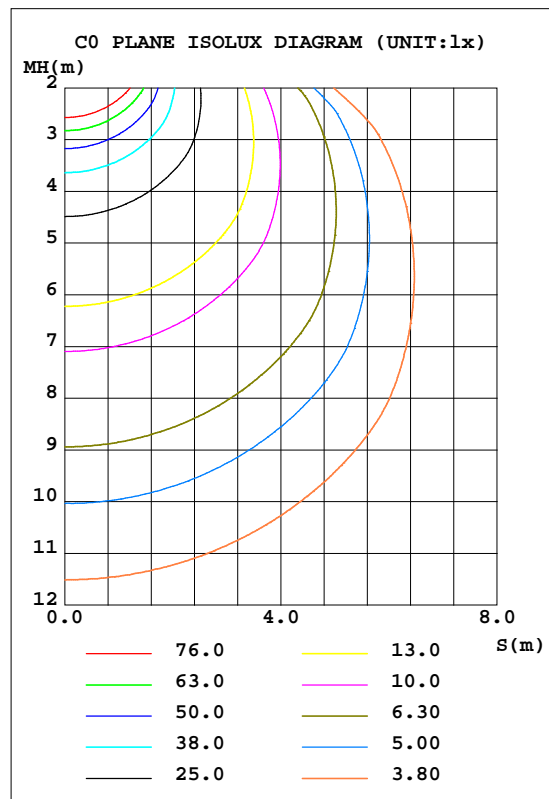
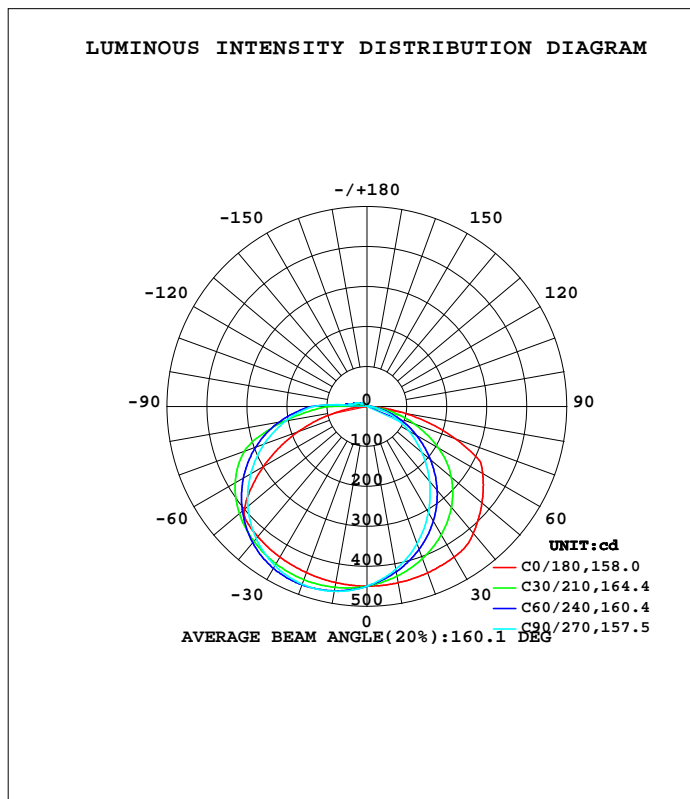


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.92V I:0.2043A P:22.294W PF:0.9099 Freq:59.98Hz Lamp Flux:1695.46x1 lm		
NAME: ASD-UCB-48D24CC-WH-5000K	TYPE:0	WEIGHT:
SPEC.:24W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MOBBD-UCB-48D24CC-WH-5000K		Imax(cd)	474.7	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)	1695.5	h UP, DN(C0-180)	0.5,36.0
NOMINAL FLUX(lm)	1695.46	CIE CLASS	DIRECT	h UP, DN(C180-360)	3.2,60.3
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=1.2193]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	447.8	425.2	413.8	426.0	447.6	464.1	469.4	463.2	0- 10	42.67	42.67	2.52,2.52
20	442.7	391.8	365.6	393.6	442.4	469.1	473.4	467.0	10- 20	124.0	166.7	9.83,9.83
30	435.1	349.8	307.3	352.2	435.4	463.9	460.1	460.9	20- 30	193.9	360.6	21.3,21.3
40	414.1	300.1	243.7	302.4	424.9	448.7	431.4	445.4	30- 40	245.5	606.1	35.7,35.7
50	375.7	241.5	180.0	243.3	400.5	422.8	389.1	419.3	40- 50	272.8	878.9	51.8,51.8
60	334.5	176.7	120.3	177.4	298.0	383.2	335.8	371.0	50- 60	269.7	1149	67.7,67.7
70	234.5	103.1	67.06	107.6	182.0	314.4	273.6	303.0	60- 70	232.6	1381	81.5,81.5
80	92.12	36.72	24.75	38.38	67.03	230.9	205.9	222.1	70- 80	164.6	1546	91.2,91.2
90	1.313	3.488	1.888	2.030	0.8299	131.9	134.1	125.3	80- 90	87.21	1633	96.3,96.3
100	0.9079	2.988	3.232	3.609	1.293	41.50	35.06	33.74	90-100	27.86	1661	98,98
110	1.536	3.474	4.139	3.976	2.144	22.11	27.68	19.73	100-110	13.03	1674	98.7,98.7
120	1.961	3.075	3.996	3.281	2.393	15.04	15.14	14.64	110-120	8.332	1682	99.2,99.2
130	1.999	2.711	3.489	2.733	2.172	7.337	14.91	7.209	120-130	5.885	1688	99.6,99.6
140	1.781	2.385	2.334	2.378	1.894	5.997	8.429	5.806	130-140	3.538	1692	99.8,99.8
150	1.608	2.252	2.301	2.121	1.692	3.289	6.451	3.358	140-150	2.020	1694	99.9,99.9
160	1.462	1.842	1.890	1.646	1.570	2.904	3.313	3.092	150-160	1.123	1695	100,100
170	1.526	1.771	1.347	1.582	1.458	2.218	2.928	2.390	160-170	0.5782	1695	100,100
180	1.600	1.856	1.645	2.034	1.604	1.855	1.642	2.032	170-180	0.1734	1695	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=1.2193]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:119.92V I:0.2043A P:22.294W PF:0.9099 Freq:59.98Hz Lamp Flux:1695.46x1 lm										
NAME: ASD-UCB-48D24CC-WH-5000K					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	12.9	14.5	13.3	14.8	15.1	8.7	10.2	9.0	10.5	10.8
3H	15.2	16.7	15.6	17.0	17.3	9.7	11.2	10.1	11.5	11.8
4H	16.1	17.5	16.5	17.8	18.2	10.1	11.5	10.5	11.8	12.2
6H	16.7	18.0	17.1	18.4	18.7	10.4	11.7	10.7	12.0	12.4
8H	16.9	18.1	17.3	18.5	18.9	10.4	11.7	10.8	12.0	12.4
12H	16.9	18.2	17.4	18.5	18.9	10.4	11.7	10.8	12.0	12.4
4H 2H	13.0	14.4	13.4	14.7	15.0	9.6	11.0	10.0	11.3	11.6
3H	15.4	16.6	15.8	16.9	17.3	10.8	12.0	11.2	12.4	12.7
4H	16.4	17.5	16.8	17.9	18.3	11.2	12.3	11.6	12.7	13.2
6H	17.1	18.1	17.6	18.5	19.0	11.5	12.5	12.0	13.0	13.4
8H	17.3	18.3	17.8	18.7	19.2	11.6	12.6	12.1	13.0	13.5
12H	17.4	18.3	17.9	18.8	19.3	11.7	12.5	12.2	13.0	13.5
8H 4H	16.3	17.3	16.8	17.7	18.2	11.6	12.6	12.1	13.0	13.5
6H	17.1	17.9	17.6	18.4	18.9	12.0	12.8	12.5	13.3	13.8
8H	17.4	18.1	17.9	18.6	19.1	12.2	12.9	12.7	13.4	13.9
12H	17.6	18.2	18.1	18.7	19.3	12.3	12.9	12.8	13.4	14.0
12H 4H	16.3	17.2	16.8	17.6	18.1	11.7	12.5	12.2	13.0	13.5
6H	17.1	17.8	17.6	18.3	18.8	12.1	12.8	12.6	13.3	13.9
8H	17.4	18.0	17.9	18.5	19.1	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				

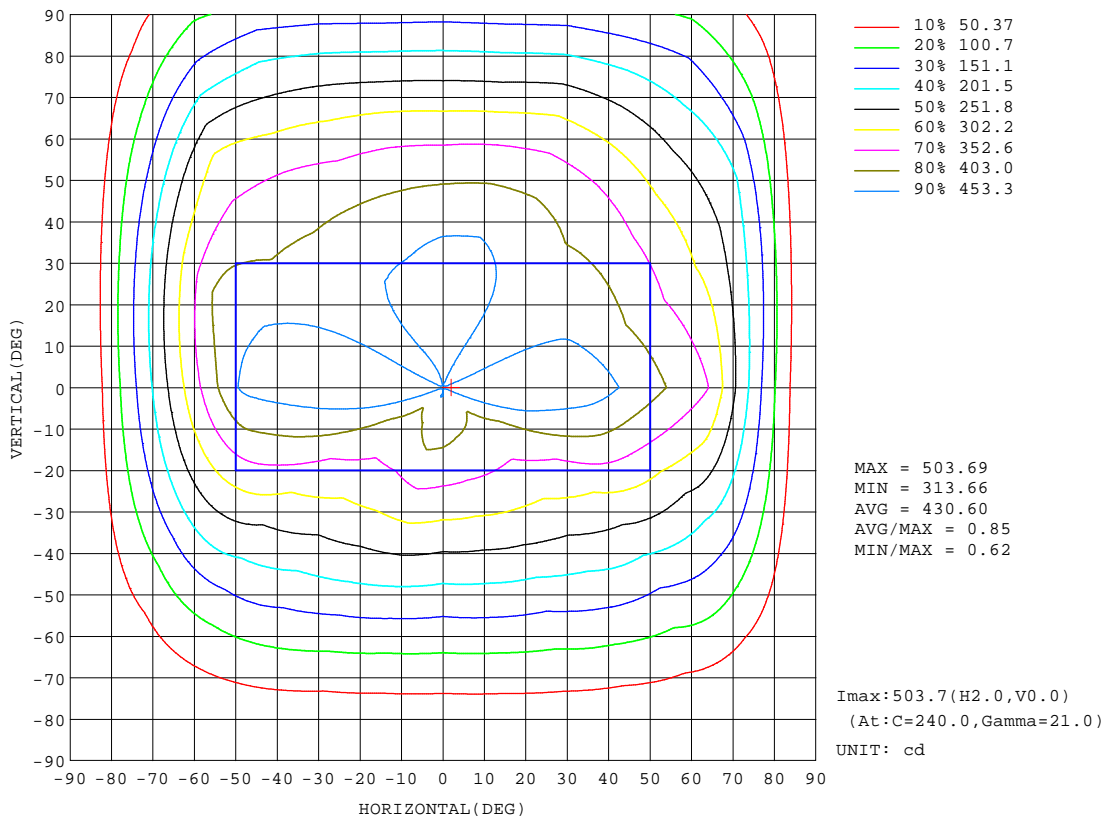
CIE Pub.117, 1695 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 1.8)

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=1.2193]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:119.92V I:0.2043A P:22.294W PF:0.9099 Freq:59.98Hz Lamp Flux:1695.46x1 lm		
NAME: ASD-UCB-48D24CC-WH-5000K	TYPE:0	WEIGHT:
SPEC.:24W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



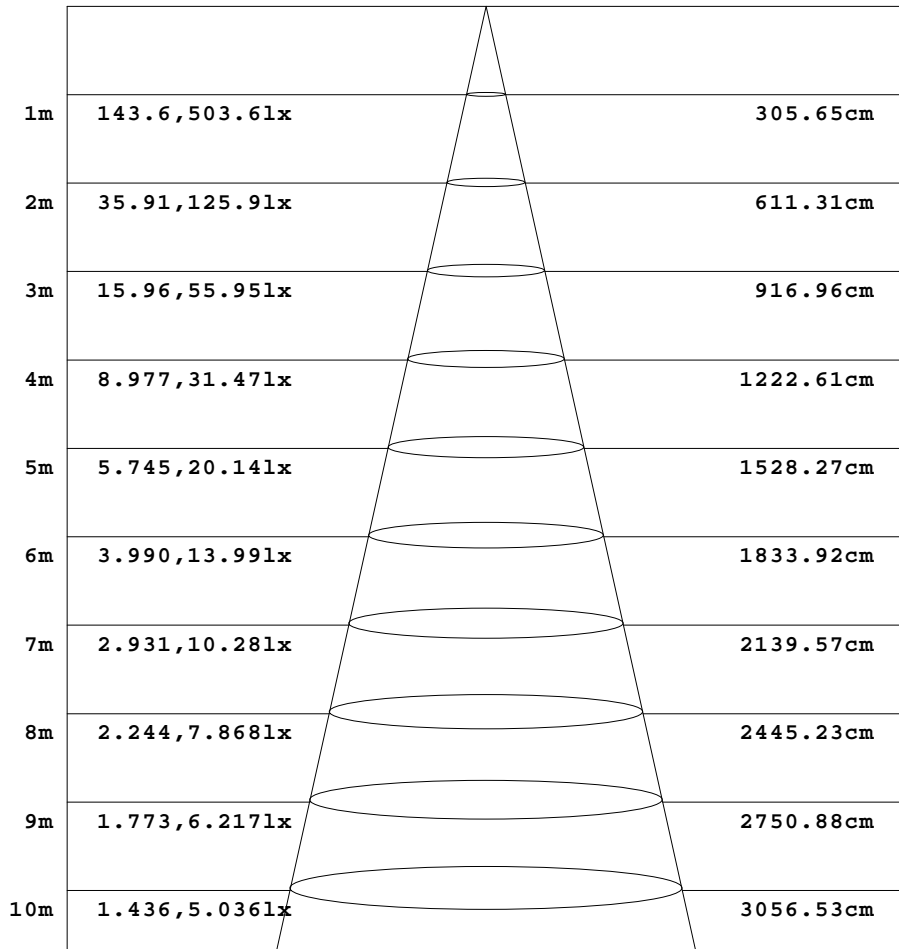
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:21 April 2021

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=1.2193]
 Remarks:

AAI Figure

Test:U:119.92V I:0.2043A P:22.294W PF:0.9099 Freq:59.98Hz Lamp Flux:1695.46x1 lm		
NAME: ASD-UCB-48D24CC-WH-5000K	TYPE:0	WEIGHT:
SPEC.:24W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Flux out:1070 lm



Height Eavg, Emax Angle:113.60deg Diameter

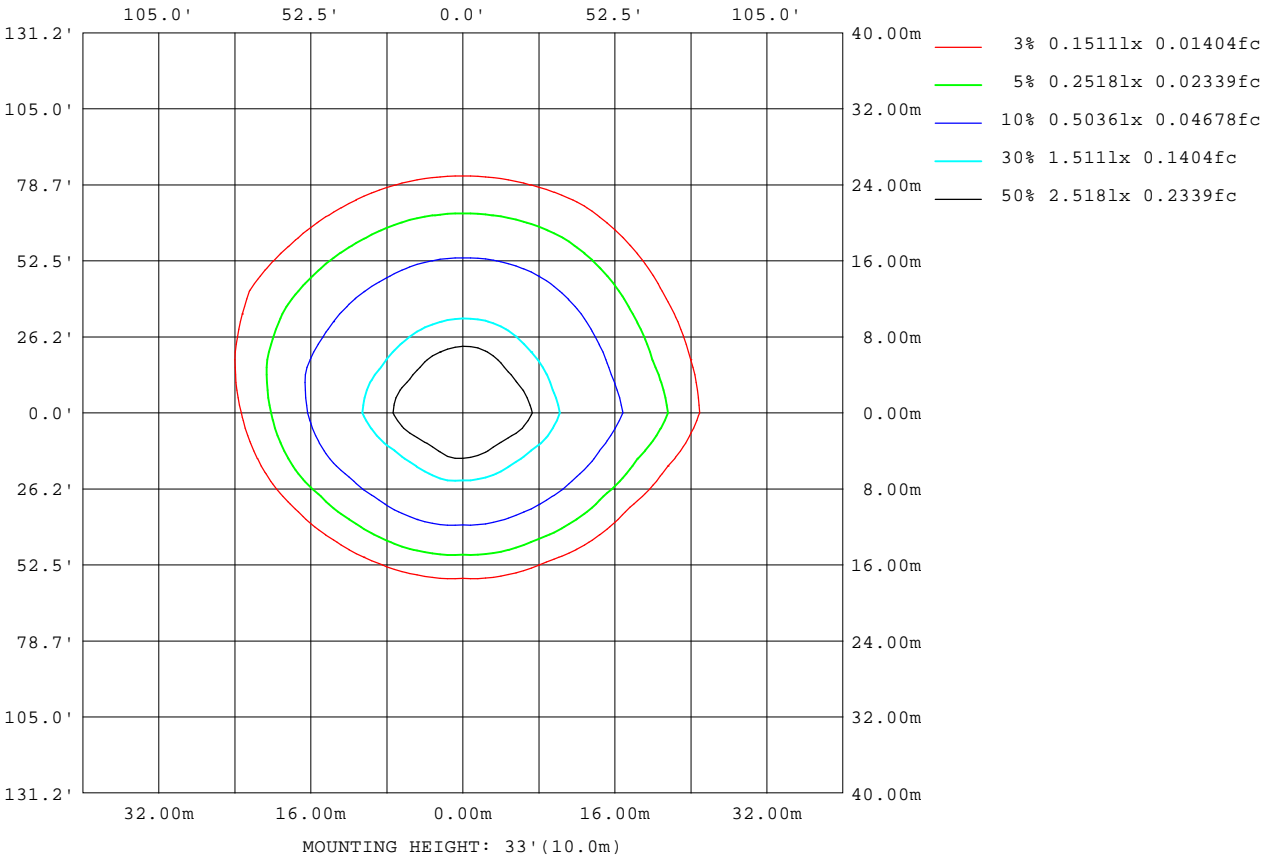
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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=1.2193]
 Remarks:

ISOLUX DIAGRAM

Test:U:119.92V I:0.2043A P:22.294W PF:0.9099 Freq:59.98Hz Lamp Flux:1695.46x1 lm		
NAME: ASD-UCB-48D24CC-WH-5000K	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=1.2193]
 Remarks:

LED Avg.L Report

Test:U:119.92V I:0.2043A P:22.294W PF:0.9099 Freq:59.98Hz Lamp Flux:1695.46x1 lm		
NAME: ASD-UCB-48D24CC-WH-5000K	TYPE:0	WEIGHT:
SPEC.:24W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

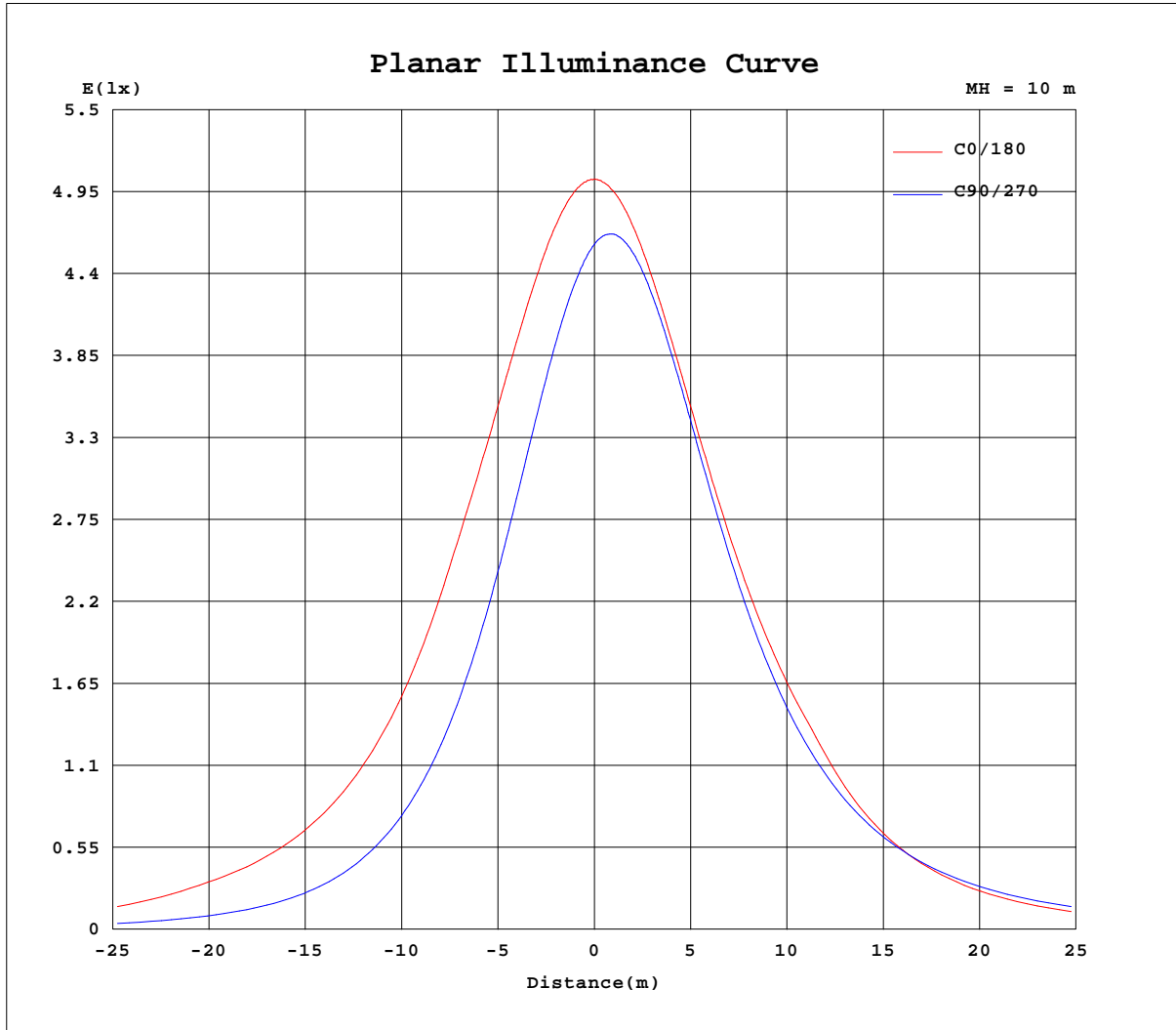
AvgL	cd/m2
L_0~180(65)av	1289
L_0~180(75)av	1101
L_0~180(85)av	623
L_90~270(65)av	942
L_90~270(75)av	1095
L_90~270(85)av	2079
L_45(65)av	1152
L_45(75)av	1306
L_45(85)av	2232

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=1.2193]
 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=1.2193]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:119.92V I:0.2043A P:22.294W PF:0.9099 Freq:59.98Hz Lamp Flux:1695.46x1 lm		
NAME: ASD-UCB-48D24CC-WH-5000K	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	449	449	449	449	449	449	449	449	449	449	449	449	449	449	449	449	449	449	449
5	449	445	441	438	436	434	433	435	436	439	442	446	449	452	455	458	460	461	461
10	448	439	431	425	420	416	414	417	421	426	433	441	448	454	459	464	468	468	469
15	446	431	419	410	402	395	391	396	403	411	421	435	445	454	461	468	473	472	473
20	443	422	405	392	381	371	366	372	382	394	408	427	442	452	461	469	475	473	473
25	439	411	389	372	358	345	337	346	359	374	392	418	439	448	459	468	473	469	468
30	435	399	371	350	332	316	307	317	334	352	374	408	435	444	455	464	468	462	460
35	429	384	351	326	304	286	276	287	307	328	355	394	430	438	448	458	458	451	448
40	414	368	329	300	273	255	244	255	278	302	332	379	425	430	440	449	445	437	431
45	395	343	304	272	241	223	212	223	247	274	307	361	418	421	430	437	427	419	412
50	376	313	276	241	208	192	180	190	216	243	279	337	400	409	417	423	407	398	389
55	355	281	244	210	175	160	149	158	183	211	247	299	352	394	401	405	383	375	364
60	334	246	205	177	142	130	120	127	149	177	212	256	298	360	381	383	357	348	336
65	304	208	165	141	112	100	92.8	97.5	117	143	170	206	241	303	356	351	328	318	305
70	234	166	125	103	81.9	72.6	67.1	70.4	84.6	108	125	146	182	244	326	314	296	285	274
75	162	119	85.3	66.9	54.4	47.7	44.0	46.0	54.7	70.9	81.4	90.9	123	183	273	274	261	248	239
80	92.1	62.8	45.5	36.7	30.3	27.2	24.7	25.8	29.8	38.4	42.8	44.5	67.0	123	208	231	223	212	206
85	31.9	20.9	16.7	15.1	13.0	11.9	11.0	11.2	12.4	14.9	14.4	13.4	22.3	70.6	148	186	181	174	170
90	1.31	2.09	3.23	3.49	2.46	2.34	1.89	1.99	1.98	2.03	1.74	1.20	0.83	31.8	95.9	132	138	136	134
95	0.73	1.18	1.60	1.82	1.97	2.02	2.00	2.05	2.22	2.24	2.19	1.68	1.02	9.44	36.3	62.3	50.7	44.3	45.7
100	0.91	1.57	2.46	2.99	3.16	3.25	3.23	3.35	3.60	3.61	3.24	2.17	1.29	5.78	25.2	41.5	36.4	34.2	35.1
105	1.28	1.77	2.76	3.33	3.60	3.89	3.95	4.03	4.09	3.85	3.45	2.38	1.91	4.78	16.2	32.6	33.2	31.6	31.0
110	1.54	1.98	2.91	3.47	3.74	4.12	4.14	4.20	4.20	3.98	3.54	2.53	2.14	4.04	13.2	22.1	25.6	27.2	27.7
115	1.76	2.05	2.97	3.53	3.79	4.15	4.16	4.17	4.18	3.98	3.47	2.50	2.29	4.04	11.1	17.5	18.7	17.6	18.6
120	1.96	2.11	2.96	3.08	3.68	3.95	4.00	3.99	3.95	3.28	3.38	2.50	2.39	4.02	8.35	15.0	17.2	15.5	15.1
125	2.06	2.11	2.77	2.97	3.12	3.64	3.66	3.66	3.31	3.07	3.01	2.40	2.41	3.66	6.88	12.1	16.1	15.6	15.3
130	2.00	1.95	2.50	2.71	2.63	3.26	3.49	3.18	2.69	2.73	2.65	2.03	2.17	3.41	6.04	7.34	12.8	14.9	14.9
135	1.88	1.73	2.30	2.54	2.43	2.71	2.67	2.63	2.42	2.54	2.39	1.77	2.02	3.31	4.53	6.74	8.42	12.0	12.3
140	1.78	1.65	2.18	2.39	2.36	2.30	2.33	2.13	2.26	2.38	2.20	1.62	1.89	2.97	3.84	6.00	6.71	4.94	8.43
145	1.71	1.63	2.02	2.47	2.30	2.39	2.35	2.18	2.30	2.63	1.98	1.66	1.79	2.66	3.41	3.81	5.90	6.88	7.04
150	1.61	1.63	1.95	2.25	2.46	2.59	2.30	2.42	2.35	2.12	1.91	1.57	1.69	2.47	3.01	3.29	3.32	4.14	6.45
155	1.55	1.50	1.83	2.00	2.11	2.39	2.34	2.12	1.96	1.89	1.65	1.37	1.66	2.33	3.03	3.08	2.81	3.39	3.47
160	1.46	1.44	1.69	1.84	1.86	1.89	1.89	1.77	1.71	1.65	1.45	1.27	1.57	2.05	2.62	2.90	2.81	3.36	3.31
165	1.37	1.33	1.62	1.77	1.71	1.55	1.49	1.46	1.54	1.55	1.37	1.15	1.38	1.68	2.26	2.52	2.93	3.27	3.10
170	1.53	1.41	1.67	1.77	1.64	1.53	1.35	1.40	1.51	1.58	1.47	1.33	1.46	1.66	1.95	2.22	2.56	2.90	2.93
175	1.59	1.55	1.65	1.64	1.57	1.52	1.45	1.39	1.59	1.67	1.59	1.56	1.49	1.63	1.79	1.89	2.00	2.16	2.17
180	1.60	1.65	1.79	1.86	1.77	1.85	1.65	1.61	1.86	2.03	1.99	1.87	1.60	1.64	1.78	1.85	1.77	1.85	1.64

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=1.2193]

Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:119.92V I:0.2043A P:22.294W PF:0.9099 Freq:59.98Hz Lamp Flux:1695.46x1 lm		
NAME: ASD-UCB-48D24CC-WH-5000K	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	449	449	449	449	449														
5	461	459	457	455	452														
10	468	467	463	458	453														
15	472	471	466	459	453														
20	472	473	467	458	451														
25	468	472	465	456	448														
30	460	468	461	451	443														
35	449	461	455	445	428														
40	434	451	445	436	409														
45	416	438	434	424	388														
50	394	420	419	400	365														
55	369	397	401	373	341														
60	341	369	371	344	315														
65	310	339	338	313	287														
70	276	305	303	279	254														
75	240	266	264	241	218														
80	204	224	222	199	165														
85	167	181	174	154	95.4														
90	131	138	125	99.7	42.1														
95	42.2	46.8	49.2	42.2	13.0														
100	33.6	35.4	33.7	27.1	7.27														
105	31.0	31.1	27.9	18.3	5.73														
110	26.8	23.1	19.7	13.9	5.12														
115	17.7	16.9	16.8	11.5	4.71														
120	15.6	16.0	14.6	8.56	4.49														
125	15.6	15.3	11.8	6.67	3.98														
130	14.5	12.7	7.21	5.91	3.70														
135	11.5	8.07	6.46	4.43	3.52														
140	4.70	6.54	5.81	3.89	3.19														
145	6.47	5.93	3.73	3.55	2.98														
150	4.13	3.29	3.36	3.22	2.81														
155	3.44	3.03	3.23	3.22	2.65														
160	3.41	3.01	3.09	2.79	2.45														
165	3.21	3.01	2.66	2.52	2.15														
170	2.58	2.43	2.39	2.33	2.15														
175	1.84	1.89	2.07	2.23	2.07														
180	1.61	1.87	2.03	1.99	1.86														

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=1.2193]
 Remarks: