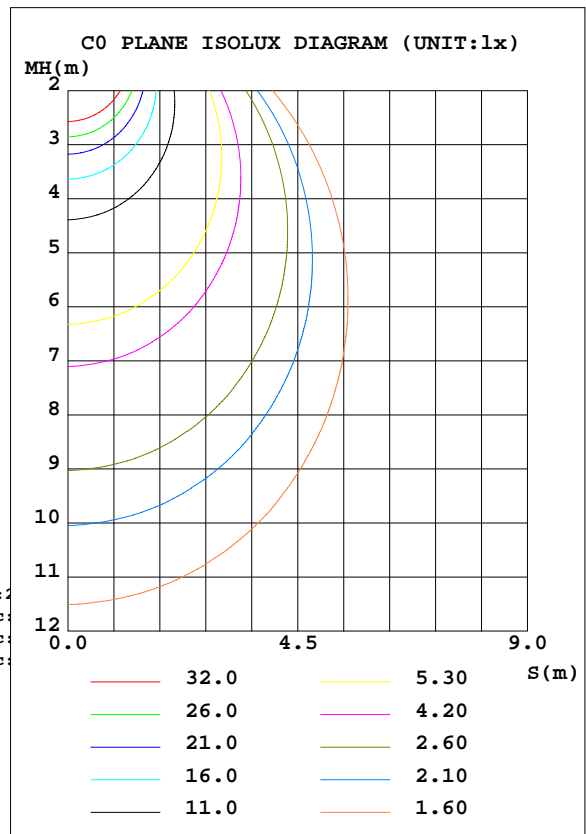
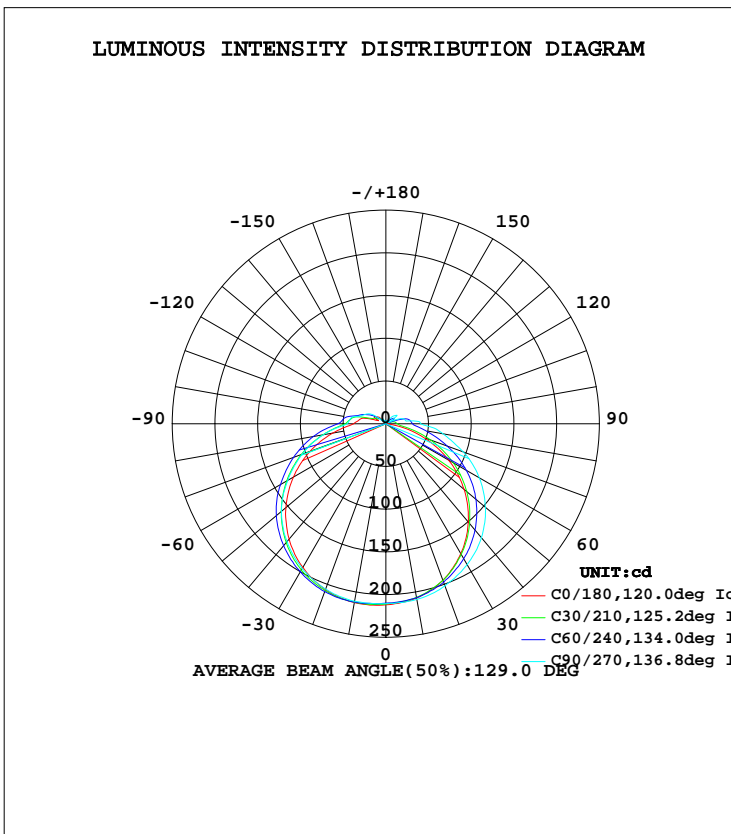


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.1063A P:12.03W PF:0.9427 Lamp Flux:842.096x1 lm		
NAME: ASD-OLWS-23-8D12CC-BZ/WH 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 70.03 lm/W			
MODEL	ASD-OLWS-23-8D12CC-BZ/WH	I <sub>max</sub> (cd)	213.0	S/MH(C0/180)	1.36
NOMINAL POWER(W)	12	LOR(%)	100.0	S/MH(C90/270)	1.38
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	842.10	η UP, DN(C0-180)	4.6,42.3
NOMINAL FLUX(lm)	842.096	CIE CLASS	SEMI-D.	η UP, DN(C180-360)	6.3,46.8
LAMPS INSIDE	1	η up(%)	10.8	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	η down(%)	89.2	CIBSE SHR MAX	1.55



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-05-05

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	207.1	206.3	208.8	209.1	212.5	211.9	210.9	208.5	0- 10	20.04	20.04	2.38,2.38
20	195.0	196.2	201.9	203.1	206.7	208.5	206.0	201.7	10- 20	58.34	78.38	9.31,9.31
30	175.5	179.6	190.3	190.9	194.4	199.2	195.5	188.6	20- 30	90.58	169.0	20.1,20.1
40	150.2	157.8	174.1	174.3	176.2	183.7	179.9	168.9	30- 40	113.0	282.0	33.5,33.5
50	119.6	131.3	152.2	152.8	152.6	163.5	159.4	144.4	40- 50	123.0	405.0	48.1,48.1
60	84.74	100.4	126.2	127.3	125.1	139.3	132.8	115.1	50- 60	119.3	524.3	62.3,62.3
70	47.13	66.95	96.56	98.56	94.42	110.1	104.3	82.44	60- 70	102.4	626.7	74.4,74.4
80	11.96	36.75	67.99	68.32	63.24	80.80	74.42	50.02	70- 80	75.87	702.6	83.4,83.4
90	2.500	23.12	40.99	47.42	37.83	52.76	45.39	29.39	80- 90	48.19	750.8	89.2,89.2
100	2.480	18.96	23.53	40.31	30.87	44.60	41.20	25.09	90-100	35.05	785.8	93.3,93.3
110	2.573	8.189	17.15	10.95	13.06	27.91	29.12	18.68	100-110	24.11	809.9	96.2,96.2
120	2.650	8.564	5.257	17.21	15.76	15.38	23.46	6.097	110-120	12.79	822.7	97.7,97.7
130	2.761	5.376	15.37	7.764	12.79	8.708	8.985	7.439	120-130	9.402	832.1	98.8,98.8
140	3.037	3.057	9.430	3.439	2.946	6.493	3.099	4.463	130-140	4.793	836.9	99.4,99.4
150	3.000	2.954	4.744	2.958	4.325	3.235	6.082	3.062	140-150	2.539	839.4	99.7,99.7
160	2.996	3.047	3.065	3.027	3.035	3.170	3.150	3.008	150-160	1.479	840.9	99.9,99.9
170	3.085	3.135	3.123	3.108	3.116	3.135	3.189	3.077	160-170	0.8748	841.8	100,100
180	3.143	3.185	3.193	3.204	3.173	3.185	3.189	3.189	170-180	0.2997	842.1	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

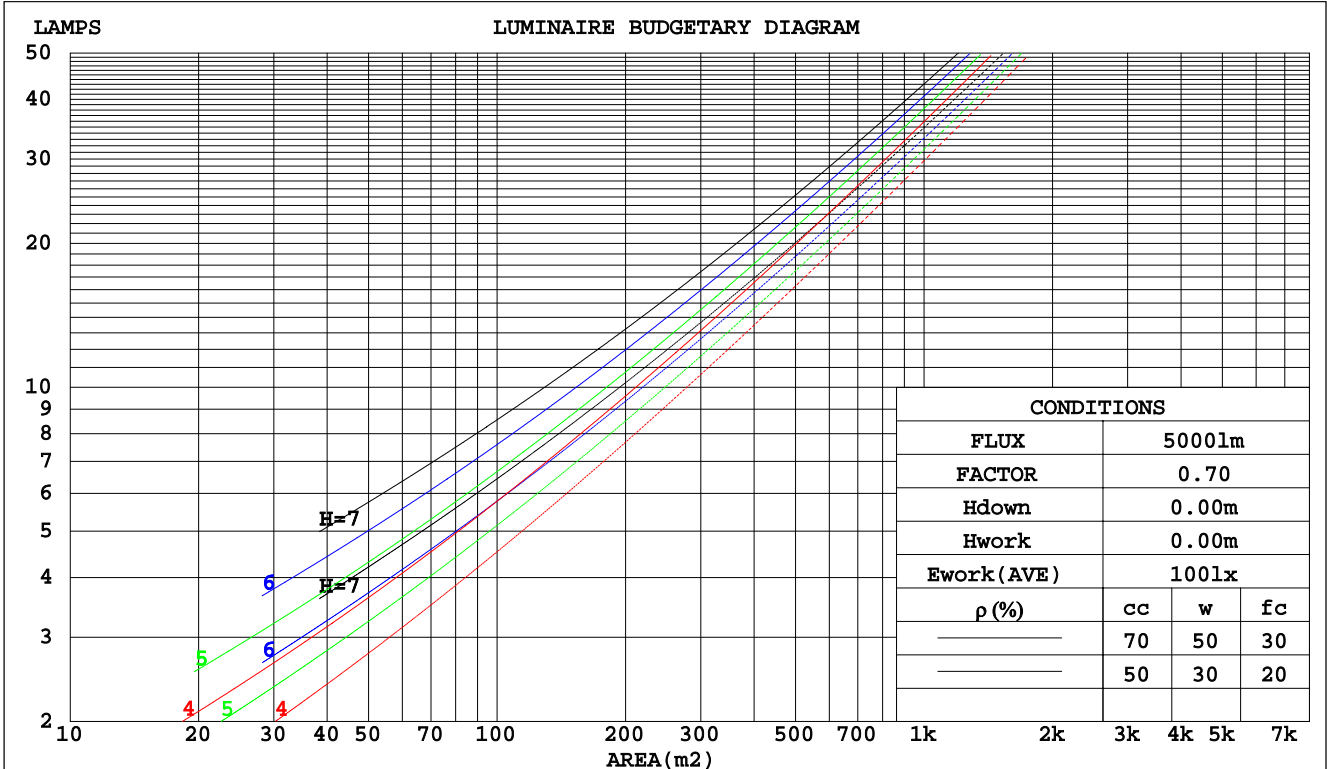
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2022-05-05

$\gamma$  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:0.1063A P:12.03W PF:0.9427 Lamp Flux:842.096x1 lm		
NAME: ASD-OLWS-23-8D12CC-BZ/WH 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION 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																0
RCR	RCR:Room Cavity Ratio			Coefficients of Utilization(CU)												
0.0	1.16	1.16	1.16	1.12	1.12	1.12	1.05	1.05	1.05	.98	.98	.98	.92	.92	.92	.89
1.0	.98	.93	.89	.95	.90	.86	.89	.85	.82	.83	.80	.77	.78	.75	.73	.70
2.0	.85	.77	.70	.82	.75	.69	.76	.71	.66	.71	.67	.62	.67	.63	.59	.57
3.0	.73	.65	.58	.71	.63	.56	.66	.60	.54	.62	.56	.52	.58	.53	.49	.47
4.0	.65	.55	.48	.63	.54	.47	.59	.51	.45	.55	.49	.44	.52	.46	.42	.39
5.0	.57	.48	.41	.56	.47	.40	.52	.45	.39	.49	.42	.37	.46	.40	.36	.33
6.0	.51	.42	.35	.50	.41	.35	.47	.39	.34	.44	.38	.32	.42	.36	.31	.29
7.0	.46	.37	.31	.45	.37	.31	.43	.35	.30	.40	.34	.29	.38	.32	.28	.25
8.0	.42	.33	.27	.41	.33	.27	.39	.31	.26	.37	.30	.25	.35	.29	.25	.23
9.0	.39	.30	.25	.38	.30	.24	.36	.28	.23	.34	.27	.23	.32	.26	.22	.20
10.0	.36	.27	.22	.35	.27	.22	.33	.26	.21	.31	.25	.21	.30	.24	.20	.18



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2022-05-05

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:0.1063A P:12.03W PF:0.9427 Lamp Flux:842.096x1 lm		
NAME: ASD-OLWS-23-8D12CC-BZ/WH 5000K	TYPE:LED	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	.365	.207	.066	.354	.202	.064	.334	.192	.061	.316	.182	.059	.300	.174	.056	
2.0	.323	.177	.054	.314	.173	.053	.296	.165	.051	.280	.157	.049	.265	.150	.047	
3.0	.291	.155	.046	.282	.151	.046	.266	.144	.044	.252	.138	.042	.238	.132	.041	
4.0	.264	.137	.040	.256	.134	.040	.242	.128	.038	.228	.123	.037	.216	.117	.036	
5.0	.241	.123	.036	.234	.120	.035	.221	.115	.034	.209	.110	.033	.198	.106	.032	
6.0	.221	.111	.032	.215	.109	.031	.203	.104	.030	.192	.100	.029	.182	.096	.028	
7.0	.205	.101	.029	.199	.099	.028	.188	.095	.027	.178	.091	.027	.169	.088	.026	
8.0	.190	.093	.026	.185	.091	.026	.175	.088	.025	.166	.084	.024	.157	.081	.024	
9.0	.177	.086	.024	.173	.084	.024	.164	.081	.023	.155	.078	.022	.147	.075	.022	
10.0	.166	.080	.022	.162	.078	.022	.154	.075	.021	.146	.072	.021	.139	.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	.273	.273	.273	.233	.233	.233	.159	.159	.159	.092	.092	.092	.029	.029	.029	
1.0	.267	.239	.213	.229	.205	.184	.157	.141	.127	.090	.082	.074	.029	.026	.024	
2.0	.260	.216	.178	.223	.186	.154	.153	.128	.107	.088	.075	.063	.028	.024	.021	
3.0	.253	.199	.156	.217	.171	.135	.149	.119	.095	.086	.070	.056	.028	.023	.018	
4.0	.245	.186	.141	.210	.161	.122	.145	.112	.086	.084	.066	.051	.027	.021	.017	
5.0	.237	.176	.131	.204	.152	.114	.140	.106	.080	.081	.062	.048	.026	.020	.016	
6.0	.230	.168	.123	.198	.145	.107	.136	.102	.076	.079	.060	.045	.026	.020	.015	
7.0	.223	.161	.118	.192	.140	.103	.133	.098	.073	.077	.058	.043	.025	.019	.014	
8.0	.216	.156	.114	.186	.135	.099	.129	.095	.070	.075	.056	.042	.024	.018	.014	
9.0	.210	.151	.111	.181	.131	.096	.125	.092	.068	.073	.054	.041	.024	.018	.014	
10.0	.204	.147	.108	.176	.127	.094	.122	.090	.067	.071	.053	.040	.023	.017	.013	

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-05-05

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:0.1063A P:12.03W PF:0.9427 Lamp Flux:842.096x1 lm										
NAME: ASD-OLWS-23-8D12CC-BZ/WH 5000K					TYPE:LED			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	13.4	14.9	13.8	15.3	15.7	15.1	16.6	15.5	17.0	17.4
3H	14.6	16.0	15.1	16.4	16.8	17.3	18.6	17.7	19.1	19.5
4H	15.0	16.2	15.4	16.7	17.2	18.4	19.7	18.9	20.1	20.6
6H	15.1	16.3	15.6	16.8	17.3	19.5	20.7	20.0	21.2	21.7
8H	15.1	16.2	15.6	16.7	17.2	20.2	21.3	20.7	21.8	22.3
12H	15.0	16.1	15.5	16.6	17.1	20.9	22.0	21.4	22.5	23.0
4H 2H	14.2	15.5	14.7	15.9	16.4	15.5	16.8	16.0	17.2	17.7
3H	15.6	16.7	16.1	17.2	17.7	17.9	19.0	18.4	19.5	20.0
4H	16.0	17.1	16.6	17.6	18.1	19.1	20.2	19.7	20.7	21.2
6H	16.2	17.1	16.8	17.7	18.3	20.5	21.4	21.1	21.9	22.5
8H	16.2	17.1	16.8	17.6	18.2	21.2	22.1	21.8	22.7	23.3
12H	16.2	17.0	16.7	17.5	18.2	22.1	22.9	22.7	23.5	24.1
8H 4H	16.6	17.5	17.2	18.0	18.6	19.3	20.1	19.9	20.7	21.3
6H	17.0	17.7	17.6	18.3	18.9	20.9	21.6	21.5	22.2	22.8
8H	17.0	17.7	17.6	18.3	18.9	21.8	22.4	22.4	23.0	23.7
12H	17.0	17.6	17.6	18.2	18.9	22.9	23.5	23.5	24.1	24.8
12H 4H	16.8	17.6	17.3	18.1	18.8	19.3	20.0	19.8	20.6	21.3
6H	17.3	17.9	17.9	18.5	19.2	20.9	21.5	21.5	22.1	22.8
8H	17.4	18.0	18.0	18.6	19.3	21.9	22.4	22.5	23.1	23.8
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 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117 Corrected 842.1 lm Total Lamp Luminous Flux. (8log(F/F0) = -0.6)

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-05-05

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:0.1063A P:12.03W PF:0.9427 Lamp Flux:842.096x1 lm		
NAME: ASD-OLWS-23-8D12CC-BZ/WH 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

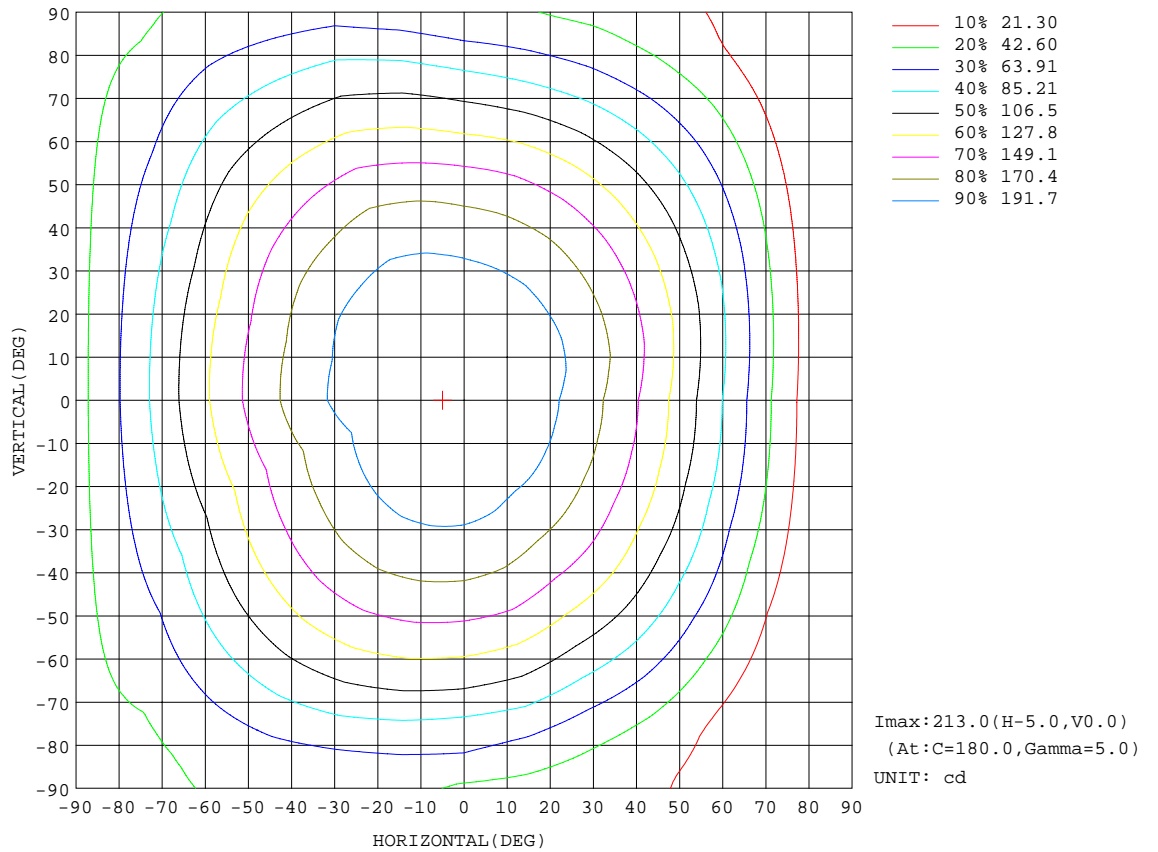
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	51	38	31	50	38	31	48	37	31	24
0.80	60	48	40	59	47	39	56	46	39	31
1.00	68	56	48	67	55	47	64	56	46	38
1.25	75	63	55	73	62	54	70	60	53	44
1.50	80	69	61	78	67	60	74	65	58	49
2.00	88	77	69	85	75	68	80	72	66	56
2.50	92	82	75	89	80	74	84	77	71	60
3.00	96	87	80	93	85	78	87	81	75	64
4.00	100	93	87	97	90	85	91	85	81	69
5.00	103	97	91	99	94	89	93	89	85	72
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:  
 Test Date:2022-05-05

$\gamma$  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:0.1063A P:12.03W PF:0.9427 Lamp Flux:842.096x1 lm		
NAME: ASD-OLWS-23-8D12CC-BZ/WH 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

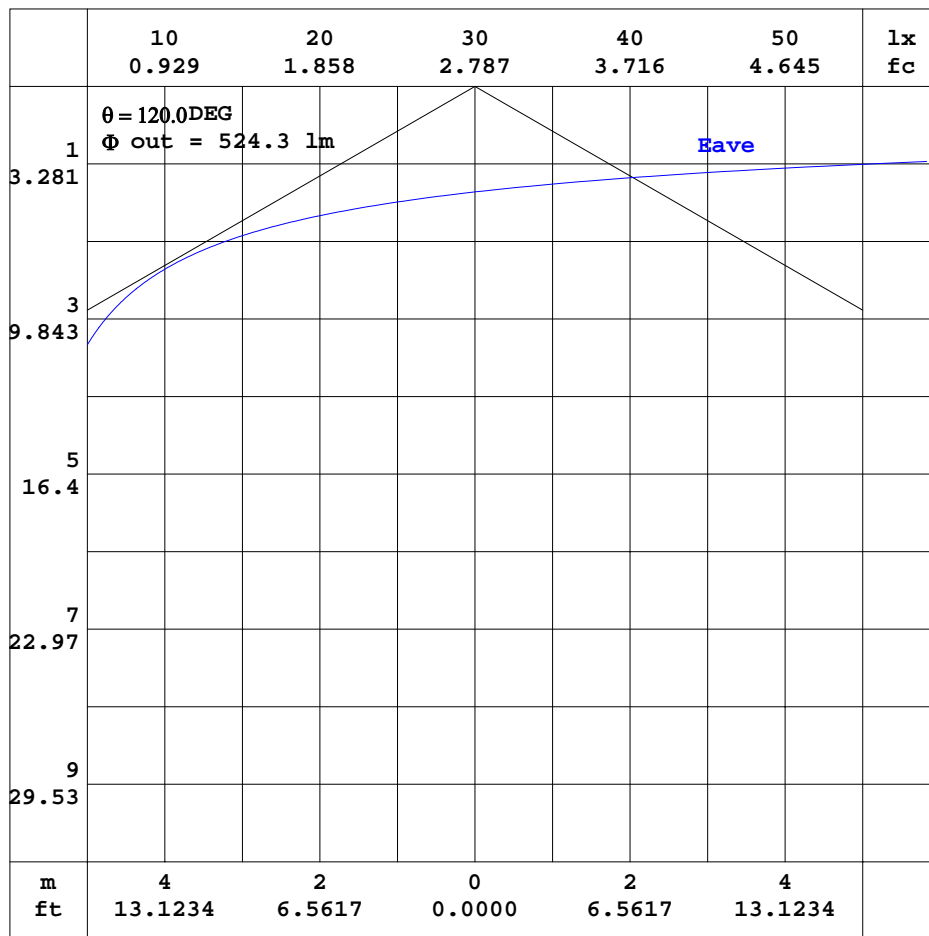


C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2022-05-05

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:0.1063A P:12.03W PF:0.9427 Lamp Flux:842.096x1 lm		
NAME: ASD-OLWS-23-8D12CC-BZ/WH 5000K	TYPE:LED	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.

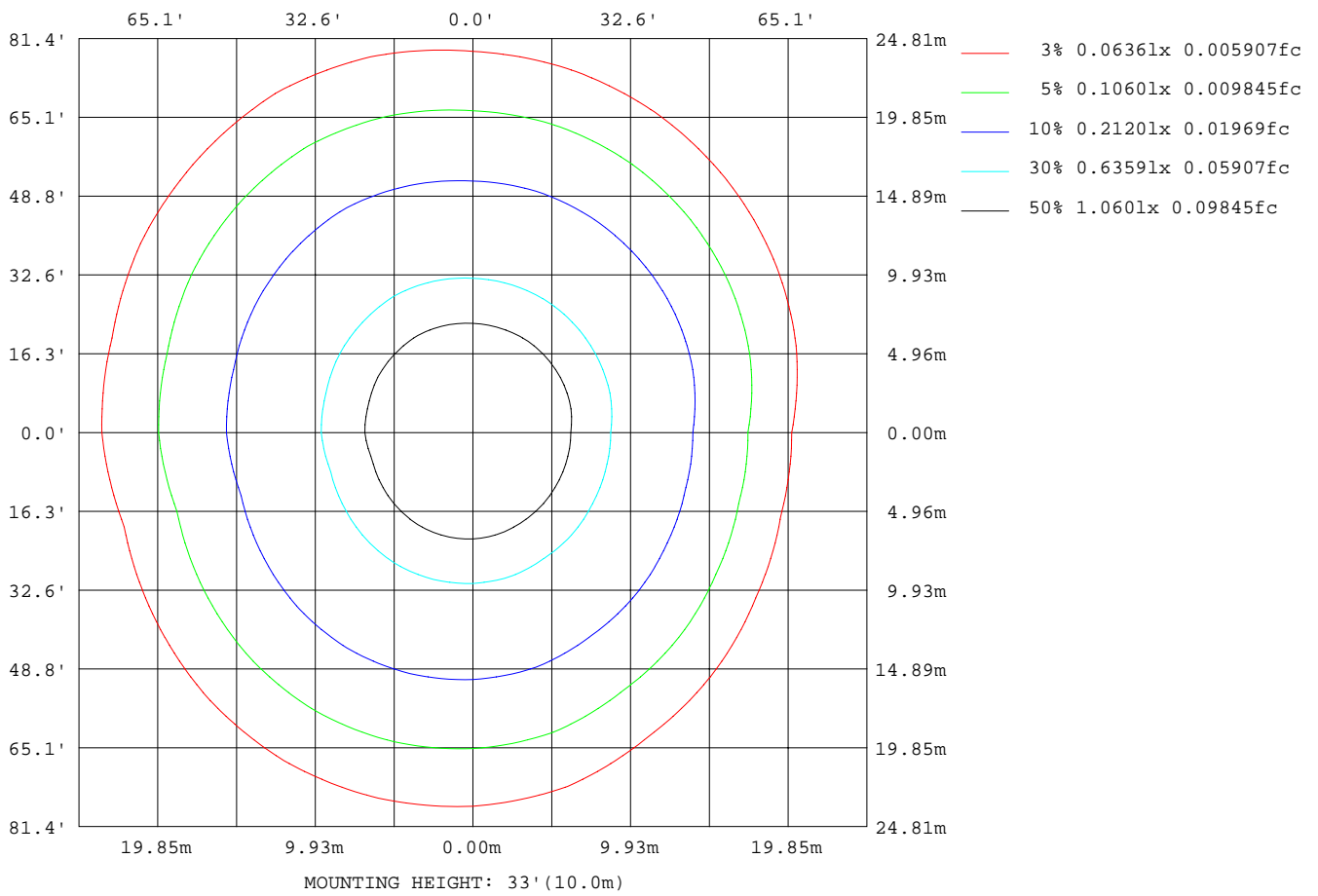
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2022-05-05

$\gamma$  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:0.1063A P:12.03W PF:0.9427 Lamp Flux:842.096x1 lm		
NAME: ASD-OLWS-23-8D12CC-BZ/WH 5000K	TYPE:LED	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:  
 Test Date:2022-05-05

$\gamma$  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:

## LED Avg.L Report

Test:U:120.0V I:0.1063A P:12.03W PF:0.9427 Lamp Flux:842.096x1 lm		
NAME: ASD-OLWS-23-8D12CC-BZ/WH 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

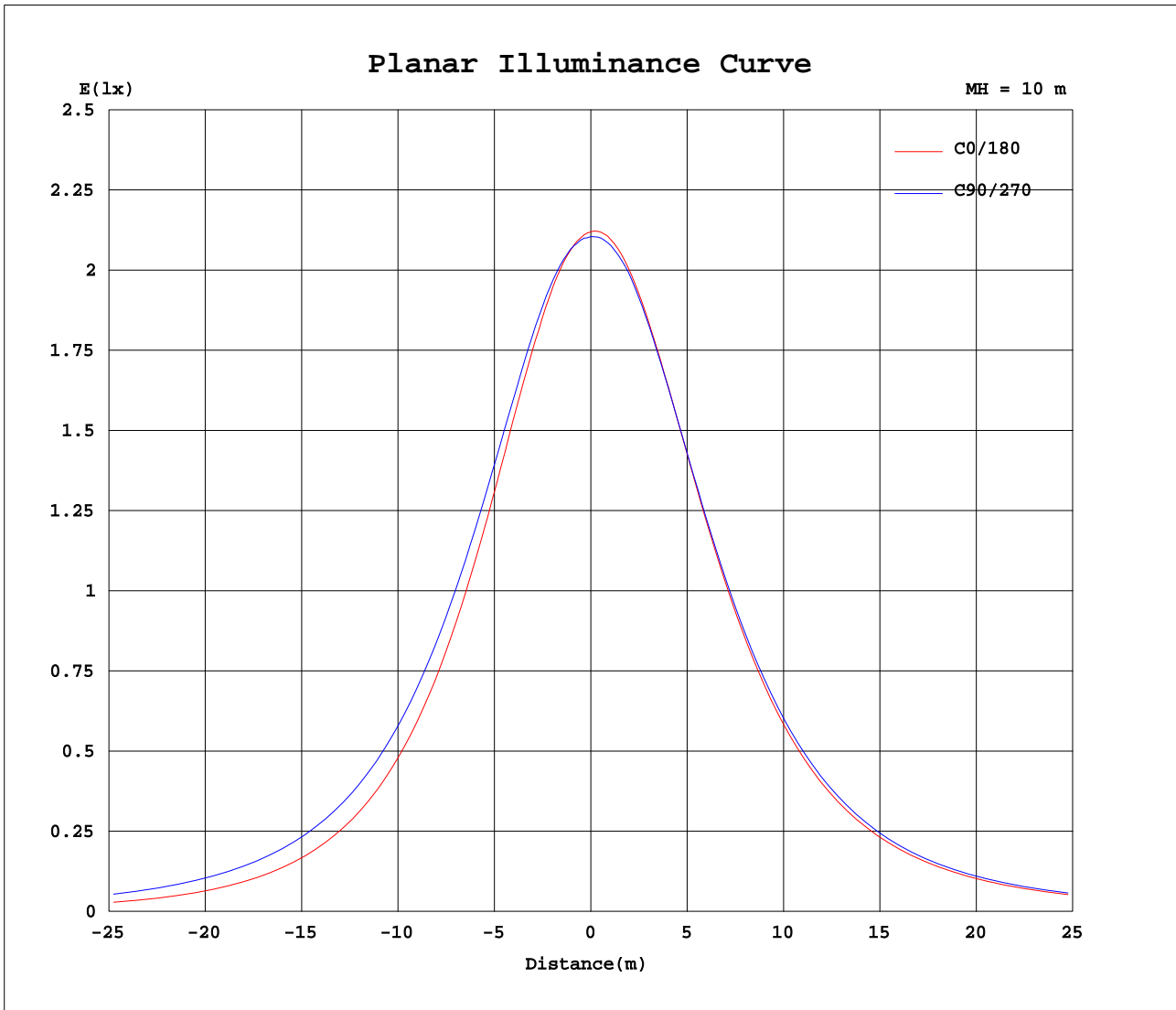
AvgL	cd/m2
L_0~180(65)av	2083
L_0~180(75)av	2079
L_0~180(85)av	2918
L_90~270(65)av	2731
L_90~270(75)av	3292
L_90~270(85)av	6572
L_45(65)av	2492
L_45(75)av	2855
L_45(85)av	5293

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2022-05-05

$\gamma$  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:  
 Test Date: 2022-05-05

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:0.1063A P:12.03W PF:0.9427 Lamp Flux:842.096x1 lm		
NAME: ASD-OLWS-23-8D12CC-BZ/WH 5000K	TYPE:LED	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	212	211	211	210	210	210	210	210	210	210	210	210	212	211	211	210	210	210	210
5	210	210	209	209	209	209	210	210	210	210	210	210	213	213	212	212	211	211	211
10	207	206	206	206	207	208	209	209	210	209	209	208	212	212	212	212	212	211	211
15	202	201	201	202	203	204	206	207	207	207	206	205	211	210	211	211	211	211	209
20	195	195	195	196	198	200	202	203	203	203	202	201	207	206	208	208	209	208	206
25	186	186	187	189	190	194	196	198	198	198	196	195	201	201	204	205	205	204	201
30	176	175	176	180	182	187	190	192	192	191	189	187	194	194	198	199	200	198	196
35	164	164	165	169	173	179	183	185	185	183	180	178	186	186	190	192	194	192	188
40	150	150	152	158	162	170	174	176	176	174	171	168	176	177	181	184	186	184	180
45	136	136	139	145	150	159	164	166	167	164	160	157	165	166	171	174	177	175	170
50	120	120	124	131	138	148	152	155	156	153	148	144	153	154	160	163	167	164	159
55	103	103	108	116	124	135	140	143	143	141	135	130	139	141	147	152	156	152	147
60	84.7	84.8	90.8	100	109	120	126	130	130	127	121	116	125	127	134	139	142	139	133
65	66.1	66.2	73.4	83.8	93.0	106	112	116	116	113	107	101	110	112	120	125	129	126	119
70	47.1	47.5	55.6	67.0	76.7	90.4	96.6	101	102	98.6	92.4	86.2	94.4	96.6	105	110	115	112	104
75	28.9	29.3	38.6	50.8	61.1	74.2	80.7	84.4	86.1	83.5	77.4	71.1	78.8	81.0	90.4	95.5	101	97.3	89.7
80	12.0	12.6	23.4	36.7	47.4	59.7	68.0	70.5	70.4	68.3	62.7	56.4	63.2	65.6	74.9	80.8	86.3	82.6	74.4
85	2.57	4.44	15.9	27.6	36.9	46.8	56.3	56.4	56.1	54.3	49.3	43.2	48.3	50.9	59.9	65.6	71.0	67.4	58.3
90	2.50	3.87	13.6	23.1	31.2	38.1	41.0	45.7	48.1	47.4	43.5	37.6	37.8	39.8	47.8	52.8	56.2	52.4	45.4
95	2.48	3.33	12.3	21.7	29.7	36.2	36.1	42.1	45.1	44.2	39.9	33.8	33.8	35.9	43.6	48.6	51.1	48.6	43.0
100	2.48	2.91	11.2	19.0	27.7	31.2	23.5	31.0	38.2	40.3	33.4	30.8	30.9	32.3	40.0	44.6	46.4	44.5	41.2
105	2.52	2.60	9.01	12.5	22.2	25.3	21.9	24.5	27.9	26.3	22.1	25.8	25.3	24.4	31.2	37.3	36.7	31.1	34.1
110	2.57	2.61	6.56	8.19	9.46	16.9	17.2	16.9	15.4	11.0	11.5	12.6	13.1	12.5	18.9	27.9	31.1	27.7	29.1
115	2.62	2.65	5.56	8.28	4.76	4.26	7.55	7.06	8.09	13.4	14.0	7.71	10.5	12.6	15.6	19.7	25.6	24.5	26.3
120	2.65	2.68	4.64	8.56	11.0	8.24	5.26	5.54	10.8	17.2	14.4	12.5	15.8	16.5	11.4	15.4	20.3	21.3	23.5
125	2.73	2.74	3.66	7.28	11.3	15.8	14.2	13.9	15.8	13.8	11.6	10.9	14.7	14.6	10.5	12.1	14.3	16.6	18.0
130	2.76	2.75	2.73	5.38	8.97	13.7	15.4	14.4	12.9	7.76	8.52	9.21	12.8	12.4	10.0	8.71	8.23	9.33	8.98
135	2.81	2.80	2.75	3.71	6.72	11.3	13.1	12.2	10.1	6.28	2.97	7.24	10.1	7.43	5.17	7.22	4.99	3.78	3.03
140	3.04	2.90	2.82	3.06	2.96	8.00	9.43	8.32	6.56	3.44	2.89	2.73	2.95	2.97	4.89	6.49	3.61	3.18	3.10
145	2.97	2.96	2.88	2.95	3.74	4.15	2.96	3.01	3.00	3.22	3.63	4.12	3.90	4.88	4.84	4.02	4.68	4.51	6.47
150	3.00	3.02	2.92	2.95	2.98	4.29	4.74	4.16	3.35	2.96	2.90	3.01	4.32	4.13	3.39	3.24	3.91	5.13	6.08
155	3.06	2.97	2.94	3.00	3.07	3.00	3.16	3.07	3.07	2.99	2.95	2.90	3.00	3.01	3.07	3.22	3.20	3.21	3.28
160	3.00	3.02	3.00	3.05	3.01	3.07	3.07	3.19	3.14	3.03	2.97	2.96	3.03	3.02	3.09	3.17	3.18	3.19	3.15
165	3.05	3.10	3.06	3.09	3.07	3.11	3.09	3.12	3.08	3.07	3.00	3.01	3.08	3.05	3.11	3.13	3.17	3.18	3.17
170	3.08	3.10	3.08	3.14	3.12	3.26	3.12	3.15	3.10	3.11	3.06	3.05	3.12	3.08	3.13	3.13	3.19	3.18	3.19
175	3.12	3.14	3.12	3.17	3.18	3.19	3.16	3.18	3.12	3.14	3.08	3.10	3.19	3.13	3.15	3.15	3.20	3.19	3.19
180	3.14	3.15	3.14	3.19	3.19	3.20	3.19	3.20	3.22	3.20	3.19	3.19	3.17	3.14	3.15	3.19	3.20	3.19	3.19

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-05-05

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:0.1063A P:12.03W PF:0.9427 Lamp Flux:842.096x1 lm		
NAME: ASD-OLWS-23-8D12CC-BZ/WH 5000K	TYPE:LED	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	210	210	210	210	210														
5	210	210	210	209	209														
10	210	209	209	208	207														
15	208	207	206	205	203														
20	204	203	202	200	198														
25	199	198	196	194	191														
30	193	192	189	185	182														
35	186	183	179	175	171														
40	177	174	169	164	159														
45	167	163	157	151	145														
50	156	151	144	138	130														
55	144	138	130	123	114														
60	129	123	115	107	97.2														
65	114	108	99.1	89.7	79.3														
70	98.8	91.6	82.4	72.1	60.8														
75	83.2	75.8	65.7	54.7	42.4														
80	68.1	60.5	50.0	38.0	24.8														
85	54.3	47.5	37.1	23.9	9.50														
90	43.5	37.7	29.4	18.4	6.51														
95	40.8	34.9	26.6	16.4	5.74														
100	39.0	33.2	25.1	15.1	5.02														
105	36.8	31.2	22.7	13.1	4.25														
110	34.0	28.0	18.7	9.94	3.44														
115	30.0	23.4	11.6	7.15	2.83														
120	24.6	14.3	6.10	6.00	2.77														
125	15.0	5.12	4.78	5.42	2.81														
130	5.00	3.25	7.44	4.07	2.82														
135	2.96	6.82	6.80	2.96	2.83														
140	4.53	8.31	4.46	2.97	2.86														
145	8.25	5.56	3.11	3.02	2.94														
150	5.20	3.39	3.06	3.07	3.00														
155	3.08	3.04	2.99	3.23	3.05														
160	3.08	3.07	3.01	3.00	2.98														
165	3.10	3.10	3.13	3.05	2.99														
170	3.13	3.14	3.08	3.08	3.06														
175	3.16	3.17	3.11	3.12	3.08														
180	3.20	3.20	3.19	3.19	3.20														

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-05-05

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: