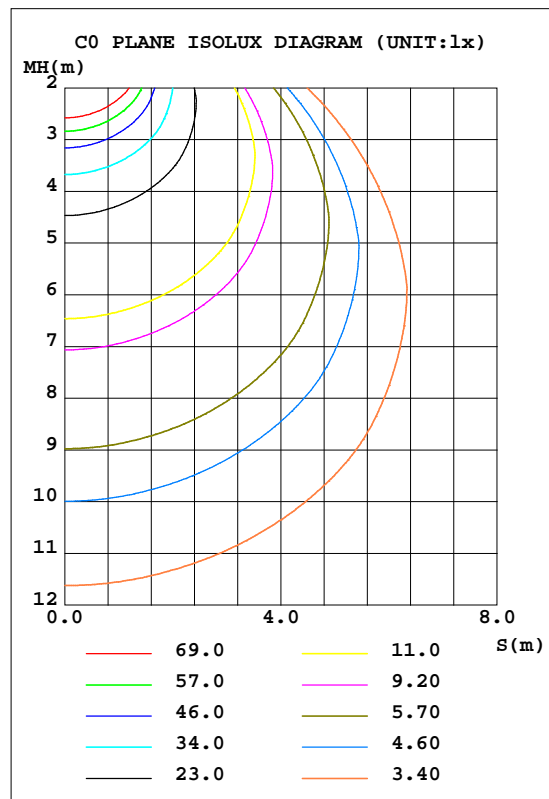
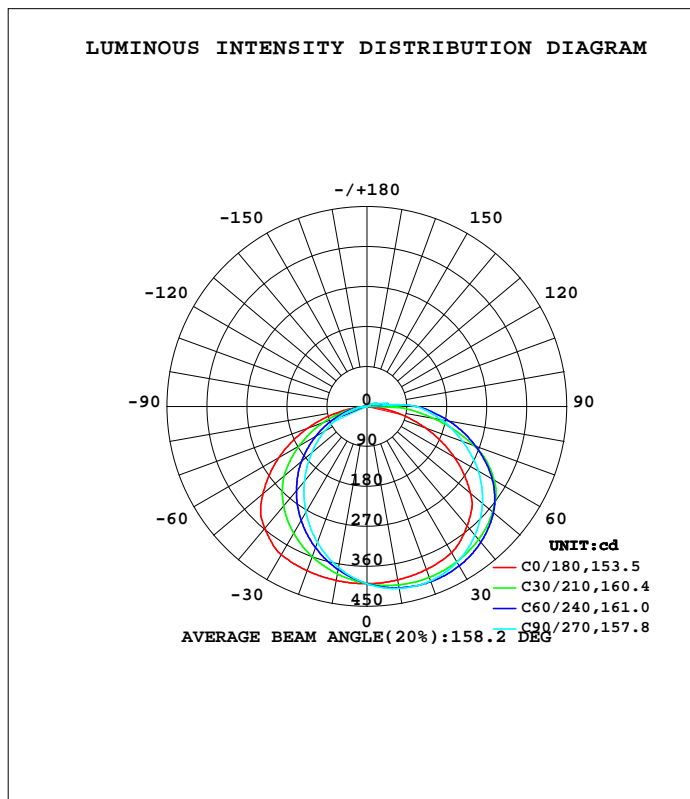


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.90V I:0.1718A P:18.767W PF:0.9112 Freq:59.98Hz Lamp Flux:1454.07x1 lm		
NAME: ASD-UCB-40D20CC-WH-3000K	TYPE:0	WEIGHT:
SPEC.:20W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MOBESD-UCB-40D20CC-WH-3000K		Imax(cd)	421.0	S/MH(C0/180)	1.44
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	1.05
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1454.1	h UP, DN(C0-180)	3.0,60.9
NOMINAL FLUX(lm)	1454.07	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.4,35.7
LAMPS INSIDE	1	h up(%)	3.4	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	h down(%)	96.6	CIBSE SHR MAX	1.55



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:23 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=1.1628]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	396.1	411.7	415.9	412.3	397.8	377.2	368.4	376.4	0- 10	37.86	37.86	2.6,2.6
20	390.6	415.6	417.9	417.1	393.4	347.6	326.2	346.3	10- 20	110.0	147.9	10.2,10.2
30	380.2	411.1	405.3	412.9	385.6	310.8	275.0	308.3	20- 30	171.9	319.8	22,22
40	351.0	397.3	378.2	399.3	358.2	265.4	219.0	262.4	30- 40	217.0	536.8	36.9,36.9
50	304.5	374.0	339.3	375.5	306.1	212.8	162.7	209.5	40- 50	239.2	776.0	53.4,53.4
60	226.4	338.7	289.1	340.0	228.3	154.0	109.3	146.2	50- 60	232.6	1009	69.4,69.4
70	138.8	283.0	229.0	287.3	141.3	90.22	61.81	85.15	60- 70	195.2	1204	82.8,82.8
80	51.89	188.3	169.5	198.0	52.76	33.13	23.94	31.60	70- 80	133.2	1337	91.9,91.9
90	0.8277	103.1	110.1	112.2	0.7340	1.586	3.069	3.149	80- 90	68.24	1405	96.6,96.6
100	0.8615	28.78	44.14	32.94	1.036	1.821	1.874	1.812	90-100	23.59	1429	98.3,98.3
110	1.246	15.22	20.29	17.46	1.556	2.127	2.232	2.088	100-110	10.02	1439	98.9,98.9
120	1.400	8.020	12.41	8.759	1.779	2.131	2.181	1.989	110-120	6.050	1445	99.4,99.4
130	1.384	5.515	7.502	6.389	1.722	2.054	1.941	1.921	120-130	3.689	1448	99.6,99.6
140	1.397	3.917	6.119	4.154	1.596	1.899	1.827	1.832	130-140	2.492	1451	99.8,99.8
150	1.319	2.420	5.239	2.391	1.432	1.690	1.712	1.675	140-150	1.640	1453	99.9,99.9
160	1.186	1.856	2.612	2.057	1.245	1.357	1.370	1.320	150-160	0.8716	1454	100,100
170	1.222	1.772	2.299	1.952	1.204	1.175	1.035	1.176	160-170	0.4387	1454	100,100
180	1.282	1.466	1.245	1.426	1.287	1.457	1.249	1.428	170-180	0.1329	1454	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:23 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=1.1628]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:119.90V I:0.1718A P:18.767W PF:0.9112 Freq:59.98Hz Lamp Flux:1454.07x1 lm										
NAME: ASD-UCB-40D20CC-WH-3000K					TYPE:0			WEIGHT:		
SPEC.:20W					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	14.2	15.8	14.5	16.0	16.3	14.2	15.8	14.5	16.0	16.3
3H	15.9	17.4	16.3	17.7	18.0	16.5	17.9	16.8	18.2	18.5
4H	16.6	17.9	16.9	18.3	18.6	17.7	19.0	18.0	19.3	19.7
6H	17.0	18.3	17.4	18.6	19.0	18.9	20.2	19.3	20.5	20.9
8H	17.1	18.3	17.5	18.7	19.0	19.5	20.8	19.9	21.2	21.5
12H	17.1	18.3	17.5	18.7	19.1	20.3	21.5	20.7	21.9	22.2
4H 2H	15.2	16.5	15.5	16.9	17.2	15.1	16.5	15.5	16.8	17.2
3H	17.2	18.4	17.6	18.8	19.2	17.6	18.8	18.0	19.2	19.6
4H	18.1	19.2	18.5	19.6	20.0	18.9	20.1	19.4	20.4	20.9
6H	18.7	19.7	19.1	20.1	20.5	20.3	21.3	20.8	21.8	22.2
8H	18.9	19.8	19.3	20.2	20.7	21.1	22.0	21.6	22.5	22.9
12H	18.9	19.8	19.4	20.3	20.7	21.9	22.8	22.4	23.2	23.7
8H 4H	18.8	19.7	19.3	20.2	20.6	19.5	20.4	20.0	20.9	21.3
6H	19.8	20.5	20.3	21.0	21.5	21.2	22.0	21.7	22.4	22.9
8H	20.1	20.8	20.6	21.3	21.8	22.1	22.8	22.6	23.3	23.8
12H	20.4	21.0	20.9	21.5	22.0	23.2	23.8	23.7	24.3	24.8
12H 4H	19.0	19.8	19.4	20.3	20.7	19.6	20.4	20.1	20.9	21.4
6H	20.1	20.8	20.6	21.3	21.8	21.4	22.1	21.9	22.6	23.1
8H	20.6	21.2	21.1	21.7	22.3	22.4	23.0	22.9	23.5	24.1
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 / - 0.3				
2.0H	+ 0.3 / - 0.5					+ 0.2 / - 0.4				

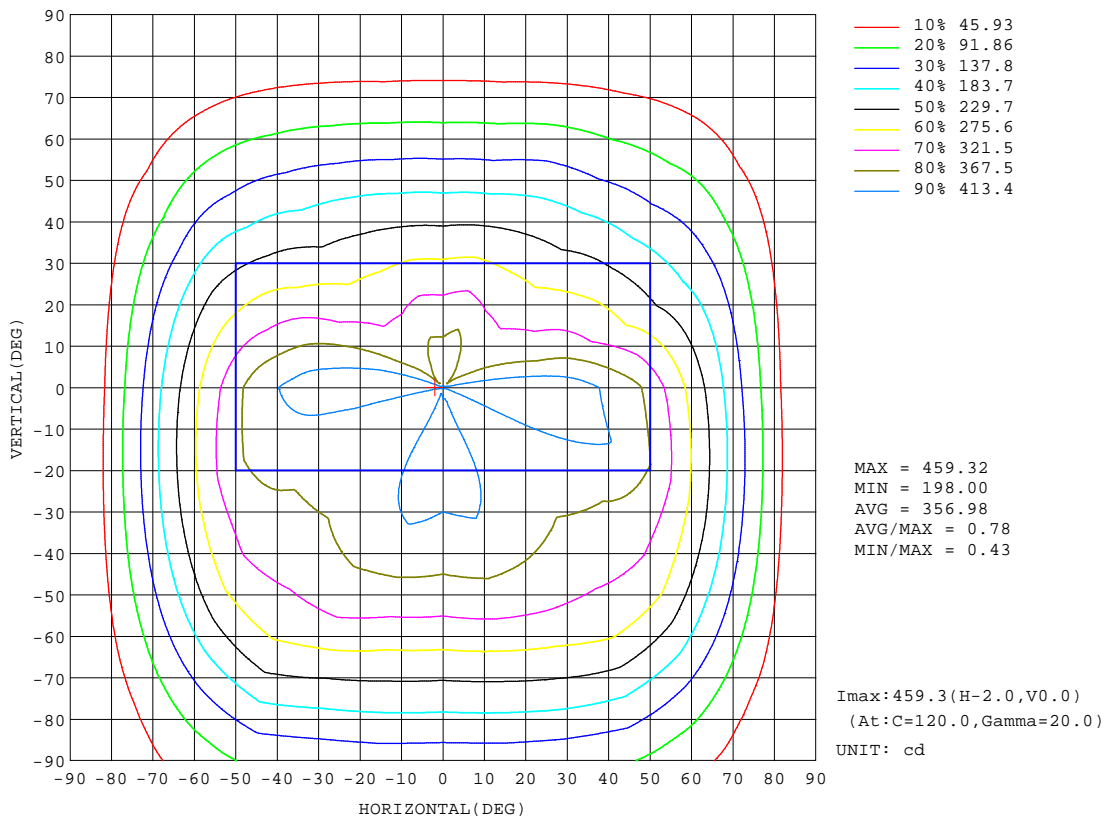
CIE Pub.117, 1454 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 1.3)

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:23 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=1.1628]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:119.90V I:0.1718A P:18.767W PF:0.9112 Freq:59.98Hz Lamp Flux:1454.07x1 lm		
NAME: ASD-UCB-40D20CC-WH-3000K	TYPE:0	WEIGHT:
SPEC.:20W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



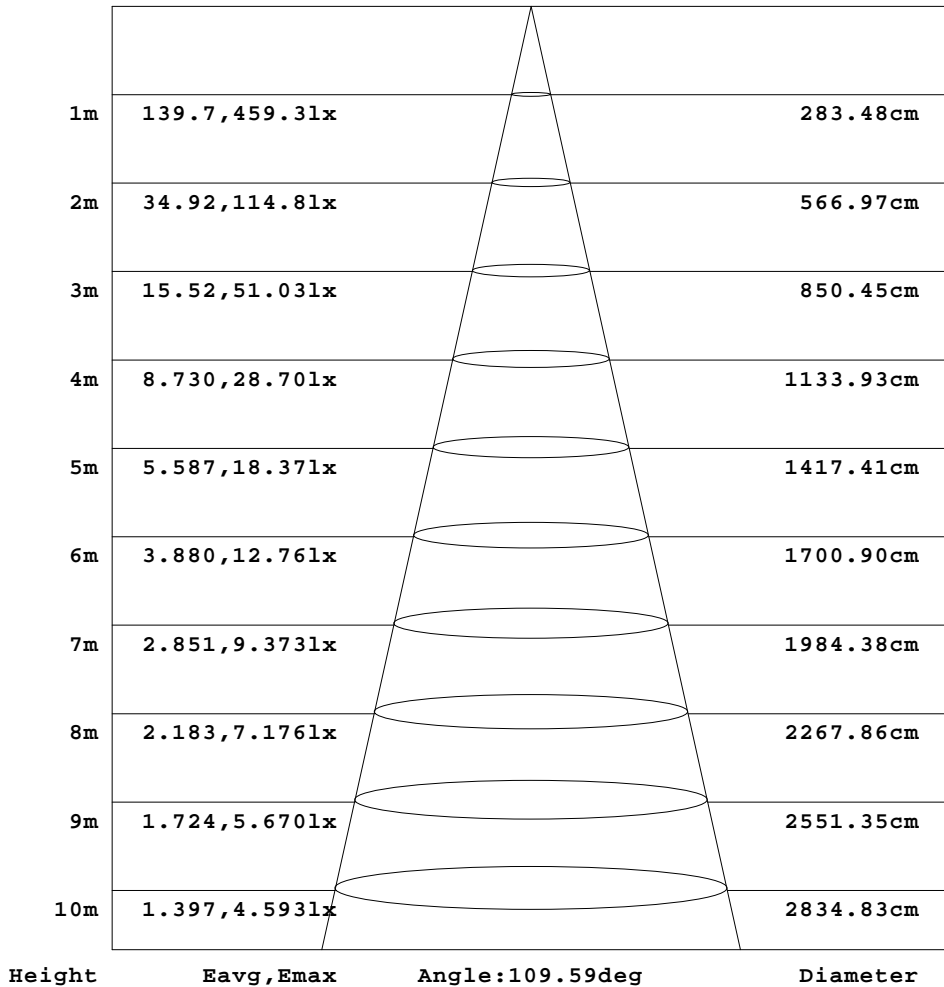
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:23 April 2021

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=1.1628]
 Remarks:

AAI Figure

Test:U:119.90V I:0.1718A P:18.767W PF:0.9112 Freq:59.98Hz Lamp Flux:1454.07x1 lm		
NAME: ASD-UCB-40D20CC-WH-3000K	TYPE:0	WEIGHT:
SPEC.:20W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Flux out:895.0 lm



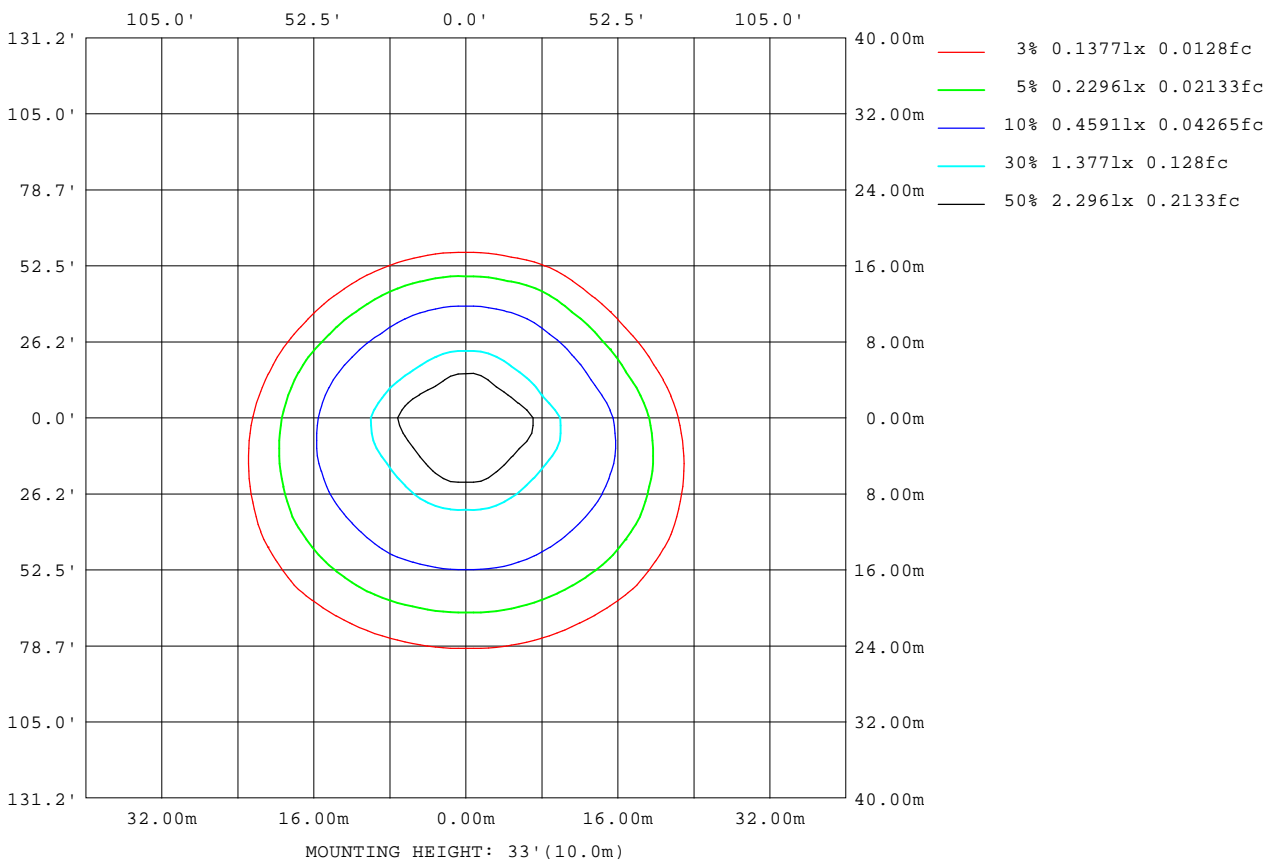
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:23 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=1.1628]
 Remarks:

ISOLUX DIAGRAM

Test:U:119.90V I:0.1718A P:18.767W PF:0.9112 Freq:59.98Hz Lamp Flux:1454.07x1 lm		
NAME: ASD-UCB-40D20CC-WH-3000K	TYPE:0	WEIGHT:
SPEC.:20W	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:23 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=1.1628]
Remarks:

LED Avg.L Report

Test:U:119.90V I:0.1718A P:18.767W PF:0.9112 Freq:59.98Hz Lamp Flux:1454.07x1 lm		
NAME: ASD-UCB-40D20CC-WH-3000K	TYPE:0	WEIGHT:
SPEC.:20W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

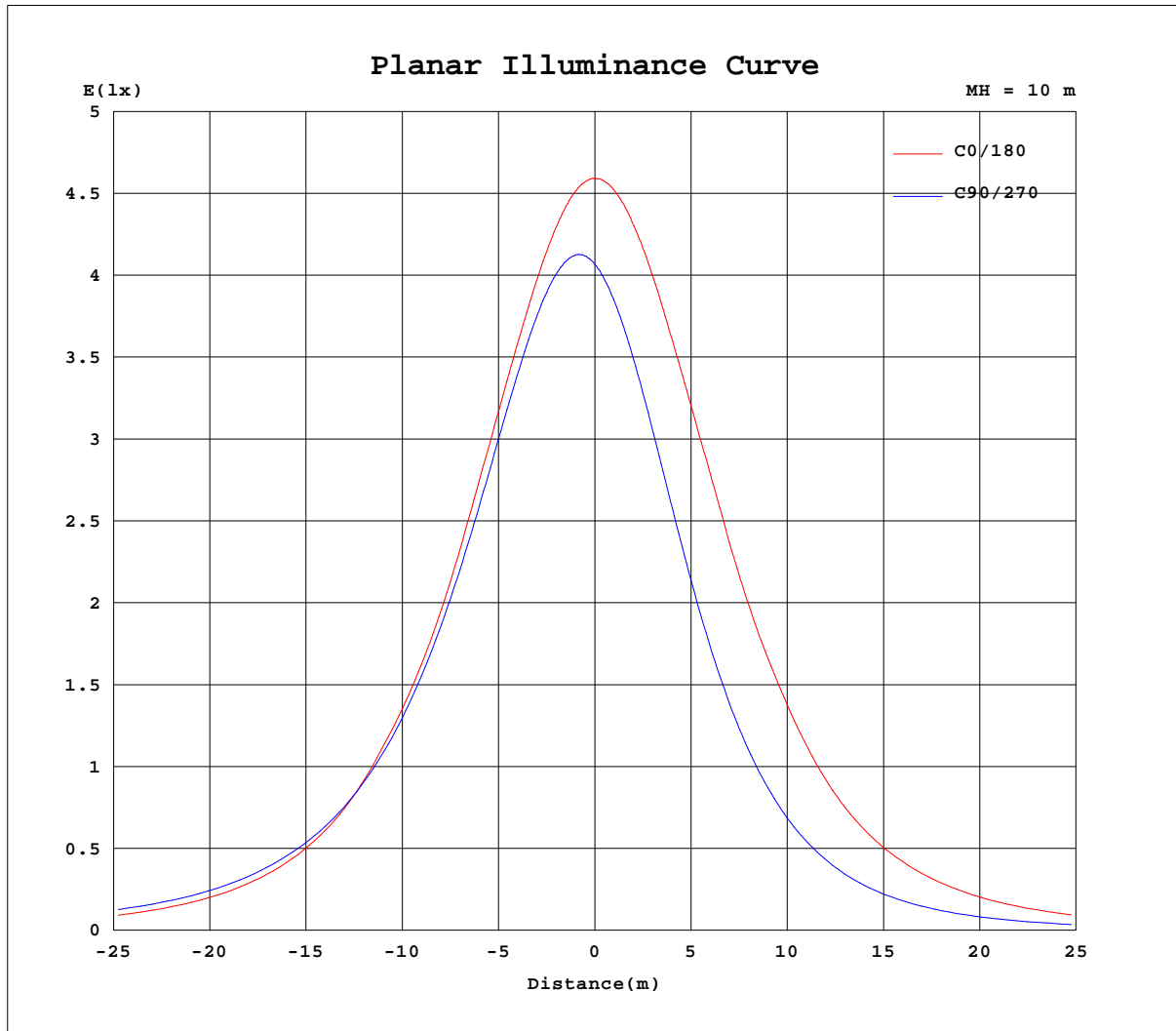
AvgL	cd/m2
L_0~180(65)av	873
L_0~180(75)av	736
L_0~180(85)av	396
L_90~270(65)av	814
L_90~270(75)av	930
L_90~270(85)av	1716
L_45(65)av	1029
L_45(75)av	1152
L_45(85)av	1837

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:23 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=1.1628]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3DEG
 Operators:
 Test Date: 23 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=1.1628]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:119.90V I:0.1718A P:18.767W PF:0.9112 Freq:59.98Hz Lamp Flux:1454.07x1 lm		
NAME: ASD-UCB-40D20CC-WH-3000K	TYPE:0	WEIGHT:
SPEC.:20W	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	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399
5	398	402	404	406	408	409	409	408	408	407	405	402	399	395	392	389	387	385	385
10	396	403	408	412	414	416	416	415	415	412	409	404	398	389	383	377	373	369	368
15	394	404	410	415	419	420	419	418	419	416	411	406	396	383	372	363	357	350	349
20	391	403	409	416	420	420	418	417	421	417	411	407	393	375	360	348	339	328	326
25	387	401	408	414	419	416	413	412	420	416	411	406	390	365	346	330	319	304	301
30	380	397	404	411	415	409	405	404	416	413	407	405	386	354	330	311	296	278	275
35	368	393	398	405	408	399	393	392	409	407	401	403	374	339	312	289	273	251	247
40	351	386	391	397	399	385	378	377	400	399	394	400	358	317	292	265	247	223	219
45	333	374	382	387	387	368	360	358	388	389	385	393	339	292	270	240	221	196	191
50	305	353	370	374	372	347	339	337	373	375	373	371	306	265	243	213	193	168	163
55	267	321	354	358	351	324	316	313	354	359	358	341	269	237	211	184	163	140	136
60	226	280	330	339	326	297	289	287	329	340	339	299	228	202	175	154	133	113	109
65	183	236	299	316	295	266	259	257	296	317	303	253	186	157	140	122	104	87.6	84.6
70	139	190	255	283	260	234	229	228	258	287	259	204	141	112	104	90.2	76.3	63.6	61.8
75	94.6	142	203	235	224	203	199	197	220	245	208	153	96.0	70.2	66.9	59.8	51.0	42.1	41.2
80	51.9	94.1	150	188	187	172	170	168	183	198	156	102	52.8	34.2	34.4	33.1	28.8	23.8	23.9
85	16.9	49.4	103	143	148	141	139	138	146	152	110	56.2	17.7	9.93	11.5	12.6	11.9	10.5	10.6
90	0.83	18.2	63.2	103	112	111	110	110	113	112	71.1	25.1	0.73	0.77	1.18	1.59	2.11	1.99	3.07
95	0.67	4.50	26.7	44.9	44.0	46.2	47.2	46.6	43.0	51.5	31.1	7.86	0.76	0.94	1.23	1.52	1.65	1.61	1.58
100	0.86	2.69	14.6	28.8	35.5	38.8	44.1	40.9	36.0	32.9	19.4	5.04	1.04	1.22	1.53	1.82	1.97	1.89	1.87
105	1.06	2.70	10.7	21.4	25.4	23.7	24.2	23.4	25.9	25.1	14.0	4.22	1.30	1.35	1.76	2.02	2.16	2.11	2.13
110	1.25	2.82	7.45	15.2	20.1	20.8	20.3	19.5	19.8	17.5	10.20	4.12	1.56	1.47	1.88	2.13	2.28	2.22	2.23
115	1.35	2.95	5.98	10.41	14.4	16.8	16.6	15.8	14.1	11.8	7.98	4.01	1.67	1.54	1.93	2.19	2.31	2.23	2.22
120	1.40	3.04	5.47	8.02	10.36	12.3	12.4	11.4	9.97	8.76	6.84	3.93	1.78	1.57	1.98	2.13	2.28	2.20	2.18
125	1.39	2.94	4.68	6.90	8.15	9.02	9.05	8.17	7.68	7.29	6.24	3.73	1.80	1.53	1.90	2.11	2.10	2.07	2.11
130	1.38	2.66	4.06	5.51	7.15	7.40	7.50	6.75	6.69	6.39	4.89	3.39	1.72	1.44	1.82	2.05	2.09	2.02	1.94
135	1.40	2.52	3.19	4.56	6.45	6.48	6.74	6.00	6.02	5.15	3.98	3.10	1.68	1.36	1.72	2.02	2.02	1.90	1.91
140	1.40	2.27	2.80	3.92	5.75	5.90	6.12	5.49	5.51	4.15	3.41	2.76	1.60	1.32	1.65	1.90	1.98	1.82	1.83
145	1.38	2.01	2.45	2.69	4.46	5.38	6.14	5.12	4.36	2.79	2.93	2.47	1.52	1.28	1.51	1.79	1.90	1.79	1.81
150	1.32	1.86	2.13	2.42	2.69	4.52	5.24	4.63	2.46	2.39	2.50	2.24	1.43	1.24	1.41	1.69	1.72	1.63	1.71
155	1.26	1.81	2.08	2.22	2.53	2.44	2.99	2.44	2.28	2.27	2.28	2.10	1.34	1.21	1.38	1.48	1.61	1.53	1.58
160	1.19	1.69	1.92	1.86	2.17	2.50	2.61	2.19	2.29	2.06	2.16	1.97	1.24	1.15	1.31	1.36	1.37	1.34	1.37
165	1.12	1.50	1.75	1.83	1.88	2.25	1.89	2.04	2.13	2.05	1.90	1.78	1.15	1.04	1.22	1.28	1.27	1.10	1.10
170	1.22	1.57	1.76	1.77	1.74	1.76	2.30	2.00	1.97	1.95	1.92	1.61	1.20	1.05	1.19	1.18	1.17	1.01	1.03
175	1.26	1.49	1.66	1.72	1.46	1.41	1.96	1.53	1.84	1.72	1.56	1.46	1.21	1.13	1.14	1.19	1.10	0.93	1.01
180	1.28	1.35	1.40	1.47	1.37	1.11	1.24	1.22	1.30	1.43	1.39	1.36	1.29	1.34	1.40	1.46	1.37	1.11	1.25

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: MEDIUM

Temperature:25.3DEG

Operators:

Test Date:23 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=1.1628]

Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:119.90V I:0.1718A P:18.767W PF:0.9112 Freq:59.98Hz Lamp Flux:1454.07x1 lm		
NAME: ASD-UCB-40D20CC-WH-3000K	TYPE:0	WEIGHT:
SPEC.:20W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C(DEG) g (DEG)	285	300	315	330	345															
0	399	399	399	399	399															
5	385	387	389	391	394															
10	368	373	376	382	389															
15	349	356	362	371	382															
20	327	338	346	358	375															
25	302	317	328	343	366															
30	275	294	308	327	355															
35	248	271	286	309	332															
40	219	245	262	289	308															
45	191	218	237	263	282															
50	163	191	209	232	255															
55	135	163	179	199	225															
60	110	133	146	165	194															
65	84.6	104	116	132	161															
70	61.5	75.5	85.1	98.4	122															
75	40.8	49.8	57.0	66.3	78.4															
80	23.4	28.3	31.6	37.3	40.1															
85	10.4	12.0	12.6	14.0	13.2															
90	2.91	3.58	3.15	2.74	2.05															
95	1.55	1.60	1.50	1.21	1.31															
100	1.81	1.89	1.81	1.49	1.38															
105	2.05	2.11	1.99	1.73	1.35															
110	2.15	2.22	2.09	1.80	1.50															
115	2.15	2.22	2.10	1.85	1.61															
120	2.10	2.15	1.99	1.91	1.68															
125	1.98	1.95	1.97	1.87	1.62															
130	1.89	1.95	1.92	1.81	1.54															
135	1.79	1.87	1.90	1.72	1.49															
140	1.71	1.83	1.83	1.67	1.43															
145	1.72	1.80	1.73	1.59	1.38															
150	1.60	1.62	1.68	1.47	1.32															
155	1.48	1.55	1.47	1.40	1.29															
160	1.29	1.34	1.32	1.32	1.26															
165	1.11	1.20	1.26	1.23	1.17															
170	1.08	1.10	1.18	1.28	1.16															
175	0.99	1.07	1.17	1.22	1.24															
180	1.22	1.30	1.43	1.40	1.35															

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:23 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=1.1628]
 Remarks: