

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: P511756

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

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511756
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-835-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

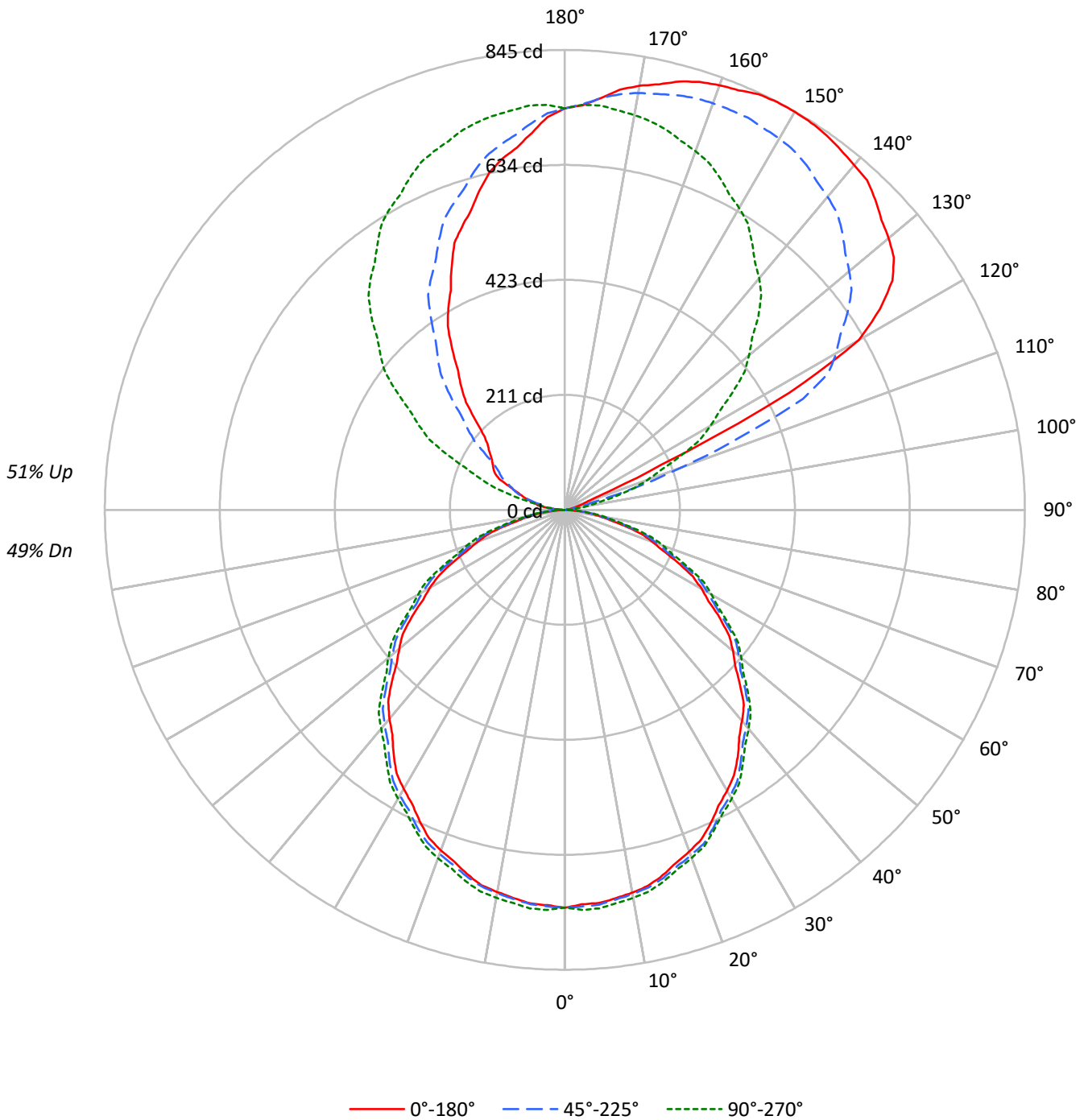
Lumens per Lamp: N/A
Luminaire Lumens: 4043.0 lumens
Efficiency: N/A
Efficacy: 128.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: General Diffuse

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



TEST NUMBER: P511756
CATALOG NUMBER: SQW-F-050U-050D-835-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P511756

CATALOG NUMBER: SQW-F-050U-050D-835-1D-UNV-STD-W-4

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°	23605	23605	23605
5°	23501	23825	23533
10°	23412	23740	23379
15°	23235	23602	23168
20°	22955	23402	22887
25°	22625	23124	22483
30°	22223	22857	22074
35°	21839	22470	21603
40°	21330	22131	21119
45°	20779	21738	20550
50°	20246	21250	19944
55°	19592	20718	19311
60°	18729	20086	18471
65°	17498	19102	17268
70°	16145	18033	15956
75°	14223	16344	14099
80°	11530	13761	11716
85°	6669	9263	7781



TEST NUMBER: P511756

CATALOG NUMBER: SQW-F-050U-050D-835-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.0	1.7
10°-20°	196.7	4.9
20°-30°	294.7	7.3
30°-40°	350.3	8.7
40°-50°	358.5	8.9
50°-60°	319.7	7.9
60°-70°	237.2	5.9
70°-80°	129.9	3.2
80°-90°	31.1	0.8
90°-100°	18.1	0.4
100°-110°	82.8	2.0
110°-120°	242.8	6.0
120°-130°	365.4	9.0
130°-140°	392.4	9.7
140°-150°	374.5	9.3
150°-160°	308.2	7.6
160°-170°	201.8	5.0
170°-180°	70.0	1.7
0°-30°	560.4	13.9
0°-40°	910.7	22.5
0°-60°	1588.9	39.3
0°-90°	1987.0	49.1
90°-120°	343.7	8.5
90°-150°	1476.0	36.5
90°-180°	2056.0	50.9
0°-180°	4043.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	731	731	731	731	731	
5°	725	728	735	727	726	69
15°	695	700	706	697	693	196
25°	635	645	649	643	631	292
35°	554	564	570	562	548	346
45°	455	469	476	465	450	351
55°	348	360	368	359	343	310
65°	229	240	250	239	226	227
75°	114	122	131	122	113	121
85°	18	24	25	26	21	25
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: P511756

CATALOG NUMBER: SQW-F-050U-050D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0
2.5°	725.4	728.5	729.4	728.8	735.8	729.5	729.4	728.6	727.0
5°	725.0	726.0	728.0	726.2	735.0	726.2	727.0	725.0	726.0
7.5°	719.6	720.6	721.8	720.8	728.8	720.8	721.4	719.4	719.4
10°	714.0	715.0	717.0	715.2	724.0	715.2	715.0	713.0	713.0
12.5°	707.6	708.6	710.6	708.8	717.6	708.8	708.6	705.8	706.6
15°	695.0	697.9	700.0	697.2	706.0	697.2	697.0	695.0	693.0
17.5°	680.0	682.9	686.4	683.4	691.4	682.4	683.4	679.0	677.2
20°	668.0	670.9	676.0	672.2	681.0	671.2	673.0	667.0	666.0
22.5°	655.2	657.4	664.8	661.0	669.0	660.0	661.0	653.4	652.4
25°	635.0	637.0	645.0	642.2	649.0	640.2	643.0	632.0	631.0
27.5°	612.0	614.9	622.2	620.4	628.2	618.4	621.2	609.8	608.0
30°	596.0	598.9	607.0	605.2	613.0	603.2	606.0	593.0	592.0
32.5°	578.4	582.9	590.2	589.9	596.2	587.2	588.4	576.2	574.4
35°	554.0	556.9	564.0	564.1	570.0	562.2	562.0	550.0	548.0
37.5°	526.0	529.9	537.4	538.5	544.2	535.6	534.2	523.3	520.2
40°	506.0	509.9	519.0	520.1	525.0	517.2	515.0	504.9	501.0
42.5°	486.8	490.7	499.8	500.9	505.8	498.8	495.0	485.7	480.2
45°	455.0	459.9	469.0	472.1	476.0	469.2	465.0	453.9	450.0
47.5°	424.6	428.5	437.8	442.8	444.6	439.9	434.6	422.7	418.6
50°	403.0	406.9	417.0	422.0	423.0	419.1	413.0	401.9	397.0
52.5°	380.6	384.5	395.4	400.4	401.4	397.5	391.4	380.3	375.4
55°	348.0	351.9	360.0	368.0	368.0	366.0	359.0	346.9	343.0
57.5°	313.2	316.9	327.0	334.0	334.2	331.5	324.2	313.1	309.2
60°	290.0	292.9	303.0	310.0	311.0	309.0	301.0	289.9	286.0
62.5°	264.4	268.1	278.2	286.0	287.8	285.1	276.2	265.9	260.4
65°	229.0	231.0	240.0	248.0	250.0	247.1	239.0	228.9	226.0
67.5°	194.2	195.4	204.0	212.0	214.2	211.1	203.0	196.1	191.4
70°	171.0	173.0	180.0	188.1	191.0	187.1	179.0	172.9	169.0
72.5°	147.8	149.8	156.8	164.1	167.0	163.9	156.6	150.5	146.6
75°	114.0	115.0	122.0	129.0	131.0	128.1	122.0	116.9	113.0
77.5°	82.0	83.0	90.4	94.6	96.4	94.6	89.8	84.9	82.2
80°	62.0	63.0	68.0	73.0	74.0	73.0	69.0	65.0	63.0
82.5°	42.8	43.8	49.6	53.0	53.2	53.8	50.6	47.3	44.6
85°	18.0	19.0	24.0	27.0	25.0	27.9	26.0	23.0	21.0
87.5°	2.6	2.6	5.0	7.4	7.4	8.2	6.8	6.2	4.8
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



TEST NUMBER: P511756

CATALOG NUMBER: SQW-F-050U-050D-835-1D-UNV-STD-W-4

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)