

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P686281

Luminaire Tested: SQ4R-F-050D-92765-1-UNV-STD-W-4\_4500K

Issue Date: 5/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P686281  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4R-F-050D-92765-1-UNV-STD-W-4\_4500K  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS, WHITE TUNING 2700K-6500I  
500 LUMENS PER FOOT  
Light Source: 2700K AND 6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

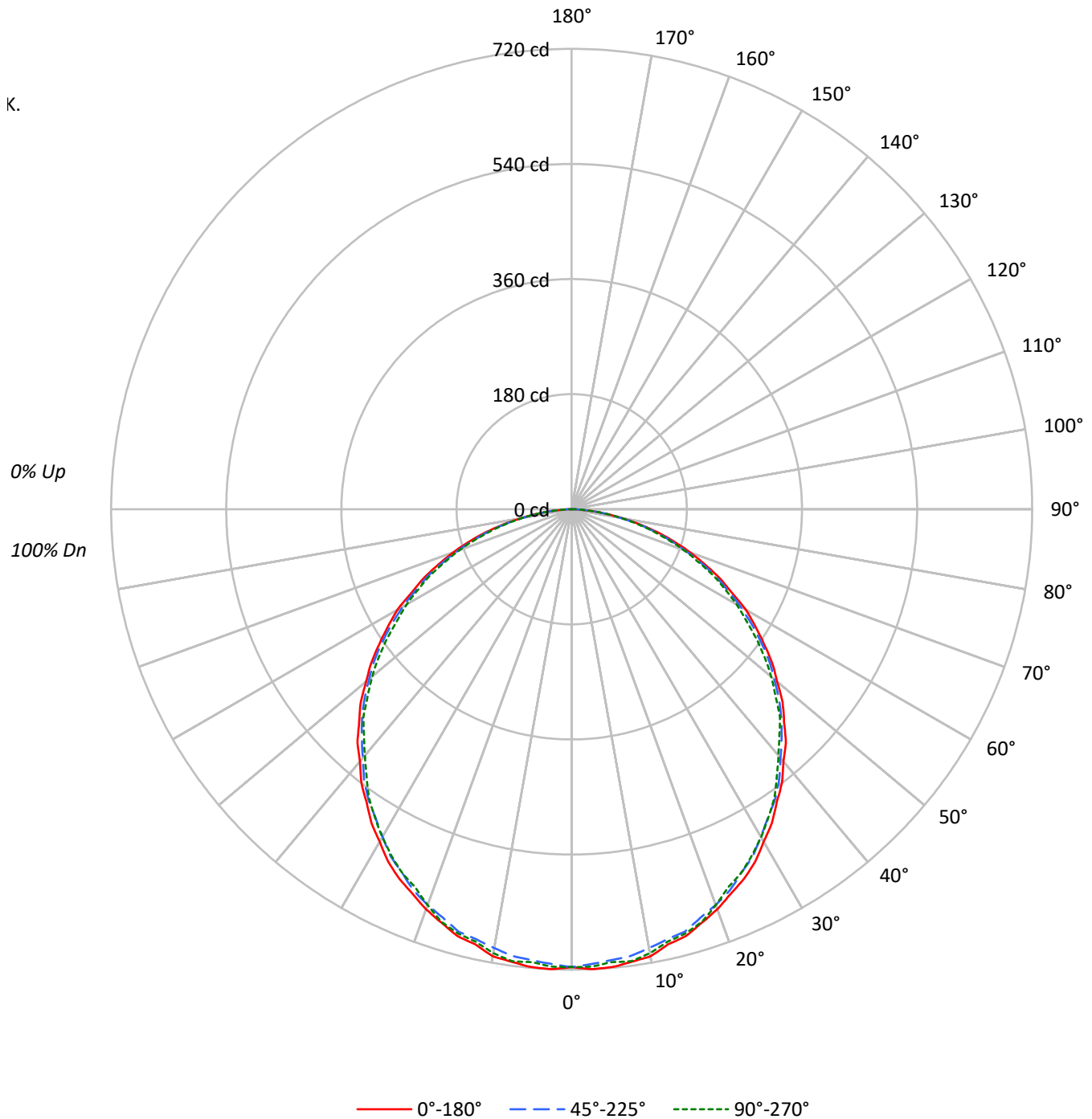
Lumens per Lamp: N/A  
Luminaire Lumens: 2002.0 lumens  
Efficiency: N/A  
Efficacy: 94.4 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.23 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')  
CIE Type: Direct

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	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	38
7	65	51	43	36	63	51	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	44	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	6892	6892	6892
5°	6948	6841	6870
10°	6940	6812	6890
15°	6885	6814	6844
20°	6819	6747	6747
25°	6772	6665	6665
30°	6673	6572	6583
35°	6570	6511	6488
40°	6470	6382	6318
45°	6394	6311	6270
50°	6280	6190	6099
55°	6160	6059	5907
60°	6059	5867	5730
65°	5818	5659	5565
70°	5548	5320	5236
75°	5163	4973	4824
80°	4402	4291	4291
85°	3225	3336	3225

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 6407 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.8	3.4
10°-20°	193.4	9.7
20°-30°	290.6	14.5
30°-40°	346.9	17.3
40°-50°	358.0	17.9
50°-60°	322.4	16.1
60°-70°	245.3	12.3
70°-80°	140.8	7.0
80°-90°	36.7	1.8
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°	551.8	27.6
0°-40°	898.8	44.9
0°-60°	1579.2	78.9
0°-90°	2002.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2002.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	716	716	716	716	716	
5°	719	716	708	716	711	68
15°	691	688	684	686	687	194
25°	638	632	627	629	627	293
35°	559	558	554	552	552	351
45°	470	471	464	460	460	363
55°	367	368	361	358	352	329
65°	255	252	248	243	244	252
75°	139	135	134	131	130	146
85°	29	30	30	30	29	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	715.9	715.9	715.9	715.9	715.9
2.5°	719.9	719.9	711.9	716.9	715.9
5°	718.9	715.9	707.9	715.9	710.9
7.5°	713.9	708.9	704.8	709.9	712.9
10°	709.9	708.9	696.8	702.8	704.8
12.5°	696.8	701.8	688.8	692.8	692.8
15°	690.8	687.7	683.7	685.7	686.7
17.5°	677.7	675.7	669.6	674.7	676.7
20°	665.6	662.6	658.6	659.6	658.6
22.5°	650.5	648.5	645.5	645.5	639.5
25°	637.5	632.4	627.4	629.4	627.4
27.5°	621.4	617.4	612.3	613.3	610.3
30°	600.3	601.3	591.2	591.2	592.2
32.5°	582.2	578.1	571.1	571.1	572.1
35°	559.0	558.0	554.0	552.0	552.0
37.5°	539.9	539.9	532.9	529.9	526.9
40°	514.8	515.8	507.8	506.8	502.7
42.5°	495.7	493.7	485.6	484.6	480.6
45°	469.6	470.6	463.5	459.5	460.5
47.5°	447.4	444.4	439.4	435.4	432.4
50°	419.3	418.3	413.3	410.2	407.2
52.5°	395.2	392.1	389.1	382.1	380.1
55°	367.0	368.0	361.0	357.9	351.9
57.5°	339.9	338.8	332.8	327.8	322.8
60°	314.7	311.7	304.7	299.6	297.6
62.5°	281.5	280.5	275.5	271.5	269.5
65°	255.4	252.4	248.4	243.3	244.3
67.5°	225.2	223.2	219.2	215.2	213.2
70°	197.1	194.1	189.0	187.0	186.0
72.5°	167.9	164.9	160.9	156.9	157.9
75°	138.8	134.7	133.7	130.7	129.7
77.5°	108.6	106.6	104.6	103.6	102.6
80°	79.4	80.4	77.4	76.4	77.4
82.5°	54.3	54.3	53.3	52.3	53.3
85°	29.2	30.2	30.2	30.2	29.2
87.5°	10.1	12.1	13.1	13.1	12.1
90°	0.0	0.0	0.0	0.0	0.0



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**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	18.53	20.17	18.90	20.49	20.80	18.29	19.93	18.66	20.24	20.56
	3H	20.37	21.85	20.75	22.18	22.54	20.10	21.58	20.47	21.91	22.27
	4H	21.06	22.45	21.46	22.80	23.18	20.76	22.16	21.16	22.51	22.89
	6H	21.54	22.84	21.95	23.20	23.59	21.25	22.55	21.66	22.91	23.30
	8H	21.69	22.93	22.11	23.31	23.71	21.40	22.64	21.82	23.03	23.43
	12H	21.77	22.95	22.20	23.33	23.76	21.49	22.67	21.92	23.05	23.48
4H	2H	19.15	20.55	19.55	20.89	21.27	18.96	20.35	19.35	20.70	21.08
	3H	21.20	22.37	21.61	22.77	23.17	20.97	22.15	21.38	22.54	22.94
	4H	22.01	23.08	22.44	23.49	23.92	21.77	22.83	22.20	23.24	23.68
	6H	22.63	23.56	23.08	24.00	24.45	22.38	23.30	22.83	23.74	24.20
	8H	22.82	23.69	23.28	24.13	24.59	22.57	23.44	23.03	23.88	24.34
	12H	22.94	23.72	23.42	24.19	24.66	22.69	23.47	23.17	23.95	24.42
8H	4H	22.31	23.18	22.77	23.62	24.09	22.10	22.96	22.56	23.41	23.87
	6H	23.04	23.76	23.53	24.25	24.73	22.81	23.54	23.31	24.02	24.50
	8H	23.30	23.95	23.81	24.45	24.94	23.08	23.72	23.58	24.23	24.72
	12H	23.48	24.05	23.99	24.54	25.10	23.26	23.84	23.77	24.33	24.89
12H	4H	22.34	23.12	22.82	23.60	24.07	22.13	22.91	22.61	23.39	23.86
	6H	23.09	23.74	23.60	24.24	24.73	22.87	23.52	23.38	24.03	24.51
	8H	23.40	23.97	23.91	24.46	25.02	23.19	23.76	23.69	24.25	24.81