

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: P519214

Luminaire Tested: **SQ4-WB-075U-100D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519214  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-100D-830-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

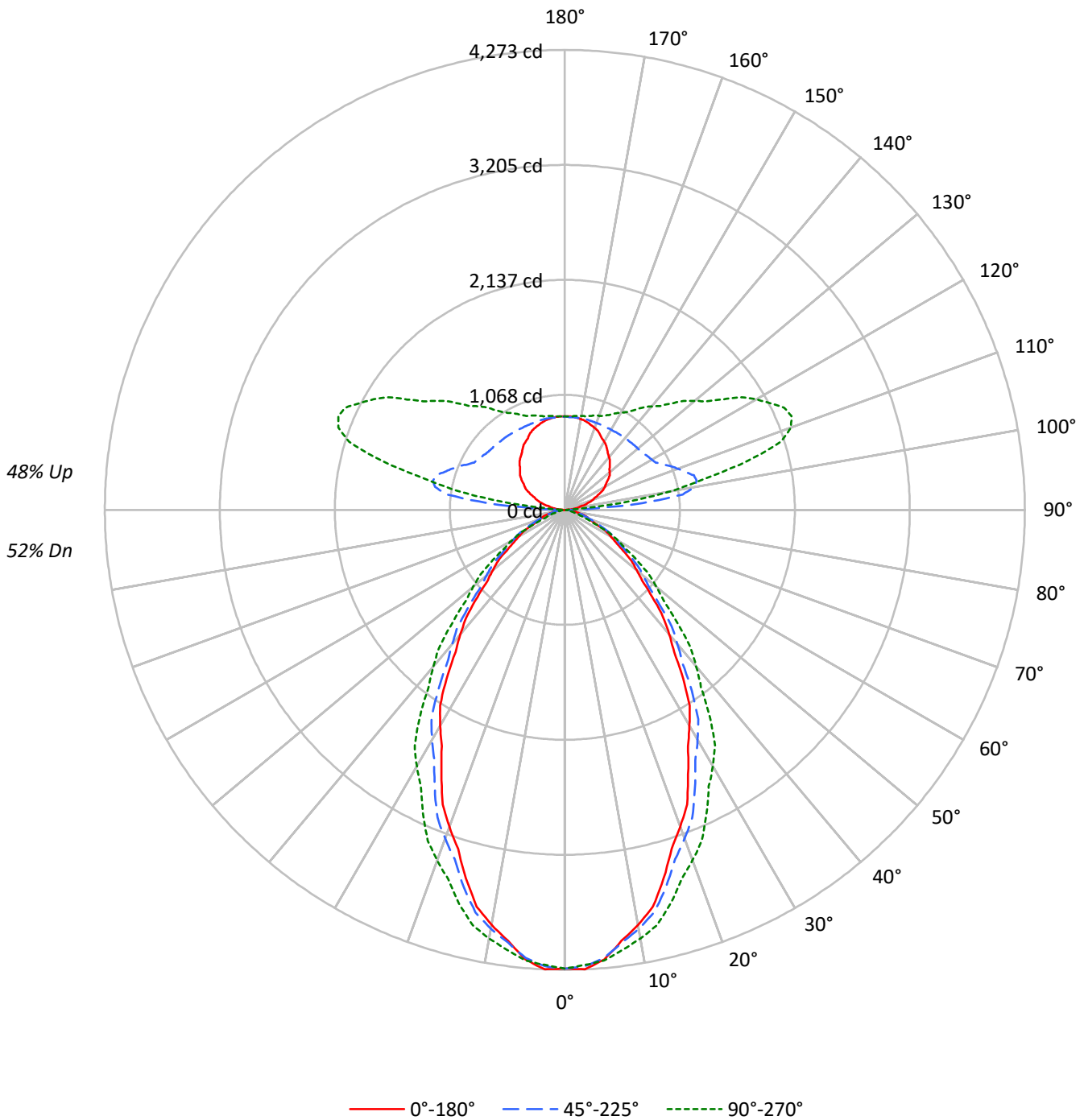
Lumens per Lamp: N/A  
Luminaire Lumens: 11865.4 lumens  
Efficiency: N/A  
Efficacy: 109.6 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 108.3  
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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58	52
1	99	96	92	89	92	89	86	83	76	74	72	64	63	61	53	52	52	46
2	92	85	79	75	85	79	74	70	68	65	62	58	55	53	48	47	45	41
3	84	76	69	64	78	71	65	60	61	57	53	52	49	47	44	42	40	36
4	78	68	61	55	72	64	57	52	55	50	47	48	44	41	40	38	36	32
5	72	61	54	48	67	57	51	46	50	45	41	43	40	37	37	34	32	29
6	67	56	48	43	62	52	45	41	46	41	37	40	36	33	34	31	29	26
7	62	51	43	38	58	48	41	36	42	37	33	37	33	30	32	29	26	24
8	58	46	39	34	54	44	37	33	39	33	30	34	30	27	29	26	24	22
9	54	43	36	31	51	40	34	30	36	31	27	31	27	24	27	24	22	20
10	51	39	33	28	47	37	31	27	33	28	25	29	25	22	26	23	20	18

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

	0°	45°	90°
0°	19664	19664	19664
5°	19419	19349	19462
10°	18347	18513	18943
15°	16937	17330	18107
20°	15380	15959	17015
25°	13795	14547	15852
30°	12335	13142	14646
35°	10786	11566	13220
40°	9079	9800	11444
45°	7492	8139	9554
50°	6255	6819	7960
55°	5311	5852	6574
60°	4538	5073	5246
65°	3614	4267	3389
70°	3203	3330	2069
75°	2968	2700	1267
80°	2734	2484	1092
85°	2477	2276	889



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	391.0	3.3
10°-20°	1017.0	8.6
20°-30°	1317.3	11.1
30°-40°	1290.0	10.9
40°-50°	987.4	8.3
50°-60°	657.9	5.5
60°-70°	359.0	3.0
70°-80°	149.6	1.3
80°-90°	44.6	0.4
90°-100°	409.2	3.4
100°-110°	1125.7	9.5
110°-120°	1161.9	9.8
120°-130°	931.0	7.8
130°-140°	731.2	6.2
140°-150°	560.3	4.7
150°-160°	402.9	3.4
160°-170°	246.4	2.1
170°-180°	83.0	0.7
0°-30°	2725.3	23.0
0°-40°	4015.2	33.8
0°-60°	5660.5	47.7
0°-90°	6213.8	52.4
90°-120°	2696.8	22.7
90°-150°	4919.3	41.5
90°-180°	5652.0	47.6
0°-180°	11865.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4263	4263	4263	4263	4263	
5°	4194	4151	4178	4188	4203	390
15°	3546	3534	3629	3727	3791	990
25°	2710	2718	2858	2983	3114	1246
35°	1915	1924	2054	2192	2347	1191
45°	1148	1170	1248	1342	1464	896
55°	660	688	728	755	817	599
65°	331	358	391	342	310	344
75°	166	166	152	104	71	178
85°	47	47	43	28	17	51
90°	2	7	13	17	17	6
95°	61	223	724	309	198	64
105°	201	310	1240	1889	1763	212
115°	356	434	995	1981	2248	352
125°	491	560	903	1527	1789	438
135°	592	658	877	1235	1397	457
145°	685	732	864	1052	1133	429
155°	775	800	858	946	973	356
165°	838	849	862	897	903	236
175°	868	869	864	875	873	82
180°	868	868	868	868	868	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4262.7	4262.7	4262.7	4262.7	4262.7
2.5°	4273.2	4235.1	4244.8	4244.5	4232.8
5°	4193.5	4151.4	4178.5	4188.2	4202.9
7.5°	4037.9	4006.1	4055.5	4092.1	4121.7
10°	3916.7	3889.2	3952.2	4005.5	4043.9
12.5°	3776.0	3753.0	3831.0	3902.5	3952.6
15°	3546.3	3533.5	3628.6	3727.4	3791.4
17.5°	3300.6	3294.3	3403.4	3518.6	3600.6
20°	3133.0	3131.1	3250.8	3370.8	3465.9
22.5°	2963.9	2967.9	3093.7	3218.5	3326.7
25°	2710.3	2717.6	2858.0	2982.6	3114.3
27.5°	2475.7	2479.0	2624.2	2755.7	2896.2
30°	2315.6	2324.7	2467.1	2603.2	2749.5
32.5°	2155.5	2166.1	2305.5	2446.2	2595.4
35°	1915.3	1924.5	2053.7	2191.9	2347.4
37.5°	1667.7	1680.1	1794.9	1925.5	2078.4
40°	1507.6	1525.9	1627.3	1750.4	1900.4
42.5°	1353.4	1376.1	1470.2	1587.0	1722.3
45°	1148.4	1170.4	1247.6	1342.0	1464.5
47.5°	971.9	997.1	1056.4	1137.7	1242.3
50°	871.6	895.4	950.2	1010.4	1109.2
52.5°	783.3	807.1	855.9	902.3	986.5
55°	660.3	687.7	727.6	755.2	817.4
57.5°	559.3	585.6	617.2	629.7	667.4
60°	491.9	521.2	549.9	548.5	568.6
62.5°	430.6	455.4	484.1	464.3	465.4
65°	331.1	358.5	390.9	341.6	310.5
67.5°	267.5	273.3	306.8	238.2	201.3
70°	237.5	237.5	246.9	184.5	153.4
72.5°	209.1	209.1	200.5	150.0	117.5
75°	166.5	166.5	151.5	104.0	71.1
77.5°	128.3	126.8	116.0	77.6	51.6
80°	102.9	102.9	93.5	61.3	41.1
82.5°	80.4	80.4	72.6	47.9	30.7
85°	46.8	46.8	43.0	27.8	16.8
87.5°	16.8	17.9	17.5	12.3	10.8
90°	1.8	7.3	12.9	16.6	16.6
92.5°	25.5	108.9	188.6	72.4	59.4
95°	60.9	223.3	723.6	309.4	197.5
97.5°	99.3	247.7	1104.2	850.8	600.3
100°	127.4	262.7	1223.8	1235.2	1007.8
102.5°	153.9	280.6	1254.8	1532.4	1323.8
105°	201.2	309.5	1240.4	1889.1	1762.7
107.5°	246.2	345.1	1169.9	2063.7	2101.3
110°	278.7	369.0	1116.7	2107.2	2237.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	308.3	395.6	1063.6	2079.2	2277.0
115°	356.2	433.8	994.9	1981.1	2248.2
117.5°	402.0	473.5	951.3	1843.4	2145.6
120°	430.1	498.7	932.1	1740.3	2052.5
122.5°	455.2	523.8	918.8	1649.9	1946.2
125°	491.0	559.6	902.6	1526.9	1788.6
127.5°	524.9	590.3	891.9	1424.3	1653.8
130°	542.7	609.4	886.0	1363.3	1572.6
132.5°	563.3	630.1	881.6	1309.7	1498.8
135°	592.5	657.5	876.8	1234.8	1397.3
137.5°	619.8	680.1	872.7	1174.4	1308.3
140°	640.5	696.4	871.2	1134.2	1255.2
142.5°	658.2	709.8	868.3	1098.4	1202.0
145°	684.8	731.7	863.8	1052.1	1133.3
147.5°	713.2	753.6	861.6	1011.1	1076.1
150°	730.9	767.0	860.1	988.7	1039.2
152.5°	747.2	780.4	858.7	969.3	1011.1
155°	775.2	800.5	858.3	945.7	972.7
157.5°	795.5	816.1	858.3	926.3	945.1
160°	810.3	826.6	858.3	915.9	930.3
162.5°	822.1	835.5	859.8	906.9	918.5
165°	838.0	848.8	862.0	897.2	902.6
167.5°	849.1	857.4	863.8	889.0	890.4
170°	856.5	861.9	863.8	886.0	886.0
172.5°	862.4	864.9	863.8	881.5	880.1
175°	867.5	869.3	863.8	874.9	873.1
177.5°	869.0	869.0	863.1	871.9	869.0
180°	867.5	867.5	867.5	867.5	867.5

(END OF REPORT)