

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: P520256

Luminaire Tested: **SQ4-F-100U-125D-930-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520256  
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-930-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

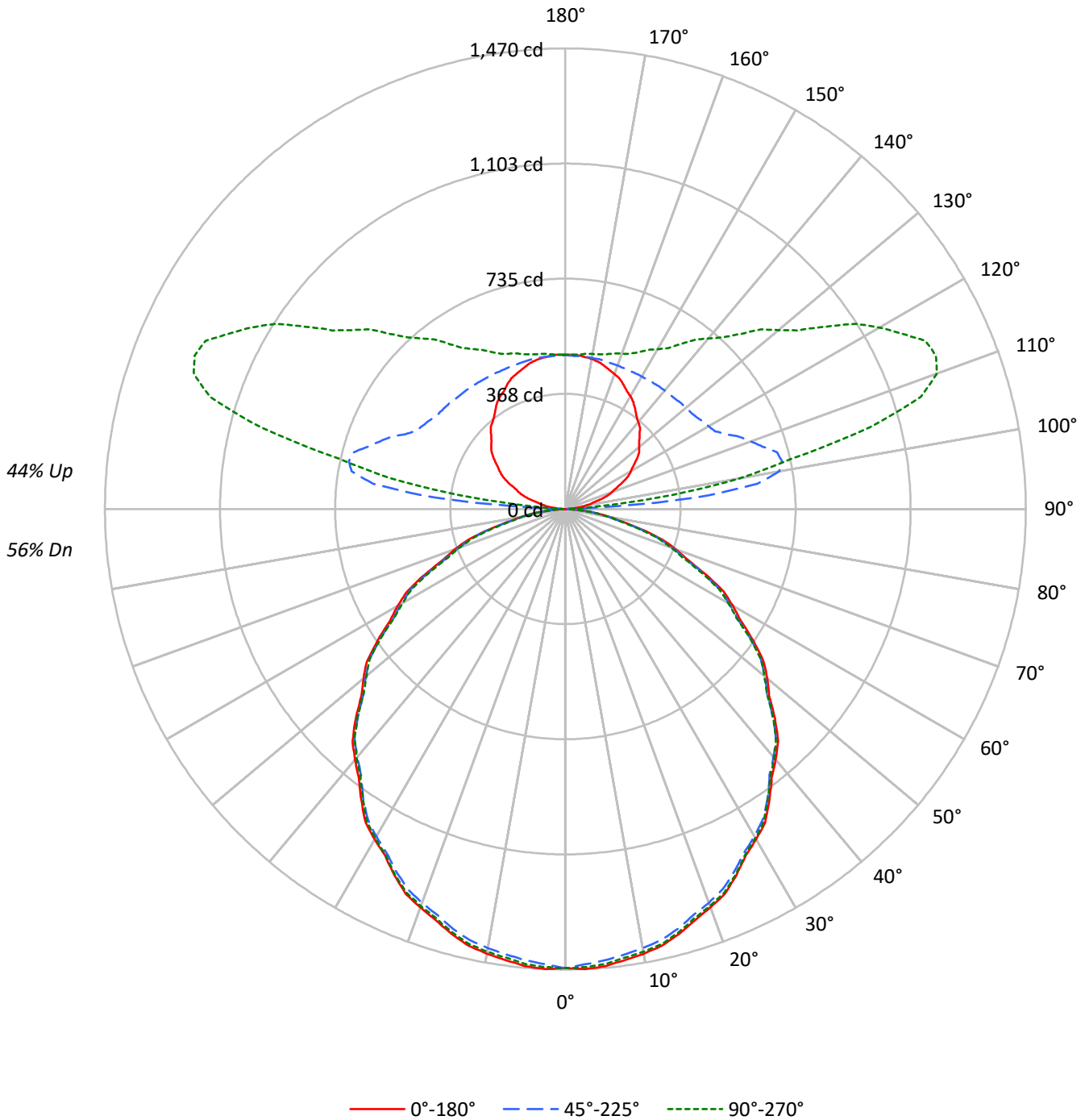
Lumens per Lamp: N/A  
Luminaire Lumens: 7195.1 lumens  
Efficiency: N/A  
Efficacy: 104.7 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 68.7  
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	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°	13520	13520	13520
5°	13564	13393	13504
10°	13502	13336	13441
15°	13411	13250	13358
20°	13288	13137	13240
25°	13136	12997	13104
30°	12974	12862	12931
35°	12789	12681	12690
40°	12579	12444	12481
45°	12343	12208	12228
50°	12074	11935	11900
55°	11766	11598	11572
60°	11385	11130	11071
65°	10793	10566	10424
70°	10051	9789	9660
75°	8940	8741	8480
80°	7284	7072	7029
85°	4351	4954	4954



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.3	1.9
10°-20°	393.8	5.5
20°-30°	591.6	8.2
30°-40°	705.9	9.8
40°-50°	723.6	10.1
50°-60°	644.9	9.0
60°-70°	480.1	6.7
70°-80°	260.1	3.6
80°-90°	60.7	0.8
90°-100°	230.3	3.2
100°-110°	635.9	8.8
110°-120°	655.8	9.1
120°-130°	527.0	7.3
130°-140°	414.2	5.8
140°-150°	317.7	4.4
150°-160°	228.3	3.2
160°-170°	139.6	1.9
170°-180°	47.1	0.7
0°-30°	1123.7	15.6
0°-40°	1829.6	25.4
0°-60°	3198.1	44.4
0°-90°	3999.1	55.6
90°-120°	1522.1	21.2
90°-150°	2781.0	38.7
90°-180°	3196.0	44.4
0°-180°	7195.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1465	1465	1465	1465	1465	
5°	1465	1462	1446	1459	1458	139
15°	1404	1401	1387	1399	1398	396
25°	1290	1288	1277	1284	1287	594
35°	1136	1135	1126	1126	1127	710
45°	946	944	936	934	937	729
55°	732	729	721	715	719	653
65°	494	491	484	481	478	490
75°	251	251	245	240	238	266
85°	41	47	47	48	47	57
90°	2	3	6	7	8	3
95°	34	125	418	172	112	36
105°	113	175	700	1068	1006	121
115°	203	245	564	1116	1269	200
125°	279	317	511	864	1014	248
135°	335	372	497	700	789	259
145°	389	416	490	596	641	243
155°	438	453	486	535	552	202
165°	474	481	489	508	512	134
175°	492	493	490	497	495	47
180°	492	492	492	492	492	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1465.4	1465.4	1465.4	1465.4	1465.4
2.5°	1469.9	1467.5	1454.5	1465.3	1463.5
5°	1464.6	1462.3	1446.1	1459.0	1458.1
7.5°	1452.2	1449.2	1434.4	1446.5	1445.1
10°	1441.2	1438.9	1423.5	1435.5	1434.7
12.5°	1427.6	1425.3	1409.9	1422.1	1421.9
15°	1404.1	1401.0	1387.2	1399.3	1398.5
17.5°	1376.0	1372.3	1358.6	1368.2	1369.8
20°	1353.4	1350.9	1338.0	1346.9	1348.5
22.5°	1330.1	1327.1	1313.5	1323.7	1325.3
25°	1290.4	1288.1	1276.7	1284.0	1287.2
27.5°	1246.8	1246.8	1236.4	1241.6	1243.5
30°	1217.8	1217.8	1207.3	1210.6	1213.8
32.5°	1186.8	1184.3	1174.5	1177.1	1180.2
35°	1135.5	1134.7	1125.9	1125.9	1126.7
37.5°	1082.5	1080.3	1070.6	1071.3	1075.0
40°	1044.4	1042.8	1033.2	1033.2	1036.3
42.5°	1005.7	1004.1	995.7	994.5	995.7
45°	946.0	943.7	935.6	934.1	937.2
47.5°	882.5	883.1	873.4	871.2	872.9
50°	841.2	841.2	831.5	826.7	829.1
52.5°	797.9	796.7	787.0	781.6	787.2
55°	731.5	729.1	721.0	715.4	719.4
57.5°	663.4	659.8	651.7	645.6	647.7
60°	617.0	611.5	603.2	598.5	600.0
62.5°	568.6	565.6	556.8	549.4	553.0
65°	494.4	491.3	484.0	480.6	477.5
67.5°	421.6	419.6	411.3	407.8	405.8
70°	372.6	368.6	362.9	358.9	358.1
72.5°	324.8	320.3	314.5	311.1	309.0
75°	250.8	250.8	245.2	240.3	237.9
77.5°	180.3	181.0	176.4	174.6	173.5
80°	137.1	137.1	133.1	131.5	132.3
82.5°	95.8	97.7	96.3	94.1	92.9
85°	41.1	46.6	46.8	47.5	46.8
87.5°	7.4	12.2	13.6	12.4	11.3
90°	1.6	3.1	6.3	7.1	7.9
92.5°	14.1	58.8	105.2	38.4	29.9
95°	33.8	124.6	417.9	171.8	111.8
97.5°	56.0	139.6	619.1	476.6	345.1
100°	72.4	148.6	693.3	698.3	567.4
102.5°	88.1	158.8	707.9	862.7	738.6
105°	113.4	174.9	699.7	1068.2	1005.8
107.5°	140.1	194.9	660.6	1167.2	1189.9
110°	159.0	208.2	630.4	1188.5	1262.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	176.0	223.4	602.0	1171.6	1280.6
115°	203.1	245.3	563.5	1115.5	1268.7
117.5°	226.6	268.9	538.1	1036.5	1210.7
120°	242.4	283.9	528.0	983.0	1158.5
122.5°	257.5	297.3	519.9	933.1	1099.3
125°	278.6	317.0	510.7	864.4	1014.4
127.5°	296.6	335.0	505.4	806.3	935.8
130°	308.5	347.0	502.9	770.8	888.5
132.5°	319.8	356.5	500.3	740.9	847.7
135°	335.2	371.5	496.6	700.1	789.4
137.5°	352.6	385.5	494.7	665.8	742.0
140°	362.1	394.3	493.4	642.9	709.9
142.5°	372.7	402.6	492.2	622.6	681.6
145°	388.8	415.7	490.4	596.0	641.4
147.5°	404.2	427.7	488.6	573.5	608.9
150°	415.6	434.8	488.0	560.2	588.7
152.5°	424.4	442.4	487.3	548.8	572.4
155°	438.3	453.0	486.4	534.8	551.7
157.5°	451.3	462.6	486.5	524.6	536.2
160°	458.8	468.8	487.2	518.8	527.3
162.5°	465.1	473.9	487.8	513.8	520.3
165°	474.5	480.8	488.8	507.7	511.5
167.5°	481.8	485.5	489.6	504.0	505.3
170°	485.6	488.7	489.6	502.1	502.1
172.5°	488.8	490.6	489.6	499.6	499.0
175°	491.8	492.6	489.6	496.6	495.0
177.5°	493.1	492.5	489.4	493.7	492.5
180°	491.8	491.8	491.8	491.8	491.8

(END OF REPORT)