

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: P518882

Luminaire Tested: **SQ4-BB-150U-050D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518882  
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-835-1D-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

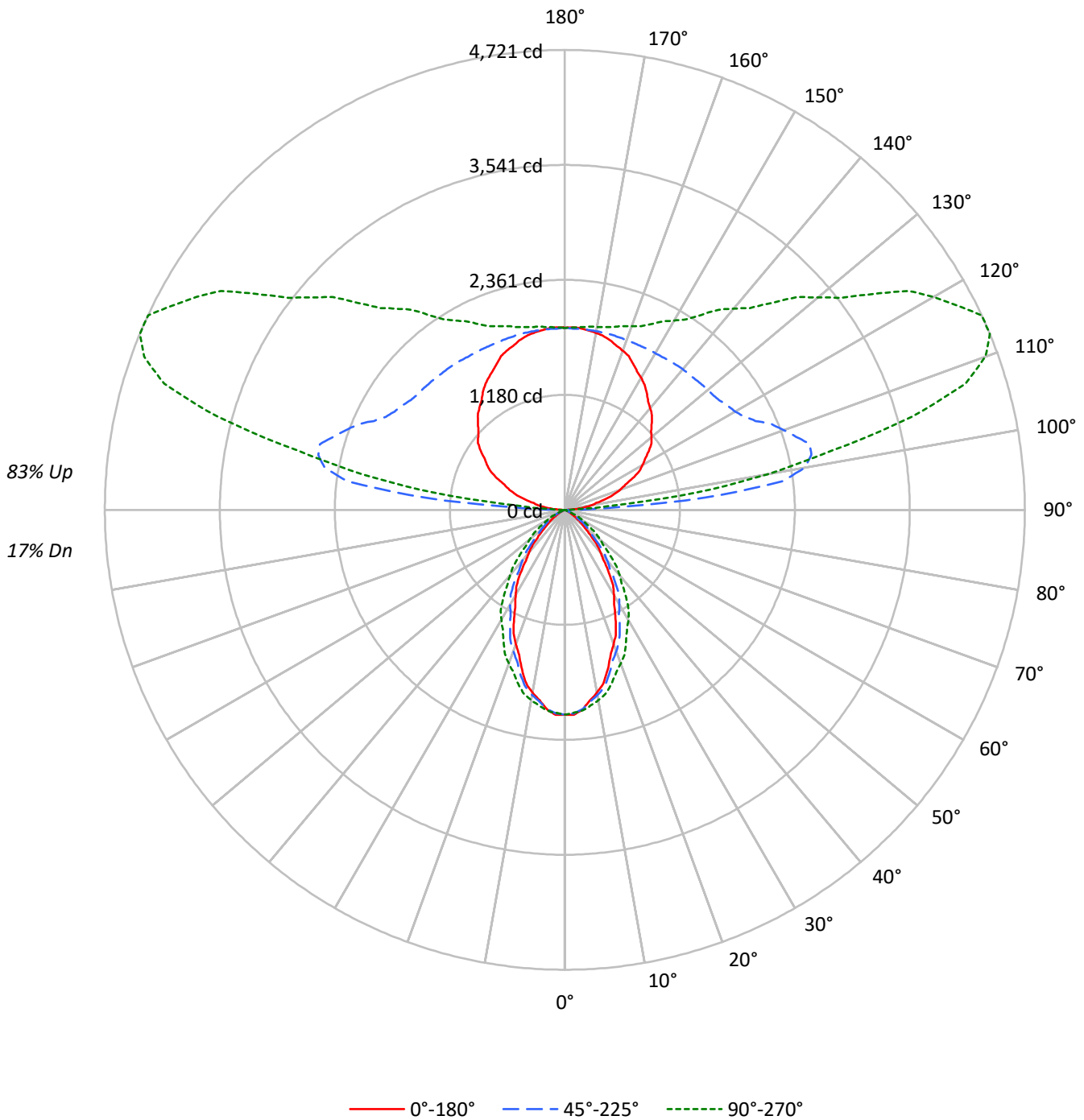
Lumens per Lamp: N/A  
Luminaire Lumens: 14558.7 lumens  
Efficiency: N/A  
Efficacy: 130.1 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

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°	9694	9694	9694
5°	9538	9515	9586
10°	8925	9044	9296
15°	8114	8371	8837
20°	7202	7576	8240
25°	6272	6769	7571
30°	5372	5963	6938
35°	4455	5061	6172
40°	3422	4047	5259
45°	2474	3064	4231
50°	1686	2284	3357
55°	1095	1652	2608
60°	628	1163	1886
65°	167	711	954
70°	82	220	274
75°	36	18	0
80°	27	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	191.8	1.3
10°-20°	490.4	3.4
20°-30°	614.0	4.2
30°-40°	567.1	3.9
40°-50°	381.1	2.6
50°-60°	196.8	1.4
60°-70°	61.7	0.4
70°-80°	3.9	0.0
80°-90°	4.0	0.0
90°-100°	868.4	6.0
100°-110°	2348.1	16.1
110°-120°	2468.6	17.0
120°-130°	2005.2	13.8
130°-140°	1572.9	10.8
140°-150°	1207.2	8.3
150°-160°	868.2	6.0
160°-170°	530.4	3.6
170°-180°	178.8	1.2
0°-30°	1296.2	8.9
0°-40°	1863.3	12.8
0°-60°	2441.3	16.8
0°-90°	2510.8	17.2
90°-120°	5685.1	39.0
90°-150°	10470.5	71.9
90°-180°	12048.0	82.8
0°-180°	14558.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2102	2102	2102	2102	2102	
5°	2060	2039	2055	2062	2070	191
15°	1699	1693	1753	1812	1850	473
25°	1232	1242	1330	1421	1487	565
35°	791	811	899	1004	1096	490
45°	379	402	470	561	649	298
55°	136	159	205	264	324	127
65°	15	29	65	78	87	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	4	12	26	28	26	9
95°	135	473	1444	747	444	141
105°	436	674	2605	3842	3685	460
115°	768	940	2160	4182	4721	759
125°	1052	1205	1947	3286	3860	938
135°	1261	1411	1895	2653	3003	975
145°	1466	1576	1869	2271	2444	917
155°	1655	1720	1853	2037	2104	764
165°	1802	1820	1861	1933	1943	508
175°	1871	1869	1863	1887	1883	178
180°	1869	1869	1869	1869	1869	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2101.5	2101.5	2101.5	2101.5	2101.5
2.5°	2106.4	2086.5	2091.7	2091.6	2086.0
5°	2059.8	2038.9	2054.7	2062.0	2070.0
7.5°	1972.8	1956.5	1986.8	2009.5	2026.0
10°	1905.3	1891.3	1930.7	1961.7	1984.6
12.5°	1827.2	1816.4	1864.0	1906.5	1935.8
15°	1698.9	1692.9	1752.8	1811.6	1850.4
17.5°	1561.4	1561.2	1629.5	1702.6	1749.3
20°	1467.1	1470.0	1543.3	1623.9	1678.5
22.5°	1372.7	1379.7	1457.9	1541.9	1604.5
25°	1232.2	1242.2	1329.8	1420.8	1487.4
27.5°	1097.2	1111.7	1203.9	1298.5	1379.6
30°	1008.5	1025.4	1119.4	1218.9	1302.4
32.5°	921.5	941.6	1033.1	1138.4	1223.5
35°	791.0	810.9	898.7	1004.5	1096.0
37.5°	656.2	675.6	761.5	865.6	964.4
40°	568.3	590.2	672.0	772.9	873.3
42.5°	488.6	510.5	587.4	686.6	781.4
45°	379.2	402.1	469.7	561.2	648.6
47.5°	288.5	313.4	372.7	455.5	535.2
50°	234.9	259.7	318.2	391.1	467.7
52.5°	191.7	215.8	268.6	337.3	407.5
55°	136.2	159.1	205.4	263.7	324.3
57.5°	94.1	113.8	155.3	204.0	251.5
60°	68.1	87.0	126.1	165.6	204.4
62.5°	45.3	62.6	100.9	131.1	157.2
65°	15.3	29.2	65.1	78.5	87.4
67.5°	7.7	9.3	34.2	36.1	39.0
70°	6.1	6.1	16.3	17.4	20.3
72.5°	4.5	4.5	6.5	8.4	8.9
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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°	0.8	2.4	5.2	5.6	5.2
90°	4.0	11.9	26.1	28.1	26.1
92.5°	57.1	208.2	410.7	178.3	129.1
95°	134.8	473.1	1444.2	747.4	444.5
97.5°	216.4	542.5	2251.2	1863.0	1368.2
100°	277.6	570.6	2502.3	2609.6	2110.0
102.5°	333.9	609.6	2590.8	3175.7	2802.0
105°	436.5	674.5	2604.9	3842.4	3685.0
107.5°	531.4	748.6	2491.0	4258.3	4310.6
110°	605.5	802.1	2389.6	4369.9	4592.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	671.4	855.5	2296.3	4347.6	4720.9
115°	768.4	939.5	2160.3	4182.0	4720.9
117.5°	863.3	1023.8	2070.6	3929.0	4539.9
120°	921.3	1078.6	2017.5	3747.5	4370.9
122.5°	976.0	1130.2	1985.3	3552.9	4181.0
125°	1052.0	1205.4	1947.1	3285.7	3860.0
127.5°	1122.0	1272.7	1924.6	3067.7	3572.8
130°	1160.6	1316.0	1914.9	2933.0	3389.3
132.5°	1200.8	1354.6	1905.3	2811.5	3231.6
135°	1261.2	1410.7	1894.8	2653.0	3003.1
137.5°	1321.9	1463.2	1886.0	2524.4	2809.6
140°	1363.8	1495.5	1882.7	2441.7	2695.4
142.5°	1404.0	1527.9	1876.3	2366.9	2589.2
145°	1466.4	1576.5	1868.7	2270.9	2443.9
147.5°	1523.1	1620.6	1859.8	2183.9	2316.8
150°	1564.9	1651.5	1856.6	2136.6	2242.8
152.5°	1603.5	1679.1	1855.0	2092.7	2180.0
155°	1655.4	1720.3	1852.6	2037.1	2104.0
157.5°	1709.3	1754.6	1853.0	1998.4	2042.4
160°	1739.9	1777.3	1854.6	1974.0	2005.4
162.5°	1764.1	1795.1	1856.2	1954.5	1978.1
165°	1802.3	1820.0	1860.6	1933.2	1943.1
167.5°	1828.4	1840.6	1861.0	1915.0	1919.7
170°	1844.5	1850.4	1862.6	1906.9	1906.9
172.5°	1857.4	1858.6	1862.6	1897.2	1895.6
175°	1870.7	1868.7	1862.6	1886.7	1882.7
177.5°	1875.1	1870.4	1862.2	1878.2	1873.5
180°	1868.7	1868.7	1868.7	1868.7	1868.7

(END OF REPORT)