

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: P519907

Luminaire Tested: **SQ4-F-050U-075D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519907
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-12
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: 14034.3 lumens
Efficiency: N/A
Efficacy: 122.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

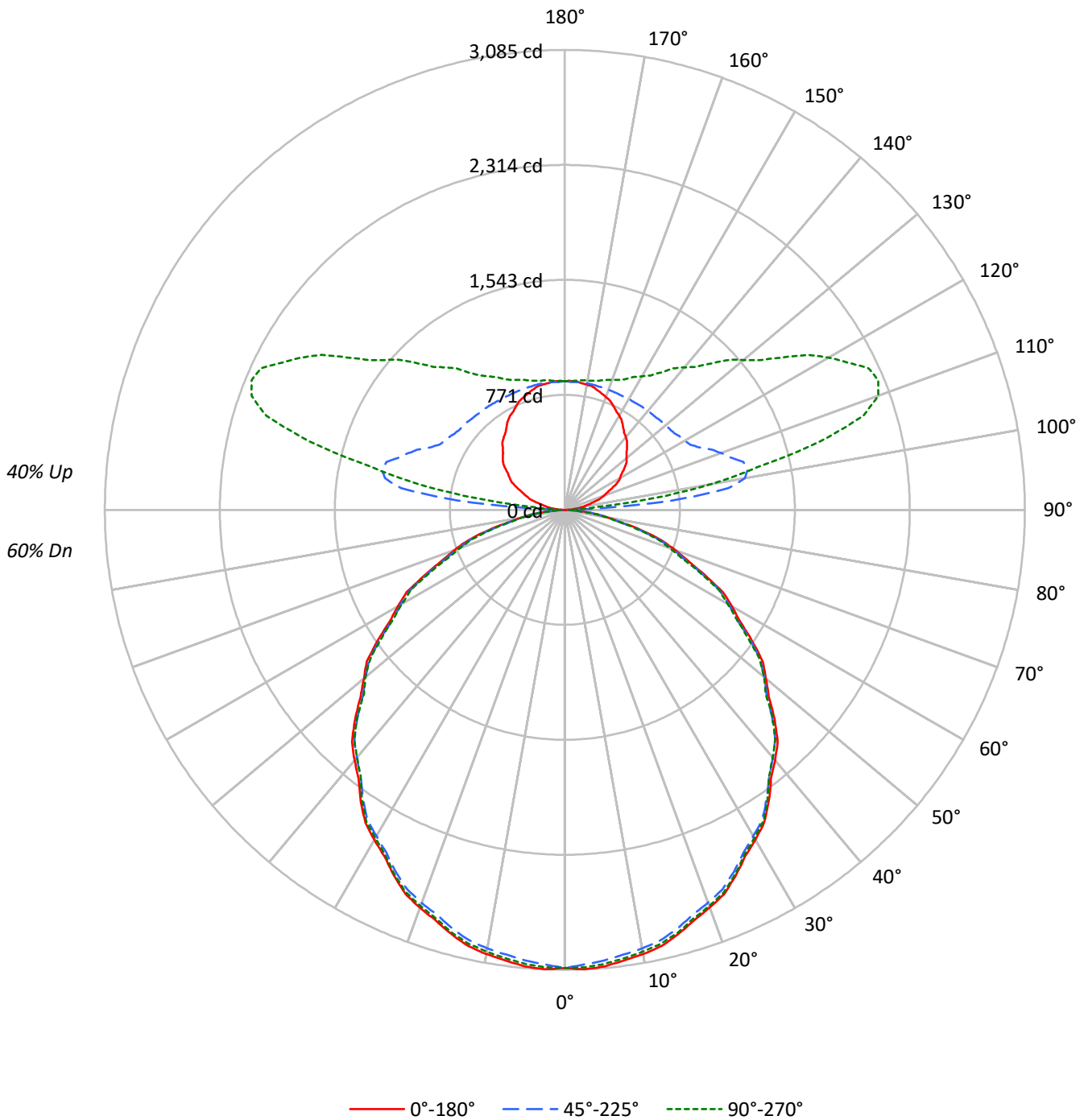
Input Watts (W): 114.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	9329	9398
15°	9378	9263	9342
20°	9293	9184	9257
25°	9191	9096	9163
30°	9074	8975	9025
35°	8955	8861	8903
40°	8804	8715	8703
45°	8653	8544	8569
50°	8413	8346	8346
55°	8217	8113	8038
60°	7953	7815	7747
65°	7524	7381	7280
70°	7066	6890	6715
75°	6357	6125	5992
80°	5085	4984	4936
85°	3049	3440	3539



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.1	2.1
10°-20°	825.9	5.9
20°-30°	1240.9	8.8
30°-40°	1480.6	10.5
40°-50°	1518.4	10.8
50°-60°	1353.0	9.6
60°-70°	1008.8	7.2
70°-80°	547.1	3.9
80°-90°	129.0	0.9
90°-100°	414.7	3.0
100°-110°	1126.5	8.0
110°-120°	1158.3	8.3
120°-130°	926.1	6.6
130°-140°	727.6	5.2
140°-150°	557.9	4.0
150°-160°	401.2	2.9
160°-170°	245.4	1.7
170°-180°	82.7	0.6
0°-30°	2356.9	16.8
0°-40°	3837.5	27.3
0°-60°	6708.9	47.8
0°-90°	8393.8	59.8
90°-120°	2699.5	19.2
90°-150°	4911.2	35.0
90°-180°	5640.0	40.2
0°-180°	14034.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3074	3074	3074	3074	3074	
5°	3074	3068	3034	3060	3057	292
15°	2945	2940	2909	2932	2934	831
25°	2708	2706	2681	2695	2700	1247
35°	2385	2380	2360	2360	2371	1490
45°	1990	1981	1964	1965	1970	1531
55°	1533	1530	1513	1499	1499	1369
65°	1034	1034	1014	1003	1000	1029
75°	535	524	516	507	504	562
85°	86	92	98	98	100	120
90°	3	11	19	25	25	6
95°	61	227	722	314	211	65
105°	200	311	1239	1886	1775	212
115°	356	432	992	1973	2247	351
125°	489	557	897	1512	1783	436
135°	589	654	872	1231	1389	455
145°	680	729	861	1046	1125	427
155°	769	797	856	940	967	355
165°	833	844	858	894	897	235
175°	864	867	861	872	869	82
180°	864	864	864	864	864	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3073.5	3073.5	3073.5	3073.5	3073.5
2.5°	3084.7	3078.1	3051.3	3073.5	3071.4
5°	3073.5	3068.1	3034.5	3059.5	3056.9
7.5°	3048.5	3042.5	3009.5	3034.5	3034.0
10°	3026.2	3018.0	2987.2	3012.2	3009.5
12.5°	2997.3	2989.0	2958.2	2983.2	2980.5
15°	2945.4	2939.9	2909.2	2931.5	2934.3
17.5°	2886.3	2875.9	2848.4	2870.2	2873.0
20°	2839.5	2831.3	2806.1	2825.6	2828.4
22.5°	2790.4	2782.2	2757.0	2776.5	2779.3
25°	2708.5	2705.8	2680.7	2694.8	2700.2
27.5°	2619.9	2612.3	2592.0	2602.7	2608.3
30°	2555.3	2549.8	2527.4	2535.9	2541.3
32.5°	2488.4	2485.1	2465.0	2469.0	2476.7
35°	2385.3	2379.9	2360.2	2360.5	2371.4
37.5°	2271.0	2265.0	2248.8	2246.0	2250.4
40°	2193.0	2184.8	2170.7	2167.9	2167.9
42.5°	2112.8	2106.8	2088.3	2083.4	2089.9
45°	1989.6	1981.4	1964.5	1964.7	1970.1
47.5°	1856.4	1853.1	1833.5	1824.6	1826.8
50°	1758.3	1763.7	1744.3	1733.5	1744.3
52.5°	1673.6	1670.3	1653.0	1641.9	1646.3
55°	1532.6	1529.9	1513.1	1499.1	1499.1
57.5°	1391.1	1384.0	1366.6	1356.1	1364.3
60°	1293.0	1290.2	1270.6	1251.3	1259.5
62.5°	1194.8	1189.9	1170.3	1157.6	1163.7
65°	1033.9	1033.9	1014.3	1003.1	1000.4
67.5°	892.8	879.8	868.8	855.3	851.6
70°	785.8	774.9	766.3	755.0	746.8
72.5°	681.1	674.5	661.5	650.4	648.7
75°	535.0	524.1	515.5	507.1	504.3
77.5°	380.6	378.5	370.6	366.2	367.8
80°	287.1	287.1	281.4	281.3	278.7
82.5°	202.3	204.5	203.4	199.0	198.4
85°	86.4	91.8	97.5	97.6	100.3
87.5°	16.1	28.7	28.4	29.5	29.5
90°	2.7	10.9	19.4	25.0	25.0
92.5°	25.0	113.5	197.2	84.7	71.6
95°	61.1	226.8	722.2	314.3	211.1
97.5°	101.1	250.5	1107.2	861.4	605.0
100°	127.8	266.3	1224.9	1241.7	1002.8
102.5°	154.5	282.1	1256.0	1535.7	1324.9
105°	200.0	311.4	1238.9	1886.3	1774.9
107.5°	247.2	345.5	1167.2	2067.4	2098.3
110°	280.5	370.1	1113.9	2103.0	2236.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	309.4	394.7	1060.6	2073.4	2273.8
115°	355.5	431.6	991.7	1972.9	2247.1
117.5°	398.9	471.7	947.7	1830.3	2139.4
120°	427.7	498.4	927.8	1734.7	2041.7
122.5°	452.2	522.8	914.5	1638.9	1935.0
125°	488.9	556.8	897.2	1511.7	1783.3
127.5°	521.7	589.0	887.8	1415.3	1648.3
130°	541.7	606.8	883.4	1354.8	1563.9
132.5°	561.7	626.8	878.8	1303.0	1488.3
135°	588.9	654.0	872.2	1231.3	1388.8
137.5°	618.3	677.6	868.8	1168.0	1300.5
140°	636.1	693.2	866.7	1127.7	1247.2
142.5°	653.8	706.5	864.4	1096.1	1196.1
145°	680.5	729.4	861.1	1046.2	1124.9
147.5°	710.5	752.4	858.3	1006.9	1068.9
150°	730.6	765.9	858.3	984.4	1033.3
152.5°	746.1	777.1	856.1	964.2	1004.4
155°	769.4	796.6	855.6	939.5	966.7
157.5°	792.2	813.4	855.6	922.7	943.3
160°	805.5	824.6	855.6	911.4	927.8
162.5°	818.9	833.5	857.7	902.5	914.5
165°	833.3	844.2	858.3	894.4	897.2
167.5°	848.3	853.7	861.1	885.0	887.2
170°	852.7	858.2	861.1	880.5	880.5
172.5°	857.3	860.5	861.1	876.1	876.1
175°	863.8	866.6	861.1	872.2	869.4
177.5°	866.1	866.1	859.4	868.2	863.8
180°	863.8	863.8	863.8	863.8	863.8

(END OF REPORT)