

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P520190

Luminaire Tested: **SQ4-F-100U-050D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520190
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-050D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

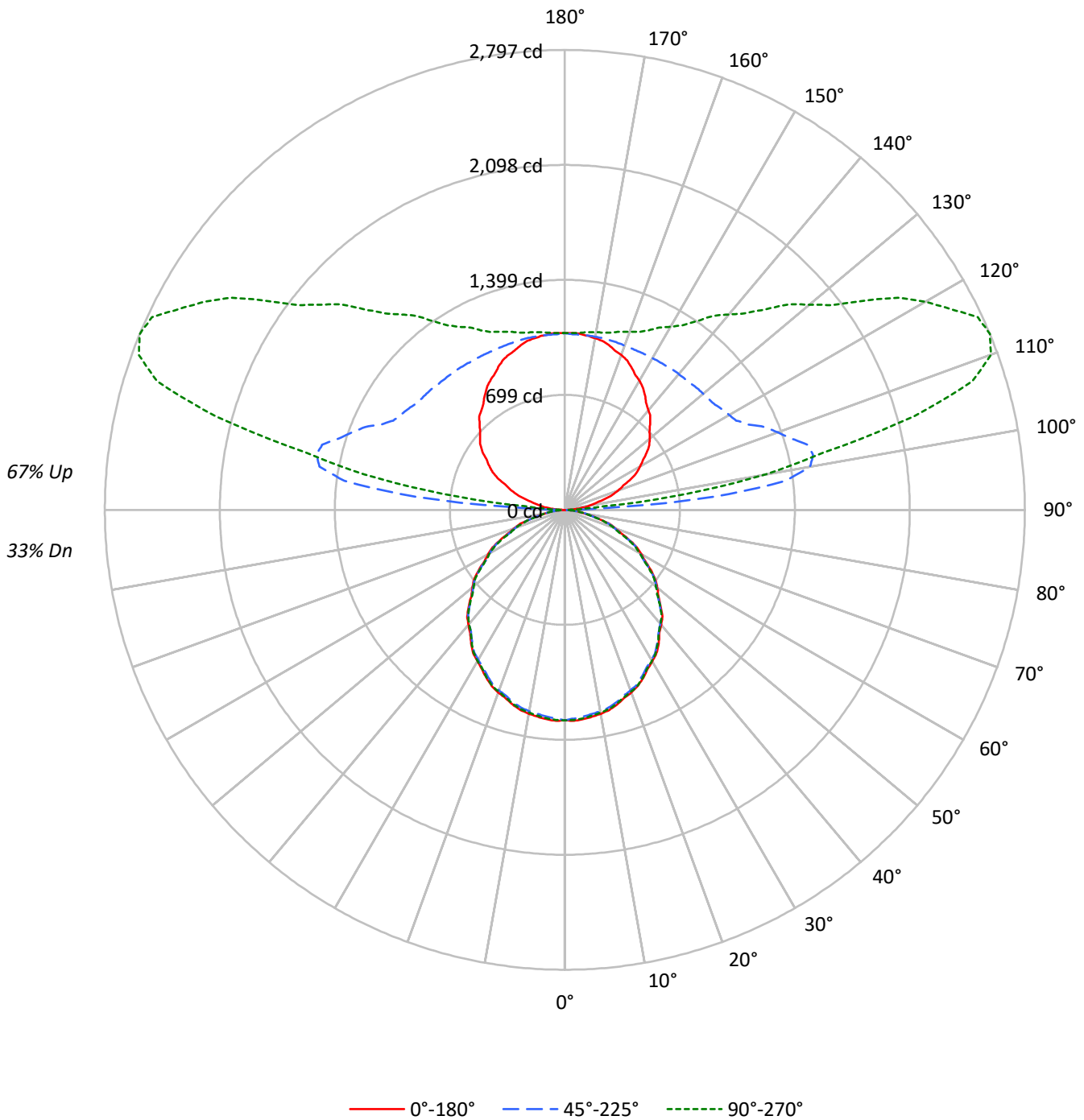
Lumens per Lamp: N/A
Luminaire Lumens: 10475.3 lumens
Efficiency: N/A
Efficacy: 122.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 85.7
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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28
2	86	78	72	67	77	71	66	61	57	53	50	44	41	39	32	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	39	36	33	28	26	25	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	34	31	31	27	24	22	20	18	15
6	60	48	40	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	20	23	19	17	17	14	13	10
9	48	36	28	23	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5905	5905	5905
5°	5919	5848	5896
10°	5900	5827	5868
15°	5860	5786	5835
20°	5805	5737	5780
25°	5739	5669	5722
30°	5659	5613	5650
35°	5597	5529	5558
40°	5490	5438	5448
45°	5377	5332	5332
50°	5263	5214	5189
55°	5141	5072	5044
60°	4948	4869	4838
65°	4713	4619	4564
70°	4392	4299	4207
75°	3941	3818	3725
80°	3185	3140	3050
85°	1905	2175	2265



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.8	1.2
10°-20°	343.9	3.3
20°-30°	516.6	4.9
30°-40°	616.6	5.9
40°-50°	631.9	6.0
50°-60°	563.5	5.4
60°-70°	419.7	4.0
70°-80°	227.8	2.2
80°-90°	55.0	0.5
90°-100°	503.1	4.8
100°-110°	1388.8	13.3
110°-120°	1432.3	13.7
120°-130°	1150.9	11.0
130°-140°	904.5	8.6
140°-150°	693.7	6.6
150°-160°	498.6	4.8
160°-170°	304.9	2.9
170°-180°	102.8	1.0
0°-30°	981.3	9.4
0°-40°	1597.9	15.3
0°-60°	2793.3	26.7
0°-90°	3495.8	33.4
90°-120°	3324.1	31.7
90°-150°	6073.3	58.0
90°-180°	6980.0	66.6
0°-180°	10475.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1280	1280	1280	1280	1280	
5°	1278	1277	1263	1275	1273	121
15°	1227	1224	1212	1222	1222	346
25°	1128	1124	1114	1121	1124	519
35°	994	990	982	982	987	620
45°	824	826	817	816	817	636
55°	639	639	631	626	627	569
65°	432	430	423	418	418	428
75°	221	219	214	211	209	234
85°	36	39	41	43	43	50
90°	4	7	14	16	17	6
95°	74	272	913	375	244	79
105°	248	382	1528	2333	2196	263
115°	444	536	1231	2436	2770	436
125°	608	692	1115	1888	2215	541
135°	732	811	1084	1529	1724	566
145°	849	908	1071	1302	1401	532
155°	957	989	1062	1168	1205	441
165°	1036	1050	1067	1109	1117	292
175°	1074	1076	1069	1084	1081	102
180°	1074	1074	1074	1074	1074	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1280.0	1280.0	1280.0	1280.0	1280.0
2.5°	1284.1	1281.5	1270.4	1280.0	1278.6
5°	1278.3	1276.6	1262.8	1274.9	1273.2
7.5°	1269.1	1265.7	1252.3	1263.9	1262.3
10°	1259.5	1256.1	1244.0	1254.3	1252.6
12.5°	1247.2	1245.1	1231.7	1241.9	1241.6
15°	1227.0	1223.6	1211.5	1221.7	1221.7
17.5°	1200.1	1198.2	1186.4	1196.4	1195.0
20°	1182.4	1179.0	1168.7	1177.3	1177.3
22.5°	1160.4	1158.4	1148.1	1155.3	1156.6
25°	1127.6	1124.2	1113.8	1120.8	1124.1
27.5°	1091.2	1088.5	1079.9	1084.4	1086.7
30°	1062.4	1062.4	1053.8	1055.7	1060.7
32.5°	1036.3	1036.3	1026.4	1028.2	1030.5
35°	993.8	990.5	981.8	982.0	987.0
37.5°	944.5	942.9	937.3	936.4	937.6
40°	911.6	909.9	903.0	904.7	904.7
42.5°	878.7	877.0	870.1	867.8	870.5
45°	824.2	825.9	817.3	815.7	817.3
47.5°	770.4	770.4	763.6	758.9	761.5
50°	733.4	733.4	726.5	723.1	723.1
52.5°	695.0	696.4	688.2	683.4	684.7
55°	639.2	639.2	630.6	625.5	627.1
57.5°	577.4	577.4	568.9	563.8	566.9
60°	536.3	536.3	527.7	522.7	524.4
62.5°	495.2	495.2	486.6	481.5	481.9
65°	431.8	430.1	423.2	418.1	418.1
67.5°	370.9	366.4	361.2	354.4	354.4
70°	325.6	323.9	318.7	311.9	311.9
72.5°	284.5	281.4	276.2	270.8	270.8
75°	221.1	219.4	214.2	210.7	209.0
77.5°	158.4	157.0	156.6	151.9	153.2
80°	119.9	119.9	118.2	114.8	114.8
82.5°	85.7	87.0	84.0	83.2	81.9
85°	36.0	39.3	41.1	42.8	42.8
87.5°	7.5	12.2	12.3	14.1	14.4
90°	3.5	6.8	13.8	15.5	17.2
92.5°	31.0	128.4	229.6	83.8	65.3
95°	73.9	272.2	912.7	375.1	244.0
97.5°	122.4	304.9	1352.0	1040.9	753.8
100°	158.1	324.5	1514.2	1524.9	1239.2
102.5°	192.5	346.7	1545.8	1884.1	1613.2
105°	247.5	381.9	1527.9	2332.6	2196.5
107.5°	306.0	425.6	1442.7	2548.9	2598.7
110°	347.2	454.7	1376.7	2595.5	2756.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	384.3	487.8	1314.8	2558.7	2796.6
115°	443.5	535.9	1230.6	2436.1	2770.5
117.5°	495.0	587.1	1175.3	2263.5	2644.1
120°	529.3	620.1	1153.2	2146.8	2529.9
122.5°	562.4	649.0	1135.3	2037.7	2400.6
125°	608.5	692.5	1115.4	1887.7	2215.4
127.5°	647.6	731.6	1103.8	1760.9	2043.5
130°	673.8	757.7	1098.2	1683.3	1940.5
132.5°	698.5	778.5	1092.8	1618.2	1851.0
135°	732.1	811.2	1084.5	1528.9	1723.8
137.5°	770.0	841.9	1080.3	1454.1	1620.3
140°	790.6	861.2	1077.7	1404.1	1550.3
142.5°	813.9	879.2	1074.9	1359.7	1488.4
145°	849.0	907.8	1070.7	1301.6	1400.7
147.5°	882.7	934.1	1067.0	1252.6	1329.6
150°	907.5	949.5	1065.6	1223.4	1285.6
152.5°	926.7	966.1	1064.2	1198.4	1249.9
155°	957.3	989.2	1062.1	1167.9	1204.8
157.5°	985.5	1010.0	1062.5	1145.6	1170.7
160°	1002.0	1023.8	1063.9	1133.1	1151.5
162.5°	1015.7	1034.9	1065.3	1122.0	1136.4
165°	1036.4	1049.9	1067.3	1108.7	1117.1
167.5°	1052.2	1060.2	1069.0	1100.7	1103.4
170°	1060.4	1067.2	1069.0	1096.5	1096.5
172.5°	1067.3	1071.3	1069.0	1091.0	1089.6
175°	1074.2	1075.9	1069.0	1084.4	1081.0
177.5°	1077.0	1075.6	1068.7	1078.2	1075.6
180°	1074.2	1074.2	1074.2	1074.2	1074.2

(END OF REPORT)