

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: P519838

Luminaire Tested: **SQ4-F-025U-100D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519838
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-025U-100D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

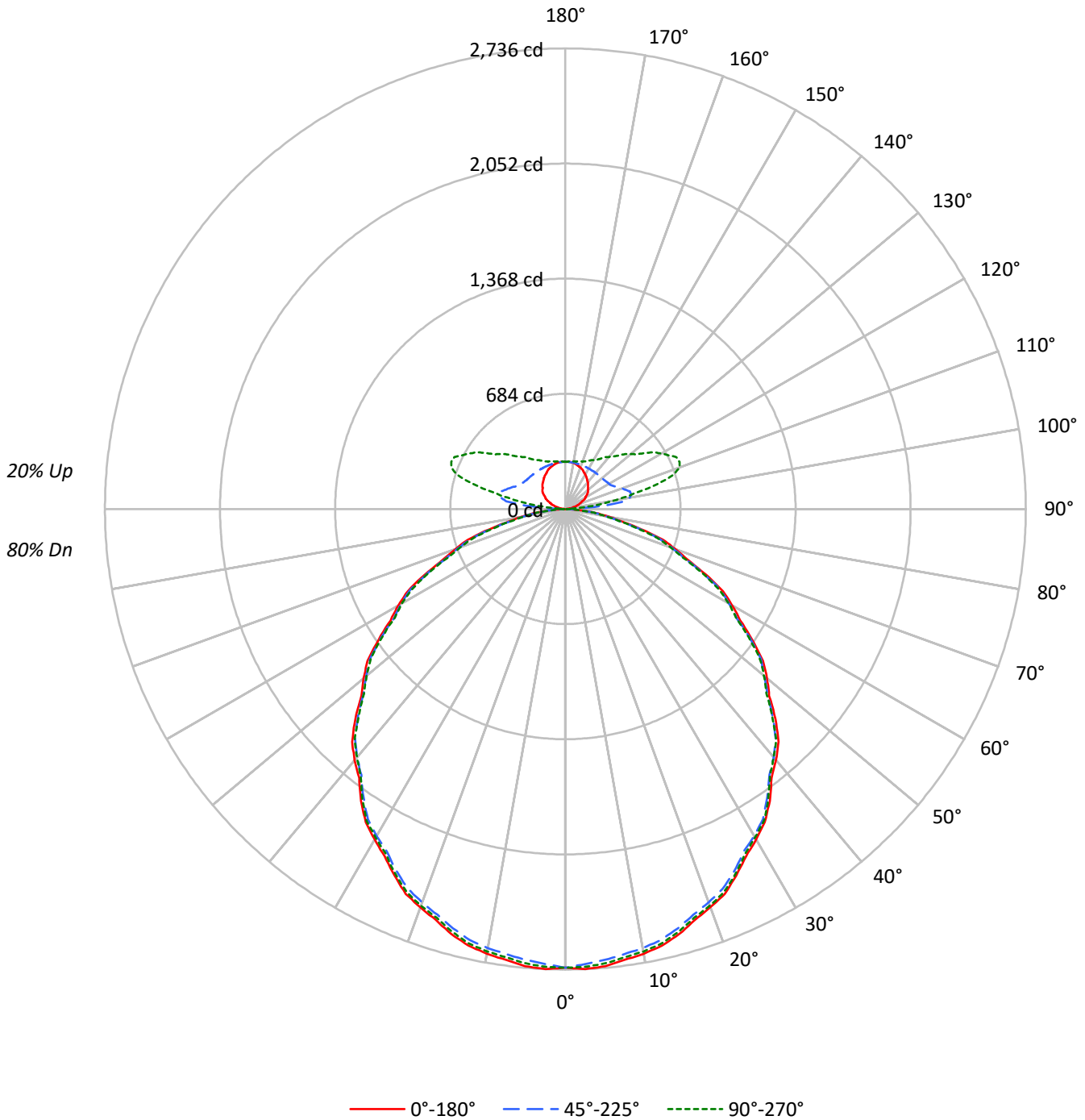
Lumens per Lamp: N/A
Luminaire Lumens: 9257.9 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 79.3
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: P519838
CATALOG NUMBER: SQ4-F-025U-100D-830-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P519838

CATALOG NUMBER: SQ4-F-025U-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	114	114	114	114	109	109	109	109	100	100	100	92	92	92	84	84	84	80
1	105	100	96	92	100	96	92	89	88	85	83	81	79	77	74	73	71	68
2	95	87	81	75	91	84	78	73	77	72	68	71	67	64	65	62	60	56
3	87	77	69	63	83	74	67	61	68	62	57	63	58	54	58	54	51	48
4	79	68	59	53	76	65	58	52	60	54	49	56	50	46	51	47	43	41
5	73	61	52	46	70	58	50	44	54	47	42	50	44	40	46	42	38	35
6	67	54	46	40	64	52	45	39	49	42	37	45	39	35	42	37	33	31
7	62	49	41	35	59	48	40	34	44	38	33	41	35	31	38	33	30	27
8	58	45	37	31	55	43	36	30	40	34	29	38	32	28	35	30	26	24
9	54	41	33	28	52	40	32	27	37	31	26	35	29	25	32	28	24	22
10	51	38	30	25	48	37	29	25	34	28	24	32	27	23	30	25	22	20

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: P519838

CATALOG NUMBER: SQ4-F-025U-100D-830-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.2	2.8
10°-20°	732.5	7.9
20°-30°	1100.0	11.9
30°-40°	1312.7	14.2
40°-50°	1345.5	14.5
50°-60°	1198.2	12.9
60°-70°	893.2	9.6
70°-80°	483.6	5.2
80°-90°	111.6	1.2
90°-100°	137.1	1.5
100°-110°	360.5	3.9
110°-120°	373.8	4.0
120°-130°	299.8	3.2
130°-140°	235.2	2.5
140°-150°	180.5	2.0
150°-160°	130.0	1.4
160°-170°	79.6	0.9
170°-180°	26.9	0.3
0°-30°	2089.7	22.6
0°-40°	3402.4	36.8
0°-60°	5946.1	64.2
0°-90°	7434.5	80.3
90°-120°	871.3	9.4
90°-150°	1587.0	17.1
90°-180°	1823.0	19.7
0°-180°	9257.9	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	5	14	7	7	3
95°	18	71	236	122	83	20
105°	65	98	399	605	564	69
115°	115	140	319	637	727	114
125°	160	180	290	491	579	142
135°	191	211	281	396	449	148
145°	222	236	278	338	364	139
155°	251	258	278	305	314	115
165°	270	274	278	289	292	76
175°	281	281	280	283	283	27
180°	281	281	281	281	281	

TEST NUMBER: P519838

CATALOG NUMBER: SQ4-F-025U-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	23.4	24.0	19.4	19.4
90°	1.8	5.4	14.4	7.2	7.2
92.5°	7.6	36.5	80.8	35.7	23.0
95°	18.1	70.9	236.3	121.8	83.0
97.5°	31.4	77.9	353.5	281.1	207.0
100°	41.5	83.8	389.5	394.8	306.5
102.5°	50.1	89.7	399.6	491.7	416.2
105°	64.9	98.5	398.6	605.1	564.4
107.5°	80.1	111.1	375.8	663.8	673.8
110°	90.1	118.3	357.1	679.0	721.4

TEST NUMBER: P519838

CATALOG NUMBER: SQ4-F-025U-100D-830-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	100.3	127.0	339.7	669.5	734.3
115°	115.4	140.1	319.2	636.8	726.7
117.5°	130.2	152.7	305.1	591.6	691.4
120°	138.9	160.0	299.4	561.3	658.2
122.5°	147.5	168.7	295.1	530.9	626.5
125°	160.5	179.9	290.4	490.7	578.9
127.5°	171.0	190.7	286.4	458.3	532.7
130°	176.7	197.9	284.9	438.0	506.7
132.5°	182.5	203.7	283.5	420.5	482.2
135°	191.2	210.6	281.3	396.1	449.1
137.5°	200.2	219.2	280.9	377.9	421.2
140°	207.4	225.0	279.5	363.4	403.9
142.5°	213.2	229.4	279.5	353.2	388.1
145°	221.9	235.9	277.7	337.8	364.3
147.5°	230.5	244.2	277.7	325.1	347.0
150°	236.3	248.6	277.7	317.8	335.4
152.5°	242.0	251.6	277.7	311.9	325.4
155°	250.6	257.7	277.7	305.0	313.8
157.5°	257.1	263.8	277.7	298.8	305.1
160°	261.5	266.8	277.7	295.8	299.4
162.5°	265.8	269.7	277.7	293.0	296.5
165°	270.5	274.0	277.7	288.6	292.1
167.5°	274.8	276.6	279.5	286.8	288.2
170°	277.7	279.5	279.5	286.8	286.8
172.5°	279.2	279.5	279.5	285.2	283.9
175°	281.3	281.3	279.5	283.1	283.1
177.5°	281.3	281.3	279.9	282.7	281.3
180°	281.3	281.3	281.3	281.3	281.3

(END OF REPORT)