

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: P564961

Luminaire Tested: **SQ4-PW1-100U-100D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564961  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-PW1-100U-100D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 1000 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: 23615.5 lumens  
Efficiency: N/A  
Efficacy: 129.6 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

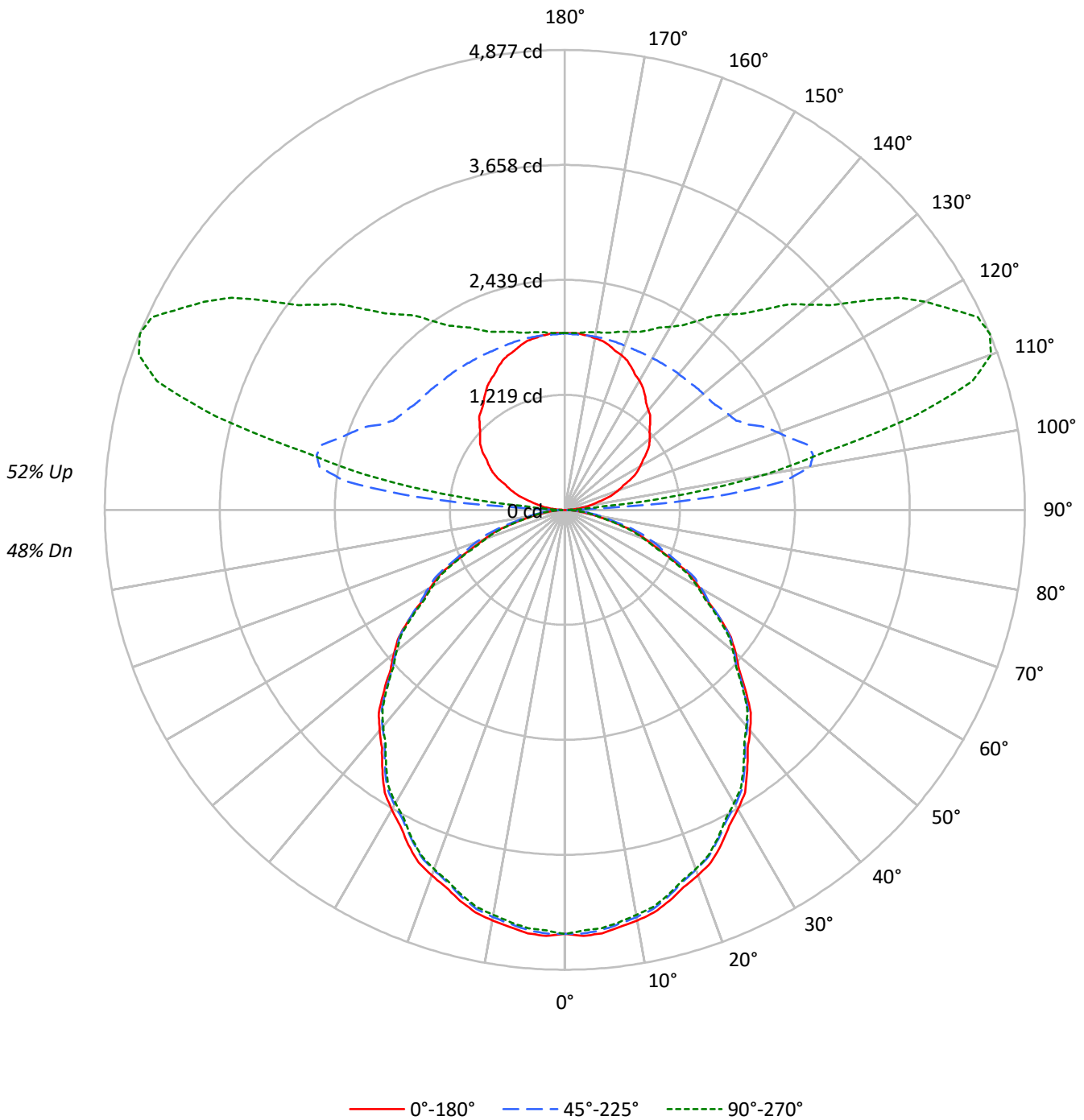
Input Watts (W): 182.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55	48				48
1	98	93	89	86	90	86	83	80	72	70	68	60	58	57	49	47	46				41	
2	89	82	75	70	82	75	70	66	64	60	56	53	50	48	43	41	39				35	
3	81	72	64	59	74	66	60	55	56	51	47	47	43	40	38	36	33				29	
4	74	63	56	50	68	59	52	47	50	45	40	42	38	35	34	31	29				25	
5	68	57	48	43	62	52	45	40	45	39	35	37	33	30	31	28	25				22	
6	63	51	43	37	58	47	40	35	40	35	30	34	30	26	28	25	22				19	
7	58	46	38	32	53	43	35	30	36	31	27	31	26	23	25	22	20				17	
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	18				15	
9	50	38	30	25	46	35	29	24	30	25	21	26	22	19	21	18	16				14	
10	47	35	28	23	43	32	26	22	28	23	19	24	20	17	20	17	14				12	

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

	0°	45°	90°
0°	13830	13830	13830
5°	13919	13809	13748
10°	13808	13697	13622
15°	13662	13511	13460
20°	13499	13291	13265
25°	13310	13068	13028
30°	13029	12832	12747
35°	12659	12480	12406
40°	12264	12073	12025
45°	11787	11632	11580
50°	11298	11203	11127
55°	10771	10771	10601
60°	10114	10308	9943
65°	9255	9716	9024
70°	8158	8942	7944
75°	6968	8003	6779
80°	5403	6737	5473
85°	3497	5173	4612



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	423.5	1.8
10°-20°	1195.5	5.1
20°-30°	1773.4	7.5
30°-40°	2075.0	8.8
40°-50°	2065.8	8.7
50°-60°	1783.9	7.6
60°-70°	1284.1	5.4
70°-80°	673.4	2.9
80°-90°	170.8	0.7
90°-100°	877.2	3.7
100°-110°	2421.6	10.3
110°-120°	2497.4	10.6
120°-130°	2006.9	8.5
130°-140°	1577.2	6.7
140°-150°	1209.7	5.1
150°-160°	869.4	3.7
160°-170°	531.7	2.3
170°-180°	179.2	0.8
0°-30°	3392.4	14.4
0°-40°	5467.4	23.2
0°-60°	9317.0	39.5
0°-90°	11445.3	48.5
90°-120°	5796.2	24.5
90°-150°	10589.9	44.8
90°-180°	12170.0	51.5
0°-180°	23615.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4497	4497	4497	4497	4497	
5°	4509	4458	4473	4461	4453	427
15°	4291	4237	4243	4235	4228	1209
25°	3922	3857	3851	3828	3839	1804
35°	3372	3325	3324	3293	3304	2108
45°	2710	2687	2674	2666	2662	2091
55°	2009	2005	2009	1981	1977	1792
65°	1272	1311	1335	1283	1240	1260
75°	586	641	674	629	570	629
85°	99	130	147	138	131	131
90°	6	12	24	27	30	13
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°	4496.9	4496.9	4496.9	4496.9	4496.9
2.5°	4522.3	4485.1	4496.9	4486.9	4465.2
5°	4508.8	4458.5	4473.2	4461.1	4453.3
7.5°	4462.9	4416.4	4427.2	4414.4	4409.8
10°	4421.7	4375.2	4386.0	4370.0	4362.2
12.5°	4374.1	4324.5	4335.3	4319.3	4314.7
15°	4290.9	4236.7	4243.4	4235.3	4227.5
17.5°	4194.2	4139.2	4140.3	4127.6	4126.1
20°	4124.5	4066.4	4061.1	4045.4	4053.2
22.5°	4048.4	3987.2	3981.9	3959.9	3970.8
25°	3922.4	3856.6	3851.1	3827.6	3839.2
27.5°	3776.6	3711.5	3711.7	3678.7	3691.0
30°	3668.9	3606.9	3613.4	3574.1	3589.6
32.5°	3554.8	3499.0	3502.5	3463.2	3478.7
35°	3371.7	3325.2	3324.2	3292.7	3304.4
37.5°	3184.7	3143.6	3137.2	3119.0	3122.1
40°	3054.7	3019.9	3007.2	2995.3	2995.3
42.5°	2918.4	2886.7	2874.1	2865.3	2862.2
45°	2710.0	2686.8	2674.4	2666.4	2662.5
47.5°	2504.0	2482.3	2471.5	2465.9	2462.0
50°	2361.4	2345.9	2341.6	2329.6	2325.7
52.5°	2218.7	2209.5	2205.3	2190.1	2186.3
55°	2008.8	2004.9	2008.8	1980.9	1977.1
57.5°	1790.1	1796.3	1809.1	1771.6	1762.3
60°	1644.3	1659.7	1675.9	1632.0	1616.5
62.5°	1495.3	1520.1	1542.8	1492.4	1470.7
65°	1271.8	1310.6	1335.2	1282.7	1240.1
67.5°	1056.3	1104.3	1133.9	1077.4	1029.3
70°	907.3	961.5	994.5	937.8	883.5
72.5°	777.4	837.8	864.5	811.0	756.8
75°	586.4	640.6	673.5	628.6	570.5
77.5°	416.0	467.2	494.5	455.3	407.3
80°	305.1	359.3	380.4	347.8	309.0
82.5°	216.3	261.3	275.8	256.1	229.8
85°	99.1	130.0	146.6	138.5	130.7
87.5°	26.6	49.4	65.0	65.7	69.4
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)