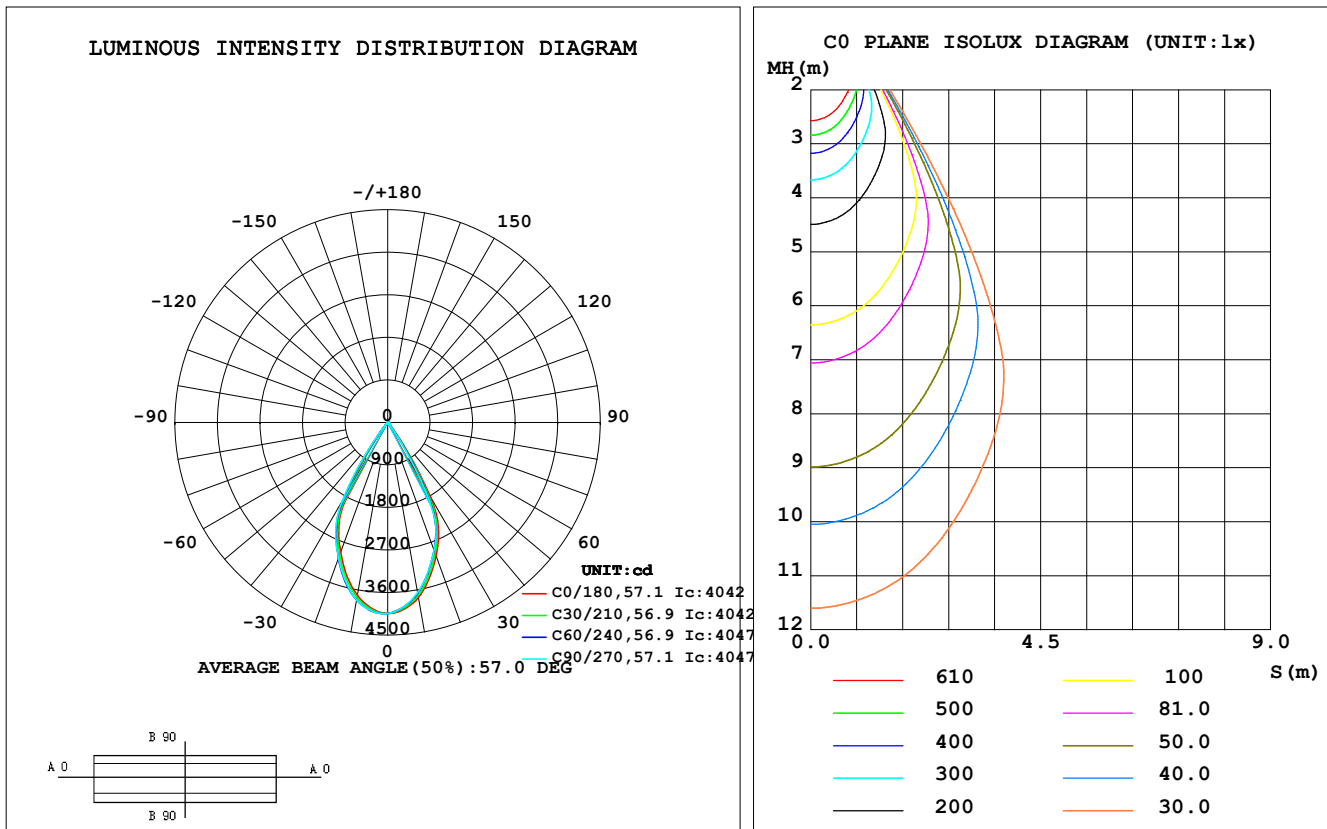


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:225.2V I:0.1630A P:35.00W PF:0.9520 Freq:50.00Hz Lamp Flux:2926.24x1 lm		
NAME: ALT85Z-35G30-Z2-Max	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:78	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 83.61 lm/W			
MODEL	3000K CRI90	I _{max} (cd)	4050	S/MH(C0/180)	0.83
NOMINAL POWER(W)	35	LOR(%)	100.0	S/MH(C90/270)	0.87
RATED VOLTAGE(V)	226	TOTAL FLUX(lm)	2926.2	η UP,DN(C0-180)	0.0,47.7
NOMINAL FLUX(lm)	2926.24	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,52.3
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	225.2	η down(%)	100.0	CIBSE SHR MAX	0.85



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-06-04

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
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	3756	3702	3656	3653	3710	3774	3808	3808	0- 10	370.7	370.7	12.7,12.7
20	2996	2921	2877	2875	2922	2996	3049	3049	10- 20	943.7	1314	44.9,44.9
30	1776	1591	1419	1401	1619	1767	1951	1969	20- 30	1115	2430	83,83
40	120.6	93.65	81.45	78.85	91.35	120.0	134.6	144.2	30- 40	414.6	2844	97.2,97.2
50	41.06	38.22	35.34	33.55	36.84	40.04	41.23	40.50	40- 50	45.20	2890	98.7,98.7
60	17.79	17.63	13.00	13.00	17.18	17.30	21.29	19.56	50- 60	24.59	2914	99.6,99.6
70	3.539	3.204	2.529	2.543	2.947	3.303	3.868	3.845	60- 70	7.982	2922	99.9,99.9
80	1.810	1.865	1.833	1.846	1.476	1.478	1.478	1.510	70- 80	2.080	2924	99.9,99.9
90	2.358	2.431	2.489	2.542	1.688	1.614	1.604	1.580	80- 90	1.967	2926	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): 2871.2 lm

%lum = 98.1%

%lamp = 98.1%

Conical surface Flux(120deg): 2914.2 lm

%lum = 99.6%

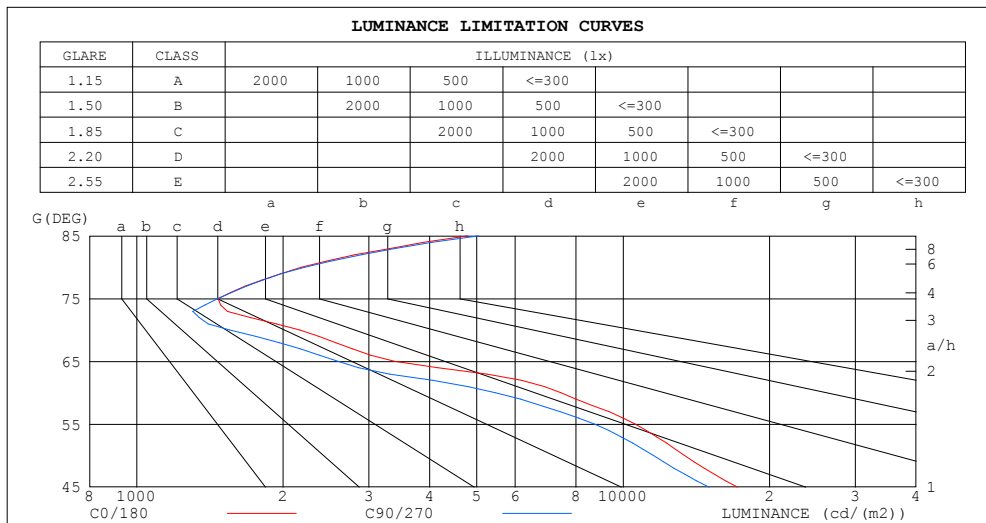
%lamp = 99.6%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:AE
 Test Date:2020-06-04

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 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:0.1630A P:35.00W PF:0.9520 Freq:50.00Hz Lamp Flux:2926.24x1 lm		
NAME: ALT85Z-35G30-Z2-Max	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:78	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	4794	5047
80	2180	2218
75	1471	1468
70	2165	1553
65	3394	2593
60	7443	5460
55	10591	8732
50	13364	11547
45	17189	15010

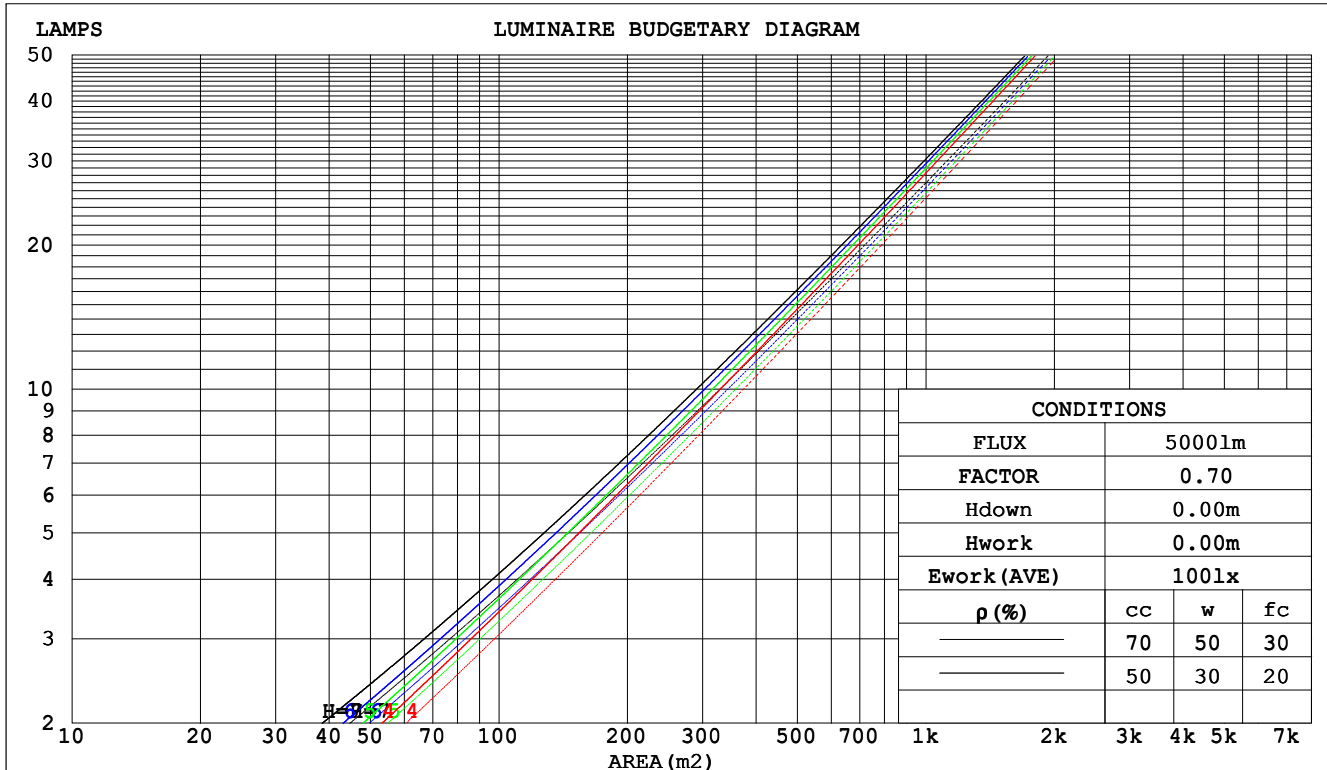
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-06-04

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
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:0.1630A P:35.00W PF:0.9520 Freq:50.00Hz Lamp Flux:2926.24x1 lm		
NAME: ALT85Z-35G30-Z2-Max	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:78	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	1.11	1.09	1.07	1.09	1.07	1.05	1.05	1.03	1.02	1.01	1.00	.99	.98	.97	.96	.94
2.0	1.04	1.00	.97	1.03	.99	.96	.99	.97	.94	.96	.94	.92	.94	.92	.90	.89
3.0	.98	.93	.90	.96	.92	.89	.94	.90	.87	.92	.89	.86	.89	.87	.85	.83
4.0	.92	.87	.83	.91	.86	.83	.89	.85	.82	.87	.83	.81	.85	.82	.80	.78
5.0	.87	.81	.78	.86	.81	.77	.84	.80	.76	.83	.79	.76	.81	.78	.75	.74
6.0	.82	.77	.73	.81	.76	.72	.80	.75	.72	.79	.74	.71	.77	.74	.71	.70
7.0	.78	.72	.68	.77	.72	.68	.76	.71	.68	.75	.71	.67	.74	.70	.67	.66
8.0	.74	.68	.64	.73	.68	.64	.72	.67	.64	.71	.67	.64	.70	.66	.63	.62
9.0	.70	.65	.61	.70	.64	.61	.69	.64	.61	.68	.63	.60	.67	.63	.60	.59
10.0	.67	.61	.58	.66	.61	.58	.65	.61	.57	.65	.60	.57	.64	.60	.57	.56



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:AE
 Test Date:2020-06-04

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 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:0.1630A P:35.00W PF:0.9520 Freq:50.00Hz Lamp Flux:2926.24x1 lm					
NAME: ALT85Z-35G30-Z2-Max			TYPE:		WEIGHT:
SPEC.:			DIM.:		SERIAL No.:
MFR.:			SUR.:78		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	.168	.095	.030	.161	.092	.029	.149	.085	.027	.137	.079	.025	.127	.073	.024		
2.0	.159	.087	.027	.154	.085	.026	.143	.080	.025	.134	.075	.023	.125	.071	.022		
3.0	.151	.081	.024	.147	.079	.024	.138	.075	.023	.130	.071	.022	.122	.067	.021		
4.0	.144	.075	.022	.140	.073	.022	.132	.070	.021	.125	.067	.020	.119	.064	.020		
5.0	.137	.070	.020	.134	.069	.020	.127	.066	.019	.121	.064	.019	.115	.062	.018		
6.0	.131	.066	.019	.128	.065	.019	.122	.063	.018	.117	.061	.018	.112	.059	.017		
7.0	.125	.062	.018	.123	.061	.017	.118	.059	.017	.113	.058	.017	.108	.056	.017		
8.0	.120	.059	.017	.118	.058	.016	.113	.057	.016	.109	.055	.016	.105	.054	.016		
9.0	.115	.056	.016	.113	.055	.015	.109	.054	.015	.105	.053	.015	.102	.052	.015		
10.0	.111	.053	.015	.109	.053	.015	.105	.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	.170	.157	.146	.146	.135	.125	.100	.093	.087	.057	.054	.050	.018	.017	.016	
2.0	.155	.133	.114	.132	.114	.099	.091	.079	.069	.052	.046	.040	.017	.015	.013	
3.0	.142	.113	.091	.121	.098	.079	.083	.068	.055	.048	.040	.033	.015	.013	.011	
4.0	.131	.099	.074	.112	.085	.064	.077	.059	.045	.045	.035	.027	.014	.011	.009	
5.0	.122	.087	.061	.105	.075	.053	.072	.053	.037	.042	.031	.022	.013	.010	.007	
6.0	.114	.077	.051	.098	.067	.044	.068	.047	.031	.039	.028	.019	.013	.009	.006	
7.0	.108	.070	.043	.093	.060	.038	.064	.042	.027	.037	.025	.016	.012	.008	.005	
8.0	.102	.063	.037	.088	.055	.032	.061	.039	.023	.035	.023	.014	.011	.007	.005	
9.0	.097	.058	.032	.083	.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: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-06-04

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
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:0.1630A P:35.00W PF:0.9520 Freq:50.00Hz Lamp Flux:2926.24x1 lm										
NAME: ALT85Z-35G30-Z2-Max					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.:					SUR.:78			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	16.4	17.3	16.6	17.4	17.6	14.7	15.5	14.9	15.7	15.9
3H	16.2	17.0	16.5	17.2	17.4	14.5	15.3	14.8	15.5	15.7
4H	16.1	16.9	16.4	17.1	17.3	14.4	15.2	14.7	15.4	15.6
6H	16.1	16.8	16.4	17.0	17.3	14.3	15.1	14.6	15.3	15.5
8H	16.0	16.7	16.3	17.0	17.2	14.3	15.0	14.6	15.2	15.5
12H	16.0	16.6	16.3	16.9	17.2	14.3	14.9	14.6	15.2	15.5
4H 2H	16.2	16.9	16.4	17.1	17.4	14.4	15.2	14.7	15.4	15.6
3H	16.0	16.6	16.3	16.9	17.2	14.3	14.9	14.6	15.2	15.5
4H	15.9	16.5	16.2	16.8	17.1	14.2	14.8	14.5	15.1	15.4
6H	15.8	16.3	16.2	16.7	17.0	14.1	14.6	14.5	15.0	15.3
8H	15.8	16.3	16.2	16.6	17.0	14.1	14.6	14.5	14.9	15.3
12H	15.7	16.2	16.1	16.5	16.9	14.0	14.5	14.5	14.9	15.3
8H 4H	15.8	16.2	16.1	16.6	17.0	14.0	14.5	14.4	14.9	15.2
6H	15.7	16.1	16.1	16.5	16.9	14.0	14.4	14.4	14.8	15.2
8H	15.6	16.0	16.1	16.4	16.8	13.9	14.3	14.4	14.7	15.1
12H	15.6	15.9	16.1	16.3	16.8	13.9	14.2	14.4	14.7	15.1
12H 4H	15.7	16.1	16.1	16.5	16.9	14.0	14.4	14.4	14.8	15.2
6H	15.6	16.0	16.1	16.4	16.8	13.9	14.3	14.4	14.7	15.1
8H	15.6	15.9	16.0	16.3	16.8	13.9	14.2	14.4	14.6	15.1
Variations with the observer position at spacings:										
S = 1.0H	+ 4.7 / - 4.8					+ 3.4 / - 3.5				
1.5H	+ 6.8 / - 3.6					+ 4.9 / - 2.3				
2.0H	+ 2.3 / - 4.4					+ 2.2 / - 4.1				

CIE Pub.117, 2926 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.7)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-06-04

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
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:0.1630A P:35.00W PF:0.9520 Freq:50.00Hz Lamp Flux:2926.24x1 lm		
NAME: ALT85Z-35G30-Z2-Max	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:78	Shielding Angle:

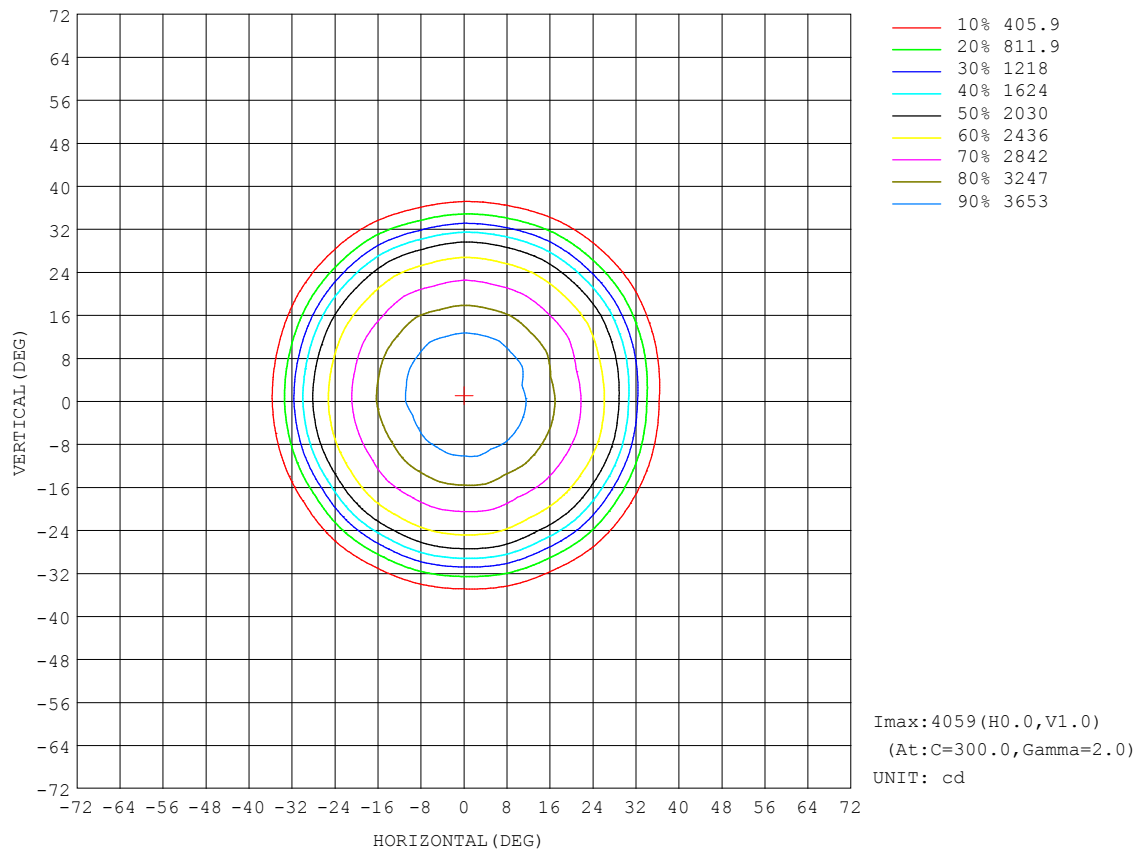
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	90	84	80	89	84	80	89	83	80	77
0.80	97	91	88	96	91	88	95	91	88	84
1.00	101	96	92	100	95	92	99	95	92	88
1.25	105	100	97	104	99	96	102	98	95	91
1.50	107	103	100	106	102	99	104	101	98	94
2.00	109	106	103	108	104	102	105	103	100	95
2.50	111	107	105	109	106	104	106	104	102	96
3.00	112	109	107	111	108	106	107	105	103	97
4.00	114	112	110	112	110	108	109	107	106	99
5.00	115	113	112	113	112	110	109	108	107	100
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:2020-06-04

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
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:0.1630A P:35.00W PF:0.9520 Freq:50.00Hz Lamp Flux:2926.24x1 lm		
NAME: ALT85Z-35G30-Z2-Max	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:78	Shielding Angle:

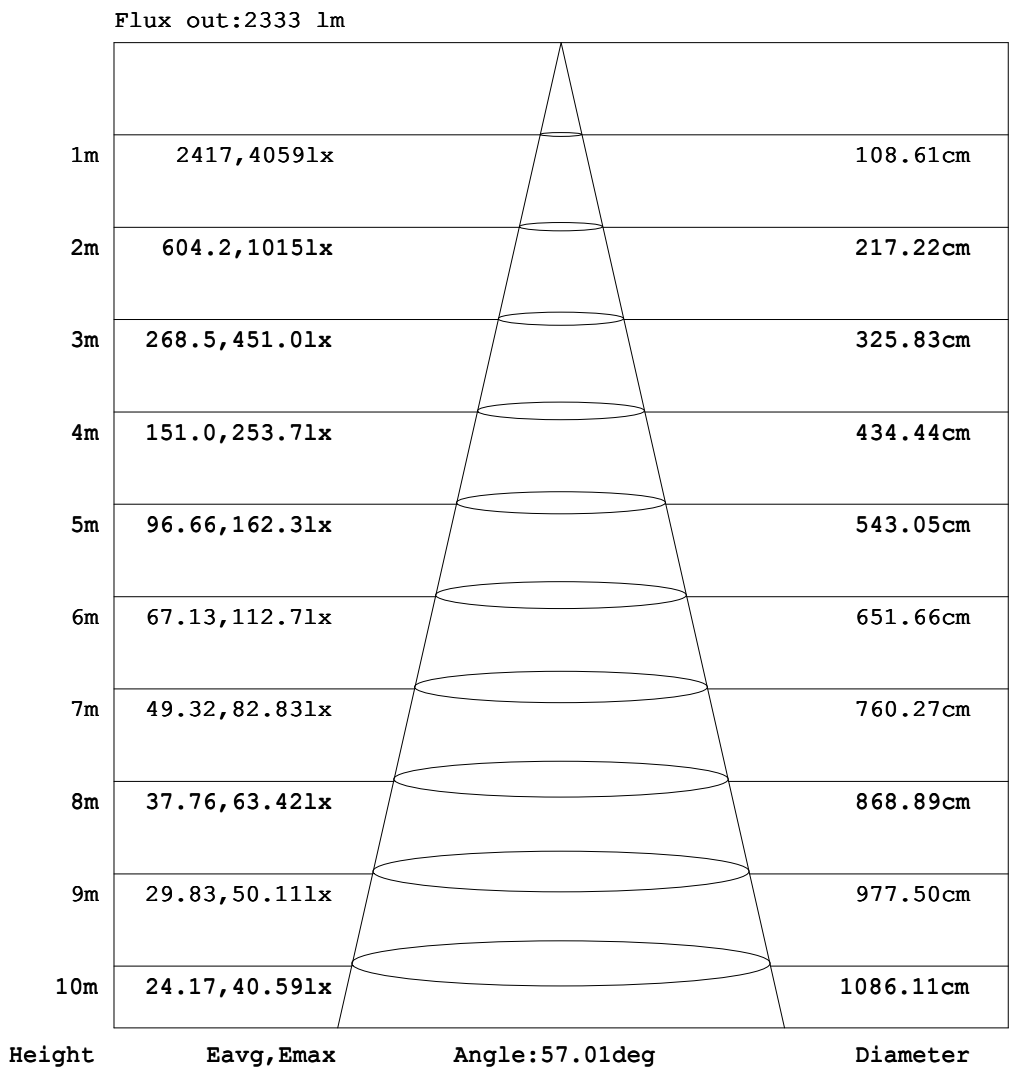


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: AE
Test Date: 2020-06-04

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
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:0.1630A P:35.00W PF:0.9520 Freq:50.00Hz Lamp Flux:2926.24x1 lm		
NAME: ALT85Z-35G30-Z2-Max	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:78	Shielding Angle:



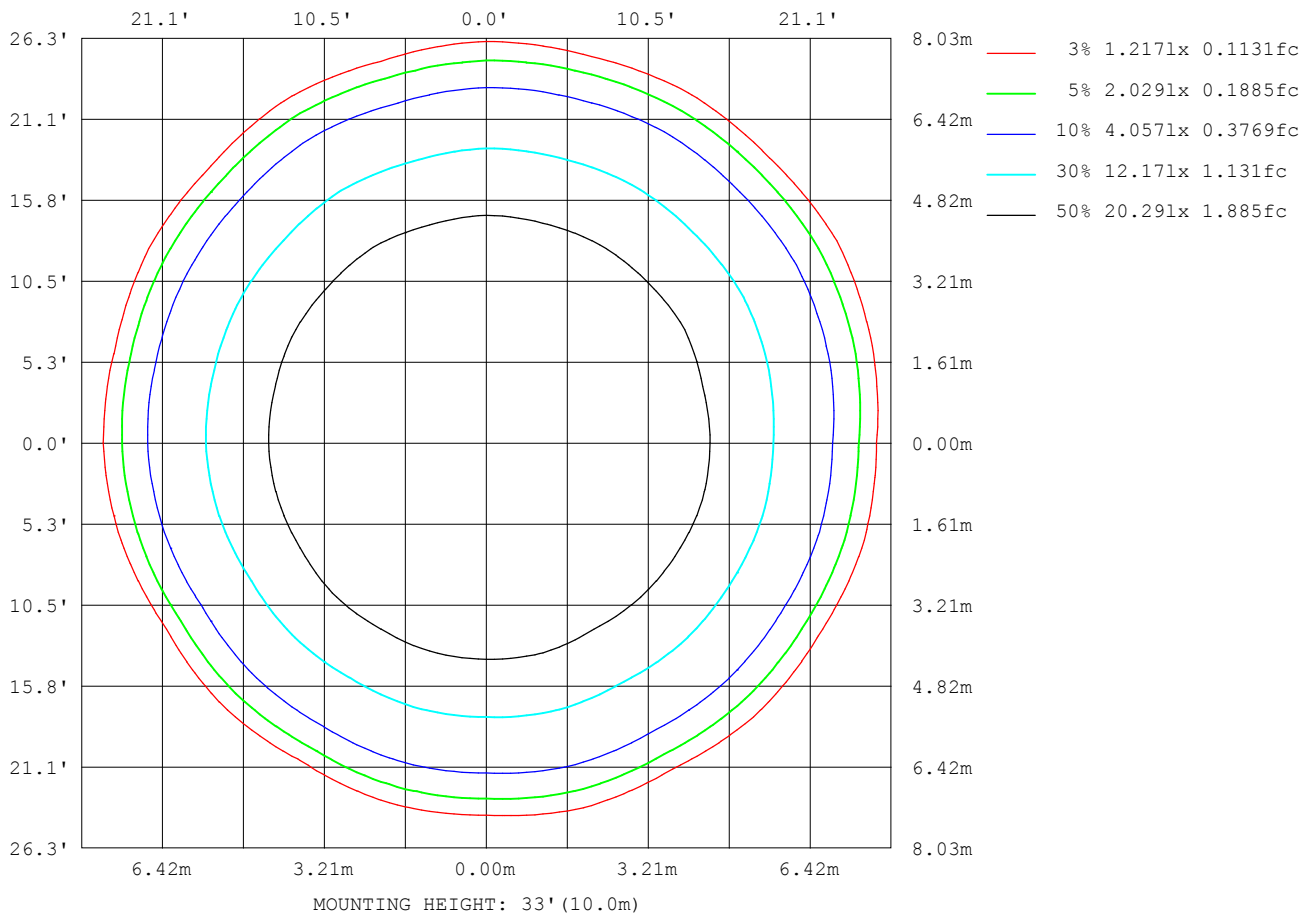
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: AE
 Test Date: 2020-06-04

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 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:0.1630A P:35.00W PF:0.9520 Freq:50.00Hz Lamp Flux:2926.24x1 lm		
NAME: ALT85Z-35G30-Z2-Max	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:78	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:AE
 Test Date:2020-06-04

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 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:0.1630A P:35.00W PF:0.9520 Freq:50.00Hz Lamp Flux:2926.24x1 lm		
NAME: ALT85Z-35G30-Z2-Max	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:78	Shielding Angle:

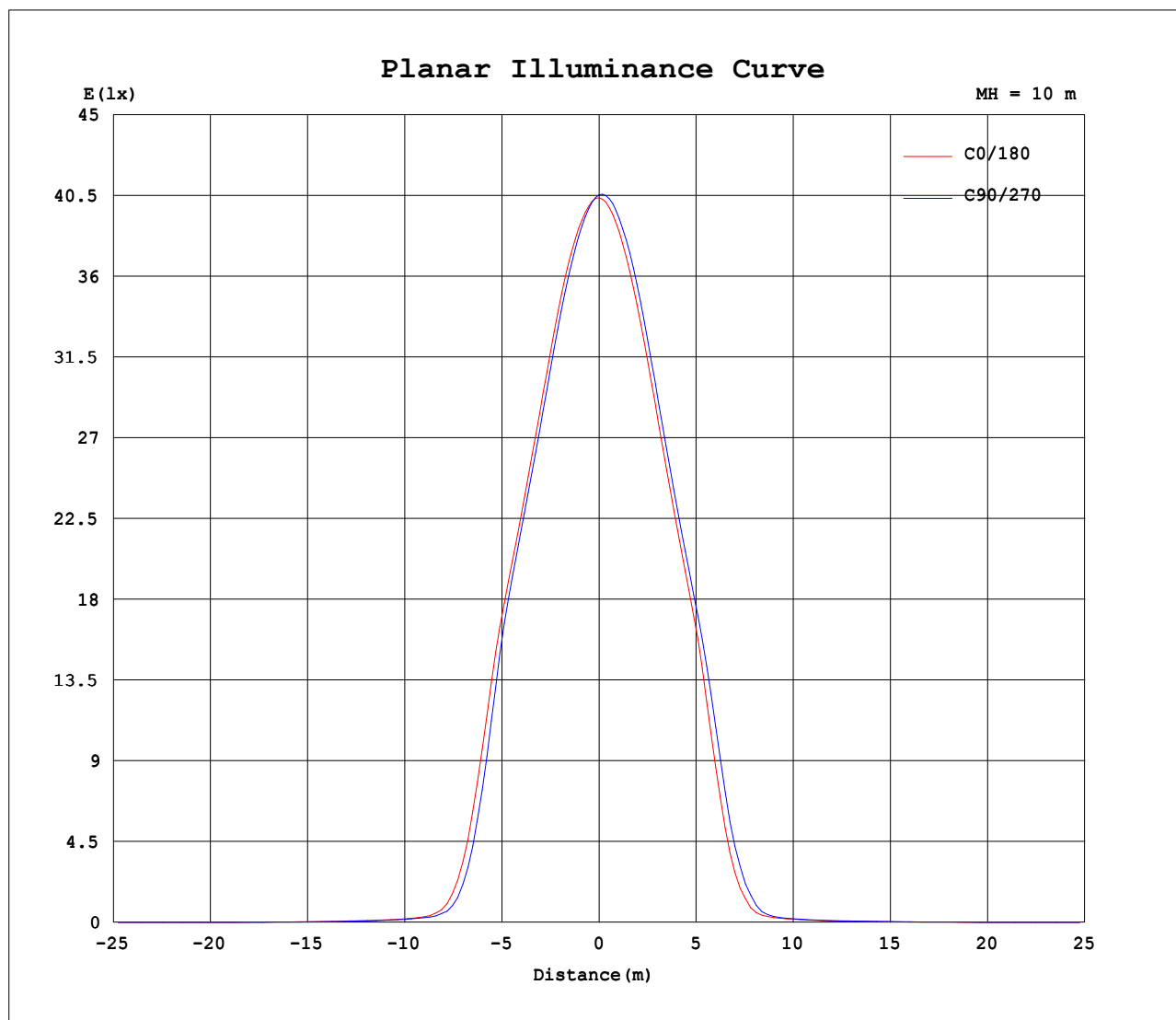
AvgL	cd/m2
L_0~180 (65) av	3194
L_0~180 (75) av	1362
L_0~180 (85) av	4212
L_90~270 (65) av	3225
L_90~270 (75) av	1421
L_90~270 (85) av	4283
L_45 (65) av	3260
L_45 (75) av	1393
L_45 (85) av	4294

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-06-04

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
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: HIGH
Temperature: 25.3DEG
Operators: AE
Test Date: 2020-06-04

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
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: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

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