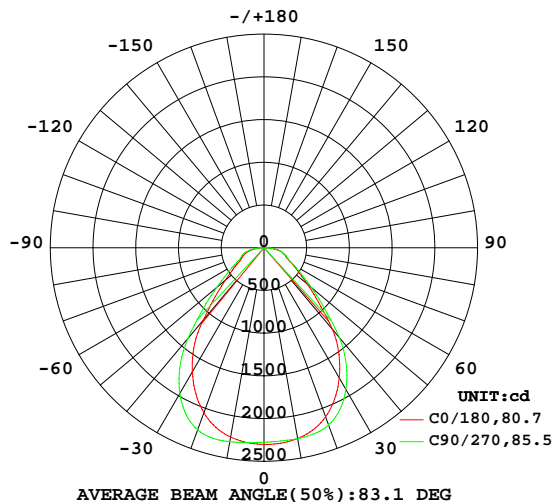


LUMINAIRE PHOTOMETRIC TEST REPORT

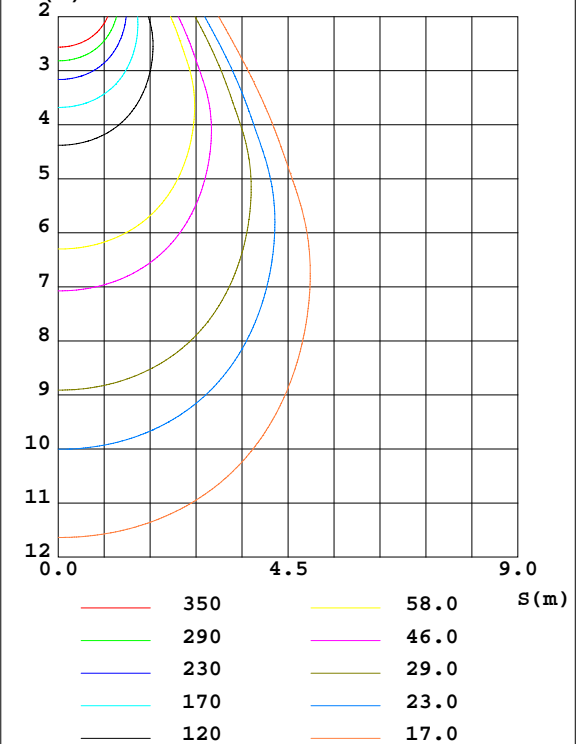
Test:U:229.70V I:0.3513A P:78.972W PF:0.9785 Freq:49.99Hz Lamp Flux:4495.34x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 56.92 lm/W			
MODEL		I _{max} (cd)	2311	S/MH(C0/180)	1.11
NOMINAL POWER(W)	80	LOR(%)	100.0	S/MH(C90/270)	1.23
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	4495.3	η UP,DN(C0-180)	0.0,50.1
NOMINAL FLUX(lm)	4495.34	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.9
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230.0	η down(%)	100.0	CIBSE SHR MAX	1.25

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:2024-05-05

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:

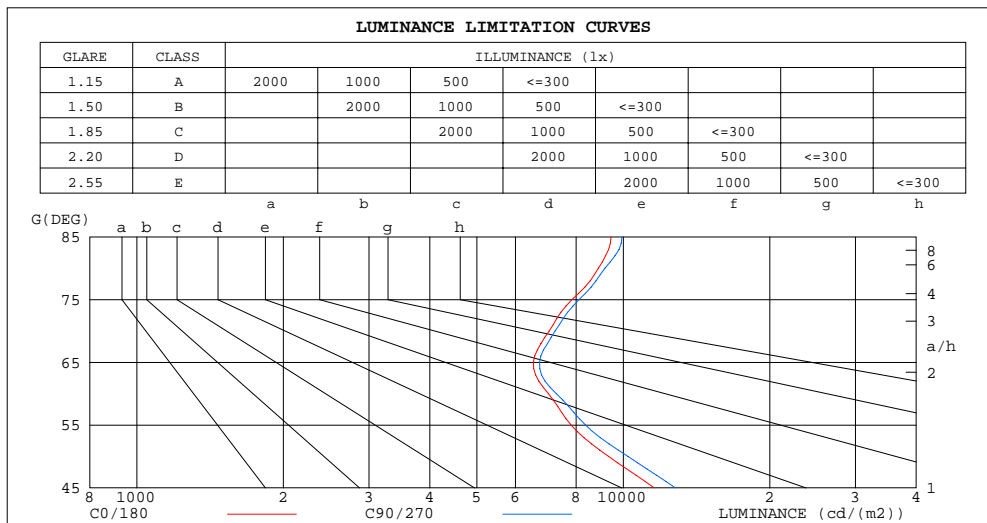
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	$\%lum, lamp$
10	2268	2262	2268	2233	2250	2275	2305	2271	0- 10	217.0	217.0	4.83,4.83
20	2107	2142	2207	2087	2056	2137	2269	2168	10- 20	627.2	844.2	18.8,18.8
30	1761	1803	1917	1723	1678	1763	1969	1822	20- 30	917.1	1761	39.2,39.2
40	1246	1350	1372	1261	1109	1281	1387	1355	30- 40	978.0	2739	60.9,60.9
50	661.9	654.4	725.2	574.8	589.3	579.1	723.7	646.0	40- 50	743.0	3482	77.5,77.5
60	387.4	283.5	402.0	251.2	346.3	253.9	395.3	270.4	50- 60	433.7	3916	87.1,87.1
70	265.9	235.0	273.4	224.2	251.4	223.3	273.3	232.3	60- 70	286.3	4202	93.5,93.5
80	170.3	132.4	175.7	118.6	144.3	120.2	173.5	132.5	70- 80	205.7	4408	98.1,98.1
90	8.479	8.308	6.108	1.821	2.672	2.552	2.921	6.040	80- 90	87.16	4495	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:2024-05-05

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:229.70V I:0.3513A P:78.972W PF:0.9785 Freq:49.99Hz Lamp Flux:4495.34x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	9435	9933
80	8883	9163
75	7843	8108
70	7042	7241
65	6534	6727
60	7018	7283
55	7814	8363
50	9327	10219
45	11578	12796

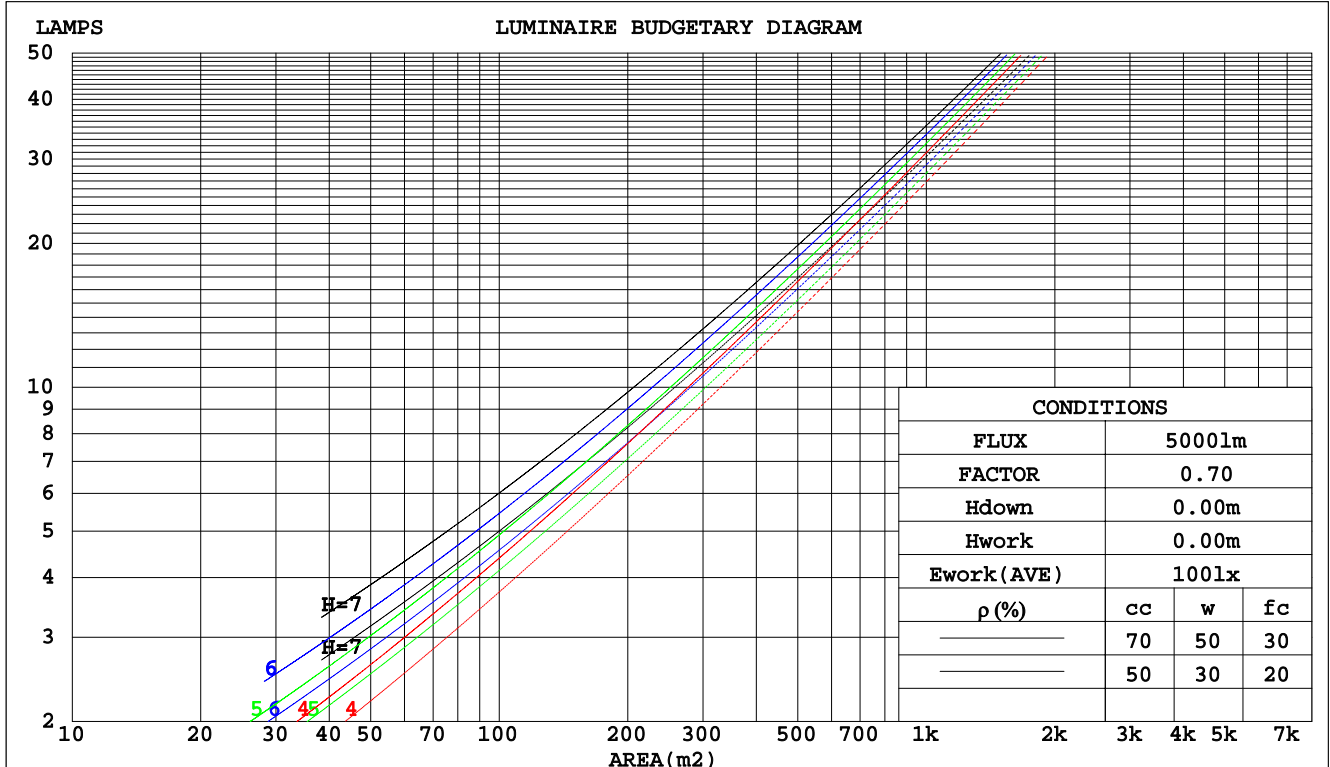
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-05-05

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:229.70V I:0.3513A P:78.972W PF:0.9785 Freq:49.99Hz Lamp Flux:4495.34x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	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	1.06	1.02	.99	1.04	1.00	.97	.90	.97	.94	.96	.93	.91	.92	.90	.89	.87
2.0	.95	.89	.84	.93	.87	.83	.89	.85	.81	.86	.82	.79	.83	.80	.77	.75
3.0	.85	.78	.72	.83	.77	.71	.81	.75	.70	.78	.73	.69	.75	.71	.68	.66
4.0	.77	.69	.63	.75	.68	.63	.73	.67	.62	.71	.65	.61	.69	.64	.60	.58
5.0	.70	.62	.56	.69	.61	.56	.67	.60	.55	.65	.59	.54	.63	.58	.54	.52
6.0	.64	.56	.50	.63	.55	.50	.61	.54	.49	.59	.53	.49	.58	.53	.48	.47
7.0	.58	.50	.45	.58	.50	.45	.56	.49	.44	.55	.49	.44	.54	.48	.44	.42
8.0	.54	.46	.41	.53	.46	.41	.52	.45	.40	.51	.45	.40	.50	.44	.40	.38
9.0	.50	.42	.37	.49	.42	.37	.48	.42	.37	.47	.41	.37	.46	.41	.37	.35
10.0	.46	.39	.34	.46	.39	.34	.45	.38	.34	.44	.38	.34	.43	.38	.34	.32



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-05-05

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:229.70V I:0.3513A P:78.972W PF:0.9785 Freq:49.99Hz Lamp Flux:4495.34x1 lm								
NAME:			TYPE:			WEIGHT:		
SPEC.:			DIM.: 610*280*42			SERIAL No.:		
MFR.:			SUR.:0.6*0.184			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	.270	.153	.049	.263	.150	.048	.250	.143	.046	.238	.137	.044	.226	.131	.042		
2.0	.252	.138	.042	.246	.135	.042	.235	.130	.041	.224	.126	.039	.214	.121	.038		
3.0	.234	.125	.037	.229	.123	.037	.219	.119	.036	.210	.115	.035	.201	.112	.035		
4.0	.218	.113	.033	.213	.112	.033	.205	.109	.032	.197	.106	.032	.189	.103	.031		
5.0	.204	.104	.030	.199	.102	.030	.192	.100	.029	.185	.097	.029	.178	.095	.029		
6.0	.190	.095	.027	.187	.094	.027	.180	.092	.027	.174	.090	.027	.168	.088	.026		
7.0	.179	.088	.025	.176	.088	.025	.170	.086	.025	.164	.084	.024	.158	.082	.024		
8.0	.168	.082	.023	.166	.081	.023	.160	.080	.023	.155	.078	.023	.150	.077	.022		
9.0	.159	.077	.021	.156	.076	.021	.151	.075	.021	.147	.074	.021	.142	.072	.021		
10.0	.150	.072	.020	.148	.072	.020	.144	.070	.020	.140	.069	.020	.136	.068	.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	.135	.098	.069	.093	.068	.048	.054	.040	.028	.017	.013	.009		
4.0	.149	.100	.063	.128	.087	.055	.088	.060	.039	.051	.035	.023	.016	.012	.007		
5.0	.141	.090	.051	.122	.077	.045	.084	.054	.031	.048	.032	.019	.016	.010	.006		
6.0	.134	.081	.042	.116	.070	.037	.080	.049	.026	.046	.029	.016	.015	.009	.005		
7.0	.128	.074	.036	.110	.064	.031	.076	.045	.022	.044	.026	.013	.014	.009	.004		
8.0	.122	.068	.031	.105	.059	.027	.073	.041	.019	.042	.024	.011	.014	.008	.004		
9.0	.116	.063	.027	.100	.055	.024	.069	.038	.017	.040	.023	.010	.013	.007	.003		
10.0	.111	.059	.024	.096	.051	.021	.066	.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:2024-05-05

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:229.70V I:0.3513A P:78.972W PF:0.9785 Freq:49.99Hz Lamp Flux:4495.34x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:					DIM.: 610*280*42			SERIAL No.:			
MFR.:					SUR.:0.6*0.184			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	19.3	20.6	19.5	20.8	21.0	19.7	21.0	19.9	21.2	21.4	
	3H	20.4	21.6	20.7	21.8	22.0	20.7	21.9	20.9	22.1	22.3
	4H	21.0	22.2	21.3	22.5	22.7	21.3	22.5	21.6	22.7	23.0
	6H	21.8	22.9	22.1	23.1	23.4	22.0	23.1	22.3	23.4	23.6
	8H	22.1	23.2	22.5	23.5	23.7	22.4	23.4	22.7	23.7	24.0
	12H	22.4	23.4	22.7	23.7	24.0	22.6	23.7	23.0	23.9	24.2
4H	2H	19.5	20.6	19.8	20.9	21.1	19.8	21.0	20.1	21.2	21.5
	3H	20.9	21.9	21.2	22.2	22.5	21.1	22.1	21.4	22.4	22.7
	4H	21.7	22.7	22.1	23.0	23.3	21.9	22.8	22.3	23.1	23.5
	6H	22.7	23.5	23.1	23.8	24.2	22.8	23.6	23.2	24.0	24.4
	8H	23.1	23.9	23.5	24.3	24.6	23.3	24.0	23.7	24.4	24.8
	12H	23.5	24.2	23.9	24.6	25.0	23.7	24.4	24.1	24.8	25.2
8H	4H	22.0	22.8	22.4	23.1	23.5	22.2	22.9	22.6	23.3	23.7
	6H	23.1	23.8	23.6	24.2	24.6	23.3	23.9	23.7	24.3	24.7
	8H	23.7	24.3	24.2	24.7	25.2	23.9	24.4	24.3	24.8	25.3
	12H	24.3	24.8	24.8	25.2	25.7	24.4	24.9	24.9	25.4	25.8
12H	4H	22.0	22.7	22.5	23.1	23.5	22.2	22.9	22.6	23.3	23.7
	6H	23.2	23.8	23.7	24.2	24.7	23.3	23.9	23.8	24.3	24.8
	8H	23.9	24.4	24.4	24.8	25.3	24.0	24.5	24.5	24.9	25.4
Variations with the observer position at spacings:											
S = 1.0H	+ 0.4 / - 0.4					+ 0.4 / - 0.4					
1.5H	+ 0.2 / - 0.3					+ 0.3 / - 0.2					
2.0H	+ 0.6 / - 0.4					+ 0.8 / - 0.5					

CIE Pub.117, 4495 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 5.2$)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-05-05

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:229.70V I:0.3513A P:78.972W PF:0.9785 Freq:49.99Hz Lamp Flux:4495.34x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:

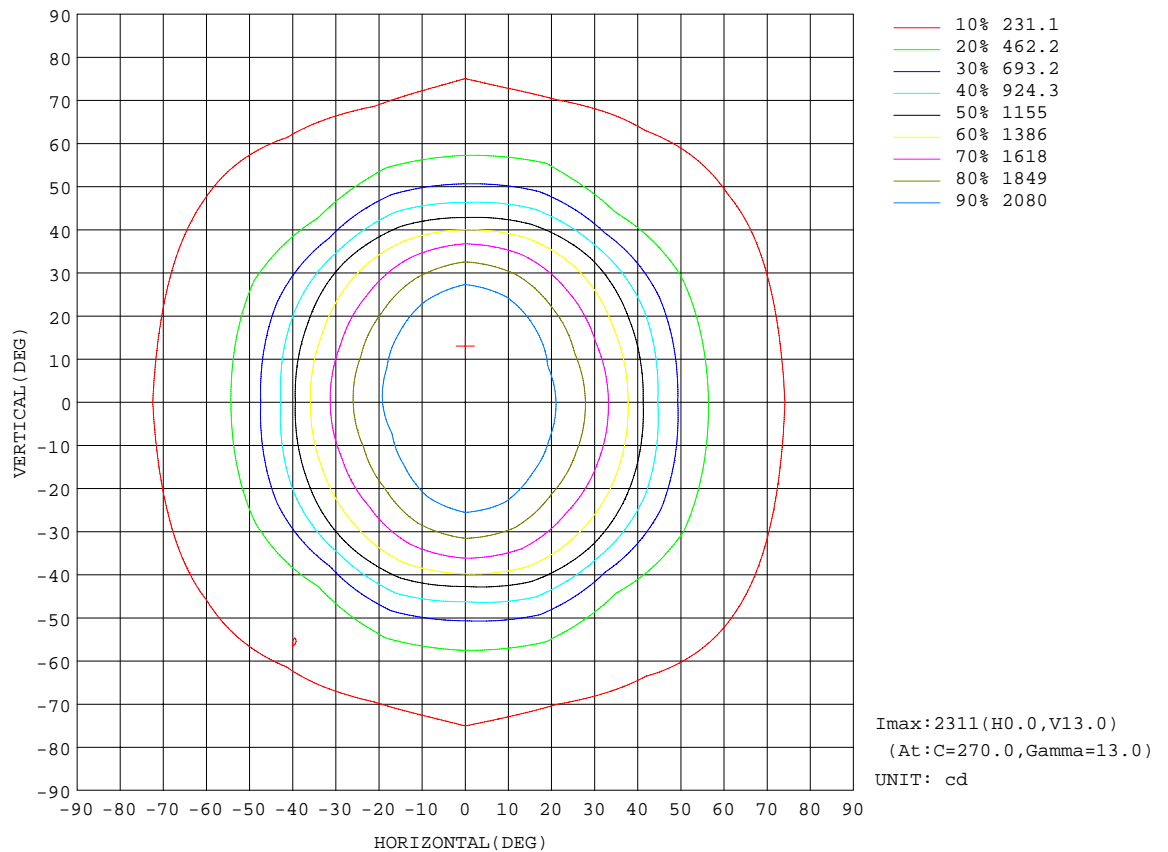
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	67	58	52	67	57	51	66	57	51	46
0.80	77	67	61	76	67	61	74	66	60	55
1.00	84	75	69	83	74	69	81	75	68	62
1.25	90	82	76	89	81	75	86	80	75	68
1.50	94	86	81	93	85	80	90	84	79	73
2.00	100	93	87	98	92	87	95	89	85	78
2.50	103	96	91	101	95	90	97	92	89	81
3.00	105	100	95	103	98	94	100	95	92	84
4.00	109	104	100	106	102	99	102	99	96	88
5.00	111	106	103	108	105	102	104	101	98	90
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:2024-05-05

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:229.70V I:0.3513A P:78.972W PF:0.9785 Freq:49.99Hz Lamp Flux:4495.34x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:

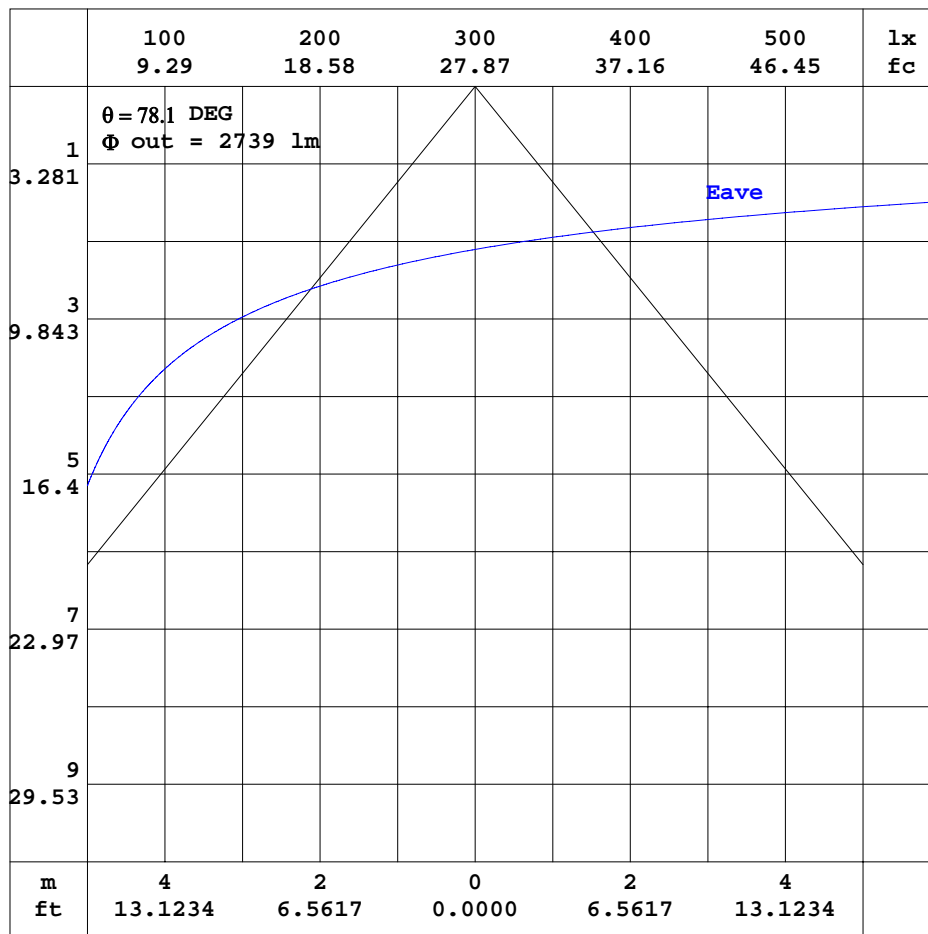


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-05-05

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:229.70V I:0.3513A P:78.972W PF:0.9785 Freq:49.99Hz Lamp Flux:4495.34x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:



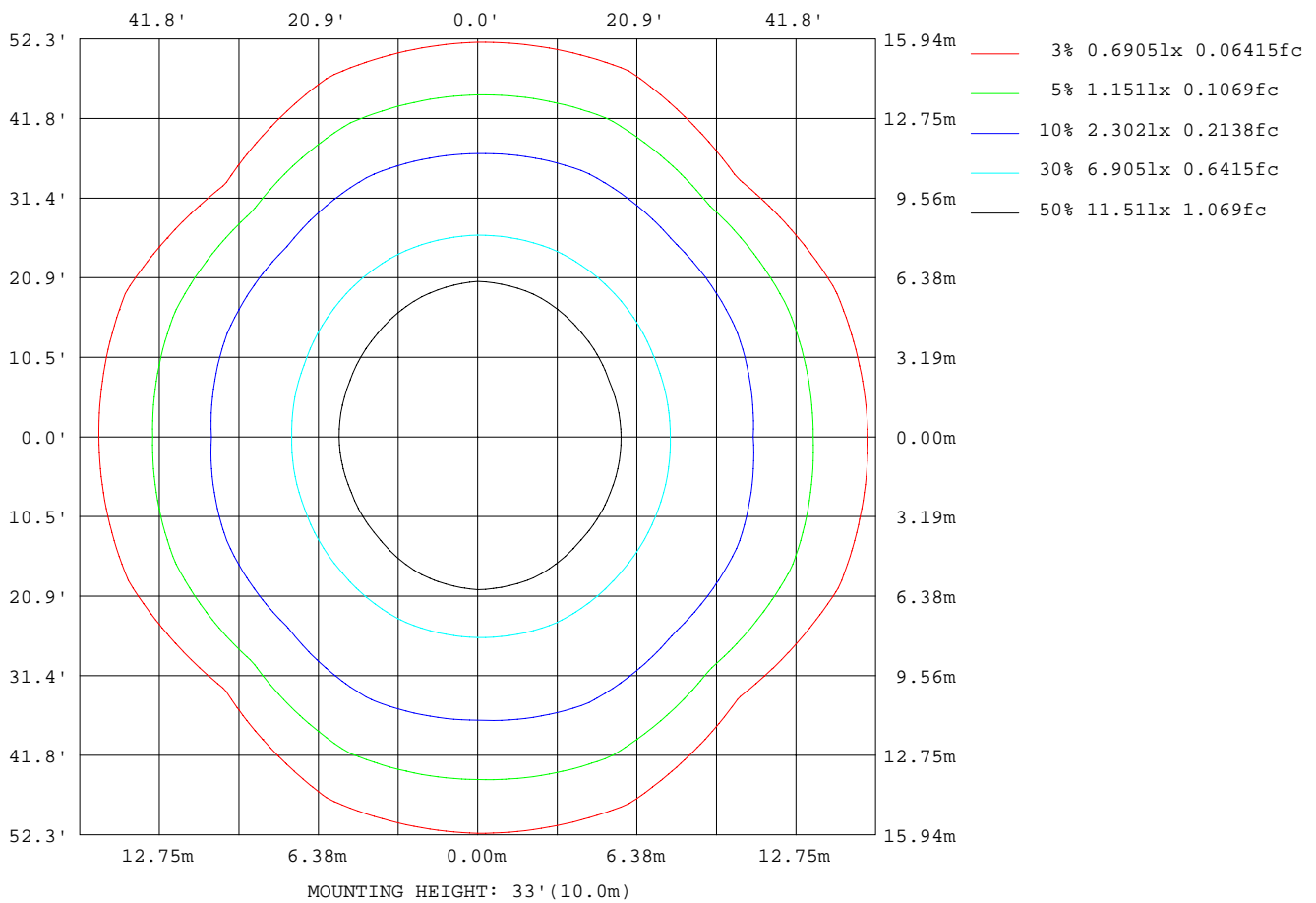
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-05-05

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:229.70V I:0.3513A P:78.972W PF:0.9785 Freq:49.99Hz Lamp Flux:4495.34x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-05-05

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:229.70V I:0.3513A P:78.972W PF:0.9785 Freq:49.99Hz Lamp Flux:4495.34x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:

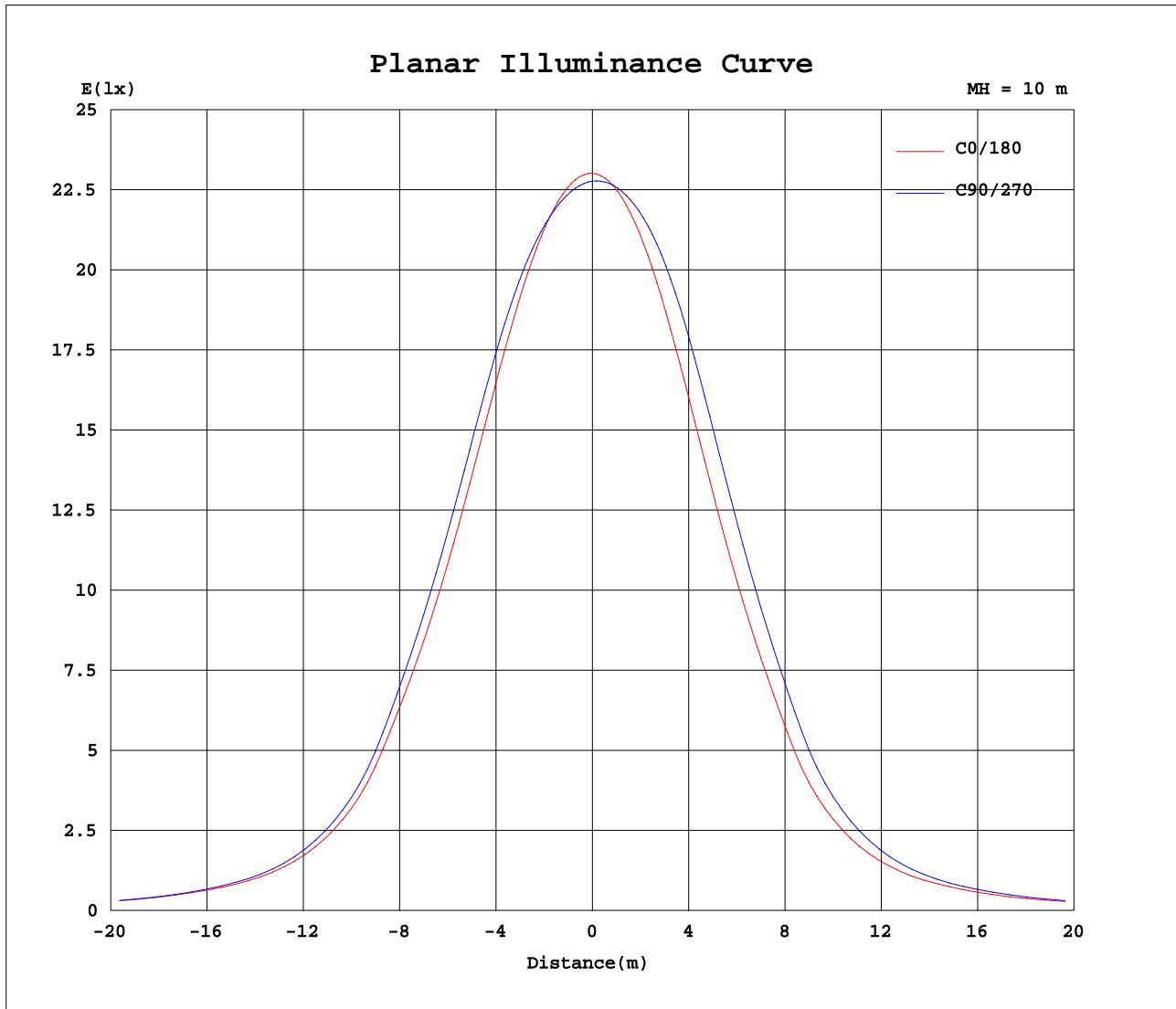
AvgL	cd/m2
L_0~180(65)av	6358
L_0~180(75)av	7606
L_0~180(85)av	7718
L_90~270(65)av	6701
L_90~270(75)av	8104
L_90~270(85)av	9655
L_45(65)av	4975
L_45(75)av	6238
L_45(85)av	7000

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-05-05

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: 2024-05-05

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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