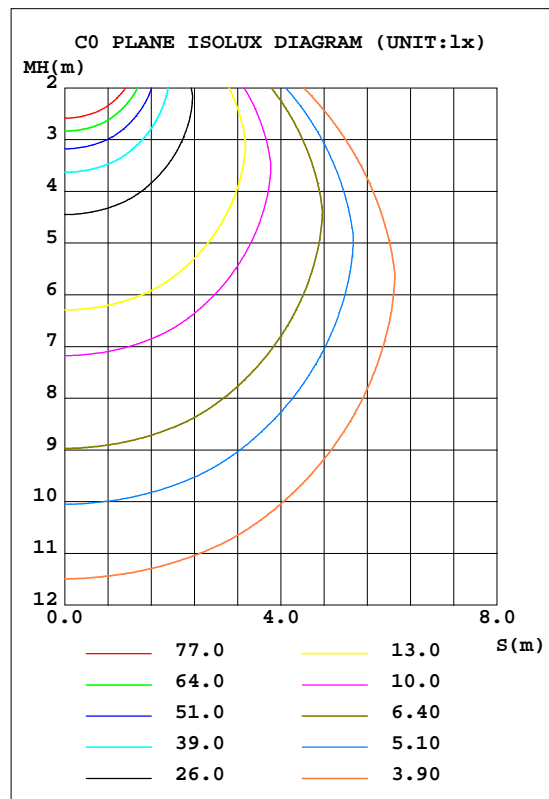
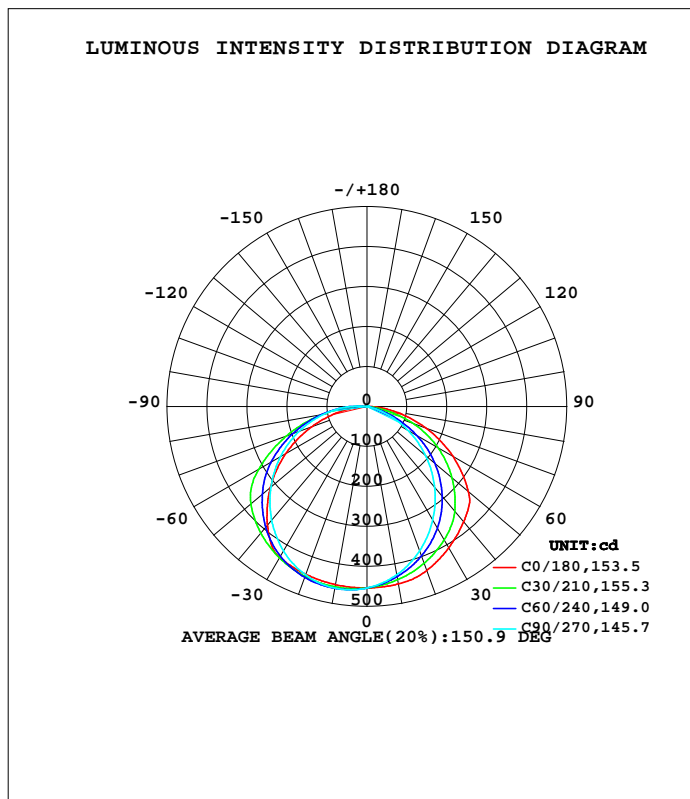


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.07V I:0.3081A P:20.096W PF:0.5435 Freq:59.98Hz Lamp Flux:1431.46x1 lm		
NAME: ASD-UCS-40D20CC-4000K	TYPE:	WEIGHT:
SPEC.:20W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	ASD-UCS-40D20CC-4000K	Imax(cd)	461.9	S/MH(C0/180)	1.42
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	1.36
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1431.5	h UP, DN(C0-180)	0.4,41.2
NOMINAL FLUX(lm)	1431.46	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.5,57.9
LAMPS INSIDE	1	h up(%)	0.9	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	h down(%)	99.1	CIBSE SHR MAX	1.55



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:  
 Test Date:21 February 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=1.0963]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	450.6	436.2	427.7	436.2	452.5	460.2	461.2	459.6	0- 10	43.05	43.05	3.01,3.01
20	436.8	407.3	384.4	407.6	446.9	454.0	448.6	453.6	10- 20	124.5	167.5	11.7,11.7
30	408.7	368.7	328.9	369.0	436.6	436.3	417.5	435.9	20- 30	192.2	359.7	25.1,25.1
40	376.5	320.0	263.7	320.1	387.6	407.5	371.1	406.7	30- 40	238.2	597.9	41.8,41.8
50	330.8	258.5	192.0	260.1	315.6	367.2	313.8	364.7	40- 50	254.6	852.5	59.6,59.6
60	247.6	179.0	117.1	186.1	233.6	313.8	249.6	300.1	50- 60	236.4	1089	76.1,76.1
70	156.4	88.65	47.24	93.92	145.5	230.9	180.0	216.2	60- 70	183.4	1272	88.9,88.9
80	67.67	11.88	0.5660	9.529	60.41	128.5	107.9	121.3	70- 80	107.2	1380	96.4,96.4
90	1.310	0.7963	0.8113	0.8475	0.4486	37.09	40.25	37.15	80- 90	39.23	1419	99.1,99.1
100	0.8085	1.297	1.397	1.387	0.7258	0.5787	0.3033	0.6927	90-100	5.040	1424	99.5,99.5
110	1.122	1.706	1.891	1.797	1.060	0.8638	0.6486	0.8772	100-110	1.111	1425	99.6,99.6
120	1.401	1.924	2.125	2.010	1.286	1.186	1.017	1.185	110-120	1.349	1426	99.6,99.6
130	1.485	1.978	2.279	2.011	1.318	1.441	1.325	1.447	120-130	1.408	1428	99.7,99.7
140	1.428	2.037	2.215	2.014	1.262	1.596	1.606	1.600	130-140	1.285	1429	99.8,99.8
150	1.362	2.079	2.199	2.005	1.177	1.459	1.819	1.533	140-150	1.056	1430	99.9,99.9
160	1.303	1.743	2.052	1.664	1.121	1.421	1.542	1.485	150-160	0.7481	1431	100,100
170	1.317	1.789	1.613	1.659	1.172	1.502	1.583	1.565	160-170	0.4216	1431	100,100
180	1.348	1.715	1.669	1.752	1.343	1.717	1.670	1.747	170-180	0.1448	1431	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 February 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=1.0963]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.07V I:0.3081A P:20.096W PF:0.5435 Freq:59.98Hz Lamp Flux:1431.46x1 lm										
NAME: ASD-UCS-40D20CC-4000K					TYPE:			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	13.0	14.5	13.3	14.8	15.0	9.3	10.9	9.6	11.1	11.3
3H	14.7	16.2	15.1	16.4	16.7	9.9	11.3	10.2	11.6	11.8
4H	15.4	16.8	15.7	17.0	17.3	9.9	11.3	10.2	11.5	11.8
6H	15.9	17.2	16.2	17.5	17.8	9.8	11.1	10.2	11.4	11.7
8H	16.1	17.3	16.4	17.6	17.9	9.8	11.0	10.1	11.3	11.6
12H	16.2	17.3	16.5	17.7	18.0	9.7	10.9	10.1	11.2	11.5
4H 2H	13.2	14.5	13.5	14.8	15.1	10.2	11.6	10.5	11.8	12.1
3H	15.0	16.2	15.4	16.5	16.9	10.9	12.1	11.2	12.4	12.7
4H	15.8	16.9	16.2	17.3	17.6	10.9	12.0	11.3	12.4	12.7
6H	16.4	17.4	16.8	17.8	18.1	10.8	11.8	11.3	12.2	12.6
8H	16.6	17.5	17.1	17.9	18.3	10.8	11.7	11.2	12.1	12.5
12H	16.8	17.6	17.2	18.0	18.4	10.7	11.6	11.2	12.0	12.4
8H 4H	15.8	16.7	16.2	17.1	17.5	11.2	12.1	11.7	12.5	12.9
6H	16.4	17.2	16.9	17.6	18.1	11.2	11.9	11.6	12.3	12.8
8H	16.7	17.3	17.1	17.8	18.3	11.1	11.8	11.6	12.2	12.7
12H	16.9	17.4	17.3	17.9	18.4	11.1	11.7	11.6	12.1	12.6
12H 4H	15.7	16.6	16.2	17.0	17.4	11.2	12.1	11.7	12.5	12.9
6H	16.4	17.1	16.9	17.5	18.0	11.2	11.9	11.7	12.3	12.8
8H	16.6	17.2	17.1	17.7	18.2	11.1	11.7	11.6	12.2	12.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.4 / - 0.5				
1.5H	+ 0.3 / - 0.3					+ 0.4 / - 0.6				
2.0H	+ 0.6 / - 0.8					+ 0.5 / - 1.1				

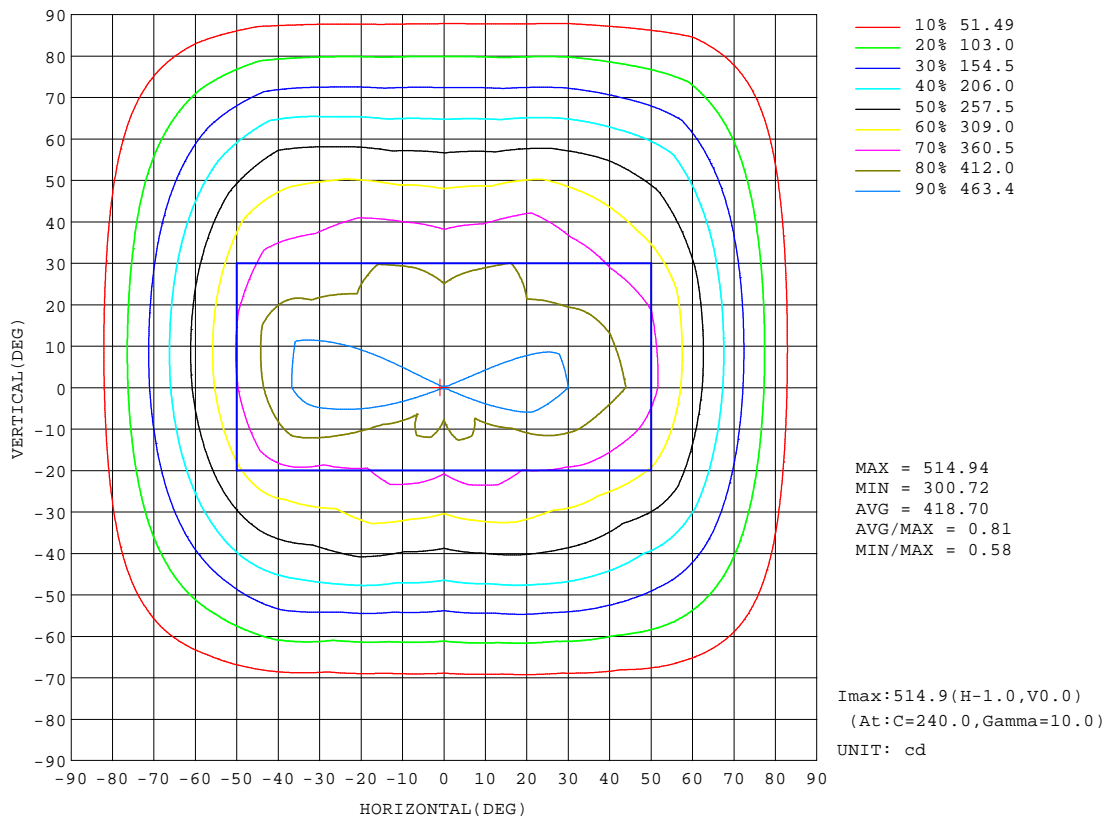
CIE Pub.117, 1431 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 1.2)

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:  
 Test Date:21 February 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=1.0963]  
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.07V I:0.3081A P:20.096W PF:0.5435 Freq:59.98Hz Lamp Flux:1431.46x1 lm		
NAME: ASD-UCS-40D20CC-4000K	TYPE:	WEIGHT:
SPEC.:20W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



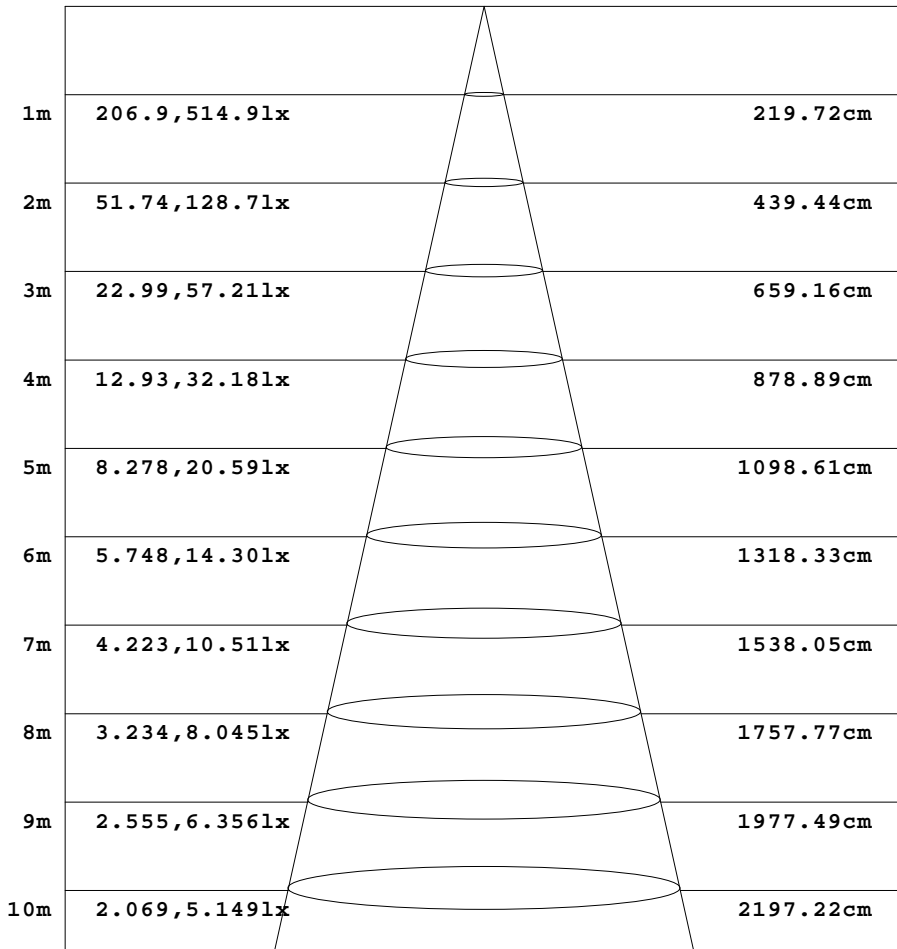
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:  
 Test Date:21 February 2021

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=1.0963]  
 Remarks:

**AAI Figure**

Test:U:120.07V I:0.3081A P:20.096W PF:0.5435 Freq:59.98Hz Lamp Flux:1431.46x1 lm		
NAME: ASD-UCS-40D20CC-4000K	TYPE:	WEIGHT:
SPEC.:20W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Flux out:801.9 lm



Height                      Eavg, Emax                      Angle:95.38deg                      Diameter

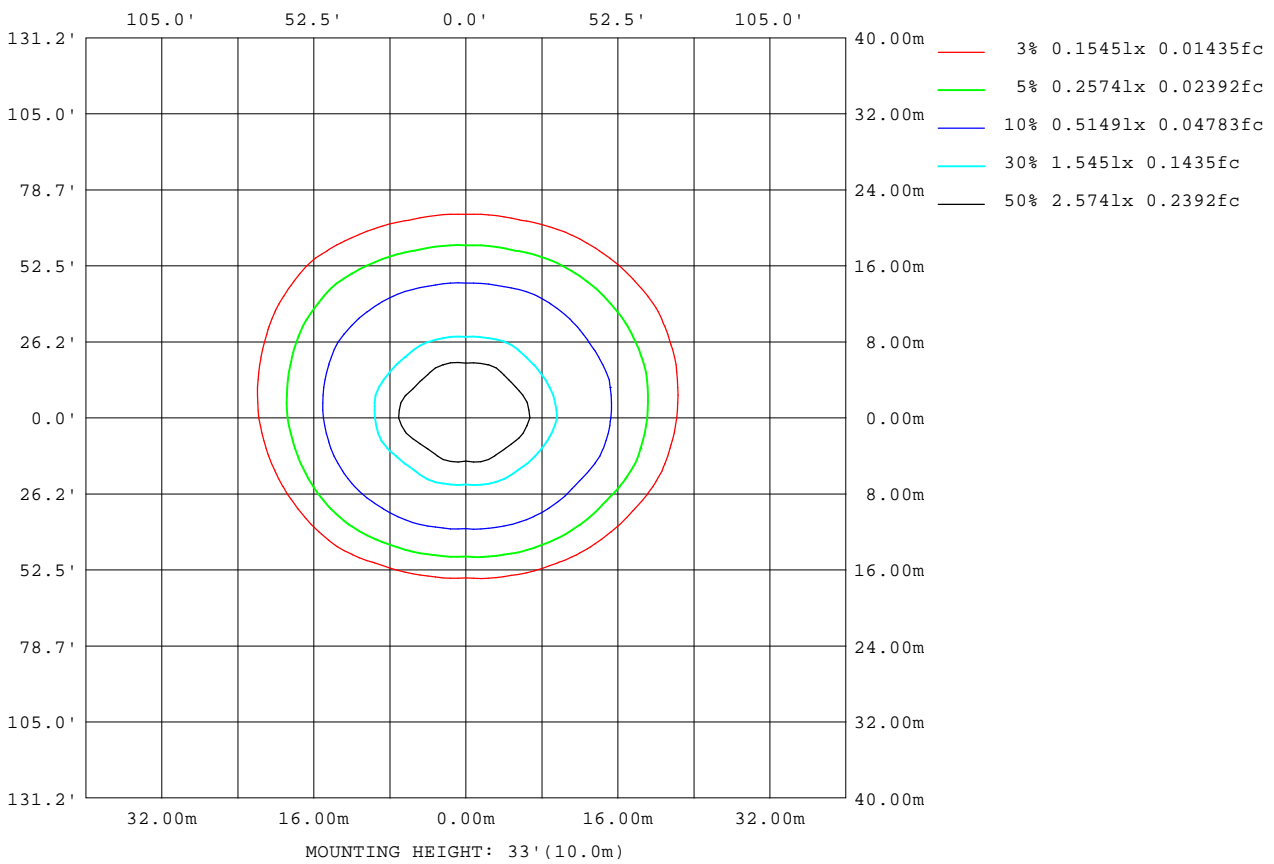
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:  
 Test Date:21 February 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=1.0963]  
 Remarks:

**ISOLUX DIAGRAM**

Test:U:120.07V I:0.3081A P:20.096W PF:0.5435 Freq:59.98Hz Lamp Flux:1431.46x1 lm		
NAME: ASD-UCS-40D20CC-4000K	TYPE:	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:21 February 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=1.0963]**  
**Remarks:**

LED Avg.L Report

Test:U:120.07V I:0.3081A P:20.096W PF:0.5435 Freq:59.98Hz Lamp Flux:1431.46x1 lm		
NAME: ASD-UCS-40D20CC-4000K	TYPE:	WEIGHT:
SPEC.:20W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

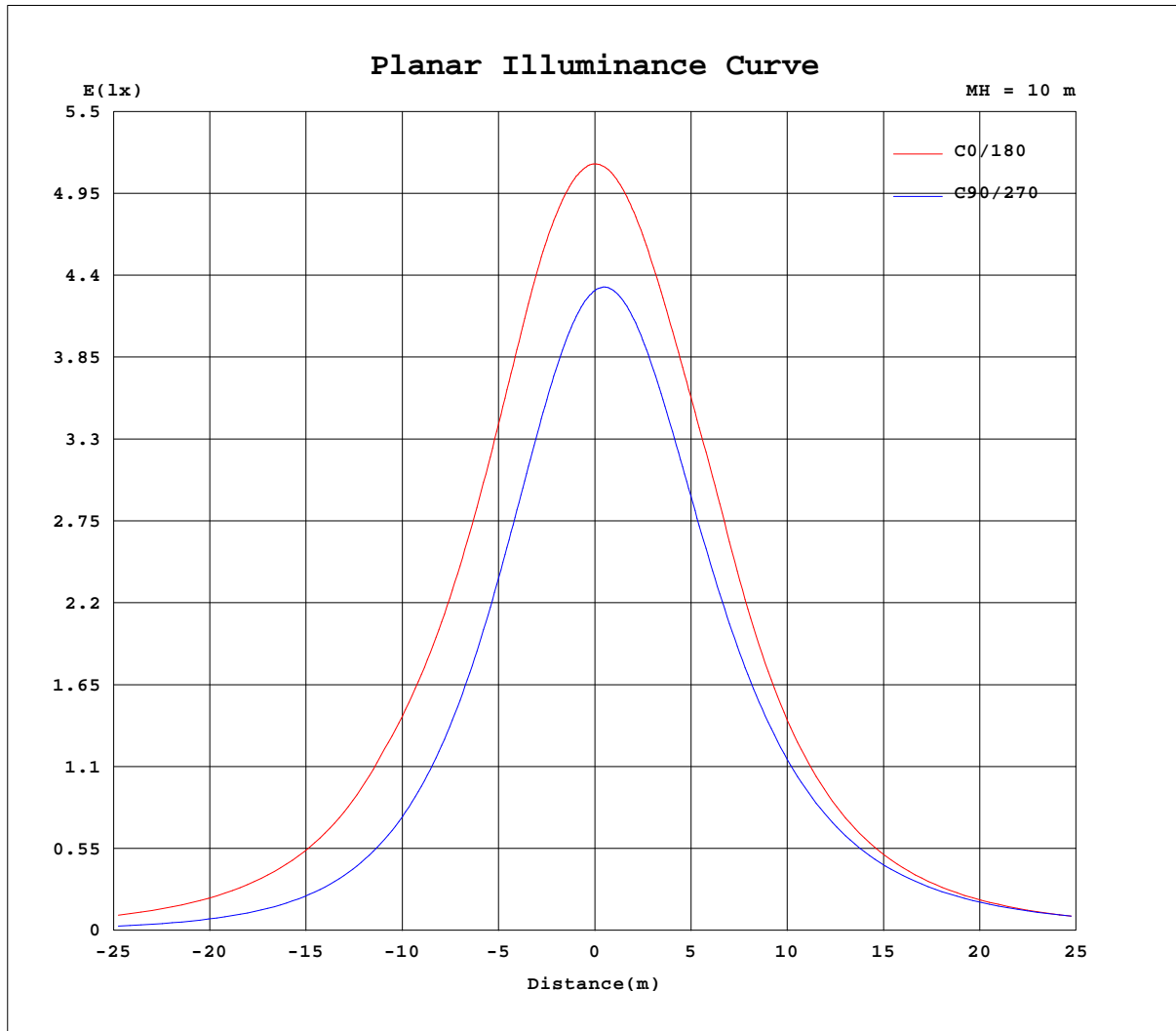
AvgL	cd/m2
L_0~180(65)av	930
L_0~180(75)av	819
L_0~180(85)av	625
L_90~270(65)av	702
L_90~270(75)av	619
L_90~270(85)av	842
L_45(65)av	964
L_45(75)av	858
L_45(85)av	920

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:  
 Test Date:21 February 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=1.0963]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 21 February 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=1.0963]  
 Remarks:



LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.07V I:0.3081A P:20.096W PF:0.5435 Freq:59.98Hz Lamp Flux:1431.46x1 lm		
NAME: ASD-UCS-40D20CC-4000K	TYPE:	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	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454
5	453	451	448	447	445	444	443	443	445	447	449	451	454	455	457	459	460	460	460
10	451	445	440	436	432	428	428	428	433	436	441	447	453	455	458	460	462	460	461
15	446	438	430	423	417	409	408	409	417	423	431	441	450	454	457	459	460	456	457
20	437	428	417	407	398	386	384	386	399	408	418	433	447	450	452	454	455	447	449
25	424	413	403	389	377	360	358	360	377	390	404	424	442	444	446	447	446	434	435
30	409	393	386	369	352	331	329	331	353	369	387	413	437	437	438	436	433	416	417
35	393	372	366	345	324	300	297	299	327	346	368	400	419	428	427	423	416	394	396
40	376	349	342	320	293	267	264	266	297	320	346	380	388	414	413	408	394	369	371
45	359	324	311	291	259	232	228	232	264	292	322	349	353	382	398	389	369	342	344
50	331	298	278	258	222	196	192	195	225	260	294	310	316	345	379	367	342	312	314
55	290	269	242	220	184	159	155	158	184	225	257	266	276	304	353	343	312	280	282
60	248	232	204	179	143	122	117	121	142	186	213	221	234	262	312	314	276	246	250
65	203	185	164	134	102	85.1	81.5	84.0	101	142	162	175	190	217	264	276	237	212	215
70	156	137	121	88.7	63.9	50.7	47.2	49.6	62.1	93.9	112	128	146	172	213	231	197	176	180
75	110	91.2	74.5	47.5	28.9	19.8	16.2	18.7	27.0	48.6	66.0	82.8	102	125	163	180	155	140	144
80	67.7	48.9	31.4	11.9	2.59	0.62	0.57	0.69	1.79	9.53	25.5	42.4	60.4	81.9	112	129	114	104	108
85	29.4	13.8	1.24	0.97	0.72	0.61	0.61	0.61	0.72	0.98	1.35	9.31	25.0	41.8	65.5	80.8	74.6	69.8	72.8
90	1.31	0.63	0.74	0.80	0.79	0.75	0.81	0.79	0.81	0.85	0.81	0.71	0.45	9.73	25.1	37.1	38.3	37.5	40.2
95	0.69	0.74	0.91	1.02	1.03	1.03	1.10	1.05	1.07	1.10	1.03	0.86	0.57	0.54	0.70	4.68	4.16	8.21	9.28
100	0.81	0.91	1.15	1.30	1.32	1.31	1.40	1.34	1.36	1.39	1.27	1.04	0.73	0.65	0.64	0.58	0.41	0.42	0.30
105	0.96	1.09	1.35	1.54	1.57	1.59	1.68	1.61	1.62	1.63	1.47	1.21	0.90	0.81	0.78	0.70	0.56	0.48	0.46
110	1.12	1.25	1.51	1.71	1.75	1.77	1.89	1.81	1.80	1.80	1.63	1.37	1.06	0.96	0.93	0.86	0.77	0.65	0.65
115	1.26	1.37	1.64	1.85	1.87	1.89	2.02	1.92	1.92	1.94	1.73	1.49	1.19	1.10	1.12	1.03	0.89	0.82	0.84
120	1.40	1.51	1.77	1.92	1.97	2.00	2.13	2.01	2.01	2.01	1.83	1.61	1.29	1.22	1.26	1.19	1.05	0.99	1.02
125	1.48	1.57	1.83	1.94	2.00	2.08	2.23	2.08	2.02	2.00	1.87	1.65	1.34	1.28	1.37	1.34	1.18	1.13	1.18
130	1.49	1.59	1.89	1.98	2.00	2.12	2.28	2.11	2.01	2.01	1.92	1.64	1.32	1.30	1.47	1.44	1.31	1.27	1.33
135	1.48	1.55	1.90	2.02	2.00	2.10	2.27	2.06	1.99	2.01	1.93	1.58	1.32	1.30	1.47	1.51	1.43	1.38	1.48
140	1.43	1.52	1.91	2.04	2.02	2.07	2.22	2.00	1.96	2.01	1.92	1.54	1.26	1.29	1.45	1.60	1.46	1.49	1.61
145	1.40	1.53	1.88	2.09	2.03	2.09	2.19	1.99	1.97	2.04	1.87	1.53	1.22	1.28	1.44	1.55	1.60	1.56	1.68
150	1.36	1.52	1.77	2.08	2.08	2.11	2.20	2.02	2.01	2.01	1.74	1.49	1.18	1.24	1.39	1.46	1.55	1.67	1.82
155	1.33	1.50	1.70	1.95	2.02	2.14	2.25	2.05	1.93	1.88	1.63	1.44	1.14	1.21	1.40	1.44	1.40	1.49	1.69
160	1.30	1.46	1.65	1.74	1.85	1.93	2.05	1.88	1.78	1.66	1.53	1.39	1.12	1.16	1.34	1.42	1.40	1.44	1.54
165	1.27	1.38	1.63	1.70	1.66	1.67	1.74	1.64	1.59	1.60	1.49	1.29	1.08	1.13	1.30	1.46	1.45	1.43	1.51
170	1.32	1.43	1.70	1.79	1.66	1.62	1.61	1.59	1.60	1.66	1.56	1.34	1.17	1.20	1.38	1.50	1.46	1.43	1.58
175	1.34	1.45	1.69	1.74	1.65	1.63	1.68	1.52	1.63	1.71	1.58	1.37	1.23	1.27	1.44	1.56	1.49	1.42	1.59
180	1.35	1.42	1.62	1.72	1.57	1.54	1.67	1.53	1.55	1.75	1.68	1.46	1.34	1.42	1.62	1.72	1.58	1.54	1.67

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:  
 Test Date:21 February 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=1.0963]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.07V I:0.3081A P:20.096W PF:0.5435 Freq:59.98Hz Lamp Flux:1431.46x1 lm		
NAME: ASD-UCS-40D20CC-4000K	TYPE:	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	454	454	454	454	454														
5	460	460	458	457	455														
10	460	462	460	458	455														
15	456	460	458	456	454														
20	447	455	454	452	451														
25	434	446	446	445	445														
30	416	434	436	436	432														
35	394	419	423	425	414														
40	369	400	407	410	395														
45	342	377	388	387	374														
50	312	347	365	360	351														
55	280	311	334	332	326														
60	247	274	300	301	284														
65	212	235	263	267	238														
70	177	195	216	229	189														
75	140	155	168	176	140														
80	104	115	121	124	93.3														
85	70.6	75.1	77.6	74.0	49.9														
90	38.4	39.7	37.2	30.6	13.4														
95	10.02	5.45	4.82	1.27	0.62														
100	0.46	0.53	0.69	0.70	0.63														
105	0.47	0.60	0.74	0.77	0.79														
110	0.65	0.73	0.88	0.93	0.94														
115	0.82	0.89	1.04	1.09	1.09														
120	0.99	1.05	1.19	1.26	1.25														
125	1.14	1.16	1.33	1.36	1.33														
130	1.29	1.31	1.45	1.49	1.39														
135	1.42	1.44	1.51	1.51	1.40														
140	1.53	1.48	1.60	1.51	1.42														
145	1.61	1.60	1.60	1.52	1.41														
150	1.73	1.60	1.53	1.50	1.39														
155	1.55	1.48	1.52	1.53	1.38														
160	1.49	1.47	1.48	1.49	1.37														
165	1.52	1.50	1.53	1.48	1.33														
170	1.56	1.50	1.57	1.56	1.39														
175	1.50	1.46	1.58	1.64	1.46														
180	1.53	1.55	1.75	1.68	1.46														

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:  
 Test Date:21 February 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=1.0963]  
 Remarks: