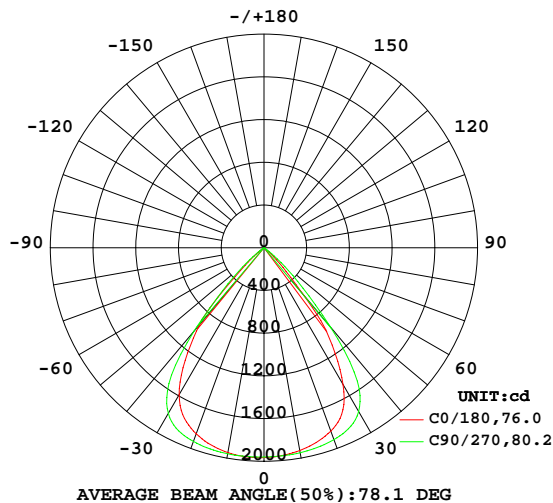


LUMINAIRE PHOTOMETRIC TEST REPORT

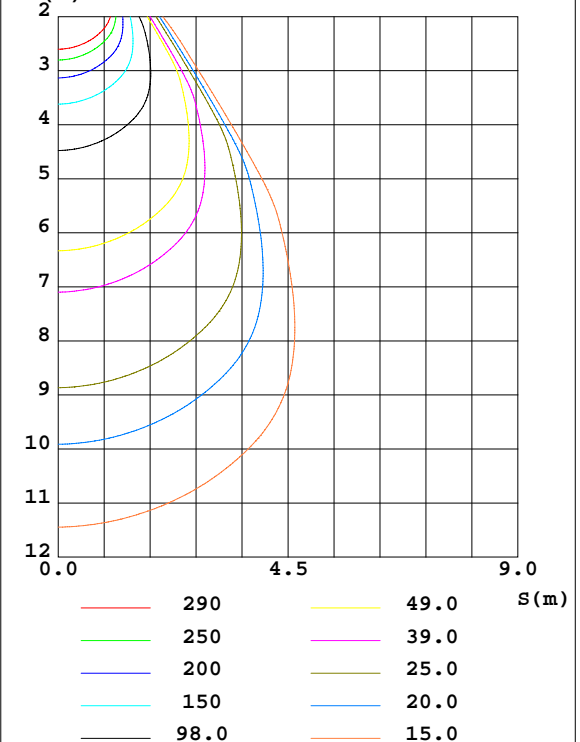
Test:U:229.66V I:0.2951A P:67.422W PF:0.9950 Freq:49.99Hz Lamp Flux:3037.63x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1650*48*76	SERIAL No.:
MFR.:	SUR.:1.64*0.042	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 45.05 lm/W			
MODEL		I _{max} (cd)	1966	S/MH(C0/180)	1.13
NOMINAL POWER(W)	70	LOR(%)	100.0	S/MH(C90/270)	1.17
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	3037.6	η UP,DN(C0-180)	0.0,49.4
NOMINAL FLUX(lm)	3037.63	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.6
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:

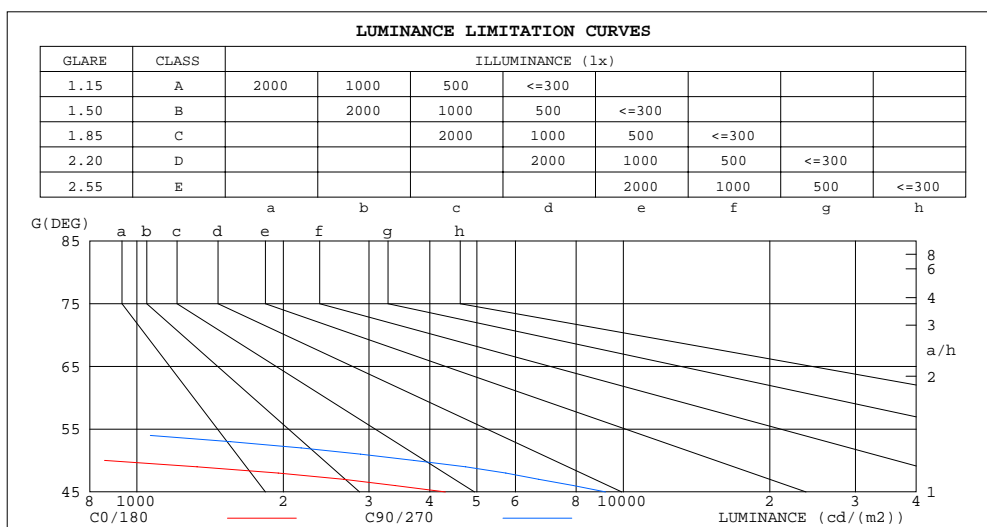
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum, lamp
10	1928	1934	1949	1950	1948	1958	1959	1941	0- 10	186.5	186.5	6.14,6.14
20	1828	1882	1912	1913	1855	1922	1930	1901	10- 20	544.2	730.7	24.1,24.1
30	1483	1793	1772	1845	1590	1856	1792	1822	20- 30	848.0	1579	52,52
40	577.6	1167	968.8	1313	937.4	1376	1016	1150	30- 40	920.9	2500	82.3,82.3
50	37.95	271.1	164.0	481.7	122.8	526.1	177.0	268.9	40- 50	458.2	2958	97.4,97.4
60	2.692	19.78	2.872	46.89	4.207	55.28	3.332	18.46	50- 60	73.20	3031	99.8,99.8
70	1.882	1.255	1.315	1.496	1.804	1.236	1.245	1.160	60- 70	3.949	3035	99.9,99.9
80	1.289	1.077	0.6274	0.9365	1.864	0.6912	0.7165	0.6443	70- 80	1.267	3036	100,100
90	0.6357	1.418	0.7646	3.084	3.488	1.624	0.8935	0.8849	80- 90	1.407	3038	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
 γ 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:0.2951A P:67.422W PF:0.9950 Freq:49.99Hz Lamp Flux:3037.63x1 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	176	95
80	108	53
75	101	51
70	80	56
65	74	62
60	78	83
55	156	703
50	858	3708
45	4306	9191

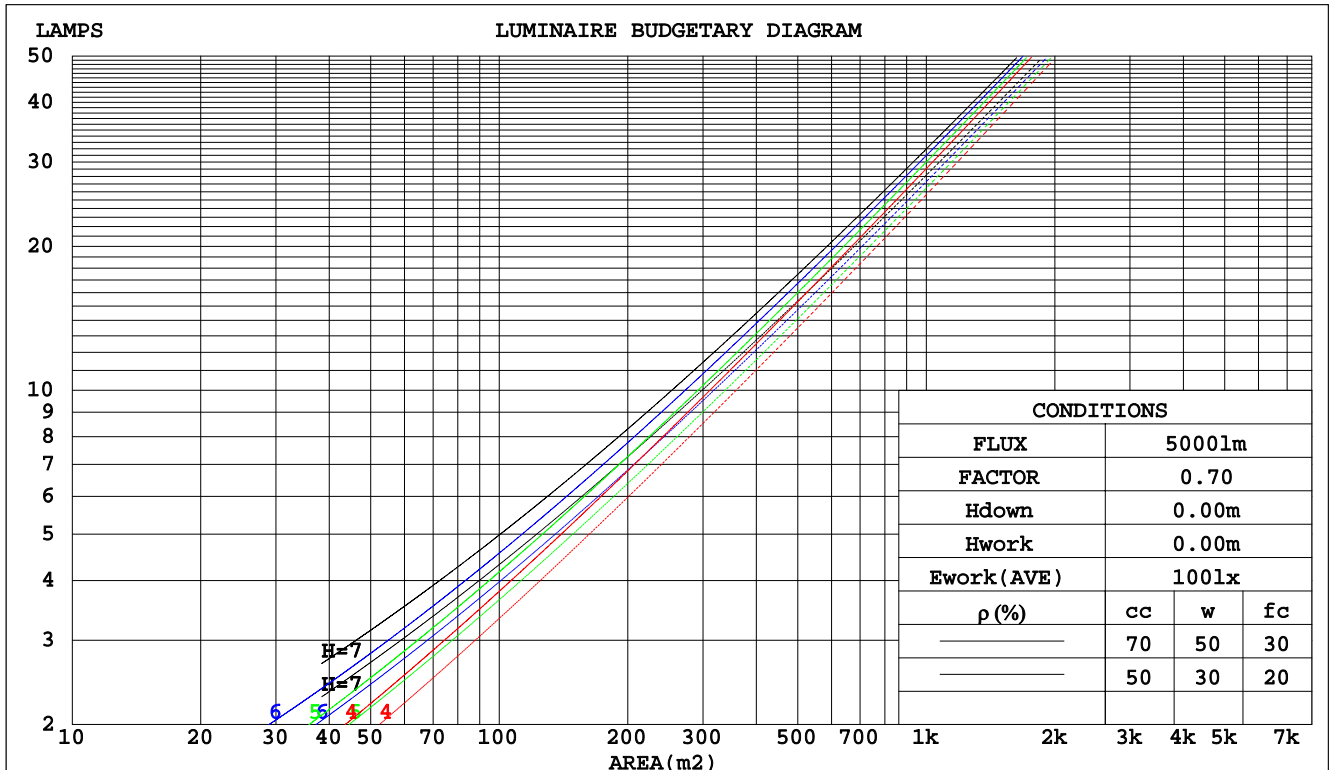
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2025-09-29

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:229.66V I:0.2951A P:67.422W PF:0.9950 Freq:49.99Hz Lamp Flux:3037.63x1 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	1.03	1.02	.00	.00	.98	.97	.96	.95	.94	.92
2.0	1.01	.96	.93	.99	.95	.91	.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	.69
5.0	.79	.72	.67	.78	.71	.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	.59	.58
7.0	.67	.60	.56	.67	.60	.55	.65	.59	.55	.64	.59	.55	.63	.58	.54	.53
8.0	.62	.56	.51	.62	.55	.51	.61	.55	.51	.60	.54	.50	.58	.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:229.66V I:0.2951A P:67.422W PF:0.9950 Freq:49.99Hz Lamp Flux:3037.63x1 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	.036	.190	.109	.034	.178	.102	.033	.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	.180	.096	.029	.170	.092	.028	.162	.089	.027	.154	.085	.026	
4.0	.177	.092	.027	.172	.090	.027	.164	.087	.026	.157	.084	.025	.150	.081	.025	
5.0	.169	.086	.025	.165	.085	.025	.158	.082	.024	.151	.080	.024	.145	.078	.023	
6.0	.162	.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	.148	.072	.020	.145	.071	.020	.140	.070	.020	.135	.068	.020	.131	.067	.020	
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	.173	.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	.015	.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	.071	.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:229.66V I:0.2951A P:67.422W PF:0.9950 Freq:49.99Hz Lamp Flux:3037.63x1 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	16.0	17.1	16.2	17.2	17.4	17.8	18.9	18.1	19.1	19.3
3H	15.8	16.8	16.0	17.0	17.2	17.7	18.7	17.9	18.9	19.1
4H	15.7	16.6	16.0	16.9	17.1	17.6	18.5	17.8	18.7	19.0
6H	15.6	16.5	15.9	16.7	17.0	17.5	18.4	17.8	18.6	18.9
8H	15.5	16.4	15.9	16.7	16.9	17.4	18.3	17.7	18.5	18.8
12H	15.5	16.3	15.8	16.6	16.9	17.4	18.2	17.7	18.5	18.7
4H 2H	15.7	16.6	16.0	16.9	17.1	17.6	18.5	17.9	18.7	19.0
3H	15.5	16.3	15.8	16.6	16.9	17.4	18.2	17.7	18.5	18.7
4H	15.4	16.2	15.8	16.5	16.8	17.3	18.0	17.6	18.3	18.6
6H	15.3	16.0	15.7	16.3	16.7	17.2	17.8	17.6	18.2	18.5
8H	15.3	15.9	15.7	16.2	16.6	17.1	17.7	17.5	18.1	18.5
12H	15.2	15.8	15.6	16.1	16.5	17.1	17.6	17.5	18.0	18.4
8H 4H	15.3	15.9	15.7	16.2	16.6	17.1	17.7	17.5	18.1	18.5
6H	15.2	15.7	15.6	16.1	16.5	17.1	17.5	17.5	17.9	18.3
8H	15.1	15.6	15.6	16.0	16.4	17.0	17.4	17.5	17.8	18.3
12H	15.1	15.4	15.6	15.9	16.4	17.0	17.3	17.4	17.8	18.2
12H 4H	15.2	15.8	15.6	16.1	16.5	17.1	17.6	17.5	18.0	18.4
6H	15.1	15.6	15.6	16.0	16.4	17.0	17.4	17.5	17.8	18.3
8H	15.1	15.4	15.6	15.9	16.4	17.0	17.3	17.4	17.8	18.2
Variations with the observer position at spacings:										
S = 1.0H	+ 2.7 / -22.8					+ 2.8 / -22.3				
1.5H	+ 4.1 / -18.4					+ 4.2 / -11.0				
2.0H	+ 6.0 / -16.0					+ 6.6 / -22.4				

CIE Pub.117, 3038 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 3.9$)

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:229.66V I:0.2951A P:67.422W PF:0.9950 Freq:49.99Hz Lamp Flux:3037.63x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1650*48*76	SERIAL No.:
MFR.:	SUR.:1.64*0.042	Shielding Angle:

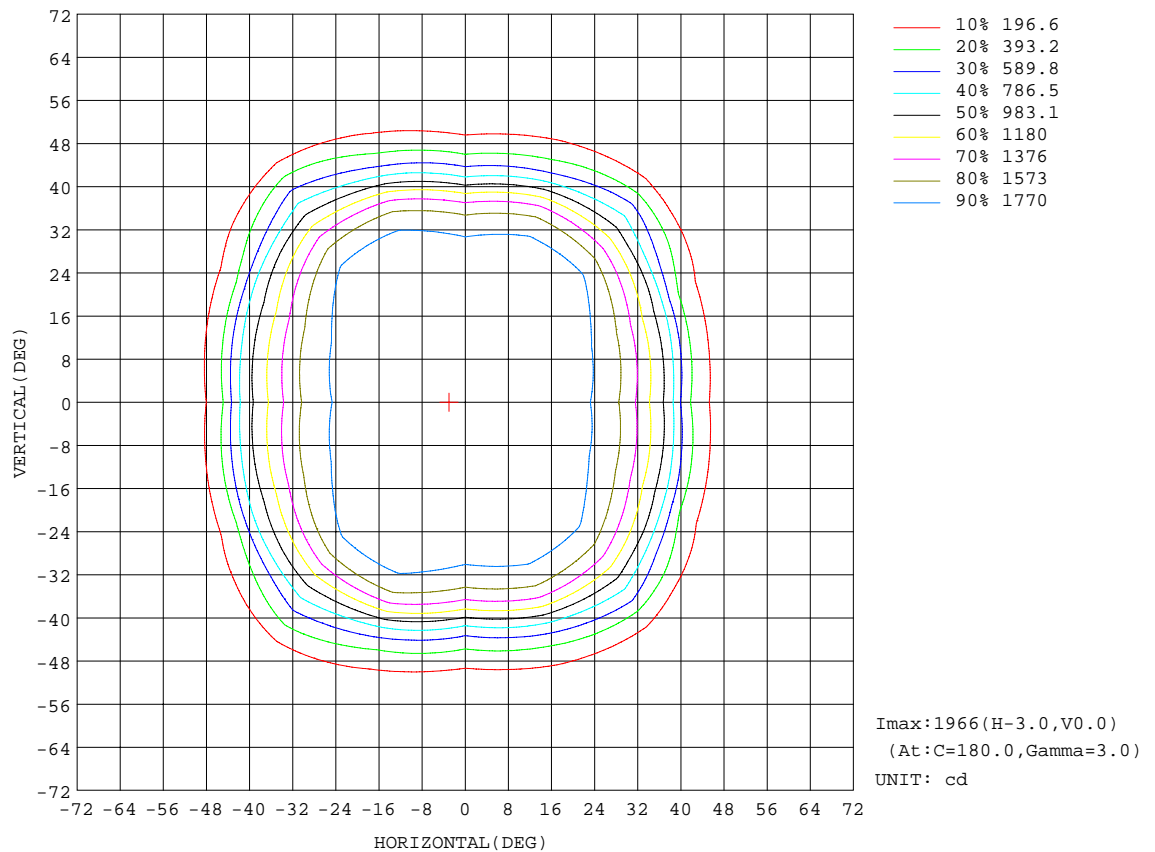
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	80	73	68	80	72	68	79	72	68	64
0.80	89	82	77	88	82	77	87	81	77	72
1.00	95	88	84	94	88	84	92	88	83	79
1.25	100	94	90	99	93	90	97	92	89	84
1.50	103	98	94	102	97	93	100	95	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	102	105	103	100	94
4.00	113	109	107	111	108	106	107	105	103	95
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:229.66V I:0.2951A P:67.422W PF:0.9950 Freq:49.99Hz Lamp Flux:3037.63x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1650*48*76	SERIAL No.:
MFR.:	SUR.:1.64*0.042	Shielding Angle:

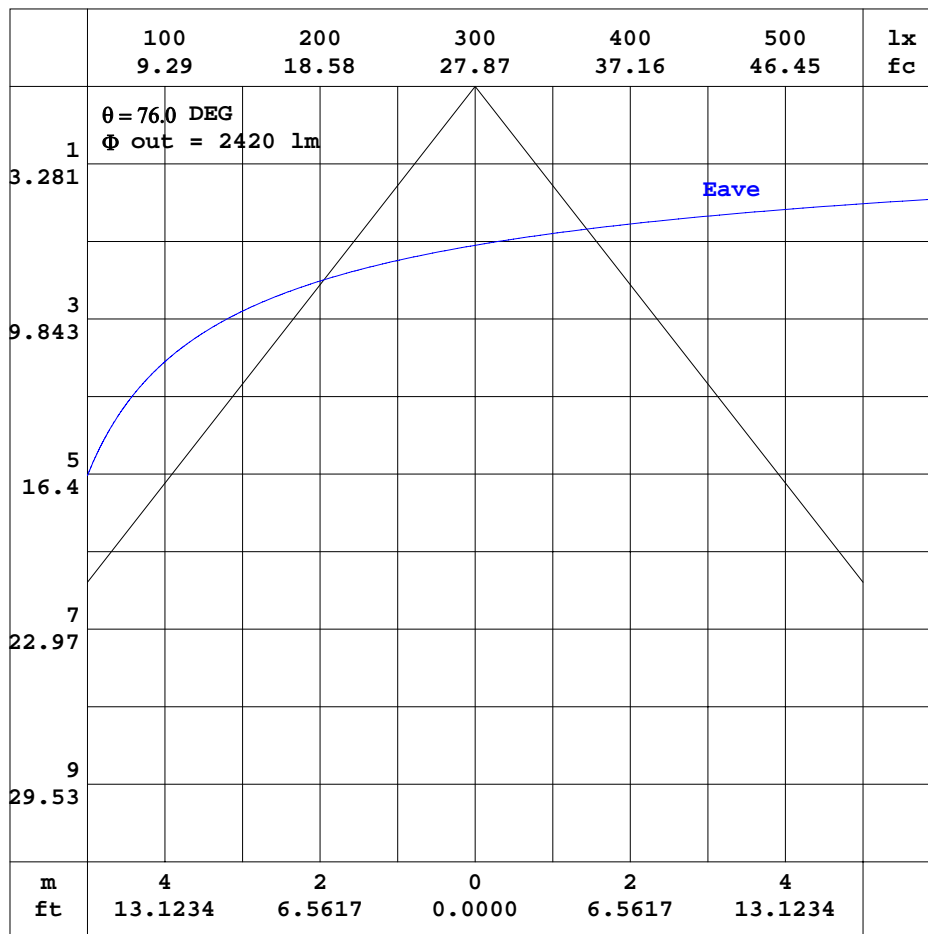


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-09-29

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:229.66V I:0.2951A P:67.422W PF:0.9950 Freq:49.99Hz Lamp Flux:3037.63x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1650*48*76	SERIAL No.:
MFR.:	SUR.:1.64*0.042	Shielding Angle:



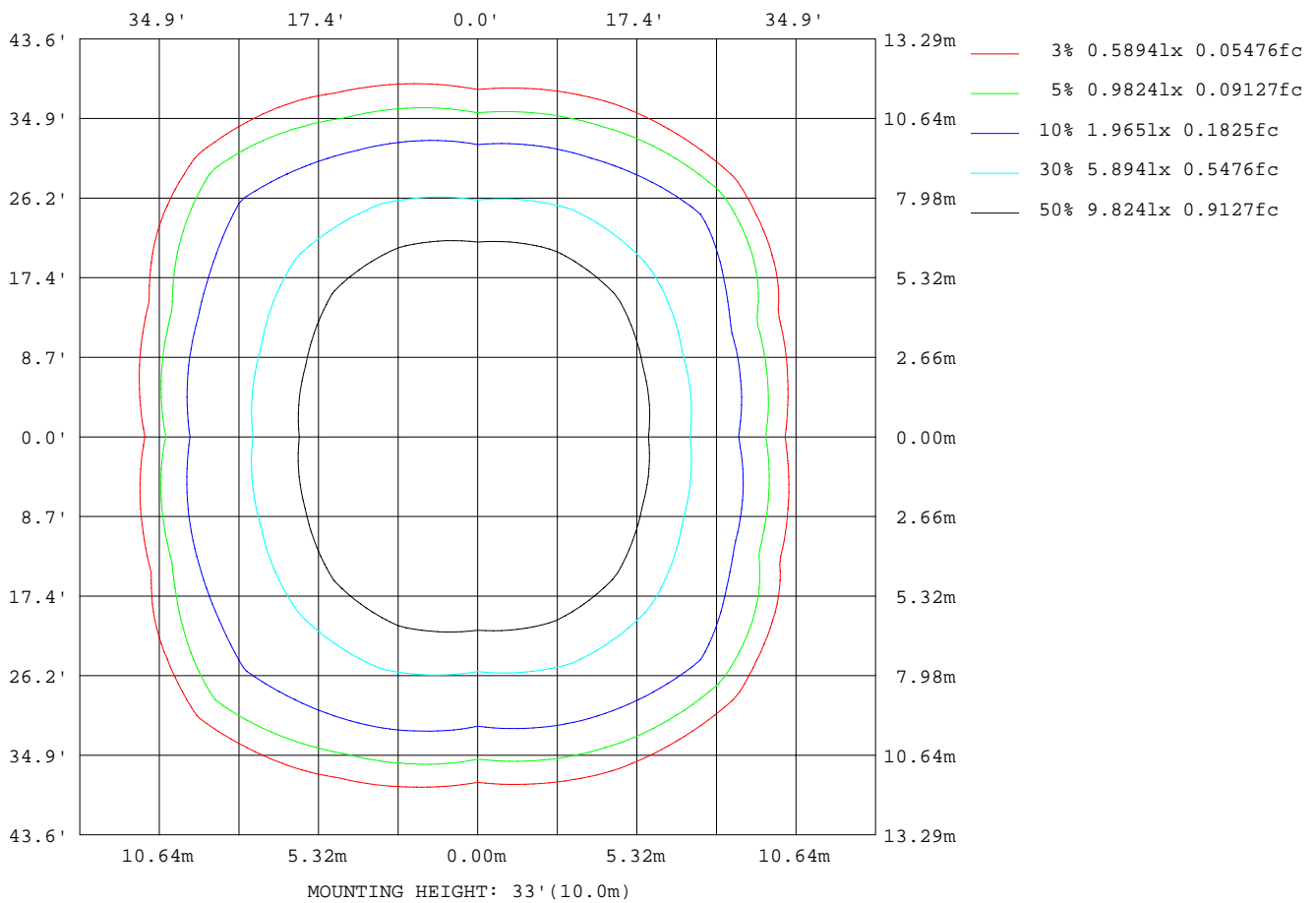
Note: The Curves indicate the illuminated area and the average illuminance when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 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:229.66V I:0.2951A P:67.422W PF:0.9950 Freq:49.99Hz Lamp Flux:3037.63x1 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:229.66V I:0.2951A P:67.422W PF:0.9950 Freq:49.99Hz Lamp Flux:3037.63x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1650*48*76	SERIAL No.:
MFR.:	SUR.:1.64*0.042	Shielding Angle:

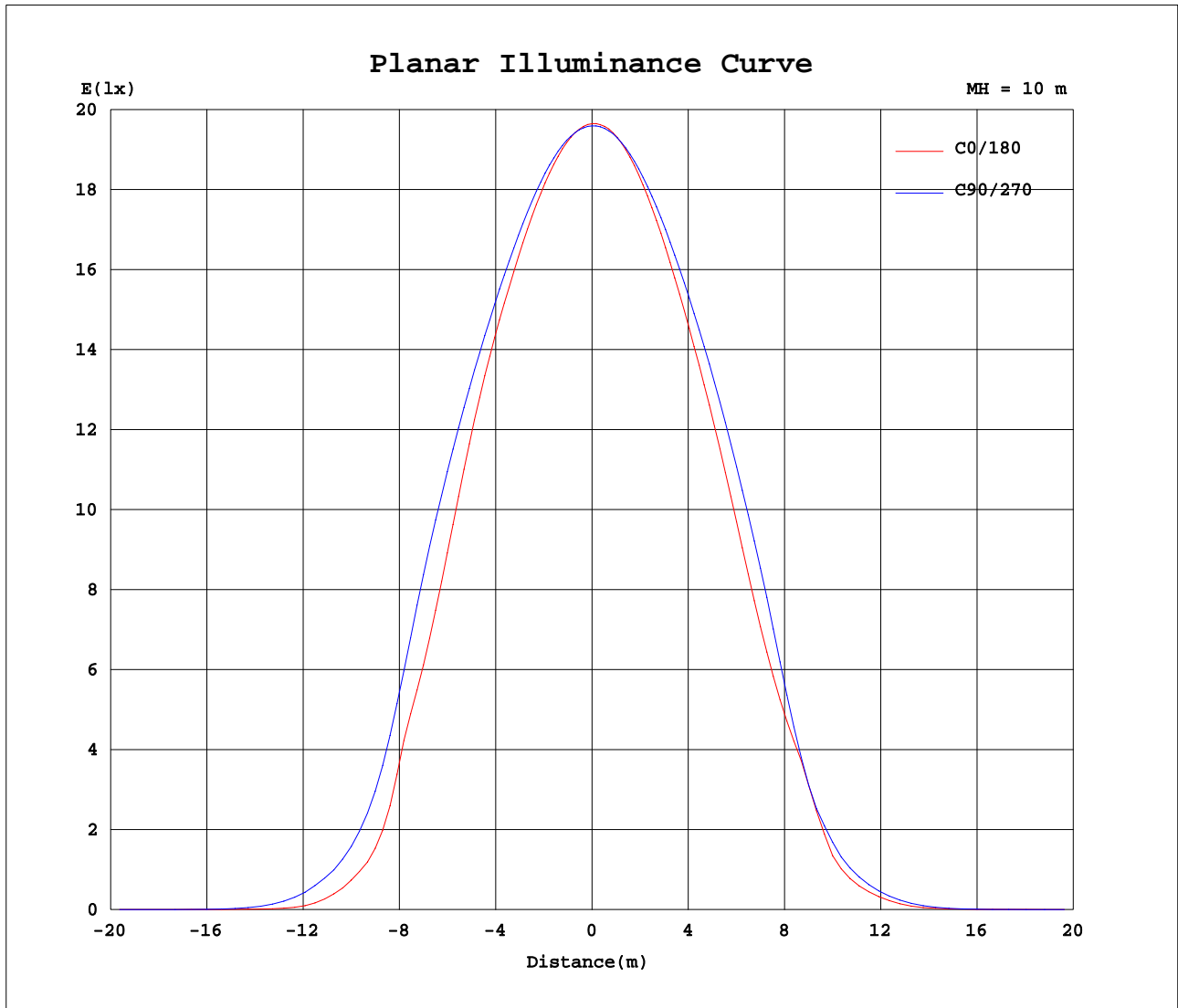
AvgL	cd/m2
L_0~180(65)av	77
L_0~180(75)av	97
L_0~180(85)av	297
L_90~270(65)av	61
L_90~270(75)av	49
L_90~270(85)av	105
L_45(65)av	153
L_45(75)av	52
L_45(85)av	180

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:

```