

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: P518922

Luminaire Tested: **SQ4-BB-150U-075D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518922  
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-940-1D-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, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

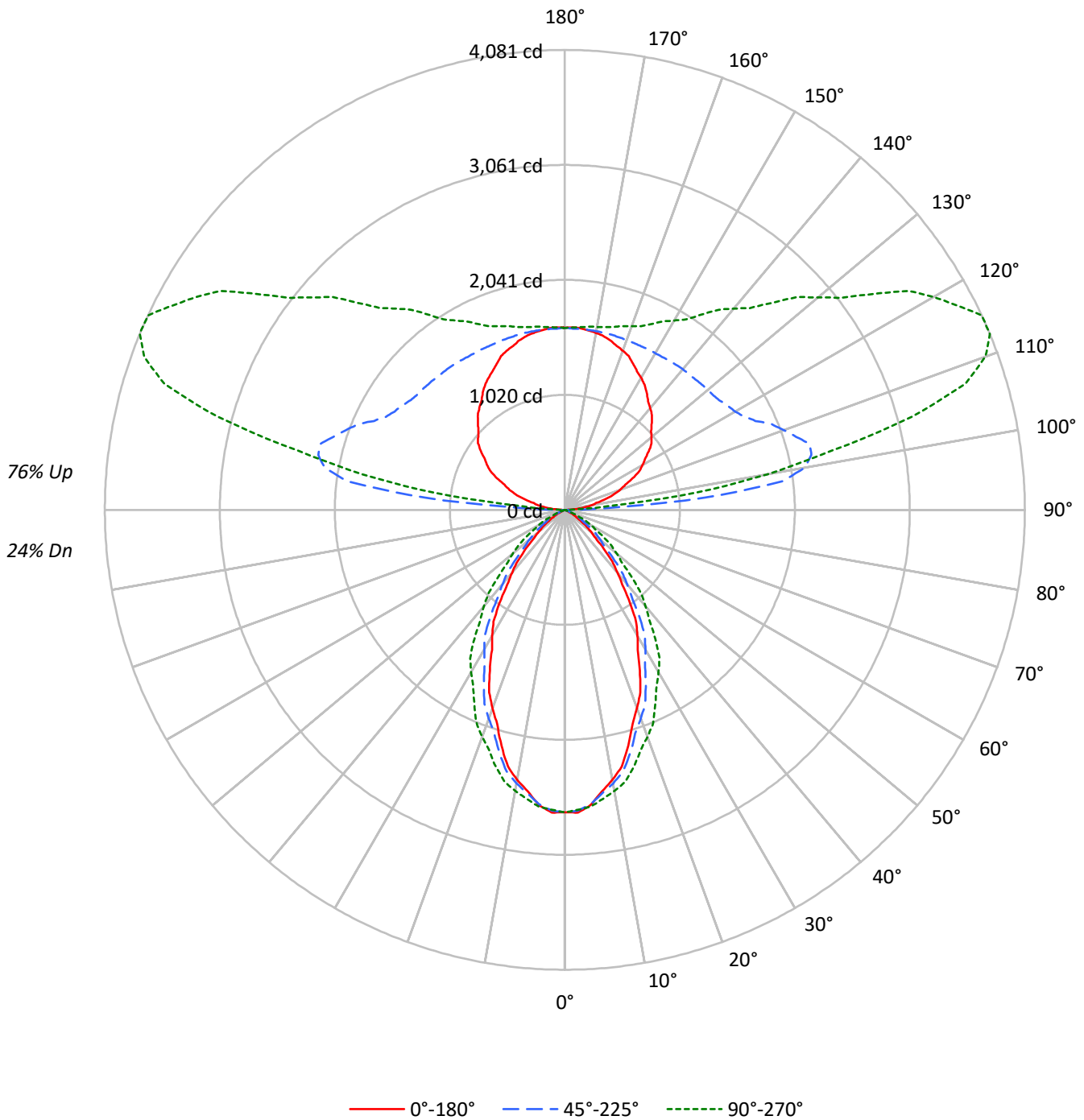
Lumens per Lamp: N/A  
Luminaire Lumens: 13619.2 lumens  
Efficiency: N/A  
Efficacy: 103.9 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

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°	12377	12377	12377
5°	12178	12148	12238
10°	11394	11546	11869
15°	10359	10687	11282
20°	9195	9673	10520
25°	8008	8642	9666
30°	6859	7612	8857
35°	5687	6462	7880
40°	4370	5167	6715
45°	3159	3912	5402
50°	2152	2916	4285
55°	1399	2109	3330
60°	803	1485	2407
65°	213	907	1218
70°	105	281	351
75°	46	23	0
80°	35	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	244.9	1.8
10°-20°	626.2	4.6
20°-30°	783.9	5.8
30°-40°	724.1	5.3
40°-50°	486.5	3.6
50°-60°	251.3	1.8
60°-70°	78.7	0.6
70°-80°	5.0	0.0
80°-90°	3.5	0.0
90°-100°	750.7	5.5
100°-110°	2029.9	14.9
110°-120°	2134.1	15.7
120°-130°	1733.5	12.7
130°-140°	1359.8	10.0
140°-150°	1043.6	7.7
150°-160°	750.6	5.5
160°-170°	458.5	3.4
170°-180°	154.6	1.1
0°-30°	1654.9	12.2
0°-40°	2379.0	17.5
0°-60°	3116.8	22.9
0°-90°	3204.0	23.5
90°-120°	4914.7	36.1
90°-150°	9051.5	66.5
90°-180°	10415.0	76.5
0°-180°	13619.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2683	2683	2683	2683	2683	
5°	2630	2603	2623	2633	2643	244
15°	2169	2161	2238	2313	2362	604
25°	1573	1586	1698	1814	1899	721
35°	1010	1035	1148	1282	1399	626
45°	484	513	600	716	828	380
55°	174	203	262	337	414	162
65°	20	37	83	100	112	33
75°	3	3	1	0	0	4
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°	2683.0	2683.0	2683.0	2683.0	2683.0
2.5°	2689.2	2663.9	2670.5	2670.4	2663.3
5°	2629.8	2603.1	2623.3	2632.6	2642.8
7.5°	2518.7	2497.9	2536.6	2565.6	2586.7
10°	2432.5	2414.7	2464.9	2504.5	2533.7
12.5°	2332.8	2319.1	2379.8	2434.1	2471.4
15°	2169.0	2161.4	2237.8	2312.9	2362.4
17.5°	1993.5	1993.2	2080.5	2173.7	2233.4
20°	1873.0	1876.9	1970.4	2073.2	2143.0
22.5°	1752.6	1761.5	1861.4	1968.6	2048.5
25°	1573.2	1585.9	1697.8	1814.0	1899.0
27.5°	1400.8	1419.4	1537.1	1657.8	1761.4
30°	1287.6	1309.2	1429.1	1556.2	1662.8
32.5°	1176.5	1202.2	1319.0	1453.4	1562.0
35°	1009.9	1035.2	1147.5	1282.5	1399.3
37.5°	837.7	862.6	972.2	1105.1	1231.3
40°	725.6	753.5	858.0	986.8	1115.0
42.5°	623.8	651.8	750.0	876.6	997.7
45°	484.2	513.4	599.7	716.4	828.1
47.5°	368.4	400.1	475.9	581.5	683.3
50°	299.8	331.6	406.3	499.4	597.1
52.5°	244.8	275.5	342.9	430.6	520.2
55°	173.9	203.1	262.2	336.6	414.1
57.5°	120.2	145.3	198.3	260.5	321.1
60°	87.0	111.1	161.0	211.4	260.9
62.5°	57.9	80.0	128.8	167.4	200.7
65°	19.5	37.2	83.1	100.2	111.6
67.5°	9.9	11.9	43.6	46.0	49.8
70°	7.8	7.8	20.8	22.2	26.0
72.5°	5.7	5.7	8.3	10.7	11.4
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	0.0	0.0
80°	1.3	1.3	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°	0.7	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)