

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: P518510

Luminaire Tested: **SQ4-BB-075U-050D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518510
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-935-1D-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

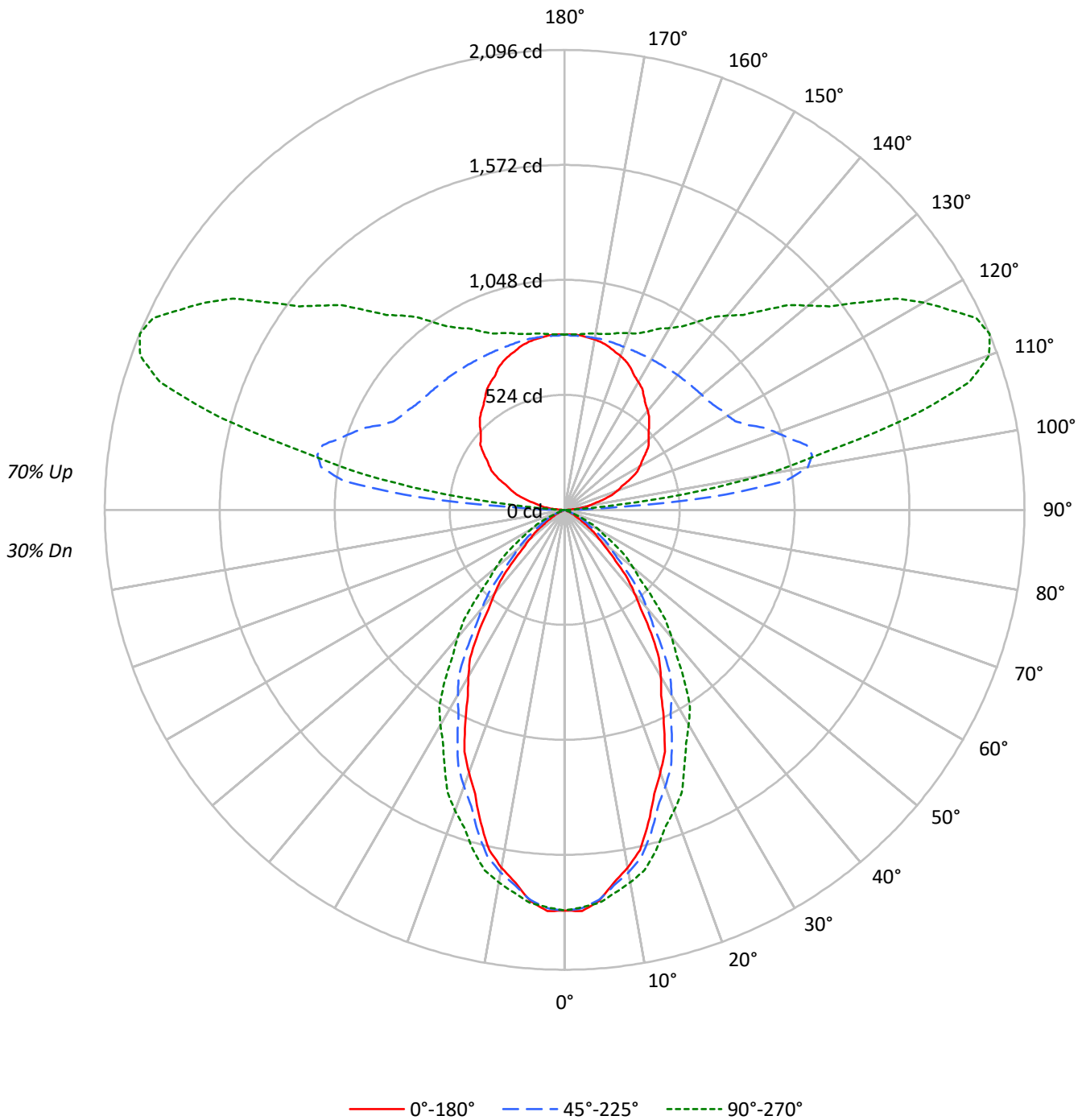
Lumens per Lamp: N/A
Luminaire Lumens: 7382.8 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

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°	8424	8424	8424
5°	8288	8267	8329
10°	7755	7858	8078
15°	7050	7274	7679
20°	6258	6583	7160
25°	5450	5881	6578
30°	4668	5181	6028
35°	3871	4398	5363
40°	2974	3516	4569
45°	2150	2662	3677
50°	1465	1984	2917
55°	952	1435	2266
60°	546	1010	1639
65°	145	617	830
70°	71	190	239
75°	32	16	0
80°	24	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.6	2.3
10°-20°	426.2	5.8
20°-30°	533.5	7.2
30°-40°	492.8	6.7
40°-50°	331.1	4.5
50°-60°	171.0	2.3
60°-70°	53.6	0.7
70°-80°	3.4	0.0
80°-90°	2.1	0.0
90°-100°	376.7	5.1
100°-110°	1036.3	14.0
110°-120°	1069.6	14.5
120°-130°	857.0	11.6
130°-140°	673.1	9.1
140°-150°	515.8	7.0
150°-160°	370.9	5.0
160°-170°	226.8	3.1
170°-180°	76.4	1.0
0°-30°	1126.3	15.3
0°-40°	1619.1	21.9
0°-60°	2121.2	28.7
0°-90°	2180.3	29.5
90°-120°	2482.6	33.6
90°-150°	4528.5	61.3
90°-180°	5203.0	70.5
0°-180°	7382.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1826	1826	1826	1826	1826	
5°	1790	1772	1785	1792	1799	166
15°	1476	1471	1523	1574	1608	411
25°	1071	1079	1156	1234	1292	491
35°	687	704	781	873	952	426
45°	330	349	408	488	564	259
55°	118	138	178	229	282	110
65°	13	25	56	68	76	22
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	7	12	15	15	4
95°	56	206	666	285	182	59
105°	185	285	1142	1739	1623	195
115°	328	399	916	1824	2070	324
125°	452	515	831	1406	1646	403
135°	545	605	807	1137	1286	421
145°	630	674	795	968	1043	395
155°	714	737	790	870	896	328
165°	771	781	794	826	831	217
175°	799	800	795	805	804	76
180°	799	799	799	799	799	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1826.0	1826.0	1826.0	1826.0	1826.0
2.5°	1830.2	1812.9	1817.5	1817.4	1812.5
5°	1789.7	1771.6	1785.3	1791.7	1798.6
7.5°	1714.1	1700.0	1726.3	1746.1	1760.4
10°	1655.5	1643.4	1677.5	1704.5	1724.4
12.5°	1587.6	1578.3	1619.6	1656.6	1682.0
15°	1476.1	1471.0	1523.0	1574.1	1607.8
17.5°	1356.7	1356.5	1415.9	1479.4	1520.0
20°	1274.7	1277.3	1341.0	1411.0	1458.5
22.5°	1192.7	1198.8	1266.8	1339.7	1394.2
25°	1070.7	1079.3	1155.5	1234.5	1292.4
27.5°	953.3	966.0	1046.1	1128.3	1198.8
30°	876.3	891.0	972.6	1059.1	1131.6
32.5°	800.7	818.1	897.7	989.1	1063.1
35°	687.3	704.5	780.9	872.8	952.3
37.5°	570.1	587.1	661.7	752.1	838.0
40°	493.8	512.8	583.9	671.6	758.8
42.5°	424.6	443.6	510.4	596.6	679.0
45°	329.5	349.4	408.1	487.6	563.6
47.5°	250.7	272.3	323.8	395.7	465.0
50°	204.1	225.7	276.5	339.8	406.4
52.5°	166.6	187.5	233.4	293.1	354.1
55°	118.4	138.2	178.4	229.1	281.8
57.5°	81.8	98.9	135.0	177.3	218.5
60°	59.2	75.6	109.5	143.9	177.6
62.5°	39.4	54.4	87.6	113.9	136.6
65°	13.3	25.3	56.5	68.2	76.0
67.5°	6.7	8.1	29.7	31.3	33.9
70°	5.3	5.3	14.1	15.1	17.7
72.5°	3.9	3.9	5.7	7.3	7.8
75°	1.8	1.8	0.9	0.0	0.0
77.5°	0.9	0.9	0.7	0.0	0.0
80°	0.9	0.9	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	1.3	2.4	3.1	3.1
90°	1.7	6.7	11.9	15.3	15.3
92.5°	23.4	100.2	173.7	66.7	54.7
95°	56.1	205.6	666.1	284.8	181.8
97.5°	91.4	228.0	1016.4	783.2	552.6
100°	117.2	241.8	1126.5	1137.1	927.7
102.5°	141.7	258.3	1155.1	1410.7	1218.6
105°	185.2	284.9	1141.8	1739.0	1622.7
107.5°	226.7	317.7	1076.9	1899.8	1934.3
110°	256.6	339.6	1028.0	1939.7	2059.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	283.8	364.2	979.0	1914.0	2096.1
115°	327.9	399.4	915.8	1823.7	2069.6
117.5°	370.1	435.9	875.7	1697.0	1975.1
120°	395.9	459.0	858.1	1602.0	1889.5
122.5°	419.0	482.1	845.8	1518.8	1791.6
125°	452.0	515.1	830.9	1405.6	1646.5
127.5°	483.2	543.4	821.0	1311.1	1522.4
130°	499.5	561.0	815.6	1255.0	1447.7
132.5°	518.6	580.1	811.5	1205.6	1379.7
135°	545.4	605.2	807.1	1136.7	1286.3
137.5°	570.6	626.1	803.4	1081.1	1204.4
140°	589.6	641.1	802.0	1044.1	1155.4
142.5°	605.9	653.4	799.3	1011.1	1106.5
145°	630.4	673.6	795.2	968.5	1043.3
147.5°	656.6	693.8	793.2	930.8	990.6
150°	672.9	706.1	791.8	910.1	956.6
152.5°	687.8	718.4	790.4	892.2	930.8
155°	713.6	736.9	790.1	870.5	895.5
157.5°	732.3	751.3	790.1	852.7	870.0
160°	745.9	760.9	790.1	843.1	856.4
162.5°	756.8	769.1	791.5	834.9	845.5
165°	771.4	781.4	793.5	825.9	830.9
167.5°	781.6	789.2	795.2	818.3	819.7
170°	788.4	793.4	795.2	815.6	815.6
172.5°	793.8	796.2	795.2	811.5	810.2
175°	798.6	800.3	795.2	805.4	803.7
177.5°	800.0	800.0	794.5	802.6	800.0
180°	798.6	798.6	798.6	798.6	798.6

(END OF REPORT)