

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: P518506

Luminaire Tested: **SQ4-BB-075U-050D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518506
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-050D-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

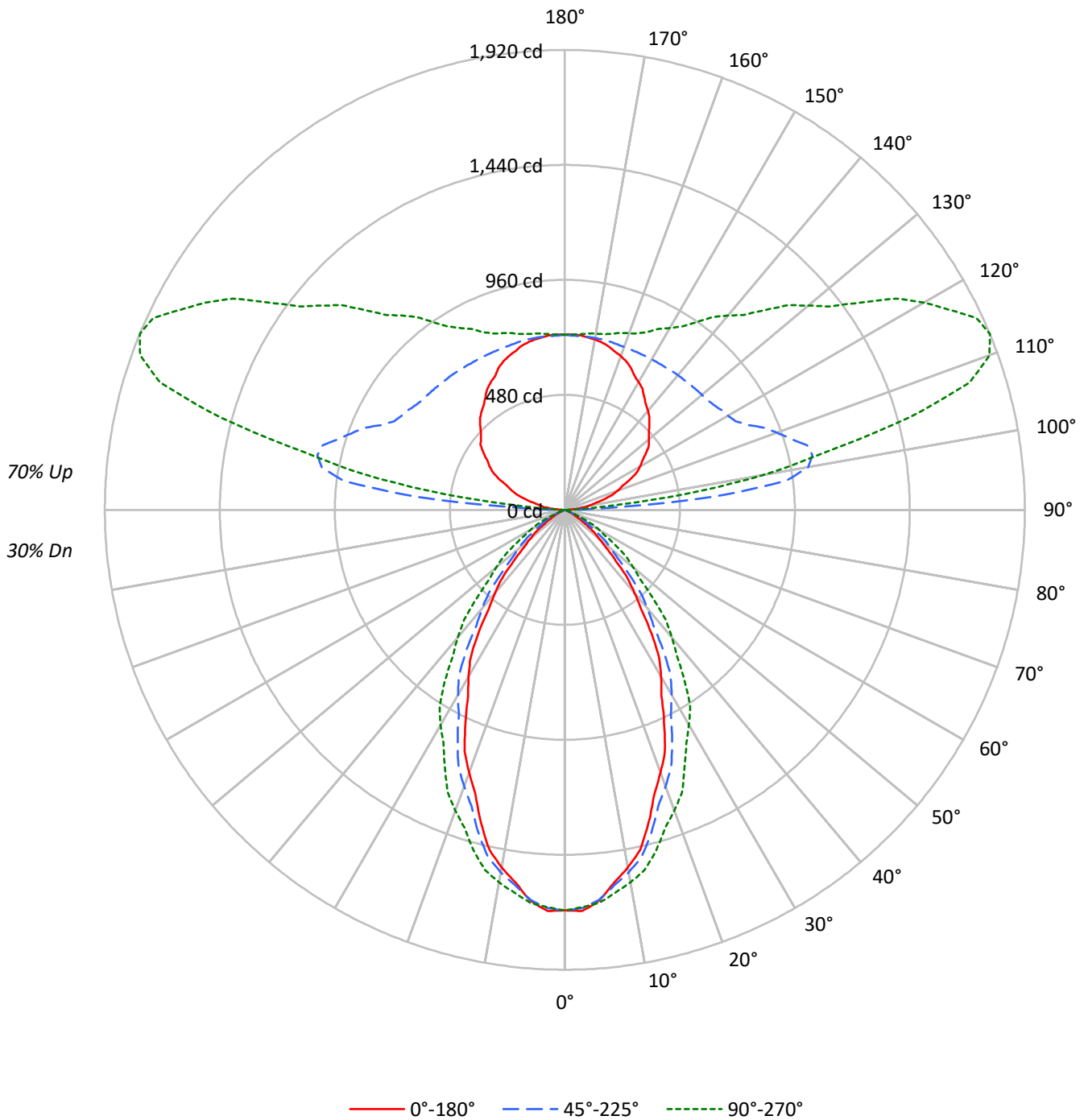
Lumens per Lamp: N/A
Luminaire Lumens: 6761.4 lumens
Efficiency: N/A
Efficacy: 94.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 71.8
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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	94	90	87	84	84	81	79	76	64	63	61	49	48	47	35	34	33	27
2	87	80	75	70	78	72	68	64	58	55	52	44	42	41	32	31	30	24
3	80	71	65	60	72	65	59	55	52	48	45	40	38	36	29	28	27	22
4	73	64	57	52	66	58	52	47	47	43	39	36	34	32	27	25	24	20
5	68	57	50	45	61	52	46	41	42	38	35	33	30	28	25	23	22	18
6	63	52	45	39	56	47	41	36	39	34	31	30	27	25	23	21	20	16
7	58	47	40	35	52	43	37	32	35	31	27	28	25	23	21	19	18	15
8	54	43	36	31	49	39	33	29	32	28	25	26	23	21	20	18	16	14
9	51	39	33	28	46	36	30	26	30	25	22	24	21	19	18	16	15	13
10	47	36	30	25	43	33	27	24	28	23	20	22	19	17	17	15	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7714	7714	7714
5°	7590	7571	7628
10°	7102	7196	7397
15°	6456	6661	7032
20°	5731	6029	6557
25°	4991	5386	6025
30°	4275	4745	5521
35°	3545	4028	4911
40°	2723	3221	4185
45°	1969	2439	3368
50°	1341	1817	2671
55°	872	1314	2076
60°	500	925	1500
65°	132	565	760
70°	66	174	219
75°	29	14	0
80°	21	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.6	2.3
10°-20°	390.3	5.8
20°-30°	488.6	7.2
30°-40°	451.3	6.7
40°-50°	303.3	4.5
50°-60°	156.6	2.3
60°-70°	49.1	0.7
70°-80°	3.1	0.0
80°-90°	1.9	0.0
90°-100°	344.9	5.1
100°-110°	949.1	14.0
110°-120°	979.6	14.5
120°-130°	784.8	11.6
130°-140°	616.4	9.1
140°-150°	472.4	7.0
150°-160°	339.7	5.0
160°-170°	207.7	3.1
170°-180°	70.0	1.0
0°-30°	1031.5	15.3
0°-40°	1482.8	21.9
0°-60°	1942.6	28.7
0°-90°	1996.7	29.5
90°-120°	2273.6	33.6
90°-150°	4147.3	61.3
90°-180°	4765.0	70.5
0°-180°	6761.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1672	1672	1672	1672	1672	
5°	1639	1622	1635	1641	1647	152
15°	1352	1347	1395	1442	1472	377
25°	980	988	1058	1131	1184	450
35°	629	645	715	799	872	390
45°	302	320	374	446	516	237
55°	108	127	163	210	258	101
65°	12	23	52	62	70	20
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	2	6	11	14	14	3
95°	51	188	610	261	166	54
105°	170	261	1046	1593	1486	179
115°	300	366	839	1670	1895	296
125°	414	472	761	1287	1508	369
135°	500	554	739	1041	1178	385
145°	577	617	728	887	956	362
155°	654	675	724	797	820	300
165°	706	716	727	756	761	199
175°	731	733	728	738	736	69
180°	731	731	731	731	731	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1672.3	1672.3	1672.3	1672.3	1672.3
2.5°	1676.1	1660.3	1664.5	1664.4	1660.0
5°	1639.1	1622.5	1635.0	1640.8	1647.2
7.5°	1569.8	1556.9	1581.0	1599.1	1612.2
10°	1516.1	1505.0	1536.3	1561.0	1579.2
12.5°	1454.0	1445.4	1483.3	1517.1	1540.4
15°	1351.9	1347.1	1394.8	1441.6	1472.4
17.5°	1242.5	1242.3	1296.7	1354.8	1392.0
20°	1167.4	1169.8	1228.1	1292.2	1335.7
22.5°	1092.3	1097.9	1160.1	1227.0	1276.8
25°	980.5	988.5	1058.2	1130.6	1183.6
27.5°	873.1	884.7	958.0	1033.3	1097.8
30°	802.6	816.0	890.7	969.9	1036.4
32.5°	733.3	749.3	822.1	905.9	973.6
35°	629.4	645.2	715.2	799.4	872.1
37.5°	522.1	537.7	606.0	688.8	767.4
40°	452.2	469.6	534.8	615.1	695.0
42.5°	388.8	406.2	467.5	546.4	621.8
45°	301.8	320.0	373.8	446.5	516.2
47.5°	229.6	249.4	296.6	362.4	425.9
50°	186.9	206.7	253.2	311.2	372.2
52.5°	152.6	171.7	213.7	268.4	324.3
55°	108.4	126.6	163.4	209.8	258.1
57.5°	74.9	90.6	123.6	162.3	200.2
60°	54.2	69.2	100.3	131.8	162.6
62.5°	36.1	49.8	80.3	104.4	125.1
65°	12.1	23.2	51.8	62.5	69.6
67.5°	6.1	7.4	27.2	28.7	31.1
70°	4.9	4.9	12.9	13.8	16.2
72.5°	3.6	3.6	5.2	6.6	7.1
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°	0.3	1.2	2.2	2.8	2.8
90°	1.6	6.1	10.9	14.0	14.0
92.5°	21.5	91.8	159.0	61.1	50.1
95°	51.4	188.3	610.0	260.8	166.5
97.5°	83.7	208.8	930.9	717.2	506.1
100°	107.4	221.5	1031.7	1041.4	849.6
102.5°	129.8	236.6	1057.9	1291.9	1116.1
105°	169.6	260.9	1045.7	1592.6	1486.1
107.5°	207.6	291.0	986.3	1739.8	1771.5
110°	235.0	311.1	941.5	1776.5	1886.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	259.9	333.5	896.6	1752.9	1919.6
115°	300.3	365.8	838.8	1670.2	1895.4
117.5°	338.9	399.2	802.0	1554.1	1808.8
120°	362.6	420.4	785.8	1467.2	1730.4
122.5°	383.7	441.6	774.6	1390.9	1640.8
125°	413.9	471.7	760.9	1287.3	1507.9
127.5°	442.6	497.6	751.9	1200.7	1394.3
130°	457.5	513.8	746.9	1149.3	1325.8
132.5°	474.9	531.2	743.2	1104.1	1263.6
135°	499.5	554.3	739.2	1041.0	1178.0
137.5°	522.5	573.4	735.7	990.1	1103.0
140°	540.0	587.1	734.5	956.2	1058.2
142.5°	554.9	598.4	732.0	926.0	1013.3
145°	577.3	616.9	728.3	887.0	955.5
147.5°	601.3	635.4	726.4	852.4	907.2
150°	616.2	646.7	725.2	833.5	876.1
152.5°	629.9	657.9	723.9	817.1	852.4
155°	653.6	674.9	723.6	797.3	820.1
157.5°	670.7	688.0	723.6	780.9	796.7
160°	683.1	696.8	723.6	772.1	784.3
162.5°	693.1	704.4	724.8	764.6	774.3
165°	706.5	715.6	726.7	756.4	760.9
167.5°	715.8	722.8	728.3	749.5	750.7
170°	722.0	726.6	728.3	746.9	746.9
172.5°	727.0	729.2	728.3	743.2	742.0
175°	731.4	732.9	728.3	737.6	736.0
177.5°	732.6	732.6	727.6	735.1	732.6
180°	731.4	731.4	731.4	731.4	731.4

(END OF REPORT)