

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: P520446

Luminaire Tested: **SQ4-F-150U-125D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520446  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-150U-125D-840-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

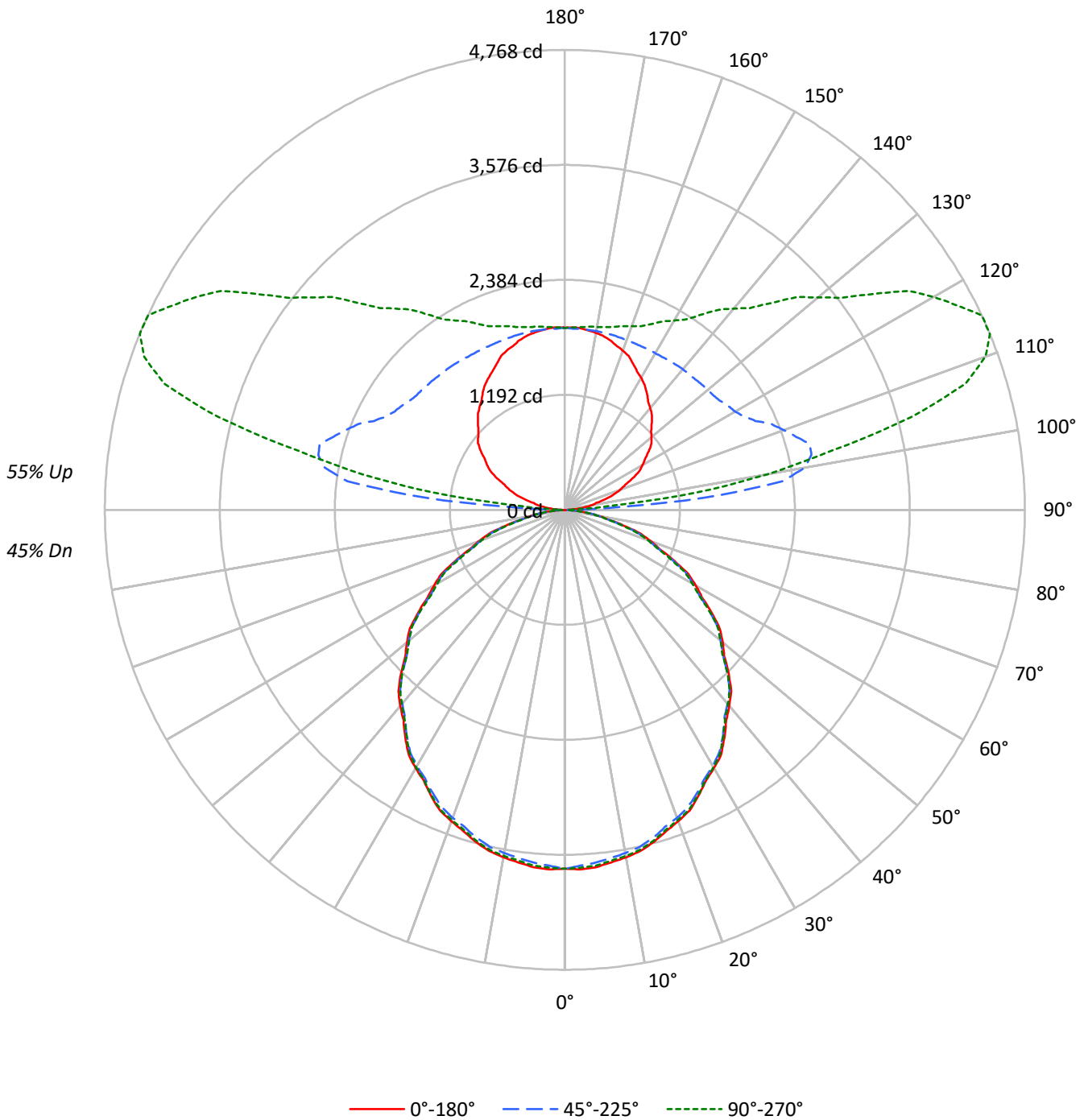
Lumens per Lamp: N/A  
Luminaire Lumens: 22322.8 lumens  
Efficiency: N/A  
Efficacy: 133.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 167.3  
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	45
1	97	92	89	85	89	85	82	79	71	68	66	58	56	55	46	45	44	38
2	88	81	75	69	80	74	69	64	62	58	55	51	48	46	40	38	37	32
3	80	71	63	58	73	65	59	54	55	50	46	45	41	38	36	33	31	27
4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	32	29	27	23
5	67	56	48	42	61	51	44	39	43	38	34	36	32	28	29	26	23	20
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	20	17
7	57	45	37	31	52	42	35	29	35	30	26	29	25	22	24	20	18	15
8	53	41	33	28	48	38	31	26	32	27	23	27	22	19	22	19	16	14
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	20	17	15	12
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	18	15	13	11

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

	0°	45°	90°
0°	17162	17162	17162
5°	17217	17000	17142
10°	17139	16928	17062
15°	17023	16819	16956
20°	16866	16675	16806
25°	16674	16497	16633
30°	16468	16326	16414
35°	16234	16096	16107
40°	15967	15794	15844
45°	15668	15494	15521
50°	15326	15149	15106
55°	14936	14721	14689
60°	14451	14130	14054
65°	13699	13410	13231
70°	12758	12428	12260
75°	11350	11093	10765
80°	9245	8974	8921
85°	5526	6288	6288



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	351.0	1.6
10°-20°	999.7	4.5
20°-30°	1501.9	6.7
30°-40°	1792.1	8.0
40°-50°	1836.9	8.2
50°-60°	1637.3	7.3
60°-70°	1218.9	5.5
70°-80°	660.3	3.0
80°-90°	155.5	0.7
90°-100°	877.2	3.9
100°-110°	2371.7	10.6
110°-120°	2493.5	11.2
120°-130°	2025.4	9.1
130°-140°	1588.7	7.1
140°-150°	1219.4	5.5
150°-160°	877.0	3.9
160°-170°	535.7	2.4
170°-180°	180.6	0.8
0°-30°	2852.6	12.8
0°-40°	4644.7	20.8
0°-60°	8119.0	36.4
0°-90°	10153.7	45.5
90°-120°	5742.4	25.7
90°-150°	10575.8	47.4
90°-180°	12169.0	54.5
0°-180°	22322.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3720	3720	3720	3720	3720	
5°	3718	3712	3671	3704	3702	353
15°	3564	3556	3522	3552	3550	1005
25°	3276	3270	3241	3260	3268	1509
35°	2883	2881	2858	2858	2860	1803
45°	2402	2396	2375	2371	2379	1851
55°	1857	1851	1830	1816	1826	1659
65°	1255	1247	1228	1220	1212	1243
75°	637	637	622	610	604	676
85°	104	118	119	121	119	144
90°	4	12	26	28	26	12
95°	136	478	1459	755	449	142
105°	441	681	2631	3881	3722	464
115°	776	949	2182	4224	4768	766
125°	1063	1218	1967	3319	3899	947
135°	1274	1425	1914	2680	3033	984
145°	1481	1592	1887	2294	2468	927
155°	1672	1738	1871	2058	2125	771
165°	1820	1838	1879	1953	1963	513
175°	1889	1888	1881	1906	1902	179
180°	1887	1887	1887	1887	1887	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3720.2	3720.2	3720.2	3720.2	3720.2
2.5°	3731.7	3725.3	3692.3	3720.1	3715.3
5°	3718.1	3712.1	3671.1	3703.8	3701.8
7.5°	3686.6	3679.0	3641.6	3672.2	3668.6
10°	3658.8	3652.7	3613.7	3644.4	3642.4
12.5°	3624.3	3618.4	3579.3	3610.0	3609.6
15°	3564.5	3556.5	3521.6	3552.3	3550.3
17.5°	3492.9	3483.7	3449.1	3473.3	3477.4
20°	3435.6	3429.5	3396.7	3419.3	3423.3
22.5°	3376.6	3369.0	3334.5	3360.3	3364.4
25°	3275.9	3269.9	3241.1	3259.7	3267.7
27.5°	3165.3	3165.3	3138.7	3151.9	3156.7
30°	3091.6	3091.6	3065.0	3073.4	3081.4
32.5°	3013.0	3006.6	2981.5	2988.2	2996.2
35°	2882.7	2880.8	2858.2	2858.2	2860.2
37.5°	2748.1	2742.5	2717.7	2719.6	2729.2
40°	2651.5	2647.4	2622.8	2623.0	2631.0
42.5°	2553.2	2549.1	2527.7	2524.6	2527.7
45°	2401.6	2395.7	2375.0	2371.1	2379.1
47.5°	2240.3	2241.9	2217.4	2211.7	2216.2
50°	2135.5	2135.5	2110.9	2098.8	2104.8
52.5°	2025.7	2022.6	1997.8	1984.3	1998.3
55°	1857.1	1851.0	1830.4	1816.3	1826.4
57.5°	1684.3	1675.0	1654.4	1638.9	1644.5
60°	1566.3	1552.3	1531.5	1519.3	1523.3
62.5°	1443.5	1435.9	1413.6	1394.9	1403.7
65°	1255.0	1247.0	1228.5	1220.1	1212.1
67.5°	1070.4	1065.2	1044.2	1035.5	1030.2
70°	945.9	935.9	921.4	911.1	909.0
72.5°	824.7	813.0	798.4	789.7	784.6
75°	636.8	636.8	622.4	610.0	604.0
77.5°	457.8	459.4	447.6	443.4	440.6
80°	348.0	348.0	337.8	333.8	335.8
82.5°	243.2	248.0	244.5	238.7	235.8
85°	104.4	118.5	118.8	120.7	118.8
87.5°	18.9	31.6	36.5	33.4	29.9
90°	4.0	12.0	26.5	28.4	26.5
92.5°	57.7	210.3	414.9	180.1	130.5
95°	136.1	477.8	1458.8	754.9	449.0
97.5°	218.6	548.0	2273.9	1881.8	1381.9
100°	280.4	576.3	2527.4	2635.9	2131.3
102.5°	337.3	615.8	2616.9	3207.6	2830.1
105°	440.9	681.3	2631.1	3881.0	3722.0
107.5°	536.8	756.1	2516.1	4301.1	4353.9
110°	611.5	810.2	2413.7	4413.9	4638.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	678.1	864.1	2319.4	4391.3	4768.4
115°	776.1	948.9	2182.1	4224.1	4768.4
117.5°	872.0	1034.2	2091.4	3968.5	4585.6
120°	930.5	1089.5	2037.8	3785.1	4414.9
122.5°	985.8	1141.5	2005.3	3588.6	4223.1
125°	1062.6	1217.5	1966.7	3318.7	3898.8
127.5°	1133.2	1285.4	1944.0	3098.5	3608.7
130°	1172.3	1329.2	1934.2	2962.5	3423.5
132.5°	1212.9	1368.2	1924.5	2839.8	3264.1
135°	1273.9	1424.9	1913.9	2679.7	3033.4
137.5°	1335.2	1477.9	1904.9	2549.9	2837.9
140°	1377.5	1510.6	1901.7	2466.2	2722.5
142.5°	1418.1	1543.3	1895.2	2390.7	2615.3
145°	1481.1	1592.4	1887.4	2293.7	2468.5
147.5°	1538.5	1636.9	1878.5	2205.8	2340.1
150°	1580.7	1668.1	1875.3	2158.0	2265.4
152.5°	1619.6	1696.0	1873.6	2113.8	2202.0
155°	1672.0	1737.6	1871.2	2057.6	2125.1
157.5°	1726.6	1772.2	1871.6	2018.5	2063.0
160°	1757.5	1795.2	1873.2	1993.9	2025.7
162.5°	1781.8	1813.2	1874.9	1974.1	1998.0
165°	1820.4	1838.3	1879.3	1952.7	1962.7
167.5°	1846.8	1859.2	1879.8	1934.3	1939.0
170°	1863.1	1869.0	1881.4	1926.1	1926.1
172.5°	1876.1	1877.3	1881.4	1916.3	1914.7
175°	1889.4	1887.5	1881.4	1905.6	1901.7
177.5°	1894.0	1889.1	1881.0	1897.1	1892.4
180°	1887.4	1887.4	1887.4	1887.4	1887.4

(END OF REPORT)