

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: P564912

Luminaire Tested: **SQ4-PW1-100U-050D-835-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564912
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-835-1D-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

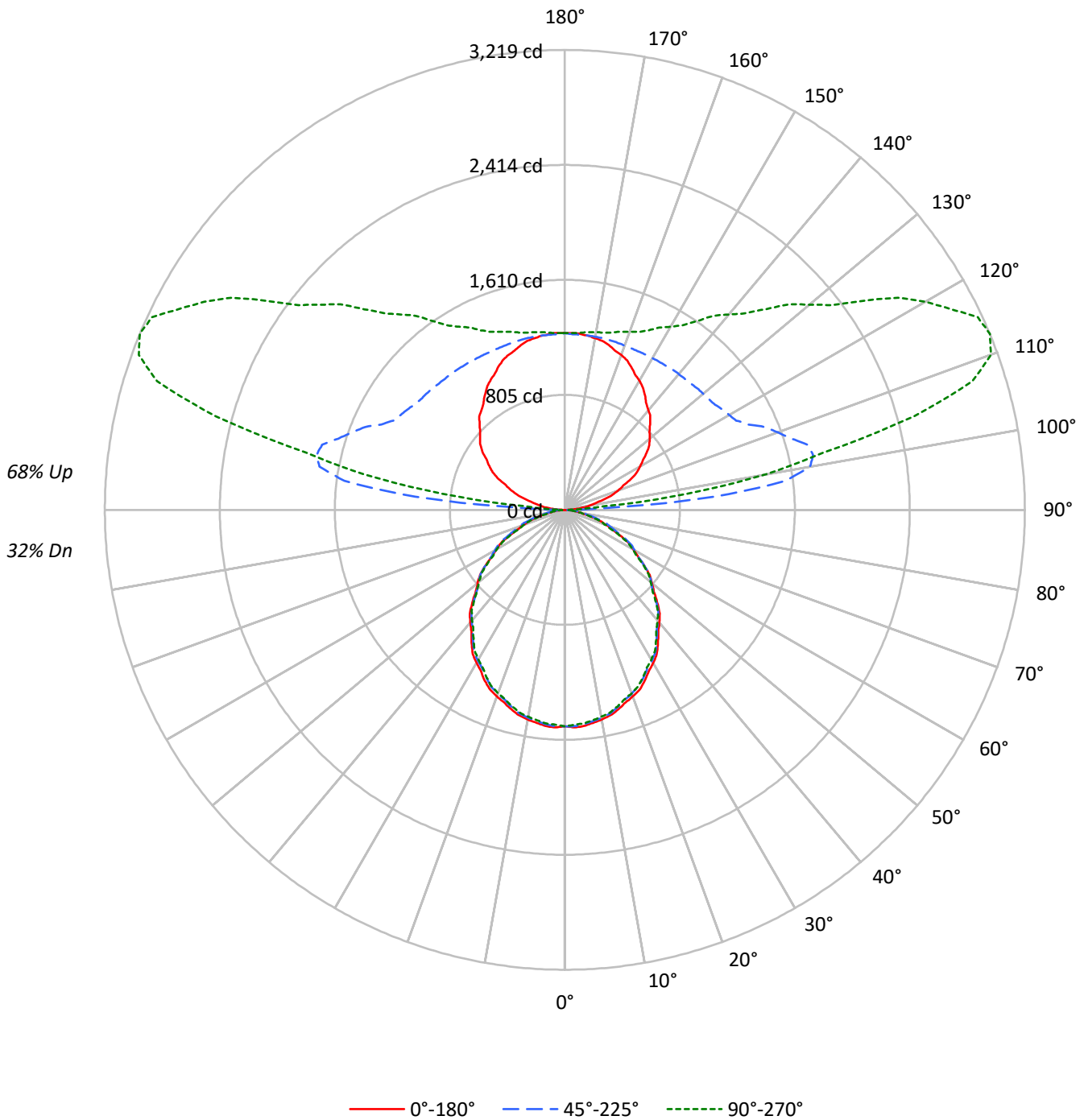
Lumens per Lamp: N/A
Luminaire Lumens: 11891.3 lumens
Efficiency: N/A
Efficacy: 140.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

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



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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	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°	6992	6992	6992
5°	7037	6981	6950
10°	6980	6924	6887
15°	6907	6830	6805
20°	6824	6719	6706
25°	6729	6606	6586
30°	6587	6487	6444
35°	6400	6309	6272
40°	6200	6103	6079
45°	5959	5880	5854
50°	5712	5664	5625
55°	5445	5445	5359
60°	5113	5211	5026
65°	4678	4912	4563
70°	4125	4521	4017
75°	3522	4046	3427
80°	2731	3406	2768
85°	1768	2615	2334



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.7	1.2
10°-20°	402.9	3.4
20°-30°	597.7	5.0
30°-40°	699.3	5.9
40°-50°	696.2	5.9
50°-60°	601.2	5.1
60°-70°	432.8	3.6
70°-80°	226.9	1.9
80°-90°	58.8	0.5
90°-100°	579.0	4.9
100°-110°	1598.3	13.4
110°-120°	1648.4	13.9
120°-130°	1324.6	11.1
130°-140°	1041.0	8.8
140°-150°	798.4	6.7
150°-160°	573.8	4.8
160°-170°	350.9	3.0
170°-180°	118.3	1.0
0°-30°	1143.3	9.6
0°-40°	1842.7	15.5
0°-60°	3140.1	26.4
0°-90°	3858.6	32.4
90°-120°	3825.6	32.2
90°-150°	6989.6	58.8
90°-180°	8033.0	67.6
0°-180°	11891.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1516	1516	1516	1516	1516	
5°	1520	1503	1508	1504	1501	144
15°	1446	1428	1430	1427	1425	408
25°	1322	1300	1298	1290	1294	608
35°	1136	1121	1120	1110	1114	710
45°	913	906	901	899	897	705
55°	677	676	677	668	666	604
65°	429	442	450	432	418	425
75°	198	216	227	212	192	212
85°	33	44	49	47	44	44
90°	4	8	16	18	20	7
95°	85	313	1050	432	281	91
105°	285	440	1758	2685	2528	303
115°	510	617	1416	2804	3189	501
125°	700	797	1284	2172	2550	623
135°	843	934	1248	1760	1984	652
145°	977	1045	1232	1498	1612	612
155°	1102	1138	1222	1344	1387	508
165°	1193	1208	1228	1276	1286	336
175°	1236	1238	1230	1248	1244	117
180°	1236	1236	1236	1236	1236	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1515.6	1515.6	1515.6	1515.6	1515.6
2.5°	1524.1	1511.6	1515.6	1512.2	1504.9
5°	1519.6	1502.6	1507.6	1503.5	1500.9
7.5°	1504.1	1488.5	1492.1	1487.8	1486.2
10°	1490.2	1474.6	1478.2	1472.8	1470.2
12.5°	1474.2	1457.5	1461.1	1455.7	1454.2
15°	1446.2	1427.9	1430.1	1427.4	1424.8
17.5°	1413.6	1395.0	1395.4	1391.1	1390.6
20°	1390.1	1370.5	1368.7	1363.4	1366.0
22.5°	1364.4	1343.8	1342.0	1334.6	1338.3
25°	1322.0	1299.8	1297.9	1290.0	1293.9
27.5°	1272.8	1250.9	1250.9	1239.8	1244.0
30°	1236.5	1215.6	1217.8	1204.6	1209.8
32.5°	1198.1	1179.3	1180.4	1167.2	1172.4
35°	1136.4	1120.7	1120.3	1109.8	1113.7
37.5°	1073.3	1059.5	1057.3	1051.2	1052.2
40°	1029.5	1017.8	1013.5	1009.5	1009.5
42.5°	983.6	972.9	968.7	965.7	964.6
45°	913.4	905.5	901.3	898.6	897.3
47.5°	843.9	836.6	833.0	831.1	829.8
50°	795.9	790.6	789.2	785.1	783.8
52.5°	747.8	744.7	743.2	738.1	736.8
55°	677.0	675.7	677.0	667.6	666.3
57.5°	603.3	605.4	609.7	597.1	594.0
60°	554.2	559.4	564.8	550.0	544.8
62.5°	504.0	512.3	520.0	503.0	495.7
65°	428.6	441.7	450.0	432.3	418.0
67.5°	356.0	372.2	382.2	363.1	346.9
70°	305.8	324.1	335.2	316.1	297.8
72.5°	262.0	282.4	291.4	273.3	255.0
75°	197.6	215.9	227.0	211.9	192.3
77.5°	140.2	157.4	166.6	153.5	137.3
80°	102.8	121.1	128.2	117.2	104.2
82.5°	72.9	88.1	92.9	86.3	77.4
85°	33.4	43.8	49.4	46.7	44.1
87.5°	9.3	17.4	23.5	23.9	25.3
90°	4.0	7.8	15.8	17.8	19.8
92.5°	35.6	147.8	264.3	96.4	75.2
95°	85.1	313.3	1050.3	431.7	280.9
97.5°	140.8	350.9	1555.9	1197.9	867.6
100°	182.0	373.5	1742.6	1755.0	1426.2
102.5°	221.5	399.1	1779.0	2168.4	1856.6
105°	284.8	439.6	1758.5	2684.6	2527.9
107.5°	352.1	489.8	1660.4	2933.5	2990.8
110°	399.6	523.3	1584.4	2987.1	3172.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	442.3	561.4	1513.2	2944.8	3218.7
115°	510.3	616.7	1416.3	2803.7	3188.6
117.5°	569.7	675.7	1352.6	2605.1	3043.0
120°	609.2	713.7	1327.3	2470.7	2911.7
122.5°	647.2	747.0	1306.7	2345.2	2762.9
125°	700.2	796.9	1283.7	2172.5	2549.7
127.5°	745.3	842.0	1270.3	2026.6	2351.9
130°	775.4	872.1	1264.0	1937.3	2233.2
132.5°	803.9	895.9	1257.6	1862.3	2130.3
135°	842.6	933.5	1248.1	1759.6	1984.0
137.5°	886.2	968.9	1243.4	1673.4	1864.9
140°	909.9	991.1	1240.2	1615.9	1784.2
142.5°	936.8	1011.8	1237.1	1564.8	1713.0
145°	977.1	1044.8	1232.3	1498.0	1612.1
147.5°	1015.9	1075.1	1228.0	1441.6	1530.2
150°	1044.4	1092.8	1226.4	1408.0	1479.6
152.5°	1066.6	1111.8	1224.8	1379.2	1438.4
155°	1101.8	1138.5	1222.4	1344.1	1386.6
157.5°	1134.2	1162.4	1222.8	1318.4	1347.4
160°	1153.2	1178.3	1224.4	1304.0	1325.3
162.5°	1169.0	1191.1	1226.0	1291.2	1307.9
165°	1192.8	1208.2	1228.4	1276.1	1285.7
167.5°	1211.0	1220.2	1230.3	1266.8	1269.9
170°	1220.4	1228.2	1230.3	1262.0	1262.0
172.5°	1228.4	1233.0	1230.3	1255.6	1254.1
175°	1236.3	1238.2	1230.3	1248.1	1244.2
177.5°	1239.4	1237.9	1229.9	1240.9	1237.9
180°	1236.3	1236.3	1236.3	1236.3	1236.3

(END OF REPORT)