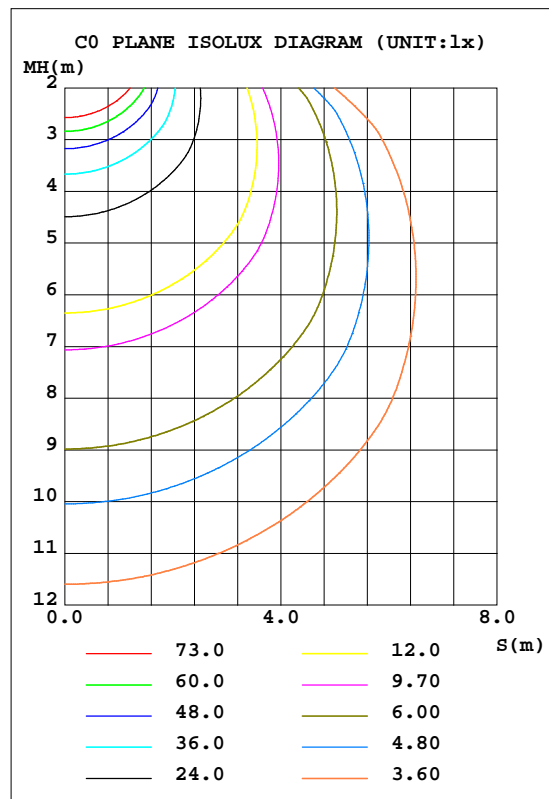
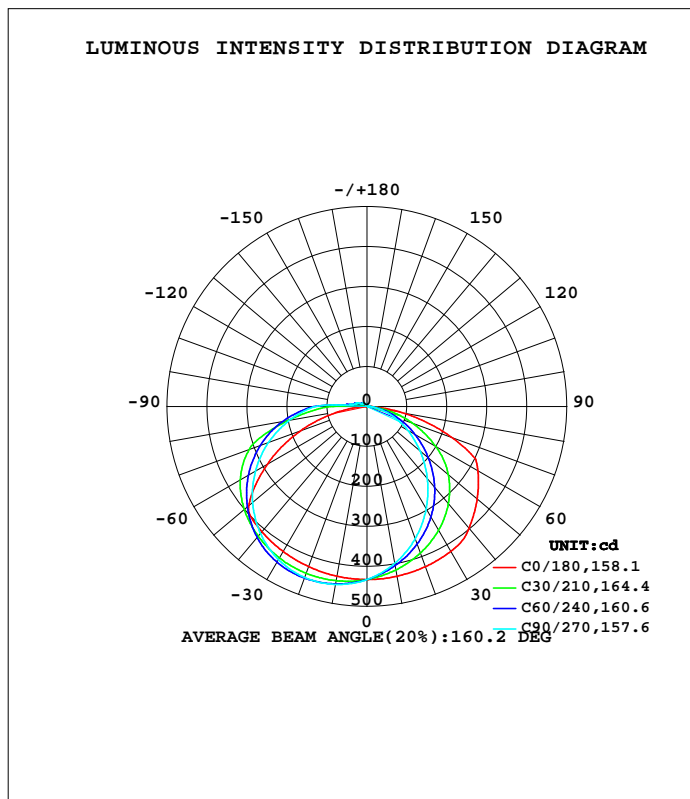


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.87V I:0.2026A P:21.969W PF:0.9048 Freq:59.98Hz Lamp Flux:1630.52x1 lm		
NAME: ASD-UCB-48D24CC-WH-3000K	TYPE:0	WEIGHT:
SPEC.:24W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MOBESD-UCB-48D24CC-WH-3000K		Imax(cd)	457.0	S/MH(C0/180)	1.47
NOMINAL POWER(W)	24	LOR(%)	100.0	S/MH(C90/270)	1.51
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1630.5	h UP, DN(C0-180)	0.5,36.2
NOMINAL FLUX(lm)	1630.52	CIE CLASS	DIRECT	h UP, DN(C180-360)	3.2,60.2
LAMPS INSIDE	1	h up(%)	3.7	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	h down(%)	96.3	CIBSE SHR MAX	1.55



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:21 April 2021

g Range: 0 - 180DEG
 g Interval: 0.5DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402
 Humidity:65.0%
 Test Distance:3.010m [K=1.2292]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	431.4	409.1	398.8	410.4	431.0	446.9	452.0	446.0	0- 10	41.09	41.09	2.52,2.52
20	426.6	377.3	352.5	379.0	426.5	451.6	455.1	449.5	10- 20	119.4	160.5	9.85,9.85
30	419.0	337.5	296.2	339.8	419.1	446.5	442.5	443.7	20- 30	186.7	347.3	21.3,21.3
40	397.4	289.5	235.0	292.1	409.1	431.5	414.6	428.5	30- 40	236.4	583.6	35.8,35.8
50	360.1	233.3	173.8	235.6	385.8	406.3	373.7	402.8	40- 50	262.5	846.1	51.9,51.9
60	320.1	171.1	117.1	172.4	287.0	367.7	321.7	354.9	50- 60	259.4	1105	67.8,67.8
70	225.1	99.96	65.66	104.8	175.6	301.5	261.9	289.2	60- 70	223.6	1329	81.5,81.5
80	88.55	36.11	24.77	38.01	64.92	221.3	196.8	211.3	70- 80	158.2	1487	91.2,91.2
90	1.198	4.308	2.550	2.468	0.8162	126.4	128.5	120.9	80- 90	83.68	1571	96.3,96.3
100	0.8702	2.841	3.078	3.428	1.224	39.32	33.38	31.94	90-100	26.68	1598	98,98
110	1.418	3.340	3.975	3.780	2.021	20.84	26.44	18.76	100-110	12.40	1610	98.7,98.7
120	1.801	2.963	3.796	3.116	2.235	14.33	14.25	13.99	110-120	7.923	1618	99.2,99.2
130	1.849	2.615	3.337	2.613	2.018	7.274	14.03	6.867	120-130	5.581	1623	99.6,99.6
140	1.657	2.298	2.234	2.272	1.776	5.684	8.211	5.549	130-140	3.373	1627	99.8,99.8
150	1.510	2.166	2.197	2.031	1.580	3.123	6.171	3.194	140-150	1.927	1629	99.9,99.9
160	1.359	1.764	1.811	1.564	1.465	2.750	3.159	2.947	150-160	1.070	1630	100,100
170	1.430	1.692	1.292	1.526	1.364	2.109	2.791	2.272	160-170	0.5513	1630	100,100
180	1.500	1.750	1.564	1.917	1.498	1.750	1.561	1.914	170-180	0.1648	1631	100,100
DEG	LUMINOUS INTENSITY:cd								UNIT:lm			

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:21 April 2021

g Range: 0 - 180DEG
 g Interval: 0.5DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402
 Humidity:65.0%
 Test Distance:3.010m [K=1.2292]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:119.87V I:0.2026A P:21.969W PF:0.9048 Freq:59.98Hz Lamp Flux:1630.52x1 lm										
NAME: ASD-UCB-48D24CC-WH-3000K					TYPE:0			WEIGHT:		
SPEC.:24W					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	12.8	14.3	13.1	14.6	14.9	8.6	10.2	8.9	10.4	10.7
3H	15.0	16.5	15.4	16.8	17.1	9.7	11.1	10.0	11.4	11.8
4H	15.9	17.3	16.3	17.7	18.0	10.1	11.5	10.4	11.8	12.1
6H	16.6	17.9	16.9	18.2	18.6	10.3	11.6	10.7	12.0	12.3
8H	16.7	18.0	17.1	18.3	18.7	10.4	11.6	10.8	12.0	12.4
12H	16.8	18.0	17.2	18.4	18.8	10.4	11.6	10.8	12.0	12.4
4H 2H	12.8	14.2	13.2	14.5	14.9	9.5	10.9	9.9	11.2	11.5
3H	15.2	16.4	15.6	16.8	17.2	10.7	11.9	11.1	12.3	12.7
4H	16.2	17.3	16.7	17.7	18.2	11.2	12.3	11.6	12.7	13.1
6H	17.0	18.0	17.4	18.4	18.8	11.5	12.5	11.9	12.9	13.4
8H	17.2	18.1	17.7	18.6	19.0	11.6	12.5	12.1	13.0	13.4
12H	17.3	18.2	17.8	18.6	19.1	11.6	12.5	12.1	13.0	13.5
8H 4H	16.2	17.1	16.7	17.6	18.0	11.6	12.5	12.0	12.9	13.4
6H	17.0	17.8	17.5	18.3	18.8	12.0	12.8	12.5	13.3	13.8
8H	17.3	18.0	17.8	18.5	19.0	12.2	12.9	12.7	13.4	13.9
12H	17.5	18.1	18.0	18.6	19.1	12.3	12.9	12.8	13.4	14.0
12H 4H	16.1	17.0	16.6	17.5	18.0	11.6	12.5	12.1	12.9	13.4
6H	17.0	17.7	17.5	18.2	18.7	12.1	12.8	12.6	13.3	13.8
8H	17.3	17.9	17.8	18.4	19.0	12.3	12.9	12.8	13.4	14.0
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
1.5H	+ 0.5 / - 0.5					+ 0.2 / - 0.3				
2.0H	+ 1.1 / - 1.0					+ 0.3 / - 0.5				

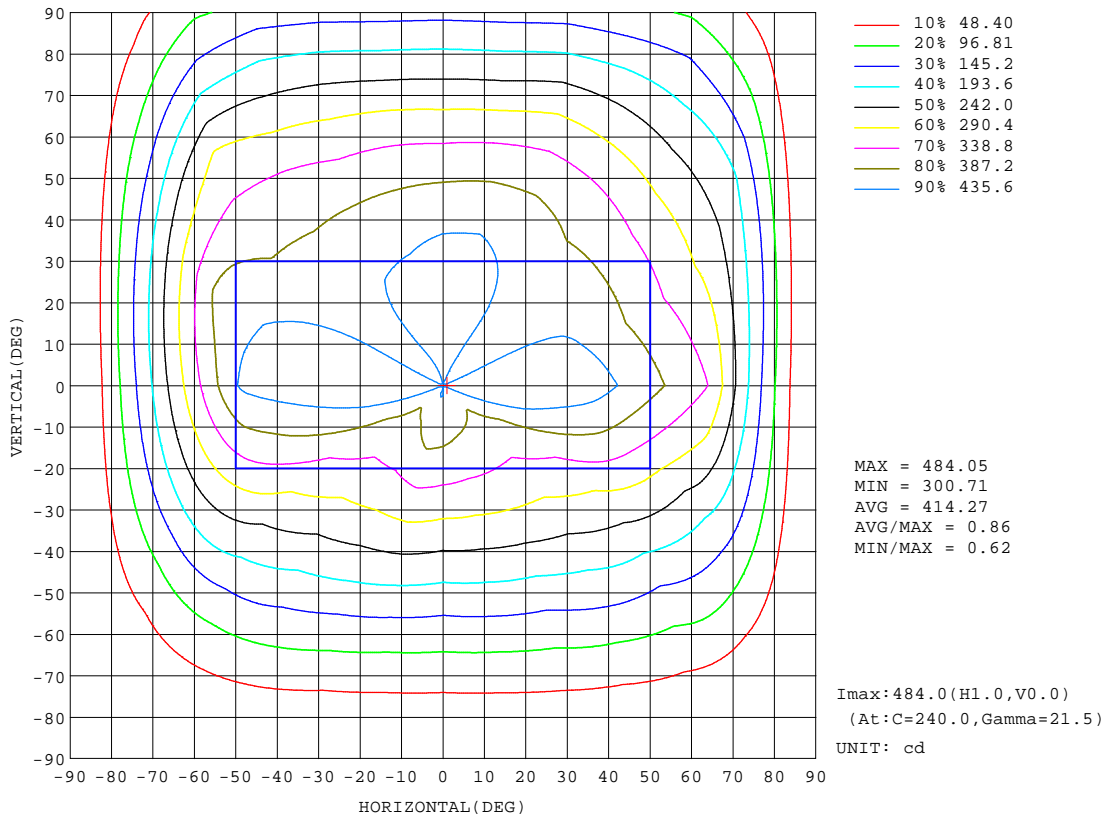
CIE Pub.117, 1631 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 1.7)

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:21 April 2021

g Range: 0 - 180DEG
 g Interval: 0.5DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402
 Humidity:65.0%
 Test Distance:3.010m [K=1.2292]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:119.87V I:0.2026A P:21.969W PF:0.9048 Freq:59.98Hz Lamp Flux:1630.52x1 lm		
NAME: ASD-UCB-48D24CC-WH-3000K	TYPE:0	WEIGHT:
SPEC.:24W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



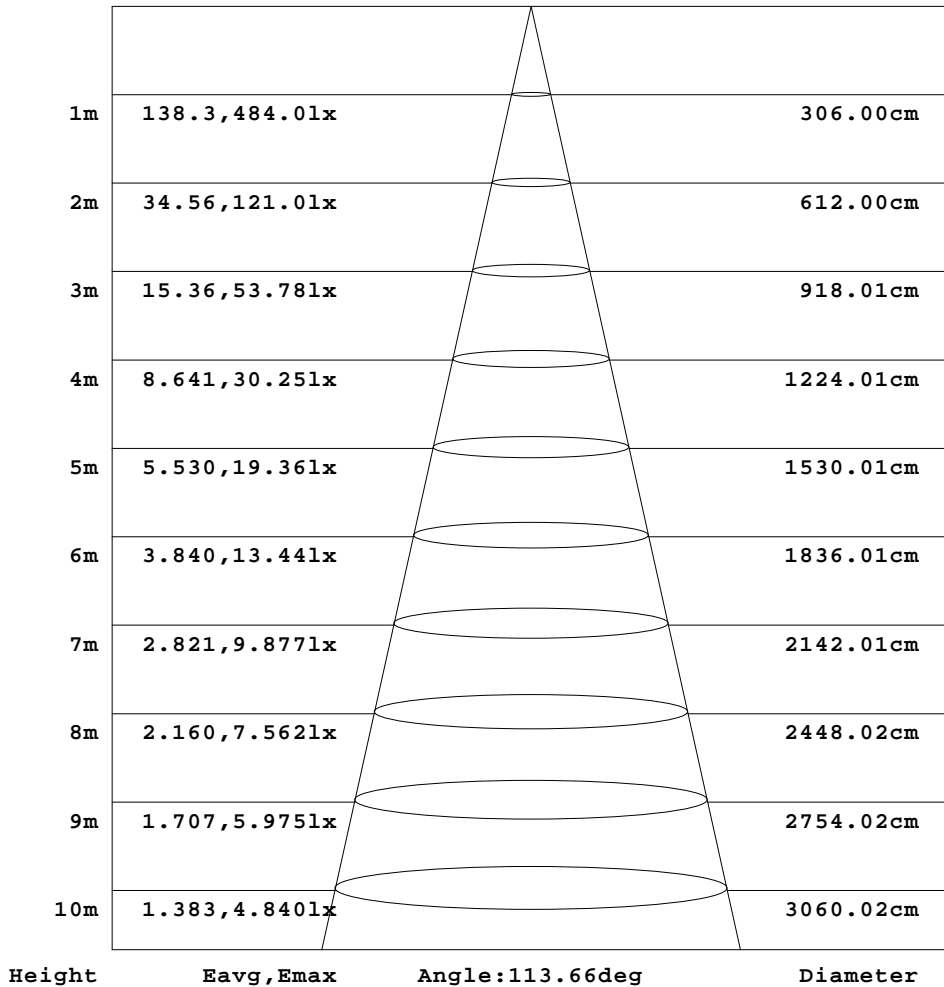
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:21 April 2021

g Range: 0 - 180DEG
 g Interval: 0.5DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402
 Humidity:65.0%
 Test Distance:3.010m [K=1.2292]
 Remarks:

AAI Figure

Test:U:119.87V I:0.2026A P:21.969W PF:0.9048 Freq:59.98Hz Lamp Flux:1630.52x1 lm		
NAME: ASD-UCB-48D24CC-WH-3000K	TYPE:0	WEIGHT:
SPEC.:24W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Flux out:1030 lm



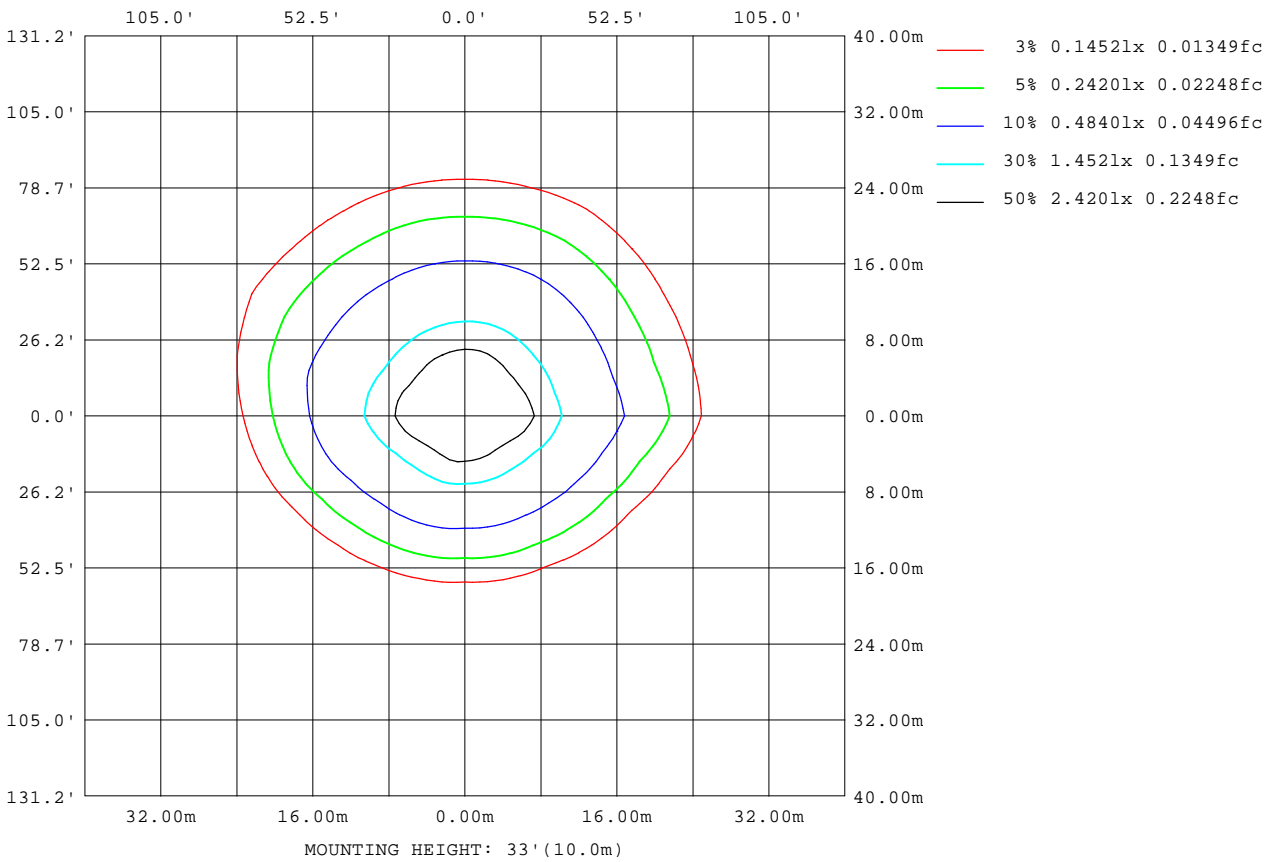
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:21 April 2021

g Range: 0 - 180DEG
 g Interval: 0.5DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402
 Humidity:65.0%
 Test Distance:3.010m [K=1.2292]
 Remarks:

ISOLUX DIAGRAM

Test:U:119.87V I:0.2026A P:21.969W PF:0.9048 Freq:59.98Hz Lamp Flux:1630.52x1 lm		
NAME: ASD-UCB-48D24CC-WH-3000K	TYPE:0	WEIGHT:
SPEC.:24W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:21 April 2021

g Range: 0 - 180DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402
Humidity:65.0%
Test Distance:3.010m [K=1.2292]
Remarks:

LED Avg.L Report

Test:U:119.87V I:0.2026A P:21.969W PF:0.9048 Freq:59.98Hz Lamp Flux:1630.52x1 lm		
NAME: ASD-UCB-48D24CC-WH-3000K	TYPE:0	WEIGHT:
SPEC.:24W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

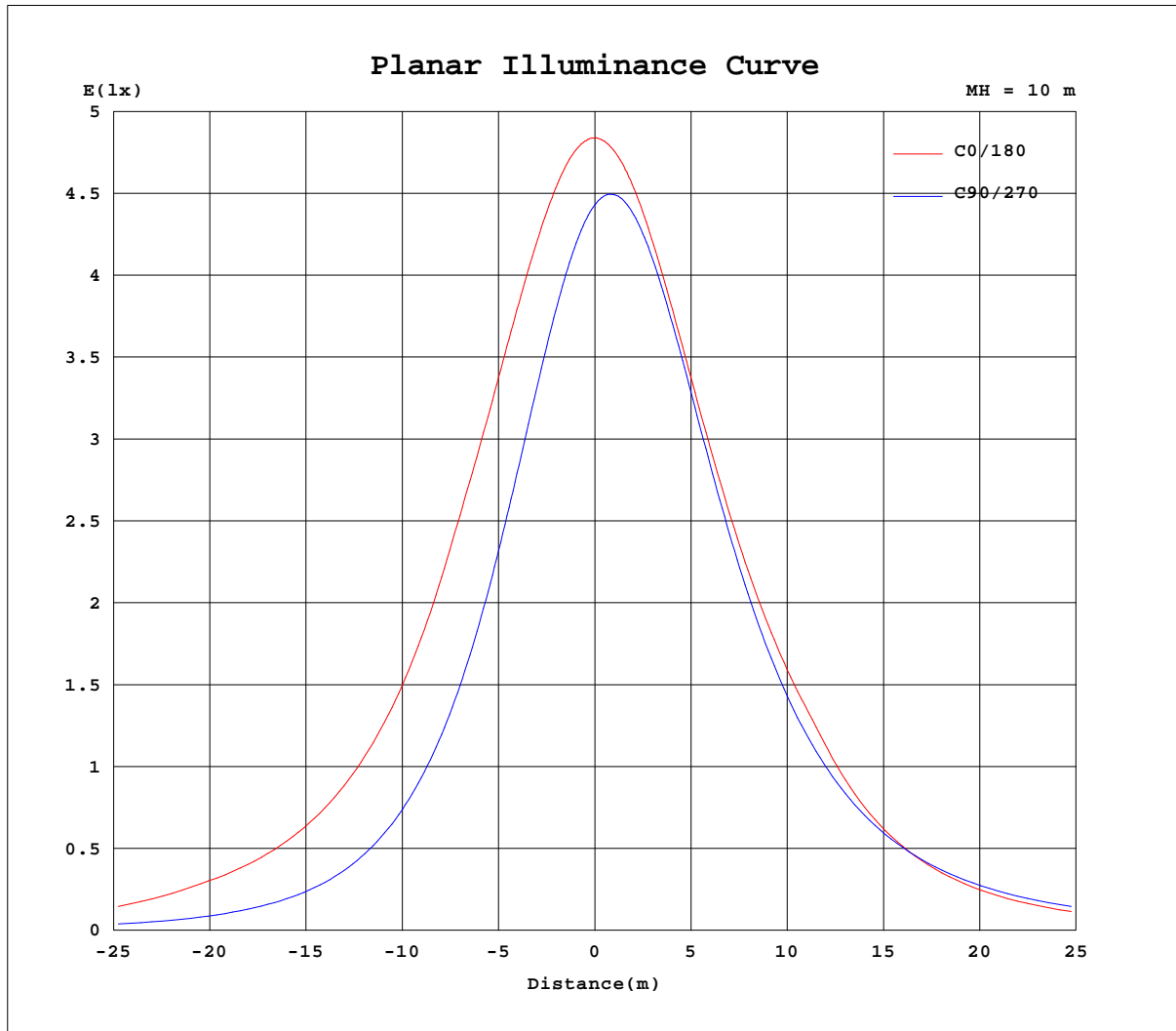
AvgL	cd/m2
L_0~180(65)av	1240
L_0~180(75)av	1059
L_0~180(85)av	599
L_90~270(65)av	907
L_90~270(75)av	1052
L_90~270(85)av	1995
L_45(65)av	1108
L_45(75)av	1254
L_45(85)av	2135

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:21 April 2021

g Range: 0 - 180DEG
 g Interval: 0.5DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402
 Humidity:65.0%
 Test Distance:3.010m [K=1.2292]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3DEG
 Operators:
 Test Date: 21 April 2021

g Range: 0 - 180DEG
 g Interval: 0.5DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402
 Humidity: 65.0%
 Test Distance: 3.010m [K=1.2292]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:119.87V I:0.2026A P:21.969W PF:0.9048 Freq:59.98Hz Lamp Flux:1630.52x1 lm		
NAME: ASD-UCB-48D24CC-WH-3000K	TYPE:0	WEIGHT:
SPEC.:24W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C(DEG) g (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	433	433	433	433	433	433	433	433	433	433	433	433	433	433	433	433	433	433	433
5	433	428	425	422	420	419	418	419	420	423	426	429	432	436	439	441	443	444	444
10	431	423	415	409	404	401	399	402	405	410	417	425	431	437	442	447	450	451	452
15	429	415	404	394	387	381	377	381	388	396	406	419	429	437	444	450	455	455	456
20	427	406	390	377	367	358	353	359	368	379	393	412	426	435	444	452	457	455	455
25	423	396	375	358	344	332	325	333	346	360	378	403	423	432	442	450	455	451	451
30	419	384	358	337	320	305	296	306	322	340	361	393	419	427	438	446	450	444	443
35	413	371	339	315	293	276	266	277	296	317	342	380	415	422	432	440	441	434	430
40	397	354	317	290	264	246	235	247	268	292	321	365	409	414	423	432	428	420	415
45	379	329	293	262	233	216	204	215	239	265	297	348	403	405	413	420	411	403	396
50	360	300	266	233	201	185	174	184	209	236	269	324	386	394	401	406	391	383	374
55	340	270	235	203	169	155	144	153	177	205	239	288	339	379	385	389	368	360	349
60	320	236	198	171	137	126	117	123	144	172	205	246	287	346	366	368	342	334	322
65	292	199	159	137	109	97.9	90.4	94.9	113	139	165	198	232	292	342	337	314	305	293
70	225	159	121	100.0	80.1	71.1	65.7	68.9	82.8	105	121	141	176	234	313	301	284	273	262
75	156	115	82.7	65.3	53.5	47.1	43.4	45.3	53.9	69.5	79.3	87.9	119	176	262	263	250	238	229
80	88.5	60.9	44.3	36.1	30.2	27.1	24.8	25.9	29.8	38.0	42.1	43.2	64.9	118	200	221	213	203	197
85	30.5	20.1	16.5	15.1	13.3	12.2	11.2	11.4	12.6	15.0	14.5	13.2	21.7	67.6	142	177	173	166	163
90	1.20	2.09	3.70	4.31	3.40	3.36	2.55	2.75	2.36	2.47	1.84	1.22	0.82	30.5	91.8	126	133	128	129
95	0.70	1.13	1.52	1.73	1.89	1.94	1.92	1.96	2.12	2.14	2.08	1.60	0.97	9.01	34.8	59.4	48.6	42.2	43.9
100	0.87	1.51	2.35	2.84	3.04	3.11	3.08	3.18	3.42	3.43	3.07	2.07	1.22	5.49	23.9	39.3	34.7	32.5	33.4
105	1.22	1.70	2.66	3.19	3.45	3.74	3.80	3.84	3.88	3.66	3.28	2.26	1.81	4.57	15.3	30.9	31.7	29.9	29.5
110	1.42	1.90	2.81	3.34	3.59	3.96	3.98	4.05	3.99	3.78	3.36	2.40	2.02	3.82	12.4	20.8	24.4	25.8	26.4
115	1.61	1.97	2.86	3.40	3.62	3.98	3.96	4.00	4.01	3.78	3.29	2.38	2.15	3.82	10.6	16.5	17.7	16.7	17.7
120	1.80	2.03	2.84	2.96	3.55	3.77	3.80	3.77	3.78	3.12	3.22	2.38	2.24	3.81	7.95	14.3	16.1	14.7	14.2
125	1.91	2.01	2.66	2.85	2.99	3.48	3.49	3.43	3.15	2.92	2.87	2.28	2.24	3.46	6.55	11.5	15.2	14.8	14.4
130	1.85	1.87	2.41	2.62	2.53	3.12	3.34	3.02	2.56	2.61	2.54	1.94	2.02	3.24	5.77	7.27	12.2	14.2	14.0
135	1.75	1.65	2.21	2.45	2.34	2.61	2.55	2.50	2.31	2.43	2.28	1.69	1.89	3.15	4.33	6.36	8.00	11.4	11.7
140	1.66	1.57	2.10	2.30	2.28	2.21	2.23	2.05	2.17	2.27	2.11	1.55	1.78	2.83	3.67	5.68	6.35	4.70	8.21
145	1.60	1.56	1.94	2.37	2.22	2.30	2.25	2.10	2.20	2.51	1.90	1.58	1.67	2.54	3.25	3.62	5.62	6.58	6.72
150	1.51	1.56	1.86	2.17	2.35	2.49	2.20	2.31	2.24	2.03	1.83	1.50	1.58	2.34	2.85	3.12	3.16	4.01	6.17
155	1.44	1.45	1.74	1.92	2.04	2.31	2.24	2.02	1.87	1.81	1.57	1.31	1.54	2.20	2.87	2.93	2.67	3.23	3.30
160	1.36	1.39	1.61	1.76	1.79	1.81	1.81	1.70	1.63	1.56	1.39	1.22	1.47	1.95	2.49	2.75	2.66	3.20	3.16
165	1.29	1.28	1.56	1.69	1.64	1.49	1.43	1.41	1.49	1.48	1.31	1.10	1.29	1.60	2.14	2.39	2.78	3.11	2.92
170	1.43	1.32	1.59	1.69	1.57	1.47	1.29	1.35	1.45	1.53	1.41	1.25	1.36	1.56	1.87	2.11	2.44	2.77	2.79
175	1.48	1.46	1.55	1.57	1.51	1.46	1.39	1.34	1.52	1.59	1.49	1.46	1.40	1.54	1.70	1.80	1.91	2.07	2.10
180	1.50	1.54	1.68	1.75	1.67	1.73	1.56	1.52	1.75	1.92	1.88	1.75	1.50	1.54	1.68	1.75	1.68	1.74	1.56

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: MEDIUM

Temperature:25.3DEG

Operators:

Test Date:21 April 2021

g Range: 0 - 180DEG

g Interval: 0.5DEG

Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402

Humidity:65.0%

Test Distance:3.010m [K=1.2292]

Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:119.87V I:0.2026A P:21.969W PF:0.9048 Freq:59.98Hz Lamp Flux:1630.52x1 lm		
NAME: ASD-UCB-48D24CC-WH-3000K	TYPE:0	WEIGHT:
SPEC.:24W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C(DEG) g (DEG)	285	300	315	330	345															
0	433	433	433	433	433															
5	443	443	441	438	435															
10	450	450	446	441	436															
15	454	454	449	442	436															
20	454	456	449	441	434															
25	450	454	448	439	431															
30	442	450	444	434	426															
35	431	443	437	428	411															
40	417	433	428	419	392															
45	399	420	417	406	372															
50	378	403	403	383	350															
55	354	381	384	357	326															
60	327	354	355	329	301															
65	297	325	323	299	274															
70	264	293	289	266	242															
75	229	255	252	229	207															
80	195	214	211	189	157															
85	160	173	165	146	91.0															
90	123	132	121	94.9	40.2															
95	40.5	44.9	46.8	40.0	12.4															
100	32.1	34.0	31.9	25.7	6.93															
105	29.6	29.6	26.5	17.4	5.50															
110	25.6	22.1	18.8	13.2	4.89															
115	16.8	16.1	16.0	10.9	4.48															
120	14.7	15.2	14.0	8.15	4.27															
125	14.7	14.5	11.2	6.34	3.79															
130	13.9	12.1	6.87	5.61	3.53															
135	11.0	7.71	6.18	4.21	3.34															
140	4.49	6.24	5.55	3.69	3.02															
145	6.17	5.66	3.56	3.37	2.84															
150	4.02	3.14	3.19	3.05	2.68															
155	3.27	2.88	3.08	3.06	2.52															
160	3.25	2.88	2.95	2.65	2.33															
165	3.05	2.88	2.53	2.40	2.05															
170	2.45	2.31	2.27	2.23	2.04															
175	1.75	1.81	1.97	2.13	1.95															
180	1.53	1.76	1.91	1.87	1.74															

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:21 April 2021

g Range: 0 - 180DEG
 g Interval: 0.5DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402
 Humidity:65.0%
 Test Distance:3.010m [K=1.2292]
 Remarks: