

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: P564649

Luminaire Tested: **SQ4-PW1-050U-075D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564649
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-PW1-050U-075D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14650.4 lumens
Efficiency: N/A
Efficacy: 138.7 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

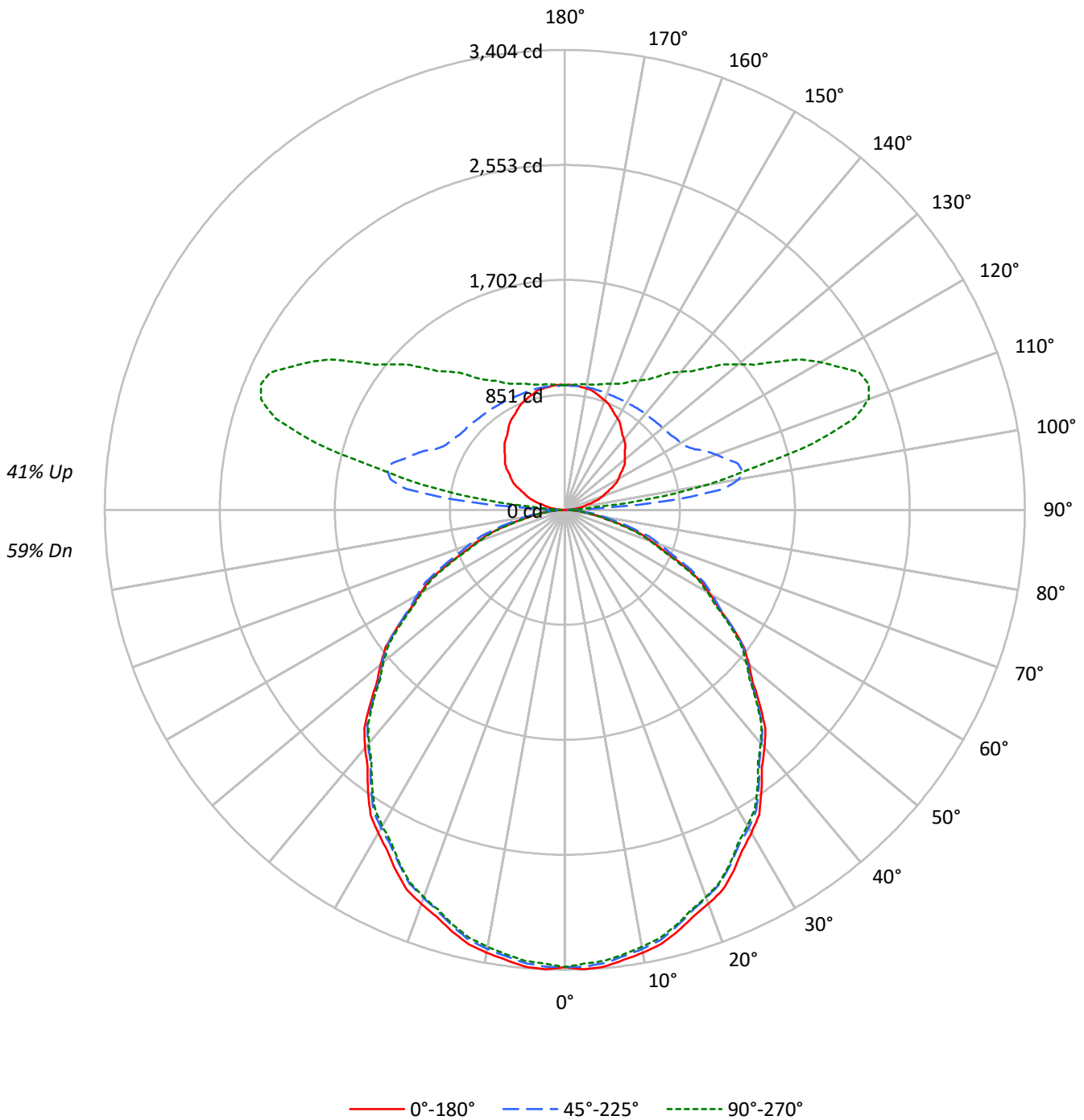
Input Watts (W): 105.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64	59
1	100	96	92	88	93	89	86	83	78	75	73	67	65	63	57	56	55	50
2	91	84	77	72	85	78	73	68	68	64	60	59	56	53	50	48	46	42
3	83	74	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39	36
4	76	65	57	51	71	61	54	48	54	48	43	46	42	39	40	37	34	31
5	70	58	50	44	65	55	47	42	48	42	38	42	37	34	36	32	30	27
6	64	52	44	38	60	49	42	36	43	37	33	38	33	29	33	29	26	23
7	60	47	39	33	55	44	37	32	39	33	29	34	30	26	30	26	23	21
8	55	43	35	30	52	40	33	28	36	30	26	31	27	23	27	24	21	19
9	52	39	32	26	48	37	30	25	33	27	23	29	24	21	25	22	19	17
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	23	20	17	15

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	2.2
10°-20°	899.8	6.1
20°-30°	1334.7	9.1
30°-40°	1561.7	10.7
40°-50°	1554.7	10.6
50°-60°	1342.6	9.2
60°-70°	966.4	6.6
70°-80°	506.8	3.5
80°-90°	129.2	0.9
90°-100°	443.8	3.0
100°-110°	1205.5	8.2
110°-120°	1239.5	8.5
120°-130°	991.0	6.8
130°-140°	778.7	5.3
140°-150°	597.1	4.1
150°-160°	429.4	2.9
160°-170°	262.6	1.8
170°-180°	88.5	0.6
0°-30°	2553.1	17.4
0°-40°	4114.8	28.1
0°-60°	7012.1	47.9
0°-90°	8614.5	58.8
90°-120°	2888.8	19.7
90°-150°	5255.5	35.9
90°-180°	6036.0	41.2
0°-180°	14650.4	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°	3	12	21	27	27	7
95°	65	243	773	336	226	69
105°	214	333	1326	2019	1899	227
115°	380	462	1061	2111	2405	375
125°	523	596	960	1618	1908	466
135°	630	700	933	1318	1486	487
145°	728	781	922	1120	1204	457
155°	823	852	916	1005	1034	380
165°	892	903	918	957	960	252
175°	924	927	922	933	930	88
180°	924	924	924	924	924	

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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°	19.7	37.7	49.5	50.7	53.1
90°	3.0	11.7	20.8	26.8	26.8
92.5°	26.8	121.5	211.0	90.6	76.7
95°	65.4	242.7	772.8	336.3	225.9
97.5°	108.2	268.0	1184.8	921.8	647.4
100°	136.7	285.0	1310.9	1328.8	1073.1
102.5°	165.3	301.9	1344.1	1643.4	1417.9
105°	214.0	333.2	1325.7	2018.6	1899.4
107.5°	264.5	369.8	1249.0	2212.3	2245.4
110°	300.2	396.1	1192.0	2250.4	2392.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	331.1	422.4	1134.9	2218.8	2433.2
115°	380.5	461.9	1061.2	2111.2	2404.7
117.5°	426.8	504.7	1014.2	1958.6	2289.4
120°	457.8	533.3	992.8	1856.3	2184.8
122.5°	483.9	559.5	978.5	1753.8	2070.6
125°	523.2	595.8	960.1	1617.7	1908.3
127.5°	558.2	630.3	950.0	1514.5	1763.9
130°	579.6	649.4	945.2	1449.7	1673.5
132.5°	601.0	670.8	940.5	1394.4	1592.6
135°	630.2	699.9	933.4	1317.7	1486.2
137.5°	661.7	725.0	929.8	1249.9	1391.7
140°	680.7	741.7	927.4	1206.7	1334.6
142.5°	699.7	756.1	925.0	1173.0	1279.9
145°	728.3	780.6	921.5	1119.6	1203.8
147.5°	760.4	805.1	918.5	1077.5	1143.8
150°	781.8	819.5	918.5	1053.4	1105.8
152.5°	798.4	831.5	916.1	1031.8	1074.8
155°	823.4	852.4	915.5	1005.3	1034.4
157.5°	847.7	870.4	915.5	987.4	1009.4
160°	862.0	882.4	915.5	975.4	992.8
162.5°	876.3	892.0	917.9	965.7	978.5
165°	891.7	903.4	918.5	957.2	960.1
167.5°	907.8	913.6	921.5	947.1	949.4
170°	912.5	918.4	921.5	942.3	942.3
172.5°	917.3	920.8	921.5	937.5	937.5
175°	924.4	927.3	921.5	933.3	930.4
177.5°	926.8	926.8	919.7	929.1	924.4
180°	924.4	924.4	924.4	924.4	924.4

(END OF REPORT)