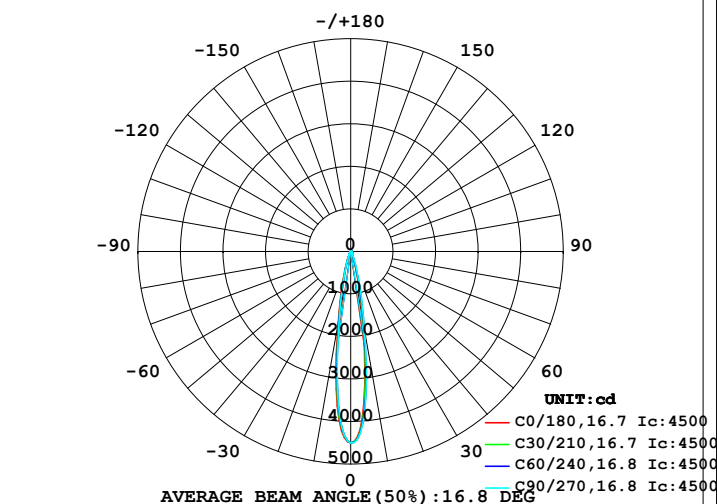


## LUMINAIRE PHOTOMETRIC TEST REPORT

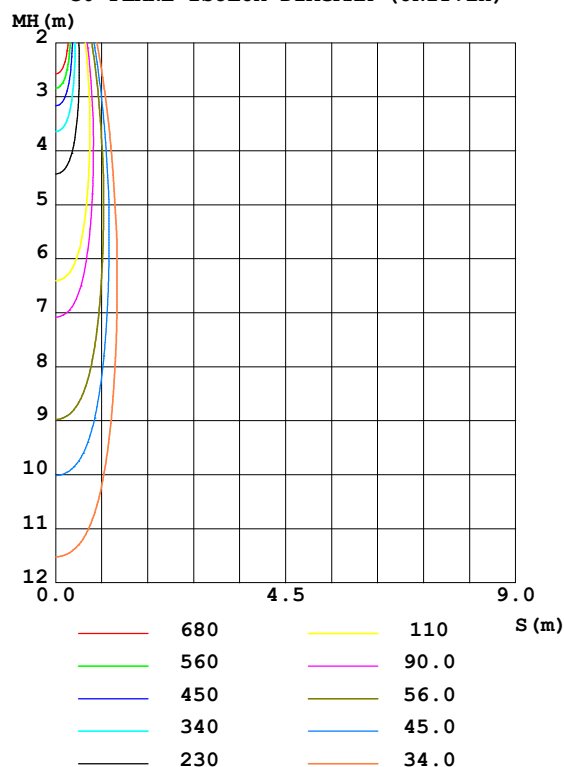
Test:U:225.1V I:0.0360A P:7.630W PF:0.9200 Freq:0Hz Lamp Flux:614.66x1 lm					
NAME: ALT35-7G30-S		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.:		SUR.:28		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 80.56 lm/W
MODEL	3000K CRI90	I <sub>max</sub> (cd)	4500	S/MH(C0/180)	0.30	
NOMINAL POWER(W)	7	LOR(%)	100.0	S/MH(C90/270)	0.27	
RATED VOLTAGE(V)	226	TOTAL FLUX(lm)	614.66	η UP,DN(C0-180)	0.0,53.0	
NOMINAL FLUX(lm)	614.66	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,47.0	
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: 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:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	1643	1827	1892	1878	1723	1542	1540	1536	0- 10	277.8	277.8	45.2, 45.2
20	241.1	290.1	330.8	344.3	289.7	237.1	242.5	244.5	10- 20	202.0	479.7	78.1, 78.1
30	60.43	67.51	75.13	76.12	64.96	59.43	64.97	65.64	20- 30	61.33	541.1	88, 88
40	31.51	33.24	34.58	33.82	31.75	32.29	32.21	31.89	30- 40	28.51	569.6	92.7, 92.7
50	19.51	21.38	21.41	21.42	19.82	20.66	20.51	20.12	40- 50	20.13	589.7	95.9, 95.9
60	10.61	11.43	11.36	11.62	10.57	10.93	11.28	10.84	50- 60	14.06	603.8	98.2, 98.2
70	4.759	4.950	4.902	5.160	4.812	4.785	4.779	4.790	60- 70	7.538	611.3	99.5, 99.5
80	1.068	1.093	1.083	1.162	0.9567	0.9600	0.9718	1.061	70- 80	2.995	614.3	99.9, 99.9
90	0.2262	0.1916	0.1879	0.1960	0	0	0	0	80- 90	0.3492	614.7	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): 580.34 lm

%lum = 94.4%

%lamp = 94.4%

Conical surface Flux(120deg): 603.78 lm

%lum = 98.2%

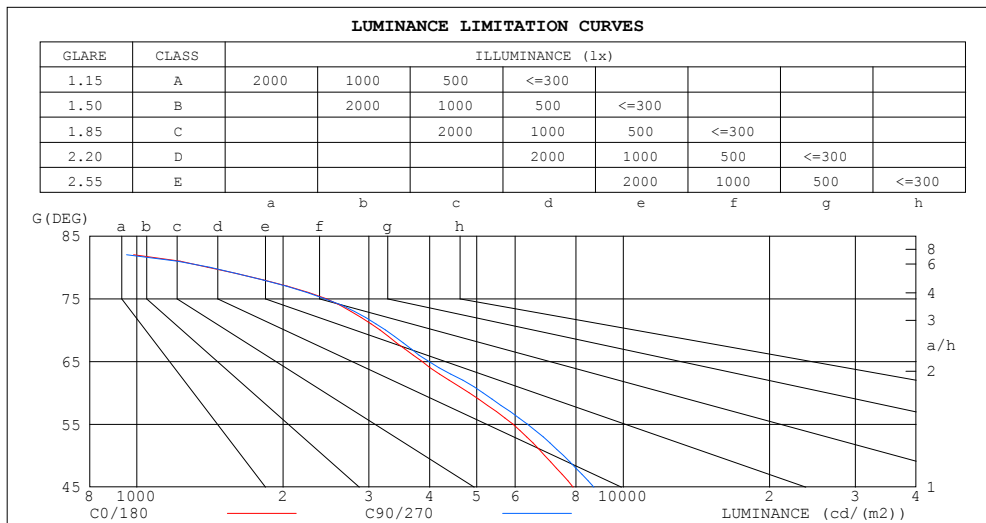
%lamp = 98.2%

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

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:225.1V I:0.0360A P:7.630W PF:0.9200 Freq:0Hz Lamp Flux:614.66x1 lm		
NAME: ALT35-7G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	692	631
80	1397	1413
75	2449	2432
70	3162	3245
65	3860	3981
60	4824	5143
55	5932	6351
50	6896	7542
45	7893	8706

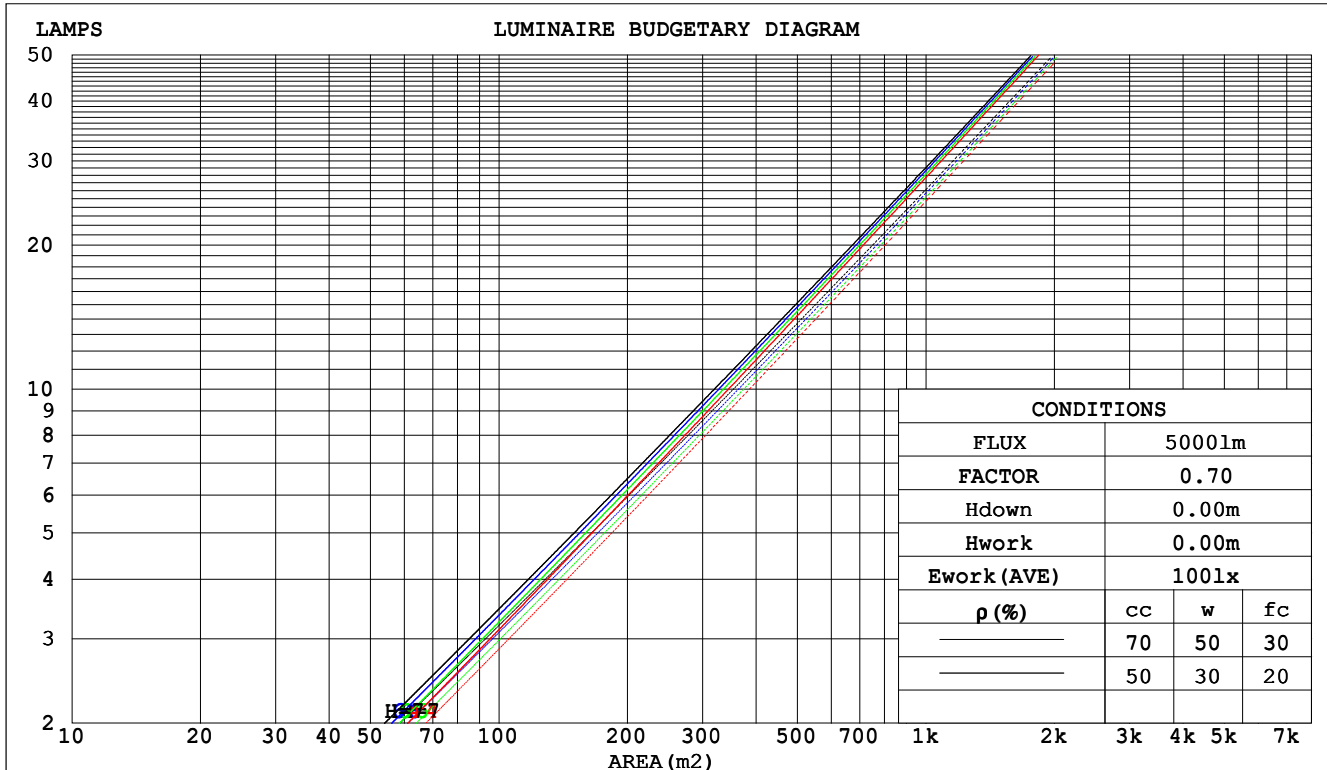
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-06-16

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:225.1V I:0.0360A P:7.630W PF:0.9200 Freq:0Hz Lamp Flux:614.66x1 lm		
NAME: ALT35-7G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	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	1.13	1.11	1.09	1.10	1.09	1.07	1.06	1.05	1.04	1.03	1.02	1.01	.99	.99	.98	.96
2.0	1.07	1.04	1.01	1.05	1.02	1.00	1.02	.99	.98	.99	.97	.96	.97	.95	.94	.92
3.0	1.02	.98	.95	1.01	.97	.95	.98	.96	.93	.96	.94	.92	.94	.92	.90	.89
4.0	.98	.94	.91	.97	.93	.90	.95	.92	.89	.93	.91	.88	.91	.89	.87	.86
5.0	.95	.90	.87	.94	.90	.87	.92	.89	.86	.91	.88	.85	.89	.87	.85	.84
6.0	.91	.87	.84	.91	.87	.84	.89	.86	.83	.88	.85	.83	.87	.84	.82	.81
7.0	.89	.84	.81	.88	.84	.81	.87	.83	.81	.86	.83	.80	.85	.82	.80	.79
8.0	.86	.82	.79	.86	.82	.79	.85	.81	.79	.84	.81	.78	.83	.80	.78	.77
9.0	.84	.80	.77	.83	.80	.77	.83	.79	.77	.82	.79	.77	.81	.78	.76	.75
10.0	.82	.78	.75	.81	.78	.75	.81	.77	.75	.80	.77	.75	.80	.77	.75	.74



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:225.1V I:0.0360A P:7.630W PF:0.9200 Freq:0Hz Lamp Flux:614.66x1 lm								
NAME: ALT35-7G30-S				TYPE:			WEIGHT:	
SPEC.:				DIM.:			SERIAL No.:	
MFR.:				SUR.:28			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	.143	.081	.026	.136	.078	.025	.124	.071	.023	.113	.065	.021	.102	.059	.019	
2.0	.133	.073	.022	.128	.070	.022	.117	.065	.020	.108	.061	.019	.099	.056	.018	
3.0	.124	.066	.020	.119	.064	.019	.111	.060	.018	.103	.056	.017	.095	.053	.016	
4.0	.115	.060	.018	.111	.058	.017	.104	.055	.016	.097	.052	.016	.091	.050	.015	
5.0	.108	.055	.016	.104	.054	.016	.098	.051	.015	.093	.049	.015	.087	.047	.014	
6.0	.101	.051	.015	.098	.050	.014	.093	.048	.014	.088	.046	.013	.083	.044	.013	
7.0	.095	.047	.013	.093	.046	.013	.088	.045	.013	.084	.043	.013	.080	.042	.012	
8.0	.090	.044	.012	.088	.043	.012	.084	.042	.012	.080	.041	.012	.077	.039	.011	
9.0	.086	.041	.012	.084	.041	.011	.080	.040	.011	.077	.039	.011	.074	.037	.011	
10.0	.081	.039	.011	.080	.039	.011	.077	.038	.011	.074	.037	.010	.071	.036	.010	

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	.148	.144	.135	.127	.099	.093	.088	.057	.054	.051	.018	.017	.017	
2.0	.151	.133	.117	.129	.114	.101	.089	.079	.071	.051	.046	.041	.016	.015	.013	
3.0	.136	.113	.095	.117	.098	.082	.080	.068	.058	.046	.040	.034	.015	.013	.011	
4.0	.124	.098	.078	.106	.085	.068	.073	.059	.048	.042	.035	.028	.014	.011	.009	
5.0	.113	.086	.065	.097	.074	.057	.067	.052	.040	.039	.030	.024	.013	.010	.008	
6.0	.104	.076	.055	.090	.066	.048	.062	.046	.034	.036	.027	.020	.012	.009	.007	
7.0	.096	.068	.047	.083	.059	.041	.057	.041	.029	.033	.024	.017	.011	.008	.006	
8.0	.090	.061	.041	.077	.053	.036	.053	.037	.025	.031	.022	.015	.010	.007	.005	
9.0	.084	.055	.036	.072	.048	.031	.050	.034	.022	.029	.020	.013	.009	.007	.004	
10.0	.078	.050	.031	.068	.044	.027	.047	.031	.019	.027	.018	.012	.009	.006	.004	

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:225.1V I:0.0360A P:7.630W PF:0.9200 Freq:0Hz Lamp Flux:614.66x1 lm											
NAME: ALT35-7G30-S					TYPE:			WEIGHT:			
SPEC.:					DIM.:			SERIAL No.:			
MFR.:					SUR.:28			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		14.4	15.1	14.6	15.2	15.4	14.7	15.4	14.9	15.6	15.7
	3H	15.0	15.6	15.2	15.8	16.0	15.3	15.9	15.5	16.1	16.3
	4H	15.2	15.8	15.4	16.0	16.2	15.4	16.0	15.7	16.3	16.5
	6H	15.2	15.8	15.5	16.0	16.2	15.5	16.0	15.8	16.3	16.5
	8H	15.2	15.7	15.5	16.0	16.2	15.4	16.0	15.7	16.2	16.5
	12H	15.1	15.7	15.4	15.9	16.2	15.4	15.9	15.7	16.2	16.5
4H	2H	14.7	15.3	15.0	15.6	15.8	15.0	15.6	15.3	15.8	16.0
	3H	15.4	16.0	15.7	16.2	16.5	15.7	16.2	16.0	16.5	16.7
	4H	15.7	16.1	16.0	16.4	16.7	15.9	16.4	16.2	16.7	17.0
	6H	15.7	16.2	16.1	16.5	16.8	15.9	16.4	16.3	16.7	17.0
	8H	15.7	16.1	16.1	16.4	16.8	15.9	16.3	16.3	16.7	17.0
	12H	15.6	16.0	16.0	16.4	16.8	15.9	16.2	16.3	16.6	17.0
8H	4H	15.7	16.1	16.1	16.4	16.8	15.9	16.3	16.3	16.6	17.0
	6H	15.8	16.1	16.2	16.5	16.9	16.0	16.3	16.4	16.7	17.1
	8H	15.7	16.0	16.2	16.4	16.9	15.9	16.2	16.4	16.6	17.1
	12H	15.7	15.9	16.1	16.4	16.8	15.9	16.1	16.3	16.6	17.0
12H	4H	15.6	16.0	16.0	16.4	16.7	15.8	16.2	16.3	16.6	17.0
	6H	15.7	16.0	16.2	16.4	16.9	15.9	16.2	16.4	16.6	17.1
	8H	15.7	15.9	16.2	16.4	16.8	15.9	16.1	16.4	16.6	17.1
Variations with the observer position at spacings:											
S = 1.0H	+ 0.5 / - 0.8					+ 0.6 / - 0.8					
1.5H	+ 0.2 / - 0.4					+ 0.3 / - 0.4					
2.0H	+ 1.0 / - 1.2					+ 1.1 / - 1.3					

CIE Pub.117, 614.7 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.7)

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:225.1V I:0.0360A P:7.630W PF:0.9200 Freq:0Hz Lamp Flux:614.66x1 lm		
NAME: ALT35-7G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	Shielding Angle:

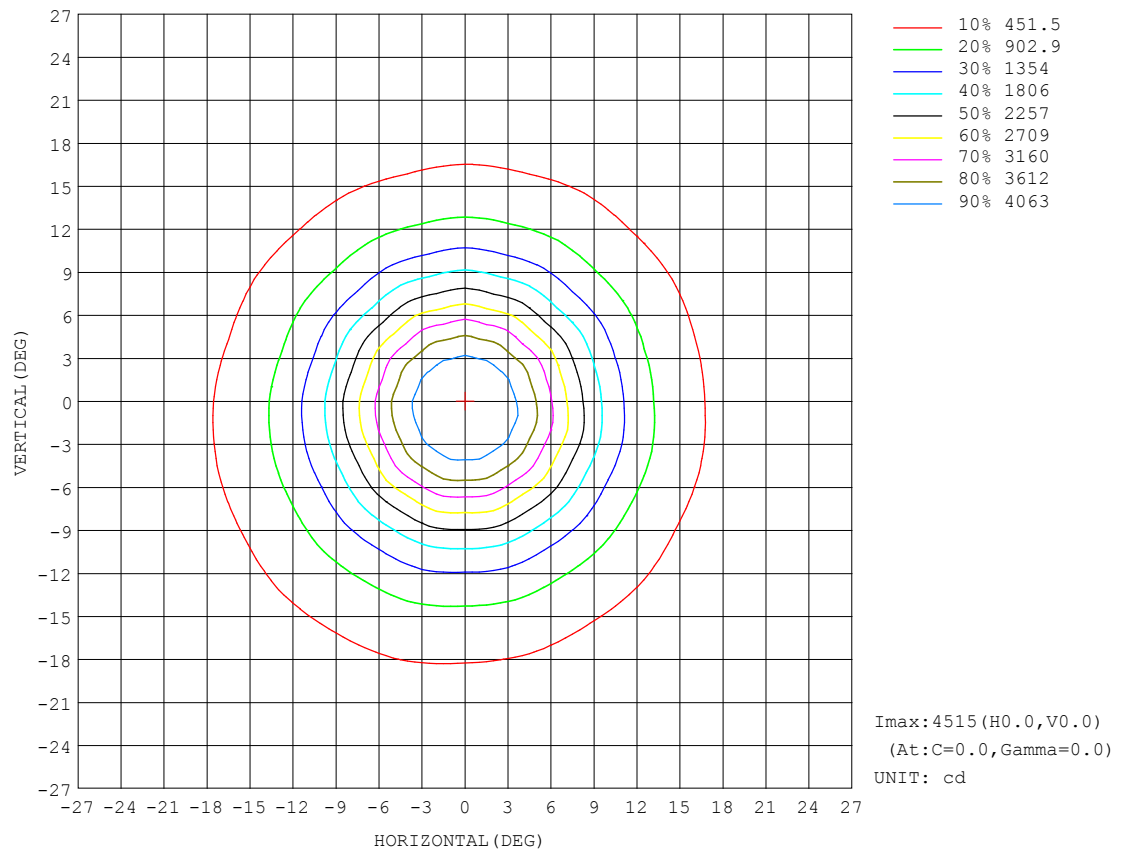
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	87	81	77	86	80	77	86	80	76	73
0.80	94	88	85	94	88	85	93	87	84	80
1.00	99	93	89	98	93	89	96	93	89	85
1.25	103	98	94	102	97	94	100	96	93	89
1.50	106	101	97	104	100	97	102	98	96	91
2.00	108	104	101	107	103	100	104	101	99	93
2.50	110	106	103	108	105	102	105	103	100	94
3.00	112	108	105	110	107	104	106	104	102	96
4.00	114	111	109	112	109	107	108	106	105	97
5.00	115	113	111	113	111	109	109	107	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: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-06-16

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:225.1V I:0.0360A P:7.630W PF:0.9200 Freq:0Hz Lamp Flux:614.66x1 lm		
NAME: ALT35-7G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	Shielding Angle:



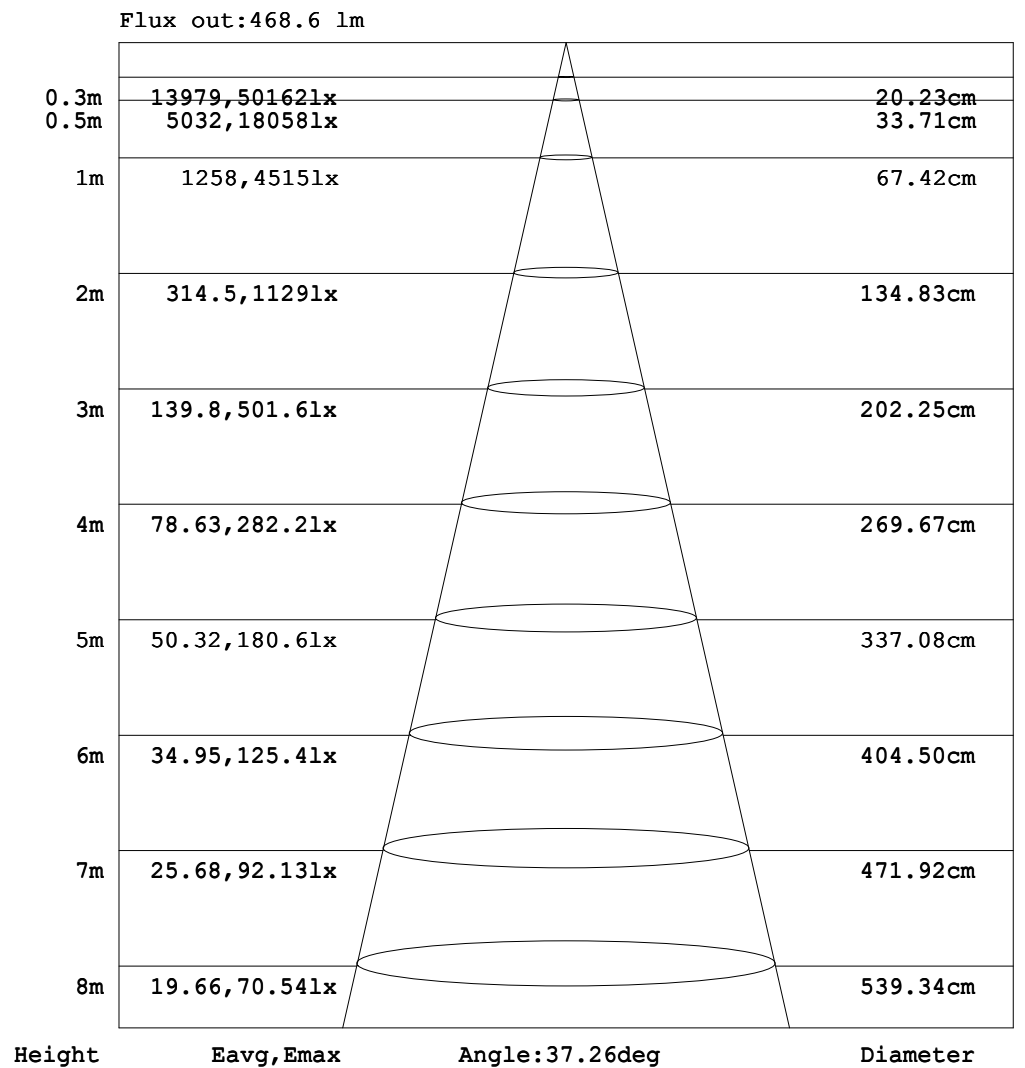
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-06-16

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:225.1V I:0.0360A P:7.630W PF:0.9200 Freq:0Hz Lamp Flux:614.66x1 lm		
NAME: ALT35-7G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	Shielding Angle:



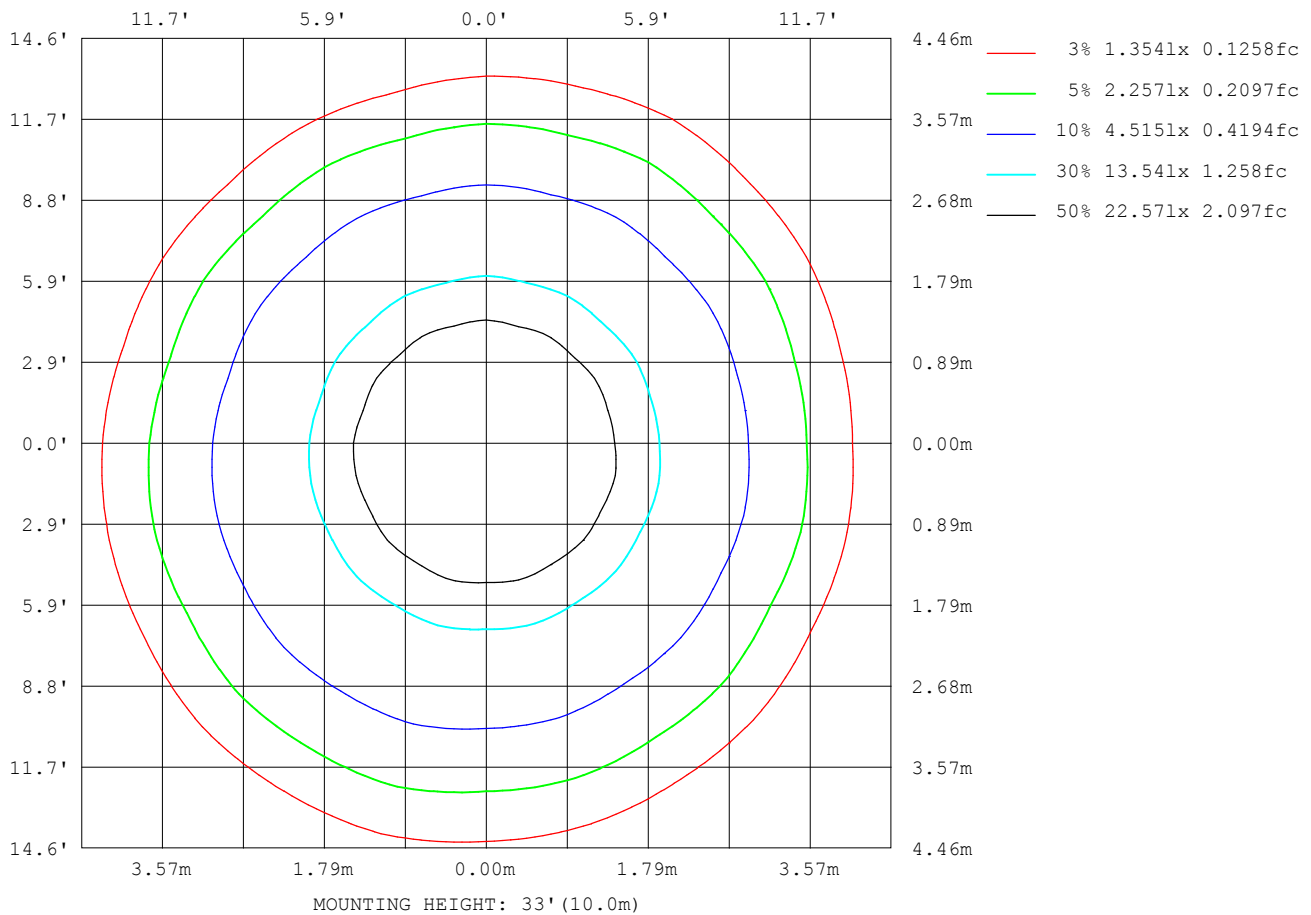
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:225.1V I:0.0360A P:7.630W PF:0.9200 Freq:0Hz Lamp Flux:614.66x1 lm		
NAME: ALT35-7G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	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:225.1V I:0.0360A P:7.630W PF:0.9200 Freq:0Hz Lamp Flux:614.66x1 lm		
NAME: ALT35-7G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:28	Shielding Angle:

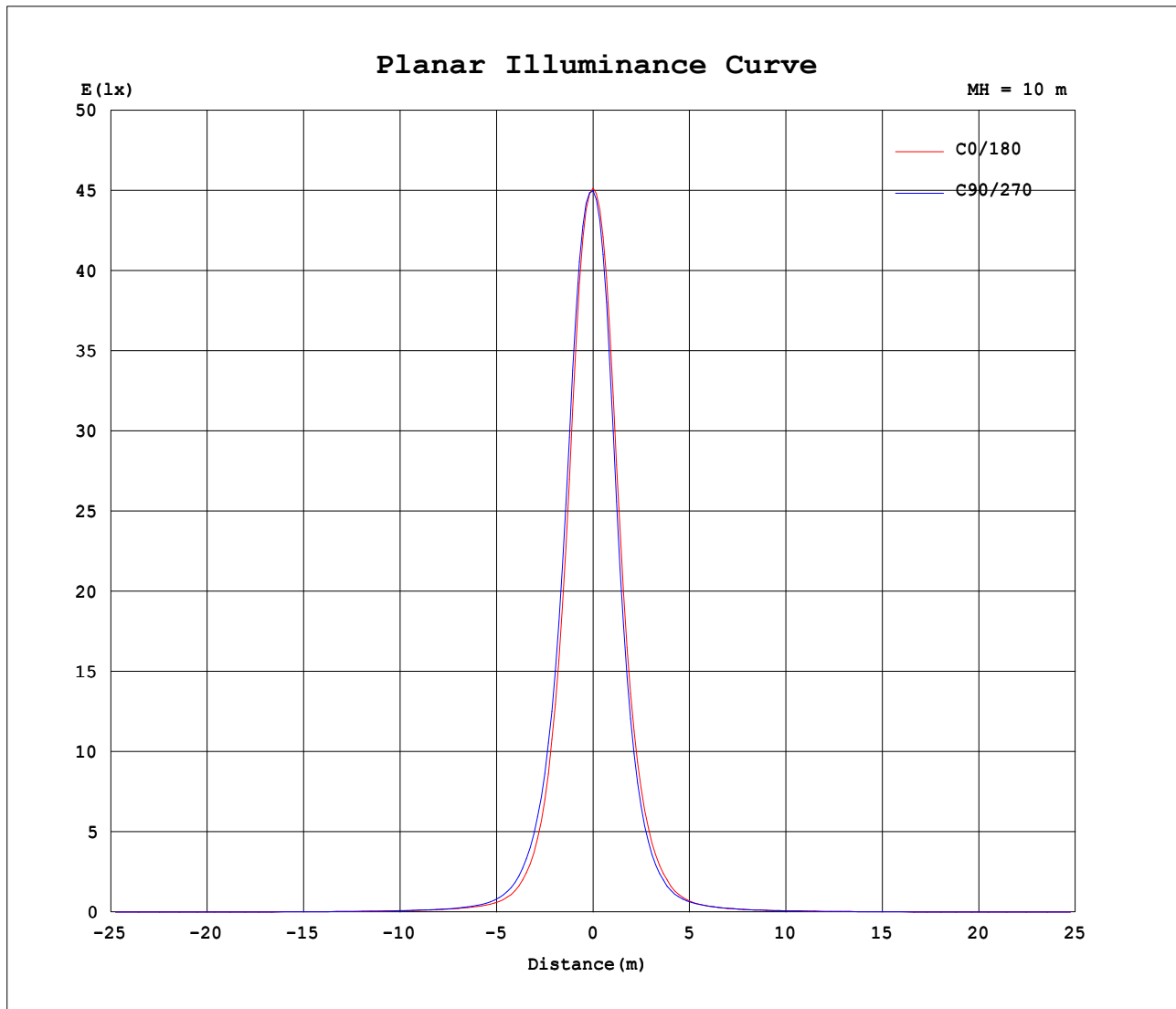
AvgL	cd/m2
L_0~180 (65) av	3843
L_0~180 (75) av	2414
L_0~180 (85) av	446
L_90~270 (65) av	3971
L_90~270 (75) av	2423
L_90~270 (85) av	407
L_45 (65) av	4028
L_45 (75) av	2494
L_45 (85) av	428

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

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
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 V2.0.362
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 V2.0.362  
 Humidity:65.0%  
 Test Distance:7.240m [K=1.0000]  
 Remarks: