

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: P519987

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519987
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-075U-050D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

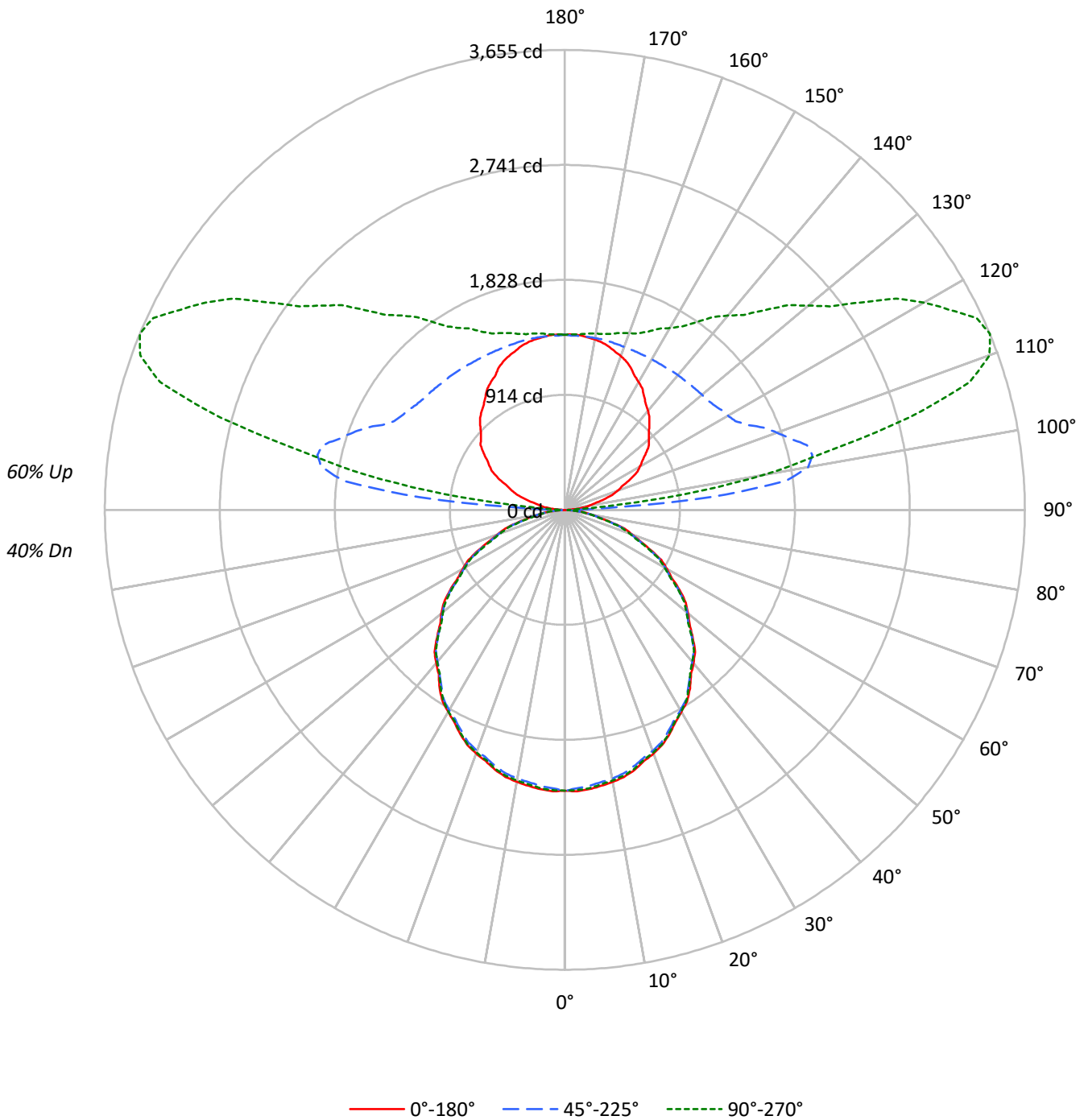
Lumens per Lamp: N/A
Luminaire Lumens: 15167.0 lumens
Efficiency: N/A
Efficacy: 138.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 109.7
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	78	78	78	62	62	62	47	47	47	40
1	96	91	87	84	87	83	80	77	68	66	64	54	53	51	42	41	40	34
2	87	80	74	68	79	73	68	63	60	56	53	48	45	43	37	35	33	28
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	32	30	28	24
4	72	62	54	48	66	56	50	44	47	42	38	37	34	31	29	26	24	20
5	66	55	47	41	60	50	43	38	42	36	32	33	30	27	26	23	21	18
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	21	19	15
7	56	44	36	31	51	41	34	29	34	28	25	27	23	20	21	19	16	14
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	20	17	15	12
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13	11
10	45	33	26	22	41	31	24	20	26	21	17	21	17	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6864	6864	6864
5°	6881	6798	6853
10°	6858	6774	6821
15°	6811	6726	6783
20°	6747	6669	6718
25°	6672	6590	6651
30°	6579	6526	6568
35°	6506	6428	6462
40°	6382	6321	6334
45°	6251	6199	6199
50°	6118	6061	6033
55°	5976	5896	5863
60°	5752	5661	5624
65°	5480	5371	5306
70°	5105	4997	4890
75°	4579	4438	4331
80°	3703	3652	3546
85°	2212	2530	2636



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.6	1.4
10°-20°	599.7	4.0
20°-30°	900.7	5.9
30°-40°	1075.2	7.1
40°-50°	1101.8	7.3
50°-60°	982.6	6.5
60°-70°	731.8	4.8
70°-80°	397.3	2.6
80°-90°	95.5	0.6
90°-100°	656.8	4.3
100°-110°	1807.0	11.9
110°-120°	1865.1	12.3
120°-130°	1494.3	9.9
130°-140°	1173.7	7.7
140°-150°	899.5	5.9
150°-160°	646.7	4.3
160°-170°	395.4	2.6
170°-180°	133.3	0.9
0°-30°	1711.0	11.3
0°-40°	2786.3	18.4
0°-60°	4870.7	32.1
0°-90°	6095.3	40.2
90°-120°	4328.8	28.5
90°-150°	7896.3	52.1
90°-180°	9072.0	59.8
0°-180°	15167.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2232	2232	2232	2232	2232	
5°	2229	2226	2202	2223	2220	212
15°	2139	2134	2112	2130	2130	603
25°	1966	1960	1942	1954	1960	905
35°	1733	1727	1712	1712	1721	1081
45°	1437	1440	1425	1422	1425	1109
55°	1114	1114	1100	1091	1094	993
65°	753	750	738	729	729	746
75°	385	382	374	367	364	407
85°	63	69	72	75	75	88
90°	3	12	21	27	27	8
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°	2231.9	2231.9	2231.9	2231.9	2231.9
2.5°	2239.1	2234.5	2215.3	2231.9	2229.6
5°	2229.0	2226.1	2202.1	2223.0	2220.0
7.5°	2212.9	2207.0	2183.6	2203.8	2200.9
10°	2196.1	2190.3	2169.2	2187.1	2184.2
12.5°	2174.6	2171.1	2147.7	2165.7	2165.1
15°	2139.3	2133.5	2112.4	2130.4	2130.4
17.5°	2092.7	2089.3	2068.8	2086.1	2083.8
20°	2061.6	2055.8	2037.8	2052.7	2052.7
22.5°	2023.4	2019.9	2001.9	2014.5	2016.9
25°	1966.1	1960.2	1942.1	1954.3	1960.1
27.5°	1902.7	1898.1	1883.0	1890.9	1894.9
30°	1852.5	1852.5	1837.6	1840.8	1849.5
32.5°	1807.1	1807.1	1789.8	1792.8	1797.0
35°	1733.0	1727.2	1712.1	1712.3	1721.1
37.5°	1646.9	1644.1	1634.4	1632.6	1635.0
40°	1589.6	1586.7	1574.6	1577.6	1577.6
42.5°	1532.2	1529.3	1517.2	1513.2	1517.8
45°	1437.2	1440.1	1425.2	1422.3	1425.2
47.5°	1343.4	1343.4	1331.4	1323.2	1327.8
50°	1278.8	1278.8	1266.9	1260.9	1260.9
52.5°	1211.9	1214.2	1199.9	1191.6	1194.0
55°	1114.5	1114.5	1099.6	1090.7	1093.5
57.5°	1007.0	1007.0	992.0	983.2	988.4
60°	935.2	935.2	920.3	911.4	914.3
62.5°	863.5	863.5	848.6	839.6	840.2
65°	753.0	750.0	738.1	729.1	729.1
67.5°	646.6	639.0	629.9	617.9	617.9
70°	567.7	564.8	555.7	543.8	543.8
72.5°	496.0	490.8	481.7	472.1	472.1
75°	385.4	382.5	373.5	367.4	364.5
77.5°	276.1	273.7	273.1	264.8	267.1
80°	209.1	209.1	206.2	200.2	200.2
82.5°	149.4	151.8	146.4	145.1	142.8
85°	62.7	68.6	71.7	74.7	74.7
87.5°	12.5	21.3	20.9	24.5	24.5
90°	2.9	11.6	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	1964.4	1982.7	1617.7
102.5°	247.1	450.4	2014.1	2459.8	2125.0
105°	323.0	496.8	1991.1	3032.3	2829.5
107.5°	395.3	554.0	1877.8	3312.6	3372.8
110°	447.4	592.3	1792.5	3382.3	3591.0

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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°	690.4	800.4	1496.2	2793.5	3294.7
122.5°	730.7	840.7	1474.9	2648.4	3124.0
125°	788.1	898.2	1448.8	2450.9	2871.0
127.5°	842.6	947.5	1431.7	2286.2	2654.7
130°	871.1	978.2	1422.2	2188.2	2524.3
132.5°	904.3	1011.5	1415.0	2102.2	2405.8
135°	951.0	1055.4	1407.3	1982.2	2242.8
137.5°	994.9	1091.7	1400.9	1885.1	2100.0
140°	1028.1	1117.9	1398.4	1820.6	2014.7
142.5°	1056.6	1139.4	1393.7	1763.1	1929.3
145°	1099.2	1174.5	1386.6	1688.8	1819.2
147.5°	1144.8	1209.7	1383.1	1623.0	1727.4
150°	1173.3	1231.3	1380.7	1586.9	1668.1
152.5°	1199.4	1252.7	1378.3	1555.8	1623.0
155°	1244.4	1285.0	1377.7	1517.9	1561.4
157.5°	1276.9	1310.0	1377.7	1486.8	1517.0
160°	1300.7	1326.7	1377.7	1470.1	1493.3
162.5°	1319.7	1341.1	1380.1	1455.7	1474.3
165°	1345.1	1362.5	1383.6	1440.1	1448.8
167.5°	1362.9	1376.2	1386.6	1427.0	1429.2
170°	1374.7	1383.5	1386.6	1422.2	1422.2
172.5°	1384.2	1388.2	1386.6	1414.9	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)