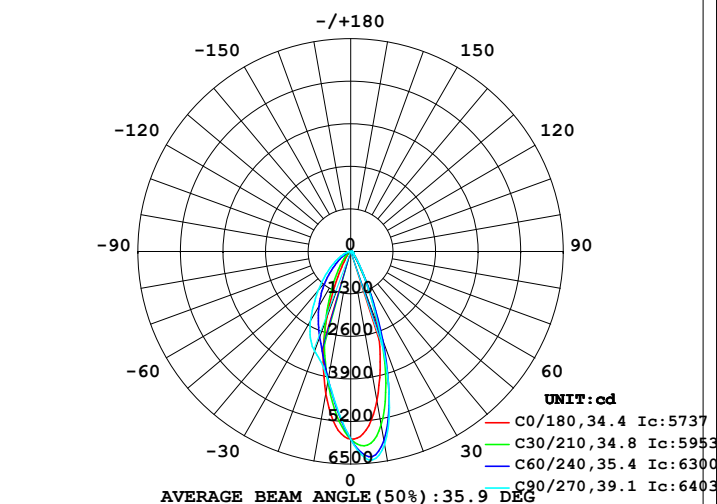


## LUMINAIRE PHOTOMETRIC TEST REPORT

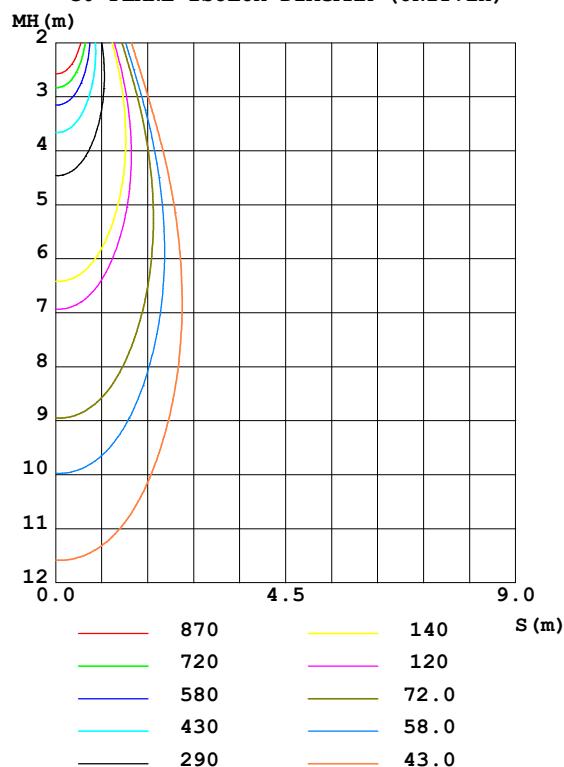
Test:U:225.1V I:0.1890A P:41.20W PF:0.9680 Freq:50.00Hz Lamp Flux:3410.47x1 lm		
NAME: ALT85W-40G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 82.78 lm/W
MODEL	3000K CRI90	I <sub>max</sub> (cd)	6427	S/MH(C0/180)	0.55	
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH(C90/270)	0.65	
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	3410.5	η UP,DN(C0-180)	0.0,41.2	
NOMINAL FLUX(lm)	3410.47	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,58.8	
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: 2020-05-28

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	4623	5701	5980	5411	4398	3974	3995	4078	0- 10	502.2	502.2	14.7,14.7
20	2386	2939	2605	2582	2128	2444	3237	2656	10- 20	1021	1523	44.7,44.7
30	710.2	690.2	716.2	574.7	564.2	1385	2466	1607	20- 30	795.0	2318	68,68
40	242.0	194.0	235.4	171.5	202.4	703.7	1536	845.1	30- 40	480.2	2799	82.1,82.1
50	125.1	95.58	110.5	89.44	110.7	293.2	871.4	358.9	40- 50	294.7	3093	90.7,90.7
60	65.42	54.77	66.59	52.41	60.02	125.0	445.1	146.2	50- 60	170.1	3263	95.7,95.7
70	35.02	33.15	47.02	31.80	32.68	56.57	191.6	63.88	60- 70	92.64	3356	98.4,98.4
80	16.43	15.77	21.47	13.83	13.58	19.07	52.48	22.03	70- 80	43.30	3399	99.7,99.7
90	3.597	5.186	7.315	5.858	2.927	2.746	2.475	2.457	80- 90	11.16	3410	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): 2964.9 lm

%lum = 86.9%

%lamp = 86.9%

Conical surface Flux(120deg): 3263.4 lm

%lum = 95.7%

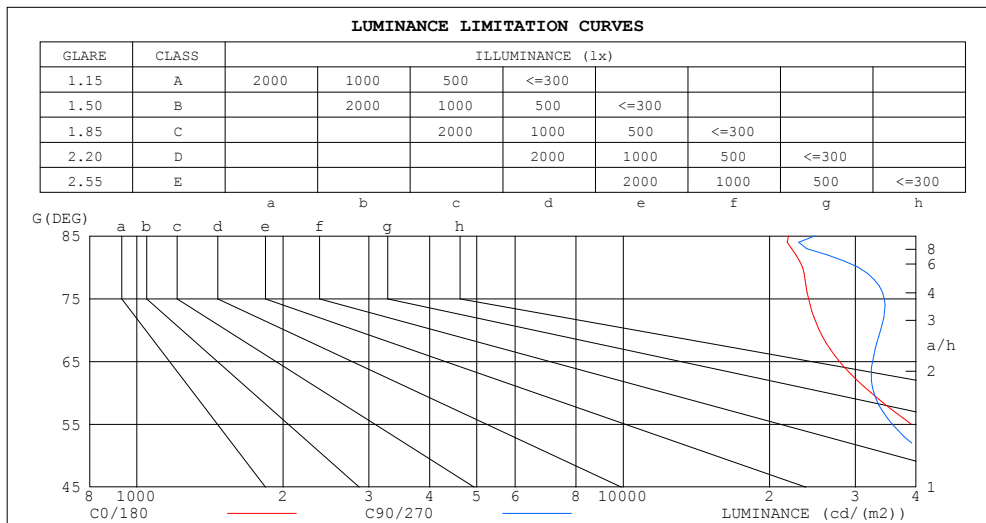
%lamp = 95.7%

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:225.1V I:0.1890A P:41.20W PF:0.9680 Freq:50.00Hz Lamp Flux:3410.47x1 lm		
NAME: ALT85W-40G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	21855	24805
80	23376	30415
75	24062	34428
70	25295	33817
65	27842	32560
60	32322	32760
55	39051	35732
50	48068	42294
45	59308	54104

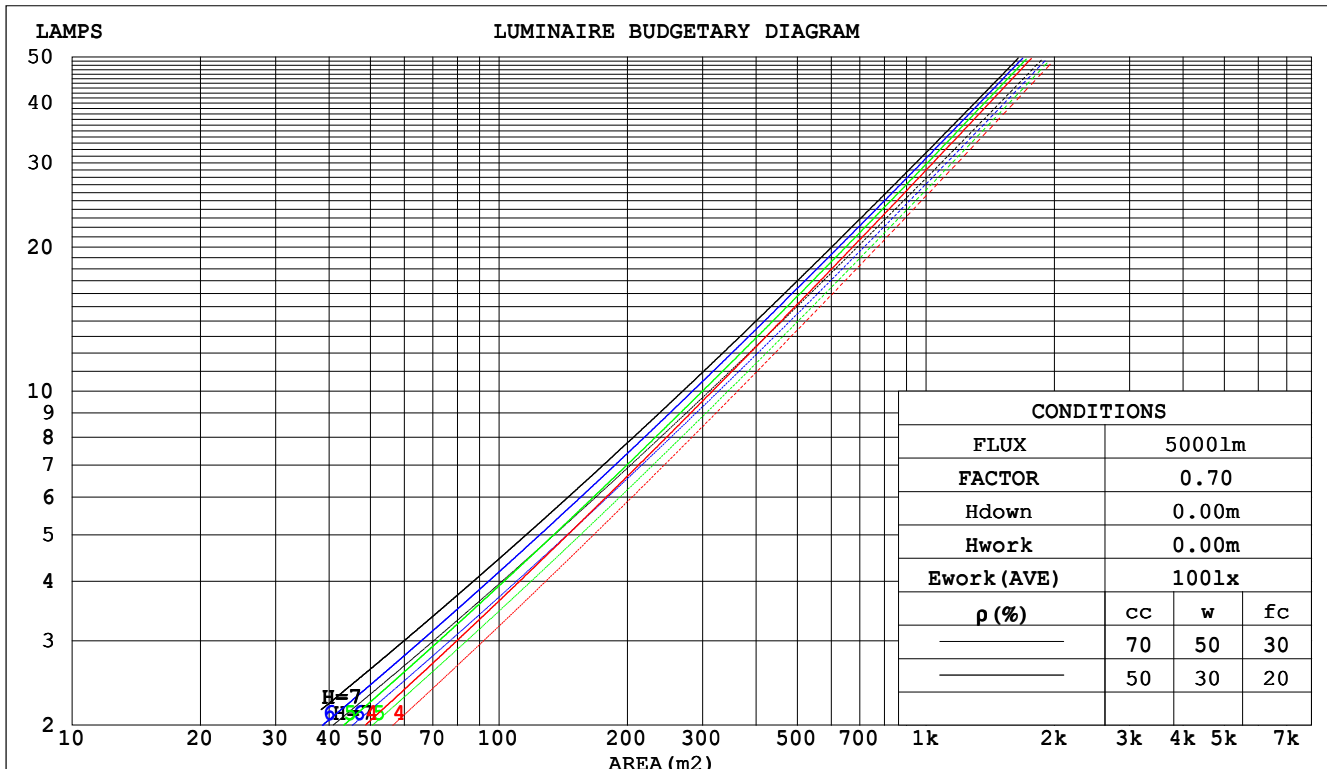
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-05-28

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:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:225.1V I:0.1890A P:41.20W PF:0.9680 Freq:50.00Hz Lamp Flux:3410.47x1 lm		
NAME: ALT85W-40G30-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	.00
1.0	1.10	1.07	1.05	1.08	1.05	1.03	1.04	1.02	.00	.00	.98	.97	.96	.95	.94	.92
2.0	1.02	.97	.94	.00	.96	.93	.97	.93	.90	.94	.91	.89	.91	.89	.87	.85
3.0	.94	.89	.85	.93	.88	.84	.90	.86	.83	.88	.84	.81	.85	.83	.80	.78
4.0	.88	.82	.78	.87	.81	.77	.85	.80	.76	.83	.79	.75	.81	.77	.74	.73
5.0	.82	.76	.72	.81	.76	.71	.80	.75	.71	.78	.74	.70	.76	.73	.69	.68
6.0	.77	.71	.67	.77	.71	.67	.75	.70	.66	.74	.69	.66	.72	.68	.65	.64
7.0	.73	.67	.62	.72	.66	.62	.71	.66	.62	.70	.65	.62	.69	.64	.61	.60
8.0	.69	.63	.59	.68	.63	.59	.67	.62	.58	.66	.62	.58	.65	.61	.58	.56
9.0	.65	.59	.55	.65	.59	.55	.64	.59	.55	.63	.58	.55	.62	.58	.55	.53
10.0	.62	.56	.53	.62	.56	.52	.61	.56	.52	.60	.56	.52	.59	.55	.52	.51



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:225.1V I:0.1890A P:41.20W PF:0.9680 Freq:50.00Hz Lamp Flux:3410.47x1 lm									
NAME: ALT85W-40G30-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 Coefficients(WEC)									
0.0																
1.0	.194	.110	.035	.187	.107	.034	.175	.100	.032	.163	.094	.030	.152	.088	.028	
2.0	.185	.101	.031	.179	.099	.030	.168	.094	.029	.158	.089	.028	.149	.084	.027	
3.0	.174	.093	.028	.169	.091	.027	.160	.087	.026	.152	.083	.025	.144	.080	.025	
4.0	.164	.085	.025	.160	.084	.025	.152	.081	.024	.145	.078	.023	.138	.075	.023	
5.0	.155	.079	.023	.151	.078	.023	.144	.075	.022	.138	.073	.022	.132	.070	.021	
6.0	.146	.073	.021	.143	.072	.021	.137	.070	.020	.131	.068	.020	.126	.066	.020	
7.0	.139	.069	.019	.136	.068	.019	.130	.066	.019	.125	.064	.019	.121	.063	.018	
8.0	.132	.064	.018	.129	.064	.018	.124	.062	.018	.120	.061	.018	.116	.059	.017	
9.0	.125	.061	.017	.123	.060	.017	.119	.059	.017	.115	.058	.016	.111	.056	.016	
10.0	.120	.057	.016	.117	.057	.016	.114	.056	.016	.110	.055	.016	.107	.054	.015	

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	.172	.157	.144	.147	.135	.124	.101	.093	.085	.058	.054	.050	.019	.017	.016	
2.0	.158	.132	.111	.135	.114	.096	.093	.079	.067	.053	.046	.039	.017	.015	.013	
3.0	.146	.114	.088	.125	.098	.076	.086	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.136	.099	.071	.117	.086	.062	.080	.060	.043	.046	.035	.026	.015	.011	.008	
5.0	.127	.088	.058	.109	.076	.051	.075	.053	.036	.044	.031	.021	.014	.010	.007	
6.0	.119	.078	.049	.103	.068	.043	.071	.047	.030	.041	.028	.018	.013	.009	.006	
7.0	.113	.071	.041	.097	.061	.036	.067	.043	.026	.039	.025	.015	.013	.008	.005	
8.0	.107	.065	.036	.092	.056	.031	.064	.039	.022	.037	.023	.013	.012	.008	.004	
9.0	.101	.059	.031	.087	.051	.027	.060	.036	.019	.035	.021	.011	.011	.007	.004	
10.0	.096	.055	.027	.083	.048	.024	.058	.034	.017	.034	.020	.010	.011	.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:225.1V I:0.1890A P:41.20W PF:0.9680 Freq:50.00Hz Lamp Flux:3410.47x1 lm											
NAME: ALT85W-40G30-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		15.0	16.0	15.3	16.2	16.4	15.5	16.5	15.8	16.7	16.9
	3H	15.8	16.7	16.0	16.9	17.1	16.6	17.5	16.8	17.7	17.9
	4H	16.1	17.0	16.4	17.2	17.5	17.2	18.0	17.4	18.3	18.5
	6H	16.5	17.3	16.8	17.5	17.8	17.6	18.5	17.9	18.7	19.0
	8H	16.6	17.4	16.9	17.7	17.9	17.8	18.6	18.1	18.8	19.1
	12H	16.7	17.4	17.0	17.7	18.0	17.8	18.6	18.1	18.8	19.1
4H	2H	15.2	16.1	15.5	16.3	16.6	15.7	16.5	16.0	16.8	17.0
	3H	16.2	16.9	16.5	17.2	17.5	16.9	17.7	17.3	18.0	18.2
	4H	16.7	17.4	17.0	17.7	18.0	17.7	18.4	18.0	18.7	19.0
	6H	17.2	17.8	17.5	18.1	18.5	18.3	18.9	18.7	19.3	19.6
	8H	17.3	17.9	17.7	18.3	18.6	18.5	19.1	18.9	19.4	19.8
	12H	17.5	18.0	17.9	18.4	18.8	18.6	19.1	19.0	19.5	19.9
8H	4H	16.9	17.4	17.3	17.8	18.2	17.8	18.4	18.2	18.7	19.1
	6H	17.5	17.9	17.9	18.3	18.8	18.5	19.0	19.0	19.4	19.8
	8H	17.7	18.1	18.2	18.6	19.0	18.8	19.2	19.2	19.6	20.1
	12H	17.9	18.3	18.4	18.7	19.2	19.0	19.3	19.4	19.7	20.2
12H	4H	16.9	17.4	17.3	17.8	18.2	17.8	18.3	18.2	18.7	19.1
	6H	17.5	17.9	18.0	18.4	18.8	18.6	19.0	19.0	19.4	19.8
	8H	17.8	18.2	18.3	18.6	19.1	18.8	19.2	19.3	19.6	20.1
Variations with the observer position at spacings:											
S = 1.0H	+ 0.8 / - 0.5					+ 0.5 / - 0.5					
1.5H	+ 1.3 / - 0.5					+ 1.1 / - 0.4					
2.0H	+ 1.4 / - 0.7					+ 0.8 / - 0.5					

CIE Pub.117, 3410 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.3)

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:225.1V I:0.1890A P:41.20W PF:0.9680 Freq:50.00Hz Lamp Flux:3410.47x1 lm		
NAME: ALT85W-40G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:

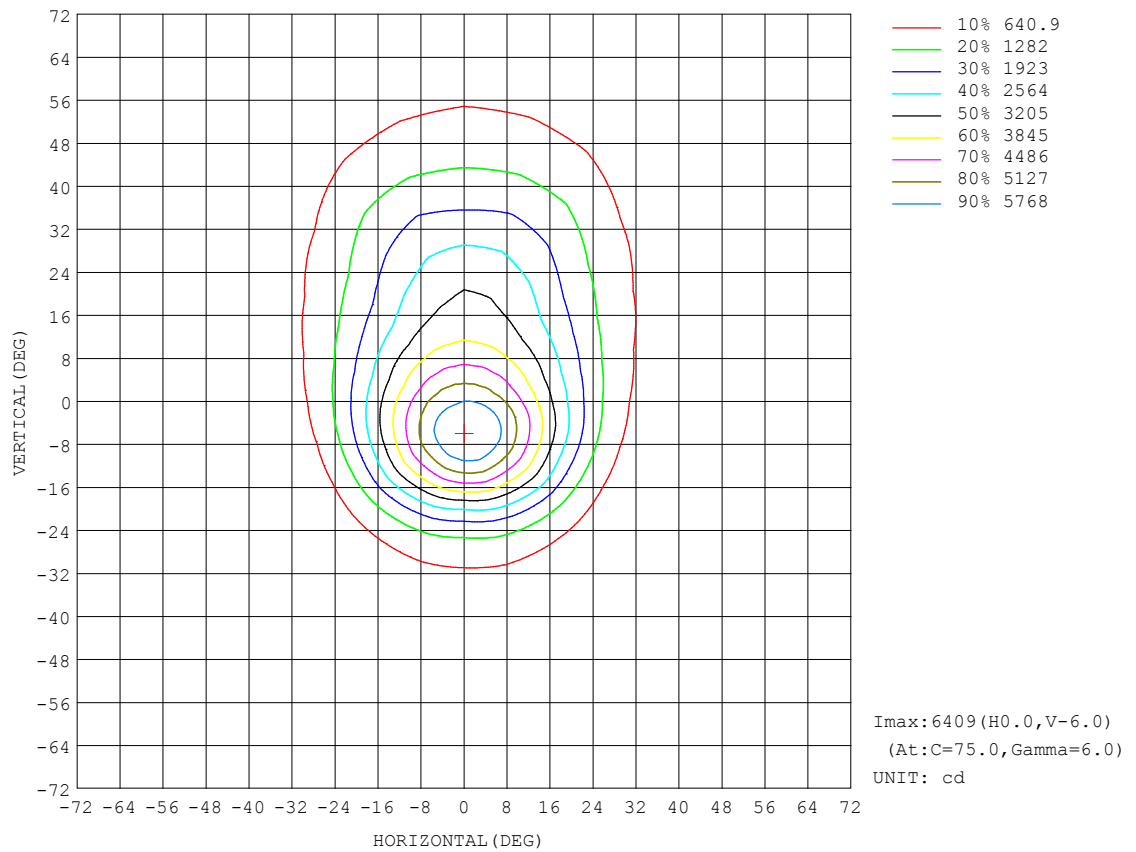
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	80	73	68	80	73	68	79	72	68	64
0.80	89	81	77	88	81	77	86	80	76	72
1.00	94	87	83	93	87	83	91	87	82	77
1.25	99	93	88	98	92	88	96	91	87	82
1.50	102	96	92	101	96	92	98	94	91	86
2.00	106	101	97	104	100	96	101	98	95	89
2.50	108	103	100	106	102	99	103	100	97	90
3.00	110	106	102	108	104	101	104	102	99	92
4.00	112	109	106	110	107	105	106	104	102	95
5.00	114	111	109	111	109	107	107	106	104	96
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:225.1V I:0.1890A P:41.20W PF:0.9680 Freq:50.00Hz Lamp Flux:3410.47x1 lm		
NAME: ALT85W-40G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:



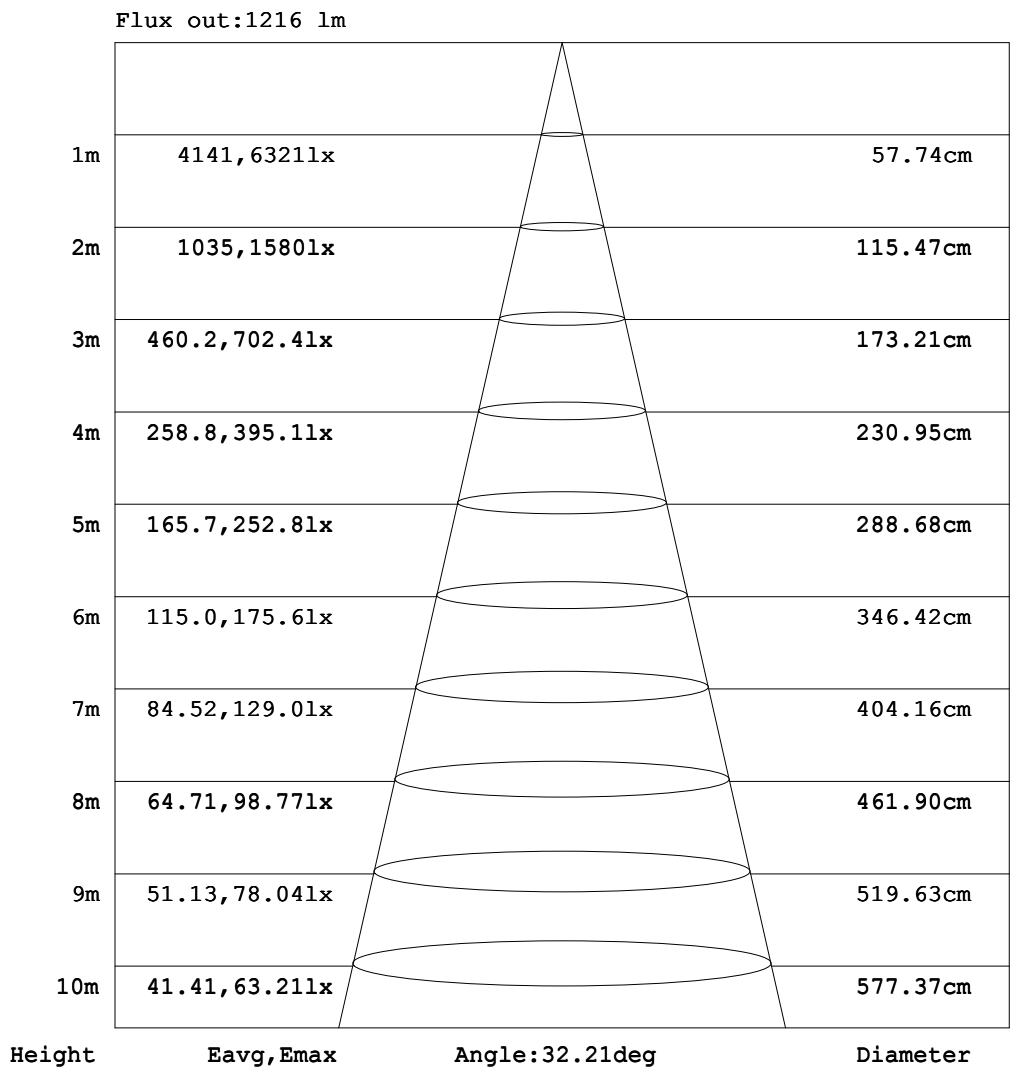
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: AE  
Test Date: 2020-05-28

$\gamma$  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:225.1V I:0.1890A P:41.20W PF:0.9680 Freq:50.00Hz Lamp Flux:3410.47x1 lm		
NAME: ALT85W-40G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:



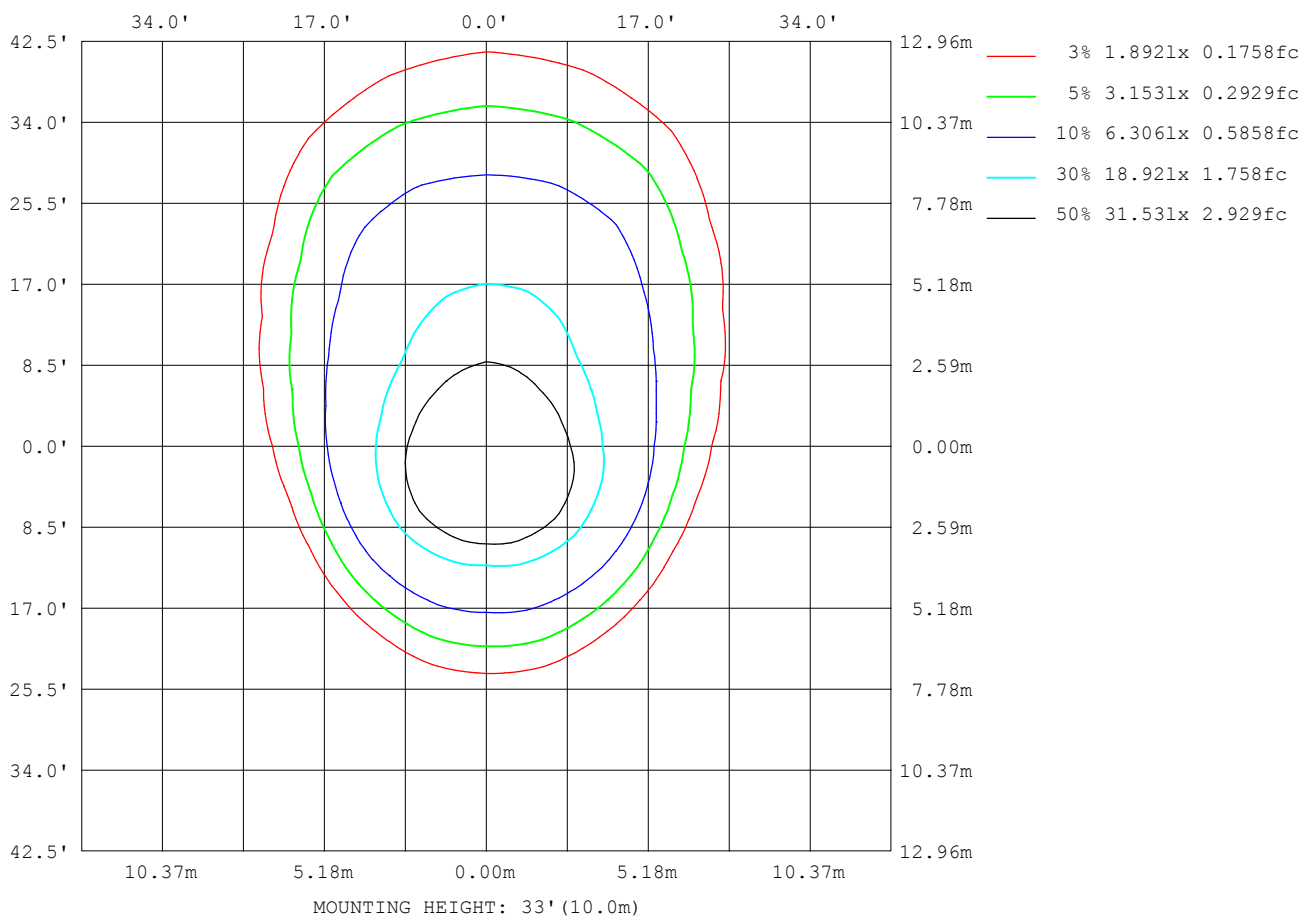
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:225.1V I:0.1890A P:41.20W PF:0.9680 Freq:50.00Hz Lamp Flux:3410.47x1 lm		
NAME: ALT85W-40G30-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:225.1V I:0.1890A P:41.20W PF:0.9680 Freq:50.00Hz Lamp Flux:3410.47x1 lm		
NAME: ALT85W-40G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:

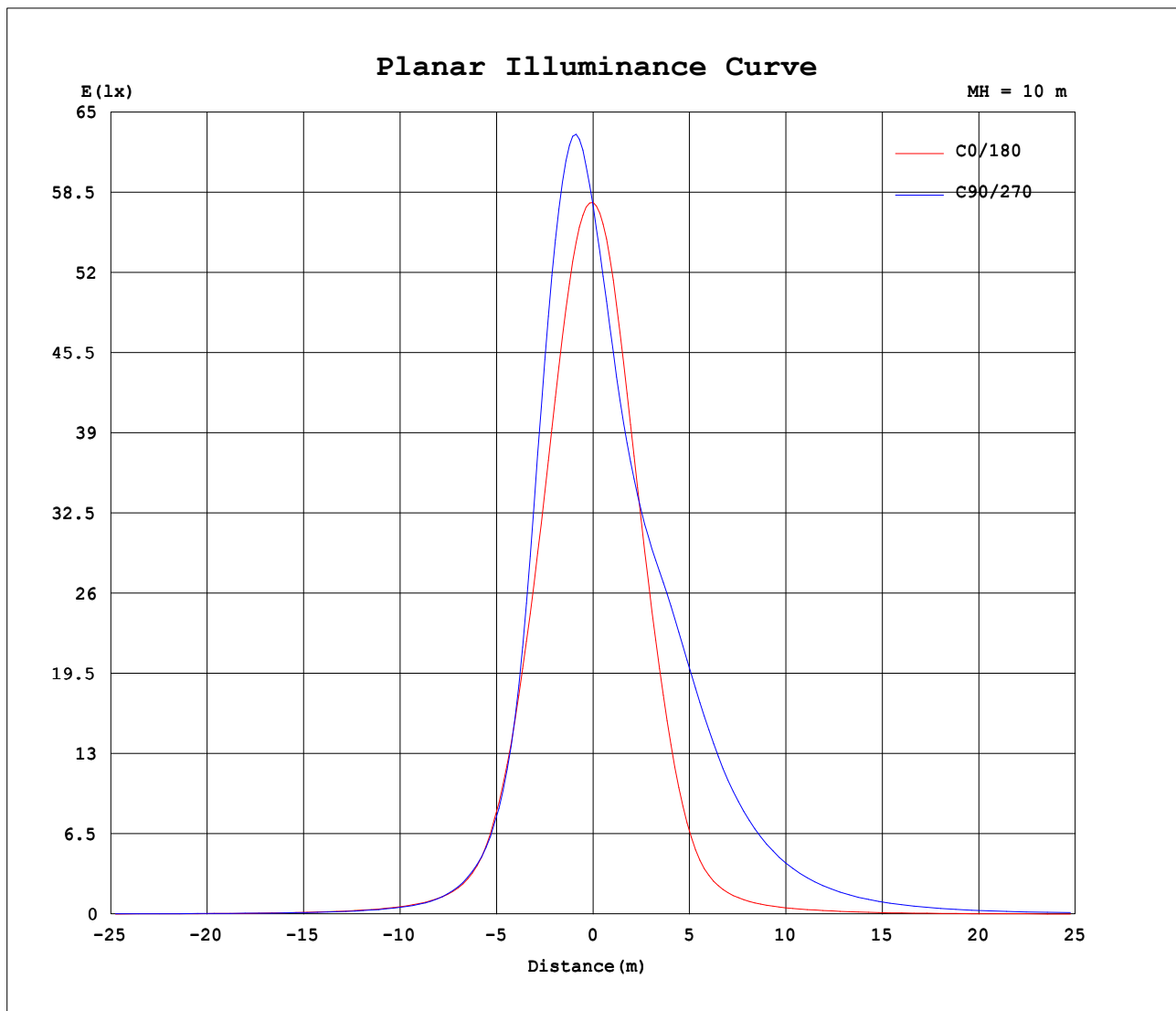
AvgL	cd/m2
L_0~180 (65) av	26708
L_0~180 (75) av	22869
L_0~180 (85) av	18361
L_90~270 (65) av	103880
L_90~270 (75) av	68850
L_90~270 (85) av	38348
L_45 (65) av	38445
L_45 (75) av	29356
L_45 (85) av	22159

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:

```