

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: P686290

Luminaire Tested: SQ4R-F-075D-92765-1-UNV-STD-W-4\_2700K

Issue Date: 5/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P686290  
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\_2700K  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS, WHITE TUNING 2700K-6500K  
750 LUMENS PER FOOT  
Light Source: 2700K AND 6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

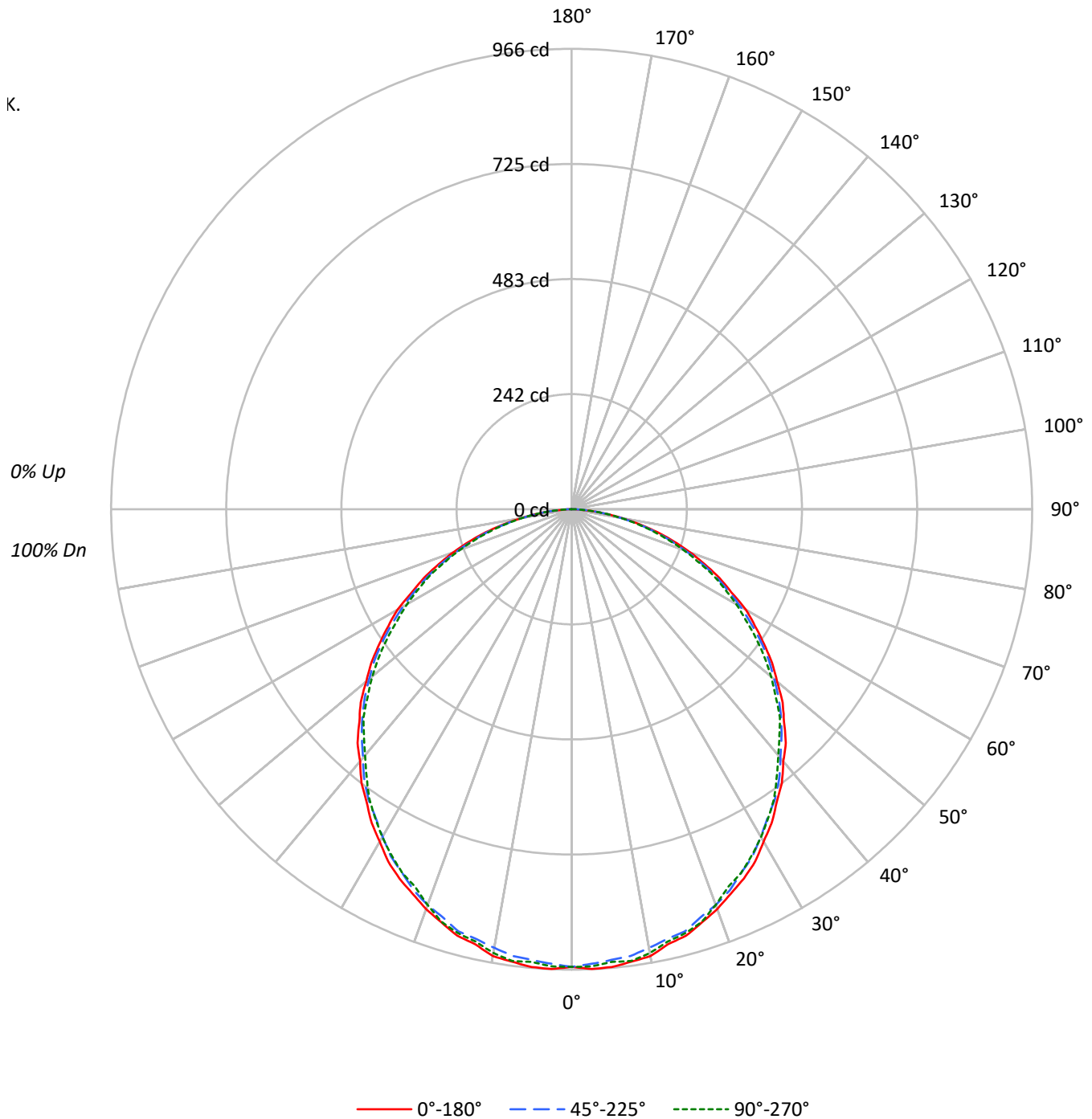
Lumens per Lamp: N/A  
Luminaire Lumens: 2684.9 lumens  
Efficiency: N/A  
Efficacy: 82.4 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.23 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 32.6  
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	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					100			
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84					84			
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70					70			
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59					59			
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50					50			
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43					43			
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	38					38			
7	65	51	43	36	63	51	42	36	49	41	36	48	41	36	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	44	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	34	29	39	33	29	27					27			
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24					24			

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

	0°	45°	90°
0°	9243	9243	9243
5°	9317	9174	9214
10°	9307	9136	9241
15°	9233	9140	9180
20°	9146	9049	9049
25°	9081	8938	8938
30°	8949	8814	8829
35°	8811	8732	8701
40°	8677	8559	8473
45°	8573	8463	8409
50°	8422	8301	8179
55°	8261	8126	7922
60°	8127	7867	7685
65°	7802	7588	7465
70°	7440	7136	7023
75°	6922	6669	6472
80°	5905	5755	5755
85°	4319	4474	4319

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 8593 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.9	3.4
10°-20°	259.4	9.7
20°-30°	389.8	14.5
30°-40°	465.3	17.3
40°-50°	480.1	17.9
50°-60°	432.4	16.1
60°-70°	329.0	12.3
70°-80°	188.9	7.0
80°-90°	49.2	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°	740.1	27.6
0°-40°	1205.4	44.9
0°-60°	2117.9	78.9
0°-90°	2684.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2684.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	960	960	960	960	960	
5°	964	960	949	960	953	92
15°	926	922	917	920	921	261
25°	855	848	841	844	841	393
35°	750	748	743	740	740	470
45°	630	631	622	616	618	487
55°	492	494	484	480	472	441
65°	342	338	333	326	328	338
75°	186	181	179	175	174	196
85°	39	40	40	40	39	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	960.1	960.1	960.1	960.1	960.1
2.5°	965.5	965.5	954.7	961.5	960.1
5°	964.1	960.1	949.3	960.1	953.4
7.5°	957.4	950.7	945.3	952.0	956.1
10°	952.0	950.7	934.5	942.6	945.3
12.5°	934.5	941.2	923.7	929.1	929.1
15°	926.4	922.3	917.0	919.6	921.0
17.5°	908.9	906.2	898.1	904.8	907.5
20°	892.7	888.6	883.2	884.6	883.2
22.5°	872.5	869.8	865.7	865.7	857.6
25°	854.9	848.2	841.4	844.1	841.4
27.5°	833.3	828.0	821.2	822.6	818.5
30°	805.0	806.4	792.9	792.9	794.2
32.5°	780.8	775.4	765.9	765.9	767.3
35°	749.7	748.4	743.0	740.3	740.3
37.5°	724.1	724.1	714.7	710.6	706.6
40°	690.4	691.8	681.0	679.6	674.2
42.5°	664.8	662.1	651.3	650.0	644.6
45°	629.7	631.1	621.6	616.2	617.6
47.5°	600.1	596.0	589.3	583.9	579.8
50°	562.3	561.0	554.2	550.2	546.1
52.5°	529.9	525.9	521.9	512.4	509.7
55°	492.2	493.5	484.1	480.1	472.0
57.5°	455.8	454.4	446.3	439.6	432.9
60°	422.1	418.0	408.6	401.8	399.1
62.5°	377.6	376.2	369.5	364.1	361.4
65°	342.5	338.5	333.1	326.3	327.7
67.5°	302.1	299.4	294.0	288.6	285.9
70°	264.3	260.3	253.5	250.8	249.5
72.5°	225.2	221.1	215.8	210.4	211.7
75°	186.1	180.7	179.3	175.3	174.0
77.5°	145.6	142.9	140.2	138.9	137.5
80°	106.5	107.9	103.8	102.5	103.8
82.5°	72.8	72.8	71.5	70.1	71.5
85°	39.1	40.5	40.5	40.5	39.1
87.5°	13.5	16.2	17.5	17.5	16.2
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	19.55	21.19	19.92	21.51	21.82	19.31	20.95	19.68	21.27	21.58
	3H	21.39	22.87	21.77	23.20	23.56	21.12	22.60	21.49	22.93	23.29
	4H	22.08	23.47	22.47	23.82	24.20	21.79	23.18	22.18	23.53	23.91
	6H	22.56	23.86	22.97	24.22	24.61	22.27	23.57	22.68	23.93	24.32
	8H	22.71	23.94	23.13	24.33	24.73	22.42	23.66	22.84	24.05	24.45
	12H	22.79	23.97	23.22	24.35	24.78	22.51	23.69	22.94	24.07	24.50
4H	2H	20.17	21.56	20.56	21.91	22.29	19.98	21.37	20.37	21.72	22.10
	3H	22.22	23.39	22.63	23.79	24.19	22.00	23.17	22.40	23.57	23.96
	4H	23.03	24.09	23.46	24.51	24.94	22.79	23.85	23.22	24.26	24.70
	6H	23.65	24.58	24.10	25.02	25.47	23.40	24.32	23.85	24.76	25.22
	8H	23.84	24.71	24.30	25.15	25.61	23.59	24.46	24.05	24.90	25.36
	12H	23.96	24.74	24.44	25.21	25.68	23.71	24.49	24.19	24.97	25.44
8H	4H	23.33	24.20	23.79	24.64	25.11	23.12	23.98	23.58	24.43	24.89
	6H	24.06	24.78	24.55	25.27	25.75	23.84	24.56	24.33	25.04	25.52
	8H	24.32	24.97	24.83	25.47	25.96	24.10	24.74	24.61	25.25	25.74
	12H	24.50	25.07	25.01	25.56	26.12	24.28	24.86	24.79	25.35	25.91
12H	4H	23.36	24.14	23.84	24.62	25.09	23.15	23.93	23.63	24.41	24.88
	6H	24.11	24.76	24.62	25.26	25.75	23.89	24.54	24.40	25.05	25.53
	8H	24.42	24.99	24.93	25.48	26.04	24.21	24.78	24.71	25.27	25.83