

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: P563972

Luminaire Tested: **SQ4-PR1-050U-075D-830-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P563972  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PR1-050U-075D-830-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9154.2 lumens  
Efficiency: N/A  
Efficacy: 117.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

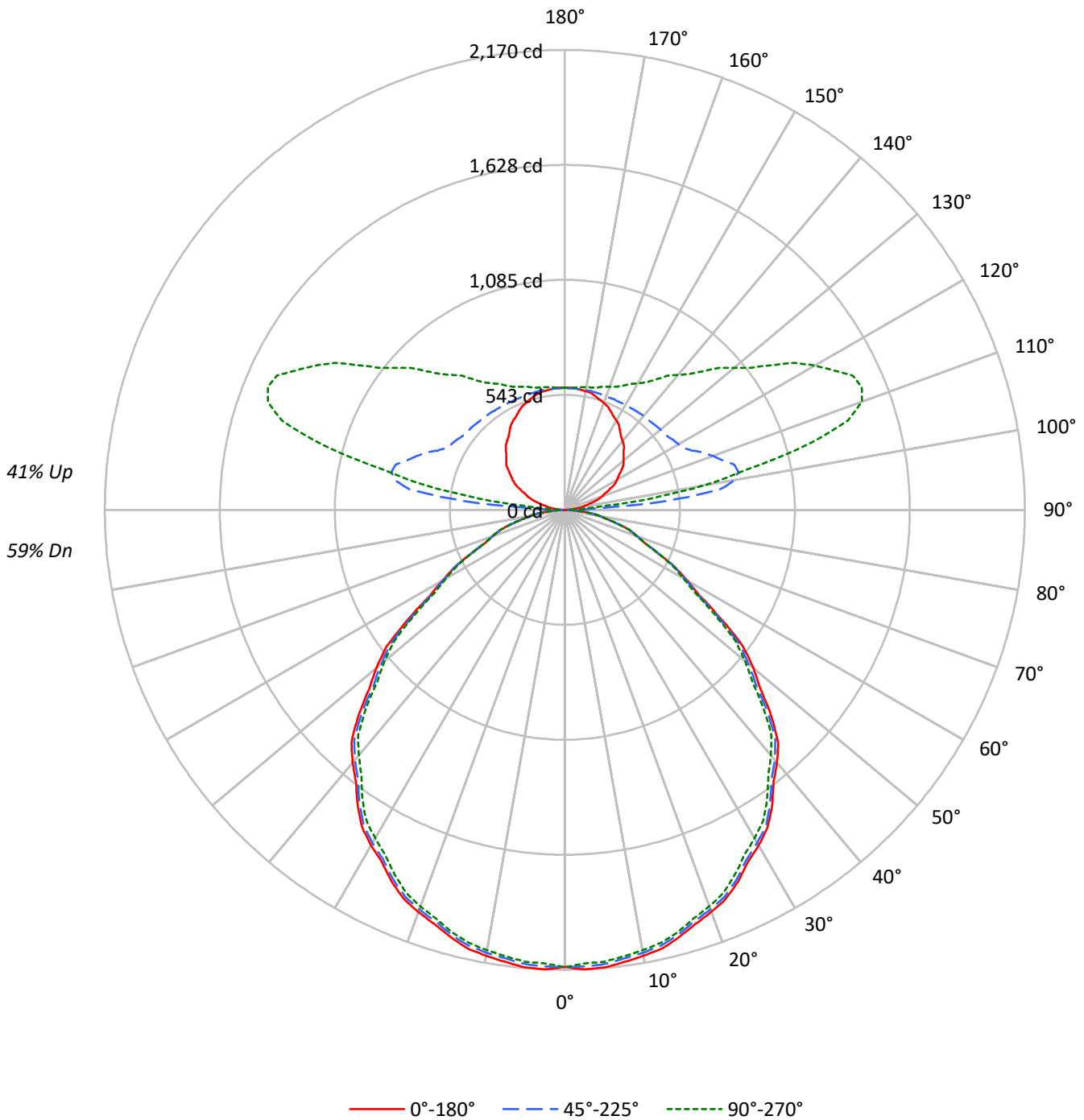
Input Watts (W): 78.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64	59
1	100	96	92	89	93	90	86	83	78	76	73	67	65	64	57	56	55	50
2	91	84	78	73	85	79	73	69	69	65	61	59	56	54	51	49	47	43
3	84	74	67	61	78	70	63	58	61	56	52	53	49	46	45	43	40	37
4	77	66	58	52	71	62	55	49	54	49	44	47	43	40	41	38	35	32
5	71	59	51	45	66	55	48	43	49	43	39	43	38	35	37	33	31	28
6	65	53	45	39	61	50	43	37	44	38	34	39	34	30	33	30	27	24
7	60	48	40	34	56	45	38	33	40	34	30	35	30	27	31	27	24	22
8	56	44	36	30	52	41	34	29	37	31	27	32	28	24	28	24	22	19
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	26	22	20	17
10	49	37	29	25	46	35	28	24	31	25	22	27	23	20	24	20	18	16

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

	0°	45°	90°
0°	9950	9950	9950
5°	10039	9962	9910
10°	10007	9938	9885
15°	9963	9901	9848
20°	9913	9849	9776
25°	9844	9777	9664
30°	9737	9668	9530
35°	9593	9509	9374
40°	9374	9274	9106
45°	8993	8835	8653
50°	8319	8119	7959
55°	7261	7097	6947
60°	6119	6067	5947
65°	5293	5313	5272
70°	4861	4887	4887
75°	4668	4668	4702
80°	4391	4442	4391
85°	3541	3933	3933



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	204.0	2.2
10°-20°	583.5	6.4
20°-30°	880.2	9.6
30°-40°	1048.7	11.5
40°-50°	1033.9	11.3
50°-60°	790.2	8.6
60°-70°	489.0	5.3
70°-80°	277.7	3.0
80°-90°	86.7	0.9
90°-100°	276.5	3.0
100°-110°	751.0	8.2
110°-120°	772.2	8.4
120°-130°	617.4	6.7
130°-140°	485.1	5.3
140°-150°	372.0	4.1
150°-160°	267.5	2.9
160°-170°	163.6	1.8
170°-180°	55.1	0.6
0°-30°	1667.7	18.2
0°-40°	2716.4	29.7
0°-60°	4540.5	49.6
0°-90°	5393.9	58.9
90°-120°	1799.7	19.7
90°-150°	3274.1	35.8
90°-180°	3760.0	41.1
0°-180°	9154.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2157	2157	2157	2157	2157	
5°	2168	2144	2151	2144	2140	206
15°	2086	2064	2073	2066	2062	589
25°	1934	1910	1921	1900	1899	890
35°	1704	1684	1689	1666	1664	1063
45°	1378	1360	1354	1330	1326	1056
55°	903	888	882	868	864	809
65°	485	481	487	483	483	491
75°	262	262	262	264	264	277
85°	67	70	74	74	74	78
90°	2	7	13	17	17	6
95°	41	151	482	210	141	43
105°	133	208	826	1258	1183	142
115°	237	288	661	1315	1498	234
125°	326	371	598	1008	1189	291
135°	393	436	582	821	926	304
145°	454	486	574	698	750	285
155°	513	531	570	626	644	237
165°	556	563	572	596	598	157
175°	576	578	574	581	580	55
180°	576	576	576	576	576	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2156.8	2156.8	2156.8	2156.8	2156.8
2.5°	2170.2	2151.3	2156.8	2152.1	2141.9
5°	2167.9	2144.3	2151.2	2143.7	2140.1
7.5°	2151.2	2128.0	2134.9	2127.4	2125.2
10°	2136.3	2114.6	2121.5	2114.0	2110.3
12.5°	2120.0	2096.7	2105.1	2096.1	2092.5
15°	2086.2	2064.4	2073.2	2065.7	2062.0
17.5°	2049.0	2025.8	2034.5	2025.9	2021.2
20°	2019.3	1997.5	2006.3	1993.3	1991.4
22.5°	1986.6	1964.8	1973.6	1956.1	1955.8
25°	1933.9	1910.2	1920.9	1900.4	1898.6
27.5°	1871.1	1849.3	1858.1	1837.2	1835.0
30°	1828.0	1806.2	1815.0	1792.6	1789.0
32.5°	1778.9	1758.6	1765.9	1743.6	1741.4
35°	1703.5	1683.5	1688.6	1666.3	1664.5
37.5°	1617.7	1599.5	1602.4	1577.9	1576.1
40°	1556.7	1538.6	1540.0	1514.0	1512.2
42.5°	1489.9	1471.7	1470.2	1444.1	1442.3
45°	1378.4	1360.2	1354.3	1330.0	1326.4
47.5°	1251.3	1233.2	1222.0	1202.2	1199.7
50°	1159.2	1141.0	1131.3	1114.5	1109.0
52.5°	1059.6	1041.5	1033.2	1017.9	1012.4
55°	902.8	888.3	882.4	867.5	863.8
57.5°	753.9	744.0	742.3	727.8	726.4
60°	663.2	657.7	657.6	644.6	644.6
62.5°	585.9	581.9	584.8	576.2	574.8
65°	484.9	481.2	486.7	483.0	483.0
67.5°	405.0	405.0	408.3	406.8	406.8
70°	360.4	360.4	362.3	362.3	362.3
72.5°	320.3	318.8	323.6	323.6	322.1
75°	261.9	261.9	261.9	263.8	263.8
77.5°	204.0	204.3	205.8	205.4	204.0
80°	165.3	167.2	167.2	165.3	165.3
82.5°	126.7	128.5	128.6	128.1	126.7
85°	66.9	70.5	74.3	74.3	74.3
87.5°	19.7	26.6	32.3	33.0	31.6
90°	1.9	7.3	13.0	16.7	16.7
92.5°	16.7	75.7	131.5	56.5	47.8
95°	40.7	151.2	481.5	209.5	140.7
97.5°	67.4	167.0	738.1	574.3	403.3
100°	85.2	177.5	816.7	827.8	668.5
102.5°	103.0	188.1	837.4	1023.8	883.3
105°	133.3	207.6	825.9	1257.5	1183.3
107.5°	164.8	230.4	778.1	1378.2	1398.9
110°	187.0	246.8	742.6	1402.0	1490.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	206.3	263.1	707.0	1382.3	1515.9
115°	237.0	287.7	661.1	1315.2	1498.1
117.5°	265.9	314.4	631.8	1220.2	1426.3
120°	285.2	332.3	618.5	1156.5	1361.1
122.5°	301.5	348.6	609.6	1092.6	1290.0
125°	325.9	371.2	598.1	1007.8	1188.9
127.5°	347.8	392.7	591.8	943.5	1098.9
130°	361.1	404.6	588.9	903.2	1042.6
132.5°	374.4	417.9	585.9	868.7	992.2
135°	392.6	436.0	581.5	820.9	925.9
137.5°	412.2	451.7	579.2	778.7	867.0
140°	424.1	462.1	577.8	751.8	831.5
142.5°	435.9	471.0	576.3	730.8	797.4
145°	453.7	486.3	574.1	697.5	750.0
147.5°	473.7	501.6	572.2	671.3	712.6
150°	487.0	510.6	572.2	656.3	688.9
152.5°	497.4	518.0	570.7	642.8	669.6
155°	513.0	531.1	570.4	626.3	644.4
157.5°	528.1	542.3	570.4	615.1	628.9
160°	537.0	549.7	570.4	607.6	618.5
162.5°	545.9	555.7	571.8	601.7	609.6
165°	555.5	562.8	572.2	596.3	598.1
167.5°	565.5	569.2	574.1	590.0	591.5
170°	568.5	572.1	574.1	587.0	587.0
172.5°	571.5	573.6	574.1	584.1	584.1
175°	575.9	577.7	574.1	581.4	579.6
177.5°	577.4	577.4	573.0	578.8	575.9
180°	575.9	575.9	575.9	575.9	575.9

(END OF REPORT)