

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: P519945

Luminaire Tested: **SQ4-F-050U-100D-930-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519945  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-100D-930-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

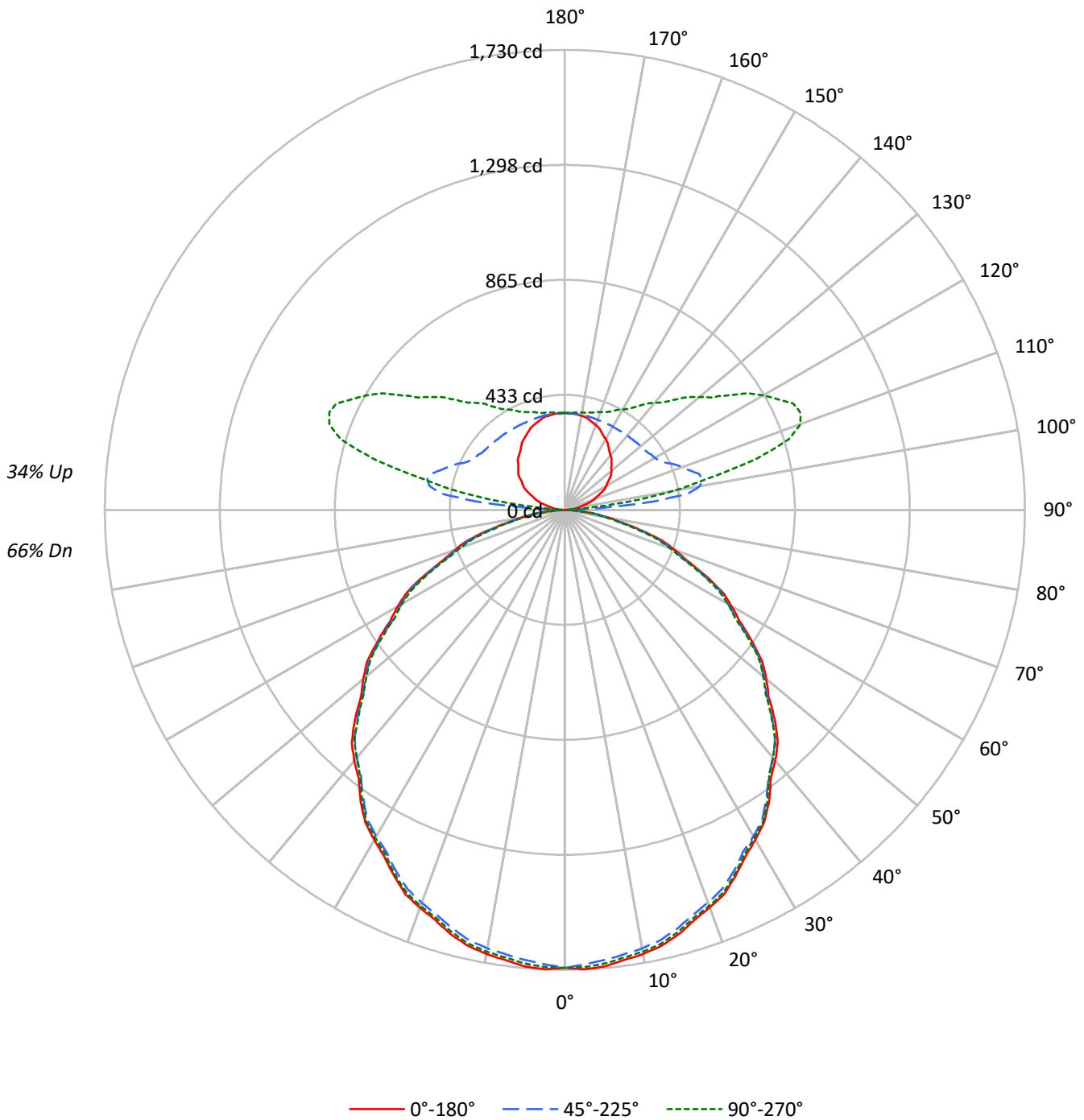
Lumens per Lamp: N/A  
Luminaire Lumens: 7078.8 lumens  
Efficiency: N/A  
Efficacy: 101.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 70  
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	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	85	81	79	76	72	70	68	63	61	60	56
2	92	85	78	73	87	80	74	69	71	67	63	63	59	57	55	53	51	47
3	84	74	67	61	79	70	63	58	63	57	53	55	51	48	49	46	43	39
4	77	66	58	51	72	62	55	49	56	50	45	49	45	41	44	40	37	34
5	71	59	50	44	66	56	48	42	50	44	39	44	39	35	39	35	32	29
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	36	31	28	26
7	60	48	39	34	57	45	38	32	41	34	30	36	31	27	32	28	25	23
8	56	43	35	30	53	41	34	29	37	31	27	33	28	24	30	26	22	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	18
10	49	36	29	24	46	35	28	23	31	26	21	28	23	20	25	21	18	16

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

	0°	45°	90°
0°	10598	10598	10598
5°	10646	10500	10581
10°	10593	10460	10541
15°	10528	10385	10468
20°	10420	10295	10381
25°	10306	10185	10266
30°	10180	10072	10122
35°	10053	9929	9981
40°	9886	9771	9780
45°	9712	9578	9547
50°	9461	9348	9326
55°	9183	9081	9017
60°	8904	8744	8714
65°	8469	8278	8211
70°	7868	7677	7528
75°	7027	6802	6661
80°	5781	5572	5320
85°	3423	3754	3839



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.6	2.3
10°-20°	463.1	6.5
20°-30°	695.5	9.8
30°-40°	830.0	11.7
40°-50°	850.8	12.0
50°-60°	757.6	10.7
60°-70°	564.7	8.0
70°-80°	305.8	4.3
80°-90°	71.0	1.0
90°-100°	174.8	2.5
100°-110°	474.9	6.7
110°-120°	488.2	6.9
120°-130°	390.4	5.5
130°-140°	306.7	4.3
140°-150°	235.2	3.3
150°-160°	169.1	2.4
160°-170°	103.4	1.5
170°-180°	34.8	0.5
0°-30°	1321.3	18.7
0°-40°	2151.3	30.4
0°-60°	3759.7	53.1
0°-90°	4701.2	66.4
90°-120°	1137.9	16.1
90°-150°	2070.2	29.2
90°-180°	2378.0	33.6
0°-180°	7078.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1723	1723	1723	1723	1723	
5°	1724	1721	1701	1716	1714	163
15°	1653	1648	1631	1644	1644	466
25°	1518	1515	1501	1509	1513	700
35°	1339	1333	1322	1325	1329	836
45°	1116	1111	1101	1095	1098	859
55°	856	858	847	838	841	766
65°	582	580	569	563	564	575
75°	296	292	286	280	280	315
85°	48	53	53	54	54	68
90°	1	5	8	10	10	3
95°	26	96	304	132	89	27
105°	84	131	522	795	748	90
115°	150	182	418	832	947	148
125°	206	235	378	637	752	184
135°	248	276	368	519	585	192
145°	287	307	363	441	474	180
155°	324	336	361	396	407	150
165°	351	356	362	377	378	99
175°	364	365	363	368	366	35
180°	364	364	364	364	364	



TEST NUMBER: P519945

CATALOG NUMBER: SQ4-F-050U-100D-930-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1723.1	1723.1	1723.1	1723.1	1723.1
2.5°	1729.8	1726.1	1710.9	1723.1	1721.3
5°	1724.3	1720.9	1700.6	1716.0	1713.7
7.5°	1708.3	1704.8	1687.0	1701.1	1699.1
10°	1696.0	1692.5	1674.7	1688.9	1687.7
12.5°	1679.8	1676.4	1658.6	1672.7	1671.6
15°	1653.4	1647.6	1630.9	1643.9	1643.9
17.5°	1618.4	1614.0	1598.5	1609.4	1609.6
20°	1591.9	1588.4	1572.9	1584.8	1586.0
22.5°	1565.4	1561.9	1544.6	1555.5	1557.6
25°	1518.5	1515.1	1500.8	1509.2	1512.7
27.5°	1470.3	1465.2	1451.2	1458.5	1461.1
30°	1433.4	1431.0	1418.1	1421.6	1425.1
32.5°	1394.6	1392.3	1381.1	1382.9	1389.1
35°	1338.8	1333.1	1322.3	1324.7	1329.3
37.5°	1272.8	1270.0	1259.5	1258.2	1262.6
40°	1231.2	1226.5	1216.9	1214.6	1218.1
42.5°	1185.7	1181.2	1169.7	1167.4	1171.8
45°	1116.5	1110.7	1101.1	1095.3	1097.5
47.5°	1038.9	1038.9	1029.0	1022.1	1025.6
50°	988.7	988.7	976.9	971.1	974.6
52.5°	936.7	937.6	924.8	921.8	920.6
55°	856.3	857.5	846.8	838.5	840.9
57.5°	778.7	776.1	763.7	758.4	759.6
60°	723.8	720.3	710.8	702.7	708.4
62.5°	668.0	666.3	656.8	647.6	646.9
65°	581.9	579.5	568.8	563.0	564.2
67.5°	496.2	493.4	483.7	475.3	478.3
70°	437.5	437.5	426.9	422.1	418.6
72.5°	383.6	379.0	371.2	364.4	361.9
75°	295.7	292.2	286.2	280.3	280.3
77.5°	215.2	212.2	208.4	204.3	203.2
80°	163.2	162.1	157.3	156.0	150.2
82.5°	114.9	114.7	111.9	108.8	108.6
85°	48.5	53.1	53.2	54.4	54.4
87.5°	8.7	15.0	14.9	13.5	13.5
90°	1.2	4.6	8.2	10.5	10.5
92.5°	10.5	47.9	83.1	35.7	30.2
95°	25.8	95.6	304.4	132.5	89.0
97.5°	42.6	105.6	466.7	363.1	255.0
100°	53.9	112.3	516.4	523.4	422.7
102.5°	65.1	118.9	529.5	647.4	558.5
105°	84.3	131.2	522.2	795.1	748.2
107.5°	104.2	145.6	492.0	871.5	884.5
110°	118.2	156.0	469.5	886.5	942.5

TEST NUMBER: P519945

CATALOG NUMBER: SQ4-F-050U-100D-930-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	130.4	166.4	447.1	874.0	958.5
115°	149.8	181.9	418.0	831.6	947.2
117.5°	168.1	198.8	399.5	771.5	901.8
120°	180.4	210.1	391.0	731.3	860.6
122.5°	190.7	220.4	385.4	690.8	815.6
125°	206.1	234.7	378.2	637.2	751.7
127.5°	219.9	248.3	374.3	596.6	694.8
130°	228.3	255.8	372.3	571.0	659.2
132.5°	236.8	264.3	370.4	549.3	627.3
135°	248.3	275.7	367.7	519.0	585.4
137.5°	260.6	285.6	366.2	492.3	548.2
140°	268.1	292.1	365.3	475.3	525.8
142.5°	275.6	297.8	364.4	462.1	504.2
145°	286.8	307.4	363.0	441.0	474.3
147.5°	299.5	317.2	361.8	424.5	450.6
150°	307.9	322.8	361.8	415.0	435.6
152.5°	314.5	327.6	360.9	406.4	423.4
155°	324.3	335.8	360.6	396.0	407.4
157.5°	333.9	342.9	360.6	389.0	397.6
160°	339.5	347.6	360.6	384.2	391.0
162.5°	345.2	351.4	361.6	380.4	385.4
165°	351.3	355.8	361.8	377.0	378.2
167.5°	357.6	359.8	363.0	373.1	374.0
170°	359.4	361.8	363.0	371.2	371.2
172.5°	361.3	362.7	363.0	369.3	369.3
175°	364.2	365.3	363.0	367.6	366.5
177.5°	365.0	365.0	362.3	366.0	364.2
180°	364.2	364.2	364.2	364.2	364.2

(END OF REPORT)