

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: P519171

Luminaire Tested: **SQ4-WB-075U-050D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519171  
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-050D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

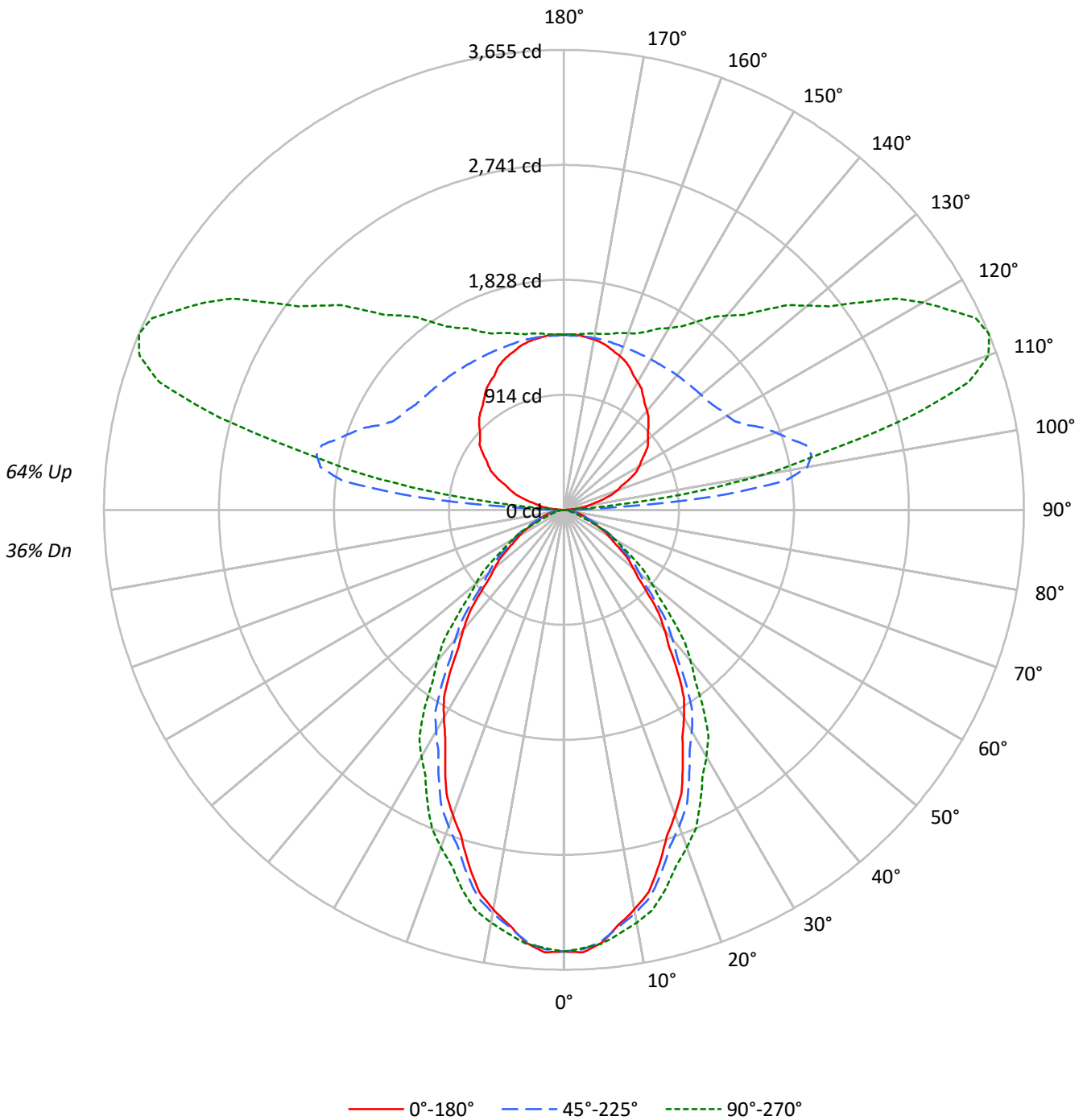
Lumens per Lamp: N/A  
Luminaire Lumens: 14191.1 lumens  
Efficiency: N/A  
Efficacy: 132.1 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 107.4  
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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	43	43	43	36
1	95	92	88	85	86	83	80	78	67	65	64	53	52	50	40	39	38	32
2	88	81	75	71	79	74	69	65	60	57	54	47	45	43	36	35	33	28
3	80	72	65	60	73	66	60	55	54	50	46	43	40	38	33	31	29	25
4	74	64	57	51	67	59	52	48	48	44	40	39	36	33	30	28	26	22
5	68	58	50	45	62	53	46	41	44	39	35	35	32	29	27	25	23	20
6	63	52	44	39	57	48	41	36	40	35	31	32	29	26	25	23	21	18
7	58	47	40	35	53	43	37	32	36	31	28	29	26	23	23	21	19	16
8	54	43	36	31	49	40	33	29	33	28	25	27	24	21	21	19	17	15
9	51	39	32	28	46	36	30	26	31	26	23	25	22	19	20	18	16	14
10	47	36	29	25	43	33	27	23	28	24	20	23	20	18	19	16	15	13

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

	0°	45°	90°
0°	10797	10797	10797
5°	10662	10624	10686
10°	10074	10165	10401
15°	9300	9515	9942
20°	8445	8763	9342
25°	7575	7988	8704
30°	6772	7216	8042
35°	5923	6351	7258
40°	4985	5380	6283
45°	4114	4469	5246
50°	3435	3744	4371
55°	2916	3213	3610
60°	2492	2786	2880
65°	1984	2343	1861
70°	1759	1828	1136
75°	1629	1483	695
80°	1500	1364	600
85°	1359	1249	490



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	322.0	2.3
10°-20°	837.6	5.9
20°-30°	1084.9	7.6
30°-40°	1062.4	7.5
40°-50°	813.2	5.7
50°-60°	541.9	3.8
60°-70°	295.7	2.1
70°-80°	123.2	0.9
80°-90°	38.4	0.3
90°-100°	656.8	4.6
100°-110°	1807.0	12.7
110°-120°	1865.1	13.1
120°-130°	1494.3	10.5
130°-140°	1173.7	8.3
140°-150°	899.4	6.3
150°-160°	646.7	4.6
160°-170°	395.4	2.8
170°-180°	133.3	0.9
0°-30°	2244.5	15.8
0°-40°	3307.0	23.3
0°-60°	4662.1	32.9
0°-90°	5119.4	36.1
90°-120°	4328.8	30.5
90°-150°	7896.3	55.6
90°-180°	9072.0	63.9
0°-180°	14191.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3511	3511	3511	3511	3511	
5°	3454	3419	3442	3450	3462	321
15°	2921	2910	2989	3070	3123	816
25°	2232	2238	2354	2456	2565	1027
35°	1578	1585	1692	1805	1933	981
45°	946	964	1028	1105	1206	738
55°	544	566	599	622	673	493
65°	273	295	322	281	256	283
75°	137	137	125	86	58	146
85°	38	38	35	23	14	42
90°	3	12	21	27	27	8
95°	98	358	1161	497	317	103
105°	323	497	1991	3032	2830	340
115°	572	696	1597	3180	3609	564
125°	788	898	1449	2451	2871	703
135°	951	1055	1407	1982	2243	734
145°	1099	1174	1387	1689	1819	689
155°	1244	1285	1378	1518	1561	572
165°	1345	1362	1384	1440	1449	379
175°	1392	1395	1387	1404	1401	132
180°	1392	1392	1392	1392	1392	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3510.8	3510.8	3510.8	3510.8	3510.8
2.5°	3519.4	3488.1	3496.0	3495.8	3486.1
5°	3453.8	3419.2	3441.5	3449.5	3461.5
7.5°	3325.6	3299.4	3340.1	3370.2	3394.6
10°	3225.8	3203.2	3255.1	3298.9	3330.6
12.5°	3110.0	3091.0	3155.2	3214.1	3255.4
15°	2920.8	2910.2	2988.6	3069.9	3122.6
17.5°	2718.4	2713.2	2803.1	2898.0	2965.5
20°	2580.3	2578.8	2677.4	2776.2	2854.5
22.5°	2441.1	2444.4	2548.0	2650.8	2739.9
25°	2232.2	2238.2	2353.9	2456.5	2564.9
27.5°	2039.0	2041.7	2161.3	2269.6	2385.3
30°	1907.1	1914.7	2031.9	2144.0	2264.5
32.5°	1775.3	1784.0	1898.8	2014.7	2137.6
35°	1577.5	1585.0	1691.5	1805.3	1933.3
37.5°	1373.5	1383.8	1478.3	1585.9	1711.8
40°	1241.6	1256.7	1340.2	1441.6	1565.1
42.5°	1114.7	1133.4	1210.8	1307.0	1418.5
45°	945.9	963.9	1027.5	1105.3	1206.2
47.5°	800.4	821.2	870.1	937.0	1023.2
50°	717.9	737.5	782.6	832.2	913.5
52.5°	645.2	664.7	704.9	743.2	812.5
55°	543.8	566.4	599.3	622.0	673.2
57.5°	460.6	482.3	508.4	518.6	549.6
60°	405.2	429.3	452.9	451.7	468.3
62.5°	354.6	375.1	398.7	382.4	383.3
65°	272.7	295.3	322.0	281.3	255.7
67.5°	220.3	225.1	252.6	196.2	165.8
70°	195.6	195.6	203.3	151.9	126.3
72.5°	172.2	172.2	165.1	123.6	96.7
75°	137.1	137.1	124.8	85.7	58.5
77.5°	105.7	104.5	95.5	63.9	42.5
80°	84.7	84.7	77.0	50.5	33.9
82.5°	66.2	66.2	59.8	39.4	25.3
85°	38.5	38.5	35.4	22.9	13.9
87.5°	14.1	15.9	16.5	12.7	11.5
90°	3.0	11.7	20.7	26.7	26.7
92.5°	40.9	174.7	302.8	116.3	95.4
95°	97.8	358.5	1161.4	496.6	317.0
97.5°	159.4	397.5	1772.4	1365.6	963.5
100°	204.4	421.7	1964.3	1982.7	1617.7
102.5°	247.1	450.5	2014.1	2459.8	2124.9
105°	322.9	496.8	1991.0	3032.3	2829.5
107.5°	395.2	554.0	1877.8	3312.6	3372.9
110°	447.4	592.2	1792.5	3382.3	3590.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	494.8	635.0	1707.2	3337.4	3654.9
115°	571.8	696.4	1597.0	3180.0	3608.7
117.5°	645.3	760.0	1527.0	2959.0	3444.0
120°	690.3	800.4	1496.2	2793.5	3294.6
122.5°	730.6	840.7	1474.9	2648.3	3124.0
125°	788.1	898.2	1448.8	2450.9	2871.0
127.5°	842.6	947.5	1431.6	2286.2	2654.7
130°	871.1	978.3	1422.2	2188.3	2524.3
132.5°	904.3	1011.4	1415.0	2102.2	2405.8
135°	951.1	1055.4	1407.3	1982.1	2242.8
137.5°	994.9	1091.7	1400.8	1885.1	2100.0
140°	1028.1	1117.9	1398.4	1820.6	2014.7
142.5°	1056.5	1139.4	1393.7	1763.1	1929.4
145°	1099.2	1174.5	1386.6	1688.8	1819.2
147.5°	1144.8	1209.7	1383.0	1623.0	1727.3
150°	1173.3	1231.2	1380.7	1586.9	1668.1
152.5°	1199.3	1252.7	1378.3	1555.8	1623.0
155°	1244.4	1284.9	1377.7	1517.9	1561.4
157.5°	1277.0	1310.0	1377.7	1486.8	1517.0
160°	1300.7	1326.7	1377.7	1470.1	1493.3
162.5°	1319.6	1341.1	1380.1	1455.8	1474.3
165°	1345.1	1362.5	1383.6	1440.1	1448.8
167.5°	1362.9	1376.2	1386.6	1426.9	1429.3
170°	1374.7	1383.4	1386.6	1422.2	1422.2
172.5°	1384.2	1388.3	1386.6	1415.0	1412.7
175°	1392.5	1395.4	1386.6	1404.3	1401.4
177.5°	1394.9	1394.9	1385.4	1399.5	1394.9
180°	1392.5	1392.5	1392.5	1392.5	1392.5

(END OF REPORT)