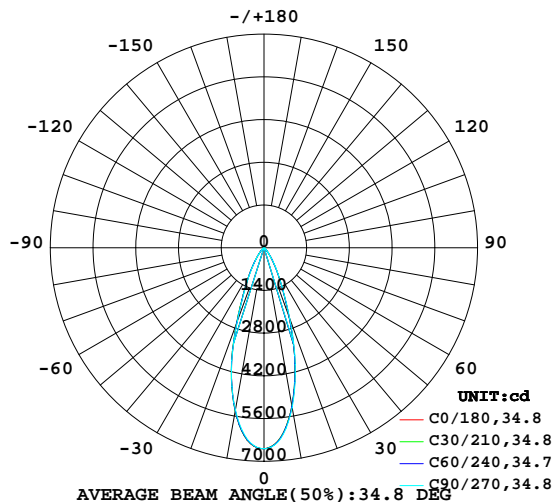


## LUMINAIRE PHOTOMETRIC TEST REPORT

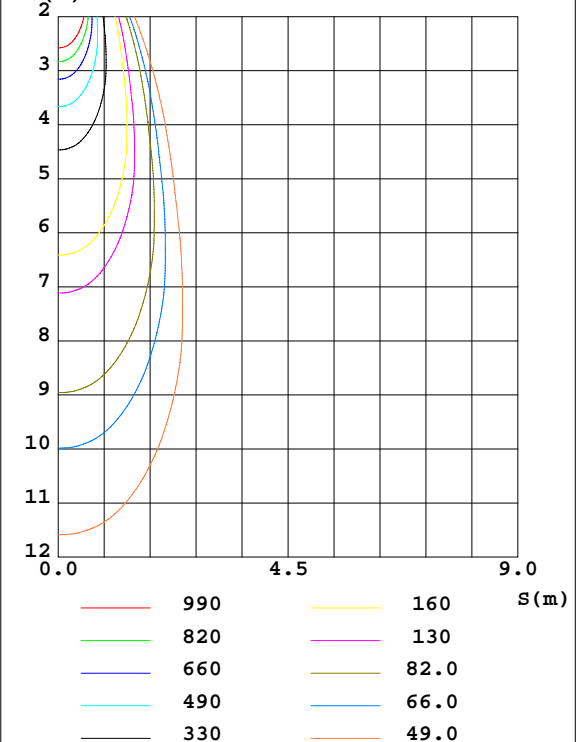
Test:U:225.1V I:0.1600A P:34.20W PF:0.9510 Freq:50.00Hz Lamp Flux:2760.16x1 lm					
NAME:		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.:		SUR.:75		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 80.71 lm/W
MODEL	ALR85-35W-G30-36	I <sub>max</sub> (cd)	6586	S/MH(C0/180)	0.56	
NOMINAL POWER(W)	35	LOR(%)	100.0	S/MH(C90/270)	0.56	
RATED VOLTAGE(V)	226	TOTAL FLUX(lm)	2760.2	η UP,DN(C0-180)	0.0,50.9	
NOMINAL FLUX(lm)	2760.16	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)	225.0	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:2020-03-11

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:

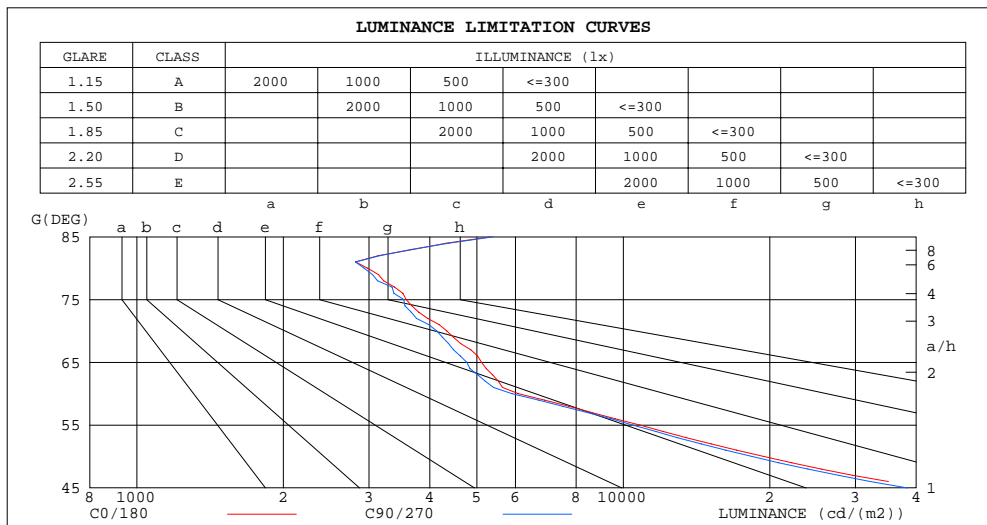
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\%lum, lamp$
10	5426	5470	5396	5357	5281	5221	5320	5360	0- 10	569.9	569.9	20.6,20.6
20	2618	2672	2557	2515	2410	2351	2479	2537	10- 20	1089	1659	60.1,60.1
30	872.0	898.6	840.1	800.0	778.6	759.7	798.3	826.4	20- 30	675.2	2334	84.6,84.6
40	255.8	261.6	249.9	240.1	225.4	215.1	228.8	235.8	30- 40	290.9	2625	95.1,95.1
50	55.23	54.84	52.13	49.90	48.00	47.39	51.07	50.97	40- 50	95.35	2720	98.5,98.5
60	13.46	13.45	13.03	12.45	12.66	12.84	13.64	13.86	50- 60	24.79	2745	99.4,99.4
70	6.558	6.187	6.243	5.484	5.895	5.773	6.172	6.349	60- 70	9.034	2754	99.8,99.8
80	2.289	2.314	2.248	2.142	2.093	1.742	1.859	1.983	70- 80	4.148	2758	99.9,99.9
90	2.438	2.442	2.491	2.523	1.740	1.738	1.701	1.678	80- 90	2.070	2760	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:2020-03-11

$\gamma$  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:34.20W PF:0.9510 Freq:50.00Hz Lamp Flux:2760.16x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	5345	5396
80	2979	2933
75	3578	3536
70	4335	4135
65	5112	4768
60	6084	5901
55	10811	10451
50	19422	18372
45	40399	38345

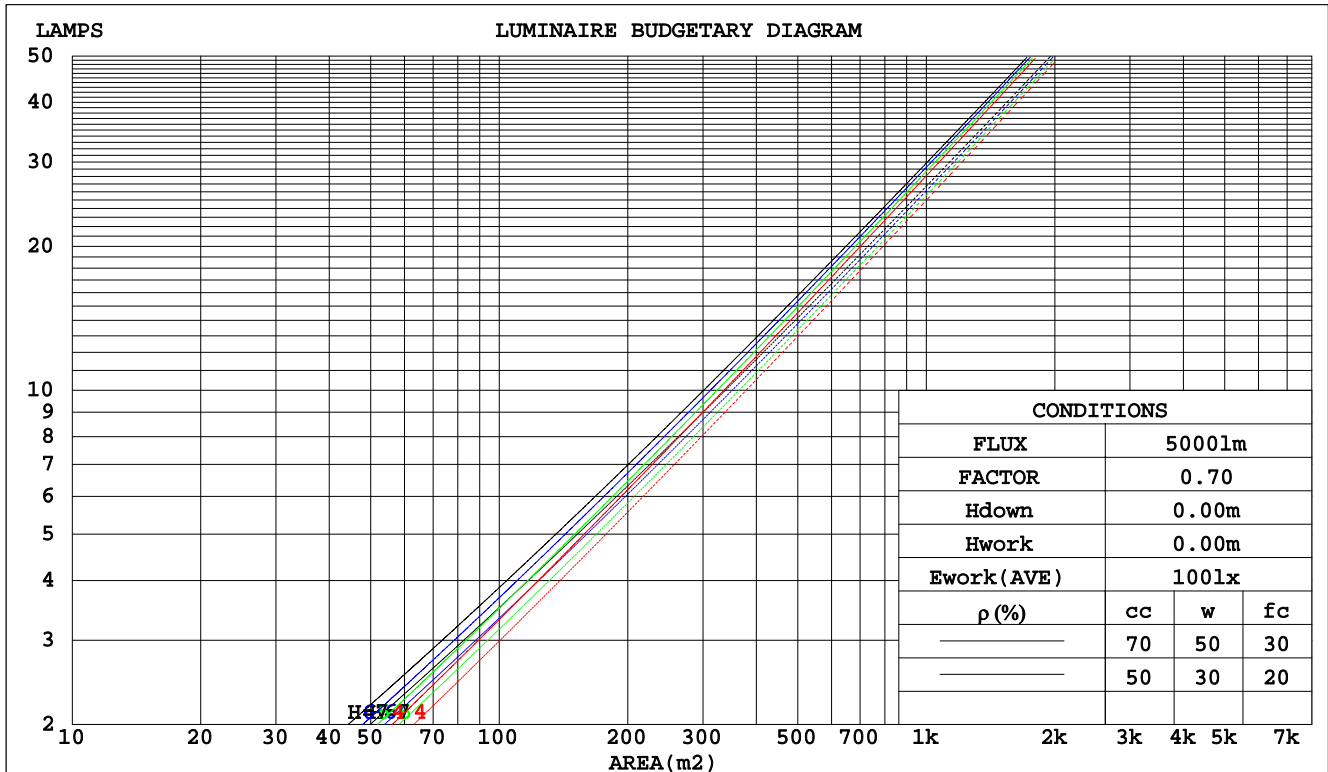
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-03-11

$\gamma$  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:34.20W PF:0.9510 Freq:50.00Hz Lamp Flux:2760.16x1 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	1.06	1.06	1.04	1.03	1.02	1.01	.00	.98	.98	.97	.95
2.0	1.05	1.02	.99	1.04	1.00	.98	1.00	.98	.95	.97	.95	.93	.95	.93	.92	.90
3.0	.99	.95	.92	.98	.94	.91	.96	.92	.89	.93	.90	.88	.91	.89	.87	.85
4.0	.94	.89	.86	.93	.89	.85	.91	.87	.84	.89	.86	.83	.87	.85	.82	.81
5.0	.90	.85	.81	.89	.84	.81	.87	.83	.80	.85	.82	.79	.84	.81	.78	.77
6.0	.85	.80	.77	.85	.80	.76	.83	.79	.76	.82	.78	.75	.81	.77	.75	.74
7.0	.81	.76	.73	.81	.76	.73	.80	.75	.72	.78	.75	.72	.77	.74	.71	.70
8.0	.78	.73	.69	.77	.73	.69	.76	.72	.69	.75	.71	.69	.74	.71	.68	.67
9.0	.75	.70	.66	.74	.69	.66	.73	.69	.66	.72	.69	.66	.72	.68	.66	.64
10.0	.72	.67	.63	.71	.67	.63	.71	.66	.63	.70	.66	.63	.69	.66	.63	.62



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:34.20W PF:0.9510 Freq:50.00Hz Lamp Flux:2760.16x1 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	.159	.090	.029	.152	.087	.028	.140	.080	.026	.128	.074	.024	.118	.068	.022	
2.0	.150	.082	.025	.144	.080	.025	.134	.075	.023	.124	.070	.022	.116	.065	.021	
3.0	.142	.075	.023	.137	.073	.022	.128	.069	.021	.120	.066	.020	.112	.062	.019	
4.0	.134	.070	.020	.130	.068	.020	.122	.065	.019	.115	.062	.019	.109	.059	.018	
5.0	.127	.065	.019	.124	.063	.018	.117	.061	.018	.111	.059	.017	.105	.056	.017	
6.0	.121	.061	.017	.118	.060	.017	.112	.058	.017	.107	.056	.016	.102	.054	.016	
7.0	.115	.057	.016	.113	.056	.016	.108	.054	.016	.103	.053	.015	.099	.051	.015	
8.0	.110	.054	.015	.108	.053	.015	.103	.052	.015	.099	.050	.015	.095	.049	.014	
9.0	.105	.051	.014	.103	.050	.014	.100	.049	.014	.096	.048	.014	.092	.047	.014	
10.0	.101	.049	.013	.099	.048	.013	.096	.047	.013	.093	.046	.013	.089	.045	.013	

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	.157	.146	.145	.135	.126	.099	.093	.087	.057	.054	.051	.018	.017	.016		
2.0	.153	.133	.115	.131	.114	.100	.090	.079	.069	.052	.046	.041	.017	.015	.013		
3.0	.140	.113	.092	.120	.098	.080	.082	.068	.056	.048	.040	.033	.015	.013	.011		
4.0	.128	.098	.075	.110	.085	.066	.076	.059	.046	.044	.035	.027	.014	.011	.009		
5.0	.119	.086	.063	.102	.075	.054	.070	.052	.038	.041	.031	.023	.013	.010	.008		
6.0	.111	.077	.052	.095	.067	.046	.066	.047	.032	.038	.027	.019	.012	.009	.006		
7.0	.104	.069	.045	.089	.060	.039	.062	.042	.028	.036	.025	.016	.012	.008	.005		
8.0	.098	.063	.038	.084	.054	.033	.058	.038	.024	.034	.022	.014	.011	.007	.005		
9.0	.092	.057	.033	.080	.050	.029	.055	.035	.021	.032	.021	.012	.010	.007	.004		
10.0	.088	.053	.029	.076	.046	.025	.053	.032	.018	.031	.019	.011	.010	.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:34.20W PF:0.9510 Freq:50.00Hz Lamp Flux:2760.16x1 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	2H	15.6	16.4	15.8	16.5	16.7	15.4	16.2	15.6	16.4	16.5	
	3H	15.5	16.2	15.7	16.4	16.6	15.3	16.0	15.5	16.2	16.4	
	4H	15.4	16.1	15.7	16.3	16.5	15.2	15.9	15.5	16.1	16.4	
	6H	15.3	16.0	15.6	16.2	16.5	15.1	15.8	15.4	16.1	16.3	
	8H	15.3	15.9	15.6	16.2	16.4	15.1	15.8	15.4	16.0	16.3	
	12H	15.3	15.9	15.6	16.1	16.4	15.1	15.7	15.4	16.0	16.2	
	4H	2H	15.4	16.1	15.6	16.3	16.5	15.2	15.9	15.5	16.1	16.3
		3H	15.3	15.9	15.6	16.1	16.4	15.1	15.7	15.4	16.0	16.2
		4H	15.2	15.8	15.5	16.1	16.4	15.0	15.6	15.4	15.9	16.2
		6H	15.1	15.6	15.5	16.0	16.3	14.9	15.4	15.3	15.8	16.1
		8H	15.1	15.6	15.5	15.9	16.3	14.9	15.4	15.3	15.7	16.1
		12H	15.1	15.5	15.5	15.9	16.2	14.9	15.3	15.3	15.7	16.1
8H	4H	15.1	15.5	15.5	15.9	16.2	14.9	15.3	15.3	15.7	16.1	
	6H	15.0	15.4	15.4	15.8	16.2	14.8	15.2	15.2	15.6	16.0	
	8H	15.0	15.3	15.4	15.7	16.2	14.8	15.1	15.2	15.5	16.0	
	12H	15.0	15.2	15.4	15.7	16.2	14.8	15.1	15.2	15.5	16.0	
12H	4H	15.0	15.4	15.4	15.8	16.2	14.8	15.3	15.2	15.6	16.0	
	6H	15.0	15.3	15.4	15.7	16.1	14.8	15.1	15.2	15.5	16.0	
	8H	14.9	15.2	15.4	15.6	16.1	14.7	15.0	15.2	15.5	15.9	
Variations with the observer position at spacings:												
S = 1.0H	+ 2.7 / - 7.3					+ 2.7 / - 7.3						
1.5H	+ 4.6 / - 6.2					+ 4.5 / - 6.1						
2.0H	+ 5.6 / - 4.5					+ 5.4 / - 4.4						

CIE Pub.117, 2760 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 3.5$ )

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:34.20W PF:0.9510 Freq:50.00Hz Lamp Flux:2760.16x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:

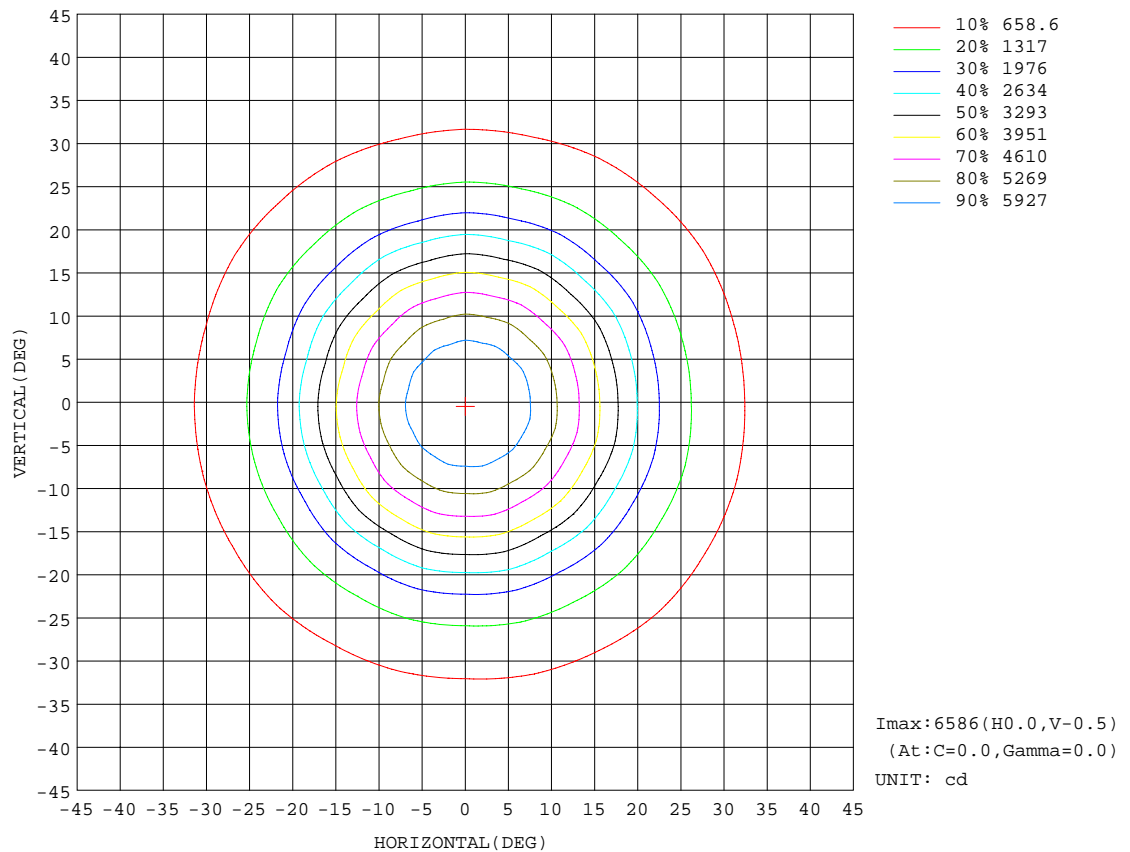
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	88	82	79	88	82	79	87	82	78	75
0.80	96	90	87	95	90	86	94	89	86	82
1.00	100	95	91	99	94	91	98	94	90	87
1.25	104	99	96	103	98	95	101	97	94	90
1.50	106	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	95
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:34.20W PF:0.9510 Freq:50.00Hz Lamp Flux:2760.16x1 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

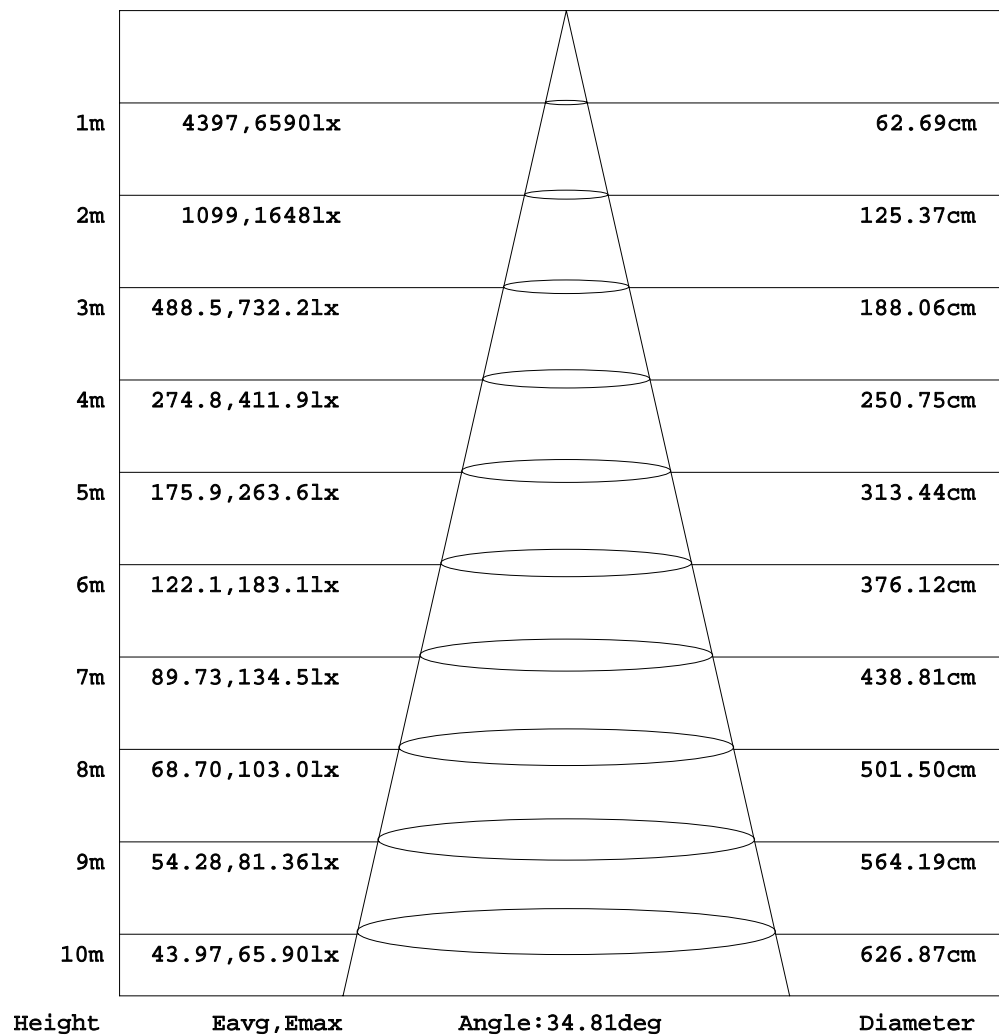
$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.240m [K=1.0000]  
Remarks:



### AAI Figure

Test:U:225.1V I:0.1600A P:34.20W PF:0.9510 Freq:50.00Hz Lamp Flux:2760.16x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:

Flux out:1458 lm



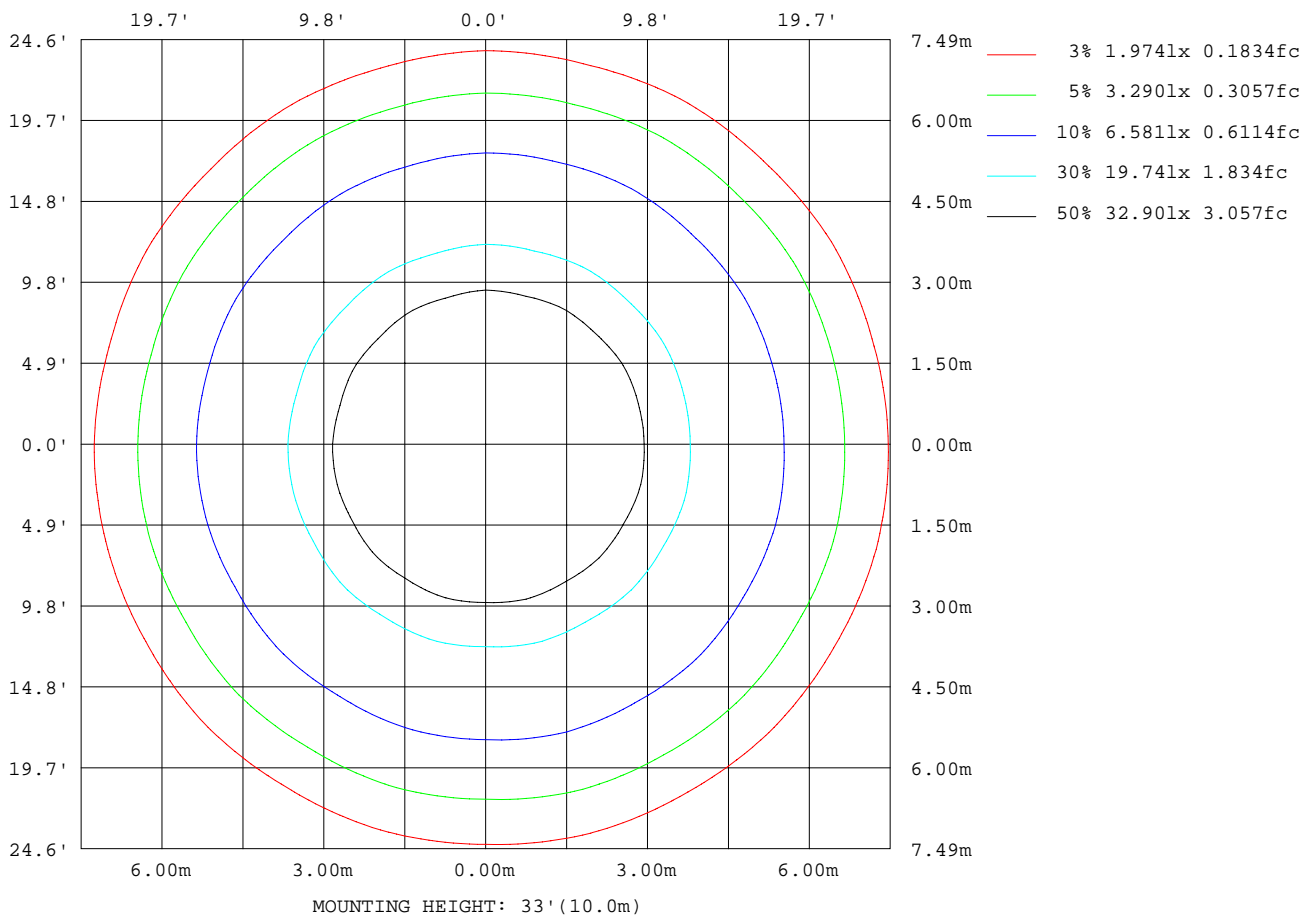
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:34.20W PF:0.9510 Freq:50.00Hz Lamp Flux:2760.16x1 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:34.20W PF:0.9510 Freq:50.00Hz Lamp Flux:2760.16x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:

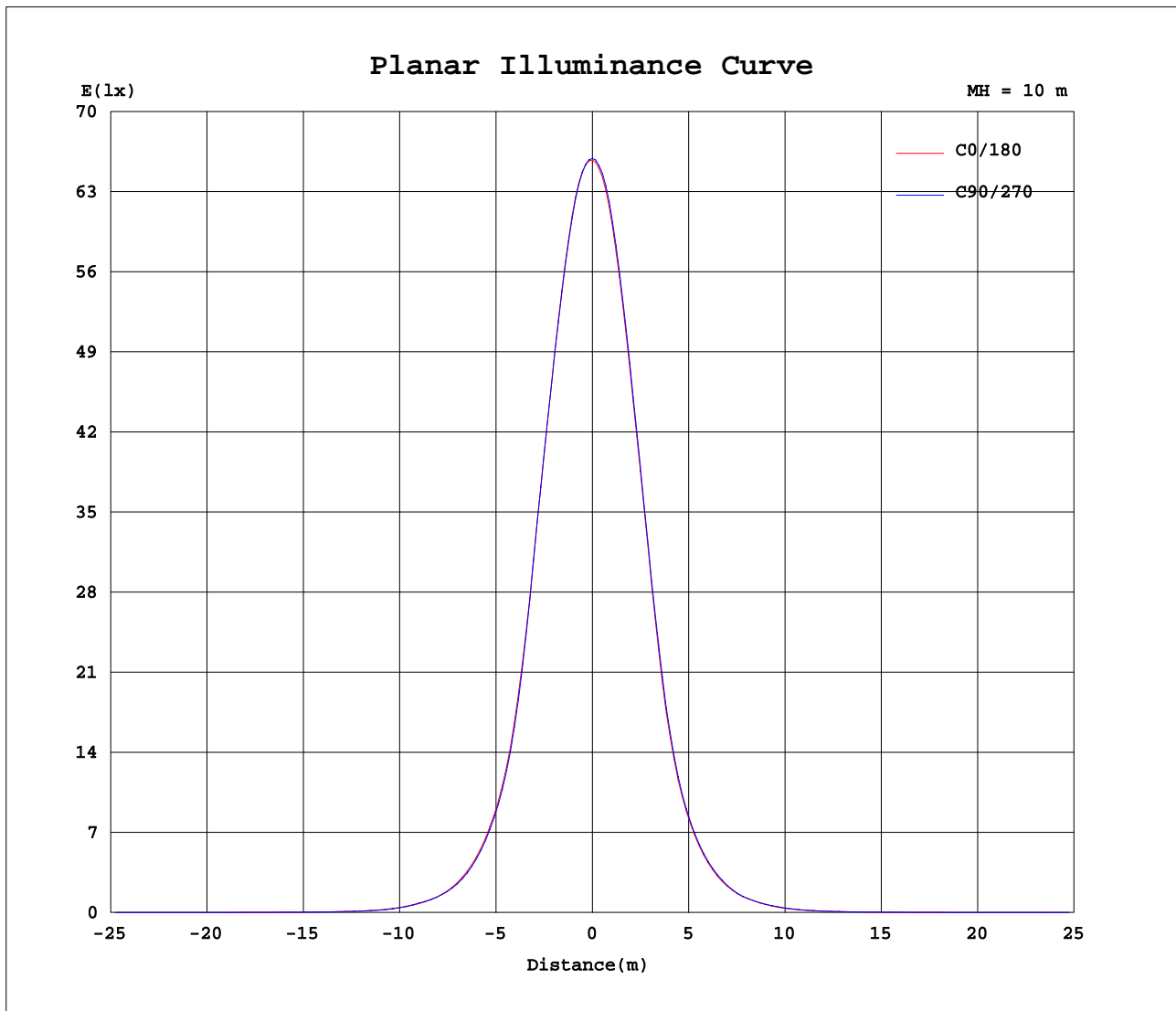
AvgL	cd/m2
L_0~180(65)av	4920
L_0~180(75)av	3424
L_0~180(85)av	4764
L_90~270(65)av	4920
L_90~270(75)av	3387
L_90~270(85)av	4826
L_45(65)av	4745
L_45(75)av	3362
L_45(85)av	4813

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:

```