

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: P521205

Luminaire Tested: **SQ4-BB-100U-075D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521205
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 (3000K)
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 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

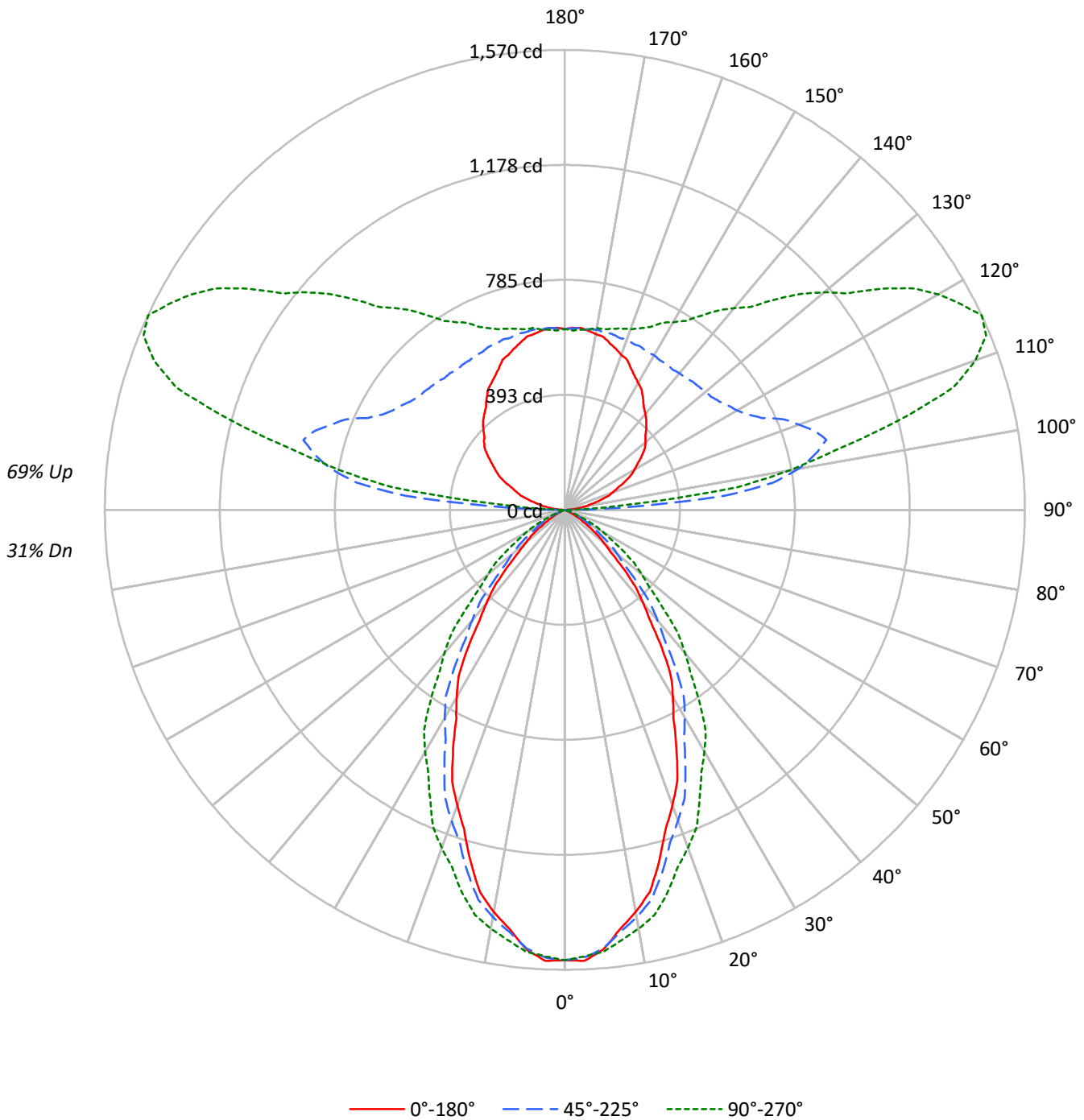
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5829.3 lumens
Efficiency: N/A
Efficacy: 91.2 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): 63.9
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	50	30	10	0	
RCR																						
0	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	31	31	31	31	
1	95	91	88	85	85	82	79	77	66	64	62	50	49	48	36	36	35	29	29	29	29	
2	87	81	75	71	78	73	69	65	59	56	53	46	44	42	33	32	31	26	26	26	26	
3	80	72	66	60	72	65	60	56	53	49	46	41	39	37	31	29	28	23	23	23	23	
4	74	64	57	52	67	59	53	48	48	44	40	38	35	33	28	27	25	21	21	21	21	
5	68	58	51	45	62	53	47	42	43	39	35	34	31	29	26	24	23	19	19	19	19	
6	63	52	45	40	57	48	42	37	39	35	32	31	28	26	24	22	21	18	18	18	18	
7	59	48	40	35	53	44	37	33	36	31	28	29	26	23	22	20	19	16	16	16	16	
8	55	43	36	32	49	40	34	30	33	29	25	27	24	21	21	19	17	15	15	15	15	
9	51	40	33	28	46	37	31	27	31	26	23	25	22	19	19	17	16	14	14	14	14	
10	48	37	30	26	43	34	28	24	28	24	21	23	20	18	18	16	15	13	13	13	13	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14183	14183	14183
5°	13954	13920	14024
10°	13057	13231	13600
15°	11870	12246	12928
20°	10536	11084	12055
25°	9176	9902	11076
30°	7859	8723	10150
35°	6517	7404	9030
40°	5007	5921	7694
45°	3619	4483	6191
50°	2466	3341	4910
55°	1604	2416	3815
60°	919	1701	2759
65°	245	1039	1397
70°	121	321	402
75°	53	25	0
80°	37	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.3	2.4
10°-20°	358.8	6.2
20°-30°	449.1	7.7
30°-40°	414.8	7.1
40°-50°	278.8	4.8
50°-60°	144.0	2.5
60°-70°	45.1	0.8
70°-80°	2.8	0.0
80°-90°	0.0	0.0
90°-100°	318.1	5.5
100°-110°	768.8	13.2
110°-120°	820.0	14.1
120°-130°	664.1	11.4
130°-140°	514.2	8.8
140°-150°	392.3	6.7
150°-160°	283.9	4.9
160°-170°	174.9	3.0
170°-180°	59.2	1.0
0°-30°	948.2	16.3
0°-40°	1363.0	23.4
0°-60°	1785.8	30.6
0°-90°	1833.7	31.5
90°-120°	1906.9	32.7
90°-150°	3477.5	59.7
90°-180°	3996.0	68.6
0°-180°	5829.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1537	1537	1537	1537	1537	
5°	1507	1491	1503	1508	1514	140
15°	1243	1238	1282	1325	1354	346
25°	901	909	973	1039	1088	413
35°	579	593	657	735	802	358
45°	277	294	344	410	474	218
55°	100	116	150	193	237	93
65°	11	21	48	57	64	19
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	31	159	545	354	248	35
105°	123	212	924	1196	1180	130
115°	225	287	742	1407	1570	222
125°	320	369	644	1119	1315	286
135°	393	439	618	883	1016	304
145°	465	500	606	750	809	291
155°	533	556	614	664	689	246
165°	590	598	622	632	640	166
175°	623	621	623	618	617	59
180°	617	617	617	617	617	



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CATALOG NUMBER: SQ4-BB-100U-075D-93050-1D-UNV-STD-W-4 (3000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1537.2	1537.2	1537.2	1537.2	1537.2
2.5°	1540.8	1526.2	1530.1	1530.0	1525.9
5°	1506.7	1491.4	1503.0	1508.3	1514.2
7.5°	1443.1	1431.1	1453.3	1470.0	1482.0
10°	1393.7	1383.5	1412.3	1435.0	1451.7
12.5°	1336.6	1328.7	1363.5	1394.6	1416.0
15°	1242.7	1238.3	1282.1	1325.2	1353.5
17.5°	1142.2	1142.0	1192.0	1245.4	1279.6
20°	1073.1	1075.3	1128.9	1187.8	1227.8
22.5°	1004.1	1009.2	1066.4	1127.9	1173.7
25°	901.4	908.6	972.7	1039.3	1088.0
27.5°	802.6	813.2	880.7	949.8	1009.2
30°	737.7	750.1	818.8	891.6	952.7
32.5°	674.1	688.8	755.7	832.7	895.0
35°	578.6	593.1	657.4	734.8	801.7
37.5°	480.0	494.2	557.0	633.2	705.5
40°	415.7	431.7	491.6	565.4	638.8
42.5°	357.4	373.4	429.7	502.2	571.6
45°	277.4	294.1	343.6	410.5	474.5
47.5°	211.1	229.2	272.6	333.2	391.5
50°	171.8	190.0	232.8	286.1	342.1
52.5°	140.3	157.9	196.5	246.7	298.1
55°	99.7	116.4	150.2	192.9	237.2
57.5°	68.9	83.3	113.6	149.2	184.0
60°	49.8	63.6	92.2	121.1	149.5
62.5°	33.2	45.8	73.8	95.9	115.0
65°	11.2	21.3	47.6	57.4	64.0
67.5°	5.7	6.8	25.0	26.4	28.6
70°	4.5	4.5	11.9	12.7	14.9
72.5°	3.3	3.3	4.8	6.1	6.5
75°	1.5	1.5	0.7	0.0	0.0
77.5°	0.7	0.7	0.6	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°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.5	86.1	202.8	98.6	66.9
95°	31.4	159.2	545.0	354.4	248.3
97.5°	55.7	176.3	717.8	691.5	593.6
100°	74.5	187.0	812.9	858.2	777.7
102.5°	92.3	196.6	875.7	996.9	949.1
105°	122.9	212.3	924.0	1195.6	1180.2
107.5°	152.9	230.9	895.6	1354.9	1390.9
110°	173.8	246.7	849.5	1423.5	1491.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	194.7	262.5	808.8	1440.3	1556.1
115°	224.8	287.4	742.4	1407.4	1569.7
117.5°	254.6	313.6	703.4	1331.7	1521.9
120°	274.5	329.4	678.3	1272.3	1471.7
122.5°	295.4	346.2	662.6	1211.6	1407.9
125°	320.2	368.8	644.3	1119.3	1314.8
127.5°	344.8	390.5	631.5	1041.1	1212.9
130°	359.4	404.2	627.4	986.7	1155.4
132.5°	373.0	419.8	621.1	947.4	1090.6
135°	393.4	439.4	618.2	882.6	1015.5
137.5°	412.7	459.0	609.1	838.8	938.9
140°	427.4	469.6	609.1	807.2	899.2
142.5°	442.0	484.2	603.8	779.7	857.4
145°	465.3	499.8	606.4	750.2	809.0
147.5°	487.0	520.5	604.9	716.3	764.9
150°	500.6	530.0	609.1	701.4	739.8
152.5°	515.2	543.6	608.0	685.6	719.9
155°	533.3	556.3	614.3	664.5	688.8
157.5°	554.9	574.6	613.0	656.4	670.7
160°	563.3	579.9	618.2	645.9	656.1
162.5°	576.9	591.5	616.1	642.7	648.8
165°	589.5	598.4	622.1	631.5	640.4
167.5°	604.9	610.8	620.6	630.8	631.0
170°	609.1	612.9	624.7	623.6	630.0
172.5°	616.4	619.2	621.6	624.4	620.6
175°	623.4	620.9	623.4	618.2	616.9
177.5°	622.1	622.1	620.0	617.8	612.7
180°	616.9	616.9	616.9	616.9	616.9

(END OF REPORT)