

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: P518814

Luminaire Tested: **SQ4-BB-125U-075D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518814  
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-075D-840-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

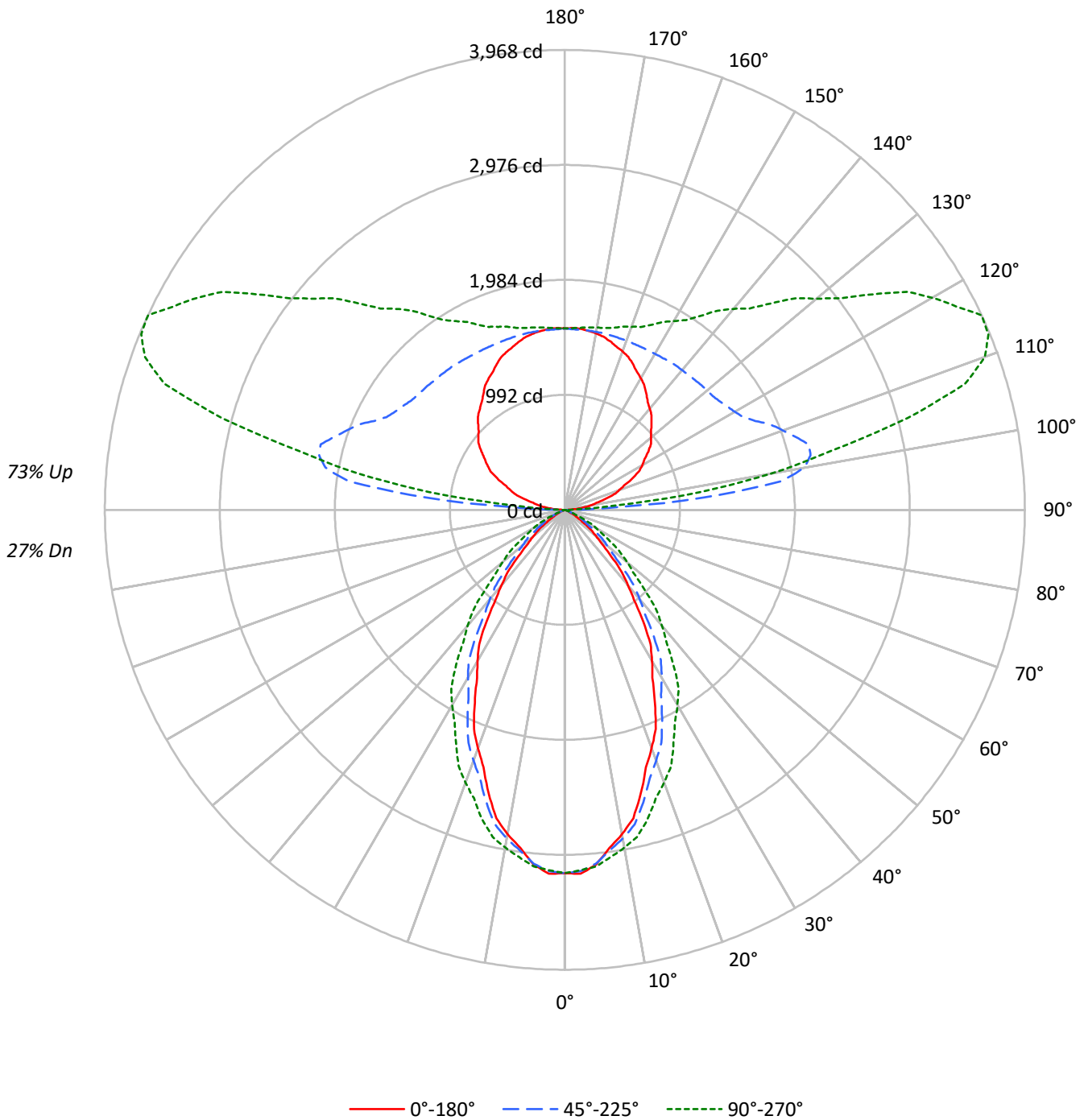
Lumens per Lamp: N/A  
Luminaire Lumens: 13842.5 lumens  
Efficiency: N/A  
Efficacy: 119.3 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 116  
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	91	91	91	91	71	71	71	52	52	52	35	35	35	27
1	94	90	86	83	84	81	78	75	63	61	60	47	46	45	32	32	31	25
2	86	80	74	70	77	71	67	63	56	53	51	43	41	39	30	29	28	22
3	79	71	64	59	71	64	58	54	51	47	44	39	36	34	27	26	25	20
4	73	63	56	51	65	57	51	47	46	42	38	35	32	30	25	24	22	18
5	67	57	49	44	60	51	45	41	41	37	34	32	29	27	23	21	20	17
6	62	51	44	39	56	46	40	36	37	33	30	29	26	24	21	20	18	15
7	58	46	39	34	52	42	36	32	34	30	27	27	24	22	20	18	17	14
8	53	42	35	30	48	39	32	28	31	27	24	25	22	20	18	17	15	13
9	50	39	32	27	45	35	29	25	29	25	22	23	20	18	17	15	14	12
10	47	36	29	25	42	33	27	23	27	22	20	21	18	16	16	14	13	11

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	14461	14461	14461
5°	14229	14194	14299
10°	13313	13491	13867
15°	12103	12487	13182
20°	10744	11302	12292
25°	9356	10097	11294
30°	8014	8895	10349
35°	6645	7550	9207
40°	5105	6037	7845
45°	3691	4571	6313
50°	2514	3407	5006
55°	1634	2464	3891
60°	937	1735	2812
65°	248	1060	1423
70°	123	328	409
75°	53	27	0
80°	40	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	286.1	2.1
10°-20°	731.6	5.3
20°-30°	915.9	6.6
30°-40°	846.0	6.1
40°-50°	568.5	4.1
50°-60°	293.6	2.1
60°-70°	92.0	0.7
70°-80°	5.8	0.0
80°-90°	3.8	0.0
90°-100°	731.8	5.3
100°-110°	1971.4	14.2
110°-120°	2068.9	14.9
120°-130°	1678.9	12.1
130°-140°	1316.7	9.5
140°-150°	1010.9	7.3
150°-160°	726.8	5.3
160°-170°	444.1	3.2
170°-180°	149.7	1.1
0°-30°	1933.6	14.0
0°-40°	2779.6	20.1
0°-60°	3641.7	26.3
0°-90°	3743.3	27.0
90°-120°	4772.2	34.5
90°-150°	8778.6	63.4
90°-180°	10099.0	73.0
0°-180°	13842.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3135	3135	3135	3135	3135	
5°	3073	3042	3065	3076	3088	285
15°	2534	2525	2615	2702	2760	706
25°	1838	1853	1984	2119	2219	843
35°	1180	1210	1341	1498	1635	731
45°	566	600	701	837	968	444
55°	203	237	306	393	484	190
65°	23	44	97	117	130	38
75°	3	3	2	0	0	4
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°	3134.8	3134.8	3134.8	3134.8	3134.8
2.5°	3142.1	3112.5	3120.3	3120.1	3111.8
5°	3072.7	3041.5	3065.1	3076.0	3087.8
7.5°	2942.8	2918.5	2963.8	2997.7	3022.3
10°	2842.1	2821.4	2880.0	2926.3	2960.4
12.5°	2725.7	2709.6	2780.6	2844.0	2887.6
15°	2534.3	2525.4	2614.6	2702.4	2760.2
17.5°	2329.2	2328.9	2430.8	2539.8	2609.5
20°	2188.5	2192.9	2302.2	2422.4	2503.9
22.5°	2047.7	2058.1	2174.8	2300.1	2393.5
25°	1838.1	1853.0	1983.7	2119.4	2218.8
27.5°	1636.7	1658.4	1796.0	1937.0	2058.0
30°	1504.5	1529.7	1669.8	1818.2	1942.8
32.5°	1374.7	1404.6	1541.2	1698.2	1825.1
35°	1179.9	1209.6	1340.7	1498.5	1634.9
37.5°	978.8	1007.9	1135.9	1291.3	1438.7
40°	847.8	880.4	1002.5	1153.0	1302.8
42.5°	728.9	761.5	876.3	1024.2	1165.7
45°	565.7	599.8	700.7	837.1	967.6
47.5°	430.4	467.5	556.0	679.4	798.3
50°	350.3	387.4	474.7	583.5	697.6
52.5°	286.0	321.9	400.7	503.2	607.9
55°	203.2	237.3	306.4	393.3	483.8
57.5°	140.4	169.8	231.7	304.3	375.2
60°	101.6	129.8	188.1	247.0	304.8
62.5°	67.6	93.4	150.4	195.6	234.5
65°	22.7	43.5	97.1	117.1	130.4
67.5°	11.5	13.9	51.0	53.8	58.2
70°	9.1	9.1	24.3	25.9	30.3
72.5°	6.7	6.7	9.7	12.5	13.3
75°	3.0	3.0	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	0.0	0.0	0.0
82.5°	0.3	0.3	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)