

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: P518557

Luminaire Tested: **SQ4-BB-075U-100D-935-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518557
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-075U-100D-935-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

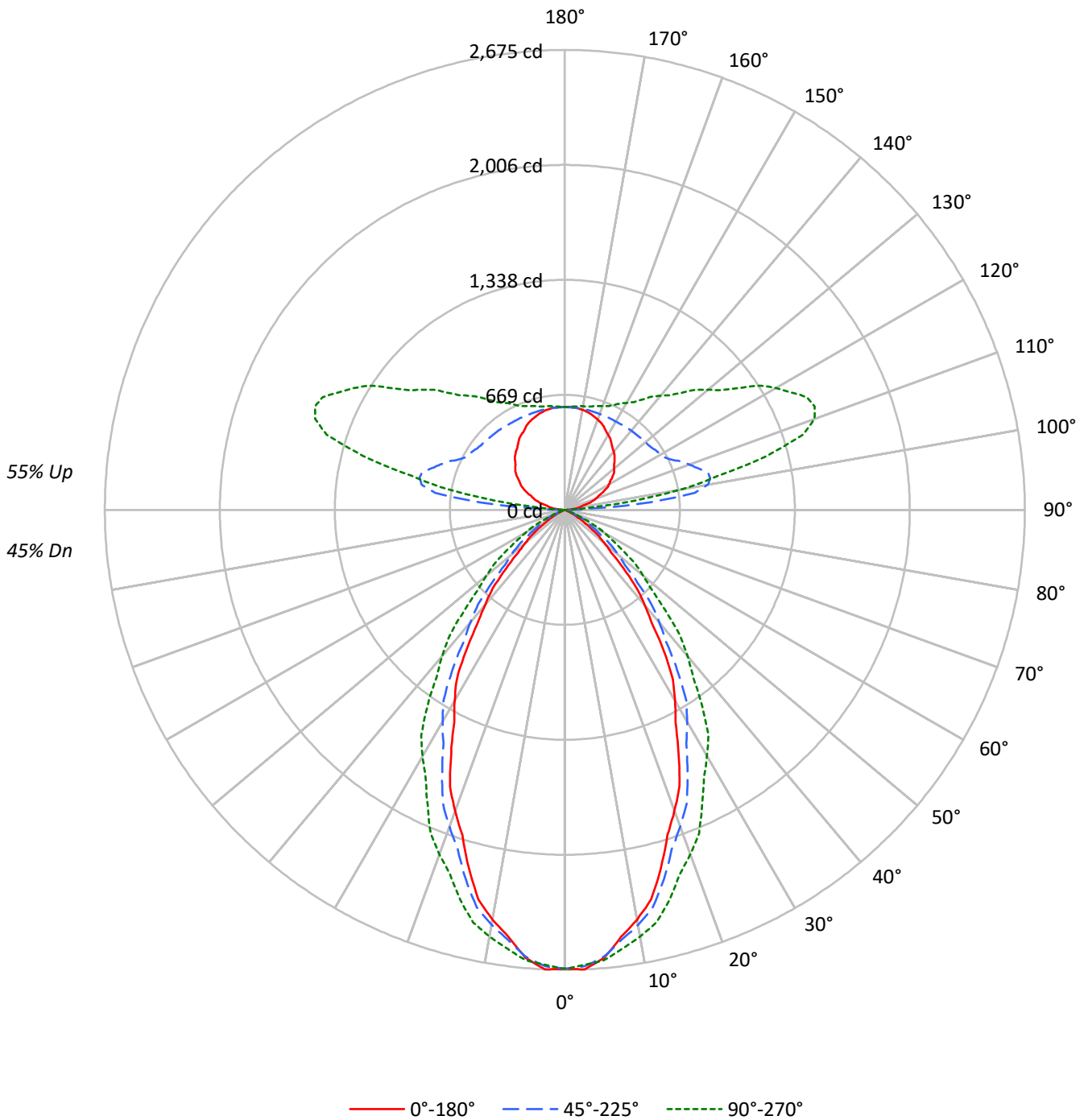
Lumens per Lamp: N/A
Luminaire Lumens: 7087.3 lumens
Efficiency: N/A
Efficacy: 85.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 82.9
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	0
RCR																		
0	106	106	106	106	97	97	97	97	81	81	81	65	65	65	51	51	51	45
1	98	95	91	88	90	87	84	82	73	71	69	60	59	58	48	47	47	41
2	91	84	79	75	83	78	74	70	66	63	60	55	53	51	44	43	42	37
3	84	76	69	64	77	70	65	60	60	56	52	50	47	45	41	39	38	33
4	78	68	61	56	71	63	57	53	54	50	46	46	42	40	38	36	34	30
5	72	62	55	49	66	57	51	46	49	45	41	42	38	36	35	32	31	28
6	67	56	49	44	62	52	46	41	45	40	37	38	35	32	32	30	28	25
7	62	51	44	39	57	48	42	37	41	37	33	36	32	29	30	27	26	23
8	58	47	40	35	54	44	38	33	38	33	30	33	29	27	28	25	23	21
9	54	43	36	32	50	41	34	30	35	31	27	31	27	25	26	24	22	20
10	51	40	33	29	47	38	32	28	33	28	25	29	25	23	24	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16416	16416	16416
5°	16153	16112	16232
10°	15113	15315	15742
15°	13740	14175	14965
20°	12196	12830	13954
25°	10621	11462	12821
30°	9097	10097	11748
35°	7543	8571	10452
40°	5796	6853	8906
45°	4189	5190	7166
50°	2854	3868	5684
55°	1855	2797	4417
60°	1064	1969	3192
65°	282	1202	1615
70°	138	372	464
75°	62	31	0
80°	46	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.6	3.4
10°-20°	622.9	8.8
20°-30°	779.8	11.0
30°-40°	720.3	10.2
40°-50°	484.0	6.8
50°-60°	250.0	3.5
60°-70°	78.3	1.1
70°-80°	5.0	0.1
80°-90°	1.6	0.0
90°-100°	282.5	4.0
100°-110°	777.2	11.0
110°-120°	802.2	11.3
120°-130°	642.7	9.1
130°-140°	504.8	7.1
140°-150°	386.9	5.5
150°-160°	278.2	3.9
160°-170°	170.1	2.4
170°-180°	57.3	0.8
0°-30°	1646.3	23.2
0°-40°	2366.6	33.4
0°-60°	3100.6	43.7
0°-90°	3185.4	44.9
90°-120°	1861.9	26.3
90°-150°	3396.4	47.9
90°-180°	3902.0	55.1
0°-180°	7087.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2669	2669	2669	2669	2669	
5°	2616	2590	2610	2619	2629	243
15°	2158	2150	2226	2301	2350	601
25°	1565	1578	1689	1804	1889	717
35°	1005	1030	1142	1276	1392	622
45°	482	511	597	713	824	378
55°	173	202	261	335	412	161
65°	19	37	83	100	111	33
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	1	5	9	12	12	3
95°	42	154	500	214	136	44
105°	139	214	856	1304	1217	146
115°	246	300	687	1368	1552	243
125°	339	386	623	1054	1235	302
135°	409	454	605	852	965	316
145°	473	505	596	726	782	296
155°	535	553	593	653	672	246
165°	579	586	595	619	623	163
175°	599	600	596	604	603	57
180°	599	599	599	599	599	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2669.0	2669.0	2669.0	2669.0	2669.0
2.5°	2675.2	2649.9	2656.6	2656.4	2649.4
5°	2616.1	2589.5	2609.6	2618.9	2629.0
7.5°	2505.5	2484.8	2523.3	2552.2	2573.2
10°	2419.8	2402.1	2452.1	2491.5	2520.5
12.5°	2320.6	2307.0	2367.4	2421.4	2458.5
15°	2157.7	2150.1	2226.1	2300.8	2350.1
17.5°	1983.1	1982.8	2069.6	2162.4	2221.7
20°	1863.3	1867.1	1960.1	2062.4	2131.8
22.5°	1743.4	1752.3	1851.6	1958.3	2037.8
25°	1565.0	1577.6	1688.9	1804.5	1889.1
27.5°	1393.5	1411.9	1529.1	1649.2	1752.2
30°	1280.9	1302.4	1421.7	1548.0	1654.1
32.5°	1170.4	1195.9	1312.2	1445.8	1553.9
35°	1004.6	1029.8	1141.5	1275.8	1392.0
37.5°	833.4	858.1	967.1	1099.4	1224.9
40°	721.8	749.6	853.5	981.7	1109.2
42.5°	620.6	648.3	746.1	872.0	992.4
45°	481.6	510.7	596.6	712.7	823.8
47.5°	366.5	398.0	473.4	578.5	679.7
50°	298.3	329.8	404.2	496.8	594.0
52.5°	243.5	274.1	341.1	428.4	517.5
55°	173.0	202.1	260.8	334.9	411.9
57.5°	119.6	144.6	197.3	259.1	319.5
60°	86.5	110.5	160.1	210.3	259.5
62.5°	57.6	79.6	128.1	166.5	199.6
65°	19.4	37.0	82.6	99.7	111.0
67.5°	9.8	11.8	43.4	45.8	49.6
70°	7.7	7.7	20.7	22.0	25.8
72.5°	5.7	5.7	8.3	10.6	11.4
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	0.0	0.0
80°	1.3	1.3	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	1.0	1.8	2.3	2.3
90°	1.3	5.0	8.9	11.5	11.5
92.5°	17.6	75.2	130.2	50.0	41.0
95°	42.1	154.2	499.5	213.6	136.4
97.5°	68.6	171.0	762.3	587.4	414.4
100°	87.9	181.4	844.9	852.8	695.8
102.5°	106.3	193.8	866.3	1058.0	914.0
105°	138.9	213.7	856.4	1304.2	1217.0
107.5°	170.0	238.3	807.7	1424.8	1450.7
110°	192.4	254.7	771.0	1454.8	1544.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	212.8	273.1	734.3	1435.5	1572.1
115°	246.0	299.5	686.9	1367.8	1552.2
117.5°	277.6	326.9	656.8	1272.7	1481.3
120°	296.9	344.3	643.6	1201.5	1417.1
122.5°	314.3	361.6	634.4	1139.1	1343.7
125°	339.0	386.3	623.2	1054.2	1234.9
127.5°	362.4	407.5	615.8	983.3	1141.8
130°	374.7	420.8	611.7	941.2	1085.8
132.5°	388.9	435.0	608.6	904.2	1034.8
135°	409.1	453.9	605.3	852.5	964.7
137.5°	427.9	469.5	602.5	810.8	903.3
140°	442.2	480.8	601.5	783.1	866.6
142.5°	454.4	490.1	599.5	758.3	829.9
145°	472.8	505.2	596.4	726.4	782.5
147.5°	492.4	520.3	594.9	698.1	743.0
150°	504.6	529.6	593.9	682.6	717.5
152.5°	515.9	538.8	592.8	669.2	698.1
155°	535.2	552.7	592.6	652.9	671.6
157.5°	549.2	563.5	592.6	639.5	652.5
160°	559.4	570.7	592.6	632.3	642.3
162.5°	567.6	576.8	593.6	626.1	634.1
165°	578.6	586.0	595.1	619.4	623.2
167.5°	586.2	591.9	596.4	613.8	614.8
170°	591.3	595.0	596.4	611.7	611.7
172.5°	595.4	597.1	596.4	608.6	607.6
175°	598.9	600.2	596.4	604.0	602.8
177.5°	600.0	600.0	595.9	602.0	600.0
180°	598.9	598.9	598.9	598.9	598.9

(END OF REPORT)