

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: P511755

Luminaire Tested: **SQW-F-050U-050D-830-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511755
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-830-1D-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, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

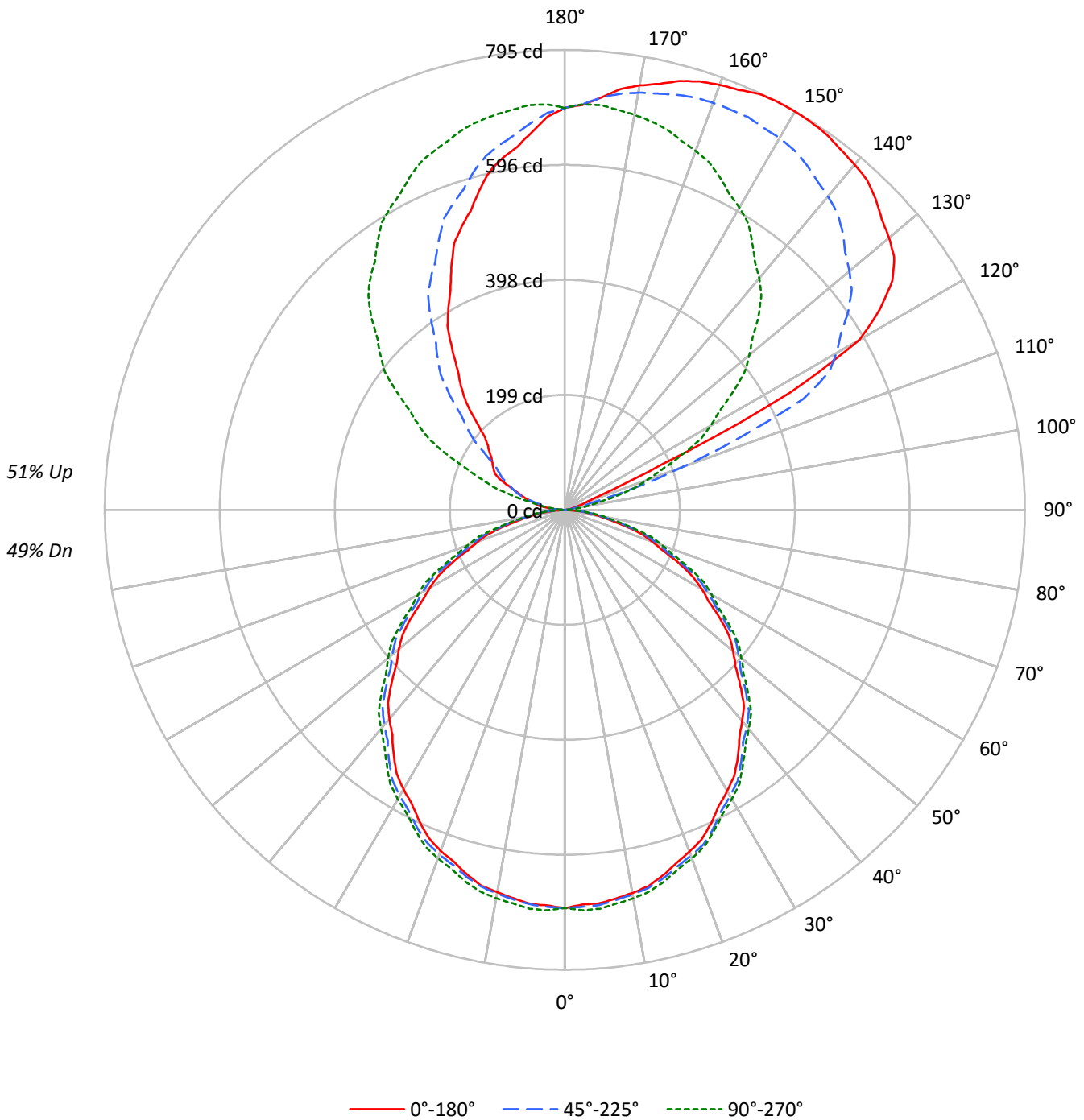
Lumens per Lamp: N/A
Luminaire Lumens: 3807.4 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: General Diffuse

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°	22230	22230	22230
5°	22133	22438	22162
10°	22048	22356	22019
15°	21881	22228	21817
20°	21619	22038	21553
25°	21307	21777	21171
30°	20929	21526	20788
35°	20566	21161	20345
40°	20086	20841	19888
45°	19569	20473	19354
50°	19065	20015	18784
55°	18449	19513	18185
60°	17638	18917	17392
65°	16481	17987	16260
70°	15201	16985	15031
75°	13400	15396	13275
80°	10860	12962	11028
85°	6299	8707	7336



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.0	1.7
10°-20°	185.2	4.9
20°-30°	277.5	7.3
30°-40°	329.9	8.7
40°-50°	337.6	8.9
50°-60°	301.1	7.9
60°-70°	223.4	5.9
70°-80°	122.3	3.2
80°-90°	29.3	0.8
90°-100°	17.0	0.4
100°-110°	78.0	2.0
110°-120°	228.6	6.0
120°-130°	344.1	9.0
130°-140°	369.6	9.7
140°-150°	352.7	9.3
150°-160°	290.2	7.6
160°-170°	190.0	5.0
170°-180°	65.9	1.7
0°-30°	527.8	13.9
0°-40°	857.6	22.5
0°-60°	1496.3	39.3
0°-90°	1871.2	49.1
90°-120°	323.6	8.5
90°-150°	1390.0	36.5
90°-180°	1936.0	50.8
0°-180°	3807.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	688	688	688	688	688	
5°	683	686	692	685	684	65
15°	654	659	665	656	653	184
25°	598	607	611	606	594	275
35°	522	531	537	529	516	326
45°	428	442	448	438	424	331
55°	328	339	347	338	323	292
65°	216	226	235	225	213	214
75°	107	115	123	115	106	114
85°	17	23	24	24	20	24
90°	1	1	1	2	4	1
95°	5	6	13	21	20	6
105°	21	50	89	59	63	25
115°	183	455	222	112	123	245
125°	692	598	354	167	154	608
135°	760	679	473	281	216	586
145°	790	728	564	404	340	495
155°	793	749	634	515	464	366
165°	767	743	681	606	571	218
175°	715	715	702	671	655	69
180°	694	694	694	694	694	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	688.4	688.4	688.4	688.4	688.4	688.4	688.4	688.4	688.4
2.5°	683.1	686.1	686.9	686.3	692.9	687.0	686.9	686.1	684.6
5°	682.8	683.7	685.6	683.9	692.2	683.9	684.6	682.8	683.7
7.5°	677.7	678.6	679.8	678.8	686.3	678.8	679.4	677.5	677.5
10°	672.4	673.3	675.2	673.5	681.8	673.5	673.3	671.5	671.5
12.5°	666.4	667.3	669.2	667.5	675.8	667.5	667.3	664.7	665.4
15°	654.5	657.3	659.2	656.6	664.9	656.6	656.4	654.5	652.6
17.5°	640.4	643.1	646.4	643.6	651.1	642.7	643.6	639.4	637.7
20°	629.1	631.8	636.6	633.0	641.3	632.1	633.8	628.1	627.2
22.5°	617.0	619.1	626.1	622.5	630.0	621.6	622.5	615.3	614.4
25°	598.0	599.8	607.4	604.7	611.2	602.9	605.5	595.2	594.2
27.5°	576.3	579.1	586.0	584.2	591.6	582.4	585.0	574.2	572.6
30°	561.3	564.0	571.6	569.9	577.3	568.1	570.7	558.4	557.5
32.5°	544.7	548.9	555.8	555.6	561.5	553.0	554.1	542.6	540.9
35°	521.7	524.5	531.1	531.3	536.8	529.4	529.3	517.9	516.1
37.5°	495.4	499.0	506.1	507.2	512.5	504.4	503.1	492.8	489.9
40°	476.5	480.2	488.8	489.8	494.4	487.0	485.0	475.5	471.8
42.5°	458.4	462.1	470.7	471.7	476.3	469.7	466.2	457.4	452.2
45°	428.5	433.1	441.7	444.6	448.3	441.8	437.9	427.5	423.8
47.5°	399.9	403.5	412.3	417.0	418.7	414.3	409.3	398.1	394.2
50°	379.5	383.2	392.7	397.4	398.4	394.7	388.9	378.5	373.9
52.5°	358.4	362.1	372.4	377.1	378.0	374.3	368.6	358.1	353.5
55°	327.7	331.4	339.0	346.6	346.6	344.7	338.1	326.7	323.0
57.5°	295.0	298.5	308.0	314.5	314.7	312.2	305.3	294.9	291.2
60°	273.1	275.9	285.3	292.0	292.9	291.0	283.5	273.0	269.3
62.5°	249.0	252.5	262.0	269.4	271.0	268.5	260.1	250.4	245.2
65°	215.7	217.5	226.0	233.6	235.4	232.7	225.1	215.6	212.8
67.5°	182.9	184.0	192.1	199.7	201.7	198.8	191.2	184.7	180.2
70°	161.0	162.9	169.5	177.1	179.9	176.2	168.6	162.8	159.2
72.5°	139.2	141.0	147.7	154.5	157.3	154.3	147.5	141.7	138.1
75°	107.4	108.3	114.9	121.5	123.4	120.6	114.9	110.1	106.4
77.5°	77.2	78.1	85.1	89.1	90.8	89.1	84.6	80.0	77.4
80°	58.4	59.3	64.0	68.8	69.7	68.8	65.0	61.2	59.3
82.5°	40.3	41.2	46.7	49.9	50.1	50.7	47.7	44.6	42.0
85°	17.0	17.9	22.6	25.4	23.5	26.3	24.5	21.6	19.8
87.5°	2.5	2.5	4.7	7.0	7.0	7.7	6.4	5.8	4.5
90°	1.0	1.0	1.0	1.0	1.0	1.0	1.9	2.9	3.9
92.5°	2.5	2.5	2.5	3.3	3.3	7.9	5.8	5.3	6.2
95°	4.8	4.8	5.8	14.5	12.6	19.2	21.3	20.4	20.4
97.5°	8.5	8.5	11.1	38.6	28.5	26.2	35.9	37.0	36.7
100°	11.6	11.6	16.5	61.6	41.7	34.1	39.8	45.6	47.5
102.5°	14.7	15.5	25.0	95.4	58.8	43.6	45.2	51.1	53.0
105°	21.3	23.2	50.4	160.4	89.2	57.9	59.2	60.2	63.0
107.5°	31.6	38.6	127.8	228.9	125.9	76.0	78.6	75.5	75.7
110°	41.7	57.8	216.3	272.7	152.3	88.7	90.2	86.3	87.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	68.1	114.6	328.8	307.5	180.2	103.8	98.7	102.6	100.5
115°	183.3	299.0	454.9	357.7	222.1	129.2	111.5	120.3	123.2
117.5°	438.0	516.2	514.3	400.2	263.8	159.9	123.4	131.6	136.4
120°	587.8	599.2	542.2	426.6	291.0	181.0	131.9	137.8	142.6
122.5°	646.0	632.3	565.5	450.7	316.6	203.5	143.6	142.5	148.0
125°	691.6	666.9	597.5	484.0	354.0	241.2	166.8	151.4	154.2
127.5°	717.4	690.1	625.0	515.2	392.1	278.8	197.7	166.0	164.3
130°	731.3	704.8	642.1	534.7	416.1	305.1	220.2	178.4	173.6
132.5°	743.0	718.7	657.6	553.4	439.4	330.7	244.2	196.9	188.4
135°	759.5	736.7	679.0	578.6	473.3	367.1	281.3	228.6	216.3
137.5°	773.4	750.3	697.0	602.6	502.6	402.7	317.4	267.4	253.0
140°	778.9	758.0	707.1	616.7	522.8	425.1	341.4	290.7	279.3
142.5°	784.3	764.2	716.4	630.7	539.9	446.7	366.3	315.5	303.4
145°	790.5	770.6	728.4	648.9	564.5	478.2	403.5	351.8	339.5
147.5°	793.8	776.0	737.4	664.3	588.6	507.2	440.2	388.1	376.9
150°	795.4	778.3	742.0	674.4	603.3	526.5	462.7	413.0	402.5
152.5°	795.4	777.5	744.3	682.3	615.7	544.2	484.4	437.0	427.4
155°	793.4	776.4	748.8	692.2	634.4	569.9	515.0	474.1	463.6
157.5°	785.7	775.4	748.8	701.3	650.5	593.7	544.9	508.4	499.1
160°	781.8	772.3	748.8	706.1	660.5	608.4	563.5	529.4	520.9
162.5°	776.4	766.9	747.3	709.3	669.1	621.5	581.4	548.1	541.8
165°	767.2	757.8	743.0	712.2	680.9	640.1	606.2	577.9	571.3
167.5°	754.2	748.9	737.0	713.1	688.1	656.8	627.2	604.5	599.2
170°	744.9	741.1	732.3	712.5	693.5	666.0	641.1	621.7	617.9
172.5°	733.3	731.0	725.3	711.8	697.4	675.2	654.3	635.6	632.6
175°	714.9	716.8	714.9	708.9	702.2	687.1	671.2	657.6	654.7
177.5°	700.7	700.7	702.2	702.2	701.5	693.9	686.7	679.0	680.5
180°	694.5	694.5	694.5	694.5	694.5	694.5	694.5	694.5	694.5

(END OF REPORT)