

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: P520251

Luminaire Tested: **SQ4-F-100U-125D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520251
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-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

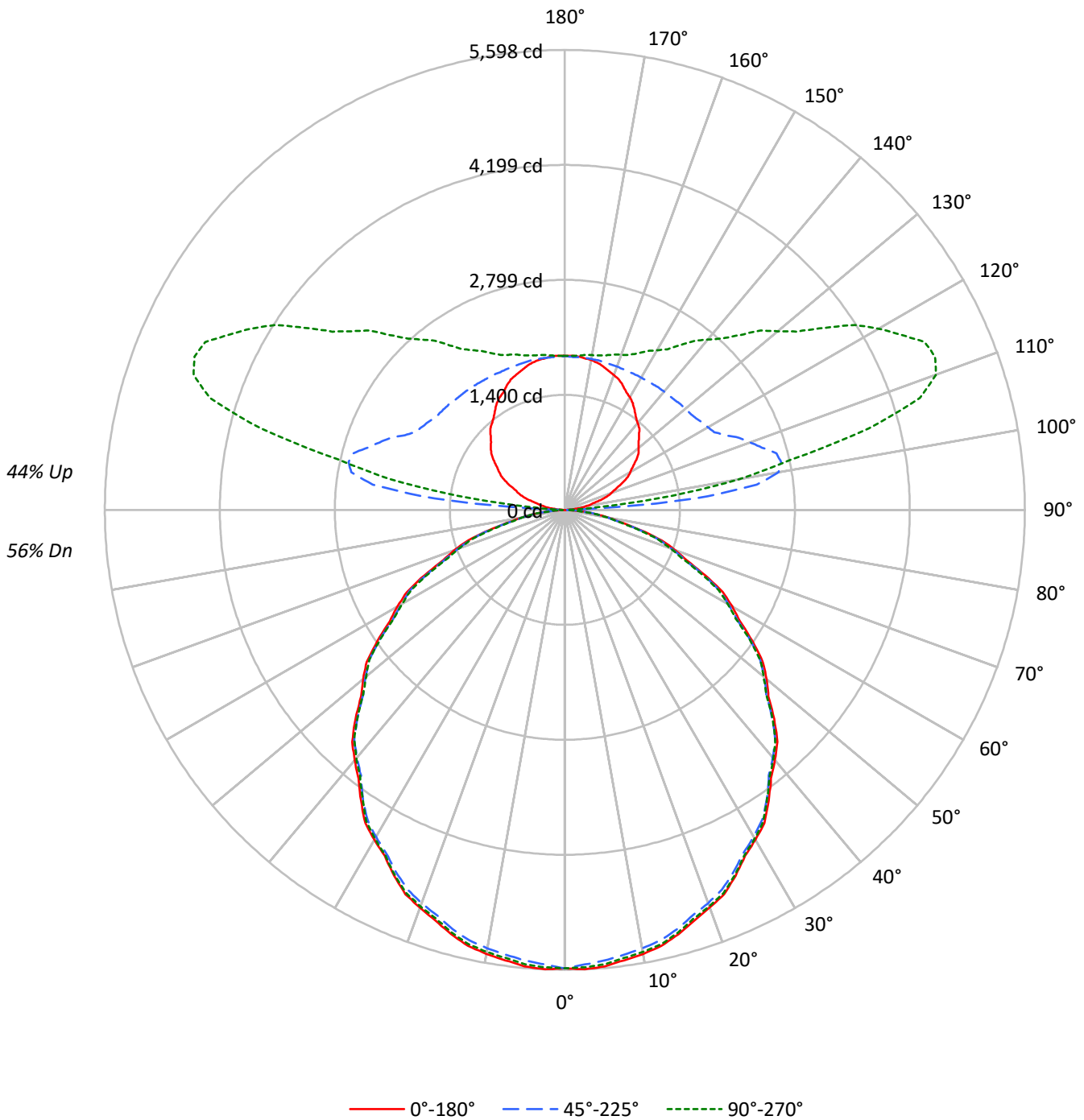
Lumens per Lamp: N/A
Luminaire Lumens: 27398.7 lumens
Efficiency: N/A
Efficacy: 127.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 215.6
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



TEST NUMBER: P520251
CATALOG NUMBER: SQ4-F-100U-125D-840-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P520251

CATALOG NUMBER: SQ4-F-100U-125D-840-1D-UNV-STD-W-12

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20				
RC	80					70					50					30				
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°	17161	17161	17161
5°	17218	16999	17142
10°	17138	16928	17062
15°	17024	16819	16955
20°	16866	16675	16806
25°	16674	16497	16633
30°	16469	16326	16413
35°	16235	16096	16108
40°	15967	15794	15843
45°	15668	15494	15521
50°	15326	15149	15105
55°	14936	14721	14688
60°	14451	14130	14055
65°	13700	13409	13230
70°	12758	12427	12261
75°	11349	11095	10765
80°	9247	8976	8921
85°	5526	6288	6288



TEST NUMBER: P520251

CATALOG NUMBER: SQ4-F-100U-125D-840-1D-UNV-STD-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	526.5	1.9
10°-20°	1499.5	5.5
20°-30°	2252.9	8.2
30°-40°	2688.1	9.8
40°-50°	2755.4	10.1
50°-60°	2456.0	9.0
60°-70°	1828.3	6.7
70°-80°	990.5	3.6
80°-90°	231.3	0.8
90°-100°	877.2	3.2
100°-110°	2421.6	8.8
110°-120°	2497.4	9.1
120°-130°	2006.9	7.3
130°-140°	1577.2	5.8
140°-150°	1209.6	4.4
150°-160°	869.4	3.2
160°-170°	531.7	1.9
170°-180°	179.2	0.7
0°-30°	4279.0	15.6
0°-40°	6967.1	25.4
0°-60°	12178.5	44.4
0°-90°	15228.5	55.6
90°-120°	5796.2	21.2
90°-150°	10589.9	38.7
90°-180°	12170.0	44.4
0°-180°	27398.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5580	5580	5580	5580	5580	
5°	5577	5568	5506	5556	5553	529
15°	5347	5335	5282	5328	5325	1507
25°	4914	4905	4862	4890	4902	2263
35°	4324	4321	4287	4287	4290	2704
45°	3602	3593	3562	3557	3569	2776
55°	2786	2776	2746	2724	2739	2488
65°	1883	1871	1843	1830	1818	1864
75°	955	955	934	915	906	1014
85°	157	178	178	181	178	217
90°	6	12	24	27	30	13
95°	129	475	1591	654	426	138
105°	432	666	2664	4067	3830	459
115°	773	934	2146	4248	4831	760
125°	1061	1207	1945	3292	3863	944
135°	1277	1414	1891	2666	3006	988
145°	1480	1583	1867	2270	2442	927
155°	1669	1725	1852	2036	2101	769
165°	1807	1830	1861	1933	1948	509
175°	1873	1876	1864	1891	1885	178
180°	1873	1873	1873	1873	1873	

TEST NUMBER: P520251

CATALOG NUMBER: SQ4-F-100U-125D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5580.2	5580.2	5580.2	5580.2	5580.2
2.5°	5597.5	5587.8	5538.5	5580.1	5572.9
5°	5577.2	5568.2	5506.5	5555.6	5552.7
7.5°	5530.0	5518.5	5462.4	5508.3	5502.9
10°	5488.1	5479.2	5420.6	5466.6	5463.6
12.5°	5436.5	5427.5	5369.0	5415.0	5414.4
15°	5346.9	5334.9	5282.4	5328.4	5325.3
17.5°	5239.4	5225.6	5173.7	5210.0	5216.1
20°	5153.4	5144.4	5095.1	5128.9	5135.0
22.5°	5065.0	5053.5	5001.7	5040.5	5046.5
25°	4913.8	4904.8	4861.6	4889.5	4901.6
27.5°	4748.0	4748.0	4708.1	4727.9	4735.1
30°	4637.5	4637.5	4597.5	4610.1	4622.0
32.5°	4519.5	4509.8	4472.2	4482.3	4494.3
35°	4324.2	4321.1	4287.3	4287.4	4290.4
37.5°	4122.1	4113.7	4076.7	4079.4	4093.8
40°	3977.1	3971.2	3934.2	3934.4	3946.4
42.5°	3829.7	3823.7	3791.7	3786.8	3791.7
45°	3602.4	3593.4	3562.5	3556.6	3568.7
47.5°	3360.4	3362.9	3326.1	3317.6	3324.2
50°	3203.2	3203.2	3166.3	3148.1	3157.1
52.5°	3038.6	3033.8	2996.9	2976.4	2997.5
55°	2785.6	2776.5	2745.6	2724.4	2739.4
57.5°	2526.3	2512.5	2481.5	2458.3	2466.7
60°	2349.4	2328.5	2297.2	2278.9	2285.0
62.5°	2165.2	2153.7	2120.3	2092.4	2105.6
65°	1882.6	1870.6	1842.7	1830.1	1818.1
67.5°	1605.6	1597.8	1566.3	1553.2	1545.4
70°	1418.8	1403.8	1382.0	1366.6	1363.6
72.5°	1237.1	1219.7	1197.8	1184.7	1176.9
75°	955.1	955.1	933.7	915.0	906.0
77.5°	686.7	689.1	671.4	665.1	660.9
80°	522.1	522.1	506.8	500.7	503.7
82.5°	364.9	372.1	366.7	358.0	353.8
85°	156.6	177.7	178.2	181.1	178.2
87.5°	28.3	46.3	51.6	47.2	43.0
90°	6.0	11.9	23.9	27.0	30.0
92.5°	53.9	223.9	400.4	146.1	113.9
95°	128.9	474.6	1591.4	654.2	425.6
97.5°	213.4	531.6	2357.4	1814.9	1314.5
100°	275.7	565.8	2640.2	2658.9	2160.7
102.5°	335.6	604.6	2695.4	3285.3	2812.9
105°	431.6	665.9	2664.3	4067.4	3830.1
107.5°	533.5	742.1	2515.6	4444.6	4531.3
110°	605.4	793.0	2400.5	4525.8	4807.0



TEST NUMBER: P520251

CATALOG NUMBER: SQ4-F-100U-125D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	670.1	850.6	2292.6	4461.7	4876.5
115°	773.2	934.4	2145.8	4247.9	4831.0
117.5°	863.1	1023.6	2049.3	3947.0	4610.5
120°	923.0	1081.3	2010.9	3743.3	4411.4
122.5°	980.6	1131.8	1979.7	3553.2	4186.1
125°	1060.9	1207.4	1945.0	3291.6	3863.0
127.5°	1129.2	1275.8	1924.6	3070.4	3563.4
130°	1174.8	1321.3	1915.0	2935.2	3383.5
132.5°	1217.9	1357.4	1905.4	2821.5	3227.6
135°	1276.7	1414.4	1891.1	2665.9	3005.9
137.5°	1342.6	1468.0	1883.9	2535.4	2825.5
140°	1378.6	1501.6	1879.0	2448.3	2703.2
142.5°	1419.3	1533.0	1874.3	2370.9	2595.3
145°	1480.5	1583.0	1867.1	2269.6	2442.5
147.5°	1539.2	1628.8	1860.5	2184.2	2318.4
150°	1582.4	1655.7	1858.0	2133.2	2241.7
152.5°	1615.9	1684.5	1855.7	2089.7	2179.3
155°	1669.3	1725.0	1852.1	2036.4	2100.8
157.5°	1718.5	1761.2	1852.7	1997.5	2041.4
160°	1747.2	1785.2	1855.1	1975.7	2007.9
162.5°	1771.2	1804.5	1857.5	1956.4	1981.6
165°	1807.1	1830.5	1861.1	1933.3	1948.0
167.5°	1834.7	1848.8	1864.1	1919.3	1924.0
170°	1849.0	1860.8	1864.1	1912.1	1912.1
172.5°	1861.1	1868.1	1864.1	1902.4	1900.0
175°	1873.1	1876.0	1864.1	1890.9	1885.1
177.5°	1877.8	1875.6	1863.5	1880.1	1875.5
180°	1873.1	1873.1	1873.1	1873.1	1873.1

(END OF REPORT)