

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: P518929

Luminaire Tested: **SQ4-BB-150U-100D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518929
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-100D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

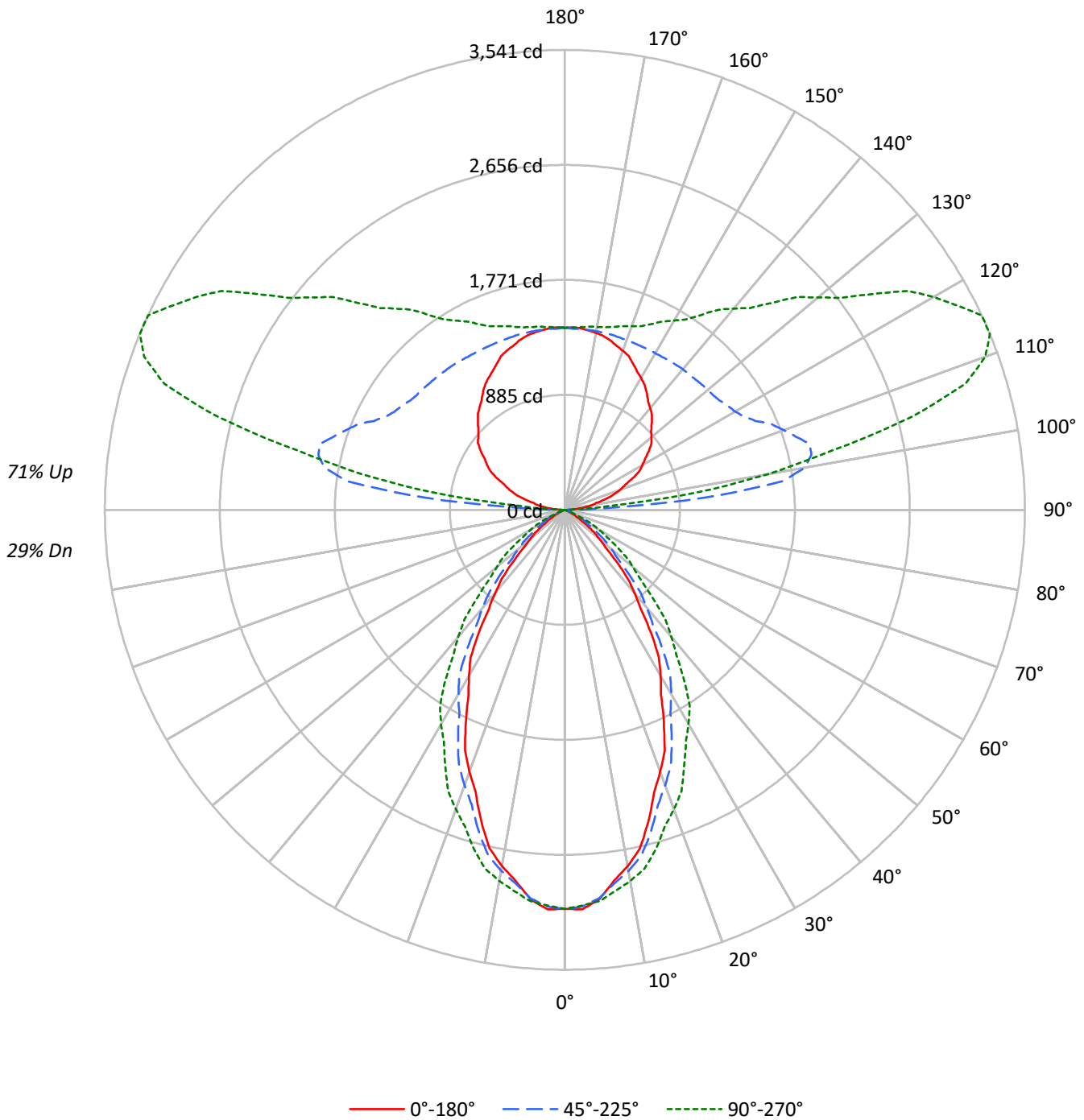
Lumens per Lamp: N/A
Luminaire Lumens: 12703.2 lumens
Efficiency: N/A
Efficacy: 112.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 112.7
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	50	30	10	0	
RCR																						
0	102	102	102	102	91	91	91	91	72	72	72	53	53	53	37	37	37	29				
1	94	90	87	84	84	81	78	76	64	62	61	48	47	46	34	33	33	26				
2	86	80	75	70	77	72	68	64	57	54	52	44	42	40	31	30	29	24				
3	80	71	65	60	71	64	59	55	52	48	45	40	37	35	29	27	26	21				
4	73	64	57	51	66	58	52	47	46	42	39	36	33	31	26	25	24	19				
5	68	57	50	45	61	52	46	41	42	38	34	33	30	28	24	23	21	18				
6	63	52	44	39	56	47	41	36	38	34	30	30	27	25	22	21	19	16				
7	58	47	40	35	52	43	37	32	35	30	27	28	25	22	21	19	18	15				
8	54	43	36	31	49	39	33	29	32	28	24	26	22	20	19	17	16	14				
9	50	39	32	28	45	36	30	26	30	25	22	24	21	18	18	16	15	13				
10	47	36	29	25	43	33	27	23	27	23	20	22	19	17	17	15	14	12				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18893	18893	18893
5°	18590	18544	18682
10°	17394	17626	18117
15°	15812	16314	17223
20°	14036	14766	16059
25°	12223	13192	14755
30°	10470	11621	13521
35°	8682	9864	12029
40°	6670	7887	10249
45°	4822	5972	8247
50°	3285	4451	6541
55°	2135	3219	5084
60°	1225	2267	3674
65°	325	1384	1860
70°	160	428	534
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	280.3	2.2
10°-20°	716.9	5.6
20°-30°	897.5	7.1
30°-40°	829.0	6.5
40°-50°	557.0	4.4
50°-60°	287.7	2.3
60°-70°	90.1	0.7
70°-80°	5.7	0.0
80°-90°	3.0	0.0
90°-100°	651.3	5.1
100°-110°	1761.1	13.9
110°-120°	1851.5	14.6
120°-130°	1503.9	11.8
130°-140°	1179.7	9.3
140°-150°	905.4	7.1
150°-160°	651.2	5.1
160°-170°	397.8	3.1
170°-180°	134.1	1.1
0°-30°	1894.7	14.9
0°-40°	2723.7	21.4
0°-60°	3568.4	28.1
0°-90°	3667.2	28.9
90°-120°	4263.9	33.6
90°-150°	7852.9	61.8
90°-180°	9036.0	71.1
0°-180°	12703.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3072	3072	3072	3072	3072	
5°	3011	2980	3003	3014	3026	279
15°	2483	2474	2562	2648	2705	692
25°	1801	1816	1944	2077	2174	826
35°	1156	1185	1314	1468	1602	716
45°	554	588	687	820	948	435
55°	199	233	300	385	474	186
65°	22	43	95	115	128	38
75°	3	3	2	0	0	4
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°	3071.7	3071.7	3071.7	3071.7	3071.7
2.5°	3078.9	3049.8	3057.5	3057.3	3049.1
5°	3010.8	2980.3	3003.4	3014.0	3025.7
7.5°	2883.6	2859.8	2904.1	2937.3	2961.5
10°	2784.9	2764.6	2822.1	2867.4	2900.8
12.5°	2670.8	2655.1	2724.6	2786.8	2829.5
15°	2483.2	2474.5	2562.0	2648.0	2704.7
17.5°	2282.3	2282.0	2381.9	2488.7	2556.9
20°	2144.4	2148.8	2255.9	2373.6	2453.5
22.5°	2006.5	2016.7	2131.0	2253.8	2345.3
25°	1801.1	1815.7	1943.8	2076.8	2174.1
27.5°	1603.8	1625.0	1759.8	1898.0	2016.6
30°	1474.2	1498.9	1636.2	1781.6	1903.7
32.5°	1347.0	1376.3	1510.2	1664.0	1788.3
35°	1156.2	1185.2	1313.7	1468.3	1602.0
37.5°	959.1	987.6	1113.1	1265.3	1409.7
40°	830.7	862.7	982.3	1129.8	1276.5
42.5°	714.2	746.2	858.7	1003.6	1142.2
45°	554.3	587.7	686.6	820.2	948.1
47.5°	421.7	458.1	544.8	665.7	782.3
50°	343.3	379.6	465.1	571.7	683.6
52.5°	280.3	315.4	392.6	493.0	595.6
55°	199.1	232.6	300.2	385.4	474.1
57.5°	137.6	166.4	227.1	298.2	367.7
60°	99.6	127.2	184.3	242.0	298.7
62.5°	66.3	91.6	147.4	191.7	229.7
65°	22.3	42.6	95.1	114.7	127.8
67.5°	11.3	13.6	49.9	52.7	57.1
70°	8.9	8.9	23.8	25.4	29.7
72.5°	6.5	6.5	9.5	12.2	13.1
75°	3.0	3.0	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	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°	0.6	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)