

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: P518782

Luminaire Tested: **SQ4-BB-125U-050D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518782
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-830-1D-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

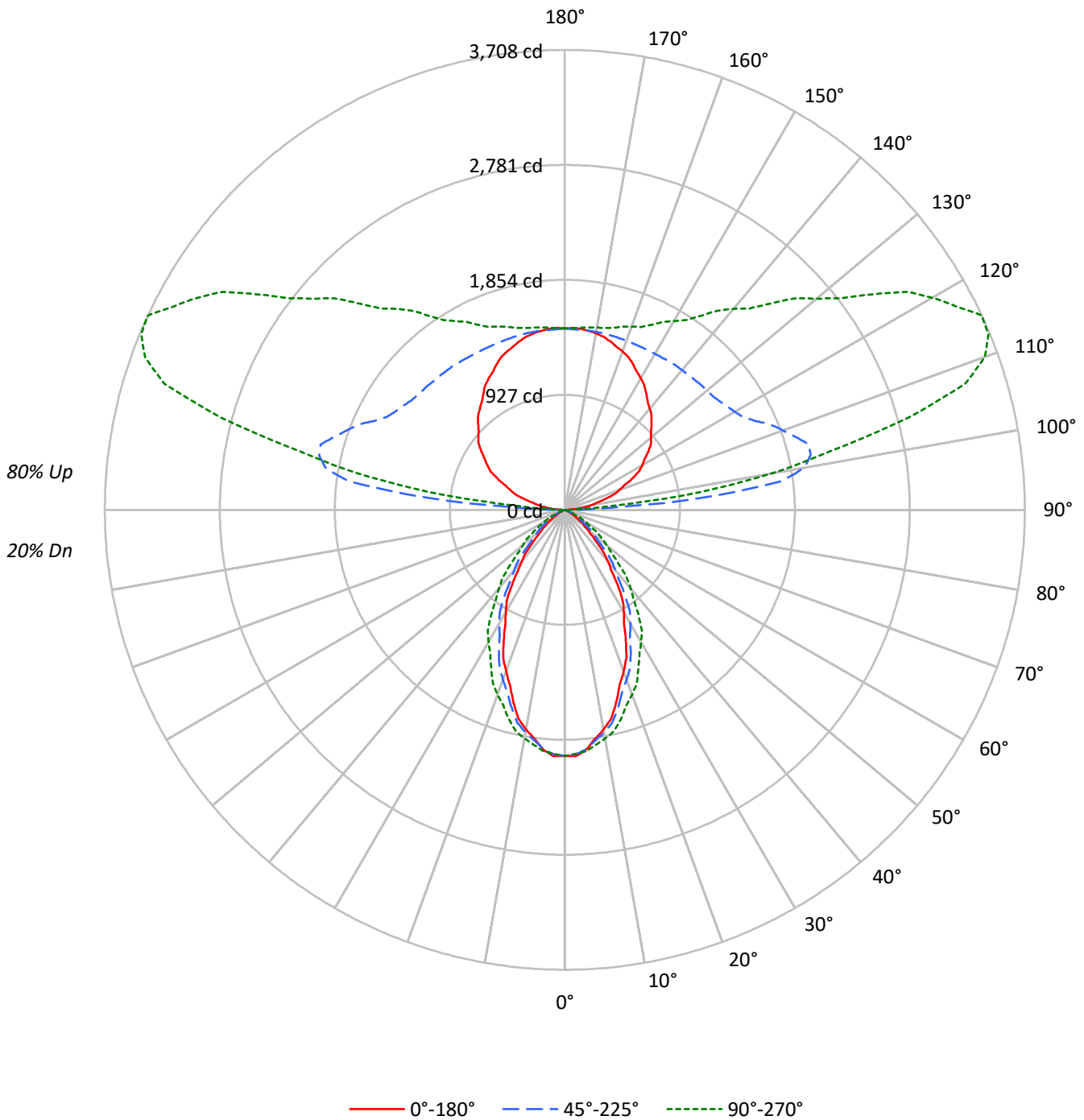
Lumens per Lamp: N/A
Luminaire Lumens: 11807.3 lumens
Efficiency: N/A
Efficacy: 122.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

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°	9151	9151	9151
5°	9003	8981	9048
10°	8424	8536	8775
15°	7658	7901	8341
20°	6798	7151	7778
25°	5920	6389	7146
30°	5071	5628	6548
35°	4205	4777	5826
40°	3230	3820	4964
45°	2335	2893	3994
50°	1591	2156	3168
55°	1034	1559	2462
60°	593	1098	1780
65°	157	670	901
70°	78	208	259
75°	34	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.0	1.5
10°-20°	462.9	3.9
20°-30°	579.5	4.9
30°-40°	535.3	4.5
40°-50°	359.7	3.0
50°-60°	185.8	1.6
60°-70°	58.2	0.5
70°-80°	3.7	0.0
80°-90°	3.5	0.0
90°-100°	683.9	5.8
100°-110°	1842.3	15.6
110°-120°	1933.4	16.4
120°-130°	1568.9	13.3
130°-140°	1230.4	10.4
140°-150°	944.7	8.0
150°-160°	679.2	5.8
160°-170°	415.0	3.5
170°-180°	139.9	1.2
0°-30°	1223.5	10.4
0°-40°	1758.8	14.9
0°-60°	2304.3	19.5
0°-90°	2369.7	20.1
90°-120°	4459.5	37.8
90°-150°	8203.5	69.5
90°-180°	9438.0	79.9
0°-180°	11807.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1984	1984	1984	1984	1984	
5°	1944	1924	1939	1946	1954	180
15°	1604	1598	1654	1710	1746	447
25°	1163	1172	1255	1341	1404	533
35°	747	765	848	948	1034	462
45°	358	380	443	530	612	281
55°	129	150	194	249	306	120
65°	14	28	61	74	82	24
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	4	11	22	24	24	7
95°	104	372	1121	573	397	109
105°	341	530	2037	3048	2861	358
115°	602	736	1697	3278	3708	592
125°	821	943	1523	2575	3030	733
135°	989	1104	1481	2077	2352	763
145°	1144	1233	1462	1776	1907	717
155°	1298	1345	1449	1594	1644	598
165°	1408	1424	1454	1512	1520	397
175°	1464	1462	1456	1477	1473	139
180°	1462	1462	1462	1462	1462	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1983.6	1983.6	1983.6	1983.6	1983.6
2.5°	1988.2	1969.4	1974.4	1974.2	1969.0
5°	1944.2	1924.5	1939.4	1946.3	1953.8
7.5°	1862.1	1846.7	1875.3	1896.8	1912.4
10°	1798.4	1785.2	1822.3	1851.6	1873.2
12.5°	1724.7	1714.5	1759.4	1799.6	1827.1
15°	1603.5	1597.9	1654.4	1709.9	1746.5
17.5°	1473.8	1473.6	1538.1	1607.0	1651.1
20°	1384.8	1387.6	1456.7	1532.7	1584.4
22.5°	1295.7	1302.3	1376.1	1455.4	1514.5
25°	1163.1	1172.5	1255.2	1341.1	1403.9
27.5°	1035.6	1049.3	1136.4	1225.7	1302.2
30°	952.0	967.9	1056.6	1150.5	1229.3
32.5°	869.8	888.8	975.2	1074.5	1154.8
35°	746.6	765.4	848.3	948.2	1034.5
37.5°	619.3	637.7	718.8	817.0	910.3
40°	536.4	557.1	634.3	729.6	824.3
42.5°	461.2	481.8	554.5	648.1	737.6
45°	357.9	379.5	443.4	529.7	612.2
47.5°	272.3	295.8	351.8	429.9	505.2
50°	221.7	245.1	300.4	369.2	441.4
52.5°	181.0	203.7	253.5	318.4	384.6
55°	128.6	150.2	193.8	248.9	306.1
57.5°	88.9	107.4	146.6	192.6	237.4
60°	64.3	82.1	119.0	156.3	192.9
62.5°	42.8	59.1	95.2	123.8	148.4
65°	14.4	27.5	61.4	74.1	82.5
67.5°	7.3	8.8	32.2	34.0	36.8
70°	5.8	5.8	15.4	16.4	19.2
72.5°	4.2	4.2	6.1	7.9	8.4
75°	1.9	1.9	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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	2.2	4.5	4.8	4.8
90°	3.7	11.0	22.3	24.2	24.2
92.5°	45.4	160.5	317.3	152.8	106.2
95°	104.3	372.0	1121.1	573.3	396.7
97.5°	166.5	425.8	1758.4	1469.0	1107.7
100°	214.2	447.3	1961.0	2051.8	1702.2
102.5°	260.4	477.4	2028.1	2488.3	2201.3
105°	340.8	530.2	2037.4	3048.1	2860.6
107.5°	416.8	585.8	1950.6	3335.8	3384.2
110°	467.4	627.7	1871.6	3425.1	3601.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	521.1	669.7	1795.7	3405.4	3695.6
115°	601.5	736.3	1696.6	3278.2	3707.9
117.5°	674.9	801.3	1619.9	3075.2	3553.7
120°	722.6	844.6	1581.1	2929.5	3421.1
122.5°	764.3	884.9	1552.8	2780.4	3270.6
125°	821.3	943.3	1523.4	2574.8	3030.0
127.5°	876.0	996.2	1504.8	2393.4	2799.8
130°	908.8	1029.0	1497.3	2289.5	2646.4
132.5°	941.6	1060.3	1489.9	2197.9	2525.7
135°	988.9	1103.6	1480.6	2077.2	2352.1
137.5°	1034.0	1144.0	1475.7	1974.7	2200.5
140°	1065.3	1170.9	1471.2	1911.7	2115.6
142.5°	1098.0	1196.4	1468.3	1852.8	2024.7
145°	1143.5	1232.7	1461.9	1775.9	1907.0
147.5°	1192.6	1270.2	1455.6	1711.2	1814.3
150°	1225.4	1292.8	1452.6	1670.6	1756.2
152.5°	1255.2	1313.9	1451.1	1637.5	1707.0
155°	1298.0	1345.4	1448.9	1593.5	1644.4
157.5°	1335.7	1372.5	1449.3	1562.5	1596.8
160°	1359.5	1390.5	1450.8	1544.5	1570.0
162.5°	1380.4	1405.5	1452.3	1529.4	1547.6
165°	1407.9	1424.3	1454.5	1512.4	1519.7
167.5°	1430.3	1439.7	1456.3	1499.2	1502.2
170°	1445.2	1448.8	1456.3	1491.7	1491.7
172.5°	1454.1	1454.8	1457.8	1484.3	1484.3
175°	1463.8	1462.0	1456.3	1476.8	1473.1
177.5°	1467.9	1465.0	1457.5	1469.3	1466.4
180°	1461.9	1461.9	1461.9	1461.9	1461.9

(END OF REPORT)