

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: P518926

Luminaire Tested: **SQ4-BB-150U-100D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518926
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-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

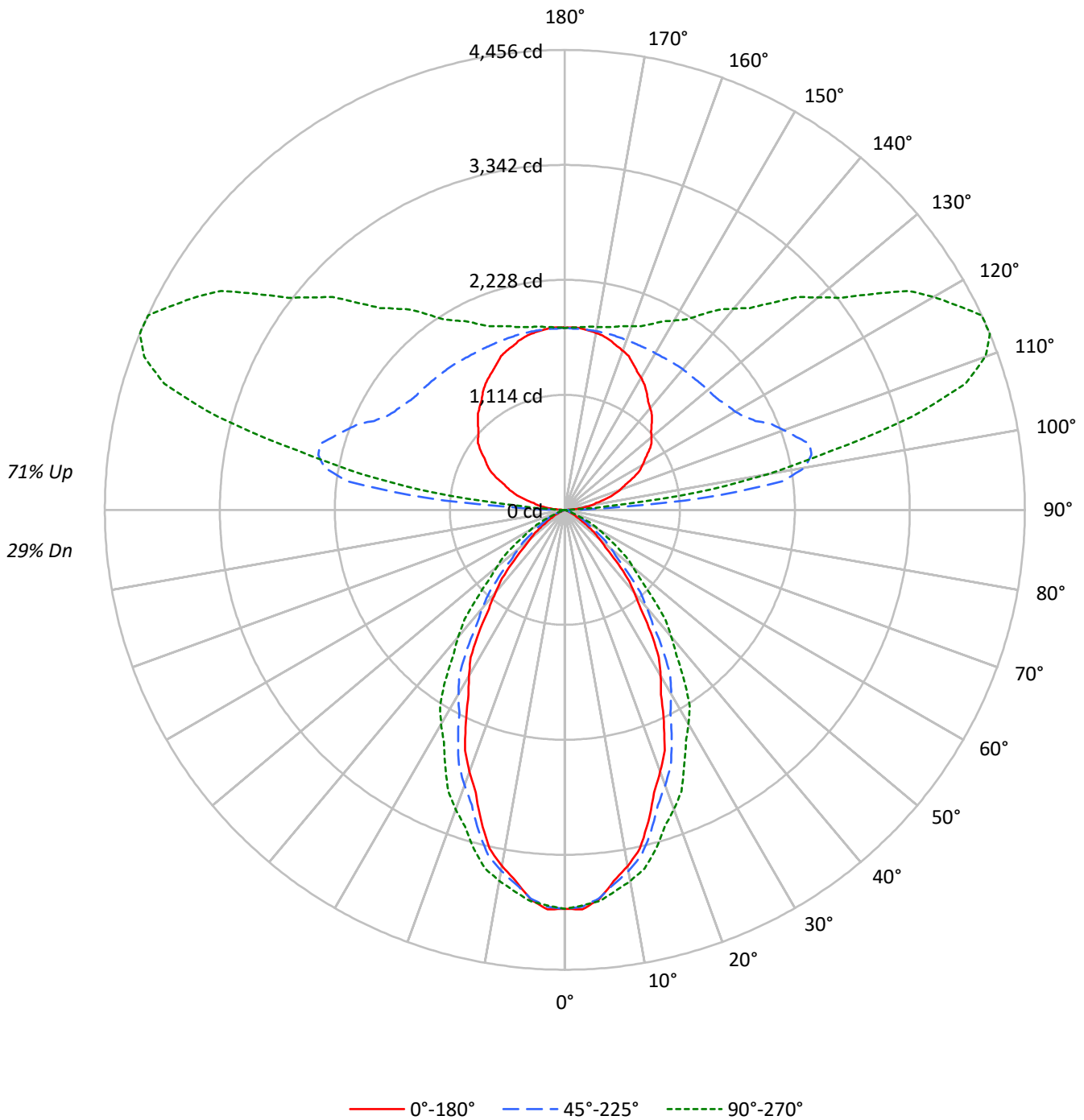
Lumens per Lamp: N/A
Luminaire Lumens: 15987.2 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 148.4
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



TEST NUMBER: P518926
CATALOG NUMBER: SQ4-BB-150U-100D-830-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P518926

CATALOG NUMBER: SQ4-BB-150U-100D-830-1D-UNV-STD-W-8

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	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°	17833	17833	17833
5°	17547	17503	17633
10°	16418	16637	17101
15°	14925	15399	16256
20°	13249	13938	15159
25°	11538	12452	13927
30°	9883	10969	12762
35°	8194	9311	11354
40°	6296	7444	9675
45°	4551	5637	7784
50°	3100	4201	6174
55°	2015	3039	4798
60°	1156	2140	3468
65°	307	1307	1755
70°	151	403	504
75°	66	34	0
80°	50	0	0
85°	0	0	0



TEST NUMBER: P518926

CATALOG NUMBER: SQ4-BB-150U-100D-830-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	352.8	2.2
10°-20°	902.2	5.6
20°-30°	1129.5	7.1
30°-40°	1043.3	6.5
40°-50°	701.0	4.4
50°-60°	362.1	2.3
60°-70°	113.4	0.7
70°-80°	7.2	0.0
80°-90°	3.8	0.0
90°-100°	819.7	5.1
100°-110°	2216.3	13.9
110°-120°	2330.1	14.6
120°-130°	1892.7	11.8
130°-140°	1484.7	9.3
140°-150°	1139.5	7.1
150°-160°	819.5	5.1
160°-170°	500.6	3.1
170°-180°	168.8	1.1
0°-30°	2384.5	14.9
0°-40°	3427.8	21.4
0°-60°	4490.9	28.1
0°-90°	4615.3	28.9
90°-120°	5366.2	33.6
90°-150°	9883.0	61.8
90°-180°	11372.0	71.1
0°-180°	15987.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3866	3866	3866	3866	3866	
5°	3789	3751	3780	3793	3808	351
15°	3125	3114	3224	3333	3404	870
25°	2267	2285	2446	2614	2736	1039
35°	1455	1492	1653	1848	2016	901
45°	698	740	864	1032	1193	548
55°	251	293	378	485	597	234
65°	28	54	120	144	161	47
75°	4	4	2	0	0	5
85°	0	0	0	0	0	0
90°	4	11	25	26	25	9
95°	127	446	1363	706	420	133
105°	412	637	2459	3627	3478	434
115°	725	887	2039	3947	4456	716
125°	993	1138	1838	3101	3643	885
135°	1190	1332	1788	2504	2835	920
145°	1384	1488	1764	2143	2307	866
155°	1563	1624	1749	1923	1986	721
165°	1701	1718	1756	1825	1834	479
175°	1766	1764	1758	1781	1777	168
180°	1764	1764	1764	1764	1764	

TEST NUMBER: P518926

CATALOG NUMBER: SQ4-BB-150U-100D-830-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3865.8	3865.8	3865.8	3865.8	3865.8
2.5°	3874.8	3838.2	3847.9	3847.6	3837.4
5°	3789.2	3750.8	3779.8	3793.2	3807.9
7.5°	3629.1	3599.1	3654.9	3696.7	3727.1
10°	3504.9	3479.3	3551.6	3608.7	3650.8
12.5°	3361.2	3341.5	3428.9	3507.2	3561.0
15°	3125.2	3114.2	3224.3	3332.6	3403.9
17.5°	2872.4	2872.0	2997.7	3132.0	3218.0
20°	2698.8	2704.3	2839.1	2987.2	3087.8
22.5°	2525.2	2538.0	2682.0	2836.4	2951.7
25°	2266.8	2285.0	2446.3	2613.7	2736.2
27.5°	2018.4	2045.1	2214.8	2388.7	2537.9
30°	1855.3	1886.4	2059.2	2242.2	2395.8
32.5°	1695.2	1732.1	1900.6	2094.1	2250.7
35°	1455.1	1491.6	1653.3	1847.9	2016.1
37.5°	1207.1	1242.9	1400.8	1592.4	1774.1
40°	1045.5	1085.7	1236.2	1421.9	1606.6
42.5°	898.8	939.1	1080.6	1263.0	1437.5
45°	697.6	739.7	864.1	1032.3	1193.2
47.5°	530.8	576.5	685.6	837.8	984.5
50°	432.0	477.7	585.4	719.5	860.3
52.5°	352.7	397.0	494.1	620.5	749.6
55°	250.6	292.7	377.8	485.1	596.6
57.5°	173.2	209.4	285.8	375.3	462.7
60°	125.3	160.1	231.9	304.6	375.9
62.5°	83.4	115.2	185.5	241.2	289.1
65°	28.1	53.7	119.7	144.4	160.8
67.5°	14.2	17.1	62.8	66.3	71.8
70°	11.2	11.2	29.9	31.9	37.4
72.5°	8.2	8.2	12.0	15.4	16.5
75°	3.7	3.7	1.9	0.0	0.0
77.5°	1.9	1.9	1.5	0.0	0.0
80°	1.9	1.9	0.0	0.0	0.0
82.5°	0.4	0.4	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	2.2	4.9	5.3	4.9
90°	3.8	11.2	24.7	26.5	24.7
92.5°	53.9	196.5	387.7	168.3	121.9
95°	127.2	446.5	1363.2	705.5	419.6
97.5°	204.3	512.1	2124.9	1758.5	1291.4
100°	262.0	538.6	2361.9	2463.2	1991.6
102.5°	315.2	575.4	2445.4	2997.5	2644.8
105°	412.0	636.6	2458.7	3626.8	3478.3
107.5°	501.6	706.6	2351.2	4019.3	4068.7
110°	571.5	757.1	2255.5	4124.7	4334.5



TEST NUMBER: P518926

CATALOG NUMBER: SQ4-BB-150U-100D-830-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	633.8	807.5	2167.5	4103.7	4456.0
115°	725.3	886.8	2039.1	3947.4	4456.0
117.5°	814.9	966.4	1954.4	3708.6	4285.2
120°	869.6	1018.1	1904.3	3537.2	4125.7
122.5°	921.2	1066.7	1873.9	3353.5	3946.4
125°	993.0	1137.8	1837.9	3101.4	3643.4
127.5°	1059.0	1201.2	1816.6	2895.6	3372.3
130°	1095.5	1242.2	1807.5	2768.5	3199.2
132.5°	1133.5	1278.6	1798.4	2653.8	3050.3
135°	1190.4	1331.5	1788.5	2504.2	2834.6
137.5°	1247.8	1381.1	1780.1	2382.8	2652.0
140°	1287.3	1411.6	1777.1	2304.7	2544.1
142.5°	1325.2	1442.2	1771.0	2234.1	2443.9
145°	1384.1	1488.0	1763.8	2143.4	2306.8
147.5°	1437.6	1529.7	1755.5	2061.3	2186.8
150°	1477.1	1558.8	1752.4	2016.7	2116.9
152.5°	1513.6	1584.9	1750.9	1975.3	2057.7
155°	1562.6	1623.8	1748.6	1922.8	1985.9
157.5°	1613.4	1656.1	1749.0	1886.3	1927.8
160°	1642.3	1677.6	1750.5	1863.2	1892.9
162.5°	1665.1	1694.4	1752.0	1844.8	1867.1
165°	1701.2	1717.9	1756.2	1824.8	1834.1
167.5°	1725.8	1737.3	1756.6	1807.6	1812.0
170°	1741.0	1746.6	1758.1	1799.9	1799.9
172.5°	1753.2	1754.3	1758.1	1790.7	1789.2
175°	1765.7	1763.9	1758.1	1780.8	1777.1
177.5°	1769.9	1765.4	1757.7	1772.8	1768.4
180°	1763.8	1763.8	1763.8	1763.8	1763.8

(END OF REPORT)