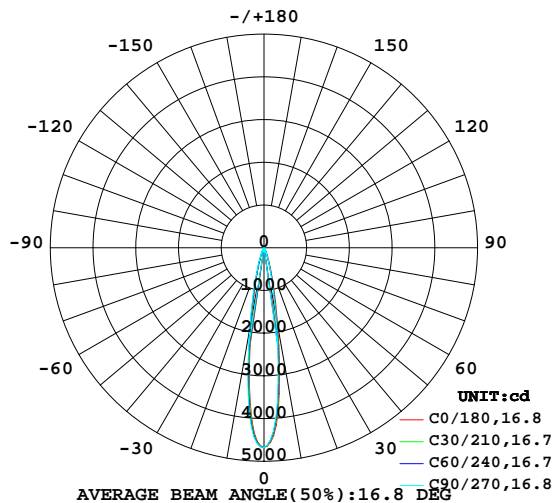


## LUMINAIRE PHOTOMETRIC TEST REPORT

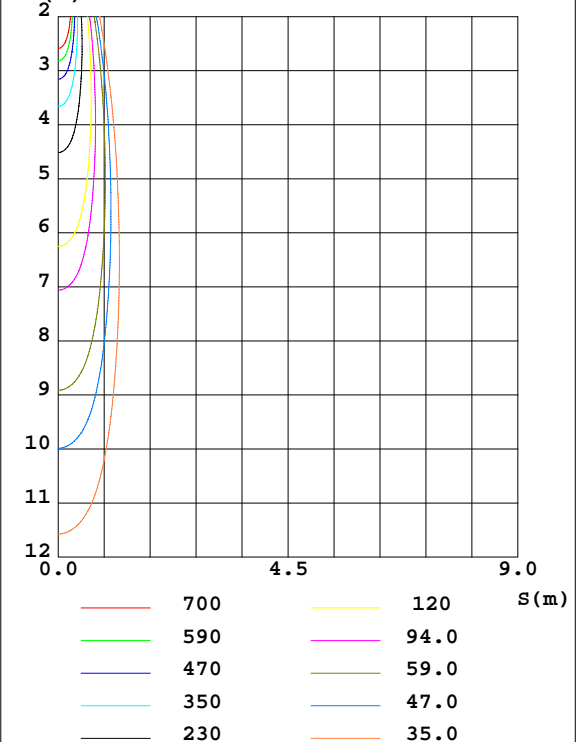
Test:U:225.2V I:0.0610A P:8.180W PF:0.5930 Freq:50.00Hz Lamp Flux:641.693x1 lm					
NAME:		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.:		SUR.:28		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 78.45 lm/W
MODEL	ALRP35-8G30-S	I <sub>max</sub> (cd)	4673	S/MH(C0/180)	0.30	
NOMINAL POWER(W)	8	LOR(%)	100.0	S/MH(C90/270)	0.28	
RATED VOLTAGE(V)	226	TOTAL FLUX(lm)	641.69	η UP,DN(C0-180)	0.0,52.5	
NOMINAL FLUX(lm)	641.693	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,47.5	
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.00	
TEST VOLTAGE(V)	225.1	η down(%)	100.0	CIBSE SHR MAX	1.00	

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:AE  
 Test Date:2020-06-16

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:7.240m [K=1.0000]  
 Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

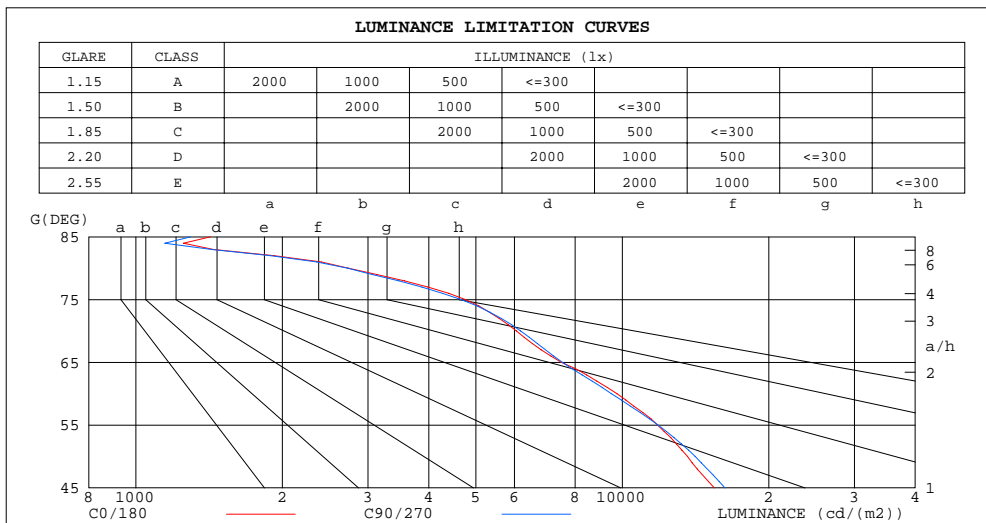
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\%lum, lamp$
10	1681	1849	1935	1975	1840	1646	1625	1592	0- 10	288.7	288.7	45.45
20	250.5	285.4	328.7	367.4	322.6	259.3	253.8	258.6	10- 20	210.7	499.5	77.8,77.8
30	66.71	67.95	74.98	81.30	72.39	64.58	66.15	69.58	20- 30	64.49	564.0	87.9,87.9
40	34.46	34.48	35.90	35.53	34.95	34.31	33.72	33.88	30- 40	30.11	594.1	92.6,92.6
50	21.47	22.15	22.35	22.29	21.94	22.41	20.97	21.19	40- 50	21.25	615.3	95.9,95.9
60	11.95	11.87	11.69	12.02	11.55	11.65	11.56	11.43	50- 60	14.83	630.1	98.2,98.2
70	5.082	5.183	5.204	5.341	5.204	5.069	5.158	5.125	60- 70	7.974	638.1	99.4,99.4
80	1.165	1.170	1.166	1.229	1.061	1.030	1.058	1.179	70- 80	3.190	641.3	99.9,99.9
90	0.2574	0.2345	0.2271	0.3020	0	0	0	0.0196	80- 90	0.3813	641.7	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:AE  
 Test Date:2020-06-16

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:7.240m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

Test:U:225.2V I:0.0610A P:8.180W PF:0.5930 Freq:50.00Hz Lamp Flux:641.693x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1423	1296
80	2735	2726
75	4755	4664
70	6057	6178
65	7487	7530
60	9745	9494
55	11814	11842
50	13618	14117
45	15461	16252

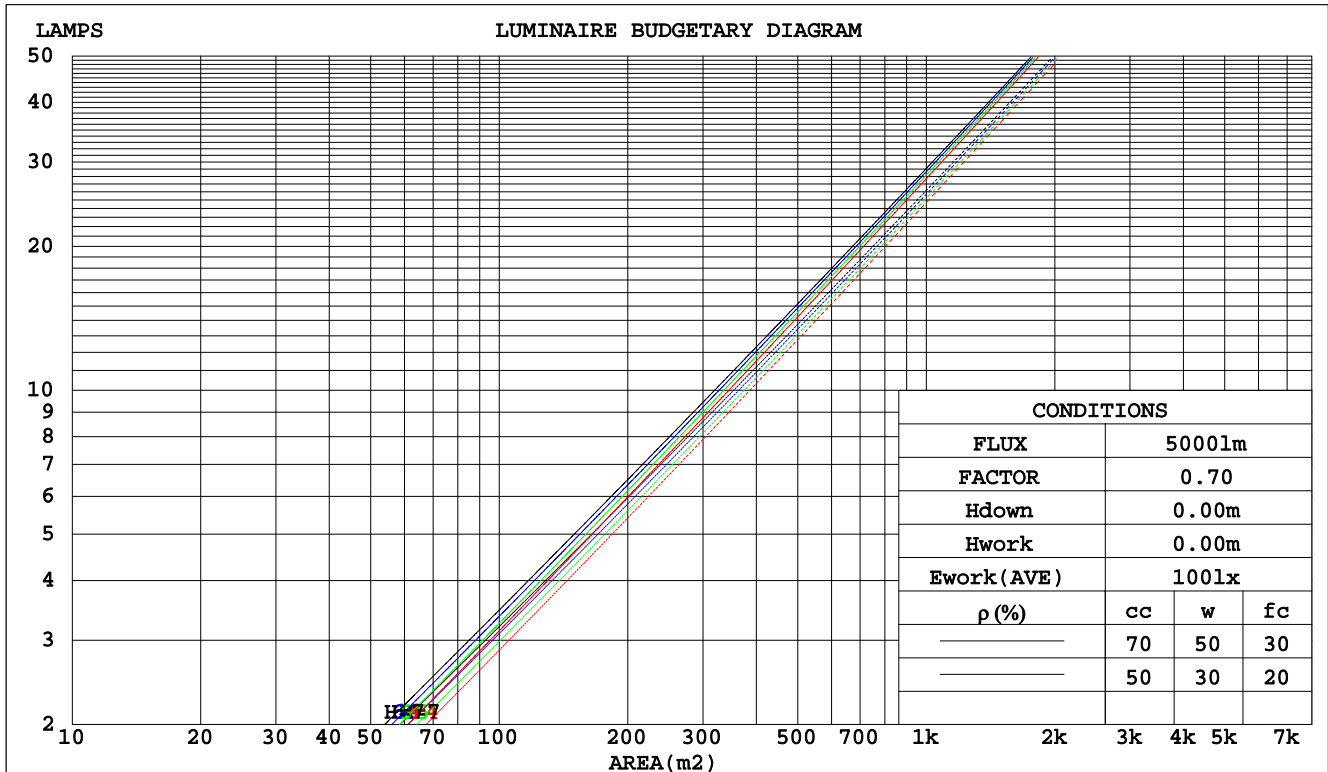
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-06-16

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.240m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:225.2V I:0.0610A P:8.180W PF:0.5930 Freq:50.00Hz Lamp Flux:641.693x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	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	1.13	1.11	1.09	1.10	1.09	1.07	1.06	1.05	1.04	1.03	1.02	1.01	.99	.99	.98	.96
2.0	1.07	1.04	1.01	1.05	1.02	1.00	1.02	.00	.98	.99	.97	.96	.97	.95	.94	.92
3.0	1.02	.98	.95	1.01	.97	.95	.98	.95	.93	.96	.94	.92	.94	.92	.90	.89
4.0	.98	.94	.91	.97	.93	.90	.95	.92	.89	.93	.90	.88	.91	.89	.87	.86
5.0	.94	.90	.87	.94	.90	.87	.92	.89	.86	.90	.88	.85	.89	.87	.85	.83
6.0	.91	.87	.84	.91	.87	.84	.89	.86	.83	.88	.85	.83	.87	.84	.82	.81
7.0	.89	.84	.81	.88	.84	.81	.87	.83	.81	.86	.83	.80	.85	.82	.80	.79
8.0	.86	.82	.79	.86	.82	.79	.85	.81	.79	.84	.81	.78	.83	.80	.78	.77
9.0	.84	.80	.77	.83	.79	.77	.83	.79	.77	.82	.79	.76	.81	.78	.76	.75
10.0	.82	.78	.75	.81	.78	.75	.81	.77	.75	.80	.77	.75	.79	.77	.74	.74



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:AE  
 Test Date:2020-06-16

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:7.240m [K=1.0000]  
 Remarks:

## WEC AND CCEC

Test:U:225.2V I:0.0610A P:8.180W PF:0.5930 Freq:50.00Hz Lamp Flux:641.693x1 lm					
NAME:		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.:		SUR.:28		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	.143	.082	.026	.137	.078	.025	.124	.071	.023	.113	.065	.021	.102	.059	.019	
2.0	.133	.073	.022	.128	.071	.022	.118	.065	.020	.108	.061	.019	.100	.056	.018	
3.0	.124	.066	.020	.119	.064	.019	.111	.060	.018	.103	.056	.017	.096	.053	.016	
4.0	.116	.060	.018	.112	.058	.017	.104	.055	.017	.098	.052	.016	.091	.050	.015	
5.0	.108	.055	.016	.105	.054	.016	.099	.051	.015	.093	.049	.015	.087	.047	.014	
6.0	.101	.051	.015	.099	.050	.014	.093	.048	.014	.088	.046	.014	.084	.044	.013	
7.0	.096	.047	.013	.093	.046	.013	.089	.045	.013	.084	.043	.013	.080	.042	.012	
8.0	.090	.044	.012	.088	.044	.012	.084	.042	.012	.081	.041	.012	.077	.040	.012	
9.0	.086	.042	.012	.084	.041	.011	.080	.040	.011	.077	.039	.011	.074	.038	.011	
10.0	.082	.039	.011	.080	.039	.011	.077	.038	.011	.074	.037	.010	.071	.036	.010	

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	.169	.158	.148	.144	.135	.127	.099	.093	.088	.057	.054	.051	.018	.017	.017	
2.0	.151	.133	.117	.129	.114	.101	.089	.079	.071	.051	.046	.041	.016	.015	.013	
3.0	.136	.113	.095	.117	.098	.082	.080	.068	.058	.046	.040	.034	.015	.013	.011	
4.0	.124	.098	.078	.106	.085	.068	.073	.059	.048	.042	.035	.028	.014	.011	.009	
5.0	.113	.086	.065	.097	.074	.057	.067	.052	.040	.039	.030	.024	.013	.010	.008	
6.0	.104	.076	.055	.090	.066	.048	.062	.046	.034	.036	.027	.020	.012	.009	.007	
7.0	.096	.068	.047	.083	.059	.041	.057	.041	.029	.033	.024	.017	.011	.008	.006	
8.0	.090	.061	.041	.077	.053	.036	.053	.037	.025	.031	.022	.015	.010	.007	.005	
9.0	.084	.055	.036	.072	.048	.031	.050	.034	.022	.029	.020	.013	.009	.007	.004	
10.0	.079	.050	.031	.068	.044	.027	.047	.031	.019	.027	.018	.012	.009	.006	.004	

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-06-16

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.240m [K=1.0000]  
Remarks:

UGR(Unified Glare Rating) Table

Test:U:225.2V I:0.0610A P:8.180W PF:0.5930 Freq:50.00Hz Lamp Flux:641.693x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:					DIM.:			SERIAL No.:			
MFR.:					SUR.:28			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	16.5	17.2	16.7	17.3	17.5	16.8	17.4	17.0	17.6	17.7
	3H	17.1	17.7	17.3	17.9	18.1	17.4	18.0	17.6	18.2	18.4
	4H	17.3	17.9	17.5	18.1	18.3	17.5	18.1	17.8	18.3	18.5
	6H	17.3	17.9	17.6	18.1	18.4	17.5	18.1	17.8	18.3	18.6
	8H	17.3	17.8	17.6	18.1	18.3	17.5	18.1	17.8	18.3	18.6
	12H	17.3	17.8	17.6	18.0	18.3	17.5	18.0	17.8	18.3	18.5
4H	2H	16.8	17.4	17.1	17.6	17.9	17.1	17.7	17.3	17.9	18.1
	3H	17.5	18.1	17.8	18.3	18.6	17.7	18.3	18.1	18.5	18.8
	4H	17.8	18.3	18.1	18.6	18.9	18.0	18.5	18.3	18.7	19.0
	6H	17.8	18.3	18.2	18.6	18.9	18.0	18.4	18.4	18.8	19.1
	8H	17.8	18.2	18.2	18.6	18.9	18.0	18.4	18.4	18.7	19.1
	12H	17.8	18.1	18.2	18.5	18.9	17.9	18.3	18.3	18.7	19.1
8H	4H	17.8	18.2	18.2	18.5	18.9	18.0	18.4	18.4	18.7	19.1
	6H	17.9	18.2	18.3	18.6	19.0	18.0	18.4	18.5	18.8	19.2
	8H	17.9	18.2	18.3	18.6	19.0	18.0	18.3	18.5	18.7	19.2
	12H	17.8	18.1	18.3	18.5	19.0	18.0	18.2	18.4	18.7	19.1
12H	4H	17.7	18.1	18.1	18.5	18.9	17.9	18.3	18.3	18.7	19.0
	6H	17.8	18.1	18.3	18.5	19.0	18.0	18.3	18.4	18.7	19.1
	8H	17.8	18.1	18.3	18.5	19.0	18.0	18.2	18.4	18.7	19.1
Variations with the observer position at spacings:											
S = 1.0H	+ 0.5 / - 0.7					+ 0.5 / - 0.8					
1.5H	+ 0.3 / - 0.3					+ 0.3 / - 0.4					
2.0H	+ 0.9 / - 1.2					+ 1.1 / - 1.3					

CIE Pub.117, 641.7 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = -1.5$ )

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-06-16

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.240m [K=1.0000]  
Remarks:

## UTILIZATION FACTORS TABLE

Test:U:225.2V I:0.0610A P:8.180W PF:0.5930 Freq:50.00Hz Lamp Flux:641.693x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	Shielding Angle:

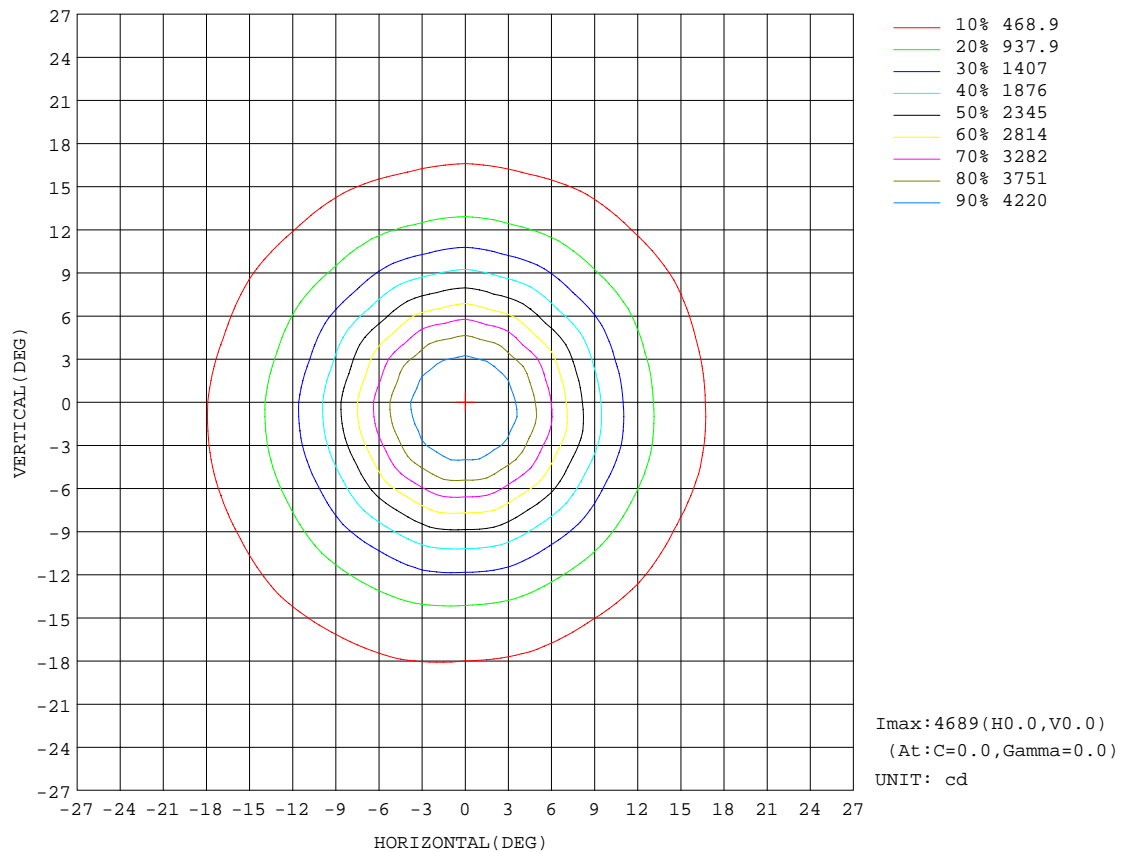
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	87	80	77	86	80	77	86	80	76	73
0.80	94	88	85	94	88	84	92	87	84	80
1.00	99	93	89	98	93	89	96	92	89	85
1.25	103	97	94	102	97	94	100	96	93	89
1.50	106	101	97	104	100	97	102	98	96	91
2.00	108	104	101	107	103	100	104	101	98	93
2.50	110	106	103	108	105	102	105	102	100	94
3.00	112	108	105	110	107	104	106	104	102	96
4.00	114	111	109	112	109	107	108	106	105	97
5.00	115	113	111	113	111	109	109	107	106	99
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:AE  
Test Date:2020-06-16

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.240m [K=1.0000]  
Remarks:

## ISOCANDELA DIAGRAM

Test:U:225.2V I:0.0610A P:8.180W PF:0.5930 Freq:50.00Hz Lamp Flux:641.693x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	Shielding Angle:



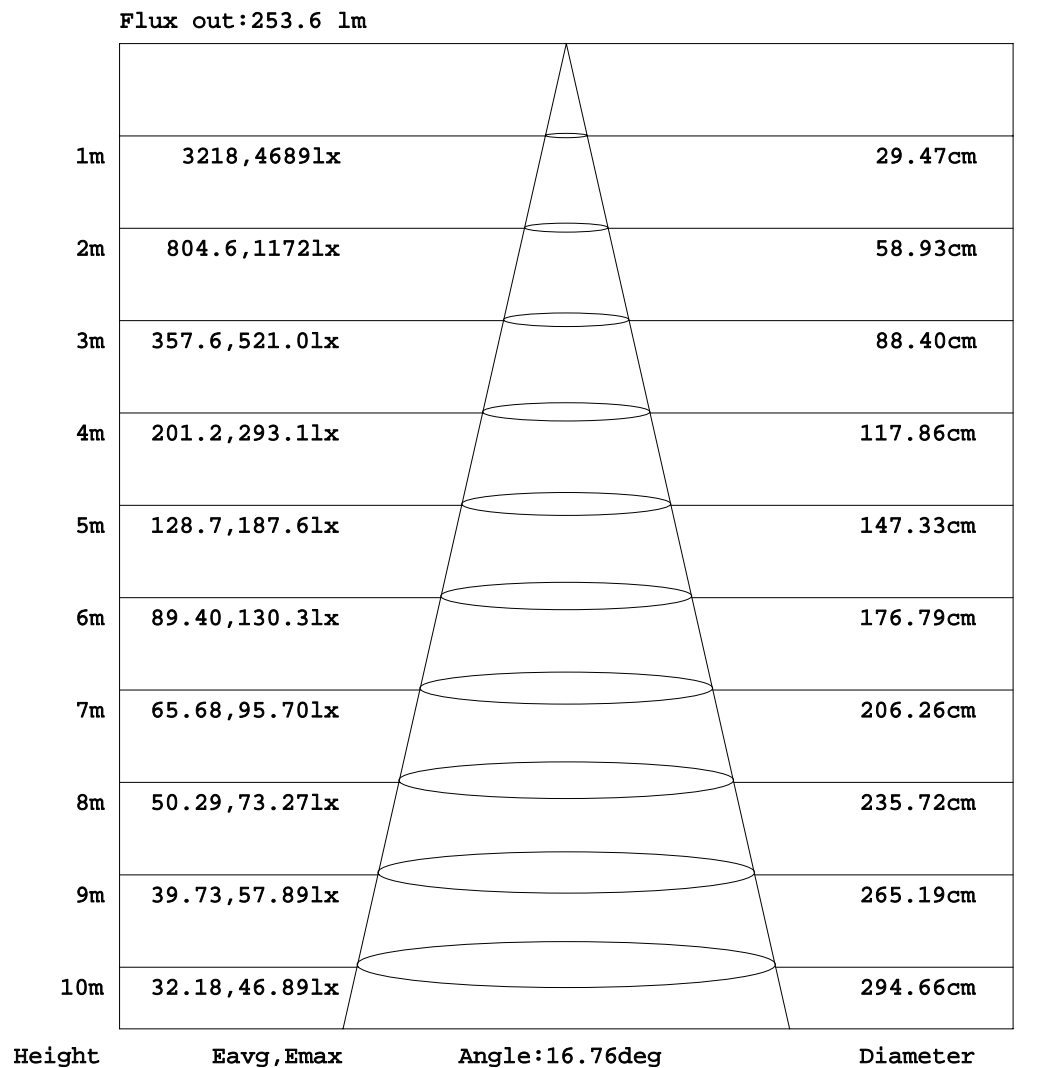
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: AE  
Test Date: 2020-06-16

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 7.240m [K=1.0000]  
Remarks:



### AAI Figure

Test:U:225.2V I:0.0610A P:8.180W PF:0.5930 Freq:50.00Hz Lamp Flux:641.693x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	Shielding Angle:



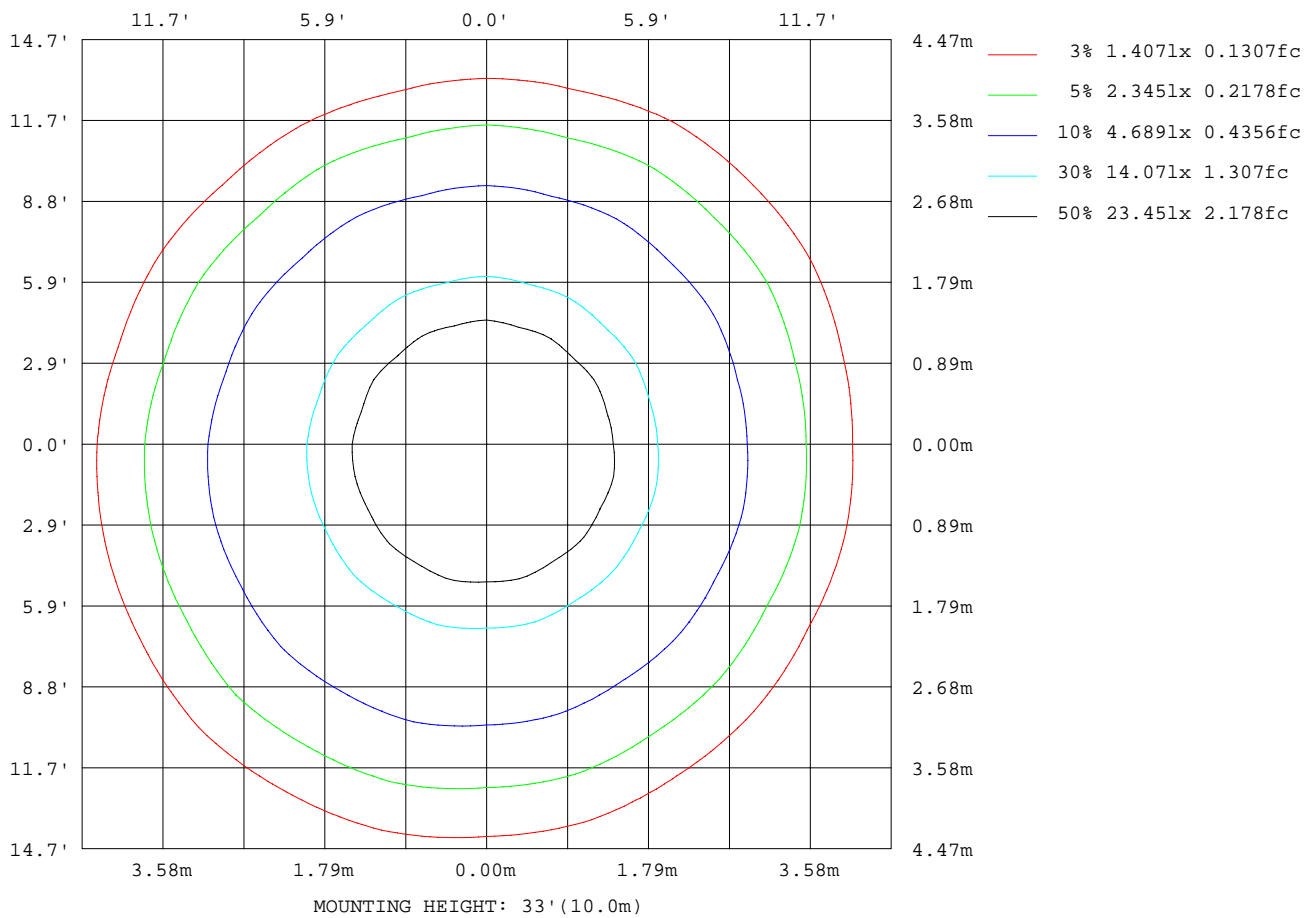
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:AE  
 Test Date:2020-06-16

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:7.240m [K=1.0000]  
 Remarks:

### ISOLUX DIAGRAM

Test:U:225.2V I:0.0610A P:8.180W PF:0.5930 Freq:50.00Hz Lamp Flux:641.693x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: AE  
 Test Date: 2020-06-16

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity: 65.0%  
 Test Distance: 7.240m [K=1.0000]  
 Remarks:

## LED Avg.L Report

Test:U:225.2V I:0.0610A P:8.180W PF:0.5930 Freq:50.00Hz Lamp Flux:641.693x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	Shielding Angle:

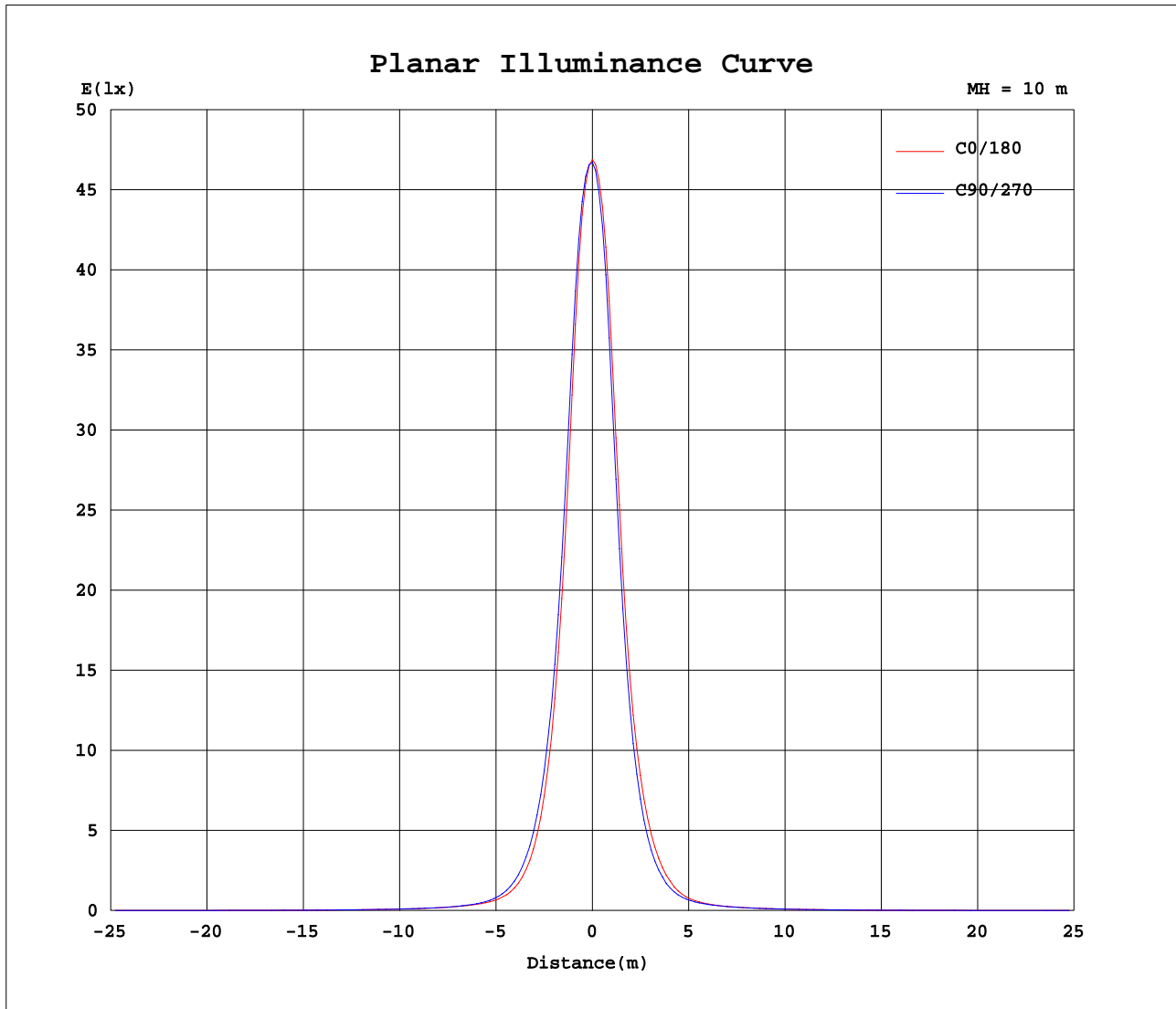
AvgL	cd/m2
L_0~180(65)av	7461
L_0~180(75)av	4707
L_0~180(85)av	990
L_90~270(65)av	7534
L_90~270(75)av	4667
L_90~270(85)av	902
L_45(65)av	7586
L_45(75)av	4708
L_45(85)av	1046

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:AE  
 Test Date:2020-06-16

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:7.240m [K=1.0000]  
 Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: AE  
Test Date: 2020-06-16

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 7.240m [K=1.0000]  
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

```