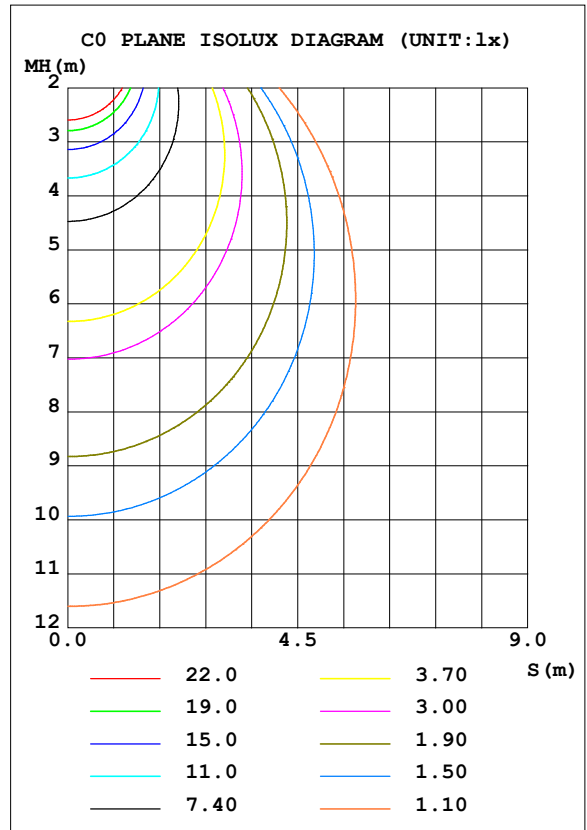
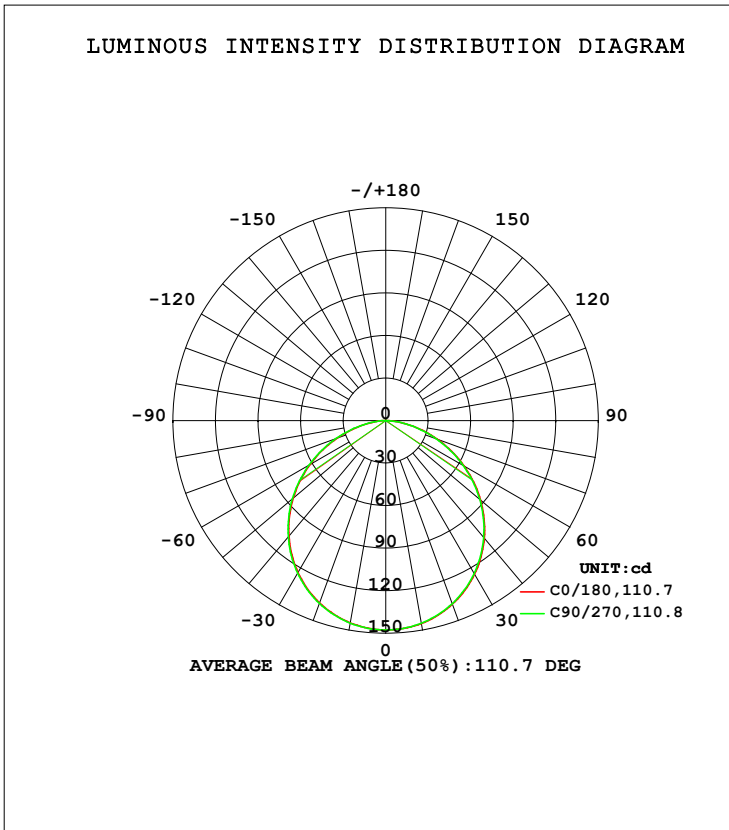


**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:0V I:0A P:0W PF:0.0000 Freq:0Hz Lamp Flux:412.41lx1 lm		
NAME: ADS7R-EBBM	TYPE:	WEIGHT:
SPEC.:3000K	DIM.:	SERIAL No.:90MIN
MFR.: ADS	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	ADS7R-EBBM	I <sub>max</sub> (cd)	147.7	S/MH (C0/180)	1.25
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.25
RATED VOLTAGE (V)		TOTAL FLUX (lm)	412.41	η UP, DN (C0-180)	0.0,50.2
NOMINAL FLUX (lm)	412.411	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0,49.8
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)		η down (%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2020-10-23

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.421  
 Humidity: 65.0%  
 Test Distance: 3.080m [K=1.0000]  
 Remarks:

**ZONAL FLUX DIAGRAM**

ZONAL FLUX DIAGRAM:

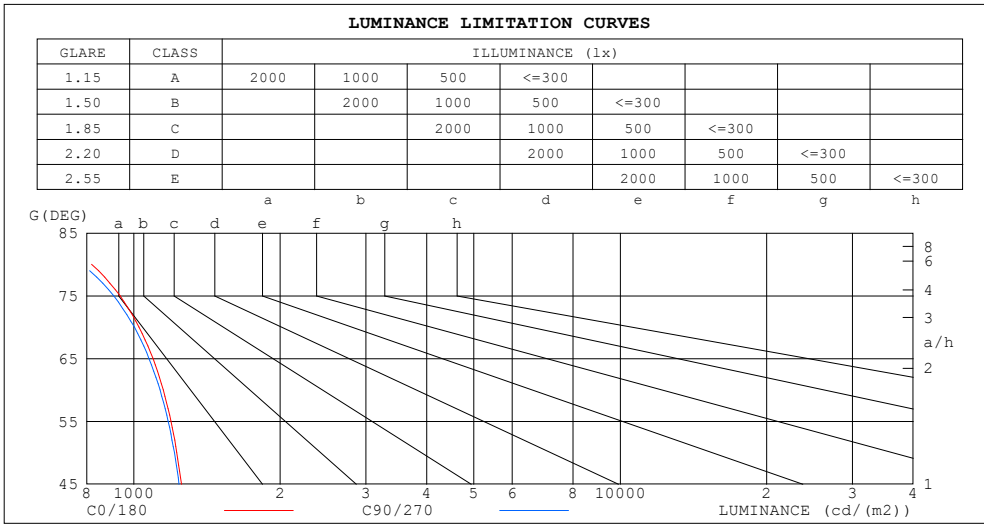
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	145.3	145.3	145.1	144.8	144.8	144.8	145.0	145.2	0- 10	13.97	13.97	3.39,3.39
20	137.8	137.7	137.3	136.9	136.7	136.9	137.2	137.5	10- 20	40.01	53.98	13.1,13.1
30	125.3	125.2	124.6	124.0	123.7	124.0	124.3	124.9	20- 30	60.58	114.6	27.8,27.8
40	108.2	108.2	107.5	106.6	106.3	106.6	107.0	107.7	30- 40	72.78	187.3	45.4,45.4
50	87.37	87.46	86.58	85.63	85.19	85.60	85.99	86.73	40- 50	74.93	262.3	63.6,63.6
60	63.70	63.88	62.93	61.90	61.38	61.80	62.27	63.02	50- 60	66.76	329.0	79.8,79.8
70	38.86	38.97	38.13	37.14	36.59	36.99	37.47	38.19	60- 70	49.65	378.7	91.8,91.8
80	15.77	15.77	15.11	14.35	13.91	14.18	14.59	15.24	70- 80	27.43	406.1	98.5,98.5
90	0.0496	0.0497	0.0508	0.0532	0.1062	0.1040	0.1008	0.0943	80- 90	6.304	412.4	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		

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-10-23

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.421  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

**LUMINANCE LIMITATION CURVES**

Test:U:0V I:0A P:0W PF:0.0000 Freq:0Hz Lamp Flux:412.411x1 lm		
NAME: ADS7R-EBBM	TYPE:	WEIGHT:
SPEC.:3000K	DIM.:	SERIAL No.:90MIN
MFR.: ADS	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	621	558
80	819	783
75	937	909
70	1025	1003
65	1095	1075
60	1150	1132
55	1193	1177
50	1226	1212
45	1253	1239

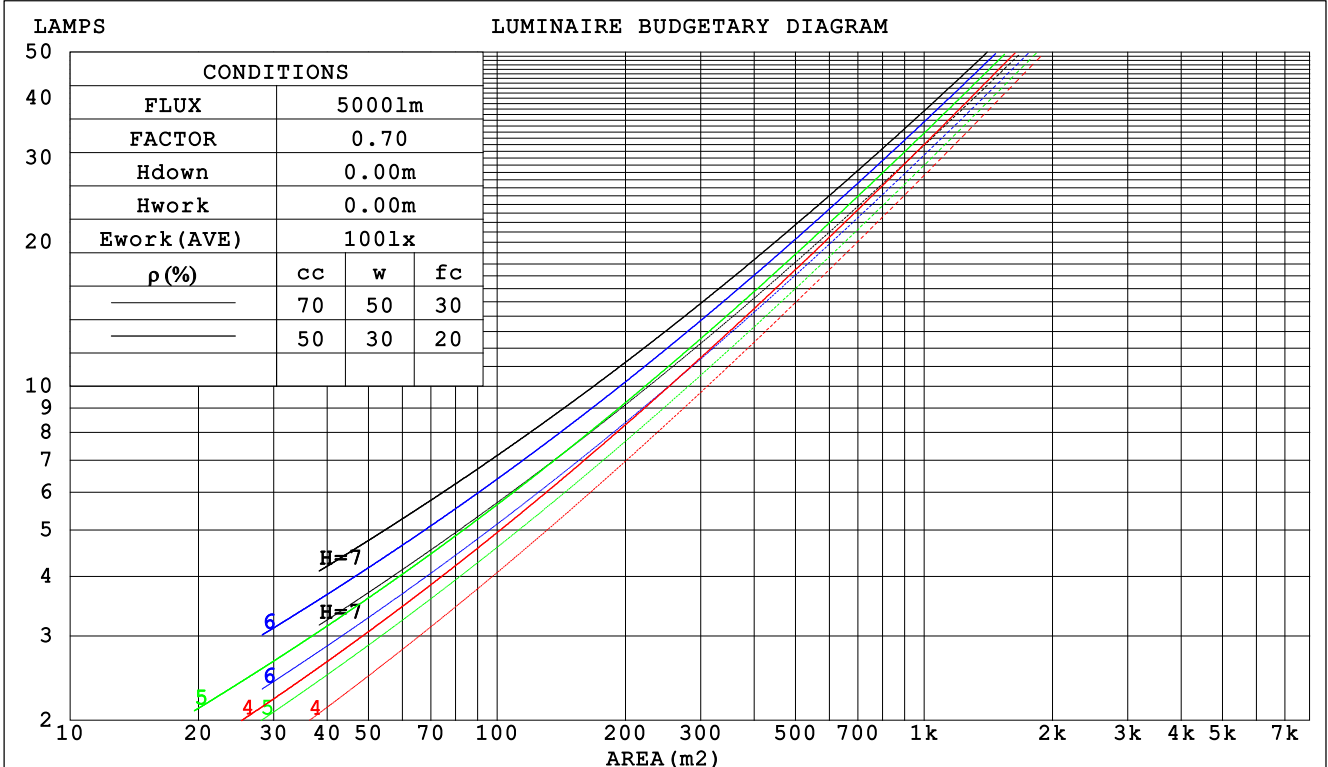
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-10-23

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.421  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:0V I:0A P:0W PF:0.0000 Freq:0Hz Lamp Flux:412.41lx lm		
NAME: ADS7R-EBBM	TYPE:	WEIGHT:
SPEC.:3000K	DIM.:	SERIAL No.:90MIN
MFR.: ADS	SUR.:	Shielding Angle:

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	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	1.04	.00	.96	1.02	.98	.95	.98	.95	.92	.94	.91	.89	.90	.88	.86	.84
2.0	.91	.84	.78	.89	.83	.77	.85	.80	.76	.82	.78	.74	.79	.76	.72	.70
3.0	.80	.72	.65	.78	.71	.65	.75	.69	.63	.73	.67	.62	.70	.65	.61	.59
4.0	.71	.62	.55	.69	.61	.55	.67	.60	.54	.65	.58	.53	.62	.57	.53	.50
5.0	.63	.54	.48	.62	.54	.47	.60	.53	.47	.58	.51	.46	.56	.50	.46	.44
6.0	.57	.48	.42	.56	.48	.41	.54	.47	.41	.52	.46	.41	.51	.45	.40	.38
7.0	.52	.43	.37	.51	.42	.37	.49	.42	.36	.48	.41	.36	.46	.40	.36	.34
8.0	.47	.39	.33	.46	.38	.33	.45	.38	.32	.44	.37	.32	.43	.37	.32	.30
9.0	.43	.35	.29	.43	.35	.29	.41	.34	.29	.40	.34	.29	.39	.33	.29	.27
10.0	.40	.32	.27	.39	.32	.27	.38	.31	.27	.37	.31	.26	.37	.31	.26	.25



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-10-23

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.421  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:0V I:0A P:0W PF:0.0000 Freq:0Hz Lamp Flux:412.411x1 lm		
NAME: ADS7R-EBBM	TYPE:	WEIGHT:
SPEC.:3000K	DIM.:	SERIAL No.:90MIN
MFR.: ADS	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.303	.173	.055	.296	.169	.054	.283	.162	.052	.271	.156	.050	.260	.151	.049	
2.0	.287	.158	.048	.281	.155	.048	.270	.150	.047	.259	.145	.045	.249	.141	.044	
3.0	.267	.142	.043	.261	.140	.042	.251	.136	.041	.242	.132	.041	.233	.129	.040	
4.0	.247	.128	.038	.242	.127	.037	.233	.123	.037	.224	.120	.036	.216	.118	.036	
5.0	.229	.116	.034	.224	.115	.034	.216	.113	.033	.209	.110	.033	.202	.108	.032	
6.0	.212	.106	.030	.208	.105	.030	.201	.103	.030	.194	.101	.030	.188	.099	.029	
7.0	.198	.098	.028	.194	.097	.028	.188	.095	.027	.182	.093	.027	.176	.091	.027	
8.0	.185	.090	.025	.182	.089	.025	.176	.088	.025	.171	.086	.025	.165	.085	.025	
9.0	.173	.084	.023	.171	.083	.023	.165	.082	.023	.160	.080	.023	.156	.079	.023	
10.0	.163	.078	.022	.161	.078	.022	.156	.076	.022	.151	.075	.021	.147	.074	.021	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	.180	.156	.135	.154	.134	.116	.105	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.172	.132	.099	.147	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.164	.114	.075	.141	.099	.065	.096	.068	.045	.056	.040	.027	.018	.013	.009	
4.0	.156	.101	.059	.134	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.149	.091	.047	.128	.078	.041	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.142	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.135	.075	.033	.116	.065	.029	.080	.046	.021	.047	.027	.012	.015	.009	.004	
8.0	.129	.069	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.004	
9.0	.123	.064	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-10-23

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.421  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

**UGR(Unified Glare Rating) Table**

Test:U:0V I:0A P:0W PF:0.0000 Freq:0Hz Lamp Flux:412.41lx1 lm										
NAME: ADS7R-EBBM					TYPE:			WEIGHT:		
SPEC.:3000K					DIM.:			SERIAL No.:90MIN		
MFR.: ADS					SUR.:			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	16.6	18.1	16.9	18.3	18.5	16.6	18.1	16.8	18.3	18.5
3H	18.1	19.5	18.4	19.7	19.9	18.0	19.4	18.3	19.6	19.9
4H	18.6	20.0	19.0	20.2	20.5	18.6	19.9	18.9	20.1	20.4
6H	19.0	20.3	19.4	20.6	20.8	18.9	20.2	19.3	20.5	20.7
8H	19.2	20.4	19.5	20.6	20.9	19.0	20.2	19.4	20.5	20.8
12H	19.2	20.4	19.6	20.7	21.0	19.1	20.2	19.4	20.5	20.8
4H 2H	17.2	18.5	17.5	18.8	19.0	17.2	18.5	17.5	18.8	19.0
3H	18.9	20.0	19.2	20.3	20.6	18.8	20.0	19.1	20.3	20.6
4H	19.6	20.6	19.9	20.9	21.3	19.5	20.5	19.8	20.9	21.2
6H	20.1	21.0	20.5	21.4	21.7	20.0	20.9	20.4	21.3	21.6
8H	20.2	21.1	20.6	21.5	21.9	20.1	21.0	20.5	21.4	21.7
12H	20.3	21.1	20.7	21.5	21.9	20.2	21.0	20.6	21.4	21.8
8H 4H	19.8	20.7	20.2	21.0	21.4	19.7	20.6	20.1	21.0	21.4
6H	20.5	21.2	20.9	21.6	22.0	20.4	21.1	20.8	21.5	21.9
8H	20.7	21.3	21.2	21.8	22.2	20.6	21.2	21.0	21.7	22.1
12H	20.9	21.4	21.3	21.8	22.3	20.7	21.3	21.2	21.7	22.2
12H 4H	19.8	20.6	20.2	21.0	21.4	19.7	20.5	20.2	20.9	21.3
6H	20.5	21.1	21.0	21.6	22.0	20.4	21.1	20.9	21.5	21.9
8H	20.8	21.3	21.3	21.8	22.3	20.7	21.2	21.2	21.7	22.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 412.4 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -3.1)  
 Area: 0.111111 m2

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-10-23

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.421  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

**UTILIZATION FACTORS TABLE**

Test:U:0V I:0A P:0W PF:0.0000 Freq:0Hz Lamp Flux:412.41lx1 lm		
NAME: ADS7R-EBBM	TYPE:	WEIGHT:
SPEC.:3000K	DIM.:	SERIAL No.:90MIN
MFR.: ADS	SUR.:	Shielding Angle:

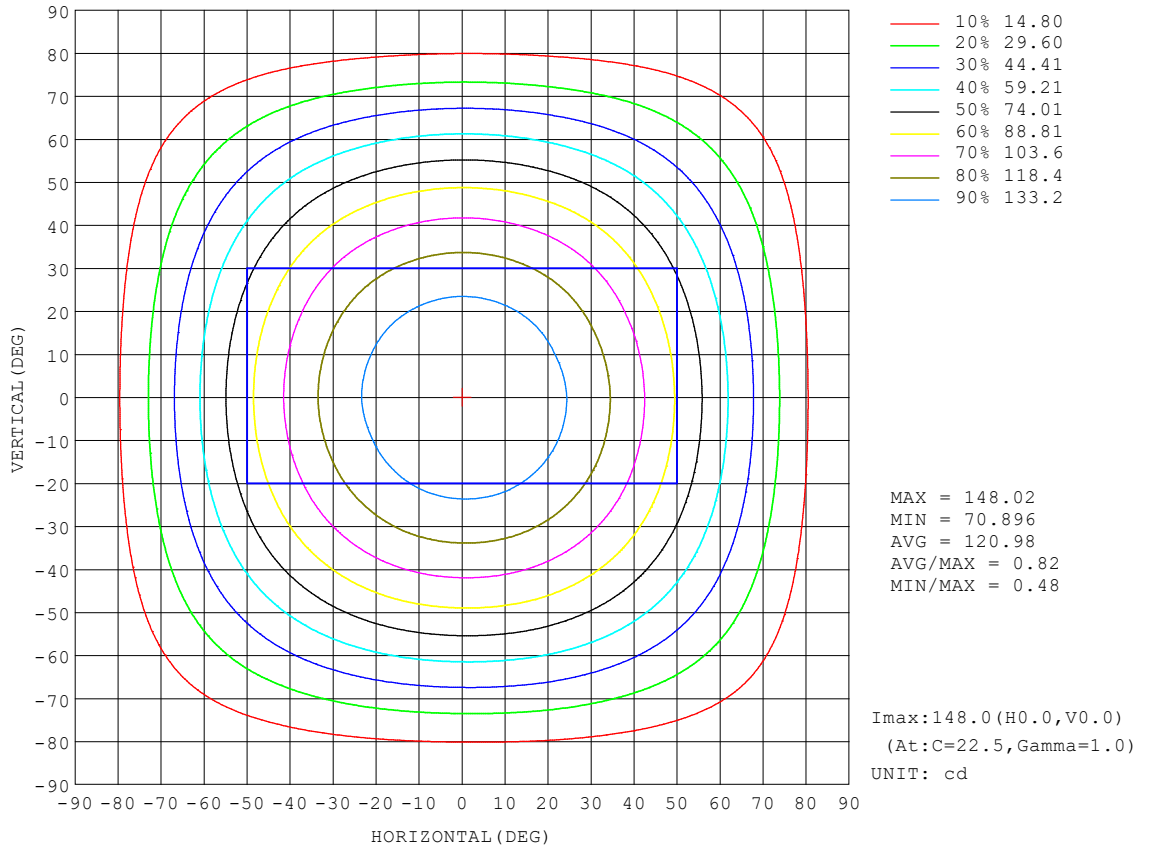
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	58	46	39	57	46	39	56	46	39	33
0.80	68	56	49	67	56	49	65	55	49	42
1.00	76	65	58	75	65	58	73	66	57	50
1.25	84	73	66	82	72	66	79	71	65	58
1.50	89	79	72	87	78	71	84	76	70	63
2.00	95	87	81	94	86	80	90	84	78	71
2.50	99	92	86	97	90	85	93	88	83	75
3.00	103	96	90	100	94	89	96	91	87	79
4.00	107	101	96	104	99	95	100	96	92	84
5.00	109	104	100	106	102	99	102	99	96	86
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-10-23

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.421  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

Test:U:0V I:0A P:0W PF:0.0000 Freq:0Hz Lamp Flux:412.41lx1 lm		
NAME: ADS7R-EBBM	TYPE:	WEIGHT:
SPEC.:3000K	DIM.:	SERIAL No.:90MIN
MFR.: ADS	SUR.:	Shielding Angle:



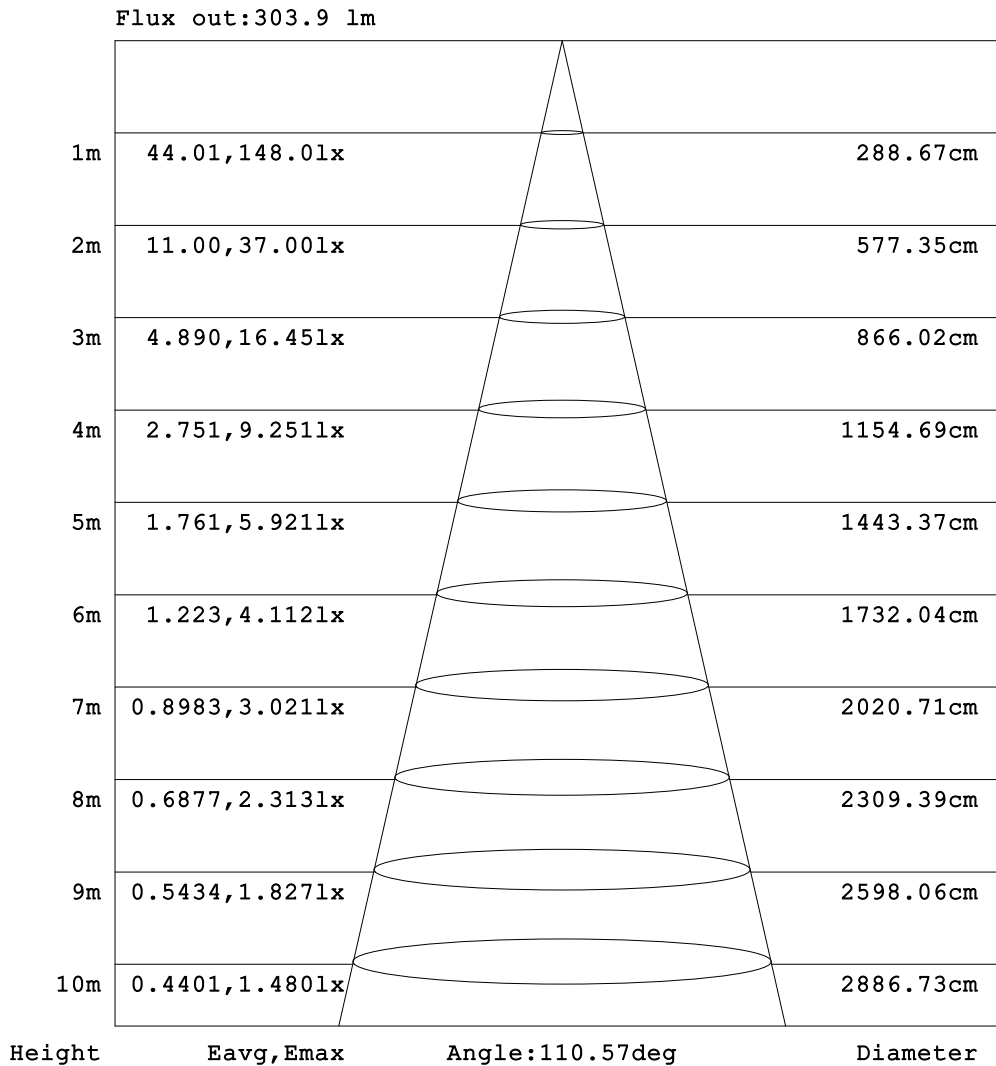
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-10-23

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.421  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:



**AAI Figure**

Test:U:0V I:0A P:0W PF:0.0000 Freq:0Hz Lamp Flux:412.41lx1 lm		
NAME: ADS7R-EBBM	TYPE:	WEIGHT:
SPEC.:3000K	DIM.:	SERIAL No.:90MIN
MFR.: ADS	SUR.:	Shielding Angle:



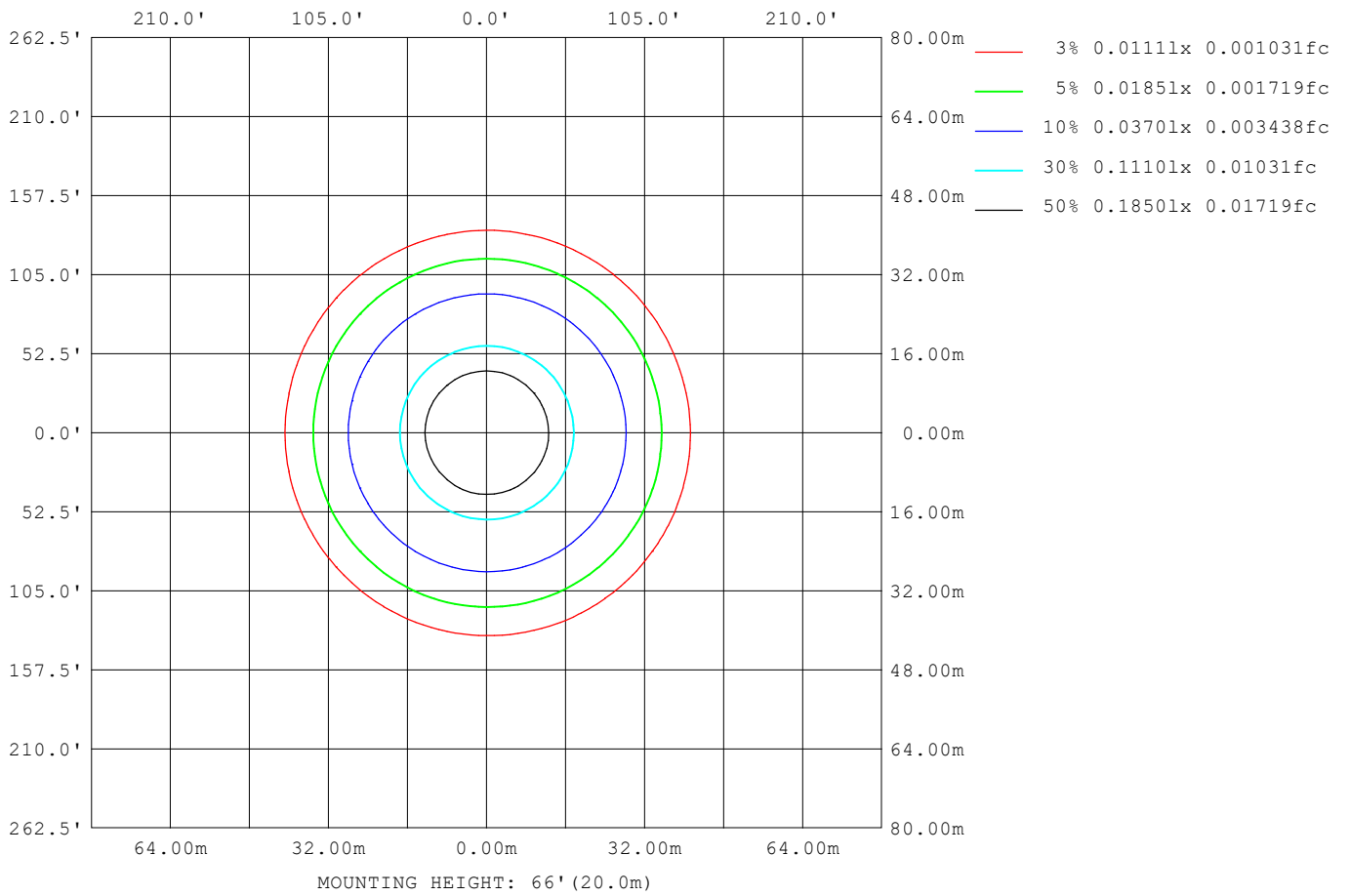
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-10-23

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.421  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

**ISOLUX DIAGRAM**

Test:U:0V I:0A P:0W PF:0.0000 Freq:0Hz Lamp Flux:412.41lx1 lm		
NAME: ADS7R-EBBM	TYPE:	WEIGHT:
SPEC.:3000K	DIM.:	SERIAL No.:90MIN
MFR.: ADS	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-10-23

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.421  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

**LED Avg.L Report**

Test:U:0V I:0A P:0W PF:0.0000 Freq:0Hz Lamp Flux:412.41lx1 lm		
NAME: ADS7R-EBBM	TYPE:	WEIGHT:
SPEC.:3000K	DIM.:	SERIAL No.:90MIN
MFR.: ADS	SUR.:	Shielding Angle:

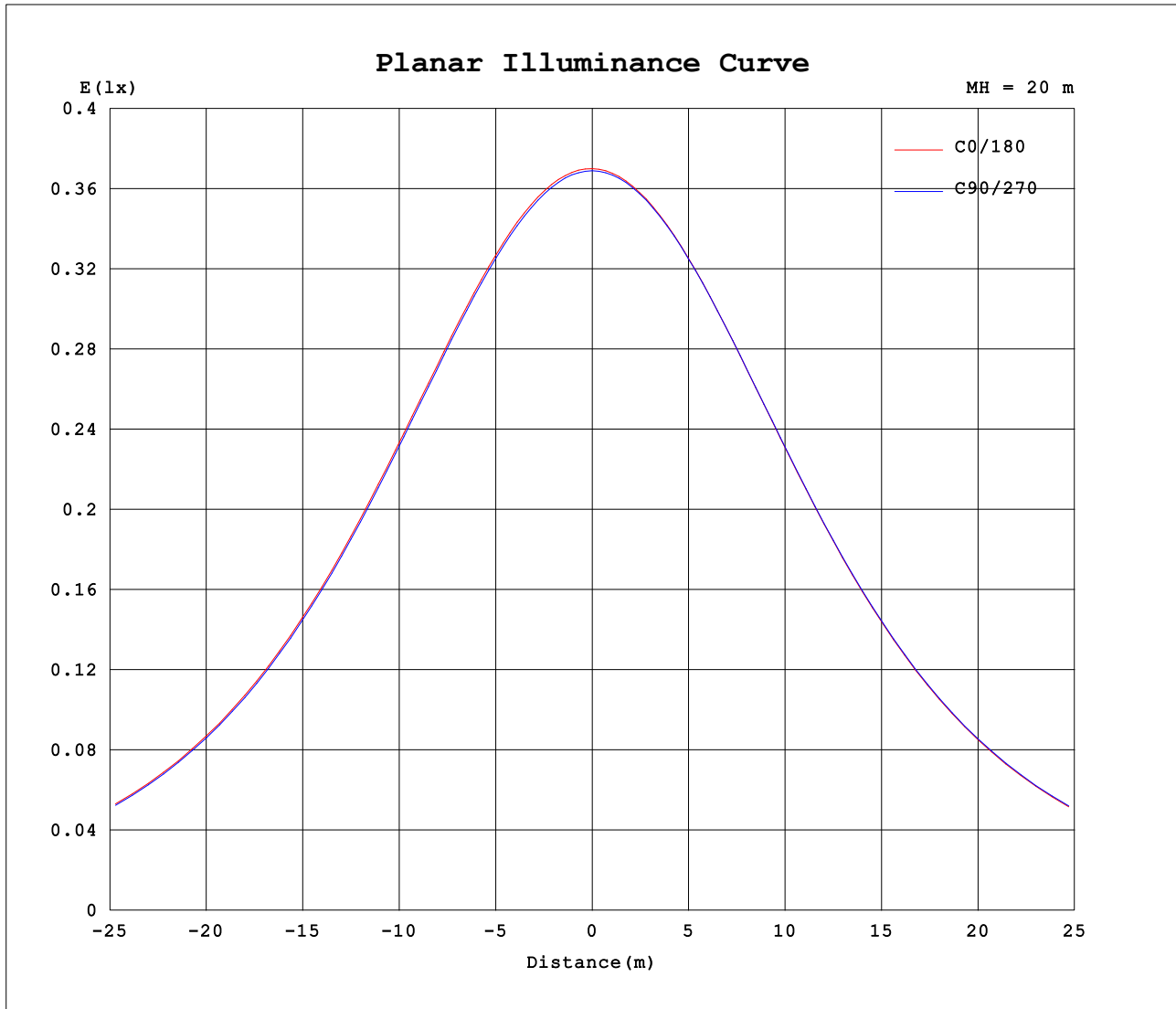
AvgL	cd/m2
L_0~180 (65) av	1067
L_0~180 (75) av	897
L_0~180 (85) av	535
L_90~270 (65) av	1068
L_90~270 (75) av	899
L_90~270 (85) av	533
L_45 (65) av	1069
L_45 (75) av	900
L_45 (85) av	535

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-10-23

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.421  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

**Planar Illuminance Curve**



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2020-10-23

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.421  
 Humidity: 65.0%  
 Test Distance: 3.080m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table with 3 columns: NAME, TYPE, WEIGHT; SPEC, DIM, SERIAL No.; MFR, SUR, Shielding Angle. Values include ADS7R-EBBM, TYPE:, WEIGHT:, SPEC.:3000K, DIM.:, SERIAL No.:90MIN, MFR.: ADS, SUR.:, Shielding Angle:.

Table--1

UNIT: cd

Large data table with C (DEG) on the y-axis (0 to 90) and gamma (DEG) on the x-axis (0 to 337.5). Contains numerical intensity values in cd for each combination.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-10-23

gamma Range: 0 - 90DEG
gamma Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:3.080m [K=1.0000]
Remarks: