

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: P564929

Luminaire Tested: **SQ4-PW1-100U-075D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564929
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-075D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 750 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: 19423.3 lumens
Efficiency: N/A
Efficacy: 126.6 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

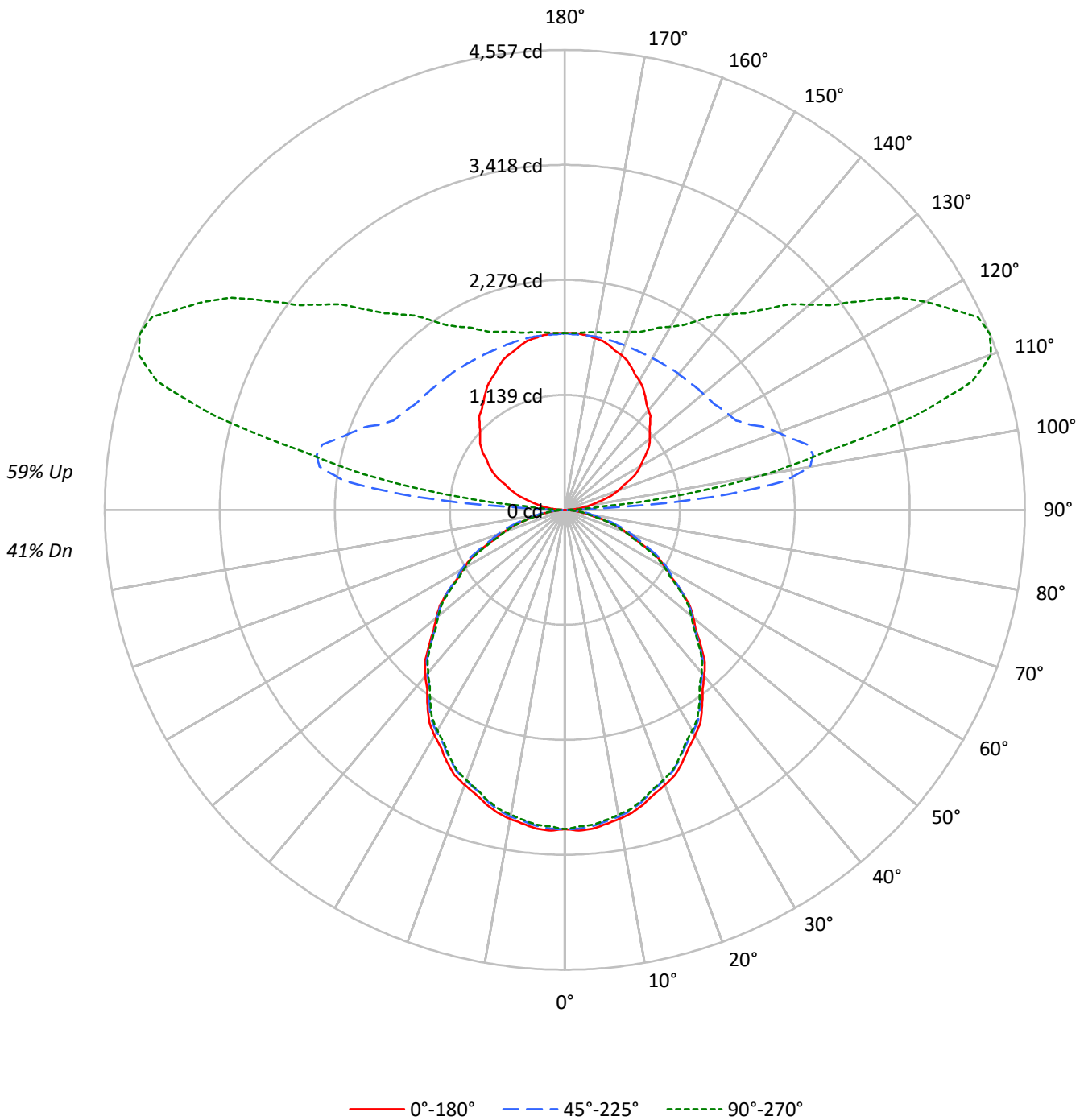
Input Watts (W): 153.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	41
1	96	92	88	85	87	84	81	78	69	67	65	55	54	52	43	42	41	35
2	87	80	74	69	79	73	68	64	60	57	54	49	46	44	38	36	35	30
3	80	70	63	58	72	65	58	53	53	49	45	43	40	37	33	31	29	25
4	73	62	55	49	66	57	50	45	47	42	38	38	35	32	30	27	25	22
5	67	55	48	42	61	51	44	39	42	37	33	34	31	28	27	24	22	19
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	22	19	16
7	57	45	37	32	52	41	34	29	35	29	25	28	24	21	22	19	17	15
8	53	41	33	28	48	37	31	26	31	26	22	26	22	19	20	18	15	13
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9727	9727	9727
5°	9790	9712	9669
10°	9711	9633	9581
15°	9608	9502	9466
20°	9494	9348	9329
25°	9361	9191	9163
30°	9163	9025	8965
35°	8903	8777	8725
40°	8625	8491	8457
45°	8290	8181	8144
50°	7946	7879	7826
55°	7575	7575	7456
60°	7113	7250	6993
65°	6509	6834	6347
70°	5738	6289	5588
75°	4900	5629	4768
80°	3801	4738	3850
85°	2459	3638	3246



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.8	1.5
10°-20°	840.8	4.3
20°-30°	1247.2	6.4
30°-40°	1459.4	7.5
40°-50°	1452.9	7.5
50°-60°	1254.6	6.5
60°-70°	903.1	4.6
70°-80°	473.6	2.4
80°-90°	121.0	0.6
90°-100°	819.7	4.2
100°-110°	2262.9	11.7
110°-120°	2333.8	12.0
120°-130°	1875.4	9.7
130°-140°	1473.9	7.6
140°-150°	1130.4	5.8
150°-160°	812.4	4.2
160°-170°	496.8	2.6
170°-180°	167.5	0.9
0°-30°	2385.9	12.3
0°-40°	3845.2	19.8
0°-60°	6552.7	33.7
0°-90°	8050.4	41.4
90°-120°	5416.4	27.9
90°-150°	9896.1	50.9
90°-180°	11373.0	58.6
0°-180°	19423.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3163	3163	3163	3163	3163	
5°	3171	3136	3146	3138	3132	300
15°	3018	2980	2984	2979	2973	851
25°	2759	2712	2708	2692	2700	1269
35°	2371	2339	2338	2316	2324	1482
45°	1906	1890	1881	1875	1873	1471
55°	1413	1410	1413	1393	1390	1261
65°	894	922	939	902	872	886
75°	412	451	474	442	401	442
85°	70	92	103	97	92	92
90°	6	11	22	25	28	11
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°	3162.7	3162.7	3162.7	3162.7	3162.7
2.5°	3180.6	3154.4	3162.7	3155.7	3140.4
5°	3171.1	3135.7	3146.0	3137.5	3132.1
7.5°	3138.8	3106.1	3113.7	3104.7	3101.4
10°	3109.8	3077.1	3084.7	3073.4	3068.0
12.5°	3076.3	3041.5	3049.0	3037.8	3034.6
15°	3017.8	2979.7	2984.4	2978.7	2973.2
17.5°	2949.8	2911.1	2911.9	2903.0	2901.9
20°	2900.8	2859.9	2856.2	2845.2	2850.6
22.5°	2847.3	2804.2	2800.5	2785.0	2792.7
25°	2758.7	2712.4	2708.5	2692.0	2700.2
27.5°	2656.1	2610.4	2610.4	2587.2	2595.9
30°	2580.3	2536.7	2541.3	2513.7	2524.6
32.5°	2500.1	2460.9	2463.3	2435.7	2446.6
35°	2371.4	2338.7	2337.9	2315.8	2324.0
37.5°	2239.8	2210.9	2206.4	2193.6	2195.8
40°	2148.4	2123.9	2115.0	2106.6	2106.6
42.5°	2052.6	2030.2	2021.4	2015.2	2013.0
45°	1906.0	1889.7	1880.9	1875.3	1872.6
47.5°	1761.1	1745.8	1738.2	1734.3	1731.6
50°	1660.8	1649.9	1646.8	1638.4	1635.7
52.5°	1560.5	1553.9	1551.0	1540.3	1537.6
55°	1412.8	1410.1	1412.8	1393.2	1390.5
57.5°	1259.0	1263.3	1272.3	1246.0	1239.5
60°	1156.4	1167.3	1178.7	1147.8	1136.9
62.5°	1051.6	1069.1	1085.1	1049.6	1034.4
65°	894.5	921.7	939.1	902.2	872.2
67.5°	742.9	776.7	797.5	757.7	723.9
70°	638.1	676.3	699.4	659.5	621.4
72.5°	546.7	589.2	608.0	570.4	532.2
75°	412.4	450.6	473.7	442.1	401.3
77.5°	292.6	328.6	347.8	320.2	286.5
80°	214.6	252.7	267.5	244.6	217.4
82.5°	152.1	183.8	193.9	180.1	161.6
85°	69.7	91.5	103.1	97.4	92.0
87.5°	19.0	35.3	46.8	47.5	50.2
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)