

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: P518802

Luminaire Tested: **SQ4-BB-125U-050D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518802  
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-940-1D-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, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

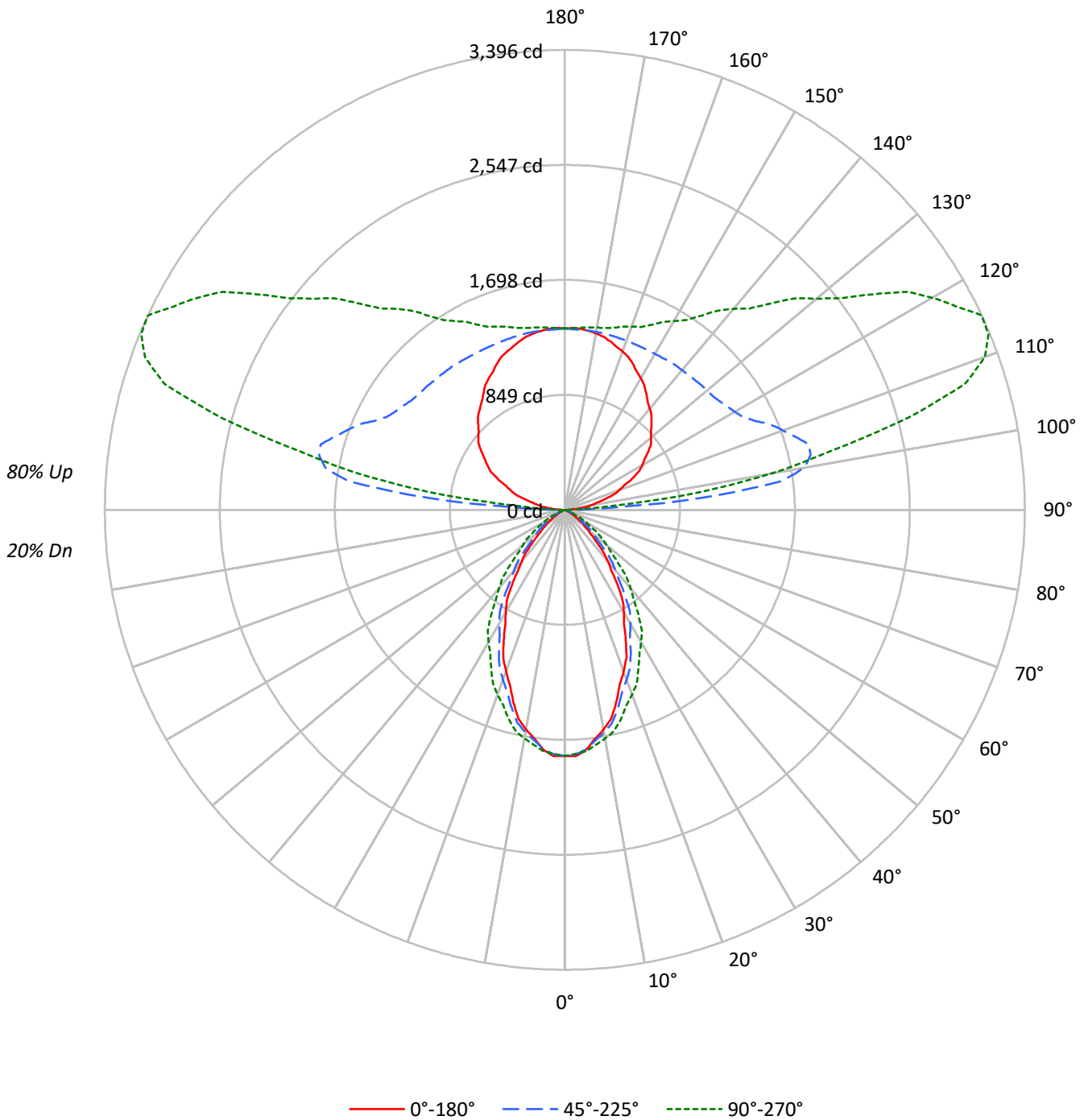
Lumens per Lamp: N/A  
Luminaire Lumens: 10813.9 lumens  
Efficiency: N/A  
Efficacy: 111.7 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

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°	8381	8381	8381
5°	8245	8226	8286
10°	7715	7818	8036
15°	7014	7236	7639
20°	6226	6550	7124
25°	5422	5851	6545
30°	4644	5155	5997
35°	3851	4375	5336
40°	2959	3499	4547
45°	2139	2649	3658
50°	1457	1974	2902
55°	947	1428	2255
60°	543	1006	1630
65°	144	613	825
70°	71	190	237
75°	32	16	0
80°	24	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	165.8	1.5
10°-20°	424.0	3.9
20°-30°	530.8	4.9
30°-40°	490.3	4.5
40°-50°	329.4	3.0
50°-60°	170.2	1.6
60°-70°	53.3	0.5
70°-80°	3.4	0.0
80°-90°	3.2	0.0
90°-100°	626.4	5.8
100°-110°	1687.3	15.6
110°-120°	1770.7	16.4
120°-130°	1436.9	13.3
130°-140°	1126.9	10.4
140°-150°	865.2	8.0
150°-160°	622.1	5.8
160°-170°	380.0	3.5
170°-180°	128.2	1.2
0°-30°	1120.6	10.4
0°-40°	1610.8	14.9
0°-60°	2110.4	19.5
0°-90°	2170.3	20.1
90°-120°	4084.4	37.8
90°-150°	7513.4	69.5
90°-180°	8644.0	79.9
0°-180°	10813.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1817	1817	1817	1817	1817	
5°	1781	1763	1776	1783	1789	165
15°	1469	1464	1515	1566	1600	409
25°	1065	1074	1150	1228	1286	488
35°	684	701	777	868	948	424
45°	328	348	406	485	561	257
55°	118	138	178	228	280	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	20	22	22	7
95°	96	341	1027	525	363	100
105°	312	486	1866	2792	2620	328
115°	551	674	1554	3002	3396	542
125°	752	864	1395	2358	2775	672
135°	906	1011	1356	1902	2154	699
145°	1047	1129	1339	1626	1747	657
155°	1189	1232	1327	1459	1506	547
165°	1290	1304	1332	1385	1392	364
175°	1341	1339	1334	1352	1349	127
180°	1339	1339	1339	1339	1339	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1816.7	1816.7	1816.7	1816.7	1816.7
2.5°	1820.9	1803.7	1808.2	1808.1	1803.3
5°	1780.6	1762.6	1776.3	1782.6	1789.4
7.5°	1705.4	1691.3	1717.5	1737.2	1751.5
10°	1647.1	1635.0	1669.0	1695.8	1715.6
12.5°	1579.6	1570.3	1611.4	1648.2	1673.4
15°	1468.6	1463.5	1515.2	1566.1	1599.6
17.5°	1349.8	1349.6	1408.7	1471.8	1512.2
20°	1268.3	1270.8	1334.2	1403.8	1451.1
22.5°	1186.7	1192.7	1260.3	1332.9	1387.1
25°	1065.2	1073.8	1149.6	1228.3	1285.8
27.5°	948.5	961.1	1040.8	1122.5	1192.7
30°	871.9	886.5	967.7	1053.7	1125.9
32.5°	796.6	814.0	893.1	984.1	1057.7
35°	683.8	701.0	776.9	868.4	947.5
37.5°	567.2	584.1	658.3	748.3	833.7
40°	491.3	510.2	581.0	668.2	755.0
42.5°	422.4	441.3	507.8	593.5	675.5
45°	327.8	347.6	406.1	485.1	560.7
47.5°	249.4	270.9	322.2	393.7	462.7
50°	203.0	224.5	275.1	338.1	404.3
52.5°	165.8	186.6	232.2	291.6	352.3
55°	117.8	137.5	177.5	227.9	280.4
57.5°	81.4	98.4	134.3	176.4	217.4
60°	58.9	75.2	109.0	143.1	176.7
62.5°	39.2	54.2	87.2	113.4	135.9
65°	13.2	25.2	56.2	67.9	75.6
67.5°	6.7	8.1	29.5	31.2	33.7
70°	5.3	5.3	14.1	15.0	17.6
72.5°	3.9	3.9	5.6	7.2	7.7
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	4.4	4.4
90°	3.4	10.1	20.5	22.2	22.2
92.5°	41.6	147.0	290.6	139.9	97.2
95°	95.5	340.7	1026.8	525.1	363.3
97.5°	152.5	390.0	1610.5	1345.4	1014.5
100°	196.2	409.6	1796.1	1879.2	1559.0
102.5°	238.5	437.2	1857.5	2278.9	2016.1
105°	312.1	485.6	1866.0	2791.7	2619.9
107.5°	381.7	536.5	1786.5	3055.2	3099.5
110°	428.1	574.9	1714.2	3137.0	3298.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	477.2	613.3	1644.6	3118.9	3384.7
115°	550.9	674.3	1553.9	3002.4	3396.0
117.5°	618.1	733.9	1483.6	2816.4	3254.7
120°	661.8	773.5	1448.1	2683.0	3133.3
122.5°	700.0	810.4	1422.2	2546.5	2995.5
125°	752.2	863.9	1395.2	2358.2	2775.1
127.5°	802.3	912.4	1378.2	2192.0	2564.3
130°	832.4	942.4	1371.3	2096.9	2423.7
132.5°	862.4	971.1	1364.5	2013.0	2313.2
135°	905.7	1010.8	1356.0	1902.4	2154.2
137.5°	947.0	1047.7	1351.6	1808.6	2015.4
140°	975.6	1072.4	1347.5	1750.8	1937.6
142.5°	1005.7	1095.7	1344.7	1697.0	1854.4
145°	1047.3	1129.0	1338.9	1626.5	1746.6
147.5°	1092.3	1163.3	1333.1	1567.3	1661.6
150°	1122.3	1184.0	1330.4	1530.0	1608.4
152.5°	1149.6	1203.3	1329.0	1499.7	1563.4
155°	1188.8	1232.2	1327.0	1459.4	1506.1
157.5°	1223.3	1257.0	1327.3	1431.1	1462.4
160°	1245.1	1273.5	1328.7	1414.5	1437.9
162.5°	1264.2	1287.2	1330.1	1400.7	1417.4
165°	1289.5	1304.5	1332.1	1385.1	1391.8
167.5°	1309.9	1318.6	1333.8	1373.1	1375.8
170°	1323.6	1326.9	1333.8	1366.2	1366.2
172.5°	1331.8	1332.4	1335.2	1359.4	1359.4
175°	1340.6	1339.0	1333.8	1352.5	1349.2
177.5°	1344.4	1341.7	1334.8	1345.7	1343.0
180°	1338.9	1338.9	1338.9	1338.9	1338.9

(END OF REPORT)