

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: P520246

Luminaire Tested: **SQ4-F-100U-125D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520246
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-830-1D-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

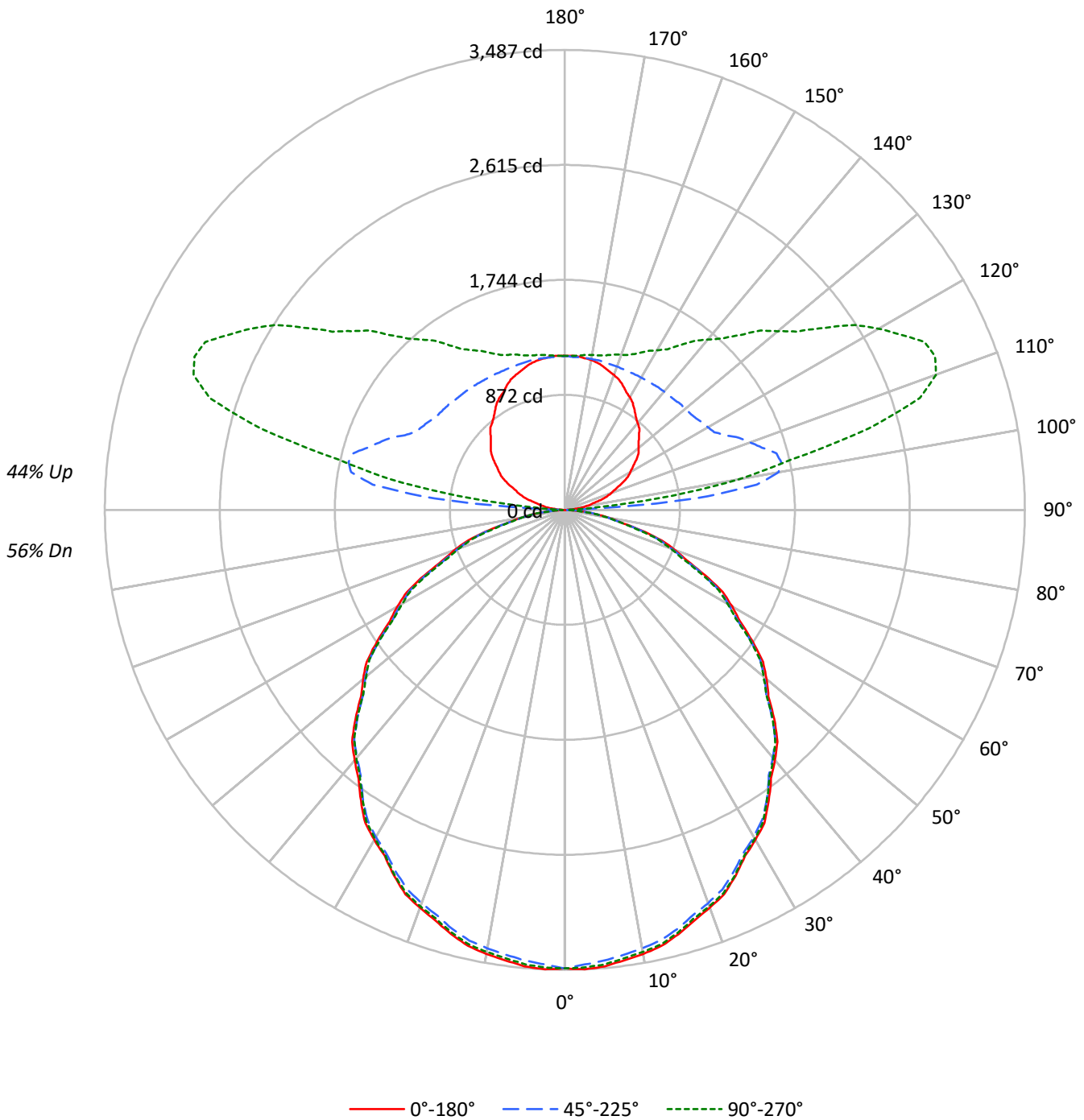
Lumens per Lamp: N/A
Luminaire Lumens: 17069.2 lumens
Efficiency: N/A
Efficacy: 123.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

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	
RC	80									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°	16037	16037	16037
5°	16089	15886	16019
10°	16016	15818	15944
15°	15908	15717	15844
20°	15761	15582	15705
25°	15582	15417	15543
30°	15390	15257	15338
35°	15171	15041	15052
40°	14921	14760	14806
45°	14642	14479	14505
50°	14322	14157	14115
55°	13956	13757	13726
60°	13504	13205	13133
65°	12802	12531	12364
70°	11923	11613	11458
75°	10605	10368	10060
80°	8639	8387	8336
85°	5166	5875	5875



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	328.0	1.9
10°-20°	934.2	5.5
20°-30°	1403.5	8.2
30°-40°	1674.7	9.8
40°-50°	1716.6	10.1
50°-60°	1530.0	9.0
60°-70°	1139.0	6.7
70°-80°	617.1	3.6
80°-90°	144.1	0.8
90°-100°	546.5	3.2
100°-110°	1508.6	8.8
110°-120°	1555.9	9.1
120°-130°	1250.3	7.3
130°-140°	982.6	5.8
140°-150°	753.6	4.4
150°-160°	541.6	3.2
160°-170°	331.2	1.9
170°-180°	111.7	0.7
0°-30°	2665.8	15.6
0°-40°	4340.4	25.4
0°-60°	7587.1	44.4
0°-90°	9487.3	55.6
90°-120°	3611.0	21.2
90°-150°	6597.4	38.7
90°-180°	7582.0	44.4
0°-180°	17069.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3476	3476	3476	3476	3476	
5°	3474	3469	3431	3461	3459	330
15°	3331	3324	3291	3320	3318	939
25°	3061	3056	3029	3046	3054	1410
35°	2694	2692	2671	2671	2673	1685
45°	2244	2239	2219	2216	2223	1729
55°	1735	1730	1710	1697	1707	1550
65°	1173	1165	1148	1140	1133	1161
75°	595	595	582	570	564	632
85°	98	111	111	113	111	135
90°	4	7	15	17	19	8
95°	80	296	991	408	265	86
105°	269	415	1660	2534	2386	286
115°	482	582	1337	2646	3010	473
125°	661	752	1212	2051	2407	588
135°	795	881	1178	1661	1873	615
145°	922	986	1163	1414	1522	578
155°	1040	1075	1154	1269	1309	479
165°	1126	1140	1160	1204	1214	317
175°	1167	1169	1161	1178	1174	111
180°	1167	1167	1167	1167	1167	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3476.5	3476.5	3476.5	3476.5	3476.5
2.5°	3487.2	3481.2	3450.4	3476.4	3471.9
5°	3474.5	3469.0	3430.6	3461.2	3459.2
7.5°	3445.0	3438.0	3403.0	3431.7	3428.2
10°	3419.1	3413.4	3376.9	3405.6	3403.8
12.5°	3387.0	3381.3	3344.8	3373.5	3373.2
15°	3331.0	3323.5	3290.9	3319.6	3317.6
17.5°	3264.1	3255.5	3223.2	3245.8	3249.5
20°	3210.5	3204.9	3174.1	3195.3	3199.1
22.5°	3155.4	3148.3	3116.0	3140.2	3143.9
25°	3061.3	3055.7	3028.8	3046.1	3053.6
27.5°	2958.0	2958.0	2933.1	2945.5	2949.9
30°	2889.1	2889.1	2864.2	2872.0	2879.5
32.5°	2815.7	2809.7	2786.2	2792.4	2799.9
35°	2693.9	2692.1	2670.9	2671.0	2672.8
37.5°	2568.1	2562.8	2539.7	2541.5	2550.4
40°	2477.7	2474.0	2451.0	2451.1	2458.6
42.5°	2385.9	2382.2	2362.2	2359.2	2362.2
45°	2244.3	2238.7	2219.4	2215.8	2223.3
47.5°	2093.5	2095.0	2072.1	2066.9	2070.9
50°	1995.6	1995.6	1972.6	1961.3	1966.8
52.5°	1893.0	1890.0	1867.0	1854.3	1867.4
55°	1735.3	1729.8	1710.5	1697.3	1706.7
57.5°	1573.9	1565.3	1545.9	1531.5	1536.8
60°	1463.7	1450.5	1431.2	1419.7	1423.5
62.5°	1348.9	1341.8	1320.9	1303.5	1311.8
65°	1172.8	1165.3	1148.0	1140.2	1132.7
67.5°	1000.2	995.4	975.8	967.6	962.7
70°	884.0	874.6	861.0	851.4	849.5
72.5°	770.7	759.8	746.2	738.0	733.2
75°	595.0	595.0	581.7	570.0	564.4
77.5°	427.8	429.3	418.3	414.3	411.8
80°	325.2	325.2	315.7	312.0	313.8
82.5°	227.3	231.8	228.4	223.1	220.4
85°	97.6	110.7	111.0	112.8	111.0
87.5°	17.6	28.8	32.1	29.4	26.8
90°	3.8	7.4	14.9	16.8	18.7
92.5°	33.6	139.5	249.5	91.0	70.9
95°	80.3	295.7	991.4	407.6	265.1
97.5°	133.0	331.2	1468.6	1130.7	818.9
100°	171.7	352.5	1644.9	1656.4	1346.1
102.5°	209.1	376.7	1679.2	2046.7	1752.4
105°	268.9	414.9	1659.8	2534.0	2386.1
107.5°	332.4	462.4	1567.2	2768.9	2822.9
110°	377.2	494.0	1495.5	2819.5	2994.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	417.5	529.9	1428.3	2779.6	3038.1
115°	481.7	582.1	1336.8	2646.4	3009.7
117.5°	537.7	637.7	1276.7	2459.0	2872.3
120°	575.0	673.7	1252.7	2332.1	2748.3
122.5°	610.9	705.1	1233.4	2213.6	2607.9
125°	660.9	752.2	1211.7	2050.6	2406.7
127.5°	703.5	794.7	1199.0	1912.9	2219.9
130°	731.9	823.1	1193.0	1828.6	2107.9
132.5°	758.7	845.7	1187.1	1757.7	2010.8
135°	795.3	881.2	1178.1	1660.9	1872.7
137.5°	836.5	914.5	1173.6	1579.5	1760.2
140°	858.8	935.5	1170.6	1525.3	1684.0
142.5°	884.3	955.1	1167.7	1477.0	1616.9
145°	922.3	986.3	1163.1	1413.9	1521.6
147.5°	958.9	1014.7	1159.1	1360.8	1444.4
150°	985.8	1031.5	1157.6	1329.0	1396.6
152.5°	1006.7	1049.5	1156.1	1301.8	1357.7
155°	1040.0	1074.6	1153.8	1268.7	1308.8
157.5°	1070.5	1097.2	1154.2	1244.4	1271.8
160°	1088.5	1112.2	1155.7	1230.9	1251.0
162.5°	1103.5	1124.2	1157.2	1218.8	1234.4
165°	1125.8	1140.5	1159.5	1204.5	1213.6
167.5°	1143.0	1151.7	1161.3	1195.8	1198.6
170°	1151.9	1159.3	1161.3	1191.2	1191.2
172.5°	1159.5	1163.8	1161.3	1185.2	1183.7
175°	1166.9	1168.8	1161.3	1178.1	1174.4
177.5°	1169.8	1168.5	1160.9	1171.3	1168.4
180°	1166.9	1166.9	1166.9	1166.9	1166.9

(END OF REPORT)