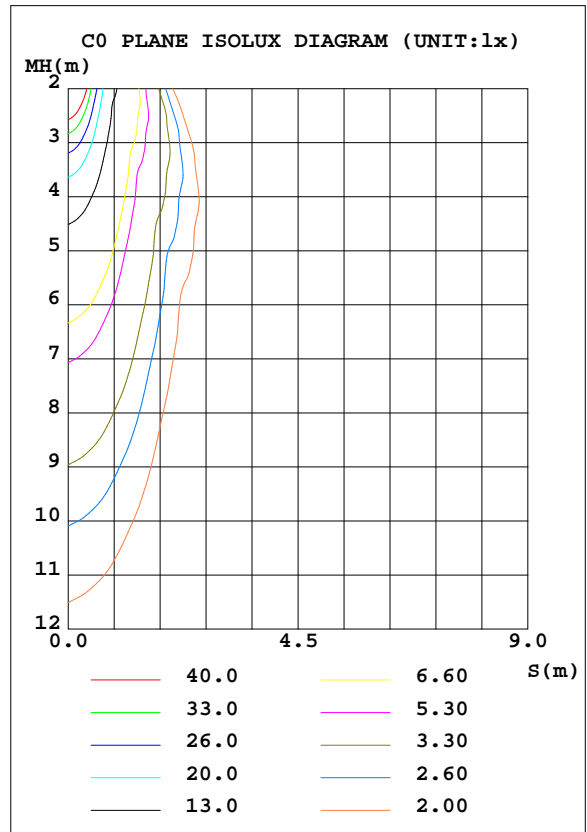
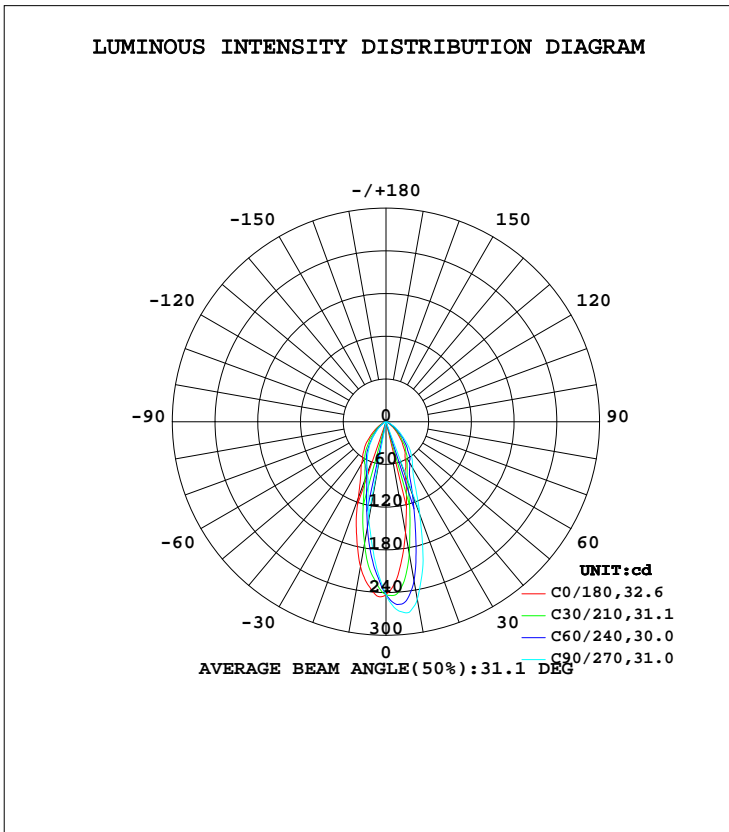


**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:3.8000V I:0.5480A P:2.0800W PF:0.0000 Freq:0Hz Lamp Flux:169.355x1 lm		
NAME: ASD-EXL-2RL-RW	TYPE:	WEIGHT:
SPEC.:4000K	DIM.:	SERIAL No.:s25050020a-01
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 81.42 lm/W			
MODEL	ASD-EXL-2RL-RW	I <sub>max</sub> (cd)	270.9	S/MH(C0/180)	0.63
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	0.40
RATED VOLTAGE(V)	3.8	TOTAL FLUX(lm)	169.36	η UP, DN(C0-180)	0.1,58.3
NOMINAL FLUX(lm)	169.355	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.1,41.4
LAMPS INSIDE	1	η up(%)	0.3	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	3.8	η down(%)	99.7	CIBSE SHR MAX	0.60



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

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:1.900m [K=1.3161]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

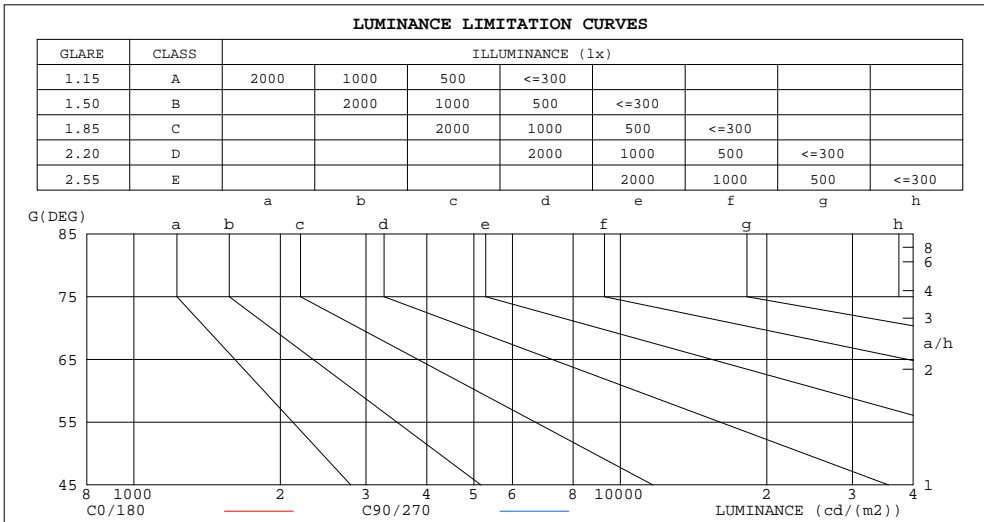
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum,lamp
10	158.1	206.6	253.5	244.3	206.5	161.1	139.9	140.8	0- 10	20.45	20.45	12.1,12.1
20	79.32	97.63	138.8	155.9	113.9	81.68	76.22	77.19	10- 20	39.06	59.50	35.1,35.1
30	53.78	62.64	75.48	81.49	69.16	56.89	50.87	50.57	20- 30	36.10	95.60	56.5,56.5
40	32.05	41.04	53.22	54.79	46.67	35.21	29.28	28.54	30- 40	31.63	127.2	75.1,75.1
50	14.83	20.72	28.11	31.20	25.19	16.75	13.17	12.44	40- 50	22.60	149.8	88.5,88.5
60	4.948	7.707	12.92	13.16	10.48	6.166	4.201	4.303	50- 60	11.99	161.8	95.6,95.6
70	1.642	2.622	4.160	4.261	3.854	2.127	1.594	1.570	60- 70	4.769	166.6	98.4,98.4
80	0.7072	0.8837	1.183	1.215	1.139	0.7935	0.7146	0.6711	70- 80	1.693	168.3	99.4,99.4
90	0.1061	0.2974	0.4391	0.4594	0.2424	0.2109	0.1939	0.1639	80- 90	0.6013	168.9	99.7,99.7
100	0.0542	0.0507	0.1334	0.0883	0.0869	0.0899	0.1008	0.0886	90-100	0.1843	169.1	99.8,99.8
110	0.0260	0.0332	0.0963	0.0602	0.0559	0.0431	0.0570	0.0368	100-110	0.0745	169.2	99.9,99.9
120	0.0157	0.0129	0.0408	0.0267	0.0269	0.0295	0.0431	0.0292	110-120	0.0379	169.2	99.9,99.9
130	0.0206	0.0155	0.0237	0.0189	0.0260	0.0329	0.0462	0.0403	120-130	0.0238	169.2	99.9,99.9
140	0.0360	0.0271	0.0247	0.0217	0.0492	0.0645	0.0846	0.0818	130-140	0.0293	169.2	99.9,99.9
150	0.0578	0.0469	0.0405	0.0394	0.0785	0.0968	0.1123	0.1111	140-150	0.0382	169.3	100,100
160	0.0756	0.0697	0.0632	0.0600	0.0960	0.1060	0.1106	0.1044	150-160	0.0372	169.3	100,100
170	0.0864	0.0859	0.0812	0.0771	0.1061	0.1055	0.1003	0.0942	160-170	0.0254	169.3	100,100
180	0.1005	0.0995	0.0949	0.0880	0.1033	0.1008	0.0970	0.0906	170-180	0.0088	169.4	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

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

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:1.900m [K=1.3161]  
 Remarks:

**LUMINANCE LIMITATION CURVES**

Test:U:3.8000V I:0.5480A P:2.0800W PF:0.0000 Freq:0Hz Lamp Flux:169.355x1 lm		
NAME: ASD-EXL-2RL-RW	TYPE:	WEIGHT:
SPEC.:4000K	DIM.:	SERIAL No.:s25050020a-01
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	57	98
80	54	82
75	56	92
70	63	145
65	100	206
60	130	309
55	193	406
50	304	523
45	423	672

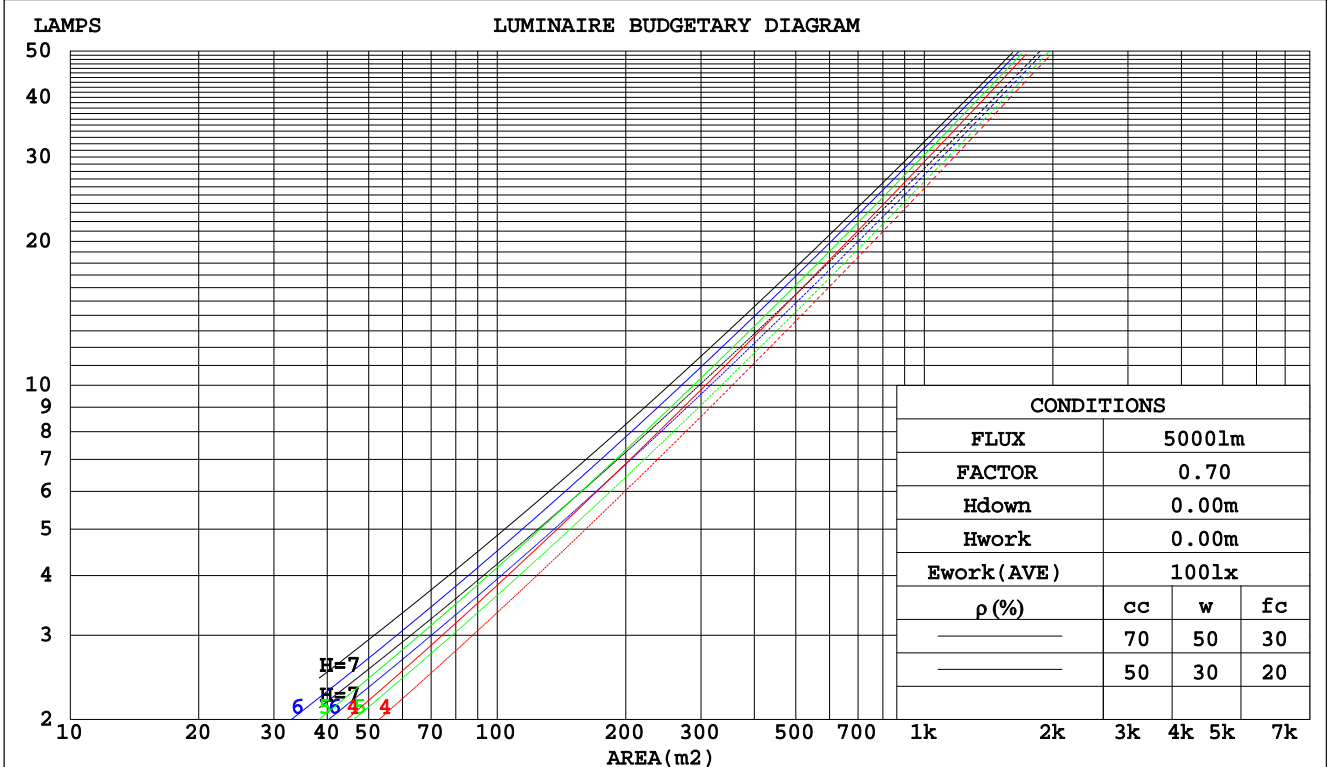
C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:1.900m [K=1.3161]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:3.8000V I:0.5480A P:2.0800W PF:0.0000 Freq:0Hz Lamp Flux:169.355x1 lm		
NAME: ASD-EXL-2RL-RW	TYPE:	WEIGHT:
SPEC.:4000K	DIM.:	SERIAL No.:s25050020a-01
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																0
pfc	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	1.09	1.06	1.04	1.07	1.04	1.02	1.03	1.01	.99	.99	.97	.96	.96	.94	.93	.91
2.0	1.00	.95	.91	.98	.94	.90	.95	.91	.88	.92	.89	.86	.89	.87	.85	.83
3.0	.92	.86	.82	.91	.85	.81	.88	.83	.80	.85	.81	.78	.83	.80	.77	.75
4.0	.85	.79	.74	.84	.78	.73	.81	.76	.72	.79	.75	.71	.77	.74	.71	.69
5.0	.79	.72	.67	.78	.71	.67	.76	.70	.66	.74	.69	.66	.72	.68	.65	.63
6.0	.73	.66	.62	.72	.66	.61	.71	.65	.61	.69	.64	.60	.68	.63	.60	.58
7.0	.68	.62	.57	.68	.61	.57	.66	.61	.56	.65	.60	.56	.64	.59	.56	.54
8.0	.64	.58	.53	.63	.57	.53	.62	.57	.53	.61	.56	.52	.60	.56	.52	.51
9.0	.60	.54	.49	.60	.54	.49	.59	.53	.49	.58	.53	.49	.57	.52	.49	.47
10.0	.57	.51	.46	.56	.50	.46	.56	.50	.46	.55	.50	.46	.54	.49	.46	.45



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

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:1.900m [K=1.3161]  
 Remarks:

WEC AND CCEC

Test:U:3.8000V I:0.5480A P:2.0800W PF:0.0000 Freq:0Hz Lamp Flux:169.355x1 lm		
NAME: ASD-EXL-2RL-RW	TYPE:	WEIGHT:
SPEC.:4000K	DIM.:	SERIAL No.:s25050020a-01
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	.207	.118	.037	.200	.114	.036	.187	.107	.034	.175	.101	.032	.164	.095	.031	
2.0	.199	.109	.033	.193	.106	.033	.182	.101	.031	.172	.096	.030	.162	.092	.029	
3.0	.189	.100	.030	.184	.098	.030	.174	.094	.029	.165	.091	.028	.157	.087	.027	
4.0	.178	.093	.027	.174	.091	.027	.166	.088	.026	.158	.085	.026	.151	.082	.025	
5.0	.169	.086	.025	.165	.085	.025	.158	.082	.024	.151	.080	.024	.144	.077	.023	
6.0	.160	.080	.023	.156	.079	.023	.150	.077	.022	.144	.075	.022	.138	.073	.022	
7.0	.151	.075	.021	.148	.074	.021	.142	.072	.021	.137	.070	.020	.132	.069	.020	
8.0	.143	.070	.020	.141	.069	.020	.136	.068	.019	.131	.066	.019	.126	.065	.019	
9.0	.136	.066	.018	.134	.065	.018	.129	.064	.018	.125	.063	.018	.121	.061	.018	
10.0	.130	.062	.017	.128	.062	.017	.123	.060	.017	.119	.059	.017	.116	.058	.017	

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	.193	.193	.193	.165	.165	.165	.112	.112	.112	.065	.065	.065	.021	.021	.021	
1.0	.175	.159	.145	.150	.137	.124	.103	.094	.086	.059	.054	.050	.019	.018	.016	
2.0	.162	.134	.111	.139	.116	.096	.095	.080	.067	.055	.047	.039	.018	.015	.013	
3.0	.151	.116	.088	.129	.100	.076	.089	.069	.053	.051	.041	.032	.016	.013	.010	
4.0	.142	.102	.071	.121	.088	.062	.084	.061	.043	.048	.036	.026	.016	.012	.008	
5.0	.133	.090	.058	.115	.078	.051	.079	.055	.036	.046	.032	.021	.015	.010	.007	
6.0	.126	.081	.049	.108	.070	.043	.075	.049	.030	.043	.029	.018	.014	.009	.006	
7.0	.120	.074	.042	.103	.064	.036	.071	.045	.026	.041	.026	.015	.013	.009	.005	
8.0	.114	.068	.036	.098	.059	.032	.068	.041	.022	.039	.024	.013	.013	.008	.004	
9.0	.108	.063	.032	.093	.054	.028	.065	.038	.020	.038	.023	.012	.012	.007	.004	
10.0	.103	.058	.028	.089	.051	.025	.062	.036	.018	.036	.021	.010	.012	.007	.003	

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

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:1.900m [K=1.3161]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:3.8000V I:0.5480A P:2.0800W PF:0.0000 Freq:0Hz Lamp Flux:169.355x1 lm		
NAME: ASD-EXL-2RL-RW	TYPE:	WEIGHT:
SPEC.:4000K	DIM.:	SERIAL No.:s25050020a-01
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	6.1	7.2	6.3	7.3	7.5	8.3	9.4	8.5	9.6	9.8
3H	6.1	7.1	6.4	7.3	7.5	8.4	9.4	8.7	9.7	9.9
4H	6.1	7.0	6.3	7.2	7.5	8.4	9.4	8.7	9.6	9.9
6H	6.0	6.9	6.3	7.2	7.4	8.4	9.3	8.7	9.6	9.8
8H	6.0	6.9	6.3	7.1	7.4	8.4	9.3	8.7	9.5	9.8
12H	6.0	6.8	6.3	7.1	7.4	8.4	9.2	8.7	9.5	9.8
4H 2H	6.2	7.1	6.5	7.3	7.6	8.2	9.2	8.5	9.4	9.6
3H	6.2	7.1	6.6	7.3	7.6	8.4	9.2	8.7	9.5	9.8
4H	6.2	7.0	6.6	7.3	7.6	8.4	9.2	8.8	9.5	9.8
6H	6.2	6.9	6.6	7.2	7.6	8.4	9.1	8.8	9.4	9.8
8H	6.2	6.8	6.6	7.2	7.6	8.4	9.1	8.8	9.4	9.8
12H	6.2	6.8	6.7	7.2	7.6	8.5	9.0	8.9	9.4	9.8
8H 4H	6.2	6.8	6.6	7.1	7.5	8.3	8.9	8.7	9.3	9.7
6H	6.2	6.7	6.7	7.1	7.6	8.4	8.9	8.8	9.3	9.7
8H	6.3	6.7	6.7	7.1	7.6	8.4	8.8	8.9	9.3	9.7
12H	6.3	6.7	6.8	7.1	7.6	8.4	8.8	8.9	9.3	9.7
12H 4H	6.1	6.7	6.6	7.1	7.5	8.3	8.8	8.7	9.2	9.6
6H	6.2	6.6	6.7	7.1	7.5	8.3	8.8	8.8	9.2	9.7
8H	6.3	6.6	6.7	7.1	7.6	8.4	8.8	8.9	9.2	9.7
Variations with the observer position at spacings:										
S = 1.0H	+ 1.5 / - 2.6					+ 1.0 / - 1.5				
1.5H	+ 1.3 / - 1.7					+ 1.1 / - 1.3				
2.0H	+ 2.6 / - 3.0					+ 2.8 / - 3.4				

CIE Pub.117, 169.4 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = -6.2)

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

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:1.900m [K=1.3161]  
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:3.8000V I:0.5480A P:2.0800W PF:0.0000 Freq:0Hz Lamp Flux:169.355x1 lm		
NAME: ASD-EXL-2RL-RW	TYPE:	WEIGHT:
SPEC.:4000K	DIM.:	SERIAL No.:s25050020a-01
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

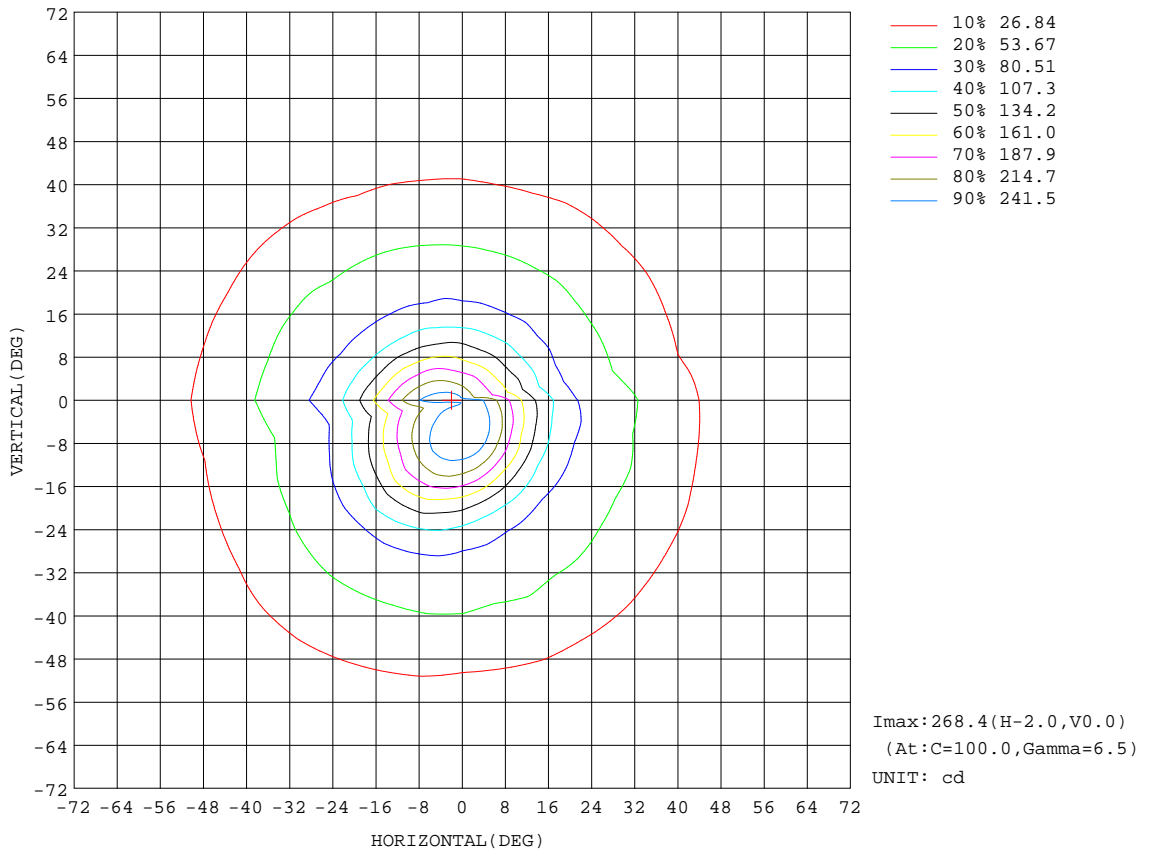
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	76	67	62	75	67	62	74	67	62	57
0.80	85	77	72	84	76	72	82	76	71	66
1.00	91	84	79	90	83	79	88	84	78	73
1.25	97	90	85	95	89	85	93	88	84	79
1.50	100	94	89	99	93	89	96	91	88	82
2.00	104	99	95	103	98	94	100	96	93	87
2.50	107	102	98	105	100	97	102	98	95	88
3.00	109	104	101	107	103	100	103	100	98	91
4.00	111	108	105	109	106	103	105	103	101	93
5.00	113	110	107	111	108	106	106	104	103	94
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:

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:1.900m [K=1.3161]  
 Remarks:

**ISOCANDELA DIAGRAM**

Test:U:3.8000V I:0.5480A P:2.0800W PF:0.0000 Freq:0Hz Lamp Flux:169.355x1 lm		
NAME: ASD-EXL-2RL-RW	TYPE:	WEIGHT:
SPEC.:4000K	DIM.:	SERIAL No.:s25050020a-01
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

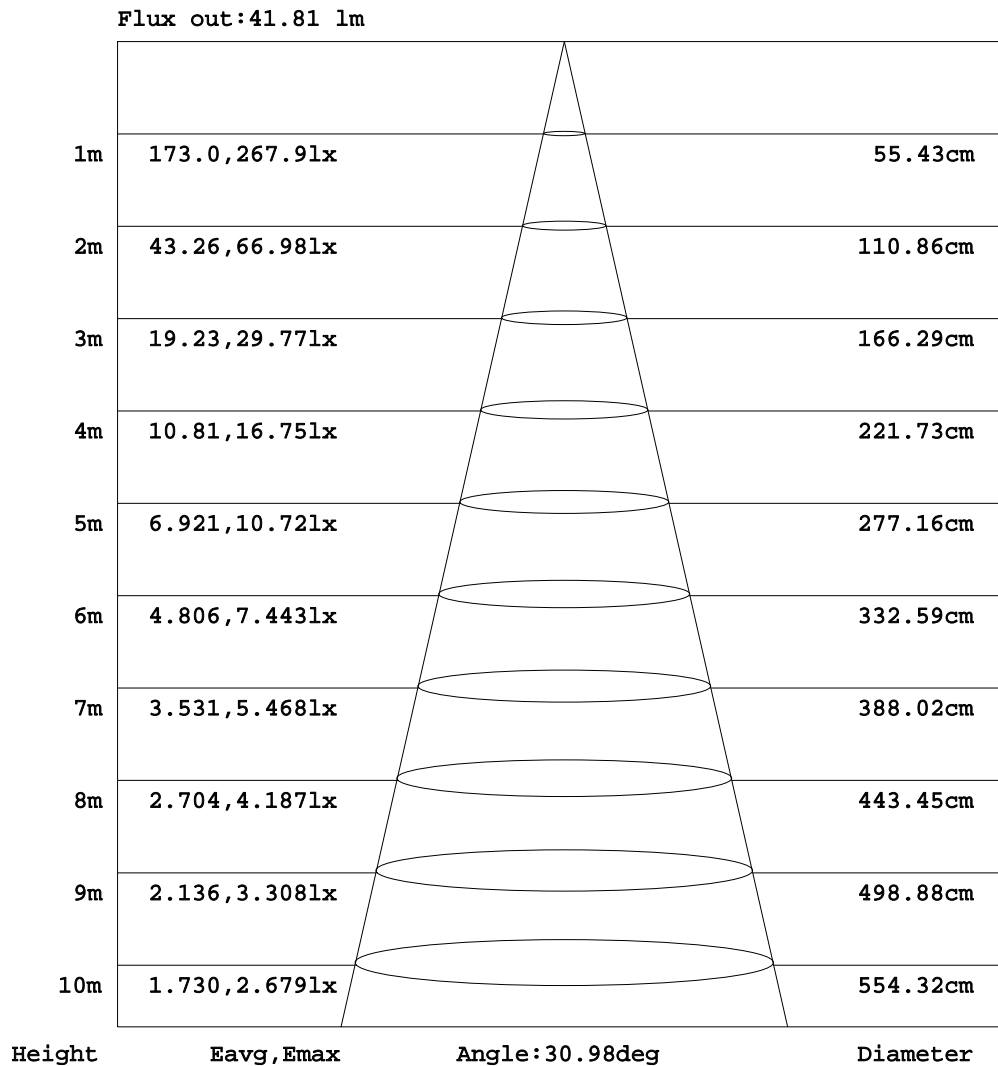


C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date:

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 1.900m [K=1.3161]  
 Remarks:

**AAI Figure**

Test:U:3.8000V I:0.5480A P:2.0800W PF:0.0000 Freq:0Hz Lamp Flux:169.355x1 lm		
NAME: ASD-EXL-2RL-RW	TYPE:	WEIGHT:
SPEC.:4000K	DIM.:	SERIAL No.:s25050020a-01
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



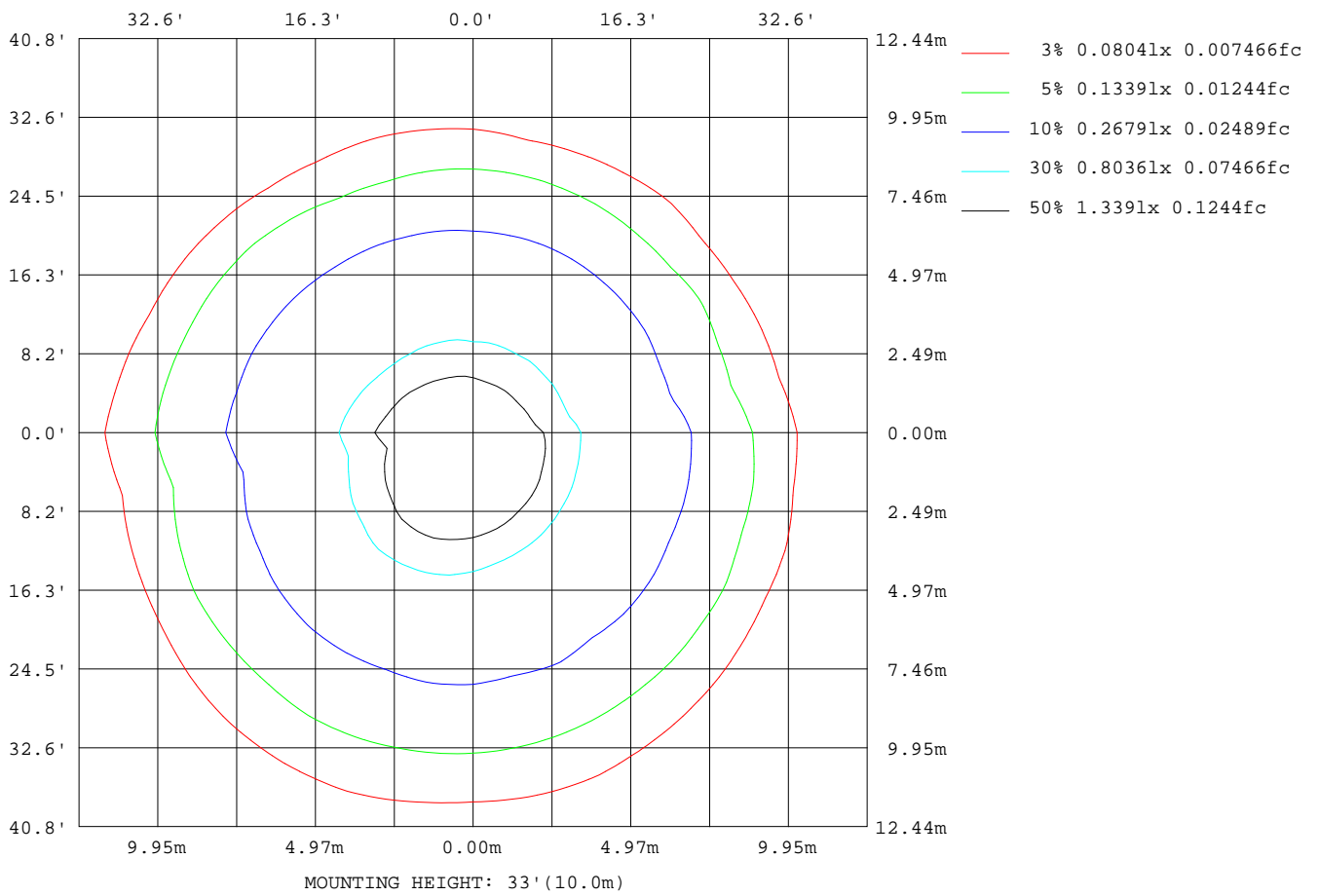
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:1.900m [K=1.3161]  
 Remarks:

**ISOLUX DIAGRAM**

Test:U:3.8000V I:0.5480A P:2.0800W PF:0.0000 Freq:0Hz Lamp Flux:169.355x1 lm		
NAME: ASD-EXL-2RL-RW	TYPE:	WEIGHT:
SPEC.:4000K	DIM.:	SERIAL No.:s25050020a-01
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



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

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:1.900m [K=1.3161]  
 Remarks:

LED Avg.L Report

Test:U:3.8000V I:0.5480A P:2.0800W PF:0.0000 Freq:0Hz Lamp Flux:169.355x1 lm		
NAME: ASD-EXL-2RL-RW	TYPE:	WEIGHT:
SPEC.:4000K	DIM.:	SERIAL No.:s25050020a-01
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

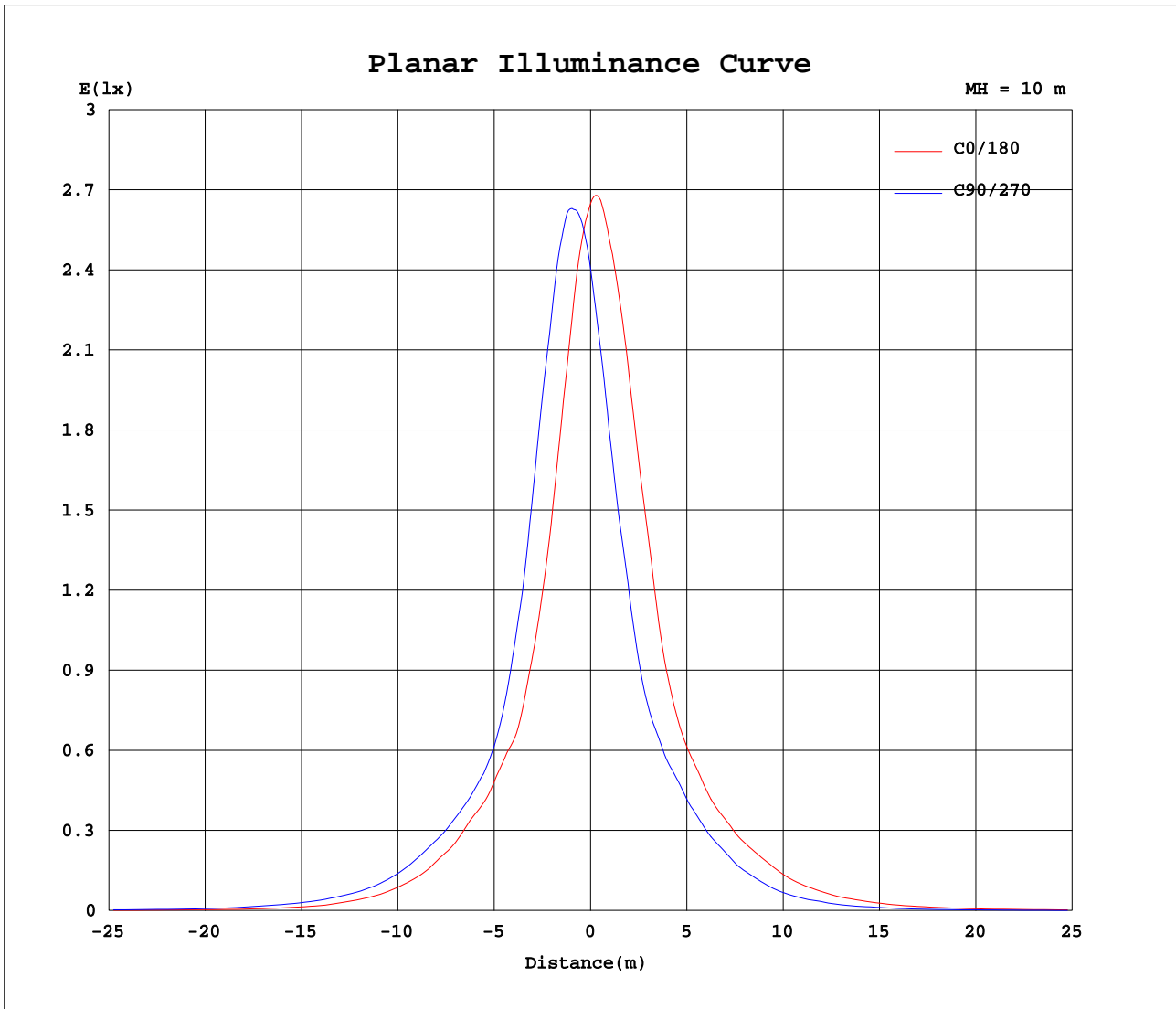
AvgL	cd/m2
L_0~180(65)av	132
L_0~180(75)av	69
L_0~180(85)av	73
L_90~270(65)av	142
L_90~270(75)av	72
L_90~270(85)av	77
L_45(65)av	132
L_45(75)av	74
L_45(85)av	72

Standard: GB/T 29293-2012

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

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:1.900m [K=1.3161]  
 Remarks:

Planar Illuminance Curve



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

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 1.900m [K=1.3161]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:3.8000V I:0.5480A P:2.0800W PF:0.0000 Freq:0Hz Lamp Flux:169.355x1 lm		
NAME: ASD-EXL-2RL-RW	TYPE:	WEIGHT:
SPEC.:4000K	DIM.:	SERIAL No.:s25050020a-01
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C( DEG) γ (DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	243	243	243	243	243	243	243	243	243	243	243	243	243	243	243	243	243	243	243
5	211	219	228	236	243	250	257	263	266	268	268	267	264	261	258	254	247	239	237
10	158	168	178	189	201	213	227	238	246	253	257	258	256	248	240	231	222	212	207
15	112	117	121	129	140	151	161	175	190	201	212	216	213	210	198	188	176	163	161
20	79.3	83.0	85.5	90.2	94.3	101	109	117	127	139	149	160	162	161	151	142	129	120	114
25	66.2	66.6	68.8	70.6	72.5	74.1	78.2	82.3	87.8	95.6	106	111	115	116	107	101	92.9	86.4	84.1
30	53.8	55.1	57.5	59.2	61.8	63.5	66.4	70.6	70.9	75.5	78.1	81.1	83.2	81.9	81.1	77.7	73.1	69.0	69.2
35	42.7	44.6	46.1	47.5	50.5	53.5	57.0	58.9	62.7	64.1	66.3	65.4	66.1	66.7	66.2	63.8	60.5	58.6	56.9
40	32.0	33.7	35.9	37.4	39.4	42.6	45.2	47.6	49.8	53.2	54.7	54.8	55.2	55.5	54.1	52.8	50.1	46.5	46.7
45	22.7	23.7	25.9	28.1	29.2	31.7	34.5	36.3	38.0	39.7	42.0	42.9	43.7	42.5	42.3	41.8	38.9	35.6	35.2
50	14.8	15.8	17.0	19.4	20.0	21.5	23.9	26.4	27.3	28.1	30.1	31.9	32.3	31.8	30.6	28.4	27.1	26.5	25.2
55	8.38	9.66	10.6	11.4	13.9	15.4	16.0	17.7	18.7	19.5	20.1	21.3	21.3	22.0	21.4	19.9	17.8	16.9	17.0
60	4.95	5.34	5.80	6.76	7.22	8.20	9.08	10.5	11.9	12.9	13.1	13.7	13.6	13.4	12.9	12.3	11.8	10.70	10.5
65	3.22	3.71	3.71	3.87	3.96	4.61	5.11	5.65	6.22	7.28	7.75	8.01	8.04	8.18	7.71	7.01	6.69	5.83	5.99
70	1.64	1.69	1.79	2.07	2.38	2.86	2.86	3.07	3.64	4.16	4.67	4.60	4.07	4.19	4.33	3.98	3.77	3.58	3.85
75	1.09	1.13	1.17	1.22	1.31	1.53	1.62	1.78	1.85	1.98	2.10	2.46	2.83	2.69	2.46	2.27	2.08	1.98	1.87
80	0.71	0.75	0.80	0.82	0.85	0.91	1.03	1.09	1.12	1.18	1.19	1.17	1.25	1.18	1.25	1.29	1.26	1.18	1.14
85	0.38	0.42	0.46	0.50	0.53	0.56	0.60	0.64	0.67	0.71	0.73	0.74	0.74	0.73	0.75	0.75	0.73	0.68	0.68
90	0.11	0.21	0.22	0.25	0.28	0.32	0.34	0.37	0.41	0.44	0.46	0.47	0.47	0.47	0.45	0.44	0.41	0.38	0.24
95	0.06	0.06	0.06	0.06	0.10	0.14	0.16	0.19	0.22	0.24	0.25	0.25	0.25	0.23	0.20	0.15	0.14	0.12	0.12
100	0.05	0.06	0.06	0.06	0.05	0.05	0.07	0.10	0.13	0.13	0.14	0.13	0.12	0.09	0.08	0.08	0.08	0.08	0.09
105	0.04	0.04	0.04	0.04	0.04	0.04	0.07	0.09	0.11	0.11	0.11	0.10	0.09	0.07	0.07	0.07	0.07	0.07	0.08
110	0.03	0.03	0.03	0.03	0.03	0.03	0.05	0.07	0.08	0.10	0.10	0.09	0.08	0.07	0.05	0.05	0.05	0.05	0.06
115	0.02	0.02	0.02	0.02	0.02	0.02	0.04	0.05	0.06	0.07	0.06	0.06	0.05	0.04	0.04	0.04	0.03	0.03	0.04
120	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.03
125	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02
130	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03
135	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.04
140	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.05
145	0.05	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.06
150	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.08
155	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.09
160	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.10
165	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.08	0.08	0.10
170	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.11
175	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10
180	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10

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

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:1.900m [K=1.3161]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:3.8000V I:0.5480A P:2.0800W PF:0.0000 Freq:0Hz Lamp Flux:169.355x1 lm		
NAME: ASD-EXL-2RL-RW	TYPE:	WEIGHT:
SPEC.:4000K	DIM.:	SERIAL No.:s25050020a-01
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C(DEG) γ (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	243	243	243	243	243	243	243	243	243	243	243	243	243	243	243	243	243		
5	230	223	217	212	207	202	197	193	191	191	192	193	194	195	198	202	208		
10	195	185	173	165	157	151	146	143	140	137	137	139	140	141	145	153	158		
15	146	135	125	116	111	106	102	99.8	96.9	97.6	97.5	97.3	100	100	104	108	111		
20	104	95.3	86.9	82.5	80.9	79.4	77.0	77.5	76.2	75.8	74.9	75.3	77.9	76.5	79.3	78.5	81.6		
25	78.9	73.0	69.8	67.9	67.7	66.1	65.6	63.1	63.5	62.0	63.0	62.3	62.7	63.2	62.7	64.9	63.8		
30	65.2	62.9	60.4	57.7	56.1	54.9	53.2	51.7	50.9	50.4	50.1	50.1	50.2	51.0	51.7	51.6	53.8		
35	54.3	52.1	49.7	47.0	44.4	42.7	41.2	40.1	40.0	39.2	38.1	38.3	39.9	40.3	41.0	40.7	42.0		
40	43.6	39.7	37.7	36.2	34.2	30.9	29.5	29.5	29.3	28.5	28.2	29.0	28.5	28.5	30.2	29.5	30.4		
45	32.9	30.5	28.1	25.3	22.7	21.4	20.9	20.5	19.2	18.4	18.7	19.1	19.8	19.2	19.8	21.1	22.7		
50	22.3	21.0	19.2	17.4	16.1	15.1	13.6	12.7	13.2	13.0	12.9	12.0	12.4	12.5	12.2	13.1	14.2		
55	16.2	13.9	13.1	11.3	9.78	8.59	8.07	8.17	7.91	7.46	7.42	7.40	7.35	7.43	7.47	7.63	8.17		
60	9.41	8.25	7.62	6.81	5.51	5.06	4.86	4.71	4.20	4.28	4.15	4.50	4.39	4.22	4.33	4.52	4.94		
65	5.61	5.66	5.00	4.09	3.33	2.99	2.78	2.70	2.64	2.51	2.42	2.27	2.42	2.55	2.62	2.69	2.92		
70	3.44	2.74	2.40	2.18	2.07	1.92	1.76	1.69	1.59	1.56	1.50	1.49	1.55	1.59	1.63	1.72	1.73		
75	1.61	1.48	1.42	1.34	1.25	1.17	1.11	1.09	1.09	1.07	1.06	1.02	1.03	1.07	1.08	1.12	1.12		
80	1.01	0.95	0.89	0.83	0.76	0.72	0.73	0.71	0.71	0.72	0.68	0.66	0.67	0.67	0.70	0.70	0.73		
85	0.61	0.55	0.49	0.44	0.42	0.40	0.39	0.39	0.40	0.39	0.38	0.37	0.36	0.35	0.36	0.36	0.38		
90	0.32	0.28	0.26	0.22	0.20	0.19	0.18	0.19	0.19	0.20	0.18	0.17	0.16	0.16	0.16	0.16	0.16		
95	0.10	0.11	0.14	0.13	0.13	0.13	0.12	0.15	0.12	0.13	0.13	0.13	0.12	0.12	0.12	0.11	0.07		
100	0.09	0.08	0.08	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.11	0.10	0.09	0.08	0.07	0.06	0.06		
105	0.07	0.06	0.06	0.06	0.06	0.07	0.08	0.12	0.08	0.09	0.07	0.07	0.07	0.06	0.05	0.05	0.04		
110	0.05	0.05	0.04	0.04	0.04	0.05	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.03	0.03	0.03		
115	0.03	0.03	0.04	0.03	0.03	0.04	0.04	0.05	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.03	0.03		
120	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.02		
125	0.02	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.02	0.02		
130	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.03	0.03		
135	0.04	0.04	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.06	0.06	0.06	0.05	0.05		
140	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.08	0.08	0.08	0.08	0.07	0.07		
145	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.09		
150	0.08	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.10	0.10		
155	0.09	0.09	0.10	0.10	0.11	0.11	0.11	0.11	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.10	0.10		
160	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.10		
165	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10		
170	0.11	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.10		
175	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		
180	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09		

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

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:1.900m [K=1.3161]  
 Remarks: