

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: P686322

Luminaire Tested: SQ4R-F-125D-92765-1-UNV-STD-W-4_5700K

Issue Date: 5/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P686322
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_5700K
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

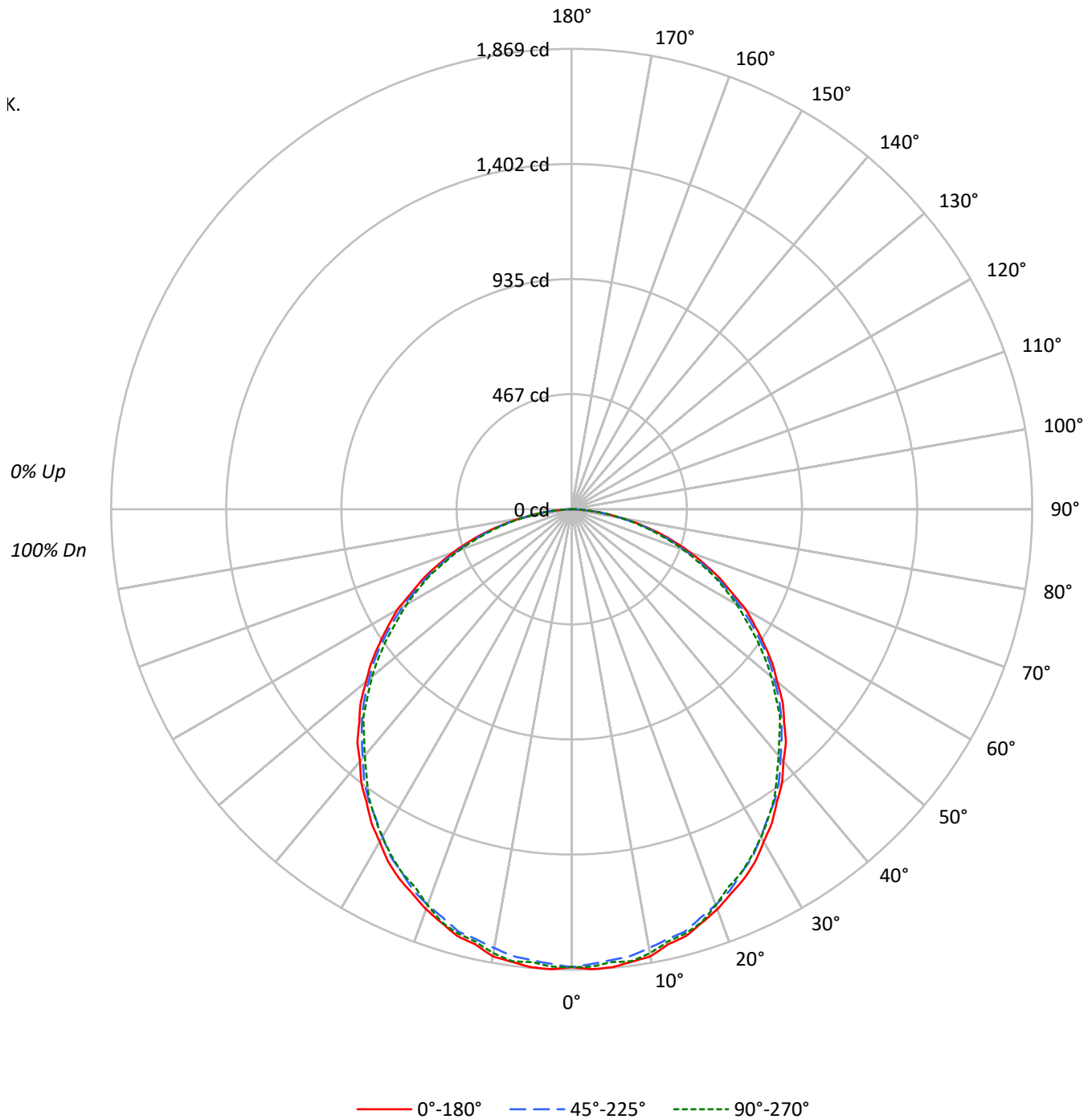
Lumens per Lamp: N/A
Luminaire Lumens: 5196.9 lumens
Efficiency: N/A
Efficacy: 84.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 61.3
Input Voltage (V): 120
Input Current (A_{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°	17891	17891	17891
5°	18035	17758	17834
10°	18015	17683	17887
15°	17873	17690	17768
20°	17703	17515	17515
25°	17578	17301	17301
30°	17322	17062	17091
35°	17056	16903	16842
40°	16795	16565	16402
45°	16595	16383	16276
50°	16301	16068	15833
55°	15991	15727	15333
60°	15731	15229	14876
65°	15103	14686	14450
70°	14401	13812	13593
75°	13398	12911	12524
80°	11432	11144	11144
85°	8362	8649	8362

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 16631 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.0	3.4
10°-20°	502.1	9.7
20°-30°	754.5	14.5
30°-40°	900.7	17.3
40°-50°	929.3	17.9
50°-60°	837.0	16.1
60°-70°	636.8	12.3
70°-80°	365.6	7.0
80°-90°	95.1	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°	1432.5	27.6
0°-40°	2333.2	44.9
0°-60°	4099.4	78.9
0°-90°	5196.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5196.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1858	1858	1858	1858	1858	
5°	1866	1858	1838	1858	1845	177
15°	1793	1785	1775	1780	1783	505
25°	1655	1642	1629	1634	1629	762
35°	1451	1449	1438	1433	1433	910
45°	1219	1222	1203	1193	1195	942
55°	953	955	937	929	914	853
65°	663	655	645	632	634	654
75°	360	350	347	339	337	379
85°	76	78	78	78	76	94
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1858.4	1858.4	1858.4	1858.4	1858.4
2.5°	1868.9	1868.9	1848.0	1861.0	1858.4
5°	1866.2	1858.4	1837.5	1858.4	1845.4
7.5°	1853.2	1840.1	1829.7	1842.8	1850.6
10°	1842.8	1840.1	1808.8	1824.5	1829.7
12.5°	1808.8	1821.9	1787.9	1798.4	1798.4
15°	1793.2	1785.3	1774.9	1780.1	1782.7
17.5°	1759.2	1754.0	1738.3	1751.4	1756.6
20°	1727.9	1720.1	1709.6	1712.2	1709.6
22.5°	1688.8	1683.5	1675.7	1675.7	1660.0
25°	1654.8	1641.8	1628.7	1633.9	1628.7
27.5°	1613.1	1602.6	1589.6	1592.2	1584.3
30°	1558.2	1560.9	1534.8	1534.8	1537.4
32.5°	1511.3	1500.8	1482.6	1482.6	1485.2
35°	1451.2	1448.6	1438.2	1433.0	1433.0
37.5°	1401.6	1401.6	1383.4	1375.5	1367.7
40°	1336.4	1339.0	1318.1	1315.5	1305.1
42.5°	1286.8	1281.6	1260.7	1258.1	1247.6
45°	1218.9	1221.5	1203.3	1192.8	1195.4
47.5°	1161.5	1153.7	1140.6	1130.2	1122.4
50°	1088.4	1085.8	1072.8	1064.9	1057.1
52.5°	1025.8	1018.0	1010.1	991.8	986.6
55°	952.7	955.3	937.0	929.2	913.5
57.5°	882.2	879.6	864.0	850.9	837.9
60°	817.0	809.1	790.9	777.8	772.6
62.5°	730.8	728.2	715.2	704.7	699.5
65°	663.0	655.1	644.7	631.7	634.3
67.5°	584.7	579.4	569.0	558.6	553.3
70°	511.6	503.8	490.7	485.5	482.9
72.5°	435.9	428.1	417.6	407.2	409.8
75°	360.2	349.8	347.1	339.3	336.7
77.5°	281.9	276.7	271.5	268.8	266.2
80°	206.2	208.8	201.0	198.4	201.0
82.5°	140.9	140.9	138.3	135.7	138.3
85°	75.7	78.3	78.3	78.3	75.7
87.5°	26.1	31.3	33.9	33.9	31.3
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	21.85	23.49	22.21	23.80	24.12	21.61	23.25	21.97	23.56	23.87
	3H	23.68	25.17	24.06	25.49	25.85	23.41	24.89	23.79	25.22	25.58
	4H	24.37	25.77	24.77	26.12	26.49	24.08	25.48	24.48	25.82	26.20
	6H	24.86	26.15	25.27	26.52	26.91	24.57	25.86	24.98	26.23	26.62
	8H	25.00	26.24	25.43	26.63	27.03	24.71	25.95	25.14	26.34	26.74
	12H	25.08	26.27	25.51	26.65	27.08	24.80	25.99	25.23	26.37	26.80
4H	2H	22.46	23.86	22.86	24.21	24.58	22.27	23.67	22.67	24.02	24.39
	3H	24.51	25.69	24.92	26.08	26.48	24.29	25.46	24.70	25.86	26.26
	4H	25.33	26.39	25.76	26.80	27.24	25.08	26.15	25.52	26.56	26.99
	6H	25.94	26.87	26.40	27.31	27.77	25.69	26.62	26.14	27.06	27.51
	8H	26.13	27.00	26.59	27.44	27.91	25.88	26.75	26.34	27.19	27.66
	12H	26.25	27.03	26.73	27.51	27.97	26.01	26.79	26.49	27.26	27.73
8H	4H	25.63	26.49	26.09	26.94	27.40	25.41	26.28	25.87	26.72	27.19
	6H	26.36	27.08	26.85	27.57	28.04	26.13	26.85	26.62	27.34	27.81
	8H	26.61	27.26	27.12	27.77	28.25	26.39	27.04	26.90	27.54	28.03
	12H	26.79	27.37	27.30	27.86	28.42	26.58	27.15	27.09	27.64	28.20
12H	4H	25.66	26.44	26.14	26.91	27.38	25.45	26.23	25.93	26.70	27.17
	6H	26.40	27.05	26.91	27.56	28.04	26.19	26.83	26.69	27.34	27.83
	8H	26.72	27.29	27.22	27.78	28.34	26.50	27.07	27.01	27.56	28.13