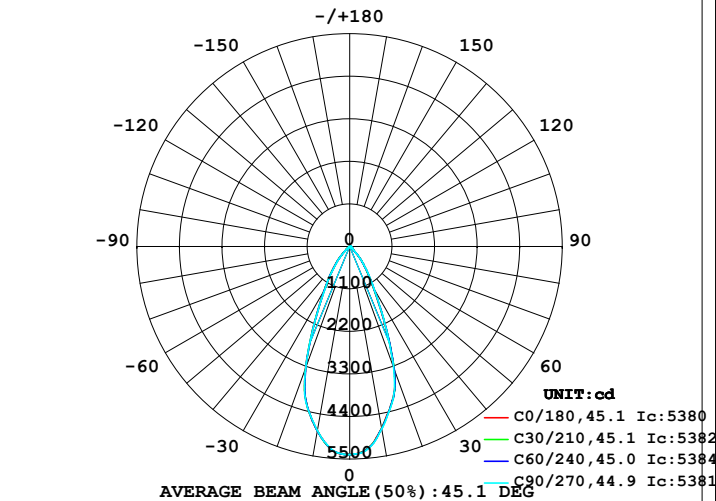


## LUMINAIRE PHOTOMETRIC TEST REPORT

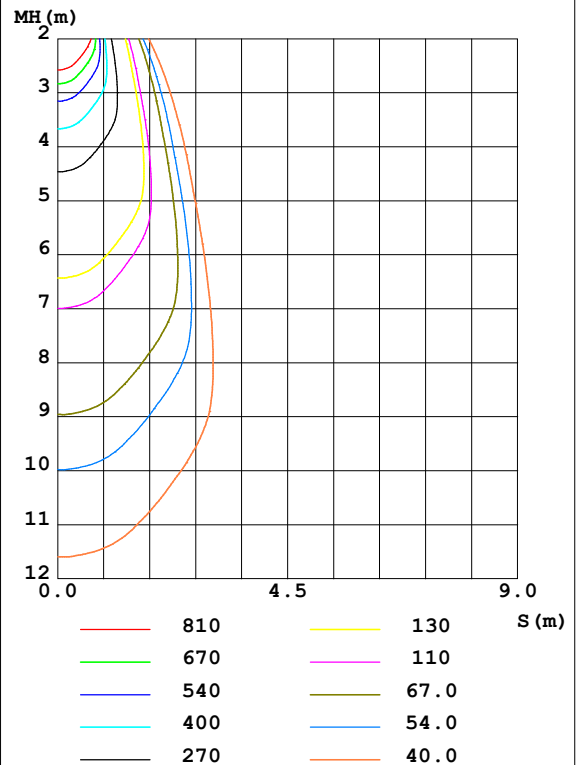
Test:U:225.0V I:0.1840A P:40.00W PF:0.9660 Freq:0Hz Lamp Flux:3380.92x1 lm		
NAME: ALT85-40G30-WF	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 84.52 lm/W			
MODEL	3000K CRI90	I <sub>max</sub> (cd)	5384	S/MH(C0/180)	0.71
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH(C90/270)	0.70
RATED VOLTAGE(V)	226	TOTAL FLUX(lm)	3380.9	η UP,DN(C0-180)	0.0,49.8
NOMINAL FLUX(lm)	3380.92	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.2
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	225.1	η down(%)	100.0	CIBSE SHR MAX	0.70

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:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	4765	4787	4792	4825	4839	4831	4831	4784	0- 10	487.7	487.7	14.4,14.4
20	3358	3407	3315	3335	3348	3288	3336	3322	10- 20	1165	1653	48.9,48.9
30	1239	1257	1268	1317	1340	1320	1306	1265	20- 30	980.6	2634	77.9,77.9
40	471.4	470.1	468.1	489.8	509.8	498.2	489.5	466.5	30- 40	516.1	3150	93.2,93.2
50	72.83	74.46	73.27	76.17	84.11	80.64	74.23	69.18	40- 50	176.1	3326	98.4,98.4
60	19.07	18.75	18.20	19.00	20.38	19.52	18.48	18.43	50- 60	33.71	3360	99.4,99.4
70	8.254	8.289	8.542	8.888	8.936	8.678	8.236	8.058	60- 70	13.19	3373	99.8,99.8
80	2.686	2.743	2.759	2.813	2.522	2.493	2.375	2.309	70- 80	5.484	3378	99.9,99.9
90	3.257	3.259	3.197	3.185	2.368	2.375	2.375	2.434	80- 90	2.719	3381	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): 3275.2 lm

%lum = 96.9%

%lamp = 96.9%

Conical surface Flux(120deg): 3359.5 lm

%lum = 99.4%

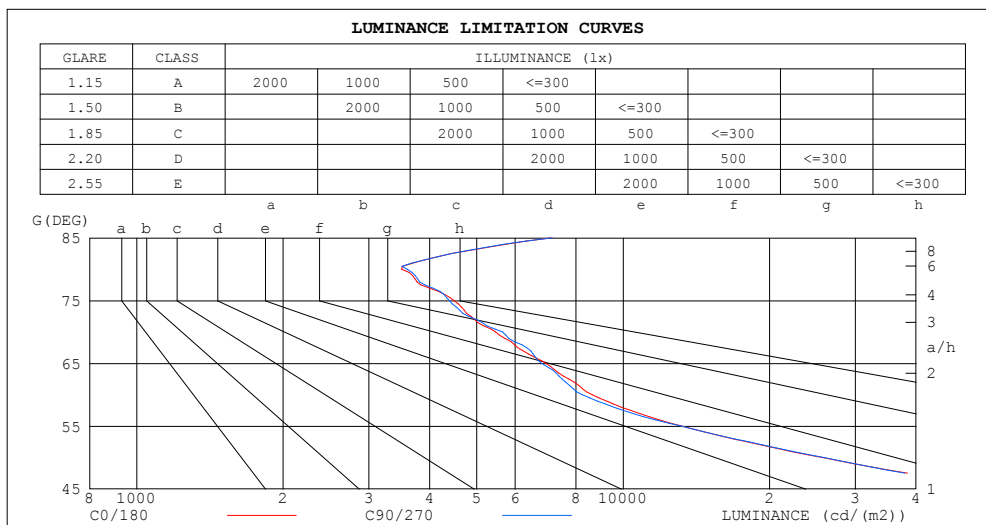
%lamp = 99.4%

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

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:225.0V I:0.1840A P:40.00W PF:0.9660 Freq:0Hz Lamp Flux:3380.92x1 lm		
NAME: ALT85-40G30-WF	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	7105	7154
80	3503	3599
75	4492	4395
70	5465	5657
65	6942	6802
60	8638	8244
55	13207	13165
50	25659	25820
45	60263	58901

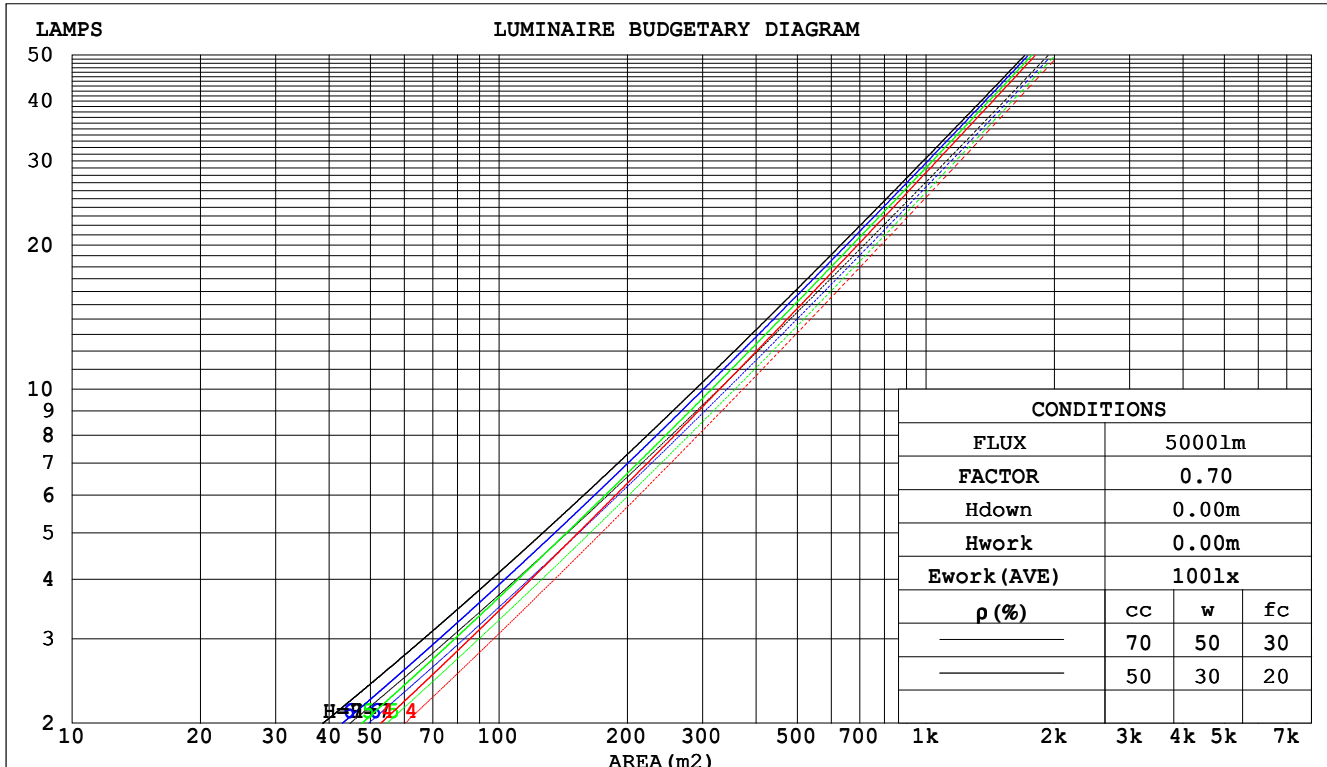
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-03-11

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:225.0V I:0.1840A P:40.00W PF:0.9660 Freq:0Hz Lamp Flux:3380.92x1 lm		
NAME: ALT85-40G30-WF	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	1.09	1.07	1.09	1.07	1.05	1.05	1.03	1.02	1.01	.00	.99	.98	.97	.96	.94
2.0	1.04	1.00	.97	1.02	.99	.96	.99	.96	.94	.96	.94	.92	.93	.92	.90	.88
3.0	.98	.93	.89	.96	.92	.88	.94	.90	.87	.91	.88	.86	.89	.86	.84	.83
4.0	.92	.87	.83	.91	.86	.82	.89	.84	.81	.87	.83	.80	.85	.82	.79	.78
5.0	.86	.81	.77	.86	.80	.77	.84	.79	.76	.82	.78	.75	.81	.77	.75	.73
6.0	.82	.76	.72	.81	.76	.72	.79	.75	.71	.78	.74	.71	.77	.73	.70	.69
7.0	.77	.72	.68	.77	.71	.68	.76	.71	.67	.74	.70	.67	.73	.70	.67	.65
8.0	.73	.68	.64	.73	.68	.64	.72	.67	.64	.71	.67	.63	.70	.66	.63	.62
9.0	.70	.64	.61	.69	.64	.61	.68	.64	.60	.68	.63	.60	.67	.63	.60	.59
10.0	.67	.61	.58	.66	.61	.57	.65	.61	.57	.65	.60	.57	.64	.60	.57	.56



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:225.0V I:0.1840A P:40.00W PF:0.9660 Freq:0Hz Lamp Flux:3380.92x1 lm					
NAME: ALT85-40G30-WF			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	.170	.097	.031	.163	.093	.030	.151	.086	.028	.139	.080	.026	.129	.075	.024	
2.0	.162	.089	.027	.156	.086	.026	.146	.081	.025	.136	.076	.024	.127	.072	.023	
3.0	.153	.082	.024	.149	.080	.024	.140	.076	.023	.131	.072	.022	.124	.069	.021	
4.0	.146	.076	.022	.142	.074	.022	.134	.071	.021	.127	.068	.021	.120	.065	.020	
5.0	.139	.071	.020	.135	.069	.020	.129	.067	.020	.122	.065	.019	.117	.062	.019	
6.0	.132	.066	.019	.129	.065	.019	.123	.063	.018	.118	.061	.018	.113	.059	.018	
7.0	.126	.062	.018	.124	.062	.018	.118	.060	.017	.114	.058	.017	.109	.057	.017	
8.0	.121	.059	.017	.118	.058	.016	.114	.057	.016	.110	.055	.016	.105	.054	.016	
9.0	.116	.056	.016	.114	.055	.016	.110	.054	.015	.106	.053	.015	.102	.052	.015	
10.0	.111	.053	.015	.109	.053	.015	.106	.052	.015	.102	.051	.014	.099	.050	.014	

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	.087	.057	.054	.050	.018	.017	.016	
2.0	.155	.133	.114	.133	.114	.098	.091	.079	.069	.052	.046	.040	.017	.015	.013	
3.0	.142	.114	.091	.122	.098	.079	.084	.068	.055	.048	.040	.033	.016	.013	.011	
4.0	.131	.099	.074	.113	.085	.064	.078	.059	.045	.045	.035	.027	.014	.011	.009	
5.0	.122	.087	.061	.105	.075	.053	.072	.053	.037	.042	.031	.022	.014	.010	.007	
6.0	.115	.078	.051	.099	.067	.044	.068	.047	.031	.039	.028	.019	.013	.009	.006	
7.0	.108	.070	.043	.093	.061	.038	.064	.042	.027	.037	.025	.016	.012	.008	.005	
8.0	.102	.064	.037	.088	.055	.032	.061	.039	.023	.035	.023	.014	.011	.007	.005	
9.0	.097	.058	.032	.084	.051	.028	.058	.036	.020	.034	.021	.012	.011	.007	.004	
10.0	.092	.054	.028	.080	.047	.025	.055	.033	.017	.032	.019	.010	.010	.006	.003	

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:225.0V I:0.1840A P:40.00W PF:0.9660 Freq:0Hz Lamp Flux:3380.92x1 lm											
NAME: ALT85-40G30-WF					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	17.4	18.3	17.6	18.4	18.6	17.4	18.3	17.7	18.5	18.7	
	3H	17.3	18.1	17.5	18.3	18.5	17.3	18.1	17.6	18.3	18.5
	4H	17.2	18.0	17.5	18.2	18.4	17.2	18.0	17.5	18.2	18.4
	6H	17.1	17.8	17.4	18.1	18.3	17.2	17.9	17.5	18.1	18.4
	8H	17.1	17.8	17.4	18.0	18.3	17.1	17.8	17.4	18.1	18.3
	12H	17.0	17.7	17.3	18.0	18.2	17.1	17.8	17.4	18.0	18.3
4H	2H	17.2	17.9	17.4	18.1	18.4	17.2	18.0	17.5	18.2	18.4
	3H	17.0	17.7	17.3	18.0	18.2	17.1	17.8	17.4	18.0	18.3
	4H	17.0	17.6	17.3	17.9	18.2	17.0	17.6	17.4	17.9	18.2
	6H	16.9	17.4	17.2	17.7	18.1	16.9	17.5	17.3	17.8	18.1
	8H	16.8	17.3	17.2	17.7	18.0	16.9	17.4	17.3	17.7	18.1
	12H	16.8	17.2	17.2	17.6	18.0	16.9	17.3	17.3	17.7	18.1
8H	4H	16.8	17.3	17.2	17.7	18.0	16.9	17.4	17.3	17.7	18.1
	6H	16.7	17.1	17.2	17.5	17.9	16.8	17.2	17.2	17.6	18.0
	8H	16.7	17.1	17.1	17.5	17.9	16.8	17.1	17.2	17.5	18.0
	12H	16.7	17.0	17.1	17.4	17.9	16.7	17.0	17.2	17.5	17.9
12H	4H	16.8	17.2	17.2	17.6	18.0	16.8	17.3	17.2	17.6	18.0
	6H	16.7	17.0	17.1	17.5	17.9	16.7	17.1	17.2	17.5	18.0
	8H	16.6	17.0	17.1	17.4	17.9	16.7	17.0	17.2	17.5	17.9
Variations with the observer position at spacings:											
S = 1.0H	+ 2.7 / - 9.3					+ 2.8 / - 9.3					
1.5H	+ 4.9 / - 8.2					+ 5.0 / - 8.1					
2.0H	+ 6.0 / - 4.5					+ 6.0 / - 4.5					

CIE Pub.117, 3381 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.2)

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:225.0V I:0.1840A P:40.00W PF:0.9660 Freq:0Hz Lamp Flux:3380.92x1 lm		
NAME: ALT85-40G30-WF	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:

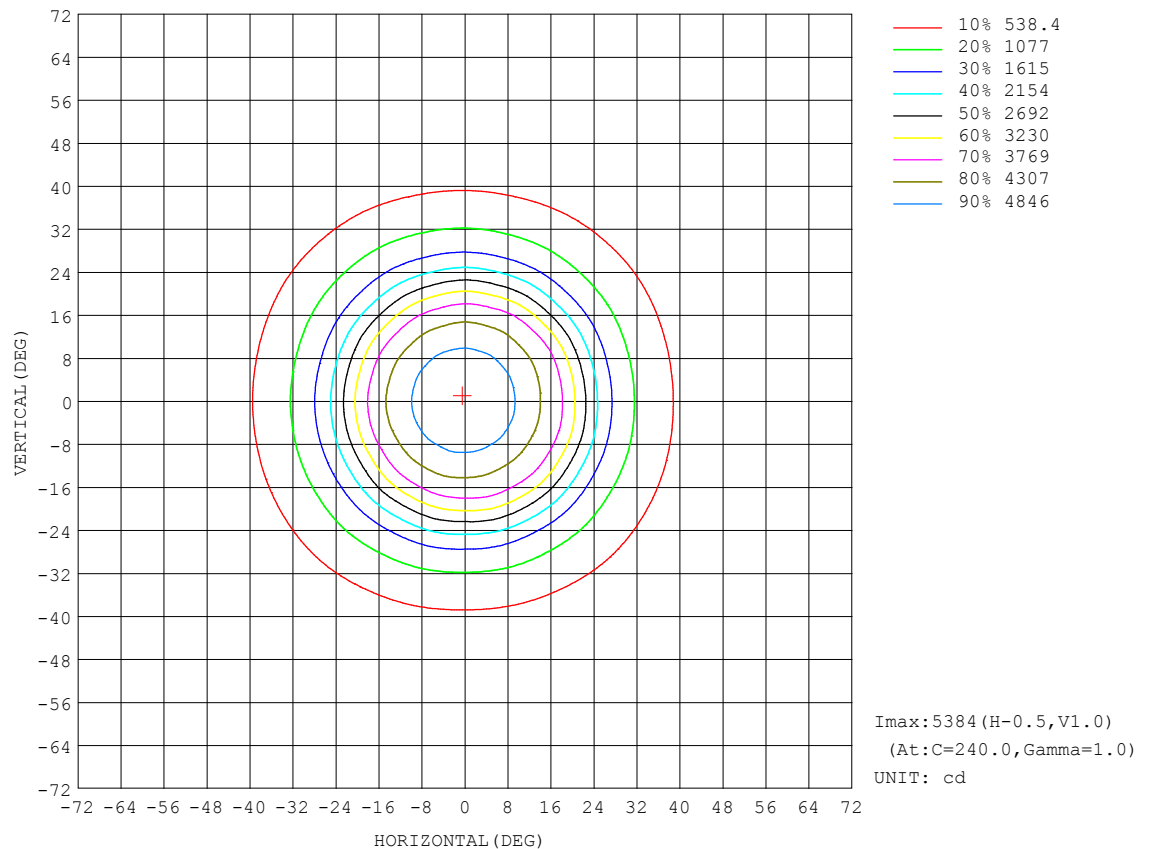
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	87	81	77	87	81	77	86	80	77	73
0.80	95	89	85	94	89	85	93	88	85	81
1.00	99	94	90	98	93	90	97	93	89	85
1.25	103	98	95	102	98	94	100	96	93	89
1.50	106	101	98	105	101	97	103	99	96	92
2.00	109	105	101	107	103	101	105	102	99	94
2.50	110	107	104	109	105	103	106	103	101	95
3.00	112	108	106	110	107	105	107	104	102	96
4.00	114	111	109	112	109	107	108	106	105	98
5.00	115	113	111	113	111	109	109	108	106	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

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:225.0V I:0.1840A P:40.00W PF:0.9660 Freq:0Hz Lamp Flux:3380.92x1 lm		
NAME: ALT85-40G30-WF	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:



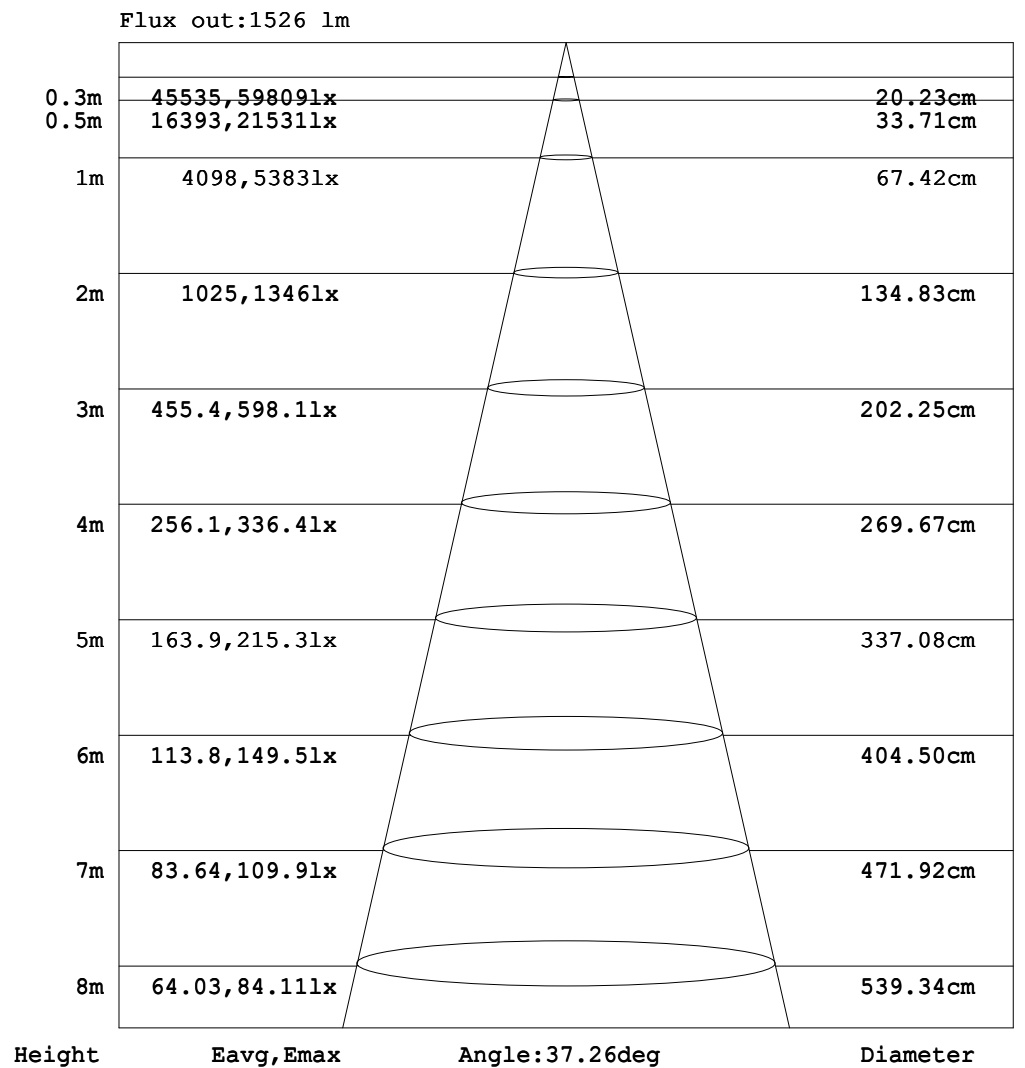
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3DEG  
Operators: AE  
Test Date: 2020-03-11

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:225.0V I:0.1840A P:40.00W PF:0.9660 Freq:0Hz Lamp Flux:3380.92x1 lm		
NAME: ALT85-40G30-WF	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:



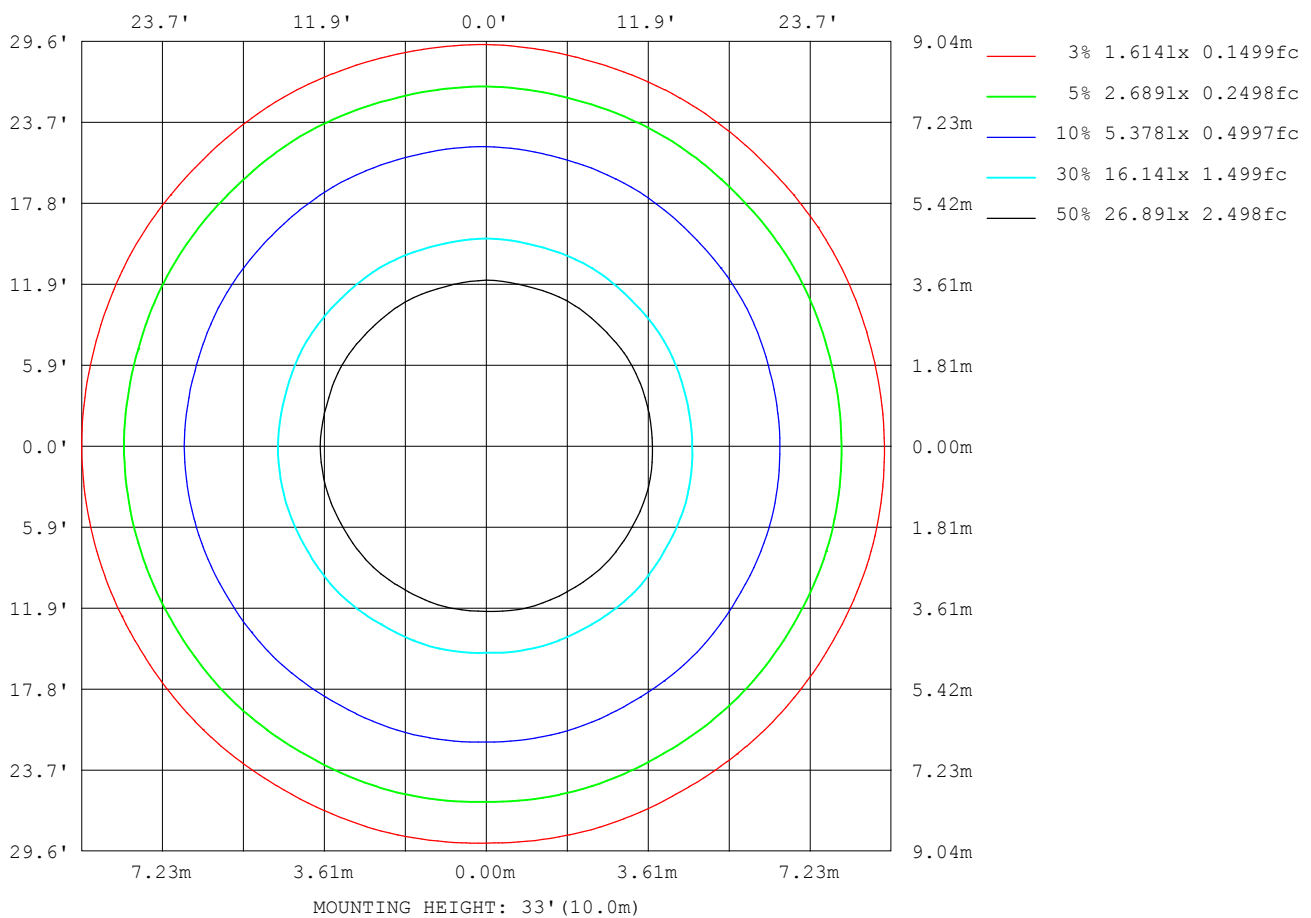
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:225.0V I:0.1840A P:40.00W PF:0.9660 Freq:0Hz Lamp Flux:3380.92x1 lm		
NAME: ALT85-40G30-WF	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:225.0V I:0.1840A P:40.00W PF:0.9660 Freq:0Hz Lamp Flux:3380.92x1 lm		
NAME: ALT85-40G30-WF	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:75	Shielding Angle:

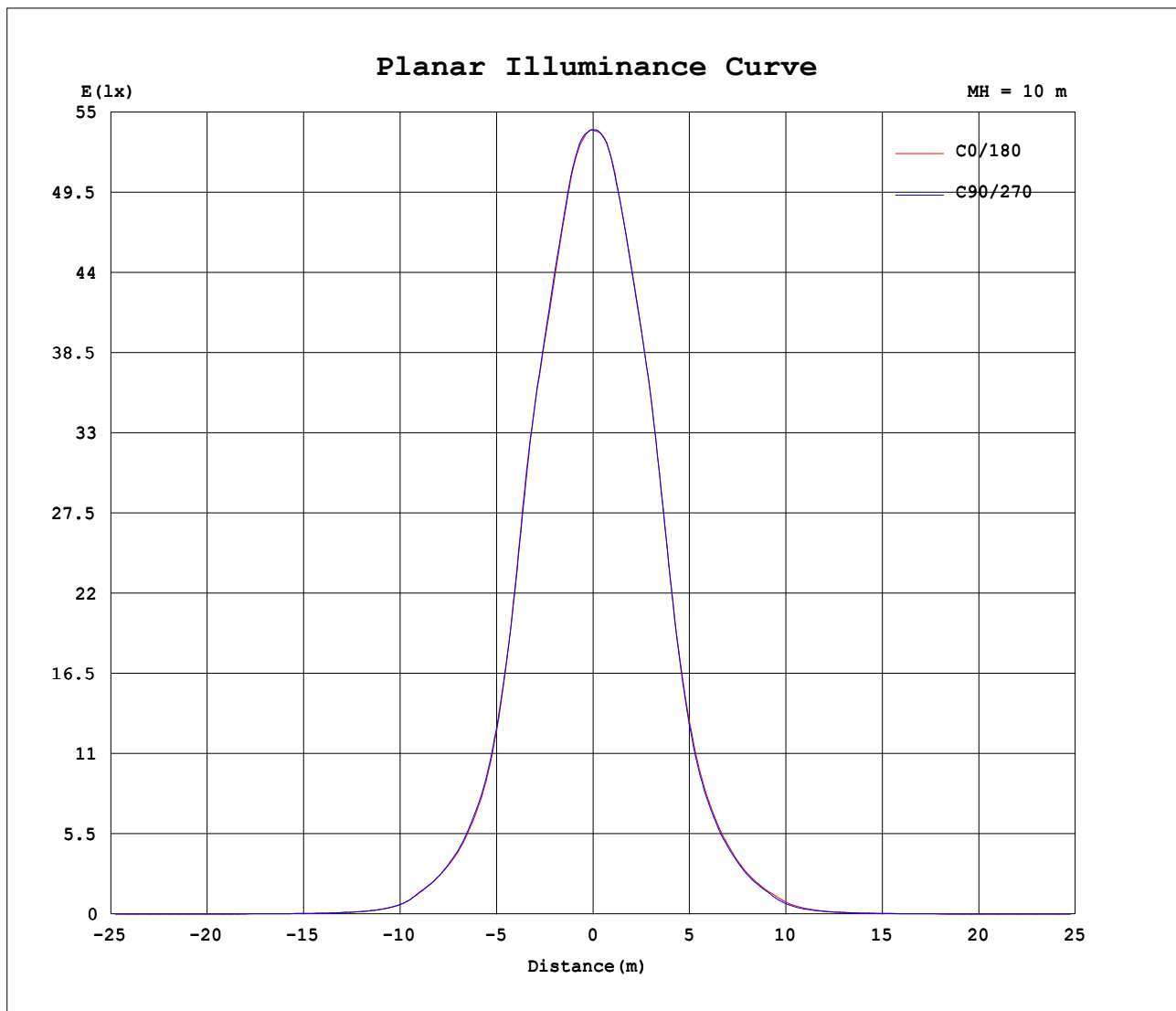
AvgL	cd/m2
L_0~180 (65) av	7241
L_0~180 (75) av	4532
L_0~180 (85) av	6356
L_90~270 (65) av	6844
L_90~270 (75) av	4385
L_90~270 (85) av	6364
L_45 (65) av	7054
L_45 (75) av	4474
L_45 (85) av	6321

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

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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: