

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: P686324

Luminaire Tested: SQ4R-F-125D-93050-1-UNV-STD-W-4_3000K

Issue Date: 5/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P686324
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-21)
Test Lab: INNOVATION CENTER
Issue Date: 5/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-F-125D-93050-1-UNV-STD-W-4_3000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS, WHITE TUNING 3000K-5000K
1250 LUMENS PER FOOT
Light Source: 3000K AND 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

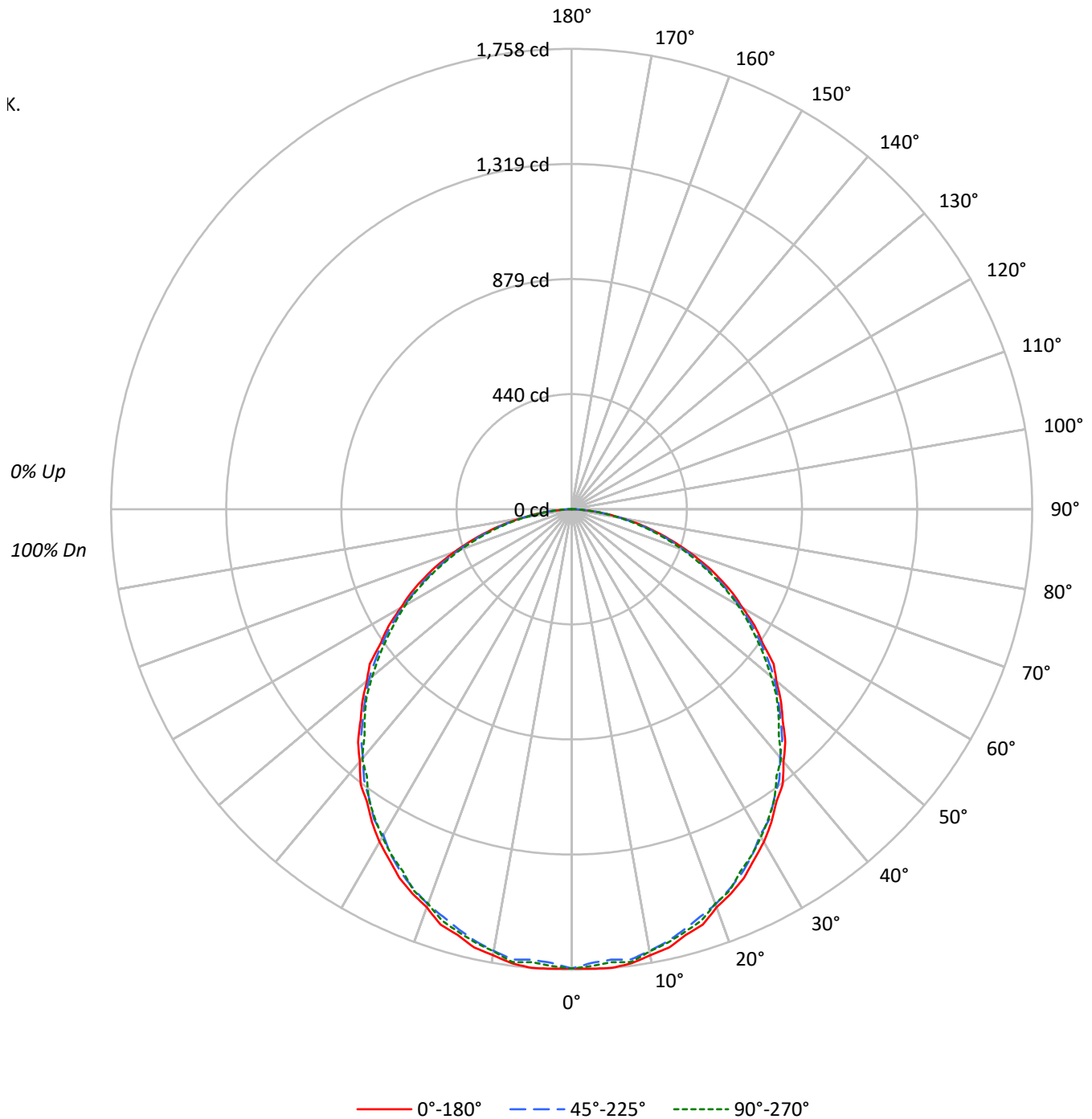
Lumens per Lamp: N/A
Luminaire Lumens: 4877.9 lumens
Efficiency: N/A
Efficacy: 79.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

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										
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	94	91	88	90	88	86	84						84														
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70						70														
3	90	80	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	35	29	41	34	29	40	34	29	39	33	29	27						27														
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	24						24														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16879	16879	16879
5°	16990	16685	16779
10°	16902	16736	16760
15°	16772	16555	16652
20°	16570	16445	16420
25°	16509	16302	16199
30°	16305	15981	16061
35°	16011	15839	15867
40°	15809	15564	15625
45°	15506	15340	15208
50°	15276	15130	14876
55°	14918	14714	14468
60°	14495	14260	14119
65°	14160	13664	13443
70°	13396	12988	12715
75°	12376	12015	11654
80°	10634	10501	10235
85°	7776	8042	7776

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 15572 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.7	3.4
10°-20°	472.4	9.7
20°-30°	709.2	14.5
30°-40°	847.4	17.4
40°-50°	871.9	17.9
50°-60°	785.7	16.1
60°-70°	597.0	12.2
70°-80°	341.0	7.0
80°-90°	87.7	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°	1347.3	27.6
0°-40°	2194.7	45.0
0°-60°	3852.3	79.0
0°-90°	4877.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4877.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1753	1753	1753	1753	1753	
5°	1758	1746	1726	1746	1736	167
15°	1683	1680	1661	1678	1671	476
25°	1554	1537	1535	1537	1525	714
35°	1362	1370	1348	1343	1350	856
45°	1139	1144	1127	1120	1117	882
55°	889	898	877	869	862	799
65°	622	617	600	590	590	613
75°	333	328	323	316	313	352
85°	70	73	73	70	70	87
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1753.2	1753.2	1753.2	1753.2	1753.2
2.5°	1755.7	1755.7	1733.8	1758.1	1746.0
5°	1758.1	1746.0	1726.5	1746.0	1736.2
7.5°	1748.4	1731.4	1733.8	1736.2	1743.5
10°	1729.0	1721.7	1712.0	1721.7	1714.4
12.5°	1714.4	1714.4	1690.1	1699.8	1695.0
15°	1682.8	1680.4	1661.0	1678.0	1670.7
17.5°	1663.4	1651.3	1631.8	1644.0	1646.4
20°	1617.3	1619.7	1605.1	1617.3	1602.7
22.5°	1588.1	1597.8	1571.1	1585.7	1576.0
25°	1554.1	1537.1	1534.7	1537.1	1525.0
27.5°	1508.0	1505.6	1491.0	1486.1	1488.6
30°	1466.7	1471.6	1437.6	1437.6	1444.8
32.5°	1418.1	1415.7	1403.6	1391.4	1398.7
35°	1362.3	1369.6	1347.7	1342.9	1350.1
37.5°	1323.4	1313.7	1301.6	1294.3	1284.6
40°	1257.9	1262.7	1238.4	1238.4	1243.3
42.5°	1206.9	1204.4	1189.9	1180.2	1170.4
45°	1138.9	1143.7	1126.7	1119.5	1117.0
47.5°	1083.0	1080.6	1068.5	1053.9	1061.2
50°	1019.9	1017.5	1010.2	995.6	993.2
52.5°	971.3	961.6	944.6	932.5	927.6
55°	888.8	898.5	876.6	869.3	862.0
57.5°	828.1	823.2	811.1	798.9	796.5
60°	752.8	752.8	740.6	733.3	733.3
62.5°	692.1	684.8	670.2	665.4	662.9
65°	621.6	616.8	599.8	590.1	590.1
67.5°	551.2	546.4	529.4	519.7	519.7
70°	475.9	471.1	461.4	454.1	451.7
72.5°	403.1	400.7	391.0	383.7	378.8
75°	332.7	327.8	323.0	315.7	313.3
77.5°	264.7	259.8	255.0	247.7	245.3
80°	191.8	189.4	189.4	182.1	184.6
82.5°	131.1	131.1	128.7	123.8	126.3
85°	70.4	72.8	72.8	70.4	70.4
87.5°	24.3	29.1	31.6	29.1	29.1
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	21.59	23.23	21.96	23.54	23.86	21.40	23.04	21.77	23.36	23.67
	3H	23.43	24.91	23.81	25.24	25.60	23.19	24.67	23.56	25.00	25.36
	4H	24.11	25.51	24.51	25.86	26.23	23.85	25.24	24.25	25.59	25.97
	6H	24.59	25.89	25.00	26.25	26.64	24.32	25.61	24.73	25.98	26.37
	8H	24.73	25.97	25.16	26.36	26.76	24.46	25.70	24.89	26.09	26.49
	12H	24.81	26.00	25.24	26.38	26.81	24.55	25.73	24.98	26.11	26.54
4H	2H	22.20	23.60	22.60	23.94	24.32	22.05	23.45	22.45	23.80	24.17
	3H	24.26	25.43	24.67	25.83	26.23	24.06	25.23	24.47	25.63	26.03
	4H	25.07	26.13	25.50	26.54	26.98	24.84	25.90	25.27	26.32	26.75
	6H	25.67	26.60	26.13	27.04	27.49	25.43	26.36	25.89	26.80	27.26
	8H	25.86	26.72	26.32	27.17	27.63	25.62	26.49	26.08	26.93	27.39
	12H	25.97	26.75	26.45	27.23	27.70	25.74	26.52	26.22	26.99	27.46
8H	4H	25.37	26.24	25.83	26.68	27.14	25.17	26.03	25.63	26.48	26.94
	6H	26.08	26.80	26.58	27.29	27.77	25.87	26.59	26.36	27.08	27.55
	8H	26.34	26.98	26.84	27.49	27.97	26.12	26.77	26.63	27.27	27.76
	12H	26.51	27.09	27.02	27.58	28.14	26.30	26.88	26.81	27.37	27.93
12H	4H	25.40	26.18	25.88	26.65	27.12	25.20	25.98	25.68	26.46	26.93
	6H	26.13	26.78	26.64	27.28	27.77	25.93	26.57	26.43	27.08	27.56
	8H	26.44	27.01	26.94	27.50	28.06	26.23	26.80	26.74	27.29	27.85