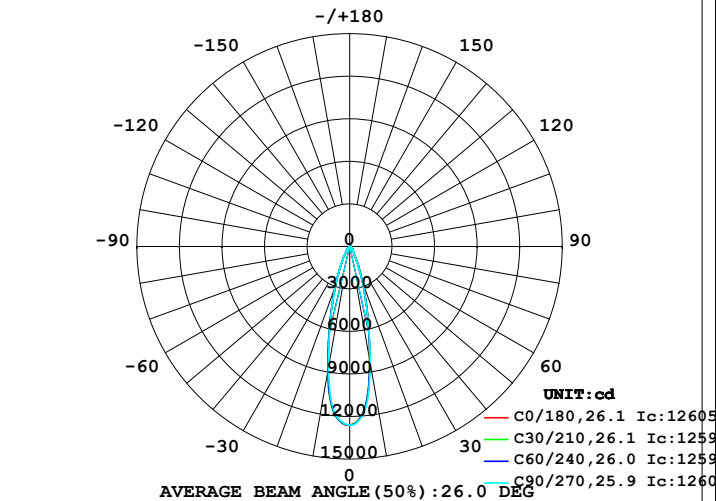


LUMINAIRE PHOTOMETRIC TEST REPORT

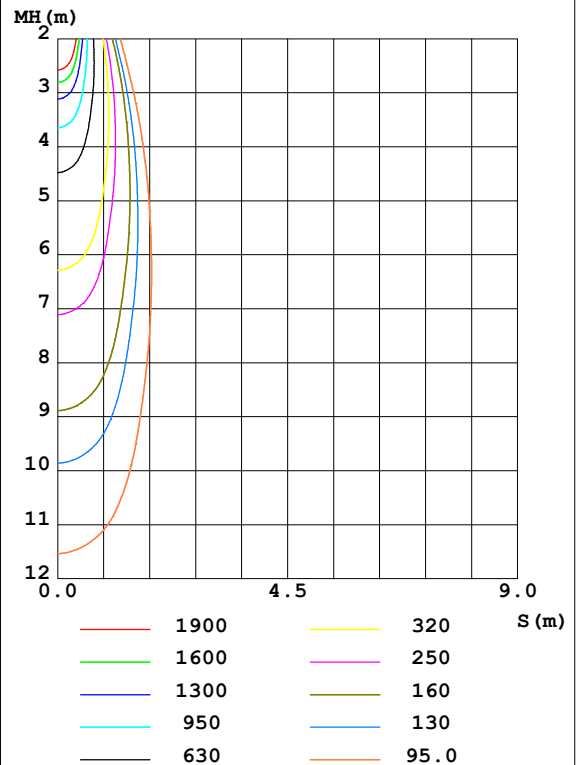
Test:U:225.1V I:0.1840A P:40.10W PF:0.9670 Freq:0Hz Lamp Flux:3546.53x1 lm					
NAME: ALT85-40G30-M		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.:		SUR.:75		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 88.44 lm/W
MODEL	3000K CRI90	I _{max} (cd)	12611	S/MH(C0/180)	0.45	
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH(C90/270)	0.45	
RATED VOLTAGE(V)	226	TOTAL FLUX(lm)	3546.5	η UP,DN(C0-180)	0.0,48.7	
NOMINAL FLUX(lm)	3546.53	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,51.3	
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.00	
TEST VOLTAGE(V)	225.1	η down(%)	100.0	CIBSE SHR MAX	1.00	

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:2020-03-11

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	817.8	825.7	834.8	870.6	887.4	875.3	861.6	823.1	0- 10	1018	1018	28.7,28.7
20	271.9	267.0	260.3	275.0	294.0	296.9	293.1	279.8	10- 20	1402	2421	68.3,68.3
30	73.04	68.68	66.80	72.14	77.93	81.43	81.37	77.49	20- 30	696.4	3117	87.9,87.9
40	23.34	21.47	20.43	21.01	22.62	24.62	25.13	24.51	30- 40	263.9	3381	95.3,95.3
50	8.404	7.718	7.358	7.510	8.106	8.525	8.883	8.709	40- 50	108.7	3490	98.4,98.4
60	1.307	1.291	1.246	1.432	1.600	1.536	1.488	1.376	50- 60	40.27	3530	99.5,99.5
70	0.6315	0.6045	0.5839	0.6032	0.6419	0.6654	0.6958	0.6797	60- 70	9.063	3539	99.8,99.8
80	0.2709	0.2725	0.2788	0.2911	0.2763	0.2736	0.2573	0.2458	70- 80	4.700	3544	99.9,99.9
90	0.3376	0.3433	0.3443	0.3400	0.2230	0.2186	0.2139	0.2141	80- 90	2.874	3547	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:×10cd									UNIT:lm		

Conical surface Flux(90deg): 3446.6 lm

%lum = 97.2%

%lamp = 97.2%

Conical surface Flux(120deg): 3529.9 lm

%lum = 99.5%

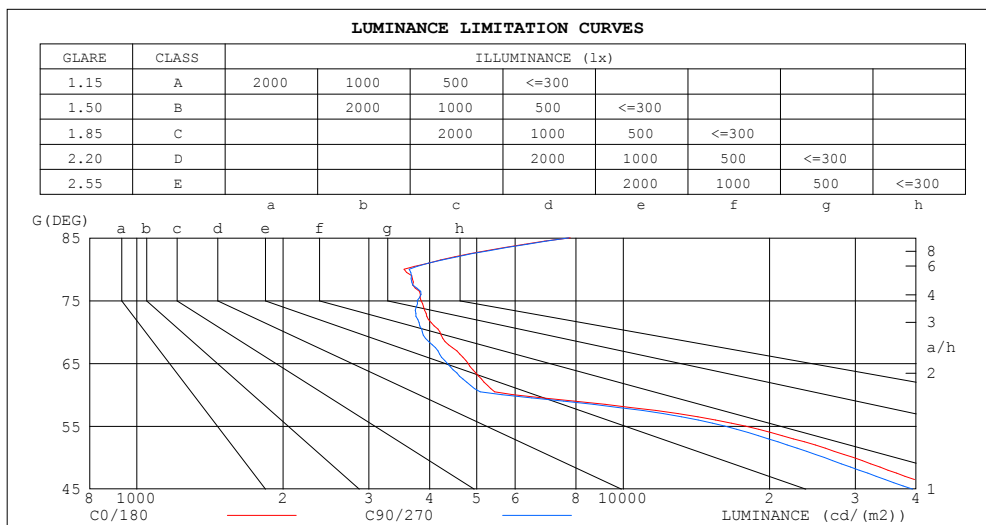
%lamp = 99.5%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:AE
 Test Date:2020-03-11

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:225.1V I:0.1840A P:40.10W PF:0.9670 Freq:0Hz Lamp Flux:3546.53x1 lm		
NAME: ALT85-40G30-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	7785	7737
80	3547	3634
75	3839	3773
70	4198	3864
65	4797	4351
60	5946	5638
55	17824	16186
50	29727	25904
45	45083	39367

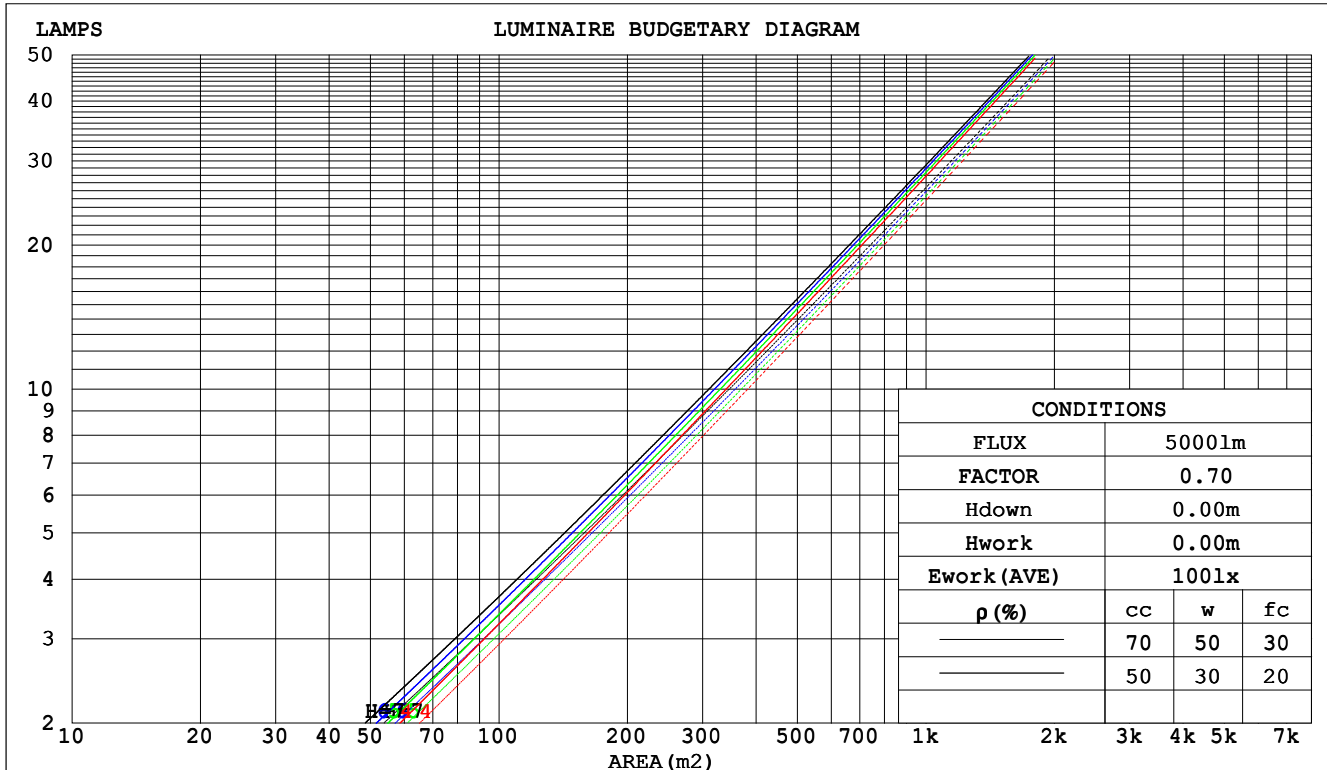
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:AE
Test Date:2020-03-11

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:225.1V I:0.1840A P:40.10W PF:0.9670 Freq:0Hz Lamp Flux:3546.53x1 lm		
NAME: ALT85-40G30-M	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	.00
1.0	1.12	1.10	1.08	1.10	1.08	1.07	1.06	1.05	1.03	1.02	1.01	1.00	.99	.98	.97	.96
2.0	1.06	1.03	1.00	1.04	1.01	.99	1.01	.99	.97	.98	.96	.95	.96	.94	.93	.91
3.0	1.01	.97	.94	.90	.96	.93	.97	.94	.91	.95	.92	.90	.93	.90	.89	.87
4.0	.96	.92	.88	.95	.91	.88	.93	.90	.87	.91	.88	.86	.89	.87	.85	.84
5.0	.92	.87	.84	.91	.87	.84	.89	.86	.83	.88	.85	.82	.86	.84	.81	.80
6.0	.88	.83	.80	.87	.83	.80	.86	.82	.79	.85	.81	.79	.84	.81	.78	.77
7.0	.85	.80	.77	.84	.80	.76	.83	.79	.76	.82	.78	.76	.81	.78	.75	.74
8.0	.82	.77	.74	.81	.77	.73	.80	.76	.73	.79	.76	.73	.78	.75	.73	.72
9.0	.79	.74	.71	.78	.74	.71	.77	.73	.71	.77	.73	.70	.76	.73	.70	.69
10.0	.76	.71	.68	.76	.71	.68	.75	.71	.68	.74	.71	.68	.74	.70	.68	.67



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:AE
 Test Date:2020-03-11

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:225.1V I:0.1840A P:40.10W PF:0.9670 Freq:0Hz Lamp Flux:3546.53x1 lm					
NAME: ALT85-40G30-M			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	.150	.086	.027	.144	.082	.026	.131	.075	.024	.120	.069	.022	.109	.063	.020	
2.0	.141	.077	.024	.135	.075	.023	.125	.070	.022	.116	.065	.020	.107	.060	.019	
3.0	.132	.070	.021	.128	.068	.021	.119	.064	.020	.111	.061	.019	.104	.057	.018	
4.0	.125	.065	.019	.121	.063	.019	.113	.060	.018	.106	.057	.017	.100	.054	.017	
5.0	.118	.060	.017	.114	.059	.017	.108	.056	.017	.102	.054	.016	.097	.052	.016	
6.0	.112	.056	.016	.109	.055	.016	.103	.053	.015	.098	.051	.015	.093	.049	.015	
7.0	.106	.053	.015	.104	.052	.015	.099	.050	.014	.094	.048	.014	.090	.047	.014	
8.0	.101	.050	.014	.099	.049	.014	.095	.047	.014	.091	.046	.013	.087	.045	.013	
9.0	.097	.047	.013	.095	.046	.013	.091	.045	.013	.088	.044	.013	.084	.043	.012	
10.0	.093	.045	.012	.091	.044	.012	.088	.043	.012	.085	.042	.012	.082	.041	.012	

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	.169	.158	.147	.145	.135	.126	.099	.093	.087	.057	.054	.051	.018	.017	.016	
2.0	.152	.133	.116	.130	.114	.101	.089	.079	.070	.051	.046	.041	.017	.015	.013	
3.0	.138	.113	.094	.118	.098	.081	.081	.068	.057	.047	.040	.034	.015	.013	.011	
4.0	.126	.098	.077	.108	.085	.067	.074	.059	.047	.043	.035	.028	.014	.011	.009	
5.0	.116	.086	.064	.100	.075	.056	.069	.052	.039	.040	.031	.023	.013	.010	.008	
6.0	.108	.076	.054	.093	.066	.047	.064	.046	.033	.037	.027	.020	.012	.009	.007	
7.0	.100	.068	.046	.086	.059	.040	.060	.042	.028	.035	.024	.017	.011	.008	.006	
8.0	.094	.062	.039	.081	.054	.034	.056	.038	.024	.033	.022	.015	.011	.007	.005	
9.0	.089	.056	.034	.076	.049	.030	.053	.034	.021	.031	.020	.013	.010	.007	.004	
10.0	.084	.052	.030	.072	.045	.026	.050	.032	.019	.029	.019	.011	.009	.006	.004	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:AE
Test Date:2020-03-11

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:225.1V I:0.1840A P:40.10W PF:0.9670 Freq:0Hz Lamp Flux:3546.53x1 lm										
NAME: ALT85-40G30-M					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	13.3	14.1	13.5	14.2	14.4	12.8	13.5	13.0	13.7	13.9
3H	13.2	13.9	13.5	14.1	14.3	12.7	13.4	12.9	13.6	13.8
4H	13.2	13.8	13.4	14.0	14.2	12.7	13.3	12.9	13.5	13.7
6H	13.1	13.7	13.4	13.9	14.2	12.6	13.2	12.9	13.4	13.7
8H	13.1	13.7	13.4	13.9	14.2	12.6	13.2	12.9	13.4	13.7
12H	13.1	13.6	13.4	13.9	14.2	12.6	13.1	12.9	13.4	13.7
4H 2H	13.1	13.8	13.4	14.0	14.2	12.6	13.3	12.9	13.5	13.7
3H	13.0	13.6	13.3	13.9	14.1	12.5	13.1	12.9	13.4	13.6
4H	13.0	13.5	13.3	13.8	14.1	12.5	13.0	12.8	13.3	13.6
6H	12.9	13.4	13.3	13.7	14.1	12.4	12.9	12.8	13.2	13.6
8H	12.9	13.3	13.3	13.7	14.0	12.4	12.9	12.8	13.2	13.6
12H	12.9	13.3	13.3	13.7	14.1	12.4	12.8	12.9	13.2	13.6
8H 4H	12.9	13.3	13.2	13.6	14.0	12.4	12.8	12.8	13.1	13.5
6H	12.8	13.2	13.2	13.6	14.0	12.3	12.7	12.8	13.1	13.5
8H	12.8	13.1	13.3	13.5	14.0	12.3	12.7	12.8	13.1	13.5
12H	12.9	13.1	13.3	13.6	14.0	12.4	12.7	12.9	13.1	13.6
12H 4H	12.8	13.2	13.2	13.6	14.0	12.3	12.7	12.7	13.1	13.5
6H	12.8	13.1	13.2	13.5	13.9	12.3	12.6	12.7	13.0	13.5
8H	12.8	13.0	13.2	13.5	14.0	12.3	12.6	12.8	13.0	13.5
Variations with the observer position at spacings:										
S = 1.0H	+ 2.5 / - 5.1					+ 2.2 / - 5.0				
1.5H	+ 3.4 / - 3.5					+ 3.2 / - 3.3				
2.0H	+ 4.5 / - 5.6					+ 4.1 / - 5.4				

CIE Pub.117, 3547 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.4)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:AE
Test Date:2020-03-11

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:225.1V I:0.1840A P:40.10W PF:0.9670 Freq:0Hz Lamp Flux:3546.53x1 lm		
NAME: ALT85-40G30-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:

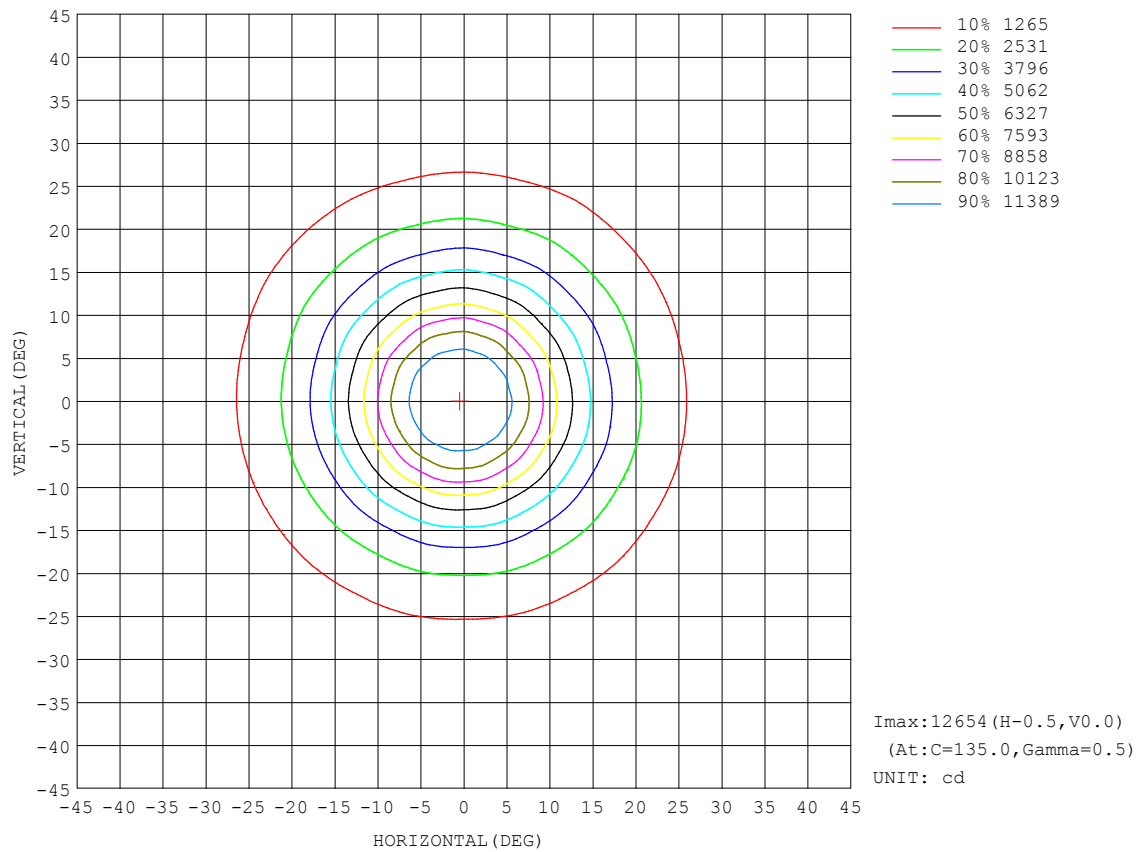
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	89	82	79	88	82	79	87	82	79	75
0.80	96	90	87	95	90	87	94	89	86	83
1.00	100	95	91	99	94	91	98	94	90	87
1.25	104	99	96	103	98	95	101	97	94	90
1.50	107	102	99	105	101	98	103	100	97	93
2.00	109	105	102	108	104	101	105	102	100	95
2.50	111	107	104	109	106	103	106	103	101	96
3.00	112	109	106	110	107	105	107	105	103	97
4.00	114	111	109	112	110	108	108	107	105	98
5.00	115	113	111	113	111	110	109	108	107	99
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:2020-03-11

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:225.1V I:0.1840A P:40.10W PF:0.9670 Freq:0Hz Lamp Flux:3546.53x1 lm		
NAME: ALT85-40G30-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:

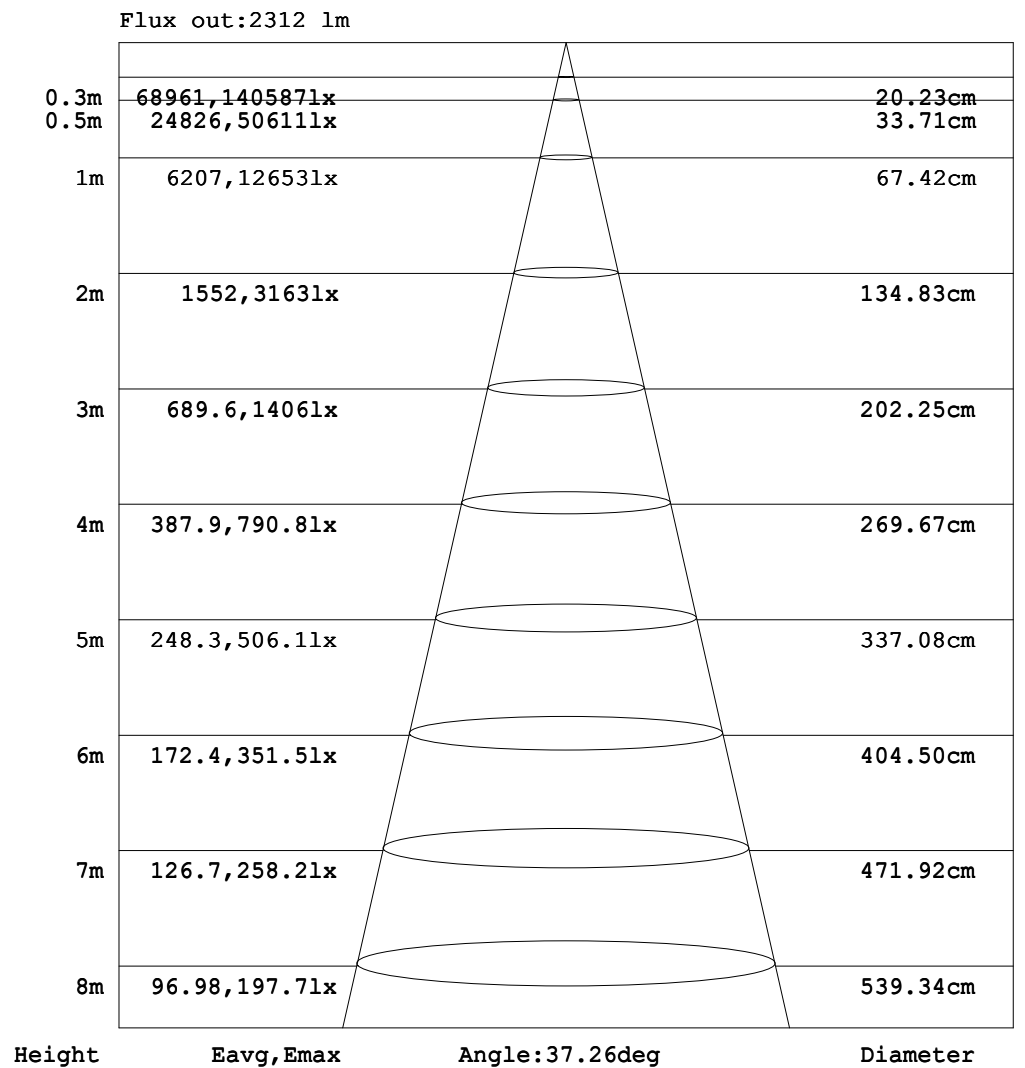


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:AE
Test Date:2020-03-11

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:225.1V I:0.1840A P:40.10W PF:0.9670 Freq:0Hz Lamp Flux:3546.53x1 lm		
NAME: ALT85-40G30-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:



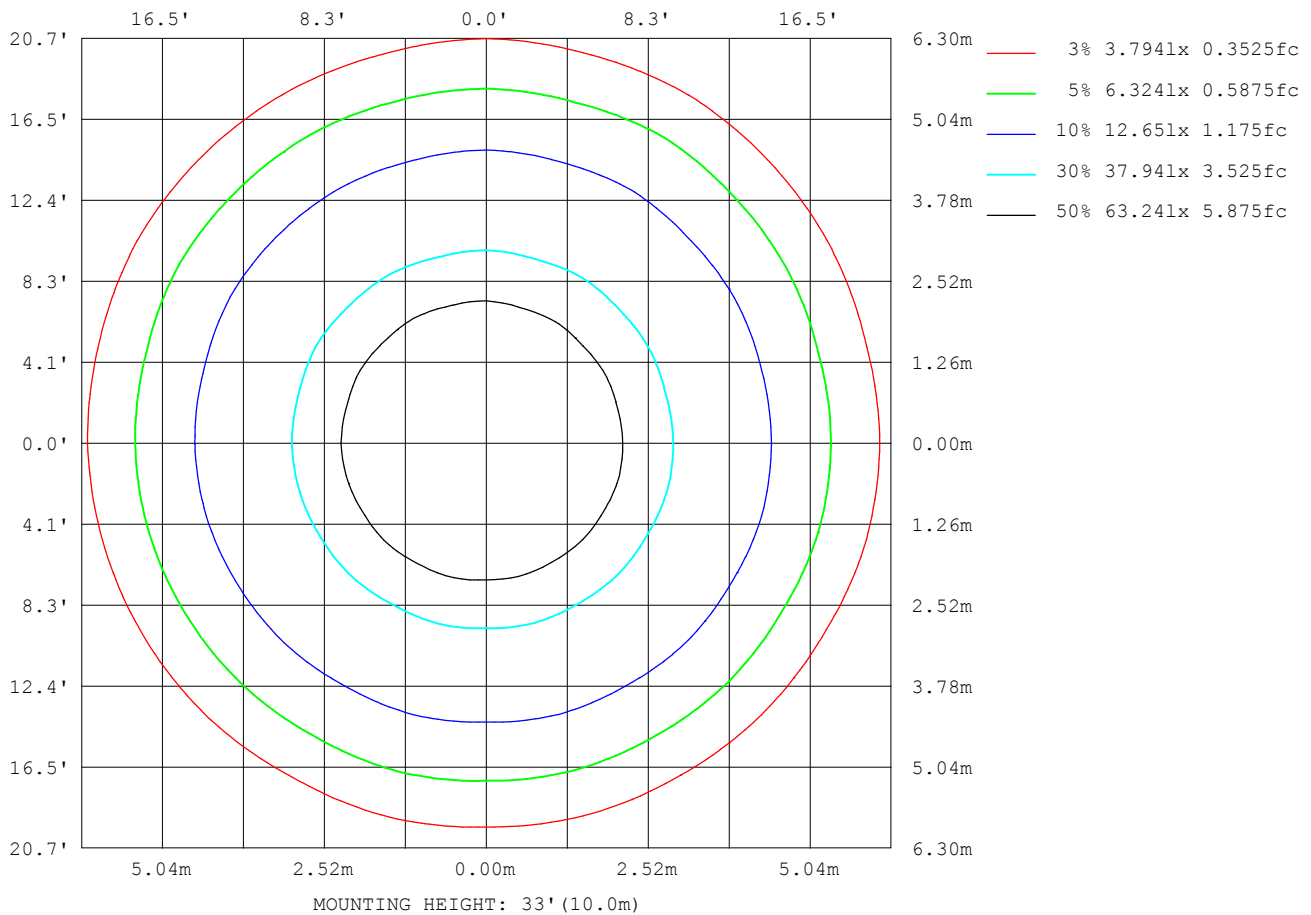
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:AE
Test Date:2020-03-11

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:225.1V I:0.1840A P:40.10W PF:0.9670 Freq:0Hz Lamp Flux:3546.53x1 lm		
NAME: ALT85-40G30-M	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:2020-03-11

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:225.1V I:0.1840A P:40.10W PF:0.9670 Freq:0Hz Lamp Flux:3546.53x1 lm		
NAME: ALT85-40G30-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:

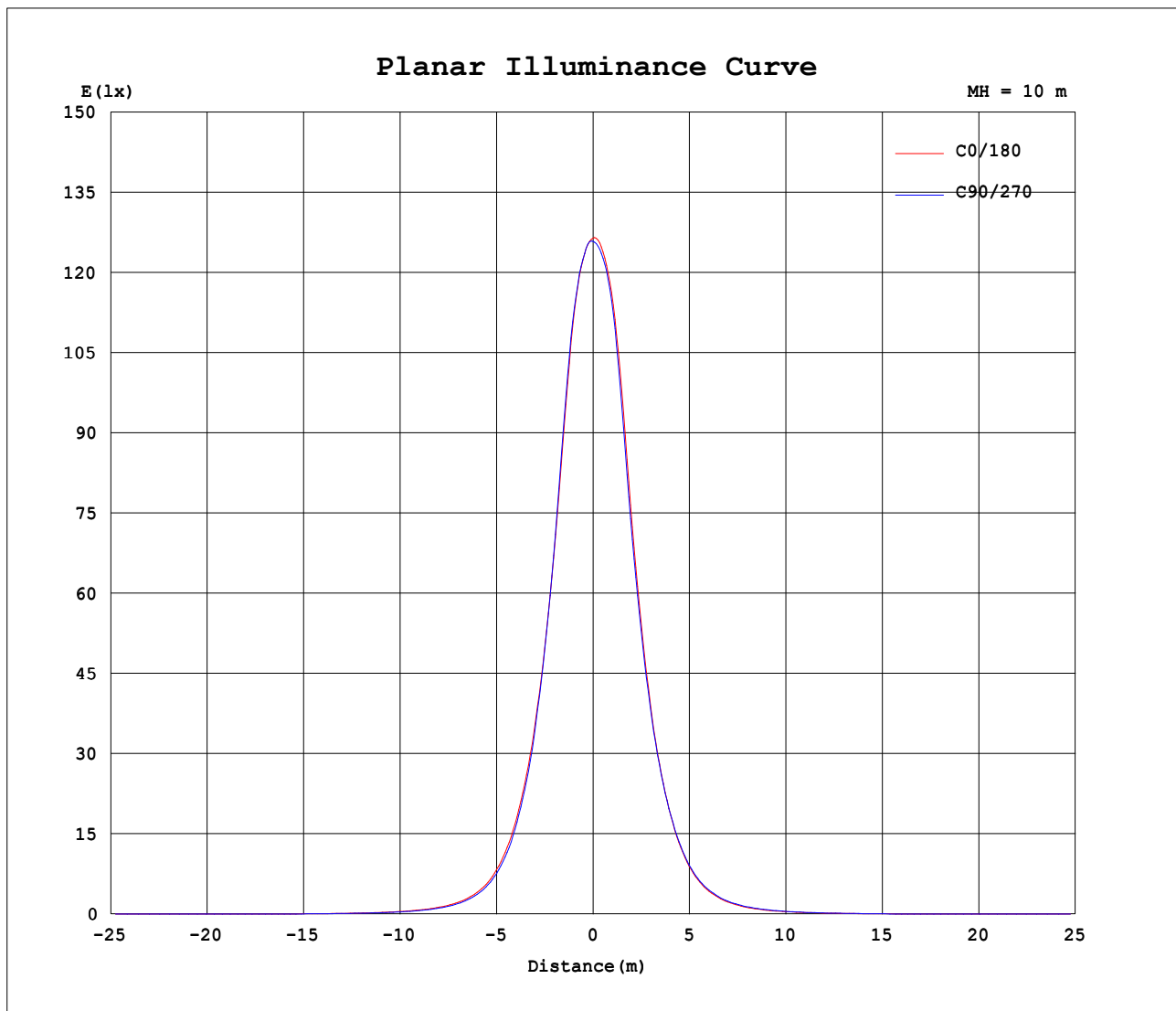
AvgL	cd/m2
L_0~180 (65) av	4833
L_0~180 (75) av	3866
L_0~180 (85) av	6854
L_90~270 (65) av	4803
L_90~270 (75) av	3880
L_90~270 (85) av	6717
L_45 (65) av	4813
L_45 (75) av	3857
L_45 (85) av	6799

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:AE
 Test Date:2020-03-11

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: 2020-03-11

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:

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:

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: