

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: P562913

Luminaire Tested: **SQ4-PC3-100U-075D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P562913  
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-075D-830-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PYRAMID CONTINUOUS LENS.  
DOWNLIGHT 750 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: 19589.9 lumens  
Efficiency: N/A  
Efficacy: 127.7 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: General Diffuse

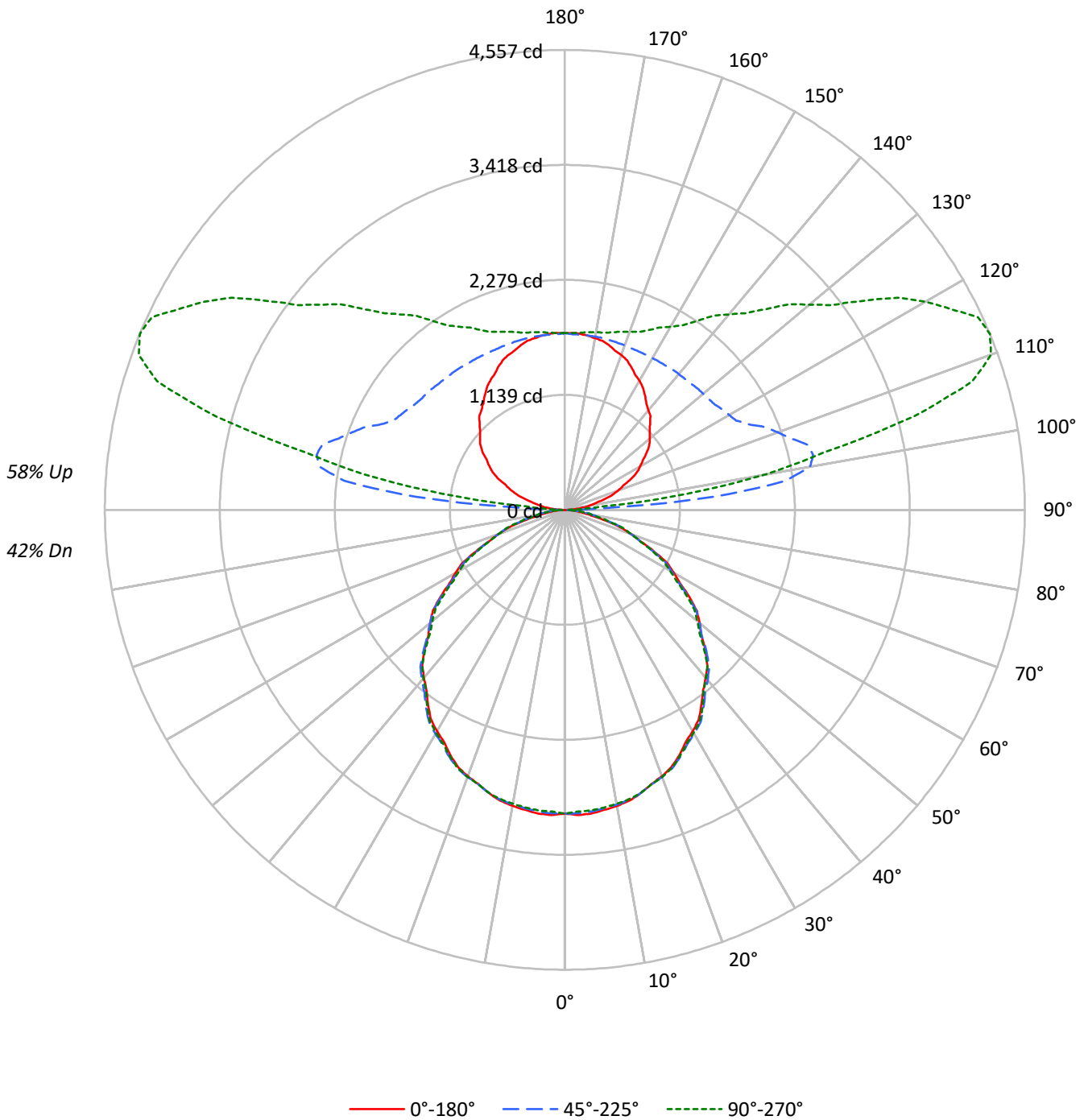
Input Watts (W): 153.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	49	49	49	42
1	96	92	88	85	87	84	81	78	69	67	65	56	54	53	43	42	41	35
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35	30
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	31	30	25
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	27	25	22
5	67	55	47	41	61	51	44	39	42	37	33	34	30	27	27	24	22	19
6	61	50	42	36	56	46	39	33	38	33	29	31	27	24	24	22	19	16
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17	14
8	53	40	33	28	48	37	31	26	31	26	22	26	22	19	20	18	15	13
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	20	26	21	18	22	18	15	17	15	13	11

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	9255	9255	9255
5°	9325	9265	9231
10°	9302	9259	9233
15°	9254	9254	9245
20°	9193	9220	9220
25°	9106	9172	9144
30°	8995	9104	9064
35°	8861	8997	8934
40°	8715	8838	8748
45°	8556	8617	8484
50°	8333	8333	8199
55°	8068	7963	7844
60°	7679	7524	7404
65°	7097	6955	6894
70°	6214	6264	6239
75°	5000	5530	5562
80°	3553	4688	4738
85°	2163	3934	3934



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	284.8	1.5
10°-20°	817.3	4.2
20°-30°	1237.7	6.3
30°-40°	1483.9	7.6
40°-50°	1513.1	7.7
50°-60°	1320.8	6.7
60°-70°	945.6	4.8
70°-80°	487.0	2.5
80°-90°	126.8	0.6
90°-100°	819.7	4.2
100°-110°	2262.9	11.6
110°-120°	2333.8	11.9
120°-130°	1875.4	9.6
130°-140°	1473.9	7.5
140°-150°	1130.4	5.8
150°-160°	812.4	4.1
160°-170°	496.8	2.5
170°-180°	167.5	0.9
0°-30°	2339.9	11.9
0°-40°	3823.8	19.5
0°-60°	6657.7	34.0
0°-90°	8217.0	41.9
90°-120°	5416.4	27.6
90°-150°	9896.1	50.5
90°-180°	11373.0	58.1
0°-180°	19589.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3010	3010	3010	3010	3010	
5°	3021	2991	3001	2993	2990	287
15°	2906	2882	2906	2906	2904	819
25°	2683	2664	2703	2695	2695	1235
35°	2360	2355	2396	2380	2380	1476
45°	1967	1962	1981	1956	1951	1514
55°	1505	1486	1485	1463	1463	1341
65°	975	954	956	947	947	965
75°	421	440	465	468	468	455
85°	61	94	112	114	112	83
90°	6	11	22	25	28	11
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°	3009.5	3009.5	3009.5	3009.5	3009.5
2.5°	3027.3	3001.1	3009.5	3002.5	2991.6
5°	3020.6	2990.6	3001.1	2992.7	2990.0
7.5°	2998.9	2968.9	2982.7	2977.1	2974.4
10°	2978.8	2948.8	2964.9	2959.2	2956.5
12.5°	2952.1	2924.3	2942.6	2937.0	2936.5
15°	2906.4	2881.8	2906.4	2906.3	2903.6
17.5°	2849.0	2826.6	2852.9	2854.5	2852.9
20°	2808.8	2784.3	2817.2	2814.5	2817.2
22.5°	2759.8	2739.6	2774.8	2767.7	2770.4
25°	2683.4	2664.4	2702.9	2694.6	2694.6
27.5°	2593.2	2579.5	2621.6	2612.7	2612.7
30°	2533.0	2519.3	2563.6	2552.5	2552.5
32.5°	2466.1	2456.8	2499.0	2485.6	2485.6
35°	2360.2	2354.8	2396.4	2379.7	2379.7
37.5°	2251.0	2246.1	2283.9	2263.6	2257.1
40°	2170.7	2168.0	2201.4	2179.1	2179.1
42.5°	2090.5	2087.7	2116.7	2089.9	2089.9
45°	1967.3	1961.9	1981.2	1956.0	1950.6
47.5°	1833.0	1827.5	1839.7	1812.3	1809.6
50°	1741.6	1736.1	1741.6	1716.5	1713.7
52.5°	1648.0	1638.2	1639.0	1614.0	1613.4
55°	1504.7	1485.7	1485.2	1462.9	1462.9
57.5°	1353.1	1328.1	1330.3	1311.3	1308.6
60°	1248.4	1221.1	1223.3	1206.5	1203.8
62.5°	1145.8	1114.2	1120.7	1101.8	1101.2
65°	975.3	953.5	955.8	947.4	947.4
67.5°	811.4	791.3	805.9	799.2	798.6
70°	691.1	677.4	696.6	696.6	693.8
72.5°	579.6	579.1	603.0	603.0	604.7
75°	420.8	439.8	465.4	468.1	468.1
77.5°	280.9	314.7	342.7	343.8	343.3
80°	200.6	238.8	264.7	270.2	267.5
82.5°	136.0	176.3	197.8	203.4	200.6
85°	61.3	94.0	111.5	114.2	111.5
87.5°	19.0	39.7	49.1	49.5	45.7
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)