

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: P511758

Luminaire Tested: **SQW-F-050U-050D-930-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511758
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-930-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

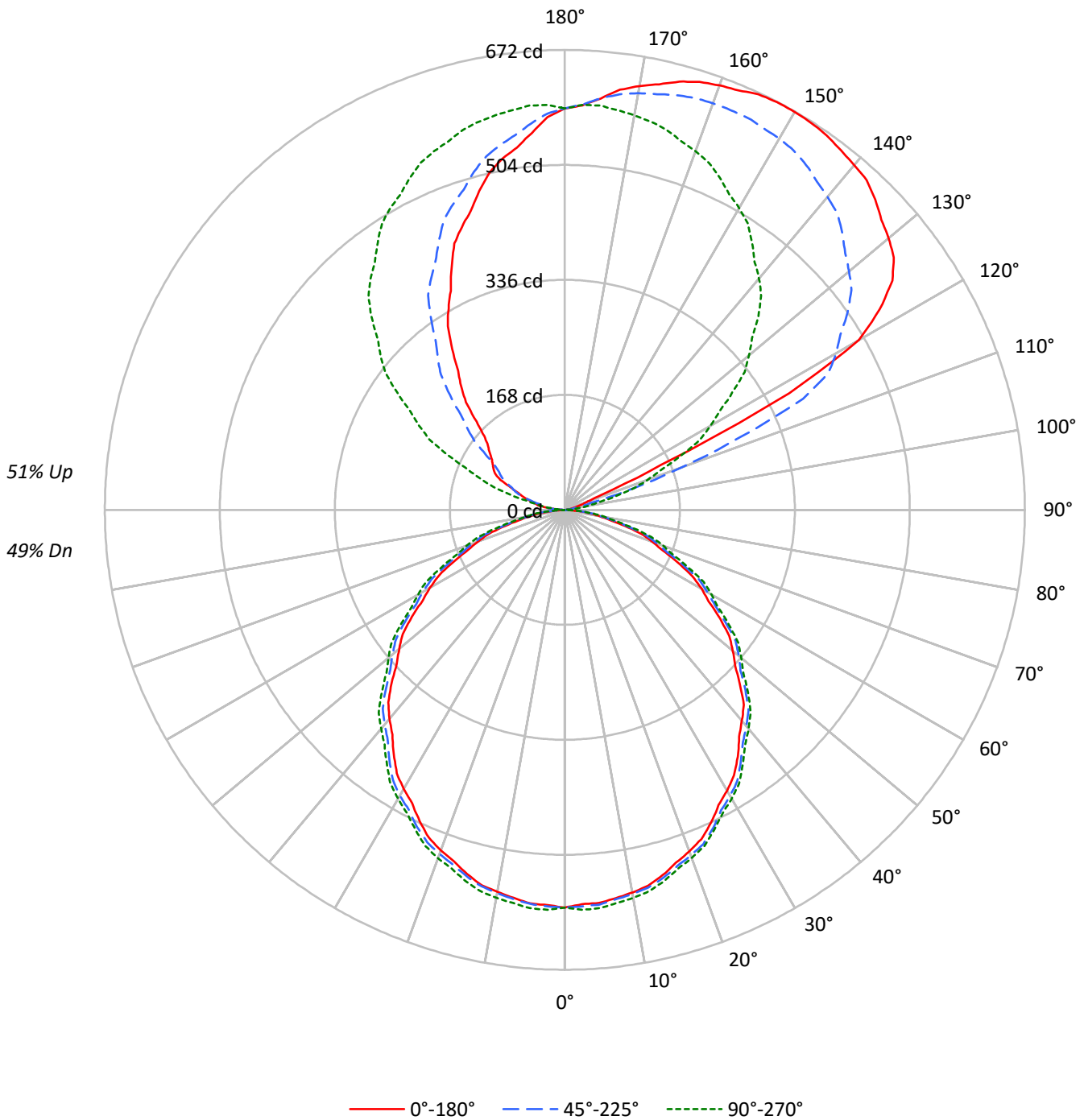
Lumens per Lamp: N/A
Luminaire Lumens: 3214.5 lumens
Efficiency: N/A
Efficacy: 102.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: General Diffuse

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°	18768	18768	18768
5°	18684	18943	18710
10°	18615	18874	18589
15°	18474	18765	18420
20°	18251	18608	18196
25°	17990	18385	17876
30°	17671	18174	17551
35°	17365	17866	17176
40°	16959	17595	16790
45°	16523	17285	16340
50°	16096	16895	15860
55°	15578	16473	15353
60°	14893	15972	14686
65°	13914	15190	13731
70°	12840	14342	12689
75°	11304	13001	11204
80°	9168	10935	9317
85°	5298	7373	6187



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.9	1.7
10°-20°	156.4	4.9
20°-30°	234.3	7.3
30°-40°	278.5	8.7
40°-50°	285.0	8.9
50°-60°	254.2	7.9
60°-70°	188.6	5.9
70°-80°	103.3	3.2
80°-90°	24.7	0.8
90°-100°	14.4	0.4
100°-110°	65.8	2.0
110°-120°	193.0	6.0
120°-130°	290.6	9.0
130°-140°	312.0	9.7
140°-150°	297.8	9.3
150°-160°	245.0	7.6
160°-170°	160.4	5.0
170°-180°	55.6	1.7
0°-30°	445.6	13.9
0°-40°	724.1	22.5
0°-60°	1263.3	39.3
0°-90°	1579.8	49.1
90°-120°	273.2	8.5
90°-150°	1173.6	36.5
90°-180°	1635.0	50.9
0°-180°	3214.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	581	581	581	581	581	
5°	576	579	584	578	577	55
15°	553	557	561	554	551	156
25°	505	513	516	511	502	232
35°	440	448	453	447	436	275
45°	362	373	378	370	358	279
55°	277	286	293	285	273	247
65°	182	191	199	190	180	181
75°	91	97	104	97	90	96
85°	14	19	20	21	17	20
90°	1	1	1	2	3	1
95°	4	5	11	18	17	5
105°	18	43	75	50	53	21
115°	155	384	188	94	104	207
125°	584	504	299	141	130	513
135°	641	573	400	238	183	495
145°	667	615	477	341	287	418
155°	670	632	536	435	391	309
165°	648	627	575	512	482	184
175°	604	604	593	567	553	59
180°	586	586	586	586	586	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	581.2	581.2	581.2	581.2	581.2	581.2	581.2	581.2	581.2
2.5°	576.8	579.2	579.9	579.4	585.0	580.1	579.9	579.3	578.0
5°	576.4	577.2	578.8	577.4	584.4	577.4	578.0	576.5	577.2
7.5°	572.2	572.9	573.9	573.1	579.5	573.1	573.6	572.0	572.0
10°	567.7	568.5	570.1	568.7	575.6	568.7	568.5	566.9	566.9
12.5°	562.6	563.4	565.0	563.6	570.6	563.6	563.4	561.2	561.8
15°	552.6	554.9	556.6	554.3	561.3	554.3	554.2	552.6	551.0
17.5°	540.7	543.0	545.8	543.4	549.7	542.6	543.4	539.8	538.4
20°	531.1	533.5	537.5	534.5	541.5	533.7	535.1	530.3	529.5
22.5°	520.9	522.7	528.6	525.5	531.9	524.8	525.6	519.5	518.7
25°	504.9	506.4	512.8	510.6	516.0	509.0	511.2	502.5	501.7
27.5°	486.6	488.9	494.7	493.3	499.5	491.7	493.9	484.8	483.4
30°	473.9	476.2	482.6	481.2	487.4	479.6	481.8	471.5	470.7
32.5°	459.9	463.5	469.3	469.1	474.0	466.9	467.8	458.1	456.7
35°	440.5	442.8	448.4	448.5	453.2	447.0	446.8	437.3	435.7
37.5°	418.2	421.3	427.3	428.2	432.7	425.8	424.7	416.1	413.6
40°	402.3	405.4	412.7	413.5	417.4	411.2	409.5	401.5	398.3
42.5°	387.1	390.2	397.4	398.3	402.2	396.6	393.6	386.2	381.8
45°	361.8	365.7	372.9	375.4	378.5	373.0	369.7	360.9	357.8
47.5°	337.6	340.7	348.1	352.1	353.5	349.8	345.5	336.1	332.8
50°	320.4	323.5	331.6	335.5	336.3	333.2	328.4	319.5	315.7
52.5°	302.6	305.7	314.4	318.4	319.2	316.0	311.2	302.4	298.5
55°	276.7	279.8	286.2	292.6	292.6	291.0	285.4	275.8	272.7
57.5°	249.0	252.0	260.0	265.6	265.7	263.5	257.8	249.0	245.8
60°	230.6	232.9	240.9	246.5	247.3	245.7	239.3	230.5	227.4
62.5°	210.2	213.2	221.2	227.4	228.8	226.7	219.6	211.4	207.0
65°	182.1	183.6	190.8	197.2	198.8	196.4	190.0	182.0	179.7
67.5°	154.4	155.3	162.2	168.6	170.3	167.8	161.4	155.9	152.2
70°	136.0	137.5	143.1	149.5	151.9	148.8	142.3	137.5	134.4
72.5°	117.5	119.1	124.7	130.4	132.8	130.3	124.5	119.7	116.6
75°	90.6	91.4	97.0	102.6	104.2	101.8	97.0	93.0	89.8
77.5°	65.2	66.0	71.9	75.2	76.6	75.2	71.4	67.5	65.4
80°	49.3	50.1	54.1	58.1	58.8	58.1	54.9	51.6	50.1
82.5°	34.0	34.8	39.4	42.1	42.3	42.8	40.2	37.6	35.5
85°	14.3	15.1	19.1	21.4	19.9	22.2	20.7	18.3	16.7
87.5°	2.1	2.1	4.0	5.9	5.9	6.5	5.4	4.9	3.8
90°	0.8	0.8	0.8	0.8	0.8	0.8	1.6	2.5	3.3
92.5°	2.1	2.1	2.1	2.8	2.8	6.6	4.9	4.4	5.2
95°	4.1	4.1	4.9	12.2	10.6	16.3	18.0	17.2	17.2
97.5°	7.2	7.2	9.3	32.6	24.1	22.2	30.3	31.3	31.0
100°	9.8	9.8	13.9	52.0	35.2	28.8	33.6	38.5	40.1
102.5°	12.4	13.1	21.1	80.5	49.6	36.8	38.2	43.1	44.7
105°	18.0	19.6	42.6	135.4	75.3	48.9	50.0	50.8	53.2
107.5°	26.7	32.6	107.9	193.3	106.3	64.2	66.3	63.7	63.9
110°	35.2	48.8	182.6	230.3	128.6	74.9	76.2	72.9	73.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	57.5	96.7	277.6	259.6	152.2	87.6	83.4	86.6	84.8
115°	154.8	252.5	384.1	302.0	187.5	109.1	94.2	101.6	104.0
117.5°	369.8	435.8	434.2	337.9	222.7	135.0	104.2	111.1	115.1
120°	496.3	505.9	457.8	360.2	245.7	152.8	111.4	116.4	120.4
122.5°	545.4	533.9	477.4	380.5	267.3	171.8	121.2	120.3	125.0
125°	583.9	563.1	504.5	408.6	298.9	203.6	140.9	127.8	130.2
127.5°	605.7	582.6	527.7	434.9	331.0	235.4	166.9	140.2	138.7
130°	617.5	595.0	542.1	451.4	351.3	257.6	185.9	150.6	146.6
132.5°	627.3	606.8	555.2	467.2	371.0	279.2	206.2	166.2	159.0
135°	641.2	622.0	573.2	488.5	399.6	309.9	237.5	193.0	182.6
137.5°	653.0	633.5	588.5	508.8	424.4	340.0	267.9	225.7	213.6
140°	657.6	640.0	597.0	520.7	441.4	358.9	288.3	245.5	235.8
142.5°	662.2	645.2	604.8	532.5	455.8	377.2	309.2	266.4	256.2
145°	667.4	650.6	615.0	547.9	476.6	403.7	340.7	297.0	286.6
147.5°	670.2	655.1	622.5	560.8	496.9	428.2	371.6	327.7	318.2
150°	671.5	657.1	626.5	569.4	509.4	444.5	390.6	348.7	339.8
152.5°	671.5	656.5	628.4	576.1	519.8	459.5	409.0	369.0	360.8
155°	669.9	655.5	632.2	584.4	535.6	481.1	434.8	400.2	391.4
157.5°	663.3	654.7	632.2	592.1	549.2	501.3	460.1	429.3	421.4
160°	660.0	652.0	632.2	596.1	557.7	513.6	475.8	447.0	439.8
162.5°	655.5	647.5	630.9	598.8	564.9	524.7	490.9	462.7	457.4
165°	647.8	639.8	627.3	601.3	574.9	540.4	511.8	487.9	482.3
167.5°	636.8	632.3	622.2	602.1	580.9	554.5	529.5	510.4	505.9
170°	628.9	625.7	618.3	601.5	585.5	562.3	541.3	524.9	521.6
172.5°	619.1	617.2	612.4	601.0	588.8	570.1	552.4	536.7	534.1
175°	603.5	605.1	603.5	598.5	592.9	580.1	566.7	555.2	552.8
177.5°	591.6	591.6	592.9	592.9	592.2	585.8	579.8	573.3	574.5
180°	586.3	586.3	586.3	586.3	586.3	586.3	586.3	586.3	586.3

(END OF REPORT)