

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: P688621

Luminaire Tested: SQ4R-PW1-100D-835-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688621
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-835-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3701.2 lumens
Efficiency: N/A
Efficacy: 100.0 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

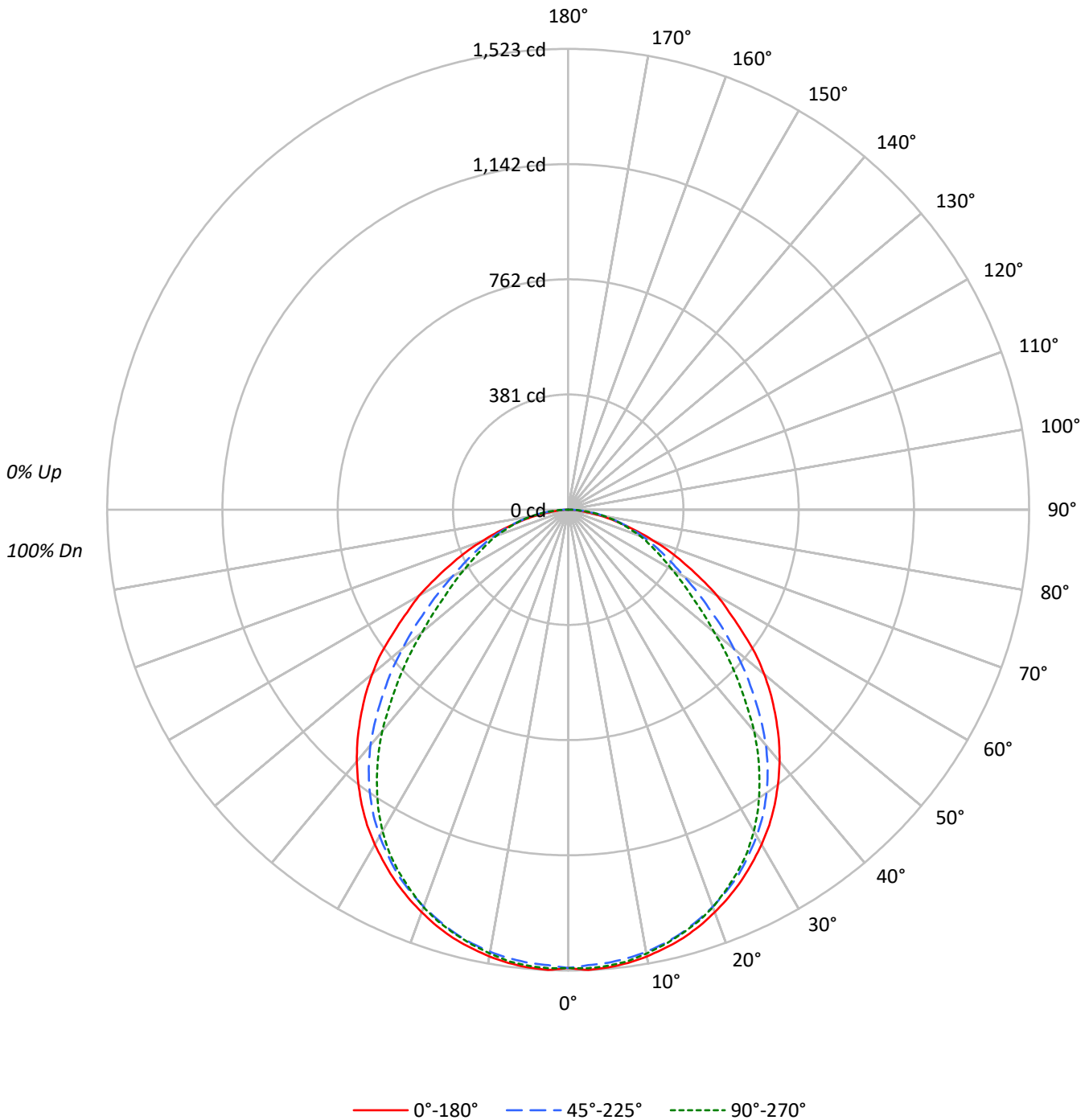
Input Watts (W): 37
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	14583	14583	14583
5°	14677	14526	14621
10°	14656	14504	14561
15°	14613	14438	14458
20°	14502	14302	14323
25°	14374	14147	14044
30°	14199	13853	13636
35°	13982	13432	12952
40°	13655	12774	12015
45°	13201	11796	10763
50°	12656	10703	9419
55°	11764	9510	8334
60°	10946	8511	7648
65°	9713	7896	7230
70°	8439	7507	7124
75°	6952	7097	6807
80°	5505	6692	6692
85°	4087	6020	6241

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13201 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.7	3.9
10°-20°	410.5	11.1
20°-30°	614.9	16.6
30°-40°	714.4	19.3
40°-50°	674.0	18.2
50°-60°	525.9	14.2
60°-70°	357.0	9.6
70°-80°	201.0	5.4
80°-90°	59.7	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°	1169.1	31.6
0°-40°	1883.5	50.9
0°-60°	3083.5	83.3
0°-90°	3701.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3701.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1515	1515	1515	1515	1515	
5°	1519	1515	1503	1515	1513	144
15°	1466	1460	1449	1456	1451	413
25°	1353	1347	1332	1328	1322	623
35°	1190	1178	1143	1118	1102	743
45°	970	940	866	812	790	748
55°	701	660	567	512	496	629
65°	426	388	347	325	317	426
75°	187	195	191	183	183	203
85°	37	53	54	54	56	45
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1514.8	1514.8	1514.8	1514.8	1514.8
2.5°	1522.6	1518.7	1507.0	1518.7	1516.8
5°	1518.7	1514.8	1503.1	1514.8	1512.9
7.5°	1510.9	1509.0	1495.3	1507.0	1505.1
10°	1499.2	1497.3	1483.7	1493.4	1489.5
12.5°	1483.7	1481.7	1468.1	1475.9	1472.0
15°	1466.1	1460.3	1448.6	1456.4	1450.6
17.5°	1442.8	1436.9	1423.3	1429.1	1427.2
20°	1415.5	1409.7	1396.0	1401.9	1398.0
22.5°	1386.3	1380.5	1364.9	1366.8	1361.0
25°	1353.2	1347.4	1331.8	1327.9	1322.1
27.5°	1316.2	1312.3	1289.0	1285.1	1279.2
30°	1277.3	1271.4	1246.1	1238.3	1226.6
32.5°	1236.4	1224.7	1197.4	1181.9	1168.2
35°	1189.7	1178.0	1142.9	1117.6	1102.0
37.5°	1139.0	1121.5	1082.6	1047.5	1031.9
40°	1086.5	1067.0	1016.4	969.6	956.0
42.5°	1030.0	1006.6	942.4	893.7	870.3
45°	969.6	940.4	866.4	811.9	790.5
47.5°	909.3	872.3	792.5	734.0	710.7
50°	845.0	800.2	714.6	652.3	628.9
52.5°	778.8	730.1	642.5	578.3	560.8
55°	700.9	660.1	566.6	512.1	496.5
57.5°	630.8	586.1	504.3	457.6	445.9
60°	568.5	514.0	442.0	406.9	397.2
62.5°	496.5	447.8	391.4	364.1	354.4
65°	426.4	387.5	346.6	325.2	317.4
67.5°	366.0	332.9	305.7	288.2	284.3
70°	299.8	282.3	266.7	253.1	253.1
72.5°	243.4	237.5	227.8	220.0	214.2
75°	186.9	194.7	190.8	183.0	183.0
77.5°	142.1	153.8	155.8	151.9	153.8
80°	99.3	116.8	120.7	118.8	120.7
82.5°	62.3	83.7	87.6	87.6	89.6
85°	37.0	52.6	54.5	54.5	56.5
87.5°	15.6	25.3	27.3	27.3	27.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)