

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: P521790

Luminaire Tested: **SQ4-WB-050U-100D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521790  
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 (3000K)  
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 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

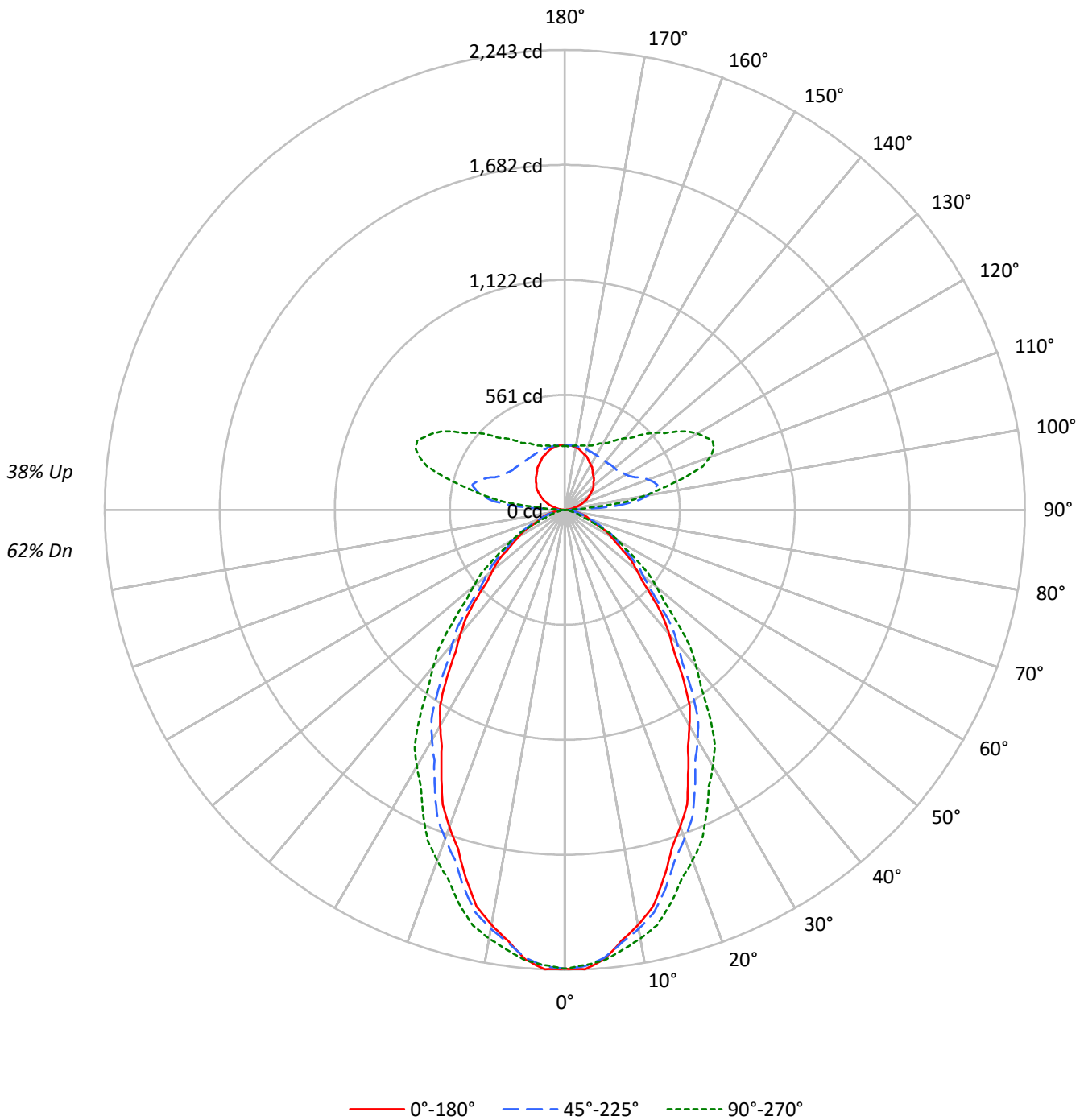
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5283.3 lumens  
Efficiency: N/A  
Efficacy: 90.3 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): 58.5  
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				
RC	80					70					50					30				
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°	20645	20645	20645
5°	20387	20315	20433
10°	19262	19437	19888
15°	17781	18194	19010
20°	16147	16755	17863
25°	14483	15273	16642
30°	12949	13797	15376
35°	11324	12143	13878
40°	9532	10288	12015
45°	7867	8545	10031
50°	6567	7159	8357
55°	5575	6143	6902
60°	4764	5327	5508
65°	3794	4480	3558
70°	3364	3496	2172
75°	3116	2834	1330
80°	2869	2609	1148
85°	2594	2392	932



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	205.2	3.9
10°-20°	533.9	10.1
20°-30°	691.5	13.1
30°-40°	677.1	12.8
40°-50°	518.3	9.8
50°-60°	345.4	6.5
60°-70°	188.5	3.6
70°-80°	78.5	1.5
80°-90°	22.2	0.4
90°-100°	161.0	3.0
100°-110°	389.2	7.4
110°-120°	415.1	7.9
120°-130°	336.2	6.4
130°-140°	260.3	4.9
140°-150°	198.6	3.8
150°-160°	143.7	2.7
160°-170°	88.5	1.7
170°-180°	30.0	0.6
0°-30°	1430.6	27.1
0°-40°	2107.7	39.9
0°-60°	2971.4	56.2
0°-90°	3260.7	61.7
90°-120°	965.3	18.3
90°-150°	1760.4	33.3
90°-180°	2023.0	38.3
0°-180°	5283.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2238	2238	2238	2238	2238	
5°	2201	2179	2194	2199	2206	205
15°	1862	1855	1905	1957	1990	520
25°	1423	1427	1500	1566	1635	654
35°	1005	1010	1078	1151	1232	625
45°	603	614	655	704	769	470
55°	347	361	382	396	429	314
65°	174	188	205	179	163	181
75°	87	87	80	55	37	93
85°	24	24	23	15	9	27
90°	0	0	0	0	0	2
95°	16	81	276	179	126	18
105°	62	108	468	605	598	66
115°	114	146	376	712	795	113
125°	162	187	326	567	666	145
135°	199	222	313	447	514	154
145°	236	253	307	380	410	147
155°	270	282	311	336	349	125
165°	298	303	315	320	324	84
175°	316	314	316	313	312	30
180°	312	312	312	312	312	



TEST NUMBER: P521790

CATALOG NUMBER: SQ4-WB-050U-100D-93050-1D-UNV-STD-W-4 (3000K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2237.7	2237.7	2237.7	2237.7	2237.7
2.5°	2243.2	2223.2	2228.2	2228.1	2222.0
5°	2201.3	2179.3	2193.5	2198.6	2206.2
7.5°	2119.6	2102.9	2128.9	2148.1	2163.6
10°	2056.0	2041.6	2074.7	2102.6	2122.8
12.5°	1982.2	1970.1	2011.1	2048.6	2074.9
15°	1861.6	1854.9	1904.8	1956.6	1990.2
17.5°	1732.6	1729.3	1786.6	1847.1	1890.1
20°	1644.6	1643.7	1706.5	1769.5	1819.4
22.5°	1555.9	1558.0	1624.0	1689.5	1746.3
25°	1422.7	1426.6	1500.3	1565.7	1634.8
27.5°	1299.6	1301.3	1377.6	1446.6	1520.3
30°	1215.5	1220.3	1295.1	1366.5	1443.3
32.5°	1131.5	1137.1	1210.2	1284.1	1362.4
35°	1005.4	1010.2	1078.1	1150.6	1232.2
37.5°	875.4	882.0	942.2	1010.8	1091.0
40°	791.4	801.0	854.2	918.9	997.6
42.5°	710.5	722.4	771.7	833.1	904.1
45°	602.9	614.4	654.9	704.5	768.8
47.5°	510.2	523.4	554.6	597.2	652.2
50°	457.5	470.0	498.8	530.4	582.2
52.5°	411.2	423.7	449.3	473.7	517.8
55°	346.6	361.0	381.9	396.4	429.1
57.5°	293.6	307.4	324.0	330.6	350.3
60°	258.2	273.6	288.7	287.9	298.5
62.5°	226.0	239.1	254.1	243.7	244.3
65°	173.8	188.2	205.2	179.3	163.0
67.5°	140.4	143.5	161.0	125.0	105.6
70°	124.7	124.7	129.6	96.8	80.5
72.5°	109.8	109.8	105.3	78.7	61.7
75°	87.4	87.4	79.5	54.6	37.3
77.5°	67.4	66.6	60.9	40.7	27.1
80°	54.0	54.0	49.1	32.2	21.6
82.5°	42.2	42.2	38.1	25.1	16.1
85°	24.5	24.5	22.6	14.6	8.8
87.5°	8.6	8.6	7.9	4.7	3.9
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.3	43.6	102.7	49.9	33.9
95°	15.9	80.6	275.9	179.4	125.7
97.5°	28.2	89.3	363.4	350.1	300.5
100°	37.7	94.6	411.5	434.4	393.7
102.5°	46.7	99.5	443.3	504.7	480.5
105°	62.2	107.5	467.8	605.2	597.5
107.5°	77.4	116.9	453.4	685.9	704.1
110°	88.0	124.9	430.1	720.6	754.9

TEST NUMBER: P521790

CATALOG NUMBER: SQ4-WB-050U-100D-93050-1D-UNV-STD-W-4 (3000K)

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	98.6	132.9	409.4	729.1	787.7
115°	113.8	145.5	375.8	712.5	794.6
117.5°	128.9	158.8	356.1	674.1	770.4
120°	138.9	166.8	343.4	644.1	745.0
122.5°	149.5	175.3	335.4	613.3	712.7
125°	162.1	186.7	326.2	566.6	665.6
127.5°	174.5	197.7	319.7	527.0	614.0
130°	181.9	204.6	317.6	499.5	584.9
132.5°	188.8	212.5	314.4	479.6	552.1
135°	199.2	222.4	313.0	446.8	514.1
137.5°	208.9	232.4	308.3	424.6	475.3
140°	216.4	237.7	308.3	408.6	455.2
142.5°	223.8	245.1	305.7	394.7	434.0
145°	235.5	253.0	307.0	379.8	409.6
147.5°	246.5	263.5	306.2	362.6	387.2
150°	253.4	268.3	308.3	355.1	374.5
152.5°	260.8	275.2	307.8	347.1	364.4
155°	269.9	281.6	311.0	336.4	348.7
157.5°	280.9	290.9	310.3	332.3	339.5
160°	285.2	293.6	313.0	327.0	332.1
162.5°	292.0	299.4	311.9	325.3	328.4
165°	298.4	302.9	314.9	319.7	324.2
167.5°	306.2	309.2	314.1	319.3	319.4
170°	308.3	310.3	316.3	315.7	318.9
172.5°	312.0	313.4	314.7	316.1	314.1
175°	315.6	314.3	315.6	312.9	312.3
177.5°	314.9	314.9	313.9	312.8	310.2
180°	312.3	312.3	312.3	312.3	312.3

(END OF REPORT)