

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: P511724

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

Issue Date: 4/9/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P511724  
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-025D-940-1D-UNV-STD-W-4  
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE  
DOWNLIGHT 250 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

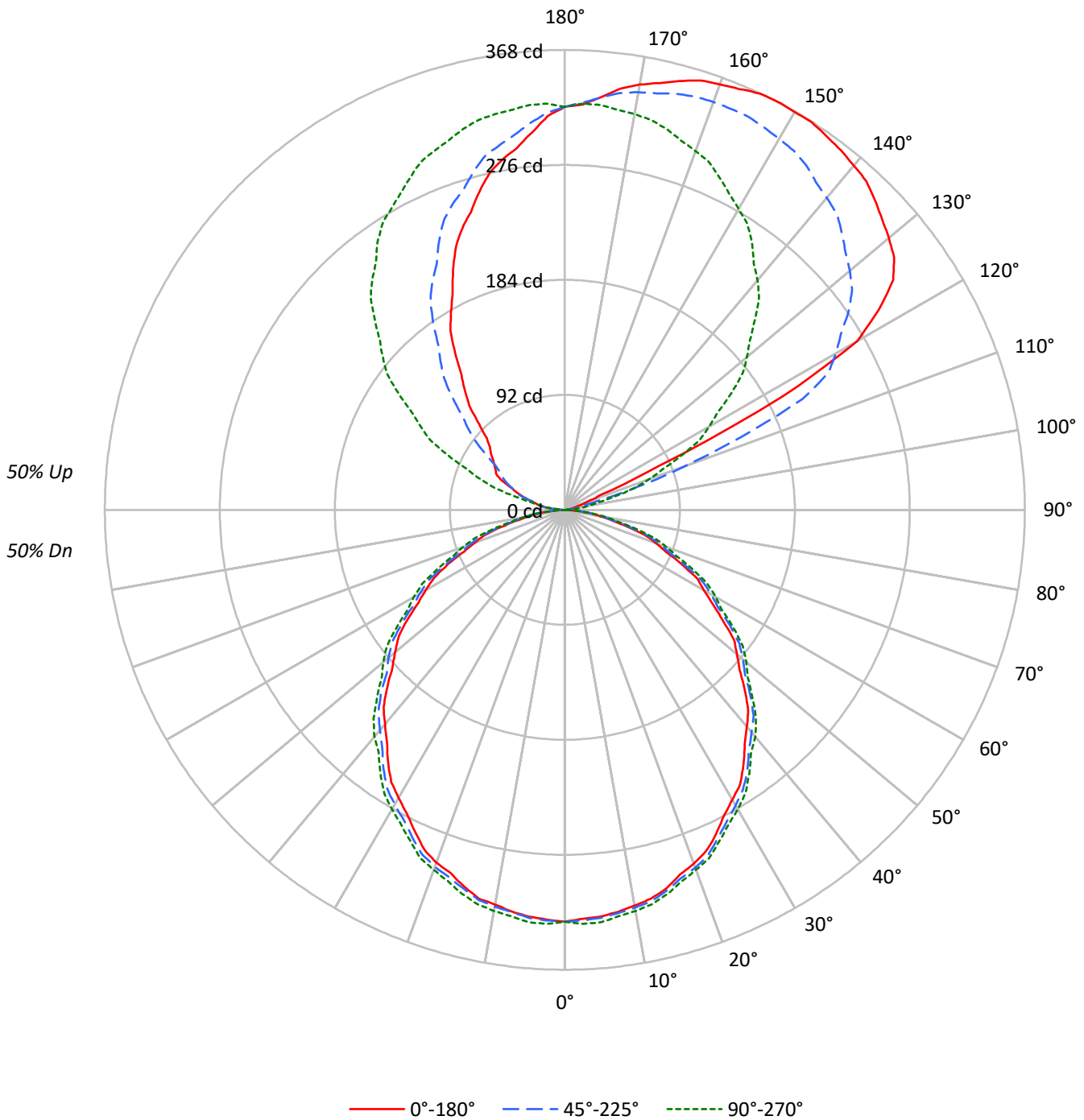
Lumens per Lamp: N/A  
Luminaire Lumens: 1783.2 lumens  
Efficiency: N/A  
Efficacy: 109.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 16.3  
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: P511724  
CATALOG NUMBER: SQW-F-025U-025D-940-1D-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P511724

CATALOG NUMBER: SQW-F-025U-025D-940-1D-UNV-STD-W-4

**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	56	56	56	50
1	98	93	90	86	90	86	83	80	73	71	68	61	59	58	50	48	47	42
2	89	82	75	70	82	75	70	66	64	60	57	53	50	48	44	42	40	35
3	81	72	64	58	75	66	60	55	56	51	47	47	44	40	39	36	34	30
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	34	31	29	25
5	68	56	48	42	62	52	45	40	45	39	35	38	33	30	31	28	25	22
6	63	50	42	36	58	47	40	34	40	34	30	34	30	26	28	25	22	19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20	17
8	54	41	34	28	49	39	32	27	33	28	24	28	24	21	23	20	18	15
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16	14
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

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

	0°	90°	180°
0°	10640	10640	10640
5°	10593	10736	10593
10°	10542	10686	10516
15°	10484	10631	10427
20°	10354	10536	10323
25°	10201	10422	10108
30°	9986	10314	9918
35°	9828	10139	9725
40°	9544	9991	9434
45°	9293	9695	9175
50°	9028	9515	8897
55°	8681	9272	8681
60°	8305	8990	8305
65°	7878	8619	7878
70°	7317	8148	7232
75°	6376	7361	6488
80°	5244	6062	5411
85°	2927	4261	3594



TEST NUMBER: P511724

CATALOG NUMBER: SQW-F-025U-025D-940-1D-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	31.1	1.7
10°-20°	88.6	5.0
20°-30°	132.8	7.4
30°-40°	157.6	8.8
40°-50°	160.1	9.0
50°-60°	142.7	8.0
60°-70°	106.5	6.0
70°-80°	58.6	3.3
80°-90°	14.0	0.8
90°-100°	7.9	0.4
100°-110°	36.2	2.0
110°-120°	104.9	5.9
120°-130°	158.2	8.9
130°-140°	169.4	9.5
140°-150°	161.9	9.1
150°-160°	134.1	7.5
160°-170°	88.0	4.9
170°-180°	30.5	1.7
0°-30°	252.5	14.2
0°-40°	410.1	23.0
0°-60°	712.9	40.0
0°-90°	892.0	50.0
90°-120°	148.9	8.4
90°-150°	638.5	35.8
90°-180°	891.0	50.0
0°-180°	1783.2	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	330	330	330	330	330	
5°	327	328	331	328	327	31
15°	314	315	318	314	312	88
25°	286	290	292	289	284	132
35°	249	255	257	253	247	155
45°	204	210	212	208	201	157
55°	154	161	165	159	154	138
65°	103	108	113	108	103	102
75°	51	55	59	55	52	55
85°	8	11	12	12	10	11
90°	1	1	0	1	2	0
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	



TEST NUMBER: P511724

CATALOG NUMBER: SQW-F-025U-025D-940-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5
2.5°	327.4	328.7	328.8	328.8	331.6	328.8	328.8	328.8	328.1
5°	326.8	326.8	327.7	327.8	331.2	327.8	327.7	326.8	326.8
7.5°	324.4	324.5	325.4	325.3	328.1	324.4	324.5	324.4	324.2
10°	321.5	322.4	323.3	322.5	325.9	321.6	322.4	321.5	320.7
12.5°	318.7	319.6	320.5	319.7	323.1	319.5	319.6	318.7	318.5
15°	313.6	314.5	315.4	314.6	318.0	313.7	313.6	312.7	311.9
17.5°	306.2	307.8	309.0	308.2	311.5	307.4	308.2	306.0	304.6
20°	301.3	302.1	304.8	304.0	306.6	303.1	303.9	300.4	300.4
22.5°	295.6	296.5	299.2	298.4	301.6	297.5	298.3	294.7	294.1
25°	286.3	287.2	289.8	289.0	292.5	288.2	288.9	284.5	283.7
27.5°	275.6	276.6	280.8	280.0	283.7	278.5	279.3	274.8	273.8
30°	267.8	269.5	273.1	272.3	276.6	271.4	272.2	267.8	266.0
32.5°	260.8	262.5	265.3	265.9	268.9	264.4	264.5	260.0	258.3
35°	249.3	251.0	254.6	254.7	257.2	252.9	252.8	248.4	246.7
37.5°	236.3	237.8	241.7	242.8	244.7	240.8	239.8	235.3	233.6
40°	226.4	227.3	232.6	234.4	237.0	230.9	229.9	225.5	223.8
42.5°	217.2	218.8	223.4	224.5	226.4	222.4	220.8	216.3	214.6
45°	203.5	205.2	209.7	211.4	212.3	208.9	207.9	203.4	200.9
47.5°	189.6	191.3	195.7	197.7	198.6	196.0	193.3	189.5	186.9
50°	179.7	181.4	185.9	188.5	189.4	186.8	184.1	179.7	177.1
52.5°	170.5	171.6	176.0	179.4	179.5	177.6	174.2	169.8	167.9
55°	154.2	156.7	161.2	164.7	164.7	163.0	159.4	155.0	154.2
57.5°	139.9	140.9	145.4	148.9	149.1	148.0	144.5	140.0	139.2
60°	128.6	130.3	134.8	138.3	139.2	137.5	133.9	129.5	128.6
62.5°	119.5	119.8	124.2	127.8	128.6	126.9	123.3	119.6	118.0
65°	103.1	103.9	107.5	111.9	112.8	111.0	107.5	103.9	103.1
67.5°	87.4	88.3	91.6	95.9	96.9	95.2	90.7	88.1	87.2
70°	77.5	78.4	81.0	84.6	86.3	84.6	80.2	77.5	76.6
72.5°	67.0	67.8	70.5	74.0	75.1	73.3	69.6	67.6	66.8
75°	51.1	52.8	54.6	58.2	59.0	58.2	54.6	52.8	52.0
77.5°	37.4	38.2	40.0	42.5	43.2	42.5	40.9	38.2	38.2
80°	28.2	29.1	30.8	32.6	32.6	32.6	31.7	29.1	29.1
82.5°	19.7	20.6	21.7	24.1	23.4	24.1	23.3	21.3	20.6
85°	7.9	8.8	10.6	12.3	11.5	12.3	11.5	9.7	9.7
87.5°	0.9	1.6	1.6	3.5	3.5	4.2	3.0	2.3	2.5
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



TEST NUMBER: P511724

CATALOG NUMBER: SQW-F-025U-025D-940-1D-UNV-STD-W-4

**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)