

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: P511766

Luminaire Tested: **SQW-F-050U-075D-940-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511766
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-075D-940-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

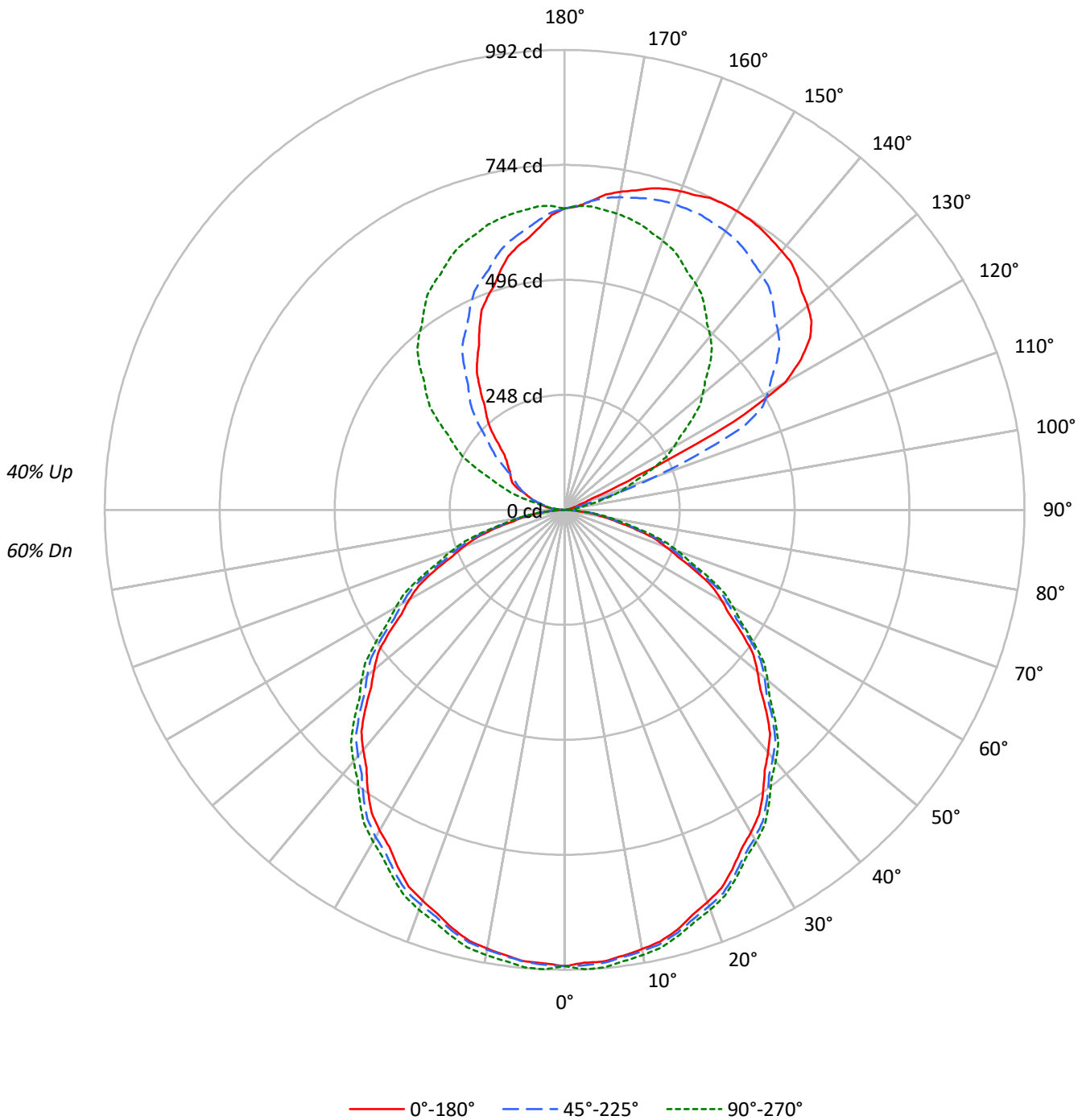
Lumens per Lamp: N/A
Luminaire Lumens: 4492.5 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 41.6
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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60
1	100	96	92	88	93	89	86	83	78	75	73	67	65	64	57	56	55	50
2	91	83	77	72	85	78	73	68	68	64	60	59	56	53	50	48	46	42
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39	35
4	76	65	57	50	70	61	54	48	53	48	43	46	42	38	40	36	34	30
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	32	29	26
6	64	52	43	37	60	49	41	36	43	37	32	37	33	29	32	29	26	23
7	59	47	39	33	55	44	37	31	39	33	28	34	29	26	30	26	23	20
8	55	42	35	29	51	40	33	28	35	30	25	31	26	23	27	23	20	18
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	18	16
10	48	36	28	23	45	34	27	22	30	24	20	27	22	19	23	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	31775	31775	31775
5°	31696	32098	31696
10°	31544	31977	31514
15°	31365	31776	31248
20°	30938	31543	30818
25°	30478	31201	30321
30°	29957	30811	29759
35°	29416	30350	29172
40°	28779	29858	28483
45°	28081	29328	27757
50°	27264	28721	26952
55°	26387	27969	26038
60°	25259	27138	24975
65°	23763	26048	23557
70°	21961	24538	21791
75°	19127	21984	19127
80°	15398	18354	15900
85°	8818	12412	10448



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.0	2.1
10°-20°	265.1	5.9
20°-30°	397.2	8.8
30°-40°	472.3	10.5
40°-50°	483.5	10.8
50°-60°	431.1	9.6
60°-70°	322.1	7.2
70°-80°	175.6	3.9
80°-90°	41.6	0.9
90°-100°	15.9	0.4
100°-110°	73.0	1.6
110°-120°	213.9	4.8
120°-130°	321.9	7.2
130°-140°	345.7	7.7
140°-150°	329.9	7.3
150°-160°	271.5	6.0
160°-170°	177.8	4.0
170°-180°	61.6	1.4
0°-30°	755.3	16.8
0°-40°	1227.6	27.3
0°-60°	2142.1	47.7
0°-90°	2681.3	59.7
90°-120°	302.7	6.7
90°-150°	1300.3	28.9
90°-180°	1811.0	40.3
0°-180°	4492.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	984	984	984	984	984	
5°	978	980	990	979	978	93
15°	938	944	950	940	935	264
25°	855	869	876	865	851	394
35°	746	761	770	757	740	466
45°	615	633	642	626	608	474
55°	469	487	497	482	462	418
65°	311	327	341	325	308	308
75°	153	165	176	166	153	164
85°	24	31	34	34	28	34
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	



TEST NUMBER: P511766

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	984.0	984.0	984.0	984.0	984.0	984.0	984.0	984.0	984.0
2.5°	977.7	982.5	983.3	982.1	991.8	982.8	982.6	982.5	979.1
5°	977.8	977.8	980.5	979.0	990.2	979.0	978.7	977.0	977.8
7.5°	969.7	970.8	972.7	971.0	981.5	970.2	970.8	968.2	969.6
10°	962.0	963.7	966.4	964.0	975.2	963.1	963.7	961.1	961.1
12.5°	953.5	955.3	958.6	955.5	966.7	955.4	955.3	951.9	951.9
15°	938.2	939.9	943.5	940.2	950.5	938.5	940.0	935.5	934.7
17.5°	916.5	920.1	924.8	921.5	932.0	919.8	920.6	914.6	913.0
20°	900.3	904.6	910.0	906.7	917.9	905.0	906.5	897.7	896.8
22.5°	883.4	887.0	894.5	891.2	901.7	889.5	891.0	879.3	879.2
25°	855.4	858.8	868.6	866.2	875.7	863.6	865.1	851.8	851.0
27.5°	825.3	829.7	839.5	837.3	846.8	833.8	835.3	821.0	819.3
30°	803.4	808.6	818.4	816.8	826.3	813.4	814.9	799.9	798.1
32.5°	780.2	786.7	796.5	795.7	804.5	792.2	791.6	777.3	774.9
35°	746.2	751.3	761.1	762.2	769.9	758.7	756.7	742.6	740.0
37.5°	708.8	714.1	724.0	726.2	732.9	721.9	718.7	704.5	701.8
40°	682.7	688.8	698.6	702.2	708.3	697.9	693.3	679.1	675.7
42.5°	655.9	662.7	673.2	676.9	682.2	671.9	666.5	653.0	648.9
45°	614.9	621.8	633.4	637.9	642.2	632.7	626.3	612.2	607.8
47.5°	572.3	579.1	591.1	596.6	599.9	592.2	584.8	570.6	565.4
50°	542.7	549.5	562.9	569.1	571.7	564.0	555.9	541.7	536.5
52.5°	513.8	520.0	533.3	540.2	542.1	535.8	527.0	513.5	507.6
55°	468.7	474.7	487.2	495.1	496.8	491.7	481.9	467.7	462.5
57.5°	422.1	428.2	440.5	449.3	451.2	446.0	435.4	422.9	417.0
60°	391.1	397.2	408.8	417.6	420.2	415.0	404.4	391.9	386.7
62.5°	359.4	364.1	376.3	385.2	389.2	384.7	373.3	359.5	355.0
65°	311.0	316.1	326.8	337.5	340.9	337.5	325.1	312.6	308.3
67.5°	264.3	267.7	277.5	288.0	292.3	288.5	277.3	264.6	261.8
70°	232.6	236.0	245.8	255.6	259.9	254.7	244.9	234.3	230.8
72.5°	199.4	202.9	212.0	221.7	225.3	220.2	211.8	202.5	198.4
75°	153.3	156.7	164.7	172.7	176.2	172.7	165.6	157.6	153.3
77.5°	110.3	113.6	120.5	127.4	129.0	126.7	121.7	114.8	111.5
80°	82.8	85.4	91.6	97.8	98.7	97.8	94.3	88.0	85.5
82.5°	58.1	60.0	66.2	71.0	70.5	72.4	68.9	63.4	61.5
85°	23.8	25.5	30.8	36.1	33.5	37.8	34.4	30.8	28.2
87.5°	3.0	3.0	5.8	10.0	9.3	12.1	9.5	7.6	6.4
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)