

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: P686080

Luminaire Tested: SQ4R-F-125D-835-1-UNV-STD-W-4

Issue Date: 11/18/2022

Test Information

Test Method: LM-79-2019
Report Number: P686080
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-2)
Test Lab: INNOVATION CENTER
Issue Date: 11/18/2022
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-F-125D-835-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS.
1250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

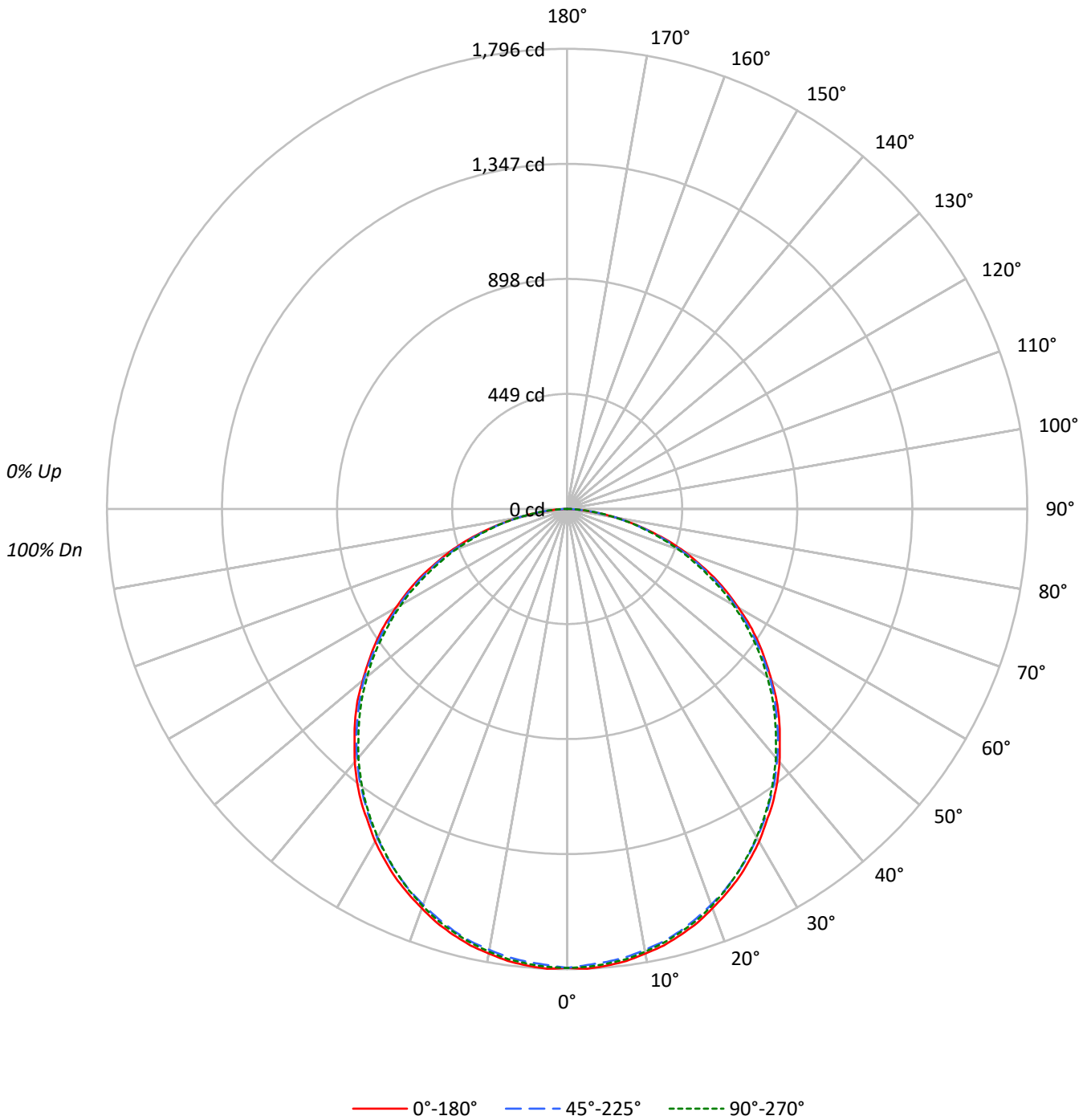
Lumens per Lamp: N/A
Luminaire Lumens: 4993.4 lumens
Efficiency: N/A
Efficacy: 100.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 49.5
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		94	91	88		90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75		82	77	74		79	75	72	70
3	90	80	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	35	29	41	34	29		40	34	29		39	33	29	27
10	53	40	32	27	52	39	32	26	38	31	26		37	31	26		36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17246	17246	17246
5°	17289	17146	17218
10°	17224	17079	17152
15°	17144	16997	17045
20°	16992	16841	16891
25°	16860	16677	16677
30°	16659	16468	16440
35°	16456	16253	16195
40°	16205	16020	15927
45°	15947	15747	15612
50°	15590	15517	15259
55°	15323	15116	14870
60°	14878	14641	14404
65°	14406	14069	13734
70°	13714	13300	13021
75°	12450	12175	11899
80°	10639	10639	10506
85°	7611	8152	8152

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15947 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.4	3.4
10°-20°	483.2	9.7
20°-30°	726.3	14.5
30°-40°	868.0	17.4
40°-50°	894.4	17.9
50°-60°	804.8	16.1
60°-70°	611.8	12.3
70°-80°	347.8	7.0
80°-90°	87.9	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°	1378.9	27.6
0°-40°	2246.8	45.0
0°-60°	3946.0	79.0
0°-90°	4993.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4993.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1791	1791	1791	1791	1791	
5°	1789	1786	1774	1789	1782	170
15°	1720	1718	1705	1715	1710	485
25°	1587	1582	1570	1575	1570	731
35°	1400	1395	1383	1383	1378	875
45°	1171	1171	1157	1149	1147	902
55°	913	910	901	893	886	815
65°	632	630	618	610	603	624
75°	335	332	327	325	320	356
85°	69	71	74	74	74	85
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1791.4	1791.4	1791.4	1791.4	1791.4
2.5°	1796.3	1791.4	1781.6	1793.9	1789.0
5°	1789.0	1786.5	1774.2	1789.0	1781.6
7.5°	1779.1	1776.7	1764.4	1776.7	1771.7
10°	1761.9	1759.4	1747.1	1759.4	1754.5
12.5°	1744.7	1742.2	1729.9	1739.8	1734.8
15°	1720.1	1717.6	1705.3	1715.1	1710.2
17.5°	1693.0	1690.5	1675.8	1685.6	1683.2
20°	1658.5	1656.1	1643.8	1651.2	1648.7
22.5°	1624.1	1621.6	1609.3	1616.7	1611.8
25°	1587.2	1582.3	1570.0	1574.9	1570.0
27.5°	1542.9	1540.4	1528.1	1530.6	1525.7
30°	1498.6	1496.1	1481.4	1483.8	1478.9
32.5°	1446.9	1446.9	1434.6	1434.6	1429.7
35°	1400.2	1395.2	1382.9	1382.9	1378.0
37.5°	1346.0	1341.1	1331.3	1328.8	1323.9
40°	1289.4	1287.0	1274.7	1272.2	1267.3
42.5°	1227.9	1230.4	1218.1	1210.7	1205.8
45°	1171.3	1171.3	1156.6	1149.2	1146.7
47.5°	1109.8	1109.8	1097.5	1090.1	1085.2
50°	1040.9	1045.8	1036.0	1023.7	1018.8
52.5°	976.9	979.4	967.1	959.7	954.8
55°	912.9	910.5	900.6	893.3	885.9
57.5°	846.5	844.0	829.3	821.9	817.0
60°	772.7	772.7	760.4	753.0	748.1
62.5°	703.8	701.3	691.5	681.6	679.2
65°	632.4	630.0	617.6	610.3	602.9
67.5°	556.1	553.7	546.3	536.4	531.5
70°	487.2	479.8	472.5	465.1	462.6
72.5°	413.4	406.0	398.6	393.7	388.8
75°	334.7	332.2	327.3	324.8	319.9
77.5°	263.3	263.3	258.4	255.9	255.9
80°	191.9	191.9	191.9	189.5	189.5
82.5°	125.5	128.0	128.0	125.5	128.0
85°	68.9	71.4	73.8	73.8	73.8
87.5°	22.1	29.5	27.1	29.5	29.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)