

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: P519910

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

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519910  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-050U-075D-830-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

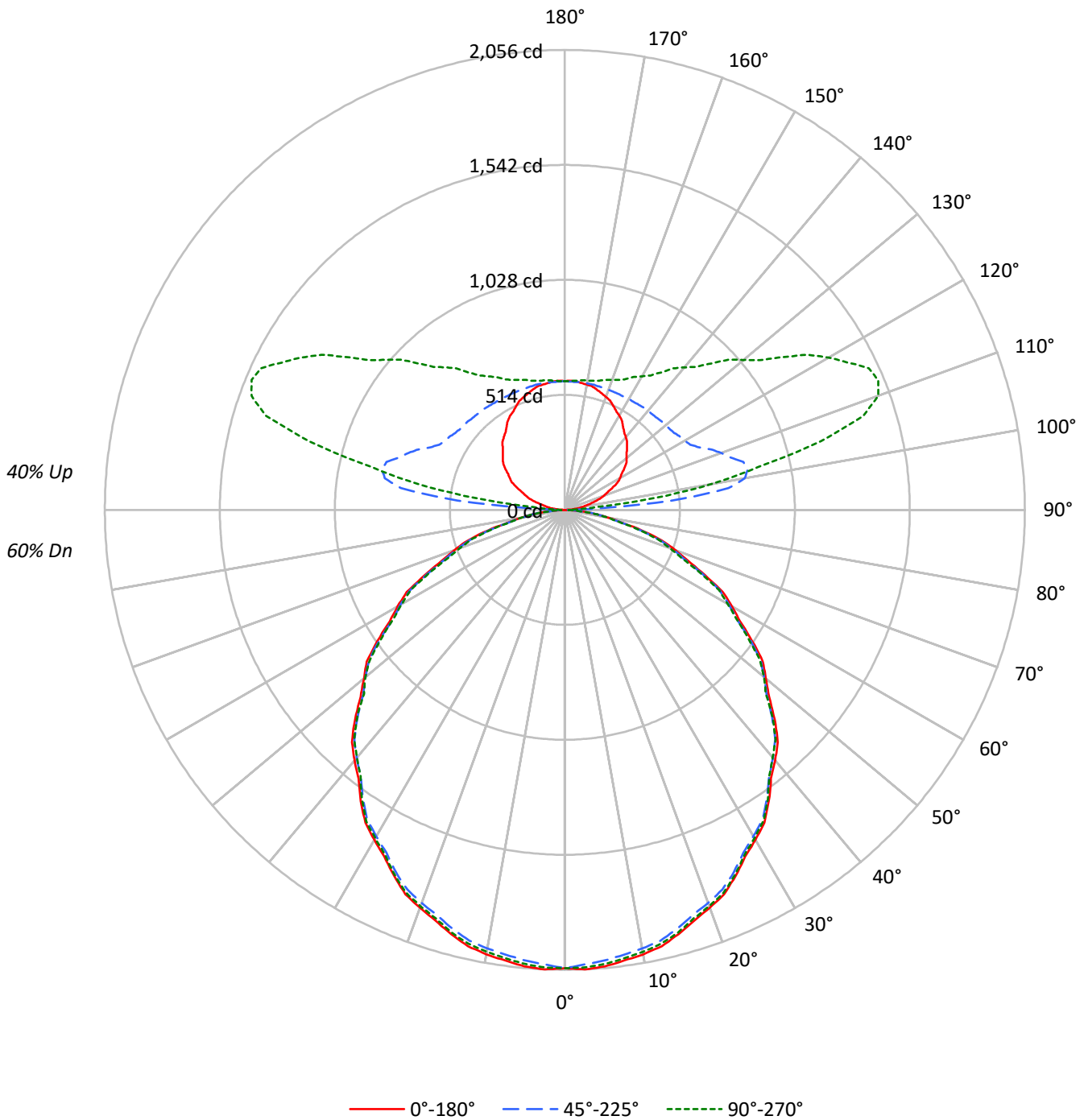
Lumens per Lamp: N/A  
Luminaire Lumens: 9356.2 lumens  
Efficiency: N/A  
Efficacy: 122.3 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 76.5  
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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60
1	100	96	92	88	93	89	86	83	78	75	73	67	65	64	58	56	55	50
2	91	83	77	72	85	78	73	68	68	64	60	59	56	53	51	48	46	42
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39	35
4	76	65	57	50	71	61	54	48	53	48	43	46	42	38	40	36	34	30
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	32	29	26
6	64	52	43	37	60	49	41	36	43	37	32	38	33	29	32	29	26	23
7	59	47	39	33	55	44	37	31	39	33	28	34	29	26	30	26	23	20
8	55	42	35	29	51	40	33	28	35	30	25	31	26	23	27	23	20	18
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	18	16
10	48	36	28	23	45	34	27	22	30	24	20	27	22	19	23	19	17	15

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

	0°	45°	90°
0°	9452	9452	9452
5°	9488	9368	9437
10°	9450	9328	9398
15°	9378	9262	9342
20°	9293	9184	9257
25°	9191	9097	9162
30°	9074	8975	9025
35°	8955	8861	8903
40°	8804	8715	8704
45°	8653	8544	8569
50°	8413	8347	8347
55°	8218	8113	8038
60°	7952	7816	7747
65°	7523	7381	7280
70°	7066	6890	6714
75°	6358	6124	5994
80°	5082	4986	4936
85°	3049	3440	3541



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	193.4	2.1
10°-20°	550.6	5.9
20°-30°	827.2	8.8
30°-40°	987.1	10.5
40°-50°	1012.3	10.8
50°-60°	902.0	9.6
60°-70°	672.6	7.2
70°-80°	364.7	3.9
80°-90°	86.0	0.9
90°-100°	276.5	3.0
100°-110°	751.0	8.0
110°-120°	772.2	8.3
120°-130°	617.4	6.6
130°-140°	485.1	5.2
140°-150°	372.0	4.0
150°-160°	267.5	2.9
160°-170°	163.6	1.7
170°-180°	55.1	0.6
0°-30°	1571.3	16.8
0°-40°	2558.3	27.3
0°-60°	4472.7	47.8
0°-90°	5596.0	59.8
90°-120°	1799.6	19.2
90°-150°	3274.1	35.0
90°-180°	3760.0	40.2
0°-180°	9356.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2049	2049	2049	2049	2049	
5°	2049	2045	2023	2040	2038	194
15°	1964	1960	1939	1954	1956	554
25°	1806	1804	1787	1796	1800	832
35°	1590	1587	1574	1574	1581	993
45°	1326	1321	1310	1310	1313	1021
55°	1022	1020	1009	999	999	913
65°	689	689	676	669	667	686
75°	357	349	344	338	336	375
85°	58	61	65	65	67	80
90°	2	7	13	17	17	4
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	

TEST NUMBER: P519910

CATALOG NUMBER: SQ4-F-050U-075D-830-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2049.0	2049.0	2049.0	2049.0	2049.0
2.5°	2056.5	2052.1	2034.2	2049.0	2047.5
5°	2049.0	2045.4	2023.0	2039.7	2037.9
7.5°	2032.3	2028.3	2006.3	2023.0	2022.6
10°	2017.4	2012.0	1991.4	2008.2	2006.3
12.5°	1998.1	1992.7	1972.2	1988.8	1987.0
15°	1963.6	1960.0	1939.4	1954.3	1956.1
17.5°	1924.2	1917.3	1898.9	1913.5	1915.3
20°	1893.0	1887.5	1870.7	1883.8	1885.6
22.5°	1860.3	1854.9	1838.0	1851.0	1852.9
25°	1805.7	1803.9	1787.2	1796.5	1800.1
27.5°	1746.6	1741.5	1728.0	1735.2	1738.8
30°	1703.5	1699.9	1684.9	1690.6	1694.3
32.5°	1658.9	1656.8	1643.3	1646.0	1651.2
35°	1590.1	1586.6	1573.5	1573.6	1580.9
37.5°	1514.0	1510.0	1499.1	1497.3	1500.3
40°	1462.0	1456.6	1447.2	1445.3	1445.3
42.5°	1408.5	1404.6	1392.2	1388.9	1393.2
45°	1326.4	1320.9	1309.7	1309.8	1313.4
47.5°	1237.6	1235.4	1222.4	1216.5	1217.9
50°	1172.2	1175.9	1163.0	1155.7	1163.0
52.5°	1115.7	1113.6	1102.0	1094.7	1097.5
55°	1021.8	1019.9	1008.8	999.4	999.4
57.5°	927.4	922.7	911.0	904.1	909.6
60°	861.9	860.2	847.1	834.2	839.7
62.5°	796.6	793.4	780.3	771.8	775.7
65°	689.2	689.2	676.2	668.8	666.9
67.5°	595.2	586.5	579.2	570.3	567.7
70°	523.9	516.6	510.8	503.3	497.8
72.5°	454.0	449.6	441.1	433.6	432.5
75°	356.7	349.4	343.6	338.0	336.3
77.5°	253.8	252.3	247.1	244.1	245.2
80°	191.3	191.3	187.7	187.6	185.8
82.5°	134.9	136.3	135.6	132.7	132.3
85°	57.6	61.2	65.0	65.0	66.9
87.5°	10.7	19.1	19.0	19.7	19.7
90°	1.9	7.3	13.0	16.7	16.7
92.5°	16.7	75.7	131.5	56.4	47.8
95°	40.7	151.2	481.5	209.5	140.7
97.5°	67.4	167.0	738.1	574.2	403.3
100°	85.2	177.5	816.6	827.8	668.6
102.5°	102.9	188.0	837.4	1023.8	883.4
105°	133.4	207.5	825.9	1257.5	1183.3
107.5°	164.9	230.4	778.2	1378.2	1398.8
110°	187.0	246.8	742.5	1402.0	1490.7

TEST NUMBER: P519910

CATALOG NUMBER: SQ4-F-050U-075D-830-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	206.3	263.2	707.0	1382.2	1515.9
115°	237.1	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	1156.4	1361.0
122.5°	301.5	348.6	609.6	1092.6	1290.0
125°	325.9	371.2	598.1	1007.8	1188.8
127.5°	347.8	392.7	591.8	943.5	1098.8
130°	361.1	404.6	588.9	903.2	1042.6
132.5°	374.5	417.9	585.9	868.7	992.2
135°	392.6	436.1	581.5	820.8	925.9
137.5°	412.2	451.7	579.3	778.7	867.1
140°	424.1	462.1	577.8	751.8	831.4
142.5°	435.9	471.0	576.3	730.8	797.4
145°	453.6	486.3	574.1	697.5	750.0
147.5°	473.7	501.5	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°	512.9	531.1	570.3	626.4	644.4
157.5°	528.1	542.3	570.3	615.1	628.9
160°	537.1	549.7	570.3	607.6	618.5
162.5°	545.9	555.7	571.8	601.6	609.6
165°	555.5	562.8	572.2	596.3	598.1
167.5°	565.5	569.1	574.1	590.0	591.4
170°	568.5	572.1	574.1	587.0	587.0
172.5°	571.5	573.7	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	578.9	575.9
180°	575.9	575.9	575.9	575.9	575.9

(END OF REPORT)