

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: P519550

Luminaire Tested: **SQ4-WB-150U-050D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519550
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-150U-050D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

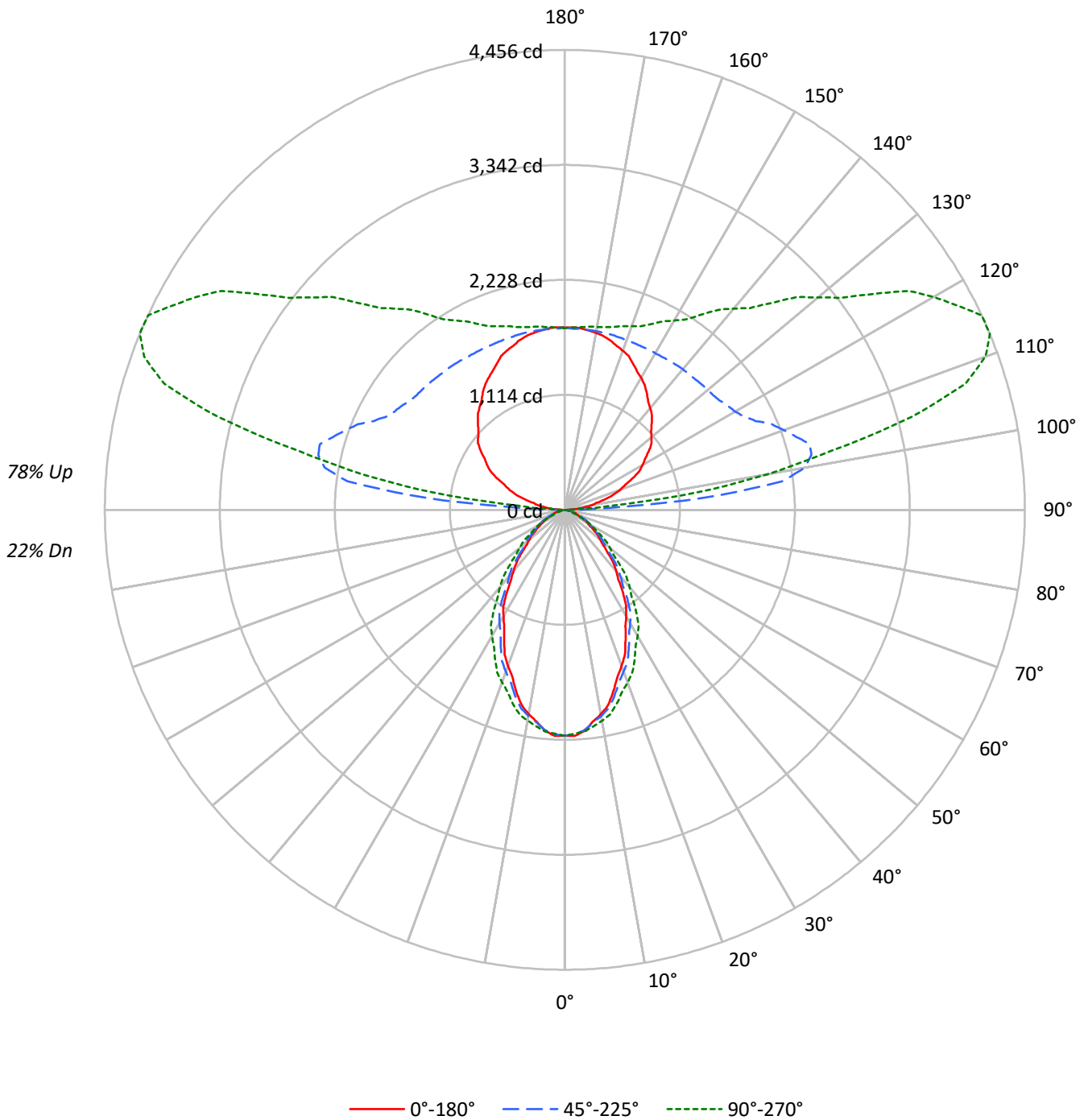
Lumens per Lamp: N/A
Luminaire Lumens: 14562.8 lumens
Efficiency: N/A
Efficacy: 130.1 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 111.9
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	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30	22
1	92	88	84	81	81	78	75	73	60	58	56	43	42	41	27	27	26	19
2	84	77	72	67	74	69	64	60	53	50	47	38	37	35	25	24	23	17
3	77	68	62	56	68	61	56	51	47	43	40	34	32	30	22	21	20	15
4	71	61	54	48	63	54	48	44	42	38	35	31	28	26	20	19	18	13
5	65	54	47	41	57	49	42	38	38	34	30	28	25	23	19	17	16	12
6	60	49	41	36	53	44	37	33	34	30	26	25	23	20	17	16	14	11
7	55	44	37	32	49	40	33	29	31	27	23	23	20	18	16	14	13	10
8	51	40	33	28	46	36	30	25	28	24	21	21	18	16	15	13	12	9
9	48	36	29	25	42	33	27	23	26	22	19	20	17	15	14	12	11	8
10	45	33	27	22	40	30	24	20	24	20	17	18	15	13	13	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10090	10090	10090
5°	9964	9928	9986
10°	9414	9499	9719
15°	8690	8892	9291
20°	7891	8188	8730
25°	7078	7464	8133
30°	6329	6743	7515
35°	5535	5935	6783
40°	4658	5028	5872
45°	3845	4176	4903
50°	3209	3499	4084
55°	2725	3002	3373
60°	2329	2604	2692
65°	1855	2190	1739
70°	1644	1709	1061
75°	1522	1385	651
80°	1403	1275	561
85°	1270	1170	455



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.6	1.4
10°-20°	521.8	3.6
20°-30°	675.9	4.6
30°-40°	661.9	4.5
40°-50°	506.6	3.5
50°-60°	337.6	2.3
60°-70°	184.2	1.3
70°-80°	76.8	0.5
80°-90°	25.4	0.2
90°-100°	819.7	5.6
100°-110°	2216.3	15.2
110°-120°	2330.1	16.0
120°-130°	1892.7	13.0
130°-140°	1484.7	10.2
140°-150°	1139.5	7.8
150°-160°	819.5	5.6
160°-170°	500.6	3.4
170°-180°	168.8	1.2
0°-30°	1398.3	9.6
0°-40°	2060.2	14.1
0°-60°	2904.4	19.9
0°-90°	3190.8	21.9
90°-120°	5366.2	36.8
90°-150°	9883.0	67.9
90°-180°	11372.0	78.1
0°-180°	14562.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2187	2187	2187	2187	2187	
5°	2152	2130	2144	2149	2156	200
15°	1820	1813	1862	1912	1945	508
25°	1391	1394	1466	1530	1598	640
35°	983	987	1054	1125	1204	611
45°	589	600	640	689	752	460
55°	339	353	373	388	419	307
65°	170	184	201	175	159	177
75°	85	85	78	53	36	91
85°	24	24	22	14	9	26
90°	4	11	25	26	25	10
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°	2187.2	2187.2	2187.2	2187.2	2187.2
2.5°	2192.6	2173.1	2178.0	2177.9	2171.8
5°	2151.7	2130.1	2144.0	2149.0	2156.5
7.5°	2071.8	2055.5	2080.9	2099.6	2114.8
10°	2009.7	1995.6	2027.9	2055.2	2074.9
12.5°	1937.5	1925.7	1965.7	2002.4	2028.1
15°	1819.6	1813.1	1861.9	1912.5	1945.4
17.5°	1693.5	1690.3	1746.3	1805.4	1847.5
20°	1607.5	1606.6	1668.0	1729.6	1778.4
22.5°	1520.8	1522.8	1587.4	1651.4	1707.0
25°	1390.6	1394.4	1466.5	1530.4	1597.9
27.5°	1270.3	1272.0	1346.5	1414.0	1486.0
30°	1188.1	1192.8	1265.9	1335.7	1410.8
32.5°	1106.0	1111.4	1182.9	1255.1	1331.7
35°	982.8	987.4	1053.8	1124.7	1204.4
37.5°	855.7	862.1	920.9	988.0	1066.4
40°	773.5	782.9	835.0	898.1	975.1
42.5°	694.5	706.1	754.3	814.3	883.7
45°	589.3	600.5	640.1	688.6	751.5
47.5°	498.7	511.6	542.0	583.8	637.4
50°	447.2	459.4	487.5	518.4	569.1
52.5°	401.9	414.1	439.2	463.0	506.2
55°	338.8	352.9	373.3	387.5	419.4
57.5°	287.0	300.5	316.7	323.1	342.4
60°	252.4	267.4	282.2	281.4	291.8
62.5°	220.9	233.7	248.4	238.2	238.8
65°	169.9	183.9	200.6	175.3	159.3
67.5°	137.2	140.2	157.4	122.2	103.3
70°	121.9	121.9	126.7	94.6	78.7
72.5°	107.3	107.3	102.9	77.0	60.3
75°	85.4	85.4	77.7	53.4	36.5
77.5°	65.8	65.1	59.5	39.8	26.5
80°	52.8	52.8	48.0	31.4	21.1
82.5°	41.3	41.3	37.2	24.6	15.7
85°	24.0	24.0	22.1	14.3	8.6
87.5°	9.2	10.7	12.6	9.9	8.8
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)