

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: P521922

Luminaire Tested: **SQ4-WB-100U-050D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521922
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-WB-100U-050D-93050-1D-UNV-STD-W-4 (4000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

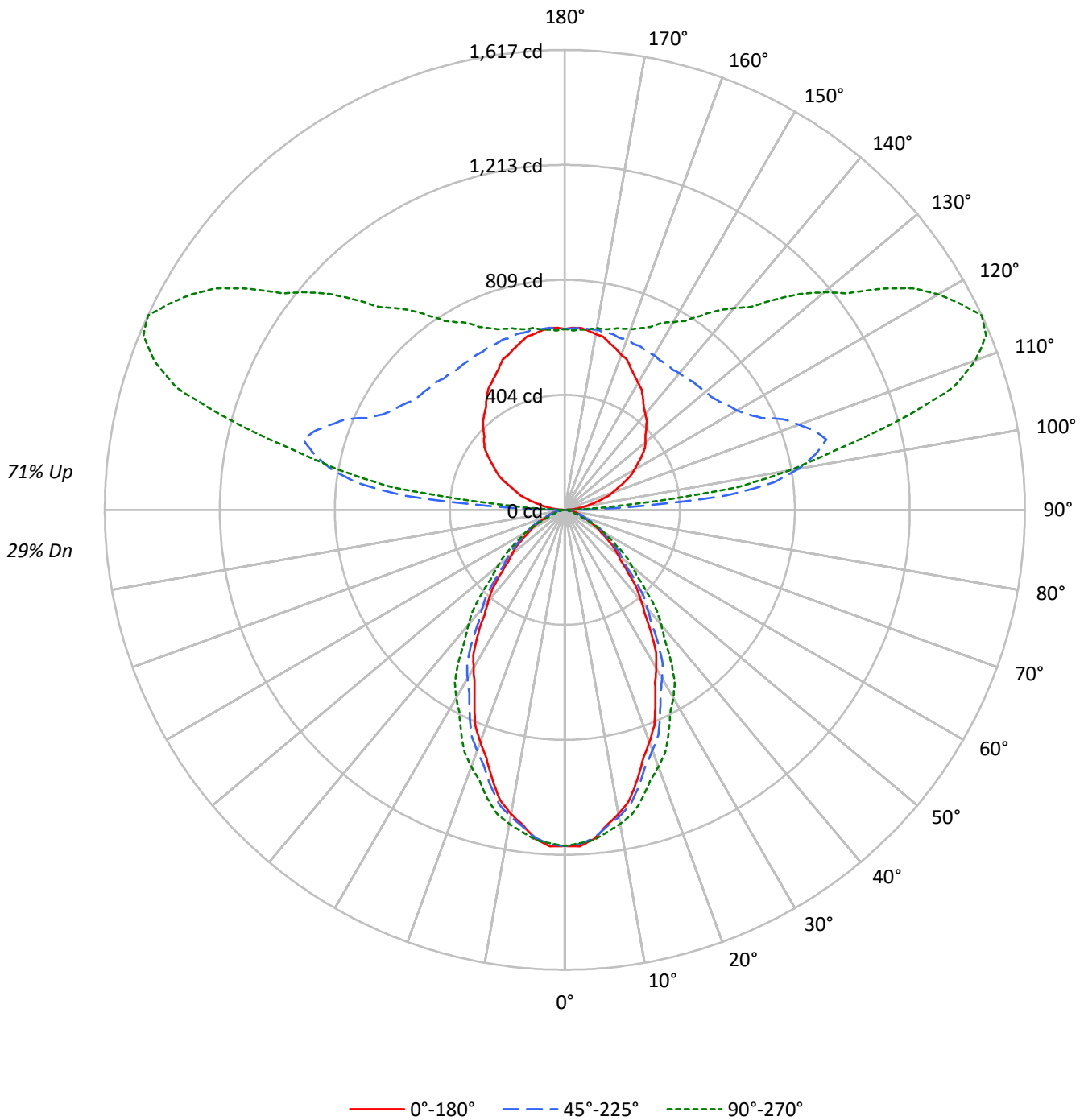
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5837.2 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
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 (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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	29
1	94	90	86	83	84	81	78	75	64	62	60	48	47	46	34	33	33	26
2	86	79	74	69	77	71	67	63	57	54	51	43	41	40	31	30	29	23
3	79	70	64	58	71	63	58	53	51	47	44	39	36	34	28	26	25	20
4	72	63	55	50	65	57	51	46	45	41	38	35	32	30	25	24	22	18
5	67	56	49	43	60	51	44	40	41	36	33	32	29	26	23	21	20	16
6	62	50	43	38	55	46	39	35	37	32	29	29	26	23	21	19	18	15
7	57	46	38	33	51	42	35	31	34	29	26	27	23	21	20	18	16	13
8	53	42	34	29	48	38	32	27	31	26	23	24	21	19	18	16	15	12
9	49	38	31	26	44	35	29	24	28	24	21	23	19	17	17	15	13	11
10	46	35	28	24	42	32	26	22	26	22	19	21	18	16	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10902	10902	10902
5°	10766	10728	10790
10°	10171	10263	10502
15°	9389	9608	10039
20°	8527	8847	9432
25°	7648	8065	8788
30°	6838	7286	8120
35°	5980	6412	7329
40°	5033	5433	6345
45°	4153	4512	5297
50°	3468	3781	4414
55°	2944	3244	3645
60°	2517	2812	2908
65°	2004	2366	1880
70°	1775	1845	1146
75°	1643	1497	702
80°	1514	1376	606
85°	1376	1260	498



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.4	1.9
10°-20°	281.9	4.8
20°-30°	365.2	6.3
30°-40°	357.6	6.1
40°-50°	273.7	4.7
50°-60°	182.4	3.1
60°-70°	99.5	1.7
70°-80°	41.5	0.7
80°-90°	11.7	0.2
90°-100°	327.6	5.6
100°-110°	791.9	13.6
110°-120°	844.6	14.5
120°-130°	684.0	11.7
130°-140°	529.6	9.1
140°-150°	404.0	6.9
150°-160°	292.5	5.0
160°-170°	180.1	3.1
170°-180°	61.0	1.0
0°-30°	755.4	12.9
0°-40°	1113.0	19.1
0°-60°	1569.1	26.9
0°-90°	1721.8	29.5
90°-120°	1964.1	33.6
90°-150°	3581.8	61.4
90°-180°	4115.0	70.5
0°-180°	5837.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1182	1182	1182	1182	1182	
5°	1162	1151	1158	1161	1165	108
15°	983	980	1006	1033	1051	275
25°	751	753	792	827	863	346
35°	531	534	569	608	651	330
45°	318	324	346	372	406	248
55°	183	191	202	209	227	166
65°	92	99	108	95	86	95
75°	46	46	42	29	20	49
85°	13	13	12	8	5	14
90°	0	0	0	0	0	2
95°	32	164	561	365	256	36
105°	126	219	952	1231	1216	134
115°	232	296	765	1450	1617	229
125°	330	380	664	1153	1354	294
135°	405	453	637	909	1046	313
145°	479	515	625	773	833	300
155°	549	573	633	684	709	254
165°	607	616	641	650	660	171
175°	642	640	642	637	635	61
180°	635	635	635	635	635	

TEST NUMBER: P521922

CATALOG NUMBER: SQ4-WB-100U-050D-93050-1D-UNV-STD-W-4 (4000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1181.6	1181.6	1181.6	1181.6	1181.6
2.5°	1184.5	1174.0	1176.6	1176.6	1173.3
5°	1162.4	1150.8	1158.3	1161.0	1165.0
7.5°	1119.3	1110.5	1124.2	1134.3	1142.5
10°	1085.7	1078.1	1095.5	1110.3	1121.0
12.5°	1046.7	1040.3	1062.0	1081.8	1095.7
15°	983.0	979.5	1005.9	1033.2	1051.0
17.5°	914.9	913.2	943.4	975.4	998.1
20°	868.5	867.9	901.1	934.4	960.7
22.5°	821.6	822.7	857.6	892.2	922.2
25°	751.3	753.3	792.2	826.8	863.3
27.5°	686.3	687.2	727.4	763.9	802.8
30°	641.9	644.4	683.9	721.6	762.2
32.5°	597.5	600.4	639.1	678.1	719.4
35°	530.9	533.5	569.3	607.6	650.7
37.5°	462.3	465.7	497.5	533.8	576.1
40°	417.9	423.0	451.1	485.2	526.8
42.5°	375.2	381.5	407.5	439.9	477.4
45°	318.3	324.4	345.8	372.0	406.0
47.5°	269.4	276.4	292.8	315.4	344.4
50°	241.6	248.2	263.4	280.1	307.5
52.5°	217.1	223.7	237.3	250.1	273.4
55°	183.0	190.6	201.7	209.3	226.6
57.5°	155.0	162.3	171.1	174.6	185.0
60°	136.4	144.5	152.4	152.0	157.6
62.5°	119.4	126.2	134.2	128.7	129.0
65°	91.8	99.4	108.4	94.7	86.1
67.5°	74.1	75.8	85.0	66.0	55.8
70°	65.8	65.8	68.4	51.1	42.5
72.5°	58.0	58.0	55.6	41.6	32.6
75°	46.1	46.1	42.0	28.8	19.7
77.5°	35.6	35.2	32.1	21.5	14.3
80°	28.5	28.5	25.9	17.0	11.4
82.5°	22.3	22.3	20.1	13.3	8.5
85°	13.0	13.0	11.9	7.7	4.7
87.5°	4.6	4.6	4.1	2.5	2.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.8	88.7	208.9	101.6	68.9
95°	32.3	163.9	561.4	365.0	255.8
97.5°	57.3	181.6	739.3	712.3	611.4
100°	76.7	192.6	837.3	883.9	801.0
102.5°	95.0	202.4	902.0	1026.8	977.6
105°	126.5	218.7	951.8	1231.4	1215.6
107.5°	157.5	237.8	922.4	1395.5	1432.6
110°	179.0	254.1	875.0	1466.2	1536.0



TEST NUMBER: P521922

CATALOG NUMBER: SQ4-WB-100U-050D-93050-1D-UNV-STD-W-4 (4000K)

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	200.6	270.3	833.0	1483.5	1602.8
115°	231.5	296.0	764.6	1449.6	1616.8
117.5°	262.2	323.1	724.5	1371.6	1567.5
120°	282.7	339.3	698.7	1310.5	1515.8
122.5°	304.2	356.6	682.5	1247.9	1450.1
125°	329.8	379.8	663.7	1152.9	1354.3
127.5°	355.1	402.2	650.5	1072.4	1249.3
130°	370.2	416.3	646.2	1016.3	1190.0
132.5°	384.2	432.4	639.7	975.8	1123.3
135°	405.2	452.6	636.8	909.1	1046.0
137.5°	425.1	472.8	627.3	863.9	967.1
140°	440.2	483.6	627.3	831.4	926.2
142.5°	455.3	498.7	621.9	803.1	883.1
145°	479.2	514.8	624.6	772.7	833.3
147.5°	501.6	536.1	623.0	737.8	787.8
150°	515.6	545.9	627.3	722.5	761.9
152.5°	530.7	559.9	626.2	706.2	741.5
155°	549.2	572.9	632.7	684.4	709.4
157.5°	571.6	591.9	631.4	676.1	690.9
160°	580.2	597.3	636.8	665.3	675.8
162.5°	594.2	609.2	634.6	661.9	668.3
165°	607.1	616.3	640.8	650.4	659.6
167.5°	623.0	629.1	639.2	649.7	649.9
170°	627.3	631.3	643.5	642.3	648.9
172.5°	634.9	637.8	640.3	643.1	639.2
175°	642.1	639.5	642.1	636.7	635.4
177.5°	640.8	640.8	638.6	636.4	631.1
180°	635.4	635.4	635.4	635.4	635.4

(END OF REPORT)