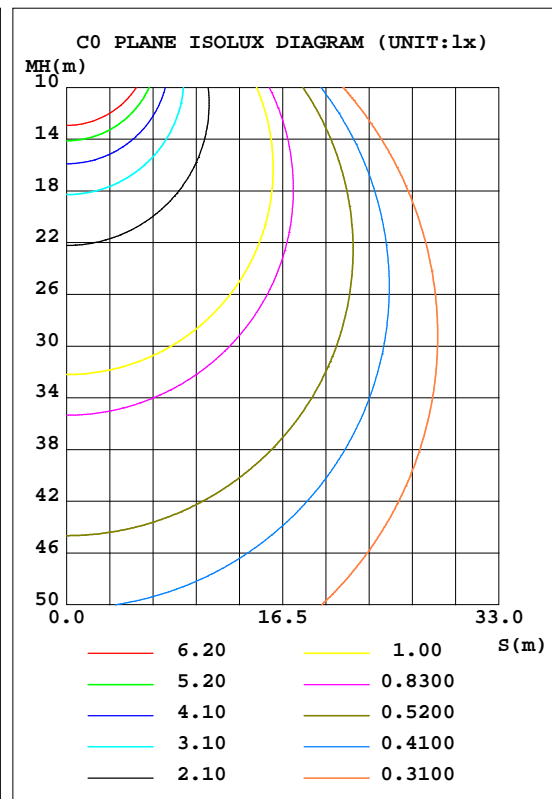
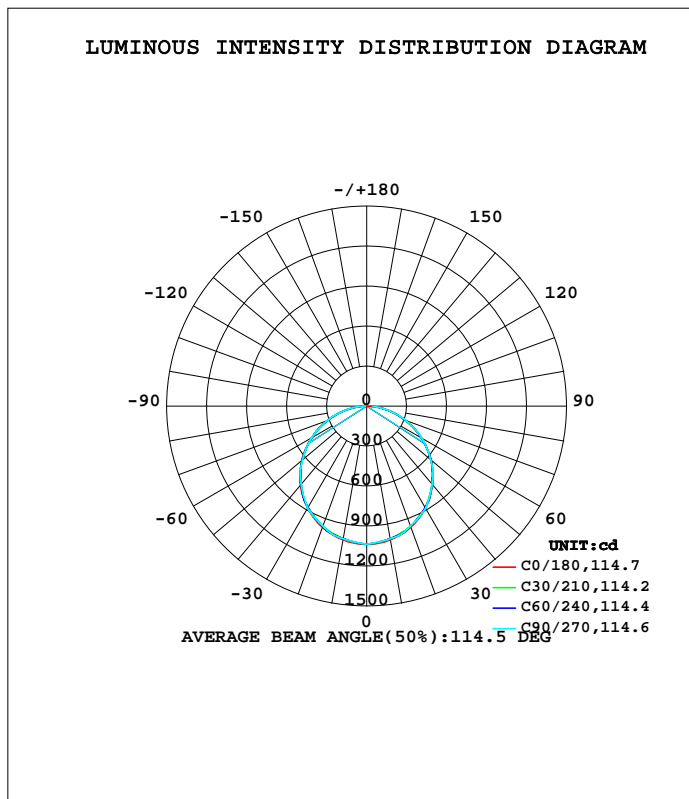


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.1V I:0.1824A P:21.83W PF:0.9963 Lamp Flux:2895.12x1 lm		
NAME: ASD Lighting corp	TYPE:LED PANEL	WEIGHT:
SPEC.:ASD-ELP01-22D2240-PRM	DIM.: 603x603mm	SERIAL No.:BLD20170428P22
MFR.: ASD Lighting corp	SUR.:0.55*0.55	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 132.62 lm/W			
MODEL		I <sub>max</sub> (cd)	1037	S/MH(C0/180)	1.27
NOMINAL POWER(W)	22W	LOR(%)	100.0	S/MH(C90/270)	1.26
RATED VOLTAGE(V)		TOTAL FLUX(lm)	2895.1	η UP, DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	2895.12	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,50.0
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)		η down(%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:24DEG  
 Operators:NEIKO  
 Test Date:2017-08-8

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:53%  
 Test Distance:12.218m [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
5	1032	1025	1024	1025	1032	1025	1024	1025	0- 5	24.63	24.63	0.81,0.81
10	1019	1010	1011	1010	1019	1010	1011	1010	5- 10	72.87	97.51	3.2,3.2
15	997.2	989.9	995.8	990.8	998.5	990.5	995.5	989.8	10- 15	118.9	216.4	7.1,7.1
20	966.9	965.3	960.4	966.6	969.0	966.1	960.1	965.1	15- 20	161.1	377.5	12.4,12.4
25	928.7	923.8	922.6	925.3	931.1	925.0	922.2	923.5	20- 25	197.7	575.2	18.9,18.9
30	882.7	875.4	884.7	877.5	885.7	877.1	884.3	875.0	25- 30	228.1	803.4	26.4,26.4
35	829.4	824.6	825.0	827.3	833.1	826.9	824.8	824.2	30- 35	251.3	1055	34.6,34.6
40	769.3	769.1	765.4	772.5	773.7	772.1	765.4	769.0	35- 40	265.7	1320	43.3,43.3
45	702.8	698.4	704.1	701.6	707.9	701.5	704.3	698.3	40- 45	271.8	1592	52.2,52.2
50	630.6	627.3	629.4	630.5	636.1	630.5	629.9	627.1	45- 50	269.2	1861	61.1,61.1
55	553.6	554.9	553.0	557.8	559.5	558.0	553.8	554.6	50- 55	257.3	2119	69.5,69.5
60	472.8	471.9	476.7	474.7	476.9	475.4	477.7	471.7	55- 60	237.4	2356	77.3,77.3
65	389.3	389.4	392.9	392.0	392.5	393.1	394.4	389.0	60- 65	210.3	2566	84.2,84.2
70	304.1	306.9	309.3	308.3	306.7	310.0	311.1	306.5	65- 70	176.8	2743	90,90
75	219.5	223.4	226.0	223.1	221.8	225.3	228.2	222.8	70- 75	138.7	2882	94.6,94.6
80	137.7	141.3	143.7	140.0	139.8	142.2	145.7	140.7	75- 80	97.31	2979	97.8,97.8
85	48.35	62.03	62.60	61.31	45.11	62.90	64.02	61.24	80- 85	54.22	3033	99.5,99.5
90	0.6752	3.750	7.649	3.818	1.236	3.994	7.927	2.971	85- 90	13.72	3047	100,100
95	0	0	0	0	0	0	0	0	90- 95	0.4943	3047	100,100
100	0	0	0	0	0	0	0	0	95-100	0	3047	100,100
105	0	0	0	0	0	0	0	0	100-105	0	3047	100,100
110	0	0	0	0	0	0	0	0	105-110	0	3047	100,100
115	0	0	0	0	0	0	0	0	110-115	0	3047	100,100
120	0	0	0	0	0	0	0	0	115-120	0	3047	100,100
125	0	0	0	0	0	0	0	0	120-125	0	3047	100,100
130	0	0	0	0	0	0	0	0	125-130	0	3047	100,100
135	0	0	0	0	0	0	0	0	130-135	0	3047	100,100
140	0	0	0	0	0	0	0	0	135-140	0	3047	100,100
145	0	0	0	0	0	0	0	0	140-145	0	3047	100,100
150	0	0	0	0	0	0	0	0	145-150	0	3047	100,100
155	0	0	0	0	0	0	0	0	150-155	0	3047	100,100
160	0	0	0	0	0	0	0	0	155-160	0	3047	100,100
165	0	0	0	0	0	0	0	0	160-165	0	3047	100,100
170	0	0	0	0	0	0	0	0	165-170	0	3047	100,100
175	0	0	0	0	0	0	0	0	170-175	0	3047	100,100
180	0	0	0	0	0	0	0	0	175-180	0	3047	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1511.3 lm

%lum = 52.2%  
%lamp = 52.2%

Conical surface Flux(120deg): 2237.9 lm

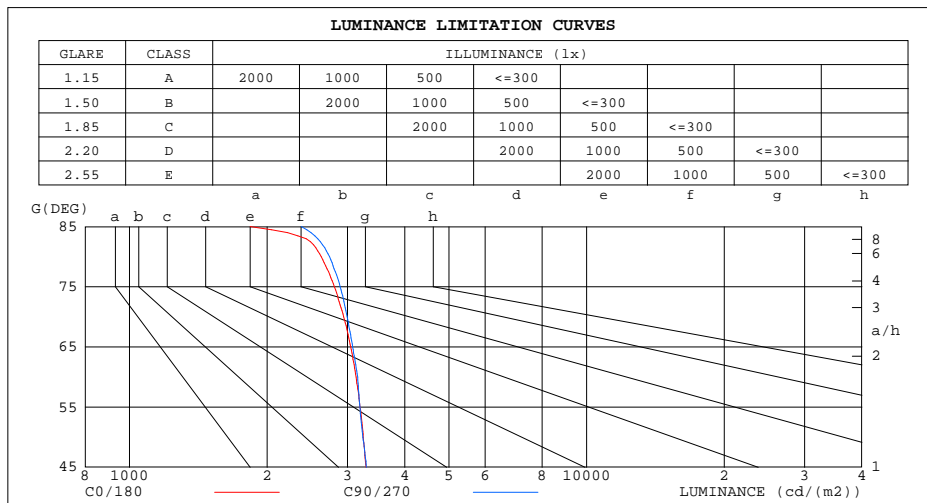
%lum = 77.3%  
%lamp = 77.3%

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:24DEG  
Operators:NEIKO  
Test Date:2017-08-08

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
Humidity:53%  
Test Distance:12.218m [K=1.0000]  
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.1V I:0.1824A P:21.83W PF:0.9963 Lamp Flux:2895.12x1 lm		
NAME: ASD Lighting corp	TYPE:LED PANEL	WEIGHT:
SPEC.:ASD-ELP01-22D2240-PRM	DIM.: 603x603mm	SERIAL No.:BLD20170428P22
MFR.: ASD Lighting corp	SUR.:0.55*0.55	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1837	2378
80	2627	2740
75	2808	2892
70	2944	2994
65	3050	3078
60	3131	3157
55	3196	3193
50	3248	3242
45	3291	3297

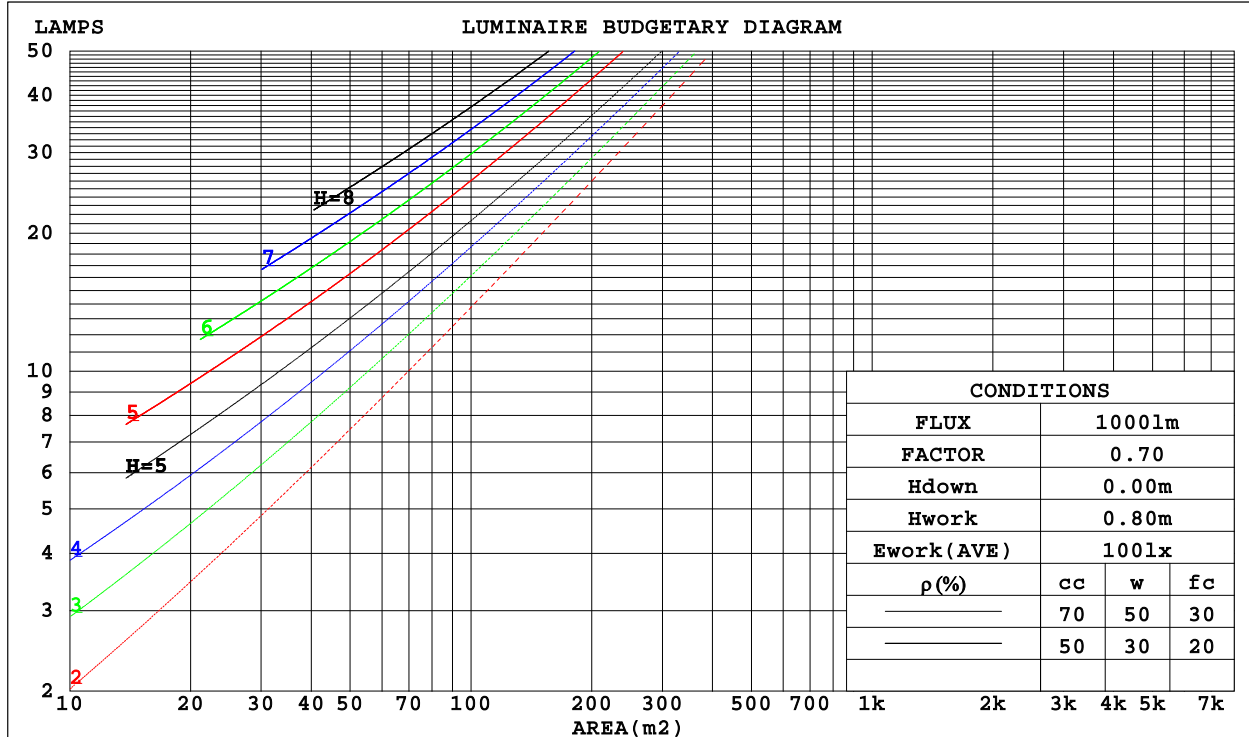
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:24DEG  
 Operators:NEIKO  
 Test Date:2017-08-08

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:53%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.1V I:0.1824A P:21.83W PF:0.9963 Lamp Flux:2895.12x1 lm		
NAME: ASD Lighting corp	TYPE:LED PANEL	WEIGHT:
SPEC.:ASD-ELP01-22D2240-PRM	DIM.: 603x603mm	SERIAL No.:BLD20170428P22
MFR.: ASD Lighting corp	SUR.:0.55*0.55	Shielding Angle:

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	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	.00
1.0	1.03	.99	.95	1.01	.97	.93	.97	.94	.90	.93	.90	.88	.89	.87	.85	.83
2.0	.90	.83	.77	.88	.81	.76	.84	.79	.74	.81	.76	.72	.78	.74	.71	.69
3.0	.79	.70	.64	.77	.69	.63	.74	.67	.62	.71	.66	.61	.69	.64	.60	.57
4.0	.69	.61	.54	.68	.60	.53	.66	.58	.53	.63	.57	.52	.61	.56	.51	.49
5.0	.62	.53	.46	.61	.52	.46	.59	.51	.45	.57	.50	.45	.55	.49	.44	.42
6.0	.56	.47	.40	.55	.46	.40	.53	.45	.40	.51	.44	.39	.50	.44	.39	.37
7.0	.50	.42	.35	.50	.41	.35	.48	.40	.35	.47	.40	.35	.45	.39	.34	.32
8.0	.46	.37	.31	.45	.37	.31	.44	.37	.31	.43	.36	.31	.42	.35	.31	.29
9.0	.42	.34	.28	.42	.34	.28	.40	.33	.28	.39	.33	.28	.38	.32	.28	.26
10.0	.39	.31	.26	.38	.31	.26	.37	.30	.25	.36	.30	.25	.36	.30	.25	.23



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:24DEG  
 Operators:NEIKO  
 Test Date:2017-08-08

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:53%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:120.1V I:0.1824A P:21.83W PF:0.9963 Lamp Flux:2895.12x1 lm		
NAME: ASD Lighting corp	TYPE:LED PANEL	WEIGHT:
SPEC.:ASD-ELP01-22D2240-PRM	DIM.: 603x603mm	SERIAL No.:BLD20170428P22
MFR.: ASD Lighting corp	SUR.:0.55*0.55	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.318	.181	.057	.311	.178	.056	.298	.171	.055	.286	.165	.053	.275	.159	.051	
2.0	.298	.163	.050	.292	.161	.050	.280	.156	.048	.269	.151	.047	.259	.147	.046	
3.0	.275	.146	.044	.269	.144	.043	.259	.140	.043	.249	.137	.042	.240	.133	.041	
4.0	.253	.131	.039	.248	.130	.038	.239	.127	.038	.230	.124	.037	.222	.121	.037	
5.0	.233	.119	.034	.229	.118	.034	.221	.115	.034	.213	.112	.033	.206	.110	.033	
6.0	.216	.108	.031	.212	.107	.031	.205	.105	.031	.198	.103	.030	.192	.101	.030	
7.0	.201	.099	.028	.197	.098	.028	.191	.096	.028	.185	.095	.028	.179	.093	.027	
8.0	.187	.092	.026	.184	.091	.026	.178	.089	.025	.173	.088	.025	.168	.086	.025	
9.0	.175	.085	.024	.173	.084	.024	.167	.083	.023	.162	.081	.023	.158	.080	.023	
10.0	.165	.079	.022	.162	.078	.022	.158	.077	.022	.153	.076	.022	.149	.075	.021	

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.191	.191	.191	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.181	.156	.134	.155	.134	.115	.106	.092	.080	.061	.053	.046	.020	.017	.015	
2.0	.173	.132	.097	.148	.114	.084	.102	.079	.059	.059	.046	.034	.019	.015	.011	
3.0	.166	.114	.074	.142	.099	.064	.097	.069	.045	.056	.040	.026	.018	.013	.009	
4.0	.158	.101	.058	.135	.087	.050	.093	.061	.035	.054	.036	.021	.017	.012	.007	
5.0	.150	.091	.047	.129	.079	.041	.089	.055	.029	.052	.032	.017	.017	.011	.006	
6.0	.143	.082	.039	.123	.071	.034	.085	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.136	.076	.033	.117	.066	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.130	.070	.029	.112	.061	.025	.077	.043	.018	.045	.025	.011	.015	.008	.003	
9.0	.124	.065	.025	.106	.056	.022	.074	.040	.016	.043	.023	.009	.014	.008	.003	
10.0	.118	.061	.022	.102	.053	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:24DEG  
 Operators:NEIKO  
 Test Date:2017-08-08

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:53%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:

## UGR(Unified Glare Rating) Table

Test:U:120.1V I:0.1824A P:21.83W PF:0.9963 Lamp Flux:2895.12x1 lm										
NAME: ASD Lighting corp					TYPE:LED PANEL			WEIGHT:		
SPEC.:ASD-ELP01-22D2240-PRM					DIM.: 603x603mm			SERIAL No.:BLD20170428P22		
MFR.: ASD Lighting corp					SUR.:0.55*0.55			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	16.9	18.4	17.2	18.6	18.8	16.9	18.5	17.2	18.7	18.9
3H	18.5	19.9	18.8	20.2	20.4	18.6	20.0	18.9	20.2	20.5
4H	19.2	20.5	19.5	20.8	21.0	19.3	20.6	19.6	20.9	21.1
6H	19.7	20.9	20.0	21.2	21.5	19.8	21.1	20.1	21.4	21.6
8H	19.8	21.0	20.1	21.3	21.6	20.0	21.2	20.3	21.5	21.8
12H	19.8	21.0	20.2	21.3	21.6	20.1	21.3	20.5	21.6	21.9
4H 2H	17.5	18.9	17.9	19.1	19.4	17.6	18.9	17.9	19.2	19.4
3H	19.3	20.5	19.7	20.8	21.1	19.4	20.6	19.8	20.9	21.2
4H	20.1	21.2	20.5	21.6	21.9	20.2	21.3	20.6	21.6	22.0
6H	20.8	21.7	21.2	22.1	22.5	20.9	21.9	21.3	22.2	22.6
8H	20.9	21.8	21.4	22.2	22.6	21.2	22.1	21.6	22.4	22.8
12H	21.0	21.9	21.5	22.2	22.7	21.3	22.2	21.8	22.5	22.9
8H 4H	20.5	21.4	20.9	21.7	22.1	20.5	21.4	21.0	21.8	22.2
6H	21.3	22.0	21.7	22.4	22.8	21.4	22.1	21.8	22.5	23.0
8H	21.5	22.2	22.0	22.6	23.1	21.7	22.4	22.2	22.8	23.3
12H	21.7	22.3	22.2	22.7	23.2	22.0	22.6	22.5	23.0	23.5
12H 4H	20.5	21.3	20.9	21.7	22.1	20.6	21.4	21.0	21.8	22.2
6H	21.3	22.0	21.8	22.4	22.9	21.5	22.1	21.9	22.6	23.0
8H	21.7	22.2	22.1	22.7	23.2	21.8	22.4	22.3	22.9	23.3
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.1 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.2					+ 0.1 / - 0.3				

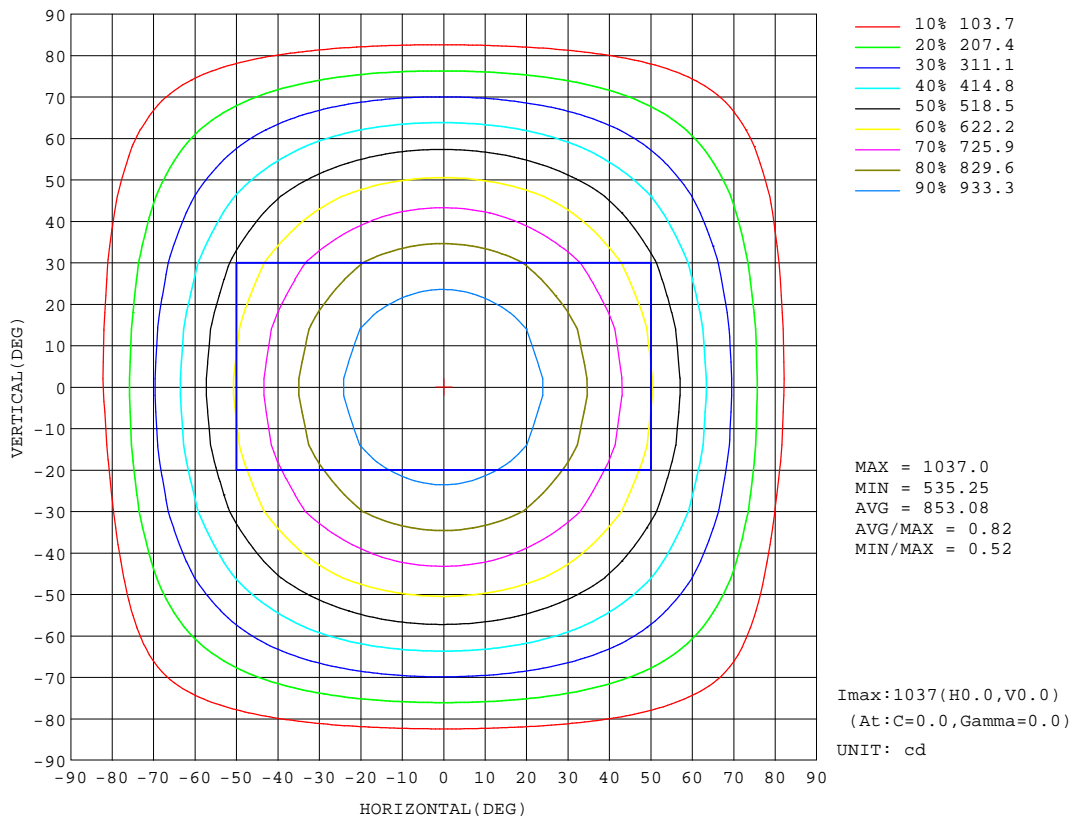
CIE Pub.117 Corrected 2895 lm Total Lamp Luminous Flux.(8log(F/F0) = 3.9)

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:24DEG  
Operators:NEIKO  
Test Date:2017-08-08

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
Humidity:53%  
Test Distance:12.218m [K=1.0000]  
Remarks:

ISOCANDELA DIAGRAM

Test:U:120.1V I:0.1824A P:21.83W PF:0.9963 Lamp Flux:2895.12x1 lm		
NAME: ASD Lighting corp	TYPE:LED PANEL	WEIGHT:
SPEC.:ASD-ELP01-22D2240-PRM	DIM.: 603x603mm	SERIAL No.:BLD20170428P22
MFR.: ASD Lighting corp	SUR.:0.55*0.55	Shielding Angle:



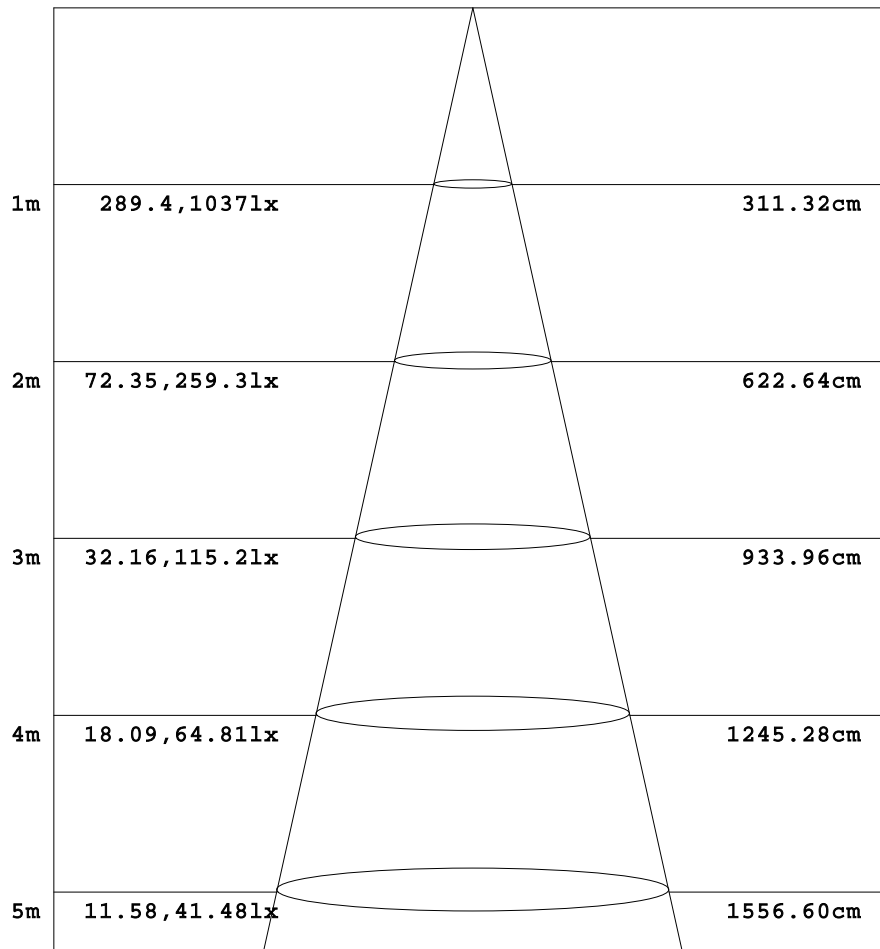
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:24DEG  
 Operators:NEIKO  
 Test Date:2017-08-08

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:53%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:

AAI Figure

Test:U:120.1V I:0.1824A P:21.83W PF:0.9963 Lamp Flux:2895.12x1 lm		
NAME: ASD Lighting corp	TYPE:LED PANEL	WEIGHT:
SPEC.:ASD-ELP01-22D2240-PRM	DIM.: 603x603mm	SERIAL No.:BLD20170428P22
MFR.: ASD Lighting corp	SUR.:0.55*0.55	Shielding Angle:

Flux out:2240 lm



Height                      Eavg, Emax                      Angle:114.56deg                      Diameter

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

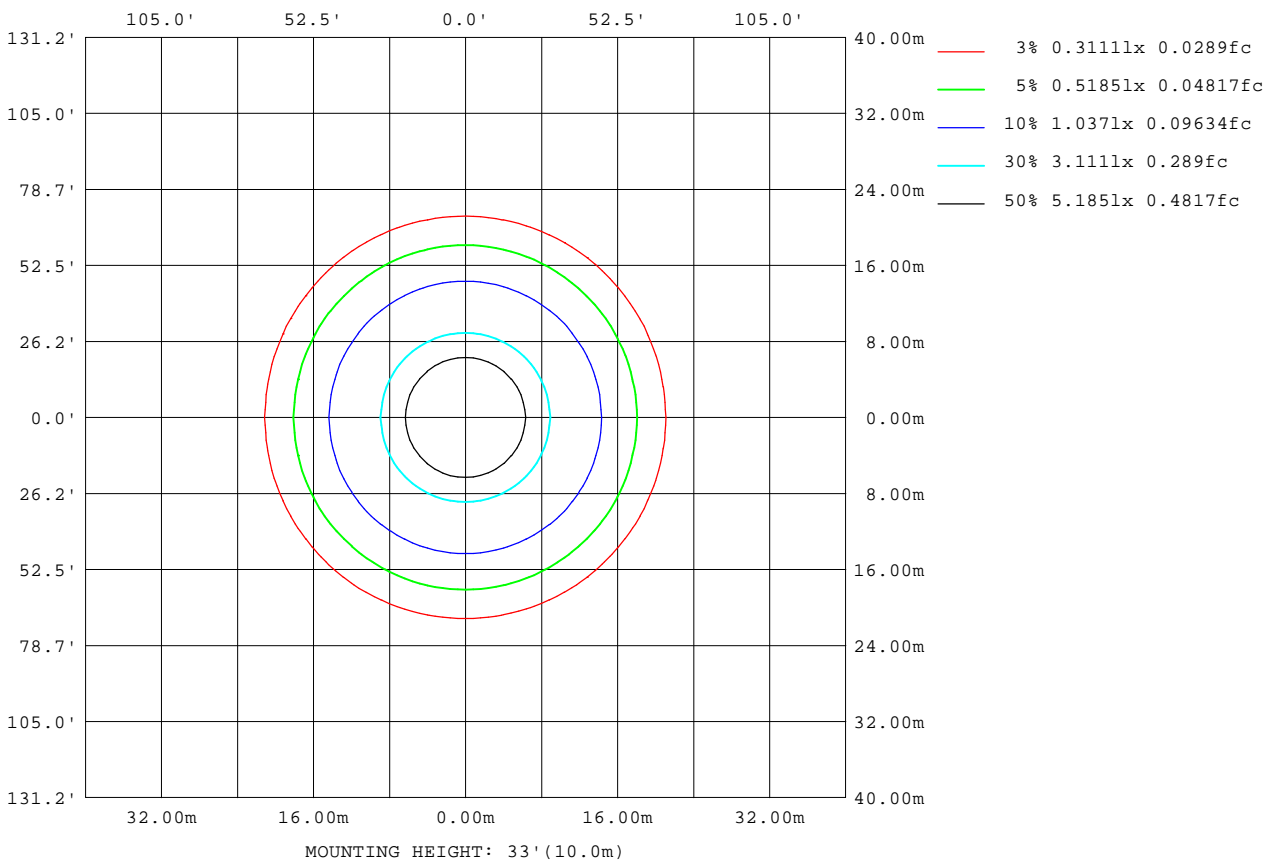
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:24DEG  
 Operators:NEIKO  
 Test Date:2017-08-08

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:53%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:



ISOLUX DIAGRAM

Test:U:120.1V I:0.1824A P:21.83W PF:0.9963 Lamp Flux:2895.12x1 lm		
NAME: ASD Lighting corp	TYPE:LED PANEL	WEIGHT:
SPEC.:ASD-ELP01-22D2240-PRM	DIM.: 603x603mm	SERIAL No.:BLD20170428P22
MFR.: ASD Lighting corp	SUR.:0.55*0.55	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:24DEG  
 Operators:NEIKO  
 Test Date:2017-08-08

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:53%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:

## LED Avg.L Report

Test:U:120.1V I:0.1824A P:21.83W PF:0.9963 Lamp Flux:2895.12x1 lm		
NAME: ASD Lighting corp	TYPE:LED PANEL	WEIGHT:
SPEC.:ASD-ELP01-22D2240-PRM	DIM.: 603x603mm	SERIAL No.:BLD20170428P22
MFR.: ASD Lighting corp	SUR.:0.55*0.55	Shielding Angle:

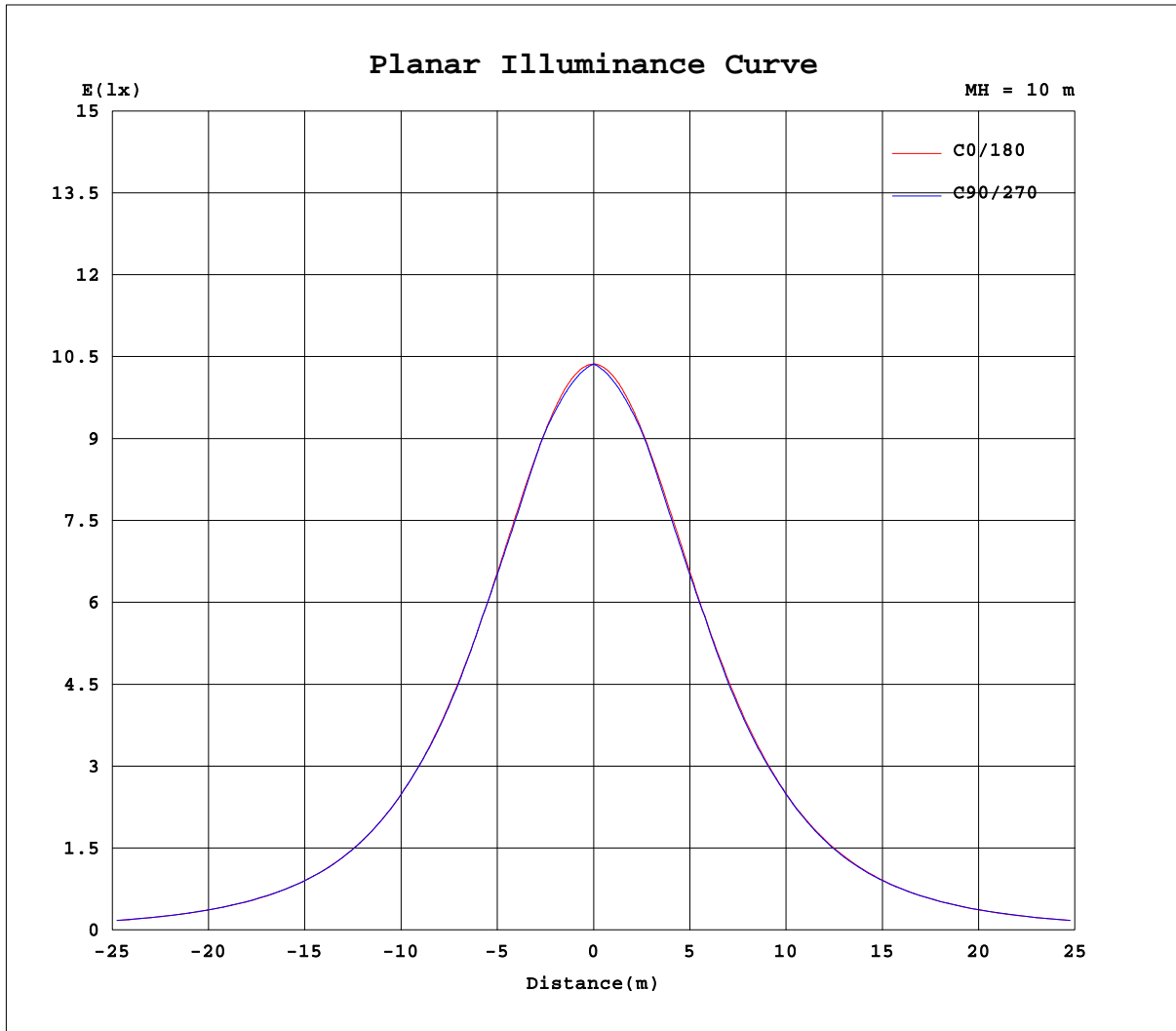
AvgL	cd/m2
L_0~180(65)av	3063
L_0~180(75)av	2823
L_0~180(85)av	1775
L_90~270(65)av	3084
L_90~270(75)av	2905
L_90~270(85)av	2405
L_45(65)av	3062
L_45(75)av	2862
L_45(85)av	2351

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:24DEG  
Operators:NEIKO  
Test Date:2017-08-08

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
Humidity:53%  
Test Distance:12.218m [K=1.0000]  
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature: 24DEG  
 Operators: NEIKO  
 Test Date: 2017-08-08

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity: 53%  
 Test Distance: 12.218m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.1V I:0.1824A P:21.83W PF:0.9963 Lamp Flux:2895.12x1 lm		
NAME: ASD Lighting corp	TYPE:LED PANEL	WEIGHT:
SPEC.:ASD-ELP01-22D2240-PRM	DIM.: 603x603mm	SERIAL No.:BLD20170428P22
MFR.: ASD Lighting corp	SUR.:0.55*0.55	Shielding Angle:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037
5	1032	1031	1030	1029	1028	1028	1027	1026	1026	1025	1025	1025	1025	1024	1024	1024	1024	1024	1024
10	1019	1017	1015	1014	1012	1011	1011	1010	1010	1010	1010	1010	1010	1010	1011	1011	1011	1011	1011
15	997	994	992	990	989	988	988	988	989	990	991	992	994	995	996	996	996	996	996
20	967	963	960	959	958	958	960	961	964	965	965	964	963	962	961	961	961	961	960
25	929	924	921	920	921	923	926	927	926	924	922	921	921	921	921	922	922	922	923
30	883	878	875	875	877	881	881	878	876	875	876	877	878	879	881	882	884	884	885
35	829	824	822	823	827	827	824	823	823	825	827	830	829	827	826	825	825	825	825
40	769	764	762	765	768	764	763	764	767	769	766	765	764	764	764	764	765	765	765
45	703	697	697	702	698	697	699	703	700	698	698	698	699	701	702	704	704	704	704
50	631	625	627	629	626	627	630	627	627	627	629	631	632	631	630	629	629	629	629
55	554	549	553	550	550	553	550	550	552	555	554	553	552	552	552	552	553	553	553
60	473	469	472	469	473	470	471	473	472	472	472	472	473	473	474	475	476	476	477
65	389	387	387	389	387	388	390	388	389	389	391	392	392	392	392	392	393	393	393
70	304	304	302	303	304	304	304	305	307	307	307	308	308	308	308	309	309	309	309
75	219	219	219	221	220	221	222	222	223	223	224	224	225	225	226	226	226	226	226
80	138	130	128	134	138	140	140	140	141	141	142	142	143	143	143	143	143	144	144
85	48.4	40.1	46.0	54.7	58.9	60.8	61.7	62.1	62.1	62.0	61.8	61.4	61.4	61.4	61.4	61.6	62.0	62.5	62.6
90	0.68	1.44	1.42	1.39	1.39	1.93	2.47	3.05	3.41	3.75	4.12	4.38	4.91	5.38	5.88	6.44	7.02	7.48	7.65
95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:24DEG  
 Operators:NEIKO  
 Test Date:2017-08-08

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:53%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.1V I:0.1824A P:21.83W PF:0.9963 Lamp Flux:2895.12x1 lm		
NAME: ASD Lighting corp	TYPE:LED PANEL	WEIGHT:
SPEC.:ASD-ELP01-22D2240-PRM	DIM.: 603x603mm	SERIAL No.:BLD20170428P22
MFR.: ASD Lighting corp	SUR.:0.55*0.55	Shielding Angle:

Table--2

UNIT: cd

C(DEG) γ (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037
5	1024	1024	1024	1024	1025	1025	1025	1025	1025	1026	1026	1027	1028	1028	1029	1030	1031	1032	1031
10	1011	1011	1011	1011	1011	1010	1010	1010	1010	1010	1011	1011	1012	1013	1014	1015	1017	1019	1017
15	996	996	996	996	995	994	993	992	991	990	989	989	989	990	991	993	995	999	995
20	961	961	961	962	963	964	966	967	967	965	963	961	960	960	961	962	965	969	965
25	923	923	922	922	922	922	923	924	925	928	929	927	924	923	922	924	927	931	926
30	885	884	883	882	881	880	878	878	877	878	880	883	883	879	877	878	881	886	880
35	825	826	826	827	829	831	833	830	827	826	825	827	830	830	826	825	827	833	827
40	766	766	766	766	766	766	767	769	773	771	767	766	767	771	769	766	768	774	768
45	704	704	705	704	702	701	701	701	702	704	708	703	701	702	706	701	702	708	702
50	630	630	631	631	632	634	634	632	630	630	631	635	632	630	633	632	630	636	630
55	553	553	553	553	554	554	555	556	558	556	554	555	559	555	554	557	554	559	553
60	477	477	476	476	475	475	475	474	475	476	477	474	473	477	473	475	472	477	472
65	393	393	393	394	394	394	395	393	392	391	391	392	391	390	392	389	389	393	389
70	309	309	310	310	310	309	309	309	308	308	307	305	306	306	305	305	306	307	305
75	226	226	226	226	226	225	224	224	223	223	222	222	222	220	221	220	220	222	220
80	144	143	143	143	143	142	140	140	140	140	140	139	139	138	133	126	126	140	139
85	62.2	61.7	61.4	61.1	61.2	61.3	61.2	61.2	61.3	61.5	61.8	61.8	61.4	59.7	54.7	46.3	37.7	45.1	54.6
90	7.29	6.81	6.24	5.73	5.43	5.17	4.77	4.34	3.82	3.43	3.20	2.71	1.95	1.42	1.41	1.40	1.38	1.24	0.83
95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:24DEG  
 Operators:NEIKO  
 Test Date:2017-08-08

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:53%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.1V I:0.1824A P:21.83W PF:0.9963 Lamp Flux:2895.12x1 lm		
NAME: ASD Lighting corp	TYPE:LED PANEL	WEIGHT:
SPEC.:ASD-ELP01-22D2240-PRM	DIM.: 603x603mm	SERIAL No.:BLD20170428P22
MFR.: ASD Lighting corp	SUR.:0.55*0.55	Shielding Angle:

Table--3

UNIT: cd

C(DEG) γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037
5	1030	1029	1028	1028	1027	1026	1026	1025	1025	1025	1024	1024	1024	1024	1024	1024	1024	1024	1024
10	1015	1014	1013	1012	1011	1011	1010	1010	1010	1010	1010	1010	1010	1011	1011	1011	1011	1011	1011
15	993	991	990	989	989	989	990	990	992	993	994	995	996	996	996	996	996	995	995
20	962	960	960	960	961	962	965	966	966	965	964	962	961	961	961	960	960	960	960
25	924	922	923	924	927	928	927	925	923	922	922	922	922	922	922	922	922	922	922
30	878	877	879	883	883	880	878	877	877	878	879	880	882	883	884	884	884	884	883
35	825	826	830	830	826	825	825	827	829	832	830	828	827	826	826	825	825	825	825
40	766	769	771	767	766	767	770	772	769	767	766	766	765	765	765	766	765	765	765
45	701	705	702	701	703	707	704	701	701	701	701	702	704	705	704	704	704	704	704
50	631	633	630	632	635	631	630	631	632	634	634	633	632	631	630	630	630	630	630
55	557	554	555	558	555	555	556	558	557	556	555	554	554	554	554	554	554	553	553
60	475	473	477	474	475	477	476	475	475	476	476	477	477	478	478	478	478	477	476
65	389	392	390	391	393	392	392	393	395	396	396	396	395	395	395	395	394	394	393
70	305	305	306	306	307	308	310	310	311	311	312	312	312	312	312	311	311	311	310
75	221	221	221	223	224	224	224	225	226	227	228	228	229	229	229	228	228	228	228
80	139	139	140	140	141	141	142	142	143	143	144	145	146	146	146	146	146	145	145
85	54.3	56.4	60.6	62.1	62.6	62.8	62.7	62.9	62.9	62.8	63.0	63.0	63.1	63.2	63.6	63.9	64.0	63.8	63.2
90	0.83	0.83	0.83	1.06	2.14	2.81	3.23	3.99	4.54	5.03	5.47	5.81	6.19	6.67	7.31	7.75	7.93	7.73	7.21
95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:24DEG  
 Operators:NEIKO  
 Test Date:2017-08-08

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:53%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.1V I:0.1824A P:21.83W PF:0.9963 Lamp Flux:2895.12x1 lm		
NAME: ASD Lighting corp	TYPE:LED PANEL	WEIGHT:
SPEC.:ASD-ELP01-22D2240-PRM	DIM.: 603x603mm	SERIAL No.:BLD20170428P22
MFR.: ASD Lighting corp	SUR.:0.55*0.55	Shielding Angle:

Table--4

UNIT: cd

C(DEG) γ (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037				
5	1024	1024	1024	1024	1025	1025	1025	1026	1026	1027	1028	1028	1029	1030	1031				
10	1011	1010	1010	1010	1010	1010	1010	1010	1010	1011	1011	1012	1014	1015	1017				
15	995	995	995	993	992	991	990	989	988	988	988	989	990	992	994				
20	960	961	962	963	964	965	965	963	961	959	958	958	959	960	963				
25	921	921	921	921	921	922	924	926	927	925	922	920	920	921	924				
30	882	881	879	878	876	875	875	875	877	881	880	876	874	875	878				
35	825	826	827	828	830	827	824	822	822	824	827	827	823	822	824				
40	764	764	764	764	765	766	769	767	764	762	764	768	765	762	764				
45	704	702	701	699	698	698	698	700	703	698	697	698	701	697	697				
50	630	630	631	632	631	629	627	626	627	630	627	625	628	627	625				
55	553	552	552	552	552	554	555	552	550	550	553	550	549	552	548				
60	476	475	473	473	472	471	472	472	473	470	469	472	468	471	468				
65	393	393	392	392	392	391	389	388	388	389	388	386	388	386	386				
70	310	309	309	308	308	307	306	306	304	303	303	304	302	302	303				
75	227	227	226	225	224	224	223	222	221	221	220	219	220	218	219				
80	145	144	144	143	142	141	141	140	140	139	139	138	137	138	137				
85	62.6	62.3	62.1	61.8	61.5	61.4	61.2	61.2	61.2	61.0	60.6	58.9	54.4	52.2	53.0				
90	6.57	5.99	5.45	4.87	4.25	3.63	2.97	2.43	1.78	0.92	0.84	0.83	0.83	0.83	0.83				
95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
125	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
135	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
145	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
155	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:24DEG  
 Operators:NEIKO  
 Test Date:2017-08-08

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:53%  
 Test Distance:12.218m [K=1.0000]  
 Remarks: