

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: P511791

Luminaire Tested: **SQW-F-075U-075D-830-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511791
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-17,
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQW-F-075U-075D-830-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

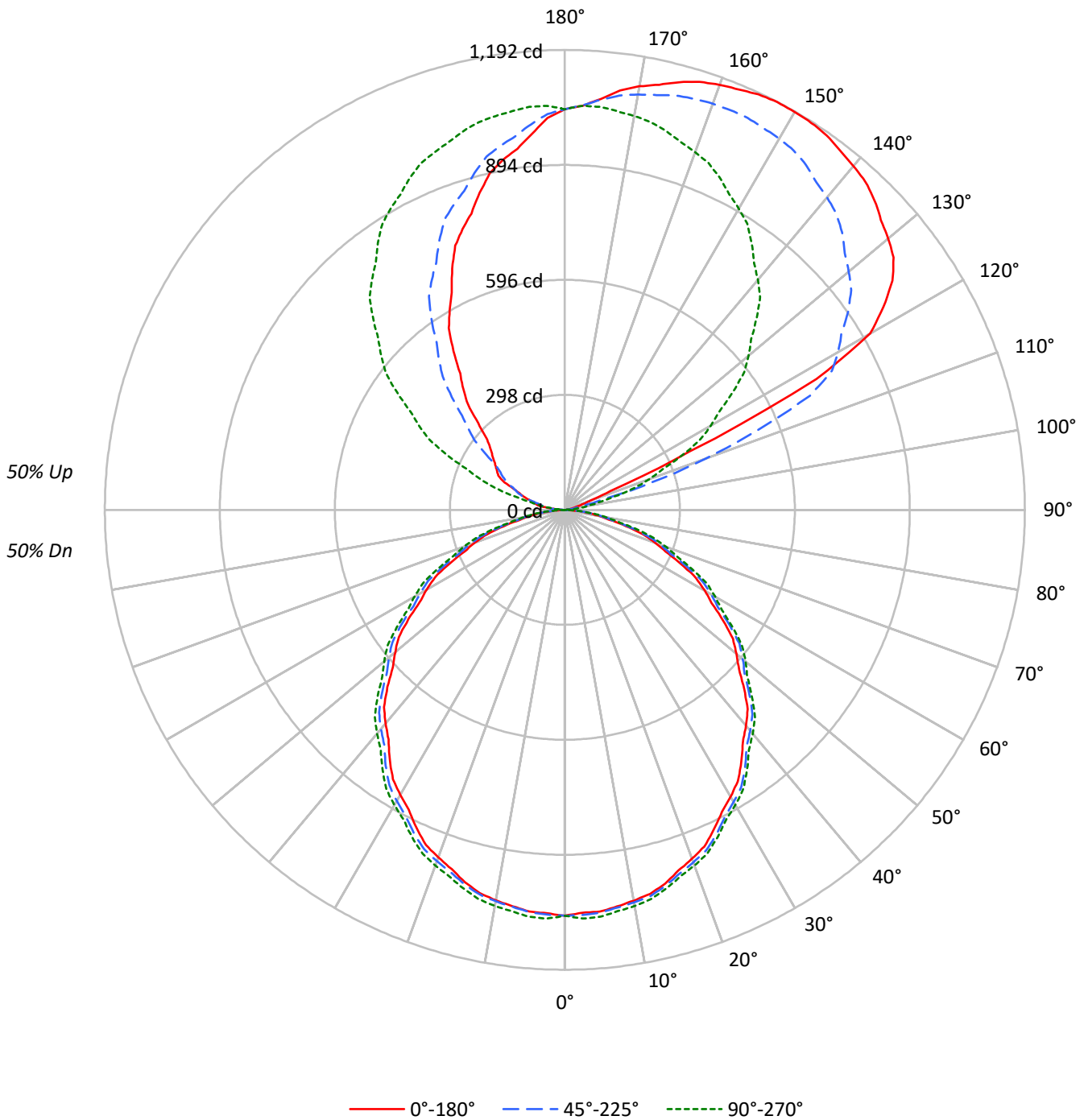
Lumens per Lamp: N/A
Luminaire Lumens: 5776.4 lumens
Efficiency: N/A
Efficacy: 120.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 47.8
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



TEST NUMBER: P511791
CATALOG NUMBER: SQW-F-075U-075D-830-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P511791

CATALOG NUMBER: SQW-F-075U-075D-830-1D-UNV-STD-W-4

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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50				
1	98	93	89	86	90	86	83	80	73	70	68	61	59	57	49	48	47	42				
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	40	35				
3	81	71	64	58	74	66	60	55	56	51	47	47	43	40	38	36	34	29				
4	74	63	55	49	68	59	52	46	50	44	40	42	38	34	34	31	29	25				
5	68	56	48	42	62	52	45	40	45	39	35	37	33	30	31	28	25	22				
6	63	50	42	36	57	47	40	34	40	34	30	34	29	26	28	25	22	19				
7	58	45	37	32	53	42	35	30	36	31	26	31	26	23	25	22	19	17				
8	54	41	33	28	49	38	31	27	33	27	23	28	24	20	23	20	17	15				
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14				
10	47	34	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	33968	33968	33968
5°	33884	34312	33884
10°	33721	34184	33688
15°	33531	33969	33404
20°	33076	33722	32945
25°	32580	33353	32413
30°	32026	32940	31814
35°	31446	32448	31186
40°	30768	31919	30448
45°	30017	31351	29675
50°	29143	30705	28811
55°	28206	29900	27834
60°	27002	29011	26699
65°	25398	27851	25184
70°	23472	26229	23292
75°	20449	23493	20449
80°	16458	19619	16978
85°	9411	13264	11152



TEST NUMBER: P511791

CATALOG NUMBER: SQW-F-075U-075D-830-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.4	1.7
10°-20°	283.4	4.9
20°-30°	424.7	7.4
30°-40°	504.9	8.7
40°-50°	516.8	8.9
50°-60°	460.8	8.0
60°-70°	344.3	6.0
70°-80°	187.7	3.2
80°-90°	44.7	0.8
90°-100°	26.2	0.5
100°-110°	121.4	2.1
110°-120°	354.0	6.1
120°-130°	514.4	8.9
130°-140°	550.4	9.5
140°-150°	526.6	9.1
150°-160°	434.2	7.5
160°-170°	284.0	4.9
170°-180°	98.5	1.7
0°-30°	807.4	14.0
0°-40°	1312.3	22.7
0°-60°	2290.0	39.6
0°-90°	2866.7	49.6
90°-120°	501.6	8.7
90°-150°	2093.1	36.2
90°-180°	2910.0	50.4
0°-180°	5776.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1052	1052	1052	1052	1052	
5°	1045	1048	1058	1046	1045	99
15°	1003	1009	1016	1005	999	282
25°	914	929	936	925	910	421
35°	798	814	823	809	791	498
45°	657	677	686	670	650	507
55°	501	521	531	515	494	447
65°	332	349	364	348	330	329
75°	164	176	188	177	164	175
85°	25	33	36	37	30	36
90°	2	2	1	4	8	1
95°	8	10	20	32	29	8
105°	32	94	135	86	93	39
115°	356	701	337	161	178	418
125°	1036	896	531	246	224	917
135°	1135	1016	703	414	317	876
145°	1184	1090	844	602	503	741
155°	1188	1120	950	769	690	549
165°	1148	1112	1016	904	851	326
175°	1069	1067	1048	1003	978	104
180°	1038	1038	1038	1038	1038	



TEST NUMBER: P511791

CATALOG NUMBER: SQW-F-075U-075D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1051.9	1051.9	1051.9	1051.9	1051.9	1051.9	1051.9	1051.9	1051.9
2.5°	1045.1	1050.3	1051.2	1049.9	1060.2	1050.6	1050.4	1050.3	1046.7
5°	1045.3	1045.3	1048.2	1046.5	1058.5	1046.5	1046.3	1044.4	1045.3
7.5°	1036.7	1037.8	1039.9	1038.1	1049.3	1037.1	1037.8	1035.0	1036.5
10°	1028.4	1030.2	1033.1	1030.5	1042.5	1029.6	1030.3	1027.4	1027.4
12.5°	1019.3	1021.2	1024.8	1021.5	1033.5	1021.3	1021.2	1017.6	1017.6
15°	1003.0	1004.8	1008.6	1005.1	1016.1	1003.2	1004.8	1000.1	999.2
17.5°	979.8	983.7	988.6	985.1	996.4	983.3	984.1	977.7	976.0
20°	962.5	967.1	972.8	969.3	981.3	967.5	969.1	959.6	958.7
22.5°	944.4	948.2	956.2	952.7	964.0	950.9	952.5	940.0	939.9
25°	914.4	918.1	928.6	926.0	936.1	923.2	924.8	910.6	909.7
27.5°	882.2	887.0	897.5	895.1	905.2	891.4	893.0	877.7	875.8
30°	858.9	864.4	874.9	873.2	883.4	869.5	871.1	855.1	853.2
32.5°	834.0	841.0	851.5	850.6	860.0	846.9	846.3	830.9	828.4
35°	797.7	803.2	813.7	814.8	823.1	811.1	809.0	793.8	791.1
37.5°	757.7	763.4	773.9	776.3	783.5	771.7	768.3	753.1	750.2
40°	729.9	736.3	746.8	750.7	757.2	746.1	741.2	726.0	722.3
42.5°	701.2	708.4	719.7	723.6	729.3	718.2	712.5	698.1	693.7
45°	657.3	664.7	677.1	681.9	686.5	676.4	669.6	654.4	649.8
47.5°	611.8	619.1	631.9	637.8	641.3	633.0	625.1	609.9	604.4
50°	580.1	587.5	601.8	608.4	611.2	602.9	594.2	579.0	573.5
52.5°	549.2	555.9	570.1	577.5	579.5	572.7	563.4	548.9	542.6
55°	501.0	507.5	520.8	529.3	531.1	525.6	515.1	499.9	494.4
57.5°	451.3	457.7	470.9	480.3	482.4	476.8	465.4	452.1	445.8
60°	418.1	424.6	437.0	446.4	449.2	443.7	432.3	419.0	413.4
62.5°	384.2	389.2	402.3	411.8	416.1	411.3	399.1	384.3	379.5
65°	332.4	338.0	349.4	360.8	364.5	360.8	347.5	334.2	329.6
67.5°	282.5	286.2	296.6	307.9	312.5	308.4	296.5	282.8	279.9
70°	248.6	252.3	262.7	273.2	277.8	272.3	261.8	250.4	246.7
72.5°	213.2	216.9	226.6	237.0	240.9	235.4	226.4	216.5	212.1
75°	163.9	167.5	176.1	184.7	188.3	184.7	177.0	168.5	163.9
77.5°	117.9	121.4	128.8	136.2	137.9	135.5	130.1	122.7	119.2
80°	88.5	91.3	97.9	104.6	105.5	104.6	100.8	94.1	91.3
82.5°	62.2	64.2	70.8	75.9	75.3	77.4	73.6	67.8	65.7
85°	25.4	27.3	33.0	38.5	35.8	40.4	36.7	32.9	30.1
87.5°	3.4	3.4	6.4	10.7	10.0	13.1	10.6	8.9	7.6
90°	2.0	2.0	2.0	1.0	1.0	1.9	3.9	6.9	7.8
92.5°	3.5	4.3	4.3	4.9	5.7	11.2	7.8	9.2	9.4
95°	7.8	7.8	9.8	23.3	19.5	29.1	32.2	30.2	29.3
97.5°	12.9	13.8	18.9	61.3	43.9	39.0	53.1	56.7	53.3
100°	17.6	18.5	28.3	96.8	63.4	50.1	58.6	69.3	71.3
102.5°	23.0	24.8	43.9	149.3	89.2	63.6	67.2	77.2	79.8
105°	32.2	37.0	93.7	247.3	134.7	84.1	85.9	88.9	92.7
107.5°	50.0	67.2	238.0	351.0	190.7	110.4	114.2	111.5	111.7
110°	70.3	106.5	389.4	410.7	231.3	131.1	129.8	127.8	124.9



TEST NUMBER: P511791

CATALOG NUMBER: SQW-F-075U-075D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	127.3	223.1	542.5	463.6	274.3	153.4	142.3	151.2	145.2
115°	356.3	540.4	700.8	536.2	336.7	191.7	161.0	173.8	177.6
117.5°	734.8	818.2	779.7	600.7	396.5	236.3	179.0	188.1	194.4
120°	913.6	910.7	817.9	640.5	436.3	269.3	192.3	198.2	203.0
122.5°	979.2	951.9	849.9	676.5	474.5	304.5	210.2	206.9	212.4
125°	1036.5	999.3	896.0	725.6	531.0	358.2	246.0	220.7	224.5
127.5°	1073.8	1033.0	935.4	770.8	585.6	415.2	293.2	242.5	238.0
130°	1094.1	1054.1	960.4	798.3	620.8	451.8	326.0	264.2	252.8
132.5°	1111.3	1073.5	983.8	825.0	655.1	489.2	361.1	291.5	274.7
135°	1135.1	1098.9	1016.1	864.0	702.7	543.4	413.8	341.1	317.2
137.5°	1153.3	1120.3	1041.4	899.0	749.0	596.7	469.1	395.9	371.5
140°	1163.4	1131.9	1057.0	921.1	777.9	630.9	506.6	431.9	409.0
142.5°	1172.8	1142.1	1070.3	940.7	805.2	663.6	544.8	468.6	445.7
145°	1183.9	1154.3	1090.2	969.3	844.3	712.6	602.2	524.6	502.7
147.5°	1189.2	1161.9	1104.5	994.7	879.2	757.8	655.5	581.0	558.9
150°	1190.8	1165.0	1110.7	1009.7	901.9	787.3	689.1	619.3	596.4
152.5°	1191.5	1165.0	1115.4	1022.4	922.2	813.7	721.9	656.0	634.6
155°	1187.8	1164.0	1120.5	1037.5	949.7	851.4	769.1	709.1	690.1
157.5°	1179.2	1161.7	1121.3	1050.2	972.7	886.6	814.0	759.1	741.2
160°	1172.2	1156.9	1120.5	1057.4	986.8	907.6	841.3	791.2	774.0
162.5°	1162.8	1147.6	1116.6	1060.7	999.3	926.9	867.1	819.4	805.2
165°	1147.8	1133.5	1111.7	1065.7	1016.1	955.9	903.8	862.6	851.1
167.5°	1128.7	1119.7	1101.0	1067.7	1029.5	980.9	937.4	903.8	894.0
170°	1114.6	1108.0	1093.2	1067.1	1036.5	995.5	958.5	928.1	921.4
172.5°	1096.7	1093.0	1083.0	1064.2	1042.0	1008.6	977.2	950.7	944.0
175°	1068.8	1070.7	1066.8	1059.7	1048.3	1025.4	1003.4	984.7	978.0
177.5°	1047.9	1047.9	1048.7	1049.4	1047.9	1037.9	1026.8	1015.9	1016.6
180°	1038.5	1038.5	1038.5	1038.5	1038.5	1038.5	1038.5	1038.5	1038.5

(END OF REPORT)