

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: P563569

Luminaire Tested: **SQ4-PP3-100U-050D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563569
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2103-172-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PP3-100U-050D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

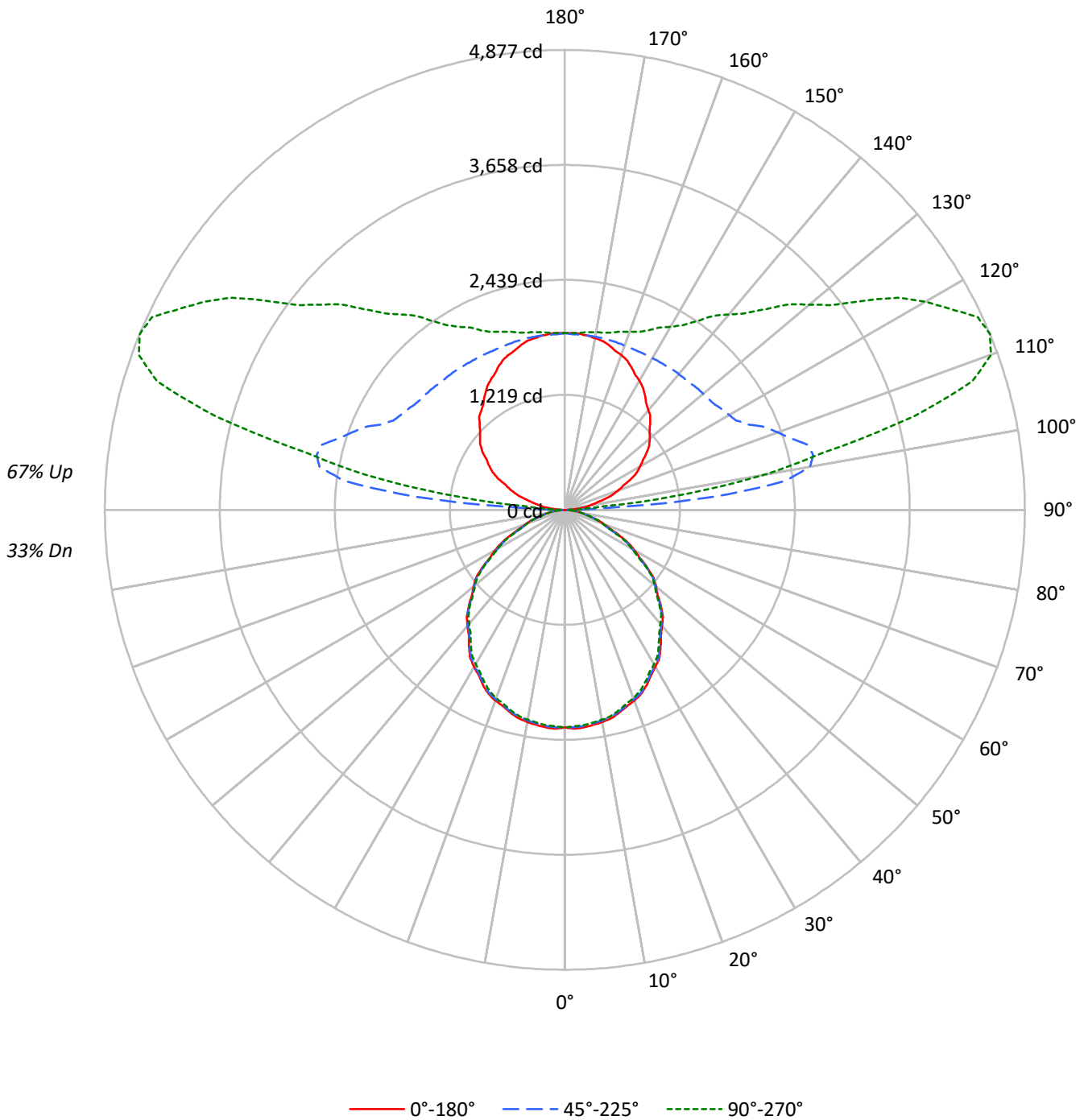
Lumens per Lamp: N/A
Luminaire Lumens: 18080.9 lumens
Efficiency: N/A
Efficacy: 141.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 127.4
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



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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	56	56	56	40	40	40	33
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28
2	86	79	73	68	77	71	66	62	57	53	50	44	41	39	32	30	29	23
3	78	69	62	56	70	63	57	52	50	46	42	39	36	33	28	26	25	20
4	71	61	53	48	64	55	49	44	45	40	36	34	31	29	25	23	21	17
5	66	54	47	41	59	49	43	37	40	35	31	31	27	25	23	20	19	15
6	60	49	41	35	54	44	37	32	36	31	27	28	24	22	20	18	16	13
7	56	44	36	31	50	40	33	28	32	27	24	25	22	19	19	16	15	12
8	52	40	32	27	46	36	30	25	29	24	21	23	20	17	17	15	13	10
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	13	12	9
10	45	33	26	21	40	30	24	20	25	20	17	19	16	14	15	12	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7098	7098	7098
5°	7150	7106	7081
10°	7138	7087	7055
15°	7091	7052	7013
20°	7043	7004	6951
25°	6960	6912	6843
30°	6831	6795	6709
35°	6652	6607	6523
40°	6439	6399	6326
45°	6263	6219	6158
50°	6038	6000	5942
55°	5726	5650	5607
60°	5213	5063	5039
65°	4593	4401	4387
70°	3965	3801	3801
75°	3413	3365	3316
80°	3009	3044	2974
85°	2354	2569	2569



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.2	1.2
10°-20°	623.1	3.4
20°-30°	933.4	5.2
30°-40°	1094.8	6.1
40°-50°	1098.2	6.1
50°-60°	936.8	5.2
60°-70°	611.0	3.4
70°-80°	306.5	1.7
80°-90°	88.7	0.5
90°-100°	877.2	4.9
100°-110°	2421.6	13.4
110°-120°	2497.4	13.8
120°-130°	2006.9	11.1
130°-140°	1577.2	8.7
140°-150°	1209.7	6.7
150°-160°	869.4	4.8
160°-170°	531.7	2.9
170°-180°	179.2	1.0
0°-30°	1774.7	9.8
0°-40°	2869.5	15.9
0°-60°	4904.5	27.1
0°-90°	5910.7	32.7
90°-120°	5796.2	32.1
90°-150°	10589.9	58.6
90°-180°	12170.0	67.3
0°-180°	18080.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2308	2308	2308	2308	2308	
5°	2316	2294	2302	2294	2294	220
15°	2227	2205	2215	2207	2203	628
25°	2051	2027	2037	2019	2017	943
35°	1772	1754	1760	1740	1738	1107
45°	1440	1430	1430	1416	1416	1109
55°	1068	1064	1054	1048	1046	949
65°	631	619	605	601	603	630
75°	287	287	283	281	279	312
85°	67	73	73	73	73	79
90°	6	12	24	27	30	12
95°	129	475	1591	654	426	138
105°	432	666	2664	4067	3830	459
115°	773	934	2146	4248	4831	760
125°	1061	1207	1945	3292	3863	944
135°	1277	1414	1891	2666	3006	988
145°	1480	1583	1867	2270	2442	927
155°	1669	1725	1852	2036	2101	769
165°	1807	1831	1861	1933	1948	509
175°	1873	1876	1864	1891	1885	178
180°	1873	1873	1873	1873	1873	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2307.9	2307.9	2307.9	2307.9	2307.9
2.5°	2322.4	2303.4	2307.9	2304.4	2294.9
5°	2316.0	2294.2	2301.8	2293.7	2293.7
7.5°	2300.2	2276.5	2284.0	2275.9	2275.5
10°	2285.6	2261.9	2269.4	2261.3	2259.3
12.5°	2264.6	2240.9	2250.0	2240.3	2239.9
15°	2227.0	2205.2	2214.8	2206.6	2202.7
17.5°	2184.5	2160.8	2172.4	2161.0	2159.4
20°	2152.1	2128.4	2140.0	2123.8	2123.8
22.5°	2113.3	2089.6	2102.8	2081.7	2081.7
25°	2051.0	2027.3	2036.8	2018.6	2016.6
27.5°	1977.0	1953.6	1963.6	1943.0	1942.6
30°	1923.6	1901.8	1913.4	1891.2	1889.2
32.5°	1865.3	1845.1	1853.6	1831.3	1829.3
35°	1771.9	1754.1	1759.7	1739.5	1737.5
37.5°	1673.6	1655.4	1661.8	1644.4	1643.6
40°	1604.0	1592.1	1593.9	1579.6	1575.7
42.5°	1539.3	1525.8	1527.5	1513.3	1512.6
45°	1440.1	1430.3	1430.0	1415.9	1415.9
47.5°	1335.0	1327.4	1325.3	1313.5	1313.1
50°	1262.1	1256.2	1254.1	1243.9	1241.9
52.5°	1186.1	1183.3	1176.4	1167.9	1167.5
55°	1068.0	1064.0	1053.8	1047.7	1045.7
57.5°	939.7	931.8	920.3	911.5	913.0
60°	847.5	839.6	823.2	819.2	819.2
62.5°	758.5	749.0	732.6	727.0	730.2
65°	631.1	619.2	604.8	600.8	602.8
67.5°	515.4	504.7	489.1	489.0	487.5
70°	440.9	435.0	422.7	422.7	422.7
72.5°	374.6	371.8	362.9	362.8	361.2
75°	287.2	287.2	283.2	281.1	279.1
77.5°	215.2	216.0	214.0	211.9	208.3
80°	169.9	173.9	171.9	169.9	167.9
82.5°	127.8	131.8	131.5	127.8	127.4
85°	66.7	72.7	72.8	72.8	72.8
87.5°	19.0	26.5	30.7	31.3	33.5
90°	6.0	11.9	24.0	27.0	30.0
92.5°	53.9	223.9	400.4	146.1	113.9
95°	128.9	474.6	1591.4	654.1	425.6
97.5°	213.4	531.6	2357.4	1814.9	1314.4
100°	275.7	565.8	2640.3	2658.9	2160.8
102.5°	335.7	604.7	2695.4	3285.3	2812.9
105°	431.6	666.0	2664.2	4067.4	3830.0
107.5°	533.4	742.1	2515.6	4444.6	4531.3
110°	605.4	792.9	2400.5	4525.7	4807.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	670.1	850.6	2292.6	4461.6	4876.6
115°	773.2	934.4	2145.8	4247.9	4831.0
117.5°	863.1	1023.7	2049.3	3947.0	4610.4
120°	923.0	1081.3	2010.9	3743.3	4411.4
122.5°	980.6	1131.8	1979.8	3553.1	4186.1
125°	1060.9	1207.4	1945.0	3291.6	3863.0
127.5°	1129.2	1275.7	1924.6	3070.4	3563.3
130°	1174.8	1321.3	1915.0	2935.2	3383.5
132.5°	1217.9	1357.4	1905.4	2821.5	3227.7
135°	1276.7	1414.4	1891.0	2666.0	3005.9
137.5°	1342.6	1468.0	1883.9	2535.4	2825.5
140°	1378.6	1501.6	1879.1	2448.3	2703.2
142.5°	1419.3	1533.0	1874.3	2370.9	2595.3
145°	1480.5	1583.0	1867.1	2269.6	2442.5
147.5°	1539.2	1628.9	1860.5	2184.2	2318.4
150°	1582.4	1655.6	1858.1	2133.3	2241.7
152.5°	1615.9	1684.5	1855.7	2089.7	2179.3
155°	1669.3	1725.0	1852.1	2036.4	2100.8
157.5°	1718.4	1761.2	1852.7	1997.5	2041.5
160°	1747.2	1785.3	1855.1	1975.7	2007.9
162.5°	1771.2	1804.6	1857.5	1956.4	1981.6
165°	1807.1	1830.6	1861.1	1933.3	1948.0
167.5°	1834.7	1848.8	1864.1	1919.3	1924.0
170°	1849.1	1860.8	1864.1	1912.0	1912.0
172.5°	1861.1	1868.1	1864.1	1902.4	1900.0
175°	1873.1	1876.0	1864.1	1890.9	1885.1
177.5°	1877.9	1875.5	1863.5	1880.2	1875.5
180°	1873.1	1873.1	1873.1	1873.1	1873.1

(END OF REPORT)