

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: P520318

Luminaire Tested: **SQ4-F-125U-100D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520318
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-125U-100D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

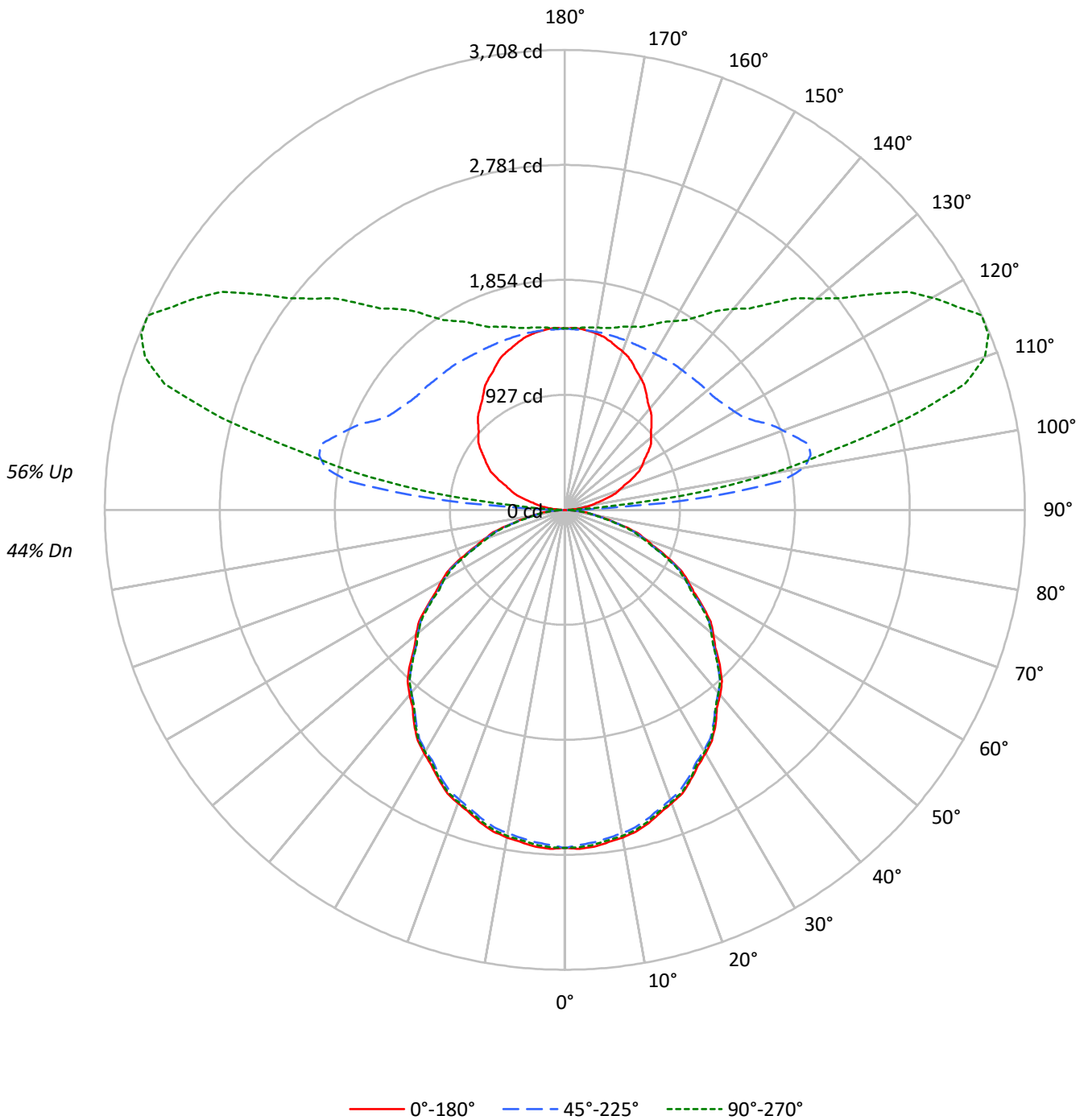
Lumens per Lamp: N/A
Luminaire Lumens: 16874.0 lumens
Efficiency: N/A
Efficacy: 137.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 123.2
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	80	80	80	65	65	65	51	51	51	44
1	96	92	88	85	88	84	81	78	70	68	66	57	55	54	45	44	43	37
2	88	80	74	69	80	74	69	64	61	58	54	50	47	45	39	38	36	31
3	80	71	63	57	73	65	59	53	54	49	45	44	41	38	35	32	30	26
4	73	62	54	48	67	57	50	45	48	43	39	39	35	32	31	28	26	22
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	28	25	23	19
6	62	50	42	36	56	46	39	33	38	33	29	32	28	24	25	22	20	17
7	57	45	37	31	52	41	34	29	35	29	25	29	25	21	23	20	18	15
8	53	41	33	28	48	38	31	26	32	26	22	26	22	19	21	18	16	13
9	49	37	30	24	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	27	22	18	22	18	15	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12572	12572	12572
5°	12628	12455	12551
10°	12565	12407	12503
15°	12488	12319	12417
20°	12360	12213	12314
25°	12225	12082	12177
30°	12076	11946	12006
35°	11924	11776	11840
40°	11726	11590	11602
45°	11519	11361	11324
50°	11222	11088	11061
55°	10892	10772	10696
60°	10561	10372	10337
65°	10046	9821	9739
70°	9335	9107	8932
75°	8334	8067	7901
80°	6857	6610	6309
85°	4060	4457	4552



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.2	1.5
10°-20°	732.5	4.3
20°-30°	1100.0	6.5
30°-40°	1312.7	7.8
40°-50°	1345.5	8.0
50°-60°	1198.2	7.1
60°-70°	893.2	5.3
70°-80°	483.6	2.9
80°-90°	113.5	0.7
90°-100°	683.9	4.1
100°-110°	1842.3	10.9
110°-120°	1933.4	11.5
120°-130°	1568.9	9.3
130°-140°	1230.4	7.3
140°-150°	944.7	5.6
150°-160°	679.2	4.0
160°-170°	415.0	2.5
170°-180°	139.9	0.8
0°-30°	2089.7	12.4
0°-40°	3402.4	20.2
0°-60°	5946.1	35.2
0°-90°	7436.4	44.1
90°-120°	4459.5	26.4
90°-150°	8203.5	48.6
90°-180°	9438.0	55.9
0°-180°	16874.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2725	2725	2725	2725	2725	
5°	2727	2722	2690	2714	2710	259
15°	2615	2606	2579	2600	2600	737
25°	2402	2396	2374	2387	2392	1107
35°	2117	2108	2091	2095	2102	1322
45°	1766	1756	1741	1732	1736	1359
55°	1354	1356	1339	1326	1330	1212
65°	920	917	900	890	892	910
75°	468	462	453	443	443	498
85°	77	84	84	86	86	107
90°	4	11	22	24	24	9
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	1593	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°	2725.3	2725.3	2725.3	2725.3	2725.3
2.5°	2735.8	2729.9	2705.8	2725.2	2722.3
5°	2727.1	2721.7	2689.7	2714.0	2710.3
7.5°	2701.7	2696.2	2668.0	2690.4	2687.1
10°	2682.3	2676.7	2648.6	2671.0	2669.2
12.5°	2656.8	2651.3	2623.1	2645.5	2643.7
15°	2614.9	2605.8	2579.4	2599.9	2599.9
17.5°	2559.5	2552.6	2528.1	2545.3	2545.7
20°	2517.7	2512.1	2487.8	2506.5	2508.3
22.5°	2475.8	2470.2	2442.8	2460.1	2463.4
25°	2401.7	2396.2	2373.6	2386.8	2392.3
27.5°	2325.4	2317.3	2295.0	2306.7	2310.8
30°	2267.0	2263.3	2242.7	2248.4	2253.9
32.5°	2205.7	2202.0	2184.4	2187.1	2197.0
35°	2117.4	2108.2	2091.1	2095.1	2102.4
37.5°	2013.0	2008.6	1992.0	1990.0	1996.9
40°	1947.2	1939.8	1924.7	1921.1	1926.6
42.5°	1875.3	1868.0	1849.9	1846.3	1853.2
45°	1765.7	1756.5	1741.4	1732.2	1735.8
47.5°	1643.0	1643.0	1627.3	1616.6	1622.1
50°	1563.7	1563.7	1545.0	1535.8	1541.2
52.5°	1481.4	1482.9	1462.7	1457.8	1456.0
55°	1354.3	1356.0	1339.3	1326.2	1329.9
57.5°	1231.5	1227.5	1207.9	1199.4	1201.2
60°	1144.7	1139.2	1124.2	1111.3	1120.4
62.5°	1056.4	1053.8	1038.9	1024.2	1023.1
65°	920.3	916.6	899.7	890.4	892.2
67.5°	784.8	780.5	765.0	751.6	756.4
70°	692.1	692.1	675.2	667.6	662.2
72.5°	606.8	599.4	587.0	576.4	572.4
75°	467.6	462.1	452.6	443.3	443.3
77.5°	340.4	335.7	329.5	323.2	321.3
80°	258.1	256.3	248.8	246.7	237.5
82.5°	181.8	181.4	177.0	172.1	171.7
85°	76.7	84.0	84.2	86.0	86.0
87.5°	14.2	24.5	25.5	22.8	22.8
90°	3.7	11.1	22.3	24.2	24.2
92.5°	45.5	160.5	317.3	152.7	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	3601.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	521.1	669.7	1795.6	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	3553.8
120°	722.6	844.6	1581.1	2929.5	3421.1
122.5°	764.3	884.9	1552.8	2780.5	3270.7
125°	821.2	943.3	1523.4	2574.7	3030.0
127.5°	876.0	996.2	1504.7	2393.4	2799.8
130°	908.9	1029.0	1497.3	2289.5	2646.4
132.5°	941.6	1060.3	1489.8	2197.9	2525.7
135°	988.9	1103.6	1480.6	2077.1	2352.1
137.5°	1034.0	1144.0	1475.7	1974.7	2200.6
140°	1065.3	1170.8	1471.3	1911.7	2115.6
142.5°	1098.0	1196.4	1468.2	1852.9	2024.7
145°	1143.5	1232.7	1461.9	1775.9	1907.0
147.5°	1192.6	1270.2	1455.6	1711.3	1814.3
150°	1225.4	1292.8	1452.6	1670.6	1756.2
152.5°	1255.2	1313.8	1451.2	1637.5	1707.0
155°	1298.0	1345.4	1448.9	1593.4	1644.5
157.5°	1335.6	1372.4	1449.3	1562.6	1596.8
160°	1359.5	1390.5	1450.8	1544.4	1570.0
162.5°	1380.3	1405.5	1452.2	1529.4	1547.6
165°	1407.9	1424.3	1454.5	1512.3	1519.6
167.5°	1430.2	1439.7	1456.4	1499.2	1502.2
170°	1445.1	1448.8	1456.4	1491.7	1491.7
172.5°	1454.1	1454.8	1457.9	1484.3	1484.3
175°	1463.8	1462.0	1456.4	1476.7	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)