

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P518724

Luminaire Tested: **SQ4-BB-100U-075D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518724
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-100U-075D-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

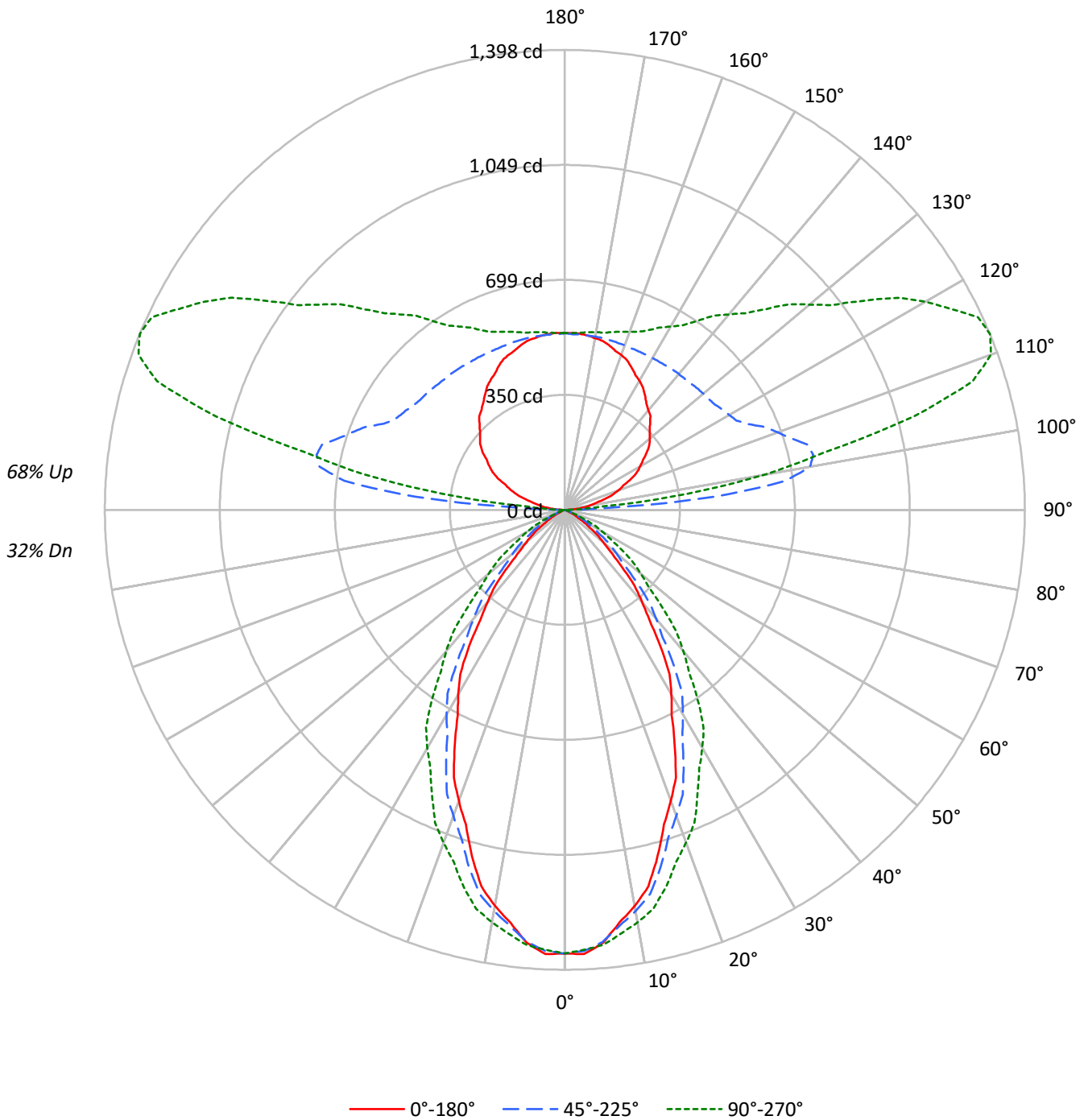
Lumens per Lamp: N/A
Luminaire Lumens: 5099.3 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 49.1
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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	32
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	36	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	32	28	29	26	24	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°	12441	12441	12441
5°	12240	12209	12300
10°	11453	11606	11929
15°	10411	10742	11340
20°	9242	9722	10574
25°	8048	8686	9715
30°	6894	7651	8902
35°	5716	6495	7920
40°	4391	5193	6748
45°	3175	3933	5431
50°	2163	2931	4307
55°	1406	2120	3347
60°	806	1493	2419
65°	214	910	1225
70°	105	281	351
75°	46	25	0
80°	37	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.1	2.4
10°-20°	314.7	6.2
20°-30°	393.9	7.7
30°-40°	363.9	7.1
40°-50°	244.5	4.8
50°-60°	126.3	2.5
60°-70°	39.5	0.8
70°-80°	2.5	0.0
80°-90°	1.2	0.0
90°-100°	251.5	4.9
100°-110°	694.4	13.6
110°-120°	716.1	14.0
120°-130°	575.5	11.3
130°-140°	452.3	8.9
140°-150°	346.9	6.8
150°-160°	249.3	4.9
160°-170°	152.5	3.0
170°-180°	51.4	1.0
0°-30°	831.7	16.3
0°-40°	1195.6	23.4
0°-60°	1566.4	30.7
0°-90°	1609.6	31.6
90°-120°	1662.0	32.6
90°-150°	3036.6	59.5
90°-180°	3490.0	68.4
0°-180°	5099.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1348	1348	1348	1348	1348	
5°	1322	1308	1318	1323	1328	123
15°	1090	1086	1125	1162	1187	304
25°	791	797	853	912	954	362
35°	508	520	577	644	703	314
45°	243	258	301	360	416	191
55°	87	102	132	169	208	82
65°	10	19	42	50	56	17
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	2	3	7	8	9	3
95°	37	136	456	188	122	40
105°	124	191	764	1166	1098	132
115°	222	268	615	1218	1385	218
125°	304	346	558	944	1108	271
135°	366	406	542	764	862	283
145°	424	454	535	651	700	266
155°	479	495	531	584	602	221
165°	518	525	534	554	559	146
175°	537	538	534	542	540	51
180°	537	537	537	537	537	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1348.4	1348.4	1348.4	1348.4	1348.4
2.5°	1351.5	1338.7	1342.1	1342.0	1338.4
5°	1321.6	1308.2	1318.3	1323.0	1328.1
7.5°	1265.8	1255.3	1274.8	1289.4	1299.9
10°	1222.5	1213.5	1238.8	1258.7	1273.3
12.5°	1172.4	1165.5	1196.0	1223.3	1242.0
15°	1090.0	1086.2	1124.6	1162.4	1187.2
17.5°	1001.8	1001.7	1045.5	1092.4	1122.4
20°	941.3	943.2	990.2	1041.9	1077.0
22.5°	880.8	885.2	935.4	989.3	1029.5
25°	790.6	797.0	853.2	911.6	954.3
27.5°	704.0	713.3	772.5	833.2	885.2
30°	647.1	657.9	718.2	782.0	835.6
32.5°	591.3	604.1	662.9	730.4	785.0
35°	507.5	520.3	576.7	644.5	703.2
37.5°	421.0	433.5	488.6	555.4	618.8
40°	364.6	378.7	431.2	495.9	560.3
42.5°	313.5	327.5	376.9	440.5	501.4
45°	243.3	258.0	301.4	360.1	416.2
47.5°	185.1	201.1	239.1	292.2	343.4
50°	150.7	166.6	204.2	251.0	300.1
52.5°	123.0	138.5	172.3	216.4	261.5
55°	87.4	102.1	131.8	169.2	208.1
57.5°	60.4	73.0	99.7	130.9	161.4
60°	43.7	55.8	80.9	106.2	131.1
62.5°	29.1	40.2	64.7	84.1	100.8
65°	9.8	18.7	41.7	50.4	56.1
67.5°	5.0	6.0	21.9	23.1	25.0
70°	3.9	3.9	10.4	11.1	13.0
72.5°	2.9	2.9	4.2	5.4	5.7
75°	1.3	1.3	0.7	0.0	0.0
77.5°	0.7	0.7	0.5	0.0	0.0
80°	0.7	0.7	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°	0.3	0.7	1.4	1.6	1.7
90°	1.7	3.4	6.9	7.8	8.6
92.5°	15.5	64.2	114.8	41.9	32.7
95°	37.0	136.1	456.3	187.6	122.0
97.5°	61.2	152.4	676.0	520.4	376.9
100°	79.1	162.2	757.1	762.4	619.6
102.5°	96.2	173.4	772.9	942.0	806.6
105°	123.7	191.0	764.0	1166.3	1098.2
107.5°	153.0	212.8	721.3	1274.5	1299.3
110°	173.6	227.4	688.3	1297.7	1378.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	192.2	243.9	657.4	1279.4	1398.3
115°	221.7	267.9	615.3	1218.1	1385.3
117.5°	247.5	293.5	587.6	1131.8	1322.0
120°	264.7	310.1	576.6	1073.4	1265.0
122.5°	281.2	324.5	567.7	1018.8	1200.3
125°	304.2	346.2	557.7	943.9	1107.7
127.5°	323.8	365.8	551.9	880.4	1021.8
130°	336.9	378.9	549.1	841.6	970.2
132.5°	349.2	389.2	546.4	809.1	925.5
135°	366.1	405.6	542.2	764.5	861.9
137.5°	385.0	421.0	540.2	727.0	810.2
140°	395.3	430.6	538.8	702.0	775.1
142.5°	407.0	439.6	537.4	679.8	744.2
145°	424.5	453.9	535.4	650.8	700.4
147.5°	441.4	467.1	533.5	626.3	664.8
150°	453.7	474.7	532.8	611.7	642.8
152.5°	463.4	483.0	532.1	599.2	624.9
155°	478.7	494.6	531.1	583.9	602.4
157.5°	492.8	505.0	531.2	572.8	585.4
160°	501.0	511.9	531.9	566.5	575.8
162.5°	507.9	517.5	532.6	561.0	568.2
165°	518.2	524.9	533.7	554.4	558.6
167.5°	526.1	530.1	534.5	550.4	551.7
170°	530.2	533.6	534.5	548.3	548.3
172.5°	533.7	535.7	534.5	545.5	544.8
175°	537.1	537.9	534.5	542.2	540.5
177.5°	538.5	537.8	534.3	539.1	537.8
180°	537.1	537.1	537.1	537.1	537.1

(END OF REPORT)