

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: P519393

Luminaire Tested: **SQ4-WB-100U-075D-930-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519393  
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-930-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

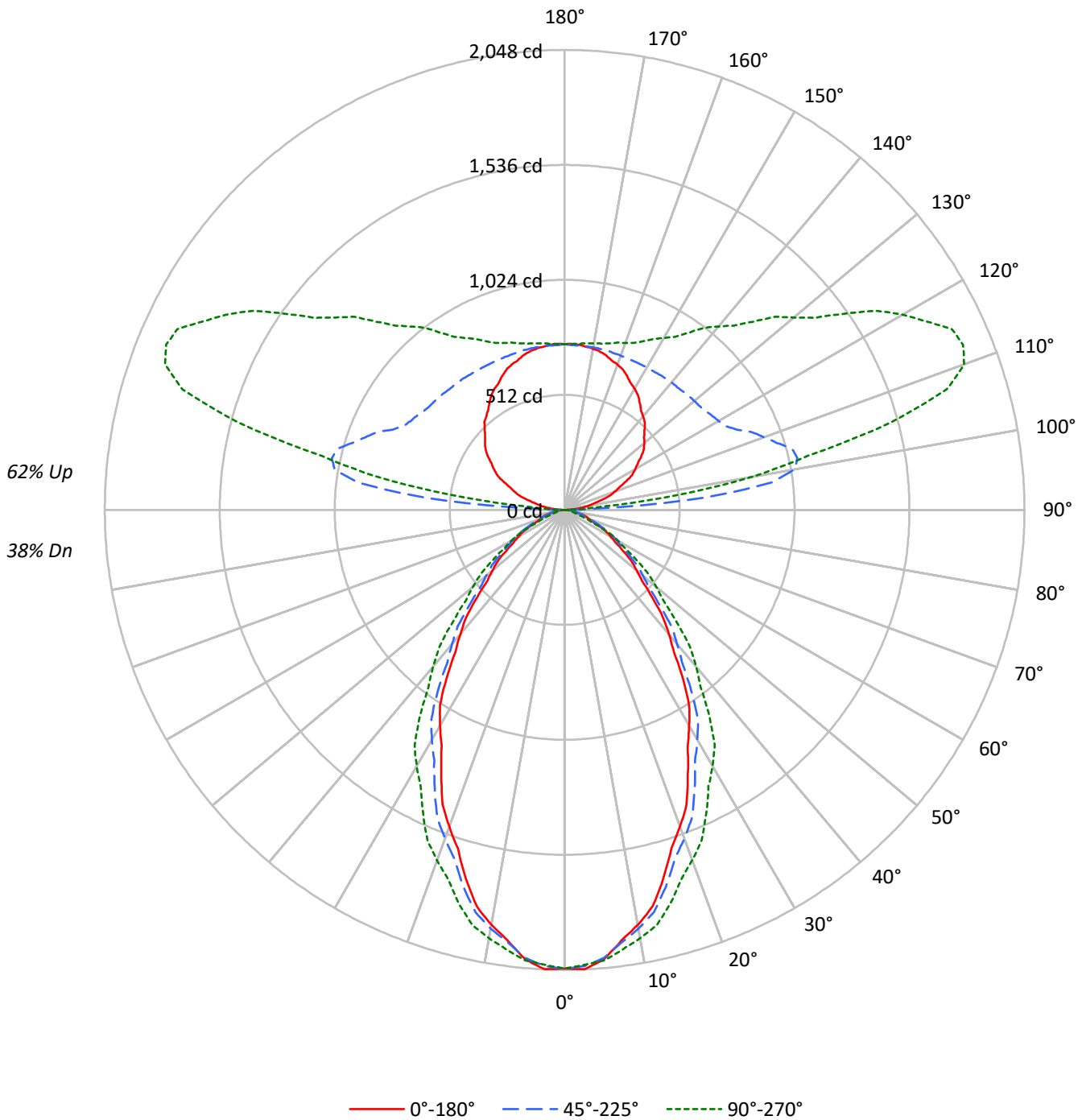
Lumens per Lamp: N/A  
Luminaire Lumens: 7771.8 lumens  
Efficiency: N/A  
Efficacy: 99.6 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 78  
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°	12562	12562	12562
5°	12406	12362	12434
10°	11721	11827	12102
15°	10820	11071	11568
20°	9826	10195	10870
25°	8813	9294	10127
30°	7880	8396	9357
35°	6891	7389	8445
40°	5800	6260	7311
45°	4787	5200	6104
50°	3996	4357	5085
55°	3393	3738	4199
60°	2899	3241	3351
65°	2308	2726	2166
70°	2047	2127	1322
75°	1896	1725	810
80°	1746	1587	698
85°	1581	1454	572



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	187.3	2.4
10°-20°	487.3	6.3
20°-30°	631.2	8.1
30°-40°	618.1	8.0
40°-50°	473.1	6.1
50°-60°	315.2	4.1
60°-70°	172.0	2.2
70°-80°	71.7	0.9
80°-90°	21.8	0.3
90°-100°	345.5	4.4
100°-110°	953.9	12.3
110°-120°	983.8	12.7
120°-130°	790.5	10.2
130°-140°	621.3	8.0
140°-150°	476.5	6.1
150°-160°	342.5	4.4
160°-170°	209.4	2.7
170°-180°	70.6	0.9
0°-30°	1305.8	16.8
0°-40°	1923.9	24.8
0°-60°	2712.2	34.9
0°-90°	2977.8	38.3
90°-120°	2283.2	29.4
90°-150°	4171.5	53.7
90°-180°	4794.0	61.7
0°-180°	7771.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2042	2042	2042	2042	2042	
5°	2009	1989	2002	2007	2014	187
15°	1699	1693	1739	1786	1817	475
25°	1299	1302	1369	1429	1492	597
35°	918	922	984	1050	1125	571
45°	550	561	598	643	702	429
55°	316	330	349	362	392	287
65°	159	172	187	164	149	165
75°	80	80	73	50	34	85
85°	22	22	21	13	8	24
90°	2	5	9	11	12	5
95°	51	187	627	258	168	54
105°	170	262	1050	1602	1509	181
115°	305	368	845	1673	1903	299
125°	418	476	766	1297	1522	372
135°	503	557	745	1050	1184	389
145°	583	624	736	894	962	365
155°	658	680	730	802	828	303
165°	712	721	733	762	767	201
175°	738	739	734	745	742	70
180°	738	738	738	738	738	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2042.4	2042.4	2042.4	2042.4	2042.4
2.5°	2047.5	2029.2	2033.8	2033.7	2028.1
5°	2009.3	1989.1	2002.1	2006.8	2013.8
7.5°	1934.7	1919.5	1943.1	1960.7	1974.9
10°	1876.6	1863.5	1893.7	1919.2	1937.6
12.5°	1809.3	1798.2	1835.6	1869.8	1893.9
15°	1699.2	1693.1	1738.6	1785.9	1816.6
17.5°	1581.4	1578.5	1630.7	1685.9	1725.2
20°	1501.1	1500.3	1557.6	1615.1	1660.7
22.5°	1420.1	1422.0	1482.3	1542.1	1594.0
25°	1298.6	1302.1	1369.4	1429.1	1492.2
27.5°	1186.2	1187.8	1257.4	1320.4	1387.7
30°	1109.5	1113.9	1182.1	1247.3	1317.4
32.5°	1032.8	1037.9	1104.7	1172.1	1243.6
35°	917.7	922.1	984.0	1050.2	1124.7
37.5°	799.1	805.0	860.0	922.6	995.9
40°	722.3	731.1	779.7	838.7	910.5
42.5°	648.5	659.4	704.4	760.4	825.2
45°	550.3	560.8	597.8	643.0	701.7
47.5°	465.7	477.8	506.2	545.1	595.3
50°	417.6	429.0	455.3	484.1	531.4
52.5°	375.3	386.7	410.1	432.3	472.7
55°	316.4	329.5	348.6	361.8	391.6
57.5°	268.0	280.6	295.7	301.7	319.8
60°	235.7	249.7	263.5	262.8	272.4
62.5°	206.3	218.2	231.9	222.4	223.0
65°	158.6	171.8	187.3	163.7	148.8
67.5°	128.2	131.0	147.0	114.1	96.4
70°	113.8	113.8	118.3	88.4	73.5
72.5°	100.2	100.2	96.1	71.9	56.3
75°	79.8	79.8	72.6	49.8	34.1
77.5°	61.5	60.8	55.6	37.2	24.7
80°	49.3	49.3	44.8	29.4	19.7
82.5°	38.5	38.5	34.8	22.9	14.7
85°	22.4	22.4	20.6	13.3	8.1
87.5°	8.4	8.8	9.1	6.4	5.9
90°	2.4	4.7	9.4	10.7	11.8
92.5°	21.2	88.2	157.7	57.6	44.9
95°	50.8	187.0	626.9	257.7	167.6
97.5°	84.1	209.4	928.6	714.9	517.8
100°	108.6	222.9	1040.0	1047.4	851.2
102.5°	132.2	238.2	1061.8	1294.1	1108.0
105°	170.0	262.3	1049.5	1602.2	1508.7
107.5°	210.1	292.3	990.9	1750.8	1784.9
110°	238.5	312.3	945.6	1782.7	1893.6

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	264.0	335.1	903.1	1757.5	1920.9
115°	304.6	368.1	845.3	1673.3	1903.0
117.5°	340.0	403.2	807.2	1554.8	1816.1
120°	363.6	425.9	792.1	1474.6	1737.7
122.5°	386.3	445.8	779.9	1399.6	1649.0
125°	417.9	475.6	766.2	1296.6	1521.7
127.5°	444.8	502.5	758.1	1209.5	1403.6
130°	462.8	520.5	754.4	1156.2	1332.8
132.5°	479.8	534.7	750.6	1111.4	1271.4
135°	502.9	557.2	744.9	1050.2	1184.1
137.5°	528.9	578.3	742.1	998.7	1113.0
140°	543.0	591.5	740.2	964.4	1064.8
142.5°	559.1	603.9	738.3	933.9	1022.3
145°	583.2	623.6	735.5	894.0	962.1
147.5°	606.3	641.6	732.9	860.4	913.3
150°	623.3	652.2	731.9	840.3	883.0
152.5°	636.5	663.5	731.0	823.2	858.5
155°	657.6	679.5	729.6	802.2	827.5
157.5°	676.9	693.8	729.8	786.9	804.2
160°	688.2	703.2	730.7	778.3	790.9
162.5°	697.7	710.8	731.7	770.6	780.6
165°	711.9	721.1	733.1	761.6	767.3
167.5°	722.7	728.3	734.3	756.0	757.9
170°	728.4	733.0	734.3	753.2	753.2
172.5°	733.1	735.9	734.3	749.4	748.5
175°	737.8	739.0	734.3	744.9	742.5
177.5°	739.7	738.8	734.0	740.6	738.8
180°	737.8	737.8	737.8	737.8	737.8

(END OF REPORT)