

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: P520997

Luminaire Tested: **SQ4-BB-025U-075D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P520997
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-075D-93050-1D-UNV-STD-W-4 (3000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 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

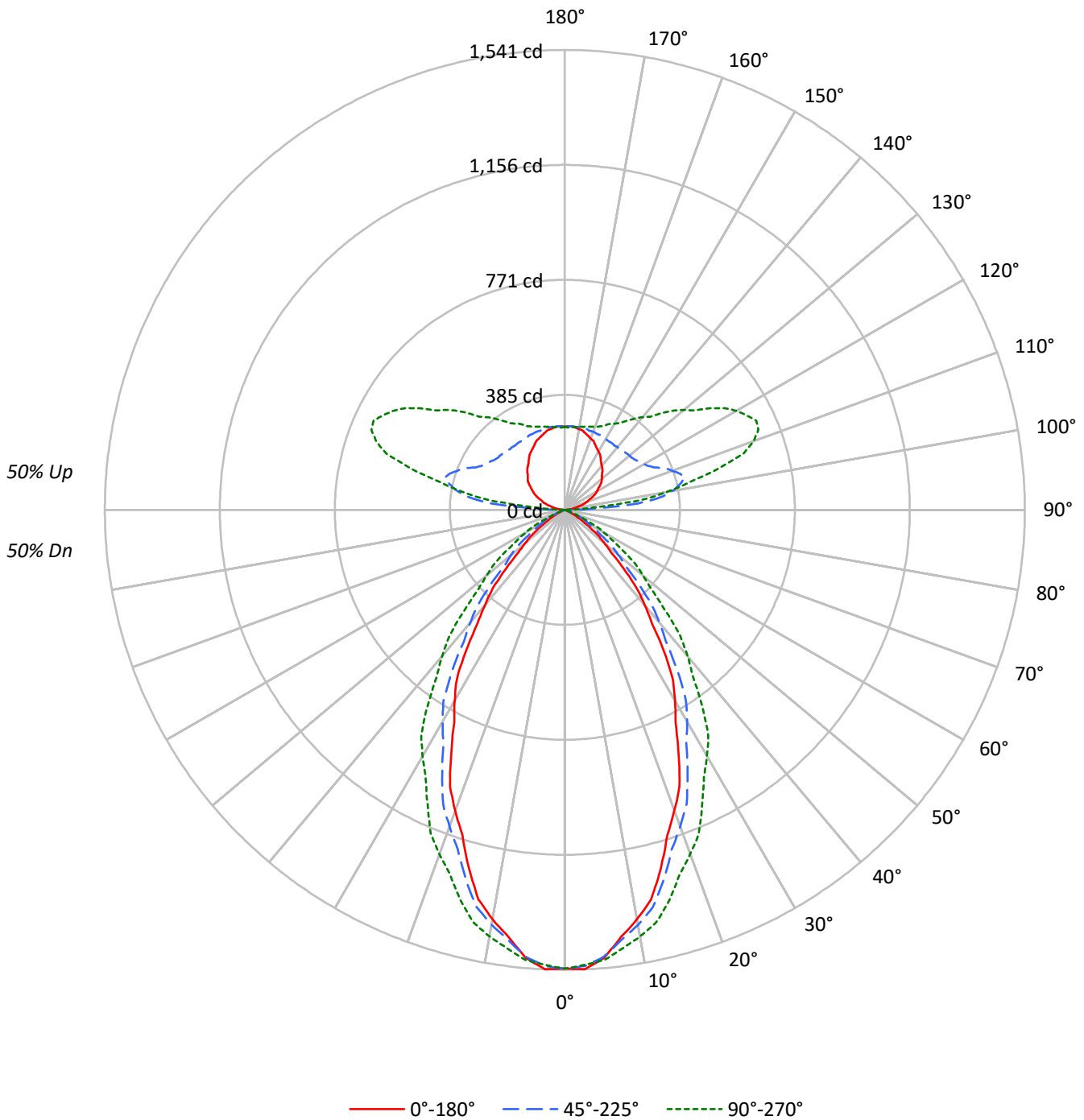
Lumens per Lamp: N/A
Luminaire Lumens: 3634.9 lumens
Efficiency: N/A
Efficacy: 79.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 45.9
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	99	99	99	99	84	84	84	69	69	69	57	57	57	50				
1	100	96	93	90	92	89	86	84	76	74	72	64	63	61	53	52	51	46				
2	92	86	81	77	85	80	76	72	69	66	63	58	56	54	49	47	46	42				
3	85	77	71	66	79	72	67	62	62	58	55	53	51	48	45	43	41	38				
4	79	70	63	58	73	65	59	55	57	52	49	49	46	43	41	39	37	34				
5	73	63	56	51	68	59	53	48	52	47	43	45	41	39	38	36	34	31				
6	68	58	50	45	63	54	48	43	47	43	39	41	38	35	36	33	31	28				
7	64	53	46	41	59	50	43	39	44	39	35	38	34	32	33	30	28	26				
8	60	48	41	37	55	46	39	35	40	35	32	35	32	29	31	28	26	24				
9	56	45	38	33	52	42	36	32	37	33	29	33	29	27	29	26	24	22				
10	52	41	35	30	49	39	33	29	35	30	27	31	27	25	27	24	22	20				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14183	14183	14183
5°	13954	13920	14024
10°	13057	13231	13600
15°	11870	12246	12928
20°	10536	11084	12055
25°	9176	9902	11076
30°	7859	8723	10150
35°	6517	7404	9030
40°	5007	5921	7694
45°	3619	4483	6191
50°	2466	3341	4910
55°	1604	2416	3815
60°	919	1701	2759
65°	245	1039	1397
70°	121	321	402
75°	53	25	0
80°	37	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.3	3.9
10°-20°	358.8	9.9
20°-30°	449.1	12.4
30°-40°	414.8	11.4
40°-50°	278.8	7.7
50°-60°	144.0	4.0
60°-70°	45.1	1.2
70°-80°	2.8	0.1
80°-90°	0.0	0.0
90°-100°	143.4	3.9
100°-110°	346.6	9.5
110°-120°	369.6	10.2
120°-130°	299.4	8.2
130°-140°	231.8	6.4
140°-150°	176.8	4.9
150°-160°	128.0	3.5
160°-170°	78.8	2.2
170°-180°	26.7	0.7
0°-30°	948.2	26.1
0°-40°	1363.0	37.5
0°-60°	1785.8	49.1
0°-90°	1833.7	50.4
90°-120°	859.6	23.6
90°-150°	1567.6	43.1
90°-180°	1801.0	49.5
0°-180°	3634.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1537	1537	1537	1537	1537	
5°	1507	1491	1503	1508	1514	140
15°	1243	1238	1282	1325	1354	346
25°	901	909	973	1039	1088	413
35°	579	593	657	735	802	358
45°	277	294	344	410	474	218
55°	100	116	150	193	237	93
65°	11	21	48	57	64	19
75°	2	2	1	0	0	2
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	

TEST NUMBER: P520997

CATALOG NUMBER: SQ4-BB-025U-075D-93050-1D-UNV-STD-W-4 (3000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1537.2	1537.2	1537.2	1537.2	1537.2
2.5°	1540.8	1526.2	1530.1	1530.0	1525.9
5°	1506.7	1491.4	1503.0	1508.3	1514.2
7.5°	1443.1	1431.1	1453.3	1470.0	1482.0
10°	1393.7	1383.5	1412.3	1435.0	1451.7
12.5°	1336.6	1328.7	1363.5	1394.6	1416.0
15°	1242.7	1238.3	1282.1	1325.2	1353.5
17.5°	1142.2	1142.0	1192.0	1245.4	1279.6
20°	1073.1	1075.3	1128.9	1187.8	1227.8
22.5°	1004.1	1009.2	1066.4	1127.9	1173.7
25°	901.4	908.6	972.7	1039.3	1088.0
27.5°	802.6	813.2	880.7	949.8	1009.2
30°	737.7	750.1	818.8	891.6	952.7
32.5°	674.1	688.8	755.7	832.7	895.0
35°	578.6	593.1	657.4	734.8	801.7
37.5°	480.0	494.2	557.0	633.2	705.5
40°	415.7	431.7	491.6	565.4	638.8
42.5°	357.4	373.4	429.7	502.2	571.6
45°	277.4	294.1	343.6	410.5	474.5
47.5°	211.1	229.2	272.6	333.2	391.5
50°	171.8	190.0	232.8	286.1	342.1
52.5°	140.3	157.9	196.5	246.7	298.1
55°	99.7	116.4	150.2	192.9	237.2
57.5°	68.9	83.3	113.6	149.2	184.0
60°	49.8	63.6	92.2	121.1	149.5
62.5°	33.2	45.8	73.8	95.9	115.0
65°	11.2	21.3	47.6	57.4	64.0
67.5°	5.7	6.8	25.0	26.4	28.6
70°	4.5	4.5	11.9	12.7	14.9
72.5°	3.3	3.3	4.8	6.1	6.5
75°	1.5	1.5	0.7	0.0	0.0
77.5°	0.7	0.7	0.6	0.0	0.0
80°	0.7	0.7	0.0	0.0	0.0
82.5°	0.1	0.1	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

TEST NUMBER: P520997

CATALOG NUMBER: SQ4-BB-025U-075D-93050-1D-UNV-STD-W-4 (3000K)

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)