

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: P520019

Luminaire Tested: **SQ4-F-075U-075D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520019
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-075D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

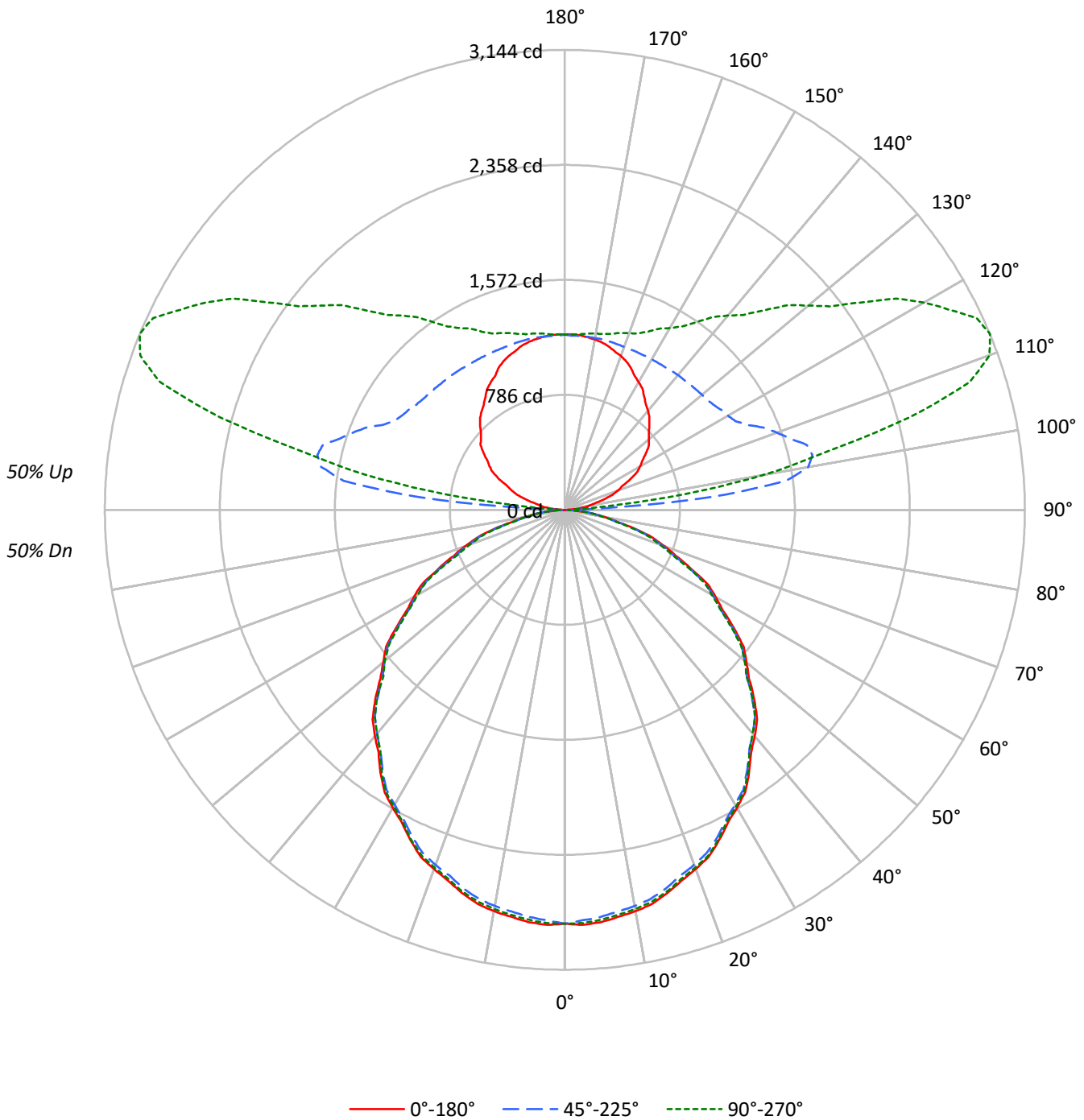
Lumens per Lamp: N/A
Luminaire Lumens: 15530.7 lumens
Efficiency: N/A
Efficacy: 115.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 134.5
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	89	86	90	86	83	80	73	71	68	61	59	57	49	48	47	42
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	40	35
3	81	72	64	58	74	66	60	55	56	51	47	47	43	40	38	36	34	29
4	74	63	55	49	68	59	52	46	50	44	40	42	38	34	34	31	29	25
5	68	56	48	42	62	52	45	40	45	39	35	37	33	30	31	28	25	22
6	63	50	42	36	57	47	40	34	40	34	30	34	29	26	28	25	22	19
7	58	45	37	32	53	42	35	30	36	31	26	31	26	23	25	22	20	17
8	54	41	33	28	49	38	31	27	33	27	23	28	24	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14
10	47	34	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8702	8702	8702
5°	8735	8624	8687
10°	8700	8588	8651
15°	8633	8526	8600
20°	8555	8454	8521
25°	8461	8373	8434
30°	8353	8262	8308
35°	8243	8157	8195
40°	8105	8022	8012
45°	7966	7865	7887
50°	7744	7683	7683
55°	7564	7468	7399
60°	7321	7195	7131
65°	6926	6795	6701
70°	6505	6343	6182
75°	5852	5638	5517
80°	4679	4589	4543
85°	2805	3165	3257



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	267.1	1.7
10°-20°	760.3	4.9
20°-30°	1142.3	7.4
30°-40°	1363.0	8.8
40°-50°	1397.8	9.0
50°-60°	1245.5	8.0
60°-70°	928.7	6.0
70°-80°	503.6	3.2
80°-90°	118.8	0.8
90°-100°	565.0	3.6
100°-110°	1554.4	10.0
110°-120°	1604.4	10.3
120°-130°	1285.5	8.3
130°-140°	1009.6	6.5
140°-150°	773.8	5.0
150°-160°	556.3	3.6
160°-170°	340.2	2.2
170°-180°	114.7	0.7
0°-30°	2169.6	14.0
0°-40°	3532.6	22.7
0°-60°	6175.9	39.8
0°-90°	7726.9	49.8
90°-120°	3723.8	24.0
90°-150°	6792.7	43.7
90°-180°	7804.0	50.2
0°-180°	15530.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2829	2829	2829	2829	2829	
5°	2829	2824	2794	2816	2814	268
15°	2711	2706	2678	2699	2701	765
25°	2493	2491	2468	2481	2486	1148
35°	2196	2191	2173	2173	2183	1372
45°	1832	1824	1808	1808	1814	1410
55°	1411	1408	1393	1380	1380	1260
65°	952	952	934	923	921	947
75°	492	482	474	467	464	517
85°	80	84	90	90	92	110
90°	2	10	18	23	23	8
95°	84	308	999	427	273	89
105°	278	427	1713	2608	2434	293
115°	492	599	1374	2736	3104	485
125°	678	773	1246	2108	2470	605
135°	818	908	1211	1705	1929	631
145°	946	1010	1193	1453	1565	593
155°	1070	1105	1185	1306	1343	492
165°	1157	1172	1190	1239	1246	326
175°	1198	1200	1193	1208	1206	114
180°	1198	1198	1198	1198	1198	



TEST NUMBER: P520019

CATALOG NUMBER: SQ4-F-075U-075D-935-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2829.4	2829.4	2829.4	2829.4	2829.4
2.5°	2839.6	2833.6	2808.8	2829.3	2827.3
5°	2829.4	2824.4	2793.5	2816.5	2813.9
7.5°	2806.2	2800.7	2770.3	2793.5	2793.0
10°	2785.8	2778.2	2749.9	2772.9	2770.3
12.5°	2759.0	2751.5	2723.2	2746.2	2743.7
15°	2711.4	2706.4	2678.0	2698.6	2701.1
17.5°	2657.0	2647.4	2622.0	2642.1	2644.7
20°	2613.9	2606.4	2583.1	2601.1	2603.6
22.5°	2568.7	2561.2	2538.0	2556.0	2558.5
25°	2493.3	2490.8	2467.6	2480.6	2485.6
27.5°	2411.7	2404.8	2386.1	2396.0	2401.0
30°	2352.2	2347.2	2326.6	2334.4	2339.4
32.5°	2290.7	2287.6	2269.1	2272.9	2279.9
35°	2195.7	2190.7	2172.7	2172.9	2182.9
37.5°	2090.5	2085.0	2070.1	2067.6	2071.6
40°	2018.8	2011.2	1998.2	1995.7	1995.7
42.5°	1944.9	1939.4	1922.3	1917.8	1923.8
45°	1831.5	1824.0	1808.4	1808.5	1813.5
47.5°	1708.9	1705.9	1687.9	1679.7	1681.7
50°	1618.6	1623.6	1605.8	1595.8	1605.8
52.5°	1540.6	1537.6	1521.7	1511.4	1515.5
55°	1410.8	1408.3	1392.8	1380.0	1380.0
57.5°	1280.6	1274.0	1257.9	1248.4	1255.9
60°	1190.2	1187.8	1169.7	1151.9	1159.4
62.5°	1099.9	1095.5	1077.4	1065.6	1071.2
65°	951.7	951.7	933.7	923.3	920.9
67.5°	821.9	809.8	799.8	787.4	783.9
70°	723.4	713.3	705.4	694.9	687.5
72.5°	626.9	620.9	608.9	598.7	597.1
75°	492.5	482.5	474.5	466.8	464.3
77.5°	350.4	348.4	341.2	337.1	338.6
80°	264.2	264.2	259.1	259.0	256.5
82.5°	186.2	188.3	187.3	183.1	182.6
85°	79.5	84.5	89.7	89.8	92.3
87.5°	14.9	26.4	26.2	27.2	27.2
90°	2.5	10.0	17.8	23.0	23.0
92.5°	35.2	150.3	260.5	100.0	82.1
95°	84.1	308.4	999.1	427.2	272.7
97.5°	137.1	342.0	1524.7	1174.7	828.9
100°	175.9	362.8	1689.8	1705.6	1391.6
102.5°	212.5	387.5	1732.6	2116.1	1827.9
105°	277.8	427.3	1712.8	2608.4	2434.0
107.5°	340.0	476.5	1615.4	2849.7	2901.5
110°	384.9	509.5	1542.0	2909.6	3089.1



TEST NUMBER: P520019

CATALOG NUMBER: SQ4-F-075U-075D-935-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	425.7	546.3	1468.5	2871.0	3144.1
115°	491.9	599.1	1373.8	2735.5	3104.4
117.5°	555.1	653.8	1313.6	2545.5	2962.6
120°	593.8	688.6	1287.1	2403.0	2834.2
122.5°	628.5	723.2	1268.7	2278.1	2687.4
125°	677.9	772.6	1246.3	2108.3	2469.7
127.5°	724.9	815.1	1231.5	1966.7	2283.6
130°	749.3	841.6	1223.4	1882.4	2171.5
132.5°	777.9	870.0	1217.3	1808.3	2069.6
135°	818.1	907.9	1210.6	1705.1	1929.3
137.5°	855.9	939.1	1205.0	1621.6	1806.5
140°	884.4	961.7	1203.0	1566.2	1733.1
142.5°	908.9	980.2	1198.9	1516.7	1659.8
145°	945.5	1010.4	1192.8	1452.8	1564.9
147.5°	984.9	1040.6	1189.8	1396.2	1485.9
150°	1009.3	1059.1	1187.7	1365.2	1434.9
152.5°	1031.7	1077.6	1185.7	1338.4	1396.2
155°	1070.5	1105.4	1185.2	1305.8	1343.2
157.5°	1098.5	1126.9	1185.2	1279.0	1304.9
160°	1118.9	1141.3	1185.2	1264.6	1284.6
162.5°	1135.2	1153.6	1187.2	1252.3	1268.2
165°	1157.1	1172.1	1190.3	1238.9	1246.3
167.5°	1172.4	1183.9	1192.8	1227.5	1229.5
170°	1182.6	1190.1	1192.8	1223.4	1223.4
172.5°	1190.8	1194.3	1192.8	1217.3	1215.2
175°	1197.9	1200.3	1192.8	1208.1	1205.5
177.5°	1200.0	1200.0	1191.7	1204.0	1200.0
180°	1197.9	1197.9	1197.9	1197.9	1197.9

(END OF REPORT)