

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: P562897

Luminaire Tested: **SQ4-PC3-100U-050D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P562897
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PC3-100U-050D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PYRAMID CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

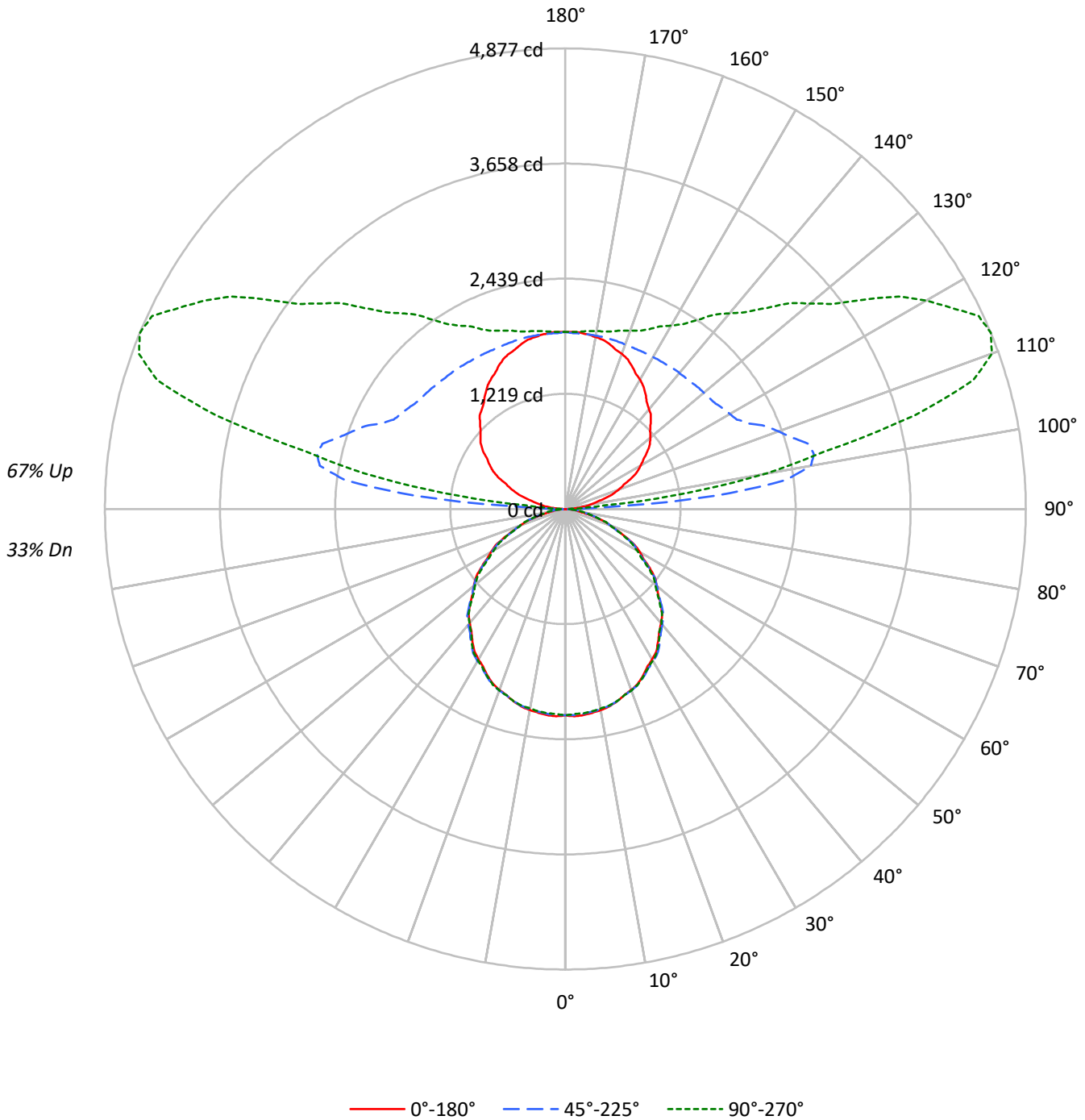
Lumens per Lamp: N/A
Luminaire Lumens: 18137.4 lumens
Efficiency: N/A
Efficacy: 142.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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	78	72	67	77	71	66	62	57	53	50	44	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	38	36	33	28	26	24	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	34	31	31	27	24	22	20	18	15
6	60	48	40	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	55	43	36	30	50	40	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	14	13	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6720	6720	6720
5°	6770	6727	6702
10°	6754	6722	6703
15°	6718	6718	6712
20°	6674	6694	6694
25°	6611	6659	6639
30°	6531	6610	6581
35°	6433	6532	6487
40°	6327	6417	6352
45°	6212	6256	6159
50°	6050	6050	5953
55°	5858	5782	5695
60°	5575	5463	5376
65°	5153	5050	5006
70°	4511	4548	4530
75°	3630	4015	4039
80°	2580	3404	3439
85°	1570	2855	2855



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.8	1.1
10°-20°	593.4	3.3
20°-30°	898.7	5.0
30°-40°	1077.4	5.9
40°-50°	1098.6	6.1
50°-60°	959.0	5.3
60°-70°	686.5	3.8
70°-80°	353.6	1.9
80°-90°	93.3	0.5
90°-100°	877.2	4.8
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°	1698.9	9.4
0°-40°	2776.2	15.3
0°-60°	4833.8	26.7
0°-90°	5967.2	32.9
90°-120°	5796.2	32.0
90°-150°	10589.9	58.4
90°-180°	12170.0	67.1
0°-180°	18137.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2185	2185	2185	2185	2185	
5°	2193	2171	2179	2173	2171	208
15°	2110	2092	2110	2110	2108	595
25°	1948	1934	1962	1956	1956	897
35°	1714	1710	1740	1728	1728	1072
45°	1428	1424	1438	1420	1416	1099
55°	1092	1079	1078	1062	1062	974
65°	708	692	694	688	688	700
75°	306	319	338	340	340	330
85°	44	68	81	83	81	61
90°	6	12	24	27	30	11
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°	2185.0	2185.0	2185.0	2185.0	2185.0
2.5°	2198.0	2179.0	2185.0	2180.0	2172.1
5°	2193.1	2171.3	2178.9	2172.8	2170.8
7.5°	2177.3	2155.6	2165.6	2161.5	2159.5
10°	2162.8	2141.0	2152.6	2148.5	2146.6
12.5°	2143.3	2123.2	2136.4	2132.4	2132.0
15°	2110.1	2092.3	2110.1	2110.1	2108.1
17.5°	2068.5	2052.3	2071.3	2072.5	2071.3
20°	2039.3	2021.5	2045.4	2043.4	2045.4
22.5°	2003.7	1989.1	2014.7	2009.4	2011.4
25°	1948.3	1934.4	1962.5	1956.4	1956.4
27.5°	1882.7	1872.9	1903.4	1896.9	1896.9
30°	1839.0	1829.2	1861.3	1853.2	1853.2
32.5°	1790.5	1783.8	1814.4	1804.7	1804.7
35°	1713.6	1709.7	1739.9	1727.8	1727.8
37.5°	1634.3	1630.7	1658.2	1643.5	1638.8
40°	1576.0	1574.1	1598.3	1582.1	1582.1
42.5°	1517.8	1515.8	1536.8	1517.4	1517.4
45°	1428.3	1424.4	1438.5	1420.2	1416.2
47.5°	1330.8	1326.9	1335.7	1315.8	1313.8
50°	1264.5	1260.5	1264.5	1246.2	1244.2
52.5°	1196.5	1189.4	1190.0	1171.8	1171.4
55°	1092.5	1078.7	1078.3	1062.2	1062.2
57.5°	982.4	964.2	965.9	952.1	950.1
60°	906.4	886.6	888.2	876.0	874.0
62.5°	831.9	809.0	813.7	799.9	799.6
65°	708.1	692.3	693.9	687.9	687.9
67.5°	589.1	574.5	585.1	580.2	579.8
70°	501.7	491.9	505.8	505.7	503.8
72.5°	420.8	420.4	437.8	437.8	439.0
75°	305.5	319.3	337.9	339.9	339.9
77.5°	203.9	228.5	248.8	249.6	249.3
80°	145.7	173.4	192.2	196.2	194.2
82.5°	98.7	128.0	143.6	147.6	145.7
85°	44.5	68.2	80.9	82.9	80.9
87.5°	14.1	29.6	37.2	37.7	35.1
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)