

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: P564908

Luminaire Tested: **SQ4-PW1-100U-050D-830-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564908
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-PW1-100U-050D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

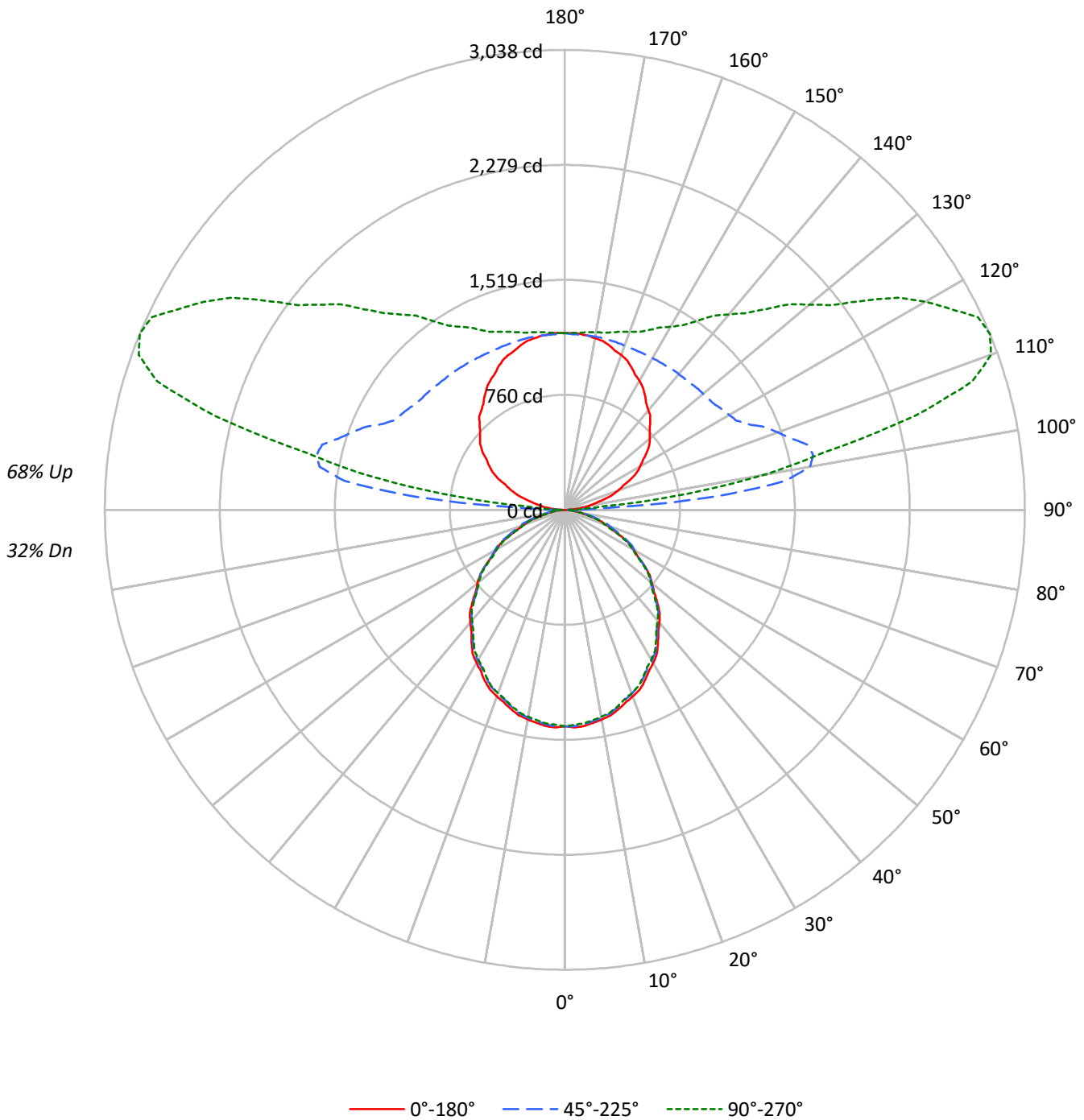
Lumens per Lamp: N/A
Luminaire Lumens: 11224.1 lumens
Efficiency: N/A
Efficacy: 132.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

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



TEST NUMBER: P564908
CATALOG NUMBER: SQ4-PW1-100U-050D-830-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P564908

CATALOG NUMBER: SQ4-PW1-100U-050D-830-1D-UNV-STD-W-8

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	32
1	94	90	86	83	84	81	78	75	64	62	60	49	48	47	35	35	34	27
2	86	78	72	67	77	71	66	62	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	49	43	44	40	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	35	31	31	27	24	22	20	18	15
6	60	48	41	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	55	44	36	31	50	40	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	45	33	26	21	40	30	24	20	24	20	17	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6600	6600	6600
5°	6642	6590	6560
10°	6589	6536	6500
15°	6519	6447	6423
20°	6441	6342	6330
25°	6351	6236	6216
30°	6217	6123	6083
35°	6040	5955	5920
40°	5852	5761	5738
45°	5624	5551	5526
50°	5391	5346	5310
55°	5139	5139	5058
60°	4826	4919	4744
65°	4416	4637	4306
70°	3893	4268	3791
75°	3324	3820	3235
80°	2580	3214	2611
85°	1667	2467	2202



TEST NUMBER: P564908

CATALOG NUMBER: SQ4-PW1-100U-050D-830-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.7	1.2
10°-20°	380.3	3.4
20°-30°	564.1	5.0
30°-40°	660.1	5.9
40°-50°	657.2	5.9
50°-60°	567.5	5.1
60°-70°	408.5	3.6
70°-80°	214.2	1.9
80°-90°	55.5	0.5
90°-100°	546.5	4.9
100°-110°	1508.6	13.4
110°-120°	1555.9	13.9
120°-130°	1250.3	11.1
130°-140°	982.6	8.8
140°-150°	753.6	6.7
150°-160°	541.6	4.8
160°-170°	331.2	3.0
170°-180°	111.7	1.0
0°-30°	1079.2	9.6
0°-40°	1739.3	15.5
0°-60°	2963.9	26.4
0°-90°	3642.1	32.4
90°-120°	3611.0	32.2
90°-150°	6597.5	58.8
90°-180°	7582.0	67.6
0°-180°	11224.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1431	1431	1431	1431	1431	
5°	1434	1418	1423	1419	1417	136
15°	1365	1348	1350	1347	1345	385
25°	1248	1227	1225	1218	1221	574
35°	1073	1058	1058	1048	1051	671
45°	862	855	851	848	847	665
55°	639	638	639	630	629	570
65°	405	417	425	408	394	401
75°	186	204	214	200	182	200
85°	32	41	47	44	42	42
90°	4	7	15	17	19	7
95°	80	296	991	408	265	86
105°	269	415	1660	2534	2386	286
115°	482	582	1337	2646	3010	473
125°	661	752	1212	2051	2407	588
135°	795	881	1178	1661	1873	615
145°	922	986	1163	1414	1522	577
155°	1040	1075	1154	1269	1309	479
165°	1126	1140	1159	1204	1214	317
175°	1167	1169	1161	1178	1174	111
180°	1167	1167	1167	1167	1167	

TEST NUMBER: P564908

CATALOG NUMBER: SQ4-PW1-100U-050D-830-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1430.6	1430.6	1430.6	1430.6	1430.6
2.5°	1438.6	1426.8	1430.6	1427.4	1420.5
5°	1434.3	1418.3	1423.0	1419.2	1416.7
7.5°	1419.7	1404.9	1408.4	1404.3	1402.8
10°	1406.6	1391.8	1395.3	1390.2	1387.7
12.5°	1391.5	1375.7	1379.1	1374.1	1372.6
15°	1365.0	1347.8	1349.9	1347.3	1344.9
17.5°	1334.3	1316.8	1317.1	1313.1	1312.6
20°	1312.1	1293.6	1291.9	1286.9	1289.4
22.5°	1287.9	1268.4	1266.7	1259.7	1263.2
25°	1247.8	1226.9	1225.1	1217.6	1221.3
27.5°	1201.4	1180.7	1180.8	1170.3	1174.2
30°	1167.1	1147.4	1149.5	1137.0	1141.9
32.5°	1130.8	1113.1	1114.2	1101.7	1106.6
35°	1072.6	1057.8	1057.5	1047.5	1051.2
37.5°	1013.1	1000.1	998.0	992.2	993.2
40°	971.8	960.7	956.7	952.9	952.9
42.5°	928.4	918.3	914.3	911.5	910.5
45°	862.1	854.7	850.8	848.2	847.0
47.5°	796.6	789.7	786.2	784.5	783.2
50°	751.2	746.3	744.9	741.1	739.9
52.5°	705.8	702.9	701.5	696.7	695.5
55°	639.0	637.8	639.0	630.2	628.9
57.5°	569.5	571.4	575.5	563.6	560.6
60°	523.1	528.0	533.2	519.2	514.2
62.5°	475.7	483.6	490.8	474.8	467.9
65°	404.6	416.9	424.8	408.1	394.5
67.5°	336.0	351.3	360.7	342.7	327.5
70°	288.6	305.9	316.4	298.3	281.1
72.5°	247.3	266.5	275.0	258.0	240.7
75°	186.5	203.8	214.3	200.0	181.5
77.5°	132.3	148.6	157.3	144.9	129.6
80°	97.1	114.3	121.0	110.6	98.3
82.5°	68.8	83.1	87.7	81.5	73.1
85°	31.5	41.4	46.6	44.1	41.6
87.5°	8.8	16.4	22.1	22.5	23.9
90°	3.7	7.4	14.9	16.8	18.7
92.5°	33.6	139.5	249.4	91.0	70.9
95°	80.3	295.7	991.4	407.5	265.1
97.5°	132.9	331.2	1468.6	1130.7	818.9
100°	171.8	352.5	1644.9	1656.5	1346.1
102.5°	209.1	376.7	1679.2	2046.7	1752.4
105°	268.9	414.9	1659.8	2534.0	2386.1
107.5°	332.3	462.3	1567.2	2768.9	2823.0
110°	377.1	494.0	1495.5	2819.5	2994.7



TEST NUMBER: P564908

CATALOG NUMBER: SQ4-PW1-100U-050D-830-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	417.5	529.9	1428.3	2779.6	3038.1
115°	481.7	582.1	1336.8	2646.4	3009.7
117.5°	537.7	637.8	1276.7	2459.0	2872.3
120°	575.1	673.6	1252.8	2332.1	2748.3
122.5°	610.9	705.1	1233.4	2213.6	2607.9
125°	660.9	752.2	1211.7	2050.6	2406.6
127.5°	703.5	794.8	1199.0	1912.9	2219.9
130°	731.9	823.2	1193.0	1828.6	2107.9
132.5°	758.8	845.7	1187.1	1757.8	2010.8
135°	795.4	881.2	1178.1	1660.9	1872.7
137.5°	836.4	914.6	1173.6	1579.5	1760.3
140°	858.8	935.5	1170.6	1525.3	1684.1
142.5°	884.2	955.1	1167.7	1477.0	1616.9
145°	922.3	986.2	1163.2	1413.9	1521.6
147.5°	958.9	1014.8	1159.1	1360.7	1444.3
150°	985.8	1031.4	1157.6	1329.0	1396.6
152.5°	1006.7	1049.4	1156.1	1301.9	1357.7
155°	1039.9	1074.6	1153.8	1268.6	1308.8
157.5°	1070.6	1097.2	1154.2	1244.5	1271.8
160°	1088.5	1112.2	1155.7	1230.8	1250.9
162.5°	1103.4	1124.2	1157.2	1218.8	1234.5
165°	1125.8	1140.4	1159.4	1204.5	1213.6
167.5°	1143.0	1151.8	1161.3	1195.7	1198.6
170°	1152.0	1159.3	1161.3	1191.2	1191.2
172.5°	1159.4	1163.8	1161.3	1185.2	1183.7
175°	1166.9	1168.7	1161.3	1178.0	1174.4
177.5°	1169.9	1168.4	1160.9	1171.3	1168.4
180°	1166.9	1166.9	1166.9	1166.9	1166.9

(END OF REPORT)