

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: P688728

Luminaire Tested: SQ4R-PH1-050D-92765-1-UNV-STD-W-4\_5700K

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688728  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-36)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/22/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4R-PH1-050D-92765-1-UNV-STD-W-4\_5700K  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.  
500 LUMENS PER FOOT  
Light Source: 5700K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2023.1 lumens  
Efficiency: N/A  
Efficacy: 95.4 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.22 / 1.28  
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')  
CIE Type: Direct

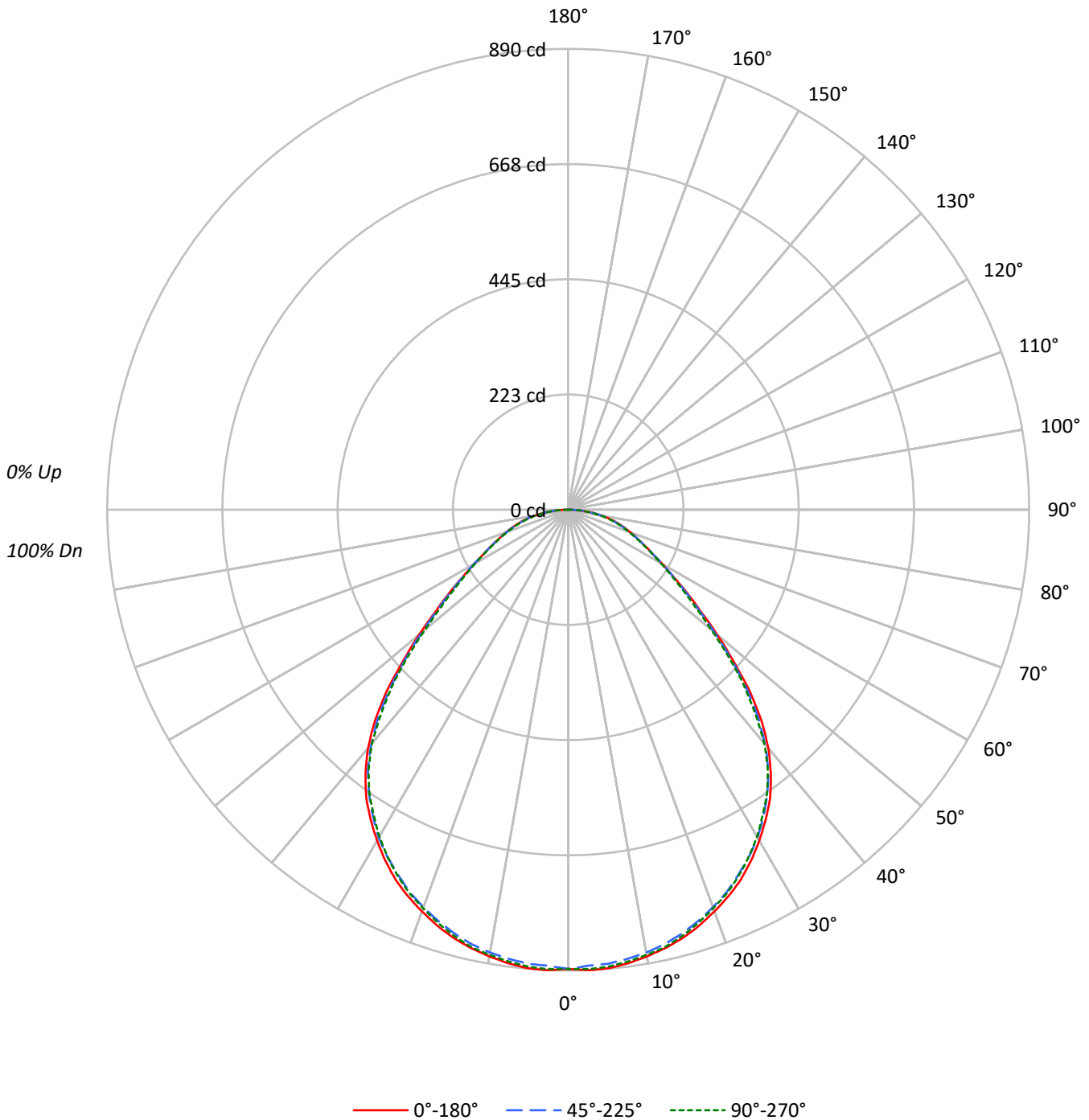
Input Watts (W): 21.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	110	105	102	98	107	103	100	96	99	96	93		95	93	91		92	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79		85	81	77		82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68		76	71	67		73	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59		69	63	58		66	62	57	55
5	79	67	59	53	77	66	58	52	64	57	52		62	56	51		60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46		57	50	46		55	50	45	43
7	68	56	47	42	67	55	47	41	53	46	41		52	46	41		51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37		48	42	37		47	41	37	35
9	60	47	39	34	58	47	39	34	45	39	34		44	38	34		43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31		41	35	31		40	35	31	29

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

	0°	45°	90°
0°	8538	8538	8538
5°	8592	8507	8560
10°	8563	8488	8531
15°	8534	8447	8491
20°	8458	8368	8391
25°	8375	8258	8281
30°	8204	8131	8106
35°	7992	7876	7863
40°	7554	7431	7404
45°	6738	6605	6530
50°	5626	5510	5395
55°	4686	4631	4522
60°	4026	4047	3963
65°	3693	3668	3618
70°	3575	3544	3482
75°	3623	3545	3463
80°	3643	3582	3460
85°	3513	3513	3270

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6738 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.1	4.2
10°-20°	240.3	11.9
20°-30°	360.0	17.8
30°-40°	418.9	20.7
40°-50°	372.6	18.4
50°-60°	250.2	12.4
60°-70°	161.7	8.0
70°-80°	100.8	5.0
80°-90°	34.5	1.7
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°	684.4	33.8
0°-40°	1103.3	54.5
0°-60°	1726.0	85.3
0°-90°	2023.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2023.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	887	887	887	887	887	
5°	889	887	880	887	886	84
15°	856	854	848	853	852	241
25°	788	785	777	782	780	362
35°	680	677	670	670	669	423
45°	495	493	485	478	480	378
55°	279	279	276	272	269	253
65°	162	163	161	160	159	162
75°	97	96	95	95	93	103
85°	32	33	32	31	30	35
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	886.9	886.9	886.9	886.9	886.9
2.5°	890.2	888.0	881.4	889.1	888.0
5°	889.1	886.9	880.3	886.9	885.8
7.5°	883.6	882.5	874.9	882.5	880.3
10°	875.9	875.9	868.3	874.9	872.7
12.5°	867.2	866.1	859.5	866.1	865.0
15°	856.2	854.1	847.5	853.0	851.9
17.5°	842.0	840.9	833.2	838.7	836.5
20°	825.6	823.4	816.8	821.2	819.0
22.5°	808.1	805.9	799.3	802.6	801.5
25°	788.4	785.1	777.4	781.8	779.6
27.5°	764.3	763.2	755.5	757.7	755.5
30°	738.0	736.9	731.4	731.4	729.2
32.5°	709.5	710.6	701.9	702.9	698.6
35°	680.0	676.7	670.1	670.1	669.0
37.5°	642.7	640.5	635.1	634.0	632.9
40°	601.1	598.9	591.3	589.1	589.1
42.5°	551.8	549.7	542.0	538.7	534.3
45°	494.9	492.7	485.1	478.5	479.6
47.5°	431.4	433.6	425.9	420.5	419.4
50°	375.6	374.5	367.9	364.6	360.2
52.5°	321.9	323.0	317.5	315.3	309.9
55°	279.2	279.2	275.9	271.5	269.4
57.5°	240.9	243.1	239.8	237.6	235.4
60°	209.1	210.2	210.2	205.8	205.8
62.5°	182.9	183.9	182.9	180.7	180.7
65°	162.1	163.1	161.0	159.9	158.8
67.5°	143.4	144.5	143.4	142.3	140.2
70°	127.0	127.0	125.9	125.9	123.7
72.5°	112.8	111.7	110.6	110.6	109.5
75°	97.4	96.4	95.3	95.3	93.1
77.5°	82.1	81.0	81.0	78.8	77.7
80°	65.7	65.7	64.6	63.5	62.4
82.5°	50.4	49.3	48.2	47.1	46.0
85°	31.8	32.8	31.8	30.7	29.6
87.5°	14.2	15.3	15.3	15.3	14.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)