

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: P520434

Luminaire Tested: **SQ4-F-150U-100D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520434
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-150U-100D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

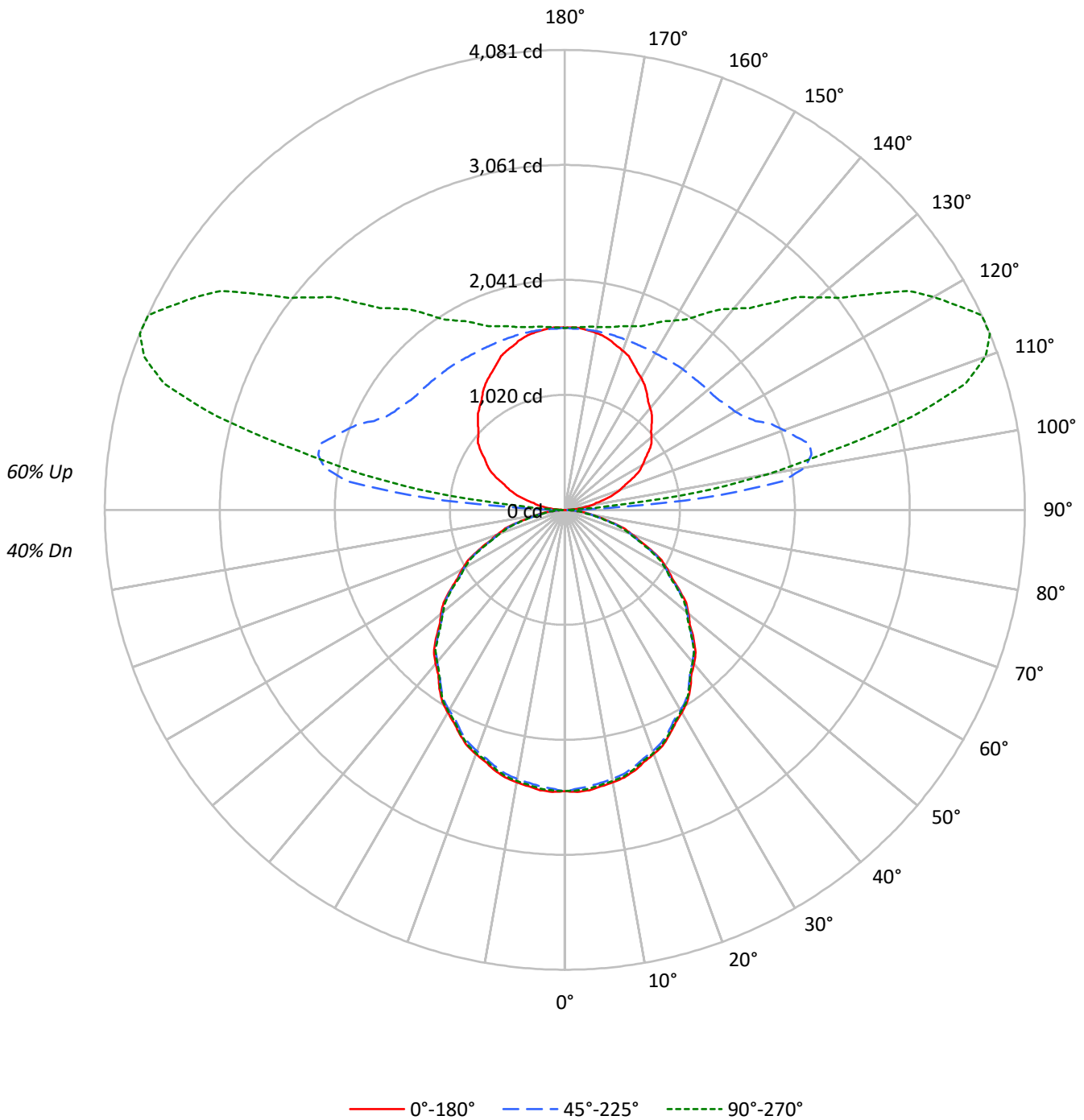
Lumens per Lamp: N/A
Luminaire Lumens: 17226.2 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 148.5
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	61	61	61	47	47	47	40
1	95	91	87	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	73	68	79	73	67	63	59	56	52	47	45	42	36	34	33	28
3	79	70	63	57	72	64	57	52	52	48	44	42	39	36	32	30	28	23
4	72	62	54	48	65	56	50	44	46	41	37	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	26	23	21	17
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	17	14	12
9	48	36	29	24	44	34	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11514	11514	11514
5°	11566	11407	11495
10°	11507	11363	11451
15°	11438	11282	11372
20°	11320	11185	11277
25°	11196	11066	11152
30°	11060	10941	10996
35°	10921	10786	10844
40°	10739	10616	10626
45°	10550	10405	10372
50°	10278	10155	10131
55°	9975	9864	9796
60°	9673	9499	9467
65°	9200	8994	8919
70°	8549	8342	8180
75°	7632	7390	7236
80°	6280	6054	5781
85°	3716	4081	4171



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.6	1.4
10°-20°	670.8	3.9
20°-30°	1007.4	5.8
30°-40°	1202.3	7.0
40°-50°	1232.3	7.2
50°-60°	1097.4	6.4
60°-70°	818.0	4.7
70°-80°	442.9	2.6
80°-90°	104.2	0.6
90°-100°	750.7	4.4
100°-110°	2029.9	11.8
110°-120°	2134.1	12.4
120°-130°	1733.5	10.1
130°-140°	1359.8	7.9
140°-150°	1043.6	6.1
150°-160°	750.6	4.4
160°-170°	458.5	2.7
170°-180°	154.6	0.9
0°-30°	1913.8	11.1
0°-40°	3116.1	18.1
0°-60°	5445.9	31.6
0°-90°	6811.0	39.5
90°-120°	4914.7	28.5
90°-150°	9051.6	52.5
90°-180°	10415.0	60.5
0°-180°	17226.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2496	2496	2496	2496	2496	
5°	2498	2493	2463	2486	2482	237
15°	2395	2386	2362	2381	2381	675
25°	2200	2195	2174	2186	2191	1014
35°	1939	1931	1915	1919	1926	1211
45°	1617	1609	1595	1586	1590	1244
55°	1240	1242	1226	1215	1218	1110
65°	843	840	824	815	817	834
75°	428	423	415	406	406	456
85°	70	77	77	79	79	98
90°	4	10	23	24	23	10
95°	116	409	1248	646	384	122
105°	377	583	2252	3322	3186	397
115°	664	812	1868	3615	4081	656
125°	909	1042	1683	2840	3337	811
135°	1090	1220	1638	2294	2596	843
145°	1268	1363	1615	1963	2113	793
155°	1431	1487	1602	1761	1819	660
165°	1558	1573	1608	1671	1680	439
175°	1617	1615	1610	1631	1628	154
180°	1615	1615	1615	1615	1615	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2496.0	2496.0	2496.0	2496.0	2496.0
2.5°	2505.6	2500.2	2478.1	2495.9	2493.2
5°	2497.7	2492.7	2463.4	2485.6	2482.3
7.5°	2474.4	2469.3	2443.6	2464.1	2461.0
10°	2456.5	2451.6	2425.7	2446.2	2444.6
12.5°	2433.3	2428.2	2402.4	2423.0	2421.3
15°	2394.9	2386.5	2362.3	2381.2	2381.2
17.5°	2344.2	2337.8	2315.5	2331.2	2331.5
20°	2305.8	2300.8	2278.4	2295.5	2297.2
22.5°	2267.5	2262.4	2237.3	2253.1	2256.1
25°	2199.6	2194.6	2174.0	2186.1	2191.0
27.5°	2129.7	2122.3	2101.9	2112.6	2116.4
30°	2076.3	2072.9	2054.0	2059.2	2064.3
32.5°	2020.1	2016.7	2000.6	2003.1	2012.2
35°	1939.2	1930.8	1915.3	1918.8	1925.6
37.5°	1843.6	1839.7	1824.4	1822.5	1828.9
40°	1783.3	1776.6	1762.8	1759.5	1764.5
42.5°	1717.6	1710.9	1694.2	1690.9	1697.4
45°	1617.1	1608.8	1594.9	1586.4	1589.8
47.5°	1504.8	1504.8	1490.4	1480.6	1485.6
50°	1432.1	1432.1	1415.0	1406.6	1411.6
52.5°	1356.7	1358.1	1339.6	1335.1	1333.4
55°	1240.3	1242.0	1226.5	1214.6	1218.0
57.5°	1127.9	1124.2	1106.4	1098.4	1100.1
60°	1048.4	1043.4	1029.6	1017.8	1026.1
62.5°	967.5	965.3	951.5	938.1	937.0
65°	842.8	839.5	824.0	815.4	817.1
67.5°	718.8	714.8	700.6	688.4	692.8
70°	633.8	633.8	618.5	611.4	606.5
72.5°	555.8	549.0	537.5	527.9	524.2
75°	428.2	423.3	414.6	406.0	406.0
77.5°	311.8	307.5	301.8	296.0	294.3
80°	236.4	234.7	227.9	225.9	217.6
82.5°	166.6	166.2	162.1	157.6	157.2
85°	70.2	76.9	77.1	78.8	78.8
87.5°	13.0	22.4	23.7	21.2	20.9
90°	3.5	10.3	22.6	24.3	22.6
92.5°	49.4	180.0	355.1	154.1	111.7
95°	116.5	408.9	1248.5	646.1	384.3
97.5°	187.1	469.0	1946.2	1610.6	1182.7
100°	239.9	493.3	2163.2	2255.9	1824.1
102.5°	288.6	527.0	2239.6	2745.3	2422.2
105°	377.3	583.1	2251.8	3321.7	3185.7
107.5°	459.4	647.2	2153.4	3681.2	3726.4
110°	523.4	693.4	2065.8	3777.7	3969.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	580.5	739.6	1985.1	3758.5	4081.2
115°	664.3	812.1	1867.5	3615.3	4081.2
117.5°	746.3	885.1	1790.0	3396.5	3924.7
120°	796.4	932.4	1744.1	3239.6	3778.6
122.5°	843.7	977.0	1716.3	3071.4	3614.4
125°	909.4	1042.0	1683.2	2840.4	3336.9
127.5°	970.0	1100.1	1663.8	2652.0	3088.6
130°	1003.4	1137.7	1655.5	2535.6	2930.0
132.5°	1038.1	1171.1	1647.1	2430.5	2793.7
135°	1090.3	1219.5	1638.0	2293.5	2596.1
137.5°	1142.8	1264.8	1630.4	2182.3	2428.9
140°	1178.9	1292.9	1627.6	2110.8	2330.1
142.5°	1213.7	1320.9	1622.1	2046.2	2238.3
145°	1267.6	1362.8	1615.4	1963.1	2112.8
147.5°	1316.6	1401.0	1607.8	1887.9	2002.8
150°	1352.9	1427.7	1605.0	1847.0	1938.8
152.5°	1386.2	1451.5	1603.5	1809.1	1884.6
155°	1431.1	1487.3	1601.5	1761.1	1818.8
157.5°	1477.7	1516.8	1601.8	1727.6	1765.6
160°	1504.2	1536.4	1603.2	1706.5	1733.6
162.5°	1525.0	1551.8	1604.6	1689.7	1710.0
165°	1558.1	1573.4	1608.5	1671.2	1679.8
167.5°	1580.6	1591.2	1608.8	1655.6	1659.6
170°	1594.6	1599.6	1610.2	1648.4	1648.4
172.5°	1605.7	1606.7	1610.2	1640.1	1638.8
175°	1617.1	1615.4	1610.2	1631.0	1627.6
177.5°	1620.9	1616.9	1609.9	1623.7	1619.6
180°	1615.4	1615.4	1615.4	1615.4	1615.4

(END OF REPORT)