

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: P521222

Luminaire Tested: **SQ4-BB-100U-100D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521222
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 (5000K)
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 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

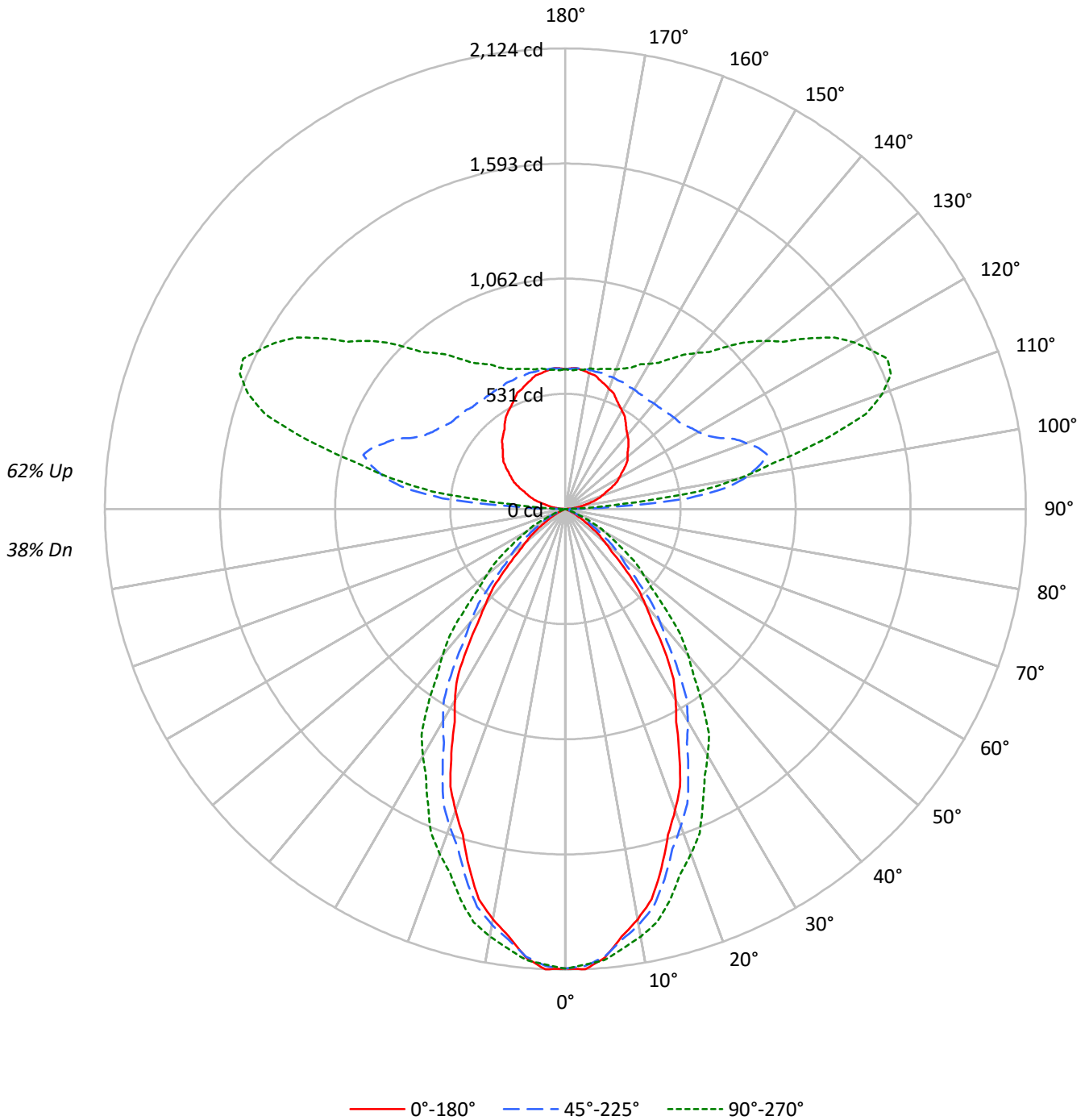
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6701.1 lumens
Efficiency: N/A
Efficacy: 89.8 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): 74.6
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°	19555	19555	19555
5°	19241	19192	19335
10°	18003	18242	18752
15°	16367	16885	17825
20°	14528	15283	16621
25°	12652	13653	15272
30°	10837	12028	13993
35°	8986	10210	12450
40°	6904	8163	10608
45°	4991	6181	8536
50°	3400	4607	6771
55°	2210	3331	5262
60°	1268	2347	3803
65°	336	1432	1925
70°	167	442	553
75°	75	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.4	2.9
10°-20°	494.7	7.4
20°-30°	619.3	9.2
30°-40°	572.0	8.5
40°-50°	384.4	5.7
50°-60°	198.5	3.0
60°-70°	62.2	0.9
70°-80°	3.9	0.1
80°-90°	0.1	0.0
90°-100°	332.2	5.0
100°-110°	802.9	12.0
110°-120°	856.3	12.8
120°-130°	693.6	10.4
130°-140°	537.0	8.0
140°-150°	409.7	6.1
150°-160°	296.5	4.4
160°-170°	182.6	2.7
170°-180°	61.8	0.9
0°-30°	1307.3	19.5
0°-40°	1879.3	28.0
0°-60°	2462.2	36.7
0°-90°	2528.4	37.7
90°-120°	1991.5	29.7
90°-150°	3631.7	54.2
90°-180°	4173.0	62.3
0°-180°	6701.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2120	2120	2120	2120	2120	
5°	2078	2056	2072	2080	2088	193
15°	1714	1707	1768	1827	1866	477
25°	1243	1253	1341	1433	1500	570
35°	798	818	906	1013	1105	494
45°	382	406	474	566	654	300
55°	137	160	207	266	327	128
65°	15	29	66	79	88	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	33	166	569	370	259	37
105°	128	222	965	1249	1233	136
115°	235	300	775	1470	1639	232
125°	334	385	673	1169	1373	298
135°	411	459	646	922	1061	317
145°	486	522	633	784	845	304
155°	557	581	642	694	719	257
165°	616	625	650	660	669	174
175°	651	648	651	646	644	62
180°	644	644	644	644	644	



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CATALOG NUMBER: SQ4-BB-100U-100D-93050-1D-UNV-STD-W-4 (5000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2119.5	2119.5	2119.5	2119.5	2119.5
2.5°	2124.4	2104.4	2109.7	2109.5	2103.9
5°	2077.5	2056.4	2072.3	2079.7	2087.7
7.5°	1989.7	1973.3	2003.8	2026.8	2043.4
10°	1921.6	1907.6	1947.2	1978.5	2001.6
12.5°	1842.9	1832.0	1880.0	1922.9	1952.4
15°	1713.5	1707.4	1767.8	1827.1	1866.2
17.5°	1574.8	1574.6	1643.5	1717.2	1764.3
20°	1479.7	1482.7	1556.6	1637.8	1692.9
22.5°	1384.5	1391.5	1470.4	1555.1	1618.3
25°	1242.8	1252.8	1341.2	1433.0	1500.2
27.5°	1106.6	1121.3	1214.3	1309.7	1391.5
30°	1017.2	1034.2	1129.0	1229.3	1313.5
32.5°	929.4	949.7	1042.0	1148.1	1234.0
35°	797.8	817.8	906.5	1013.1	1105.4
37.5°	661.8	681.4	768.0	873.0	972.7
40°	573.2	595.3	677.8	779.6	880.8
42.5°	492.8	514.9	592.5	692.5	788.1
45°	382.5	405.5	473.7	566.0	654.2
47.5°	291.0	316.1	375.9	459.4	539.8
50°	236.9	261.9	321.0	394.5	471.7
52.5°	193.4	217.7	270.9	340.2	411.0
55°	137.4	160.5	207.1	265.9	327.1
57.5°	95.0	114.8	156.7	205.8	253.7
60°	68.7	87.8	127.2	167.0	206.1
62.5°	45.7	63.2	101.7	132.3	158.5
65°	15.4	29.4	65.6	79.2	88.2
67.5°	7.8	9.4	34.5	36.4	39.4
70°	6.2	6.2	16.4	17.5	20.5
72.5°	4.5	4.5	6.6	8.4	9.0
75°	2.1	2.1	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°	10.9	89.9	211.8	103.0	69.9
95°	32.8	166.2	569.2	370.1	259.3
97.5°	58.1	184.1	749.6	722.2	620.0
100°	77.8	195.2	849.0	896.2	812.1
102.5°	96.4	205.3	914.5	1041.1	991.2
105°	128.3	221.7	965.0	1248.6	1232.6
107.5°	159.7	241.1	935.3	1414.9	1452.6
110°	181.5	257.6	887.2	1486.7	1557.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	203.4	274.1	844.6	1504.2	1625.1
115°	234.8	300.2	775.3	1469.8	1639.3
117.5°	265.9	327.6	734.6	1390.8	1589.3
120°	286.6	344.0	708.4	1328.7	1536.9
122.5°	308.5	361.6	692.0	1265.3	1470.3
125°	334.4	385.1	672.9	1168.9	1373.1
127.5°	360.1	407.9	659.5	1087.3	1266.7
130°	375.4	422.1	655.2	1030.4	1206.6
132.5°	389.6	438.4	648.6	989.4	1138.9
135°	410.9	458.9	645.6	921.8	1060.6
137.5°	431.1	479.4	636.1	875.9	980.6
140°	446.3	490.4	636.1	843.0	939.1
142.5°	461.6	505.7	630.6	814.3	895.4
145°	485.9	522.0	633.3	783.5	844.9
147.5°	508.6	543.5	631.7	748.1	798.8
150°	522.8	553.5	636.1	732.5	772.6
152.5°	538.1	567.7	635.0	716.0	751.8
155°	556.9	580.9	641.5	694.0	719.3
157.5°	579.6	600.1	640.2	685.5	700.5
160°	588.3	605.6	645.6	674.5	685.2
162.5°	602.5	617.7	643.4	671.2	677.6
165°	615.6	624.9	649.7	659.5	668.8
167.5°	631.7	637.8	648.1	658.7	659.0
170°	636.1	640.1	652.4	651.2	657.9
172.5°	643.7	646.6	649.2	652.1	648.1
175°	651.1	648.4	651.1	645.6	644.3
177.5°	649.7	649.7	647.5	645.2	639.9
180°	644.3	644.3	644.3	644.3	644.3

(END OF REPORT)