

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: P688589

Luminaire Tested: SQ4R-PR1-100D-940-1-UNV-STD-W-4

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688589  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/22/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4R-PR1-100D-940-1-UNV-STD-W-4  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE 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: 3272.8 lumens  
Efficiency: N/A  
Efficacy: 88.5 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.23 / 1.34  
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')  
CIE Type: Direct

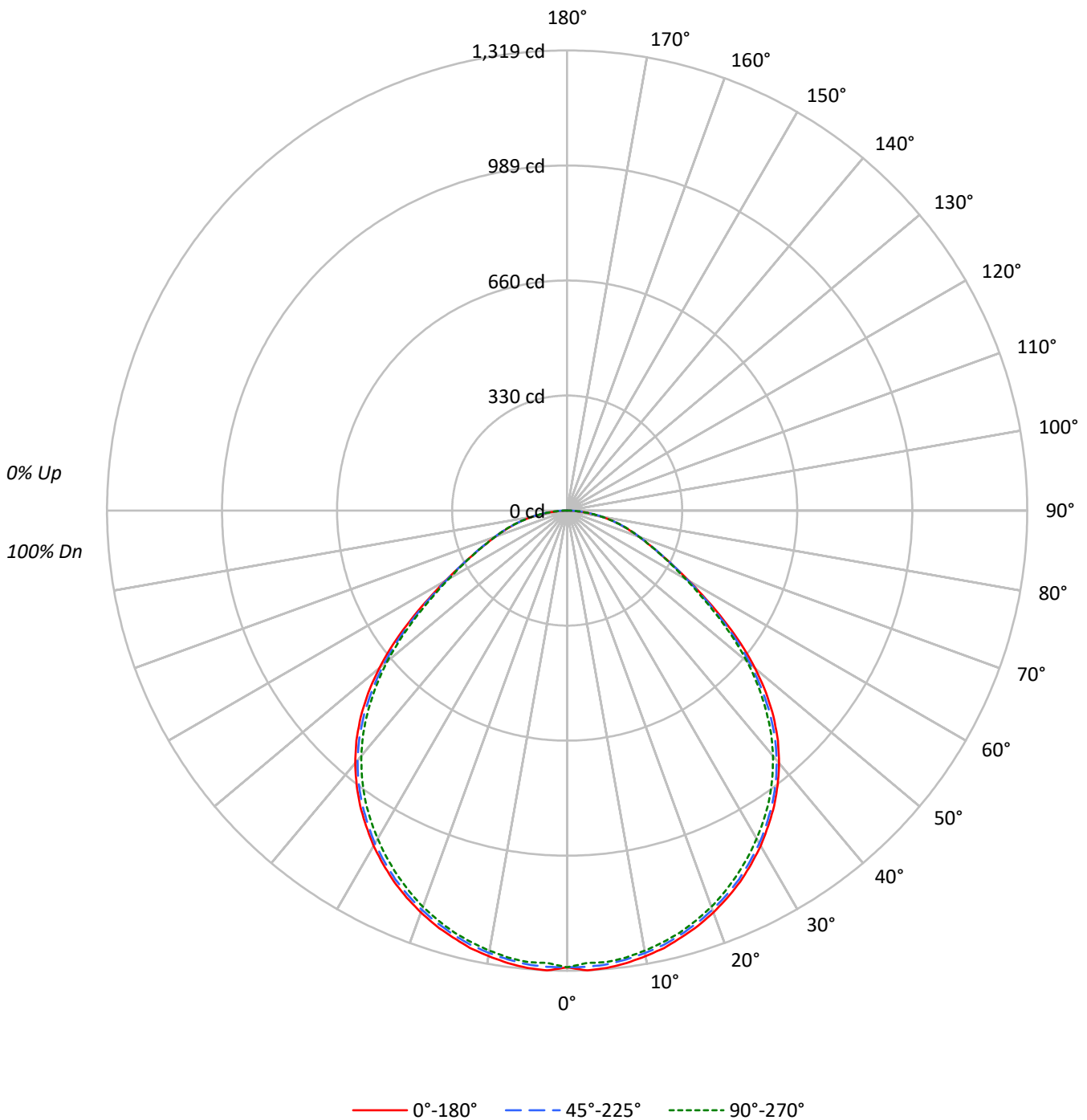
Input Watts (W): 37  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	110	105	101	98	107	103	99	96	99	96	93		95	92	90		91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81	78	75	72
3	92	82	74	68	90	80	73	68	78	71	66		75	70	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	58	50	44	57	49	44		55	49	44		53	48	43	41
7	67	54	46	40	65	53	45	39	52	44	39		50	44	39		49	43	39	37
8	63	49	41	36	61	49	41	35	47	40	35		46	40	35		45	39	35	33
9	58	45	37	32	57	45	37	32	44	37	32		43	36	32		42	36	31	30
10	55	42	34	29	54	41	34	29	40	34	29		40	33	29		39	33	29	27

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	12603	12603	12603
5°	12717	12619	12554
10°	12676	12588	12522
15°	12621	12542	12475
20°	12558	12477	12384
25°	12469	12385	12241
30°	12335	12247	12072
35°	12152	12047	11874
40°	11875	11748	11536
45°	11392	11192	10962
50°	10538	10285	10083
55°	9198	8990	8800
60°	7752	7686	7534
65°	6704	6729	6679
70°	6159	6190	6190
75°	5914	5914	5955
80°	5566	5627	5566
85°	4485	4982	4982

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 11392 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.9	3.8
10°-20°	354.4	10.8
20°-30°	534.5	16.3
30°-40°	637.0	19.5
40°-50°	628.4	19.2
50°-60°	479.4	14.6
60°-70°	295.9	9.0
70°-80°	168.6	5.2
80°-90°	50.9	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°	1012.8	30.9
0°-40°	1649.8	50.4
0°-60°	2757.5	84.3
0°-90°	3272.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3272.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1309	1309	1309	1309	1309	
5°	1316	1301	1306	1301	1299	125
15°	1266	1253	1258	1254	1252	358
25°	1174	1159	1166	1154	1152	541
35°	1034	1022	1025	1011	1010	646
45°	837	825	822	807	805	642
55°	548	539	536	527	524	491
65°	294	292	295	293	293	297
75°	159	159	159	160	160	168
85°	41	43	45	45	45	48
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1309.1	1309.1	1309.1	1309.1	1309.1
2.5°	1319.3	1304.6	1309.1	1305.8	1297.9
5°	1315.9	1301.2	1305.8	1301.2	1299.0
7.5°	1308.0	1293.3	1297.9	1293.3	1292.2
10°	1296.7	1283.2	1287.7	1283.2	1280.9
12.5°	1284.3	1269.7	1275.3	1269.7	1267.4
15°	1266.3	1252.8	1258.4	1253.9	1251.6
17.5°	1248.2	1233.6	1239.2	1234.7	1231.3
20°	1225.7	1212.2	1217.8	1209.9	1208.8
22.5°	1200.9	1187.4	1193.0	1181.7	1181.7
25°	1173.8	1159.2	1165.9	1153.5	1152.4
27.5°	1142.3	1128.7	1134.4	1122.0	1120.8
30°	1109.6	1096.0	1101.7	1088.1	1085.9
32.5°	1072.3	1059.9	1064.4	1050.9	1049.8
35°	1034.0	1021.6	1025.0	1011.4	1010.3
37.5°	991.2	979.9	982.1	967.5	966.3
40°	944.9	933.6	934.8	919.0	917.9
42.5°	894.2	882.9	881.8	866.0	864.9
45°	836.7	825.4	822.0	807.4	805.1
47.5°	773.5	762.3	755.5	743.1	742.0
50°	703.6	692.3	686.7	676.6	673.2
52.5°	628.1	616.8	612.3	603.3	599.9
55°	548.0	539.0	535.6	526.6	524.3
57.5°	471.3	464.6	463.4	454.4	453.3
60°	402.6	399.2	399.2	391.3	391.3
62.5°	343.9	341.7	343.9	339.4	338.3
65°	294.3	292.0	295.4	293.2	293.2
67.5°	252.6	252.6	254.8	253.7	253.7
70°	218.8	218.8	219.9	219.9	219.9
72.5°	188.3	187.2	190.6	190.6	189.4
75°	159.0	159.0	159.0	160.1	160.1
77.5°	129.7	129.7	130.8	130.8	129.7
80°	100.4	101.5	101.5	100.4	100.4
82.5°	71.0	72.2	72.2	72.2	71.0
85°	40.6	42.8	45.1	45.1	45.1
87.5°	14.7	19.2	22.6	22.6	21.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)