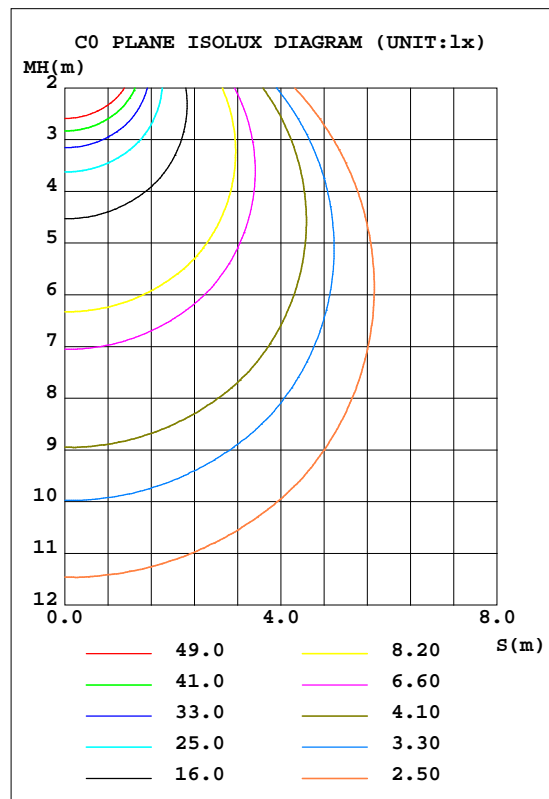
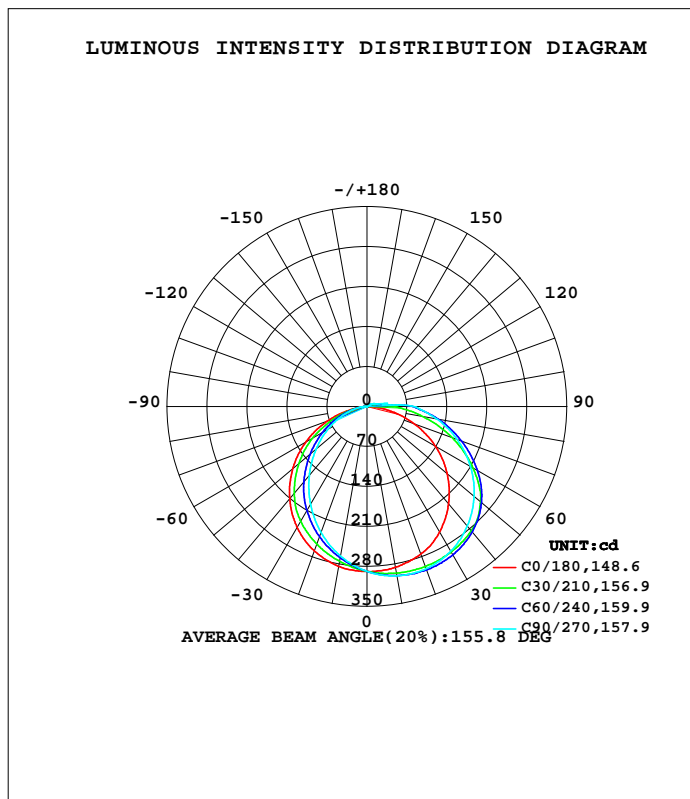


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.90V I:0.1364A P:15.308W PF:0.9361 Freq:59.98Hz Lamp Flux:985.279x1 lm		
NAME: ASD-UCB-32D16CC-WH-3000K	TYPE:0	WEIGHT:
SPEC.:16W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MOBESD-UCB-32D16CC-WH-3000K		Imax(cd)	305.4	S/MH(C0/180)	1.26
NOMINAL POWER(W)	16	LOR(%)	100.0	S/MH(C90/270)	1.05
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	985.28	h UP, DN(C0-180)	3.0,61.3
NOMINAL FLUX(lm)	985.279	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.3,35.4
LAMPS INSIDE	1	h up(%)	3.3	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	h down(%)	96.7	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=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	285.9	299.0	301.0	297.5	284.4	271.8	266.1	273.3	0- 10	27.38	27.38	2.78,2.78
20	275.2	302.5	302.3	300.4	269.4	248.7	234.9	252.0	10- 20	79.19	106.6	10.8,10.8
30	254.2	299.1	292.9	296.9	244.6	219.9	197.8	219.8	20- 30	122.3	228.9	23.2,23.2
40	222.7	288.8	273.2	286.7	210.6	185.2	157.3	181.8	30- 40	151.6	380.5	38.6,38.6
50	183.4	270.4	245.1	260.0	169.8	143.1	116.5	140.5	40- 50	162.8	543.2	55.1,55.1
60	138.0	236.5	209.2	222.0	123.1	98.70	78.41	98.12	50- 60	153.8	697.1	70.7,70.7
70	87.37	184.8	167.7	167.7	72.36	56.32	44.71	58.09	60- 70	126.1	823.2	83.5,83.5
80	36.28	127.2	123.3	108.0	23.69	20.18	17.80	21.48	70- 80	85.38	908.5	92.2,92.2
90	1.140	73.33	82.19	58.33	0.3231	0.9022	1.742	1.469	80- 90	44.47	953.0	96.7,96.7
100	0.6457	18.56	33.47	13.90	0.5634	1.151	1.135	1.021	90-100	15.69	968.7	98.3,98.3
110	1.075	11.25	14.62	8.233	0.7987	1.359	1.363	1.222	100-110	6.489	975.2	99,99
120	1.285	5.486	8.821	5.120	0.8945	1.295	1.344	1.198	110-120	4.010	979.2	99.4,99.4
130	1.342	4.222	5.219	4.087	0.8455	1.240	1.184	1.129	120-130	2.441	981.6	99.6,99.6
140	1.213	2.931	4.136	2.873	0.7813	1.182	1.079	1.060	130-140	1.649	983.3	99.8,99.8
150	1.118	1.597	3.605	1.610	0.7149	1.020	1.007	0.9855	140-150	1.075	984.4	99.9,99.9
160	0.9548	1.239	1.623	1.256	0.6384	0.7834	0.7964	0.8154	150-160	0.5513	984.9	100,100
170	0.8761	1.146	1.278	1.177	0.6654	0.6532	0.6423	0.7431	160-170	0.2766	985.2	100,100
180	0.7814	0.8503	0.7614	0.8712	0.7817	0.8463	0.7626	0.8705	170-180	0.0816	985.3	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=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:119.90V I:0.1364A P:15.308W PF:0.9361 Freq:59.98Hz Lamp Flux:985.279x1 lm										
NAME: ASD-UCB-32D16CC-WH-3000K					TYPE:0			WEIGHT:		
SPEC.:16W					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	12.3	13.9	12.6	14.1	14.4	13.3	14.8	13.6	15.1	15.3
3H	14.0	15.4	14.3	15.7	16.0	15.6	17.0	15.9	17.3	17.6
4H	14.6	16.0	15.0	16.3	16.6	16.8	18.1	17.2	18.5	18.8
6H	15.1	16.4	15.5	16.7	17.1	18.0	19.3	18.4	19.7	20.0
8H	15.2	16.5	15.6	16.8	17.2	18.7	19.9	19.1	20.3	20.7
12H	15.3	16.5	15.7	16.9	17.2	19.4	20.6	19.8	21.0	21.4
4H 2H	13.4	14.8	13.8	15.1	15.4	14.1	15.4	14.4	15.7	16.1
3H	15.3	16.5	15.8	16.9	17.3	16.6	17.8	17.0	18.2	18.5
4H	16.2	17.3	16.6	17.7	18.1	18.0	19.1	18.4	19.5	19.9
6H	16.9	17.8	17.3	18.3	18.7	19.4	20.4	19.9	20.8	21.3
8H	17.1	18.0	17.5	18.4	18.9	20.2	21.1	20.7	21.5	22.0
12H	17.2	18.1	17.7	18.5	19.0	21.0	21.9	21.5	22.3	22.8
8H 4H	17.0	17.9	17.5	18.4	18.8	18.4	19.4	18.9	19.8	20.3
6H	18.0	18.8	18.5	19.3	19.8	20.2	21.0	20.7	21.4	21.9
8H	18.4	19.1	18.9	19.6	20.1	21.1	21.8	21.7	22.3	22.8
12H	18.7	19.3	19.3	19.8	20.4	22.2	22.8	22.8	23.3	23.9
12H 4H	17.2	18.1	17.7	18.5	19.0	18.5	19.3	19.0	19.8	20.3
6H	18.4	19.1	18.9	19.6	20.1	20.3	21.0	20.9	21.5	22.0
8H	19.0	19.6	19.5	20.1	20.6	21.4	22.0	21.9	22.5	23.1
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.4					+ 0.2 / - 0.3				
2.0H	+ 0.3 / - 0.6					+ 0.2 / - 0.4				

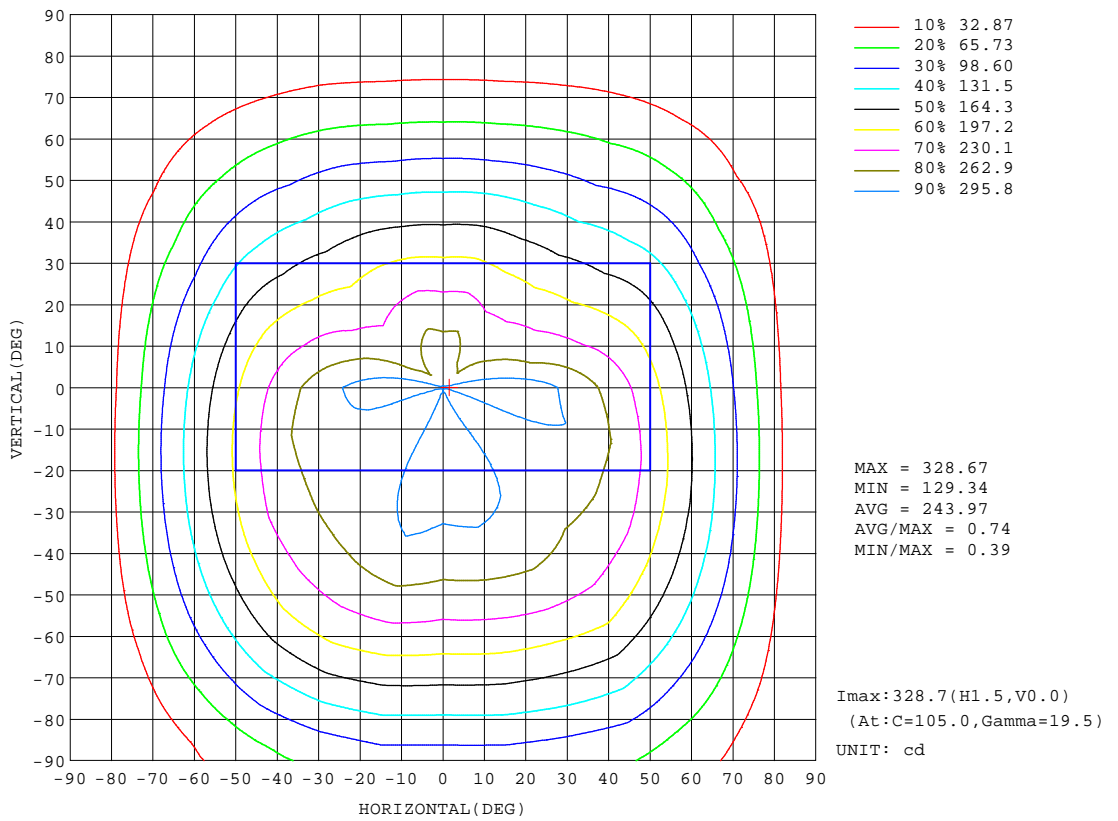
CIE Pub.117, 985.3 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = -0.1)

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=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:119.90V I:0.1364A P:15.308W PF:0.9361 Freq:59.98Hz Lamp Flux:985.279x1 lm		
NAME: ASD-UCB-32D16CC-WH-3000K	TYPE:0	WEIGHT:
SPEC.:16W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



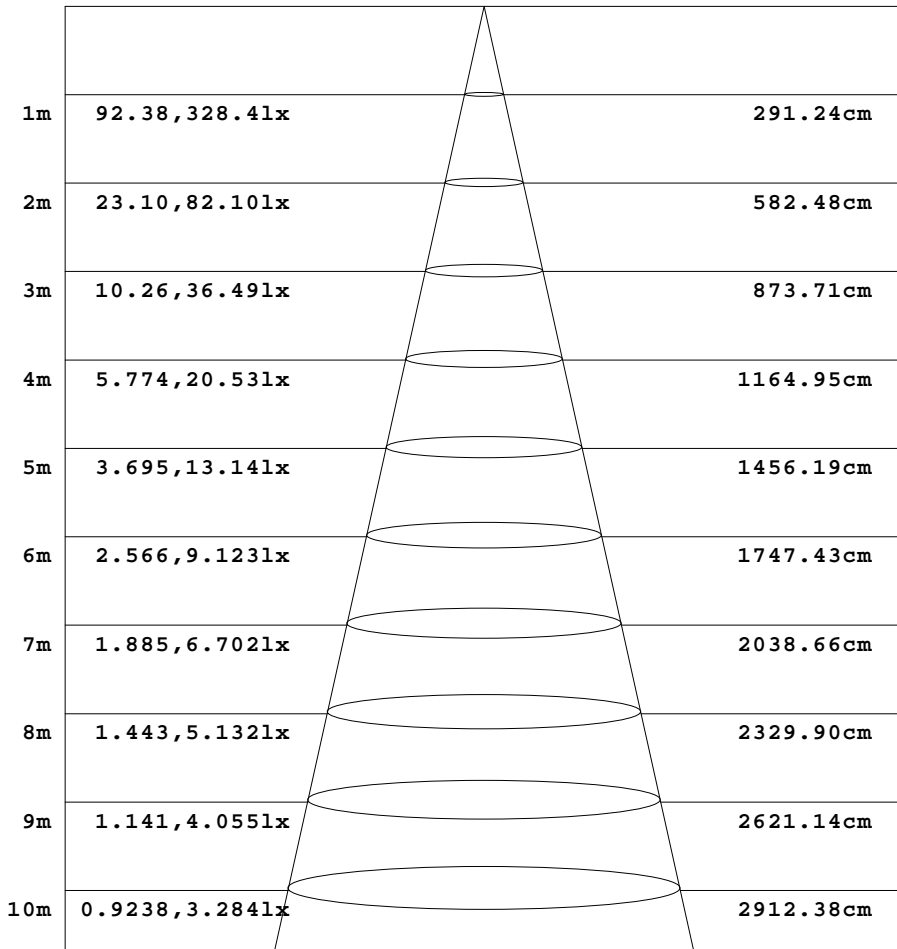
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:21 April 2021

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=1.0000]
 Remarks:

AAI Figure

Test:U:119.90V I:0.1364A P:15.308W PF:0.9361 Freq:59.98Hz Lamp Flux:985.279x1 lm		
NAME: ASD-UCB-32D16CC-WH-3000K	TYPE:0	WEIGHT:
SPEC.:16W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Flux out:637.9 lm



Height Eavg, Emax Angle:111.04deg Diameter

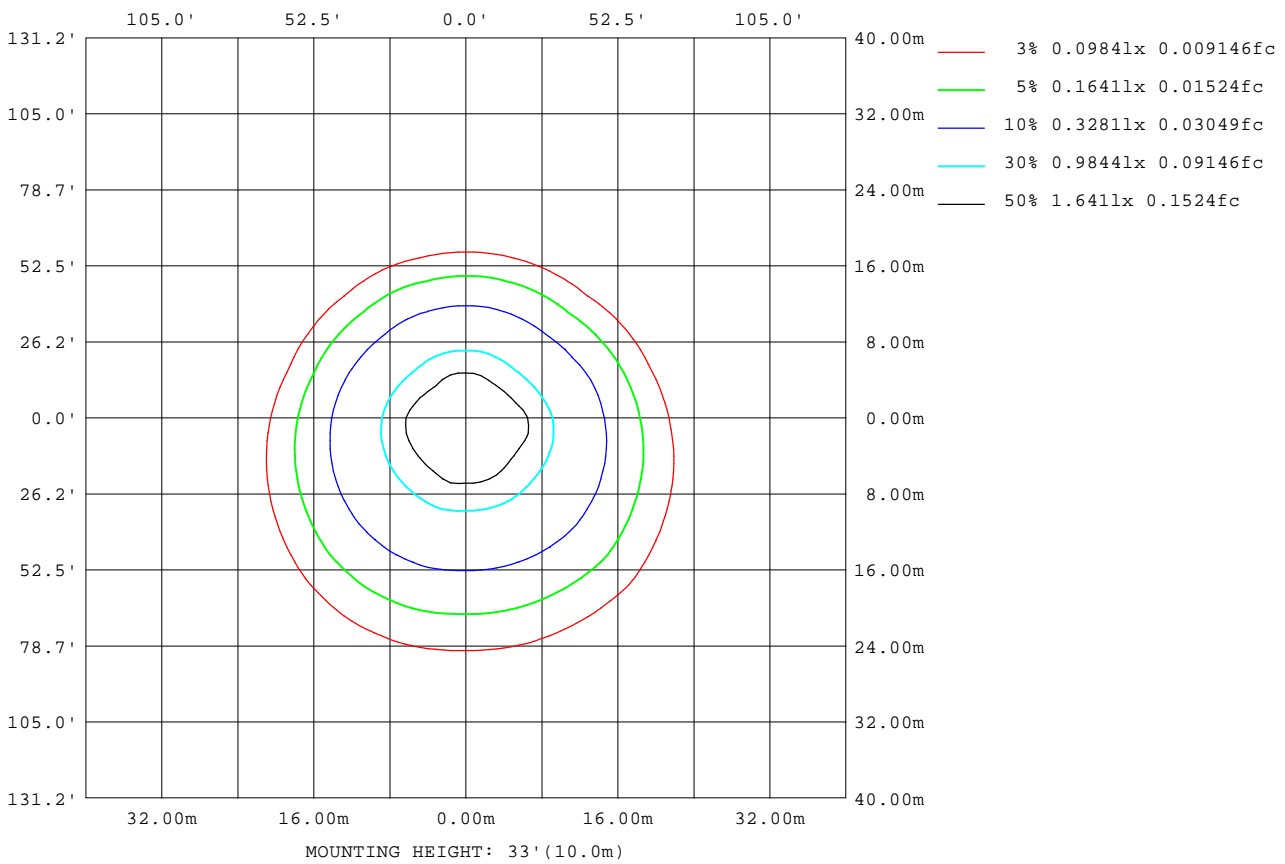
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:119.90V I:0.1364A P:15.308W PF:0.9361 Freq:59.98Hz Lamp Flux:985.279x1 lm		
NAME: ASD-UCB-32D16CC-WH-3000K	TYPE:0	WEIGHT:
SPEC.:16W	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=1.0000]
 Remarks:

LED Avg.L Report

Test:U:119.90V I:0.1364A P:15.308W PF:0.9361 Freq:59.98Hz Lamp Flux:985.279x1 lm		
NAME: ASD-UCB-32D16CC-WH-3000K	TYPE:0	WEIGHT:
SPEC.:16W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

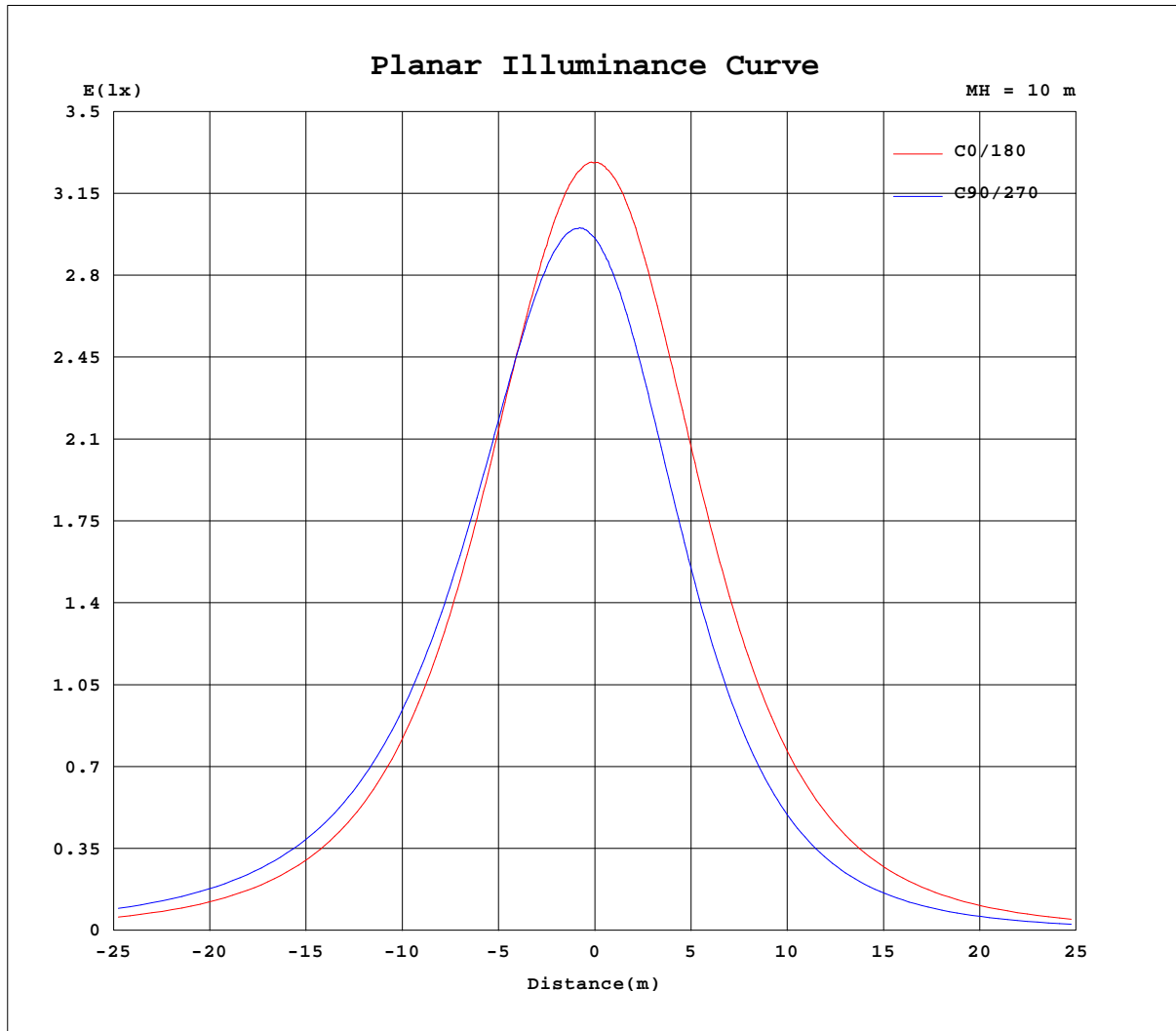
AvgL	cd/m2
L_0~180(65)av	500
L_0~180(75)av	420
L_0~180(85)av	235
L_90~270(65)av	591
L_90~270(75)av	681
L_90~270(85)av	1254
L_45(65)av	669
L_45(75)av	713
L_45(85)av	1113

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=1.0000]
 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=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:119.90V I:0.1364A P:15.308W PF:0.9361 Freq:59.98Hz Lamp Flux:985.279x1 lm		
NAME: ASD-UCB-32D16CC-WH-3000K	TYPE:0	WEIGHT:
SPEC.:16W	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	289	289	289	289	289	289	289	289	289	289	289	289	289	289	289	289	289	289	289
5	289	292	293	294	296	296	296	296	295	294	293	290	288	284	283	281	280	279	279
10	286	293	296	299	301	301	301	302	300	298	295	291	284	279	275	272	269	266	266
15	281	294	298	301	304	303	303	305	303	300	296	291	278	272	267	261	257	252	252
20	275	293	298	302	305	302	302	305	304	300	296	290	269	263	257	249	243	236	235
25	267	291	297	301	303	299	299	303	303	300	293	285	258	251	245	235	227	218	217
30	254	287	294	299	300	293	293	299	300	297	287	278	245	237	232	220	211	198	198
35	239	278	290	295	295	284	284	291	295	293	278	267	229	222	217	203	192	178	178
40	223	262	284	289	287	273	273	281	289	287	268	251	211	205	198	185	172	157	157
45	204	244	275	281	276	260	260	268	280	275	254	231	191	188	178	165	151	137	137
50	183	223	260	270	262	245	245	252	266	260	238	209	170	165	156	143	130	116	117
55	162	200	240	255	244	228	228	234	249	242	215	185	147	140	133	121	109	96.7	97.1
60	138	176	214	237	223	209	209	214	230	222	190	160	123	113	109	98.7	89.2	78.5	78.4
65	113	150	187	213	200	189	189	193	207	196	162	133	98.0	86.4	83.5	77.8	69.7	60.8	60.8
70	87.4	122	158	185	176	168	168	171	181	168	134	104	72.4	61.5	59.3	56.3	51.3	44.4	44.7
75	61.8	93.9	128	156	151	146	146	148	154	138	104	75.6	46.9	38.0	37.8	36.6	34.1	29.8	30.2
80	36.3	65.0	97.8	127	126	123	123	125	126	108	75.3	47.0	23.7	18.8	20.2	20.2	19.6	17.3	17.8
85	14.0	38.4	69.9	97.2	101	101	101	102	98.4	79.8	47.8	21.2	6.42	6.00	7.32	8.18	8.43	7.81	8.10
90	1.14	18.6	47.4	73.3	80.6	81.4	82.2	81.4	77.9	58.3	29.5	6.32	0.32	0.45	0.65	0.90	1.26	1.30	1.74
95	0.47	5.19	21.5	27.0	30.9	35.5	35.0	33.2	29.0	24.6	9.93	1.56	0.43	0.58	0.76	0.91	0.94	0.93	0.94
100	0.65	2.83	9.85	18.6	26.5	31.7	33.5	29.7	21.8	13.9	6.24	1.11	0.56	0.78	0.99	1.15	1.16	1.13	1.13
105	0.86	2.12	7.78	14.4	16.8	17.4	17.8	18.0	17.2	11.3	4.27	1.44	0.68	0.90	1.14	1.29	1.32	1.30	1.30
110	1.07	2.20	5.57	11.2	13.8	15.1	14.6	14.7	13.2	8.23	3.44	1.63	0.80	0.98	1.20	1.36	1.40	1.38	1.36
115	1.19	2.22	4.43	7.65	10.6	12.3	11.9	11.3	9.67	6.03	3.23	1.63	0.86	1.04	1.22	1.37	1.41	1.37	1.36
120	1.29	2.37	3.91	5.49	7.48	9.16	8.82	7.94	6.90	5.12	3.28	1.70	0.89	1.07	1.27	1.30	1.37	1.35	1.34
125	1.35	2.17	3.47	4.67	5.60	6.65	6.41	5.70	5.50	4.60	2.88	1.66	0.89	1.04	1.20	1.28	1.25	1.27	1.29
130	1.34	1.98	2.92	4.22	4.85	5.48	5.22	4.75	4.78	4.09	2.41	1.55	0.85	0.98	1.17	1.24	1.25	1.19	1.18
135	1.30	1.81	2.67	3.74	4.34	4.87	4.66	4.19	4.19	3.12	2.13	1.50	0.82	0.91	1.10	1.23	1.17	1.11	1.13
140	1.21	1.71	1.97	2.93	4.24	4.31	4.14	3.91	3.44	2.87	1.83	1.32	0.78	0.88	1.06	1.18	1.16	1.07	1.08
145	1.17	1.50	1.73	2.74	3.44	4.12	4.15	3.43	2.94	1.87	1.62	1.28	0.75	0.84	0.99	1.08	1.11	1.05	1.08
150	1.12	1.39	1.49	1.60	2.00	3.44	3.60	3.06	1.62	1.61	1.29	1.22	0.71	0.79	0.88	1.02	0.99	0.97	1.01
155	1.03	1.31	1.28	1.37	1.70	1.90	1.89	1.55	1.50	1.41	1.31	1.15	0.68	0.75	0.82	0.89	0.93	0.89	0.92
160	0.95	1.23	1.27	1.24	1.68	1.53	1.62	1.47	1.45	1.26	1.20	1.07	0.64	0.71	0.78	0.78	0.77	0.77	0.80
165	0.86	1.09	1.19	1.26	1.17	1.50	1.51	1.30	1.42	1.24	1.11	0.90	0.60	0.65	0.70	0.74	0.69	0.62	0.64
170	0.88	1.07	1.16	1.15	1.14	1.44	1.28	1.24	1.27	1.18	1.08	0.87	0.67	0.63	0.67	0.65	0.63	0.58	0.64
175	0.83	0.97	1.06	1.04	0.91	0.97	1.17	1.09	1.16	1.02	0.90	0.83	0.69	0.62	0.64	0.66	0.62	0.55	0.61
180	0.78	0.80	0.84	0.85	0.75	0.71	0.76	0.72	0.84	0.87	0.83	0.81	0.78	0.80	0.84	0.85	0.76	0.71	0.76

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=1.0000]

Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:119.90V I:0.1364A P:15.308W PF:0.9361 Freq:59.98Hz Lamp Flux:985.279x1 lm		
NAME: ASD-UCB-32D16CC-WH-3000K	TYPE:0	WEIGHT:
SPEC.:16W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Table--2 UNIT: cd

C(DEG) g (DEG)	285	300	315	330	345															
0	289	289	289	289	289															
5	279	280	282	283	286															
10	267	270	273	274	280															
15	253	259	264	264	272															
20	236	246	252	252	262															
25	219	230	237	238	251															
30	200	213	220	224	239															
35	180	193	201	208	226															
40	160	173	182	191	212															
45	139	152	162	173	197															
50	118	131	140	154	179															
55	98.3	111	119	134	155															
60	79.6	90.5	98.1	112	129															
65	61.8	71.1	78.2	89.2	101															
70	45.2	52.6	58.1	63.9	74.2															
75	30.2	35.1	38.9	40.8	47.3															
80	17.4	20.3	21.5	21.7	23.9															
85	7.94	8.71	8.77	7.96	7.73															
90	1.63	1.86	1.47	1.23	0.71															
95	0.91	0.90	0.78	0.59	0.47															
100	1.11	1.11	1.02	0.81	0.68															
105	1.28	1.27	1.17	0.97	0.80															
110	1.35	1.34	1.22	1.05	0.90															
115	1.35	1.36	1.24	1.08	0.96															
120	1.31	1.29	1.20	1.13	1.01															
125	1.18	1.18	1.16	1.08	0.99															
130	1.17	1.17	1.13	1.02	0.94															
135	1.10	1.14	1.13	0.99	0.90															
140	1.05	1.13	1.06	0.95	0.86															
145	1.05	1.06	1.03	0.89	0.85															
150	0.97	1.00	0.99	0.86	0.83															
155	0.90	0.95	0.88	0.84	0.80															
160	0.80	0.80	0.82	0.79	0.78															
165	0.69	0.75	0.77	0.75	0.70															
170	0.65	0.69	0.74	0.75	0.74															
175	0.61	0.67	0.71	0.76	0.77															
180	0.72	0.84	0.87	0.83	0.81															

C Range: 0 - 360DEG	g Range: 0 - 180DEG
C Interval: 15.0DEG	g Interval: 0.5DEG
Test Speed: MEDIUM	Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402
Temperature:25.3DEG	Humidity:65.0%
Operators:	Test Distance:3.010m [K=1.0000]
Test Date:21 April 2021	Remarks: