

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: P511751

Luminaire Tested: **SQW-F-050U-025D-840-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511751
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-025D-840-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

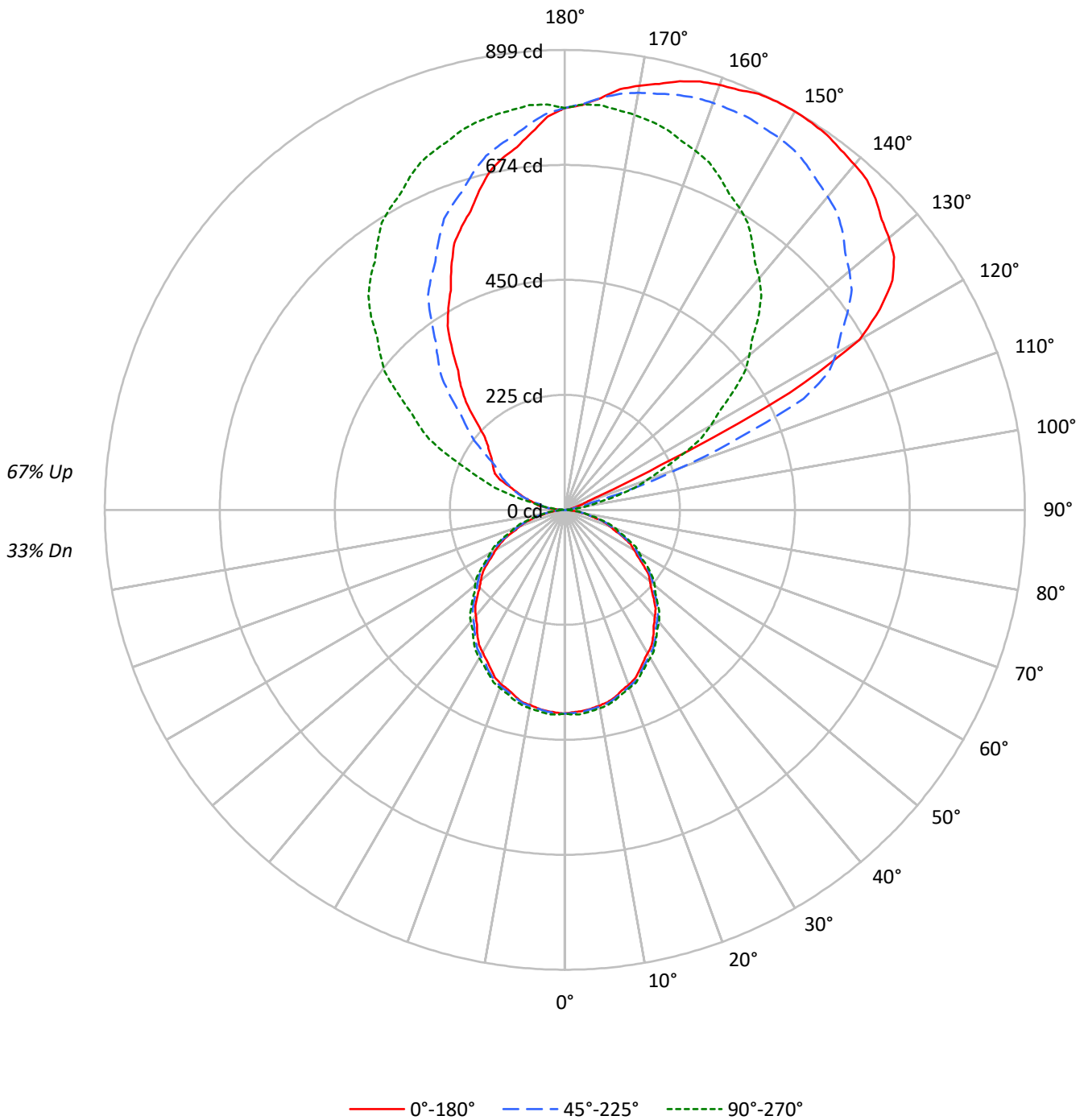
Lumens per Lamp: N/A
Luminaire Lumens: 3267.4 lumens
Efficiency: N/A
Efficacy: 140.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 23.2
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	41	41	41	33
1	94	90	86	83	85	81	78	75	65	62	60	50	48	47	36	35	34	28
2	85	78	72	67	77	71	66	61	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	45	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	34	31	31	27	24	22	20	18	15
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	18	16	13
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	20	23	19	16	17	14	13	10
9	48	36	28	24	43	33	26	22	27	22	18	21	17	15	15	13	11	9
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	12859	12859	12859
5°	12804	12976	12804
10°	12742	12919	12709
15°	12670	12851	12600
20°	12512	12732	12478
25°	12328	12595	12214
30°	12070	12465	11992
35°	11878	12256	11751
40°	11533	12073	11398
45°	11234	11718	11088
50°	10912	11499	10751
55°	10489	11209	10489
60°	10043	10863	10043
65°	9521	10415	9521
70°	8847	9847	8743
75°	7711	8896	7835
80°	6341	7327	6527
85°	3557	5113	4335



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.6	1.2
10°-20°	107.1	3.3
20°-30°	160.5	4.9
30°-40°	190.5	5.8
40°-50°	193.5	5.9
50°-60°	172.5	5.3
60°-70°	128.7	3.9
70°-80°	70.8	2.2
80°-90°	17.1	0.5
90°-100°	19.3	0.6
100°-110°	88.2	2.7
110°-120°	258.5	7.9
120°-130°	389.1	11.9
130°-140°	417.9	12.8
140°-150°	398.7	12.2
150°-160°	328.1	10.0
160°-170°	214.8	6.6
170°-180°	74.5	2.3
0°-30°	305.2	9.3
0°-40°	495.7	15.2
0°-60°	861.7	26.4
0°-90°	1078.3	33.0
90°-120°	365.9	11.2
90°-150°	1571.6	48.1
90°-180°	2189.0	67.0
0°-180°	3267.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	398	398	398	398	398	
5°	395	396	400	396	395	37
15°	379	381	384	379	377	107
25°	346	350	354	349	343	159
35°	301	308	311	306	298	188
45°	246	253	257	251	243	190
55°	186	195	199	193	186	167
65°	125	130	136	130	125	123
75°	62	66	71	66	63	66
85°	10	13	14	14	12	14
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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CATALOG NUMBER: SQW-F-050U-025D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2
2.5°	395.7	397.3	397.4	397.4	400.8	397.4	397.4	397.3	396.5
5°	395.0	395.0	396.1	396.2	400.3	396.2	396.1	395.0	395.0
7.5°	392.0	392.2	393.3	393.2	396.5	392.1	392.2	392.0	391.8
10°	388.6	389.7	390.8	389.8	394.0	388.7	389.7	388.6	387.6
12.5°	385.2	386.3	387.4	386.4	390.5	386.2	386.3	385.2	385.0
15°	379.0	380.1	381.2	380.2	384.4	379.2	379.0	378.0	376.9
17.5°	370.1	372.0	373.5	372.5	376.5	371.5	372.4	369.9	368.2
20°	364.1	365.2	368.4	367.4	370.5	366.4	367.3	363.1	363.1
22.5°	357.3	358.4	361.6	360.6	364.6	359.6	360.5	356.2	355.4
25°	346.0	347.1	350.3	349.3	353.5	348.3	349.2	343.9	342.8
27.5°	333.1	334.3	339.4	338.5	342.8	336.6	337.5	332.2	330.9
30°	323.7	325.8	330.1	329.1	334.3	328.1	329.0	323.6	321.6
32.5°	315.2	317.2	320.7	321.4	325.0	319.5	319.6	314.3	312.2
35°	301.3	303.4	307.7	307.8	310.9	305.7	305.6	300.2	298.1
37.5°	285.6	287.4	292.2	293.5	295.8	291.0	289.8	284.5	282.4
40°	273.6	274.7	281.1	283.3	286.4	279.1	277.9	272.5	270.4
42.5°	262.6	264.4	270.0	271.3	273.6	268.8	266.8	261.5	259.4
45°	246.0	248.0	253.4	255.6	256.6	252.4	251.3	245.9	242.8
47.5°	229.1	231.2	236.6	239.0	240.0	236.9	233.6	229.1	225.9
50°	217.2	219.3	224.7	227.9	228.9	225.8	222.5	217.1	214.0
52.5°	206.1	207.4	212.7	216.8	217.0	214.7	210.6	205.2	202.9
55°	186.3	189.5	194.8	199.1	199.1	197.0	192.7	187.4	186.3
57.5°	169.1	170.3	175.7	179.9	180.2	178.9	174.6	169.3	168.2
60°	155.5	157.5	162.9	167.2	168.2	166.1	161.8	156.5	155.5
62.5°	144.4	144.8	150.1	154.4	155.5	153.4	149.1	144.5	142.7
65°	124.6	125.6	129.9	135.2	136.3	134.2	129.9	125.6	124.6
67.5°	105.6	106.7	110.7	115.9	117.1	115.0	109.7	106.5	105.4
70°	93.7	94.7	98.0	102.3	104.3	102.3	96.9	93.7	92.6
72.5°	80.9	82.0	85.2	89.5	90.7	88.6	84.1	81.7	80.7
75°	61.8	63.8	66.0	70.3	71.3	70.3	66.0	63.9	62.8
77.5°	45.1	46.2	48.3	51.3	52.2	51.3	49.4	46.2	46.2
80°	34.1	35.1	37.3	39.4	39.4	39.4	38.3	35.1	35.1
82.5°	23.9	24.9	26.2	29.2	28.3	29.2	28.1	25.7	24.9
85°	9.6	10.6	12.8	14.9	13.8	14.9	13.8	11.7	11.7
87.5°	1.1	1.9	1.9	4.5	4.5	5.3	3.8	3.2	3.4
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)