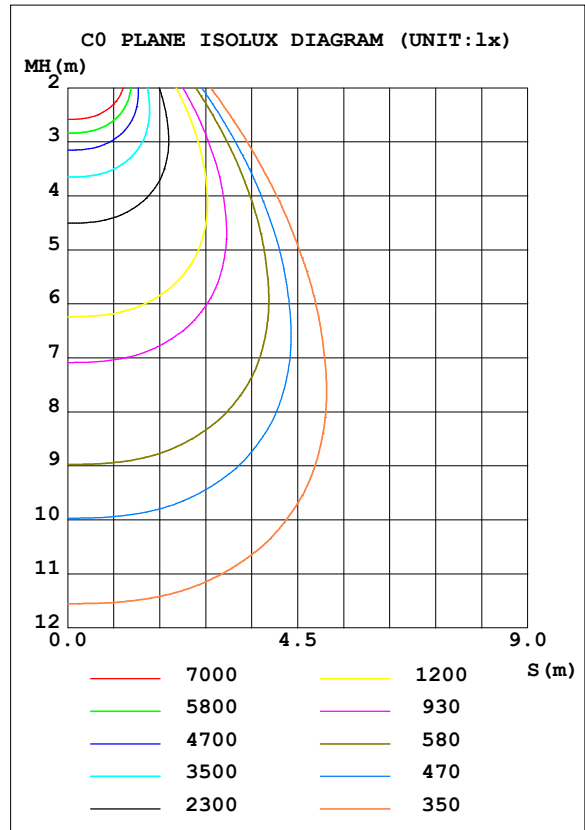
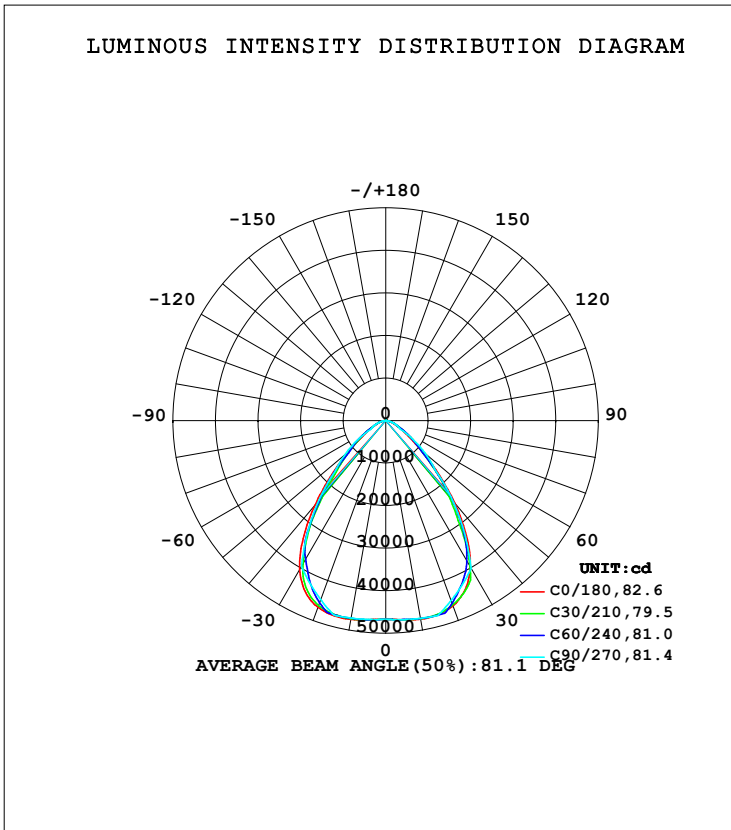


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:118.07V I:4.2495A P:492.76W PF:0.9821 Freq:50.02Hz		
Lamp Flux:81899.3x1 lm		
NAME: ASD-UHB2A-PRO-500-BK	TYPE:	
MFR.: ASD LIGHTING CORP		
SPEC.: 500W 5000K		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 166.20 lm/W			
MODEL	ASD-UHB2A-PRO-500-BK	I _{max} (cd)	47523	S/MH (C0/180)	1.19
NOMINAL POWER (W)	500	LOR (%)	100.0	S/MH (C90/270)	1.17
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	81899	η UP, DN (C0-180)	0.0, 49.9
NOMINAL FLUX (lm)	81899.3	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)	120	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:

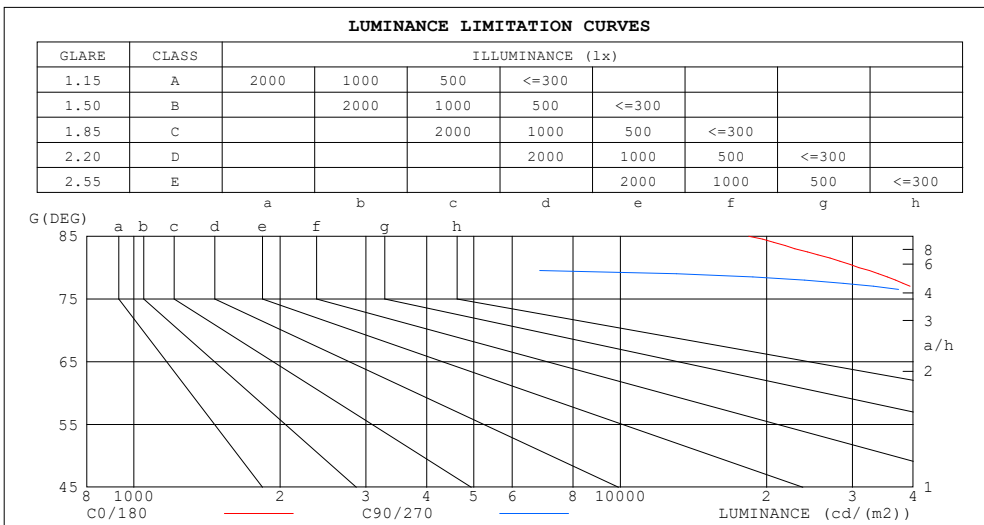
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	4739	4724	4719	4731	4742	4724	4712	4716	0- 10	4493	4493	5.49,5.49
20	4633	4679	4500	4674	4669	4646	4476	4656	10- 20	13298	17791	21.7,21.7
30	3970	3733	4016	3725	4046	3717	3964	3731	20- 30	19705	37496	45.8,45.8
40	2517	2192	2442	2210	2581	2252	2447	2226	30- 40	19585	57081	69.7,69.7
50	1093	1081	1234	1111	1150	1134	1261	1101	40- 50	12904	69985	85.5,85.5
60	437.0	492.3	394.2	510.7	465.0	523.5	407.0	504.3	50- 60	7035	77020	94,94
70	192.7	209.0	220.6	211.3	208.5	215.8	224.6	214.0	60- 70	3363	80383	98.1,98.1
80	57.78	58.24	0	57.78	67.25	56.99	0	58.88	70- 80	1408	81791	99.9,99.9
90	3.350	0	0	0	0.8333	0	0	0	80- 90	108.7	81899	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(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:

LUMINANCE LIMITATION CURVES

Test:U:118.07V I:4.2495A P:492.76W PF:0.9821 Freq:50.02Hz		
Lamp Flux:81899.3x1 lm		
NAME: ASD-UHB2A-PRO-500-BK	TYPE:	
MFR.: ASD LIGHTING CORP		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	18384	0
80	30963	0
75	43628	48082
70	52432	60018
65	62949	67758
60	81336	73361
55	109482	132152
50	158295	178721
45	227654	217698

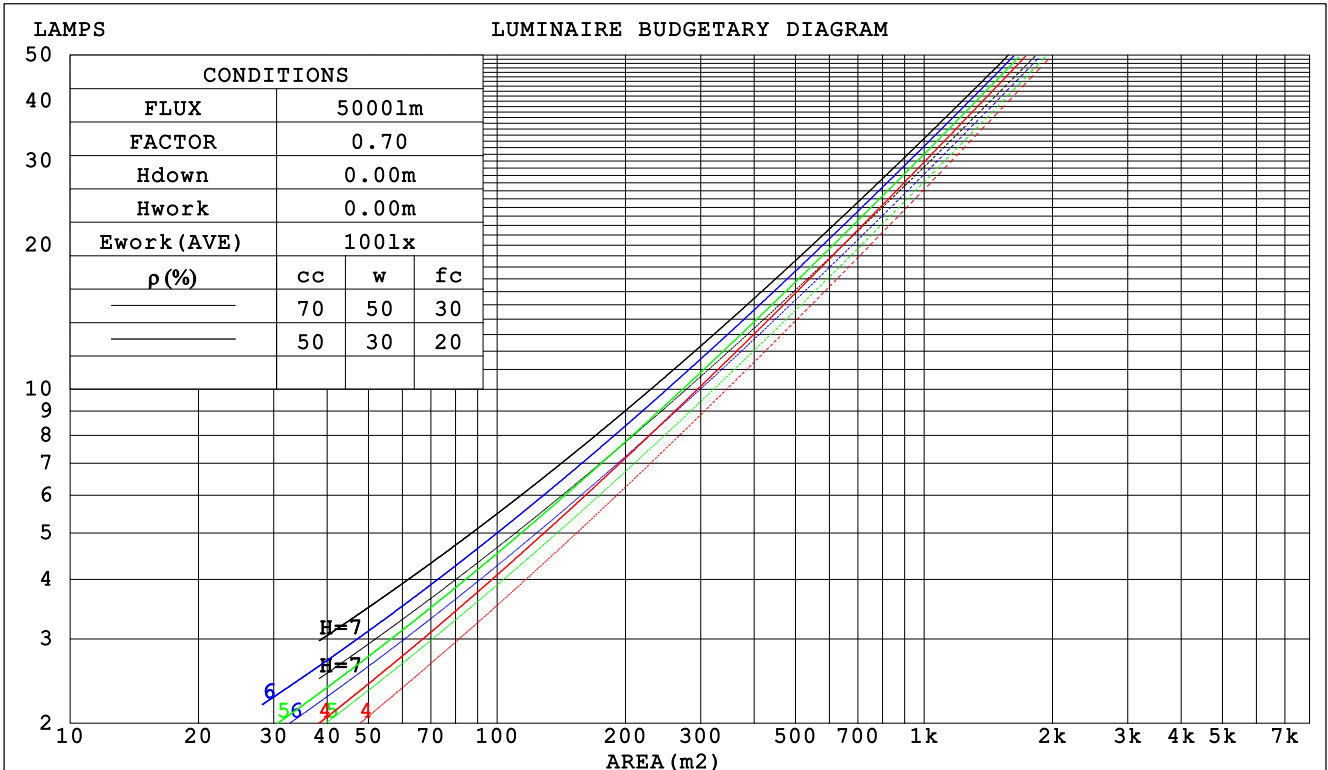
H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:S
Test Date:19 April 2024

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:118.07V I:4.2495A P:492.76W PF:0.9821 Freq:50.02Hz		
Lamp Flux:81899.3x1 lm		
NAME: ASD-UHB2A-PRO-500-BK	TYPE:	
MFR.: ASD LIGHTING CORP		

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{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	1.08	1.05	1.02	1.06	1.03	1.01	1.02	.99	.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:118.07V I:4.2495A P:492.76W PF:0.9821 Freq:50.02Hz		
Lamp Flux:81899.3x1 lm		
NAME: ASD-UHB2A-PRO-500-BK	TYPE:	
MFR.: ASD LIGHTING CORP		

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	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	

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	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:118.07V I:4.2495A P:492.76W PF:0.9821 Freq:50.02Hz										
Lamp Flux:81899.3x1 lm										
NAME: ASD-UHB2A-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	27.6	28.0	26.6	27.9	27.0	28.3	28.6
3H	26.8	27.9	27.1	28.2	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	29.1	29.5
6H	27.1	28.1	27.5	28.4	28.8	27.7	28.7	28.1	29.1	29.4
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	28.0	28.9	29.3
4H 2H	26.3	27.3	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	28.2	29.1	29.5
4H	27.5	28.3	27.9	28.7	29.1	28.1	28.9	28.6	29.3	29.8
6H	27.7	28.3	28.1	28.8	29.3	28.1	28.8	28.6	29.2	29.7
8H	27.7	28.3	28.1	28.7	29.2	28.1	28.7	28.5	29.1	29.6
12H	27.7	28.2	28.1	28.7	29.2	28.0	28.6	28.5	29.1	29.5
8H 4H	27.6	28.2	28.0	28.6	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	29.6
8H	27.8	28.3	28.3	28.8	29.3	28.1	28.5	28.6	29.1	29.6
12H	27.8	28.2	28.3	28.7	29.3	28.0	28.4	28.6	28.9	29.5
12H 4H	27.5	28.1	28.0	28.6	29.0	28.1	28.7	28.6	29.2	29.6
6H	27.8	28.2	28.3	28.7	29.2	28.1	28.6	28.6	29.0	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(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:

UTILIZATION FACTORS TABLE

Test:U:118.07V I:4.2495A P:492.76W PF:0.9821 Freq:50.02Hz		
Lamp Flux:81899.3x1 lm		
NAME: ASD-UHB2A-PRO-500-BK	TYPE:	
MFR.: ASD LIGHTING CORP		

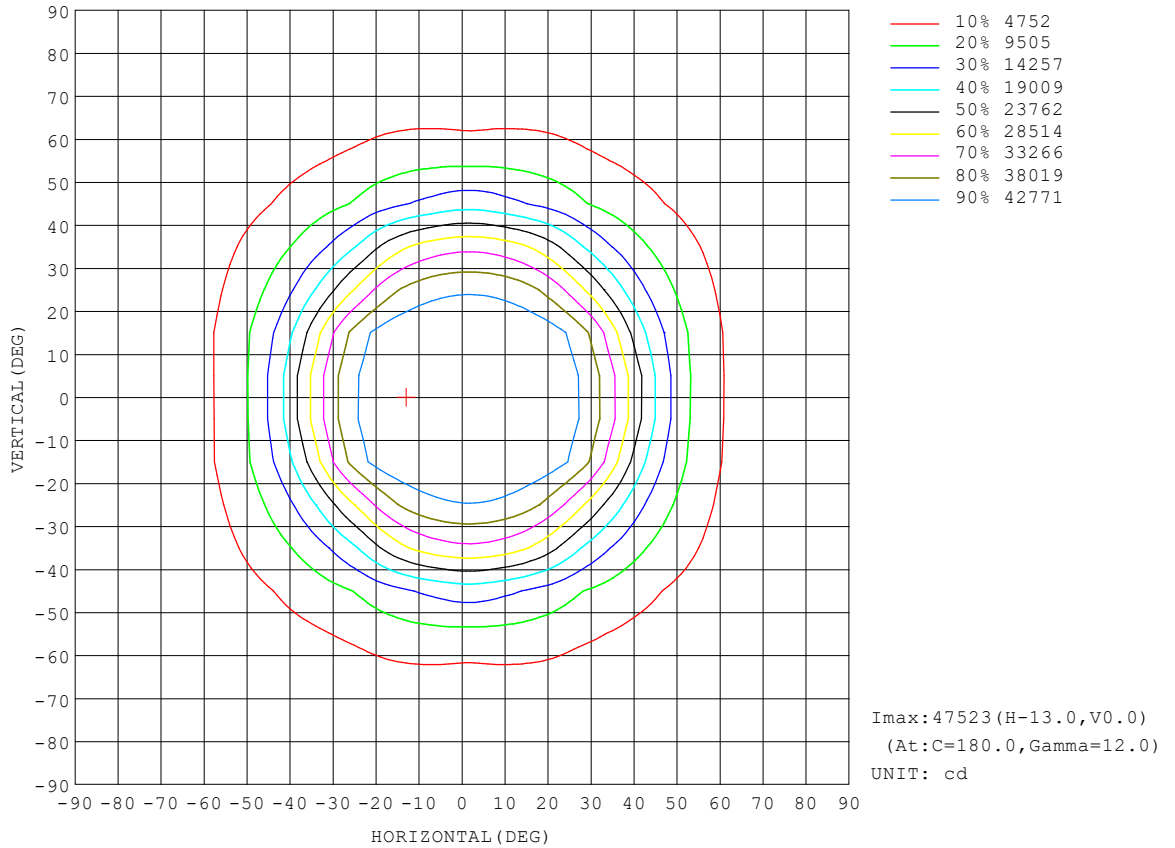
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	72	63	58	72	63	58	71	63	58	53
0.80	82	73	68	81	73	68	79	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:118.07V I:4.2495A P:492.76W PF:0.9821 Freq:50.02Hz		
Lamp Flux:81899.3x1 lm		
NAME: ASD-UHB2A-PRO-500-BK	TYPE:	
MFR.: ASD LIGHTING CORP		



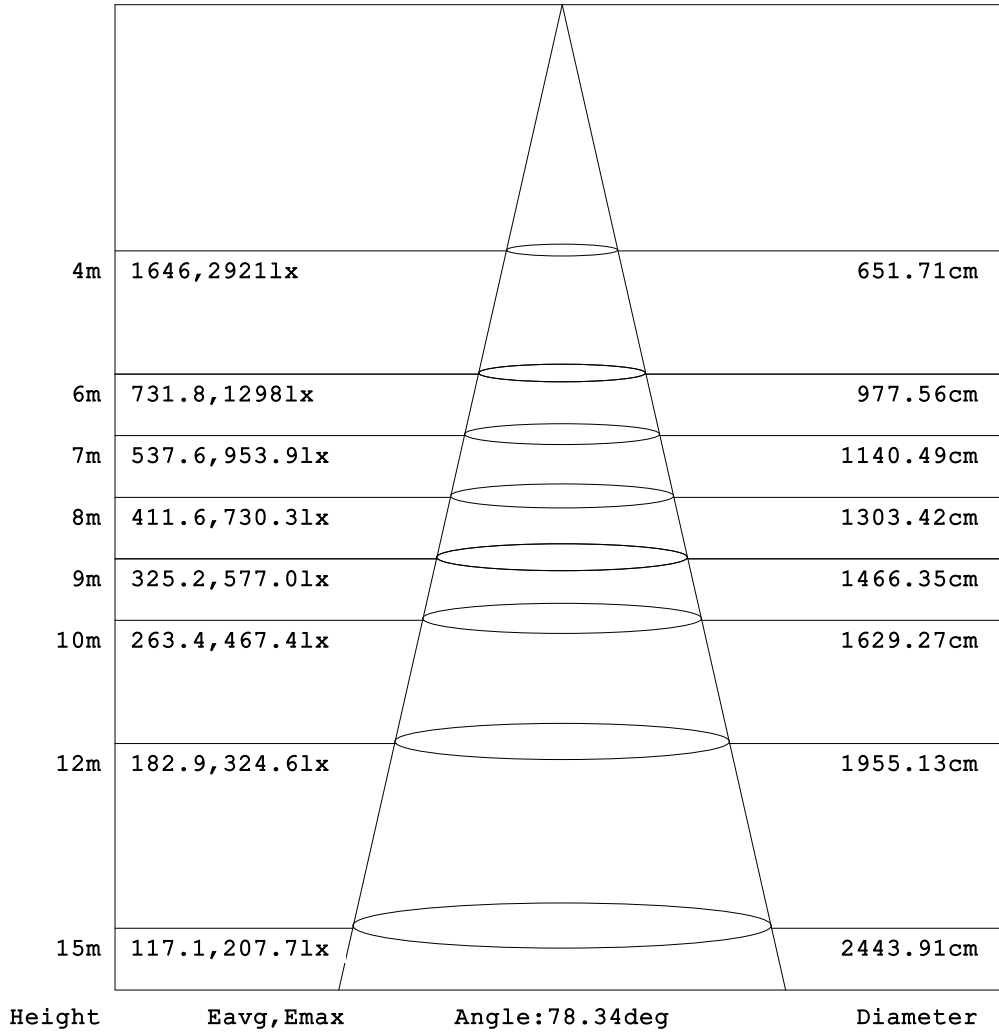
H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:S
Test Date:19 April 2024

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:

AAI Figure

Test:U:118.07V I:4.2495A P:492.76W PF:0.9821 Freq:50.02Hz		
Lamp Flux:81899.3x1 lm		
NAME: ASD-UHB2A-PRO-500-BK	TYPE:	
MFR.: ASD LIGHTING CORP		

Flux out:56238 lm



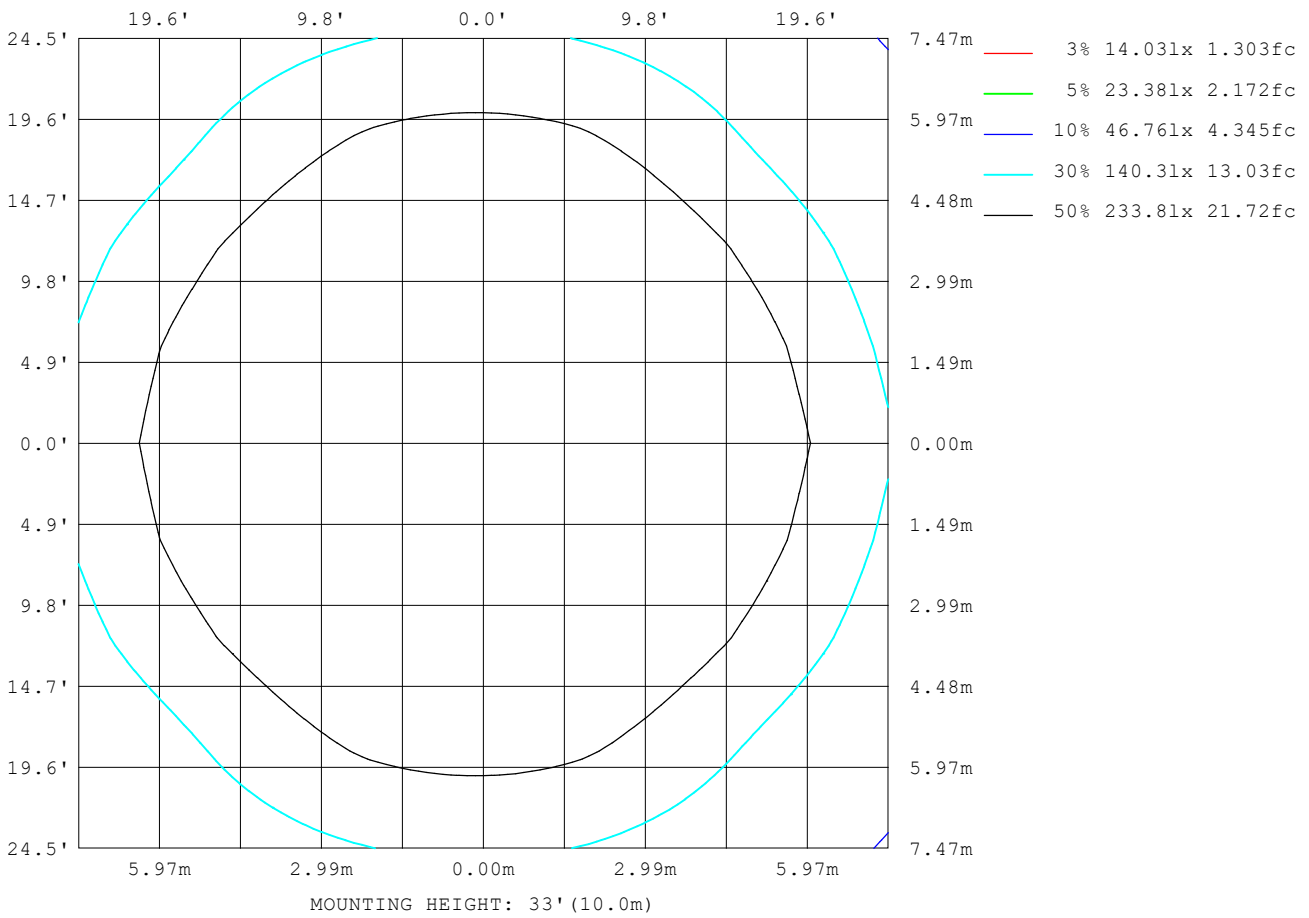
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:118.07V I:4.2495A P:492.76W PF:0.9821 Freq:50.02Hz		
Lamp Flux:81899.3x1 lm		
NAME: ASD-UHB2A-PRO-500-BK	TYPE:	
MFR.: ASD LIGHTING CORP		



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:

LED Avg.L Report

Test:U:118.07V I:4.2495A P:492.76W PF:0.9821 Freq:50.02Hz Lamp Flux:81899.3x1 lm		
NAME: ASD-UHB2A-PRO-500-BK	TYPE:	
MFR.: ASD LIGHTING CORP		

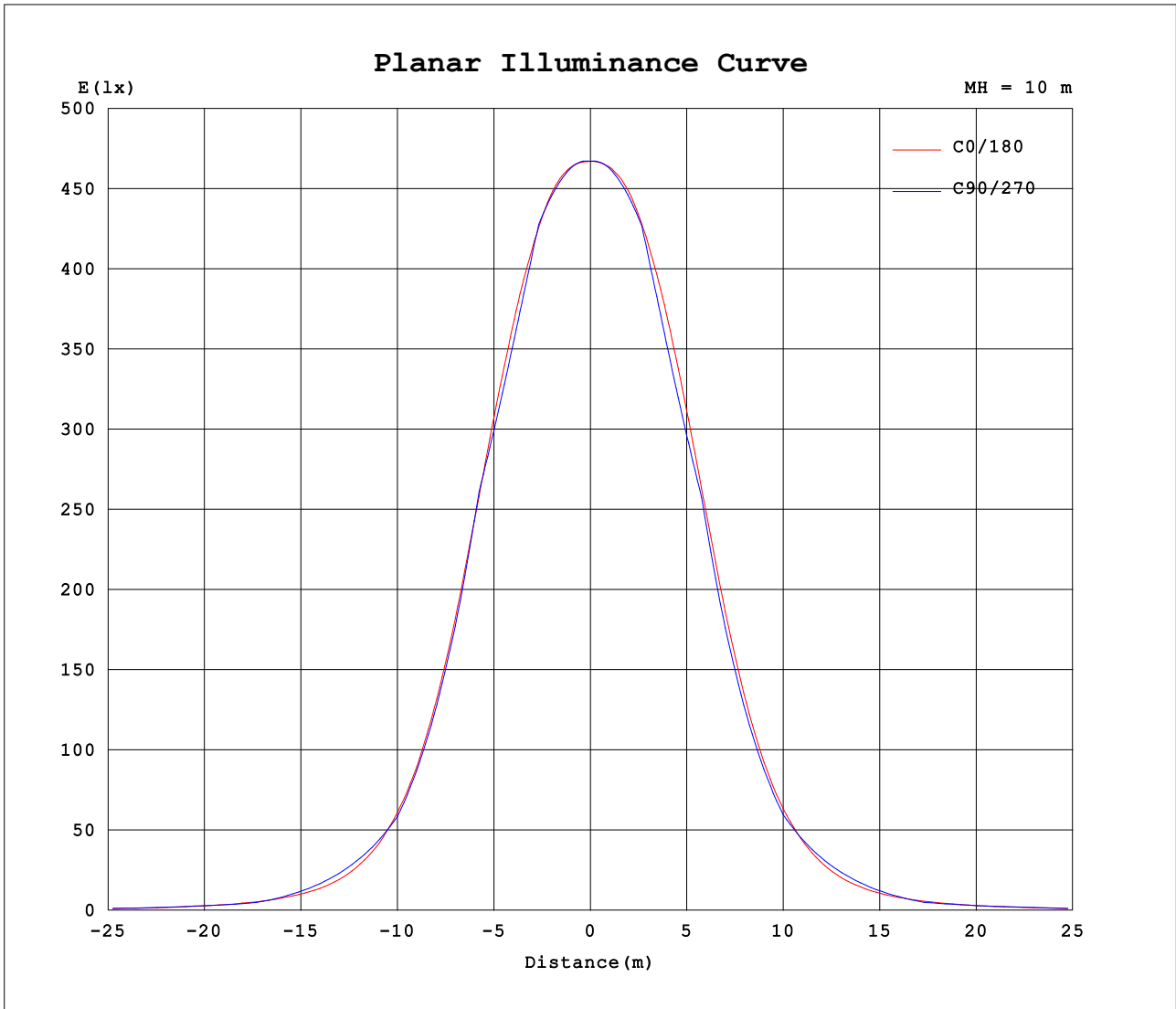
AvgL	cd/m2
L_0~180 (65) av	65234
L_0~180 (75) av	46011
L_0~180 (85) av	20119
L_90~270 (65) av	68810
L_90~270 (75) av	48005
L_90~270 (85) av	0
L_45 (65) av	73589
L_45 (75) av	48813
L_45 (85) av	0

Standard: GB/T 29293-2012

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:

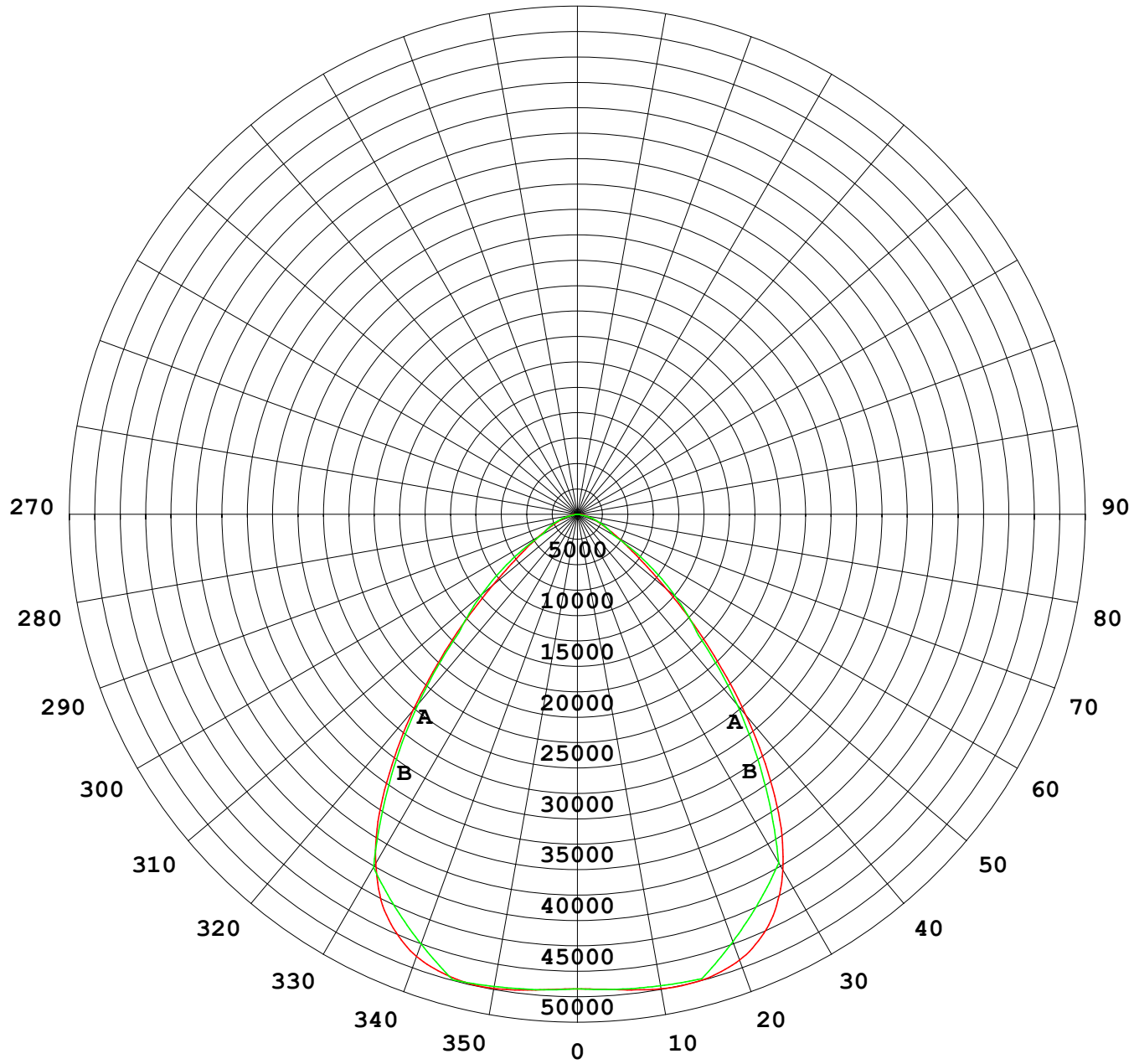
Planar Illuminance Curve



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

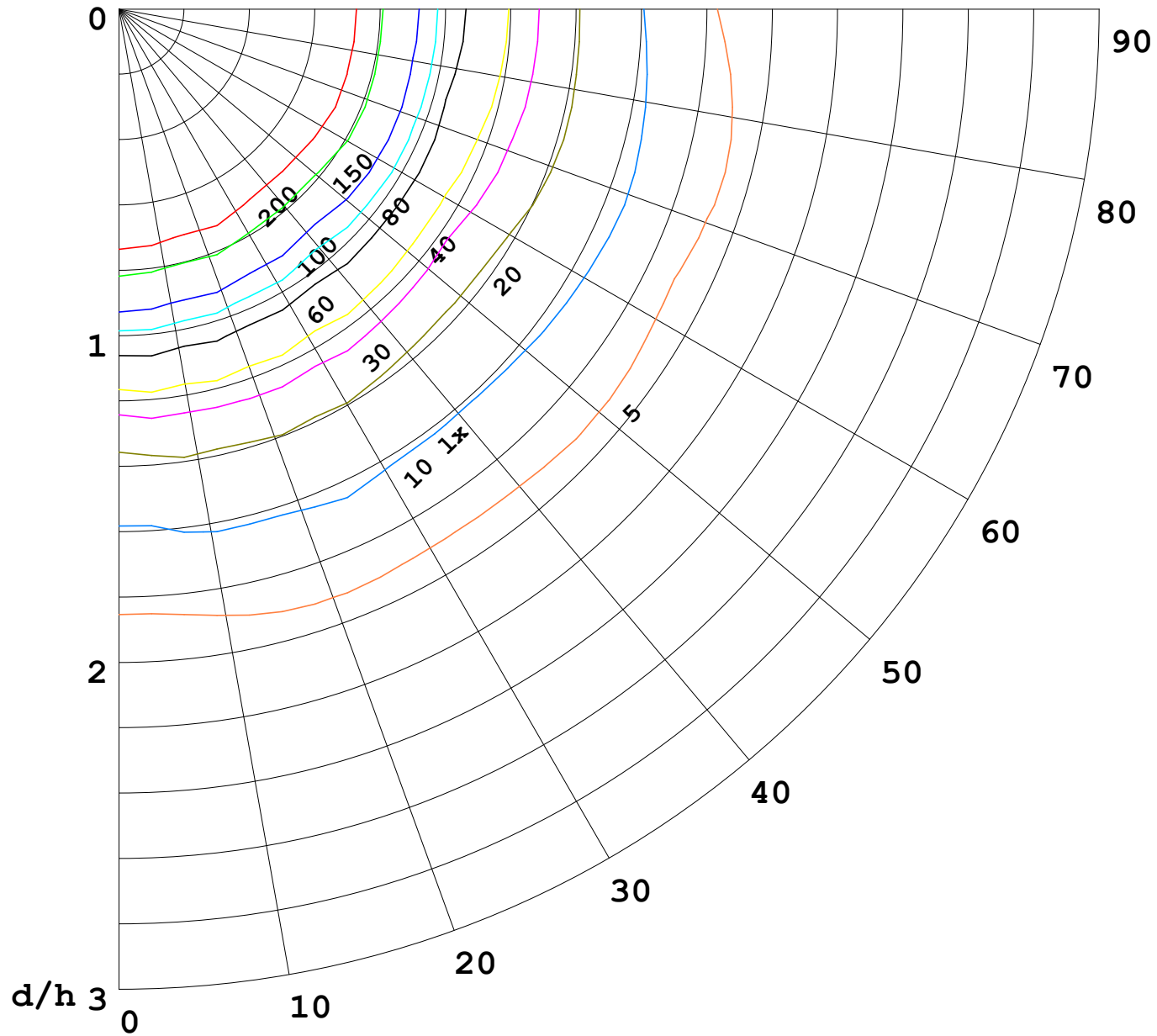
V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:7.850m [K=1.0000]
Remarks:

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

