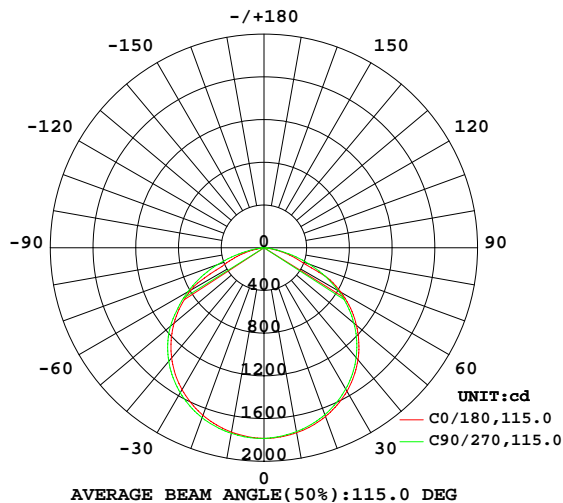


LUMINAIRE PHOTOMETRIC TEST REPORT

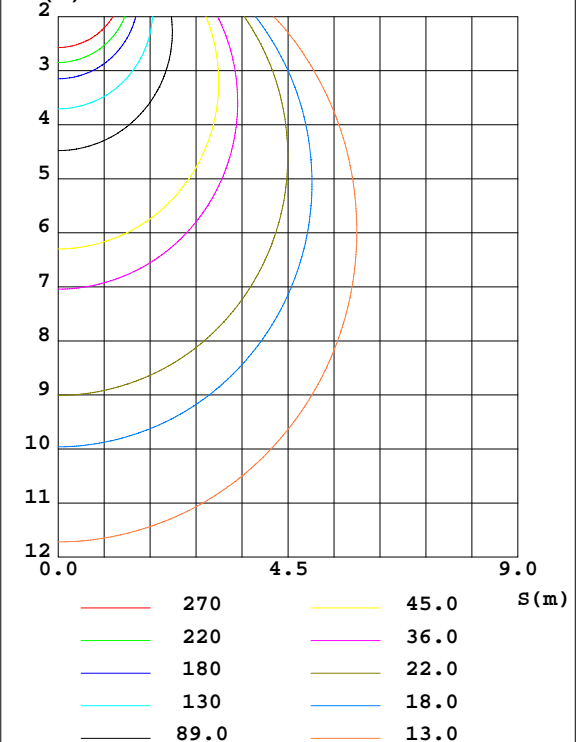
Test:U:229.72V I:0.2753A P:61.128W PF:0.9665 Freq:49.99Hz Lamp Flux:5030.66x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.503*0.09	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 82.30 lm/W			
MODEL		Imax(cd)	1786	S/MH(C0/180)	1.28
NOMINAL POWER(W)	60	LOR(%)	100.0	S/MH(C90/270)	1.30
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	5030.7	η UP,DN(C0-180)	0.0,50.2
NOMINAL FLUX(lm)	5030.66	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.8
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: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-07-05

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:

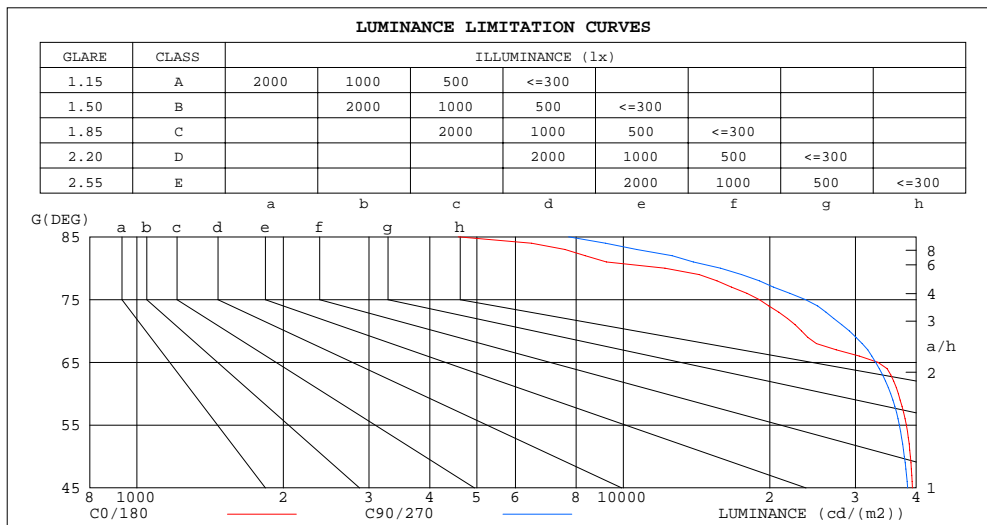
γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	1758	1748	1753	1764					0- 10	168.9	168.9	3.36, 3.36
20	1682	1664	1670	1694					10- 20	486.7	655.6	13, 13
30	1552	1529	1535	1568					20- 30	746.1	1402	27.9, 27.9
40	1369	1342	1345	1388					30- 40	913.7	2315	46, 46
50	1130	1099	1100	1143					40- 50	961.3	3277	65.1, 65.1
60	830.7	801.0	790.2	823.3					50- 60	866.4	4143	82.4, 82.4
70	359.4	450.7	320.2	463.3					60- 70	595.1	4738	94.2, 94.2
80	95.58	124.4	61.38	124.3					70- 80	256.7	4995	99.3, 99.3
90	5.344	3.196	4.201	3.703					80- 90	35.61	5031	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: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-07-05

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:229.72V I:0.2753A P:61.128W PF:0.9665 Freq:49.99Hz Lamp Flux:5030.66x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.503*0.09	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	4579	7716
80	12178	15847
75	19027	23671
70	23249	29153
65	33353	33013
60	36756	35444
55	38173	36934
50	38897	37814
45	39308	38419

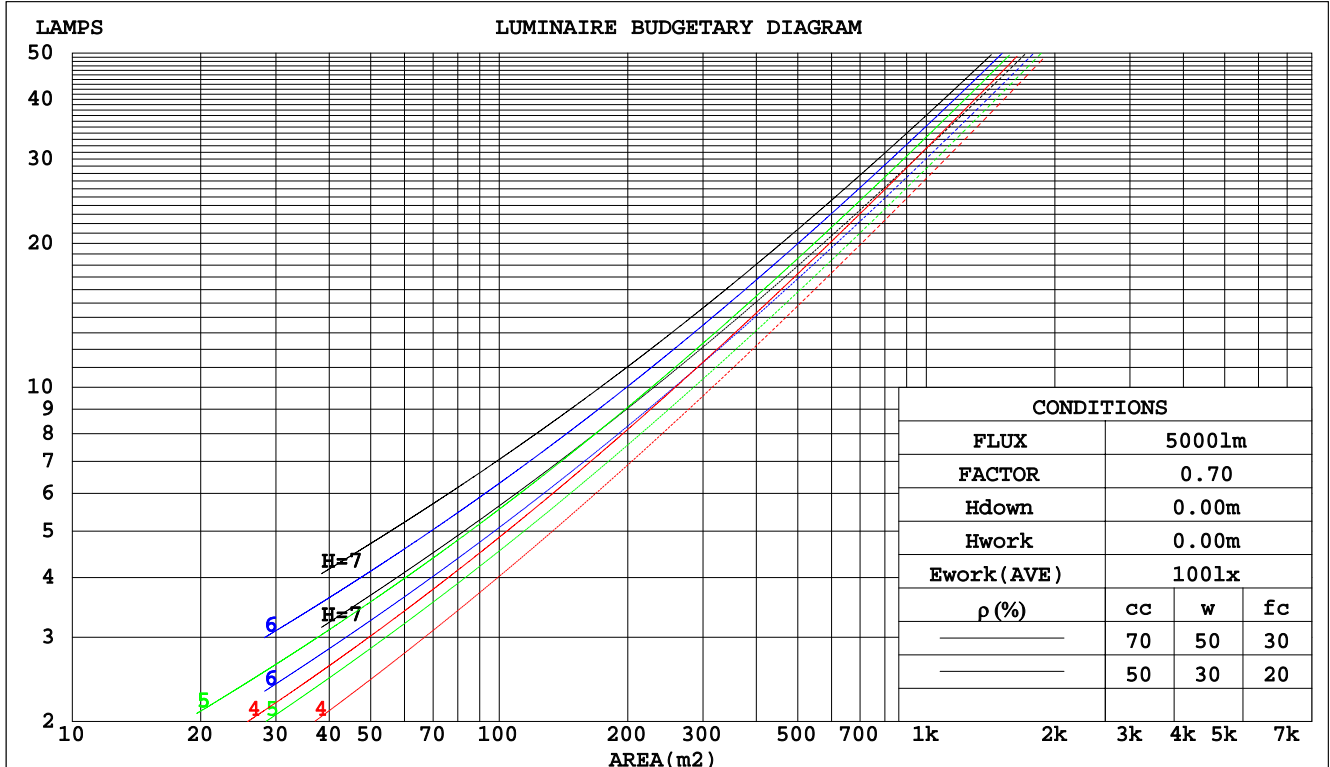
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-07-05

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:229.72V I:0.2753A P:61.128W PF:0.9665 Freq:49.99Hz Lamp Flux:5030.66x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.503*0.09	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	1.05	1.01	.97	1.03	.99	.96	.99	.96	.93	.95	.92	.90	.91	.89	.87	.85
2.0	.92	.85	.80	.90	.84	.79	.86	.81	.77	.83	.79	.75	.80	.77	.74	.72
3.0	.81	.73	.67	.79	.72	.66	.76	.70	.65	.74	.68	.64	.71	.66	.63	.60
4.0	.72	.63	.56	.70	.62	.56	.68	.61	.55	.65	.59	.54	.63	.58	.54	.52
5.0	.64	.55	.49	.63	.54	.48	.61	.53	.48	.59	.52	.47	.57	.51	.47	.45
6.0	.58	.49	.42	.57	.48	.42	.55	.47	.42	.53	.46	.41	.52	.46	.41	.39
7.0	.52	.43	.37	.51	.43	.37	.50	.42	.37	.48	.42	.37	.47	.41	.36	.34
8.0	.47	.39	.33	.47	.39	.33	.45	.38	.33	.44	.38	.33	.43	.37	.32	.31
9.0	.44	.35	.30	.43	.35	.30	.42	.35	.30	.41	.34	.29	.40	.34	.29	.27
10.0	.40	.32	.27	.40	.32	.27	.39	.32	.27	.38	.31	.27	.37	.31	.27	.25



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-07-05

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:229.72V I:0.2753A P:61.128W PF:0.9665 Freq:49.99Hz Lamp Flux:5030.66x1 lm								
NAME:			TYPE:			WEIGHT:		
SPEC.:			DIM.: 610*280*42			SERIAL No.:		
MFR.:			SUR.:0.503*0.09			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	.288	.164	.052	.281	.160	.051	.268	.154	.049	.256	.148	.047	.245	.142	.046		
2.0	.278	.152	.047	.272	.150	.046	.260	.145	.045	.249	.140	.044	.240	.136	.043		
3.0	.261	.139	.042	.255	.137	.041	.245	.133	.040	.236	.129	.040	.227	.126	.039		
4.0	.243	.126	.037	.238	.124	.037	.229	.121	.036	.220	.118	.036	.213	.115	.035		
5.0	.226	.115	.033	.221	.114	.033	.213	.111	.033	.206	.109	.032	.199	.106	.032		
6.0	.210	.105	.030	.206	.104	.030	.199	.102	.030	.193	.100	.029	.186	.098	.029		
7.0	.196	.097	.028	.193	.096	.027	.186	.094	.027	.180	.093	.027	.175	.091	.027		
8.0	.184	.090	.025	.181	.089	.025	.175	.087	.025	.170	.086	.025	.164	.084	.025		
9.0	.173	.083	.023	.170	.083	.023	.165	.081	.023	.160	.080	.023	.155	.079	.023		
10.0	.162	.078	.022	.160	.077	.022	.155	.076	.021	.151	.075	.021	.147	.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	.179	.156	.136	.153	.134	.117	.105	.092	.081	.060	.053	.047	.019	.017	.015		
2.0	.170	.132	.100	.146	.114	.086	.100	.079	.060	.058	.046	.035	.019	.015	.011		
3.0	.163	.114	.076	.139	.099	.066	.096	.068	.046	.055	.040	.027	.018	.013	.009		
4.0	.155	.101	.059	.133	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007		
5.0	.148	.090	.048	.127	.078	.042	.088	.055	.029	.051	.032	.017	.016	.010	.006		
6.0	.141	.082	.040	.121	.071	.035	.084	.050	.024	.049	.029	.015	.016	.010	.005		
7.0	.134	.075	.034	.116	.065	.029	.080	.046	.021	.046	.027	.012	.015	.009	.004		
8.0	.128	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004		
9.0	.122	.064	.025	.105	.056	.022	.073	.039	.016	.042	.023	.009	.014	.008	.003		
10.0	.117	.060	.023	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003		

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-07-05

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:229.72V I:0.2753A P:61.128W PF:0.9665 Freq:49.99Hz Lamp Flux:5030.66x1 lm										
NAME:			TYPE:			WEIGHT:				
SPEC.:			DIM.: 610*280*42			SERIAL No.:				
MFR.:			SUR.:0.503*0.09			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	25.7	27.2	26.0	27.4	27.6	25.6	27.1	25.8	27.3	27.5
3H	26.7	28.1	27.0	28.3	28.5	26.8	28.2	27.1	28.4	28.7
4H	26.9	28.3	27.3	28.5	28.8	27.2	28.5	27.5	28.8	29.0
6H	27.0	28.3	27.4	28.5	28.8	27.4	28.6	27.7	28.9	29.2
8H	27.0	28.2	27.4	28.5	28.8	27.4	28.6	27.7	28.9	29.1
12H	27.0	28.1	27.3	28.4	28.7	27.4	28.5	27.7	28.8	29.1
4H 2H	26.2	27.5	26.5	27.8	28.0	26.1	27.4	26.4	27.7	27.9
3H	27.3	28.5	27.7	28.8	29.1	27.5	28.6	27.9	28.9	29.2
4H	27.7	28.7	28.1	29.0	29.4	28.0	29.0	28.4	29.3	29.7
6H	27.8	28.8	28.2	29.1	29.5	28.2	29.1	28.6	29.5	29.8
8H	27.8	28.7	28.3	29.1	29.4	28.2	29.1	28.7	29.5	29.8
12H	27.8	28.6	28.2	29.0	29.4	28.2	29.0	28.7	29.4	29.8
8H 4H	27.8	28.7	28.2	29.0	29.4	28.1	28.9	28.5	29.3	29.7
6H	28.0	28.7	28.5	29.1	29.6	28.4	29.1	28.8	29.5	29.9
8H	28.1	28.7	28.5	29.1	29.6	28.4	29.1	28.9	29.5	29.9
12H	28.1	28.6	28.5	29.0	29.5	28.5	29.0	28.9	29.4	29.9
12H 4H	27.8	28.6	28.2	29.0	29.4	28.1	28.8	28.5	29.2	29.6
6H	28.0	28.7	28.5	29.1	29.5	28.4	29.0	28.8	29.4	29.9
8H	28.1	28.6	28.6	29.1	29.5	28.4	29.0	28.9	29.4	29.9
Variations with the observer position at spacings:										
S = 1.0H	+ 0.3 / - 0.3					+ 0.2 / - 0.3				
1.5H	+ 0.3 / - 0.4					+ 0.2 / - 0.4				
2.0H	+ 0.3 / - 0.5					+ 0.3 / - 0.4				

CIE Pub.117, 5031 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 5.6$)

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-07-05

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:229.72V I:0.2753A P:61.128W PF:0.9665 Freq:49.99Hz Lamp Flux:5030.66x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.503*0.09	Shielding Angle:

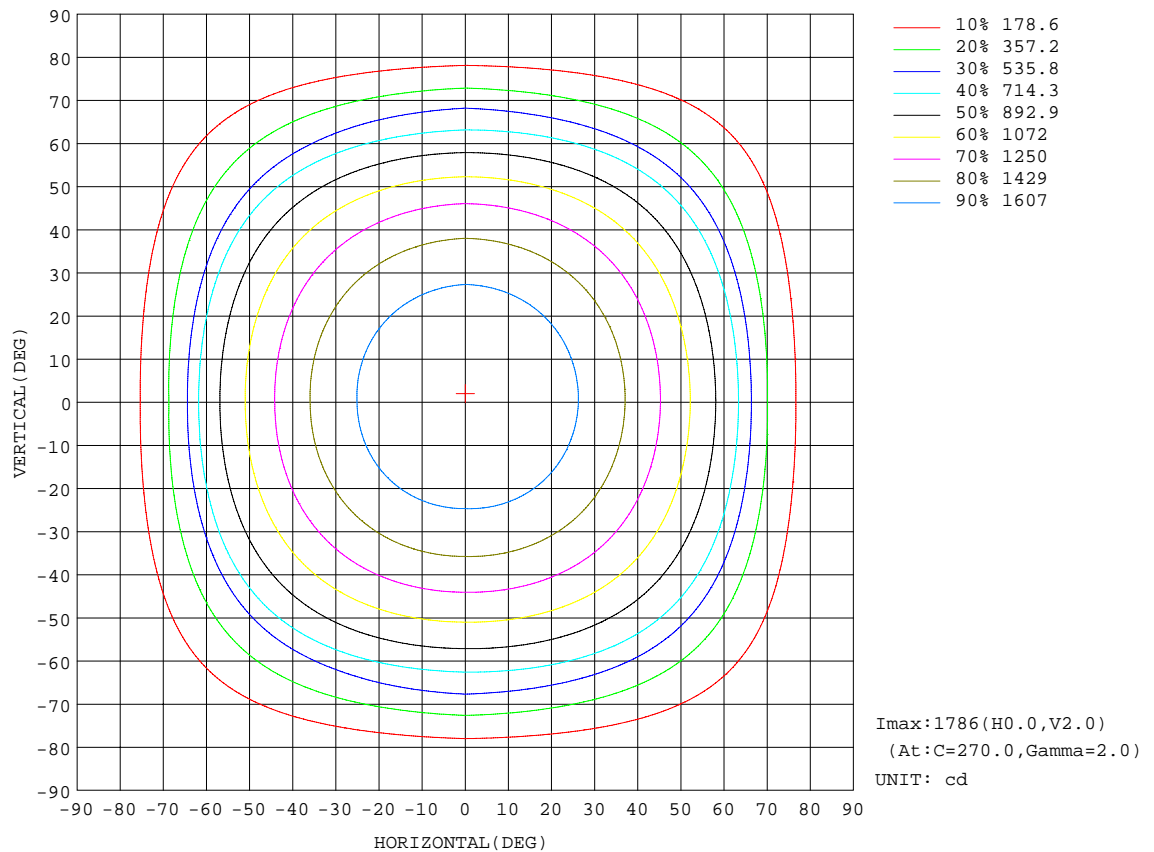
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	58	46	40	57	46	39	56	46	39	33
0.80	68	57	50	67	56	49	66	56	49	42
1.00	77	66	59	76	66	59	74	67	58	51
1.25	84	74	67	83	73	67	80	72	66	59
1.50	89	80	73	88	79	73	85	77	72	64
2.00	96	88	82	94	87	81	91	85	80	72
2.50	100	93	87	98	91	86	94	89	84	76
3.00	103	97	92	101	95	91	97	92	88	80
4.00	107	102	97	105	100	96	101	97	93	85
5.00	109	105	101	107	103	100	103	99	97	88
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-07-05

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:229.72V I:0.2753A P:61.128W PF:0.9665 Freq:49.99Hz Lamp Flux:5030.66x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.503*0.09	Shielding Angle:

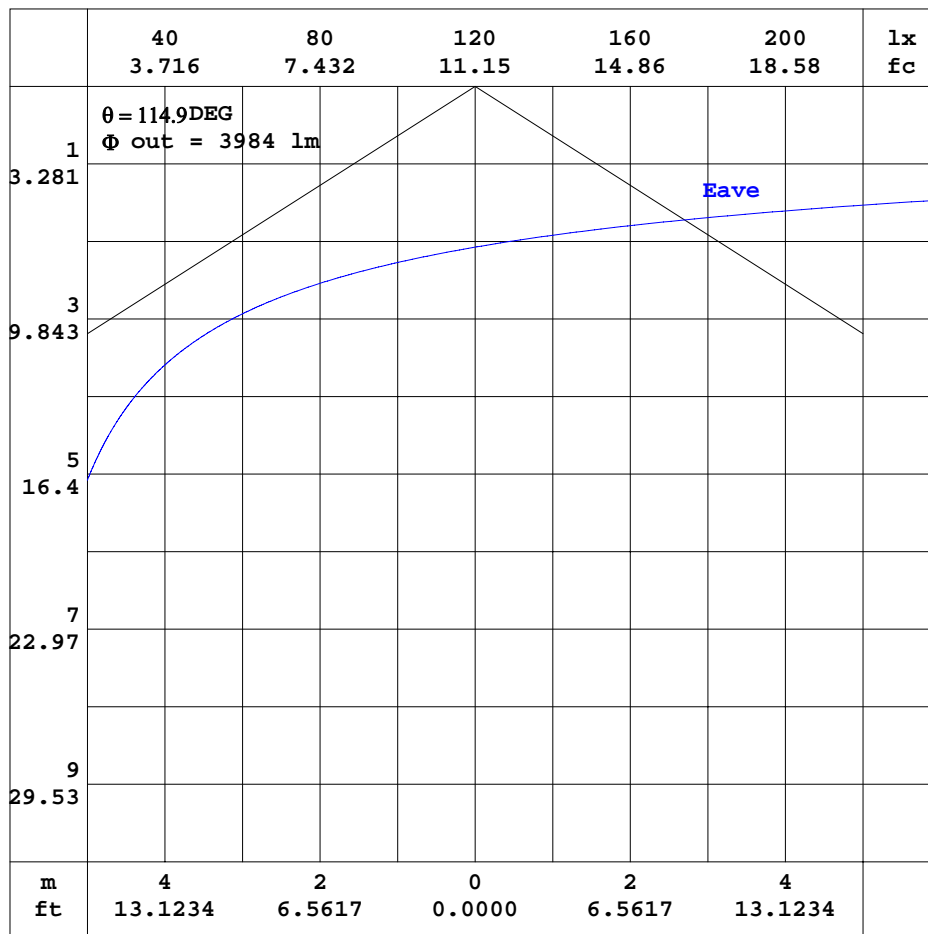


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-07-05

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:229.72V I:0.2753A P:61.128W PF:0.9665 Freq:49.99Hz Lamp Flux:5030.66x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.503*0.09	Shielding Angle:



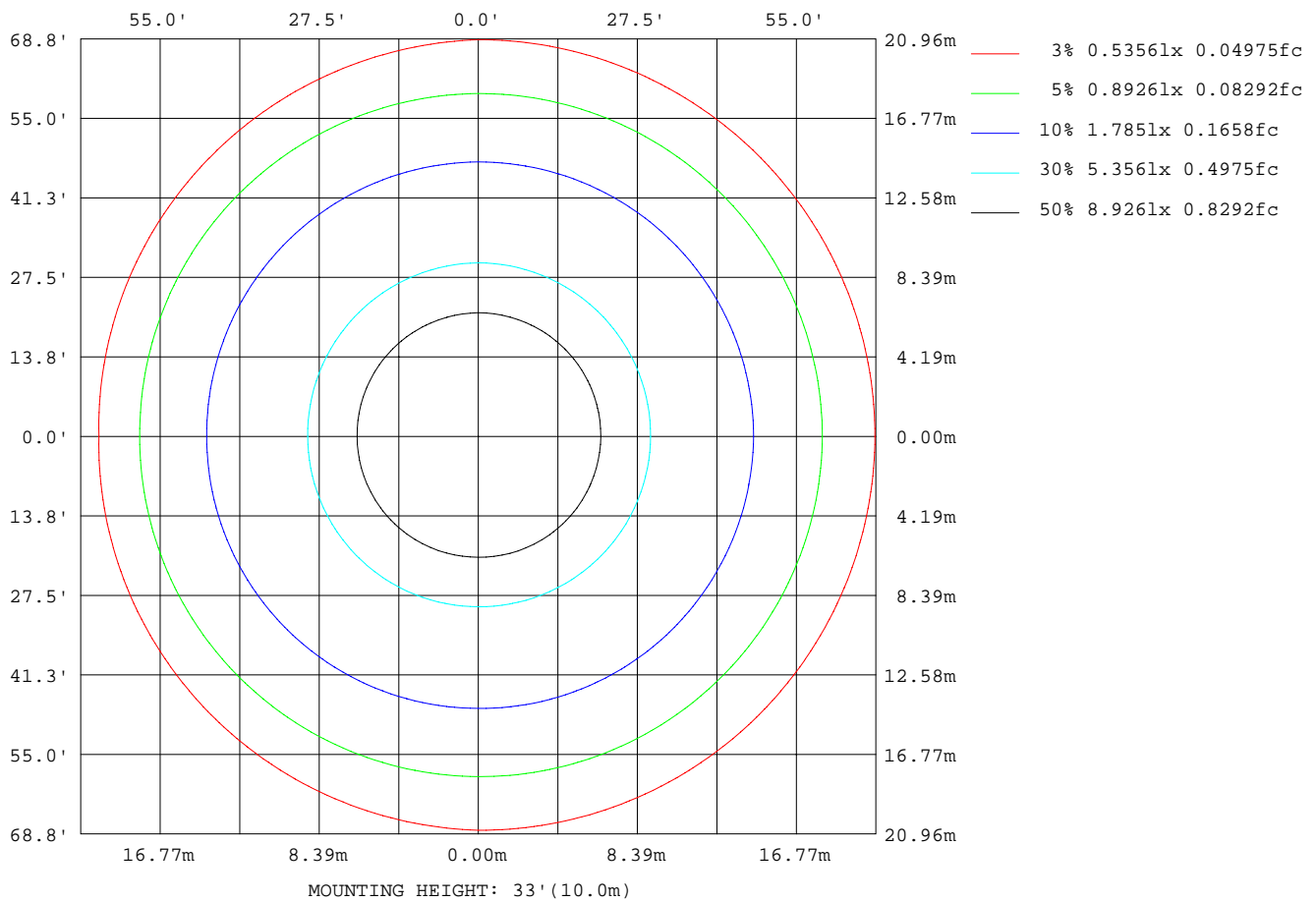
Note: The Curves indicate the illuminated area and the average illuminance when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-07-05

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:

ISOLUX DIAGRAM

Test:U:229.72V I:0.2753A P:61.128W PF:0.9665 Freq:49.99Hz Lamp Flux:5030.66x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.503*0.09	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-07-05

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:229.72V I:0.2753A P:61.128W PF:0.9665 Freq:49.99Hz Lamp Flux:5030.66x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.503*0.09	Shielding Angle:

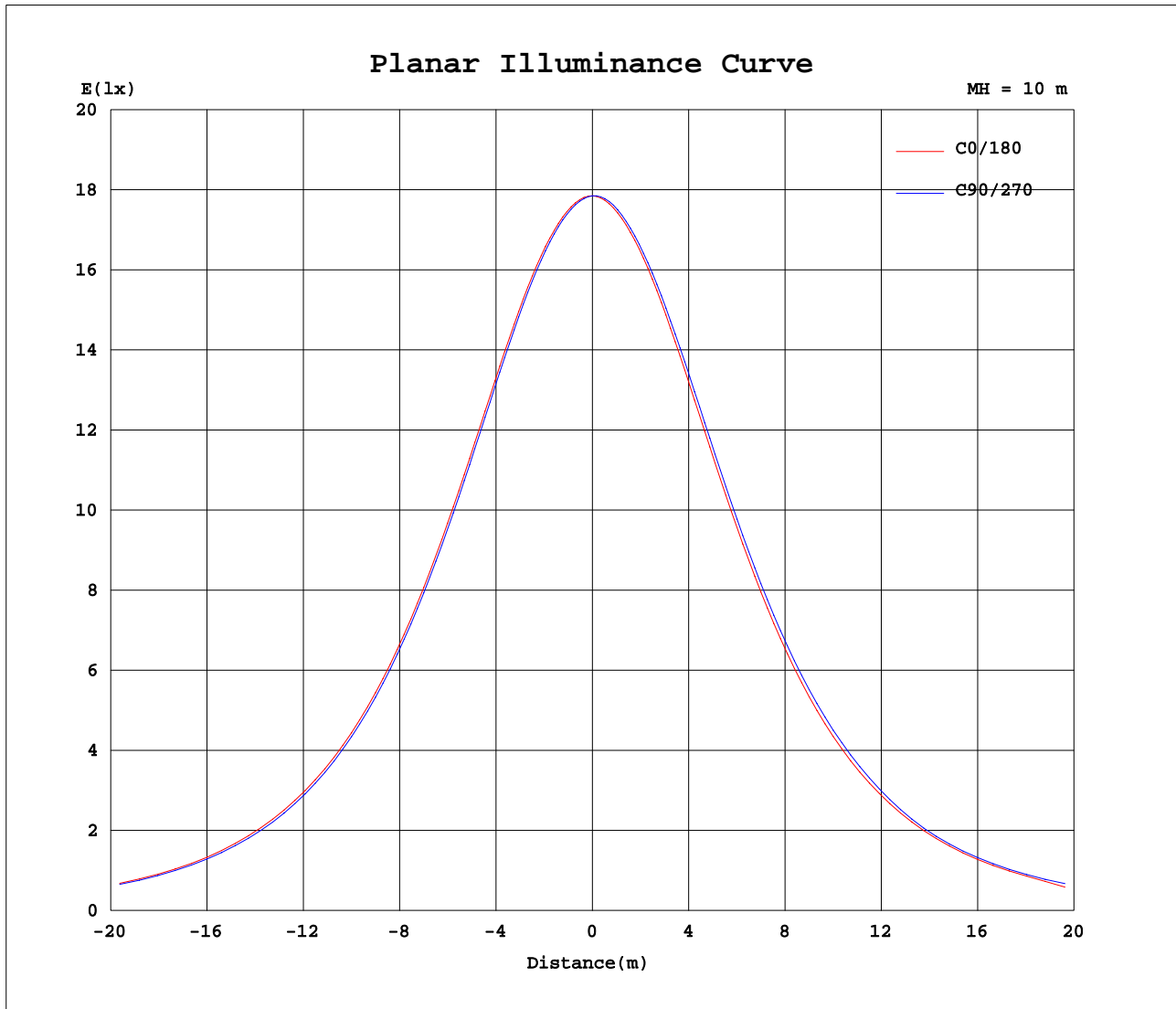
AvgL	cd/m2
L_0~180(65)av	29677
L_0~180(75)av	17518
L_0~180(85)av	3395
L_90~270(65)av	33480
L_90~270(75)av	23773
L_90~270(85)av	7622
L_45(65)av	31824
L_45(75)av	21333
L_45(85)av	5963

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-07-05

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: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-07-05

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:

```

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:

```