

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: P519913

Luminaire Tested: **SQ4-F-050U-075D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519913
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-075D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

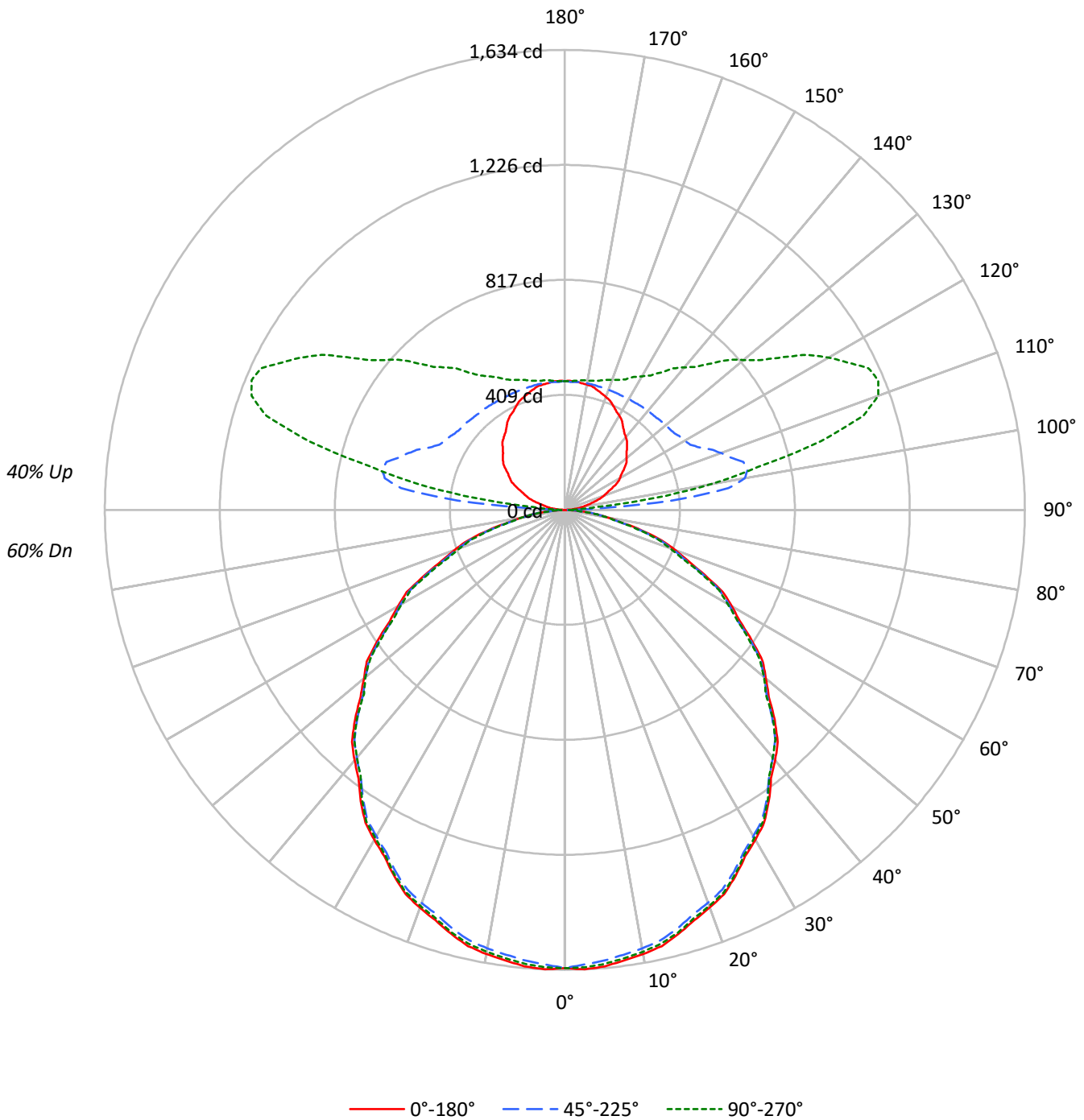
Lumens per Lamp: N/A
Luminaire Lumens: 7434.3 lumens
Efficiency: N/A
Efficacy: 132.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 56.3
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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60
1	100	96	92	88	93	89	86	83	78	75	73	67	65	64	58	56	55	50
2	91	83	77	72	85	78	73	68	68	64	60	59	56	53	51	48	46	42
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39	35
4	76	65	57	50	71	61	54	48	53	48	43	46	42	38	40	36	34	30
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	32	29	26
6	64	52	43	37	60	49	41	36	43	37	32	38	33	29	32	29	26	23
7	59	47	39	33	55	44	37	31	39	33	28	34	29	26	30	26	23	20
8	55	42	35	29	51	40	33	28	35	30	25	31	26	23	27	23	20	18
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	18	16
10	48	36	28	23	45	34	27	22	30	24	20	27	22	19	23	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10014	10014	10014
5°	10052	9925	9998
10°	10012	9883	9957
15°	9935	9813	9897
20°	9845	9729	9807
25°	9737	9637	9707
30°	9614	9509	9561
35°	9487	9387	9432
40°	9328	9233	9221
45°	9167	9052	9078
50°	8913	8842	8842
55°	8706	8595	8516
60°	8425	8280	8208
65°	7970	7820	7712
70°	7487	7300	7114
75°	6735	6490	6350
80°	5384	5281	5228
85°	3232	3649	3747



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.7	2.1
10°-20°	437.5	5.9
20°-30°	657.3	8.8
30°-40°	784.3	10.5
40°-50°	804.3	10.8
50°-60°	716.7	9.6
60°-70°	534.4	7.2
70°-80°	289.8	3.9
80°-90°	68.3	0.9
90°-100°	219.7	3.0
100°-110°	596.8	8.0
110°-120°	613.6	8.3
120°-130°	490.5	6.6
130°-140°	385.5	5.2
140°-150°	295.5	4.0
150°-160°	212.5	2.9
160°-170°	130.0	1.7
170°-180°	43.8	0.6
0°-30°	1248.5	16.8
0°-40°	2032.8	27.3
0°-60°	3553.9	47.8
0°-90°	4446.4	59.8
90°-120°	1430.0	19.2
90°-150°	2601.6	35.0
90°-180°	2988.0	40.2
0°-180°	7434.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1628	1628	1628	1628	1628	
5°	1628	1625	1608	1621	1619	154
15°	1560	1557	1541	1553	1554	440
25°	1435	1433	1420	1428	1430	661
35°	1264	1261	1250	1250	1256	789
45°	1054	1050	1041	1041	1044	811
55°	812	810	802	794	794	725
65°	548	548	537	531	530	545
75°	283	278	273	269	267	298
85°	46	49	52	52	53	63
90°	2	6	10	13	13	3
95°	32	120	383	166	112	34
105°	106	165	656	999	940	113
115°	188	229	525	1045	1190	186
125°	259	295	475	801	945	231
135°	312	346	462	652	736	241
145°	360	386	456	554	596	226
155°	408	422	453	498	512	188
165°	441	447	455	474	475	125
175°	458	459	456	462	460	43
180°	458	458	458	458	458	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1628.1	1628.1	1628.1	1628.1	1628.1
2.5°	1634.0	1630.6	1616.3	1628.1	1626.9
5°	1628.1	1625.3	1607.5	1620.7	1619.3
7.5°	1614.8	1611.7	1594.2	1607.5	1607.2
10°	1603.0	1598.7	1582.4	1595.7	1594.2
12.5°	1587.7	1583.4	1567.0	1580.3	1578.8
15°	1560.2	1557.4	1541.0	1552.8	1554.3
17.5°	1528.9	1523.4	1508.9	1520.4	1521.9
20°	1504.1	1499.8	1486.4	1496.8	1498.2
22.5°	1478.2	1473.8	1460.4	1470.8	1472.3
25°	1434.8	1433.3	1420.0	1427.5	1430.3
27.5°	1387.8	1383.8	1373.1	1378.8	1381.6
30°	1353.6	1350.7	1338.8	1343.3	1346.2
32.5°	1318.1	1316.4	1305.8	1307.9	1312.0
35°	1263.5	1260.7	1250.2	1250.3	1256.2
37.5°	1203.0	1199.9	1191.2	1189.8	1192.1
40°	1161.7	1157.4	1149.9	1148.4	1148.4
42.5°	1119.2	1116.0	1106.2	1103.6	1107.1
45°	1053.9	1049.6	1040.6	1040.7	1043.6
47.5°	983.4	981.6	971.3	966.5	967.7
50°	931.4	934.3	924.0	918.2	924.0
52.5°	886.5	884.8	875.6	869.8	872.1
55°	811.9	810.4	801.5	794.1	794.1
57.5°	736.9	733.1	723.9	718.4	722.7
60°	684.9	683.4	673.1	662.9	667.2
62.5°	632.9	630.4	620.0	613.3	616.4
65°	547.6	547.6	537.3	531.4	529.9
67.5°	472.9	466.1	460.2	453.2	451.1
70°	416.3	410.5	405.9	399.9	395.6
72.5°	360.8	357.3	350.4	344.5	343.6
75°	283.4	277.6	273.1	268.6	267.2
77.5°	201.6	200.5	196.3	194.0	194.8
80°	152.0	152.0	149.1	149.1	147.6
82.5°	107.2	108.3	107.8	105.4	105.1
85°	45.8	48.6	51.7	51.7	53.1
87.5°	8.6	15.2	15.1	15.6	15.6
90°	1.5	5.8	10.3	13.2	13.2
92.5°	13.2	60.2	104.5	44.8	38.0
95°	32.4	120.1	382.6	166.5	111.9
97.5°	53.6	132.7	586.5	456.3	320.5
100°	67.7	141.1	648.9	657.8	531.2
102.5°	81.8	149.4	665.4	813.5	701.9
105°	106.0	165.0	656.3	999.2	940.3
107.5°	131.0	183.0	618.3	1095.1	1111.5
110°	148.6	196.1	590.0	1114.0	1184.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	163.9	209.1	561.8	1098.4	1204.5
115°	188.3	228.6	525.3	1045.1	1190.4
117.5°	211.3	249.8	502.0	969.6	1133.3
120°	226.6	264.0	491.4	918.9	1081.5
122.5°	239.5	276.9	484.4	868.1	1025.0
125°	259.0	295.0	475.2	800.8	944.7
127.5°	276.3	312.0	470.2	749.7	873.1
130°	286.9	321.5	467.9	717.6	828.4
132.5°	297.5	332.1	465.5	690.2	788.4
135°	312.0	346.5	462.0	652.3	735.7
137.5°	327.6	358.9	460.2	618.7	689.0
140°	337.0	367.2	459.0	597.4	660.7
142.5°	346.4	374.3	457.9	580.6	633.6
145°	360.5	386.4	456.1	554.2	595.9
147.5°	376.4	398.5	454.6	533.4	566.2
150°	387.0	405.7	454.6	521.5	547.4
152.5°	395.3	411.6	453.5	510.8	532.1
155°	407.6	422.0	453.2	497.7	512.0
157.5°	419.7	430.9	453.2	488.8	499.7
160°	426.7	436.8	453.2	482.8	491.4
162.5°	433.7	441.6	454.3	478.1	484.4
165°	441.4	447.2	454.6	473.9	475.2
167.5°	449.3	452.3	456.1	468.9	469.9
170°	451.7	454.6	456.1	466.4	466.4
172.5°	454.0	455.8	456.1	464.1	464.1
175°	457.6	459.0	456.1	462.0	460.5
177.5°	458.8	458.8	455.2	459.9	457.6
180°	457.6	457.6	457.6	457.6	457.6

(END OF REPORT)