

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: P518790

Luminaire Tested: **SQ4-BB-125U-050D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518790
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-840-1D-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

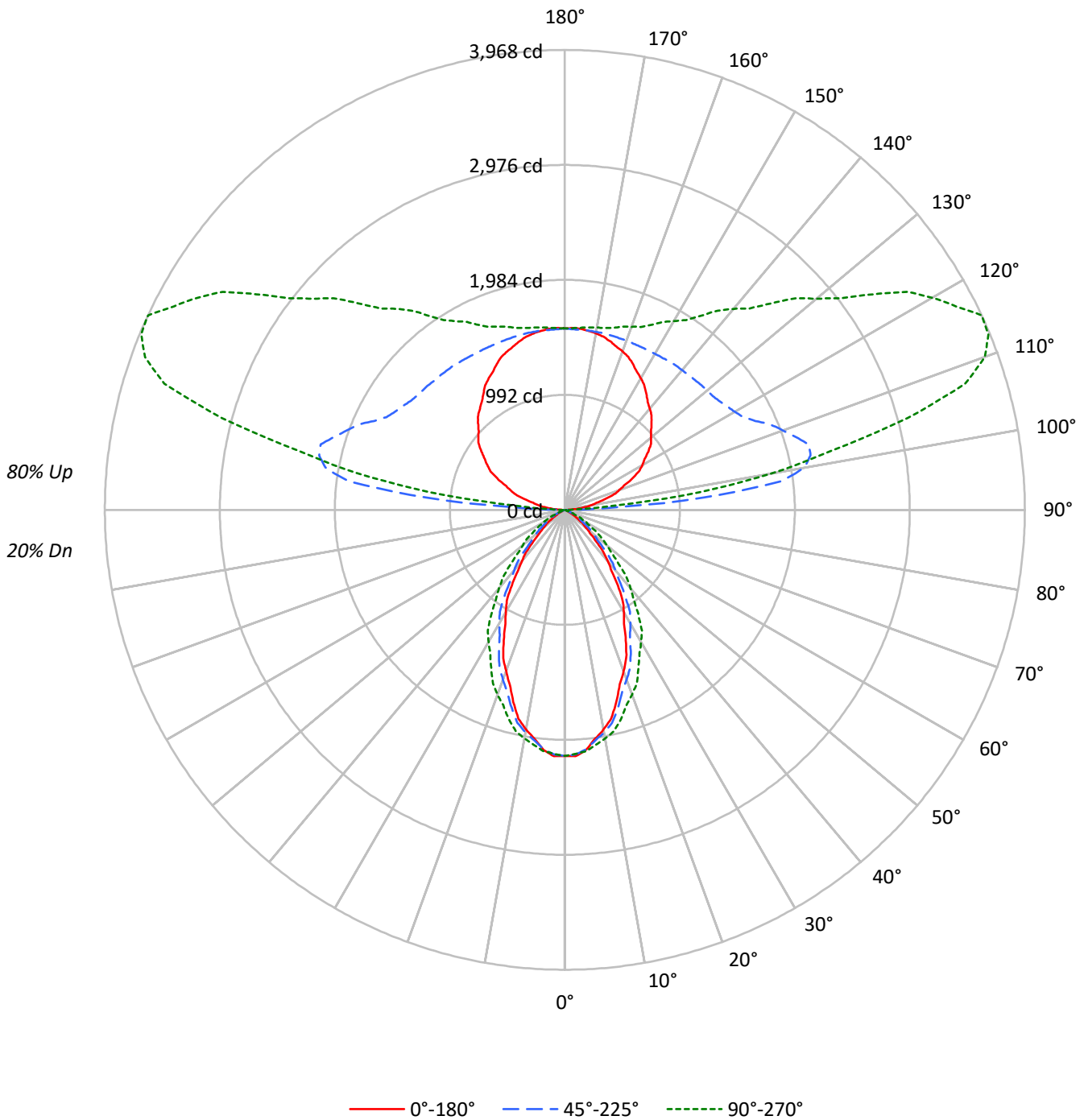
Lumens per Lamp: N/A
Luminaire Lumens: 12635.0 lumens
Efficiency: N/A
Efficacy: 130.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

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°	9792	9792	9792
5°	9634	9611	9682
10°	9014	9135	9390
15°	8195	8455	8926
20°	7274	7652	8323
25°	6335	6837	7647
30°	5426	6022	7007
35°	4499	5112	6234
40°	3457	4088	5312
45°	2499	3095	4274
50°	1702	2307	3390
55°	1107	1668	2635
60°	635	1174	1904
65°	168	717	964
70°	84	221	277
75°	37	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.7	1.5
10°-20°	495.4	3.9
20°-30°	620.2	4.9
30°-40°	572.8	4.5
40°-50°	384.9	3.0
50°-60°	198.8	1.6
60°-70°	62.3	0.5
70°-80°	3.9	0.0
80°-90°	3.7	0.0
90°-100°	731.8	5.8
100°-110°	1971.4	15.6
110°-120°	2068.9	16.4
120°-130°	1678.9	13.3
130°-140°	1316.7	10.4
140°-150°	1010.9	8.0
150°-160°	726.8	5.8
160°-170°	444.1	3.5
170°-180°	149.7	1.2
0°-30°	1309.3	10.4
0°-40°	1882.1	14.9
0°-60°	2465.8	19.5
0°-90°	2535.8	20.1
90°-120°	4772.2	37.8
90°-150°	8778.6	69.5
90°-180°	10099.0	79.9
0°-180°	12635.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2123	2123	2123	2123	2123	
5°	2080	2059	2075	2083	2091	193
15°	1716	1710	1770	1830	1869	478
25°	1245	1255	1343	1435	1502	571
35°	799	819	908	1015	1107	495
45°	383	406	474	567	655	301
55°	138	161	207	266	328	128
65°	15	30	66	79	88	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	4	12	24	26	26	8
95°	112	398	1200	614	424	117
105°	365	567	2180	3262	3061	383
115°	644	788	1816	3508	3968	633
125°	879	1009	1630	2755	3242	785
135°	1058	1181	1584	2223	2517	817
145°	1224	1319	1564	1900	2041	767
155°	1389	1440	1550	1705	1760	639
165°	1507	1524	1556	1618	1626	425
175°	1566	1564	1558	1580	1576	149
180°	1564	1564	1564	1564	1564	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2122.6	2122.6	2122.6	2122.6	2122.6
2.5°	2127.5	2107.5	2112.8	2112.6	2107.0
5°	2080.5	2059.4	2075.4	2082.8	2090.8
7.5°	1992.6	1976.1	2006.8	2029.8	2046.4
10°	1924.4	1910.4	1950.1	1981.4	2004.5
12.5°	1845.6	1834.7	1882.7	1925.7	1955.2
15°	1716.0	1709.9	1770.4	1829.8	1869.0
17.5°	1577.1	1576.9	1645.9	1719.7	1766.9
20°	1481.8	1484.8	1558.8	1640.2	1695.4
22.5°	1386.5	1393.6	1472.6	1557.4	1620.7
25°	1244.6	1254.7	1343.2	1435.1	1502.4
27.5°	1108.2	1122.9	1216.1	1311.6	1393.5
30°	1018.7	1035.8	1130.6	1231.1	1315.5
32.5°	930.8	951.1	1043.5	1149.8	1235.8
35°	798.9	819.0	907.8	1014.6	1107.0
37.5°	662.8	682.4	769.2	874.3	974.1
40°	574.0	596.1	678.8	780.7	882.1
42.5°	493.5	515.6	593.3	693.5	789.3
45°	383.0	406.1	474.4	566.8	655.2
47.5°	291.4	316.5	376.5	460.0	540.6
50°	237.2	262.3	321.4	395.1	472.4
52.5°	193.7	218.0	271.3	340.7	411.6
55°	137.6	160.7	207.4	266.3	327.6
57.5°	95.1	115.0	156.9	206.1	254.1
60°	68.8	87.9	127.3	167.2	206.4
62.5°	45.8	63.3	101.9	132.5	158.8
65°	15.4	29.5	65.7	79.3	88.3
67.5°	7.8	9.4	34.5	36.4	39.4
70°	6.2	6.2	16.4	17.5	20.5
72.5°	4.5	4.5	6.6	8.4	9.0
75°	2.1	2.1	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°	0.8	2.4	4.8	5.2	5.2
90°	4.0	11.8	23.9	25.9	25.9
92.5°	48.6	171.8	339.6	163.5	113.6
95°	111.6	398.0	1199.7	613.5	424.5
97.5°	178.2	455.6	1881.7	1572.0	1185.4
100°	229.2	478.6	2098.5	2195.6	1821.5
102.5°	278.6	510.9	2170.3	2662.7	2355.6
105°	364.7	567.4	2180.2	3261.8	3061.1
107.5°	446.0	626.8	2087.4	3569.7	3621.5
110°	500.2	671.7	2002.9	3665.2	3854.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	557.6	716.6	1921.5	3644.1	3954.7
115°	643.7	787.9	1815.5	3508.0	3967.9
117.5°	722.2	857.5	1733.4	3290.7	3802.8
120°	773.2	903.8	1692.0	3134.8	3660.9
122.5°	817.9	946.9	1661.7	2975.4	3499.9
125°	878.9	1009.4	1630.2	2755.3	3242.4
127.5°	937.5	1066.1	1610.3	2561.2	2996.1
130°	972.5	1101.1	1602.3	2450.0	2831.9
132.5°	1007.6	1134.7	1594.3	2352.0	2702.8
135°	1058.2	1181.0	1584.4	2222.8	2517.0
137.5°	1106.5	1224.2	1579.2	2113.2	2354.8
140°	1139.9	1253.0	1574.4	2045.7	2263.9
142.5°	1175.0	1280.2	1571.2	1982.7	2166.7
145°	1223.6	1319.1	1564.4	1900.4	2040.7
147.5°	1276.2	1359.3	1557.6	1831.2	1941.5
150°	1311.3	1383.4	1554.5	1787.7	1879.3
152.5°	1343.2	1406.0	1552.9	1752.3	1826.7
155°	1389.0	1439.7	1550.5	1705.2	1759.7
157.5°	1429.3	1468.7	1550.9	1672.1	1708.7
160°	1454.8	1487.9	1552.5	1652.7	1680.0
162.5°	1477.1	1504.0	1554.1	1636.6	1656.1
165°	1506.6	1524.2	1556.5	1618.4	1626.2
167.5°	1530.5	1540.7	1558.4	1604.4	1607.5
170°	1546.5	1550.4	1558.4	1596.3	1596.3
172.5°	1556.1	1556.8	1560.0	1588.3	1588.3
175°	1566.4	1564.5	1558.4	1580.3	1576.4
177.5°	1570.8	1567.7	1559.6	1572.3	1569.2
180°	1564.4	1564.4	1564.4	1564.4	1564.4

(END OF REPORT)