

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: P511763

Luminaire Tested: **SQW-F-050U-075D-840-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P511763  
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-840-1D-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, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

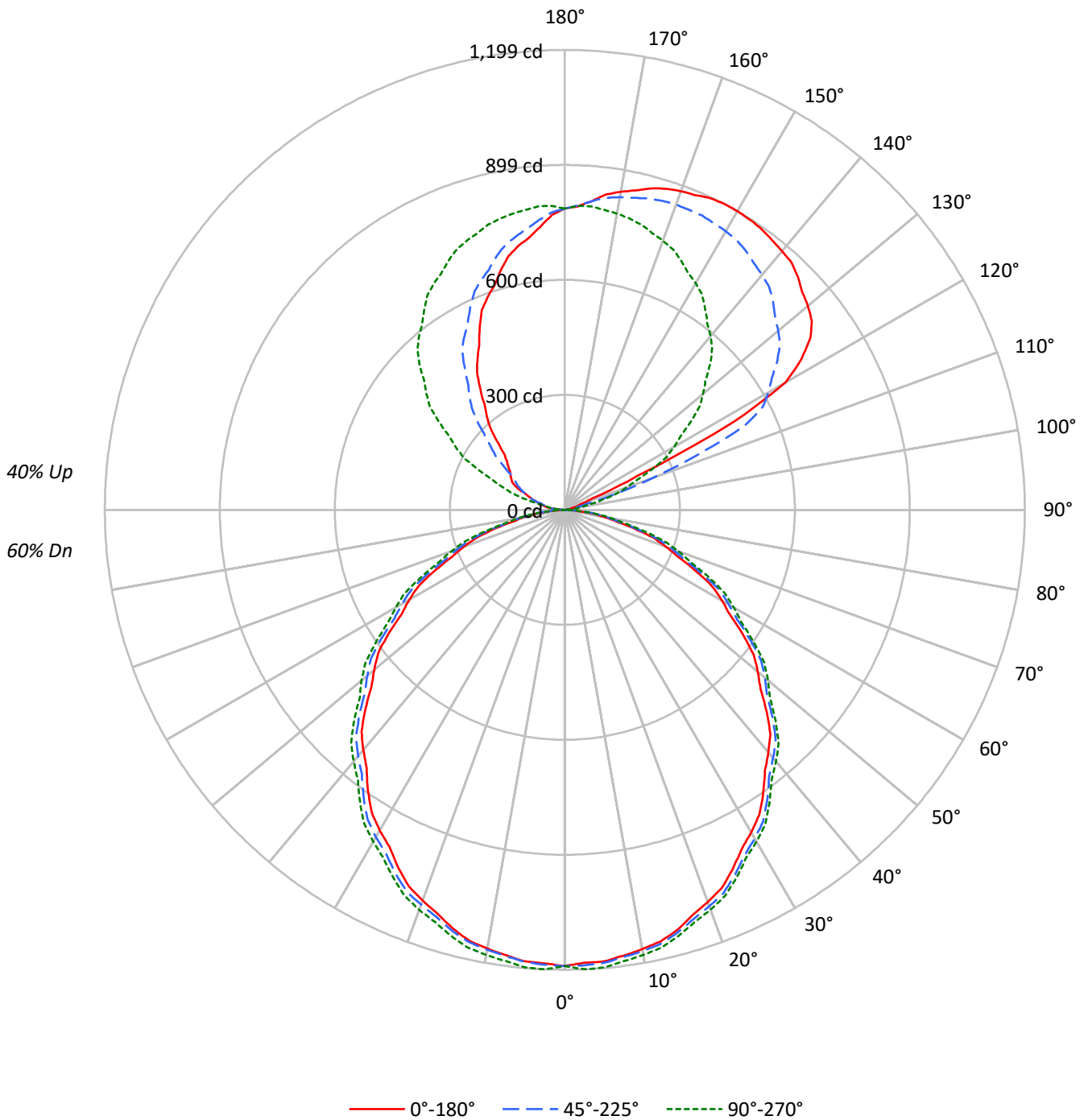
Lumens per Lamp: N/A  
Luminaire Lumens: 5429.9 lumens  
Efficiency: N/A  
Efficacy: 130.5 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')  
CIE Type: General Diffuse

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°	38405	38405	38405
5°	38312	38795	38312
10°	38125	38650	38089
15°	37907	38409	37767
20°	37395	38127	37247
25°	36838	37707	36646
30°	36206	37239	35971
35°	35550	36685	35258
40°	34786	36084	34427
45°	33940	35447	33552
50°	32951	34714	32574
55°	31888	33808	31471
60°	30529	32802	30186
65°	28722	31488	28478
70°	26540	29656	26342
75°	23119	26563	23119
80°	18615	22185	19210
85°	10634	15006	12634



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.4	2.1
10°-20°	320.4	5.9
20°-30°	480.1	8.8
30°-40°	570.8	10.5
40°-50°	584.3	10.8
50°-60°	521.0	9.6
60°-70°	389.3	7.2
70°-80°	212.2	3.9
80°-90°	50.3	0.9
90°-100°	19.3	0.4
100°-110°	88.2	1.6
110°-120°	258.5	4.8
120°-130°	389.1	7.2
130°-140°	417.9	7.7
140°-150°	398.7	7.3
150°-160°	328.1	6.0
160°-170°	214.8	4.0
170°-180°	74.5	1.4
0°-30°	912.9	16.8
0°-40°	1483.7	27.3
0°-60°	2589.0	47.7
0°-90°	3240.8	59.7
90°-120°	365.9	6.7
90°-150°	1571.6	28.9
90°-180°	2189.0	40.3
0°-180°	5429.9	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1189	1189	1189	1189	1189	
5°	1182	1185	1197	1183	1182	112
15°	1134	1140	1149	1136	1130	319
25°	1034	1050	1058	1046	1028	476
35°	902	920	931	915	894	563
45°	743	766	776	757	735	573
55°	566	589	600	582	559	506
65°	376	395	412	393	373	373
75°	185	199	213	200	185	198
85°	29	37	40	42	34	41
90°	1	1	1	2	4	1
95°	6	7	14	24	23	6
105°	24	57	101	67	71	28
115°	207	514	251	126	139	277
125°	782	676	400	189	174	687
135°	859	768	535	318	244	663
145°	894	824	638	456	384	560
155°	897	847	717	582	524	414
165°	867	840	770	685	646	246
175°	808	808	794	759	740	78
180°	785	785	785	785	785	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1189.3	1189.3	1189.3	1189.3	1189.3	1189.3	1189.3	1189.3	1189.3
2.5°	1181.6	1187.5	1188.5	1187.0	1198.7	1187.9	1187.6	1187.5	1183.3
5°	1181.9	1181.9	1185.1	1183.2	1196.8	1183.2	1182.9	1180.8	1181.9
7.5°	1172.1	1173.3	1175.7	1173.6	1186.3	1172.6	1173.3	1170.2	1171.9
10°	1162.7	1164.8	1168.0	1165.1	1178.7	1164.1	1164.8	1161.6	1161.6
12.5°	1152.5	1154.6	1158.6	1154.9	1168.4	1154.7	1154.6	1150.6	1150.6
15°	1133.9	1136.0	1140.3	1136.4	1148.9	1134.3	1136.1	1130.7	1129.7
17.5°	1107.8	1112.1	1117.8	1113.8	1126.5	1111.7	1112.7	1105.4	1103.5
20°	1088.2	1093.4	1099.9	1095.9	1109.5	1093.8	1095.6	1084.9	1083.9
22.5°	1067.7	1072.1	1081.1	1077.2	1089.9	1075.1	1076.9	1062.8	1062.6
25°	1033.9	1038.0	1049.8	1046.9	1058.3	1043.8	1045.6	1029.6	1028.5
27.5°	997.4	1002.9	1014.7	1012.0	1023.4	1007.8	1009.6	992.3	990.2
30°	971.0	977.3	989.1	987.3	998.7	983.1	984.9	966.7	964.7
32.5°	942.9	950.8	962.7	961.7	972.3	957.5	956.8	939.5	936.5
35°	901.8	908.1	919.9	921.2	930.6	917.0	914.6	897.5	894.4
37.5°	856.7	863.1	875.0	877.7	885.9	872.5	868.6	851.5	848.2
40°	825.2	832.5	844.3	848.8	856.0	843.6	837.9	820.8	816.7
42.5°	792.8	800.9	813.7	818.1	824.5	812.0	805.6	789.3	784.3
45°	743.2	751.5	765.5	771.0	776.2	764.7	757.0	739.9	734.7
47.5°	691.7	700.0	714.4	721.1	725.1	715.7	706.8	689.6	683.3
50°	655.9	664.2	680.4	687.9	691.0	681.6	671.8	654.7	648.4
52.5°	621.0	628.5	644.6	652.9	655.2	647.5	636.9	620.6	613.5
55°	566.4	573.7	588.8	598.4	600.5	594.3	582.4	565.2	559.0
57.5°	510.2	517.5	532.4	543.1	545.4	539.1	526.2	511.1	504.0
60°	472.7	480.0	494.0	504.8	507.9	501.6	488.7	473.7	467.4
62.5°	434.4	440.0	454.9	465.6	470.4	465.0	451.2	434.5	429.1
65°	375.9	382.1	395.0	407.9	412.1	407.9	392.9	377.9	372.7
67.5°	319.4	323.6	335.4	348.1	353.3	348.7	335.2	319.8	316.4
70°	281.1	285.3	297.1	308.9	314.1	307.9	296.0	283.1	279.0
72.5°	241.1	245.2	256.2	268.0	272.4	266.1	256.0	244.8	239.8
75°	185.3	189.4	199.1	208.8	212.9	208.8	200.2	190.5	185.3
77.5°	133.3	137.3	145.7	154.0	155.9	153.2	147.1	138.8	134.8
80°	100.1	103.2	110.7	118.2	119.3	118.2	113.9	106.4	103.3
82.5°	70.3	72.6	80.1	85.8	85.2	87.5	83.3	76.6	74.3
85°	28.7	30.8	37.3	43.6	40.5	45.7	41.5	37.2	34.1
87.5°	3.6	3.6	7.0	12.1	11.3	14.6	11.5	9.1	7.7
90°	1.1	1.1	1.1	1.1	1.1	1.1	2.2	3.3	4.4
92.5°	2.9	2.9	2.9	3.7	3.7	8.9	6.6	5.9	7.0
95°	5.5	5.5	6.6	16.4	14.3	21.8	24.1	23.0	23.0
97.5°	9.7	9.7	12.5	43.6	32.2	29.7	40.6	41.9	41.5
100°	13.2	13.2	18.6	69.7	47.2	38.6	45.0	51.6	53.7
102.5°	16.7	17.5	28.3	107.8	66.5	49.3	51.1	57.7	59.9
105°	24.1	26.3	57.0	181.3	100.9	65.5	66.9	68.1	71.3
107.5°	35.8	43.7	144.5	258.8	142.3	85.9	88.8	85.3	85.5
110°	47.2	65.4	244.5	308.3	172.2	100.3	102.0	97.6	98.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	77.0	129.5	371.8	347.7	203.8	117.3	111.6	116.0	113.6
115°	207.3	338.1	514.3	404.5	251.1	146.0	126.1	136.1	139.3
117.5°	495.2	583.6	581.4	452.5	298.3	180.8	139.5	148.8	154.2
120°	664.6	677.4	613.0	482.3	329.0	204.6	149.1	155.8	161.2
122.5°	730.4	714.9	639.3	509.6	357.9	230.1	162.3	161.1	167.3
125°	781.9	754.0	675.5	547.2	400.3	272.7	188.6	171.1	174.4
127.5°	811.1	780.2	706.7	582.4	443.3	315.2	223.5	187.7	185.8
130°	826.9	796.8	726.0	604.5	470.5	345.0	248.9	201.7	196.3
132.5°	840.0	812.6	743.5	625.7	496.8	373.9	276.1	222.6	213.0
135°	858.7	832.9	767.6	654.2	535.2	415.1	318.0	258.5	244.5
137.5°	874.5	848.3	788.0	681.3	568.3	455.3	358.8	302.3	286.0
140°	880.6	857.0	799.4	697.2	591.1	480.6	386.0	328.7	315.8
142.5°	886.7	864.0	810.0	713.1	610.4	505.1	414.1	356.8	343.0
145°	893.8	871.2	823.6	733.7	638.2	540.7	456.2	397.8	383.8
147.5°	897.5	877.3	833.7	751.0	665.4	573.4	497.7	438.8	426.2
150°	899.2	879.9	838.9	762.5	682.1	595.3	523.1	466.9	455.1
152.5°	899.2	879.1	841.6	771.4	696.1	615.3	547.7	494.1	483.2
155°	897.0	877.7	846.6	782.6	717.2	644.3	582.3	536.0	524.2
157.5°	888.3	876.7	846.6	792.9	735.4	671.3	616.1	574.8	564.3
160°	883.9	873.2	846.6	798.3	746.8	687.8	637.1	598.5	588.9
162.5°	877.7	867.0	844.8	801.9	756.5	702.6	657.3	619.7	612.6
165°	867.4	856.7	840.0	805.2	769.8	723.7	685.4	653.4	645.9
167.5°	852.7	846.7	833.2	806.3	778.0	742.6	709.1	683.5	677.5
170°	842.2	837.9	828.0	805.5	784.1	753.0	724.9	702.8	698.6
172.5°	829.1	826.5	820.1	804.8	788.5	763.4	739.8	718.7	715.2
175°	808.2	810.4	808.2	801.5	794.0	776.8	758.9	743.4	740.2
177.5°	792.2	792.2	794.0	793.9	793.1	784.5	776.4	767.7	769.4
180°	785.2	785.2	785.2	785.2	785.2	785.2	785.2	785.2	785.2

(END OF REPORT)