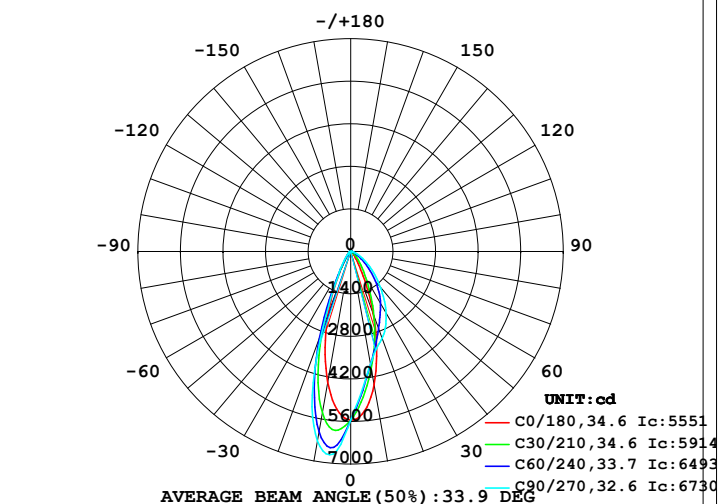


LUMINAIRE PHOTOMETRIC TEST REPORT

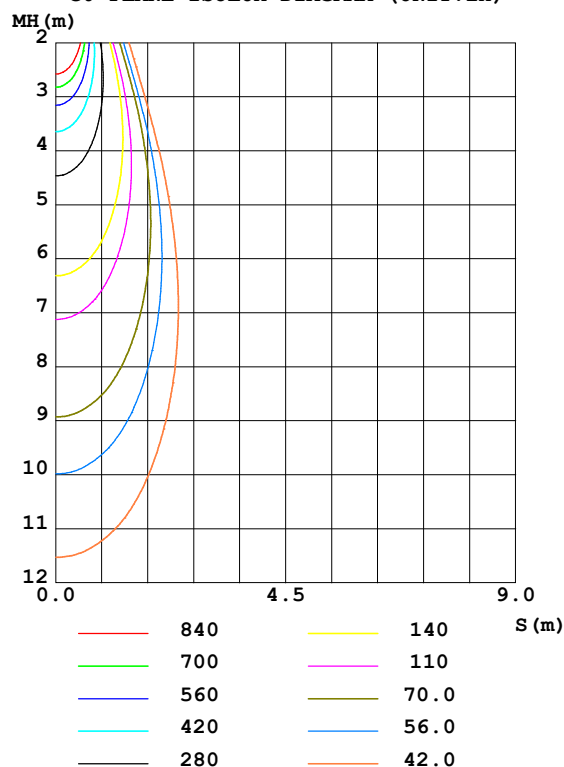
Test:U:225.0V I:0.1830A P:39.80W PF:0.9680 Freq:0Hz Lamp Flux:3380.26x1 lm		
NAME: ALT85-40G30-WF	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 84.93 lm/W
MODEL	3000K CRI90	I _{max} (cd)	6730	S/MH (C0/180)	0.57	
NOMINAL POWER (W)	40	LOR (%)	100.0	S/MH (C90/270)	0.59	
RATED VOLTAGE (V)	226	TOTAL FLUX (lm)	3380.3	η UP, DN (C0-180)	0.0, 57.7	
NOMINAL FLUX (lm)	3380.26	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 42.3	
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: 2020-06-16

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	4451	3820	3770	3831	4365	5695	6329	5803	0- 10	497.3	497.3	14.7,14.7
20	2182	2427	3040	2488	2166	2881	2688	3027	10- 20	1025	1523	45,45
30	595.4	1398	2331	1490	607.0	600.3	708.1	661.0	20- 30	779.0	2302	68.1,68.1
40	218.5	761.1	1514	820.5	218.8	175.0	246.5	183.1	30- 40	472.5	2774	82.1,82.1
50	115.5	330.2	870.4	366.0	115.9	87.34	105.1	89.03	40- 50	295.6	3070	90.8,90.8
60	61.04	130.5	432.7	149.0	63.82	51.17	58.85	50.88	50- 60	170.9	3241	95.9,95.9
70	31.10	55.70	176.3	63.84	33.49	29.53	36.23	28.61	60- 70	89.16	3330	98.5,98.5
80	13.19	18.61	46.56	21.30	14.54	13.99	18.70	13.46	70- 80	40.06	3370	99.7,99.7
90	3.449	3.119	3.391	3.750	2.616	4.466	6.094	4.716	80- 90	10.43	3380	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): 2940.4 lm

%lum = 87.0%

%lamp = 87.0%

Conical surface Flux(120deg): 3240.6 lm

%lum = 95.9%

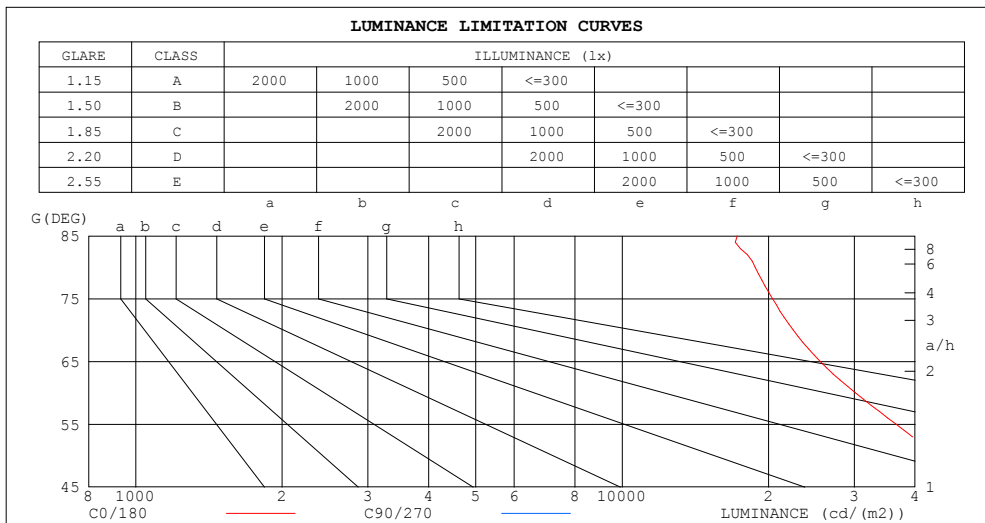
%lamp = 95.9%

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:225.0V I:0.1830A P:39.80W PF:0.9680 Freq:0Hz Lamp Flux:3380.26x1 lm		
NAME: ALT85-40G30-WF	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	17231	40916
80	18764	65546
75	20379	95049
70	22466	125975
65	25514	163408
60	30157	211541
55	36572	268166
50	44405	330988
45	54686	403173

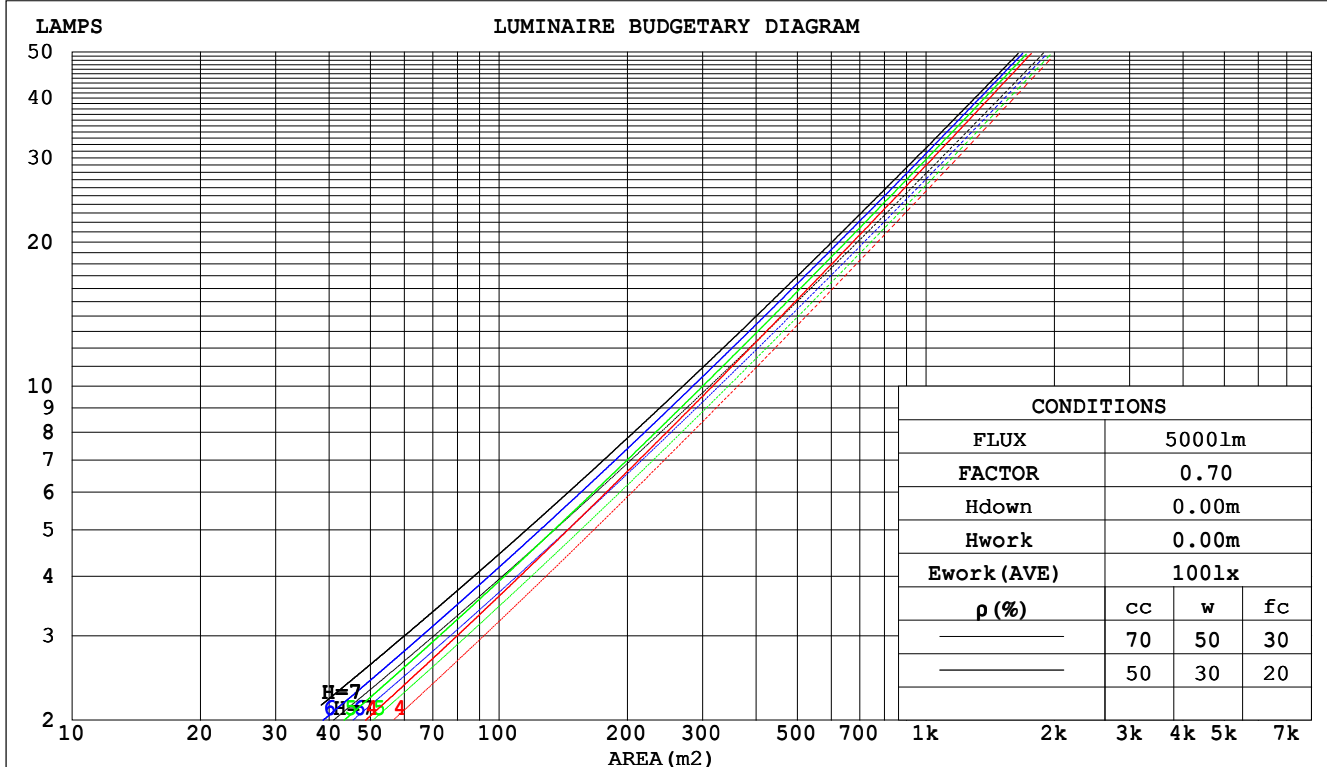
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-06-16

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:225.0V I:0.1830A P:39.80W PF:0.9680 Freq:0Hz Lamp Flux:3380.26x1 lm		
NAME: ALT85-40G30-WF	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	1.10	1.07	1.05	1.08	1.05	1.03	1.04	1.02	.00	.00	.98	.97	.97	.95	.94	.92
2.0	1.02	.97	.94	.00	.96	.93	.97	.93	.91	.94	.91	.89	.91	.89	.87	.85
3.0	.94	.89	.85	.93	.88	.84	.90	.86	.83	.88	.84	.82	.86	.83	.80	.79
4.0	.88	.82	.78	.87	.81	.77	.85	.80	.76	.83	.79	.75	.81	.77	.75	.73
5.0	.82	.76	.72	.81	.76	.72	.80	.75	.71	.78	.74	.70	.76	.73	.70	.68
6.0	.77	.71	.67	.77	.71	.67	.75	.70	.66	.74	.69	.66	.72	.68	.65	.64
7.0	.73	.67	.63	.72	.67	.62	.71	.66	.62	.70	.65	.62	.69	.65	.61	.60
8.0	.69	.63	.59	.68	.63	.59	.67	.62	.58	.66	.62	.58	.65	.61	.58	.57
9.0	.66	.60	.56	.65	.59	.55	.64	.59	.55	.63	.58	.55	.62	.58	.55	.54
10.0	.62	.57	.53	.62	.56	.53	.61	.56	.52	.60	.56	.52	.60	.55	.52	.51



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:225.0V I:0.1830A P:39.80W PF:0.9680 Freq:0Hz Lamp Flux:3380.26x1 lm								
NAME: ALT85-40G30-WF				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	.193	.110	.035	.187	.106	.034	.174	.100	.032	.162	.094	.030	.151	.088	.028	
2.0	.184	.101	.031	.178	.098	.030	.168	.093	.029	.158	.089	.028	.149	.084	.027	
3.0	.174	.092	.028	.169	.090	.027	.160	.087	.026	.151	.083	.025	.143	.079	.025	
4.0	.164	.085	.025	.160	.083	.025	.152	.080	.024	.144	.077	.023	.137	.075	.023	
5.0	.155	.079	.023	.151	.077	.023	.144	.075	.022	.137	.073	.022	.131	.070	.021	
6.0	.146	.073	.021	.143	.072	.021	.137	.070	.020	.131	.068	.020	.126	.066	.020	
7.0	.138	.068	.019	.136	.068	.019	.130	.066	.019	.125	.064	.019	.120	.063	.018	
8.0	.131	.064	.018	.129	.063	.018	.124	.062	.018	.120	.061	.017	.115	.059	.017	
9.0	.125	.061	.017	.123	.060	.017	.119	.059	.017	.115	.057	.016	.111	.056	.016	
10.0	.119	.057	.016	.117	.057	.016	.113	.056	.016	.110	.055	.016	.106	.053	.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	.032	.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	.063	.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:2020-06-16

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:225.0V I:0.1830A P:39.80W PF:0.9680 Freq:0Hz Lamp Flux:3380.26x1 lm											
NAME: ALT85-40G30-WF					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	18.8	19.8	19.1	20.0	20.2	27.7	28.7	27.9	28.9	29.0	
	3H	19.0	19.9	19.3	20.1	20.4	28.2	29.1	28.5	29.3	29.5
	4H	19.1	20.0	19.4	20.2	20.4	28.3	29.2	28.6	29.4	29.7
	6H	19.1	20.0	19.5	20.2	20.5	28.4	29.2	28.7	29.5	29.7
	8H	19.2	19.9	19.5	20.2	20.5	28.4	29.2	28.7	29.4	29.7
	12H	19.1	19.9	19.5	20.2	20.5	28.4	29.1	28.7	29.4	29.7
4H	2H	19.8	20.7	20.1	20.9	21.2	27.5	28.4	27.8	28.6	28.9
	3H	20.1	20.8	20.4	21.1	21.4	28.1	28.9	28.4	29.1	29.4
	4H	20.2	20.9	20.5	21.2	21.5	28.3	29.0	28.7	29.3	29.6
	6H	20.2	20.9	20.6	21.2	21.5	28.4	29.0	28.8	29.4	29.7
	8H	20.3	20.8	20.7	21.2	21.6	28.4	29.0	28.8	29.3	29.7
	12H	20.3	20.8	20.7	21.2	21.5	28.4	28.9	28.8	29.3	29.7
8H	4H	20.4	21.0	20.8	21.4	21.7	28.2	28.8	28.6	29.1	29.5
	6H	20.6	21.0	21.0	21.4	21.8	28.3	28.8	28.8	29.2	29.6
	8H	20.6	21.0	21.0	21.4	21.9	28.3	28.8	28.8	29.2	29.6
	12H	20.6	21.0	21.1	21.4	21.9	28.3	28.7	28.8	29.1	29.6
12H	4H	20.4	21.0	20.9	21.3	21.7	28.1	28.7	28.6	29.0	29.4
	6H	20.6	21.0	21.0	21.4	21.9	28.3	28.7	28.7	29.1	29.5
	8H	20.7	21.0	21.1	21.4	21.9	28.3	28.7	28.8	29.1	29.6
Variations with the observer position at spacings:											
S = 1.0H	+ 1.4 / - 1.9					+ 0.8 / - 1.0					
1.5H	+ 1.8 / - 1.6					+ 1.2 / - 2.3					
2.0H	+ 1.8 / - 1.7					+ 2.5 / - 3.6					

CIE Pub.117, 3380 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 4.2$)

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:225.0V I:0.1830A P:39.80W PF:0.9680 Freq:0Hz Lamp Flux:3380.26x1 lm		
NAME: ALT85-40G30-WF	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:

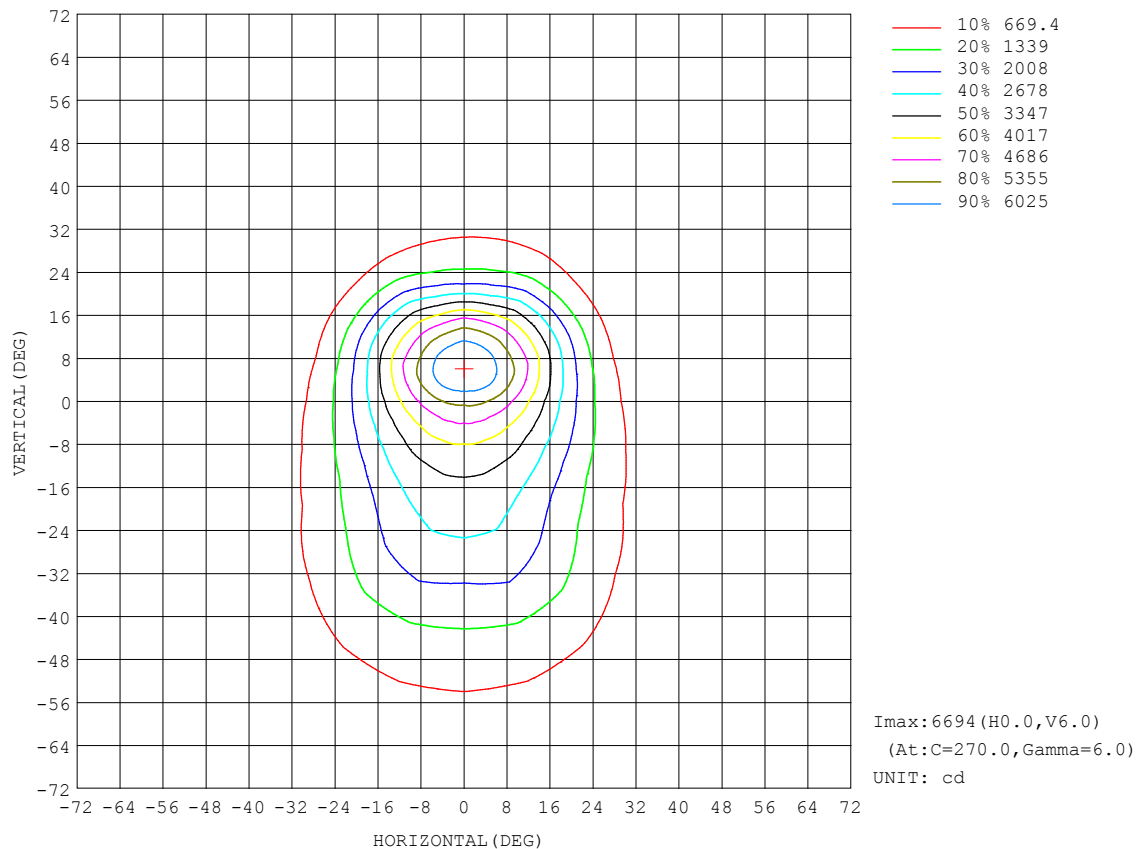
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	80	73	68	80	72	68	79	72	68	64
0.80	89	81	77	88	81	77	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	91
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	112	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:2020-06-16

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:225.0V I:0.1830A P:39.80W PF:0.9680 Freq:0Hz Lamp Flux:3380.26x1 lm		
NAME: ALT85-40G30-WF	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:

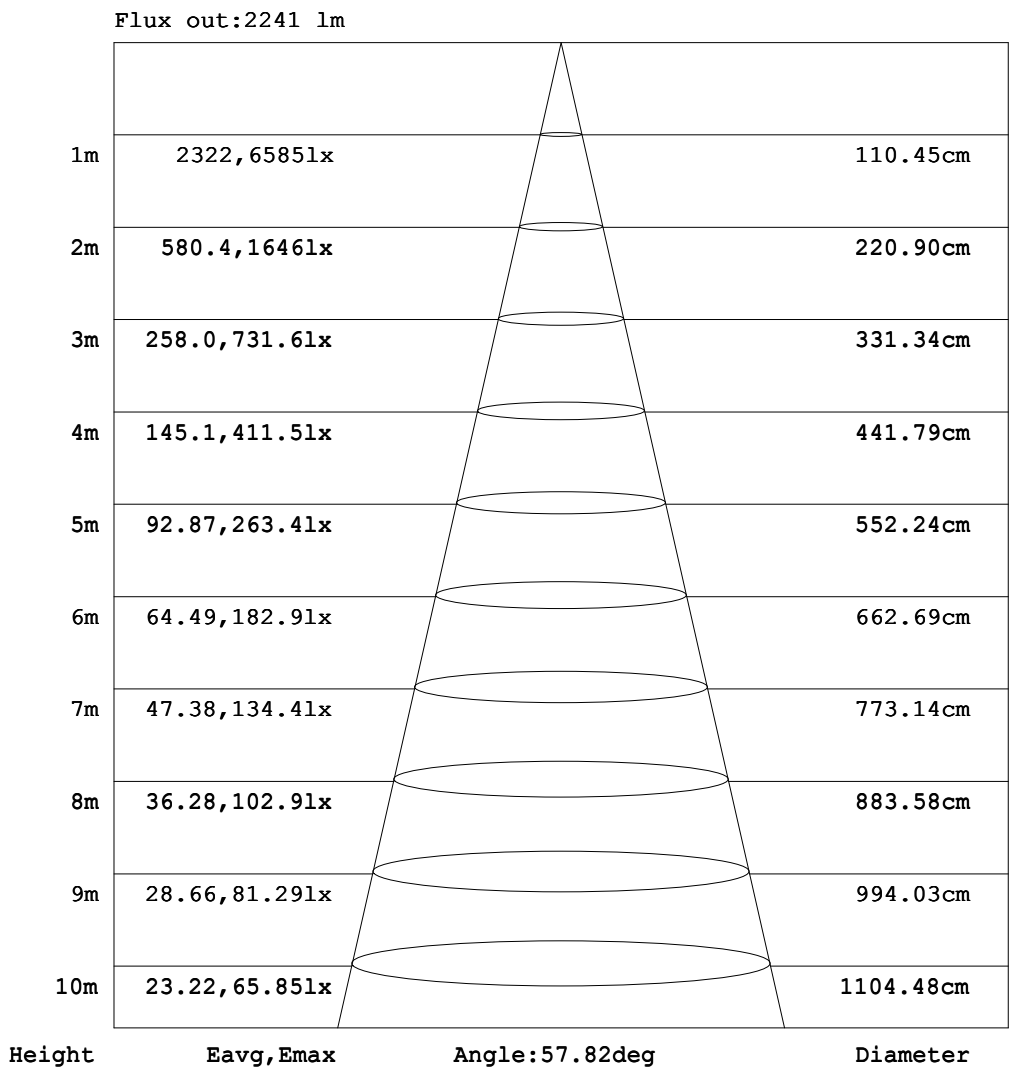


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-06-16

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:225.0V I:0.1830A P:39.80W PF:0.9680 Freq:0Hz Lamp Flux:3380.26x1 lm		
NAME: ALT85-40G30-WF	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:



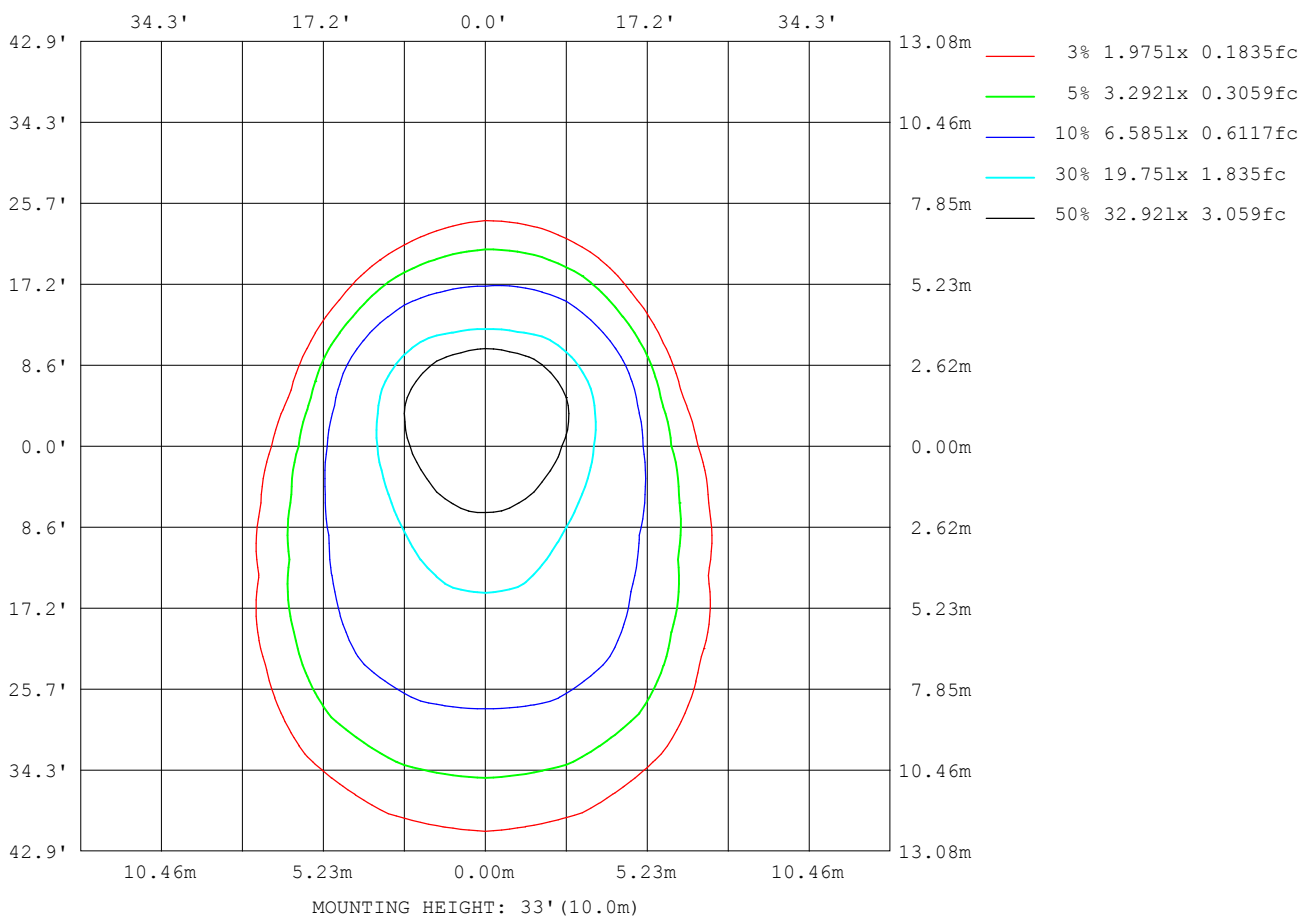
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

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:225.0V I:0.1830A P:39.80W PF:0.9680 Freq:0Hz Lamp Flux:3380.26x1 lm		
NAME: ALT85-40G30-WF	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:2020-06-16

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:225.0V I:0.1830A P:39.80W PF:0.9680 Freq:0Hz Lamp Flux:3380.26x1 lm		
NAME: ALT85-40G30-WF	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:

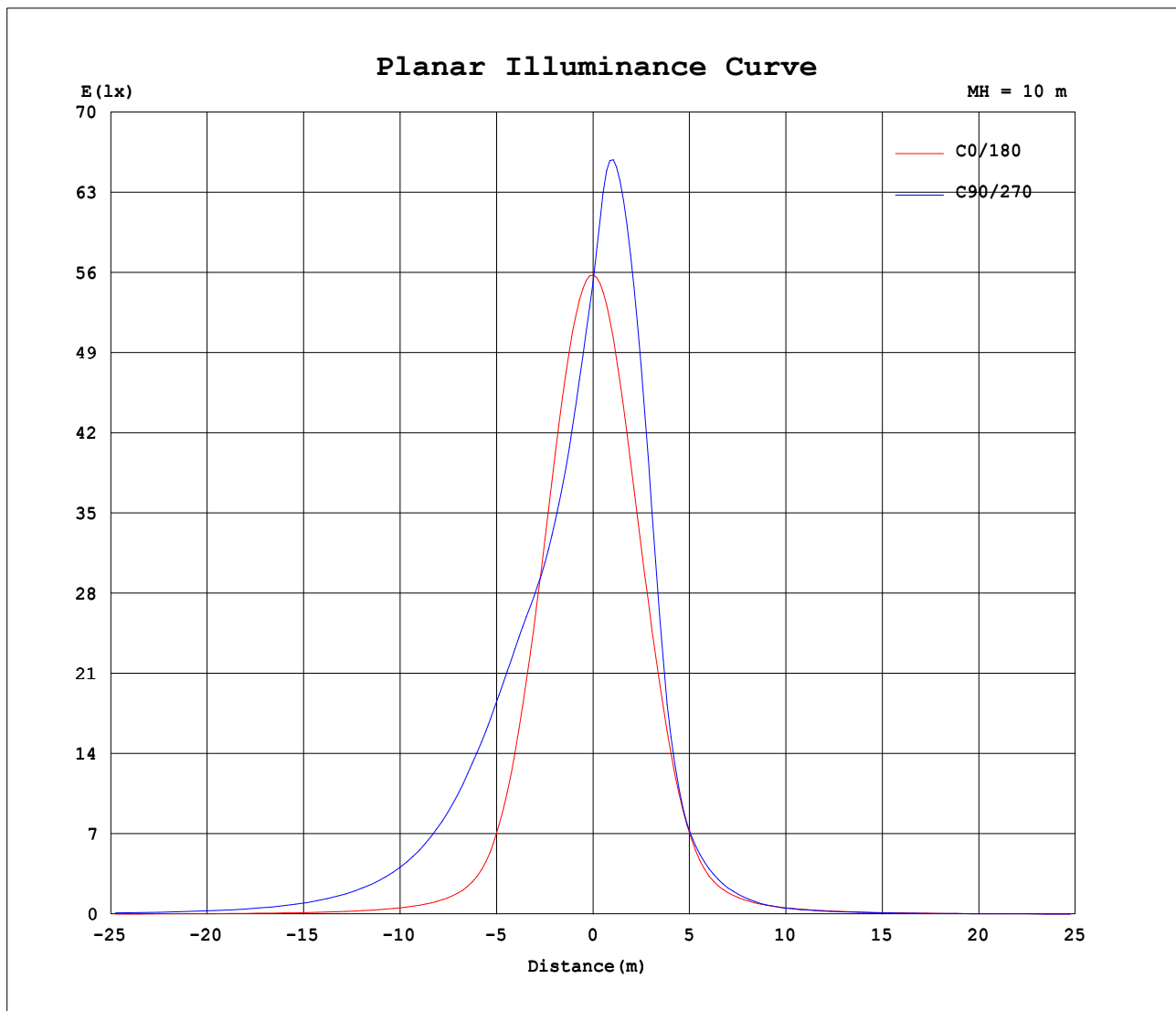
AvgL	cd/m2
L_0~180 (65) av	26170
L_0~180 (75) av	21218
L_0~180 (85) av	17059
L_90~270 (65) av	95537
L_90~270 (75) av	60898
L_90~270 (85) av	32434
L_45 (65) av	37927
L_45 (75) av	27662
L_45 (85) av	21295

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:

```