

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: P519917

Luminaire Tested: **SQ4-F-050U-075D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519917
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-840-1D-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

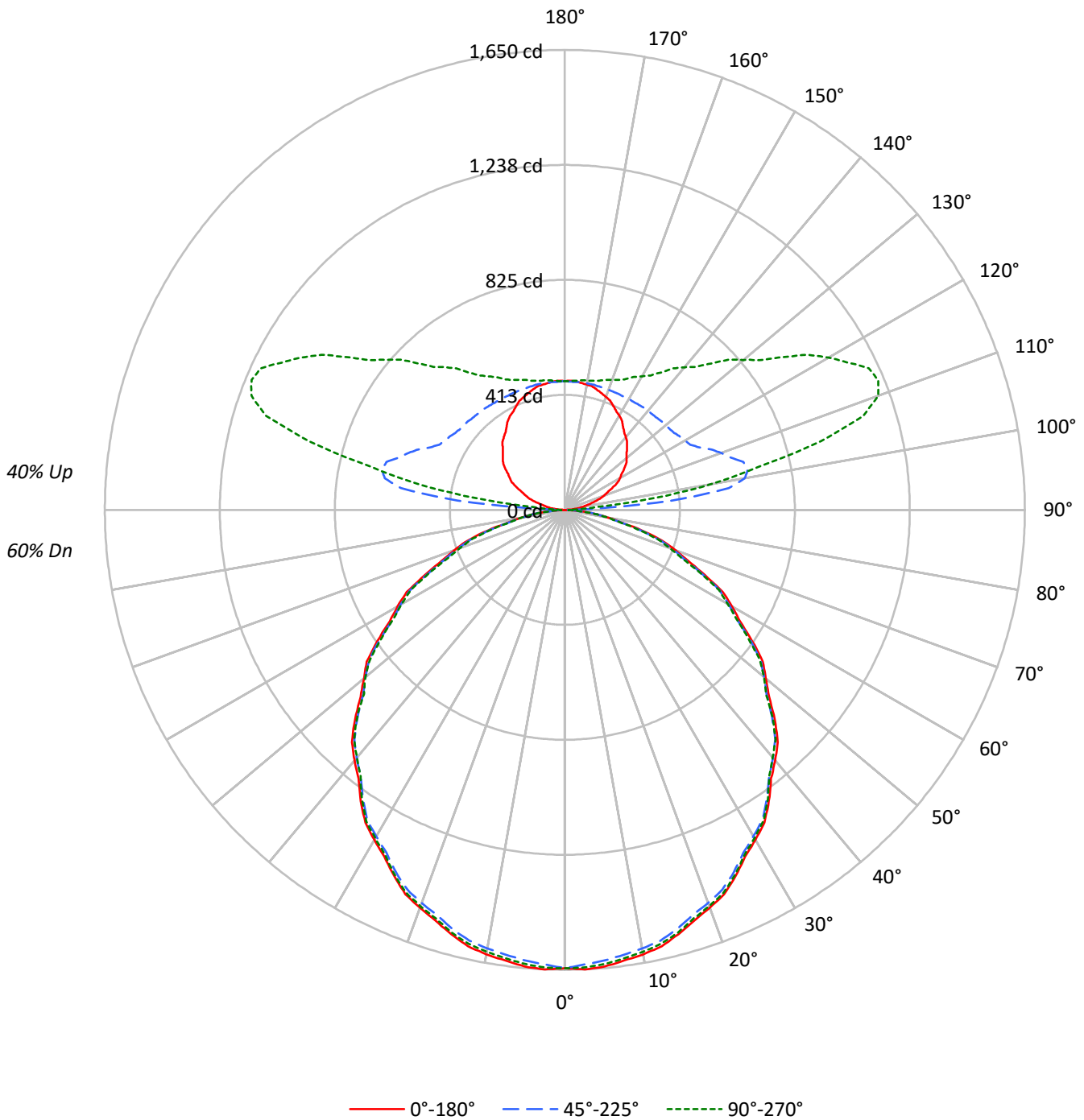
Lumens per Lamp: N/A
Luminaire Lumens: 7509.1 lumens
Efficiency: N/A
Efficacy: 133.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

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°	10116	10116	10116
5°	10154	10025	10099
10°	10113	9982	10057
15°	10036	9912	9997
20°	9945	9827	9905
25°	9835	9734	9805
30°	9710	9604	9658
35°	9583	9482	9527
40°	9422	9326	9313
45°	9260	9143	9169
50°	9002	8931	8931
55°	8793	8682	8601
60°	8510	8364	8290
65°	8050	7898	7789
70°	7562	7375	7185
75°	6804	6554	6412
80°	5441	5334	5281
85°	3268	3684	3783



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.2	2.1
10°-20°	441.9	5.9
20°-30°	663.9	8.8
30°-40°	792.2	10.5
40°-50°	812.4	10.8
50°-60°	723.9	9.6
60°-70°	539.8	7.2
70°-80°	292.7	3.9
80°-90°	69.1	0.9
90°-100°	221.9	3.0
100°-110°	602.8	8.0
110°-120°	619.7	8.3
120°-130°	495.5	6.6
130°-140°	389.3	5.2
140°-150°	298.5	4.0
150°-160°	214.7	2.9
160°-170°	131.3	1.7
170°-180°	44.2	0.6
0°-30°	1261.0	16.8
0°-40°	2053.2	27.3
0°-60°	3589.6	47.8
0°-90°	4491.2	59.8
90°-120°	1444.4	19.2
90°-150°	2627.7	35.0
90°-180°	3018.0	40.2
0°-180°	7509.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1645	1645	1645	1645	1645	
5°	1645	1642	1624	1637	1636	156
15°	1576	1573	1557	1568	1570	444
25°	1449	1448	1434	1442	1445	667
35°	1276	1273	1263	1263	1269	797
45°	1065	1060	1051	1051	1054	819
55°	820	818	810	802	802	732
65°	553	553	543	537	535	551
75°	286	280	276	271	270	301
85°	46	49	52	52	54	64
90°	2	6	10	13	13	3
95°	33	121	386	168	113	35
105°	107	167	663	1009	950	114
115°	190	231	531	1056	1202	188
125°	262	298	480	809	954	233
135°	315	350	467	659	743	244
145°	364	390	461	560	602	229
155°	412	426	458	503	517	190
165°	446	452	459	479	480	126
175°	462	464	461	467	465	44
180°	462	462	462	462	462	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1644.6	1644.6	1644.6	1644.6	1644.6
2.5°	1650.5	1647.0	1632.6	1644.5	1643.3
5°	1644.6	1641.6	1623.6	1637.0	1635.6
7.5°	1631.1	1627.9	1610.2	1623.6	1623.3
10°	1619.2	1614.7	1598.3	1611.7	1610.2
12.5°	1603.6	1599.3	1582.8	1596.1	1594.7
15°	1576.0	1573.0	1556.6	1568.5	1570.0
17.5°	1544.3	1538.8	1524.0	1535.7	1537.2
20°	1519.3	1514.9	1501.4	1511.8	1513.3
22.5°	1493.0	1488.7	1475.1	1485.6	1487.1
25°	1449.2	1447.8	1434.3	1441.8	1444.7
27.5°	1401.8	1397.7	1386.8	1392.6	1395.5
30°	1367.2	1364.3	1352.3	1356.8	1359.8
32.5°	1331.4	1329.7	1318.9	1321.1	1325.1
35°	1276.2	1273.4	1262.8	1262.9	1268.8
37.5°	1215.1	1211.9	1203.2	1201.7	1204.1
40°	1173.4	1169.0	1161.5	1159.9	1159.9
42.5°	1130.4	1127.2	1117.3	1114.7	1118.2
45°	1064.6	1060.1	1051.1	1051.2	1054.1
47.5°	993.3	991.5	981.0	976.3	977.5
50°	940.8	943.7	933.3	927.5	933.3
52.5°	895.5	893.7	884.5	878.5	880.8
55°	820.0	818.5	809.6	802.1	802.1
57.5°	744.2	740.5	731.2	725.5	730.0
60°	691.8	690.3	679.9	669.6	673.9
62.5°	639.3	636.7	626.2	619.4	622.6
65°	553.1	553.1	542.7	536.7	535.2
67.5°	477.7	470.7	464.9	457.7	455.6
70°	420.5	414.6	410.1	404.0	399.5
72.5°	364.4	360.9	354.0	348.0	347.1
75°	286.3	280.5	275.8	271.3	269.8
77.5°	203.7	202.5	198.3	195.9	196.8
80°	153.6	153.6	150.6	150.6	149.1
82.5°	108.2	109.4	108.8	106.5	106.2
85°	46.3	49.1	52.2	52.3	53.6
87.5°	8.7	15.4	15.3	15.8	15.8
90°	1.5	5.9	10.4	13.3	13.3
92.5°	13.3	60.7	105.5	45.3	38.4
95°	32.7	121.4	386.4	168.2	112.9
97.5°	54.1	134.0	592.4	460.9	323.7
100°	68.4	142.5	655.4	664.4	536.6
102.5°	82.6	150.9	672.1	821.7	708.9
105°	107.0	166.6	662.9	1009.3	949.7
107.5°	132.3	184.9	624.5	1106.1	1122.7
110°	150.1	198.0	595.9	1125.2	1196.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	165.5	211.2	567.5	1109.3	1216.6
115°	190.3	230.9	530.6	1055.6	1202.4
117.5°	213.4	252.4	507.1	979.3	1144.7
120°	228.8	266.6	496.4	928.2	1092.4
122.5°	242.0	279.8	489.3	876.9	1035.3
125°	261.6	297.9	480.0	808.9	954.2
127.5°	279.1	315.2	475.0	757.3	881.9
130°	289.8	324.7	472.6	724.9	836.7
132.5°	300.5	335.4	470.2	697.2	796.3
135°	315.1	349.9	466.7	658.8	743.1
137.5°	330.8	362.5	464.9	625.0	695.8
140°	340.3	370.8	463.7	603.4	667.3
142.5°	349.8	378.1	462.5	586.5	640.0
145°	364.2	390.3	460.7	559.8	601.9
147.5°	380.2	402.5	459.2	538.7	571.9
150°	390.8	409.8	459.2	526.8	552.9
152.5°	399.2	415.8	458.1	516.0	537.5
155°	411.6	426.2	457.8	502.7	517.2
157.5°	423.9	435.2	457.8	493.7	504.7
160°	431.0	441.2	457.8	487.7	496.4
162.5°	438.1	446.0	458.9	482.9	489.3
165°	445.9	451.7	459.2	478.6	480.0
167.5°	453.8	456.8	460.7	473.6	474.7
170°	456.3	459.1	460.7	471.1	471.1
172.5°	458.7	460.4	460.7	468.8	468.8
175°	462.2	463.7	460.7	466.6	465.2
177.5°	463.4	463.4	459.8	464.5	462.2
180°	462.2	462.2	462.2	462.2	462.2

(END OF REPORT)