

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: P520002

Luminaire Tested: **SQ4-F-075U-050D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520002  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-050D-940-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

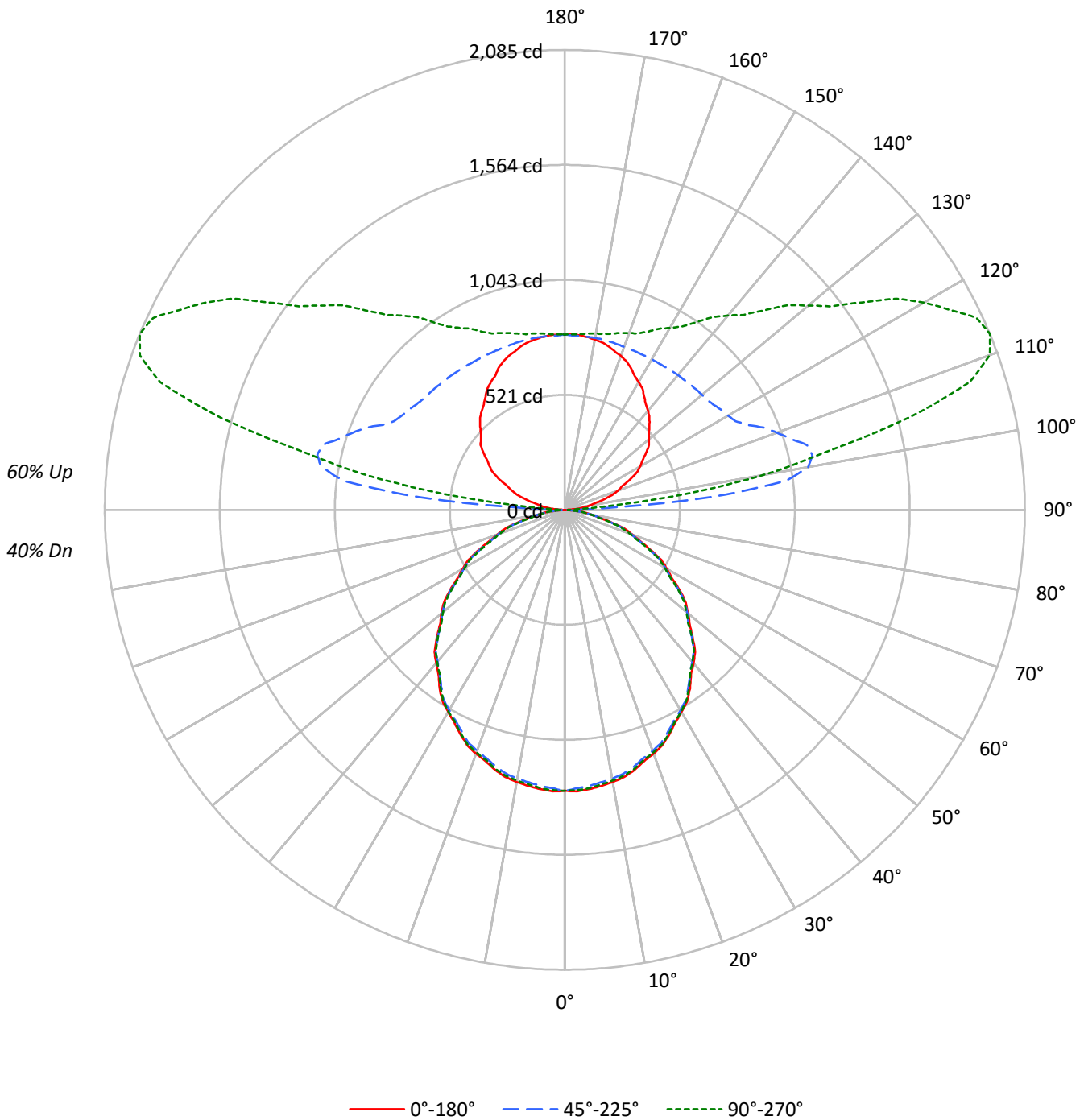
Lumens per Lamp: N/A  
Luminaire Lumens: 8653.9 lumens  
Efficiency: N/A  
Efficacy: 119.9 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 72.2  
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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	96	91	87	84	87	83	80	77	68	66	64	54	53	51	42	41	40	34
2	87	80	74	68	79	73	68	63	60	56	53	48	45	43	37	35	33	28
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	32	30	28	24
4	72	62	54	48	66	56	50	44	47	42	38	37	34	31	29	26	24	20
5	66	55	47	41	60	50	43	38	42	36	32	33	30	27	26	23	21	18
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	21	19	15
7	56	44	36	31	51	41	34	29	34	28	25	27	23	20	21	19	16	14
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	20	17	15	12
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13	11
10	45	33	26	22	41	31	24	20	26	21	17	21	17	15	17	14	12	10

**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	1.4
10°-20°	342.2	4.0
20°-30°	513.9	5.9
30°-40°	613.5	7.1
40°-50°	628.7	7.3
50°-60°	560.7	6.5
60°-70°	417.5	4.8
70°-80°	226.7	2.6
80°-90°	54.5	0.6
90°-100°	374.7	4.3
100°-110°	1031.0	11.9
110°-120°	1064.2	12.3
120°-130°	852.6	9.9
130°-140°	669.7	7.7
140°-150°	513.2	5.9
150°-160°	369.0	4.3
160°-170°	225.6	2.6
170°-180°	76.1	0.9
0°-30°	976.3	11.3
0°-40°	1589.8	18.4
0°-60°	2779.1	32.1
0°-90°	3477.8	40.2
90°-120°	2469.9	28.5
90°-150°	4505.5	52.1
90°-180°	5176.0	59.8
0°-180°	8653.9	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	5
95°	56	204	663	283	181	59
105°	184	284	1136	1730	1614	194
115°	326	397	911	1814	2059	322
125°	450	512	827	1398	1638	401
135°	543	602	803	1131	1280	419
145°	627	670	791	964	1038	393
155°	710	733	786	866	891	326
165°	768	777	789	822	827	216
175°	794	796	791	801	800	75
180°	794	794	794	794	794	

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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	11.8	15.3	15.3
92.5°	23.4	99.7	172.7	66.3	54.5
95°	55.8	204.5	662.7	283.4	180.9
97.5°	91.0	226.8	1011.3	779.2	549.8
100°	116.7	240.6	1120.8	1131.3	923.1
102.5°	140.9	257.0	1149.2	1403.5	1212.5
105°	184.3	283.5	1136.0	1730.2	1614.5
107.5°	225.6	316.1	1071.4	1890.1	1924.4
110°	255.3	337.9	1022.7	1929.9	2048.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	282.3	362.3	974.1	1904.3	2085.4
115°	326.3	397.3	911.2	1814.4	2059.0
117.5°	368.2	433.7	871.3	1688.3	1965.0
120°	393.9	456.7	853.7	1593.9	1879.8
122.5°	416.9	479.7	841.6	1511.1	1782.5
125°	449.6	512.5	826.7	1398.4	1638.2
127.5°	480.7	540.6	816.8	1304.4	1514.7
130°	497.0	558.2	811.4	1248.6	1440.3
132.5°	516.0	577.1	807.4	1199.5	1372.7
135°	542.7	602.1	803.0	1131.0	1279.8
137.5°	567.7	622.9	799.3	1075.6	1198.2
140°	586.6	637.8	797.9	1038.8	1149.6
142.5°	602.8	650.2	795.2	1006.0	1100.9
145°	627.2	670.2	791.2	963.6	1038.0
147.5°	653.2	690.3	789.1	926.1	985.6
150°	669.4	702.5	787.8	905.4	951.8
152.5°	684.3	714.7	786.4	887.7	926.1
155°	710.0	733.2	786.1	866.1	890.9
157.5°	728.6	747.5	786.1	848.3	865.5
160°	742.1	757.0	786.1	838.8	852.0
162.5°	753.0	765.2	787.5	830.6	841.2
165°	767.5	777.4	789.4	821.7	826.7
167.5°	777.6	785.2	791.2	814.2	815.5
170°	784.4	789.3	791.2	811.4	811.4
172.5°	789.8	792.1	791.2	807.3	806.1
175°	794.5	796.2	791.2	801.3	799.6
177.5°	795.9	795.9	790.5	798.5	795.9
180°	794.5	794.5	794.5	794.5	794.5

(END OF REPORT)