

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: P519919

Luminaire Tested: **SQ4-F-050U-075D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519919
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-075D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

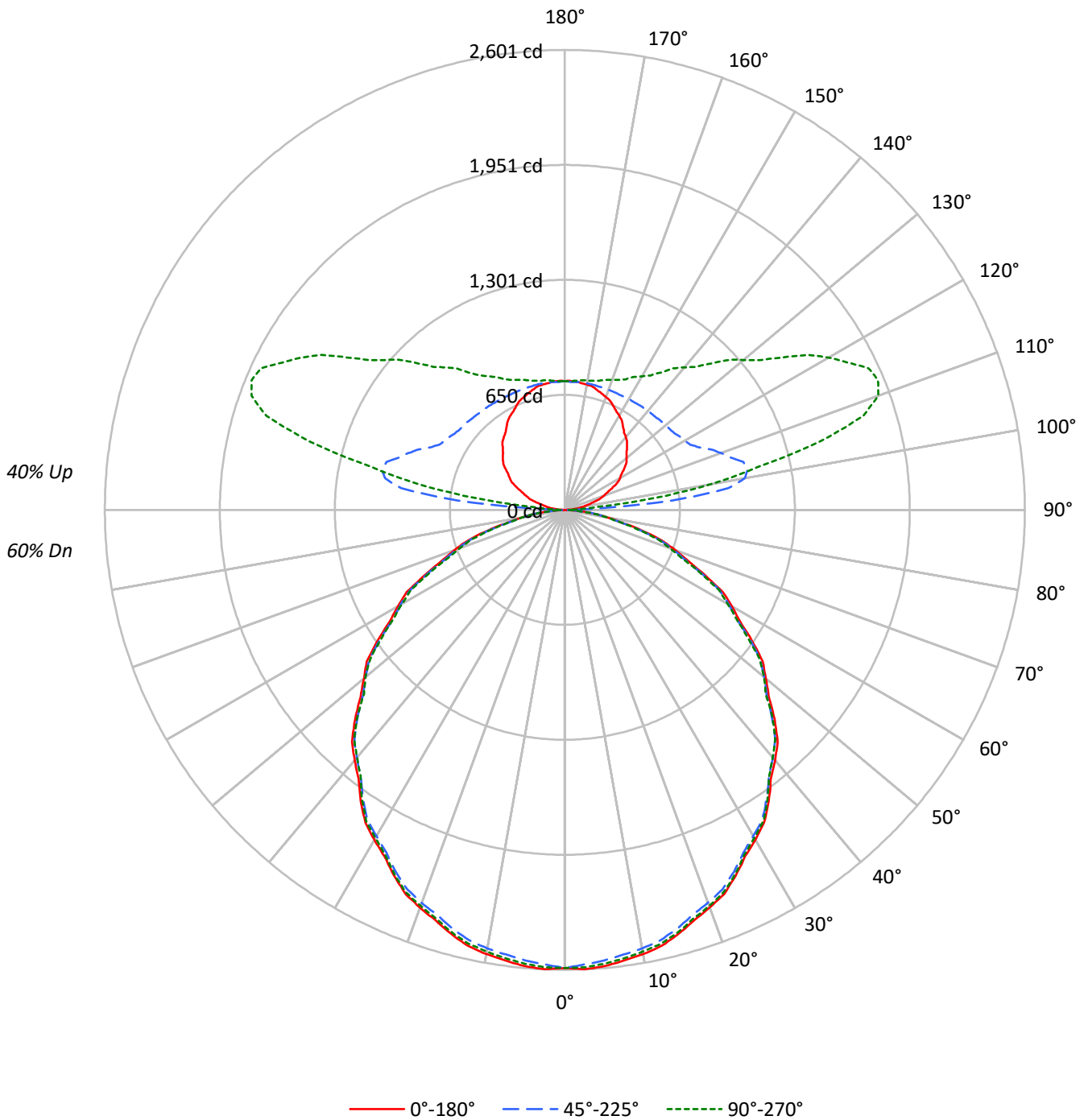
Lumens per Lamp: N/A
Luminaire Lumens: 11831.7 lumens
Efficiency: N/A
Efficacy: 103.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 114.3
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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60
1	100	96	92	88	93	89	86	83	78	75	73	67	65	64	58	56	55	50
2	91	83	77	72	85	78	73	68	68	64	60	59	56	53	51	48	46	42
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39	35
4	76	65	57	50	71	61	54	48	53	48	43	46	42	38	40	36	34	30
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	32	29	26
6	64	52	43	37	60	49	41	36	43	37	32	38	33	29	32	29	26	23
7	59	47	39	33	55	44	37	31	39	33	28	34	29	26	30	26	23	20
8	55	42	35	29	51	40	33	28	35	30	25	31	26	23	27	23	20	18
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	18	16
10	48	36	28	23	45	34	27	22	30	24	20	27	22	19	23	19	17	15

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	2.1
10°-20°	696.3	5.9
20°-30°	1046.1	8.8
30°-40°	1248.2	10.5
40°-50°	1280.1	10.8
50°-60°	1140.7	9.6
60°-70°	850.5	7.2
70°-80°	461.2	3.9
80°-90°	108.8	0.9
90°-100°	349.6	3.0
100°-110°	949.7	8.0
110°-120°	976.5	8.3
120°-130°	780.7	6.6
130°-140°	613.5	5.2
140°-150°	470.4	4.0
150°-160°	338.3	2.9
160°-170°	206.9	1.7
170°-180°	69.7	0.6
0°-30°	1987.0	16.8
0°-40°	3235.2	27.3
0°-60°	5656.0	47.8
0°-90°	7076.5	59.8
90°-120°	2275.9	19.2
90°-150°	4140.4	35.0
90°-180°	4755.0	40.2
0°-180°	11831.7	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	5
95°	52	191	609	265	178	55
105°	169	262	1044	1590	1496	179
115°	300	364	836	1663	1894	296
125°	412	469	756	1274	1503	367
135°	496	551	735	1038	1171	384
145°	574	615	726	882	948	360
155°	649	672	721	792	815	299
165°	702	712	724	754	756	198
175°	728	731	726	735	733	69
180°	728	728	728	728	728	

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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°	2.4	9.2	16.4	21.1	21.1
92.5°	21.1	95.7	166.2	71.4	60.4
95°	51.5	191.2	608.9	264.9	178.0
97.5°	85.3	211.2	933.4	726.2	510.1
100°	107.7	224.5	1032.7	1046.8	845.4
102.5°	130.2	237.9	1058.9	1294.7	1117.0
105°	168.6	262.5	1044.5	1590.3	1496.4
107.5°	208.4	291.3	984.0	1742.9	1769.0
110°	236.5	312.0	939.1	1772.9	1885.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	260.8	332.8	894.0	1748.0	1916.9
115°	299.8	363.9	836.1	1663.3	1894.5
117.5°	336.3	397.6	799.1	1543.1	1803.6
120°	360.6	420.2	782.2	1462.5	1721.2
122.5°	381.2	440.8	770.9	1381.7	1631.3
125°	412.1	469.3	756.4	1274.5	1503.4
127.5°	439.8	496.5	748.4	1193.1	1389.6
130°	456.7	511.6	744.7	1142.1	1318.5
132.5°	473.5	528.4	741.0	1098.5	1254.8
135°	496.4	551.4	735.3	1038.1	1170.9
137.5°	521.3	571.2	732.5	984.7	1096.4
140°	536.3	584.4	730.7	950.7	1051.4
142.5°	551.3	595.6	728.8	924.1	1008.4
145°	573.8	615.0	726.0	882.0	948.4
147.5°	599.1	634.3	723.6	848.9	901.1
150°	615.9	645.7	723.6	830.0	871.2
152.5°	629.0	655.1	721.7	812.9	846.8
155°	648.6	671.6	721.2	792.0	815.0
157.5°	667.9	685.7	721.2	777.9	795.2
160°	679.1	695.1	721.2	768.4	782.2
162.5°	690.3	702.7	723.1	760.8	770.9
165°	702.5	711.7	723.6	754.1	756.4
167.5°	715.2	719.8	726.0	746.2	747.9
170°	718.9	723.5	726.0	742.3	742.3
172.5°	722.7	725.5	726.0	738.6	738.6
175°	728.3	730.6	726.0	735.3	733.0
177.5°	730.2	730.2	724.6	731.9	728.3
180°	728.3	728.3	728.3	728.3	728.3

(END OF REPORT)