

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: P521443

Luminaire Tested: **SQ4-F-050U-125D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521443
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-125D-93050-1D-UNV-STD-W-4 (5000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

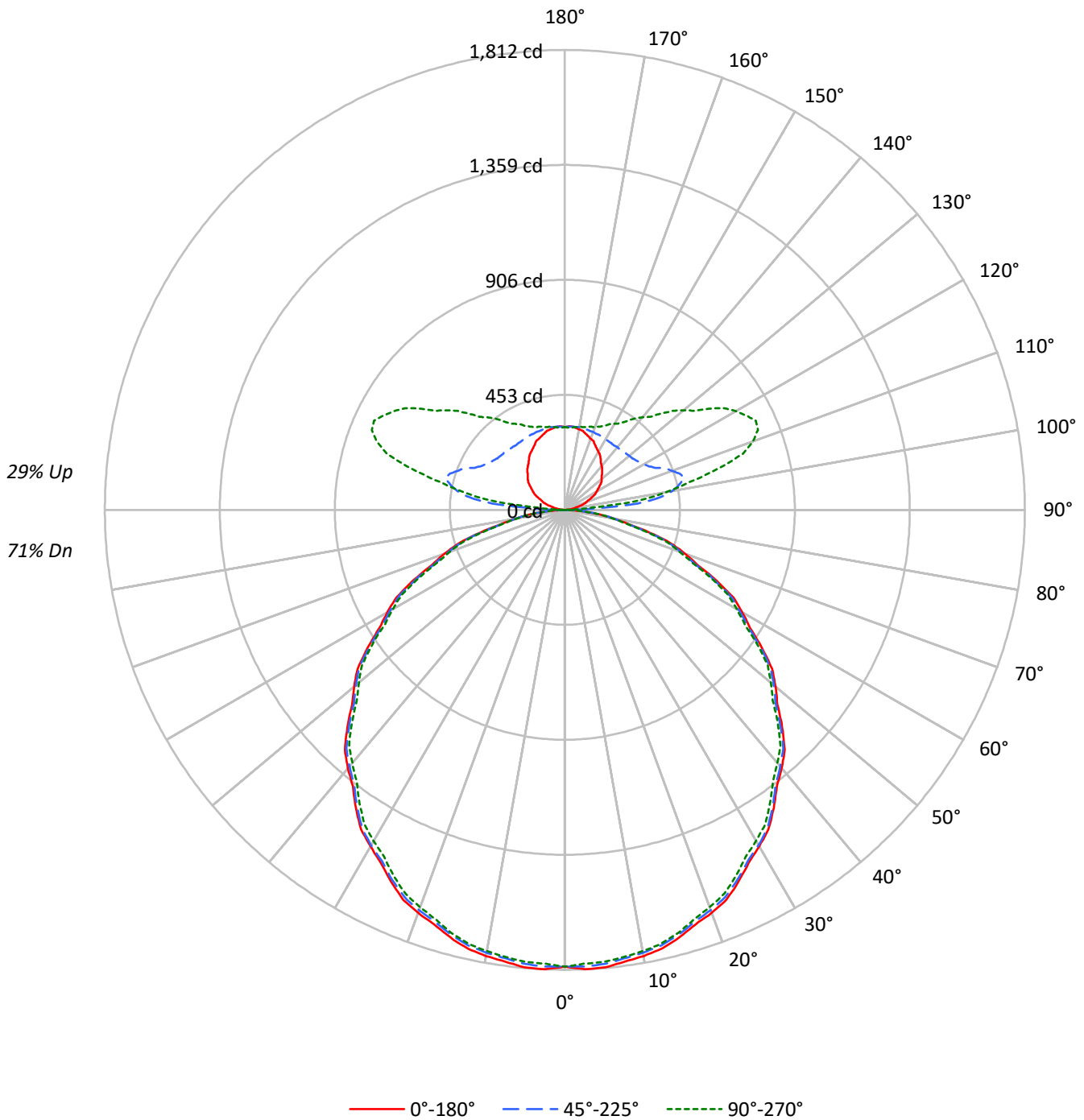
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7240.0 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): 71.5
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75	71
1	102	98	94	90	97	93	89	86	83	80	78	74	72	70	66	65	63	59
2	93	85	79	73	88	81	75	70	73	68	64	65	61	58	58	55	53	49
3	85	75	67	61	80	71	64	58	64	58	54	57	53	49	51	48	45	41
4	77	66	58	51	73	63	55	49	57	50	46	51	46	42	46	42	38	35
5	71	59	50	44	67	56	48	42	51	44	39	46	40	36	41	37	33	30
6	65	53	44	38	62	50	42	37	46	39	34	41	36	32	37	33	29	27
7	61	48	39	33	57	45	38	32	41	35	30	37	32	28	34	29	26	24
8	56	43	35	30	53	41	34	29	38	31	27	34	29	25	31	27	23	21
9	52	40	32	26	50	38	31	26	35	28	24	32	26	22	29	24	21	19
10	49	36	29	24	46	35	28	23	32	26	22	29	24	20	27	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16602	16602	16602
5°	16760	16636	16560
10°	16724	16598	16541
15°	16659	16551	16482
20°	16591	16480	16359
25°	16471	16378	16221
30°	16309	16255	16047
35°	16158	16077	15881
40°	16008	15896	15686
45°	15804	15670	15469
50°	15546	15428	15209
55°	15247	15098	14902
60°	14882	14673	14428
65°	14384	14094	13826
70°	13544	13213	12964
75°	12348	11981	11724
80°	10180	10127	9909
85°	7272	8246	8246



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.3	2.4
10°-20°	487.9	6.7
20°-30°	737.8	10.2
30°-40°	888.3	12.3
40°-50°	922.4	12.7
50°-60°	836.0	11.5
60°-70°	636.7	8.8
70°-80°	355.8	4.9
80°-90°	92.5	1.3
90°-100°	168.2	2.3
100°-110°	406.5	5.6
110°-120°	433.5	6.0
120°-130°	351.1	4.8
130°-140°	271.8	3.8
140°-150°	207.4	2.9
150°-160°	150.1	2.1
160°-170°	92.5	1.3
170°-180°	31.3	0.4
0°-30°	1396.0	19.3
0°-40°	2284.3	31.6
0°-60°	4042.7	55.8
0°-90°	5127.6	70.8
90°-120°	1008.1	13.9
90°-150°	1838.5	25.4
90°-180°	2112.0	29.2
0°-180°	7240.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1799	1799	1799	1799	1799	
5°	1810	1791	1796	1789	1788	172
15°	1744	1726	1733	1729	1726	492
25°	1618	1600	1609	1594	1593	745
35°	1435	1422	1427	1411	1410	897
45°	1211	1201	1201	1186	1186	933
55°	948	944	939	926	926	847
65°	659	652	646	634	633	650
75°	346	338	336	331	329	365
85°	69	75	78	79	78	85
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: P521443

CATALOG NUMBER: SQ4-F-050U-125D-93050-1D-UNV-STD-W-4 (5000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1799.4	1799.4	1799.4	1799.4	1799.4
2.5°	1811.7	1795.7	1800.2	1796.8	1789.6
5°	1809.7	1790.6	1796.3	1789.1	1788.1
7.5°	1795.7	1776.7	1782.4	1778.1	1777.1
10°	1785.1	1766.0	1771.7	1766.6	1765.6
12.5°	1770.3	1752.1	1757.8	1751.8	1750.8
15°	1744.1	1726.0	1732.8	1728.6	1725.6
17.5°	1711.9	1693.5	1701.5	1695.2	1691.6
20°	1689.8	1669.7	1678.5	1668.2	1666.2
22.5°	1662.7	1642.7	1651.4	1638.7	1638.3
25°	1618.0	1600.0	1608.8	1594.4	1593.4
27.5°	1567.8	1551.0	1560.2	1542.8	1541.6
30°	1530.9	1514.9	1525.8	1508.3	1506.3
32.5°	1493.2	1479.6	1486.5	1471.4	1468.6
35°	1434.6	1421.6	1427.4	1411.0	1410.0
37.5°	1371.7	1358.7	1364.1	1348.5	1346.7
40°	1329.1	1316.0	1319.8	1303.4	1302.4
42.5°	1282.3	1271.7	1273.9	1256.7	1257.3
45°	1211.2	1201.2	1201.0	1185.6	1185.6
47.5°	1135.6	1125.6	1125.8	1111.6	1110.4
50°	1083.1	1077.1	1074.9	1061.6	1059.6
52.5°	1029.0	1024.6	1020.8	1007.5	1007.1
55°	947.9	943.9	938.6	926.4	926.4
57.5°	864.7	860.1	853.4	841.1	840.1
60°	806.5	803.5	795.2	782.9	781.9
62.5°	748.3	742.8	736.2	724.7	723.7
65°	658.9	651.9	645.6	634.3	633.3
67.5°	566.1	558.2	552.9	545.1	542.1
70°	502.1	495.1	489.8	483.6	480.6
72.5°	438.2	432.0	428.3	422.1	419.1
75°	346.4	338.3	336.1	330.9	328.9
77.5°	253.1	249.1	247.2	243.4	240.6
80°	191.6	191.6	190.6	188.5	186.5
82.5°	138.3	139.9	141.4	141.0	139.0
85°	68.7	74.7	77.9	78.9	77.9
87.5°	19.7	26.1	31.2	32.0	31.2
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)