

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: P519135

Luminaire Tested: **SQ4-WB-050U-100D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519135  
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-100D-940-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

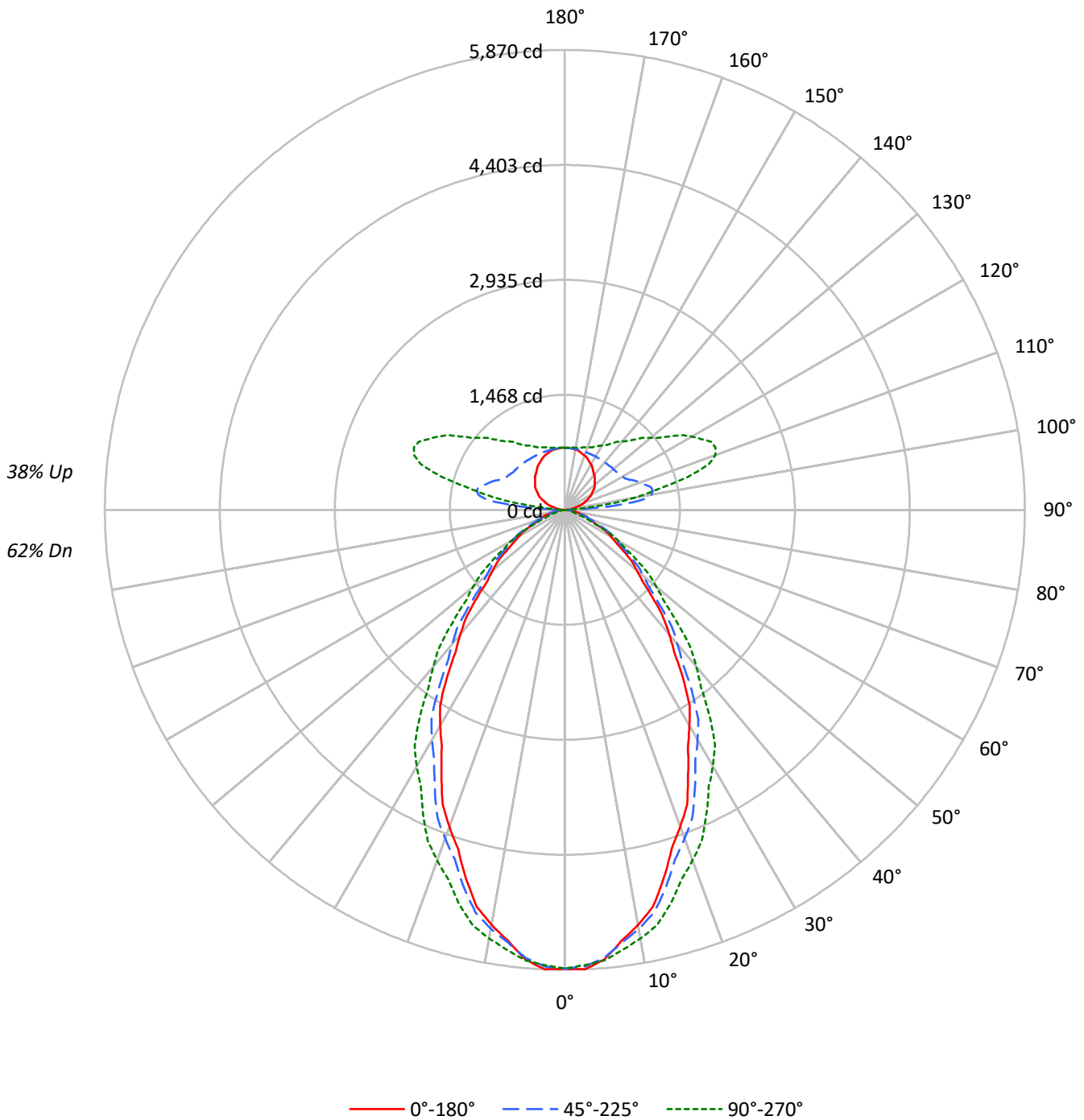
Lumens per Lamp: N/A  
Luminaire Lumens: 13702.4 lumens  
Efficiency: N/A  
Efficacy: 102.0 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 134.4  
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62
1	102	98	95	92	95	92	89	87	81	79	77	71	70	68	62	61	60	55
2	94	87	82	77	88	82	78	73	73	69	66	64	62	59	56	54	53	49
3	87	78	72	66	81	74	68	63	66	61	57	58	55	52	51	49	47	43
4	80	70	63	58	75	67	60	55	60	54	50	53	49	46	47	44	41	38
5	74	64	56	51	70	60	54	49	54	49	45	48	44	41	43	40	37	34
6	69	58	50	45	65	55	48	43	50	44	40	44	40	37	40	36	34	31
7	64	53	45	40	61	50	44	39	45	40	36	41	37	33	37	33	31	28
8	60	49	41	36	57	46	40	35	42	36	33	38	33	30	34	31	28	26
9	56	45	38	33	53	43	36	32	39	33	30	35	31	28	32	28	26	24
10	53	41	35	30	50	40	33	29	36	31	27	33	29	25	30	26	24	22

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

	0°	45°	90°
0°	18010	18010	18010
5°	17785	17722	17825
10°	16803	16956	17349
15°	15512	15872	16584
20°	14086	14616	15583
25°	12635	13323	14518
30°	11297	12036	13414
35°	9879	10593	12107
40°	8315	8975	10481
45°	6862	7454	8751
50°	5729	6246	7291
55°	4864	5360	6021
60°	4157	4647	4805
65°	3310	3908	3104
70°	2934	3050	1895
75°	2718	2473	1160
80°	2502	2276	1001
85°	2265	2085	815



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	537.1	3.9
10°-20°	1397.1	10.2
20°-30°	1809.7	13.2
30°-40°	1772.1	12.9
40°-50°	1356.5	9.9
50°-60°	903.9	6.6
60°-70°	493.2	3.6
70°-80°	205.5	1.5
80°-90°	61.2	0.4
90°-100°	379.8	2.8
100°-110°	1031.8	7.5
110°-120°	1060.8	7.7
120°-130°	848.2	6.2
130°-140°	666.4	4.9
140°-150°	511.0	3.7
150°-160°	367.5	2.7
160°-170°	224.7	1.6
170°-180°	75.7	0.6
0°-30°	3744.0	27.3
0°-40°	5516.1	40.3
0°-60°	7776.5	56.8
0°-90°	8536.5	62.3
90°-120°	2472.4	18.0
90°-150°	4498.0	32.8
90°-180°	5166.0	37.7
0°-180°	13702.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5856	5856	5856	5856	5856	
5°	5761	5703	5740	5754	5774	536
15°	4872	4854	4985	5121	5209	1361
25°	3723	3733	3926	4098	4278	1712
35°	2631	2644	2821	3011	3225	1636
45°	1578	1608	1714	1844	2012	1230
55°	907	945	1000	1038	1123	822
65°	455	492	537	469	427	473
75°	229	229	208	143	98	244
85°	64	64	59	38	23	70
90°	2	10	18	23	23	7
95°	56	208	661	288	193	59
105°	183	285	1135	1728	1626	195
115°	326	395	908	1807	2058	321
125°	448	510	822	1384	1633	399
135°	539	599	799	1128	1272	417
145°	623	668	789	958	1030	391
155°	705	730	784	860	885	325
165°	763	773	786	819	822	215
175°	791	794	789	799	796	75
180°	791	791	791	791	791	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5856.1	5856.1	5856.1	5856.1	5856.1
2.5°	5870.5	5818.2	5831.4	5831.1	5815.0
5°	5761.0	5703.3	5740.5	5753.8	5773.9
7.5°	5547.3	5503.5	5571.4	5621.7	5662.4
10°	5380.7	5343.1	5429.6	5502.7	5555.5
12.5°	5187.5	5155.9	5263.1	5361.2	5430.1
15°	4872.0	4854.4	4985.0	5120.6	5208.6
17.5°	4534.3	4525.8	4675.6	4833.9	4946.5
20°	4304.1	4301.6	4466.0	4630.8	4761.5
22.5°	4071.8	4077.3	4250.1	4421.6	4570.3
25°	3723.4	3733.4	3926.3	4097.5	4278.4
27.5°	3401.1	3405.6	3605.1	3785.8	3978.8
30°	3181.2	3193.7	3389.3	3576.3	3777.3
32.5°	2961.2	2975.8	3167.3	3360.6	3565.6
35°	2631.3	2643.8	2821.4	3011.3	3224.8
37.5°	2291.1	2308.1	2465.8	2645.3	2855.3
40°	2071.1	2096.2	2235.6	2404.7	2610.7
42.5°	1859.4	1890.5	2019.7	2180.2	2366.1
45°	1577.7	1607.9	1713.9	1843.7	2012.0
47.5°	1335.2	1369.8	1451.3	1563.0	1706.7
50°	1197.4	1230.1	1305.4	1388.1	1523.8
52.5°	1076.1	1108.8	1175.8	1239.6	1355.2
55°	907.1	944.8	999.6	1037.5	1122.9
57.5°	768.3	804.5	848.0	865.1	916.8
60°	675.8	716.0	755.5	753.5	781.2
62.5°	591.5	625.7	665.0	637.8	639.3
65°	454.8	492.5	537.0	469.3	426.6
67.5°	367.5	375.5	421.4	327.2	276.5
70°	326.3	326.3	339.2	253.4	210.7
72.5°	287.3	287.3	275.5	206.1	161.4
75°	228.7	228.7	208.1	142.9	97.6
77.5°	176.3	174.3	159.3	106.6	70.9
80°	141.3	141.3	128.5	84.2	56.5
82.5°	110.5	110.5	99.7	65.8	42.1
85°	64.2	64.2	59.1	38.2	23.1
87.5°	23.1	24.6	24.1	16.9	14.9
90°	2.5	10.0	17.8	22.9	22.9
92.5°	22.9	104.0	180.6	77.6	65.6
95°	56.0	207.7	661.4	287.9	193.3
97.5°	92.6	229.4	1014.0	788.9	554.1
100°	117.0	243.9	1121.9	1137.3	918.4
102.5°	141.4	258.4	1150.4	1406.5	1213.5
105°	183.2	285.2	1134.6	1727.6	1625.6
107.5°	226.4	316.5	1069.0	1893.4	1921.8
110°	256.9	339.0	1020.2	1926.1	2047.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	283.4	361.5	971.3	1899.0	2082.5
115°	325.6	395.3	908.2	1806.9	2058.1
117.5°	365.3	432.0	868.0	1676.3	1959.4
120°	391.8	456.5	849.7	1588.8	1869.9
122.5°	414.2	478.8	837.5	1501.0	1772.2
125°	447.7	509.9	821.7	1384.5	1633.3
127.5°	477.8	539.5	813.1	1296.2	1509.6
130°	496.1	555.8	809.0	1240.8	1432.3
132.5°	514.4	574.1	804.9	1193.4	1363.1
135°	539.3	599.0	798.8	1127.7	1272.0
137.5°	566.3	620.5	795.8	1069.7	1191.1
140°	582.6	634.8	793.7	1032.8	1142.3
142.5°	598.9	647.1	791.7	1003.9	1095.5
145°	623.3	668.1	788.6	958.2	1030.3
147.5°	650.8	689.1	786.1	922.2	978.9
150°	669.1	701.4	786.1	901.6	946.4
152.5°	683.3	711.7	784.1	883.1	919.9
155°	704.7	729.6	783.6	860.4	885.3
157.5°	725.6	745.0	783.6	845.0	864.0
160°	737.8	755.2	783.6	834.8	849.7
162.5°	750.0	763.4	785.6	826.5	837.5
165°	763.2	773.2	786.1	819.2	821.7
167.5°	776.9	781.9	788.6	810.6	812.6
170°	781.0	786.0	788.6	806.5	806.5
172.5°	785.1	788.1	788.6	802.4	802.4
175°	791.2	793.7	788.6	798.8	796.3
177.5°	793.2	793.2	787.1	795.2	791.2
180°	791.2	791.2	791.2	791.2	791.2

(END OF REPORT)