

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: P520009

Luminaire Tested: **SQ4-F-075U-075D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520009  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-075U-075D-835-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

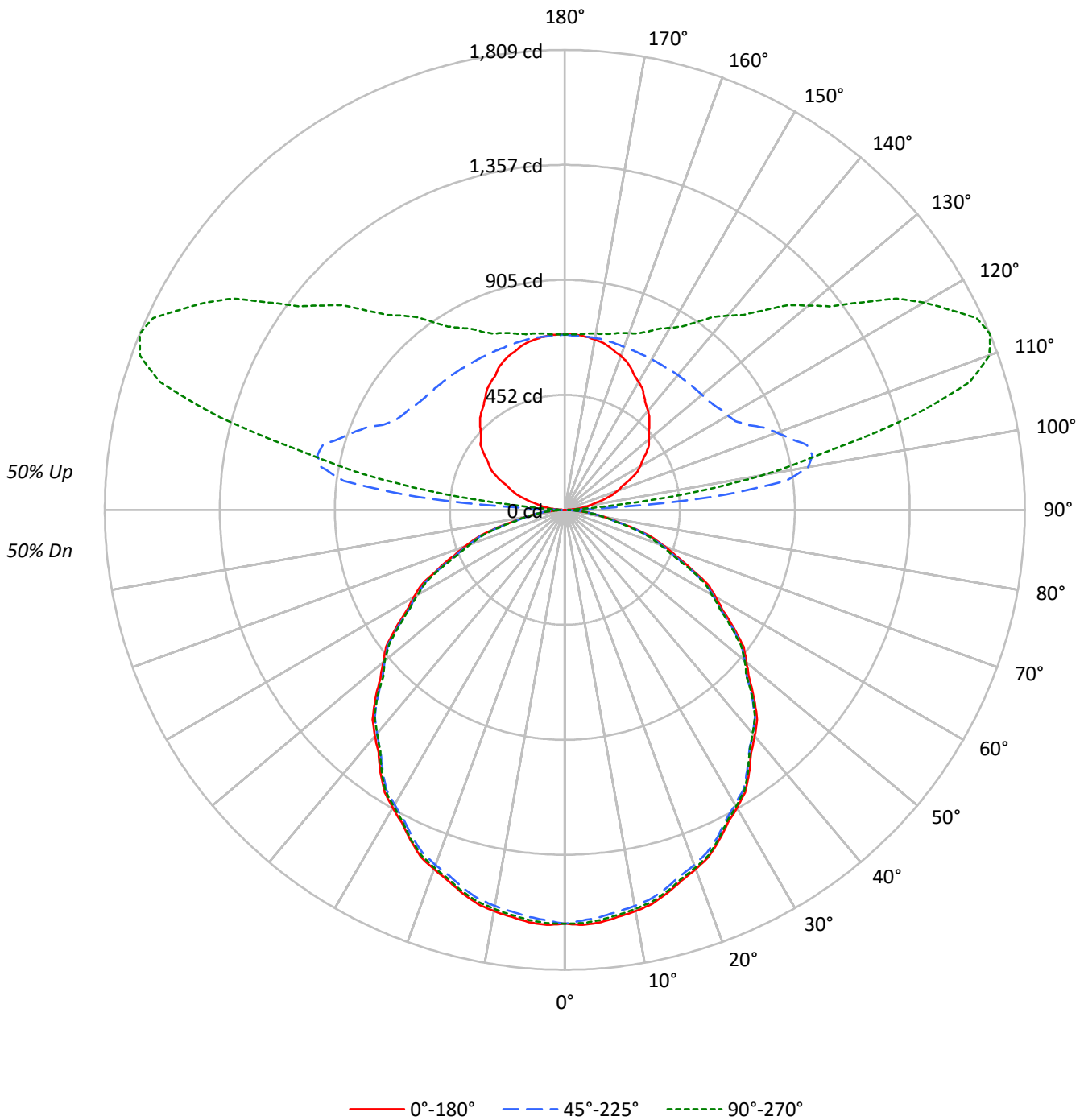
Lumens per Lamp: N/A  
Luminaire Lumens: 8937.0 lumens  
Efficiency: N/A  
Efficacy: 135.2 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 66.1  
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	89	86	90	86	83	80	73	71	68	61	59	57	49	48	47	42
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	40	35
3	81	72	64	58	74	66	60	55	56	51	47	47	43	40	38	36	34	29
4	74	63	55	49	68	59	52	46	50	44	40	42	38	34	34	31	29	25
5	68	56	48	42	62	52	45	40	45	39	35	37	33	30	31	28	25	22
6	63	50	42	36	57	47	40	34	40	34	30	34	29	26	28	25	22	19
7	58	45	37	32	53	42	35	30	36	31	26	31	26	23	25	22	20	17
8	54	41	33	28	49	38	31	27	33	27	23	28	24	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14
10	47	34	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	10014	10014	10014
5°	10052	9925	9998
10°	10012	9883	9957
15°	9935	9813	9897
20°	9845	9729	9807
25°	9737	9637	9707
30°	9614	9509	9561
35°	9487	9387	9432
40°	9328	9233	9221
45°	9167	9052	9078
50°	8913	8842	8842
55°	8706	8595	8516
60°	8425	8280	8208
65°	7970	7820	7712
70°	7487	7300	7114
75°	6735	6490	6350
80°	5384	5281	5228
85°	3232	3649	3747



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.7	1.7
10°-20°	437.5	4.9
20°-30°	657.3	7.4
30°-40°	784.3	8.8
40°-50°	804.3	9.0
50°-60°	716.7	8.0
60°-70°	534.4	6.0
70°-80°	289.8	3.2
80°-90°	68.3	0.8
90°-100°	325.1	3.6
100°-110°	894.5	10.0
110°-120°	923.2	10.3
120°-130°	739.7	8.3
130°-140°	581.0	6.5
140°-150°	445.2	5.0
150°-160°	320.1	3.6
160°-170°	195.7	2.2
170°-180°	66.0	0.7
0°-30°	1248.5	14.0
0°-40°	2032.8	22.7
0°-60°	3553.9	39.8
0°-90°	4446.4	49.8
90°-120°	2142.8	24.0
90°-150°	3908.8	43.7
90°-180°	4491.0	50.3
0°-180°	8937.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1628	1628	1628	1628	1628	
5°	1628	1625	1608	1621	1619	154
15°	1560	1557	1541	1553	1554	440
25°	1435	1433	1420	1428	1430	661
35°	1264	1261	1250	1250	1256	789
45°	1054	1050	1041	1041	1044	811
55°	812	810	802	794	794	725
65°	548	548	537	531	530	545
75°	283	278	273	269	267	298
85°	46	49	52	52	53	63
90°	2	6	10	13	13	4
95°	48	177	575	246	157	51
105°	160	246	986	1501	1401	169
115°	283	345	790	1574	1786	279
125°	390	445	717	1213	1421	348
135°	471	522	697	981	1110	363
145°	544	581	686	836	901	341
155°	616	636	682	751	773	283
165°	666	674	685	713	717	188
175°	689	691	686	695	694	65
180°	689	689	689	689	689	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1628.1	1628.1	1628.1	1628.1	1628.1
2.5°	1634.0	1630.6	1616.3	1628.1	1626.9
5°	1628.1	1625.3	1607.5	1620.7	1619.3
7.5°	1614.8	1611.7	1594.2	1607.5	1607.2
10°	1603.0	1598.7	1582.4	1595.7	1594.2
12.5°	1587.7	1583.4	1567.0	1580.3	1578.8
15°	1560.2	1557.4	1541.0	1552.8	1554.3
17.5°	1528.9	1523.4	1508.9	1520.4	1521.9
20°	1504.1	1499.8	1486.4	1496.8	1498.2
22.5°	1478.2	1473.8	1460.4	1470.8	1472.3
25°	1434.8	1433.3	1420.0	1427.5	1430.3
27.5°	1387.8	1383.8	1373.1	1378.8	1381.6
30°	1353.6	1350.7	1338.8	1343.3	1346.2
32.5°	1318.1	1316.4	1305.8	1307.9	1312.0
35°	1263.5	1260.7	1250.2	1250.3	1256.2
37.5°	1203.0	1199.9	1191.2	1189.8	1192.1
40°	1161.7	1157.4	1149.9	1148.4	1148.4
42.5°	1119.2	1116.0	1106.2	1103.6	1107.1
45°	1053.9	1049.6	1040.6	1040.7	1043.6
47.5°	983.4	981.6	971.3	966.5	967.7
50°	931.4	934.3	924.0	918.2	924.0
52.5°	886.5	884.8	875.6	869.8	872.1
55°	811.9	810.4	801.5	794.1	794.1
57.5°	736.9	733.1	723.9	718.4	722.7
60°	684.9	683.4	673.1	662.9	667.2
62.5°	632.9	630.4	620.0	613.3	616.4
65°	547.6	547.6	537.3	531.4	529.9
67.5°	472.9	466.1	460.2	453.2	451.1
70°	416.3	410.5	405.9	399.9	395.6
72.5°	360.8	357.3	350.4	344.5	343.6
75°	283.4	277.6	273.1	268.6	267.2
77.5°	201.6	200.5	196.3	194.0	194.8
80°	152.0	152.0	149.1	149.1	147.6
82.5°	107.2	108.3	107.8	105.4	105.1
85°	45.8	48.6	51.7	51.7	53.1
87.5°	8.6	15.2	15.1	15.6	15.6
90°	1.5	5.8	10.3	13.2	13.2
92.5°	20.2	86.5	149.8	57.5	47.2
95°	48.4	177.4	574.9	245.8	156.9
97.5°	78.9	196.8	877.4	676.0	476.9
100°	101.2	208.7	972.3	981.4	800.8
102.5°	122.4	223.0	997.0	1217.7	1051.9
105°	159.8	245.9	985.6	1501.0	1400.7
107.5°	195.6	274.3	929.6	1639.8	1669.6
110°	221.4	293.1	887.3	1674.3	1777.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	244.9	314.4	845.1	1652.0	1809.2
115°	283.1	344.7	790.5	1574.2	1786.3
117.5°	319.5	376.2	755.9	1464.7	1704.9
120°	341.8	396.2	740.6	1382.9	1630.9
122.5°	361.7	416.2	730.1	1311.0	1546.4
125°	390.2	444.7	717.2	1213.3	1421.2
127.5°	417.1	469.0	708.6	1131.7	1314.1
130°	431.2	484.3	704.0	1083.3	1249.5
132.5°	447.6	500.7	700.4	1040.6	1191.0
135°	470.8	522.4	696.6	981.2	1110.3
137.5°	492.5	540.4	693.4	933.1	1039.5
140°	508.9	553.4	692.2	901.2	997.3
142.5°	523.0	564.0	689.9	872.8	955.0
145°	544.1	581.4	686.3	836.0	900.6
147.5°	566.7	598.8	684.6	803.4	855.1
150°	580.8	609.5	683.4	785.5	825.7
152.5°	593.7	620.1	682.2	770.2	803.4
155°	616.0	636.1	681.9	751.4	772.9
157.5°	632.2	648.5	681.9	736.0	750.9
160°	643.9	656.8	681.9	727.7	739.2
162.5°	653.3	663.8	683.1	720.6	729.8
165°	665.9	674.5	684.9	712.9	717.2
167.5°	674.7	681.3	686.3	706.4	707.5
170°	680.5	684.8	686.3	704.0	704.0
172.5°	685.2	687.2	686.3	700.4	699.3
175°	689.3	690.7	686.3	695.1	693.7
177.5°	690.5	690.5	685.8	692.8	690.5
180°	689.3	689.3	689.3	689.3	689.3

(END OF REPORT)