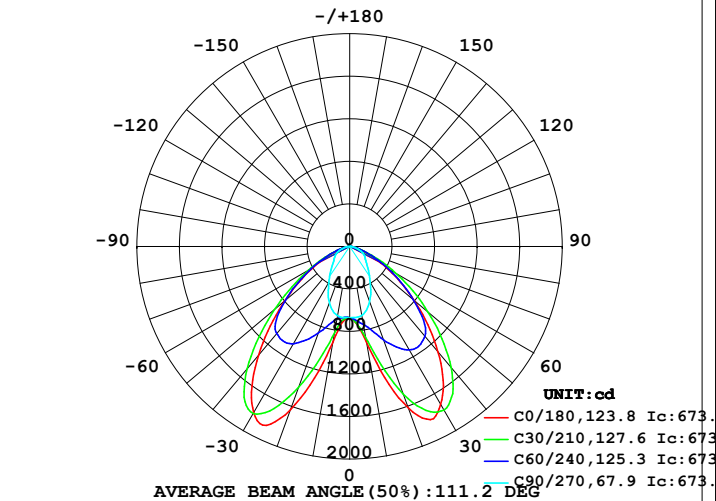


LUMINAIRE PHOTOMETRIC TEST REPORT

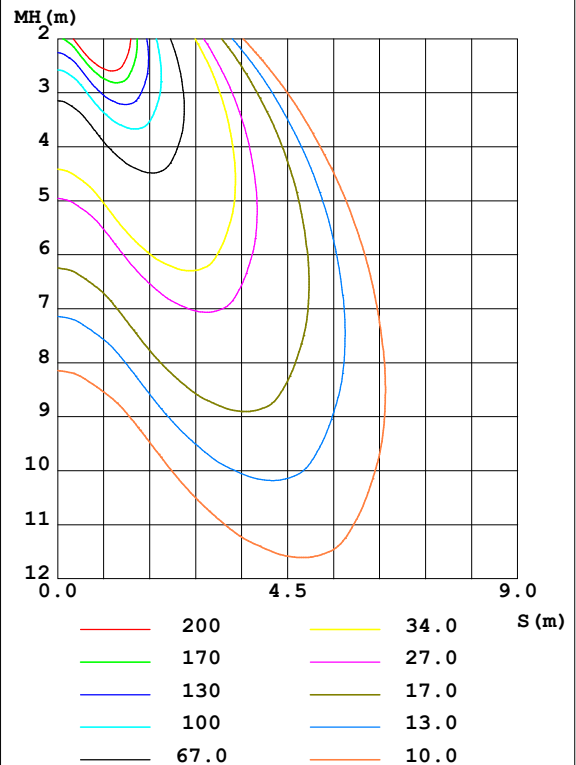
Test:U:225.0V I:0.1830A P:39.90W PF:0.9680 Freq:0Hz Lamp Flux:3205.79x1 lm		
NAME: ALT85-40G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 80.35 lm/W			
MODEL	3000K CRI90	I _{max} (cd)	1868	S/MH(C0/180)	1.80
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH(C90/270)	0.98
RATED VOLTAGE(V)	226	TOTAL FLUX(lm)	3205.8	η UP,DN(C0-180)	0.0,50.2
NOMINAL FLUX(lm)	3205.79	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.8
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: 2020-06-16

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	912.4	802.2	659.5	740.8	911.2	759.0	662.4	799.5	0- 10	68.98	68.98	2.15,2.15
20	1615	1229	551.0	1077	1633	1166	561.7	1158	10- 20	273.1	342.1	10.7,10.7
30	1714	1554	386.3	1367	1805	1524	395.3	1434	20- 30	569.4	911.5	28.4,28.4
40	1290	1487	268.9	1379	1330	1486	268.5	1379	30- 40	752.2	1664	51.9,51.9
50	796.8	1026	196.1	970.8	797.2	987.7	194.2	933.7	40- 50	701.5	2365	73.8,73.8
60	397.3	538.6	155.4	521.9	398.7	511.0	152.6	484.5	50- 60	483.5	2849	88.9,88.9
70	144.6	195.0	95.89	191.3	143.1	178.2	93.13	176.3	60- 70	249.7	3098	96.7,96.7
80	38.38	48.22	33.23	48.90	39.20	43.43	30.11	42.58	70- 80	90.45	3189	99.5,99.5
90	7.789	7.090	5.564	6.594	6.916	6.077	5.105	6.085	80- 90	16.93	3206	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): 2035.2 lm

%lum = 63.5%

%lamp = 63.5%

Conical surface Flux(120deg): 2848.7 lm

%lum = 88.9%

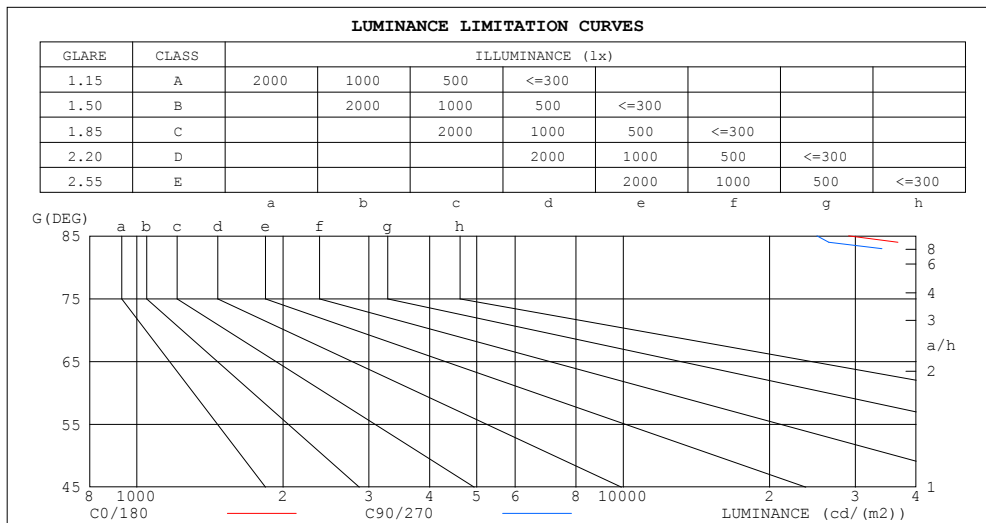
%lamp = 88.9%

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:39.90W PF:0.9680 Freq:0Hz Lamp Flux:3205.79x1 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	29081	25029
80	53533	47804
75	72617	61213
70	102405	70027
65	143180	75873
60	192503	77619
55	246240	76904
50	300265	76219
45	355889	79868

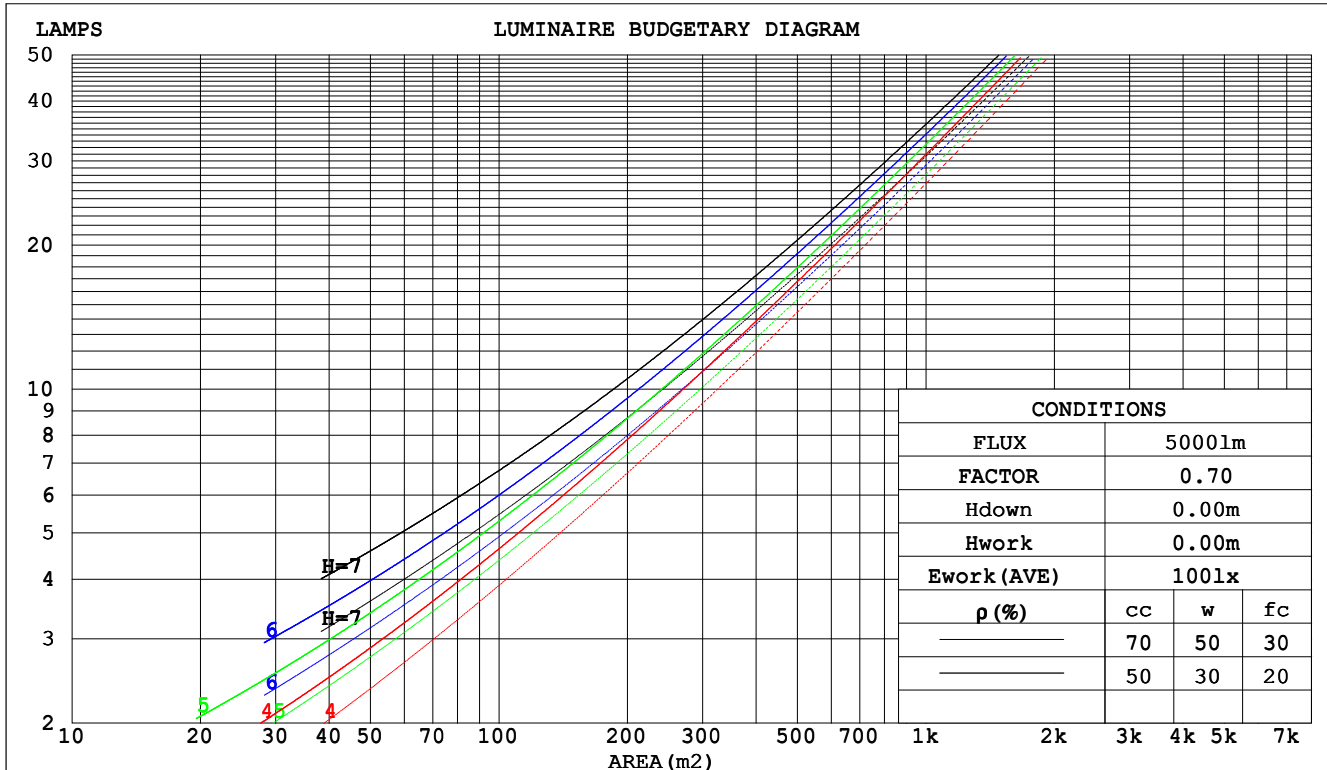
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-06-16

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:3205.79x1 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	1.06	1.02	.99	1.04	1.01	.98	.90	.97	.94	.96	.94	.92	.92	.91	.89	.87
2.0	.94	.88	.83	.92	.86	.82	.89	.84	.80	.85	.81	.78	.82	.79	.76	.74
3.0	.83	.76	.70	.82	.75	.69	.79	.73	.68	.76	.71	.67	.74	.69	.66	.64
4.0	.74	.66	.60	.73	.65	.59	.70	.64	.58	.68	.62	.58	.66	.61	.57	.55
5.0	.66	.58	.51	.65	.57	.51	.63	.56	.51	.61	.55	.50	.59	.54	.50	.48
6.0	.60	.51	.45	.59	.51	.45	.57	.50	.44	.55	.49	.44	.54	.48	.44	.42
7.0	.54	.45	.39	.53	.45	.39	.52	.44	.39	.50	.44	.39	.49	.43	.39	.37
8.0	.49	.41	.35	.48	.40	.35	.47	.40	.35	.46	.39	.34	.45	.39	.34	.32
9.0	.45	.37	.31	.44	.36	.31	.43	.36	.31	.42	.35	.31	.41	.35	.31	.29
10.0	.41	.33	.28	.41	.33	.28	.40	.33	.28	.39	.32	.28	.38	.32	.28	.26



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:3205.79x1 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	.266	.151	.048	.259	.148	.047	.246	.141	.045	.234	.135	.043	.223	.129	.042	
2.0	.258	.142	.043	.252	.139	.043	.241	.134	.042	.231	.129	.040	.221	.125	.039	
3.0	.245	.131	.039	.240	.128	.039	.230	.125	.038	.221	.121	.037	.212	.117	.036	
4.0	.231	.120	.035	.226	.118	.035	.217	.115	.034	.209	.112	.034	.201	.109	.033	
5.0	.217	.110	.032	.213	.109	.032	.205	.107	.031	.197	.104	.031	.190	.102	.031	
6.0	.203	.102	.029	.200	.101	.029	.193	.099	.029	.186	.097	.028	.180	.095	.028	
7.0	.191	.095	.027	.188	.094	.027	.182	.092	.026	.176	.090	.026	.170	.088	.026	
8.0	.180	.088	.025	.177	.087	.025	.171	.086	.024	.166	.084	.024	.161	.083	.024	
9.0	.170	.082	.023	.167	.082	.023	.162	.080	.023	.157	.079	.023	.153	.078	.022	
10.0	.161	.077	.021	.158	.076	.021	.154	.075	.021	.149	.074	.021	.145	.073	.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	.152	.134	.119	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.168	.132	.102	.144	.114	.088	.098	.079	.062	.057	.046	.036	.018	.015	.012	
3.0	.160	.114	.078	.137	.098	.067	.094	.068	.047	.054	.040	.028	.017	.013	.009	
4.0	.152	.101	.061	.131	.087	.053	.090	.061	.037	.052	.035	.022	.017	.012	.007	
5.0	.145	.090	.049	.125	.078	.043	.086	.054	.030	.050	.032	.018	.016	.010	.006	
6.0	.139	.082	.041	.119	.071	.035	.082	.049	.025	.048	.029	.015	.015	.010	.005	
7.0	.133	.075	.034	.114	.065	.030	.079	.045	.021	.046	.027	.013	.015	.009	.004	
8.0	.127	.069	.029	.109	.060	.026	.075	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.121	.064	.026	.104	.056	.022	.072	.039	.016	.042	.023	.009	.014	.008	.003	
10.0	.116	.060	.023	.100	.052	.020	.069	.037	.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:2020-06-16

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:3205.79x1 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	29.0	30.4	29.2	30.6	30.8	26.2	27.6	26.5	27.8	28.0		
	3H	29.3	30.6	29.5	30.8	31.0	26.5	27.8	26.8	28.1	28.3	
	4H	29.3	30.5	29.6	30.8	31.0	26.6	27.9	26.9	28.1	28.4	
	6H	29.2	30.4	29.6	30.7	30.9	26.7	27.8	27.0	28.1	28.4	
	8H	29.2	30.3	29.5	30.6	30.9	26.6	27.8	27.0	28.0	28.3	
	12H	29.2	30.2	29.5	30.5	30.8	26.6	27.7	27.0	28.0	28.3	
	4H	2H	29.2	30.5	29.6	30.7	31.0	27.1	28.4	27.4	28.6	28.9
		3H	29.6	30.7	30.0	31.0	31.3	27.6	28.6	27.9	28.9	29.2
		4H	29.7	30.7	30.1	31.0	31.3	27.7	28.7	28.1	29.0	29.3
		6H	29.7	30.6	30.1	30.9	31.3	27.8	28.7	28.2	29.0	29.4
		8H	29.7	30.5	30.1	30.9	31.3	27.8	28.6	28.2	29.0	29.4
		12H	29.7	30.4	30.1	30.8	31.2	27.8	28.5	28.2	28.9	29.3
	8H	4H	29.7	30.5	30.1	30.9	31.2	27.8	28.6	28.2	29.0	29.4
		6H	29.8	30.4	30.2	30.8	31.2	28.0	28.6	28.4	29.0	29.5
		8H	29.8	30.3	30.2	30.8	31.2	28.0	28.6	28.5	29.0	29.5
		12H	29.8	30.2	30.2	30.7	31.2	28.0	28.5	28.5	28.9	29.4
	12H	4H	29.7	30.4	30.1	30.8	31.2	27.8	28.5	28.2	28.9	29.3
		6H	29.7	30.3	30.2	30.7	31.2	28.0	28.6	28.4	29.0	29.4
		8H	29.8	30.2	30.2	30.7	31.2	28.0	28.5	28.5	29.0	29.4
Variations with the observer position at spacings:												
S = 1.0H	+ 0.8 / - 0.9					+ 1.2 / - 0.9						
1.5H	+ 0.5 / - 0.8					+ 1.6 / - 2.4						
2.0H	+ 1.0 / - 1.8					+ 2.1 / - 3.2						

CIE Pub.117, 3206 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.0)

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:3205.79x1 lm		
NAME: ALT85-40G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:

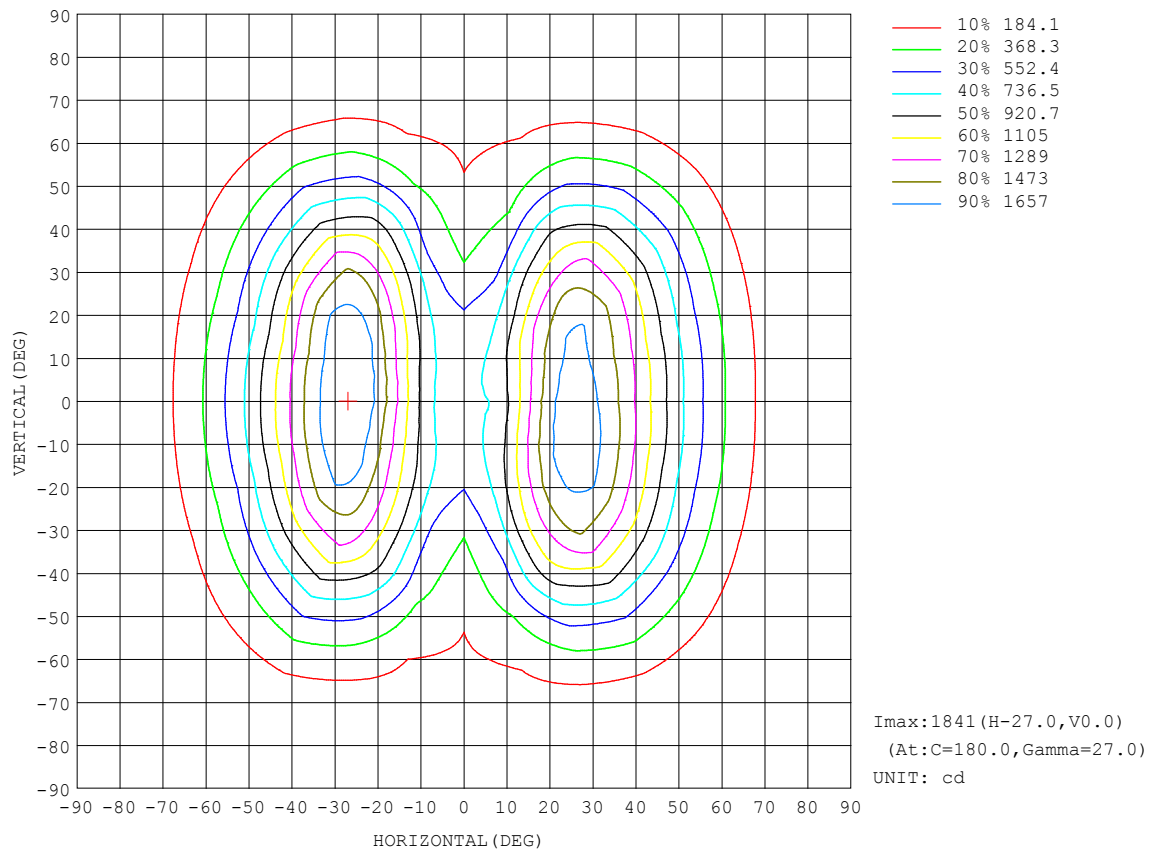
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	61	50	44	60	50	43	59	49	43	37
0.80	72	61	54	71	61	54	69	60	54	47
1.00	81	71	64	80	70	64	77	71	63	57
1.25	88	78	72	86	78	72	84	76	71	64
1.50	92	84	78	91	83	77	88	81	76	69
2.00	99	91	86	97	90	85	94	88	84	77
2.50	102	95	90	100	94	89	97	91	87	80
3.00	105	99	94	103	98	93	99	95	91	83
4.00	108	104	100	106	102	98	102	98	95	87
5.00	110	106	103	108	104	101	104	101	98	89
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:3205.79x1 lm		
NAME: ALT85-40G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:

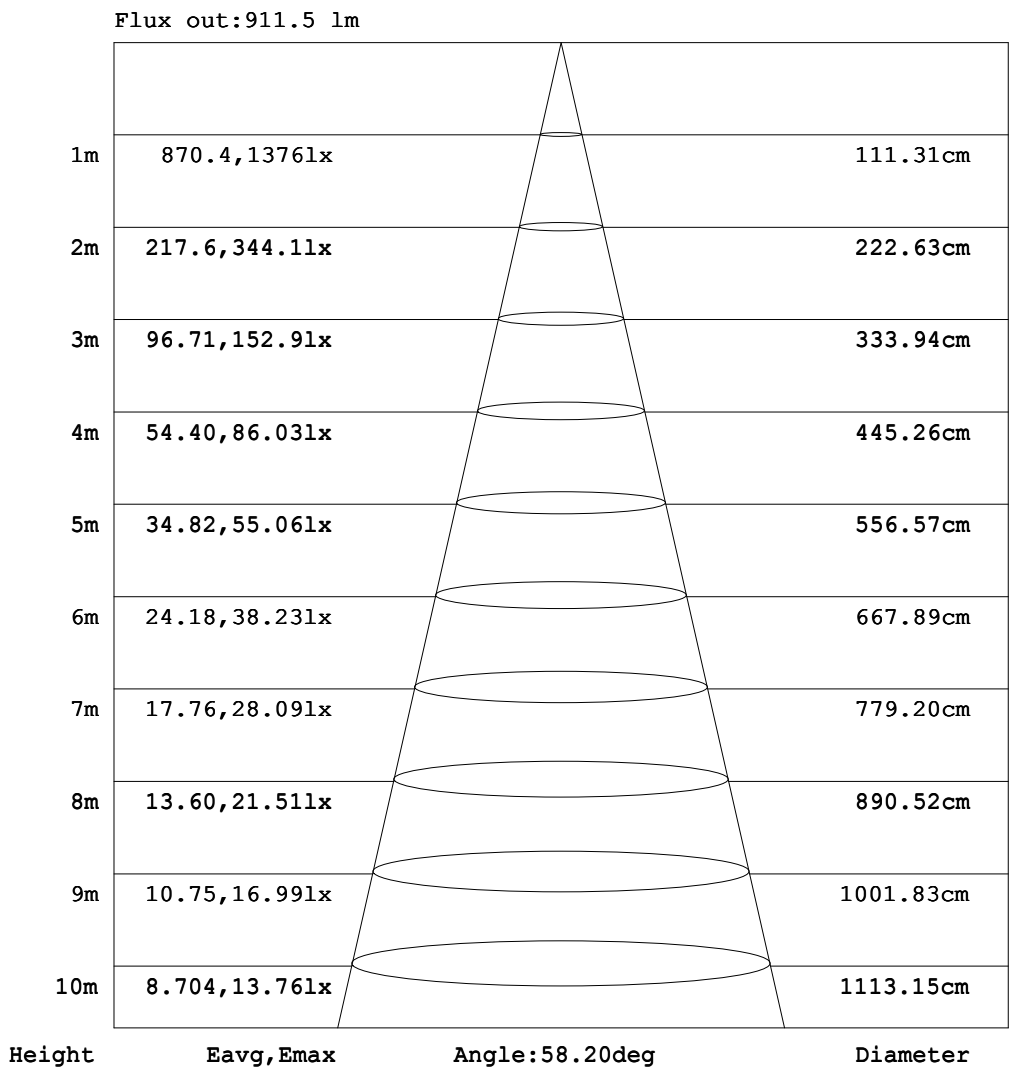


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-06-16

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:3205.79x1 lm		
NAME: ALT85-40G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:



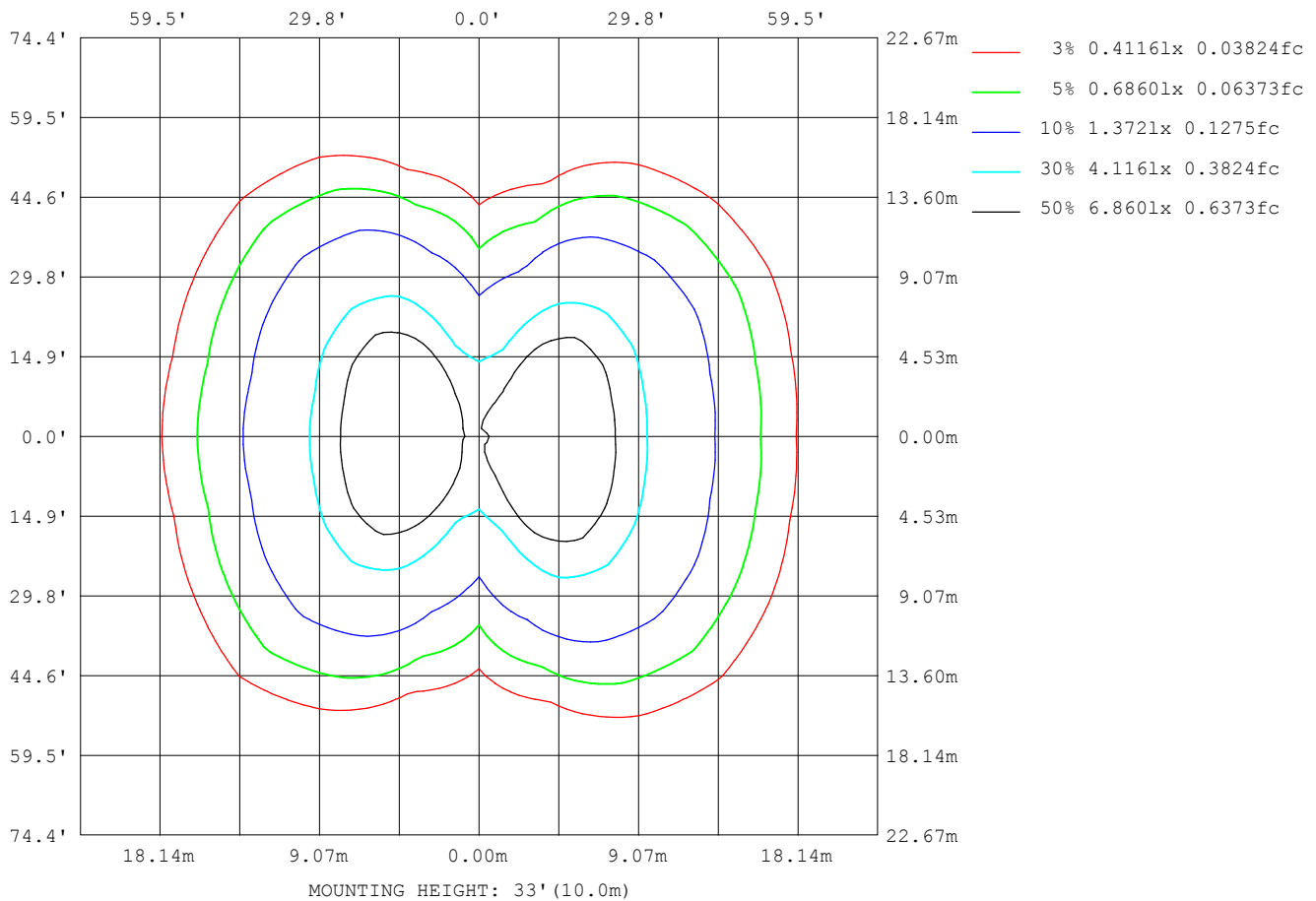
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:3205.79x1 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:3205.79x1 lm		
NAME: ALT85-40G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:72	Shielding Angle:

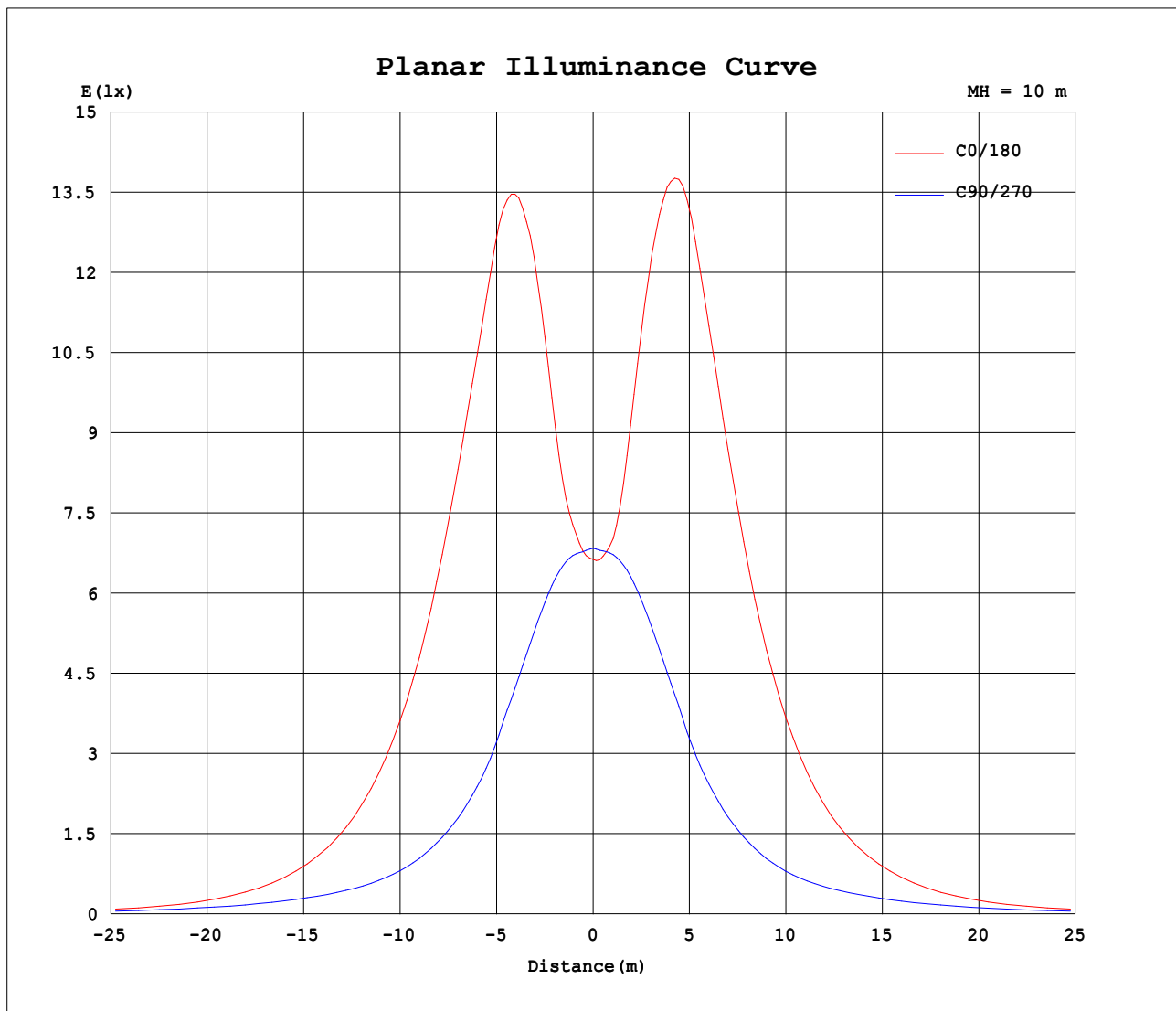
AvgL	cd/m2
L_0~180 (65) av	145141
L_0~180 (75) av	73969
L_0~180 (85) av	29675
L_90~270 (65) av	73695
L_90~270 (75) av	58790
L_90~270 (85) av	23131
L_45 (65) av	190395
L_45 (75) av	90951
L_45 (85) av	31160

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:

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