

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: P521196

Luminaire Tested: **SQ4-BB-100U-050D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521196
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-050D-93050-1D-UNV-STD-W-4 (5000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

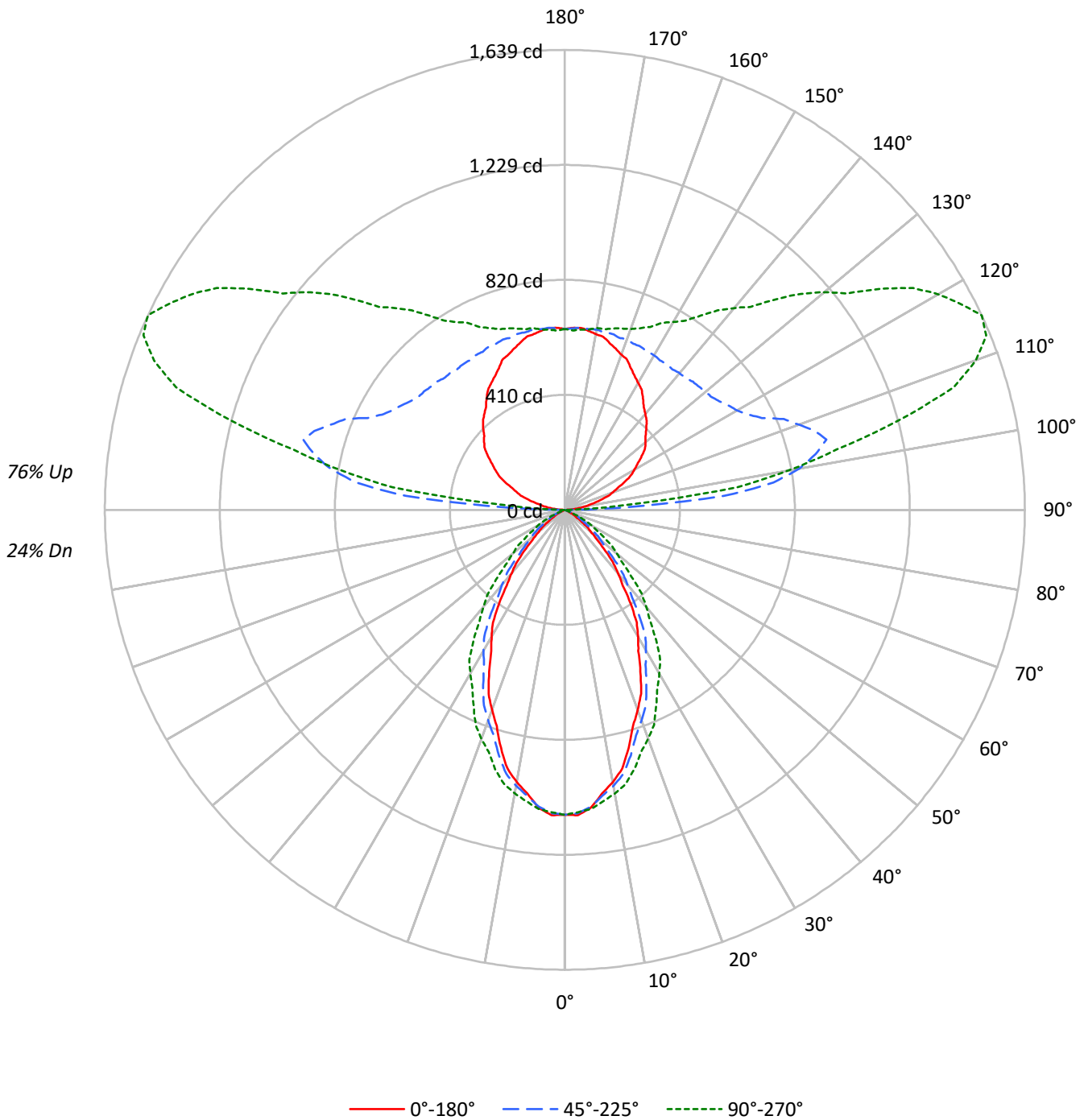
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5469.0 lumens
Efficiency: N/A
Efficacy: 103.0 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): 53.1
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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	93	89	86	82	82	79	77	74	61	60	58	45	44	43	29	29	29	22
2	85	79	73	69	76	70	66	62	55	52	49	40	39	37	27	26	25	20
3	78	70	63	58	69	63	57	53	49	45	42	36	34	32	25	24	23	18
4	72	62	55	50	64	56	50	45	44	40	37	33	30	28	23	21	20	16
5	66	56	49	43	59	50	44	39	40	36	32	30	27	25	21	19	18	15
6	61	50	43	38	54	45	39	35	36	32	28	27	25	22	19	18	17	13
7	57	46	38	33	51	41	35	31	33	29	25	25	22	20	18	16	15	12
8	53	41	34	30	47	38	31	27	30	26	23	23	20	18	17	15	14	11
9	49	38	31	26	44	34	28	24	28	23	20	21	19	16	15	14	13	10
10	46	35	28	24	41	32	26	22	26	21	19	20	17	15	14	13	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10025	10025	10025
5°	9864	9839	9913
10°	9230	9353	9614
15°	8391	8657	9139
20°	7448	7835	8521
25°	6487	7000	7829
30°	5556	6166	7174
35°	4607	5234	6383
40°	3540	4185	5439
45°	2559	3169	4376
50°	1743	2361	3471
55°	1132	1708	2698
60°	650	1203	1950
65°	172	734	987
70°	86	227	283
75°	39	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.2	1.8
10°-20°	253.6	4.6
20°-30°	317.5	5.8
30°-40°	293.3	5.4
40°-50°	197.1	3.6
50°-60°	101.8	1.9
60°-70°	31.9	0.6
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	332.2	6.1
100°-110°	802.9	14.7
110°-120°	856.3	15.7
120°-130°	693.6	12.7
130°-140°	537.0	9.8
140°-150°	409.7	7.5
150°-160°	296.5	5.4
160°-170°	182.6	3.3
170°-180°	61.8	1.1
0°-30°	670.2	12.3
0°-40°	963.5	17.6
0°-60°	1262.3	23.1
0°-90°	1296.3	23.7
90°-120°	1991.5	36.4
90°-150°	3631.7	66.4
90°-180°	4173.0	76.3
0°-180°	5469.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1087	1087	1087	1087	1087	
5°	1065	1054	1062	1066	1070	99
15°	878	875	906	937	957	245
25°	637	642	688	735	769	292
35°	409	419	465	519	567	253
45°	196	208	243	290	335	154
55°	70	82	106	136	168	66
65°	8	15	34	41	45	13
75°	1	1	0	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1086.6	1086.6	1086.6	1086.6	1086.6
2.5°	1089.2	1078.9	1081.6	1081.5	1078.6
5°	1065.1	1054.3	1062.4	1066.2	1070.3
7.5°	1020.1	1011.6	1027.3	1039.1	1047.6
10°	985.2	978.0	998.3	1014.4	1026.2
12.5°	944.8	939.2	963.8	985.8	1000.9
15°	878.5	875.4	906.3	936.7	956.8
17.5°	807.4	807.3	842.6	880.4	904.5
20°	758.6	760.1	798.0	839.7	867.9
22.5°	709.8	713.4	753.9	797.3	829.7
25°	637.2	642.3	687.6	734.7	769.1
27.5°	567.3	574.8	622.5	671.4	713.4
30°	521.5	530.2	578.8	630.2	673.4
32.5°	476.5	486.9	534.2	588.6	632.6
35°	409.0	419.3	464.7	519.4	566.7
37.5°	339.3	349.4	393.8	447.6	498.7
40°	293.9	305.2	347.5	399.7	451.6
42.5°	252.7	264.0	303.8	355.0	404.1
45°	196.1	207.9	242.9	290.2	335.4
47.5°	149.2	162.0	192.7	235.5	276.7
50°	121.4	134.3	164.5	202.2	241.8
52.5°	99.1	111.6	138.9	174.4	210.7
55°	70.4	82.3	106.2	136.3	167.7
57.5°	48.7	58.9	80.3	105.5	130.1
60°	35.2	45.0	65.2	85.6	105.7
62.5°	23.4	32.4	52.1	67.8	81.3
65°	7.9	15.1	33.6	40.6	45.2
67.5°	4.0	4.8	17.7	18.6	20.2
70°	3.2	3.2	8.4	9.0	10.5
72.5°	2.3	2.3	3.4	4.3	4.6
75°	1.1	1.1	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	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)