

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: P518886

Luminaire Tested: **SQ4-BB-150U-050D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518886
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-050D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

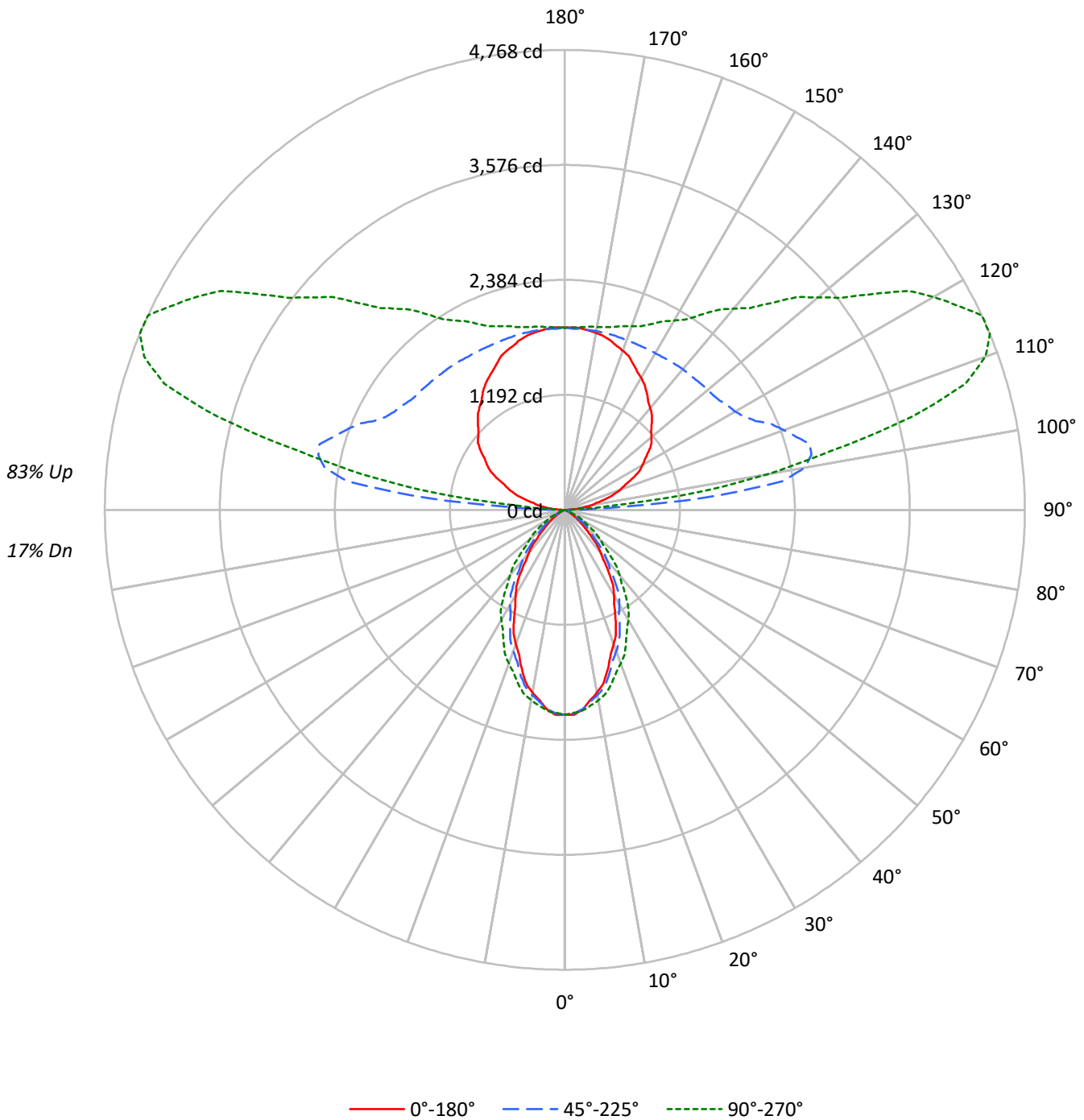
Lumens per Lamp: N/A
Luminaire Lumens: 14705.2 lumens
Efficiency: N/A
Efficacy: 131.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 111.9
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	99	99	99	99	87	87	87	87	65	65	65	45	45	45	26	26	26	17
1	91	87	84	81	80	77	74	72	58	56	54	40	39	38	24	23	23	16
2	83	77	71	67	73	68	63	60	51	48	46	36	34	33	22	21	20	14
3	76	68	61	56	67	60	55	51	46	42	39	32	30	29	20	19	18	13
4	70	60	53	48	62	54	48	43	41	37	34	29	27	25	18	17	16	12
5	64	54	47	41	57	48	42	37	37	33	30	26	24	22	17	15	14	11
6	59	48	41	36	52	43	37	33	33	29	26	24	21	19	15	14	13	10
7	55	44	37	32	48	39	33	29	30	26	23	22	19	17	14	13	12	9
8	51	40	33	28	45	36	30	25	28	23	20	20	18	16	13	12	11	8
9	47	36	29	25	42	32	27	23	25	21	18	19	16	14	12	11	10	8
10	44	33	27	22	39	30	24	20	23	19	16	17	15	13	11	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9792	9792	9792
5°	9634	9611	9682
10°	9014	9135	9390
15°	8195	8455	8926
20°	7274	7652	8323
25°	6335	6837	7647
30°	5426	6022	7007
35°	4499	5112	6234
40°	3457	4088	5312
45°	2499	3095	4274
50°	1702	2307	3390
55°	1107	1668	2635
60°	635	1174	1904
65°	168	717	964
70°	84	221	277
75°	37	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.7	1.3
10°-20°	495.4	3.4
20°-30°	620.2	4.2
30°-40°	572.8	3.9
40°-50°	384.9	2.6
50°-60°	198.8	1.4
60°-70°	62.3	0.4
70°-80°	3.9	0.0
80°-90°	4.0	0.0
90°-100°	877.2	6.0
100°-110°	2371.7	16.1
110°-120°	2493.5	17.0
120°-130°	2025.4	13.8
130°-140°	1588.7	10.8
140°-150°	1219.4	8.3
150°-160°	877.0	6.0
160°-170°	535.7	3.6
170°-180°	180.6	1.2
0°-30°	1309.3	8.9
0°-40°	1882.1	12.8
0°-60°	2465.8	16.8
0°-90°	2536.0	17.2
90°-120°	5742.4	39.0
90°-150°	10575.8	71.9
90°-180°	12169.0	82.8
0°-180°	14705.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2123	2123	2123	2123	2123	
5°	2080	2059	2075	2083	2091	193
15°	1716	1710	1770	1830	1869	478
25°	1245	1255	1343	1435	1502	571
35°	799	819	908	1015	1107	495
45°	383	406	474	567	655	301
55°	138	161	207	266	328	128
65°	15	30	66	79	88	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	4	12	26	28	26	9
95°	136	478	1459	755	449	142
105°	441	681	2631	3881	3722	464
115°	776	949	2182	4224	4768	766
125°	1063	1218	1967	3319	3899	947
135°	1274	1425	1914	2680	3033	984
145°	1481	1592	1888	2294	2468	927
155°	1672	1738	1871	2058	2125	771
165°	1820	1838	1879	1953	1963	513
175°	1890	1888	1881	1906	1902	179
180°	1888	1888	1888	1888	1888	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2122.6	2122.6	2122.6	2122.6	2122.6
2.5°	2127.5	2107.5	2112.8	2112.6	2107.0
5°	2080.5	2059.4	2075.4	2082.8	2090.8
7.5°	1992.6	1976.1	2006.8	2029.8	2046.4
10°	1924.4	1910.4	1950.1	1981.4	2004.5
12.5°	1845.6	1834.7	1882.7	1925.7	1955.2
15°	1716.0	1709.9	1770.4	1829.8	1869.0
17.5°	1577.1	1576.9	1645.9	1719.7	1766.9
20°	1481.8	1484.8	1558.8	1640.2	1695.4
22.5°	1386.5	1393.6	1472.6	1557.4	1620.7
25°	1244.6	1254.7	1343.2	1435.1	1502.4
27.5°	1108.2	1122.9	1216.1	1311.6	1393.5
30°	1018.7	1035.8	1130.6	1231.1	1315.5
32.5°	930.8	951.1	1043.5	1149.8	1235.8
35°	798.9	819.0	907.8	1014.6	1107.0
37.5°	662.8	682.4	769.2	874.3	974.1
40°	574.0	596.1	678.8	780.7	882.1
42.5°	493.5	515.6	593.3	693.5	789.3
45°	383.0	406.1	474.4	566.8	655.2
47.5°	291.4	316.5	376.5	460.0	540.6
50°	237.2	262.3	321.4	395.1	472.4
52.5°	193.7	218.0	271.3	340.7	411.6
55°	137.6	160.7	207.4	266.3	327.6
57.5°	95.1	115.0	156.9	206.1	254.1
60°	68.8	87.9	127.3	167.2	206.4
62.5°	45.8	63.3	101.9	132.5	158.8
65°	15.4	29.5	65.7	79.3	88.3
67.5°	7.8	9.4	34.5	36.4	39.4
70°	6.2	6.2	16.4	17.5	20.5
72.5°	4.5	4.5	6.6	8.4	9.0
75°	2.1	2.1	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°	0.8	2.4	5.3	5.7	5.3
90°	4.1	12.0	26.4	28.4	26.4
92.5°	57.7	210.3	414.9	180.1	130.4
95°	136.1	477.8	1458.8	754.9	449.0
97.5°	218.6	548.0	2273.9	1881.8	1382.0
100°	280.4	576.4	2527.4	2635.8	2131.3
102.5°	337.3	615.8	2616.8	3207.6	2830.2
105°	440.9	681.3	2631.1	3881.0	3722.1
107.5°	536.8	756.1	2516.1	4301.1	4354.0
110°	611.5	810.2	2413.7	4413.9	4638.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	678.2	864.1	2319.4	4391.4	4768.4
115°	776.1	948.9	2182.1	4224.1	4768.4
117.5°	872.0	1034.1	2091.4	3968.5	4585.6
120°	930.5	1089.4	2037.8	3785.2	4414.9
122.5°	985.8	1141.5	2005.3	3588.6	4223.1
125°	1062.6	1217.5	1966.7	3318.8	3898.8
127.5°	1133.3	1285.5	1943.9	3098.6	3608.7
130°	1172.3	1329.2	1934.2	2962.5	3423.4
132.5°	1212.9	1368.3	1924.4	2839.8	3264.1
135°	1273.9	1424.9	1913.9	2679.7	3033.3
137.5°	1335.2	1477.9	1904.9	2549.8	2837.9
140°	1377.5	1510.6	1901.7	2466.2	2722.5
142.5°	1418.1	1543.3	1895.2	2390.7	2615.2
145°	1481.1	1592.4	1887.5	2293.7	2468.5
147.5°	1538.4	1636.9	1878.5	2205.8	2340.1
150°	1580.7	1668.1	1875.3	2158.1	2265.4
152.5°	1619.7	1696.0	1873.6	2113.8	2202.0
155°	1672.1	1737.7	1871.2	2057.6	2125.2
157.5°	1726.5	1772.2	1871.6	2018.5	2063.0
160°	1757.4	1795.2	1873.2	1993.8	2025.6
162.5°	1781.8	1813.2	1874.9	1974.1	1998.0
165°	1820.4	1838.3	1879.3	1952.7	1962.6
167.5°	1846.8	1859.1	1879.7	1934.3	1939.1
170°	1863.1	1869.0	1881.4	1926.1	1926.1
172.5°	1876.1	1877.3	1881.4	1916.3	1914.7
175°	1889.5	1887.5	1881.4	1905.7	1901.7
177.5°	1894.0	1889.2	1881.0	1897.1	1892.3
180°	1887.5	1887.5	1887.5	1887.5	1887.5

(END OF REPORT)