

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: P518902

Luminaire Tested: **SQ4-BB-150U-075D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518902
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-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

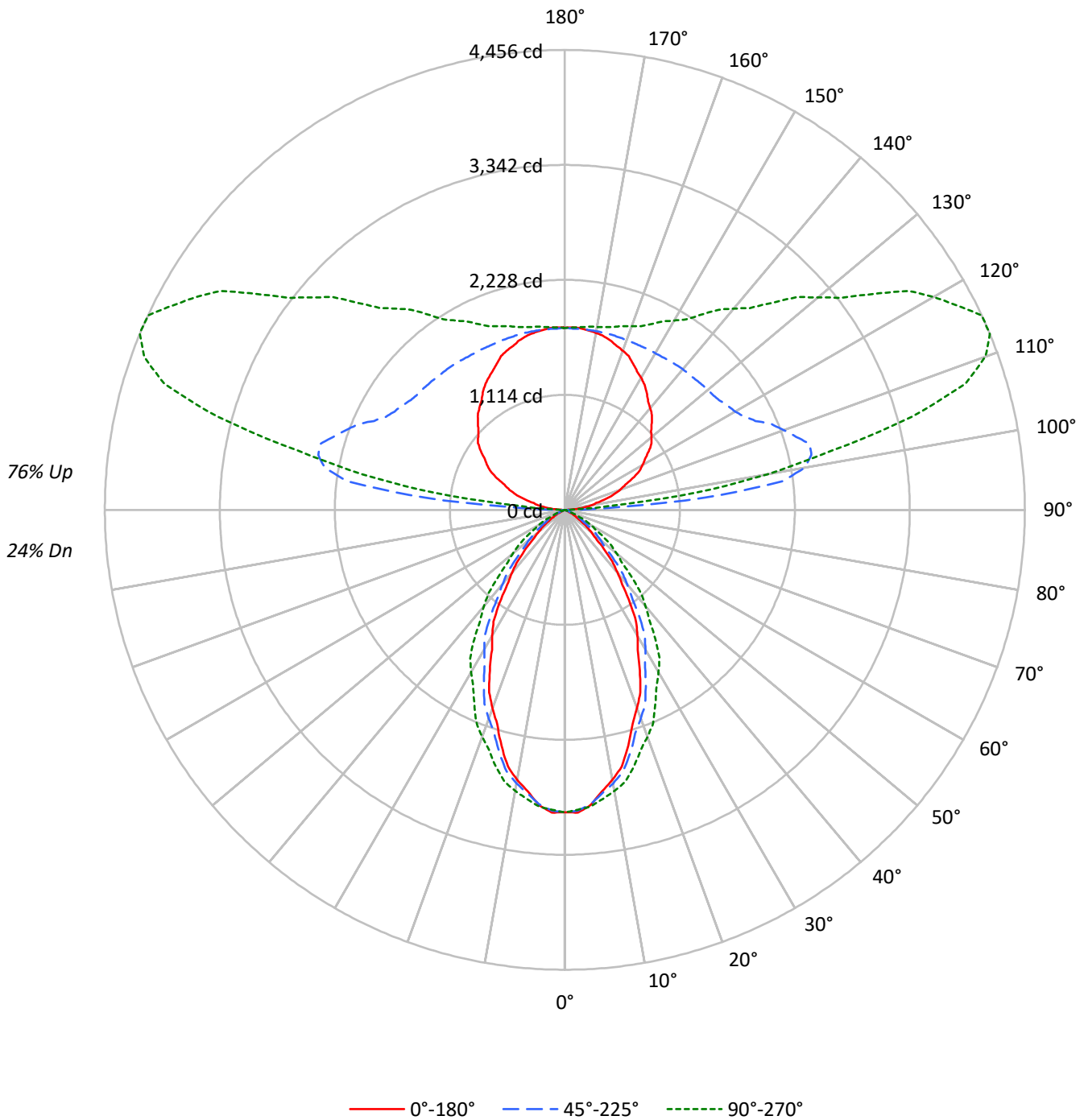
Lumens per Lamp: N/A
Luminaire Lumens: 14870.2 lumens
Efficiency: N/A
Efficacy: 113.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 131.1
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				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°	13514	13514	13514
5°	13297	13264	13362
10°	12441	12607	12959
15°	11310	11669	12319
20°	10040	10562	11487
25°	8743	9436	10554
30°	7489	8312	9671
35°	6209	7056	8604
40°	4771	5641	7331
45°	3449	4272	5899
50°	2350	3184	4678
55°	1527	2303	3636
60°	876	1621	2629
65°	233	990	1331
70°	115	306	382
75°	50	25	0
80°	37	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	267.3	1.8
10°-20°	683.7	4.6
20°-30°	855.9	5.8
30°-40°	790.6	5.3
40°-50°	531.2	3.6
50°-60°	274.4	1.8
60°-70°	85.9	0.6
70°-80°	5.4	0.0
80°-90°	3.8	0.0
90°-100°	819.7	5.5
100°-110°	2216.3	14.9
110°-120°	2330.1	15.7
120°-130°	1892.7	12.7
130°-140°	1484.7	10.0
140°-150°	1139.5	7.7
150°-160°	819.5	5.5
160°-170°	500.6	3.4
170°-180°	168.8	1.1
0°-30°	1806.9	12.2
0°-40°	2597.5	17.5
0°-60°	3403.1	22.9
0°-90°	3498.3	23.5
90°-120°	5366.2	36.1
90°-150°	9883.0	66.5
90°-180°	11372.0	76.5
0°-180°	14870.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2930	2930	2930	2930	2930	
5°	2871	2842	2864	2874	2886	266
15°	2368	2360	2443	2525	2579	660
25°	1718	1732	1854	1981	2073	788
35°	1103	1130	1253	1400	1528	683
45°	529	560	655	782	904	415
55°	190	222	286	368	452	177
65°	21	41	91	109	122	36
75°	3	3	1	0	0	4
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2929.5	2929.5	2929.5	2929.5	2929.5
2.5°	2936.3	2908.6	2915.9	2915.7	2907.9
5°	2871.4	2842.3	2864.3	2874.5	2885.5
7.5°	2750.0	2727.3	2769.6	2801.3	2824.3
10°	2655.9	2636.5	2691.4	2734.6	2766.5
12.5°	2547.1	2532.1	2598.4	2657.7	2698.5
15°	2368.2	2359.9	2443.4	2525.4	2579.4
17.5°	2176.6	2176.3	2271.6	2373.4	2438.5
20°	2045.1	2049.3	2151.4	2263.7	2339.9
22.5°	1913.6	1923.3	2032.3	2149.4	2236.7
25°	1717.7	1731.6	1853.8	1980.6	2073.4
27.5°	1529.5	1549.7	1678.3	1810.1	1923.2
30°	1405.9	1429.5	1560.4	1699.1	1815.5
32.5°	1284.6	1312.6	1440.2	1586.9	1705.5
35°	1102.6	1130.3	1252.9	1400.3	1527.8
37.5°	914.7	941.9	1061.5	1206.7	1344.4
40°	792.2	822.7	936.8	1077.5	1217.4
42.5°	681.1	711.6	818.9	957.1	1089.3
45°	528.6	560.5	654.8	782.3	904.2
47.5°	402.2	436.9	519.6	634.9	746.0
50°	327.4	362.0	443.6	545.2	651.9
52.5°	267.3	300.8	374.4	470.2	568.0
55°	189.9	221.8	286.3	367.6	452.1
57.5°	131.2	158.7	216.6	284.4	350.6
60°	95.0	121.3	175.7	230.8	284.9
62.5°	63.2	87.3	140.6	182.8	219.1
65°	21.3	40.7	90.7	109.4	121.9
67.5°	10.8	13.0	47.6	50.3	54.4
70°	8.5	8.5	22.7	24.2	28.3
72.5°	6.2	6.2	9.1	11.6	12.5
75°	2.8	2.8	1.4	0.0	0.0
77.5°	1.4	1.4	1.1	0.0	0.0
80°	1.4	1.4	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°	0.8	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



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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)