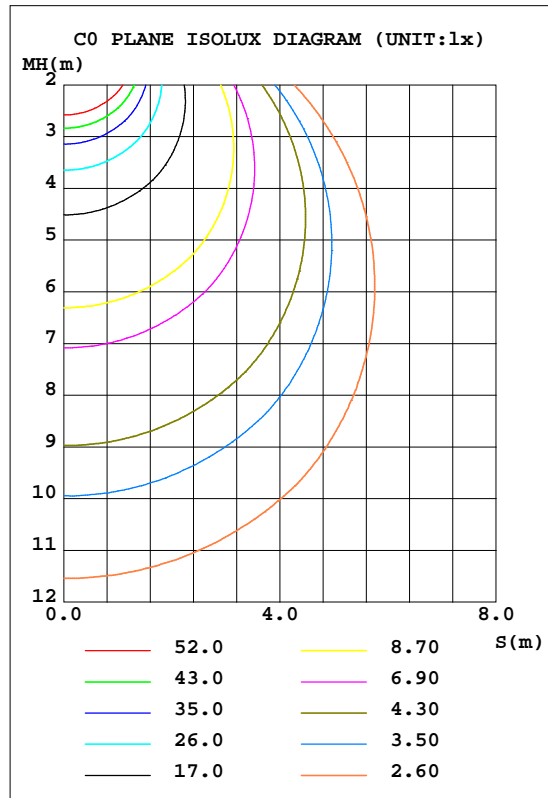
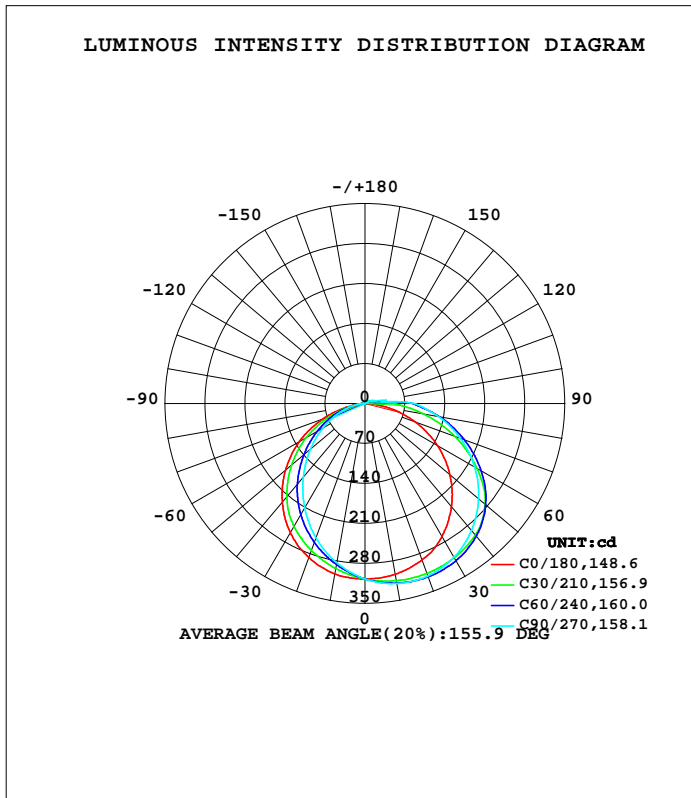


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.90V I:0.1376A P:15.524W PF:0.9409 Freq:59.98Hz Lamp Flux:1046.76x1 lm		
NAME: ASD-UCB-32D16CC-WH-4000K	TYPE:0	WEIGHT:
SPEC.:16W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MOBESD-UCB-32D16CC-WH-4000K		Imax(cd)	324.5	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)	1046.8	h UP, DN(C0-180)	2.9,61.1
NOMINAL FLUX(lm)	1046.76	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.3,35.6
LAMPS INSIDE	1	h up(%)	3.2	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	h down(%)	96.8	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	303.7	317.8	320.0	316.7	303.1	289.6	283.5	290.8	0- 10	29.13	29.13	2.78,2.78
20	291.8	320.9	321.3	319.7	287.4	265.4	250.8	267.8	10- 20	84.25	113.4	10.8,10.8
30	269.3	316.9	311.0	316.1	261.2	235.2	211.0	233.7	20- 30	130.2	243.5	23.3,23.3
40	235.7	305.5	290.1	304.5	225.4	198.4	168.1	193.4	30- 40	161.2	404.8	38.7,38.7
50	194.3	284.9	259.9	275.9	181.8	153.9	124.9	149.5	40- 50	173.2	577.9	55.2,55.2
60	146.0	249.0	221.7	235.4	132.0	106.4	84.24	104.5	50- 60	163.6	741.5	70.8,70.8
70	92.54	194.4	177.5	178.1	77.62	60.88	48.18	61.97	60- 70	134.0	875.5	83.6,83.6
80	38.39	133.2	130.1	114.6	25.46	21.93	19.24	22.97	70- 80	90.56	966.1	92.3,92.3
90	1.201	76.50	86.04	61.41	0.3355	1.013	1.978	1.568	80- 90	46.88	1013	96.8,96.8
100	0.6829	20.22	35.26	14.67	0.5935	1.212	1.202	1.085	90-100	16.46	1029	98.3,98.3
110	1.136	11.54	15.32	8.637	0.8444	1.429	1.443	1.297	100-110	6.771	1036	99,99
120	1.363	5.622	9.179	5.387	0.9443	1.369	1.423	1.278	110-120	4.193	1040	99.4,99.4
130	1.417	4.378	5.476	4.304	0.8944	1.313	1.255	1.203	120-130	2.561	1043	99.6,99.6
140	1.283	3.049	4.355	3.042	0.8278	1.255	1.147	1.127	130-140	1.736	1045	99.8,99.8
150	1.178	1.673	3.805	1.709	0.7571	1.087	1.069	1.054	140-150	1.135	1046	99.9,99.9
160	1.003	1.311	1.724	1.335	0.6816	0.8453	0.8501	0.8652	150-160	0.5850	1046	100,100
170	0.9192	1.210	1.415	1.248	0.7057	0.7001	0.6910	0.7897	160-170	0.2933	1047	100,100
180	0.8235	0.9083	0.8045	0.9235	0.8254	0.9020	0.8060	0.9251	170-180	0.0867	1047	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:0.1376A P:15.524W PF:0.9409 Freq:59.98Hz Lamp Flux:1046.76x1 lm										
NAME: ASD-UCB-32D16CC-WH-4000K					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	12.5	14.0	12.8	14.3	14.5	13.4	15.0	13.7	15.2	15.5
3H	14.1	15.5	14.5	15.8	16.1	15.7	17.2	16.1	17.5	17.8
4H	14.8	16.1	15.1	16.4	16.8	17.0	18.3	17.3	18.6	19.0
6H	15.2	16.5	15.6	16.8	17.2	18.2	19.5	18.6	19.8	20.2
8H	15.4	16.6	15.8	16.9	17.3	18.9	20.1	19.3	20.5	20.8
12H	15.4	16.6	15.8	17.0	17.4	19.6	20.8	20.0	21.2	21.5
4H 2H	13.5	14.9	13.9	15.2	15.6	14.2	15.6	14.6	15.9	16.2
3H	15.5	16.7	15.9	17.0	17.4	16.8	18.0	17.2	18.3	18.7
4H	16.3	17.4	16.8	17.8	18.2	18.1	19.2	18.6	19.6	20.0
6H	17.0	18.0	17.4	18.4	18.8	19.6	20.6	20.0	21.0	21.4
8H	17.2	18.1	17.7	18.5	19.0	20.4	21.3	20.8	21.7	22.2
12H	17.3	18.2	17.8	18.6	19.1	21.2	22.0	21.7	22.5	23.0
8H 4H	17.1	18.1	17.6	18.5	18.9	18.6	19.5	19.1	19.9	20.4
6H	18.1	18.9	18.6	19.4	19.9	20.3	21.1	20.8	21.6	22.1
8H	18.5	19.2	19.1	19.7	20.2	21.3	22.0	21.8	22.5	23.0
12H	18.8	19.4	19.4	19.9	20.5	22.4	23.0	22.9	23.5	24.0
12H 4H	17.3	18.2	17.8	18.6	19.1	18.7	19.5	19.1	19.9	20.4
6H	18.5	19.2	19.0	19.7	20.2	20.5	21.2	21.0	21.7	22.2
8H	19.1	19.7	19.6	20.2	20.7	21.5	22.1	22.1	22.6	23.2
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				

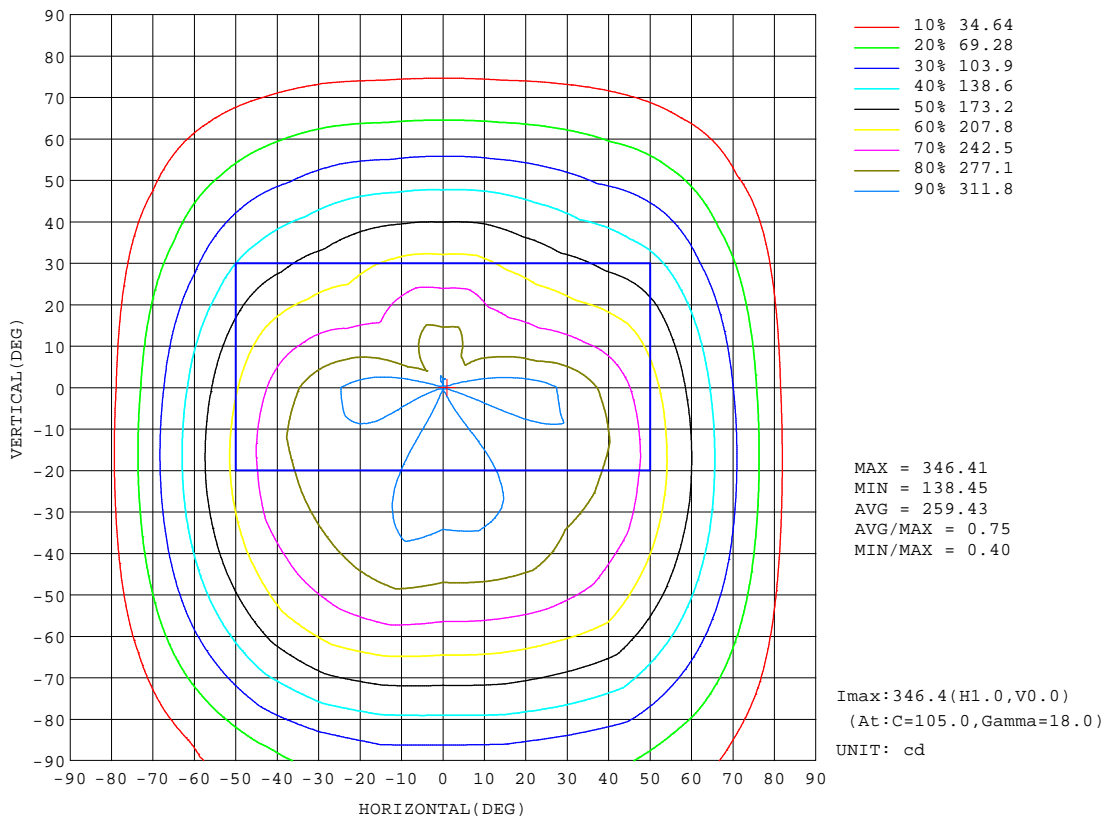
CIE Pub.117, 1047 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 0.2)

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:0.1376A P:15.524W PF:0.9409 Freq:59.98Hz Lamp Flux:1046.76x1 lm		
NAME: ASD-UCB-32D16CC-WH-4000K	TYPE:0	WEIGHT:
SPEC.:16W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



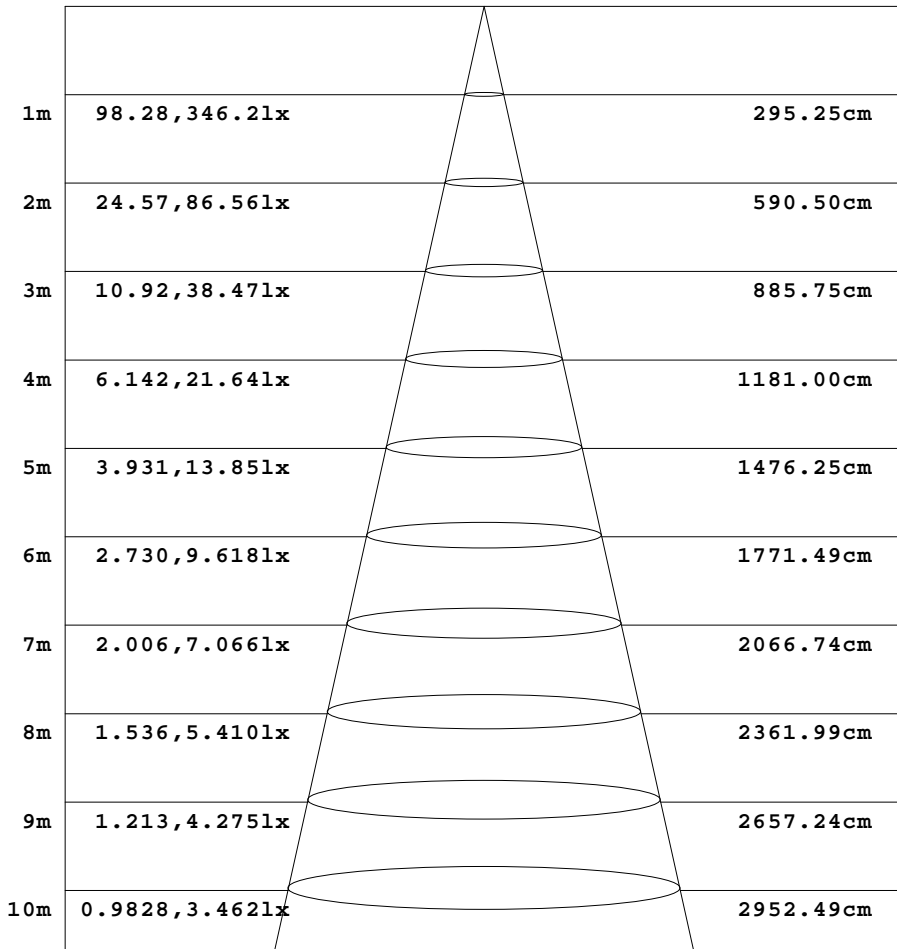
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:21 April 2021

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:0.1376A P:15.524W PF:0.9409 Freq:59.98Hz Lamp Flux:1046.76x1 lm		
NAME: ASD-UCB-32D16CC-WH-4000K	TYPE:0	WEIGHT:
SPEC.:16W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Flux out:678.6 lm



Height Eavg, Emax Angle:111.77deg Diameter

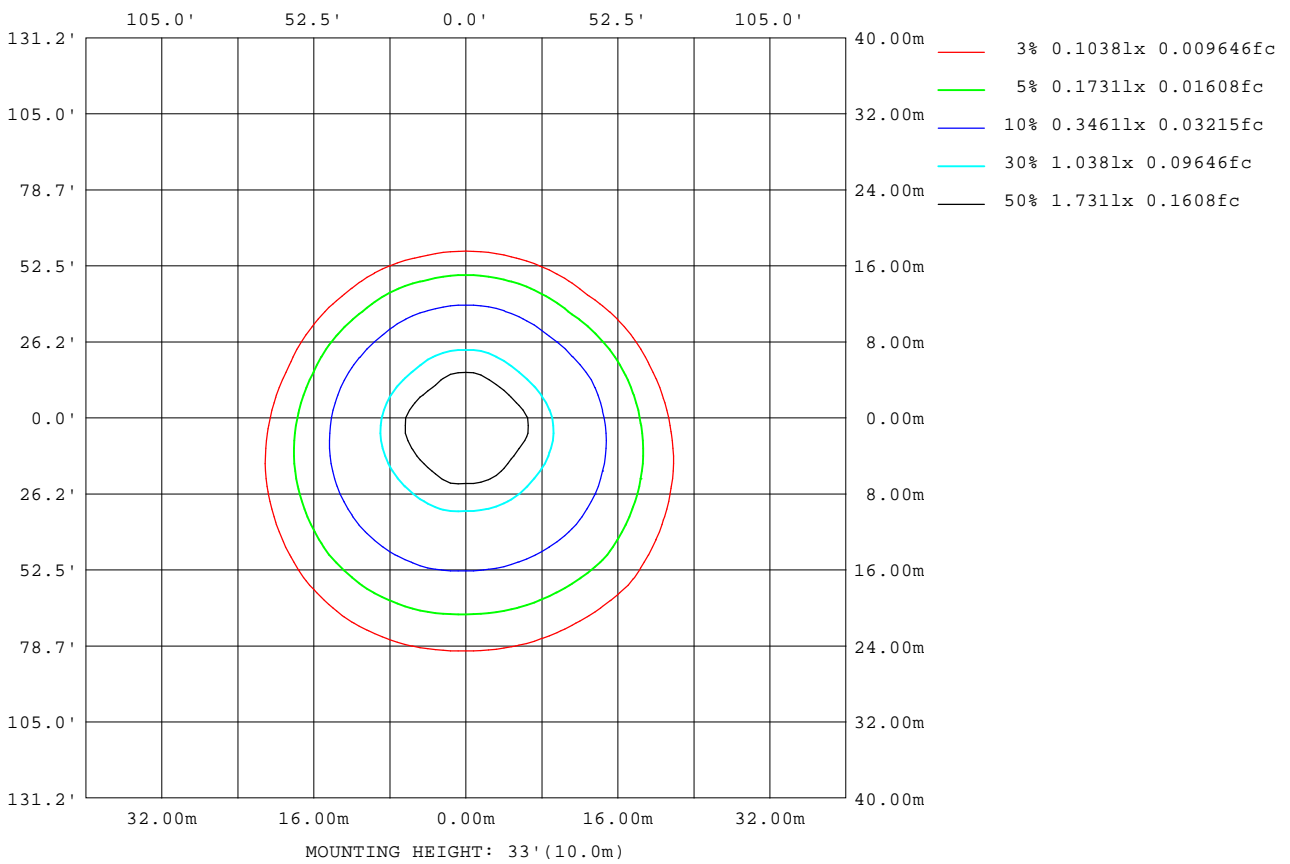
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.1376A P:15.524W PF:0.9409 Freq:59.98Hz Lamp Flux:1046.76x1 lm		
NAME: ASD-UCB-32D16CC-WH-4000K	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:0.1376A P:15.524W PF:0.9409 Freq:59.98Hz Lamp Flux:1046.76x1 lm		
NAME: ASD-UCB-32D16CC-WH-4000K	TYPE:0	WEIGHT:
SPEC.:16W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

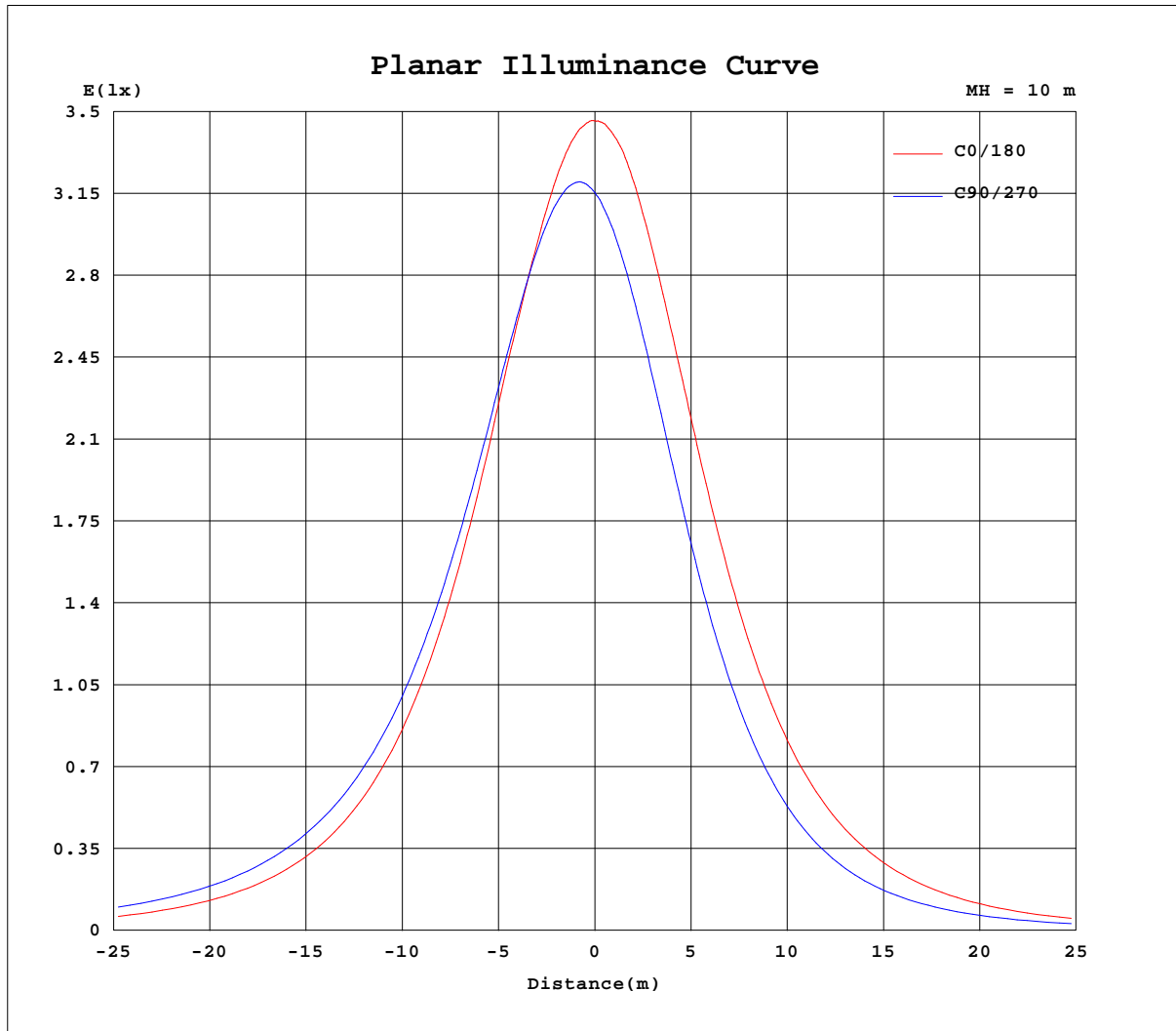
AvgL	cd/m2
L_0~180(65)av	532
L_0~180(75)av	447
L_0~180(85)av	250
L_90~270(65)av	628
L_90~270(75)av	721
L_90~270(85)av	1321
L_45(65)av	709
L_45(75)av	756
L_45(85)av	1168

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:0.1376A P:15.524W PF:0.9409 Freq:59.98Hz Lamp Flux:1046.76x1 lm		
NAME: ASD-UCB-32D16CC-WH-4000K	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	307	307	307	307	307	307	307	307	307	307	307	307	307	307	307	307	307	307	307
5	307	310	312	313	314	315	315	315	314	313	312	309	306	303	301	299	298	297	297
10	304	312	315	318	319	320	320	321	319	317	314	310	303	298	294	290	287	284	284
15	299	312	317	320	322	322	322	324	322	319	315	310	296	291	285	278	274	269	268
20	292	311	317	321	323	321	321	324	323	320	315	309	287	282	274	265	259	252	251
25	283	309	315	320	322	317	318	322	322	319	312	304	276	269	262	251	243	233	232
30	269	304	312	317	318	310	311	317	319	316	305	296	261	254	249	235	225	212	211
35	253	295	307	312	312	301	302	309	314	311	296	285	245	238	233	218	205	191	190
40	236	278	301	305	303	289	290	298	307	305	285	268	225	221	213	198	184	169	168
45	216	258	290	296	291	275	276	284	297	292	271	246	204	202	191	178	162	147	146
50	194	236	275	285	276	259	260	268	282	276	253	223	182	178	168	154	140	125	125
55	171	212	253	269	257	241	242	248	264	257	229	198	158	150	144	130	118	104	104
60	146	186	227	249	235	221	222	227	243	235	202	171	132	122	118	106	95.9	83.8	84.2
65	120	158	198	224	210	199	200	204	219	208	173	142	105	93.2	90.3	84.0	75.0	65.6	65.4
70	92.5	129	167	194	185	177	177	180	192	178	143	112	77.6	66.4	64.3	60.9	55.4	48.0	48.2
75	65.4	99.1	135	163	159	154	154	155	162	146	111	80.8	50.4	41.1	41.1	39.7	36.8	32.3	32.6
80	38.4	68.5	103	133	132	130	130	131	133	115	80.0	50.3	25.5	20.5	22.0	21.9	21.2	18.8	19.2
85	14.8	40.3	73.2	101	105	105	106	107	104	84.1	50.8	22.8	6.90	6.65	8.01	8.89	9.18	8.48	8.80
90	1.20	19.4	49.4	76.5	83.5	85.2	86.0	85.7	81.7	61.4	31.1	6.70	0.34	0.48	0.71	1.01	1.43	1.48	1.98
95	0.49	5.35	22.3	27.9	31.6	37.2	37.0	35.2	30.5	26.1	10.5	1.64	0.44	0.61	0.79	0.95	0.98	0.98	0.98
100	0.68	2.91	10.04	20.2	27.2	33.0	35.3	31.3	23.1	14.7	6.63	1.16	0.59	0.82	1.04	1.21	1.22	1.19	1.20
105	0.91	2.20	8.03	14.8	17.1	18.0	18.7	18.9	18.1	11.9	4.52	1.50	0.71	0.95	1.21	1.36	1.39	1.38	1.38
110	1.14	2.29	5.76	11.5	14.2	15.8	15.3	15.4	13.9	8.64	3.63	1.68	0.84	1.04	1.27	1.43	1.48	1.46	1.44
115	1.25	2.33	4.60	7.80	10.9	12.7	12.5	11.9	10.08	6.34	3.43	1.67	0.91	1.10	1.30	1.44	1.49	1.45	1.44
120	1.36	2.49	4.05	5.62	7.71	9.52	9.18	8.37	7.24	5.39	3.47	1.75	0.94	1.13	1.35	1.37	1.45	1.43	1.42
125	1.43	2.28	3.61	4.81	5.79	6.91	6.72	6.04	5.77	4.84	3.04	1.69	0.94	1.10	1.27	1.35	1.32	1.34	1.36
130	1.42	2.08	3.06	4.38	5.03	5.70	5.48	5.08	5.01	4.30	2.54	1.57	0.89	1.03	1.24	1.31	1.33	1.27	1.26
135	1.37	1.90	2.81	3.90	4.51	5.07	4.89	4.49	4.42	3.30	2.24	1.51	0.86	0.97	1.17	1.30	1.24	1.18	1.20
140	1.28	1.73	2.07	3.05	4.43	4.51	4.36	4.18	3.64	3.04	1.93	1.32	0.83	0.92	1.12	1.26	1.23	1.14	1.15
145	1.24	1.57	1.81	2.82	3.58	4.33	4.37	3.67	3.12	1.99	1.71	1.29	0.79	0.89	1.05	1.15	1.18	1.12	1.15
150	1.18	1.43	1.57	1.67	2.10	3.62	3.81	3.28	1.73	1.71	1.37	1.24	0.76	0.84	0.94	1.09	1.05	1.03	1.07
155	1.09	1.37	1.35	1.44	1.78	1.99	2.01	1.69	1.59	1.50	1.40	1.18	0.72	0.80	0.88	0.96	0.99	0.95	0.98
160	1.00	1.29	1.36	1.31	1.77	1.61	1.72	1.56	1.54	1.33	1.27	1.11	0.68	0.76	0.84	0.85	0.83	0.82	0.85
165	0.90	1.15	1.25	1.33	1.23	1.58	1.60	1.36	1.50	1.31	1.18	0.94	0.64	0.70	0.76	0.79	0.73	0.67	0.69
170	0.92	1.14	1.22	1.21	1.21	1.54	1.42	1.32	1.34	1.25	1.14	0.91	0.71	0.68	0.71	0.70	0.68	0.63	0.69
175	0.87	1.02	1.12	1.10	0.96	1.02	1.25	1.16	1.24	1.09	0.96	0.86	0.73	0.67	0.68	0.71	0.65	0.59	0.66
180	0.82	0.85	0.89	0.91	0.80	0.76	0.80	0.78	0.90	0.92	0.88	0.86	0.83	0.84	0.89	0.90	0.80	0.75	0.81

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:0.1376A P:15.524W PF:0.9409 Freq:59.98Hz Lamp Flux:1046.76x1 lm		
NAME: ASD-UCB-32D16CC-WH-4000K	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	307	307	307	307	307															
5	297	298	300	301	304															
10	284	288	291	292	297															
15	269	275	280	281	288															
20	252	261	268	268	278															
25	233	245	252	253	267															
30	213	226	234	237	254															
35	192	206	214	221	240															
40	170	184	193	203	225															
45	148	162	172	184	208															
50	127	140	149	163	190															
55	105	118	127	142	165															
60	84.7	96.6	105	119	137															
65	66.3	75.9	83.2	95.1	108															
70	48.5	56.3	62.0	68.2	78.1															
75	32.6	37.6	41.6	43.6	50.4															
80	18.8	21.7	23.0	23.1	25.5															
85	8.57	9.40	9.26	8.53	8.03															
90	1.82	2.06	1.57	1.32	0.73															
95	0.96	0.95	0.83	0.63	0.49															
100	1.17	1.18	1.09	0.87	0.72															
105	1.36	1.35	1.24	1.03	0.84															
110	1.43	1.43	1.30	1.12	0.95															
115	1.44	1.44	1.32	1.15	1.02															
120	1.40	1.38	1.28	1.20	1.07															
125	1.27	1.26	1.24	1.16	1.06															
130	1.24	1.25	1.20	1.09	1.00															
135	1.17	1.22	1.21	1.06	0.96															
140	1.11	1.20	1.13	1.02	0.92															
145	1.12	1.14	1.10	0.96	0.91															
150	1.03	1.07	1.05	0.92	0.89															
155	0.96	1.00	0.94	0.89	0.86															
160	0.84	0.86	0.87	0.85	0.83															
165	0.74	0.79	0.82	0.80	0.75															
170	0.70	0.73	0.79	0.80	0.78															
175	0.64	0.72	0.76	0.80	0.82															
180	0.78	0.90	0.93	0.88	0.86															

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=1.0000]

Remarks: