

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: P521206

Luminaire Tested: **SQ4-BB-100U-075D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521206
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-BB-100U-075D-93050-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

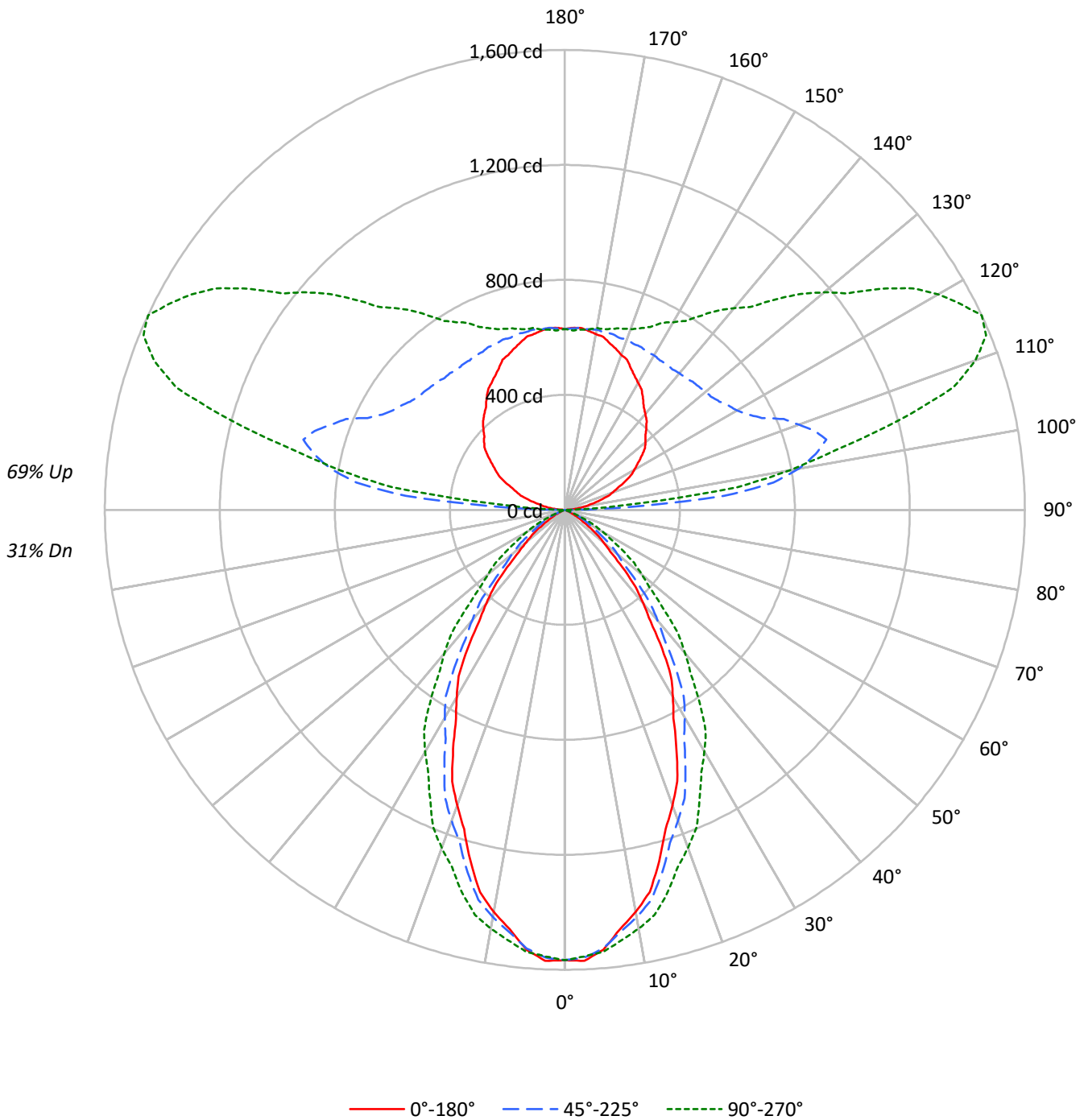
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5940.9 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 63.9
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	50	30	10	0	
RCR																						
0	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	31	31	31	20	
1	95	91	88	85	85	82	79	77	66	64	62	50	49	48	36	36	35	29	29	29	0	
2	87	81	75	71	78	73	69	65	59	56	53	46	44	42	33	32	31	26	26	26	0	
3	80	72	66	60	72	65	60	56	53	49	46	41	39	37	31	29	28	23	23	23	0	
4	74	64	57	52	67	59	53	48	48	44	40	38	35	33	28	27	25	21	21	21	0	
5	68	58	51	45	62	53	47	42	43	39	35	34	31	29	26	24	23	19	19	19	0	
6	63	52	45	40	57	48	42	37	39	35	32	31	28	26	24	22	21	18	18	18	0	
7	59	48	40	35	53	44	37	33	36	31	28	29	26	23	22	20	19	16	16	16	0	
8	55	43	36	32	49	40	34	30	33	29	25	27	24	21	21	19	17	15	15	15	0	
9	51	40	33	28	46	37	31	27	31	26	23	25	22	19	19	17	16	14	14	14	0	
10	48	37	30	26	43	34	28	24	28	24	21	23	20	18	18	16	15	13	13	13	0	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14454	14454	14454
5°	14222	14187	14291
10°	13307	13484	13861
15°	12097	12481	13176
20°	10738	11296	12286
25°	9351	10092	11289
30°	8010	8890	10343
35°	6642	7546	9202
40°	5103	6034	7842
45°	3689	4569	6310
50°	2513	3405	5004
55°	1634	2463	3889
60°	937	1735	2810
65°	249	1059	1423
70°	121	326	410
75°	53	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.0	2.4
10°-20°	365.6	6.2
20°-30°	457.7	7.7
30°-40°	422.8	7.1
40°-50°	284.1	4.8
50°-60°	146.7	2.5
60°-70°	46.0	0.8
70°-80°	2.9	0.0
80°-90°	0.1	0.0
90°-100°	324.2	5.5
100°-110°	783.5	13.2
110°-120°	835.7	14.1
120°-130°	676.8	11.4
130°-140°	524.0	8.8
140°-150°	399.8	6.7
150°-160°	289.4	4.9
160°-170°	178.2	3.0
170°-180°	60.4	1.0
0°-30°	966.3	16.3
0°-40°	1389.1	23.4
0°-60°	1820.0	30.6
0°-90°	1868.9	31.5
90°-120°	1943.4	32.7
90°-150°	3544.1	59.7
90°-180°	4072.0	68.5
0°-180°	5940.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1567	1567	1567	1567	1567	
5°	1536	1520	1532	1537	1543	142
15°	1266	1262	1307	1350	1379	353
25°	919	926	991	1059	1109	421
35°	590	604	670	749	817	365
45°	283	300	350	418	484	222
55°	102	119	153	197	242	95
65°	11	22	48	58	65	19
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	32	162	556	361	253	36
105°	125	216	942	1218	1203	132
115°	229	293	757	1434	1600	227
125°	326	376	657	1141	1340	291
135°	401	448	630	900	1035	310
145°	474	509	618	765	824	296
155°	544	567	626	677	702	251
165°	601	610	634	644	653	170
175°	635	633	635	630	629	60
180°	629	629	629	629	629	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1566.6	1566.6	1566.6	1566.6	1566.6
2.5°	1570.3	1555.5	1559.4	1559.3	1555.1
5°	1535.6	1520.0	1531.8	1537.2	1543.1
7.5°	1470.7	1458.5	1481.1	1498.1	1510.4
10°	1420.4	1410.0	1439.3	1462.4	1479.5
12.5°	1362.2	1354.1	1389.6	1421.3	1443.1
15°	1266.5	1262.1	1306.7	1350.5	1379.4
17.5°	1164.0	1163.9	1214.8	1269.3	1304.1
20°	1093.7	1095.9	1150.5	1210.6	1251.3
22.5°	1023.4	1028.5	1086.9	1149.5	1196.2
25°	918.6	926.0	991.4	1059.2	1108.9
27.5°	818.0	828.8	897.5	968.0	1028.5
30°	751.9	764.5	834.5	908.7	970.9
32.5°	687.0	702.0	770.2	848.7	912.1
35°	589.7	604.5	670.0	748.9	817.0
37.5°	489.2	503.7	567.7	645.3	719.0
40°	423.7	440.0	501.0	576.2	651.1
42.5°	364.3	380.6	437.9	511.8	582.5
45°	282.7	299.8	350.2	418.3	483.6
47.5°	215.1	233.6	277.9	339.5	399.0
50°	175.1	193.6	237.2	291.6	348.6
52.5°	142.9	160.9	200.2	251.5	303.8
55°	101.6	118.6	153.1	196.6	241.8
57.5°	70.2	84.9	115.8	152.1	187.5
60°	50.8	64.9	94.0	123.4	152.3
62.5°	33.8	46.7	75.2	97.8	117.2
65°	11.4	21.7	48.5	58.5	65.2
67.5°	5.8	6.9	25.5	26.9	29.1
70°	4.5	4.5	12.1	12.9	15.2
72.5°	3.3	3.3	4.9	6.2	6.7
75°	1.5	1.5	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.7	87.8	206.7	100.5	68.2
95°	32.0	162.2	555.5	361.2	253.1
97.5°	56.7	179.7	731.5	704.8	605.0
100°	75.9	190.5	828.5	874.6	792.6
102.5°	94.0	200.3	892.5	1016.0	967.3
105°	125.2	216.4	941.7	1218.4	1202.8
107.5°	155.8	235.3	912.7	1380.8	1417.5
110°	177.2	251.4	865.8	1450.8	1519.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	198.5	267.5	824.3	1467.9	1585.9
115°	229.1	292.9	756.6	1434.3	1599.8
117.5°	259.5	319.6	716.9	1357.2	1551.0
120°	279.7	335.7	691.3	1296.7	1499.9
122.5°	301.0	352.9	675.3	1234.8	1434.9
125°	326.3	375.8	656.7	1140.7	1340.0
127.5°	351.4	398.0	643.6	1061.1	1236.1
130°	366.3	411.9	639.4	1005.6	1177.5
132.5°	380.2	427.8	633.0	965.6	1111.4
135°	400.9	447.8	630.0	899.5	1035.0
137.5°	420.7	467.8	620.7	854.8	956.9
140°	435.6	478.6	620.7	822.7	916.4
142.5°	450.5	493.5	615.4	794.6	873.8
145°	474.2	509.4	618.1	764.6	824.5
147.5°	496.3	530.4	616.5	730.0	779.5
150°	510.2	540.1	620.7	714.9	753.9
152.5°	525.1	554.0	619.7	698.8	733.7
155°	543.5	566.9	626.0	677.2	702.0
157.5°	565.6	585.6	624.7	669.0	683.6
160°	574.1	591.0	630.0	658.3	668.7
162.5°	588.0	602.8	627.9	655.0	661.2
165°	600.7	609.9	634.0	643.6	652.7
167.5°	616.5	622.4	632.4	642.8	643.1
170°	620.7	624.6	636.7	635.5	642.0
172.5°	628.2	631.0	633.5	636.4	632.4
175°	635.4	632.8	635.4	630.0	628.7
177.5°	634.0	634.0	631.9	629.7	624.5
180°	628.7	628.7	628.7	628.7	628.7

(END OF REPORT)