

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: P688990

Luminaire Tested: SQ4R-PW1-100D-93050-1-UNV-STD-W-4_3000K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688990
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-93050-1-UNV-STD-W-4_3000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3821.6 lumens
Efficiency: N/A
Efficacy: 82.5 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

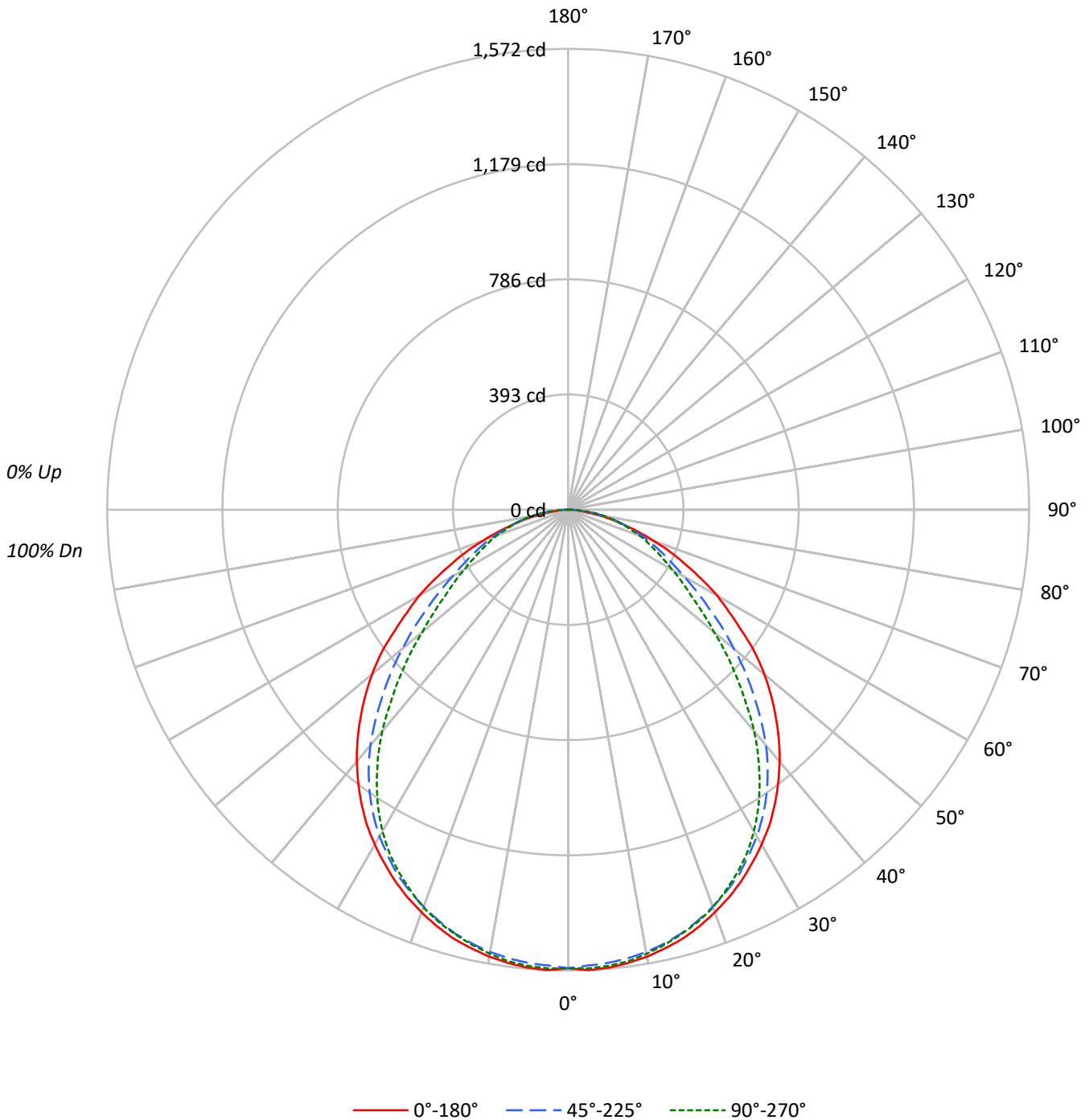
Input Watts (W): 46.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	15058	15058	15058
5°	15154	14999	15096
10°	15133	14976	15035
15°	15089	14909	14929
20°	14974	14768	14789
25°	14842	14607	14501
30°	14661	14304	14080
35°	14437	13869	13374
40°	14098	13188	12405
45°	13631	12180	11113
50°	13068	11050	9726
55°	12149	9819	8606
60°	11303	8788	7896
65°	10030	8153	7465
70°	8715	7752	7358
75°	7179	7328	7030
80°	5683	6908	6908
85°	4220	6219	6440

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13631 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.4	3.9
10°-20°	423.9	11.1
20°-30°	634.9	16.6
30°-40°	737.7	19.3
40°-50°	696.0	18.2
50°-60°	543.0	14.2
60°-70°	368.6	9.6
70°-80°	207.6	5.4
80°-90°	61.6	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°	1207.2	31.6
0°-40°	1944.8	50.9
0°-60°	3183.8	83.3
0°-90°	3821.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3821.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1564	1564	1564	1564	1564	
5°	1568	1564	1552	1564	1562	149
15°	1514	1508	1496	1504	1498	427
25°	1397	1391	1375	1371	1365	643
35°	1228	1216	1180	1154	1138	767
45°	1001	971	895	838	816	772
55°	724	682	585	529	513	650
65°	440	400	358	336	328	440
75°	193	201	197	189	189	210
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°	1564.1	1564.1	1564.1	1564.1	1564.1
2.5°	1572.2	1568.1	1556.1	1568.1	1566.1
5°	1568.1	1564.1	1552.0	1564.1	1562.1
7.5°	1560.1	1558.1	1544.0	1556.1	1554.1
10°	1548.0	1546.0	1531.9	1542.0	1538.0
12.5°	1531.9	1529.9	1515.9	1523.9	1519.9
15°	1513.9	1507.8	1495.8	1503.8	1497.8
17.5°	1489.7	1483.7	1469.6	1475.7	1473.6
20°	1461.6	1455.5	1441.5	1447.5	1443.5
22.5°	1431.4	1425.4	1409.3	1411.3	1405.3
25°	1397.2	1391.2	1375.1	1371.1	1365.1
27.5°	1359.0	1355.0	1330.9	1326.9	1320.8
30°	1318.8	1312.8	1286.7	1278.6	1266.6
32.5°	1276.6	1264.6	1236.4	1220.3	1206.3
35°	1228.4	1216.3	1180.1	1154.0	1137.9
37.5°	1176.1	1158.0	1117.8	1081.6	1065.5
40°	1121.8	1101.7	1049.4	1001.2	987.1
42.5°	1063.5	1039.4	973.0	922.8	898.7
45°	1001.2	971.0	894.6	838.3	816.2
47.5°	938.9	900.7	818.2	757.9	733.8
50°	872.5	826.3	737.8	673.5	649.4
52.5°	804.2	753.9	663.4	597.1	579.0
55°	723.8	681.5	585.0	528.7	512.7
57.5°	651.4	605.1	520.7	472.5	460.4
60°	587.0	530.8	456.4	420.2	410.1
62.5°	512.7	462.4	404.1	375.9	365.9
65°	440.3	400.1	357.9	335.7	327.7
67.5°	378.0	343.8	315.6	297.5	293.5
70°	309.6	291.5	275.4	261.4	261.4
72.5°	251.3	245.3	235.2	227.2	221.1
75°	193.0	201.0	197.0	189.0	189.0
77.5°	146.8	158.8	160.8	156.8	158.8
80°	102.5	120.6	124.6	122.6	124.6
82.5°	64.3	86.4	90.5	90.5	92.5
85°	38.2	54.3	56.3	56.3	58.3
87.5°	16.1	26.1	28.1	28.1	28.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)