

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: P564241

Luminaire Tested: **SQ4-PR1-100U-050D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564241
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-100U-050D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

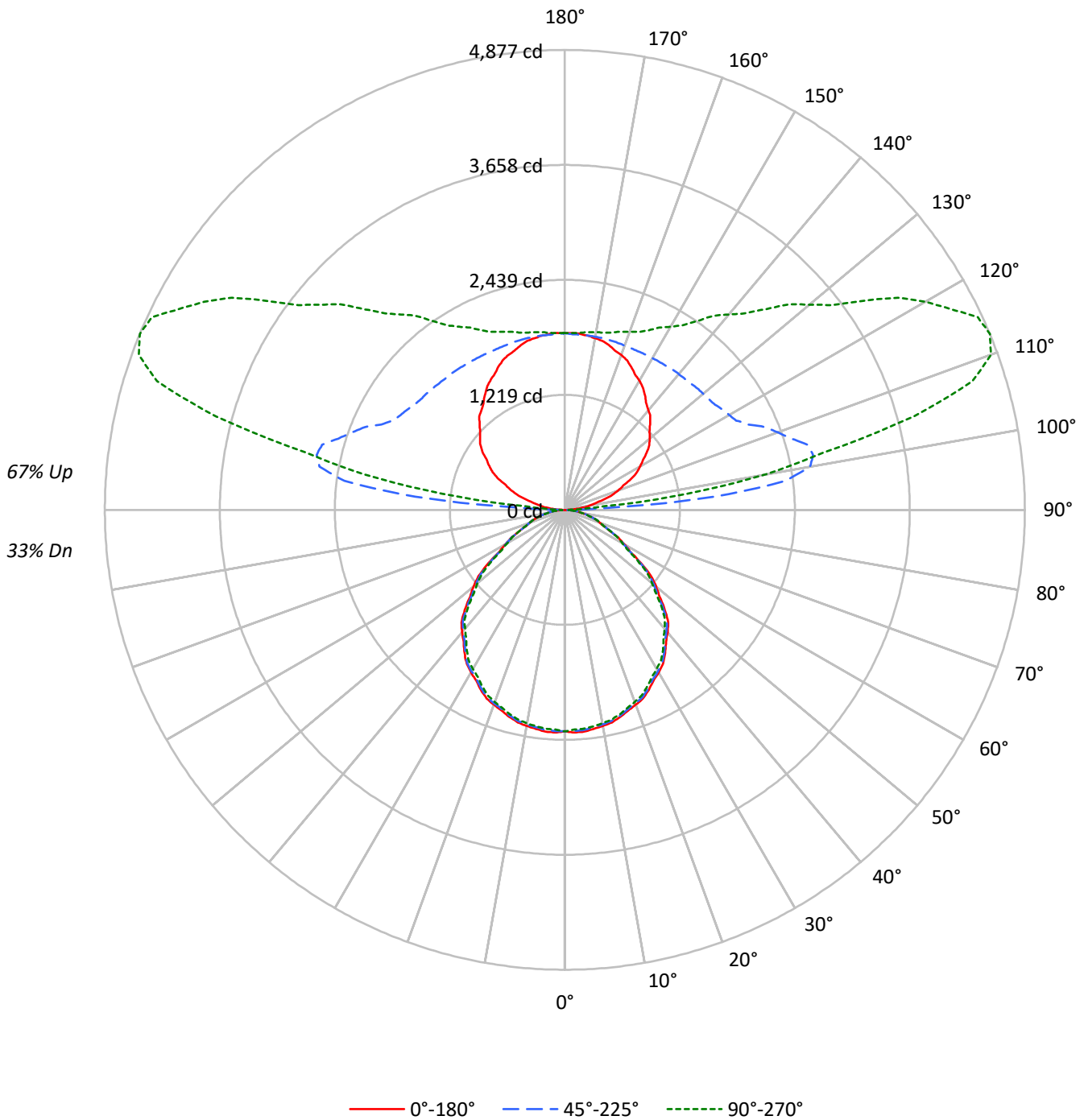
Lumens per Lamp: N/A
Luminaire Lumens: 18046.0 lumens
Efficiency: N/A
Efficacy: 141.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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	42	40	32	30	29	24
3	78	69	62	57	70	63	57	52	50	46	43	39	36	34	28	26	25	20
4	72	61	54	48	64	56	49	44	45	40	36	35	31	29	25	23	22	17
5	66	55	47	41	59	50	43	38	40	35	31	31	28	25	23	21	19	15
6	60	49	41	35	54	44	38	33	36	31	27	28	25	22	21	18	17	13
7	56	44	36	31	50	40	33	29	33	28	24	25	22	19	19	17	15	12
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	17	15	13	11
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	14	12	10
10	45	33	26	22	40	30	24	20	25	20	17	20	16	14	15	12	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7224	7224	7224
5°	7289	7233	7195
10°	7266	7215	7177
15°	7234	7189	7150
20°	7197	7151	7098
25°	7147	7099	7016
30°	7070	7019	6919
35°	6965	6904	6806
40°	6806	6733	6611
45°	6529	6415	6283
50°	6040	5895	5779
55°	5272	5153	5044
60°	4443	4405	4318
65°	3842	3858	3828
70°	3529	3547	3547
75°	3390	3390	3414
80°	3190	3225	3190
85°	2569	2855	2855



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.1	1.2
10°-20°	635.5	3.5
20°-30°	958.6	5.3
30°-40°	1142.1	6.3
40°-50°	1126.0	6.2
50°-60°	860.6	4.8
60°-70°	532.5	3.0
70°-80°	302.5	1.7
80°-90°	95.9	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°	1816.2	10.1
0°-40°	2958.3	16.4
0°-60°	4944.9	27.4
0°-90°	5875.8	32.6
90°-120°	5796.2	32.1
90°-150°	10589.9	58.7
90°-180°	12170.0	67.4
0°-180°	18046.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2349	2349	2349	2349	2349	
5°	2361	2335	2343	2335	2331	224
15°	2272	2248	2258	2250	2246	641
25°	2106	2080	2092	2070	2068	969
35°	1855	1834	1839	1815	1813	1158
45°	1501	1481	1475	1448	1444	1150
55°	983	967	961	945	941	881
65°	528	524	530	526	526	535
75°	285	285	285	287	287	301
85°	73	77	81	81	81	85
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°	2348.9	2348.9	2348.9	2348.9	2348.9
2.5°	2363.4	2342.9	2348.9	2343.8	2332.7
5°	2361.0	2335.3	2342.8	2334.6	2330.7
7.5°	2342.8	2317.5	2325.0	2316.9	2314.5
10°	2326.6	2302.9	2310.4	2302.3	2298.3
12.5°	2308.8	2283.5	2292.6	2282.8	2278.9
15°	2272.0	2248.3	2257.8	2249.7	2245.7
17.5°	2231.5	2206.2	2215.8	2206.3	2201.2
20°	2199.2	2175.4	2185.0	2170.8	2168.8
22.5°	2163.6	2139.8	2149.4	2130.4	2130.0
25°	2106.1	2080.4	2091.9	2069.6	2067.7
27.5°	2037.7	2014.0	2023.6	2000.8	1998.5
30°	1990.8	1967.0	1976.6	1952.2	1948.3
32.5°	1937.4	1915.2	1923.2	1898.9	1896.5
35°	1855.2	1833.5	1839.0	1814.7	1812.7
37.5°	1761.8	1742.0	1745.2	1718.4	1716.4
40°	1695.4	1675.6	1677.2	1648.8	1646.8
42.5°	1622.6	1602.8	1601.1	1572.8	1570.8
45°	1501.2	1481.4	1474.9	1448.5	1444.5
47.5°	1362.8	1343.0	1330.8	1309.3	1306.5
50°	1262.4	1242.7	1232.1	1213.8	1207.8
52.5°	1154.0	1134.2	1125.3	1108.6	1102.6
55°	983.3	967.4	961.0	944.7	940.8
57.5°	821.0	810.3	808.5	792.6	791.1
60°	722.3	716.3	716.2	702.0	702.0
62.5°	638.1	633.7	636.9	627.5	626.0
65°	528.0	524.1	530.1	526.0	526.0
67.5°	441.0	441.0	444.7	443.1	443.1
70°	392.5	392.5	394.5	394.5	394.5
72.5°	348.8	347.2	352.4	352.4	350.8
75°	285.3	285.3	285.3	287.3	287.3
77.5°	222.1	222.5	224.2	223.7	222.1
80°	180.1	182.0	182.1	180.1	180.1
82.5°	138.0	140.0	140.0	139.6	138.0
85°	72.8	76.8	80.9	80.9	80.9
87.5°	22.2	29.7	37.2	37.7	36.7
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)