

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: P519983

Luminaire Tested: **SQ4-F-075U-050D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519983
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-835-1D-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

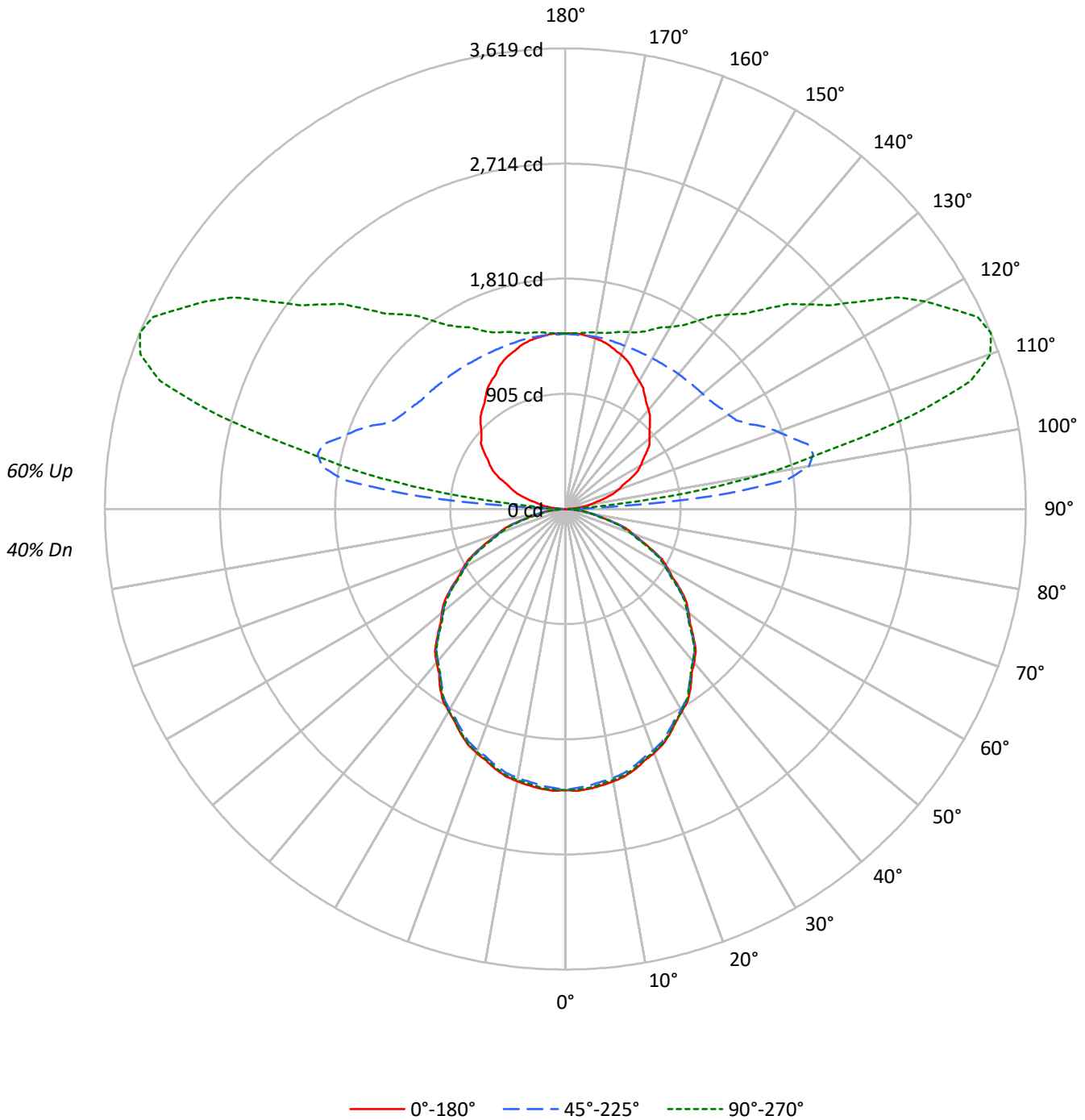
Lumens per Lamp: N/A
Luminaire Lumens: 15016.0 lumens
Efficiency: N/A
Efficacy: 136.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

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	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°	6796	6796	6796
5°	6813	6731	6785
10°	6790	6707	6753
15°	6743	6659	6715
20°	6680	6603	6651
25°	6605	6525	6585
30°	6513	6461	6503
35°	6441	6364	6397
40°	6318	6259	6270
45°	6189	6137	6137
50°	6058	6001	5972
55°	5916	5837	5805
60°	5695	5604	5568
65°	5425	5317	5253
70°	5054	4947	4841
75°	4534	4394	4288
80°	3668	3615	3510
85°	2191	2505	2611



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.5	1.4
10°-20°	593.7	4.0
20°-30°	891.8	5.9
30°-40°	1064.5	7.1
40°-50°	1090.8	7.3
50°-60°	972.8	6.5
60°-70°	724.5	4.8
70°-80°	393.3	2.6
80°-90°	94.6	0.6
90°-100°	650.2	4.3
100°-110°	1789.0	11.9
110°-120°	1846.5	12.3
120°-130°	1479.4	9.9
130°-140°	1162.0	7.7
140°-150°	890.5	5.9
150°-160°	640.2	4.3
160°-170°	391.5	2.6
170°-180°	132.0	0.9
0°-30°	1694.0	11.3
0°-40°	2758.5	18.4
0°-60°	4822.2	32.1
0°-90°	6034.6	40.2
90°-120°	4285.7	28.5
90°-150°	7817.7	52.1
90°-180°	8981.0	59.8
0°-180°	15016.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2210	2210	2210	2210	2210	
5°	2207	2204	2180	2201	2198	210
15°	2118	2112	2091	2109	2109	597
25°	1946	1941	1923	1935	1941	896
35°	1716	1710	1695	1695	1704	1071
45°	1423	1426	1411	1408	1411	1098
55°	1103	1103	1089	1080	1083	983
65°	746	743	731	722	722	738
75°	382	379	370	364	361	403
85°	62	68	71	74	74	87
90°	3	12	20	26	26	8
95°	97	355	1150	492	314	102
105°	320	492	1971	3002	2801	337
115°	566	690	1581	3148	3573	559
125°	780	889	1434	2426	2842	696
135°	942	1045	1393	1962	2220	727
145°	1088	1163	1373	1672	1801	682
155°	1232	1272	1364	1503	1546	566
165°	1332	1349	1370	1426	1434	375
175°	1379	1382	1373	1390	1388	131
180°	1379	1379	1379	1379	1379	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2209.8	2209.8	2209.8	2209.8	2209.8
2.5°	2216.9	2212.2	2193.2	2209.7	2207.4
5°	2206.8	2203.9	2180.2	2200.8	2197.9
7.5°	2190.8	2185.0	2161.8	2181.8	2179.0
10°	2174.3	2168.4	2147.6	2165.3	2162.4
12.5°	2153.0	2149.5	2126.3	2144.1	2143.5
15°	2118.0	2112.2	2091.4	2109.2	2109.2
17.5°	2071.9	2068.5	2048.2	2065.3	2063.0
20°	2041.1	2035.3	2017.5	2032.3	2032.3
22.5°	2003.3	1999.8	1982.0	1994.5	1996.8
25°	1946.5	1940.7	1922.8	1934.7	1940.6
27.5°	1883.8	1879.1	1864.2	1872.0	1876.1
30°	1834.1	1834.1	1819.3	1822.4	1831.1
32.5°	1789.1	1789.1	1771.9	1775.0	1779.0
35°	1715.7	1709.9	1695.0	1695.2	1703.9
37.5°	1630.5	1627.7	1618.1	1616.4	1618.7
40°	1573.7	1570.9	1559.0	1561.9	1561.9
42.5°	1516.9	1514.1	1502.2	1498.1	1502.8
45°	1422.9	1425.7	1411.0	1408.2	1411.0
47.5°	1330.0	1330.0	1318.2	1310.0	1314.6
50°	1266.1	1266.1	1254.3	1248.3	1248.3
52.5°	1199.8	1202.1	1188.0	1179.8	1182.1
55°	1103.4	1103.4	1088.6	1079.8	1082.7
57.5°	996.9	996.9	982.1	973.3	978.6
60°	925.9	925.9	911.1	902.3	905.2
62.5°	854.9	854.9	840.1	831.2	831.8
65°	745.5	742.6	730.7	721.8	721.8
67.5°	640.1	632.7	623.6	611.7	611.7
70°	562.1	559.2	550.2	538.4	538.4
72.5°	491.1	485.8	476.9	467.4	467.4
75°	381.6	378.7	369.8	363.8	360.9
77.5°	273.3	271.1	270.4	262.2	264.5
80°	207.1	207.1	204.1	198.2	198.2
82.5°	147.9	150.2	145.0	143.7	141.4
85°	62.1	67.9	71.0	74.0	74.0
87.5°	12.4	21.1	20.7	24.3	24.3
90°	2.9	11.5	20.5	26.4	26.4
92.5°	40.5	173.0	299.8	115.1	94.5
95°	96.8	355.0	1149.9	491.7	313.9
97.5°	157.8	393.6	1754.7	1352.0	953.9
100°	202.4	417.5	1944.8	1963.0	1601.6
102.5°	244.6	446.0	1994.1	2435.3	2103.7
105°	319.7	491.8	1971.2	3002.0	2801.3
107.5°	391.3	548.4	1859.1	3279.6	3339.3
110°	442.9	586.4	1774.6	3348.7	3555.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	489.8	628.6	1690.2	3304.2	3618.6
115°	566.1	689.5	1581.0	3148.3	3572.8
117.5°	638.9	752.5	1511.8	2929.6	3409.6
120°	683.4	792.5	1481.4	2765.6	3261.8
122.5°	723.3	832.4	1460.2	2621.9	3092.9
125°	780.2	889.2	1434.4	2426.5	2842.4
127.5°	834.2	938.0	1417.4	2263.4	2628.2
130°	862.4	968.5	1408.0	2166.4	2499.2
132.5°	895.3	1001.4	1401.0	2081.2	2381.8
135°	941.6	1044.8	1393.3	1962.4	2220.5
137.5°	985.0	1080.8	1386.9	1866.3	2079.1
140°	1017.8	1106.7	1384.5	1802.5	1994.7
142.5°	1046.0	1128.1	1379.8	1745.6	1910.2
145°	1088.3	1162.8	1372.8	1672.0	1801.0
147.5°	1133.4	1197.7	1369.3	1606.9	1710.1
150°	1161.6	1218.9	1366.9	1571.2	1651.5
152.5°	1187.4	1240.2	1364.6	1540.3	1606.9
155°	1231.9	1272.1	1364.0	1502.8	1545.8
157.5°	1264.2	1297.0	1364.0	1472.0	1501.8
160°	1287.7	1313.5	1364.0	1455.4	1478.4
162.5°	1306.5	1327.7	1366.3	1441.3	1459.6
165°	1331.7	1348.9	1369.9	1425.8	1434.4
167.5°	1349.3	1362.5	1372.8	1412.7	1415.0
170°	1361.1	1369.7	1372.8	1408.0	1408.0
172.5°	1370.4	1374.5	1372.8	1400.9	1398.6
175°	1378.7	1381.5	1372.8	1390.3	1387.5
177.5°	1381.0	1381.0	1371.6	1385.6	1381.0
180°	1378.7	1378.7	1378.7	1378.7	1378.7

(END OF REPORT)