

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: P520287

Luminaire Tested: **SQ4-F-125U-050D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520287
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-125U-050D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

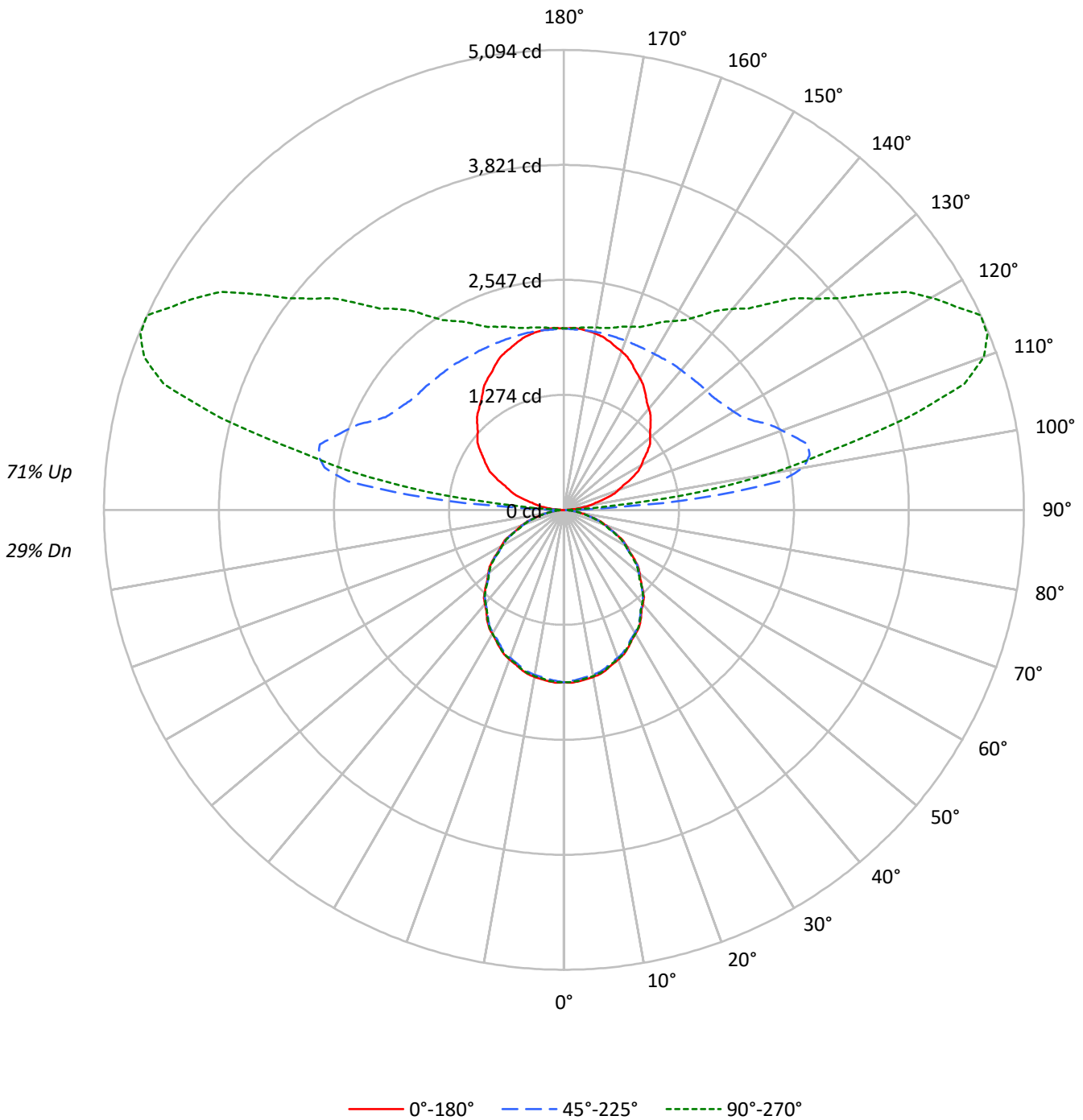
Lumens per Lamp: N/A
Luminaire Lumens: 18183.9 lumens
Efficiency: N/A
Efficacy: 119.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 152.8
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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	29
1	93	89	85	82	83	80	77	74	63	60	58	47	45	44	32	31	31	24
2	85	77	72	67	76	70	65	60	55	51	48	41	39	37	28	27	26	20
3	77	68	61	55	69	61	55	50	48	44	40	36	33	31	25	23	22	17
4	70	60	52	47	63	54	47	42	43	38	34	32	29	26	22	20	19	15
5	64	53	45	40	57	48	41	36	38	33	29	29	25	23	20	18	16	13
6	59	48	40	34	53	43	36	31	34	29	25	26	22	20	18	16	14	11
7	55	43	35	30	49	39	32	27	31	26	22	23	20	17	16	14	13	10
8	51	39	31	26	45	35	28	24	28	23	20	21	18	15	15	13	11	9
9	47	35	28	23	42	32	26	21	26	21	17	20	16	14	14	12	10	8
10	44	32	25	21	39	29	23	19	23	19	16	18	15	12	13	11	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5875	5875	5875
5°	5889	5818	5866
10°	5870	5798	5838
15°	5830	5756	5805
20°	5775	5708	5750
25°	5710	5640	5693
30°	5630	5585	5621
35°	5568	5501	5530
40°	5462	5410	5421
45°	5350	5306	5306
50°	5237	5188	5163
55°	5115	5046	5019
60°	4923	4845	4813
65°	4689	4597	4541
70°	4369	4277	4185
75°	3920	3799	3707
80°	3170	3124	3036
85°	1895	2163	2255



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.2	1.0
10°-20°	513.3	2.8
20°-30°	770.9	4.2
30°-40°	920.2	5.1
40°-50°	943.0	5.2
50°-60°	841.0	4.6
60°-70°	626.3	3.4
70°-80°	340.0	1.9
80°-90°	83.4	0.5
90°-100°	939.5	5.2
100°-110°	2530.9	13.9
110°-120°	2656.1	14.6
120°-130°	2155.4	11.9
130°-140°	1690.4	9.3
140°-150°	1297.8	7.1
150°-160°	933.1	5.1
160°-170°	570.1	3.1
170°-180°	192.2	1.1
0°-30°	1464.4	8.1
0°-40°	2384.7	13.1
0°-60°	4168.7	22.9
0°-90°	5218.4	28.7
90°-120°	6126.5	33.7
90°-150°	11270.0	62.0
90°-180°	12965.0	71.3
0°-180°	18183.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1910	1910	1910	1910	1910	
5°	1908	1905	1885	1903	1900	181
15°	1831	1826	1808	1823	1823	516
25°	1683	1678	1662	1672	1678	775
35°	1483	1478	1465	1466	1473	926
45°	1230	1233	1220	1217	1220	949
55°	954	954	941	934	936	850
65°	644	642	632	624	624	638
75°	330	327	320	314	312	349
85°	54	59	61	64	64	75
90°	5	15	31	33	33	11
95°	143	511	1540	788	545	150
105°	468	728	2799	4188	3930	492
115°	826	1012	2331	4504	5094	813
125°	1128	1296	2093	3537	4163	1007
135°	1358	1516	2034	2854	3231	1049
145°	1571	1694	2008	2440	2620	985
155°	1783	1848	1990	2189	2259	821
165°	1934	1957	1998	2078	2088	545
175°	2011	2008	2001	2029	2024	191
180°	2008	2008	2008	2008	2008	



TEST NUMBER: P520287

CATALOG NUMBER: SQ4-F-125U-050D-940-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1910.3	1910.3	1910.3	1910.3	1910.3
2.5°	1916.4	1912.5	1896.0	1910.3	1908.2
5°	1907.7	1905.3	1884.7	1902.6	1900.0
7.5°	1893.9	1888.9	1868.9	1886.2	1883.7
10°	1879.6	1874.6	1856.5	1871.8	1869.4
12.5°	1861.2	1858.2	1838.2	1853.5	1853.0
15°	1831.0	1826.0	1808.0	1823.3	1823.3
17.5°	1791.1	1788.1	1770.7	1785.5	1783.5
20°	1764.5	1759.5	1744.0	1756.9	1756.9
22.5°	1731.8	1728.8	1713.4	1724.1	1726.2
25°	1682.7	1677.7	1662.2	1672.5	1677.6
27.5°	1628.5	1624.4	1611.6	1618.3	1621.9
30°	1585.5	1585.5	1572.8	1575.4	1582.9
32.5°	1546.6	1546.6	1531.8	1534.4	1538.0
35°	1483.2	1478.2	1465.3	1465.5	1473.0
37.5°	1409.6	1407.1	1398.8	1397.3	1399.3
40°	1360.5	1358.0	1347.6	1350.2	1350.2
42.5°	1311.4	1308.9	1298.5	1295.1	1299.1
45°	1230.0	1232.6	1219.9	1217.3	1219.9
47.5°	1149.7	1149.7	1139.5	1132.5	1136.4
50°	1094.5	1094.5	1084.3	1079.1	1079.1
52.5°	1037.2	1039.2	1027.0	1019.9	1021.9
55°	953.9	953.9	941.1	933.5	936.0
57.5°	861.8	861.8	849.0	841.4	845.9
60°	800.4	800.4	787.7	780.1	782.5
62.5°	739.0	739.0	726.2	718.6	719.1
65°	644.4	641.9	631.7	624.0	624.0
67.5°	553.4	546.9	539.1	528.8	528.8
70°	485.9	483.4	475.7	465.4	465.4
72.5°	424.5	420.0	412.3	404.1	404.1
75°	329.9	327.4	319.7	314.5	312.0
77.5°	236.3	234.3	233.7	226.6	228.7
80°	179.0	179.0	176.4	171.4	171.4
82.5°	127.9	129.9	125.3	124.2	122.3
85°	53.7	58.7	61.3	63.9	63.9
87.5°	11.2	19.2	20.4	23.0	23.0
90°	5.1	15.1	30.7	33.3	33.3
92.5°	62.5	220.5	435.9	209.9	145.8
95°	143.3	511.0	1540.2	787.6	545.0
97.5°	228.7	584.9	2415.7	2018.1	1521.8
100°	294.2	614.4	2694.1	2818.8	2338.4
102.5°	357.7	655.9	2786.2	3418.4	3024.1
105°	468.2	728.4	2799.0	4187.5	3929.8
107.5°	572.6	804.8	2679.7	4582.7	4649.3
110°	642.2	862.3	2571.3	4705.5	4948.1



TEST NUMBER: P520287

CATALOG NUMBER: SQ4-F-125U-050D-940-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	715.9	920.0	2466.9	4678.3	5077.0
115°	826.4	1011.5	2330.8	4503.6	5093.9
117.5°	927.2	1100.8	2225.3	4224.6	4882.1
120°	992.7	1160.3	2172.2	4024.5	4699.9
122.5°	1050.0	1215.6	2133.3	3819.8	4493.2
125°	1128.3	1295.9	2092.8	3537.3	4162.7
127.5°	1203.5	1368.6	2067.3	3288.0	3846.4
130°	1248.5	1413.7	2057.0	3145.3	3635.6
132.5°	1293.6	1456.7	2046.7	3019.5	3469.8
135°	1358.5	1516.2	2034.0	2853.6	3231.4
137.5°	1420.5	1571.5	2027.3	2712.9	3023.1
140°	1463.5	1608.5	2021.2	2626.2	2906.5
142.5°	1508.5	1643.6	2017.1	2545.4	2781.6
145°	1571.0	1693.5	2008.4	2439.8	2619.9
147.5°	1638.4	1745.0	1999.7	2350.9	2492.4
150°	1683.4	1776.1	1995.6	2295.1	2412.6
152.5°	1724.4	1805.0	1993.6	2249.5	2345.1
155°	1783.3	1848.3	1990.5	2189.1	2259.2
157.5°	1834.9	1885.5	1991.0	2146.6	2193.7
160°	1867.7	1910.2	1993.1	2121.7	2156.8
162.5°	1896.4	1930.9	1995.1	2101.1	2126.1
165°	1934.3	1956.8	1998.2	2077.7	2087.7
167.5°	1964.9	1978.0	2000.8	2059.7	2063.7
170°	1985.4	1990.4	2000.8	2049.3	2049.3
172.5°	1997.7	1998.7	2002.7	2039.1	2039.1
175°	2010.9	2008.5	2000.8	2028.8	2023.8
177.5°	2016.6	2012.6	2002.2	2018.5	2014.6
180°	2008.4	2008.4	2008.4	2008.4	2008.4

(END OF REPORT)