

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: P520206

Luminaire Tested: **SQ4-F-100U-075D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520206
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-075D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

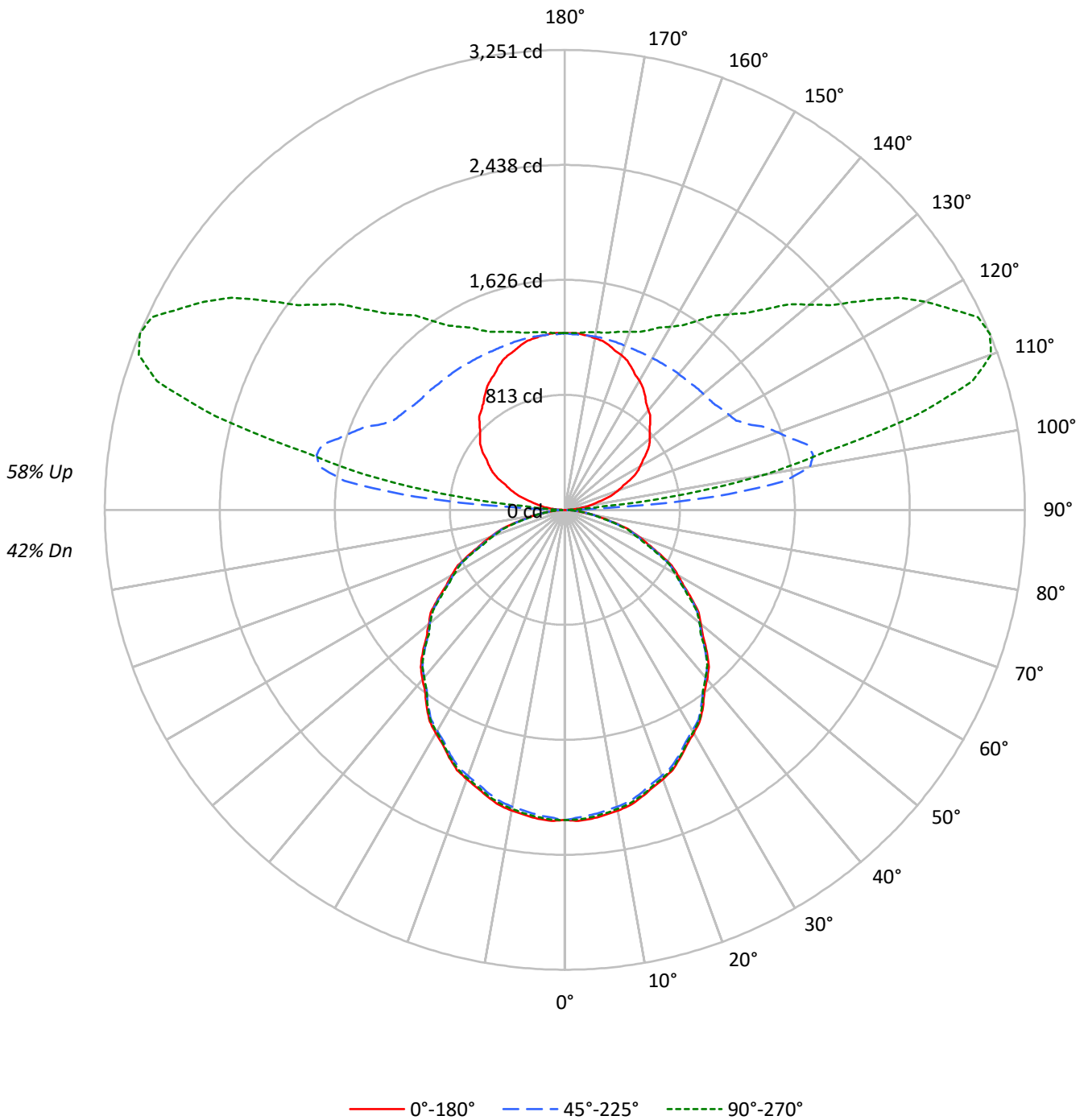
Lumens per Lamp: N/A
Luminaire Lumens: 14101.8 lumens
Efficiency: N/A
Efficacy: 136.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 103.7
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	96	96	96	96	79	79	79	64	64	64	49	49	49	42
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	43	42	42	36
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35	30
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	31	30	25
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	28	25	22
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22	19
6	61	49	41	36	56	45	38	33	38	33	29	31	27	24	24	22	19	16
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17	14
8	53	40	33	27	48	37	30	26	31	26	22	26	22	19	20	18	15	13
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	20	26	21	18	22	18	15	17	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10115	10115	10115
5°	10154	10025	10099
10°	10113	9983	10057
15°	10035	9912	9997
20°	9944	9828	9905
25°	9835	9734	9805
30°	9711	9605	9657
35°	9583	9482	9527
40°	9421	9326	9314
45°	9260	9143	9169
50°	9002	8931	8931
55°	8794	8681	8602
60°	8510	8364	8290
65°	8051	7898	7789
70°	7561	7372	7186
75°	6803	6554	6413
80°	5441	5332	5281
85°	3260	3684	3784



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.0	1.5
10°-20°	589.2	4.2
20°-30°	885.2	6.3
30°-40°	1056.3	7.5
40°-50°	1083.3	7.7
50°-60°	965.2	6.8
60°-70°	719.7	5.1
70°-80°	390.3	2.8
80°-90°	92.2	0.7
90°-100°	584.8	4.1
100°-110°	1614.4	11.4
110°-120°	1664.9	11.8
120°-130°	1337.9	9.5
130°-140°	1051.5	7.5
140°-150°	806.4	5.7
150°-160°	579.6	4.1
160°-170°	354.4	2.5
170°-180°	119.5	0.8
0°-30°	1681.4	11.9
0°-40°	2737.7	19.4
0°-60°	4786.1	33.9
0°-90°	5988.4	42.5
90°-120°	3864.1	27.4
90°-150°	7059.9	50.1
90°-180°	8113.0	57.5
0°-180°	14101.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2193	2193	2193	2193	2193	
5°	2193	2189	2165	2183	2181	208
15°	2101	2097	2075	2091	2093	593
25°	1932	1930	1912	1922	1926	890
35°	1702	1698	1684	1684	1692	1063
45°	1419	1414	1402	1402	1405	1092
55°	1093	1091	1079	1070	1070	977
65°	738	738	724	716	714	734
75°	382	374	368	362	360	401
85°	62	66	70	70	72	85
90°	4	8	16	18	20	8
95°	86	316	1061	436	284	92
105°	288	444	1776	2712	2553	306
115°	516	623	1430	2832	3221	507
125°	707	805	1297	2194	2575	629
135°	851	943	1261	1777	2004	659
145°	987	1055	1245	1513	1628	618
155°	1113	1150	1235	1358	1400	513
165°	1205	1220	1241	1289	1299	340
175°	1249	1251	1243	1261	1257	119
180°	1249	1249	1249	1249	1249	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2192.7	2192.7	2192.7	2192.7	2192.7
2.5°	2200.7	2195.9	2176.7	2192.7	2191.1
5°	2192.7	2188.8	2164.8	2182.7	2180.8
7.5°	2174.8	2170.5	2146.9	2164.8	2164.4
10°	2158.9	2153.0	2131.1	2148.9	2146.9
12.5°	2138.2	2132.4	2110.4	2128.2	2126.3
15°	2101.3	2097.3	2075.4	2091.3	2093.3
17.5°	2059.0	2051.7	2032.1	2047.6	2049.6
20°	2025.7	2019.9	2001.9	2015.8	2017.7
22.5°	1990.8	1984.9	1966.8	1980.8	1982.8
25°	1932.3	1930.3	1912.4	1922.5	1926.3
27.5°	1869.0	1863.6	1849.1	1856.8	1860.7
30°	1823.0	1819.0	1803.1	1809.1	1813.0
32.5°	1775.2	1772.9	1758.5	1761.5	1766.9
35°	1701.6	1697.8	1683.7	1683.9	1691.7
37.5°	1620.2	1615.9	1604.2	1602.3	1605.5
40°	1564.5	1558.7	1548.6	1546.6	1546.6
42.5°	1507.3	1503.0	1489.8	1486.3	1491.0
45°	1419.4	1413.5	1401.5	1401.6	1405.4
47.5°	1324.3	1322.0	1308.0	1301.7	1303.3
50°	1254.4	1258.3	1244.4	1236.7	1244.4
52.5°	1194.0	1191.6	1179.2	1171.3	1174.5
55°	1093.4	1091.4	1079.4	1069.5	1069.5
57.5°	992.3	987.3	974.9	967.4	973.3
60°	922.4	920.5	906.5	892.7	898.5
62.5°	852.4	848.9	835.0	825.9	830.2
65°	737.6	737.6	723.6	715.6	713.6
67.5°	636.9	627.6	619.9	610.2	607.6
70°	560.6	552.8	546.6	538.6	532.8
72.5°	485.8	481.2	472.0	464.0	462.8
75°	381.7	373.9	367.7	361.7	359.8
77.5°	271.5	270.0	264.4	261.3	262.4
80°	204.8	204.8	200.7	200.7	198.8
82.5°	144.4	145.8	145.1	141.9	141.5
85°	61.6	65.5	69.6	69.6	71.5
87.5°	11.9	20.5	20.7	21.1	21.5
90°	4.0	7.9	16.0	18.0	20.0
92.5°	36.0	149.3	266.9	97.4	75.9
95°	85.9	316.5	1060.9	436.0	283.7
97.5°	142.2	354.4	1571.6	1209.9	876.2
100°	183.8	377.2	1760.2	1772.6	1440.5
102.5°	223.8	403.1	1796.9	2190.1	1875.3
105°	287.7	444.0	1776.1	2711.6	2553.4
107.5°	355.6	494.7	1677.0	2963.0	3020.9
110°	403.6	528.6	1600.4	3017.1	3204.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	446.7	567.1	1528.4	2974.4	3251.1
115°	515.5	622.9	1430.5	2831.9	3220.7
117.5°	575.4	682.5	1366.2	2631.3	3073.6
120°	615.4	720.8	1340.6	2495.6	2940.9
122.5°	653.7	754.6	1319.8	2368.8	2790.7
125°	707.3	804.9	1296.7	2194.4	2575.3
127.5°	752.8	850.5	1283.1	2047.0	2375.5
130°	783.2	880.9	1276.7	1956.8	2255.7
132.5°	812.0	904.9	1270.3	1881.0	2151.7
135°	851.1	942.9	1260.7	1777.3	2004.0
137.5°	895.0	978.7	1255.9	1690.3	1883.7
140°	919.1	1001.1	1252.7	1632.2	1802.2
142.5°	946.2	1022.1	1249.5	1580.6	1730.2
145°	986.9	1055.4	1244.7	1513.1	1628.4
147.5°	1026.1	1086.0	1240.3	1456.1	1545.6
150°	1054.9	1103.8	1238.7	1422.2	1494.4
152.5°	1077.3	1123.0	1237.1	1393.1	1452.9
155°	1112.9	1150.0	1234.7	1357.6	1400.5
157.5°	1145.6	1174.1	1235.1	1331.7	1361.0
160°	1164.8	1190.2	1236.7	1317.1	1338.6
162.5°	1180.7	1203.1	1238.3	1304.2	1321.0
165°	1204.8	1220.4	1240.7	1288.9	1298.6
167.5°	1223.2	1232.5	1242.8	1279.6	1282.7
170°	1232.8	1240.6	1242.8	1274.7	1274.7
172.5°	1240.7	1245.4	1242.8	1268.3	1266.7
175°	1248.7	1250.7	1242.8	1260.6	1256.7
177.5°	1252.0	1250.4	1242.4	1253.4	1250.3
180°	1248.7	1248.7	1248.7	1248.7	1248.7

(END OF REPORT)