

Cree® J Series™ LED Components IES LM-80-2015 Testing Results

Revision: 8 (April 10, 2019)

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INTRODUCTION

This document provides the results of IES LM-80-2015 (“LM-80”) testing on J Series™ LED components. Cree Venture is providing this data so that the public can verify the reliability of Cree Venture LEDs as part of a complete LED lighting system.

Note that this document provides only the end results of the LM-80 tests. This is not a complete LM-80 report. Do not use this document to submit luminaires or lamps to an agency. Cree Venture customers who need the full LM-80 reports should contact their Cree Venture sales representative.

Cree Venture customers who wish to share LM-80 results with their customers have permission to link to this document from their website. This document is subject to change without notice, so please do not link to a local copy.

J Series™ Products are sold exclusively by Cree Venture LED Company Limited (“Cree Venture”), regardless of geography. Any orders for J Series Products that are submitted to Cree, Inc. or any of its subsidiaries will be directed to Cree Venture for acknowledgement and order fulfillment.

J SERIES™ 2016 WHITE LEDS (REV 0)

Revision: 0 (November 6, 2018)

Description Of LED Light Sources

J Series 2016 White LEDs (Series: Jx2016AWT)

This LM-80 report is applicable to the following order codes:

2016 0.2-W 3-V Standard JB2016AWT-xx-xxxx-x0xAxxxxxxx

No failures occurred during testing.

Summary: JB2016 0.2-W 3-V Standard

Applicable order codes: JB2016AWT-xx-xxxx-x0xAxxxxxxx

Nominal Case & Ambient Temp.	Drive Current	Tested Product & Data Set	ANSI CCT Target	Mean CRI	Sample Count	Test Duration	Reported TM-21 Lifetimes
55 °C	100 mA	JB2016 3-V Standard @ 55 °C, 100 mA	2700 K	80	25	9,000 hrs	L90(9k) = 19,500 hrs L80(9k) = 40,600 hrs L70(9k) > 54,000 hrs
85 °C	100 mA	JB2016 3-V Standard @ 85 °C, 100 mA	2700 K	80	25	9,000 hrs	L90(9k) = 18,400 hrs L80(9k) = 39,100 hrs L70(9k) > 54,000 hrs
105 °C	100 mA	JB2016 3-V Standard @ 105 °C, 100 mA	2700 K	80	25	9,000 hrs	L90(9k) = 16,100 hrs L80(9k) = 34,500 hrs L70(9k) > 54,000 hrs

J SERIES™ 2835 WHITE LEDS (REV 5)

Revision: 5 (January 2, 2019)

Description Of LED Light Sources

J Series 2835 White LEDs (Series: Jx2835AWT)

This LM-80 report is applicable to the following order codes:

2835 0.5-W 3-V Standard	JE2835AWT-xx-xxxx-x0xAxxxxxxx
2835 0.5-W 3-V Value	JE2835AWT-xx-xxxx-xBxAxxxxxxx
2835 0.5-W 3-V High Efficacy (H Class)	JE2835AWT-xx-xxxx-xCxAXxxxxxxx
2835 0.5-W 3-V High Efficacy (K Class)	JE2835AWT-xx-xxxx-xKxAxxxxxxx
2835 1-W 6-V Standard	JK2835AWT-xx-xxxx-x0xBxxxxxxx
2835 1-W 9-V Value	JK2835AWT-xx-xxxx-x0xCxxxxxxx
2835 1-W 18-V Value	JK2835AWT-xx-xxxx-x0xFxxxxxxx

No failures occurred during testing.

Summary: JE2835 0.5-W 3-V Standard

Applicable order codes: JE2835AWT-xx-xxxx-x0xAxxxxxxx

Nominal Case & Ambient Temp.	Drive Current	Tested Product & Data Set	ANSI CCT Target	Mean CRI	Sample Count	Test Duration	Reported TM-21 Lifetimes
55 °C	100 mA	JK2835 6-V Standard @ 55 °C, 100 mA	2700 K	83	25	6,000 hrs	L90(6k) > 36,000 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
105 °C	100 mA	JK2835 6-V Standard @ 105 °C, 100 mA	2700 K	83	25	6,000 hrs	L90(6k) = 28,200 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
55 °C	150 mA	JK2835 6-V Standard @ 55 °C, 150 mA	2700 K	81	25	12,000 hrs	L90(12k) = 45,200 hrs L80(12k) > 72,000 hrs L70(12k) > 72,000 hrs
85 °C	150 mA	JK2835 6-V Standard @ 85 °C, 150 mA	2700 K	81	25	12,000 hrs	L90(12k) = 33,700 hrs L80(12k) > 72,000 hrs L70(12k) > 72,000 hrs
55 °C	200 mA	JK2835 6-V Standard @ 55 °C, 200 mA	2700 K	81	25	12,000 hrs	L90(12k) = 44,400 hrs L80(12k) > 72,000 hrs L70(12k) > 72,000 hrs
85 °C	200 mA	JK2835 6-V Standard @ 85 °C, 200 mA	2700 K	81	25	12,000 hrs	L90(12k) = 32,100 hrs L80(12k) = 69,300 hrs L70(12k) > 72,000 hrs

J SERIES™ 2835 WHITE LEDS (REV 5) - CONTINUED
Summary: JE2835 0.5-W 3-V Value

Applicable order codes: JE2835AWT-xx-xxxx-xBxAxxxxxxx

Nominal Case & Ambient Temp.	Drive Current	Tested Product & Data Set	ANSI CCT Target	Mean CRI	Sample Count	Test Duration	Reported TM-21 Lifetimes
55 °C	224 mA	JK2835 9-V Value @ 55 °C, 120 mA	2700 K	82	25	12,000 hrs	L90(12k) = 45,800 hrs L80(12k) > 72,000 hrs L70(12k) > 72,000 hrs
105 °C	224 mA	JK2835 9-V Value @ 105 °C, 120 mA	2700 K	82	25	12,000 hrs	L90(12k) = 33,600 hrs L80(12k) = 69,500 hrs L70(12k) > 72,000 hrs
115 °C	224 mA	JK2835 9-V Value @ 115 °C, 120 mA	2700 K	82	25	12,000 hrs	L90(12k) = 29,000 hrs L80(12k) = 60,500 hrs L70(12k) > 72,000 hrs

Summary: JE2835 0.5-W 3-V High Efficacy (H Class)

Applicable order codes: JE2835AWT-xx-xxxx-xCxAXxxxxxxx

Nominal Case & Ambient Temp.	Drive Current	Tested Product & Data Set	ANSI CCT Target	Mean CRI	Sample Count	Test Duration	Reported TM-21 Lifetimes
55 °C	200 mA	JK2835 6-V Standard @ 55 °C, 100 mA	2700 K	83	25	6,000 hrs	L90(6k) > 36,000 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
105 °C	200 mA	JK2835 6-V Standard @ 105 °C, 100 mA	2700 K	83	25	6,000 hrs	L90(6k) = 28,200 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
55 °C	300 mA	JK2835 6-V Standard @ 55 °C, 150 mA	2700 K	81	25	12,000 hrs	L90(12k) = 45,200 hrs L80(12k) > 72,000 hrs L70(12k) > 72,000 hrs
85 °C	300 mA	JK2835 6-V Standard @ 85 °C, 150 mA	2700 K	81	25	12,000 hrs	L90(12k) = 33,700 hrs L80(12k) > 72,000 hrs L70(12k) > 72,000 hrs

J SERIES™ 2835 WHITE LEDS (REV 5) - CONTINUED
Summary: JE2835 0.5-W 3-V High Efficacy (K Class)

Applicable order codes: JE2835AWT-xx-xxxx-xKxAxxxxxxx

Nominal Case & Ambient Temp.	Drive Current	Tested Product & Data Set	ANSI CCT Target	Mean CRI	Sample Count	Test Duration	Reported TM-21 Lifetimes
55 °C	125 mA	JK2835 6-V Standard @ 55 °C, 100 mA	2700 K	83	25	6,000 hrs	L90(6k) > 36,000 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
105 °C	125 mA	JK2835 6-V Standard @ 105 °C, 100 mA	2700 K	83	25	6,000 hrs	L90(6k) = 28,200 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
55 °C	188 mA	JK2835 6-V Standard @ 55 °C, 150 mA	2700 K	81	25	12,000 hrs	L90(12k) = 45,200 hrs L80(12k) > 72,000 hrs L70(12k) > 72,000 hrs
85 °C	188 mA	JK2835 6-V Standard @ 85 °C, 150 mA	2700 K	81	25	12,000 hrs	L90(12k) = 33,700 hrs L80(12k) > 72,000 hrs L70(12k) > 72,000 hrs
55 °C	251 mA	JK2835 6-V Standard @ 55 °C, 150 mA	2700 K	81	25	12,000 hrs	L90(12k) = 44,400 hrs L80(12k) > 72,000 hrs L70(12k) > 72,000 hrs
85 °C	251 mA	JK2835 6-V Standard @ 85 °C, 150 mA	2700 K	81	25	12,000 hrs	L90(12k) = 32,100 hrs L80(12k) = 69,300 hrs L70(12k) > 72,000 hrs

Summary: JK2835 1-W 6-V Standard

Applicable order codes: JK2835AWT-xx-xxxx-x0xBxxxxxxx

Nominal Case & Ambient Temp.	Drive Current	Tested Product & Data Set	ANSI CCT Target	Mean CRI	Sample Count	Test Duration	Reported TM-21 Lifetimes
55 °C	100 mA	JK2835 6-V Standard @ 55 °C, 100 mA	2700 K	83	25	6,000 hrs	L90(6k) > 36,000 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
105 °C	100 mA	JK2835 6-V Standard @ 105 °C, 100 mA	2700 K	83	25	6,000 hrs	L90(6k) = 28,200 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
55 °C	150 mA	JK2835 6-V Standard @ 55 °C, 150 mA	2700 K	81	25	12,000 hrs	L90(12k) = 45,200 hrs L80(12k) > 72,000 hrs L70(12k) > 72,000 hrs
85 °C	150 mA	JK2835 6-V Standard @ 85 °C, 150 mA	2700 K	81	25	12,000 hrs	L90(12k) = 33,700 hrs L80(12k) > 72,000 hrs L70(12k) > 72,000 hrs
55 °C	200 mA	JK2835 6-V Standard @ 55 °C, 200 mA	2700 K	81	25	12,000 hrs	L90(12k) = 44,400 hrs L80(12k) > 72,000 hrs L70(12k) > 72,000 hrs
85 °C	200 mA	JK2835 6-V Standard @ 85 °C, 200 mA	2700 K	81	25	12,000 hrs	L90(12k) = 32,100 hrs L80(12k) = 69,300 hrs L70(12k) > 72,000 hrs

J SERIES™ 2835 WHITE LEDS (REV 5) - CONTINUED

Summary: JK2835 1-W 9-V Value

Applicable order codes: JK2835AWT-xx-xxxx-x0xCxxxxxxx

Nominal Case & Ambient Temp.	Drive Current	Tested Product & Data Set	ANSI CCT Target	Mean CRI	Sample Count	Test Duration	Reported TM-21 Lifetimes
55 °C	120 mA	JK2835 9-V Value @ 55 °C, 120 mA	2700 K	82	25	12,000 hrs	L90(12k) = 45,800 hrs L80(12k) > 72,000 hrs L70(12k) > 72,000 hrs
105 °C	120 mA	JK2835 9-V Value @ 105 °C, 120 mA	2700 K	82	25	12,000 hrs	L90(12k) = 33,600 hrs L80(12k) = 69,500 hrs L70(12k) > 72,000 hrs
115 °C	120 mA	JK2835 9-V Value @ 115 °C, 120 mA	2700 K	82	25	12,000 hrs	L90(12k) = 29,000 hrs L80(12k) = 60,500 hrs L70(12k) > 72,000 hrs

Summary: JK2835 1-W 18-V Value

Applicable order codes: JK2835AWT-xx-xxxx-x0xFxxxxxxx

Nominal Case & Ambient Temp.	Drive Current	Tested Product & Data Set	ANSI CCT Target	Mean CRI	Sample Count	Test Duration	Reported TM-21 Lifetimes
55 °C	59 mA	JK2835 9-V Value @ 55 °C, 120 mA	2700 K	82	25	12,000 hrs	L90(12k) = 45,800 hrs L80(12k) > 72,000 hrs L70(12k) > 72,000 hrs
105 °C	59 mA	JK2835 9-V Value @ 105 °C, 120 mA	2700 K	82	25	12,000 hrs	L90(12k) = 33,600 hrs L80(12k) = 69,500 hrs L70(12k) > 72,000 hrs
115 °C	59 mA	JK2835 9-V Value @ 115 °C, 120 mA	2700 K	82	25	12,000 hrs	L90(12k) = 29,000 hrs L80(12k) = 60,500 hrs L70(12k) > 72,000 hrs

J SERIES™ 3030 WHITE LEDS (REV 3)

Revision: 3 (September 27, 2018)

Description Of LED Light Sources

J Series 3030 White LEDs (Series: Jx3030AWT)

This LM-80 report is applicable to the following order codes:

3030 0.2-W 3-V JB3030AWT-xx-xxxx-xxxAxxxxxxxx

3030 1-W 3-V JK3030AWT-xx-xxxx-xxxAxxxxxxxx

3030 1-W 6-V JK3030AWT-xx-xxxx-xxxBxxxxxxxx

No failures occurred during testing.

Summary: JB3030 0.2-W 3-V

Applicable order codes: JB3030AWT-xx-xxxx-xxxAxxxxxxxx

Nominal Case & Ambient Temp.	Drive Current	Tested Product & Data Set	ANSI CCT Target	Mean CRI	Sample Count	Test Duration	Reported TM-21 Lifetimes
55 °C	60 mA	JK3030 6-V @ 55 °C, 60 mA	2700 K	93	25	9,000 hrs	L90(9k) > 54,000 hrs L80(9k) > 54,000 hrs L70(9k) > 54,000 hrs
85 °C	60 mA	JK3030 6-V @ 85 °C, 60 mA	2700 K	93	25	9,000 hrs	L90(9k) = 43,700 hrs L80(9k) > 54,000 hrs L70(9k) > 54,000 hrs
105 °C	60 mA	JK3030 6-V @ 105 °C, 60 mA	2700 K	93	25	9,000 hrs	L90(9k) = 38,000 hrs L80(9k) > 54,000 hrs L70(9k) > 54,000 hrs
55 °C	180 mA	JK3030 6-V @ 55 °C, 180 mA	2200 K	82	25	12,000 hrs	L90(12k) = 43,000 hrs L80(12k) > 72,000 hrs L70(12k) > 72,000 hrs
85 °C	180 mA	JK3030 6-V @ 85 °C, 180 mA	2200 K	82	25	12,000 hrs	L90(12k) = 35,400 hrs L80(12k) = 71,900 hrs L70(12k) > 72,000 hrs
105 °C	180 mA	JK3030 6-V @ 105 °C, 180 mA	2200 K	82	25	12,000 hrs	L90(12k) = 29,700 hrs L80(12k) = 60,400 hrs L70(12k) > 72,000 hrs

J SERIES™ 3030 WHITE LEDS (REV 3) - CONTINUED

Summary: JK3030 1-W 3-V

Applicable order codes: JK3030AWT-xx-xxxx-xxxAxxxxxxx

Nominal Case & Ambient Temp.	Drive Current	Tested Product & Data Set	ANSI CCT Target	Mean CRI	Sample Count	Test Duration	Reported TM-21 Lifetimes
55 °C	78 mA	JK3030 6-V @ 55 °C, 60 mA	2700 K	93	25	9,000 hrs	L90(9k) > 54,000 hrs L80(9k) > 54,000 hrs L70(9k) > 54,000 hrs
85 °C	78 mA	JK3030 6-V @ 85 °C, 60 mA	2700 K	93	25	9,000 hrs	L90(9k) = 43,700 hrs L80(9k) > 54,000 hrs L70(9k) > 54,000 hrs
105 °C	78 mA	JK3030 6-V @ 105 °C, 60 mA	2700 K	93	25	9,000 hrs	L90(9k) = 38,000 hrs L80(9k) > 54,000 hrs L70(9k) > 54,000 hrs
55 °C	234 mA	JK3030 6-V @ 55 °C, 180 mA	2200 K	82	25	12,000 hrs	L90(12k) = 43,000 hrs L80(12k) > 72,000 hrs L70(12k) > 72,000 hrs
85 °C	234 mA	JK3030 6-V @ 85 °C, 180 mA	2200 K	82	25	12,000 hrs	L90(12k) = 35,400 hrs L80(12k) = 71,900 hrs L70(12k) > 72,000 hrs
105 °C	234 mA	JK3030 6-V @ 105 °C, 180 mA	2200 K	82	25	12,000 hrs	L90(12k) = 29,700 hrs L80(12k) = 60,400 hrs L70(12k) > 72,000 hrs
55 °C	350 mA	JK3030 3-V @ 55 °C, 350 mA	2700 K	81	25	6,000 hrs	L90(6k) > 36,000 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
85 °C	350 mA	JK3030 3-V @ 85 °C, 350 mA	2700 K	81	25	6,000 hrs	L90(6k) > 36,000 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
105 °C	350 mA	JK3030 3-V @ 105 °C, 350 mA	2700 K	81	25	6,000 hrs	L90(6k) = 28,400 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs

J SERIES™ 3030 WHITE LEDS (REV 3) - CONTINUED

Summary: JK3030 1-W 6-V

Applicable order codes: JK3030AWT-xx-xxxx-xxxBxxxxxxxx

Nominal Case & Ambient Temp.	Drive Current	Tested Product & Data Set	ANSI CCT Target	Mean CRI	Sample Count	Test Duration	Reported TM-21 Lifetimes
55 °C	60 mA	JK3030 6-V @ 55 °C, 60 mA	2700 K	93	25	9,000 hrs	L90(9k) > 54,000 hrs L80(9k) > 54,000 hrs L70(9k) > 54,000 hrs
85 °C	60 mA	JK3030 6-V @ 85 °C, 60 mA	2700 K	93	25	9,000 hrs	L90(9k) = 43,700 hrs L80(9k) > 54,000 hrs L70(9k) > 54,000 hrs
105 °C	60 mA	JK3030 6-V @ 105 °C, 60 mA	2700 K	93	25	9,000 hrs	L90(9k) = 38,000 hrs L80(9k) > 54,000 hrs L70(9k) > 54,000 hrs
55 °C	180 mA	JK3030 6-V @ 55 °C, 180 mA	2200 K	82	25	12,000 hrs	L90(12k) = 43,000 hrs L80(12k) > 72,000 hrs L70(12k) > 72,000 hrs
85 °C	180 mA	JK3030 6-V @ 85 °C, 180 mA	2200 K	82	25	12,000 hrs	L90(12k) = 35,400 hrs L80(12k) = 71,900 hrs L70(12k) > 72,000 hrs
105 °C	180 mA	JK3030 6-V @ 105 °C, 180 mA	2200 K	82	25	12,000 hrs	L90(12k) = 29,700 hrs L80(12k) = 60,400 hrs L70(12k) > 72,000 hrs

J SERIES™ 5050 WHITE LEDS (REV 3)

Revision: 3 (April 5, 2019)

Description Of LED Light Sources

J Series 5050 White LEDs (Series: Jx5050AWT)

This LM-80 report is applicable to the following order codes:

- 5050 4-W 9-V JQ5050AWT-xx-xxxx-x0xCxxxxxxx
- 5050 5-W 6-V JR5050AWT-xx-xxxx-x0xBxxxxxxx
- 5050 5-W 9-V JR5050AWT-xx-xxxx-x0xCxxxxxxx
- 5050 5-W 12-V JR5050AWT-xx-xxxx-x0xDxxxxxxx
- 5050 5-W 24-V JR5050AWT-xx-xxxx-x0xHxxxxxxx
- 5050 5-W 36-V JR5050AWT-xx-xxxx-x0xNxxxxxxx

No failures occurred during testing.

Summary: JQ5050 4-W 9-V

Applicable order codes: JQ5050AWT-xx-xxxx-x0xCxxxxxxx

Nominal Case & Ambient Temp.	Drive Current	Tested Product & Data Set	ANSI CCT Target	Mean CRI	Sample Count	Test Duration	Reported TM-21 Lifetimes
85 °C	80 mA	JR5050 36-V @ 85 °C, 30 mA	2700 K	93	25	6,000 hrs	L90(6k) > 36,000 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
85 °C	107 mA	JR5050 36-V @ 85 °C, 40 mA	2700 K	93	25	6,000 hrs	L90(6k) > 36,000 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
55 °C	134 mA	JR5050 36-V @ 55 °C, 50 mA	2700 K	93	25	9,000 hrs	L90(9k) = 36,000 hrs L80(9k) > 54,000 hrs L70(9k) > 54,000 hrs
105 °C	134 mA	JR5050 36-V @ 105 °C, 50 mA	2700 K	93	25	9,000 hrs	L90(9k) = 23,300 hrs L80(9k) = 47,300 hrs L70(9k) > 54,000 hrs
55 °C	402 mA	JR5050 36-V @ 55 °C, 150 mA	2700 K	92	25	9,000 hrs	L90(9k) = 26,000 hrs L80(9k) = 53,100 hrs L70(9k) > 54,000 hrs
105 °C	402 mA	JR5050 36-V @ 105 °C, 150 mA	2700 K	92	25	9,000 hrs	L90(9k) = 20,300 hrs L80(9k) = 41,100 hrs L70(9k) > 54,000 hrs

J SERIES™ 5050 WHITE LEDS (REV 3) - CONTINUED
Summary: JR5050 5-W 6-V

Applicable order codes: JR5050AWT-xx-xxxx-x0xBxxxxxxx

Nominal Case & Ambient Temp.	Drive Current	Tested Product & Data Set	ANSI CCT Target	Mean CRI	Sample Count	Test Duration	Reported TM-21 Lifetimes
85 °C	180 mA	JR5050 36-V @ 85 °C, 30 mA	2700 K	93	25	6,000 hrs	L90(6k) > 36,000 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
85 °C	240 mA	JR5050 36-V @ 85 °C, 40 mA	2700 K	93	25	6,000 hrs	L90(6k) > 36,000 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
55 °C	300 mA	JR5050 36-V @ 55 °C, 50 mA	2700 K	93	25	9,000 hrs	L90(9k) = 36,000 hrs L80(9k) > 54,000 hrs L70(9k) > 54,000 hrs
105 °C	300 mA	JR5050 36-V @ 105 °C, 50 mA	2700 K	93	25	9,000 hrs	L90(9k) = 23,300 hrs L80(9k) = 47,300 hrs L70(9k) > 54,000 hrs
55 °C	900 mA	JR5050 36-V @ 55 °C, 150 mA	2700 K	92	25	9,000 hrs	L90(9k) = 26,000 hrs L80(9k) = 53,100 hrs L70(9k) > 54,000 hrs
105 °C	900 mA	JR5050 36-V @ 105 °C, 150 mA	2700 K	92	25	9,000 hrs	L90(9k) = 20,300 hrs L80(9k) = 41,100 hrs L70(9k) > 54,000 hrs

Summary: JR5050 5-W 9-V

Applicable order codes: JR5050AWT-xx-xxxx-x0xCxxxxxxx

Nominal Case & Ambient Temp.	Drive Current	Tested Product & Data Set	ANSI CCT Target	Mean CRI	Sample Count	Test Duration	Reported TM-21 Lifetimes
85 °C	120 mA	JR5050 36-V @ 85 °C, 30 mA	2700 K	93	25	6,000 hrs	L90(6k) > 36,000 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
85 °C	160 mA	JR5050 36-V @ 85 °C, 40 mA	2700 K	93	25	6,000 hrs	L90(6k) > 36,000 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
55 °C	200 mA	JR5050 36-V @ 55 °C, 50 mA	2700 K	93	25	9,000 hrs	L90(9k) = 36,000 hrs L80(9k) > 54,000 hrs L70(9k) > 54,000 hrs
105 °C	200 mA	JR5050 36-V @ 105 °C, 50 mA	2700 K	93	25	9,000 hrs	L90(9k) = 23,300 hrs L80(9k) = 47,300 hrs L70(9k) > 54,000 hrs
55 °C	600 mA	JR5050 36-V @ 55 °C, 150 mA	2700 K	92	25	9,000 hrs	L90(9k) = 26,000 hrs L80(9k) = 53,100 hrs L70(9k) > 54,000 hrs
105 °C	600 mA	JR5050 36-V @ 105 °C, 150 mA	2700 K	92	25	9,000 hrs	L90(9k) = 20,300 hrs L80(9k) = 41,100 hrs L70(9k) > 54,000 hrs

J SERIES™ 5050 WHITE LEDS (REV 3) - CONTINUED
Summary: JR5050 5-W 12-V

Applicable order codes: JR5050AWT-xx-xxxx-x0xDxxxxxxx

Nominal Case & Ambient Temp.	Drive Current	Tested Product & Data Set	ANSI CCT Target	Mean CRI	Sample Count	Test Duration	Reported TM-21 Lifetimes
85 °C	80 mA	JR5050 36-V @ 85 °C, 30 mA	2700 K	93	25	6,000 hrs	L90(6k) > 36,000 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
85 °C	107 mA	JR5050 36-V @ 85 °C, 40 mA	2700 K	93	25	6,000 hrs	L90(6k) > 36,000 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
55 °C	134 mA	JR5050 36-V @ 55 °C, 50 mA	2700 K	93	25	9,000 hrs	L90(9k) = 36,000 hrs L80(9k) > 54,000 hrs L70(9k) > 54,000 hrs
105 °C	134 mA	JR5050 36-V @ 105 °C, 50 mA	2700 K	93	25	9,000 hrs	L90(9k) = 23,300 hrs L80(9k) = 47,300 hrs L70(9k) > 54,000 hrs
55 °C	402 mA	JR5050 36-V @ 55 °C, 150 mA	2700 K	92	25	9,000 hrs	L90(9k) = 26,000 hrs L80(9k) = 53,100 hrs L70(9k) > 54,000 hrs
105 °C	402 mA	JR5050 36-V @ 105 °C, 150 mA	2700 K	92	25	9,000 hrs	L90(9k) = 20,300 hrs L80(9k) = 41,100 hrs L70(9k) > 54,000 hrs

Summary: JR5050 5-W 24-V

Applicable order codes: JR5050AWT-xx-xxxx-x0xHxxxxxxx

Nominal Case & Ambient Temp.	Drive Current	Tested Product & Data Set	ANSI CCT Target	Mean CRI	Sample Count	Test Duration	Reported TM-21 Lifetimes
85 °C	40 mA	JR5050 36-V @ 85 °C, 30 mA	2700 K	93	25	6,000 hrs	L90(6k) > 36,000 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
85 °C	54 mA	JR5050 36-V @ 85 °C, 40 mA	2700 K	93	25	6,000 hrs	L90(6k) > 36,000 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
55 °C	67 mA	JR5050 36-V @ 55 °C, 50 mA	2700 K	93	25	9,000 hrs	L90(9k) = 36,000 hrs L80(9k) > 54,000 hrs L70(9k) > 54,000 hrs
105 °C	67 mA	JR5050 36-V @ 105 °C, 50 mA	2700 K	93	25	9,000 hrs	L90(9k) = 23,300 hrs L80(9k) = 47,300 hrs L70(9k) > 54,000 hrs
55 °C	201 mA	JR5050 36-V @ 55 °C, 150 mA	2700 K	92	25	9,000 hrs	L90(9k) = 26,000 hrs L80(9k) = 53,100 hrs L70(9k) > 54,000 hrs
105 °C	201 mA	JR5050 36-V @ 105 °C, 150 mA	2700 K	92	25	9,000 hrs	L90(9k) = 20,300 hrs L80(9k) = 41,100 hrs L70(9k) > 54,000 hrs

J SERIES™ 5050 WHITE LEDS (REV 3) - CONTINUED

Summary: JR5050 5-W 36-V

Applicable order codes: JR5050AWT-xx-xxxx-x0xNxxxxxxx

Nominal Case & Ambient Temp.	Drive Current	Tested Product & Data Set	ANSI CCT Target	Mean CRI	Sample Count	Test Duration	Reported TM-21 Lifetimes
85 °C	30 mA	JR5050 36-V @ 85 °C, 30 mA	2700 K	93	25	6,000 hrs	L90(6k) > 36,000 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
85 °C	40 mA	JR5050 36-V @ 85 °C, 40 mA	2700 K	93	25	6,000 hrs	L90(6k) > 36,000 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
55 °C	50 mA	JR5050 36-V @ 55 °C, 50 mA	2700 K	93	25	9,000 hrs	L90(9k) = 36,000 hrs L80(9k) > 54,000 hrs L70(9k) > 54,000 hrs
105 °C	50 mA	JR5050 36-V @ 105 °C, 50 mA	2700 K	93	25	9,000 hrs	L90(9k) = 23,300 hrs L80(9k) = 47,300 hrs L70(9k) > 54,000 hrs
55 °C	150 mA	JR5050 36-V @ 55 °C, 150 mA	2700 K	92	25	9,000 hrs	L90(9k) = 26,000 hrs L80(9k) = 53,100 hrs L70(9k) > 54,000 hrs
105 °C	150 mA	JR5050 36-V @ 105 °C, 150 mA	2700 K	92	25	9,000 hrs	L90(9k) = 20,300 hrs L80(9k) = 41,100 hrs L70(9k) > 54,000 hrs

J SERIES™ 5630 WHITE LEDS (REV 0)

Revision: 0 (December 7, 2018)

Description Of LED Light Sources

J Series 5630 White LEDs (Series: Jx5630AWT)

This LM-80 report is applicable to the following order codes:

5630C 0.2-W 3-V JB5630AWT-Cx-xxxx-xxxAXxxxxxx

No failures occurred during testing.

Summary: JB5630C 0.2-W 3-V

Applicable order codes: JB5630AWT-Cx-xxxx-xxxAXxxxxxx

Nominal Case & Ambient Temp.	Drive Current	Tested Product & Data Set	ANSI CCT Target	Mean CRI	Sample Count	Test Duration	Reported TM-21 Lifetimes
55 °C	65 mA	JB5630C 3-V Standard @ 55 °C, 65 mA	2700 K	83	25	6,000 hrs	L90(6k) = 34,400 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
85 °C	65 mA	JB5630C 3-V Standard @ 85 °C, 65 mA	2700 K	83	25	6,000 hrs	L90(6k) = 27,800 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
105 °C	65 mA	JB5630C 3-V Standard @ 105 °C, 65 mA	2700 K	83	25	6,000 hrs	L90(6k) = 24,400 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
55 °C	180 mA	JB5630C 3-V Standard @ 55 °C, 180 mA	2700 K	82	25	6,000 hrs	L90(6k) = 32,100 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
85 °C	180 mA	JB5630C 3-V Standard @ 85 °C, 180 mA	2700 K	82	25	6,000 hrs	L90(6k) = 26,400 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs
105 °C	180 mA	JB5630C 3-V Standard @ 105 °C, 180 mA	2700 K	82	25	6,000 hrs	L90(6k) = 23,100 hrs L80(6k) > 36,000 hrs L70(6k) > 36,000 hrs