

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: P521781

Luminaire Tested: **SQ4-WB-050U-075D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521781  
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-075D-93050-1D-UNV-STD-W-4 (5000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 750 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**

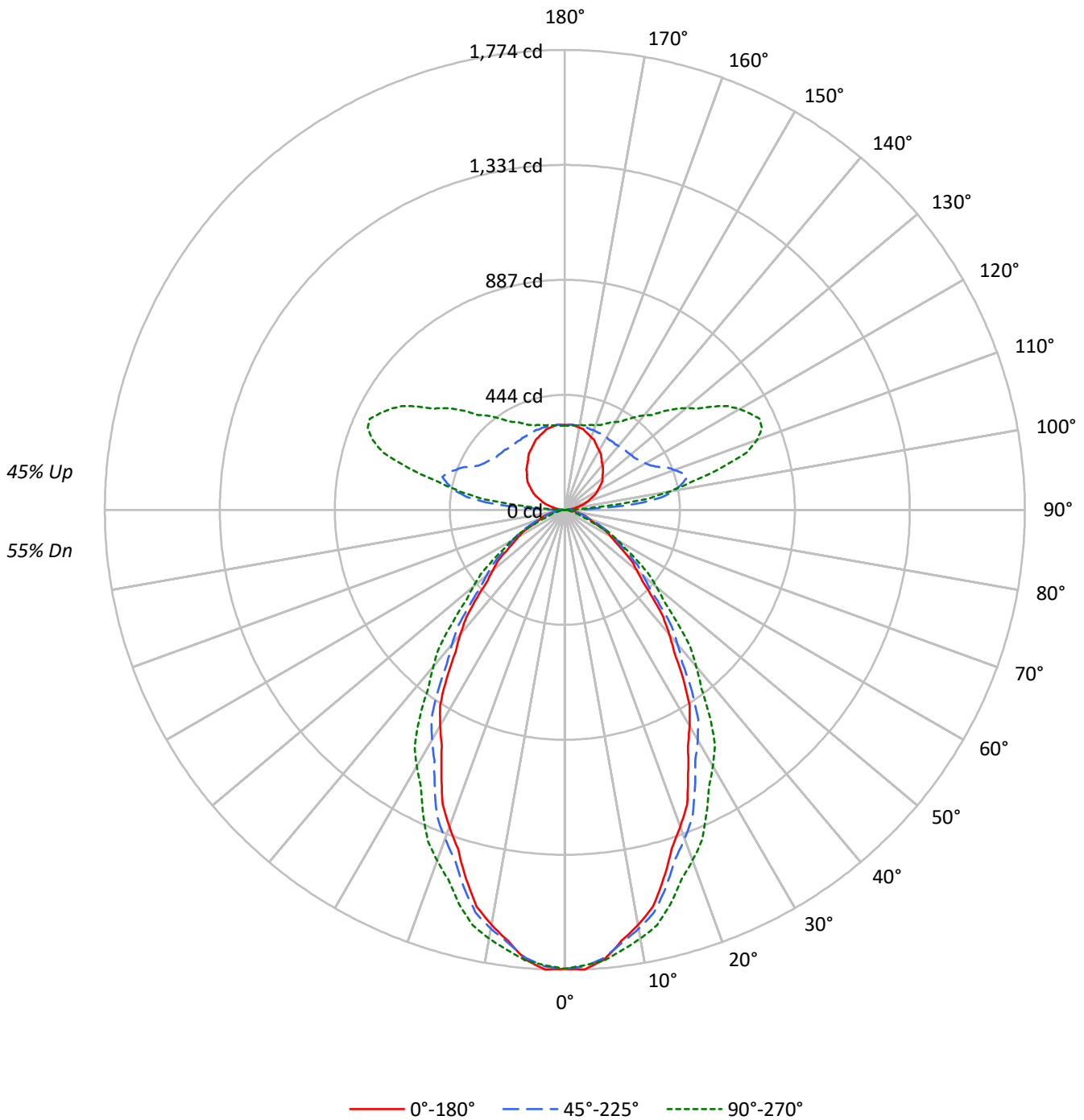
Lumens per Lamp: N/A  
Luminaire Lumens: 4691.6 lumens  
Efficiency: N/A  
Efficacy: 98.8 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 47.5  
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

TEST NUMBER: P521781

CATALOG NUMBER: SQ4-WB-050U-075D-93050-1D-UNV-STD-W-4 (5000K)

### Luminous Intensity Polar Plot





TEST NUMBER: P521781

CATALOG NUMBER: SQ4-WB-050U-075D-93050-1D-UNV-STD-W-4 (5000K)

**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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55
1	100	96	93	90	93	90	87	84	77	75	73	66	65	63	56	55	54	49
2	92	86	80	75	86	80	75	71	69	66	63	60	57	55	51	49	47	43
3	85	76	70	64	79	72	66	61	62	58	54	54	51	48	46	44	42	38
4	79	69	61	56	73	64	58	53	56	52	48	49	45	42	42	39	37	34
5	73	62	54	49	68	58	52	47	51	46	42	45	41	38	39	36	33	30
6	67	56	49	43	63	53	46	41	47	41	38	41	37	34	36	33	30	27
7	63	51	44	39	58	48	42	37	43	38	34	38	34	31	33	30	27	25
8	59	47	40	35	55	44	38	33	40	34	30	35	31	28	31	27	25	23
9	55	43	36	31	51	41	35	30	37	31	28	32	28	25	29	25	23	21
10	51	40	33	29	48	38	32	27	34	29	25	30	26	23	27	24	21	19

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

	0°	45°	90°
0°	16330	16330	16330
5°	16127	16070	16163
10°	15236	15375	15732
15°	14066	14391	15037
20°	12773	13253	14131
25°	11457	12081	13165
30°	10243	10913	12163
35°	8958	9605	10978
40°	7540	8138	9504
45°	6223	6759	7934
50°	5195	5662	6611
55°	4411	4859	5459
60°	3770	4213	4357
65°	3002	3543	2814
70°	2660	2765	1718
75°	2463	2242	1052
80°	2269	2062	909
85°	2054	1895	741



TEST NUMBER: P521781

CATALOG NUMBER: SQ4-WB-050U-075D-93050-1D-UNV-STD-W-4 (5000K)

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.4	3.5
10°-20°	422.3	9.0
20°-30°	547.0	11.7
30°-40°	535.6	11.4
40°-50°	410.0	8.7
50°-60°	273.2	5.8
60°-70°	149.1	3.2
70°-80°	62.1	1.3
80°-90°	17.6	0.4
90°-100°	168.2	3.6
100°-110°	406.5	8.7
110°-120°	433.5	9.2
120°-130°	351.1	7.5
130°-140°	271.8	5.8
140°-150°	207.4	4.4
150°-160°	150.1	3.2
160°-170°	92.5	2.0
170°-180°	31.3	0.7
0°-30°	1131.6	24.1
0°-40°	1667.3	35.5
0°-60°	2350.5	50.1
0°-90°	2579.2	55.0
90°-120°	1008.1	21.5
90°-150°	1838.5	39.2
90°-180°	2112.0	45.0
0°-180°	4691.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1770	1770	1770	1770	1770	
5°	1741	1724	1735	1739	1745	162
15°	1473	1467	1507	1548	1574	411
25°	1125	1128	1187	1238	1293	518
35°	795	799	853	910	975	494
45°	477	486	518	557	608	372
55°	274	286	302	314	339	249
65°	138	149	162	142	129	143
75°	69	69	63	43	30	74
85°	19	19	18	12	7	21
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	

TEST NUMBER: P521781

CATALOG NUMBER: SQ4-WB-050U-075D-93050-1D-UNV-STD-W-4 (5000K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1770.0	1770.0	1770.0	1770.0	1770.0
2.5°	1774.4	1758.6	1762.6	1762.5	1757.6
5°	1741.3	1723.8	1735.1	1739.1	1745.2
7.5°	1676.7	1663.5	1684.0	1699.2	1711.5
10°	1626.3	1615.0	1641.1	1663.2	1679.2
12.5°	1567.9	1558.4	1590.8	1620.4	1641.3
15°	1472.6	1467.2	1506.7	1547.7	1574.3
17.5°	1370.5	1367.9	1413.2	1461.1	1495.1
20°	1300.9	1300.2	1349.8	1399.7	1439.2
22.5°	1230.7	1232.4	1284.6	1336.4	1381.4
25°	1125.4	1128.4	1186.7	1238.5	1293.2
27.5°	1028.0	1029.4	1089.7	1144.3	1202.6
30°	961.5	965.3	1024.4	1080.9	1141.7
32.5°	895.0	899.4	957.3	1015.7	1077.7
35°	795.3	799.1	852.8	910.2	974.7
37.5°	692.5	697.6	745.3	799.5	863.0
40°	626.0	633.6	675.7	726.8	789.1
42.5°	562.0	571.4	610.5	659.0	715.2
45°	476.9	486.0	518.0	557.3	608.1
47.5°	403.6	414.0	438.7	472.4	515.9
50°	361.9	371.8	394.5	419.6	460.6
52.5°	325.3	335.1	355.4	374.7	409.6
55°	274.2	285.6	302.1	313.6	339.4
57.5°	232.2	243.2	256.3	261.5	277.1
60°	204.3	216.4	228.3	227.8	236.1
62.5°	178.8	189.1	201.0	192.8	193.2
65°	137.5	148.9	162.3	141.8	128.9
67.5°	111.1	113.5	127.4	98.9	83.6
70°	98.6	98.6	102.5	76.6	63.7
72.5°	86.8	86.8	83.3	62.3	48.8
75°	69.1	69.1	62.9	43.2	29.5
77.5°	53.3	52.7	48.2	32.2	21.4
80°	42.7	42.7	38.8	25.4	17.1
82.5°	33.4	33.4	30.1	19.9	12.7
85°	19.4	19.4	17.9	11.5	7.0
87.5°	6.8	6.8	6.2	3.7	3.1
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

TEST NUMBER: P521781

CATALOG NUMBER: SQ4-WB-050U-075D-93050-1D-UNV-STD-W-4 (5000K)

**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)