

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: P520342

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520342
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-125D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

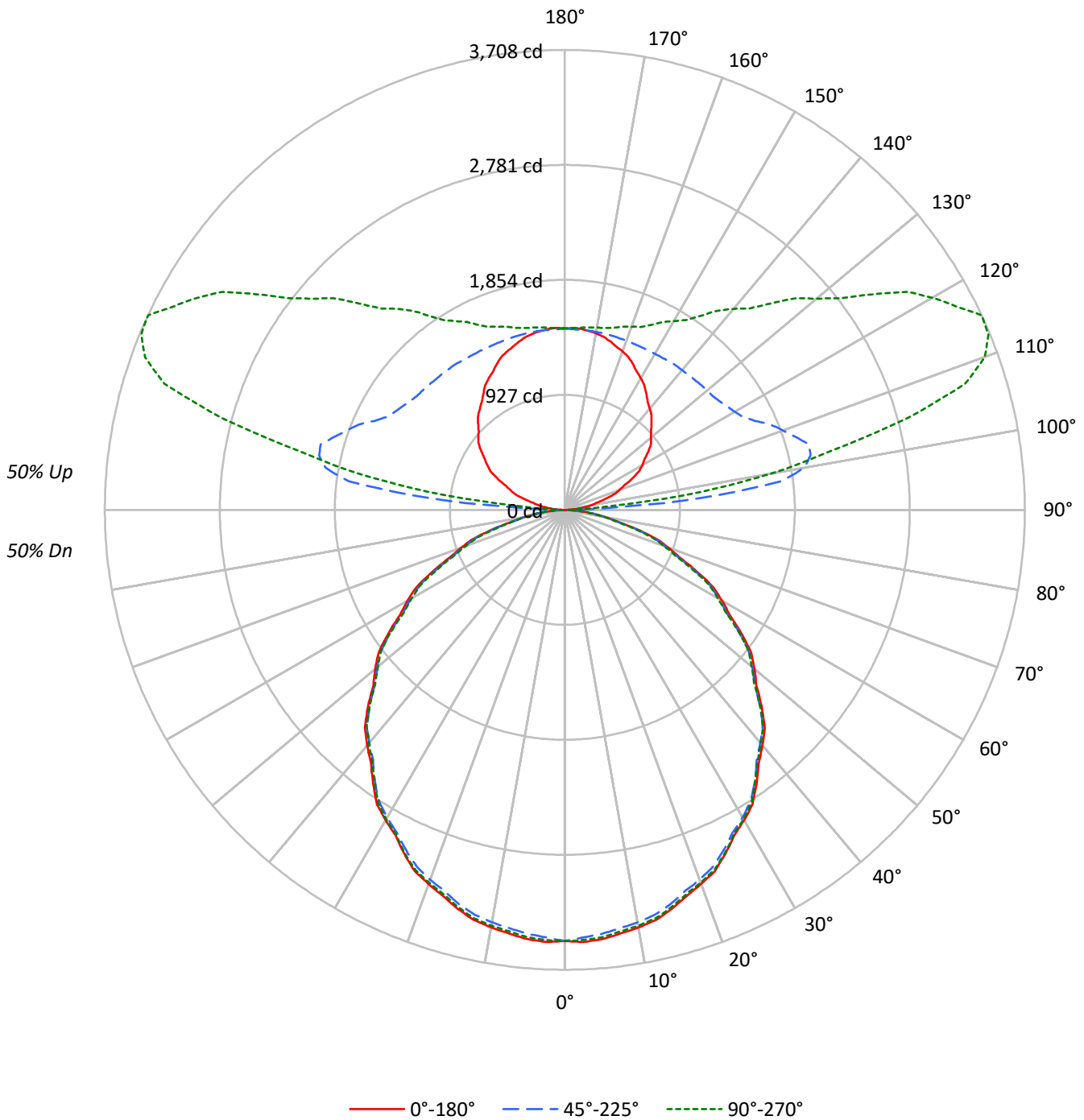
Lumens per Lamp: N/A
Luminaire Lumens: 18925.9 lumens
Efficiency: N/A
Efficacy: 133.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 142
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	90	86	90	86	83	80	73	71	68	61	59	58	50	49	47	42
2	89	82	75	70	82	75	70	66	64	60	57	53	51	48	44	42	40	35
3	81	72	64	58	75	66	60	55	56	51	47	47	44	41	39	36	34	30
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	34	31	29	25
5	68	56	48	42	62	52	45	40	45	39	35	38	33	30	31	28	25	22
6	63	50	42	36	58	47	40	34	40	34	30	34	30	26	28	25	22	19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20	17
8	54	41	33	28	49	38	31	27	33	28	24	28	24	21	23	20	18	15
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16	14
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16037	16037	16037
5°	16089	15886	16019
10°	16016	15818	15944
15°	15908	15717	15844
20°	15761	15582	15705
25°	15582	15417	15543
30°	15390	15257	15338
35°	15171	15041	15052
40°	14921	14760	14806
45°	14642	14479	14505
50°	14322	14157	14115
55°	13956	13757	13726
60°	13504	13205	13133
65°	12802	12531	12364
70°	11923	11613	11458
75°	10605	10368	10060
80°	8639	8387	8336
85°	5166	5875	5875



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	328.0	1.7
10°-20°	934.2	4.9
20°-30°	1403.5	7.4
30°-40°	1674.7	8.8
40°-50°	1716.6	9.1
50°-60°	1530.0	8.1
60°-70°	1139.0	6.0
70°-80°	617.1	3.3
80°-90°	145.1	0.8
90°-100°	683.9	3.6
100°-110°	1842.3	9.7
110°-120°	1933.4	10.2
120°-130°	1568.9	8.3
130°-140°	1230.4	6.5
140°-150°	944.7	5.0
150°-160°	679.2	3.6
160°-170°	415.0	2.2
170°-180°	139.9	0.7
0°-30°	2665.8	14.1
0°-40°	4340.4	22.9
0°-60°	7587.1	40.1
0°-90°	9488.3	50.1
90°-120°	4459.5	23.6
90°-150°	8203.5	43.3
90°-180°	9438.0	49.9
0°-180°	18925.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3476	3476	3476	3476	3476	
5°	3474	3469	3431	3461	3459	330
15°	3331	3324	3291	3320	3318	939
25°	3061	3056	3029	3046	3054	1410
35°	2694	2692	2671	2671	2673	1685
45°	2244	2239	2219	2216	2223	1729
55°	1735	1730	1710	1697	1707	1550
65°	1173	1165	1148	1140	1133	1161
75°	595	595	582	570	564	632
85°	98	111	111	113	111	135
90°	4	11	22	24	24	10
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°	3476.5	3476.5	3476.5	3476.5	3476.5
2.5°	3487.2	3481.2	3450.4	3476.4	3471.9
5°	3474.5	3469.0	3430.6	3461.2	3459.2
7.5°	3445.0	3438.0	3403.0	3431.7	3428.2
10°	3419.1	3413.4	3376.9	3405.6	3403.8
12.5°	3387.0	3381.3	3344.8	3373.5	3373.2
15°	3331.0	3323.5	3290.9	3319.6	3317.6
17.5°	3264.1	3255.5	3223.2	3245.8	3249.5
20°	3210.5	3204.9	3174.1	3195.3	3199.1
22.5°	3155.4	3148.3	3116.0	3140.2	3143.9
25°	3061.3	3055.7	3028.8	3046.1	3053.6
27.5°	2958.0	2958.0	2933.1	2945.5	2949.9
30°	2889.1	2889.1	2864.2	2872.0	2879.5
32.5°	2815.7	2809.7	2786.2	2792.4	2799.9
35°	2693.9	2692.1	2670.9	2671.0	2672.8
37.5°	2568.1	2562.8	2539.7	2541.5	2550.4
40°	2477.7	2474.0	2451.0	2451.1	2458.6
42.5°	2385.9	2382.2	2362.2	2359.2	2362.2
45°	2244.3	2238.7	2219.4	2215.8	2223.3
47.5°	2093.5	2095.0	2072.1	2066.9	2070.9
50°	1995.6	1995.6	1972.6	1961.3	1966.8
52.5°	1893.0	1890.0	1867.0	1854.3	1867.4
55°	1735.3	1729.8	1710.5	1697.3	1706.7
57.5°	1573.9	1565.3	1545.9	1531.5	1536.8
60°	1463.7	1450.5	1431.2	1419.7	1423.5
62.5°	1348.9	1341.8	1320.9	1303.5	1311.8
65°	1172.8	1165.3	1148.0	1140.2	1132.7
67.5°	1000.2	995.4	975.8	967.6	962.7
70°	884.0	874.6	861.0	851.4	849.5
72.5°	770.7	759.8	746.2	738.0	733.2
75°	595.0	595.0	581.7	570.0	564.4
77.5°	427.8	429.3	418.3	414.3	411.8
80°	325.2	325.2	315.7	312.0	313.8
82.5°	227.3	231.8	228.4	223.1	220.4
85°	97.6	110.7	111.0	112.8	111.0
87.5°	17.6	29.6	33.6	30.9	28.0
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)