

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
(formerly Eaton)

Brand: CORELITE

Report Number: P519080

Luminaire Tested: **SQ4-WB-050U-050D-930-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519080
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-050D-930-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

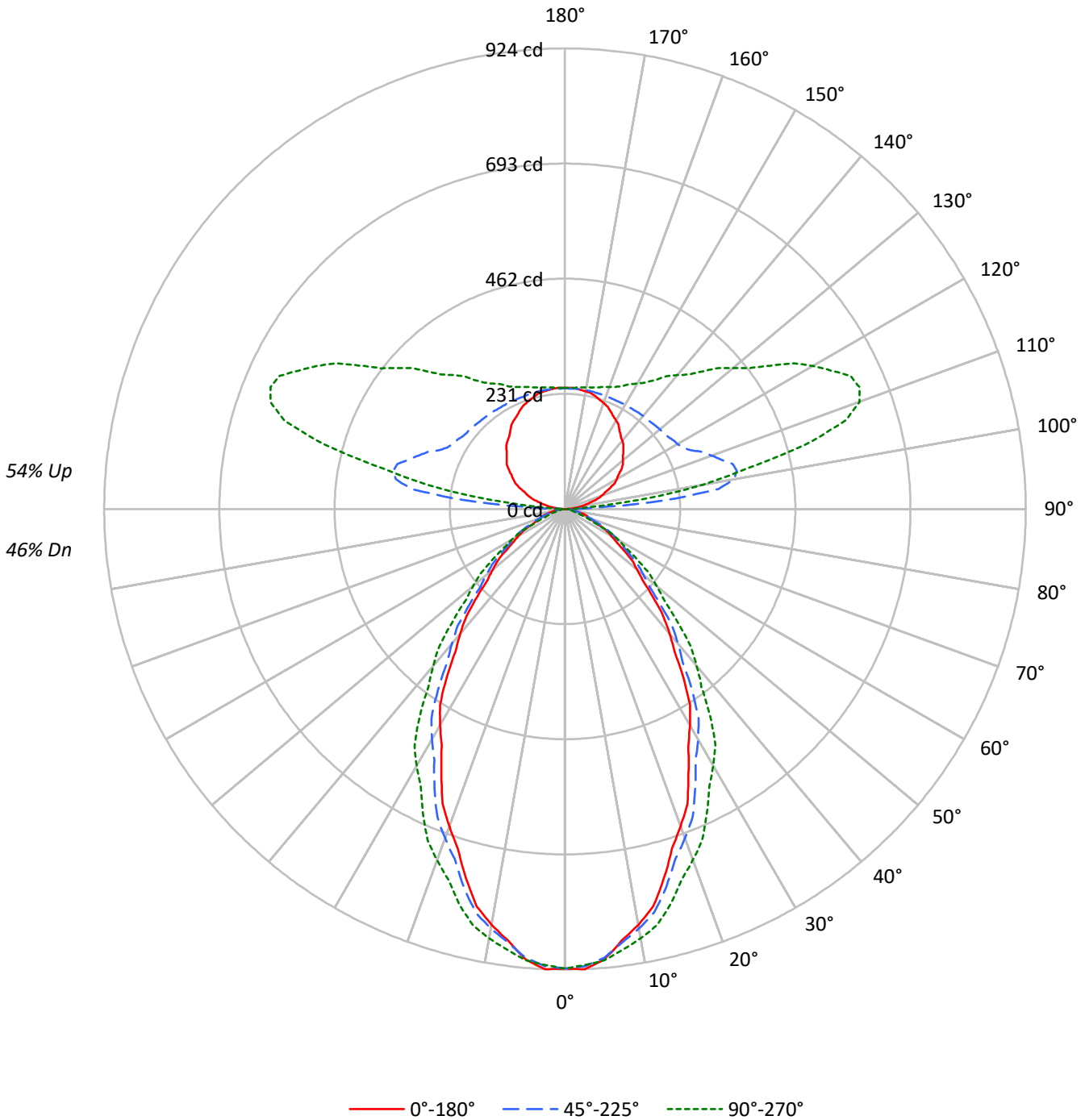
Lumens per Lamp: N/A
Luminaire Lumens: 2929.5 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 28.5
Input Voltage (V): 120
Input Current (A_{in}): 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	0
RCR																		
0	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46
1	98	94	91	87	90	87	84	81	73	70	69	60	58	57	48	47	46	41
2	90	83	78	73	83	77	72	68	65	61	59	54	51	49	43	42	41	36
3	83	74	68	62	76	69	63	58	58	54	51	49	46	43	40	38	36	32
4	76	66	59	54	70	62	55	50	52	48	44	44	41	38	36	34	32	28
5	71	60	52	47	65	56	49	44	48	43	39	40	36	34	33	31	29	25
6	65	54	47	41	60	50	44	39	43	38	34	37	33	30	30	28	26	23
7	61	49	42	37	56	46	39	35	40	35	31	34	30	27	28	25	23	21
8	57	45	38	33	52	42	36	31	36	31	28	31	27	25	26	23	21	19
9	53	41	34	30	49	39	32	28	34	29	25	29	25	22	24	22	20	17
10	50	38	31	27	46	36	30	26	31	26	23	27	23	21	23	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8507	8507	8507
5°	8400	8370	8419
10°	7936	8008	8194
15°	7326	7496	7832
20°	6653	6903	7360
25°	5968	6293	6857
30°	5335	5685	6336
35°	4666	5003	5718
40°	3928	4239	4950
45°	3241	3520	4134
50°	2706	2950	3443
55°	2297	2532	2844
60°	1963	2194	2270
65°	1563	1847	1467
70°	1387	1440	896
75°	1283	1169	549
80°	1185	1073	473
85°	1069	984	381



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.6	2.9
10°-20°	220.0	7.5
20°-30°	284.9	9.7
30°-40°	279.0	9.5
40°-50°	213.6	7.3
50°-60°	142.3	4.9
60°-70°	77.7	2.7
70°-80°	32.4	1.1
80°-90°	10.1	0.3
90°-100°	116.5	4.0
100°-110°	316.6	10.8
110°-120°	325.5	11.1
120°-130°	260.2	8.9
130°-140°	204.5	7.0
140°-150°	156.8	5.4
150°-160°	112.8	3.8
160°-170°	69.0	2.4
170°-180°	23.2	0.8
0°-30°	589.4	20.1
0°-40°	868.4	29.6
0°-60°	1224.3	41.8
0°-90°	1344.4	45.9
90°-120°	758.6	25.9
90°-150°	1380.1	47.1
90°-180°	1585.0	54.1
0°-180°	2929.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	922	922	922	922	922	
5°	907	898	904	906	909	84
15°	767	764	785	806	820	214
25°	586	588	618	645	674	270
35°	414	416	444	474	508	258
45°	248	253	270	290	317	194
55°	143	149	157	163	177	129
65°	72	78	85	74	67	74
75°	36	36	33	22	15	38
85°	10	10	9	6	4	11
90°	1	3	6	7	7	2
95°	17	64	203	88	59	18
105°	56	88	348	530	499	60
115°	100	121	279	554	632	99
125°	137	156	252	425	501	122
135°	166	184	245	346	390	128
145°	191	205	242	294	316	120
155°	216	224	240	264	272	100
165°	234	237	241	251	252	66
175°	243	244	242	245	244	23
180°	243	243	243	243	243	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	922.0	922.0	922.0	922.0	922.0
2.5°	924.2	916.0	918.1	918.0	915.5
5°	907.0	897.9	903.8	905.9	909.0
7.5°	873.3	866.5	877.1	885.1	891.5
10°	847.1	841.2	854.8	866.3	874.6
12.5°	816.7	811.7	828.6	844.1	854.9
15°	767.0	764.3	784.8	806.2	820.0
17.5°	713.9	712.5	736.1	761.0	778.8
20°	677.6	677.2	703.1	729.1	749.6
22.5°	641.0	641.9	669.1	696.1	719.5
25°	586.2	587.8	618.2	645.1	673.6
27.5°	535.5	536.2	567.6	596.0	626.4
30°	500.8	502.8	533.6	563.0	594.7
32.5°	466.2	468.5	498.6	529.1	561.4
35°	414.3	416.2	444.2	474.1	507.7
37.5°	360.7	363.4	388.2	416.5	449.5
40°	326.1	330.0	352.0	378.6	411.0
42.5°	292.7	297.6	318.0	343.2	372.5
45°	248.4	253.1	269.8	290.3	316.8
47.5°	210.2	215.7	228.5	246.1	268.7
50°	188.5	193.7	205.5	218.5	239.9
52.5°	169.4	174.6	185.1	195.2	213.4
55°	142.8	148.7	157.4	163.3	176.8
57.5°	121.0	126.7	133.5	136.2	144.3
60°	106.4	112.7	118.9	118.6	123.0
62.5°	93.1	98.5	104.7	100.4	100.7
65°	71.6	77.5	84.6	73.9	67.2
67.5°	57.9	59.1	66.3	51.5	43.5
70°	51.4	51.4	53.4	39.9	33.2
72.5°	45.2	45.2	43.4	32.4	25.4
75°	36.0	36.0	32.8	22.5	15.4
77.5°	27.8	27.4	25.1	16.8	11.2
80°	22.3	22.3	20.2	13.3	8.9
82.5°	17.4	17.4	15.7	10.4	6.6
85°	10.1	10.1	9.3	6.0	3.6
87.5°	3.7	4.2	4.3	3.3	3.0
90°	0.8	3.1	5.5	7.0	7.0
92.5°	7.0	31.9	55.4	23.8	20.1
95°	17.2	63.7	203.0	88.3	59.3
97.5°	28.4	70.4	311.1	242.1	170.0
100°	35.9	74.8	344.2	349.0	281.8
102.5°	43.4	79.3	353.0	431.6	372.3
105°	56.2	87.5	348.1	530.1	498.8
107.5°	69.5	97.1	328.0	581.0	589.7
110°	78.8	104.0	313.0	591.0	628.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	<i>87.0</i>	110.9	298.0	582.7	639.0
115°	<i>99.9</i>	121.3	278.7	554.4	631.5
117.5°	<i>112.1</i>	132.5	266.3	514.4	601.2
120°	<i>120.2</i>	140.1	260.7	487.5	573.7
122.5°	<i>127.1</i>	146.9	257.0	460.6	543.8
125°	<i>137.4</i>	156.5	252.1	424.8	501.1
127.5°	<i>146.6</i>	165.5	249.5	397.7	463.2
130°	<i>152.2</i>	170.5	248.2	380.7	439.5
132.5°	<i>157.8</i>	176.2	247.0	366.2	418.2
135°	<i>165.5</i>	183.8	245.1	346.0	390.3
137.5°	<i>173.8</i>	190.4	244.2	328.2	365.5
140°	<i>178.8</i>	194.8	243.5	316.9	350.5
142.5°	<i>183.8</i>	198.6	242.9	308.0	336.1
145°	<i>191.2</i>	205.0	242.0	294.0	316.1
147.5°	<i>199.7</i>	211.4	241.2	283.0	300.4
150°	<i>205.3</i>	215.2	241.2	276.6	290.4
152.5°	<i>209.7</i>	218.4	240.6	271.0	282.3
155°	<i>216.2</i>	223.9	240.4	264.0	271.6
157.5°	<i>222.6</i>	228.6	240.4	259.3	265.1
160°	<i>226.4</i>	231.7	240.4	256.1	260.7
162.5°	<i>230.1</i>	234.2	241.0	253.6	257.0
165°	<i>234.2</i>	237.2	241.2	251.4	252.1
167.5°	<i>238.4</i>	239.9	242.0	248.7	249.3
170°	<i>239.6</i>	241.2	242.0	247.4	247.4
172.5°	<i>240.9</i>	241.8	242.0	246.2	246.2
175°	<i>242.8</i>	243.5	242.0	245.1	244.3
177.5°	<i>243.4</i>	243.4	241.5	244.0	242.8
180°	<i>242.8</i>	242.8	242.8	242.8	242.8

(END OF REPORT)