

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: P688723

Luminaire Tested: SQ4R-PH1-050D-92765-1-UNV-STD-W-4\_3000K

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688723  
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\_3000K  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.  
500 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1777.3 lumens  
Efficiency: N/A  
Efficacy: 84.2 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

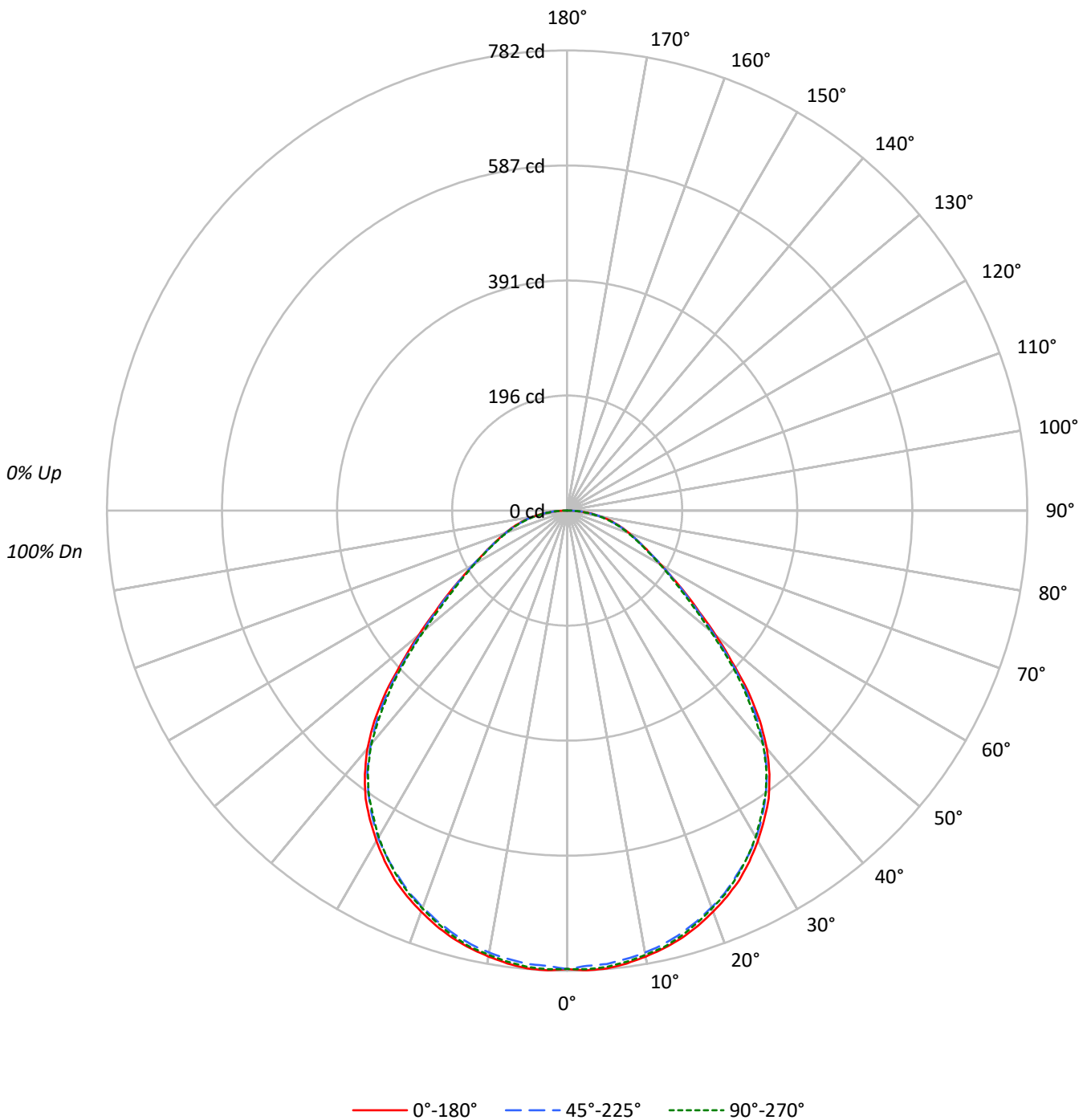
Input Watts (W): 21.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	7501	7501	7501
5°	7549	7474	7521
10°	7523	7457	7494
15°	7497	7420	7459
20°	7431	7352	7371
25°	7357	7254	7275
30°	7207	7142	7121
35°	7020	6919	6907
40°	6637	6528	6504
45°	5920	5801	5736
50°	4941	4841	4740
55°	4117	4069	3971
60°	3537	3556	3481
65°	3244	3221	3178
70°	3141	3113	3060
75°	3184	3113	3043
80°	3199	3149	3038
85°	3082	3082	2872

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5920 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.9	4.2
10°-20°	211.1	11.9
20°-30°	316.3	17.8
30°-40°	368.0	20.7
40°-50°	327.3	18.4
50°-60°	219.8	12.4
60°-70°	142.0	8.0
70°-80°	88.6	5.0
80°-90°	30.4	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°	601.3	33.8
0°-40°	969.3	54.5
0°-60°	1516.3	85.3
0°-90°	1777.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1777.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	779	779	779	779	779	
5°	781	779	773	779	778	74
15°	752	750	744	749	748	212
25°	693	690	683	687	685	318
35°	597	594	589	589	588	371
45°	435	433	426	420	421	332
55°	245	245	242	238	237	222
65°	142	143	141	140	140	143
75°	86	85	84	84	82	90
85°	28	29	28	27	26	31
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	779.1	779.1	779.1	779.1	779.1
2.5°	782.0	780.1	774.3	781.1	780.1
5°	781.1	779.1	773.4	779.1	778.2
7.5°	776.2	775.3	768.6	775.3	773.4
10°	769.5	769.5	762.8	768.6	766.6
12.5°	761.8	760.9	755.1	760.9	759.9
15°	752.2	750.3	744.5	749.3	748.4
17.5°	739.7	738.7	732.0	736.8	734.9
20°	725.3	723.3	717.6	721.4	719.5
22.5°	709.9	708.0	702.2	705.1	704.1
25°	692.6	689.7	682.9	686.8	684.9
27.5°	671.4	670.4	663.7	665.6	663.7
30°	648.3	647.4	642.5	642.5	640.6
32.5°	623.3	624.3	616.6	617.5	613.7
35°	597.3	594.5	588.7	588.7	587.7
37.5°	564.6	562.7	557.9	556.9	556.0
40°	528.1	526.2	519.4	517.5	517.5
42.5°	484.8	482.9	476.1	473.3	469.4
45°	434.8	432.9	426.1	420.3	421.3
47.5°	379.0	380.9	374.2	369.4	368.4
50°	329.9	329.0	323.2	320.3	316.5
52.5°	282.8	283.8	278.9	277.0	272.2
55°	245.3	245.3	242.4	238.5	236.6
57.5°	211.6	213.5	210.7	208.7	206.8
60°	183.7	184.7	184.7	180.8	180.8
62.5°	160.6	161.6	160.6	158.7	158.7
65°	142.4	143.3	141.4	140.4	139.5
67.5°	126.0	127.0	126.0	125.0	123.1
70°	111.6	111.6	110.6	110.6	108.7
72.5°	99.1	98.1	97.2	97.2	96.2
75°	85.6	84.6	83.7	83.7	81.8
77.5°	72.1	71.2	71.2	69.3	68.3
80°	57.7	57.7	56.8	55.8	54.8
82.5°	44.2	43.3	42.3	41.4	40.4
85°	27.9	28.9	27.9	26.9	26.0
87.5°	12.5	13.5	13.5	13.5	12.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)