

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: P686320

Luminaire Tested: SQ4R-F-125D-92765-1-UNV-STD-W-4\_4500K

Issue Date: 5/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P686320  
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\_4500K  
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**

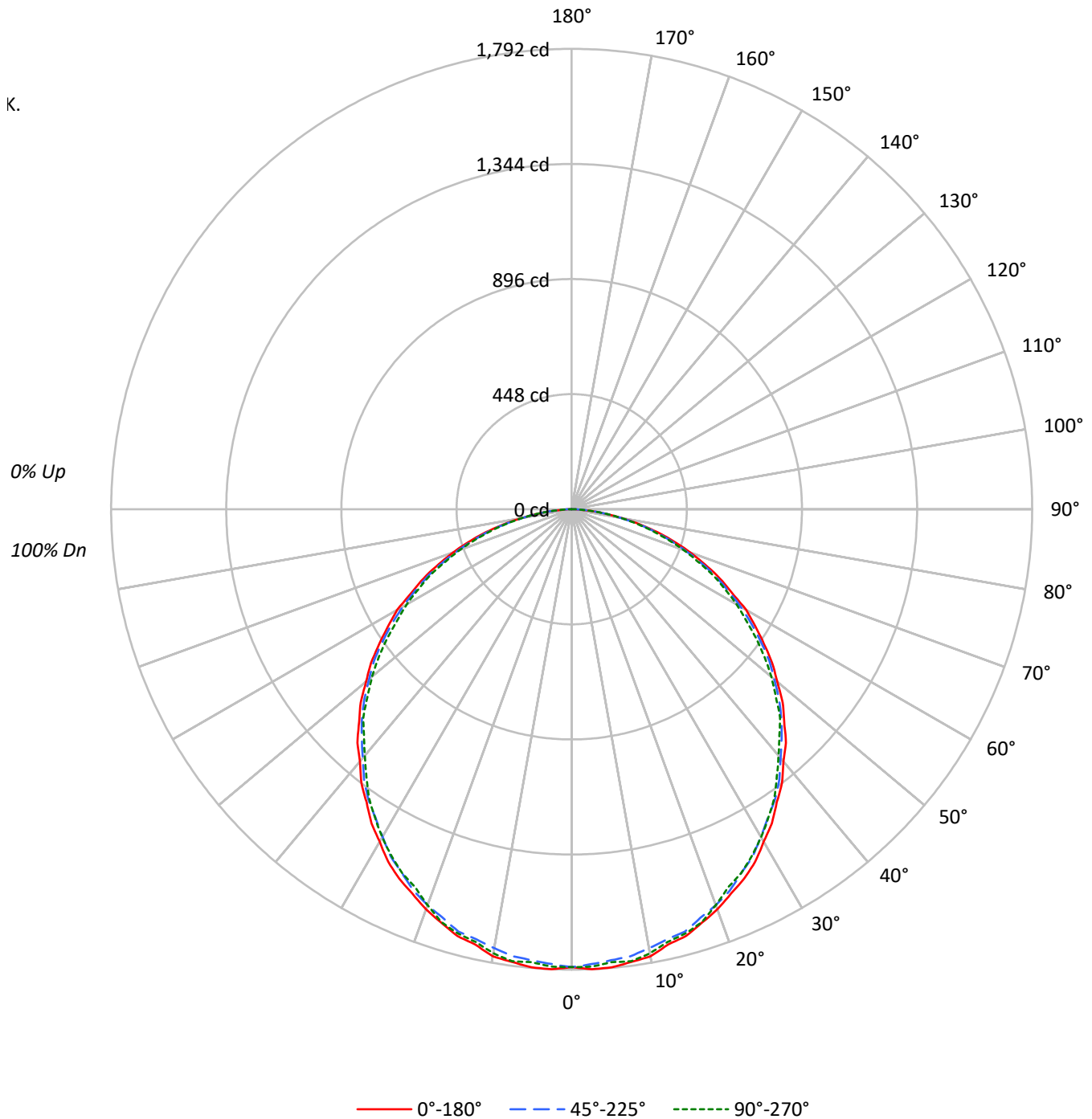
Lumens per Lamp: N/A  
Luminaire Lumens: 4983.6 lumens  
Efficiency: N/A  
Efficacy: 81.4 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.23 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 61.2  
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°	17157	17157	17157
5°	17295	17029	17102
10°	17275	16957	17153
15°	17138	16964	17039
20°	16976	16796	16796
25°	16857	16591	16591
30°	16612	16360	16389
35°	16356	16208	16150
40°	16105	15885	15728
45°	15915	15710	15608
50°	15632	15407	15183
55°	15335	15083	14703
60°	15084	14603	14266
65°	14484	14083	13855
70°	13810	13247	13036
75°	12848	12383	12011
80°	10961	10684	10684
85°	8019	8296	8019

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 15949 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	168.8	3.4
10°-20°	481.4	9.7
20°-30°	723.5	14.5
30°-40°	863.7	17.3
40°-50°	891.1	17.9
50°-60°	802.6	16.1
60°-70°	610.6	12.3
70°-80°	350.6	7.0
80°-90°	91.2	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°	1373.7	27.6
0°-40°	2237.4	44.9
0°-60°	3931.2	78.9
0°-90°	4983.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4983.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1782	1782	1782	1782	1782	
5°	1790	1782	1762	1782	1770	170
15°	1720	1712	1702	1707	1710	484
25°	1587	1574	1562	1567	1562	730
35°	1392	1389	1379	1374	1374	873
45°	1169	1171	1154	1144	1146	903
55°	914	916	899	891	876	818
65°	636	628	618	606	608	627
75°	345	335	333	325	323	363
85°	73	75	75	75	73	90
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1782.1	1782.1	1782.1	1782.1	1782.1
2.5°	1792.1	1792.1	1772.1	1784.6	1782.1
5°	1789.6	1782.1	1762.1	1782.1	1769.6
7.5°	1777.1	1764.6	1754.6	1767.1	1774.6
10°	1767.1	1764.6	1734.6	1749.6	1754.6
12.5°	1734.6	1747.1	1714.5	1724.6	1724.6
15°	1719.5	1712.0	1702.0	1707.0	1709.5
17.5°	1687.0	1682.0	1667.0	1679.5	1684.5
20°	1657.0	1649.5	1639.4	1642.0	1639.4
22.5°	1619.4	1614.4	1606.9	1606.9	1591.9
25°	1586.9	1574.4	1561.9	1566.9	1561.9
27.5°	1546.8	1536.8	1524.3	1526.8	1519.3
30°	1494.3	1496.8	1471.7	1471.7	1474.3
32.5°	1449.2	1439.2	1421.7	1421.7	1424.2
35°	1391.7	1389.2	1379.1	1374.1	1374.1
37.5°	1344.1	1344.1	1326.6	1319.1	1311.6
40°	1281.5	1284.0	1264.0	1261.5	1251.5
42.5°	1234.0	1229.0	1208.9	1206.4	1196.4
45°	1168.9	1171.4	1153.9	1143.9	1146.4
47.5°	1113.8	1106.3	1093.8	1083.8	1076.3
50°	1043.7	1041.2	1028.7	1021.2	1013.7
52.5°	983.7	976.2	968.7	951.1	946.1
55°	913.6	916.1	898.6	891.1	876.0
57.5°	846.0	843.5	828.5	816.0	803.5
60°	783.4	775.9	758.4	745.9	740.9
62.5°	700.8	698.3	685.8	675.8	670.8
65°	635.8	628.2	618.2	605.7	608.2
67.5°	560.7	555.7	545.6	535.6	530.6
70°	490.6	483.1	470.6	465.6	463.1
72.5°	418.0	410.5	400.5	390.5	393.0
75°	345.4	335.4	332.9	325.4	322.9
77.5°	270.3	265.3	260.3	257.8	255.3
80°	197.7	200.2	192.7	190.2	192.7
82.5°	135.2	135.2	132.7	130.2	132.7
85°	72.6	75.1	75.1	75.1	72.6
87.5°	25.0	30.0	32.5	32.5	30.0
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	21.70	23.34	22.07	23.66	23.97	21.46	23.10	21.82	23.41	23.73
	3H	23.54	25.02	23.91	25.35	25.71	23.27	24.75	23.64	25.08	25.44
	4H	24.23	25.62	24.62	25.97	26.35	23.93	25.33	24.33	25.68	26.05
	6H	24.71	26.01	25.12	26.37	26.76	24.42	25.72	24.83	26.08	26.47
	8H	24.86	26.09	25.28	26.48	26.88	24.57	25.81	24.99	26.20	26.59
	12H	24.94	26.12	25.36	26.50	26.93	24.66	25.84	25.08	26.22	26.65
4H	2H	22.32	23.71	22.71	24.06	24.44	22.12	23.52	22.52	23.87	24.25
	3H	24.37	25.54	24.78	25.94	26.34	24.14	25.32	24.55	25.71	26.11
	4H	25.18	26.24	25.61	26.66	27.09	24.94	26.00	25.37	26.41	26.85
	6H	25.80	26.72	26.25	27.16	27.62	25.54	26.47	26.00	26.91	27.37
	8H	25.99	26.85	26.45	27.30	27.76	25.74	26.61	26.20	27.05	27.51
	12H	26.10	26.88	26.58	27.36	27.83	25.86	26.64	26.34	27.12	27.59
8H	4H	25.48	26.35	25.94	26.79	27.26	25.27	26.13	25.73	26.58	27.04
	6H	26.21	26.93	26.70	27.42	27.89	25.98	26.71	26.48	27.19	27.67
	8H	26.47	27.12	26.98	27.62	28.11	26.25	26.89	26.75	27.40	27.88
	12H	26.65	27.22	27.15	27.71	28.27	26.43	27.01	26.94	27.50	28.06
12H	4H	25.51	26.29	25.99	26.77	27.23	25.30	26.08	25.78	26.56	27.03
	6H	26.26	26.91	26.77	27.41	27.90	26.04	26.69	26.55	27.19	27.68
	8H	26.57	27.14	27.08	27.63	28.19	26.36	26.93	26.86	27.42	27.98