

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: P519906

Luminaire Tested: **SQ4-F-050U-050D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519906
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-050D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

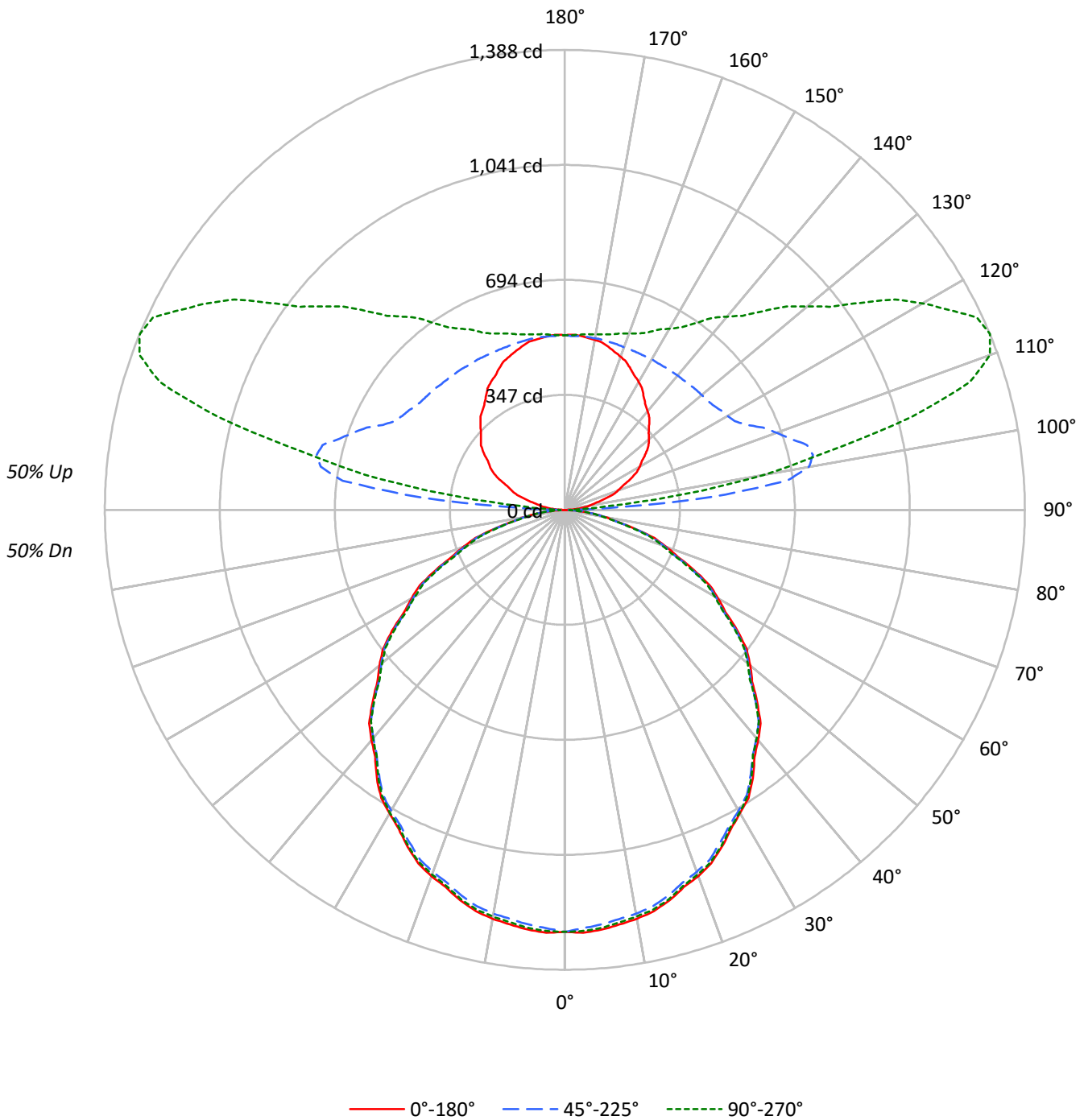
Lumens per Lamp: N/A
Luminaire Lumens: 6921.8 lumens
Efficiency: N/A
Efficacy: 118.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 58.5
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48	42
2	89	82	75	70	82	75	70	66	64	60	57	53	51	48	44	42	40	35
3	81	72	64	58	75	66	60	55	56	51	47	47	44	41	39	36	34	30
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	34	32	29	25
5	68	56	48	42	62	52	45	40	45	39	35	38	33	30	31	28	25	22
6	63	50	42	36	58	47	40	34	40	34	30	34	30	26	28	25	22	19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20	17
8	54	41	33	28	49	38	31	27	33	28	24	28	24	21	23	20	18	15
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16	14
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5875	5875	5875
5°	5889	5818	5866
10°	5870	5798	5838
15°	5829	5757	5805
20°	5775	5708	5750
25°	5710	5640	5693
30°	5631	5585	5621
35°	5568	5501	5530
40°	5462	5411	5421
45°	5350	5305	5305
50°	5237	5188	5163
55°	5114	5046	5019
60°	4924	4845	4813
65°	4689	4597	4541
70°	4369	4277	4185
75°	3919	3798	3707
80°	3169	3124	3034
85°	1895	2165	2255



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.2	1.7
10°-20°	342.2	4.9
20°-30°	513.9	7.4
30°-40°	613.5	8.9
40°-50°	628.7	9.1
50°-60°	560.7	8.1
60°-70°	417.5	6.0
70°-80°	226.7	3.3
80°-90°	54.5	0.8
90°-100°	253.2	3.7
100°-110°	687.8	9.9
110°-120°	707.2	10.2
120°-130°	565.4	8.2
130°-140°	444.3	6.4
140°-150°	340.7	4.9
150°-160°	245.0	3.5
160°-170°	149.8	2.2
170°-180°	50.5	0.7
0°-30°	976.3	14.1
0°-40°	1589.8	23.0
0°-60°	2779.1	40.2
0°-90°	3477.8	50.2
90°-120°	1648.3	23.8
90°-150°	2998.7	43.3
90°-180°	3444.0	49.8
0°-180°	6921.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1274	1274	1274	1274	1274	
5°	1272	1270	1256	1268	1267	121
15°	1221	1217	1205	1216	1216	344
25°	1122	1118	1108	1115	1118	517
35°	989	986	977	977	982	617
45°	820	822	813	812	813	633
55°	636	636	627	622	624	566
65°	430	428	421	416	416	425
75°	220	218	213	210	208	232
85°	36	39	41	43	43	50
90°	2	7	12	15	15	4
95°	37	138	441	192	129	40
105°	122	190	756	1152	1084	130
115°	217	264	606	1205	1372	214
125°	298	340	548	923	1089	266
135°	360	399	532	752	848	278
145°	416	445	526	639	687	261
155°	470	486	522	574	590	217
165°	509	516	524	546	548	144
175°	527	529	526	532	531	50
180°	527	527	527	527	527	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1273.5	1273.5	1273.5	1273.5	1273.5
2.5°	1277.6	1275.0	1264.0	1273.5	1272.1
5°	1271.8	1270.1	1256.4	1268.4	1266.7
7.5°	1262.6	1259.3	1245.9	1257.4	1255.8
10°	1253.1	1249.7	1237.7	1248.0	1246.3
12.5°	1240.8	1238.8	1225.5	1235.6	1235.3
15°	1220.6	1217.4	1205.4	1215.5	1215.5
17.5°	1194.1	1192.0	1180.4	1190.3	1189.0
20°	1176.4	1173.0	1162.8	1171.2	1171.2
22.5°	1154.6	1152.5	1142.2	1149.4	1150.7
25°	1121.8	1118.5	1108.1	1115.0	1118.4
27.5°	1085.6	1083.0	1074.4	1078.8	1081.2
30°	1057.1	1057.1	1048.5	1050.3	1055.3
32.5°	1031.1	1031.1	1021.2	1022.9	1025.3
35°	988.8	985.5	976.9	977.0	982.0
37.5°	939.7	938.0	932.5	931.5	932.9
40°	907.0	905.3	898.5	900.2	900.2
42.5°	874.2	872.6	865.8	863.4	866.1
45°	820.0	821.7	813.2	811.5	813.2
47.5°	766.5	766.5	759.7	754.9	757.6
50°	729.7	729.7	722.9	719.4	719.4
52.5°	691.5	692.8	684.6	679.9	681.3
55°	635.9	635.9	627.4	622.3	624.0
57.5°	574.6	574.6	566.0	561.0	563.9
60°	533.7	533.7	525.1	520.0	521.7
62.5°	492.7	492.7	484.2	479.0	479.4
65°	429.6	427.9	421.1	416.0	416.0
67.5°	368.9	364.6	359.4	352.5	352.5
70°	323.9	322.2	317.1	310.3	310.3
72.5°	283.0	280.0	274.8	269.4	269.4
75°	219.9	218.2	213.1	209.6	208.0
77.5°	157.6	156.2	155.8	151.1	152.4
80°	119.3	119.3	117.6	114.2	114.2
82.5°	85.2	86.6	83.5	82.8	81.4
85°	35.8	39.1	40.9	42.6	42.6
87.5°	7.2	12.1	11.9	14.0	14.0
90°	1.7	6.7	11.9	15.3	15.3
92.5°	15.3	69.3	120.4	51.7	43.8
95°	37.3	138.5	441.0	191.9	128.9
97.5°	61.7	153.0	676.0	526.0	369.4
100°	78.0	162.6	747.9	758.2	612.2
102.5°	94.3	172.2	767.0	937.7	809.0
105°	122.1	190.1	756.5	1151.7	1083.7
107.5°	150.9	211.0	712.7	1262.2	1281.2
110°	171.3	226.0	680.1	1284.0	1365.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	188.9	241.0	647.6	1266.0	1388.3
115°	217.1	263.5	605.5	1204.6	1372.0
117.5°	243.6	288.0	578.7	1117.6	1306.3
120°	261.2	304.3	566.5	1059.2	1246.5
122.5°	276.1	319.2	558.4	1000.7	1181.5
125°	298.5	339.9	547.9	923.0	1088.8
127.5°	318.5	359.6	542.1	864.1	1006.4
130°	330.7	370.5	539.3	827.1	954.9
132.5°	343.0	382.7	536.7	795.6	908.8
135°	359.5	399.4	532.5	751.9	848.0
137.5°	377.5	413.7	530.5	713.2	794.1
140°	388.4	423.2	529.1	688.6	761.5
142.5°	399.3	431.4	527.8	669.2	730.3
145°	415.5	445.4	525.8	638.8	686.9
147.5°	433.8	459.3	524.1	614.8	652.7
150°	446.1	467.6	524.1	601.0	631.0
152.5°	455.5	474.5	522.7	588.8	613.3
155°	469.8	486.4	522.3	573.7	590.2
157.5°	483.7	496.6	522.3	563.4	576.0
160°	491.8	503.5	522.3	556.5	566.5
162.5°	500.0	508.9	523.7	551.0	558.4
165°	508.8	515.5	524.1	546.2	547.9
167.5°	517.9	521.3	525.8	540.4	541.7
170°	520.7	524.0	525.8	537.6	537.6
172.5°	523.4	525.4	525.8	534.9	534.9
175°	527.4	529.1	525.8	532.5	530.9
177.5°	528.8	528.8	524.8	530.1	527.4
180°	527.4	527.4	527.4	527.4	527.4

(END OF REPORT)