

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: P520241

Luminaire Tested: **SQ4-F-100U-100D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520241
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-100D-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

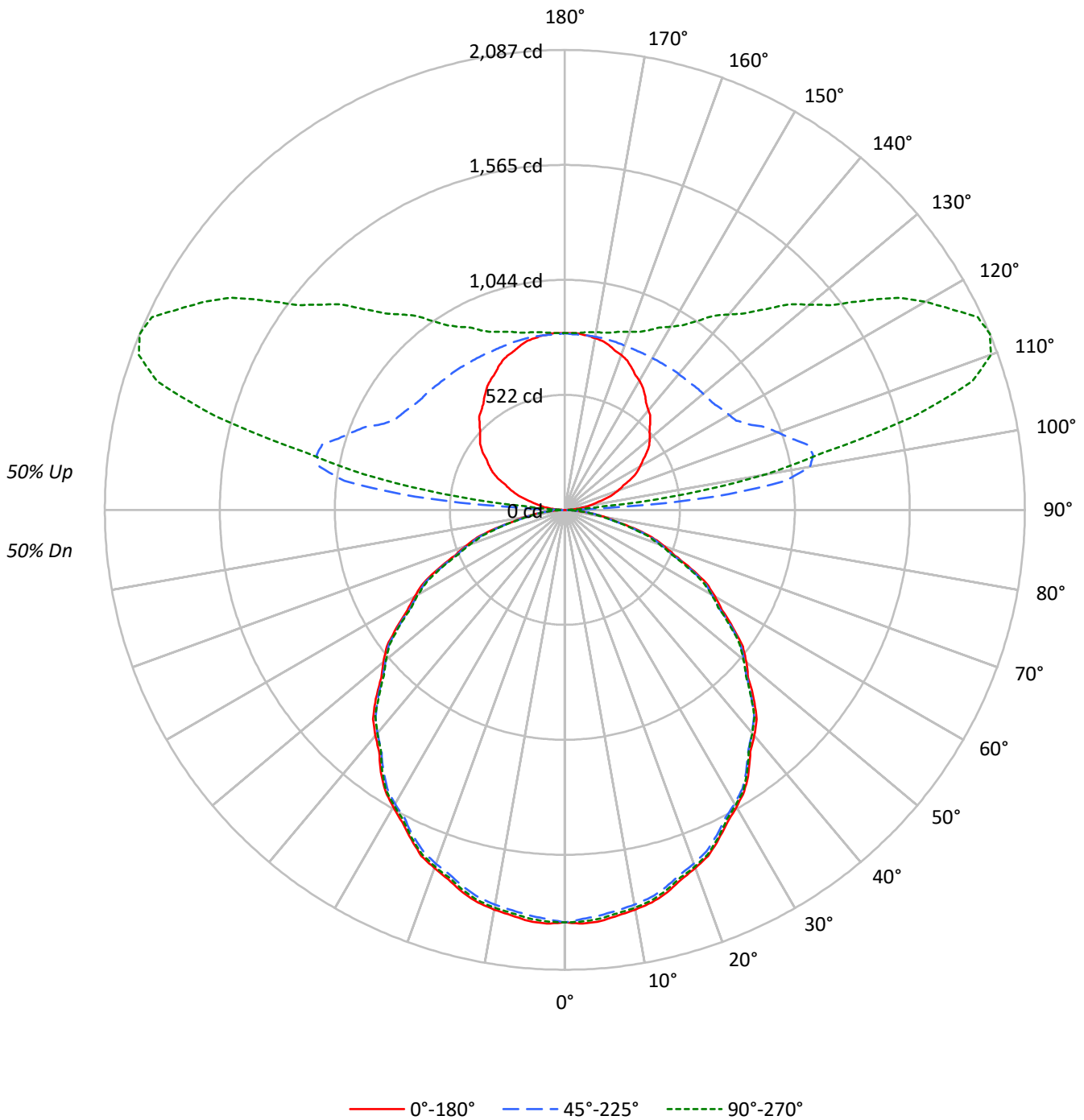
Lumens per Lamp: N/A
Luminaire Lumens: 10315.4 lumens
Efficiency: N/A
Efficacy: 114.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 90.2
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



TEST NUMBER: P520241
CATALOG NUMBER: SQ4-F-100U-100D-940-1D-UNV-STD-W-6

Luminous Intensity Polar Plot





TEST NUMBER: P520241

CATALOG NUMBER: SQ4-F-100U-100D-940-1D-UNV-STD-W-6

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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	89	86	90	86	83	80	73	70	68	61	59	57	49	48	47	42
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	39	35
3	81	71	64	58	74	66	60	55	56	51	47	47	43	40	38	36	33	29
4	74	63	55	49	68	59	52	46	50	44	40	42	38	34	34	31	29	25
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	31	27	25	22
6	63	50	42	36	57	47	40	34	40	34	30	34	29	26	28	24	22	19
7	58	45	37	32	53	42	35	30	36	31	26	31	26	23	25	22	19	17
8	54	41	33	28	49	38	31	27	33	27	23	28	24	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14
10	47	34	27	22	43	32	26	21	28	23	19	24	19	17	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11514	11514	11514
5°	11566	11408	11495
10°	11507	11363	11451
15°	11438	11282	11372
20°	11320	11185	11277
25°	11196	11065	11153
30°	11060	10941	10996
35°	10921	10786	10843
40°	10739	10616	10625
45°	10550	10404	10372
50°	10279	10156	10131
55°	9975	9866	9796
60°	9673	9498	9467
65°	9200	8994	8919
70°	8549	8341	8179
75°	7633	7388	7236
80°	6280	6053	5781
85°	3719	4086	4171



TEST NUMBER: P520241

CATALOG NUMBER: SQ4-F-100U-100D-940-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.7	1.7
10°-20°	503.1	4.9
20°-30°	755.6	7.3
30°-40°	901.7	8.7
40°-50°	924.3	9.0
50°-60°	823.1	8.0
60°-70°	613.5	5.9
70°-80°	332.2	3.2
80°-90°	77.3	0.7
90°-100°	375.4	3.6
100°-110°	1036.3	10.0
110°-120°	1068.7	10.4
120°-130°	858.8	8.3
130°-140°	674.9	6.5
140°-150°	517.6	5.0
150°-160°	372.0	3.6
160°-170°	227.5	2.2
170°-180°	76.7	0.7
0°-30°	1435.4	13.9
0°-40°	2337.1	22.7
0°-60°	4084.4	39.6
0°-90°	5107.4	49.5
90°-120°	2480.4	24.0
90°-150°	4531.8	43.9
90°-180°	5208.0	50.5
0°-180°	10315.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1872	1872	1872	1872	1872	
5°	1873	1870	1848	1864	1862	178
15°	1796	1790	1772	1786	1786	506
25°	1650	1646	1630	1640	1643	760
35°	1454	1448	1436	1439	1444	908
45°	1213	1207	1196	1190	1192	933
55°	930	932	920	911	914	833
65°	632	630	618	612	613	625
75°	321	318	311	304	304	342
85°	53	58	58	59	59	74
90°	3	5	10	12	13	5
95°	55	203	681	280	182	59
105°	185	285	1140	1740	1639	196
115°	331	400	918	1818	2067	325
125°	454	517	832	1408	1653	404
135°	546	605	809	1141	1286	423
145°	634	677	799	971	1045	397
155°	714	738	793	871	899	329
165°	773	783	796	827	834	218
175°	802	803	798	809	807	76
180°	802	802	802	802	802	



TEST NUMBER: P520241

CATALOG NUMBER: SQ4-F-100U-100D-940-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1872.0	1872.0	1872.0	1872.0	1872.0
2.5°	1879.2	1875.1	1858.6	1872.0	1869.9
5°	1873.2	1869.5	1847.6	1864.2	1861.7
7.5°	1855.8	1852.0	1832.6	1848.1	1845.8
10°	1842.4	1838.7	1819.3	1834.7	1833.4
12.5°	1825.0	1821.2	1801.8	1817.3	1816.0
15°	1796.2	1789.9	1771.8	1785.9	1785.9
17.5°	1758.1	1753.4	1736.5	1748.4	1748.6
20°	1729.4	1725.6	1708.8	1721.7	1722.9
22.5°	1700.5	1696.8	1678.0	1689.8	1692.1
25°	1649.7	1646.0	1630.4	1639.5	1643.3
27.5°	1597.3	1591.8	1576.5	1584.5	1587.3
30°	1557.2	1554.7	1540.5	1544.4	1548.2
32.5°	1515.1	1512.6	1500.4	1502.4	1509.1
35°	1454.4	1448.1	1436.4	1439.1	1444.1
37.5°	1382.7	1379.7	1368.3	1366.9	1371.7
40°	1337.5	1332.5	1322.1	1319.6	1323.3
42.5°	1288.2	1283.1	1270.7	1268.3	1273.0
45°	1212.9	1206.6	1196.1	1189.8	1192.4
47.5°	1128.5	1128.5	1117.7	1110.4	1114.2
50°	1074.2	1074.2	1061.3	1054.9	1058.7
52.5°	1017.6	1018.6	1004.7	1001.3	1000.1
55°	930.2	931.5	920.0	911.0	913.5
57.5°	846.0	843.2	829.7	823.9	825.2
60°	786.3	782.6	772.1	763.3	769.6
62.5°	725.7	723.9	713.6	703.6	702.8
65°	632.1	629.7	618.0	611.6	612.8
67.5°	539.1	536.1	525.5	516.3	519.6
70°	475.4	475.4	463.8	458.6	454.8
72.5°	416.8	411.8	403.2	395.9	393.2
75°	321.2	317.5	310.9	304.5	304.5
77.5°	233.8	230.6	226.4	221.9	220.8
80°	177.3	176.1	170.9	169.4	163.2
82.5°	124.8	124.6	121.6	118.2	117.9
85°	52.7	57.7	57.9	59.1	59.1
87.5°	9.8	16.2	16.4	14.7	14.9
90°	2.6	5.0	10.3	11.6	12.9
92.5°	23.0	95.9	171.3	62.5	48.8
95°	55.1	203.1	681.0	279.9	182.1
97.5°	91.3	227.5	1008.8	776.6	562.5
100°	118.0	242.2	1129.9	1137.8	924.6
102.5°	143.6	258.8	1153.4	1405.9	1203.8
105°	184.7	285.0	1140.1	1740.5	1639.0
107.5°	228.3	317.5	1076.5	1902.0	1939.1
110°	259.1	339.3	1027.3	1936.7	2057.1



TEST NUMBER: P520241

CATALOG NUMBER: SQ4-F-100U-100D-940-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	286.8	364.0	981.1	1909.3	2086.9
115°	330.9	399.8	918.3	1817.8	2067.4
117.5°	369.4	438.0	876.9	1689.1	1973.0
120°	395.0	462.8	860.5	1601.9	1887.8
122.5°	419.6	484.3	847.2	1520.5	1791.4
125°	454.0	516.7	832.3	1408.5	1653.1
127.5°	483.2	545.9	823.6	1314.0	1524.9
130°	502.7	565.4	819.5	1256.0	1447.9
132.5°	521.2	580.9	815.4	1207.4	1381.2
135°	546.3	605.3	809.3	1140.9	1286.3
137.5°	574.5	628.3	806.2	1085.0	1209.1
140°	590.0	642.6	804.1	1047.7	1156.8
142.5°	607.4	656.0	802.1	1014.5	1110.6
145°	633.5	677.4	799.0	971.2	1045.2
147.5°	658.7	697.0	796.1	934.7	992.1
150°	677.1	708.5	795.1	912.9	959.2
152.5°	691.5	720.8	794.1	894.3	932.6
155°	714.3	738.2	792.6	871.4	899.0
157.5°	735.4	753.7	792.9	854.8	873.6
160°	747.7	764.0	793.8	845.5	859.2
162.5°	757.9	772.3	794.8	837.2	848.0
165°	773.4	783.4	796.4	827.4	833.6
167.5°	785.1	791.2	797.7	821.3	823.3
170°	791.3	796.3	797.7	818.2	818.2
172.5°	796.4	799.4	797.7	814.1	813.1
175°	801.6	802.8	797.7	809.2	806.7
177.5°	803.6	802.6	797.4	804.6	802.6
180°	801.6	801.6	801.6	801.6	801.6

(END OF REPORT)