

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: P511750

Luminaire Tested: **SQW-F-050U-025D-835-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P511750  
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-835-1D-UNV-STD-W-4  
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE  
DOWNLIGHT 250 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

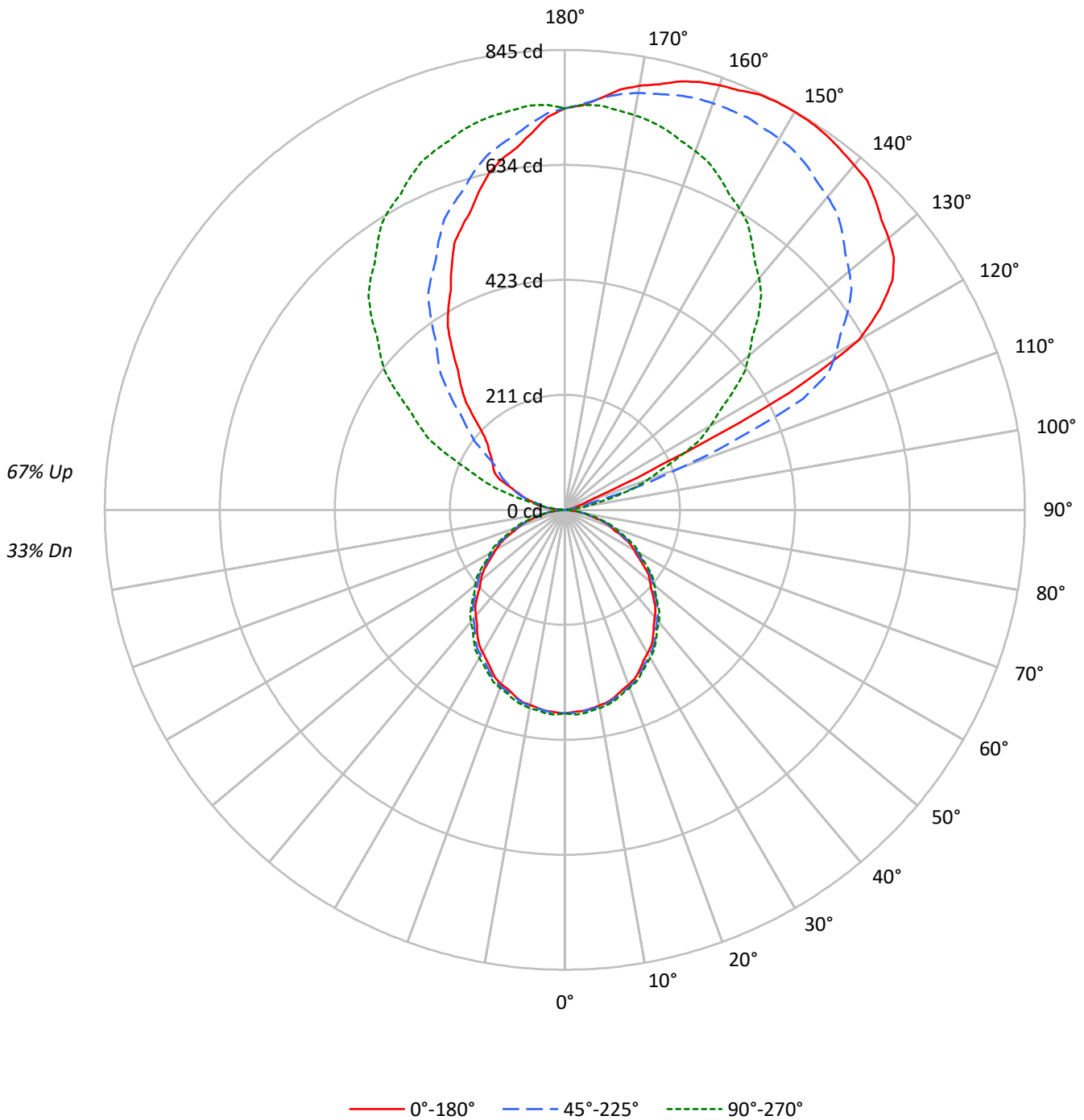
Lumens per Lamp: N/A  
Luminaire Lumens: 3068.8 lumens  
Efficiency: N/A  
Efficacy: 132.3 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')  
CIE Type: Semi-Indirect

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°	12077	12077	12077
5°	12026	12188	12026
10°	11968	12132	11936
15°	11901	12069	11835
20°	11753	11959	11718
25°	11580	11829	11473
30°	11335	11708	11261
35°	11156	11511	11038
40°	10834	11339	10707
45°	10549	11006	10412
50°	10248	10801	10098
55°	9852	10528	9852
60°	9429	10204	9429
65°	8940	9780	8940
70°	8309	9253	8214
75°	7236	8359	7361
80°	5951	6881	6137
85°	3335	4817	4076



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.3	1.2
10°-20°	100.6	3.3
20°-30°	150.7	4.9
30°-40°	178.9	5.8
40°-50°	181.8	5.9
50°-60°	162.0	5.3
60°-70°	120.9	3.9
70°-80°	66.5	2.2
80°-90°	16.1	0.5
90°-100°	18.1	0.6
100°-110°	82.8	2.7
110°-120°	242.8	7.9
120°-130°	365.4	11.9
130°-140°	392.4	12.8
140°-150°	374.5	12.2
150°-160°	308.2	10.0
160°-170°	201.8	6.6
170°-180°	70.0	2.3
0°-30°	286.7	9.3
0°-40°	465.6	15.2
0°-60°	809.3	26.4
0°-90°	1012.8	33.0
90°-120°	343.7	11.2
90°-150°	1476.0	48.1
90°-180°	2056.0	67.0
0°-180°	3068.8	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	374	374	374	374	374	
5°	371	372	376	372	371	35
15°	356	358	361	356	354	100
25°	325	329	332	328	322	149
35°	283	289	292	287	280	176
45°	231	238	241	236	228	178
55°	175	183	187	181	175	157
65°	117	122	128	122	117	116
75°	58	62	67	62	59	62
85°	9	12	13	13	11	13
90°	1	1	1	2	4	1
95°	5	6	13	23	22	6
105°	23	54	95	63	67	26
115°	195	483	236	118	131	260
125°	734	634	376	177	164	645
135°	806	721	503	299	230	623
145°	839	774	599	428	360	526
155°	842	795	674	547	492	389
165°	815	789	723	644	607	231
175°	759	759	746	713	695	74
180°	737	737	737	737	737	



TEST NUMBER: P511750

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	374.0	374.0	374.0	374.0	374.0	374.0	374.0	374.0	374.0
2.5°	371.6	373.2	373.2	373.3	376.4	373.3	373.2	373.2	372.4
5°	371.0	371.0	372.0	372.1	376.0	372.1	372.0	371.0	371.0
7.5°	368.2	368.4	369.4	369.3	372.4	368.3	368.4	368.2	368.0
10°	365.0	366.0	367.0	366.1	370.0	365.1	366.0	365.0	364.0
12.5°	361.8	362.8	363.8	362.9	366.8	362.7	362.8	361.8	361.6
15°	356.0	357.0	358.0	357.1	361.0	356.1	356.0	355.0	354.0
17.5°	347.6	349.4	350.8	349.9	353.6	348.9	349.8	347.4	345.8
20°	342.0	343.0	346.0	345.1	348.0	344.1	345.0	341.0	341.0
22.5°	335.6	336.6	339.6	338.7	342.4	337.7	338.6	334.6	333.8
25°	325.0	326.0	329.0	328.1	332.0	327.1	328.0	323.0	322.0
27.5°	312.8	314.0	318.8	317.9	322.0	316.1	317.0	312.0	310.8
30°	304.0	306.0	310.0	309.1	314.0	308.1	309.0	304.0	302.0
32.5°	296.0	298.0	301.2	301.9	305.2	300.1	300.2	295.2	293.2
35°	283.0	285.0	289.0	289.1	292.0	287.1	287.0	282.0	280.0
37.5°	268.2	270.0	274.4	275.6	277.8	273.3	272.2	267.2	265.2
40°	257.0	258.0	264.0	266.1	269.0	262.2	261.0	256.0	254.0
42.5°	246.6	248.4	253.6	254.8	257.0	252.5	250.6	245.6	243.6
45°	231.0	233.0	238.0	240.0	241.0	237.1	236.0	230.9	228.0
47.5°	215.2	217.2	222.2	224.4	225.4	222.5	219.4	215.1	212.2
50°	204.0	206.0	211.0	214.0	215.0	212.1	209.0	203.9	201.0
52.5°	193.6	194.8	199.8	203.6	203.8	201.6	197.8	192.8	190.6
55°	175.0	177.9	183.0	187.0	187.0	185.0	181.0	176.0	175.0
57.5°	158.8	160.0	165.0	169.0	169.2	168.0	164.0	159.0	158.0
60°	146.0	148.0	153.0	157.0	158.0	156.0	152.0	147.0	146.0
62.5°	135.6	136.0	141.0	145.0	146.0	144.0	140.0	135.8	134.0
65°	117.0	118.0	122.0	127.0	128.0	126.0	122.0	118.0	117.0
67.5°	99.2	100.2	104.0	108.8	110.0	108.0	103.0	100.0	99.0
70°	88.0	89.0	92.0	96.0	98.0	96.0	91.0	88.0	87.0
72.5°	76.0	77.0	80.0	84.0	85.2	83.2	79.0	76.8	75.8
75°	58.0	60.0	62.0	66.0	67.0	66.0	62.0	60.0	59.0
77.5°	42.4	43.4	45.4	48.2	49.0	48.2	46.4	43.4	43.4
80°	32.0	33.0	35.0	37.0	37.0	37.0	36.0	33.0	33.0
82.5°	22.4	23.4	24.6	27.4	26.6	27.4	26.4	24.2	23.4
85°	9.0	10.0	12.0	14.0	13.0	14.0	13.0	11.0	11.0
87.5°	1.0	1.8	1.8	4.2	4.2	5.0	3.6	3.0	3.2
90°	1.0	1.0	1.0	1.0	1.0	1.0	2.1	3.1	4.1
92.5°	2.7	2.7	2.7	3.5	3.5	8.3	6.2	5.6	6.6
95°	5.1	5.1	6.2	15.4	13.4	20.4	22.7	21.6	21.6
97.5°	9.1	9.1	11.7	41.0	30.3	27.9	38.1	39.3	38.9
100°	12.4	12.4	17.5	65.4	44.3	36.2	42.2	48.5	50.5
102.5°	15.7	16.5	26.6	101.3	62.4	46.3	48.0	54.2	56.2
105°	22.7	24.7	53.6	170.3	94.8	61.5	62.8	63.9	66.9
107.5°	33.6	41.0	135.7	243.1	133.7	80.7	83.4	80.1	80.3
110°	44.3	61.4	229.7	289.6	161.7	94.2	95.8	91.7	92.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	72.3	121.6	349.2	326.5	191.4	110.2	104.8	108.9	106.7
115°	194.7	317.5	483.0	379.9	235.9	137.2	118.4	127.8	130.8
117.5°	465.1	548.1	546.1	425.0	280.1	169.8	131.0	139.8	144.8
120°	624.2	636.2	575.7	453.0	309.0	192.2	140.1	146.4	151.4
122.5°	686.0	671.4	600.5	478.6	336.2	216.1	152.4	151.3	157.2
125°	734.4	708.2	634.5	513.9	375.9	256.1	177.2	160.7	163.8
127.5°	761.8	732.8	663.7	547.0	416.3	296.1	209.9	176.3	174.5
130°	776.6	748.4	681.8	567.7	441.9	324.0	233.8	189.4	184.4
132.5°	788.9	763.2	698.3	587.6	466.6	351.2	259.3	209.1	200.0
135°	806.5	782.3	721.0	614.4	502.6	389.8	298.7	242.8	229.7
137.5°	821.3	796.7	740.1	639.9	533.7	427.6	337.0	283.9	268.6
140°	827.1	804.9	750.8	654.8	555.1	451.4	362.5	308.7	296.6
142.5°	832.8	811.5	760.7	669.8	573.3	474.4	388.9	335.1	322.2
145°	839.4	818.3	773.5	689.1	599.4	507.8	428.5	373.6	360.5
147.5°	842.9	824.0	783.0	705.3	625.0	538.6	467.4	412.1	400.2
150°	844.6	826.4	787.9	716.2	640.6	559.1	491.3	438.5	427.4
152.5°	844.6	825.6	790.4	724.5	653.8	577.9	514.4	464.1	453.8
155°	842.5	824.4	795.1	735.0	673.6	605.1	546.9	503.4	492.3
157.5°	834.3	823.4	795.1	744.7	690.7	630.5	578.6	539.9	530.0
160°	830.1	820.1	795.1	749.7	701.4	646.0	598.4	562.2	553.1
162.5°	824.4	814.3	793.5	753.2	710.5	659.9	617.4	582.0	575.3
165°	814.7	804.6	788.9	756.3	723.0	679.7	643.7	613.7	606.6
167.5°	800.9	795.3	782.6	757.2	730.7	697.4	666.0	641.9	636.3
170°	791.0	787.0	777.6	756.6	736.4	707.2	680.8	660.1	656.1
172.5°	778.6	776.2	770.2	755.8	740.5	717.0	694.8	675.0	671.7
175°	759.1	761.1	759.1	752.7	745.7	729.6	712.7	698.2	695.2
177.5°	744.0	744.0	745.7	745.7	744.9	736.8	729.2	721.0	722.6
180°	737.4	737.4	737.4	737.4	737.4	737.4	737.4	737.4	737.4

(END OF REPORT)