

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: P562609

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

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P562609  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-PC3-050U-050D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PYRAMID CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12002.7 lumens  
Efficiency: N/A  
Efficacy: 150.8 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

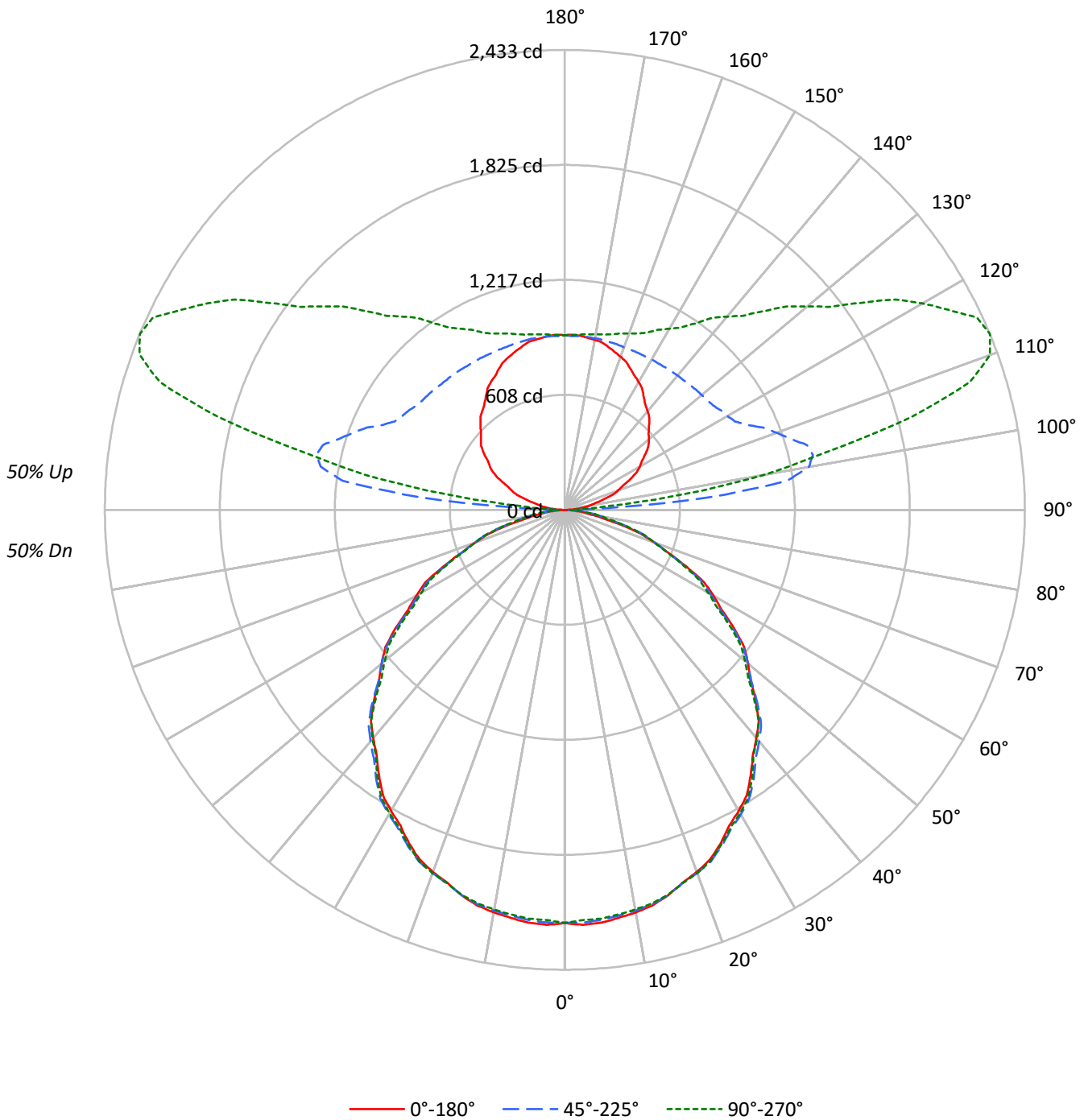
Input Watts (W): 79.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	90	86	90	86	83	80	73	71	68	61	59	58	49	48	47	42
2	89	82	76	70	82	75	70	66	64	60	57	53	51	48	44	42	40	35
3	81	72	64	59	75	66	60	55	56	52	48	47	44	41	39	36	34	30
4	74	63	56	49	68	59	52	46	50	45	41	42	38	35	34	32	29	25
5	68	56	48	42	63	52	45	40	45	39	35	38	33	30	31	28	25	22
6	63	51	42	37	58	47	40	35	40	35	30	34	30	26	28	25	22	19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20	17
8	54	41	34	28	49	39	32	27	33	28	24	28	24	21	23	20	18	15
9	50	38	30	25	46	35	28	24	30	25	21	26	22	19	22	18	16	14
10	47	35	27	23	43	32	26	21	28	23	19	24	20	17	20	17	14	12

**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	1.7
10°-20°	593.4	4.9
20°-30°	898.7	7.5
30°-40°	1077.4	9.0
40°-50°	1098.6	9.2
50°-60°	959.0	8.0
60°-70°	686.5	5.7
70°-80°	353.6	2.9
80°-90°	93.0	0.8
90°-100°	443.8	3.7
100°-110°	1205.5	10.0
110°-120°	1239.5	10.3
120°-130°	991.0	8.3
130°-140°	778.7	6.5
140°-150°	597.1	5.0
150°-160°	429.4	3.6
160°-170°	262.6	2.2
170°-180°	88.5	0.7
0°-30°	1698.9	14.2
0°-40°	2776.2	23.1
0°-60°	4833.8	40.3
0°-90°	5966.9	49.7
90°-120°	2888.8	24.1
90°-150°	5255.5	43.8
90°-180°	6036.0	50.3
0°-180°	12002.7	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°	3	12	21	27	27	6
95°	65	243	773	336	226	69
105°	214	333	1326	2019	1899	227
115°	380	462	1061	2111	2405	375
125°	523	596	960	1618	1908	466
135°	630	700	933	1318	1486	487
145°	728	781	922	1120	1204	457
155°	823	852	916	1005	1034	380
165°	892	903	918	957	960	252
175°	924	927	922	933	930	88
180°	924	924	924	924	924	



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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°	13.5	29.5	36.5	37.6	34.5
90°	3.0	11.7	20.8	26.8	26.8
92.5°	26.8	121.5	211.0	90.6	76.7
95°	65.4	242.7	772.8	336.3	225.9
97.5°	108.2	268.0	1184.8	921.8	647.4
100°	136.7	285.0	1310.9	1328.8	1073.1
102.5°	165.3	301.9	1344.1	1643.4	1417.9
105°	214.0	333.2	1325.7	2018.6	1899.4
107.5°	264.5	369.8	1249.0	2212.3	2245.4
110°	300.2	396.1	1192.0	2250.4	2392.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	331.1	422.4	1134.9	2218.8	2433.2
115°	380.5	461.9	1061.2	2111.2	2404.7
117.5°	426.8	504.7	1014.2	1958.6	2289.4
120°	457.8	533.3	992.8	1856.3	2184.8
122.5°	483.9	559.5	978.5	1753.8	2070.6
125°	523.2	595.8	960.1	1617.7	1908.3
127.5°	558.2	630.3	950.0	1514.5	1763.9
130°	579.6	649.4	945.2	1449.7	1673.5
132.5°	601.0	670.8	940.5	1394.4	1592.6
135°	630.2	699.9	933.4	1317.7	1486.2
137.5°	661.7	725.0	929.8	1249.9	1391.7
140°	680.7	741.7	927.4	1206.7	1334.6
142.5°	699.7	756.1	925.0	1173.0	1279.9
145°	728.3	780.6	921.5	1119.6	1203.8
147.5°	760.4	805.1	918.5	1077.5	1143.8
150°	781.8	819.5	918.5	1053.4	1105.8
152.5°	798.4	831.5	916.1	1031.8	1074.8
155°	823.4	852.4	915.5	1005.3	1034.4
157.5°	847.7	870.4	915.5	987.4	1009.4
160°	862.0	882.4	915.5	975.4	992.8
162.5°	876.3	892.0	917.9	965.7	978.5
165°	891.7	903.4	918.5	957.2	960.1
167.5°	907.8	913.6	921.5	947.1	949.4
170°	912.5	918.4	921.5	942.3	942.3
172.5°	917.3	920.8	921.5	937.5	937.5
175°	924.4	927.3	921.5	933.3	930.4
177.5°	926.8	926.8	919.7	929.1	924.4
180°	924.4	924.4	924.4	924.4	924.4

(END OF REPORT)