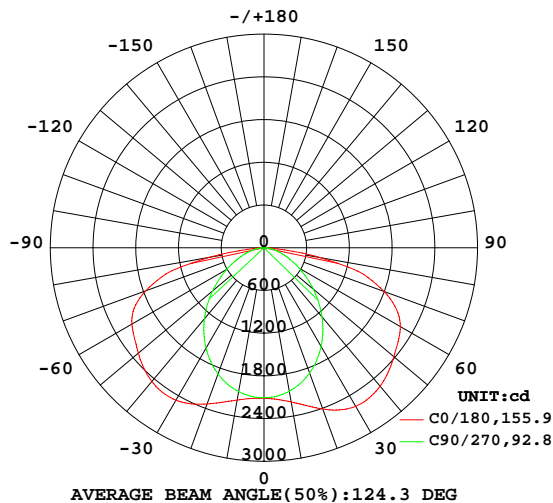


LUMINAIRE PHOTOMETRIC TEST REPORT

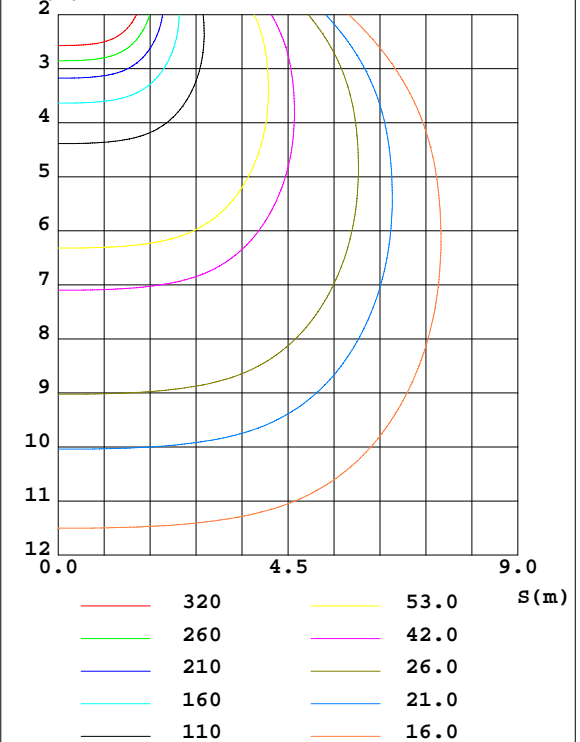
Test:U:229.69V I:0.3640A P:81.783W PF:0.9781 Freq:49.99Hz Lamp Flux:8594.31x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1203*52*31	SERIAL No.:
MFR.:	SUR.:0.8*0.02	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 105.09 lm/W			
MODEL		Imax(cd)	2580	S/MH(C0/180)	1.73
NOMINAL POWER(W)	80	LOR(%)	100.0	S/MH(C90/270)	1.16
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	8594.3	η UP,DN(C0-180)	0.0,49.7
NOMINAL FLUX(lm)	8594.31	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.3
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	230.0	η down(%)	100.0	CIBSE SHR MAX	1.55

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:2024-10-31

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:

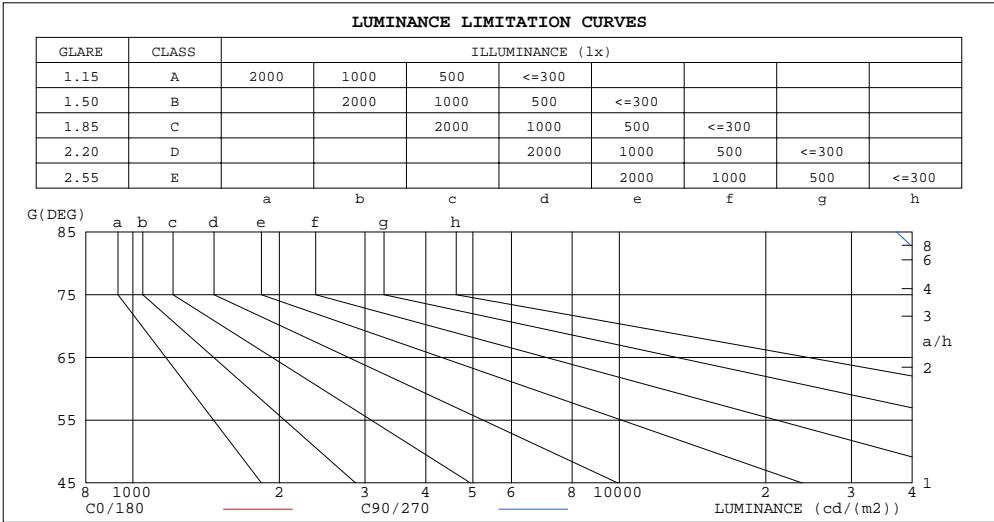
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum, lamp
10	2199	2127	2046	2093	2173	2112	2052	2114	0- 10	201.4	201.4	2.34,2.34
20	2410	2161	1874	2091	2335	2126	1888	2138	10- 20	601.1	802.6	9.34,9.34
30	2572	2195	1604	2074	2472	2135	1629	2161	20- 30	980.4	1783	20.7,20.7
40	2538	2164	1268	2018	2451	2100	1301	2135	30- 40	1285	3068	35.7,35.7
50	2382	2003	903.6	1864	2303	1963	941.2	1988	40- 50	1452	4521	52.6,52.6
60	2211	1727	567.3	1601	2142	1715	600.2	1727	50- 60	1463	5984	69.6,69.6
70	1793	1375	306.2	1255	1766	1387	324.8	1384	60- 70	1333	7317	85.1,85.1
80	806.9	919.0	120.0	847.5	774.4	965.7	129.0	942.0	70- 80	986.1	8303	96.6,96.6
90	10.01	10.43	6.082	8.359	11.76	10.46	6.942	11.59	80- 90	290.9	8594	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:2024-10-31

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:229.69V I:0.3640A P:81.783W PF:0.9781 Freq:49.99Hz Lamp Flux:8594.31x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1203*52*31	SERIAL No.:
MFR.:	SUR.:0.8*0.02	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	134834	37134
80	290425	43176
75	350069	49220
70	327577	55948
65	303928	63061
60	276370	70915
55	250540	79353
50	231657	87855
45	218232	96030

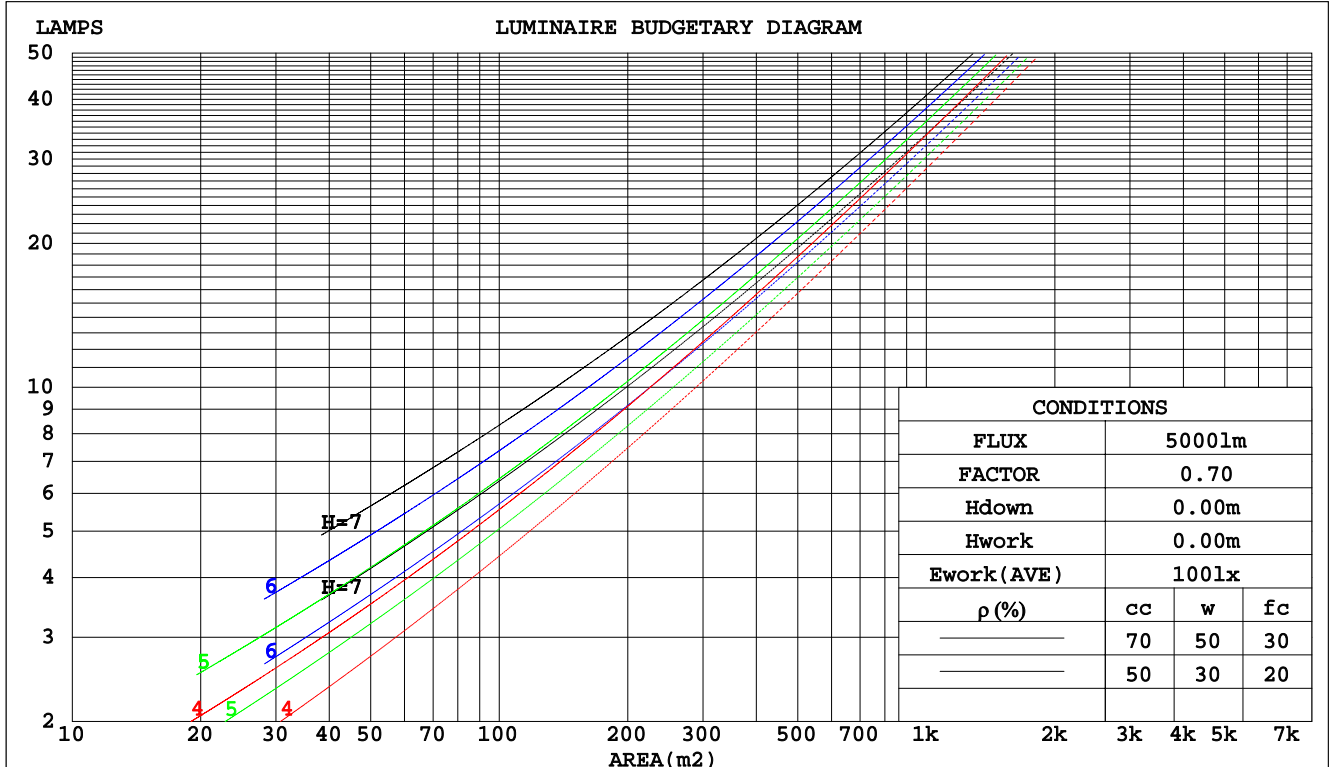
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-10-31

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:229.69V I:0.3640A P:81.783W PF:0.9781 Freq:49.99Hz Lamp Flux:8594.31x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1203*52*31	SERIAL No.:
MFR.:	SUR.:0.8*0.02	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	1.01	.96	.92	.99	.94	.90	.95	.91	.87	.91	.87	.85	.87	.84	.82	.80
2.0	.86	.79	.72	.84	.77	.71	.81	.75	.69	.77	.72	.68	.74	.70	.66	.64
3.0	.75	.66	.58	.73	.65	.58	.70	.63	.57	.67	.61	.56	.64	.59	.55	.52
4.0	.65	.56	.48	.64	.55	.48	.61	.53	.47	.59	.52	.46	.57	.51	.46	.43
5.0	.58	.48	.41	.57	.47	.40	.54	.46	.40	.52	.45	.40	.50	.44	.39	.37
6.0	.52	.42	.35	.51	.41	.35	.49	.41	.34	.47	.40	.34	.45	.39	.34	.32
7.0	.46	.37	.31	.46	.37	.30	.44	.36	.30	.43	.35	.30	.41	.35	.30	.27
8.0	.42	.33	.27	.41	.33	.27	.40	.32	.27	.39	.32	.26	.38	.31	.26	.24
9.0	.39	.30	.24	.38	.30	.24	.37	.29	.24	.36	.29	.24	.35	.28	.23	.22
10.0	.35	.27	.22	.35	.27	.21	.34	.26	.21	.33	.26	.21	.32	.26	.21	.19



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-10-31

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:229.69V I:0.3640A P:81.783W PF:0.9781 Freq:49.99Hz Lamp Flux:8594.31x1 lm								
NAME:			TYPE:			WEIGHT:		
SPEC.:			DIM.: 1203*52*31			SERIAL No.:		
MFR.:			SUR.:0.8*0.02			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	.360	.205	.065	.353	.201	.064	.339	.195	.062	.327	.188	.060	.315	.183	.059	
2.0	.330	.181	.056	.324	.178	.055	.312	.173	.054	.301	.169	.053	.291	.164	.052	
3.0	.300	.160	.048	.294	.158	.047	.284	.154	.047	.274	.150	.046	.265	.147	.045	
4.0	.273	.142	.042	.268	.140	.041	.258	.137	.041	.250	.134	.040	.241	.131	.040	
5.0	.250	.127	.037	.245	.126	.037	.237	.123	.036	.229	.121	.036	.221	.118	.036	
6.0	.229	.115	.033	.225	.114	.033	.218	.112	.032	.211	.110	.032	.204	.108	.032	
7.0	.212	.105	.030	.208	.104	.030	.202	.102	.029	.195	.100	.029	.189	.098	.029	
8.0	.197	.096	.027	.193	.095	.027	.187	.094	.027	.182	.092	.027	.177	.091	.026	
9.0	.183	.089	.025	.181	.088	.025	.175	.087	.025	.170	.085	.024	.165	.084	.024	
10.0	.172	.082	.023	.169	.082	.023	.164	.080	.023	.160	.079	.023	.155	.078	.022	

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	.184	.156	.130	.157	.134	.112	.108	.092	.078	.062	.053	.045	.020	.017	.015	
2.0	.177	.132	.093	.152	.113	.081	.104	.078	.056	.060	.046	.033	.019	.015	.011	
3.0	.170	.114	.070	.146	.099	.061	.100	.069	.043	.058	.040	.025	.019	.013	.008	
4.0	.163	.102	.055	.140	.088	.048	.096	.061	.033	.056	.036	.020	.018	.012	.007	
5.0	.155	.091	.044	.133	.079	.039	.092	.055	.027	.053	.032	.016	.017	.011	.005	
6.0	.148	.083	.037	.127	.072	.032	.088	.050	.023	.051	.030	.014	.016	.010	.004	
7.0	.140	.076	.031	.121	.066	.027	.083	.046	.019	.048	.027	.012	.016	.009	.004	
8.0	.133	.071	.027	.115	.061	.024	.079	.043	.017	.046	.025	.010	.015	.008	.003	
9.0	.127	.066	.024	.109	.057	.021	.076	.040	.015	.044	.024	.009	.014	.008	.003	
10.0	.121	.061	.022	.104	.053	.019	.072	.037	.013	.042	.022	.008	.014	.007	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-10-31

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:229.69V I:0.3640A P:81.783W PF:0.9781 Freq:49.99Hz Lamp Flux:8594.31lx1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:					DIM.: 1203*52*31			SERIAL No.:			
MFR.:					SUR.:0.8*0.02			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	33.3	35.0	33.6	35.2	35.4	28.4	30.0	28.6	30.2	30.4
	3H	35.9	37.5	36.3	37.7	38.0	29.3	30.8	29.6	31.1	31.3
	4H	37.1	38.6	37.5	38.9	39.1	29.6	31.1	29.9	31.3	31.6
	6H	37.9	39.3	38.3	39.6	39.9	29.8	31.2	30.1	31.5	31.8
	8H	38.1	39.4	38.4	39.7	40.0	29.9	31.2	30.2	31.5	31.8
	12H	38.1	39.4	38.5	39.7	40.0	29.9	31.2	30.2	31.5	31.8
4H	2H	33.8	35.3	34.2	35.6	35.8	30.6	32.1	30.9	32.3	32.6
	3H	36.8	38.1	37.1	38.4	38.7	31.8	33.1	32.2	33.4	33.7
	4H	38.1	39.3	38.5	39.7	40.0	32.3	33.5	32.6	33.8	34.1
	6H	39.1	40.2	39.5	40.5	40.9	32.5	33.6	32.9	33.9	34.3
	8H	39.3	40.3	39.8	40.7	41.1	32.6	33.6	33.0	34.0	34.4
	12H	39.4	40.3	39.8	40.7	41.1	32.6	33.6	33.1	33.9	34.4
8H	4H	38.4	39.4	38.9	39.8	40.2	34.0	35.0	34.4	35.4	35.8
	6H	39.6	40.5	40.1	40.9	41.3	34.6	35.5	35.1	35.9	36.3
	8H	40.0	40.7	40.4	41.1	41.6	34.8	35.5	35.2	36.0	36.4
	12H	40.1	40.8	40.6	41.2	41.7	34.9	35.5	35.4	36.0	36.5
12H	4H	38.4	39.4	38.9	39.8	40.2	34.3	35.2	34.7	35.6	36.0
	6H	39.7	40.5	40.2	40.9	41.3	35.2	35.9	35.7	36.4	36.8
	8H	40.1	40.8	40.6	41.2	41.7	35.5	36.1	36.0	36.6	37.1
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.2					
1.5H	+ 0.1 / - 0.2					+ 0.2 / - 0.4					
2.0H	+ 0.2 / - 0.4					+ 0.4 / - 0.6					

CIE Pub.117, 8594 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 7.5$)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-10-31

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:229.69V I:0.3640A P:81.783W PF:0.9781 Freq:49.99Hz Lamp Flux:8594.31x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1203*52*31	SERIAL No.:
MFR.:	SUR.:0.8*0.02	Shielding Angle:

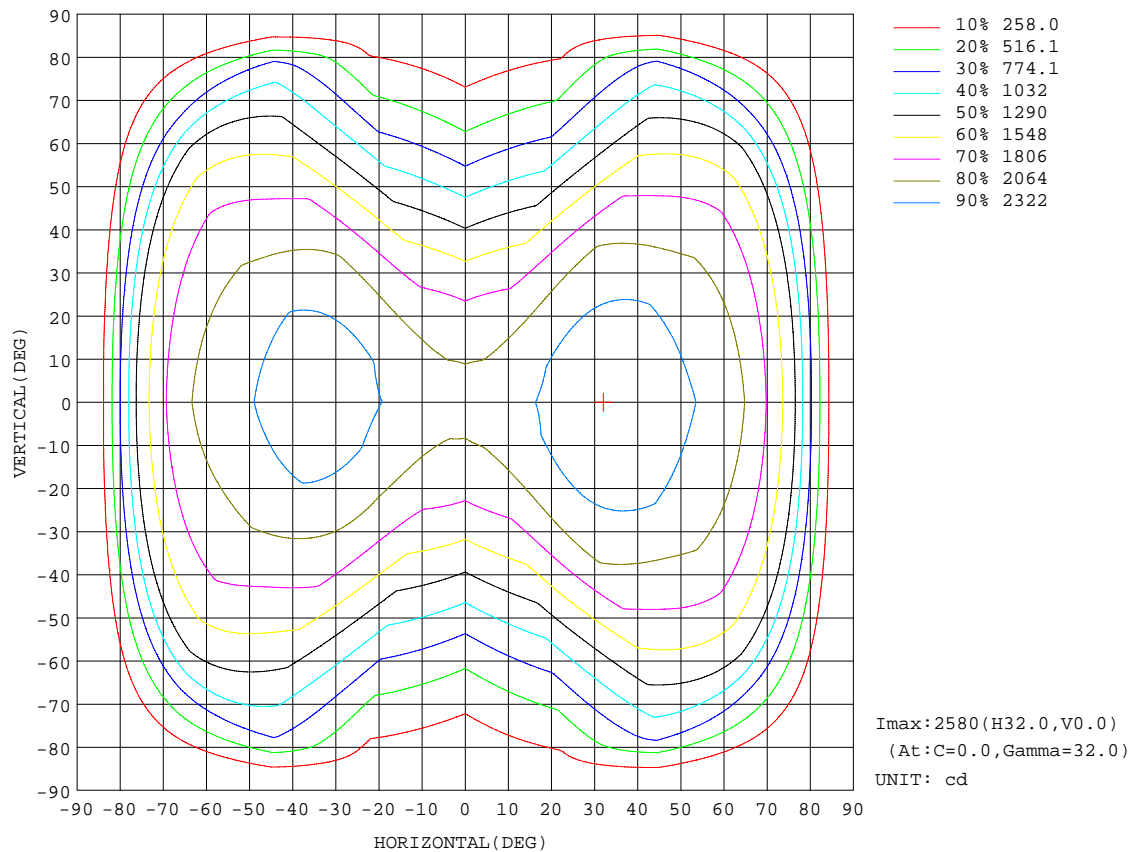
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	53	40	33	52	40	33	51	40	33	26
0.80	62	50	42	61	49	42	60	49	41	34
1.00	71	59	50	70	58	50	67	60	50	42
1.25	78	66	58	77	66	58	74	64	57	49
1.50	83	72	64	82	71	64	78	69	63	54
2.00	91	81	74	89	80	73	85	78	71	63
2.50	95	87	80	93	85	79	89	82	77	68
3.00	99	91	85	97	90	84	93	87	82	72
4.00	104	97	92	101	95	90	97	92	88	78
5.00	107	101	96	104	99	95	99	95	92	82
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:2024-10-31

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:229.69V I:0.3640A P:81.783W PF:0.9781 Freq:49.99Hz Lamp Flux:8594.31x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1203*52*31	SERIAL No.:
MFR.:	SUR.:0.8*0.02	Shielding Angle:

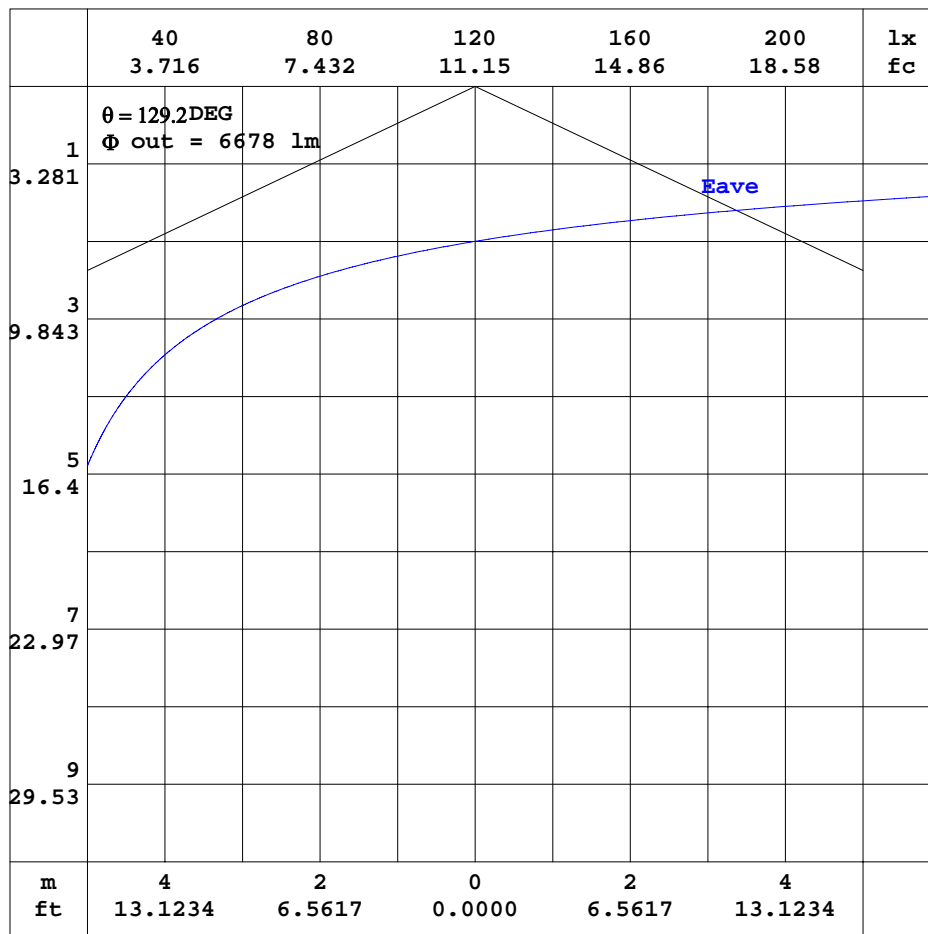


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-10-31

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:229.69V I:0.3640A P:81.783W PF:0.9781 Freq:49.99Hz Lamp Flux:8594.31x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1203*52*31	SERIAL No.:
MFR.:	SUR.:0.8*0.02	Shielding Angle:



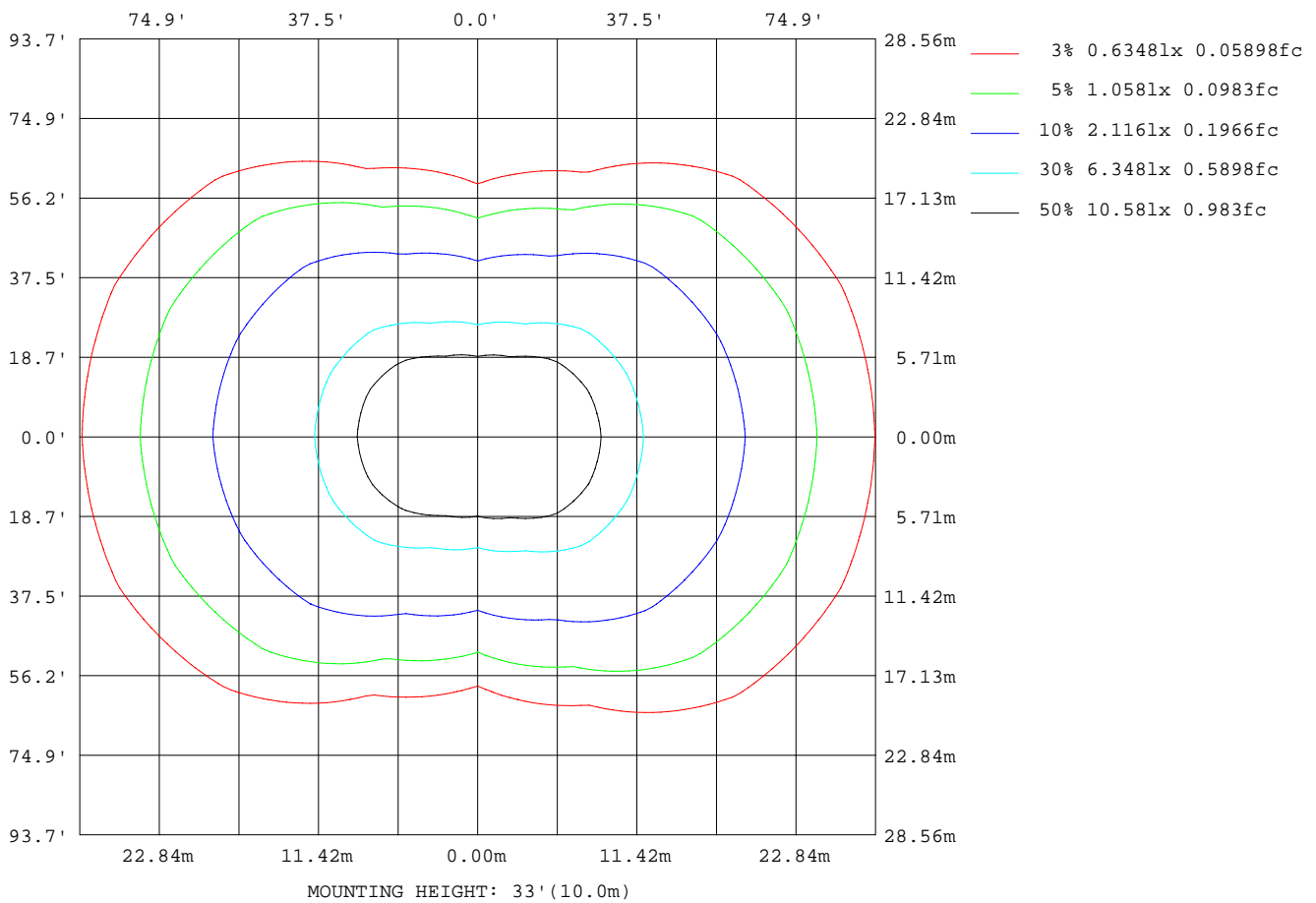
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-10-31

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:229.69V I:0.3640A P:81.783W PF:0.9781 Freq:49.99Hz Lamp Flux:8594.31x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1203*52*31	SERIAL No.:
MFR.:	SUR.:0.8*0.02	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-10-31

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:229.69V I:0.3640A P:81.783W PF:0.9781 Freq:49.99Hz Lamp Flux:8594.31x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1203*52*31	SERIAL No.:
MFR.:	SUR.:0.8*0.02	Shielding Angle:

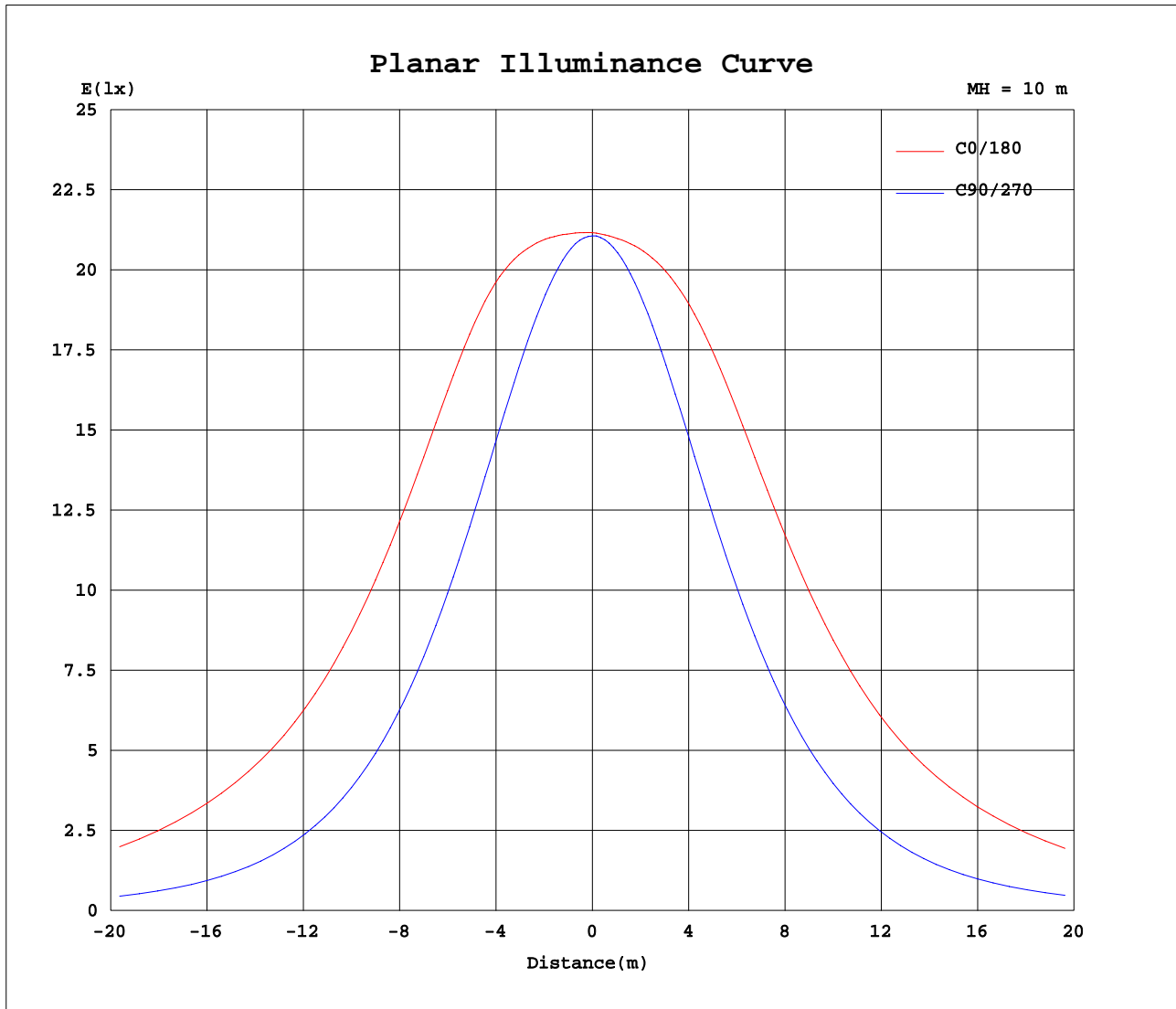
AvgL	cd/m2
L_0~180(65)av	300711
L_0~180(75)av	347335
L_0~180(85)av	122788
L_90~270(65)av	64867
L_90~270(75)av	50959
L_90~270(85)av	38669
L_45(65)av	226214
L_45(75)av	278705
L_45(85)av	278984

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-10-31

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: 2024-10-31

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:

```