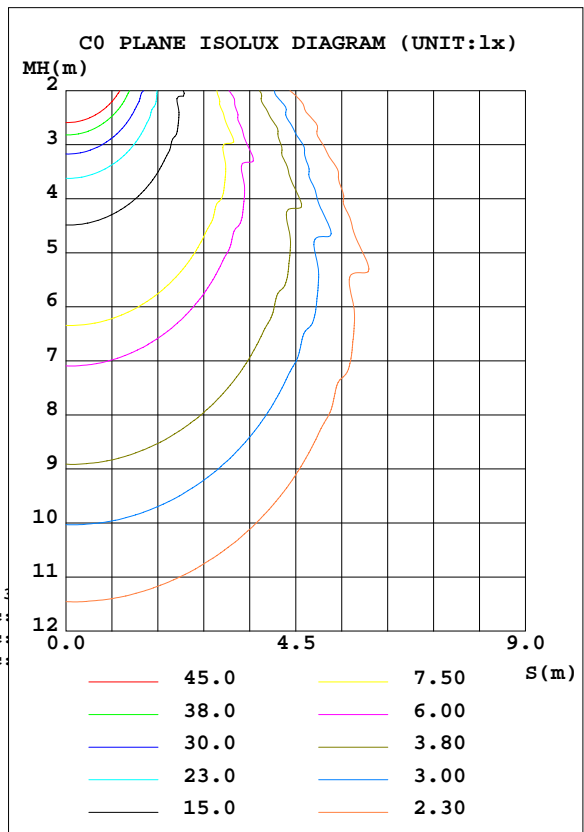
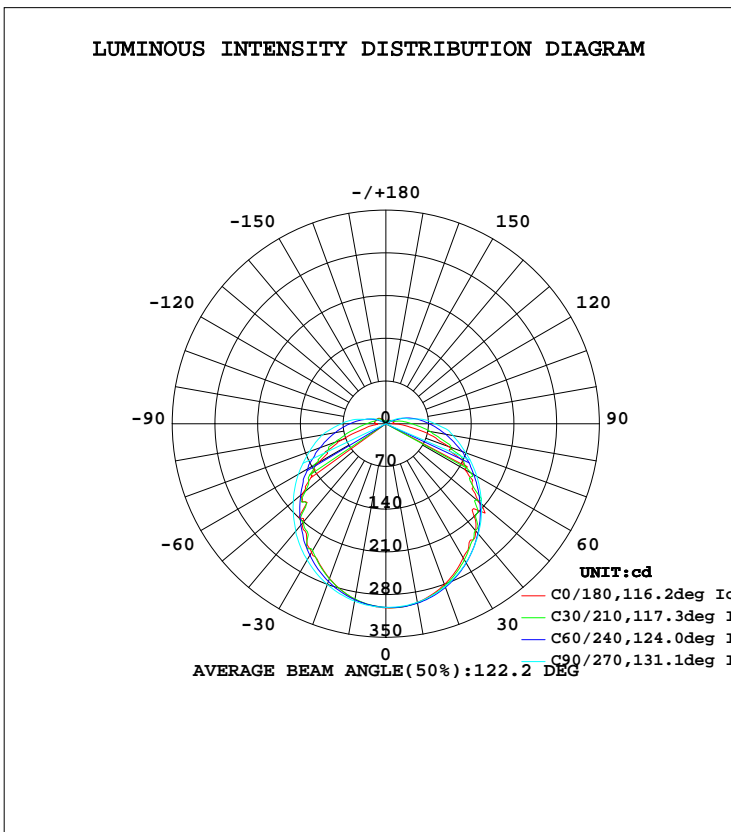


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.1317A P:15.10W PF:0.9555 Lamp Flux:1098.9x1 lm		
NAME: ASD-OLWS-21-D15CC-BZ/NK 4000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 72.76 lm/W			
MODEL	ASD-OLWS-21-D15CC-BZ/NK	I _{max} (cd)	302.1	S/MH(C0/180)	1.21
NOMINAL POWER(W)	15	LOR(%)	100.0	S/MH(C90/270)	1.28
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1098.9	η UP, DN(C0-180)	4.9,45.9
NOMINAL FLUX(lm)	1098.9	CIE CLASS	DIRECT	η UP, DN(C180-360)	4.8,44.5
LAMPS INSIDE	1	η up(%)	9.7	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	η down(%)	90.3	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2022-04-08

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	Φ lum,lamp
10	297.3	298.6	297.1	293.0	292.1	291.8	295.2	297.3	0- 10	28.46	28.46	2.59,2.59
20	280.6	284.6	284.1	274.1	269.9	272.1	280.5	281.8	10- 20	81.28	109.7	9.99,9.99
30	253.7	261.0	262.6	246.0	243.6	243.4	258.0	257.3	20- 30	122.9	232.6	21.2,21.2
40	229.0	230.0	235.9	212.0	210.3	210.6	229.9	225.9	30- 40	149.7	382.3	34.8,34.8
50	198.7	195.5	204.8	181.7	178.1	174.3	198.1	191.4	40- 50	159.9	542.2	49.3,49.3
60	149.2	159.9	172.0	144.1	129.5	138.7	165.7	158.0	50- 60	153.3	695.6	63.3,63.3
70	109.2	127.0	139.3	106.5	75.99	99.93	133.4	116.6	60- 70	131.2	826.7	75.2,75.2
80	49.79	88.07	112.0	71.59	29.82	69.06	105.9	82.10	70- 80	98.90	925.6	84.2,84.2
90	14.16	58.85	80.71	48.37	15.96	45.80	73.27	53.74	80- 90	67.14	992.8	90.3,90.3
100	12.68	38.56	45.55	32.44	19.30	30.32	43.20	34.11	90-100	44.24	1037	94.4,94.4
110	14.01	16.56	27.16	16.89	17.33	17.43	24.39	16.97	100-110	26.42	1063	96.8,96.8
120	11.34	9.138	7.589	11.50	16.21	11.53	11.33	7.269	110-120	14.35	1078	98.1,98.1
130	8.907	6.518	7.108	9.216	14.18	9.107	4.076	6.712	120-130	8.106	1086	98.8,98.8
140	7.451	5.369	5.192	5.089	10.63	5.920	4.464	5.903	130-140	5.835	1092	99.3,99.3
150	6.276	5.132	3.817	4.797	6.767	4.613	4.036	5.220	140-150	3.451	1095	99.7,99.7
160	4.077	3.937	3.940	3.932	4.834	4.182	4.105	4.106	150-160	2.160	1097	99.9,99.9
170	3.971	4.013	4.040	4.052	4.044	4.090	4.121	4.048	160-170	1.188	1099	100,100
180	4.078	4.109	4.117	4.186	4.086	4.117	4.129	4.182	170-180	0.3931	1099	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

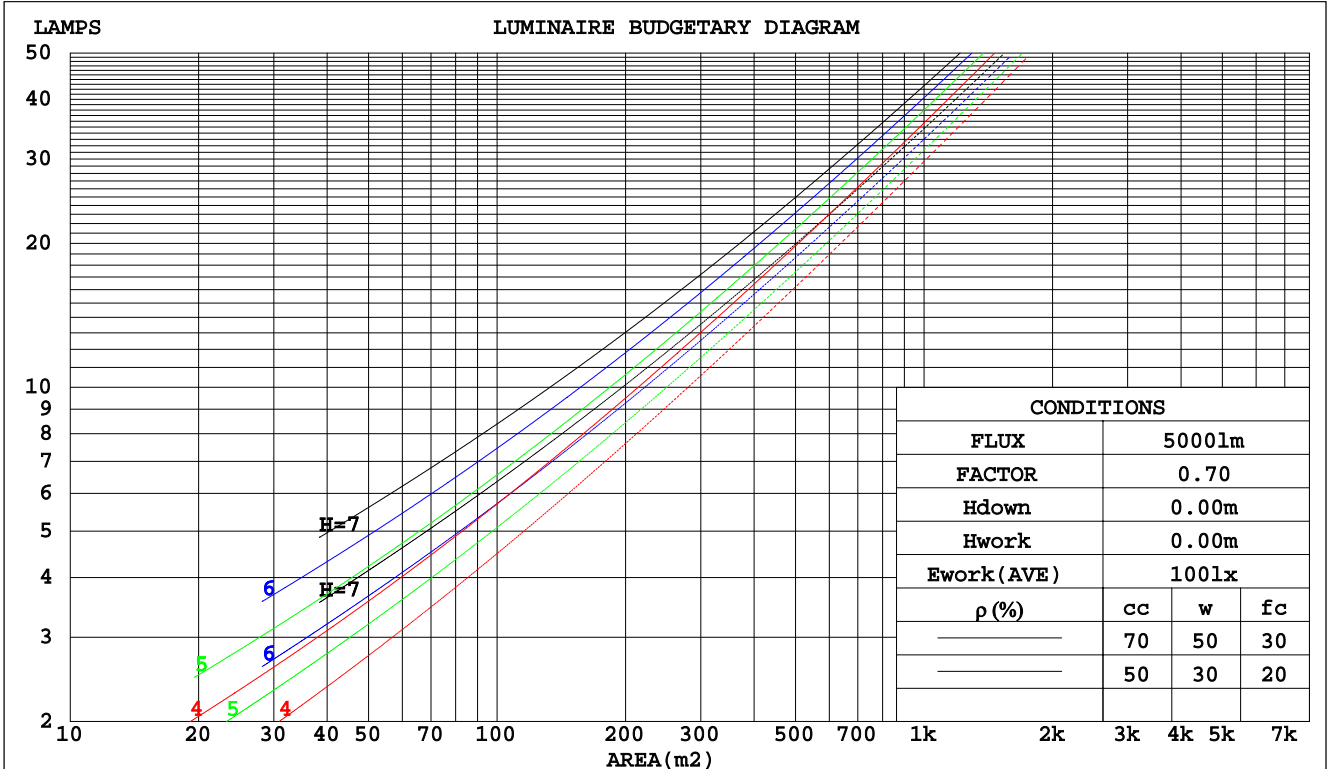
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-04-08

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:120.0V I:0.1317A P:15.10W PF:0.9555 Lamp Flux:1098.9x1 lm		
NAME: ASD-OLWS-21-D15CC-BZ/NK 4000K	TYPE:LED	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	1.17	1.17	1.17	1.13	1.13	1.13	1.06	1.06	1.06	.99	.99	.99	.93	.93	.93	.90
1.0	.99	.93	.89	.95	.91	.87	.89	.85	.82	.84	.81	.78	.78	.76	.74	.71
2.0	.85	.77	.71	.82	.75	.69	.77	.71	.66	.72	.67	.63	.68	.64	.60	.57
3.0	.74	.65	.58	.71	.63	.57	.67	.60	.55	.63	.57	.52	.59	.54	.50	.48
4.0	.65	.56	.49	.63	.54	.48	.59	.52	.46	.56	.49	.44	.52	.47	.43	.40
5.0	.58	.48	.41	.56	.47	.41	.53	.45	.39	.50	.43	.38	.47	.41	.37	.34
6.0	.52	.43	.36	.50	.42	.35	.48	.40	.34	.45	.38	.33	.43	.37	.32	.30
7.0	.47	.38	.32	.46	.37	.31	.43	.36	.30	.41	.34	.29	.39	.33	.28	.26
8.0	.43	.34	.28	.42	.33	.28	.39	.32	.27	.37	.31	.26	.36	.30	.25	.23
9.0	.39	.31	.25	.38	.30	.25	.36	.29	.24	.35	.28	.23	.33	.27	.23	.21
10.0	.36	.28	.23	.35	.28	.22	.34	.27	.22	.32	.26	.21	.30	.25	.21	.19



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2022-04-08

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:0.1317A P:15.10W PF:0.9555 Lamp Flux:1098.9x1 lm		
NAME: ASD-OLWS-21-D15CC-BZ/NK 4000K	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	.367	.208	.066	.356	.203	.065	.337	.194	.062	.320	.185	.059	.304	.176	.057	
2.0	.324	.177	.054	.314	.173	.053	.297	.165	.051	.282	.158	.049	.267	.151	.048	
3.0	.290	.155	.046	.282	.151	.045	.267	.145	.044	.253	.138	.042	.240	.133	.041	
4.0	.263	.137	.040	.256	.134	.040	.242	.128	.038	.229	.123	.037	.217	.118	.036	
5.0	.240	.122	.035	.234	.120	.035	.221	.115	.034	.209	.111	.033	.199	.106	.032	
6.0	.221	.111	.032	.215	.108	.031	.203	.104	.030	.193	.100	.029	.183	.096	.029	
7.0	.204	.101	.029	.199	.099	.028	.188	.095	.027	.179	.092	.027	.170	.088	.026	
8.0	.190	.093	.026	.185	.091	.026	.175	.088	.025	.167	.084	.024	.158	.081	.024	
9.0	.177	.086	.024	.172	.084	.024	.164	.081	.023	.156	.078	.022	.148	.075	.022	
10.0	.166	.079	.022	.162	.078	.022	.154	.075	.021	.146	.073	.021	.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	.264	.264	.264	.226	.226	.226	.154	.154	.154	.088	.088	.088	.028	.028	.028	
1.0	.258	.230	.204	.221	.197	.176	.151	.136	.121	.087	.079	.071	.028	.025	.023	
2.0	.251	.206	.169	.215	.178	.146	.147	.123	.102	.085	.072	.060	.027	.023	.019	
3.0	.244	.190	.147	.209	.164	.127	.143	.114	.089	.083	.066	.053	.027	.022	.017	
4.0	.236	.177	.132	.202	.153	.114	.139	.106	.081	.080	.062	.048	.026	.020	.016	
5.0	.228	.167	.121	.196	.144	.106	.135	.101	.075	.078	.059	.044	.025	.019	.015	
6.0	.221	.159	.114	.190	.137	.099	.131	.096	.070	.076	.057	.042	.024	.018	.014	
7.0	.213	.152	.109	.184	.132	.095	.127	.092	.067	.074	.054	.040	.024	.018	.013	
8.0	.207	.146	.104	.178	.127	.091	.123	.089	.065	.072	.052	.039	.023	.017	.013	
9.0	.201	.141	.101	.173	.123	.088	.120	.086	.063	.070	.051	.037	.023	.017	.012	
10.0	.195	.137	.099	.168	.119	.086	.116	.084	.061	.068	.050	.037	.022	.016	.012	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2022-04-08

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:0.1317A P:15.10W PF:0.9555 Lamp Flux:1098.9x1 lm		
NAME: ASD-OLWS-21-D15CC-BZ/NK 4000K	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	16.2	17.7	16.6	18.1	18.5	16.7	18.2	17.1	18.6	19.0
3H	18.1	19.4	18.5	19.8	20.3	19.1	20.4	19.5	20.8	21.3
4H	18.8	20.1	19.3	20.5	21.0	20.3	21.6	20.8	22.0	22.5
6H	19.5	20.7	20.0	21.1	21.6	21.7	22.9	22.2	23.4	23.9
8H	19.7	20.9	20.2	21.3	21.8	22.5	23.7	23.0	24.2	24.6
12H	19.9	21.1	20.4	21.5	22.0	23.4	24.6	23.9	25.0	25.5
4H 2H	17.0	18.3	17.5	18.8	19.2	17.4	18.7	17.9	19.1	19.6
3H	19.1	20.2	19.6	20.7	21.2	20.0	21.1	20.4	21.6	22.1
4H	20.0	21.0	20.5	21.5	22.1	21.4	22.4	21.9	22.9	23.5
6H	20.8	21.8	21.4	22.3	22.9	23.0	23.9	23.6	24.5	25.0
8H	21.1	22.0	21.7	22.5	23.1	23.9	24.8	24.5	25.3	25.9
12H	21.4	22.2	22.0	22.8	23.4	25.0	25.8	25.5	26.3	26.9
8H 4H	20.6	21.5	21.2	22.0	22.6	21.8	22.7	22.3	23.2	23.8
6H	21.7	22.5	22.3	23.0	23.7	23.7	24.4	24.3	25.0	25.6
8H	22.2	22.9	22.8	23.5	24.1	24.8	25.4	25.4	26.0	26.7
12H	22.7	23.3	23.3	23.9	24.5	26.1	26.6	26.7	27.2	27.9
12H 4H	20.8	21.6	21.4	22.1	22.8	21.8	22.6	22.4	23.2	23.8
6H	22.1	22.7	22.7	23.3	24.0	23.8	24.5	24.4	25.1	25.7
8H	22.7	23.3	23.3	23.9	24.5	25.0	25.6	25.6	26.2	26.9
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.4					+ 0.2 / - 0.3				
2.0H	+ 0.3 / - 0.4					+ 0.2 / - 0.4				

CIE Pub.117 Corrected 1099 lm Total Lamp Luminous Flux.(8log(F/F0) = 0.3)

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2022-04-08

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:0.1317A P:15.10W PF:0.9555 Lamp Flux:1098.9x1 lm		
NAME: ASD-OLWS-21-D15CC-BZ/NK 4000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

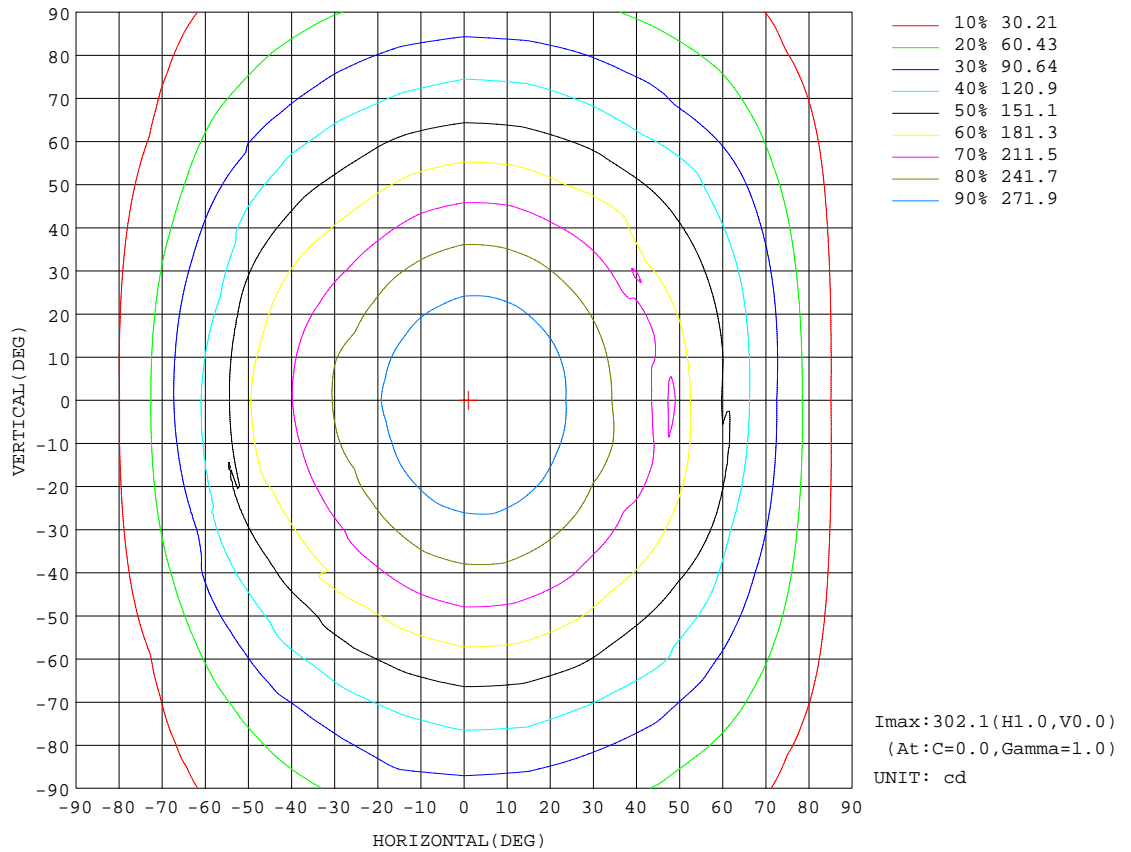
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	52	39	32	51	39	32	49	38	32	25
0.80	61	48	41	60	48	40	57	47	40	32
1.00	69	57	49	67	56	48	64	57	47	39
1.25	76	64	56	74	63	55	70	61	54	45
1.50	81	69	61	79	68	61	75	66	59	50
2.00	88	78	70	86	76	69	81	73	67	57
2.50	92	83	75	90	81	74	84	77	72	61
3.00	96	87	80	93	85	79	88	81	76	65
4.00	100	93	87	97	91	85	91	86	82	70
5.00	103	97	92	100	94	89	94	89	85	73
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:2022-04-08

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:120.0V I:0.1317A P:15.10W PF:0.9555 Lamp Flux:1098.9x1 lm		
NAME: ASD-OLWS-21-D15CC-BZ/NK 4000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

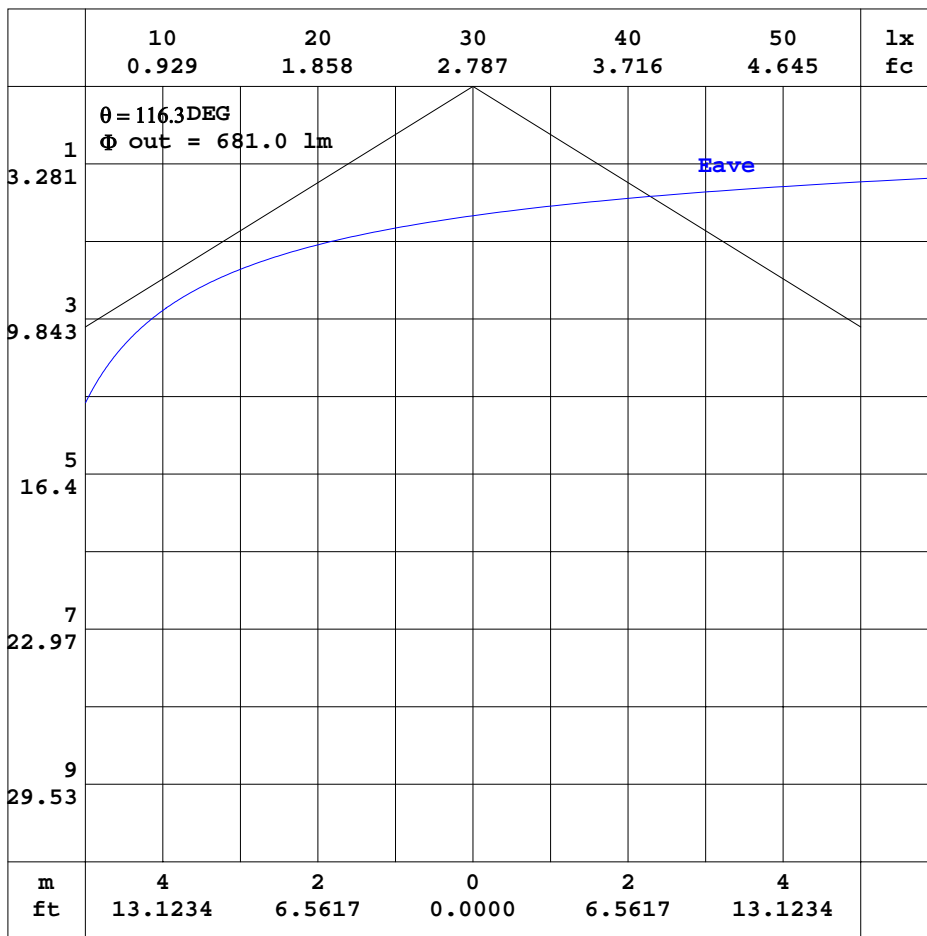


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2022-04-08

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:0.1317A P:15.10W PF:0.9555 Lamp Flux:1098.9x1 lm		
NAME: ASD-OLWS-21-D15CC-BZ/NK 4000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:



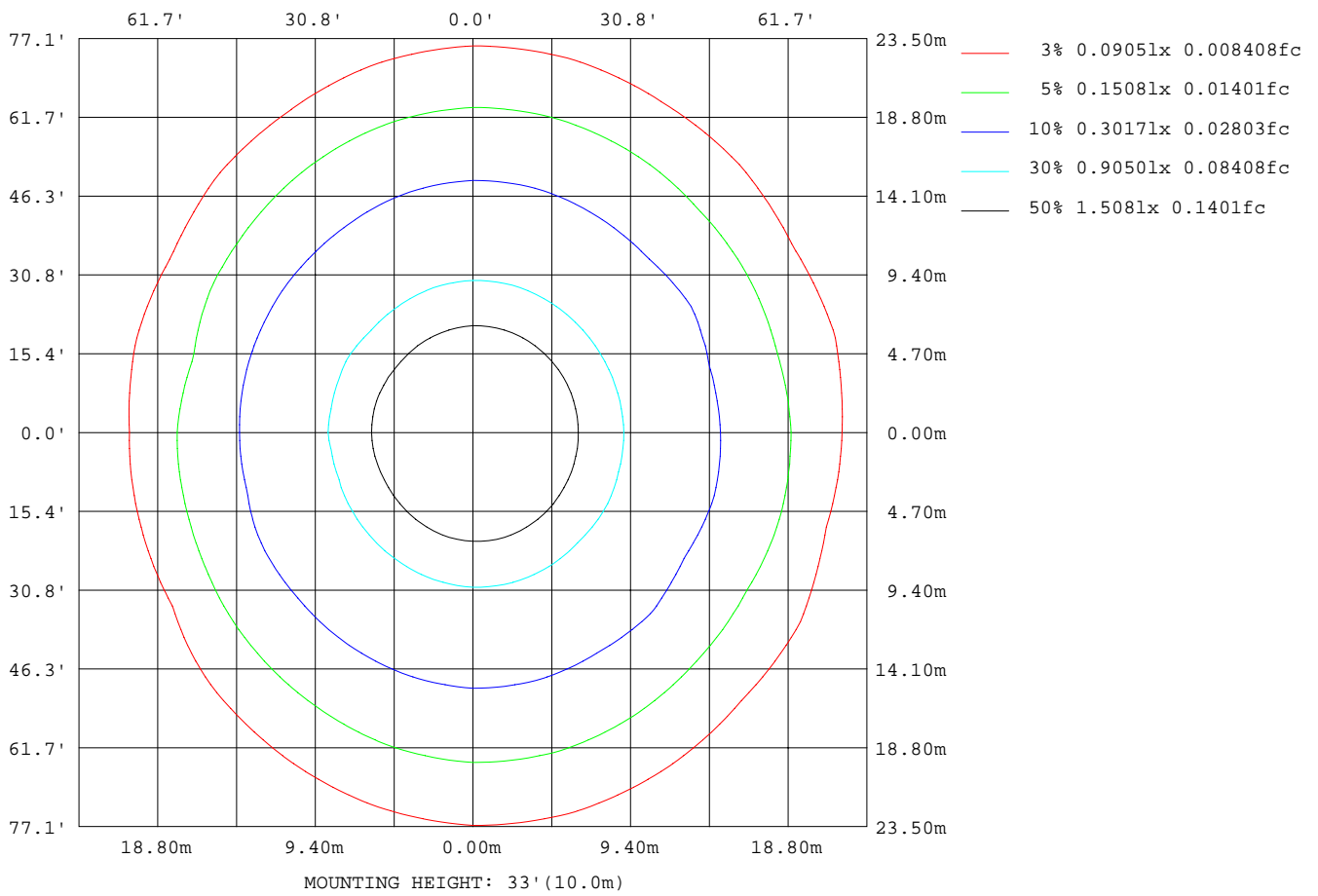
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2022-04-08

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:120.0V I:0.1317A P:15.10W PF:0.9555 Lamp Flux:1098.9x1 lm		
NAME: ASD-OLWS-21-D15CC-BZ/NK 4000K	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:2022-04-08

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:0.1317A P:15.10W PF:0.9555 Lamp Flux:1098.9x1 lm		
NAME: ASD-OLWS-21-D15CC-BZ/NK 4000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

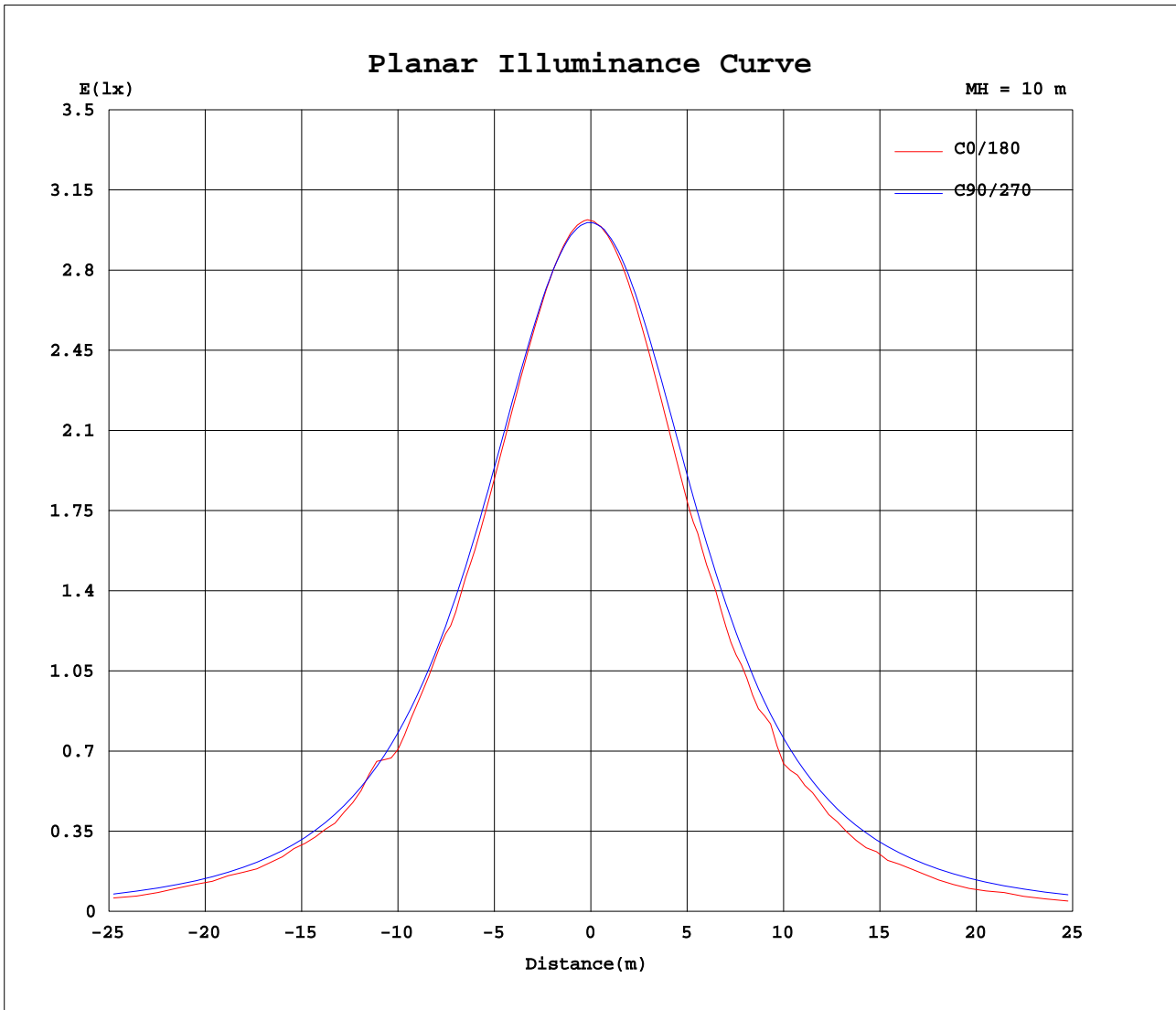
AvgL	cd/m2
L_0~180(65)av	2896
L_0~180(75)av	2444
L_0~180(85)av	2606
L_90~270(65)av	3605
L_90~270(75)av	4723
L_90~270(85)av	10743
L_45(65)av	3139
L_45(75)av	3623
L_45(85)av	7260

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-04-08

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: 2022-04-08

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:0.1317A P:15.10W PF:0.9555 Lamp Flux:1098.9x1 lm		
NAME: ASD-OLWS-21-D15CC-BZ/NK 4000K	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	302	301	301	301	301	301	301	301	301	301	301	301	302	301	301	301	301	301	301
5	301	301	301	301	301	301	300	300	299	298	298	297	299	298	298	298	298	299	299
10	297	298	298	299	299	298	297	296	294	293	291	291	292	291	291	292	293	294	295
15	290	291	292	293	293	293	292	290	287	285	282	281	282	282	283	283	285	287	289
20	281	282	283	285	286	286	284	281	278	274	270	268	270	269	271	272	275	277	281
25	268	270	271	274	275	277	274	271	266	261	256	254	255	254	256	259	263	266	270
30	254	256	257	261	263	265	263	259	252	246	241	243	244	245	240	243	249	253	258
35	238	246	242	247	250	252	250	245	237	231	232	228	227	223	222	227	234	240	245
40	229	226	228	230	235	238	236	230	221	212	208	203	210	211	210	211	217	225	230
45	200	217	210	213	219	222	221	214	204	201	209	188	183	187	184	195	200	209	214
50	199	195	194	195	201	206	205	197	189	182	165	172	178	178	172	174	182	192	198
55	173	178	172	177	184	189	188	181	173	163	160	151	147	151	155	159	165	176	182
60	149	157	161	160	166	172	172	164	153	144	132	132	130	119	137	139	148	159	166
65	135	128	139	141	150	156	156	148	137	126	108	105	110	114	107	123	131	143	149
70	109	119	113	127	134	139	139	132	119	107	88.9	79.8	76.0	74.7	86.5	99.9	114	127	133
75	80.8	80.6	91.9	106	116	124	125	117	103	87.1	66.9	51.5	45.7	51.2	69.4	84.0	99.0	112	119
80	49.8	60.6	74.0	88.1	99.6	110	112	104	88.9	71.6	50.7	32.8	29.8	34.5	51.8	69.1	84.6	97.5	106
85	30.5	38.6	56.4	71.7	84.7	94.3	99.1	93.3	75.4	58.4	39.5	23.6	14.9	24.3	40.1	56.3	71.1	82.3	88.2
90	14.2	26.0	42.6	58.8	71.5	79.8	80.7	75.9	63.4	48.4	31.8	18.1	16.0	18.5	31.8	45.8	59.1	68.6	73.3
95	10.8	18.3	33.4	48.2	59.8	67.5	67.5	62.7	52.8	40.0	26.4	16.3	18.3	17.0	26.3	37.1	48.5	56.4	60.1
100	12.7	14.9	25.3	38.6	48.6	53.9	45.5	40.7	41.5	32.4	21.9	20.0	19.3	19.6	22.0	30.3	38.7	43.1	43.2
105	14.2	14.5	16.1	28.2	37.0	37.5	34.5	33.3	29.8	25.1	16.7	19.2	18.2	18.8	17.8	24.3	30.1	30.4	30.6
110	14.0	15.2	12.3	16.6	23.1	24.8	27.2	26.0	21.1	16.9	16.2	17.9	17.3	18.1	16.8	17.4	21.6	22.9	24.4
115	12.6	13.4	12.5	8.28	10.2	15.2	18.4	17.1	13.2	11.4	16.3	16.9	17.1	17.4	16.4	12.4	14.1	16.1	18.2
120	11.3	11.4	10.9	9.14	5.44	5.17	7.59	7.56	6.60	11.5	14.8	15.8	16.2	16.8	15.3	11.5	7.18	8.61	11.3
125	9.91	9.72	8.99	8.35	7.88	4.85	4.36	4.46	7.28	11.3	13.1	14.6	15.5	15.8	14.2	11.0	6.33	4.08	4.03
130	8.91	8.69	7.59	6.52	7.95	7.90	7.11	7.26	7.45	9.22	11.4	12.8	14.2	13.9	12.1	9.11	7.13	4.38	4.08
135	8.28	7.95	6.48	5.33	6.66	7.16	7.31	7.77	5.38	7.25	9.82	11.3	12.3	11.9	10.3	7.72	5.06	5.54	6.13
140	7.45	7.05	5.60	5.37	5.08	5.16	5.19	5.48	4.85	5.09	8.15	9.59	10.6	10.2	8.77	5.92	4.46	4.14	4.46
145	5.98	5.83	5.74	5.76	3.96	3.96	3.83	4.43	5.08	4.46	5.75	7.23	8.23	8.13	6.85	4.45	5.01	4.07	4.04
150	6.28	6.24	6.30	5.13	3.76	3.89	3.82	4.01	3.83	4.80	4.49	5.45	6.77	6.19	4.71	4.61	5.06	4.04	4.04
155	6.37	6.16	5.31	3.77	3.96	3.97	3.90	4.02	3.89	5.15	4.72	4.56	4.57	4.41	4.50	5.59	4.11	4.07	4.08
160	4.08	3.97	3.89	3.94	4.11	3.90	3.94	3.94	3.97	3.93	5.17	5.36	4.83	5.24	5.74	4.18	4.10	4.12	4.11
165	4.14	4.10	4.40	4.31	3.94	4.00	3.99	3.99	4.01	3.98	3.97	3.94	4.65	4.22	4.03	4.09	4.12	4.14	4.13
170	3.97	3.99	3.99	4.01	4.02	4.08	4.04	4.04	4.06	4.05	4.03	4.01	4.04	4.04	4.06	4.09	4.11	4.12	4.12
175	4.27	4.24	4.44	4.45	4.34	4.14	4.08	4.12	4.11	4.10	4.09	4.09	4.09	4.08	4.09	4.10	4.11	4.12	4.11
180	4.08	4.08	4.08	4.11	4.14	4.12	4.12	4.11	4.12	4.19	4.18	4.16	4.09	4.08	4.09	4.12	4.15	4.12	4.13

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2022-04-08

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:0.1317A P:15.10W PF:0.9555 Lamp Flux:1098.9x1 lm		
NAME: ASD-OLWS-21-D15CC-BZ/NK 4000K	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	301	301	301	301	301														
5	300	300	301	301	301														
10	296	297	297	298	298														
15	290	291	291	291	291														
20	282	282	282	282	281														
25	271	272	271	270	269														
30	259	259	257	257	255														
35	246	245	242	241	240														
40	231	229	226	228	232														
45	215	212	210	209	219														
50	199	195	191	191	206														
55	182	177	176	181	174														
60	165	161	158	155	157														
65	148	143	140	135	134														
70	133	126	117	116	101														
75	118	111	97.7	92.0	87.2														
80	104	93.8	82.1	72.1	57.6														
85	86.0	78.3	66.7	54.2	37.3														
90	71.6	65.0	53.7	40.5	24.8														
95	59.0	53.2	43.4	31.3	16.8														
100	42.7	40.9	34.1	24.2	13.5														
105	29.1	27.9	25.5	18.1	15.2														
110	23.0	19.4	17.0	12.4	15.1														
115	17.1	13.2	9.64	11.7	13.5														
120	9.86	6.20	7.27	10.9	11.8														
125	4.44	4.34	7.53	9.41	10.3														
130	4.91	5.68	6.71	7.85	9.14														
135	6.62	6.06	5.55	6.71	8.07														
140	5.11	4.96	5.90	5.56	7.04														
145	4.80	3.98	5.97	5.88	5.74														
150	4.23	3.94	5.22	6.18	5.83														
155	4.35	4.29	4.05	5.51	6.31														
160	4.19	4.02	4.11	4.00	4.23														
165	4.09	4.03	4.12	4.28	4.15														
170	4.11	4.06	4.05	4.04	4.03														
175	4.12	4.32	4.35	4.14	4.11														
180	4.11	4.12	4.18	4.18	4.16														

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2022-04-08

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: