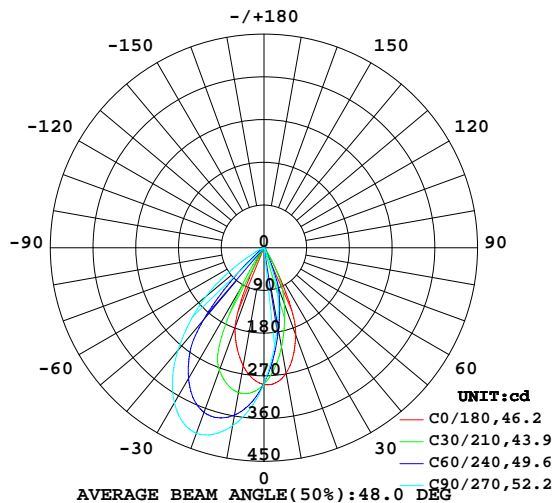


LUMINAIRE PHOTOMETRIC TEST REPORT

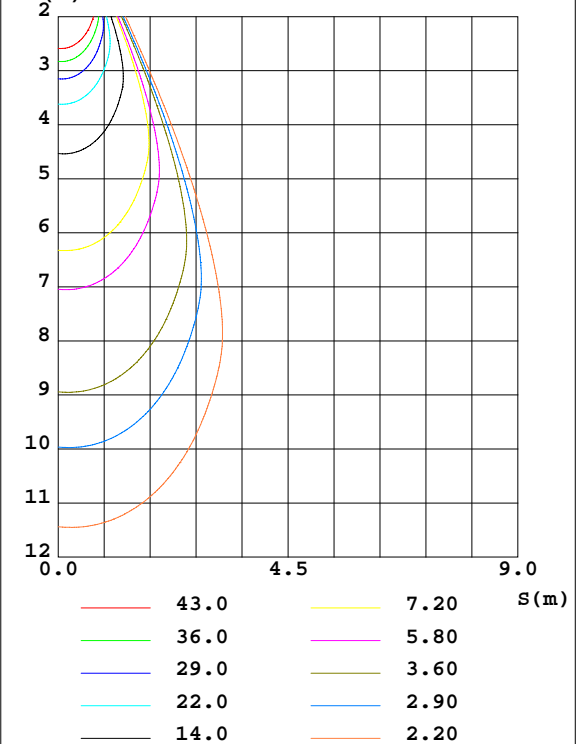
Test:U:229.73V I:0.0311A P:3.8351W PF:0.5362 Freq:49.99Hz Lamp Flux:266.318x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 110*110*105	SERIAL No.:
MFR.: AS2363020B1-11	SUR.:0.06*0.028	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 69.44 lm/W			
MODEL		Imax(cd)	415.8	S/MH(C0/180)	0.70
NOMINAL POWER(W)	4	LOR(%)	100.0	S/MH(C90/270)	0.40
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	266.32	η UP,DN(C0-180)	0.0,18.4
NOMINAL FLUX(lm)	266.318	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,81.6
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	230.0	η down(%)	100.0	CIBSE SHR MAX	0.85

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:2023-02-27

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
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:

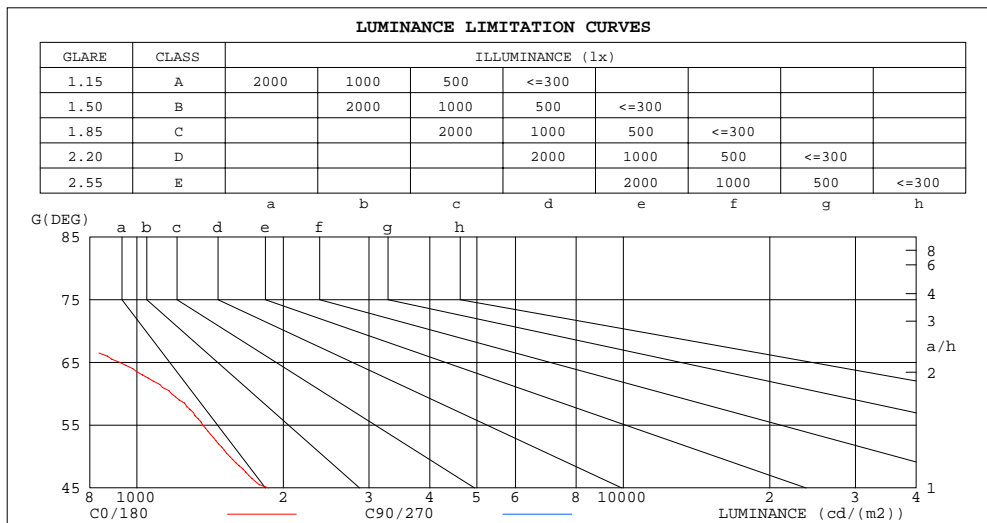
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	$\%lum, lamp$
10	268.4	194.1	164.1	185.7	252.7	333.7	380.6	346.8	0- 10	26.29	26.29	9.87,9.87
20	195.4	107.1	61.65	102.7	178.3	321.8	415.8	348.3	10- 20	68.36	94.65	35.5,35.5
30	39.37	25.56	4.294	17.99	22.57	207.1	377.4	244.7	20- 30	77.57	172.2	64.7,64.7
40	4.363	2.243	0.3915	1.770	3.612	103.6	281.9	117.8	30- 40	53.73	225.9	84.8,84.8
50	1.676	0.2489	0	0.2015	1.587	14.79	160.0	17.63	40- 50	28.98	254.9	95.7,95.7
60	0.9894	0.0787	0	0.0429	0.8067	2.783	36.90	3.012	50- 60	9.352	264.3	99.2,99.2
70	0.3612	0	0	0	0.1539	0.6746	2.408	0.8549	60- 70	1.864	266.1	99.9,99.9
80	0.0517	0	0	0	0	0.0301	0.0515	0.0560	70- 80	0.1729	266.3	100,100
90	0	0	0.0086	0	0	0	0	0	80- 90	0.0050	266.3	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: 30.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:2023-02-27

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 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:229.73V I:0.0311A P:3.8351W PF:0.5362 Freq:49.99Hz Lamp Flux:266.318x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 110*110*105	SERIAL No.:
MFR.: AS2363020B1-11	SUR.:0.06*0.028	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	0	0
80	177	0
75	376	0
70	629	0
65	922	0
60	1178	0
55	1365	0
50	1552	0
45	1867	0

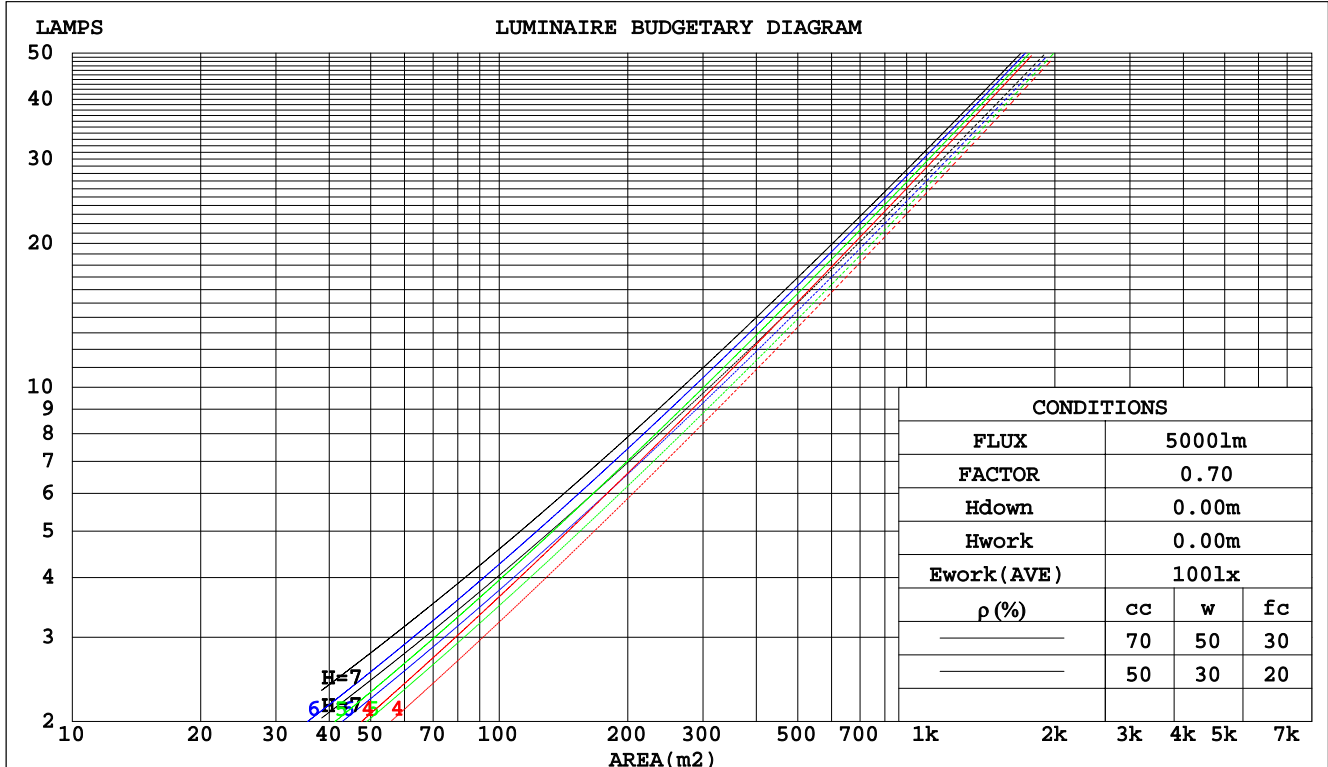
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:2023-02-27

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
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:229.73V I:0.0311A P:3.8351W PF:0.5362 Freq:49.99Hz Lamp Flux:266.318x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 110*110*105	SERIAL No.:
MFR.: AS2363020B1-11	SUR.:0.06*0.028	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	1.08	1.05	1.08	1.06	1.04	1.04	1.02	1.00	1.00	.99	.97	.97	.96	.95	.93
2.0	1.02	.98	.94	1.00	.96	.93	.97	.94	.91	.94	.91	.89	.91	.89	.87	.86
3.0	.95	.89	.85	.93	.88	.84	.90	.86	.83	.88	.85	.82	.86	.83	.80	.79
4.0	.88	.82	.77	.87	.81	.77	.84	.80	.76	.82	.78	.75	.81	.77	.74	.73
5.0	.82	.76	.71	.81	.75	.71	.79	.74	.70	.77	.73	.69	.76	.72	.69	.67
6.0	.76	.70	.66	.76	.70	.65	.74	.69	.65	.73	.68	.64	.71	.67	.64	.62
7.0	.71	.65	.61	.71	.65	.61	.69	.64	.60	.68	.63	.60	.67	.63	.60	.58
8.0	.67	.61	.56	.66	.60	.56	.65	.60	.56	.64	.59	.56	.63	.59	.56	.54
9.0	.63	.57	.53	.63	.57	.53	.62	.56	.52	.61	.56	.52	.60	.55	.52	.51
10.0	.60	.53	.49	.59	.53	.49	.58	.53	.49	.57	.53	.49	.57	.52	.49	.48



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:2023-02-27

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
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:229.73V I:0.0311A P:3.8351W PF:0.5362 Freq:49.99Hz Lamp Flux:266.318x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 110*110*105	SERIAL No.:
MFR.: AS2363020B1-11	SUR.:0.06*0.028	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	.187	.106	.034	.180	.103	.033	.167	.096	.031	.156	.090	.029	.145	.084	.027		
2.0	.180	.099	.030	.175	.096	.030	.164	.091	.028	.154	.086	.027	.145	.082	.026		
3.0	.173	.092	.028	.168	.090	.027	.159	.086	.026	.150	.082	.025	.142	.079	.024		
4.0	.165	.086	.025	.160	.084	.025	.153	.081	.024	.145	.078	.024	.138	.075	.023		
5.0	.157	.080	.023	.153	.079	.023	.146	.076	.022	.140	.074	.022	.134	.071	.021		
6.0	.150	.075	.021	.146	.074	.021	.140	.072	.021	.135	.070	.021	.129	.068	.020		
7.0	.143	.071	.020	.140	.070	.020	.134	.068	.020	.129	.066	.019	.125	.065	.019		
8.0	.136	.067	.019	.134	.066	.019	.129	.064	.018	.124	.063	.018	.120	.062	.018		
9.0	.130	.063	.018	.128	.062	.018	.124	.061	.017	.120	.060	.017	.116	.059	.017		
10.0	.125	.060	.017	.123	.059	.017	.119	.058	.016	.115	.057	.016	.112	.056	.016		

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	.144	.147	.135	.124	.101	.093	.086	.058	.054	.050	.019	.017	.016	
2.0	.157	.132	.111	.135	.114	.096	.092	.079	.067	.053	.046	.039	.017	.015	.013	
3.0	.146	.114	.088	.125	.098	.076	.086	.068	.054	.050	.040	.032	.016	.013	.010	
4.0	.136	.099	.071	.117	.086	.062	.080	.060	.043	.046	.035	.026	.015	.011	.008	
5.0	.128	.088	.058	.110	.076	.051	.076	.053	.036	.044	.031	.021	.014	.010	.007	
6.0	.121	.079	.048	.104	.068	.042	.072	.048	.030	.041	.028	.018	.013	.009	.006	
7.0	.114	.071	.041	.098	.062	.036	.068	.043	.025	.039	.025	.015	.013	.008	.005	
8.0	.109	.065	.035	.094	.056	.031	.065	.040	.022	.038	.023	.013	.012	.008	.004	
9.0	.104	.060	.030	.089	.052	.026	.062	.037	.019	.036	.022	.011	.012	.007	.004	
10.0	.099	.056	.027	.085	.048	.023	.059	.034	.017	.034	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:2023-02-27

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
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:229.73V I:0.0311A P:3.8351W PF:0.5362 Freq:49.99Hz Lamp Flux:266.318x1 lm										
NAME:			TYPE:			WEIGHT:				
SPEC.:			DIM.: 110*110*105			SERIAL No.:				
MFR.: AS2363020B1-11			SUR.:0.06*0.028			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	4.6	5.6	4.9	5.8	6.0	-6.2	-5.1	-5.9	-5.0	-4.8
3H	4.6	5.5	4.9	5.7	5.9	-6.3	-5.4	-6.1	-5.2	-5.0
4H	4.5	5.4	4.8	5.7	5.9	-6.4	-5.5	-6.1	-5.3	-5.1
6H	4.5	5.3	4.8	5.5	5.8	-6.5	-5.7	-6.2	-5.4	-5.2
8H	4.4	5.2	4.7	5.5	5.7	-6.6	-5.8	-6.2	-5.5	-5.2
12H	4.4	5.1	4.7	5.4	5.7	-6.6	-5.8	-6.3	-5.6	-5.3
4H 2H	4.4	5.2	4.6	5.5	5.7	-6.3	-5.5	-6.1	-5.2	-5.0
3H	4.3	5.1	4.6	5.4	5.6	-6.5	-5.8	-6.2	-5.5	-5.2
4H	4.3	5.0	4.6	5.3	5.6	-6.6	-5.9	-6.3	-5.6	-5.3
6H	4.2	4.8	4.6	5.1	5.5	-6.7	-6.1	-6.3	-5.8	-5.4
8H	4.2	4.7	4.5	5.1	5.4	-6.8	-6.2	-6.4	-5.8	-5.5
12H	4.1	4.6	4.5	5.0	5.4	-6.8	-6.3	-6.4	-5.9	-5.5
8H 4H	4.1	4.7	4.5	5.0	5.4	-6.7	-6.2	-6.3	-5.8	-5.5
6H	4.1	4.5	4.5	4.9	5.3	-6.8	-6.4	-6.4	-6.0	-5.6
8H	4.0	4.4	4.5	4.8	5.3	-6.9	-6.5	-6.4	-6.1	-5.6
12H	4.0	4.3	4.4	4.7	5.2	-6.9	-6.6	-6.5	-6.2	-5.7
12H 4H	4.1	4.6	4.5	5.0	5.4	-6.8	-6.3	-6.4	-5.9	-5.5
6H	4.0	4.4	4.4	4.8	5.3	-6.9	-6.5	-6.4	-6.1	-5.6
8H	4.0	4.3	4.4	4.7	5.2	-6.9	-6.6	-6.5	-6.2	-5.7
Variations with the observer position at spacings:										
S = 1.0H	+ 3.5 / - 4.6					+ 2.9 / -17.0				
1.5H	+ 5.7 / - 7.8					+ 5.2 / -13.4				
2.0H	+ 4.4 / - 8.5					+ 5.4 / -11.8				

CIE Pub.117, 266.3 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = -4.6)

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:2023-02-27

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
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:229.73V I:0.0311A P:3.8351W PF:0.5362 Freq:49.99Hz Lamp Flux:266.318x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 110*110*105	SERIAL No.:
MFR.: AS2363020B1-11	SUR.:0.06*0.028	Shielding Angle:

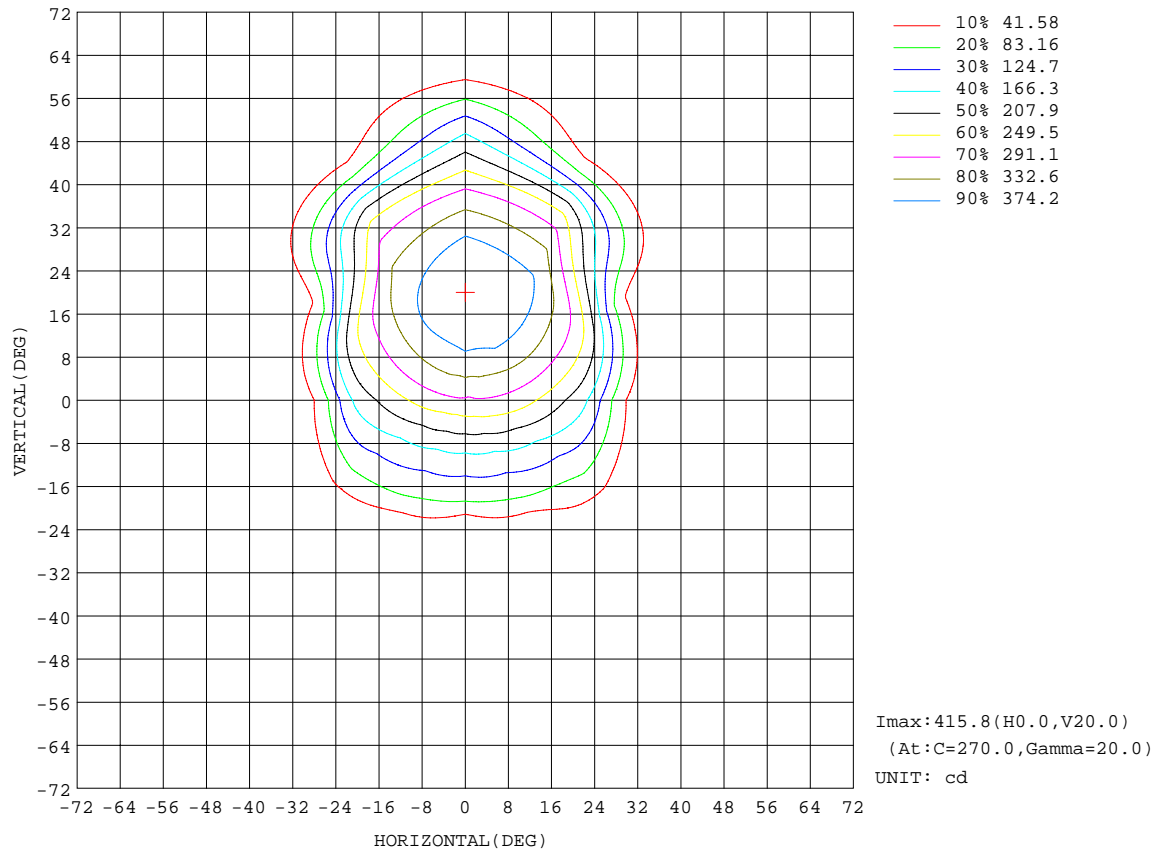
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	82	74	70	81	74	70	80	74	70	66
0.80	90	83	79	89	83	79	88	82	79	74
1.00	96	89	85	95	89	85	93	89	85	80
1.25	101	95	91	100	94	90	97	93	90	85
1.50	104	98	95	102	98	94	100	96	93	88
2.00	107	103	99	106	101	98	103	99	97	91
2.50	109	105	101	107	104	101	104	101	99	93
3.00	111	107	104	109	106	103	106	103	101	94
4.00	113	110	107	111	108	106	107	105	103	96
5.00	114	112	110	112	110	108	108	106	105	97
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:2023-02-27

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
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:229.73V I:0.0311A P:3.8351W PF:0.5362 Freq:49.99Hz Lamp Flux:266.318x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 110*110*105	SERIAL No.:
MFR.: AS2363020B1-11	SUR.:0.06*0.028	Shielding Angle:

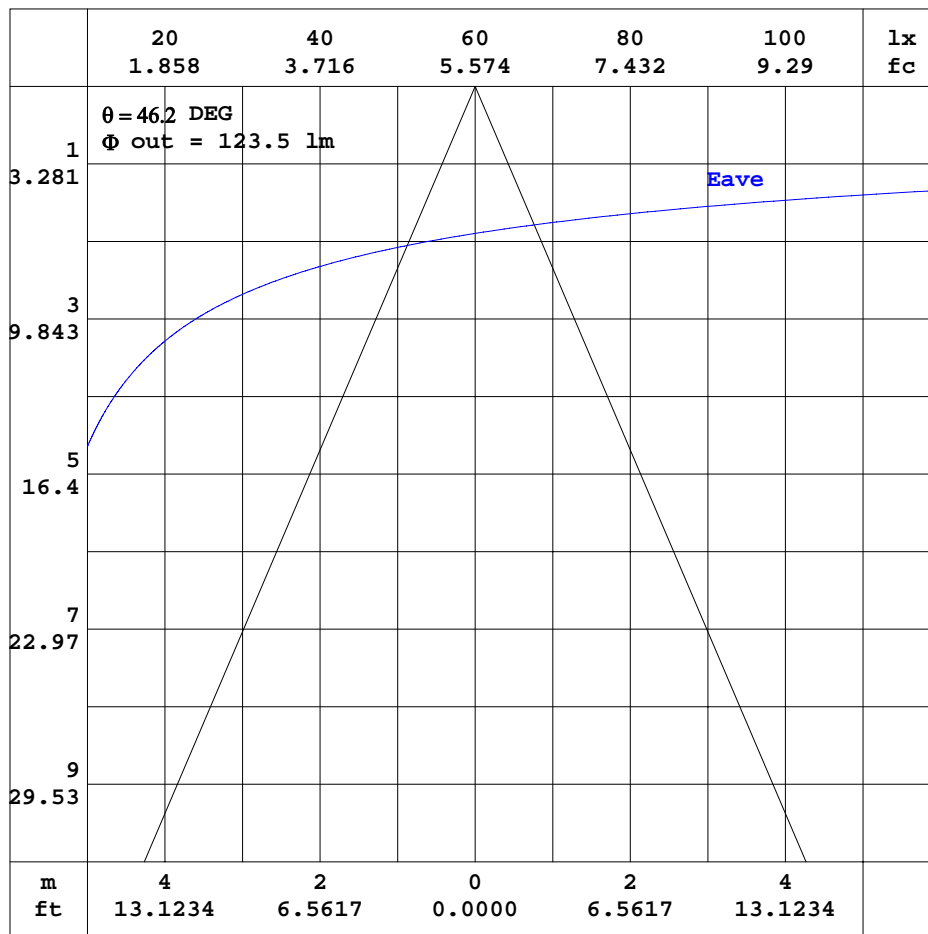


C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:2023-02-27

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
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:229.73V I:0.0311A P:3.8351W PF:0.5362 Freq:49.99Hz Lamp Flux:266.318x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 110*110*105	SERIAL No.:
MFR.: AS2363020B1-11	SUR.:0.06*0.028	Shielding Angle:



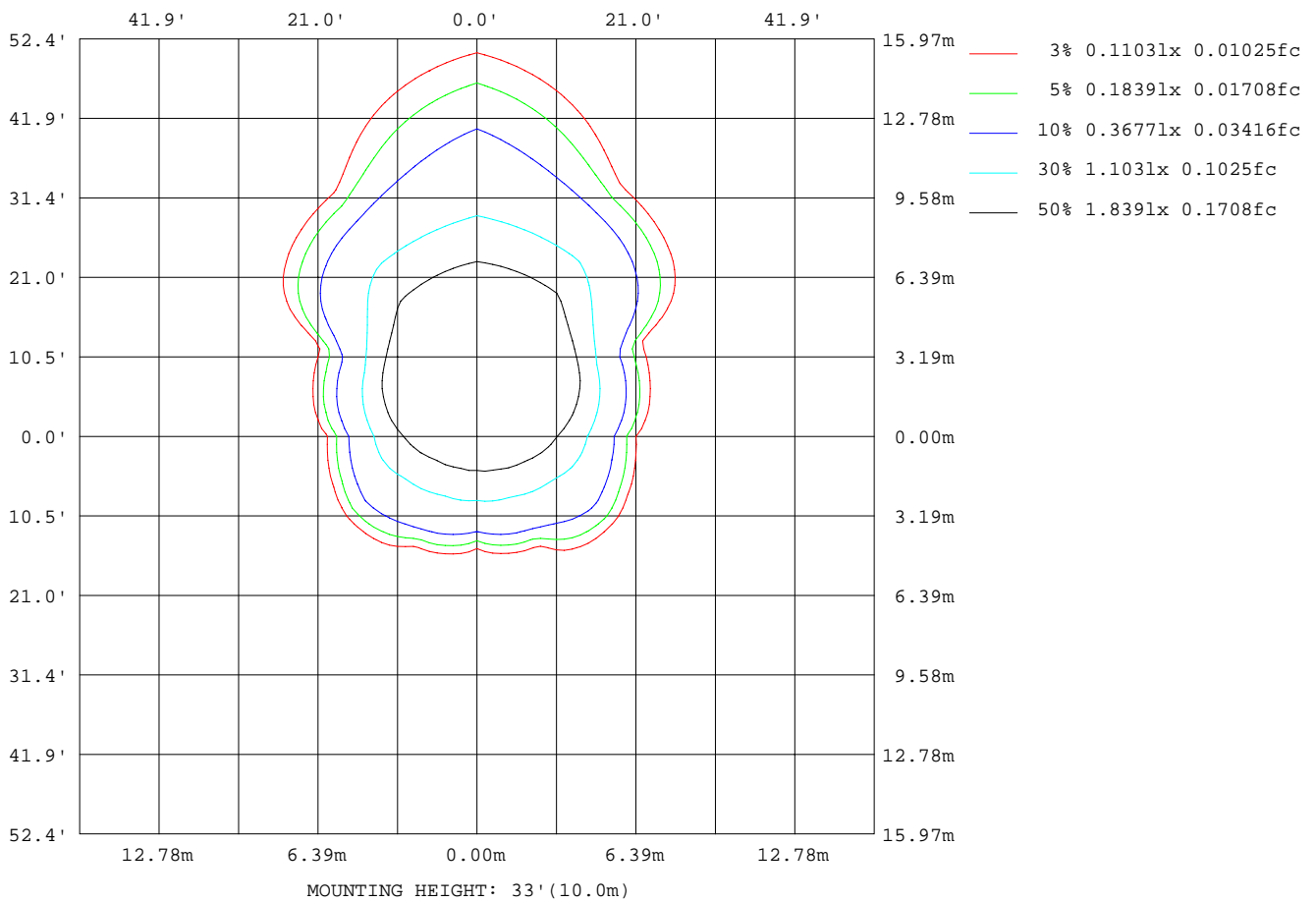
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:2023-02-27

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 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:229.73V I:0.0311A P:3.8351W PF:0.5362 Freq:49.99Hz Lamp Flux:266.318x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 110*110*105	SERIAL No.:
MFR.: AS2363020B1-11	SUR.:0.06*0.028	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:2023-02-27

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
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:229.73V I:0.0311A P:3.8351W PF:0.5362 Freq:49.99Hz Lamp Flux:266.318x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 110*110*105	SERIAL No.:
MFR.: AS2363020B1-11	SUR.:0.06*0.028	Shielding Angle:

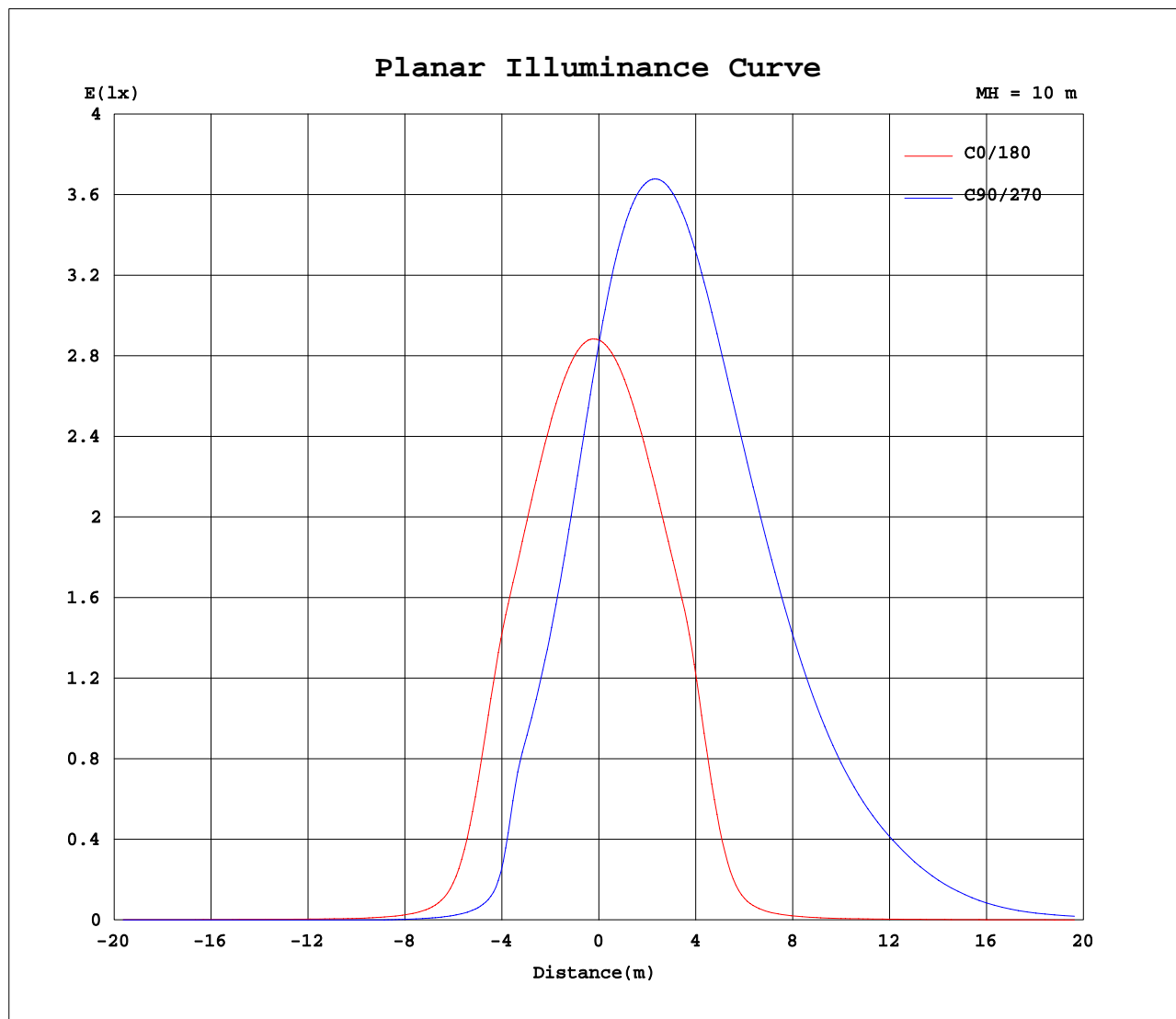
AvgL	cd/m2
L_0~180(65)av	763
L_0~180(75)av	208
L_0~180(85)av	0
L_90~270(65)av	10312
L_90~270(75)av	198
L_90~270(85)av	0
L_45(65)av	485
L_45(75)av	328
L_45(85)av	0

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:2023-02-27

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
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: 30.0DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators:
Test Date: 2023-02-27

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
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: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

```