

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: P511773

Luminaire Tested: **SQW-F-050U-125D-830-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511773
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-830-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

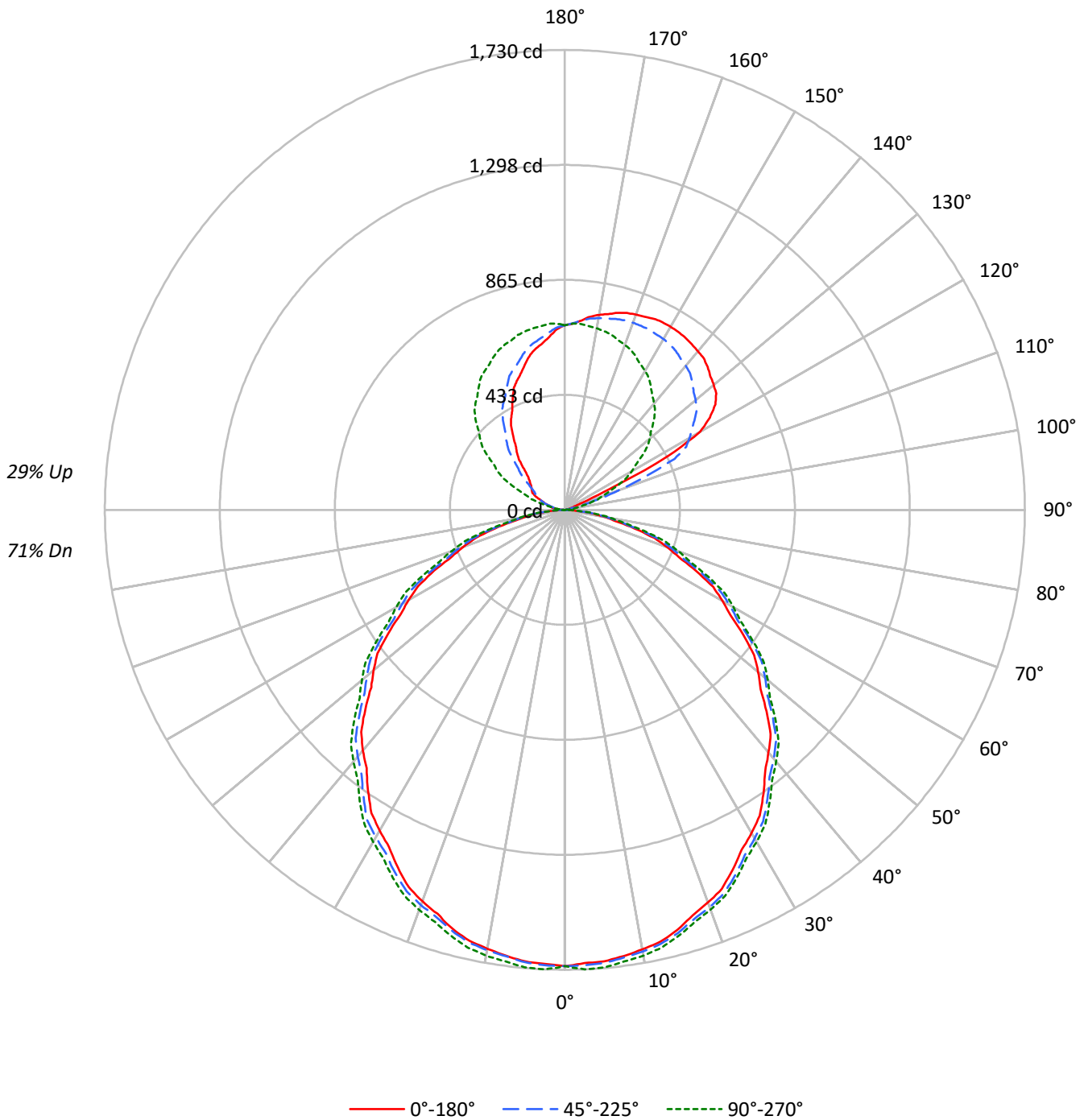
Lumens per Lamp: N/A
Luminaire Lumens: 6617.9 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Semi-Direct

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				
RC	80					70					50					30				
RW	70	50	30	10	70	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	71		
1	102	98	94	90	97	93	89	86	83	81	78	75	72	71	66	65	63	60		
2	93	85	79	74	88	81	75	71	73	68	64	65	62	59	58	56	53	50		
3	85	75	67	61	80	71	64	59	64	59	54	58	53	50	52	48	45	42		
4	78	66	58	52	73	63	56	50	57	51	46	51	46	42	46	42	39	36		
5	71	59	51	44	67	56	49	43	51	45	40	46	41	37	41	37	34	31		
6	66	53	45	39	62	51	43	37	46	40	35	42	36	32	38	33	30	27		
7	61	48	40	34	57	46	38	33	42	35	31	38	33	29	34	30	26	24		
8	57	44	36	30	53	42	34	29	38	32	27	35	29	25	31	27	24	21		
9	53	40	32	27	50	38	31	26	35	29	25	32	27	23	29	25	21	19		
10	49	37	29	24	47	35	28	24	32	26	22	30	24	21	27	23	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	55439	55439	55439
5°	55255	55988	55284
10°	55058	55832	54966
15°	54686	55442	54559
20°	54045	55017	53852
25°	53217	54457	52914
30°	52355	53761	51934
35°	51342	52939	50861
40°	50218	52123	49780
45°	48983	51180	48467
50°	47690	50056	47123
55°	46126	48727	45647
60°	44156	47256	43730
65°	41666	45402	41376
70°	38502	42770	38229
75°	33837	38653	33961
80°	27318	32041	28024
85°	15710	21971	18859



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.3	2.5
10°-20°	462.5	7.0
20°-30°	693.1	10.5
30°-40°	824.4	12.5
40°-50°	844.1	12.8
50°-60°	752.6	11.4
60°-70°	562.2	8.5
70°-80°	308.0	4.7
80°-90°	72.4	1.1
90°-100°	17.0	0.3
100°-110°	78.0	1.2
110°-120°	228.6	3.5
120°-130°	344.1	5.2
130°-140°	369.6	5.6
140°-150°	352.7	5.3
150°-160°	290.2	4.4
160°-170°	190.0	2.9
170°-180°	65.9	1.0
0°-30°	1317.9	19.9
0°-40°	2142.3	32.4
0°-60°	3739.0	56.5
0°-90°	4681.8	70.7
90°-120°	323.6	4.9
90°-150°	1390.0	21.0
90°-180°	1936.0	29.3
0°-180°	6617.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1717	1717	1717	1717	1717	
5°	1705	1710	1727	1708	1706	162
15°	1636	1647	1658	1640	1632	461
25°	1494	1516	1528	1509	1485	688
35°	1302	1329	1343	1320	1290	814
45°	1073	1106	1121	1093	1061	827
55°	819	851	866	842	811	731
65°	545	572	594	567	542	540
75°	271	292	310	289	272	289
85°	42	56	59	58	51	60
90°	1	1	1	2	4	1
95°	5	6	13	21	20	6
105°	21	50	89	59	63	25
115°	183	455	222	112	123	245
125°	692	598	354	167	154	608
135°	760	679	473	281	216	586
145°	790	728	564	404	340	495
155°	793	749	634	515	464	366
165°	767	743	681	606	571	218
175°	715	715	702	671	655	69
180°	694	694	694	694	694	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1716.8	1716.8	1716.8	1716.8	1716.8	1716.8	1716.8	1716.8	1716.8
2.5°	1706.3	1714.4	1715.3	1714.2	1730.4	1714.9	1715.3	1713.7	1709.3
5°	1704.6	1706.4	1710.2	1707.8	1727.2	1706.9	1708.3	1704.6	1705.5
7.5°	1692.7	1694.0	1698.2	1693.7	1713.2	1693.5	1694.0	1690.1	1692.1
10°	1679.1	1681.9	1687.6	1682.4	1702.7	1681.5	1682.0	1677.2	1676.3
12.5°	1664.1	1665.3	1672.5	1667.3	1686.1	1665.7	1666.9	1659.9	1660.5
15°	1635.8	1640.4	1647.1	1639.1	1658.4	1638.2	1639.6	1633.0	1632.0
17.5°	1599.1	1607.2	1614.0	1605.9	1625.1	1604.3	1605.5	1596.4	1593.4
20°	1572.7	1580.1	1590.6	1582.5	1601.0	1577.9	1582.1	1567.1	1567.1
22.5°	1543.3	1547.7	1562.7	1553.9	1573.1	1550.1	1553.5	1534.7	1535.4
25°	1493.6	1500.1	1516.2	1509.1	1528.4	1504.5	1508.7	1487.0	1485.1
27.5°	1441.1	1448.6	1465.4	1458.8	1478.0	1454.2	1457.3	1433.5	1430.5
30°	1404.1	1412.4	1427.7	1423.4	1441.8	1418.8	1421.1	1396.5	1392.8
32.5°	1363.5	1373.2	1388.5	1387.9	1403.4	1382.6	1382.7	1357.3	1352.9
35°	1302.4	1311.6	1328.8	1329.1	1342.9	1321.7	1320.3	1295.7	1290.2
37.5°	1237.3	1247.8	1265.3	1267.7	1280.2	1260.5	1254.8	1230.2	1225.4
40°	1191.3	1203.3	1222.4	1225.5	1236.5	1215.3	1211.1	1186.5	1180.9
42.5°	1145.3	1157.3	1176.4	1181.0	1190.6	1173.1	1164.4	1139.7	1133.5
45°	1072.6	1085.5	1106.5	1113.3	1120.7	1105.0	1093.4	1068.7	1061.3
47.5°	999.0	1011.0	1032.9	1042.2	1046.8	1033.6	1021.4	995.8	987.7
50°	949.3	961.2	983.2	991.8	996.4	985.3	970.9	945.3	938.0
52.5°	897.3	909.3	931.2	941.3	945.1	935.6	921.2	895.6	888.3
55°	819.3	829.4	851.3	863.6	865.5	859.0	841.9	817.3	810.8
57.5°	738.0	747.9	769.6	782.8	786.0	779.5	761.3	736.9	731.4
60°	683.7	692.9	713.8	727.1	731.7	725.3	706.3	682.6	677.1
62.5°	628.7	637.2	657.3	671.4	677.5	670.3	650.6	627.6	622.1
65°	545.3	552.6	571.6	590.6	594.2	586.0	566.9	545.2	541.5
67.5°	462.8	468.3	486.1	504.7	509.5	501.0	481.4	462.9	458.4
70°	407.8	413.3	430.4	447.5	453.0	443.8	425.7	408.6	404.9
72.5°	352.8	357.6	374.6	390.2	395.7	388.0	369.9	354.4	350.7
75°	271.2	276.7	291.9	306.2	309.8	304.3	289.1	275.8	272.2
77.5°	195.1	198.6	211.7	222.7	225.8	221.8	210.2	198.5	196.6
80°	146.9	149.7	162.0	171.4	172.3	170.5	162.0	152.5	150.7
82.5°	102.5	106.0	117.5	125.4	123.4	124.5	118.3	109.6	108.5
85°	42.4	44.2	56.5	63.9	59.3	63.9	58.4	51.8	50.9
87.5°	4.7	5.5	10.0	18.2	16.0	19.7	16.2	11.9	12.1
90°	1.0	1.0	1.0	1.0	1.0	1.0	1.9	2.9	3.9
92.5°	2.5	2.5	2.5	3.3	3.3	7.9	5.8	5.3	6.2
95°	4.8	4.8	5.8	14.5	12.6	19.2	21.3	20.4	20.4
97.5°	8.5	8.5	11.1	38.6	28.5	26.2	35.9	37.0	36.7
100°	11.6	11.6	16.5	61.6	41.7	34.1	39.8	45.6	47.5
102.5°	14.7	15.5	25.0	95.4	58.8	43.6	45.2	51.1	53.0
105°	21.3	23.2	50.4	160.4	89.2	57.9	59.2	60.2	63.0
107.5°	31.6	38.6	127.8	228.9	125.9	76.0	78.6	75.5	75.7
110°	41.7	57.8	216.3	272.7	152.3	88.7	90.2	86.3	87.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	68.1	114.6	328.8	307.5	180.2	103.8	98.7	102.6	100.5
115°	183.3	299.0	454.9	357.7	222.1	129.2	111.5	120.3	123.2
117.5°	438.0	516.2	514.3	400.2	263.8	159.9	123.4	131.6	136.4
120°	587.8	599.2	542.2	426.6	291.0	181.0	131.9	137.8	142.6
122.5°	646.0	632.3	565.5	450.7	316.6	203.5	143.6	142.5	148.0
125°	691.6	666.9	597.5	484.0	354.0	241.2	166.8	151.4	154.2
127.5°	717.4	690.1	625.0	515.2	392.1	278.8	197.7	166.0	164.3
130°	731.3	704.8	642.1	534.7	416.1	305.1	220.2	178.4	173.6
132.5°	743.0	718.7	657.6	553.4	439.4	330.7	244.2	196.9	188.4
135°	759.5	736.7	679.0	578.6	473.3	367.1	281.3	228.6	216.3
137.5°	773.4	750.3	697.0	602.6	502.6	402.7	317.4	267.4	253.0
140°	778.9	758.0	707.1	616.7	522.8	425.1	341.4	290.7	279.3
142.5°	784.3	764.2	716.4	630.7	539.9	446.7	366.3	315.5	303.4
145°	790.5	770.6	728.4	648.9	564.5	478.2	403.5	351.8	339.5
147.5°	793.8	776.0	737.4	664.3	588.6	507.2	440.2	388.1	376.9
150°	795.4	778.3	742.0	674.4	603.3	526.5	462.7	413.0	402.5
152.5°	795.4	777.5	744.3	682.3	615.7	544.2	484.4	437.0	427.4
155°	793.4	776.4	748.8	692.2	634.4	569.9	515.0	474.1	463.6
157.5°	785.7	775.4	748.8	701.3	650.5	593.7	544.9	508.4	499.1
160°	781.8	772.3	748.8	706.1	660.5	608.4	563.5	529.4	520.9
162.5°	776.4	766.9	747.3	709.3	669.1	621.5	581.4	548.1	541.8
165°	767.2	757.8	743.0	712.2	680.9	640.1	606.2	577.9	571.3
167.5°	754.2	748.9	737.0	713.1	688.1	656.8	627.2	604.5	599.2
170°	744.9	741.1	732.3	712.5	693.5	666.0	641.1	621.7	617.9
172.5°	733.3	731.0	725.3	711.8	697.4	675.2	654.3	635.6	632.6
175°	714.9	716.8	714.9	708.9	702.2	687.1	671.2	657.6	654.7
177.5°	700.7	700.7	702.2	702.2	701.5	693.9	686.7	679.0	680.5
180°	694.5	694.5	694.5	694.5	694.5	694.5	694.5	694.5	694.5

(END OF REPORT)