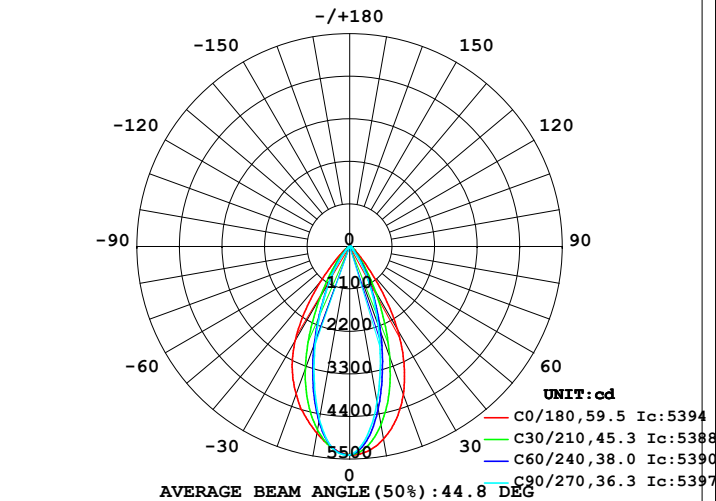


LUMINAIRE PHOTOMETRIC TEST REPORT

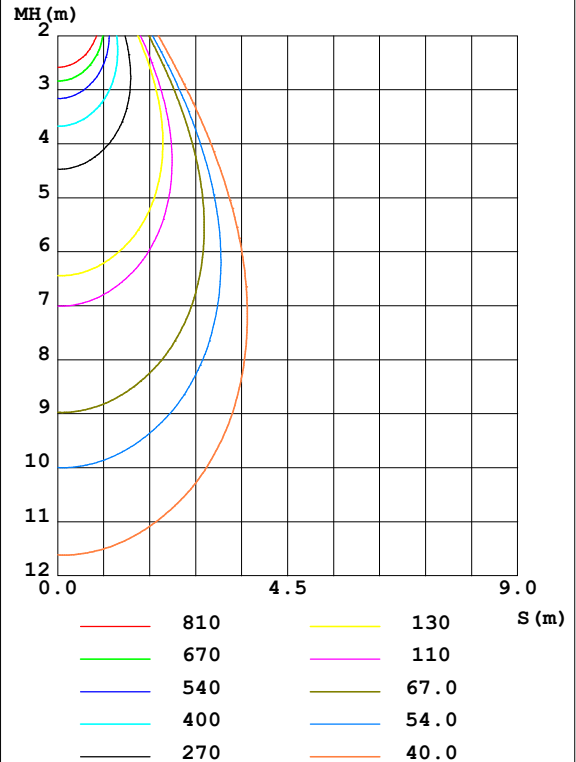
Test:U:225.2V I:0.1840A P:40.10W PF:0.9670 Freq:0Hz Lamp Flux:3415.49x1 lm		
NAME: ALT85-40G30-Oval	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 85.17 lm/W			
MODEL	3000K CRI90	I _{max} (cd)	5404	S/MH (C0/180)	0.92
NOMINAL POWER (W)	40	LOR (%)	100.0	S/MH (C90/270)	0.63
RATED VOLTAGE (V)	226	TOTAL FLUX (lm)	3415.5	η UP, DN (C0-180)	0.0, 47.6
NOMINAL FLUX (lm)	3415.49	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 52.4
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	225.2	η down (%)	100.0	CIBSE SHR MAX	0.65

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3DEG
 Operators: AE
 Test Date: 2020-03-12

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 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:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	5053	4466	4092	4422	4899	4676	4532	4841	0- 10	476.5	476.5	14,14
20	4064	2610	2156	2697	4058	2898	2583	3104	10- 20	1067	1544	45.2,45.2
30	2466	1091	880.4	1178	2833	1206	1060	1288	20- 30	1006	2549	74.6,74.6
40	819.1	351.0	242.9	402.3	1126	396.7	296.1	403.3	30- 40	564.7	3114	91.2,91.2
50	231.6	91.62	64.20	116.9	291.0	113.7	83.24	119.1	40- 50	202.8	3317	97.1,97.1
60	64.86	21.54	17.96	29.88	86.13	36.78	28.93	35.50	50- 60	69.15	3386	99.1,99.1
70	13.57	7.148	7.077	7.910	17.50	10.10	9.933	9.491	60- 70	20.33	3406	99.7,99.7
80	2.955	2.551	2.337	2.633	3.068	3.399	3.547	3.079	70- 80	6.047	3413	99.9,99.9
90	4.053	3.489	3.107	3.386	2.810	2.382	2.247	2.688	80- 90	2.954	3415	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): 3242.7 lm

%lum = 94.9%

%lamp = 94.9%

Conical surface Flux(120deg): 3386.2 lm

%lum = 99.1%

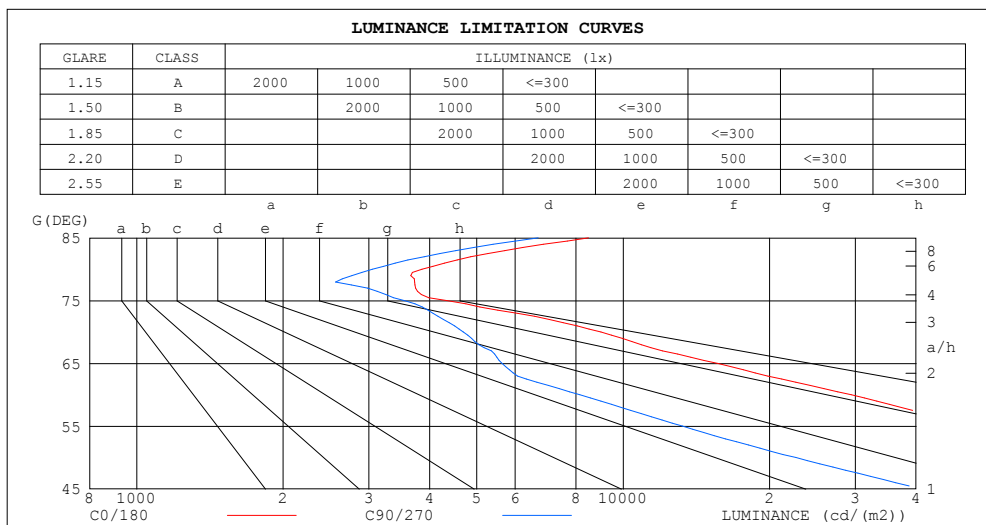
%lamp = 99.1%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:AE
 Test Date:2020-03-12

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 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:225.2V I:0.1840A P:40.10W PF:0.9670 Freq:0Hz Lamp Flux:3415.49x1 lm		
NAME: ALT85-40G30-Oval	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	8481	6690
80	3859	3052
75	4345	3552
70	9001	4692
65	15630	5638
60	29420	8147
55	51350	13237
50	81718	22650
45	135016	41033

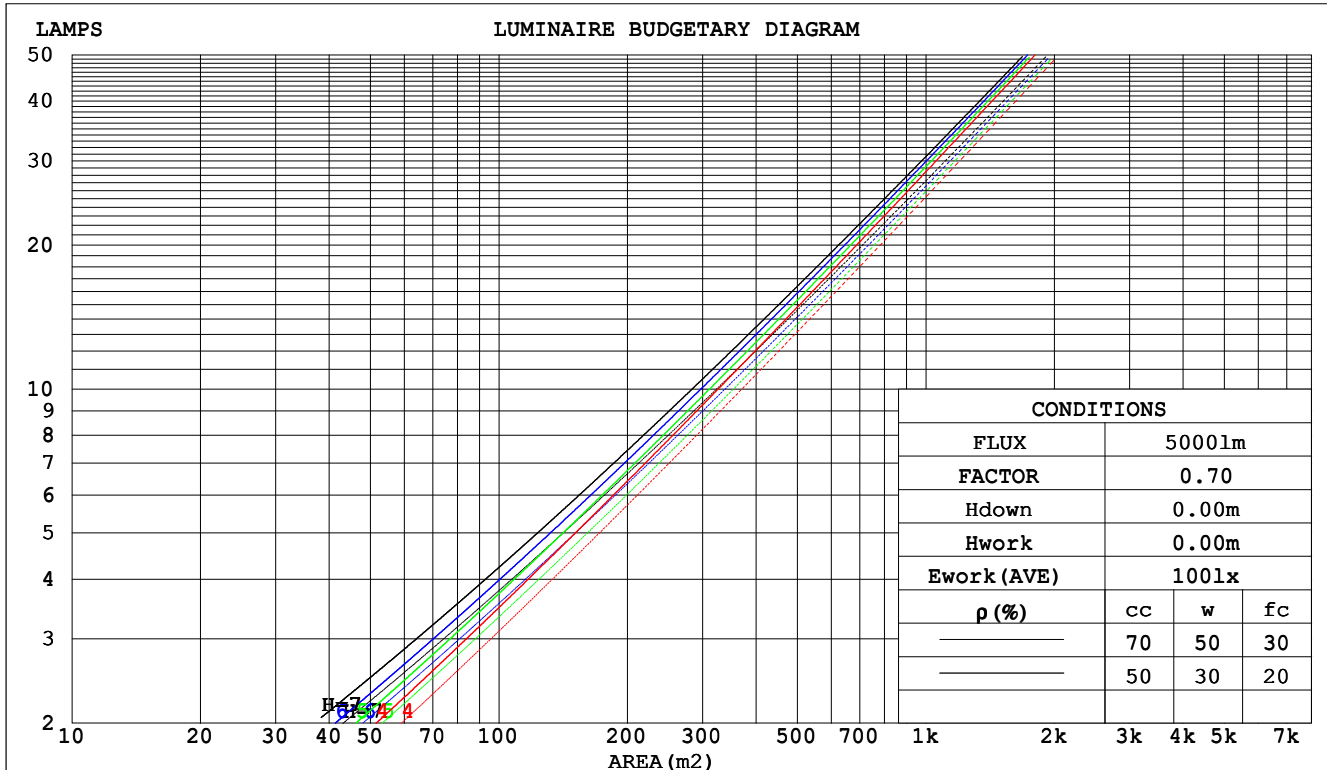
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:AE
Test Date:2020-03-12

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
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:225.2V I:0.1840A P:40.10W PF:0.9670 Freq:0Hz Lamp Flux:3415.49x1 lm		
NAME: ALT85-40G30-Oval	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	1.11	1.08	1.06	1.09	1.07	1.05	1.05	1.03	1.01	1.01	.00	.98	.98	.97	.96	.94
2.0	1.03	.00	.96	1.02	.98	.95	.99	.96	.93	.96	.93	.91	.93	.91	.89	.88
3.0	.97	.92	.88	.95	.91	.87	.93	.89	.86	.90	.87	.85	.88	.86	.83	.82
4.0	.91	.85	.81	.90	.85	.81	.87	.83	.80	.85	.82	.79	.84	.81	.78	.77
5.0	.85	.80	.75	.84	.79	.75	.83	.78	.74	.81	.77	.74	.79	.76	.73	.72
6.0	.80	.75	.70	.80	.74	.70	.78	.73	.70	.77	.73	.69	.75	.72	.69	.67
7.0	.76	.70	.66	.75	.70	.66	.74	.69	.66	.73	.68	.65	.72	.68	.65	.64
8.0	.72	.66	.62	.71	.66	.62	.70	.65	.62	.69	.65	.62	.68	.64	.61	.60
9.0	.68	.63	.59	.68	.62	.59	.67	.62	.58	.66	.61	.58	.65	.61	.58	.57
10.0	.65	.59	.56	.64	.59	.56	.64	.59	.55	.63	.58	.55	.62	.58	.55	.54



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:AE
 Test Date:2020-03-12

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 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:225.2V I:0.1840A P:40.10W PF:0.9670 Freq:0Hz Lamp Flux:3415.49x1 lm					
NAME: ALT85-40G30-Oval			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	.175	.099	.031	.168	.096	.030	.155	.089	.028	.144	.083	.027	.133	.077	.025		
2.0	.167	.091	.028	.161	.089	.027	.151	.084	.026	.141	.079	.025	.132	.075	.024		
3.0	.159	.084	.025	.154	.082	.025	.145	.078	.024	.137	.075	.023	.129	.071	.022		
4.0	.151	.078	.023	.147	.077	.023	.139	.074	.022	.132	.071	.021	.125	.068	.021		
5.0	.143	.073	.021	.140	.072	.021	.133	.069	.020	.127	.067	.020	.121	.065	.019		
6.0	.137	.069	.020	.134	.067	.019	.128	.065	.019	.122	.063	.019	.117	.062	.018		
7.0	.130	.064	.018	.128	.064	.018	.122	.062	.018	.118	.060	.018	.113	.059	.017		
8.0	.125	.061	.017	.122	.060	.017	.118	.059	.017	.113	.057	.017	.109	.056	.016		
9.0	.119	.058	.016	.117	.057	.016	.113	.056	.016	.109	.055	.016	.105	.053	.015		
10.0	.114	.055	.015	.112	.054	.015	.109	.053	.015	.105	.052	.015	.102	.051	.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	.171	.157	.145	.146	.135	.125	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.156	.133	.113	.133	.114	.098	.091	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.143	.114	.090	.123	.098	.078	.084	.068	.055	.049	.040	.032	.016	.013	.011	
4.0	.133	.099	.073	.114	.085	.063	.078	.059	.045	.045	.035	.026	.015	.011	.009	
5.0	.124	.087	.060	.106	.075	.052	.073	.053	.037	.042	.031	.022	.014	.010	.007	
6.0	.116	.078	.050	.100	.067	.044	.069	.047	.031	.040	.028	.018	.013	.009	.006	
7.0	.110	.070	.043	.094	.061	.037	.065	.043	.026	.038	.025	.016	.012	.008	.005	
8.0	.104	.064	.036	.089	.055	.032	.062	.039	.023	.036	.023	.013	.012	.008	.004	
9.0	.099	.059	.032	.085	.051	.028	.059	.036	.020	.034	.021	.012	.011	.007	.004	
10.0	.094	.054	.028	.081	.047	.024	.056	.033	.017	.033	.020	.010	.011	.006	.003	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:AE
Test Date:2020-03-12

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
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:225.2V I:0.1840A P:40.10W PF:0.9670 Freq:0Hz Lamp Flux:3415.49x1 lm											
NAME: ALT85-40G30-Oval					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		19.9	20.9	20.2	21.0	21.2	14.9	15.8	15.1	16.0	16.1
	3H	19.8	20.6	20.1	20.8	21.0	14.8	15.6	15.0	15.8	16.0
	4H	19.7	20.5	20.0	20.7	21.0	14.7	15.5	15.0	15.7	15.9
	6H	19.6	20.4	19.9	20.6	20.9	14.6	15.4	14.9	15.6	15.9
	8H	19.6	20.3	19.9	20.6	20.8	14.6	15.3	14.9	15.6	15.8
	12H	19.5	20.2	19.9	20.5	20.8	14.6	15.2	14.9	15.5	15.8
4H	2H	19.7	20.5	20.0	20.7	20.9	14.7	15.5	15.0	15.7	16.0
	3H	19.5	20.2	19.9	20.5	20.8	14.6	15.3	14.9	15.6	15.8
	4H	19.5	20.1	19.8	20.4	20.7	14.5	15.2	14.9	15.5	15.8
	6H	19.4	19.9	19.7	20.3	20.6	14.5	15.0	14.8	15.3	15.7
	8H	19.3	19.8	19.7	20.2	20.6	14.4	14.9	14.8	15.3	15.7
	12H	19.3	19.8	19.7	20.1	20.5	14.4	14.9	14.8	15.2	15.6
8H	4H	19.3	19.8	19.7	20.2	20.5	14.4	14.9	14.8	15.3	15.6
	6H	19.2	19.6	19.7	20.0	20.5	14.3	14.8	14.8	15.1	15.6
	8H	19.2	19.6	19.6	20.0	20.4	14.3	14.7	14.8	15.1	15.5
	12H	19.1	19.5	19.6	19.9	20.4	14.3	14.6	14.8	15.1	15.5
12H	4H	19.3	19.7	19.7	20.1	20.5	14.4	14.8	14.8	15.2	15.6
	6H	19.2	19.5	19.6	20.0	20.4	14.3	14.7	14.7	15.1	15.5
	8H	19.1	19.4	19.6	19.9	20.4	14.3	14.6	14.7	15.0	15.5
Variations with the observer position at spacings:											
S = 1.0H	+ 4.7 / - 7.3					+ 2.4 / - 6.8					
1.5H	+ 6.4 / - 7.7					+ 3.8 / - 5.2					
2.0H	+ 6.6 / - 9.1					+ 4.5 / - 4.7					

CIE Pub.117, 3415 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.3)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:AE
Test Date:2020-03-12

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
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:225.2V I:0.1840A P:40.10W PF:0.9670 Freq:0Hz Lamp Flux:3415.49x1 lm		
NAME: ALT85-40G30-Oval	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:

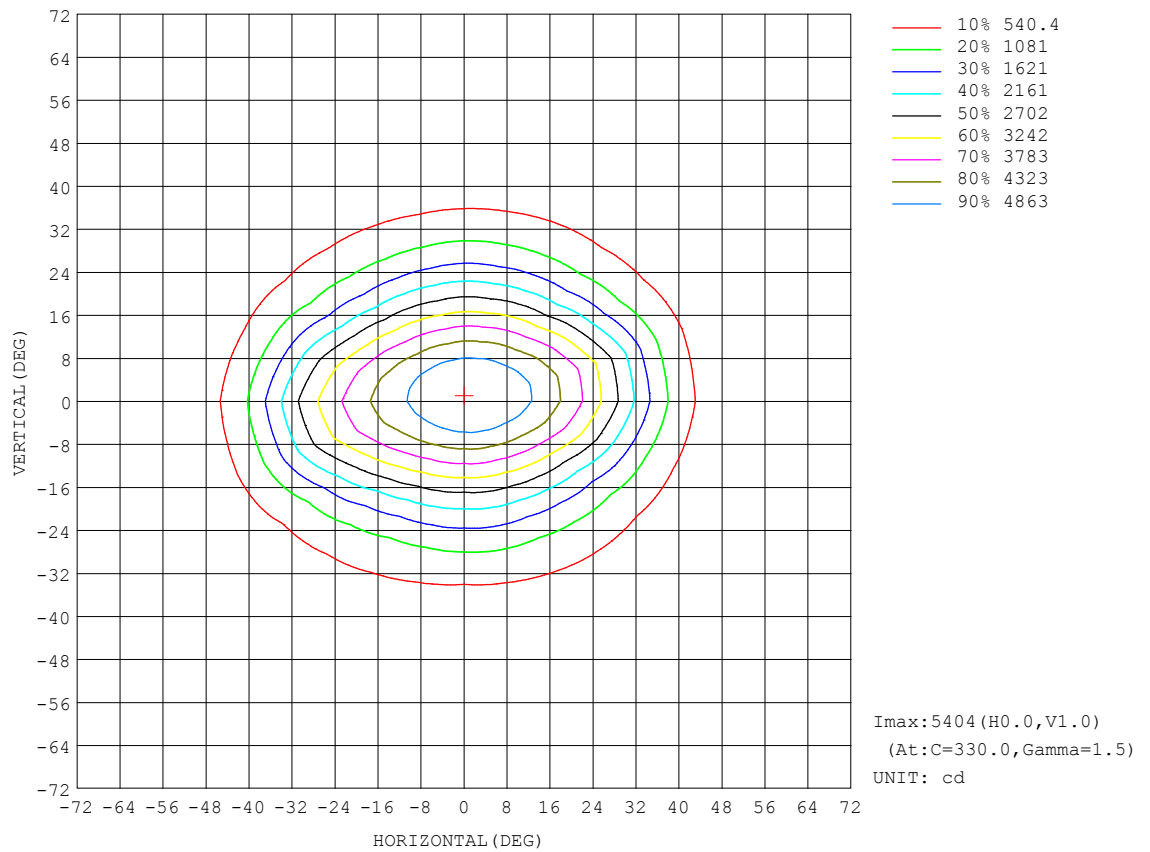
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	86	79	75	85	79	75	85	79	75	71
0.80	94	88	84	93	87	84	92	87	83	79
1.00	98	93	89	98	92	89	96	92	88	84
1.25	103	97	94	102	97	93	100	95	92	88
1.50	105	101	97	104	100	97	102	98	95	91
2.00	108	104	101	107	103	100	104	101	98	93
2.50	110	106	103	108	105	102	105	102	100	94
3.00	112	108	105	110	107	104	106	104	102	96
4.00	114	111	108	112	109	107	108	106	104	97
5.00	115	112	111	113	111	109	109	107	106	98
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: MEDIUM
Temperature:25.3DEG
Operators:AE
Test Date:2020-03-12

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
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:225.2V I:0.1840A P:40.10W PF:0.9670 Freq:0Hz Lamp Flux:3415.49x1 lm		
NAME: ALT85-40G30-Oval	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:

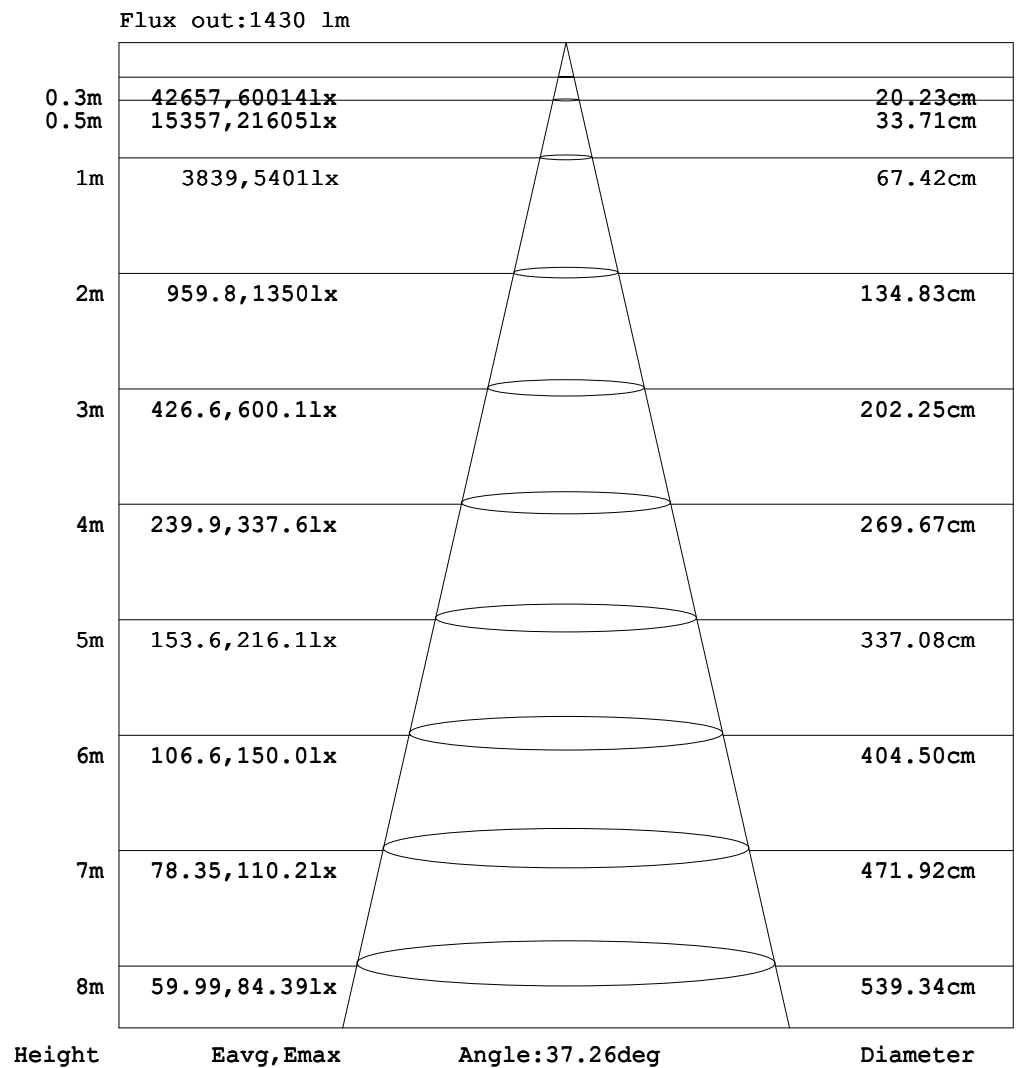


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:AE
Test Date:2020-03-12

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
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:225.2V I:0.1840A P:40.10W PF:0.9670 Freq:0Hz Lamp Flux:3415.49x1 lm		
NAME: ALT85-40G30-Oval	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:



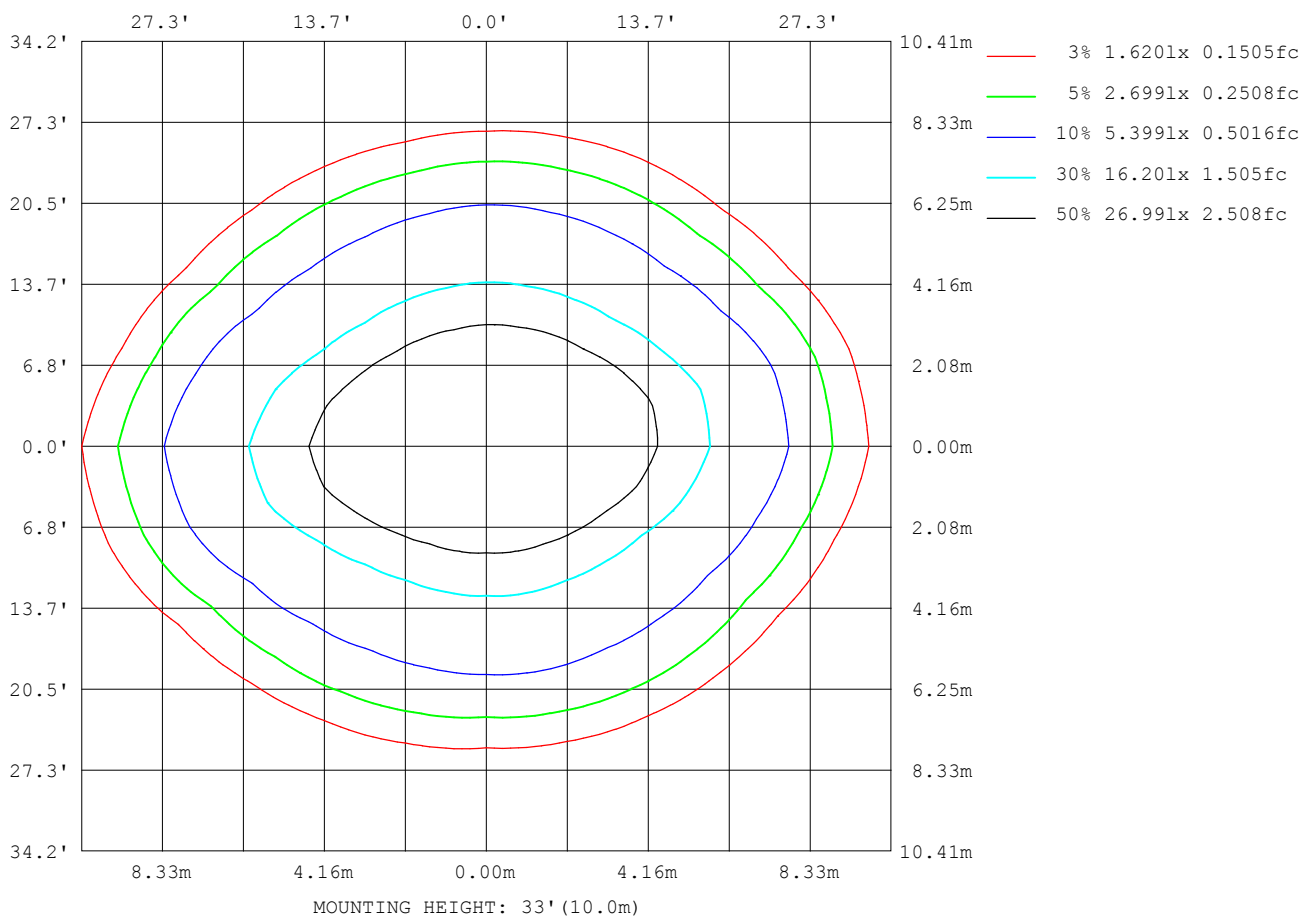
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:AE
Test Date:2020-03-12

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
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:225.2V I:0.1840A P:40.10W PF:0.9670 Freq:0Hz Lamp Flux:3415.49x1 lm		
NAME: ALT85-40G30-Oval	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:AE
Test Date:2020-03-12

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
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:225.2V I:0.1840A P:40.10W PF:0.9670 Freq:0Hz Lamp Flux:3415.49x1 lm		
NAME: ALT85-40G30-Oval	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:

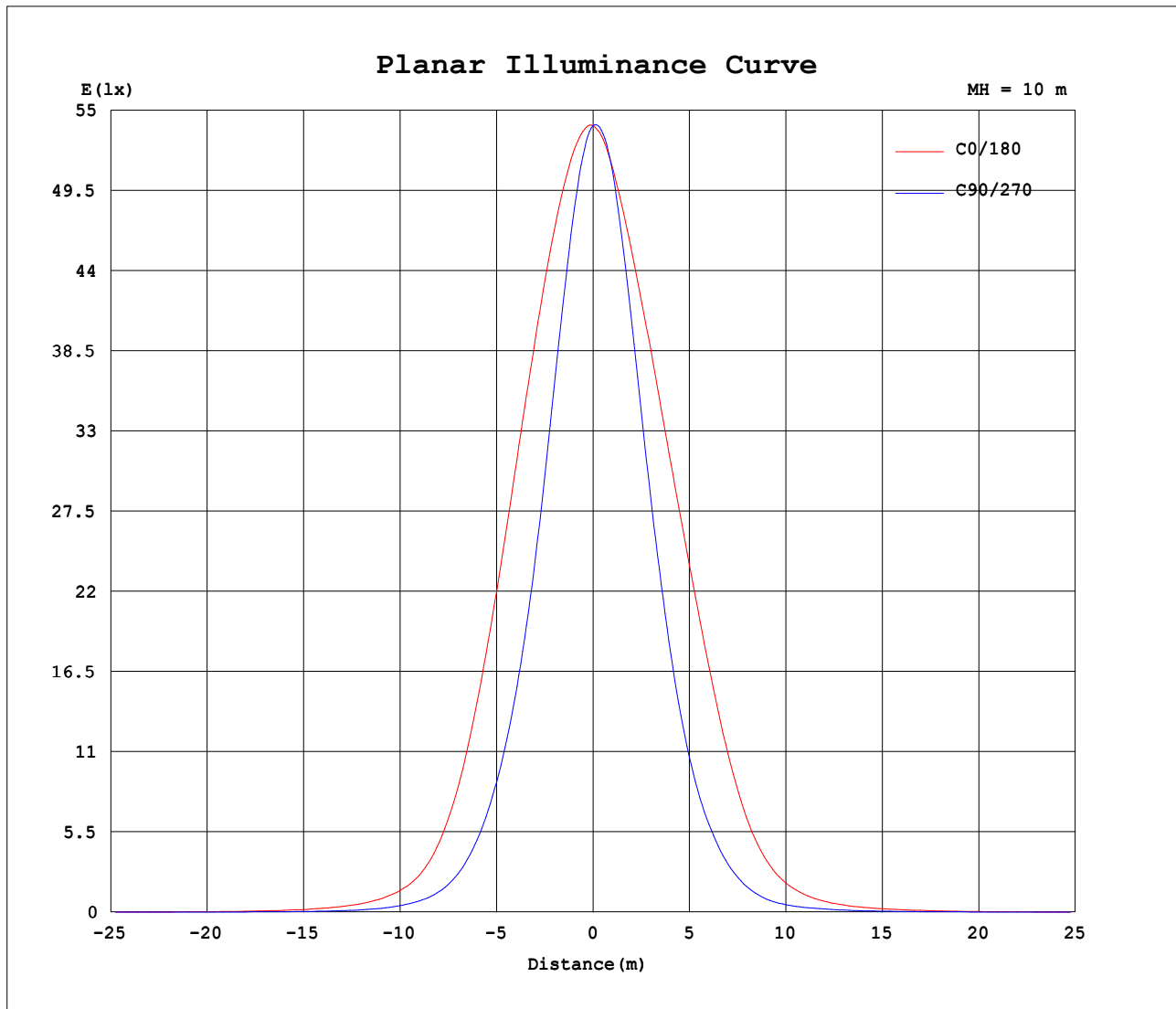
AvgL	cd/m2
L_0~180 (65) av	18189
L_0~180 (75) av	5506
L_0~180 (85) av	7379
L_90~270 (65) av	7304
L_90~270 (75) av	4563
L_90~270 (85) av	6266
L_45 (65) av	8166
L_45 (75) av	4491
L_45 (85) av	6709

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:AE
 Test Date:2020-03-12

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 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: MEDIUM
Temperature: 25.3DEG
Operators: AE
Test Date: 2020-03-12

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
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Humidity: 65.0%
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