

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: P521430

Luminaire Tested: **SQ4-F-050U-100D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521430  
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 (5000K)  
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 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

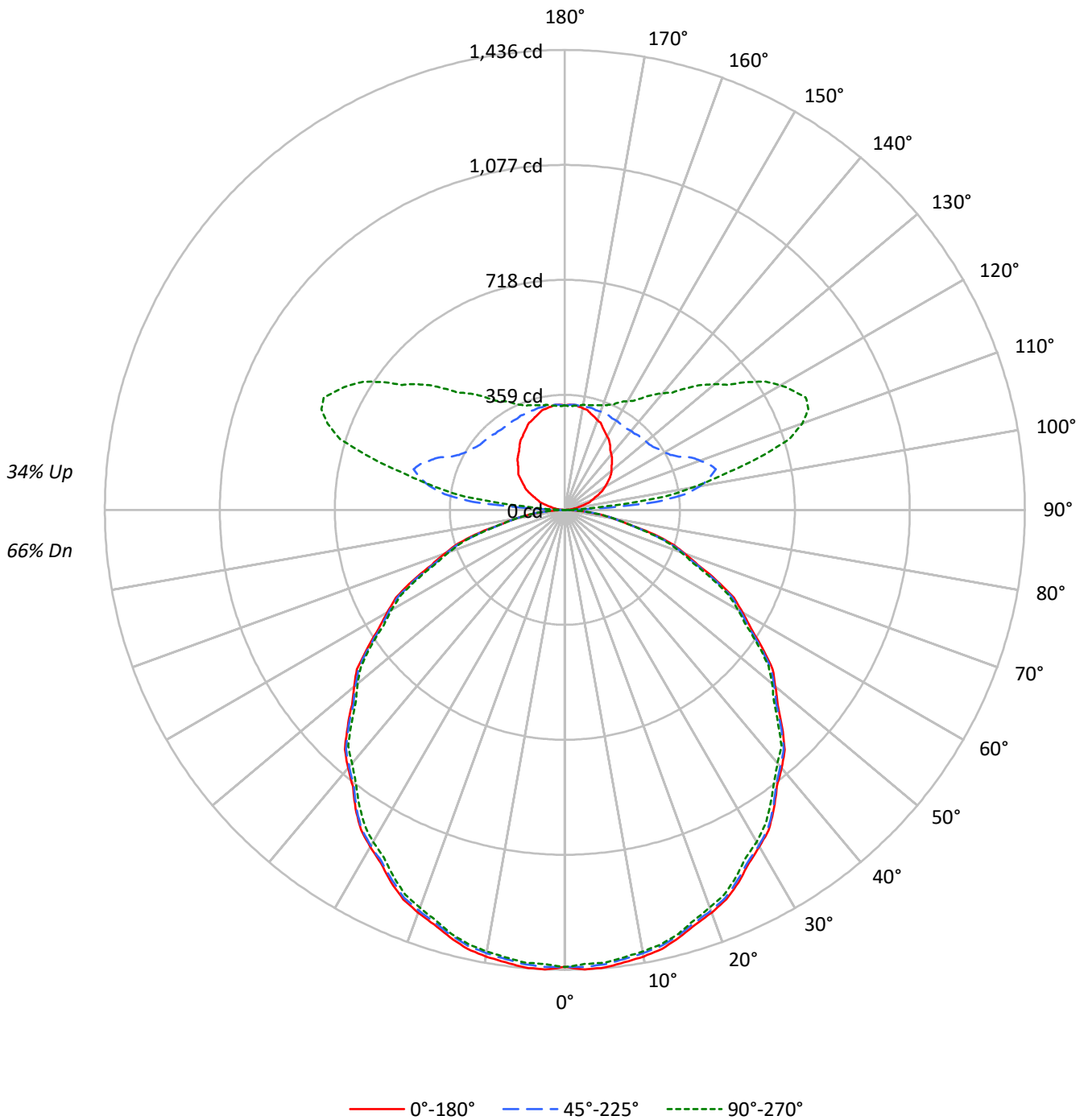
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6186.0 lumens  
Efficiency: N/A  
Efficacy: 105.9 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): 58.4  
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°	13169	13169	13169
5°	13286	13192	13144
10°	13268	13171	13114
15°	13204	13126	13087
20°	13140	13079	12979
25°	13061	12988	12873
30°	12937	12904	12751
35°	12823	12777	12615
40°	12675	12614	12440
45°	12514	12448	12274
50°	12311	12238	12120
55°	12098	11984	11852
60°	11819	11686	11516
65°	11431	11208	11007
70°	10779	10531	10337
75°	9828	9496	9315
80°	8060	8060	8060
85°	5748	6510	6838



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	135.2	2.2
10°-20°	387.0	6.3
20°-30°	585.4	9.5
30°-40°	705.1	11.4
40°-50°	732.2	11.8
50°-60°	664.6	10.7
60°-70°	507.0	8.2
70°-80°	283.4	4.6
80°-90°	73.8	1.2
90°-100°	168.2	2.7
100°-110°	406.5	6.6
110°-120°	433.5	7.0
120°-130°	351.1	5.7
130°-140°	271.8	4.4
140°-150°	207.4	3.4
150°-160°	150.1	2.4
160°-170°	92.5	1.5
170°-180°	31.3	0.5
0°-30°	1107.6	17.9
0°-40°	1812.7	29.3
0°-60°	3209.4	51.9
0°-90°	4073.7	65.9
90°-120°	1008.1	16.3
90°-150°	1838.5	29.7
90°-180°	2112.0	34.1
0°-180°	6186.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1427	1427	1427	1427	1427	
5°	1435	1420	1424	1421	1419	136
15°	1382	1368	1374	1370	1370	390
25°	1283	1270	1276	1264	1264	591
35°	1138	1128	1134	1120	1120	712
45°	959	952	954	941	941	740
55°	752	750	745	737	737	673
65°	524	520	513	506	504	516
75°	276	272	266	262	261	290
85°	54	59	62	63	65	67
90°	0	0	0	0	0	3
95°	17	84	288	187	131	19
105°	65	112	488	632	624	69
115°	119	152	392	744	830	117
125°	169	195	341	592	695	151
135°	208	232	327	467	537	161
145°	246	264	321	397	428	154
155°	282	294	325	351	364	130
165°	312	316	329	334	339	88
175°	330	328	330	327	326	31
180°	326	326	326	326	326	

TEST NUMBER: P521430

CATALOG NUMBER: SQ4-F-050U-100D-93050-1D-UNV-STD-W-4 (5000K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1427.4	1427.4	1427.4	1427.4	1427.4
2.5°	1436.5	1424.4	1428.3	1426.5	1419.2
5°	1434.6	1419.6	1424.4	1421.2	1419.2
7.5°	1425.2	1410.2	1414.9	1410.8	1409.6
10°	1416.2	1401.1	1405.9	1401.8	1399.8
12.5°	1403.9	1389.6	1394.4	1389.5	1389.1
15°	1382.4	1368.3	1374.2	1370.1	1370.1
17.5°	1357.1	1344.1	1350.2	1344.2	1343.2
20°	1338.3	1325.3	1332.1	1322.9	1321.9
22.5°	1317.0	1304.8	1310.8	1300.0	1300.6
25°	1283.0	1269.9	1275.8	1264.5	1264.5
27.5°	1243.8	1231.0	1238.3	1224.7	1223.9
30°	1214.3	1202.3	1211.2	1196.9	1196.9
32.5°	1184.8	1174.4	1180.9	1167.3	1164.9
35°	1138.5	1128.4	1134.4	1120.0	1120.0
37.5°	1087.6	1079.4	1082.5	1069.3	1072.3
40°	1052.4	1043.4	1047.3	1033.9	1032.9
42.5°	1016.3	1008.1	1011.2	997.9	1000.9
45°	959.1	952.1	954.0	940.7	940.7
47.5°	901.1	895.9	894.4	882.5	884.5
50°	857.7	855.7	852.6	842.4	844.4
52.5°	818.3	813.9	809.9	800.5	801.7
55°	752.1	750.1	745.0	736.8	736.8
57.5°	688.8	684.4	678.4	670.0	670.0
60°	640.5	638.4	633.3	624.1	624.1
62.5°	594.5	591.7	585.7	577.3	576.5
65°	523.6	519.6	513.4	506.2	504.2
67.5°	449.6	445.4	440.4	433.6	432.4
70°	399.6	394.6	390.4	385.3	383.2
72.5°	348.8	346.2	341.2	336.1	334.9
75°	275.7	271.6	266.4	262.3	261.3
77.5°	198.4	197.8	195.9	193.3	194.3
80°	151.7	152.7	151.7	150.7	151.7
82.5°	109.9	112.5	112.3	112.1	113.1
85°	54.3	59.3	61.5	62.6	64.6
87.5°	15.6	20.4	24.6	25.4	26.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.5	45.5	107.2	52.1	35.4
95°	16.6	84.1	288.1	187.4	131.3
97.5°	29.4	93.2	379.5	365.6	313.8
100°	39.4	98.8	429.8	453.7	411.1
102.5°	48.8	103.9	463.0	527.1	501.8
105°	65.0	112.2	488.5	632.1	623.9
107.5°	80.8	122.1	473.5	716.3	735.3
110°	91.9	130.4	449.1	752.6	788.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	103.0	138.8	427.6	761.5	822.7
115°	118.8	152.0	392.5	744.1	829.9
117.5°	134.6	165.8	371.9	704.0	804.6
120°	145.1	174.2	358.6	672.6	778.0
122.5°	156.2	183.0	350.3	640.5	744.3
125°	169.3	195.0	340.6	591.7	695.1
127.5°	182.3	206.5	333.9	550.4	641.2
130°	190.0	213.7	331.7	521.6	610.8
132.5°	197.2	221.9	328.4	500.9	576.5
135°	208.0	232.3	326.8	466.6	536.9
137.5°	218.2	242.7	322.0	443.4	496.4
140°	225.9	248.2	322.0	426.7	475.4
142.5°	233.7	256.0	319.2	412.2	453.3
145°	246.0	264.2	320.6	396.6	427.7
147.5°	257.5	275.2	319.8	378.7	404.4
150°	264.6	280.2	322.0	370.8	391.1
152.5°	272.4	287.4	321.4	362.5	380.6
155°	281.9	294.1	324.8	351.3	364.1
157.5°	293.4	303.8	324.1	347.0	354.6
160°	297.8	306.6	326.8	341.5	346.9
162.5°	305.0	312.7	325.7	339.8	343.0
165°	311.6	316.4	328.9	333.8	338.6
167.5°	319.8	322.9	328.1	333.5	333.6
170°	322.0	324.0	330.3	329.7	333.0
172.5°	325.9	327.3	328.6	330.1	328.1
175°	329.6	328.2	329.6	326.8	326.1
177.5°	328.9	328.9	327.8	326.6	323.9
180°	326.1	326.1	326.1	326.1	326.1

(END OF REPORT)