

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: P519558

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

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519558  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2009-966-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-150U-050D-840-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

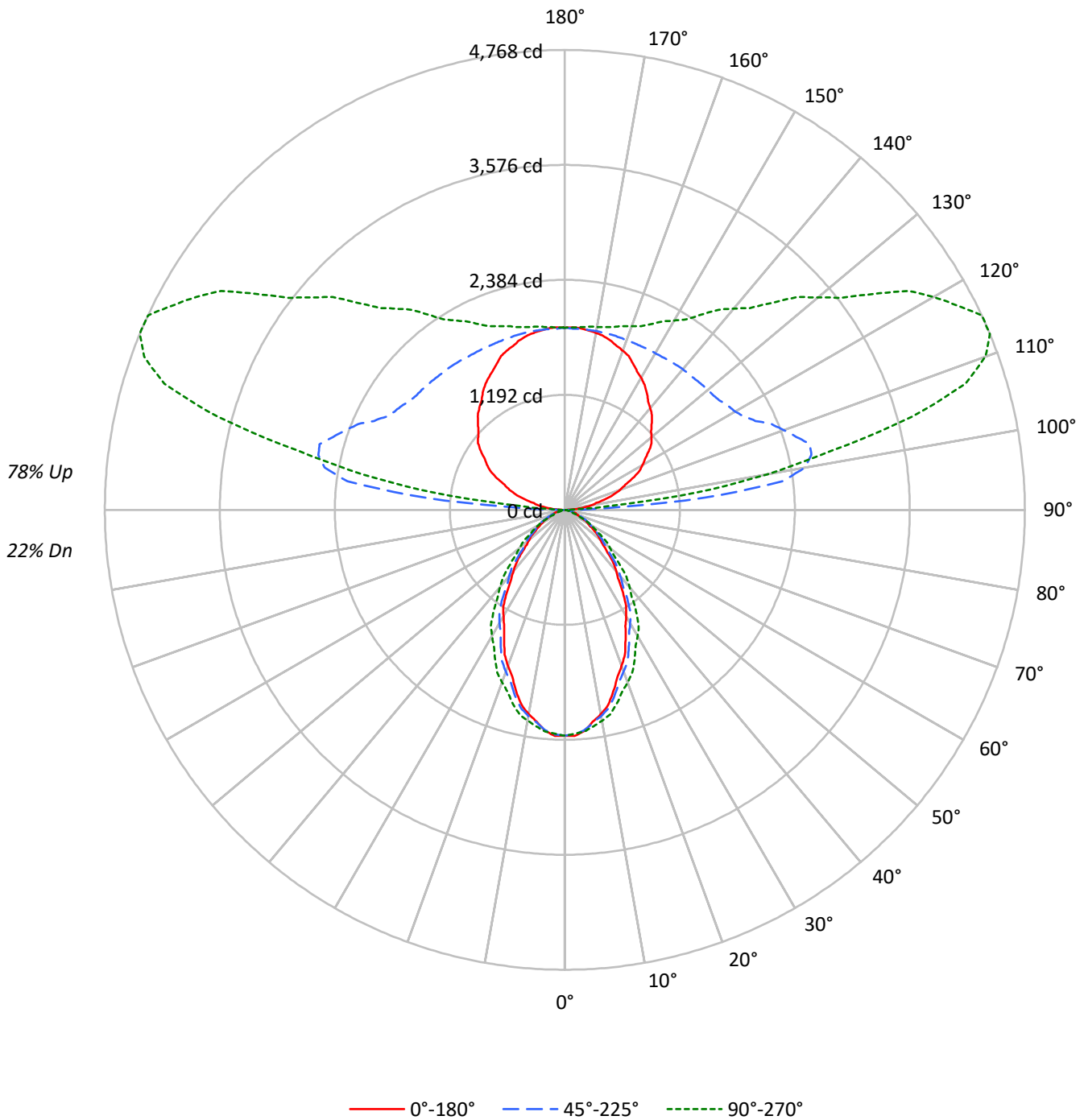
Lumens per Lamp: N/A  
Luminaire Lumens: 15583.6 lumens  
Efficiency: N/A  
Efficacy: 139.3 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

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	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30	22
1	92	88	84	81	81	78	75	73	60	58	56	43	42	41	27	27	26	19
2	84	77	72	67	74	69	64	60	53	50	47	38	37	35	25	24	23	17
3	77	68	62	56	68	61	56	51	47	43	40	34	32	30	22	21	20	15
4	71	61	54	48	63	54	48	44	42	38	35	31	28	26	20	19	18	13
5	65	54	47	41	57	49	42	38	38	34	30	28	25	23	19	17	16	12
6	60	49	41	36	53	44	37	33	34	30	26	25	23	20	17	16	14	11
7	55	44	37	32	49	40	33	29	31	27	23	23	20	18	16	14	13	10
8	51	40	33	28	46	36	30	25	28	24	21	21	18	16	15	13	12	9
9	48	36	29	25	42	33	27	23	26	22	19	20	17	15	14	12	11	8
10	45	33	27	22	40	30	24	20	24	20	17	18	15	13	13	11	10	8

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	10797	10797	10797
5°	10662	10624	10686
10°	10074	10165	10401
15°	9300	9515	9942
20°	8445	8762	9342
25°	7574	7988	8704
30°	6772	7216	8042
35°	5922	6350	7259
40°	4985	5381	6283
45°	4114	4469	5246
50°	3435	3744	4371
55°	2915	3213	3610
60°	2492	2785	2880
65°	1984	2342	1861
70°	1759	1829	1136
75°	1629	1483	695
80°	1501	1363	600
85°	1360	1249	487



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	214.7	1.4
10°-20°	558.4	3.6
20°-30°	723.3	4.6
30°-40°	708.3	4.5
40°-50°	542.1	3.5
50°-60°	361.3	2.3
60°-70°	197.1	1.3
70°-80°	82.1	0.5
80°-90°	27.2	0.2
90°-100°	877.2	5.6
100°-110°	2371.7	15.2
110°-120°	2493.5	16.0
120°-130°	2025.4	13.0
130°-140°	1588.7	10.2
140°-150°	1219.4	7.8
150°-160°	877.0	5.6
160°-170°	535.7	3.4
170°-180°	180.6	1.2
0°-30°	1496.4	9.6
0°-40°	2204.6	14.1
0°-60°	3108.0	19.9
0°-90°	3414.5	21.9
90°-120°	5742.4	36.8
90°-150°	10575.8	67.9
90°-180°	12169.0	78.1
0°-180°	15583.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2340	2340	2340	2340	2340	
5°	2302	2279	2294	2300	2308	214
15°	1947	1940	1992	2047	2082	544
25°	1488	1492	1569	1638	1710	684
35°	1052	1057	1128	1204	1289	654
45°	631	643	685	737	804	492
55°	362	378	400	415	449	329
65°	182	197	215	188	170	189
75°	91	91	83	57	39	98
85°	26	26	24	15	9	28
90°	4	12	26	28	26	10
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	

TEST NUMBER: P519558

CATALOG NUMBER: SQ4-WB-150U-050D-840-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2340.5	2340.5	2340.5	2340.5	2340.5
2.5°	2346.3	2325.4	2330.7	2330.5	2324.1
5°	2302.5	2279.4	2294.3	2299.6	2307.7
7.5°	2217.1	2199.6	2226.7	2246.8	2263.1
10°	2150.5	2135.5	2170.0	2199.3	2220.4
12.5°	2073.3	2060.7	2103.5	2142.7	2170.3
15°	1947.2	1940.2	1992.4	2046.6	2081.7
17.5°	1812.2	1808.8	1868.7	1932.0	1977.0
20°	1720.2	1719.2	1784.9	1850.8	1903.0
22.5°	1627.4	1629.6	1698.7	1767.2	1826.6
25°	1488.1	1492.1	1569.3	1637.7	1710.0
27.5°	1359.3	1361.1	1440.9	1513.1	1590.2
30°	1271.4	1276.4	1354.6	1429.4	1509.7
32.5°	1183.5	1189.3	1265.9	1343.1	1425.1
35°	1051.6	1056.7	1127.6	1203.5	1288.9
37.5°	915.7	922.5	985.5	1057.3	1141.2
40°	827.8	837.8	893.5	961.1	1043.4
42.5°	743.1	755.6	807.2	871.4	945.7
45°	630.6	642.6	685.0	736.9	804.1
47.5°	533.6	547.5	580.0	624.7	682.1
50°	478.6	491.6	521.7	554.8	609.0
52.5°	430.1	443.2	470.0	495.4	541.6
55°	362.5	377.6	399.5	414.7	448.8
57.5°	307.1	321.5	338.9	345.7	366.4
60°	270.1	286.2	301.9	301.2	312.2
62.5°	236.4	250.1	265.8	254.9	255.5
65°	181.8	196.8	214.6	187.6	170.5
67.5°	146.9	150.1	168.4	130.8	110.5
70°	130.4	130.4	135.6	101.3	84.2
72.5°	114.8	114.8	110.1	82.4	64.5
75°	91.4	91.4	83.2	57.1	39.0
77.5°	70.5	69.6	63.7	42.6	28.3
80°	56.5	56.5	51.3	33.6	22.6
82.5°	44.2	44.2	39.8	26.3	16.8
85°	25.7	25.7	23.6	15.3	9.2
87.5°	9.9	11.4	13.5	10.6	9.4
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



TEST NUMBER: P519558

CATALOG NUMBER: SQ4-WB-150U-050D-840-1D-UNV-STD-W-8

**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)