

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: P511770

Luminaire Tested: **SQW-F-050U-100D-930-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511770
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-100D-930-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

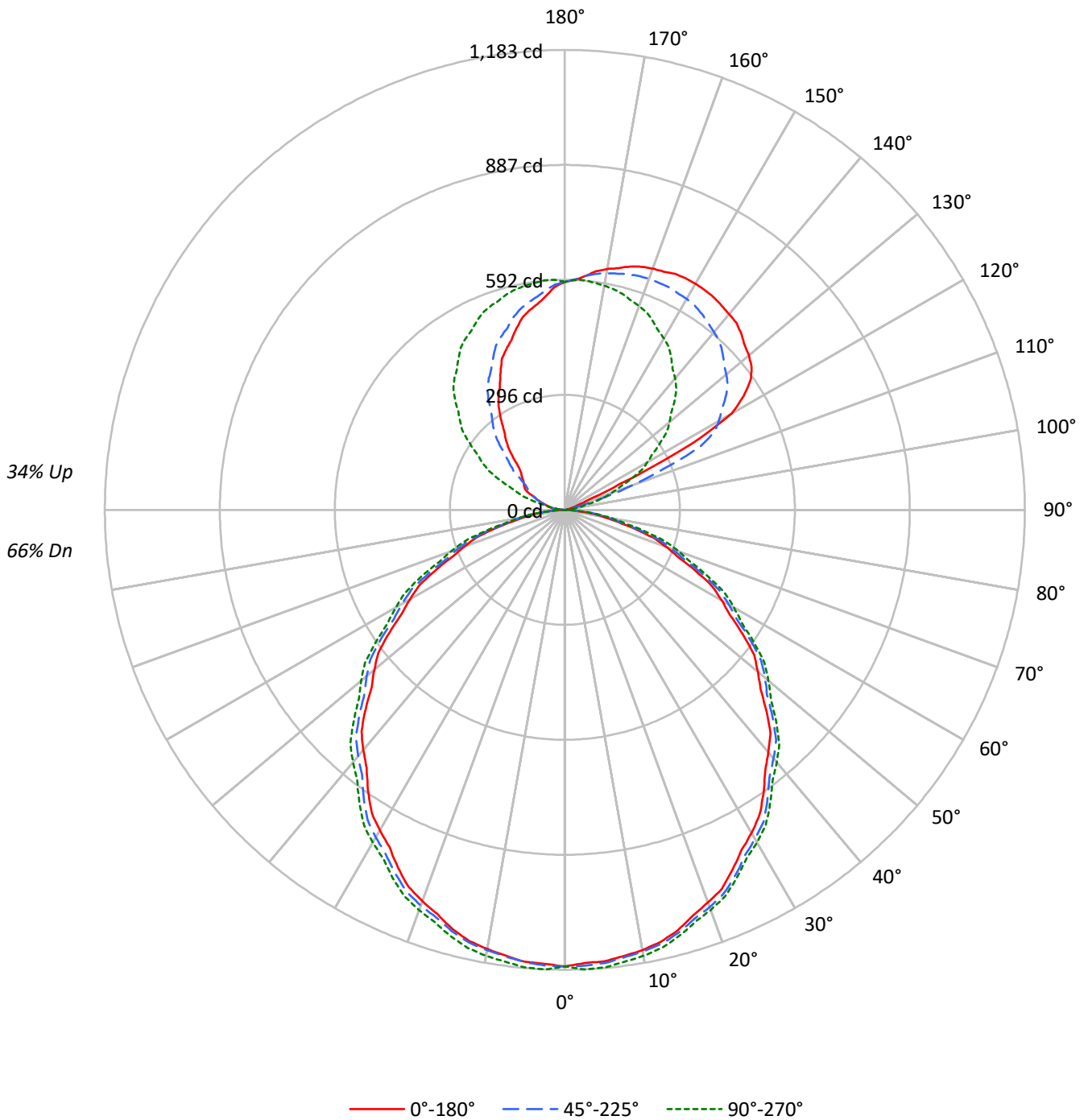
Lumens per Lamp: N/A
Luminaire Lumens: 4835.8 lumens
Efficiency: N/A
Efficacy: 95.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 50.8
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



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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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	85	81	78	76	72	70	68	63	61	60	56
2	92	85	78	73	87	80	74	69	71	67	63	63	59	56	55	53	50	47
3	84	74	67	61	79	70	63	58	62	57	53	55	51	48	49	45	43	39
4	77	66	58	51	72	62	55	49	55	50	45	49	45	41	43	40	37	34
5	71	59	50	44	66	56	48	42	50	43	39	44	39	35	39	35	32	29
6	65	53	44	38	61	50	42	37	45	38	34	40	35	31	35	31	28	25
7	60	48	39	34	57	45	38	32	41	34	30	36	31	27	32	28	25	22
8	56	43	35	30	53	41	34	29	37	31	26	33	28	24	30	25	22	20
9	52	40	32	27	49	38	30	26	34	28	24	31	26	22	27	23	20	18
10	49	36	29	24	46	35	28	23	31	26	21	28	23	20	25	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	37924	37924	37924
5°	37783	38299	37835
10°	37699	38194	37620
15°	37453	37958	37319
20°	36942	37650	36804
25°	36375	37255	36175
30°	35785	36851	35486
35°	35104	36295	34762
40°	34322	35730	33985
45°	33479	35077	33077
50°	32554	34352	32117
55°	31471	33391	31021
60°	30090	32402	29683
65°	28310	31106	27943
70°	26049	29354	25747
75°	22620	26588	23119
80°	18187	22036	19228
85°	10004	15006	12968



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.0	2.3
10°-20°	316.5	6.5
20°-30°	474.4	9.8
30°-40°	564.1	11.7
40°-50°	577.5	11.9
50°-60°	514.8	10.6
60°-70°	383.7	7.9
70°-80°	209.7	4.3
80°-90°	49.4	1.0
90°-100°	14.4	0.3
100°-110°	65.8	1.4
110°-120°	193.0	4.0
120°-130°	290.6	6.0
130°-140°	312.0	6.5
140°-150°	297.8	6.2
150°-160°	245.0	5.1
160°-170°	160.4	3.3
170°-180°	55.6	1.2
0°-30°	901.9	18.7
0°-40°	1466.0	30.3
0°-60°	2558.2	52.9
0°-90°	3201.1	66.2
90°-120°	273.2	5.7
90°-150°	1173.6	24.3
90°-180°	1635.0	33.8
0°-180°	4835.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1174	1174	1174	1174	1174	
5°	1166	1170	1182	1168	1167	111
15°	1120	1127	1135	1122	1116	315
25°	1021	1038	1046	1032	1015	470
35°	890	909	921	902	882	556
45°	733	755	768	747	724	565
55°	559	581	593	576	551	499
65°	370	389	407	386	366	367
75°	181	196	213	197	185	194
85°	27	37	40	41	35	40
90°	1	1	1	2	3	1
95°	4	5	11	18	17	5
105°	18	43	75	50	53	21
115°	155	384	188	94	104	207
125°	584	504	299	141	130	513
135°	641	573	400	238	183	495
145°	667	615	477	341	287	418
155°	670	632	536	435	391	309
165°	648	627	575	512	482	184
175°	604	604	593	567	553	59
180°	586	586	586	586	586	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4
2.5°	1166.7	1172.3	1173.7	1172.7	1183.3	1173.3	1173.1	1172.4	1168.6
5°	1165.6	1167.2	1170.4	1168.3	1181.5	1168.3	1168.0	1166.4	1167.2
7.5°	1158.0	1159.5	1161.3	1159.2	1172.4	1158.9	1158.8	1156.1	1156.9
10°	1149.7	1151.3	1153.7	1151.6	1164.8	1150.0	1150.5	1146.5	1147.3
12.5°	1138.3	1139.8	1144.1	1141.4	1154.0	1139.9	1140.3	1135.7	1135.9
15°	1120.3	1122.6	1126.6	1122.2	1135.4	1121.4	1121.9	1117.1	1116.3
17.5°	1094.7	1099.4	1104.2	1100.4	1112.2	1098.8	1099.5	1092.1	1090.1
20°	1075.0	1079.6	1087.7	1083.2	1095.6	1081.6	1082.9	1071.8	1071.0
22.5°	1055.3	1058.7	1068.6	1064.1	1076.6	1062.6	1063.2	1050.2	1050.0
25°	1020.9	1025.6	1037.6	1033.9	1045.6	1031.6	1032.0	1017.7	1015.3
27.5°	985.8	990.6	1002.8	999.2	1011.2	996.9	997.8	981.8	977.2
30°	959.7	965.1	978.0	975.1	988.3	972.8	972.4	956.4	951.7
32.5°	931.7	938.4	951.3	949.6	961.6	946.7	945.1	929.0	924.4
35°	890.5	897.5	908.8	909.8	920.7	906.7	902.4	887.2	881.8
37.5°	846.0	852.5	864.7	866.9	877.5	862.9	856.8	843.0	836.8
40°	814.2	822.0	834.8	838.2	847.6	833.6	826.9	812.4	806.2
42.5°	783.0	790.8	804.3	809.6	816.4	803.0	795.1	781.2	773.8
45°	733.1	740.9	755.3	762.6	768.1	755.6	746.6	732.1	724.3
47.5°	682.4	690.9	705.6	714.6	718.1	706.8	698.4	682.3	673.6
50°	648.0	656.6	671.9	681.4	683.8	673.7	664.7	648.6	639.3
52.5°	613.0	620.3	635.6	646.4	647.5	639.3	629.7	613.6	604.9
55°	559.0	566.7	581.2	593.9	593.1	587.7	575.6	559.6	551.0
57.5°	503.5	509.7	524.8	538.3	538.6	532.4	520.8	504.9	496.5
60°	465.9	472.1	486.6	500.2	501.7	495.5	482.6	467.3	459.6
62.5°	428.4	434.0	447.8	462.6	464.2	458.0	444.5	429.8	422.0
65°	370.5	375.2	388.8	404.0	407.1	400.1	385.6	372.7	365.7
67.5°	313.4	317.9	330.6	345.6	349.7	341.8	328.7	316.5	309.6
70°	275.9	279.8	291.8	306.2	310.9	302.3	291.8	278.9	272.7
72.5°	237.7	241.6	253.6	267.4	271.4	263.5	253.6	242.1	239.6
75°	181.3	185.2	195.6	210.0	213.1	206.1	197.2	186.8	185.3
77.5°	130.9	133.4	142.8	152.7	154.7	150.5	145.2	135.9	135.2
80°	97.8	100.9	109.7	117.7	118.5	116.1	112.1	104.1	103.4
82.5°	68.5	71.0	78.6	85.8	84.8	84.9	82.2	74.9	74.7
85°	27.0	29.4	37.4	43.7	40.5	42.9	41.3	35.8	35.0
87.5°	2.7	3.3	6.5	12.9	11.6	13.5	11.8	8.8	8.9
90°	0.8	0.8	0.8	0.8	0.8	0.8	1.6	2.5	3.3
92.5°	2.1	2.1	2.1	2.8	2.8	6.6	4.9	4.4	5.2
95°	4.1	4.1	4.9	12.2	10.6	16.3	18.0	17.2	17.2
97.5°	7.2	7.2	9.3	32.6	24.1	22.2	30.3	31.3	31.0
100°	9.8	9.8	13.9	52.0	35.2	28.8	33.6	38.5	40.1
102.5°	12.4	13.1	21.1	80.5	49.6	36.8	38.2	43.1	44.7
105°	18.0	19.6	42.6	135.4	75.3	48.9	50.0	50.8	53.2
107.5°	26.7	32.6	107.9	193.3	106.3	64.2	66.3	63.7	63.9
110°	35.2	48.8	182.6	230.3	128.6	74.9	76.2	72.9	73.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	57.5	96.7	277.6	259.6	152.2	87.6	83.4	86.6	84.8
115°	154.8	252.5	384.1	302.0	187.5	109.1	94.2	101.6	104.0
117.5°	369.8	435.8	434.2	337.9	222.7	135.0	104.2	111.1	115.1
120°	496.3	505.9	457.8	360.2	245.7	152.8	111.4	116.4	120.4
122.5°	545.4	533.9	477.4	380.5	267.3	171.8	121.2	120.3	125.0
125°	583.9	563.1	504.5	408.6	298.9	203.6	140.9	127.8	130.2
127.5°	605.7	582.6	527.7	434.9	331.0	235.4	166.9	140.2	138.7
130°	617.5	595.0	542.1	451.4	351.3	257.6	185.9	150.6	146.6
132.5°	627.3	606.8	555.2	467.2	371.0	279.2	206.2	166.2	159.0
135°	641.2	622.0	573.2	488.5	399.6	309.9	237.5	193.0	182.6
137.5°	653.0	633.5	588.5	508.8	424.4	340.0	267.9	225.7	213.6
140°	657.6	640.0	597.0	520.7	441.4	358.9	288.3	245.5	235.8
142.5°	662.2	645.2	604.8	532.5	455.8	377.2	309.2	266.4	256.2
145°	667.4	650.6	615.0	547.9	476.6	403.7	340.7	297.0	286.6
147.5°	670.2	655.1	622.5	560.8	496.9	428.2	371.6	327.7	318.2
150°	671.5	657.1	626.5	569.4	509.4	444.5	390.6	348.7	339.8
152.5°	671.5	656.5	628.4	576.1	519.8	459.5	409.0	369.0	360.8
155°	669.9	655.5	632.2	584.4	535.6	481.1	434.8	400.2	391.4
157.5°	663.3	654.7	632.2	592.1	549.2	501.3	460.1	429.3	421.4
160°	660.0	652.0	632.2	596.1	557.7	513.6	475.8	447.0	439.8
162.5°	655.5	647.5	630.9	598.8	564.9	524.7	490.9	462.7	457.4
165°	647.8	639.8	627.3	601.3	574.9	540.4	511.8	487.9	482.3
167.5°	636.8	632.3	622.2	602.1	580.9	554.5	529.5	510.4	505.9
170°	628.9	625.7	618.3	601.5	585.5	562.3	541.3	524.9	521.6
172.5°	619.1	617.2	612.4	601.0	588.8	570.1	552.4	536.7	534.1
175°	603.5	605.1	603.5	598.5	592.9	580.1	566.7	555.2	552.8
177.5°	591.6	591.6	592.9	592.9	592.2	585.8	579.8	573.3	574.5
180°	586.3	586.3	586.3	586.3	586.3	586.3	586.3	586.3	586.3

(END OF REPORT)