

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: P519884

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

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519884  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-050D-830-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

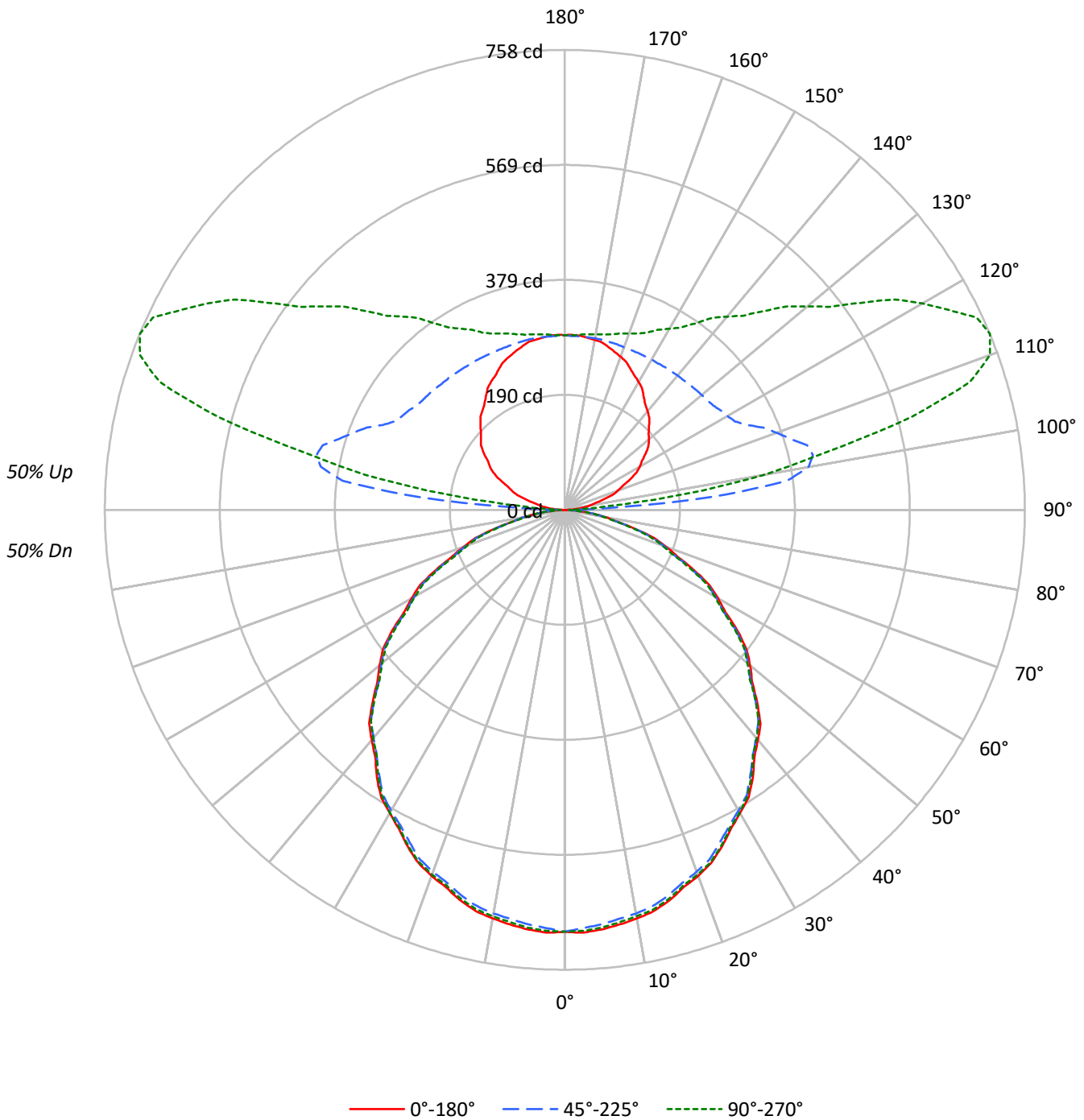
Lumens per Lamp: N/A  
Luminaire Lumens: 3778.9 lumens  
Efficiency: N/A  
Efficacy: 132.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 28.5  
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	69	61	59	58	50	49	48	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	32	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°	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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.6	1.7
10°-20°	186.8	4.9
20°-30°	280.6	7.4
30°-40°	334.9	8.9
40°-50°	343.2	9.1
50°-60°	306.1	8.1
60°-70°	228.0	6.0
70°-80°	123.7	3.3
80°-90°	29.8	0.8
90°-100°	138.2	3.7
100°-110°	375.5	9.9
110°-120°	386.1	10.2
120°-130°	308.7	8.2
130°-140°	242.6	6.4
140°-150°	186.0	4.9
150°-160°	133.7	3.5
160°-170°	81.8	2.2
170°-180°	27.6	0.7
0°-30°	533.0	14.1
0°-40°	867.9	23.0
0°-60°	1517.2	40.1
0°-90°	1898.7	50.2
90°-120°	899.9	23.8
90°-150°	1637.1	43.3
90°-180°	1880.0	49.8
0°-180°	3778.9	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°	1	4	6	8	8	2
95°	20	76	241	105	70	22
105°	67	104	413	629	592	71
115°	118	144	331	658	749	117
125°	163	186	299	504	594	145
135°	196	218	291	410	463	152
145°	227	243	287	349	375	142
155°	256	266	285	313	322	118
165°	278	281	286	298	299	78
175°	288	289	287	291	290	27
180°	288	288	288	288	288	

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**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°	3.9	6.6	6.5	7.6	7.6
90°	0.9	3.6	6.5	8.3	8.3
92.5°	8.3	37.9	65.7	28.3	23.8
95°	20.4	75.6	240.7	104.8	70.4
97.5°	33.7	83.5	369.1	287.1	201.7
100°	42.6	88.8	408.3	413.9	334.2
102.5°	51.5	94.0	418.7	511.9	441.7
105°	66.6	103.8	412.9	628.8	591.6
107.5°	82.4	115.2	389.1	689.2	699.5
110°	93.5	123.3	371.3	701.0	745.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	103.1	131.6	353.6	691.1	757.9
115°	118.5	143.9	330.6	657.7	749.0
117.5°	133.0	157.2	315.9	610.1	713.1
120°	142.6	166.1	309.3	578.3	680.5
122.5°	150.7	174.3	304.8	546.3	645.0
125°	163.0	185.6	299.1	503.9	594.5
127.5°	173.9	196.4	296.0	471.8	549.4
130°	180.6	202.2	294.5	451.6	521.3
132.5°	187.2	208.9	292.9	434.3	496.1
135°	196.3	218.0	290.8	410.5	463.0
137.5°	206.1	225.9	289.6	389.4	433.5
140°	212.1	231.1	288.9	375.9	415.8
142.5°	217.9	235.5	288.1	365.3	398.7
145°	226.9	243.2	287.0	348.7	374.9
147.5°	236.9	250.8	286.1	335.6	356.3
150°	243.6	255.3	286.1	328.1	344.4
152.5°	248.7	259.1	285.4	321.4	334.8
155°	256.5	265.5	285.2	313.1	322.3
157.5°	264.1	271.1	285.2	307.5	314.4
160°	268.5	274.9	285.2	303.8	309.3
162.5°	273.0	277.8	285.9	300.9	304.8
165°	277.8	281.4	286.1	298.1	299.1
167.5°	282.8	284.6	287.0	295.0	295.8
170°	284.3	286.0	287.0	293.5	293.5
172.5°	285.8	286.8	287.0	292.0	292.0
175°	287.9	288.9	287.0	290.8	289.8
177.5°	288.7	288.7	286.4	289.4	287.9
180°	287.9	287.9	287.9	287.9	287.9

(END OF REPORT)