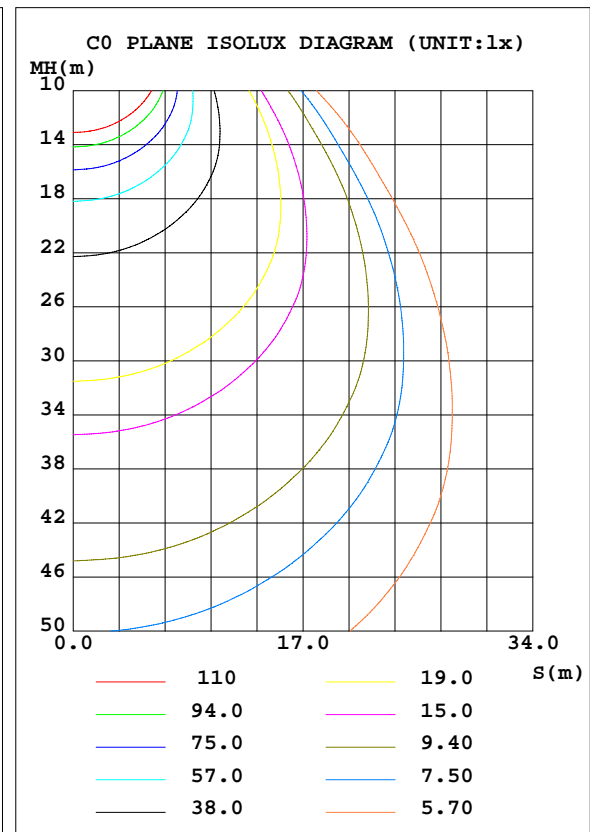
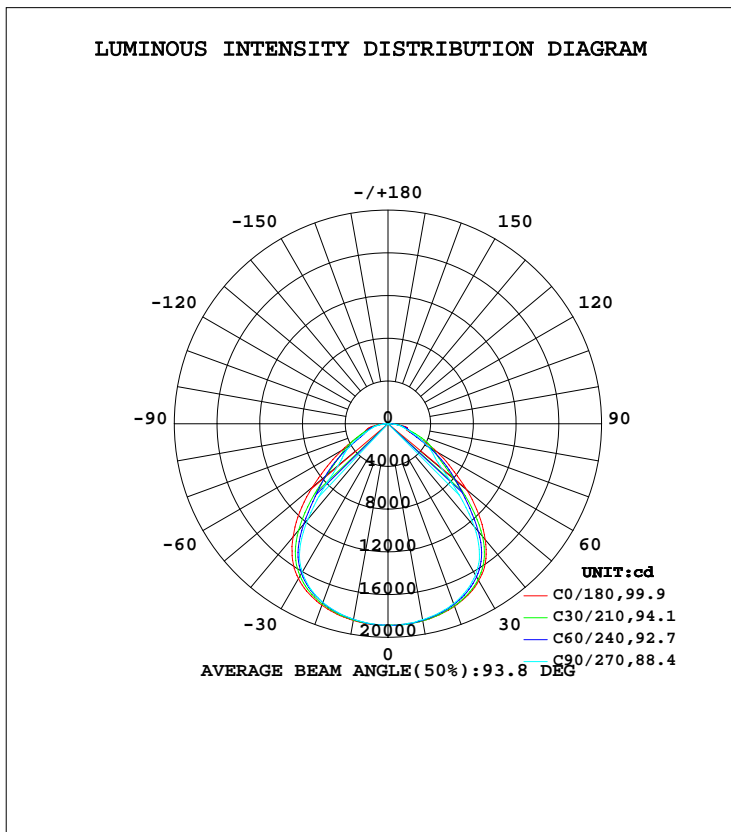


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.00V I:2.6755A P:320.52W PF:0.9983 Freq:60.00Hz Lamp Flux:43839.1x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-WHB5M-4D32050-MSR	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 136.77 lm/W			
MODEL	ASD-WHB5M-4D32050-MSR	Imax(cd)	18907	S/MH(C0/180)	1.31
NOMINAL POWER(W)	320	LOR(%)	100.0	S/MH(C90/270)	1.23
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	43839	η UP, DN(C0-180)	0.1,50.7
NOMINAL FLUX(lm)	43839.1	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.1,49.2
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: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 June 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 57.3%
 Test Distance: 2.500m [K=1.0462]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	1874	1871	1864	1864	1870	1863	1859	1863	0- 10	1791	1791	4.09,4.09
20	1819	1808	1793	1795	1808	1790	1780	1797	10- 20	5195	6986	15.9,15.9
30	1698	1671	1638	1649	1676	1633	1606	1649	20- 30	8007	14993	34.2,34.2
40	1416	1346	1257	1304	1383	1264	1166	1289	30- 40	9401	24395	55.6,55.6
50	962.8	830.1	668.1	795.8	924.0	777.0	612.8	775.6	40- 50	7980	32374	73.8,73.8
60	535.7	505.5	439.3	480.8	500.5	452.1	405.2	461.0	50- 60	5445	37819	86.3,86.3
70	201.4	250.6	230.7	239.1	242.7	228.3	209.1	239.0	60- 70	3337	41156	93.9,93.9
80	167.4	141.1	119.4	130.5	154.0	119.7	106.0	125.0	70- 80	1941	43097	98.3,98.3
90	8.099	6.364	7.857	7.781	4.132	3.862	0.8597	2.047	80- 90	690.1	43787	99.9,99.9
100	0.3348	0.1982	0.1618	0.2125	0.4443	0.3516	0.3034	0.3393	90-100	8.905	43796	99.9,99.9
110	0.2738	0.2897	0.3021	0.3319	0.4741	0.4733	0.4517	0.4521	100-110	3.693	43800	99.9,99.9
120	0.4243	0.4410	0.4564	0.5249	0.6034	0.6827	0.6503	0.6724	110-120	4.705	43804	99.9,99.9
130	0.6407	0.6850	0.6600	0.8014	0.9977	1.243	1.063	1.130	120-130	6.593	43811	99.9,99.9
140	0.8788	0.8430	0.9802	0.9501	1.068	1.430	1.579	1.332	130-140	7.950	43819	100,100
150	1.008	1.032	1.084	1.118	1.394	1.594	1.703	1.570	140-150	7.665	43827	100,100
160	1.306	1.229	1.243	1.282	1.572	1.733	1.824	1.695	150-160	6.431	43833	100,100
170	1.620	1.439	1.429	1.491	1.726	1.743	1.792	1.732	160-170	4.404	43837	100,100
180	1.678	1.678	1.678	1.678	1.651	1.651	1.651	1.651	170-180	1.574	43839	100,100
DEG	LUMINOUS INTENSITY: $\times 10\text{cd}$									UNIT:lm		

Conical surface Flux(90deg): 28718 lm

%lum = 65.5%

%lamp = 65.5%

Conical surface Flux(120deg): 37819 lm

%lum = 86.3%

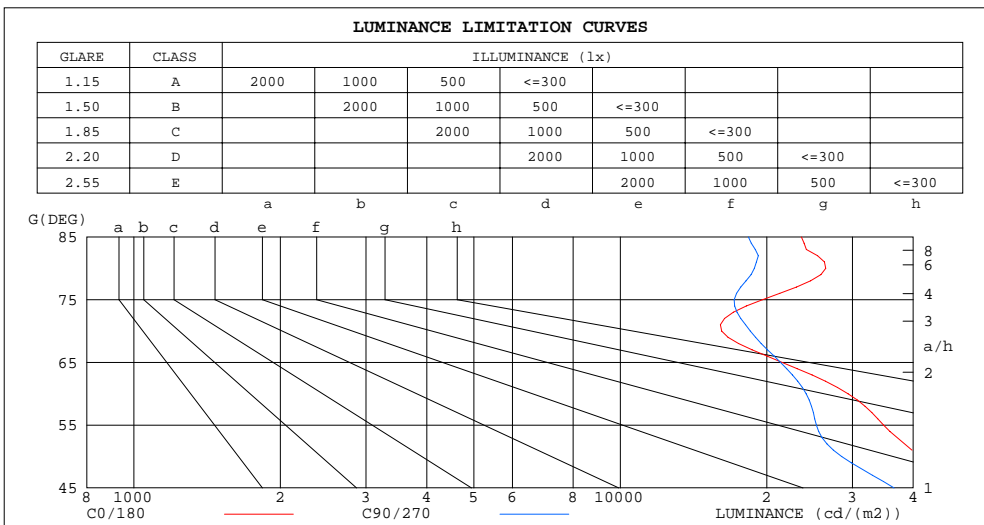
%lamp = 86.3%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 June 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 57.3%
 Test Distance: 2.500m [K=1.0462]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.00V I:2.6755A P:320.52W PF:0.9983 Freq:60.00Hz Lamp Flux:43839.lx1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-WHB5M-4D32050-MSR	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	23557	18331
80	26445	18860
75	19596	17141
70	16153	18506
65	21518	21354
60	29387	24099
55	34777	25307
50	41088	28511
45	46602	36547

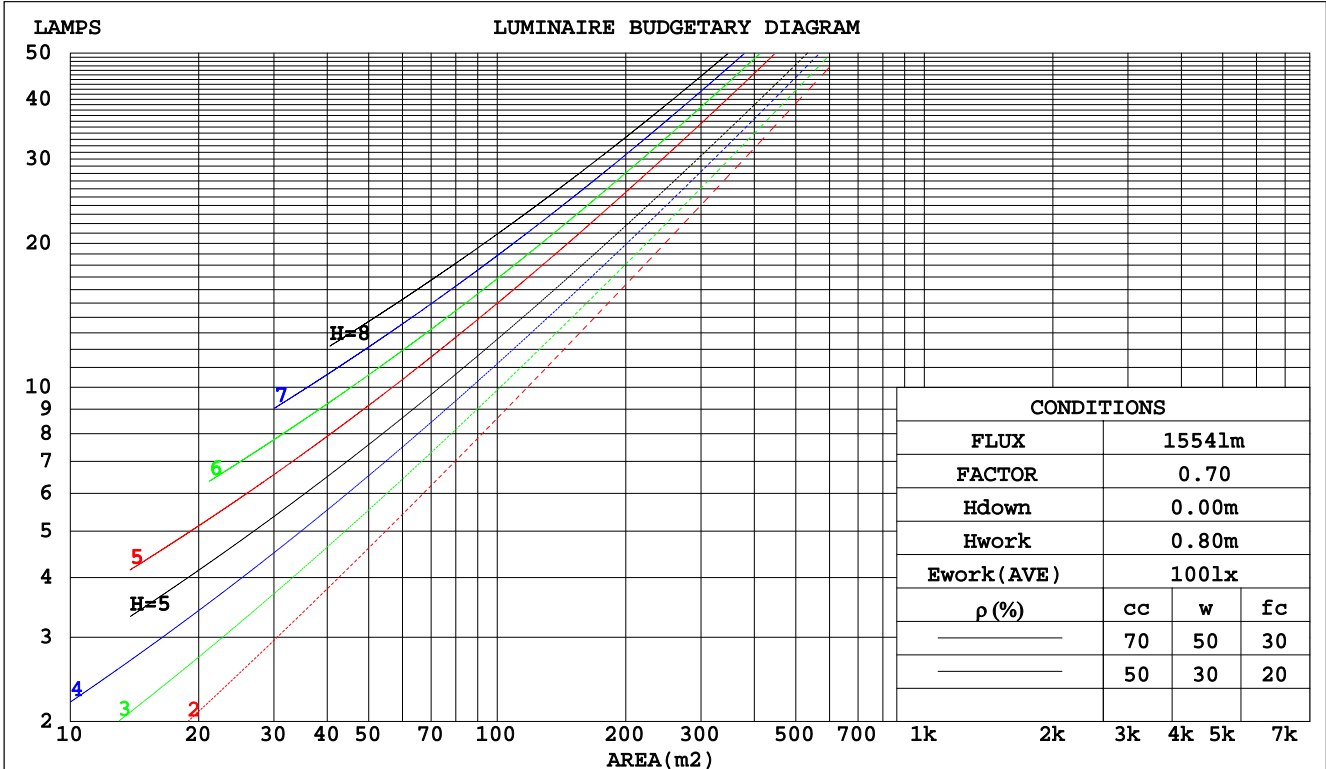
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 June 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 57.3%
 Test Distance: 2.500m [K=1.0462]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.00V I:2.6755A P:320.52W PF:0.9983 Freq:60.00Hz Lamp Flux:43839.1x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-WHB5M-4D32050-MSR	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	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						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	1.06	1.02	.98	1.03	.00	.97	.99	.96	.94	.95	.93	.91	.92	.90	.88	.86
2.0	.94	.88	.82	.92	.86	.81	.88	.84	.80	.85	.81	.78	.82	.79	.76	.74
3.0	.84	.76	.70	.82	.75	.70	.79	.73	.68	.76	.71	.67	.74	.70	.66	.64
4.0	.75	.67	.61	.74	.66	.60	.71	.65	.60	.69	.63	.59	.67	.62	.58	.56
5.0	.68	.59	.53	.67	.59	.53	.65	.58	.52	.63	.57	.52	.61	.56	.51	.49
6.0	.61	.53	.47	.60	.53	.47	.59	.52	.47	.57	.51	.46	.56	.50	.46	.44
7.0	.56	.48	.42	.55	.47	.42	.54	.47	.42	.52	.46	.41	.51	.45	.41	.39
8.0	.51	.43	.38	.51	.43	.38	.49	.42	.38	.48	.42	.37	.47	.41	.37	.35
9.0	.47	.40	.34	.47	.39	.34	.46	.39	.34	.45	.38	.34	.44	.38	.34	.32
10.0	.44	.36	.31	.43	.36	.31	.42	.36	.31	.41	.35	.31	.41	.35	.31	.29



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 June 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 57.3%
 Test Distance: 2.500m [K=1.0462]
 Remarks:

WEC AND CCEC

Test:U:120.00V I:2.6755A P:320.52W PF:0.9983 Freq:60.00Hz Lamp Flux:43839.1x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-WHB5M-4D32050-MSR	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	.275	.156	.050	.268	.153	.049	.255	.146	.047	.243	.140	.045	.231	.134	.043	
2.0	.260	.142	.044	.254	.140	.043	.242	.135	.042	.232	.130	.041	.222	.126	.040	
3.0	.243	.129	.039	.237	.127	.038	.227	.123	.037	.218	.119	.037	.209	.116	.036	
4.0	.226	.118	.035	.222	.116	.034	.213	.113	.034	.204	.110	.033	.197	.107	.033	
5.0	.211	.108	.031	.207	.106	.031	.199	.104	.031	.192	.101	.030	.185	.099	.030	
6.0	.198	.099	.028	.194	.098	.028	.187	.096	.028	.180	.094	.028	.174	.092	.027	
7.0	.185	.092	.026	.182	.091	.026	.176	.089	.026	.170	.087	.025	.164	.085	.025	
8.0	.174	.085	.024	.171	.084	.024	.166	.083	.024	.160	.081	.023	.155	.080	.023	
9.0	.164	.079	.022	.162	.079	.022	.156	.077	.022	.152	.076	.022	.147	.075	.022	
10.0	.155	.074	.021	.153	.074	.021	.148	.073	.020	.144	.071	.020	.140	.070	.020	

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	.164	.164	.164	.112	.112	.112	.064	.064	.064	.021	.021	.021	
1.0	.179	.157	.138	.153	.135	.119	.105	.093	.082	.060	.054	.048	.019	.017	.015	
2.0	.169	.133	.103	.145	.114	.089	.099	.079	.062	.057	.046	.036	.018	.015	.012	
3.0	.160	.115	.079	.137	.099	.069	.094	.069	.048	.054	.040	.028	.017	.013	.009	
4.0	.152	.101	.063	.131	.088	.054	.090	.061	.038	.052	.036	.023	.017	.012	.007	
5.0	.145	.091	.051	.124	.079	.044	.086	.055	.031	.050	.032	.019	.016	.011	.006	
6.0	.138	.082	.042	.118	.071	.037	.082	.050	.026	.047	.029	.016	.015	.010	.005	
7.0	.131	.075	.036	.113	.065	.031	.078	.046	.022	.045	.027	.013	.015	.009	.004	
8.0	.125	.069	.031	.108	.060	.027	.075	.042	.019	.043	.025	.011	.014	.008	.004	
9.0	.119	.064	.027	.103	.056	.024	.071	.039	.017	.042	.023	.010	.013	.008	.003	
10.0	.114	.060	.024	.098	.052	.021	.068	.037	.015	.040	.022	.009	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 June 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 57.3%
 Test Distance: 2.500m [K=1.0462]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.00V I:2.6755A P:320.52W PF:0.9983 Freq:60.00Hz Lamp Flux:43839.1lx1 lm										
NAME: ASD Lighting Corp					TYPE: LED			WEIGHT:		
SPEC.: ASD-WHB5M-4D32050-MSR					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	23.2	24.7	23.5	25.0	25.3	22.2	23.7	22.6	24.0	24.3
3H	24.7	26.0	25.1	26.4	26.7	23.5	24.9	23.9	25.2	25.6
4H	25.3	26.5	25.7	26.9	27.3	24.1	25.3	24.5	25.7	26.1
6H	25.9	27.1	26.4	27.5	27.9	24.6	25.7	25.0	26.1	26.5
8H	26.2	27.3	26.6	27.7	28.1	24.8	25.9	25.2	26.3	26.7
12H	26.4	27.4	26.8	27.8	28.2	24.9	26.0	25.4	26.4	26.8
4H 2H	23.6	24.8	24.0	25.2	25.6	22.7	24.0	23.1	24.3	24.7
3H	25.3	26.3	25.7	26.7	27.1	24.2	25.3	24.7	25.7	26.1
4H	26.0	26.9	26.4	27.3	27.8	24.9	25.9	25.4	26.3	26.7
6H	26.8	27.7	27.3	28.1	28.6	25.6	26.4	26.1	26.9	27.3
8H	27.2	27.9	27.6	28.4	28.9	25.9	26.7	26.4	27.1	27.6
12H	27.4	28.1	27.9	28.6	29.1	26.1	26.8	26.6	27.3	27.7
8H 4H	26.2	27.0	26.7	27.5	27.9	25.3	26.1	25.8	26.5	27.0
6H	27.2	27.9	27.7	28.4	28.8	26.1	26.8	26.6	27.3	27.7
8H	27.7	28.3	28.2	28.8	29.3	26.5	27.1	27.0	27.6	28.1
12H	28.0	28.6	28.6	29.0	29.6	26.8	27.3	27.3	27.8	28.4
12H 4H	26.3	27.0	26.8	27.4	27.9	25.3	26.0	25.8	26.5	27.0
6H	27.3	27.9	27.8	28.4	28.9	26.2	26.8	26.8	27.3	27.8
8H	27.8	28.3	28.3	28.8	29.4	26.7	27.2	27.2	27.7	28.3
CIE190: 2010										

CIE190: 2010
Area: 0.36456 m2

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.1DEG
Operators: Alan Wang
Test Date: 16 June 2021

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
Humidity: 57.3%
Test Distance: 2.500m [K=1.0462]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.00V I:2.6755A P:320.52W PF:0.9983 Freq:60.00Hz Lamp Flux:43839.1x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-WHB5M-4D32050-MSR	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

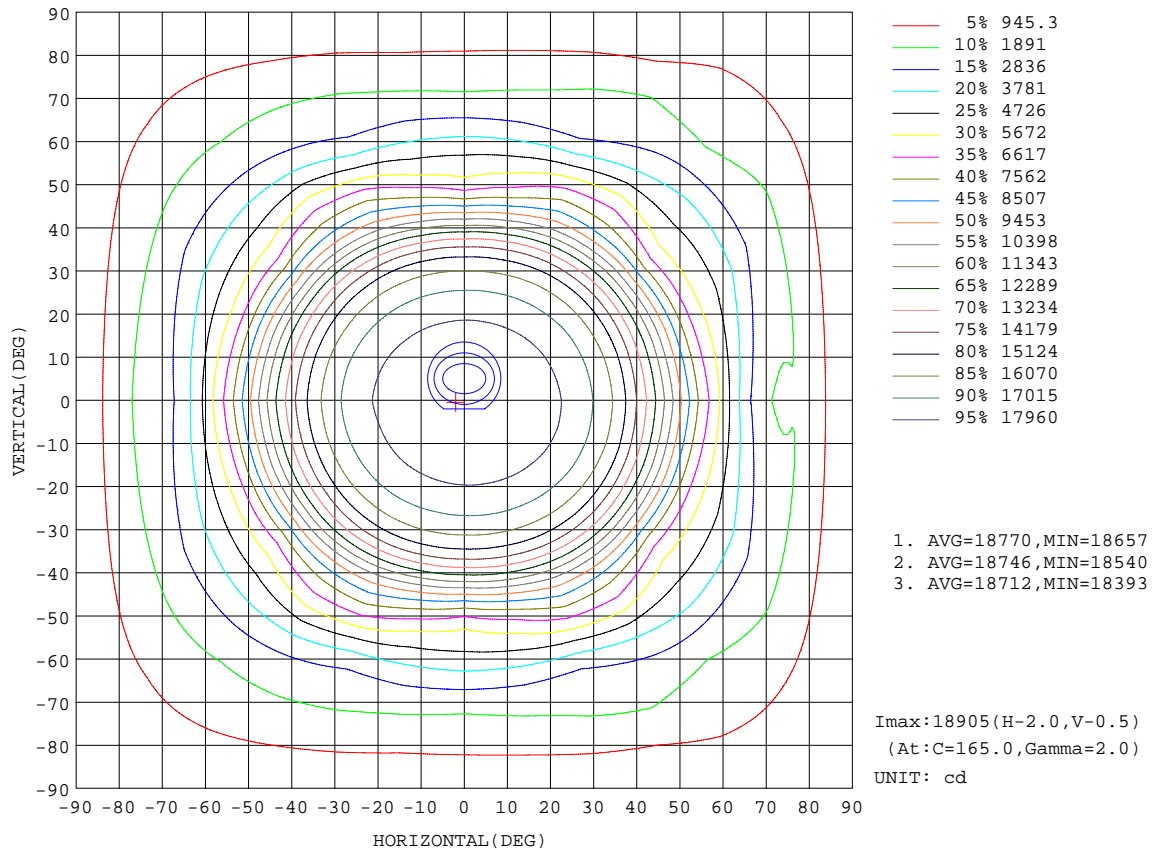
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	64	53	47	63	53	47	62	53	47	41
0.80	74	63	57	73	63	57	71	62	56	50
1.00	82	72	66	81	71	65	79	72	65	58
1.25	88	79	73	87	78	73	84	77	72	65
1.50	93	84	78	91	83	78	88	82	77	70
2.00	99	91	86	97	90	85	94	88	83	76
2.50	102	95	90	100	94	89	96	91	87	79
3.00	105	99	94	103	97	93	99	94	91	83
4.00	108	103	99	106	101	98	102	98	95	87
5.00	110	106	102	108	104	101	103	100	98	89
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: 25.1DEG
Operators: Alan Wang
Test Date: 16 June 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
Humidity: 57.3%
Test Distance: 2.500m [K=1.0462]
Remarks:

ISOCANDELA DIAGRAM

Test:U:120.00V I:2.6755A P:320.52W PF:0.9983 Freq:60.00Hz Lamp Flux:43839.1x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-WHB5M-4D32050-MSR	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

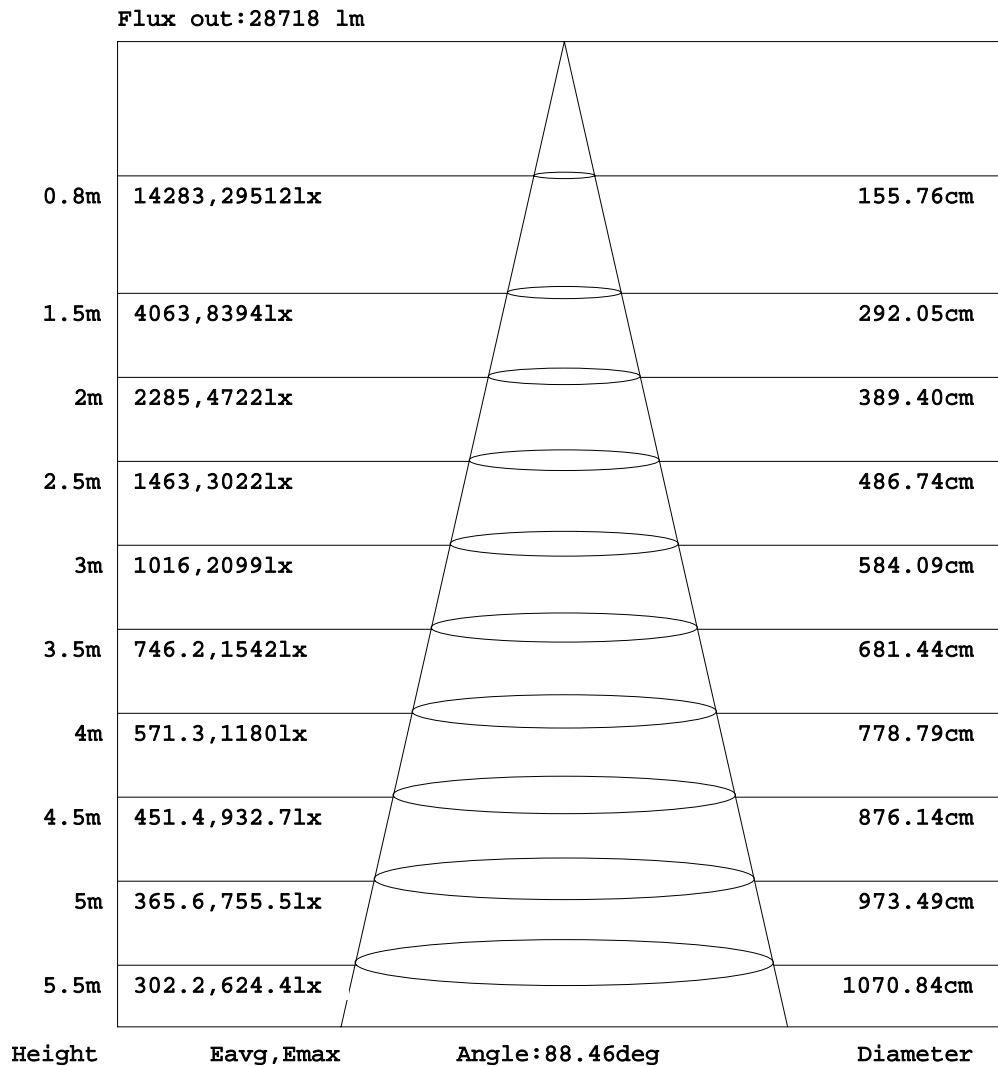


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 June 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 57.3%
 Test Distance: 2.500m [K=1.0462]
 Remarks:

AAI Figure

Test:U:120.00V I:2.6755A P:320.52W PF:0.9983 Freq:60.00Hz Lamp Flux:43839.1x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-WHB5M-4D32050-MSR	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



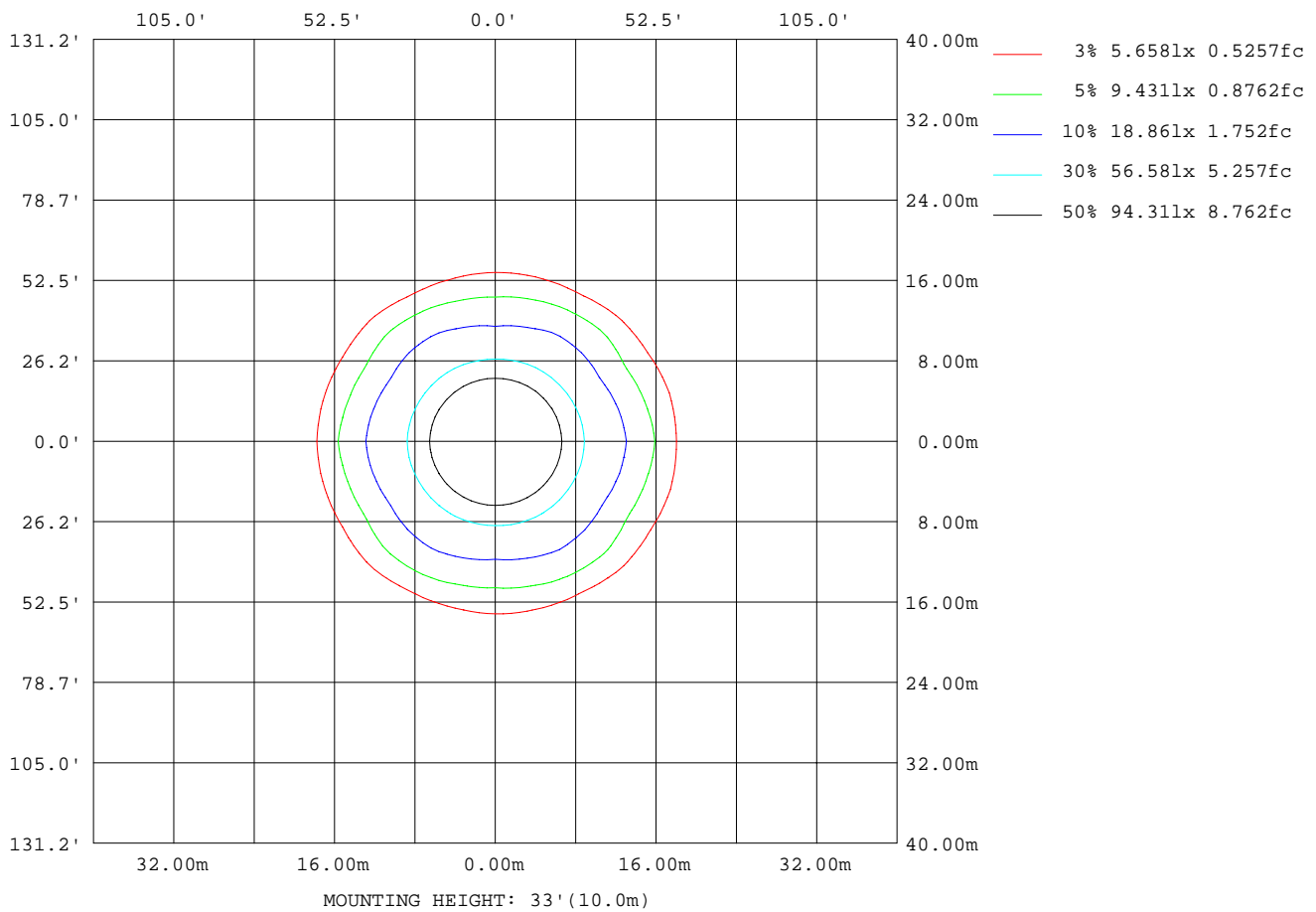
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators:Alan Wang
 Test Date:16 June 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 57.3%
 Test Distance:2.500m [K=1.0462]
 Remarks:

ISOLUX DIAGRAM

Test:U:120.00V I:2.6755A P:320.52W PF:0.9983 Freq:60.00Hz Lamp Flux:43839.1x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-WHB5M-4D32050-MSR	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 June 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 57.3%
 Test Distance: 2.500m [K=1.0462]
 Remarks:

LED Avg.L Report

Test:U:120.00V I:2.6755A P:320.52W PF:0.9983 Freq:60.00Hz Lamp Flux:43839.1x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-WHB5M-4D32050-MSR	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

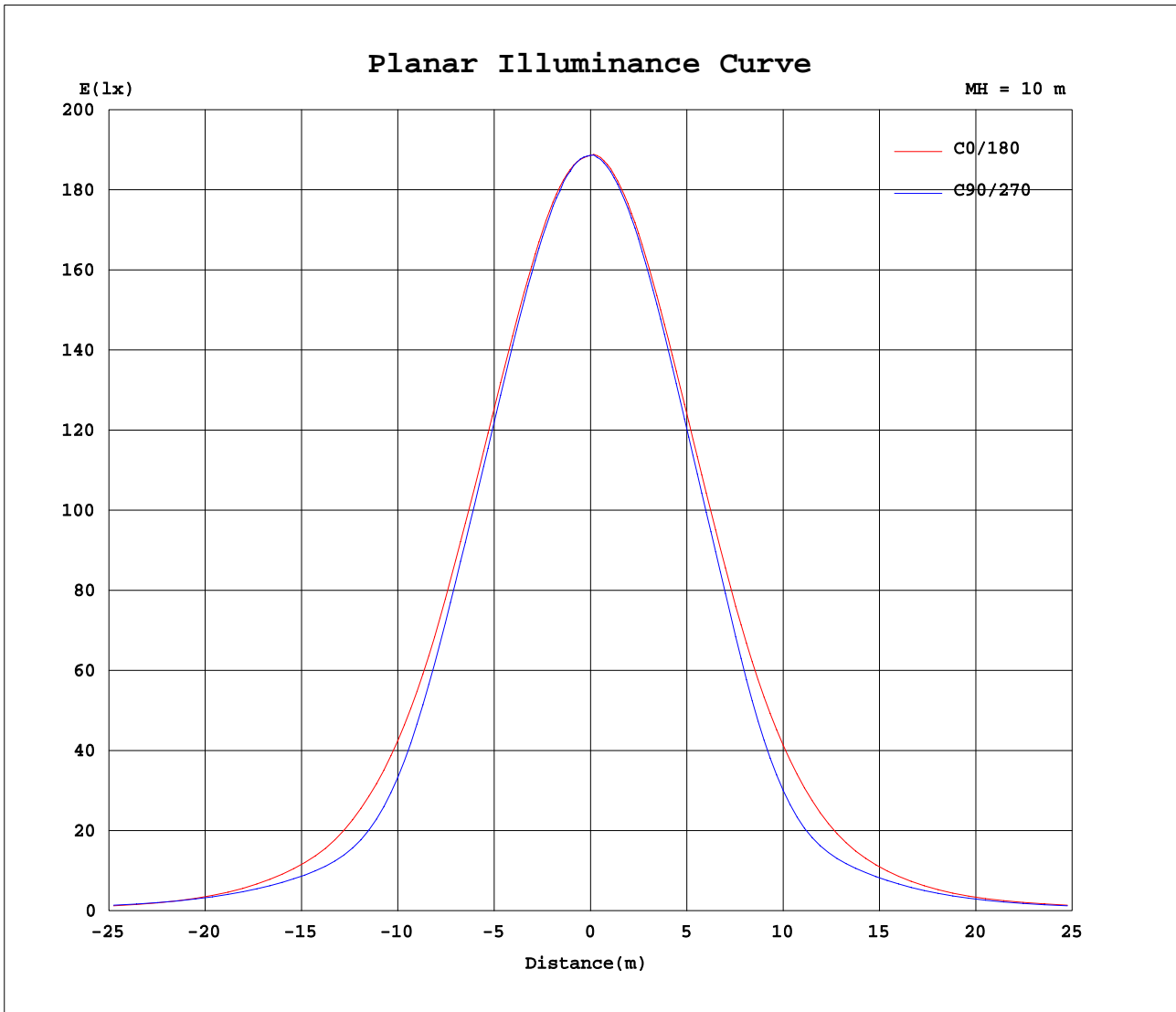
AvgL	cd/m2
L_0~180(65)av	21613
L_0~180(75)av	20598
L_0~180(85)av	23871
L_90~270(65)av	20195
L_90~270(75)av	16688
L_90~270(85)av	15559
L_45(65)av	21186
L_45(75)av	20235
L_45(85)av	19295

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 June 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 57.3%
 Test Distance: 2.500m [K=1.0462]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 June 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 57.3%
 Test Distance: 2.500m [K=1.0462]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.00V I:2.6755A P:320.52W PF:0.9983 Freq:60.00Hz Lamp Flux:43839.1x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-WHB5M-4D32050-MSR	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Table--1

UNIT: x10cd

C(DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	1886	1886	1886	1886	1886	1886	1886	1886	1886	1886	1886	1886	1886	1886	1886	1886	1886	1886	1886
5	1883	1887	1887	1885	1884	1882	1882	1880	1879	1879	1879	1883	1885	1884	1883	1881	1880	1879	1878
10	1874	1876	1874	1871	1868	1866	1864	1863	1864	1864	1863	1866	1870	1868	1866	1863	1860	1859	1859
15	1853	1853	1851	1846	1841	1838	1835	1835	1835	1835	1837	1840	1846	1842	1838	1834	1830	1826	1827
20	1819	1819	1814	1808	1801	1795	1793	1791	1792	1795	1797	1801	1808	1803	1797	1790	1784	1781	1780
25	1771	1770	1763	1752	1743	1734	1729	1727	1731	1736	1741	1747	1754	1747	1737	1726	1717	1711	1709
30	1698	1696	1686	1671	1657	1645	1638	1637	1643	1649	1659	1666	1676	1665	1647	1633	1619	1610	1606
35	1591	1585	1566	1548	1527	1506	1493	1497	1506	1515	1526	1542	1558	1538	1512	1488	1470	1450	1442
40	1416	1404	1376	1346	1317	1283	1257	1261	1284	1304	1324	1357	1383	1348	1301	1264	1227	1184	1166
45	1201	1167	1107	1077	1052	989	942	971	1015	1031	1053	1120	1169	1107	1026	991	965	898	850
50	963	900	813	830	830	732	668	727	803	796	773	855	924	843	754	777	768	670	613
55	727	663	605	670	643	567	529	552	619	640	579	626	694	619	572	621	577	517	505
60	536	522	492	505	452	442	439	428	434	481	462	478	501	477	454	452	395	396	405
65	332	415	394	346	296	319	329	319	295	334	356	368	334	367	342	310	272	293	293
70	201	297	270	251	219	234	231	234	223	239	256	277	243	275	245	228	215	217	209
75	185	214	175	204	192	176	162	170	183	185	180	201	204	198	175	179	175	158	153
80	167	154	139	141	139	127	119	118	129	131	132	132	154	131	127	120	116	105	106
85	74.8	72.6	76.1	68.1	68.6	62.7	58.2	60.7	65.3	65.5	64.8	67.4	76.8	65.7	57.4	55.2	51.4	44.4	40.6
90	8.10	9.25	7.04	6.36	7.21	6.39	7.86	7.66	7.64	7.78	7.25	2.37	4.13	2.73	5.31	3.86	2.12	1.29	0.86
95	0.29	0.33	0.25	0.22	0.20	0.20	0.20	0.18	0.18	0.20	0.25	0.31	0.42	0.49	0.36	0.30	0.28	0.27	0.27
100	0.33	0.34	0.26	0.20	0.17	0.16	0.16	0.17	0.18	0.20	0.21	0.31	0.35	0.44	0.49	0.45	0.35	0.33	0.30
105	0.31	0.31	0.33	0.21	0.25	0.24	0.24	0.26	0.27	0.25	0.29	0.32	0.48	0.49	0.42	0.41	0.43	0.41	0.40
110	0.27	0.28	0.25	0.29	0.31	0.30	0.30	0.32	0.34	0.33	0.32	0.33	0.47	0.53	0.46	0.47	0.48	0.46	0.45
115	0.34	0.38	0.38	0.37	0.37	0.36	0.37	0.38	0.41	0.43	0.44	0.42	0.54	0.60	0.58	0.56	0.54	0.53	0.53
120	0.42	0.45	0.52	0.44	0.44	0.44	0.46	0.48	0.50	0.52	0.58	0.50	0.60	0.72	0.86	0.68	0.66	0.65	0.65
125	0.62	0.58	0.57	0.62	0.52	0.53	0.56	0.58	0.60	0.71	0.66	0.62	0.88	0.88	1.02	1.00	0.85	0.84	0.83
130	0.64	0.61	0.64	0.69	0.71	0.62	0.66	0.69	0.79	0.80	0.74	0.70	1.00	0.99	1.15	1.24	1.19	1.08	1.06
135	0.77	0.70	0.75	0.74	0.82	0.88	0.90	0.94	0.91	0.87	0.83	0.80	1.10	1.07	1.24	1.36	1.43	1.45	1.43
140	0.88	0.88	0.86	0.84	0.87	0.94	0.98	1.00	0.98	0.95	0.90	0.88	1.07	1.15	1.28	1.43	1.53	1.58	1.58
145	0.98	0.99	0.94	0.93	0.96	1.00	1.02	1.04	1.05	1.01	1.01	1.01	1.25	1.33	1.40	1.49	1.62	1.66	1.67
150	1.01	1.03	0.99	1.03	1.03	1.07	1.08	1.13	1.11	1.12	1.03	1.08	1.39	1.40	1.38	1.59	1.63	1.68	1.70
155	1.14	1.19	1.21	1.15	1.17	1.14	1.13	1.19	1.25	1.23	1.22	1.17	1.41	1.45	1.59	1.59	1.73	1.75	1.72
160	1.31	1.34	1.36	1.23	1.24	1.25	1.24	1.28	1.31	1.28	1.32	1.27	1.57	1.56	1.61	1.73	1.72	1.78	1.82
165	1.45	1.48	1.45	1.44	1.32	1.26	1.25	1.33	1.36	1.42	1.42	1.41	1.65	1.65	1.66	1.74	1.82	1.83	1.80
170	1.62	1.60	1.52	1.44	1.41	1.44	1.43	1.45	1.48	1.49	1.49	1.53	1.73	1.73	1.75	1.74	1.77	1.80	1.79
175	1.69	1.69	1.67	1.59	1.49	1.45	1.41	1.47	1.53	1.59	1.63	1.66	1.82	1.81	1.82	1.85	1.85	1.83	1.76
180	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.65	1.65	1.65	1.65	1.65	1.65	1.65

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 June 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 57.3%
 Test Distance: 2.500m [K=1.0462]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.00V I:2.6755A P:320.52W PF:0.9983 Freq:60.00Hz Lamp Flux:43839.1x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-WHB5M-4D32050-MSR	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Table--2

UNIT: x10cd

C(DEG) γ (DEG)	285	300	315	330	345														
0	1886	1886	1886	1886	1886														
5	1878	1879	1880	1881	1881														
10	1859	1860	1863	1867	1868														
15	1828	1832	1837	1841	1845														
20	1782	1788	1797	1805	1811														
25	1715	1725	1737	1750	1761														
30	1614	1631	1649	1669	1686														
35	1459	1487	1514	1543	1571														
40	1198	1247	1289	1338	1385														
45	904	978	1006	1056	1144														
50	672	776	776	760	875														
55	533	591	629	571	643														
60	404	404	461	472	511														
65	286	264	316	372	405														
70	216	210	239	248	288														
75	167	185	196	162	211														
80	113	123	125	134	149														
85	45.9	53.2	56.4	66.3	64.8														
90	1.46	1.29	2.05	3.20	8.28														
95	0.26	0.27	0.30	0.36	0.45														
100	0.31	0.32	0.34	0.41	0.49														
105	0.40	0.41	0.39	0.39	0.48														
110	0.45	0.47	0.45	0.42	0.47														
115	0.53	0.54	0.55	0.56	0.53														
120	0.65	0.65	0.67	0.79	0.66														
125	0.83	0.83	0.95	0.92	0.85														
130	1.05	1.14	1.13	1.03	0.88														
135	1.39	1.33	1.23	1.13	1.00														
140	1.52	1.44	1.33	1.25	1.17														
145	1.62	1.55	1.42	1.31	1.30														
150	1.67	1.60	1.57	1.40	1.36														
155	1.70	1.72	1.65	1.58	1.46														
160	1.77	1.74	1.70	1.75	1.58														
165	1.77	1.77	1.82	1.80	1.65														
170	1.83	1.80	1.73	1.75	1.70														
175	1.75	1.78	1.78	1.77	1.70														
180	1.65	1.65	1.65	1.65	1.65														

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 June 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 57.3%
 Test Distance: 2.500m [K=1.0462]
 Remarks: