

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: P518910

Luminaire Tested: **SQ4-BB-150U-075D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518910
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-075D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

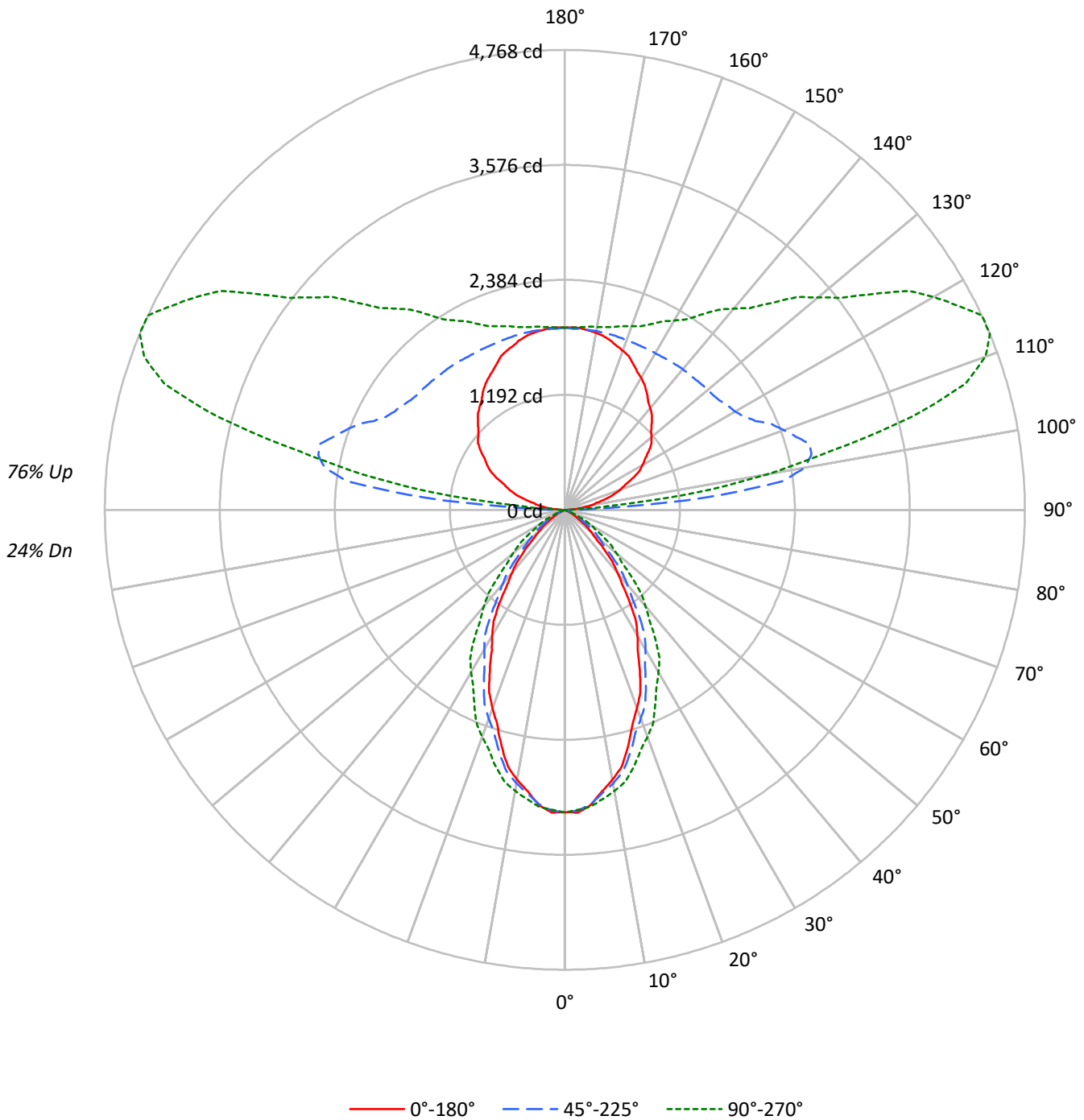
Lumens per Lamp: N/A
Luminaire Lumens: 15912.7 lumens
Efficiency: N/A
Efficacy: 121.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 131.1
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	101	101	101	101	90	90	90	90	69	69	69	49	49	49	32	32	32	24
1	93	89	85	82	82	79	76	74	61	59	58	45	44	43	29	29	28	21
2	85	79	73	69	76	70	66	62	55	52	49	40	38	37	27	26	25	19
3	78	70	63	58	69	63	57	53	49	45	42	36	34	32	25	23	23	17
4	72	62	55	50	64	56	50	45	44	40	37	33	30	28	23	21	20	16
5	66	56	48	43	59	50	44	39	40	35	32	30	27	25	21	19	18	14
6	61	50	43	38	54	45	39	35	36	32	28	27	24	22	19	18	16	13
7	57	45	38	33	50	41	35	31	33	28	25	25	22	20	18	16	15	12
8	53	41	34	30	47	37	31	27	30	26	23	23	20	18	16	15	14	11
9	49	38	31	26	44	34	28	24	28	23	20	21	18	16	15	14	13	10
10	46	35	28	24	41	32	26	22	26	21	18	20	17	15	14	13	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14461	14461	14461
5°	14229	14194	14299
10°	13313	13491	13867
15°	12103	12487	13182
20°	10744	11302	12292
25°	9356	10097	11294
30°	8014	8895	10349
35°	6645	7550	9207
40°	5105	6037	7845
45°	3691	4571	6313
50°	2514	3407	5006
55°	1634	2464	3891
60°	937	1735	2812
65°	248	1060	1423
70°	123	328	409
75°	53	27	0
80°	40	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	286.1	1.8
10°-20°	731.6	4.6
20°-30°	915.9	5.8
30°-40°	846.0	5.3
40°-50°	568.5	3.6
50°-60°	293.6	1.8
60°-70°	92.0	0.6
70°-80°	5.8	0.0
80°-90°	4.0	0.0
90°-100°	877.2	5.5
100°-110°	2371.7	14.9
110°-120°	2493.5	15.7
120°-130°	2025.4	12.7
130°-140°	1588.7	10.0
140°-150°	1219.4	7.7
150°-160°	877.0	5.5
160°-170°	535.7	3.4
170°-180°	180.6	1.1
0°-30°	1933.6	12.2
0°-40°	2779.6	17.5
0°-60°	3641.7	22.9
0°-90°	3743.5	23.5
90°-120°	5742.4	36.1
90°-150°	10575.8	66.5
90°-180°	12169.0	76.5
0°-180°	15912.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3135	3135	3135	3135	3135	
5°	3073	3042	3065	3076	3088	285
15°	2534	2525	2615	2702	2760	706
25°	1838	1853	1984	2119	2219	843
35°	1180	1210	1341	1498	1635	731
45°	566	600	701	837	968	444
55°	203	237	306	393	484	190
65°	23	44	97	117	130	38
75°	3	3	2	0	0	4
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°	3134.8	3134.8	3134.8	3134.8	3134.8
2.5°	3142.1	3112.5	3120.3	3120.1	3111.8
5°	3072.7	3041.5	3065.1	3076.0	3087.8
7.5°	2942.8	2918.5	2963.8	2997.7	3022.3
10°	2842.1	2821.4	2880.0	2926.3	2960.4
12.5°	2725.7	2709.6	2780.6	2844.0	2887.6
15°	2534.3	2525.4	2614.6	2702.4	2760.2
17.5°	2329.2	2328.9	2430.8	2539.8	2609.5
20°	2188.5	2192.9	2302.2	2422.4	2503.9
22.5°	2047.7	2058.1	2174.8	2300.1	2393.5
25°	1838.1	1853.0	1983.7	2119.4	2218.8
27.5°	1636.7	1658.4	1796.0	1937.0	2058.0
30°	1504.5	1529.7	1669.8	1818.2	1942.8
32.5°	1374.7	1404.6	1541.2	1698.2	1825.1
35°	1179.9	1209.6	1340.7	1498.5	1634.9
37.5°	978.8	1007.9	1135.9	1291.3	1438.7
40°	847.8	880.4	1002.5	1153.0	1302.8
42.5°	728.9	761.5	876.3	1024.2	1165.7
45°	565.7	599.8	700.7	837.1	967.6
47.5°	430.4	467.5	556.0	679.4	798.3
50°	350.3	387.4	474.7	583.5	697.6
52.5°	286.0	321.9	400.7	503.2	607.9
55°	203.2	237.3	306.4	393.3	483.8
57.5°	140.4	169.8	231.7	304.3	375.2
60°	101.6	129.8	188.1	247.0	304.8
62.5°	67.6	93.4	150.4	195.6	234.5
65°	22.7	43.5	97.1	117.1	130.4
67.5°	11.5	13.9	51.0	53.8	58.2
70°	9.1	9.1	24.3	25.9	30.3
72.5°	6.7	6.7	9.7	12.5	13.3
75°	3.0	3.0	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	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°	0.8	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)