

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: P522516

Luminaire Tested: **SQW-F-050U-025D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/11/2021

Test Information

Test Method: LM-79-08
Report Number: P522516
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-53,
Test Lab: INNOVATION CENTER
Issue Date: 5/11/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQW-F-050U-025D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

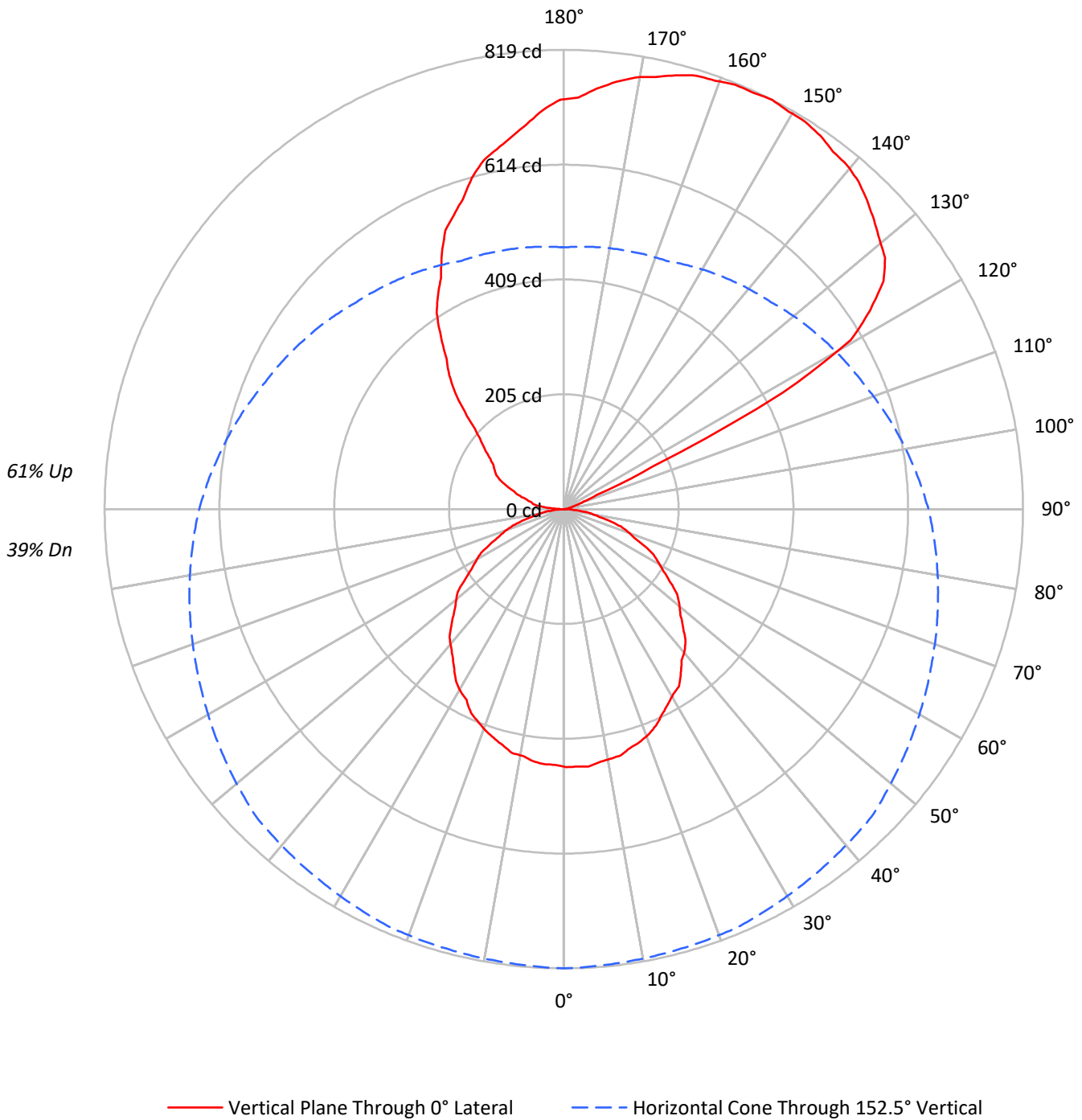
Lumens per Lamp: N/A
Luminaire Lumens: 3307.7 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.26 / 1.36
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 31.5
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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	91	87	84	86	83	79	76	67	65	63	53	52	50	40	39	38	32
2	87	79	73	68	78	72	67	63	59	55	52	47	44	42	35	34	32	27
3	79	69	62	56	71	63	57	52	52	47	44	41	38	35	31	29	27	23
4	72	61	54	48	65	56	49	44	46	41	37	37	33	30	28	25	23	19
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	22	20	17
6	61	49	41	35	55	45	38	33	37	31	28	29	26	23	23	20	18	15
7	56	44	36	31	51	40	33	28	33	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	37	30	25	30	25	21	24	20	18	19	16	14	12
9	48	36	29	24	44	33	27	22	28	23	19	22	19	16	17	15	13	10
10	45	33	26	21	41	30	24	20	25	20	17	21	17	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	7427	7427	7427
5°	7473	7506	7391
10°	7425	7442	7309
15°	7383	7435	7265
20°	7380	7397	7187
25°	7235	7326	7108
30°	7154	7230	6963
35°	7082	7121	6800
40°	6993	6993	6671
45°	6786	6925	6508
50°	6699	6825	6340
55°	6503	6674	6075
60°	6278	6474	5851
65°	6067	6262	5559
70°	5717	6005	5235
75°	5271	5458	4697
80°	4640	4826	3970
85°	3390	3779	2631



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.5	1.3
10°-20°	124.2	3.8
20°-30°	186.7	5.6
30°-40°	222.8	6.7
40°-50°	228.9	6.9
50°-60°	205.4	6.2
60°-70°	155.5	4.7
70°-80°	88.8	2.7
80°-90°	23.3	0.7
90°-100°	18.4	0.6
100°-110°	81.8	2.5
110°-120°	235.0	7.1
120°-130°	357.9	10.8
130°-140°	388.5	11.7
140°-150°	371.5	11.2
150°-160°	306.0	9.3
160°-170°	200.3	6.1
170°-180°	69.3	2.1
0°-30°	354.4	10.7
0°-40°	577.2	17.5
0°-60°	1011.6	30.6
0°-90°	1279.2	38.7
90°-120°	335.1	10.1
90°-150°	1452.9	43.9
90°-180°	2029.0	61.3
0°-180°	3307.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	460	460	460	460	460	
5°	461	459	463	456	456	44
15°	442	445	445	441	435	125
25°	406	410	411	406	399	188
35°	359	361	361	353	345	225
45°	297	303	303	292	285	230
55°	231	236	237	225	216	207
65°	159	162	164	153	146	156
75°	84	88	88	80	75	89
85°	18	21	20	17	14	22
90°	0	0	0	0	0	1
95°	3	4	13	29	28	4
105°	18	50	94	65	69	21
115°	176	463	237	111	124	243
125°	700	609	378	187	159	614
135°	771	698	501	310	247	596
145°	807	752	597	441	377	506
155°	816	782	669	554	505	377
165°	798	778	717	644	613	226
175°	752	754	739	706	689	73
180°	730	730	730	730	730	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	460.0	460.0	460.0	460.0	460.0	460.0	460.0	460.0	460.0
2.5°	459.2	460.0	461.7	459.3	462.5	459.3	460.0	458.4	456.0
5°	461.1	459.1	459.0	459.1	463.1	458.1	456.0	455.0	456.0
7.5°	455.4	455.8	455.6	455.3	459.6	451.9	454.9	451.9	452.3
10°	452.9	450.9	453.9	451.9	453.9	450.9	450.9	447.8	445.8
12.5°	450.5	449.3	450.7	447.1	453.1	445.4	444.4	443.8	444.2
15°	441.7	444.7	444.8	441.8	444.8	437.8	440.7	436.6	434.6
17.5°	436.8	433.8	435.2	432.8	436.2	430.5	430.1	425.9	426.5
20°	429.5	426.5	429.5	425.5	430.5	421.6	424.4	419.3	418.3
22.5°	419.7	419.1	423.0	419.8	420.8	415.8	415.5	409.5	408.5
25°	406.1	407.1	410.2	405.2	411.2	403.2	406.1	397.0	399.0
27.5°	394.3	394.5	398.0	395.5	396.7	390.6	390.8	383.1	381.7
30°	383.7	384.7	389.8	385.8	387.8	380.8	382.7	372.5	373.5
32.5°	376.4	374.2	378.4	374.4	378.0	371.0	371.3	363.5	362.1
35°	359.3	359.3	361.3	361.3	361.3	354.3	353.2	346.0	345.0
37.5°	341.6	340.8	347.7	342.4	344.8	339.1	336.9	329.9	328.7
40°	331.8	327.8	333.8	331.8	331.8	326.8	324.7	318.5	316.5
42.5°	318.0	317.2	321.6	320.5	322.8	314.7	312.5	305.5	304.3
45°	297.2	298.2	303.3	301.3	303.3	298.3	292.1	287.0	285.0
47.5°	279.7	278.1	282.9	282.8	284.8	277.2	274.4	266.7	266.3
50°	266.7	266.7	270.7	269.8	271.7	265.8	260.6	254.4	252.4
52.5°	253.6	252.0	256.9	256.7	257.1	251.9	246.7	241.4	240.2
55°	231.0	232.0	236.1	236.1	237.1	232.2	224.9	218.8	215.8
57.5°	209.9	209.3	213.1	214.3	214.3	209.4	202.9	197.8	196.6
60°	194.4	195.4	198.5	200.5	200.5	195.5	188.3	183.2	181.2
62.5°	179.7	179.9	183.8	185.1	186.7	180.9	174.4	169.3	167.3
65°	158.8	157.8	161.8	163.9	163.9	158.9	152.7	147.5	145.5
67.5°	135.0	136.4	139.6	140.9	141.9	135.9	129.9	126.6	125.6
70°	121.1	120.1	124.2	126.2	127.2	121.3	116.0	111.9	110.9
72.5°	106.5	106.3	109.5	111.6	111.8	105.8	101.4	98.1	95.5
75°	84.5	85.5	87.5	87.5	87.5	83.5	80.4	77.3	75.3
77.5°	62.9	63.9	65.7	67.6	66.6	63.0	59.8	56.8	55.0
80°	49.9	50.9	51.9	52.9	51.9	49.9	46.8	43.7	42.7
82.5°	36.8	37.0	39.7	39.9	38.9	36.9	34.6	31.5	31.3
85°	18.3	19.3	21.4	21.4	20.4	19.4	17.3	15.2	14.2
87.5°	4.1	4.9	6.5	8.1	6.5	6.5	4.9	3.2	2.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.5	0.5	1.1	1.7	2.7	10.2	11.4	10.3	9.8
95°	2.7	2.7	4.1	12.9	12.9	20.9	28.6	27.9	27.9
97.5°	6.1	6.8	9.5	39.4	29.4	28.6	40.8	44.9	45.3
100°	8.8	9.5	15.0	64.1	43.5	36.9	43.5	53.1	55.1
102.5°	12.1	13.3	23.7	101.3	61.5	44.2	51.1	58.0	60.0
105°	18.4	20.4	49.7	169.7	93.9	58.6	64.6	68.0	68.7
107.5°	27.6	35.1	135.9	238.6	133.2	77.6	81.1	83.4	84.2
110°	37.4	53.4	236.0	280.3	162.6	92.1	89.8	95.9	94.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	63.0	109.8	346.5	314.4	191.9	109.2	97.9	107.9	108.7
115°	176.2	302.5	463.2	363.0	236.7	138.9	110.9	120.5	124.5
117.5°	442.1	526.0	524.7	408.0	279.7	173.9	126.4	131.0	135.5
120°	594.4	607.1	555.7	438.4	307.4	199.0	139.4	137.5	141.5
122.5°	651.0	640.8	579.1	465.1	335.7	225.2	156.3	144.5	148.0
125°	699.9	679.9	609.4	503.2	377.5	263.8	187.0	159.8	159.2
127.5°	726.9	706.1	639.1	536.2	415.8	303.8	222.0	181.5	175.3
130°	740.0	720.7	659.7	556.5	441.4	331.0	247.6	200.4	191.1
132.5°	755.8	734.9	674.4	577.2	465.9	356.6	273.1	223.2	212.3
135°	771.3	752.0	698.5	604.3	500.6	394.2	310.1	260.9	246.9
137.5°	785.2	767.5	720.5	625.6	531.9	431.2	349.3	301.3	284.3
140°	794.4	775.1	729.8	642.0	550.9	454.5	375.4	327.5	314.2
142.5°	797.7	785.8	739.6	655.8	572.1	476.8	401.6	352.0	339.8
145°	807.3	799.3	751.6	672.3	597.2	510.0	441.4	390.1	376.8
147.5°	813.6	801.6	762.6	690.1	621.6	539.9	477.6	428.3	416.0
150°	814.1	804.8	771.3	701.2	638.0	561.5	499.9	453.4	442.1
152.5°	818.5	807.0	775.6	710.5	649.9	579.8	522.2	478.9	466.6
155°	815.5	807.5	782.2	722.4	668.6	603.4	553.6	515.3	504.7
157.5°	815.5	805.6	783.0	731.8	686.5	629.3	583.0	547.6	539.6
160°	810.0	806.1	783.5	738.3	695.8	643.9	602.6	570.4	559.8
162.5°	807.9	801.2	784.6	742.8	703.9	655.8	619.5	589.0	581.0
165°	798.5	792.5	778.1	744.8	716.9	677.0	644.1	616.8	612.8
167.5°	787.7	783.1	773.6	748.1	725.4	692.9	665.2	643.2	637.7
170°	780.1	772.8	769.2	749.7	729.8	702.5	678.8	658.9	652.9
172.5°	767.1	766.1	763.3	745.6	733.6	711.1	691.3	673.1	669.3
175°	751.6	751.6	753.6	742.6	738.6	720.0	706.0	695.0	689.0
177.5°	733.6	734.1	738.5	738.0	738.5	727.9	723.8	713.4	712.4
180°	729.8	729.8	729.8	729.8	729.8	729.8	729.8	729.8	729.8

(END OF REPORT)