

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: P688889

Luminaire Tested: SQ4R-PR1-050D-93050-1-UNV-STD-W-4\_4500K

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688889  
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-PR1-050D-93050-1-UNV-STD-W-4\_4500K  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
500 LUMENS PER FOOT  
Light Source: 4500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1936.7 lumens  
Efficiency: N/A  
Efficacy: 90.9 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

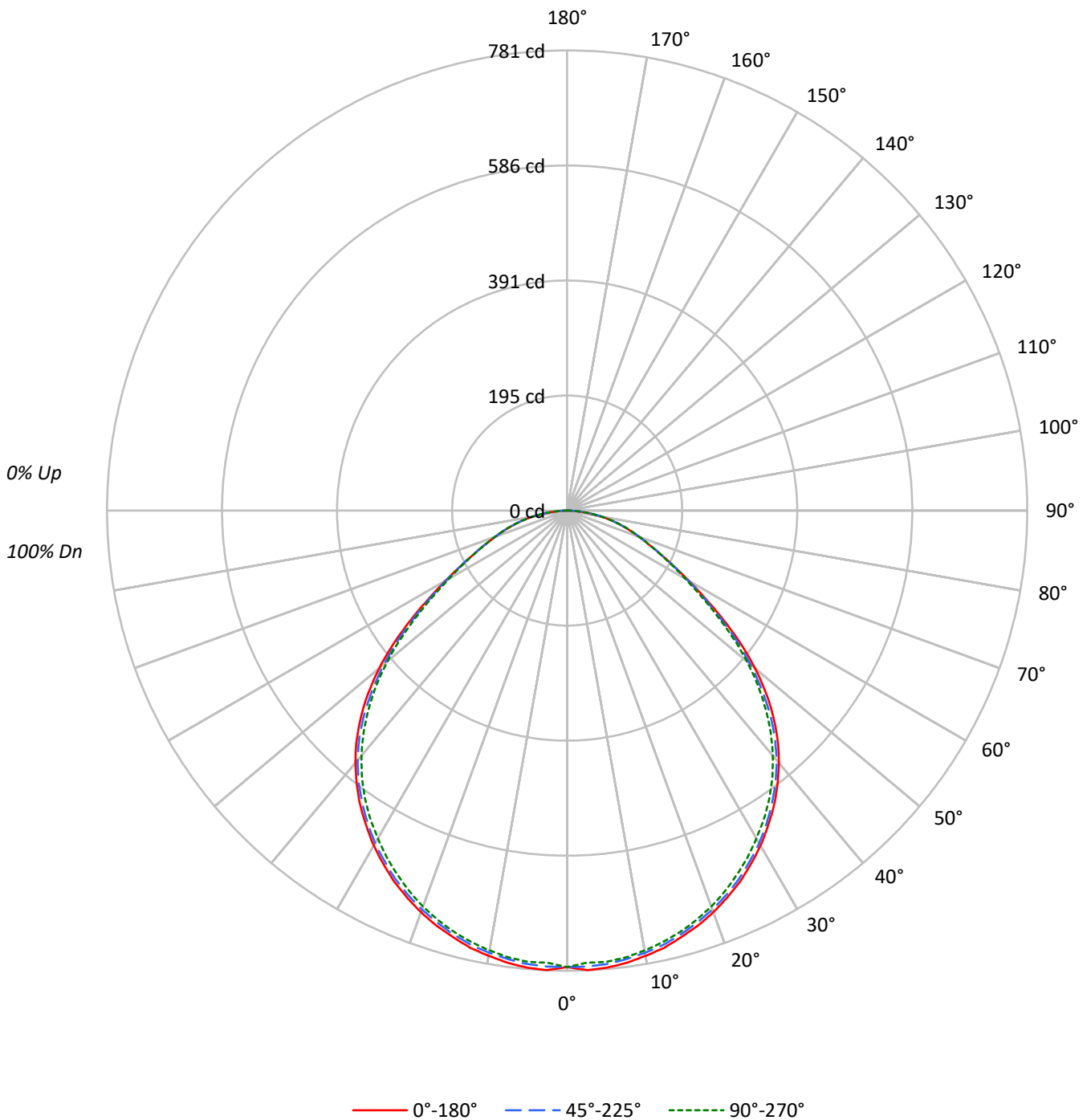
Input Watts (W): 21.3  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	7458	7458	7458
5°	7525	7467	7429
10°	7501	7449	7410
15°	7468	7422	7382
20°	7431	7383	7328
25°	7378	7329	7244
30°	7299	7247	7144
35°	7192	7128	7027
40°	7028	6952	6825
45°	6741	6622	6486
50°	6237	6087	5966
55°	5443	5319	5208
60°	4586	4548	4457
65°	3968	3982	3952
70°	3642	3662	3662
75°	3500	3500	3523
80°	3293	3332	3293
85°	2651	2949	2949

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6741 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.3	3.8
10°-20°	209.7	10.8
20°-30°	316.3	16.3
30°-40°	377.0	19.5
40°-50°	371.9	19.2
50°-60°	283.6	14.6
60°-70°	175.1	9.0
70°-80°	99.8	5.2
80°-90°	30.1	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°	599.3	30.9
0°-40°	976.3	50.4
0°-60°	1631.8	84.3
0°-90°	1936.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1936.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	779	770	773	770	769	74
15°	749	741	745	742	741	212
25°	695	686	690	683	682	320
35°	612	604	606	598	598	382
45°	495	488	486	478	476	380
55°	324	319	317	312	310	291
65°	174	173	175	174	174	176
75°	94	94	94	95	95	99
85°	24	25	27	27	27	28
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	774.7	774.7	774.7	774.7	774.7
2.5°	780.7	772.0	774.7	772.7	768.0
5°	778.7	770.0	772.7	770.0	768.7
7.5°	774.0	765.3	768.0	765.3	764.7
10°	767.3	759.3	762.0	759.3	758.0
12.5°	760.0	751.3	754.7	751.3	750.0
15°	749.3	741.3	744.7	742.0	740.6
17.5°	738.6	730.0	733.3	730.6	728.6
20°	725.3	717.3	720.6	716.0	715.3
22.5°	710.6	702.6	706.0	699.3	699.3
25°	694.6	685.9	689.9	682.6	681.9
27.5°	675.9	667.9	671.3	663.9	663.2
30°	656.6	648.6	651.9	643.9	642.6
32.5°	634.6	627.2	629.9	621.9	621.2
35°	611.9	604.5	606.5	598.5	597.9
37.5°	586.5	579.8	581.2	572.5	571.8
40°	559.2	552.5	553.2	543.8	543.1
42.5°	529.1	522.5	521.8	512.4	511.8
45°	495.1	488.4	486.4	477.8	476.4
47.5°	457.7	451.1	447.1	439.7	439.1
50°	416.4	409.7	406.4	400.4	398.3
52.5°	371.7	365.0	362.3	357.0	355.0
55°	324.3	318.9	316.9	311.6	310.3
57.5°	278.9	274.9	274.2	268.9	268.2
60°	238.2	236.2	236.2	231.5	231.5
62.5°	203.5	202.2	203.5	200.8	200.2
65°	174.2	172.8	174.8	173.5	173.5
67.5°	149.5	149.5	150.8	150.1	150.1
70°	129.4	129.4	130.1	130.1	130.1
72.5°	111.4	110.8	112.8	112.8	112.1
75°	94.1	94.1	94.1	94.7	94.7
77.5°	76.7	76.7	77.4	77.4	76.7
80°	59.4	60.1	60.1	59.4	59.4
82.5°	42.0	42.7	42.7	42.7	42.0
85°	24.0	25.4	26.7	26.7	26.7
87.5°	8.7	11.3	13.3	13.3	12.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)