

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: P520268

Luminaire Tested: **SQ4-F-125U-050D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520268  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, G3-1910-536-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-125U-050D-830-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

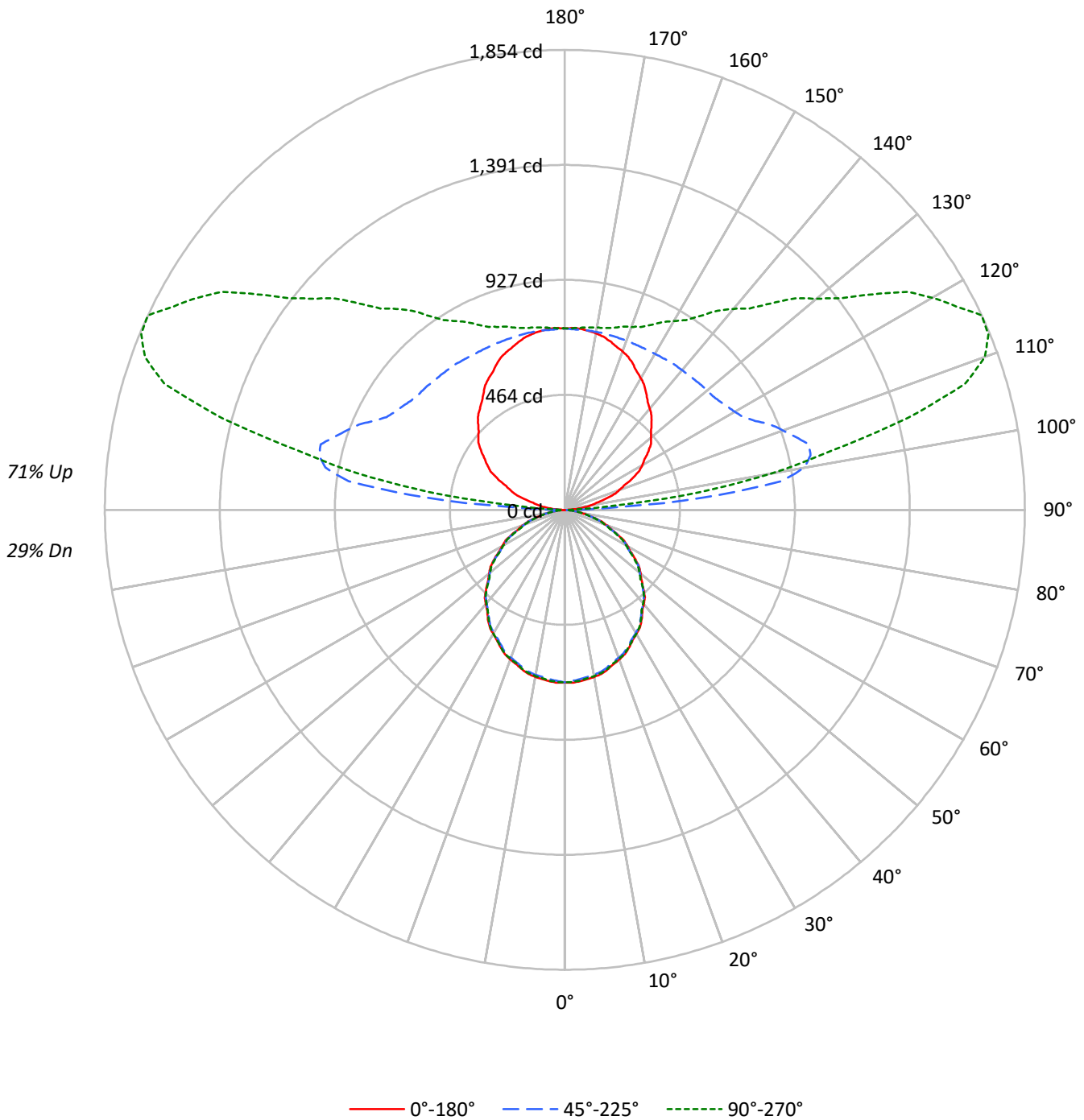
Lumens per Lamp: N/A  
Luminaire Lumens: 6618.1 lumens  
Efficiency: N/A  
Efficacy: 138.2 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 47.9  
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: P520268  
CATALOG NUMBER: SQ4-F-125U-050D-830-1D-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P520268

CATALOG NUMBER: SQ4-F-125U-050D-830-1D-UNV-STD-W-4

**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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	29
1	93	89	85	82	83	80	77	74	63	60	58	47	45	44	32	31	31	24
2	85	77	72	67	76	70	65	60	55	51	48	41	39	37	28	27	26	20
3	77	68	61	55	69	61	55	50	48	44	40	36	33	31	25	23	22	17
4	70	60	52	47	63	54	47	42	43	38	34	32	29	26	22	20	19	15
5	64	53	45	40	57	48	41	36	38	33	29	29	25	23	20	18	16	13
6	59	48	40	34	53	43	36	31	34	29	25	26	22	20	18	16	14	11
7	55	43	35	30	49	39	32	27	31	26	22	23	20	17	16	14	13	10
8	51	39	31	26	45	35	28	24	28	23	20	21	18	15	15	13	11	9
9	47	35	28	23	42	32	26	21	26	21	17	20	16	14	14	12	10	8
10	44	32	25	21	39	29	23	19	23	19	16	18	15	12	13	11	9	7

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

	0°	45°	90°
0°	6415	6415	6415
5°	6430	6352	6404
10°	6409	6330	6374
15°	6365	6285	6338
20°	6305	6232	6279
25°	6234	6158	6216
30°	6147	6098	6139
35°	6081	6007	6038
40°	5963	5908	5920
45°	5842	5792	5792
50°	5718	5664	5637
55°	5585	5511	5480
60°	5375	5288	5255
65°	5122	5017	4958
70°	4769	4672	4570
75°	4281	4149	4050
80°	3464	3411	3310
85°	2064	2371	2467



TEST NUMBER: P520268

CATALOG NUMBER: SQ4-F-125U-050D-830-1D-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.6	1.0
10°-20°	186.8	2.8
20°-30°	280.6	4.2
30°-40°	334.9	5.1
40°-50°	343.2	5.2
50°-60°	306.1	4.6
60°-70°	228.0	3.4
70°-80°	123.7	1.9
80°-90°	30.4	0.5
90°-100°	341.9	5.2
100°-110°	921.1	13.9
110°-120°	966.7	14.6
120°-130°	784.4	11.9
130°-140°	615.2	9.3
140°-150°	472.3	7.1
150°-160°	339.6	5.1
160°-170°	207.5	3.1
170°-180°	70.0	1.1
0°-30°	533.0	8.1
0°-40°	867.9	13.1
0°-60°	1517.2	22.9
0°-90°	1899.3	28.7
90°-120°	2229.8	33.7
90°-150°	4101.7	62.0
90°-180°	4719.0	71.3
0°-180°	6618.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	695	695	695	695	695	
5°	694	693	686	692	692	66
15°	666	665	658	664	664	188
25°	612	611	605	609	611	282
35°	540	538	533	533	536	337
45°	448	449	444	443	444	346
55°	347	347	343	340	341	309
65°	235	234	230	227	227	232
75°	120	119	116	114	114	127
85°	20	21	22	23	23	27
90°	2	6	11	12	12	4
95°	52	186	561	287	198	54
105°	170	265	1019	1524	1430	179
115°	301	368	848	1639	1854	296
125°	411	472	762	1287	1515	367
135°	494	552	740	1039	1176	382
145°	572	616	731	888	954	359
155°	649	673	724	797	822	299
165°	704	712	727	756	760	199
175°	732	731	728	738	737	70
180°	731	731	731	731	731	

TEST NUMBER: P520268

CATALOG NUMBER: SQ4-F-125U-050D-830-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	695.3	695.3	695.3	695.3	695.3
2.5°	697.5	696.1	690.0	695.3	694.5
5°	694.3	693.4	685.9	692.4	691.5
7.5°	689.3	687.5	680.2	686.5	685.6
10°	684.1	682.3	675.7	681.3	680.4
12.5°	677.4	676.3	669.0	674.6	674.4
15°	666.4	664.6	658.0	663.6	663.6
17.5°	651.9	650.8	644.5	649.8	649.1
20°	642.2	640.3	634.7	639.5	639.5
22.5°	630.3	629.2	623.6	627.5	628.2
25°	612.4	610.6	604.9	608.7	610.6
27.5°	592.7	591.2	586.5	589.0	590.3
30°	577.0	577.0	572.4	573.4	576.2
32.5°	562.9	562.9	557.5	558.5	559.8
35°	539.9	538.0	533.3	533.4	536.1
37.5°	513.0	512.1	509.1	508.6	509.3
40°	495.1	494.2	490.5	491.5	491.5
42.5°	477.3	476.4	472.6	471.3	472.8
45°	447.7	448.6	443.9	443.0	443.9
47.5°	418.5	418.5	414.7	412.2	413.7
50°	398.4	398.4	394.6	392.7	392.7
52.5°	377.5	378.3	373.8	371.2	371.9
55°	347.2	347.2	342.6	339.7	340.7
57.5°	313.7	313.7	309.0	306.3	307.8
60°	291.3	291.3	286.6	283.9	284.8
62.5°	269.0	269.0	264.4	261.5	261.7
65°	234.6	233.6	229.8	227.1	227.1
67.5°	201.5	199.1	196.2	192.5	192.5
70°	176.8	175.9	173.2	169.4	169.4
72.5°	154.5	152.8	150.1	147.0	147.0
75°	120.1	119.1	116.4	114.5	113.6
77.5°	86.0	85.3	85.1	82.4	83.2
80°	65.2	65.2	64.2	62.3	62.3
82.5°	46.5	47.2	45.7	45.3	44.5
85°	19.5	21.4	22.4	23.3	23.3
87.5°	4.1	7.0	7.5	8.4	8.4
90°	1.9	5.5	11.1	12.1	12.1
92.5°	22.7	80.2	158.7	76.4	53.1
95°	52.1	186.0	560.6	286.6	198.3
97.5°	83.3	212.9	879.2	734.5	553.8
100°	107.1	223.6	980.5	1025.9	851.0
102.5°	130.1	238.7	1014.0	1244.2	1100.7
105°	170.4	265.1	1018.7	1524.1	1430.2
107.5°	208.4	292.9	975.3	1667.9	1692.1
110°	233.8	313.9	935.8	1712.5	1800.9

TEST NUMBER: P520268

CATALOG NUMBER: SQ4-F-125U-050D-830-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	260.5	334.8	897.8	1702.7	1847.8
115°	300.8	368.1	848.3	1639.1	1853.9
117.5°	337.5	400.6	809.9	1537.6	1776.9
120°	361.3	422.3	790.6	1464.7	1710.6
122.5°	382.2	442.4	776.4	1390.2	1635.3
125°	410.7	471.7	761.7	1287.4	1515.0
127.5°	438.0	498.1	752.4	1196.7	1400.0
130°	454.4	514.5	748.6	1144.7	1323.2
132.5°	470.8	530.2	745.0	1099.0	1262.9
135°	494.4	551.8	740.2	1038.6	1176.1
137.5°	516.9	572.0	737.9	987.4	1100.3
140°	532.6	585.4	735.6	955.8	1057.8
142.5°	549.0	598.1	734.1	926.4	1012.4
145°	571.7	616.3	731.0	887.9	953.6
147.5°	596.3	635.1	727.8	855.6	907.2
150°	612.8	646.4	726.3	835.3	878.1
152.5°	627.7	657.0	725.5	818.8	853.5
155°	649.1	672.7	724.4	796.8	822.2
157.5°	667.8	686.3	724.6	781.3	798.4
160°	679.7	695.2	725.3	772.2	784.9
162.5°	690.2	702.7	726.1	764.7	773.8
165°	703.9	712.1	727.2	756.2	759.9
167.5°	715.2	719.9	728.2	749.6	751.1
170°	722.6	724.4	728.2	745.9	745.9
172.5°	727.0	727.4	728.9	742.1	742.1
175°	731.9	731.0	728.2	738.4	736.6
177.5°	733.9	732.5	728.7	734.6	733.2
180°	731.0	731.0	731.0	731.0	731.0

(END OF REPORT)