

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: P511760

Luminaire Tested: **SQW-F-050U-050D-940-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P511760  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-16,  
Test Lab: INNOVATION CENTER  
Issue Date: 4/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQW-F-050U-050D-940-1D-UNV-STD-W-4  
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

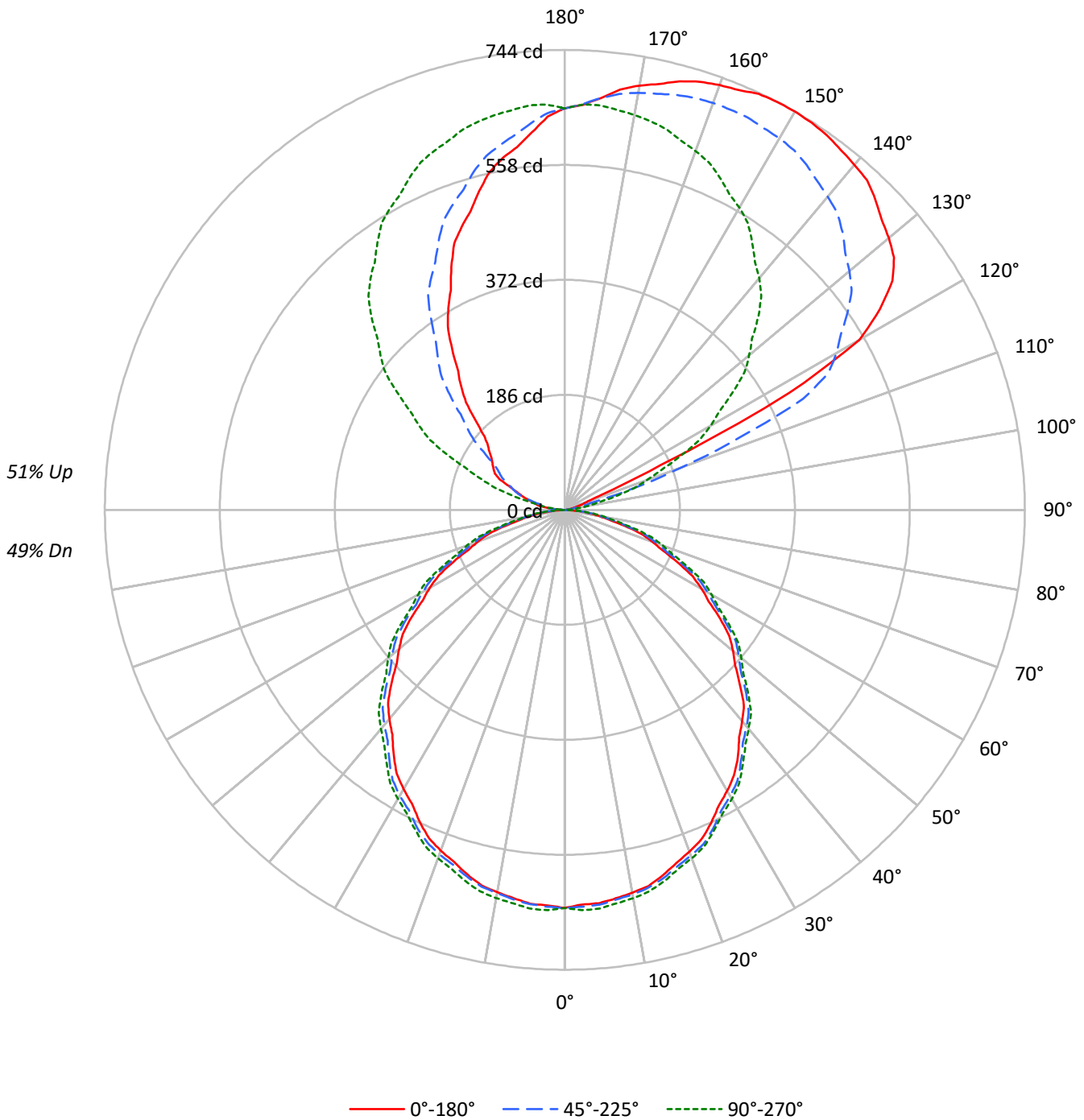
Lumens per Lamp: N/A  
Luminaire Lumens: 3561.6 lumens  
Efficiency: N/A  
Efficacy: 113.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 31.4  
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	55	55	55	49
1	98	93	89	86	90	86	83	80	73	70	68	60	59	57	49	48	47	41
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	39	35
3	81	71	64	58	74	66	60	54	56	51	47	47	43	40	38	35	33	29
4	74	63	55	49	68	58	51	46	50	44	40	41	37	34	34	31	29	25
5	68	56	48	42	62	52	45	39	44	39	34	37	33	30	30	27	25	22
6	62	50	42	36	57	47	40	34	40	34	30	34	29	26	28	24	22	19
7	58	45	37	32	53	42	35	30	36	31	26	30	26	23	25	22	19	17
8	54	41	33	28	49	38	31	27	33	27	23	28	24	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	13
10	47	34	27	22	43	32	26	21	28	22	19	24	19	16	20	16	14	12

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

	0°	90°	180°
0°	20796	20796	20796
5°	20704	20989	20733
10°	20625	20913	20595
15°	20470	20791	20410
20°	20223	20615	20162
25°	19932	20370	19807
30°	19576	20135	19445
35°	19237	19793	19033
40°	18792	19496	18607
45°	18304	19148	18103
50°	17834	18718	17568
55°	17261	18252	17014
60°	16501	17696	16269
65°	15412	16825	15213
70°	14219	15890	14058
75°	12527	14398	12414
80°	10153	12125	10321
85°	5891	8151	6854



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.8	1.7
10°-20°	173.3	4.9
20°-30°	259.6	7.3
30°-40°	308.6	8.7
40°-50°	315.8	8.9
50°-60°	281.6	7.9
60°-70°	208.9	5.9
70°-80°	114.4	3.2
80°-90°	27.4	0.8
90°-100°	15.9	0.4
100°-110°	73.0	2.0
110°-120°	213.9	6.0
120°-130°	321.9	9.0
130°-140°	345.7	9.7
140°-150°	329.9	9.3
150°-160°	271.5	7.6
160°-170°	177.8	5.0
170°-180°	61.6	1.7
0°-30°	493.7	13.9
0°-40°	802.3	22.5
0°-60°	1399.7	39.3
0°-90°	1750.4	49.1
90°-120°	302.7	8.5
90°-150°	1300.3	36.5
90°-180°	1811.0	50.8
0°-180°	3561.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	644	644	644	644	644	
5°	639	641	648	640	640	61
15°	612	617	622	614	610	173
25°	559	568	572	566	556	257
35°	488	497	502	495	483	305
45°	401	413	419	410	396	310
55°	307	317	324	316	302	273
65°	202	211	220	210	199	200
75°	100	108	115	108	100	107
85°	16	21	22	23	18	22
90°	1	1	1	2	4	1
95°	4	5	12	20	19	5
105°	20	47	84	55	59	23
115°	172	426	208	104	115	229
125°	647	559	331	156	144	568
135°	710	635	443	263	202	548
145°	740	681	528	377	318	463
155°	742	700	593	482	434	343
165°	718	695	637	567	534	203
175°	669	669	657	628	612	65
180°	650	650	650	650	650	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	644.0	644.0	644.0	644.0	644.0	644.0	644.0	644.0	644.0
2.5°	639.0	641.8	642.6	642.0	648.2	642.7	642.6	641.8	640.4
5°	638.7	639.5	641.3	639.7	647.5	639.7	640.4	638.7	639.6
7.5°	633.9	634.8	635.9	635.0	642.0	635.0	635.5	633.7	633.7
10°	629.0	629.9	631.6	630.0	637.8	630.0	629.9	628.1	628.1
12.5°	623.4	624.2	626.0	624.4	632.2	624.4	624.2	621.8	622.5
15°	612.3	614.8	616.7	614.2	621.9	614.2	614.0	612.2	610.5
17.5°	599.0	601.6	604.7	602.0	609.1	601.2	602.0	598.1	596.6
20°	588.5	591.1	595.5	592.2	599.9	591.3	592.9	587.6	586.7
22.5°	577.2	579.1	585.6	582.3	589.3	581.4	582.3	575.6	574.7
25°	559.4	561.1	568.2	565.7	571.7	564.0	566.4	556.7	555.9
27.5°	539.1	541.7	548.1	546.5	553.4	544.8	547.2	537.2	535.6
30°	525.0	527.6	534.7	533.1	540.0	531.4	533.8	522.4	521.5
32.5°	509.5	513.5	519.9	519.7	525.2	517.3	518.3	507.6	506.0
35°	488.0	490.6	496.8	497.0	502.1	495.2	495.1	484.5	482.8
37.5°	463.4	466.8	473.4	474.4	479.4	471.8	470.6	461.0	458.3
40°	445.8	449.2	457.2	458.2	462.5	455.6	453.7	444.8	441.4
42.5°	428.8	432.3	440.3	441.3	445.6	439.4	436.1	427.9	423.0
45°	400.8	405.1	413.2	415.9	419.3	413.3	409.6	399.9	396.4
47.5°	374.0	377.5	385.7	390.1	391.7	387.5	382.9	372.4	368.8
50°	355.0	358.5	367.4	371.8	372.6	369.2	363.8	354.0	349.7
52.5°	335.3	338.7	348.3	352.7	353.6	350.2	344.8	335.0	330.7
55°	306.6	310.0	317.1	324.2	324.2	322.5	316.3	305.6	302.2
57.5°	275.9	279.2	288.1	294.2	294.4	292.0	285.6	275.8	272.4
60°	255.5	258.1	266.9	273.1	274.0	272.2	265.2	255.4	251.9
62.5°	232.9	236.2	245.1	252.0	253.5	251.1	243.3	234.2	229.4
65°	201.7	203.5	211.4	218.5	220.2	217.7	210.5	201.7	199.1
67.5°	171.1	172.1	179.7	186.8	188.7	185.9	178.8	172.7	168.6
70°	150.6	152.4	158.6	165.7	168.3	164.8	157.7	152.3	148.9
72.5°	130.2	131.9	138.1	144.5	147.1	144.4	138.0	132.6	129.1
75°	100.4	101.3	107.5	113.7	115.4	112.8	107.5	103.0	99.5
77.5°	72.2	73.1	79.6	83.4	84.9	83.4	79.1	74.8	72.4
80°	54.6	55.5	59.9	64.3	65.2	64.3	60.8	57.2	55.5
82.5°	37.7	38.6	43.7	46.7	46.9	47.4	44.6	41.7	39.3
85°	15.9	16.7	21.1	23.7	22.0	24.6	22.9	20.2	18.5
87.5°	2.3	2.3	4.4	6.5	6.5	7.2	6.0	5.5	4.2
90°	0.9	0.9	0.9	0.9	0.9	0.9	1.8	2.7	3.6
92.5°	2.4	2.4	2.4	3.1	3.1	7.3	5.4	4.9	5.8
95°	4.5	4.5	5.4	13.6	11.8	18.0	20.0	19.1	19.1
97.5°	8.0	8.0	10.3	36.1	26.7	24.5	33.6	34.7	34.3
100°	10.9	10.9	15.4	57.6	39.0	31.9	37.2	42.7	44.5
102.5°	13.8	14.5	23.4	89.2	55.0	40.8	42.3	47.8	49.5
105°	20.0	21.7	47.2	150.0	83.5	54.2	55.3	56.3	59.0
107.5°	29.6	36.1	119.6	214.1	117.8	71.1	73.5	70.6	70.8
110°	39.0	54.1	202.3	255.1	142.5	83.0	84.4	80.8	81.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	63.7	107.2	307.6	287.6	168.6	97.1	92.4	96.0	94.0
115°	171.5	279.7	425.5	334.6	207.8	120.8	104.3	112.6	115.2
117.5°	409.7	482.9	481.1	374.4	246.8	149.6	115.4	123.1	127.6
120°	549.8	560.5	507.2	399.1	272.2	169.3	123.4	128.9	133.4
122.5°	604.3	591.5	529.0	421.6	296.2	190.4	134.3	133.3	138.5
125°	646.9	623.9	558.9	452.7	331.2	225.6	156.1	141.6	144.3
127.5°	671.1	645.5	584.7	481.9	366.7	260.8	184.9	155.3	153.7
130°	684.1	659.3	600.7	500.1	389.2	285.4	206.0	166.8	162.4
132.5°	695.0	672.3	615.2	517.7	411.0	309.4	228.5	184.2	176.2
135°	710.4	689.1	635.1	541.3	442.8	343.4	263.1	213.9	202.3
137.5°	723.5	701.9	652.0	563.7	470.2	376.7	296.9	250.1	236.6
140°	728.6	709.1	661.4	576.9	489.1	397.7	319.4	272.0	261.3
142.5°	733.7	714.9	670.2	590.0	505.0	417.9	342.6	295.2	283.8
145°	739.5	720.8	681.4	607.0	528.1	447.3	377.4	329.1	317.6
147.5°	742.6	725.9	689.8	621.4	550.6	474.4	411.7	363.1	352.6
150°	744.0	728.0	694.1	630.9	564.4	492.5	432.8	386.3	376.5
152.5°	744.0	727.3	696.3	638.3	576.0	509.1	453.1	408.8	399.8
155°	742.2	726.2	700.5	647.5	593.4	533.1	481.8	443.5	433.7
157.5°	734.9	725.4	700.5	656.0	608.5	555.4	509.7	475.6	466.9
160°	731.3	722.4	700.5	660.5	617.9	569.1	527.2	495.2	487.2
162.5°	726.2	717.4	699.0	663.5	625.9	581.3	543.9	512.7	506.8
165°	717.7	708.8	695.0	666.2	636.9	598.8	567.1	540.6	534.4
167.5°	705.5	700.6	689.4	667.1	643.7	614.4	586.7	565.5	560.5
170°	696.8	693.3	685.0	666.5	648.7	623.0	599.7	581.5	578.0
172.5°	685.9	683.8	678.5	665.9	652.4	631.6	612.1	594.6	591.8
175°	668.7	670.5	668.7	663.1	656.9	642.7	627.9	615.1	612.4
177.5°	655.5	655.5	656.9	656.9	656.2	649.1	642.4	635.2	636.6
180°	649.6	649.6	649.6	649.6	649.6	649.6	649.6	649.6	649.6

(END OF REPORT)