

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: P519390

Luminaire Tested: **SQ4-WB-100U-075D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519390
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-075D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

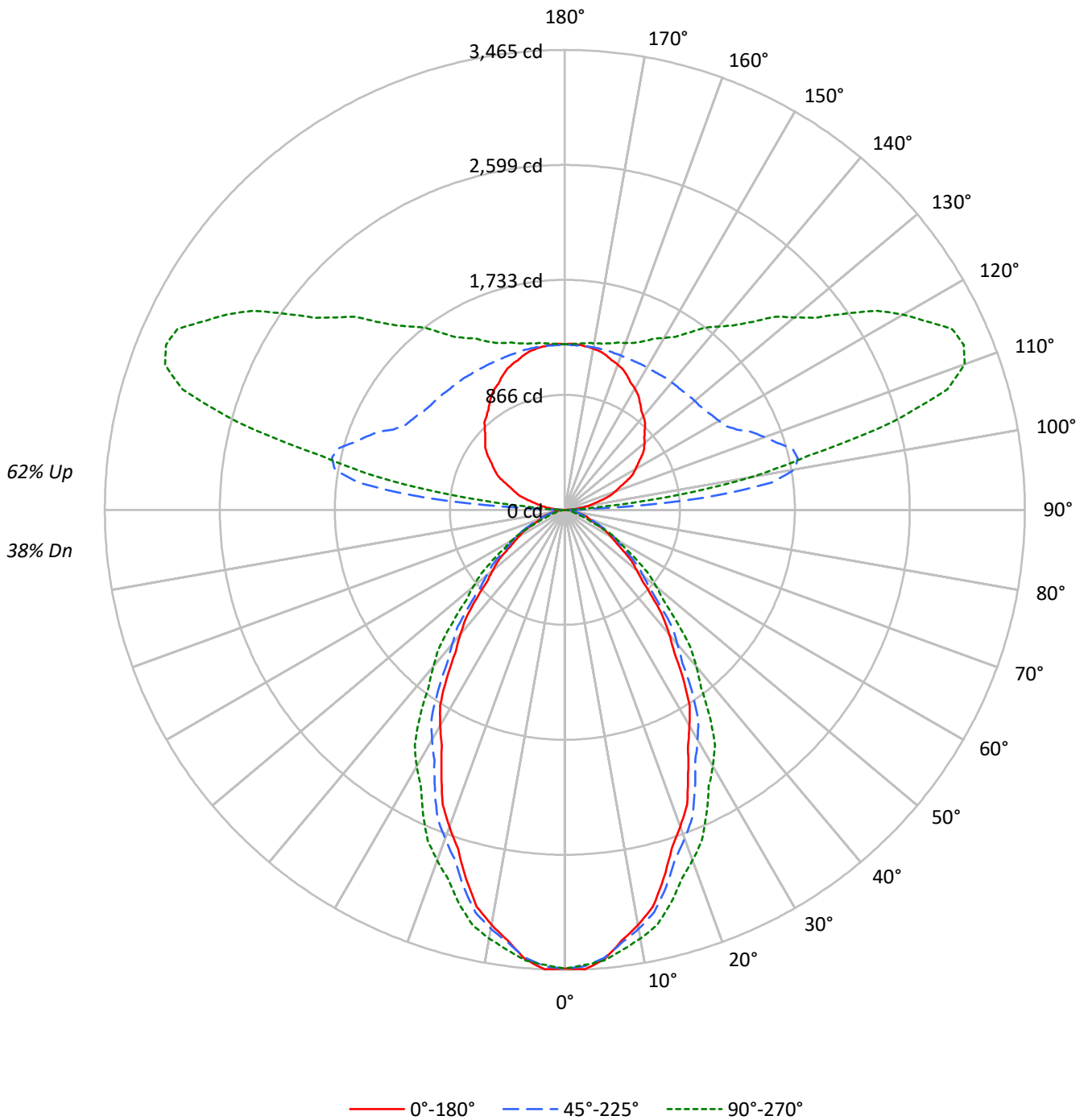
Lumens per Lamp: N/A
Luminaire Lumens: 13153.0 lumens
Efficiency: N/A
Efficacy: 126.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 103.9
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	92	89	85	87	84	81	78	69	67	65	54	53	52	41	41	40	34
2	88	81	76	71	80	74	70	66	61	58	55	49	47	45	38	36	35	30
3	81	72	66	60	74	66	61	56	55	51	47	44	41	39	34	32	31	26
4	75	65	57	52	68	59	53	48	49	45	41	40	37	34	31	29	27	24
5	69	58	51	45	62	53	47	42	45	40	36	36	33	30	29	26	25	21
6	64	52	45	40	58	48	42	37	40	36	32	33	30	27	26	24	22	19
7	59	48	40	35	54	44	37	33	37	32	29	30	27	24	24	22	20	17
8	55	43	36	31	50	40	34	29	34	29	26	28	24	22	23	20	18	16
9	51	40	33	28	47	37	31	26	31	26	23	26	22	20	21	19	17	15
10	48	37	30	25	44	34	28	24	29	24	21	24	21	18	20	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15946	15946	15946
5°	15747	15691	15782
10°	14878	15013	15361
15°	13734	14053	14683
20°	12472	12941	13797
25°	11187	11797	12854
30°	10002	10657	11877
35°	8746	9379	10720
40°	7362	7947	9280
45°	6076	6600	7748
50°	5072	5530	6455
55°	4306	4745	5331
60°	3680	4114	4254
65°	2931	3460	2749
70°	2598	2700	1678
75°	2406	2191	1027
80°	2216	2014	887
85°	2006	1847	725



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	317.1	2.4
10°-20°	824.7	6.3
20°-30°	1068.2	8.1
30°-40°	1046.0	8.0
40°-50°	800.7	6.1
50°-60°	533.5	4.1
60°-70°	291.1	2.2
70°-80°	121.3	0.9
80°-90°	36.9	0.3
90°-100°	584.8	4.4
100°-110°	1614.4	12.3
110°-120°	1664.9	12.7
120°-130°	1337.9	10.2
130°-140°	1051.5	8.0
140°-150°	806.4	6.1
150°-160°	579.6	4.4
160°-170°	354.4	2.7
170°-180°	119.5	0.9
0°-30°	2209.9	16.8
0°-40°	3256.0	24.8
0°-60°	4590.2	34.9
0°-90°	5039.6	38.3
90°-120°	3864.1	29.4
90°-150°	7060.0	53.7
90°-180°	8113.0	61.7
0°-180°	13153.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3457	3457	3457	3457	3457	
5°	3400	3366	3388	3396	3408	316
15°	2876	2865	2942	3022	3074	803
25°	2198	2204	2318	2419	2525	1011
35°	1553	1561	1665	1778	1904	966
45°	931	949	1012	1088	1188	726
55°	535	558	590	612	663	485
65°	268	291	317	277	252	279
75°	135	135	123	84	58	144
85°	38	38	35	22	14	41
90°	4	8	16	18	20	8
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3456.7	3456.7	3456.7	3456.7	3456.7
2.5°	3465.2	3434.3	3442.1	3441.9	3432.4
5°	3400.5	3366.4	3388.4	3396.3	3408.1
7.5°	3274.4	3248.5	3288.6	3318.3	3342.3
10°	3176.1	3153.8	3204.9	3248.1	3279.2
12.5°	3062.0	3043.3	3106.6	3164.6	3205.2
15°	2875.8	2865.4	2942.5	3022.5	3074.4
17.5°	2676.5	2671.4	2759.9	2853.3	2919.7
20°	2540.6	2539.1	2636.1	2733.4	2810.5
22.5°	2403.4	2406.7	2508.7	2609.9	2697.7
25°	2197.8	2203.7	2317.6	2418.6	2525.4
27.5°	2007.6	2010.2	2128.0	2234.6	2348.5
30°	1877.7	1885.1	2000.6	2111.0	2229.6
32.5°	1747.9	1756.5	1869.5	1983.6	2104.6
35°	1553.1	1560.6	1665.4	1777.5	1903.5
37.5°	1352.3	1362.4	1455.5	1561.4	1685.4
40°	1222.5	1237.3	1319.6	1419.4	1541.0
42.5°	1097.5	1115.9	1192.2	1286.9	1396.6
45°	931.3	949.1	1011.7	1088.2	1187.6
47.5°	788.1	808.6	856.7	922.6	1007.4
50°	706.8	726.1	770.5	819.3	899.4
52.5°	635.2	654.5	694.1	731.7	799.9
55°	535.4	557.7	590.0	612.4	662.8
57.5°	453.5	474.9	500.5	510.6	541.2
60°	398.9	422.6	445.9	444.8	461.1
62.5°	349.2	369.3	392.5	376.5	377.4
65°	268.5	290.7	317.0	277.0	251.8
67.5°	216.9	221.6	248.7	193.2	163.2
70°	192.6	192.6	200.2	149.6	124.4
72.5°	169.6	169.6	162.6	121.6	95.3
75°	135.0	135.0	122.9	84.3	57.6
77.5°	104.0	102.9	94.0	62.9	41.9
80°	83.4	83.4	75.8	49.7	33.4
82.5°	65.2	65.2	58.8	38.8	24.9
85°	37.9	37.9	34.9	22.5	13.7
87.5°	14.1	14.9	15.3	10.9	10.1
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

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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)