

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521559

Luminaire Tested: **SQ4-F-100U-050D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521559
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-050D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

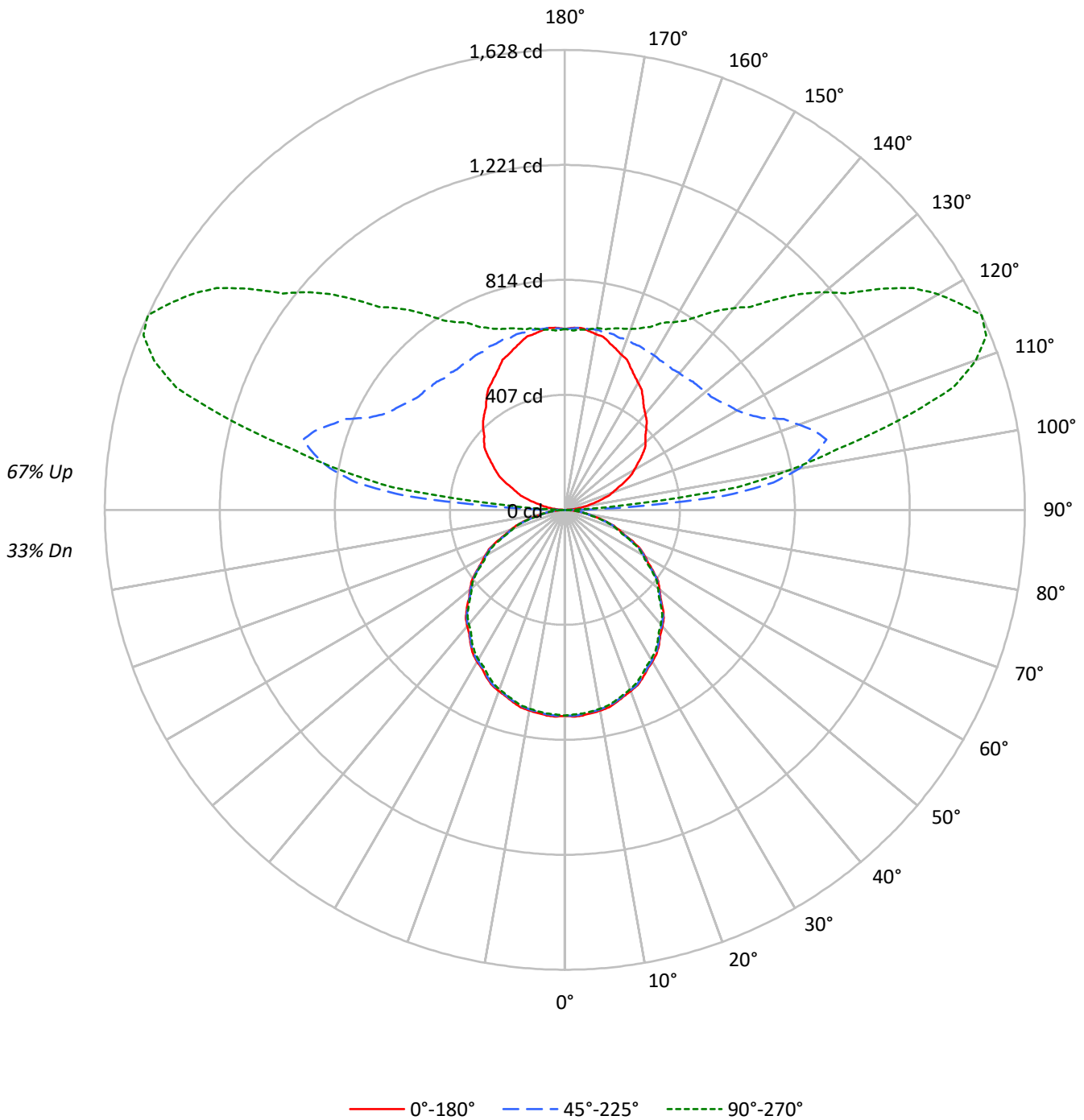
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6218.9 lumens
Efficiency: N/A
Efficacy: 116.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 53.2
Input Voltage (V): 120
Input Current (A_{in}): 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: P521559
CATALOG NUMBER: SQ4-F-100U-050D-93050-1D-UNV-STD-W-4 (4500K)

Luminous Intensity Polar Plot





TEST NUMBER: P521559

CATALOG NUMBER: SQ4-F-100U-050D-93050-1D-UNV-STD-W-4 (4500K)

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	82	85	81	78	75	65	63	60	50	48	47	36	35	34	28
2	85	78	72	67	77	71	66	61	57	53	50	44	41	39	31	30	29	23
3	78	69	61	56	70	62	56	51	50	45	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	48	43	44	39	35	34	31	28	25	23	21	17
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18	14
6	60	48	40	34	54	44	37	32	35	30	26	27	24	21	20	18	16	13
7	55	43	35	30	50	39	32	28	32	27	23	25	21	18	18	16	14	11
8	51	39	32	26	46	36	29	24	29	24	20	23	19	16	17	14	12	10
9	47	36	28	23	43	32	26	22	26	21	18	21	17	15	15	13	11	9
10	44	32	25	21	40	30	23	19	24	19	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6723	6723	6723
5°	6768	6730	6702
10°	6760	6722	6694
15°	6737	6699	6669
20°	6705	6675	6635
25°	6662	6621	6559
30°	6614	6571	6506
35°	6546	6511	6443
40°	6472	6423	6362
45°	6401	6335	6281
50°	6281	6238	6179
55°	6172	6106	6042
60°	6028	5934	5859
65°	5798	5643	5578
70°	5436	5298	5244
75°	4934	4787	4716
80°	4112	4166	4054
85°	2911	3451	3451



TEST NUMBER: P521559

CATALOG NUMBER: SQ4-F-100U-050D-93050-1D-UNV-STD-W-4 (4500K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.9	1.1
10°-20°	197.5	3.2
20°-30°	298.5	4.8
30°-40°	359.5	5.8
40°-50°	373.4	6.0
50°-60°	338.7	5.4
60°-70°	256.8	4.1
70°-80°	143.2	2.3
80°-90°	37.9	0.6
90°-100°	330.0	5.3
100°-110°	797.5	12.8
110°-120°	850.5	13.7
120°-130°	688.9	11.1
130°-140°	533.4	8.6
140°-150°	406.9	6.5
150°-160°	294.5	4.7
160°-170°	181.4	2.9
170°-180°	61.4	1.0
0°-30°	565.0	9.1
0°-40°	924.5	14.9
0°-60°	1636.5	26.3
0°-90°	2074.5	33.4
90°-120°	1978.0	31.8
90°-150°	3607.1	58.0
90°-180°	4144.0	66.6
0°-180°	6218.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	729	729	729	729	729	
5°	731	725	727	725	724	69
15°	705	697	701	699	698	199
25°	654	648	650	644	644	301
35°	581	575	578	571	572	363
45°	491	486	486	480	481	377
55°	384	383	380	376	376	343
65°	266	263	258	256	256	262
75°	138	136	134	132	132	146
85°	28	30	33	33	33	34
90°	0	0	0	0	0	3
95°	32	165	565	368	258	37
105°	127	220	958	1240	1224	135
115°	233	298	770	1460	1628	231
125°	332	382	668	1161	1364	296
135°	408	456	641	916	1053	315
145°	483	518	629	778	839	302
155°	553	577	637	689	714	255
165°	611	621	645	655	664	173
175°	647	644	647	641	640	61
180°	640	640	640	640	640	

TEST NUMBER: P521559

CATALOG NUMBER: SQ4-F-100U-050D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	728.7	728.7	728.7	728.7	728.7
2.5°	732.8	727.2	728.7	727.8	724.7
5°	730.8	724.8	726.7	724.6	723.6
7.5°	725.7	719.5	721.6	719.6	720.2
10°	721.6	714.6	717.5	715.5	714.5
12.5°	716.7	709.0	711.8	709.0	709.6
15°	705.3	697.4	701.3	699.2	698.2
17.5°	692.7	685.7	689.6	686.4	686.4
20°	682.9	676.0	679.9	675.8	675.8
22.5°	672.3	664.6	668.5	663.6	663.6
25°	654.4	647.5	650.4	644.3	644.3
27.5°	633.9	626.7	630.6	624.5	624.5
30°	620.8	612.9	616.8	610.7	610.7
32.5°	604.6	599.0	601.3	595.2	595.2
35°	581.2	575.2	578.1	571.0	572.0
37.5°	555.3	551.1	551.2	544.9	546.1
40°	537.4	532.4	533.3	526.2	528.2
42.5°	518.7	514.5	514.6	509.1	510.3
45°	490.6	485.6	485.5	480.4	481.4
47.5°	458.8	456.2	455.8	449.9	450.9
50°	437.6	436.7	434.6	429.5	430.5
52.5°	416.5	415.5	413.4	408.4	409.4
55°	383.7	382.7	379.6	375.6	375.6
57.5°	349.5	348.5	345.2	341.2	341.2
60°	326.7	325.7	321.6	317.5	317.5
62.5°	303.1	301.3	297.2	293.9	293.9
65°	265.6	262.7	258.5	255.5	255.5
67.5°	226.8	224.8	221.7	218.8	218.8
70°	201.5	199.5	196.4	194.4	194.4
72.5°	176.3	174.3	171.2	169.2	169.2
75°	138.4	136.4	134.3	132.3	132.3
77.5°	101.0	100.4	100.4	98.3	98.3
80°	77.4	78.3	78.4	76.3	76.3
82.5°	55.4	57.2	58.0	57.6	57.6
85°	27.5	30.5	32.6	32.6	32.6
87.5°	8.1	10.5	13.0	13.0	13.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.8	89.3	210.4	102.3	69.4
95°	32.5	165.1	565.3	367.6	257.6
97.5°	57.8	182.9	744.6	717.3	615.8
100°	77.3	193.9	843.3	890.2	806.6
102.5°	95.7	203.9	908.3	1034.1	984.5
105°	127.4	220.2	958.5	1240.1	1224.2
107.5°	158.6	239.5	928.9	1405.4	1442.7
110°	180.3	255.9	881.2	1476.6	1546.9

TEST NUMBER: P521559

CATALOG NUMBER: SQ4-F-100U-050D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	202.0	272.3	838.9	1494.0	1614.1
115°	233.2	298.1	770.0	1459.9	1628.2
117.5°	264.1	325.3	729.6	1381.3	1578.6
120°	284.7	341.7	703.6	1319.7	1526.5
122.5°	306.4	359.1	687.3	1256.8	1460.4
125°	332.1	382.5	668.4	1161.0	1363.8
127.5°	357.6	405.1	655.1	1079.9	1258.1
130°	372.8	419.2	650.7	1023.5	1198.4
132.5°	386.9	435.4	644.2	982.7	1131.2
135°	408.1	455.8	641.2	915.5	1053.4
137.5°	428.1	476.1	631.8	870.0	973.9
140°	443.3	487.1	631.8	837.3	932.7
142.5°	458.5	502.2	626.3	808.7	889.3
145°	482.6	518.4	629.0	778.2	839.2
147.5°	505.1	539.9	627.4	743.0	793.4
150°	519.2	549.7	631.8	727.6	767.3
152.5°	534.4	563.8	630.7	711.2	746.7
155°	553.1	577.0	637.2	689.3	714.5
157.5°	575.6	596.0	635.8	680.9	695.7
160°	584.3	601.5	641.2	670.0	680.6
162.5°	598.4	613.5	639.1	666.6	673.0
165°	611.4	620.7	645.3	655.0	664.3
167.5°	627.4	633.5	643.7	654.3	654.5
170°	631.8	635.7	648.0	646.8	653.5
172.5°	639.4	642.3	644.8	647.7	643.7
175°	646.7	644.0	646.7	641.2	639.9
177.5°	645.3	645.3	643.1	640.9	635.6
180°	639.9	639.9	639.9	639.9	639.9

(END OF REPORT)