

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: P519079

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

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519079  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-050D-930-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

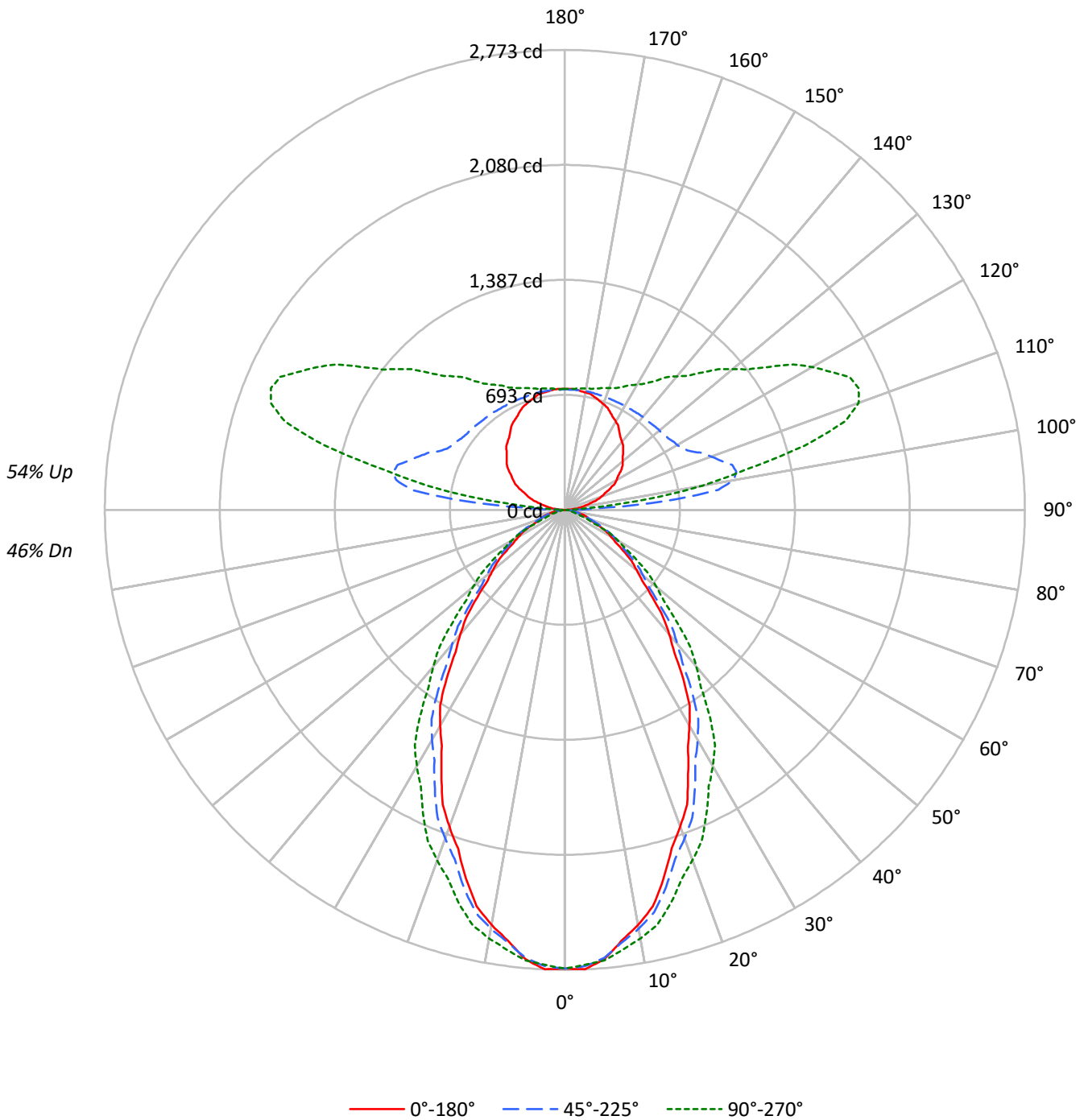
Lumens per Lamp: N/A  
Luminaire Lumens: 8788.5 lumens  
Efficiency: N/A  
Efficacy: 110.4 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 79.6  
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46
1	98	94	91	87	90	87	84	81	73	70	69	60	58	57	48	47	46	41
2	90	83	78	73	83	77	72	68	65	61	59	54	51	49	43	42	41	36
3	83	74	68	62	76	69	63	58	58	54	51	49	46	43	40	38	36	32
4	76	66	59	54	70	62	55	50	52	48	44	44	41	38	36	34	32	28
5	71	60	52	47	65	56	49	44	48	43	39	40	36	34	33	31	29	25
6	65	54	47	41	60	50	44	39	43	38	34	37	33	30	30	28	26	23
7	61	49	42	37	56	46	39	35	40	35	31	34	30	27	28	25	23	21
8	57	45	38	33	52	42	36	31	36	31	28	31	27	25	26	23	21	19
9	53	41	34	30	49	39	32	28	34	29	25	29	25	22	24	22	20	17
10	50	38	31	27	46	36	30	26	31	26	23	27	23	21	23	20	18	16

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

	0°	45°	90°
0°	8506	8506	8506
5°	8400	8370	8419
10°	7936	8008	8194
15°	7326	7496	7833
20°	6653	6903	7360
25°	5968	6293	6857
30°	5336	5685	6336
35°	4666	5003	5718
40°	3927	4239	4950
45°	3241	3521	4133
50°	2706	2950	3443
55°	2297	2531	2844
60°	1963	2195	2269
65°	1563	1846	1466
70°	1386	1440	895
75°	1283	1168	548
80°	1183	1075	473
85°	1069	984	385



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	253.7	2.9
10°-20°	659.9	7.5
20°-30°	854.7	9.7
30°-40°	837.0	9.5
40°-50°	640.7	7.3
50°-60°	426.9	4.9
60°-70°	233.0	2.7
70°-80°	97.1	1.1
80°-90°	30.3	0.3
90°-100°	349.6	4.0
100°-110°	949.7	10.8
110°-120°	976.5	11.1
120°-130°	780.7	8.9
130°-140°	613.5	7.0
140°-150°	470.4	5.4
150°-160°	338.3	3.8
160°-170°	206.9	2.4
170°-180°	69.7	0.8
0°-30°	1768.3	20.1
0°-40°	2605.3	29.6
0°-60°	3672.9	41.8
0°-90°	4033.2	45.9
90°-120°	2275.9	25.9
90°-150°	4140.4	47.1
90°-180°	4755.0	54.1
0°-180°	8788.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2766	2766	2766	2766	2766	
5°	2721	2694	2711	2718	2727	253
15°	2301	2293	2354	2418	2460	643
25°	1759	1763	1854	1935	2021	809
35°	1243	1249	1333	1422	1523	773
45°	745	759	810	871	950	581
55°	428	446	472	490	530	388
65°	215	233	254	222	202	223
75°	108	108	98	68	46	115
85°	30	30	28	18	11	33
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°	2765.9	2765.9	2765.9	2765.9	2765.9
2.5°	2772.7	2748.0	2754.3	2754.1	2746.5
5°	2721.0	2693.7	2711.3	2717.6	2727.1
7.5°	2620.0	2599.4	2631.4	2655.2	2674.4
10°	2541.4	2523.6	2564.4	2599.0	2623.9
12.5°	2450.1	2435.2	2485.8	2532.2	2564.7
15°	2301.1	2292.8	2354.5	2418.5	2460.1
17.5°	2141.6	2137.6	2208.4	2283.1	2336.3
20°	2032.9	2031.7	2109.3	2187.2	2248.9
22.5°	1923.1	1925.8	2007.4	2088.3	2158.6
25°	1758.6	1763.3	1854.5	1935.3	2020.7
27.5°	1606.4	1608.5	1702.7	1788.1	1879.2
30°	1502.5	1508.4	1600.8	1689.1	1784.1
32.5°	1398.6	1405.5	1495.9	1587.2	1684.1
35°	1242.8	1248.7	1332.6	1422.3	1523.1
37.5°	1082.1	1090.2	1164.6	1249.4	1348.6
40°	978.2	990.1	1055.9	1135.8	1233.1
42.5°	878.2	892.9	953.9	1029.7	1117.5
45°	745.2	759.4	809.5	870.8	950.3
47.5°	630.6	647.0	685.5	738.2	806.1
50°	565.6	581.0	616.5	655.6	719.7
52.5°	508.3	523.7	555.4	585.5	640.1
55°	428.4	446.2	472.1	490.0	530.4
57.5°	362.9	380.0	400.5	408.6	433.0
60°	319.2	338.2	356.8	355.9	368.9
62.5°	279.4	295.5	314.1	301.2	302.0
65°	214.8	232.6	253.7	221.6	201.5
67.5°	173.6	177.3	199.0	154.6	130.6
70°	154.1	154.1	160.2	119.7	99.5
72.5°	135.7	135.7	130.1	97.3	76.2
75°	108.0	108.0	98.3	67.5	46.1
77.5°	83.3	82.3	75.2	50.3	33.5
80°	66.8	66.8	60.7	39.8	26.7
82.5°	52.2	52.2	47.1	31.1	19.9
85°	30.3	30.3	27.9	18.0	10.9
87.5°	11.1	12.5	13.0	10.0	9.1
90°	2.3	9.2	16.4	21.1	21.1
92.5°	21.1	95.7	166.3	71.4	60.4
95°	51.5	191.2	608.9	265.0	178.0
97.5°	85.2	211.2	933.4	726.2	510.0
100°	107.7	224.5	1032.7	1046.9	845.4
102.5°	130.2	237.8	1059.0	1294.7	1117.0
105°	168.6	262.5	1044.4	1590.3	1496.4
107.5°	208.4	291.3	984.0	1742.9	1769.0
110°	236.5	312.1	939.1	1772.9	1885.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	260.9	332.8	894.1	1748.0	1917.0
115°	299.7	363.9	836.0	1663.2	1894.5
117.5°	336.3	397.6	799.0	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°	412.2	469.4	756.4	1274.4	1503.4
127.5°	439.8	496.6	748.4	1193.2	1389.6
130°	456.6	511.6	744.7	1142.1	1318.4
132.5°	473.5	528.5	740.9	1098.6	1254.7
135°	496.5	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	730.6	950.7	1051.5
142.5°	551.3	595.7	728.8	924.1	1008.4
145°	573.7	615.0	726.0	882.0	948.4
147.5°	599.0	634.3	723.6	848.9	901.1
150°	615.9	645.7	723.6	829.9	871.1
152.5°	629.0	655.1	721.7	812.9	846.8
155°	648.7	671.6	721.3	792.0	814.9
157.5°	667.9	685.7	721.3	777.9	795.3
160°	679.1	695.1	721.3	768.4	782.2
162.5°	690.4	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	746.1	748.0
170°	718.9	723.5	726.0	742.3	742.3
172.5°	722.7	725.4	726.0	738.6	738.6
175°	728.3	730.6	726.0	735.3	733.0
177.5°	730.2	730.2	724.5	732.0	728.3
180°	728.3	728.3	728.3	728.3	728.3

(END OF REPORT)