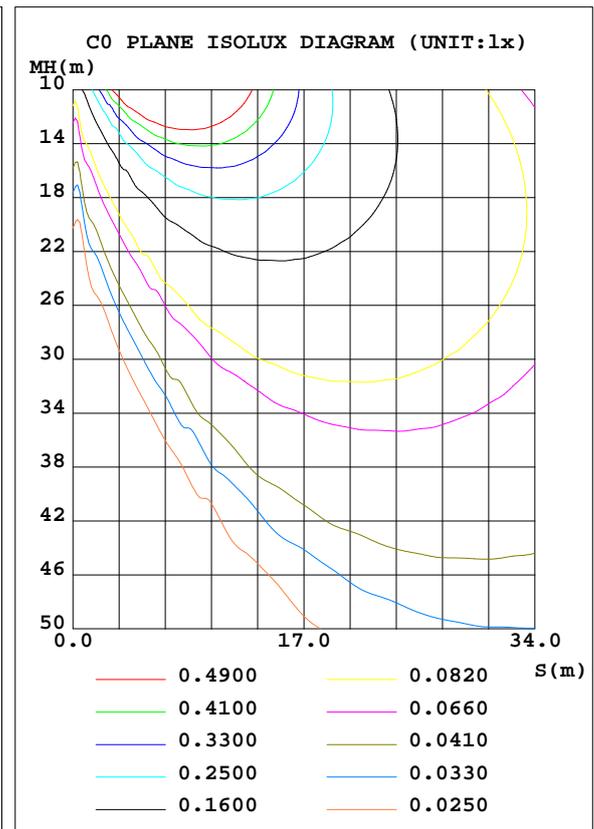
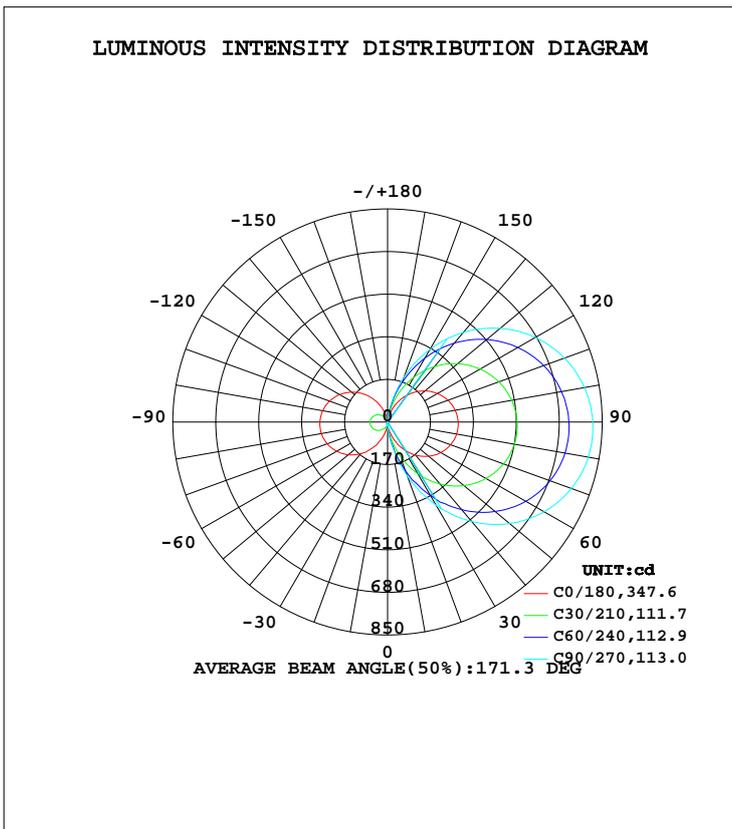


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.2461A P:29.20W PF:0.9889 Freq:60.00Hz Lamp Flux:3158.66x1 lm		
NAME:ASD-OLWS-21-MV-36D30CC-NK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 108.17 lm/W			
MODEL-OLWS-21-MV-36D30CC-NK		I <sub>max</sub> (cd)	813.5	S/MH(C0/180)	6.49
NOMINAL POWER(W)	30	LOR(%)	100.0	S/MH(C90/270)	1.18
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	3158.7	η UP, DN(C0-180)	43.8, 46.3
NOMINAL FLUX(lm)	3158.66	CIE CLASS	DIFFUSE	η UP, DN(C180-360)	4.7, 5.2
LAMPS INSIDE	1	η up(%)	48.5	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	120	η down(%)	51.5	CIBSE SHR MAX	1.15



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 24.9DEG  
 Operators: Alan Wang  
 Test Date: 29 January 2024

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 43.8%  
 Test Distance: 2.500m [K=1.0423]  
 Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	31.71	69.95	82.45	65.90	30.13	13.07	13.38	13.91	0- 10	2.628	2.628	0.08,0.08
20	75.23	174.7	228.5	176.8	73.42	10.77	9.796	12.35	10- 20	19.87	22.49	0.71,0.71
30	124.8	291.8	382.8	292.7	118.9	9.813	6.989	12.98	20- 30	59.23	81.73	2.59,2.59
40	172.4	394.6	518.2	392.9	165.0	9.657	4.860	14.53	30- 40	116.0	197.8	6.26,6.26
50	212.3	481.1	630.0	477.4	203.5	9.863	3.218	16.23	40- 50	181.2	378.9	12,12
60	243.9	547.7	715.8	542.9	233.3	10.28	2.006	17.77	50- 60	245.8	624.8	19.8,19.8
70	265.7	593.6	774.3	587.7	254.6	10.76	1.357	19.07	60- 70	301.3	926.0	29.3,29.3
80	277.7	618.8	807.1	612.2	266.1	11.41	1.322	20.08	70- 80	341.0	1267	40.1,40.1
90	279.6	622.9	812.4	616.7	268.3	11.41	1.238	20.18	80- 90	360.2	1627	51.5,51.5
100	271.6	606.9	792.0	600.9	261.1	10.94	1.131	19.40	90-100	356.6	1984	62.8,62.8
110	254.4	570.7	745.6	565.2	244.4	9.886	0.9700	17.80	100-110	331.0	2315	73.3,73.3
120	228.1	515.1	675.7	511.5	219.3	8.318	0.7795	15.42	110-120	286.4	2601	82.4,82.4
130	193.3	442.9	582.3	440.2	185.9	6.424	0.6296	12.43	120-130	228.3	2830	89.6,89.6
140	151.4	354.1	466.9	353.4	145.8	4.499	0.5059	8.895	130-140	163.9	2993	94.8,94.8
150	104.2	252.7	334.9	253.3	100.6	3.625	0.3940	4.362	140-150	101.2	3095	98,98
160	55.81	143.3	190.9	144.9	54.04	4.257	0.3136	0.6815	150-160	48.78	3143	99.5,99.5
170	14.66	42.60	57.17	44.37	14.65	2.163	0.2353	0.3157	160-170	14.26	3158	100,100
180	0.1526	0	0	0	0.1563	0.1496	0.1517	0.1768	170-180	1.047	3159	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 280.02 lm

%lum = 8.9%

%lamp = 8.9%

Conical surface Flux(120deg): 624.76 lm

%lum = 19.8%

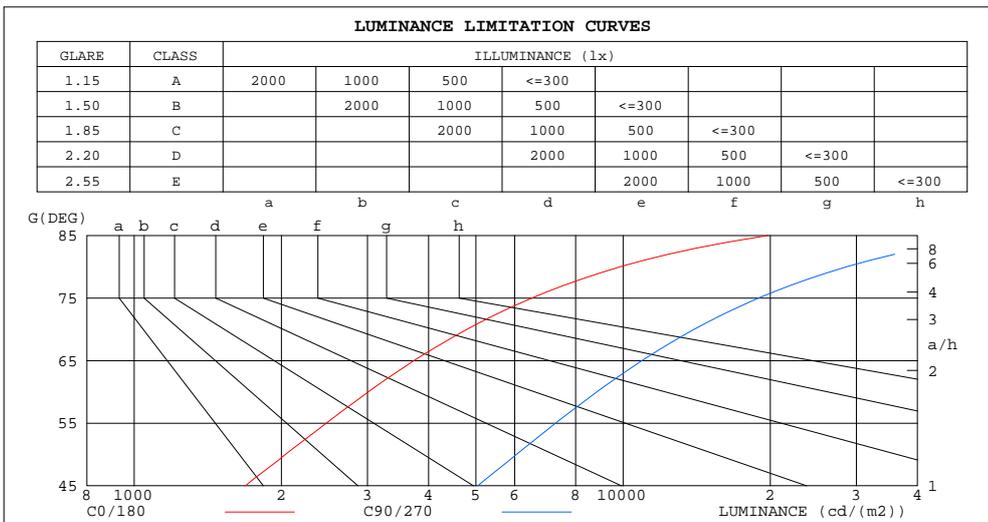
%lamp = 19.8%

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 24.9DEG  
 Operators: Alan Wang  
 Test Date: 29 January 2024

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 43.8%  
 Test Distance: 2.500m [K=1.0423]  
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.0V I:0.2461A P:29.20W PF:0.9889 Freq:60.00Hz Lamp Flux:3158.66x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-OLWS-21-MV-36D30CC-NK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	19826	57563
80	9873	28690
75	6513	18935
70	4796	13974
65	3735	10931
60	3011	8837
55	2471	7277
50	2039	6050
45	1688	5040

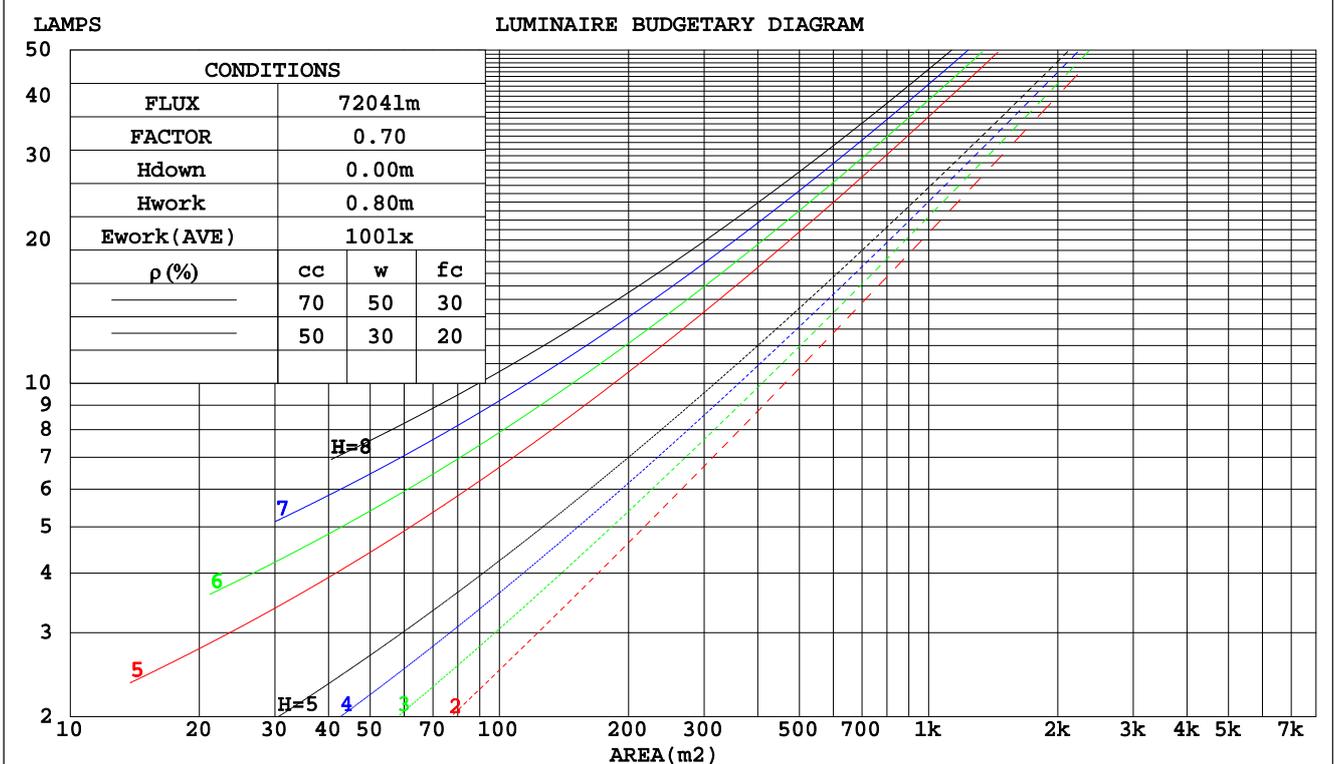
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 24.9DEG  
 Operators: Alan Wang  
 Test Date: 29 January 2024

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 43.8%  
 Test Distance: 2.500m [K=1.0423]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.0V I:0.2461A P:29.20W PF:0.9889 Freq:60.00Hz Lamp Flux:3158.66x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-OLWS-21-MV-36D30CC-NK_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	1.08	1.08	1.08	.99	.99	.99	.84	.84	.84	.70	.70	.70	.58	.58	.58	.52
1.0	.85	.79	.74	.78	.73	.68	.65	.61	.57	.53	.50	.47	.42	.39	.37	.31
2.0	.71	.63	.55	.65	.58	.51	.54	.48	.43	.43	.38	.34	.33	.30	.27	.22
3.0	.61	.51	.43	.55	.47	.40	.45	.39	.33	.36	.31	.26	.28	.24	.20	.16
4.0	.52	.43	.35	.48	.39	.32	.39	.32	.27	.31	.26	.21	.23	.19	.16	.12
5.0	.46	.36	.29	.42	.33	.27	.34	.27	.22	.27	.22	.17	.20	.16	.13	.09
6.0	.41	.31	.24	.37	.28	.22	.30	.23	.18	.24	.19	.14	.18	.14	.10	.07
7.0	.36	.27	.21	.33	.25	.19	.27	.20	.15	.22	.16	.12	.16	.12	.09	.06
8.0	.33	.24	.18	.30	.22	.16	.24	.18	.13	.19	.14	.10	.15	.11	.07	.05
9.0	.29	.21	.15	.27	.19	.14	.22	.16	.11	.18	.13	.09	.13	.09	.06	.04
10.0	.27	.19	.13	.25	.17	.12	.20	.14	.10	.16	.11	.08	.12	.08	.06	.03



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 24.9DEG  
 Operators: Alan Wang  
 Test Date: 29 January 2024

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 43.8%  
 Test Distance: 2.500m [K=1.0423]  
 Remarks:

WEC AND CCEC

Test:U:120.0V I:0.2461A P:29.20W PF:0.9889 Freq:60.00Hz Lamp Flux:3158.66x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-OLWS-21-MV-36D30CC-NK_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	.442	.251	.080	.420	.239	.076	.378	.217	.069	.340	.196	.063	.305	.177	.057	
2.0	.363	.199	.061	.343	.189	.058	.305	.170	.053	.271	.152	.048	.238	.135	.043	
3.0	.314	.167	.050	.296	.158	.048	.261	.142	.043	.229	.126	.039	.199	.110	.034	
4.0	.278	.144	.042	.261	.137	.040	.229	.122	.036	.200	.107	.032	.172	.094	.029	
5.0	.249	.127	.037	.234	.120	.035	.205	.107	.031	.178	.094	.028	.152	.081	.024	
6.0	.226	.113	.032	.212	.107	.031	.185	.095	.028	.160	.083	.024	.137	.072	.021	
7.0	.207	.102	.029	.194	.097	.028	.169	.086	.025	.146	.075	.022	.124	.064	.019	
8.0	.191	.093	.026	.179	.088	.025	.156	.078	.022	.134	.068	.020	.114	.058	.017	
9.0	.177	.086	.024	.166	.081	.023	.144	.071	.020	.124	.062	.018	.105	.053	.015	
10.0	.165	.079	.022	.155	.075	.021	.134	.066	.019	.115	.057	.016	.098	.049	.014	

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	.560	.560	.560	.478	.478	.478	.327	.327	.327	.188	.188	.188	.060	.060	.060	
1.0	.562	.527	.496	.481	.453	.427	.329	.311	.295	.189	.180	.172	.061	.058	.056	
2.0	.557	.507	.464	.477	.436	.401	.327	.302	.280	.188	.175	.164	.060	.057	.053	
3.0	.550	.492	.445	.471	.424	.386	.324	.295	.271	.187	.172	.160	.060	.056	.052	
4.0	.543	.480	.433	.466	.415	.376	.320	.289	.265	.185	.169	.157	.060	.055	.051	
5.0	.535	.471	.424	.459	.408	.369	.316	.285	.261	.183	.167	.155	.059	.055	.051	
6.0	.528	.464	.418	.454	.402	.364	.313	.281	.258	.182	.165	.153	.059	.054	.051	
7.0	.521	.458	.414	.448	.397	.361	.309	.278	.256	.180	.164	.152	.058	.054	.050	
8.0	.514	.453	.411	.442	.393	.358	.306	.276	.254	.178	.163	.151	.058	.053	.050	
9.0	.508	.448	.408	.437	.389	.356	.303	.274	.253	.177	.162	.151	.057	.053	.050	
10.0	.502	.444	.406	.433	.386	.354	.300	.272	.252	.175	.161	.150	.057	.053	.050	

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 24.9DEG  
 Operators: Alan Wang  
 Test Date: 29 January 2024

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 43.8%  
 Test Distance: 2.500m [K=1.0423]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.0V I:0.2461A P:29.20W PF:0.9889 Freq:60.00Hz Lamp Flux:3158.66x1 lm										
NAME:					TYPE:LED			WEIGHT:		
SPEC.:ASD-OLWS-21-MV-36D30CC-NK_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	15.6	16.7	16.4	17.6	18.8	19.7	20.8	20.5	21.7	22.9
3H	18.6	19.6	19.4	20.5	21.7	23.5	24.5	24.3	25.4	26.6
4H	20.2	21.2	21.1	22.1	23.3	25.5	26.5	26.4	27.4	28.6
6H	22.0	22.9	22.9	23.9	25.1	27.8	28.7	28.7	29.6	30.9
8H	23.0	23.9	23.9	24.8	26.1	29.0	29.9	29.9	30.8	32.1
12H	24.1	25.0	25.0	25.9	27.2	30.4	31.2	31.3	32.2	33.4
4H 2H	17.9	18.9	18.8	19.8	21.0	20.4	21.4	21.3	22.3	23.5
3H	20.9	21.7	21.8	22.7	23.9	24.3	25.2	25.3	26.2	27.4
4H	22.6	23.3	23.5	24.3	25.6	26.6	27.4	27.5	28.3	29.6
6H	24.4	25.1	25.3	26.0	27.3	29.0	29.7	30.0	30.7	32.0
8H	25.3	26.0	26.3	27.0	28.3	30.4	31.0	31.3	32.0	33.3
12H	26.4	27.1	27.4	28.0	29.3	31.9	32.5	32.9	33.5	34.8
8H 4H	24.2	24.8	25.1	25.8	27.1	27.0	27.7	28.0	28.7	30.0
6H	26.3	26.8	27.2	27.8	29.1	29.8	30.4	30.8	31.4	32.7
8H	27.4	27.9	28.4	28.9	30.3	31.3	31.9	32.3	32.9	34.2
12H	28.6	29.1	29.6	30.1	31.5	33.1	33.6	34.1	34.6	35.9
12H 4H	24.7	25.3	25.7	26.3	27.6	27.1	27.7	28.1	28.7	30.0
6H	27.0	27.5	28.0	28.5	29.8	30.0	30.5	31.0	31.5	32.8
8H	28.3	28.7	29.3	29.8	31.1	31.7	32.1	32.7	33.1	34.5
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.4				

CIE Pub.117, 3159 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 4.0)  
 Area: 0.162 m2

C Range: 0 - 360DEG	γ Range: 0 - 180DEG
C Interval: 15.0DEG	γ Interval: 1.0DEG
Test Speed: HIGH	Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.416
Temperature: 24.9DEG	Humidity: 43.8%
Operators:Alan Wang	Test Distance:2.500m [K=1.0423]
Test Date:29 January 2024	Remarks:

## UTILIZATION FACTORS TABLE

Test:U:120.0V I:0.2461A P:29.20W PF:0.9889 Freq:60.00Hz Lamp Flux:3158.66x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-OLWS-21-MV-36D30CC-NK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

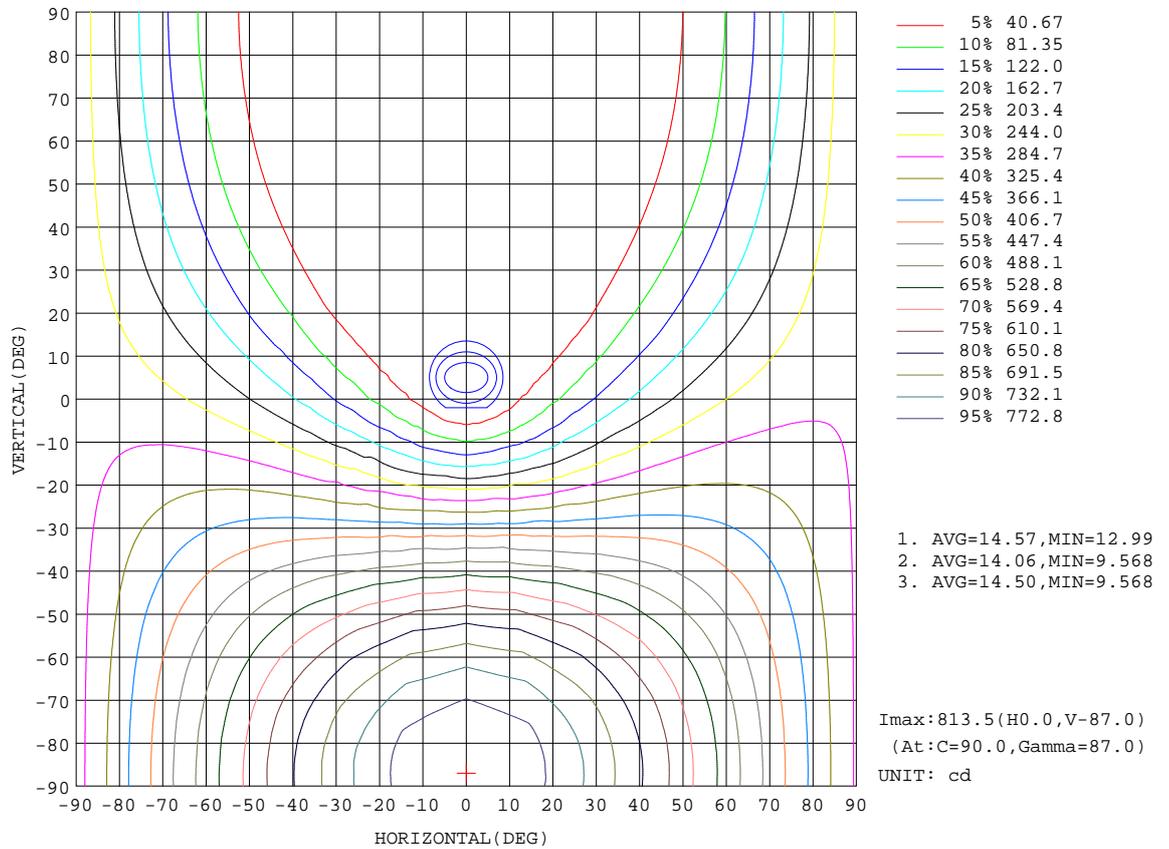
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	34	21	13	32	20	13	29	18	12	4
0.80	42	28	19	39	26	18	35	23	16	7
1.00	49	34	25	46	32	24	40	31	21	10
1.25	56	41	31	52	39	29	45	34	26	13
1.50	62	47	37	57	44	34	49	38	30	15
2.00	70	56	46	64	52	43	55	45	37	19
2.50	75	62	52	69	58	49	59	50	42	22
3.00	79	67	58	73	62	54	62	53	47	25
4.00	85	74	66	78	69	61	66	59	53	29
5.00	88	79	72	81	73	66	69	62	57	32
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: 24.9DEG  
 Operators: Alan Wang  
 Test Date: 29 January 2024

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 43.8%  
 Test Distance: 2.500m [K=1.0423]  
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.0V I:0.2461A P:29.20W PF:0.9889 Freq:60.00Hz Lamp Flux:3158.66x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-OLWS-21-MV-36D30CC-NK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

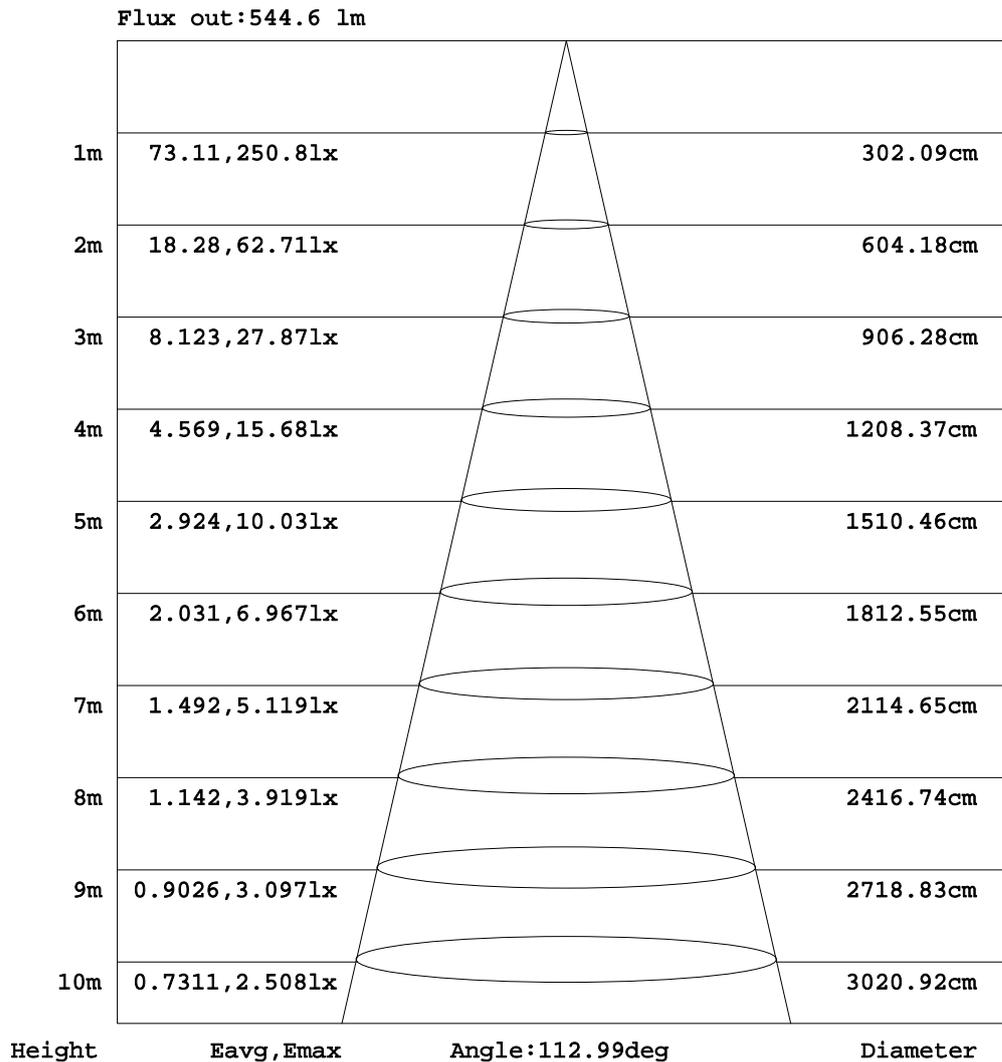


C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 24.9DEG  
 Operators:Alan Wang  
 Test Date:29 January 2024

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 43.8%  
 Test Distance:2.500m [K=1.0423]  
 Remarks:

AAI Figure

Test:U:120.0V I:0.2461A P:29.20W PF:0.9889 Freq:60.00Hz Lamp Flux:3158.66x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-OLWS-21-MV-36D30CC-NK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



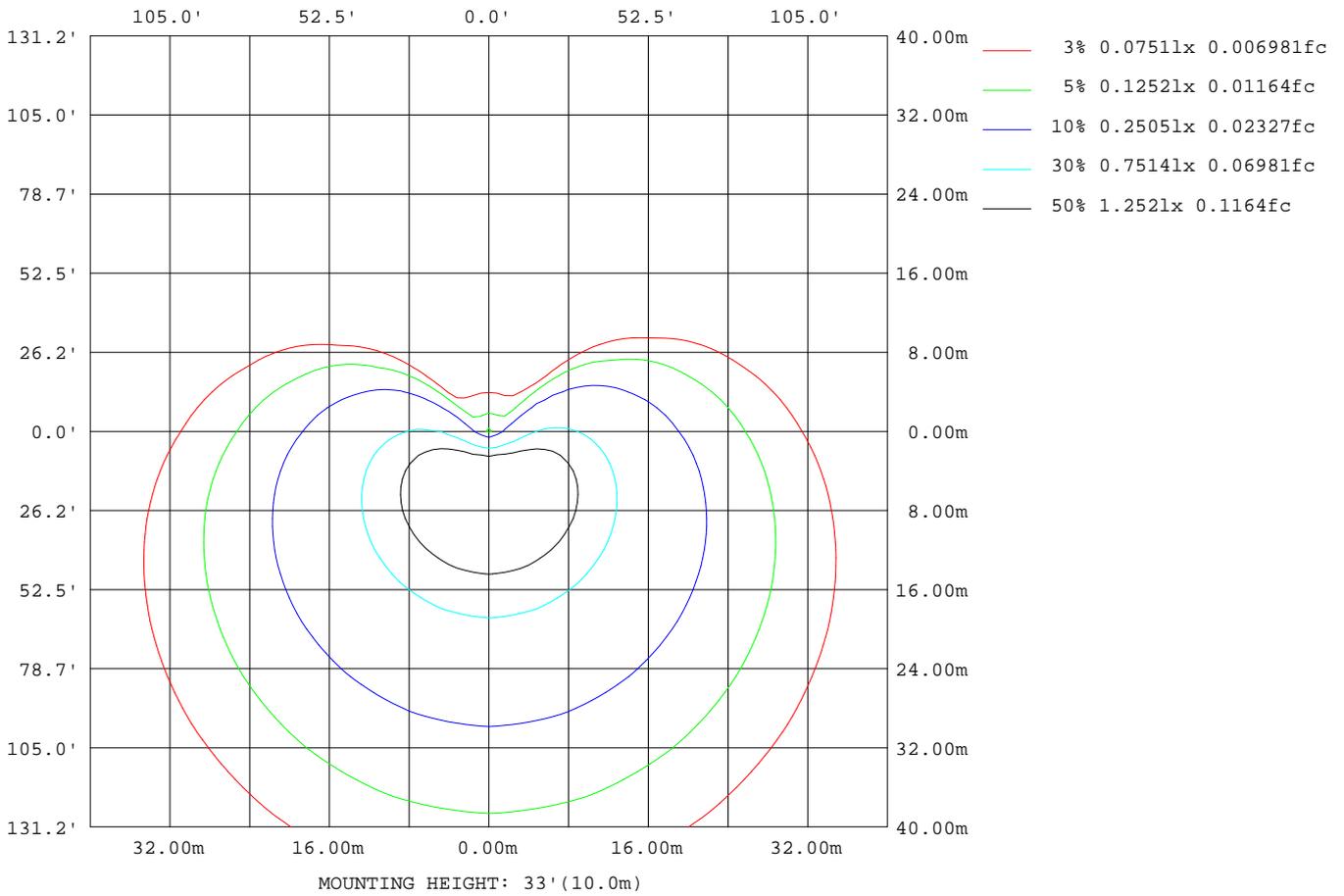
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 24.9DEG  
 Operators: Alan Wang  
 Test Date: 29 January 2024

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 43.8%  
 Test Distance: 2.500m [K=1.0423]  
 Remarks:

ISOLUX DIAGRAM

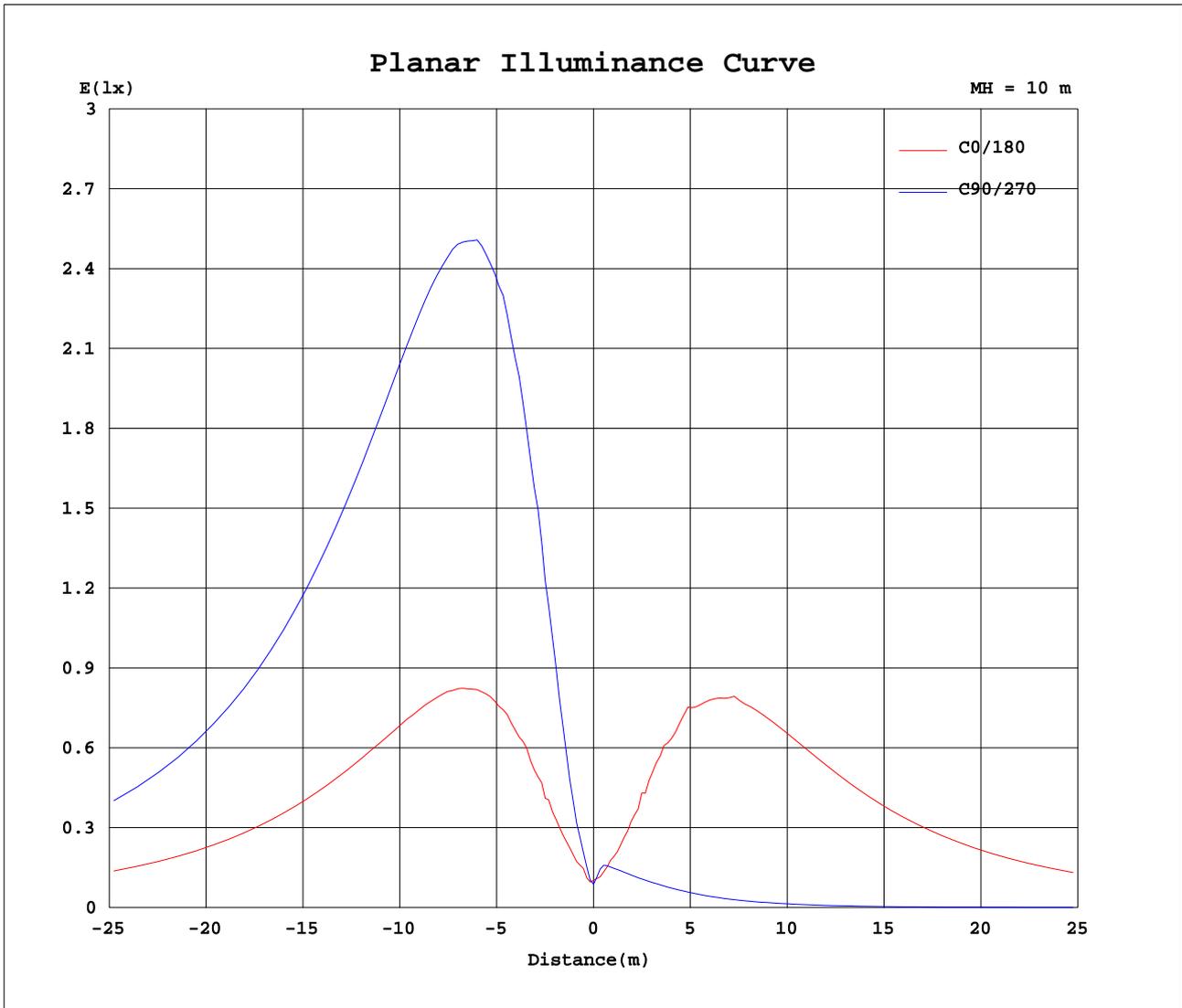
Test:U:120.0V I:0.2461A P:29.20W PF:0.9889 Freq:60.00Hz Lamp Flux:3158.66x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-OLWS-21-MV-36D30CC-NK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 24.9DEG  
 Operators: Alan Wang  
 Test Date: 29 January 2024

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 43.8%  
 Test Distance: 2.500m [K=1.0423]  
 Remarks:

Planar Illuminance Curve



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 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 24.9DEG  
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γ Range: 0 - 180DEG  
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 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.2461A P:29.20W PF:0.9889 Freq:60.00Hz Lamp Flux:3158.66xl lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-OLWS-21-MV-36D30CC-NK_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	10.3	10.4	11.3	8.93	8.85	8.78	8.79	8.78	8.80	10.0	10.1	8.71	10.3	10.4	11.3	8.93	8.85	8.78	8.79
5	17.6	21.7	23.9	28.7	30.9	34.6	32.4	33.8	30.9	27.7	24.8	20.4	17.9	16.2	14.3	13.9	14.7	15.2	15.4
10	31.7	40.2	53.8	69.9	75.9	84.3	82.5	86.1	77.2	65.9	57.3	43.2	30.1	22.5	16.3	13.1	13.0	13.2	13.4
15	52.1	72.8	94.1	121	140	154	152	148	136	119	104	73.1	47.7	32.6	18.0	11.8	11.3	11.4	11.4
20	75.2	109	142	175	206	224	229	225	203	177	149	109	73.4	44.1	22.4	10.8	9.78	9.78	9.80
25	99.9	149	189	234	269	304	309	297	272	232	199	143	97.2	55.7	26.9	10.1	8.36	8.36	8.33
30	125	181	238	292	338	370	383	368	336	293	244	179	119	70.1	32.1	9.81	7.10	7.05	6.99
35	150	218	282	345	398	444	453	436	400	343	286	213	143	83.4	37.1	9.66	5.96	5.89	5.82
40	172	247	323	395	456	502	518	499	456	393	321	244	165	96.5	42.5	9.66	4.93	4.91	4.86
45	193	277	361	440	509	560	577	556	506	437	357	273	185	109	47.6	9.76	4.01	4.02	4.04
50	212	303	395	481	556	610	630	608	552	477	390	299	203	120	52.3	9.86	3.16	3.21	3.22
55	230	327	425	517	597	655	676	653	592	513	419	321	219	129	56.4	10.0	2.48	2.54	2.52
60	244	347	451	548	633	694	716	691	628	543	444	341	233	138	60.1	10.3	1.95	2.00	2.01
65	256	363	471	574	661	725	748	722	657	567	465	357	245	145	63.3	10.5	1.49	1.58	1.62
70	266	377	489	594	685	751	774	747	679	588	482	370	255	151	65.8	10.8	1.24	1.33	1.36
75	273	387	502	609	702	770	794	766	697	603	494	380	261	155	67.9	11.1	1.22	1.29	1.31
80	278	393	510	619	714	782	807	779	708	612	502	387	266	158	69.3	11.4	1.23	1.28	1.32
85	280	396	513	624	719	788	813	784	713	617	506	389	268	159	69.9	11.5	1.16	1.26	1.29
90	280	395	513	623	718	787	812	784	712	617	507	389	268	159	69.8	11.4	1.12	1.21	1.24
95	277	392	508	617	711	780	805	776	706	611	502	386	266	158	69.0	11.3	1.08	1.16	1.19
100	272	385	500	607	699	767	792	763	694	601	494	378	261	155	67.6	10.9	1.03	1.10	1.13
105	264	375	486	591	681	748	772	744	677	586	481	369	254	150	65.5	10.5	0.98	1.04	1.07
110	254	361	469	571	658	722	746	717	654	565	463	356	244	144	62.7	9.89	0.90	0.94	0.97
115	242	345	448	545	629	691	713	686	625	541	443	340	233	137	59.2	9.17	0.81	0.84	0.87
120	228	325	423	515	595	653	676	650	592	511	419	321	219	129	55.1	8.32	0.74	0.75	0.78
125	212	303	394	481	556	611	632	608	553	478	391	299	203	119	50.5	7.40	0.67	0.68	0.70
130	193	277	362	443	512	563	582	562	510	440	360	275	186	108	45.3	6.42	0.60	0.61	0.63
135	173	250	327	401	464	510	527	509	462	399	325	248	167	95.9	39.8	5.41	0.54	0.55	0.57
140	151	220	289	354	411	452	467	451	410	353	288	218	146	83.5	34.1	4.50	0.47	0.48	0.51
145	128	188	248	305	354	390	403	390	354	305	248	187	124	71.2	28.9	3.87	0.42	0.42	0.44
150	104	154	205	253	294	323	335	323	294	253	205	154	101	59.6	24.4	3.63	0.37	0.37	0.39
155	79.8	120	160	199	231	254	264	254	232	200	161	120	77.1	49.7	21.1	3.91	0.33	0.32	0.35
160	55.8	85.1	115	143	167	184	191	185	168	145	117	86.5	54.0	39.8	17.8	4.26	0.33	0.28	0.31
165	33.4	52.2	71.6	90.3	105	116	120	117	107	92.1	73.9	54.1	32.6	27.7	13.0	3.75	0.38	0.24	0.28
170	14.7	23.8	33.5	42.6	50.1	55.2	57.2	55.6	51.5	44.4	35.5	25.8	14.7	13.8	6.61	2.16	0.33	0.20	0.24
175	2.96	4.97	8.01	10.4	11.2	12.3	12.8	12.6	12.0	10.5	9.26	6.40	3.40	3.42	1.87	0.80	0.18	0.16	0.18
180	0.15	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.16	0.15	0.15	0.15	0.15	0.15

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γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 43.8%  
 Test Distance: 2.500m [K=1.0423]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.2461A P:29.20W PF:0.9889 Freq:60.00Hz Lamp Flux:3158.66x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-OLWS-21-MV-36D30CC-NK_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	8.78	8.80	10.0	10.1	8.71														
5	15.4	15.0	14.1	14.7	16.2														
10	13.4	13.3	13.9	17.0	23.5														
15	11.4	11.4	12.7	19.7	33.2														
20	9.79	9.81	12.3	24.7	46.1														
25	8.32	8.41	12.5	30.6	61.7														
30	7.03	7.14	13.0	37.2	76.3														
35	5.85	5.93	13.7	43.7	91.2														
40	4.86	4.90	14.5	50.1	105														
45	4.00	3.98	15.4	56.2	119														
50	3.20	3.18	16.2	61.7	131														
55	2.51	2.50	17.0	66.7	141														
60	1.97	1.93	17.8	71.1	150														
65	1.58	1.52	18.5	74.7	158														
70	1.32	1.25	19.1	77.7	164														
75	1.25	1.16	19.6	80.1	169														
80	1.27	1.19	20.1	81.8	172														
85	1.23	1.16	20.3	82.4	174														
90	1.20	1.12	20.2	82.4	174														
95	1.15	1.08	19.9	81.7	172														
100	1.10	1.04	19.4	80.0	169														
105	1.04	1.00	18.7	77.6	164														
110	0.95	0.92	17.8	74.5	158														
115	0.85	0.84	16.7	70.6	151														
120	0.76	0.78	15.4	66.0	142														
125	0.69	0.72	14.0	60.7	131														
130	0.63	0.66	12.4	55.0	119														
135	0.57	0.61	10.8	48.6	107														
140	0.51	0.55	8.90	41.6	92.6														
145	0.45	0.50	6.75	33.8	77.0														
150	0.41	0.44	4.36	25.1	59.8														
155	0.37	0.39	1.96	15.8	41.2														
160	0.34	0.36	0.68	7.93	24.1														
165	0.31	0.34	0.42	3.12	11.5														
170	0.26	0.29	0.32	1.18	4.43														
175	0.20	0.22	0.24	0.45	1.30														
180	0.16	0.17	0.18	0.19	0.20														

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