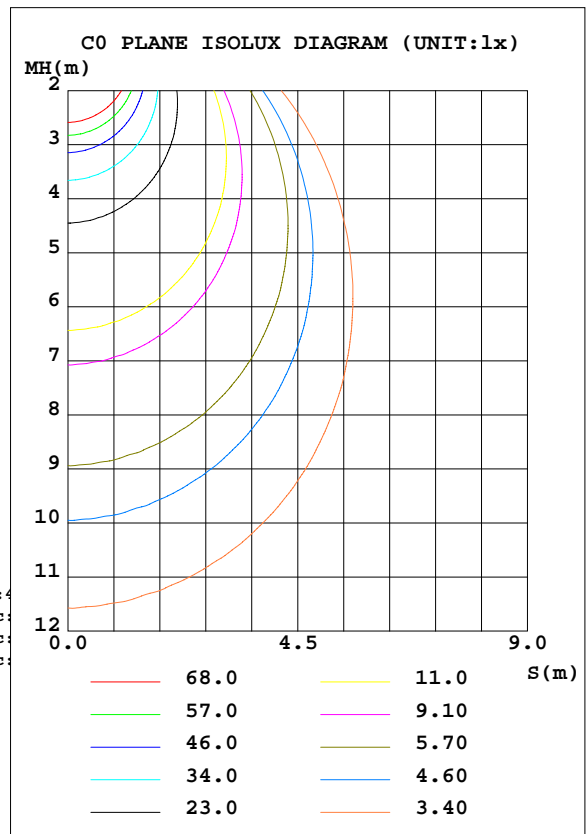
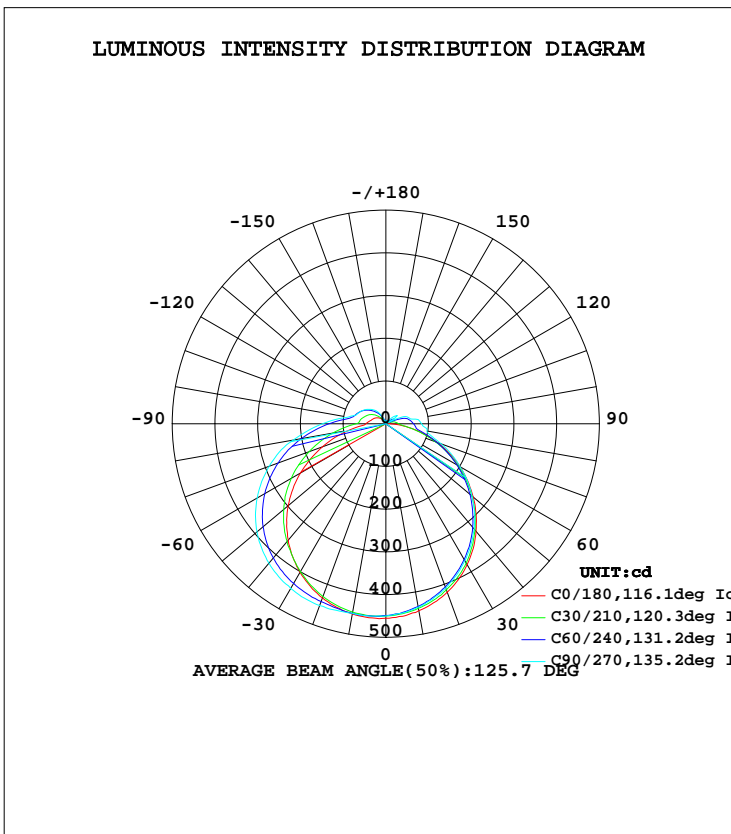


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.9V I:0.1821A P:21.48W PF:0.9832 Lamp Flux:1758.95x1 lm		
NAME: ASD-OLWS-23-14N20CC-PC-BZ 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 81.88 lm/W			
MODEL	ASD-OLWS-23-14N20CC-PC-BZ	Imax(cd)	456.5	S/MH(C0/180)	1.31
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	1.49
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1759.0	η UP, DN(C0-180)	4.4,39.1
NOMINAL FLUX(lm)	1758.95	CIE CLASS	SEMI-D.	η UP, DN(C180-360)	7.1,49.4
LAMPS INSIDE	1	η up(%)	11.5	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	η down(%)	88.5	CIBSE SHR MAX	1.50



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2022-04-12

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:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	lum, lamp
10	444.5	435.7	436.1	443.6	452.1	449.6	450.5	444.4	0- 10	42.67	42.67	2.43,2.43
20	419.7	409.6	409.4	424.7	434.0	436.0	453.1	433.5	10- 20	123.4	166.0	9.44,9.44
30	380.6	369.8	370.1	392.4	401.6	414.5	445.3	409.6	20- 30	190.8	356.8	20.3,20.3
40	328.5	318.3	321.7	348.6	355.7	386.7	425.9	373.9	30- 40	236.9	593.7	33.8,33.8
50	267.3	257.4	264.0	294.9	298.3	346.9	393.9	324.9	40- 50	256.1	849.8	48.3,48.3
60	200.0	189.1	200.6	231.5	230.7	295.9	347.8	264.3	50- 60	246.1	1096	62.3,62.3
70	128.5	121.6	137.7	164.8	157.9	235.2	290.8	198.6	60- 70	209.2	1305	74.2,74.2
80	58.02	66.13	98.01	101.9	88.59	168.6	220.3	128.0	70- 80	153.6	1459	82.9,82.9
90	10.59	48.79	83.78	76.36	46.88	105.2	148.8	69.17	80- 90	98.78	1557	88.5,88.5
100	9.209	39.55	64.32	67.11	38.48	75.77	90.57	50.28	90-100	67.66	1625	92.4,92.4
110	7.224	15.24	49.95	38.69	32.85	64.20	70.36	38.49	100-110	48.88	1674	95.2,95.2
120	6.075	13.05	9.909	32.64	27.63	55.17	62.66	29.32	110-120	32.86	1707	97,97
130	5.419	5.752	28.17	18.86	21.40	43.78	52.91	14.17	120-130	24.14	1731	98.4,98.4
140	5.600	6.160	8.100	7.582	14.18	28.15	41.94	7.423	130-140	14.49	1746	99.2,99.2
150	5.827	5.893	6.385	6.158	7.303	14.28	25.08	7.086	140-150	7.216	1753	99.6,99.6
160	6.096	6.235	6.566	6.359	6.266	8.073	6.462	6.270	150-160	3.720	1756	99.9,99.9
170	6.389	6.455	6.709	6.528	6.459	6.505	6.617	6.597	160-170	1.873	1758	100,100
180	6.586	6.620	6.728	6.582	6.613	6.613	6.736	6.574	170-180	0.6270	1759	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

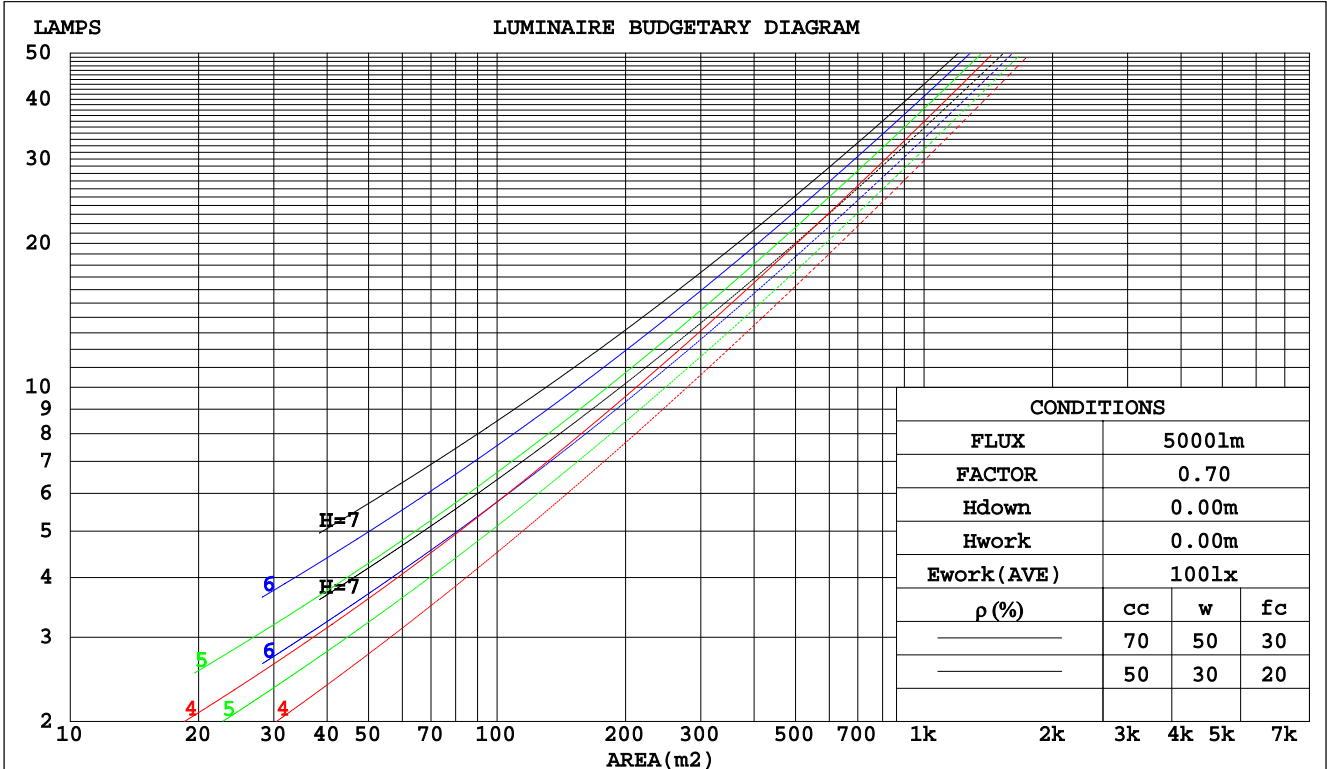
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2022-04-12

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:119.9V I:0.1821A P:21.48W PF:0.9832 Lamp Flux:1758.95x1 lm		
NAME: ASD-OLWS-23-14N20CC-PC-BZ 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	.77	.75	.73	.70
2.0	.85	.77	.71	.82	.75	.69	.76	.71	.66	.71	.67	.62	.67	.63	.59	.56
3.0	.74	.65	.58	.71	.63	.57	.66	.60	.54	.62	.56	.52	.58	.53	.49	.47
4.0	.65	.56	.48	.63	.54	.47	.59	.51	.46	.55	.49	.44	.51	.46	.42	.39
5.0	.58	.48	.41	.56	.47	.40	.52	.45	.39	.49	.43	.38	.46	.41	.36	.34
6.0	.52	.42	.36	.50	.41	.35	.47	.39	.34	.44	.38	.33	.42	.36	.31	.29
7.0	.47	.38	.31	.45	.37	.31	.43	.35	.30	.40	.34	.29	.38	.32	.28	.26
8.0	.42	.34	.28	.41	.33	.27	.39	.32	.26	.37	.30	.26	.35	.29	.25	.23
9.0	.39	.30	.25	.38	.30	.24	.36	.29	.24	.34	.28	.23	.32	.26	.22	.20
10.0	.36	.28	.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: 2022-04-12

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:119.9V I:0.1821A P:21.48W PF:0.9832 Lamp Flux:1758.95x1 lm		
NAME: ASD-OLWS-23-14N20CC-PC-BZ 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	.361	.205	.065	.351	.200	.064	.331	.190	.061	.312	.180	.058	.295	.171	.055	
2.0	.321	.176	.054	.311	.171	.053	.293	.163	.051	.277	.155	.049	.261	.148	.047	
3.0	.289	.154	.046	.280	.150	.045	.264	.143	.043	.249	.136	.042	.235	.130	.040	
4.0	.262	.136	.040	.254	.133	.039	.240	.127	.038	.226	.121	.037	.213	.116	.035	
5.0	.239	.122	.035	.232	.119	.035	.219	.114	.034	.207	.109	.032	.195	.104	.031	
6.0	.220	.110	.032	.214	.108	.031	.202	.103	.030	.191	.099	.029	.180	.095	.028	
7.0	.204	.101	.029	.198	.099	.028	.187	.095	.027	.177	.091	.026	.167	.087	.026	
8.0	.189	.092	.026	.184	.091	.026	.174	.087	.025	.165	.083	.024	.156	.080	.023	
9.0	.177	.085	.024	.172	.084	.024	.163	.080	.023	.154	.077	.022	.146	.074	.021	
10.0	.166	.079	.022	.161	.078	.022	.153	.075	.021	.145	.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	.278	.278	.278	.237	.237	.237	.162	.162	.162	.093	.093	.093	.030	.030	.030	
1.0	.272	.244	.218	.233	.209	.188	.159	.144	.130	.092	.083	.076	.029	.027	.024	
2.0	.265	.220	.183	.227	.190	.158	.155	.131	.110	.090	.076	.065	.029	.025	.021	
3.0	.257	.203	.161	.220	.176	.139	.151	.122	.098	.087	.071	.058	.028	.023	.019	
4.0	.249	.191	.146	.214	.165	.127	.147	.115	.089	.085	.067	.053	.027	.022	.017	
5.0	.242	.181	.136	.208	.156	.118	.143	.109	.083	.083	.064	.049	.027	.021	.016	
6.0	.234	.173	.128	.202	.149	.112	.139	.105	.079	.081	.062	.047	.026	.020	.016	
7.0	.227	.166	.123	.196	.144	.107	.135	.101	.076	.079	.059	.045	.025	.019	.015	
8.0	.221	.160	.119	.190	.139	.103	.132	.098	.073	.077	.058	.044	.025	.019	.014	
9.0	.215	.155	.115	.185	.135	.101	.128	.095	.072	.075	.056	.043	.024	.018	.014	
10.0	.209	.151	.113	.180	.131	.099	.125	.092	.070	.073	.055	.042	.024	.018	.014	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2022-04-12

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:119.9V I:0.1821A P:21.48W PF:0.9832 Lamp Flux:1758.95x1 lm										
NAME: ASD-OLWS-23-14N20CC-PC-BZ 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	16.3	17.8	16.8	18.2	18.6	16.2	17.7	16.6	18.1	18.5
3H	17.9	19.2	18.3	19.6	20.1	17.9	19.2	18.4	19.7	20.1
4H	18.5	19.7	18.9	20.2	20.7	18.7	20.0	19.2	20.4	20.9
6H	18.9	20.1	19.4	20.6	21.1	19.7	20.9	20.2	21.4	21.9
8H	19.1	20.2	19.6	20.7	21.3	20.4	21.5	20.9	22.0	22.6
12H	19.2	20.3	19.7	20.8	21.4	21.2	22.3	21.8	22.8	23.4
4H 2H	16.9	18.1	17.3	18.6	19.1	16.8	18.0	17.3	18.5	19.0
3H	18.6	19.7	19.1	20.2	20.7	18.6	19.8	19.2	20.2	20.8
4H	19.3	20.3	19.8	20.8	21.4	19.6	20.6	20.1	21.1	21.7
6H	19.9	20.8	20.4	21.3	21.9	20.7	21.7	21.3	22.2	22.8
8H	20.1	20.9	20.6	21.5	22.1	21.6	22.4	22.1	23.0	23.6
12H	20.2	21.0	20.8	21.6	22.2	22.6	23.3	23.2	23.9	24.6
8H 4H	19.6	20.4	20.2	21.0	21.6	19.9	20.7	20.4	21.3	21.9
6H	20.3	21.0	20.9	21.6	22.3	21.2	21.9	21.8	22.5	23.2
8H	20.6	21.3	21.2	21.9	22.6	22.2	22.9	22.8	23.5	24.2
12H	20.8	21.4	21.5	22.0	22.7	23.5	24.0	24.1	24.7	25.4
12H 4H	19.6	20.4	20.2	21.0	21.6	19.9	20.6	20.5	21.2	21.9
6H	20.5	21.1	21.1	21.7	22.4	21.3	21.9	21.9	22.6	23.2
8H	20.8	21.4	21.5	22.0	22.7	22.4	22.9	23.0	23.6	24.3
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.1				
1.5H	+ 0.1 / - 0.2					+ 0.2 / - 0.2				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117 Corrected 1759 lm Total Lamp Luminous Flux.(8log(F/F0) = 2.0)

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2022-04-12

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:119.9V I:0.1821A P:21.48W PF:0.9832 Lamp Flux:1758.95x1 lm		
NAME: ASD-OLWS-23-14N20CC-PC-BZ 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

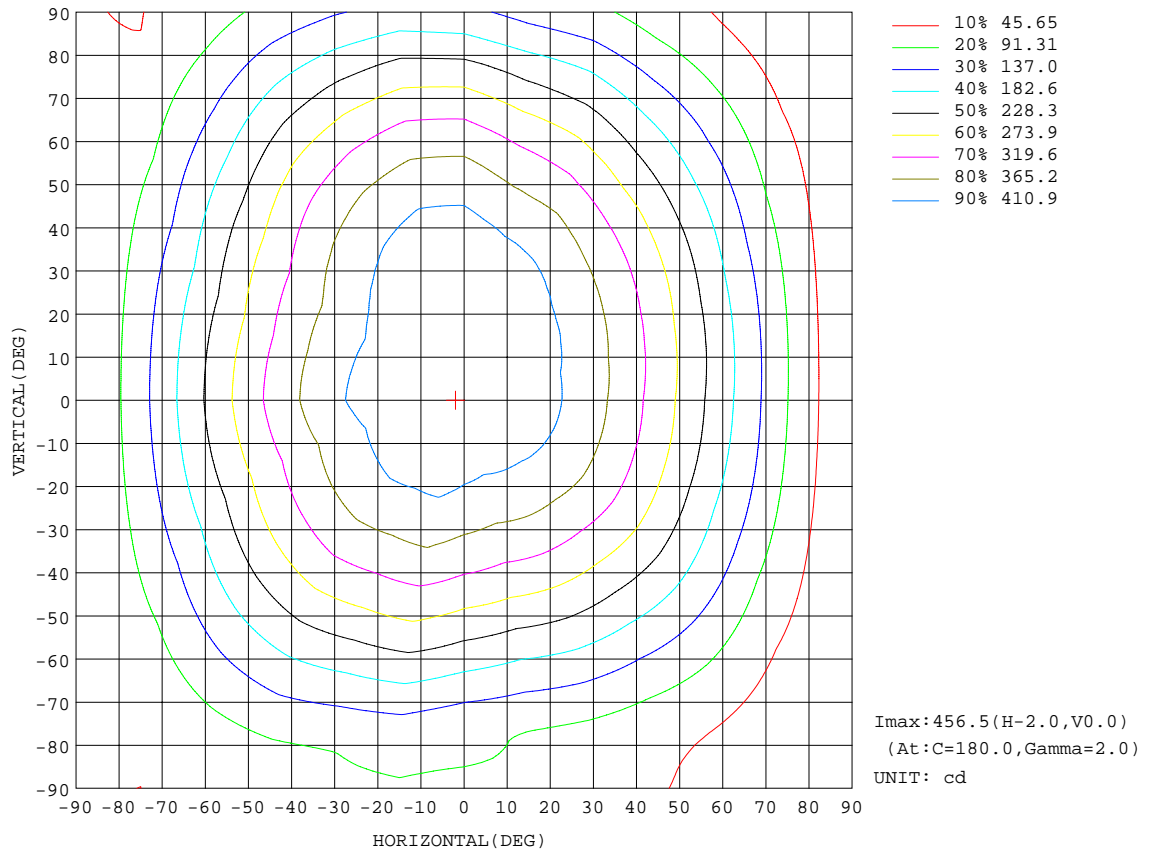
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	51	39	31	50	38	31	48	38	31	24
0.80	60	48	40	59	47	40	57	46	39	31
1.00	68	56	48	67	55	47	64	56	47	38
1.25	75	63	55	73	62	55	70	60	53	44
1.50	80	69	61	78	68	60	74	65	58	49
2.00	88	77	70	85	76	68	80	72	66	56
2.50	92	83	75	89	80	74	84	77	71	60
3.00	96	87	80	93	85	79	87	81	75	64
4.00	100	93	87	97	90	85	91	85	81	68
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:2022-04-12

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:

ISOCANDELA DIAGRAM

Test:U:119.9V I:0.1821A P:21.48W PF:0.9832 Lamp Flux:1758.95x1 lm		
NAME: ASD-OLWS-23-14N20CC-PC-BZ 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

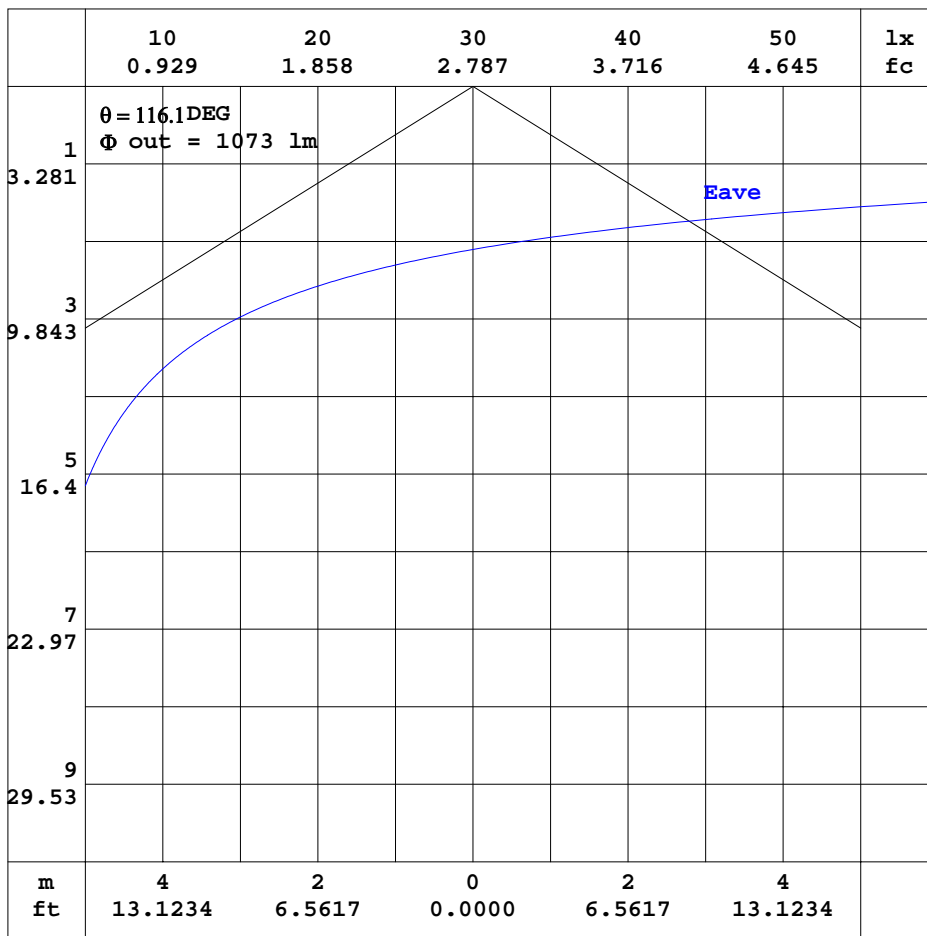


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2022-04-12

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:119.9V I:0.1821A P:21.48W PF:0.9832 Lamp Flux:1758.95x1 lm		
NAME: ASD-OLWS-23-14N20CC-PC-BZ 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:



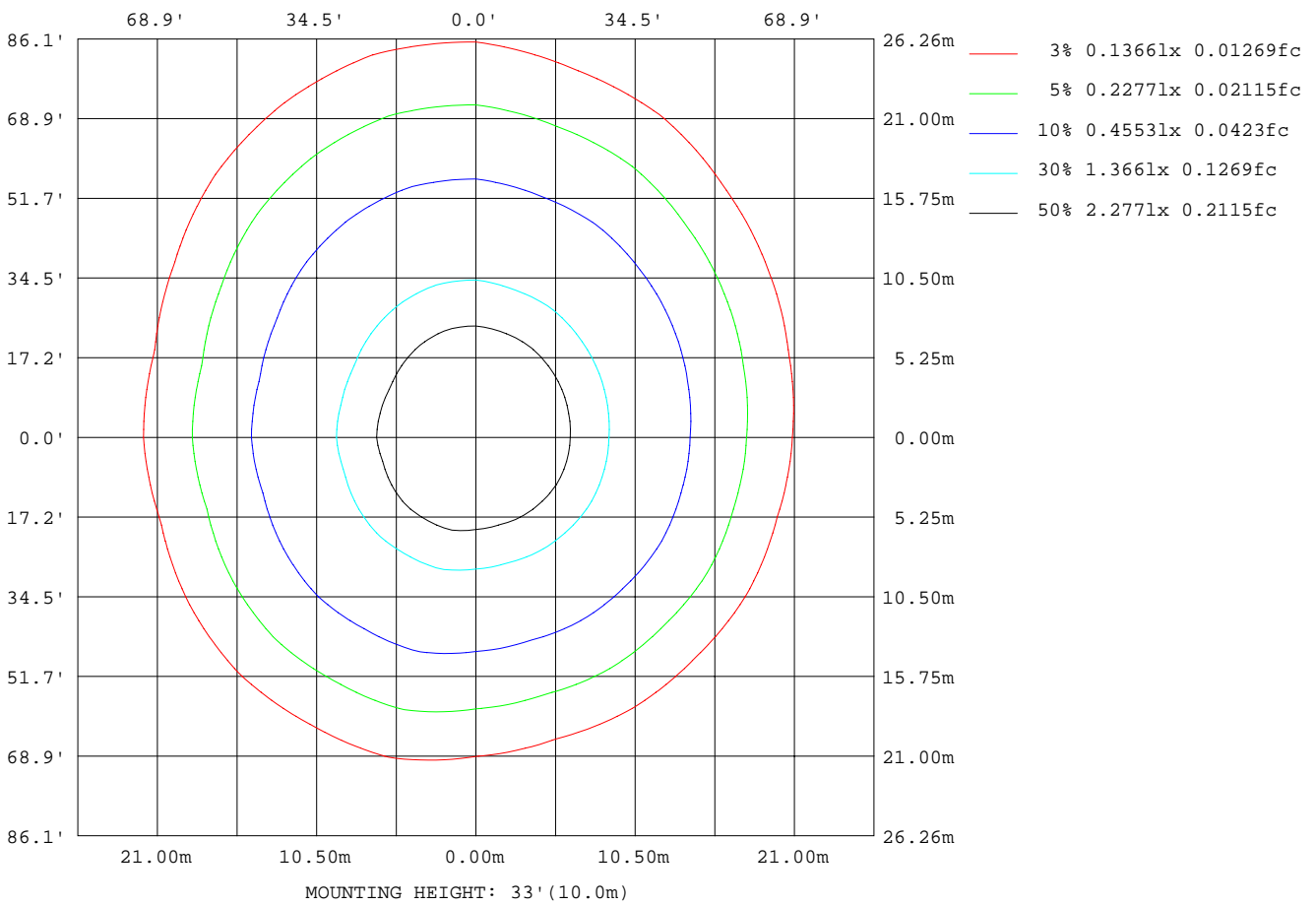
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2022-04-12

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:

ISOLUX DIAGRAM

Test:U:119.9V I:0.1821A P:21.48W PF:0.9832 Lamp Flux:1758.95x1 lm		
NAME: ASD-OLWS-23-14N20CC-PC-BZ 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: 2022-04-12

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:119.9V I:0.1821A P:21.48W PF:0.9832 Lamp Flux:1758.95x1 lm		
NAME: ASD-OLWS-23-14N20CC-PC-BZ 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

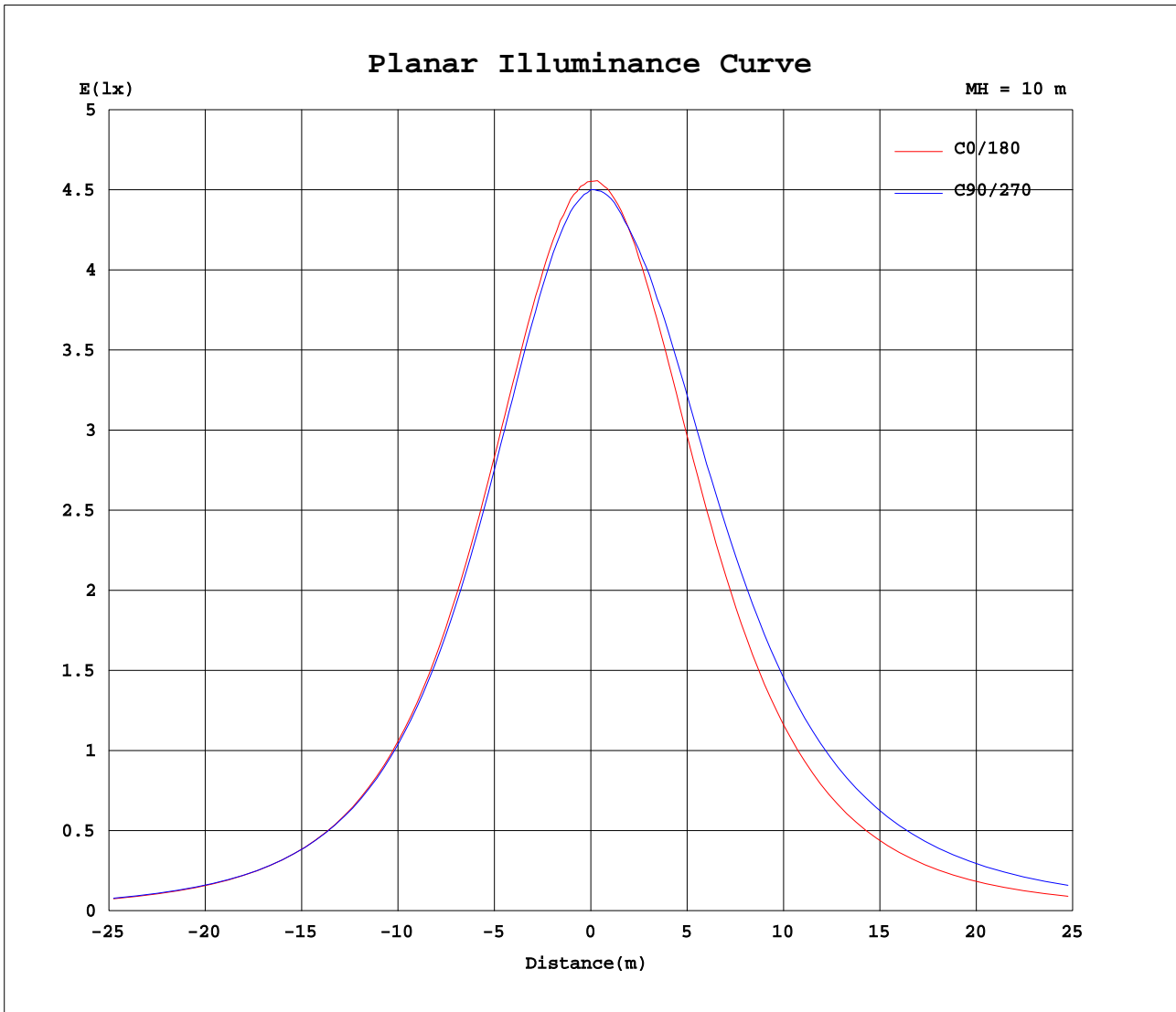
AvgL	cd/m2
L_0~180(65)av	4250
L_0~180(75)av	4146
L_0~180(85)av	5037
L_90~270(65)av	5803
L_90~270(75)av	7122
L_90~270(85)av	15706
L_45(65)av	5037
L_45(75)av	5689
L_45(85)av	10456

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-04-12

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:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2022-04-12

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:119.9V I:0.1821A P:21.48W PF:0.9832 Lamp Flux:1758.95x1 lm		
NAME: ASD-OLWS-23-14N20CC-PC-BZ 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	455	453	450	449	449	449	450	450	449	449	448	448	455	453	450	449	449	449	450
5	452	449	446	444	443	442	445	448	448	448	448	446	456	453	451	451	451	452	452
10	445	442	439	436	434	432	436	443	442	444	443	442	452	450	448	450	451	452	450
15	434	431	428	424	422	420	425	433	433	436	435	433	445	443	441	445	447	450	452
20	420	418	414	410	407	403	409	421	421	425	424	421	434	432	430	436	443	450	453
25	402	400	397	391	388	384	391	405	406	410	408	406	419	417	417	426	439	448	451
30	381	378	376	370	367	362	370	387	387	392	390	388	402	399	400	415	432	444	445
35	357	353	352	345	343	338	347	366	366	372	370	366	380	378	381	402	422	436	437
40	328	326	325	318	316	312	322	341	341	349	346	341	356	354	360	387	410	426	426
45	299	296	295	289	287	284	294	315	315	323	318	314	328	326	337	368	394	412	411
50	267	264	263	257	257	254	264	287	287	295	290	284	298	296	312	347	375	394	394
55	234	228	229	223	225	221	233	257	256	264	258	252	266	264	285	323	353	373	373
60	200	192	194	189	192	189	201	224	224	231	226	217	231	230	256	296	327	350	348
65	165	156	159	155	159	157	170	192	192	198	192	183	194	195	224	267	299	323	321
70	129	121	123	122	127	127	138	159	159	165	158	148	158	159	191	235	269	293	291
75	92.1	82.3	88.4	90.4	97.6	99.6	110	129	127	133	125	114	123	125	158	202	237	261	259
80	58.0	50.3	58.9	66.1	74.9	88.2	98.0	105	99.8	102	93.5	81.5	88.6	91.7	126	169	201	226	220
85	29.5	18.6	37.4	53.1	69.4	81.6	91.3	96.9	88.8	80.6	68.0	53.9	58.3	62.0	95.7	136	166	188	182
90	10.6	9.46	30.4	48.8	65.1	76.0	83.8	88.6	84.2	76.4	62.3	45.6	46.9	44.4	69.7	105	133	154	149
95	10.2	7.62	26.4	44.3	60.5	71.2	79.0	83.4	79.5	71.9	58.3	42.4	42.8	42.5	62.4	81.6	104	122	118
100	9.21	6.29	22.7	39.5	55.5	64.5	64.3	66.3	72.3	67.1	52.8	38.5	38.5	40.8	59.7	75.8	83.5	91.7	90.6
105	7.54	6.61	17.4	31.9	49.2	49.6	55.5	59.9	60.0	57.9	43.7	34.1	35.0	38.2	55.8	69.3	75.4	77.6	76.1
110	7.22	6.07	13.3	15.2	30.9	40.3	49.9	52.0	48.5	38.7	38.9	31.1	32.9	35.1	51.5	64.2	71.4	73.7	70.4
115	6.51	5.93	8.68	17.1	10.6	11.6	26.8	32.0	25.8	32.4	34.7	28.6	30.4	31.7	47.7	60.0	66.9	69.2	66.8
120	6.07	5.74	5.57	13.0	22.1	15.7	9.91	12.7	22.8	32.6	28.1	25.9	27.6	28.7	43.2	55.2	61.7	63.8	62.7
125	5.57	5.67	5.97	8.22	18.2	25.6	32.8	22.0	27.2	27.1	22.0	23.0	24.7	25.5	37.8	49.9	55.7	58.1	58.0
130	5.42	5.39	5.57	5.75	11.3	20.1	28.2	27.7	21.3	18.9	17.2	19.7	21.4	22.0	31.5	43.8	49.4	52.5	52.9
135	5.57	5.46	5.61	5.73	6.19	11.4	20.8	21.1	13.1	11.9	13.8	16.2	17.9	18.2	24.7	36.5	42.7	47.5	47.7
140	5.60	5.56	5.52	6.16	5.92	7.50	8.10	11.6	8.17	7.58	10.6	12.7	14.2	14.4	18.5	28.2	35.7	42.1	41.9
145	5.75	5.65	5.56	5.77	5.98	6.16	7.14	7.72	6.24	6.12	7.62	9.32	10.6	10.6	12.8	19.8	29.0	35.9	35.0
150	5.83	5.77	5.71	5.89	6.05	6.27	6.39	6.41	6.32	6.16	6.05	6.30	7.30	7.28	7.94	14.3	21.5	28.1	25.1
155	5.95	5.94	5.87	6.06	6.18	6.38	6.47	6.45	6.40	6.27	6.14	6.04	6.17	6.12	6.37	11.1	14.4	18.8	13.5
160	6.10	6.07	6.04	6.24	6.31	6.49	6.57	6.55	6.45	6.36	6.23	6.16	6.27	6.20	6.29	8.07	10.2	11.8	6.46
165	6.30	6.24	6.20	6.32	6.44	6.61	6.65	6.65	6.55	6.45	6.34	6.27	6.35	6.30	6.37	6.45	7.19	8.33	6.54
170	6.39	6.37	6.33	6.45	6.55	6.67	6.71	6.68	6.60	6.53	6.44	6.41	6.46	6.41	6.45	6.50	6.60	6.63	6.62
175	6.50	6.49	6.43	6.54	6.62	6.70	6.72	6.70	6.63	6.57	6.51	6.47	6.55	6.49	6.51	6.55	6.65	6.66	6.69
180	6.59	6.59	6.52	6.62	6.66	6.72	6.73	6.69	6.64	6.58	6.52	6.50	6.61	6.57	6.54	6.61	6.68	6.71	6.74

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2022-04-12

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:119.9V I:0.1821A P:21.48W PF:0.9832 Lamp Flux:1758.95x1 lm		
NAME: ASD-OLWS-23-14N20CC-PC-BZ 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	450	449	449	448	448															
5	451	449	448	446	446															
10	449	446	444	442	440															
15	450	445	440	436	433															
20	448	442	434	427	420															
25	442	435	423	414	406															
30	435	425	410	399	386															
35	423	412	394	379	364															
40	408	395	374	355	339															
45	389	376	350	329	311															
50	368	352	325	302	281															
55	344	326	295	271	249															
60	318	299	264	238	214															
65	290	269	232	203	178															
70	259	238	199	167	141															
75	226	203	164	132	104															
80	191	168	128	96.6	68.0															
85	153	132	95.0	64.5	37.6															
90	121	102	69.2	40.5	13.9															
95	93.8	77.8	52.9	32.2	12.4															
100	77.8	67.1	50.3	30.1	11.5															
105	63.6	56.1	45.8	27.8	8.85															
110	60.9	50.3	38.5	24.7	7.45															
115	57.4	47.1	33.2	19.5	6.44															
120	53.4	43.7	29.3	11.3	6.24															
125	48.8	39.5	23.3	6.42	6.13															
130	42.1	31.9	14.2	6.81	6.08															
135	31.0	21.0	6.98	6.78	6.48															
140	17.4	11.4	7.42	6.03	6.09															
145	9.09	7.66	8.12	6.11	6.08															
150	9.63	10.4	7.09	6.12	6.09															
155	10.9	9.28	6.18	6.19	6.14															
160	8.71	6.52	6.27	6.26	6.20															
165	6.56	6.50	6.45	6.42	6.38															
170	6.56	6.65	6.60	6.60	6.59															
175	6.63	6.62	6.59	6.56	6.56															
180	6.69	6.64	6.57	6.52	6.49															

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2022-04-12

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: