

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: P519909

Luminaire Tested: **SQ4-F-050U-075D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519909  
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-830-1D-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**

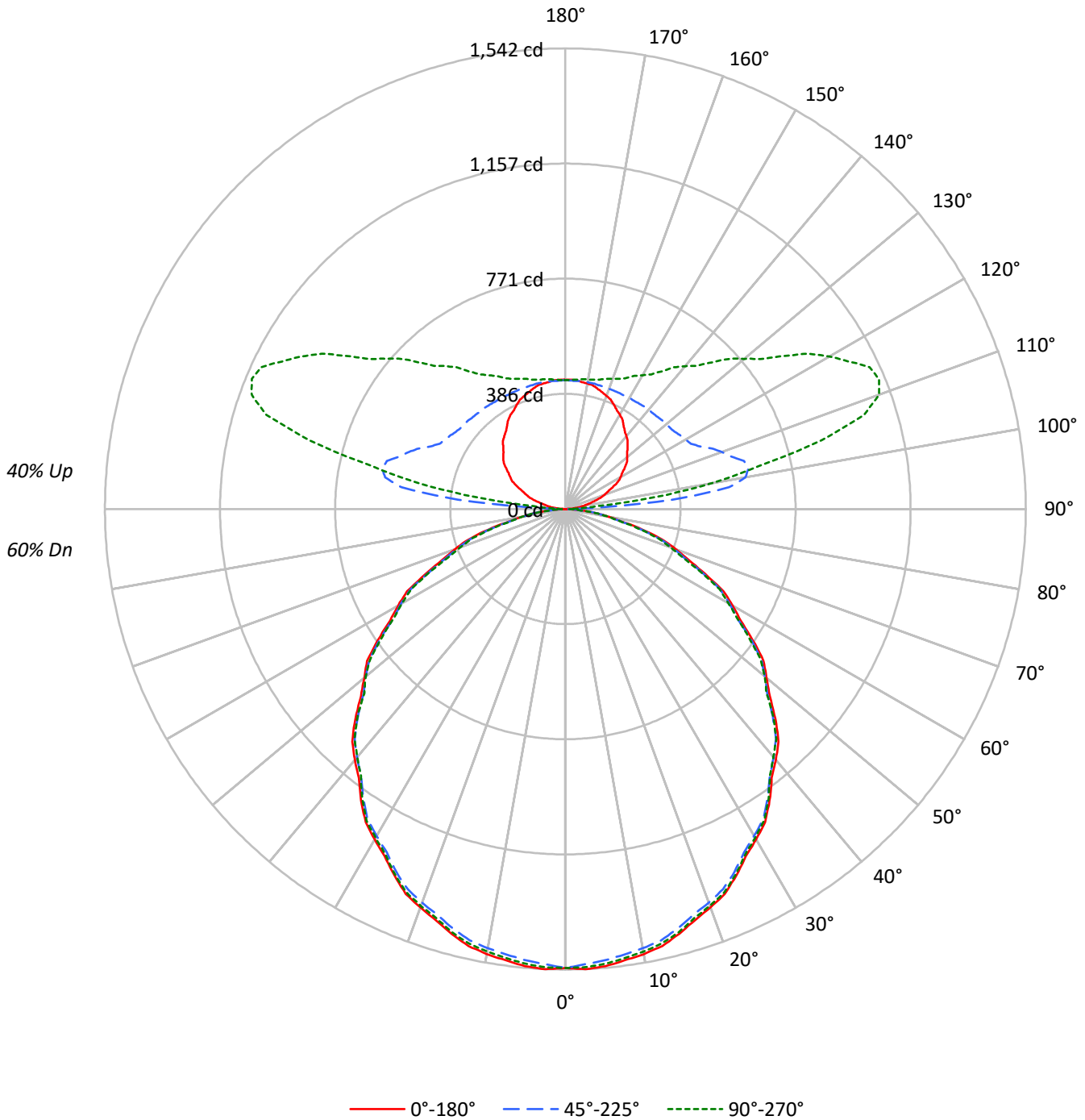
Lumens per Lamp: N/A  
Luminaire Lumens: 7017.2 lumens  
Efficiency: N/A  
Efficacy: 124.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: General Diffuse

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°	9453	9453	9453
5°	9489	9368	9437
10°	9450	9329	9398
15°	9377	9262	9342
20°	9293	9184	9257
25°	9191	9096	9162
30°	9074	8975	9024
35°	8956	8861	8903
40°	8804	8714	8703
45°	8653	8545	8568
50°	8413	8346	8346
55°	8217	8112	8038
60°	7952	7815	7748
65°	7523	7382	7280
70°	7066	6891	6715
75°	6357	6124	5994
80°	5083	4984	4934
85°	3049	3444	3543



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.1	2.1
10°-20°	413.0	5.9
20°-30°	620.4	8.8
30°-40°	740.3	10.5
40°-50°	759.2	10.8
50°-60°	676.5	9.6
60°-70°	504.4	7.2
70°-80°	273.5	3.9
80°-90°	64.5	0.9
90°-100°	207.4	3.0
100°-110°	563.3	8.0
110°-120°	579.1	8.3
120°-130°	463.0	6.6
130°-140°	363.8	5.2
140°-150°	279.0	4.0
150°-160°	200.6	2.9
160°-170°	122.7	1.7
170°-180°	41.3	0.6
0°-30°	1178.4	16.8
0°-40°	1918.7	27.3
0°-60°	3354.5	47.8
0°-90°	4197.0	59.8
90°-120°	1349.7	19.2
90°-150°	2455.6	35.0
90°-180°	2820.0	40.2
0°-180°	7017.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1537	1537	1537	1537	1537	
5°	1537	1534	1517	1530	1528	146
15°	1473	1470	1454	1466	1467	415
25°	1354	1353	1340	1347	1350	624
35°	1193	1190	1180	1180	1186	745
45°	995	991	982	982	985	766
55°	766	765	756	750	750	684
65°	517	517	507	502	500	515
75°	268	262	258	254	252	281
85°	43	46	49	49	50	60
90°	1	6	10	12	12	3
95°	30	113	361	157	106	32
105°	100	156	619	943	888	106
115°	178	216	496	986	1124	175
125°	244	278	449	756	892	218
135°	294	327	436	616	694	228
145°	340	365	431	523	562	214
155°	385	398	428	470	483	177
165°	417	422	429	447	449	118
175°	432	433	431	436	435	41
180°	432	432	432	432	432	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1536.8	1536.8	1536.8	1536.8	1536.8
2.5°	1542.3	1539.1	1525.6	1536.7	1535.6
5°	1536.8	1534.1	1517.2	1529.8	1528.4
7.5°	1524.2	1521.3	1504.7	1517.2	1517.0
10°	1513.1	1509.0	1493.6	1506.1	1504.7
12.5°	1498.6	1494.5	1479.1	1491.6	1490.3
15°	1472.6	1470.0	1454.5	1465.8	1467.1
17.5°	1443.1	1438.0	1424.2	1435.1	1436.4
20°	1419.7	1415.7	1403.1	1412.8	1414.2
22.5°	1395.2	1391.2	1378.5	1388.3	1389.7
25°	1354.3	1352.9	1340.3	1347.4	1350.0
27.5°	1310.0	1306.1	1296.0	1301.4	1304.1
30°	1277.6	1274.9	1263.7	1268.0	1270.6
32.5°	1244.1	1242.6	1232.5	1234.5	1238.3
35°	1192.7	1189.9	1180.1	1180.2	1185.7
37.5°	1135.5	1132.6	1124.4	1123.0	1125.2
40°	1096.5	1092.4	1085.3	1083.9	1083.9
42.5°	1056.4	1053.3	1044.1	1041.7	1045.0
45°	994.8	990.8	982.3	982.3	985.0
47.5°	928.2	926.6	916.8	912.3	913.4
50°	879.2	881.9	872.2	866.8	872.2
52.5°	836.8	835.2	826.5	821.0	823.2
55°	766.3	764.9	756.5	749.6	749.6
57.5°	695.5	692.0	683.2	678.0	682.2
60°	646.4	645.2	635.3	625.7	629.8
62.5°	597.4	595.0	585.2	578.8	581.9
65°	516.9	516.9	507.2	501.6	500.2
67.5°	446.4	439.9	434.5	427.7	425.8
70°	392.9	387.4	383.2	377.5	373.4
72.5°	340.5	337.2	330.7	325.1	324.3
75°	267.5	262.1	257.7	253.6	252.2
77.5°	190.3	189.2	185.3	183.1	183.9
80°	143.5	143.5	140.7	140.7	139.3
82.5°	101.2	102.2	101.8	99.5	99.2
85°	43.2	46.0	48.8	48.8	50.2
87.5°	8.1	14.4	14.2	14.8	14.8
90°	1.4	5.5	9.7	12.5	12.5
92.5°	12.5	56.8	98.6	42.4	35.8
95°	30.5	113.4	361.1	157.2	105.6
97.5°	50.5	125.2	553.6	430.7	302.5
100°	63.9	133.2	612.5	620.9	501.3
102.5°	77.2	141.0	628.0	767.9	662.5
105°	100.0	155.6	619.4	943.1	887.5
107.5°	123.6	172.8	583.6	1033.7	1049.2
110°	140.3	185.1	557.0	1051.4	1118.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	154.7	197.3	530.3	1036.7	1136.9
115°	177.8	215.8	495.8	986.4	1123.6
117.5°	199.4	235.8	473.9	915.1	1069.7
120°	213.9	249.1	463.9	867.4	1020.8
122.5°	226.1	261.4	457.2	819.5	967.4
125°	244.4	278.4	448.6	755.9	891.7
127.5°	260.8	294.5	443.8	707.6	824.2
130°	270.8	303.4	441.7	677.4	781.9
132.5°	280.8	313.4	439.4	651.6	744.1
135°	294.5	327.1	436.1	615.7	694.5
137.5°	309.2	338.7	434.4	584.0	650.3
140°	318.0	346.6	433.3	563.8	623.6
142.5°	327.0	353.3	432.3	548.0	598.0
145°	340.3	364.7	430.6	523.1	562.5
147.5°	355.2	376.2	429.1	503.5	534.4
150°	365.2	382.9	429.1	492.2	516.6
152.5°	373.1	388.5	428.0	482.1	502.2
155°	384.8	398.3	427.7	469.7	483.3
157.5°	396.1	406.7	427.7	461.3	471.7
160°	402.8	412.2	427.7	455.7	463.9
162.5°	409.4	416.8	428.9	451.2	457.2
165°	416.7	422.1	429.1	447.3	448.6
167.5°	424.1	426.9	430.6	442.6	443.6
170°	426.4	429.1	430.6	440.3	440.3
172.5°	428.6	430.2	430.6	438.0	438.0
175°	432.0	433.3	430.6	436.1	434.7
177.5°	433.0	433.0	429.7	434.1	432.0
180°	432.0	432.0	432.0	432.0	432.0

(END OF REPORT)