

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: P565117

Luminaire Tested: **SQ4-PW1-150U-050D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565117
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-150U-050D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20628.1 lumens
Efficiency: N/A
Efficacy: 122.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

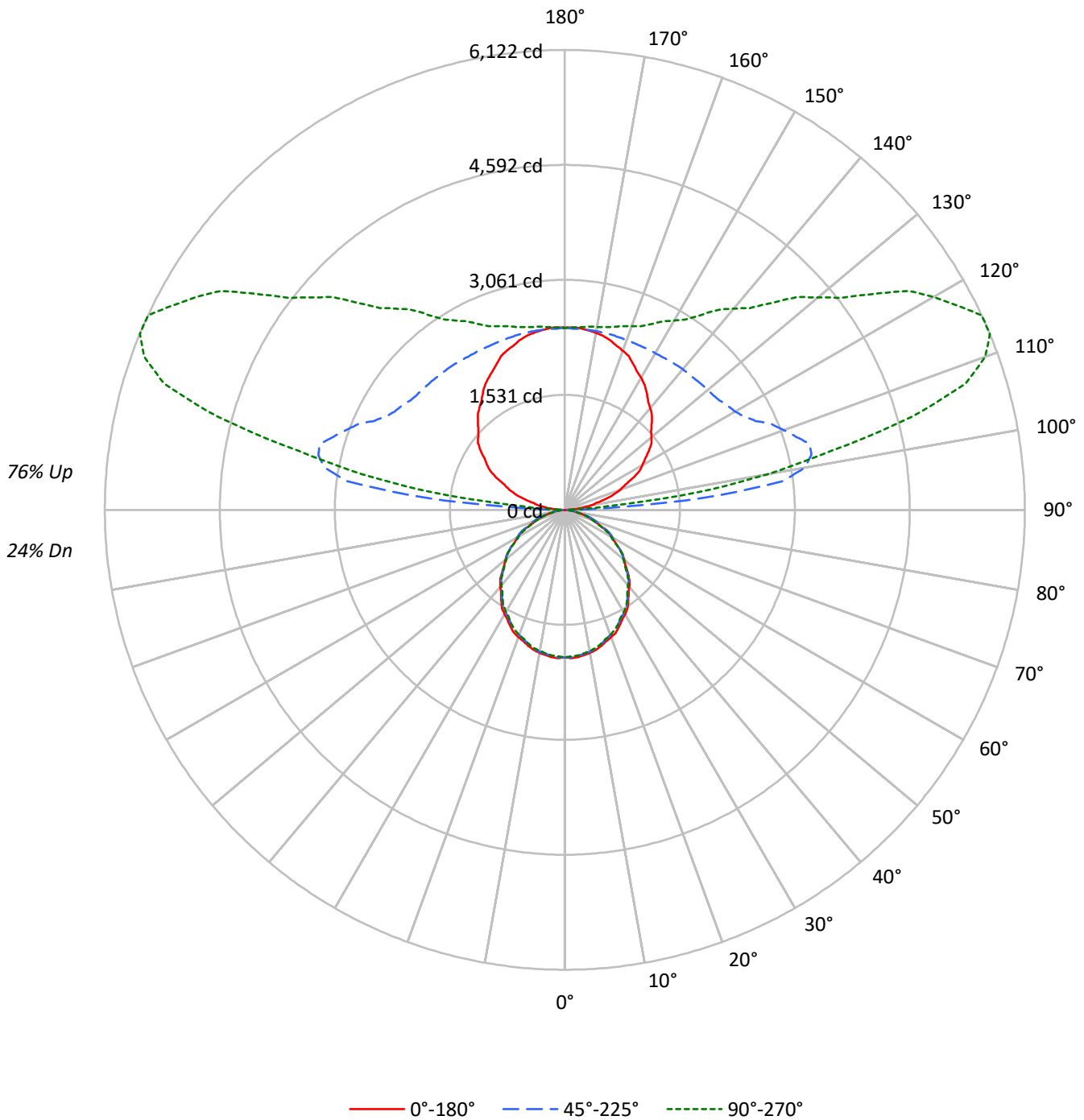
Input Watts (W): 168.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24				24
1	92	88	84	81	82	78	75	72	60	58	57	44	43	42	29	28	27	21				21
2	84	77	71	66	74	68	64	59	53	50	47	39	37	35	25	24	23	17				17
3	76	67	60	55	68	60	54	50	47	43	39	34	32	29	22	21	20	15				15
4	70	60	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13				13
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15	11				11
6	59	47	40	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10				10
7	54	43	35	30	48	38	32	27	30	25	22	22	19	17	15	13	11	9				9
8	50	38	31	26	45	35	28	24	27	22	19	20	17	15	14	12	10	8				8
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9	7				7
10	43	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	8	6				6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6044	6044	6044
5°	6083	6035	6009
10°	6035	5986	5953
15°	5971	5905	5883
20°	5899	5809	5797
25°	5817	5711	5694
30°	5694	5608	5571
35°	5532	5454	5422
40°	5360	5276	5256
45°	5151	5083	5061
50°	4938	4896	4863
55°	4707	4707	4633
60°	4420	4505	4346
65°	4045	4246	3944
70°	3565	3908	3472
75°	3045	3498	2962
80°	2361	2943	2393
85°	1528	2262	2015



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.1	0.9
10°-20°	522.5	2.5
20°-30°	775.0	3.8
30°-40°	906.9	4.4
40°-50°	902.8	4.4
50°-60°	779.6	3.8
60°-70°	561.2	2.7
70°-80°	294.3	1.4
80°-90°	78.0	0.4
90°-100°	1126.1	5.5
100°-110°	3044.8	14.8
110°-120°	3201.2	15.5
120°-130°	2600.2	12.6
130°-140°	2039.6	9.9
140°-150°	1565.4	7.6
150°-160°	1125.8	5.5
160°-170°	687.8	3.3
170°-180°	231.9	1.1
0°-30°	1482.6	7.2
0°-40°	2389.4	11.6
0°-60°	4071.9	19.7
0°-90°	5005.3	24.3
90°-120°	7372.0	35.7
90°-150°	13577.3	65.8
90°-180°	15623.0	75.7
0°-180°	20628.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1965	1965	1965	1965	1965	
5°	1970	1948	1955	1950	1946	187
15°	1875	1852	1854	1851	1848	529
25°	1714	1686	1683	1673	1678	788
35°	1474	1453	1453	1439	1444	921
45°	1184	1174	1169	1165	1164	914
55°	878	876	878	866	864	783
65°	556	573	584	561	542	551
75°	256	280	294	275	249	275
85°	43	57	64	60	57	57
90°	5	15	34	36	34	13
95°	175	613	1873	969	576	183
105°	566	875	3378	4982	4778	596
115°	996	1218	2801	5423	6122	984
125°	1364	1563	2525	4261	5005	1216
135°	1635	1829	2457	3440	3894	1264
145°	1902	2044	2423	2945	3169	1190
155°	2147	2231	2402	2642	2728	990
165°	2337	2360	2413	2507	2520	658
175°	2426	2423	2415	2446	2441	230
180°	2423	2423	2423	2423	2423	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1965.3	1965.3	1965.3	1965.3	1965.3
2.5°	1976.4	1960.1	1965.3	1960.9	1951.5
5°	1970.5	1948.5	1954.9	1949.7	1946.3
7.5°	1950.4	1930.1	1934.8	1929.3	1927.2
10°	1932.4	1912.1	1916.8	1909.8	1906.4
12.5°	1911.6	1890.0	1894.7	1887.7	1885.7
15°	1875.3	1851.6	1854.5	1851.0	1847.6
17.5°	1833.0	1809.0	1809.5	1803.9	1803.2
20°	1802.5	1777.2	1774.8	1768.0	1771.4
22.5°	1769.3	1742.6	1740.2	1730.6	1735.4
25°	1714.2	1685.5	1683.1	1672.8	1677.9
27.5°	1650.5	1622.1	1622.1	1607.7	1613.1
30°	1603.4	1576.3	1579.2	1562.0	1568.8
32.5°	1553.6	1529.2	1530.7	1513.5	1520.3
35°	1473.6	1453.2	1452.8	1439.0	1444.1
37.5°	1391.8	1373.9	1371.0	1363.1	1364.5
40°	1335.0	1319.8	1314.2	1309.1	1309.1
42.5°	1275.5	1261.6	1256.1	1252.2	1250.9
45°	1184.4	1174.2	1168.8	1165.3	1163.6
47.5°	1094.3	1084.9	1080.1	1077.7	1076.0
50°	1032.0	1025.2	1023.3	1018.1	1016.4
52.5°	969.7	965.6	963.8	957.2	955.5
55°	877.9	876.2	877.9	865.7	864.0
57.5°	782.3	785.0	790.6	774.3	770.2
60°	718.6	725.4	732.4	713.2	706.5
62.5°	653.5	664.3	674.3	652.2	642.8
65°	555.8	572.8	583.5	560.6	542.0
67.5°	461.6	482.6	495.6	470.9	449.9
70°	396.5	420.2	434.6	409.8	386.1
72.5°	339.7	366.1	377.8	354.4	330.7
75°	256.3	280.0	294.4	274.7	249.3
77.5°	181.8	204.2	216.1	199.0	178.0
80°	133.3	157.0	166.2	152.0	135.1
82.5°	94.5	114.2	120.5	111.9	100.4
85°	43.3	56.8	64.1	60.5	57.1
87.5°	12.1	23.6	33.1	33.6	34.5
90°	5.2	15.4	33.9	36.5	33.9
92.5°	74.1	269.9	532.6	231.2	167.5
95°	174.8	613.4	1872.8	969.2	576.4
97.5°	280.7	703.5	2919.2	2415.8	1774.2
100°	359.9	739.9	3244.7	3383.9	2736.1
102.5°	433.0	790.5	3359.5	4117.9	3633.4
105°	566.0	874.6	3377.8	4982.5	4778.4
107.5°	689.1	970.7	3230.1	5521.8	5589.6
110°	785.1	1040.1	3098.7	5666.6	5954.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	870.7	1109.4	2977.7	5637.7	6121.7
115°	996.4	1218.3	2801.3	5422.9	6121.7
117.5°	1119.5	1327.6	2685.0	5094.8	5887.0
120°	1194.6	1398.6	2616.1	4859.4	5667.9
122.5°	1265.6	1465.5	2574.4	4607.1	5421.6
125°	1364.1	1563.1	2524.8	4260.7	5005.4
127.5°	1454.9	1650.3	2495.6	3978.0	4632.9
130°	1505.0	1706.5	2483.1	3803.3	4395.0
132.5°	1557.2	1756.6	2470.6	3645.8	4190.5
135°	1635.4	1829.2	2457.0	3440.2	3894.2
137.5°	1714.2	1897.3	2445.6	3273.5	3643.3
140°	1768.4	1939.3	2441.4	3166.1	3495.1
142.5°	1820.6	1981.3	2433.0	3069.2	3357.4
145°	1901.5	2044.3	2423.1	2944.7	3169.1
147.5°	1975.0	2101.5	2411.6	2831.9	3004.3
150°	2029.3	2141.5	2407.5	2770.6	2908.3
152.5°	2079.3	2177.3	2405.4	2713.7	2826.9
155°	2146.6	2230.8	2402.3	2641.6	2728.3
157.5°	2216.5	2275.2	2402.8	2591.4	2648.5
160°	2256.2	2304.6	2404.9	2559.7	2600.5
162.5°	2287.5	2327.8	2407.0	2534.4	2565.0
165°	2337.0	2360.0	2412.7	2506.9	2519.6
167.5°	2371.0	2386.8	2413.2	2483.3	2489.4
170°	2391.8	2399.5	2415.3	2472.7	2472.7
172.5°	2408.5	2410.0	2415.3	2460.1	2458.1
175°	2425.7	2423.2	2415.3	2446.5	2441.4
177.5°	2431.5	2425.3	2414.8	2435.5	2429.4
180°	2423.1	2423.1	2423.1	2423.1	2423.1

(END OF REPORT)