

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: P564049

Luminaire Tested: **SQ4-PR1-075U-050D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564049
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-075U-050D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14947.2 lumens
Efficiency: N/A
Efficacy: 139.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

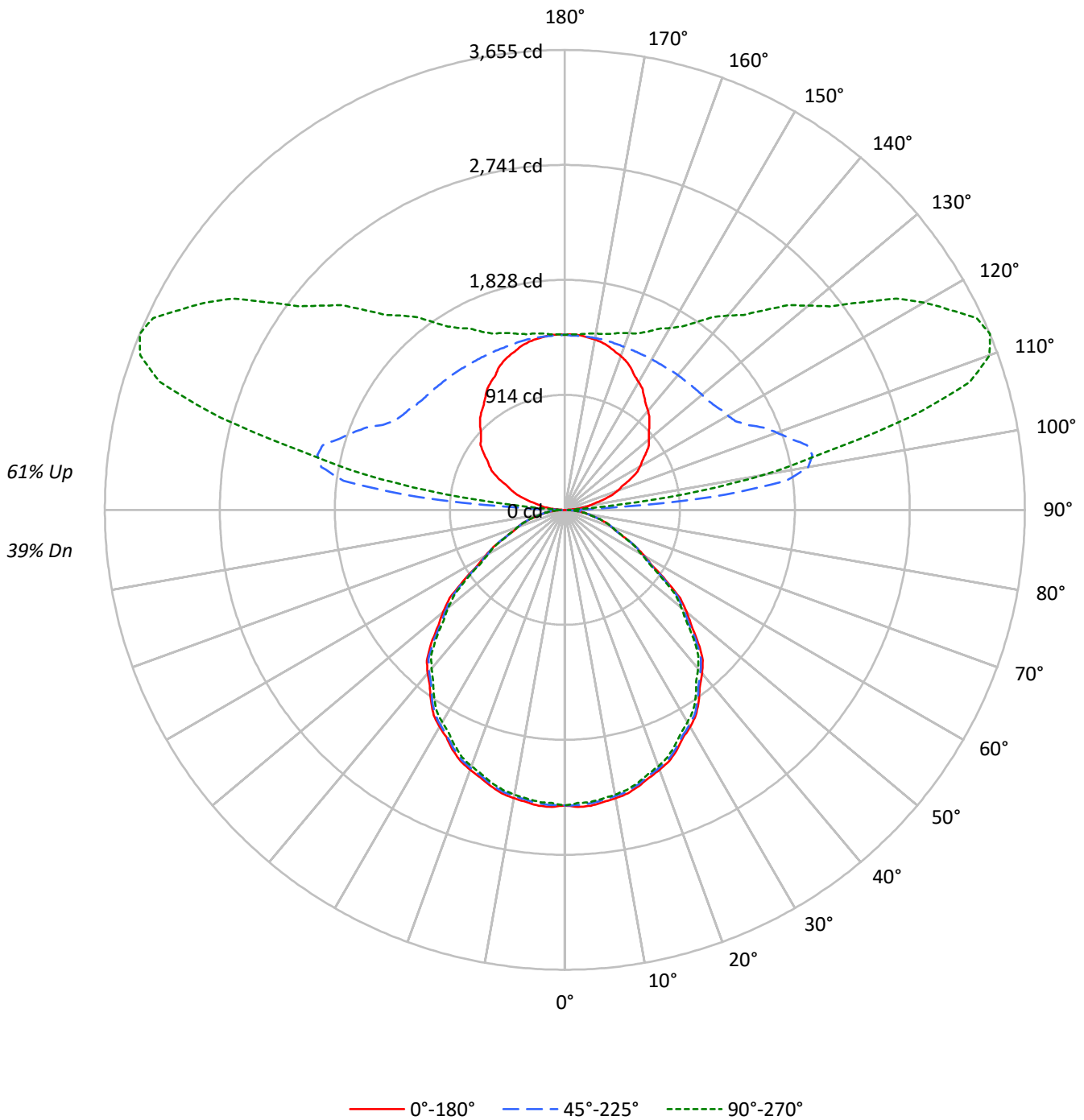
Input Watts (W): 107.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	96	91	88	84	87	83	80	77	68	66	64	54	53	51	41	40	39	34
2	87	80	74	69	79	73	68	64	60	56	53	48	45	43	37	35	34	28
3	80	71	63	58	72	64	58	53	53	49	45	42	39	37	33	31	29	24
4	73	63	55	49	66	57	51	45	47	42	38	38	34	32	29	27	25	21
5	67	56	48	42	61	51	44	39	42	37	33	34	30	27	26	24	22	18
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19	16
7	57	45	37	32	52	41	35	30	34	29	25	28	24	21	22	19	17	14
8	53	41	33	28	48	38	31	26	31	26	23	26	22	19	20	17	15	13
9	49	37	30	25	45	34	28	23	29	24	20	23	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	26	22	18	22	18	15	17	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7224	7224	7224
5°	7289	7233	7195
10°	7266	7215	7177
15°	7234	7189	7150
20°	7197	7151	7098
25°	7147	7099	7016
30°	7070	7019	6919
35°	6965	6904	6806
40°	6806	6733	6611
45°	6529	6415	6283
50°	6040	5895	5779
55°	5272	5153	5044
60°	4443	4405	4318
65°	3842	3858	3828
70°	3529	3547	3547
75°	3390	3390	3414
80°	3190	3225	3190
85°	2569	2855	2855



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.1	1.5
10°-20°	635.5	4.3
20°-30°	958.6	6.4
30°-40°	1142.1	7.6
40°-50°	1126.0	7.5
50°-60°	860.6	5.8
60°-70°	532.5	3.6
70°-80°	302.5	2.0
80°-90°	95.6	0.6
90°-100°	656.8	4.4
100°-110°	1807.0	12.1
110°-120°	1865.1	12.5
120°-130°	1494.3	10.0
130°-140°	1173.7	7.9
140°-150°	899.4	6.0
150°-160°	646.7	4.3
160°-170°	395.4	2.6
170°-180°	133.3	0.9
0°-30°	1816.2	12.2
0°-40°	2958.3	19.8
0°-60°	4944.9	33.1
0°-90°	5875.5	39.3
90°-120°	4328.8	29.0
90°-150°	7896.3	52.8
90°-180°	9072.0	60.7
0°-180°	14947.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2349	2349	2349	2349	2349	
5°	2361	2335	2343	2335	2331	224
15°	2272	2248	2258	2250	2246	641
25°	2106	2080	2092	2070	2068	969
35°	1855	1834	1839	1815	1813	1158
45°	1501	1481	1475	1448	1444	1150
55°	983	967	961	945	941	881
65°	528	524	530	526	526	535
75°	285	285	285	287	287	301
85°	73	77	81	81	81	85
90°	3	12	21	27	27	9
95°	98	358	1161	497	317	103
105°	323	497	1991	3032	2830	340
115°	572	696	1597	3180	3609	564
125°	788	898	1449	2451	2871	703
135°	951	1055	1407	1982	2243	734
145°	1099	1174	1387	1689	1819	689
155°	1244	1285	1378	1518	1561	572
165°	1345	1362	1384	1440	1449	379
175°	1392	1395	1387	1404	1401	132
180°	1392	1392	1392	1392	1392	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2348.9	2348.9	2348.9	2348.9	2348.9
2.5°	2363.4	2342.9	2348.9	2343.8	2332.7
5°	2361.0	2335.3	2342.8	2334.6	2330.7
7.5°	2342.8	2317.5	2325.0	2316.9	2314.5
10°	2326.6	2302.9	2310.4	2302.3	2298.3
12.5°	2308.8	2283.5	2292.6	2282.8	2278.9
15°	2272.0	2248.3	2257.8	2249.7	2245.7
17.5°	2231.5	2206.2	2215.8	2206.3	2201.2
20°	2199.2	2175.4	2185.0	2170.8	2168.8
22.5°	2163.6	2139.8	2149.4	2130.4	2130.0
25°	2106.1	2080.4	2091.9	2069.6	2067.7
27.5°	2037.7	2014.0	2023.6	2000.8	1998.5
30°	1990.8	1967.0	1976.6	1952.2	1948.3
32.5°	1937.4	1915.2	1923.2	1898.9	1896.5
35°	1855.2	1833.5	1839.0	1814.7	1812.7
37.5°	1761.8	1742.0	1745.2	1718.4	1716.4
40°	1695.4	1675.6	1677.2	1648.8	1646.8
42.5°	1622.6	1602.8	1601.1	1572.8	1570.8
45°	1501.2	1481.4	1474.9	1448.5	1444.5
47.5°	1362.8	1343.0	1330.8	1309.3	1306.5
50°	1262.4	1242.7	1232.1	1213.8	1207.8
52.5°	1154.0	1134.2	1125.3	1108.6	1102.6
55°	983.3	967.4	961.0	944.7	940.8
57.5°	821.0	810.3	808.5	792.6	791.1
60°	722.3	716.3	716.2	702.0	702.0
62.5°	638.1	633.7	636.9	627.5	626.0
65°	528.0	524.1	530.1	526.0	526.0
67.5°	441.0	441.0	444.7	443.1	443.1
70°	392.5	392.5	394.5	394.5	394.5
72.5°	348.8	347.2	352.4	352.4	350.8
75°	285.3	285.3	285.3	287.3	287.3
77.5°	222.1	222.5	224.2	223.7	222.1
80°	180.1	182.0	182.1	180.1	180.1
82.5°	138.0	140.0	140.0	139.6	138.0
85°	72.8	76.8	80.9	80.9	80.9
87.5°	21.6	29.7	36.5	37.7	36.1
90°	3.0	11.7	20.7	26.7	26.7
92.5°	40.9	174.7	302.8	116.3	95.4
95°	97.8	358.5	1161.4	496.6	317.0
97.5°	159.4	397.5	1772.4	1365.6	963.5
100°	204.4	421.7	1964.3	1982.7	1617.7
102.5°	247.1	450.5	2014.1	2459.8	2124.9
105°	322.9	496.8	1991.0	3032.3	2829.5
107.5°	395.2	554.0	1877.8	3312.6	3372.9
110°	447.4	592.2	1792.5	3382.3	3590.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	494.8	635.0	1707.2	3337.4	3654.9
115°	571.8	696.4	1597.0	3180.0	3608.7
117.5°	645.3	760.0	1527.0	2959.0	3444.0
120°	690.3	800.4	1496.2	2793.5	3294.6
122.5°	730.6	840.7	1474.9	2648.3	3124.0
125°	788.1	898.2	1448.8	2450.9	2871.0
127.5°	842.6	947.5	1431.6	2286.2	2654.7
130°	871.1	978.3	1422.2	2188.3	2524.3
132.5°	904.3	1011.4	1415.0	2102.2	2405.8
135°	951.1	1055.4	1407.3	1982.1	2242.8
137.5°	994.9	1091.7	1400.8	1885.1	2100.0
140°	1028.1	1117.9	1398.4	1820.6	2014.7
142.5°	1056.5	1139.4	1393.7	1763.1	1929.4
145°	1099.2	1174.5	1386.6	1688.8	1819.2
147.5°	1144.8	1209.7	1383.0	1623.0	1727.3
150°	1173.3	1231.2	1380.7	1586.9	1668.1
152.5°	1199.3	1252.7	1378.3	1555.8	1623.0
155°	1244.4	1284.9	1377.7	1517.9	1561.4
157.5°	1277.0	1310.0	1377.7	1486.8	1517.0
160°	1300.7	1326.7	1377.7	1470.1	1493.3
162.5°	1319.6	1341.1	1380.1	1455.8	1474.3
165°	1345.1	1362.5	1383.6	1440.1	1448.8
167.5°	1362.9	1376.2	1386.6	1426.9	1429.3
170°	1374.7	1383.4	1386.6	1422.2	1422.2
172.5°	1384.2	1388.3	1386.6	1415.0	1412.7
175°	1392.5	1395.4	1386.6	1404.3	1401.4
177.5°	1394.9	1394.9	1385.4	1399.5	1394.9
180°	1392.5	1392.5	1392.5	1392.5	1392.5

(END OF REPORT)