

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

Brand: CORELITE

Report Number: P688622

Luminaire Tested: SQ4R-PW1-100D-840-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688622
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-35)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PW1-100D-840-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3804.3 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

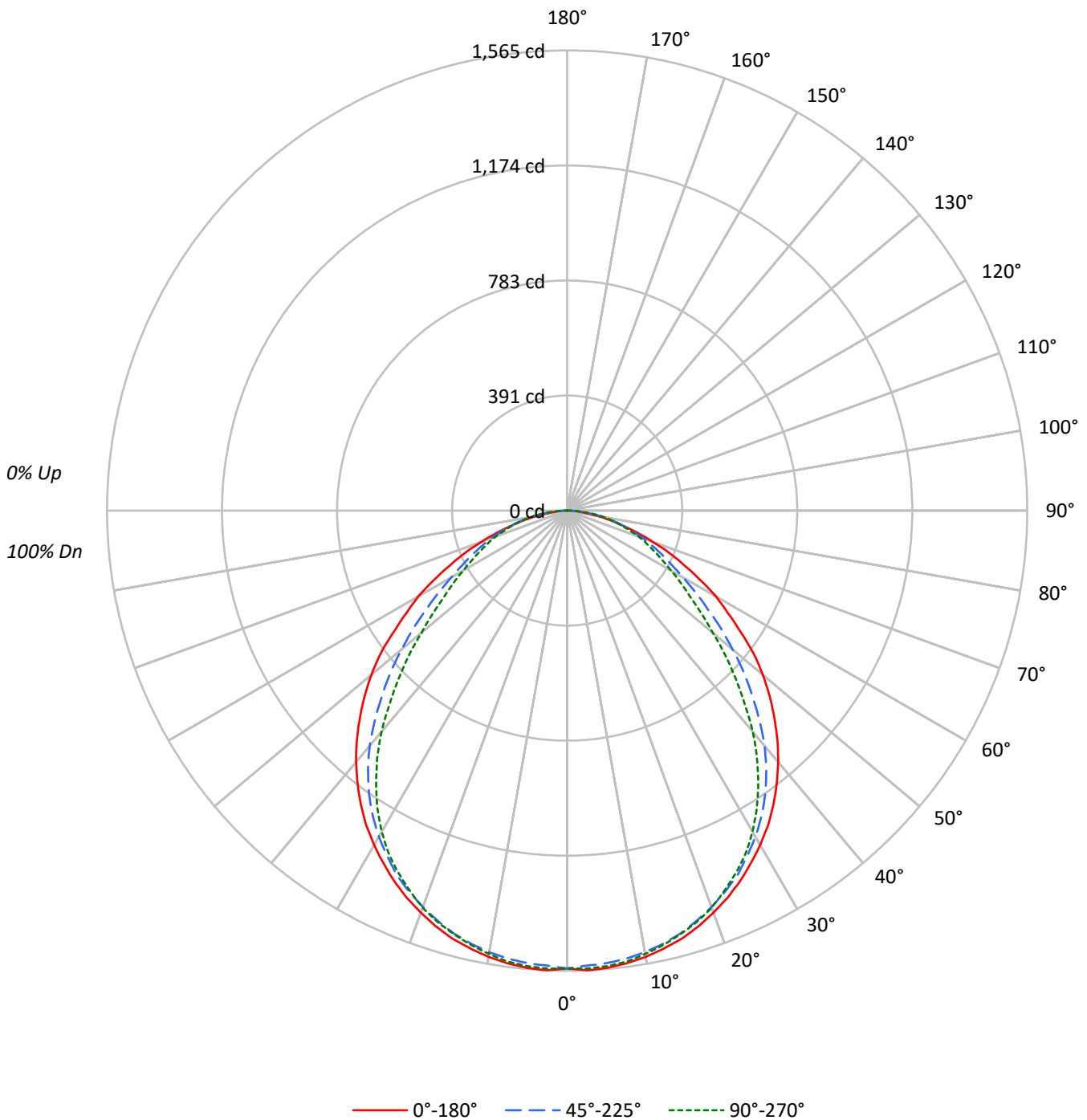
Input Watts (W): 37
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	85	73	65	58	82	72	64	58	69	63	57	67	61	56	65	60	56	54
5	78	66	57	51	76	65	57	50	63	55	50	61	54	49	59	53	49	47
6	72	59	51	45	70	59	50	44	57	49	44	55	49	44	54	48	43	41
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	37
8	63	50	41	36	61	49	41	36	48	40	35	46	40	35	45	39	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30
10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14990	14990	14990
5°	15086	14931	15028
10°	15065	14908	14967
15°	15020	14841	14861
20°	14906	14701	14721
25°	14775	14541	14435
30°	14594	14238	14016
35°	14371	13807	13312
40°	14034	13129	12349
45°	13569	12126	11062
50°	13009	11001	9681
55°	12093	9775	8565
60°	11252	8747	7862
65°	9985	8114	7431
70°	8675	7718	7324
75°	7146	7294	6997
80°	5661	6880	6880
85°	4198	6186	6407

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13569 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.7	3.9
10°-20°	421.9	11.1
20°-30°	632.0	16.6
30°-40°	734.3	19.3
40°-50°	692.8	18.2
50°-60°	540.5	14.2
60°-70°	367.0	9.6
70°-80°	206.6	5.4
80°-90°	61.4	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1201.7	31.6
0°-40°	1936.0	50.9
0°-60°	3169.3	83.3
0°-90°	3804.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3804.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1557	1557	1557	1557	1557	
5°	1561	1557	1545	1557	1555	148
15°	1507	1501	1489	1497	1491	425
25°	1391	1385	1369	1365	1359	641
35°	1223	1211	1175	1149	1133	764
45°	997	967	891	834	812	768
55°	720	678	582	526	510	647
65°	438	398	356	334	326	438
75°	192	200	196	188	188	209
85°	38	54	56	56	58	46
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1557.0	1557.0	1557.0	1557.0	1557.0
2.5°	1565.0	1561.0	1549.0	1561.0	1559.0
5°	1561.0	1557.0	1545.0	1557.0	1555.0
7.5°	1553.0	1551.0	1537.0	1549.0	1547.0
10°	1541.0	1539.0	1525.0	1535.0	1531.0
12.5°	1525.0	1523.0	1509.0	1517.0	1513.0
15°	1507.0	1501.0	1489.0	1497.0	1491.0
17.5°	1483.0	1477.0	1462.9	1468.9	1466.9
20°	1454.9	1448.9	1434.9	1440.9	1436.9
22.5°	1424.9	1418.9	1402.9	1404.9	1398.9
25°	1390.9	1384.9	1368.9	1364.9	1358.9
27.5°	1352.9	1348.9	1324.9	1320.9	1314.8
30°	1312.8	1306.8	1280.8	1272.8	1260.8
32.5°	1270.8	1258.8	1230.8	1214.8	1200.8
35°	1222.8	1210.8	1174.8	1148.7	1132.7
37.5°	1170.8	1152.7	1112.7	1076.7	1060.7
40°	1116.7	1096.7	1044.7	996.6	982.6
42.5°	1058.7	1034.7	968.6	918.6	894.6
45°	996.6	966.6	890.6	834.5	812.5
47.5°	934.6	896.6	814.5	754.5	730.5
50°	868.6	822.5	734.5	670.4	646.4
52.5°	800.5	750.5	660.4	594.4	576.4
55°	720.5	678.4	582.4	526.3	510.3
57.5°	648.4	602.4	518.3	470.3	458.3
60°	584.4	528.3	454.3	418.3	408.3
62.5°	510.3	460.3	402.3	374.2	364.2
65°	438.3	398.3	356.2	334.2	326.2
67.5°	376.2	342.2	314.2	296.2	292.2
70°	308.2	290.2	274.2	260.2	260.2
72.5°	250.2	244.2	234.2	226.1	220.1
75°	192.1	200.1	196.1	188.1	188.1
77.5°	146.1	158.1	160.1	156.1	158.1
80°	102.1	120.1	124.1	122.1	124.1
82.5°	64.0	86.1	90.1	90.1	92.1
85°	38.0	54.0	56.0	56.0	58.0
87.5°	16.0	26.0	28.0	28.0	28.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)