

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: P518798

Luminaire Tested: **SQ4-BB-125U-050D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518798
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-050D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

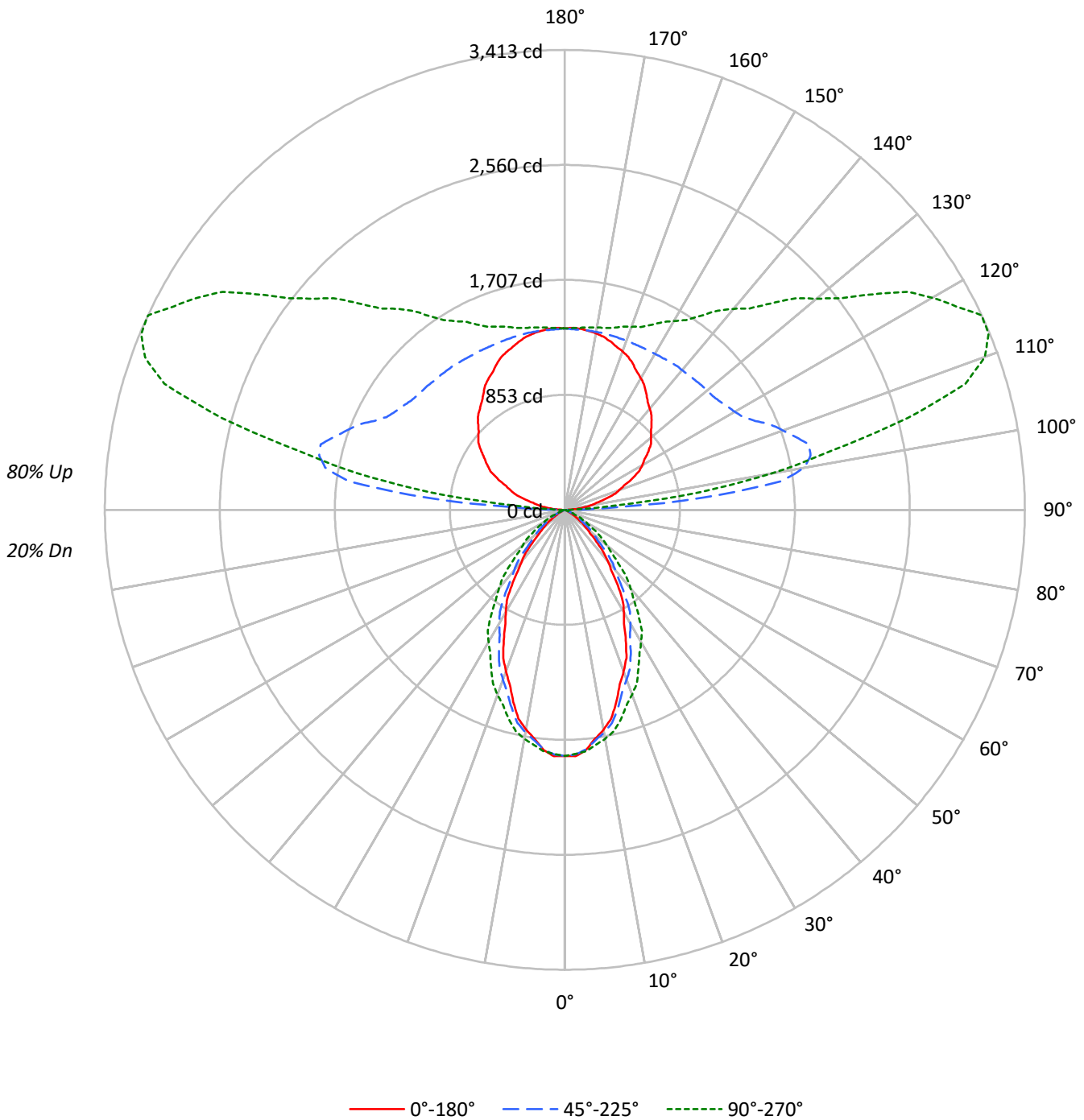
Lumens per Lamp: N/A
Luminaire Lumens: 10869.1 lumens
Efficiency: N/A
Efficacy: 112.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 96.8
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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20
1	92	88	84	81	81	78	75	73	59	58	56	42	41	40	26	26	25	18
2	84	78	72	68	74	69	64	61	53	50	47	38	36	35	24	23	23	17
3	77	69	62	57	68	61	56	52	47	44	41	34	32	30	22	21	20	15
4	71	61	54	49	63	55	49	44	42	38	35	31	28	26	20	19	18	14
5	65	55	47	42	58	49	43	38	38	34	31	28	25	23	19	17	16	12
6	60	49	42	37	53	44	38	33	35	30	27	26	23	21	17	16	15	11
7	56	45	37	32	49	40	34	29	31	27	24	23	21	19	16	14	13	10
8	52	40	33	29	46	36	30	26	29	24	21	21	19	17	15	13	12	9
9	48	37	30	26	43	33	27	23	26	22	19	20	17	15	14	12	11	9
10	45	34	27	23	40	31	25	21	24	20	17	18	16	14	13	11	10	8

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	1.5
10°-20°	426.2	3.9
20°-30°	533.5	4.9
30°-40°	492.8	4.5
40°-50°	331.1	3.0
50°-60°	171.0	1.6
60°-70°	53.6	0.5
70°-80°	3.4	0.0
80°-90°	3.2	0.0
90°-100°	629.6	5.8
100°-110°	1695.9	15.6
110°-120°	1779.8	16.4
120°-130°	1444.2	13.3
130°-140°	1132.7	10.4
140°-150°	869.6	8.0
150°-160°	625.2	5.8
160°-170°	382.0	3.5
170°-180°	128.8	1.2
0°-30°	1126.3	10.4
0°-40°	1619.1	14.9
0°-60°	2121.2	19.5
0°-90°	2181.4	20.1
90°-120°	4105.2	37.8
90°-150°	7551.7	69.5
90°-180°	8688.0	79.9
0°-180°	10869.1	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°	3	10	21	22	22	7
95°	96	342	1032	528	365	100
105°	314	488	1876	2806	2633	330
115°	554	678	1562	3018	3413	545
125°	756	868	1402	2370	2789	675
135°	910	1016	1363	1912	2165	703
145°	1053	1135	1346	1635	1756	660
155°	1195	1238	1334	1467	1514	550
165°	1296	1311	1339	1392	1399	365
175°	1348	1346	1341	1359	1356	128
180°	1346	1346	1346	1346	1346	

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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°	0.7	2.0	4.1	4.5	4.5
90°	3.4	10.1	20.6	22.3	22.3
92.5°	41.8	147.8	292.1	140.6	97.7
95°	96.0	342.4	1032.0	527.8	365.2
97.5°	153.3	392.0	1618.7	1352.3	1019.7
100°	197.2	411.7	1805.2	1888.8	1566.9
102.5°	239.7	439.5	1866.9	2290.6	2026.4
105°	313.7	488.1	1875.5	2805.9	2633.3
107.5°	383.7	539.2	1795.6	3070.7	3115.3
110°	430.3	577.8	1722.9	3153.0	3315.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	479.7	616.5	1653.0	3134.8	3402.0
115°	553.7	677.8	1561.8	3017.7	3413.3
117.5°	621.3	737.6	1491.2	2830.8	3271.3
120°	665.2	777.5	1455.5	2696.7	3149.3
122.5°	703.6	814.5	1429.4	2559.5	3010.8
125°	756.0	868.3	1402.3	2370.2	2789.3
127.5°	806.4	917.1	1385.2	2203.2	2577.4
130°	836.6	947.2	1378.3	2107.6	2436.1
132.5°	866.8	976.1	1371.5	2023.3	2325.0
135°	910.3	1015.9	1362.9	1912.1	2165.2
137.5°	951.8	1053.1	1358.5	1817.8	2025.7
140°	980.6	1077.8	1354.3	1759.8	1947.5
142.5°	1010.8	1101.3	1351.6	1705.6	1863.9
145°	1052.6	1134.8	1345.8	1634.8	1755.5
147.5°	1097.9	1169.3	1339.9	1575.3	1670.1
150°	1128.0	1190.1	1337.2	1537.9	1616.6
152.5°	1155.5	1209.5	1335.8	1507.3	1571.4
155°	1194.9	1238.5	1333.8	1466.8	1513.8
157.5°	1229.5	1263.4	1334.1	1438.4	1469.9
160°	1251.5	1280.0	1335.5	1421.7	1445.2
162.5°	1270.7	1293.8	1336.9	1407.9	1424.6
165°	1296.1	1311.1	1338.9	1392.2	1398.9
167.5°	1316.6	1325.3	1340.6	1380.1	1382.8
170°	1330.3	1333.7	1340.6	1373.2	1373.2
172.5°	1338.6	1339.2	1342.0	1366.3	1366.3
175°	1347.5	1345.8	1340.6	1359.4	1356.1
177.5°	1351.3	1348.6	1341.7	1352.6	1349.9
180°	1345.8	1345.8	1345.8	1345.8	1345.8

(END OF REPORT)