

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: P518950

Luminaire Tested: **SQ4-BB-150U-125D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518950
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-125D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

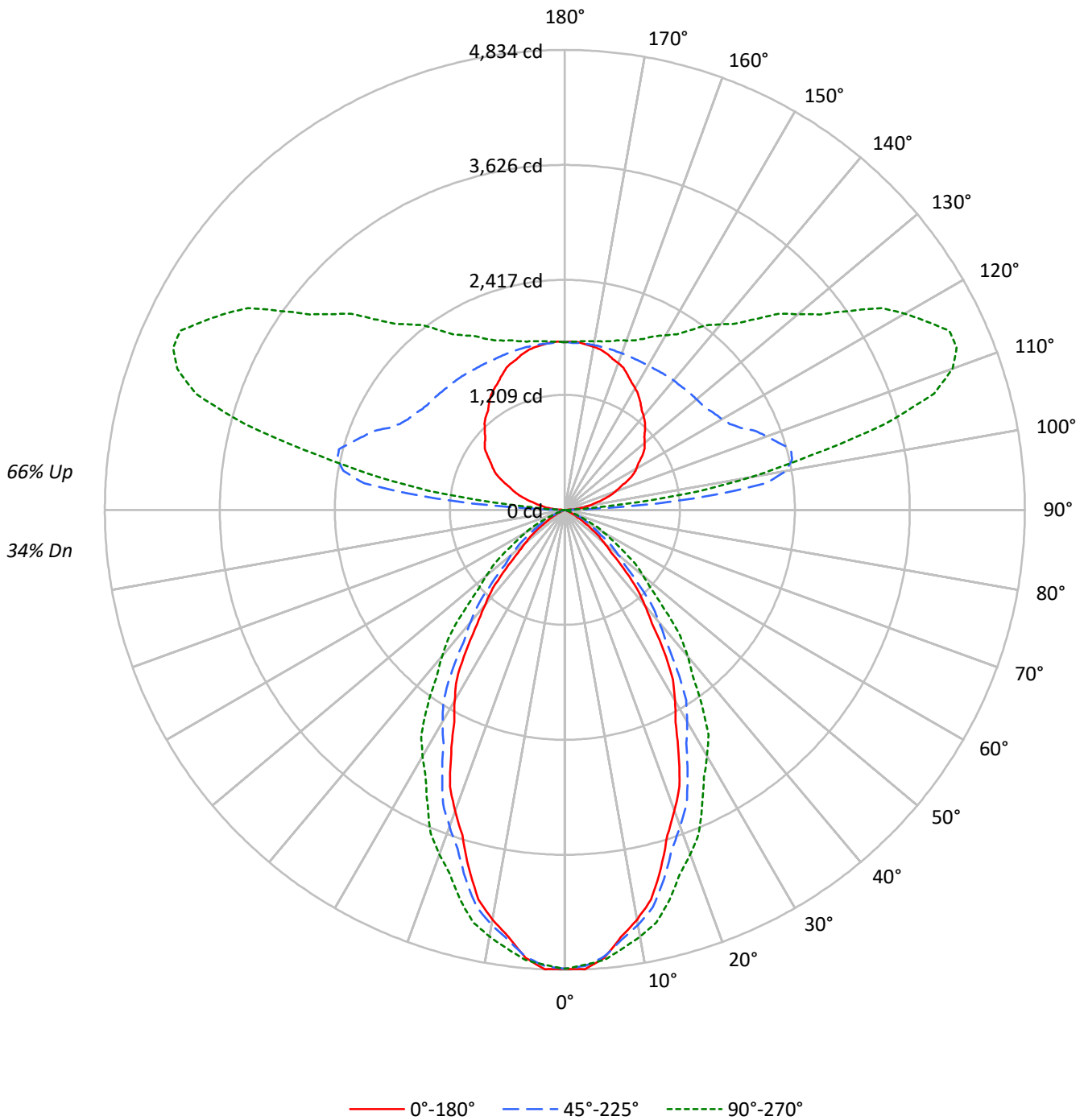
Lumens per Lamp: N/A
Luminaire Lumens: 17128.9 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 167.8
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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	34
1	95	92	88	85	86	83	80	78	67	65	63	52	51	50	38	37	37	31
2	88	81	76	72	79	74	69	66	60	57	54	47	45	43	35	34	33	28
3	81	73	66	61	73	66	61	56	54	50	47	43	40	38	32	31	30	25
4	75	65	58	53	67	59	53	49	49	45	41	39	36	34	30	28	27	23
5	69	59	51	46	62	54	47	43	44	40	36	35	32	30	27	26	24	21
6	64	53	46	40	58	49	42	38	40	36	32	33	29	27	25	23	22	19
7	59	48	41	36	54	44	38	34	37	32	29	30	27	24	23	21	20	17
8	55	44	37	32	50	41	34	30	34	29	26	28	25	22	22	20	18	16
9	52	40	34	29	47	37	31	27	31	27	24	26	23	20	20	18	17	15
10	48	37	31	26	44	34	29	25	29	25	22	24	21	19	19	17	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22249	22249	22249
5°	21890	21836	21998
10°	20482	20756	21334
15°	18620	19211	20281
20°	16529	17388	18911
25°	14394	15534	17375
30°	12329	13684	15921
35°	10223	11616	14165
40°	7854	9288	12070
45°	5678	7033	9711
50°	3868	5241	7703
55°	2515	3791	5986
60°	1442	2669	4327
65°	382	1630	2191
70°	189	503	630
75°	84	41	0
80°	61	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	440.1	2.6
10°-20°	1125.6	6.6
20°-30°	1409.1	8.2
30°-40°	1301.6	7.6
40°-50°	874.6	5.1
50°-60°	451.7	2.6
60°-70°	141.5	0.8
70°-80°	8.9	0.1
80°-90°	3.8	0.0
90°-100°	819.7	4.8
100°-110°	2216.3	12.9
110°-120°	2330.1	13.6
120°-130°	1892.7	11.0
130°-140°	1484.7	8.7
140°-150°	1139.5	6.7
150°-160°	819.5	4.8
160°-170°	500.6	2.9
170°-180°	168.8	1.0
0°-30°	2974.8	17.4
0°-40°	4276.4	25.0
0°-60°	5602.7	32.7
0°-90°	5756.9	33.6
90°-120°	5366.2	31.3
90°-150°	9883.0	57.7
90°-180°	11372.0	66.4
0°-180°	17128.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4823	4823	4823	4823	4823	
5°	4727	4679	4716	4732	4750	438
15°	3899	3885	4022	4158	4246	1086
25°	2828	2851	3052	3261	3414	1296
35°	1815	1861	2063	2305	2515	1125
45°	870	923	1078	1288	1489	684
55°	313	365	471	605	744	292
65°	35	67	149	180	201	59
75°	5	5	2	0	0	7
85°	0	0	0	0	0	1
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°	4822.9	4822.9	4822.9	4822.9	4822.9
2.5°	4834.1	4788.4	4800.5	4800.2	4787.4
5°	4727.2	4679.3	4715.5	4732.3	4750.5
7.5°	4527.5	4490.0	4559.7	4611.9	4649.7
10°	4372.5	4340.6	4430.9	4502.1	4554.5
12.5°	4193.3	4168.7	4277.8	4375.5	4442.5
15°	3898.9	3885.2	4022.5	4157.6	4246.5
17.5°	3583.4	3583.0	3739.8	3907.4	4014.6
20°	3366.9	3373.7	3541.9	3726.7	3852.2
22.5°	3150.4	3166.3	3345.9	3538.6	3682.4
25°	2827.9	2850.7	3051.9	3260.7	3413.6
27.5°	2518.1	2551.4	2763.0	2980.1	3166.2
30°	2314.6	2353.4	2568.9	2797.3	2988.9
32.5°	2114.9	2161.0	2371.1	2612.6	2807.8
35°	1815.3	1860.9	2062.6	2305.4	2515.3
37.5°	1505.9	1550.6	1747.6	1986.6	2213.3
40°	1304.3	1354.5	1542.3	1773.9	2004.3
42.5°	1121.4	1171.6	1348.2	1575.7	1793.3
45°	870.3	922.8	1078.0	1287.9	1488.6
47.5°	662.2	719.2	855.4	1045.3	1228.2
50°	539.0	596.0	730.3	897.6	1073.3
52.5°	440.1	495.3	616.4	774.1	935.2
55°	312.7	365.1	471.3	605.1	744.3
57.5°	216.1	261.2	356.5	468.2	577.2
60°	156.3	199.7	289.3	380.0	469.0
62.5°	104.1	143.8	231.5	300.9	360.7
65°	35.0	66.9	149.3	180.1	200.7
67.5°	17.7	21.4	78.4	82.8	89.6
70°	14.0	14.0	37.3	39.8	46.7
72.5°	10.3	10.3	14.9	19.2	20.5
75°	4.7	4.7	2.3	0.0	0.0
77.5°	2.3	2.3	1.9	0.0	0.0
80°	2.3	2.3	0.0	0.0	0.0
82.5°	0.5	0.5	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)