

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: P520015

Luminaire Tested: **SQ4-F-075U-075D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520015
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-930-1D-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

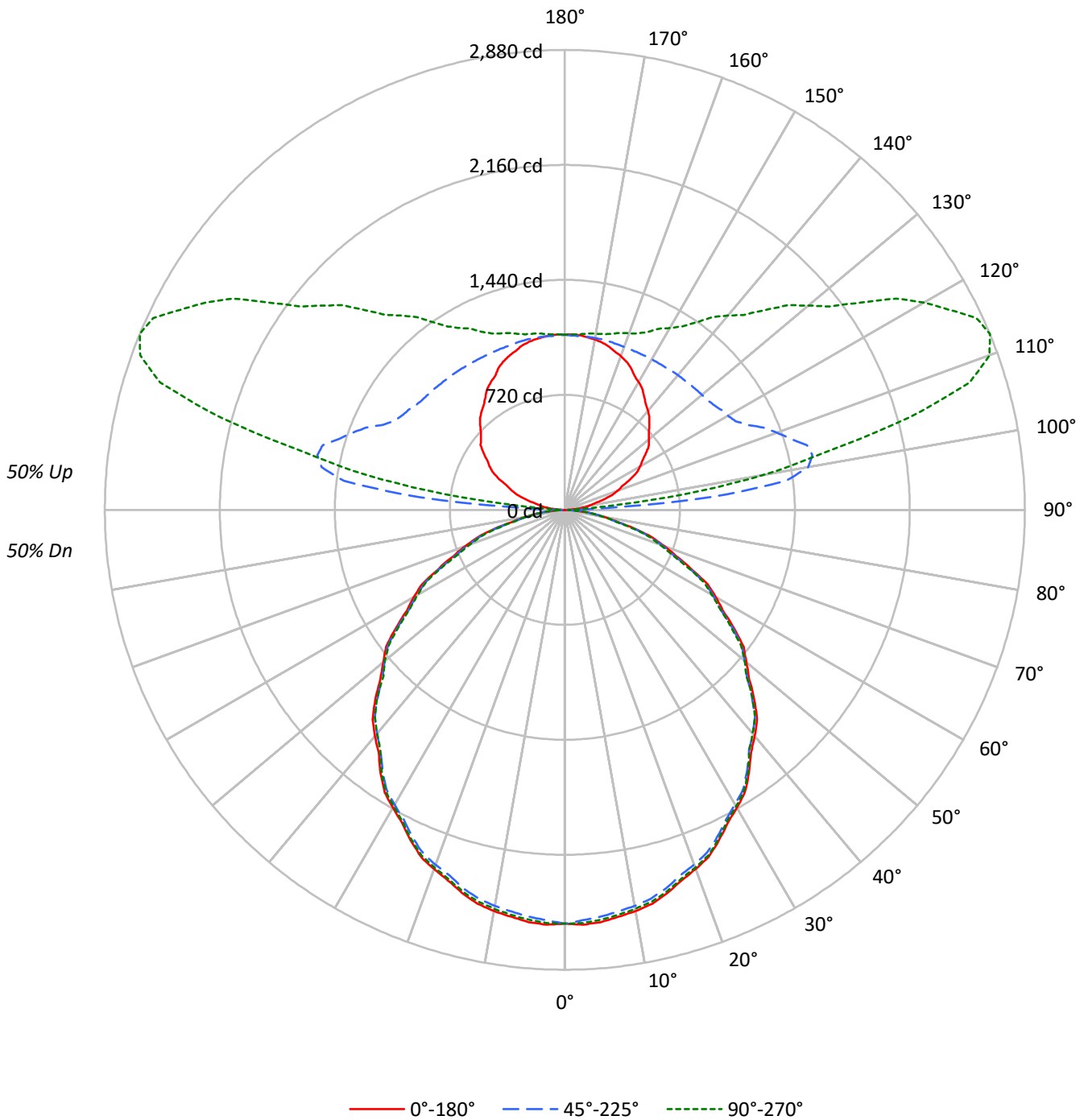
Lumens per Lamp: N/A
Luminaire Lumens: 14223.5 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

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°	7969	7969	7969
5°	7999	7898	7956
10°	7967	7865	7923
15°	7906	7809	7876
20°	7834	7742	7804
25°	7748	7669	7725
30°	7650	7567	7608
35°	7550	7470	7506
40°	7423	7347	7338
45°	7295	7203	7224
50°	7093	7036	7036
55°	6928	6840	6776
60°	6704	6589	6531
65°	6343	6223	6137
70°	5957	5809	5661
75°	5360	5164	5052
80°	4286	4203	4160
85°	2569	2904	2982



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	244.6	1.7
10°-20°	696.3	4.9
20°-30°	1046.1	7.4
30°-40°	1248.2	8.8
40°-50°	1280.1	9.0
50°-60°	1140.7	8.0
60°-70°	850.5	6.0
70°-80°	461.2	3.2
80°-90°	108.8	0.8
90°-100°	517.4	3.6
100°-110°	1423.6	10.0
110°-120°	1469.4	10.3
120°-130°	1177.3	8.3
130°-140°	924.7	6.5
140°-150°	708.6	5.0
150°-160°	509.5	3.6
160°-170°	311.5	2.2
170°-180°	105.0	0.7
0°-30°	1987.0	14.0
0°-40°	3235.2	22.7
0°-60°	5656.0	39.8
0°-90°	7076.5	49.8
90°-120°	3410.4	24.0
90°-150°	6220.9	43.7
90°-180°	7147.0	50.2
0°-180°	14223.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2591	2591	2591	2591	2591	
5°	2591	2587	2558	2579	2577	246
15°	2483	2479	2453	2472	2474	700
25°	2283	2281	2260	2272	2276	1052
35°	2011	2006	1990	1990	1999	1256
45°	1677	1670	1656	1656	1661	1291
55°	1292	1290	1276	1264	1264	1154
65°	872	872	855	846	843	868
75°	451	442	435	428	425	474
85°	73	77	82	82	84	101
90°	2	9	16	21	21	7
95°	77	282	915	391	250	81
105°	254	391	1569	2389	2229	268
115°	450	549	1258	2505	2843	445
125°	621	708	1142	1931	2262	554
135°	749	831	1109	1562	1767	578
145°	866	925	1092	1330	1433	543
155°	980	1012	1085	1196	1230	450
165°	1060	1073	1090	1135	1142	299
175°	1097	1099	1092	1106	1104	104
180°	1097	1097	1097	1097	1097	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2591.2	2591.2	2591.2	2591.2	2591.2
2.5°	2600.6	2595.1	2572.4	2591.1	2589.3
5°	2591.2	2586.6	2558.3	2579.4	2577.1
7.5°	2570.1	2565.0	2537.1	2558.3	2557.9
10°	2551.3	2544.4	2518.4	2539.5	2537.1
12.5°	2526.8	2519.9	2493.9	2515.1	2512.7
15°	2483.1	2478.6	2452.6	2471.5	2473.7
17.5°	2433.3	2424.6	2401.4	2419.7	2422.1
20°	2393.8	2386.9	2365.7	2382.1	2384.5
22.5°	2352.5	2345.6	2324.4	2340.8	2343.1
25°	2283.4	2281.2	2260.0	2271.8	2276.4
27.5°	2208.7	2202.3	2185.2	2194.3	2198.9
30°	2154.2	2149.7	2130.8	2137.9	2142.5
32.5°	2097.8	2095.1	2078.1	2081.6	2088.0
35°	2010.9	2006.3	1989.8	1990.0	1999.2
37.5°	1914.6	1909.6	1895.8	1893.5	1897.3
40°	1848.9	1842.0	1830.1	1827.7	1827.7
42.5°	1781.2	1776.1	1760.5	1756.4	1762.0
45°	1677.3	1670.4	1656.2	1656.3	1660.9
47.5°	1565.1	1562.3	1545.8	1538.3	1540.2
50°	1482.4	1486.9	1470.6	1461.4	1470.6
52.5°	1410.9	1408.2	1393.5	1384.3	1387.9
55°	1292.1	1289.8	1275.6	1263.8	1263.8
57.5°	1172.7	1166.8	1152.0	1143.3	1150.2
60°	1090.0	1087.8	1071.2	1054.9	1061.8
62.5°	1007.4	1003.3	986.7	976.0	981.0
65°	871.6	871.6	855.1	845.7	843.3
67.5°	752.7	741.7	732.4	721.1	717.9
70°	662.5	653.3	646.0	636.5	629.6
72.5°	574.1	568.6	557.7	548.3	546.9
75°	451.1	441.8	434.6	427.5	425.2
77.5°	320.9	319.0	312.4	308.7	310.1
80°	242.0	242.0	237.3	237.3	234.9
82.5°	170.5	172.4	171.5	167.7	167.3
85°	72.8	77.4	82.3	82.3	84.5
87.5°	13.6	24.2	23.9	24.9	24.9
90°	2.3	9.2	16.3	21.0	21.0
92.5°	32.2	137.6	238.6	91.6	75.1
95°	77.1	282.5	915.0	391.2	249.7
97.5°	125.6	313.2	1396.3	1075.8	759.1
100°	161.1	332.3	1547.6	1562.1	1274.5
102.5°	194.6	354.9	1586.8	1937.9	1674.1
105°	254.4	391.3	1568.6	2389.0	2229.1
107.5°	311.3	436.4	1479.4	2609.7	2657.3
110°	352.4	466.6	1412.2	2664.7	2829.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	389.8	500.3	1344.9	2629.3	2879.5
115°	450.5	548.6	1258.2	2505.3	2843.0
117.5°	508.4	598.8	1203.1	2331.2	2713.3
120°	543.8	630.6	1178.7	2200.8	2595.6
122.5°	575.6	662.4	1162.0	2086.4	2461.1
125°	620.9	707.7	1141.5	1930.9	2261.8
127.5°	663.8	746.5	1127.9	1801.1	2091.4
130°	686.2	770.7	1120.4	1723.9	1988.7
132.5°	712.4	796.9	1114.8	1656.2	1895.4
135°	749.2	831.4	1108.7	1561.6	1767.0
137.5°	783.9	860.1	1103.6	1485.1	1654.5
140°	810.0	880.7	1101.8	1434.3	1587.3
142.5°	832.4	897.6	1098.0	1389.0	1520.0
145°	866.0	925.3	1092.4	1330.4	1433.2
147.5°	901.9	953.1	1089.6	1278.7	1360.9
150°	924.3	970.0	1087.8	1250.2	1314.1
152.5°	944.9	986.8	1085.9	1225.7	1278.7
155°	980.4	1012.4	1085.4	1195.8	1230.1
157.5°	1006.0	1032.0	1085.4	1171.4	1195.1
160°	1024.7	1045.2	1085.4	1158.2	1176.4
162.5°	1039.6	1056.6	1087.3	1146.8	1161.5
165°	1059.7	1073.4	1090.1	1134.6	1141.5
167.5°	1073.7	1084.2	1092.4	1124.2	1126.0
170°	1083.1	1089.9	1092.4	1120.4	1120.4
172.5°	1090.5	1093.7	1092.4	1114.8	1112.9
175°	1097.1	1099.3	1092.4	1106.4	1104.1
177.5°	1098.9	1098.9	1091.5	1102.6	1098.9
180°	1097.1	1097.1	1097.1	1097.1	1097.1

(END OF REPORT)