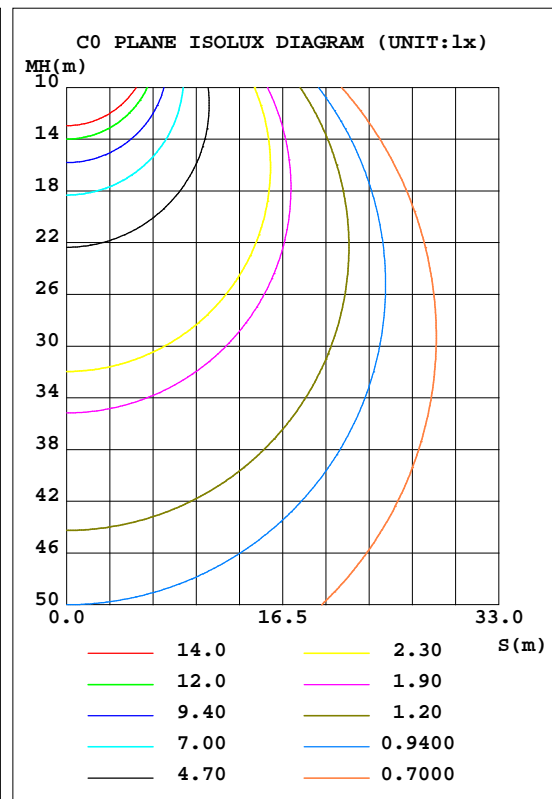
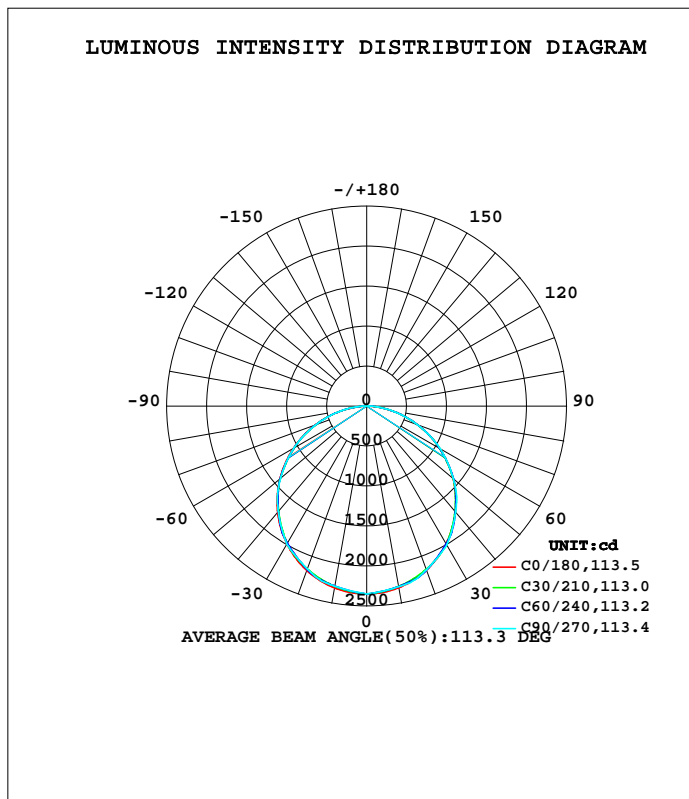


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.5000A P:60W PF:0.9899 Lamp Flux:6900x1 lm		
NAME: ASD-ELP02-24D6040-STD	TYPE:LED PANEL	WEIGHT:
SPEC.:	DIM.: 2x4	SERIAL No.:BLD20181210N21
MFR.: ASD Lighting corp	SUR.:0.56*1.17	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 115 lm/W			
MODEL	ASD-ELP02-24D6040-STD	I <sub>max</sub> (cd)	2350	S/MH(C0/180)	1.26
NOMINAL POWER(W)	60	LOR(%)	100.0	S/MH(C90/270)	1.26
RATED VOLTAGE(V)		TOTAL FLUX(lm)	6900	η UP, DN(C0-180)	0.0,50.1
NOMINAL FLUX(lm)	6900	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,49.9
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:26DEG  
 Operators:NEIKO  
 Test Date:2018-12-10

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:56%  
 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	2339	2325	2322	2325	2340	2323	2319	2322	0- 5	55.82	55.82	0.82,0.82
10	2307	2289	2295	2291	2310	2286	2287	2284	5- 10	165.1	220.9	3.25,3.25
15	2255	2245	2261	2246	2259	2239	2250	2237	10- 15	269.2	490.1	7.21,7.21
20	2184	2189	2180	2191	2189	2181	2169	2178	15- 20	364.6	854.7	12.6,12.6
25	2095	2092	2094	2095	2101	2085	2082	2082	20- 25	447.0	1302	19.1,19.1
30	1988	1980	2007	1984	1995	1974	1995	1970	25- 30	515.1	1817	26.7,26.7
35	1864	1863	1869	1867	1872	1857	1858	1852	30- 35	566.6	2383	35.1,35.1
40	1726	1735	1732	1740	1734	1731	1721	1724	35- 40	598.0	2981	43.9,43.9
45	1574	1572	1590	1576	1583	1568	1579	1561	40- 45	610.3	3592	52.8,52.8
50	1410	1408	1416	1412	1418	1403	1407	1398	45- 50	602.9	4195	61.7,61.7
55	1235	1241	1238	1244	1244	1236	1231	1231	50- 55	574.3	4769	70.2,70.2
60	1051	1050	1060	1054	1060	1047	1054	1041	55- 60	527.7	5297	77.9,77.9
65	862.2	861.1	865.3	865.6	870.4	859.6	861.1	853.3	60- 65	464.8	5761	84.8,84.8
70	670.2	672.2	670.8	676.1	678.1	671.6	668.8	665.1	65- 70	387.3	6149	90.4,90.4
75	481.2	482.4	478.5	484.2	487.0	481.1	479.7	476.3	70- 75	299.6	6448	94.9,94.9
80	290.1	299.5	298.2	299.7	285.7	298.6	297.7	295.0	75- 80	205.4	6654	97.9,97.9
85	99.47	137.8	136.1	136.2	95.07	129.4	126.6	127.1	80- 85	112.7	6766	99.5,99.5
90	1.554	15.67	20.94	14.37	3.800	7.051	12.92	6.288	85- 90	30.30	6797	100,100
95	0	0	0	0	0	0	0	0	90- 95	1.253	6798	100,100
100	0	0	0	0	0	0	0	0	95-100	0	6798	100,100
105	0	0	0	0	0	0	0	0	100-105	0	6798	100,100
110	0	0	0	0	0	0	0	0	105-110	0	6798	100,100
115	0	0	0	0	0	0	0	0	110-115	0	6798	100,100
120	0	0	0	0	0	0	0	0	115-120	0	6798	100,100
125	0	0	0	0	0	0	0	0	120-125	0	6798	100,100
130	0	0	0	0	0	0	0	0	125-130	0	6798	100,100
135	0	0	0	0	0	0	0	0	130-135	0	6798	100,100
140	0	0	0	0	0	0	0	0	135-140	0	6798	100,100
145	0	0	0	0	0	0	0	0	140-145	0	6798	100,100
150	0	0	0	0	0	0	0	0	145-150	0	6798	100,100
155	0	0	0	0	0	0	0	0	150-155	0	6798	100,100
160	0	0	0	0	0	0	0	0	155-160	0	6798	100,100
165	0	0	0	0	0	0	0	0	160-165	0	6798	100,100
170	0	0	0	0	0	0	0	0	165-170	0	6798	100,100
175	0	0	0	0	0	0	0	0	170-175	0	6798	100,100
180	0	0	0	0	0	0	0	0	175-180	0	6798	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 3591.7 lm

%lum = 52.8%  
%lamp = 52.8%

Conical surface Flux(120deg): 5296.6 lm

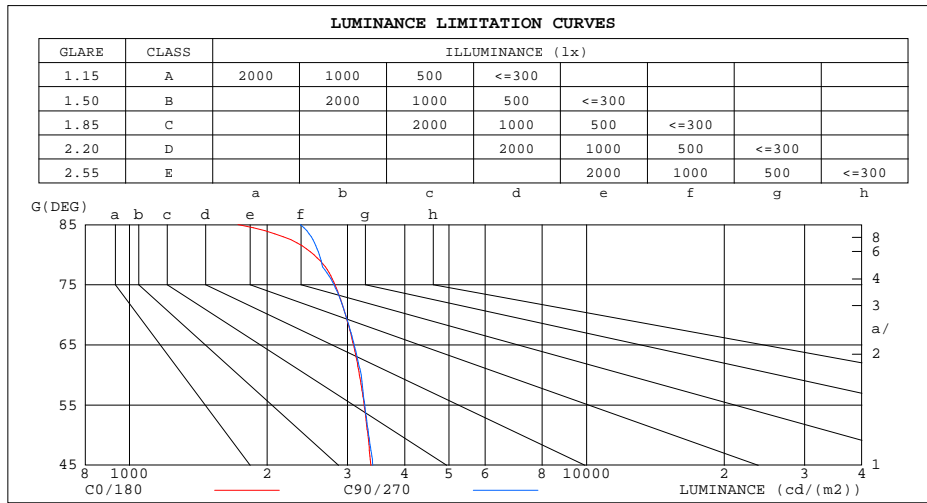
%lum = 77.9%  
%lamp = 77.9%

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:26DEG  
Operators:NEIKO  
Test Date:2018-12-10

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
Humidity:56%  
Test Distance:12.218m [K=1.0000]  
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.0V I:0.5000A P:60W PF:0.9899 Lamp Flux:6900x1 lm		
NAME: ASD-ELP02-24D6040-STD	TYPE:LED PANEL	WEIGHT:
SPEC.:	DIM.: 2x4	SERIAL No.:BLD20181210N21
MFR.: ASD Lighting corp	SUR.:0.56*1.17	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1729	2366
80	2531	2602
75	2817	2801
70	2969	2972
65	3091	3102
60	3186	3213
55	3262	3271
50	3323	3338
45	3373	3407

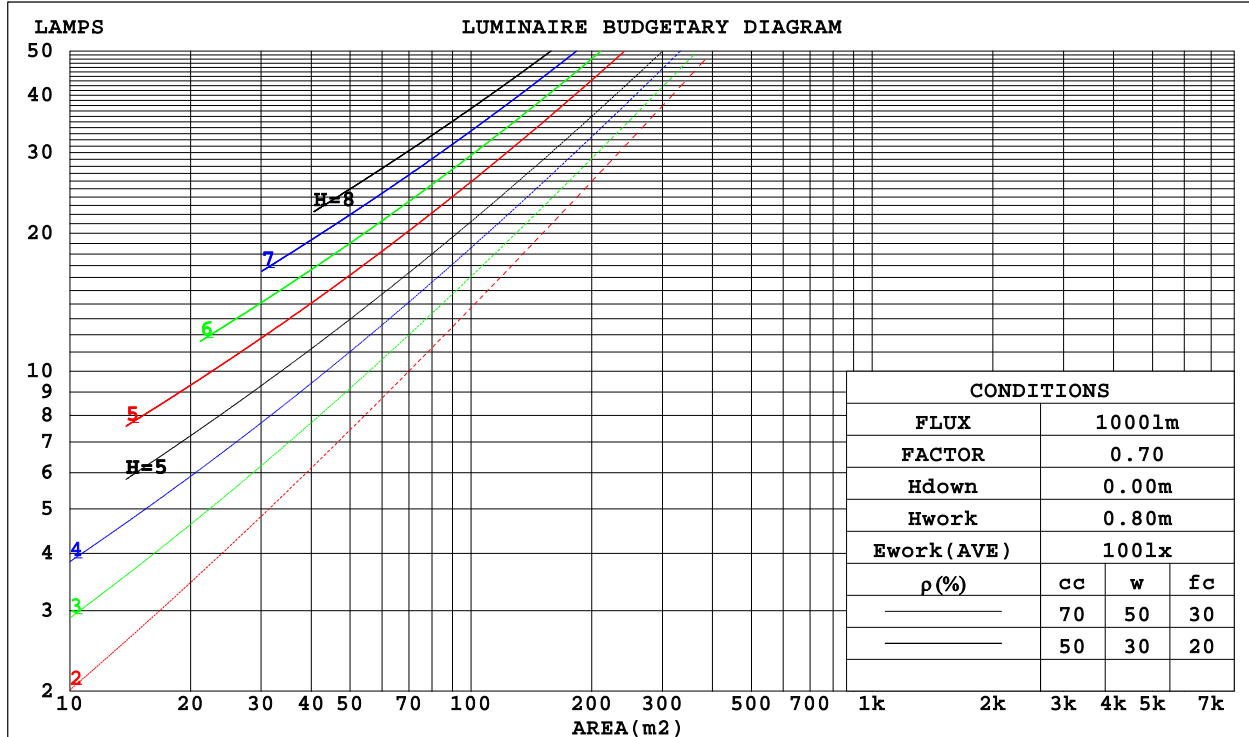
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:26DEG  
 Operators:NEIKO  
 Test Date:2018-12-10

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:56%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.0V I:0.5000A P:60W PF:0.9899 Lamp Flux:6900x1 lm		
NAME: ASD-ELP02-24D6040-STD	TYPE:LED PANEL	WEIGHT:
SPEC.:	DIM.: 2x4	SERIAL No.:BLD20181210N21
MFR.: ASD Lighting corp	SUR.:0.56*1.17	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	1.04	.99	.95	1.01	.97	.94	.97	.94	.91	.93	.90	.88	.89	.87	.85	.83
2.0	.90	.83	.77	.88	.82	.76	.85	.79	.75	.81	.77	.73	.78	.74	.71	.69
3.0	.79	.71	.64	.77	.70	.63	.74	.68	.62	.72	.66	.61	.69	.64	.60	.58
4.0	.70	.61	.54	.68	.60	.54	.66	.59	.53	.64	.57	.52	.61	.56	.51	.49
5.0	.62	.53	.46	.61	.53	.46	.59	.51	.46	.57	.50	.45	.55	.49	.45	.42
6.0	.56	.47	.40	.55	.47	.40	.53	.46	.40	.52	.45	.40	.50	.44	.39	.37
7.0	.51	.42	.36	.50	.42	.36	.48	.41	.35	.47	.40	.35	.46	.39	.35	.33
8.0	.46	.38	.32	.46	.37	.32	.44	.37	.31	.43	.36	.31	.42	.36	.31	.29
9.0	.42	.34	.29	.42	.34	.28	.41	.33	.28	.40	.33	.28	.39	.32	.28	.26
10.0	.39	.31	.26	.39	.31	.26	.38	.31	.26	.37	.30	.26	.36	.30	.25	.24



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:26DEG  
 Operators:NEIKO  
 Test Date:2018-12-10

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:56%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:120.0V I:0.5000A P:60W PF:0.9899 Lamp Flux:6900x1 lm		
NAME: ASD-ELP02-24D6040-STD	TYPE:LED PANEL	WEIGHT:
SPEC.:	DIM.: 2x4	SERIAL No.:BLD20181210N21
MFR.: ASD Lighting corp	SUR.:0.56*1.17	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	.315	.179	.057	.308	.176	.056	.295	.169	.054	.282	.163	.052	.271	.157	.051	
2.0	.295	.162	.050	.289	.159	.049	.277	.154	.048	.267	.150	.047	.257	.145	.046	
3.0	.273	.145	.043	.267	.143	.043	.257	.139	.042	.247	.135	.042	.238	.132	.041	
4.0	.251	.131	.038	.246	.129	.038	.237	.126	.038	.229	.123	.037	.221	.120	.037	
5.0	.232	.118	.034	.228	.117	.034	.220	.114	.034	.212	.112	.033	.205	.109	.033	
6.0	.215	.108	.031	.211	.107	.031	.204	.104	.030	.197	.102	.030	.191	.100	.030	
7.0	.200	.099	.028	.197	.098	.028	.190	.096	.028	.184	.094	.027	.178	.093	.027	
8.0	.187	.091	.026	.184	.090	.026	.178	.089	.025	.172	.087	.025	.167	.086	.025	
9.0	.175	.085	.024	.172	.084	.024	.167	.082	.023	.162	.081	.023	.157	.080	.023	
10.0	.164	.079	.022	.162	.078	.022	.157	.077	.022	.153	.076	.022	.148	.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	.098	.148	.114	.084	.101	.079	.059	.059	.046	.035	.019	.015	.011	
3.0	.165	.114	.074	.142	.099	.064	.097	.069	.045	.056	.040	.027	.018	.013	.009	
4.0	.158	.101	.058	.135	.087	.051	.093	.061	.036	.054	.036	.021	.017	.012	.007	
5.0	.150	.091	.047	.129	.079	.041	.089	.055	.029	.051	.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	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.129	.070	.029	.111	.061	.025	.077	.042	.018	.045	.025	.011	.015	.008	.004	
9.0	.123	.065	.025	.106	.056	.022	.074	.040	.016	.043	.023	.009	.014	.008	.003	
10.0	.118	.061	.022	.101	.053	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:26DEG  
 Operators:NEIKO  
 Test Date:2018-12-10

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:56%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.0V I:0.5000A P:60W PF:0.9899 Lamp Flux:6900x1 lm										
NAME: ASD-ELP02-24D6040-STD					TYPE:LED PANEL			WEIGHT:		
SPEC.:					DIM.: 2x4			SERIAL No.:BLD20181210N21		
MFR.: ASD Lighting corp					SUR.:0.56*1.17			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	17.0	18.5	17.2	18.7	18.9	17.0	18.6	17.3	18.8	19.0
3H 4H 6H 8H 12H	18.6	20.0	18.9	20.2	20.4	18.6	20.0	18.9	20.2	20.5
	19.2	20.5	19.5	20.8	21.0	19.2	20.6	19.5	20.8	21.1
4H 2H	19.6	20.9	19.9	21.2	21.4	19.7	21.0	20.0	21.3	21.5
3H 4H 6H 8H	19.7	21.0	20.1	21.2	21.5	19.9	21.1	20.2	21.4	21.7
12H	19.8	21.0	20.1	21.2	21.6	20.0	21.2	20.3	21.5	21.8
8H 4H	17.6	19.0	17.9	19.2	19.5	17.6	19.0	18.0	19.2	19.5
6H 8H 12H	19.4	20.6	19.7	20.9	21.2	19.4	20.6	19.8	20.9	21.2
	20.1	21.2	20.5	21.5	21.9	20.2	21.3	20.6	21.6	21.9
12H 4H	20.7	21.6	21.1	22.0	22.4	20.8	21.7	21.2	22.1	22.5
	20.8	21.7	21.3	22.1	22.5	21.0	21.9	21.4	22.3	22.7
	20.9	21.7	21.4	22.1	22.5	21.2	22.0	21.6	22.4	22.8
	20.4	21.3	20.8	21.7	22.1	20.5	21.4	20.9	21.7	22.1
	21.1	21.9	21.6	22.3	22.7	21.2	22.0	21.7	22.4	22.8
	21.4	22.1	21.9	22.5	22.9	21.6	22.2	22.0	22.6	23.1
	21.6	22.1	22.0	22.6	23.1	21.8	22.4	22.3	22.8	23.3
	20.4	21.3	20.9	21.7	22.1	20.5	21.3	20.9	21.7	22.1
	21.2	21.9	21.7	22.3	22.8	21.3	22.0	21.8	22.4	22.8
	21.5	22.1	22.0	22.5	23.0	21.7	22.2	22.2	22.7	23.2
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				

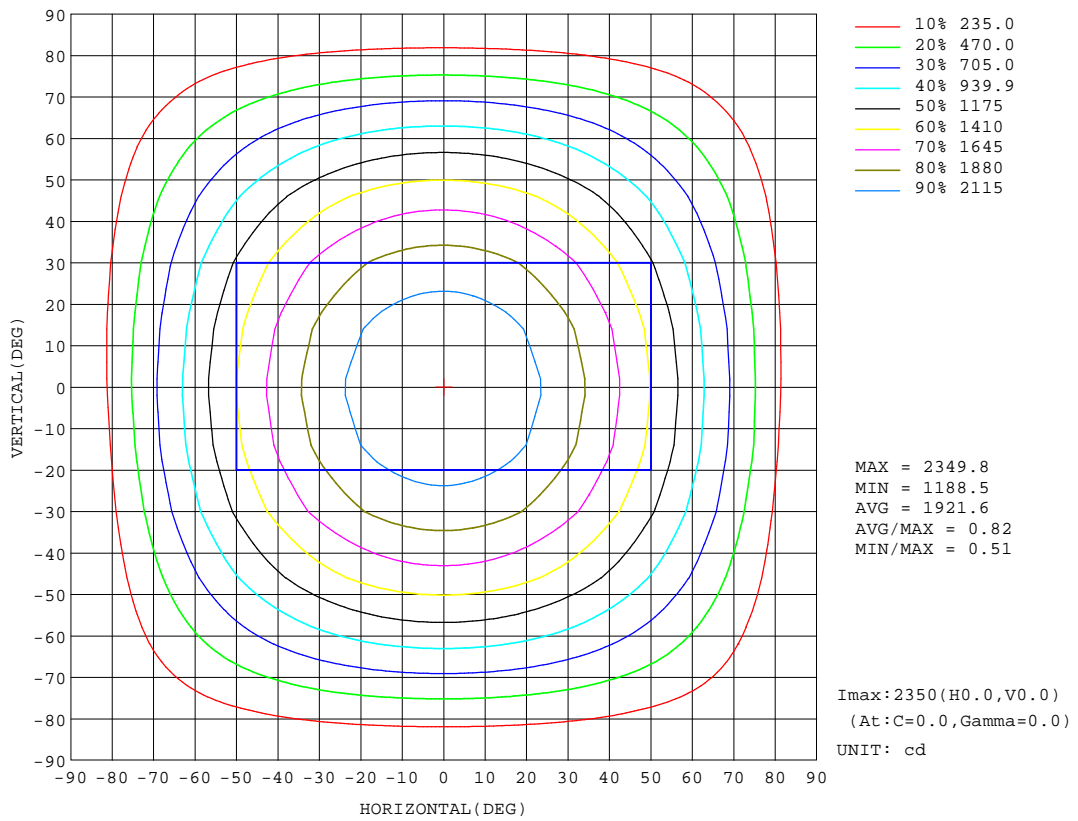
CIE Pub.117 Corrected 6798 lm Total Lamp Luminous Flux.(8log(F/F0) = 6.7)

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:26DEG  
 Operators:NEIKO  
 Test Date:2018-12-10

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:56%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.0V I:0.5000A P:60W PF:0.9899 Lamp Flux:6900x1 lm		
NAME: ASD-ELP02-24D6040-STD	TYPE:LED PANEL	WEIGHT:
SPEC.:	DIM.: 2x4	SERIAL No.:BLD20181210N21
MFR.: ASD Lighting corp	SUR.:0.56*1.17	Shielding Angle:



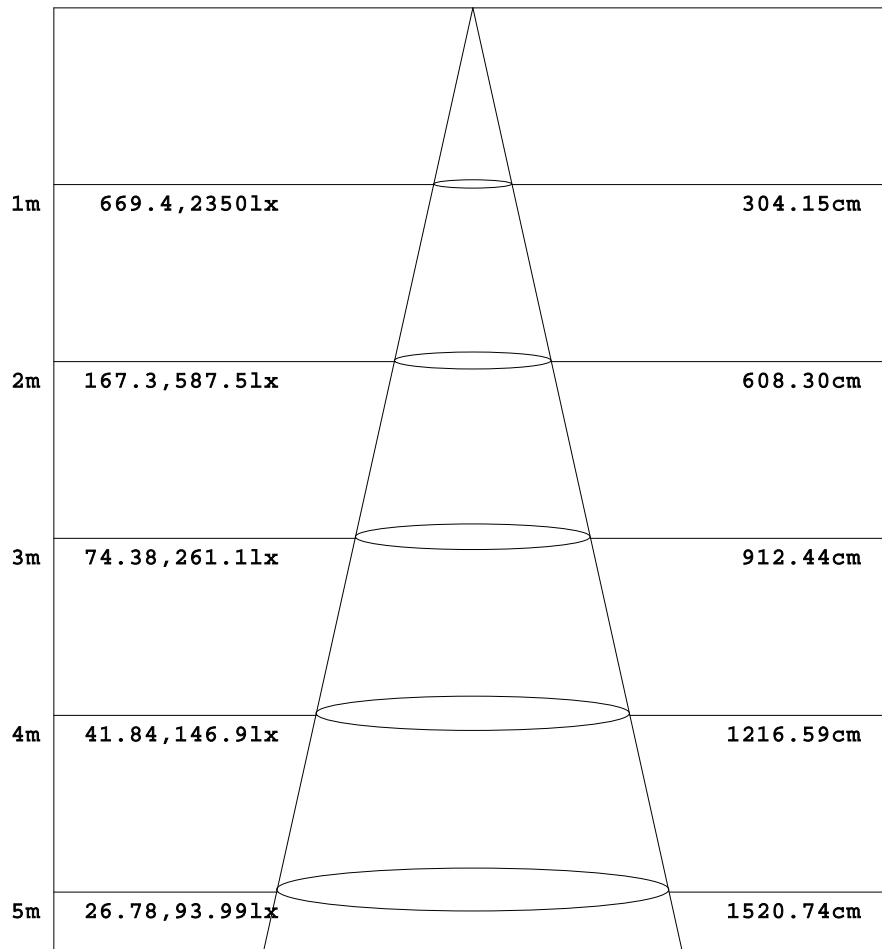
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:26DEG  
 Operators:NEIKO  
 Test Date:2018-12-10

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:56%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:

AAI Figure

Test:U:120.0V I:0.5000A P:60W PF:0.9899 Lamp Flux:6900x1 lm		
NAME: ASD-ELP02-24D6040-STD	TYPE:LED PANEL	WEIGHT:
SPEC.:	DIM.: 2x4	SERIAL No.:BLD20181210N21
MFR.: ASD Lighting corp	SUR.:0.56*1.17	Shielding Angle:

Flux out:4987 lm



Height Eavg, Emax Angle:113.34deg Diameter

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

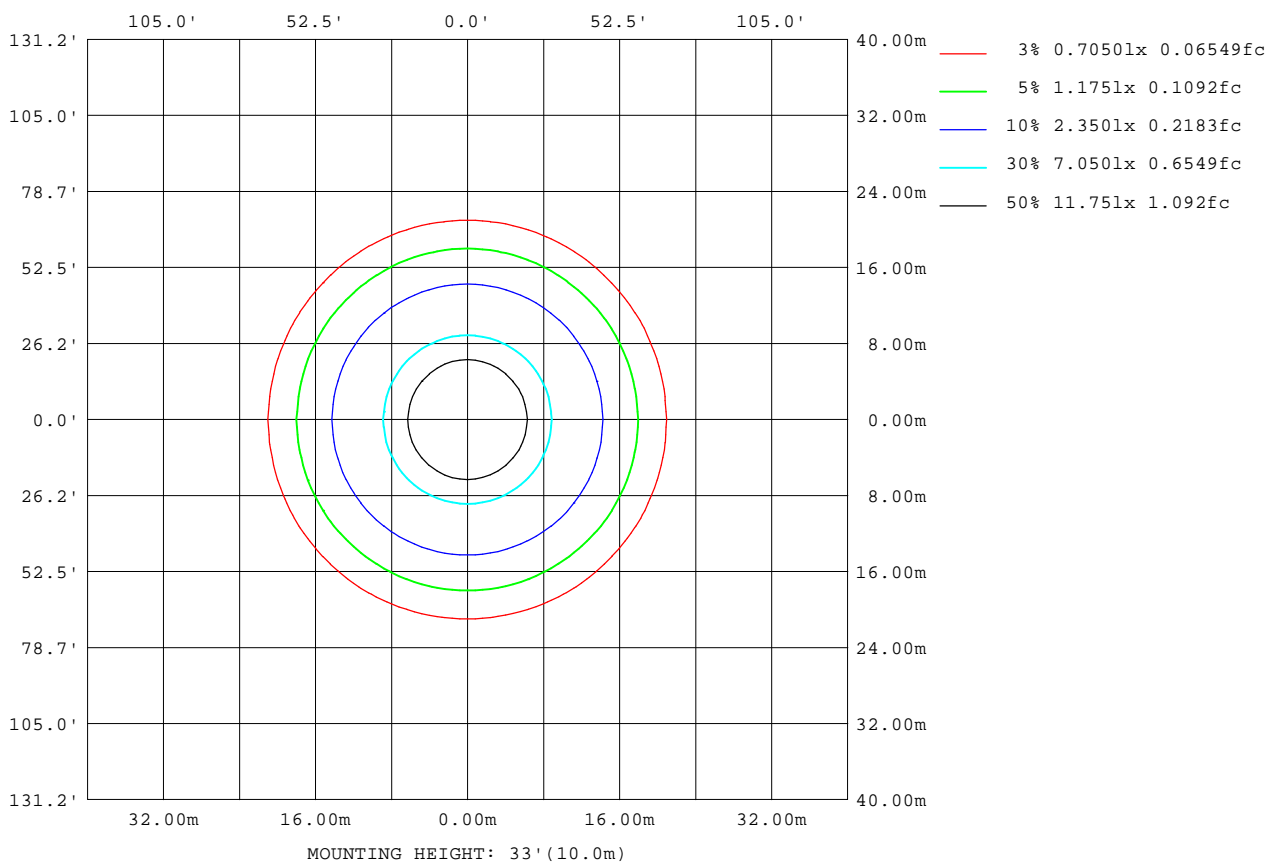
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:26DEG  
 Operators:NEIKO  
 Test Date:2018-12-10

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:56%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:



ISOLUX DIAGRAM

Test:U:120.0V I:0.5000A P:60W PF:0.9899 Lamp Flux:6900x1 lm		
NAME: ASD-ELP02-24D6040-STD	TYPE:LED PANEL	WEIGHT:
SPEC.:	DIM.: 2x4	SERIAL No.:BLD20181210N21
MFR.: ASD Lighting corp	SUR.:0.56*1.17	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:26DEG  
 Operators:NEIKO  
 Test Date:2018-12-10

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:56%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:

## LED Avg.L Report

Test:U:120.0V I:0.5000A P:60W PF:0.9899 Lamp Flux:6900x1 lm		
NAME: ASD-ELP02-24D6040-STD	TYPE:LED PANEL	WEIGHT:
SPEC.:	DIM.: 2x4	SERIAL No.:BLD20181210N21
MFR.: ASD Lighting corp	SUR.:0.56*1.17	Shielding Angle:

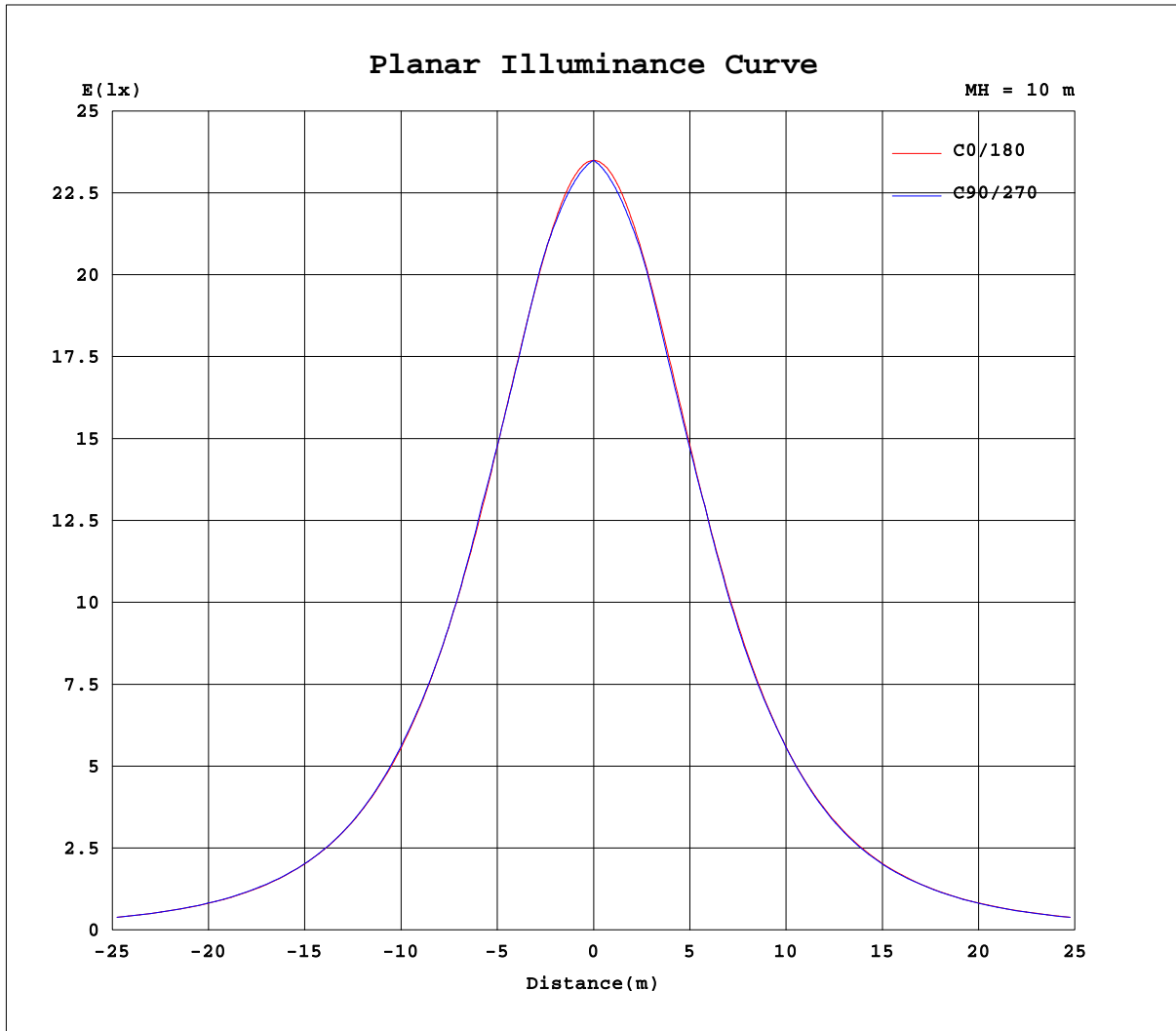
AvgL	cd/m2
L_0~180(65)av	3106
L_0~180(75)av	2834
L_0~180(85)av	1691
L_90~270(65)av	3095
L_90~270(75)av	2805
L_90~270(85)av	2284
L_45(65)av	3083
L_45(75)av	2816
L_45(85)av	2306

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:26DEG  
Operators:NEIKO  
Test Date:2018-12-10

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
Humidity:56%  
Test Distance:12.218m [K=1.0000]  
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature: 26DEG  
 Operators: NEIKO  
 Test Date: 2018-12-10

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity: 56%  
 Test Distance: 12.218m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.5000A P:60W PF:0.9899 Lamp Flux:6900x1 lm		
NAME: ASD-ELP02-24D6040-STD	TYPE:LED PANEL	WEIGHT:
SPEC.:	DIM.: 2x4	SERIAL No.:BLD20181210N21
MFR.: ASD Lighting corp	SUR.:0.56*1.17	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	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350
5	2339	2336	2334	2332	2330	2329	2328	2326	2325	2325	2324	2323	2323	2323	2322	2322	2322	2322	2322
10	2307	2303	2299	2296	2293	2292	2290	2290	2289	2289	2290	2290	2291	2292	2293	2293	2294	2294	2295
15	2255	2249	2244	2241	2239	2238	2238	2240	2242	2245	2248	2251	2255	2258	2260	2260	2260	2261	2261
20	2184	2176	2171	2168	2167	2169	2173	2178	2184	2189	2190	2188	2185	2183	2181	2181	2180	2180	2180
25	2095	2085	2080	2078	2081	2086	2094	2099	2097	2092	2090	2089	2088	2089	2090	2091	2092	2093	2094
30	1988	1977	1973	1973	1979	1990	1992	1985	1981	1980	1982	1985	1989	1993	1997	2001	2004	2006	2007
35	1864	1853	1850	1854	1865	1867	1859	1857	1858	1863	1870	1878	1875	1872	1870	1869	1869	1869	1869
40	1726	1715	1713	1722	1730	1720	1718	1722	1730	1735	1730	1727	1726	1727	1728	1729	1730	1731	1732
45	1574	1563	1565	1576	1569	1566	1571	1582	1575	1572	1572	1573	1577	1581	1585	1588	1589	1590	1590
50	1410	1399	1405	1409	1402	1406	1414	1407	1406	1408	1413	1419	1421	1418	1417	1416	1416	1416	1416
55	1235	1225	1237	1229	1230	1237	1230	1231	1236	1241	1239	1237	1235	1235	1236	1236	1237	1238	1238
60	1051	1044	1052	1046	1054	1047	1049	1055	1053	1050	1049	1050	1052	1053	1055	1057	1059	1060	1060
65	862	858	859	863	859	862	865	861	860	861	863	865	865	865	865	865	865	865	865
70	670	673	666	665	668	669	668	671	673	672	672	671	671	671	670	670	670	671	671
75	481	475	464	465	469	474	479	483	483	482	482	482	481	480	480	479	479	478	478
80	290	264	266	273	283	292	297	300	300	299	298	296	296	297	297	298	298	298	298
85	99.5	93.8	104	114	121	125	131	135	137	138	138	137	137	136	136	136	136	136	136
90	1.55	7.26	7.36	8.30	9.66	11.1	12.4	13.6	14.7	15.7	16.5	17.2	17.9	18.6	19.2	19.8	20.5	20.8	20.9
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:26DEG  
 Operators:NEIKO  
 Test Date:2018-12-10

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:56%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.5000A P:60W PF:0.9899 Lamp Flux:6900x1 lm		
NAME: ASD-ELP02-24D6040-STD	TYPE:LED PANEL	WEIGHT:
SPEC.:	DIM.: 2x4	SERIAL No.:BLD20181210N21
MFR.: ASD Lighting corp	SUR.:0.56*1.17	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	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350
5	2322	2322	2322	2323	2323	2323	2324	2325	2325	2326	2327	2329	2330	2332	2333	2335	2338	2340	2337
10	2294	2294	2294	2293	2293	2292	2291	2291	2291	2291	2291	2292	2293	2295	2298	2301	2305	2310	2304
15	2261	2261	2261	2261	2259	2256	2253	2249	2246	2244	2242	2241	2241	2242	2244	2248	2253	2259	2252
20	2180	2181	2182	2183	2184	2186	2189	2191	2191	2186	2180	2175	2172	2171	2172	2175	2181	2189	2180
25	2094	2093	2092	2092	2091	2091	2091	2092	2095	2100	2101	2097	2089	2085	2083	2085	2091	2101	2089
30	2007	2005	2003	1999	1996	1992	1988	1985	1984	1985	1988	1995	1993	1983	1978	1978	1984	1995	1982
35	1870	1870	1871	1873	1875	1878	1882	1874	1867	1863	1861	1863	1870	1869	1859	1855	1860	1872	1858
40	1732	1731	1730	1730	1729	1729	1731	1734	1740	1735	1727	1723	1725	1734	1726	1719	1722	1734	1719
45	1590	1590	1590	1587	1583	1579	1577	1576	1576	1581	1588	1577	1571	1574	1580	1570	1570	1583	1567
50	1416	1417	1418	1419	1421	1423	1422	1417	1412	1410	1412	1420	1412	1407	1414	1410	1406	1418	1403
55	1238	1238	1238	1238	1238	1238	1239	1242	1244	1240	1235	1236	1243	1236	1234	1241	1232	1244	1229
60	1060	1060	1059	1058	1056	1055	1054	1053	1054	1056	1059	1053	1052	1060	1052	1056	1050	1060	1047
65	865	866	866	867	867	868	869	868	866	864	864	867	864	861	867	861	863	870	860
70	671	671	672	672	672	673	674	675	676	677	674	670	667	663	660	661	671	678	671
75	479	479	480	481	482	483	483	484	484	485	484	480	473	464	458	455	463	487	481
80	298	298	298	298	298	297	297	299	300	300	299	295	289	281	269	257	256	286	293
85	136	136	136	136	136	136	136	137	136	135	133	130	124	119	111	100	87.1	95.1	115
90	20.7	20.2	19.6	18.9	18.1	17.2	16.2	15.3	14.4	13.4	12.4	11.3	10.0	8.67	7.53	6.51	6.36	3.80	1.90
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:26DEG  
 Operators:NEIKO  
 Test Date:2018-12-10

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:56%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.5000A P:60W PF:0.9899 Lamp Flux:6900x1 lm		
NAME: ASD-ELP02-24D6040-STD	TYPE:LED PANEL	WEIGHT:
SPEC.:	DIM.: 2x4	SERIAL No.:BLD20181210N21
MFR.: ASD Lighting corp	SUR.:0.56*1.17	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	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350
5	2335	2332	2330	2328	2327	2325	2324	2323	2322	2321	2320	2320	2319	2319	2319	2318	2319	2318	2319
10	2300	2296	2293	2290	2288	2287	2286	2286	2285	2286	2286	2286	2286	2287	2287	2287	2287	2287	2287
15	2246	2241	2238	2236	2236	2236	2237	2239	2241	2244	2246	2249	2251	2250	2250	2250	2250	2250	2250
20	2173	2168	2166	2166	2168	2172	2177	2181	2181	2179	2175	2173	2172	2170	2170	2169	2169	2169	2169
25	2082	2079	2079	2082	2088	2092	2090	2085	2082	2080	2080	2080	2080	2081	2082	2082	2082	2082	2081
30	1975	1973	1976	1984	1985	1978	1975	1974	1975	1977	1981	1985	1988	1991	1994	1995	1995	1994	1992
35	1851	1853	1861	1861	1854	1852	1853	1857	1864	1871	1868	1864	1861	1860	1859	1858	1858	1858	1858
40	1715	1720	1725	1716	1714	1718	1726	1731	1724	1721	1719	1719	1719	1720	1720	1721	1721	1720	1719
45	1565	1574	1566	1563	1568	1580	1572	1568	1566	1567	1570	1573	1576	1579	1579	1579	1579	1578	1578
50	1405	1407	1400	1405	1413	1404	1402	1403	1408	1413	1414	1411	1410	1408	1408	1407	1407	1406	1406
55	1235	1228	1230	1237	1229	1228	1232	1236	1234	1232	1231	1230	1230	1231	1231	1231	1231	1230	1229
60	1051	1046	1055	1046	1047	1052	1049	1047	1046	1047	1049	1050	1052	1053	1054	1055	1054	1054	1052
65	858	865	858	860	862	858	858	860	862	864	864	863	863	862	862	862	861	861	860
70	669	669	670	669	668	670	672	672	671	670	670	670	670	669	670	669	669	669	668
75	481	481	478	480	482	481	481	481	482	482	482	482	481	481	481	480	480	480	479
80	293	292	292	292	294	297	298	299	299	298	298	299	299	298	298	298	298	297	297
85	113	114	120	123	126	128	129	129	130	129	129	128	128	127	127	127	127	126	126
90	1.90	1.91	2.28	3.08	3.96	4.98	6.02	7.05	8.15	9.14	10.0	10.9	11.5	12.0	12.6	12.8	12.9	12.7	12.1
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:26DEG  
 Operators:NEIKO  
 Test Date:2018-12-10

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:56%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.5000A P:60W PF:0.9899 Lamp Flux:6900x1 lm		
NAME: ASD-ELP02-24D6040-STD	TYPE:LED PANEL	WEIGHT:
SPEC.:	DIM.: 2x4	SERIAL No.:BLD20181210N21
MFR.: ASD Lighting corp	SUR.:0.56*1.17	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	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350				
5	2319	2319	2319	2320	2320	2321	2322	2323	2324	2326	2327	2329	2331	2334	2336				
10	2286	2286	2285	2285	2284	2284	2284	2284	2285	2286	2288	2291	2294	2298	2302				
15	2250	2250	2248	2245	2242	2239	2237	2235	2233	2233	2233	2235	2238	2242	2248				
20	2169	2170	2171	2174	2177	2179	2178	2174	2169	2165	2163	2162	2164	2168	2175				
25	2080	2079	2078	2077	2077	2079	2082	2087	2089	2085	2078	2074	2074	2077	2084				
30	1989	1986	1981	1977	1974	1971	1970	1971	1974	1982	1980	1972	1968	1969	1976				
35	1858	1859	1861	1863	1866	1859	1852	1847	1846	1849	1857	1856	1848	1846	1851				
40	1718	1716	1715	1715	1716	1719	1724	1719	1711	1708	1711	1721	1715	1709	1712				
45	1577	1574	1570	1566	1563	1561	1561	1565	1572	1561	1557	1561	1568	1559	1560				
50	1406	1407	1408	1410	1408	1403	1398	1395	1397	1404	1398	1394	1402	1399	1396				
55	1228	1227	1226	1226	1227	1229	1231	1227	1221	1221	1228	1222	1222	1231	1222				
60	1050	1048	1046	1044	1042	1041	1041	1044	1046	1040	1038	1046	1038	1046	1040				
65	860	859	859	859	858	856	853	852	852	856	853	851	856	853	854				
70	668	667	666	666	666	666	665	665	663	661	663	665	662	662	668				
75	479	479	479	478	478	477	476	476	476	475	475	474	477	475	477				
80	297	296	296	295	294	295	295	295	294	291	289	289	288	291	289				
85	126	126	126	126	126	127	127	127	126	124	122	119	112	110	113				
90	11.5	10.8	10.2	9.29	8.39	7.39	6.29	5.24	4.14	3.05	2.17	1.90	1.90	1.90	1.90				
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:26DEG  
 Operators:NEIKO  
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γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:56%  
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 Remarks: