

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: P520386

Luminaire Tested: **SQ4-F-150U-050D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520386
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-050D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

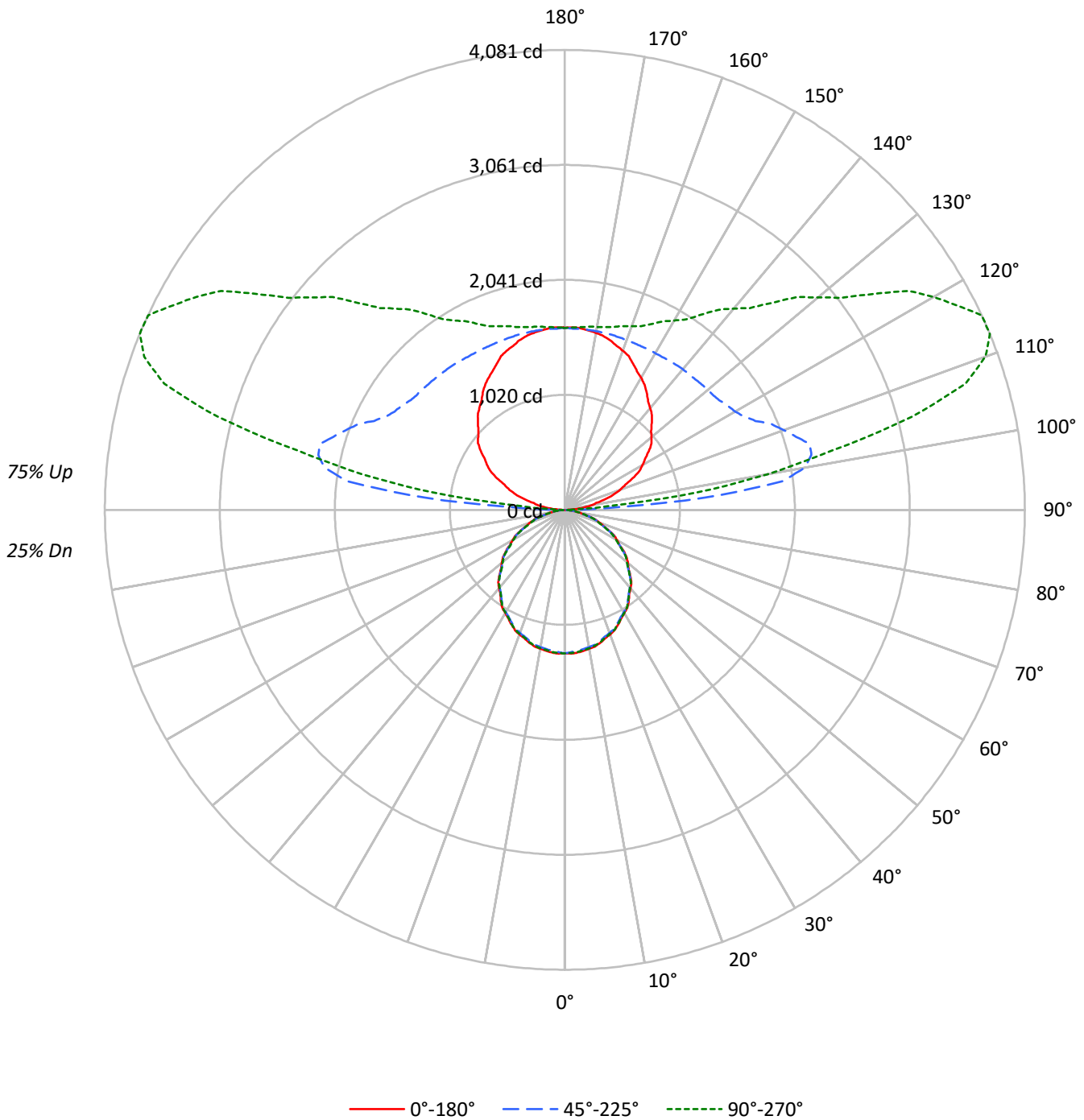
Lumens per Lamp: N/A
Luminaire Lumens: 13894.3 lumens
Efficiency: N/A
Efficacy: 121.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 114.4
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	101	101	101	101	90	90	90	90	69	69	69	51	51	51	33	33	33	25
1	92	88	84	81	82	79	75	73	61	59	57	44	43	42	29	29	28	21
2	84	77	71	66	74	69	64	59	53	50	47	39	37	35	26	25	23	18
3	76	67	60	55	68	60	54	49	47	43	39	34	32	29	23	21	20	15
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15	11
6	59	47	39	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10
7	54	42	35	29	48	38	31	27	30	25	22	22	19	16	15	13	11	8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	15	14	12	10	8
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9	7
10	43	32	25	20	39	29	23	18	23	18	15	17	14	12	12	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5875	5875	5875
5°	5889	5818	5866
10°	5870	5798	5838
15°	5829	5757	5805
20°	5775	5708	5750
25°	5710	5640	5693
30°	5631	5585	5621
35°	5568	5501	5530
40°	5462	5411	5421
45°	5350	5305	5305
50°	5237	5188	5163
55°	5114	5046	5019
60°	4924	4845	4813
65°	4689	4597	4541
70°	4369	4277	4185
75°	3919	3798	3707
80°	3169	3124	3034
85°	1895	2165	2255



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.2	0.9
10°-20°	342.2	2.5
20°-30°	513.9	3.7
30°-40°	613.5	4.4
40°-50°	628.7	4.5
50°-60°	560.7	4.0
60°-70°	417.5	3.0
70°-80°	226.7	1.6
80°-90°	55.8	0.4
90°-100°	750.7	5.4
100°-110°	2029.9	14.6
110°-120°	2134.1	15.4
120°-130°	1733.5	12.5
130°-140°	1359.8	9.8
140°-150°	1043.6	7.5
150°-160°	750.6	5.4
160°-170°	458.5	3.3
170°-180°	154.6	1.1
0°-30°	976.3	7.0
0°-40°	1589.8	11.4
0°-60°	2779.1	20.0
0°-90°	3479.1	25.0
90°-120°	4914.7	35.4
90°-150°	9051.6	65.1
90°-180°	10415.0	75.0
0°-180°	13894.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1274	1274	1274	1274	1274	
5°	1272	1270	1256	1268	1267	121
15°	1221	1217	1205	1216	1216	344
25°	1122	1118	1108	1115	1118	517
35°	989	986	977	977	982	617
45°	820	822	813	812	813	633
55°	636	636	627	622	624	566
65°	430	428	421	416	416	425
75°	220	218	213	210	208	232
85°	36	39	41	43	43	50
90°	4	10	23	24	23	9
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°	1273.5	1273.5	1273.5	1273.5	1273.5
2.5°	1277.6	1275.0	1264.0	1273.5	1272.1
5°	1271.8	1270.1	1256.4	1268.4	1266.7
7.5°	1262.6	1259.3	1245.9	1257.4	1255.8
10°	1253.1	1249.7	1237.7	1248.0	1246.3
12.5°	1240.8	1238.8	1225.5	1235.6	1235.3
15°	1220.6	1217.4	1205.4	1215.5	1215.5
17.5°	1194.1	1192.0	1180.4	1190.3	1189.0
20°	1176.4	1173.0	1162.8	1171.2	1171.2
22.5°	1154.6	1152.5	1142.2	1149.4	1150.7
25°	1121.8	1118.5	1108.1	1115.0	1118.4
27.5°	1085.6	1083.0	1074.4	1078.8	1081.2
30°	1057.1	1057.1	1048.5	1050.3	1055.3
32.5°	1031.1	1031.1	1021.2	1022.9	1025.3
35°	988.8	985.5	976.9	977.0	982.0
37.5°	939.7	938.0	932.5	931.5	932.9
40°	907.0	905.3	898.5	900.2	900.2
42.5°	874.2	872.6	865.8	863.4	866.1
45°	820.0	821.7	813.2	811.5	813.2
47.5°	766.5	766.5	759.7	754.9	757.6
50°	729.7	729.7	722.9	719.4	719.4
52.5°	691.5	692.8	684.6	679.9	681.3
55°	635.9	635.9	627.4	622.3	624.0
57.5°	574.6	574.6	566.0	561.0	563.9
60°	533.7	533.7	525.1	520.0	521.7
62.5°	492.7	492.7	484.2	479.0	479.4
65°	429.6	427.9	421.1	416.0	416.0
67.5°	368.9	364.6	359.4	352.5	352.5
70°	323.9	322.2	317.1	310.3	310.3
72.5°	283.0	280.0	274.8	269.4	269.4
75°	219.9	218.2	213.1	209.6	208.0
77.5°	157.6	156.2	155.8	151.1	152.4
80°	119.3	119.3	117.6	114.2	114.2
82.5°	85.2	86.6	83.5	82.8	81.4
85°	35.8	39.1	40.9	42.6	42.6
87.5°	7.5	12.8	14.0	15.7	15.4
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)