

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: P518934

Luminaire Tested: **SQ4-BB-150U-100D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518934
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-100D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

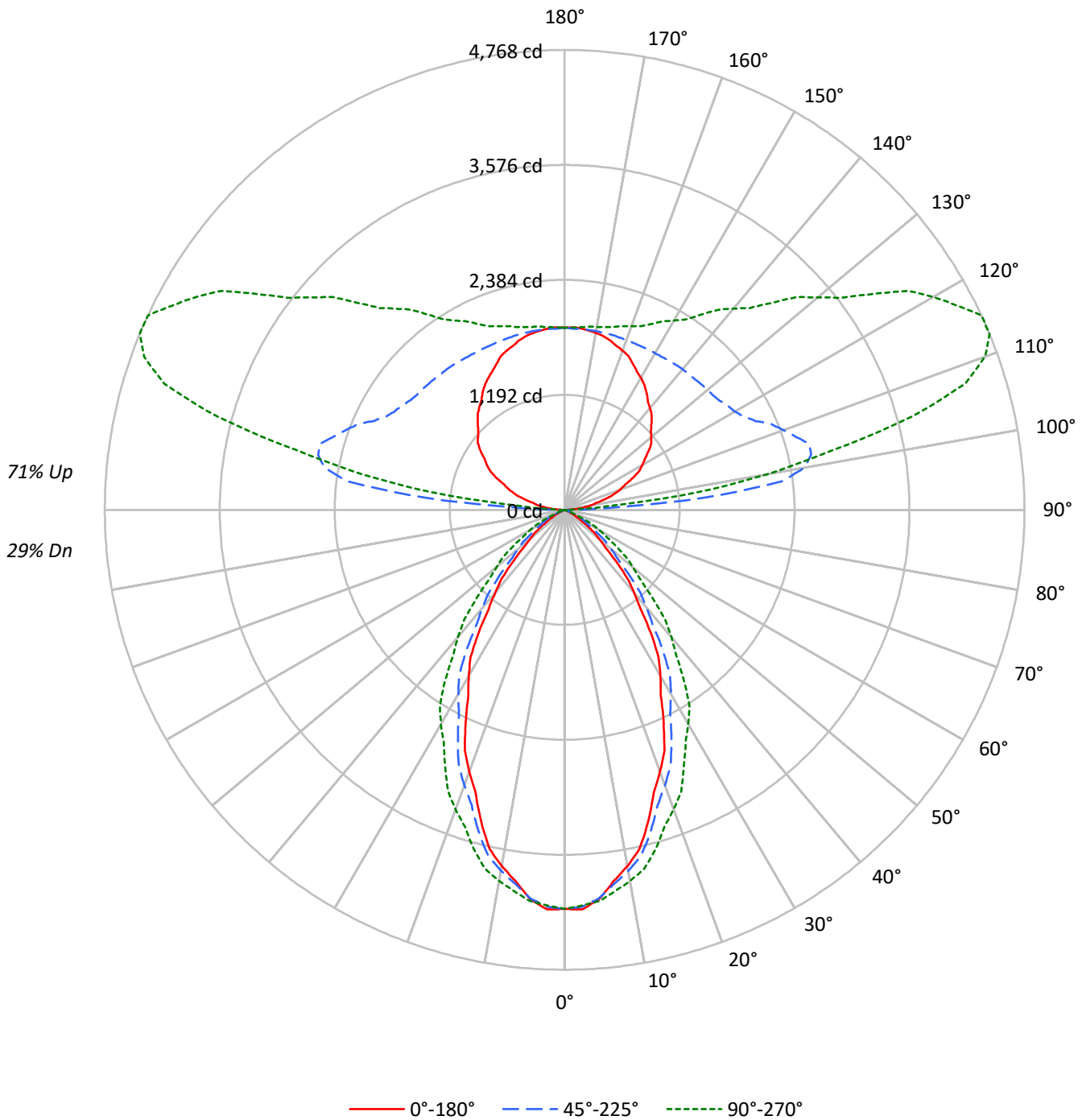
Lumens per Lamp: N/A
Luminaire Lumens: 17108.0 lumens
Efficiency: N/A
Efficacy: 115.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 148.4
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	102	102	102	102	91	91	91	91	72	72	72	53	53	53	37	37	37	29				
1	94	90	87	84	84	81	78	76	64	62	61	48	47	46	34	33	33	26				
2	86	80	75	70	77	72	68	64	57	54	52	44	42	40	31	30	29	24				
3	80	71	65	60	71	64	59	55	52	48	45	40	37	35	29	27	26	21				
4	73	64	57	51	66	58	52	47	46	42	39	36	33	31	26	25	24	19				
5	68	57	50	45	61	52	46	41	42	38	34	33	30	28	24	23	21	18				
6	63	52	44	39	56	47	41	36	38	34	30	30	27	25	22	21	19	16				
7	58	47	40	35	52	43	37	32	35	30	27	28	25	22	21	19	18	15				
8	54	43	36	31	49	39	33	29	32	28	24	26	22	20	19	17	16	14				
9	50	39	32	28	45	36	30	26	30	25	22	24	21	18	18	16	15	13				
10	47	36	29	25	43	33	27	23	27	23	20	22	19	17	17	15	14	12				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19083	19083	19083
5°	18777	18730	18869
10°	17569	17803	18300
15°	15972	16479	17396
20°	14178	14915	16221
25°	12347	13325	14904
30°	10576	11737	13657
35°	8769	9963	12150
40°	6737	7966	10353
45°	4870	6032	8330
50°	3318	4495	6607
55°	2157	3252	5134
60°	1237	2290	3712
65°	327	1398	1879
70°	162	432	540
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	377.5	2.2
10°-20°	965.5	5.6
20°-30°	1208.7	7.1
30°-40°	1116.4	6.5
40°-50°	750.2	4.4
50°-60°	387.5	2.3
60°-70°	121.4	0.7
70°-80°	7.7	0.0
80°-90°	4.1	0.0
90°-100°	877.2	5.1
100°-110°	2371.7	13.9
110°-120°	2493.5	14.6
120°-130°	2025.4	11.8
130°-140°	1588.7	9.3
140°-150°	1219.4	7.1
150°-160°	877.0	5.1
160°-170°	535.7	3.1
170°-180°	180.6	1.1
0°-30°	2551.7	14.9
0°-40°	3668.1	21.4
0°-60°	4805.7	28.1
0°-90°	4938.8	28.9
90°-120°	5742.4	33.6
90°-150°	10575.8	61.8
90°-180°	12169.0	71.1
0°-180°	17108.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4137	4137	4137	4137	4137	
5°	4055	4014	4045	4059	4075	376
15°	3344	3333	3450	3566	3642	931
25°	2426	2445	2618	2797	2928	1112
35°	1557	1596	1769	1977	2158	965
45°	746	792	925	1105	1277	586
55°	268	313	404	519	638	250
65°	30	57	128	154	172	51
75°	4	4	2	0	0	6
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°	4136.8	4136.8	4136.8	4136.8	4136.8
2.5°	4146.5	4107.3	4117.6	4117.4	4106.4
5°	4054.8	4013.7	4044.8	4059.1	4074.8
7.5°	3883.5	3851.4	3911.1	3955.9	3988.3
10°	3750.6	3723.2	3800.6	3861.7	3906.7
12.5°	3596.9	3575.7	3669.3	3753.1	3810.6
15°	3344.3	3332.6	3450.4	3566.2	3642.5
17.5°	3073.7	3073.3	3207.8	3351.6	3443.6
20°	2888.0	2893.9	3038.1	3196.6	3304.3
22.5°	2702.3	2716.0	2870.0	3035.3	3158.6
25°	2425.7	2445.2	2617.8	2796.9	2928.0
27.5°	2159.9	2188.5	2370.0	2556.2	2715.9
30°	1985.4	2018.6	2203.5	2399.4	2563.8
32.5°	1814.0	1853.6	2033.8	2240.9	2408.5
35°	1557.1	1596.2	1769.2	1977.4	2157.5
37.5°	1291.7	1330.0	1499.0	1704.0	1898.5
40°	1118.8	1161.8	1322.9	1521.5	1719.2
42.5°	961.9	1004.9	1156.4	1351.6	1538.3
45°	746.5	791.5	924.6	1104.7	1276.9
47.5°	568.0	616.9	733.7	896.6	1053.5
50°	462.3	511.2	626.4	770.0	920.6
52.5°	377.5	424.8	528.8	664.0	802.2
55°	268.2	313.2	404.3	519.1	638.4
57.5°	185.3	224.1	305.8	401.6	495.1
60°	134.1	171.3	248.2	326.0	402.3
62.5°	89.3	123.3	198.5	258.1	309.4
65°	30.0	57.4	128.1	154.5	172.1
67.5°	15.2	18.3	67.2	71.0	76.9
70°	12.0	12.0	32.0	34.2	40.0
72.5°	8.8	8.8	12.8	16.4	17.6
75°	4.0	4.0	2.0	0.0	0.0
77.5°	2.0	2.0	1.6	0.0	0.0
80°	2.0	2.0	0.0	0.0	0.0
82.5°	0.4	0.4	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)