

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: P521400

Luminaire Tested: **SQ4-F-050U-050D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521400
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-050U-050D-93050-1D-UNV-STD-W-4 (3000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

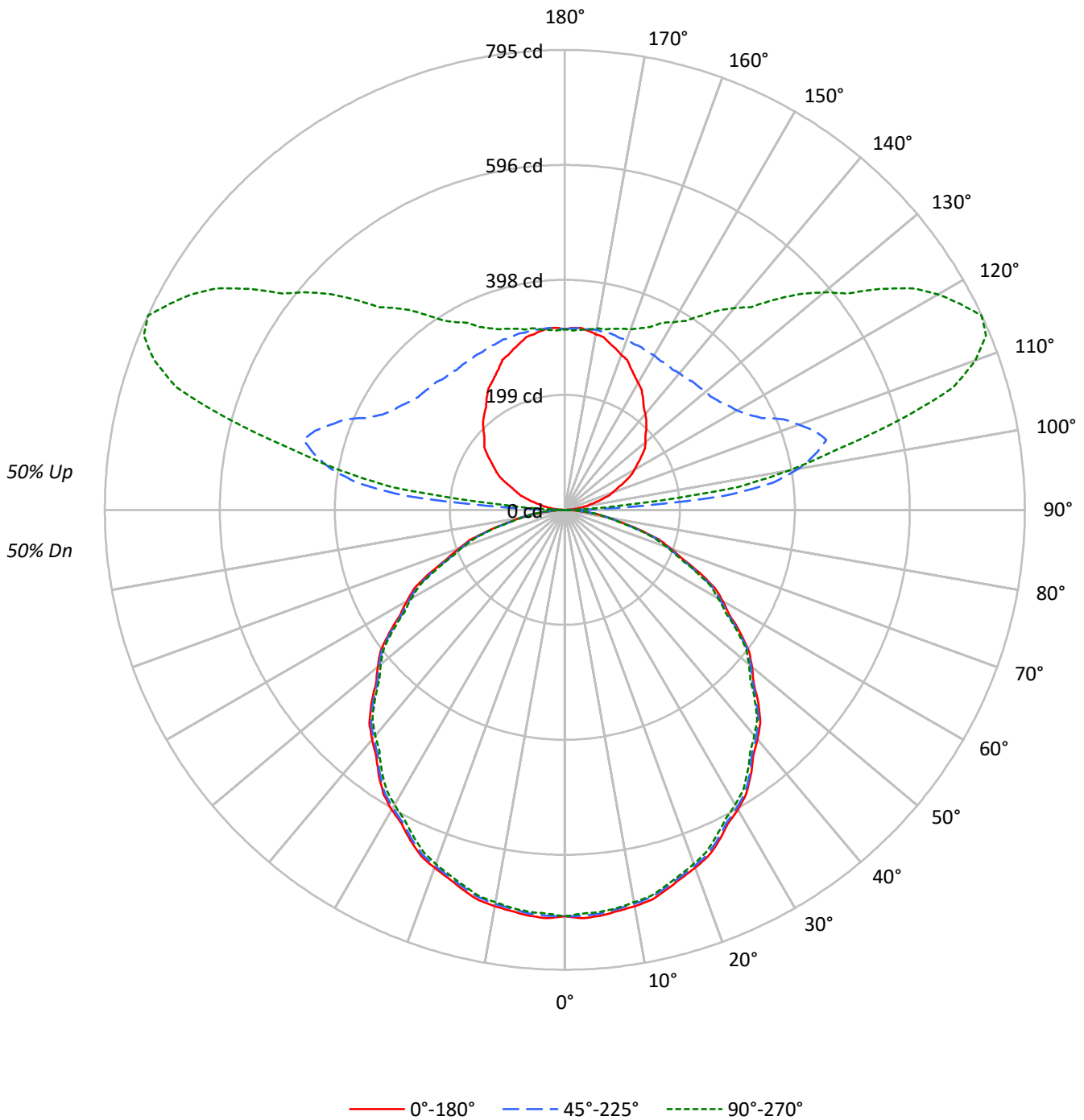
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4022.6 lumens
Efficiency: N/A
Efficacy: 109.0 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: General Diffuse

Input Watts (W): 36.9
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	70	68	60	59	57	49	48	47	42
2	89	81	75	70	82	75	70	65	64	60	56	53	50	47	43	41	39	35
3	81	71	64	58	74	66	59	54	56	51	47	47	43	40	38	35	33	29
4	74	63	55	49	68	58	51	46	50	44	40	41	37	34	34	31	28	25
5	68	56	48	42	62	52	45	39	44	39	34	37	33	29	30	27	25	21
6	62	50	42	36	57	47	39	34	40	34	30	33	29	26	28	24	22	19
7	58	45	37	31	53	42	35	30	36	30	26	30	26	23	25	22	19	17
8	53	41	33	28	49	38	31	26	33	27	23	28	23	20	23	20	17	15
9	50	37	30	25	46	35	28	23	30	25	21	25	21	18	21	18	15	13
10	46	34	27	22	43	32	25	21	28	22	19	23	19	16	20	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6481	6481	6481
5°	6525	6489	6461
10°	6518	6481	6453
15°	6495	6458	6429
20°	6464	6435	6397
25°	6423	6383	6323
30°	6376	6335	6272
35°	6311	6277	6210
40°	6240	6193	6133
45°	6170	6106	6055
50°	6056	6014	5958
55°	5950	5887	5825
60°	5813	5722	5648
65°	5591	5440	5377
70°	5241	5109	5055
75°	4755	4616	4549
80°	3964	4017	3910
85°	2805	3324	3324



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.5	1.7
10°-20°	190.4	4.7
20°-30°	287.8	7.2
30°-40°	346.6	8.6
40°-50°	359.9	8.9
50°-60°	326.5	8.1
60°-70°	247.6	6.2
70°-80°	138.1	3.4
80°-90°	36.5	0.9
90°-100°	161.0	4.0
100°-110°	389.2	9.7
110°-120°	415.1	10.3
120°-130°	336.2	8.4
130°-140°	260.3	6.5
140°-150°	198.6	4.9
150°-160°	143.7	3.6
160°-170°	88.5	2.2
170°-180°	30.0	0.7
0°-30°	544.7	13.5
0°-40°	891.3	22.2
0°-60°	1577.7	39.2
0°-90°	2000.0	49.7
90°-120°	965.3	24.0
90°-150°	1760.4	43.8
90°-180°	2023.0	50.3
0°-180°	4022.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	702	702	702	702	702	
5°	704	699	701	699	698	67
15°	680	672	676	674	673	192
25°	631	624	627	621	621	291
35°	560	554	557	550	551	350
45°	473	468	468	463	464	364
55°	370	369	366	362	362	330
65°	256	253	249	246	246	253
75°	133	132	130	128	128	141
85°	26	29	31	31	31	33
90°	0	0	0	0	0	2
95°	16	81	276	179	126	18
105°	62	108	468	605	598	66
115°	114	146	376	712	795	113
125°	162	187	326	567	666	145
135°	199	222	313	447	514	154
145°	236	253	307	380	410	147
155°	270	282	311	336	349	125
165°	298	303	315	320	324	84
175°	316	314	316	313	312	30
180°	312	312	312	312	312	

TEST NUMBER: P521400

CATALOG NUMBER: SQ4-F-050U-050D-93050-1D-UNV-STD-W-4 (3000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	702.5	702.5	702.5	702.5	702.5
2.5°	706.5	701.1	702.5	701.7	698.6
5°	704.5	698.8	700.6	698.6	697.6
7.5°	699.6	693.7	695.7	693.7	694.3
10°	695.7	689.0	691.8	689.8	688.8
12.5°	691.0	683.5	686.3	683.5	684.1
15°	680.0	672.3	676.1	674.1	673.1
17.5°	667.8	661.1	664.9	661.7	661.7
20°	658.4	651.7	655.4	651.5	651.5
22.5°	648.2	640.7	644.5	639.7	639.7
25°	630.9	624.2	627.0	621.1	621.1
27.5°	611.1	604.2	608.0	602.1	602.1
30°	598.5	590.9	594.6	588.7	588.7
32.5°	582.8	577.5	579.7	573.8	573.8
35°	560.3	554.5	557.3	550.5	551.4
37.5°	535.3	531.3	531.4	525.4	526.5
40°	518.1	513.3	514.2	507.3	509.2
42.5°	500.0	496.0	496.1	490.8	492.0
45°	472.9	468.1	468.0	463.2	464.1
47.5°	442.3	439.8	439.4	433.7	434.7
50°	421.9	421.0	419.0	414.1	415.1
52.5°	401.5	400.6	398.6	393.7	394.6
55°	369.9	369.0	366.0	362.1	362.1
57.5°	336.9	336.0	332.8	328.9	328.9
60°	315.0	314.0	310.1	306.1	306.1
62.5°	292.2	290.5	286.5	283.4	283.4
65°	256.1	253.2	249.2	246.3	246.3
67.5°	218.6	216.7	213.7	211.0	211.0
70°	194.3	192.4	189.4	187.4	187.4
72.5°	169.9	168.0	165.0	163.1	163.1
75°	133.4	131.5	129.5	127.6	127.6
77.5°	97.3	96.8	96.7	94.8	94.8
80°	74.6	75.5	75.6	73.6	73.6
82.5°	53.4	55.1	55.9	55.5	55.5
85°	26.5	29.4	31.4	31.4	31.4
87.5°	7.8	10.2	12.6	12.6	12.6
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.3	43.6	102.7	49.9	33.9
95°	15.9	80.6	275.9	179.4	125.7
97.5°	28.2	89.3	363.4	350.1	300.5
100°	37.7	94.6	411.5	434.4	393.7
102.5°	46.7	99.5	443.3	504.7	480.5
105°	62.2	107.5	467.8	605.2	597.5
107.5°	77.4	116.9	453.4	685.9	704.1
110°	88.0	124.9	430.1	720.6	754.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	98.6	132.9	409.4	729.1	787.7
115°	113.8	145.5	375.8	712.5	794.6
117.5°	128.9	158.8	356.1	674.1	770.4
120°	138.9	166.8	343.4	644.1	745.0
122.5°	149.5	175.3	335.4	613.3	712.7
125°	162.1	186.7	326.2	566.6	665.6
127.5°	174.5	197.7	319.7	527.0	614.0
130°	181.9	204.6	317.6	499.5	584.9
132.5°	188.8	212.5	314.4	479.6	552.1
135°	199.2	222.4	313.0	446.8	514.1
137.5°	208.9	232.4	308.3	424.6	475.3
140°	216.4	237.7	308.3	408.6	455.2
142.5°	223.8	245.1	305.7	394.7	434.0
145°	235.5	253.0	307.0	379.8	409.6
147.5°	246.5	263.5	306.2	362.6	387.2
150°	253.4	268.3	308.3	355.1	374.5
152.5°	260.8	275.2	307.8	347.1	364.4
155°	269.9	281.6	311.0	336.4	348.7
157.5°	280.9	290.9	310.3	332.3	339.5
160°	285.2	293.6	313.0	327.0	332.1
162.5°	292.0	299.4	311.9	325.3	328.4
165°	298.4	302.9	314.9	319.7	324.2
167.5°	306.2	309.2	314.1	319.3	319.4
170°	308.3	310.3	316.3	315.7	318.9
172.5°	312.0	313.4	314.7	316.1	314.1
175°	315.6	314.3	315.6	312.9	312.3
177.5°	314.9	314.9	313.9	312.8	310.2
180°	312.3	312.3	312.3	312.3	312.3

(END OF REPORT)