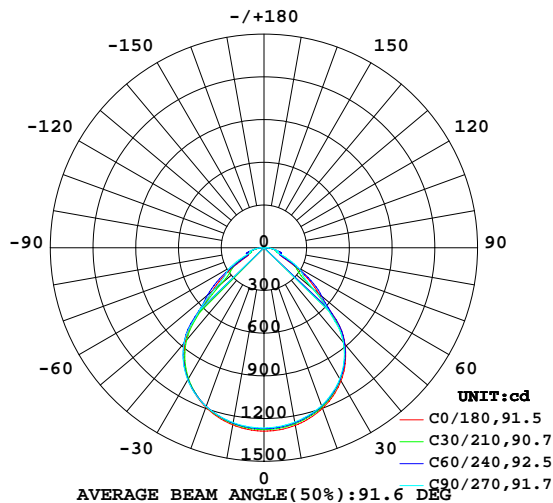


## LUMINAIRE PHOTOMETRIC TEST REPORT

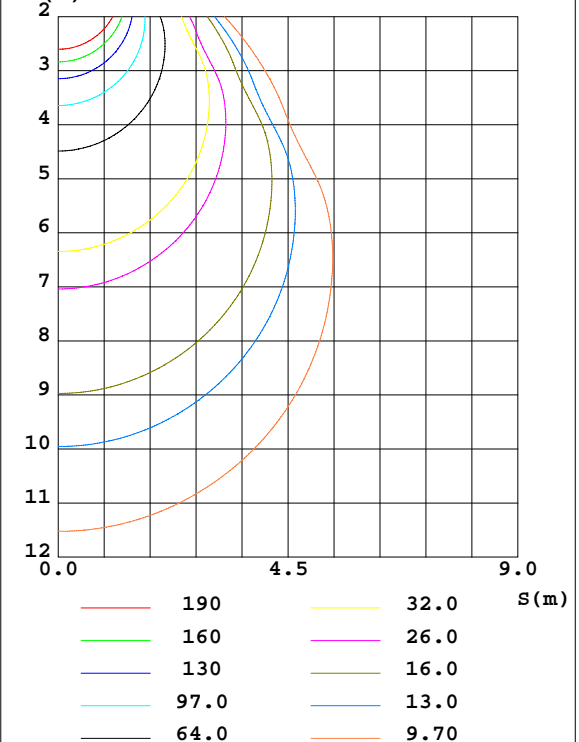
Test:U:229.68V I:0.2698A P:60.630W PF:0.9785 Freq:49.99Hz Lamp Flux:2742.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 45.24 lm/W			
MODEL		Imax(cd)	1288	S/MH(C0/180)	1.23
NOMINAL POWER(W)	60	LOR(%)	100.0	S/MH(C90/270)	1.25
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	2742.9	$\eta$ UP,DN(C0-180)	0.0,50.1
NOMINAL FLUX(lm)	2742.94	CIE CLASS	DIRECT	$\eta$ UP,DN(C180-360)	0.0,49.9
LAMPS INSIDE	1	$\eta$ up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230.0	$\eta$ down(%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-04-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:

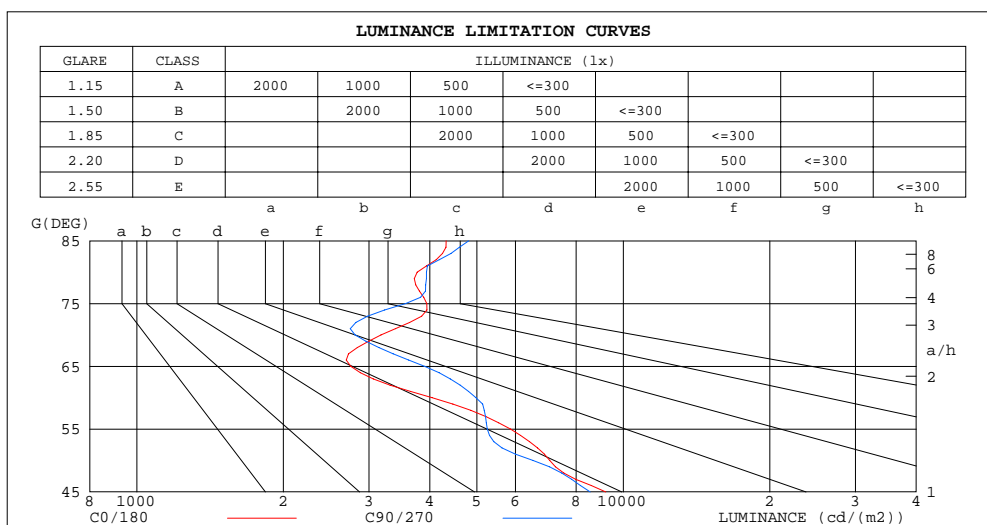
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\%lum, lamp$
10	1267	1252	1243	1237	1263	1251	1247	1241	0- 10	120.1	120.1	4.38,4.38
20	1200	1188	1180	1170	1192	1185	1187	1178	10- 20	344.4	464.5	16.9,16.9
30	1081	1072	1064	1050	1067	1061	1072	1062	20- 30	520.5	985.0	35.9,35.9
40	885.4	877.9	868.6	849.6	860.3	853.5	874.0	868.1	30- 40	608.5	1593	58.1,58.1
50	500.7	486.9	462.6	467.6	475.6	463.0	456.7	484.9	40- 50	516.0	2109	76.9,76.9
60	223.3	270.3	274.7	255.1	194.2	251.3	273.8	264.7	50- 60	314.5	2424	88.4,88.4
70	119.9	146.5	106.0	142.3	123.2	138.9	104.8	145.7	60- 70	173.3	2597	94.7,94.7
80	72.27	61.92	75.49	60.51	68.61	62.03	73.01	62.23	70- 80	104.9	2702	98.5,98.5
90	2.509	2.912	3.187	1.091	1.503	1.521	1.564	2.277	80- 90	40.71	2743	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: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-04-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 $\gamma$  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:229.68V I:0.2698A P:60.630W PF:0.9785 Freq:49.99Hz Lamp Flux:2742.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	4322	4808
80	3770	3938
75	3944	3568
70	3176	2808
65	2753	3904
60	4044	4977
55	5863	5252
50	7056	6518
45	9201	8546

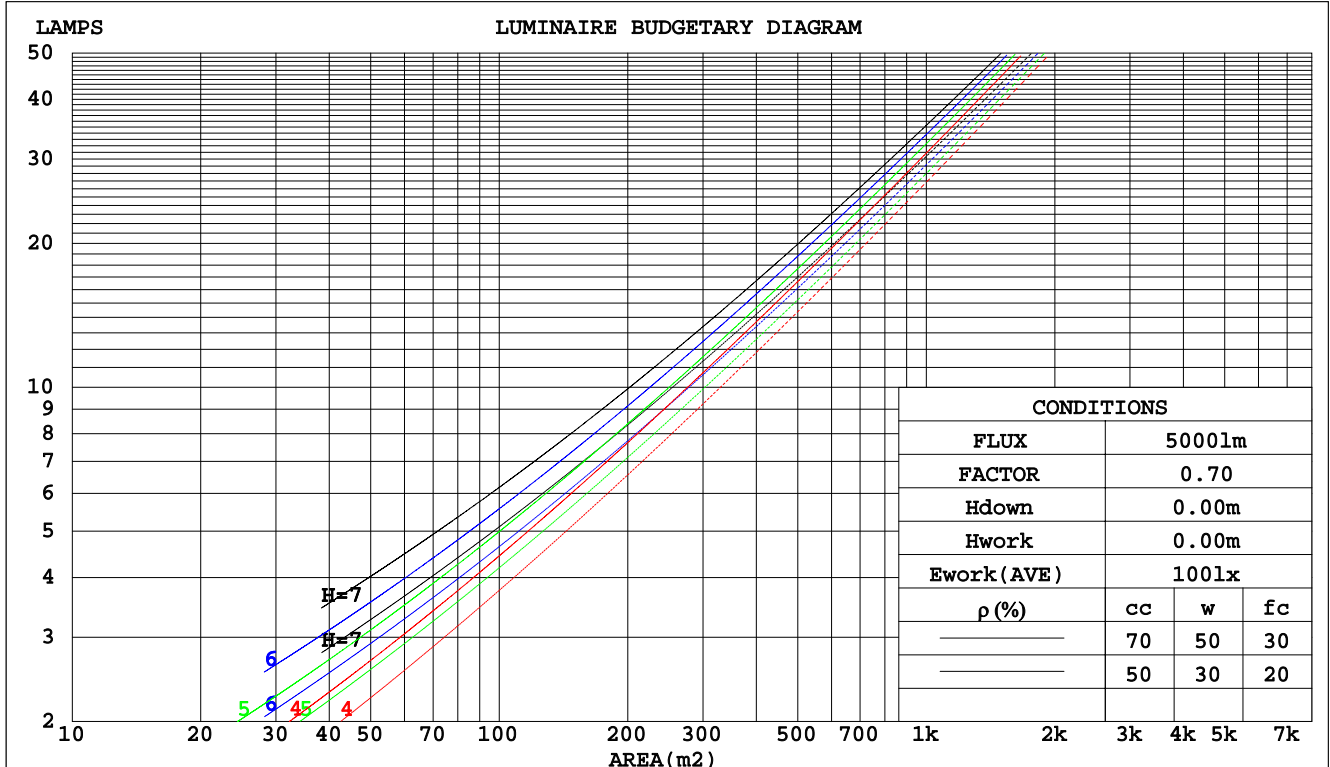
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-04-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:229.68V I:0.2698A P:60.630W PF:0.9785 Freq:49.99Hz Lamp Flux:2742.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	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	1.06	1.02	.99	1.04	1.01	.98	.90	.97	.94	.96	.94	.92	.92	.91	.89	.87
2.0	.95	.89	.84	.93	.87	.83	.89	.85	.81	.86	.82	.79	.83	.80	.77	.75
3.0	.85	.77	.72	.83	.76	.71	.80	.75	.70	.78	.73	.69	.75	.71	.68	.66
4.0	.76	.68	.62	.75	.68	.62	.73	.66	.61	.70	.65	.60	.68	.63	.60	.58
5.0	.69	.61	.55	.68	.60	.55	.66	.59	.54	.64	.58	.53	.62	.57	.53	.51
6.0	.63	.55	.49	.62	.54	.48	.60	.53	.48	.58	.52	.48	.57	.52	.47	.45
7.0	.57	.49	.44	.57	.49	.43	.55	.48	.43	.54	.47	.43	.52	.47	.43	.41
8.0	.53	.45	.39	.52	.44	.39	.51	.44	.39	.50	.43	.39	.48	.43	.39	.37
9.0	.49	.41	.36	.48	.41	.36	.47	.40	.35	.46	.40	.35	.45	.39	.35	.33
10.0	.45	.38	.33	.44	.37	.33	.44	.37	.32	.43	.37	.32	.42	.36	.32	.31



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-04-15

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:229.68V I:0.2698A P:60.630W PF:0.9785 Freq:49.99Hz Lamp Flux:2742.94x1 lm					
NAME:		TYPE:		WEIGHT:	
SPEC.:		DIM.: 610*280*42		SERIAL No.:	
MFR.:		SUR.:0.6*0.184		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	.266	.151	.048	.259	.148	.047	.246	.141	.045	.234	.135	.043	.223	.129	.042	
2.0	.252	.138	.042	.246	.135	.042	.235	.130	.041	.224	.126	.039	.214	.121	.038	
3.0	.236	.126	.038	.231	.124	.037	.221	.120	.036	.212	.116	.036	.203	.112	.035	
4.0	.221	.115	.034	.216	.113	.033	.207	.110	.033	.199	.107	.032	.192	.104	.032	
5.0	.206	.105	.030	.202	.104	.030	.195	.101	.030	.187	.099	.029	.181	.096	.029	
6.0	.194	.097	.028	.190	.096	.028	.183	.094	.027	.177	.092	.027	.170	.090	.027	
7.0	.182	.090	.025	.179	.089	.025	.172	.087	.025	.167	.085	.025	.161	.084	.025	
8.0	.171	.084	.024	.168	.083	.023	.163	.081	.023	.158	.080	.023	.153	.078	.023	
9.0	.162	.078	.022	.159	.078	.022	.154	.076	.022	.149	.075	.021	.145	.074	.021	
10.0	.153	.073	.020	.151	.073	.020	.146	.072	.020	.142	.070	.020	.138	.069	.020	

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	.177	.157	.138	.152	.134	.119	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.167	.132	.103	.143	.114	.089	.098	.079	.062	.056	.046	.036	.018	.015	.012	
3.0	.158	.114	.079	.135	.098	.069	.093	.068	.048	.054	.040	.028	.017	.013	.009	
4.0	.150	.100	.063	.129	.087	.054	.088	.060	.038	.051	.035	.023	.016	.012	.007	
5.0	.142	.090	.051	.122	.078	.044	.084	.054	.031	.049	.032	.018	.016	.010	.006	
6.0	.135	.081	.042	.116	.070	.037	.080	.049	.026	.047	.029	.015	.015	.009	.005	
7.0	.129	.074	.036	.111	.064	.031	.077	.045	.022	.045	.027	.013	.014	.009	.004	
8.0	.123	.068	.031	.106	.059	.027	.073	.042	.019	.043	.024	.011	.014	.008	.004	
9.0	.117	.063	.027	.101	.055	.023	.070	.039	.017	.041	.023	.010	.013	.007	.003	
10.0	.112	.059	.024	.097	.051	.021	.067	.036	.015	.039	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2024-04-15

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:229.68V I:0.2698A P:60.630W PF:0.9785 Freq:49.99Hz Lamp Flux:2742.94x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:					DIM.: 610*280*42			SERIAL No.:			
MFR.:					SUR.:0.6*0.184			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	18.2	19.6	18.5	19.7	19.9	18.6	19.9	18.8	20.1	20.3
	3H	18.8	20.1	19.1	20.3	20.5	19.2	20.5	19.5	20.7	20.9
	4H	19.3	20.4	19.6	20.7	20.9	19.6	20.8	19.9	21.0	21.2
	6H	19.6	20.7	19.9	21.0	21.2	19.9	21.0	20.2	21.3	21.6
	8H	19.8	20.9	20.1	21.1	21.4	20.1	21.2	20.4	21.4	21.7
	12H	20.0	21.0	20.3	21.3	21.6	20.3	21.3	20.6	21.6	21.9
4H	2H	18.5	19.6	18.8	19.9	20.1	18.7	19.9	19.0	20.2	20.4
	3H	19.2	20.3	19.6	20.5	20.8	19.6	20.6	20.0	20.9	21.2
	4H	19.8	20.7	20.1	21.0	21.4	20.1	21.1	20.5	21.4	21.7
	6H	20.3	21.1	20.7	21.5	21.8	20.6	21.5	21.0	21.8	22.2
	8H	20.6	21.3	21.0	21.7	22.1	20.9	21.7	21.3	22.0	22.4
	12H	20.8	21.5	21.2	21.9	22.3	21.2	21.9	21.6	22.3	22.7
8H	4H	20.0	20.8	20.4	21.1	21.5	20.3	21.1	20.7	21.4	21.8
	6H	20.6	21.3	21.1	21.7	22.1	21.0	21.6	21.4	22.0	22.4
	8H	21.0	21.6	21.5	22.0	22.5	21.4	21.9	21.8	22.4	22.8
	12H	21.4	21.9	21.9	22.3	22.8	21.8	22.3	22.3	22.7	23.2
12H	4H	20.0	20.7	20.4	21.1	21.5	20.3	21.0	20.7	21.4	21.8
	6H	20.7	21.3	21.2	21.7	22.1	21.0	21.6	21.5	22.0	22.5
	8H	21.2	21.6	21.6	22.1	22.6	21.5	22.0	22.0	22.4	22.9
Variations with the observer position at spacings:											
S = 1.0H	+ 0.6 / - 0.6					+ 0.6 / - 0.7					
1.5H	+ 0.3 / - 0.4					+ 0.2 / - 0.7					
2.0H	+ 1.1 / - 0.8					+ 0.9 / - 1.4					

CIE Pub.117, 2743 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = 3.5$ )

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2024-04-15

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:229.68V I:0.2698A P:60.630W PF:0.9785 Freq:49.99Hz Lamp Flux:2742.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:

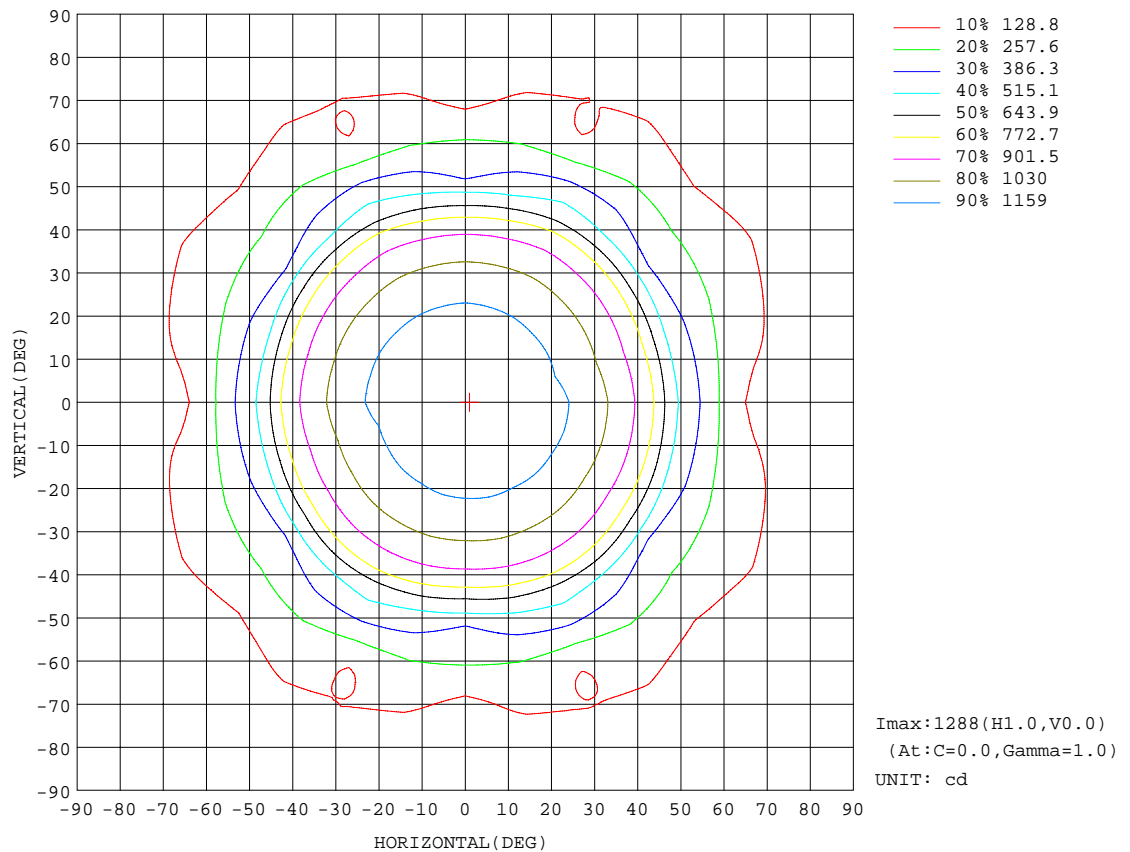
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	65	55	49	65	55	49	64	54	49	43
0.80	75	65	59	74	65	59	73	64	58	52
1.00	83	74	68	82	73	67	80	74	67	61
1.25	90	81	75	88	80	74	86	79	74	67
1.50	94	86	80	92	85	79	90	83	78	72
2.00	100	93	87	98	91	86	95	89	85	78
2.50	103	96	91	101	95	90	97	92	88	81
3.00	105	100	95	103	98	94	100	95	92	84
4.00	109	104	100	106	102	99	102	99	96	88
5.00	111	106	103	108	105	101	104	101	98	90
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2024-04-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:229.68V I:0.2698A P:60.630W PF:0.9785 Freq:49.99Hz Lamp Flux:2742.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:



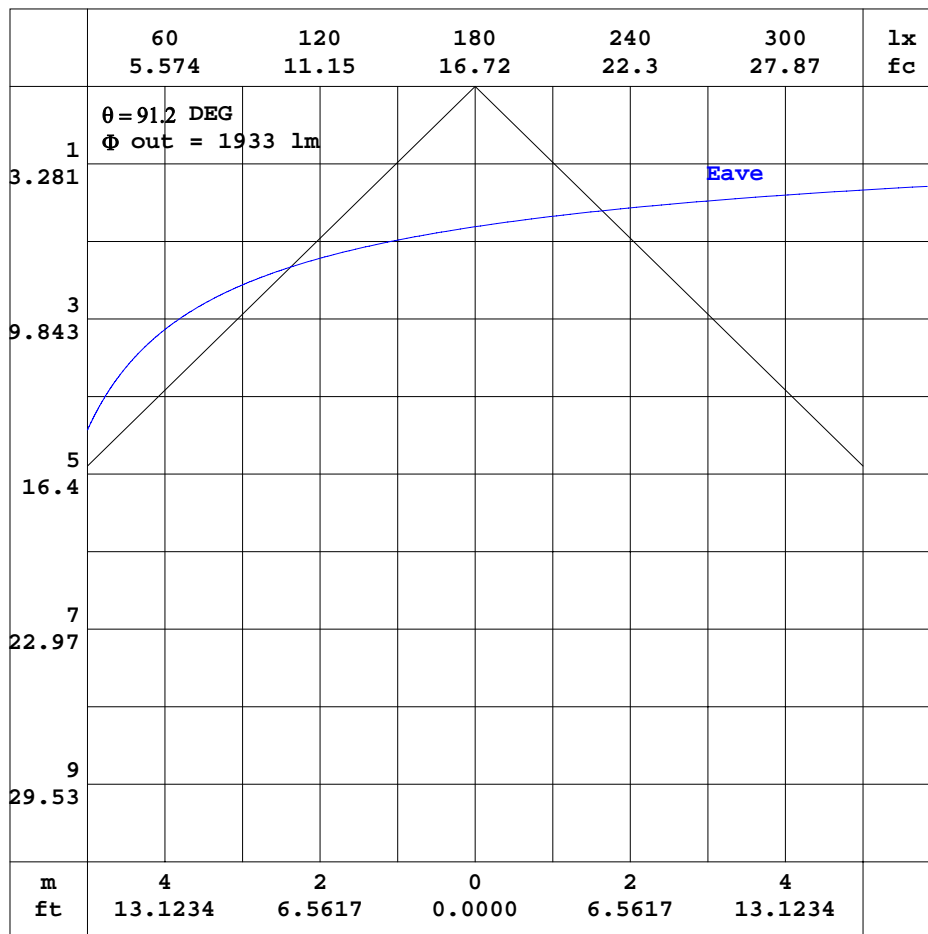
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-04-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:229.68V I:0.2698A P:60.630W PF:0.9785 Freq:49.99Hz Lamp Flux:2742.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:



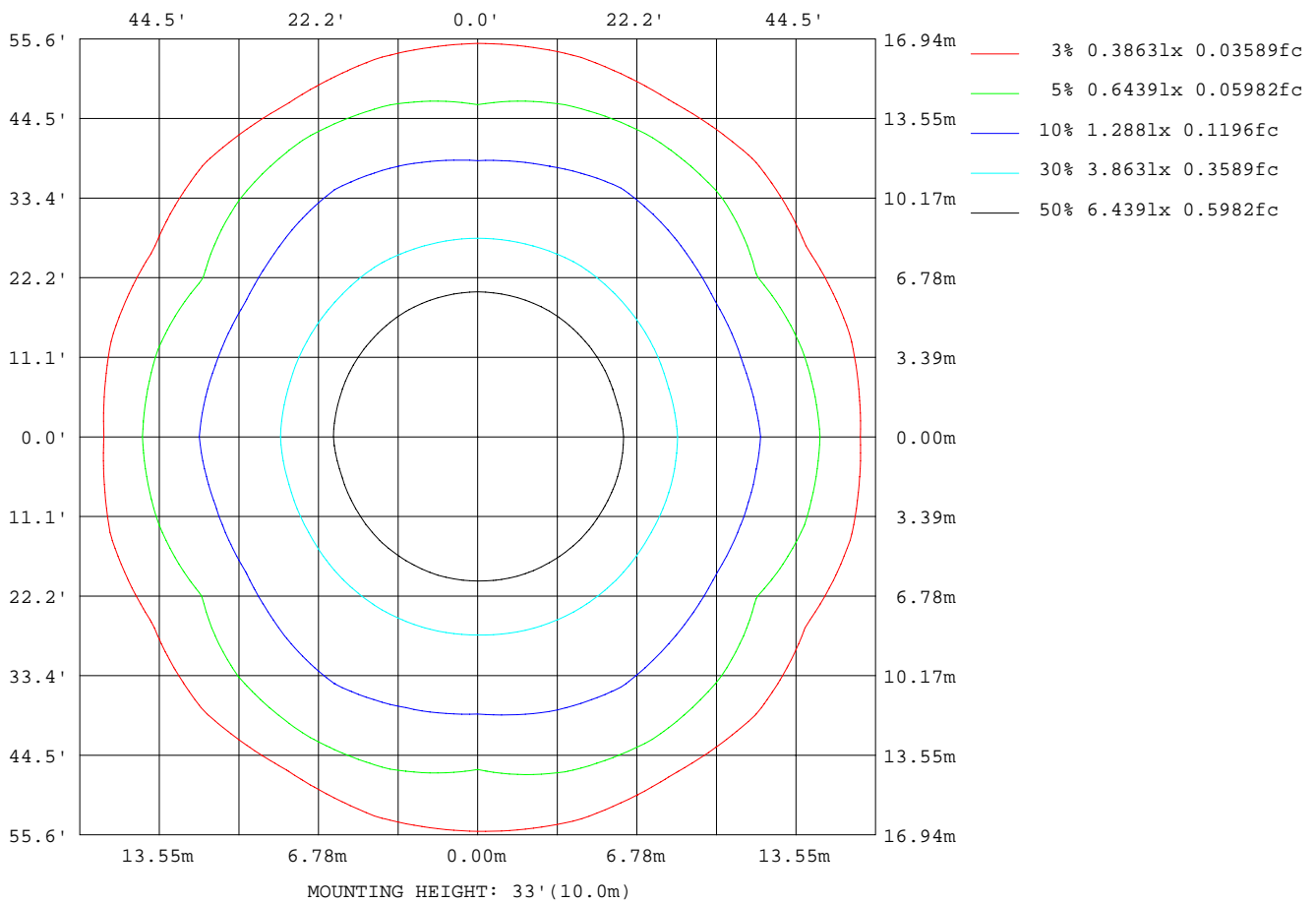
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-04-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:229.68V I:0.2698A P:60.630W PF:0.9785 Freq:49.99Hz Lamp Flux:2742.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2024-04-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:229.68V I:0.2698A P:60.630W PF:0.9785 Freq:49.99Hz Lamp Flux:2742.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:

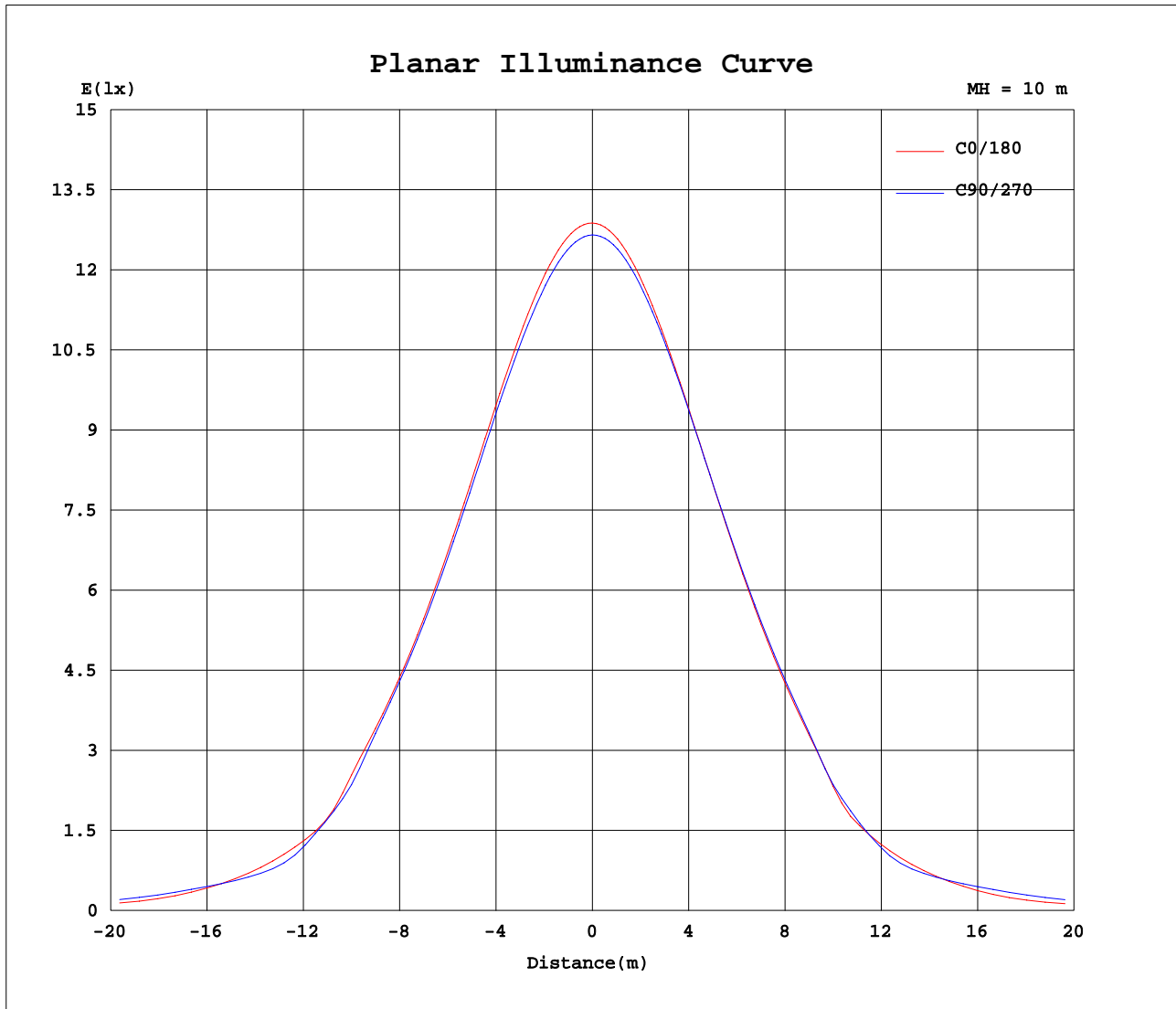
AvgL	cd/m2
L_0~180(65)av	2677
L_0~180(75)av	3793
L_0~180(85)av	3837
L_90~270(65)av	3863
L_90~270(75)av	3583
L_90~270(85)av	4701
L_45(65)av	4059
L_45(75)av	3430
L_45(85)av	3938

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-04-15

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: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2024-04-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:

```

```

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:

```