

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: P521219

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

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521219
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-100D-93050-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

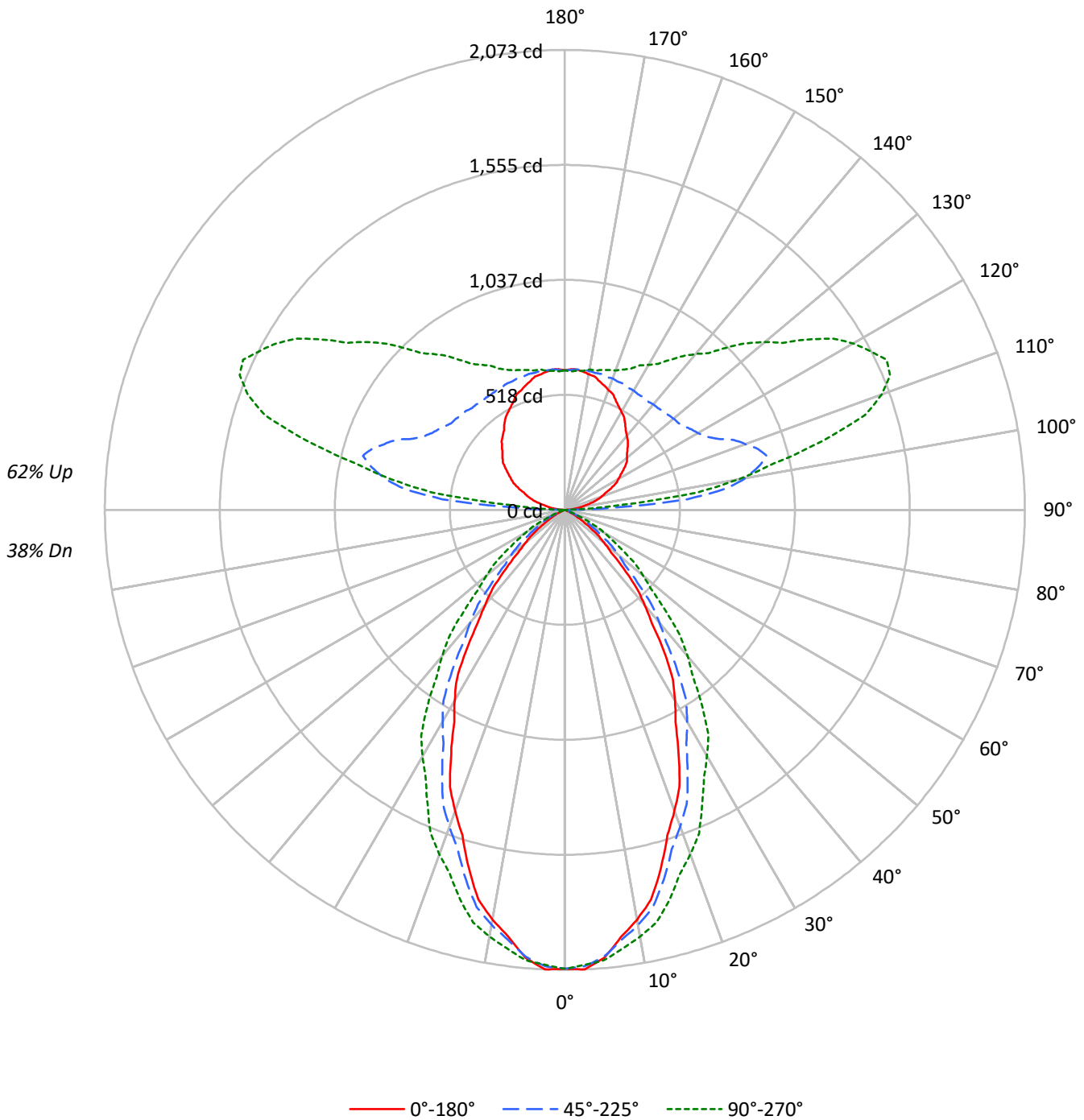
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6539.4 lumens
Efficiency: N/A
Efficacy: 87.4 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): 74.8
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	93	89	86	87	84	82	79	69	67	65	55	54	53	42	41	40	34
2	89	82	77	73	81	75	71	67	62	59	56	50	48	46	38	37	36	31
3	82	74	67	62	74	68	62	58	56	52	49	45	43	41	35	34	32	28
4	76	66	59	54	69	61	55	50	51	46	43	41	38	36	33	31	29	25
5	70	60	52	47	64	55	49	44	46	42	38	38	35	32	30	28	26	23
6	65	54	47	42	59	50	44	39	42	37	34	35	31	29	28	26	24	21
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	19
8	56	45	38	33	51	42	36	31	36	31	28	30	26	24	24	22	20	18
9	53	41	35	30	48	38	32	28	33	28	25	28	24	22	23	20	19	16
10	49	38	32	27	45	36	30	26	30	26	23	26	22	20	21	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19083	19083	19083
5°	18776	18729	18869
10°	17568	17803	18300
15°	15971	16478	17395
20°	14178	14914	16221
25°	12346	13325	14904
30°	10576	11737	13657
35°	8768	9963	12150
40°	6737	7966	10353
45°	4869	6032	8330
50°	3319	4495	6607
55°	2157	3251	5134
60°	1236	2290	3711
65°	327	1397	1880
70°	162	432	540
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.8	2.9
10°-20°	482.7	7.4
20°-30°	604.3	9.2
30°-40°	558.2	8.5
40°-50°	375.1	5.7
50°-60°	193.7	3.0
60°-70°	60.7	0.9
70°-80°	3.8	0.1
80°-90°	0.1	0.0
90°-100°	324.2	5.0
100°-110°	783.5	12.0
110°-120°	835.7	12.8
120°-130°	676.8	10.4
130°-140°	524.0	8.0
140°-150°	399.8	6.1
150°-160°	289.4	4.4
160°-170°	178.2	2.7
170°-180°	60.4	0.9
0°-30°	1275.8	19.5
0°-40°	1834.0	28.0
0°-60°	2402.8	36.7
0°-90°	2467.4	37.7
90°-120°	1943.4	29.7
90°-150°	3544.1	54.2
90°-180°	4072.0	62.3
0°-180°	6539.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2068	2068	2068	2068	2068	
5°	2027	2007	2022	2030	2037	188
15°	1672	1666	1725	1783	1821	466
25°	1213	1223	1309	1398	1464	556
35°	778	798	885	989	1079	482
45°	373	396	462	552	638	293
55°	134	157	202	260	319	125
65°	15	29	64	77	86	25
75°	2	2	1	0	0	3
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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CATALOG NUMBER: SQ4-BB-100U-100D-93050-1D-UNV-STD-W-4 (3500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2068.4	2068.4	2068.4	2068.4	2068.4
2.5°	2073.2	2053.6	2058.8	2058.6	2053.2
5°	2027.3	2006.8	2022.3	2029.5	2037.4
7.5°	1941.7	1925.6	1955.5	1977.9	1994.1
10°	1875.2	1861.5	1900.3	1930.8	1953.3
12.5°	1798.4	1787.8	1834.6	1876.5	1905.3
15°	1672.1	1666.2	1725.1	1783.1	1821.2
17.5°	1536.8	1536.6	1603.9	1675.8	1721.7
20°	1444.0	1446.9	1519.0	1598.3	1652.1
22.5°	1351.1	1357.9	1435.0	1517.6	1579.3
25°	1212.8	1222.6	1308.9	1398.4	1464.0
27.5°	1079.9	1094.2	1185.0	1278.1	1357.9
30°	992.7	1009.3	1101.7	1199.7	1281.9
32.5°	907.0	926.8	1016.9	1120.4	1204.2
35°	778.5	798.1	884.6	988.7	1078.7
37.5°	645.8	665.0	749.5	852.0	949.2
40°	559.4	580.9	661.4	760.8	859.6
42.5°	480.9	502.4	578.2	675.8	769.1
45°	373.2	395.8	462.3	552.3	638.4
47.5°	284.0	308.4	366.8	448.3	526.8
50°	231.2	255.6	313.2	385.0	460.3
52.5°	188.7	212.4	264.4	332.0	401.1
55°	134.1	156.6	202.1	259.5	319.2
57.5°	92.7	112.0	152.9	200.8	247.6
60°	67.0	85.6	124.1	163.0	201.1
62.5°	44.6	61.7	99.3	129.1	154.7
65°	15.0	28.7	64.0	77.3	86.1
67.5°	7.6	9.2	33.6	35.5	38.4
70°	6.0	6.0	16.0	17.1	20.0
72.5°	4.4	4.4	6.4	8.2	8.8
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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)