

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521010

Luminaire Tested: **SQ4-BB-025U-100D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521010
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-025U-100D-93050-1D-UNV-STD-W-4 (3000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

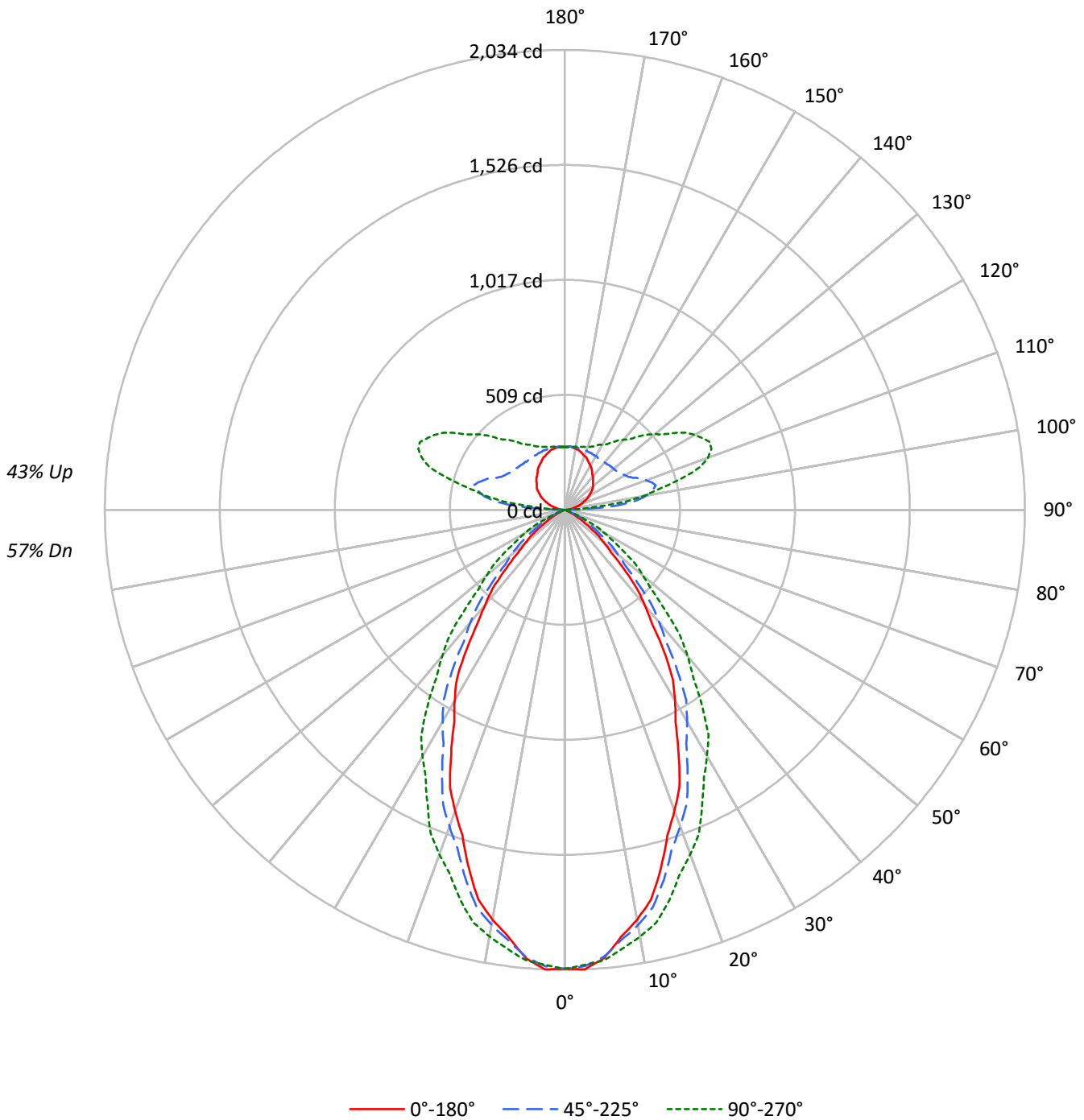
Lumens per Lamp: N/A
Luminaire Lumens: 4222.2 lumens
Efficiency: N/A
Efficacy: 74.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 56.8
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	109	109	109	109	101	101	101	101	87	87	87	75	75	75	63	63	63	57				57
1	101	98	95	92	95	92	89	86	80	78	76	69	67	66	59	58	57	52				52
2	94	88	83	79	88	83	78	74	72	69	66	63	61	59	54	53	51	47				47
3	87	79	73	68	82	75	69	65	66	62	58	58	55	52	50	48	46	43				43
4	81	72	65	60	76	68	62	57	60	55	52	53	49	47	46	44	42	39				39
5	75	65	58	53	70	62	55	51	55	50	46	49	45	42	43	40	38	35				35
6	70	59	52	47	66	56	50	45	50	45	42	45	41	38	40	37	35	32				32
7	65	55	47	42	61	52	45	41	47	41	38	42	38	35	37	34	32	29				29
8	61	50	43	38	58	48	41	37	43	38	34	39	35	32	35	31	29	27				27
9	58	46	40	35	54	44	38	34	40	35	31	36	32	29	32	29	27	25				25
10	54	43	36	32	51	41	35	31	37	32	29	34	30	27	30	27	25	23				23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18725	18725	18725
5°	18424	18377	18515
10°	17238	17469	17956
15°	15671	16168	17069
20°	13911	14634	15916
25°	12114	13074	14624
30°	10377	11516	13400
35°	8604	9776	11921
40°	6611	7817	10158
45°	4778	5918	8173
50°	3255	4411	6483
55°	2117	3190	5038
60°	1214	2248	3643
65°	321	1371	1843
70°	159	424	529
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.2	4.4
10°-20°	473.7	11.2
20°-30°	593.0	14.0
30°-40°	547.7	13.0
40°-50°	368.0	8.7
50°-60°	190.1	4.5
60°-70°	59.5	1.4
70°-80°	3.8	0.1
80°-90°	0.1	0.0
90°-100°	143.4	3.4
100°-110°	346.6	8.2
110°-120°	369.6	8.8
120°-130°	299.4	7.1
130°-140°	231.8	5.5
140°-150°	176.8	4.2
150°-160°	128.0	3.0
160°-170°	78.8	1.9
170°-180°	26.7	0.6
0°-30°	1251.8	29.6
0°-40°	1799.5	42.6
0°-60°	2357.7	55.8
0°-90°	2421.0	57.3
90°-120°	859.6	20.4
90°-150°	1567.6	37.1
90°-180°	1801.0	42.7
0°-180°	4222.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2030	2030	2030	2030	2030	
5°	1989	1969	1984	1991	1999	184
15°	1641	1635	1693	1750	1787	457
25°	1190	1200	1284	1372	1436	546
35°	764	783	868	970	1058	473
45°	366	388	454	542	626	288
55°	132	154	198	255	313	123
65°	15	28	63	76	84	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	14	72	246	160	112	16
105°	55	96	416	539	532	58
115°	101	130	335	634	708	100
125°	144	166	290	505	593	129
135°	177	198	279	398	458	137
145°	210	225	273	338	365	131
155°	240	251	277	300	310	111
165°	266	270	280	285	289	75
175°	281	280	281	279	278	27
180°	278	278	278	278	278	



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CATALOG NUMBER: SQ4-BB-025U-100D-93050-1D-UNV-STD-W-4 (3000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2029.5	2029.5	2029.5	2029.5	2029.5
2.5°	2034.2	2015.0	2020.1	2020.0	2014.6
5°	1989.3	1969.1	1984.3	1991.4	1999.1
7.5°	1905.2	1889.5	1918.8	1940.7	1956.7
10°	1840.0	1826.6	1864.6	1894.5	1916.6
12.5°	1764.6	1754.2	1800.2	1841.2	1869.5
15°	1640.7	1634.9	1692.7	1749.6	1787.0
17.5°	1507.9	1507.8	1573.7	1644.3	1689.4
20°	1416.8	1419.7	1490.5	1568.3	1621.1
22.5°	1325.7	1332.4	1408.0	1489.1	1549.6
25°	1190.0	1199.6	1284.3	1372.1	1436.5
27.5°	1059.6	1073.6	1162.7	1254.1	1332.4
30°	974.0	990.3	1081.0	1177.1	1257.8
32.5°	890.0	909.4	997.8	1099.4	1181.6
35°	763.9	783.1	868.0	970.1	1058.4
37.5°	633.7	652.5	735.4	836.0	931.4
40°	548.9	570.0	649.0	746.5	843.4
42.5°	471.9	493.0	567.3	663.1	754.7
45°	366.2	388.3	453.6	541.9	626.4
47.5°	278.7	302.7	360.0	439.9	516.9
50°	226.8	250.8	307.3	377.7	451.7
52.5°	185.2	208.4	259.4	325.8	393.5
55°	131.6	153.7	198.3	254.7	313.2
57.5°	90.9	109.9	150.0	197.0	242.9
60°	65.8	84.0	121.8	159.9	197.4
62.5°	43.8	60.5	97.4	126.6	151.8
65°	14.7	28.2	62.8	75.8	84.4
67.5°	7.5	9.0	33.0	34.8	37.7
70°	5.9	5.9	15.7	16.8	19.6
72.5°	4.3	4.3	6.3	8.1	8.6
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	4.7	38.8	91.4	44.5	30.2
95°	14.1	71.7	245.7	159.8	111.9
97.5°	25.1	79.5	323.6	311.7	267.6
100°	33.6	84.3	366.5	386.8	350.6
102.5°	41.6	88.6	394.7	449.4	427.9
105°	55.4	95.7	416.5	538.9	532.0
107.5°	68.9	104.1	403.7	610.7	627.0
110°	78.4	111.2	383.0	641.7	672.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	<i>87.8</i>	118.3	364.6	649.3	701.5
115°	<i>101.3</i>	129.6	334.6	634.4	707.6
117.5°	<i>114.8</i>	141.4	317.1	600.3	686.0
120°	<i>123.7</i>	148.5	305.8	573.5	663.4
122.5°	<i>133.2</i>	156.1	298.7	546.2	634.7
125°	<i>144.3</i>	166.2	290.5	504.6	592.7
127.5°	<i>155.4</i>	176.0	284.7	469.3	546.7
130°	<i>162.0</i>	182.2	282.8	444.8	520.8
132.5°	<i>168.1</i>	189.2	280.0	427.1	491.6
135°	<i>177.3</i>	198.1	278.7	397.9	457.8
137.5°	<i>186.1</i>	206.9	274.6	378.1	423.3
140°	<i>192.7</i>	211.7	274.6	363.9	405.3
142.5°	<i>199.3</i>	218.3	272.2	351.5	386.5
145°	<i>209.7</i>	225.3	273.4	338.2	364.7
147.5°	<i>219.5</i>	234.6	272.7	322.9	344.8
150°	<i>225.7</i>	238.9	274.6	316.2	333.5
152.5°	<i>232.3</i>	245.0	274.1	309.1	324.5
155°	<i>240.4</i>	250.8	276.9	299.5	310.5
157.5°	<i>250.2</i>	259.0	276.3	295.9	302.4
160°	<i>253.9</i>	261.4	278.7	291.2	295.8
162.5°	<i>260.1</i>	266.6	277.7	289.7	292.5
165°	<i>265.7</i>	269.7	280.4	284.7	288.7
167.5°	<i>272.7</i>	275.3	279.7	284.3	284.5
170°	<i>274.6</i>	276.3	281.6	281.1	284.0
172.5°	<i>277.9</i>	279.1	280.2	281.5	279.7
175°	<i>281.0</i>	279.9	281.0	278.7	278.1
177.5°	<i>280.4</i>	280.4	279.5	278.5	276.2
180°	<i>278.1</i>	278.1	278.1	278.1	278.1

(END OF REPORT)