

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: P520030

Luminaire Tested: **SQ4-F-075U-100D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520030
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-100D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

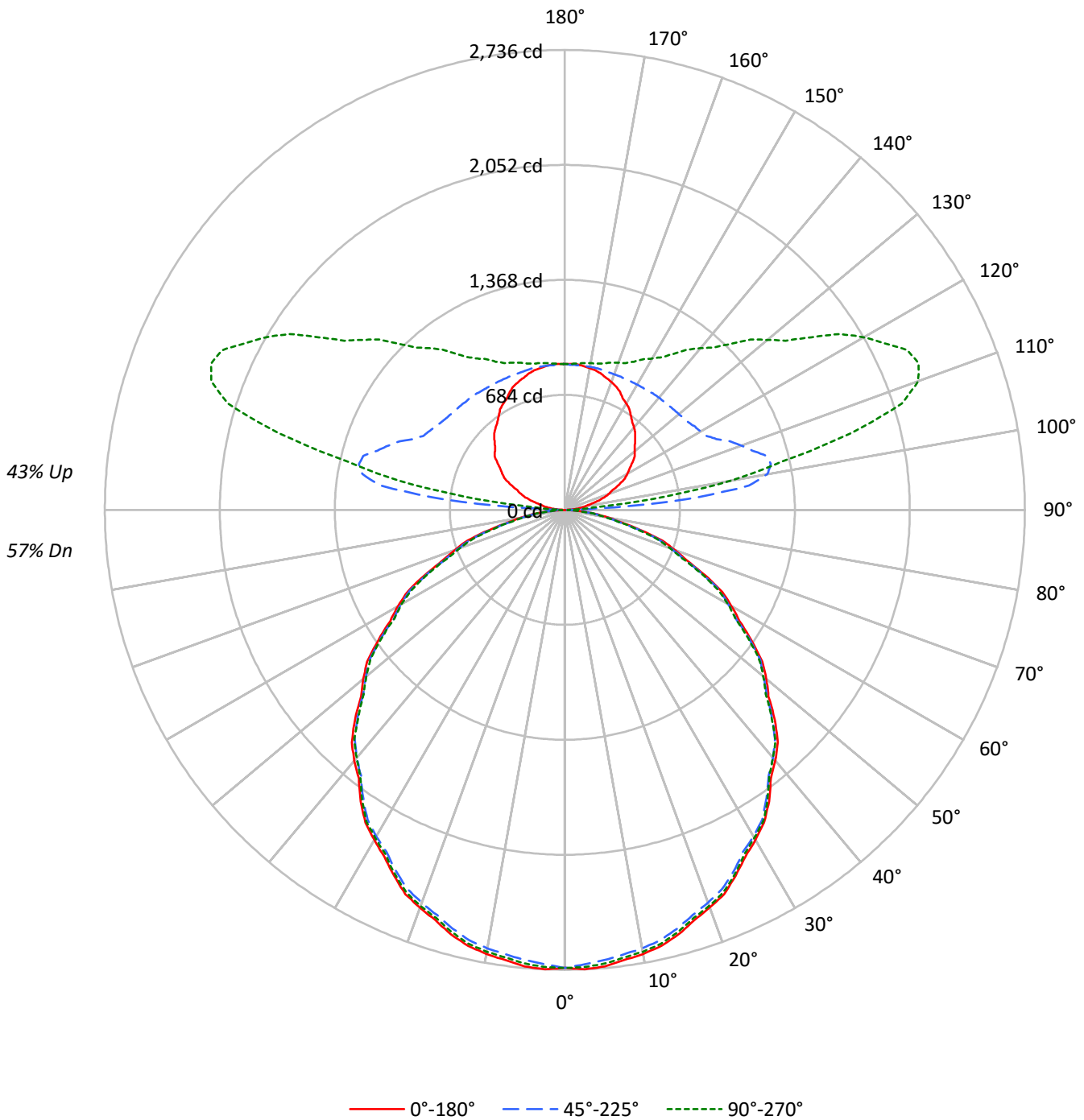
Lumens per Lamp: N/A
Luminaire Lumens: 13086.8 lumens
Efficiency: N/A
Efficacy: 123.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 106.3
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



TEST NUMBER: P520030
CATALOG NUMBER: SQ4-F-075U-100D-830-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P520030

CATALOG NUMBER: SQ4-F-075U-100D-830-1D-UNV-STD-W-8

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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57
1	99	95	91	87	92	88	85	82	76	74	72	65	64	62	55	54	53	48
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	48	46	44	40
3	82	73	65	59	76	68	61	56	59	54	50	51	47	43	43	40	38	34
4	75	64	56	50	70	60	53	47	52	47	42	45	41	37	38	35	32	29
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	31	28	25
6	64	51	43	37	59	48	41	35	42	36	32	36	32	28	31	27	25	22
7	59	46	38	33	55	44	36	31	38	32	28	33	28	25	28	25	22	19
8	55	42	34	29	51	40	32	27	35	29	25	30	26	22	26	22	20	17
9	51	38	31	26	47	36	29	24	32	26	22	28	23	20	24	20	18	15
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14

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



TEST NUMBER: P520030

CATALOG NUMBER: SQ4-F-075U-100D-830-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.2	2.0
10°-20°	732.5	5.6
20°-30°	1100.0	8.4
30°-40°	1312.7	10.0
40°-50°	1345.5	10.3
50°-60°	1198.2	9.2
60°-70°	893.2	6.8
70°-80°	483.6	3.7
80°-90°	112.3	0.9
90°-100°	409.2	3.1
100°-110°	1125.7	8.6
110°-120°	1161.9	8.9
120°-130°	931.0	7.1
130°-140°	731.2	5.6
140°-150°	560.4	4.3
150°-160°	402.9	3.1
160°-170°	246.4	1.9
170°-180°	83.0	0.6
0°-30°	2089.7	16.0
0°-40°	3402.4	26.0
0°-60°	5946.1	45.4
0°-90°	7435.2	56.8
90°-120°	2696.8	20.6
90°-150°	4919.3	37.6
90°-180°	5652.0	43.2
0°-180°	13086.8	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°	2	7	13	17	17	6
95°	61	223	724	309	198	64
105°	201	310	1240	1889	1763	212
115°	356	434	995	1981	2248	352
125°	491	560	903	1527	1789	438
135°	592	658	877	1235	1397	457
145°	685	732	864	1052	1133	429
155°	775	800	858	946	973	356
165°	838	849	862	897	903	236
175°	868	869	864	875	873	82
180°	868	868	868	868	868	

TEST NUMBER: P520030

CATALOG NUMBER: SQ4-F-075U-100D-830-1D-UNV-STD-W-8

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°	13.9	23.7	23.6	21.3	21.3
90°	1.9	7.2	12.9	16.6	16.6
92.5°	25.4	108.9	188.7	72.4	59.5
95°	60.9	223.3	723.5	309.4	197.5
97.5°	99.3	247.7	1104.2	850.8	600.3
100°	127.4	262.7	1223.7	1235.2	1007.9
102.5°	154.0	280.6	1254.8	1532.4	1323.8
105°	201.2	309.5	1240.4	1889.0	1762.8
107.5°	246.2	345.2	1169.8	2063.7	2101.3
110°	278.8	368.9	1116.7	2107.2	2237.2

TEST NUMBER: P520030

CATALOG NUMBER: SQ4-F-075U-100D-830-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	308.2	395.6	1063.5	2079.2	2277.0
115°	356.2	433.9	994.8	1981.1	2248.2
117.5°	402.0	473.5	951.3	1843.5	2145.6
120°	430.1	498.6	932.1	1740.3	2052.6
122.5°	455.2	523.8	918.8	1649.9	1946.3
125°	491.0	559.6	902.6	1526.9	1788.6
127.5°	525.0	590.3	891.8	1424.2	1653.8
130°	542.7	609.5	886.0	1363.3	1572.6
132.5°	563.3	630.1	881.6	1309.7	1498.8
135°	592.5	657.5	876.8	1234.9	1397.2
137.5°	619.8	680.1	872.7	1174.4	1308.3
140°	640.5	696.4	871.2	1134.2	1255.1
142.5°	658.2	709.8	868.3	1098.4	1202.0
145°	684.8	731.7	863.9	1052.1	1133.3
147.5°	713.2	753.6	861.6	1011.2	1076.1
150°	730.9	767.0	860.2	988.7	1039.2
152.5°	747.2	780.4	858.7	969.2	1011.2
155°	775.3	800.5	858.3	945.6	972.7
157.5°	795.5	816.1	858.3	926.3	945.1
160°	810.3	826.5	858.3	915.8	930.3
162.5°	822.1	835.5	859.8	906.9	918.5
165°	838.0	848.8	862.0	897.2	902.6
167.5°	849.1	857.4	863.9	889.0	890.4
170°	856.4	861.9	863.9	886.0	886.0
172.5°	862.4	864.9	863.9	881.5	880.1
175°	867.5	869.4	863.9	874.8	873.1
177.5°	869.0	869.0	863.1	871.9	869.0
180°	867.5	867.5	867.5	867.5	867.5

(END OF REPORT)