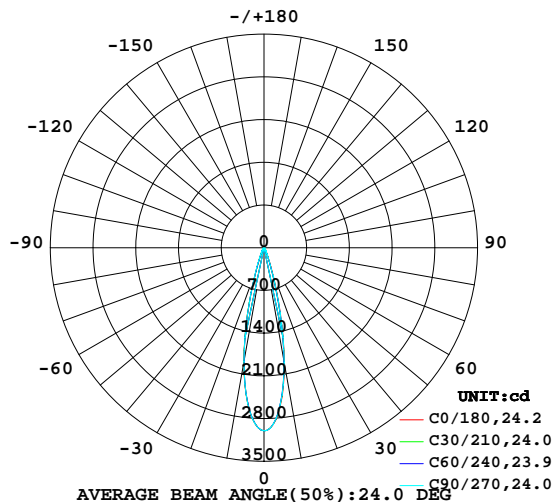


LUMINAIRE PHOTOMETRIC TEST REPORT

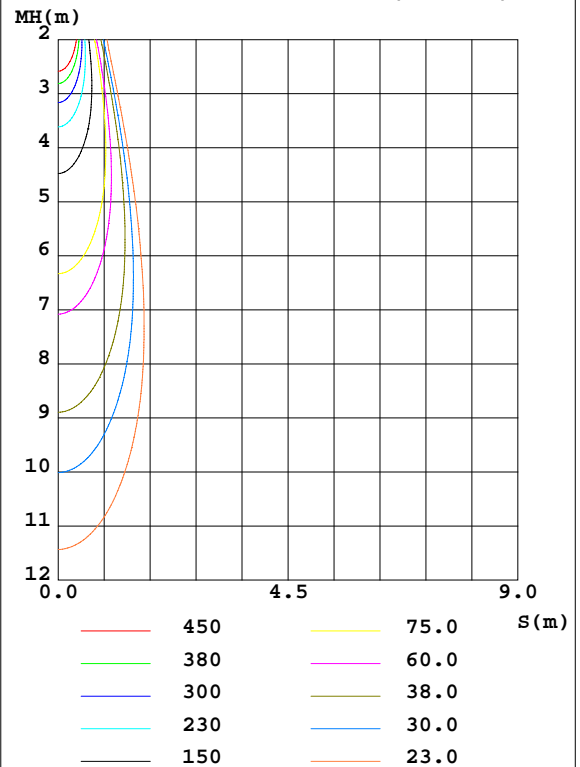
Test:U:225.2V I:0.0610A P:8.150W PF:0.5910 Freq:50.00Hz Lamp Flux:637.698x1 lm					
NAME:		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.:		SUR.:28		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 78.25 lm/W
MODEL	ALRP35-8G30-M	I _{max} (cd)	3001	S/MH(C0/180)	0.39	
NOMINAL POWER(W)	8	LOR(%)	100.0	S/MH(C90/270)	0.39	
RATED VOLTAGE(V)	226	TOTAL FLUX(lm)	637.70	η UP,DN(C0-180)	0.0,50.7	
NOMINAL FLUX(lm)	637.698	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.3	
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:

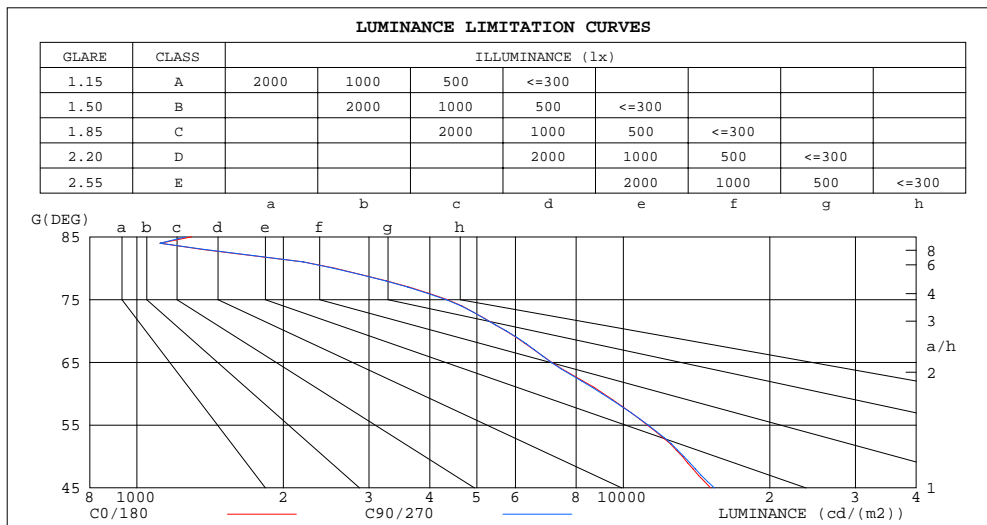
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	$\%lum, lamp$
10	1908	1914	1891	1935	1925	1859	1905	1893	0- 10	232.0	232.0	36.4,36.4
20	327.7	338.6	348.1	357.8	334.4	282.8	309.5	325.3	10- 20	257.9	489.9	76.8,76.8
30	76.79	75.83	78.52	80.36	76.01	71.20	77.05	78.97	20- 30	69.55	559.4	87.7,87.7
40	34.94	36.16	35.46	36.44	34.88	34.55	34.81	35.02	30- 40	32.24	591.7	92.8,92.8
50	20.89	22.13	21.07	20.76	20.96	21.61	20.82	20.14	40- 50	20.97	612.7	96.1,96.1
60	11.18	11.76	11.13	10.91	11.04	11.32	11.21	11.12	50- 60	14.27	626.9	98.3,98.3
70	4.824	4.941	4.839	4.671	4.770	4.590	4.860	4.773	60- 70	7.543	634.5	99.5,99.5
80	1.088	1.128	1.083	1.048	0.9303	0.9246	0.9442	1.025	70- 80	2.887	637.4	99.9,99.9
90	0.2265	0.2111	0.2114	0.2978	0	0	0	0.0235	80- 90	0.3414	637.7	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

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:

LUMINANCE LIMITATION CURVES

Test:U:225.2V I:0.0610A P:8.150W PF:0.5910 Freq:50.00Hz Lamp Flux:637.698x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1295	1259
80	2551	2533
75	4343	4319
70	5741	5746
65	7120	7108
60	9103	9039
55	11193	11243
50	13228	13313
45	15129	15390

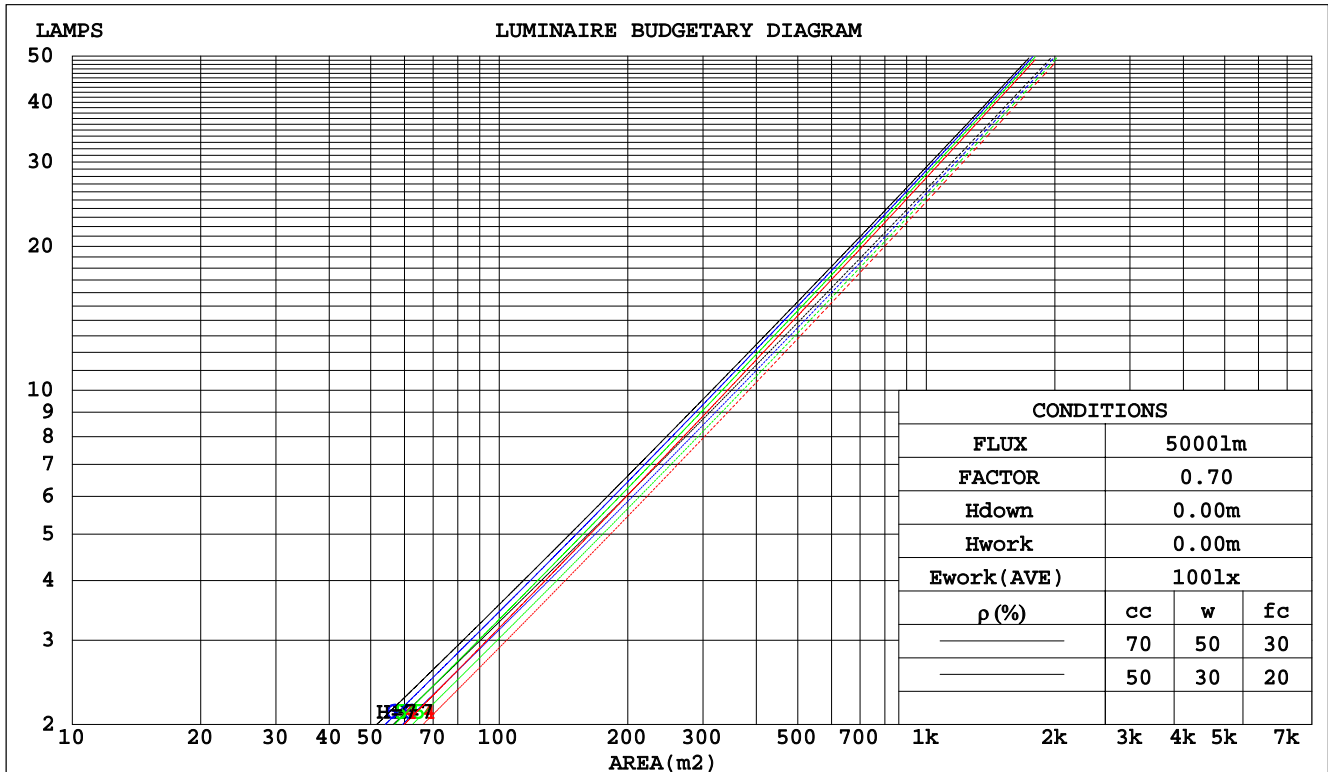
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: AE
Test Date: 2020-06-16

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:225.2V I:0.0610A P:8.150W PF:0.5910 Freq:50.00Hz Lamp Flux:637.698x1 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	1.07	1.06	1.05	1.03	1.03	1.01	1.00	.99	.98	.97	.96
2.0	1.06	1.03	1.00	1.05	1.02	.99	1.02	.99	.97	.99	.97	.95	.96	.95	.93	.92
3.0	1.01	.97	.94	1.00	.96	.94	.98	.95	.92	.95	.93	.91	.93	.91	.89	.88
4.0	.97	.93	.89	.96	.92	.89	.94	.91	.88	.92	.89	.87	.90	.88	.86	.85
5.0	.93	.89	.85	.92	.88	.85	.91	.87	.84	.89	.86	.84	.88	.85	.83	.82
6.0	.90	.85	.82	.89	.85	.82	.88	.84	.81	.86	.83	.81	.85	.82	.80	.79
7.0	.87	.82	.79	.86	.82	.79	.85	.81	.79	.84	.81	.78	.83	.80	.78	.77
8.0	.84	.80	.77	.83	.79	.76	.82	.79	.76	.82	.78	.76	.81	.78	.76	.74
9.0	.81	.77	.74	.81	.77	.74	.80	.76	.74	.79	.76	.74	.79	.76	.73	.72
10.0	.79	.75	.72	.79	.75	.72	.78	.74	.72	.77	.74	.72	.77	.74	.72	.71



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:637.698x1 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	.148	.084	.027	.141	.081	.026	.129	.074	.024	.117	.068	.022	.107	.062	.020	
2.0	.138	.076	.023	.133	.073	.023	.122	.068	.021	.113	.063	.020	.104	.059	.019	
3.0	.129	.069	.021	.124	.067	.020	.116	.063	.019	.108	.059	.018	.100	.055	.017	
4.0	.120	.063	.018	.117	.061	.018	.109	.058	.017	.102	.055	.017	.096	.052	.016	
5.0	.113	.058	.017	.110	.056	.016	.103	.054	.016	.098	.052	.015	.092	.049	.015	
6.0	.106	.053	.015	.104	.052	.015	.098	.050	.015	.093	.048	.014	.088	.047	.014	
7.0	.101	.050	.014	.098	.049	.014	.093	.047	.014	.089	.046	.013	.085	.044	.013	
8.0	.095	.047	.013	.093	.046	.013	.089	.045	.013	.085	.043	.012	.082	.042	.012	
9.0	.091	.044	.012	.089	.043	.012	.085	.042	.012	.082	.041	.012	.079	.040	.012	
10.0	.087	.042	.012	.085	.041	.011	.082	.040	.011	.079	.039	.011	.076	.038	.011	

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	.147	.145	.135	.127	.099	.093	.088	.057	.054	.051	.018	.017	.016	
2.0	.152	.133	.117	.130	.114	.101	.089	.079	.070	.051	.046	.041	.016	.015	.013	
3.0	.137	.113	.094	.118	.098	.082	.081	.068	.057	.047	.040	.034	.015	.013	.011	
4.0	.125	.098	.077	.107	.085	.067	.074	.059	.047	.043	.035	.028	.014	.011	.009	
5.0	.115	.086	.065	.099	.074	.056	.068	.052	.040	.039	.030	.024	.013	.010	.008	
6.0	.106	.076	.055	.091	.066	.048	.063	.046	.034	.036	.027	.020	.012	.009	.007	
7.0	.098	.068	.047	.085	.059	.041	.058	.041	.029	.034	.024	.017	.011	.008	.006	
8.0	.092	.061	.040	.079	.053	.035	.055	.037	.025	.032	.022	.015	.010	.007	.005	
9.0	.086	.056	.035	.074	.048	.031	.051	.034	.022	.030	.020	.013	.010	.007	.004	
10.0	.081	.051	.031	.070	.044	.027	.048	.031	.019	.028	.018	.011	.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:8.150W PF:0.5910 Freq:50.00Hz Lamp Flux:637.698x1 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	16.6	17.3	16.8	17.5	17.6	16.7	17.4	16.9	17.6	17.8
3H	17.1	17.8	17.4	18.0	18.2	17.3	17.9	17.5	18.1	18.3
4H	17.3	17.9	17.5	18.1	18.3	17.4	18.0	17.7	18.2	18.4
6H	17.3	17.9	17.6	18.1	18.4	17.4	18.0	17.7	18.2	18.5
8H	17.3	17.8	17.6	18.1	18.3	17.4	18.0	17.7	18.2	18.5
12H	17.2	17.8	17.5	18.0	18.3	17.3	17.9	17.6	18.2	18.4
4H 2H	16.9	17.5	17.2	17.7	17.9	17.0	17.6	17.3	17.9	18.1
3H	17.5	18.1	17.8	18.3	18.6	17.6	18.2	17.9	18.4	18.7
4H	17.7	18.2	18.0	18.5	18.8	17.8	18.3	18.2	18.6	18.9
6H	17.8	18.2	18.1	18.5	18.9	17.9	18.3	18.2	18.6	19.0
8H	17.7	18.1	18.1	18.5	18.9	17.8	18.2	18.2	18.6	19.0
12H	17.7	18.1	18.1	18.4	18.8	17.8	18.2	18.2	18.5	18.9
8H 4H	17.7	18.1	18.1	18.5	18.8	17.8	18.2	18.2	18.6	18.9
6H	17.8	18.1	18.2	18.5	18.9	17.9	18.2	18.3	18.6	19.0
8H	17.7	18.1	18.2	18.5	18.9	17.8	18.2	18.3	18.6	19.0
12H	17.7	18.0	18.2	18.4	18.9	17.8	18.1	18.3	18.5	19.0
12H 4H	17.7	18.0	18.1	18.4	18.8	17.8	18.1	18.2	18.5	18.9
6H	17.7	18.0	18.2	18.5	18.9	17.8	18.1	18.3	18.6	19.0
8H	17.7	18.0	18.2	18.4	18.9	17.8	18.1	18.3	18.5	19.0
Variations with the observer position at spacings:										
S = 1.0H	+ 0.6 / - 0.9					+ 0.6 / - 0.9				
1.5H	+ 0.5 / - 0.4					+ 0.4 / - 0.5				
2.0H	+ 1.0 / - 1.3					+ 1.1 / - 1.3				

CIE Pub.117, 637.7 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = -1.6$)

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:

UTILIZATION FACTORS TABLE

Test:U:225.2V I:0.0610A P:8.150W PF:0.5910 Freq:50.00Hz Lamp Flux:637.698x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	Shielding Angle:

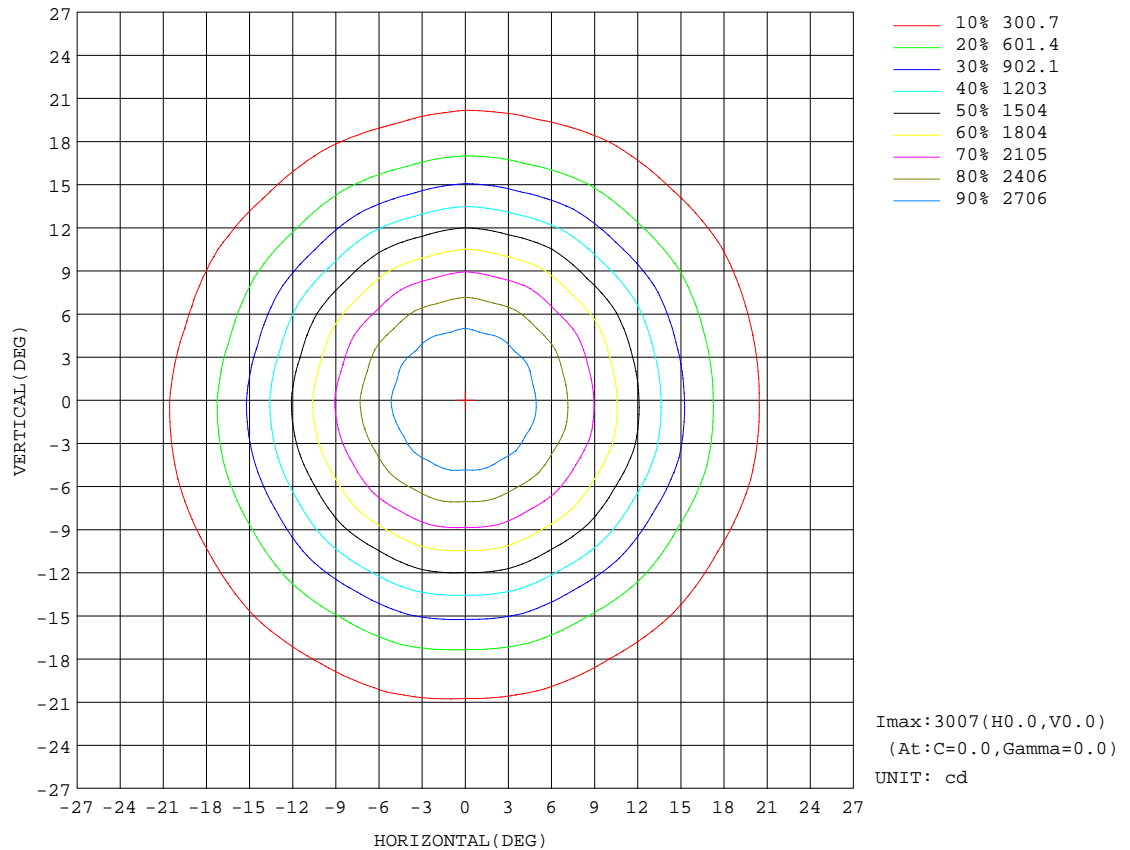
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	87	81	77	87	80	77	86	80	77	73
0.80	94	89	85	94	88	85	93	88	84	81
1.00	99	93	90	98	93	89	96	93	89	85
1.25	103	98	94	102	97	94	100	96	93	89
1.50	106	101	97	104	100	97	102	99	96	91
2.00	108	104	101	107	103	100	104	101	99	93
2.50	110	106	103	108	105	102	105	103	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

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:

ISOCANDELA DIAGRAM

Test:U:225.2V I:0.0610A P:8.150W PF:0.5910 Freq:50.00Hz Lamp Flux:637.698x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	Shielding Angle:

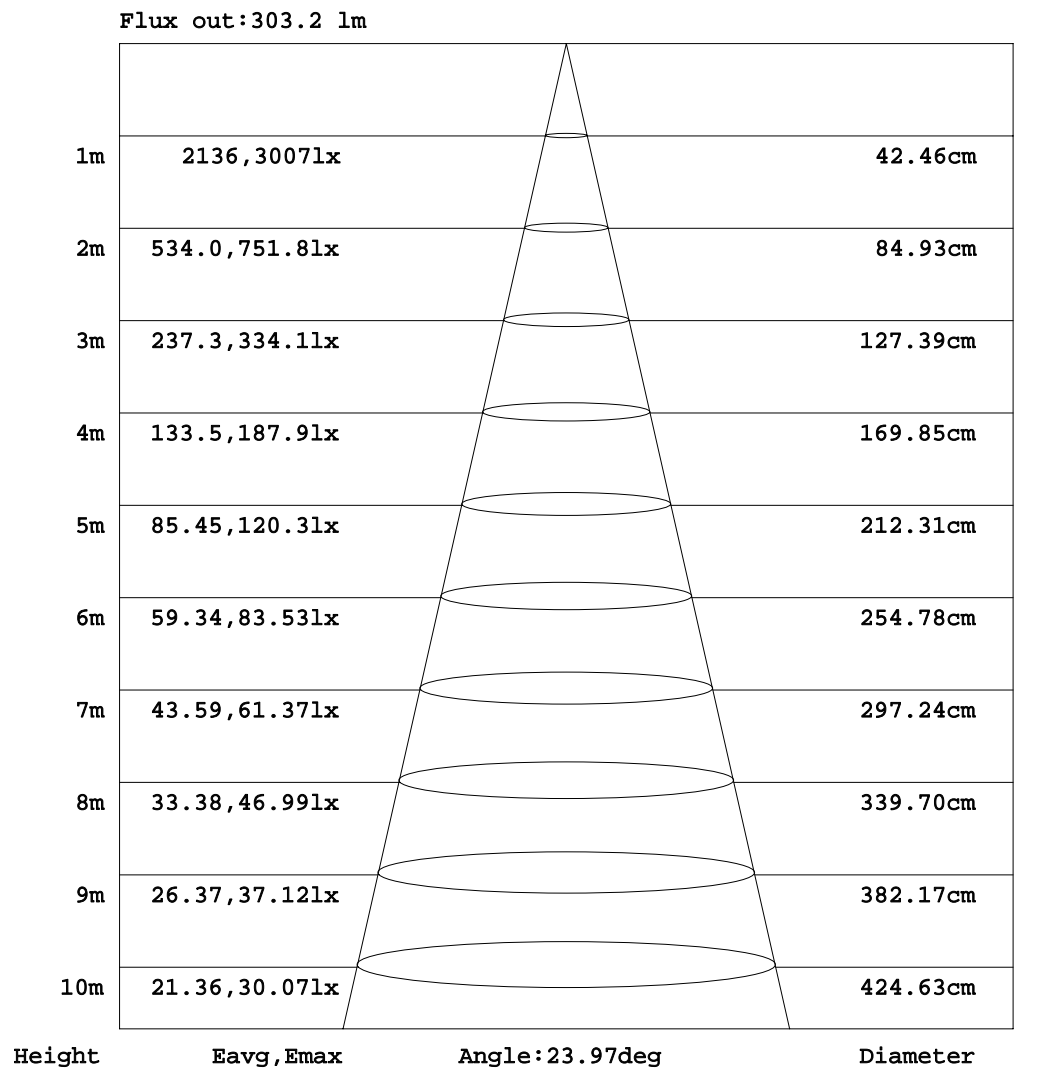


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-06-16

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:

AAI Figure

Test:U:225.2V I:0.0610A P:8.150W PF:0.5910 Freq:50.00Hz Lamp Flux:637.698x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	Shielding Angle:



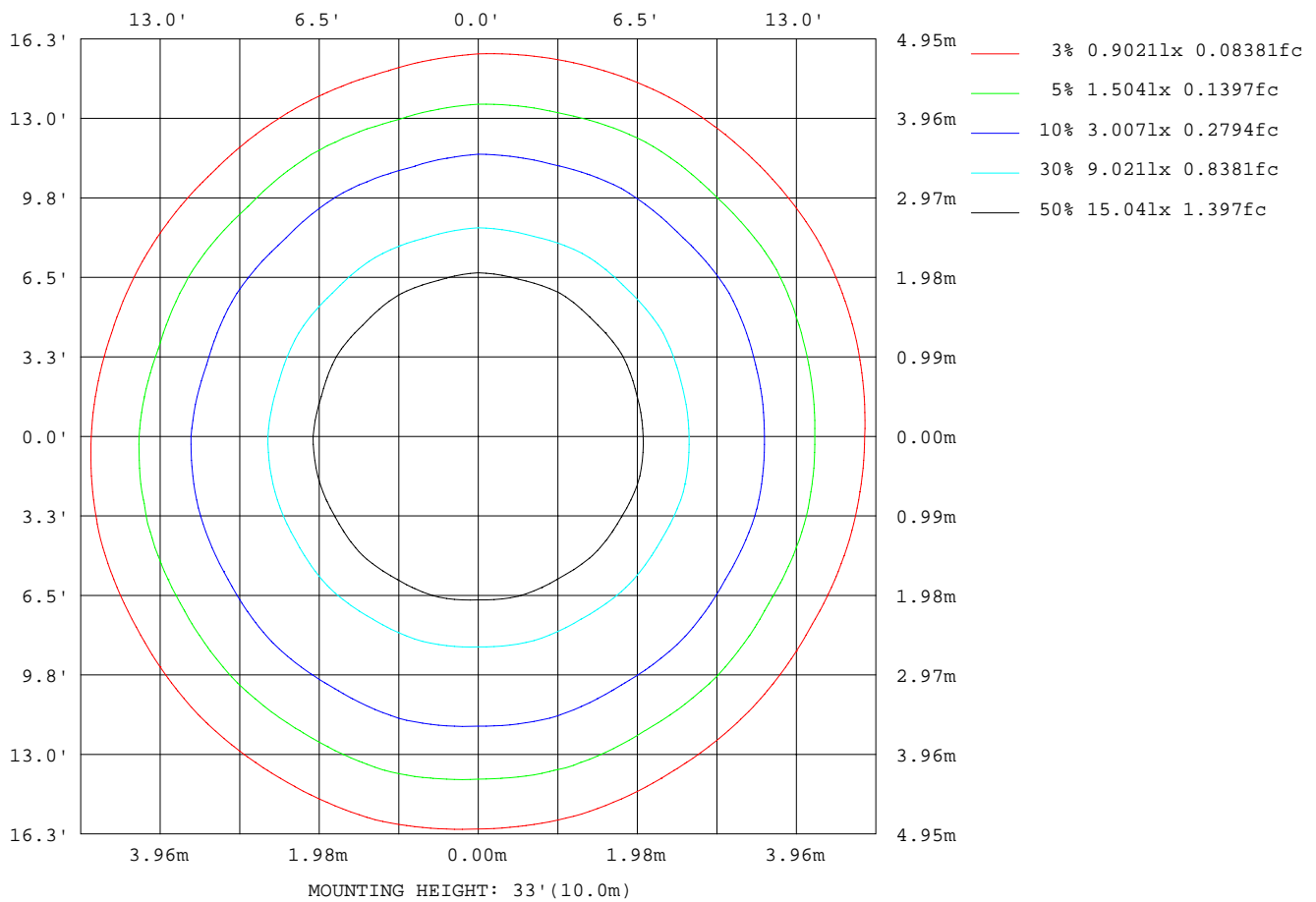
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:637.698x1 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:8.150W PF:0.5910 Freq:50.00Hz Lamp Flux:637.698x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	Shielding Angle:

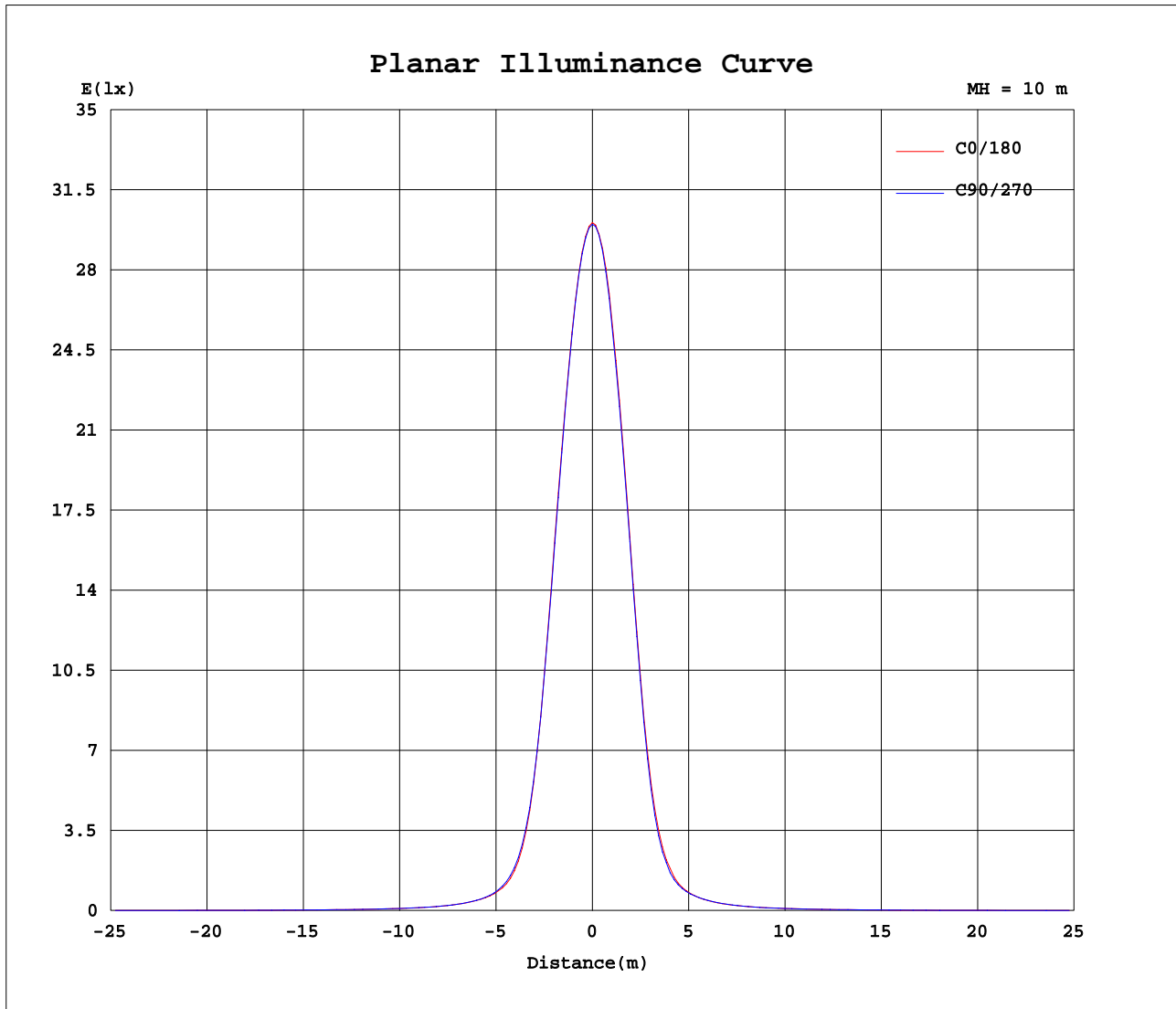
AvgL	cd/m2
L_0~180(65)av	7078
L_0~180(75)av	4242
L_0~180(85)av	836
L_90~270(65)av	7145
L_90~270(75)av	4267
L_90~270(85)av	820
L_45(65)av	7166
L_45(75)av	4193
L_45(85)av	1078

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

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:

```

```

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:

```