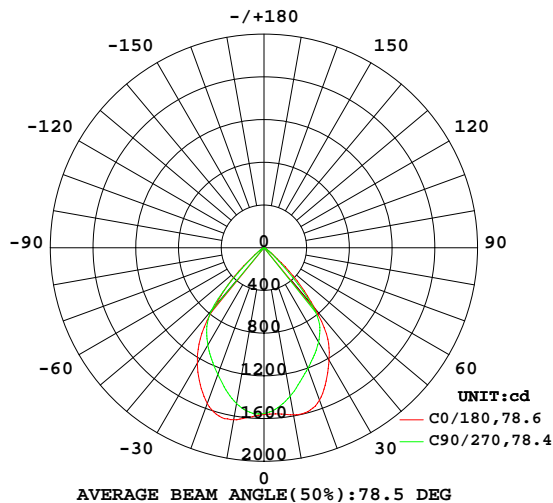


LUMINAIRE PHOTOMETRIC TEST REPORT

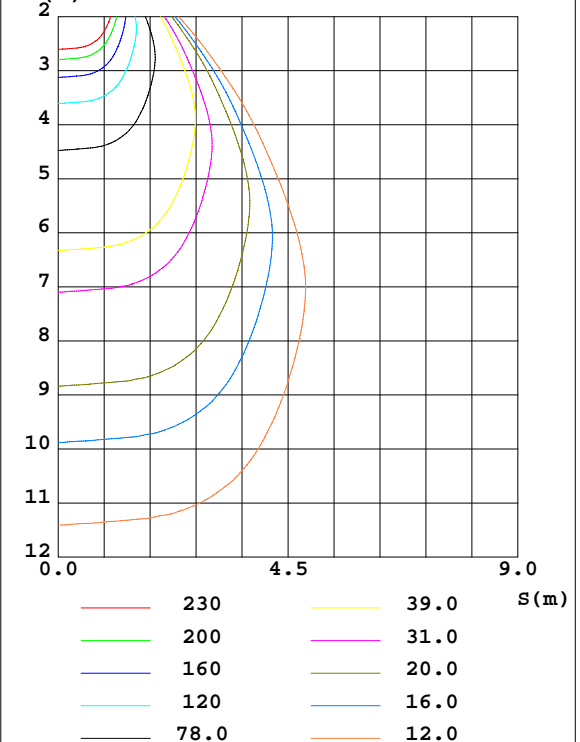
Test:U:229.62V I:0.3546A P:79.622W PF:0.9778 Freq:49.99Hz Lamp Flux:2135.81x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1203*52*31	SERIAL No.:
MFR.:	SUR.:0.8*0.042	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 26.82 lm/W			
MODEL		Imax(cd)	1643	S/MH(C0/180)	1.13
NOMINAL POWER(W)	80	LOR(%)	100.0	S/MH(C90/270)	1.04
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	2135.8	η UP,DN(C0-180)	0.0,49.0
NOMINAL FLUX(lm)	2135.81	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,51.0
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	230.0	η down(%)	100.0	CIBSE SHR MAX	1.15

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:2025-04-22

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:

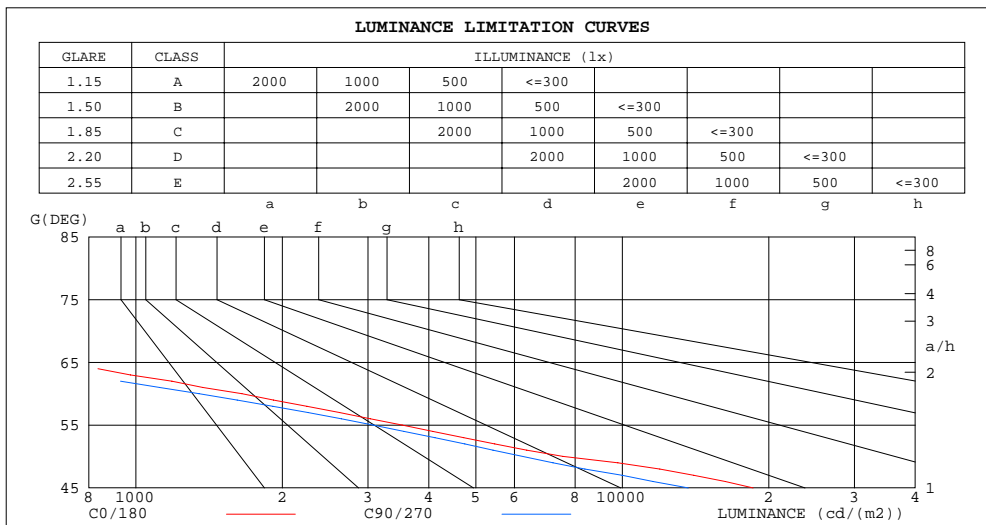
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1587	1494	1412	1504	1635	1575	1483	1529	0- 10	147.0	147.0	6.88,6.88
20	1520	1348	1203	1333	1554	1429	1262	1391	10- 20	412.8	559.8	26.2,26.2
30	1217	1106	1022	1101	1249	1164	1052	1128	20- 30	577.4	1137	53.2,53.2
40	741.1	701.6	700.9	707.5	726.6	755.5	764.7	760.7	30- 40	599.8	1737	81.3,81.3
50	163.2	157.4	134.7	154.7	158.6	175.3	150.0	172.6	40- 50	316.8	2054	96.2,96.2
60	27.75	33.82	22.64	32.23	23.25	34.10	23.99	35.56	50- 60	68.31	2122	99.4,99.4
70	2.774	3.438	1.691	2.891	1.899	3.020	2.032	3.639	60- 70	11.28	2133	99.9,99.9
80	1.503	1.167	0.1117	0.5141	2.474	0.3265	0.1633	0.4553	70- 80	1.158	2134	99.9,99.9
90	2.208	3.325	0.1031	3.316	0.8935	0.4296	0.2921	0.9708	80- 90	1.359	2136	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:2025-04-22

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:229.62V I:0.3546A P:79.622W PF:0.9778 Freq:49.99Hz Lamp Flux:2135.81x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1203*52*31	SERIAL No.:
MFR.:	SUR.:0.8*0.042	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	648	36
80	258	19
75	116	16
70	241	147
65	657	478
60	1652	1348
55	3525	3072
50	7555	6236
45	18571	13667

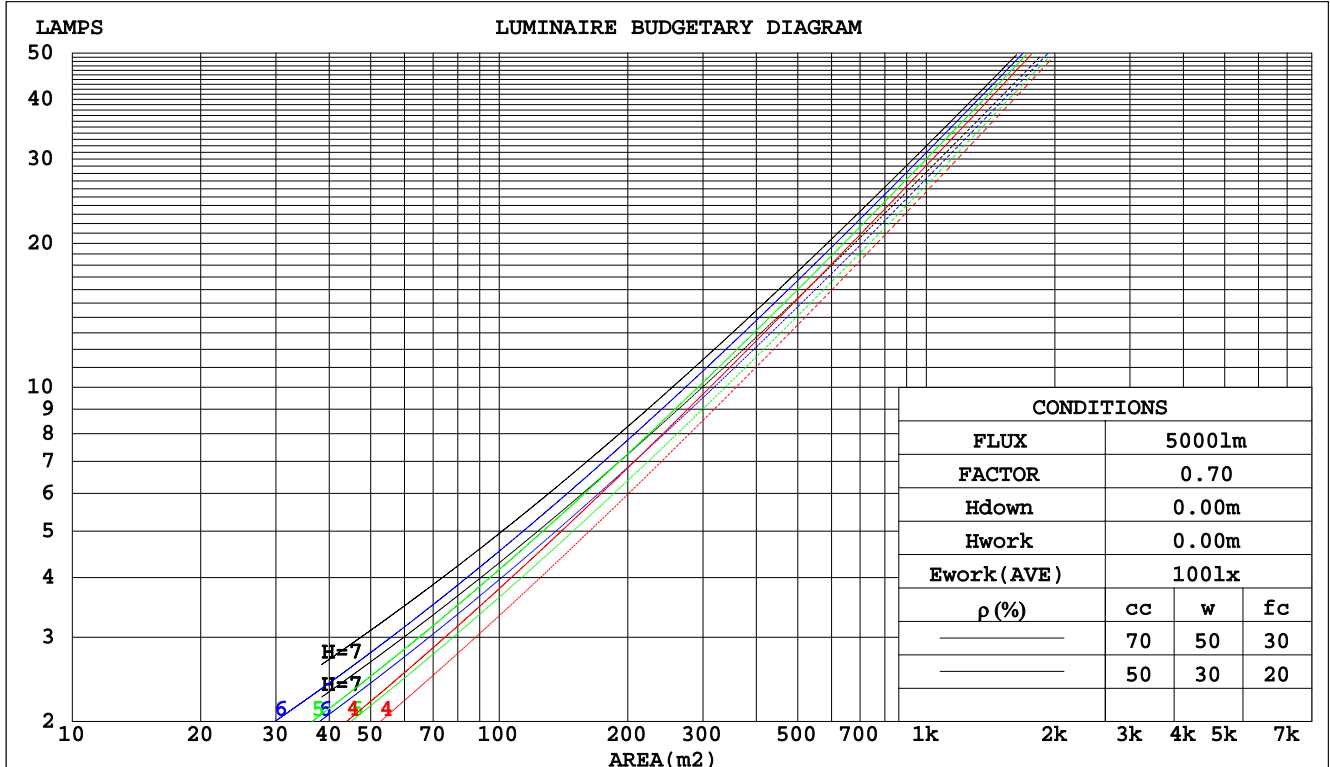
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-04-22

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:229.62V I:0.3546A P:79.622W PF:0.9778 Freq:49.99Hz Lamp Flux:2135.81x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1203*52*31	SERIAL No.:
MFR.:	SUR.:0.8*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			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	1.01	.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	.70
5.0	.79	.72	.67	.78	.72	.67	.76	.71	.66	.74	.69	.66	.73	.68	.65	.64
6.0	.73	.66	.61	.72	.66	.61	.70	.65	.61	.69	.64	.60	.68	.63	.60	.58
7.0	.68	.61	.56	.67	.60	.56	.66	.60	.56	.64	.59	.55	.63	.58	.55	.53
8.0	.63	.56	.51	.62	.56	.51	.61	.55	.51	.60	.55	.51	.59	.54	.51	.49
9.0	.59	.52	.47	.58	.52	.47	.57	.51	.47	.56	.51	.47	.55	.50	.47	.45
10.0	.55	.48	.44	.54	.48	.44	.53	.48	.44	.53	.47	.44	.52	.47	.43	.42



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-04-22

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:229.62V I:0.3546A P:79.622W PF:0.9778 Freq:49.99Hz Lamp Flux:2135.81x1 lm								
NAME:			TYPE:			WEIGHT:		
SPEC.:			DIM.: 1203*52*31			SERIAL No.:		
MFR.:			SUR.:0.8*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	.191	.109	.035	.178	.102	.033	.166	.096	.031	.155	.090	.029	
2.0	.192	.105	.032	.186	.103	.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	.168	.086	.025	.165	.085	.025	.157	.082	.024	.151	.080	.024	.145	.077	.023	
6.0	.161	.081	.023	.157	.080	.023	.151	.077	.023	.145	.075	.022	.140	.073	.022	
7.0	.153	.076	.022	.150	.075	.021	.145	.073	.021	.140	.072	.021	.135	.070	.021	
8.0	.147	.072	.020	.144	.071	.020	.139	.069	.020	.134	.068	.020	.130	.067	.019	
9.0	.140	.068	.019	.138	.067	.019	.133	.066	.019	.129	.065	.018	.125	.063	.018	
10.0	.134	.064	.018	.132	.064	.018	.128	.063	.018	.124	.061	.017	.120	.060	.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	.014	.010	.007	
6.0	.124	.079	.047	.107	.069	.041	.074	.048	.029	.043	.028	.017	.014	.009	.006	
7.0	.118	.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	.064	.037	.018	.037	.022	.011	.012	.007	.004	
10.0	.103	.057	.026	.089	.049	.022	.062	.035	.016	.036	.020	.009	.012	.007	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-04-22

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:229.62V I:0.3546A P:79.622W PF:0.9778 Freq:49.99Hz Lamp Flux:2135.81x1 lm												
NAME:					TYPE:			WEIGHT:				
SPEC.:					DIM.: 1203*52*31			SERIAL No.:				
MFR.:					SUR.:0.8*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	2H	18.8	19.9	19.1	20.1	20.3	18.2	19.3	18.4	19.4	19.6	
	3H	18.6	19.6	18.9	19.9	20.1	18.0	19.0	18.3	19.2	19.4	
	4H	18.6	19.5	18.8	19.7	20.0	17.9	18.8	18.2	19.1	19.3	
	6H	18.5	19.3	18.8	19.6	19.8	17.8	18.7	18.1	18.9	19.2	
	8H	18.4	19.3	18.7	19.5	19.8	17.8	18.6	18.1	18.9	19.1	
	12H	18.4	19.2	18.7	19.5	19.7	17.7	18.5	18.0	18.8	19.1	
	4H	2H	18.6	19.5	18.9	19.8	20.0	17.9	18.9	18.2	19.1	19.3
		3H	18.4	19.2	18.7	19.5	19.8	17.7	18.6	18.1	18.8	19.1
		4H	18.3	19.0	18.7	19.3	19.7	17.7	18.4	18.0	18.7	19.0
		6H	18.2	18.9	18.6	19.2	19.5	17.6	18.2	17.9	18.5	18.9
		8H	18.2	18.8	18.6	19.1	19.5	17.5	18.1	17.9	18.5	18.8
		12H	18.1	18.7	18.5	19.0	19.4	17.5	18.0	17.9	18.4	18.8
8H	4H	18.2	18.8	18.6	19.1	19.5	17.5	18.1	17.9	18.5	18.8	
	6H	18.1	18.6	18.5	18.9	19.4	17.4	17.9	17.8	18.3	18.7	
	8H	18.0	18.4	18.5	18.9	19.3	17.4	17.8	17.8	18.2	18.6	
	12H	18.0	18.3	18.5	18.8	19.3	17.3	17.7	17.8	18.1	18.6	
12H	4H	18.1	18.7	18.5	19.0	19.4	17.5	18.0	17.9	18.4	18.8	
	6H	18.0	18.4	18.5	18.9	19.3	17.4	17.8	17.8	18.2	18.6	
	8H	18.0	18.3	18.4	18.8	19.3	17.3	17.7	17.8	18.1	18.6	
Variations with the observer position at spacings:												
S = 1.0H		+ 2.5 / -10.4				+ 2.5 / -11.0						
1.5H		+ 3.9 / - 7.6				+ 4.0 / - 7.4						
2.0H		+ 6.8 / -10.2				+ 6.1 / -10.0						

CIE Pub.117, 2136 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 2.6$)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-04-22

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:229.62V I:0.3546A P:79.622W PF:0.9778 Freq:49.99Hz Lamp Flux:2135.81x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1203*52*31	SERIAL No.:
MFR.:	SUR.:0.8*0.042	Shielding Angle:

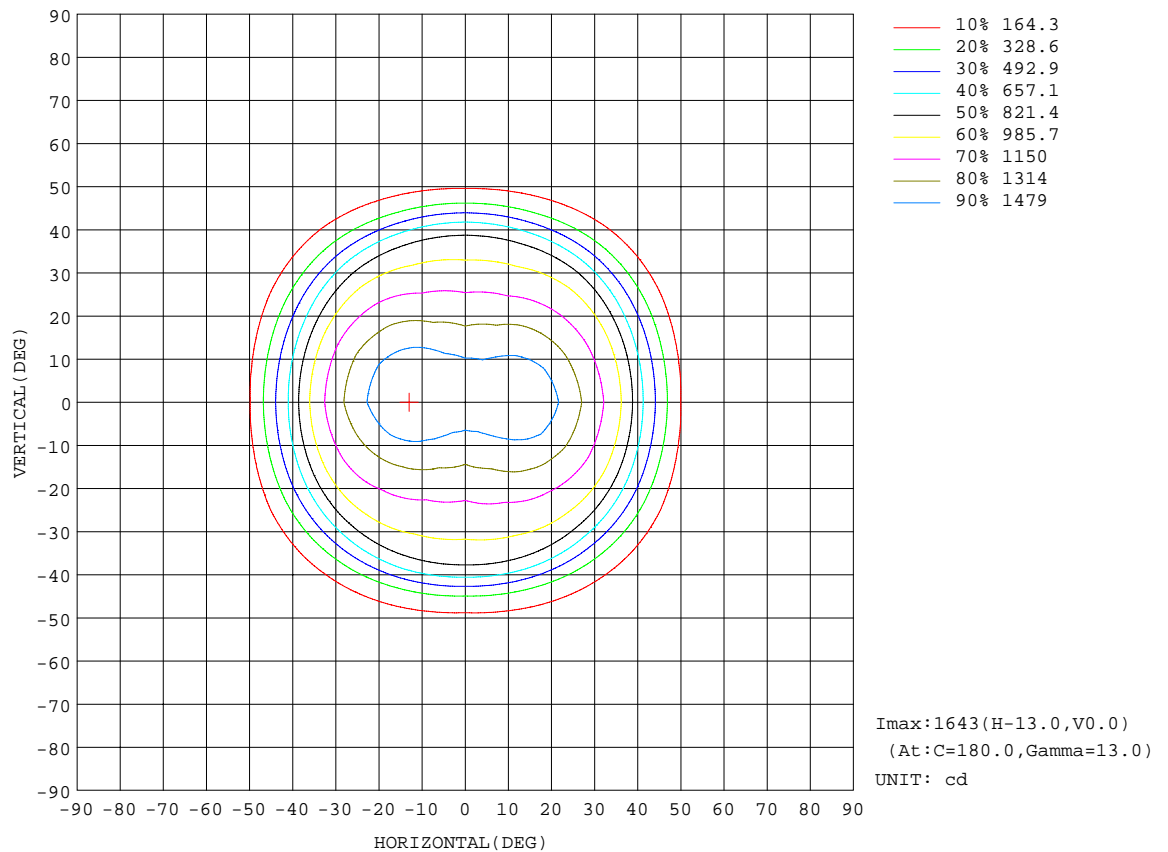
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	80	72	67	79	72	67	78	71	67	63
0.80	88	81	77	88	81	76	86	80	76	72
1.00	95	88	83	94	87	83	92	88	83	78
1.25	100	93	89	98	93	89	96	92	88	83
1.50	103	97	93	102	96	93	99	95	92	87
2.00	107	102	98	105	101	97	102	99	96	90
2.50	108	104	101	107	103	100	104	100	98	92
3.00	110	106	103	108	105	102	105	102	100	93
4.00	113	109	107	110	108	105	107	104	103	95
5.00	114	111	109	112	109	107	108	106	104	96
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:2025-04-22

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:229.62V I:0.3546A P:79.622W PF:0.9778 Freq:49.99Hz Lamp Flux:2135.81x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1203*52*31	SERIAL No.:
MFR.:	SUR.:0.8*0.042	Shielding Angle:

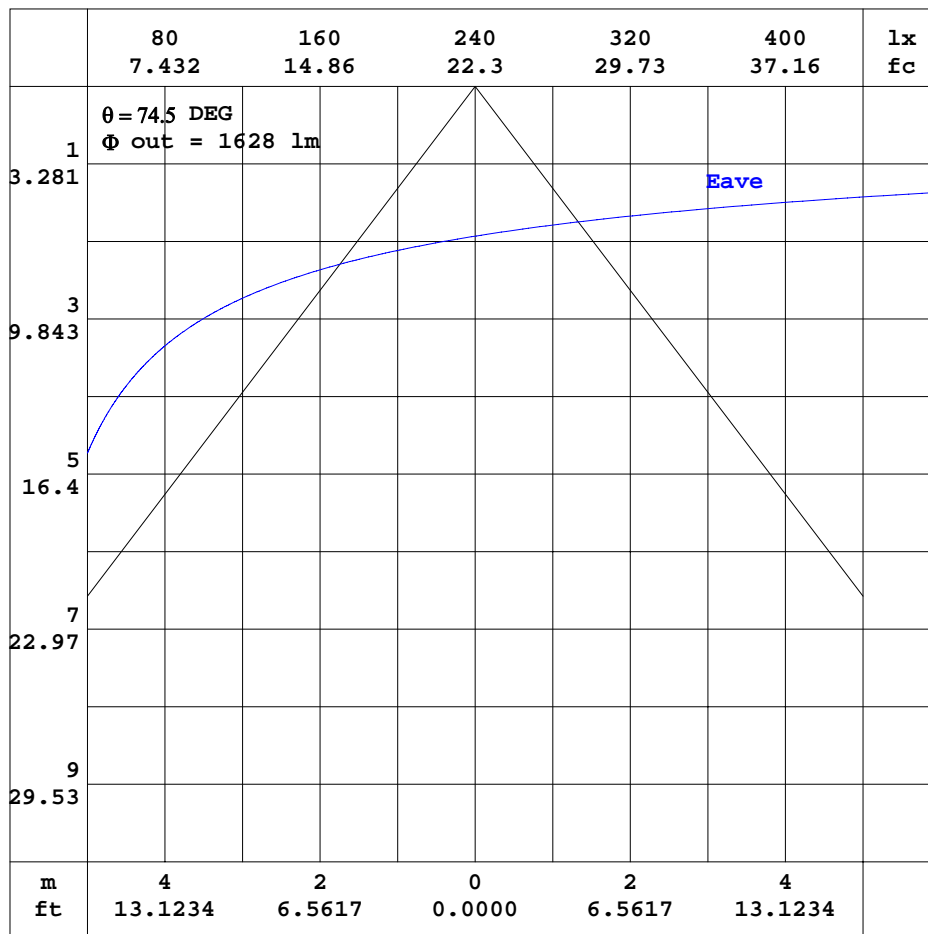


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-04-22

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:229.62V I:0.3546A P:79.622W PF:0.9778 Freq:49.99Hz Lamp Flux:2135.81x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1203*52*31	SERIAL No.:
MFR.:	SUR.:0.8*0.042	Shielding Angle:



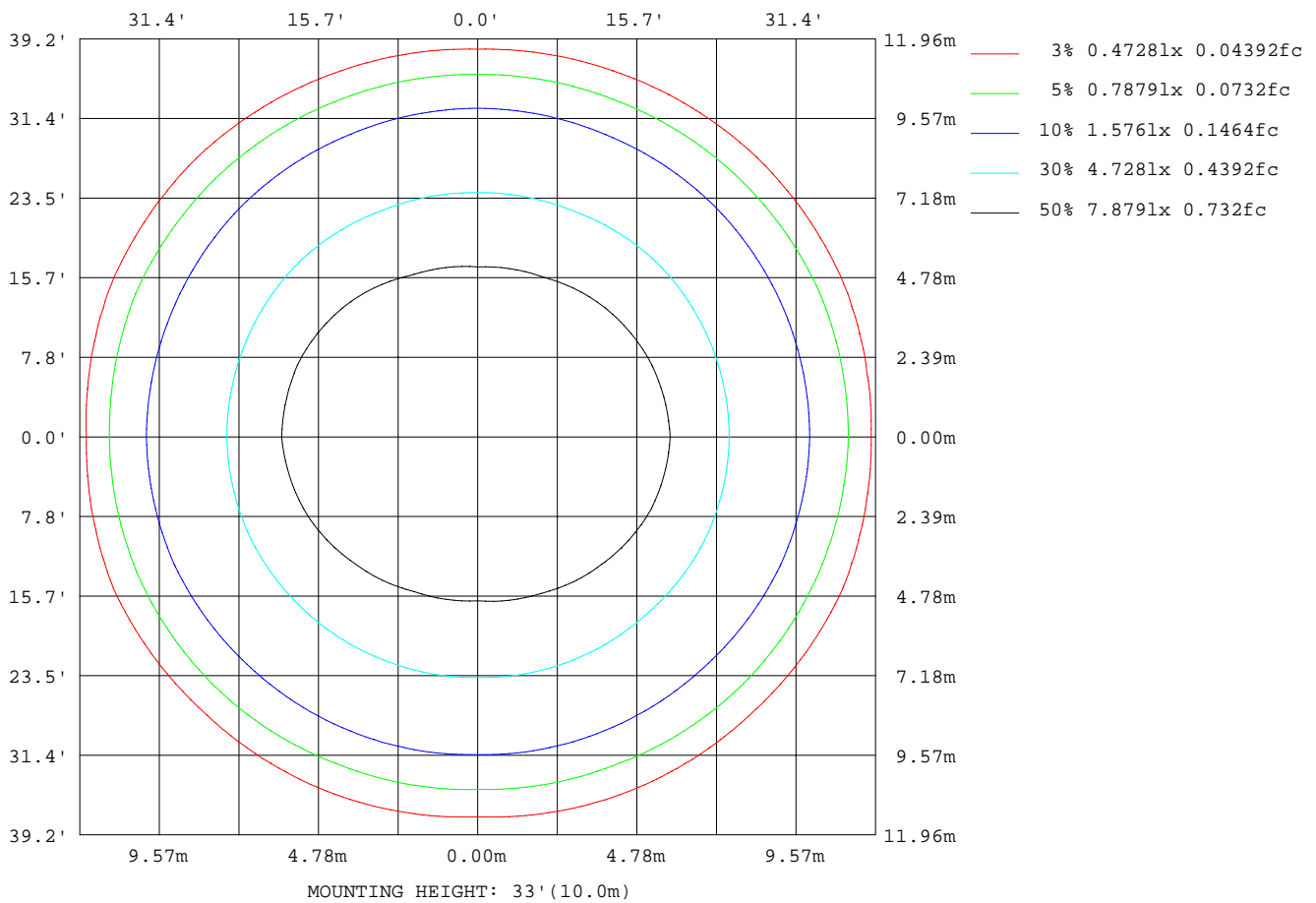
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2025-04-22

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:229.62V I:0.3546A P:79.622W PF:0.9778 Freq:49.99Hz Lamp Flux:2135.81x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1203*52*31	SERIAL No.:
MFR.:	SUR.:0.8*0.042	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2025-04-22

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:229.62V I:0.3546A P:79.622W PF:0.9778 Freq:49.99Hz Lamp Flux:2135.81x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1203*52*31	SERIAL No.:
MFR.:	SUR.:0.8*0.042	Shielding Angle:

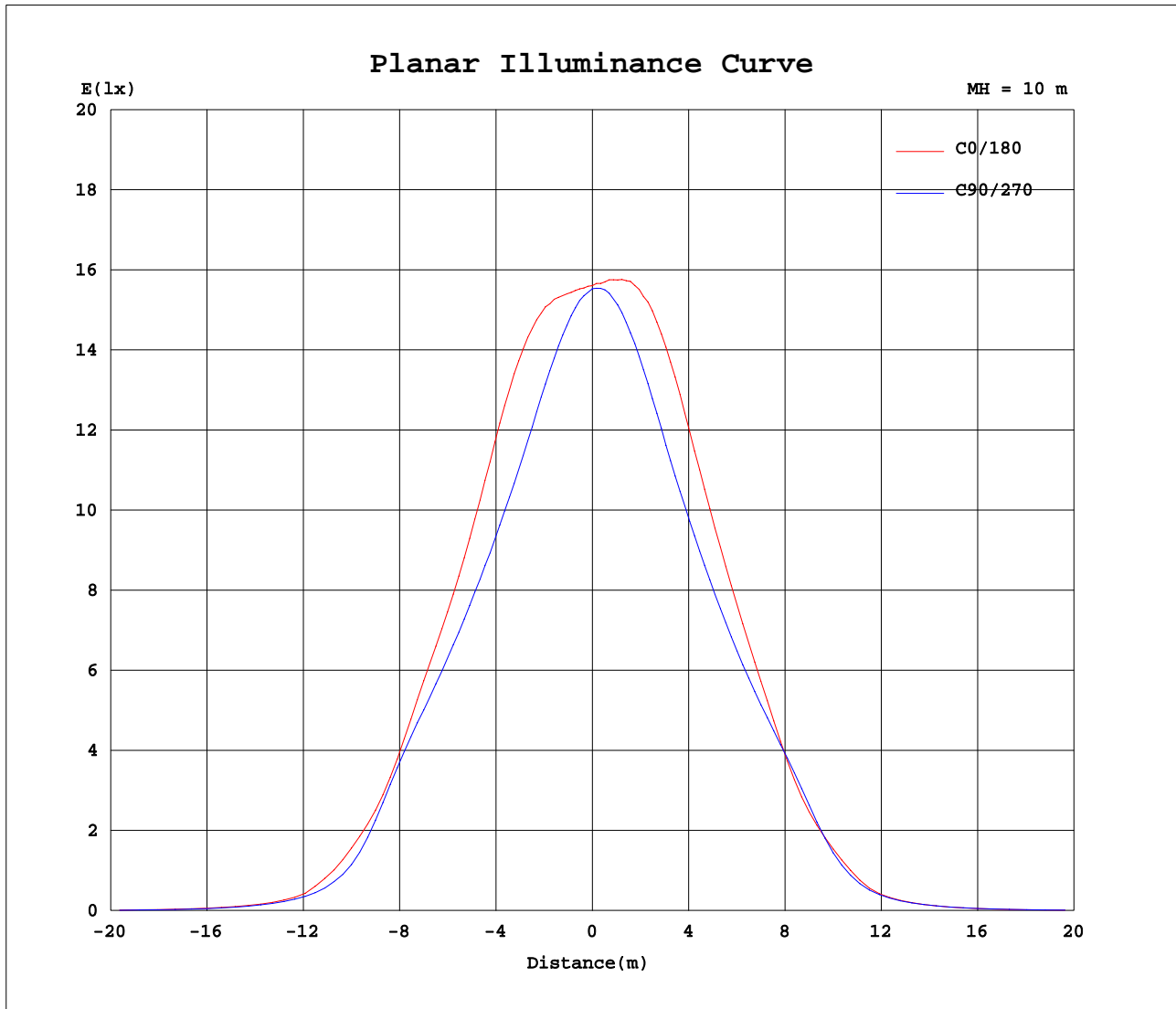
AvgL	cd/m2
L_0~180(65)av	588
L_0~180(75)av	149
L_0~180(85)av	658
L_90~270(65)av	510
L_90~270(75)av	40
L_90~270(85)av	55
L_45(65)av	850
L_45(75)av	81
L_45(85)av	528

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-04-22

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: 2025-04-22

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:

```

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