

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: P519388

Luminaire Tested: **SQ4-WB-100U-075D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519388  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2009-966-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-100U-075D-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

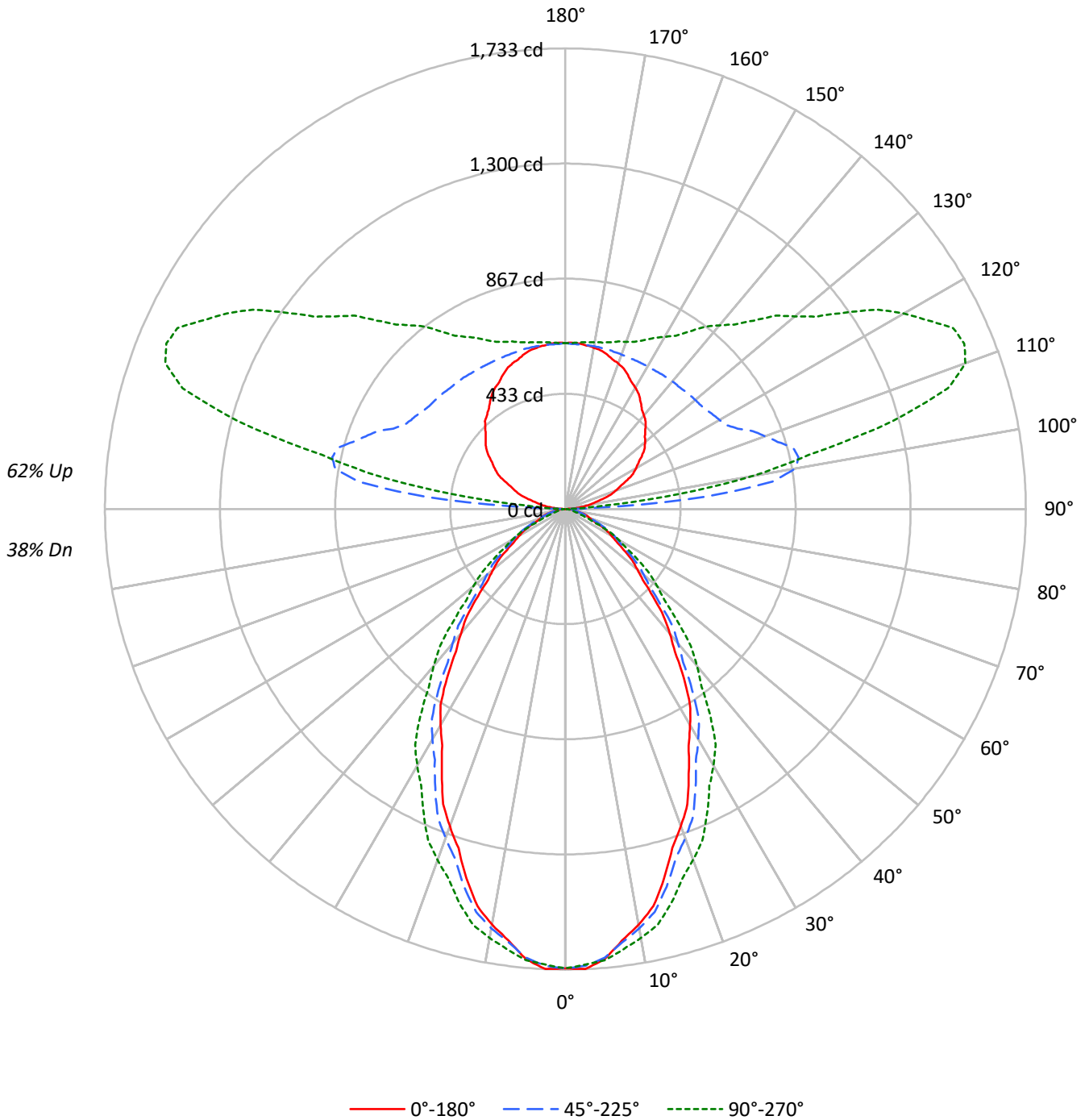
Lumens per Lamp: N/A  
Luminaire Lumens: 6576.6 lumens  
Efficiency: N/A  
Efficacy: 133.9 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 49.1  
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	92	89	85	87	84	81	78	69	67	65	54	53	52	41	41	40	34
2	88	81	76	71	80	74	70	66	61	58	55	49	47	45	38	36	35	30
3	81	72	66	60	74	66	61	56	55	51	47	44	41	39	34	32	31	26
4	75	65	57	52	68	59	53	48	49	45	41	40	37	34	31	29	27	24
5	69	58	51	45	62	53	47	42	45	40	36	36	33	30	29	26	25	21
6	64	52	45	40	58	48	42	37	40	36	32	33	30	27	26	24	22	19
7	59	48	40	35	54	44	37	33	37	32	29	30	27	24	24	22	20	17
8	55	43	36	31	50	40	34	29	34	29	26	28	24	22	23	20	18	16
9	51	40	33	28	47	37	31	26	31	26	23	26	22	20	21	19	17	15
10	48	37	30	25	44	34	28	24	29	24	21	24	21	18	20	17	15	13

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

	0°	45°	90°
0°	15946	15946	15946
5°	15747	15691	15782
10°	14877	15012	15361
15°	13734	14052	14683
20°	12472	12942	13798
25°	11187	11797	12854
30°	10003	10657	11877
35°	8747	9379	10720
40°	7361	7947	9280
45°	6075	6600	7748
50°	5072	5530	6455
55°	4306	4745	5331
60°	3681	4115	4253
65°	2930	3460	2749
70°	2598	2700	1678
75°	2406	2189	1027
80°	2216	2014	887
85°	2011	1842	720



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	158.5	2.4
10°-20°	412.3	6.3
20°-30°	534.1	8.1
30°-40°	523.0	8.0
40°-50°	400.3	6.1
50°-60°	266.8	4.1
60°-70°	145.6	2.2
70°-80°	60.7	0.9
80°-90°	18.5	0.3
90°-100°	292.4	4.4
100°-110°	807.2	12.3
110°-120°	832.5	12.7
120°-130°	669.0	10.2
130°-140°	525.7	8.0
140°-150°	403.2	6.1
150°-160°	289.8	4.4
160°-170°	177.2	2.7
170°-180°	59.8	0.9
0°-30°	1105.0	16.8
0°-40°	1628.0	24.8
0°-60°	2295.1	34.9
0°-90°	2519.8	38.3
90°-120°	1932.1	29.4
90°-150°	3530.0	53.7
90°-180°	4057.0	61.7
0°-180°	6576.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1728	1728	1728	1728	1728	
5°	1700	1683	1694	1698	1704	158
15°	1438	1433	1471	1511	1537	402
25°	1099	1102	1159	1209	1263	505
35°	777	780	833	889	952	483
45°	466	474	506	544	594	363
55°	268	279	295	306	331	243
65°	134	145	158	138	126	140
75°	68	68	61	42	29	72
85°	19	19	17	11	7	21
90°	2	4	8	9	10	4
95°	43	158	530	218	142	46
105°	144	222	888	1356	1277	153
115°	258	312	715	1416	1610	253
125°	354	402	648	1097	1288	315
135°	426	472	630	889	1002	329
145°	494	528	622	756	814	309
155°	556	575	617	679	700	256
165°	602	610	620	644	649	170
175°	624	625	621	630	628	59
180°	624	624	624	624	624	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1728.3	1728.3	1728.3	1728.3	1728.3
2.5°	1732.6	1717.2	1721.1	1720.9	1716.2
5°	1700.3	1683.2	1694.2	1698.1	1704.1
7.5°	1637.2	1624.3	1644.3	1659.1	1671.2
10°	1588.0	1576.9	1602.4	1624.0	1639.6
12.5°	1531.0	1521.7	1553.3	1582.3	1602.6
15°	1437.9	1432.7	1471.2	1511.3	1537.2
17.5°	1338.2	1335.7	1379.9	1426.6	1459.9
20°	1270.3	1269.5	1318.1	1366.7	1405.3
22.5°	1201.7	1203.4	1254.3	1304.9	1348.8
25°	1098.9	1101.8	1158.8	1209.3	1262.7
27.5°	1003.8	1005.1	1064.0	1117.3	1174.3
30°	938.9	942.6	1000.3	1055.5	1114.8
32.5°	873.9	878.3	934.8	991.8	1052.3
35°	776.6	780.3	832.7	888.7	951.8
37.5°	676.2	681.2	727.7	780.7	842.7
40°	611.2	618.7	659.8	709.7	770.5
42.5°	548.8	558.0	596.1	643.4	698.3
45°	465.6	474.5	505.8	544.1	593.8
47.5°	394.1	404.3	428.3	461.3	503.7
50°	353.4	363.0	385.3	409.7	449.7
52.5°	317.6	327.2	347.0	365.9	400.0
55°	267.7	278.8	295.0	306.2	331.4
57.5°	226.8	237.4	250.3	255.3	270.6
60°	199.5	211.3	223.0	222.4	230.5
62.5°	174.6	184.7	196.3	188.2	188.7
65°	134.2	145.4	158.5	138.5	125.9
67.5°	108.4	110.8	124.4	96.6	81.6
70°	96.3	96.3	100.1	74.8	62.2
72.5°	84.8	84.8	81.3	60.8	47.6
75°	67.5	67.5	61.4	42.2	28.8
77.5°	52.0	51.4	47.0	31.5	20.9
80°	41.7	41.7	37.9	24.8	16.7
82.5°	32.6	32.6	29.4	19.4	12.4
85°	19.0	19.0	17.4	11.3	6.8
87.5°	7.1	7.5	7.7	5.4	5.0
90°	2.0	4.0	8.0	9.0	10.0
92.5°	18.0	74.6	133.5	48.7	38.0
95°	43.0	158.2	530.5	218.0	141.9
97.5°	71.1	177.2	785.8	605.0	438.1
100°	91.9	188.6	880.1	886.3	720.3
102.5°	111.9	201.6	898.5	1095.1	937.6
105°	143.9	222.0	888.1	1355.8	1276.7
107.5°	177.8	247.4	838.5	1481.5	1510.4
110°	201.8	264.3	800.2	1508.6	1602.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	223.4	283.5	764.2	1487.2	1625.5
115°	257.7	311.5	715.3	1416.0	1610.3
117.5°	287.7	341.2	683.1	1315.7	1536.8
120°	307.7	360.4	670.3	1247.8	1470.5
122.5°	326.9	377.3	659.9	1184.4	1395.4
125°	353.6	402.5	648.3	1097.2	1287.7
127.5°	376.4	425.2	641.5	1023.5	1187.8
130°	391.6	440.4	638.3	978.4	1127.8
132.5°	406.0	452.5	635.1	940.5	1075.9
135°	425.6	471.5	630.3	888.7	1002.0
137.5°	447.5	489.3	628.0	845.1	941.8
140°	459.5	500.5	626.4	816.1	901.1
142.5°	473.1	511.0	624.8	790.3	865.1
145°	493.5	527.7	622.4	756.5	814.2
147.5°	513.1	543.0	620.2	728.1	772.8
150°	527.5	551.9	619.4	711.1	747.2
152.5°	538.6	561.5	618.6	696.6	726.4
155°	556.4	575.0	617.4	678.8	700.3
157.5°	572.8	587.1	617.6	665.8	680.5
160°	582.4	595.1	618.4	658.6	669.3
162.5°	590.4	601.5	619.2	652.1	660.5
165°	602.4	610.2	620.4	644.4	649.3
167.5°	611.6	616.3	621.4	639.8	641.3
170°	616.4	620.3	621.4	637.3	637.3
172.5°	620.4	622.7	621.4	634.1	633.3
175°	624.4	625.3	621.4	630.3	628.4
177.5°	626.0	625.2	621.2	626.7	625.2
180°	624.4	624.4	624.4	624.4	624.4

(END OF REPORT)