

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: P564625

Luminaire Tested: **SQ4-PW1-050U-050D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564625  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PW1-050U-050D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES 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: 11881.8 lumens  
Efficiency: N/A  
Efficacy: 149.3 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

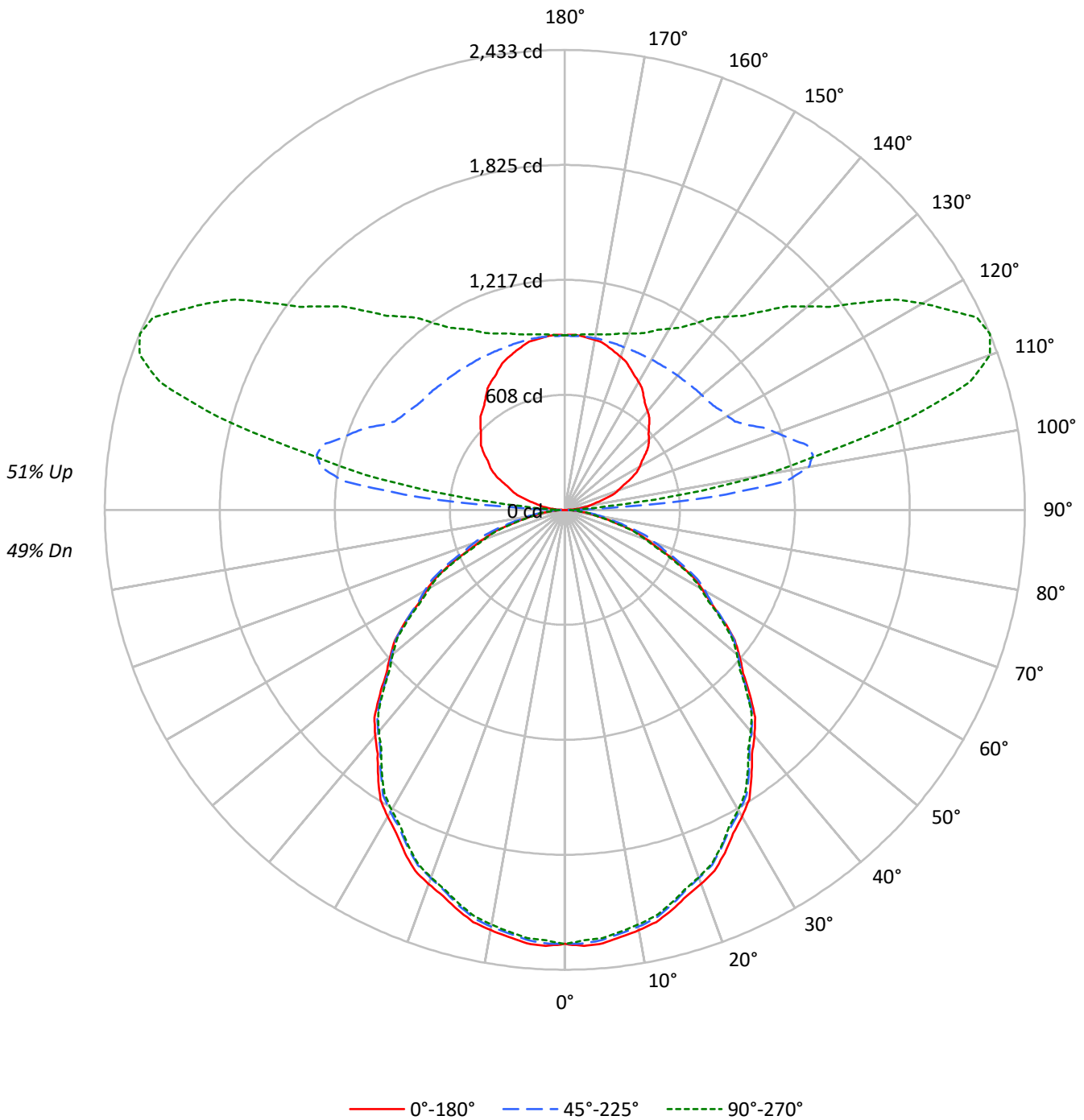
Input Watts (W): 79.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	55	55	55	49
1	98	93	90	86	90	86	83	80	73	70	68	60	59	57	49	48	47	42
2	89	82	76	70	82	75	70	66	64	60	57	53	50	48	43	41	40	35
3	81	72	65	59	75	66	60	55	56	52	48	47	44	41	38	36	34	30
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	32	29	26
5	68	57	49	43	63	53	45	40	45	39	35	38	33	30	31	28	25	22
6	63	51	43	37	58	47	40	35	40	35	31	34	30	26	28	25	22	19
7	58	46	38	32	53	43	36	31	37	31	27	31	27	23	26	22	20	17
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	24	20	18	15
9	50	38	31	26	46	35	29	24	31	25	21	26	22	19	22	19	16	14
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15	13

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

	0°	45°	90°
0°	7062	7062	7062
5°	7108	7051	7020
10°	7051	6994	6956
15°	6976	6899	6873
20°	6893	6787	6774
25°	6796	6673	6652
30°	6653	6552	6509
35°	6464	6373	6335
40°	6262	6165	6140
45°	6019	5939	5913
50°	5769	5721	5682
55°	5500	5500	5413
60°	5164	5264	5077
65°	4726	4961	4608
70°	4166	4566	4057
75°	3558	4086	3461
80°	2759	3439	2795
85°	1785	2643	2357



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	216.2	1.8
10°-20°	610.5	5.1
20°-30°	905.5	7.6
30°-40°	1059.6	8.9
40°-50°	1054.8	8.9
50°-60°	910.9	7.7
60°-70°	655.7	5.5
70°-80°	343.8	2.9
80°-90°	88.8	0.7
90°-100°	443.8	3.7
100°-110°	1205.5	10.1
110°-120°	1239.5	10.4
120°-130°	991.0	8.3
130°-140°	778.7	6.6
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°	1732.2	14.6
0°-40°	2791.8	23.5
0°-60°	4757.6	40.0
0°-90°	5845.9	49.2
90°-120°	2888.8	24.3
90°-150°	5255.5	44.2
90°-180°	6036.0	50.8
0°-180°	11881.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2296	2296	2296	2296	2296	
5°	2302	2277	2284	2278	2274	218
15°	2191	2163	2167	2163	2159	618
25°	2003	1969	1966	1954	1960	921
35°	1722	1698	1697	1681	1687	1076
45°	1384	1372	1366	1362	1360	1068
55°	1026	1024	1026	1012	1010	915
65°	649	669	682	655	633	644
75°	299	327	344	321	291	321
85°	51	66	75	71	67	67
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°	2296.3	2296.3	2296.3	2296.3	2296.3
2.5°	2309.2	2290.2	2296.3	2291.2	2280.1
5°	2302.4	2276.6	2284.1	2278.0	2274.0
7.5°	2278.9	2255.1	2260.7	2254.1	2251.8
10°	2257.8	2234.1	2239.6	2231.4	2227.5
12.5°	2233.6	2208.2	2213.7	2205.6	2203.2
15°	2191.1	2163.4	2166.8	2162.7	2158.7
17.5°	2141.7	2113.6	2114.2	2107.7	2106.9
20°	2106.1	2076.4	2073.7	2065.7	2069.7
22.5°	2067.3	2036.0	2033.3	2022.1	2027.6
25°	2002.9	1969.3	1966.5	1954.5	1960.4
27.5°	1928.5	1895.2	1895.3	1878.4	1884.8
30°	1873.4	1841.8	1845.1	1825.1	1833.0
32.5°	1815.2	1786.7	1788.5	1768.4	1776.3
35°	1721.7	1698.0	1697.4	1681.4	1687.3
37.5°	1626.2	1605.2	1601.9	1592.7	1594.2
40°	1559.9	1542.0	1535.6	1529.5	1529.5
42.5°	1490.3	1474.0	1467.6	1463.1	1461.5
45°	1383.8	1372.0	1365.6	1361.5	1359.6
47.5°	1278.6	1267.6	1262.0	1259.2	1257.2
50°	1205.8	1197.9	1195.7	1189.6	1187.6
52.5°	1133.0	1128.2	1126.1	1118.4	1116.4
55°	1025.7	1023.8	1025.7	1011.5	1009.6
57.5°	914.1	917.2	923.8	904.6	899.9
60°	839.6	847.5	855.8	833.4	825.4
62.5°	763.5	776.2	787.8	762.1	751.0
65°	649.4	669.2	681.8	655.0	633.2
67.5°	539.4	563.9	579.0	550.1	525.6
70°	463.3	491.0	507.8	478.9	451.2
72.5°	396.9	427.8	441.5	414.1	386.4
75°	299.4	327.1	343.9	321.0	291.3
77.5°	212.4	238.5	252.5	232.5	208.0
80°	155.8	183.5	194.2	177.6	157.8
82.5°	110.5	133.4	140.8	130.8	117.3
85°	50.6	66.4	74.9	70.7	66.8
87.5°	13.5	26.4	34.9	36.1	37.7
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)