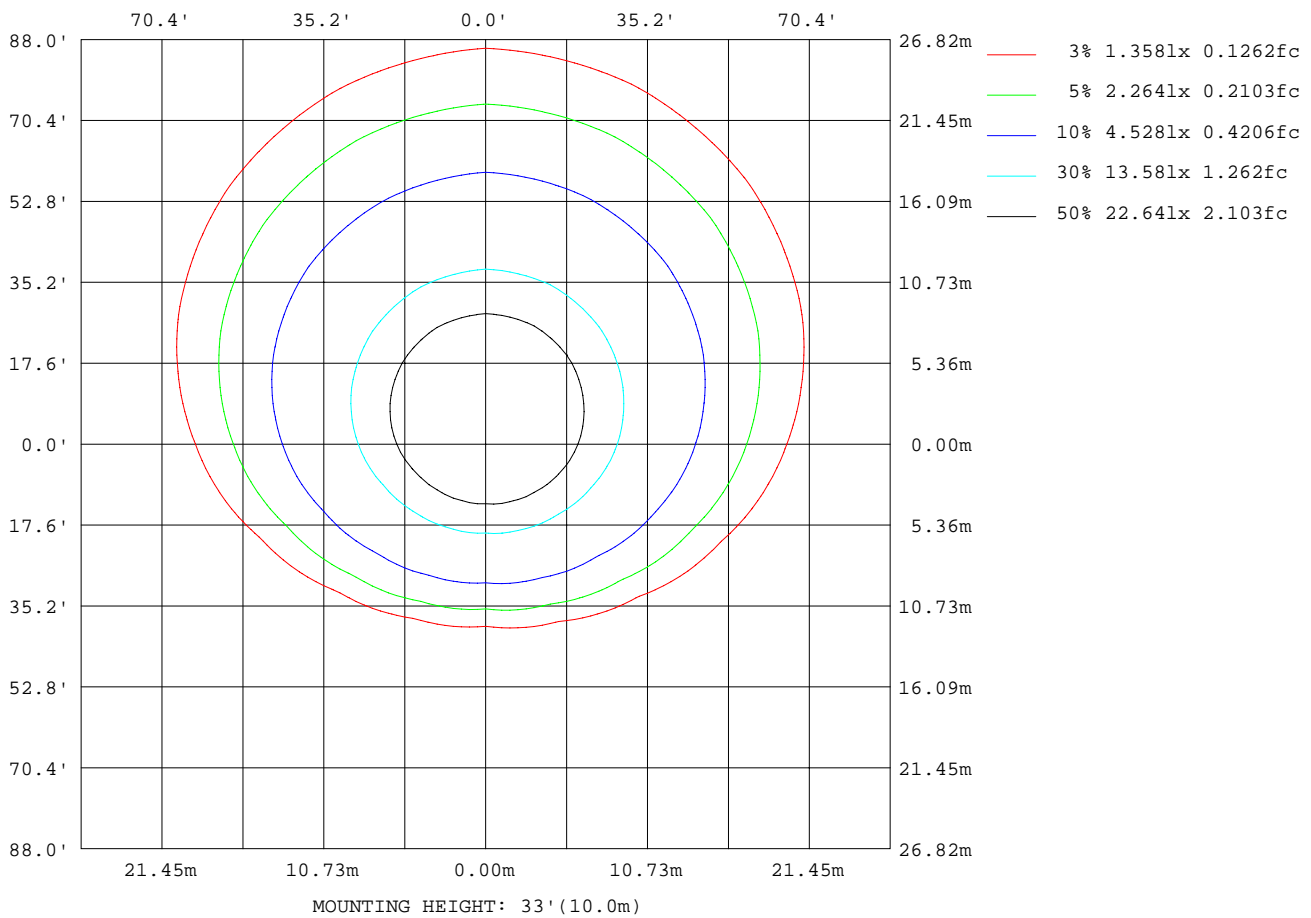
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:229.66V I:0.4378A P:99.172W PF:0.9862 Freq:49.99Hz Lamp Flux:12249.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*160*28	SERIAL No.:
MFR.:	SUR.:0.4*0.126	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:229.66V I:0.4378A P:99.172W PF:0.9862 Freq:49.99Hz Lamp Flux:12249.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*160*28	SERIAL No.:
MFR.:	SUR.:0.4*0.126	Shielding Angle:

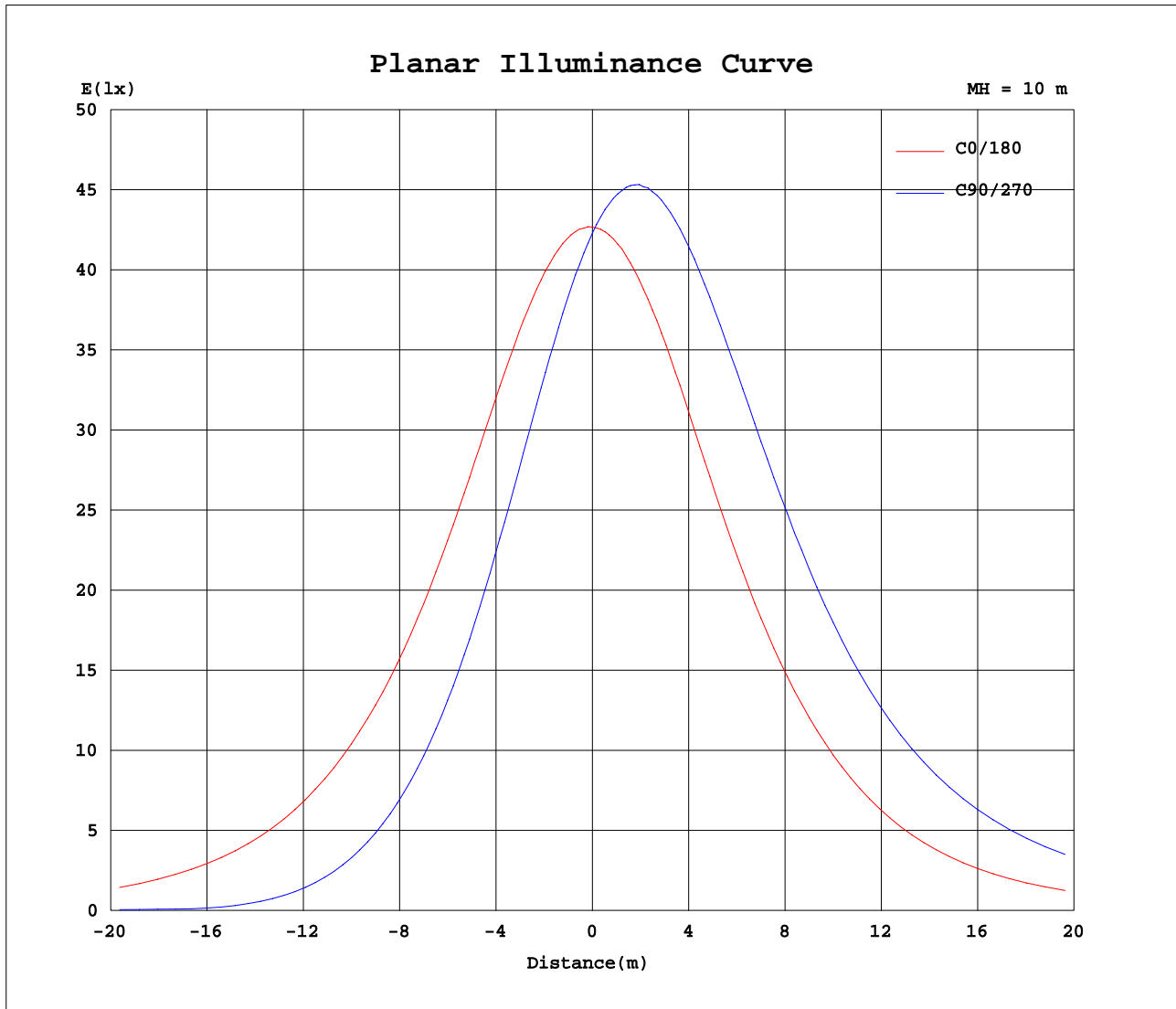
AvgL	cd/m2
L_0~180(65)av	59694
L_0~180(75)av	36494
L_0~180(85)av	13209
L_90~270(65)av	84081
L_90~270(75)av	85548
L_90~270(85)av	29452
L_45(65)av	68100
L_45(75)av	61975
L_45(85)av	45495

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:

```

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:

```