

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521794

Luminaire Tested: **SQ4-WB-050U-100D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521794  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-050U-100D-93050-1D-UNV-STD-W-4 (5000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

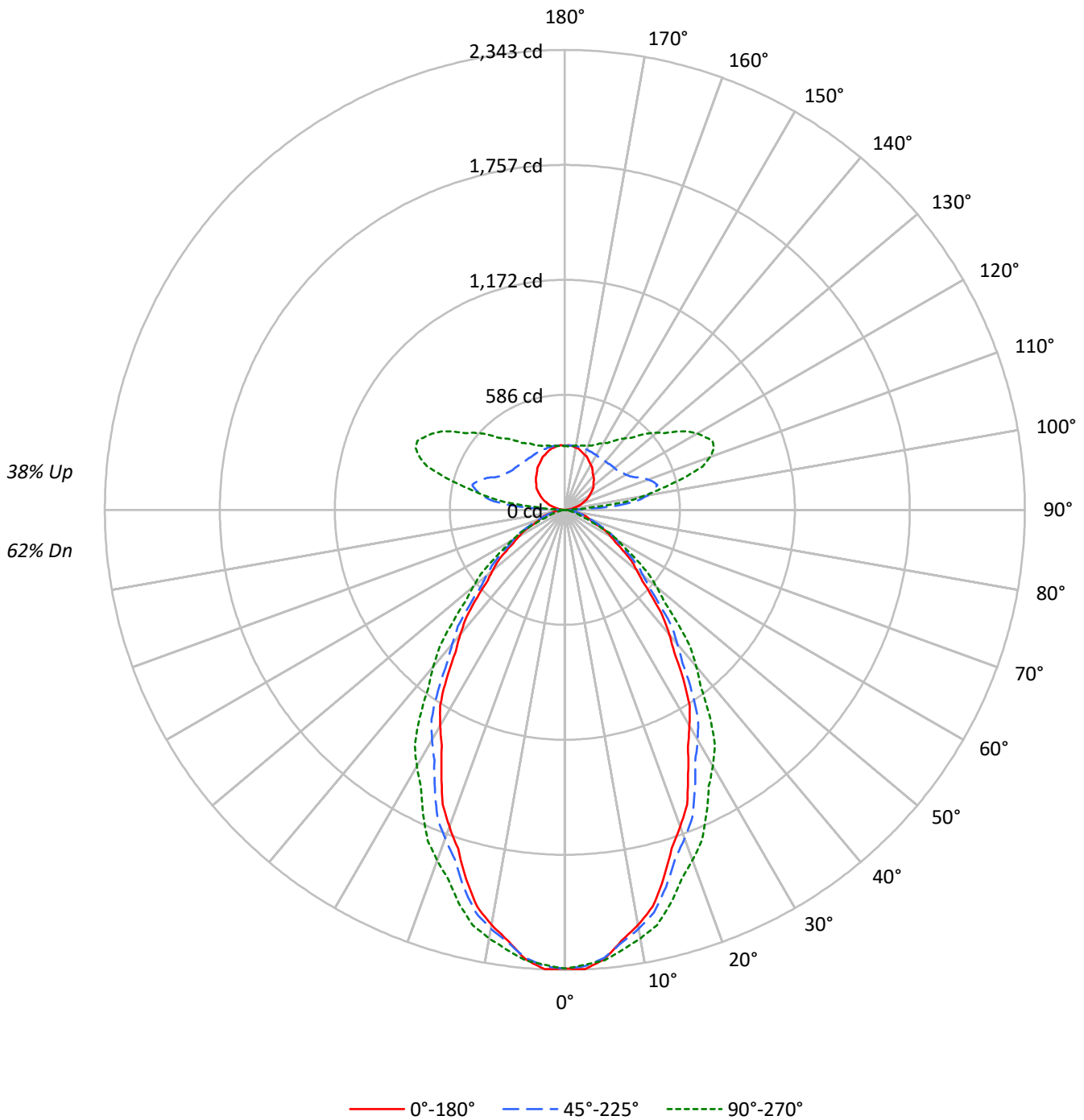
Lumens per Lamp: N/A  
Luminaire Lumens: 5517.6 lumens  
Efficiency: N/A  
Efficacy: 94.5 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 58.4  
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	91	95	92	89	86	81	79	77	71	69	68	61	60	59	55
2	94	87	82	77	88	82	77	73	73	69	66	64	61	59	56	54	52	48
3	87	78	71	66	81	74	68	63	65	61	57	58	54	52	51	48	46	43
4	80	70	63	57	75	66	60	55	59	54	50	53	49	46	46	44	41	38
5	74	63	56	50	70	60	53	48	54	49	45	48	44	41	43	39	37	34
6	69	58	50	45	65	55	48	43	49	44	40	44	40	37	39	36	33	31
7	64	53	45	40	60	50	43	39	45	40	36	41	36	33	36	33	30	28
8	60	48	41	36	56	46	39	35	42	36	32	38	33	30	34	30	28	26
9	56	45	38	33	53	43	36	32	39	33	30	35	31	28	32	28	25	24
10	53	41	34	30	50	39	33	29	36	31	27	33	28	25	30	26	24	22

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

	0°	45°	90°
0°	21561	21561	21561
5°	21292	21216	21339
10°	20116	20299	20769
15°	18570	19001	19853
20°	16864	17498	18656
25°	15125	15950	17380
30°	13525	14409	16058
35°	11826	12681	14495
40°	9954	10744	12547
45°	8215	8923	10476
50°	6858	7477	8728
55°	5823	6416	7208
60°	4977	5563	5752
65°	3962	4678	3716
70°	3512	3652	2269
75°	3255	2962	1390
80°	2997	2726	1201
85°	2710	2498	974



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	214.4	3.9
10°-20°	557.5	10.1
20°-30°	722.2	13.1
30°-40°	707.2	12.8
40°-50°	541.3	9.8
50°-60°	360.7	6.5
60°-70°	196.8	3.6
70°-80°	82.0	1.5
80°-90°	23.2	0.4
90°-100°	168.2	3.0
100°-110°	406.5	7.4
110°-120°	433.5	7.9
120°-130°	351.1	6.4
130°-140°	271.8	4.9
140°-150°	207.4	3.8
150°-160°	150.1	2.7
160°-170°	92.5	1.7
170°-180°	31.3	0.6
0°-30°	1494.0	27.1
0°-40°	2201.2	39.9
0°-60°	3103.2	56.2
0°-90°	3405.3	61.7
90°-120°	1008.1	18.3
90°-150°	1838.5	33.3
90°-180°	2112.0	38.3
0°-180°	5517.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2337	2337	2337	2337	2337	
5°	2299	2276	2291	2296	2304	214
15°	1944	1937	1989	2043	2078	543
25°	1486	1490	1567	1635	1707	683
35°	1050	1055	1126	1202	1287	653
45°	630	642	684	736	803	491
55°	362	377	399	414	448	328
65°	182	196	214	187	170	189
75°	91	91	83	57	39	97
85°	26	26	24	15	9	28
90°	0	0	0	0	0	2
95°	17	84	288	187	131	19
105°	65	112	488	632	624	69
115°	119	152	392	744	830	117
125°	169	195	341	592	695	151
135°	208	232	327	467	537	161
145°	246	264	321	397	428	154
155°	282	294	325	351	364	130
165°	312	316	329	334	339	88
175°	330	328	330	327	326	31
180°	326	326	326	326	326	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2336.9	2336.9	2336.9	2336.9	2336.9
2.5°	2342.6	2321.8	2327.1	2326.9	2320.5
5°	2299.0	2275.9	2290.8	2296.1	2304.1
7.5°	2213.6	2196.2	2223.3	2243.3	2259.6
10°	2147.2	2132.2	2166.7	2195.9	2216.9
12.5°	2070.1	2057.5	2100.2	2139.4	2166.9
15°	1944.2	1937.1	1989.3	2043.4	2078.5
17.5°	1809.4	1806.0	1865.8	1929.0	1973.9
20°	1717.6	1716.6	1782.2	1847.9	1900.1
22.5°	1624.9	1627.1	1696.0	1764.4	1823.8
25°	1485.8	1489.8	1566.8	1635.1	1707.3
27.5°	1357.2	1359.0	1438.6	1510.7	1587.7
30°	1269.5	1274.5	1352.5	1427.1	1507.3
32.5°	1181.7	1187.5	1263.9	1341.0	1422.9
35°	1050.0	1055.0	1125.9	1201.7	1286.9
37.5°	914.3	921.1	984.0	1055.6	1139.4
40°	826.5	836.5	892.1	959.6	1041.8
42.5°	742.0	754.4	806.0	870.0	944.2
45°	629.6	641.6	683.9	735.7	802.9
47.5°	532.8	546.6	579.1	623.7	681.1
50°	477.8	490.9	520.9	553.9	608.1
52.5°	429.4	442.5	469.2	494.7	540.8
55°	362.0	377.0	398.9	414.0	448.1
57.5°	306.6	321.0	338.4	345.2	365.9
60°	269.7	285.7	301.5	300.7	311.7
62.5°	236.0	249.7	265.4	254.5	255.1
65°	181.5	196.5	214.3	187.3	170.2
67.5°	146.6	149.8	168.2	130.6	110.3
70°	130.2	130.2	135.4	101.1	84.1
72.5°	114.6	114.6	109.9	82.2	64.4
75°	91.3	91.3	83.1	57.0	39.0
77.5°	70.3	69.5	63.6	42.5	28.3
80°	56.4	56.4	51.3	33.6	22.6
82.5°	44.1	44.1	39.8	26.2	16.8
85°	25.6	25.6	23.6	15.2	9.2
87.5°	9.0	9.0	8.2	4.9	4.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.5	45.5	107.2	52.1	35.4
95°	16.6	84.1	288.1	187.4	131.3
97.5°	29.4	93.2	379.5	365.6	313.8
100°	39.4	98.8	429.8	453.7	411.1
102.5°	48.8	103.9	463.0	527.1	501.8
105°	65.0	112.2	488.5	632.1	623.9
107.5°	80.8	122.1	473.5	716.3	735.3
110°	91.9	130.4	449.1	752.6	788.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	103.0	138.8	427.6	761.5	822.7
115°	118.8	152.0	392.5	744.1	829.9
117.5°	134.6	165.8	371.9	704.0	804.6
120°	145.1	174.2	358.6	672.6	778.0
122.5°	156.2	183.0	350.3	640.5	744.3
125°	169.3	195.0	340.6	591.7	695.1
127.5°	182.3	206.5	333.9	550.4	641.2
130°	190.0	213.7	331.7	521.6	610.8
132.5°	197.2	221.9	328.4	500.9	576.5
135°	208.0	232.3	326.8	466.6	536.9
137.5°	218.2	242.7	322.0	443.4	496.4
140°	225.9	248.2	322.0	426.7	475.4
142.5°	233.7	256.0	319.2	412.2	453.3
145°	246.0	264.2	320.6	396.6	427.7
147.5°	257.5	275.2	319.8	378.7	404.4
150°	264.6	280.2	322.0	370.8	391.1
152.5°	272.4	287.4	321.4	362.5	380.6
155°	281.9	294.1	324.8	351.3	364.1
157.5°	293.4	303.8	324.1	347.0	354.6
160°	297.8	306.6	326.8	341.5	346.9
162.5°	305.0	312.7	325.7	339.8	343.0
165°	311.6	316.4	328.9	333.8	338.6
167.5°	319.8	322.9	328.1	333.5	333.6
170°	322.0	324.0	330.3	329.7	333.0
172.5°	325.9	327.3	328.6	330.1	328.1
175°	329.6	328.2	329.6	326.8	326.1
177.5°	328.9	328.9	327.8	326.6	323.9
180°	326.1	326.1	326.1	326.1	326.1

(END OF REPORT)