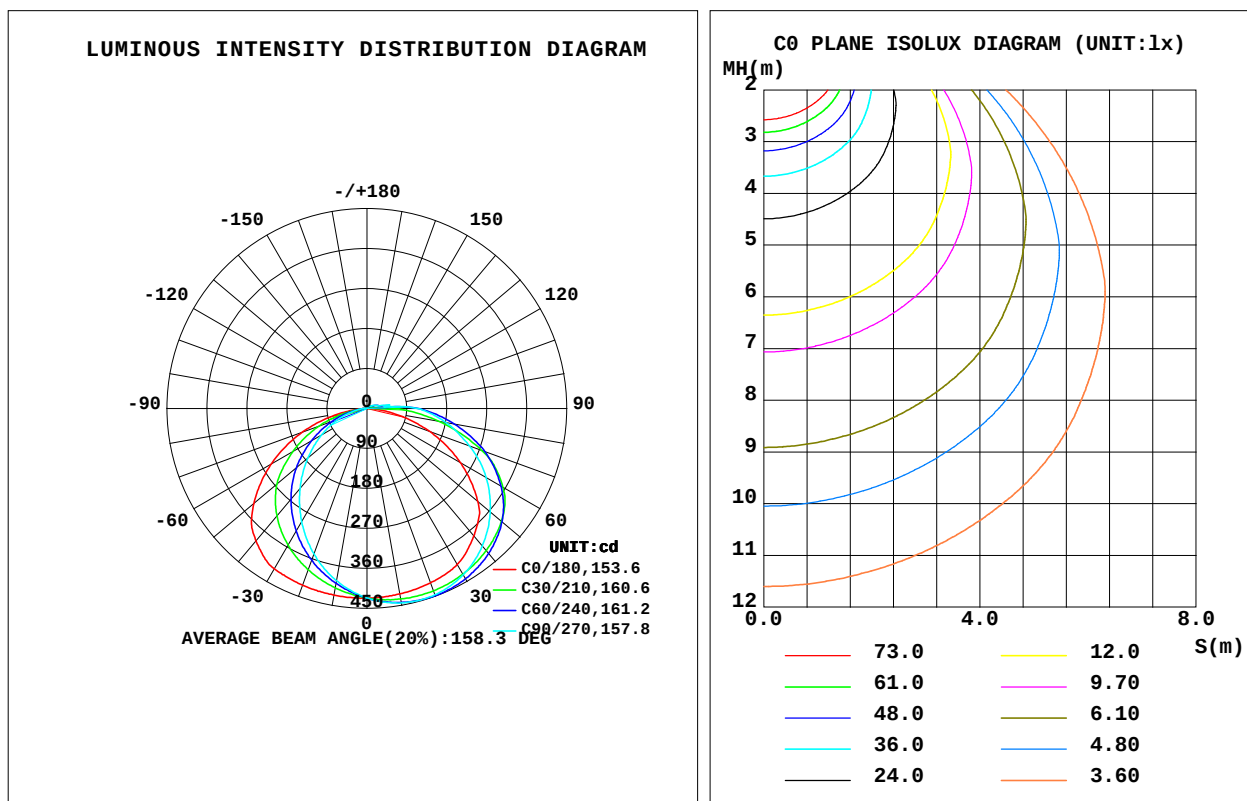


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.88V I:0.1723A P:18.899W PF:0.9148 Freq:59.98Hz Lamp Flux:1558.49x1 lm		
NAME: ASD-UCB-40D20CC-WH	TYPE:0	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 82.46 lm/W			
MODEL	ASD-UCB-40D20CC-WH	I _{max} (cd)	451.0	S/MH(C0/180)	1.45
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	1.05
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1558.5	h UP, DN(C0-180)	3.0,60.9
NOMINAL FLUX(lm)	1558.49	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.4,35.8
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 G0-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	423.9	439.9	444.5	441.1	426.5	404.6	394.0	402.2	0- 10	40.51	40.51	2.6, 2.6
20	417.7	444.0	446.2	446.4	423.2	373.5	348.9	370.0	10- 20	117.8	158.3	10.2, 10.2
30	405.7	439.0	432.7	442.4	416.9	334.3	294.1	329.2	20- 30	184.1	342.3	22, 22
40	374.3	424.5	404.2	428.9	388.9	286.5	234.6	280.5	30- 40	232.5	574.8	36.9, 36.9
50	325.7	399.4	362.4	404.5	332.1	230.4	174.3	223.6	40- 50	256.4	831.2	53.3, 53.3
60	242.3	362.1	309.6	367.3	248.0	167.7	117.2	155.8	50- 60	249.5	1081	69.3, 69.3
70	148.8	303.7	245.3	312.1	153.4	98.49	66.11	90.55	60- 70	209.8	1290	82.8, 82.8
80	55.65	200.5	179.8	213.5	57.22	36.01	25.36	33.43	70- 80	143.0	1433	92, 92
90	0.8531	108.1	114.4	119.9	0.7507	1.547	2.477	2.728	80- 90	72.60	1506	96.6, 96.6
100	0.9302	28.38	47.36	36.07	1.095	1.940	2.012	1.941	90-100	25.11	1531	98.2, 98.2
110	1.361	16.31	21.96	19.06	1.635	2.355	2.407	2.255	100-110	10.77	1542	98.9, 98.9
120	1.523	8.636	13.36	9.537	1.863	2.274	2.395	2.163	110-120	6.545	1548	99.4, 99.4
130	1.543	6.006	8.180	6.901	1.825	2.195	2.125	2.070	120-130	3.988	1552	99.6, 99.6
140	1.538	4.121	6.677	4.488	1.710	2.037	2.012	1.963	130-140	2.692	1555	99.8, 99.8
150	1.451	2.540	5.714	2.628	1.543	1.820	1.877	1.792	140-150	1.775	1557	99.9, 99.9
160	1.300	1.985	2.617	2.243	1.363	1.474	1.487	1.423	150-160	0.9513	1558	100, 100
170	1.339	1.914	2.527	2.113	1.334	1.280	1.113	1.261	160-170	0.4808	1558	100, 100
180	1.398	1.600	1.406	1.614	1.401	1.601	1.404	1.620	170-180	0.1476	1558	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 G0-SPEX500_V1 SYSTEM V2.0.402
Humidity:65.0%
Test Distance:3.010m [K=1.1628]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:119.88V I:0.1723A P:18.899W PF:0.9148 Freq:59.98Hz Lamp Flux:1558.49x1 lm											
NAME: ASD-UCB-40D20CC-WH					TYPE:0			WEIGHT:			
SPEC.:5000K					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	14.4	15.9	14.7	16.2	16.5	14.4	16.0	14.7	16.2	16.5	
	3H	16.1	17.5	16.4	17.8	18.1	16.7	18.2	17.1	18.5	18.8
	4H	16.7	18.1	17.1	18.4	18.7	17.9	19.3	18.3	19.6	19.9
	6H	17.1	18.4	17.5	18.8	19.1	19.1	20.4	19.5	20.8	21.1
	8H	17.2	18.5	17.6	18.8	19.2	19.8	21.0	20.2	21.4	21.7
	12H	17.2	18.5	17.7	18.8	19.2	20.5	21.7	20.9	22.1	22.4
4H	2H	15.3	16.7	15.7	17.0	17.3	15.3	16.7	15.7	17.0	17.4
	3H	17.4	18.6	17.8	19.0	19.3	17.9	19.1	18.3	19.4	19.8
	4H	18.2	19.3	18.7	19.7	20.1	19.2	20.3	19.6	20.7	21.1
	6H	18.8	19.8	19.3	20.3	20.7	20.6	21.6	21.0	22.0	22.4
	8H	19.0	19.9	19.5	20.4	20.8	21.3	22.2	21.8	22.7	23.1
	12H	19.1	20.0	19.6	20.4	20.9	22.1	23.0	22.6	23.4	23.9
8H	4H	19.0	19.9	19.4	20.3	20.8	19.7	20.7	20.2	21.1	21.6
	6H	19.9	20.7	20.4	21.2	21.7	21.4	22.2	21.9	22.6	23.1
	8H	20.3	21.0	20.8	21.5	22.0	22.3	23.0	22.8	23.5	24.0
	12H	20.5	21.1	21.1	21.6	22.2	23.3	24.0	23.9	24.5	25.0
12H	4H	19.1	20.0	19.6	20.4	20.9	19.8	20.7	20.3	21.1	21.6
	6H	20.3	21.0	20.8	21.4	22.0	21.6	22.3	22.1	22.8	23.3
	8H	20.8	21.4	21.3	21.9	22.4	22.6	23.2	23.1	23.7	24.3
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, 1558 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 1.5$)

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

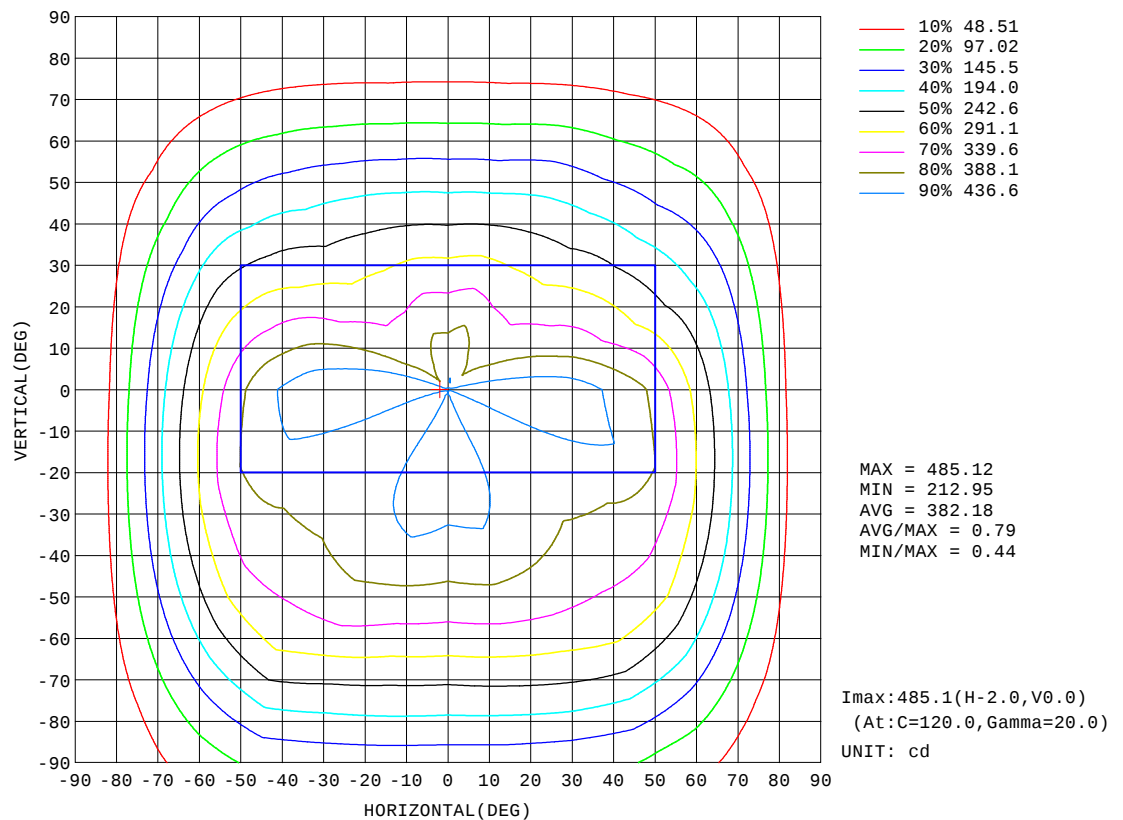
Humidity:65.0%

Test Distance:3.010m [K=1.1628]

Remarks:

ISOCANDELA DIAGRAM

Test:U:119.88V I:0.1723A P:18.899W PF:0.9148 Freq:59.98Hz Lamp Flux:1558.49x1 lm		
NAME: ASD-UCB-40D20CC-WH	TYPE:0	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



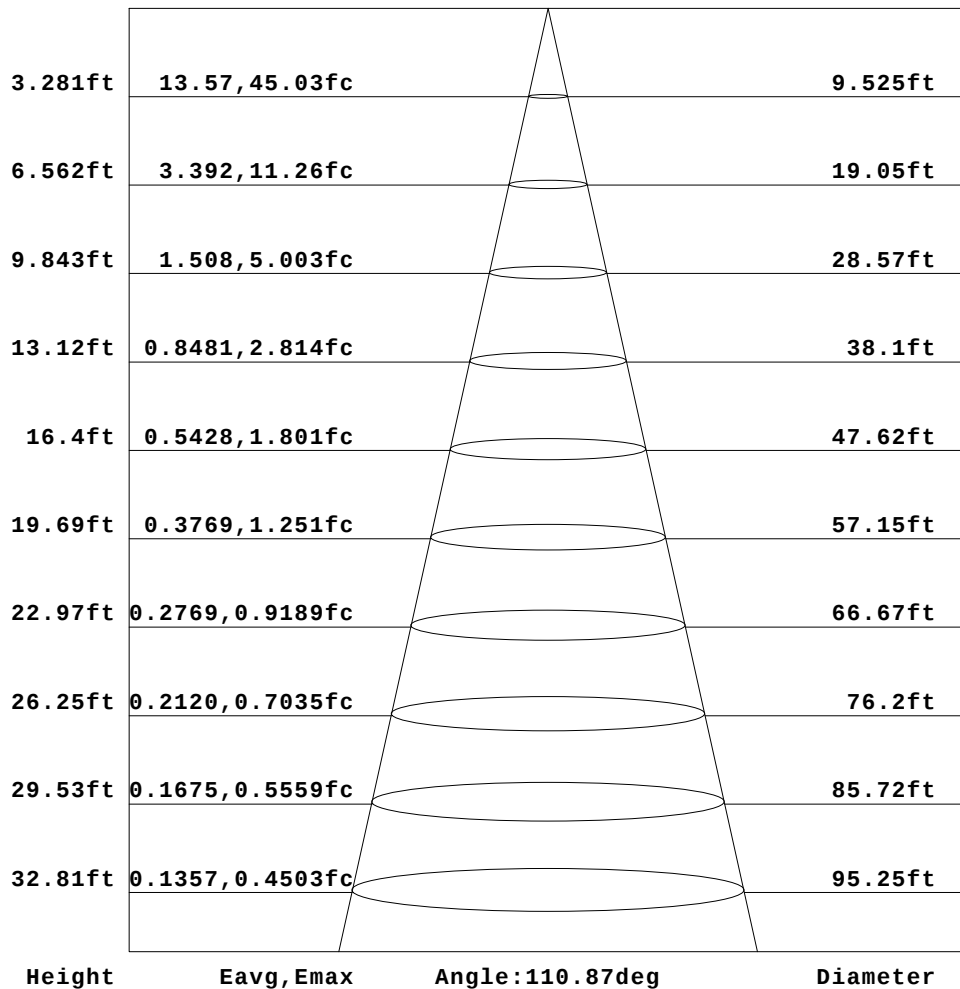
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:23 April 2021

g Range: 0 - 180DEG
 g Interval: 0.5DEG
 Test System:EVERFINE G0-SPEX500_V1 SYSTEM V2.0.402
 Humidity:65.0%
 Test Distance:3.010m [K=1.1628]
 Remarks:

AAI Figure

Test:U:119.88V I:0.1723A P:18.899W PF:0.9148 Freq:59.98Hz Lamp Flux:1558.49x1 lm		
NAME: ASD-UCB-40D20CC-WH	TYPE:0	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Flux out:971.4 lm



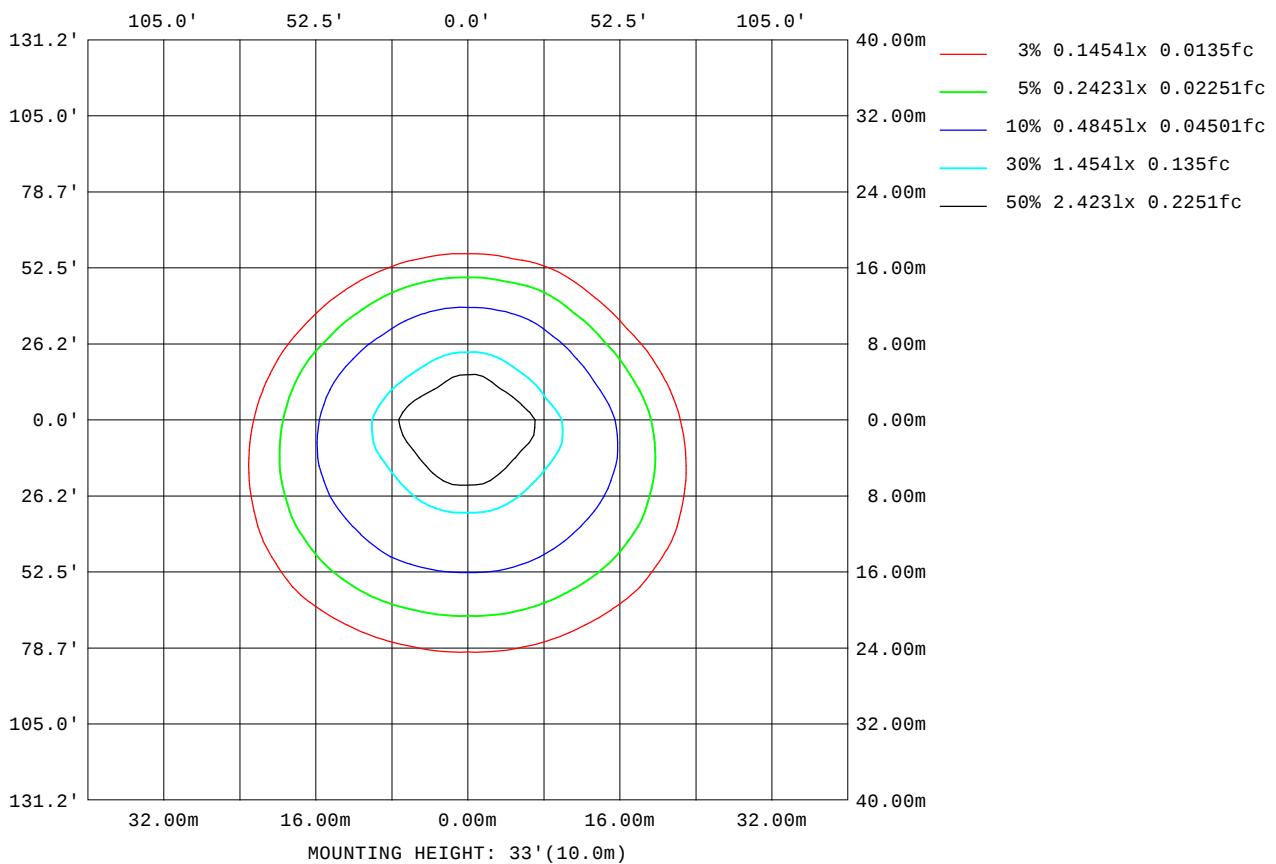
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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 G0-SPEX500_V1 SYSTEM V2.0.402
Humidity:65.0%
Test Distance:3.010m [K=1.1628]
Remarks:

ISOLUX DIAGRAM

Test:U:119.88V I:0.1723A P:18.899W PF:0.9148 Freq:59.98Hz Lamp Flux:1558.49x1 lm		
NAME: ASD-UCB-40D20CC-WH	TYPE:0	WEIGHT:
SPEC.:5000K	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 G0-SPEX500_V1 SYSTEM V2.0.402
Humidity:65.0%
Test Distance:3.010m [K=1.1628]
Remarks:

LED Avg.L Report

Test:U:119.88V I:0.1723A P:18.899W PF:0.9148 Freq:59.98Hz Lamp Flux:1558.49x1 lm		
NAME: ASD-UCB-40D20CC-WH	TYPE:0	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

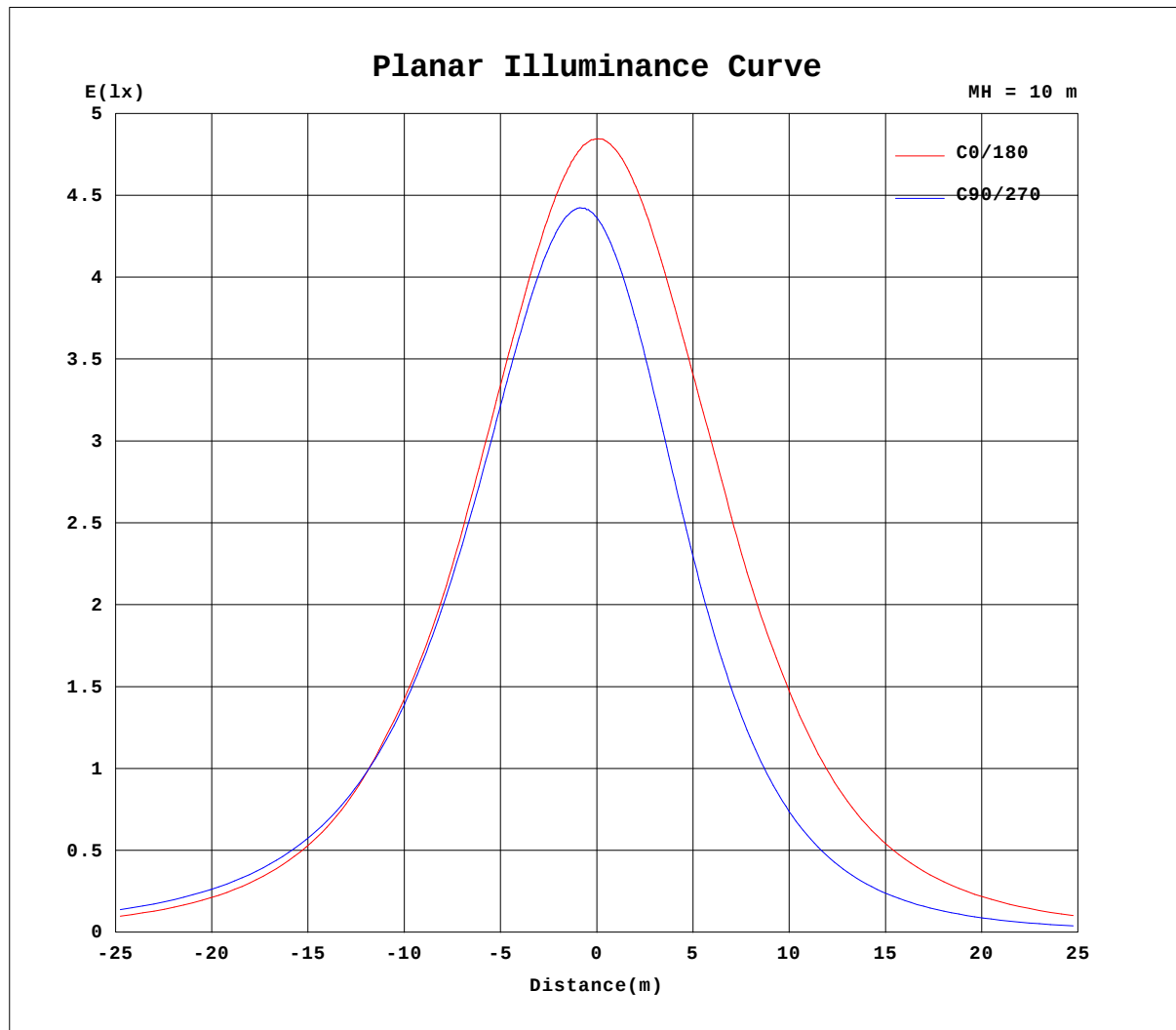
AvgL	cd/m2
L_0~180(65)av	942
L_0~180(75)av	792
L_0~180(85)av	426
L_90~270(65)av	875
L_90~270(75)av	988
L_90~270(85)av	1812
L_45(65)av	1107
L_45(75)av	1249
L_45(85)av	1960

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 G0-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 G0-SPEX500_V1 SYSTEM V2.0.402
Humidity: 65.0%
Test Distance: 3.010m [K=1.1628]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:119.88V I:0.1723A P:18.899W PF:0.9148 Freq:59.98Hz Lamp Flux:1558.49x1 lm		
NAME: ASD-UCB-40D20CC-WH	TYPE:0	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Table--1
UNIT: cd

C(DEC) g (DEC)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	427	427	427	427	427	427	427	427	427	427	427	427	427	427	427	427	427	427	427
5	426	429	432	435	436	438	437	437	437	435	433	431	427	423	419	417	415	412	412
10	424	431	436	440	443	445	444	444	444	441	437	434	426	418	410	405	400	395	394
15	421	431	437	443	447	448	447	447	449	445	439	435	426	411	399	390	383	375	373
20	418	430	437	444	448	448	446	446	451	446	439	436	423	403	386	374	364	352	349
25	413	428	435	443	447	444	442	441	450	446	438	436	421	394	372	355	342	327	323
30	406	425	431	439	443	437	433	432	446	442	434	435	417	382	355	334	319	299	294
35	392	420	425	433	436	426	420	420	439	437	428	434	406	367	337	312	293	270	265
40	374	412	418	425	426	411	404	404	430	429	420	430	389	344	316	287	266	240	235
45	355	399	408	413	413	393	385	384	417	418	410	423	368	318	292	259	238	210	204
50	326	377	395	399	397	371	362	361	401	405	398	399	332	289	265	230	208	180	174
55	285	344	379	382	375	345	337	336	381	388	383	367	292	258	229	200	175	151	145
60	242	300	353	362	348	317	310	308	354	367	361	321	248	221	192	168	143	121	117
65	196	254	320	337	317	286	279	277	319	343	323	271	202	172	153	133	112	94.2	90.6
70	149	204	274	304	282	253	245	244	279	312	277	218	153	123	114	98.5	82.6	68.3	66.1
75	101	153	219	254	241	216	212	210	236	267	221	163	104	77.0	73.3	65.3	55.1	45.1	44.0
80	55.6	101	162	200	199	183	180	179	197	213	166	109	57.2	37.5	37.6	36.0	30.8	25.4	25.4
85	18.1	53.1	110	152	157	148	147	145	157	163	117	60.1	19.0	10.9	12.5	13.4	12.6	11.2	11.2
90	0.85	19.6	66.9	108	116	114	114	115	119	120	75.0	26.5	0.75	0.80	1.20	1.55	1.80	1.76	2.48
95	0.72	4.88	29.2	47.0	46.8	48.8	50.2	49.6	47.6	56.1	33.1	8.41	0.82	0.99	1.27	1.58	1.72	1.68	1.69
100	0.93	2.91	15.6	28.4	38.0	41.9	47.4	44.1	40.3	36.1	20.4	5.40	1.09	1.30	1.64	1.94	2.07	1.98	2.01
105	1.16	2.94	11.6	22.8	27.1	25.1	25.9	25.2	28.9	26.8	15.1	4.55	1.37	1.44	1.96	2.18	2.33	2.26	2.28
110	1.36	3.04	8.05	16.3	21.7	22.2	22.0	21.4	21.4	19.1	11.1	4.43	1.64	1.57	2.01	2.36	2.47	2.39	2.41
115	1.46	3.19	6.46	11.2	15.6	17.9	17.9	17.3	15.4	12.8	8.66	4.36	1.76	1.63	2.06	2.37	2.52	2.43	2.41
120	1.52	3.28	5.84	8.64	11.2	13.1	13.4	12.5	10.9	9.54	7.41	4.29	1.86	1.67	2.11	2.27	2.47	2.39	2.39
125	1.51	3.17	4.99	7.49	8.81	9.67	9.83	8.92	8.35	7.90	6.70	4.07	1.89	1.62	2.03	2.24	2.24	2.21	2.31
130	1.54	2.86	4.37	6.01	7.70	7.94	8.18	7.35	7.24	6.90	5.27	3.71	1.82	1.53	1.94	2.19	2.23	2.16	2.12
135	1.57	2.66	3.45	4.89	6.92	6.95	7.34	6.50	6.48	5.54	4.37	3.43	1.80	1.46	1.84	2.16	2.16	2.04	2.09
140	1.54	2.43	3.01	4.12	6.06	6.36	6.68	5.94	5.95	4.49	3.77	3.11	1.71	1.41	1.76	2.04	2.12	1.96	2.01
145	1.51	2.15	2.59	2.81	4.65	5.78	6.69	5.54	4.67	3.06	3.28	2.87	1.63	1.38	1.63	1.92	2.04	1.92	1.98
150	1.45	2.03	2.26	2.54	2.92	4.80	5.71	4.98	2.71	2.63	2.84	2.64	1.54	1.33	1.51	1.82	1.84	1.76	1.88
155	1.38	1.96	2.22	2.36	2.77	2.48	3.29	2.67	2.50	2.48	2.63	2.49	1.45	1.30	1.47	1.59	1.73	1.65	1.73
160	1.30	1.82	2.04	1.99	2.35	2.72	2.62	2.37	2.50	2.24	2.54	2.34	1.36	1.24	1.41	1.47	1.47	1.45	1.49
165	1.22	1.62	1.88	2.01	2.07	2.47	2.01	2.24	2.34	2.24	2.27	2.14	1.25	1.13	1.31	1.38	1.36	1.19	1.18
170	1.34	1.72	1.91	1.91	1.89	1.92	2.53	2.18	2.15	2.11	2.29	1.97	1.33	1.17	1.28	1.28	1.28	1.09	1.11
175	1.37	1.63	1.81	1.86	1.60	1.53	2.16	1.73	1.99	1.87	1.99	1.90	1.34	1.26	1.26	1.31	1.21	1.01	1.09
180	1.40	1.47	1.57	1.60	1.51	1.24	1.41	1.38	1.47	1.61	1.87	1.82	1.40	1.47	1.57	1.60	1.50	1.24	1.40

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 G0-SPEX500_V1 SYSTEM V2.0.402
Humidity:65.0%
Test Distance:3.010m [K=1.1628]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:119.88V I:0.1723A P:18.899W PF:0.9148 Freq:59.98Hz Lamp Flux:1558.49x1 lm		
NAME: ASD-UCB-40D20CC-WH	TYPE:0	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Table--2
UNIT: cd

C(DEC) g (DEC)	285	300	315	330	345														
0	427	427	427	427	427														
5	412	414	415	418	422														
10	394	399	402	408	416														
15	374	381	387	396	409														
20	350	362	370	382	400														
25	324	339	351	367	391														
30	295	315	329	349	378														
35	265	289	306	329	354														
40	235	262	280	306	328														
45	204	234	253	276	300														
50	174	204	224	243	271														
55	145	174	191	208	240														
60	116	143	156	173	206														
65	90.5	111	123	138	170														
70	65.7	80.5	90.6	103	129														
75	43.4	52.9	60.5	69.3	83.1														
80	24.7	29.9	33.4	39.3	42.4														
85	10.9	12.6	13.4	14.6	13.8														
90	2.31	3.42	2.73	2.70	1.86														
95	1.64	1.68	1.59	1.26	1.17														
100	1.92	2.00	1.94	1.58	1.25														
105	2.19	2.26	2.15	1.84	1.43														
110	2.29	2.37	2.26	1.93	1.60														
115	2.30	2.39	2.28	1.98	1.69														
120	2.26	2.30	2.16	2.05	1.77														
125	2.12	2.08	2.13	2.01	1.75														
130	2.02	2.08	2.07	1.94	1.66														
135	1.92	1.99	2.03	1.83	1.60														
140	1.83	1.96	1.96	1.77	1.53														
145	1.85	1.91	1.84	1.69	1.48														
150	1.71	1.74	1.79	1.56	1.40														
155	1.59	1.66	1.58	1.48	1.37														
160	1.38	1.43	1.42	1.41	1.35														
165	1.19	1.30	1.35	1.31	1.25														
170	1.17	1.19	1.26	1.36	1.24														
175	1.11	1.20	1.30	1.34	1.54														
180	1.38	1.47	1.62	1.58	1.82														

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: