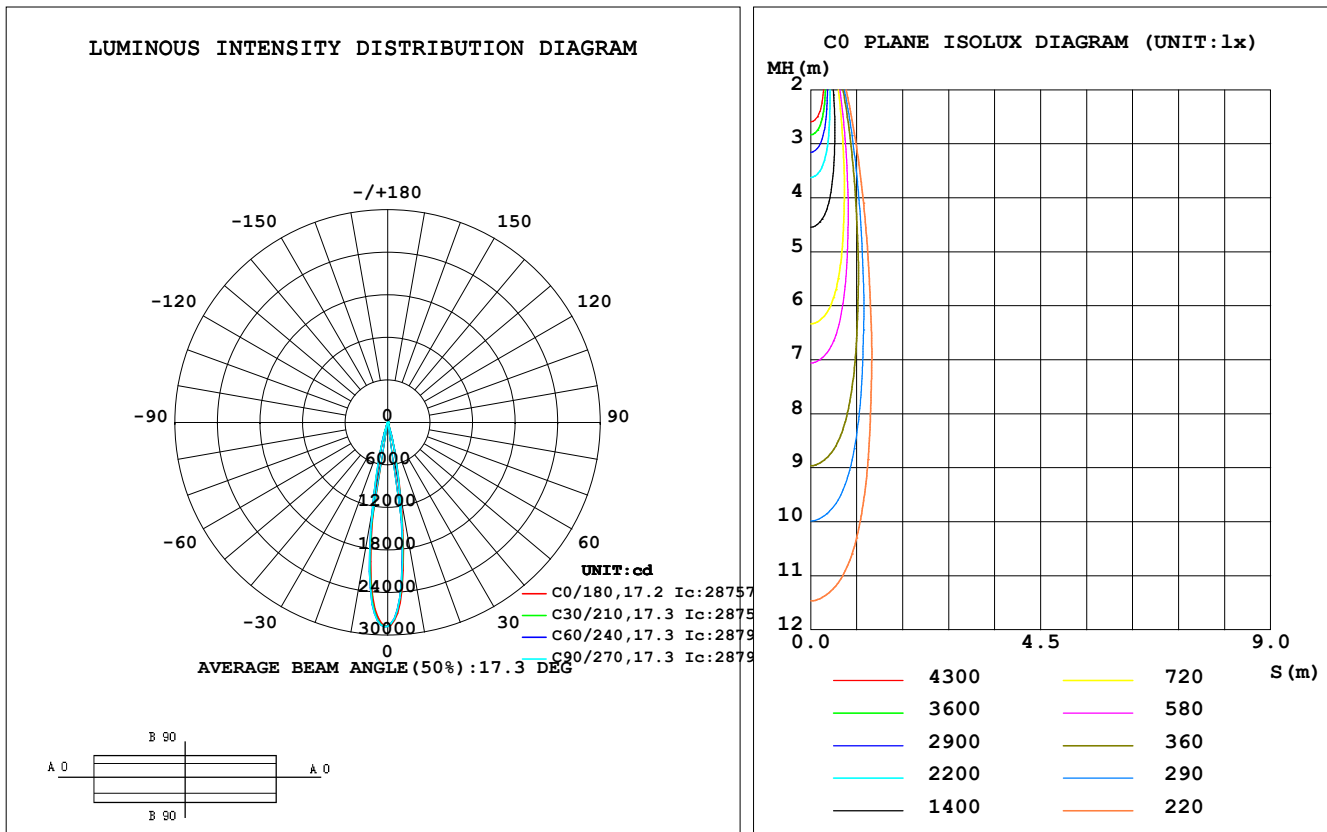


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:225.2V I:0.1630A P:35.10W PF:0.9520 Freq:50.00Hz Lamp Flux:3193.04x1 lm					
NAME: ALT85Z-35G30-Z1-Min		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.:		SUR.:78		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 90.97 lm/W
MODEL	3000K CRI90	I _{max} (cd)	28793	S/MH (C0/180)	0.30	
NOMINAL POWER (W)	35	LOR (%)	100.0	S/MH (C90/270)	0.31	
RATED VOLTAGE (V)	0	TOTAL FLUX (lm)	3193.0	η UP, DN (C0-180)	0.0, 47.2	
NOMINAL FLUX (lm)	3193.04	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 52.8	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00	
TEST VOLTAGE (V)	0.0	η down (%)	100.0	CIBSE SHR MAX	1.00	



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: AE
 Test Date: 2020-06-03

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	1055	990.9	981.6	1026	1145	1200	1262	1149	0- 10	1841	1841	57.6, 57.6
20	75.90	68.70	63.26	70.07	78.60	72.70	83.04	76.07	10- 20	1040	2881	90.2, 90.2
30	19.06	16.26	14.09	18.48	19.60	20.37	19.86	19.49	20- 30	144.2	3025	94.7, 94.7
40	8.560	7.670	7.116	8.704	9.231	8.949	8.838	8.894	30- 40	79.55	3105	97.2, 97.2
50	4.259	4.306	4.285	4.571	4.655	4.255	4.294	4.393	40- 50	47.68	3152	98.7, 98.7
60	1.694	1.795	1.869	1.927	1.994	1.811	1.771	1.773	50- 60	26.29	3179	99.6, 99.6
70	0.3073	0.3280	0.3520	0.3664	0.4139	0.3892	0.3828	0.3756	60- 70	8.889	3188	99.8, 99.8
80	0.2388	0.2395	0.2416	0.2387	0.2525	0.2496	0.2507	0.2566	70- 80	2.669	3190	99.9, 99.9
90	0.3148	0.3144	0.3122	0.3132	0.1634	0.1687	0.1680	0.1684	80- 90	2.700	3193	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: $\times 10\text{cd}$									UNIT: lm		

Conical surface Flux(90deg): 3131.4 lm

%lum = 98.1%

%lamp = 98.1%

Conical surface Flux(120deg): 3178.8 lm

%lum = 99.6%

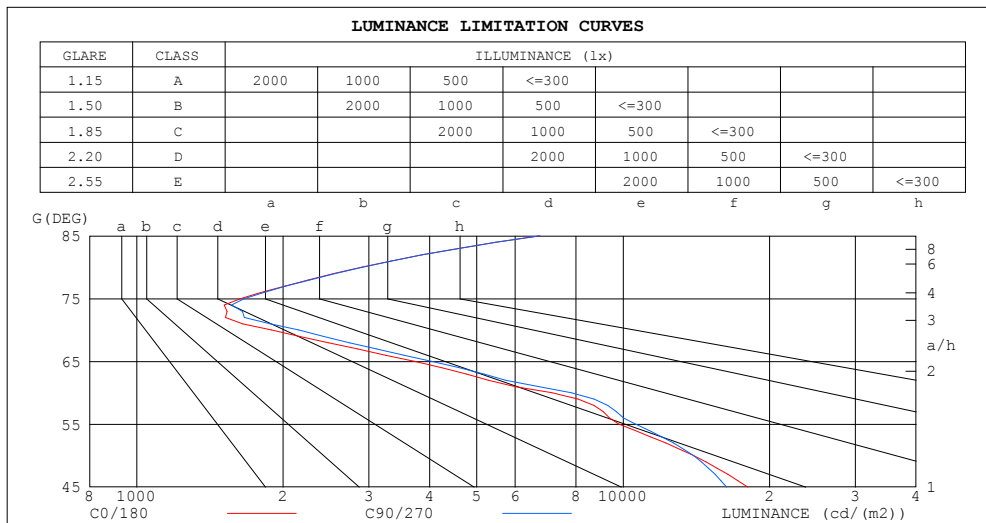
%lamp = 99.6%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: AE
 Test Date: 2020-06-03

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:35.10W PF:0.9520 Freq:50.00Hz Lamp Flux:3193.04x1 lm		
NAME: ALT85Z-35G30-Z1-Min	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:78	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	6740	6730
80	2897	2911
75	1637	1665
70	1892	2153
65	3727	4040
60	7134	7822
55	9792	10593
50	13952	13947
45	18051	16335

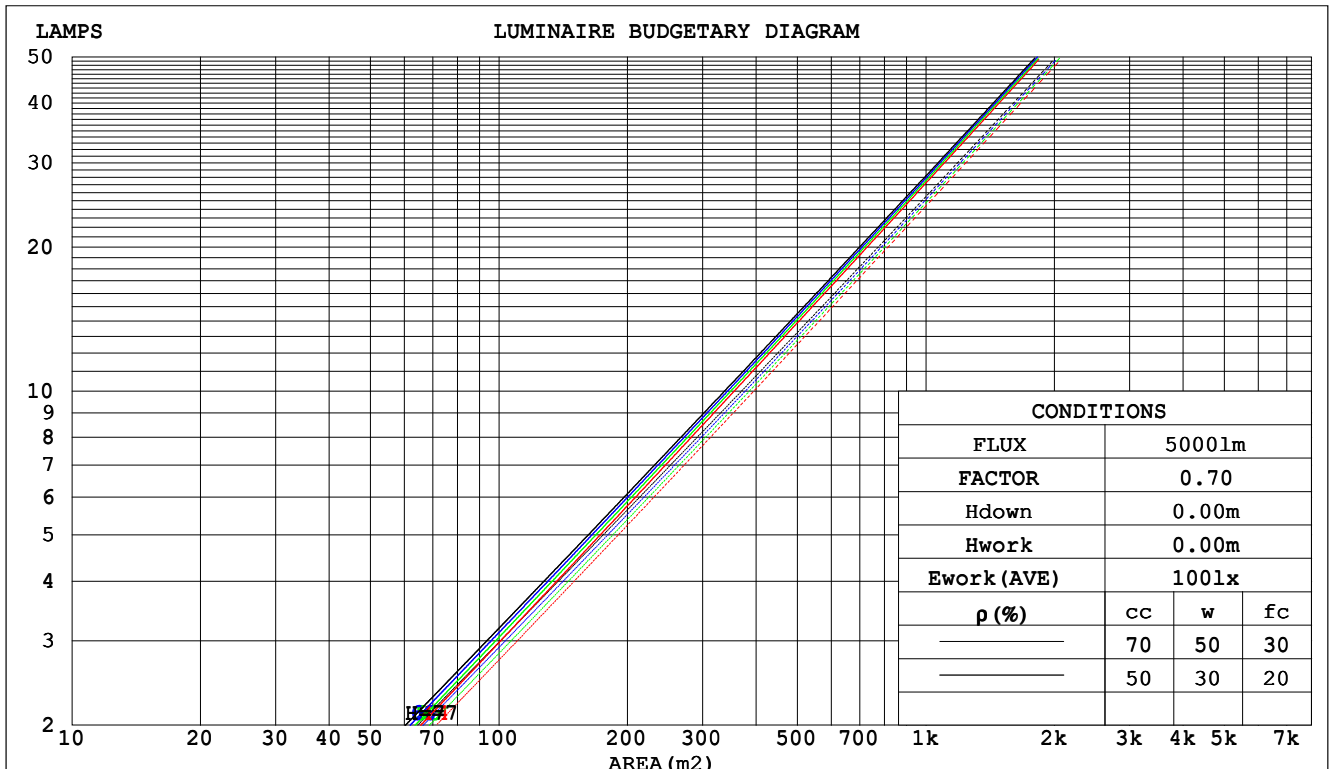
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-06-03

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:35.10W PF:0.9520 Freq:50.00Hz Lamp Flux:3193.04x1 lm		
NAME: ALT85Z-35G30-Z1-Min	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	1.14	1.12	1.10	1.11	1.10	1.09	1.08	1.06	1.05	1.04	1.03	1.02	1.01	.00	.99	.98
2.0	1.09	1.06	1.04	1.07	1.05	1.03	1.04	1.03	1.01	1.02	1.00	.99	.99	.98	.97	.95
3.0	1.05	1.02	.00	1.04	1.01	.99	1.02	.99	.97	.99	.98	.96	.97	.96	.95	.93
4.0	1.02	.99	.96	1.01	.98	.96	.99	.97	.95	.97	.95	.93	.96	.94	.92	.91
5.0	.99	.96	.93	.99	.95	.93	.97	.94	.92	.96	.93	.91	.94	.92	.91	.90
6.0	.97	.93	.91	.96	.93	.91	.95	.92	.90	.94	.91	.89	.93	.91	.89	.88
7.0	.95	.91	.89	.94	.91	.89	.93	.90	.88	.92	.90	.88	.91	.89	.87	.87
8.0	.93	.89	.87	.92	.89	.87	.91	.89	.87	.91	.88	.86	.90	.88	.86	.85
9.0	.91	.88	.85	.91	.87	.85	.90	.87	.85	.89	.87	.85	.89	.86	.85	.84
10.0	.89	.86	.84	.89	.86	.84	.88	.86	.84	.88	.85	.84	.87	.85	.83	.83



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:AE
 Test Date:2020-06-03

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:35.10W PF:0.9520 Freq:50.00Hz Lamp Flux:3193.04x1 lm					
NAME: ALT85Z-35G30-Z1-Min			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	.123	.070	.022	.117	.067	.021	.104	.060	.019	.093	.054	.017	.083	.048	.015	
2.0	.113	.062	.019	.107	.059	.018	.097	.054	.017	.088	.049	.015	.079	.045	.014	
3.0	.103	.055	.016	.099	.053	.016	.091	.049	.015	.083	.045	.014	.076	.042	.013	
4.0	.096	.050	.015	.092	.048	.014	.085	.045	.013	.079	.042	.013	.073	.039	.012	
5.0	.089	.045	.013	.086	.044	.013	.080	.042	.012	.075	.039	.012	.070	.037	.011	
6.0	.083	.042	.012	.081	.041	.012	.076	.039	.011	.071	.037	.011	.067	.035	.010	
7.0	.078	.039	.011	.076	.038	.011	.072	.036	.010	.068	.035	.010	.064	.033	.010	
8.0	.074	.036	.010	.072	.035	.010	.068	.034	.010	.065	.033	.009	.062	.032	.009	
9.0	.070	.034	.009	.068	.033	.009	.065	.032	.009	.062	.031	.009	.059	.030	.009	
10.0	.067	.032	.009	.065	.032	.009	.062	.031	.009	.060	.030	.008	.057	.029	.008	

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	.167	.158	.149	.143	.135	.128	.098	.093	.089	.056	.054	.052	.018	.017	.017	
2.0	.148	.133	.120	.127	.114	.103	.087	.079	.072	.050	.046	.042	.016	.015	.014	
3.0	.132	.113	.098	.114	.098	.085	.078	.068	.060	.045	.040	.035	.014	.013	.011	
4.0	.119	.098	.081	.102	.084	.071	.070	.059	.050	.041	.034	.029	.013	.011	.010	
5.0	.108	.085	.068	.093	.074	.059	.064	.051	.042	.037	.030	.025	.012	.010	.008	
6.0	.098	.075	.058	.084	.065	.050	.058	.045	.036	.034	.027	.021	.011	.009	.007	
7.0	.090	.066	.050	.077	.057	.043	.053	.040	.031	.031	.024	.018	.010	.008	.006	
8.0	.083	.059	.043	.071	.051	.037	.049	.036	.027	.029	.021	.016	.009	.007	.005	
9.0	.077	.053	.037	.066	.046	.033	.046	.033	.023	.027	.019	.014	.009	.006	.005	
10.0	.072	.048	.033	.062	.042	.029	.043	.030	.020	.025	.017	.012	.008	.006	.004	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-06-03

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:35.10W PF:0.9520 Freq:50.00Hz Lamp Flux:3193.04x1 lm										
NAME: ALT85Z-35G30-Z1-Min					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	7.9	8.4	8.1	8.6	8.7	7.4	8.0	7.6	8.1	8.2
3H	7.9	8.4	8.1	8.6	8.8	7.4	7.9	7.7	8.1	8.3
4H	7.8	8.3	8.1	8.5	8.7	7.4	7.9	7.6	8.1	8.3
6H	7.8	8.3	8.1	8.5	8.8	7.4	7.9	7.7	8.1	8.3
8H	7.9	8.3	8.2	8.6	8.8	7.4	7.9	7.7	8.1	8.4
12H	8.0	8.4	8.3	8.7	8.9	7.6	8.0	7.9	8.3	8.5
4H 2H	7.9	8.4	8.2	8.6	8.8	7.5	8.0	7.7	8.2	8.4
3H	7.9	8.3	8.2	8.6	8.9	7.5	7.9	7.8	8.2	8.4
4H	7.8	8.3	8.2	8.5	8.8	7.4	7.8	7.8	8.1	8.4
6H	7.9	8.2	8.2	8.6	8.9	7.5	7.8	7.8	8.2	8.5
8H	8.0	8.3	8.3	8.6	9.0	7.6	7.9	8.0	8.3	8.6
12H	8.1	8.5	8.5	8.8	9.2	7.8	8.1	8.2	8.5	8.9
8H 4H	7.7	8.1	8.1	8.4	8.8	7.3	7.7	7.7	8.0	8.4
6H	7.8	8.1	8.2	8.5	8.9	7.4	7.7	7.8	8.1	8.5
8H	8.0	8.2	8.4	8.6	9.1	7.6	7.9	8.1	8.3	8.7
12H	8.3	8.5	8.8	9.0	9.4	8.0	8.2	8.5	8.7	9.1
12H 4H	7.7	8.0	8.1	8.4	8.7	7.3	7.6	7.7	8.0	8.3
6H	7.8	8.0	8.2	8.5	8.9	7.4	7.7	7.9	8.1	8.5
8H	8.0	8.2	8.5	8.7	9.1	7.7	7.9	8.1	8.3	8.8
Variations with the observer position at spacings:										
S = 1.0H	+ 1.2 / - 2.0					+ 0.8 / - 1.4				
1.5H	+ 1.6 / - 1.2					+ 0.6 / - 0.7				
2.0H	+ 2.4 / - 3.2					+ 1.8 / - 3.1				

CIE Pub.117, 3193 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 4.0$)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-06-03

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:35.10W PF:0.9520 Freq:50.00Hz Lamp Flux:3193.04x1 lm		
NAME: ALT85Z-35G30-Z1-Min	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:78	Shielding Angle:

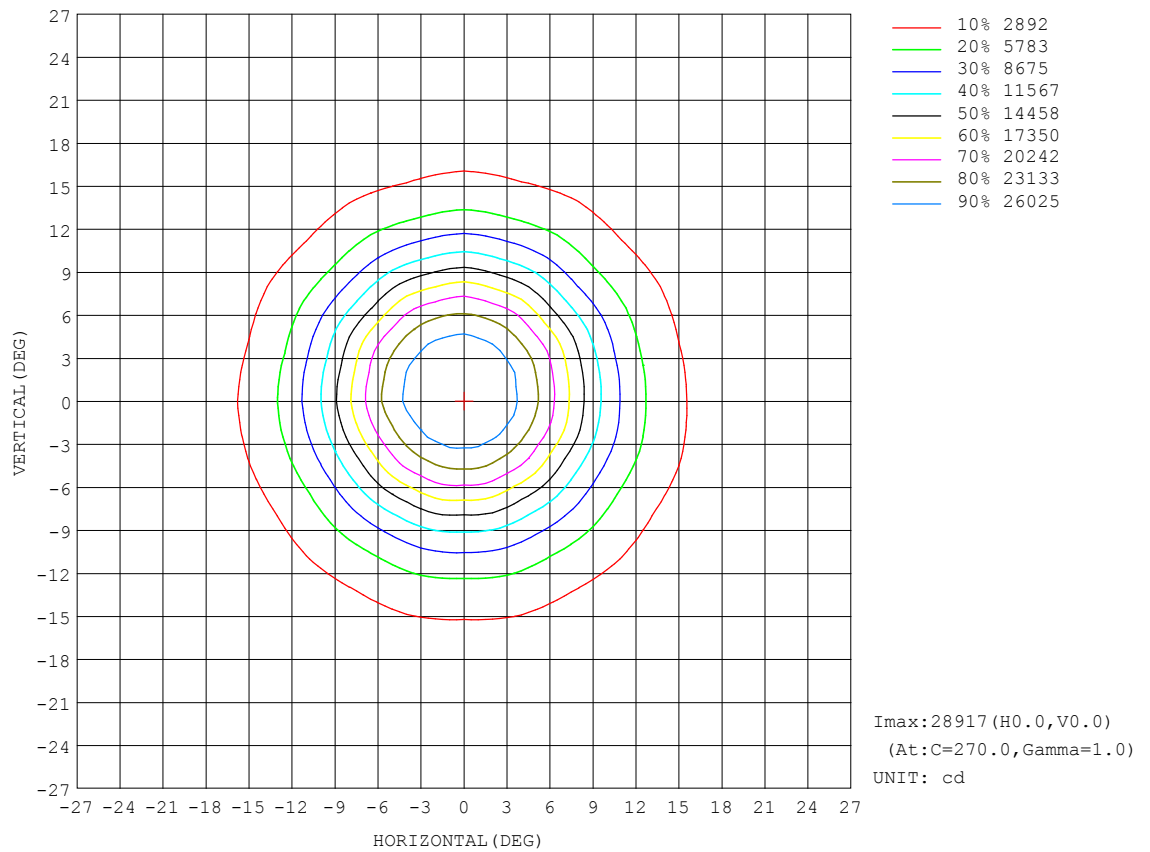
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	90	84	80	89	84	80	89	83	80	77
0.80	97	92	88	96	91	88	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	100	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:2020-06-03

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:35.10W PF:0.9520 Freq:50.00Hz Lamp Flux:3193.04x1 lm		
NAME: ALT85Z-35G30-Z1-Min	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:78	Shielding Angle:

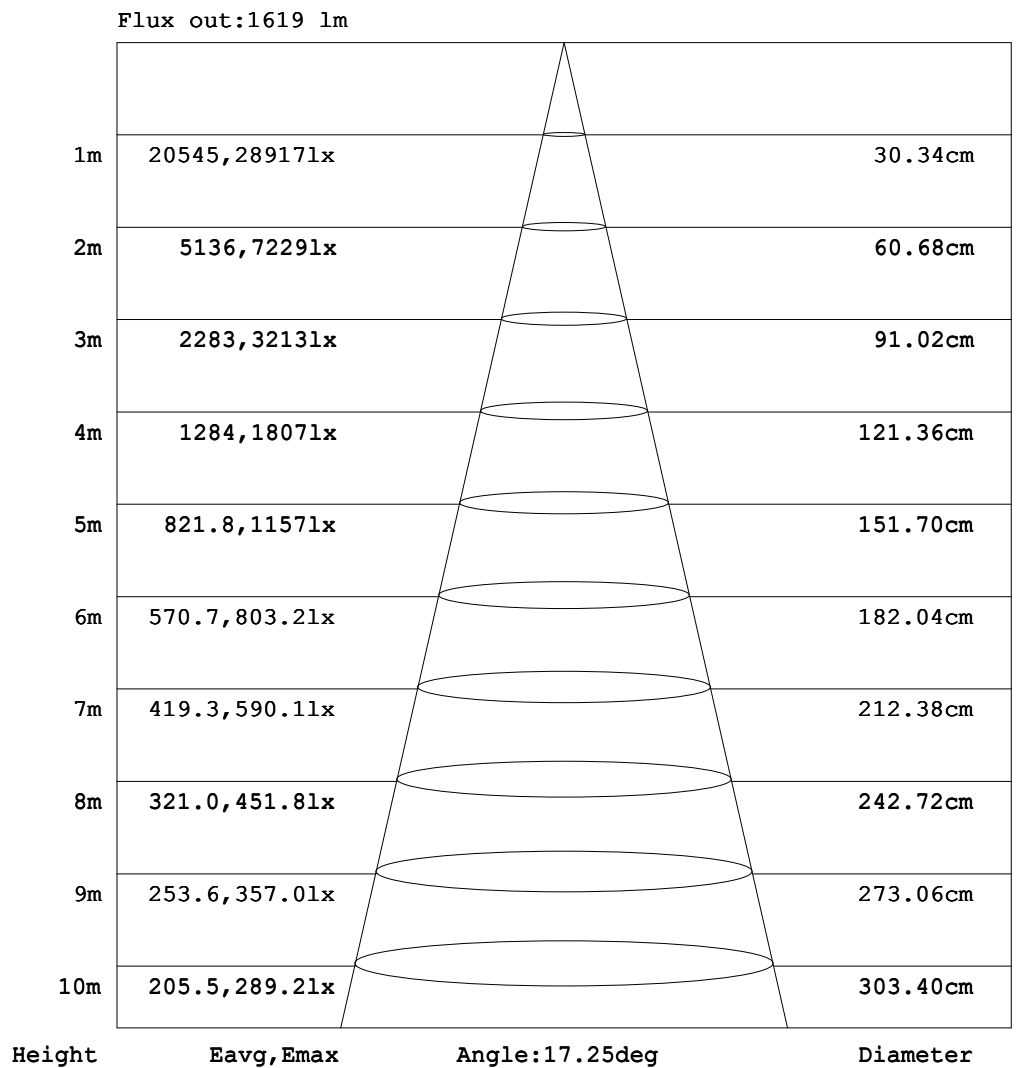


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-06-03

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:35.10W PF:0.9520 Freq:50.00Hz Lamp Flux:3193.04x1 lm		
NAME: ALT85Z-35G30-Z1-Min	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:78	Shielding Angle:



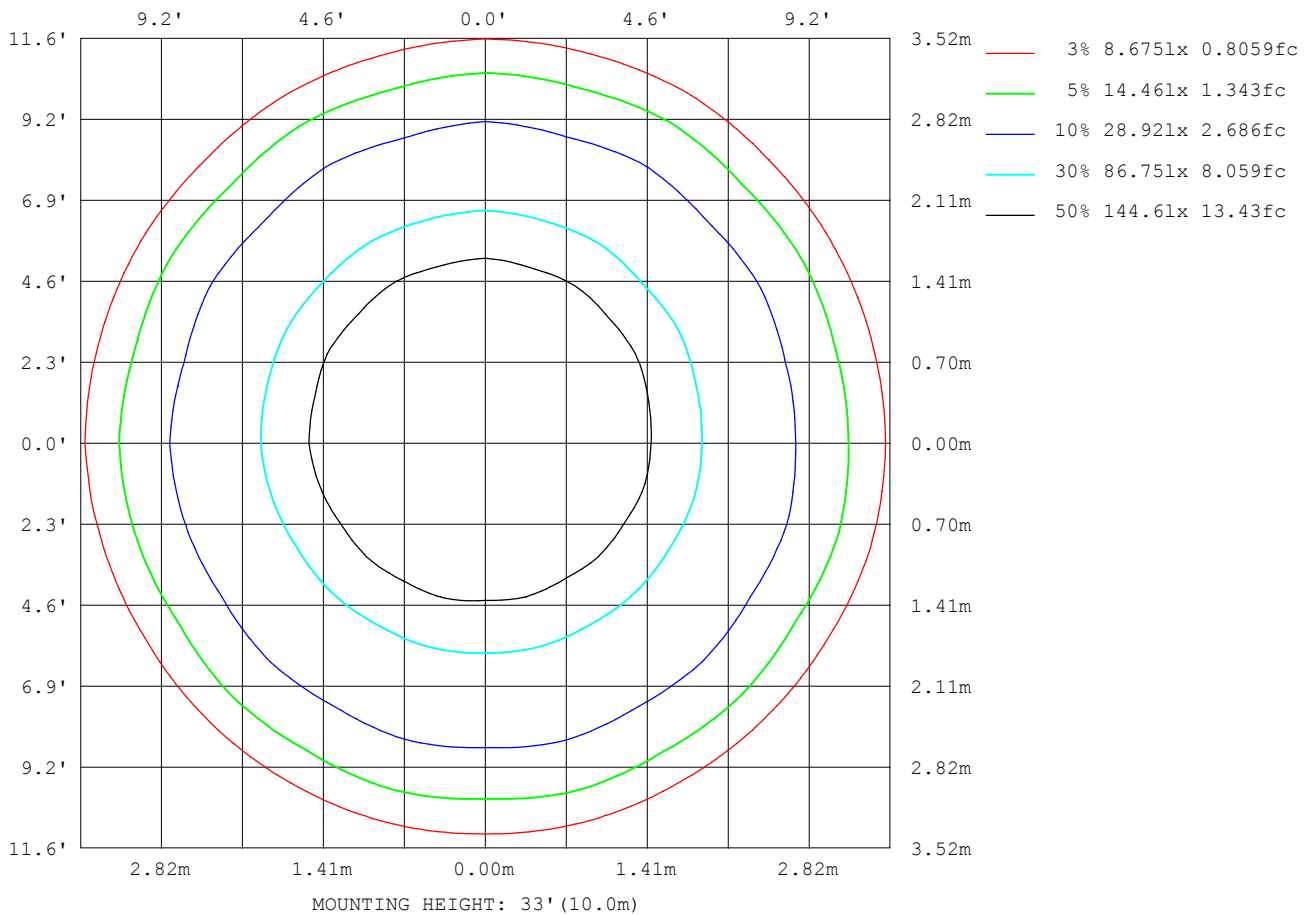
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-06-03

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:35.10W PF:0.9520 Freq:50.00Hz Lamp Flux:3193.04x1 lm		
NAME: ALT85Z-35G30-Z1-Min	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:2020-06-03

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:35.10W PF:0.9520 Freq:50.00Hz Lamp Flux:3193.04x1 lm		
NAME: ALT85Z-35G30-Z1-Min	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:78	Shielding Angle:

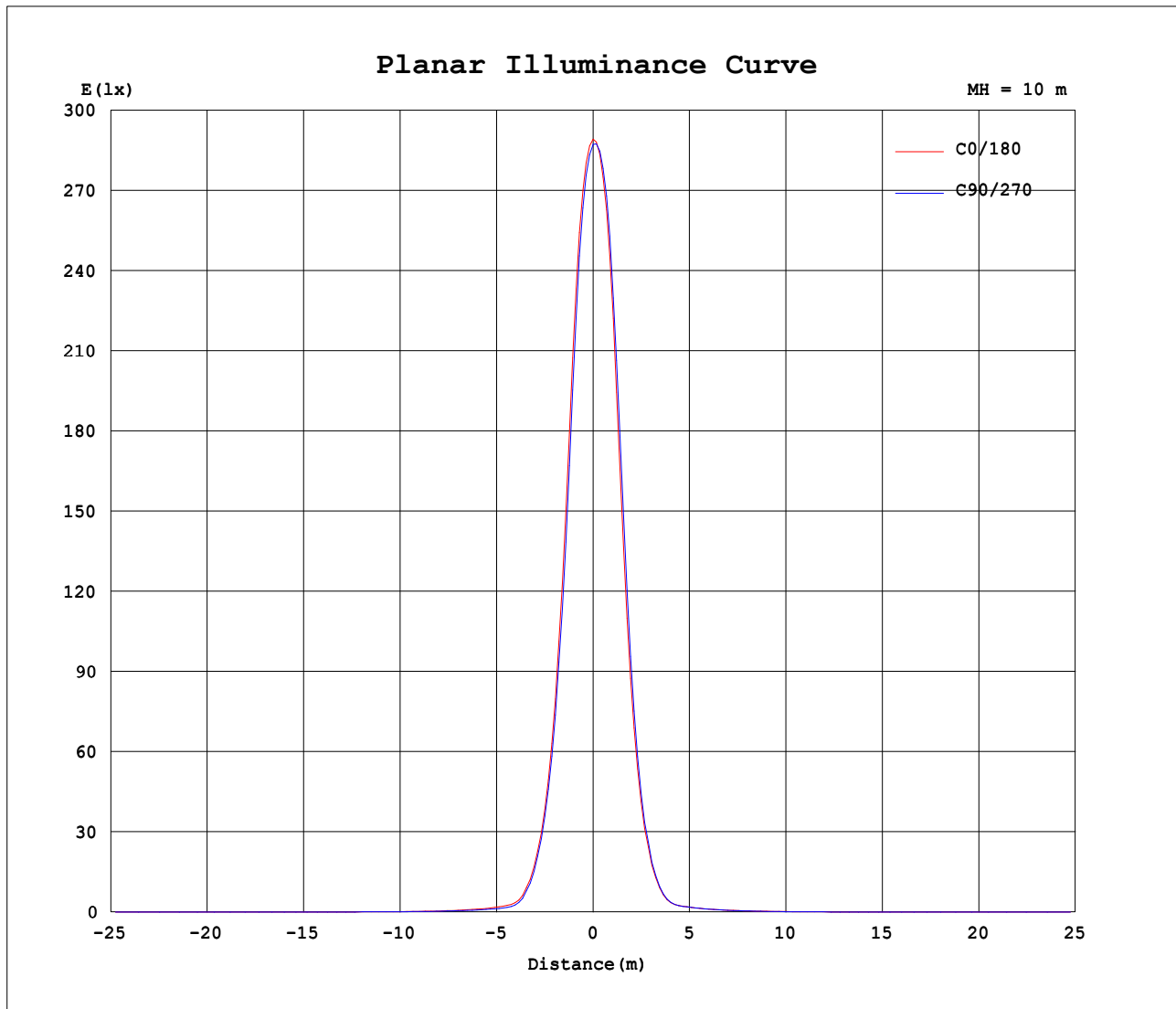
AvgL	cd/m2
L_0~180 (65) av	4118
L_0~180 (75) av	1837
L_0~180 (85) av	5949
L_90~270 (65) av	4070
L_90~270 (75) av	1827
L_90~270 (85) av	5993
L_45 (65) av	4100
L_45 (75) av	1830
L_45 (85) av	6044

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:AE
 Test Date:2020-06-03

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: 2020-06-03

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
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Humidity: 65.0%
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