

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: P686318

Luminaire Tested: SQ4R-F-125D-92765-1-UNV-STD-W-4_3500K

Issue Date: 5/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P686318
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_3500K
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

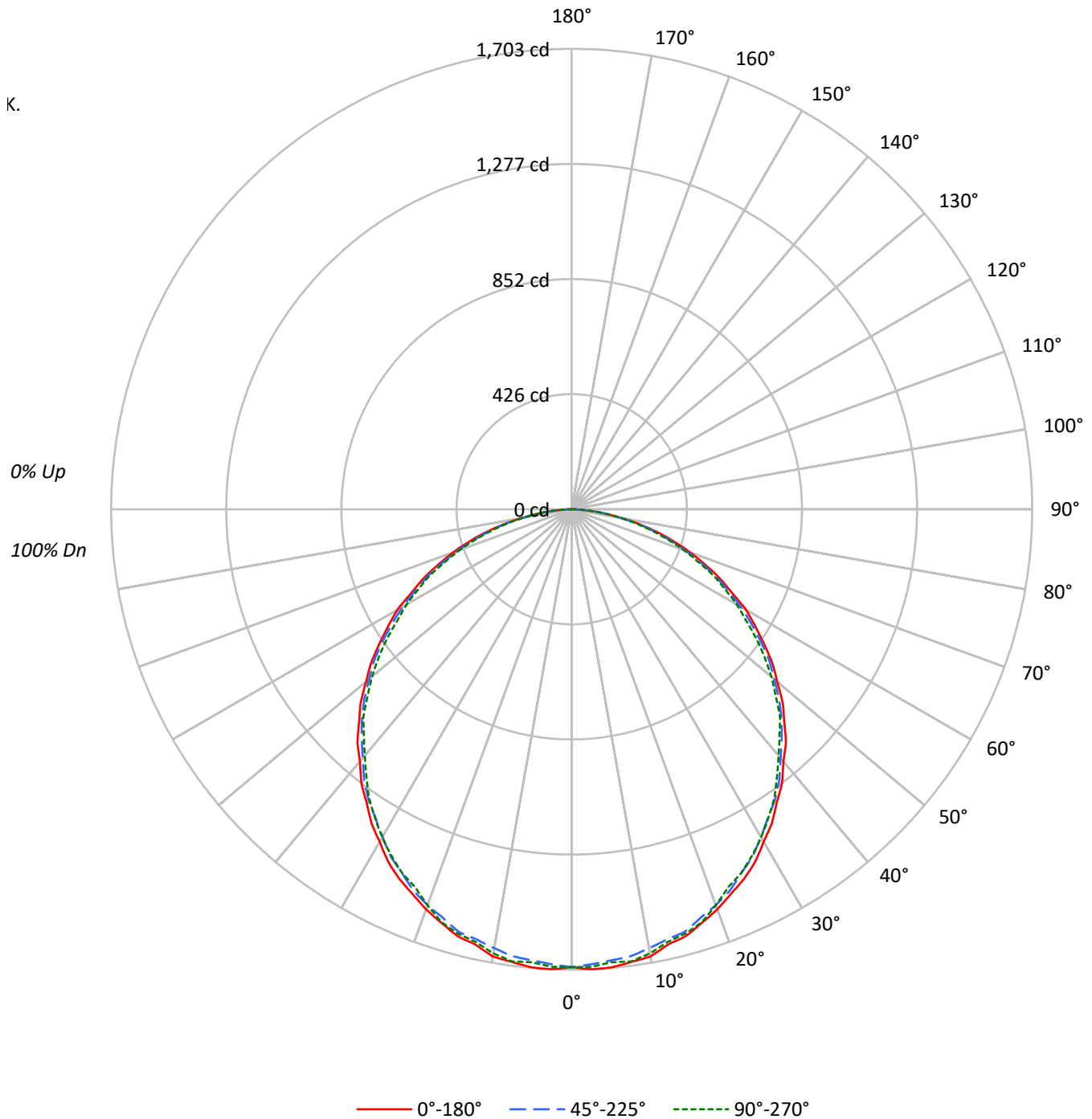
Lumens per Lamp: N/A
Luminaire Lumens: 4736.7 lumens
Efficiency: N/A
Efficacy: 77.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 61.2
Input Voltage (V): 120
Input Current (A_{in}): 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°	16307	16307	16307
5°	16439	16185	16254
10°	16420	16116	16303
15°	16290	16124	16194
20°	16135	15964	15964
25°	16022	15769	15769
30°	15788	15550	15577
35°	15545	15406	15350
40°	15307	15099	14949
45°	15126	14932	14835
50°	14858	14645	14431
55°	14574	14336	13975
60°	14337	13879	13559
65°	13766	13386	13169
70°	13126	12588	12388
75°	12212	11769	11416
80°	10417	10157	10157
85°	7622	7887	7622

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 15159 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.4	3.4
10°-20°	457.6	9.7
20°-30°	687.6	14.5
30°-40°	820.9	17.3
40°-50°	847.0	17.9
50°-60°	762.8	16.1
60°-70°	580.4	12.3
70°-80°	333.2	7.0
80°-90°	86.7	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°	1305.7	27.6
0°-40°	2126.6	44.9
0°-60°	3736.4	78.9
0°-90°	4736.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4736.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1694	1694	1694	1694	1694	
5°	1701	1694	1675	1694	1682	162
15°	1634	1627	1618	1622	1625	460
25°	1508	1496	1484	1489	1484	694
35°	1323	1320	1311	1306	1306	829
45°	1111	1113	1097	1087	1090	859
55°	868	871	854	847	833	777
65°	604	597	588	576	578	596
75°	328	319	316	309	307	345
85°	69	71	71	71	69	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1693.8	1693.8	1693.8	1693.8	1693.8
2.5°	1703.3	1703.3	1684.3	1696.2	1693.8
5°	1701.0	1693.8	1674.8	1693.8	1681.9
7.5°	1689.1	1677.2	1667.7	1679.6	1686.7
10°	1679.6	1677.2	1648.6	1662.9	1667.7
12.5°	1648.6	1660.5	1629.6	1639.1	1639.1
15°	1634.4	1627.2	1617.7	1622.5	1624.8
17.5°	1603.4	1598.7	1584.4	1596.3	1601.1
20°	1574.9	1567.7	1558.2	1560.6	1558.2
22.5°	1539.2	1534.4	1527.3	1527.3	1513.0
25°	1508.3	1496.4	1484.5	1489.2	1484.5
27.5°	1470.2	1460.7	1448.8	1451.2	1444.0
30°	1420.2	1422.6	1398.8	1398.8	1401.2
32.5°	1377.4	1367.9	1351.3	1351.3	1353.6
35°	1322.7	1320.3	1310.8	1306.1	1306.1
37.5°	1277.5	1277.5	1260.9	1253.7	1246.6
40°	1218.0	1220.4	1201.4	1199.0	1189.5
42.5°	1172.8	1168.1	1149.0	1146.7	1137.2
45°	1111.0	1113.4	1096.7	1087.2	1089.6
47.5°	1058.6	1051.5	1039.6	1030.1	1023.0
50°	992.0	989.7	977.8	970.6	963.5
52.5°	934.9	927.8	920.7	904.0	899.3
55°	868.3	870.7	854.1	846.9	832.6
57.5°	804.1	801.7	787.4	775.5	763.7
60°	744.6	737.5	720.8	708.9	704.2
62.5°	666.1	663.7	651.8	642.3	637.6
65°	604.3	597.1	587.6	575.7	578.1
67.5°	532.9	528.1	518.6	509.1	504.3
70°	466.3	459.1	447.2	442.5	440.1
72.5°	397.3	390.2	380.6	371.1	373.5
75°	328.3	318.8	316.4	309.3	306.9
77.5°	256.9	252.2	247.4	245.0	242.7
80°	187.9	190.3	183.2	180.8	183.2
82.5°	128.5	128.5	126.1	123.7	126.1
85°	69.0	71.4	71.4	71.4	69.0
87.5°	23.8	28.5	30.9	30.9	28.5
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	21.53	23.17	21.89	23.48	23.79	21.28	22.92	21.65	23.24	23.55
	3H	23.36	24.85	23.74	25.17	25.53	23.09	24.57	23.47	24.90	25.26
	4H	24.05	25.45	24.45	25.79	26.17	23.76	25.16	24.16	25.50	25.88
	6H	24.54	25.83	24.95	26.20	26.59	24.24	25.54	24.65	25.90	26.29
	8H	24.68	25.92	25.10	26.31	26.70	24.39	25.63	24.82	26.02	26.42
	12H	24.76	25.95	25.19	26.33	26.76	24.48	25.67	24.91	26.05	26.48
4H	2H	22.14	23.54	22.54	23.88	24.26	21.95	23.35	22.35	23.69	24.07
	3H	24.19	25.36	24.60	25.76	26.16	23.97	25.14	24.38	25.54	25.94
	4H	25.01	26.07	25.44	26.48	26.92	24.76	25.82	25.19	26.24	26.67
	6H	25.62	26.55	26.07	26.99	27.44	25.37	26.30	25.82	26.74	27.19
	8H	25.81	26.68	26.27	27.12	27.58	25.56	26.43	26.02	26.87	27.34
	12H	25.93	26.71	26.41	27.18	27.65	25.69	26.47	26.17	26.94	27.41
8H	4H	25.30	26.17	25.76	26.61	27.08	25.09	25.96	25.55	26.40	26.86
	6H	26.03	26.76	26.53	27.24	27.72	25.81	26.53	26.30	27.02	27.49
	8H	26.29	26.94	26.80	27.45	27.93	26.07	26.72	26.58	27.22	27.71
	12H	26.47	27.04	26.98	27.53	28.09	26.26	26.83	26.76	27.32	27.88
12H	4H	25.33	26.11	25.81	26.59	27.06	25.12	25.91	25.60	26.38	26.85
	6H	26.08	26.73	26.59	27.24	27.72	25.86	26.51	26.37	27.02	27.50
	8H	26.39	26.97	26.90	27.46	28.02	26.18	26.75	26.69	27.24	27.80