

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: P561989

Luminaire Tested: **SQ4-PR1-100U-050D-92765-1D-UNV-STD-W-4 (4500K)**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P561989
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-100U-050D-92765-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K/65000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6590.3 lumens
Efficiency: N/A
Efficacy: 124.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

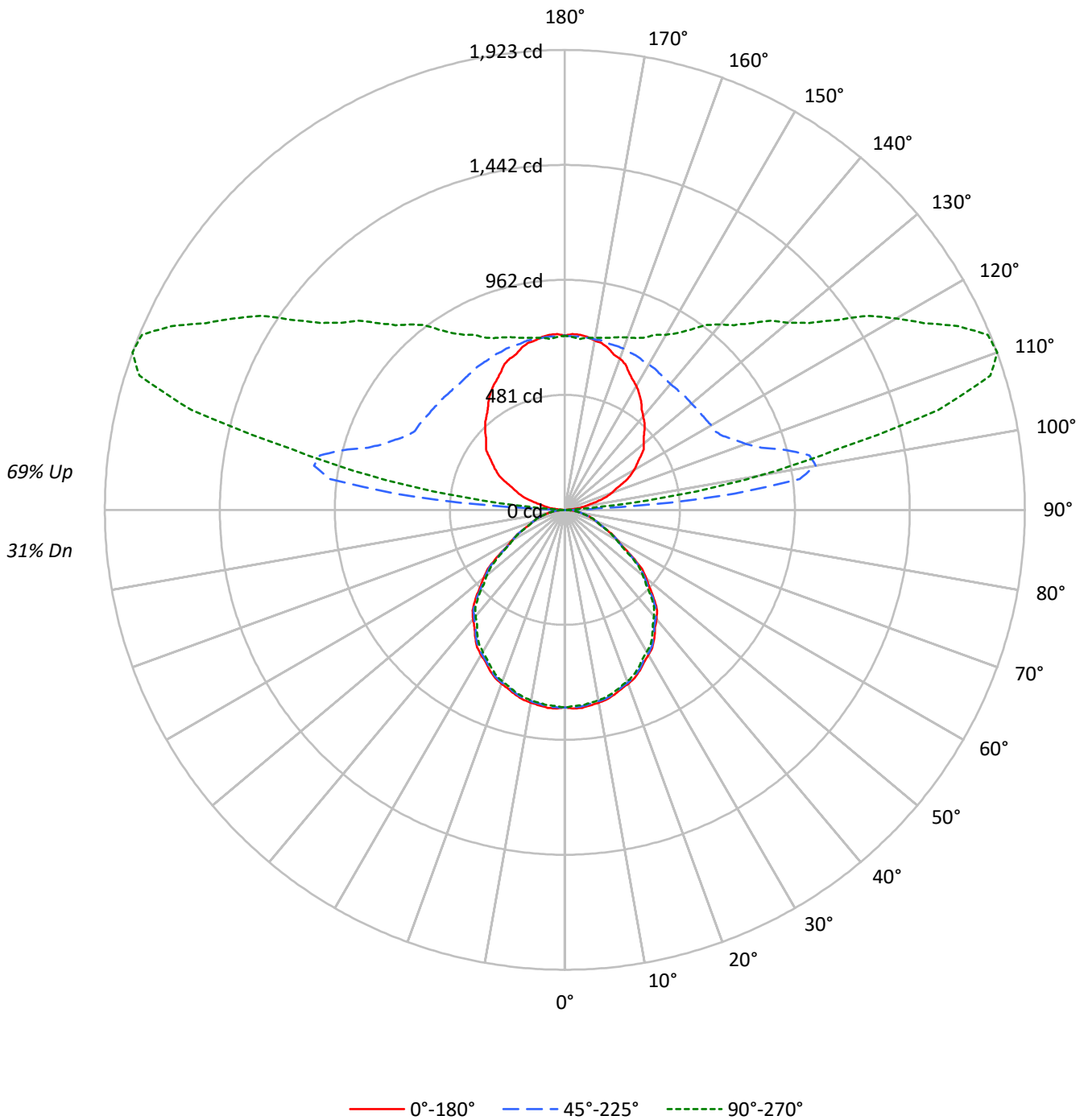
Input Watts (W): 53.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P561989

CATALOG NUMBER: SQ4-PR1-100U-050D-92765-1D-UNV-STD-W-4 (4500K)

Luminous Intensity Polar Plot





TEST NUMBER: P561989

CATALOG NUMBER: SQ4-PR1-100U-050D-92765-1D-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	92	92	92	92	73	73	73	55	55	55	39	39	39	31
1	94	90	86	83	84	81	78	75	64	62	60	49	47	46	35	34	33	27
2	86	78	73	68	77	71	66	62	56	53	50	43	41	39	31	29	28	23
3	78	69	62	57	70	62	56	52	50	46	42	38	35	33	27	26	24	19
4	71	61	54	48	64	55	49	44	44	40	36	34	31	28	25	23	21	17
5	66	54	47	41	59	49	43	38	40	35	31	31	27	25	22	20	18	15
6	60	49	41	35	54	44	37	33	36	31	27	28	24	22	20	18	16	13
7	56	44	36	31	50	40	33	28	32	27	24	25	22	19	18	16	14	12
8	52	40	32	27	46	36	30	25	29	24	21	23	19	17	17	15	13	10
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	13	12	9
10	45	33	26	21	40	30	24	20	25	20	17	19	16	14	14	12	11	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7625	7625	7625
5°	7693	7634	7594
10°	7669	7616	7575
15°	7636	7588	7547
20°	7596	7548	7492
25°	7543	7492	7406
30°	7462	7408	7303
35°	7351	7287	7184
40°	7184	7107	6978
45°	6892	6771	6631
50°	6376	6222	6100
55°	5564	5438	5324
60°	4689	4650	4558
65°	4056	4071	4041
70°	3725	3744	3744
75°	3579	3579	3604
80°	3369	3406	3369
85°	2710	3017	3017



TEST NUMBER: P561989

CATALOG NUMBER: SQ4-PR1-100U-050D-92765-1D-UNV-STD-W-4 (4500K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.1	1.2
10°-20°	223.6	3.4
20°-30°	337.3	5.1
30°-40°	401.8	6.1
40°-50°	396.2	6.0
50°-60°	302.8	4.6
60°-70°	187.4	2.8
70°-80°	106.4	1.6
80°-90°	32.4	0.5
90°-100°	331.9	5.0
100°-110°	944.4	14.3
110°-120°	904.8	13.7
120°-130°	716.1	10.9
130°-140°	574.8	8.7
140°-150°	450.0	6.8
150°-160°	329.3	5.0
160°-170°	203.9	3.1
170°-180°	69.2	1.1
0°-30°	639.0	9.7
0°-40°	1040.8	15.8
0°-60°	1739.8	26.4
0°-90°	2066.0	31.3
90°-120°	2181.1	33.1
90°-150°	3921.9	59.5
90°-180°	4524.0	68.6
0°-180°	6590.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	826	826	826	826	826	
5°	831	822	824	821	820	79
15°	799	791	794	792	790	226
25°	741	732	736	728	728	341
35°	653	645	647	638	638	407
45°	528	521	519	510	508	405
55°	346	340	338	332	331	310
65°	186	184	186	185	185	188
75°	100	100	100	101	101	106
85°	26	27	28	28	28	30
90°	0	0	0	0	0	3
95°	36	143	642	222	137	41
105°	147	223	962	1700	1616	155
115°	273	330	730	1546	1815	269
125°	385	427	696	1156	1382	345
135°	471	510	688	976	1104	363
145°	555	584	694	845	921	347
155°	634	649	710	764	795	293
165°	701	703	719	734	745	197
175°	734	730	727	723	717	70
180°	728	728	728	728	728	

TEST NUMBER: P561989

CATALOG NUMBER: SQ4-PR1-100U-050D-92765-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	826.4	826.4	826.4	826.4	826.4
2.5°	831.5	824.3	826.4	824.6	820.7
5°	830.7	821.6	824.3	821.4	820.0
7.5°	824.3	815.4	818.0	815.1	814.3
10°	818.6	810.2	812.9	810.0	808.6
12.5°	812.3	803.4	806.6	803.2	801.8
15°	799.4	791.0	794.4	791.5	790.1
17.5°	785.1	776.2	779.6	776.3	774.5
20°	773.7	765.4	768.8	763.8	763.1
22.5°	761.2	752.9	756.2	749.5	749.4
25°	741.0	731.9	736.0	728.2	727.5
27.5°	716.9	708.6	712.0	704.0	703.1
30°	700.4	692.1	695.4	686.9	685.5
32.5°	681.6	673.8	676.6	668.1	667.3
35°	652.7	645.1	647.0	638.5	637.8
37.5°	619.8	612.9	614.0	604.6	603.9
40°	596.5	589.5	590.1	580.1	579.4
42.5°	570.9	563.9	563.3	553.3	552.7
45°	528.2	521.2	518.9	509.6	508.2
47.5°	479.5	472.5	468.2	460.7	459.7
50°	444.2	437.2	433.5	427.0	425.0
52.5°	406.0	399.1	395.9	390.0	387.9
55°	345.9	340.4	338.1	332.4	331.0
57.5°	288.9	285.1	284.4	278.9	278.3
60°	254.1	252.0	252.0	247.0	247.0
62.5°	224.5	223.0	224.1	220.8	220.2
65°	185.8	184.4	186.5	185.1	185.1
67.5°	155.2	155.2	156.5	155.9	155.9
70°	138.1	138.1	138.8	138.8	138.8
72.5°	122.7	122.2	124.0	124.0	123.4
75°	100.4	100.4	100.4	101.1	101.1
77.5°	78.2	78.3	78.9	78.7	78.2
80°	63.4	64.0	64.1	63.4	63.4
82.5°	48.5	49.2	49.3	49.1	48.5
85°	25.6	27.0	28.5	28.5	28.5
87.5°	7.4	9.6	11.4	11.4	10.8
90°	0.0	0.0	0.0	0.0	0.0
92.5°	11.1	58.7	136.3	39.7	29.9
95°	36.0	143.0	642.5	222.4	137.1
97.5°	66.2	167.5	989.5	708.1	485.2
100°	87.2	182.0	1064.8	1078.6	830.8
102.5°	110.5	197.7	1048.2	1380.6	1164.3
105°	146.8	222.6	962.4	1699.9	1616.0
107.5°	183.6	251.6	862.1	1789.9	1864.7
110°	209.1	272.7	804.5	1755.5	1923.4



TEST NUMBER: P561989

CATALOG NUMBER: SQ4-PR1-100U-050D-92765-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	233.5	293.8	765.7	1674.0	1913.4
115°	272.8	329.7	729.7	1545.9	1815.4
117.5°	307.4	360.8	708.4	1405.9	1691.3
120°	335.1	379.8	706.2	1325.8	1599.3
122.5°	357.3	401.9	700.7	1255.6	1509.6
125°	385.0	426.9	696.5	1155.8	1381.9
127.5°	415.1	454.4	694.3	1096.2	1282.5
130°	430.6	469.9	691.0	1054.7	1217.2
132.5°	447.3	485.4	691.0	1022.3	1171.7
135°	470.8	510.1	688.2	976.3	1103.6
137.5°	493.0	531.1	687.9	937.5	1047.4
140°	509.6	548.8	686.8	905.2	1010.8
142.5°	528.4	561.2	690.1	879.5	974.3
145°	555.3	583.7	693.7	845.0	920.8
147.5°	578.3	605.9	699.8	810.2	875.7
150°	598.2	617.2	702.0	798.6	844.7
152.5°	613.7	633.7	704.3	783.1	825.8
155°	634.2	649.1	710.4	763.7	794.8
157.5°	659.7	668.6	711.7	754.9	777.1
160°	673.0	679.7	717.3	748.2	767.1
162.5°	680.7	688.6	718.4	742.5	757.2
165°	700.7	703.4	718.7	734.1	745.0
167.5°	714.2	711.8	725.0	732.1	736.4
170°	718.7	717.3	722.8	724.3	729.7
172.5°	728.6	724.0	726.1	722.1	726.4
175°	733.9	729.8	727.0	722.7	717.3
177.5°	736.1	729.6	726.1	721.7	722.8
180°	728.4	728.4	728.4	728.4	728.4

(END OF REPORT)