

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: P564937

Luminaire Tested: **SQ4-PW1-100U-075D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564937
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-PW1-100U-075D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20785.0 lumens
Efficiency: N/A
Efficacy: 135.5 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

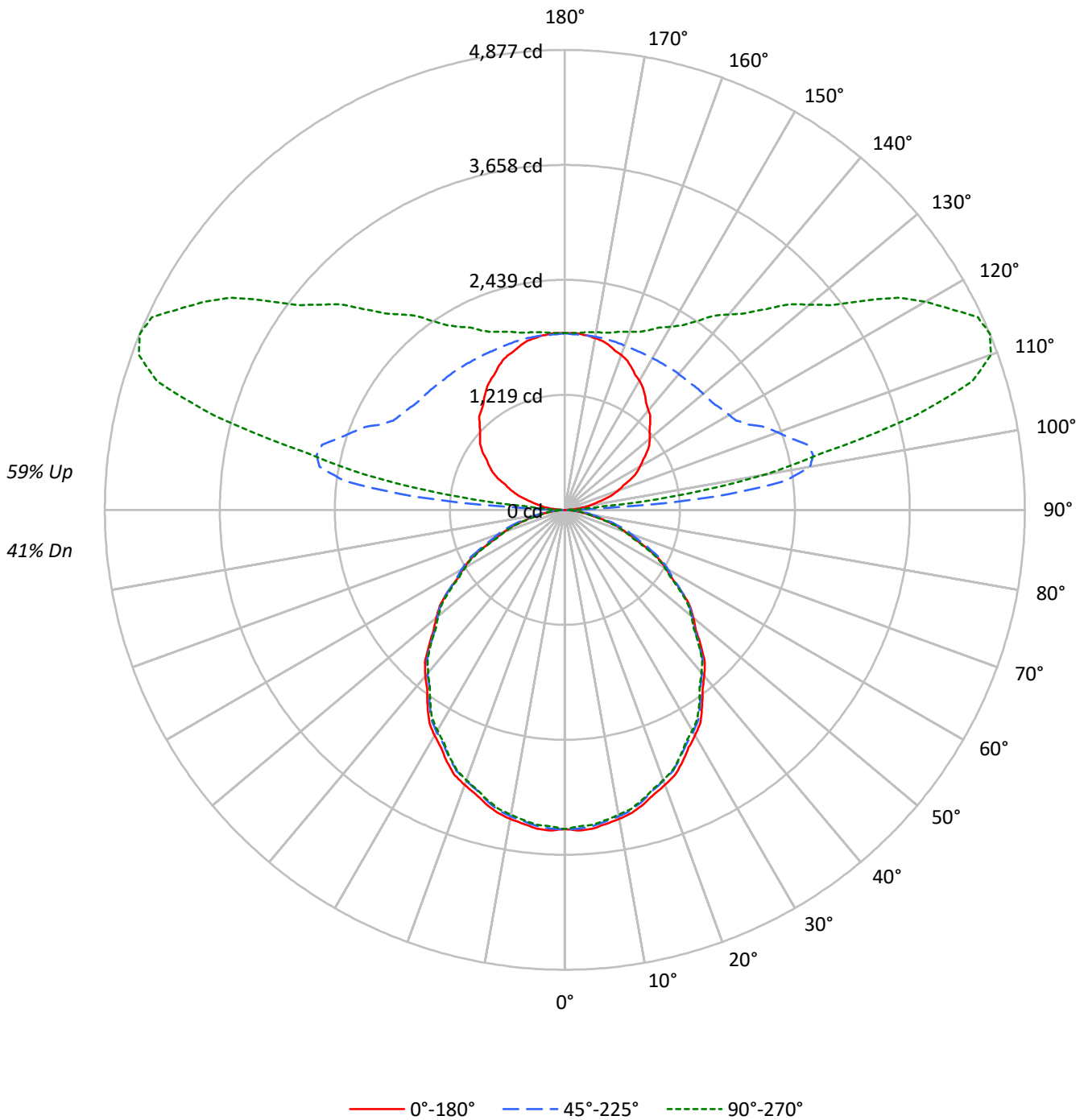
Input Watts (W): 153.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	41
1	96	92	88	85	87	84	81	78	69	67	65	55	54	52	43	42	41	35
2	87	80	74	69	79	73	68	64	60	57	54	49	46	44	38	36	35	30
3	80	70	63	58	72	65	58	53	53	49	45	43	40	37	33	31	29	25
4	73	62	55	49	66	57	50	45	47	42	38	38	35	32	30	27	25	22
5	67	55	48	42	61	51	44	39	42	37	33	34	31	28	27	24	22	19
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	22	19	16
7	57	45	37	32	52	41	34	29	35	29	25	28	24	21	22	19	17	15
8	53	41	33	28	48	37	31	26	31	26	22	26	22	19	20	18	15	13
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10409	10409	10409
5°	10476	10393	10347
10°	10392	10309	10253
15°	10282	10168	10130
20°	10159	10003	9984
25°	10017	9835	9805
30°	9805	9657	9594
35°	9527	9393	9337
40°	9230	9086	9050
45°	8871	8754	8715
50°	8503	8432	8375
55°	8106	8106	7978
60°	7612	7758	7483
65°	6966	7313	6792
70°	6141	6730	5980
75°	5244	6023	5102
80°	4066	5071	4119
85°	2629	3892	3472



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	318.7	1.5
10°-20°	899.8	4.3
20°-30°	1334.7	6.4
30°-40°	1561.7	7.5
40°-50°	1554.7	7.5
50°-60°	1342.6	6.5
60°-70°	966.4	4.6
70°-80°	506.8	2.4
80°-90°	129.5	0.6
90°-100°	877.2	4.2
100°-110°	2421.6	11.7
110°-120°	2497.4	12.0
120°-130°	2006.9	9.7
130°-140°	1577.2	7.6
140°-150°	1209.7	5.8
150°-160°	869.4	4.2
160°-170°	531.7	2.6
170°-180°	179.2	0.9
0°-30°	2553.1	12.3
0°-40°	4114.8	19.8
0°-60°	7012.1	33.7
0°-90°	8614.8	41.4
90°-120°	5796.2	27.9
90°-150°	10589.9	50.9
90°-180°	12170.0	58.6
0°-180°	20785.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3384	3384	3384	3384	3384	
5°	3393	3356	3367	3358	3352	321
15°	3229	3189	3194	3188	3182	910
25°	2952	2902	2898	2881	2890	1357
35°	2538	2503	2502	2478	2487	1586
45°	2040	2022	2013	2007	2004	1574
55°	1512	1509	1512	1491	1488	1349
65°	957	986	1005	965	933	949
75°	441	482	507	473	429	473
85°	74	98	110	104	98	98
90°	6	12	24	27	30	12
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	1831	1861	1933	1948	509
175°	1873	1876	1864	1891	1885	178
180°	1873	1873	1873	1873	1873	



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CATALOG NUMBER: SQ4-PW1-100U-075D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3384.5	3384.5	3384.5	3384.5	3384.5
2.5°	3403.5	3375.5	3384.5	3376.9	3360.6
5°	3393.4	3355.5	3366.6	3357.5	3351.7
7.5°	3358.8	3323.8	3332.0	3322.3	3318.8
10°	3327.8	3292.8	3301.0	3288.9	3283.1
12.5°	3292.0	3254.7	3262.8	3250.8	3247.3
15°	3229.4	3188.6	3193.6	3187.5	3181.7
17.5°	3156.6	3115.2	3116.1	3106.5	3105.3
20°	3104.2	3060.4	3056.4	3044.6	3050.5
22.5°	3046.9	3000.8	2996.8	2980.3	2988.5
25°	2952.1	2902.5	2898.4	2880.7	2889.5
27.5°	2842.3	2793.4	2793.4	2768.6	2777.9
30°	2761.2	2714.6	2719.5	2689.9	2701.6
32.5°	2675.4	2633.4	2636.0	2606.4	2618.1
35°	2537.6	2502.6	2501.8	2478.2	2486.9
37.5°	2396.8	2365.9	2361.1	2347.4	2349.7
40°	2299.0	2272.8	2263.3	2254.3	2254.3
42.5°	2196.5	2172.6	2163.1	2156.5	2154.1
45°	2039.6	2022.1	2012.8	2006.7	2003.8
47.5°	1884.6	1868.2	1860.1	1855.9	1852.9
50°	1777.2	1765.5	1762.3	1753.3	1750.4
52.5°	1669.9	1662.9	1659.7	1648.3	1645.4
55°	1511.8	1508.9	1511.8	1490.9	1488.0
57.5°	1347.2	1351.9	1361.5	1333.3	1326.3
60°	1237.5	1249.1	1261.3	1228.3	1216.6
62.5°	1125.4	1144.0	1161.2	1123.2	1106.9
65°	957.2	986.3	1004.9	965.4	933.3
67.5°	795.0	831.1	853.4	810.9	774.7
70°	682.9	723.7	748.5	705.8	665.0
72.5°	585.0	630.5	650.6	610.4	569.5
75°	441.3	482.1	506.9	473.1	429.4
77.5°	313.1	351.6	372.1	342.7	306.5
80°	229.6	270.4	286.3	261.7	232.6
82.5°	162.8	196.6	207.5	192.8	172.9
85°	74.5	97.9	110.3	104.2	98.4
87.5°	20.3	37.8	50.1	50.8	53.7
90°	6.0	11.9	24.0	27.0	30.0
92.5°	53.9	223.9	400.4	146.1	113.9
95°	128.9	474.6	1591.4	654.1	425.6
97.5°	213.4	531.6	2357.4	1814.9	1314.4
100°	275.7	565.8	2640.3	2658.9	2160.8
102.5°	335.7	604.7	2695.4	3285.3	2812.9
105°	431.6	666.0	2664.2	4067.4	3830.0
107.5°	533.4	742.1	2515.6	4444.6	4531.3
110°	605.4	792.9	2400.5	4525.7	4807.0



TEST NUMBER: P564937

CATALOG NUMBER: SQ4-PW1-100U-075D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	670.1	850.6	2292.6	4461.6	4876.6
115°	773.2	934.4	2145.8	4247.9	4831.0
117.5°	863.1	1023.7	2049.3	3947.0	4610.4
120°	923.0	1081.3	2010.9	3743.3	4411.4
122.5°	980.6	1131.8	1979.8	3553.1	4186.1
125°	1060.9	1207.4	1945.0	3291.6	3863.0
127.5°	1129.2	1275.7	1924.6	3070.4	3563.3
130°	1174.8	1321.3	1915.0	2935.2	3383.5
132.5°	1217.9	1357.4	1905.4	2821.5	3227.7
135°	1276.7	1414.4	1891.0	2666.0	3005.9
137.5°	1342.6	1468.0	1883.9	2535.4	2825.5
140°	1378.6	1501.6	1879.1	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	1628.9	1860.5	2184.2	2318.4
150°	1582.4	1655.6	1858.1	2133.3	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°	1718.4	1761.2	1852.7	1997.5	2041.5
160°	1747.2	1785.3	1855.1	1975.7	2007.9
162.5°	1771.2	1804.6	1857.5	1956.4	1981.6
165°	1807.1	1830.6	1861.1	1933.3	1948.0
167.5°	1834.7	1848.8	1864.1	1919.3	1924.0
170°	1849.1	1860.8	1864.1	1912.0	1912.0
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°	1877.9	1875.5	1863.5	1880.2	1875.5
180°	1873.1	1873.1	1873.1	1873.1	1873.1

(END OF REPORT)