

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: P521404

Luminaire Tested: **SQ4-F-050U-050D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521404
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 (5000K)
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 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

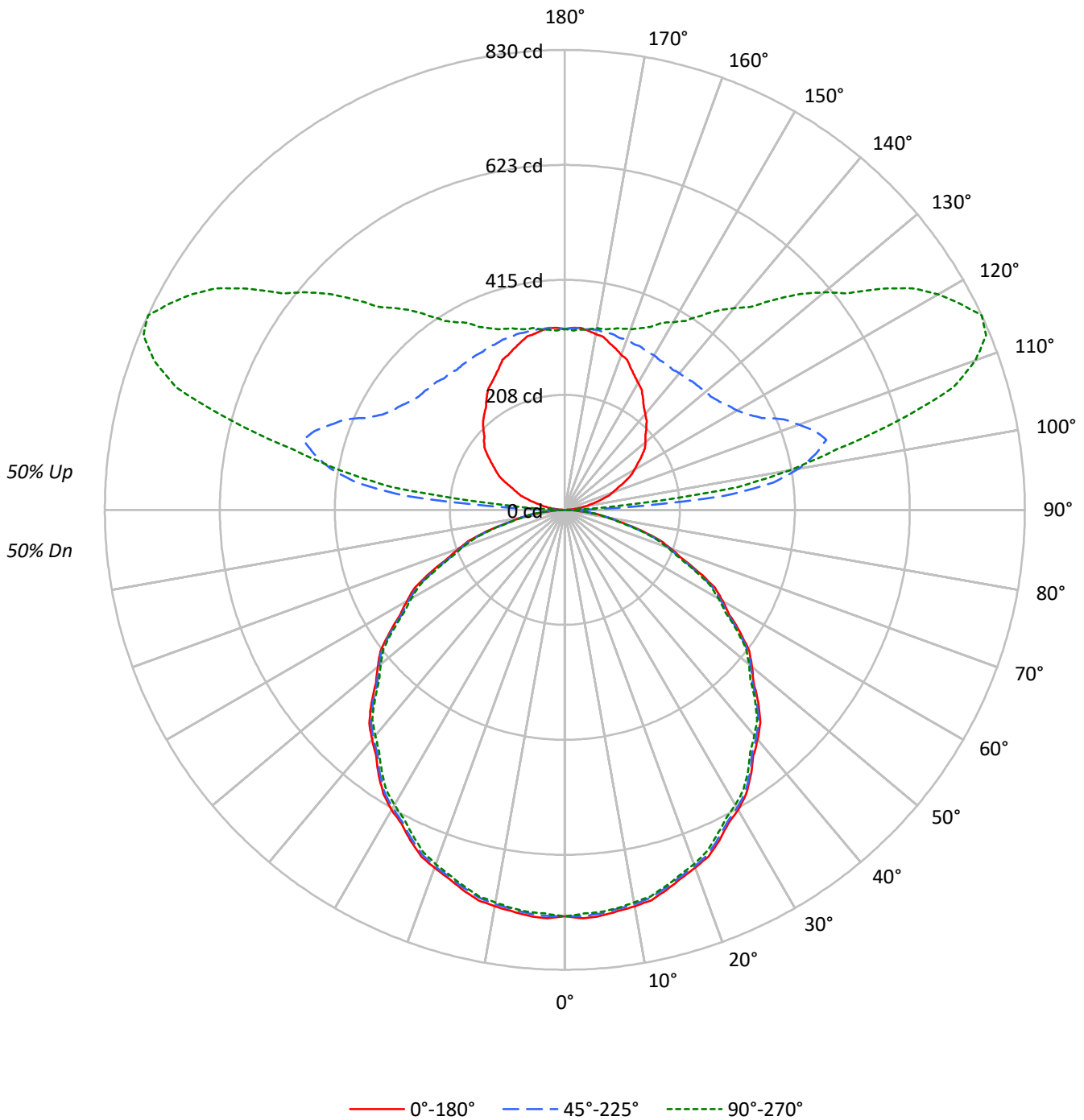
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4201.0 lumens
Efficiency: N/A
Efficacy: 113.8 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

TEST NUMBER: P521404
CATALOG NUMBER: SQ4-F-050U-050D-93050-1D-UNV-STD-W-4 (5000K)

Luminous Intensity Polar Plot





TEST NUMBER: P521404

CATALOG NUMBER: SQ4-F-050U-050D-93050-1D-UNV-STD-W-4 (5000K)

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°	6769	6769	6769
5°	6814	6777	6748
10°	6806	6768	6740
15°	6783	6743	6715
20°	6751	6721	6680
25°	6708	6666	6603
30°	6660	6616	6550
35°	6590	6555	6486
40°	6517	6468	6405
45°	6444	6378	6324
50°	6324	6281	6222
55°	6214	6148	6082
60°	6069	5975	5899
65°	5840	5683	5615
70°	5473	5336	5279
75°	4969	4823	4748
80°	4139	4192	4086
85°	2932	3472	3472



TEST NUMBER: P521404

CATALOG NUMBER: SQ4-F-050U-050D-93050-1D-UNV-STD-W-4 (5000K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.4	1.7
10°-20°	198.9	4.7
20°-30°	300.5	7.2
30°-40°	362.0	8.6
40°-50°	375.9	8.9
50°-60°	341.0	8.1
60°-70°	258.6	6.2
70°-80°	144.2	3.4
80°-90°	38.1	0.9
90°-100°	168.2	4.0
100°-110°	406.5	9.7
110°-120°	433.5	10.3
120°-130°	351.1	8.4
130°-140°	271.8	6.5
140°-150°	207.4	4.9
150°-160°	150.1	3.6
160°-170°	92.5	2.2
170°-180°	31.3	0.7
0°-30°	568.8	13.5
0°-40°	930.8	22.2
0°-60°	1647.7	39.2
0°-90°	2088.6	49.7
90°-120°	1008.1	24.0
90°-150°	1838.5	43.8
90°-180°	2112.0	50.3
0°-180°	4201.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	734	734	734	734	734	
5°	736	730	732	730	729	70
15°	710	702	706	704	703	200
25°	659	652	655	649	649	303
35°	585	579	582	575	576	366
45°	494	489	489	484	485	380
55°	386	385	382	378	378	345
65°	268	264	260	257	257	264
75°	139	137	135	133	133	147
85°	28	31	33	33	33	34
90°	0	0	0	0	0	2
95°	17	84	288	187	131	19
105°	65	112	488	632	624	69
115°	119	152	392	744	830	117
125°	169	195	341	592	695	151
135°	208	232	327	467	537	161
145°	246	264	321	397	428	154
155°	282	294	325	351	364	130
165°	312	316	329	334	339	88
175°	330	328	330	327	326	31
180°	326	326	326	326	326	

TEST NUMBER: P521404

CATALOG NUMBER: SQ4-F-050U-050D-93050-1D-UNV-STD-W-4 (5000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	733.7	733.7	733.7	733.7	733.7
2.5°	737.8	732.2	733.7	732.8	729.6
5°	735.7	729.7	731.7	729.6	728.6
7.5°	730.6	724.4	726.5	724.5	725.1
10°	726.5	719.5	722.4	720.4	719.4
12.5°	721.6	713.8	716.7	713.8	714.4
15°	710.1	702.1	706.0	704.0	703.0
17.5°	697.4	690.4	694.4	691.1	691.1
20°	687.6	680.6	684.5	680.4	680.4
22.5°	676.9	669.1	673.0	668.1	668.1
25°	658.9	651.9	654.8	648.6	648.6
27.5°	638.2	631.0	634.9	628.8	628.8
30°	625.1	617.1	621.0	614.8	614.8
32.5°	608.7	603.1	605.4	599.3	599.3
35°	585.1	579.1	582.0	574.9	575.9
37.5°	559.1	554.9	555.0	548.7	549.9
40°	541.1	536.0	537.0	529.8	531.8
42.5°	522.2	518.0	518.1	512.6	513.8
45°	493.9	488.9	488.8	483.7	484.7
47.5°	461.9	459.3	458.9	452.9	454.0
50°	440.6	439.6	437.6	432.5	433.5
52.5°	419.3	418.3	416.2	411.1	412.1
55°	386.3	385.3	382.2	378.1	378.1
57.5°	351.9	350.9	347.6	343.5	343.5
60°	328.9	327.9	323.8	319.7	319.7
62.5°	305.2	303.4	299.2	295.9	295.9
65°	267.5	264.4	260.3	257.2	257.2
67.5°	228.3	226.3	223.2	220.3	220.3
70°	202.9	200.9	197.8	195.7	195.7
72.5°	177.5	175.5	172.4	170.3	170.3
75°	139.4	137.4	135.3	133.2	133.2
77.5°	101.7	101.1	101.0	99.0	99.0
80°	77.9	78.9	78.9	76.9	76.9
82.5°	55.7	57.5	58.4	58.0	58.0
85°	27.7	30.7	32.8	32.8	32.8
87.5°	8.2	10.6	13.1	13.1	13.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.5	45.5	107.2	52.1	35.4
95°	16.6	84.1	288.1	187.4	131.3
97.5°	29.4	93.2	379.5	365.6	313.8
100°	39.4	98.8	429.8	453.7	411.1
102.5°	48.8	103.9	463.0	527.1	501.8
105°	65.0	112.2	488.5	632.1	623.9
107.5°	80.8	122.1	473.5	716.3	735.3
110°	91.9	130.4	449.1	752.6	788.4



TEST NUMBER: P521404

CATALOG NUMBER: SQ4-F-050U-050D-93050-1D-UNV-STD-W-4 (5000K)

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	103.0	138.8	427.6	761.5	822.7
115°	118.8	152.0	392.5	744.1	829.9
117.5°	134.6	165.8	371.9	704.0	804.6
120°	145.1	174.2	358.6	672.6	778.0
122.5°	156.2	183.0	350.3	640.5	744.3
125°	169.3	195.0	340.6	591.7	695.1
127.5°	182.3	206.5	333.9	550.4	641.2
130°	190.0	213.7	331.7	521.6	610.8
132.5°	197.2	221.9	328.4	500.9	576.5
135°	208.0	232.3	326.8	466.6	536.9
137.5°	218.2	242.7	322.0	443.4	496.4
140°	225.9	248.2	322.0	426.7	475.4
142.5°	233.7	256.0	319.2	412.2	453.3
145°	246.0	264.2	320.6	396.6	427.7
147.5°	257.5	275.2	319.8	378.7	404.4
150°	264.6	280.2	322.0	370.8	391.1
152.5°	272.4	287.4	321.4	362.5	380.6
155°	281.9	294.1	324.8	351.3	364.1
157.5°	293.4	303.8	324.1	347.0	354.6
160°	297.8	306.6	326.8	341.5	346.9
162.5°	305.0	312.7	325.7	339.8	343.0
165°	311.6	316.4	328.9	333.8	338.6
167.5°	319.8	322.9	328.1	333.5	333.6
170°	322.0	324.0	330.3	329.7	333.0
172.5°	325.9	327.3	328.6	330.1	328.1
175°	329.6	328.2	329.6	326.8	326.1
177.5°	328.9	328.9	327.8	326.6	323.9
180°	326.1	326.1	326.1	326.1	326.1

(END OF REPORT)