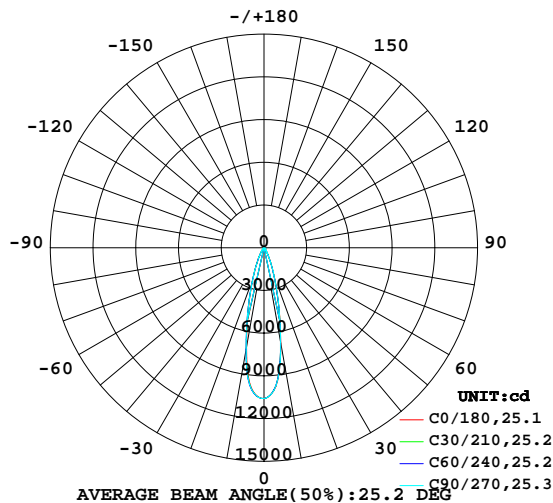


## LUMINAIRE PHOTOMETRIC TEST REPORT

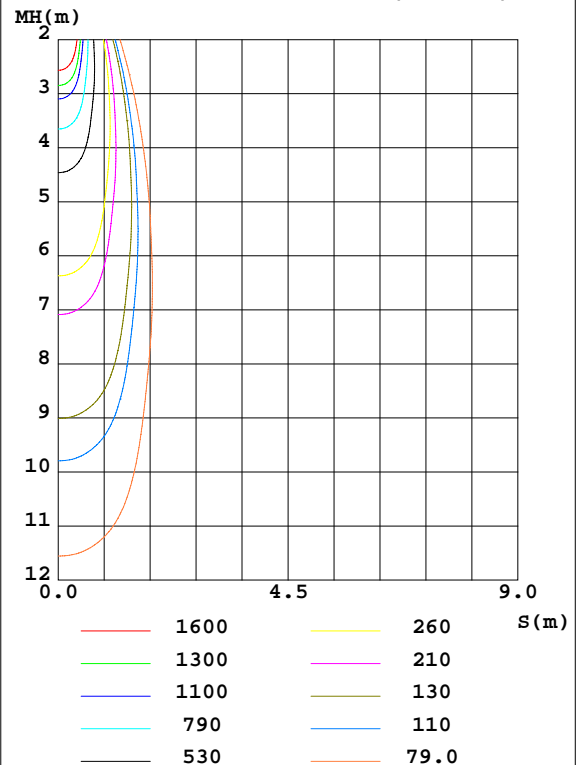
Test:U:225.1V I:0.1600A P:34.30W PF:0.9510 Freq:50.00Hz Lamp Flux:2818.37x1 lm					
NAME:		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.:		SUR.:75		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 82.17 lm/W
MODEL	ALR85-35W-G30-24	I <sub>max</sub> (cd)	10595	S/MH(C0/180)	0.42	
NOMINAL POWER(W)	35	LOR(%)	100.0	S/MH(C90/270)	0.41	
RATED VOLTAGE(V)	226	TOTAL FLUX(lm)	2818.4	η UP,DN(C0-180)	0.0,51.6	
NOMINAL FLUX(lm)	2818.37	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,48.4	
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.00	
TEST VOLTAGE(V)	225.0	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:2020-03-11

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:

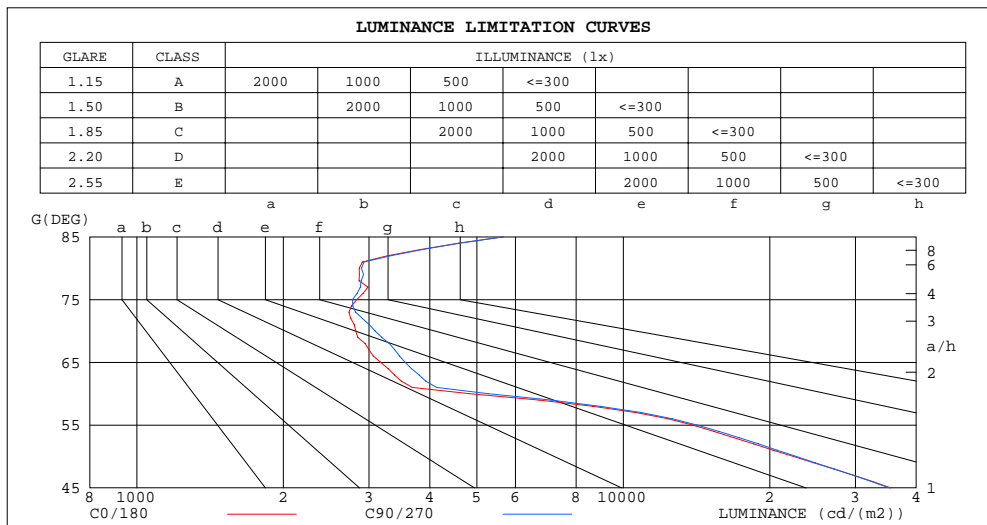
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\%lum, lamp$
10	709.4	734.8	724.4	707.9	680.2	657.5	675.5	681.1	0- 10	848.0	848.0	30.1,30.1
20	226.1	235.5	225.7	216.5	206.5	197.7	206.5	212.1	10- 20	1119	1967	69.8,69.8
30	59.33	62.24	59.13	55.80	52.50	50.37	52.12	54.48	20- 30	527.0	2494	88.5,88.5
40	18.47	19.13	18.53	17.63	16.46	16.02	16.39	17.10	30- 40	198.7	2693	95.6,95.6
50	6.375	6.545	6.429	6.207	5.850	5.608	5.713	5.913	40- 50	83.26	2776	98.5,98.5
60	1.071	1.213	1.164	1.103	0.9715	0.8680	0.9266	0.9519	50- 60	30.02	2806	99.6,99.6
70	0.4275	0.4321	0.4660	0.4737	0.4619	0.4736	0.4675	0.4698	60- 70	6.493	2813	99.8,99.8
80	0.2207	0.2234	0.2219	0.2156	0.1858	0.1839	0.1801	0.1952	70- 80	3.433	2816	99.9,99.9
90	0.2567	0.2553	0.2553	0.2602	0.1647	0.1645	0.1630	0.1633	80- 90	2.146	2818	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:×10cd									UNIT:lm		

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:AE  
 Test Date:2020-03-11

$\gamma$  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:225.1V I:0.1600A P:34.30W PF:0.9510 Freq:50.00Hz Lamp Flux:2818.37x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	5660	5680
80	2865	2896
75	2832	2775
70	2817	3088
65	3170	3560
60	4830	5278
55	13888	14166
50	22355	22668
45	35476	35246

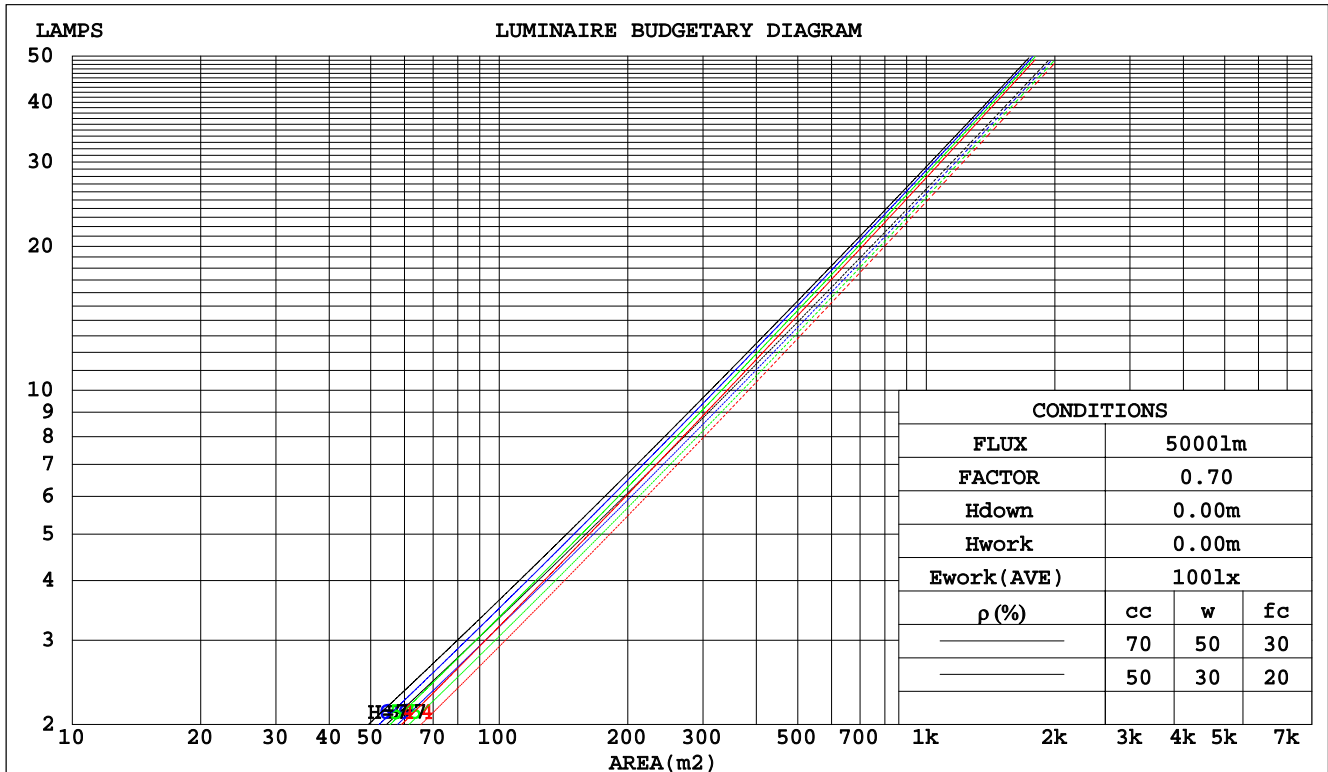
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-03-11

$\gamma$  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:225.1V I:0.1600A P:34.30W PF:0.9510 Freq:50.00Hz Lamp Flux:2818.37x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	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	1.02	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	.94	.93	.92
3.0	1.01	.97	.94	.90	.96	.93	.97	.94	.92	.95	.92	.90	.93	.91	.89	.88
4.0	.97	.92	.89	.95	.91	.88	.93	.90	.87	.92	.89	.86	.90	.87	.85	.84
5.0	.92	.88	.84	.92	.87	.84	.90	.86	.83	.88	.85	.83	.87	.84	.82	.81
6.0	.89	.84	.81	.88	.84	.80	.87	.83	.80	.85	.82	.79	.84	.81	.79	.78
7.0	.85	.81	.77	.85	.80	.77	.84	.80	.77	.82	.79	.76	.81	.78	.76	.75
8.0	.82	.78	.74	.82	.77	.74	.81	.77	.74	.80	.76	.74	.79	.76	.73	.72
9.0	.79	.75	.72	.79	.75	.72	.78	.74	.71	.77	.74	.71	.77	.73	.71	.70
10.0	.77	.72	.69	.76	.72	.69	.76	.72	.69	.75	.71	.69	.74	.71	.69	.68



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:AE  
 Test Date:2020-03-11

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:225.1V I:0.1600A P:34.30W PF:0.9510 Freq:50.00Hz Lamp Flux:2818.37x1 lm									
NAME:				TYPE:				WEIGHT:	
SPEC.:				DIM.:				SERIAL No.:	
MFR.:				SUR.:75				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	.149	.085	.027	.142	.081	.026	.130	.074	.024	.118	.068	.022	.108	.062	.020	
2.0	.139	.076	.023	.134	.074	.023	.123	.069	.021	.114	.064	.020	.105	.059	.019	
3.0	.130	.069	.021	.126	.067	.020	.117	.063	.019	.109	.060	.018	.102	.056	.017	
4.0	.123	.064	.019	.119	.062	.018	.112	.059	.018	.105	.056	.017	.098	.053	.016	
5.0	.116	.059	.017	.113	.058	.017	.106	.055	.016	.100	.053	.016	.095	.051	.015	
6.0	.110	.055	.016	.107	.054	.016	.102	.052	.015	.097	.050	.015	.092	.048	.014	
7.0	.105	.052	.015	.102	.051	.014	.097	.049	.014	.093	.048	.014	.089	.046	.014	
8.0	.100	.049	.014	.098	.048	.014	.093	.047	.013	.089	.045	.013	.086	.044	.013	
9.0	.095	.046	.013	.093	.045	.013	.090	.044	.013	.086	.043	.012	.083	.042	.012	
10.0	.091	.044	.012	.090	.043	.012	.086	.042	.012	.083	.041	.012	.080	.040	.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	.169	.158	.147	.145	.135	.127	.099	.093	.088	.057	.054	.051	.018	.017	.016	
2.0	.152	.133	.116	.130	.114	.101	.089	.079	.070	.051	.046	.041	.016	.015	.013	
3.0	.138	.113	.094	.118	.098	.082	.081	.068	.057	.047	.040	.034	.015	.013	.011	
4.0	.126	.098	.077	.108	.085	.067	.074	.059	.047	.043	.035	.028	.014	.011	.009	
5.0	.116	.086	.064	.099	.074	.056	.068	.052	.039	.040	.031	.023	.013	.010	.008	
6.0	.107	.076	.054	.092	.066	.047	.064	.046	.033	.037	.027	.020	.012	.009	.007	
7.0	.100	.068	.046	.086	.059	.040	.059	.041	.028	.034	.024	.017	.011	.008	.006	
8.0	.094	.062	.040	.080	.053	.035	.056	.038	.025	.032	.022	.015	.010	.007	.005	
9.0	.088	.056	.034	.076	.049	.030	.053	.034	.021	.031	.020	.013	.010	.007	.004	
10.0	.083	.051	.030	.072	.045	.026	.050	.031	.019	.029	.019	.011	.009	.006	.004	

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-03-11

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:225.1V I:0.1600A P:34.30W PF:0.9510 Freq:50.00Hz Lamp Flux:2818.37x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:					DIM.:			SERIAL No.:			
MFR.:					SUR.:75			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	13.6	14.3	13.8	14.5	14.6	13.6	14.3	13.8	14.5	14.6	
	3H	13.5	14.2	13.7	14.4	14.5	13.5	14.2	13.7	14.4	14.5
	4H	13.4	14.1	13.7	14.3	14.5	13.4	14.1	13.7	14.3	14.5
	6H	13.4	14.0	13.7	14.2	14.4	13.4	14.0	13.7	14.2	14.4
	8H	13.3	13.9	13.6	14.2	14.4	13.3	13.9	13.6	14.2	14.4
	12H	13.3	13.9	13.6	14.1	14.4	13.3	13.9	13.6	14.1	14.4
4H	2H	13.4	14.1	13.7	14.3	14.5	13.4	14.1	13.7	14.3	14.5
	3H	13.3	13.9	13.6	14.1	14.4	13.3	13.9	13.6	14.1	14.4
	4H	13.2	13.8	13.6	14.1	14.4	13.2	13.8	13.6	14.1	14.4
	6H	13.2	13.6	13.6	14.0	14.3	13.2	13.6	13.6	14.0	14.3
	8H	13.2	13.6	13.5	13.9	14.3	13.2	13.6	13.5	13.9	14.3
	12H	13.2	13.5	13.6	13.9	14.3	13.2	13.5	13.6	13.9	14.3
8H	4H	13.1	13.5	13.5	13.9	14.2	13.1	13.5	13.5	13.9	14.2
	6H	13.1	13.4	13.5	13.8	14.2	13.1	13.4	13.5	13.8	14.2
	8H	13.0	13.4	13.5	13.8	14.2	13.0	13.4	13.5	13.8	14.2
	12H	13.1	13.3	13.5	13.8	14.2	13.1	13.3	13.5	13.8	14.2
12H	4H	13.1	13.5	13.5	13.8	14.2	13.1	13.5	13.5	13.8	14.2
	6H	13.0	13.3	13.5	13.7	14.2	13.0	13.3	13.5	13.7	14.2
	8H	13.0	13.3	13.5	13.7	14.2	13.0	13.3	13.5	13.7	14.2
Variations with the observer position at spacings:											
S = 1.0H	+ 2.2 / - 5.5					+ 2.3 / - 5.4					
1.5H	+ 3.3 / - 3.5					+ 3.3 / - 3.6					
2.0H	+ 4.4 / - 6.3					+ 4.4 / - 6.3					

CIE Pub.117, 2818 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 3.6$ )

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-03-11

$\gamma$  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:225.1V I:0.1600A P:34.30W PF:0.9510 Freq:50.00Hz Lamp Flux:2818.37x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:

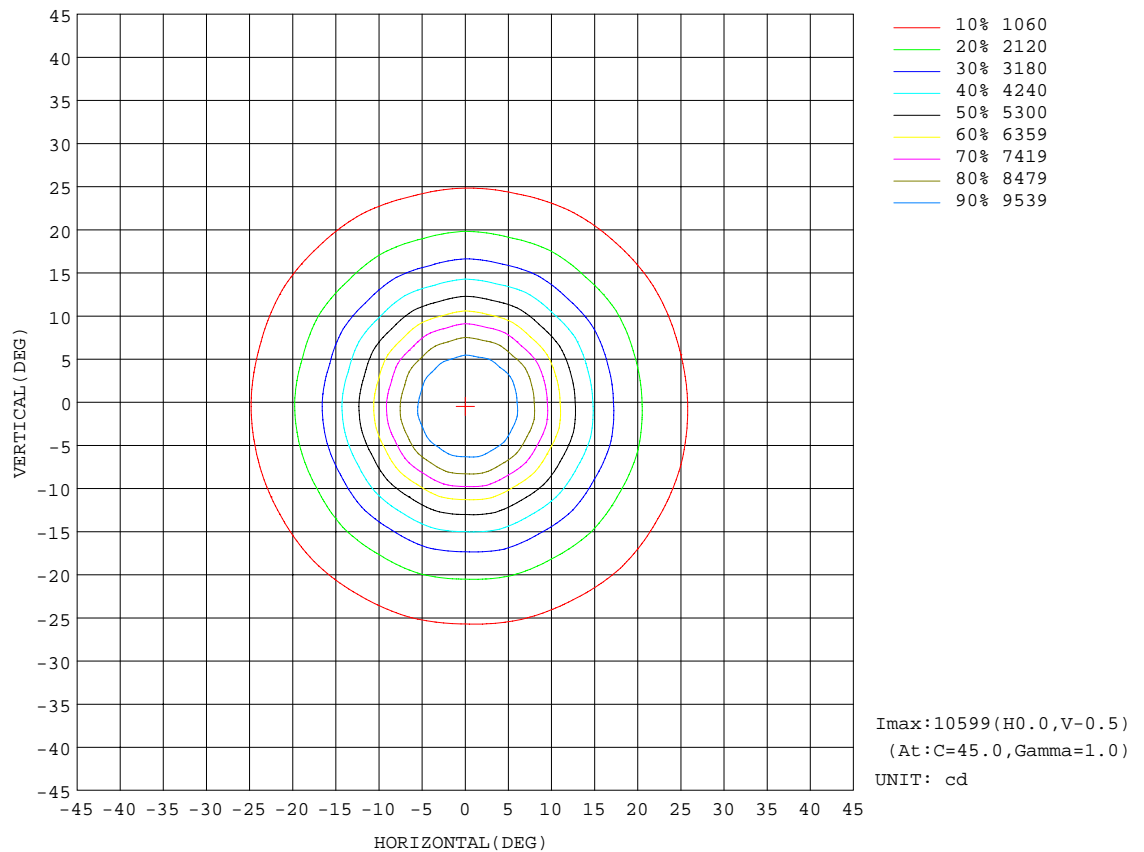
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	89	83	79	88	82	79	87	82	79	75
0.80	96	90	87	95	90	87	94	89	86	83
1.00	100	95	91	99	94	91	98	94	91	87
1.25	104	99	96	103	99	95	101	97	95	91
1.50	107	102	99	105	101	98	103	100	97	93
2.00	109	105	102	108	104	101	105	102	100	95
2.50	111	107	104	109	106	103	106	103	101	96
3.00	112	109	106	110	107	105	107	105	103	97
4.00	114	111	109	112	110	108	108	107	105	98
5.00	115	113	111	113	111	110	109	108	107	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:2020-03-11

$\gamma$  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:225.1V I:0.1600A P:34.30W PF:0.9510 Freq:50.00Hz Lamp Flux:2818.37x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:



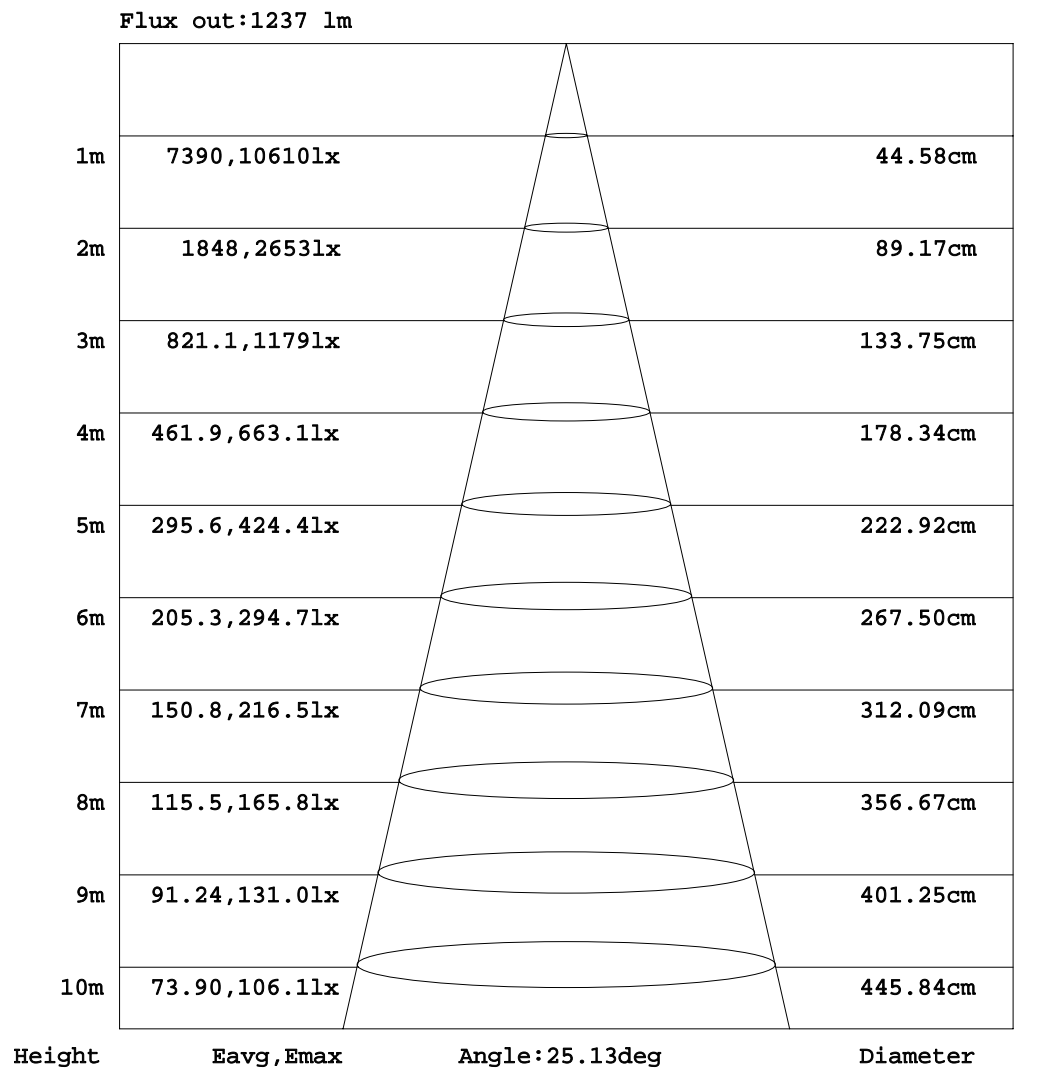
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-03-11

$\gamma$  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:225.1V I:0.1600A P:34.30W PF:0.9510 Freq:50.00Hz Lamp Flux:2818.37x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:



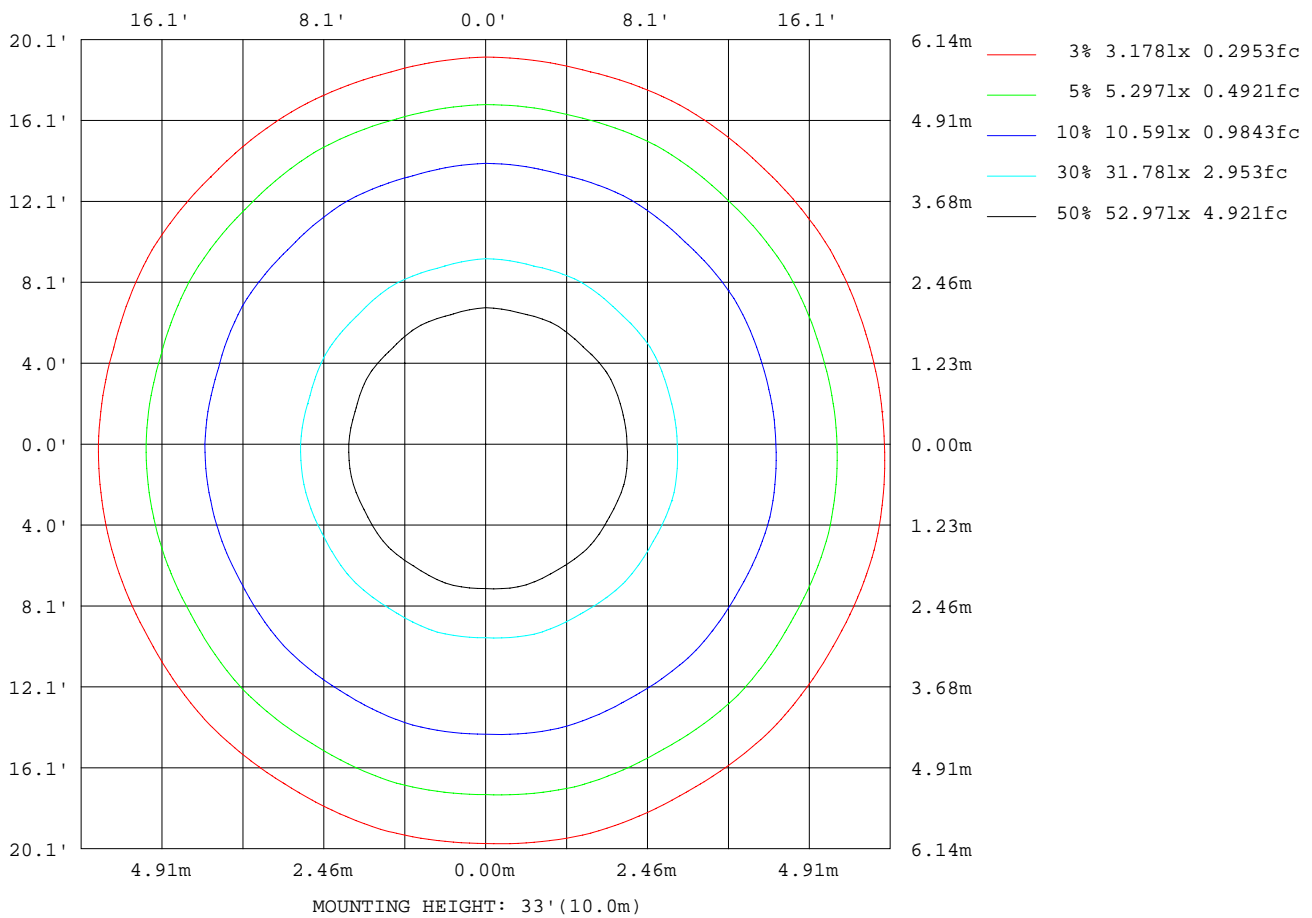
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: AE  
 Test Date: 2020-03-11

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:225.1V I:0.1600A P:34.30W PF:0.9510 Freq:50.00Hz Lamp Flux:2818.37x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: AE  
 Test Date: 2020-03-11

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:225.1V I:0.1600A P:34.30W PF:0.9510 Freq:50.00Hz Lamp Flux:2818.37x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:

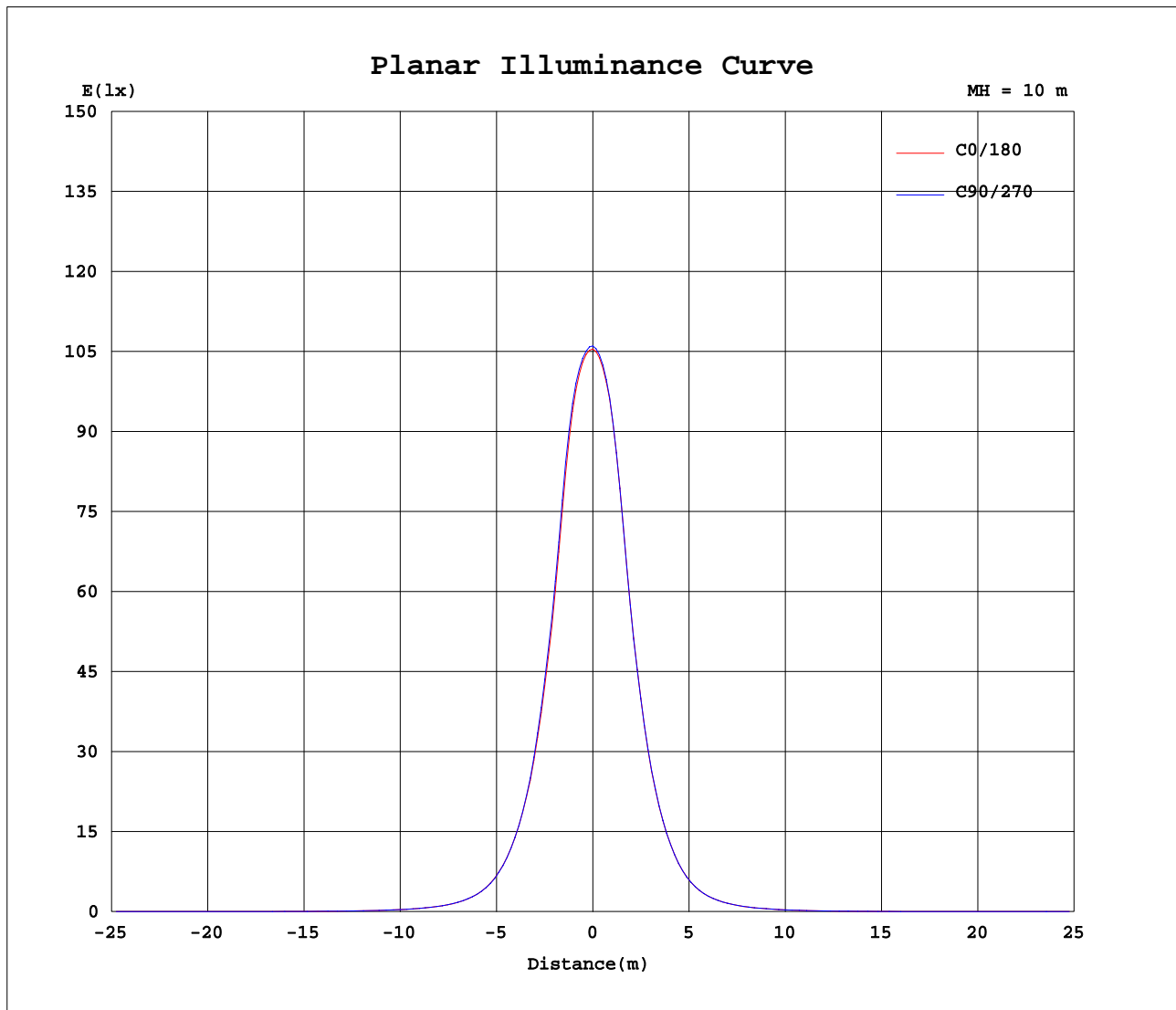
AvgL	cd/m2
L_0~180(65)av	3310
L_0~180(75)av	2814
L_0~180(85)av	4996
L_90~270(65)av	3483
L_90~270(75)av	2813
L_90~270(85)av	4974
L_45(65)av	3449
L_45(75)av	2843
L_45(85)av	5082

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:AE  
 Test Date:2020-03-11

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: 2020-03-11

$\gamma$  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:

```