

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: P686076

Luminaire Tested: SQ4R-F-100D-930-1-UNV-STD-W-4

Issue Date: 11/18/2022

Test Information

Test Method: LM-79-2019
Report Number: P686076
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-2)
Test Lab: INNOVATION CENTER
Issue Date: 11/18/2022
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-F-100D-930-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS.
1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3208.3 lumens
Efficiency: N/A
Efficacy: 86.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

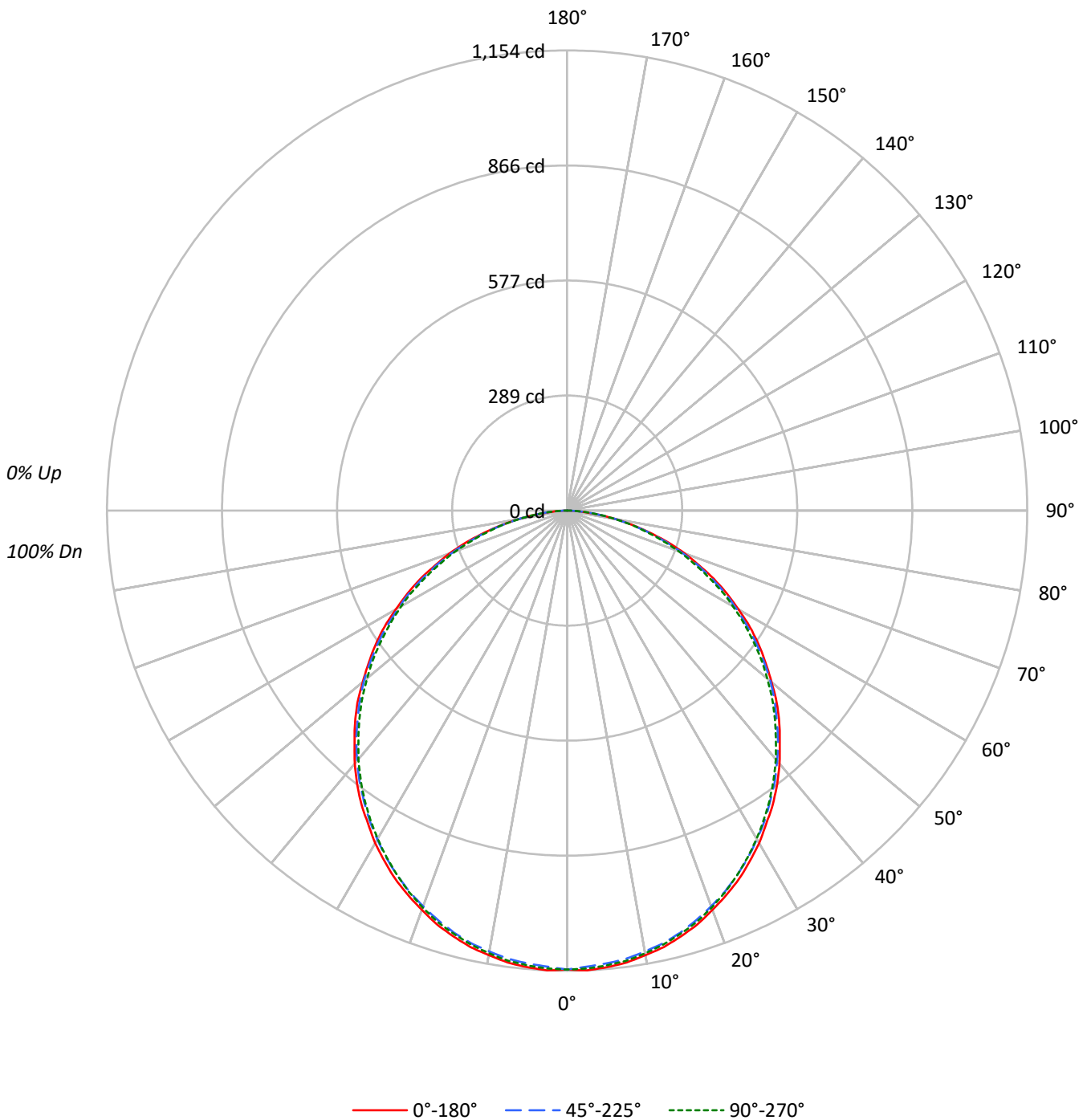
Input Watts (W): 37
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	104	100	96	106	102	98	94	97	94	91		94	91	88		90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75		82	77	74		79	75	72	70
3	90	80	71	65	88	78	70	64	75	68	63		72	67	62		70	65	61	59
4	82	70	62	55	80	69	61	54	67	59	54		64	58	53		62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46		58	51	46		56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41		52	45	40		51	45	40	38
7	65	51	43	36	63	51	42	36	49	41	36		48	41	36		46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32		44	37	32		42	36	32	30
9	56	43	35	29	55	42	35	29	41	34	29		40	34	29		39	33	29	27
10	53	40	32	27	52	39	32	26	38	31	26		37	31	26		36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11081	11081	11081
5°	11108	11016	11063
10°	11066	10974	11020
15°	11015	10921	10952
20°	10917	10820	10853
25°	10833	10715	10715
30°	10704	10581	10563
35°	10573	10444	10406
40°	10412	10293	10233
45°	10247	10117	10032
50°	10017	9969	9804
55°	9846	9713	9554
60°	9560	9406	9254
65°	9256	9039	8825
70°	8813	8546	8366
75°	7997	7823	7644
80°	6836	6836	6747
85°	4893	5236	5236

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10247 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.8	3.4
10°-20°	310.5	9.7
20°-30°	466.6	14.5
30°-40°	557.7	17.4
40°-50°	574.7	17.9
50°-60°	517.1	16.1
60°-70°	393.1	12.3
70°-80°	223.4	7.0
80°-90°	56.5	1.8
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°	885.9	27.6
0°-40°	1443.6	45.0
0°-60°	2535.4	79.0
0°-90°	3208.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3208.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1151	1151	1151	1151	1151	
5°	1149	1148	1140	1149	1145	109
15°	1105	1104	1096	1102	1099	312
25°	1020	1017	1009	1012	1009	469
35°	900	896	889	889	885	562
45°	753	753	743	738	737	580
55°	587	585	579	574	569	524
65°	406	405	397	392	387	401
75°	215	213	210	209	206	229
85°	44	46	47	47	47	55
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1151.0	1151.0	1151.0	1151.0	1151.0
2.5°	1154.2	1151.0	1144.7	1152.6	1149.4
5°	1149.4	1147.9	1139.9	1149.4	1144.7
7.5°	1143.1	1141.5	1133.6	1141.5	1138.4
10°	1132.0	1130.5	1122.6	1130.5	1127.3
12.5°	1121.0	1119.4	1111.5	1117.8	1114.6
15°	1105.2	1103.6	1095.7	1102.0	1098.8
17.5°	1087.8	1086.2	1076.7	1083.0	1081.4
20°	1065.6	1064.1	1056.1	1060.9	1059.3
22.5°	1043.5	1041.9	1034.0	1038.8	1035.6
25°	1019.8	1016.6	1008.7	1011.9	1008.7
27.5°	991.3	989.7	981.8	983.4	980.3
30°	962.9	961.3	951.8	953.4	950.2
32.5°	929.7	929.7	921.8	921.8	918.6
35°	899.6	896.5	888.6	888.6	885.4
37.5°	864.8	861.7	855.4	853.8	850.6
40°	828.5	826.9	819.0	817.4	814.2
42.5°	789.0	790.5	782.6	777.9	774.7
45°	752.6	752.6	743.1	738.4	736.8
47.5°	713.1	713.1	705.2	700.4	697.2
50°	668.8	672.0	665.6	657.7	654.6
52.5°	627.7	629.3	621.4	616.6	613.5
55°	586.6	585.0	578.7	573.9	569.2
57.5°	543.9	542.3	532.8	528.1	524.9
60°	496.5	496.5	488.5	483.8	480.6
62.5°	452.2	450.6	444.3	438.0	436.4
65°	406.3	404.8	396.8	392.1	387.4
67.5°	357.3	355.7	351.0	344.7	341.5
70°	313.1	308.3	303.6	298.8	297.2
72.5°	265.6	260.9	256.1	253.0	249.8
75°	215.0	213.4	210.3	208.7	205.5
77.5°	169.2	169.2	166.0	164.4	164.4
80°	123.3	123.3	123.3	121.7	121.7
82.5°	80.6	82.2	82.2	80.6	82.2
85°	44.3	45.9	47.4	47.4	47.4
87.5°	14.2	19.0	17.4	19.0	19.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)