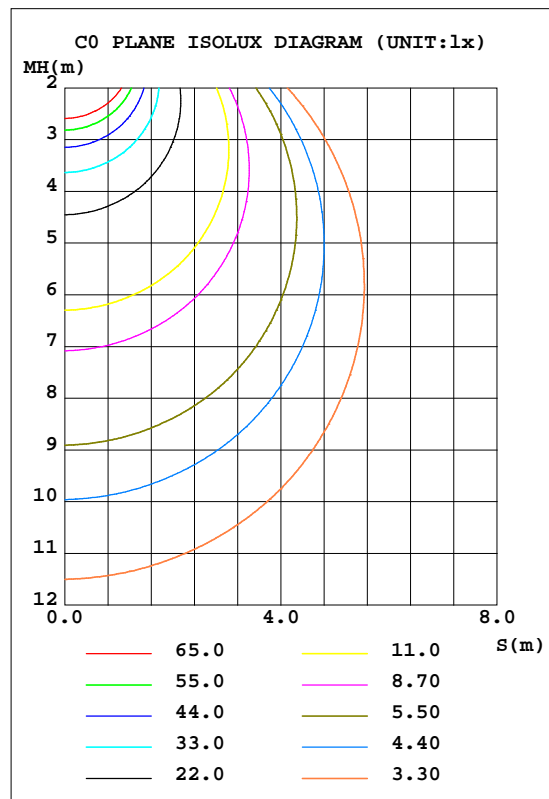
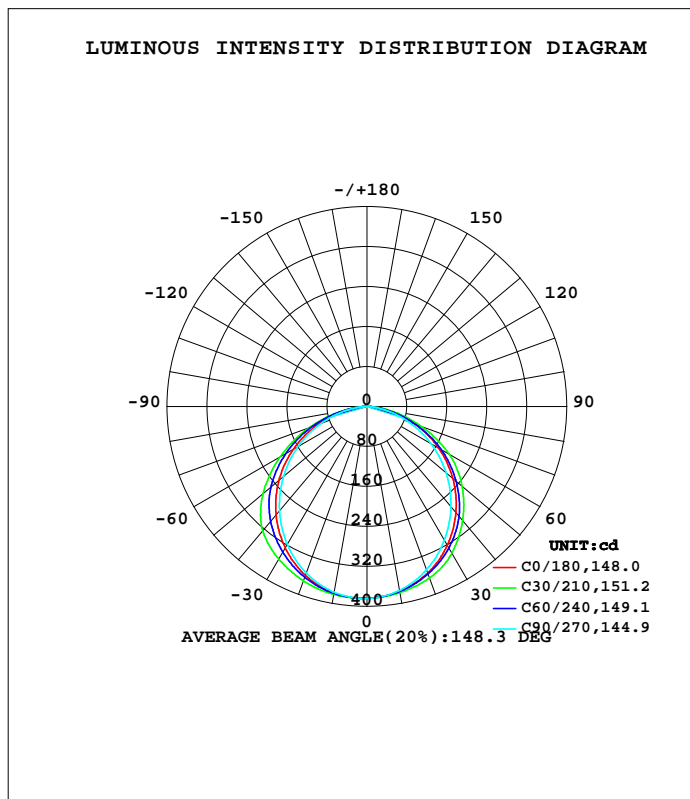


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.02V I:0.1475A P:16.411W PF:0.9268 Freq:59.98Hz Lamp Flux:1131.19x1 lm		
NAME: ASD-UCL-32D16CC-4000K	TYPE:	WEIGHT:
SPEC.:16W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	ASD-UCL-32D12CC-4000K	Imax(cd)	384.5	S/MH(C0/180)	1.26
NOMINAL POWER(W)	16	LOR(%)	100.0	S/MH(C90/270)	1.24
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1131.2	h UP, DN(C0-180)	0.3,48.8
NOMINAL FLUX(lm)	1131.19	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.2,50.7
LAMPS INSIDE	1	h up(%)	0.5	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	h down(%)	99.5	CIBSE SHR MAX	1.55



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:10 March 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	375.3	377.0	373.8	377.4	379.9	380.8	377.4	380.0	0- 10	36.36	36.36	3.21,3.21
20	354.9	360.5	348.0	360.7	359.9	367.7	354.8	365.6	10- 20	104.6	141.0	12.5,12.5
30	321.1	336.0	309.5	333.7	327.1	344.5	318.8	341.7	20- 30	160.0	301.0	26.6,26.6
40	277.1	298.2	261.7	295.9	283.4	312.1	272.4	308.0	30- 40	195.5	496.5	43.9,43.9
50	224.6	245.2	207.0	244.7	230.1	268.3	218.1	264.1	40- 50	205.4	701.9	62,62
60	165.3	184.9	147.7	186.9	169.5	201.0	158.6	196.9	50- 60	186.4	888.3	78.5,78.5
70	101.7	115.9	86.74	116.2	103.8	121.8	96.30	119.9	60- 70	140.8	1029	91,91
80	41.71	44.68	31.50	43.47	40.69	48.08	37.88	48.73	70- 80	77.84	1107	97.9,97.9
90	0.9110	0.8353	0.3080	0.8136	0.2085	0.7098	0.3184	0.8200	80- 90	18.92	1126	99.5,99.5
100	0.5785	0.6623	0.5540	0.6354	0.3958	0.4700	0.3511	0.5326	90-100	0.4945	1126	99.6,99.6
110	0.8421	0.9952	0.8987	0.9512	0.6203	0.6866	0.6001	0.7232	100-110	0.6887	1127	99.6,99.6
120	1.054	1.224	1.127	1.180	0.7937	0.8579	0.7587	0.8947	110-120	0.8765	1128	99.7,99.7
130	1.105	1.312	1.277	1.267	0.8353	0.9850	0.8962	1.012	120-130	0.9263	1129	99.8,99.8
140	1.049	1.373	1.281	1.350	0.7905	1.065	1.019	1.074	130-140	0.8489	1130	99.9,99.9
150	0.9831	1.463	1.311	1.405	0.7125	0.9272	1.107	0.9475	140-150	0.6953	1130	99.9,99.9
160	0.9331	1.249	1.302	1.212	0.6502	0.8953	0.8222	0.9136	150-160	0.4915	1131	100,100
170	0.8615	1.168	0.9915	1.096	0.7162	0.9261	0.8910	0.9607	160-170	0.2729	1131	100,100
180	0.8301	1.049	0.9708	1.075	0.8279	1.053	0.9720	1.082	170-180	0.0902	1131	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:10 March 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:120.02V I:0.1475A P:16.411W PF:0.9268 Freq:59.98Hz Lamp Flux:1131.19x1 lm										
NAME: ASD-UCL-32D16CC-4000K					TYPE:			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	12.1	13.6	12.3	13.8	14.0	11.1	12.7	11.4	12.9	13.1
3H	13.6	15.0	13.9	15.2	15.5	12.5	13.9	12.8	14.1	14.4
4H	14.2	15.5	14.5	15.8	16.1	12.9	14.3	13.3	14.5	14.8
6H	14.6	15.9	15.0	16.2	16.4	13.2	14.5	13.6	14.8	15.1
8H	14.7	16.0	15.1	16.2	16.5	13.3	14.5	13.6	14.8	15.1
12H	14.8	16.0	15.2	16.3	16.6	13.3	14.5	13.7	14.8	15.1
4H 2H	12.6	13.9	12.9	14.2	14.4	11.9	13.2	12.2	13.4	13.7
3H	14.3	15.5	14.7	15.8	16.1	13.4	14.5	13.7	14.8	15.1
4H	15.0	16.1	15.4	16.4	16.8	13.9	15.0	14.3	15.3	15.7
6H	15.6	16.5	16.0	16.9	17.2	14.3	15.3	14.7	15.6	16.0
8H	15.7	16.6	16.2	17.0	17.4	14.4	15.3	14.9	15.7	16.1
12H	15.9	16.7	16.3	17.1	17.5	14.5	15.3	14.9	15.7	16.1
8H 4H	15.2	16.1	15.6	16.5	16.9	14.3	15.1	14.7	15.5	15.9
6H	15.9	16.6	16.3	17.0	17.5	14.8	15.5	15.2	15.9	16.4
8H	16.1	16.8	16.6	17.2	17.7	14.9	15.6	15.4	16.0	16.5
12H	16.3	16.9	16.8	17.4	17.8	15.0	15.6	15.5	16.0	16.5
12H 4H	15.2	16.0	15.6	16.4	16.8	14.3	15.1	14.7	15.5	15.9
6H	15.9	16.6	16.4	17.0	17.5	14.8	15.5	15.3	15.9	16.4
8H	16.2	16.8	16.7	17.2	17.7	15.0	15.6	15.5	16.0	16.5
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.2 / - 0.3				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.4				
2.0H	+ 0.2 / - 0.4					+ 0.2 / - 0.4				

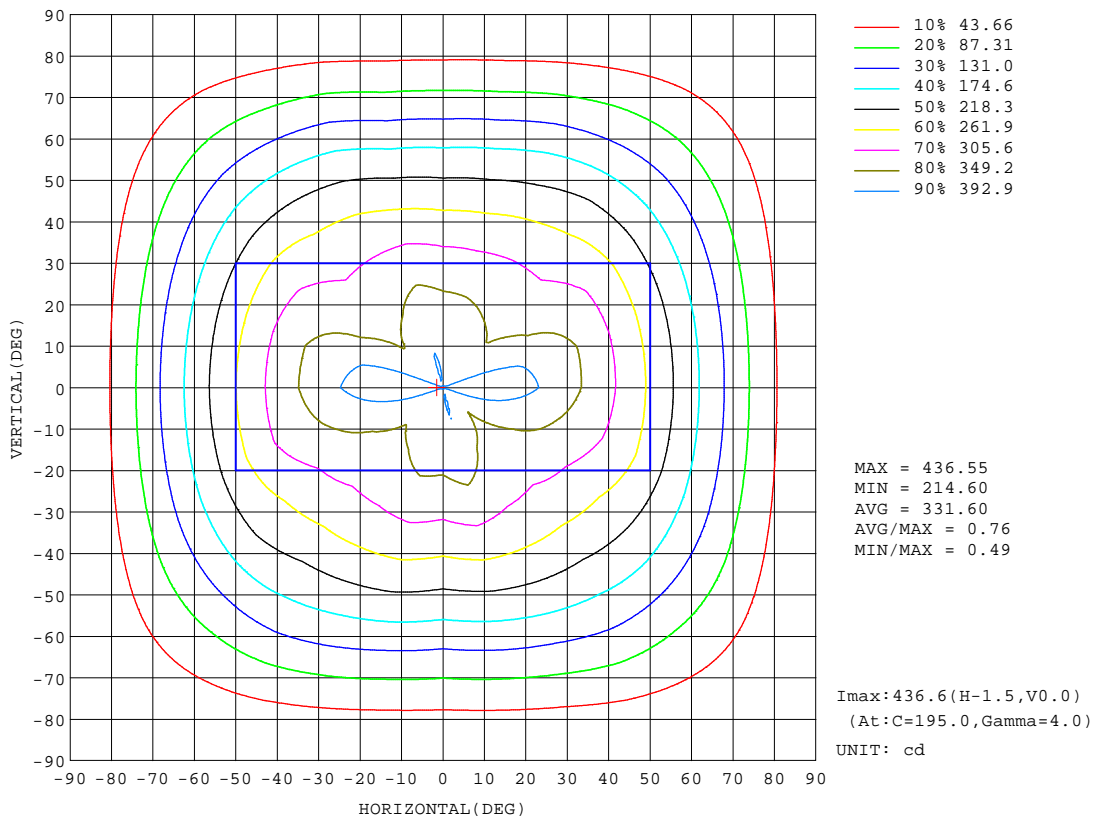
CIE Pub.117, 1131 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 0.4)

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:10 March 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:120.02V I:0.1475A P:16.411W PF:0.9268 Freq:59.98Hz Lamp Flux:1131.19x1 lm		
NAME: ASD-UCL-32D16CC-4000K	TYPE:	WEIGHT:
SPEC.:16W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



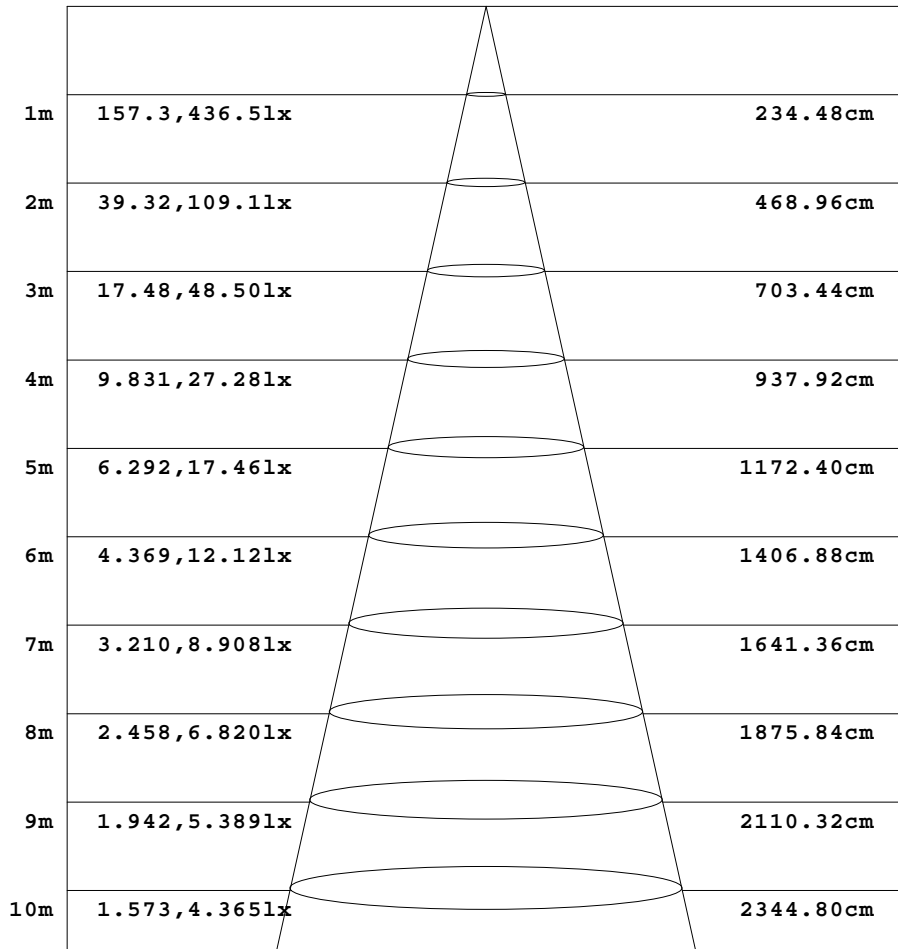
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:10 March 2021

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:120.02V I:0.1475A P:16.411W PF:0.9268 Freq:59.98Hz Lamp Flux:1131.19x1 lm		
NAME: ASD-UCL-32D16CC-4000K	TYPE:	WEIGHT:
SPEC.:16W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Flux out:701.9 lm



Height Eavg, Emax Angle:99.07deg Diameter

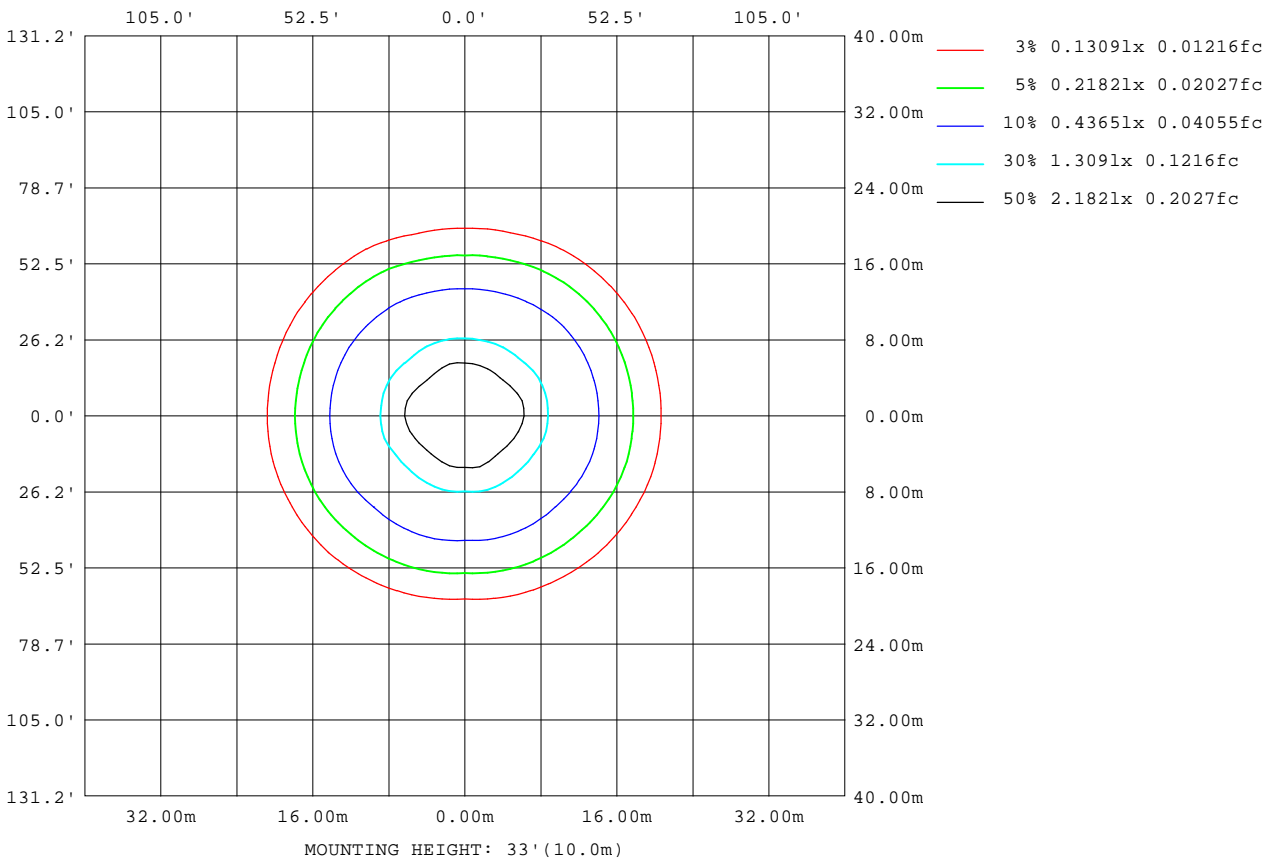
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:10 March 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:120.02V I:0.1475A P:16.411W PF:0.9268 Freq:59.98Hz Lamp Flux:1131.19x1 lm		
NAME: ASD-UCL-32D16CC-4000K	TYPE:	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:10 March 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:120.02V I:0.1475A P:16.411W PF:0.9268 Freq:59.98Hz Lamp Flux:1131.19x1 lm		
NAME: ASD-UCL-32D16CC-4000K	TYPE:	WEIGHT:
SPEC.:16W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

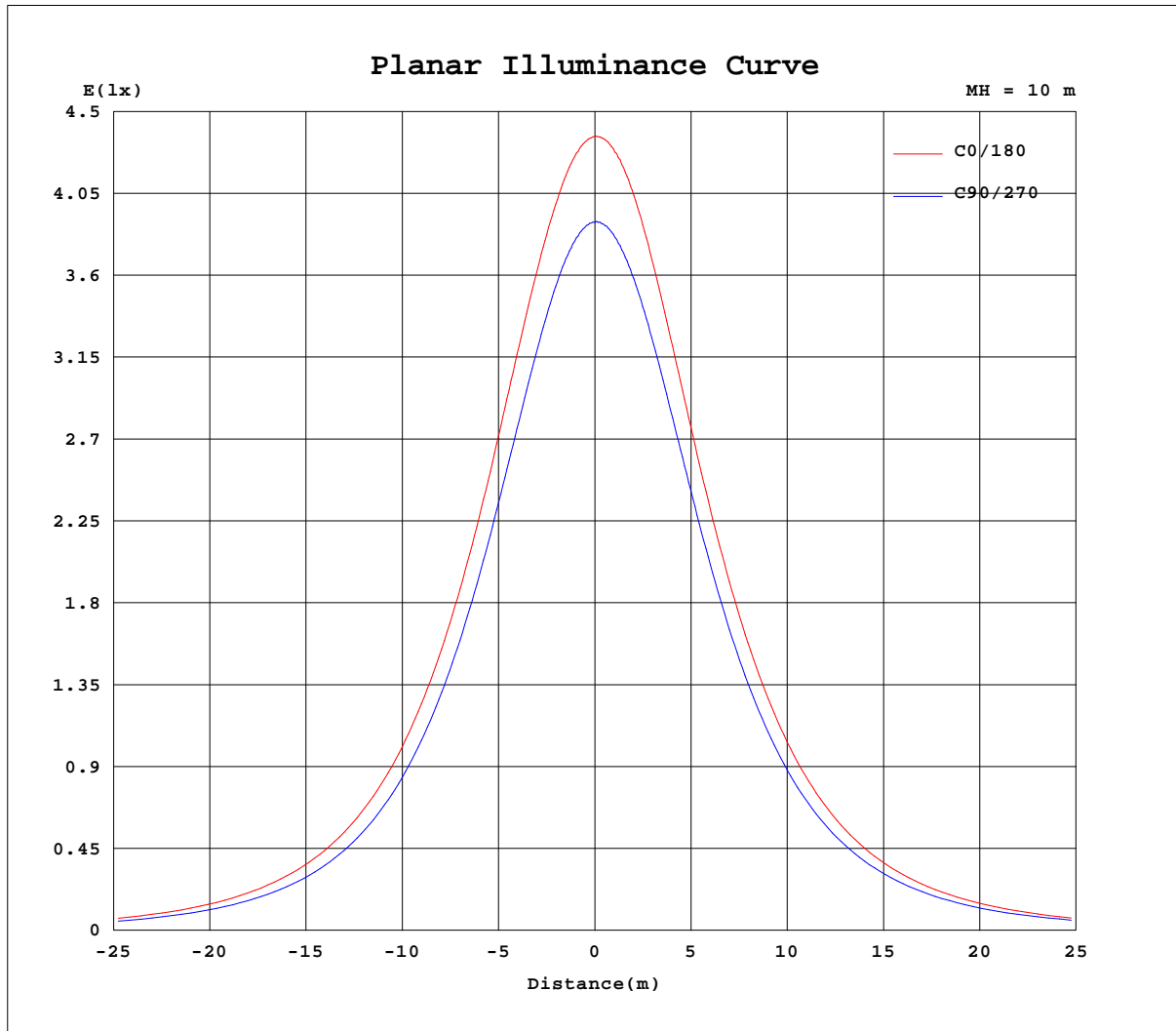
AvgL	cd/m2
L_0~180(65)av	641
L_0~180(75)av	547
L_0~180(85)av	378
L_90~270(65)av	579
L_90~270(75)av	479
L_90~270(85)av	276
L_45(65)av	741
L_45(75)av	626
L_45(85)av	393

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:10 March 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: 10 March 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:120.02V I:0.1475A P:16.411W PF:0.9268 Freq:59.98Hz Lamp Flux:1131.19x1 lm		
NAME: ASD-UCL-32D16CC-4000K	TYPE:	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	384	384	384	384	384	384	384	384	384	384	384	384	384	384	384	384	384	384	384
5	381	380	382	382	381	382	381	382	381	382	382	381	383	384	384	384	383	383	383
10	375	374	378	377	376	375	374	376	376	377	378	376	380	383	382	381	380	377	377
15	366	365	373	370	367	365	363	366	368	370	372	367	371	379	378	375	373	368	368
20	355	354	365	361	357	351	348	353	357	361	363	357	360	372	371	368	364	355	355
25	340	340	355	349	343	334	330	337	343	349	352	345	345	361	363	357	352	338	338
30	321	325	339	336	327	314	309	318	326	334	337	332	327	347	353	345	337	319	319
35	300	308	320	319	309	291	286	297	307	317	318	317	307	328	340	329	320	297	297
40	277	289	298	298	287	266	262	273	286	296	298	300	283	304	325	312	300	273	272
45	252	268	274	273	261	239	235	247	261	271	275	276	258	276	301	292	277	247	246
50	225	240	249	245	233	211	207	219	233	245	252	246	230	247	272	268	251	219	218
55	196	209	221	216	203	182	178	189	204	217	226	214	201	215	237	237	220	189	189
60	165	177	189	185	171	152	148	157	173	187	192	181	170	181	200	201	187	158	159
65	134	143	152	152	137	121	117	125	140	154	153	146	137	146	161	162	152	127	128
70	102	109	115	116	102	89.8	86.7	93.0	106	116	115	110	104	110	122	122	116	95.1	96.3
75	70.6	75.1	79.1	78.8	68.8	60.0	58.1	62.0	71.3	78.3	78.2	75.3	71.0	75.5	83.7	83.7	79.0	65.3	65.8
80	41.7	44.1	45.6	44.7	38.0	32.9	31.5	33.7	38.8	43.5	44.0	42.9	40.7	43.4	48.4	48.1	45.4	37.3	37.9
85	17.3	18.3	17.2	16.1	12.6	10.8	9.89	10.9	12.4	14.9	15.5	16.2	15.7	16.4	19.0	18.0	17.2	13.4	14.1
90	0.91	0.54	0.97	0.84	0.60	0.28	0.31	0.33	0.65	0.81	0.72	0.41	0.21	0.74	0.69	0.71	0.51	0.31	0.32
95	0.46	0.47	0.50	0.48	0.45	0.39	0.40	0.40	0.44	0.47	0.48	0.47	0.29	0.31	0.40	0.38	0.33	0.31	0.34
100	0.58	0.60	0.66	0.66	0.61	0.54	0.55	0.55	0.60	0.64	0.63	0.58	0.40	0.42	0.46	0.47	0.41	0.40	0.35
105	0.71	0.74	0.82	0.84	0.80	0.72	0.74	0.73	0.78	0.81	0.78	0.71	0.51	0.54	0.57	0.59	0.52	0.47	0.48
110	0.84	0.87	0.97	1.00	0.96	0.87	0.90	0.89	0.93	0.95	0.92	0.84	0.62	0.64	0.69	0.69	0.65	0.58	0.60
115	0.95	0.98	1.09	1.13	1.09	0.99	1.02	1.01	1.06	1.09	1.03	0.95	0.71	0.73	0.80	0.77	0.72	0.66	0.68
120	1.05	1.10	1.19	1.22	1.20	1.09	1.13	1.11	1.16	1.18	1.14	1.05	0.79	0.81	0.89	0.86	0.79	0.73	0.76
125	1.10	1.15	1.23	1.27	1.25	1.18	1.22	1.19	1.23	1.22	1.19	1.11	0.84	0.86	0.93	0.93	0.85	0.78	0.83
130	1.11	1.18	1.28	1.31	1.28	1.23	1.28	1.25	1.26	1.27	1.25	1.13	0.84	0.88	0.98	0.98	0.93	0.86	0.90
135	1.09	1.15	1.30	1.34	1.31	1.24	1.30	1.25	1.29	1.31	1.27	1.11	0.83	0.87	0.98	1.01	0.99	0.91	0.96
140	1.05	1.11	1.33	1.37	1.32	1.22	1.28	1.23	1.30	1.35	1.29	1.09	0.79	0.85	0.94	1.06	0.99	0.95	1.02
145	1.02	1.10	1.34	1.44	1.34	1.24	1.29	1.25	1.34	1.41	1.28	1.09	0.75	0.84	0.93	1.04	1.08	0.97	1.04
150	0.98	1.09	1.28	1.46	1.42	1.29	1.31	1.28	1.39	1.41	1.23	1.09	0.71	0.80	0.90	0.93	1.04	1.05	1.11
155	0.96	1.08	1.21	1.38	1.41	1.39	1.41	1.35	1.36	1.34	1.18	1.07	0.68	0.78	0.90	0.91	0.86	0.88	0.97
160	0.93	1.05	1.16	1.25	1.32	1.26	1.30	1.25	1.27	1.21	1.12	1.03	0.65	0.76	0.85	0.90	0.86	0.80	0.82
165	0.87	0.97	1.13	1.18	1.17	1.08	1.11	1.09	1.14	1.13	1.07	0.94	0.64	0.73	0.80	0.91	0.90	0.80	0.81
170	0.86	0.96	1.14	1.17	1.11	1.03	0.99	1.02	1.08	1.10	1.05	0.92	0.72	0.73	0.85	0.93	0.90	0.81	0.89
175	0.85	0.92	1.06	1.09	1.05	1.01	1.00	0.98	1.07	1.09	1.00	0.88	0.74	0.77	0.88	0.96	0.92	0.82	0.92
180	0.83	0.88	1.00	1.05	0.96	0.91	0.97	0.89	0.97	1.08	1.03	0.90	0.83	0.88	1.00	1.05	0.96	0.91	0.97

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: MEDIUM

Temperature:25.3DEG

Operators:

Test Date:10 March 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:120.02V I:0.1475A P:16.411W PF:0.9268 Freq:59.98Hz Lamp Flux:1131.19x1 lm		
NAME: ASD-UCL-32D16CC-4000K	TYPE:	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	384	384	384	384	384															
5	382	383	383	383	384															
10	376	379	380	381	382															
15	367	372	374	376	378															
20	354	363	366	369	371															
25	338	350	355	360	361															
30	320	334	342	349	346															
35	299	317	326	336	324															
40	275	296	308	320	299															
45	250	271	288	296	272															
50	223	243	264	265	242															
55	195	214	233	230	211															
60	164	183	197	195	178															
65	132	149	159	158	144															
70	99.1	113	120	120	110															
75	68.2	77.3	83.5	83.3	76.3															
80	39.3	44.9	48.7	49.4	45.2															
85	14.5	17.8	19.5	20.9	18.8															
90	0.40	0.61	0.82	0.95	0.93															
95	0.36	0.44	0.49	0.49	0.36															
100	0.41	0.48	0.53	0.50	0.45															
105	0.50	0.58	0.63	0.60	0.56															
110	0.61	0.69	0.72	0.71	0.67															
115	0.69	0.76	0.82	0.81	0.77															
120	0.77	0.84	0.89	0.91	0.87															
125	0.82	0.88	0.97	0.96	0.92															
130	0.91	0.96	1.01	1.02	0.93															
135	0.97	1.03	1.03	1.00	0.91															
140	1.00	1.04	1.07	0.98	0.89															
145	1.04	1.08	1.04	0.96	0.88															
150	1.10	1.05	0.95	0.94	0.85															
155	0.91	0.90	0.93	0.95	0.83															
160	0.84	0.89	0.91	0.90	0.79															
165	0.88	0.92	0.93	0.88	0.82															
170	0.91	0.92	0.96	0.92	0.87															
175	0.89	0.90	0.97	0.99	0.89															
180	0.89	0.98	1.08	1.02	0.89															

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:10 March 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: