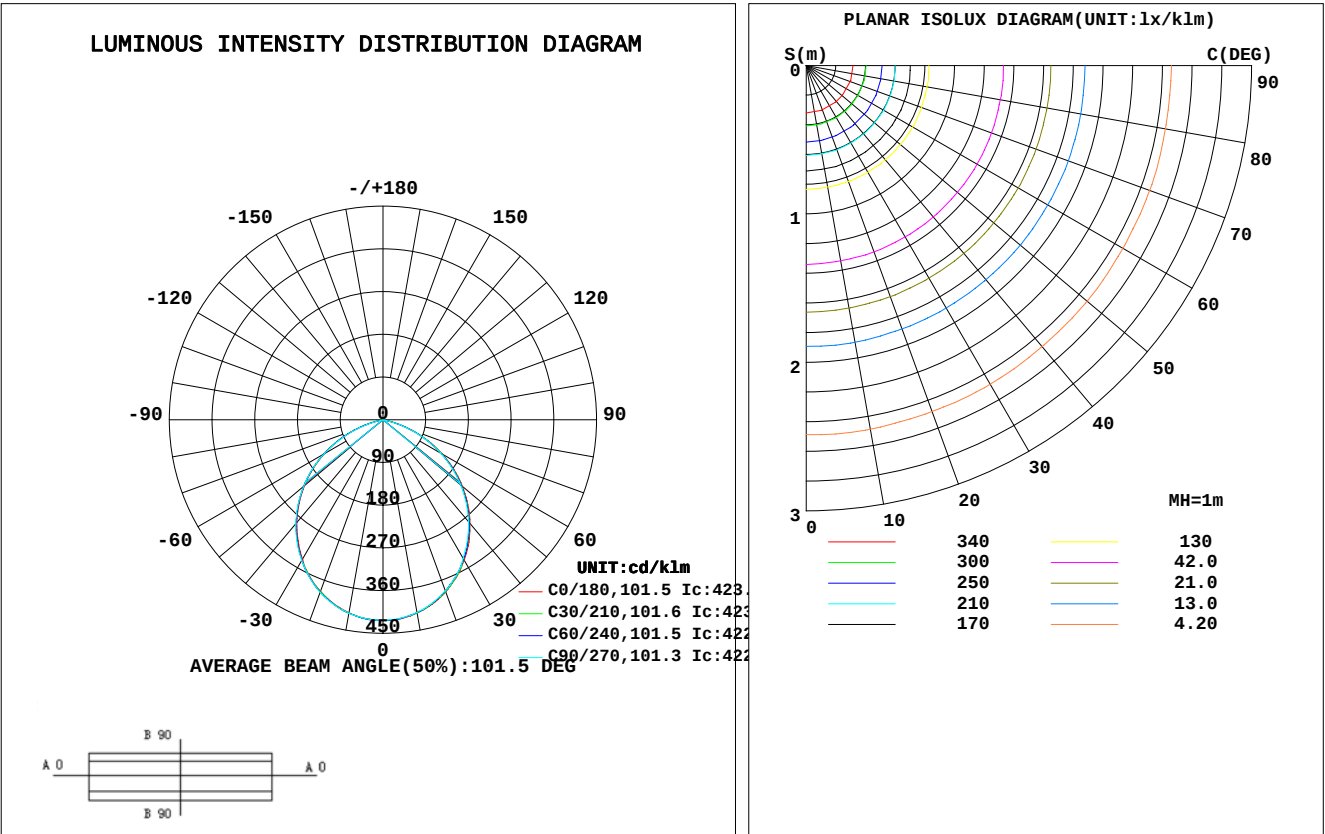


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.88V I:0.1095A P:11.405W PF:0.8593 Freq:59.98Hz Lamp Flux:971.718x1 lm		
NAME: ASD-LRKR-F6D12WH-12PACK	TYPE:5000K	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 85.20 lm/W
MODEL	ASD-LRKR-F6D12WH-12PACK	Imax(cd/klm)	423.6	S/MH(C0/180)	1.20	
NOMINAL POWER(W)	12	LOR(%)	100.0	S/MH(C90/270)	1.21	
RATED VOLTAGE(V)	120	TOTAL FLUX(lm/klm)	971.718	η UP, DN(C0-180)	0.0,49.8	
NOMINAL FLUX(lm)	971.718	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,50.2	
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE(V)	120	η down(%)	100.0	CIBSE SHR MAX	1.35	



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:23 September 2024

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.401
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

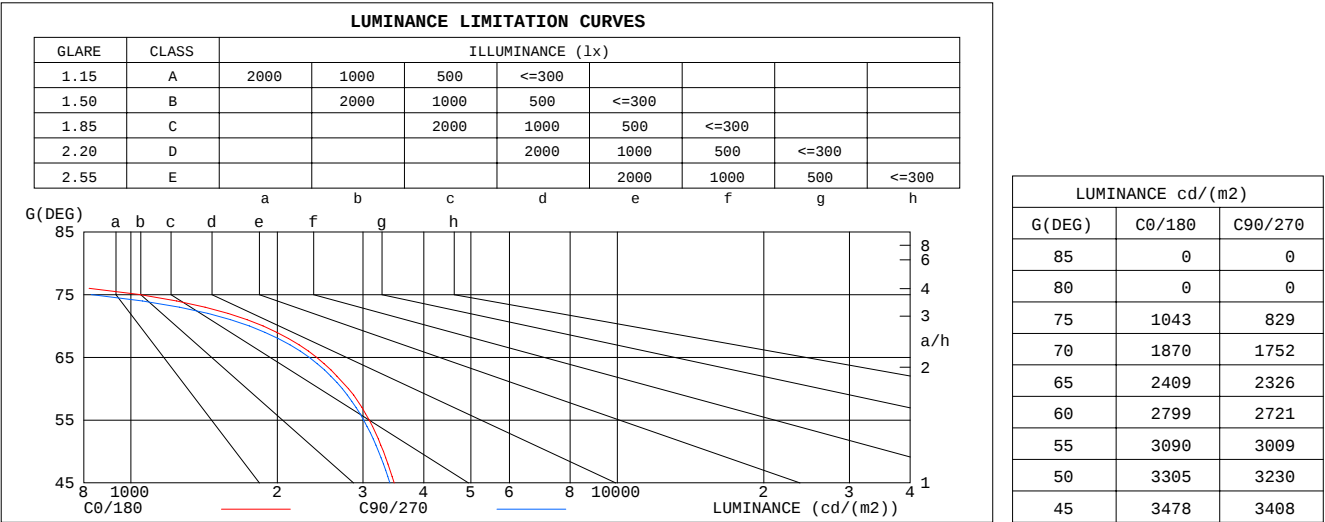
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	413.7	412.9	412.3	412.7	412.8	414.0	413.9	413.8	0- 10	39.91	39.91	3.99,3.99
20	386.4	384.5	384.1	384.1	384.4	386.2	387.2	386.7	10- 20	113.2	153.1	15.3,15.3
30	342.1	339.4	337.5	338.8	339.1	341.6	342.4	341.9	20- 30	168.0	321.1	32.1,32.1
40	285.1	282.7	280.3	281.3	282.4	285.0	285.8	285.0	30- 40	195.8	516.9	51.7,51.7
50	218.6	215.9	213.6	214.5	215.7	218.2	218.2	218.0	40- 50	193.4	710.4	71.7,71
60	144.0	141.4	140.0	140.2	142.0	143.8	142.5	142.8	50- 60	160.8	871.2	87.1,87.1
70	65.81	63.59	61.66	62.94	64.97	64.77	61.37	62.85	60- 70	101.5	972.7	97.3,97.3
80	0	0	0	0	0	0	0	0	70- 80	27.30	1000	100,100
90	0	0	0	0	0	0	0	0	80- 90	0	1000	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/klm									UNIT:lm/klm		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:23 September 2024

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 γ Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.401
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.88V I:0.1095A P:11.405W PF:0.8593 Freq:59.98Hz Lamp Flux:971.718x1 lm		
NAME: ASD-LRKR-F6D12WH-12PACK	TYPE:5000K	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



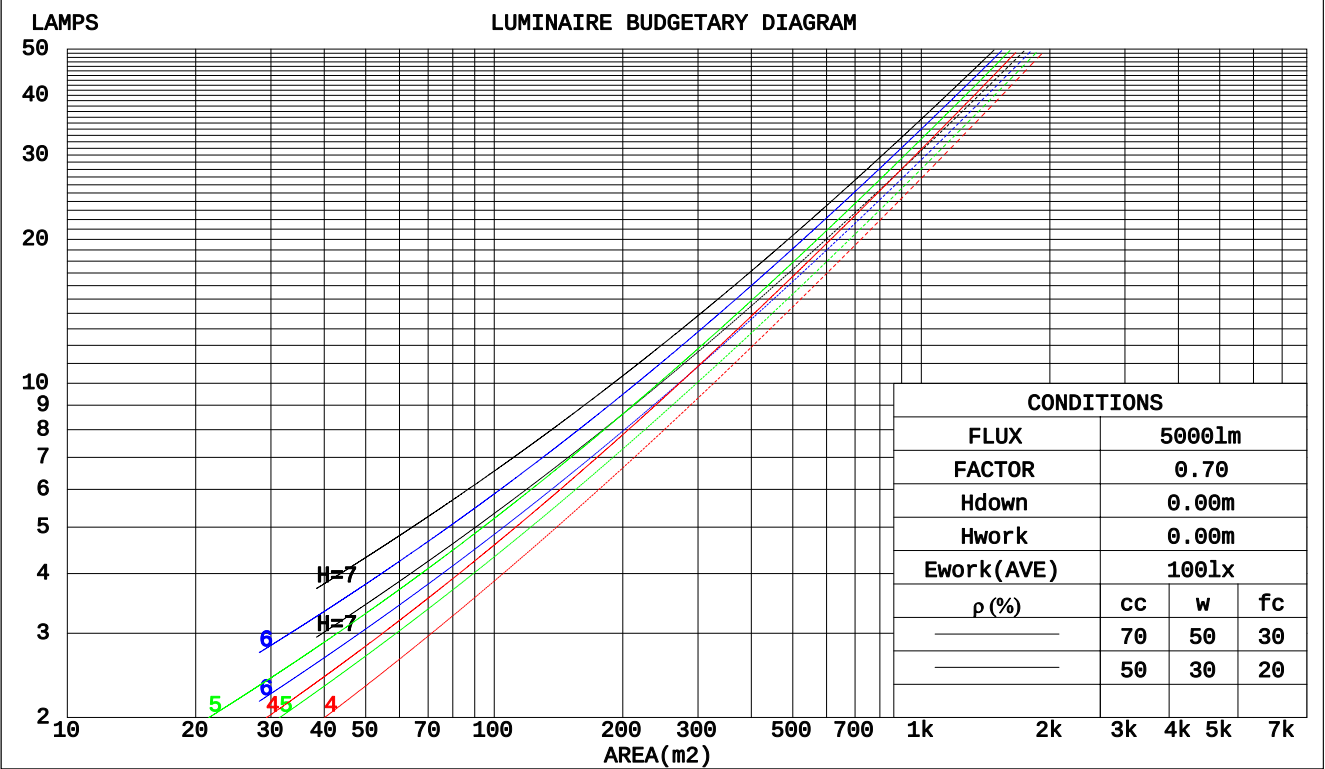
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:23 September 2024

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.401
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.88V I:0.1095A P:11.405W PF:0.8593 Freq:59.98Hz Lamp Flux:971.718x1 lm		
NAME: ASD-LRKR-F6D12WH-12PACK	TYPE:5000K	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

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	1.06	1.03	.90	1.04	1.01	.98	1.00	.97	.95	.96	.94	.92	.93	.91	.89	.87
2.0	.94	.88	.83	.92	.87	.82	.89	.84	.80	.86	.82	.78	.83	.79	.77	.75
3.0	.84	.76	.70	.82	.75	.70	.79	.73	.68	.76	.71	.67	.74	.70	.66	.64
4.0	.74	.66	.60	.73	.66	.60	.71	.64	.59	.68	.63	.58	.66	.61	.57	.55
5.0	.67	.58	.52	.66	.58	.52	.64	.57	.51	.62	.56	.51	.60	.55	.50	.48
6.0	.60	.52	.46	.60	.52	.46	.58	.51	.45	.56	.50	.45	.55	.49	.45	.43
7.0	.55	.47	.41	.54	.46	.41	.53	.46	.40	.51	.45	.40	.50	.44	.40	.38
8.0	.50	.42	.37	.50	.42	.36	.48	.41	.36	.47	.41	.36	.46	.40	.36	.34
9.0	.46	.38	.33	.46	.38	.33	.45	.38	.33	.43	.37	.33	.42	.37	.32	.31
10.0	.43	.35	.30	.42	.35	.30	.41	.34	.30	.40	.34	.30	.39	.34	.30	.28



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:23 September 2024

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.401
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:120.88V I:0.1095A P:11.405W PF:0.8593 Freq:59.98Hz Lamp Flux:971.718x1 lm									
NAME: ASD-LRKR-F6D12WH-12PACK					TYPE:5000K			WEIGHT:	
SPEC.:5000K					DIM.:			SERIAL No.:	
MFR.: ASD Lighting Corp					SUR.:			Shielding Angle:	

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	.261	.148	.047	.254	.145	.046	.241	.138	.044	.229	.132	.042	.218	.126	.041	
2.0	.256	.140	.043	.250	.138	.042	.239	.133	.041	.228	.128	.040	.219	.124	.039	
3.0	.243	.130	.039	.238	.128	.038	.228	.124	.038	.219	.120	.037	.210	.116	.036	
4.0	.229	.119	.035	.224	.117	.035	.215	.114	.034	.207	.111	.034	.199	.108	.033	
5.0	.214	.109	.032	.210	.108	.031	.202	.105	.031	.195	.103	.031	.188	.101	.030	
6.0	.201	.101	.029	.197	.100	.029	.190	.097	.028	.184	.095	.028	.177	.093	.028	
7.0	.188	.093	.026	.185	.092	.026	.179	.090	.026	.173	.089	.026	.167	.087	.026	
8.0	.177	.087	.024	.174	.086	.024	.168	.084	.024	.163	.083	.024	.158	.081	.024	
9.0	.167	.081	.023	.164	.080	.022	.159	.079	.022	.154	.077	.022	.150	.076	.022	
10.0	.157	.075	.021	.155	.075	.021	.150	.074	.021	.146	.073	.021	.142	.071	.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	.177	.157	.138	.151	.134	.119	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.168	.132	.102	.143	.114	.088	.098	.079	.062	.057	.046	.036	.018	.015	.012	
3.0	.159	.114	.078	.137	.098	.068	.094	.068	.047	.054	.040	.028	.017	.013	.009	
4.0	.152	.101	.061	.130	.087	.053	.090	.061	.038	.052	.035	.022	.017	.012	.007	
5.0	.145	.090	.050	.124	.078	.043	.086	.054	.030	.050	.032	.018	.016	.010	.006	
6.0	.138	.081	.041	.119	.071	.036	.082	.049	.025	.047	.029	.015	.015	.009	.005	
7.0	.131	.075	.035	.113	.065	.030	.078	.045	.021	.045	.027	.013	.015	.009	.004	
8.0	.125	.069	.030	.108	.060	.026	.075	.042	.018	.043	.025	.011	.014	.008	.004	
9.0	.120	.064	.026	.103	.055	.023	.071	.039	.016	.042	.023	.010	.013	.008	.003	
10.0	.114	.060	.023	.099	.052	.020	.068	.036	.014	.040	.022	.009	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:23 September 2024

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:10.000m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.88V I:0.1095A P:11.405W PF:0.8593 Freq:59.98Hz Lamp Flux:971.718x1 lm										
NAME: ASD-LRKR-F6D12WH-12PACK					TYPE:5000K			WEIGHT:		
SPEC.:5000K					DIM.:			SERIAL No.:		
MFR.: ASD Lighting Corp					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	16.7	18.1	16.9	18.3	18.5	16.6	18.0	16.8	18.2	18.4
3H	17.6	18.9	17.9	19.1	19.3	17.4	18.7	17.7	18.9	19.2
4H	17.7	18.9	18.0	19.2	19.4	17.5	18.7	17.8	19.0	19.2
6H	17.6	18.8	17.9	19.0	19.3	17.4	18.5	17.7	18.8	19.1
8H	17.6	18.7	17.9	19.0	19.2	17.3	18.4	17.7	18.7	19.0
12H	17.5	18.6	17.9	18.9	19.2	17.3	18.3	17.6	18.6	18.9
4H 2H	17.1	18.3	17.4	18.6	18.8	17.0	18.2	17.3	18.5	18.7
3H	18.1	19.2	18.4	19.5	19.8	17.9	19.0	18.3	19.3	19.6
4H	18.3	19.2	18.6	19.5	19.9	18.0	19.0	18.4	19.3	19.6
6H	18.2	19.0	18.6	19.4	19.7	17.9	18.8	18.3	19.1	19.5
8H	18.1	18.9	18.5	19.3	19.7	17.9	18.7	18.3	19.1	19.4
12H	18.1	18.8	18.5	19.2	19.6	17.9	18.6	18.3	19.0	19.4
8H 4H	18.2	19.0	18.6	19.4	19.8	18.0	18.8	18.4	19.2	19.5
6H	18.2	18.8	18.6	19.2	19.6	17.9	18.6	18.4	19.0	19.4
8H	18.1	18.7	18.6	19.1	19.6	17.9	18.5	18.3	18.9	19.3
12H	18.1	18.6	18.6	19.0	19.5	17.9	18.3	18.3	18.8	19.3
12H 4H	18.2	18.9	18.6	19.3	19.7	18.0	18.7	18.4	19.1	19.5
6H	18.1	18.7	18.6	19.1	19.6	17.9	18.5	18.3	18.9	19.3
8H	18.1	18.6	18.6	19.0	19.5	17.9	18.3	18.3	18.8	19.3
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.4					+ 0.4 / - 0.5				
1.5H	+ 0.3 / - 0.5					+ 0.2 / - 0.5				
2.0H	+ 0.6 / - 0.6					+ 0.6 / - 0.6				

CIE Pub.117, 971.7 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = -0.1$)

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:23 September 2024

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:10.000m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.88V I:0.1095A P:11.405W PF:0.8593 Freq:59.98Hz Lamp Flux:971.718x1 lm		
NAME: ASD-LRKR-F6D12WH-12PACK	TYPE:5000K	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

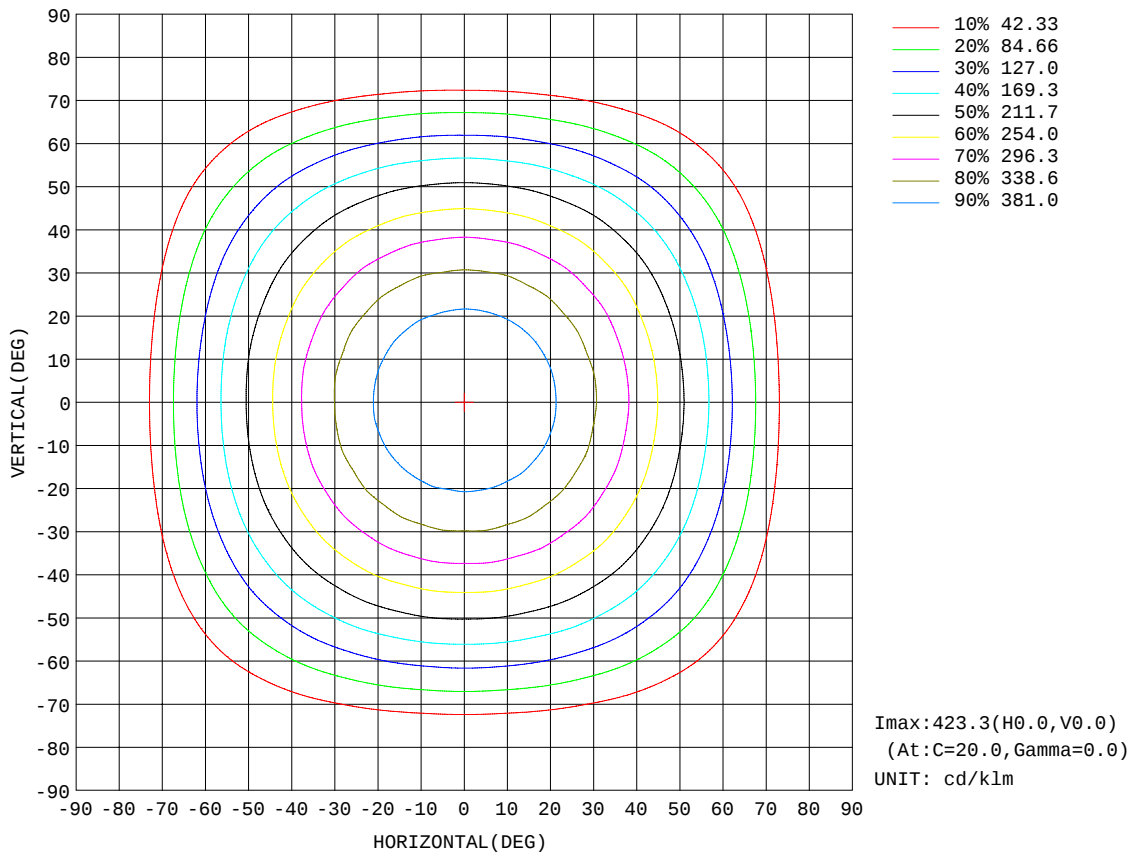
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	61	50	44	60	50	44	59	50	43	37
0.80	72	61	54	71	60	54	69	60	53	47
1.00	80	70	63	79	70	63	77	71	63	56
1.25	87	78	71	86	77	71	83	76	70	64
1.50	92	83	77	90	82	77	88	81	76	69
2.00	98	91	85	97	90	85	93	88	83	76
2.50	102	95	90	100	94	89	96	91	87	80
3.00	105	99	94	103	98	93	99	95	91	83
4.00	109	104	100	106	102	98	102	99	96	87
5.00	111	107	103	108	105	102	104	101	98	90
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:23 September 2024

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:10.000m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.88V I:0.1095A P:11.405W PF:0.8593 Freq:59.98Hz Lamp Flux:971.718x1 lm		
NAME: ASD-LRKR-F6D12WH-12PACK	TYPE:5000K	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

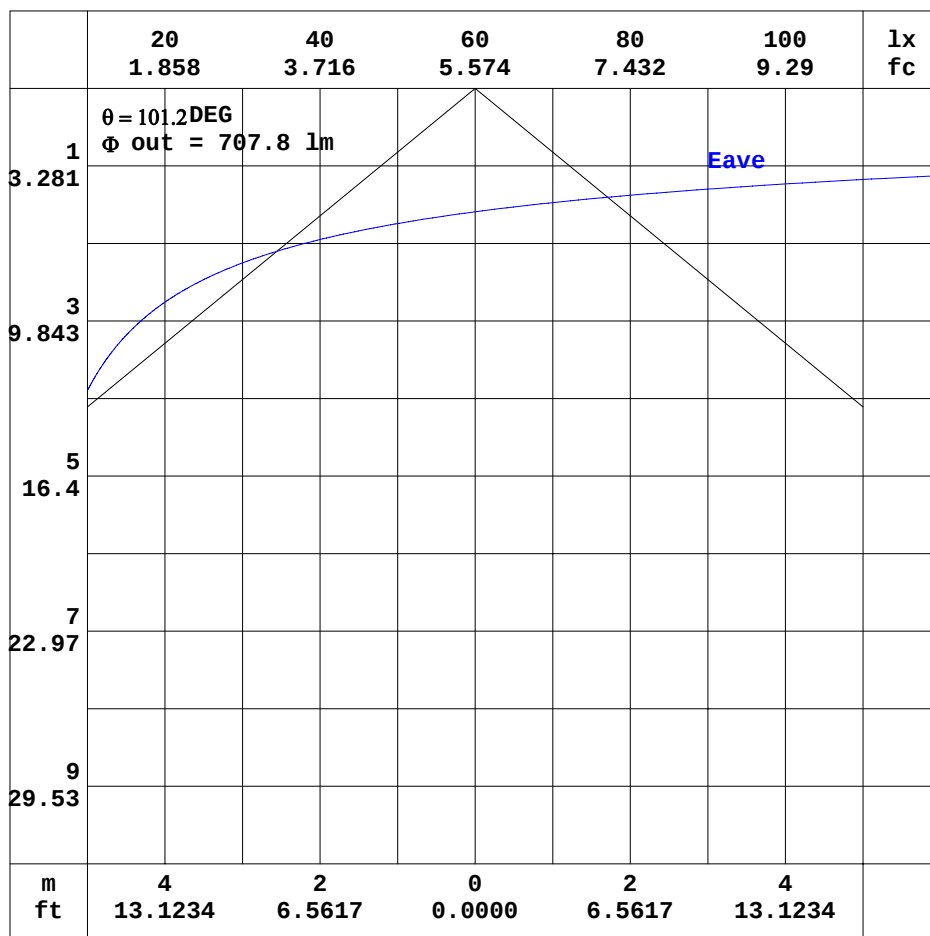


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:23 September 2024

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.401
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

AAI CURVES

Test:U:120.88V I:0.1095A P:11.405W PF:0.8593 Freq:59.98Hz Lamp Flux:971.718x1 lm		
NAME: ASD-LRKR-F6D12WH-12PACK	TYPE:5000K	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



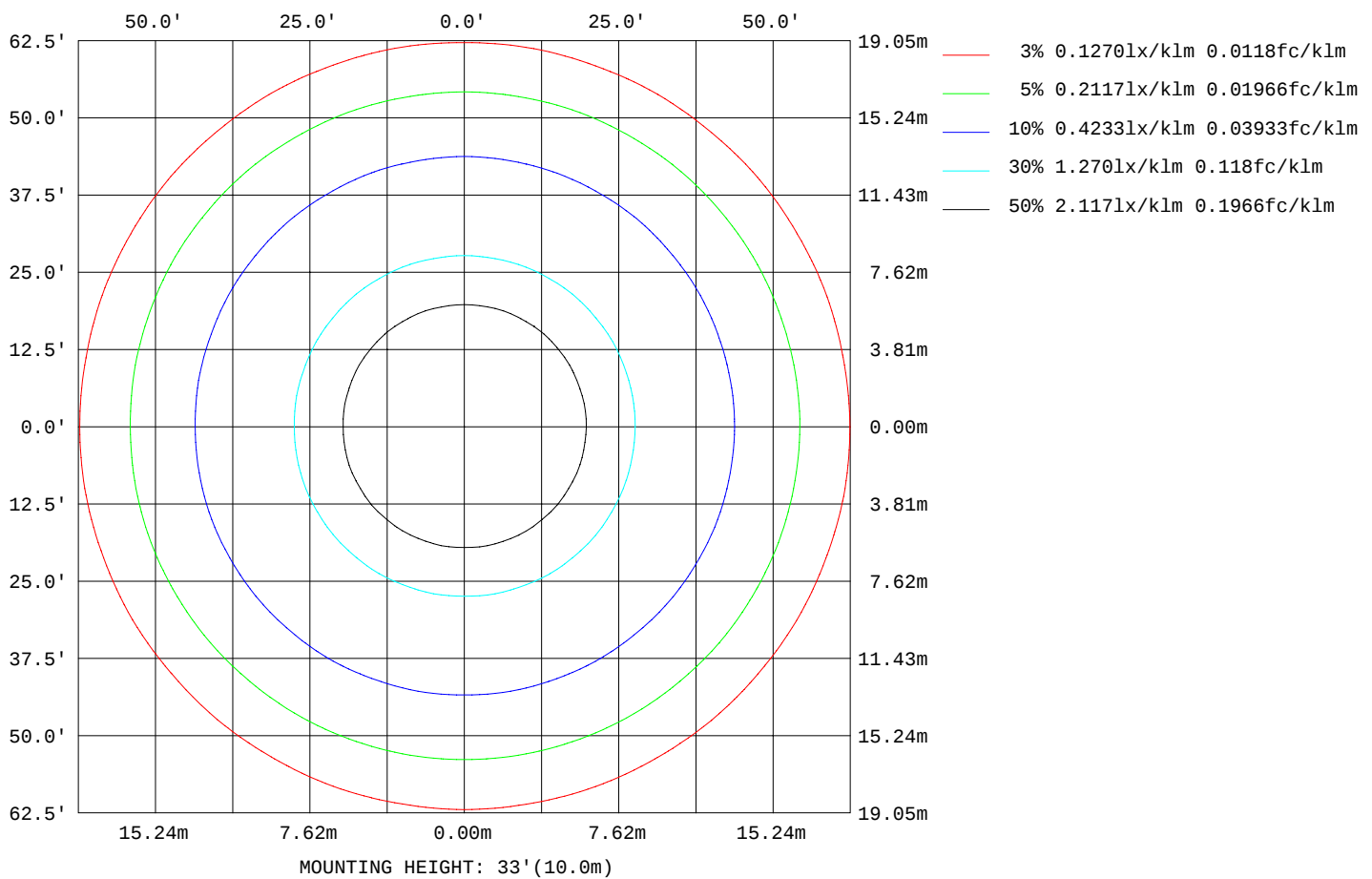
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEGR
 C Interval: 10.0DEGR
 Test Speed: HIGH
 Temperature: 25.3DEGR
 Operators:
 Test Date: 23 September 2024

γ Range: 0 - 90DEGR
 γ Interval: 1.0DEGR
 Test System: EVERFINE G0-2000A_V1 SYSTEM V2.0.401
 Humidity: 65.0%
 Test Distance: 10.000m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:120.88V I:0.1095A P:11.405W PF:0.8593 Freq:59.98Hz Lamp Flux:971.718x1 lm		
NAME: ASD-LRKR-F6D12WH-12PACK	TYPE:5000K	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:23 September 2024

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.401
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:120.88V I:0.1095A P:11.405W PF:0.8593 Freq:59.98Hz Lamp Flux:971.718x1 lm		
NAME: ASD-LRKR-F6D12WH-12PACK	TYPE:5000K	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

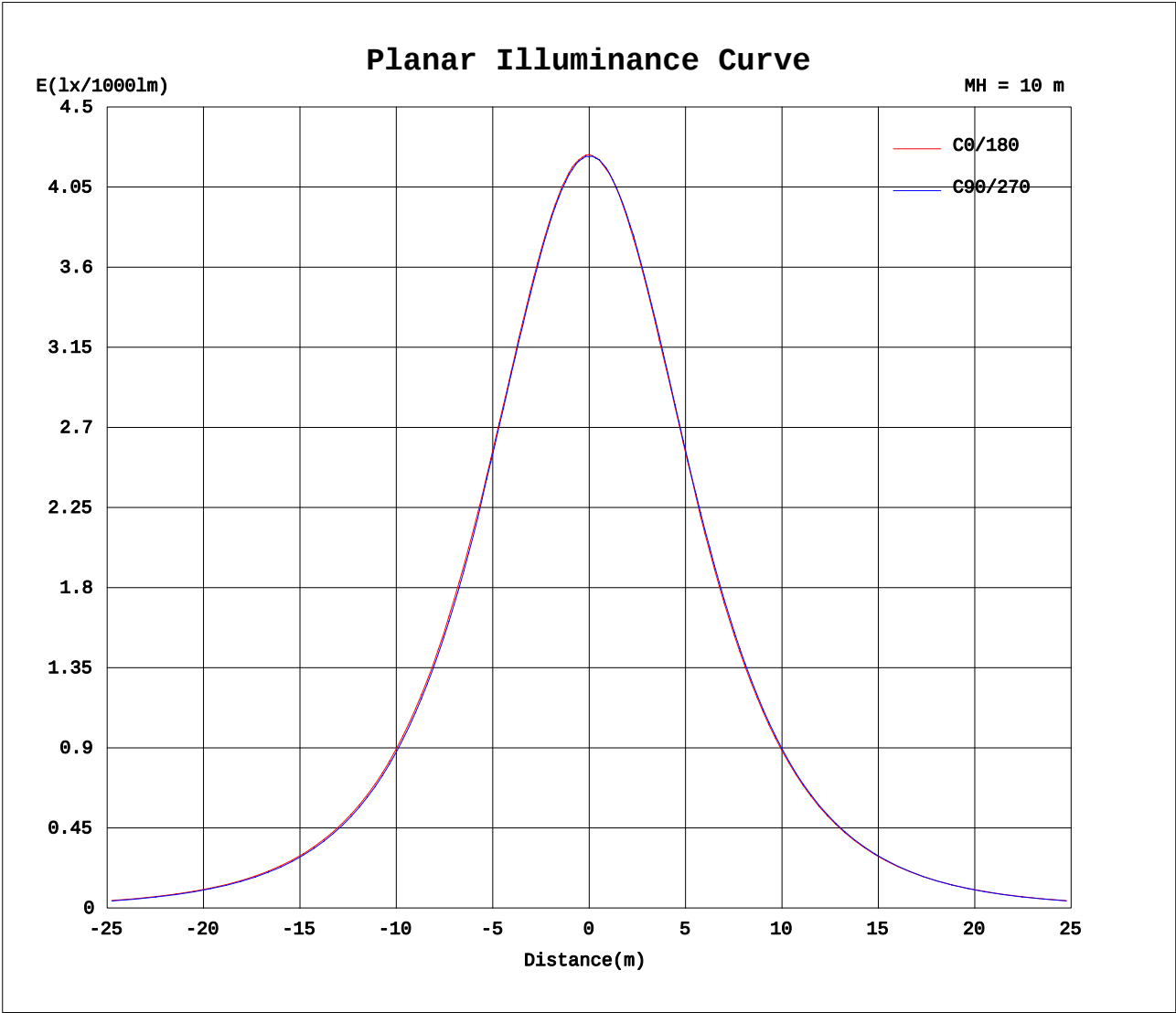
AvgL	cd/m2
L_0~180(65)av	2393
L_0~180(75)av	1033
L_0~180(85)av	0
L_90~270(65)av	2337
L_90~270(75)av	803
L_90~270(85)av	0
L_45(65)av	2366
L_45(75)av	927
L_45(85)av	0

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:23 September 2024

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:10.000m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:23 September 2024

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.401
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

Test:U:120.88V I:0.1095A P:11.405W PF:0.8593 Freq:59.98Hz Lamp Flux:971.718x1 lm		
NAME: ASD-LRKR-F6D12WH-12PACK	TYPE:5000K	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

UNIT: cd/klm

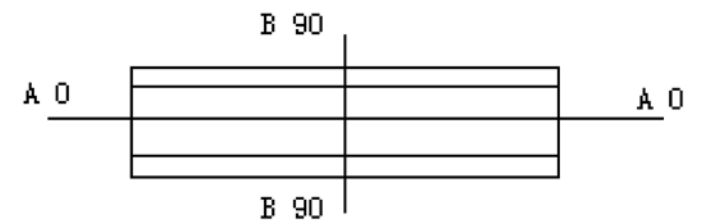
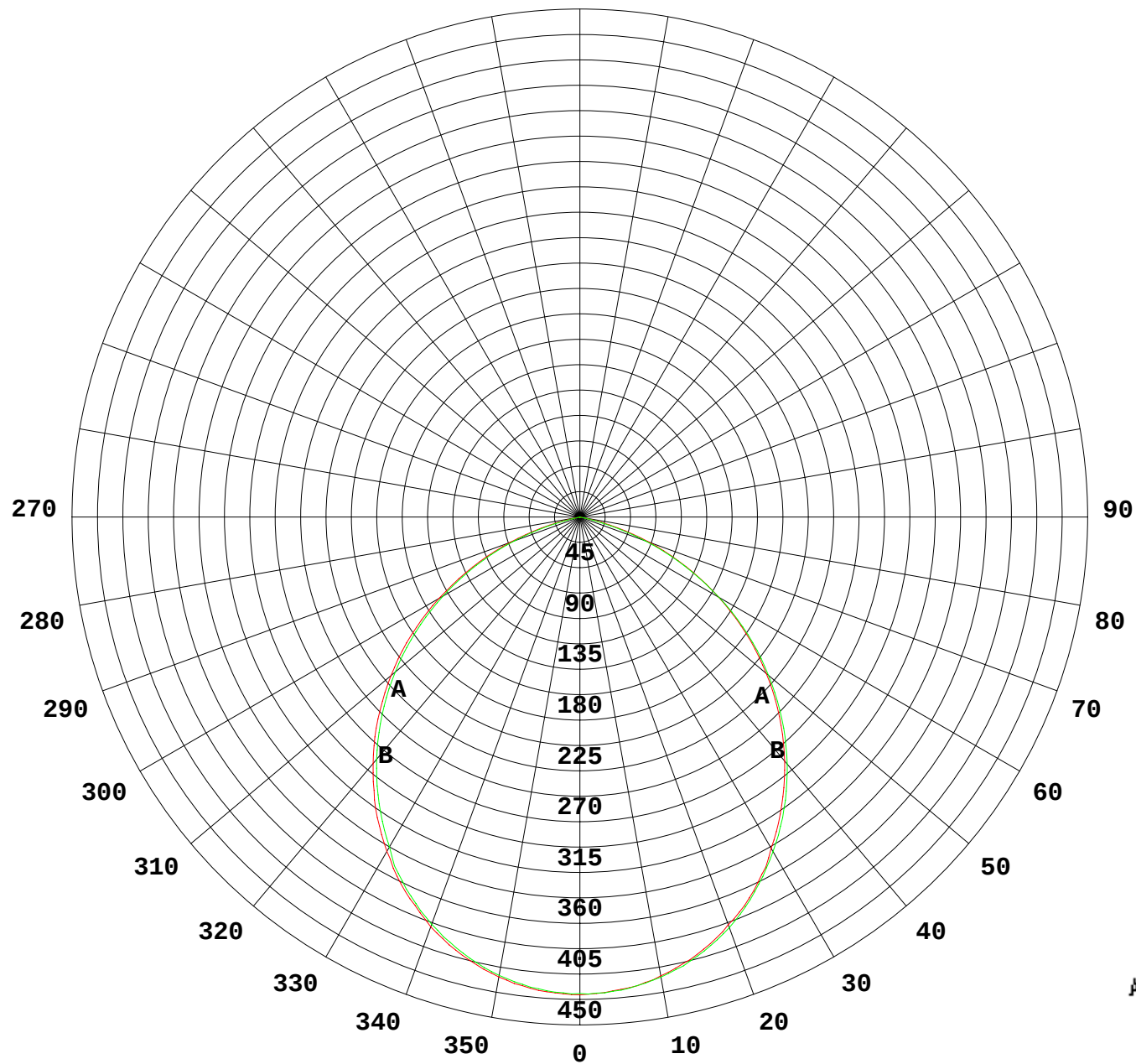
C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 10.0DEG	γ Interval: 1.0DEG
Test Speed: HIGH	Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.401
Temperature: 25.3DEG	Humidity: 65.0%
Operators:	Test Distance: 10.000m [K=1.0000]
Test Date: 23 September 2024	Remarks:

Test:U:120.88V I:0.1095A P:11.405W PF:0.8593 Freq:59.98Hz Lamp Flux:971.718x1 lm		
NAME: ASD-LRKR-F6D12WH-12PACK	TYPE:5000K	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

UNIT: cd/klm

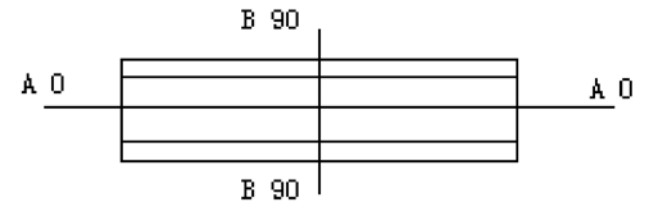
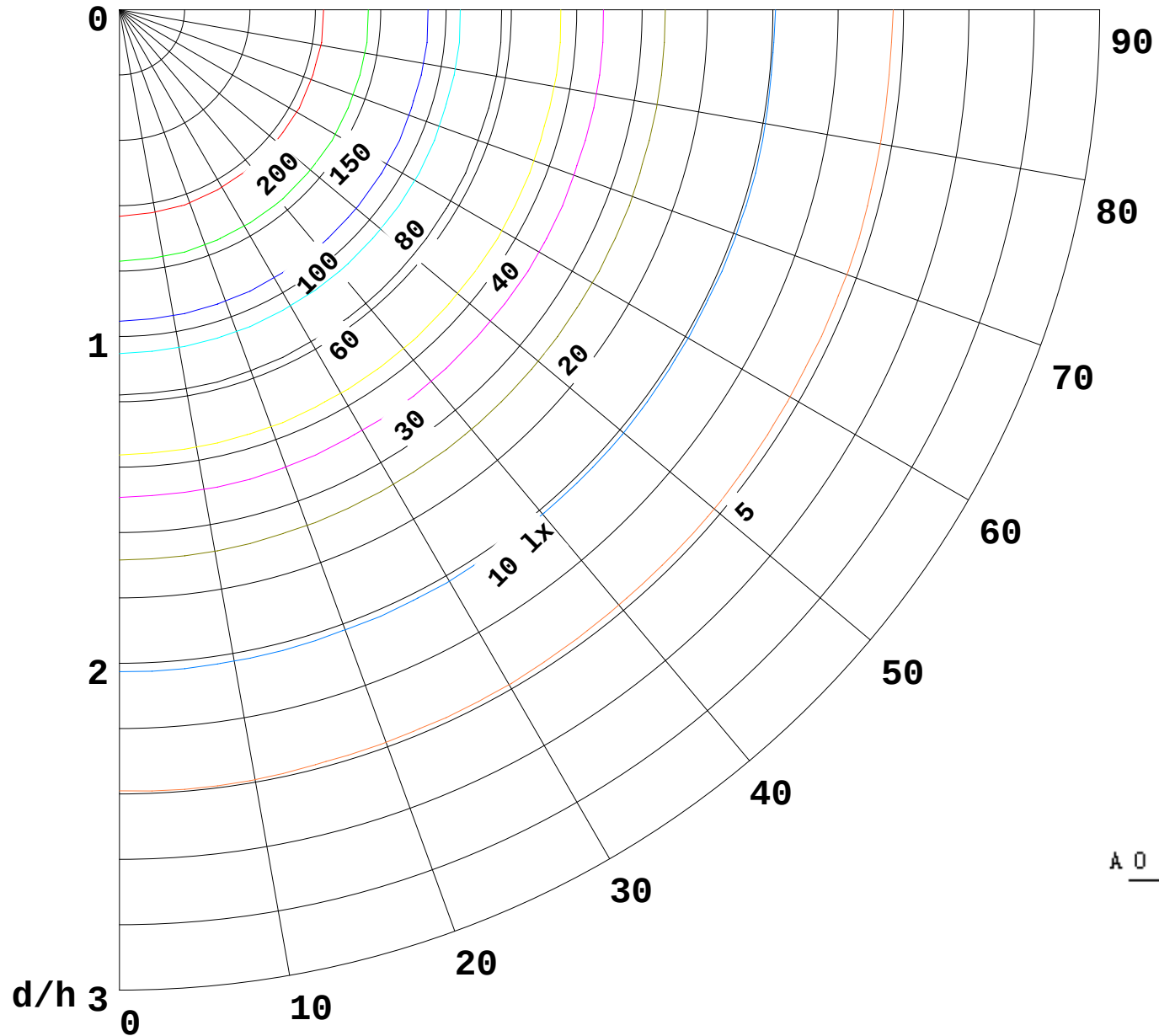
C Range: 0 - 360DEG	γ Range: 0 - 90DEG
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Test Speed: HIGH	Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.401
Temperature: 25.3DEG	Humidity: 65.0%
Operators:	Test Distance: 10.000m [K=1.0000]
Test Date: 23 September 2024	Remarks:

I(cd/1000 lm)



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

