

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: P564637

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

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564637
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-PW1-050U-050D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10169.2 lumens
Efficiency: N/A
Efficacy: 127.8 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: General Diffuse

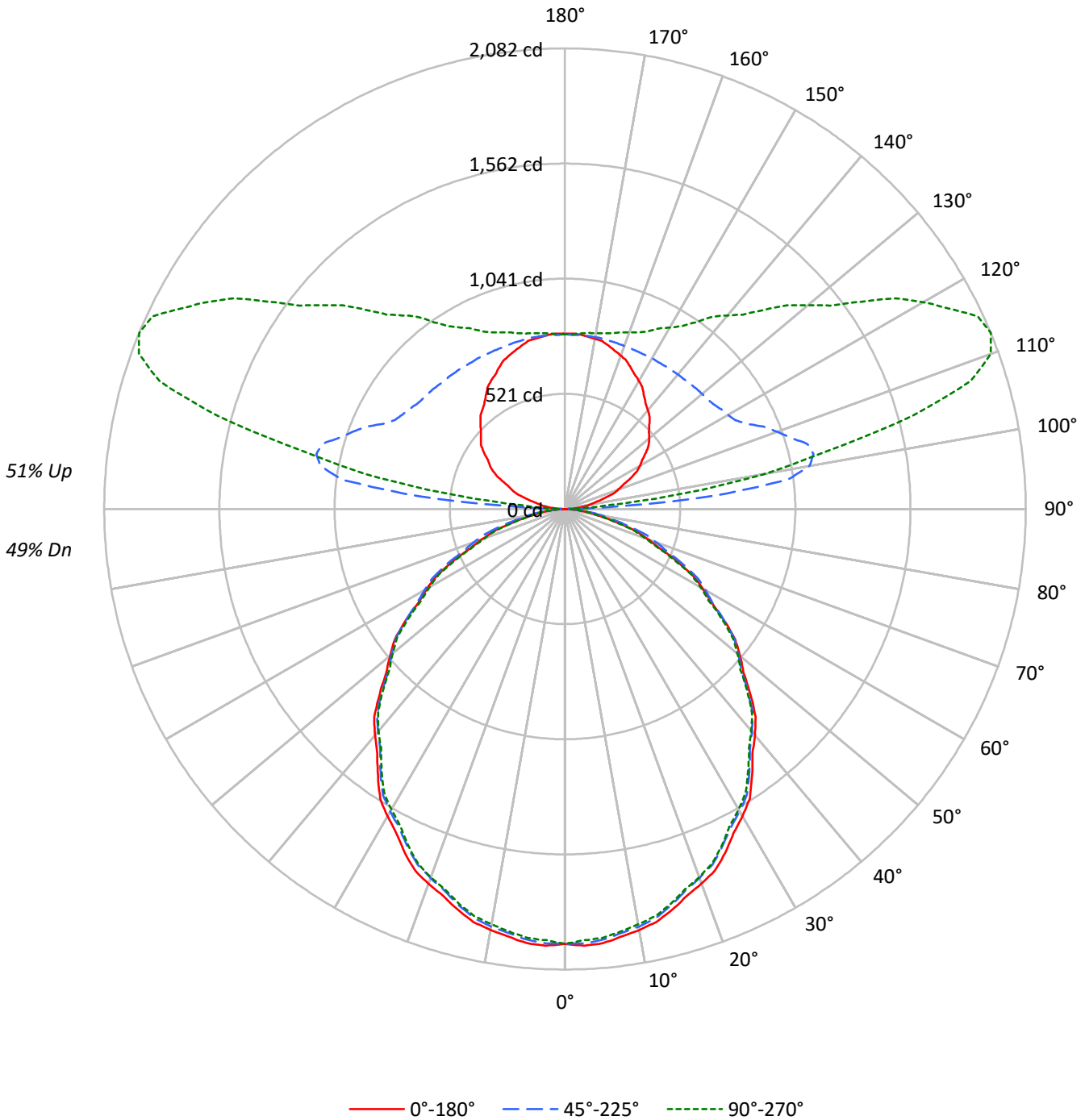
Input Watts (W): 79.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	55	55	55	49				49
1	98	93	90	86	90	86	83	80	73	70	68	60	59	57	49	48	47				42	
2	89	82	76	70	82	75	70	66	64	60	57	53	50	48	43	41	40				35	
3	81	72	65	59	75	66	60	55	56	52	48	47	44	41	38	36	34				30	
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	32	29				26	
5	68	57	49	43	63	53	45	40	45	39	35	38	33	30	31	28	25				22	
6	63	51	43	37	58	47	40	35	40	35	31	34	30	26	28	25	22				19	
7	58	46	38	32	53	43	36	31	37	31	27	31	27	23	26	22	20				17	
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	24	20	18				15	
9	50	38	31	26	46	35	29	24	31	25	21	26	22	19	22	19	16				14	
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15				13	

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



TEST NUMBER: P564637

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.1	1.8
10°-20°	522.5	5.1
20°-30°	775.0	7.6
30°-40°	906.9	8.9
40°-50°	902.8	8.9
50°-60°	779.6	7.7
60°-70°	561.2	5.5
70°-80°	294.3	2.9
80°-90°	76.0	0.7
90°-100°	379.8	3.7
100°-110°	1031.8	10.1
110°-120°	1060.8	10.4
120°-130°	848.2	8.3
130°-140°	666.4	6.6
140°-150°	511.0	5.0
150°-160°	367.5	3.6
160°-170°	224.7	2.2
170°-180°	75.7	0.7
0°-30°	1482.6	14.6
0°-40°	2389.4	23.5
0°-60°	4071.9	40.0
0°-90°	5003.3	49.2
90°-120°	2472.4	24.3
90°-150°	4498.0	44.2
90°-180°	5166.0	50.8
0°-180°	10169.2	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°	2	10	18	23	23	5
95°	56	208	661	288	193	59
105°	183	285	1135	1728	1626	195
115°	326	395	908	1807	2058	321
125°	448	510	822	1384	1633	399
135°	539	599	799	1128	1272	417
145°	623	668	789	958	1030	391
155°	705	730	784	860	885	325
165°	763	773	786	819	822	215
175°	791	794	789	799	796	75
180°	791	791	791	791	791	

TEST NUMBER: P564637

CATALOG NUMBER: SQ4-PW1-050U-050D-940-1D-UNV-STD-W-12

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°	11.6	22.6	29.9	30.9	32.3
90°	2.5	10.0	17.8	22.9	22.9
92.5°	22.9	104.0	180.6	77.6	65.6
95°	56.0	207.7	661.4	287.9	193.3
97.5°	92.6	229.4	1014.0	788.9	554.1
100°	117.0	243.9	1121.9	1137.3	918.4
102.5°	141.4	258.4	1150.4	1406.5	1213.5
105°	183.2	285.2	1134.6	1727.6	1625.6
107.5°	226.4	316.5	1069.0	1893.4	1921.8
110°	256.9	339.0	1020.2	1926.1	2047.9



TEST NUMBER: P564637

CATALOG NUMBER: SQ4-PW1-050U-050D-940-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	283.4	361.5	971.3	1899.0	2082.5
115°	325.6	395.3	908.2	1806.9	2058.1
117.5°	365.3	432.0	868.0	1676.3	1959.4
120°	391.8	456.5	849.7	1588.8	1869.9
122.5°	414.2	478.8	837.5	1501.0	1772.2
125°	447.7	509.9	821.7	1384.5	1633.3
127.5°	477.8	539.5	813.1	1296.2	1509.6
130°	496.1	555.8	809.0	1240.8	1432.3
132.5°	514.4	574.1	804.9	1193.4	1363.1
135°	539.3	599.0	798.8	1127.7	1272.0
137.5°	566.3	620.5	795.8	1069.7	1191.1
140°	582.6	634.8	793.7	1032.8	1142.3
142.5°	598.9	647.1	791.7	1003.9	1095.5
145°	623.3	668.1	788.6	958.2	1030.3
147.5°	650.8	689.1	786.1	922.2	978.9
150°	669.1	701.4	786.1	901.6	946.4
152.5°	683.3	711.7	784.1	883.1	919.9
155°	704.7	729.6	783.6	860.4	885.3
157.5°	725.6	745.0	783.6	845.0	864.0
160°	737.8	755.2	783.6	834.8	849.7
162.5°	750.0	763.4	785.6	826.5	837.5
165°	763.2	773.2	786.1	819.2	821.7
167.5°	776.9	781.9	788.6	810.6	812.6
170°	781.0	786.0	788.6	806.5	806.5
172.5°	785.1	788.1	788.6	802.4	802.4
175°	791.2	793.7	788.6	798.8	796.3
177.5°	793.2	793.2	787.1	795.2	791.2
180°	791.2	791.2	791.2	791.2	791.2

(END OF REPORT)