

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: P511757

Luminaire Tested: **SQW-F-050U-050D-840-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511757
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-840-1D-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, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

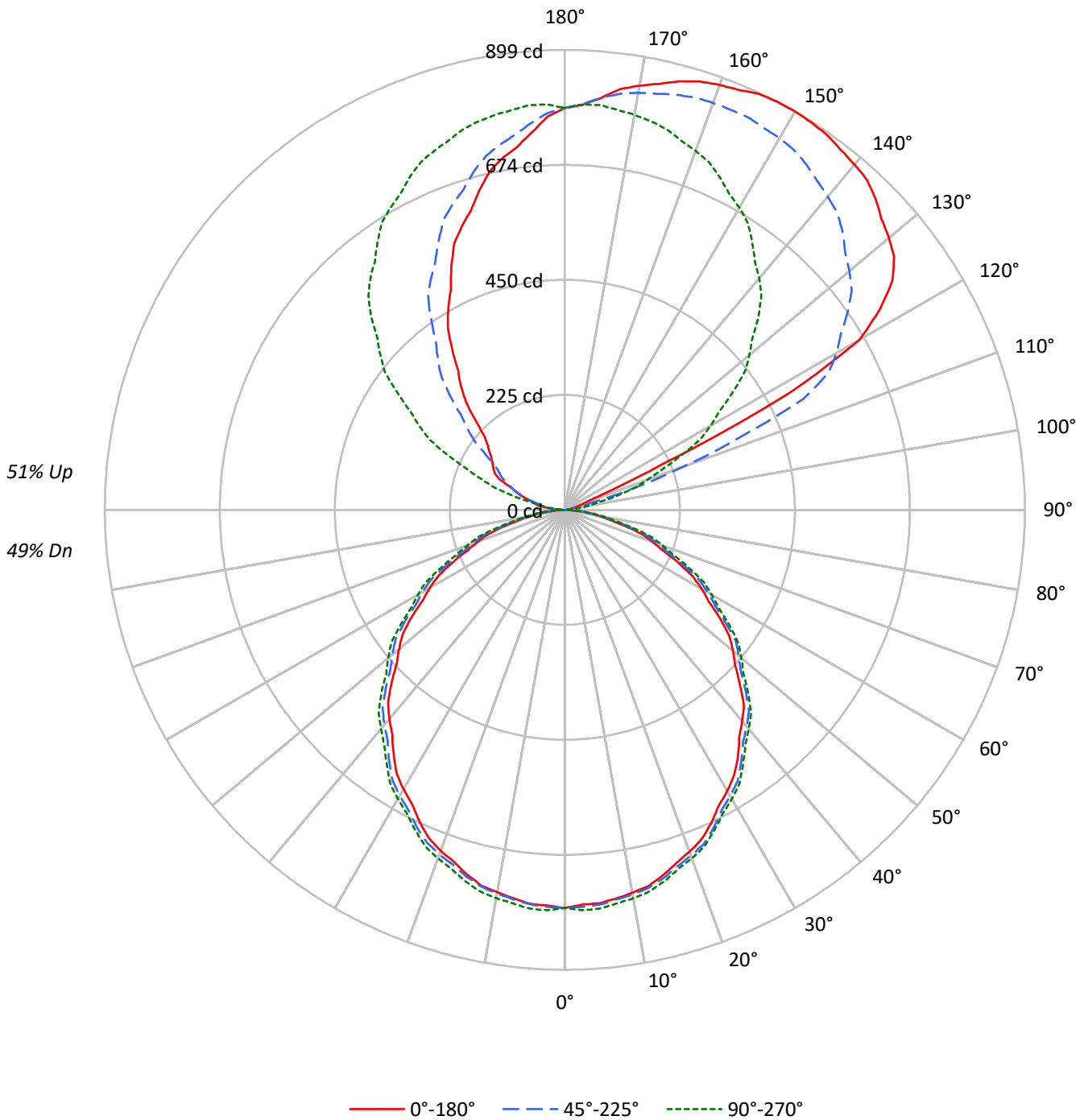
Lumens per Lamp: N/A
Luminaire Lumens: 4304.7 lumens
Efficiency: N/A
Efficacy: 137.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: General Diffuse

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°	25133	25133	25133
5°	25021	25368	25057
10°	24927	25278	24894
15°	24739	25130	24669
20°	24440	24918	24368
25°	24090	24620	23940
30°	23663	24338	23502
35°	23255	23925	23002
40°	22713	23564	22485
45°	22126	23144	21879
50°	21557	22627	21235
55°	20859	22058	20560
60°	19943	21384	19666
65°	18629	20340	18384
70°	17193	19204	16985
75°	15147	17405	15009
80°	12273	14654	12478
85°	7114	9856	8299



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.5	1.7
10°-20°	209.4	4.9
20°-30°	313.8	7.3
30°-40°	372.9	8.7
40°-50°	381.7	8.9
50°-60°	340.4	7.9
60°-70°	252.5	5.9
70°-80°	138.3	3.2
80°-90°	33.1	0.8
90°-100°	19.3	0.4
100°-110°	88.2	2.0
110°-120°	258.5	6.0
120°-130°	389.1	9.0
130°-140°	417.9	9.7
140°-150°	398.7	9.3
150°-160°	328.1	7.6
160°-170°	214.8	5.0
170°-180°	74.5	1.7
0°-30°	596.7	13.9
0°-40°	969.7	22.5
0°-60°	1691.7	39.3
0°-90°	2115.6	49.1
90°-120°	365.9	8.5
90°-150°	1571.6	36.5
90°-180°	2189.0	50.9
0°-180°	4304.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	778	778	778	778	778	
5°	772	775	783	774	773	73
15°	740	745	752	742	738	209
25°	676	687	691	685	672	311
35°	590	600	607	598	584	368
45°	484	499	507	495	479	374
55°	370	383	392	382	365	330
65°	244	256	266	254	241	242
75°	121	130	140	130	120	129
85°	19	26	27	28	22	27
90°	1	1	1	2	4	1
95°	6	7	14	24	23	6
105°	24	57	101	67	71	28
115°	207	514	251	126	139	277
125°	782	676	400	189	174	687
135°	859	768	535	318	244	663
145°	894	824	638	456	384	560
155°	897	847	717	582	524	414
165°	867	840	770	685	646	246
175°	808	808	794	759	740	78
180°	785	785	785	785	785	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	778.3	778.3	778.3	778.3	778.3	778.3	778.3	778.3	778.3
2.5°	772.4	775.7	776.6	775.9	783.4	776.8	776.6	775.7	774.1
5°	771.9	773.0	775.1	773.2	782.6	773.2	774.1	772.0	773.0
7.5°	766.2	767.2	768.5	767.4	776.0	767.4	768.1	766.0	766.0
10°	760.2	761.3	763.4	761.5	770.9	761.5	761.3	759.2	759.2
12.5°	753.4	754.5	756.6	754.7	764.1	754.7	754.5	751.5	752.3
15°	740.0	743.1	745.3	742.3	751.7	742.3	742.1	739.9	737.9
17.5°	724.0	727.1	730.8	727.6	736.2	726.6	727.6	722.9	721.0
20°	711.2	714.4	719.8	715.7	725.1	714.7	716.6	710.2	709.1
22.5°	697.6	699.9	707.8	703.8	712.3	702.7	703.8	695.7	694.6
25°	676.1	678.2	686.8	683.7	691.0	681.6	684.6	672.9	671.9
27.5°	651.6	654.7	662.5	660.5	668.9	658.5	661.4	649.2	647.4
30°	634.6	637.7	646.3	644.4	652.7	642.3	645.2	631.4	630.3
32.5°	615.8	620.6	628.4	628.1	634.8	625.2	626.5	613.5	611.6
35°	589.9	593.0	600.5	600.7	606.9	598.6	598.4	585.6	583.5
37.5°	560.1	564.2	572.2	573.4	579.4	570.3	568.8	557.2	553.9
40°	538.8	542.9	552.6	553.8	559.0	550.7	548.3	537.6	533.4
42.5°	518.3	522.5	532.2	533.3	538.5	531.0	527.0	517.1	511.3
45°	484.5	489.7	499.4	502.7	506.8	499.5	495.1	483.3	479.1
47.5°	452.1	456.3	466.1	471.5	473.4	468.4	462.7	450.1	445.7
50°	429.1	433.3	444.0	449.3	450.4	446.2	439.7	427.9	422.7
52.5°	405.2	409.4	421.0	426.3	427.4	423.2	416.7	404.9	399.7
55°	370.5	374.7	383.3	391.8	391.8	389.7	382.2	369.4	365.2
57.5°	333.5	337.4	348.2	355.6	355.8	352.9	345.2	333.4	329.2
60°	308.8	311.9	322.6	330.1	331.1	329.1	320.5	308.7	304.5
62.5°	281.5	285.5	296.2	304.6	306.4	303.5	294.1	283.1	277.3
65°	243.8	245.9	255.5	264.1	266.2	263.1	254.5	243.8	240.6
67.5°	206.8	208.0	217.2	225.8	228.1	224.7	216.1	208.8	203.8
70°	182.1	184.2	191.7	200.2	203.4	199.2	190.6	184.1	179.9
72.5°	157.4	159.5	167.0	174.7	177.8	174.5	166.7	160.3	156.1
75°	121.4	122.4	129.9	137.4	139.5	136.4	129.9	124.5	120.3
77.5°	87.3	88.3	96.3	100.8	102.6	100.8	95.6	90.4	87.5
80°	66.0	67.1	72.4	77.7	78.8	77.7	73.5	69.2	67.1
82.5°	45.6	46.6	52.8	56.4	56.6	57.3	53.9	50.4	47.5
85°	19.2	20.2	25.6	28.7	26.6	29.7	27.7	24.4	22.4
87.5°	2.8	2.8	5.3	7.9	7.9	8.7	7.3	6.6	5.1
90°	1.1	1.1	1.1	1.1	1.1	1.1	2.2	3.3	4.4
92.5°	2.9	2.9	2.9	3.7	3.7	8.9	6.6	5.9	7.0
95°	5.5	5.5	6.6	16.4	14.3	21.8	24.1	23.0	23.0
97.5°	9.7	9.7	12.5	43.6	32.2	29.7	40.6	41.9	41.5
100°	13.2	13.2	18.6	69.7	47.2	38.6	45.0	51.6	53.7
102.5°	16.7	17.5	28.3	107.8	66.5	49.3	51.1	57.7	59.9
105°	24.1	26.3	57.0	181.3	100.9	65.5	66.9	68.1	71.3
107.5°	35.8	43.7	144.5	258.8	142.3	85.9	88.8	85.3	85.5
110°	47.2	65.4	244.5	308.3	172.2	100.3	102.0	97.6	98.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	77.0	129.5	371.8	347.7	203.8	117.3	111.6	116.0	113.6
115°	207.3	338.1	514.3	404.5	251.1	146.0	126.1	136.1	139.3
117.5°	495.2	583.6	581.4	452.5	298.3	180.8	139.5	148.8	154.2
120°	664.6	677.4	613.0	482.3	329.0	204.6	149.1	155.8	161.2
122.5°	730.4	714.9	639.3	509.6	357.9	230.1	162.3	161.1	167.3
125°	781.9	754.0	675.5	547.2	400.3	272.7	188.6	171.1	174.4
127.5°	811.1	780.2	706.7	582.4	443.3	315.2	223.5	187.7	185.8
130°	826.9	796.8	726.0	604.5	470.5	345.0	248.9	201.7	196.3
132.5°	840.0	812.6	743.5	625.7	496.8	373.9	276.1	222.6	213.0
135°	858.7	832.9	767.6	654.2	535.2	415.1	318.0	258.5	244.5
137.5°	874.5	848.3	788.0	681.3	568.3	455.3	358.8	302.3	286.0
140°	880.6	857.0	799.4	697.2	591.1	480.6	386.0	328.7	315.8
142.5°	886.7	864.0	810.0	713.1	610.4	505.1	414.1	356.8	343.0
145°	893.8	871.2	823.6	733.7	638.2	540.7	456.2	397.8	383.8
147.5°	897.5	877.3	833.7	751.0	665.4	573.4	497.7	438.8	426.2
150°	899.2	879.9	838.9	762.5	682.1	595.3	523.1	466.9	455.1
152.5°	899.2	879.1	841.6	771.4	696.1	615.3	547.7	494.1	483.2
155°	897.0	877.7	846.6	782.6	717.2	644.3	582.3	536.0	524.2
157.5°	888.3	876.7	846.6	792.9	735.4	671.3	616.1	574.8	564.3
160°	883.9	873.2	846.6	798.3	746.8	687.8	637.1	598.5	588.9
162.5°	877.7	867.0	844.8	801.9	756.5	702.6	657.3	619.7	612.6
165°	867.4	856.7	840.0	805.2	769.8	723.7	685.4	653.4	645.9
167.5°	852.7	846.7	833.2	806.3	778.0	742.6	709.1	683.5	677.5
170°	842.2	837.9	828.0	805.5	784.1	753.0	724.9	702.8	698.6
172.5°	829.1	826.5	820.1	804.8	788.5	763.4	739.8	718.7	715.2
175°	808.2	810.4	808.2	801.5	794.0	776.8	758.9	743.4	740.2
177.5°	792.2	792.2	794.0	793.9	793.1	784.5	776.4	767.7	769.4
180°	785.2	785.2	785.2	785.2	785.2	785.2	785.2	785.2	785.2

(END OF REPORT)