

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: P562889

Luminaire Tested: **SQ4-PC3-100U-050D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P562889
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-830-1D-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

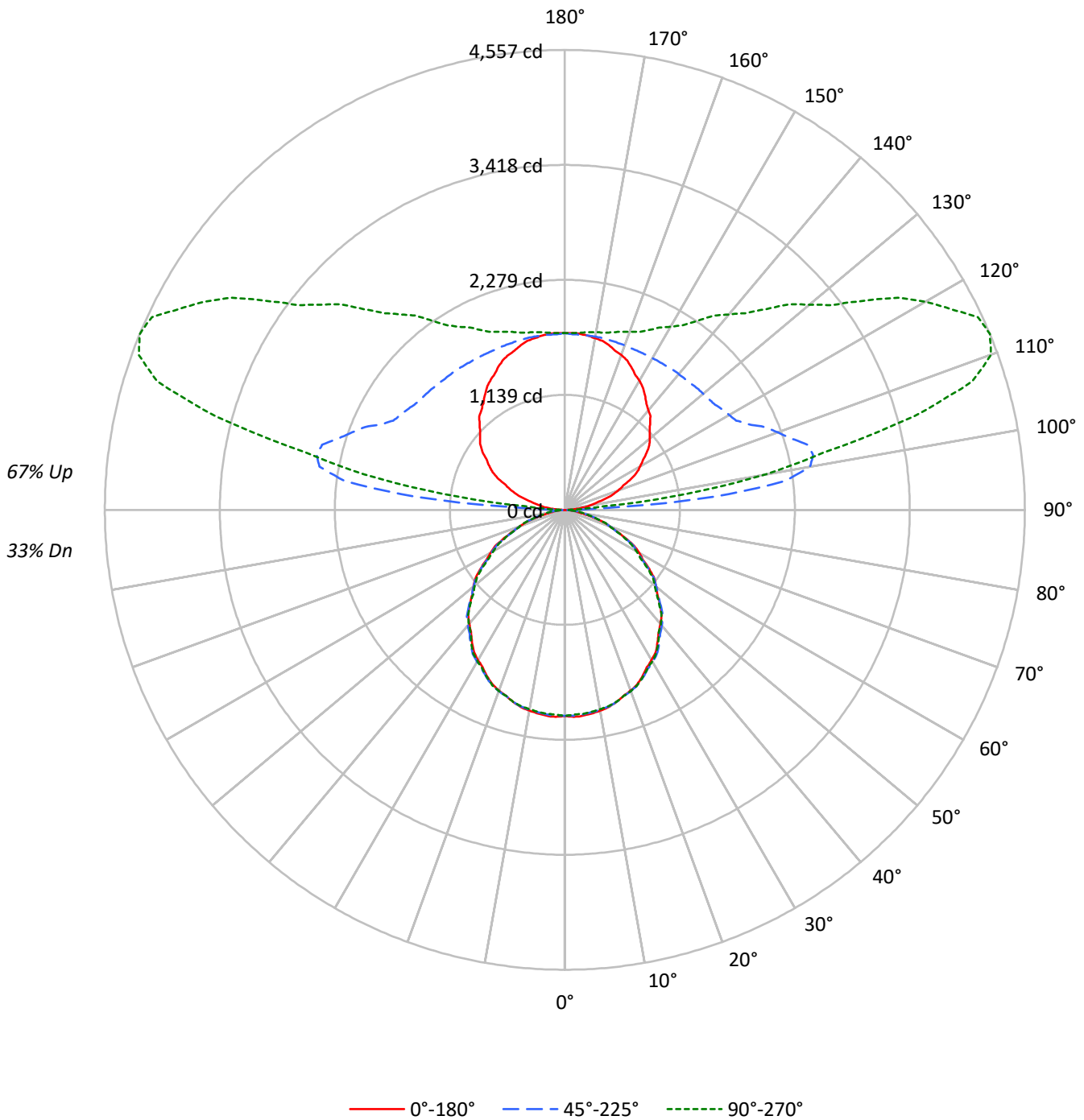
Lumens per Lamp: N/A
Luminaire Lumens: 16949.1 lumens
Efficiency: N/A
Efficacy: 133.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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	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°	6280	6280	6280
5°	6327	6286	6263
10°	6312	6282	6264
15°	6278	6278	6272
20°	6237	6256	6256
25°	6178	6223	6204
30°	6103	6177	6150
35°	6012	6104	6062
40°	5913	5996	5936
45°	5805	5846	5756
50°	5653	5653	5563
55°	5474	5403	5322
60°	5210	5105	5023
65°	4815	4719	4678
70°	4216	4250	4233
75°	3392	3751	3774
80°	2410	3181	3214
85°	1468	2668	2668



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.2	1.1
10°-20°	554.5	3.3
20°-30°	839.8	5.0
30°-40°	1006.8	5.9
40°-50°	1026.6	6.1
50°-60°	896.1	5.3
60°-70°	641.6	3.8
70°-80°	330.4	1.9
80°-90°	87.2	0.5
90°-100°	819.7	4.8
100°-110°	2262.9	13.4
110°-120°	2333.8	13.8
120°-130°	1875.4	11.1
130°-140°	1473.9	8.7
140°-150°	1130.4	6.7
150°-160°	812.4	4.8
160°-170°	496.8	2.9
170°-180°	167.5	1.0
0°-30°	1587.6	9.4
0°-40°	2594.4	15.3
0°-60°	4517.1	26.7
0°-90°	5576.2	32.9
90°-120°	5416.4	32.0
90°-150°	9896.1	58.4
90°-180°	11373.0	67.1
0°-180°	16949.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2042	2042	2042	2042	2042	
5°	2049	2029	2036	2030	2029	195
15°	1972	1955	1972	1972	1970	556
25°	1821	1808	1834	1828	1828	838
35°	1601	1598	1626	1615	1615	1001
45°	1335	1331	1344	1327	1323	1027
55°	1021	1008	1008	993	993	910
65°	662	647	648	643	643	654
75°	286	298	316	318	318	309
85°	42	64	76	78	76	57
90°	6	11	22	25	28	10
95°	120	444	1487	611	398	129
105°	403	622	2490	3801	3579	429
115°	722	873	2005	3970	4514	710
125°	991	1128	1818	3076	3610	882
135°	1193	1322	1767	2491	2809	923
145°	1384	1479	1745	2121	2282	866
155°	1560	1612	1731	1903	1963	719
165°	1689	1711	1739	1807	1820	476
175°	1750	1753	1742	1767	1762	166
180°	1750	1750	1750	1750	1750	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2041.9	2041.9	2041.9	2041.9	2041.9
2.5°	2054.0	2036.2	2041.9	2037.2	2029.8
5°	2049.4	2029.1	2036.2	2030.5	2028.6
7.5°	2034.7	2014.3	2023.7	2019.9	2018.0
10°	2021.1	2000.7	2011.6	2007.8	2005.9
12.5°	2002.9	1984.1	1996.5	1992.7	1992.3
15°	1971.9	1955.3	1971.9	1971.9	1970.0
17.5°	1933.0	1917.8	1935.6	1936.7	1935.6
20°	1905.7	1889.1	1911.4	1909.6	1911.4
22.5°	1872.5	1858.8	1882.7	1877.8	1879.6
25°	1820.7	1807.7	1833.9	1828.2	1828.2
27.5°	1759.4	1750.2	1778.7	1772.6	1772.6
30°	1718.6	1709.3	1739.4	1731.8	1731.8
32.5°	1673.2	1666.9	1695.5	1686.4	1686.4
35°	1601.4	1597.7	1625.9	1614.6	1614.6
37.5°	1527.2	1523.9	1549.5	1535.8	1531.4
40°	1472.8	1470.9	1493.6	1478.5	1478.5
42.5°	1418.3	1416.5	1436.1	1418.0	1418.0
45°	1334.8	1331.1	1344.2	1327.1	1323.4
47.5°	1243.6	1239.9	1248.2	1229.6	1227.8
50°	1181.6	1177.9	1181.6	1164.6	1162.7
52.5°	1118.1	1111.5	1112.1	1095.0	1094.7
55°	1020.9	1008.0	1007.7	992.6	992.6
57.5°	918.1	901.1	902.6	889.7	887.8
60°	847.0	828.5	830.0	818.6	816.7
62.5°	777.4	756.0	760.4	747.5	747.2
65°	661.7	646.9	648.5	642.8	642.8
67.5°	550.5	536.9	546.8	542.2	541.8
70°	468.9	459.6	472.7	472.6	470.8
72.5°	393.2	392.9	409.1	409.2	410.3
75°	285.5	298.4	315.7	317.6	317.6
77.5°	190.6	213.5	232.5	233.3	232.9
80°	136.1	162.0	179.6	183.3	181.5
82.5°	92.3	119.6	134.2	138.0	136.1
85°	41.6	63.8	75.6	77.5	75.6
87.5°	13.2	27.6	34.7	35.2	32.8
90°	5.6	11.1	22.4	25.3	28.0
92.5°	50.4	209.2	374.2	136.5	106.4
95°	120.4	443.5	1487.1	611.3	397.7
97.5°	199.4	496.8	2202.9	1696.0	1228.3
100°	257.7	528.7	2467.3	2484.7	2019.2
102.5°	313.7	565.0	2518.8	3070.0	2628.6
105°	403.3	622.3	2489.7	3800.9	3579.1
107.5°	498.5	693.5	2350.8	4153.4	4234.5
110°	565.7	741.0	2243.3	4229.2	4492.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	626.2	794.9	2142.4	4169.3	4557.1
115°	722.5	873.2	2005.2	3969.6	4514.5
117.5°	806.6	956.6	1915.0	3688.4	4308.4
120°	862.6	1010.4	1879.2	3498.1	4122.4
122.5°	916.3	1057.6	1850.1	3320.4	3911.8
125°	991.4	1128.3	1817.6	3076.0	3609.9
127.5°	1055.3	1192.2	1798.5	2869.3	3329.9
130°	1097.8	1234.7	1789.6	2742.9	3161.8
132.5°	1138.2	1268.5	1780.6	2636.7	3016.2
135°	1193.0	1321.7	1767.2	2491.3	2809.0
137.5°	1254.7	1371.9	1760.4	2369.3	2640.4
140°	1288.3	1403.3	1756.0	2287.9	2526.1
142.5°	1326.4	1432.6	1751.5	2215.5	2425.3
145°	1383.5	1479.3	1744.8	2120.9	2282.5
147.5°	1438.4	1522.2	1738.6	2041.1	2166.5
150°	1478.7	1547.2	1736.4	1993.5	2094.8
152.5°	1510.1	1574.1	1734.1	1952.8	2036.6
155°	1559.9	1611.9	1730.8	1903.0	1963.2
157.5°	1605.8	1645.8	1731.3	1866.7	1907.8
160°	1632.7	1668.3	1733.6	1846.3	1876.4
162.5°	1655.1	1686.4	1735.8	1828.2	1851.7
165°	1688.7	1710.7	1739.2	1806.7	1820.4
167.5°	1714.5	1727.7	1742.0	1793.6	1798.0
170°	1728.0	1738.9	1742.0	1786.8	1786.8
172.5°	1739.2	1745.7	1742.0	1777.8	1775.6
175°	1750.4	1753.1	1742.0	1767.0	1761.6
177.5°	1754.8	1752.6	1741.4	1757.0	1752.6
180°	1750.4	1750.4	1750.4	1750.4	1750.4

(END OF REPORT)