

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: P520249

Luminaire Tested: **SQ4-F-100U-125D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520249
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-125D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

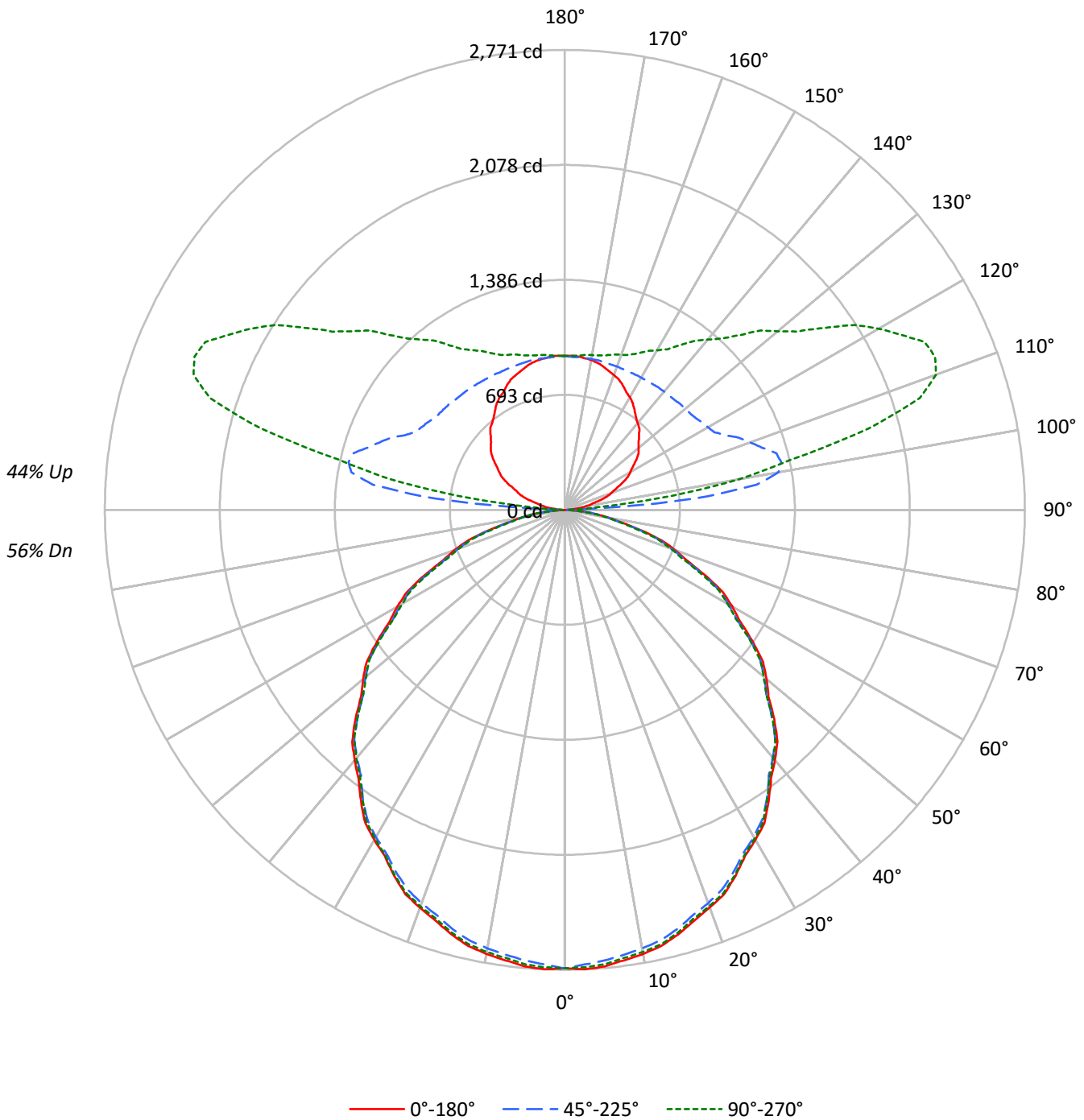
Lumens per Lamp: N/A
Luminaire Lumens: 13562.9 lumens
Efficiency: N/A
Efficacy: 130.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 104
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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56
1	99	95	91	87	92	88	85	82	76	73	71	65	63	61	54	53	52	47
2	90	83	76	71	83	77	71	67	66	62	59	57	54	51	48	45	43	39
3	82	73	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37	33
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	32	28
5	69	57	49	43	64	53	46	40	46	41	36	40	35	32	34	30	28	24
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	31	27	24	21
7	59	46	38	32	54	43	36	31	38	32	28	33	28	25	28	24	21	19
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	26	22	19	17
9	51	38	31	26	47	36	29	24	32	26	22	27	23	20	24	20	17	15
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	22	18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16990	16990	16990
5°	17046	16831	16971
10°	16968	16759	16892
15°	16854	16651	16787
20°	16698	16509	16638
25°	16508	16333	16467
30°	16304	16164	16250
35°	16072	15936	15947
40°	15808	15637	15686
45°	15512	15340	15367
50°	15173	14998	14954
55°	14787	14574	14542
60°	14307	13989	13914
65°	13563	13276	13099
70°	12632	12303	12139
75°	11236	10984	10659
80°	9153	8884	8830
85°	5469	6224	6224



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	260.6	1.9
10°-20°	742.3	5.5
20°-30°	1115.2	8.2
30°-40°	1330.7	9.8
40°-50°	1364.0	10.1
50°-60°	1215.8	9.0
60°-70°	905.0	6.7
70°-80°	490.3	3.6
80°-90°	114.5	0.8
90°-100°	434.2	3.2
100°-110°	1198.7	8.8
110°-120°	1236.3	9.1
120°-130°	993.5	7.3
130°-140°	780.8	5.8
140°-150°	598.8	4.4
150°-160°	430.3	3.2
160°-170°	263.2	1.9
170°-180°	88.7	0.7
0°-30°	2118.2	15.6
0°-40°	3448.8	25.4
0°-60°	6028.6	44.4
0°-90°	7538.4	55.6
90°-120°	2869.2	21.2
90°-150°	5242.2	38.7
90°-180°	6024.0	44.4
0°-180°	13562.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2762	2762	2762	2762	2762	
5°	2761	2756	2726	2750	2749	262
15°	2647	2641	2615	2638	2636	746
25°	2432	2428	2407	2420	2426	1120
35°	2140	2139	2122	2122	2124	1339
45°	1783	1779	1764	1761	1767	1374
55°	1379	1374	1359	1349	1356	1231
65°	932	926	912	906	900	923
75°	473	473	462	453	448	502
85°	78	88	88	90	88	107
90°	3	6	12	13	15	6
95°	64	235	788	324	211	68
105°	214	330	1319	2014	1896	227
115°	383	463	1062	2103	2391	376
125°	525	598	963	1629	1912	467
135°	632	700	936	1320	1488	489
145°	733	784	924	1124	1209	459
155°	826	854	917	1008	1040	381
165°	895	906	921	957	964	252
175°	927	929	923	936	933	88
180°	927	927	927	927	927	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2762.3	2762.3	2762.3	2762.3	2762.3
2.5°	2770.9	2766.1	2741.7	2762.2	2758.7
5°	2760.8	2756.4	2725.9	2750.2	2748.7
7.5°	2737.4	2731.7	2704.0	2726.7	2724.0
10°	2716.7	2712.3	2683.3	2706.1	2704.6
12.5°	2691.2	2686.7	2657.7	2680.6	2680.2
15°	2646.8	2640.8	2614.9	2637.7	2636.2
17.5°	2593.6	2586.8	2561.1	2579.1	2582.0
20°	2551.0	2546.6	2522.1	2539.0	2541.9
22.5°	2507.2	2501.6	2475.9	2495.2	2498.1
25°	2432.4	2428.0	2406.6	2420.4	2426.4
27.5°	2350.3	2350.3	2330.6	2340.4	2344.0
30°	2295.6	2295.6	2275.9	2282.0	2288.0
32.5°	2237.2	2232.5	2213.8	2218.8	2224.8
35°	2140.5	2139.0	2122.3	2122.3	2123.8
37.5°	2040.5	2036.4	2018.0	2019.4	2026.5
40°	1968.8	1965.8	1947.5	1947.6	1953.6
42.5°	1895.8	1892.8	1876.9	1874.6	1876.9
45°	1783.3	1778.8	1763.5	1760.6	1766.6
47.5°	1663.5	1664.7	1646.5	1642.3	1645.5
50°	1585.6	1585.6	1567.4	1558.4	1562.8
52.5°	1504.2	1501.8	1483.5	1473.4	1483.8
55°	1378.9	1374.4	1359.1	1348.7	1356.1
57.5°	1250.6	1243.8	1228.4	1216.9	1221.1
60°	1163.0	1152.6	1137.2	1128.1	1131.1
62.5°	1071.8	1066.1	1049.6	1035.7	1042.3
65°	931.9	925.9	912.2	906.0	900.0
67.5°	794.8	790.9	775.3	768.9	765.0
70°	702.4	695.0	684.1	676.5	675.0
72.5°	612.4	603.8	592.9	586.4	582.6
75°	472.8	472.8	462.2	452.9	448.5
77.5°	339.9	341.2	332.3	329.3	327.2
80°	258.4	258.4	250.8	247.8	249.3
82.5°	180.6	184.2	181.5	177.3	175.1
85°	77.5	88.0	88.2	89.7	88.2
87.5°	14.0	22.9	25.5	23.4	21.3
90°	3.0	5.8	11.9	13.4	14.8
92.5°	26.7	110.8	198.2	72.3	56.4
95°	63.8	234.9	787.7	323.8	210.7
97.5°	105.6	263.1	1167.0	898.4	650.7
100°	136.5	280.0	1307.0	1316.3	1069.6
102.5°	166.2	299.3	1334.3	1626.3	1392.4
105°	213.7	329.7	1318.8	2013.5	1895.9
107.5°	264.0	367.4	1245.2	2200.1	2243.1
110°	299.6	392.5	1188.3	2240.3	2379.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	331.7	421.1	1134.9	2208.6	2414.0
115°	382.7	462.6	1062.2	2102.8	2391.4
117.5°	427.2	506.8	1014.4	1953.8	2282.2
120°	456.9	535.3	995.5	1853.0	2183.7
122.5°	485.4	560.3	980.0	1758.8	2072.2
125°	525.2	597.7	962.8	1629.4	1912.3
127.5°	559.0	631.5	952.7	1519.9	1763.9
130°	581.6	654.1	948.0	1453.0	1674.9
132.5°	602.9	672.0	943.2	1396.7	1597.8
135°	632.0	700.2	936.1	1319.7	1488.0
137.5°	664.7	726.7	932.5	1255.0	1398.7
140°	682.5	743.3	930.2	1211.9	1338.1
142.5°	702.6	758.8	927.8	1173.6	1284.7
145°	732.8	783.7	924.2	1123.5	1209.0
147.5°	761.9	806.3	921.0	1081.2	1147.7
150°	783.3	819.6	919.8	1056.0	1109.7
152.5°	799.9	833.8	918.6	1034.4	1078.8
155°	826.3	853.9	916.8	1008.0	1040.0
157.5°	850.6	871.8	917.1	988.8	1010.6
160°	864.9	883.8	918.3	978.0	994.0
162.5°	876.7	893.3	919.5	968.4	980.9
165°	894.6	906.1	921.3	957.1	964.3
167.5°	908.2	915.2	922.7	950.1	952.4
170°	915.3	921.2	922.7	946.5	946.5
172.5°	921.3	924.7	922.7	941.7	940.5
175°	927.2	928.7	922.7	936.0	933.1
177.5°	929.6	928.4	922.4	930.8	928.4
180°	927.2	927.2	927.2	927.2	927.2

(END OF REPORT)