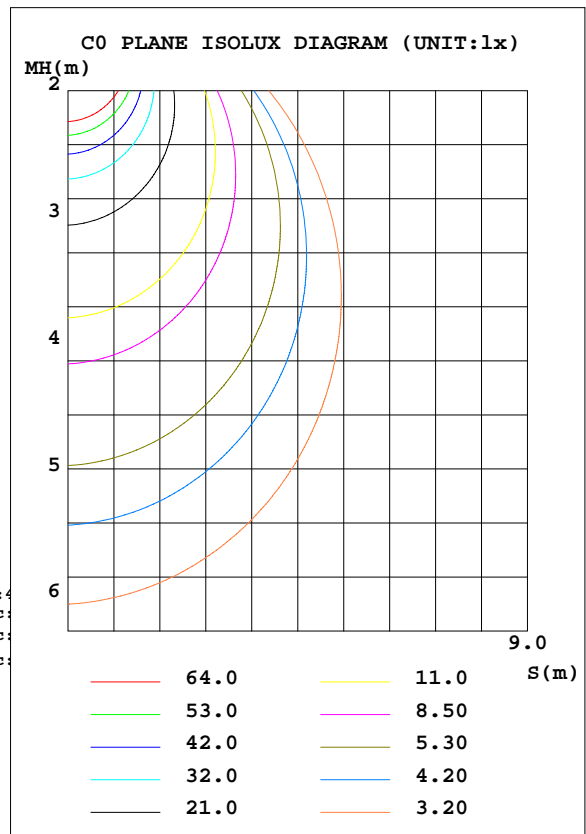
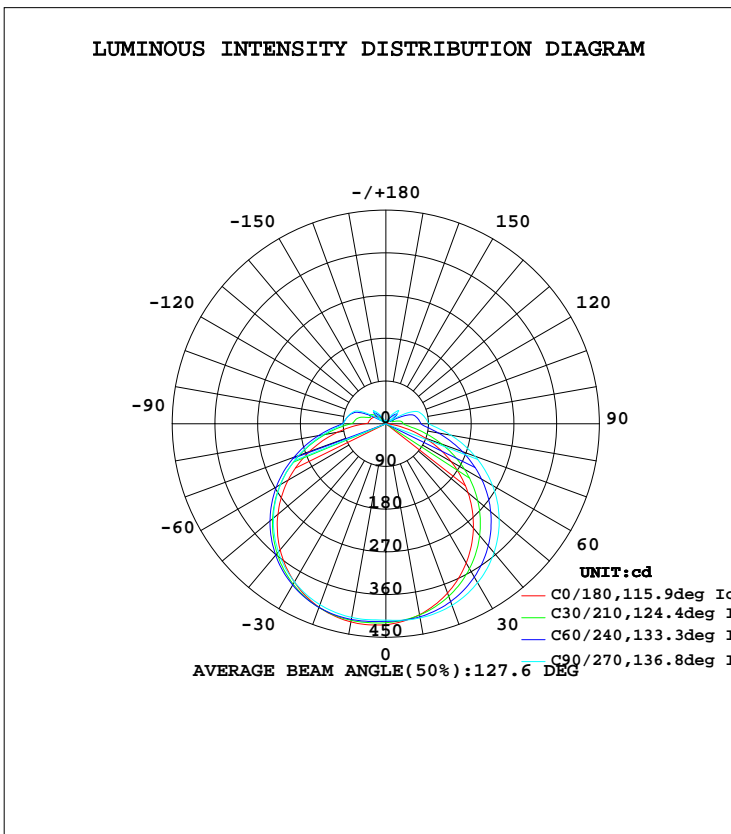


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.1709A P:20.30W PF:0.9901 Lamp Flux:1679.83x1 lm		
NAME: ASD-OLWS-23-MV-14N20CC-WH	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 82.77 lm/W			
MODEL: ASD-OLWS-23-MV-14N20CC-WH		I <sub>max</sub> (cd)	425.0	S/MH(C0/180)	1.35
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	1.38
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1679.8	η UP, DN(C0-180)	5.9,43.5
NOMINAL FLUX(lm)	1679.83	CIE CLASS	SEMI-D.	η UP, DN(C180-360)	6.3,44.3
LAMPS INSIDE	1	η up(%)	12.2	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120.0	η down(%)	87.8	CIBSE SHR MAX	1.55



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:wxh  
 Test Date:2019-05-06

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity:65.0%  
 Test Distance:7.500m [K=1.0000]  
 Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum,lamp
10	408.5	411.4	415.4	414.7	423.9	419.9	414.3	404.3	0- 10	39.55	39.55	2.35,2.35
20	379.8	393.4	407.3	407.8	411.5	412.2	405.7	386.7	10- 20	115.2	154.8	9.21,9.21
30	338.6	363.6	386.7	388.7	385.2	392.3	385.0	357.1	20- 30	179.1	333.9	19.9,19.9
40	287.0	323.0	354.6	357.4	346.5	359.8	352.3	316.9	30- 40	223.4	557.3	33.2,33.2
50	226.1	272.5	311.9	315.3	297.0	316.3	309.2	266.8	40- 50	242.7	800.0	47.6,47.6
60	158.6	213.2	259.5	263.3	238.1	263.1	256.6	209.3	50- 60	234.5	1034	61.6,61.6
70	88.06	150.4	199.7	203.0	171.5	202.5	196.0	147.4	60- 70	200.3	1235	73.5,73.5
80	24.65	91.36	138.9	141.1	103.9	139.4	135.4	89.30	70- 80	147.2	1382	82.3,82.3
90	4.317	57.98	90.72	87.10	44.56	85.30	89.70	57.96	80- 90	92.12	1474	87.8,87.8
100	4.490	52.26	83.10	75.43	35.78	75.04	82.52	52.38	90-100	67.27	1541	91.8,91.8
110	4.691	33.54	73.35	54.36	32.66	57.56	73.21	34.57	100-110	55.61	1597	95.1,95.1
120	4.868	15.31	31.62	27.37	28.63	24.91	38.41	16.05	110-120	34.75	1632	97.1,97.1
130	5.072	23.15	19.11	34.68	23.68	34.80	12.40	23.81	120-130	17.01	1649	98.2,98.2
140	5.314	12.75	33.37	18.22	17.19	18.91	33.37	13.64	130-140	16.97	1666	99.2,99.2
150	5.561	5.592	15.58	5.569	9.734	5.959	16.46	5.673	140-150	8.649	1674	99.7,99.7
160	5.811	5.827	5.942	5.766	5.823	6.046	6.089	5.804	150-160	3.115	1678	99.9,99.9
170	6.035	6.070	6.108	5.939	6.020	6.143	6.197	6.000	160-170	1.687	1679	100,100
180	6.108	6.208	6.239	6.054	6.143	6.189	6.251	6.043	170-180	0.5814	1680	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

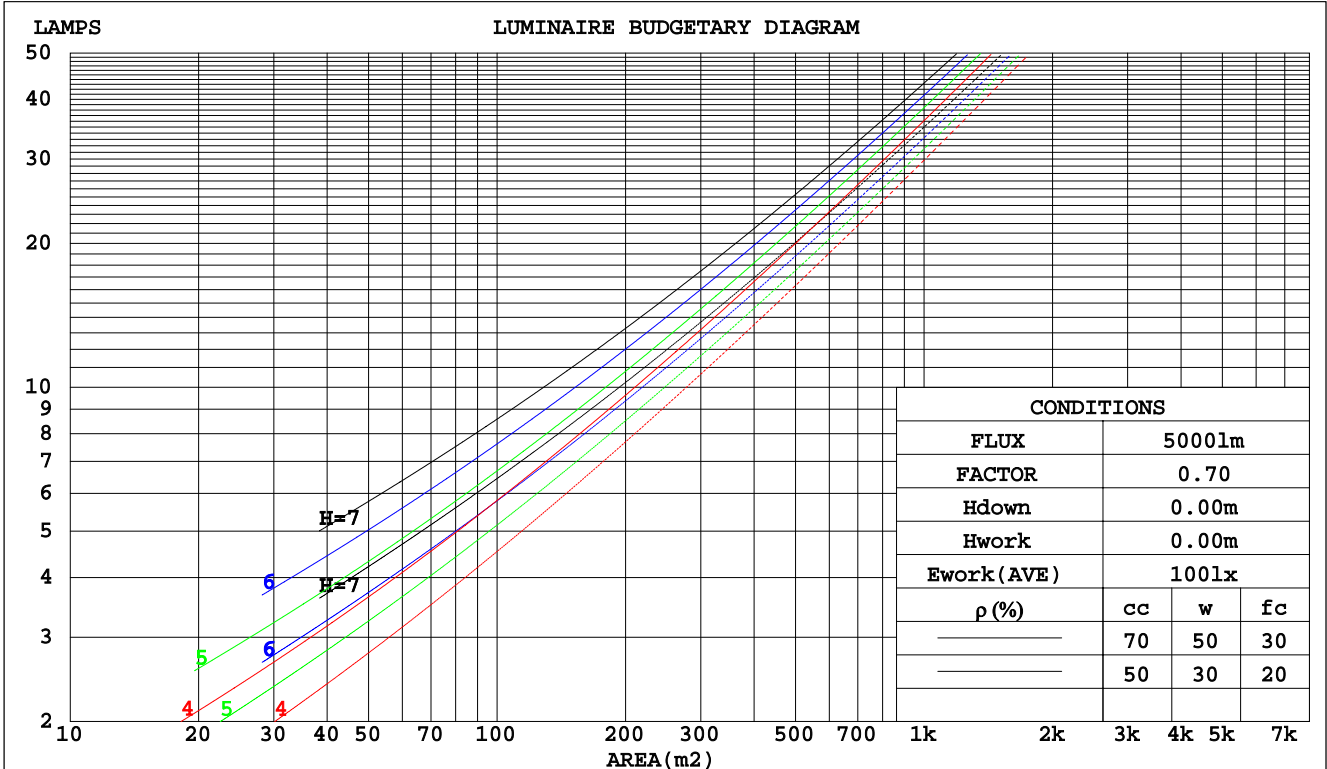
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:wxh  
Test Date:2019-05-06

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
Humidity:65.0%  
Test Distance:7.500m [K=1.0000]  
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.0V I:0.1709A P:20.30W PF:0.9901 Lamp Flux:1679.83x1 lm		
NAME: ASD-OLWS-23-MV-14N20CC-WH	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	PROTECTION 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	1.16	1.16	1.16	1.12	1.12	1.12	1.04	1.04	1.04	.97	.97	.97	.91	.91	.91	.88
1.0	.98	.93	.89	.95	.90	.86	.88	.85	.81	.82	.79	.76	.77	.74	.72	.69
2.0	.84	.77	.71	.81	.75	.69	.76	.70	.65	.71	.66	.62	.66	.62	.59	.56
3.0	.73	.65	.58	.71	.63	.56	.66	.59	.54	.62	.56	.51	.58	.53	.49	.46
4.0	.65	.55	.48	.62	.54	.47	.58	.51	.45	.55	.48	.43	.51	.46	.41	.39
5.0	.57	.48	.41	.56	.47	.40	.52	.44	.39	.49	.42	.37	.46	.40	.36	.33
6.0	.51	.42	.35	.50	.41	.35	.47	.39	.34	.44	.37	.32	.41	.35	.31	.29
7.0	.46	.37	.31	.45	.37	.31	.42	.35	.29	.40	.33	.28	.37	.32	.27	.25
8.0	.42	.33	.28	.41	.33	.27	.39	.31	.26	.36	.30	.25	.34	.29	.24	.22
9.0	.39	.30	.25	.38	.30	.24	.35	.28	.23	.34	.27	.23	.32	.26	.22	.20
10.0	.36	.27	.22	.35	.27	.22	.33	.26	.21	.31	.25	.20	.29	.24	.20	.18



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: wxh  
 Test Date: 2019-05-06

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity: 65.0%  
 Test Distance: 7.500m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:120.0V I:0.1709A P:20.30W PF:0.9901 Lamp Flux:1679.83x1 lm		
NAME: ASD-OLWS-23-MV-14N20CC-WH	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	PROTECTION 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	.361	.205	.065	.350	.200	.063	.329	.189	.060	.311	.179	.057	.293	.170	.055	
2.0	.321	.176	.054	.311	.171	.053	.292	.163	.051	.276	.155	.048	.260	.147	.046	
3.0	.289	.154	.046	.280	.150	.045	.263	.143	.043	.248	.136	.042	.234	.129	.040	
4.0	.262	.136	.040	.254	.133	.039	.239	.127	.038	.225	.121	.036	.212	.115	.035	
5.0	.239	.122	.035	.232	.119	.035	.219	.114	.034	.206	.109	.032	.194	.104	.031	
6.0	.220	.110	.032	.214	.108	.031	.201	.103	.030	.190	.099	.029	.179	.094	.028	
7.0	.204	.101	.029	.198	.099	.028	.187	.094	.027	.176	.090	.026	.166	.086	.025	
8.0	.189	.092	.026	.184	.091	.026	.174	.087	.025	.164	.083	.024	.155	.080	.023	
9.0	.177	.085	.024	.172	.084	.023	.162	.080	.023	.154	.077	.022	.145	.074	.021	
10.0	.166	.079	.022	.161	.078	.022	.152	.075	.021	.144	.072	.020	.137	.069	.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	.284	.284	.284	.243	.243	.243	.166	.166	.166	.095	.095	.095	.030	.030	.030	
1.0	.278	.250	.224	.238	.214	.193	.163	.147	.134	.094	.085	.078	.030	.027	.025	
2.0	.271	.226	.189	.232	.195	.164	.159	.135	.114	.092	.078	.067	.029	.025	.022	
3.0	.263	.210	.167	.226	.181	.145	.155	.126	.101	.089	.073	.060	.029	.024	.020	
4.0	.256	.197	.152	.219	.170	.132	.151	.119	.093	.087	.069	.055	.028	.023	.018	
5.0	.248	.187	.142	.213	.162	.123	.147	.113	.087	.085	.066	.052	.027	.022	.017	
6.0	.241	.179	.134	.207	.155	.117	.143	.108	.083	.083	.064	.049	.027	.021	.016	
7.0	.234	.172	.129	.201	.149	.112	.139	.105	.080	.081	.062	.047	.026	.020	.016	
8.0	.227	.167	.125	.195	.144	.109	.135	.101	.077	.079	.060	.046	.025	.020	.015	
9.0	.221	.162	.122	.190	.140	.106	.132	.099	.075	.077	.058	.045	.025	.019	.015	
10.0	.215	.157	.119	.185	.137	.104	.129	.096	.074	.075	.057	.044	.024	.019	.015	

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:wxh  
 Test Date:2019-05-06

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity:65.0%  
 Test Distance:7.500m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.0V I:0.1709A P:20.30W PF:0.9901 Lamp Flux:1679.83x1 lm										
NAME: ASD-OLWS-23-MV-14N20CC-WH					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: ASD Lighting Corp					SUR.:			PROTECTION 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	15.9	17.3	16.3	17.7	18.2	17.8	19.2	18.2	19.6	20.1
3H	17.1	18.4	17.6	18.9	19.3	20.0	21.3	20.4	21.7	22.2
4H	17.5	18.7	18.0	19.2	19.7	21.1	22.3	21.6	22.8	23.3
6H	17.7	18.9	18.2	19.3	19.9	22.2	23.4	22.7	23.9	24.4
8H	17.7	18.8	18.2	19.3	19.9	22.8	24.0	23.4	24.5	25.0
12H	17.6	18.7	18.2	19.2	19.8	23.5	24.6	24.1	25.1	25.7
4H 2H	16.8	18.1	17.3	18.5	19.0	18.2	19.5	18.7	20.0	20.5
3H	18.3	19.4	18.8	19.9	20.4	20.6	21.7	21.2	22.3	22.8
4H	18.8	19.8	19.4	20.4	20.9	21.9	22.9	22.5	23.5	24.1
6H	19.1	20.0	19.7	20.6	21.2	23.3	24.2	23.9	24.8	25.4
8H	19.2	20.0	19.8	20.6	21.2	24.0	24.9	24.6	25.4	26.1
12H	19.2	19.9	19.8	20.5	21.2	24.8	25.6	25.5	26.2	26.9
8H 4H	19.5	20.4	20.1	20.9	21.6	22.2	23.0	22.7	23.6	24.2
6H	20.1	20.8	20.7	21.4	22.1	23.8	24.5	24.4	25.1	25.8
8H	20.3	20.9	20.9	21.5	22.2	24.7	25.3	25.3	25.9	26.6
12H	20.4	20.9	21.0	21.6	22.3	25.7	26.3	26.4	26.9	27.7
12H 4H	19.7	20.5	20.3	21.1	21.7	22.1	22.9	22.7	23.5	24.2
6H	20.5	21.1	21.1	21.7	22.4	23.8	24.5	24.5	25.1	25.8
8H	20.8	21.3	21.4	22.0	22.7	24.8	25.4	25.5	26.0	26.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.2				
2.0H	+ 0.2 / - 0.4					+ 0.2 / - 0.3				

CIE Pub.117 Corrected 1680 lm Total Lamp Luminous Flux.(8log(F/F0) = 1.8)

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:wxh  
 Test Date:2019-05-06

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity:65.0%  
 Test Distance:7.500m [K=1.0000]  
 Remarks:

## UTILIZATION FACTORS TABLE

Test:U:120.0V I:0.1709A P:20.30W PF:0.9901 Lamp Flux:1679.83x1 lm		
NAME: ASD-OLWS-23-MV-14N20CC-WH	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:

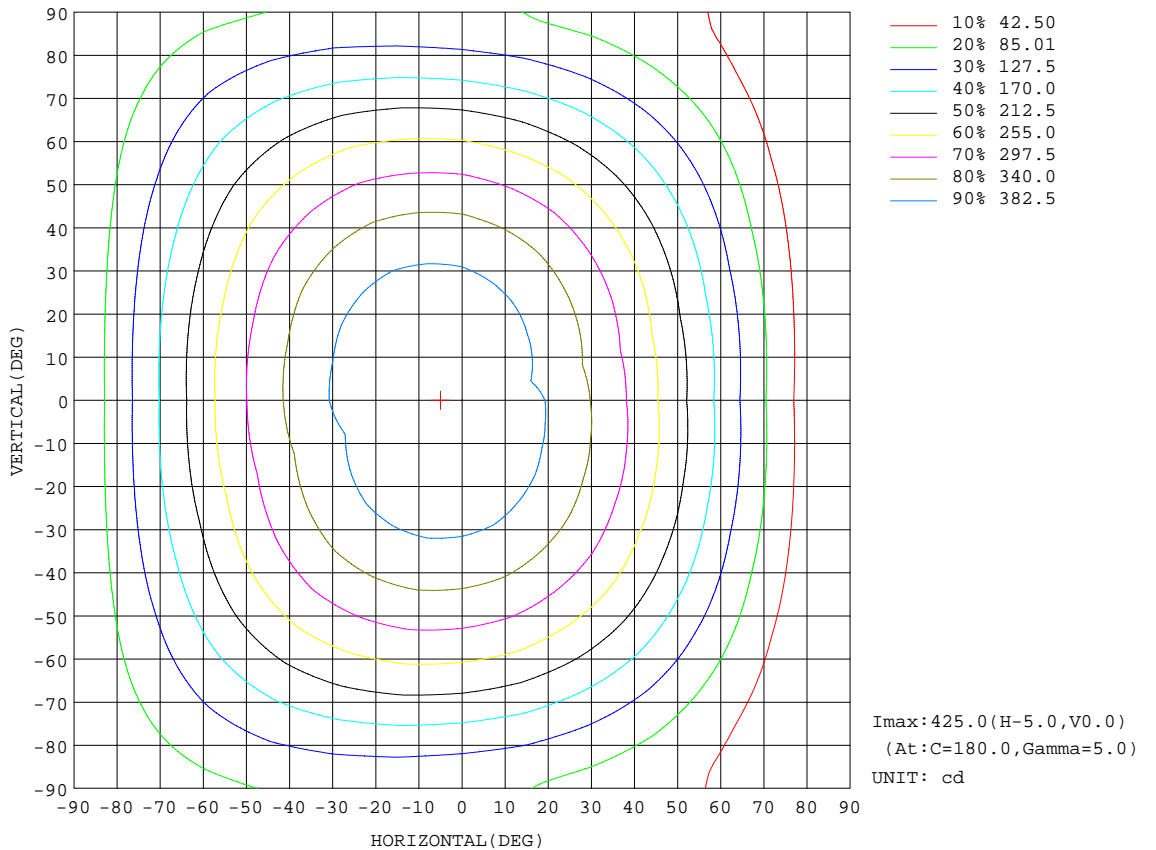
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	50	38	31	49	38	31	48	37	30	24
0.80	60	47	39	59	47	39	56	45	38	31
1.00	68	56	47	66	55	47	63	55	46	38
1.25	75	63	55	73	62	54	69	60	53	44
1.50	80	69	60	78	67	60	74	65	58	48
2.00	87	77	69	85	75	68	80	72	66	55
2.50	92	82	75	89	80	73	83	76	70	59
3.00	95	87	80	92	84	78	86	80	75	63
4.00	100	93	87	96	90	84	90	85	80	68
5.00	103	96	91	99	94	89	93	88	84	71
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:25.3DEG  
 Operators:wxh  
 Test Date:2019-05-06

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity:65.0%  
 Test Distance:7.500m [K=1.0000]  
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.0V I:0.1709A P:20.30W PF:0.9901 Lamp Flux:1679.83x1 lm		
NAME: ASD-OLWS-23-MV-14N20CC-WH	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:

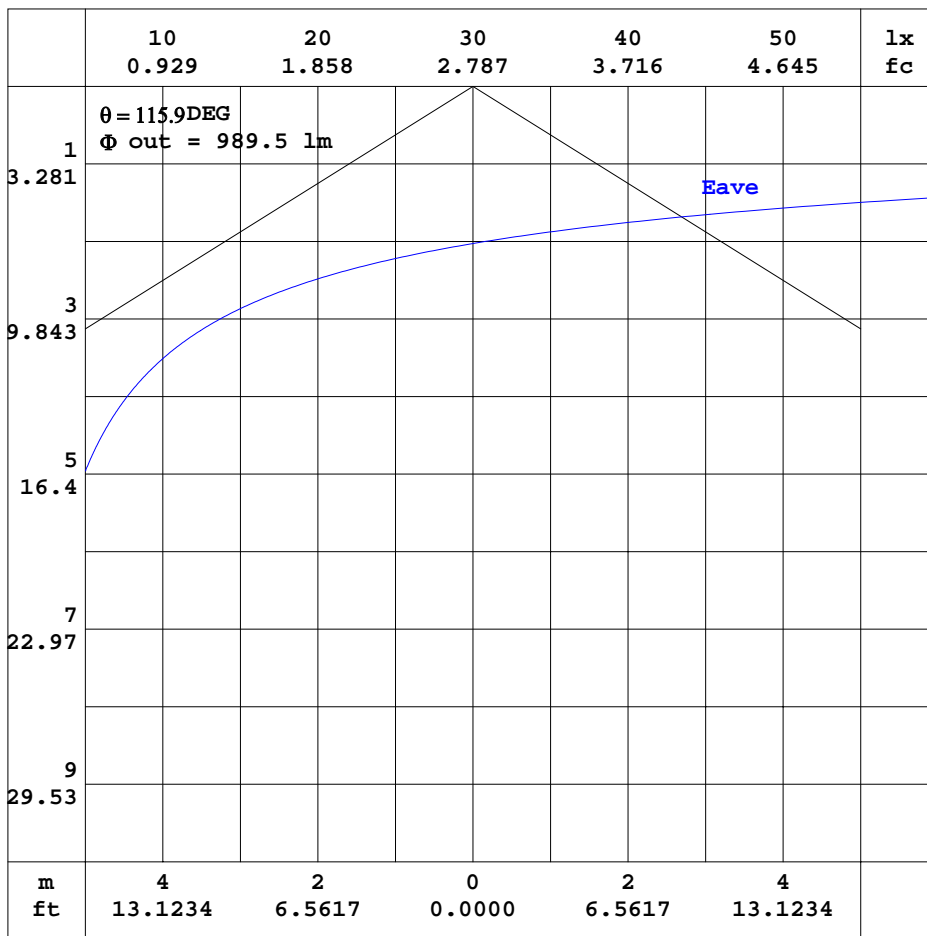


C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: wxh  
 Test Date: 2019-05-06

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity: 65.0%  
 Test Distance: 7.500m [K=1.0000]  
 Remarks:

AAI CURVES

Test:U:120.0V I:0.1709A P:20.30W PF:0.9901 Lamp Flux:1679.83x1 lm		
NAME: ASD-OLWS-23-MV-14N20CC-WH	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:



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

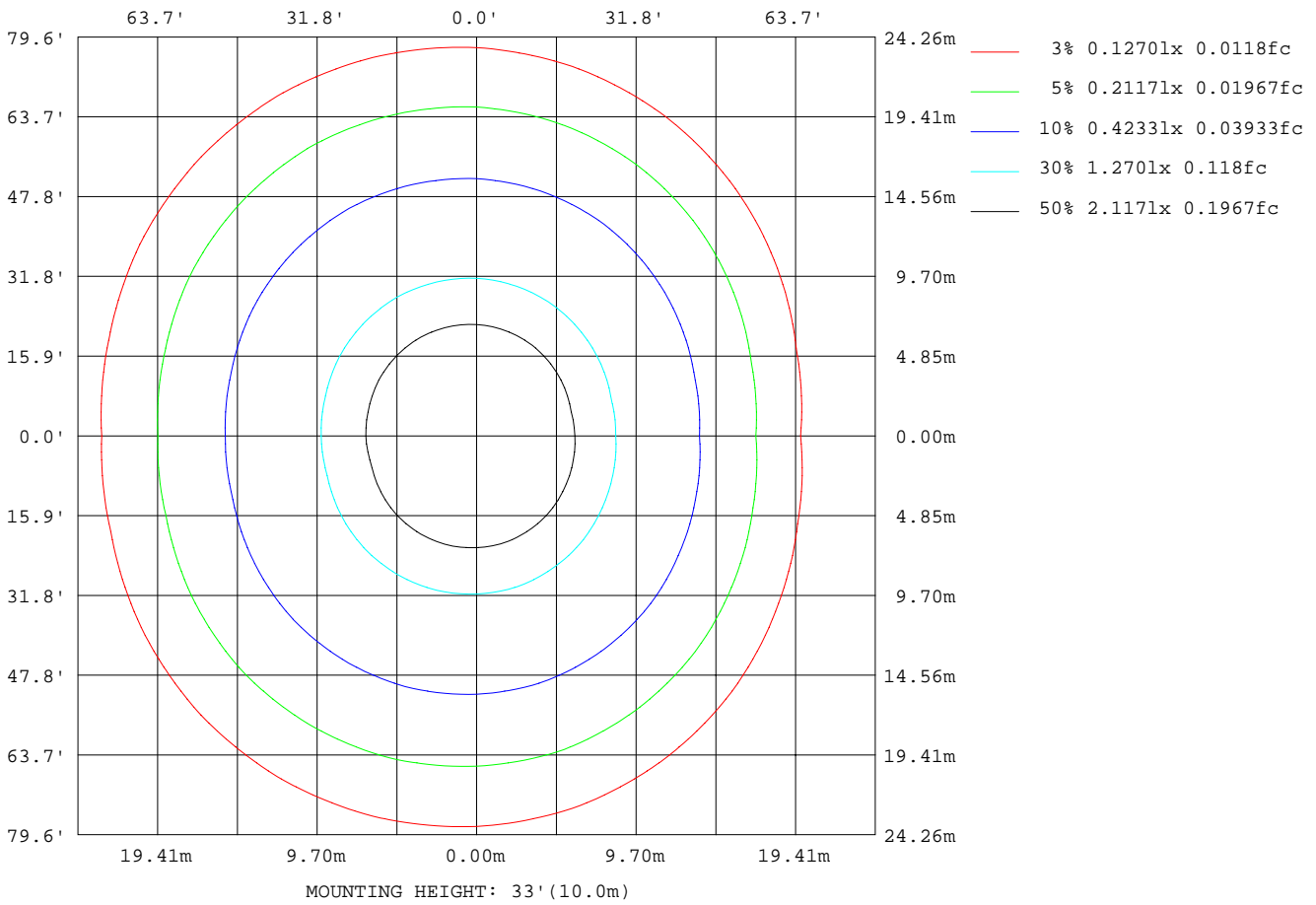
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: wxh  
 Test Date: 2019-05-06

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity: 65.0%  
 Test Distance: 7.500m [K=1.0000]  
 Remarks:



ISOLUX DIAGRAM

Test:U:120.0V I:0.1709A P:20.30W PF:0.9901 Lamp Flux:1679.83x1 lm		
NAME: ASD-OLWS-23-MV-14N20CC-WH	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: wxh  
 Test Date: 2019-05-06

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity: 65.0%  
 Test Distance: 7.500m [K=1.0000]  
 Remarks:

## LED Avg.L Report

Test:U:120.0V I:0.1709A P:20.30W PF:0.9901 Lamp Flux:1679.83x1 lm		
NAME: ASD-OLWS-23-MV-14N20CC-WH	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:

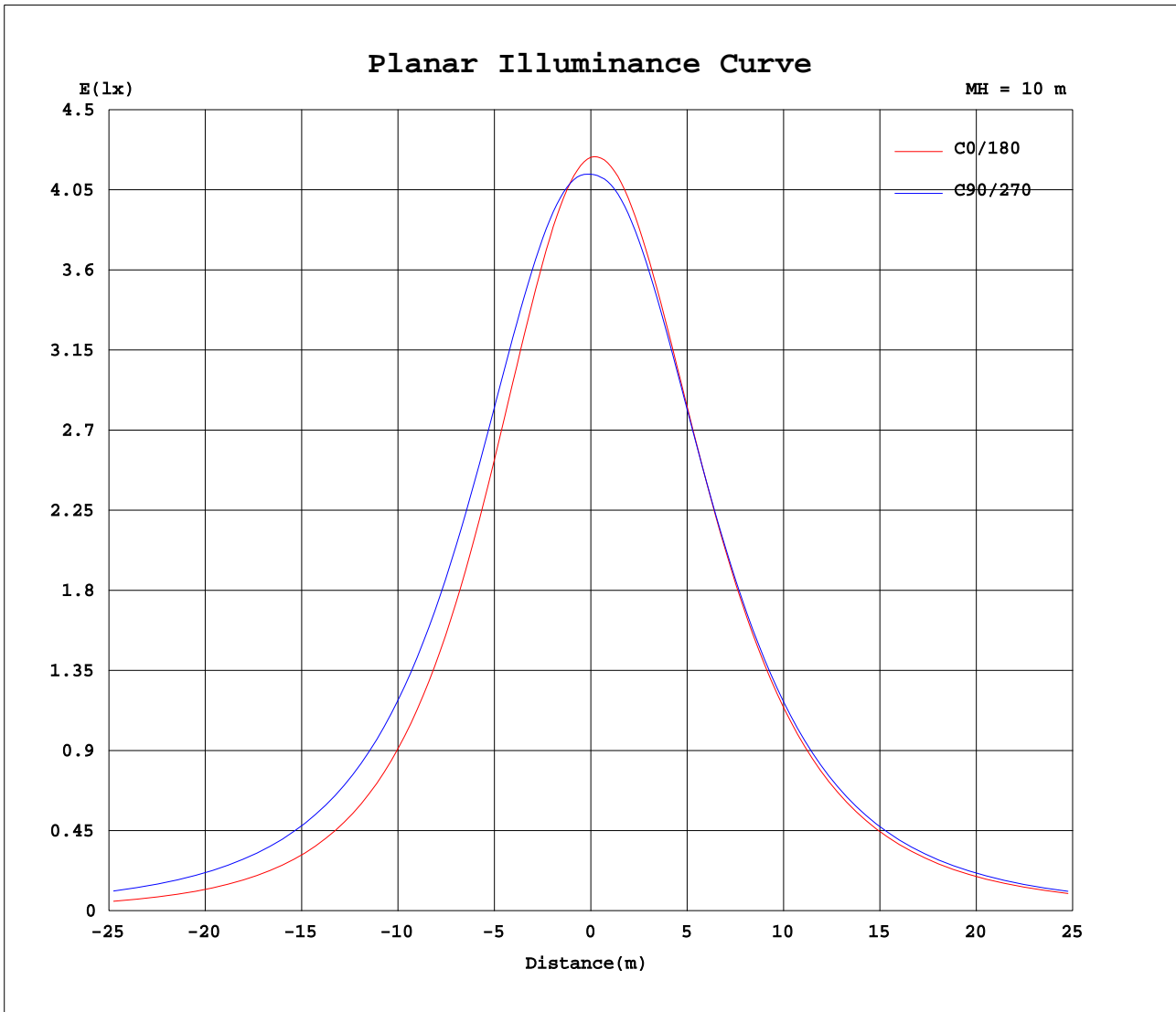
AvgL	cd/m2
L_0~180(65)av	3889
L_0~180(75)av	3713
L_0~180(85)av	4378
L_90~270(65)av	5413
L_90~270(75)av	6458
L_90~270(85)av	12531
L_45(65)av	4901
L_45(75)av	5594
L_45(85)av	10281

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:wxh  
 Test Date:2019-05-06

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity:65.0%  
 Test Distance:7.500m [K=1.0000]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: wxh  
 Test Date: 2019-05-06

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity: 65.0%  
 Test Distance: 7.500m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.1709A P:20.30W PF:0.9901 Lamp Flux:1679.83x1 lm		
NAME: ASD-OLWS-23-MV-14N20CC-WH	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	PROTECTION 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	423	421	419	418	416	415	414	413	412	411	411	410	423	421	419	418	416	415	414
5	418	416	416	416	416	416	415	415	415	414	413	412	425	422	421	419	418	416	414
10	408	408	409	411	413	415	415	416	416	415	413	411	424	421	421	420	419	417	414
15	396	397	400	404	407	411	413	414	414	413	410	408	419	417	418	418	417	414	412
20	380	382	387	393	399	404	407	409	409	408	405	401	411	410	412	412	412	409	406
25	361	365	371	380	387	394	398	401	401	400	396	391	400	400	403	404	404	401	397
30	339	345	352	364	373	382	387	390	390	389	383	377	385	386	390	392	393	390	385
35	314	321	331	345	356	366	372	376	377	374	369	361	368	369	375	378	379	375	370
40	287	296	308	323	336	348	355	359	360	357	350	342	347	350	356	360	361	358	352
45	258	268	281	299	313	327	335	340	340	338	330	321	323	327	335	339	341	338	332
50	226	237	253	272	288	304	312	318	318	315	307	296	297	302	312	316	319	315	309
55	193	205	223	244	261	278	287	293	293	290	281	270	269	275	285	291	294	290	284
60	159	171	191	213	233	250	259	266	266	263	253	241	238	245	257	263	267	263	257
65	124	137	159	182	203	220	231	238	238	234	224	210	205	214	226	234	238	234	227
70	88.1	103	125	150	171	189	200	206	207	203	192	178	172	181	194	202	206	203	196
75	54.6	69.9	93.7	120	141	159	169	176	176	172	161	146	138	148	162	171	175	172	165
80	24.6	40.3	65.4	91.4	112	129	139	145	146	141	130	114	104	115	130	139	144	141	135
85	4.27	19.5	45.0	69.0	87.9	103	111	117	117	112	99.8	84.6	72.0	84.3	100	110	115	113	108
90	4.32	16.4	37.7	58.0	74.3	85.9	90.7	94.2	93.2	87.1	74.5	58.5	44.6	57.7	74.1	85.3	92.1	92.4	89.7
95	4.41	14.8	35.3	55.3	71.3	82.5	86.9	89.0	87.1	79.9	66.9	50.4	37.1	49.9	66.6	79.2	86.8	88.1	86.3
100	4.49	12.4	31.9	52.3	67.9	78.9	83.1	84.7	82.7	75.4	61.9	46.4	35.8	46.2	62.3	75.0	82.5	83.9	82.5
105	4.59	9.76	21.4	47.7	63.8	74.6	78.7	79.1	76.7	68.8	50.7	41.1	34.3	40.9	53.5	69.1	77.1	78.6	78.2
110	4.69	8.08	13.4	33.5	56.1	68.9	73.3	71.4	67.1	54.4	37.7	37.9	32.7	37.7	39.0	57.6	70.0	71.9	73.2
115	4.78	6.00	17.3	13.6	35.3	53.0	59.7	54.6	46.4	33.0	38.7	33.7	30.8	33.5	36.3	36.5	52.6	59.0	63.5
120	4.87	4.86	16.6	15.3	11.1	24.2	31.6	26.8	19.6	27.4	38.8	28.8	28.6	28.8	38.7	24.9	25.7	32.8	38.4
125	4.96	4.96	13.5	26.0	15.2	7.27	7.57	7.39	17.8	37.7	33.2	24.7	26.3	25.6	33.6	34.0	13.6	6.14	8.11
130	5.07	5.08	9.91	23.2	30.8	21.9	19.1	20.7	33.1	34.7	26.6	21.8	23.7	22.8	27.4	34.8	27.1	15.1	12.4
135	5.20	5.20	6.27	18.1	28.4	36.3	38.4	36.8	31.5	26.5	18.9	18.4	20.7	19.8	20.5	27.0	32.2	36.9	34.6
140	5.31	5.31	5.33	12.7	21.9	29.5	33.4	30.6	23.9	18.2	12.2	14.5	17.2	16.2	13.7	18.9	24.5	31.1	33.4
145	5.43	5.43	5.44	7.30	15.1	21.5	24.6	22.5	16.7	10.1	9.03	10.8	13.2	12.5	10.4	11.3	17.5	23.1	25.0
150	5.56	5.54	5.55	5.59	8.17	13.3	15.6	14.0	9.39	5.57	6.54	7.88	9.73	9.37	7.99	5.96	10.6	14.9	16.5
155	5.69	5.66	5.66	5.72	5.77	5.86	6.91	6.16	5.76	5.66	5.53	5.61	7.11	6.62	5.92	6.00	6.06	6.84	7.96
160	5.81	5.78	5.78	5.83	5.89	5.99	5.94	5.92	5.86	5.77	5.64	5.52	5.82	5.85	5.97	6.05	6.11	6.11	6.09
165	5.92	5.91	5.91	5.96	6.00	6.03	6.03	6.01	5.94	5.86	5.75	5.64	5.92	5.93	6.03	6.10	6.15	6.17	6.14
170	6.03	6.03	6.03	6.07	6.15	6.16	6.11	6.09	6.02	5.94	5.84	5.76	6.02	6.02	6.09	6.14	6.19	6.20	6.20
175	6.10	6.11	6.09	6.16	6.20	6.22	6.18	6.15	6.08	6.00	5.91	5.83	6.10	6.09	6.14	6.18	6.22	6.24	6.24
180	6.11	6.14	6.14	6.21	6.23	6.26	6.24	6.20	6.12	6.05	5.96	5.89	6.14	6.11	6.16	6.19	6.24	6.25	6.25

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: wxh  
 Test Date: 2019-05-06

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity: 65.0%  
 Test Distance: 7.500m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.1709A P:20.30W PF:0.9901 Lamp Flux:1679.83x1 lm		
NAME: ASD-OLWS-23-MV-14N20CC-WH	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:

Table--2

UNIT: cd

C( DEG) γ (DEG)	285	300	315	330	345														
0	413	412	411	411	410														
5	413	411	409	407	405														
10	411	408	404	401	397														
15	407	402	397	392	386														
20	400	394	387	380	373														
25	390	382	373	364	356														
30	377	368	357	347	336														
35	361	351	338	326	313														
40	343	331	317	303	288														
45	322	309	293	277	261														
50	298	284	267	250	232														
55	272	258	239	219	201														
60	244	229	209	189	168														
65	215	199	179	157	135														
70	185	168	147	125	102														
75	154	138	117	94.2	69.9														
80	125	110	89.3	66.4	41.4														
85	99.1	86.1	67.7	46.1	21.2														
90	84.6	73.6	58.0	38.6	18.0														
95	81.4	70.8	55.3	36.4	16.4														
100	77.8	67.4	52.4	33.0	14.1														
105	73.7	63.5	47.8	23.4	11.1														
110	68.4	57.5	34.6	15.3	9.44														
115	55.4	39.2	15.5	18.4	7.36														
120	28.9	14.7	16.0	18.1	5.23														
125	7.32	13.0	27.3	14.9	5.22														
130	18.3	28.1	23.8	11.3	5.28														
135	36.2	28.8	18.9	7.58	5.34														
140	29.1	22.6	13.6	5.46	5.40														
145	21.4	16.0	8.20	5.53	5.46														
150	13.7	9.36	5.67	5.59	5.51														
155	6.41	5.85	5.75	5.65	5.58														
160	6.07	5.93	5.80	5.71	5.66														
165	6.13	6.02	5.90	5.80	5.74														
170	6.19	6.12	6.00	5.90	5.85														
175	6.24	6.16	6.08	6.01	5.95														
180	6.19	6.13	6.04	5.97	5.90														

C Range: 0 - 360DEG  
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γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity:65.0%  
 Test Distance:7.500m [K=1.0000]  
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