

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: P520250

Luminaire Tested: **SQ4-F-100U-125D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520250
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-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

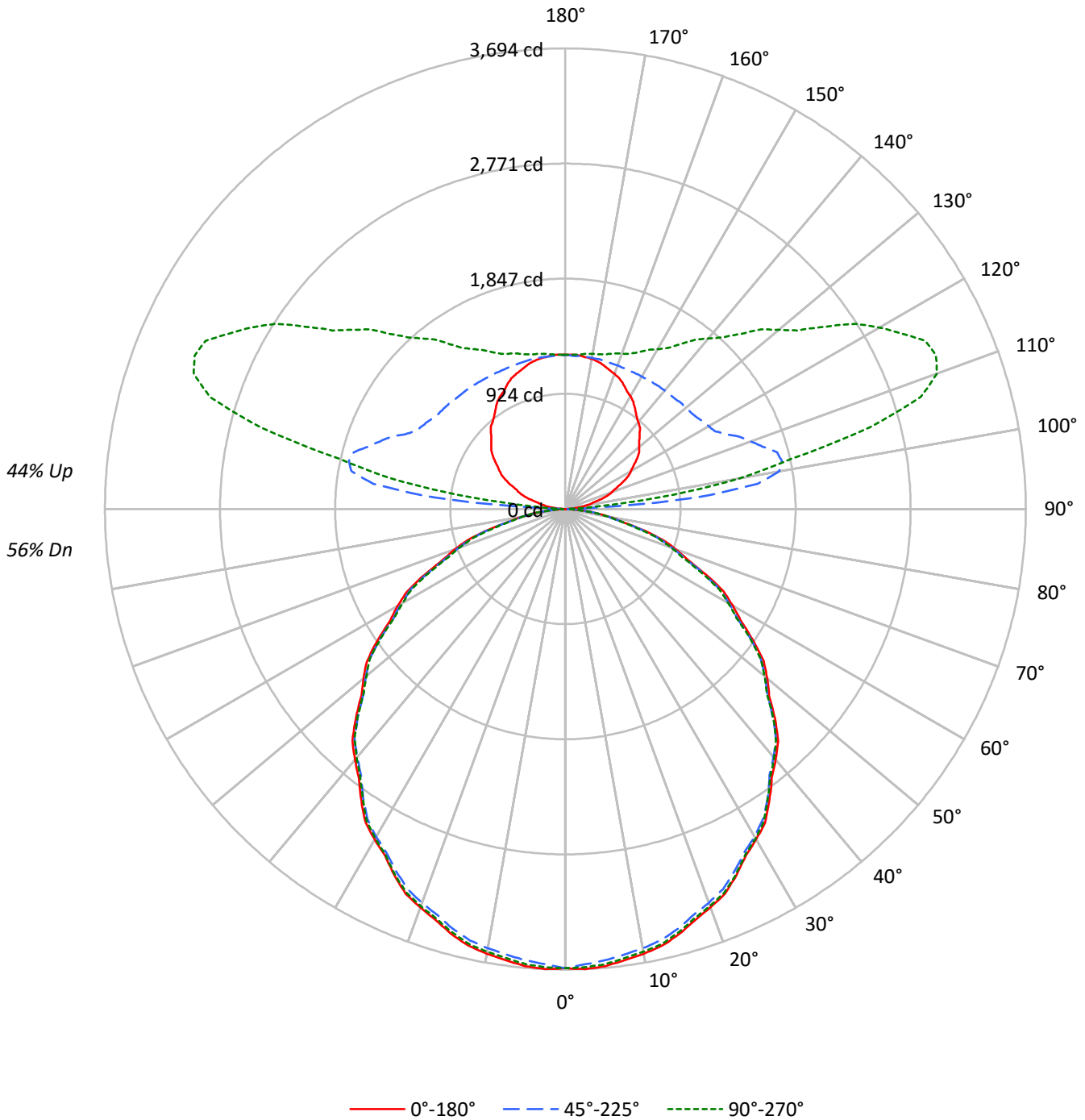
Lumens per Lamp: N/A
Luminaire Lumens: 18083.8 lumens
Efficiency: N/A
Efficacy: 130.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 138.6
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°	16991	16991	16991
5°	17046	16830	16971
10°	16968	16759	16892
15°	16854	16651	16787
20°	16698	16509	16638
25°	16508	16333	16467
30°	16304	16164	16250
35°	16073	15936	15947
40°	15808	15637	15685
45°	15512	15340	15366
50°	15173	14999	14955
55°	14786	14575	14542
60°	14307	13989	13914
65°	13564	13275	13099
70°	12631	12304	12139
75°	11236	10983	10659
80°	9155	8886	8830
85°	5473	6224	6224



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	347.5	1.9
10°-20°	989.7	5.5
20°-30°	1487.0	8.2
30°-40°	1774.2	9.8
40°-50°	1818.6	10.1
50°-60°	1621.0	9.0
60°-70°	1206.7	6.7
70°-80°	653.8	3.6
80°-90°	152.7	0.8
90°-100°	578.9	3.2
100°-110°	1598.3	8.8
110°-120°	1648.4	9.1
120°-130°	1324.6	7.3
130°-140°	1041.0	5.8
140°-150°	798.4	4.4
150°-160°	573.8	3.2
160°-170°	350.9	1.9
170°-180°	118.3	0.7
0°-30°	2824.2	15.6
0°-40°	4598.5	25.4
0°-60°	8038.1	44.4
0°-90°	10051.2	55.6
90°-120°	3825.6	21.2
90°-150°	6989.6	38.7
90°-180°	8033.0	44.4
0°-180°	18083.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3683	3683	3683	3683	3683	
5°	3681	3675	3634	3667	3665	349
15°	3529	3521	3486	3517	3515	995
25°	3243	3237	3209	3227	3235	1494
35°	2854	2852	2830	2830	2832	1785
45°	2378	2372	2351	2348	2355	1832
55°	1838	1832	1812	1798	1808	1642
65°	1243	1235	1216	1208	1200	1230
75°	630	630	616	604	598	669
85°	103	117	118	120	118	143
90°	4	8	16	18	20	9
95°	85	313	1050	432	281	91
105°	285	440	1758	2684	2528	303
115°	510	617	1416	2804	3188	501
125°	700	797	1284	2172	2550	623
135°	843	934	1248	1760	1984	652
145°	977	1045	1232	1498	1612	612
155°	1102	1138	1222	1344	1387	508
165°	1193	1208	1228	1276	1286	336
175°	1236	1238	1230	1248	1244	117
180°	1236	1236	1236	1236	1236	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3683.1	3683.1	3683.1	3683.1	3683.1
2.5°	3694.5	3688.1	3655.6	3683.0	3678.3
5°	3681.1	3675.1	3634.5	3666.9	3664.9
7.5°	3649.9	3642.4	3605.3	3635.6	3632.0
10°	3622.3	3616.3	3577.7	3608.1	3606.1
12.5°	3588.3	3582.3	3543.7	3574.1	3573.7
15°	3529.1	3521.2	3486.5	3516.9	3514.9
17.5°	3458.1	3449.0	3414.7	3438.8	3442.7
20°	3401.4	3395.4	3362.9	3385.3	3389.2
22.5°	3343.0	3335.5	3301.2	3326.9	3330.8
25°	3243.3	3237.3	3208.8	3227.2	3235.1
27.5°	3133.8	3133.8	3107.4	3120.5	3125.3
30°	3060.8	3060.8	3034.5	3042.8	3050.7
32.5°	2983.0	2976.6	2951.8	2958.5	2966.4
35°	2854.1	2852.0	2829.7	2829.7	2831.8
37.5°	2720.7	2715.1	2690.7	2692.5	2702.0
40°	2625.0	2621.1	2596.6	2596.8	2604.7
42.5°	2527.7	2523.8	2502.6	2499.4	2502.6
45°	2377.7	2371.7	2351.4	2347.5	2355.4
47.5°	2218.0	2219.6	2195.3	2189.7	2194.1
50°	2114.2	2114.2	2089.9	2077.8	2083.8
52.5°	2005.5	2002.4	1978.0	1964.5	1978.4
55°	1838.5	1832.5	1812.2	1798.2	1808.1
57.5°	1667.4	1658.3	1637.8	1622.5	1628.1
60°	1550.7	1536.8	1516.2	1504.2	1508.1
62.5°	1429.1	1421.6	1399.5	1381.0	1389.7
65°	1242.6	1234.7	1216.2	1207.9	1200.0
67.5°	1059.7	1054.6	1033.8	1025.2	1020.0
70°	936.5	926.6	912.2	902.0	900.0
72.5°	816.5	805.0	790.5	781.9	776.8
75°	630.4	630.4	616.2	604.0	598.0
77.5°	453.2	454.9	443.1	439.0	436.2
80°	344.6	344.6	334.5	330.4	332.4
82.5°	240.8	245.6	242.0	236.3	233.5
85°	103.4	117.3	117.6	119.6	117.6
87.5°	18.6	30.5	34.1	31.1	28.4
90°	4.0	7.8	15.8	17.8	19.8
92.5°	35.6	147.8	264.2	96.4	75.2
95°	85.1	313.3	1050.4	431.7	280.8
97.5°	140.9	350.9	1555.9	1197.9	867.5
100°	182.0	373.4	1742.6	1755.0	1426.2
102.5°	221.6	399.1	1779.0	2168.4	1856.6
105°	284.8	439.6	1758.4	2684.5	2527.9
107.5°	352.1	489.8	1660.4	2933.5	2990.8
110°	399.5	523.3	1584.4	2987.0	3172.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	442.3	561.4	1513.2	2944.8	3218.6
115°	510.3	616.7	1416.3	2803.7	3188.5
117.5°	569.7	675.6	1352.6	2605.1	3043.0
120°	609.3	713.7	1327.2	2470.7	2911.7
122.5°	647.2	747.1	1306.7	2345.1	2762.9
125°	700.3	796.9	1283.7	2172.5	2549.7
127.5°	745.3	842.0	1270.3	2026.6	2351.9
130°	775.3	872.1	1263.9	1937.3	2233.2
132.5°	803.8	895.9	1257.6	1862.3	2130.4
135°	842.6	933.5	1248.1	1759.6	1984.0
137.5°	886.1	968.9	1243.3	1673.5	1864.9
140°	909.9	991.1	1240.2	1615.9	1784.2
142.5°	936.8	1011.9	1237.0	1564.8	1712.9
145°	977.1	1044.8	1232.3	1498.0	1612.1
147.5°	1015.9	1075.1	1227.9	1441.6	1530.2
150°	1044.4	1092.8	1226.3	1408.1	1479.6
152.5°	1066.6	1111.8	1224.8	1379.3	1438.4
155°	1101.8	1138.5	1222.4	1344.1	1386.6
157.5°	1134.2	1162.4	1222.8	1318.4	1347.4
160°	1153.2	1178.4	1224.4	1304.0	1325.3
162.5°	1169.1	1191.0	1225.9	1291.2	1307.8
165°	1192.8	1208.2	1228.3	1276.1	1285.7
167.5°	1210.9	1220.2	1230.3	1266.8	1269.9
170°	1220.4	1228.2	1230.3	1261.9	1261.9
172.5°	1228.3	1233.0	1230.3	1255.6	1254.0
175°	1236.2	1238.2	1230.3	1248.1	1244.1
177.5°	1239.4	1237.9	1229.9	1241.0	1237.8
180°	1236.2	1236.2	1236.2	1236.2	1236.2

(END OF REPORT)