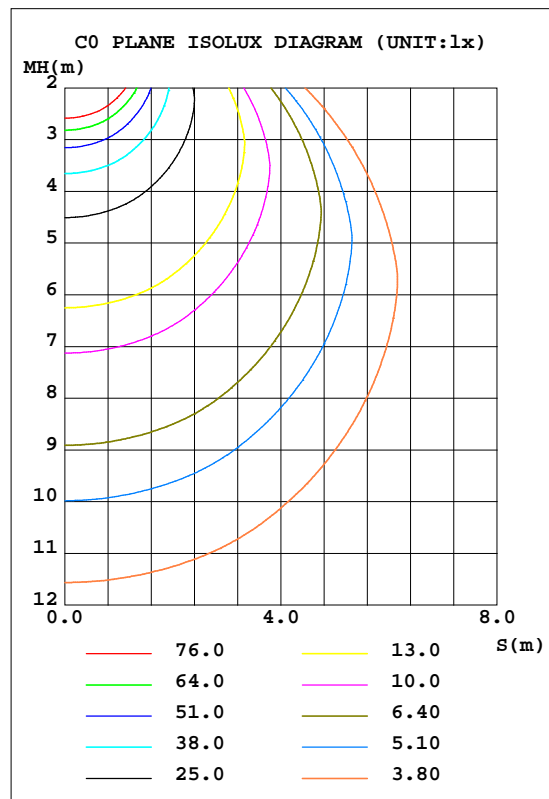
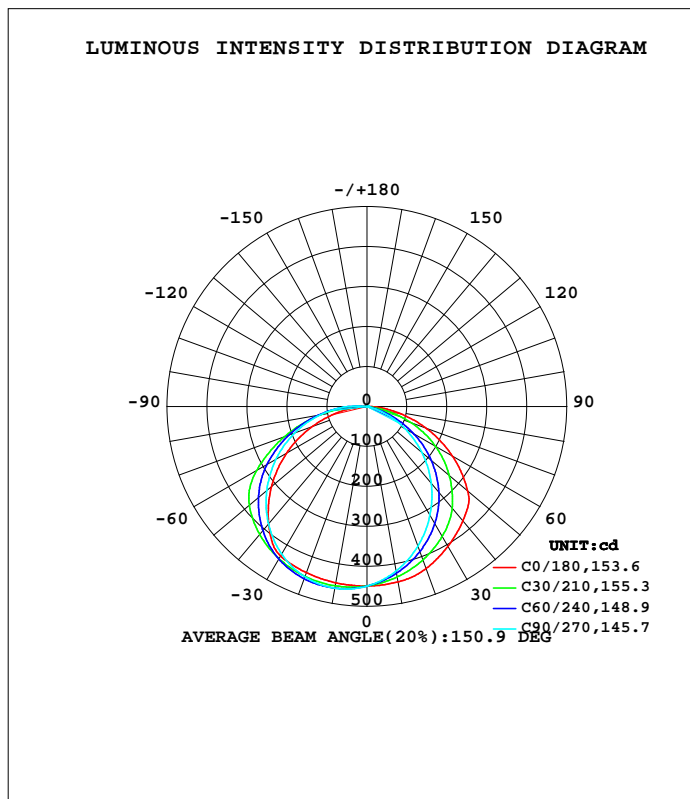


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.09V I:0.3039A P:19.756W PF:0.5414 Freq:59.98Hz Lamp Flux:1430.14x1 lm		
NAME: ASD-UCS-40D20CC-3000K	TYPE:	WEIGHT:
SPEC.:20W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	ASD-UCS-40D20CC-3000K	Imax(cd)	462.0	S/MH(C0/180)	1.42
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	1.40
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1430.1	h UP, DN(C0-180)	0.4,39.9
NOMINAL FLUX(lm)	1430.14	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.6,59.2
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	445.5	428.1	418.3	428.3	447.8	458.8	461.5	458.3	0- 10	42.59	42.59	2.98,2.98
20	431.5	397.1	372.2	397.2	442.3	456.3	453.4	455.6	10- 20	123.2	165.8	11.6,11.6
30	404.6	356.9	315.0	357.0	431.9	441.7	426.5	440.8	20- 30	190.5	356.3	24.9,24.9
40	373.5	307.5	250.3	308.1	382.9	415.4	383.0	414.2	30- 40	236.5	592.8	41.4,41.4
50	328.6	247.6	180.2	249.0	311.9	377.1	327.4	373.6	40- 50	253.5	846.2	59.2,59.2
60	246.5	169.8	109.0	176.0	231.2	324.3	262.6	309.6	50- 60	236.1	1082	75.7,75.7
70	155.9	82.42	41.24	86.69	144.1	240.5	191.5	224.8	60- 70	184.0	1266	88.5,88.5
80	67.49	9.752	0.6024	7.965	59.84	135.9	117.1	128.0	70- 80	108.9	1375	96.2,96.2
90	1.336	0.8489	0.8783	0.9063	0.4554	41.91	46.24	41.66	80- 90	41.63	1417	99.1,99.1
100	0.8088	1.358	1.494	1.468	0.7379	0.5448	0.2755	0.6520	90-100	5.759	1423	99.5,99.5
110	1.115	1.768	1.998	1.866	1.064	0.8257	0.6046	0.8299	100-110	1.127	1424	99.6,99.6
120	1.392	1.978	2.226	2.074	1.282	1.142	0.9534	1.133	110-120	1.359	1425	99.6,99.6
130	1.473	2.020	2.354	2.051	1.312	1.401	1.264	1.400	120-130	1.411	1427	99.7,99.7
140	1.420	2.067	2.278	2.047	1.256	1.553	1.539	1.555	130-140	1.283	1428	99.8,99.8
150	1.356	2.104	2.235	2.028	1.172	1.425	1.763	1.499	140-150	1.051	1429	99.9,99.9
160	1.301	1.756	2.061	1.668	1.105	1.393	1.516	1.466	150-160	0.7442	1430	100,100
170	1.314	1.781	1.614	1.656	1.162	1.482	1.560	1.562	160-170	0.4191	1430	100,100
180	1.337	1.703	1.651	1.736	1.333	1.702	1.651	1.738	170-180	0.1438	1430	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:120.09V I:0.3039A P:19.756W PF:0.5414 Freq:59.98Hz Lamp Flux:1430.14x1 lm										
NAME: ASD-UCS-40D20CC-3000K					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	12.9	14.4	13.1	14.6	14.8	8.9	10.4	9.2	10.6	10.9
3H	14.6	16.0	14.9	16.3	16.5	9.4	10.8	9.7	11.1	11.3
4H	15.3	16.6	15.6	16.9	17.2	9.4	10.7	9.7	11.0	11.3
6H	15.8	17.1	16.1	17.3	17.6	9.3	10.6	9.6	10.8	11.1
8H	15.9	17.2	16.3	17.5	17.8	9.2	10.5	9.6	10.8	11.1
12H	16.0	17.2	16.4	17.5	17.9	9.2	10.4	9.5	10.7	11.0
4H 2H	13.0	14.3	13.3	14.6	14.9	9.8	11.1	10.1	11.4	11.7
3H	14.9	16.1	15.2	16.4	16.7	10.4	11.6	10.7	11.9	12.2
4H	15.7	16.7	16.0	17.1	17.4	10.4	11.5	10.8	11.8	12.2
6H	16.3	17.2	16.7	17.6	18.0	10.3	11.3	10.7	11.6	12.0
8H	16.5	17.4	16.9	17.8	18.2	10.3	11.2	10.7	11.5	12.0
12H	16.6	17.4	17.0	17.8	18.3	10.2	11.0	10.7	11.4	11.9
8H 4H	15.6	16.5	16.0	16.9	17.3	10.7	11.6	11.1	12.0	12.4
6H	16.2	17.0	16.7	17.4	17.9	10.6	11.4	11.1	11.8	12.3
8H	16.5	17.2	17.0	17.6	18.1	10.6	11.3	11.1	11.7	12.2
12H	16.7	17.2	17.2	17.7	18.2	10.5	11.1	11.0	11.6	12.1
12H 4H	15.5	16.4	16.0	16.8	17.2	10.7	11.5	11.2	12.0	12.4
6H	16.2	16.9	16.7	17.3	17.8	10.6	11.3	11.1	11.8	12.2
8H	16.5	17.0	16.9	17.5	18.0	10.6	11.2	11.1	11.7	12.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.4 / - 0.6				
1.5H	+ 0.3 / - 0.3					+ 0.4 / - 0.6				
2.0H	+ 0.7 / - 0.9					+ 0.5 / - 1.1				

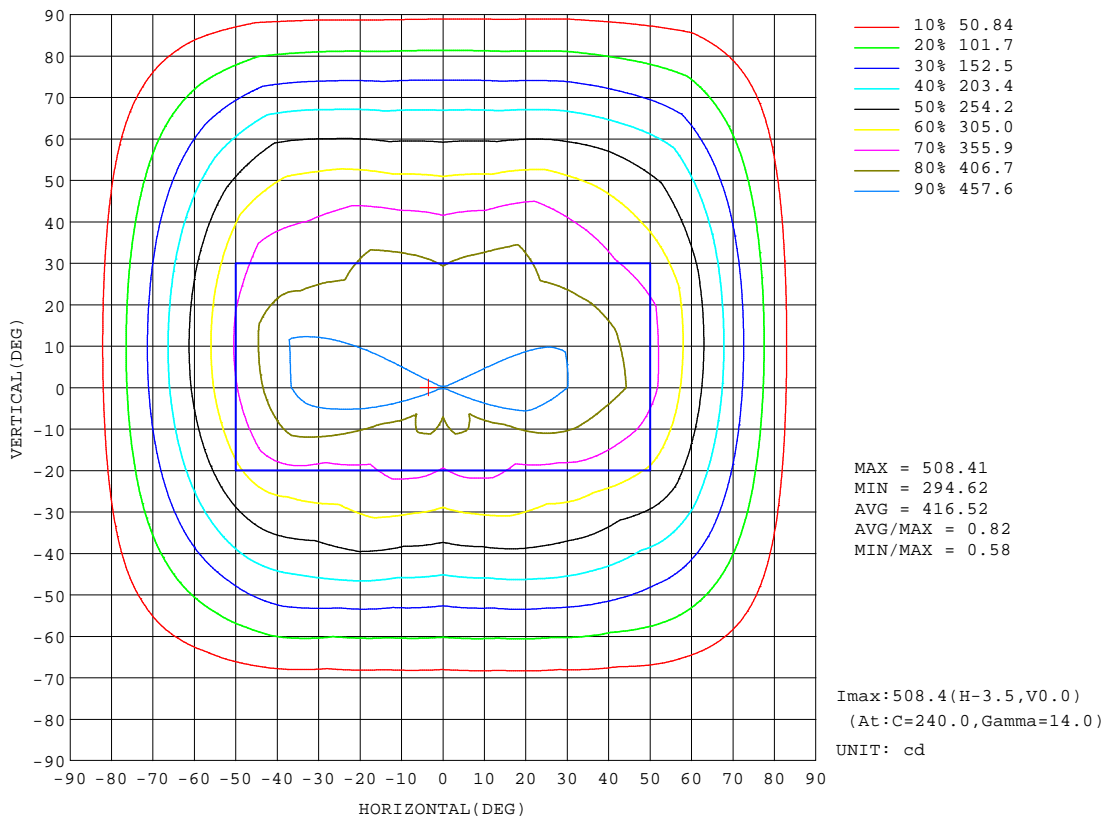
CIE Pub.117, 1430 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 1.2)

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:120.09V I:0.3039A P:19.756W PF:0.5414 Freq:59.98Hz Lamp Flux:1430.14x1 lm		
NAME: ASD-UCS-40D20CC-3000K	TYPE:	WEIGHT:
SPEC.:20W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



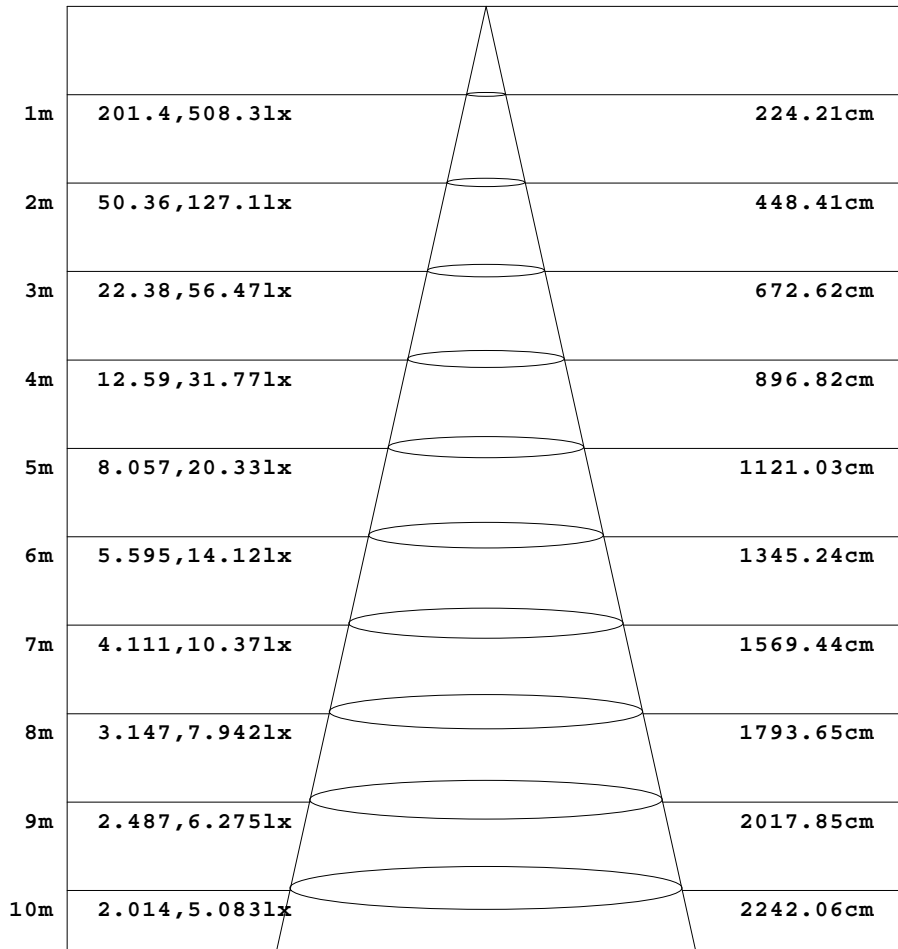
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 21 February 2021

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:120.09V I:0.3039A P:19.756W PF:0.5414 Freq:59.98Hz Lamp Flux:1430.14x1 lm		
NAME: ASD-UCS-40D20CC-3000K	TYPE:	WEIGHT:
SPEC.:20W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Flux out:808.4 lm



Height                      Eavg, Emax                      Angle:96.53deg                      Diameter

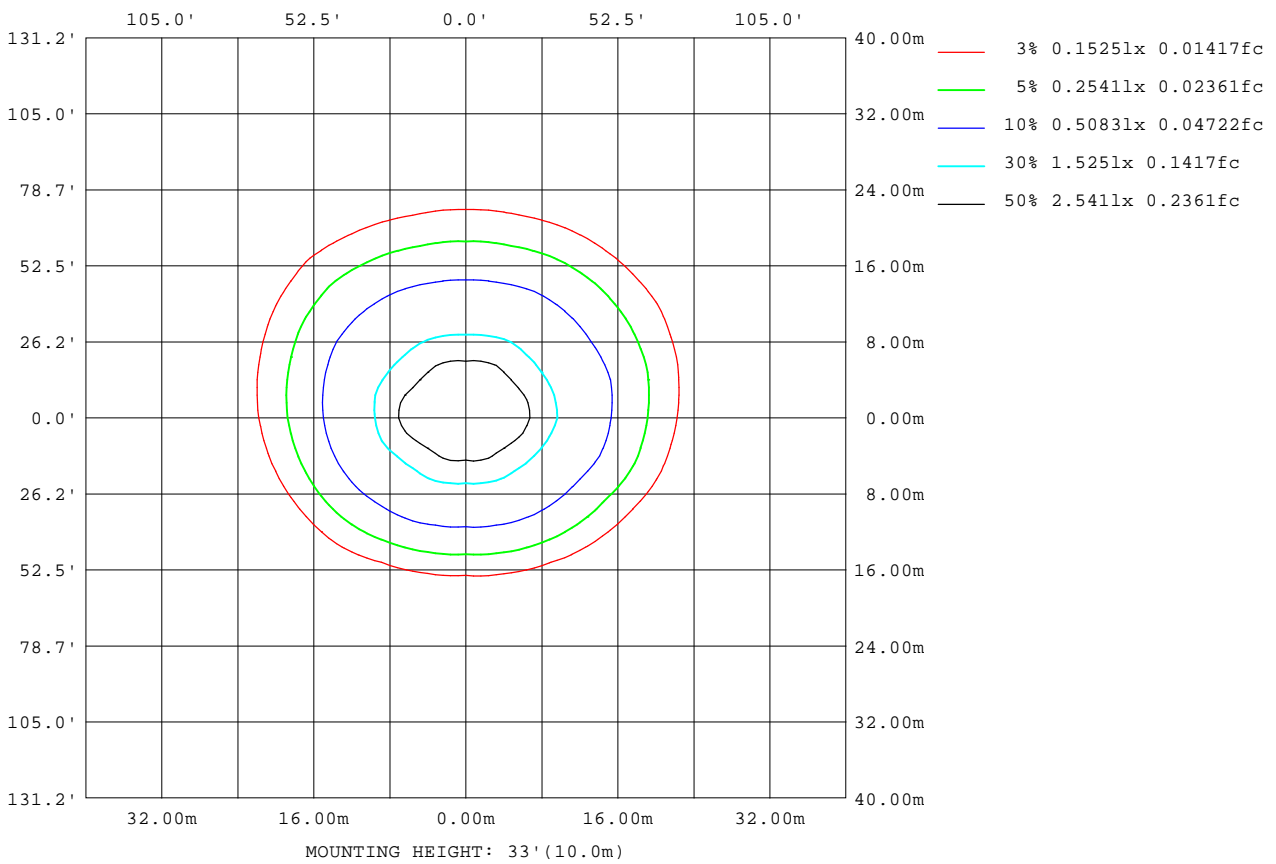
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:120.09V I:0.3039A P:19.756W PF:0.5414 Freq:59.98Hz Lamp Flux:1430.14x1 lm		
NAME: ASD-UCS-40D20CC-3000K	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:120.09V I:0.3039A P:19.756W PF:0.5414 Freq:59.98Hz Lamp Flux:1430.14x1 lm		
NAME: ASD-UCS-40D20CC-3000K	TYPE:	WEIGHT:
SPEC.:20W	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

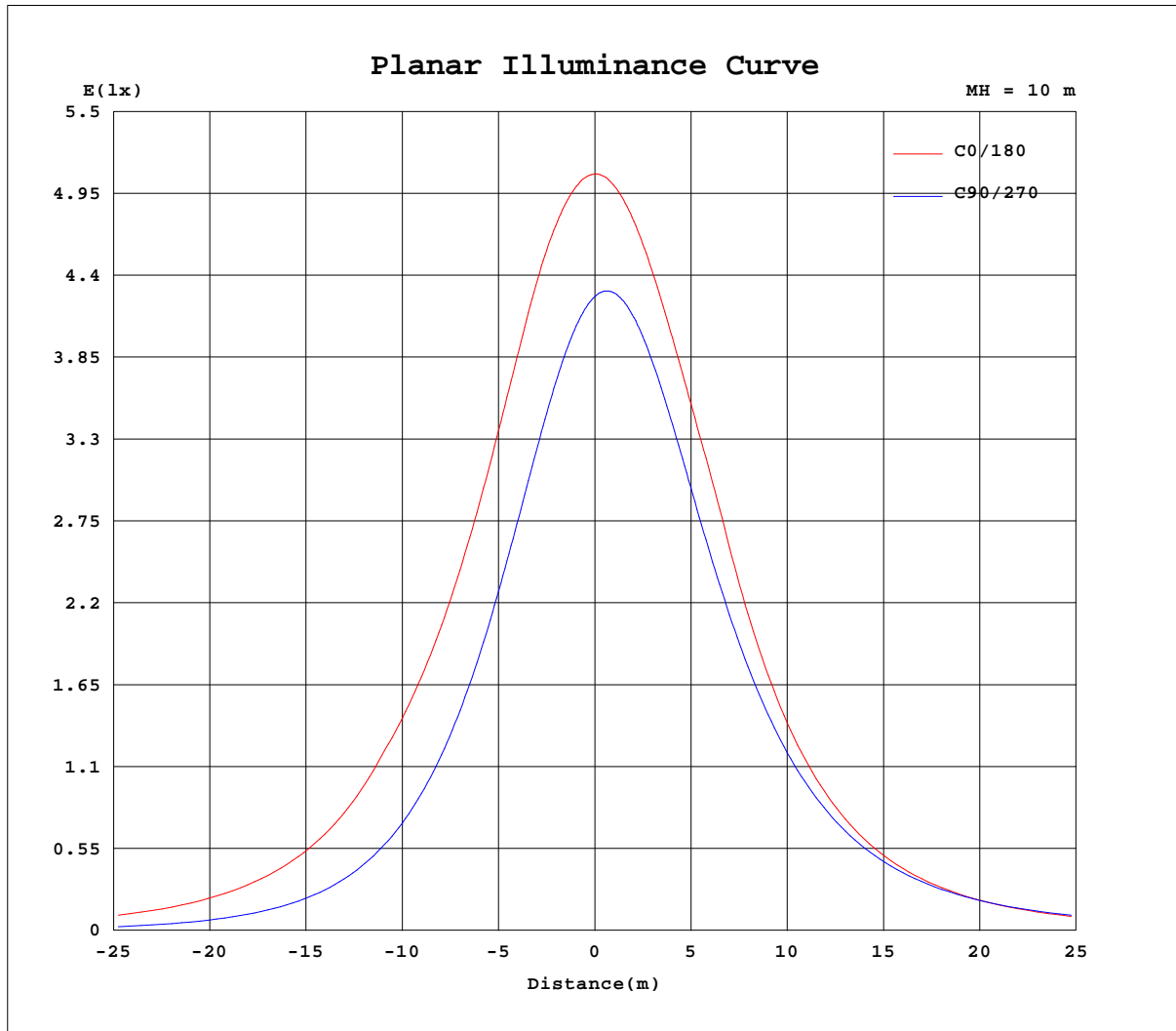
AvgL	cd/m2
L_0~180(65)av	923
L_0~180(75)av	814
L_0~180(85)av	623
L_90~270(65)av	714
L_90~270(75)av	647
L_90~270(85)av	932
L_45(65)av	967
L_45(75)av	870
L_45(85)av	989

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:120.09V I:0.3039A P:19.756W PF:0.5414 Freq:59.98Hz Lamp Flux:1430.14x1 lm		
NAME: ASD-UCS-40D20CC-3000K	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	449	449	449	449	449	449	449	449	449	449	449	449	449	449	449	449	449	449	449
5	448	445	442	440	438	436	436	437	438	440	443	446	449	451	453	455	457	457	458
10	446	439	433	428	424	419	418	419	424	428	434	441	448	452	455	459	461	461	461
15	441	431	422	414	406	398	397	398	407	414	422	435	446	451	455	459	462	459	460
20	432	421	409	397	386	374	372	374	387	397	409	427	442	448	452	456	459	452	453
25	419	406	393	378	364	347	345	347	364	378	394	418	438	443	447	450	452	441	442
30	405	387	376	357	339	318	315	318	340	357	377	407	432	436	440	442	441	425	427
35	389	366	356	333	311	286	284	286	313	334	358	393	414	428	430	430	425	405	407
40	373	343	332	308	280	254	250	253	284	308	336	373	383	414	418	415	405	381	383
45	356	319	301	279	246	220	216	219	251	280	312	343	349	382	403	398	381	354	357
50	329	294	269	248	210	185	180	184	213	249	284	303	312	345	384	377	354	325	327
55	289	265	234	210	173	149	144	148	173	214	248	260	273	305	358	353	324	293	296
60	246	227	197	170	133	113	109	112	132	176	204	216	231	263	318	324	288	259	263
65	202	182	158	126	94.6	77.5	73.8	76.5	93.2	133	155	170	188	219	269	286	249	224	228
70	156	135	116	82.4	57.5	44.7	41.2	43.8	55.8	86.7	107	124	144	173	219	240	207	187	192
75	110	89.0	70.1	42.7	24.5	16.2	13.1	15.3	22.7	43.2	61.6	80.4	101	127	167	188	165	150	154
80	67.5	47.3	28.2	9.75	2.30	0.65	0.60	0.71	1.68	7.97	22.4	40.7	59.8	83.2	116	136	123	113	117
85	29.4	12.7	1.24	1.02	0.78	0.67	0.68	0.69	0.79	1.04	1.35	8.35	24.8	43.1	68.9	87.0	81.5	77.2	80.6
90	1.34	0.66	0.78	0.85	0.85	0.82	0.88	0.86	0.88	0.91	0.85	0.74	0.46	9.88	27.8	41.9	43.8	43.2	46.2
95	0.69	0.75	0.95	1.07	1.11	1.11	1.19	1.14	1.15	1.16	1.06	0.88	0.57	0.53	0.69	4.25	5.17	10.6	11.5
100	0.81	0.92	1.18	1.36	1.39	1.40	1.49	1.44	1.45	1.47	1.31	1.06	0.74	0.64	0.62	0.54	0.38	0.38	0.28
105	0.95	1.10	1.38	1.60	1.66	1.69	1.79	1.71	1.71	1.70	1.52	1.23	0.90	0.80	0.75	0.67	0.52	0.44	0.43
110	1.12	1.26	1.54	1.77	1.83	1.88	2.00	1.90	1.88	1.87	1.68	1.40	1.06	0.95	0.91	0.83	0.73	0.62	0.60
115	1.26	1.38	1.68	1.91	1.95	1.99	2.12	2.02	2.00	2.00	1.78	1.52	1.19	1.08	1.08	0.99	0.85	0.77	0.78
120	1.39	1.52	1.79	1.98	2.04	2.08	2.23	2.11	2.09	2.07	1.87	1.63	1.28	1.21	1.23	1.14	1.01	0.93	0.95
125	1.47	1.58	1.85	1.98	2.07	2.16	2.31	2.17	2.10	2.05	1.90	1.68	1.34	1.27	1.33	1.30	1.12	1.07	1.13
130	1.47	1.60	1.92	2.02	2.06	2.20	2.35	2.18	2.07	2.05	1.96	1.65	1.31	1.29	1.44	1.40	1.26	1.21	1.26
135	1.46	1.55	1.91	2.07	2.05	2.16	2.33	2.12	2.05	2.04	1.95	1.59	1.31	1.28	1.43	1.47	1.38	1.33	1.41
140	1.42	1.53	1.92	2.07	2.05	2.11	2.28	2.05	2.00	2.05	1.94	1.54	1.26	1.27	1.42	1.55	1.42	1.43	1.54
145	1.39	1.53	1.90	2.11	2.06	2.13	2.24	2.03	2.00	2.07	1.89	1.53	1.21	1.26	1.42	1.51	1.55	1.51	1.62
150	1.36	1.52	1.78	2.10	2.11	2.14	2.23	2.05	2.03	2.03	1.74	1.49	1.17	1.22	1.37	1.43	1.51	1.62	1.76
155	1.33	1.50	1.71	1.96	2.03	2.16	2.28	2.07	1.95	1.88	1.63	1.43	1.13	1.20	1.38	1.41	1.37	1.46	1.64
160	1.30	1.46	1.64	1.76	1.87	1.95	2.06	1.90	1.78	1.67	1.53	1.37	1.10	1.15	1.31	1.39	1.37	1.41	1.52
165	1.26	1.39	1.62	1.70	1.67	1.67	1.73	1.65	1.60	1.60	1.48	1.28	1.07	1.13	1.28	1.43	1.43	1.41	1.48
170	1.31	1.43	1.69	1.78	1.66	1.64	1.61	1.60	1.60	1.66	1.54	1.33	1.16	1.19	1.37	1.48	1.44	1.41	1.56
175	1.33	1.45	1.68	1.73	1.65	1.62	1.68	1.52	1.63	1.70	1.57	1.36	1.21	1.26	1.43	1.54	1.47	1.40	1.58
180	1.34	1.41	1.60	1.70	1.56	1.53	1.65	1.51	1.55	1.74	1.68	1.44	1.33	1.41	1.60	1.70	1.56	1.53	1.65

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:120.09V I:0.3039A P:19.756W PF:0.5414 Freq:59.98Hz Lamp Flux:1430.14x1 lm		
NAME: ASD-UCS-40D20CC-3000K	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	449	449	449	449	449															
5	457	457	455	453	451															
10	460	461	458	455	452															
15	459	462	458	455	451															
20	452	459	456	452	448															
25	441	452	450	446	443															
30	425	441	441	438	431															
35	405	427	429	428	414															
40	381	410	414	414	396															
45	354	387	396	391	376															
50	325	358	374	365	353															
55	293	323	343	337	329															
60	259	285	310	307	288															
65	224	246	272	274	241															
70	188	206	225	235	193															
75	150	164	176	182	143															
80	113	123	128	129	95.4															
85	77.8	81.9	83.2	78.2	51.7															
90	44.1	45.1	41.7	33.6	14.5															
95	7.98	6.70	7.22	1.28	0.58															
100	0.42	0.50	0.65	0.65	0.63															
105	0.44	0.55	0.69	0.74	0.77															
110	0.60	0.69	0.83	0.89	0.92															
115	0.77	0.84	0.99	1.05	1.07															
120	0.94	0.99	1.13	1.22	1.22															
125	1.08	1.12	1.28	1.33	1.31															
130	1.23	1.26	1.40	1.45	1.37															
135	1.36	1.38	1.46	1.48	1.39															
140	1.47	1.43	1.55	1.48	1.40															
145	1.56	1.55	1.57	1.50	1.40															
150	1.68	1.56	1.50	1.49	1.37															
155	1.52	1.45	1.49	1.51	1.37															
160	1.47	1.45	1.47	1.47	1.35															
165	1.50	1.48	1.51	1.46	1.33															
170	1.54	1.47	1.56	1.55	1.38															
175	1.49	1.44	1.56	1.63	1.46															
180	1.52	1.55	1.74	1.67	1.45															

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: