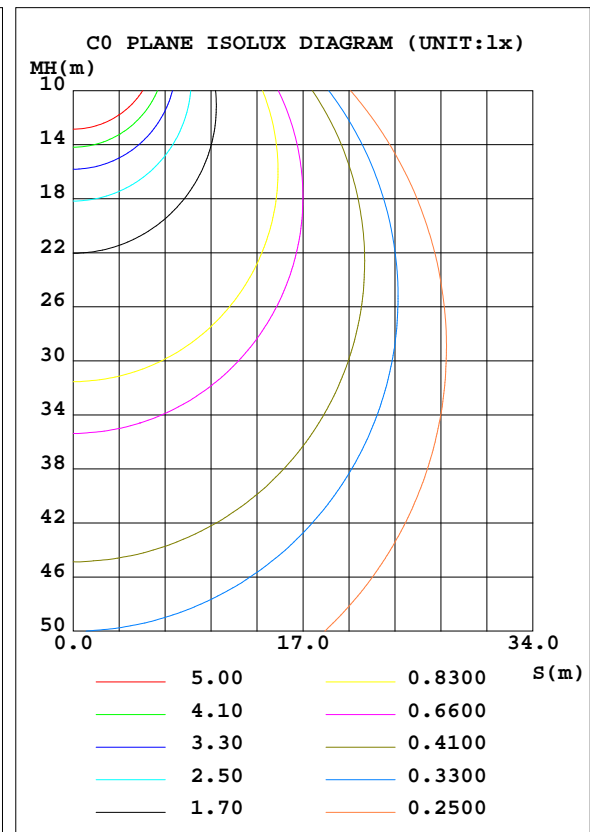
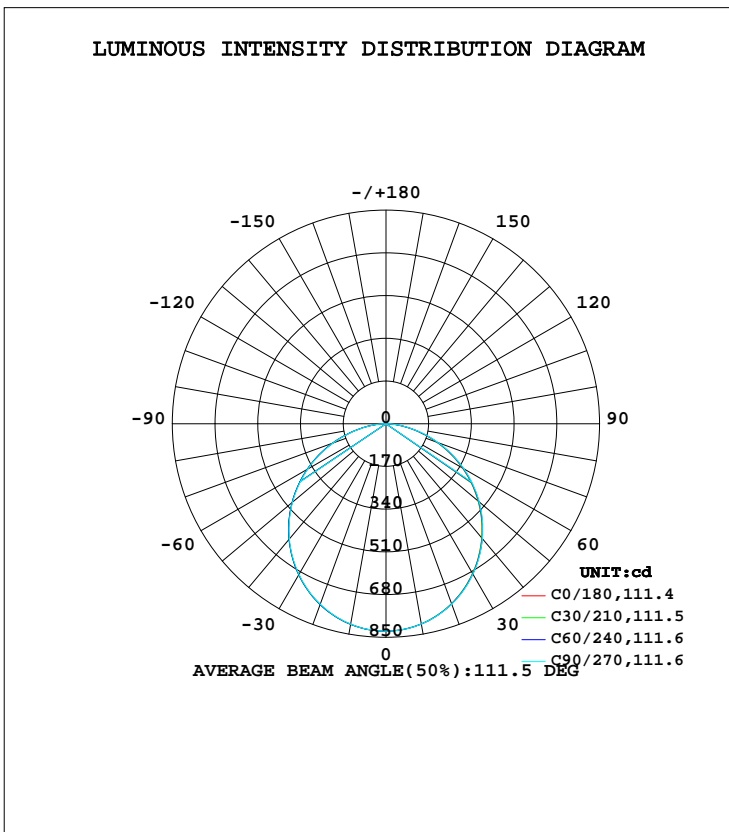


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.00V I:0.2213A P:24.840W PF:0.9355 Freq:60.00Hz Lamp Flux:2333.77x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-12D24CC_4000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 93.95 lm/W			
MODEL	ASD-MPR-12D24CC_4000K	I _{max} (cd)	825.8	S/MH(C0/180)	1.25
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.25
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	2333.8	η UP, DN(C0-180)	0.0,49.8
NOMINAL FLUX(lm)	2333.77	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.1,50.1
LAMPS INSIDE	1	η up(%)	0.1	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	η down(%)	99.9	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 24 May 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 44.9%
 Test Distance: 2.500m [K=1.0391]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	808.9	808.5	809.3	810.0	811.2	810.0	809.8	809.4	0- 10	78.02	78.02	3.34,3.34
20	762.3	762.3	763.8	764.0	765.7	765.3	764.3	763.5	10- 20	223.0	301.0	12.9,12.9
30	688.3	690.0	691.7	691.7	694.5	693.8	692.5	689.9	20- 30	336.8	637.8	27.3,27.3
40	592.5	594.9	596.9	597.2	600.0	599.4	598.1	595.0	30- 40	404.5	1042	44.7,44.7
50	478.8	481.6	484.3	485.3	488.1	487.5	485.5	482.1	40- 50	418.3	1461	62.6,62.6
60	351.3	354.2	357.6	358.4	361.8	361.4	358.6	355.1	50- 60	377.1	1838	78.7,78.7
70	215.3	218.8	222.1	223.0	226.3	226.0	223.4	219.2	60- 70	286.8	2125	91,91
80	85.87	89.03	92.10	92.73	95.26	95.30	92.62	88.78	70- 80	163.5	2288	98,98
90	0.1723	0.1799	0.2192	3.909	0.5048	0.2863	0.1649	0.1587	80- 90	43.38	2331	99.9,99.9
100	0.1335	0.1327	0.1302	0.1281	0.2481	0.2515	0.2537	0.2562	90-100	0.2155	2332	99.9,99.9
110	0.2073	0.2068	0.2041	0.2002	0.3127	0.3166	0.3196	0.3216	100-110	0.2424	2332	99.9,99.9
120	0.3077	0.3076	0.3051	0.2998	0.3406	0.3442	0.3458	0.3485	110-120	0.2898	2332	99.9,99.9
130	0.4129	0.4129	0.4100	0.4051	0.4227	0.4244	0.4230	0.4306	120-130	0.3300	2333	99.9,99.9
140	0.4749	0.4752	0.4725	0.4686	0.5341	0.5320	0.5339	0.5397	130-140	0.3592	2333	100,100
150	0.5092	0.5099	0.5090	0.5067	0.6595	0.6609	0.6629	0.6630	140-150	0.3410	2333	100,100
160	0.5930	0.5908	0.5865	0.5906	0.7416	0.7419	0.7374	0.7457	150-160	0.2894	2334	100,100
170	0.6449	0.6519	0.6516	0.6503	0.7441	0.7419	0.7357	0.7412	160-170	0.1939	2334	100,100
180	0.7110	0.7064	0.7077	0.7084	0.7123	0.7008	0.7001	0.7035	170-180	0.0671	2334	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1253.2 lm

%lum = 53.7%

%lamp = 53.7%

Conical surface Flux(120deg): 1837.8 lm

%lum = 78.7%

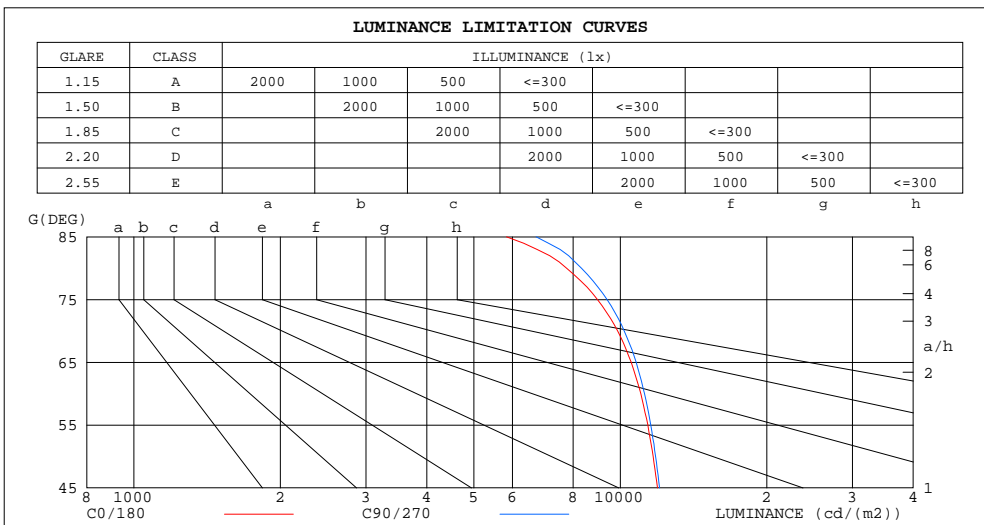
%lamp = 78.7%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 24 May 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 44.9%
 Test Distance: 2.500m [K=1.0391]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.00V I:0.2213A P:24.840W PF:0.9355 Freq:60.00Hz Lamp Flux:2333.77x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-12D24CC_4000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	5835	6713
80	7756	8318
75	8976	9390
70	9872	10185
65	10529	10776
60	11018	11217
55	11391	11550
50	11682	11816
45	11924	12039

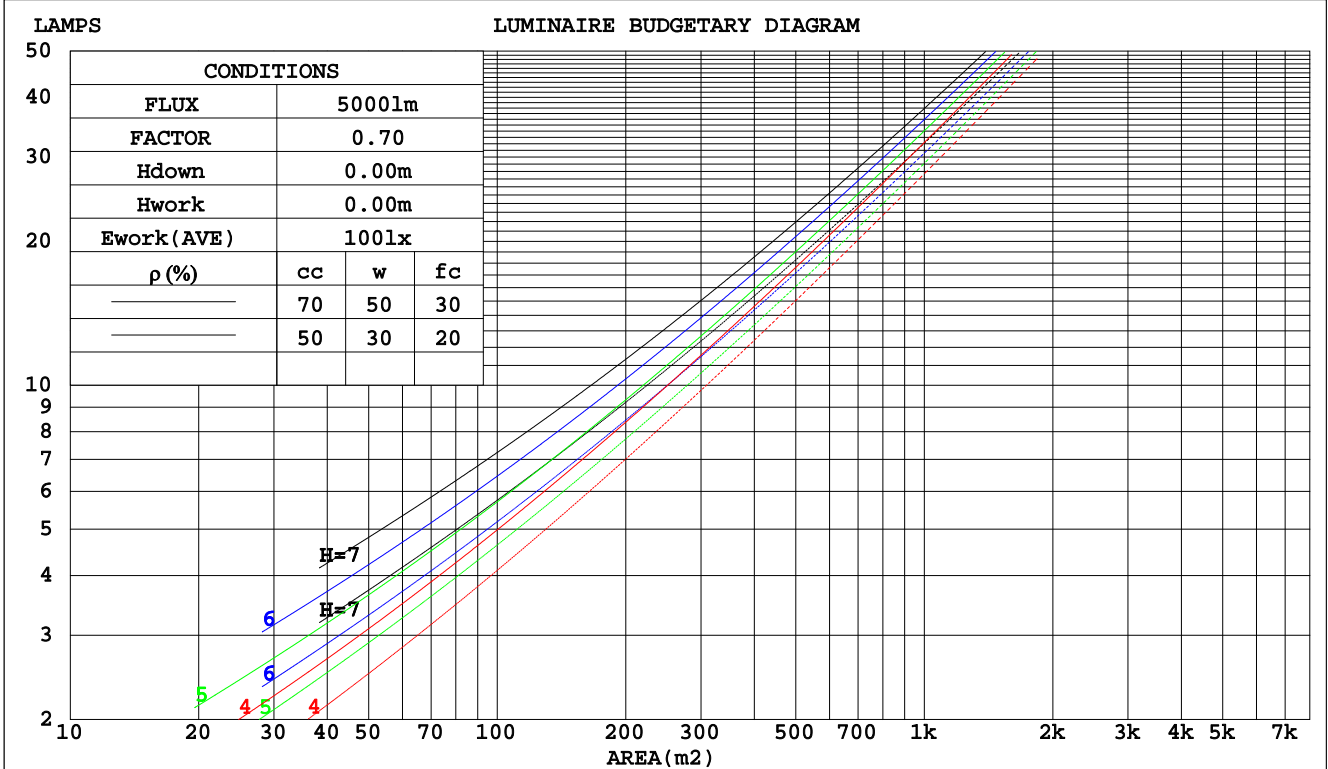
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 24 May 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 44.9%
 Test Distance: 2.500m [K=1.0391]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.00V I:0.2213A P:24.840W PF:0.9355 Freq:60.00Hz Lamp Flux:2333.77x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-12D24CC_4000K	DIM.:	SERIAL No.:
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																
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	1.04	.00	.96	1.02	.98	.94	.97	.94	.91	.93	.91	.88	.90	.88	.86	.84
2.0	.90	.84	.78	.89	.82	.77	.85	.80	.75	.82	.77	.73	.79	.75	.72	.69
3.0	.79	.71	.65	.78	.70	.64	.75	.68	.63	.72	.66	.62	.69	.65	.61	.58
4.0	.70	.61	.55	.69	.61	.54	.66	.59	.54	.64	.58	.53	.62	.56	.52	.50
5.0	.63	.54	.47	.62	.53	.47	.59	.52	.46	.57	.51	.46	.56	.50	.45	.43
6.0	.56	.47	.41	.56	.47	.41	.54	.46	.40	.52	.45	.40	.50	.44	.40	.38
7.0	.51	.42	.36	.50	.42	.36	.49	.41	.36	.47	.41	.36	.46	.40	.35	.33
8.0	.47	.38	.32	.46	.38	.32	.45	.37	.32	.43	.37	.32	.42	.36	.32	.30
9.0	.43	.35	.29	.42	.34	.29	.41	.34	.29	.40	.33	.29	.39	.33	.28	.27
10.0	.40	.32	.26	.39	.31	.26	.38	.31	.26	.37	.31	.26	.36	.30	.26	.24



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 24 May 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 44.9%
 Test Distance: 2.500m [K=1.0391]
 Remarks:

WEC AND CCEC

Test:U:120.00V I:0.2213A P:24.840W PF:0.9355 Freq:60.00Hz Lamp Flux:2333.77x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-12D24CC_4000K	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	.309	.176	.056	.302	.172	.055	.289	.166	.053	.277	.160	.051	.265	.154	.050	
2.0	.291	.160	.049	.285	.157	.048	.273	.152	.047	.263	.147	.046	.253	.143	.045	
3.0	.270	.144	.043	.264	.141	.043	.254	.138	.042	.244	.134	.041	.235	.130	.040	
4.0	.249	.129	.038	.244	.128	.038	.235	.125	.037	.226	.122	.037	.218	.119	.036	
5.0	.230	.117	.034	.226	.116	.034	.218	.113	.033	.210	.111	.033	.203	.108	.033	
6.0	.213	.107	.031	.210	.106	.030	.202	.104	.030	.196	.102	.030	.189	.100	.030	
7.0	.199	.098	.028	.195	.097	.028	.189	.095	.027	.183	.094	.027	.177	.092	.027	
8.0	.186	.091	.025	.183	.090	.025	.177	.088	.025	.171	.087	.025	.166	.085	.025	
9.0	.174	.084	.023	.171	.083	.023	.166	.082	.023	.161	.081	.023	.156	.079	.023	
10.0	.164	.078	.022	.161	.078	.022	.156	.077	.022	.152	.075	.021	.148	.074	.021	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.191	.191	.191	.163	.163	.163	.112	.112	.112	.064	.064	.064	.020	.020	.020	
1.0	.181	.157	.135	.155	.135	.116	.106	.093	.080	.061	.054	.047	.020	.017	.015	
2.0	.173	.133	.099	.148	.114	.085	.102	.079	.060	.059	.046	.035	.019	.015	.011	
3.0	.165	.115	.075	.142	.099	.065	.097	.069	.046	.056	.040	.027	.018	.013	.009	
4.0	.158	.102	.059	.135	.088	.051	.093	.061	.036	.054	.036	.021	.017	.012	.007	
5.0	.150	.091	.048	.129	.079	.042	.089	.055	.029	.051	.032	.017	.017	.011	.006	
6.0	.143	.083	.040	.123	.072	.035	.085	.050	.025	.049	.030	.015	.016	.010	.005	
7.0	.136	.076	.034	.117	.066	.030	.081	.046	.021	.047	.027	.012	.015	.009	.004	
8.0	.130	.070	.029	.112	.061	.026	.077	.043	.018	.045	.025	.011	.015	.008	.004	
9.0	.124	.065	.026	.106	.057	.023	.074	.040	.016	.043	.024	.010	.014	.008	.003	
10.0	.118	.061	.023	.102	.053	.020	.071	.037	.014	.041	.022	.009	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 24 May 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 44.9%
 Test Distance: 2.500m [K=1.0391]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.00V I:0.2213A P:24.840W PF:0.9355 Freq:60.00Hz Lamp Flux:2333.77x1 lm										
NAME:					TYPE:LED			WEIGHT:		
SPEC.:ASD-MPR-12D24CC_4000K					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	21.3	22.8	21.6	23.0	23.2	21.4	22.9	21.6	23.1	23.3
3H	22.8	24.2	23.1	24.4	24.6	22.9	24.3	23.2	24.5	24.7
4H	23.3	24.7	23.6	24.9	25.2	23.5	24.8	23.8	25.0	25.3
6H	23.7	25.0	24.0	25.2	25.5	23.9	25.1	24.2	25.4	25.7
8H	23.8	25.0	24.2	25.3	25.6	24.0	25.2	24.3	25.5	25.8
12H	23.9	25.0	24.2	25.3	25.6	24.1	25.2	24.4	25.5	25.8
4H 2H	21.9	23.2	22.2	23.5	23.7	21.9	23.3	22.3	23.5	23.8
3H	23.6	24.7	23.9	25.0	25.3	23.6	24.8	24.0	25.1	25.4
4H	24.2	25.3	24.6	25.6	26.0	24.4	25.4	24.7	25.7	26.1
6H	24.7	25.7	25.1	26.0	26.4	24.9	25.8	25.3	26.2	26.6
8H	24.9	25.8	25.3	26.2	26.5	25.1	26.0	25.5	26.3	26.7
12H	25.0	25.8	25.4	26.2	26.6	25.2	26.0	25.6	26.4	26.8
8H 4H	24.5	25.4	24.9	25.8	26.1	24.6	25.5	25.0	25.9	26.2
6H	25.1	25.9	25.6	26.3	26.7	25.3	26.0	25.7	26.4	26.9
8H	25.4	26.0	25.8	26.5	26.9	25.5	26.2	26.0	26.6	27.1
12H	25.5	26.1	26.0	26.5	27.0	25.7	26.3	26.2	26.7	27.2
12H 4H	24.5	25.3	24.9	25.7	26.1	24.6	25.4	25.0	25.8	26.2
6H	25.2	25.8	25.7	26.3	26.7	25.3	26.0	25.8	26.4	26.9
8H	25.5	26.0	25.9	26.5	27.0	25.6	26.2	26.1	26.6	27.1
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 2334 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 2.9)
 Area: 0.0637616 m2

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 24 May 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 44.9%
 Test Distance: 2.500m [K=1.0391]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.00V I:0.2213A P:24.840W PF:0.9355 Freq:60.00Hz Lamp Flux:2333.77x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-12D24CC_4000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

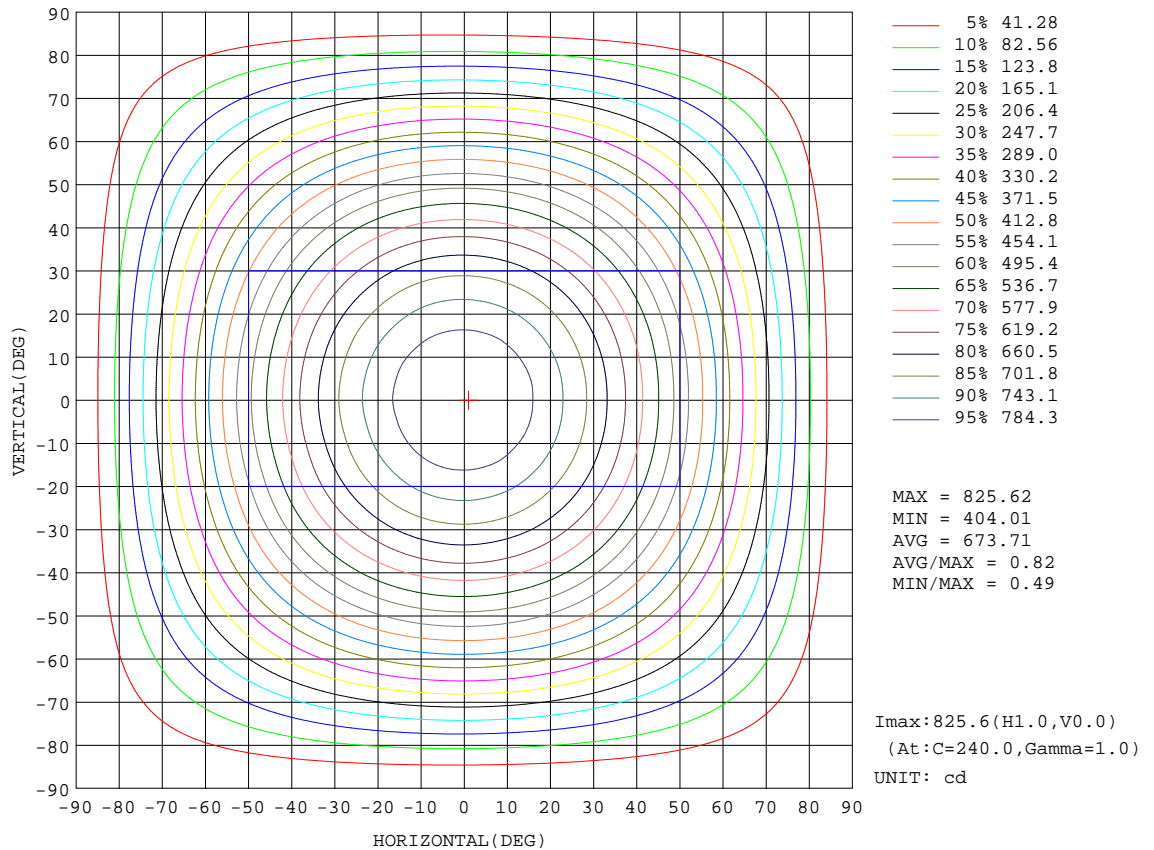
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	58	46	39	57	46	39	56	45	39	32
0.80	68	56	49	67	56	48	65	55	48	41
1.00	76	65	58	75	64	57	73	66	57	50
1.25	83	73	65	82	72	65	79	70	64	57
1.50	88	78	71	86	77	71	83	76	70	62
2.00	95	86	80	93	85	79	90	83	78	70
2.50	99	91	85	97	90	84	93	87	82	74
3.00	102	95	90	100	94	89	96	91	87	78
4.00	106	101	96	104	99	94	100	95	92	83
5.00	109	104	100	106	102	98	102	98	95	86
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 24 May 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 44.9%
 Test Distance: 2.500m [K=1.0391]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.00V I:0.2213A P:24.840W PF:0.9355 Freq:60.00Hz Lamp Flux:2333.77x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-12D24CC_4000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

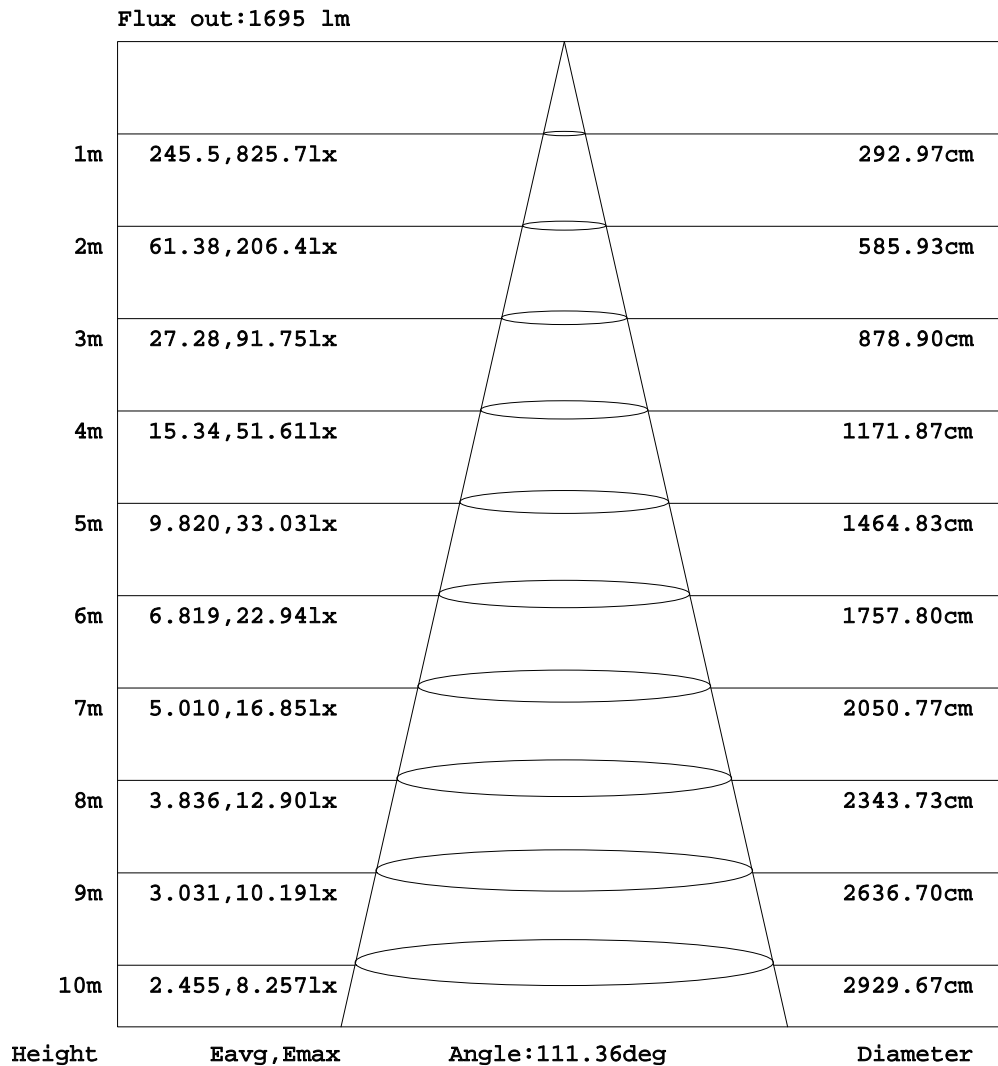


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 24 May 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 44.9%
 Test Distance: 2.500m [K=1.0391]
 Remarks:

AAI Figure

Test:U:120.00V I:0.2213A P:24.840W PF:0.9355 Freq:60.00Hz Lamp Flux:2333.77x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-12D24CC_4000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



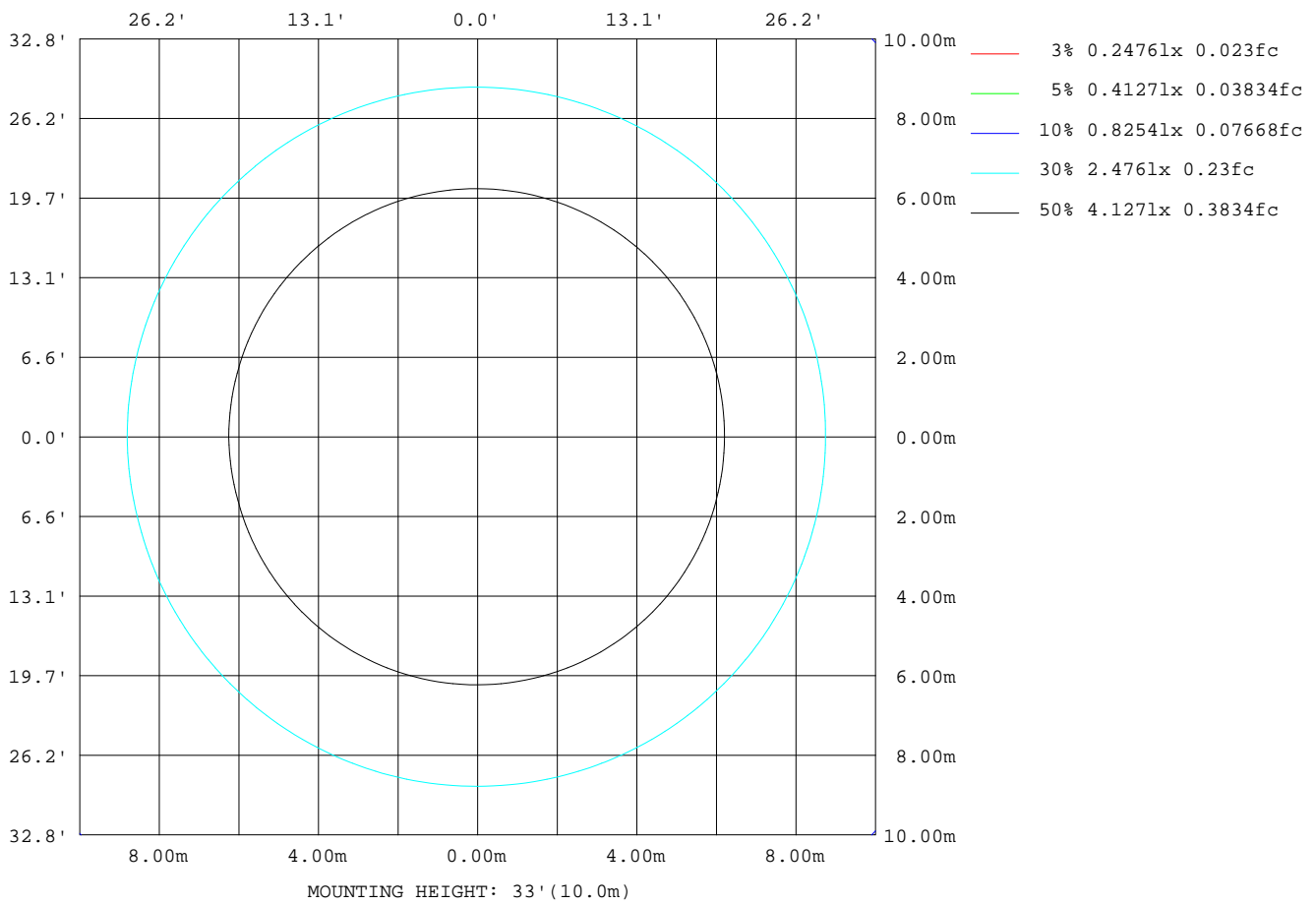
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 24 May 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 44.9%
 Test Distance: 2.500m [K=1.0391]
 Remarks:

ISOLUX DIAGRAM

Test:U:120.00V I:0.2213A P:24.840W PF:0.9355 Freq:60.00Hz Lamp Flux:2333.77x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-12D24CC_4000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 24 May 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 44.9%
 Test Distance: 2.500m [K=1.0391]
 Remarks:

LED Avg.L Report

Test:U:120.00V I:0.2213A P:24.840W PF:0.9355 Freq:60.00Hz Lamp Flux:2333.77x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-12D24CC_4000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

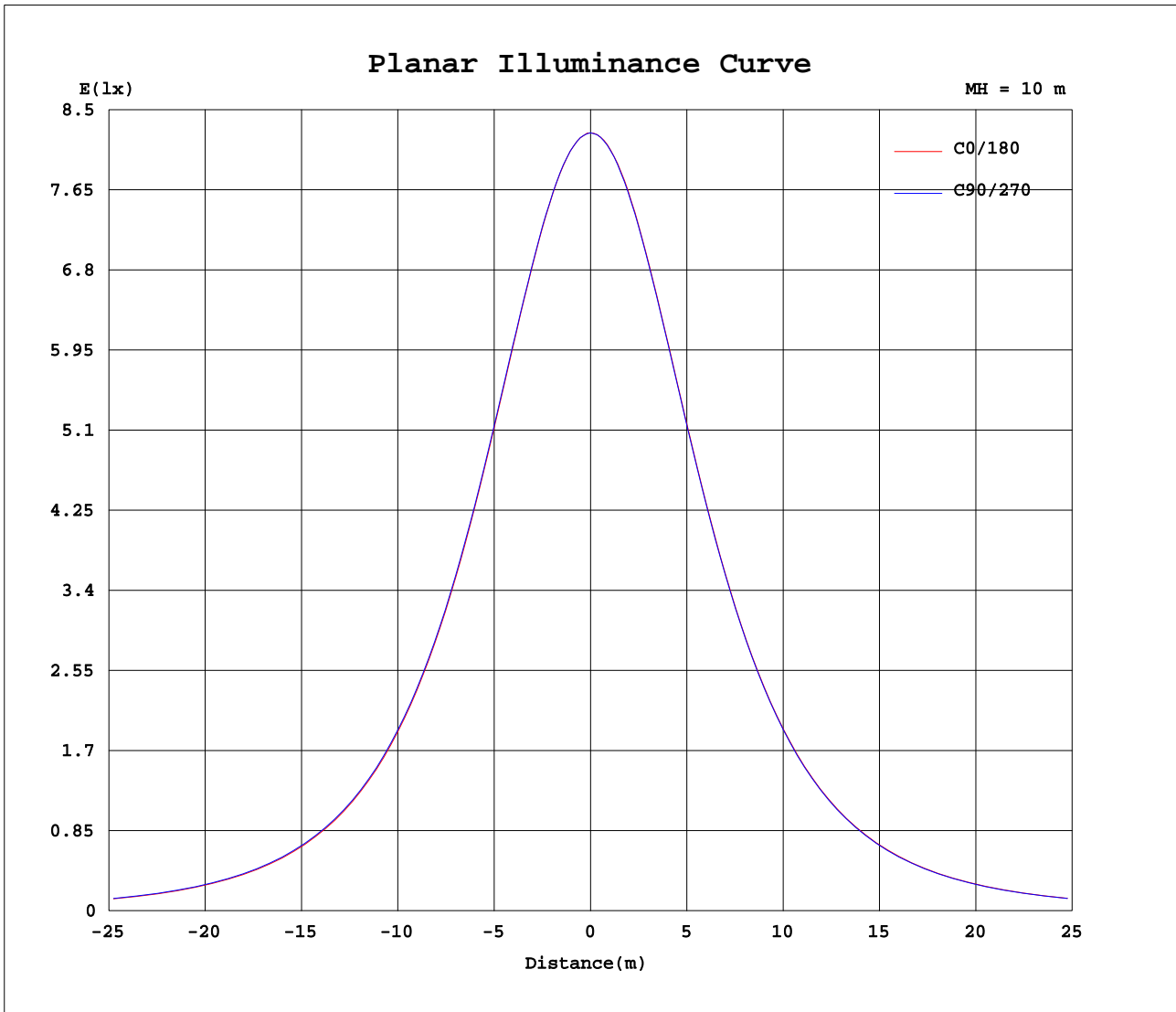
AvgL	cd/m2
L_0~180(65)av	10732
L_0~180(75)av	9280
L_0~180(85)av	6589
L_90~270(65)av	10796
L_90~270(75)av	9408
L_90~270(85)av	6772
L_45(65)av	10763
L_45(75)av	9344
L_45(85)av	6685

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.0DEG
Operators: Alan Wang
Test Date: 24 May 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
Humidity: 44.9%
Test Distance: 2.500m [K=1.0391]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.0DEG
Operators: Alan Wang
Test Date: 24 May 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
Humidity: 44.9%
Test Distance: 2.500m [K=1.0391]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.00V I:0.2213A P:24.840W PF:0.9355 Freq:60.00Hz Lamp Flux:2333.77x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-12D24CC_4000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	825	826	825	825	825	825	825	825	826	825	824	825	825	826	825	825	825	825	825
5	821	821	821	821	822	821	821	821	821	822	821	821	822	822	822	821	821	821	822
10	809	808	809	809	810	809	809	809	810	810	810	809	811	811	811	810	810	810	810
15	789	789	789	789	790	790	790	790	791	791	791	791	792	792	792	791	792	791	791
20	762	762	763	762	763	764	764	764	764	764	765	764	766	766	766	765	766	765	764
25	728	729	729	729	730	731	731	731	731	731	732	731	733	733	733	733	733	732	732
30	688	689	689	690	691	691	692	692	692	692	692	692	694	694	695	694	694	694	692
35	643	643	644	645	646	646	647	647	647	647	647	647	650	650	650	649	649	649	648
40	592	593	594	595	596	596	597	597	598	597	597	597	600	600	600	599	599	599	598
45	538	538	539	540	542	542	543	543	543	543	543	543	546	546	546	545	546	545	544
50	479	479	480	482	483	484	484	484	485	485	485	485	488	488	488	488	488	487	485
55	417	417	418	420	421	422	422	423	423	423	423	423	426	426	426	426	426	425	423
60	351	352	353	354	356	357	358	358	358	358	358	358	362	362	361	361	361	360	359
65	284	284	286	287	288	290	290	291	291	291	291	291	295	295	295	294	294	293	291
70	215	216	217	219	220	221	222	223	223	223	223	223	226	227	227	226	225	225	223
75	148	149	150	152	153	154	155	155	156	156	156	156	158	158	158	158	158	157	156
80	85.9	86.6	87.7	89.0	90.3	91.1	92.1	92.4	92.6	92.7	92.8	92.8	95.3	95.4	95.4	95.3	94.7	93.7	92.6
85	32.4	33.0	33.8	34.7	35.7	36.6	37.3	37.8	38.2	38.5	38.6	38.6	40.8	40.9	40.7	40.3	39.8	38.9	38.0
90	0.17	0.11	0.15	0.18	0.12	0.14	0.22	3.70	3.85	3.91	4.09	4.09	0.50	0.46	0.36	0.29	0.20	0.18	0.16
95	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.20	0.20	0.20	0.20	0.20	0.20	0.20
100	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.25	0.25	0.25	0.25	0.25	0.25	0.25
105	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.29	0.29	0.30	0.30	0.30	0.30	0.30
110	0.21	0.21	0.21	0.21	0.21	0.21	0.20	0.20	0.20	0.20	0.20	0.20	0.31	0.31	0.32	0.32	0.32	0.32	0.32
115	0.26	0.25	0.26	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.33	0.33	0.33	0.33	0.33	0.33	0.33
120	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.30	0.30	0.30	0.30	0.30	0.34	0.34	0.34	0.34	0.35	0.35	0.35
125	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.35	0.36	0.35	0.37	0.37	0.37	0.37	0.38	0.38	0.37
130	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.40	0.42	0.42	0.42	0.42	0.43	0.42	0.42
135	0.46	0.45	0.46	0.46	0.46	0.45	0.45	0.45	0.45	0.45	0.45	0.44	0.48	0.48	0.48	0.48	0.48	0.48	0.48
140	0.47	0.47	0.48	0.48	0.48	0.47	0.47	0.47	0.47	0.47	0.47	0.46	0.53	0.54	0.54	0.53	0.54	0.54	0.53
145	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.48	0.48	0.60	0.60	0.60	0.60	0.60	0.60	0.60
150	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.50	0.50	0.66	0.66	0.66	0.66	0.66	0.66	0.66
155	0.56	0.55	0.56	0.56	0.56	0.55	0.56	0.55	0.55	0.56	0.55	0.55	0.70	0.70	0.70	0.70	0.70	0.70	0.70
160	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.58	0.74	0.74	0.74	0.74	0.75	0.74	0.74
165	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.75	0.75	0.75	0.75	0.75	0.75	0.75
170	0.64	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.64	0.74	0.74	0.75	0.74	0.74	0.74	0.74
175	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.71	0.70	0.70	0.70	0.74	0.74	0.74	0.74	0.74	0.74	0.74
180	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.70	0.70	0.70	0.70	0.70	0.70

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 24 May 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 44.9%
 Test Distance: 2.500m [K=1.0391]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.00V I:0.2213A P:24.840W PF:0.9355 Freq:60.00Hz Lamp Flux:2333.77x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-12D24CC_4000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C(DEG)\ γ (DEG)	285	300	315	330	345														
0	825	826	825	824	825														
5	821	821	821	821	821														
10	809	810	809	809	809														
15	790	790	790	790	790														
20	764	764	763	763	763														
25	731	731	730	730	729														
30	692	691	690	690	690														
35	647	646	645	645	644														
40	597	596	595	595	594														
45	543	541	541	540	540														
50	484	483	482	481	481														
55	422	421	420	419	419														
60	357	356	355	354	354														
65	290	289	288	287	287														
70	222	220	219	218	218														
75	154	152	151	150	150														
80	91.2	90.0	88.8	87.9	87.8														
85	37.0	35.9	35.1	34.5	34.4														
90	0.16	0.16	0.16	0.16	0.16														
95	0.20	0.20	0.21	0.21	0.21														
100	0.25	0.25	0.26	0.26	0.26														
105	0.30	0.30	0.30	0.30	0.30														
110	0.32	0.32	0.32	0.32	0.32														
115	0.34	0.34	0.34	0.34	0.34														
120	0.35	0.35	0.35	0.35	0.35														
125	0.38	0.38	0.38	0.38	0.38														
130	0.43	0.43	0.43	0.43	0.43														
135	0.48	0.49	0.49	0.49	0.49														
140	0.53	0.54	0.54	0.54	0.54														
145	0.60	0.60	0.60	0.60	0.60														
150	0.66	0.66	0.66	0.66	0.66														
155	0.70	0.70	0.70	0.70	0.71														
160	0.74	0.74	0.75	0.75	0.75														
165	0.75	0.75	0.76	0.76	0.76														
170	0.73	0.74	0.74	0.74	0.74														
175	0.74	0.74	0.74	0.74	0.74														
180	0.70	0.70	0.70	0.70	0.70														

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 24 May 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 44.9%
 Test Distance: 2.500m [K=1.0391]
 Remarks: