

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: P520192

Luminaire Tested: **SQ4-F-100U-050D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520192  
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-940-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

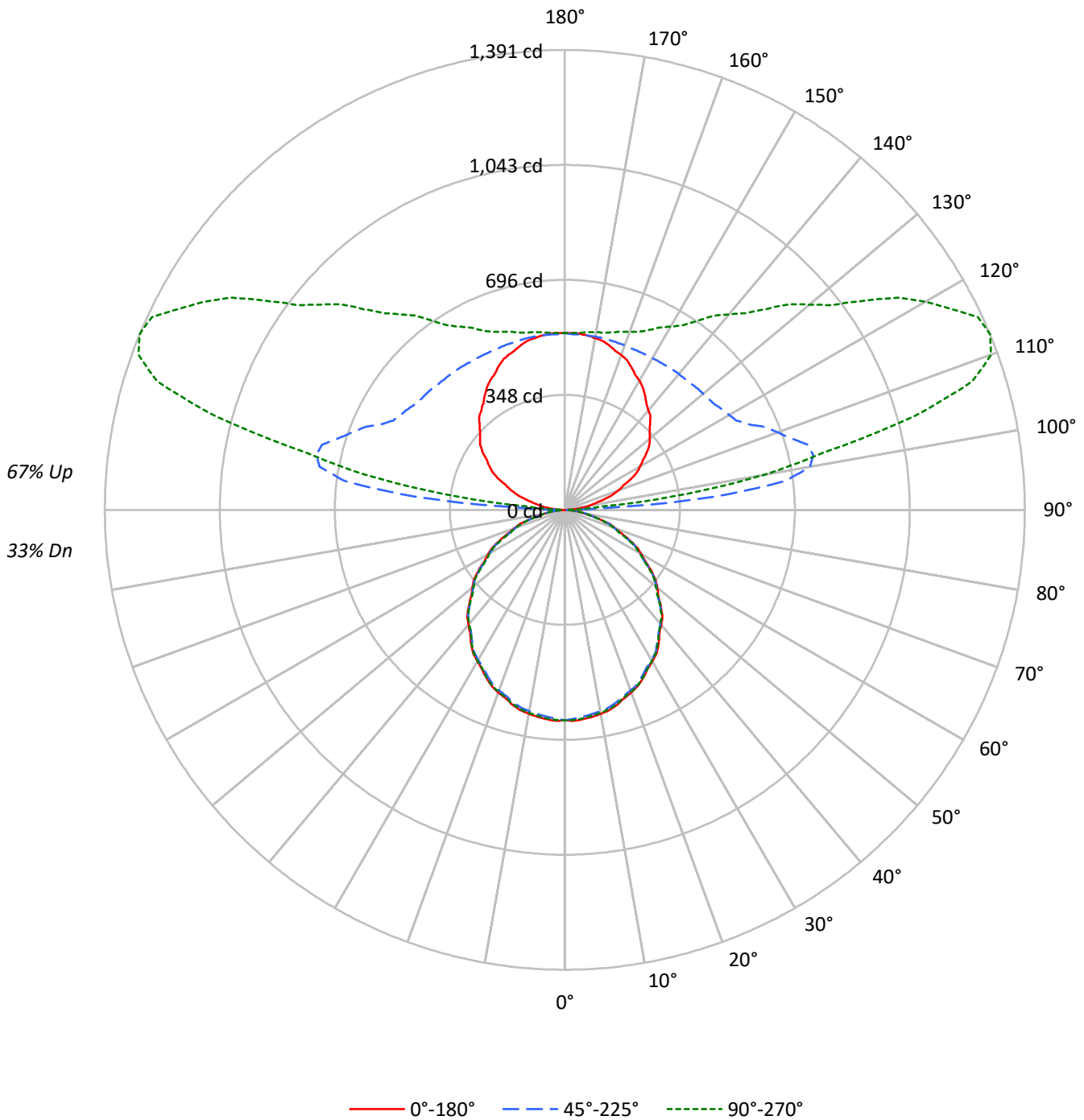
Lumens per Lamp: N/A  
Luminaire Lumens: 5211.0 lumens  
Efficiency: N/A  
Efficacy: 126.2 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 41.3  
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



TEST NUMBER: P520192  
CATALOG NUMBER: SQ4-F-100U-050D-940-1D-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P520192

CATALOG NUMBER: SQ4-F-100U-050D-940-1D-UNV-STD-W-4

**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°	5875	5875	5875
5°	5889	5818	5865
10°	5869	5797	5838
15°	5830	5757	5806
20°	5775	5708	5750
25°	5710	5641	5693
30°	5630	5586	5621
35°	5568	5501	5530
40°	5462	5410	5420
45°	5350	5305	5305
50°	5236	5187	5163
55°	5115	5046	5019
60°	4923	4846	4812
65°	4689	4595	4541
70°	4370	4278	4184
75°	3918	3800	3707
80°	3172	3124	3034
85°	1895	2160	2255



TEST NUMBER: P520192

CATALOG NUMBER: SQ4-F-100U-050D-940-1D-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.1	1.2
10°-20°	171.1	3.3
20°-30°	257.0	4.9
30°-40°	306.7	5.9
40°-50°	314.3	6.0
50°-60°	280.3	5.4
60°-70°	208.8	4.0
70°-80°	113.3	2.2
80°-90°	27.3	0.5
90°-100°	250.2	4.8
100°-110°	690.9	13.3
110°-120°	712.5	13.7
120°-130°	572.6	11.0
130°-140°	450.0	8.6
140°-150°	345.1	6.6
150°-160°	248.0	4.8
160°-170°	151.7	2.9
170°-180°	51.1	1.0
0°-30°	488.2	9.4
0°-40°	794.9	15.3
0°-60°	1389.6	26.7
0°-90°	1739.0	33.4
90°-120°	1653.6	31.7
90°-150°	3021.2	58.0
90°-180°	3472.0	66.6
0°-180°	5211.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	637	637	637	637	637	
5°	636	635	628	634	633	60
15°	610	609	603	608	608	172
25°	561	559	554	558	559	258
35°	494	493	488	488	491	309
45°	410	411	407	406	407	316
55°	318	318	314	311	312	283
65°	215	214	210	208	208	213
75°	110	109	107	105	104	116
85°	18	20	20	21	21	25
90°	2	3	7	8	8	3
95°	37	135	454	187	121	39
105°	123	190	760	1160	1093	131
115°	221	267	612	1212	1378	217
125°	303	344	555	939	1102	269
135°	364	404	540	761	858	282
145°	422	452	533	647	697	264
155°	476	492	528	581	599	219
165°	516	522	531	552	556	145
175°	534	535	532	539	538	51
180°	534	534	534	534	534	



TEST NUMBER: P520192

CATALOG NUMBER: SQ4-F-100U-050D-940-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	636.8	636.8	636.8	636.8	636.8
2.5°	638.8	637.5	632.0	636.8	636.1
5°	635.9	635.1	628.2	634.2	633.3
7.5°	631.3	629.6	623.0	628.7	627.9
10°	626.5	624.9	618.8	624.0	623.1
12.5°	620.4	619.4	612.7	617.9	617.7
15°	610.4	608.7	602.7	607.8	607.8
17.5°	597.1	596.1	590.3	595.2	594.5
20°	588.2	586.5	581.4	585.6	585.6
22.5°	577.2	576.3	571.1	574.7	575.4
25°	560.9	559.2	554.1	557.5	559.2
27.5°	542.8	541.4	537.2	539.5	540.7
30°	528.5	528.5	524.3	525.2	527.6
32.5°	515.5	515.5	510.6	511.5	512.7
35°	494.4	492.7	488.4	488.5	491.0
37.5°	469.9	469.1	466.3	465.8	466.4
40°	453.5	452.7	449.2	450.0	450.0
42.5°	437.1	436.3	432.9	431.7	433.1
45°	410.0	410.9	406.6	405.8	406.6
47.5°	383.3	383.3	379.8	377.5	378.8
50°	364.8	364.8	361.4	359.7	359.7
52.5°	345.7	346.4	342.4	340.0	340.6
55°	318.0	318.0	313.7	311.2	312.0
57.5°	287.2	287.2	283.0	280.4	282.0
60°	266.8	266.8	262.6	260.0	260.8
62.5°	246.3	246.3	242.1	239.5	239.7
65°	214.8	214.0	210.5	208.0	208.0
67.5°	184.5	182.3	179.7	176.3	176.3
70°	162.0	161.1	158.6	155.1	155.1
72.5°	141.5	140.0	137.5	134.7	134.7
75°	109.9	109.2	106.6	104.8	104.0
77.5°	78.8	78.1	77.9	75.5	76.2
80°	59.7	59.7	58.8	57.1	57.1
82.5°	42.6	43.3	41.8	41.4	40.7
85°	17.9	19.5	20.4	21.3	21.3
87.5°	3.7	6.1	6.1	7.0	7.2
90°	1.7	3.4	6.8	7.7	8.5
92.5°	15.4	63.9	114.3	41.6	32.4
95°	36.8	135.4	454.0	186.6	121.4
97.5°	60.8	151.6	672.6	517.8	375.0
100°	78.6	161.4	753.3	758.5	616.5
102.5°	95.8	172.5	769.0	937.3	802.5
105°	123.2	190.0	760.1	1160.4	1092.7
107.5°	152.1	211.7	717.7	1268.0	1292.7
110°	172.7	226.2	684.8	1291.1	1371.4



TEST NUMBER: P520192

CATALOG NUMBER: SQ4-F-100U-050D-940-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	191.2	242.7	654.1	1272.8	1391.2
115°	220.6	266.6	612.1	1211.9	1378.3
117.5°	246.2	292.0	584.6	1126.0	1315.3
120°	263.3	308.4	573.6	1068.0	1258.6
122.5°	279.8	322.9	564.8	1013.7	1194.3
125°	302.7	344.4	554.9	939.1	1102.1
127.5°	322.2	363.9	549.1	876.0	1016.6
130°	335.1	377.0	546.3	837.4	965.3
132.5°	347.5	387.3	543.6	804.9	920.9
135°	364.2	403.5	539.5	760.6	857.6
137.5°	383.0	418.8	537.4	723.3	806.1
140°	393.3	428.4	536.1	698.5	771.2
142.5°	404.9	437.3	534.7	676.4	740.4
145°	422.4	451.6	532.7	647.4	696.8
147.5°	439.1	464.7	530.8	623.1	661.4
150°	451.5	472.4	530.1	608.6	639.5
152.5°	461.0	480.6	529.4	596.2	621.7
155°	476.2	492.1	528.3	581.0	599.4
157.5°	490.3	502.4	528.5	569.9	582.5
160°	498.5	509.3	529.2	563.7	572.9
162.5°	505.3	514.8	529.9	558.1	565.3
165°	515.6	522.2	530.9	551.6	555.7
167.5°	523.4	527.5	531.8	547.5	548.9
170°	527.6	530.9	531.8	545.5	545.5
172.5°	530.9	533.0	531.8	542.7	542.1
175°	534.4	535.2	531.8	539.4	537.7
177.5°	535.8	535.1	531.6	536.4	535.1
180°	534.4	534.4	534.4	534.4	534.4

(END OF REPORT)