



Test Report Serial Number:

45461690 R6.0

Test Report Date:

15 February 2022

Project Number:

1557

EMC Test Report - Appendix D

Applicant:



Garmin International Inc.
1200 East 151 St
Olathe, KS, 66062
USA

FCC ID:

IPH-04247

Product Model Number / HVIN

A04247

IC Registration Number

1792A-04247

Product Marketing Name / PMN

A04247

In Accordance With:

CFR Title 47, Part 15 Subpart C (§15.247), Part 15 Subpart B

Digital Transmission System (DTS)

RSS-Gen, RSS-247 Issue 2

Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices

Approved By:

Ben Hewson, President

Celltech Labs Inc.
21-364 Lougheed Rd.
Kelowna, BC, V1X 7R8
Canada



Test Lab Certificate: 2470.01



Industry
Canada

IC Registration 3874A-1



FCC Registration: CA3874

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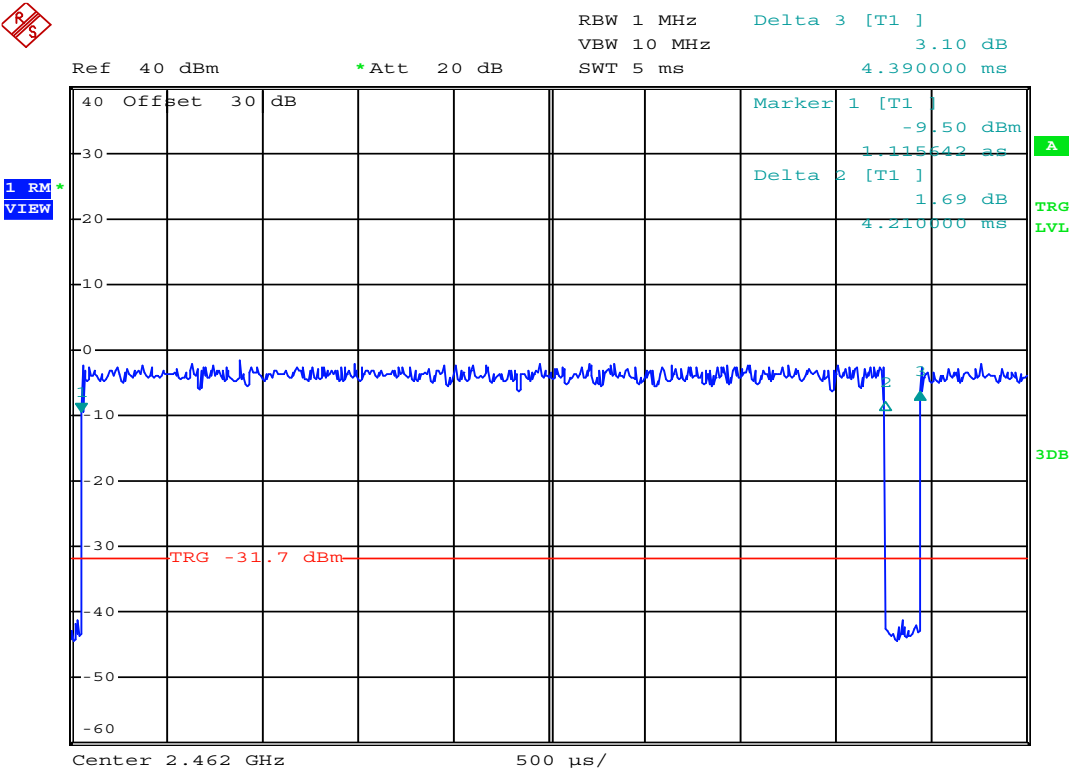
Revision History				
Samples Tested By:		Art Voss, P.Eng.		Date(s) of Evaluation:
Report Prepared By:		Art Voss, P.Eng.		1 Oct - 1 Dec, 2021
		Report Reviewed By:		Ben Hewson
Report Revision	Description of Revision	Revised Section	Revised By	Revision Date
0.1	Draft Release	n/a	Art Voss	4 December, 2022
1.0	Initial Release	n/a	Art Voss	25 January, 2022
2.0	Revised Plot Headings	16.0	Art Voss	2 February, 2022
3.0	Revised Scope	3.0	Art Voss	3 February, 2022
4.0	Added DSS Equipment Class	Cover	Art Voss	9 February, 2022
5.0	Revised BLE Info	7-14	Art Voss	14 February, 2022
6.0	Revised Appendices	D-H	Art Voss	15 February, 2022
	Revised Filing from DSS to DTS	n/a		

Duty Cycle Measurement Results: WiFi

Mode	Channel Number	Frequency (MHz)	Modulation	Data Rate (Mbps)	Measured Duty Cycle [DC _{Meas}] (dBm)	Scale* Factor [CF] (dB)
802.11b	11	2462.00	CCK	1	95.9	0.18
802.11b	11	2462.00	CCK	2	92.4	0.34
802.11b	11	2462.00	DSSS	5.5	83.4	0.79
802.11b	13	2472.00	DSSS	1	95.8	0.19
802.11g	11	2462.00	OFDM	6	96.3	0.16
802.11g	11	2462.00	OFDM	9	94.6	0.24
802.11g	11	2462.00	OFDM	12	88.2	0.55
802.11g	13	2472.00	OFDM	6	96.4	0.16
802.11n	11	2462.00	MCS0	6.5	87.6	0.57
802.11n	13	2472.00	MCS0	6.5	87.6	0.57

*Scale Factor/Correction Factor [CF] = $10\log(1/[DC_{Meas}])$

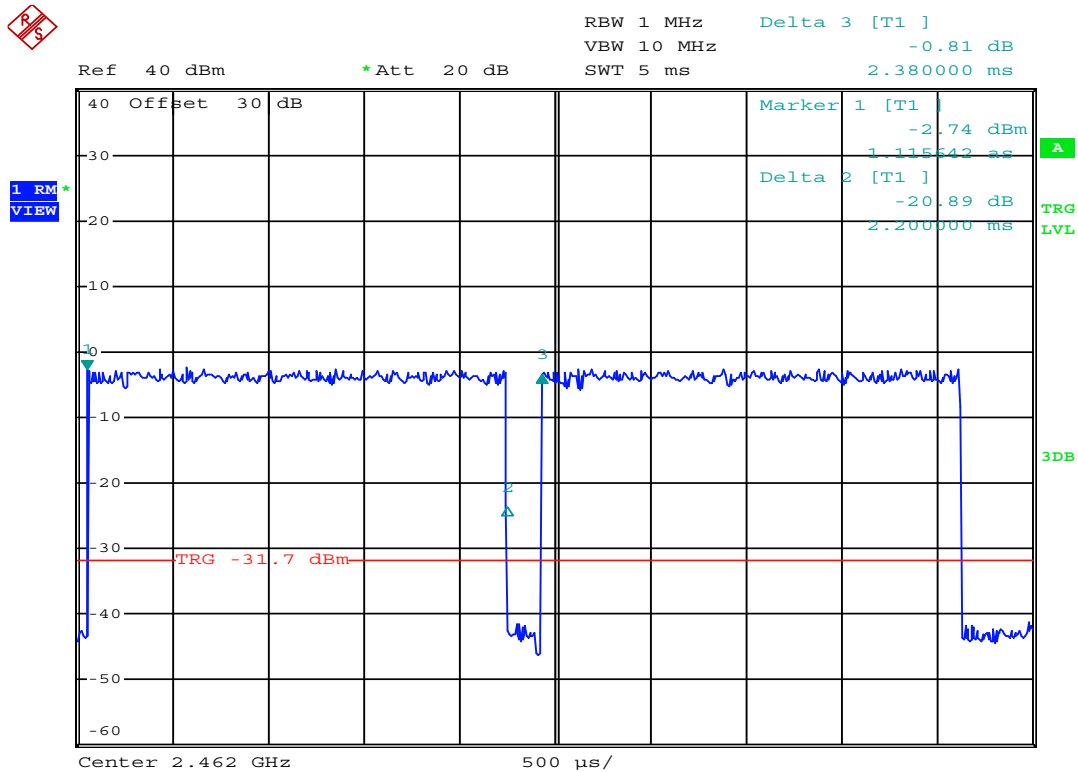
Transmit Duty Cycle: WiFi



Date: 1.DEC.2021 13:47:57

Mode	Channel Number	Channel Frequency (MHz)	Modulation	Data Rate (mbps)	Duty Cycle (%)
802.11b	11	2462	CCK	1	95.9

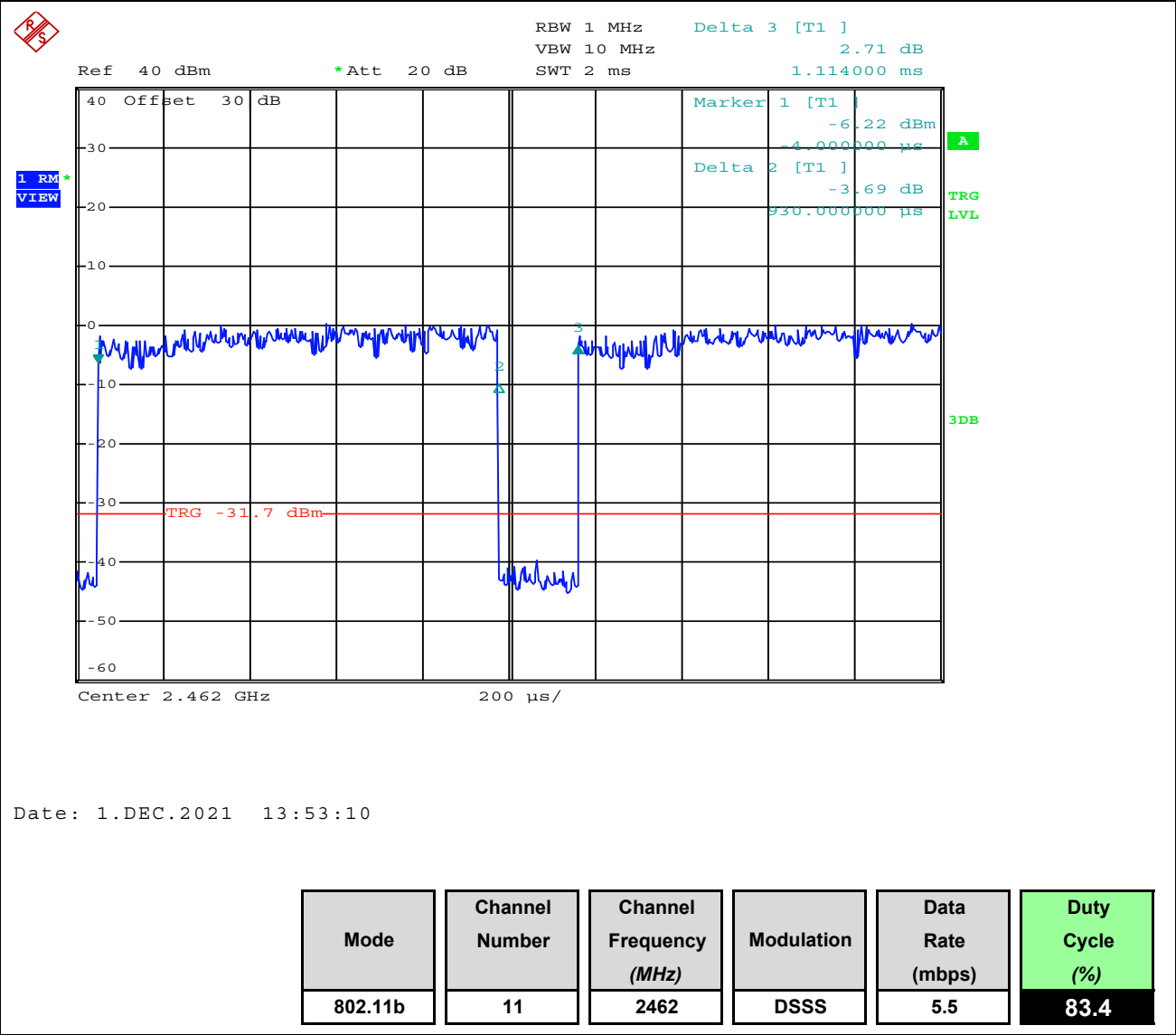
Transmit Duty Cycle: WiFi



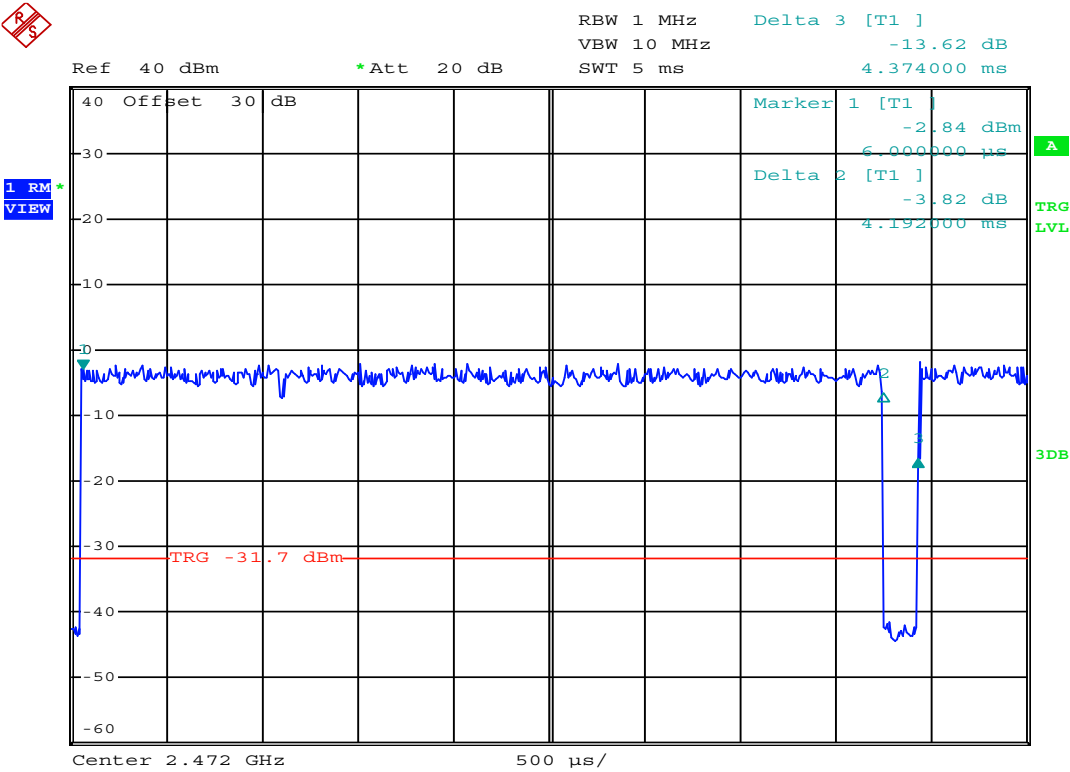
Date: 1.DEC.2021 13:51:21

Mode	Channel Number	Channel Frequency (MHz)	Modulation	Data Rate (mbps)	Duty Cycle (%)
802.11b	11	2462	CCK	2	92.4

Transmit Duty Cycle: WiFi



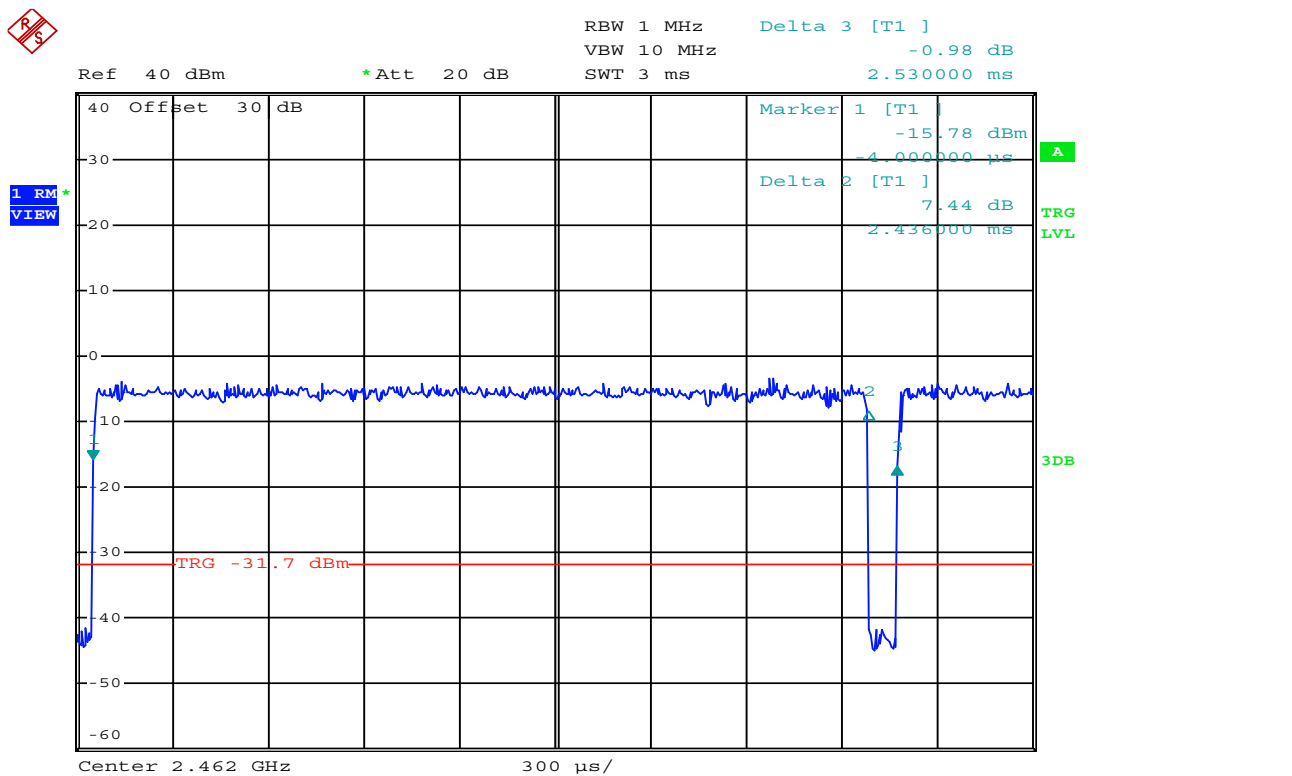
Transmit Duty Cycle: WiFi



Date: 1.DEC.2021 14:09:06

Mode	Channel Number	Channel Frequency (MHz)	Modulation	Data Rate (mbps)	Duty Cycle (%)
802.11b	13	2472	DSSS	1	95.8

Transmit Duty Cycle: WiFi



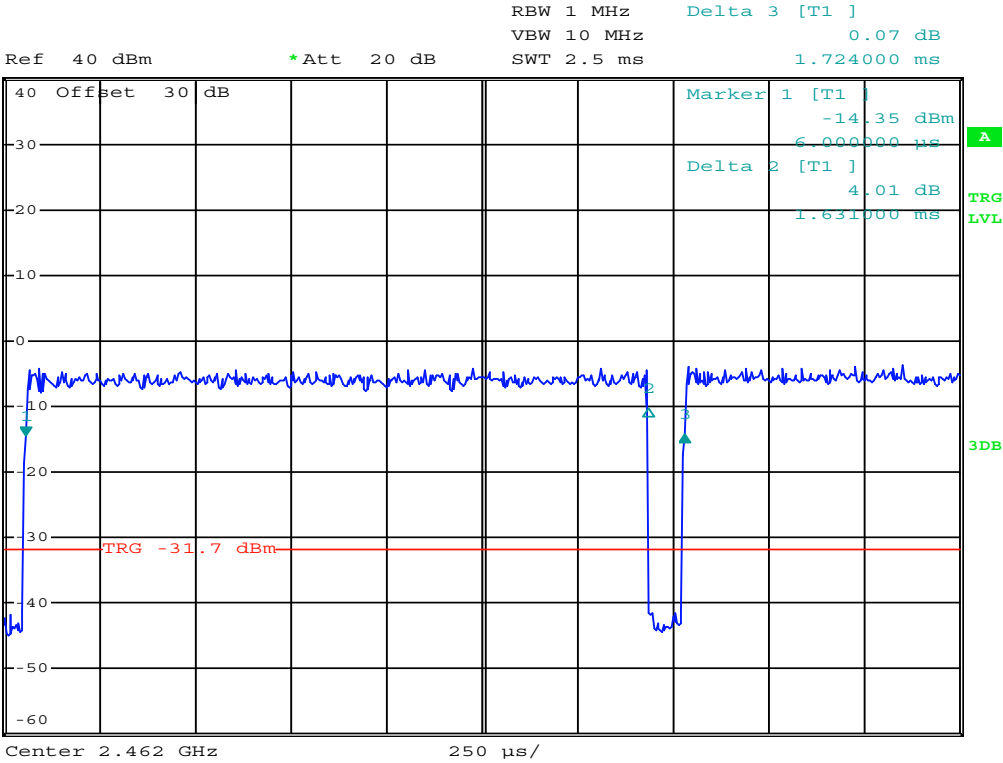
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Mode	Channel Number	Channel Frequency (MHz)	Modulation	Data Rate (mbps)	Duty Cycle (%)
802.11g	11	2462	OFDM	6	96.3

Transmit Duty Cycle: WiFi



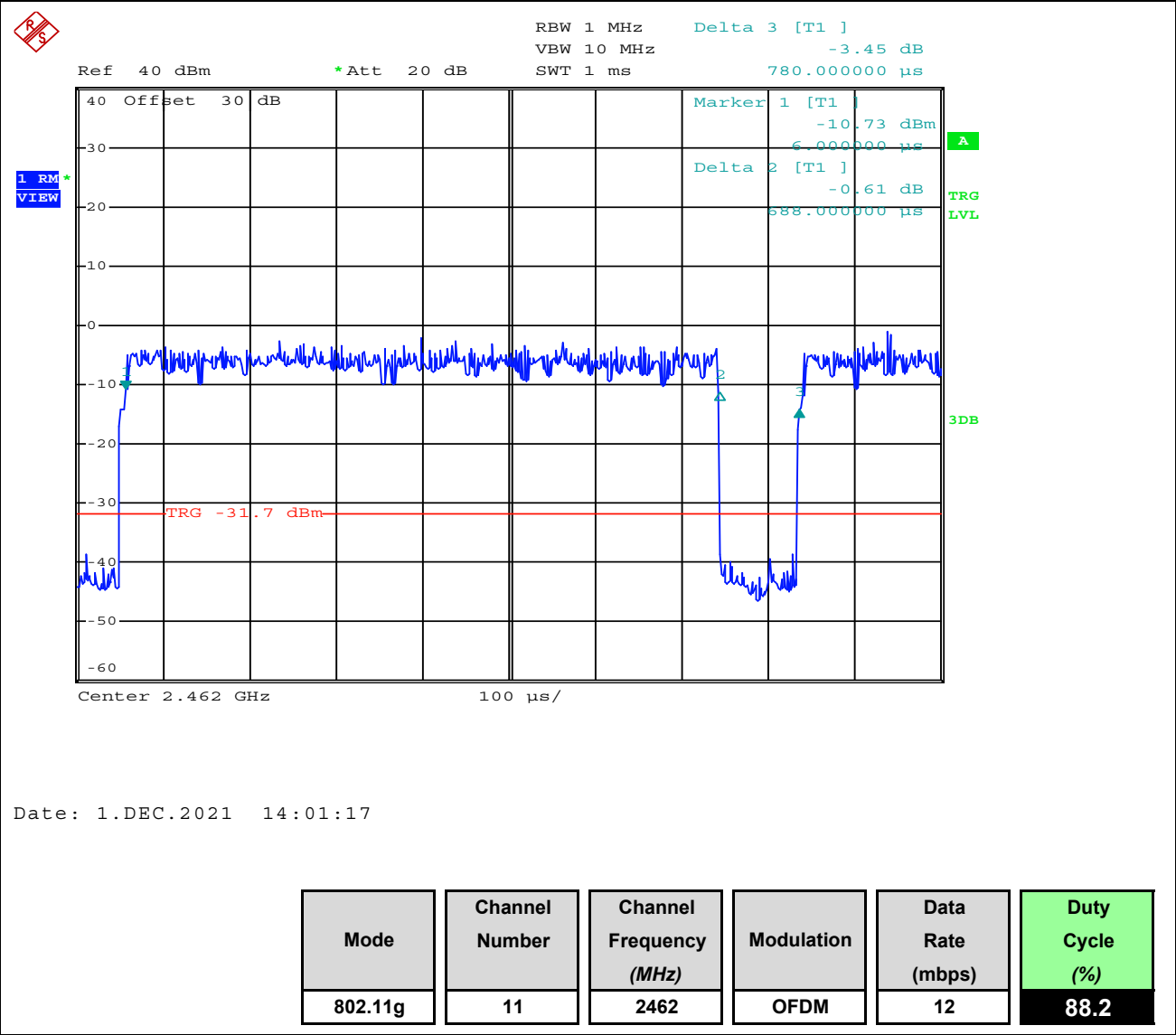
1 RM
VIEW



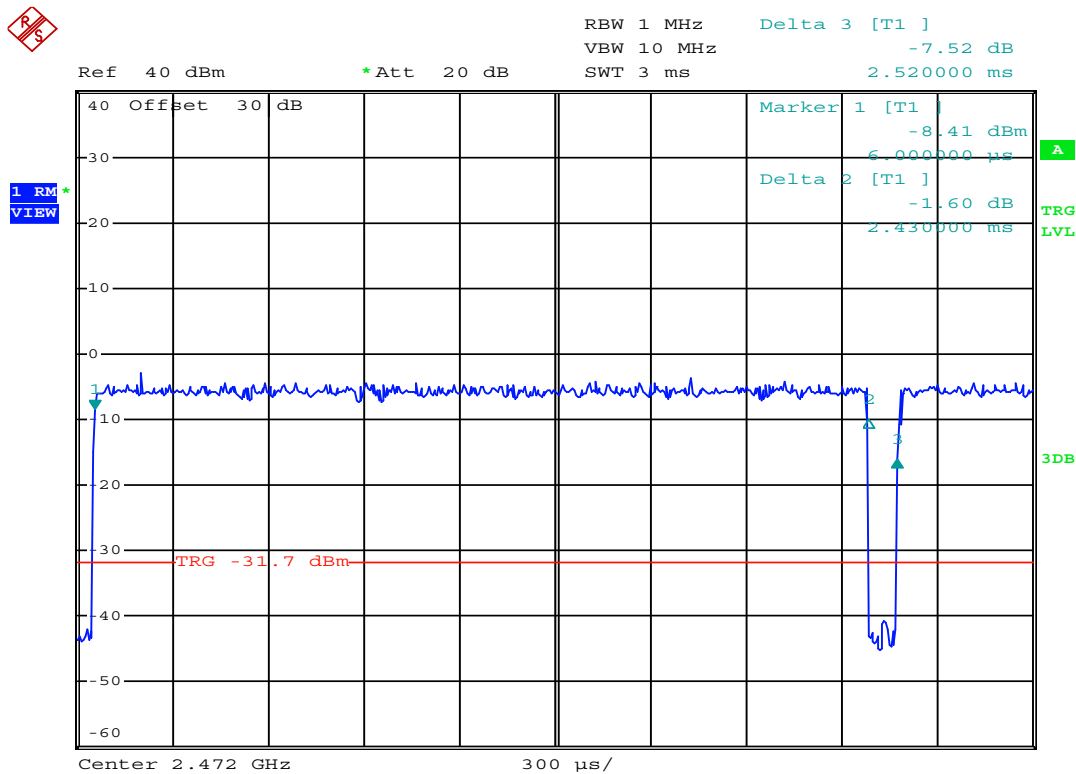
Date: 1.DEC.2021 13:59:43

Mode	Channel Number	Channel Frequency (MHz)	Modulation	Data Rate (mbps)	Duty Cycle (%)
802.11g	11	2462	OFDM	9	94.6

Transmit Duty Cycle: WiFi



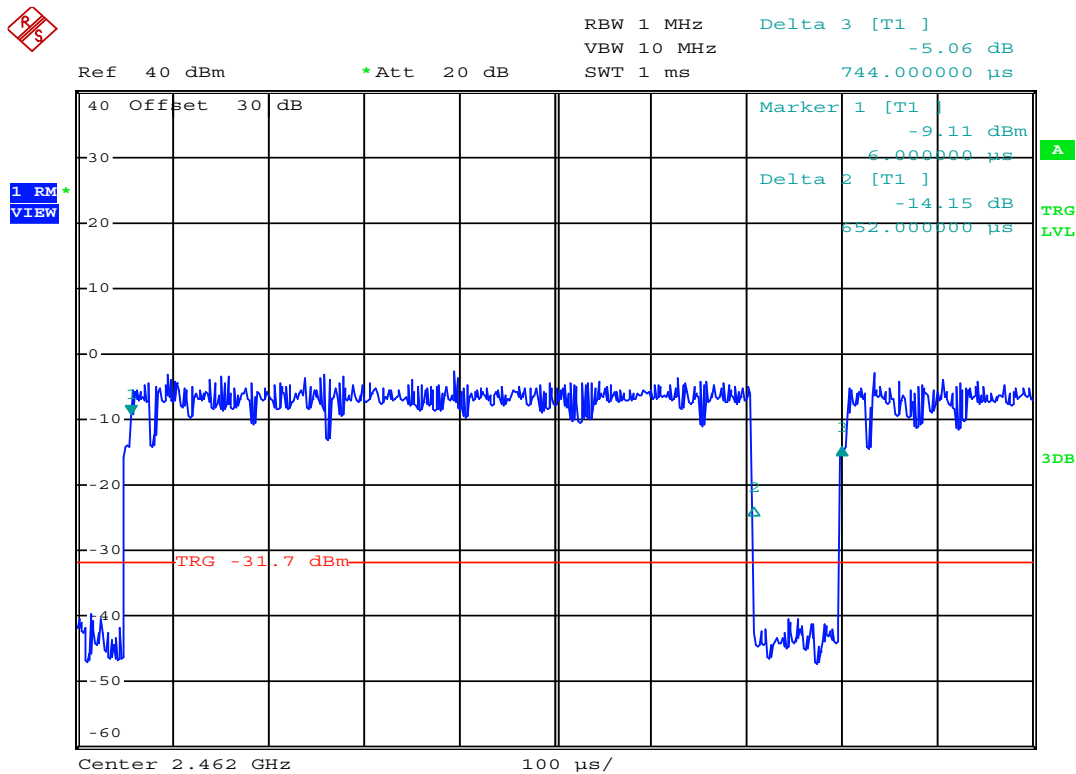
Transmit Duty Cycle: WiFi



Date: 1.DEC.2021 14:10:25

Mode	Channel Number	Channel Frequency (MHz)	Modulation	Data Rate (mbps)	Duty Cycle (%)
802.11g	13	2472	OFDM	6	96.4

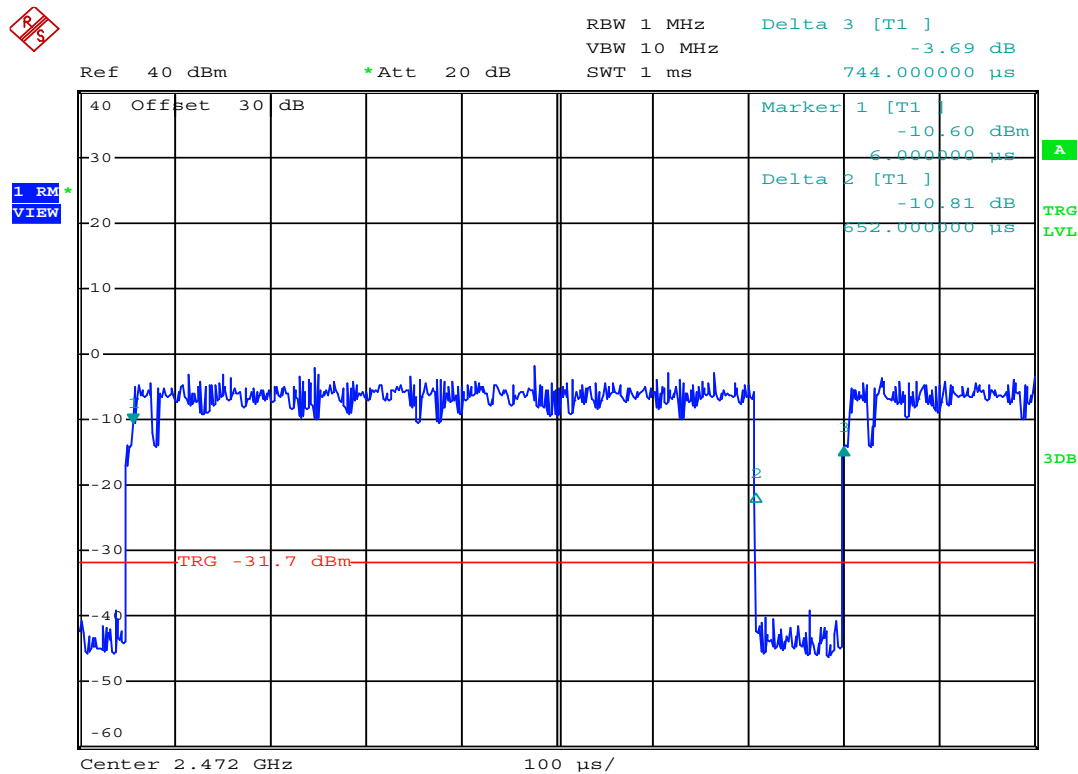
Transmit Duty Cycle: WiFi



Date: 1.DEC.2021 14:03:00

Mode	Channel Number	Channel Frequency (MHz)	Modulation	Data Rate (mbps)	Duty Cycle (%)
802.11n	11	2462	MCS0	6.5	87.6

Transmit Duty Cycle: WiFi



Date: 1.DEC.2021 14:06:52

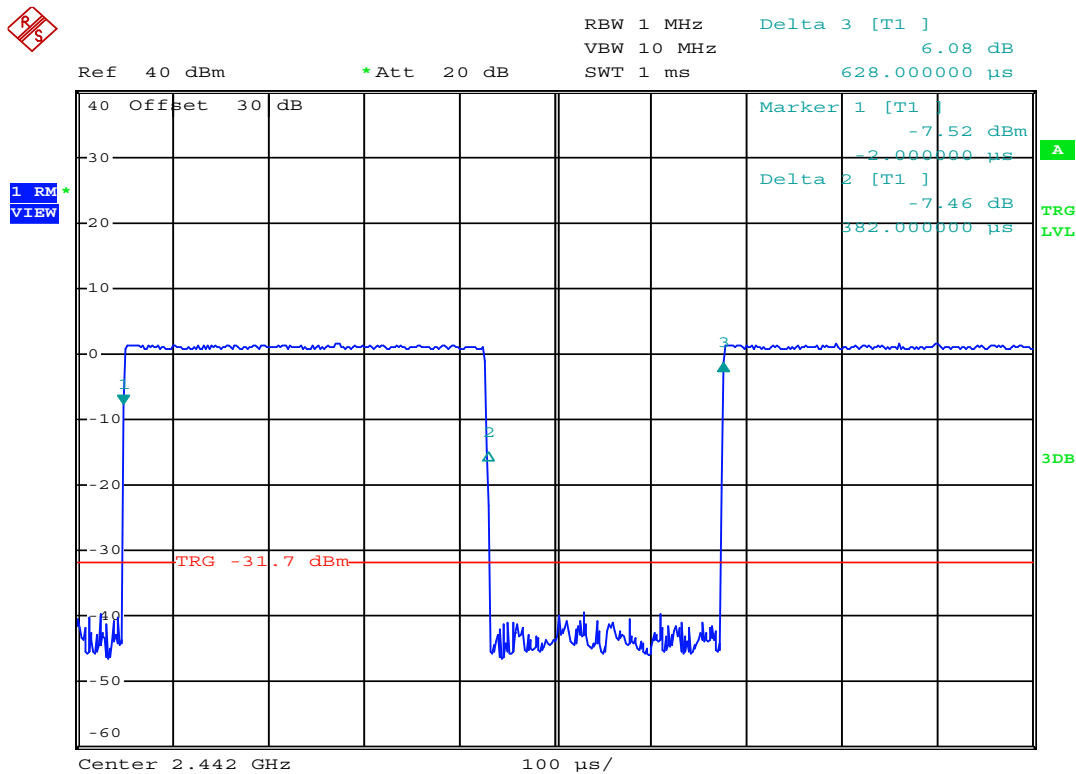
Mode	Channel Number	Channel Frequency (MHz)	Modulation	Data Rate (mbps)	Duty Cycle (%)
802.11n	13	2472	MCS0	6.5	87.6

Duty Cycle Measurement Results: BLE

Mode	Channel Number	Frequency (MHz)	Modulation	Data Rate (Mbps)	Measured Duty Cycle [DC _{Meas}] (dBm)	Scale* Factor [CF] (dB)
802	18	2442.00	GMSK	-	60.8	2.16

*Scale Factor (Correction Factor) [CF] = $10\log(1/[DC_{Meas}])$

Transmit Duty Cycle: BLE



Date: 1.DEC.2021 10:28:24

Mode	Channel Number	Channel Frequency (MHz)	Modulation	Data Rate (mbps)	Duty Cycle (%)
802.15	18	2442	GMSK	-	60.8