

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: P511778

Luminaire Tested: **SQW-F-050U-125D-940-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511778
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-125D-940-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

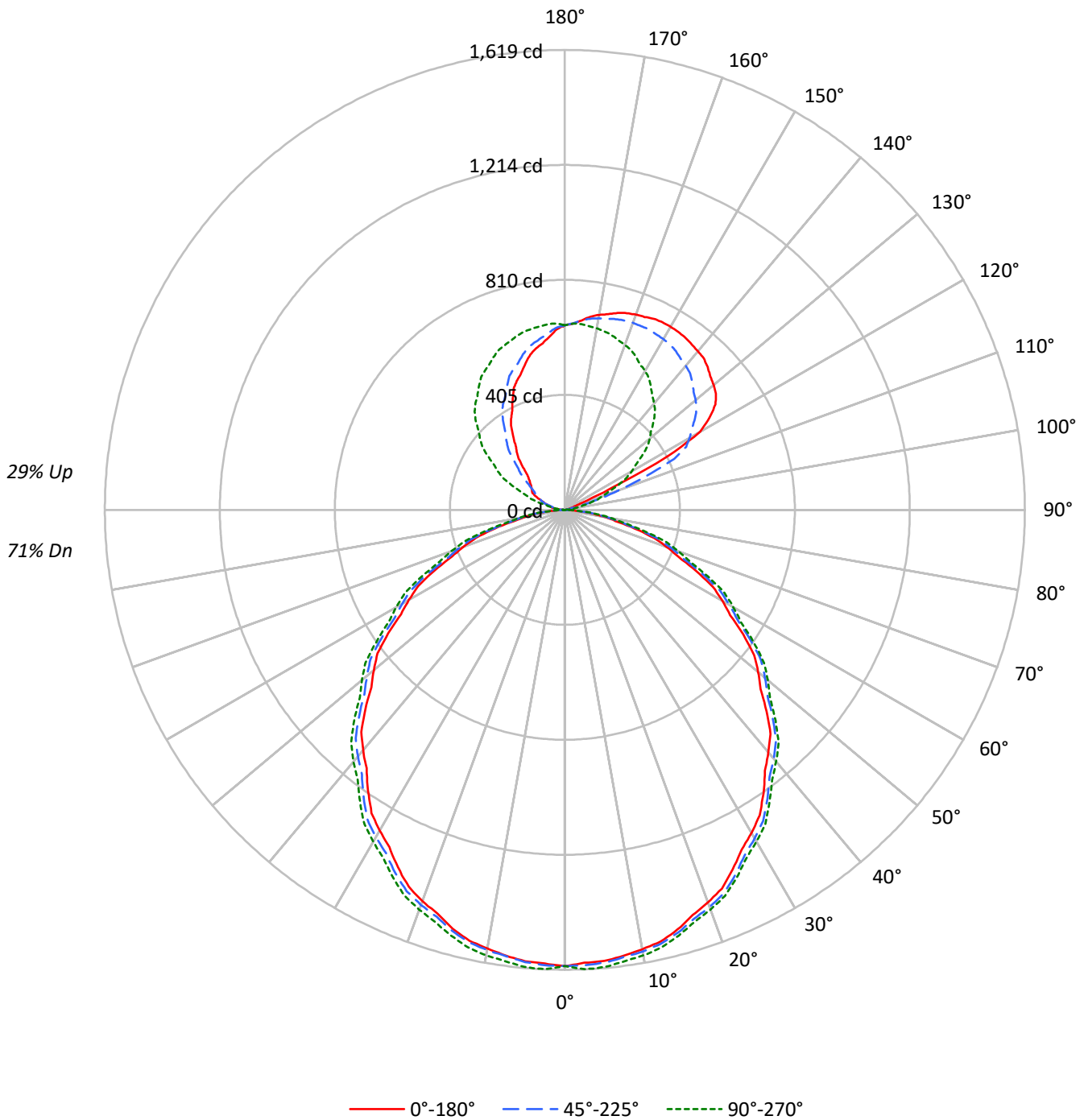
Lumens per Lamp: N/A
Luminaire Lumens: 6190.7 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 61.2
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	50	30	10	0	
RCR																						
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75	75	75	75	71	
1	102	98	94	90	97	93	89	86	83	81	78	75	72	71	66	65	63	63	63	63	60	
2	93	85	79	74	88	81	75	71	73	68	64	65	62	59	58	56	53	53	53	53	50	
3	85	75	67	61	80	71	64	59	64	59	54	58	53	50	52	48	45	45	45	45	42	
4	78	66	58	52	73	63	56	50	57	51	46	51	46	42	46	42	39	39	39	39	36	
5	71	59	51	44	67	56	49	43	51	45	40	46	41	37	41	37	34	34	34	34	31	
6	66	53	45	39	62	51	43	37	46	40	35	42	36	32	38	33	30	30	30	30	27	
7	61	48	40	34	57	46	38	33	42	35	31	38	33	29	34	30	26	26	26	26	24	
8	57	44	36	30	53	42	34	29	38	32	27	35	29	25	31	27	24	24	24	24	21	
9	53	40	32	27	50	38	31	26	35	29	25	32	27	23	29	25	21	21	21	21	19	
10	49	37	29	24	47	35	28	24	32	26	22	30	24	21	27	23	19	19	19	19	17	

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	51861	51861	51861
5°	51686	52370	51715
10°	51503	52225	51418
15°	51156	51862	51039
20°	50557	51464	50375
25°	49782	50944	49497
30°	48977	50290	48582
35°	48027	49521	47577
40°	46976	48760	46568
45°	45823	47873	45339
50°	44611	46821	44078
55°	43148	45580	42703
60°	41308	44208	40907
65°	38976	42476	38701
70°	36010	40004	35764
75°	31653	36157	31765
80°	25551	29977	26221
85°	14672	20563	17636



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.8	2.5
10°-20°	432.6	7.0
20°-30°	648.4	10.5
30°-40°	771.1	12.5
40°-50°	789.6	12.8
50°-60°	704.1	11.4
60°-70°	525.9	8.5
70°-80°	288.2	4.7
80°-90°	67.7	1.1
90°-100°	15.9	0.3
100°-110°	73.0	1.2
110°-120°	213.9	3.5
120°-130°	321.9	5.2
130°-140°	345.7	5.6
140°-150°	329.9	5.3
150°-160°	271.5	4.4
160°-170°	177.8	2.9
170°-180°	61.6	1.0
0°-30°	1232.8	19.9
0°-40°	2004.0	32.4
0°-60°	3497.6	56.5
0°-90°	4379.5	70.7
90°-120°	302.7	4.9
90°-150°	1300.3	21.0
90°-180°	1811.0	29.3
0°-180°	6190.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1606	1606	1606	1606	1606	
5°	1594	1600	1616	1598	1595	151
15°	1530	1541	1551	1534	1527	431
25°	1397	1418	1430	1411	1389	644
35°	1218	1243	1256	1235	1207	761
45°	1003	1035	1048	1023	993	774
55°	766	796	810	788	758	684
65°	510	535	556	530	506	505
75°	254	273	290	270	255	270
85°	40	53	56	55	48	56
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: P511778

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0
2.5°	1596.1	1603.7	1604.5	1603.5	1618.6	1604.2	1604.5	1603.0	1598.9
5°	1594.5	1596.2	1599.8	1597.6	1615.6	1596.7	1598.0	1594.5	1595.4
7.5°	1583.4	1584.6	1588.5	1584.3	1602.6	1584.2	1584.6	1581.0	1582.9
10°	1570.7	1573.3	1578.6	1573.8	1592.7	1572.9	1573.4	1568.9	1568.1
12.5°	1556.6	1557.8	1564.5	1559.7	1577.2	1558.1	1559.3	1552.8	1553.3
15°	1530.2	1534.5	1540.8	1533.2	1551.3	1532.4	1533.7	1527.5	1526.7
17.5°	1495.8	1503.4	1509.8	1502.2	1520.1	1500.7	1501.8	1493.3	1490.5
20°	1471.2	1478.1	1487.9	1480.4	1497.6	1476.1	1480.0	1465.9	1465.9
22.5°	1443.7	1447.8	1461.8	1453.6	1471.5	1450.0	1453.2	1435.6	1436.3
25°	1397.2	1403.2	1418.3	1411.7	1429.8	1407.4	1411.3	1391.0	1389.2
27.5°	1348.0	1355.1	1370.7	1364.6	1382.5	1360.3	1363.2	1340.9	1338.1
30°	1313.5	1321.2	1335.5	1331.5	1348.7	1327.2	1329.3	1306.4	1302.9
32.5°	1275.4	1284.6	1298.9	1298.3	1312.8	1293.3	1293.4	1269.7	1265.6
35°	1218.3	1227.0	1243.0	1243.3	1256.2	1236.4	1235.1	1212.1	1206.9
37.5°	1157.4	1167.2	1183.6	1185.8	1197.5	1179.1	1173.8	1150.8	1146.3
40°	1114.4	1125.6	1143.5	1146.3	1156.7	1136.9	1132.9	1109.9	1104.7
42.5°	1071.4	1082.6	1100.5	1104.7	1113.7	1097.3	1089.2	1066.2	1060.3
45°	1003.4	1015.4	1035.1	1041.4	1048.3	1033.7	1022.8	999.7	992.8
47.5°	934.5	945.7	966.2	974.9	979.3	966.8	955.5	931.5	923.9
50°	888.0	899.2	919.7	927.7	932.0	921.7	908.2	884.3	877.4
52.5°	839.4	850.6	871.1	880.5	884.1	875.2	861.7	837.8	830.9
55°	766.4	775.9	796.4	807.9	809.6	803.6	787.6	764.5	758.5
57.5°	690.3	699.6	719.9	732.3	735.2	729.2	712.2	689.3	684.1
60°	639.6	648.2	667.8	680.2	684.5	678.5	660.7	638.6	633.4
62.5°	588.1	596.0	614.9	628.1	633.7	627.0	608.6	587.1	581.9
65°	510.1	517.0	534.7	552.4	555.9	548.1	530.3	510.0	506.5
67.5°	432.9	438.1	454.7	472.1	476.6	468.7	450.3	433.0	428.8
70°	381.4	386.6	402.6	418.6	423.7	415.1	398.2	382.2	378.8
72.5°	330.0	334.5	350.4	365.0	370.2	362.9	346.0	331.5	328.1
75°	253.7	258.9	273.1	286.4	289.8	284.7	270.4	258.0	254.6
77.5°	182.5	185.8	198.0	208.3	211.2	207.5	196.6	185.7	183.9
80°	137.4	140.0	151.5	160.4	161.2	159.5	151.5	142.7	141.0
82.5°	95.8	99.1	109.9	117.3	115.4	116.4	110.6	102.5	101.5
85°	39.6	41.4	52.9	59.8	55.5	59.8	54.6	48.4	47.6
87.5°	4.4	5.1	9.3	17.0	15.0	18.4	15.2	11.1	11.3
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)