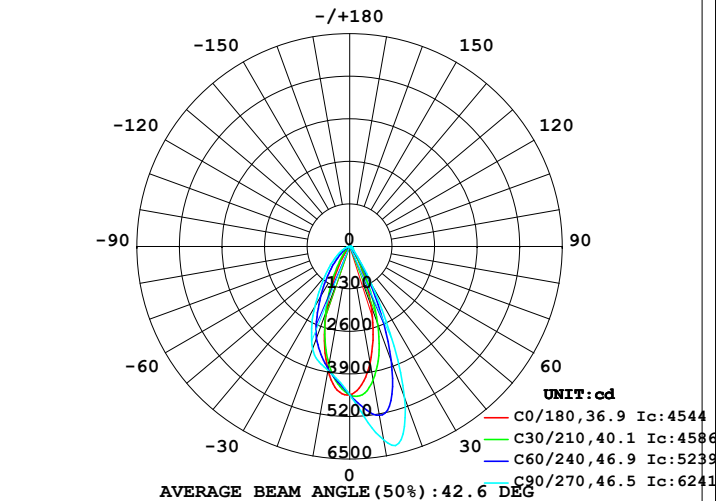


LUMINAIRE PHOTOMETRIC TEST REPORT

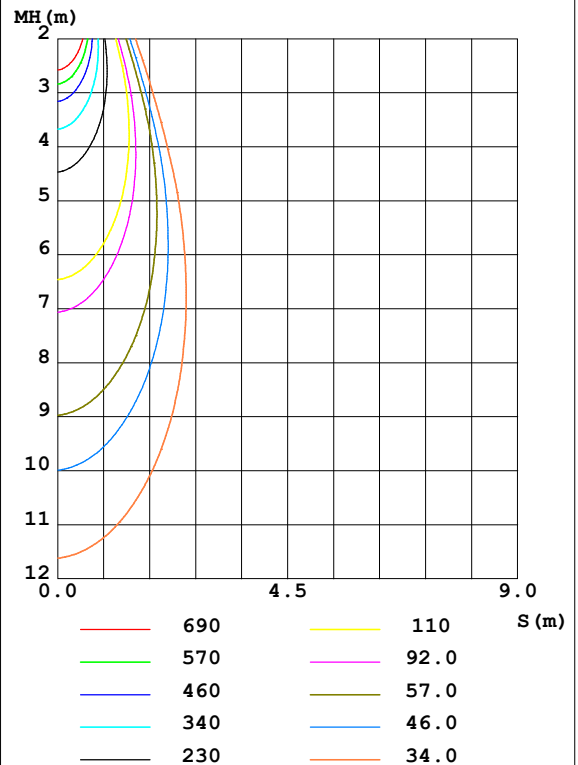
Test:U:225.0V I:0.1830A P:39.90W PF:0.9680 Freq:0Hz Lamp Flux:3311.39x1 lm		
NAME: ALT85-40G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 82.99 lm/W			
MODEL	3000K CRI90	I _{max} (cd)	6241	S/MH(C0/180)	0.62
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH(C90/270)	0.87
RATED VOLTAGE(V)	226	TOTAL FLUX(lm)	3311.4	η UP,DN(C0-180)	0.0,47.9
NOMINAL FLUX(lm)	3311.39	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,52.1
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	3603	4674	6001	5134	3846	3705	3843	3577	0- 10	422.6	422.6	12.8,12.8
20	1931	3122	4900	3564	2079	2468	3326	2556	10- 20	1045	1468	44.3,44.3
30	620.6	949.9	1365	1030	616.4	1268	2142	1430	20- 30	913.9	2381	71.9,71.9
40	208.4	192.6	280.0	195.6	196.5	503.2	1180	643.1	30- 40	449.5	2831	85.5,85.5
50	107.2	94.47	127.1	95.78	107.2	183.0	628.2	253.1	40- 50	231.1	3062	92.5,92.5
60	55.71	56.17	78.40	59.71	59.97	84.75	313.4	107.3	50- 60	133.4	3195	96.5,96.5
70	29.08	34.18	54.26	37.87	31.61	39.21	124.6	42.41	60- 70	74.72	3270	98.8,98.8
80	12.53	16.96	25.77	18.05	13.78	11.12	14.23	9.579	70- 80	32.80	3303	99.7,99.7
90	3.634	5.277	7.876	6.089	2.922	2.909	2.697	2.384	80- 90	8.379	3311	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): 2962.9 lm

%lum = 89.5%

%lamp = 89.5%

Conical surface Flux(120deg): 3195.5 lm

%lum = 96.5%

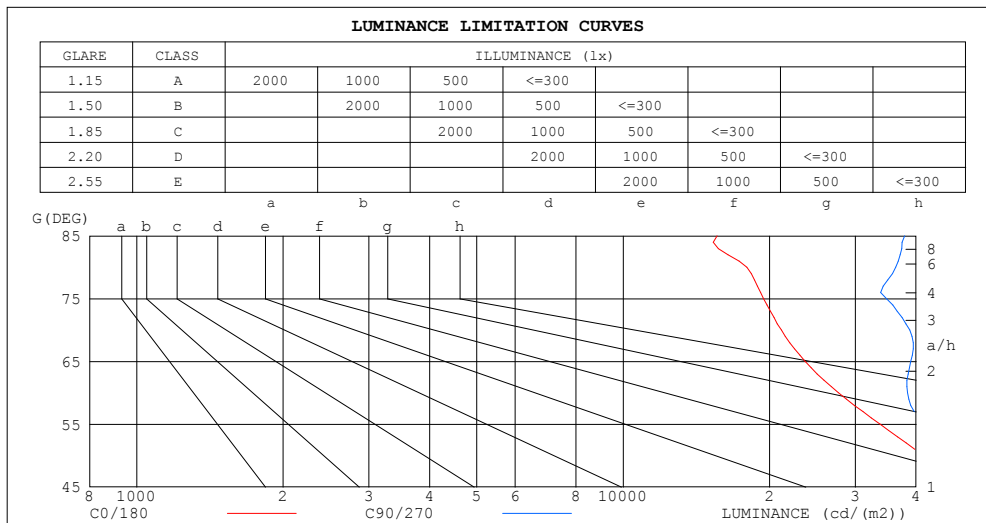
%lamp = 96.5%

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:39.90W PF:0.9680 Freq:0Hz Lamp Flux:3311.39x1 lm		
NAME: ALT85-40G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	15603	37911
80	17951	36351
75	19434	34764
70	21151	38858
65	23657	39040
60	27718	38407
55	33740	41288
50	41483	48420
45	51640	59243

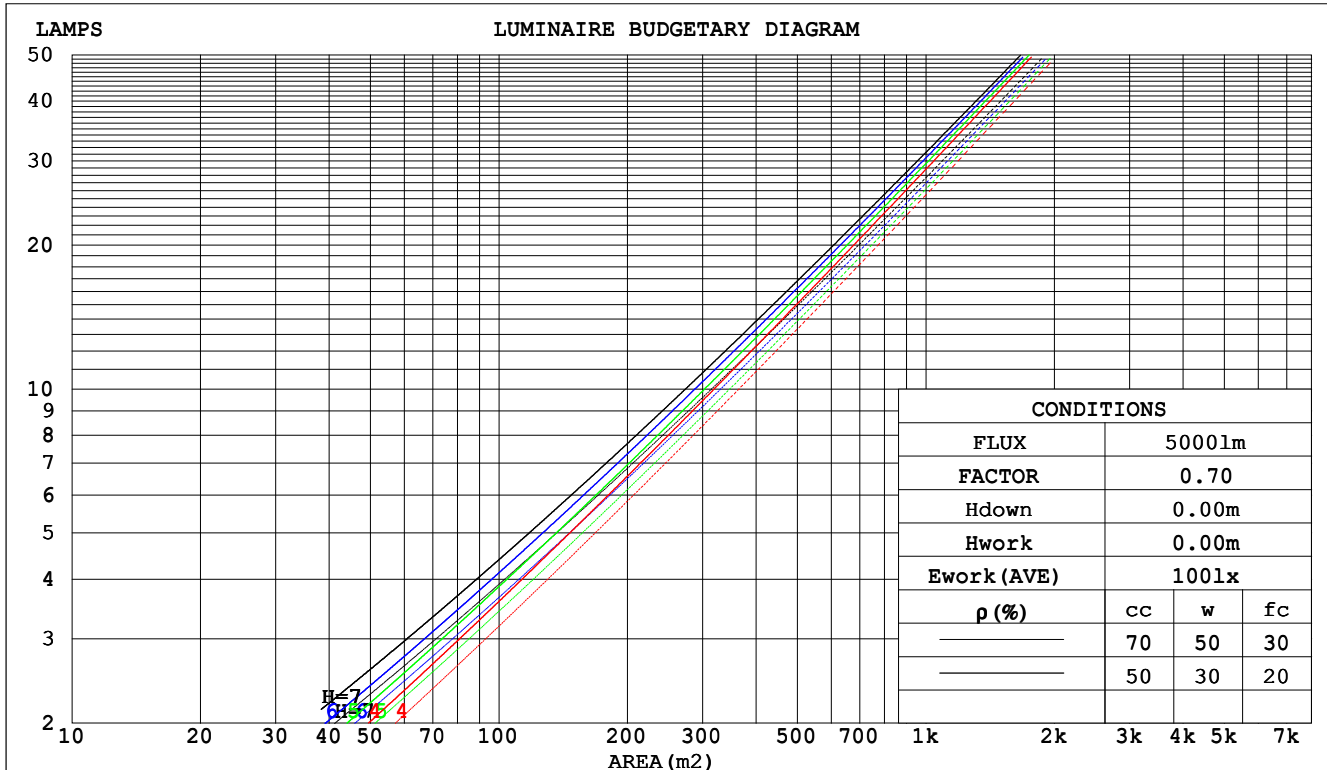
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-06-16

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:39.90W PF:0.9680 Freq:0Hz Lamp Flux:3311.39x1 lm		
NAME: ALT85-40G30-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	1.08	1.05	1.08	1.06	1.04	1.04	1.02	1.00	1.00	.99	.97	.97	.96	.94	.93
2.0	1.02	.98	.94	1.00	.97	.93	.97	.94	.91	.94	.92	.89	.91	.89	.87	.86
3.0	.95	.90	.86	.94	.89	.85	.91	.87	.84	.88	.85	.82	.86	.83	.81	.79
4.0	.89	.83	.79	.88	.82	.78	.85	.81	.77	.83	.79	.76	.81	.78	.75	.74
5.0	.83	.77	.73	.82	.77	.72	.80	.76	.72	.79	.74	.71	.77	.73	.71	.69
6.0	.78	.72	.68	.77	.72	.68	.76	.71	.67	.74	.70	.67	.73	.69	.66	.65
7.0	.74	.68	.63	.73	.67	.63	.72	.67	.63	.71	.66	.63	.69	.65	.62	.61
8.0	.70	.64	.60	.69	.63	.59	.68	.63	.59	.67	.62	.59	.66	.62	.59	.57
9.0	.66	.60	.56	.66	.60	.56	.65	.60	.56	.64	.59	.56	.63	.59	.56	.54
10.0	.63	.57	.53	.62	.57	.53	.62	.57	.53	.61	.56	.53	.60	.56	.53	.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:39.90W PF:0.9680 Freq:0Hz Lamp Flux:3311.39x1 lm					
NAME: ALT85-40G30-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	.189	.107	.034	.182	.104	.033	.170	.097	.031	.158	.091	.029	.147	.085	.028		
2.0	.180	.099	.030	.174	.096	.030	.163	.091	.028	.154	.086	.027	.145	.082	.026		
3.0	.170	.090	.027	.165	.088	.027	.156	.084	.026	.147	.081	.025	.140	.077	.024		
4.0	.160	.083	.025	.156	.082	.024	.148	.079	.023	.141	.076	.023	.134	.073	.022		
5.0	.152	.077	.022	.148	.076	.022	.141	.074	.022	.135	.071	.021	.129	.069	.021		
6.0	.144	.072	.021	.141	.071	.020	.135	.069	.020	.129	.067	.020	.124	.065	.019		
7.0	.137	.067	.019	.134	.067	.019	.128	.065	.019	.123	.063	.018	.119	.062	.018		
8.0	.130	.063	.018	.127	.063	.018	.123	.061	.017	.118	.060	.017	.114	.059	.017		
9.0	.124	.060	.017	.122	.059	.017	.117	.058	.016	.113	.057	.016	.110	.056	.016		
10.0	.118	.057	.016	.116	.056	.016	.113	.055	.016	.109	.054	.015	.105	.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	.086	.058	.054	.050	.019	.017	.016	
2.0	.157	.132	.112	.135	.114	.096	.092	.079	.067	.053	.046	.039	.017	.015	.013	
3.0	.145	.114	.088	.124	.098	.077	.085	.068	.054	.049	.040	.032	.016	.013	.010	
4.0	.135	.099	.072	.116	.086	.062	.080	.060	.044	.046	.035	.026	.015	.011	.009	
5.0	.126	.087	.059	.108	.076	.051	.075	.053	.036	.043	.031	.021	.014	.010	.007	
6.0	.119	.078	.049	.102	.068	.043	.070	.047	.030	.041	.028	.018	.013	.009	.006	
7.0	.112	.071	.042	.096	.061	.036	.066	.043	.026	.039	.025	.015	.012	.008	.005	
8.0	.106	.064	.036	.091	.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	.057	.033	.017	.033	.020	.010	.011	.006	.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:39.90W PF:0.9680 Freq:0Hz Lamp Flux:3311.39x1 lm											
NAME: ALT85-40G30-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		14.9	15.9	15.1	16.1	16.2	17.2	18.2	17.5	18.4	18.6
	3H	15.6	16.5	15.8	16.7	16.9	18.2	19.1	18.4	19.3	19.5
	4H	15.9	16.7	16.1	16.9	17.2	18.6	19.5	18.9	19.7	19.9
	6H	16.1	16.9	16.4	17.1	17.4	19.0	19.8	19.3	20.1	20.3
	8H	16.2	17.0	16.5	17.2	17.5	19.2	20.0	19.5	20.2	20.5
	12H	16.2	17.0	16.5	17.2	17.5	19.3	20.1	19.6	20.3	20.6
4H	2H	15.2	16.1	15.5	16.3	16.5	17.3	18.1	17.6	18.4	18.6
	3H	16.1	16.8	16.4	17.1	17.3	18.4	19.2	18.8	19.4	19.7
	4H	16.5	17.2	16.8	17.5	17.8	19.0	19.7	19.4	20.0	20.3
	6H	16.9	17.5	17.2	17.8	18.1	19.6	20.2	20.0	20.5	20.9
	8H	17.0	17.5	17.4	17.9	18.3	19.8	20.4	20.2	20.7	21.1
	12H	17.1	17.6	17.5	18.0	18.3	20.0	20.6	20.5	20.9	21.3
8H	4H	16.8	17.3	17.2	17.7	18.0	19.1	19.7	19.5	20.0	20.4
	6H	17.3	17.7	17.7	18.1	18.6	19.8	20.2	20.2	20.6	21.0
	8H	17.5	17.9	18.0	18.3	18.8	20.1	20.5	20.6	20.9	21.4
	12H	17.7	18.0	18.1	18.4	18.9	20.4	20.8	20.9	21.2	21.7
12H	4H	16.8	17.3	17.2	17.7	18.1	19.1	19.6	19.5	20.0	20.3
	6H	17.4	17.8	17.8	18.2	18.6	19.8	20.2	20.2	20.6	21.0
	8H	17.6	18.0	18.1	18.4	18.9	20.2	20.5	20.6	20.9	21.4
Variations with the observer position at spacings:											
S = 1.0H	+ 0.6 / - 0.6					+ 0.7 / - 0.6					
1.5H	+ 1.0 / - 0.5					+ 1.5 / - 0.6					
2.0H	+ 1.0 / - 0.6					+ 0.7 / - 0.4					

CIE Pub.117, 3311 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 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:39.90W PF:0.9680 Freq:0Hz Lamp Flux:3311.39x1 lm		
NAME: ALT85-40G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:

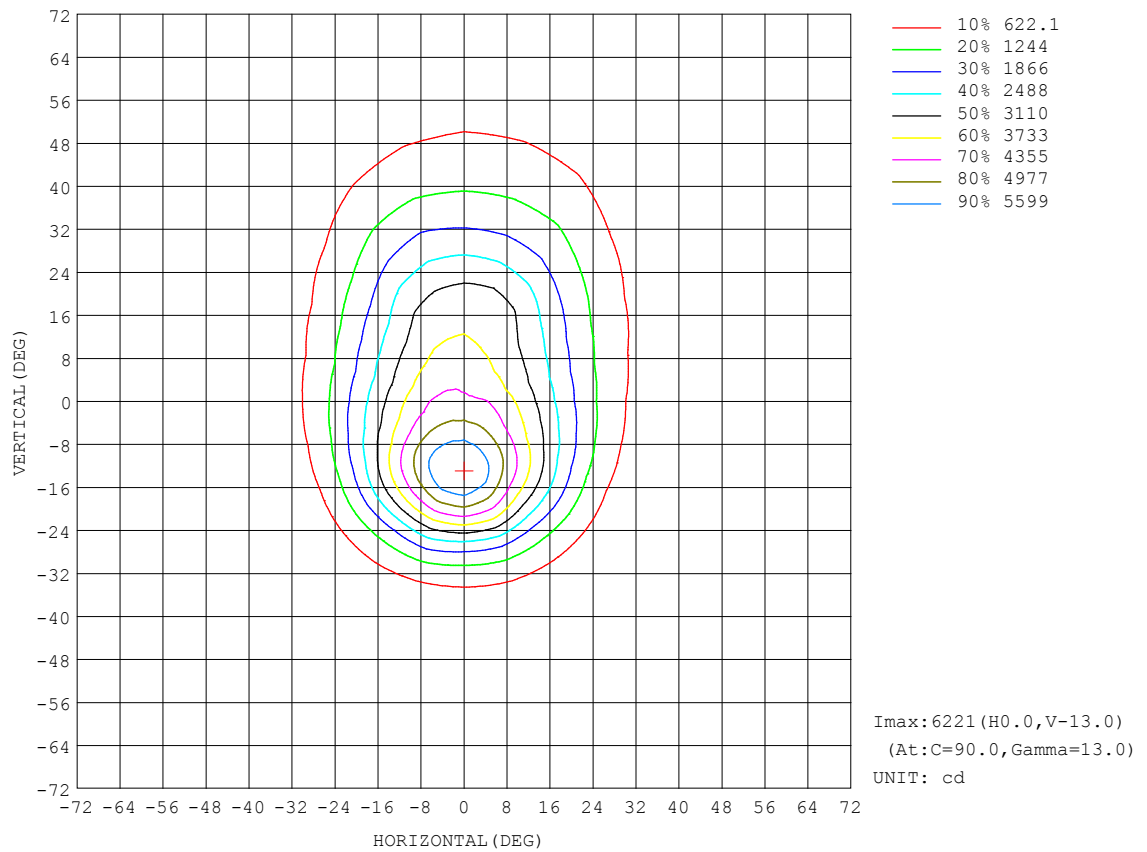
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	82	75	71	82	75	71	81	75	71	67
0.80	90	84	79	90	83	79	88	83	79	75
1.00	96	89	85	95	89	85	93	89	84	80
1.25	100	94	90	99	94	90	97	92	89	84
1.50	103	98	94	102	97	93	100	95	92	87
2.00	107	102	98	105	101	97	102	99	96	90
2.50	109	104	101	107	103	100	104	101	98	92
3.00	110	107	103	109	105	102	105	102	100	93
4.00	113	110	107	111	108	106	107	105	103	96
5.00	114	111	109	112	110	108	108	106	105	97
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:39.90W PF:0.9680 Freq:0Hz Lamp Flux:3311.39x1 lm		
NAME: ALT85-40G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:

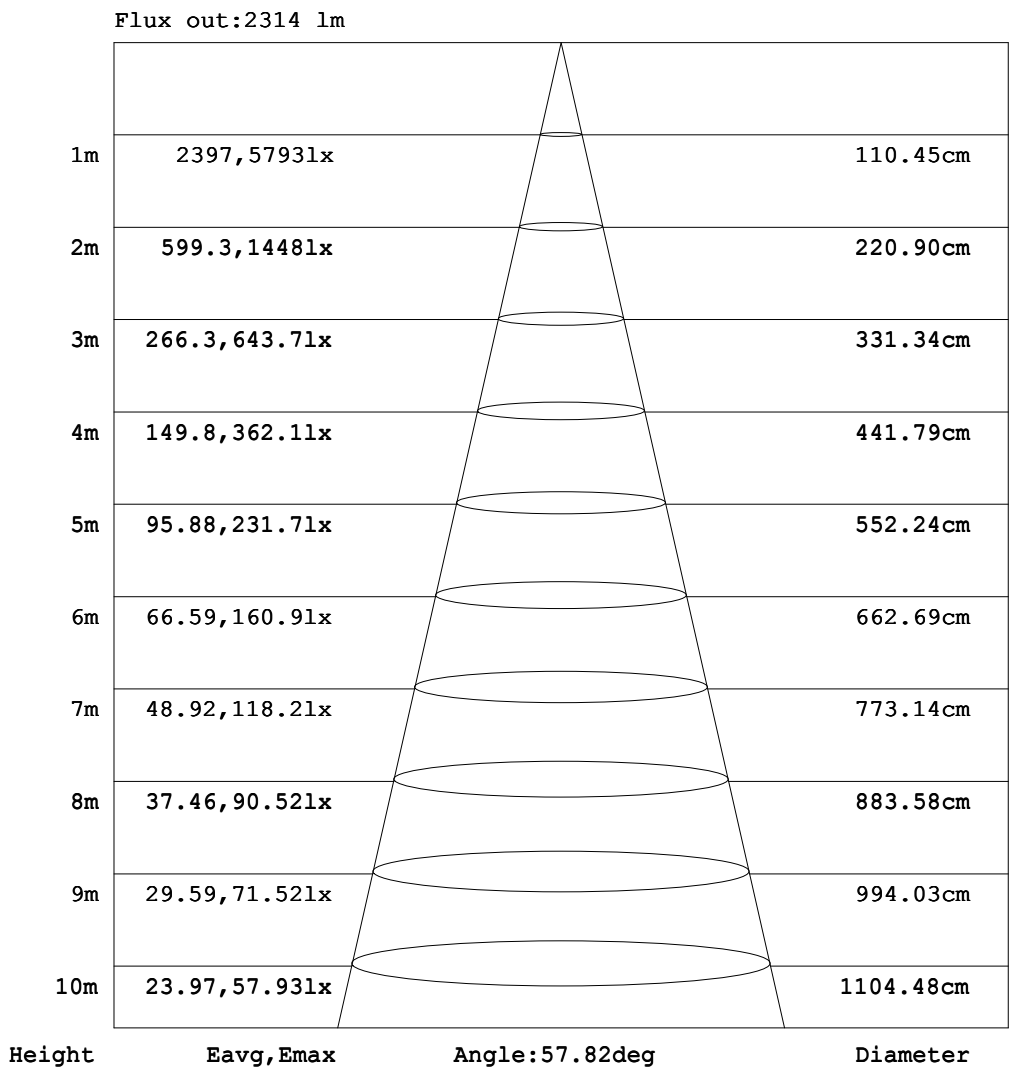


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-06-16

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:39.90W PF:0.9680 Freq:0Hz Lamp Flux:3311.39x1 lm		
NAME: ALT85-40G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:



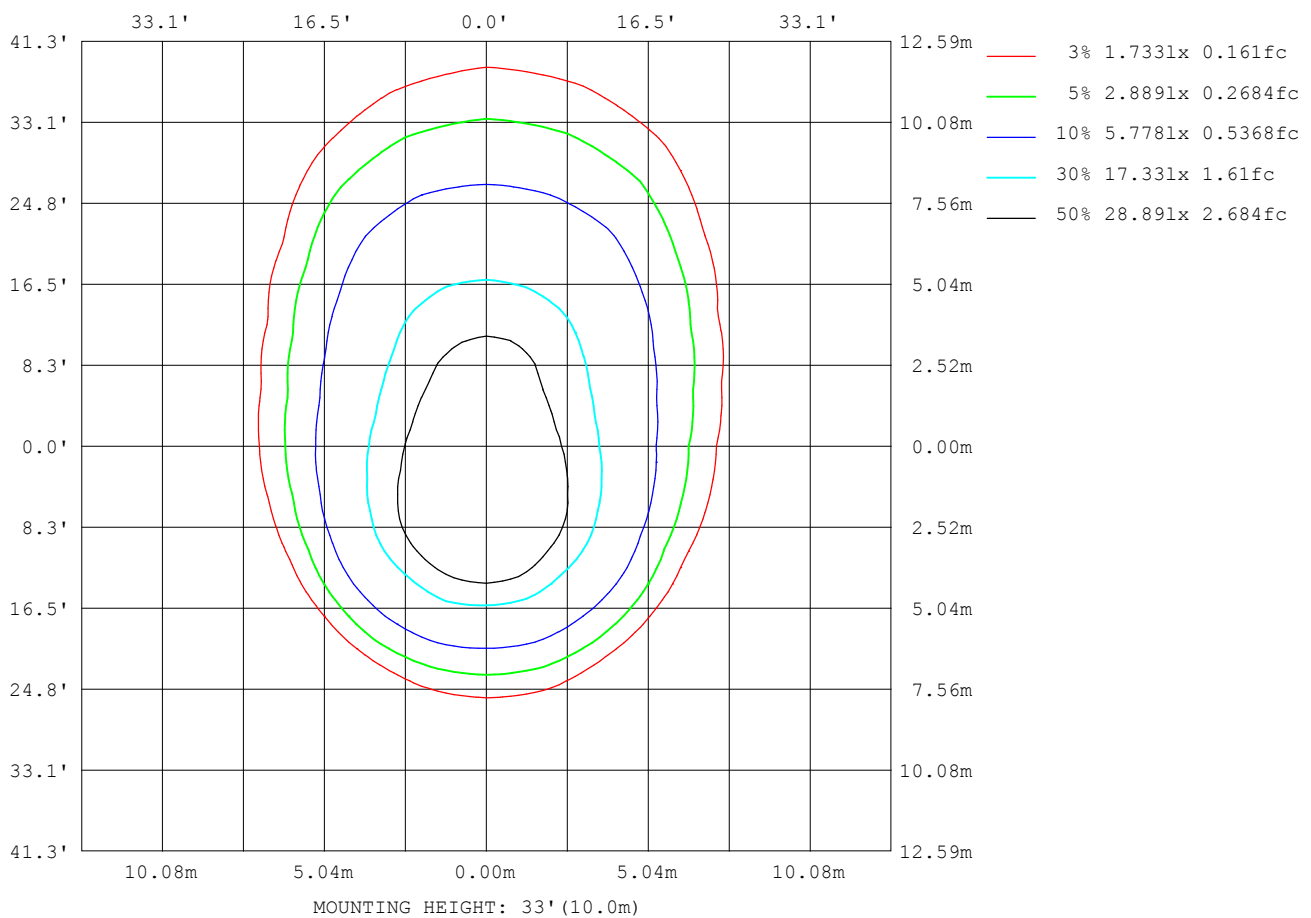
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

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:39.90W PF:0.9680 Freq:0Hz Lamp Flux:3311.39x1 lm		
NAME: ALT85-40G30-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:2020-06-16

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:39.90W PF:0.9680 Freq:0Hz Lamp Flux:3311.39x1 lm		
NAME: ALT85-40G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:

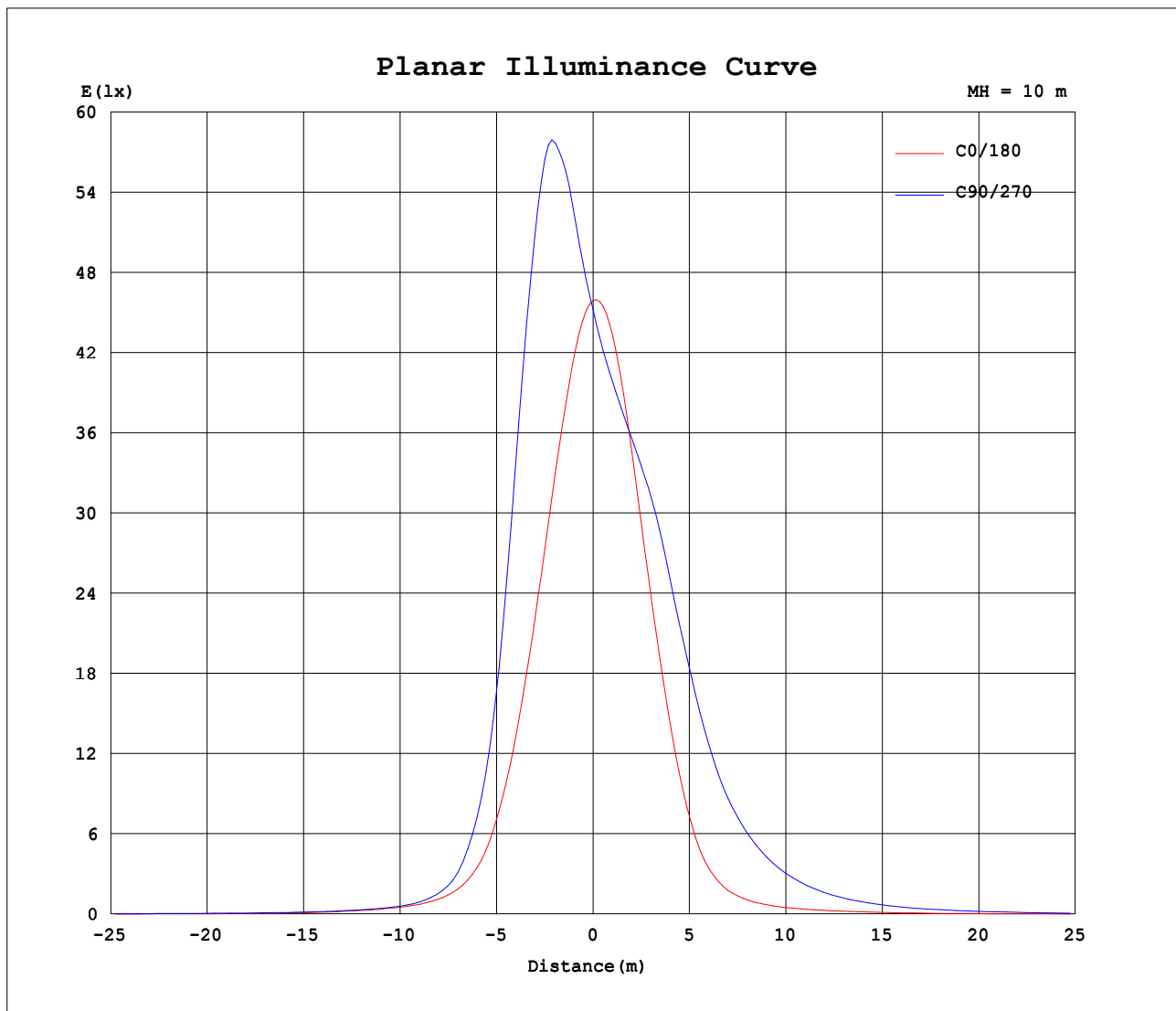
AvgL	cd/m2
L_0~180 (65) av	24394
L_0~180 (75) av	20071
L_0~180 (85) av	16685
L_90~270 (65) av	80381
L_90~270 (75) av	45568
L_90~270 (85) av	22522
L_45 (65) av	32018
L_45 (75) av	23484
L_45 (85) av	18152

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
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