

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: P519414

Luminaire Tested: **SQ4-WB-100U-100D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519414
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-100U-100D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

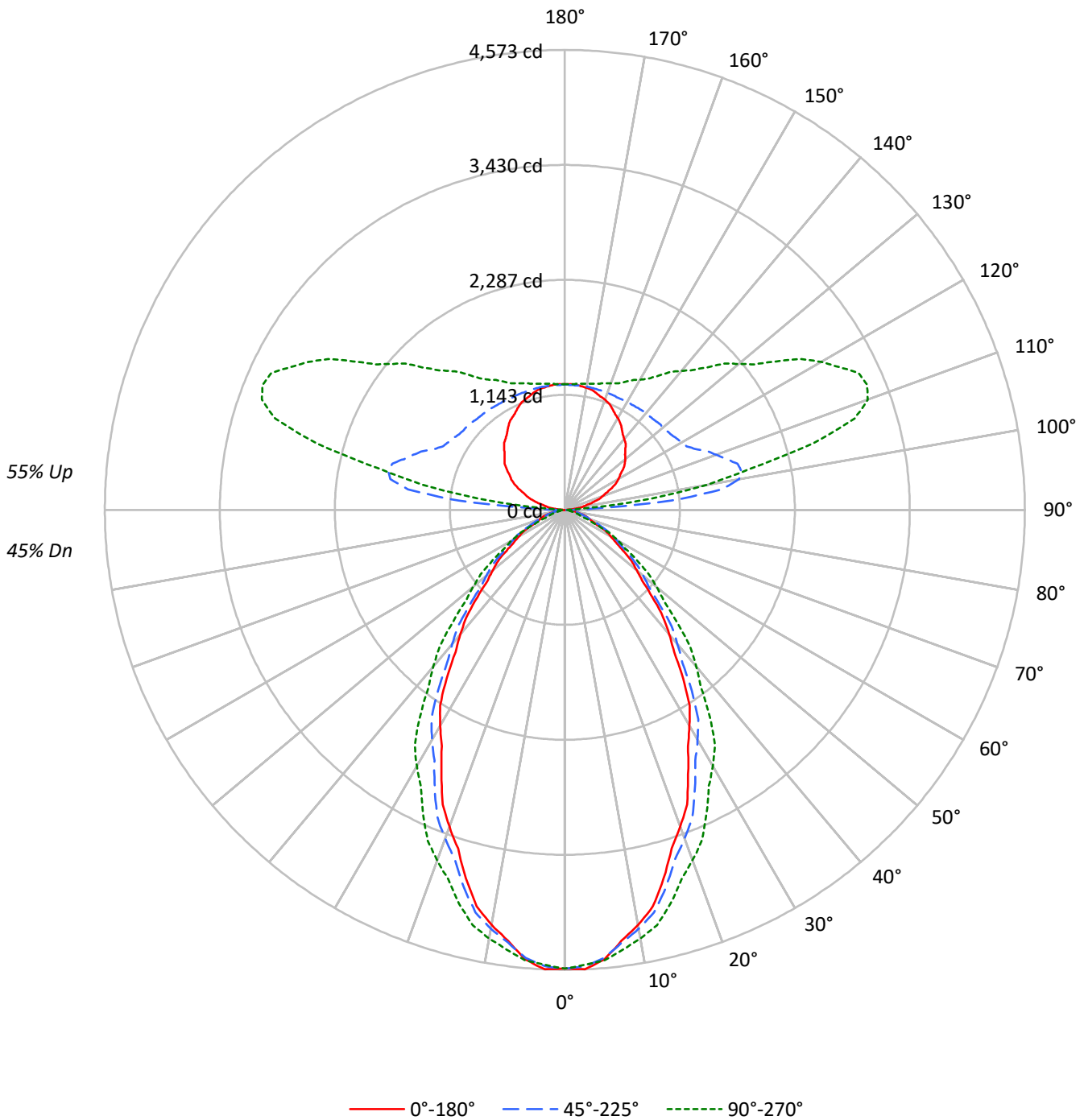
Lumens per Lamp: N/A
Luminaire Lumens: 14763.0 lumens
Efficiency: N/A
Efficacy: 121.8 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 121.2
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



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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	50	30	10	0	
RCR																						
0	106	106	106	106	97	97	97	97	81	81	81	65	65	65	52	52	52	45				
1	98	94	90	87	89	86	83	81	72	70	68	59	58	56	47	46	46	40				
2	90	83	78	73	82	77	72	68	64	61	58	53	51	49	43	41	40	35				
3	83	74	67	62	76	68	63	58	58	54	50	48	45	43	39	37	35	31				
4	76	66	59	54	70	61	55	50	52	47	44	44	40	37	36	33	31	28				
5	70	60	52	47	65	55	49	44	47	42	39	40	36	33	33	30	28	25				
6	65	54	46	41	60	50	44	39	43	38	34	36	33	30	30	27	25	22				
7	61	49	42	36	56	46	39	34	39	34	31	33	30	27	28	25	23	20				
8	56	45	38	33	52	42	35	31	36	31	28	31	27	24	26	23	21	19				
9	53	41	34	29	49	39	32	28	33	28	25	29	25	22	24	21	19	17				
10	49	38	31	27	46	36	29	25	31	26	23	27	23	20	22	20	18	16				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21043	21043	21043
5°	20780	20706	20827
10°	19633	19811	20271
15°	18124	18545	19376
20°	16458	17077	18208
25°	14763	15567	16963
30°	13199	14063	15673
35°	11542	12376	14146
40°	9715	10487	12246
45°	8018	8709	10224
50°	6694	7297	8518
55°	5682	6262	7035
60°	4857	5430	5614
65°	3867	4566	3627
70°	3429	3563	2213
75°	3174	2889	1356
80°	2925	2659	1169
85°	2646	2435	953



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	418.4	2.8
10°-20°	1088.3	7.4
20°-30°	1409.6	9.5
30°-40°	1380.4	9.4
40°-50°	1056.6	7.2
50°-60°	704.1	4.8
60°-70°	384.2	2.6
70°-80°	160.1	1.1
80°-90°	47.9	0.3
90°-100°	584.8	4.0
100°-110°	1614.4	10.9
110°-120°	1664.9	11.3
120°-130°	1337.9	9.1
130°-140°	1051.5	7.1
140°-150°	806.4	5.5
150°-160°	579.6	3.9
160°-170°	354.4	2.4
170°-180°	119.5	0.8
0°-30°	2916.3	19.8
0°-40°	4296.7	29.1
0°-60°	6057.4	41.0
0°-90°	6649.6	45.0
90°-120°	3864.1	26.2
90°-150°	7060.0	47.8
90°-180°	8113.0	55.0
0°-180°	14763.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4562	4562	4562	4562	4562	
5°	4488	4442	4472	4482	4498	417
15°	3795	3781	3883	3989	4057	1060
25°	2900	2908	3058	3192	3333	1334
35°	2050	2059	2198	2346	2512	1274
45°	1229	1252	1335	1436	1567	958
55°	706	736	779	808	875	641
65°	354	384	418	366	332	368
75°	178	178	162	111	76	190
85°	50	50	46	30	18	54
90°	4	8	16	18	20	9
95°	86	316	1061	436	284	92
105°	288	444	1776	2712	2553	306
115°	516	623	1430	2832	3221	507
125°	707	805	1297	2194	2575	629
135°	851	943	1261	1777	2004	659
145°	987	1055	1245	1513	1628	618
155°	1113	1150	1235	1358	1401	513
165°	1205	1220	1241	1289	1299	340
175°	1249	1251	1243	1261	1257	119
180°	1249	1249	1249	1249	1249	

TEST NUMBER: P519414

CATALOG NUMBER: SQ4-WB-100U-100D-840-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4561.5	4561.5	4561.5	4561.5	4561.5
2.5°	4572.7	4532.0	4542.3	4542.0	4529.5
5°	4487.5	4442.5	4471.5	4481.8	4497.5
7.5°	4321.0	4286.9	4339.8	4378.9	4410.6
10°	4191.3	4161.9	4229.3	4286.3	4327.4
12.5°	4040.7	4016.1	4099.6	4176.1	4229.7
15°	3794.9	3781.2	3883.0	3988.7	4057.1
17.5°	3531.9	3525.3	3642.0	3765.3	3853.0
20°	3352.6	3350.6	3478.7	3607.1	3708.9
22.5°	3171.7	3176.0	3310.6	3444.1	3560.0
25°	2900.3	2908.1	3058.4	3191.7	3332.6
27.5°	2649.3	2652.8	2808.2	2948.9	3099.2
30°	2477.9	2487.7	2640.0	2785.7	2942.3
32.5°	2306.6	2317.9	2467.1	2617.7	2777.4
35°	2049.6	2059.4	2197.7	2345.6	2511.9
37.5°	1784.6	1797.9	1920.7	2060.5	2224.1
40°	1613.3	1632.8	1741.4	1873.1	2033.6
42.5°	1448.3	1472.6	1573.2	1698.2	1843.0
45°	1229.0	1252.4	1335.0	1436.1	1567.2
47.5°	1040.0	1067.0	1130.5	1217.5	1329.4
50°	932.7	958.2	1016.8	1081.2	1186.9
52.5°	838.3	863.7	915.9	965.6	1055.6
55°	706.5	735.9	778.6	808.1	874.7
57.5°	598.5	626.6	660.5	673.8	714.2
60°	526.4	557.7	588.5	586.9	608.5
62.5°	460.8	487.4	518.0	496.8	498.0
65°	354.3	383.6	418.3	365.5	332.3
67.5°	286.2	292.5	328.3	254.9	215.4
70°	254.2	254.2	264.2	197.4	164.1
72.5°	223.8	223.8	214.6	160.5	125.7
75°	178.1	178.1	162.1	111.3	76.1
77.5°	137.3	135.7	124.1	83.0	55.2
80°	110.1	110.1	100.1	65.6	44.0
82.5°	86.1	86.1	77.7	51.2	32.8
85°	50.0	50.0	46.0	29.8	18.0
87.5°	18.4	19.2	19.2	13.2	12.0
90°	4.0	7.9	16.0	18.0	20.0
92.5°	36.0	149.3	266.9	97.4	75.9
95°	85.9	316.4	1060.9	436.1	283.7
97.5°	142.3	354.4	1571.6	1210.0	876.3
100°	183.8	377.2	1760.2	1772.6	1440.5
102.5°	223.8	403.1	1796.9	2190.2	1875.3
105°	287.7	444.0	1776.2	2711.6	2553.4
107.5°	355.6	494.7	1677.1	2963.1	3020.9
110°	403.6	528.6	1600.3	3017.1	3204.7



TEST NUMBER: P519414

CATALOG NUMBER: SQ4-WB-100U-100D-840-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	446.7	567.1	1528.4	2974.4	3251.0
115°	515.5	622.9	1430.5	2831.9	3220.7
117.5°	575.4	682.5	1366.2	2631.3	3073.6
120°	615.4	720.9	1340.6	2495.6	2941.0
122.5°	653.7	754.5	1319.8	2368.8	2790.7
125°	707.3	804.9	1296.7	2194.4	2575.3
127.5°	752.8	850.5	1283.1	2047.0	2375.5
130°	783.2	880.9	1276.7	1956.8	2255.7
132.5°	812.0	904.9	1270.3	1881.0	2151.8
135°	851.1	942.9	1260.7	1777.3	2003.9
137.5°	895.1	978.7	1255.9	1690.3	1883.7
140°	919.1	1001.1	1252.7	1632.2	1802.1
142.5°	946.2	1022.0	1249.5	1580.6	1730.2
145°	987.0	1055.4	1244.7	1513.1	1628.3
147.5°	1026.1	1085.9	1240.3	1456.1	1545.6
150°	1054.9	1103.7	1238.7	1422.2	1494.5
152.5°	1077.3	1123.0	1237.1	1393.1	1452.9
155°	1112.9	1150.0	1234.7	1357.6	1400.6
157.5°	1145.6	1174.1	1235.1	1331.7	1361.0
160°	1164.8	1190.2	1236.7	1317.1	1338.6
162.5°	1180.8	1203.1	1238.3	1304.2	1321.0
165°	1204.8	1220.4	1240.7	1288.9	1298.7
167.5°	1223.1	1232.5	1242.7	1279.5	1282.7
170°	1232.7	1240.5	1242.7	1274.7	1274.7
172.5°	1240.7	1245.4	1242.7	1268.3	1266.7
175°	1248.7	1250.7	1242.7	1260.6	1256.7
177.5°	1251.9	1250.3	1242.3	1253.4	1250.3
180°	1248.7	1248.7	1248.7	1248.7	1248.7

(END OF REPORT)