

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521426

Luminaire Tested: **SQ4-F-050U-100D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521426  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-050U-100D-93050-1D-UNV-STD-W-4 (3000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

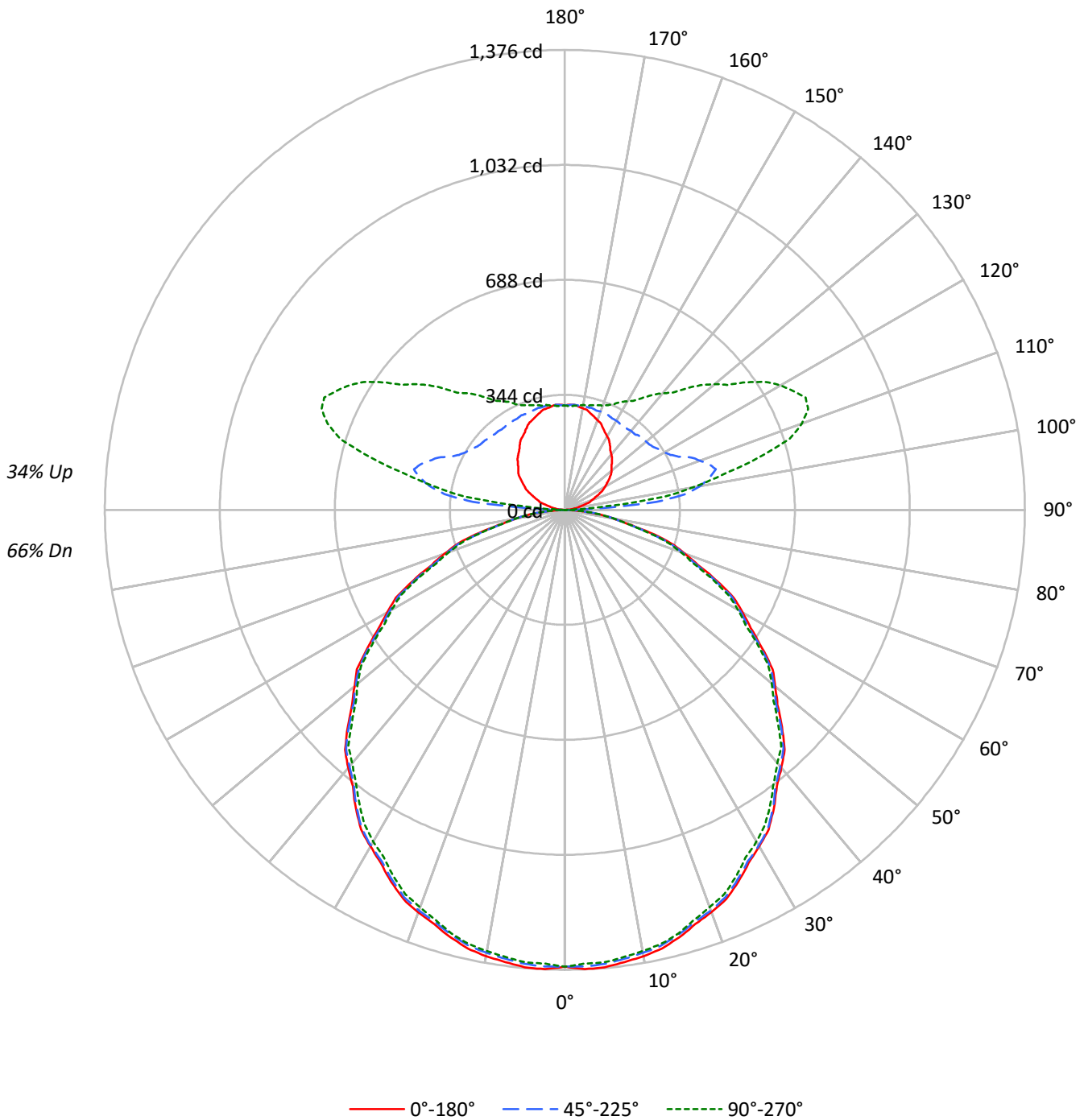
Lumens per Lamp: N/A  
Luminaire Lumens: 5923.4 lumens  
Efficiency: N/A  
Efficacy: 101.3 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 58.5  
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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	84	81	78	75	71	69	67	62	61	59	55
2	92	84	78	72	86	79	74	69	70	66	62	62	59	56	54	52	50	46
3	84	74	66	60	78	70	63	57	62	56	52	55	50	47	48	45	42	38
4	77	65	57	51	72	62	54	48	55	49	44	49	44	40	43	39	36	33
5	70	58	50	43	66	55	47	42	49	43	38	44	39	35	38	34	31	28
6	65	52	44	38	61	49	42	36	44	38	33	39	34	30	35	31	27	25
7	60	47	39	33	56	45	37	32	40	34	29	36	31	27	32	28	24	22
8	56	43	35	29	52	41	33	28	37	30	26	33	28	24	29	25	22	19
9	52	39	31	26	49	37	30	25	34	27	23	30	25	21	27	23	20	17
10	48	36	28	23	46	34	27	23	31	25	21	28	23	19	25	21	18	16

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	12610	12610	12610
5°	12722	12632	12586
10°	12704	12612	12557
15°	12644	12568	12531
20°	12582	12524	12428
25°	12506	12436	12326
30°	12387	12356	12210
35°	12278	12234	12080
40°	12137	12078	11913
45°	11983	11919	11753
50°	11788	11718	11605
55°	11585	11474	11348
60°	11317	11190	11027
65°	10946	10732	10540
70°	10324	10083	9900
75°	9407	9094	8919
80°	7715	7715	7715
85°	5505	6235	6542



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.4	2.2
10°-20°	370.6	6.3
20°-30°	560.6	9.5
30°-40°	675.1	11.4
40°-50°	701.1	11.8
50°-60°	636.3	10.7
60°-70°	485.5	8.2
70°-80°	271.4	4.6
80°-90°	70.7	1.2
90°-100°	161.0	2.7
100°-110°	389.2	6.6
110°-120°	415.1	7.0
120°-130°	336.2	5.7
130°-140°	260.3	4.4
140°-150°	198.6	3.4
150°-160°	143.7	2.4
160°-170°	88.5	1.5
170°-180°	30.0	0.5
0°-30°	1060.6	17.9
0°-40°	1735.7	29.3
0°-60°	3073.2	51.9
0°-90°	3900.7	65.9
90°-120°	965.3	16.3
90°-150°	1760.4	29.7
90°-180°	2023.0	34.2
0°-180°	5923.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1367	1367	1367	1367	1367	
5°	1374	1359	1364	1361	1359	130
15°	1324	1310	1316	1312	1312	373
25°	1228	1216	1222	1211	1211	566
35°	1090	1080	1086	1072	1072	681
45°	918	912	914	901	901	708
55°	720	718	713	706	706	644
65°	501	498	492	485	483	495
75°	264	260	255	251	250	277
85°	52	57	59	60	62	64
90°	0	0	0	0	0	3
95°	16	81	276	179	126	18
105°	62	108	468	605	598	66
115°	114	146	376	712	795	113
125°	162	187	326	567	666	145
135°	199	222	313	447	514	154
145°	236	253	307	380	410	147
155°	270	282	311	336	349	125
165°	298	303	315	320	324	84
175°	316	314	316	313	312	30
180°	312	312	312	312	312	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1366.8	1366.8	1366.8	1366.8	1366.8
2.5°	1375.5	1363.9	1367.6	1365.9	1359.0
5°	1373.7	1359.3	1363.9	1360.9	1359.0
7.5°	1364.7	1350.3	1354.9	1350.9	1349.8
10°	1356.0	1341.6	1346.2	1342.3	1340.3
12.5°	1344.3	1330.6	1335.2	1330.5	1330.1
15°	1323.7	1310.2	1315.8	1311.9	1311.9
17.5°	1299.5	1287.0	1292.8	1287.1	1286.2
20°	1281.5	1269.0	1275.6	1266.7	1265.8
22.5°	1261.1	1249.3	1255.2	1244.8	1245.4
25°	1228.5	1216.0	1221.6	1210.8	1210.8
27.5°	1191.0	1178.7	1185.7	1172.7	1172.0
30°	1162.7	1151.2	1159.8	1146.1	1146.1
32.5°	1134.5	1124.5	1130.7	1117.7	1115.4
35°	1090.1	1080.5	1086.2	1072.5	1072.5
37.5°	1041.5	1033.6	1036.6	1023.9	1026.7
40°	1007.7	999.1	1002.8	990.0	989.1
42.5°	973.2	965.3	968.3	955.6	958.4
45°	918.4	911.7	913.5	900.8	900.8
47.5°	862.9	857.9	856.4	845.1	847.0
50°	821.3	819.4	816.4	806.6	808.5
52.5°	783.6	779.4	775.5	766.5	767.7
55°	720.2	718.3	713.3	705.5	705.5
57.5°	659.6	655.3	649.6	641.5	641.5
60°	613.3	611.3	606.4	597.6	597.6
62.5°	569.3	566.6	560.9	552.8	552.0
65°	501.4	497.6	491.6	484.7	482.8
67.5°	430.6	426.5	421.7	415.2	414.1
70°	382.7	377.9	373.8	368.9	367.0
72.5°	334.0	331.5	326.7	321.8	320.7
75°	263.9	260.1	255.1	251.2	250.2
77.5°	190.0	189.4	187.6	185.1	186.0
80°	145.2	146.2	145.2	144.3	145.2
82.5°	105.2	107.7	107.5	107.4	108.3
85°	52.0	56.8	58.9	59.9	61.8
87.5°	14.9	19.5	23.5	24.4	25.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.3	43.6	102.7	49.9	33.9
95°	15.9	80.6	275.9	179.4	125.7
97.5°	28.2	89.3	363.4	350.1	300.5
100°	37.7	94.6	411.5	434.4	393.7
102.5°	46.7	99.5	443.3	504.7	480.5
105°	62.2	107.5	467.8	605.2	597.5
107.5°	77.4	116.9	453.4	685.9	704.1
110°	88.0	124.9	430.1	720.6	754.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	98.6	132.9	409.4	729.1	787.7
115°	113.8	145.5	375.8	712.5	794.6
117.5°	128.9	158.8	356.1	674.1	770.4
120°	138.9	166.8	343.4	644.1	745.0
122.5°	149.5	175.3	335.4	613.3	712.7
125°	162.1	186.7	326.2	566.6	665.6
127.5°	174.5	197.7	319.7	527.0	614.0
130°	181.9	204.6	317.6	499.5	584.9
132.5°	188.8	212.5	314.4	479.6	552.1
135°	199.2	222.4	313.0	446.8	514.1
137.5°	208.9	232.4	308.3	424.6	475.3
140°	216.4	237.7	308.3	408.6	455.2
142.5°	223.8	245.1	305.7	394.7	434.0
145°	235.5	253.0	307.0	379.8	409.6
147.5°	246.5	263.5	306.2	362.6	387.2
150°	253.4	268.3	308.3	355.1	374.5
152.5°	260.8	275.2	307.8	347.1	364.4
155°	269.9	281.6	311.0	336.4	348.7
157.5°	280.9	290.9	310.3	332.3	339.5
160°	285.2	293.6	313.0	327.0	332.1
162.5°	292.0	299.4	311.9	325.3	328.4
165°	298.4	302.9	314.9	319.7	324.2
167.5°	306.2	309.2	314.1	319.3	319.4
170°	308.3	310.3	316.3	315.7	318.9
172.5°	312.0	313.4	314.7	316.1	314.1
175°	315.6	314.3	315.6	312.9	312.3
177.5°	314.9	314.9	313.9	312.8	310.2
180°	312.3	312.3	312.3	312.3	312.3

(END OF REPORT)