

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: P518898

Luminaire Tested: **SQ4-BB-150U-050D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518898  
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-940-1D-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, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

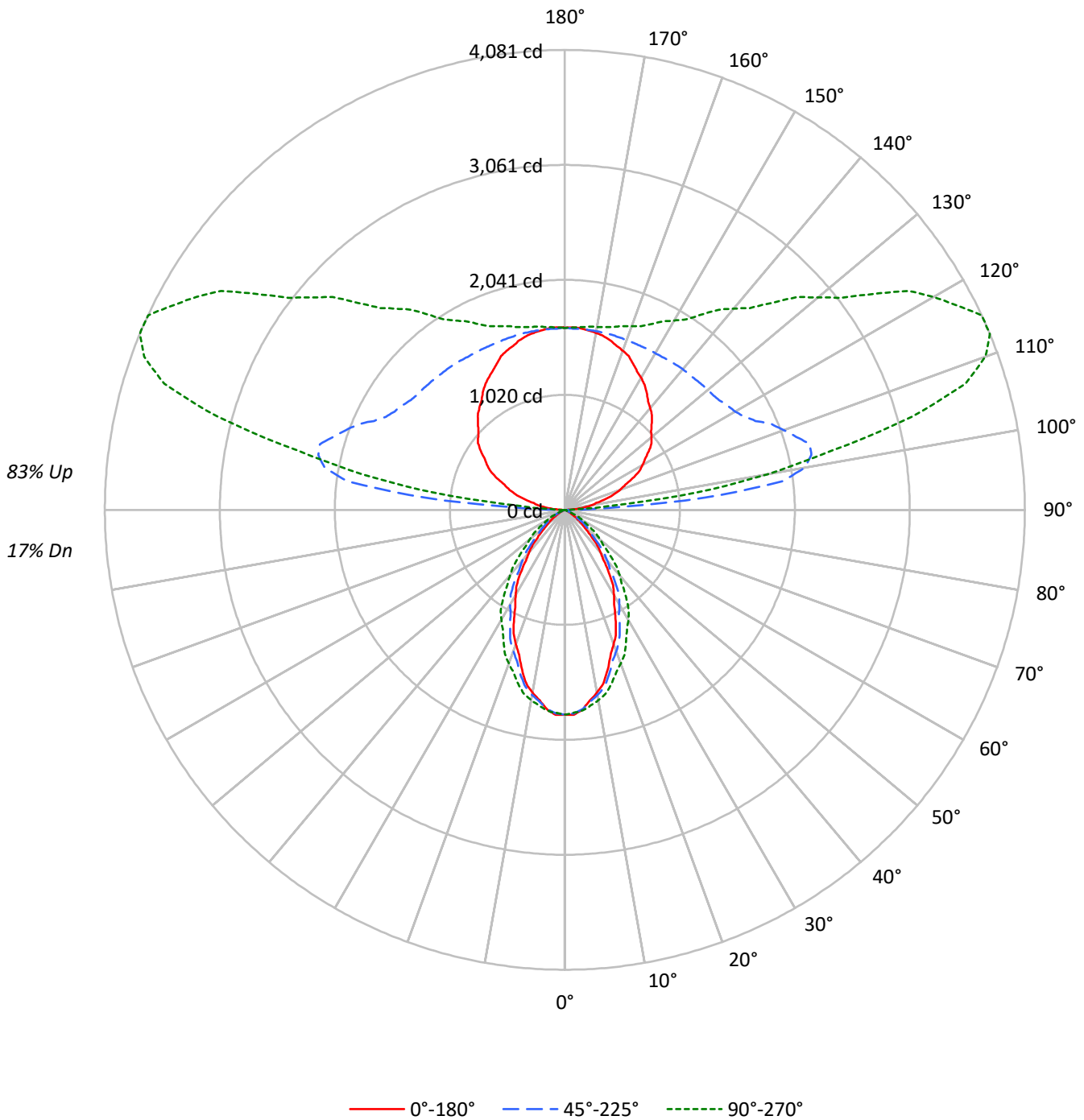
Lumens per Lamp: N/A  
Luminaire Lumens: 12585.7 lumens  
Efficiency: N/A  
Efficacy: 112.5 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

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°	8381	8381	8381
5°	8245	8226	8286
10°	7715	7818	8036
15°	7014	7236	7639
20°	6226	6550	7124
25°	5422	5851	6545
30°	4644	5155	5997
35°	3851	4375	5336
40°	2959	3499	4547
45°	2139	2649	3658
50°	1457	1974	2902
55°	947	1428	2255
60°	543	1006	1630
65°	144	613	825
70°	71	190	237
75°	32	16	0
80°	24	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	165.8	1.3
10°-20°	424.0	3.4
20°-30°	530.8	4.2
30°-40°	490.3	3.9
40°-50°	329.4	2.6
50°-60°	170.2	1.4
60°-70°	53.3	0.4
70°-80°	3.4	0.0
80°-90°	3.4	0.0
90°-100°	750.7	6.0
100°-110°	2029.9	16.1
110°-120°	2134.1	17.0
120°-130°	1733.5	13.8
130°-140°	1359.8	10.8
140°-150°	1043.6	8.3
150°-160°	750.6	6.0
160°-170°	458.5	3.6
170°-180°	154.6	1.2
0°-30°	1120.6	8.9
0°-40°	1610.8	12.8
0°-60°	2110.4	16.8
0°-90°	2170.5	17.2
90°-120°	4914.7	39.0
90°-150°	9051.5	71.9
90°-180°	10415.0	82.8
0°-180°	12585.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1817	1817	1817	1817	1817	
5°	1781	1763	1776	1783	1789	165
15°	1469	1464	1515	1566	1600	409
25°	1065	1074	1150	1228	1286	488
35°	684	701	777	868	948	424
45°	328	348	406	485	561	257
55°	118	138	178	228	280	110
65°	13	25	56	68	76	22
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	4	10	23	24	23	8
95°	116	409	1248	646	384	122
105°	377	583	2252	3322	3186	397
115°	664	812	1868	3615	4081	656
125°	909	1042	1683	2840	3337	811
135°	1090	1220	1638	2294	2596	843
145°	1268	1363	1615	1963	2113	793
155°	1431	1487	1602	1761	1819	660
165°	1558	1573	1608	1671	1680	439
175°	1617	1616	1610	1631	1628	154
180°	1615	1615	1615	1615	1615	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1816.7	1816.7	1816.7	1816.7	1816.7
2.5°	1820.9	1803.7	1808.2	1808.1	1803.3
5°	1780.6	1762.6	1776.3	1782.6	1789.4
7.5°	1705.4	1691.3	1717.5	1737.2	1751.5
10°	1647.1	1635.0	1669.0	1695.8	1715.6
12.5°	1579.6	1570.3	1611.4	1648.2	1673.4
15°	1468.6	1463.5	1515.2	1566.1	1599.6
17.5°	1349.8	1349.6	1408.7	1471.8	1512.2
20°	1268.3	1270.8	1334.2	1403.8	1451.1
22.5°	1186.7	1192.7	1260.3	1332.9	1387.1
25°	1065.2	1073.8	1149.6	1228.3	1285.8
27.5°	948.5	961.1	1040.8	1122.5	1192.7
30°	871.9	886.5	967.7	1053.7	1125.9
32.5°	796.6	814.0	893.1	984.1	1057.7
35°	683.8	701.0	776.9	868.4	947.5
37.5°	567.2	584.1	658.3	748.3	833.7
40°	491.3	510.2	581.0	668.2	755.0
42.5°	422.4	441.3	507.8	593.5	675.5
45°	327.8	347.6	406.1	485.1	560.7
47.5°	249.4	270.9	322.2	393.7	462.7
50°	203.0	224.5	275.1	338.1	404.3
52.5°	165.8	186.6	232.2	291.6	352.3
55°	117.8	137.5	177.5	227.9	280.4
57.5°	81.4	98.4	134.3	176.4	217.4
60°	58.9	75.2	109.0	143.1	176.7
62.5°	39.2	54.2	87.2	113.4	135.9
65°	13.2	25.2	56.2	67.9	75.6
67.5°	6.7	8.1	29.5	31.2	33.7
70°	5.3	5.3	14.1	15.0	17.6
72.5°	3.9	3.9	5.6	7.2	7.7
75°	1.8	1.8	0.9	0.0	0.0
77.5°	0.9	0.9	0.7	0.0	0.0
80°	0.9	0.9	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°	0.7	2.1	4.5	4.9	4.5
90°	3.5	10.3	22.6	24.3	22.6
92.5°	49.4	180.0	355.1	154.1	111.6
95°	116.5	408.9	1248.5	646.1	384.3
97.5°	187.1	469.0	1946.1	1610.6	1182.8
100°	240.0	493.3	2163.2	2255.9	1824.1
102.5°	288.7	527.0	2239.7	2745.3	2422.3
105°	377.3	583.1	2251.8	3321.6	3185.6
107.5°	459.4	647.1	2153.4	3681.2	3726.4
110°	523.4	693.4	2065.8	3777.7	3969.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	580.4	739.6	1985.1	3758.4	4081.1
115°	664.3	812.2	1867.6	3615.3	4081.1
117.5°	746.3	885.1	1790.0	3396.5	3924.6
120°	796.4	932.4	1744.1	3239.6	3778.6
122.5°	843.7	977.0	1716.3	3071.4	3614.4
125°	909.4	1042.1	1683.2	2840.4	3336.9
127.5°	969.9	1100.2	1663.8	2652.0	3088.6
130°	1003.3	1137.6	1655.4	2535.6	2930.0
132.5°	1038.1	1171.1	1647.1	2430.5	2793.7
135°	1090.3	1219.5	1638.0	2293.5	2596.1
137.5°	1142.8	1264.9	1630.4	2182.3	2428.9
140°	1179.0	1292.9	1627.6	2110.8	2330.1
142.5°	1213.7	1320.8	1622.0	2046.2	2238.3
145°	1267.6	1362.9	1615.4	1963.1	2112.7
147.5°	1316.7	1401.0	1607.8	1887.9	2002.8
150°	1352.8	1427.7	1605.0	1847.0	1938.8
152.5°	1386.2	1451.5	1603.6	1809.1	1884.6
155°	1431.1	1487.2	1601.5	1761.1	1818.9
157.5°	1477.7	1516.8	1601.9	1727.6	1765.7
160°	1504.1	1536.4	1603.2	1706.5	1733.7
162.5°	1525.0	1551.9	1604.6	1689.6	1710.0
165°	1558.0	1573.3	1608.5	1671.3	1679.8
167.5°	1580.6	1591.2	1608.8	1655.5	1659.6
170°	1594.5	1599.6	1610.2	1648.5	1648.5
172.5°	1605.7	1606.7	1610.2	1640.1	1638.7
175°	1617.2	1615.5	1610.2	1631.0	1627.6
177.5°	1621.0	1616.9	1609.9	1623.7	1619.6
180°	1615.4	1615.4	1615.4	1615.4	1615.4

(END OF REPORT)