

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: P519438

Luminaire Tested: **SQ4-WB-100U-125D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519438
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-125D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

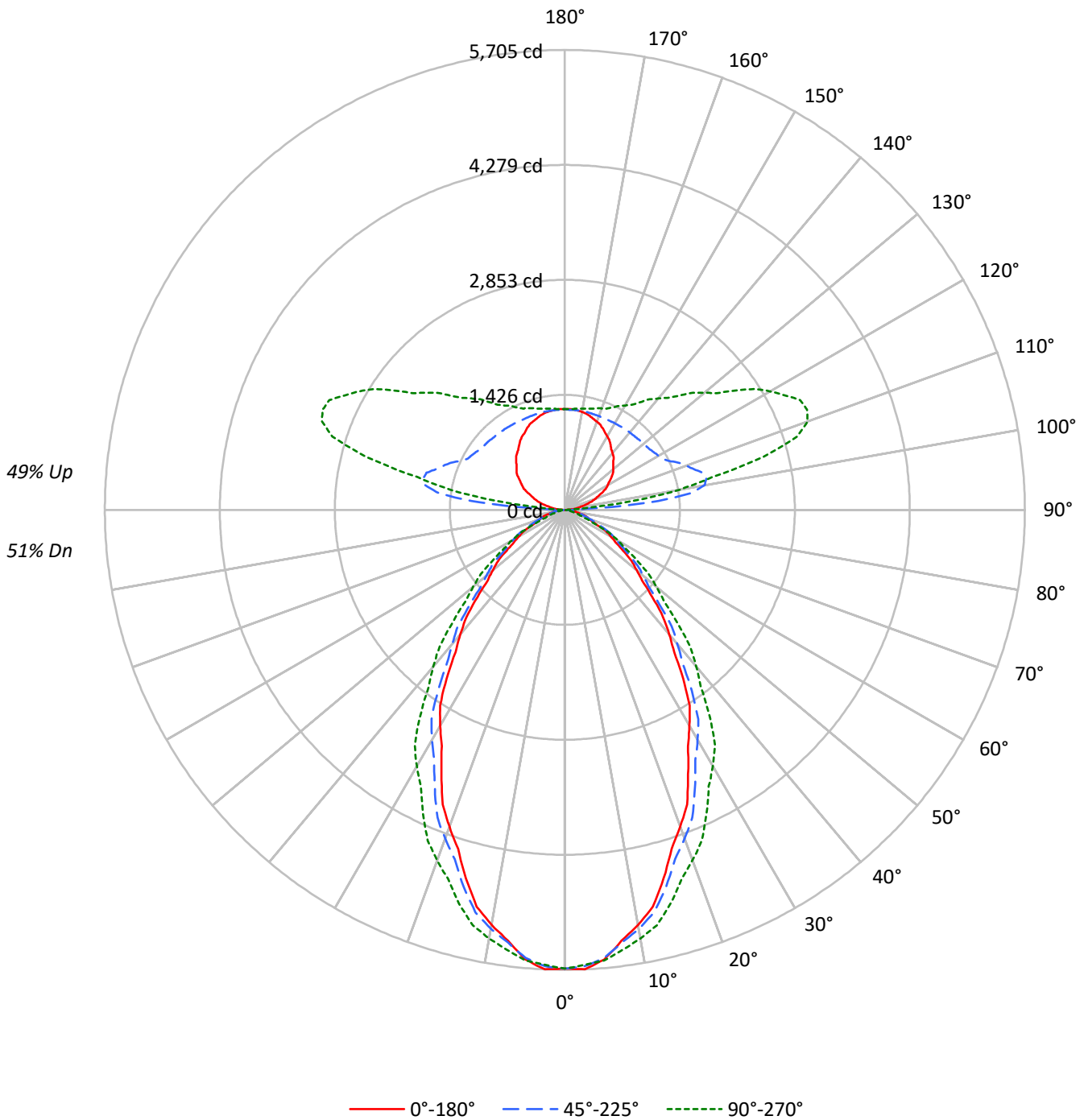
Lumens per Lamp: N/A
Luminaire Lumens: 16408.6 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 140.6
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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	99	95	92	89	91	88	85	83	75	73	71	63	62	60	52	51	50	45
2	91	84	79	74	84	78	74	70	67	64	61	57	54	52	47	45	44	40
3	84	75	69	63	78	70	64	60	60	56	53	51	48	46	43	41	39	35
4	77	68	60	55	72	63	57	52	54	50	46	47	43	40	39	37	35	31
5	72	61	53	48	66	57	50	45	49	44	40	42	39	36	36	33	31	28
6	66	55	48	42	61	52	45	40	45	40	36	39	35	32	33	30	28	25
7	62	50	43	38	57	47	41	36	41	36	32	36	32	29	31	28	25	23
8	58	46	39	34	53	43	37	32	38	33	29	33	29	26	28	25	23	21
9	54	42	35	30	50	40	33	29	35	30	27	31	27	24	27	24	21	19
10	50	39	32	28	47	37	31	27	33	28	24	29	25	22	25	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26252	26252	26252
5°	25925	25832	25983
10°	24493	24716	25288
15°	22611	23136	24173
20°	20533	21305	22715
25°	18417	19421	21162
30°	16467	17544	19553
35°	14400	15441	17648
40°	12120	13082	15278
45°	10002	10866	12756
50°	8351	9104	10627
55°	7090	7813	8776
60°	6059	6773	7004
65°	4825	5697	4524
70°	4277	4446	2762
75°	3960	3606	1691
80°	3647	3318	1458
85°	3303	3038	1191



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	522.0	3.2
10°-20°	1357.7	8.3
20°-30°	1758.6	10.7
30°-40°	1722.1	10.5
40°-50°	1318.2	8.0
50°-60°	878.4	5.4
60°-70°	479.3	2.9
70°-80°	199.7	1.2
80°-90°	59.1	0.4
90°-100°	584.8	3.6
100°-110°	1614.4	9.8
110°-120°	1664.9	10.1
120°-130°	1337.9	8.2
130°-140°	1051.5	6.4
140°-150°	806.4	4.9
150°-160°	579.6	3.5
160°-170°	354.4	2.2
170°-180°	119.5	0.7
0°-30°	3638.3	22.2
0°-40°	5360.4	32.7
0°-60°	7556.9	46.1
0°-90°	8295.1	50.6
90°-120°	3864.1	23.5
90°-150°	7060.0	43.0
90°-180°	8113.0	49.4
0°-180°	16408.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5691	5691	5691	5691	5691	
5°	5598	5542	5578	5591	5611	521
15°	4734	4717	4844	4976	5062	1322
25°	3618	3628	3816	3982	4158	1664
35°	2557	2569	2742	2926	3134	1590
45°	1533	1562	1666	1792	1955	1196
55°	882	918	971	1008	1091	799
65°	442	479	522	456	414	459
75°	222	222	202	139	95	237
85°	62	62	57	37	22	68
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5690.8	5690.8	5690.8	5690.8	5690.8
2.5°	5704.8	5654.0	5666.8	5666.5	5650.8
5°	5598.4	5542.2	5578.4	5591.3	5610.9
7.5°	5390.6	5348.2	5414.1	5463.0	5502.5
10°	5228.8	5192.2	5276.3	5347.4	5398.6
12.5°	5041.1	5010.3	5114.5	5209.9	5276.8
15°	4734.4	4717.3	4844.3	4976.1	5061.5
17.5°	4406.3	4398.0	4543.6	4697.4	4806.8
20°	4182.6	4180.1	4339.9	4500.1	4627.0
22.5°	3956.8	3962.2	4130.1	4296.7	4441.3
25°	3618.2	3628.0	3815.5	3981.8	4157.6
27.5°	3305.1	3309.5	3503.4	3678.9	3866.4
30°	3091.4	3103.6	3293.6	3475.3	3670.7
32.5°	2877.6	2891.8	3077.9	3265.7	3464.9
35°	2557.0	2569.2	2741.8	2926.3	3133.8
37.5°	2226.4	2243.0	2396.2	2570.6	2774.7
40°	2012.6	2037.0	2172.4	2336.8	2537.0
42.5°	1806.9	1837.1	1962.7	2118.6	2299.3
45°	1533.2	1562.5	1665.5	1791.6	1955.2
47.5°	1297.5	1331.2	1410.3	1518.9	1658.5
50°	1163.6	1195.4	1268.5	1348.9	1480.8
52.5°	1045.8	1077.5	1142.7	1204.6	1316.9
55°	881.5	918.1	971.4	1008.2	1091.2
57.5°	746.6	781.8	824.0	840.7	890.9
60°	656.7	695.8	734.1	732.2	759.1
62.5°	574.8	608.0	646.2	619.8	621.3
65°	442.0	478.6	521.9	456.0	414.5
67.5°	357.1	364.9	409.5	318.0	268.7
70°	317.1	317.1	329.6	246.3	204.8
72.5°	279.2	279.2	267.7	200.3	156.8
75°	222.2	222.2	202.3	138.8	94.9
77.5°	171.3	169.3	154.8	103.6	68.9
80°	137.3	137.3	124.9	81.8	54.9
82.5°	107.4	107.4	96.9	63.9	41.0
85°	62.4	62.4	57.4	37.1	22.5
87.5°	22.8	23.6	23.2	15.5	14.0
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

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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)