

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: P686292

Luminaire Tested: SQ4R-F-075D-92765-1-UNV-STD-W-4\_3500K

Issue Date: 5/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P686292  
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-075D-92765-1-UNV-STD-W-4\_3500K  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS, WHITE TUNING 2700K-6500I  
750 LUMENS PER FOOT  
Light Source: 2700K AND 6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

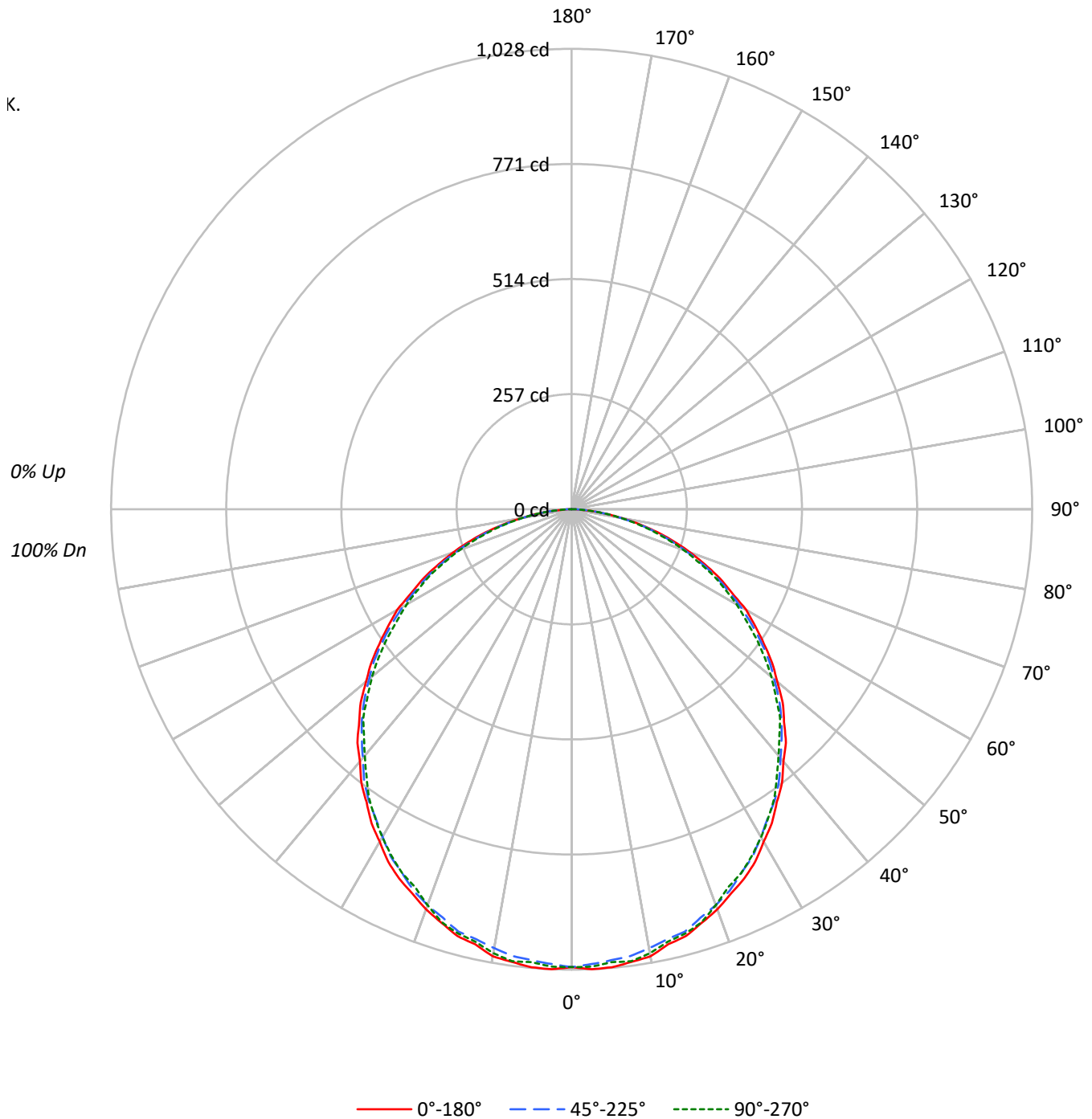
Lumens per Lamp: N/A  
Luminaire Lumens: 2858.6 lumens  
Efficiency: N/A  
Efficacy: 87.2 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.23 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 32.8  
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	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	48	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°	9841	9841	9841
5°	9920	9768	9810
10°	9909	9727	9838
15°	9830	9731	9774
20°	9738	9635	9635
25°	9670	9517	9517
30°	9528	9385	9400
35°	9382	9298	9264
40°	9238	9112	9022
45°	9129	9012	8953
50°	8967	8838	8709
55°	8795	8651	8434
60°	8653	8376	8183
65°	8308	8078	7948
70°	7921	7597	7476
75°	7369	7105	6889
80°	6287	6132	6132
85°	4595	4761	4595

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 9148 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.8	3.4
10°-20°	276.2	9.7
20°-30°	415.0	14.5
30°-40°	495.4	17.3
40°-50°	511.2	17.9
50°-60°	460.4	16.1
60°-70°	350.3	12.3
70°-80°	201.1	7.0
80°-90°	52.3	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°	788.0	27.6
0°-40°	1283.4	44.9
0°-60°	2254.9	78.9
0°-90°	2858.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2858.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1022	1022	1022	1022	1022	
5°	1026	1022	1011	1022	1015	97
15°	986	982	976	979	981	278
25°	910	903	896	899	896	419
35°	798	797	791	788	788	501
45°	670	672	662	656	658	518
55°	524	526	515	511	502	469
65°	365	360	355	347	349	360
75°	198	192	191	187	185	208
85°	42	43	43	43	42	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1022.2	1022.2	1022.2	1022.2	1022.2
2.5°	1028.0	1028.0	1016.5	1023.7	1022.2
5°	1026.5	1022.2	1010.8	1022.2	1015.1
7.5°	1019.4	1012.2	1006.4	1013.6	1017.9
10°	1013.6	1012.2	995.0	1003.6	1006.4
12.5°	995.0	1002.1	983.5	989.2	989.2
15°	986.3	982.0	976.3	979.2	980.6
17.5°	967.7	964.8	956.2	963.4	966.2
20°	950.5	946.1	940.4	941.8	940.4
22.5°	928.9	926.0	921.7	921.7	913.1
25°	910.3	903.1	895.9	898.8	895.9
27.5°	887.3	881.5	874.4	875.8	871.5
30°	857.1	858.6	844.2	844.2	845.6
32.5°	831.3	825.5	815.5	815.5	816.9
35°	798.3	796.8	791.1	788.2	788.2
37.5°	771.0	771.0	760.9	756.6	752.3
40°	735.1	736.5	725.0	723.6	717.9
42.5°	707.8	704.9	693.5	692.0	686.3
45°	670.5	671.9	661.9	656.1	657.6
47.5°	638.9	634.6	627.4	621.7	617.4
50°	598.7	597.3	590.1	585.8	581.5
52.5°	564.2	559.9	555.6	545.6	542.7
55°	524.0	525.5	515.4	511.1	502.5
57.5°	485.3	483.8	475.2	468.0	460.9
60°	449.4	445.1	435.0	427.8	425.0
62.5°	402.0	400.6	393.4	387.6	384.8
65°	364.7	360.4	354.6	347.4	348.9
67.5°	321.6	318.7	313.0	307.2	304.4
70°	281.4	277.1	269.9	267.0	265.6
72.5°	239.8	235.5	229.7	224.0	225.4
75°	198.1	192.4	191.0	186.6	185.2
77.5°	155.1	152.2	149.3	147.9	146.4
80°	113.4	114.9	110.6	109.1	110.6
82.5°	77.5	77.5	76.1	74.7	76.1
85°	41.6	43.1	43.1	43.1	41.6
87.5°	14.4	17.2	18.7	18.7	17.2
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	19.77	21.41	20.14	21.73	22.04	19.53	21.17	19.89	21.48	21.80
	3H	21.61	23.09	21.98	23.42	23.78	21.33	22.82	21.71	23.14	23.50
	4H	22.29	23.69	22.69	24.04	24.41	22.00	23.40	22.40	23.75	24.12
	6H	22.78	24.08	23.19	24.44	24.83	22.49	23.78	22.90	24.15	24.54
	8H	22.92	24.16	23.35	24.55	24.95	22.64	23.88	23.06	24.26	24.66
	12H	23.00	24.19	23.43	24.57	25.00	22.72	23.91	23.15	24.29	24.72
4H	2H	20.38	21.78	20.78	22.13	22.51	20.19	21.59	20.59	21.94	22.31
	3H	22.44	23.61	22.85	24.01	24.41	22.21	23.39	22.62	23.78	24.18
	4H	23.25	24.31	23.68	24.73	25.16	23.01	24.07	23.44	24.48	24.92
	6H	23.87	24.79	24.32	25.23	25.69	23.61	24.54	24.07	24.98	25.44
	8H	24.06	24.92	24.52	25.37	25.83	23.81	24.68	24.27	25.12	25.58
	12H	24.17	24.95	24.65	25.43	25.90	23.93	24.71	24.41	25.19	25.66
8H	4H	23.55	24.42	24.01	24.86	25.32	23.33	24.20	23.79	24.64	25.11
	6H	24.28	25.00	24.77	25.49	25.96	24.05	24.78	24.55	25.26	25.74
	8H	24.54	25.19	25.05	25.69	26.18	24.31	24.96	24.82	25.47	25.95
	12H	24.72	25.29	25.22	25.78	26.34	24.50	25.07	25.01	25.56	26.13
12H	4H	23.58	24.36	24.06	24.83	25.30	23.37	24.15	23.85	24.63	25.09
	6H	24.33	24.98	24.84	25.48	25.97	24.11	24.76	24.62	25.26	25.75
	8H	24.64	25.21	25.15	25.70	26.26	24.43	25.00	24.93	25.49	26.05