

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: P686321

Luminaire Tested: SQ4R-F-125D-92765-1-UNV-STD-W-4\_5000K

Issue Date: 5/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P686321  
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-125D-92765-1-UNV-STD-W-4\_5000K  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS, WHITE TUNING 2700K-6500I  
1250 LUMENS PER FOOT  
Light Source: 2700K AND 6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

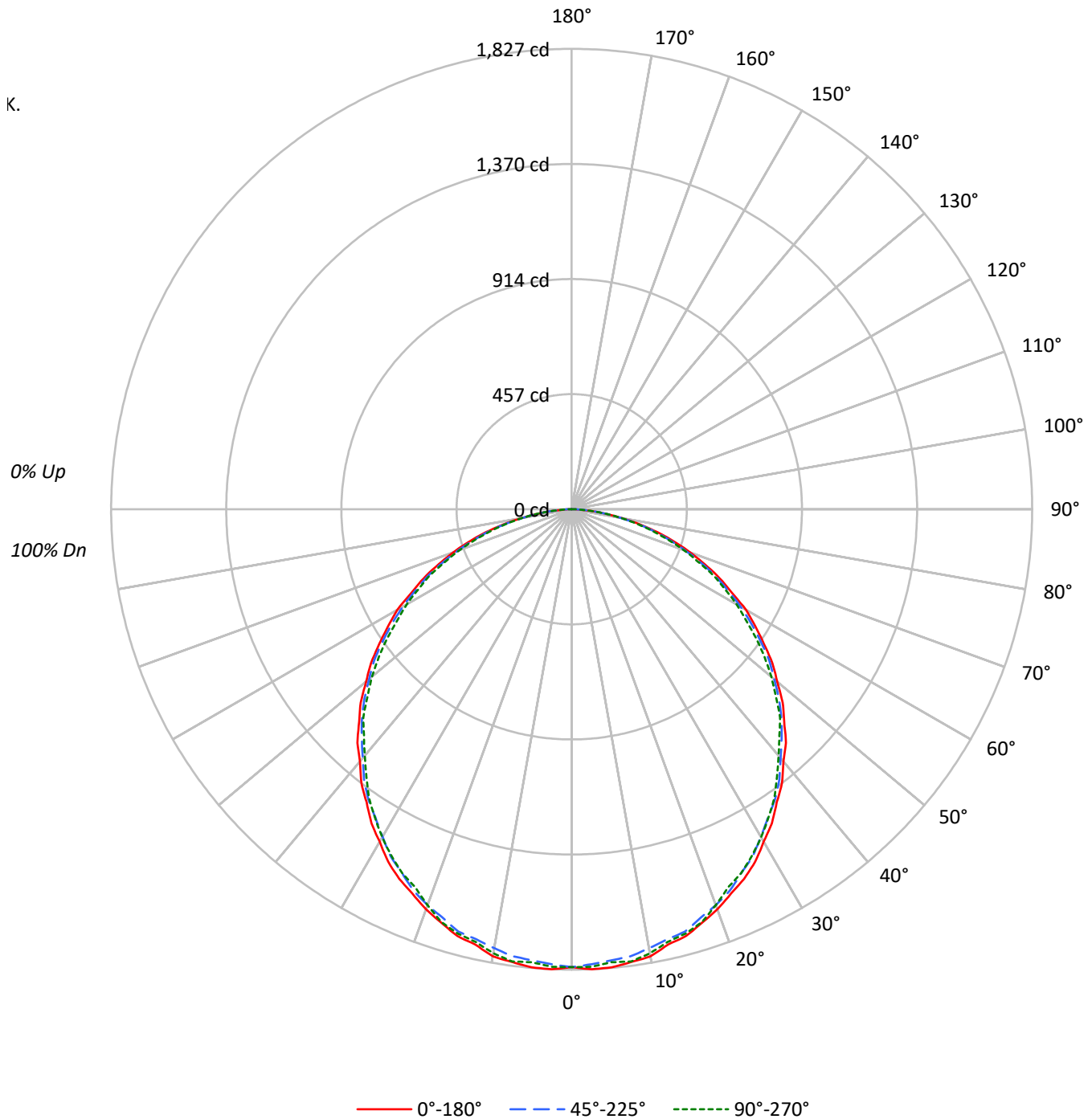
Lumens per Lamp: N/A  
Luminaire Lumens: 5081.4 lumens  
Efficiency: N/A  
Efficacy: 82.9 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.23 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 61.3  
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	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°	17494	17494	17494
5°	17635	17364	17437
10°	17614	17290	17489
15°	17475	17297	17373
20°	17309	17126	17126
25°	17187	16916	16916
30°	16937	16682	16711
35°	16677	16527	16467
40°	16422	16197	16038
45°	16226	16018	15915
50°	15939	15710	15481
55°	15635	15378	14992
60°	15381	14890	14545
65°	14766	14361	14128
70°	14080	13506	13289
75°	13101	12625	12245
80°	11177	10894	10894
85°	8174	8461	8174

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 16262 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	172.1	3.4
10°-20°	490.9	9.7
20°-30°	737.7	14.5
30°-40°	880.6	17.3
40°-50°	908.6	17.9
50°-60°	818.4	16.1
60°-70°	622.6	12.3
70°-80°	357.4	7.0
80°-90°	93.0	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°	1400.7	27.6
0°-40°	2281.3	44.9
0°-60°	4008.3	78.9
0°-90°	5081.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5081.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1817	1817	1817	1817	1817	
5°	1825	1817	1797	1817	1804	173
15°	1753	1746	1735	1740	1743	494
25°	1618	1605	1592	1598	1592	745
35°	1419	1416	1406	1401	1401	890
45°	1192	1194	1176	1166	1169	921
55°	932	934	916	909	893	834
65°	648	641	630	618	620	639
75°	352	342	339	332	329	370
85°	74	77	77	77	74	92
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1817.1	1817.1	1817.1	1817.1	1817.1
2.5°	1827.3	1827.3	1806.9	1819.7	1817.1
5°	1824.8	1817.1	1796.7	1817.1	1804.3
7.5°	1812.0	1799.2	1789.0	1801.8	1809.5
10°	1801.8	1799.2	1768.6	1783.9	1789.0
12.5°	1768.6	1781.4	1748.2	1758.4	1758.4
15°	1753.3	1745.6	1735.4	1740.5	1743.1
17.5°	1720.1	1715.0	1699.7	1712.5	1717.6
20°	1689.5	1681.8	1671.6	1674.2	1671.6
22.5°	1651.2	1646.1	1638.5	1638.5	1623.1
25°	1618.0	1605.3	1592.5	1597.6	1592.5
27.5°	1577.2	1567.0	1554.2	1556.8	1549.1
30°	1523.6	1526.2	1500.6	1500.6	1503.2
32.5°	1477.7	1467.5	1449.6	1449.6	1452.2
35°	1419.0	1416.4	1406.2	1401.1	1401.1
37.5°	1370.5	1370.5	1352.6	1345.0	1337.3
40°	1306.7	1309.2	1288.8	1286.3	1276.1
42.5°	1258.2	1253.1	1232.7	1230.1	1219.9
45°	1191.8	1194.4	1176.5	1166.3	1168.9
47.5°	1135.7	1128.0	1115.3	1105.1	1097.4
50°	1064.2	1061.7	1048.9	1041.3	1033.6
52.5°	1003.0	995.3	987.7	969.8	964.7
55°	931.5	934.1	916.2	908.6	893.2
57.5°	862.6	860.1	844.8	832.0	819.2
60°	798.8	791.2	773.3	760.5	755.4
62.5°	714.6	712.0	699.3	689.1	684.0
65°	648.2	640.6	630.4	617.6	620.2
67.5°	571.7	566.6	556.4	546.2	541.0
70°	500.2	492.6	479.8	474.7	472.1
72.5°	426.2	418.5	408.3	398.1	400.7
75°	352.2	342.0	339.4	331.8	329.2
77.5°	275.6	270.5	265.4	262.9	260.3
80°	201.6	204.2	196.5	194.0	196.5
82.5°	137.8	137.8	135.3	132.7	135.3
85°	74.0	76.6	76.6	76.6	74.0
87.5°	25.5	30.6	33.2	33.2	30.6
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	21.77	23.41	22.14	23.72	24.04	21.53	23.17	21.89	23.48	23.80
	3H	23.61	25.09	23.98	25.42	25.78	23.33	24.82	23.71	25.14	25.50
	4H	24.29	25.69	24.69	26.04	26.41	24.00	25.40	24.40	25.75	26.12
	6H	24.78	26.08	25.19	26.44	26.83	24.49	25.78	24.90	26.15	26.54
	8H	24.92	26.16	25.35	26.55	26.95	24.64	25.87	25.06	26.26	26.66
	12H	25.00	26.19	25.43	26.57	27.00	24.72	25.91	25.15	26.29	26.72
4H	2H	22.38	23.78	22.78	24.13	24.50	22.19	23.59	22.59	23.94	24.31
	3H	24.44	25.61	24.85	26.01	26.41	24.21	25.38	24.62	25.78	26.18
	4H	25.25	26.31	25.68	26.72	27.16	25.01	26.07	25.44	26.48	26.92
	6H	25.86	26.79	26.32	27.23	27.69	25.61	26.54	26.07	26.98	27.44
	8H	26.05	26.92	26.51	27.36	27.83	25.81	26.67	26.27	27.12	27.58
	12H	26.17	26.95	26.65	27.43	27.90	25.93	26.71	26.41	27.19	27.65
8H	4H	25.55	26.42	26.01	26.86	27.32	25.33	26.20	25.79	26.64	27.11
	6H	26.28	27.00	26.77	27.49	27.96	26.05	26.77	26.54	27.26	27.74
	8H	26.54	27.18	27.05	27.69	28.18	26.31	26.96	26.82	27.47	27.95
	12H	26.72	27.29	27.22	27.78	28.34	26.50	27.07	27.01	27.56	28.12
12H	4H	25.58	26.36	26.06	26.83	27.30	25.37	26.15	25.85	26.62	27.09
	6H	26.33	26.97	26.83	27.48	27.97	26.11	26.76	26.62	27.26	27.75
	8H	26.64	27.21	27.14	27.70	28.26	26.42	27.00	26.93	27.49	28.05