

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: P511754

Luminaire Tested: **SQW-F-050U-025D-940-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511754
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-940-1D-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, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

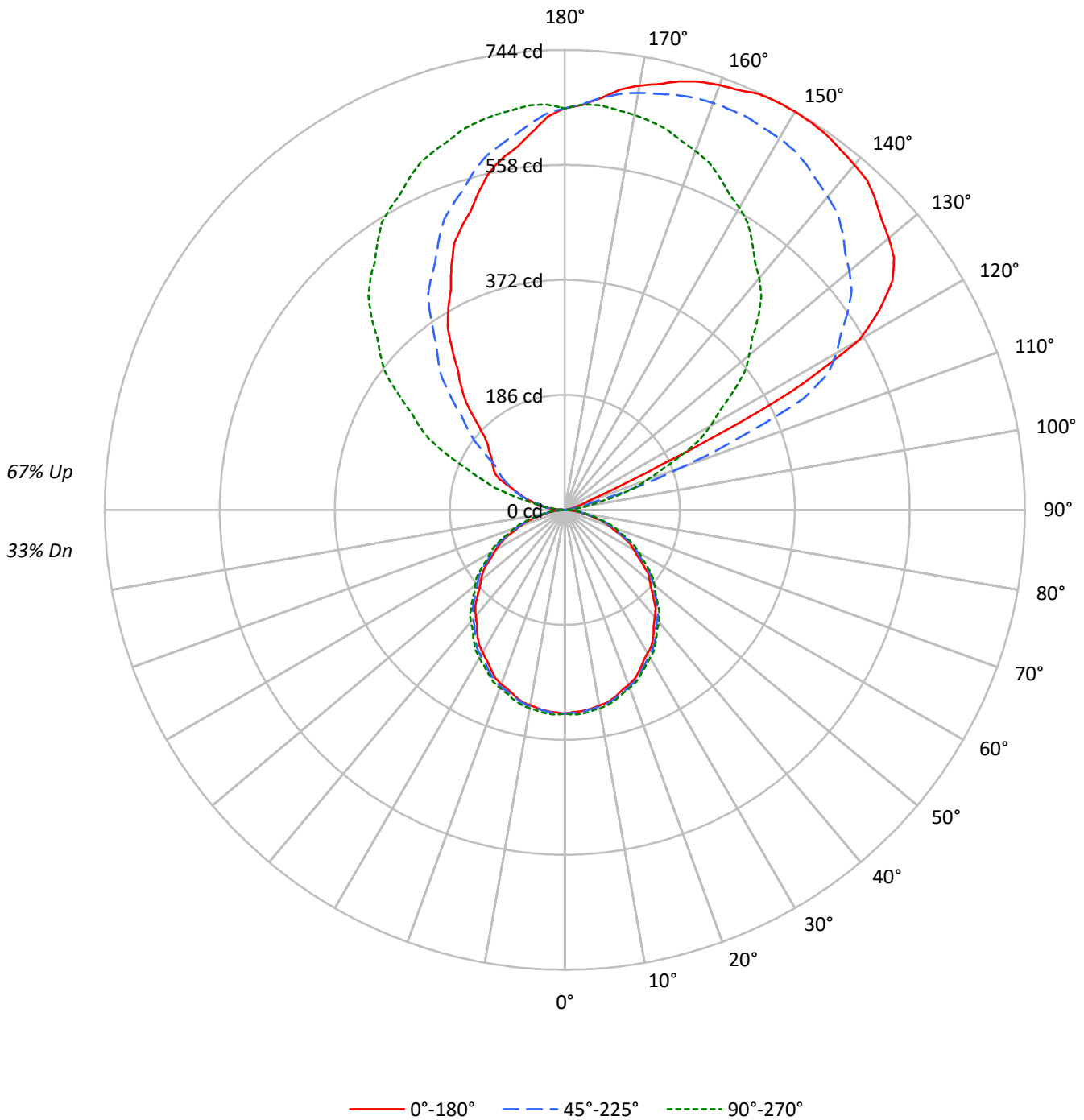
Lumens per Lamp: N/A
Luminaire Lumens: 2703.4 lumens
Efficiency: N/A
Efficacy: 116.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Semi-Indirect

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°	10640	10640	10640
5°	10593	10736	10593
10°	10542	10686	10516
15°	10484	10631	10427
20°	10354	10536	10323
25°	10201	10422	10108
30°	9986	10314	9918
35°	9828	10139	9725
40°	9544	9991	9434
45°	9293	9695	9175
50°	9028	9515	8897
55°	8681	9272	8681
60°	8305	8990	8305
65°	7878	8619	7878
70°	7317	8148	7232
75°	6376	7361	6488
80°	5244	6062	5411
85°	2927	4261	3594



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.1	1.2
10°-20°	88.6	3.3
20°-30°	132.8	4.9
30°-40°	157.6	5.8
40°-50°	160.1	5.9
50°-60°	142.7	5.3
60°-70°	106.5	3.9
70°-80°	58.6	2.2
80°-90°	14.1	0.5
90°-100°	15.9	0.6
100°-110°	73.0	2.7
110°-120°	213.9	7.9
120°-130°	321.9	11.9
130°-140°	345.7	12.8
140°-150°	329.9	12.2
150°-160°	271.5	10.0
160°-170°	177.8	6.6
170°-180°	61.6	2.3
0°-30°	252.5	9.3
0°-40°	410.1	15.2
0°-60°	712.9	26.4
0°-90°	892.2	33.0
90°-120°	302.7	11.2
90°-150°	1300.3	48.1
90°-180°	1811.0	67.0
0°-180°	2703.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	330	330	330	330	330	
5°	327	328	331	328	327	31
15°	314	315	318	314	312	88
25°	286	290	292	289	284	132
35°	249	255	257	253	247	155
45°	204	210	212	208	201	157
55°	154	161	165	159	154	138
65°	103	108	113	108	103	102
75°	51	55	59	55	52	55
85°	8	11	12	12	10	11
90°	1	1	1	2	4	1
95°	4	5	12	20	19	5
105°	20	47	84	55	59	23
115°	172	426	208	104	115	229
125°	647	559	331	156	144	568
135°	710	635	443	263	202	548
145°	740	681	528	377	318	463
155°	742	700	593	482	434	343
165°	718	695	637	567	534	203
175°	669	669	657	628	612	65
180°	650	650	650	650	650	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5
2.5°	327.4	328.7	328.8	328.8	331.6	328.8	328.8	328.8	328.1
5°	326.8	326.8	327.7	327.8	331.2	327.8	327.7	326.8	326.8
7.5°	324.4	324.5	325.4	325.3	328.1	324.4	324.5	324.4	324.2
10°	321.5	322.4	323.3	322.5	325.9	321.6	322.4	321.5	320.7
12.5°	318.7	319.6	320.5	319.7	323.1	319.5	319.6	318.7	318.5
15°	313.6	314.5	315.4	314.6	318.0	313.7	313.6	312.7	311.9
17.5°	306.2	307.8	309.0	308.2	311.5	307.4	308.2	306.0	304.6
20°	301.3	302.1	304.8	304.0	306.6	303.1	303.9	300.4	300.4
22.5°	295.6	296.5	299.2	298.4	301.6	297.5	298.3	294.7	294.1
25°	286.3	287.2	289.8	289.0	292.5	288.2	288.9	284.5	283.7
27.5°	275.6	276.6	280.8	280.0	283.7	278.5	279.3	274.8	273.8
30°	267.8	269.5	273.1	272.3	276.6	271.4	272.2	267.8	266.0
32.5°	260.8	262.5	265.3	265.9	268.9	264.4	264.5	260.0	258.3
35°	249.3	251.0	254.6	254.7	257.2	252.9	252.8	248.4	246.7
37.5°	236.3	237.8	241.7	242.8	244.7	240.8	239.8	235.3	233.6
40°	226.4	227.3	232.6	234.4	237.0	230.9	229.9	225.5	223.8
42.5°	217.2	218.8	223.4	224.5	226.4	222.4	220.8	216.3	214.6
45°	203.5	205.2	209.7	211.4	212.3	208.9	207.9	203.4	200.9
47.5°	189.6	191.3	195.7	197.7	198.6	196.0	193.3	189.5	186.9
50°	179.7	181.4	185.9	188.5	189.4	186.8	184.1	179.7	177.1
52.5°	170.5	171.6	176.0	179.4	179.5	177.6	174.2	169.8	167.9
55°	154.2	156.7	161.2	164.7	164.7	163.0	159.4	155.0	154.2
57.5°	139.9	140.9	145.4	148.9	149.1	148.0	144.5	140.0	139.2
60°	128.6	130.3	134.8	138.3	139.2	137.5	133.9	129.5	128.6
62.5°	119.5	119.8	124.2	127.8	128.6	126.9	123.3	119.6	118.0
65°	103.1	103.9	107.5	111.9	112.8	111.0	107.5	103.9	103.1
67.5°	87.4	88.3	91.6	95.9	96.9	95.2	90.7	88.1	87.2
70°	77.5	78.4	81.0	84.6	86.3	84.6	80.2	77.5	76.6
72.5°	67.0	67.8	70.5	74.0	75.1	73.3	69.6	67.6	66.8
75°	51.1	52.8	54.6	58.2	59.0	58.2	54.6	52.8	52.0
77.5°	37.4	38.2	40.0	42.5	43.2	42.5	40.9	38.2	38.2
80°	28.2	29.1	30.8	32.6	32.6	32.6	31.7	29.1	29.1
82.5°	19.7	20.6	21.7	24.1	23.4	24.1	23.3	21.3	20.6
85°	7.9	8.8	10.6	12.3	11.5	12.3	11.5	9.7	9.7
87.5°	0.9	1.6	1.6	3.7	3.7	4.4	3.2	2.7	2.8
90°	0.9	0.9	0.9	0.9	0.9	0.9	1.8	2.7	3.6
92.5°	2.4	2.4	2.4	3.1	3.1	7.3	5.4	4.9	5.8
95°	4.5	4.5	5.4	13.6	11.8	18.0	20.0	19.1	19.1
97.5°	8.0	8.0	10.3	36.1	26.7	24.5	33.6	34.7	34.3
100°	10.9	10.9	15.4	57.6	39.0	31.9	37.2	42.7	44.5
102.5°	13.8	14.5	23.4	89.2	55.0	40.8	42.3	47.8	49.5
105°	20.0	21.7	47.2	150.0	83.5	54.2	55.3	56.3	59.0
107.5°	29.6	36.1	119.6	214.1	117.8	71.1	73.5	70.6	70.8
110°	39.0	54.1	202.3	255.1	142.5	83.0	84.4	80.8	81.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	63.7	107.2	307.6	287.6	168.6	97.1	92.4	96.0	94.0
115°	171.5	279.7	425.5	334.6	207.8	120.8	104.3	112.6	115.2
117.5°	409.7	482.9	481.1	374.4	246.8	149.6	115.4	123.1	127.6
120°	549.8	560.5	507.2	399.1	272.2	169.3	123.4	128.9	133.4
122.5°	604.3	591.5	529.0	421.6	296.2	190.4	134.3	133.3	138.5
125°	646.9	623.9	558.9	452.7	331.2	225.6	156.1	141.6	144.3
127.5°	671.1	645.5	584.7	481.9	366.7	260.8	184.9	155.3	153.7
130°	684.1	659.3	600.7	500.1	389.2	285.4	206.0	166.8	162.4
132.5°	695.0	672.3	615.2	517.7	411.0	309.4	228.5	184.2	176.2
135°	710.4	689.1	635.1	541.3	442.8	343.4	263.1	213.9	202.3
137.5°	723.5	701.9	652.0	563.7	470.2	376.7	296.9	250.1	236.6
140°	728.6	709.1	661.4	576.9	489.1	397.7	319.4	272.0	261.3
142.5°	733.7	714.9	670.2	590.0	505.0	417.9	342.6	295.2	283.8
145°	739.5	720.8	681.4	607.0	528.1	447.3	377.4	329.1	317.6
147.5°	742.6	725.9	689.8	621.4	550.6	474.4	411.7	363.1	352.6
150°	744.0	728.0	694.1	630.9	564.4	492.5	432.8	386.3	376.5
152.5°	744.0	727.3	696.3	638.3	576.0	509.1	453.1	408.8	399.8
155°	742.2	726.2	700.5	647.5	593.4	533.1	481.8	443.5	433.7
157.5°	734.9	725.4	700.5	656.0	608.5	555.4	509.7	475.6	466.9
160°	731.3	722.4	700.5	660.5	617.9	569.1	527.2	495.2	487.2
162.5°	726.2	717.4	699.0	663.5	625.9	581.3	543.9	512.7	506.8
165°	717.7	708.8	695.0	666.2	636.9	598.8	567.1	540.6	534.4
167.5°	705.5	700.6	689.4	667.1	643.7	614.4	586.7	565.5	560.5
170°	696.8	693.3	685.0	666.5	648.7	623.0	599.7	581.5	578.0
172.5°	685.9	683.8	678.5	665.9	652.4	631.6	612.1	594.6	591.8
175°	668.7	670.5	668.7	663.1	656.9	642.7	627.9	615.1	612.4
177.5°	655.5	655.5	656.9	656.9	656.2	649.1	642.4	635.2	636.6
180°	649.6	649.6	649.6	649.6	649.6	649.6	649.6	649.6	649.6

(END OF REPORT)