

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: P511730

Luminaire Tested: **SQW-F-025U-050D-940-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P511730  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-15,  
Test Lab: INNOVATION CENTER  
Issue Date: 4/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQW-F-025U-050D-940-1D-UNV-STD-W-4  
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

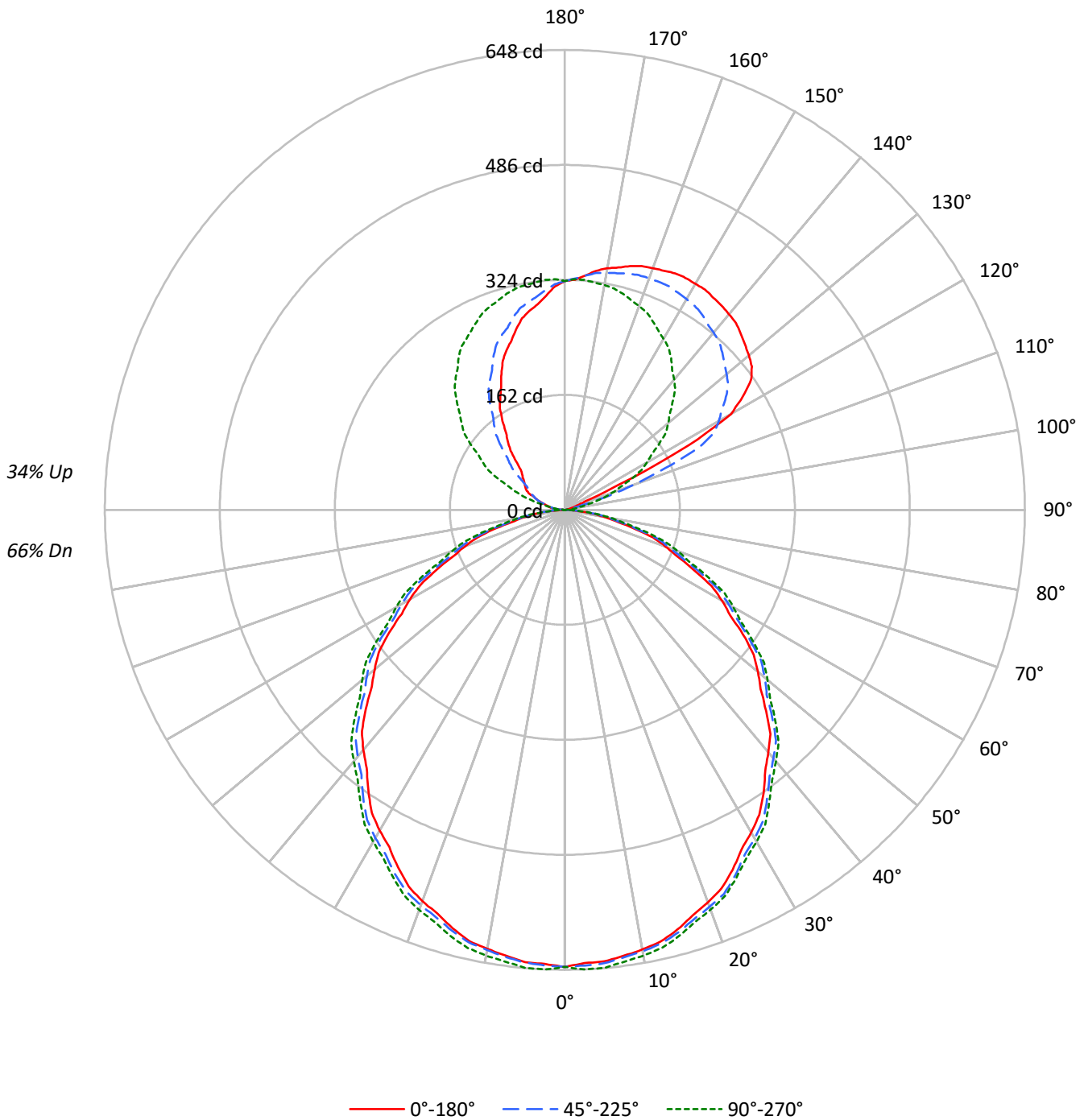
Lumens per Lamp: N/A  
Luminaire Lumens: 2641.4 lumens  
Efficiency: N/A  
Efficacy: 107.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 24.6  
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	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	85	81	78	76	72	70	68	63	61	60	56
2	92	85	78	73	87	80	74	69	71	67	63	63	59	56	55	53	50	47
3	84	74	67	61	79	70	63	58	63	57	53	55	51	48	49	46	43	39
4	77	66	58	51	72	62	55	49	56	50	45	49	45	41	44	40	37	34
5	71	59	50	44	66	56	48	42	50	43	39	44	39	35	39	35	32	29
6	65	53	44	38	61	50	42	37	45	38	34	40	35	31	35	31	28	25
7	60	48	39	34	57	45	38	32	41	34	30	36	31	27	32	28	25	23
8	56	43	35	30	53	41	34	29	37	31	27	33	28	24	30	26	22	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	18
10	49	36	29	24	46	35	28	23	31	26	21	28	23	20	25	21	18	16

**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	2.3
10°-20°	173.3	6.6
20°-30°	259.6	9.8
30°-40°	308.6	11.7
40°-50°	315.8	12.0
50°-60°	281.6	10.7
60°-70°	208.9	7.9
70°-80°	114.4	4.3
80°-90°	27.2	1.0
90°-100°	7.9	0.3
100°-110°	36.2	1.4
110°-120°	104.9	4.0
120°-130°	158.2	6.0
130°-140°	169.4	6.4
140°-150°	161.9	6.1
150°-160°	134.1	5.1
160°-170°	88.0	3.3
170°-180°	30.5	1.2
0°-30°	493.7	18.7
0°-40°	802.3	30.4
0°-60°	1399.7	53.0
0°-90°	1750.3	66.3
90°-120°	148.9	5.6
90°-150°	638.5	24.2
90°-180°	891.0	33.7
0°-180°	2641.4	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	0	1	2	1
95°	3	3	6	11	9	3
105°	10	24	42	28	29	11
115°	83	210	103	52	56	111
125°	321	277	162	76	70	281
135°	351	314	215	127	97	271
145°	365	337	261	184	153	229
155°	368	347	293	238	211	170
165°	355	345	315	281	264	101
175°	331	331	325	311	303	32
180°	322	322	322	322	322	



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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	6.3	6.3	7.0	5.8	5.1	3.9
90°	0.9	0.9	0.9	0.0	0.0	0.0	0.9	0.9	1.8
92.5°	0.9	1.6	0.9	1.4	1.4	3.5	3.0	2.3	2.5
95°	2.7	2.7	2.7	6.2	6.2	8.8	10.7	9.8	8.9
97.5°	3.9	3.9	5.2	17.5	13.9	11.8	16.5	17.1	17.1
100°	5.3	5.3	8.0	27.4	19.5	16.1	18.7	21.3	21.3
102.5°	6.8	7.4	12.3	42.8	27.4	19.7	21.5	23.5	24.2
105°	9.8	10.6	24.0	73.0	41.7	27.0	27.5	28.4	29.3
107.5°	14.6	18.0	60.2	104.3	59.2	34.8	36.8	35.2	35.2
110°	19.5	26.5	102.1	124.0	71.9	40.7	41.7	40.9	40.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	30.9	51.8	152.6	140.3	84.7	47.9	46.0	47.9	46.5
115°	82.6	134.7	209.6	163.0	103.0	59.6	51.5	55.1	56.0
117.5°	196.8	235.6	237.7	182.0	121.9	72.7	56.0	60.1	61.8
120°	270.0	276.1	250.5	194.0	133.2	82.0	59.5	62.2	63.9
122.5°	297.7	292.0	261.8	205.4	144.6	92.7	65.2	65.1	66.8
125°	320.6	308.5	277.1	222.5	162.5	109.6	76.4	69.3	70.2
127.5°	332.0	319.8	289.7	236.6	179.4	127.5	90.4	75.3	74.6
130°	338.4	326.2	297.5	246.5	190.1	138.8	100.4	81.6	78.2
132.5°	344.1	332.6	304.6	254.4	200.7	149.5	111.0	89.4	84.6
135°	350.8	339.5	313.5	266.2	214.9	166.3	127.0	103.8	96.8
137.5°	356.9	346.4	321.7	276.8	229.9	181.4	143.2	120.6	113.0
140°	359.7	349.3	326.0	283.2	239.8	192.0	154.5	131.3	124.3
142.5°	362.6	352.8	330.2	289.7	248.3	202.7	165.9	142.7	135.7
145°	365.0	356.4	336.6	298.5	261.1	217.7	183.9	159.7	152.8
147.5°	367.7	358.5	340.7	306.0	271.6	232.5	200.0	176.8	170.0
150°	367.7	359.9	342.8	311.0	278.0	242.4	211.4	188.2	182.1
152.5°	368.4	359.9	345.0	315.3	285.1	251.6	222.0	199.5	194.2
155°	367.7	359.9	347.3	320.9	293.1	263.6	238.0	216.6	211.4
157.5°	364.5	359.5	347.3	324.2	301.3	274.2	251.9	235.0	227.7
160°	362.4	358.0	347.3	326.4	305.5	281.2	261.1	245.0	239.8
162.5°	360.2	355.9	346.6	328.6	309.8	287.6	268.9	253.6	249.8
165°	355.3	351.8	344.6	330.1	315.3	296.2	280.7	267.3	263.8
167.5°	349.8	347.3	341.4	331.0	319.4	304.5	291.0	280.6	276.6
170°	345.5	343.8	339.3	331.1	321.5	309.4	296.7	287.7	285.1
172.5°	339.8	338.8	336.4	329.7	322.9	312.9	303.0	294.8	292.2
175°	331.3	331.3	331.3	328.5	325.1	318.1	310.9	304.6	302.9
177.5°	324.5	325.2	326.0	325.3	325.3	321.8	318.1	314.6	315.3
180°	322.4	322.4	322.4	322.4	322.4	322.4	322.4	322.4	322.4

(END OF REPORT)