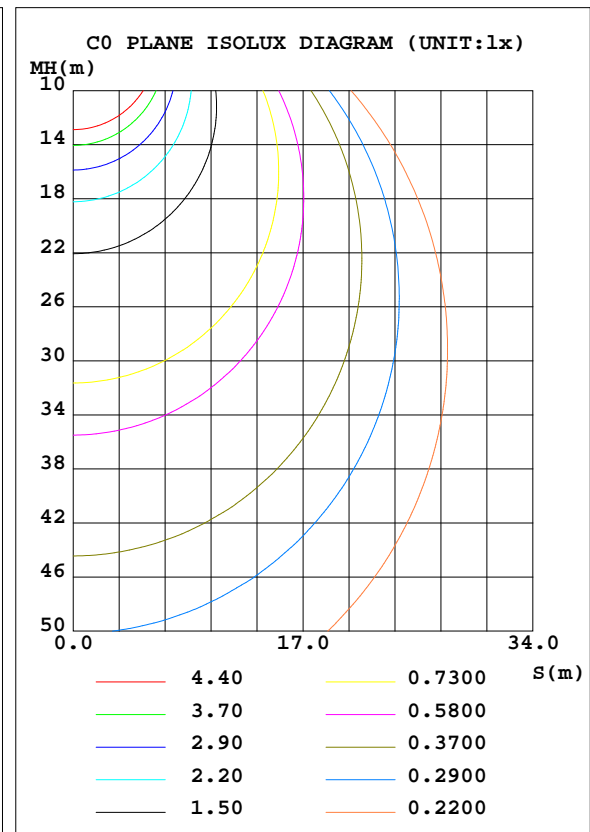
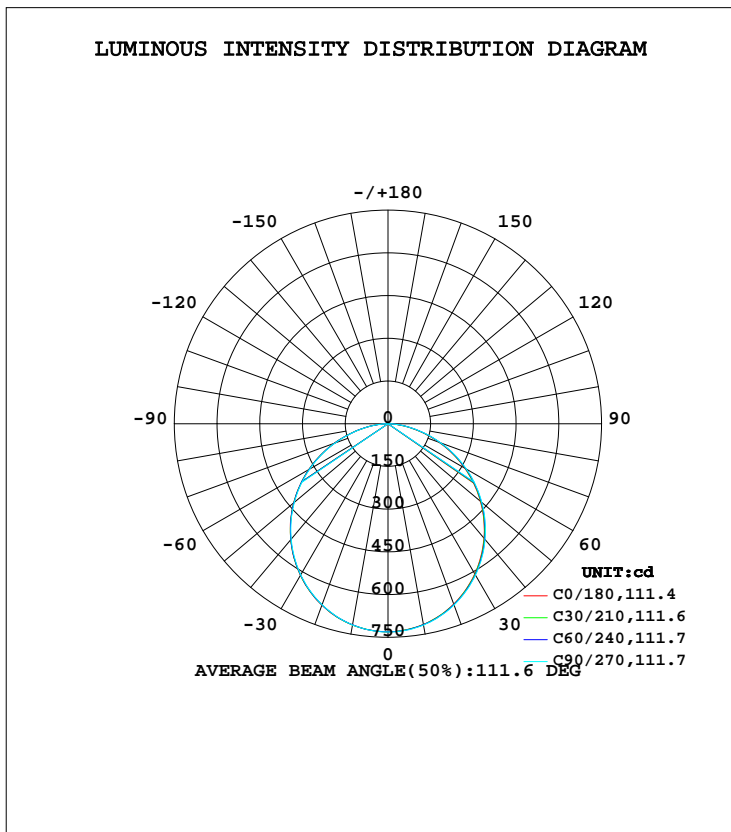


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.00V I:0.2137A P:23.860W PF:0.9306 Freq:60.00Hz Lamp Flux:2067.85x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-12D24CC_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 86.67 lm/W			
MODEL	ASD-MPR-12D24CC_5000K	I _{max} (cd)	731.2	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)	2067.9	η UP, DN(C0-180)	0.0,49.9
NOMINAL FLUX(lm)	2067.85	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.1,50.0
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	715.9	717.0	717.7	717.8	717.5	717.9	717.6	716.3	0- 10	69.09	69.09	3.34,3.34
20	674.0	675.8	677.4	677.7	678.2	677.9	676.6	675.0	10- 20	197.5	266.6	12.9,12.9
30	609.1	611.9	613.8	613.7	614.7	614.8	612.5	610.4	20- 30	298.3	564.9	27.3,27.3
40	524.6	527.6	530.4	530.5	531.2	531.5	529.1	526.1	30- 40	358.3	923.2	44.6,44.6
50	423.5	427.3	430.3	430.8	432.3	432.1	429.1	426.0	40- 50	370.7	1294	62.6,62.6
60	310.9	314.8	318.0	318.5	320.5	320.0	317.2	313.7	50- 60	334.3	1628	78.7,78.7
70	191.0	194.5	197.7	198.4	200.3	200.2	197.3	193.5	60- 70	254.3	1882	91,91
80	76.63	79.08	82.07	82.46	84.13	84.20	81.87	78.40	70- 80	144.9	2027	98,98
90	0.0834	0.1533	0.2368	0.2904	0.3908	0.2395	0.1462	0.1411	80- 90	38.49	2066	99.9,99.9
100	0.1175	0.1175	0.1162	0.1135	0.2195	0.2237	0.2254	0.2275	90-100	0.1833	2066	99.9,99.9
110	0.1825	0.1827	0.1809	0.1782	0.2763	0.2815	0.2832	0.2854	100-110	0.2149	2066	99.9,99.9
120	0.2722	0.2729	0.2703	0.2663	0.3022	0.3061	0.3071	0.3091	110-120	0.2570	2066	99.9,99.9
130	0.3649	0.3658	0.3641	0.3598	0.3738	0.3769	0.3766	0.3816	120-130	0.2925	2067	99.9,99.9
140	0.4197	0.4210	0.4184	0.4147	0.4732	0.4724	0.4736	0.4781	130-140	0.3181	2067	100,100
150	0.4511	0.4514	0.4521	0.4482	0.5840	0.5867	0.5841	0.5879	140-150	0.3020	2067	100,100
160	0.5247	0.5231	0.5201	0.5234	0.6565	0.6572	0.6527	0.6599	150-160	0.2562	2068	100,100
170	0.5709	0.5767	0.5768	0.5771	0.6584	0.6584	0.6509	0.6538	160-170	0.1716	2068	100,100
180	0.6292	0.6243	0.6209	0.6228	0.6302	0.6267	0.6250	0.6280	170-180	0.0594	2068	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1110.1 lm

%lum = 53.7%

%lamp = 53.7%

Conical surface Flux(120deg): 1628.2 lm

%lum = 78.7%

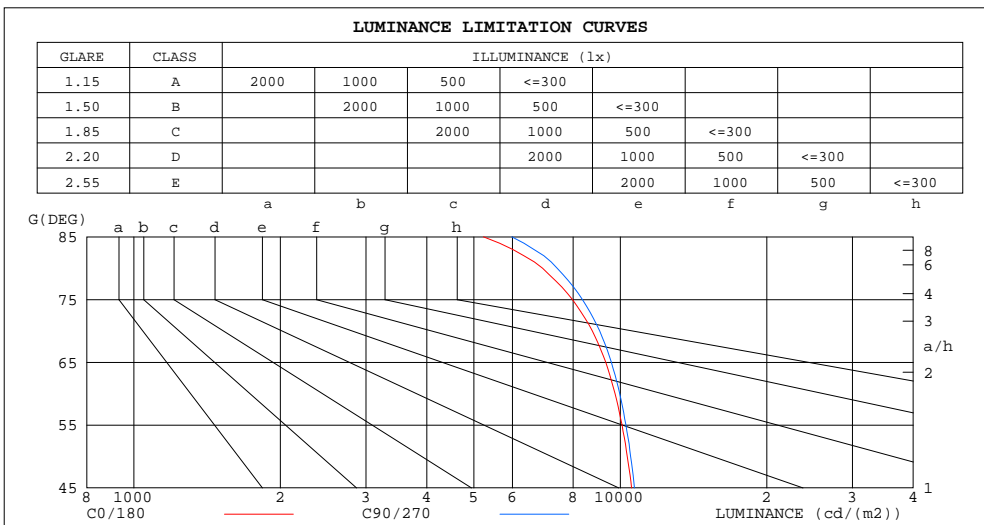
%lamp = 78.7%

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:0.2137A P:23.860W PF:0.9306 Freq:60.00Hz Lamp Flux:2067.85x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-12D24CC_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	5230	5981
80	6921	7412
75	7971	8356
70	8757	9067
65	9333	9585
60	9753	9974
55	10081	10269
50	10333	10500
45	10549	10694

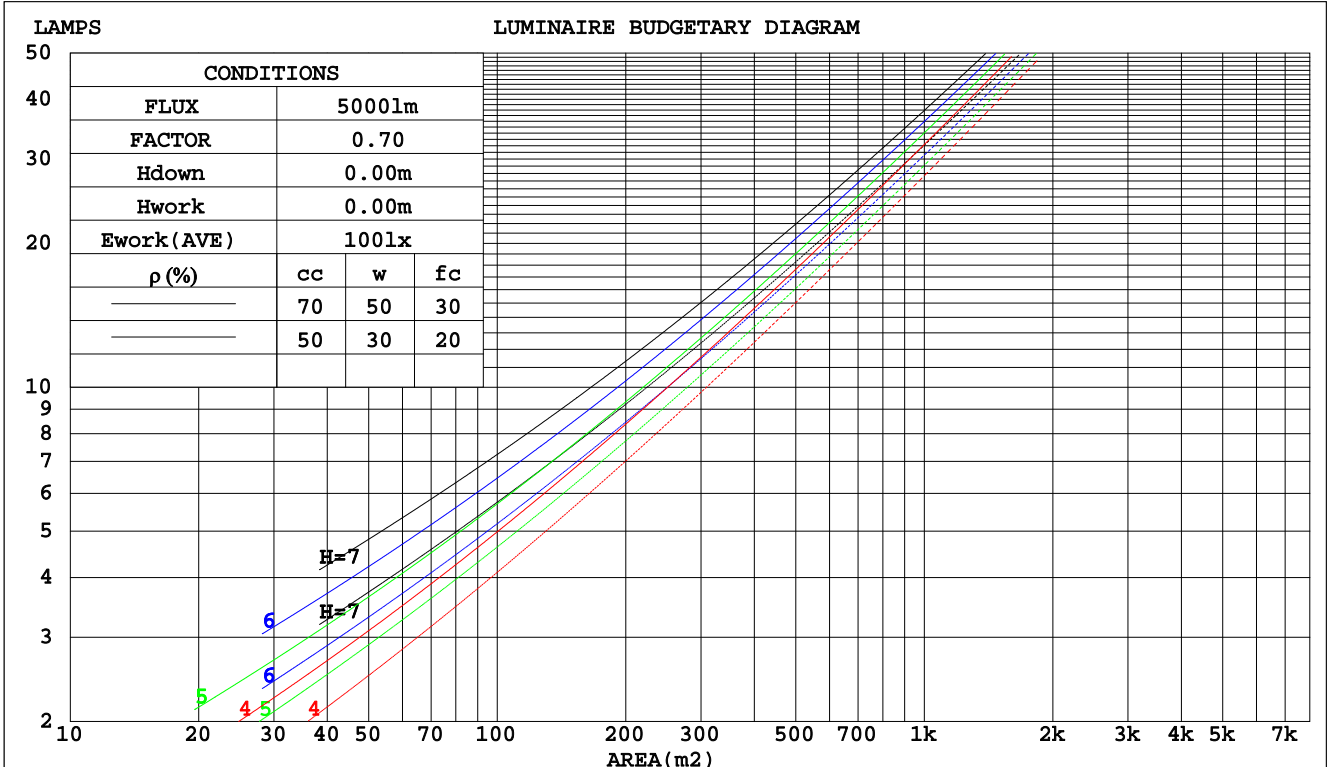
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 24 May 2023

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:0.2137A P:23.860W PF:0.9306 Freq:60.00Hz Lamp Flux:2067.85x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-12D24CC_5000K	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																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	1.04	.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:0.2137A P:23.860W PF:0.9306 Freq:60.00Hz Lamp Flux:2067.85x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-12D24CC_5000K	DIM.:	SERIAL No.:
MFR.:ASD Lighting Corp	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.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	.142	.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	.214	.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:0.2137A P:23.860W PF:0.9306 Freq:60.00Hz Lamp Flux:2067.85x1 lm										
NAME:					TYPE:LED			WEIGHT:		
SPEC.:ASD-MPR-12D24CC_5000K					DIM.:			SERIAL No.:		
MFR.: ASD Lighting Corp					SUR.:			Shielding Angle:		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	20.9	22.4	21.1	22.6	22.8	21.0	22.5	21.2	22.7	22.9
3H	22.3	23.7	22.6	24.0	24.2	22.5	23.9	22.8	24.1	24.3
4H	22.9	24.2	23.2	24.5	24.8	23.1	24.4	23.4	24.7	24.9
6H	23.3	24.6	23.6	24.8	25.1	23.5	24.7	23.8	25.0	25.3
8H	23.4	24.6	23.7	24.9	25.2	23.6	24.8	23.9	25.1	25.4
12H	23.5	24.6	23.8	24.9	25.2	23.7	24.8	24.0	25.1	25.4
4H 2H	21.5	22.8	21.8	23.1	23.3	21.5	22.9	21.9	23.1	23.4
3H	23.1	24.3	23.5	24.6	24.9	23.2	24.4	23.6	24.7	25.0
4H	23.8	24.9	24.2	25.2	25.6	24.0	25.0	24.3	25.4	25.7
6H	24.3	25.3	24.7	25.6	26.0	24.5	25.5	24.9	25.8	26.2
8H	24.5	25.4	24.9	25.7	26.1	24.7	25.6	25.1	25.9	26.3
12H	24.6	25.4	25.0	25.8	26.2	24.8	25.6	25.2	26.0	26.4
8H 4H	24.1	25.0	24.5	25.3	25.7	24.2	25.1	24.6	25.5	25.8
6H	24.7	25.5	25.2	25.9	26.3	24.9	25.6	25.3	26.0	26.5
8H	25.0	25.6	25.4	26.0	26.5	25.1	25.8	25.6	26.2	26.7
12H	25.1	25.7	25.6	26.1	26.6	25.3	25.9	25.8	26.3	26.8
12H 4H	24.1	24.9	24.5	25.3	25.7	24.2	25.0	24.6	25.4	25.8
6H	24.8	25.4	25.3	25.9	26.3	24.9	25.6	25.4	26.0	26.5
8H	25.1	25.6	25.5	26.1	26.5	25.2	25.8	25.7	26.2	26.7
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, 2068 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 2.5)
 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:0.2137A P:23.860W PF:0.9306 Freq:60.00Hz Lamp Flux:2067.85x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-12D24CC_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

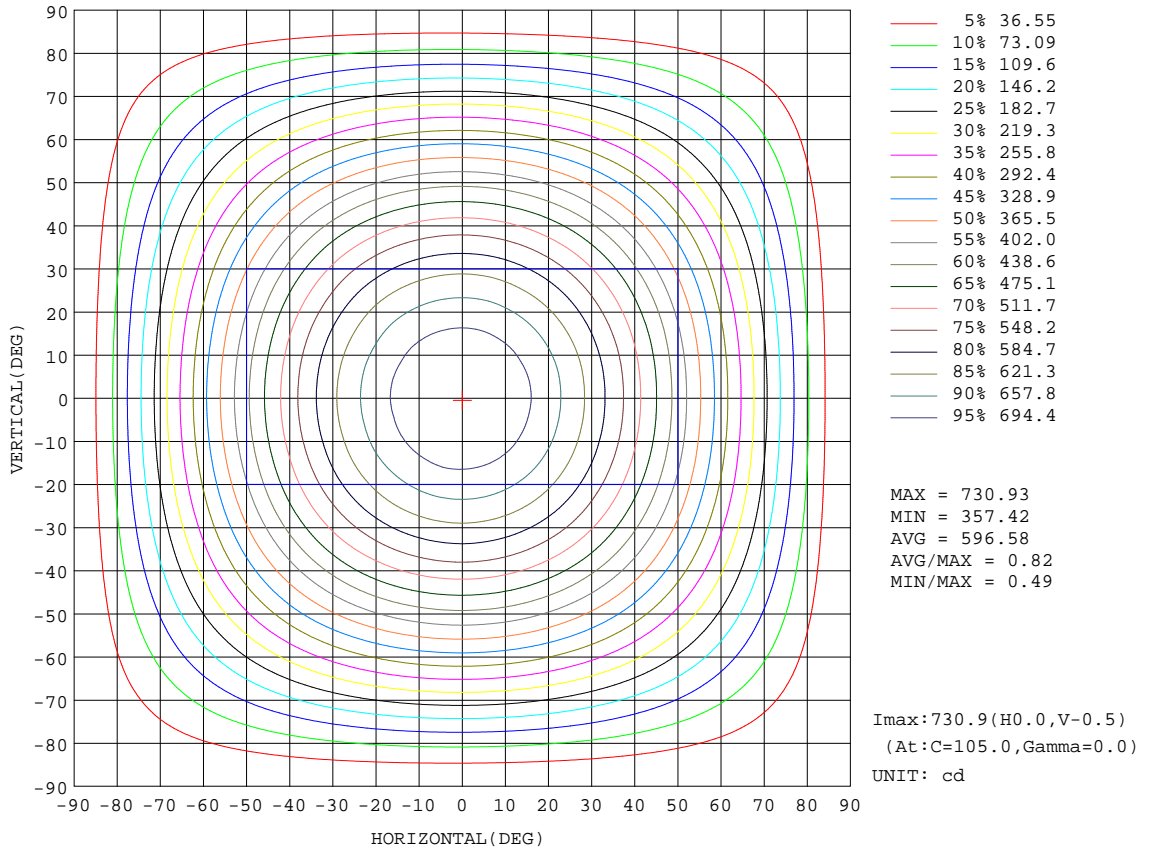
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	58	46	39	57	46	39	56	45	39	32
0.80	68	56	49	67	56	48	65	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	75	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:0.2137A P:23.860W PF:0.9306 Freq:60.00Hz Lamp Flux:2067.85x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-12D24CC_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



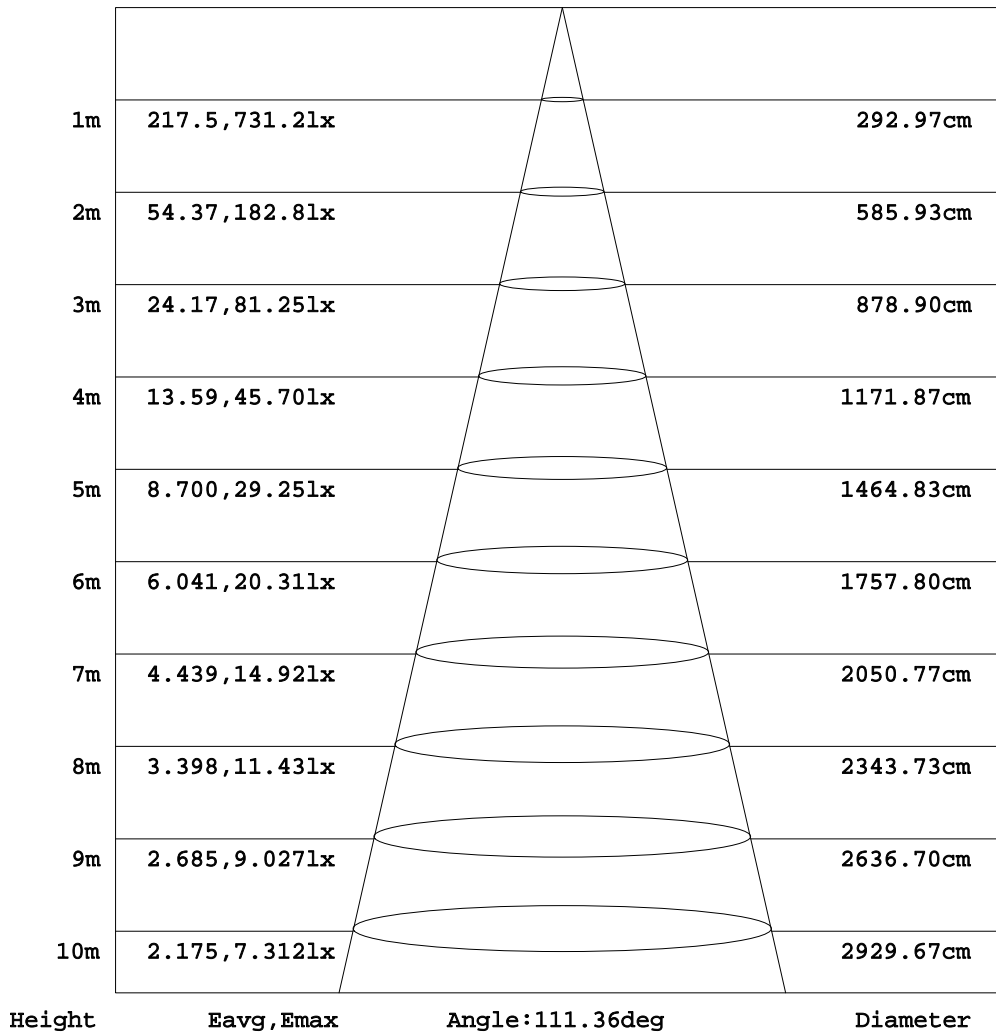
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 24 May 2023

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:0.2137A P:23.860W PF:0.9306 Freq:60.00Hz Lamp Flux:2067.85x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-12D24CC_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Flux out:1502 lm



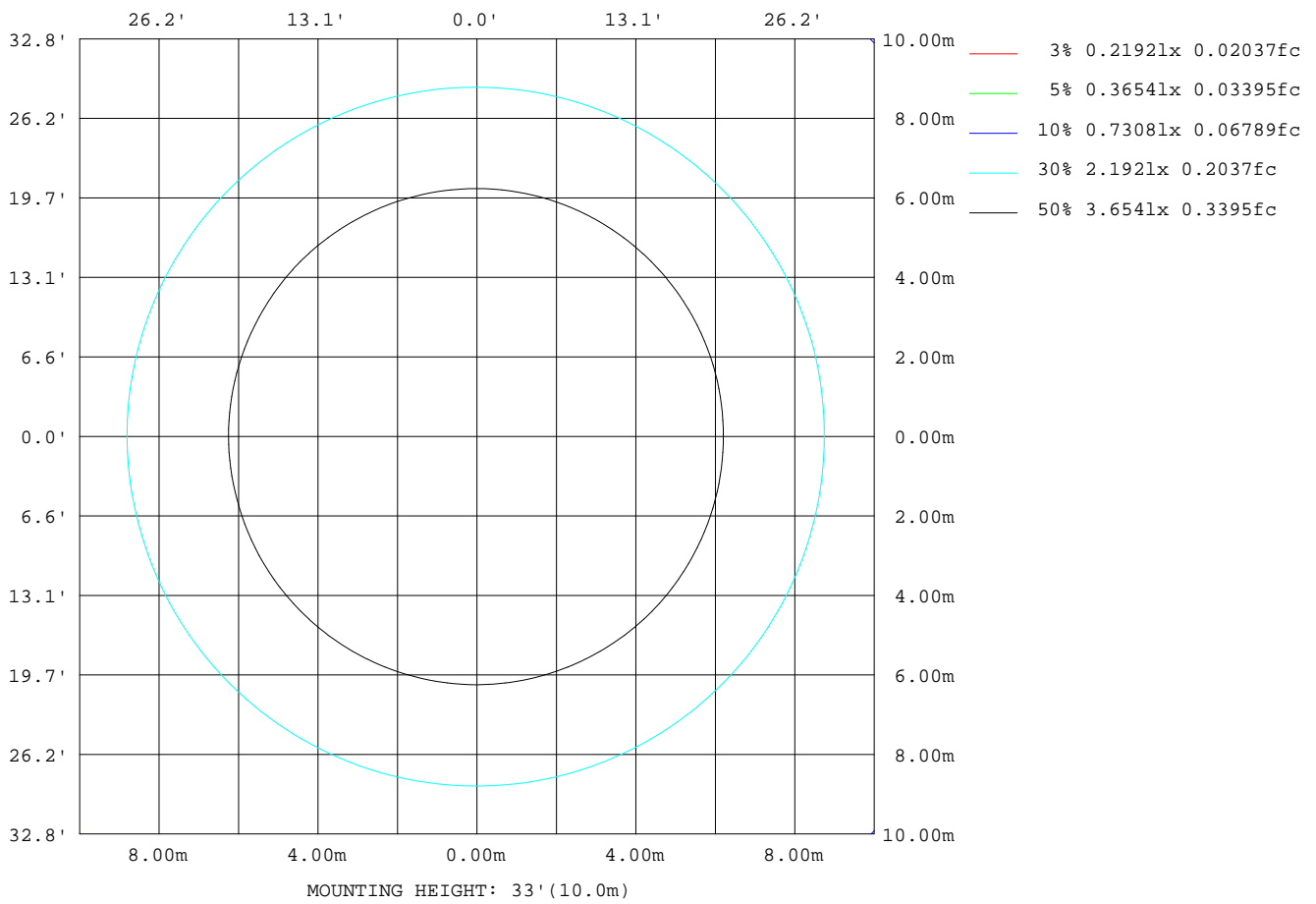
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.2137A P:23.860W PF:0.9306 Freq:60.00Hz Lamp Flux:2067.85x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-12D24CC_5000K	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:0.2137A P:23.860W PF:0.9306 Freq:60.00Hz Lamp Flux:2067.85x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-12D24CC_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

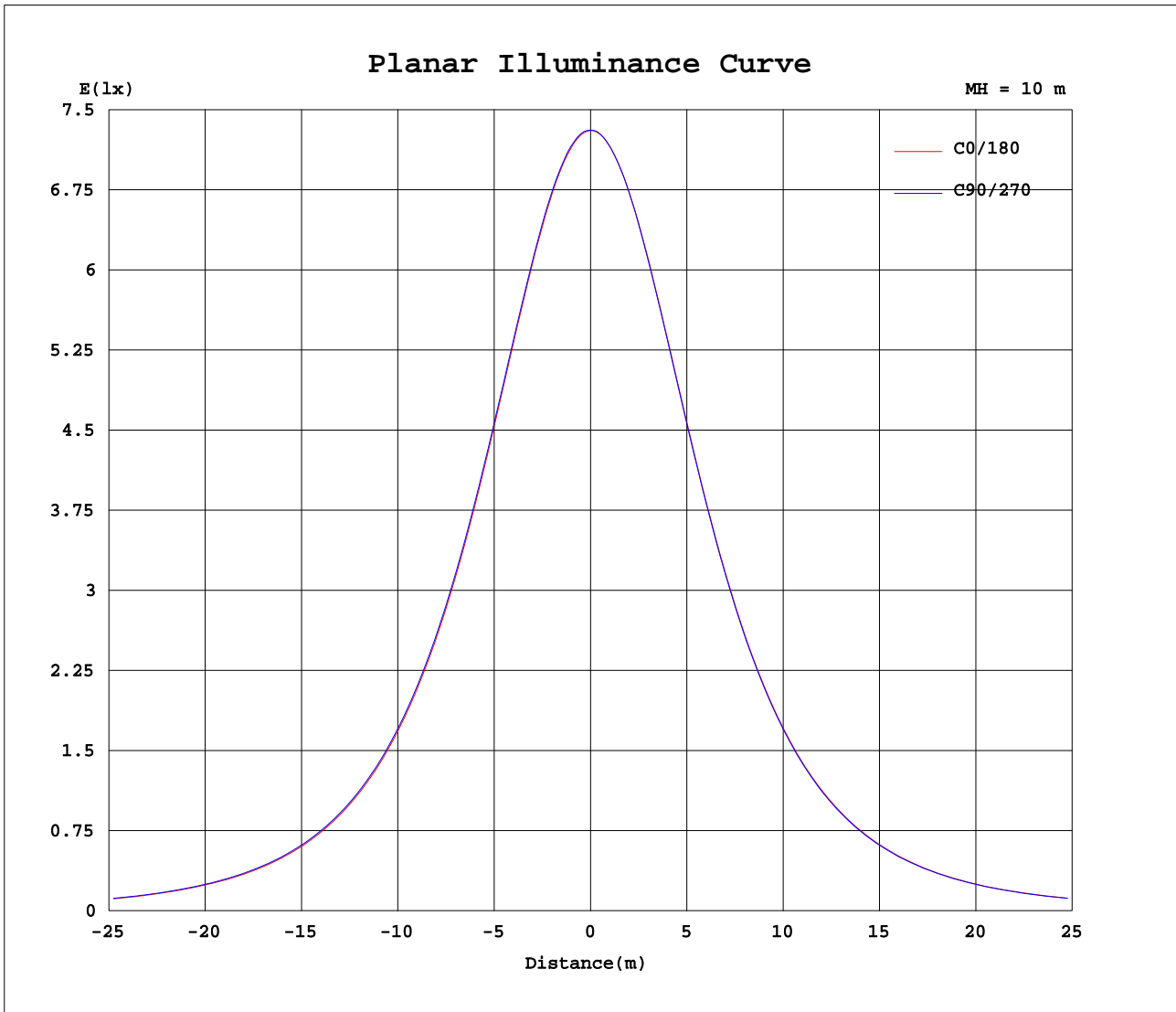
AvgL	cd/m2
L_0~180(65)av	9513
L_0~180(75)av	8225
L_0~180(85)av	5847
L_90~270(65)av	9577
L_90~270(75)av	8343
L_90~270(85)av	6013
L_45(65)av	9544
L_45(75)av	8284
L_45(85)av	5925

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:0.2137A P:23.860W PF:0.9306 Freq:60.00Hz Lamp Flux:2067.85x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-12D24CC_5000K	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	731	730	731	731	731	730	731	731	731	731	731	730	731	730	731	731	731	730	731
5	727	727	726	727	727	727	728	728	728	728	727	727	727	727	727	728	727	727	728
10	716	716	716	717	716	717	718	718	718	718	717	717	717	718	718	718	717	717	718
15	698	698	699	699	700	700	701	701	700	701	701	701	701	701	701	701	700	700	700
20	674	674	675	676	676	677	677	678	677	678	678	677	678	678	678	678	677	677	677
25	644	645	646	646	647	648	648	649	649	648	649	648	649	649	649	649	648	648	647
30	609	609	611	612	612	613	614	614	614	614	614	614	615	615	614	615	614	613	613
35	569	569	571	572	573	574	574	574	574	574	575	575	575	575	575	576	575	574	573
40	525	525	526	528	529	530	530	530	530	531	530	530	531	531	531	532	531	530	529
45	476	477	477	479	481	482	482	482	482	483	482	482	484	483	483	484	483	482	481
50	424	425	426	427	428	430	430	431	431	431	431	430	432	432	432	432	431	431	429
55	369	370	371	372	373	375	376	376	376	376	376	376	378	378	377	377	377	376	375
60	311	312	313	315	316	317	318	318	318	319	318	318	320	321	320	320	320	318	317
65	251	252	253	255	256	257	258	259	259	259	259	259	261	261	261	261	260	259	258
70	191	192	193	194	196	197	198	198	198	198	198	198	200	200	200	200	200	198	197
75	132	132	134	135	136	137	138	138	138	139	138	138	140	140	140	140	139	139	137
80	76.6	78.0	78.4	79.1	80.4	81.3	82.1	82.5	82.4	82.5	82.6	82.6	84.1	84.3	84.3	84.2	83.7	82.9	81.9
85	29.1	29.5	30.3	31.0	31.9	32.6	33.2	33.7	34.0	34.2	34.3	34.3	35.9	36.0	35.9	35.6	35.2	34.3	33.6
90	0.08	0.11	0.15	0.15	0.16	0.18	0.24	3.33	3.44	0.29	3.58	3.60	0.39	0.34	0.29	0.24	0.17	0.16	0.15
95	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.17	0.18	0.18	0.18	0.18	0.18	0.18
100	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.22	0.22	0.22	0.22	0.22	0.23	0.23
105	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.14	0.14	0.14	0.14	0.14	0.26	0.26	0.26	0.26	0.26	0.27	0.27
110	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.28	0.28	0.28	0.28	0.28	0.28	0.28
115	0.23	0.23	0.23	0.23	0.23	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.29	0.29	0.29	0.29	0.30	0.30	0.30
120	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.26	0.30	0.30	0.30	0.31	0.31	0.31	0.31
125	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.31	0.32	0.31	0.33	0.33	0.33	0.33	0.33	0.33	0.33
130	0.36	0.36	0.37	0.37	0.37	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.37	0.37	0.38	0.38	0.38	0.38	0.38
135	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.39	0.42	0.42	0.43	0.43	0.43	0.43	0.43
140	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.41	0.41	0.41	0.47	0.47	0.47	0.47	0.48	0.48	0.47
145	0.43	0.43	0.44	0.44	0.44	0.44	0.44	0.43	0.43	0.43	0.43	0.43	0.53	0.53	0.53	0.53	0.53	0.53	0.53
150	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.44	0.58	0.58	0.59	0.59	0.59	0.59	0.58
155	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.48	0.62	0.62	0.62	0.62	0.62	0.62	0.62
160	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.66	0.66	0.66	0.66	0.66	0.66	0.65
165	0.55	0.54	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.67	0.66	0.66	0.66	0.66	0.67	0.66
170	0.57	0.57	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.57	0.66	0.66	0.66	0.66	0.66	0.65	0.65
175	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.65	0.66	0.65	0.65	0.66	0.65	0.65
180	0.63	0.63	0.63	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.62

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:0.2137A P:23.860W PF:0.9306 Freq:60.00Hz Lamp Flux:2067.85x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-12D24CC_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C(DEG) γ (DEG)	285	300	315	330	345														
0	731	731	731	731	730														
5	728	727	727	726	727														
10	717	717	716	716	716														
15	699	699	699	699	699														
20	676	676	675	675	675														
25	647	646	645	645	645														
30	612	611	610	610	610														
35	573	571	571	570	570														
40	528	527	526	526	526														
45	480	479	478	478	477														
50	428	427	426	426	426														
55	373	372	371	371	371														
60	316	315	314	313	313														
65	256	255	254	253	254														
70	196	194	193	192	192														
75	136	135	134	133	133														
80	80.7	79.5	78.4	77.7	77.6														
85	32.6	31.8	31.0	30.5	30.3														
90	0.14	0.14	0.14	0.14	0.14														
95	0.18	0.18	0.18	0.18	0.18														
100	0.23	0.23	0.23	0.23	0.23														
105	0.27	0.27	0.27	0.27	0.27														
110	0.28	0.28	0.29	0.28	0.29														
115	0.30	0.30	0.30	0.30	0.30														
120	0.31	0.31	0.31	0.31	0.31														
125	0.33	0.34	0.34	0.34	0.34														
130	0.38	0.38	0.38	0.38	0.38														
135	0.43	0.43	0.43	0.43	0.43														
140	0.47	0.48	0.48	0.48	0.48														
145	0.53	0.54	0.54	0.54	0.54														
150	0.59	0.59	0.59	0.59	0.59														
155	0.62	0.62	0.62	0.62	0.63														
160	0.66	0.66	0.66	0.66	0.66														
165	0.66	0.66	0.67	0.67	0.67														
170	0.65	0.65	0.65	0.66	0.66														
175	0.65	0.66	0.65	0.65	0.66														
180	0.63	0.63	0.63	0.63	0.63														

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: