

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: P511761

Luminaire Tested: **SQW-F-050U-075D-830-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511761
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-075D-830-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

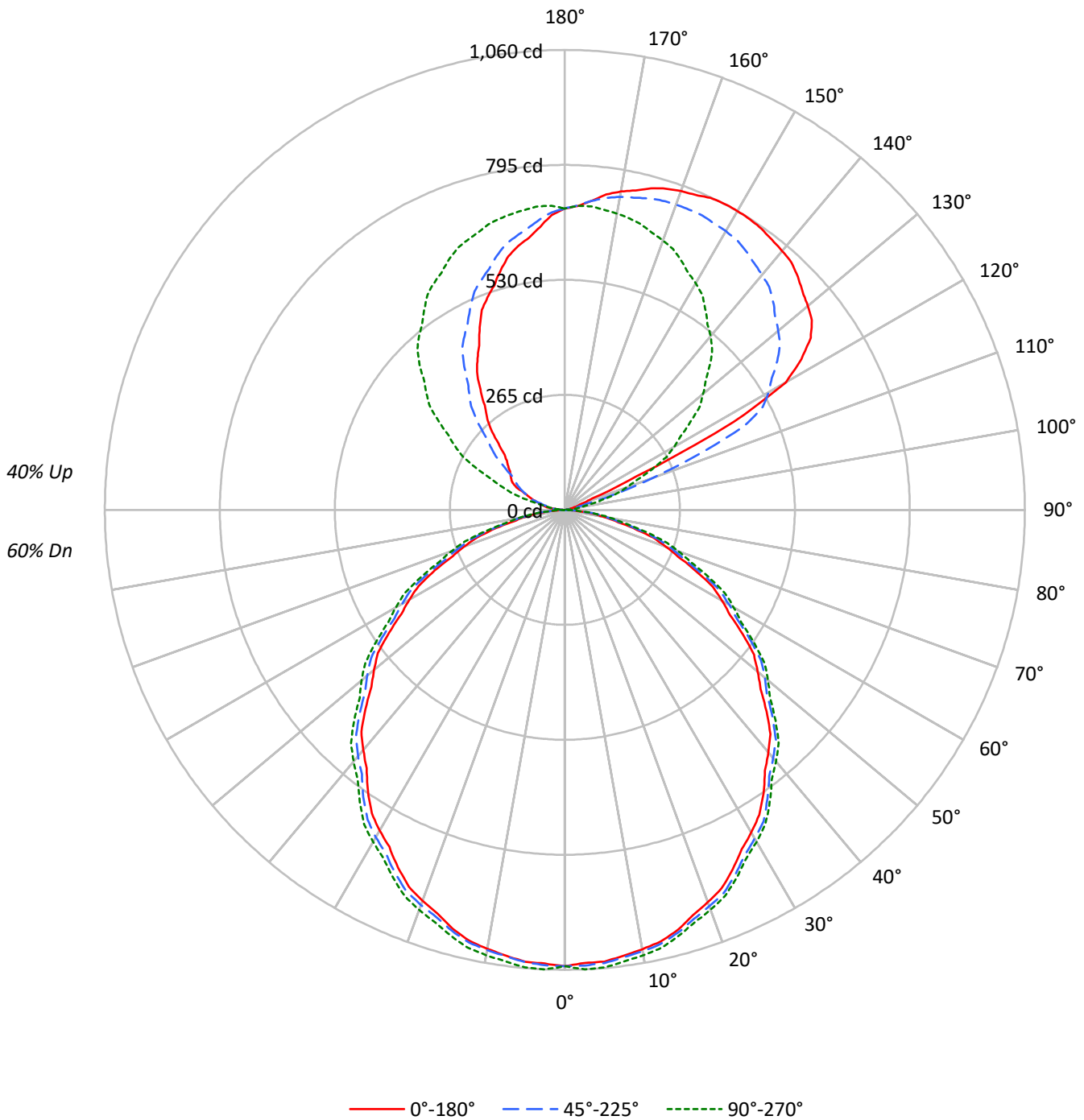
Lumens per Lamp: N/A
Luminaire Lumens: 4802.6 lumens
Efficiency: N/A
Efficacy: 115.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 41.6
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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60
1	100	96	92	88	93	89	86	83	78	75	73	67	65	64	57	56	55	50
2	91	83	77	72	85	78	73	68	68	64	60	59	56	53	50	48	46	42
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39	35
4	76	65	57	50	70	61	54	48	53	48	43	46	42	38	40	36	34	30
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	32	29	26
6	64	52	43	37	60	49	41	36	43	37	32	37	33	29	32	29	26	23
7	59	47	39	33	55	44	37	31	39	33	28	34	29	26	30	26	23	20
8	55	42	35	29	51	40	33	28	35	30	25	31	26	23	27	23	20	18
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	18	16
10	48	36	28	23	45	34	27	22	30	24	20	27	22	19	23	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	33968	33968	33968
5°	33884	34312	33884
10°	33721	34184	33688
15°	33531	33969	33404
20°	33076	33722	32945
25°	32580	33353	32413
30°	32026	32940	31814
35°	31446	32448	31186
40°	30768	31919	30448
45°	30017	31351	29675
50°	29143	30705	28811
55°	28206	29900	27834
60°	27002	29011	26699
65°	25398	27851	25184
70°	23472	26229	23292
75°	20449	23493	20449
80°	16458	19619	16978
85°	9411	13264	11152



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.4	2.1
10°-20°	283.4	5.9
20°-30°	424.7	8.8
30°-40°	504.9	10.5
40°-50°	516.8	10.8
50°-60°	460.8	9.6
60°-70°	344.3	7.2
70°-80°	187.7	3.9
80°-90°	44.5	0.9
90°-100°	17.0	0.4
100°-110°	78.0	1.6
110°-120°	228.6	4.8
120°-130°	344.1	7.2
130°-140°	369.6	7.7
140°-150°	352.7	7.3
150°-160°	290.2	6.0
160°-170°	190.0	4.0
170°-180°	65.9	1.4
0°-30°	807.4	16.8
0°-40°	1312.3	27.3
0°-60°	2290.0	47.7
0°-90°	2866.4	59.7
90°-120°	323.6	6.7
90°-150°	1390.0	28.9
90°-180°	1936.0	40.3
0°-180°	4802.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1052	1052	1052	1052	1052	
5°	1045	1048	1058	1046	1045	99
15°	1003	1009	1016	1005	999	282
25°	914	929	936	925	910	421
35°	798	814	823	809	791	498
45°	657	677	686	670	650	507
55°	501	521	531	515	494	447
65°	332	349	364	348	330	329
75°	164	176	188	177	164	175
85°	25	33	36	37	30	36
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°	1051.9	1051.9	1051.9	1051.9	1051.9	1051.9	1051.9	1051.9	1051.9
2.5°	1045.1	1050.3	1051.2	1049.9	1060.2	1050.6	1050.4	1050.3	1046.7
5°	1045.3	1045.3	1048.2	1046.5	1058.5	1046.5	1046.3	1044.4	1045.3
7.5°	1036.7	1037.8	1039.9	1038.1	1049.3	1037.1	1037.8	1035.0	1036.5
10°	1028.4	1030.2	1033.1	1030.5	1042.5	1029.6	1030.3	1027.4	1027.4
12.5°	1019.3	1021.2	1024.8	1021.5	1033.5	1021.3	1021.2	1017.6	1017.6
15°	1003.0	1004.8	1008.6	1005.1	1016.1	1003.2	1004.8	1000.1	999.2
17.5°	979.8	983.7	988.6	985.1	996.4	983.3	984.1	977.7	976.0
20°	962.5	967.1	972.8	969.3	981.3	967.5	969.1	959.6	958.7
22.5°	944.4	948.2	956.2	952.7	964.0	950.9	952.5	940.0	939.9
25°	914.4	918.1	928.6	926.0	936.1	923.2	924.8	910.6	909.7
27.5°	882.2	887.0	897.5	895.1	905.2	891.4	893.0	877.7	875.8
30°	858.9	864.4	874.9	873.2	883.4	869.5	871.1	855.1	853.2
32.5°	834.0	841.0	851.5	850.6	860.0	846.9	846.3	830.9	828.4
35°	797.7	803.2	813.7	814.8	823.1	811.1	809.0	793.8	791.1
37.5°	757.7	763.4	773.9	776.3	783.5	771.7	768.3	753.1	750.2
40°	729.9	736.3	746.8	750.7	757.2	746.1	741.2	726.0	722.3
42.5°	701.2	708.4	719.7	723.6	729.3	718.2	712.5	698.1	693.7
45°	657.3	664.7	677.1	681.9	686.5	676.4	669.6	654.4	649.8
47.5°	611.8	619.1	631.9	637.8	641.3	633.0	625.1	609.9	604.4
50°	580.1	587.5	601.8	608.4	611.2	602.9	594.2	579.0	573.5
52.5°	549.2	555.9	570.1	577.5	579.5	572.7	563.4	548.9	542.6
55°	501.0	507.5	520.8	529.3	531.1	525.6	515.1	499.9	494.4
57.5°	451.3	457.7	470.9	480.3	482.4	476.8	465.4	452.1	445.8
60°	418.1	424.6	437.0	446.4	449.2	443.7	432.3	419.0	413.4
62.5°	384.2	389.2	402.3	411.8	416.1	411.3	399.1	384.3	379.5
65°	332.4	338.0	349.4	360.8	364.5	360.8	347.5	334.2	329.6
67.5°	282.5	286.2	296.6	307.9	312.5	308.4	296.5	282.8	279.9
70°	248.6	252.3	262.7	273.2	277.8	272.3	261.8	250.4	246.7
72.5°	213.2	216.9	226.6	237.0	240.9	235.4	226.4	216.5	212.1
75°	163.9	167.5	176.1	184.7	188.3	184.7	177.0	168.5	163.9
77.5°	117.9	121.4	128.8	136.2	137.9	135.5	130.1	122.7	119.2
80°	88.5	91.3	97.9	104.6	105.5	104.6	100.8	94.1	91.3
82.5°	62.2	64.2	70.8	75.9	75.3	77.4	73.6	67.8	65.7
85°	25.4	27.3	33.0	38.5	35.8	40.4	36.7	32.9	30.1
87.5°	3.2	3.2	6.2	10.7	10.0	12.9	10.2	8.1	6.8
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)