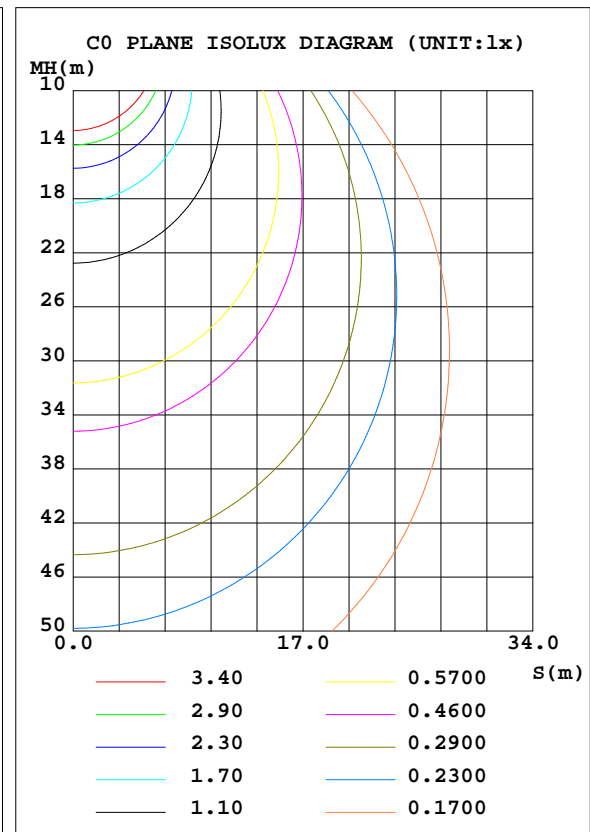
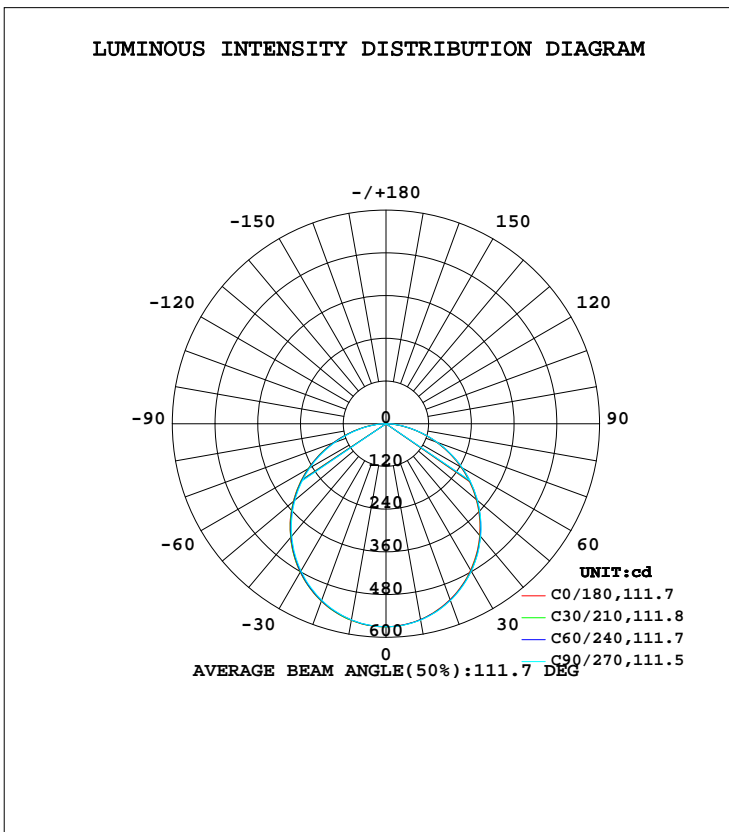


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.00V I:0.1663A P:18.690W PF:0.9366 Freq:60.00Hz Lamp Flux:1614.5x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-9D18CC_4000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 86.38 lm/W			
MODEL	ASD-MPR-9D18CC_4000K	I <sub>max</sub> (cd)	570.8	S/MH(C0/180)	1.26
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.24
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1614.5	η UP, DN(C0-180)	0.0,49.9
NOMINAL FLUX(lm)	1614.5	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:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	558.2	559.0	560.0	560.3	560.8	559.6	559.2	558.7	0- 10	53.92	53.92	3.34,3.34
20	525.7	527.1	528.6	529.5	530.8	529.2	527.2	526.5	10- 20	154.1	208.0	12.9,12.9
30	475.4	477.1	478.9	480.1	481.4	479.8	477.3	476.1	20- 30	232.8	440.9	27.3,27.3
40	409.2	411.8	413.9	415.1	417.2	415.1	411.7	410.0	30- 40	279.8	720.7	44.6,44.6
50	330.9	333.7	335.7	337.3	339.9	337.6	333.8	331.9	40- 50	289.5	1010	62.6,62.6
60	243.1	245.8	247.7	249.2	252.2	250.2	246.2	243.8	50- 60	261.1	1271	78.7,78.7
70	149.6	152.5	153.7	155.0	158.1	156.3	151.6	149.0	60- 70	198.4	1470	91,91
80	60.25	62.88	63.52	64.38	68.13	66.77	61.98	59.63	70- 80	113.2	1583	98,98
90	0.1112	0.1089	0.1254	0.1336	0.1677	0.1337	0.1123	0.1094	80- 90	30.00	1613	99.9,99.9
100	0.0918	0.0900	0.0866	0.0859	0.1708	0.1721	0.1752	0.1764	90-100	0.1166	1613	99.9,99.9
110	0.1451	0.1415	0.1396	0.1372	0.2165	0.2184	0.2198	0.2224	100-110	0.1666	1613	99.9,99.9
120	0.2152	0.2111	0.2084	0.2071	0.2356	0.2368	0.2381	0.2418	110-120	0.2000	1613	99.9,99.9
130	0.2895	0.2837	0.2835	0.2817	0.2928	0.2940	0.2942	0.2984	120-130	0.2283	1614	99.9,99.9
140	0.3323	0.3267	0.3271	0.3258	0.3703	0.3715	0.3745	0.3777	130-140	0.2496	1614	100,100
150	0.3569	0.3504	0.3543	0.3547	0.4592	0.4587	0.4625	0.4659	140-150	0.2376	1614	100,100
160	0.4154	0.4078	0.4104	0.4127	0.5186	0.5176	0.5117	0.5239	150-160	0.2020	1614	100,100
170	0.4562	0.4490	0.4562	0.4549	0.5169	0.5172	0.5094	0.5195	160-170	0.1354	1614	100,100
180	0.4860	0.4864	0.4867	0.4884	0.4910	0.4867	0.4867	0.4894	170-180	0.0467	1615	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 866.68 lm

%lum = 53.7%

%lamp = 53.7%

Conical surface Flux(120deg): 1271.3 lm

%lum = 78.7%

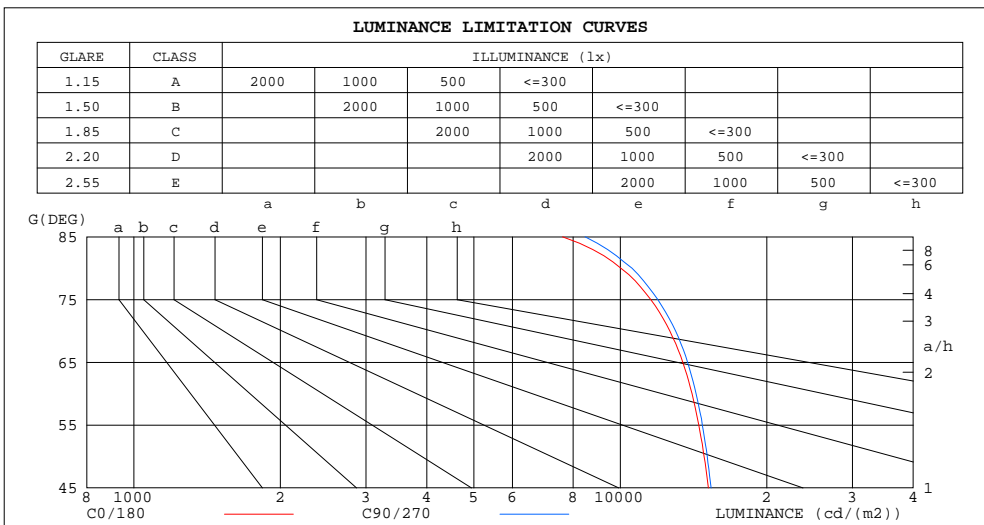
%lamp = 78.7%

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

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:0.1663A P:18.690W PF:0.9366 Freq:60.00Hz Lamp Flux:1614.5x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-9D18CC_4000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	7605	8462
80	10023	10567
75	11547	11938
70	12635	12984
65	13442	13748
60	14047	14312
55	14499	14746
50	14868	15088
45	15174	15369

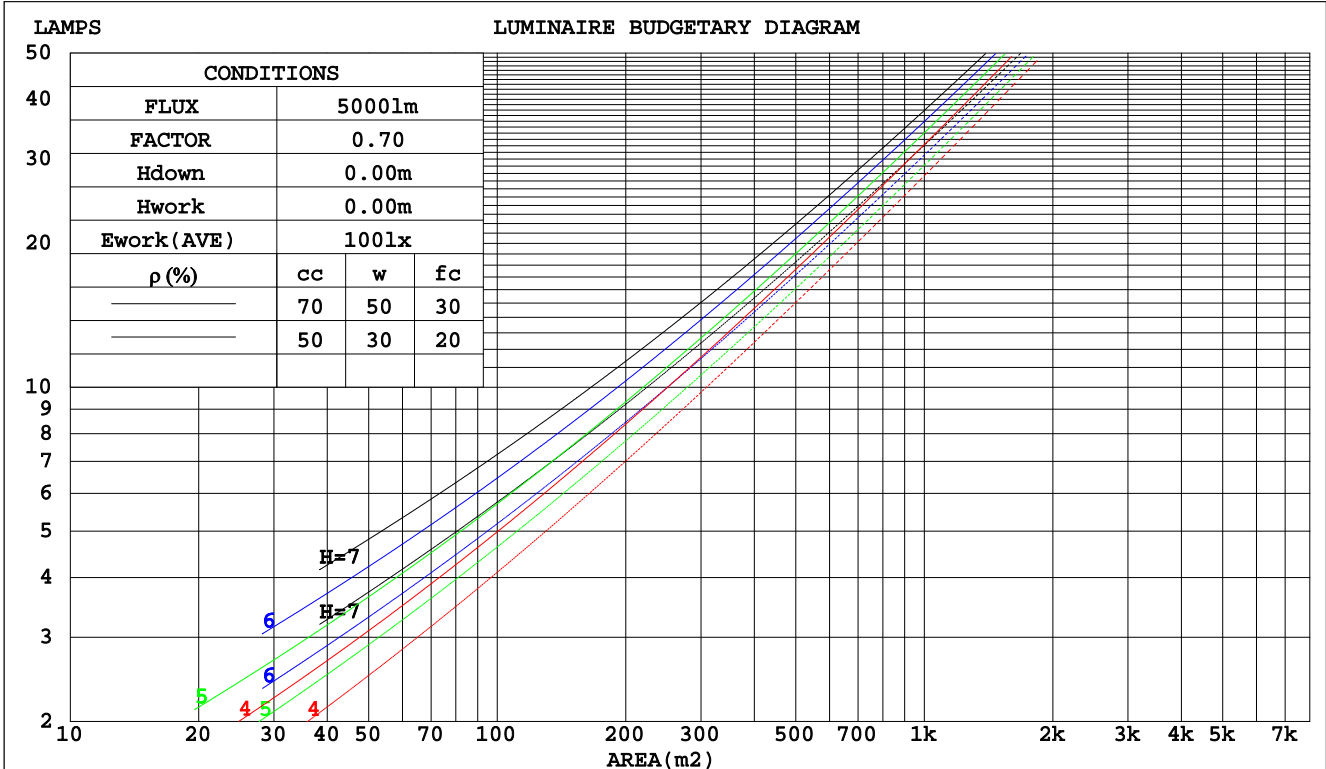
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.0DEG  
 Operators: Alan Wang  
 Test Date: 24 May 2023

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:0.1663A P:18.690W PF:0.9366 Freq:60.00Hz Lamp Flux:1614.5x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-9D18CC_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:0.1663A P:18.690W PF:0.9366 Freq:60.00Hz Lamp Flux:1614.5x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-9D18CC_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	.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:0.1663A P:18.690W PF:0.9366 Freq:60.00Hz Lamp Flux:1614.5x1 lm										
NAME:			TYPE:LED				WEIGHT:			
SPEC.:ASD-MPR-9D18CC_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	22.1	23.7	22.4	23.9	24.1	22.2	23.7	22.5	23.9	24.1
3H	23.6	25.0	23.9	25.3	25.5	23.7	25.1	24.0	25.4	25.6
4H	24.2	25.5	24.5	25.8	26.0	24.3	25.6	24.6	25.9	26.2
6H	24.6	25.9	24.9	26.1	26.4	24.7	26.0	25.1	26.3	26.5
8H	24.7	25.9	25.0	26.2	26.5	24.8	26.1	25.2	26.4	26.6
12H	24.8	25.9	25.1	26.2	26.5	24.9	26.1	25.3	26.4	26.7
4H 2H	22.8	24.1	23.1	24.3	24.6	22.8	24.1	23.1	24.4	24.7
3H	24.4	25.6	24.8	25.9	26.2	24.5	25.7	24.9	26.0	26.3
4H	25.1	26.2	25.5	26.5	26.9	25.2	26.3	25.6	26.6	26.9
6H	25.6	26.6	26.0	26.9	27.3	25.8	26.7	26.2	27.1	27.4
8H	25.8	26.7	26.2	27.1	27.4	25.9	26.8	26.3	27.2	27.6
12H	25.9	26.7	26.3	27.1	27.5	26.0	26.9	26.5	27.2	27.6
8H 4H	25.4	26.3	25.8	26.6	27.0	25.5	26.4	25.9	26.7	27.1
6H	26.1	26.8	26.5	27.2	27.6	26.2	26.9	26.6	27.3	27.7
8H	26.3	26.9	26.8	27.4	27.8	26.4	27.1	26.9	27.5	27.9
12H	26.4	27.0	26.9	27.5	27.9	26.6	27.1	27.1	27.6	28.1
12H 4H	25.4	26.2	25.8	26.6	27.0	25.5	26.3	25.9	26.7	27.1
6H	26.1	26.8	26.6	27.2	27.6	26.2	26.9	26.7	27.3	27.7
8H	26.4	26.9	26.9	27.4	27.9	26.5	27.1	27.0	27.5	28.0
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, 1615 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 1.7)  
 Area: 0.0346185 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:0.1663A P:18.690W PF:0.9366 Freq:60.00Hz Lamp Flux:1614.5x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-9D18CC_4000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

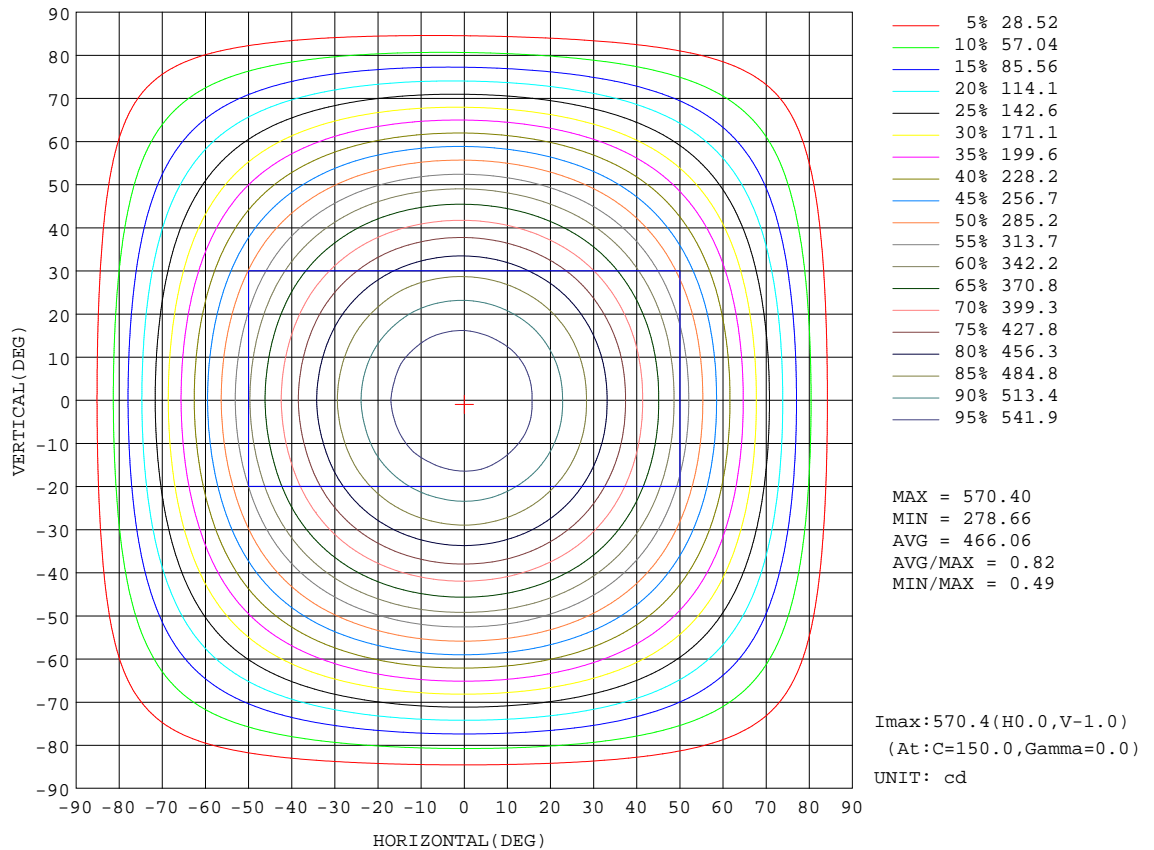
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	58	46	39	57	46	39	56	45	39	32
0.80	68	56	49	67	56	48	65	55	48	41
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	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:0.1663A P:18.690W PF:0.9366 Freq:60.00Hz Lamp Flux:1614.5x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-9D18CC_4000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



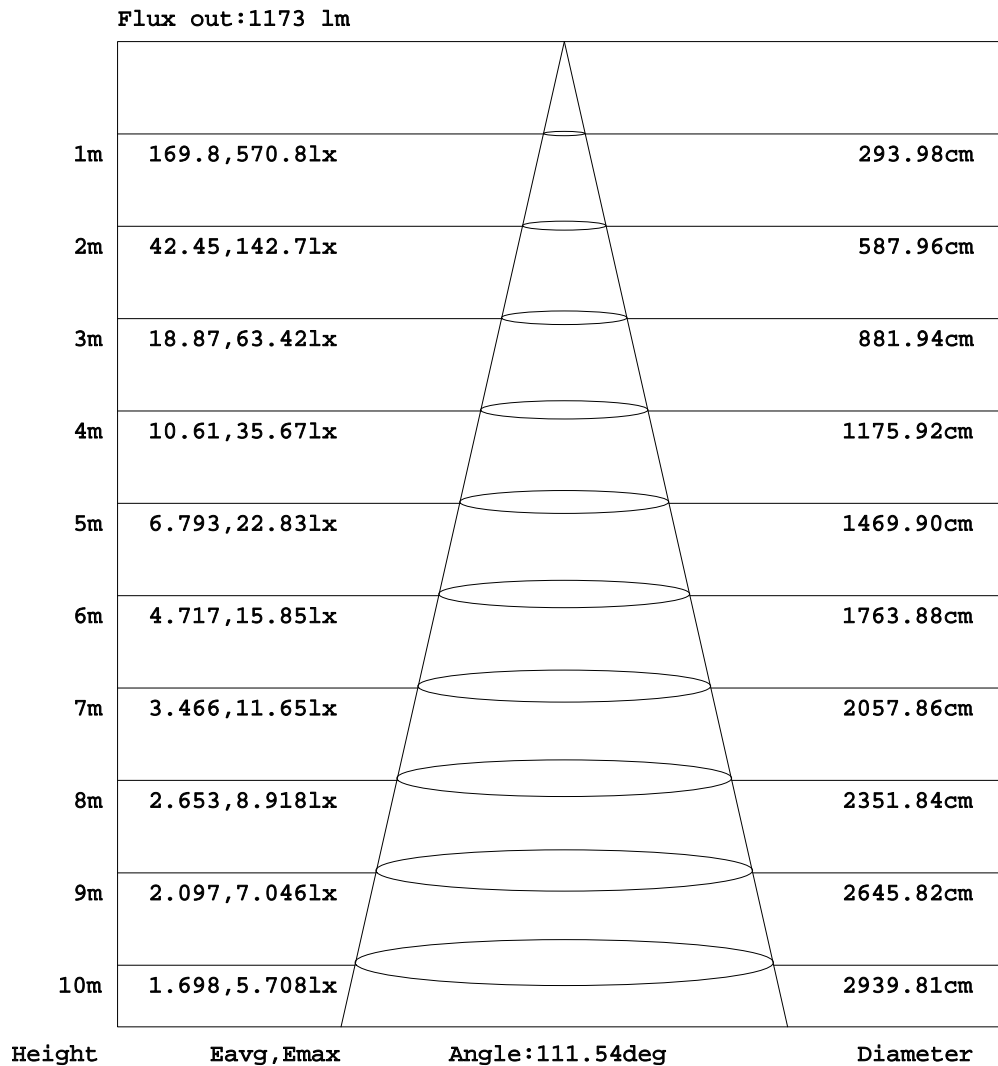
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.0DEG  
 Operators: Alan Wang  
 Test Date: 24 May 2023

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:0.1663A P:18.690W PF:0.9366 Freq:60.00Hz Lamp Flux:1614.5x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-9D18CC_4000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



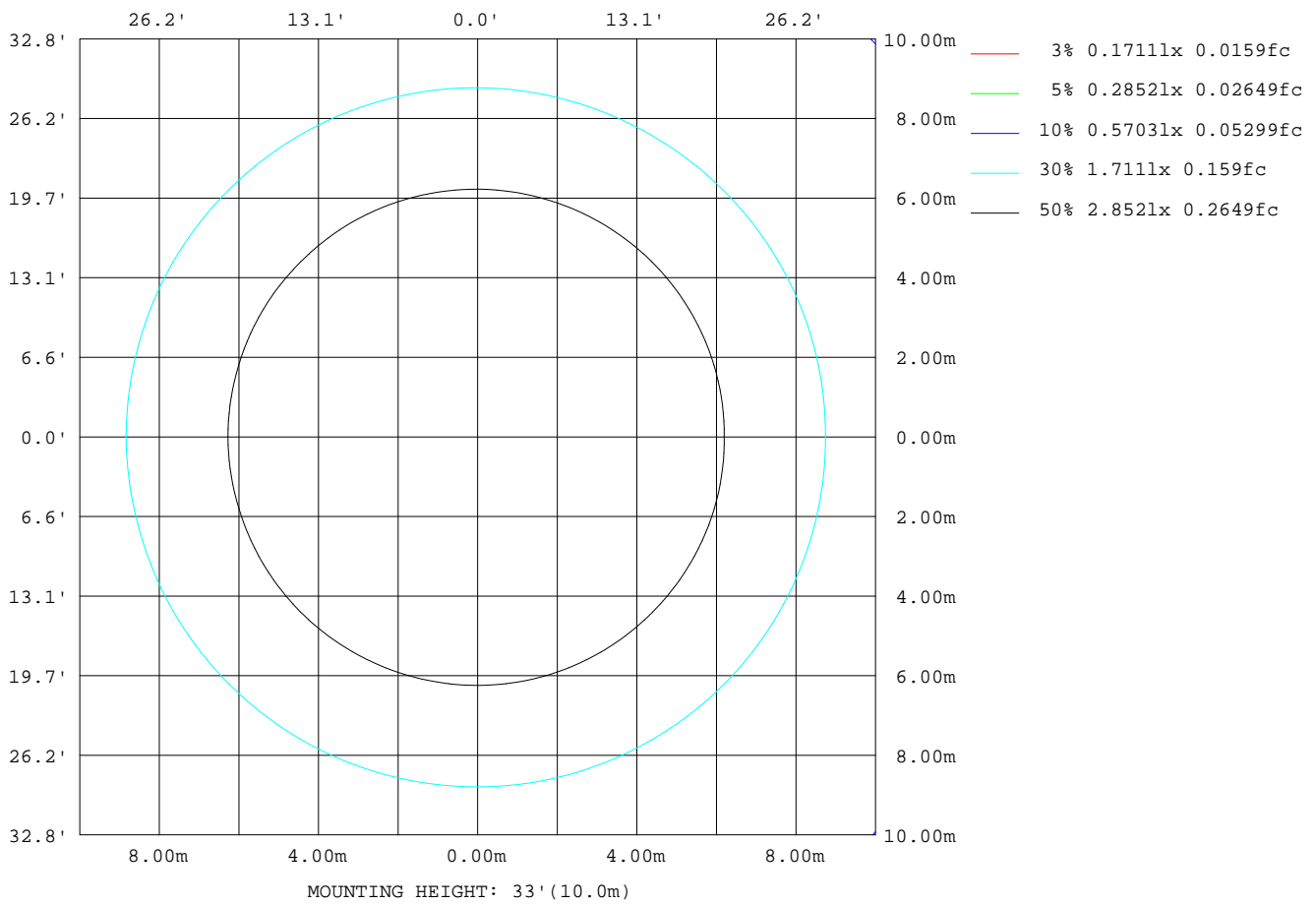
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.1663A P:18.690W PF:0.9366 Freq:60.00Hz Lamp Flux:1614.5x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-9D18CC_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

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:0.1663A P:18.690W PF:0.9366 Freq:60.00Hz Lamp Flux:1614.5x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.: ASD-MPR-9D18CC_4000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

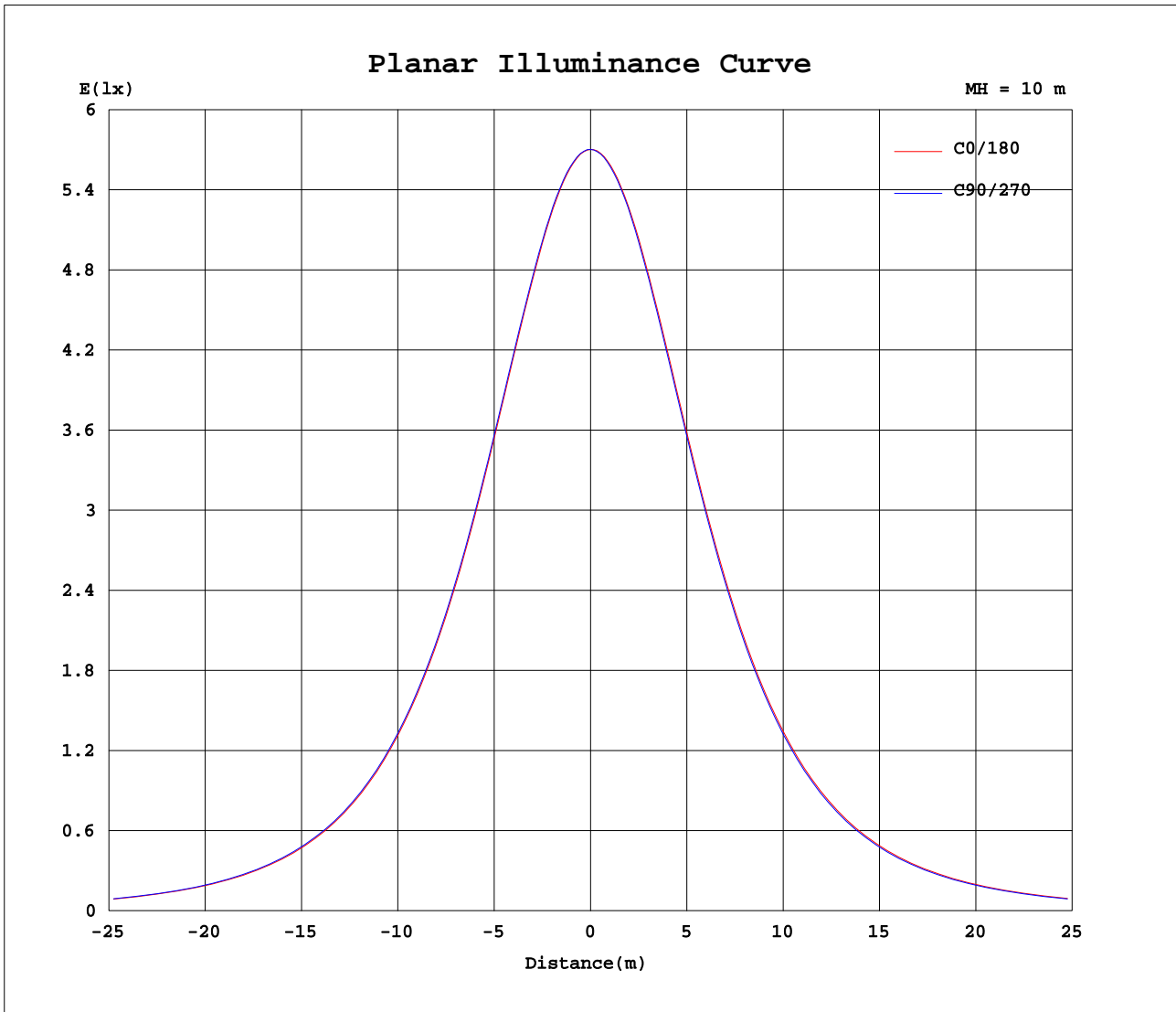
AvgL	cd/m2
L_0~180(65)av	13764
L_0~180(75)av	12011
L_0~180(85)av	8683
L_90~270(65)av	13682
L_90~270(75)av	11836
L_90~270(85)av	8437
L_45(65)av	13722
L_45(75)av	11918
L_45(85)av	8528

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

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:0.1663A P:18.690W PF:0.9366 Freq:60.00Hz Lamp Flux:1614.5x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-9D18CC_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	570	570	570	570	570	570	570	570	570	570	571	570	570	570	570	570	570	570	570
5	567	567	568	567	567	568	568	567	567	568	568	568	568	568	568	567	568	568	567
10	558	559	559	559	559	560	560	559	560	560	561	561	561	560	560	560	560	559	559
15	544	545	545	546	546	547	547	546	547	547	548	548	548	548	548	547	547	546	546
20	526	527	527	527	527	528	529	528	529	529	530	530	531	530	530	529	529	528	527
25	503	504	504	504	505	506	506	506	506	507	507	507	508	508	508	506	506	505	504
30	475	476	477	477	478	479	479	479	479	480	481	480	481	481	481	480	479	478	477
35	444	445	446	446	447	448	448	448	449	449	450	450	451	451	451	449	449	447	446
40	409	410	411	412	412	413	414	414	414	415	416	416	417	417	416	415	414	413	412
45	371	373	373	374	375	376	376	377	377	378	378	378	380	379	379	378	377	375	374
50	331	332	333	334	335	335	336	336	337	337	338	338	340	339	339	338	337	335	334
55	288	289	290	291	292	293	293	293	294	295	295	295	297	297	296	295	294	292	291
60	243	244	245	246	247	247	248	248	249	249	250	250	252	252	252	250	249	247	246
65	197	198	199	200	200	201	201	202	202	203	203	204	206	206	205	204	202	201	199
70	150	151	152	153	153	154	154	154	154	155	156	156	158	158	158	156	155	153	152
75	103	105	106	106	107	107	107	107	107	108	109	110	112	112	111	110	109	107	105
80	60.3	61.2	62.4	62.9	63.6	63.7	63.5	63.6	63.7	64.4	65.3	66.1	68.1	68.2	67.7	66.8	65.4	63.8	62.0
85	22.9	23.5	24.2	24.8	25.2	25.4	25.5	25.6	25.8	26.4	27.0	27.6	29.4	29.4	29.0	28.3	27.7	26.5	25.4
90	0.11	0.07	0.15	0.11	0.16	0.14	0.13	0.18	0.14	0.13	0.18	0.18	0.17	0.15	0.15	0.13	0.13	0.12	0.11
95	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.14	0.14	0.14	0.14	0.14	0.14	0.14
100	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	0.17	0.17	0.17	0.17	0.17	0.18
105	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.20	0.20	0.20	0.20	0.21	0.21	0.21
110	0.15	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.22	0.22	0.22	0.22	0.22	0.22	0.22
115	0.18	0.18	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.23	0.23	0.23	0.23	0.23	0.23	0.23
120	0.22	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.20	0.21	0.24	0.24	0.24	0.24	0.24	0.24	0.24
125	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.24	0.25	0.26	0.26	0.26	0.26	0.26	0.26	0.26
130	0.29	0.29	0.29	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.27	0.28	0.29	0.29	0.29	0.29	0.29	0.29	0.29
135	0.32	0.32	0.32	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.30	0.31	0.33	0.33	0.33	0.33	0.33	0.33	0.34
140	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.32	0.33	0.37	0.37	0.37	0.37	0.37	0.37	0.37
145	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.33	0.34	0.42	0.42	0.42	0.42	0.42	0.41	0.42
150	0.36	0.36	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.34	0.35	0.46	0.46	0.46	0.46	0.46	0.46	0.46
155	0.39	0.39	0.39	0.38	0.39	0.39	0.39	0.39	0.39	0.39	0.38	0.39	0.49	0.49	0.49	0.49	0.49	0.48	0.49
160	0.42	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.40	0.41	0.52	0.52	0.52	0.52	0.52	0.52	0.51
165	0.44	0.43	0.43	0.43	0.44	0.44	0.43	0.43	0.43	0.43	0.42	0.43	0.53	0.52	0.53	0.52	0.53	0.52	0.52
170	0.46	0.45	0.45	0.45	0.45	0.46	0.46	0.46	0.46	0.45	0.44	0.45	0.52	0.52	0.52	0.52	0.52	0.51	0.51
175	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.48	0.48	0.48	0.51	0.52	0.51	0.51	0.51	0.51	0.51
180	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49

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:0.1663A P:18.690W PF:0.9366 Freq:60.00Hz Lamp Flux:1614.5x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-MPR-9D18CC_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	570	570	570	571	570														
5	567	567	567	567	567														
10	559	558	559	559	558														
15	545	545	545	545	545														
20	527	526	527	527	526														
25	504	503	503	504	503														
30	476	476	476	476	476														
35	445	444	445	445	445														
40	411	410	410	410	410														
45	373	372	372	372	372														
50	333	332	332	332	332														
55	290	289	289	289	289														
60	245	244	244	244	245														
65	198	197	197	197	198														
70	150	149	149	149	150														
75	104	103	103	103	104														
80	60.6	59.7	59.6	60.1	61.0														
85	24.4	23.7	23.5	23.7	24.2														
90	0.11	0.11	0.11	0.11	0.11														
95	0.14	0.14	0.14	0.14	0.14														
100	0.18	0.18	0.18	0.18	0.18														
105	0.21	0.21	0.21	0.21	0.21														
110	0.22	0.22	0.22	0.22	0.22														
115	0.23	0.23	0.23	0.23	0.23														
120	0.24	0.24	0.24	0.24	0.24														
125	0.26	0.26	0.26	0.27	0.26														
130	0.30	0.30	0.30	0.30	0.30														
135	0.34	0.34	0.34	0.34	0.34														
140	0.38	0.38	0.38	0.38	0.38														
145	0.42	0.42	0.42	0.42	0.42														
150	0.46	0.47	0.47	0.47	0.47														
155	0.49	0.49	0.49	0.50	0.50														
160	0.52	0.52	0.52	0.52	0.52														
165	0.52	0.53	0.53	0.53	0.53														
170	0.52	0.52	0.52	0.52	0.52														
175	0.51	0.52	0.52	0.52	0.52														
180	0.49	0.49	0.49	0.49	0.49														

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: