

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: P520243

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520243
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-125D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25603.7 lumens
Efficiency: N/A
Efficacy: 118.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

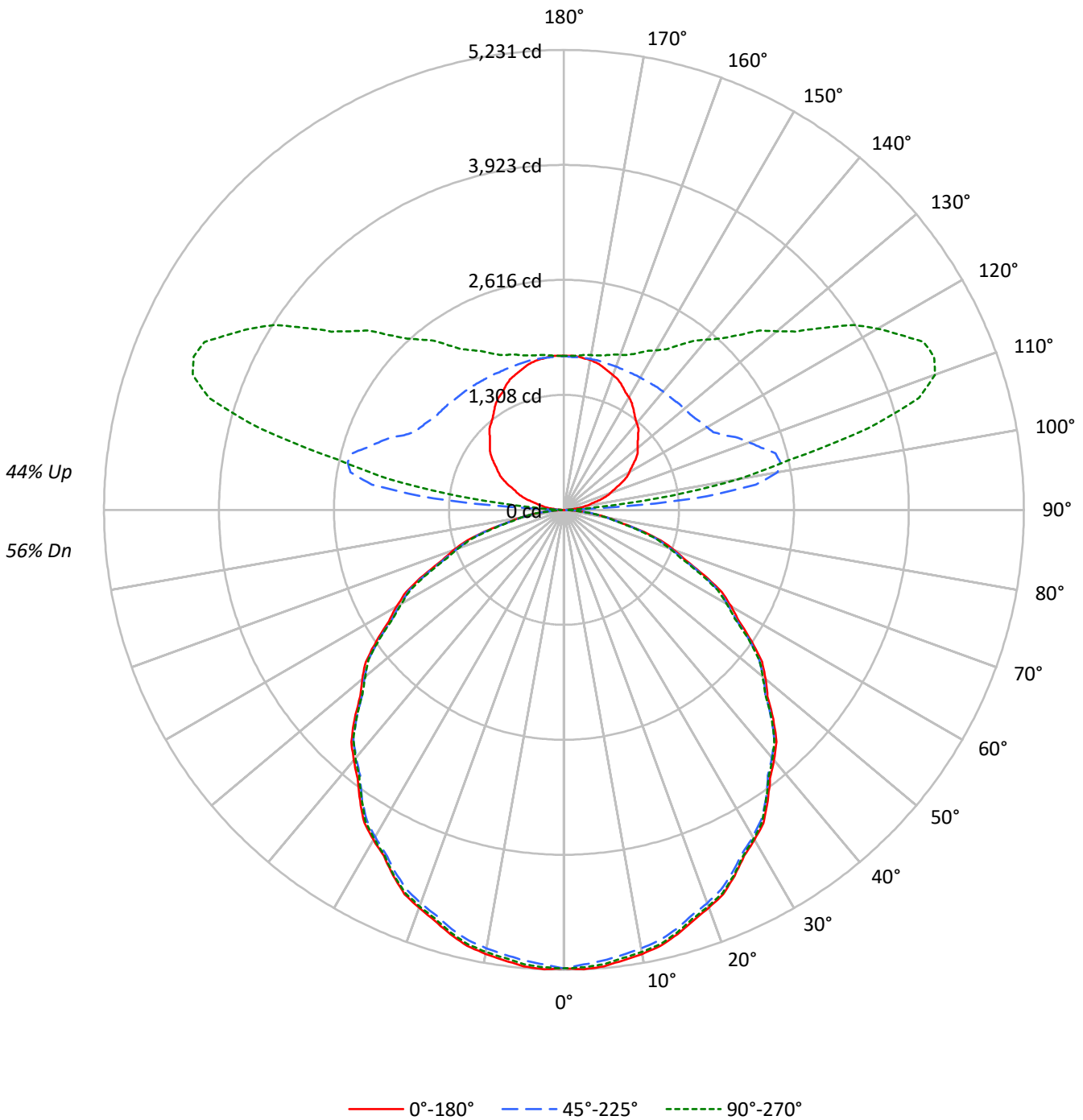
Input Watts (W): 215.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56				
1	99	95	91	87	92	88	85	82	76	73	71	65	63	61	54	53	52	47				
2	90	83	76	71	83	77	71	67	66	62	59	57	54	51	48	45	43	39				
3	82	73	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37	33				
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	32	28				
5	69	57	49	43	64	53	46	40	46	41	36	40	35	32	34	30	28	24				
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	31	27	24	21				
7	59	46	38	32	54	43	36	31	38	32	28	33	28	25	28	24	21	19				
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	26	22	19	17				
9	51	38	31	26	47	36	29	24	32	26	22	27	23	20	24	20	17	15				
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	22	18	16	14				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16038	16038	16038
5°	16090	15886	16019
10°	16016	15819	15944
15°	15908	15717	15845
20°	15761	15582	15705
25°	15582	15416	15543
30°	15389	15257	15339
35°	15171	15042	15052
40°	14921	14759	14806
45°	14642	14479	14504
50°	14321	14157	14116
55°	13957	13757	13726
60°	13504	13204	13134
65°	12802	12531	12364
70°	11922	11613	11458
75°	10606	10366	10060
80°	8641	8386	8336
85°	5166	5872	5872



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	492.0	1.9
10°-20°	1401.3	5.5
20°-30°	2105.3	8.2
30°-40°	2512.0	9.8
40°-50°	2574.9	10.1
50°-60°	2295.1	9.0
60°-70°	1708.5	6.7
70°-80°	925.6	3.6
80°-90°	216.1	0.8
90°-100°	819.7	3.2
100°-110°	2262.9	8.8
110°-120°	2333.8	9.1
120°-130°	1875.4	7.3
130°-140°	1473.9	5.8
140°-150°	1130.4	4.4
150°-160°	812.4	3.2
160°-170°	496.8	1.9
170°-180°	167.5	0.7
0°-30°	3998.6	15.6
0°-40°	6510.7	25.4
0°-60°	11380.6	44.4
0°-90°	14230.8	55.6
90°-120°	5416.4	21.2
90°-150°	9896.1	38.7
90°-180°	11373.0	44.4
0°-180°	25603.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5215	5215	5215	5215	5215	
5°	5212	5203	5146	5192	5189	494
15°	4996	4985	4936	4979	4976	1409
25°	4592	4584	4543	4569	4580	2115
35°	4041	4038	4006	4006	4009	2527
45°	3366	3358	3329	3324	3335	2594
55°	2603	2595	2566	2546	2560	2325
65°	1759	1748	1722	1710	1699	1742
75°	893	893	872	855	847	948
85°	146	166	166	169	166	202
90°	6	11	22	25	28	12
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°	5214.8	5214.8	5214.8	5214.8	5214.8
2.5°	5230.8	5221.8	5175.6	5214.5	5207.9
5°	5211.8	5203.4	5145.8	5191.6	5188.9
7.5°	5167.6	5157.0	5104.5	5147.5	5142.4
10°	5128.6	5120.2	5065.5	5108.4	5105.6
12.5°	5080.4	5071.9	5017.2	5060.3	5059.7
15°	4996.5	4985.4	4936.3	4979.3	4976.5
17.5°	4896.1	4883.2	4834.7	4868.7	4874.3
20°	4815.8	4807.3	4761.2	4792.9	4798.6
22.5°	4733.1	4722.5	4674.0	4710.3	4715.9
25°	4591.9	4583.5	4543.1	4569.2	4580.5
27.5°	4437.0	4437.0	4399.7	4418.1	4424.9
30°	4333.6	4333.6	4296.3	4308.1	4319.3
32.5°	4223.4	4214.4	4179.2	4188.7	4199.9
35°	4040.9	4038.1	4006.4	4006.5	4009.3
37.5°	3852.1	3844.2	3809.6	3812.1	3825.6
40°	3716.6	3711.0	3676.4	3676.6	3687.9
42.5°	3578.8	3573.3	3543.3	3538.8	3543.3
45°	3366.5	3358.0	3329.1	3323.6	3334.9
47.5°	3140.3	3142.5	3108.2	3100.2	3106.4
50°	2993.3	2993.3	2959.0	2941.9	2950.4
52.5°	2839.6	2835.0	2800.5	2781.4	2801.1
55°	2603.0	2594.6	2565.7	2546.0	2560.0
57.5°	2360.8	2347.9	2318.9	2297.2	2305.1
60°	2195.5	2175.8	2146.7	2129.6	2135.3
62.5°	2023.3	2012.6	1981.4	1955.3	1967.6
65°	1759.3	1748.0	1722.0	1710.2	1699.1
67.5°	1500.4	1493.1	1463.7	1451.5	1444.2
70°	1325.9	1311.9	1291.5	1277.0	1274.3
72.5°	1156.0	1139.7	1119.3	1107.1	1099.8
75°	892.6	892.6	872.4	855.1	846.6
77.5°	641.8	644.0	627.4	621.6	617.6
80°	487.9	487.9	473.5	467.8	470.7
82.5°	340.9	347.6	342.7	334.6	330.6
85°	146.4	166.0	166.4	169.3	166.4
87.5°	26.5	43.3	48.2	44.1	40.1
90°	5.6	11.1	22.4	25.2	28.0
92.5°	50.5	209.2	374.1	136.5	106.4
95°	120.4	443.6	1487.1	611.2	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	3801.0	3579.1
107.5°	498.5	693.4	2350.8	4153.4	4234.4
110°	565.7	740.9	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	4169.4	4557.1
115°	722.5	873.2	2005.2	3969.6	4514.5
117.5°	806.6	956.7	1915.0	3688.4	4308.4
120°	862.6	1010.5	1879.2	3498.1	4122.5
122.5°	916.3	1057.7	1850.0	3320.3	3911.9
125°	991.4	1128.3	1817.6	3076.0	3610.0
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	1321.8	1767.1	2491.3	2809.0
137.5°	1254.6	1371.8	1760.4	2369.3	2640.4
140°	1288.3	1403.3	1756.0	2287.9	2526.1
142.5°	1326.3	1432.6	1751.5	2215.6	2425.3
145°	1383.5	1479.3	1744.8	2120.9	2282.4
147.5°	1438.4	1522.2	1738.6	2041.2	2166.5
150°	1478.7	1547.1	1736.4	1993.5	2094.9
152.5°	1510.0	1574.1	1734.1	1952.8	2036.6
155°	1559.9	1611.9	1730.7	1903.0	1963.2
157.5°	1605.9	1645.9	1731.3	1866.7	1907.7
160°	1632.7	1668.3	1733.5	1846.3	1876.3
162.5°	1655.2	1686.3	1735.8	1828.2	1851.7
165°	1688.8	1710.7	1739.1	1806.7	1820.4
167.5°	1714.5	1727.7	1741.9	1793.6	1798.0
170°	1728.0	1738.9	1741.9	1786.7	1786.7
172.5°	1739.1	1745.8	1741.9	1777.7	1775.5
175°	1750.3	1753.1	1741.9	1767.0	1761.6
177.5°	1754.9	1752.7	1741.4	1757.0	1752.6
180°	1750.3	1750.3	1750.3	1750.3	1750.3

(END OF REPORT)