

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: P518905

Luminaire Tested: **SQ4-BB-150U-075D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518905  
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-835-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

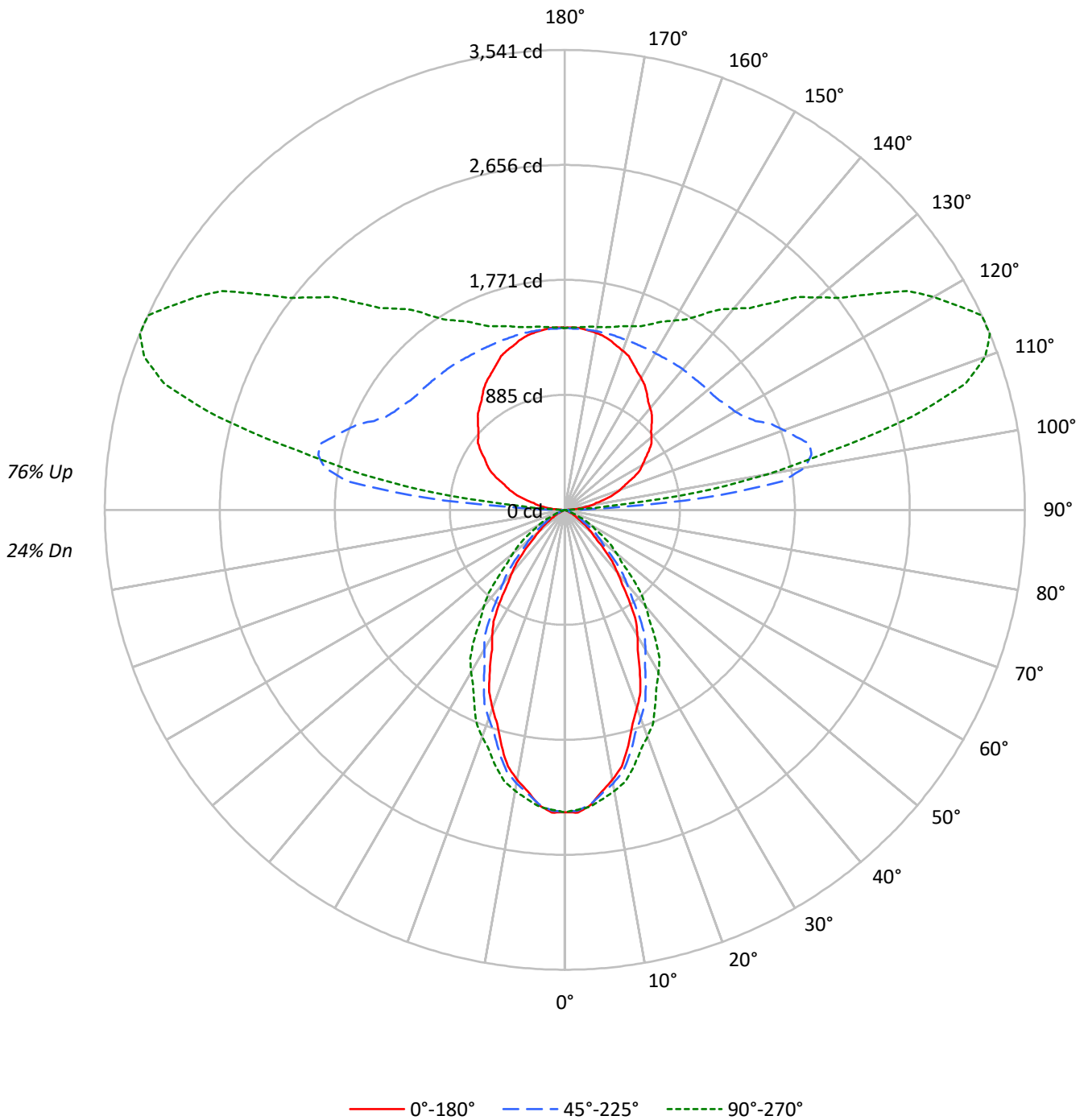
Lumens per Lamp: N/A  
Luminaire Lumens: 11815.6 lumens  
Efficiency: N/A  
Efficacy: 120.8 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 97.8  
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°	14317	14317	14317
5°	14087	14052	14156
10°	13181	13356	13729
15°	11983	12362	13051
20°	10637	11190	12169
25°	9263	9997	11181
30°	7934	8806	10246
35°	6578	7475	9116
40°	5054	5977	7767
45°	3653	4526	6250
50°	2489	3373	4957
55°	1618	2440	3852
60°	929	1717	2785
65°	246	1049	1409
70°	122	324	405
75°	55	26	0
80°	39	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	212.4	1.8
10°-20°	543.3	4.6
20°-30°	680.1	5.8
30°-40°	628.2	5.3
40°-50°	422.1	3.6
50°-60°	218.0	1.8
60°-70°	68.3	0.6
70°-80°	4.3	0.0
80°-90°	3.0	0.0
90°-100°	651.3	5.5
100°-110°	1761.1	14.9
110°-120°	1851.5	15.7
120°-130°	1503.9	12.7
130°-140°	1179.7	10.0
140°-150°	905.4	7.7
150°-160°	651.2	5.5
160°-170°	397.8	3.4
170°-180°	134.1	1.1
0°-30°	1435.8	12.2
0°-40°	2064.0	17.5
0°-60°	2704.1	22.9
0°-90°	2779.7	23.5
90°-120°	4263.9	36.1
90°-150°	7852.9	66.5
90°-180°	9036.0	76.5
0°-180°	11815.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2328	2328	2328	2328	2328	
5°	2282	2258	2276	2284	2293	212
15°	1882	1875	1941	2007	2050	524
25°	1365	1376	1473	1574	1648	626
35°	876	898	996	1113	1214	543
45°	420	445	520	622	718	330
55°	151	176	228	292	359	141
65°	17	32	72	87	97	29
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	3	9	20	21	20	7
95°	101	355	1083	561	333	106
105°	327	506	1954	2882	2764	345
115°	576	705	1620	3136	3541	569
125°	789	904	1460	2464	2895	703
135°	946	1058	1421	1990	2252	731
145°	1100	1182	1402	1703	1833	688
155°	1242	1290	1389	1528	1578	573
165°	1352	1365	1396	1450	1457	381
175°	1403	1402	1397	1415	1412	133
180°	1402	1402	1402	1402	1402	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2327.7	2327.7	2327.7	2327.7	2327.7
2.5°	2333.1	2311.1	2316.9	2316.8	2310.6
5°	2281.5	2258.4	2275.9	2284.0	2292.8
7.5°	2185.1	2167.1	2200.7	2225.9	2244.1
10°	2110.4	2094.9	2138.5	2172.9	2198.2
12.5°	2023.9	2012.0	2064.6	2111.8	2144.1
15°	1881.8	1875.2	1941.4	2006.6	2049.6
17.5°	1729.5	1729.3	1805.0	1885.9	1937.6
20°	1625.0	1628.3	1709.5	1798.7	1859.2
22.5°	1520.5	1528.2	1614.9	1707.9	1777.3
25°	1364.9	1375.9	1473.0	1573.8	1647.5
27.5°	1215.3	1231.4	1333.6	1438.3	1528.2
30°	1117.1	1135.8	1239.9	1350.1	1442.6
32.5°	1020.7	1043.0	1144.4	1260.9	1355.2
35°	876.1	898.1	995.5	1112.7	1214.0
37.5°	726.8	748.4	843.5	958.8	1068.2
40°	629.5	653.7	744.4	856.1	967.3
42.5°	541.2	565.4	650.7	760.5	865.5
45°	420.0	445.4	520.3	621.6	718.5
47.5°	319.6	347.1	412.8	504.5	592.8
50°	260.1	287.7	352.5	433.2	518.0
52.5°	212.4	239.0	297.5	373.6	451.4
55°	150.9	176.2	227.5	292.1	359.2
57.5°	104.3	126.1	172.1	226.0	278.6
60°	75.5	96.4	139.6	183.4	226.4
62.5°	50.2	69.4	111.7	145.3	174.1
65°	16.9	32.3	72.1	86.9	96.8
67.5°	8.6	10.3	37.8	39.9	43.2
70°	6.8	6.8	18.0	19.2	22.5
72.5°	5.0	5.0	7.2	9.2	9.9
75°	2.3	2.3	1.1	0.0	0.0
77.5°	1.1	1.1	0.9	0.0	0.0
80°	1.1	1.1	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°	0.6	1.8	3.9	4.2	3.9
90°	3.0	8.9	19.6	21.1	19.6
92.5°	42.8	156.1	308.1	133.7	96.9
95°	101.1	354.8	1083.2	560.6	333.4
97.5°	162.3	406.9	1688.4	1397.3	1026.2
100°	208.2	428.0	1876.7	1957.2	1582.5
102.5°	250.4	457.2	1943.1	2381.7	2101.5
105°	327.4	505.9	1953.6	2881.8	2763.8
107.5°	398.6	561.4	1868.3	3193.7	3232.9
110°	454.1	601.6	1792.2	3277.5	3444.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	503.6	641.6	1722.2	3260.7	3540.7
115°	576.3	704.6	1620.2	3136.5	3540.7
117.5°	647.5	767.9	1553.0	2946.8	3404.9
120°	690.9	808.9	1513.1	2810.6	3278.2
122.5°	732.0	847.6	1489.0	2664.6	3135.8
125°	789.0	904.1	1460.3	2464.3	2895.0
127.5°	841.5	954.5	1443.4	2300.8	2679.6
130°	870.5	987.0	1436.2	2199.8	2542.0
132.5°	900.6	1016.0	1428.9	2108.6	2423.7
135°	945.9	1058.0	1421.1	1989.8	2252.3
137.5°	991.5	1097.4	1414.5	1893.3	2107.2
140°	1022.8	1121.7	1412.1	1831.2	2021.5
142.5°	1053.0	1145.9	1407.2	1775.2	1941.9
145°	1099.8	1182.4	1401.5	1703.1	1833.0
147.5°	1142.3	1215.5	1394.9	1637.9	1737.6
150°	1173.7	1238.6	1392.4	1602.4	1682.1
152.5°	1202.7	1259.3	1391.2	1569.5	1635.0
155°	1241.6	1290.3	1389.4	1527.8	1578.0
157.5°	1282.0	1315.9	1389.7	1498.8	1531.8
160°	1304.9	1333.0	1390.9	1480.5	1504.1
162.5°	1323.0	1346.3	1392.1	1465.9	1483.6
165°	1351.7	1365.0	1395.5	1449.9	1457.3
167.5°	1371.3	1380.5	1395.8	1436.3	1439.8
170°	1383.4	1387.8	1397.0	1430.2	1430.2
172.5°	1393.0	1393.9	1397.0	1422.9	1421.7
175°	1403.0	1401.5	1397.0	1415.0	1412.1
177.5°	1406.3	1402.8	1396.7	1408.7	1405.1
180°	1401.5	1401.5	1401.5	1401.5	1401.5

(END OF REPORT)