

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: P521441

Luminaire Tested: **SQ4-F-050U-125D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521441
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 (4000K)
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 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

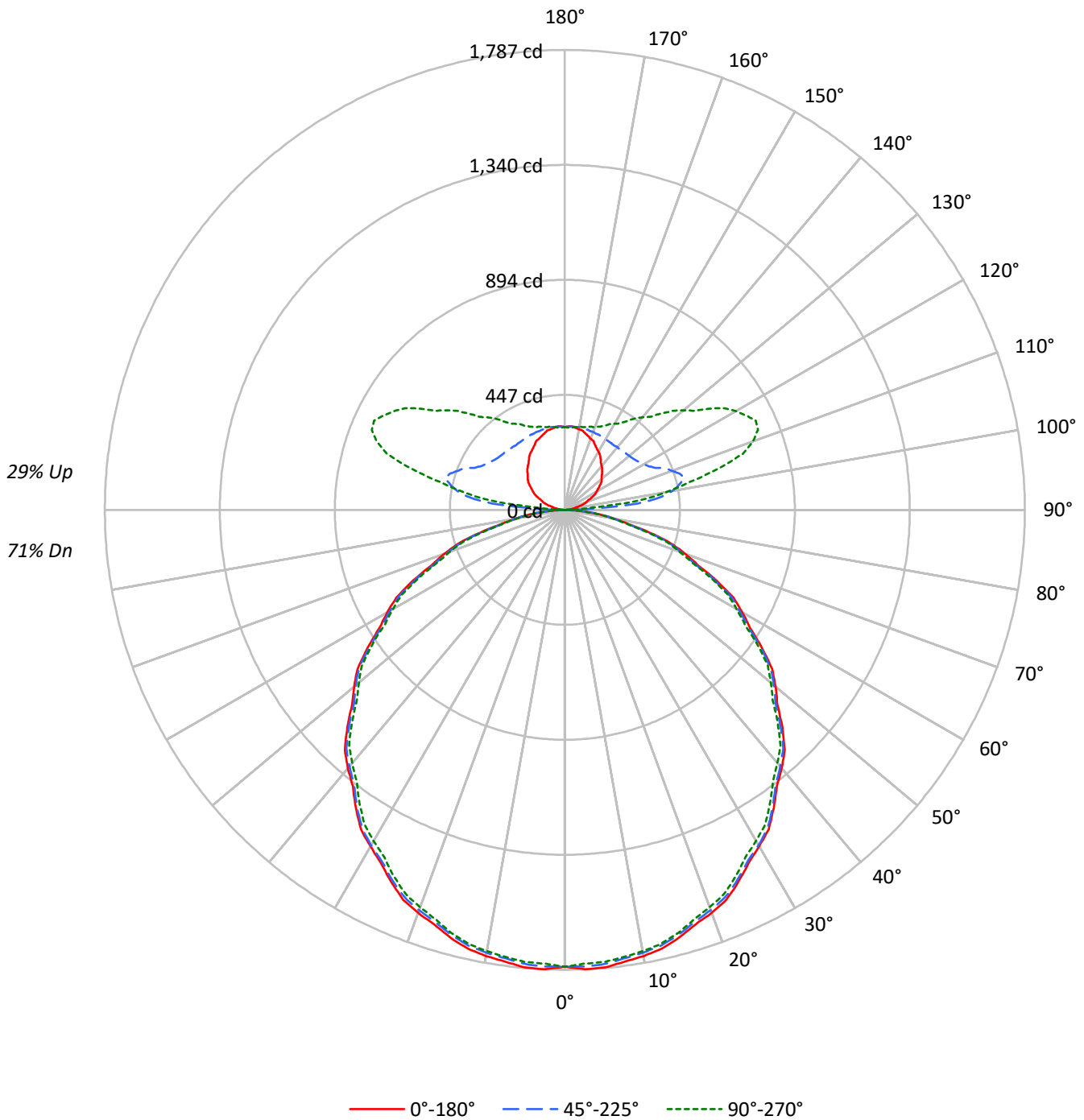
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7140.5 lumens
Efficiency: N/A
Efficacy: 99.7 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): 71.6
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				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°	16374	16374	16374
5°	16530	16409	16333
10°	16493	16371	16313
15°	16430	16324	16256
20°	16362	16253	16134
25°	16245	16153	15998
30°	16086	16031	15827
35°	15936	15856	15662
40°	15787	15678	15470
45°	15587	15455	15257
50°	15332	15217	14999
55°	15037	14890	14696
60°	14677	14472	14229
65°	14186	13900	13636
70°	13358	13032	12786
75°	12177	11817	11564
80°	10042	9989	9771
85°	7167	8130	8130



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.0	2.4
10°-20°	481.2	6.7
20°-30°	727.6	10.2
30°-40°	876.1	12.3
40°-50°	909.7	12.7
50°-60°	824.5	11.5
60°-70°	627.9	8.8
70°-80°	350.9	4.9
80°-90°	91.2	1.3
90°-100°	165.9	2.3
100°-110°	400.9	5.6
110°-120°	427.6	6.0
120°-130°	346.3	4.8
130°-140°	268.1	3.8
140°-150°	204.5	2.9
150°-160°	148.0	2.1
160°-170°	91.2	1.3
170°-180°	30.9	0.4
0°-30°	1376.8	19.3
0°-40°	2252.9	31.6
0°-60°	3987.1	55.8
0°-90°	5057.1	70.8
90°-120°	994.3	13.9
90°-150°	1813.2	25.4
90°-180°	2083.0	29.2
0°-180°	7140.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1775	1775	1775	1775	1775	
5°	1785	1766	1772	1765	1764	169
15°	1720	1702	1709	1705	1702	485
25°	1596	1578	1587	1572	1572	735
35°	1415	1402	1408	1392	1391	885
45°	1195	1185	1184	1169	1169	921
55°	935	931	926	914	914	835
65°	650	643	637	626	625	641
75°	342	334	332	326	324	360
85°	68	74	77	78	77	84
90°	0	0	0	0	0	3
95°	16	83	284	185	130	18
105°	64	111	482	623	615	68
115°	117	150	387	734	818	116
125°	167	192	336	584	686	149
135°	205	229	322	460	530	158
145°	243	261	316	391	422	152
155°	278	290	320	346	359	128
165°	307	312	324	329	334	87
175°	325	324	325	322	322	31
180°	322	322	322	322	322	

TEST NUMBER: P521441

CATALOG NUMBER: SQ4-F-050U-125D-93050-1D-UNV-STD-W-4 (4000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1774.7	1774.7	1774.7	1774.7	1774.7
2.5°	1786.8	1771.0	1775.5	1772.1	1765.0
5°	1784.8	1766.0	1771.7	1764.6	1763.6
7.5°	1771.0	1752.3	1757.9	1753.6	1752.7
10°	1760.5	1741.8	1747.4	1742.3	1741.3
12.5°	1746.0	1728.0	1733.7	1727.8	1726.8
15°	1720.1	1702.3	1709.0	1704.9	1701.9
17.5°	1688.4	1670.2	1678.1	1671.9	1668.4
20°	1666.5	1646.8	1655.4	1645.3	1643.3
22.5°	1639.9	1620.1	1628.8	1616.2	1615.8
25°	1595.8	1578.0	1586.7	1572.5	1571.5
27.5°	1546.3	1529.7	1538.8	1521.6	1520.4
30°	1509.9	1494.1	1504.8	1487.6	1485.6
32.5°	1472.7	1459.3	1466.0	1451.2	1448.5
35°	1414.9	1402.1	1407.8	1391.6	1390.6
37.5°	1352.8	1340.0	1345.4	1330.0	1328.2
40°	1310.8	1298.0	1301.7	1285.5	1284.5
42.5°	1264.7	1254.2	1256.4	1239.5	1240.1
45°	1194.6	1184.7	1184.5	1169.3	1169.3
47.5°	1120.0	1110.1	1110.3	1096.3	1095.1
50°	1068.2	1062.3	1060.2	1047.0	1045.0
52.5°	1014.9	1010.5	1006.8	993.7	993.3
55°	934.8	930.9	925.7	913.6	913.6
57.5°	852.8	848.2	841.7	829.5	828.5
60°	795.4	792.4	784.3	772.1	771.1
62.5°	738.0	732.6	726.0	714.7	713.7
65°	649.8	642.9	636.7	625.6	624.6
67.5°	558.3	550.6	545.3	537.6	534.6
70°	495.2	488.3	483.1	477.0	474.0
72.5°	432.2	426.0	422.4	416.3	413.4
75°	341.6	333.7	331.5	326.4	324.4
77.5°	249.6	245.7	243.8	240.1	237.3
80°	189.0	189.0	188.0	185.9	183.9
82.5°	136.4	138.0	139.5	139.0	137.0
85°	67.7	73.6	76.8	77.8	76.8
87.5°	19.4	25.7	30.7	31.5	30.7
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.5	44.9	105.8	51.4	34.9
95°	16.4	83.0	284.2	184.8	129.5
97.5°	29.0	91.9	374.3	360.6	309.5
100°	38.8	97.5	423.9	447.5	405.5
102.5°	48.1	102.5	456.6	519.8	494.9
105°	64.1	110.7	481.8	623.4	615.4
107.5°	79.7	120.4	466.9	706.4	725.2
110°	90.6	128.6	443.0	742.3	777.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	101.5	136.9	421.7	751.0	811.4
115°	117.2	149.9	387.1	733.8	818.5
117.5°	132.8	163.5	366.8	694.4	793.5
120°	143.1	171.8	353.7	663.4	767.3
122.5°	154.0	180.5	345.5	631.7	734.1
125°	167.0	192.3	336.0	583.6	685.6
127.5°	179.8	203.6	329.3	542.9	632.4
130°	187.4	210.7	327.1	514.5	602.4
132.5°	194.5	218.9	323.8	494.0	568.6
135°	205.1	229.1	322.3	460.2	529.5
137.5°	215.2	239.3	317.6	437.3	489.6
140°	222.8	244.8	317.6	420.9	468.9
142.5°	230.5	252.5	314.8	406.5	447.0
145°	242.6	260.6	316.2	391.2	421.8
147.5°	253.9	271.4	315.4	373.5	398.8
150°	261.0	276.3	317.6	365.7	385.7
152.5°	268.6	283.4	317.0	357.5	375.4
155°	278.0	290.0	320.3	346.5	359.1
157.5°	289.4	299.6	319.6	342.3	349.7
160°	293.7	302.4	322.3	336.8	342.1
162.5°	300.8	308.4	321.2	335.1	338.3
165°	307.3	312.0	324.4	329.3	333.9
167.5°	315.4	318.5	323.6	328.9	329.0
170°	317.6	319.6	325.7	325.1	328.5
172.5°	321.4	322.9	324.1	325.6	323.6
175°	325.1	323.7	325.1	322.3	321.7
177.5°	324.4	324.4	323.3	322.1	319.5
180°	321.7	321.7	321.7	321.7	321.7

(END OF REPORT)