

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: P520366

Luminaire Tested: **SQ4-F-150U-050D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520366
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-830-1D-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

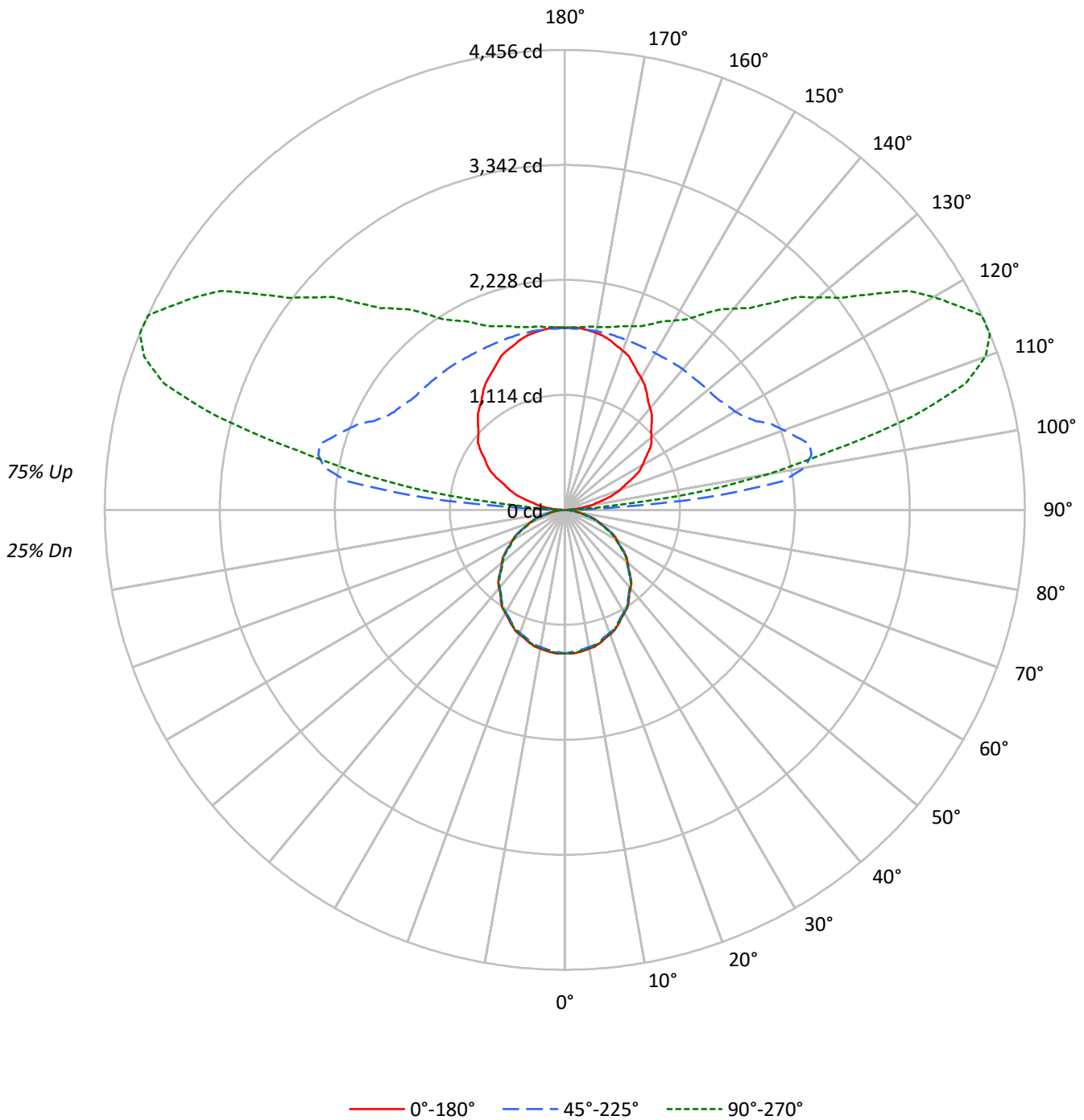
Lumens per Lamp: N/A
Luminaire Lumens: 15170.7 lumens
Efficiency: N/A
Efficacy: 132.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

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°	6415	6415	6415
5°	6431	6353	6404
10°	6409	6330	6374
15°	6366	6285	6338
20°	6305	6232	6278
25°	6235	6159	6215
30°	6148	6098	6137
35°	6080	6007	6038
40°	5964	5908	5918
45°	5841	5793	5793
50°	5718	5664	5637
55°	5584	5509	5479
60°	5376	5289	5255
65°	5120	5019	4958
70°	4771	4669	4570
75°	4279	4148	4048
80°	3462	3414	3313
85°	2064	2366	2461



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.2	0.9
10°-20°	373.6	2.5
20°-30°	561.2	3.7
30°-40°	669.8	4.4
40°-50°	686.4	4.5
50°-60°	612.2	4.0
60°-70°	455.9	3.0
70°-80°	247.5	1.6
80°-90°	61.0	0.4
90°-100°	819.7	5.4
100°-110°	2216.3	14.6
110°-120°	2330.1	15.4
120°-130°	1892.7	12.5
130°-140°	1484.7	9.8
140°-150°	1139.5	7.5
150°-160°	819.5	5.4
160°-170°	500.6	3.3
170°-180°	168.8	1.1
0°-30°	1066.0	7.0
0°-40°	1735.8	11.4
0°-60°	3034.4	20.0
0°-90°	3798.8	25.0
90°-120°	5366.2	35.4
90°-150°	9883.0	65.1
90°-180°	11372.0	75.0
0°-180°	15170.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1390	1390	1390	1390	1390	
5°	1389	1387	1372	1385	1383	132
15°	1333	1329	1316	1327	1327	376
25°	1225	1221	1210	1218	1221	564
35°	1080	1076	1067	1067	1072	674
45°	895	897	888	886	888	691
55°	694	694	685	680	681	618
65°	469	467	460	454	454	465
75°	240	238	233	229	227	254
85°	39	43	45	46	46	55
90°	4	11	25	27	25	10
95°	127	447	1363	706	420	133
105°	412	637	2459	3627	3478	434
115°	725	887	2039	3947	4456	716
125°	993	1138	1838	3101	3644	885
135°	1190	1332	1788	2504	2835	920
145°	1384	1488	1764	2144	2307	866
155°	1563	1624	1749	1923	1986	721
165°	1701	1718	1756	1825	1834	479
175°	1766	1764	1758	1781	1777	168
180°	1764	1764	1764	1764	1764	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1390.5	1390.5	1390.5	1390.5	1390.5
2.5°	1395.0	1392.1	1380.1	1390.4	1389.1
5°	1388.7	1386.8	1371.9	1384.9	1383.0
7.5°	1378.6	1375.0	1360.4	1373.0	1371.1
10°	1368.2	1364.5	1351.4	1362.5	1360.8
12.5°	1354.7	1352.6	1338.0	1349.2	1348.8
15°	1332.9	1329.2	1316.1	1327.2	1327.2
17.5°	1303.8	1301.6	1288.9	1299.6	1298.1
20°	1284.4	1280.8	1269.5	1278.8	1278.8
22.5°	1260.6	1258.4	1247.2	1255.1	1256.5
25°	1224.9	1221.2	1210.0	1217.5	1221.1
27.5°	1185.3	1182.5	1173.1	1177.9	1180.5
30°	1154.1	1154.1	1144.8	1146.8	1152.2
32.5°	1125.8	1125.8	1115.0	1116.9	1119.5
35°	1079.6	1076.0	1066.6	1066.7	1072.2
37.5°	1026.0	1024.2	1018.2	1017.1	1018.6
40°	990.3	988.5	981.0	982.8	982.8
42.5°	954.6	952.7	945.2	942.7	945.6
45°	895.3	897.2	887.9	886.1	887.9
47.5°	836.9	836.9	829.5	824.3	827.2
50°	796.7	796.7	789.2	785.5	785.5
52.5°	755.0	756.5	747.5	742.4	743.9
55°	694.3	694.3	685.0	679.5	681.3
57.5°	627.3	627.3	618.0	612.5	615.8
60°	582.7	582.7	573.3	567.8	569.6
62.5°	538.0	538.0	528.6	523.1	523.4
65°	469.1	467.3	459.8	454.2	454.2
67.5°	402.8	398.1	392.4	385.0	385.0
70°	353.7	351.8	346.2	338.8	338.8
72.5°	309.0	305.7	300.1	294.1	294.1
75°	240.1	238.3	232.7	229.0	227.1
77.5°	172.0	170.6	170.1	165.0	166.4
80°	130.3	130.3	128.5	124.7	124.7
82.5°	93.1	94.6	91.2	90.4	88.9
85°	39.0	42.7	44.7	46.5	46.5
87.5°	8.2	14.0	15.3	17.2	16.8
90°	3.8	11.3	24.6	26.6	24.6
92.5°	53.9	196.5	387.7	168.3	121.9
95°	127.2	446.6	1363.2	705.5	419.6
97.5°	204.3	512.0	2124.9	1758.5	1291.4
100°	262.0	538.6	2361.9	2463.2	1991.7
102.5°	315.2	575.4	2445.5	2997.4	2644.7
105°	412.0	636.6	2458.7	3626.8	3478.3
107.5°	501.6	706.6	2351.2	4019.3	4068.7
110°	571.5	757.1	2255.5	4124.7	4334.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	633.8	807.5	2167.5	4103.7	4456.0
115°	725.3	886.8	2039.1	3947.4	4456.0
117.5°	814.8	966.4	1954.4	3708.6	4285.2
120°	869.6	1018.1	1904.3	3537.1	4125.7
122.5°	921.2	1066.7	1874.0	3353.6	3946.5
125°	993.0	1137.8	1837.8	3101.4	3643.5
127.5°	1059.0	1201.2	1816.6	2895.6	3372.3
130°	1095.5	1242.2	1807.5	2768.5	3199.1
132.5°	1133.4	1278.6	1798.4	2653.8	3050.4
135°	1190.4	1331.5	1788.4	2504.2	2834.7
137.5°	1247.7	1381.0	1780.1	2382.8	2652.0
140°	1287.3	1411.6	1777.1	2304.6	2544.1
142.5°	1325.2	1442.2	1771.0	2234.1	2443.8
145°	1384.0	1488.1	1763.8	2143.5	2306.8
147.5°	1437.7	1529.7	1755.4	2061.4	2186.8
150°	1477.1	1558.8	1752.4	2016.7	2117.0
152.5°	1513.6	1584.8	1750.9	1975.3	2057.7
155°	1562.6	1623.9	1748.6	1922.8	1985.9
157.5°	1613.4	1656.2	1749.0	1886.2	1927.9
160°	1642.3	1677.6	1750.5	1863.2	1892.9
162.5°	1665.1	1694.4	1752.0	1844.8	1867.1
165°	1701.1	1717.8	1756.3	1824.8	1834.0
167.5°	1725.9	1737.3	1756.6	1807.6	1812.0
170°	1741.1	1746.6	1758.2	1799.9	1799.9
172.5°	1753.1	1754.3	1758.2	1790.8	1789.2
175°	1765.7	1763.9	1758.2	1780.8	1777.1
177.5°	1769.9	1765.4	1757.8	1772.8	1768.3
180°	1763.8	1763.8	1763.8	1763.8	1763.8

(END OF REPORT)