

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: P518881

Luminaire Tested: **SQ4-BB-150U-050D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518881
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-6
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

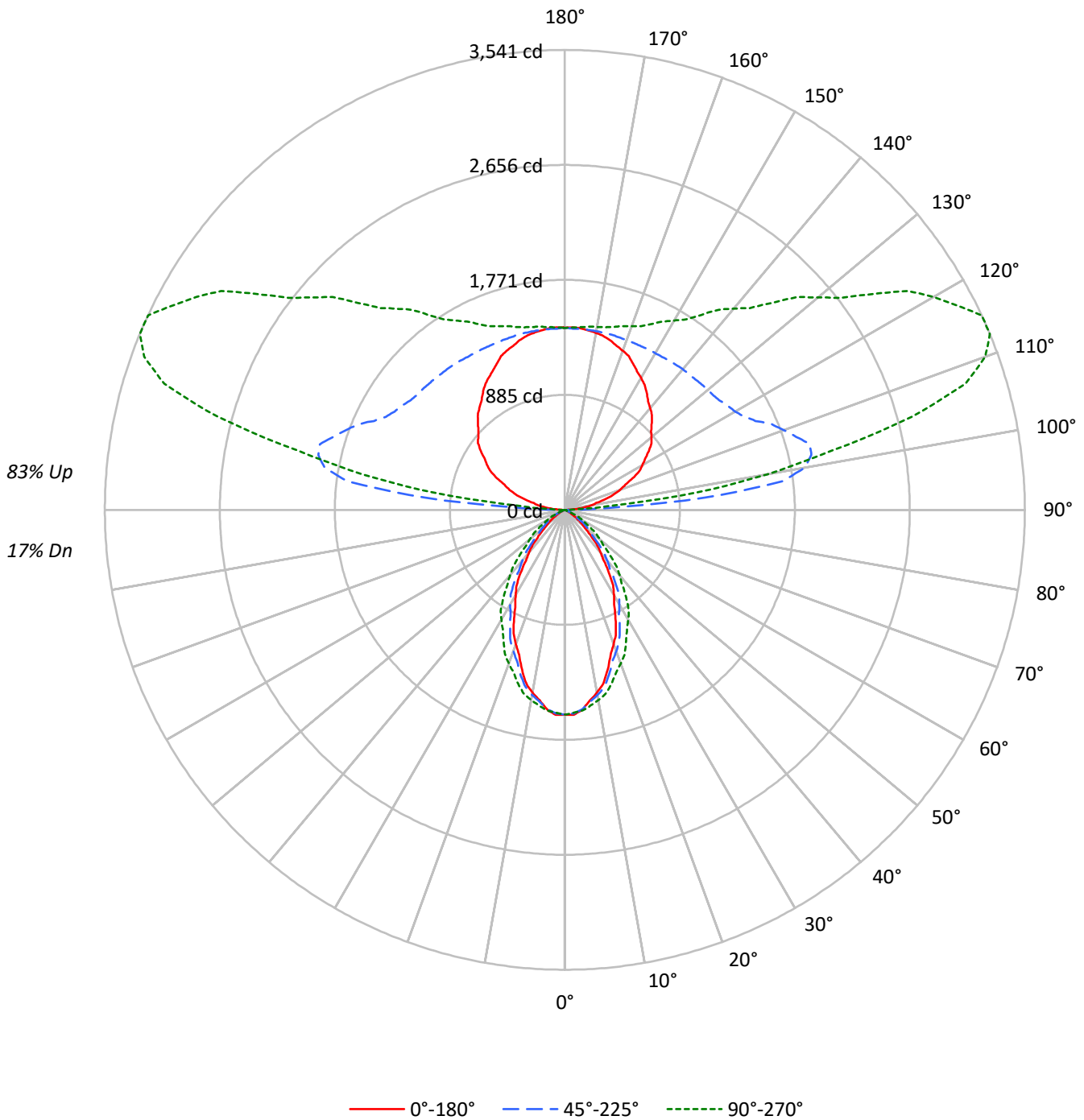
Lumens per Lamp: N/A
Luminaire Lumens: 10919.1 lumens
Efficiency: N/A
Efficacy: 129.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 84.1
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									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	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°	8924	9044	9296
15°	8114	8371	8837
20°	7202	7576	8240
25°	6272	6769	7571
30°	5372	5962	6938
35°	4454	5062	6172
40°	3422	4047	5259
45°	2474	3064	4232
50°	1685	2284	3357
55°	1096	1651	2608
60°	629	1164	1886
65°	166	710	955
70°	83	219	275
75°	36	19	0
80°	28	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.8	1.3
10°-20°	367.8	3.4
20°-30°	460.5	4.2
30°-40°	425.3	3.9
40°-50°	285.8	2.6
50°-60°	147.6	1.4
60°-70°	46.2	0.4
70°-80°	2.9	0.0
80°-90°	3.0	0.0
90°-100°	651.3	6.0
100°-110°	1761.1	16.1
110°-120°	1851.5	17.0
120°-130°	1503.9	13.8
130°-140°	1179.7	10.8
140°-150°	905.4	8.3
150°-160°	651.2	6.0
160°-170°	397.8	3.6
170°-180°	134.1	1.2
0°-30°	972.2	8.9
0°-40°	1397.5	12.8
0°-60°	1831.0	16.8
0°-90°	1883.1	17.2
90°-120°	4263.9	39.0
90°-150°	7852.9	71.9
90°-180°	9036.0	82.8
0°-180°	10919.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1576	1576	1576	1576	1576	
5°	1545	1529	1541	1546	1552	143
15°	1274	1270	1315	1359	1388	355
25°	924	932	997	1066	1116	424
35°	593	608	674	753	822	367
45°	284	302	352	421	486	223
55°	102	119	154	198	243	95
65°	11	22	49	59	66	19
75°	2	2	1	0	0	2
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°	1576.1	1576.1	1576.1	1576.1	1576.1
2.5°	1579.8	1564.9	1568.8	1568.7	1564.5
5°	1544.8	1529.2	1541.0	1546.5	1552.5
7.5°	1479.6	1467.3	1490.1	1507.2	1519.5
10°	1428.9	1418.5	1448.0	1471.3	1488.4
12.5°	1370.4	1362.3	1398.0	1429.9	1451.8
15°	1274.2	1269.7	1314.6	1358.7	1387.8
17.5°	1171.1	1170.9	1222.1	1276.9	1312.0
20°	1100.3	1102.5	1157.5	1217.9	1258.9
22.5°	1029.5	1034.8	1093.4	1156.4	1203.4
25°	924.2	931.6	997.4	1065.6	1115.5
27.5°	822.9	833.8	903.0	973.9	1034.7
30°	756.4	769.1	839.5	914.1	976.8
32.5°	691.1	706.2	774.9	853.8	917.6
35°	593.2	608.1	674.1	753.4	822.0
37.5°	492.1	506.7	571.1	649.2	723.3
40°	426.2	442.6	504.0	579.7	655.0
42.5°	366.5	382.9	440.6	514.9	586.1
45°	284.4	301.6	352.3	420.9	486.5
47.5°	216.4	235.0	279.5	341.6	401.4
50°	176.1	194.8	238.7	293.3	350.8
52.5°	143.8	161.9	201.5	253.0	305.6
55°	102.2	119.3	154.0	197.8	243.2
57.5°	70.6	85.4	116.5	153.0	188.6
60°	51.1	65.3	94.6	124.2	153.3
62.5°	34.0	47.0	75.6	98.4	117.9
65°	11.4	21.9	48.8	58.9	65.6
67.5°	5.8	7.0	25.6	27.0	29.3
70°	4.6	4.6	12.2	13.0	15.3
72.5°	3.4	3.4	4.9	6.3	6.7
75°	1.5	1.5	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	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)