

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: P520047

Luminaire Tested: **SQ4-F-075U-100D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520047
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-075U-100D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

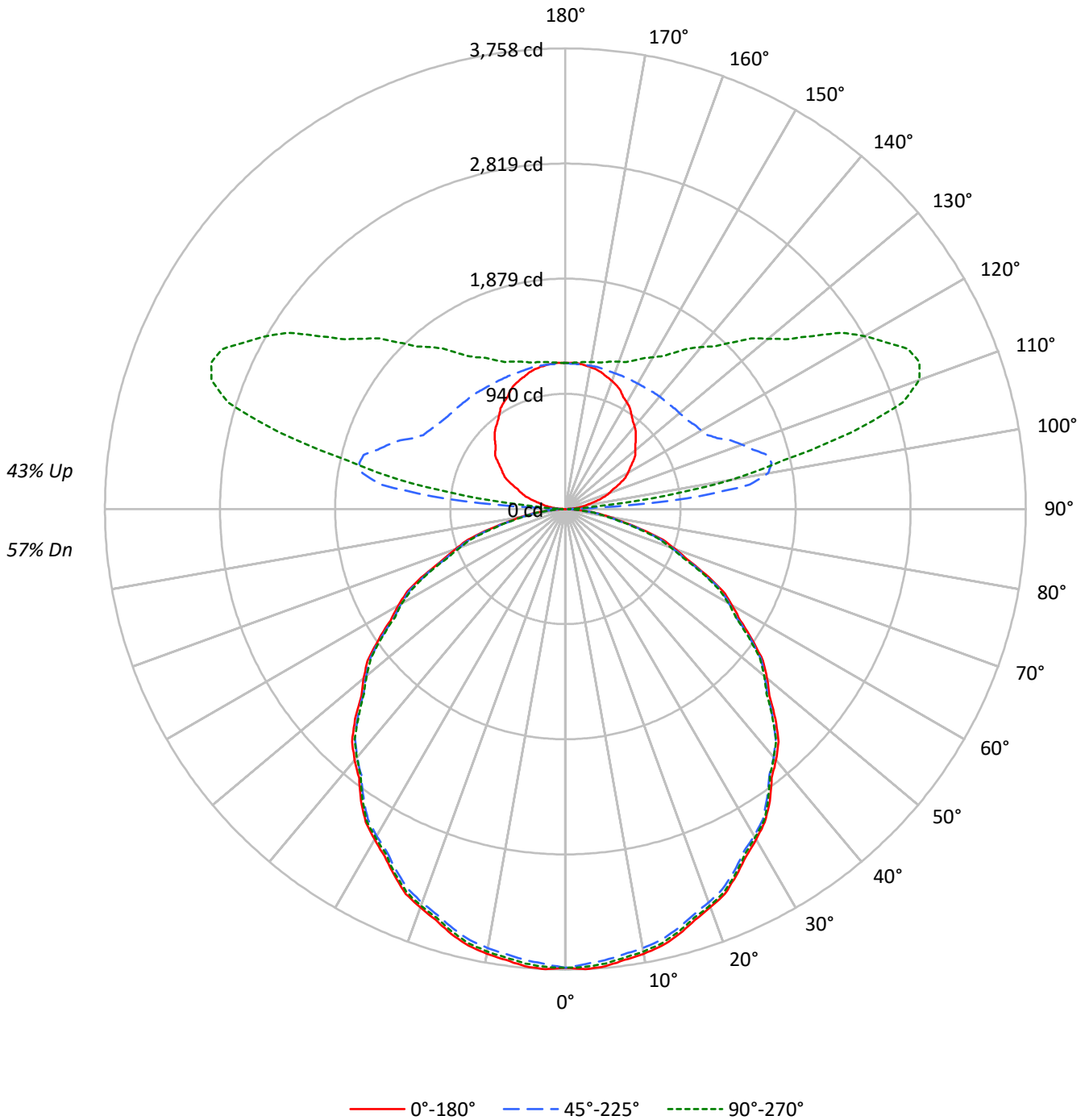
Lumens per Lamp: N/A
Luminaire Lumens: 17978.7 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 162.1
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



TEST NUMBER: P520047
CATALOG NUMBER: SQ4-F-075U-100D-940-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P520047

CATALOG NUMBER: SQ4-F-075U-100D-940-1D-UNV-STD-W-12

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57		
1	99	95	91	87	92	88	85	82	76	74	72	65	64	62	55	54	53	48		
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	48	46	44	40		
3	82	73	65	59	76	68	61	56	59	54	50	51	47	43	43	40	38	34		
4	75	64	56	50	70	60	53	47	52	47	42	45	41	37	38	35	32	29		
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	31	28	25		
6	64	51	43	37	59	48	41	35	42	36	32	36	32	28	31	27	25	22		
7	59	46	38	33	55	44	36	31	38	32	28	33	28	25	28	25	22	19		
8	55	42	34	29	51	40	32	27	35	29	25	30	26	22	26	22	20	17		
9	51	38	31	26	47	36	29	24	32	26	22	28	23	20	24	20	18	15		
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11514	11514	11514
5°	11566	11408	11495
10°	11507	11363	11451
15°	11437	11282	11372
20°	11320	11185	11278
25°	11196	11065	11153
30°	11060	10941	10996
35°	10921	10786	10843
40°	10739	10616	10626
45°	10550	10405	10371
50°	10278	10155	10131
55°	9976	9865	9796
60°	9673	9499	9467
65°	9200	8994	8919
70°	8549	8341	8180
75°	7633	7388	7236
80°	6280	6052	5781
85°	3716	4079	4171



TEST NUMBER: P520047

CATALOG NUMBER: SQ4-F-075U-100D-940-1D-UNV-STD-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	353.4	2.0
10°-20°	1006.3	5.6
20°-30°	1511.2	8.4
30°-40°	1803.4	10.0
40°-50°	1848.5	10.3
50°-60°	1646.1	9.2
60°-70°	1227.1	6.8
70°-80°	664.4	3.7
80°-90°	154.2	0.9
90°-100°	562.1	3.1
100°-110°	1546.5	8.6
110°-120°	1596.3	8.9
120°-130°	1278.9	7.1
130°-140°	1004.5	5.6
140°-150°	769.8	4.3
150°-160°	553.5	3.1
160°-170°	338.4	1.9
170°-180°	114.1	0.6
0°-30°	2870.8	16.0
0°-40°	4674.2	26.0
0°-60°	8168.8	45.4
0°-90°	10214.5	56.8
90°-120°	3704.9	20.6
90°-150°	6758.2	37.6
90°-180°	7764.0	43.2
0°-180°	17978.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3744	3744	3744	3744	3744	
5°	3746	3739	3695	3728	3723	355
15°	3592	3580	3544	3572	3572	1012
25°	3299	3292	3261	3279	3287	1520
35°	2909	2896	2873	2878	2888	1816
45°	2426	2413	2392	2380	2385	1866
55°	1860	1863	1840	1822	1827	1665
65°	1264	1259	1236	1223	1226	1250
75°	642	635	622	609	609	684
85°	105	115	116	118	118	147
90°	2	10	18	23	23	8
95°	84	307	994	425	271	88
105°	276	425	1704	2595	2422	291
115°	490	596	1367	2722	3089	483
125°	674	769	1240	2098	2457	602
135°	814	903	1204	1696	1920	628
145°	941	1005	1187	1445	1557	590
155°	1065	1100	1179	1299	1336	489
165°	1151	1166	1184	1232	1240	324
175°	1192	1194	1187	1202	1200	113
180°	1192	1192	1192	1192	1192	

TEST NUMBER: P520047

CATALOG NUMBER: SQ4-F-075U-100D-940-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3743.9	3743.9	3743.9	3743.9	3743.9
2.5°	3758.4	3750.4	3717.3	3743.9	3739.9
5°	3746.5	3739.0	3695.2	3728.5	3723.4
7.5°	3711.6	3704.1	3665.3	3696.1	3691.5
10°	3684.9	3677.3	3638.6	3669.4	3666.8
12.5°	3649.9	3642.4	3603.6	3634.4	3632.0
15°	3592.3	3579.8	3543.6	3571.8	3571.8
17.5°	3516.3	3506.7	3473.1	3496.8	3497.3
20°	3458.8	3451.2	3417.6	3443.4	3445.9
22.5°	3401.2	3393.7	3355.9	3379.7	3384.3
25°	3299.4	3291.9	3260.9	3279.0	3286.6
27.5°	3194.6	3183.5	3153.0	3169.0	3174.5
30°	3114.5	3109.4	3081.0	3088.9	3096.4
32.5°	3030.1	3025.1	3000.8	3004.8	3018.3
35°	2908.9	2896.3	2872.9	2878.2	2888.2
37.5°	2765.5	2759.4	2736.7	2733.8	2743.4
40°	2675.0	2664.9	2644.2	2639.2	2646.7
42.5°	2576.3	2566.2	2541.4	2536.4	2546.0
45°	2425.7	2413.1	2392.3	2379.6	2384.6
47.5°	2257.2	2257.2	2235.6	2220.8	2228.4
50°	2148.2	2148.2	2122.5	2109.9	2117.4
52.5°	2035.1	2037.1	2009.5	2002.7	2000.2
55°	1860.5	1862.9	1839.9	1822.0	1827.0
57.5°	1691.8	1686.3	1659.4	1647.7	1650.2
60°	1572.6	1565.1	1544.4	1526.7	1539.2
62.5°	1451.4	1447.8	1427.2	1407.1	1405.6
65°	1264.3	1259.2	1236.0	1223.2	1225.7
67.5°	1078.2	1072.2	1051.0	1032.6	1039.2
70°	950.8	950.8	927.6	917.2	909.7
72.5°	833.6	823.6	806.3	791.9	786.3
75°	642.4	634.9	621.8	609.0	609.0
77.5°	467.7	461.1	452.8	444.0	441.5
80°	354.6	352.1	341.7	338.9	326.4
82.5°	249.8	249.3	243.0	236.4	235.9
85°	105.3	115.4	115.6	118.2	118.2
87.5°	19.0	32.6	32.4	29.3	29.3
90°	2.5	10.0	17.7	22.8	22.8
92.5°	35.0	149.6	259.2	99.5	81.7
95°	83.7	306.8	994.1	425.1	271.3
97.5°	136.4	340.2	1516.9	1168.8	824.7
100°	175.0	360.9	1681.2	1696.9	1384.5
102.5°	211.5	385.6	1723.8	2105.3	1818.6
105°	276.4	425.2	1704.1	2595.2	2421.6
107.5°	338.2	474.2	1607.1	2835.2	2886.7
110°	382.9	506.9	1534.2	2894.8	3073.3

TEST NUMBER: P520047

CATALOG NUMBER: SQ4-F-075U-100D-940-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	423.4	543.4	1461.1	2856.4	3128.1
115°	489.5	596.1	1366.8	2721.6	3088.6
117.5°	552.2	650.4	1307.0	2532.5	2947.6
120°	590.9	685.1	1280.6	2390.8	2819.8
122.5°	625.3	719.5	1262.3	2266.6	2673.7
125°	674.5	768.7	1240.0	2097.7	2457.1
127.5°	721.2	811.0	1225.3	1956.6	2272.1
130°	745.5	837.3	1217.2	1872.9	2160.5
132.5°	773.9	865.6	1211.1	1799.2	2059.0
135°	814.0	903.3	1204.5	1696.4	1919.6
137.5°	851.6	934.3	1198.9	1613.4	1797.4
140°	879.9	956.8	1196.9	1558.2	1724.3
142.5°	904.3	975.2	1192.8	1508.9	1651.3
145°	940.8	1005.2	1186.8	1445.4	1557.0
147.5°	979.8	1035.3	1183.7	1389.1	1478.3
150°	1004.1	1053.7	1181.7	1358.2	1427.7
152.5°	1026.4	1072.1	1179.6	1331.6	1389.1
155°	1065.1	1099.7	1179.1	1299.1	1336.4
157.5°	1092.9	1121.2	1179.1	1272.5	1298.4
160°	1113.2	1135.5	1179.1	1258.2	1278.0
162.5°	1129.4	1147.8	1181.2	1245.9	1261.8
165°	1151.2	1166.1	1184.2	1232.5	1240.0
167.5°	1166.5	1177.9	1186.8	1221.3	1223.2
170°	1176.6	1184.0	1186.8	1217.2	1217.2
172.5°	1184.7	1188.2	1186.8	1211.0	1209.1
175°	1191.8	1194.3	1186.8	1201.9	1199.5
177.5°	1193.9	1193.9	1185.8	1197.8	1193.9
180°	1191.8	1191.8	1191.8	1191.8	1191.8

(END OF REPORT)