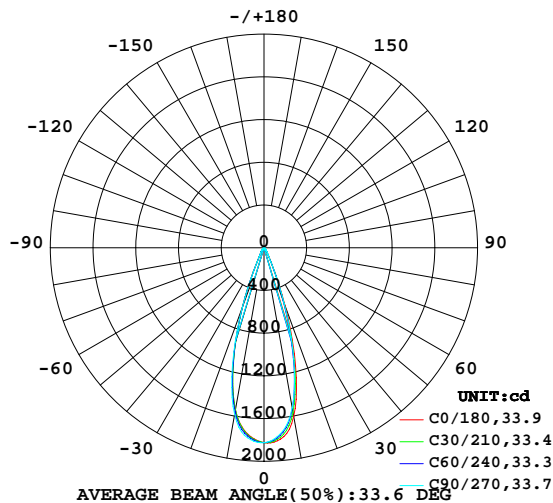


## LUMINAIRE PHOTOMETRIC TEST REPORT

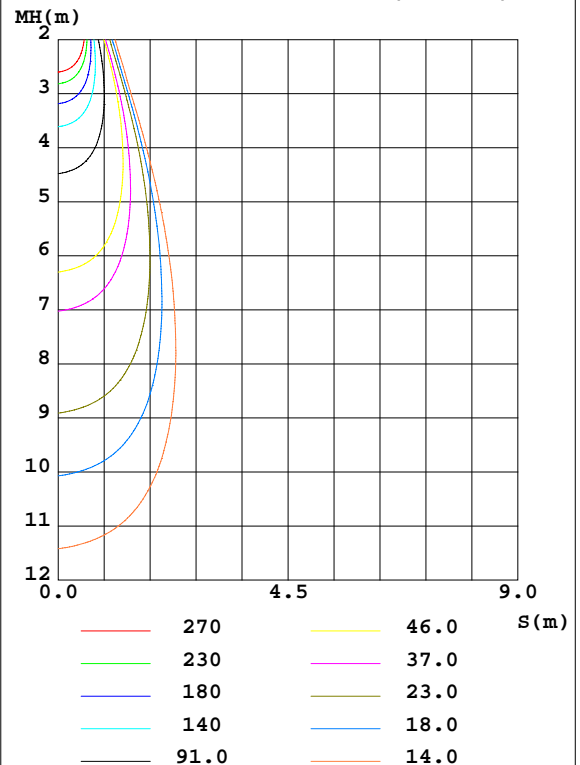
Test:U:225.2V I:0.0610A P:8.150W PF:0.5910 Freq:50.00Hz Lamp Flux:640.225x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 78.56 lm/W			
MODEL	ALRP35-8G30-F	I <sub>max</sub> (cd)	1830	S/MH(C0/180)	0.52
NOMINAL POWER(W)	8	LOR(%)	100.0	S/MH(C90/270)	0.52
RATED VOLTAGE(V)	226	TOTAL FLUX(lm)	640.23	η UP,DN(C0-180)	0.0,50.9
NOMINAL FLUX(lm)	640.225	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.1
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	225.1	η down(%)	100.0	CIBSE SHR MAX	0.55

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:

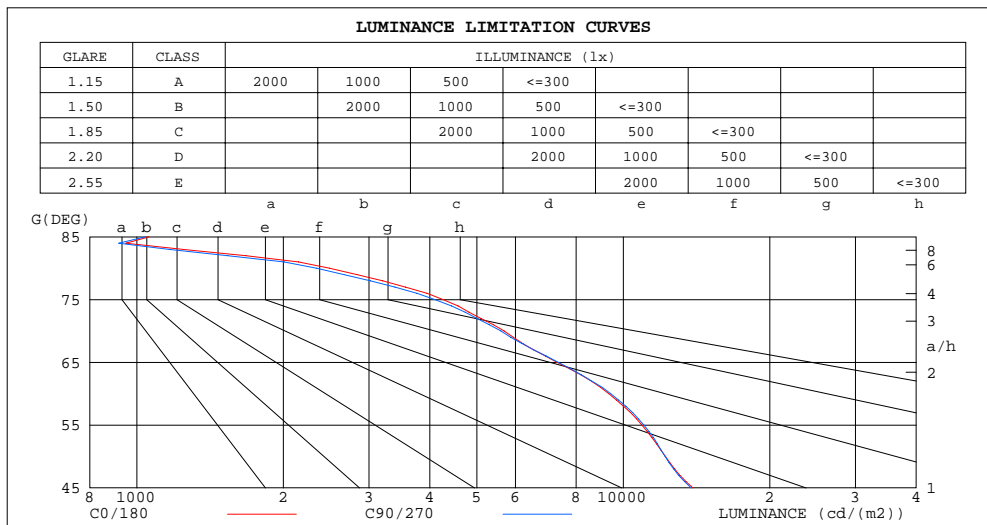
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum, lamp
10	1541	1558	1586	1625	1604	1535	1522	1530	0- 10	162.8	162.8	25.4,25.4
20	591.6	612.0	597.9	611.5	575.6	513.0	551.8	587.5	10- 20	297.3	460.1	71.9,71.9
30	75.87	79.78	77.65	79.74	78.48	78.29	78.86	75.81	20- 30	104.7	564.9	88.2,88.2
40	33.72	36.76	33.64	32.56	31.90	34.19	33.63	32.08	30- 40	31.91	596.8	93.2,93.2
50	19.31	20.45	19.28	18.82	18.52	19.81	19.27	18.43	40- 50	19.12	615.9	96.2,96.2
60	11.48	12.10	11.59	11.11	10.83	11.21	11.24	10.99	50- 60	13.68	629.6	98.3,98.3
70	4.785	4.921	4.715	4.483	4.404	4.389	4.682	4.651	60- 70	7.553	637.1	99.5,99.5
80	1.063	1.078	1.000	0.9885	0.8029	0.8353	0.9087	1.004	70- 80	2.782	639.9	100,100
90	0.1917	0.1917	0.1878	0.2584	0	0	0	0.0196	80- 90	0.2988	640.2	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:8.150W PF:0.5910 Freq:50.00Hz Lamp Flux:640.225x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1059	1040
80	2487	2341
75	4257	4098
70	5685	5601
65	7309	7347
60	9334	9420
55	10920	11019
50	12206	12188
45	13901	13793

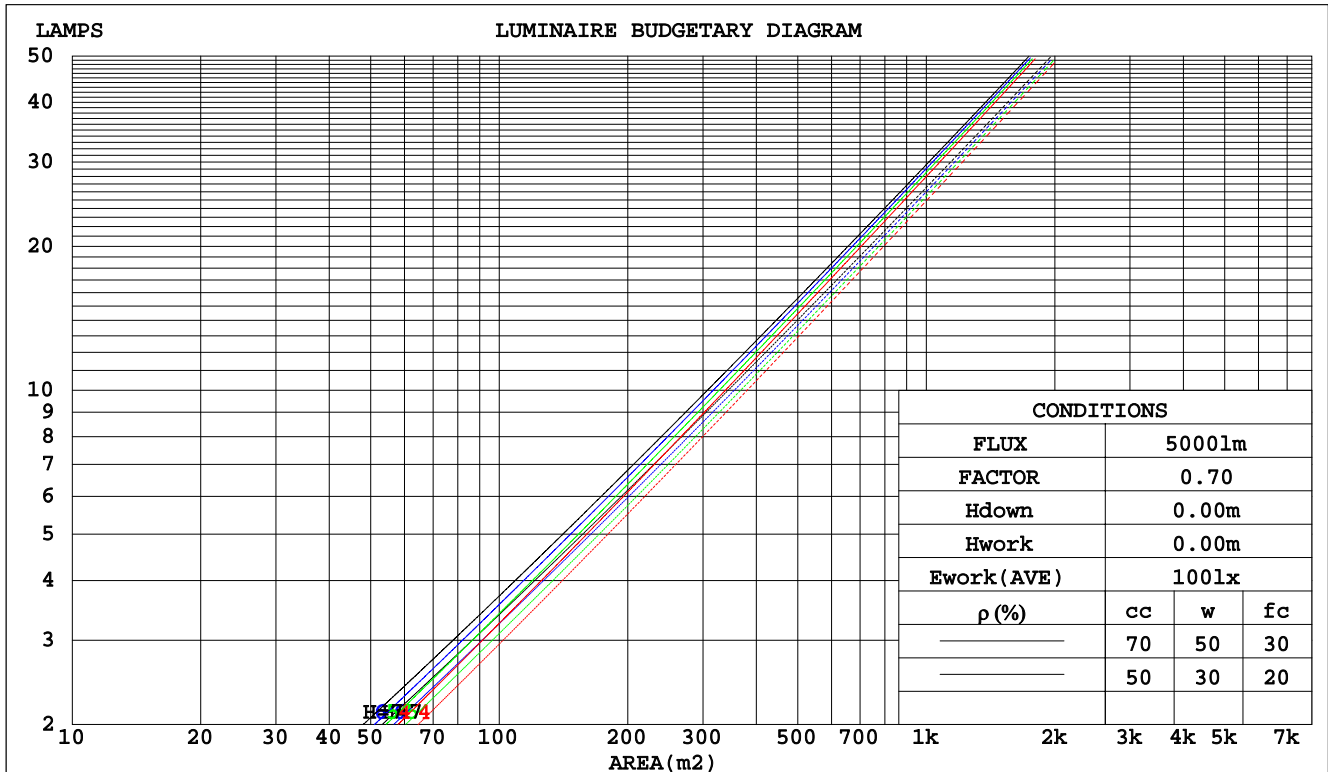
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-06-16

$\gamma$  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:8.150W PF:0.5910 Freq:50.00Hz Lamp Flux:640.225x1 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	1.12	1.10	1.08	1.10	1.08	1.06	1.06	1.04	1.03	1.02	1.01	.00	.99	.98	.97	.95
2.0	1.06	1.02	.99	1.04	1.01	.98	1.01	.98	.96	.98	.96	.94	.95	.94	.92	.91
3.0	1.00	.96	.93	.99	.95	.92	.96	.93	.91	.94	.91	.89	.92	.90	.88	.86
4.0	.95	.91	.87	.94	.90	.87	.92	.89	.86	.90	.87	.85	.89	.86	.84	.83
5.0	.91	.86	.83	.90	.86	.83	.89	.85	.82	.87	.84	.81	.86	.83	.81	.79
6.0	.87	.83	.79	.87	.82	.79	.85	.81	.78	.84	.81	.78	.83	.80	.77	.76
7.0	.84	.79	.76	.83	.79	.76	.82	.78	.75	.81	.78	.75	.80	.77	.74	.73
8.0	.81	.76	.73	.80	.76	.73	.79	.75	.72	.78	.75	.72	.78	.74	.72	.71
9.0	.78	.73	.70	.78	.73	.70	.77	.73	.70	.76	.72	.70	.75	.72	.69	.68
10.0	.75	.71	.68	.75	.71	.68	.74	.70	.67	.74	.70	.67	.73	.70	.67	.66



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:8.150W PF:0.5910 Freq:50.00Hz Lamp Flux:640.225x1 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	.155	.088	.028	.148	.085	.027	.136	.078	.025	.124	.072	.023	.114	.066	.021		
2.0	.145	.080	.024	.140	.077	.024	.129	.072	.022	.120	.067	.021	.111	.063	.020		
3.0	.136	.072	.022	.132	.070	.021	.123	.067	.020	.115	.063	.019	.107	.059	.018		
4.0	.128	.066	.020	.124	.065	.019	.117	.062	.018	.110	.059	.018	.103	.056	.017		
5.0	.121	.061	.018	.117	.060	.018	.111	.058	.017	.105	.055	.016	.099	.053	.016		
6.0	.114	.057	.016	.111	.056	.016	.106	.054	.016	.100	.052	.015	.096	.050	.015		
7.0	.108	.054	.015	.106	.053	.015	.101	.051	.015	.096	.049	.014	.092	.048	.014		
8.0	.103	.050	.014	.101	.050	.014	.097	.048	.014	.092	.047	.014	.089	.046	.013		
9.0	.098	.048	.013	.096	.047	.013	.093	.046	.013	.089	.045	.013	.086	.043	.013		
10.0	.094	.045	.013	.092	.045	.012	.089	.044	.012	.086	.043	.012	.083	.042	.012		

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	.170	.158	.147	.145	.135	.126	.099	.093	.087	.057	.054	.051	.018	.017	.016	
2.0	.153	.133	.116	.131	.114	.100	.090	.079	.070	.052	.046	.041	.017	.015	.013	
3.0	.139	.113	.093	.119	.098	.081	.082	.068	.057	.047	.040	.033	.015	.013	.011	
4.0	.127	.098	.076	.109	.085	.066	.075	.059	.047	.043	.035	.028	.014	.011	.009	
5.0	.117	.086	.063	.100	.075	.055	.069	.052	.039	.040	.031	.023	.013	.010	.008	
6.0	.109	.076	.053	.093	.066	.047	.064	.046	.033	.037	.027	.020	.012	.009	.006	
7.0	.101	.068	.046	.087	.059	.040	.060	.042	.028	.035	.025	.017	.011	.008	.006	
8.0	.095	.062	.039	.082	.054	.034	.057	.038	.024	.033	.022	.014	.011	.007	.005	
9.0	.089	.056	.034	.077	.049	.030	.053	.034	.021	.031	.020	.013	.010	.007	.004	
10.0	.084	.052	.030	.073	.045	.026	.050	.032	.019	.029	.019	.011	.010	.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:8.150W PF:0.5910 Freq:50.00Hz Lamp Flux:640.225x1 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	16.4	17.2	16.7	17.4	17.5	16.5	17.3	16.7	17.4	17.6
	3H	17.0	17.7	17.2	17.9	18.1	17.1	17.8	17.3	18.0	18.2
	4H	17.1	17.8	17.4	18.0	18.2	17.2	17.9	17.5	18.1	18.3
	6H	17.1	17.8	17.4	18.0	18.3	17.2	17.8	17.5	18.1	18.3
	8H	17.1	17.7	17.4	18.0	18.2	17.2	17.8	17.5	18.0	18.3
	12H	17.1	17.7	17.4	17.9	18.2	17.1	17.7	17.4	18.0	18.3
4H	2H	16.8	17.4	17.0	17.6	17.9	16.8	17.5	17.1	17.7	17.9
	3H	17.4	18.0	17.7	18.3	18.5	17.5	18.1	17.8	18.3	18.6
	4H	17.6	18.1	17.9	18.4	18.7	17.6	18.2	18.0	18.5	18.8
	6H	17.6	18.1	18.0	18.4	18.8	17.7	18.2	18.0	18.5	18.8
	8H	17.6	18.0	18.0	18.4	18.8	17.6	18.1	18.0	18.4	18.8
	12H	17.6	18.0	18.0	18.3	18.7	17.6	18.0	18.0	18.4	18.8
8H	4H	17.6	18.0	18.0	18.4	18.7	17.6	18.1	18.0	18.4	18.8
	6H	17.7	18.0	18.1	18.4	18.8	17.7	18.1	18.1	18.4	18.9
	8H	17.6	17.9	18.1	18.4	18.8	17.7	18.0	18.1	18.4	18.8
	12H	17.6	17.9	18.0	18.3	18.8	17.6	17.9	18.1	18.3	18.8
12H	4H	17.5	17.9	17.9	18.3	18.7	17.6	18.0	18.0	18.4	18.8
	6H	17.6	17.9	18.1	18.3	18.8	17.6	18.0	18.1	18.4	18.8
	8H	17.6	17.9	18.0	18.3	18.8	17.6	17.9	18.1	18.3	18.8
Variations with the observer position at spacings:											
S = 1.0H	+ 0.7 / - 0.9					+ 0.7 / - 0.9					
1.5H	+ 0.7 / - 0.5					+ 0.7 / - 0.5					
2.0H	+ 0.7 / - 1.0					+ 0.7 / - 1.0					

CIE Pub.117, 640.2 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:8.150W PF:0.5910 Freq:50.00Hz Lamp Flux:640.225x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	Shielding Angle:

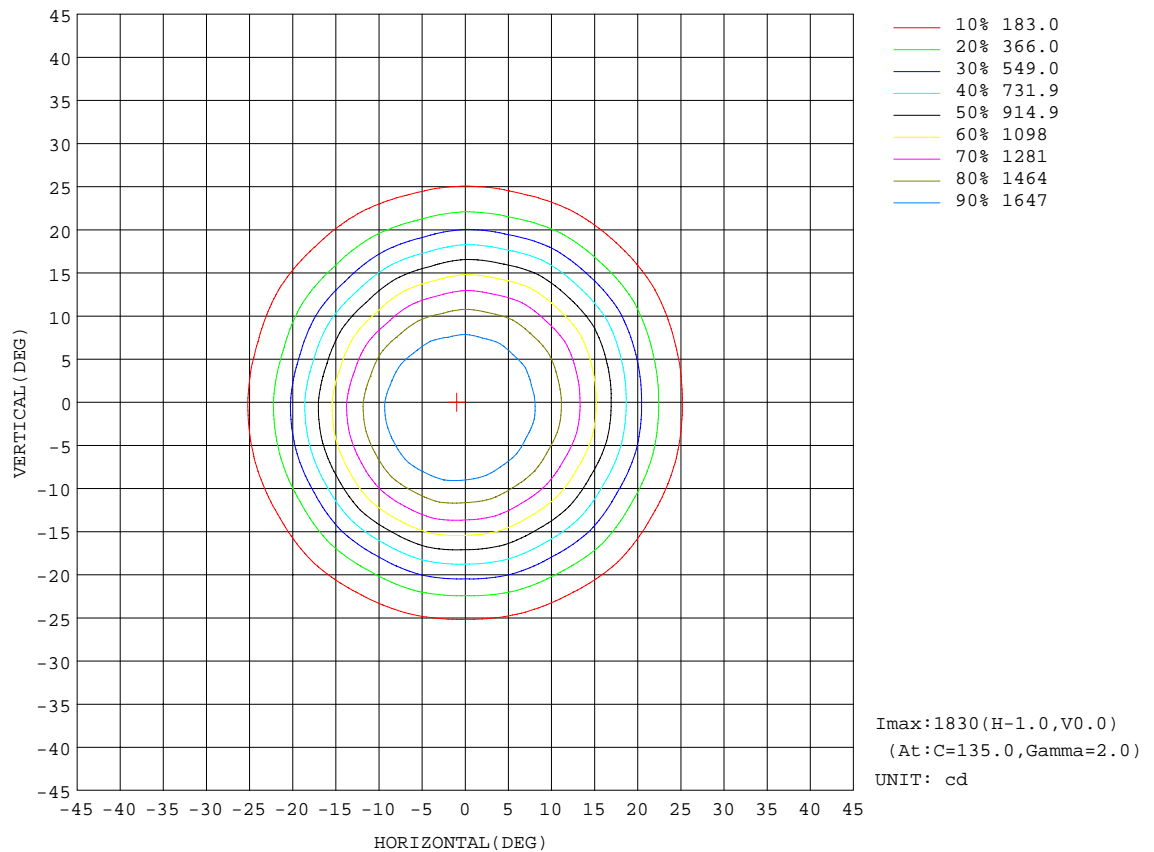
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	87	81	77	87	81	77	86	80	77	73
0.80	95	89	85	94	88	85	93	88	85	81
1.00	99	93	90	98	93	89	97	93	89	85
1.25	103	98	94	102	97	94	100	96	93	89
1.50	106	101	98	104	100	97	102	99	96	92
2.00	108	104	101	107	103	100	104	101	99	93
2.50	110	106	103	109	105	102	105	103	100	95
3.00	112	108	106	110	107	104	107	104	102	96
4.00	114	111	109	112	109	107	108	106	105	98
5.00	115	113	111	113	111	109	109	108	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:8.150W PF:0.5910 Freq:50.00Hz Lamp Flux:640.225x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	Shielding Angle:



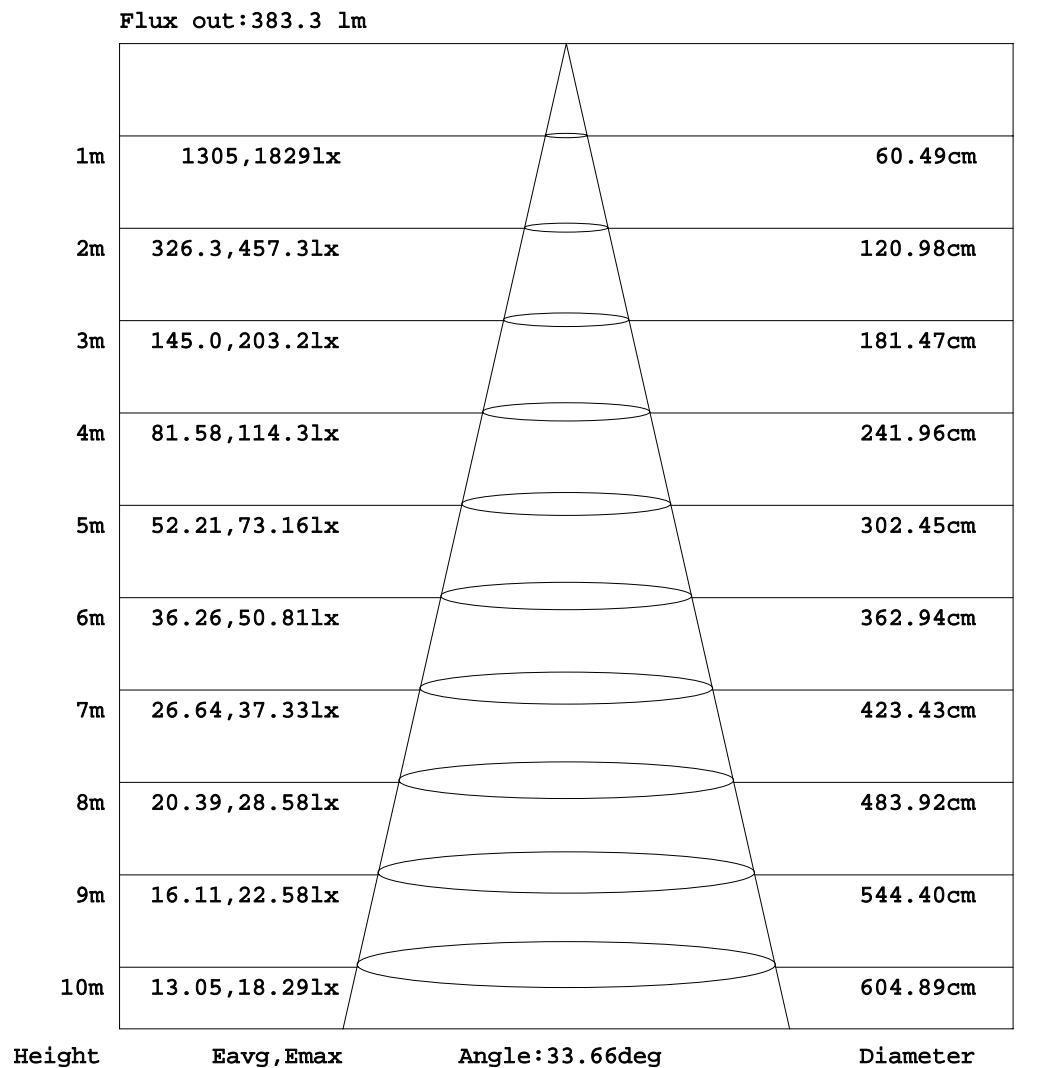
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-06-16

$\gamma$  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:8.150W PF:0.5910 Freq:50.00Hz Lamp Flux:640.225x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	Shielding Angle:



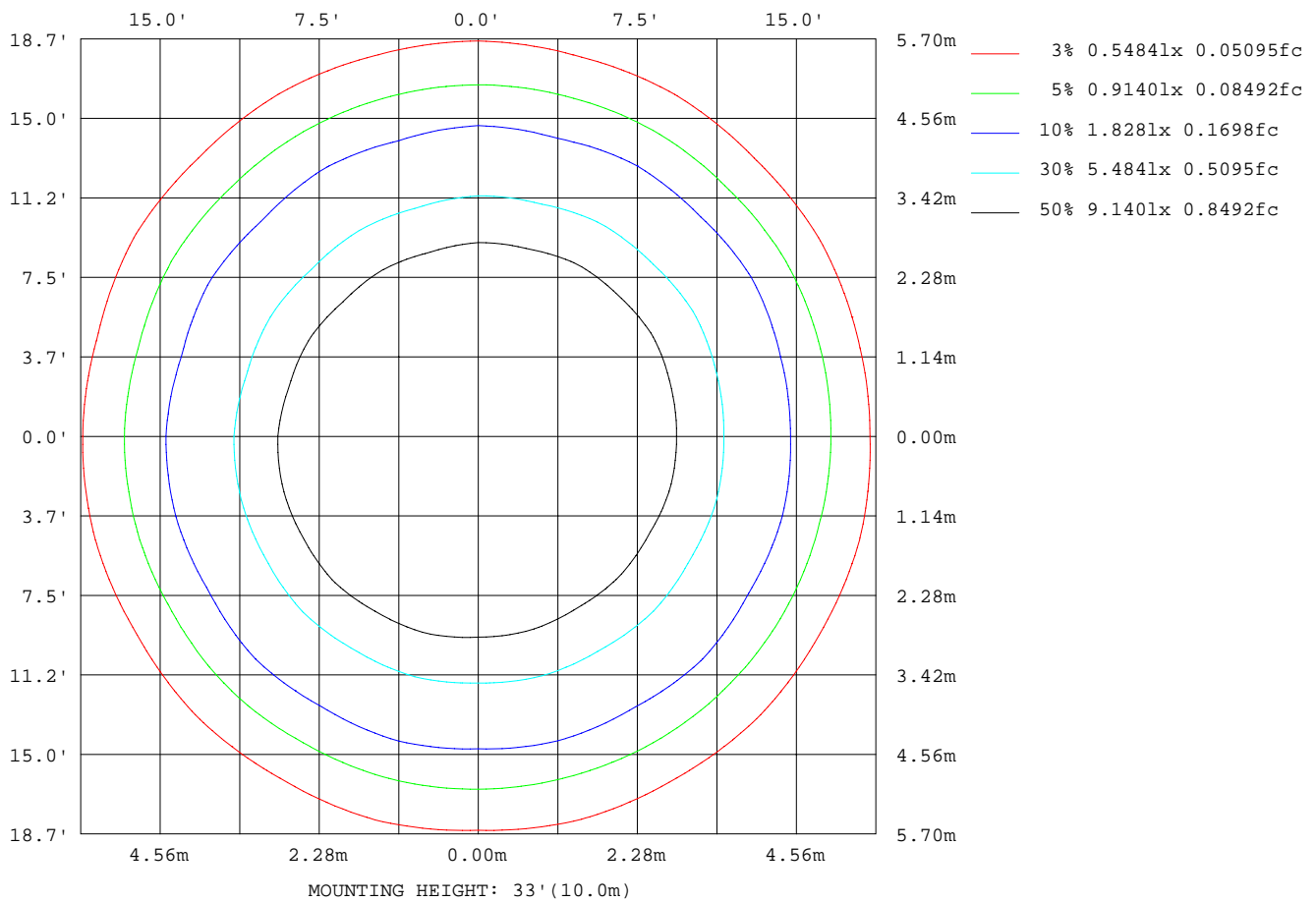
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:8.150W PF:0.5910 Freq:50.00Hz Lamp Flux:640.225x1 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:

## LED Avg.L Report

Test:U:225.2V I:0.0610A P:8.150W PF:0.5910 Freq:50.00Hz Lamp Flux:640.225x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	Shielding Angle:

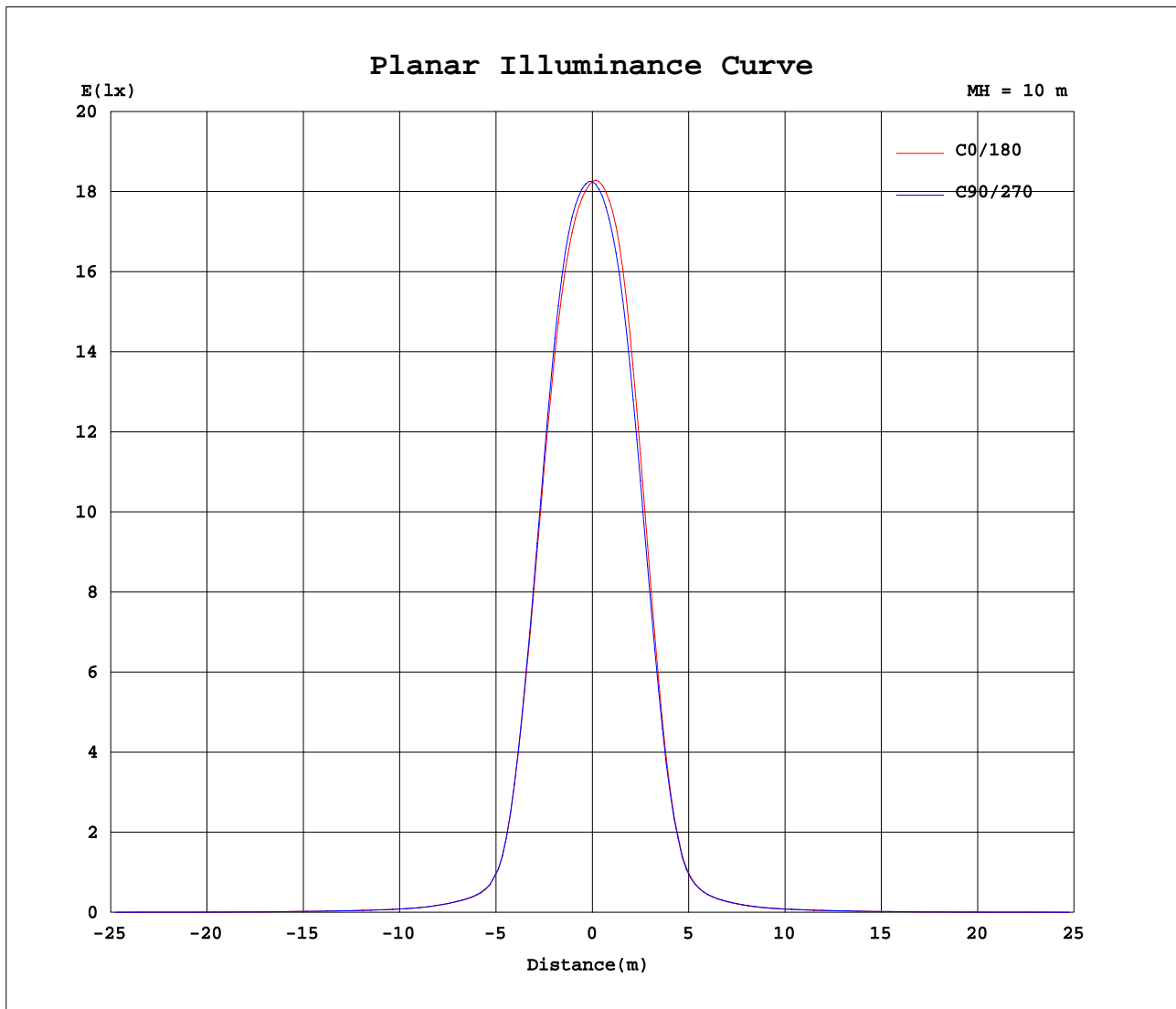
AvgL	cd/m2
L_0~180(65)av	7075
L_0~180(75)av	4043
L_0~180(85)av	638
L_90~270(65)av	7259
L_90~270(75)av	4097
L_90~270(85)av	611
L_45(65)av	7211
L_45(75)av	4072
L_45(85)av	865

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:

```