

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: P688625

Luminaire Tested: SQ4R-PW1-100D-940-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688625
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-940-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3163.7 lumens
Efficiency: N/A
Efficacy: 85.5 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

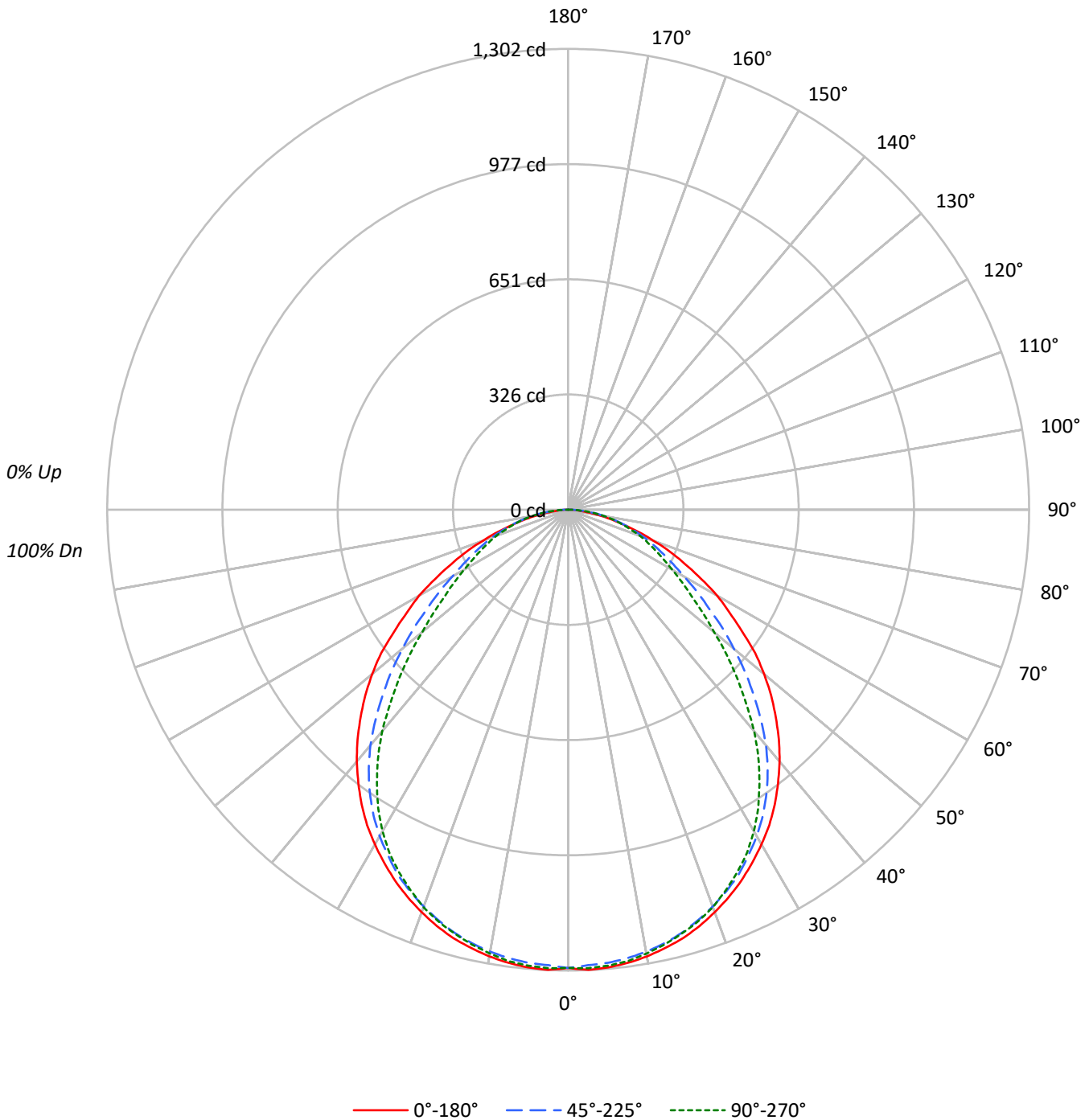
Input Watts (W): 37
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	12465	12465	12465
5°	12546	12417	12498
10°	12528	12398	12447
15°	12491	12341	12358
20°	12397	12226	12243
25°	12287	12093	12005
30°	12137	11842	11656
35°	11951	11483	11071
40°	11672	10919	10270
45°	11284	10083	9200
50°	10818	9148	8052
55°	10057	8129	7123
60°	9358	7274	6537
65°	8303	6748	6180
70°	7214	6418	6091
75°	5944	6067	5818
80°	4707	5722	5722
85°	3491	5147	5335

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11284 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.8	3.9
10°-20°	350.9	11.1
20°-30°	525.6	16.6
30°-40°	610.7	19.3
40°-50°	576.2	18.2
50°-60°	449.5	14.2
60°-70°	305.2	9.6
70°-80°	171.8	5.4
80°-90°	51.0	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°	999.3	31.6
0°-40°	1610.0	50.9
0°-60°	2635.7	83.3
0°-90°	3163.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3163.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1295	1295	1295	1295	1295	
5°	1298	1295	1285	1295	1293	123
15°	1253	1248	1238	1245	1240	353
25°	1157	1152	1138	1135	1130	533
35°	1017	1007	977	955	942	635
45°	829	804	741	694	676	639
55°	599	564	484	438	424	538
65°	364	331	296	278	271	364
75°	160	166	163	156	156	174
85°	32	45	47	47	48	38
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1294.8	1294.8	1294.8	1294.8	1294.8
2.5°	1301.5	1298.2	1288.2	1298.2	1296.5
5°	1298.2	1294.8	1284.9	1294.8	1293.2
7.5°	1291.5	1289.8	1278.2	1288.2	1286.5
10°	1281.5	1279.9	1268.2	1276.5	1273.2
12.5°	1268.2	1266.5	1254.9	1261.6	1258.2
15°	1253.2	1248.2	1238.2	1244.9	1239.9
17.5°	1233.3	1228.3	1216.6	1221.6	1219.9
20°	1210.0	1205.0	1193.3	1198.3	1195.0
22.5°	1185.0	1180.0	1166.7	1168.3	1163.4
25°	1156.7	1151.7	1138.4	1135.1	1130.1
27.5°	1125.1	1121.7	1101.8	1098.4	1093.5
30°	1091.8	1086.8	1065.2	1058.5	1048.5
32.5°	1056.8	1046.9	1023.6	1010.2	998.6
35°	1016.9	1006.9	977.0	955.3	942.0
37.5°	973.6	958.6	925.4	895.4	882.1
40°	928.7	912.0	868.8	828.8	817.2
42.5°	880.4	860.5	805.5	763.9	743.9
45°	828.8	803.9	740.6	694.0	675.7
47.5°	777.2	745.6	677.4	627.4	607.5
50°	722.3	684.0	610.8	557.5	537.6
52.5°	665.7	624.1	549.2	494.3	479.3
55°	599.2	564.2	484.3	437.7	424.4
57.5°	539.2	501.0	431.1	391.1	381.1
60°	486.0	439.4	377.8	347.8	339.5
62.5°	424.4	382.8	334.5	311.2	302.9
65°	364.5	331.2	296.2	277.9	271.3
67.5°	312.9	284.6	261.3	246.3	243.0
70°	256.3	241.3	228.0	216.4	216.4
72.5°	208.0	203.0	194.7	188.1	183.1
75°	159.8	166.4	163.1	156.4	156.4
77.5°	121.5	131.5	133.1	129.8	131.5
80°	84.9	99.9	103.2	101.5	103.2
82.5°	53.3	71.6	74.9	74.9	76.6
85°	31.6	44.9	46.6	46.6	48.3
87.5°	13.3	21.6	23.3	23.3	23.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)