

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: P564244

Luminaire Tested: **SQ4-PR1-100U-050D-840-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564244
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-100U-050D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

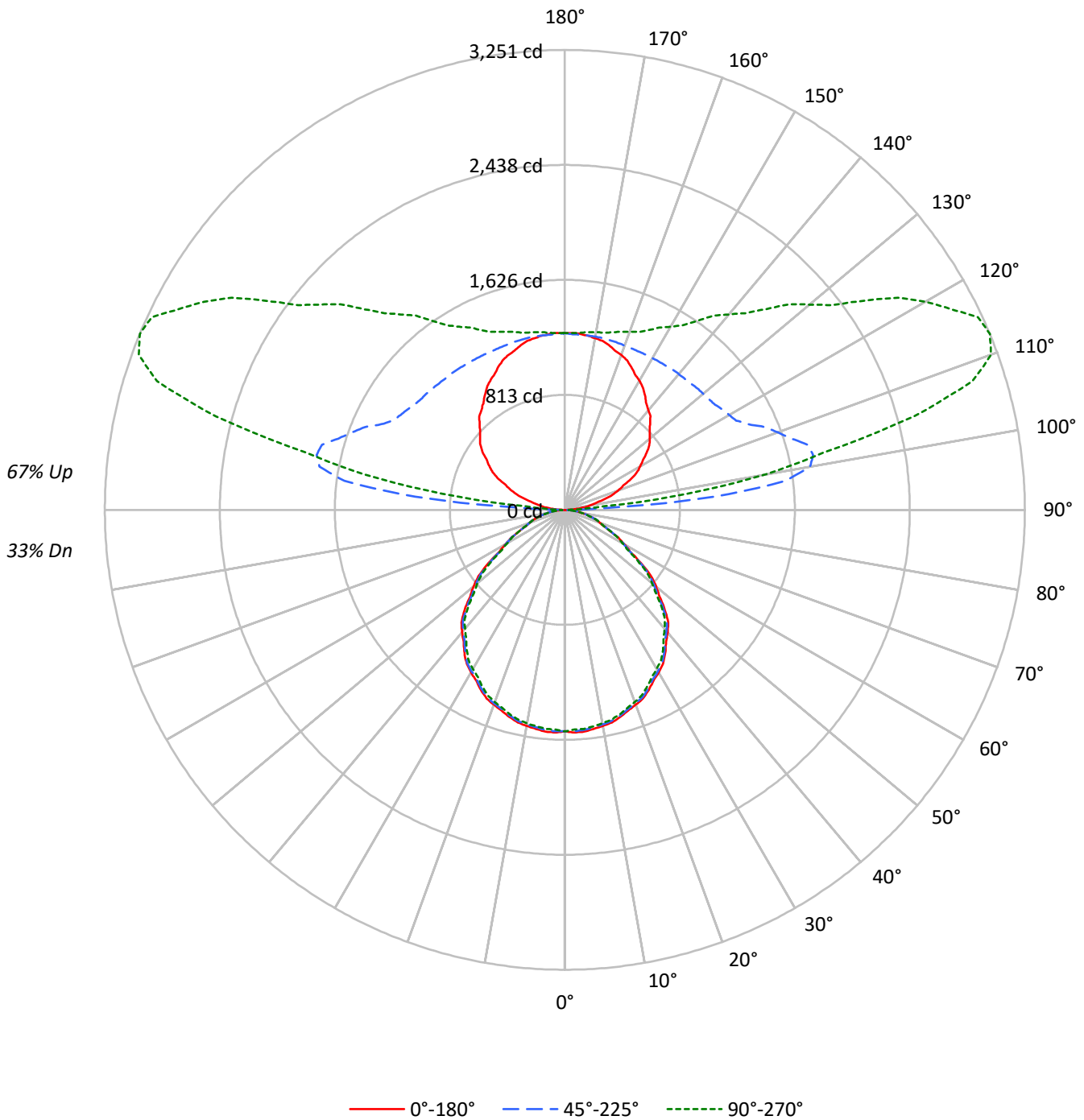
Lumens per Lamp: N/A
Luminaire Lumens: 12030.7 lumens
Efficiency: N/A
Efficacy: 142.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 84.7
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28
2	86	79	73	68	77	71	66	62	57	53	50	44	42	40	32	30	29	24
3	78	69	62	57	70	63	57	52	50	46	43	39	36	34	28	26	25	20
4	72	61	54	48	64	56	49	44	45	40	36	35	31	29	25	23	22	17
5	66	55	47	41	59	50	43	38	40	35	31	31	28	25	23	21	19	15
6	60	49	41	35	54	44	38	33	36	31	27	28	25	22	21	18	17	13
7	56	44	36	31	50	40	33	29	33	28	24	25	22	19	19	17	15	12
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	17	15	13	11
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	14	12	10
10	45	33	26	22	40	30	24	20	25	20	17	20	16	14	15	12	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7224	7224	7224
5°	7289	7233	7195
10°	7266	7215	7177
15°	7234	7189	7150
20°	7197	7151	7098
25°	7147	7099	7016
30°	7070	7019	6919
35°	6965	6904	6806
40°	6807	6733	6612
45°	6529	6415	6283
50°	6040	5895	5779
55°	5272	5153	5044
60°	4442	4406	4318
65°	3842	3858	3828
70°	3530	3547	3547
75°	3390	3390	3413
80°	3188	3225	3188
85°	2572	2858	2858



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.1	1.2
10°-20°	423.7	3.5
20°-30°	639.0	5.3
30°-40°	761.4	6.3
40°-50°	750.7	6.2
50°-60°	573.7	4.8
60°-70°	355.0	3.0
70°-80°	201.7	1.7
80°-90°	63.9	0.5
90°-100°	584.8	4.9
100°-110°	1614.4	13.4
110°-120°	1664.9	13.8
120°-130°	1337.9	11.1
130°-140°	1051.5	8.7
140°-150°	806.4	6.7
150°-160°	579.6	4.8
160°-170°	354.4	2.9
170°-180°	119.5	1.0
0°-30°	1210.8	10.1
0°-40°	1972.2	16.4
0°-60°	3296.6	27.4
0°-90°	3917.2	32.6
90°-120°	3864.1	32.1
90°-150°	7060.0	58.7
90°-180°	8113.0	67.4
0°-180°	12030.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1566	1566	1566	1566	1566	
5°	1574	1557	1562	1556	1554	149
15°	1515	1499	1505	1500	1497	427
25°	1404	1387	1395	1380	1378	646
35°	1237	1222	1226	1210	1208	772
45°	1001	988	983	966	963	767
55°	656	645	641	630	627	587
65°	352	349	353	351	351	357
75°	190	190	190	192	192	201
85°	49	51	54	54	54	57
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°	1565.9	1565.9	1565.9	1565.9	1565.9
2.5°	1575.6	1561.9	1565.9	1562.5	1555.1
5°	1574.0	1556.9	1561.9	1556.4	1553.8
7.5°	1561.9	1545.0	1550.0	1544.6	1543.0
10°	1551.1	1535.3	1540.3	1534.8	1532.2
12.5°	1539.2	1522.3	1528.4	1521.9	1519.2
15°	1514.7	1498.8	1505.2	1499.8	1497.1
17.5°	1487.7	1470.8	1477.2	1470.9	1467.5
20°	1466.1	1450.3	1456.7	1447.2	1445.9
22.5°	1442.4	1426.5	1432.9	1420.2	1420.0
25°	1404.1	1386.9	1394.6	1379.8	1378.4
27.5°	1358.5	1342.7	1349.0	1333.9	1332.3
30°	1327.2	1311.4	1317.7	1301.5	1298.9
32.5°	1291.6	1276.8	1282.1	1265.9	1264.3
35°	1236.8	1222.3	1226.0	1209.8	1208.5
37.5°	1174.5	1161.3	1163.4	1145.6	1144.3
40°	1130.3	1117.1	1118.1	1099.2	1097.9
42.5°	1081.7	1068.5	1067.4	1048.5	1047.2
45°	1000.8	987.6	983.3	965.7	963.0
47.5°	908.5	895.3	887.2	872.9	871.0
50°	841.6	828.4	821.4	809.2	805.2
52.5°	769.3	756.1	750.2	739.0	735.1
55°	655.5	644.9	640.7	629.8	627.2
57.5°	547.3	540.2	539.0	528.4	527.4
60°	481.5	477.6	477.5	468.0	468.0
62.5°	425.4	422.5	424.6	418.4	417.3
65°	352.0	349.4	353.4	350.7	350.7
67.5°	294.0	294.0	296.5	295.4	295.4
70°	261.7	261.7	263.0	263.0	263.0
72.5°	232.5	231.5	235.0	234.9	233.9
75°	190.2	190.2	190.2	191.5	191.5
77.5°	148.1	148.4	149.4	149.1	148.1
80°	120.0	121.4	121.4	120.0	120.0
82.5°	92.0	93.3	93.3	93.0	92.0
85°	48.6	51.2	54.0	54.0	54.0
87.5°	14.8	19.8	24.8	25.2	24.5
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)