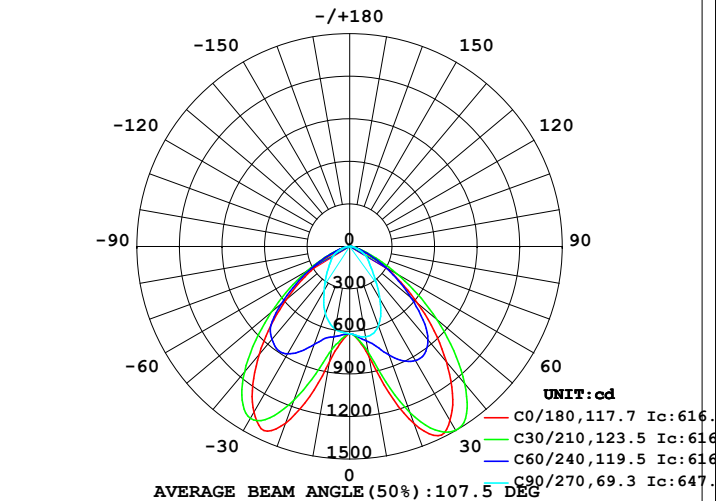


## LUMINAIRE PHOTOMETRIC TEST REPORT

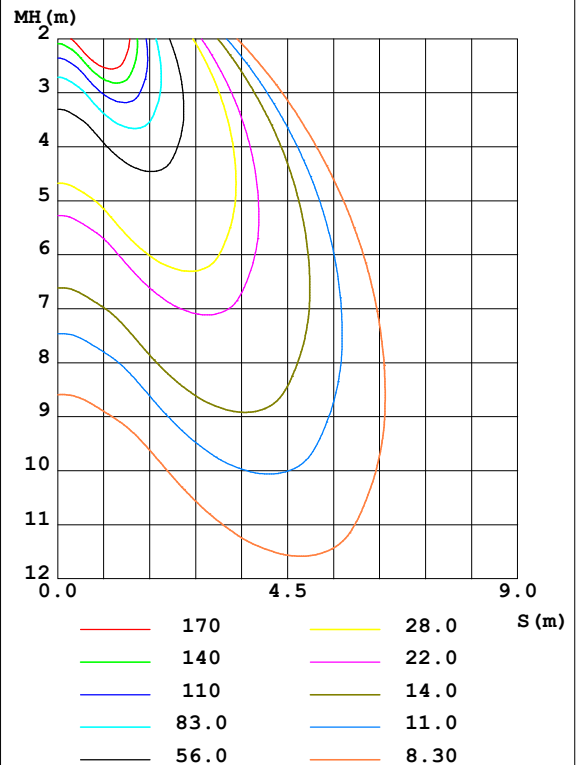
Test:U:225.0V I:0.1640A P:35.30W PF:0.9530 Freq:50.00Hz Lamp Flux:2634.05x1 lm					
NAME: ALT85D-35G30-S		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.:		SUR.:72		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 74.62 lm/W
MODEL	3000K CRI90	I <sub>max</sub> (cd)	1515	S/MH (C0/180)	1.69	
NOMINAL POWER (W)	35	LOR (%)	100.0	S/MH (C90/270)	0.97	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	2634.1	η UP, DN (C0-180)	0.0, 50.8	
NOMINAL FLUX (lm)	2634.05	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 49.2	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75	
TEST VOLTAGE (V)	225.1	η down (%)	100.0	CIBSE SHR MAX	0.80	

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: 2020-05-28

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
 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	786.5	712.0	646.7	743.8	826.2	692.1	591.7	679.2	0- 10	63.47	63.47	2.41,2.41
20	1329	1053	594.0	1099	1325	973.2	503.4	937.4	10- 20	241.6	305.1	11.6,11.6
30	1415	1295	426.5	1296	1350	1225	362.4	1189	20- 30	485.6	790.7	30,30
40	1060	1214	269.7	1181	991.9	1168	255.1	1171	30- 40	626.3	1417	53.8,53.8
50	629.8	810.6	180.7	768.2	587.0	781.9	181.0	826.4	40- 50	572.4	1989	75.5,75.5
60	284.7	409.1	128.6	377.4	269.6	393.9	133.9	440.9	50- 60	381.6	2371	90,90
70	97.17	140.0	71.55	125.1	90.93	130.3	76.72	152.6	60- 70	185.3	2556	97,97
80	28.83	35.69	23.59	31.06	24.78	29.41	23.96	36.24	70- 80	65.29	2622	99.5,99.5
90	5.608	5.223	4.345	5.251	5.226	4.542	3.835	4.469	80- 90	12.46	2634	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		

Conical surface Flux(90deg): 1721.6 lm

%lum = 65.4%

%lamp = 65.4%

Conical surface Flux(120deg): 2371 lm

%lum = 90.0%

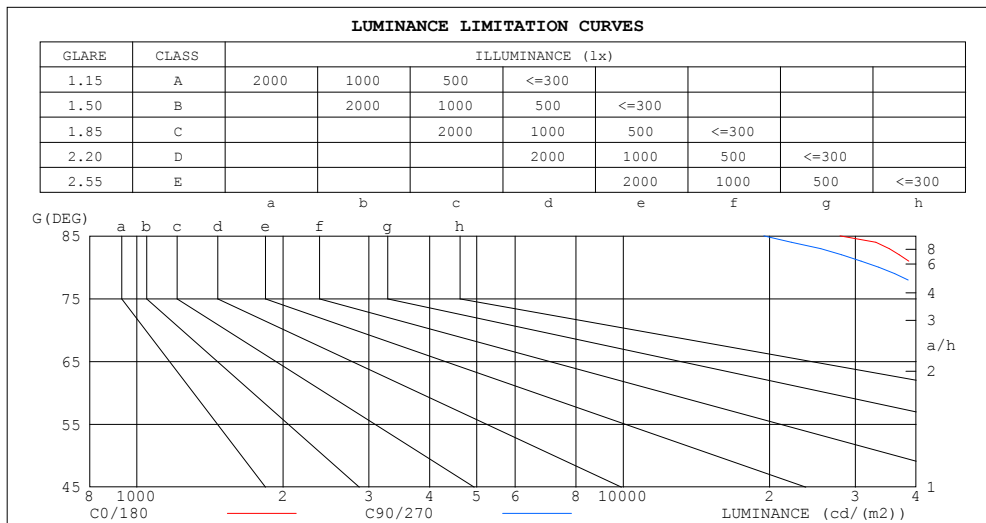
%lamp = 90.0%

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:AE  
 Test Date:2020-05-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
 Humidity:65.0%  
 Test Distance:7.240m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

Test:U:225.0V I:0.1640A P:35.30W PF:0.9530 Freq:50.00Hz Lamp Flux:2634.05x1 lm		
NAME: ALT85D-35G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	27906	19474
80	40540	33550
75	52083	44346
70	69374	51672
65	97907	58161
60	139026	63501
55	187845	66686
50	239234	69446
45	291294	75505

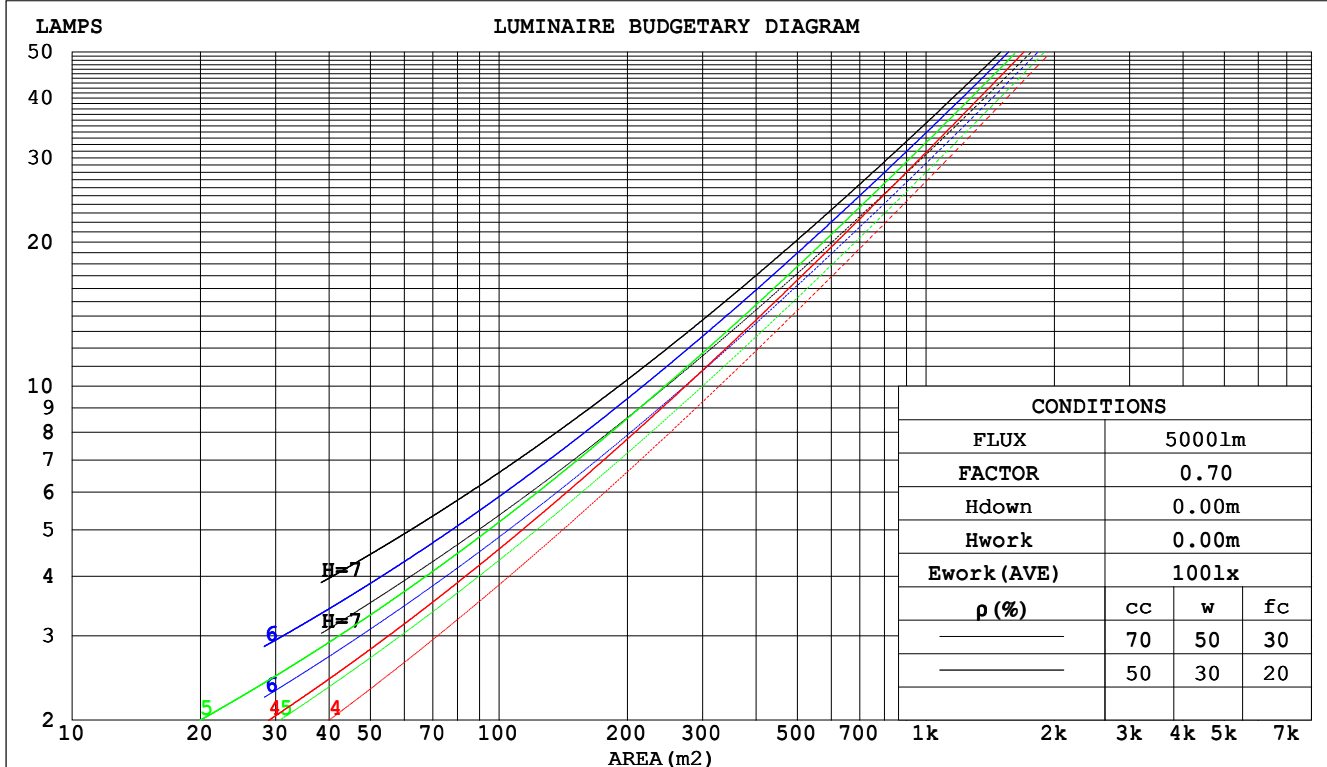
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-05-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:7.240m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:225.0V I:0.1640A P:35.30W PF:0.9530 Freq:50.00Hz Lamp Flux:2634.05x1 lm		
NAME: ALT85D-35G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	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	1.06	1.03	.00	1.04	1.01	.98	1.00	.97	.95	.96	.94	.92	.93	.91	.89	.87
2.0	.94	.89	.83	.93	.87	.83	.89	.85	.81	.86	.82	.79	.83	.80	.77	.75
3.0	.84	.77	.71	.82	.76	.70	.80	.74	.69	.77	.72	.68	.74	.70	.67	.65
4.0	.75	.67	.61	.74	.66	.60	.71	.65	.59	.69	.63	.59	.67	.62	.58	.56
5.0	.67	.59	.53	.66	.58	.52	.64	.57	.52	.62	.56	.51	.60	.55	.51	.49
6.0	.61	.52	.46	.60	.52	.46	.58	.51	.45	.56	.50	.45	.55	.49	.45	.43
7.0	.55	.46	.41	.54	.46	.40	.53	.45	.40	.51	.45	.40	.50	.44	.40	.38
8.0	.50	.42	.36	.49	.41	.36	.48	.41	.36	.47	.40	.36	.46	.40	.35	.34
9.0	.46	.38	.32	.45	.37	.32	.44	.37	.32	.43	.36	.32	.42	.36	.32	.30
10.0	.42	.34	.29	.41	.34	.29	.40	.34	.29	.40	.33	.29	.39	.33	.29	.27



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:AE  
 Test Date:2020-05-28

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
 Humidity:65.0%  
 Test Distance:7.240m [K=1.0000]  
 Remarks:

### WEC AND CCEC

Test:U:225.0V I:0.1640A P:35.30W PF:0.9530 Freq:50.00Hz Lamp Flux:2634.05x1 lm					
NAME: ALT85D-35G30-S			TYPE:		WEIGHT:
SPEC.:			DIM.:		SERIAL No.:
MFR.:			SUR.:72		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 Coeffcients(WEC)										
0.0																	
1.0	.260	.148	.047	.253	.144	.046	.240	.138	.044	.228	.131	.042	.217	.126	.041		
2.0	.253	.139	.043	.247	.136	.042	.236	.131	.041	.225	.126	.040	.216	.122	.038		
3.0	.241	.128	.038	.235	.126	.038	.225	.122	.037	.216	.118	.036	.207	.115	.036		
4.0	.227	.118	.035	.222	.116	.034	.213	.113	.034	.205	.110	.033	.197	.107	.033		
5.0	.213	.109	.031	.209	.107	.031	.201	.105	.031	.194	.102	.030	.187	.100	.030		
6.0	.200	.101	.029	.197	.099	.029	.190	.097	.028	.183	.095	.028	.177	.093	.028		
7.0	.189	.093	.026	.185	.092	.026	.179	.091	.026	.173	.089	.026	.168	.087	.026		
8.0	.178	.087	.024	.175	.086	.024	.169	.085	.024	.164	.083	.024	.159	.082	.024		
9.0	.168	.081	.023	.165	.081	.023	.160	.079	.022	.155	.078	.022	.151	.077	.022		
10.0	.159	.076	.021	.157	.076	.021	.152	.074	.021	.148	.073	.021	.143	.072	.021		

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	.177	.157	.138	.151	.134	.119	.103	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.167	.132	.103	.143	.114	.089	.098	.079	.062	.057	.046	.036	.018	.015	.012	
3.0	.159	.114	.078	.136	.098	.068	.093	.068	.048	.054	.040	.028	.017	.013	.009	
4.0	.151	.100	.062	.130	.087	.054	.089	.061	.038	.052	.035	.022	.017	.012	.007	
5.0	.144	.090	.050	.124	.078	.043	.085	.054	.031	.049	.032	.018	.016	.010	.006	
6.0	.138	.081	.041	.118	.071	.036	.082	.049	.025	.047	.029	.015	.015	.009	.005	
7.0	.132	.075	.035	.113	.065	.030	.078	.045	.021	.045	.027	.013	.015	.009	.004	
8.0	.126	.069	.030	.108	.060	.026	.075	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.120	.064	.026	.104	.055	.023	.072	.039	.016	.042	.023	.010	.014	.008	.003	
10.0	.115	.060	.023	.099	.052	.020	.069	.036	.014	.040	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-05-28

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:7.240m [K=1.0000]  
Remarks:

## UGR(Unified Glare Rating) Table

Test:U:225.0V I:0.1640A P:35.30W PF:0.9530 Freq:50.00Hz Lamp Flux:2634.05x1 lm											
NAME: ALT85D-35G30-S						TYPE:		WEIGHT:			
SPEC.:						DIM.:		SERIAL No.:			
MFR.:						SUR.:72		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		28.8	30.2	29.1	30.4	30.6	25.6	27.1	25.9	27.2	27.4
	3H	29.0	30.3	29.2	30.5	30.7	25.9	27.2	26.2	27.4	27.7
	4H	29.0	30.2	29.3	30.4	30.7	26.0	27.2	26.3	27.5	27.7
	6H	28.9	30.1	29.2	30.3	30.6	26.0	27.2	26.3	27.4	27.7
	8H	28.9	30.0	29.2	30.3	30.6	26.0	27.1	26.3	27.4	27.7
	12H	28.9	29.9	29.2	30.2	30.5	26.0	27.0	26.3	27.3	27.6
4H	2H	29.0	30.2	29.3	30.5	30.7	26.5	27.7	26.8	28.0	28.2
	3H	29.3	30.3	29.6	30.6	30.9	26.9	28.0	27.3	28.3	28.6
	4H	29.3	30.3	29.7	30.6	30.9	27.1	28.0	27.4	28.3	28.7
	6H	29.3	30.2	29.7	30.5	30.9	27.1	28.0	27.5	28.3	28.7
	8H	29.3	30.1	29.7	30.4	30.8	27.1	27.9	27.5	28.3	28.6
	12H	29.3	30.0	29.7	30.4	30.8	27.1	27.8	27.5	28.2	28.6
8H	4H	29.3	30.1	29.7	30.4	30.8	27.1	27.9	27.5	28.3	28.7
	6H	29.3	30.0	29.8	30.4	30.8	27.3	27.9	27.7	28.3	28.7
	8H	29.3	29.9	29.8	30.3	30.8	27.3	27.9	27.8	28.3	28.7
	12H	29.3	29.8	29.8	30.3	30.7	27.3	27.8	27.8	28.2	28.7
12H	4H	29.2	30.0	29.7	30.3	30.7	27.1	27.8	27.5	28.2	28.6
	6H	29.3	29.9	29.8	30.3	30.7	27.3	27.8	27.7	28.3	28.7
	8H	29.3	29.8	29.8	30.2	30.7	27.3	27.8	27.8	28.2	28.7
Variations with the observer position at spacings:											
S = 1.0H	+ 1.0 / - 1.1					+ 1.3 / - 1.0					
1.5H	+ 0.5 / - 1.0					+ 1.8 / - 2.3					
2.0H	+ 1.3 / - 2.3					+ 2.6 / - 2.8					

CIE Pub.117, 2634 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.4)

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-05-28

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:7.240m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:225.0V I:0.1640A P:35.30W PF:0.9530 Freq:50.00Hz Lamp Flux:2634.05x1 lm		
NAME: ALT85D-35G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:

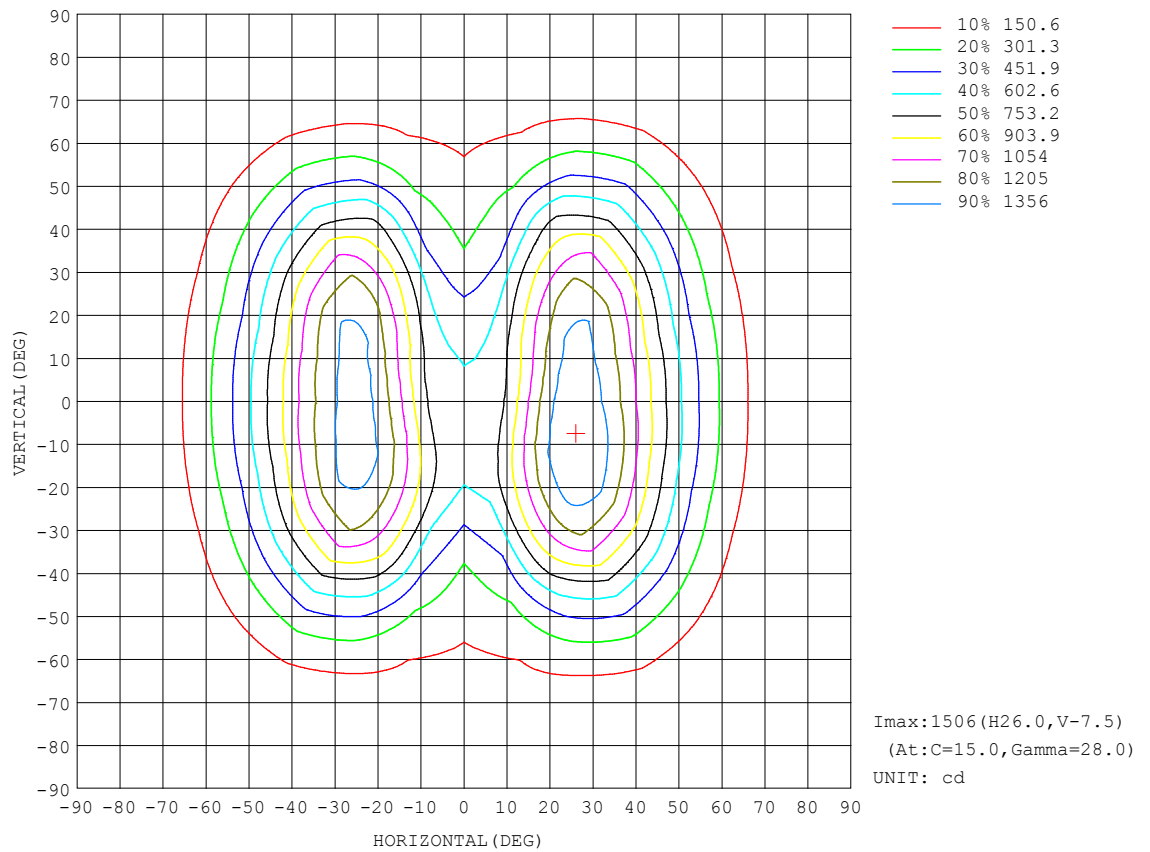
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	62	51	45	62	51	45	60	51	45	39
0.80	73	62	56	72	62	56	70	61	55	49
1.00	82	72	65	80	71	65	78	72	65	58
1.25	89	80	73	87	79	73	85	77	72	66
1.50	93	85	79	92	84	78	89	82	77	71
2.00	99	92	87	98	91	86	94	89	85	78
2.50	103	96	91	101	95	90	97	92	88	81
3.00	105	100	95	103	98	94	100	95	92	84
4.00	109	104	100	106	102	99	102	99	96	88
5.00	111	107	103	108	105	102	104	101	98	90
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:2020-05-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:7.240m [K=1.0000]  
Remarks:

## ISOCANDELA DIAGRAM

Test:U:225.0V I:0.1640A P:35.30W PF:0.9530 Freq:50.00Hz Lamp Flux:2634.05x1 lm		
NAME: ALT85D-35G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:



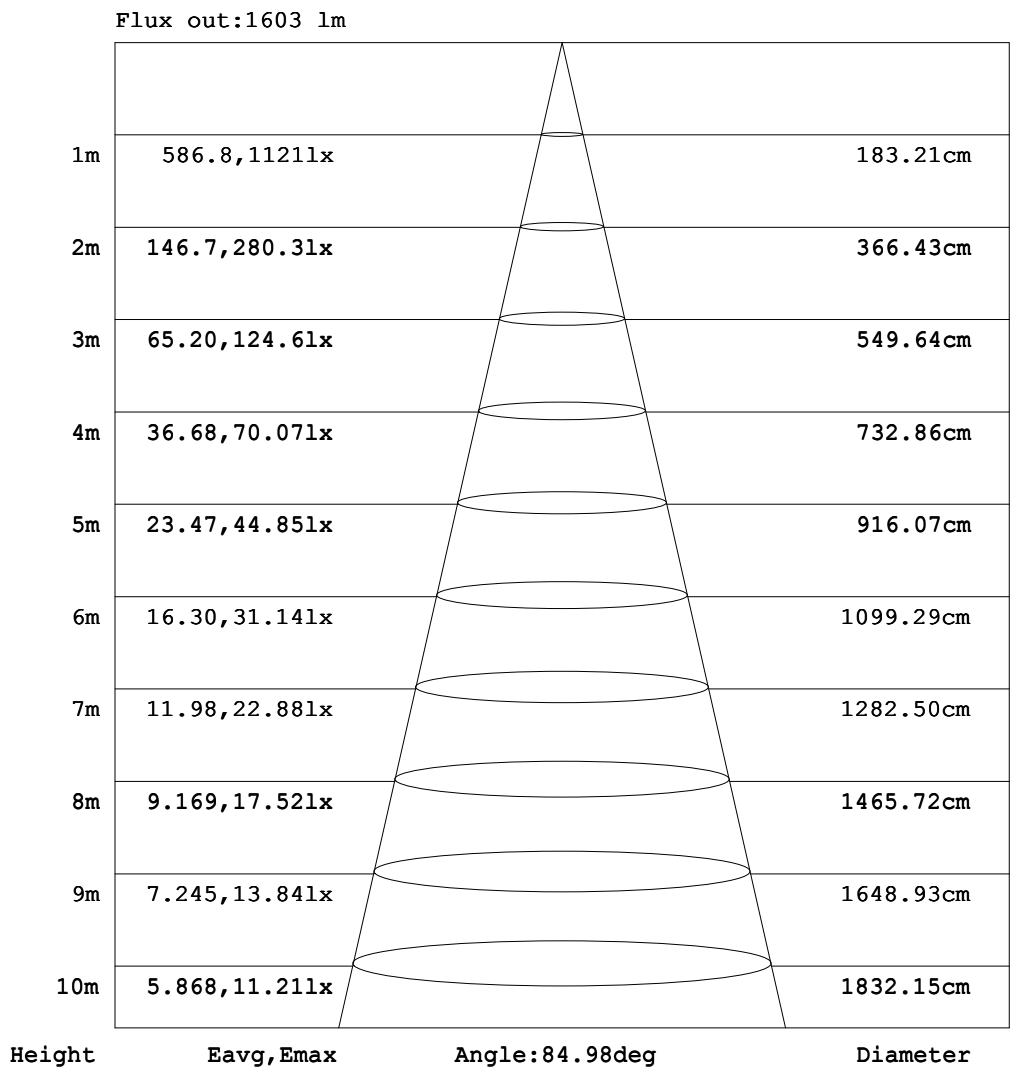
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-05-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:7.240m [K=1.0000]  
Remarks:



### AAI Figure

Test:U:225.0V I:0.1640A P:35.30W PF:0.9530 Freq:50.00Hz Lamp Flux:2634.05x1 lm		
NAME: ALT85D-35G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:



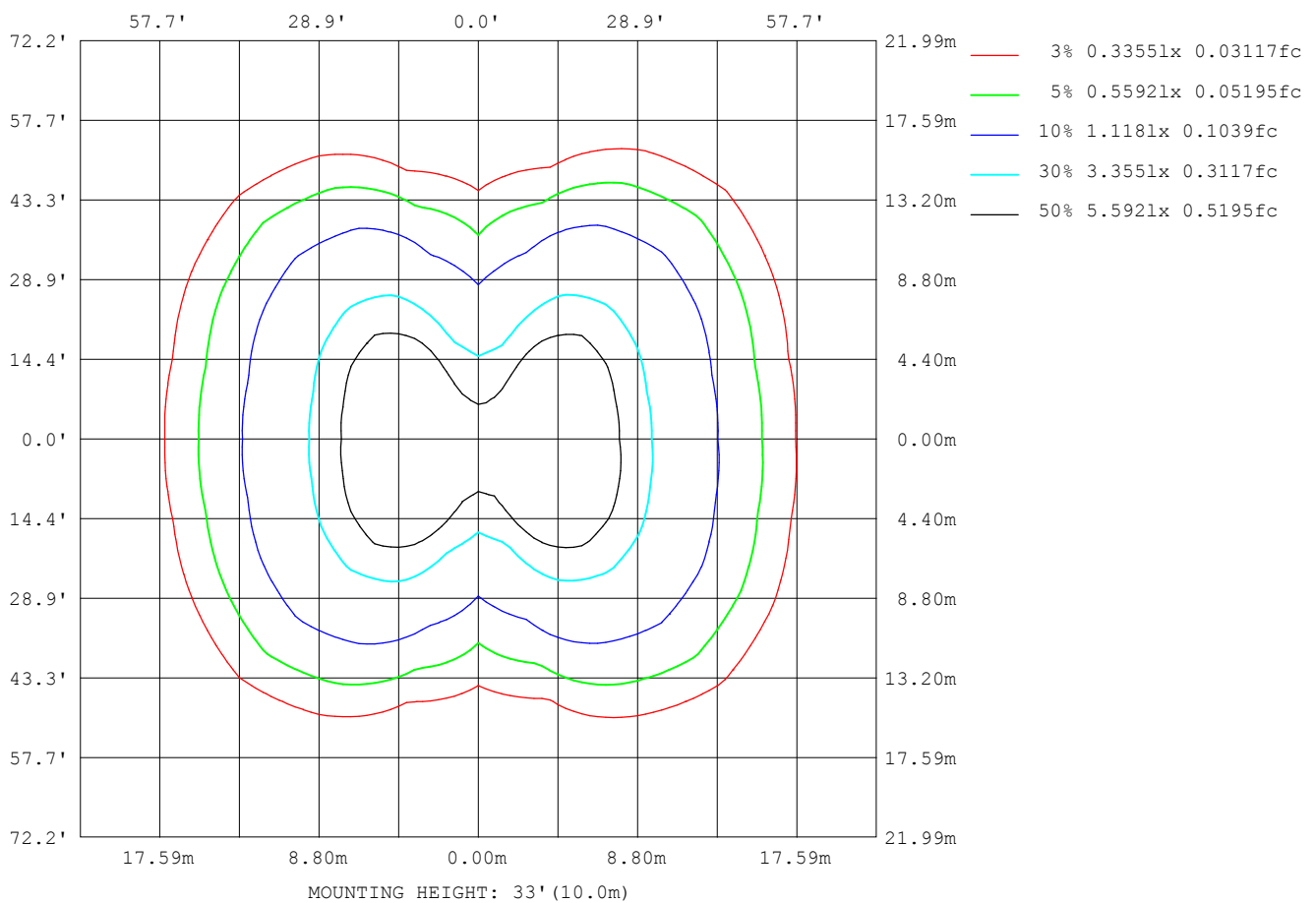
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: AE  
 Test Date: 2020-05-28

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
 Humidity: 65.0%  
 Test Distance: 7.240m [K=1.0000]  
 Remarks:

### ISOLUX DIAGRAM

Test:U:225.0V I:0.1640A P:35.30W PF:0.9530 Freq:50.00Hz Lamp Flux:2634.05x1 lm		
NAME: ALT85D-35G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-05-28

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:7.240m [K=1.0000]  
Remarks:

## LED Avg.L Report

Test:U:225.0V I:0.1640A P:35.30W PF:0.9530 Freq:50.00Hz Lamp Flux:2634.05x1 lm		
NAME: ALT85D-35G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:

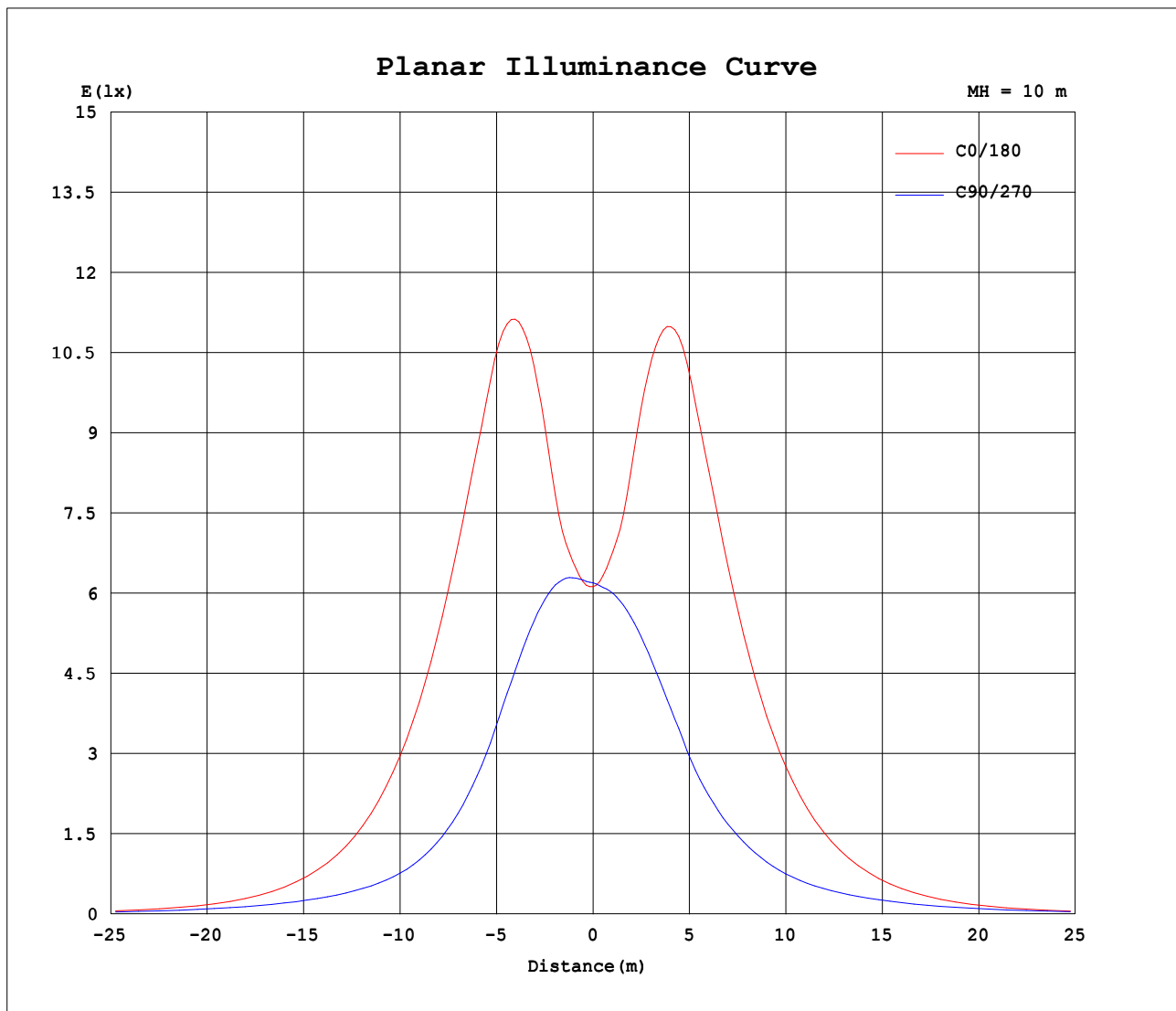
AvgL	cd/m2
L_0~180 (65) av	95670
L_0~180 (75) av	49991
L_0~180 (85) av	22424
L_90~270 (65) av	59761
L_90~270 (75) av	45184
L_90~270 (85) av	18079
L_45 (65) av	145319
L_45 (75) av	66245
L_45 (85) av	24099

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:AE  
 Test Date:2020-05-28

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
 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: 2020-05-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
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 V2.0.265
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 V2.0.265
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

```