

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: P521209

Luminaire Tested: **SQ4-BB-100U-075D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521209
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 (5000K)
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 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

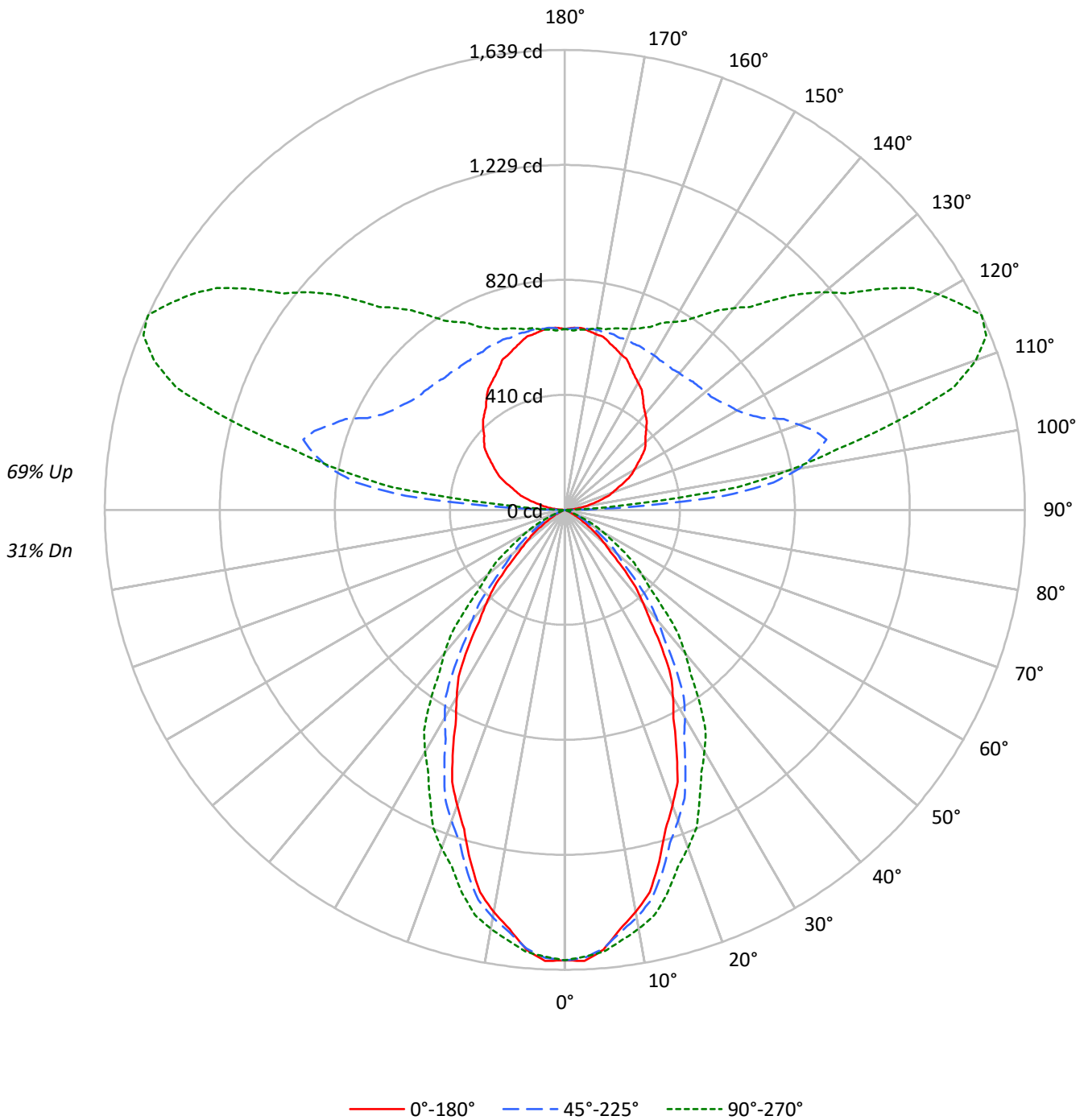
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6087.8 lumens
Efficiency: N/A
Efficacy: 95.6 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): 63.7
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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	31
1	95	91	88	85	85	82	79	77	66	64	62	50	49	48	36	36	35	29
2	87	81	75	71	78	73	69	65	59	56	53	46	44	42	33	32	31	26
3	80	72	66	60	72	65	60	56	53	49	46	41	39	37	31	29	28	23
4	74	64	57	52	67	59	53	48	48	44	40	38	35	33	28	27	25	21
5	68	58	51	45	62	53	47	42	43	39	35	34	31	29	26	24	23	19
6	63	52	45	40	57	48	42	37	39	35	32	31	28	26	24	22	21	18
7	59	48	40	35	53	44	37	33	36	31	28	29	26	23	22	20	19	16
8	55	43	36	32	49	40	34	30	33	29	25	27	24	21	21	19	17	15
9	51	40	33	28	46	37	31	27	31	26	23	25	22	19	19	17	16	14
10	48	37	30	26	43	34	28	24	28	24	21	23	20	18	18	16	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14812	14812	14812
5°	14573	14537	14645
10°	13636	13818	14204
15°	12396	12790	13501
20°	11003	11576	12590
25°	9582	10342	11568
30°	8209	9110	10599
35°	6805	7733	9429
40°	5229	6183	8036
45°	3780	4682	6465
50°	2575	3489	5128
55°	1674	2524	3986
60°	960	1777	2880
65°	255	1085	1458
70°	127	334	418
75°	57	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.5	2.4
10°-20°	374.7	6.2
20°-30°	469.0	7.7
30°-40°	433.2	7.1
40°-50°	291.1	4.8
50°-60°	150.4	2.5
60°-70°	47.1	0.8
70°-80°	3.0	0.0
80°-90°	0.1	0.0
90°-100°	332.2	5.5
100°-110°	802.9	13.2
110°-120°	856.3	14.1
120°-130°	693.6	11.4
130°-140°	537.0	8.8
140°-150°	409.7	6.7
150°-160°	296.5	4.9
160°-170°	182.6	3.0
170°-180°	61.8	1.0
0°-30°	990.2	16.3
0°-40°	1423.5	23.4
0°-60°	1864.9	30.6
0°-90°	1915.1	31.5
90°-120°	1991.5	32.7
90°-150°	3631.7	59.7
90°-180°	4173.0	68.5
0°-180°	6087.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1605	1605	1605	1605	1605	
5°	1574	1558	1570	1575	1581	146
15°	1298	1293	1339	1384	1414	361
25°	941	949	1016	1085	1136	432
35°	604	619	687	767	837	374
45°	290	307	359	429	496	228
55°	104	122	157	201	248	97
65°	12	22	50	60	67	20
75°	2	2	1	0	0	2
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	



TEST NUMBER: P521209

CATALOG NUMBER: SQ4-BB-100U-075D-93050-1D-UNV-STD-W-4 (5000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1605.4	1605.4	1605.4	1605.4	1605.4
2.5°	1609.1	1593.9	1597.9	1597.8	1593.6
5°	1573.5	1557.6	1569.6	1575.2	1581.3
7.5°	1507.0	1494.6	1517.8	1535.1	1547.7
10°	1455.5	1444.8	1474.9	1498.6	1516.1
12.5°	1395.8	1387.6	1423.9	1456.4	1478.8
15°	1297.8	1293.3	1339.0	1383.9	1413.5
17.5°	1192.8	1192.7	1244.8	1300.6	1336.3
20°	1120.7	1123.0	1179.0	1240.5	1282.3
22.5°	1048.7	1054.0	1113.7	1177.9	1225.7
25°	941.3	948.9	1015.9	1085.4	1136.3
27.5°	838.2	849.3	919.7	992.0	1053.9
30°	770.5	783.4	855.1	931.1	994.9
32.5°	704.0	719.3	789.2	869.6	934.6
35°	604.2	619.4	686.6	767.4	837.2
37.5°	501.3	516.1	581.7	661.3	736.7
40°	434.2	450.9	513.4	590.5	667.2
42.5°	373.3	390.0	448.8	524.5	596.9
45°	289.7	307.2	358.8	428.7	495.5
47.5°	220.4	239.4	284.7	347.9	408.8
50°	179.4	198.4	243.1	298.8	357.3
52.5°	146.5	164.9	205.2	257.7	311.3
55°	104.1	121.5	156.9	201.4	247.8
57.5°	71.9	87.0	118.7	155.8	192.1
60°	52.0	66.5	96.3	126.5	156.1
62.5°	34.6	47.9	77.0	100.2	120.1
65°	11.7	22.3	49.7	60.0	66.8
67.5°	5.9	7.1	26.1	27.5	29.8
70°	4.7	4.7	12.4	13.3	15.5
72.5°	3.4	3.4	5.0	6.4	6.8
75°	1.6	1.6	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°	10.9	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)