

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: P519986

Luminaire Tested: **SQ4-F-075U-050D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519986  
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-835-1D-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**

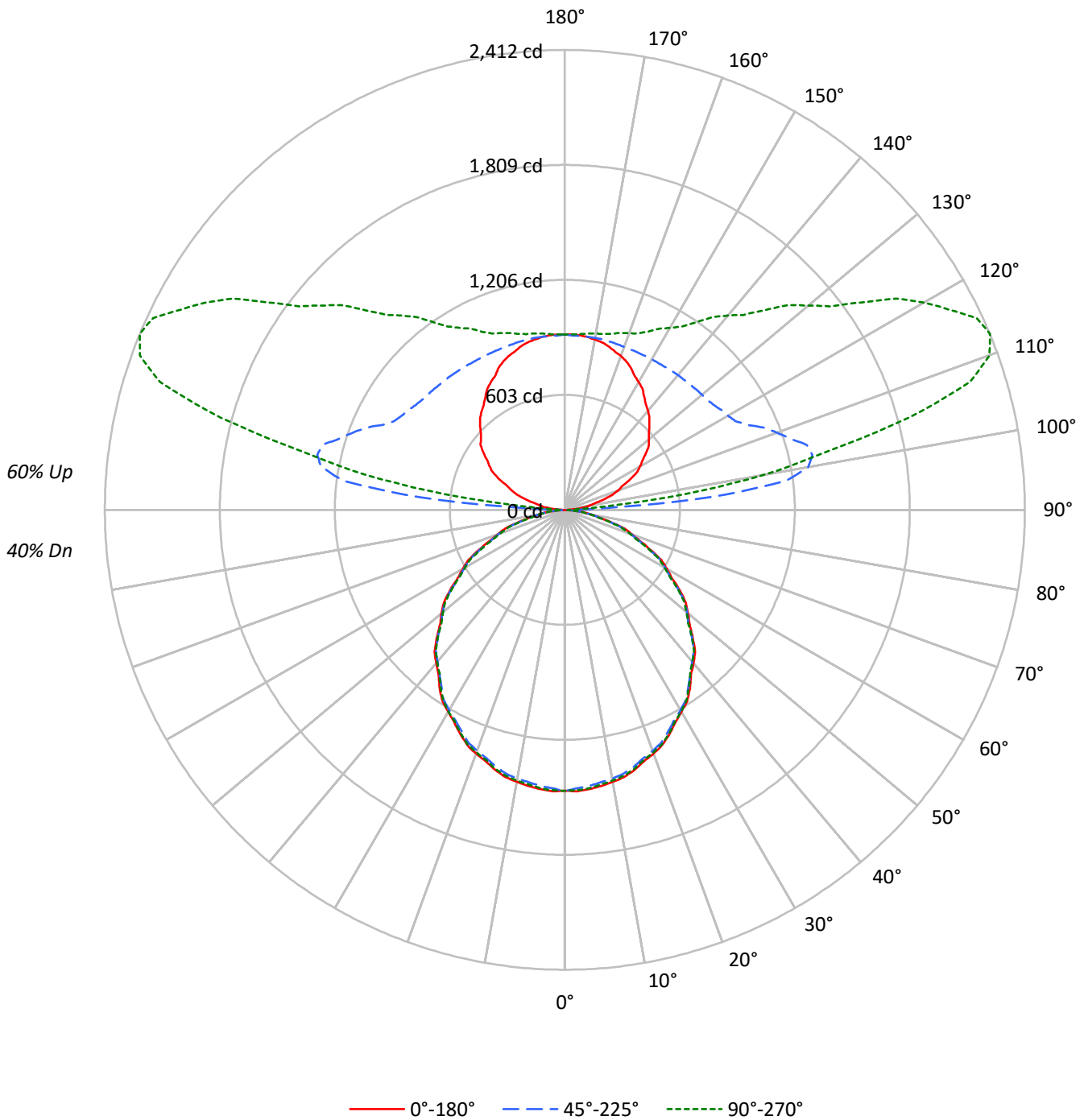
Lumens per Lamp: N/A  
Luminaire Lumens: 10010.6 lumens  
Efficiency: N/A  
Efficacy: 138.7 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

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	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°	6796	6796	6796
5°	6813	6730	6785
10°	6790	6707	6753
15°	6743	6659	6715
20°	6680	6603	6651
25°	6605	6525	6585
30°	6513	6460	6502
35°	6441	6364	6397
40°	6318	6259	6271
45°	6189	6137	6137
50°	6058	6001	5972
55°	5916	5837	5805
60°	5695	5604	5568
65°	5425	5317	5253
70°	5054	4947	4841
75°	4534	4394	4288
80°	3666	3616	3509
85°	2191	2504	2609



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.0	1.4
10°-20°	395.8	4.0
20°-30°	594.5	5.9
30°-40°	709.7	7.1
40°-50°	727.2	7.3
50°-60°	648.6	6.5
60°-70°	483.0	4.8
70°-80°	262.2	2.6
80°-90°	63.1	0.6
90°-100°	433.5	4.3
100°-110°	1192.7	11.9
110°-120°	1231.0	12.3
120°-130°	986.3	9.9
130°-140°	774.7	7.7
140°-150°	593.7	5.9
150°-160°	426.8	4.3
160°-170°	261.0	2.6
170°-180°	88.0	0.9
0°-30°	1129.3	11.3
0°-40°	1839.0	18.4
0°-60°	3214.8	32.1
0°-90°	4023.0	40.2
90°-120°	2857.1	28.5
90°-150°	5211.8	52.1
90°-180°	5988.0	59.8
0°-180°	10010.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1473	1473	1473	1473	1473	
5°	1471	1469	1453	1467	1465	140
15°	1412	1408	1394	1406	1406	398
25°	1298	1294	1282	1290	1294	598
35°	1144	1140	1130	1130	1136	714
45°	949	951	941	939	941	732
55°	736	736	726	720	722	655
65°	497	495	487	481	481	492
75°	254	252	246	243	241	269
85°	41	45	47	49	49	58
90°	2	8	14	18	18	5
95°	65	237	767	328	209	68
105°	213	328	1314	2001	1868	225
115°	378	460	1054	2099	2382	372
125°	520	593	956	1618	1895	464
135°	628	696	929	1308	1480	484
145°	726	775	915	1115	1201	455
155°	821	848	909	1002	1030	377
165°	888	899	913	950	956	250
175°	919	921	915	927	925	87
180°	919	919	919	919	919	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1473.2	1473.2	1473.2	1473.2	1473.2
2.5°	1477.9	1474.8	1462.1	1473.2	1471.6
5°	1471.2	1469.2	1453.4	1467.3	1465.3
7.5°	1460.5	1456.7	1441.2	1454.6	1452.7
10°	1449.5	1445.7	1431.8	1443.6	1441.6
12.5°	1435.3	1433.0	1417.6	1429.4	1429.0
15°	1412.0	1408.2	1394.3	1406.1	1406.1
17.5°	1381.3	1379.0	1365.5	1376.9	1375.4
20°	1360.8	1356.9	1345.0	1354.8	1354.8
22.5°	1335.5	1333.2	1321.3	1329.6	1331.2
25°	1297.7	1293.8	1281.9	1289.9	1293.7
27.5°	1255.8	1252.8	1242.8	1248.1	1250.7
30°	1222.7	1222.7	1212.8	1214.9	1220.7
32.5°	1192.7	1192.7	1181.3	1183.4	1186.0
35°	1143.8	1140.0	1130.0	1130.1	1135.9
37.5°	1087.0	1085.1	1078.7	1077.6	1079.1
40°	1049.2	1047.2	1039.3	1041.3	1041.3
42.5°	1011.3	1009.3	1001.4	998.8	1001.8
45°	948.6	950.6	940.7	938.7	940.7
47.5°	886.7	886.7	878.8	873.4	876.4
50°	844.1	844.1	836.2	832.2	832.2
52.5°	799.9	801.5	792.0	786.5	788.1
55°	735.6	735.6	725.7	719.8	721.8
57.5°	664.6	664.6	654.7	648.9	652.4
60°	617.3	617.3	607.4	601.5	603.5
62.5°	569.9	569.9	560.1	554.2	554.6
65°	497.0	495.0	487.1	481.2	481.2
67.5°	426.8	421.7	415.7	407.8	407.8
70°	374.7	372.7	366.8	358.9	358.9
72.5°	327.4	323.9	317.9	311.6	311.6
75°	254.4	252.4	246.5	242.6	240.6
77.5°	182.2	180.6	180.3	174.7	176.3
80°	138.0	138.0	136.1	132.1	132.1
82.5°	98.6	100.2	96.6	95.8	94.3
85°	41.4	45.3	47.3	49.3	49.3
87.5°	8.3	14.1	13.8	16.2	16.2
90°	2.0	7.7	13.7	17.6	17.6
92.5°	27.0	115.3	199.8	76.8	63.0
95°	64.6	236.6	766.6	327.8	209.2
97.5°	105.2	262.3	1169.8	901.3	636.0
100°	135.0	278.4	1296.5	1308.6	1067.7
102.5°	163.1	297.3	1329.4	1623.6	1402.5
105°	213.1	327.9	1314.1	2001.3	1867.5
107.5°	260.9	365.6	1239.4	2186.4	2226.2
110°	295.3	390.9	1183.1	2232.5	2370.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	326.6	419.1	1126.8	2202.8	2412.3
115°	377.5	459.6	1054.0	2098.8	2381.8
117.5°	425.9	501.7	1007.9	1953.0	2273.1
120°	455.6	528.3	987.5	1843.8	2174.6
122.5°	482.2	554.9	973.4	1748.0	2061.9
125°	520.2	592.8	956.2	1617.6	1894.9
127.5°	556.2	625.4	945.0	1508.9	1752.2
130°	574.9	645.7	938.7	1444.3	1666.1
132.5°	596.8	667.6	934.0	1387.5	1587.9
135°	627.8	696.5	928.9	1308.2	1480.4
137.5°	656.7	720.5	924.6	1244.2	1386.1
140°	678.5	737.8	923.1	1201.6	1329.8
142.5°	697.3	752.1	919.9	1163.7	1273.4
145°	725.5	775.3	915.2	1114.7	1200.7
147.5°	755.6	798.4	912.9	1071.2	1140.1
150°	774.4	812.6	911.3	1047.5	1101.0
152.5°	791.6	826.8	909.7	1026.9	1071.2
155°	821.3	848.1	909.4	1001.9	1030.5
157.5°	842.8	864.7	909.4	981.3	1001.2
160°	858.5	875.7	909.4	970.3	985.6
162.5°	871.0	885.1	910.9	960.8	973.0
165°	887.8	899.3	913.3	950.5	956.2
167.5°	899.6	908.4	915.2	941.8	943.4
170°	907.4	913.1	915.2	938.7	938.7
172.5°	913.7	916.3	915.2	933.9	932.4
175°	919.1	921.0	915.2	926.9	925.0
177.5°	920.7	920.7	914.4	923.7	920.7
180°	919.1	919.1	919.1	919.1	919.1

(END OF REPORT)