

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P521710

Luminaire Tested: SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521710
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4_5700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3904.6 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

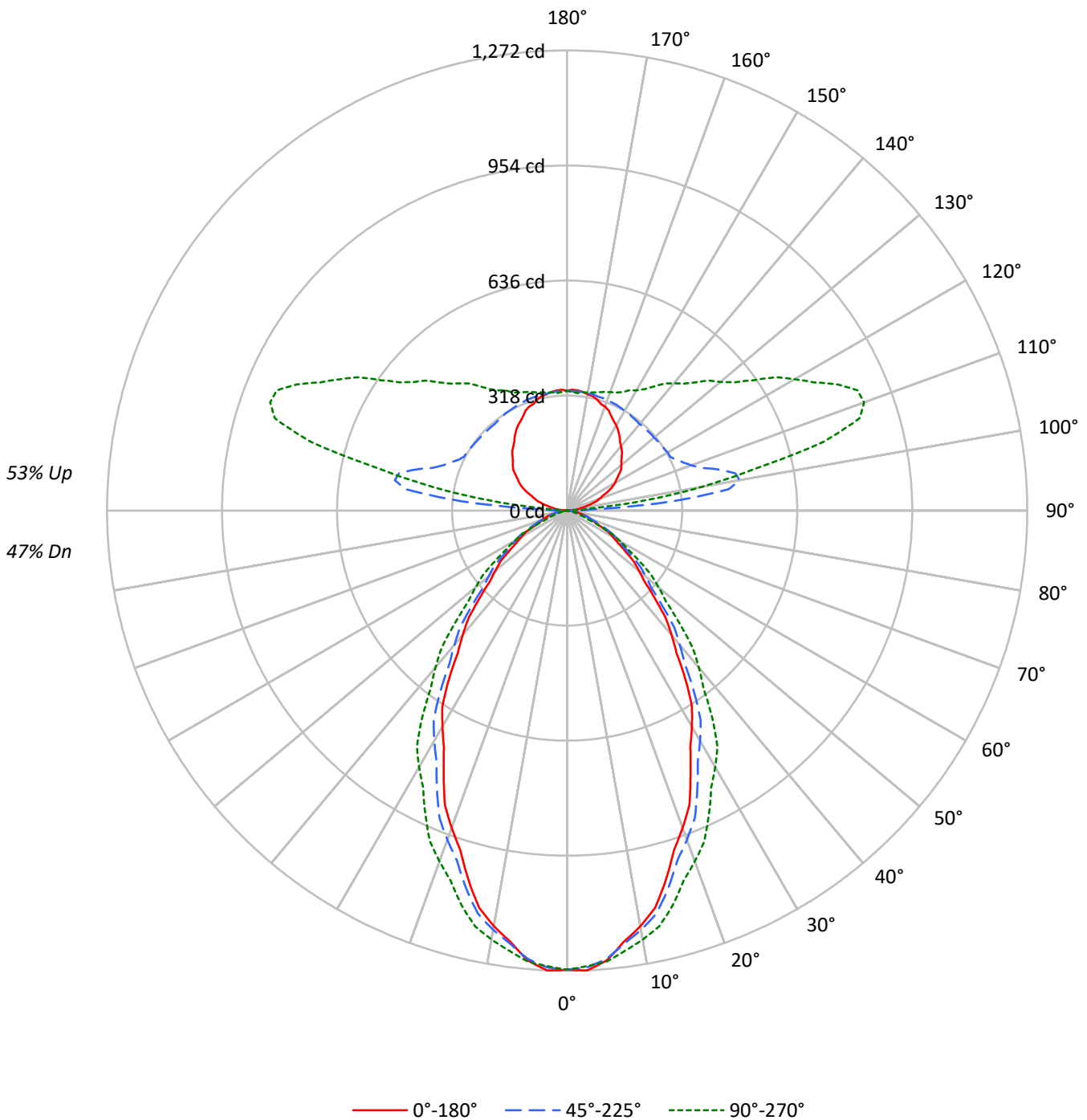
Input Watts (W): 34.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	47				47
1	98	94	91	88	90	87	84	81	73	71	69	61	59	58	49	48	47	42				42
2	90	84	78	74	83	77	73	69	66	62	59	55	52	50	45	43	42	37				37
3	83	75	68	63	76	69	63	59	59	55	51	49	46	44	41	39	37	33				33
4	77	67	60	54	71	62	56	51	53	48	45	45	41	39	37	35	33	29				29
5	71	60	53	47	65	56	49	45	48	43	39	41	37	34	34	31	29	26				26
6	66	54	47	42	61	51	44	39	44	39	35	37	34	31	31	29	26	24				24
7	61	50	42	37	56	46	40	35	40	35	31	34	31	28	29	26	24	21				21
8	57	45	38	33	53	42	36	31	37	32	28	32	28	25	27	24	22	20				20
9	53	42	35	30	49	39	33	28	34	29	26	29	26	23	25	22	20	18				18
10	50	38	32	27	46	36	30	26	32	27	23	27	24	21	23	21	19	17				17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11710	11710	11710
5°	11564	11523	11590
10°	10926	11025	11281
15°	10086	10320	10783
20°	9160	9503	10133
25°	8215	8663	9440
30°	7346	7826	8722
35°	6423	6887	7872
40°	5407	5835	6814
45°	4462	4847	5690
50°	3725	4061	4741
55°	3162	3484	3915
60°	2703	3021	3124
65°	2153	2541	2019
70°	1907	1983	1233
75°	1768	1608	756
80°	1626	1477	654
85°	1471	1355	529

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5690 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.4	3.0
10°-20°	302.8	7.8
20°-30°	392.2	10.0
30°-40°	384.1	9.8
40°-50°	294.0	7.5
50°-60°	195.9	5.0
60°-70°	106.9	2.7
70°-80°	44.6	1.1
80°-90°	12.6	0.3
90°-100°	150.8	3.9
100°-110°	428.9	11.0
110°-120°	411.0	10.5
120°-130°	325.3	8.3
130°-140°	261.1	6.7
140°-150°	204.4	5.2
150°-160°	149.6	3.8
160°-170°	92.6	2.4
170°-180°	31.4	0.8
0°-30°	811.5	20.8
0°-40°	1195.6	30.6
0°-60°	1685.5	43.2
0°-90°	1849.5	47.4
90°-120°	990.7	25.4
90°-150°	1781.4	45.6
90°-180°	2055.0	52.6
0°-180°	3904.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1269	1269	1269	1269	1269	
5°	1249	1236	1244	1247	1251	116
15°	1056	1052	1080	1110	1129	295
25°	807	809	851	888	927	371
35°	570	573	612	653	699	355
45°	342	348	372	400	436	267
55°	197	205	217	225	243	178
65°	99	107	116	102	92	102
75°	50	50	45	31	21	53
85°	14	14	13	8	5	15
90°	0	0	0	0	0	1
95°	16	65	292	101	62	19
105°	67	101	437	772	734	71
115°	124	150	332	702	825	122
125°	175	194	316	525	628	157
135°	214	232	313	444	501	165
145°	252	265	315	384	418	158
155°	288	295	323	347	361	133
165°	318	320	326	334	338	90
175°	333	332	330	328	326	32
180°	331	331	331	331	331	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1269.2	1269.2	1269.2	1269.2	1269.2
2.5°	1272.4	1261.0	1263.9	1263.8	1260.3
5°	1248.6	1236.1	1244.2	1247.1	1251.4
7.5°	1202.3	1192.8	1207.5	1218.4	1227.2
10°	1166.2	1158.0	1176.8	1192.6	1204.1
12.5°	1124.3	1117.5	1140.7	1162.0	1176.9
15°	1055.9	1052.1	1080.4	1109.8	1128.9
17.5°	982.8	980.9	1013.4	1047.7	1072.1
20°	932.9	932.3	967.9	1003.7	1032.0
22.5°	882.5	883.7	921.2	958.3	990.6
25°	807.0	809.2	851.0	888.1	927.3
27.5°	737.2	738.1	781.4	820.5	862.3
30°	689.5	692.2	734.6	775.1	818.7
32.5°	641.8	645.0	686.5	728.4	772.8
35°	570.3	573.0	611.5	652.7	698.9
37.5°	496.6	500.3	534.4	573.3	618.9
40°	448.9	454.3	484.5	521.2	565.8
42.5°	403.0	409.7	437.7	472.5	512.8
45°	342.0	348.5	371.5	399.6	436.1
47.5°	289.4	296.9	314.6	338.8	369.9
50°	259.5	266.6	282.9	300.9	330.3
52.5°	233.2	240.3	254.9	268.7	293.7
55°	196.6	204.8	216.6	224.9	243.4
57.5°	166.5	174.4	183.8	187.5	198.7
60°	146.5	155.2	163.7	163.3	169.3
62.5°	128.2	135.6	144.1	138.2	138.6
65°	98.6	106.7	116.4	101.7	92.5
67.5°	79.6	81.4	91.3	70.9	59.9
70°	70.7	70.7	73.5	54.9	45.7
72.5°	62.3	62.3	59.7	44.7	35.0
75°	49.6	49.6	45.1	31.0	21.2
77.5°	38.2	37.8	34.5	23.1	15.4
80°	30.6	30.6	27.8	18.2	12.3
82.5°	23.9	23.9	21.6	14.3	9.1
85°	13.9	13.9	12.8	8.3	5.0
87.5°	4.9	4.9	4.5	2.7	2.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.0	26.7	61.9	18.0	13.6
95°	16.4	64.9	291.8	101.0	62.3
97.5°	30.1	76.1	449.5	321.6	220.4
100°	39.6	82.7	483.7	489.9	377.4
102.5°	50.2	89.8	476.1	627.1	528.8
105°	66.7	101.1	437.1	772.1	734.0
107.5°	83.4	114.3	391.6	813.0	847.0
110°	95.0	123.9	365.4	797.4	873.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	106.0	133.5	347.8	760.4	869.1
115°	123.9	149.7	331.5	702.2	824.6
117.5°	139.6	163.9	321.8	638.6	768.2
120°	152.2	172.5	320.8	602.2	726.4
122.5°	162.3	182.6	318.3	570.3	685.7
125°	174.8	193.9	316.4	525.0	627.7
127.5°	188.6	206.4	315.4	497.9	582.5
130°	195.6	213.4	313.8	479.1	552.9
132.5°	203.2	220.5	313.8	464.3	532.2
135°	213.8	231.7	312.6	443.5	501.3
137.5°	223.9	241.3	312.5	425.8	475.7
140°	231.5	249.3	312.0	411.2	459.1
142.5°	240.0	254.9	313.5	399.5	442.5
145°	252.2	265.1	315.1	383.8	418.3
147.5°	262.7	275.2	317.9	368.0	397.8
150°	271.7	280.3	318.9	362.8	383.7
152.5°	278.8	287.9	319.9	355.7	375.1
155°	288.1	294.8	322.7	346.9	361.0
157.5°	299.6	303.7	323.3	342.9	353.0
160°	305.7	308.7	325.8	339.8	348.4
162.5°	309.2	312.8	326.3	337.3	343.9
165°	318.3	319.5	326.4	333.5	338.4
167.5°	324.4	323.3	329.3	332.5	334.5
170°	326.4	325.8	328.3	329.0	331.5
172.5°	331.0	328.9	329.8	328.0	329.9
175°	333.3	331.5	330.2	328.3	325.8
177.5°	334.4	331.4	329.8	327.8	328.3
180°	330.8	330.8	330.8	330.8	330.8

(END OF REPORT)