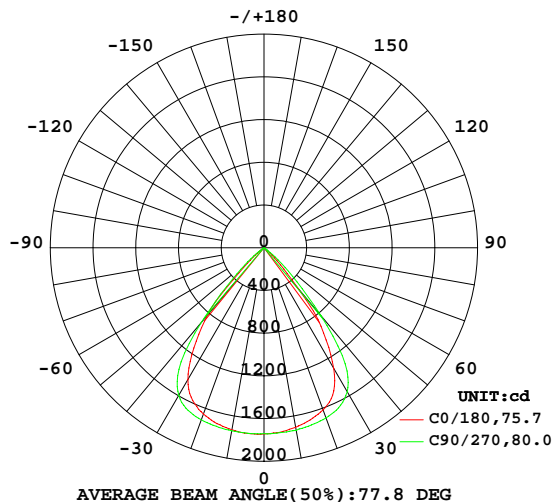


LUMINAIRE PHOTOMETRIC TEST REPORT

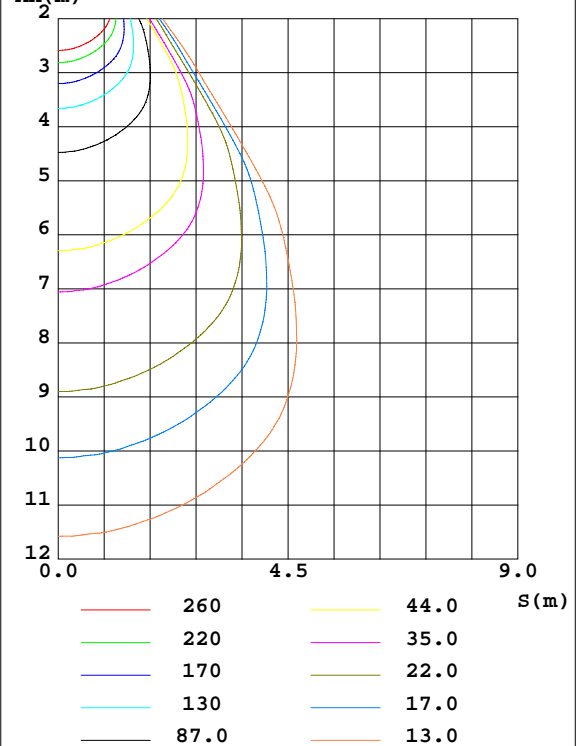
Test:U:229.63V I:0.2506A P:57.231W PF:0.9945 Freq:49.99Hz Lamp Flux:2692.84x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1650*48*76	SERIAL No.:
MFR.:	SUR.:1.64*0.042	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 47.05 lm/W			
MODEL		Imax(cd)	1749	S/MH(C0/180)	1.13
NOMINAL POWER(W)	60	LOR(%)	100.0	S/MH(C90/270)	1.17
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	2692.9	η UP,DN(C0-180)	0.0,49.2
NOMINAL FLUX(lm)	2692.84	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.8
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230.0	η down(%)	100.0	CIBSE SHR MAX	1.30

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:2025-09-29

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:

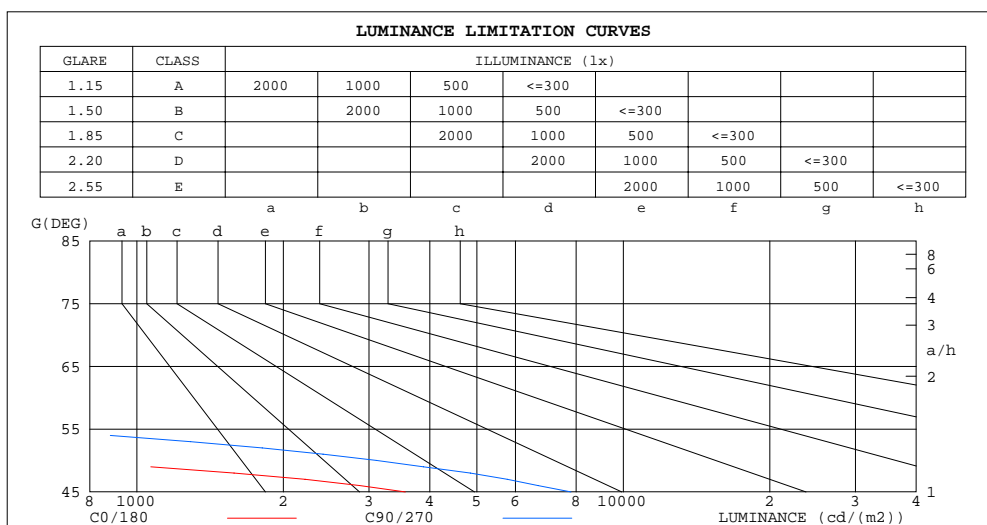
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum, lamp
10	1707	1717	1736	1736	1731	1742	1741	1723	0- 10	165.8	165.8	6.16,6.16
20	1616	1675	1696	1698	1657	1714	1715	1685	10- 20	483.7	649.5	24.1,24.1
30	1308	1604	1558	1636	1426	1665	1595	1630	20- 30	754.7	1404	52.1,52.1
40	500.9	1014	830.1	1166	825.0	1235	915.0	1016	30- 40	817.8	2222	82.5,82.5
50	30.16	246.3	137.4	417.2	109.6	463.2	159.5	235.5	40- 50	401.5	2623	97.4,97.4
60	2.337	15.71	2.493	41.30	3.719	48.64	2.974	15.87	50- 60	63.71	2687	99.8,99.8
70	1.479	1.057	1.151	1.315	1.765	1.082	1.073	0.9962	60- 70	3.441	2691	99.9,99.9
80	1.031	0.7919	0.5586	0.9620	2.268	0.5569	0.6013	0.5383	70- 80	1.091	2692	100,100
90	0.4897	1.143	0.6873	2.921	3.162	1.143	0.7388	0.6959	80- 90	1.174	2693	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:2025-09-29

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:229.63V I:0.2506A P:57.231W PF:0.9945 Freq:49.99Hz Lamp Flux:2692.84x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1650*48*76	SERIAL No.:
MFR.:	SUR.:1.64*0.042	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	128	83
80	86	47
75	76	44
70	63	49
65	63	54
60	68	72
55	134	579
50	682	3107
45	3564	7804

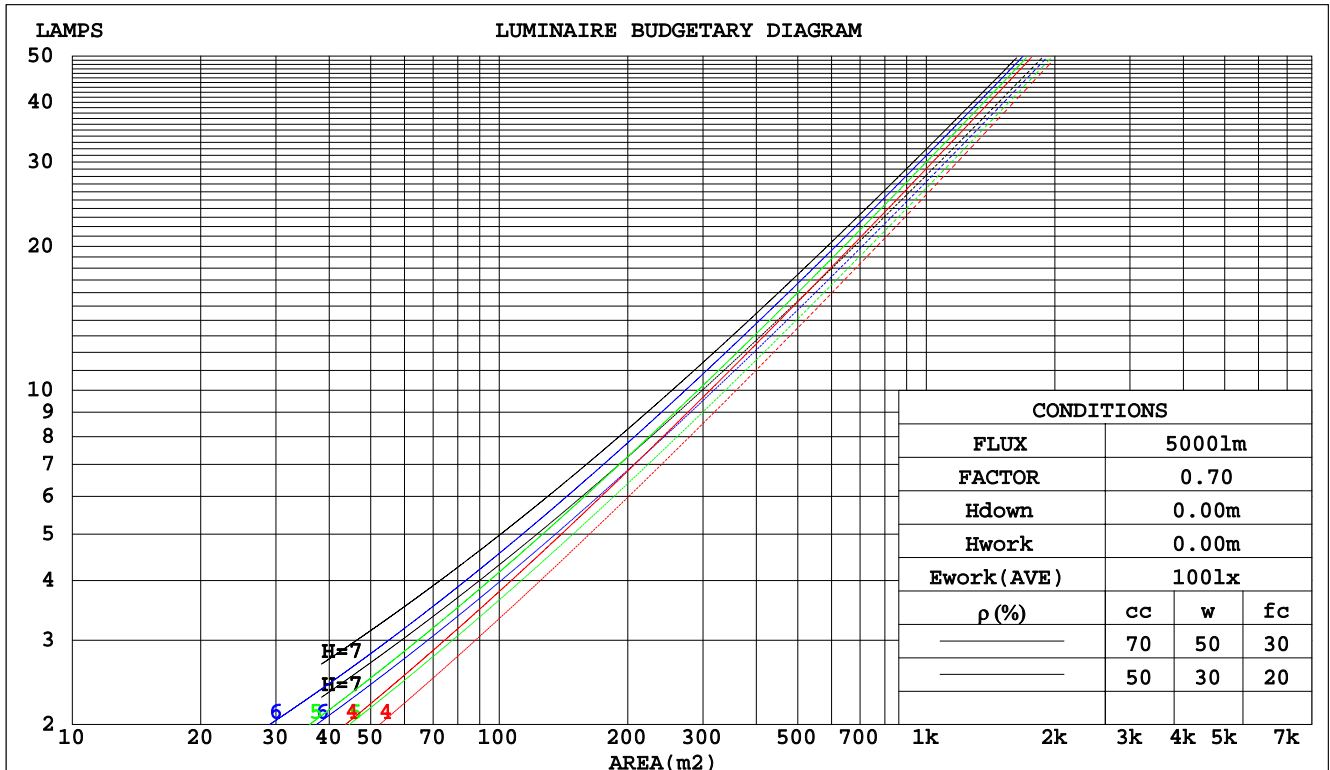
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-09-29

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:229.63V I:0.2506A P:57.231W PF:0.9945 Freq:49.99Hz Lamp Flux:2692.84x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1650*48*76	SERIAL No.:
MFR.:	SUR.:1.64*0.042	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	1.10	1.07	1.05	1.08	1.05	1.03	1.04	1.02	.00	.00	.98	.97	.96	.95	.94	.92
2.0	1.01	.96	.93	.99	.95	.92	.96	.92	.89	.93	.90	.88	.90	.88	.86	.84
3.0	.93	.87	.83	.91	.86	.82	.89	.84	.81	.86	.82	.79	.84	.81	.78	.76
4.0	.85	.79	.74	.84	.78	.74	.82	.77	.73	.80	.76	.72	.78	.74	.71	.70
5.0	.79	.72	.67	.78	.72	.67	.76	.70	.66	.74	.69	.66	.72	.68	.65	.63
6.0	.73	.66	.61	.72	.65	.61	.70	.65	.60	.69	.64	.60	.67	.63	.60	.58
7.0	.67	.60	.56	.67	.60	.56	.65	.59	.55	.64	.59	.55	.63	.58	.55	.53
8.0	.62	.56	.51	.62	.55	.51	.61	.55	.51	.60	.54	.50	.59	.54	.50	.49
9.0	.58	.51	.47	.58	.51	.47	.57	.51	.47	.56	.50	.46	.55	.50	.46	.45
10.0	.54	.48	.43	.54	.47	.43	.53	.47	.43	.52	.47	.43	.51	.46	.43	.41



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-09-29

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:229.63V I:0.2506A P:57.231W PF:0.9945 Freq:49.99Hz Lamp Flux:2692.84x1 lm					
NAME:		TYPE:		WEIGHT:	
SPEC.:		DIM.: 1650*48*76		SERIAL No.:	
MFR.:		SUR.:1.64*0.042		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	.197	.112	.035	.190	.108	.034	.177	.102	.032	.166	.096	.031	.155	.090	.029	
2.0	.192	.105	.032	.186	.102	.032	.175	.097	.030	.165	.093	.029	.156	.088	.028	
3.0	.184	.098	.029	.179	.096	.029	.170	.092	.028	.161	.088	.027	.153	.085	.026	
4.0	.176	.092	.027	.172	.090	.027	.164	.087	.026	.156	.084	.025	.149	.081	.025	
5.0	.169	.086	.025	.165	.085	.025	.158	.082	.024	.151	.080	.024	.145	.077	.023	
6.0	.161	.081	.023	.158	.080	.023	.152	.078	.023	.146	.076	.022	.140	.074	.022	
7.0	.154	.076	.022	.151	.075	.021	.146	.074	.021	.140	.072	.021	.135	.070	.021	
8.0	.147	.072	.020	.145	.071	.020	.140	.070	.020	.135	.068	.020	.130	.067	.019	
9.0	.141	.068	.019	.139	.068	.019	.134	.066	.019	.130	.065	.019	.126	.064	.018	
10.0	.135	.065	.018	.133	.064	.018	.129	.063	.018	.125	.062	.018	.121	.061	.017	

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	.172	.157	.143	.148	.135	.123	.101	.093	.085	.058	.054	.050	.019	.017	.016	
2.0	.159	.132	.110	.136	.114	.095	.093	.079	.066	.054	.046	.039	.017	.015	.013	
3.0	.148	.114	.086	.127	.098	.075	.087	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.139	.099	.069	.119	.086	.060	.082	.060	.042	.047	.035	.025	.015	.011	.008	
5.0	.131	.088	.056	.113	.076	.049	.078	.053	.035	.045	.031	.021	.014	.010	.007	
6.0	.125	.079	.047	.107	.069	.041	.074	.048	.029	.043	.028	.017	.014	.009	.006	
7.0	.119	.072	.039	.102	.062	.034	.070	.044	.024	.041	.026	.014	.013	.008	.005	
8.0	.113	.066	.034	.097	.057	.029	.067	.040	.021	.039	.024	.012	.013	.008	.004	
9.0	.108	.061	.029	.093	.053	.025	.065	.037	.018	.038	.022	.011	.012	.007	.004	
10.0	.104	.057	.026	.089	.049	.022	.062	.035	.016	.036	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-09-29

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:229.63V I:0.2506A P:57.231W PF:0.9945 Freq:49.99Hz Lamp Flux:2692.84x1 lm										
NAME:			TYPE:			WEIGHT:				
SPEC.:			DIM.: 1650*48*76			SERIAL No.:				
MFR.:			SUR.:1.64*0.042			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	15.4	16.5	15.6	16.7	16.9	17.3	18.4	17.6	18.6	18.8
3H	15.2	16.2	15.5	16.4	16.6	17.1	18.1	17.4	18.4	18.6
4H	15.1	16.1	15.4	16.3	16.5	17.0	18.0	17.3	18.2	18.5
6H	15.0	15.9	15.3	16.2	16.4	17.0	17.8	17.3	18.1	18.3
8H	15.0	15.8	15.3	16.1	16.4	16.9	17.8	17.2	18.0	18.3
12H	14.9	15.7	15.3	16.0	16.3	16.9	17.7	17.2	18.0	18.2
4H 2H	15.1	16.1	15.4	16.3	16.5	17.1	18.0	17.3	18.2	18.5
3H	14.9	15.8	15.3	16.0	16.3	16.9	17.7	17.2	18.0	18.2
4H	14.9	15.6	15.2	15.9	16.2	16.8	17.5	17.1	17.8	18.1
6H	14.8	15.4	15.1	15.7	16.1	16.7	17.3	17.1	17.7	18.0
8H	14.7	15.3	15.1	15.7	16.0	16.6	17.2	17.0	17.6	18.0
12H	14.7	15.2	15.1	15.6	16.0	16.6	17.1	17.0	17.5	17.9
8H 4H	14.7	15.3	15.1	15.7	16.0	16.6	17.2	17.0	17.6	18.0
6H	14.6	15.1	15.0	15.5	15.9	16.5	17.0	17.0	17.4	17.8
8H	14.6	15.0	15.0	15.4	15.9	16.5	16.9	16.9	17.3	17.8
12H	14.5	14.9	15.0	15.3	15.8	16.4	16.8	16.9	17.2	17.7
12H 4H	14.7	15.2	15.1	15.6	16.0	16.6	17.1	17.0	17.5	17.9
6H	14.6	15.0	15.0	15.4	15.9	16.5	16.9	16.9	17.3	17.8
8H	14.5	14.9	15.0	15.3	15.8	16.4	16.8	16.9	17.2	17.7
Variations with the observer position at spacings:										
S = 1.0H	+ 2.8 / -23.2					+ 2.8 / -22.7				
1.5H	+ 4.2 / -18.8					+ 4.3 / -11.2				
2.0H	+ 6.1 / -16.3					+ 6.6 / -22.5				

CIE Pub.117, 2693 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 3.4$)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-09-29

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:229.63V I:0.2506A P:57.231W PF:0.9945 Freq:49.99Hz Lamp Flux:2692.84x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1650*48*76	SERIAL No.:
MFR.:	SUR.:1.64*0.042	Shielding Angle:

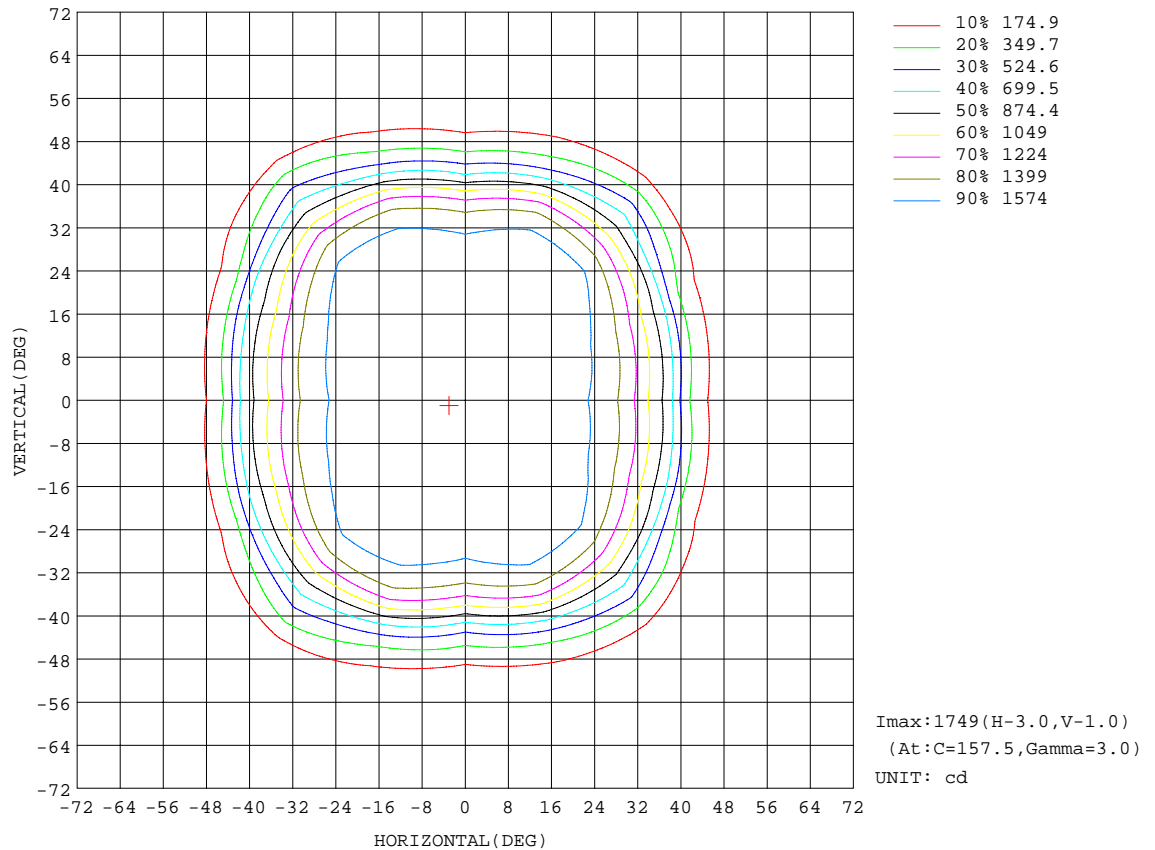
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	80	73	68	80	73	68	79	72	68	64
0.80	89	82	78	88	82	77	87	81	77	73
1.00	95	89	84	94	88	84	93	88	83	79
1.25	100	94	90	99	93	90	97	92	89	84
1.50	103	98	94	102	97	93	100	96	92	87
2.00	107	102	99	105	101	98	103	99	96	91
2.50	109	104	101	107	103	100	104	101	98	92
3.00	111	107	104	109	105	103	105	103	100	94
4.00	113	110	107	111	108	106	107	105	103	96
5.00	114	111	109	112	109	107	108	106	104	97
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:2025-09-29

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:229.63V I:0.2506A P:57.231W PF:0.9945 Freq:49.99Hz Lamp Flux:2692.84x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1650*48*76	SERIAL No.:
MFR.:	SUR.:1.64*0.042	Shielding Angle:

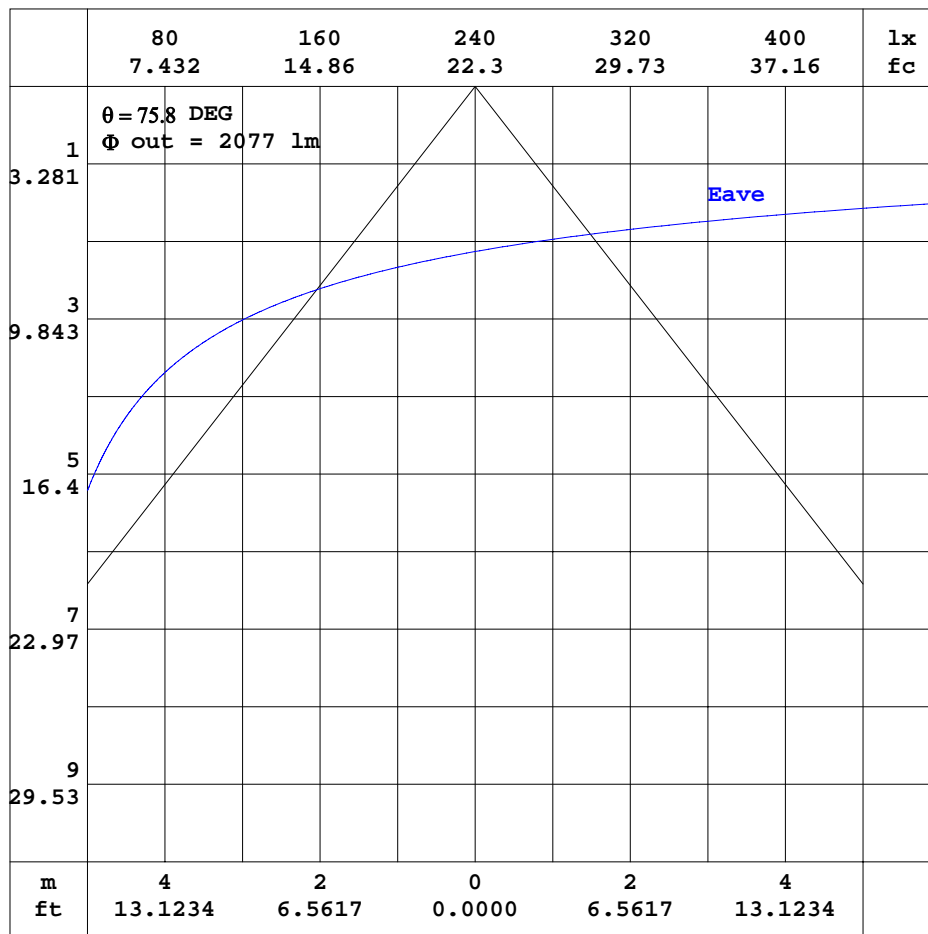


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-09-29

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:229.63V I:0.2506A P:57.231W PF:0.9945 Freq:49.99Hz Lamp Flux:2692.84x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1650*48*76	SERIAL No.:
MFR.:	SUR.:1.64*0.042	Shielding Angle:



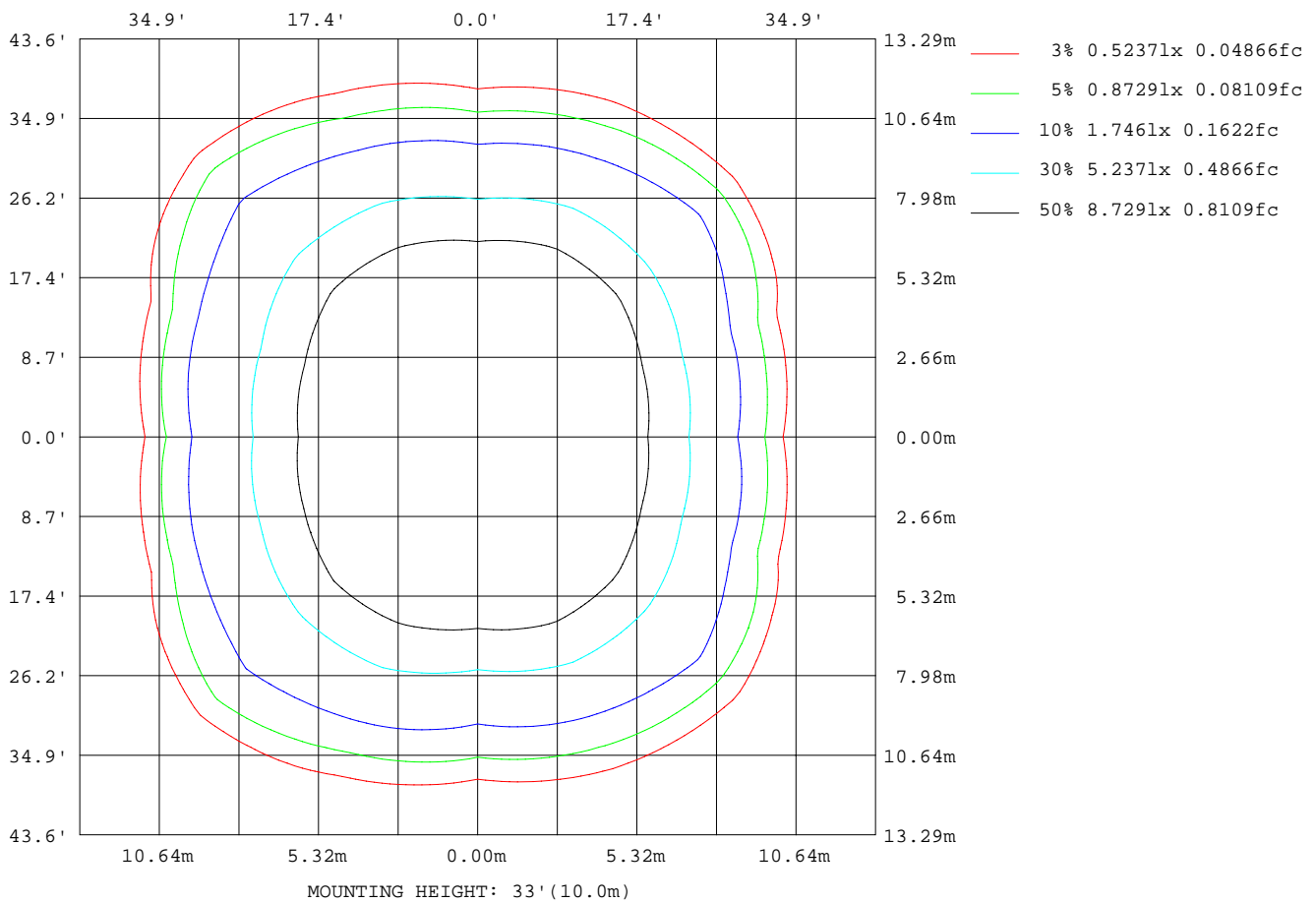
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2025-09-29

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:229.63V I:0.2506A P:57.231W PF:0.9945 Freq:49.99Hz Lamp Flux:2692.84x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1650*48*76	SERIAL No.:
MFR.:	SUR.:1.64*0.042	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-09-29

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:229.63V I:0.2506A P:57.231W PF:0.9945 Freq:49.99Hz Lamp Flux:2692.84x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1650*48*76	SERIAL No.:
MFR.:	SUR.:1.64*0.042	Shielding Angle:

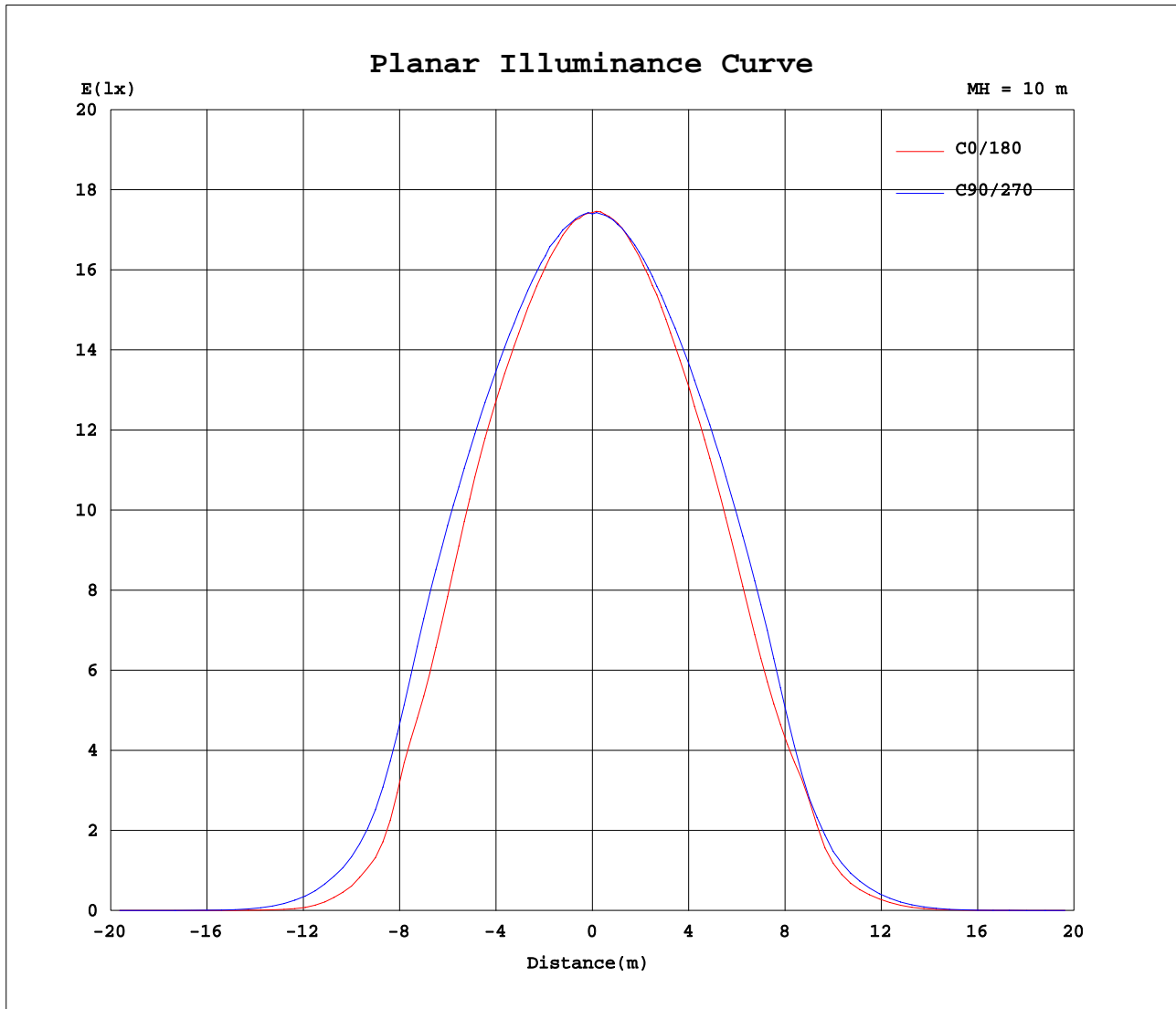
AvgL	cd/m2
L_0~180(65)av	66
L_0~180(75)av	87
L_0~180(85)av	286
L_90~270(65)av	53
L_90~270(75)av	42
L_90~270(85)av	91
L_45(65)av	135
L_45(75)av	44
L_45(85)av	155

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-09-29

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: 2025-09-29

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:

```