

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: P520252

Luminaire Tested: **SQ4-F-100U-125D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520252
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-125D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

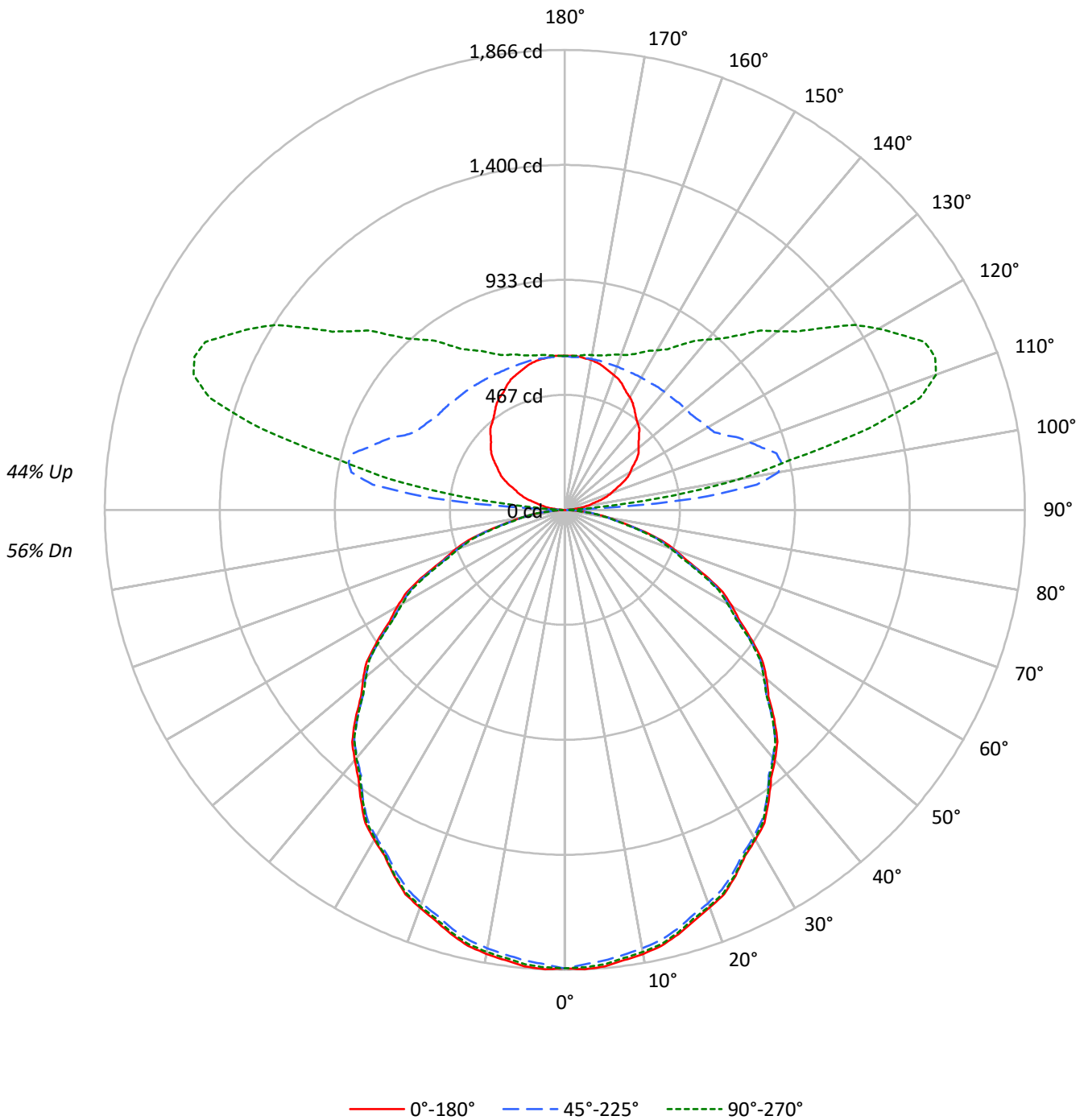
Lumens per Lamp: N/A
Luminaire Lumens: 9132.9 lumens
Efficiency: N/A
Efficacy: 132.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.7
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: P520252
CATALOG NUMBER: SQ4-F-100U-125D-840-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P520252

CATALOG NUMBER: SQ4-F-100U-125D-840-1D-UNV-STD-W-4

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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56
1	99	95	91	87	92	88	85	82	76	73	71	65	63	61	54	53	52	47
2	90	83	76	71	83	77	71	67	66	62	59	57	54	51	48	45	43	39
3	82	73	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37	33
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	32	28
5	69	57	49	43	64	53	46	40	46	41	36	40	35	32	34	30	28	24
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	31	27	24	21
7	59	46	38	32	54	43	36	31	38	32	28	33	28	25	28	24	21	19
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	26	22	19	17
9	51	38	31	26	47	36	29	24	32	26	22	27	23	20	24	20	17	15
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	22	18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17162	17162	17162
5°	17218	16999	17142
10°	17139	16928	17062
15°	17024	16819	16955
20°	16866	16675	16805
25°	16674	16497	16633
30°	16468	16326	16413
35°	16235	16096	16109
40°	15967	15794	15843
45°	15668	15494	15522
50°	15325	15150	15104
55°	14935	14721	14689
60°	14450	14129	14055
65°	13701	13409	13232
70°	12757	12425	12263
75°	11347	11097	10765
80°	9245	8979	8921
85°	5526	6288	6288



TEST NUMBER: P520252

CATALOG NUMBER: SQ4-F-100U-125D-840-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.5	1.9
10°-20°	499.8	5.5
20°-30°	751.0	8.2
30°-40°	896.0	9.8
40°-50°	918.5	10.1
50°-60°	818.6	9.0
60°-70°	609.4	6.7
70°-80°	330.2	3.6
80°-90°	77.1	0.8
90°-100°	292.4	3.2
100°-110°	807.2	8.8
110°-120°	832.5	9.1
120°-130°	669.0	7.3
130°-140°	525.7	5.8
140°-150°	403.2	4.4
150°-160°	289.8	3.2
160°-170°	177.2	1.9
170°-180°	59.7	0.7
0°-30°	1426.3	15.6
0°-40°	2322.4	25.4
0°-60°	4059.5	44.4
0°-90°	5076.1	55.6
90°-120°	1932.1	21.2
90°-150°	3530.0	38.7
90°-180°	4057.0	44.4
0°-180°	9132.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1860	1860	1860	1860	1860	
5°	1859	1856	1836	1852	1851	176
15°	1782	1778	1761	1776	1775	502
25°	1638	1635	1620	1630	1634	754
35°	1441	1440	1429	1429	1430	901
45°	1201	1198	1188	1186	1190	925
55°	928	926	915	908	913	829
65°	628	624	614	610	606	621
75°	318	318	311	305	302	338
85°	52	59	59	60	59	72
90°	2	4	8	9	10	4
95°	43	158	530	218	142	46
105°	144	222	888	1356	1277	153
115°	258	312	715	1416	1610	253
125°	354	402	648	1097	1288	315
135°	426	472	630	889	1002	329
145°	494	528	622	757	814	309
155°	556	575	617	679	700	256
165°	602	610	620	644	649	170
175°	624	625	621	630	628	59
180°	624	624	624	624	624	



TEST NUMBER: P520252

CATALOG NUMBER: SQ4-F-100U-125D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1860.1	1860.1	1860.1	1860.1	1860.1
2.5°	1865.8	1862.6	1846.1	1860.0	1857.7
5°	1859.1	1856.1	1835.5	1851.9	1850.9
7.5°	1843.3	1839.5	1820.8	1836.1	1834.3
10°	1829.4	1826.4	1806.9	1822.2	1821.2
12.5°	1812.2	1809.1	1789.7	1805.0	1804.8
15°	1782.3	1778.3	1760.8	1776.1	1775.1
17.5°	1746.5	1741.8	1724.6	1736.7	1738.7
20°	1717.8	1714.8	1698.4	1709.6	1711.6
22.5°	1688.3	1684.5	1667.2	1680.2	1682.1
25°	1637.9	1634.9	1620.5	1629.8	1633.9
27.5°	1582.7	1582.7	1569.3	1575.9	1578.4
30°	1545.8	1545.8	1532.5	1536.7	1540.6
32.5°	1506.5	1503.2	1490.8	1494.1	1498.1
35°	1441.4	1440.4	1429.1	1429.2	1430.2
37.5°	1374.0	1371.2	1358.9	1359.8	1364.6
40°	1325.7	1323.8	1311.4	1311.5	1315.4
42.5°	1276.5	1274.6	1263.9	1262.2	1263.9
45°	1200.8	1197.8	1187.5	1185.5	1189.6
47.5°	1120.1	1121.0	1108.7	1105.8	1108.1
50°	1067.7	1067.7	1055.5	1049.4	1052.3
52.5°	1012.9	1011.3	998.9	992.1	999.1
55°	928.5	925.5	915.2	908.1	913.2
57.5°	842.1	837.5	827.1	819.4	822.3
60°	783.1	776.2	765.7	759.6	761.7
62.5°	721.7	717.9	706.7	697.5	701.9
65°	627.6	623.5	614.2	610.0	606.1
67.5°	535.2	532.6	522.1	517.7	515.2
70°	472.9	467.9	460.6	455.6	454.6
72.5°	412.4	406.5	399.2	394.9	392.3
75°	318.3	318.3	311.3	305.0	302.0
77.5°	228.9	229.7	223.8	221.7	220.3
80°	174.0	174.0	169.0	166.9	167.9
82.5°	121.6	124.1	122.2	119.3	118.0
85°	52.2	59.2	59.4	60.4	59.4
87.5°	9.4	15.4	17.2	15.7	14.3
90°	2.0	4.0	8.0	9.0	10.0
92.5°	18.0	74.6	133.4	48.7	38.0
95°	42.9	158.2	530.4	218.0	141.9
97.5°	71.1	177.2	785.8	605.0	438.1
100°	91.9	188.6	880.1	886.3	720.2
102.5°	111.9	201.5	898.5	1095.1	937.7
105°	143.8	222.0	888.1	1355.8	1276.7
107.5°	177.9	247.4	838.6	1481.6	1510.4
110°	201.8	264.3	800.2	1508.6	1602.3



TEST NUMBER: P520252

CATALOG NUMBER: SQ4-F-100U-125D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	223.4	283.5	764.2	1487.2	1625.5
115°	257.7	311.5	715.3	1416.0	1610.3
117.5°	287.7	341.2	683.1	1315.7	1536.8
120°	307.6	360.5	670.3	1247.8	1470.5
122.5°	326.8	377.3	659.9	1184.4	1395.4
125°	353.6	402.5	648.3	1097.2	1287.7
127.5°	376.4	425.3	641.5	1023.4	1187.8
130°	391.6	440.4	638.3	978.4	1127.8
132.5°	406.0	452.5	635.2	940.5	1075.9
135°	425.6	471.5	630.3	888.6	1002.0
137.5°	447.5	489.4	628.0	845.1	941.8
140°	459.5	500.5	626.4	816.1	901.1
142.5°	473.1	511.0	624.8	790.3	865.1
145°	493.5	527.6	622.3	756.6	814.1
147.5°	513.1	543.0	620.1	728.1	772.8
150°	527.5	551.9	619.3	711.1	747.3
152.5°	538.6	561.5	618.6	696.6	726.5
155°	556.4	575.0	617.4	678.8	700.3
157.5°	572.9	587.1	617.6	665.8	680.5
160°	582.4	595.1	618.4	658.5	669.3
162.5°	590.4	601.5	619.2	652.1	660.5
165°	602.3	610.1	620.3	644.5	649.3
167.5°	611.5	616.3	621.3	639.7	641.3
170°	616.4	620.2	621.3	637.4	637.4
172.5°	620.3	622.7	621.3	634.1	633.3
175°	624.4	625.3	621.3	630.3	628.4
177.5°	626.0	625.2	621.1	626.7	625.2
180°	624.4	624.4	624.4	624.4	624.4

(END OF REPORT)