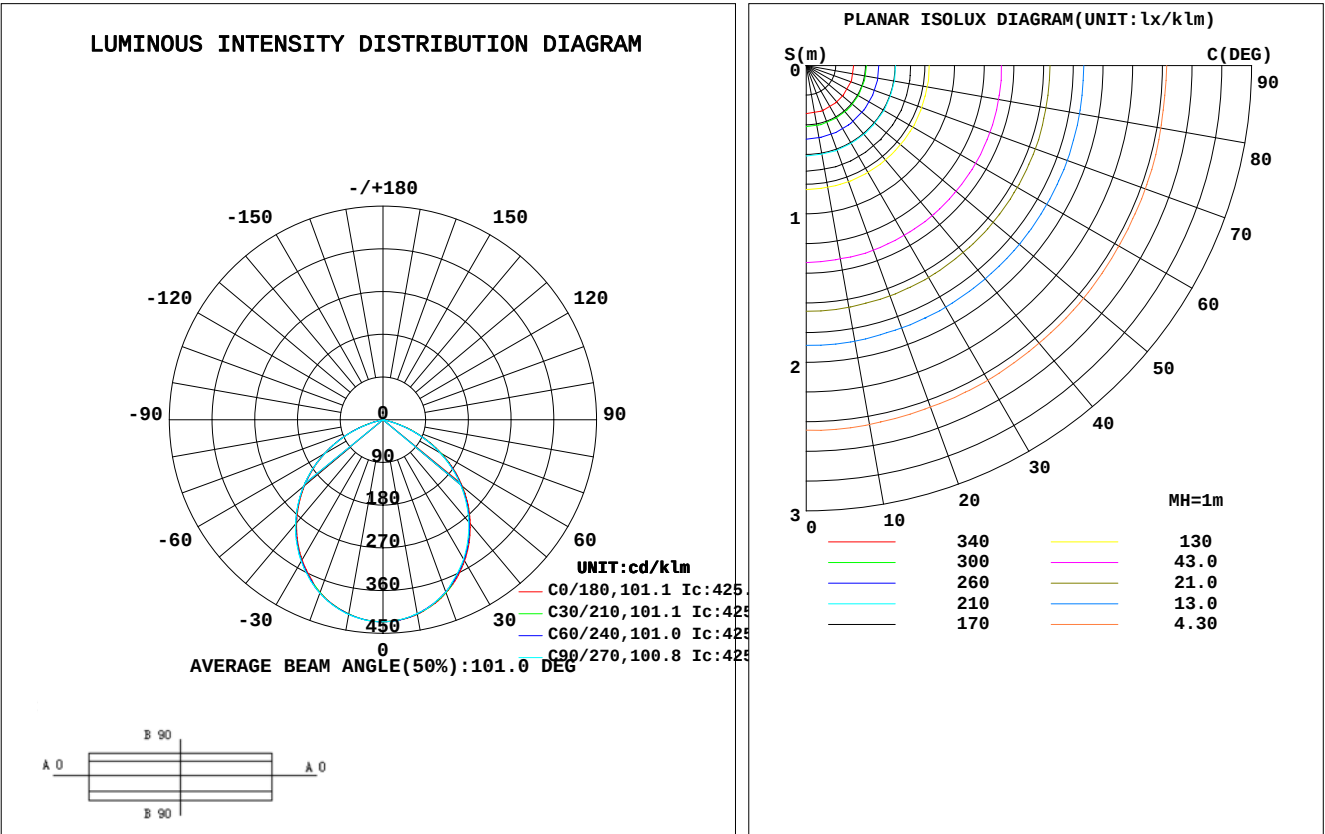


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.94V I:0.1103A P:11.389W PF:0.8511 Freq:59.98Hz Lamp Flux:922.044x1 lm		
NAME: ASD-LRKR-F6D12BK-12PACK	TYPE:5000K	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 80.96 lm/W
MODEL	ASD-LRKR-F6D12BK-12PACK	I _{max} (cd/klm)	426.8	S/MH(C0/180)	1.20	
NOMINAL POWER(W)	12	LOR(%)	99.7	S/MH(C90/270)	1.21	
RATED VOLTAGE(V)	120	TOTAL FLUX(lm/klm)	922.04	η UP, DN(C0-180)	0.0,49.6	
NOMINAL FLUX(lm)	922.044	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,50.1	
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE(V)	120	η down(%)	99.7	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:10.100m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

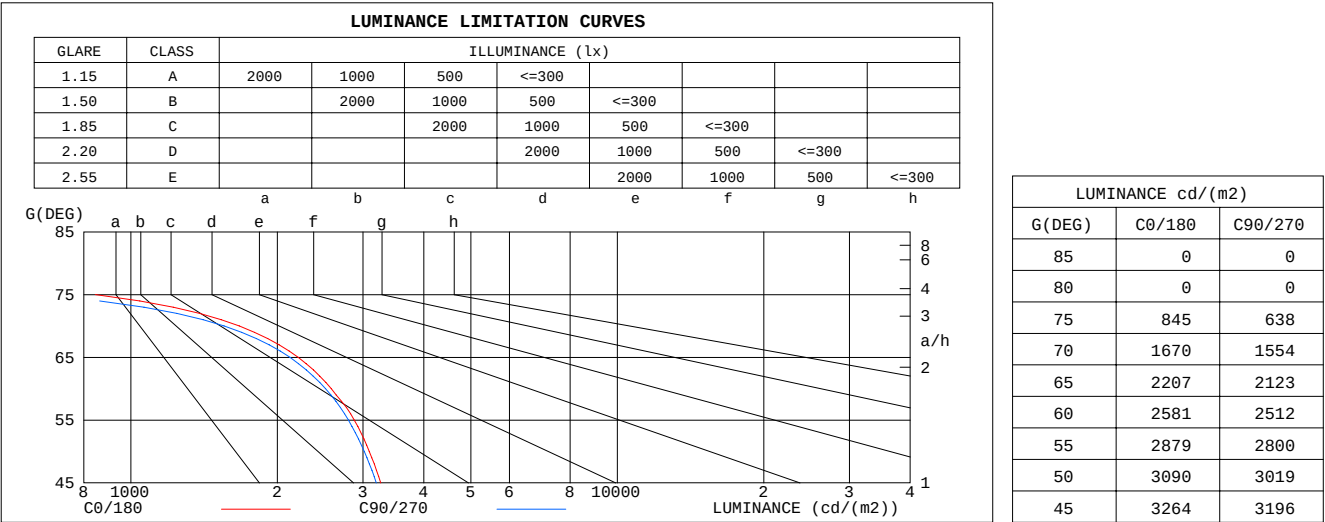
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	416.4	415.4	414.5	415.0	415.7	416.3	416.7	417.2	0- 10	40.17	40.17	4.03,4.02
20	388.1	386.5	386.4	386.2	387.1	388.3	388.8	389.2	10- 20	113.9	154.0	15.5,15.4
30	343.6	340.9	339.1	340.1	340.6	342.9	344.5	343.9	20- 30	168.7	322.7	32.4,32.3
40	285.9	283.2	281.2	282.2	283.0	285.9	286.6	286.1	30- 40	196.6	519.3	52.1,51.9
50	218.3	215.2	213.3	214.5	215.7	218.1	218.5	218.1	40- 50	193.7	713.1	71.5,71.3
60	141.8	139.6	138.0	138.7	140.5	142.1	140.8	141.3	50- 60	160.0	873.1	87.6,87.3
70	62.78	60.57	58.41	59.75	61.98	61.94	58.64	60.00	60- 70	99.31	972.4	97.6,97.2
80	0	0	0	0	0	0	0	0	70- 80	24.32	996.7	100,99.7
90	0	0	0	0	0	0	0	0	80- 90	0	996.7	100,99.7
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
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.401
Humidity:65.0%
Test Distance:10.100m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.94V I:0.1103A P:11.389W PF:0.8511 Freq:59.98Hz Lamp Flux:922.044x1 lm		
NAME: ASD-LRKR-F6D12BK-12PACK	TYPE:5000K	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



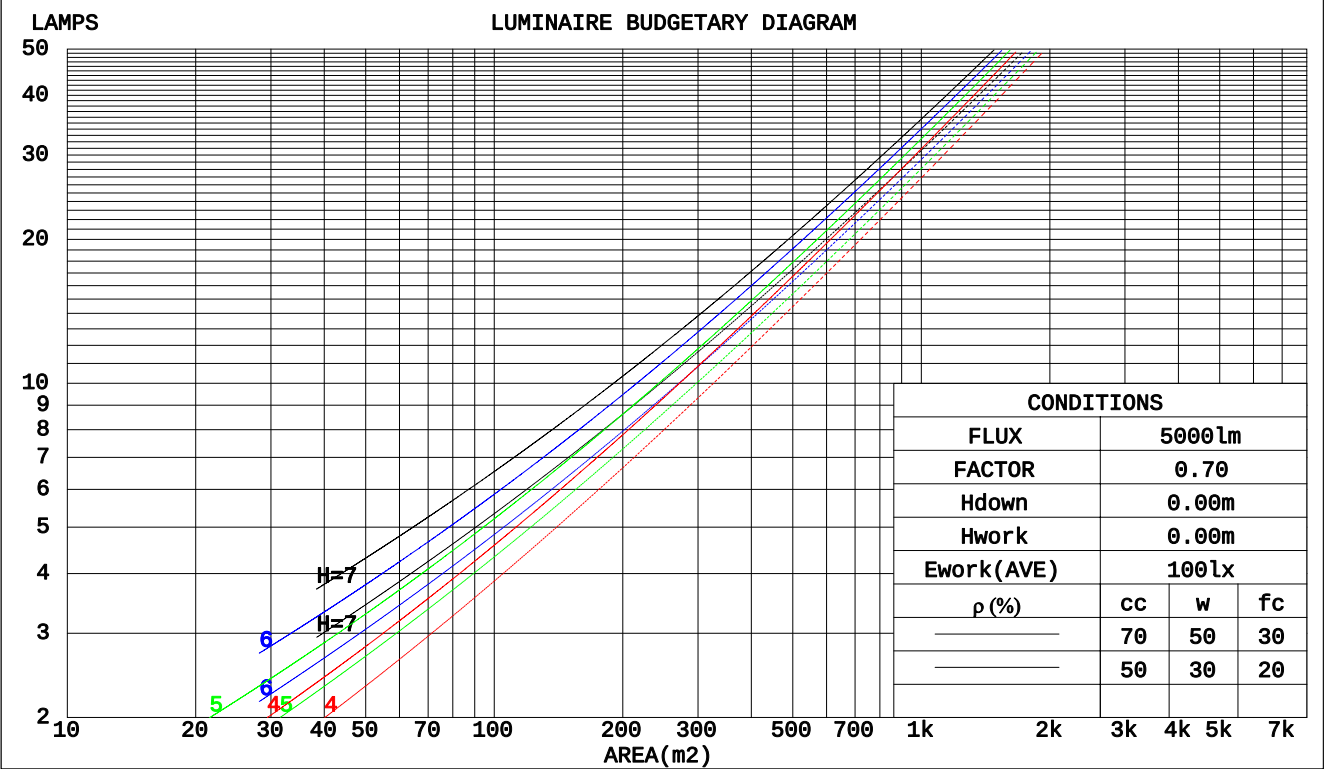
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:23 September 2024

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.401
Humidity:65.0%
Test Distance:10.100m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.94V I:0.1103A P:11.389W PF:0.8511 Freq:59.98Hz Lamp Flux:922.044x1 lm		
NAME: ASD-LRKR-F6D12BK-12PACK	TYPE:5000K	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	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 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	.00
1.0	1.06	1.03	.99	1.04	1.01	.98	.00	.97	.95	.96	.94	.92	.92	.91	.89	.87
2.0	.94	.88	.83	.92	.87	.82	.89	.84	.80	.86	.82	.78	.83	.79	.77	.75
3.0	.83	.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	.69	.63	.58	.66	.62	.58	.56
5.0	.67	.59	.52	.66	.58	.52	.64	.57	.52	.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	.37	.48	.41	.36	.47	.41	.36	.46	.40	.36	.34
9.0	.46	.38	.33	.46	.38	.33	.45	.38	.33	.44	.37	.33	.43	.37	.33	.31
10.0	.43	.35	.30	.42	.35	.30	.41	.35	.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:10.100m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:120.94V I:0.1103A P:11.389W PF:0.8511 Freq:59.98Hz Lamp Flux:922.044x1 lm								
NAME: ASD-LRKR-F6D12BK-12PACK				TYPE:5000K			WEIGHT:	
SPEC.:5000K				DIM.:			SERIAL No.:	
MFR.: ASD Lighting Corp				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	.258	.147	.047	.251	.143	.046	.238	.137	.044	.226	.131	.042	.215	.125	.040		
2.0	.254	.139	.043	.248	.136	.042	.236	.131	.041	.226	.127	.040	.216	.122	.039		
3.0	.241	.128	.038	.236	.126	.038	.226	.122	.037	.217	.119	.036	.208	.115	.036		
4.0	.227	.118	.035	.222	.116	.034	.213	.113	.034	.205	.110	.033	.198	.107	.033		
5.0	.213	.108	.031	.209	.107	.031	.201	.105	.031	.193	.102	.030	.187	.100	.030		
6.0	.199	.100	.029	.196	.099	.028	.189	.097	.028	.182	.095	.028	.176	.093	.028		
7.0	.187	.093	.026	.184	.092	.026	.178	.090	.026	.172	.088	.026	.166	.086	.025		
8.0	.176	.086	.024	.173	.085	.024	.167	.084	.024	.162	.082	.024	.157	.081	.024		
9.0	.166	.080	.022	.163	.080	.022	.158	.078	.022	.153	.077	.022	.149	.076	.022		
10.0	.157	.075	.021	.154	.074	.021	.150	.073	.021	.145	.072	.021	.141	.071	.020		

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	.162	.162	.162	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.176	.156	.138	.151	.134	.119	.103	.092	.082	.059	.053	.048	.019	.017	.015	
2.0	.167	.132	.102	.143	.113	.088	.098	.078	.062	.056	.046	.036	.018	.015	.012	
3.0	.159	.114	.078	.136	.098	.068	.093	.068	.047	.054	.040	.028	.017	.013	.009	
4.0	.151	.100	.061	.130	.087	.053	.089	.060	.038	.052	.035	.022	.017	.012	.007	
5.0	.144	.090	.050	.124	.078	.043	.085	.054	.030	.049	.032	.018	.016	.010	.006	
6.0	.137	.081	.041	.118	.070	.036	.081	.049	.025	.047	.029	.015	.015	.009	.005	
7.0	.131	.074	.035	.113	.064	.030	.078	.045	.021	.045	.027	.013	.015	.009	.004	
8.0	.125	.068	.030	.107	.059	.026	.074	.042	.018	.043	.025	.011	.014	.008	.004	
9.0	.119	.064	.026	.103	.055	.023	.071	.039	.016	.041	.023	.010	.013	.008	.003	
10.0	.114	.059	.023	.098	.051	.020	.068	.036	.014	.040	.021	.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:10.100m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.94V I:0.1103A P:11.389W PF:0.8511 Freq:59.98Hz Lamp Flux:922.044x1 lm										
NAME: ASD-LRKR-F6D12BK-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	16.8	18.2	17.0	18.4	18.6	16.6	18.1	16.9	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	19.1	19.4	17.4	18.7	17.8	18.9	19.2
6H	17.6	18.7	17.9	19.0	19.3	17.3	18.5	17.7	18.8	19.0
8H	17.5	18.6	17.9	18.9	19.2	17.3	18.4	17.6	18.7	19.0
12H	17.5	18.5	17.8	18.8	19.1	17.2	18.3	17.6	18.6	18.9
4H 2H	17.2	18.4	17.5	18.6	18.9	17.1	18.3	17.4	18.5	18.8
3H	18.1	19.1	18.4	19.4	19.7	17.9	19.0	18.3	19.3	19.6
4H	18.2	19.2	18.6	19.5	19.8	18.0	18.9	18.3	19.3	19.6
6H	18.1	19.0	18.5	19.3	19.7	17.9	18.7	18.3	19.1	19.4
8H	18.1	18.9	18.5	19.2	19.6	17.8	18.6	18.3	19.0	19.4
12H	18.0	18.7	18.4	19.1	19.5	17.8	18.5	18.2	18.9	19.3
8H 4H	18.2	18.9	18.6	19.3	19.7	17.9	18.7	18.3	19.1	19.5
6H	18.1	18.7	18.5	19.1	19.5	17.9	18.5	18.3	18.9	19.3
8H	18.0	18.6	18.5	19.0	19.5	17.8	18.4	18.3	18.8	19.2
12H	18.0	18.5	18.5	18.9	19.4	17.8	18.3	18.3	18.7	19.2
12H 4H	18.1	18.8	18.5	19.2	19.6	17.9	18.6	18.3	19.0	19.4
6H	18.0	18.6	18.5	19.0	19.5	17.8	18.4	18.3	18.8	19.2
8H	18.0	18.5	18.5	18.9	19.4	17.8	18.3	18.3	18.7	19.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.5					+ 0.4 / - 0.5				
1.5H	+ 0.2 / - 0.5					+ 0.3 / - 0.5				
2.0H	+ 0.7 / - 0.6					+ 0.7 / - 0.6				

CIE Pub.117, 910.0 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = -0.3$)

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:10.100m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.94V I:0.1103A P:11.389W PF:0.8511 Freq:59.98Hz Lamp Flux:922.044x1 lm		
NAME: ASD-LRKR-F6D12BK-12PACK	TYPE:5000K	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

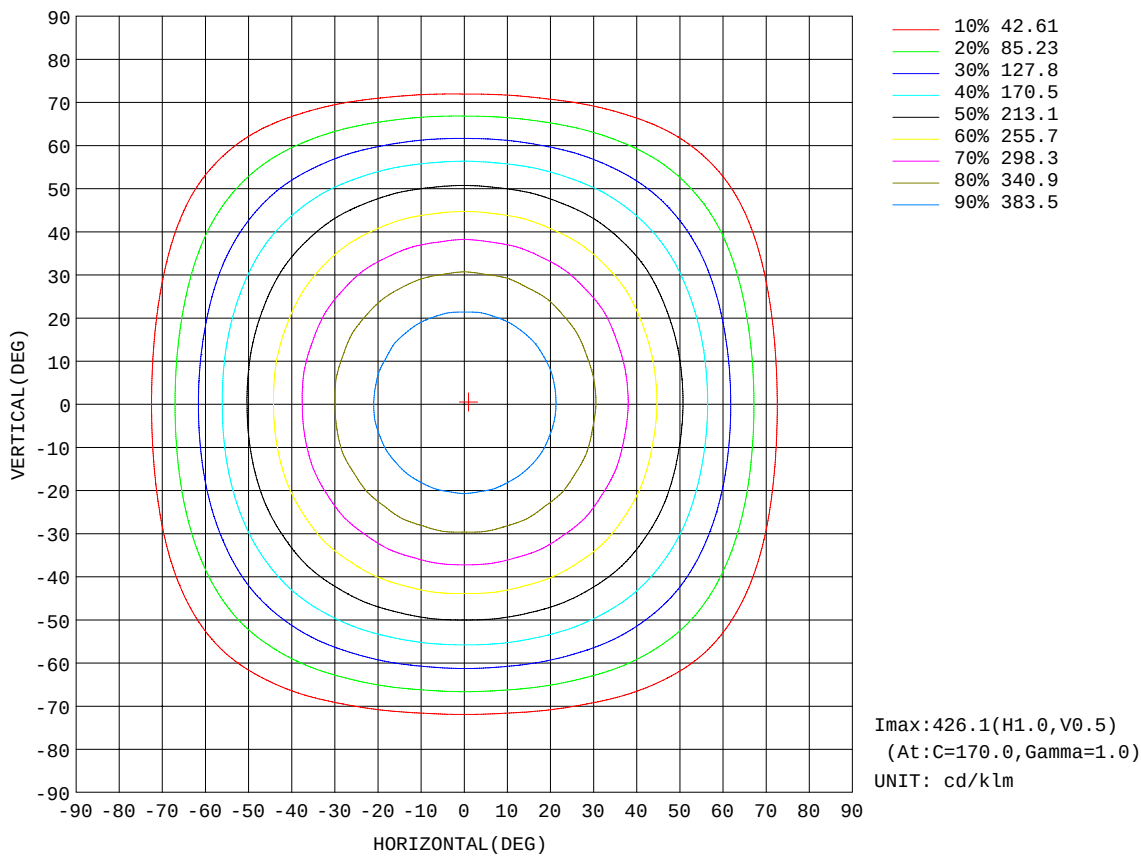
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	61	50	44	60	50	44	59	50	43	37
0.80	72	61	54	71	60	54	69	60	54	47
1.00	80	70	64	79	70	63	77	71	63	56
1.25	87	78	72	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	97	93	99	95	91	83
4.00	108	103	100	106	102	98	102	98	96	87
5.00	110	106	103	108	104	101	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
 γ Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:10.100m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.94V I:0.1103A P:11.389W PF:0.8511 Freq:59.98Hz Lamp Flux:922.044x1 lm		
NAME: ASD-LRKR-F6D12BK-12PACK	TYPE:5000K	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

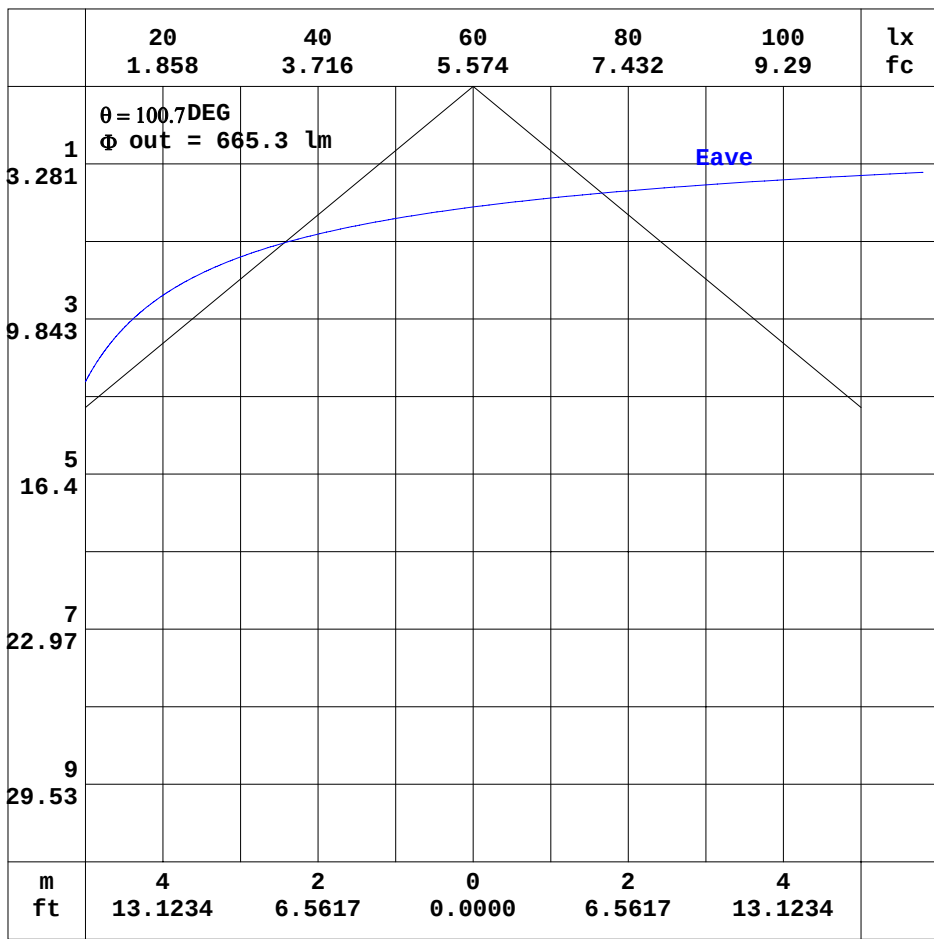


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:23 September 2024

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.401
Humidity:65.0%
Test Distance:10.100m [K=1.0000]
Remarks:

AAI CURVES

Test:U:120.94V I:0.1103A P:11.389W PF:0.8511 Freq:59.98Hz Lamp Flux:922.044x1 lm		
NAME: ASD-LRKR-F6D12BK-12PACK	TYPE:5000K	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



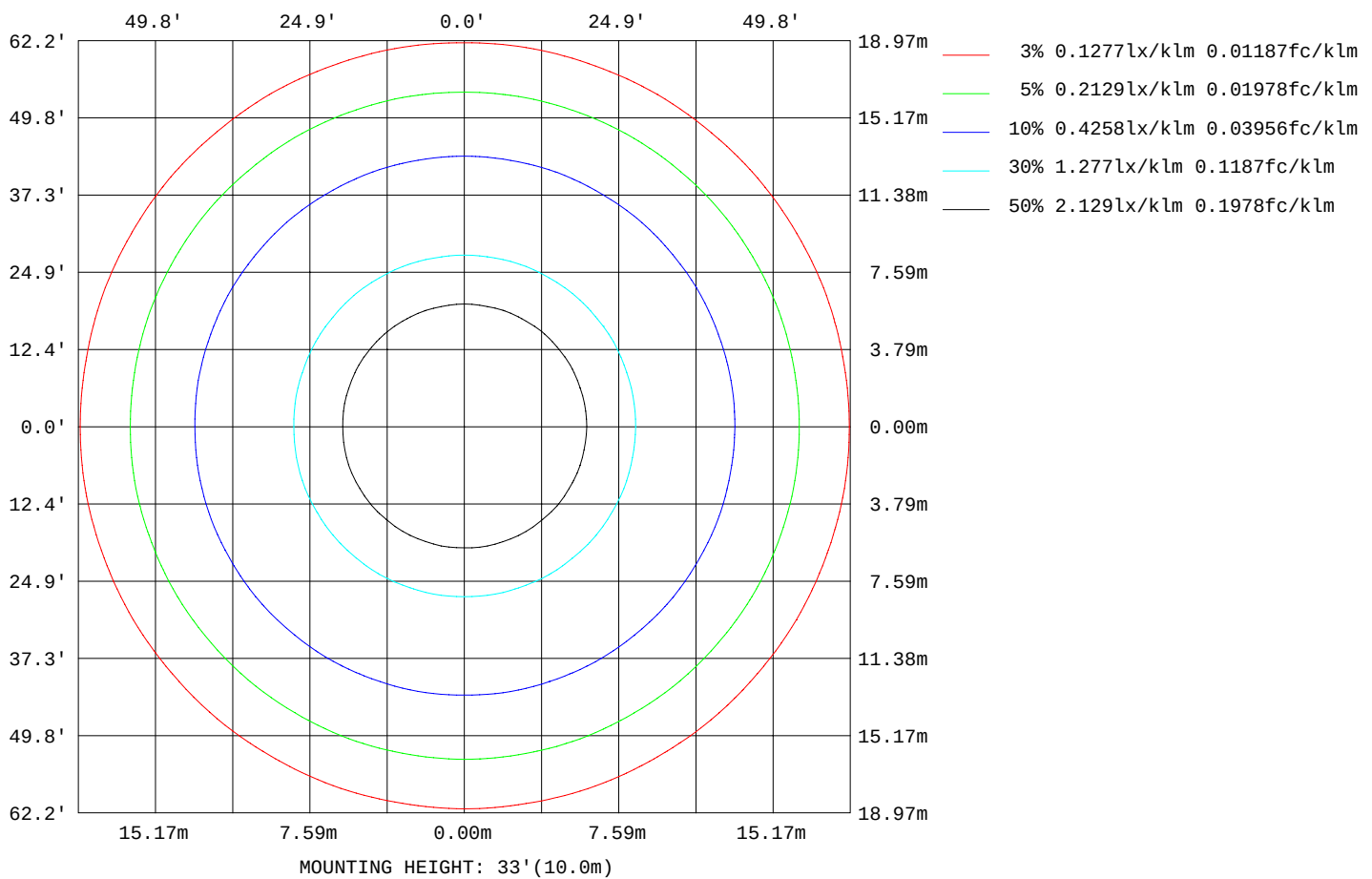
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 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:10.100m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:120.94V I:0.1103A P:11.389W PF:0.8511 Freq:59.98Hz Lamp Flux:922.044x1 lm		
NAME: ASD-LRKR-F6D12BK-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:10.100m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:120.94V I:0.1103A P:11.389W PF:0.8511 Freq:59.98Hz Lamp Flux:922.044x1 lm		
NAME: ASD-LRKR-F6D12BK-12PACK	TYPE:5000K	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

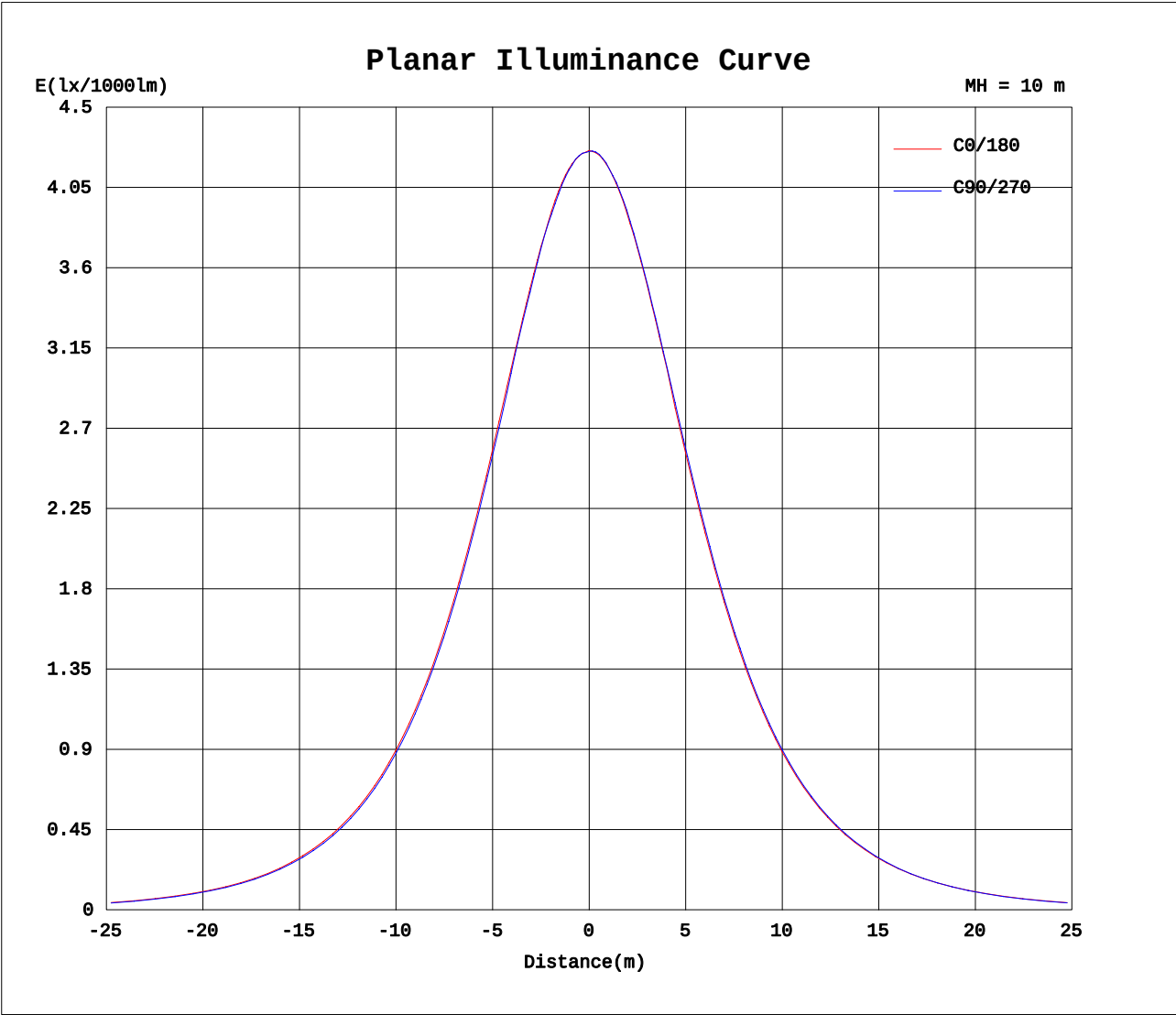
AvgL	cd/m2
L_0~180(65)av	2195
L_0~180(75)av	837
L_0~180(85)av	0
L_90~270(65)av	2139
L_90~270(75)av	621
L_90~270(85)av	0
L_45(65)av	2168
L_45(75)av	738
L_45(85)av	0

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:10.100m [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:10.100m [K=1.0000]
Remarks:

Test:U:120.94V I:0.1103A P:11.389W PF:0.8511 Freq:59.98Hz Lamp Flux:922.044x1 lm		
NAME: ASD-LRKR-F6D12BK-12PACK	TYPE:5000K	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.:ASD Lighting Corp	SUR.:	Shielding Angle:

UNIT: cd/klm

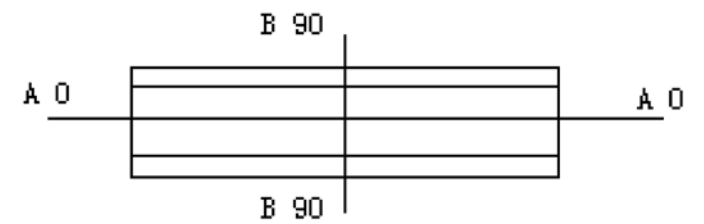
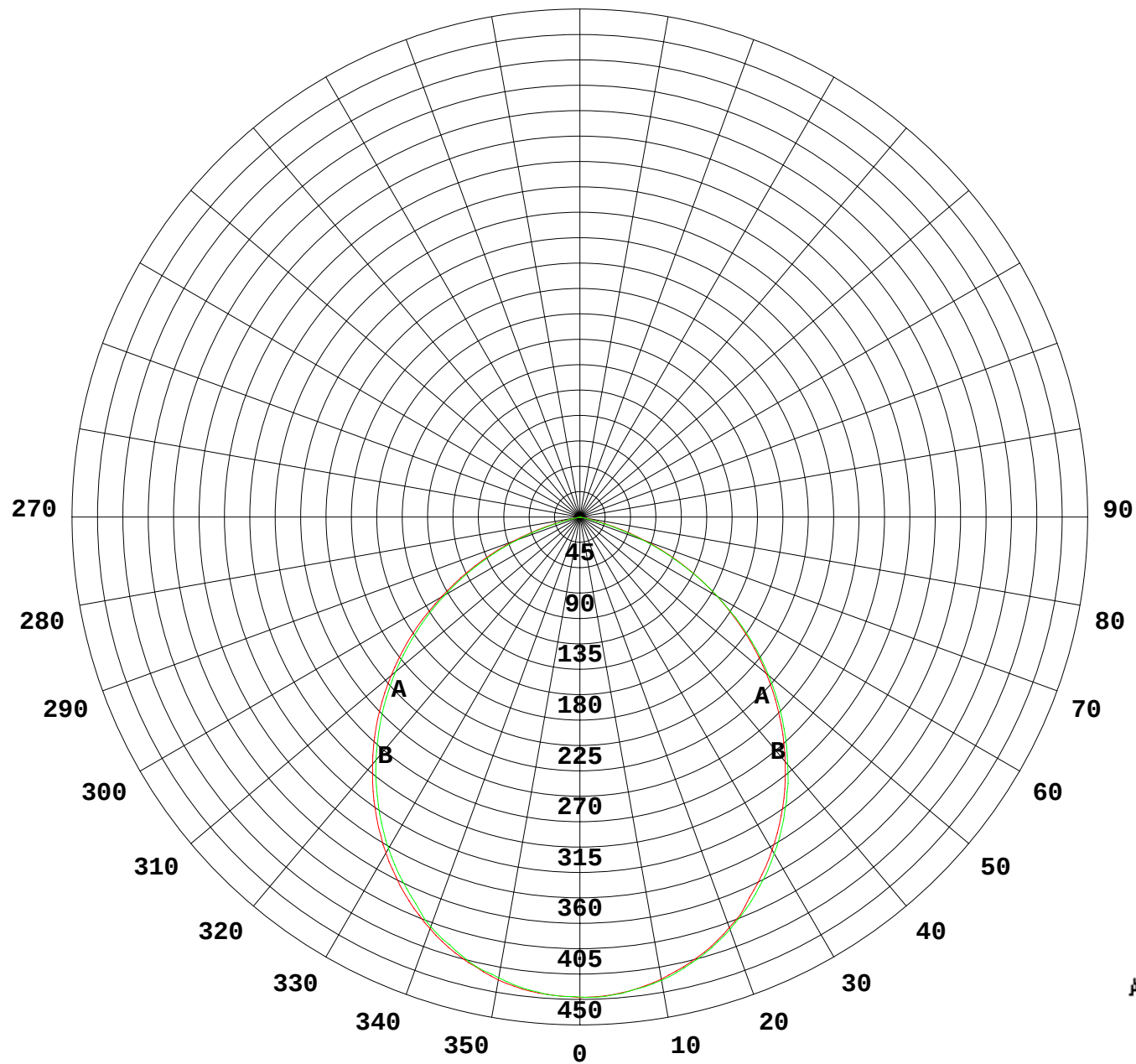
C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 10.0DEG	γ Interval: 1.0DEG
Test Speed: HIGH	Test System: EVERFINE G0-2000A_V1 SYSTEM V2.0.401
Temperature: 25.3DEG	Humidity: 65.0%
Operators:	Test Distance: 10.100m [K=1.0000]
Test Date: 23 September 2024	Remarks:

Test:U:120.94V I:0.1103A P:11.389W PF:0.8511 Freq:59.98Hz Lamp Flux:922.044x1 lm		
NAME: ASD-LRKR-F6D12BK-12PACK	TYPE:5000K	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

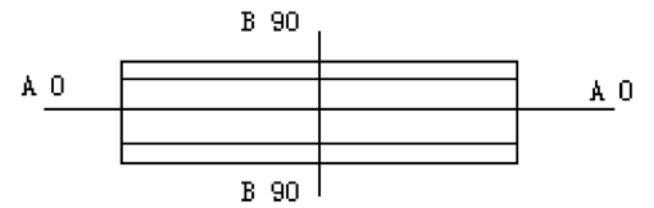
UNIT: cd/klm

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 10.0DEG	γ Interval: 1.0DEG
Test Speed: HIGH	Test System: EVERFINE G0-2000A_V1 SYSTEM V2.0.401
Temperature: 25.3DEG	Humidity: 65.0%
Operators:	Test Distance: 10.100m [K=1.0000]
Test Date: 23 September 2024	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

