

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: P688478

Luminaire Tested: SQ4R-PC3-100D-840-1-UNV-STD-W-4

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688478  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-289-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/22/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4R-PC3-100D-840-1-UNV-STD-W-4  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE PYRAMID CONTINUOUS LENS.  
1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4017.0 lumens  
Efficiency: N/A  
Efficacy: 108.6 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.26 / 1.37  
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')  
CIE Type: Direct

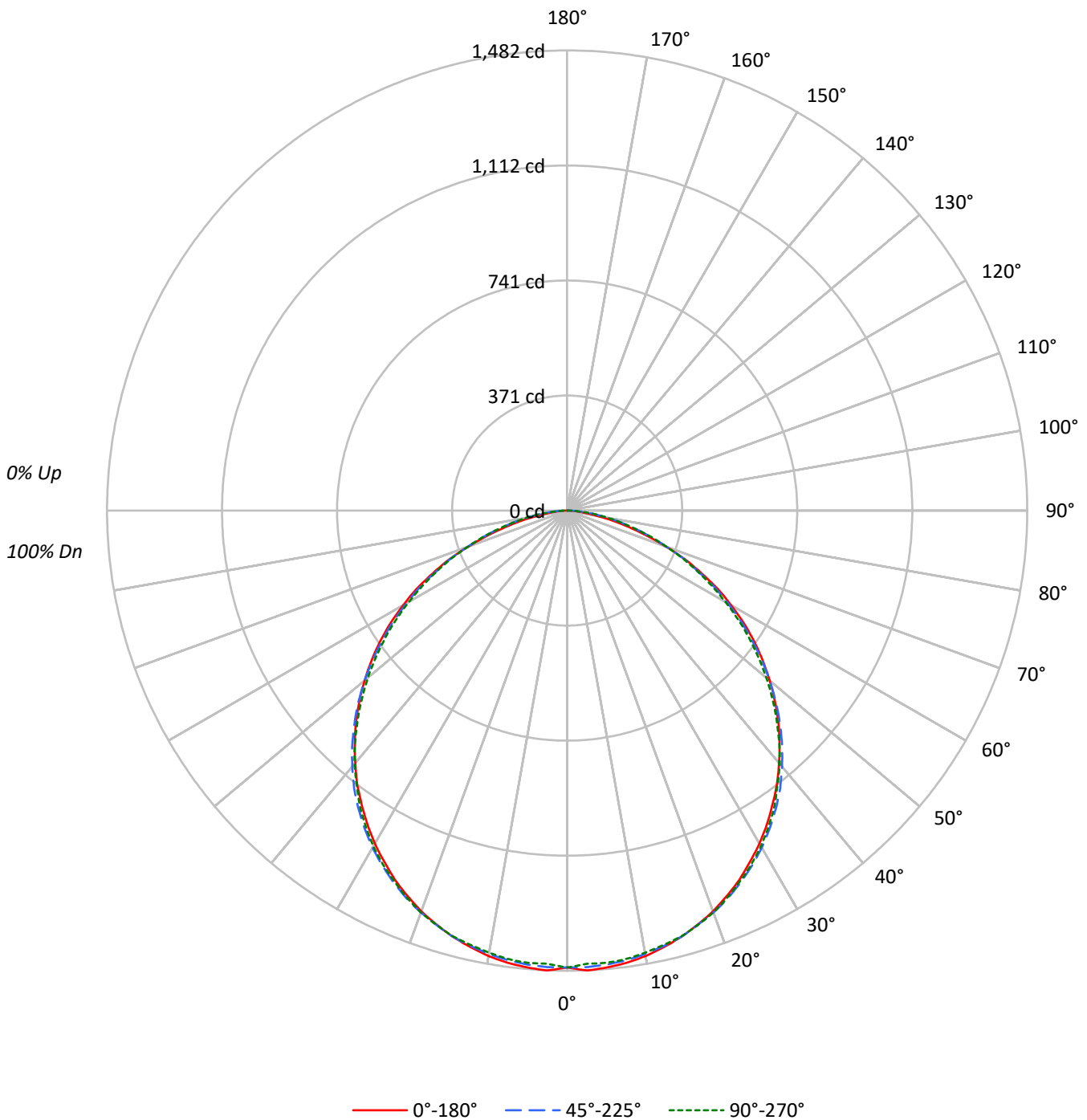
Input Watts (W): 37  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	100	97	106	102	98	95	98	95	92		94	92	89		91	88	87	85
2	99	91	85	79	97	90	83	78	86	81	76		83	78	75		80	76	73	71
3	91	80	72	66	88	79	71	65	76	70	64		73	68	63		71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55		65	59	54		63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48		59	52	47		57	51	47	44
6	71	58	49	42	69	57	48	42	55	47	42		53	46	41		52	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37		48	42	37		47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33		44	38	33		43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30		41	34	30		40	34	29	28
10	54	40	32	27	52	40	32	27	39	32	27		38	31	27		37	31	27	25

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

	0°	45°	90°
0°	14168	14168	14168
5°	14274	14182	14130
10°	14240	14173	14133
15°	14165	14165	14151
20°	14072	14114	14114
25°	13939	14040	13996
30°	13769	13936	13875
35°	13564	13772	13676
40°	13341	13528	13391
45°	13098	13190	12986
50°	12755	12755	12551
55°	12350	12191	12008
60°	11753	11518	11333
65°	10864	10647	10554
70°	9511	9587	9551
75°	7655	8466	8514
80°	5439	7174	7252
85°	3314	6020	6020

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 13190 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.3	3.5
10°-20°	399.9	10.0
20°-30°	605.6	15.1
30°-40°	726.1	18.1
40°-50°	740.3	18.4
50°-60°	646.2	16.1
60°-70°	462.6	11.5
70°-80°	237.6	5.9
80°-90°	59.5	1.5
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°	1144.8	28.5
0°-40°	1870.8	46.6
0°-60°	3257.3	81.1
0°-90°	4017.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4017.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1472	1472	1472	1472	1472	
5°	1477	1462	1468	1463	1462	140
15°	1421	1409	1421	1421	1420	401
25°	1312	1303	1322	1318	1318	604
35°	1154	1151	1172	1164	1164	722
45°	962	959	969	956	954	741
55°	736	726	726	715	715	656
65°	477	466	467	463	463	472
75°	206	215	228	229	229	221
85°	30	46	54	56	54	40
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1471.6	1471.6	1471.6	1471.6	1471.6
2.5°	1482.5	1466.1	1471.6	1467.5	1460.7
5°	1477.0	1462.1	1467.5	1463.4	1462.1
7.5°	1468.9	1453.9	1460.7	1458.0	1456.6
10°	1456.6	1441.6	1449.8	1447.1	1445.7
12.5°	1440.3	1426.6	1436.2	1433.4	1433.4
15°	1421.2	1408.9	1421.2	1421.2	1419.8
17.5°	1398.0	1387.1	1399.4	1400.7	1399.4
20°	1373.5	1361.2	1377.6	1376.2	1377.6
22.5°	1343.5	1334.0	1351.7	1347.6	1349.0
25°	1312.2	1302.6	1321.7	1317.6	1317.6
27.5°	1275.4	1268.6	1289.0	1284.9	1284.9
30°	1238.6	1231.8	1253.6	1248.1	1248.1
32.5°	1197.7	1193.6	1214.1	1207.3	1207.3
35°	1154.1	1151.4	1171.8	1163.6	1163.6
37.5°	1110.5	1107.8	1126.9	1117.3	1113.2
40°	1061.5	1060.1	1076.4	1065.5	1065.5
42.5°	1012.4	1011.0	1024.7	1011.0	1011.0
45°	962.0	959.3	968.8	956.5	953.8
47.5°	907.5	904.8	911.6	897.9	896.6
50°	851.6	848.9	851.6	839.4	838.0
52.5°	794.4	788.9	788.9	776.7	776.7
55°	735.8	726.3	726.3	715.4	715.4
57.5°	674.5	662.2	663.6	654.0	652.7
60°	610.4	596.8	598.2	590.0	588.6
62.5°	547.8	531.4	535.5	526.0	526.0
65°	476.9	466.0	467.4	463.3	463.3
67.5°	411.5	400.6	407.4	403.3	403.3
70°	337.9	331.1	340.6	340.6	339.3
72.5°	269.8	271.2	283.4	283.4	284.8
75°	205.8	215.3	227.6	228.9	228.9
77.5°	147.2	163.5	177.1	177.1	177.1
80°	98.1	117.2	129.4	132.2	130.8
82.5°	58.6	79.0	88.6	91.3	89.9
85°	30.0	46.3	54.5	55.9	54.5
87.5°	10.9	23.2	27.3	27.3	24.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)