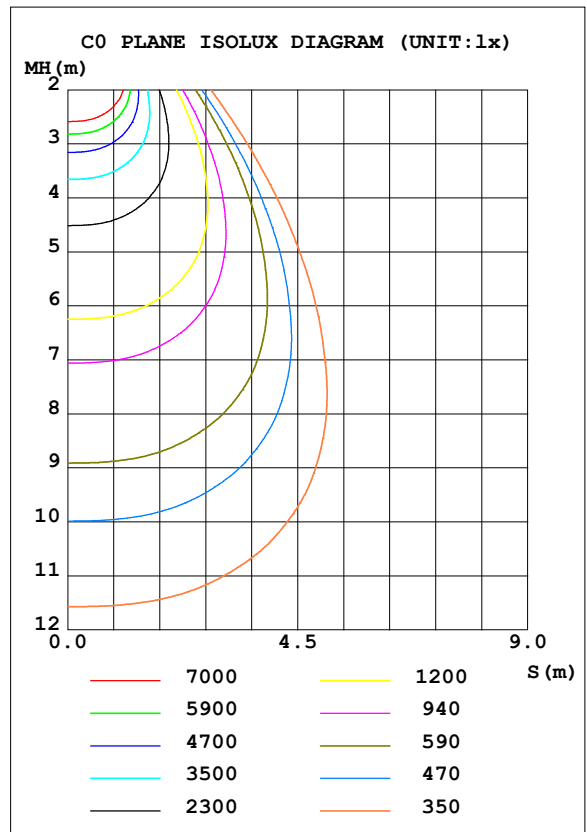
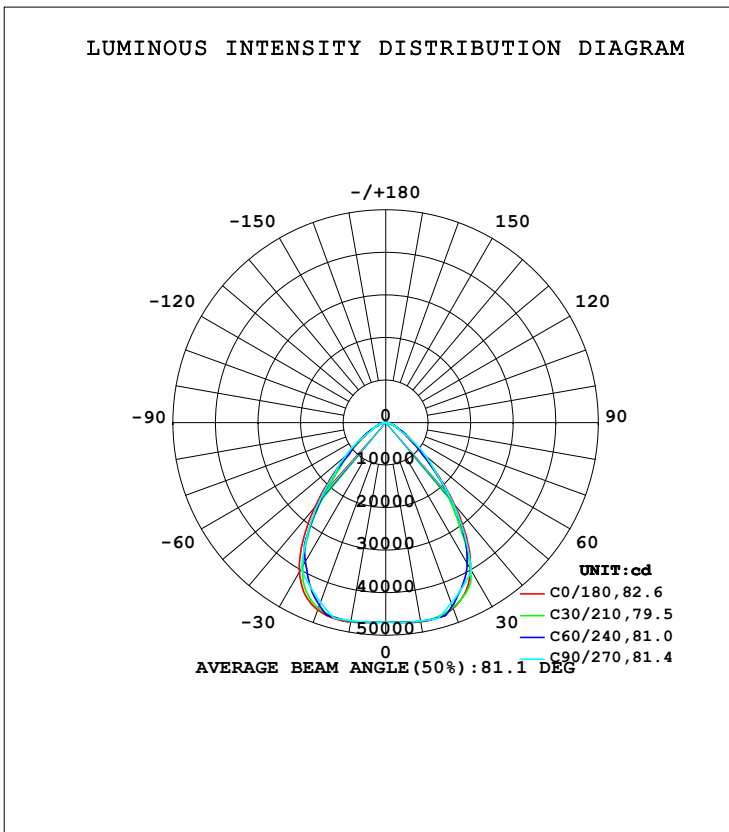


**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:276.58V I:1.8140A P:492.74W PF:0.9821 Freq:50.02Hz		
Lamp Flux:82168.2x1 lm		
NAME: ASD-UHB2AHV-PRO-500-BK	TYPE:	
MFR.: ASD LIGHTING CORP		
SPEC.: 500W 5000K		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 166.76 lm/W			
MODE/ASD-UHB2AHV-PRO-500-BK		I <sub>max</sub> (cd)	47679	S/MH (C0/180)	1.19
NOMINAL POWER (W)	500	LOR (%)	100.0	S/MH (C90/270)	1.17
RATED VOLTAGE (V)	277	TOTAL FLUX (lm)	82168	η UP, DN (C0-180)	0.0,49.9
NOMINAL FLUX (lm)	82168.2	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0,50.1
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	277	η down (%)	100.0	CIBSE SHR MAX	1.15



H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:S  
Test Date:19 April 2024

V(B) Range:-75 - 75DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.446  
Humidity:65.0%  
Test Distance:7.850m [K=1.0000]  
Remarks:

**ZONAL FLUX DIAGRAM**

ZONAL FLUX DIAGRAM:

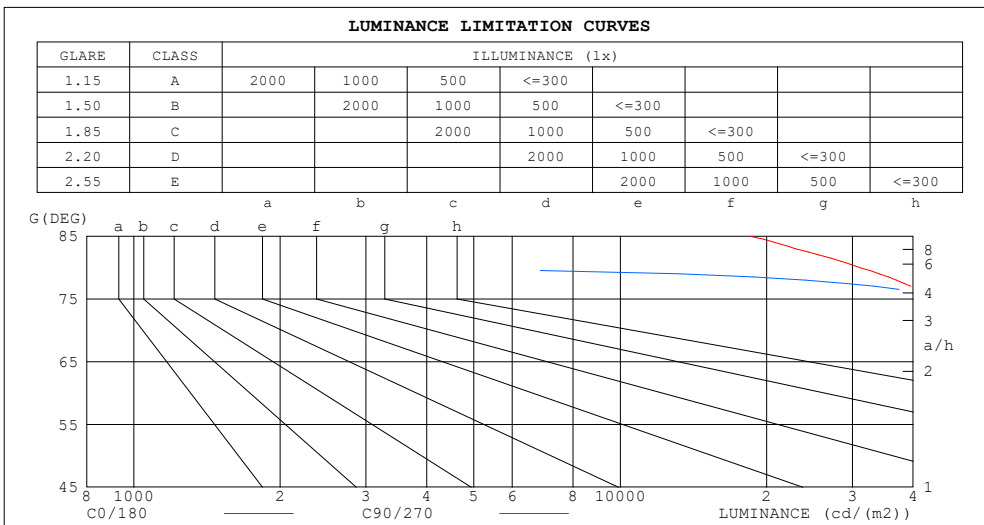
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	4754	4739	4734	4747	4758	4739	4727	4732	0- 10	4508	4508	5.49,5.49
20	4648	4695	4515	4689	4685	4661	4491	4671	10- 20	13341	17850	21.7,21.7
30	3983	3745	4029	3737	4060	3729	3977	3743	20- 30	19770	37619	45.8,45.8
40	2525	2199	2450	2218	2590	2259	2455	2233	30- 40	19649	57268	69.7,69.7
50	1097	1084	1239	1115	1154	1138	1266	1105	40- 50	12947	70215	85.5,85.5
60	438.5	493.9	395.5	512.4	466.5	525.2	408.4	506.0	50- 60	7058	77273	94,94
70	193.3	209.6	221.3	212.0	209.2	216.5	225.3	214.7	60- 70	3374	80647	98.1,98.1
80	57.97	58.43	0	57.97	67.47	57.18	0	59.07	70- 80	1412	82059	99.9,99.9
90	3.361	0	0	0	0.8360	0	0	0	80- 90	109.1	82168	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:X10cd									UNIT:lm		

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:S  
Test Date:19 April 2024

V(B) Range:-75 - 75DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.446  
Humidity:65.0%  
Test Distance:7.850m [K=1.0000]  
Remarks:

**LUMINANCE LIMITATION CURVES**

Test:U:276.58V I:1.8140A P:492.74W PF:0.9821 Freq:50.02Hz		
Lamp Flux:82168.2x1 lm		
NAME: ASD-UHB2AHV-PRO-500-BK	TYPE:	
MFR.: ASD LIGHTING CORP		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	18445	0
80	31065	0
75	43771	48240
70	52605	60215
65	63155	67980
60	81602	73602
55	109842	132586
50	158815	179307
45	228401	218412

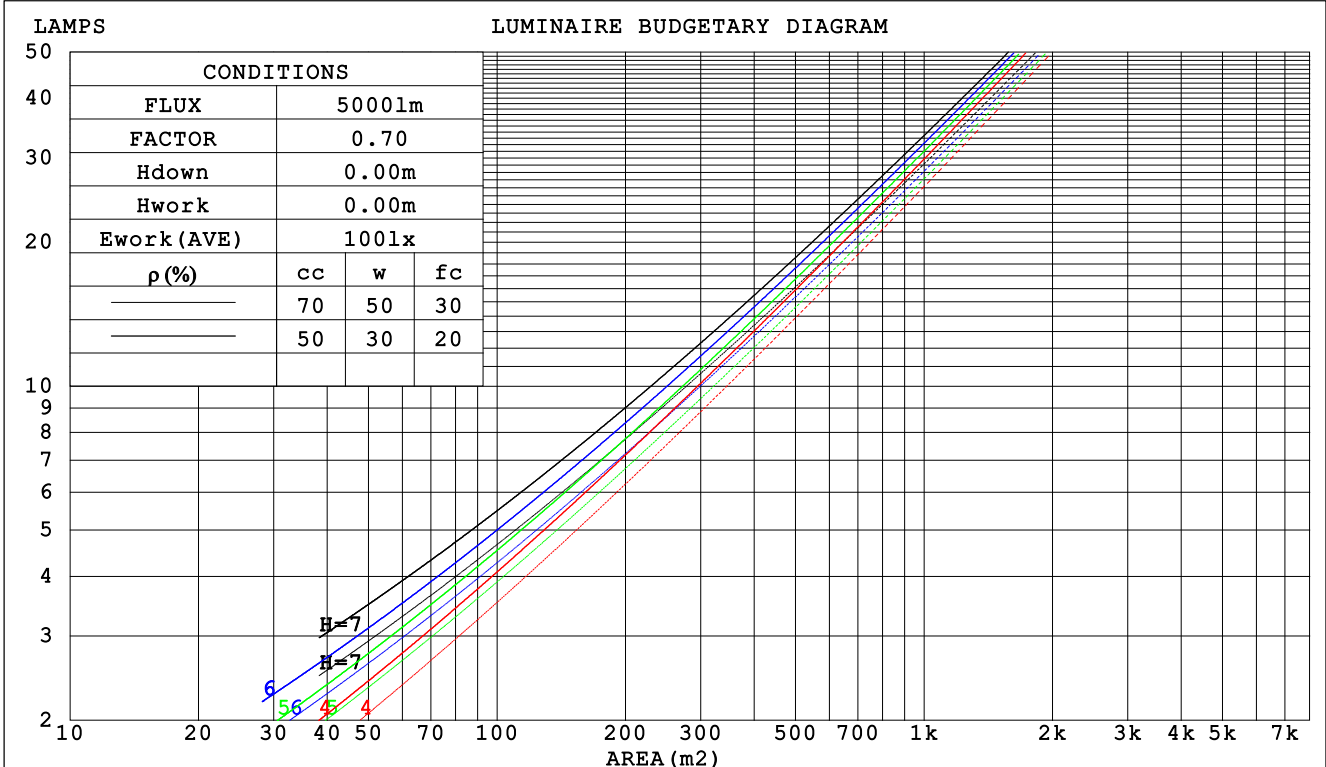
H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:S  
Test Date:19 April 2024

V(B) Range:-75 - 75DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.446  
Humidity:65.0%  
Test Distance:7.850m [K=1.0000]  
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:276.58V I:1.8140A P:492.74W PF:0.9821 Freq:50.02Hz		
Lamp Flux:82168.2x1 lm		
NAME: ASD-UHB2AHV-PRO-500-BK	TYPE:	
MFR.: ASD LIGHTING CORP		

ρcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρw																
ρfc	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	1.08	1.05	1.02	1.06	1.03	1.01	1.02	.90	.98	.98	.96	.95	.95	.93	.92	.90
2.0	.98	.93	.88	.96	.91	.87	.93	.89	.85	.90	.86	.84	.87	.84	.82	.80
3.0	.89	.82	.77	.87	.81	.77	.85	.80	.75	.82	.78	.74	.80	.76	.73	.71
4.0	.81	.74	.68	.80	.73	.68	.77	.72	.67	.75	.70	.66	.73	.69	.66	.64
5.0	.74	.67	.61	.73	.66	.61	.71	.65	.60	.69	.64	.60	.67	.63	.59	.57
6.0	.68	.60	.55	.67	.60	.55	.65	.59	.54	.64	.58	.54	.62	.57	.54	.52
7.0	.63	.55	.50	.62	.55	.50	.60	.54	.49	.59	.53	.49	.58	.53	.49	.47
8.0	.58	.50	.45	.57	.50	.45	.56	.50	.45	.55	.49	.45	.54	.49	.45	.43
9.0	.54	.46	.42	.53	.46	.42	.52	.46	.41	.51	.45	.41	.50	.45	.41	.39
10.0	.50	.43	.38	.49	.43	.38	.49	.42	.38	.48	.42	.38	.47	.42	.38	.36



H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:S  
Test Date:19 April 2024

V(B) Range:-75 - 75DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.446  
Humidity:65.0%  
Test Distance:7.850m [K=1.0000]  
Remarks:

WEC AND CCEC

Test:U:276.58V I:1.8140A P:492.74W PF:0.9821 Freq:50.02Hz		
Lamp Flux:82168.2x1 lm		
NAME: ASD-UHB2AHV-PRO-500-BK	TYPE:	
MFR.: ASD LIGHTING CORP		

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	.226	.128	.041	.219	.125	.040	.206	.118	.038	.194	.112	.036	.183	.106	.034	
2.0	.220	.120	.037	.214	.118	.036	.203	.113	.035	.192	.108	.034	.183	.104	.033	
3.0	.209	.111	.033	.204	.109	.033	.194	.105	.032	.186	.102	.031	.177	.098	.030	
4.0	.198	.103	.030	.194	.101	.030	.185	.098	.029	.177	.095	.029	.170	.092	.028	
5.0	.187	.095	.028	.183	.094	.027	.176	.092	.027	.169	.089	.026	.162	.087	.026	
6.0	.177	.089	.025	.173	.088	.025	.167	.086	.025	.161	.083	.025	.155	.082	.024	
7.0	.168	.083	.023	.164	.082	.023	.158	.080	.023	.153	.078	.023	.148	.077	.023	
8.0	.159	.078	.022	.156	.077	.022	.151	.075	.021	.146	.074	.021	.141	.072	.021	
9.0	.151	.073	.020	.148	.072	.020	.143	.071	.020	.139	.070	.020	.135	.068	.020	
10.0	.143	.069	.019	.141	.068	.019	.137	.067	.019	.133	.066	.019	.129	.065	.019	

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	.174	.157	.141	.149	.135	.121	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.163	.132	.107	.139	.114	.092	.095	.079	.064	.055	.046	.038	.018	.015	.012	
3.0	.153	.114	.083	.131	.098	.072	.090	.068	.050	.052	.040	.030	.017	.013	.010	
4.0	.144	.100	.066	.124	.086	.057	.085	.060	.040	.049	.035	.024	.016	.011	.008	
5.0	.137	.089	.054	.117	.077	.047	.081	.054	.033	.047	.032	.020	.015	.010	.006	
6.0	.130	.080	.044	.112	.069	.039	.077	.049	.027	.045	.029	.016	.014	.009	.005	
7.0	.124	.073	.037	.106	.063	.033	.073	.044	.023	.043	.026	.014	.014	.009	.005	
8.0	.118	.067	.032	.101	.058	.028	.070	.041	.020	.041	.024	.012	.013	.008	.004	
9.0	.113	.062	.028	.097	.054	.024	.067	.038	.017	.039	.022	.010	.013	.007	.003	
10.0	.108	.058	.025	.093	.050	.021	.064	.035	.015	.038	.021	.009	.012	.007	.003	

H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:S  
Test Date:19 April 2024

V(B) Range:-75 - 75DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.446  
Humidity:65.0%  
Test Distance:7.850m [K=1.0000]  
Remarks:

**UGR(Unified Glare Rating) Table**

Test:U:276.58V I:1.8140A P:492.74W PF:0.9821 Freq:50.02Hz										
Lamp Flux:82168.2x1 lm										
NAME: ASD-UHB2AHV-PRO-500-BK					TYPE:					
MFR.: ASD LIGHTING CORP										
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	26.0	27.3	26.4	27.7	28.0	26.7	28.0	27.0	28.3	28.6
3H	26.8	27.9	27.2	28.3	28.6	27.5	28.7	27.9	29.0	29.4
4H	27.0	28.1	27.4	28.4	28.8	27.7	28.8	28.1	29.2	29.5
6H	27.1	28.1	27.5	28.5	28.9	27.7	28.7	28.1	29.1	29.5
8H	27.1	28.0	27.5	28.4	28.8	27.7	28.6	28.1	29.0	29.4
12H	27.1	28.0	27.5	28.3	28.8	27.6	28.5	28.1	28.9	29.3
4H 2H	26.3	27.4	26.7	27.7	28.1	26.8	27.9	27.2	28.2	28.6
3H	27.2	28.1	27.6	28.5	28.9	27.8	28.7	28.3	29.1	29.5
4H	27.5	28.3	27.9	28.7	29.2	28.1	28.9	28.6	29.3	29.8
6H	27.7	28.4	28.2	28.8	29.3	28.1	28.8	28.6	29.2	29.7
8H	27.7	28.3	28.2	28.8	29.2	28.1	28.7	28.5	29.1	29.6
12H	27.7	28.2	28.2	28.7	29.2	28.0	28.6	28.5	29.1	29.5
8H 4H	27.6	28.2	28.1	28.7	29.1	28.2	28.8	28.6	29.2	29.7
6H	27.8	28.3	28.3	28.8	29.3	28.2	28.7	28.7	29.2	29.7
8H	27.8	28.3	28.4	28.8	29.3	28.1	28.6	28.6	29.1	29.6
12H	27.8	28.2	28.3	28.7	29.3	28.1	28.5	28.6	29.0	29.5
12H 4H	27.5	28.1	28.0	28.6	29.1	28.1	28.7	28.6	29.2	29.7
6H	27.8	28.2	28.3	28.7	29.2	28.1	28.6	28.7	29.1	29.6
8H	27.8	28.2	28.3	28.7	29.3	28.1	28.5	28.6	29.0	29.5
CIE190: 2010										

CIE190: 2010  
Area: 0.10746 m2

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:S  
Test Date:19 April 2024

V(B) Range:-75 - 75DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.446  
Humidity:65.0%  
Test Distance:7.850m [K=1.0000]  
Remarks:

**UTILIZATION FACTORS TABLE**

Test:U:276.58V I:1.8140A P:492.74W PF:0.9821 Freq:50.02Hz		
Lamp Flux:82168.2x1 lm		
NAME: ASD-UHB2AHV-PRO-500-BK	TYPE:	
MFR.: ASD LIGHTING CORP		

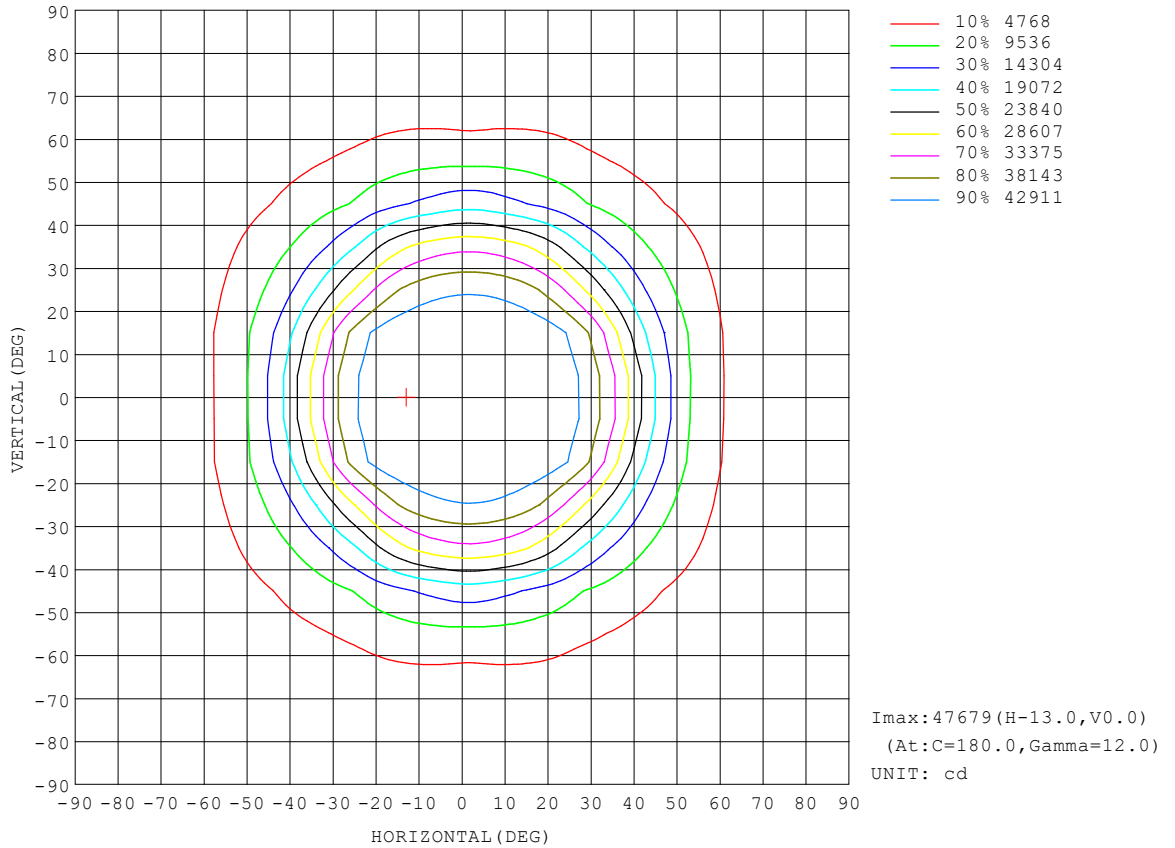
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) k(RI) x RCR = 5									
k = 0.60	72	63	58	72	63	58	71	63	58	53
0.80	82	73	68	81	73	68	79	72	67	62
1.00	89	81	75	88	80	75	86	81	75	69
1.25	95	87	82	93	87	82	91	85	81	75
1.50	98	92	87	97	91	86	94	89	85	79
2.00	103	97	93	102	96	92	99	94	91	84
2.50	106	100	96	104	99	95	101	97	93	87
3.00	108	103	100	106	102	98	103	99	96	89
4.00	111	107	104	109	105	102	105	102	100	92
5.00	112	109	106	110	107	105	106	104	102	93
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:S  
Test Date:19 April 2024

V(B) Range:-75 - 75DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.446  
Humidity:65.0%  
Test Distance:7.850m [K=1.0000]  
Remarks:

**ISOCANDELA DIAGRAM**

Test:U:276.58V I:1.8140A P:492.74W PF:0.9821 Freq:50.02Hz		
Lamp Flux:82168.2x1 lm		
NAME: ASD-UHB2AHV-PRO-500-BK	TYPE:	
MFR.: ASD LIGHTING CORP		



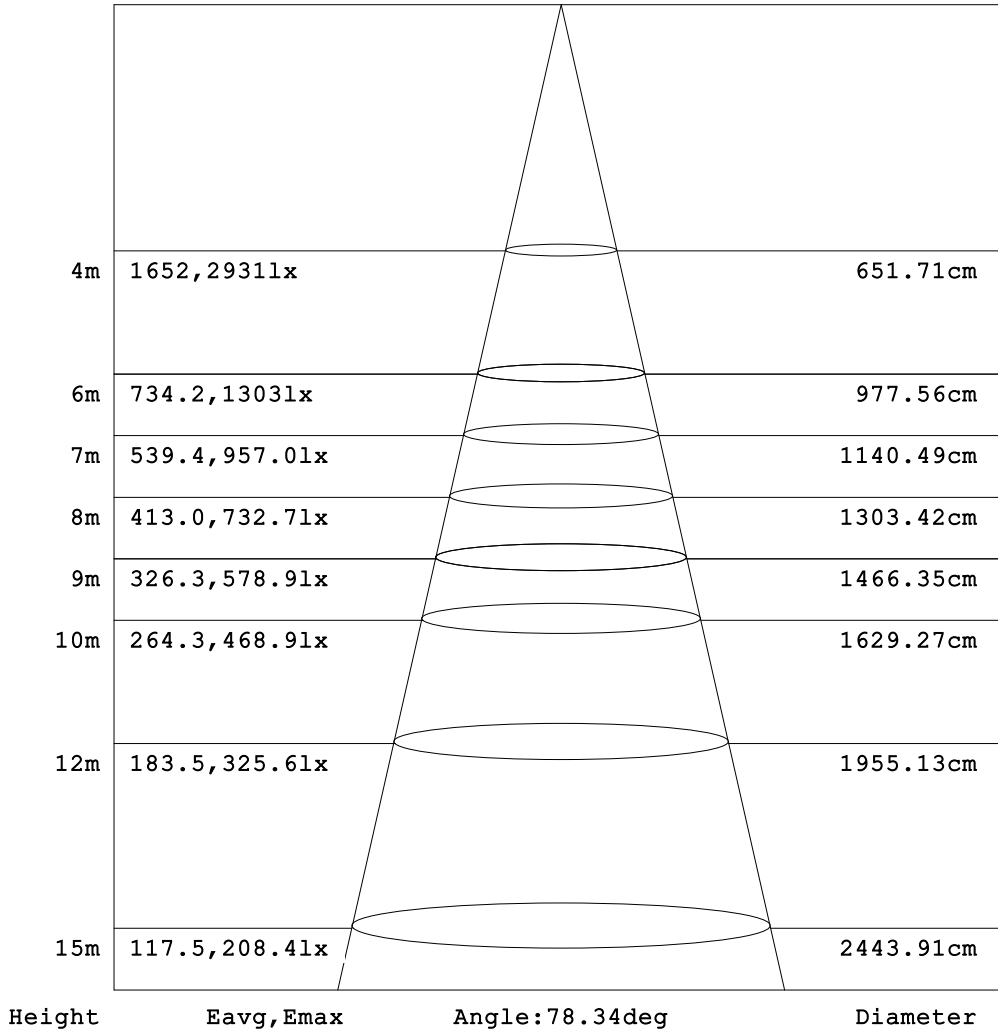
H( $\beta$ ) Range:-90 - 90DEG  
 H( $\beta$ ) Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:S  
 Test Date:19 April 2024

V(B) Range:-75 - 75DEG  
 V(B) Interval: 5.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.446  
 Humidity:65.0%  
 Test Distance:7.850m [K=1.0000]  
 Remarks:

**AAI Figure**

Test:U:276.58V I:1.8140A P:492.74W PF:0.9821 Freq:50.02Hz		
Lamp Flux:82168.2x1 lm		
NAME: ASD-UHB2AHV-PRO-500-BK	TYPE:	
MFR.: ASD LIGHTING CORP		

Flux out:56423 lm



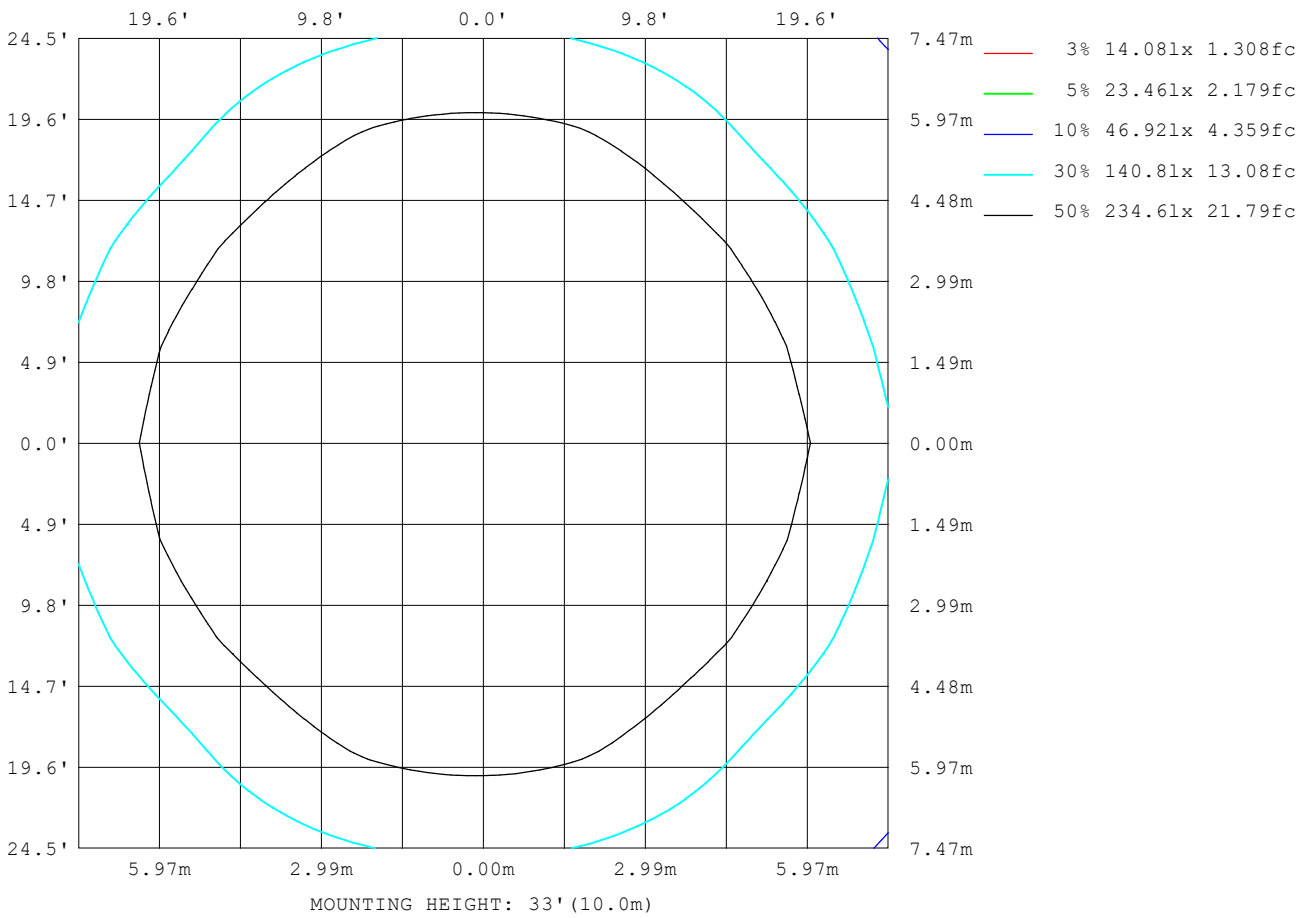
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:S  
Test Date:19 April 2024

V(B) Range:-75 - 75DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.446  
Humidity:65.0%  
Test Distance:7.850m [K=1.0000]  
Remarks:

**ISOLUX DIAGRAM**

Test:U:276.58V I:1.8140A P:492.74W PF:0.9821 Freq:50.02Hz		
Lamp Flux:82168.2x1 lm		
NAME: ASD-UHB2AHV-PRO-500-BK	TYPE:	
MFR.: ASD LIGHTING CORP		



H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:S  
Test Date:19 April 2024

V(B) Range:-75 - 75DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.446  
Humidity:65.0%  
Test Distance:7.850m [K=1.0000]  
Remarks:

**LED Avg.L Report**

Test:U:276.58V I:1.8140A P:492.74W PF:0.9821 Freq:50.02Hz Lamp Flux:82168.2x1 lm		
NAME: ASD-UHB2AHV-PRO-500-BK	TYPE:	
MFR.: ASD LIGHTING CORP		

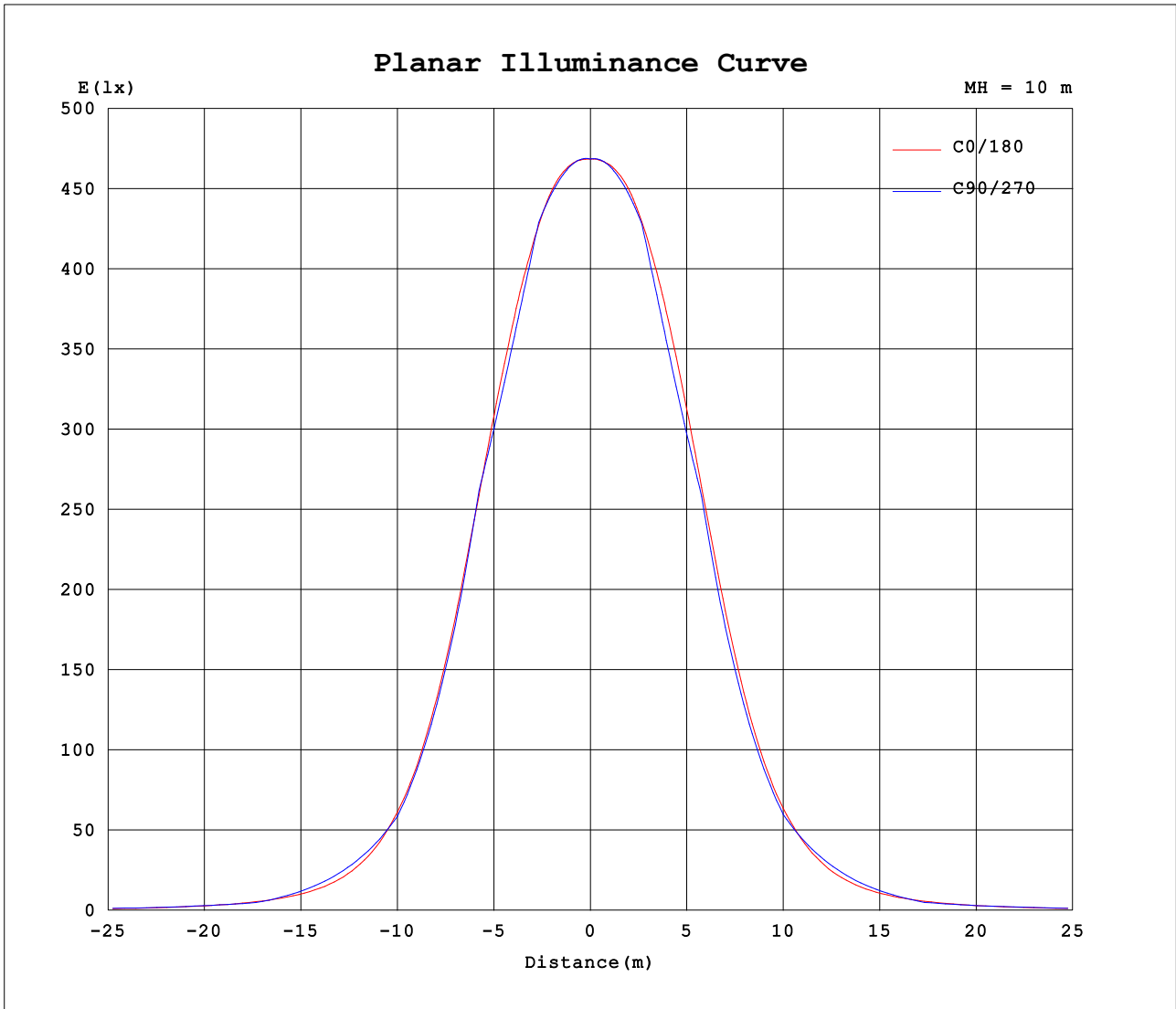
AvgL	cd/m2
L_0~180 (65) av	65448
L_0~180 (75) av	46162
L_0~180 (85) av	20185
L_90~270 (65) av	69036
L_90~270 (75) av	48163
L_90~270 (85) av	0
L_45 (65) av	73830
L_45 (75) av	48974
L_45 (85) av	0

Standard: GB/T 29293-2012

H( $\beta$ ) Range:-90 - 90DEG  
 H( $\beta$ ) Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:S  
 Test Date:19 April 2024

V(B) Range:-75 - 75DEG  
 V(B) Interval: 5.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.446  
 Humidity:65.0%  
 Test Distance:7.850m [K=1.0000]  
 Remarks:

**Planar Illuminance Curve**



H( $\beta$ ) Range:-90 - 90DEG  
 H( $\beta$ ) Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:S  
 Test Date:19 April 2024

V(B) Range:-75 - 75DEG  
 V(B) Interval: 5.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.446  
 Humidity:65.0%  
 Test Distance:7.850m [K=1.0000]  
 Remarks:

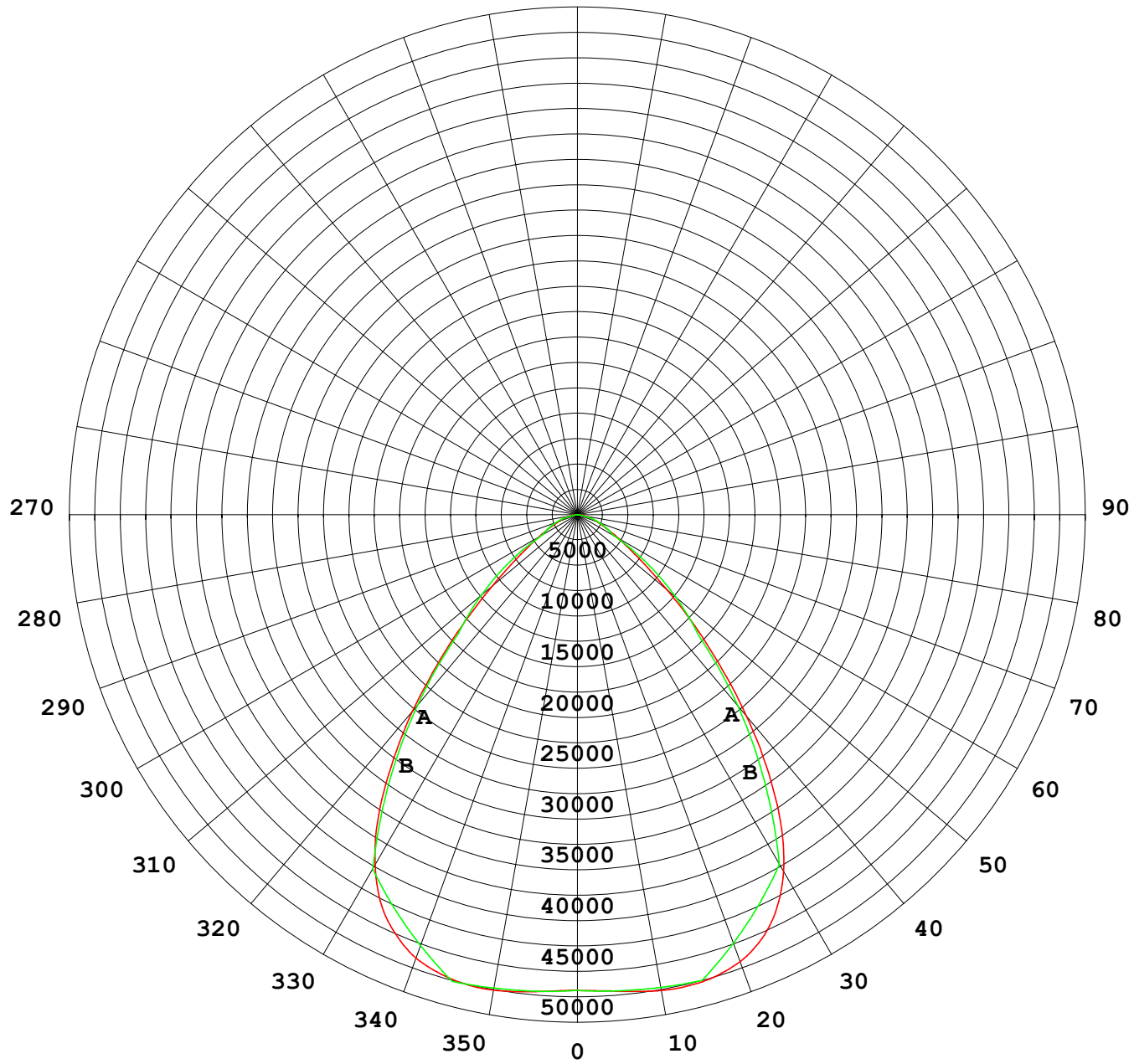






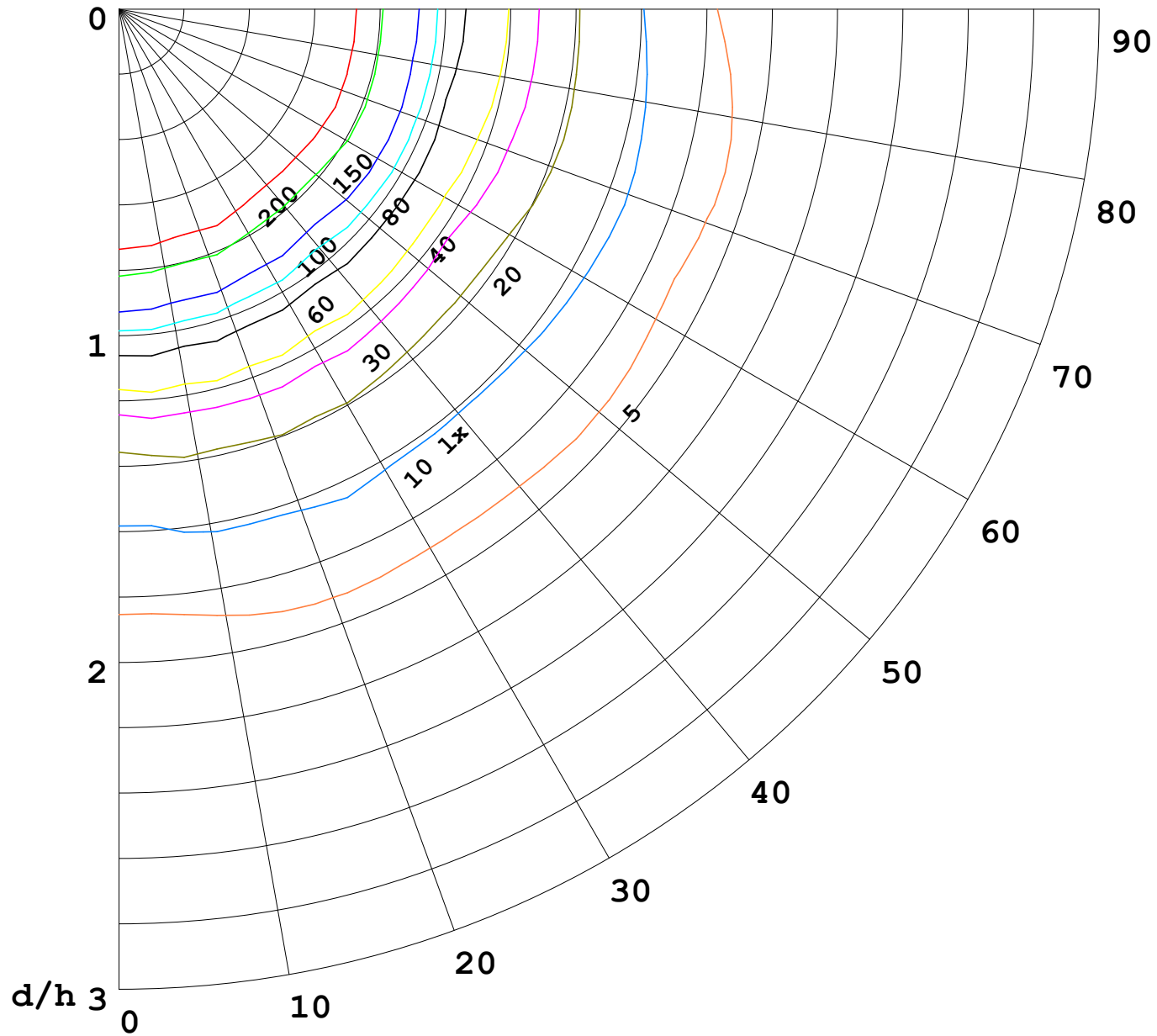


I (cd)



1000 lm

$K = 1$



F = 5000 lm  
 K = 0.7  
 Hcc = 0.0 m  
 Hfc = 0.0 m  
 Eave = 100 lx

—————	Pcc	Pw	Pfc
—————	70	50	30
—————	50	30	20

