

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: P519895

Luminaire Tested: **SQ4-F-050U-050D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519895  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-050U-050D-930-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

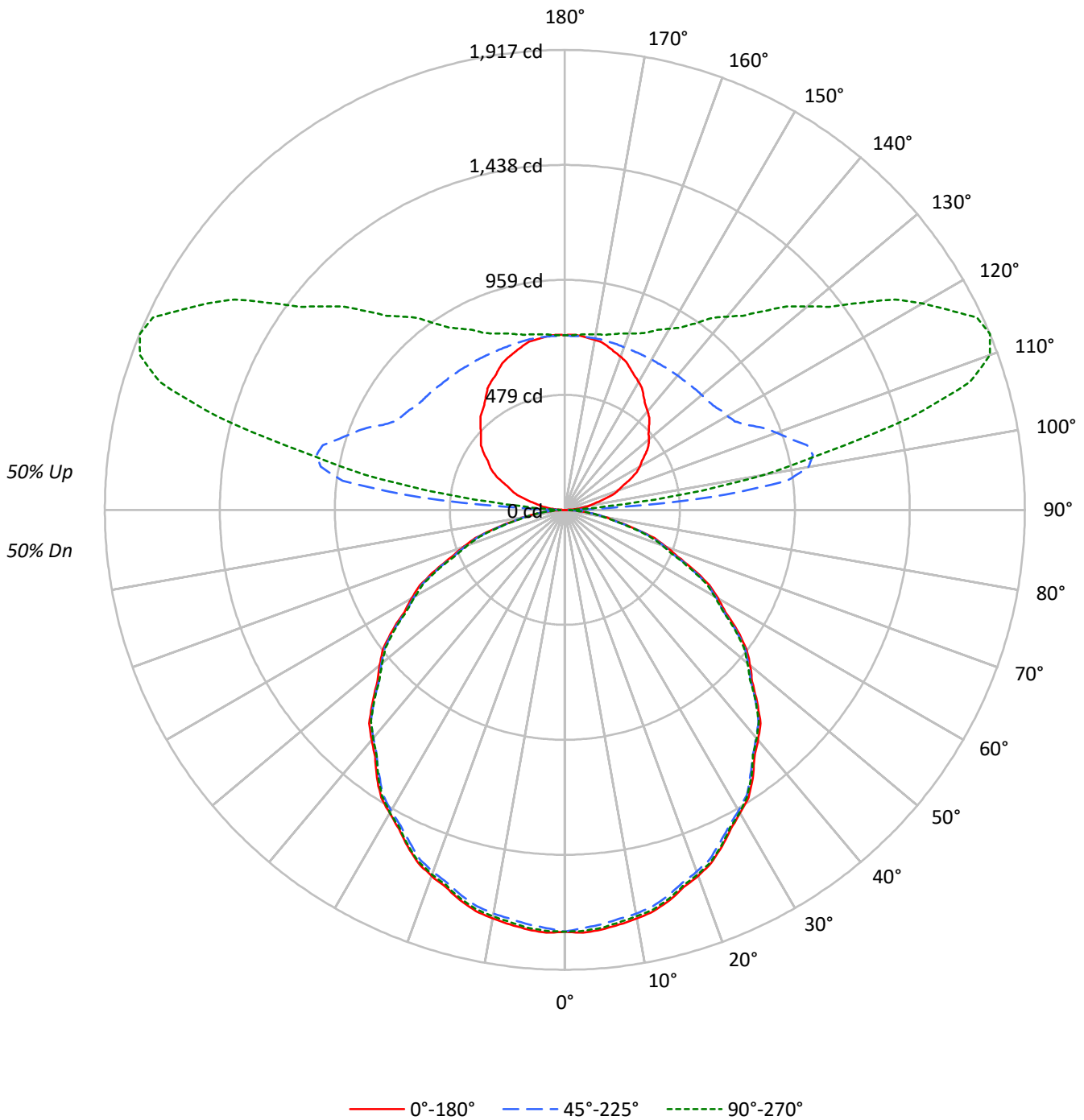
Lumens per Lamp: N/A  
Luminaire Lumens: 9557.3 lumens  
Efficiency: N/A  
Efficacy: 106.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 89.5  
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48	42
2	89	82	75	70	82	75	70	66	64	60	57	53	51	48	44	42	40	35
3	81	72	64	58	75	66	60	55	56	51	47	47	44	41	39	36	34	30
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	34	32	29	25
5	68	56	48	42	62	52	45	40	45	39	35	38	33	30	31	28	25	22
6	63	50	42	36	58	47	40	34	40	34	30	34	30	26	28	25	22	19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20	17
8	54	41	33	28	49	38	31	27	33	28	24	28	24	21	23	20	18	15
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16	14
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5408	5408	5408
5°	5421	5356	5399
10°	5403	5337	5374
15°	5366	5299	5344
20°	5316	5254	5292
25°	5256	5192	5240
30°	5183	5141	5174
35°	5126	5064	5091
40°	5028	4981	4990
45°	4925	4883	4883
50°	4820	4775	4753
55°	4708	4645	4619
60°	4532	4459	4430
65°	4317	4232	4180
70°	4022	3937	3852
75°	3609	3496	3411
80°	2919	2876	2793
85°	1743	1994	2078



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	165.9	1.7
10°-20°	472.5	4.9
20°-30°	709.6	7.4
30°-40°	847.1	8.9
40°-50°	868.0	9.1
50°-60°	774.1	8.1
60°-70°	576.5	6.0
70°-80°	313.0	3.3
80°-90°	75.3	0.8
90°-100°	349.6	3.7
100°-110°	949.7	9.9
110°-120°	976.5	10.2
120°-130°	780.7	8.2
130°-140°	613.5	6.4
140°-150°	470.4	4.9
150°-160°	338.3	3.5
160°-170°	206.9	2.2
170°-180°	69.7	0.7
0°-30°	1348.0	14.1
0°-40°	2195.1	23.0
0°-60°	3837.3	40.2
0°-90°	4802.0	50.2
90°-120°	2275.9	23.8
90°-150°	4140.4	43.3
90°-180°	4755.0	49.8
0°-180°	9557.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1758	1758	1758	1758	1758	
5°	1756	1754	1735	1751	1749	167
15°	1686	1681	1664	1678	1678	475
25°	1549	1544	1530	1540	1544	713
35°	1365	1361	1349	1349	1356	852
45°	1132	1135	1123	1121	1123	874
55°	878	878	866	859	862	782
65°	593	591	582	574	574	587
75°	304	301	294	290	287	321
85°	49	54	56	59	59	69
90°	2	9	16	21	21	5
95°	52	191	609	265	178	55
105°	169	262	1044	1590	1496	179
115°	300	364	836	1663	1894	296
125°	412	469	756	1274	1503	367
135°	496	551	735	1038	1171	384
145°	574	615	726	882	948	360
155°	649	672	721	792	815	299
165°	702	712	724	754	756	198
175°	728	731	726	735	733	69
180°	728	728	728	728	728	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1758.4	1758.4	1758.4	1758.4	1758.4
2.5°	1764.1	1760.4	1745.2	1758.3	1756.6
5°	1756.1	1753.8	1734.9	1751.3	1749.0
7.5°	1743.3	1738.7	1720.3	1736.2	1734.0
10°	1730.1	1725.6	1709.0	1723.0	1720.8
12.5°	1713.2	1710.4	1692.1	1706.2	1705.7
15°	1685.5	1680.8	1664.3	1678.4	1678.4
17.5°	1648.7	1645.9	1629.9	1643.5	1641.7
20°	1624.2	1619.6	1605.4	1617.1	1617.1
22.5°	1594.2	1591.4	1577.2	1587.1	1588.9
25°	1548.9	1544.3	1530.1	1539.6	1544.2
27.5°	1499.0	1495.4	1483.5	1489.6	1492.9
30°	1459.5	1459.5	1447.7	1450.2	1457.1
32.5°	1423.7	1423.7	1410.1	1412.4	1415.7
35°	1365.3	1360.7	1348.8	1349.0	1355.9
37.5°	1297.6	1295.2	1287.6	1286.2	1288.1
40°	1252.3	1250.0	1240.6	1242.9	1242.9
42.5°	1207.1	1204.9	1195.4	1192.1	1195.8
45°	1132.3	1134.6	1122.8	1120.6	1122.8
47.5°	1058.3	1058.3	1049.0	1042.5	1046.1
50°	1007.5	1007.5	998.1	993.4	993.4
52.5°	954.8	956.6	945.3	938.8	940.6
55°	878.0	878.0	866.3	859.2	861.5
57.5°	793.3	793.3	781.5	774.5	778.7
60°	736.8	736.8	725.0	718.0	720.3
62.5°	680.3	680.3	668.5	661.4	661.9
65°	593.2	590.9	581.5	574.4	574.4
67.5°	509.4	503.4	496.2	486.8	486.8
70°	447.3	444.9	437.8	428.4	428.4
72.5°	390.8	386.6	379.4	371.9	371.9
75°	303.7	301.3	294.2	289.5	287.1
77.5°	217.5	215.7	215.2	208.6	210.4
80°	164.8	164.8	162.4	157.7	157.7
82.5°	117.7	119.5	115.4	114.4	112.5
85°	49.4	54.0	56.5	58.9	58.9
87.5°	9.9	16.8	16.5	19.3	19.3
90°	2.4	9.2	16.4	21.1	21.1
92.5°	21.1	95.7	166.2	71.4	60.4
95°	51.5	191.2	608.9	264.9	178.0
97.5°	85.3	211.2	933.4	726.2	510.1
100°	107.7	224.5	1032.7	1046.8	845.4
102.5°	130.2	237.9	1058.9	1294.7	1117.0
105°	168.6	262.5	1044.5	1590.3	1496.4
107.5°	208.4	291.3	984.0	1742.9	1769.0
110°	236.5	312.0	939.1	1772.9	1885.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	260.8	332.8	894.0	1748.0	1916.9
115°	299.8	363.9	836.1	1663.3	1894.5
117.5°	336.3	397.6	799.1	1543.1	1803.6
120°	360.6	420.2	782.2	1462.5	1721.2
122.5°	381.2	440.8	770.9	1381.7	1631.3
125°	412.1	469.3	756.4	1274.5	1503.4
127.5°	439.8	496.5	748.4	1193.1	1389.6
130°	456.7	511.6	744.7	1142.1	1318.5
132.5°	473.5	528.4	741.0	1098.5	1254.8
135°	496.4	551.4	735.3	1038.1	1170.9
137.5°	521.3	571.2	732.5	984.7	1096.4
140°	536.3	584.4	730.7	950.7	1051.4
142.5°	551.3	595.6	728.8	924.1	1008.4
145°	573.8	615.0	726.0	882.0	948.4
147.5°	599.1	634.3	723.6	848.9	901.1
150°	615.9	645.7	723.6	830.0	871.2
152.5°	629.0	655.1	721.7	812.9	846.8
155°	648.6	671.6	721.2	792.0	815.0
157.5°	667.9	685.7	721.2	777.9	795.2
160°	679.1	695.1	721.2	768.4	782.2
162.5°	690.3	702.7	723.1	760.8	770.9
165°	702.5	711.7	723.6	754.1	756.4
167.5°	715.2	719.8	726.0	746.2	747.9
170°	718.9	723.5	726.0	742.3	742.3
172.5°	722.7	725.5	726.0	738.6	738.6
175°	728.3	730.6	726.0	735.3	733.0
177.5°	730.2	730.2	724.6	731.9	728.3
180°	728.3	728.3	728.3	728.3	728.3

(END OF REPORT)