

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: P564977

Luminaire Tested: **SQ4-PW1-100U-125D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564977  
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-125D-830-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 1250 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: 25020.7 lumens  
Efficiency: N/A  
Efficacy: 116.5 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

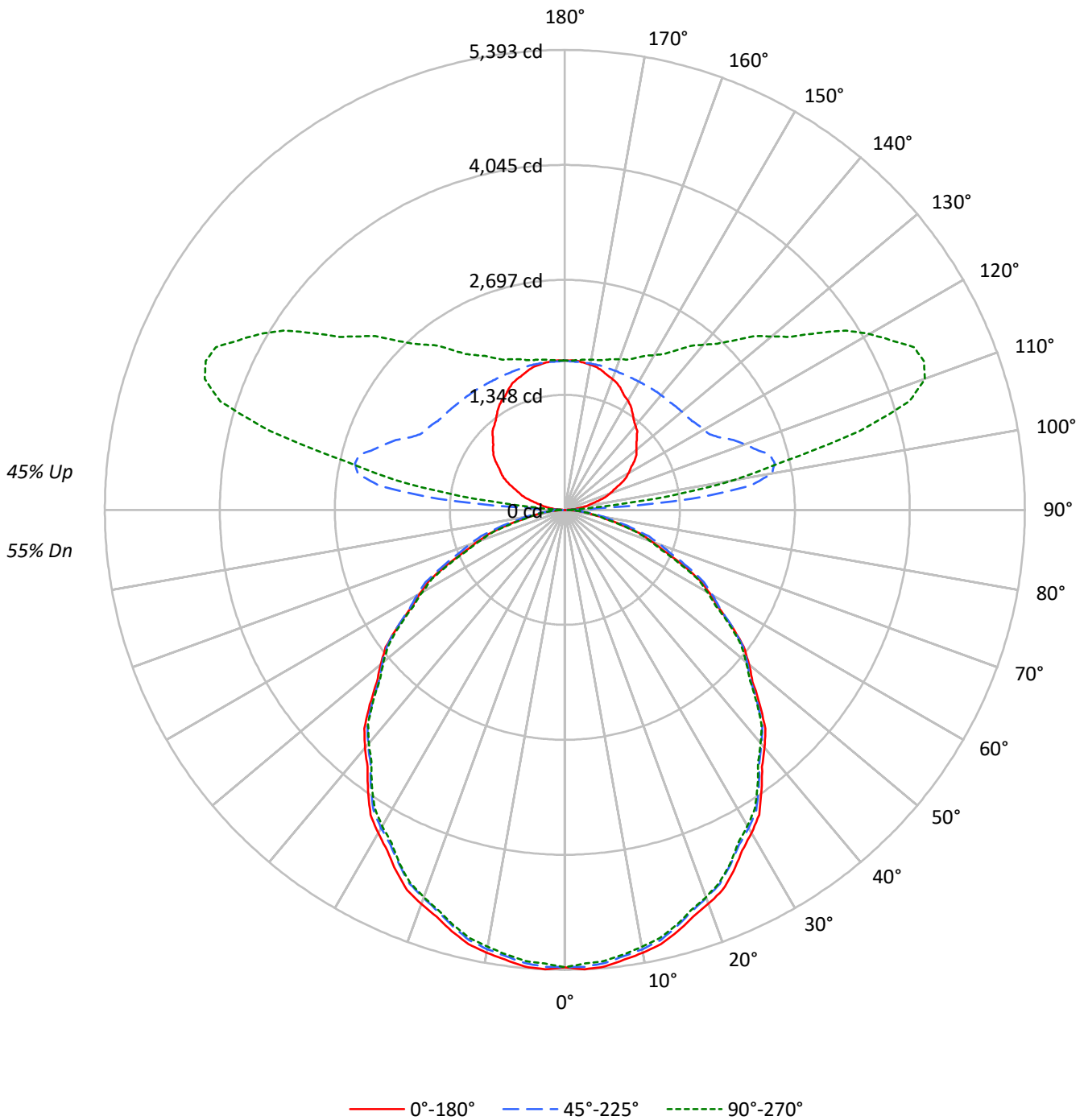
Input Watts (W): 214.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	99	95	91	87	92	88	85	82	76	73	71	64	62	61	53	52	51	46
2	90	83	77	71	83	77	72	67	66	62	59	56	53	51	47	45	43	39
3	82	73	65	60	76	68	61	56	59	54	49	50	46	43	42	39	37	33
4	75	64	57	50	70	60	53	48	52	47	42	44	40	37	37	34	32	28
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	30	28	25
6	64	52	43	38	59	48	41	36	42	36	32	36	32	28	31	27	24	22
7	59	47	39	33	55	44	36	31	38	32	28	33	28	25	28	24	22	19
8	55	42	35	29	51	40	33	28	35	29	25	30	26	22	26	22	19	17
9	51	39	31	26	47	36	30	25	32	26	22	28	23	20	24	20	18	15
10	48	36	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14

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

	0°	45°	90°
0°	16492	16492	16492
5°	16599	16468	16395
10°	16467	16334	16245
15°	16292	16111	16051
20°	16097	15850	15819
25°	15873	15584	15536
30°	15537	15302	15201
35°	15096	14883	14794
40°	14625	14397	14340
45°	14056	13871	13809
50°	13473	13360	13270
55°	12844	12844	12642
60°	12060	12293	11858
65°	11037	11587	10762
70°	9729	10663	9474
75°	8309	9544	8085
80°	6443	8033	6526
85°	4167	6168	5501



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	505.0	2.0
10°-20°	1425.7	5.7
20°-30°	2114.8	8.5
30°-40°	2474.5	9.9
40°-50°	2463.5	9.8
50°-60°	2127.3	8.5
60°-70°	1531.3	6.1
70°-80°	803.0	3.2
80°-90°	202.7	0.8
90°-100°	819.7	3.3
100°-110°	2262.9	9.0
110°-120°	2333.8	9.3
120°-130°	1875.4	7.5
130°-140°	1473.9	5.9
140°-150°	1130.4	4.5
150°-160°	812.4	3.2
160°-170°	496.8	2.0
170°-180°	167.5	0.7
0°-30°	4045.5	16.2
0°-40°	6520.0	26.1
0°-60°	11110.8	44.4
0°-90°	13647.9	54.5
90°-120°	5416.4	21.6
90°-150°	9896.1	39.6
90°-180°	11373.0	45.5
0°-180°	25020.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5363	5363	5363	5363	5363	
5°	5377	5317	5334	5320	5311	509
15°	5117	5052	5060	5051	5041	1442
25°	4678	4599	4593	4564	4578	2151
35°	4021	3965	3964	3927	3940	2514
45°	3232	3204	3189	3180	3175	2494
55°	2396	2391	2396	2362	2358	2137
65°	1517	1563	1592	1530	1479	1503
75°	699	764	803	750	680	750
85°	118	155	175	165	156	156
90°	6	11	22	25	28	13
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°	5362.7	5362.7	5362.7	5362.7	5362.7
2.5°	5393.0	5348.6	5362.7	5350.8	5324.9
5°	5376.9	5316.9	5334.4	5320.0	5310.8
7.5°	5322.1	5266.7	5279.6	5264.3	5258.8
10°	5273.0	5217.5	5230.4	5211.3	5202.1
12.5°	5216.3	5157.1	5170.0	5150.9	5145.4
15°	5117.0	5052.4	5060.3	5050.7	5041.4
17.5°	5001.8	4936.2	4937.5	4922.3	4920.5
20°	4918.6	4849.3	4843.0	4824.3	4833.6
22.5°	4827.9	4754.9	4748.5	4722.3	4735.3
25°	4677.6	4599.1	4592.6	4564.5	4578.4
27.5°	4503.8	4426.1	4426.3	4386.9	4401.7
30°	4375.2	4301.3	4309.1	4262.3	4280.7
32.5°	4239.2	4172.6	4176.8	4130.0	4148.4
35°	4020.9	3965.4	3964.2	3926.7	3940.5
37.5°	3797.9	3748.9	3741.2	3719.5	3723.2
40°	3642.9	3601.3	3586.2	3572.0	3572.0
42.5°	3480.3	3442.5	3427.4	3416.9	3413.3
45°	3231.8	3204.1	3189.3	3179.7	3175.1
47.5°	2986.1	2960.3	2947.4	2940.7	2936.0
50°	2816.0	2797.5	2792.4	2778.1	2773.5
52.5°	2645.9	2634.8	2629.9	2611.8	2607.2
55°	2395.5	2390.9	2395.5	2362.3	2357.7
57.5°	2134.7	2142.1	2157.4	2112.7	2101.6
60°	1960.8	1979.3	1998.6	1946.2	1927.8
62.5°	1783.2	1812.7	1839.9	1779.7	1753.9
65°	1516.7	1562.9	1592.3	1529.7	1478.9
67.5°	1259.7	1316.9	1352.3	1284.8	1227.5
70°	1082.0	1146.7	1185.9	1118.3	1053.6
72.5°	927.0	999.1	1031.0	967.1	902.5
75°	699.3	764.0	803.2	749.7	680.4
77.5°	496.1	557.1	589.7	543.0	485.7
80°	363.8	428.5	453.6	414.7	368.5
82.5°	258.0	311.6	328.9	305.5	274.0
85°	118.1	155.1	174.8	165.2	155.9
87.5°	31.4	58.3	76.3	77.0	81.2
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)