



FCC TAS ALGORITHM COMPLIANCE

TEST REPORT

FCC ID : B94HNI65C4KLR
Equipment : Notebook Computer
Brand Name : HP
Model Name : HSN-I65C-4
Applicant : HP Inc.
1501 Page Mill Road, Palo Alto CA 94304 USA
Standard : FCC 47 CFR Part 2 (2.1093)

The product was received on Sep. 22, 2025 and testing was started from Oct. 27, 2025 and completed on Oct. 31, 2025. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample provide by manufacturer and the test data has been evaluated in accordance with the test procedures given in 47 CFR Part 2.1093 and has been pass the FCC requirement.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Laboratory, the test report shall not be reproduced except in full.

Approved by: Cona Huang / Deputy Manager

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History of this test report

Report No.	Version	Description	Issued Date
FA591806B	01	Initial issue of report	Nov. 05, 2025

1. Test Setup Description

1.1 Measurement System

The conducted power measurement test setup is described in the following and illustrated in Figure 1

- The DUT is a RW350R-GL Cellular Modem installed inside HP model HSN-I65C-4 Laptop.
- The control PC is used to configure the call box to send power control test sequences to the RW350R-GL
- Uplink signal power is monitored by the spectrum analyzer and recorded by the PC with a time resolution of 25 msec which is substantially less than the power adjustment interval (Avg_SAR_Check_Period) of 1 sec used for RW350R-GL.
- The values of Avg_SAR_Power are read from the RW350R-GL by the PC at each Avg_SAR_Check_Period
- In addition to power results, the time sequence of power control commands and power samples are also recorded by the PC to enable results to be correlated and plotted. Uplink signal from the RW350R-GL is fed through a 3 dB power splitter, which delivers an equal amount of signal to the spectrum analyzer and the call box. The splitter has high isolation between the spectrum analyzer and the call box. Due to different uplink/downlink frequencies and the zero span time-domain measurement used, interference of uplink and downlink signals are avoided.
- Path loss in the power measurement setup from the RW350R-GL main antenna port to either the call box or the spectrum analyzer is taken into account.

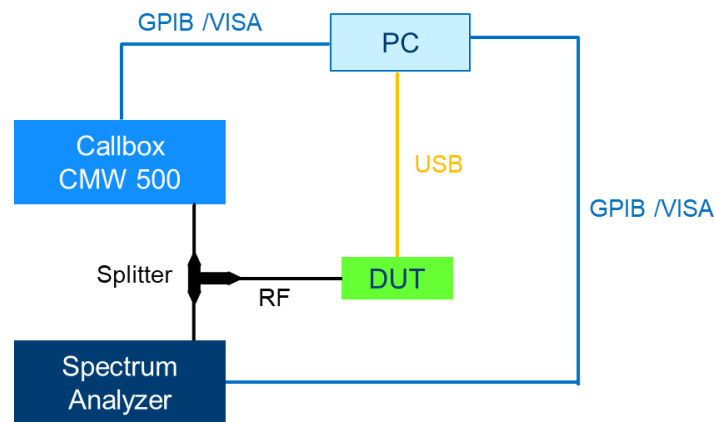


Figure 1 - Test Setup



2. Equipment list

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
R&S	Wideband Radio Communication Tester	CMX500	101932	Jun. 06, 2025	Jun. 05, 2026
R&S	Wideband Radio Communication Tester	CMW500	115793	Dec. 12, 2024	Dec. 11, 2025
R&S	Spectrum Analyzer	FSV3044	101544	Aug. 18, 2025	Aug. 17, 2026

3. Test samples

Sample	Description	Model	PC Serial	Module
#3	Notebook PC	HSN-I65C-4	00057709VK	RW350R-GL

4. Test Results

4.1 Summary of Test Cases

The following table lists the types of TAS algorithm validation tests performed and the corresponding Tables describing the test configurations and validation results.

The Average power is calculated using the measured instantaneous power and compared to the Upper Threshold Plus Tune-Up Tolerance. This is applied for all the test cases in this report.

Validation type	RAT	Configurations	Results	Verdict
Band validation	WDMa	Table 1	Section 4.3	PASS
Band validation	LTE			PASS
Band validation	5G NR			PASS
Time Varying Test Sequence	5G NR	Table 2	Section 4.4	PASS
Handover	LTE-LTE	Table 3	Section 4.5	PASS
Handover	LTE-WCDMA		Section 4.6	PASS
Call Drop and Reboot	5G NR	Table 4	Section 4.7/4.8	PASS

4.2 Plimit and Design Target

Band	Antenna	1g SAR Design Target (W/kg)	Plimit (dBm)	Pmax*	Tolerance (dB)
WCDMA B2	8	0.95	13	23.5	1
WCDMA B4	8	0.95	14	23.5	1
WCDMA B5	5	0.95	15.5	23.5	1
LTE B7	8	0.95	12	23.0	1
LTE B12	5	0.95	15.5	23.0	1
LTE B13	5	0.95	15.5	23.0	1
LTE B14	5	0.95	15.5	23.0	1
LTE B17	5	0.95	19	23.0	1
LTE B25/2	8	0.95	13	23.0	1
LTE B26/5	5	0.95	16.5	23.0	1
LTE B30	8	0.95	13.5	22.0	1
LTE B66/4	8	0.95	14	23.0	1
LTE B71	5	0.95	17	23.0	1
LTE B38	8	0.95	10	23.0	1
LTE B41	5	0.95	15	21.0	1
LTE B41	8	0.95	9.5	21.0	1
LTE B42	8	0.95	7	19.0	1
LTE B43	8	0.95	6	19.0	1
LTE B48	5	0.95	12.5	19.0	1
LTE B48	8	0.95	6.5	19.0	1
FR1 n5	5	0.95	15.5	23.0	1
FR1 n7	8	0.95	12	23.0	1
FR1 n12	5	0.95	16	23.0	1
FR1 n14	5	0.95	15.5	23.0	1
FR1 n25/2	5	0.95	17	23.0	1
FR1 n25/2	8	0.95	13	23.0	1
FR1 n26	5	0.95	16.5	23.0	1
FR1 n30	8	0.95	13.5	22.0	1
FR1 n66	8	0.95	14	23.0	1
FR1 n71	5	0.95	17	23.0	1
FR1 n38 PC3	8	0.95	12	23.0	1
FR1 n41 PC3	5	0.95	17	23.0	1
FR1 n41 PC3	8	0.95	11.5	23.0	1
FR1 n41 PC2	8	0.95	11.5	26.0	1
FR1 n48	5	0.95	14.5	21.0	1
FR1 n48	8	0.95	8.5	21.0	1
FR1 n77 PC3	5	0.95	14	23.0	1
FR1 n77 PC2	5	0.95	14	26.0	1
FR1 n77 PC3	8	0.95	8	23.0	1
FR1 n77 PC2	8	0.95	8	26.0	1
FR1 n78 PC3	5	0.95	13.5	23.0	1
FR1 n78 PC2	5	0.95	13.5	26.0	1
FR1 n78 PC3	8	0.95	9	23.0	1
FR1 n78 PC2	8	0.95	9	26.0	1

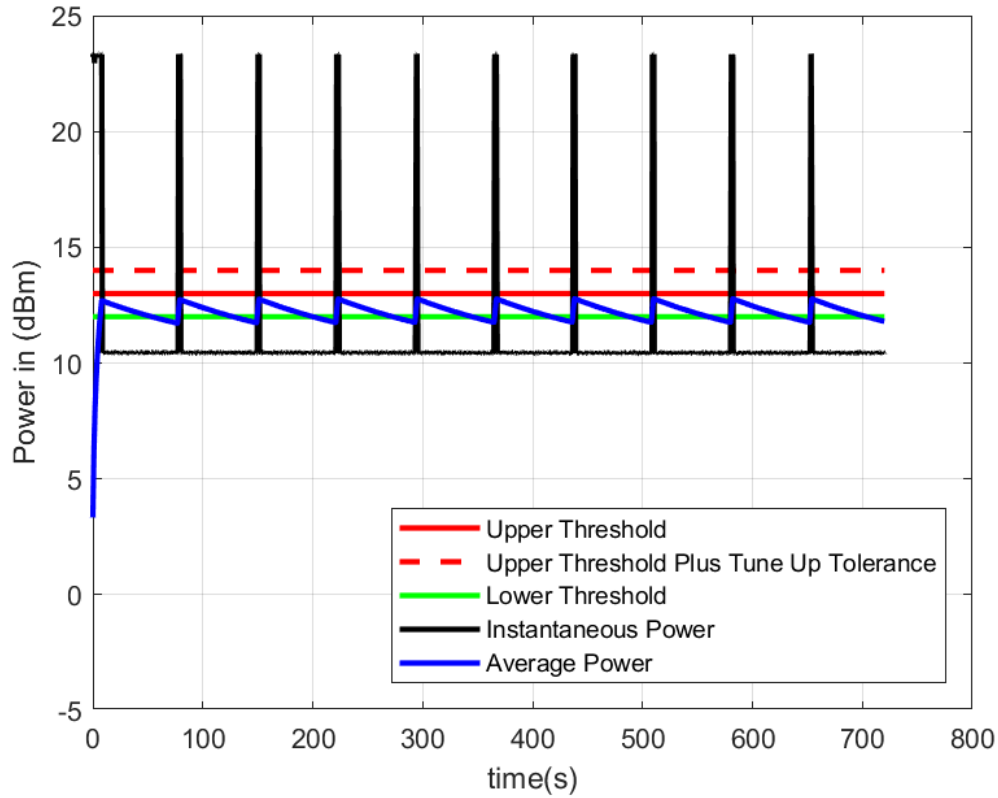
4.3 Bands Validation

Table 1- Test cases for Band Validation

Test case #	Test scenario	Band	mode	Test Position	Gap (mm)	Antenna	Channel	Freq (MHz)	Pmax Power(dBm)	Avg_SAR UppThresh [dBm]	Avg_SAR LowThresh [dBm]	Max_Power DPR_ON [dBm]	Part 1, SAR@Plimit 1-g SAR (W/kg)
1	Bands_Validation	WCDMA B2	RMC 12.2Kbps	Bottom Side	0mm	8	9262	1852.4	23.5	13	12	11	0.341
2		WCDMA B4	RMC 12.2Kbps	Bottom Side	0mm	8	1312	1712.4	23.5	14	13	12	0.437
3		WCDMA B5	RMC 12.2Kbps	Bottom Side	0mm	5	4132	826.4	23.5	15.5	14.5	13.5	0.229
4		LTE B25/2	20M_QPSK_1_0	Bottom Side	0mm	8	26340	1880	23	13	12	11	0.331
5		LTE B26/5	15M_QPSK_1_0	Bottom Side	0mm	5	26865	831.5	23	16.5	15.5	14.5	0.224
6		LTE B7	20M_QPSK_1_0	Bottom Side	0mm	8	21350	2560	23	12	11	10	0.196
7		LTE B38 pc3(B41)	20M_QPSK_1_0	Bottom Side	0mm	8	38000	2595	23	10	9	8	0.132
8		LTE B41 pc3	20M_QPSK_1_0	Bottom Side	0mm	8	40620	2593	21	9.5	8.5	7.5	0.121
9		LTE B66/4	20M_QPSK_1_0	Bottom Side	0mm	8	132322	1745	23	14	13	12	0.335
10		FR1 n25/2	45M_BPSK_120_60	Bottom Side	0mm	8	376500	1882.5	23	13	12	11	0.263
11		FR1 n5	25M_BPSK_64_0	Bottom Side	0mm	5	167300	836.5	23	15.5	14.5	13.5	0.186
12		FR1 n7	50M_BPSK_1_268	Bottom Side	0mm	8	507000	2535	23	12	11	10	0.228
13		FR1 n38 pc3	40M_BPSK_1_53	Bottom Side	0mm	8	519000	2595	23	12	11	10	0.161
14		FR1 n41 pc3	100M_BPSK_1_137	Bottom Side	0mm	8	518598	2592.99	23	11.5	10.5	9.5	0.141
15		FR1 n66	45M_BPSK_1_120	Bottom Side	0mm	8	349000	1745	23	14	13	12	0.199

Case 1 : WCDMA Band 2 - Max Power 23.5 dBm - Roll Period 100 sec - Check Period 1 sec

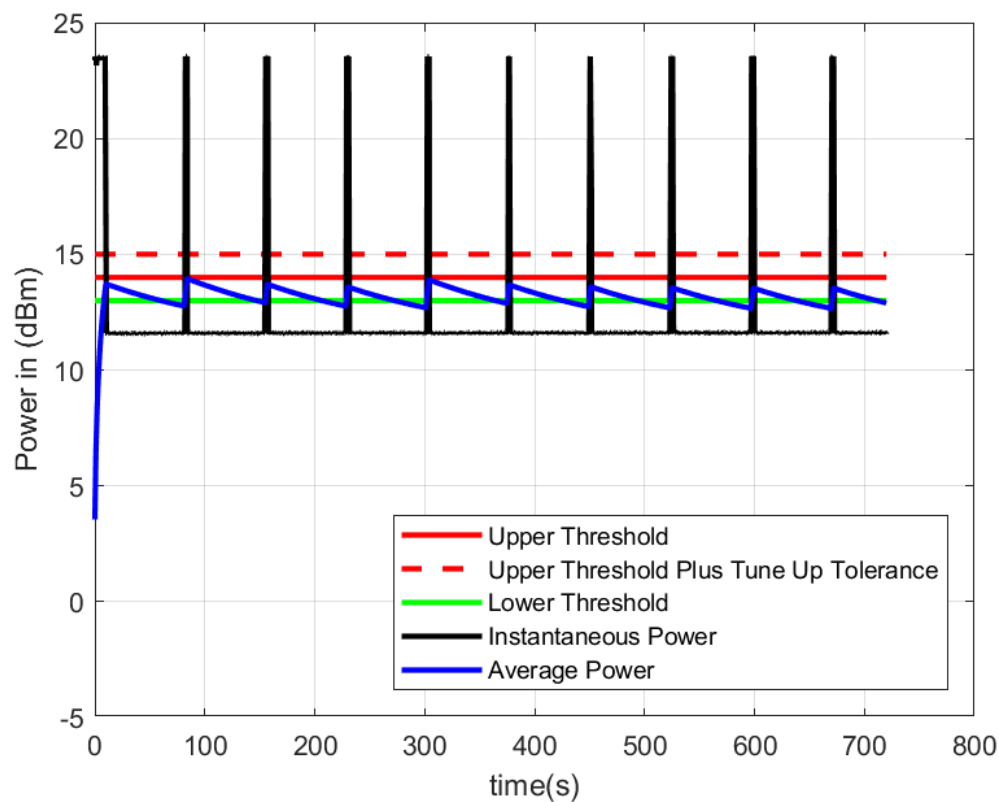
Avg_SAR_UppThresh [dBm]	Avg_SAR_LowThresh [dBm]	Max_Power_DPR_ON [dBm]
13.0	12	11





Case 2 : WCDMA Band 4 - Max Power 23.5 dBm - Roll Period 100 sec - Check Period 1 sec

Avg_SAR_UppThresh [dBm]	Avg_SAR_LowThresh [dBm]	Max_Power_DPR_ON [dBm]
14	13	12





Case 3 : WCDMA Band 5 - Max Power 23.5 dBm - Roll Period 100 sec - Check Period 1 sec

Avg_SAR_UppThresh [dBm]

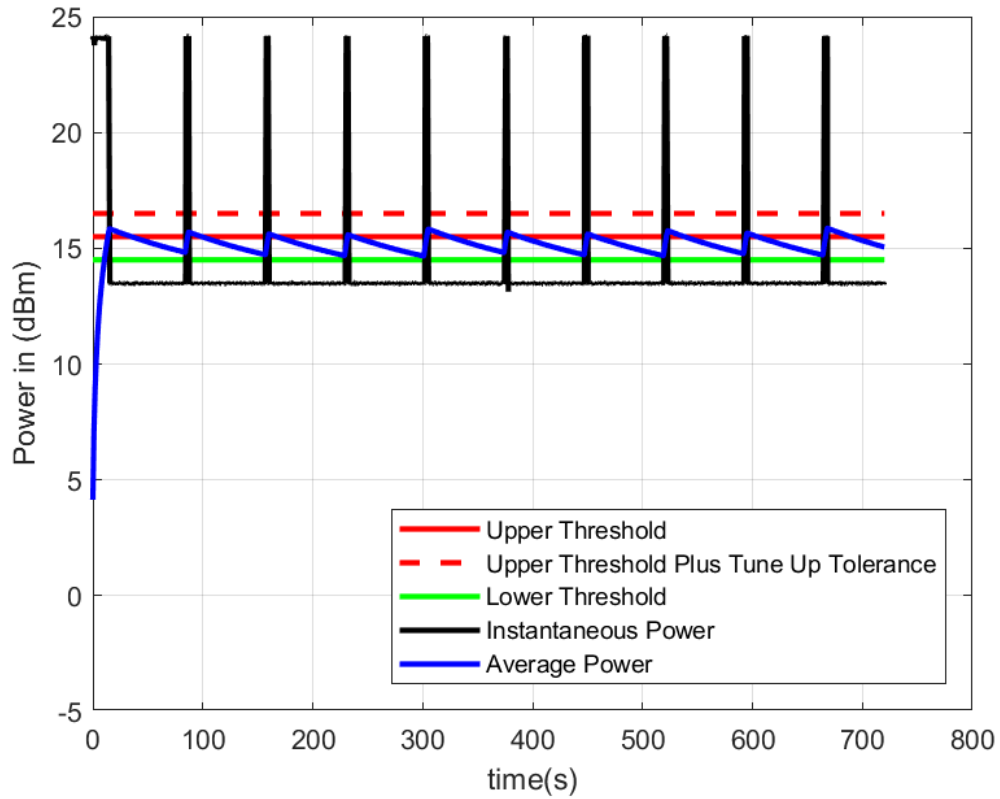
15.5

Avg_SAR_LowThresh [dBm]

14.5

Max_Power_DPR_ON [dBm]

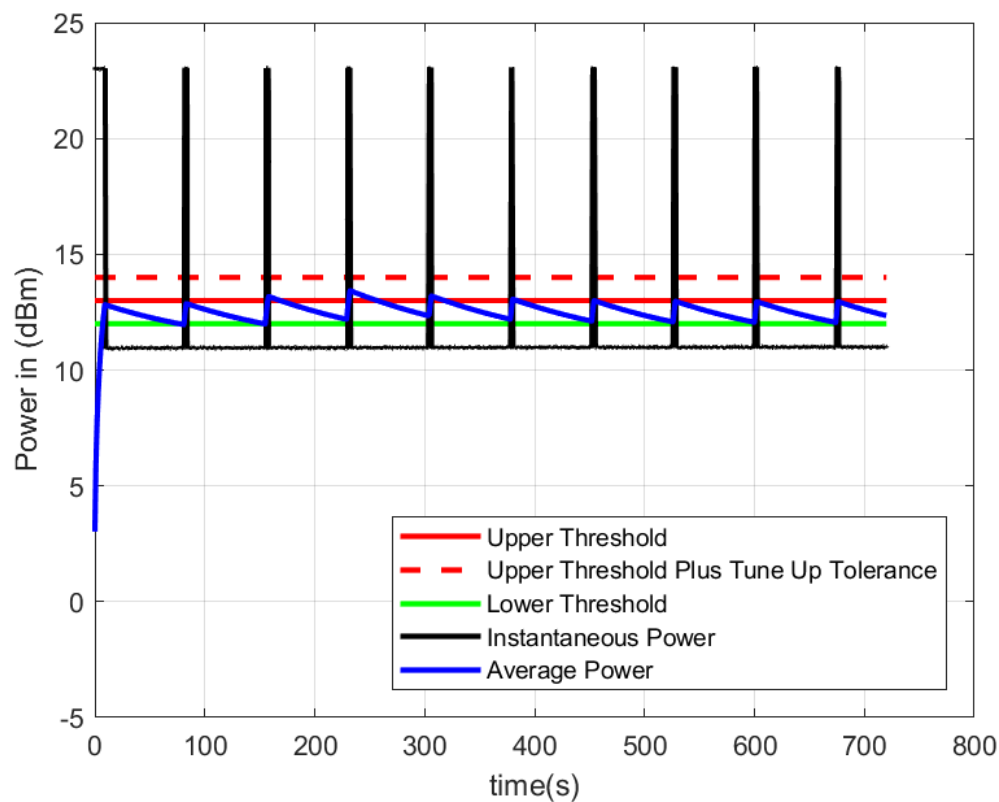
13.5





Case 4 : LTE Band 25/2 - Max Power 23 dBm - Roll Period 100 sec - Check Period 1 sec

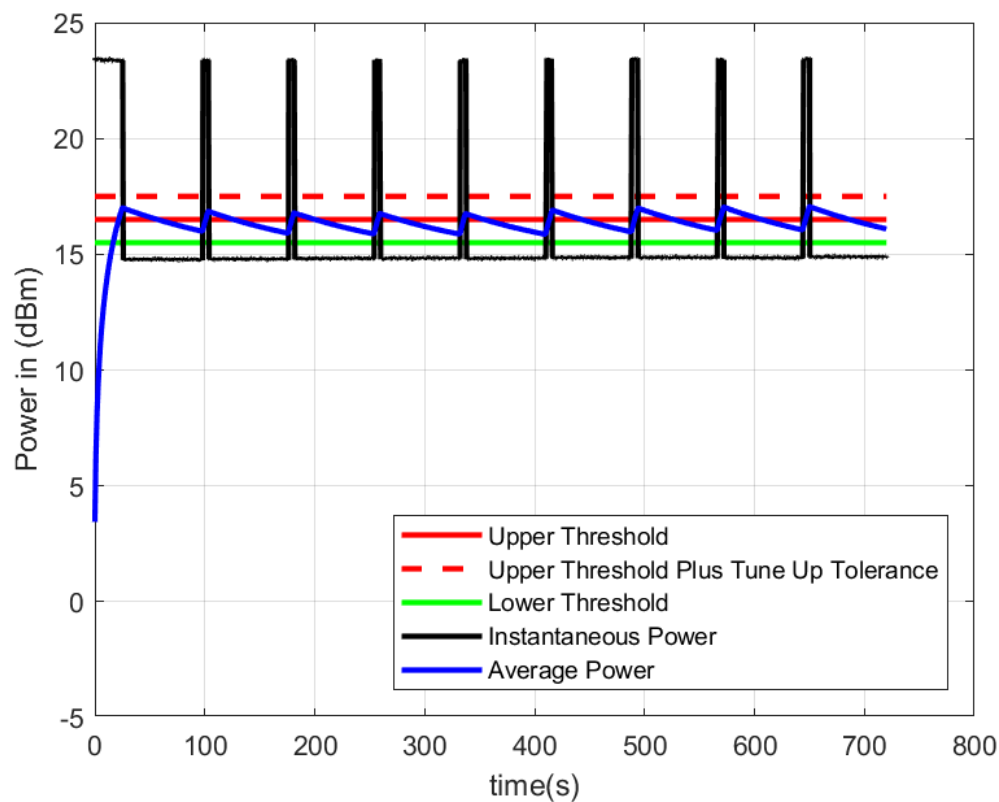
Avg_SAR_UppThresh [dBm]	Avg_SAR_LowThresh [dBm]	Max_Power_DPR_ON [dBm]
13	12	11

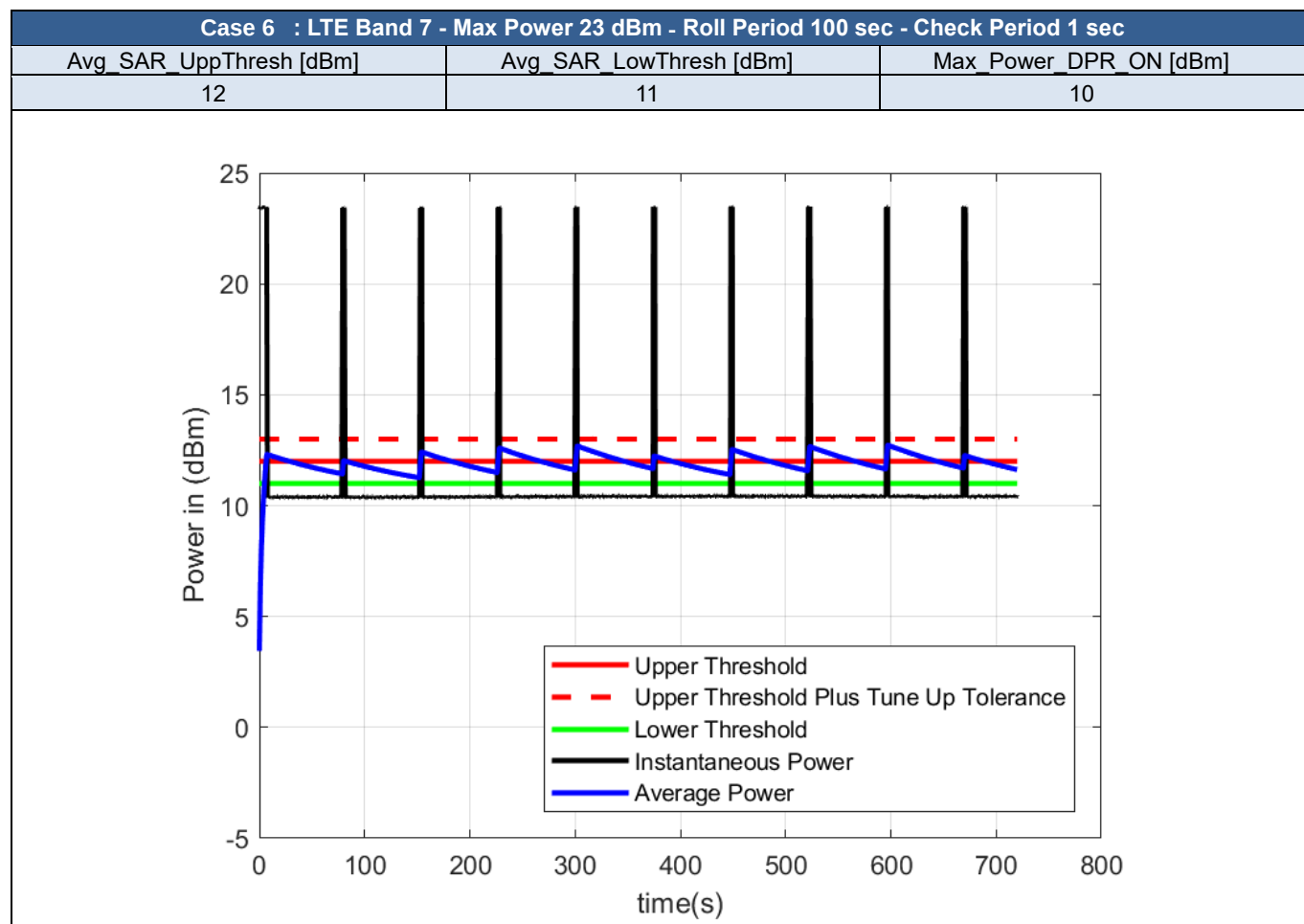


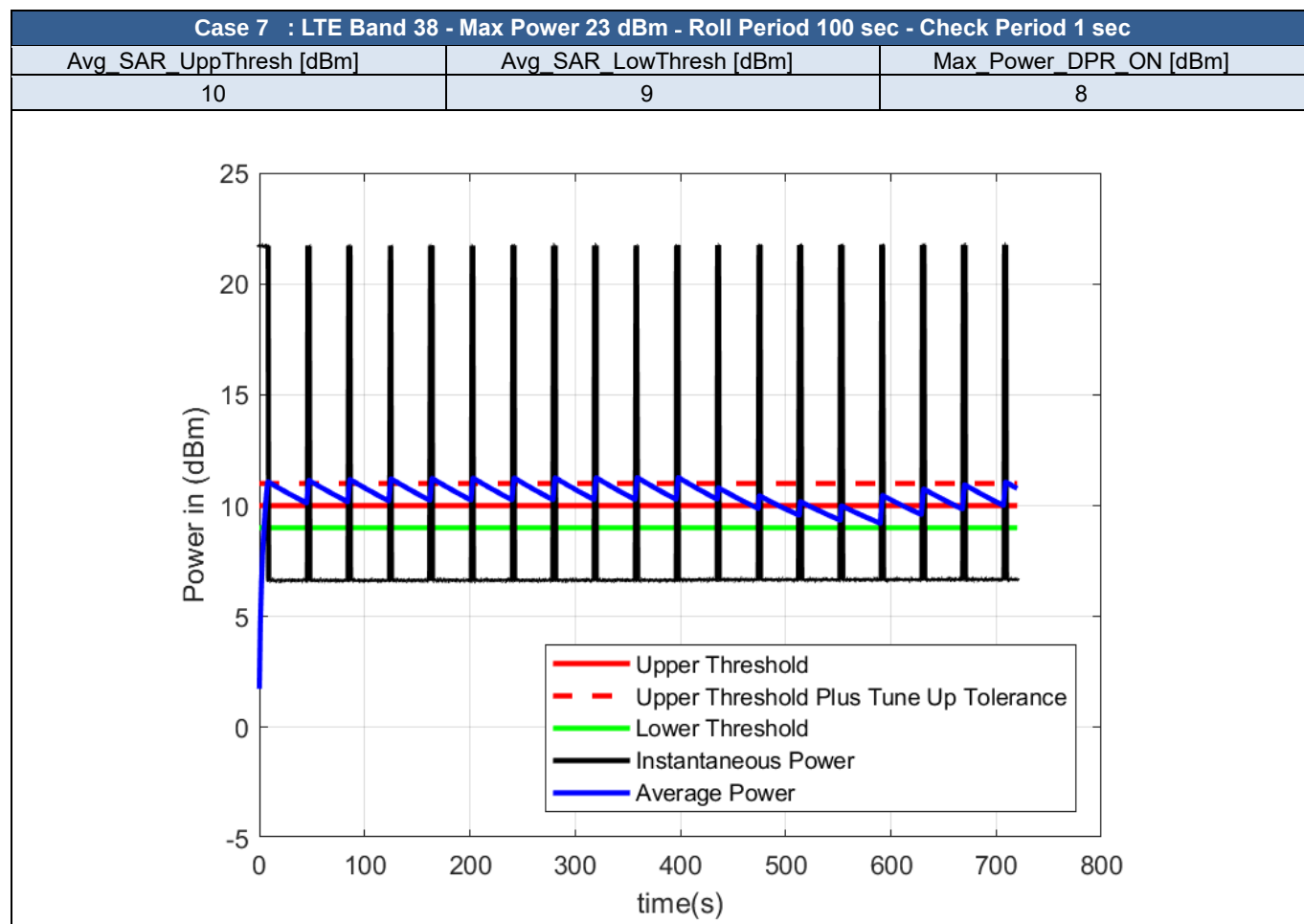


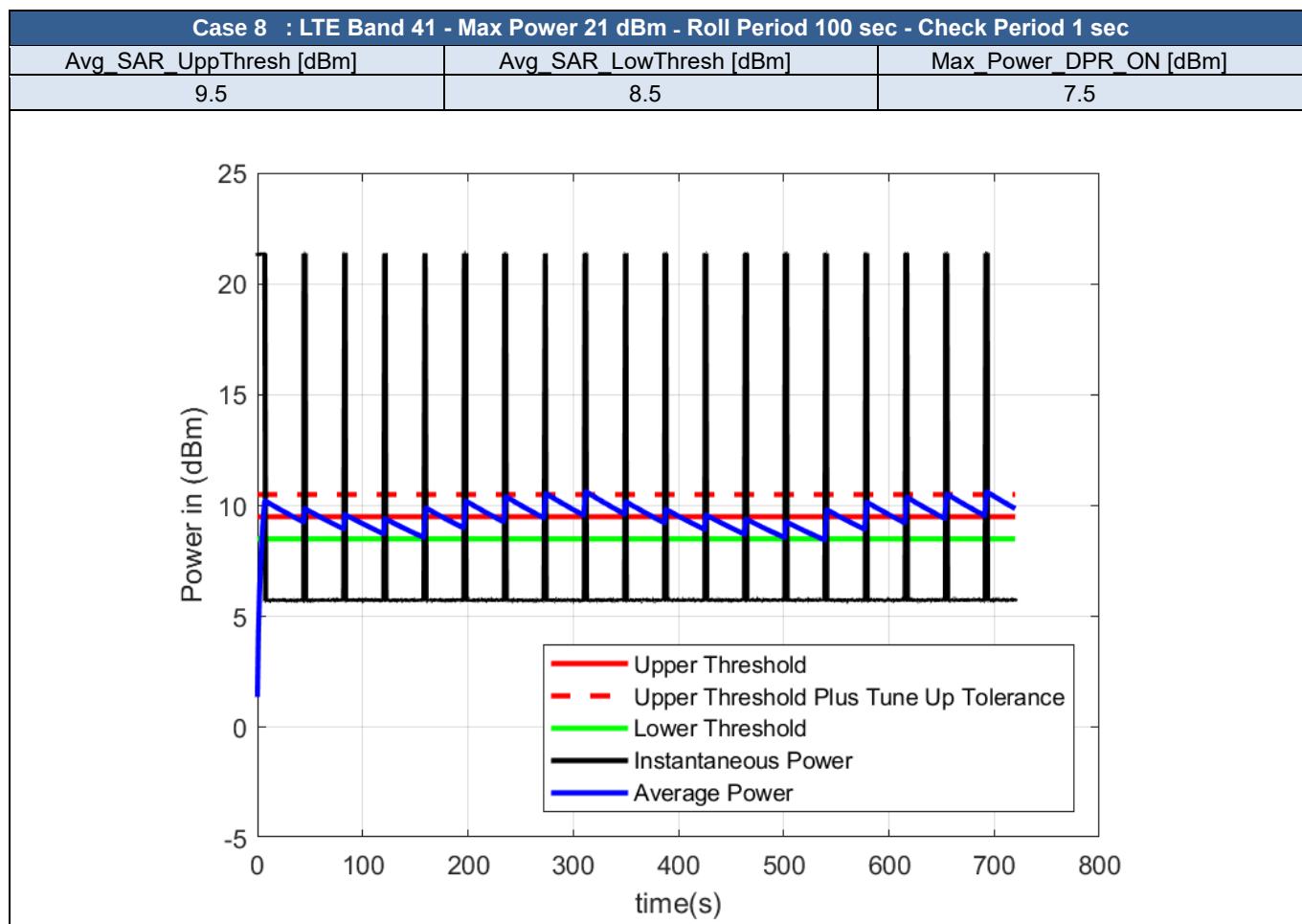
Case 5 : LTE Band 26/5 - Max Power 23 dBm - Roll Period 100 sec - Check Period 1 sec

Avg_SAR_UppThresh [dBm]	Avg_SAR_LowThresh [dBm]	Max_Power_DPR_ON [dBm]
16.5	15.5	14.5











Case 9 : LTE Band 66/4 - Max Power 23 dBm - Roll Period 100 sec - Check Period 1 sec

Avg_SAR_UppThresh [dBm]

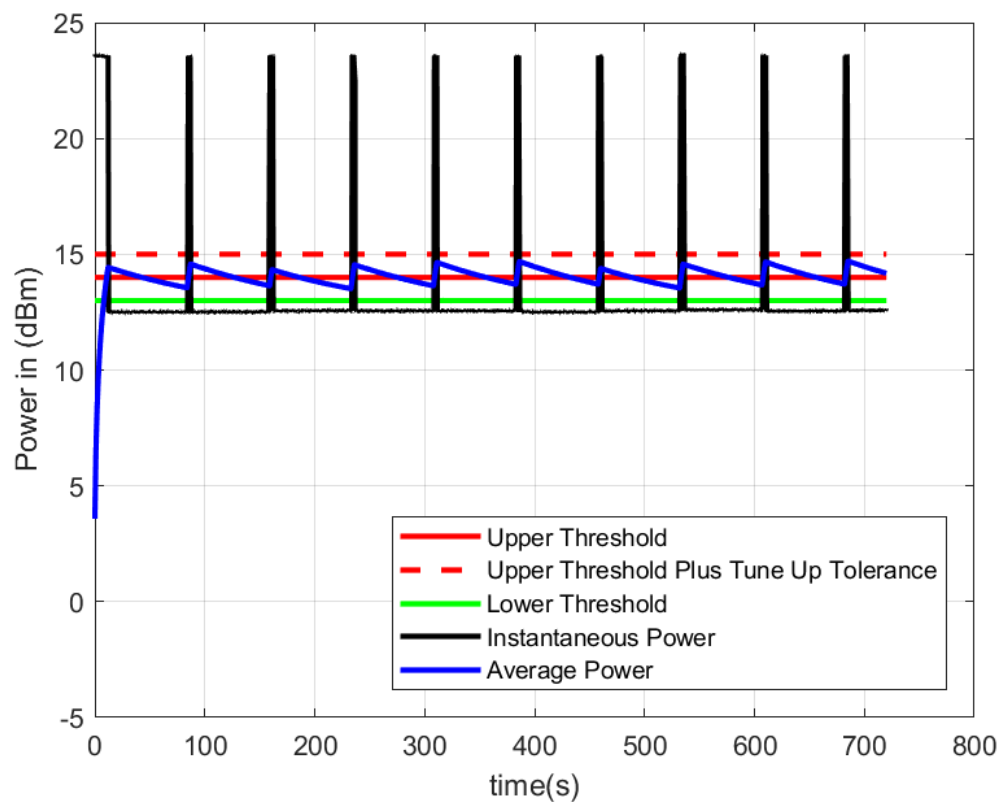
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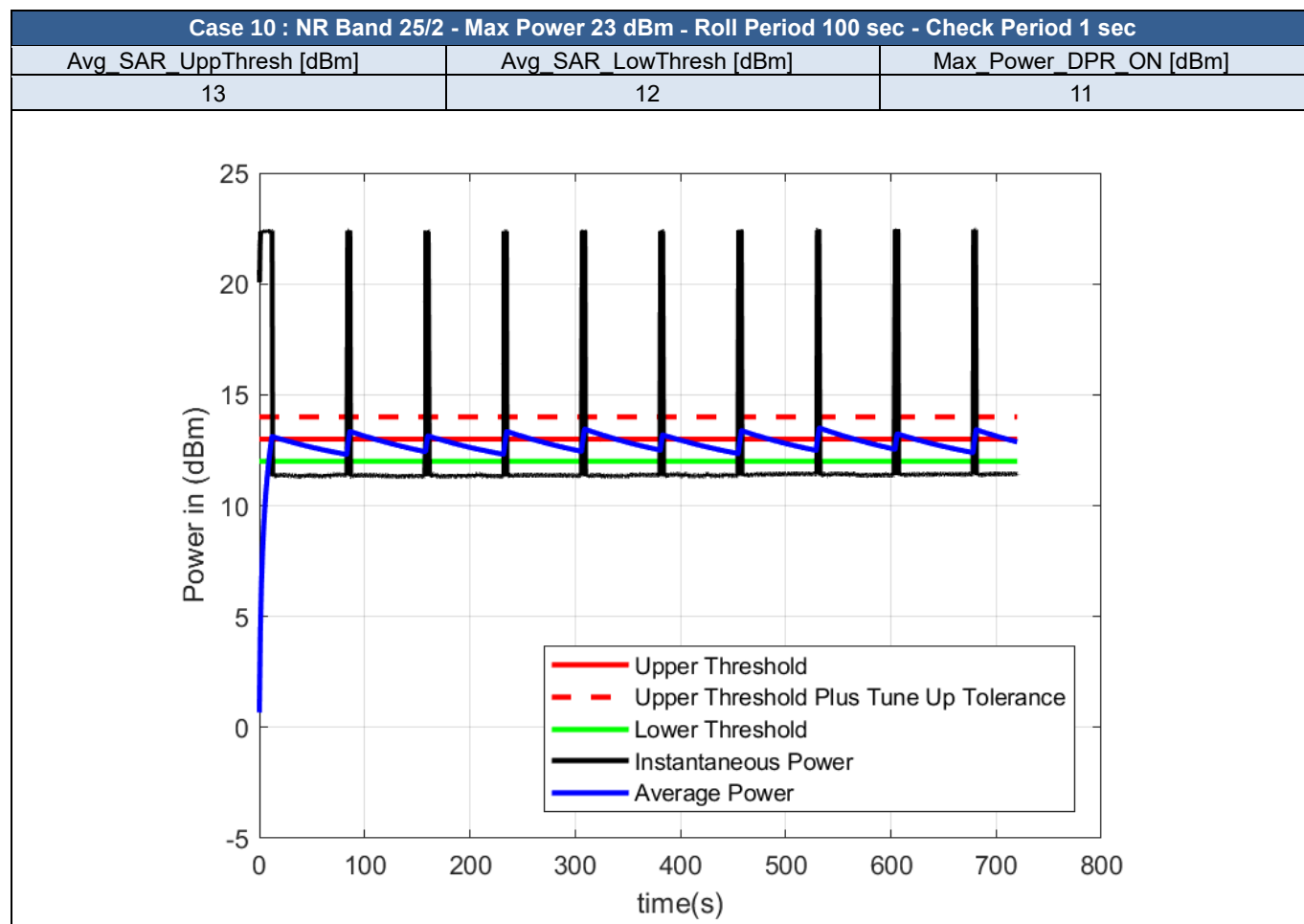
Avg_SAR_LowThresh [dBm]

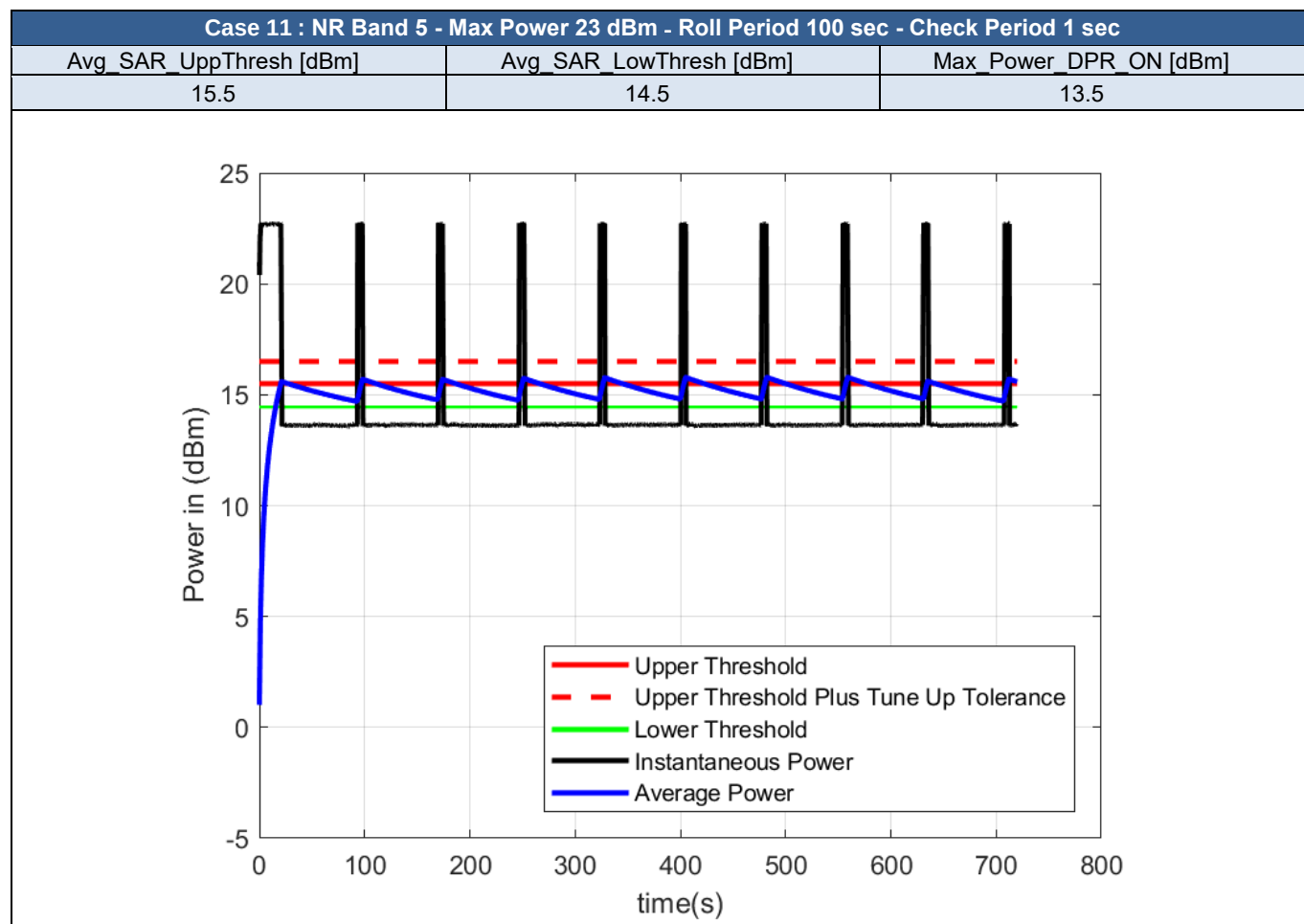
13

Max_Power_DPR_ON [dBm]

12



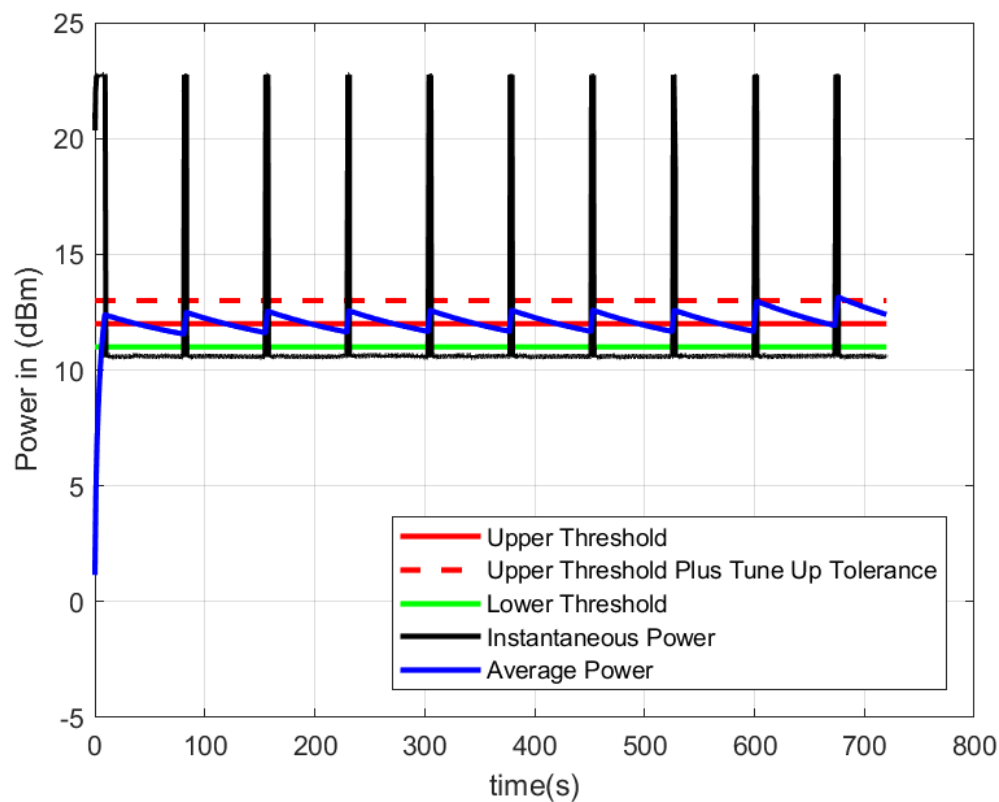






Case 12 : NR Band 7 - Max Power 23 dBm - Roll Period 100 sec - Check Period 1 sec

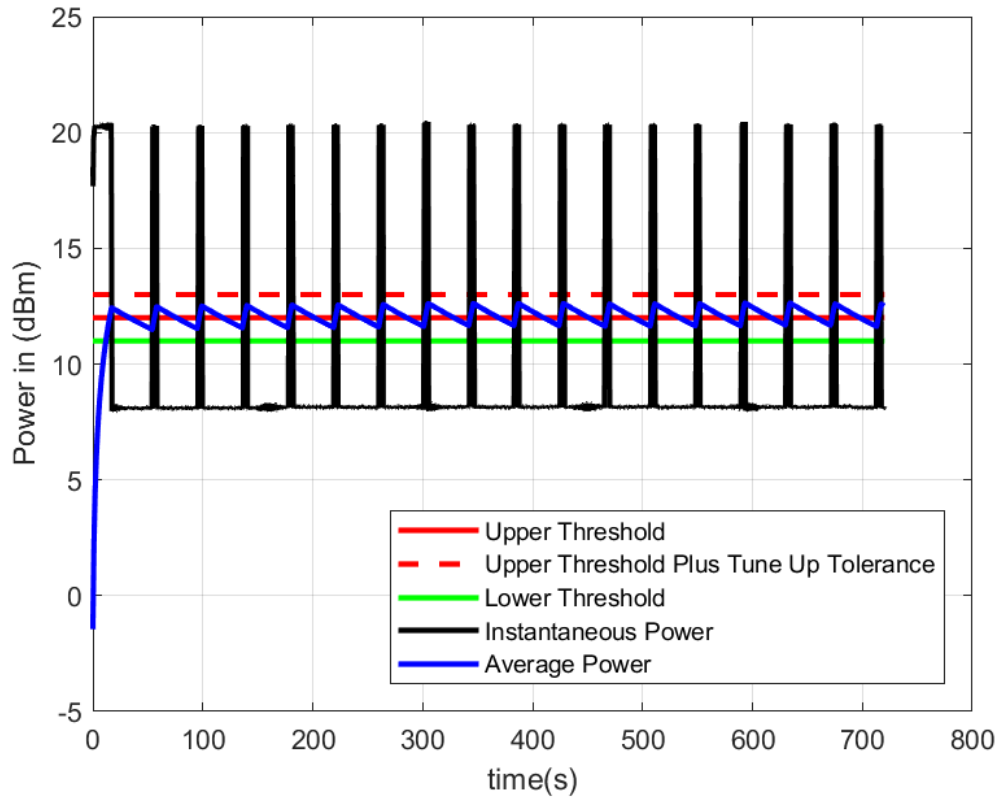
Avg_SAR_UppThresh [dBm]	Avg_SAR_LowThresh [dBm]	Max_Power_DPR_ON [dBm]
12	11	10





Case 13 : NR Band 38 - Max Power 23 dBm - Roll Period 100 sec - Check Period 1 sec

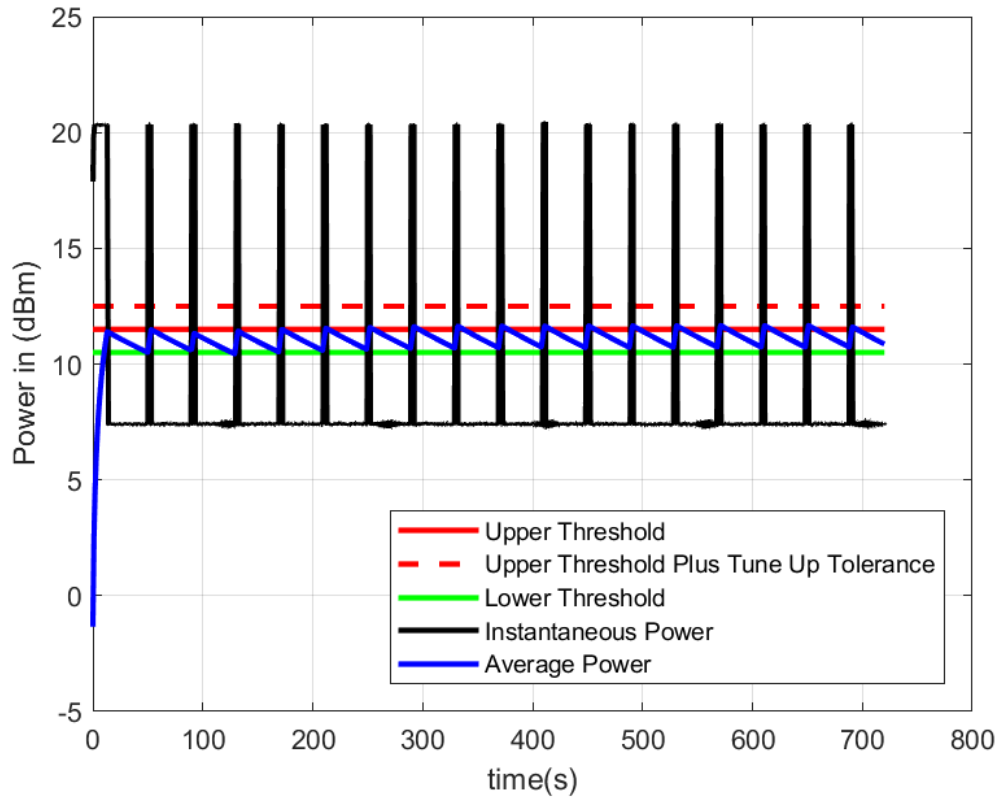
Avg_SAR_UppThresh [dBm]	Avg_SAR_LowThresh [dBm]	Max_Power_DPR_ON [dBm]
12	11	10





Case 14 : NR Band 41 - Max Power 23 dBm - Roll Period 100 sec - Check Period 1 sec

Avg_SAR_UppThresh [dBm]	Avg_SAR_LowThresh [dBm]	Max_Power_DPR_ON [dBm]
11.5	10.5	9.5



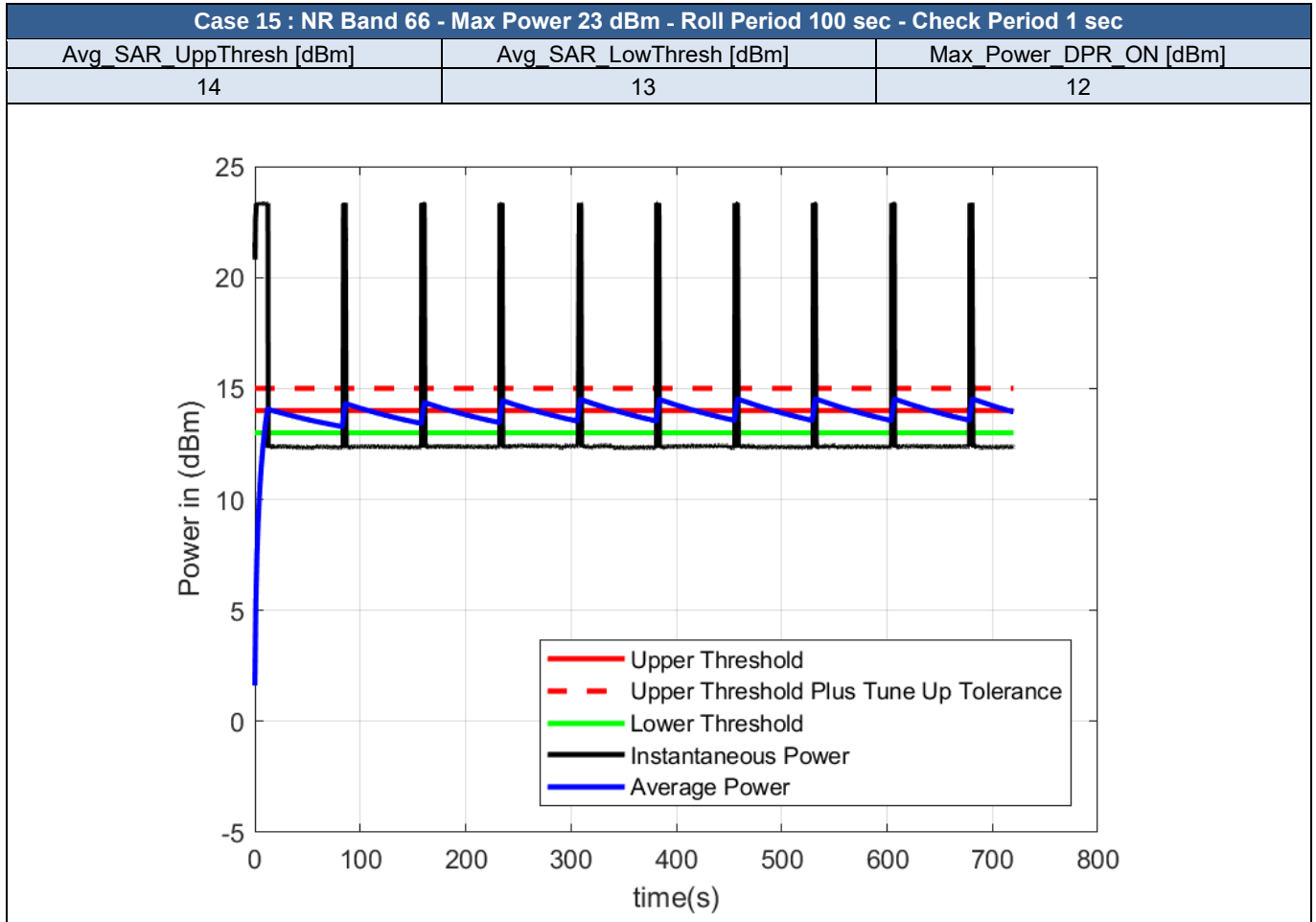
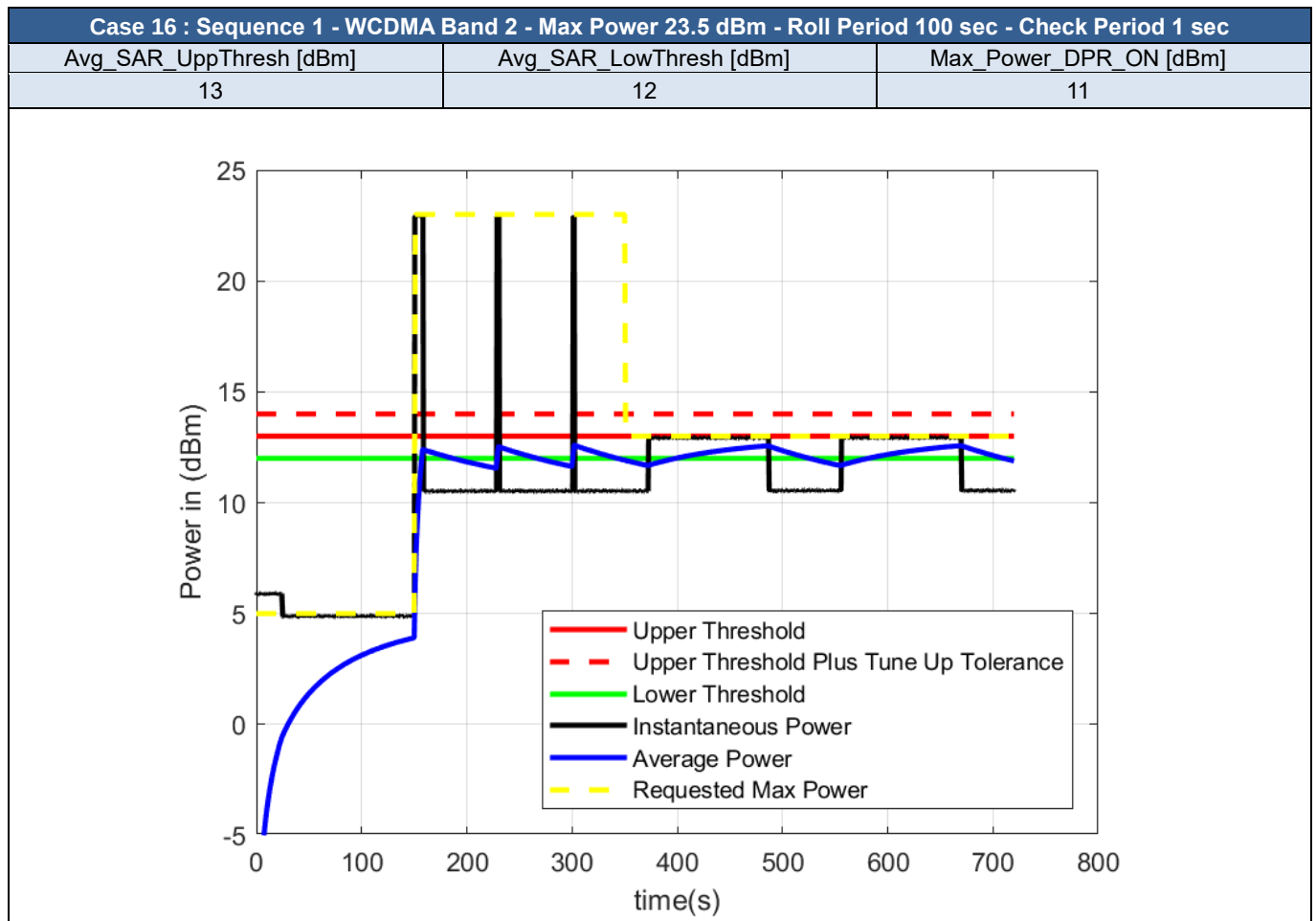


Table 2- Test cases for Time Varying Test Sequence

Test case #	Test scenario	Band	mode	Test Position	Gap (mm)	Antenna	Channel	Freq (MHz)	Pmax Power(dBm)	Avg_SAR UppThresh [dBm]	Avg_SAR LowThresh [dBm]	Max_Power DPR_ON [dBm]	Part 1, SAR@Plimit 1-g SAR (W/kg)
16	Time_Varying	WCDMA B2	RMC 12.2Kbps	Bottom Side	0mm	8	9262	1852.4	23.5	13	12	11	0.341
17		WCDMA B2	RMC 12.2Kbps	Bottom Side	0mm	8	9262	1852.4	23.5	13	12	11	0.341
18		LTE B25/2	20M_QPSK_1_0	Bottom Side	0mm	8	26340	1880	23	13	12	11	0.331
19		LTE B25/2	20M_QPSK_1_0	Bottom Side	0mm	8	26340	1880	23	13	12	11	0.331
20		FR1 n5	25M_BPSK_64_0	Bottom Side	0mm	5	167300	836.5	23	15.5	14.5	13.5	0.186
21		FR1 n5	25M_BPSK_64_0	Bottom Side	0mm	5	167300	836.5	23	15.5	14.5	13.5	0.186

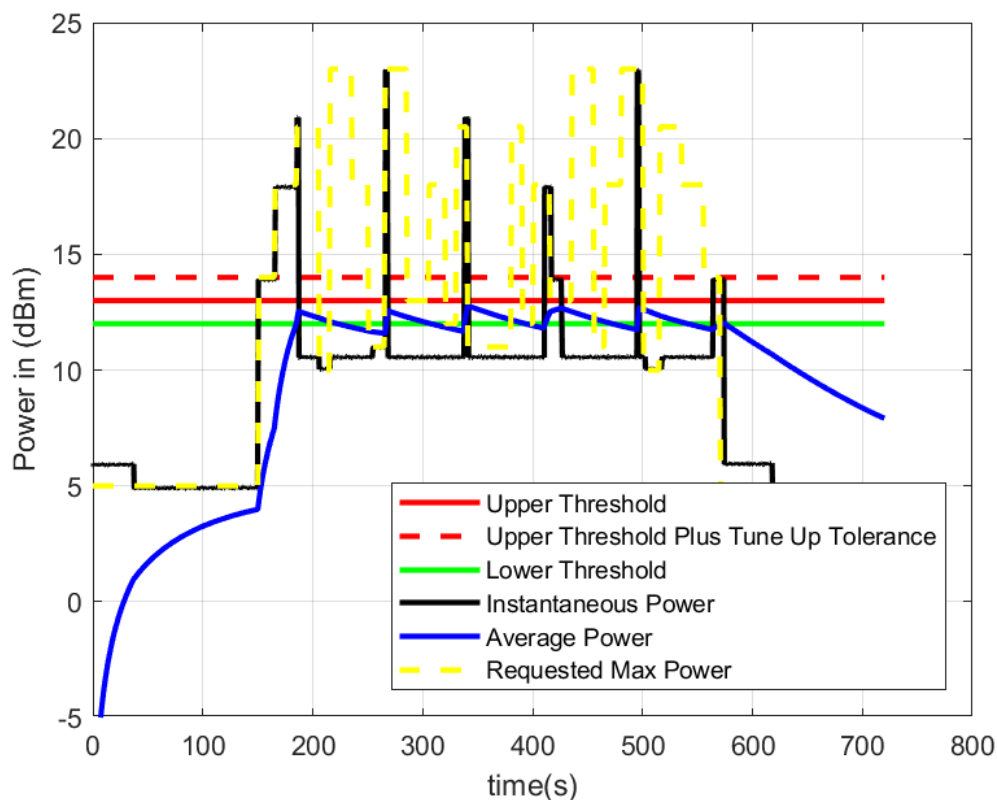
4.4 Time Varying Power Control Test Sequences Considered for Algorithm Validation



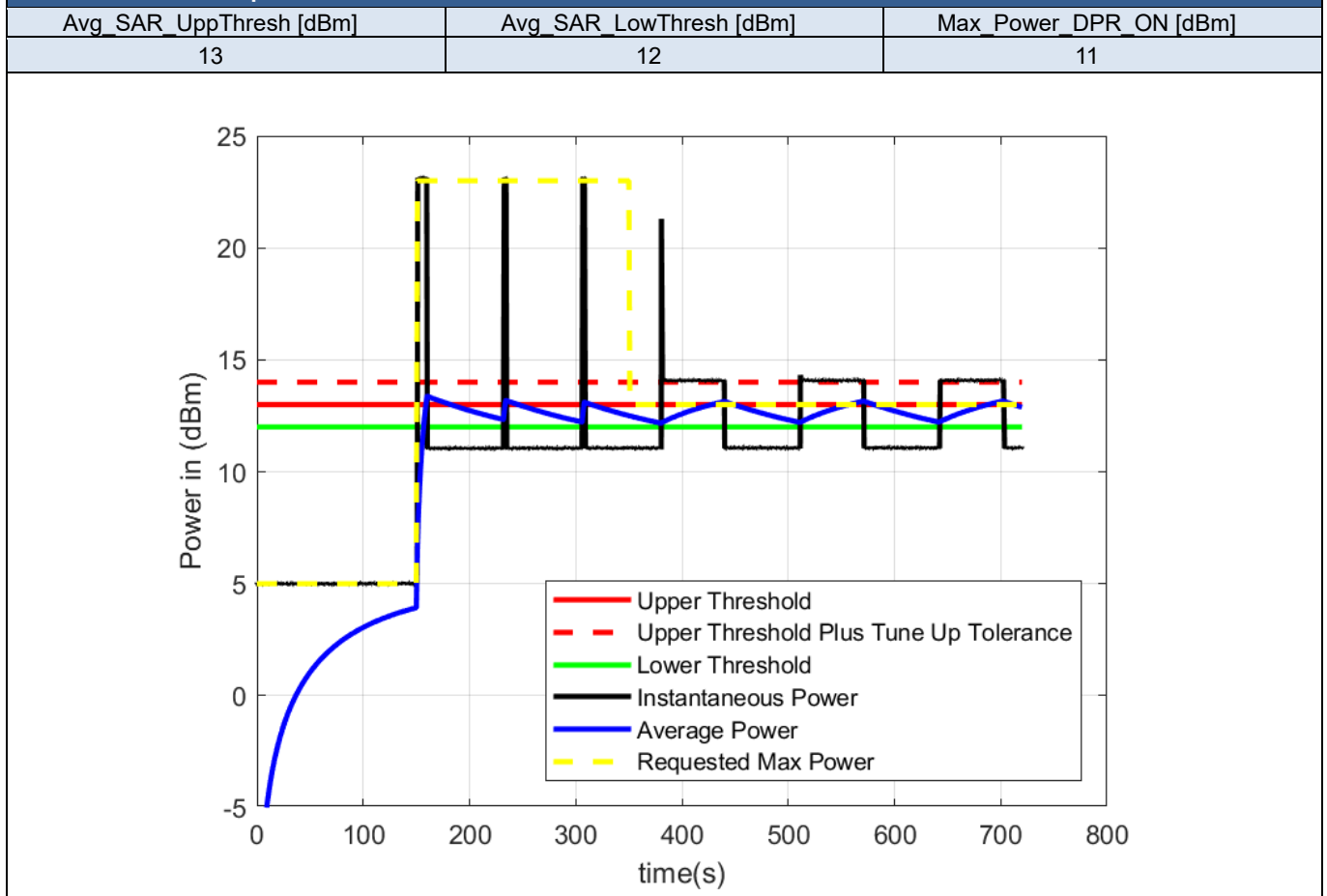


Case 17 : Sequence 2 - WCDMA Band 2 - Max Power 23.5 dBm - Roll Period 100 sec - Check Period 1 sec

Avg_SAR_UppThresh [dBm]	Avg_SAR_LowThresh [dBm]	Max_Power_DPR_ON [dBm]
13	12	11



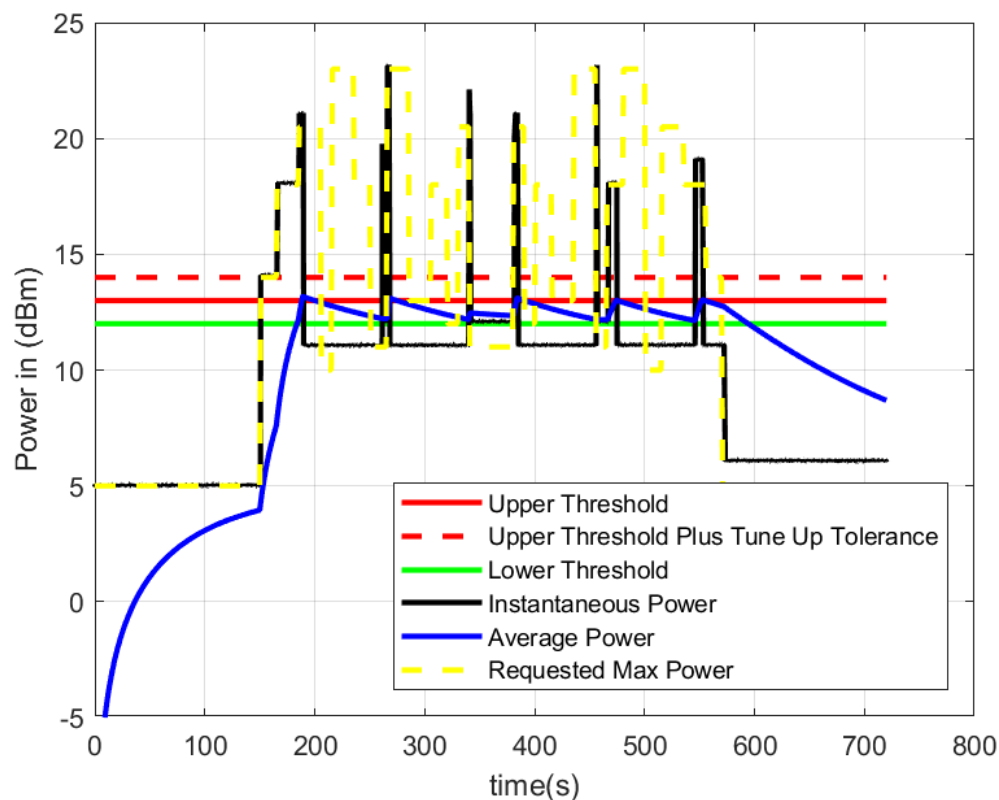
Case 18 : Sequence 1 - LTE Band 25/2 - Max Power 23 dBm - Roll Period 100 sec - Check Period 1 sec

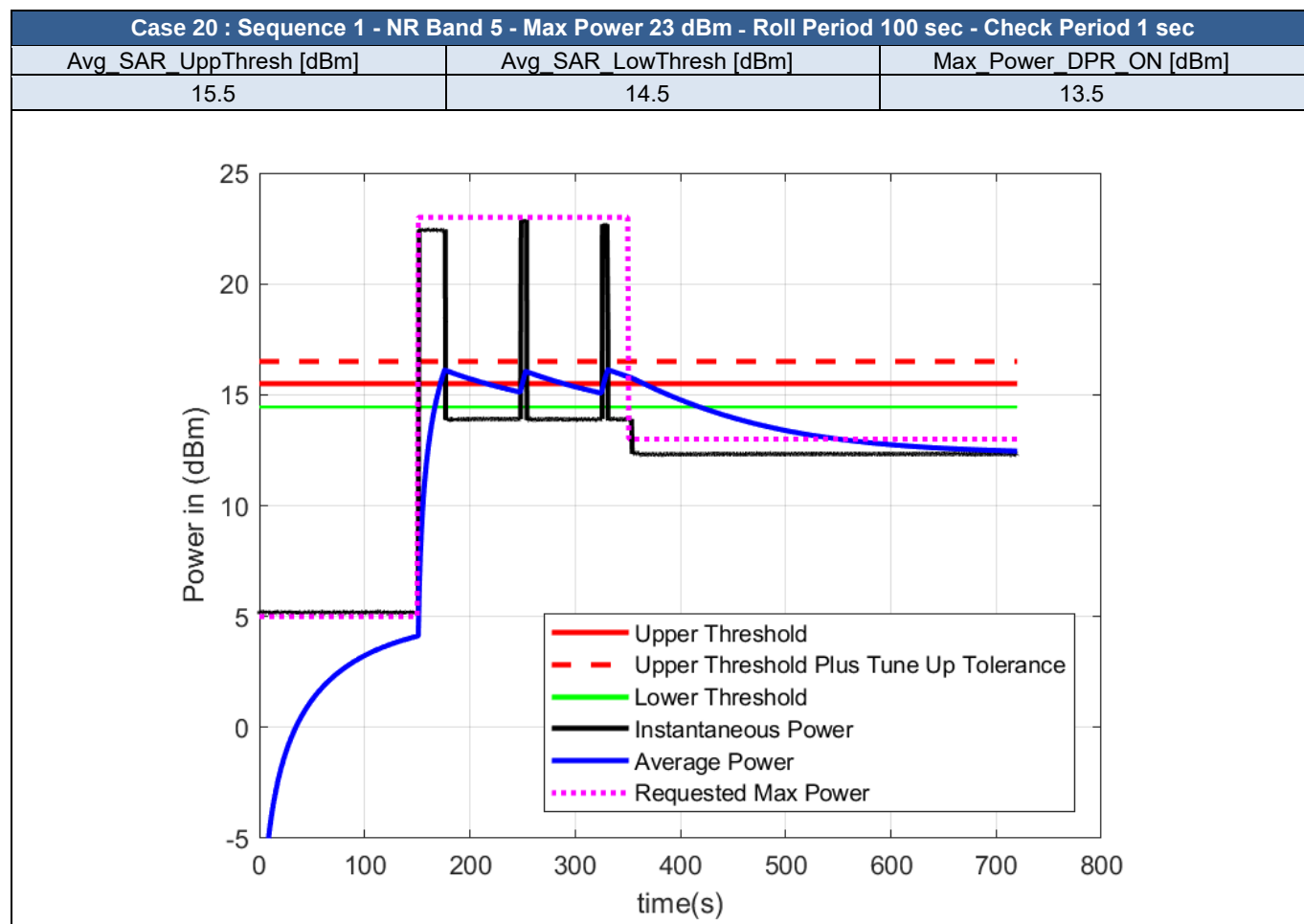




Case 19 : Sequence 2 - LTE Band 25/2 - Max Power 23 dBm - Roll Period 100 sec - Check Period 1 sec

Avg_SAR_UppThresh [dBm]	Avg_SAR_LowThresh [dBm]	Max_Power_DPR_ON [dBm]
13	12	11





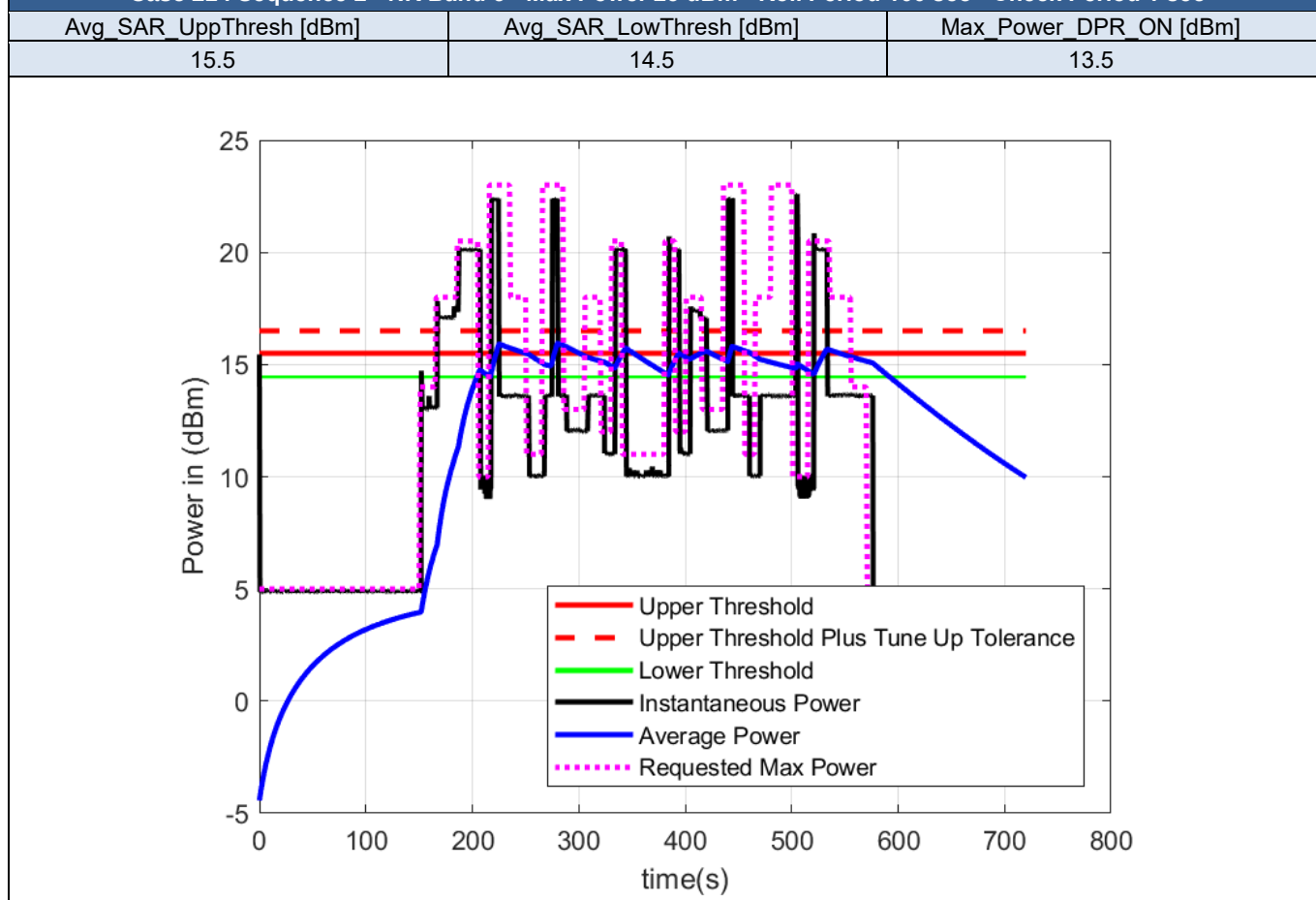
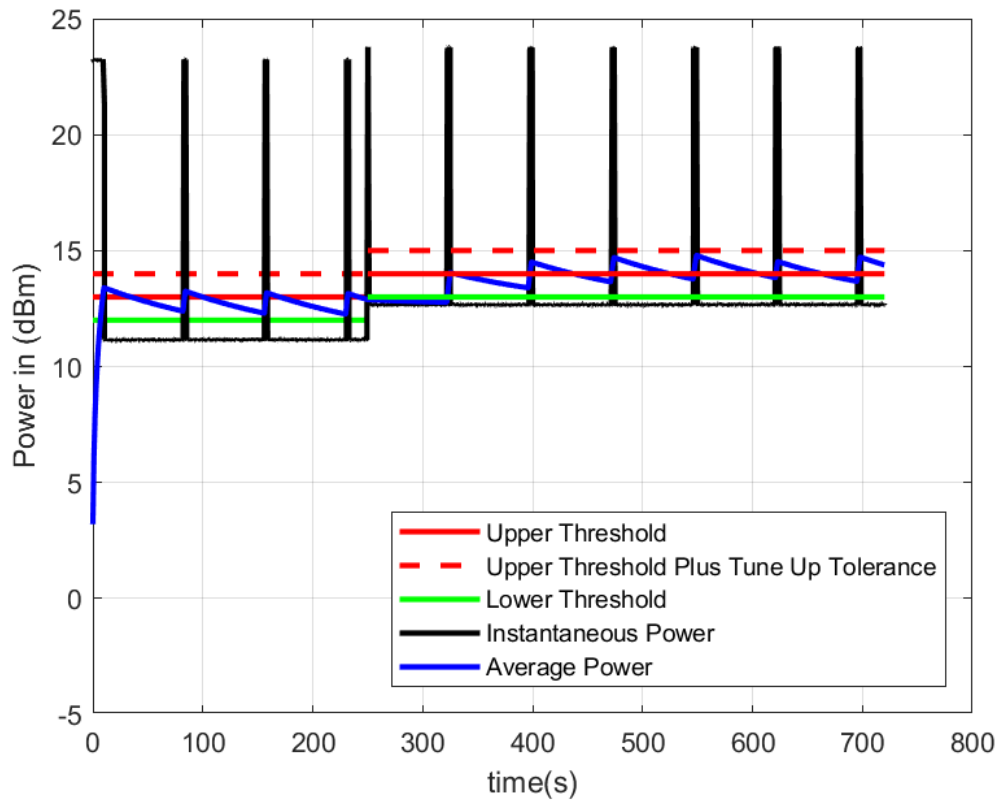
Case 21 : Sequence 2 - NR Band 5 - Max Power 23 dBm - Roll Period 100 sec - Check Period 1 sec


Table 3- Test cases for Handover

Test case #	Test scenario	Band	mode	Test Position	Gap (mm)	Antenna	Channel	Freq (MHz)	Pmax Power(dBm)	Avg_SAR UpThresh [dBm]	Avg_SAR LowThresh [dBm]	Max_Power DPR_ON [dBm]	Part 1, SAR@Plimit 1-g SAR (W/kg)
22	Handover LTE_2_LTE_4	LTE B25/2	20M_QPSK_1_0	Bottom Side	0mm	8	26340	1880	23	13	12	11	0.331
		LTE B66/4	20M_QPSK_1_0	Bottom Side	0mm	8	132322	1745	23	14	13	12	0.335
23	Handover LTE_2_WCDMA_4	LTE B25/2	20M_QPSK_1_0	Bottom Side	0mm	8	26340	1880	23	13	12	11	0.331
		WCDMA B4	RMC 12.2Kbps	Bottom Side	0mm	8	1312	1712.4	23.5	14	13	12	0.437

4.5 Handover Validation from- LTE-LTE

Case 22 : Handover LTE Band 2 > LTE Band 4 - Max Power 23 dBm - Roll Period 100 sec - Check Period 1 sec



4.6 Handover Validation from- LTE-WCDMA

Case 23 : Handover LTE Band 2 > WCDMA Band 4 - Max Power 23.5 dBm - Roll Period 100 sec - Check Period 1 sec

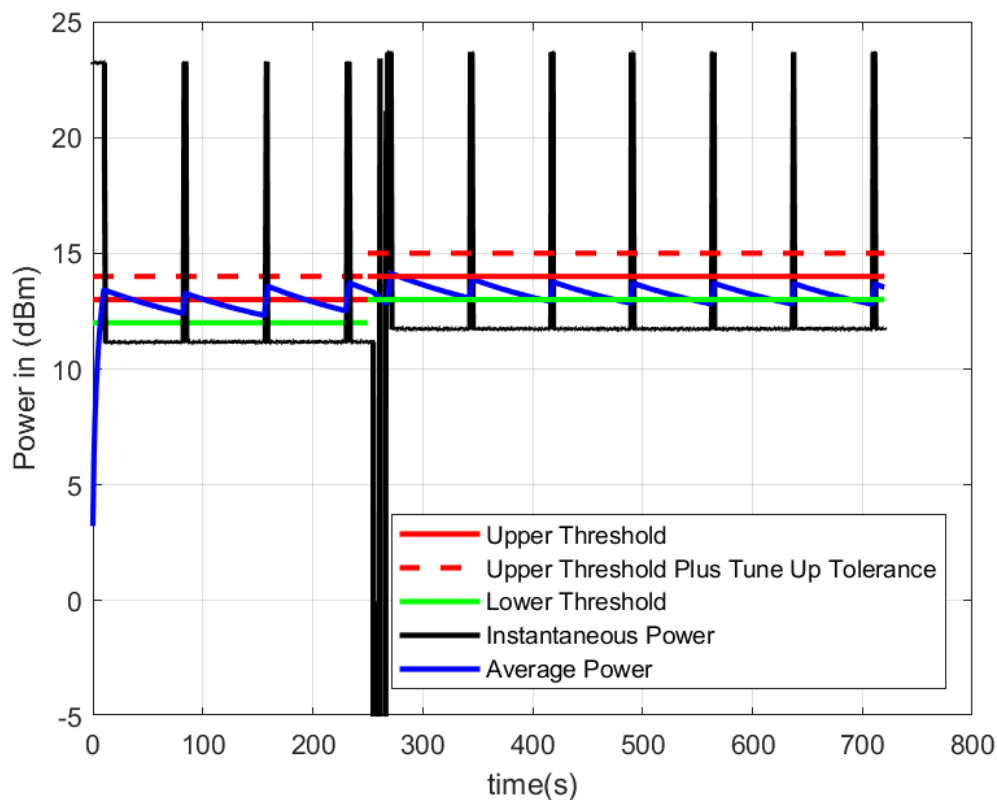
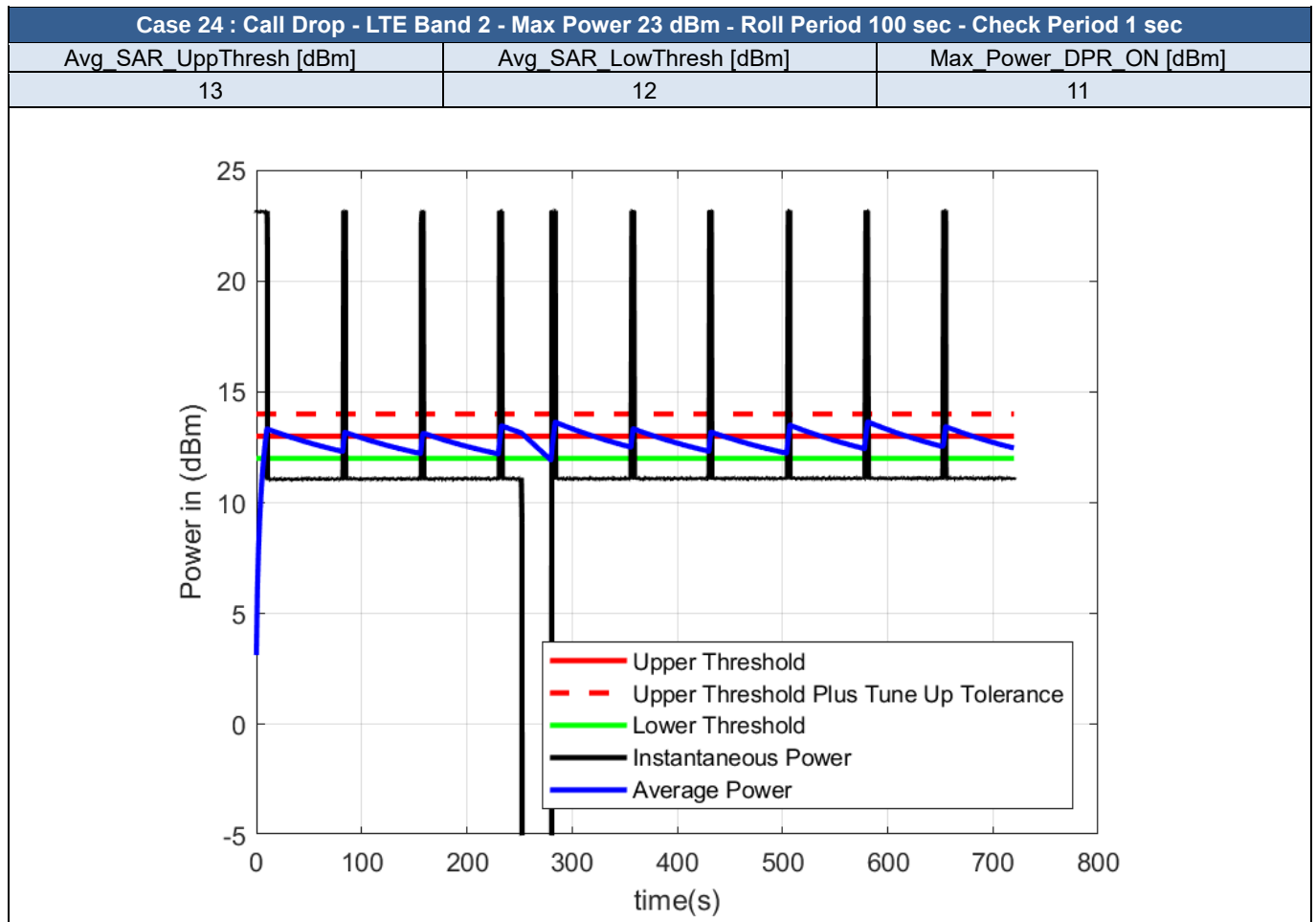


Table 4- Test cases for Call Drop and Reboot

Test case #	Test scenario	Band	mode	Test Position	Gap (mm)	Antenna	Channel	Freq (MHz)	Pmax Power(dBm)	Avg_SAR UppThresh [dBm]	Avg_SAR LowThresh [dBm]	Max_Power DPR_ON [dBm]	Part 1, SAR@Plimit 1-g SAR (W/kg)
24	Drop	LTE B25/2	20M_QPSK_1_0	Bottom Side	0mm	8	26340	1880	23	13	12	11	0.331
25		FR1 n5	25M_BPSK_64_0	Bottom Side	0mm	5	167300	836.5	23	15.5	14.5	13.5	0.186
26	Reboot	LTE B25/2	20M_QPSK_1_0	Bottom Side	0mm	8	26340	1880	23	13	12	11	0.331
27		FR1 n5	25M_BPSK_64_0	Bottom Side	0mm	5	167300	836.5	23	15.5	14.5	13.5	0.186

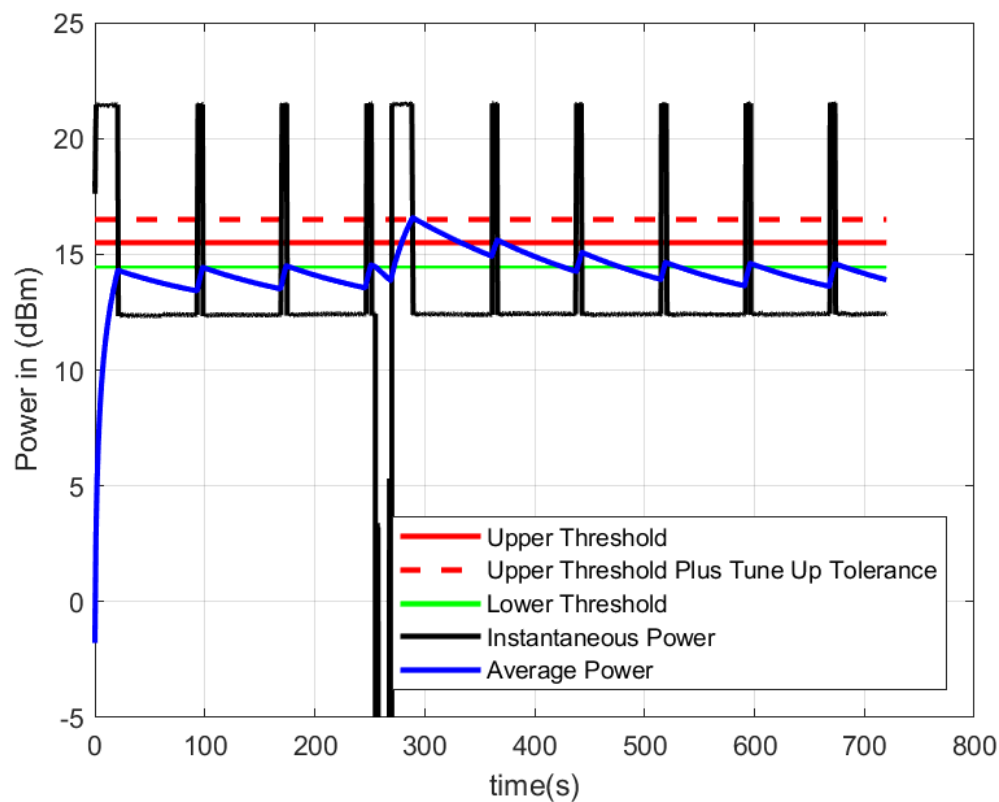
4.7 Connection Drop Scenario Validation



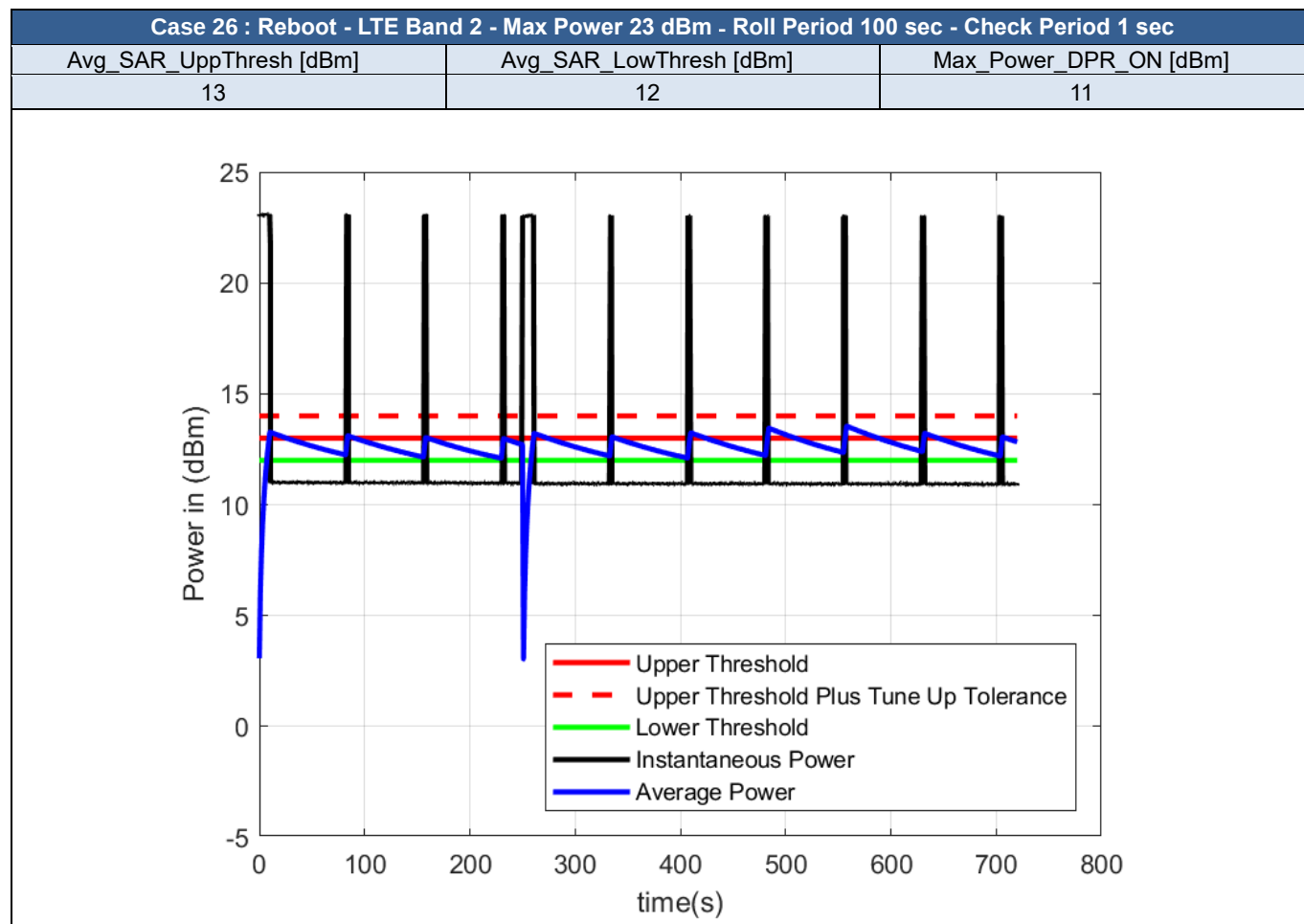


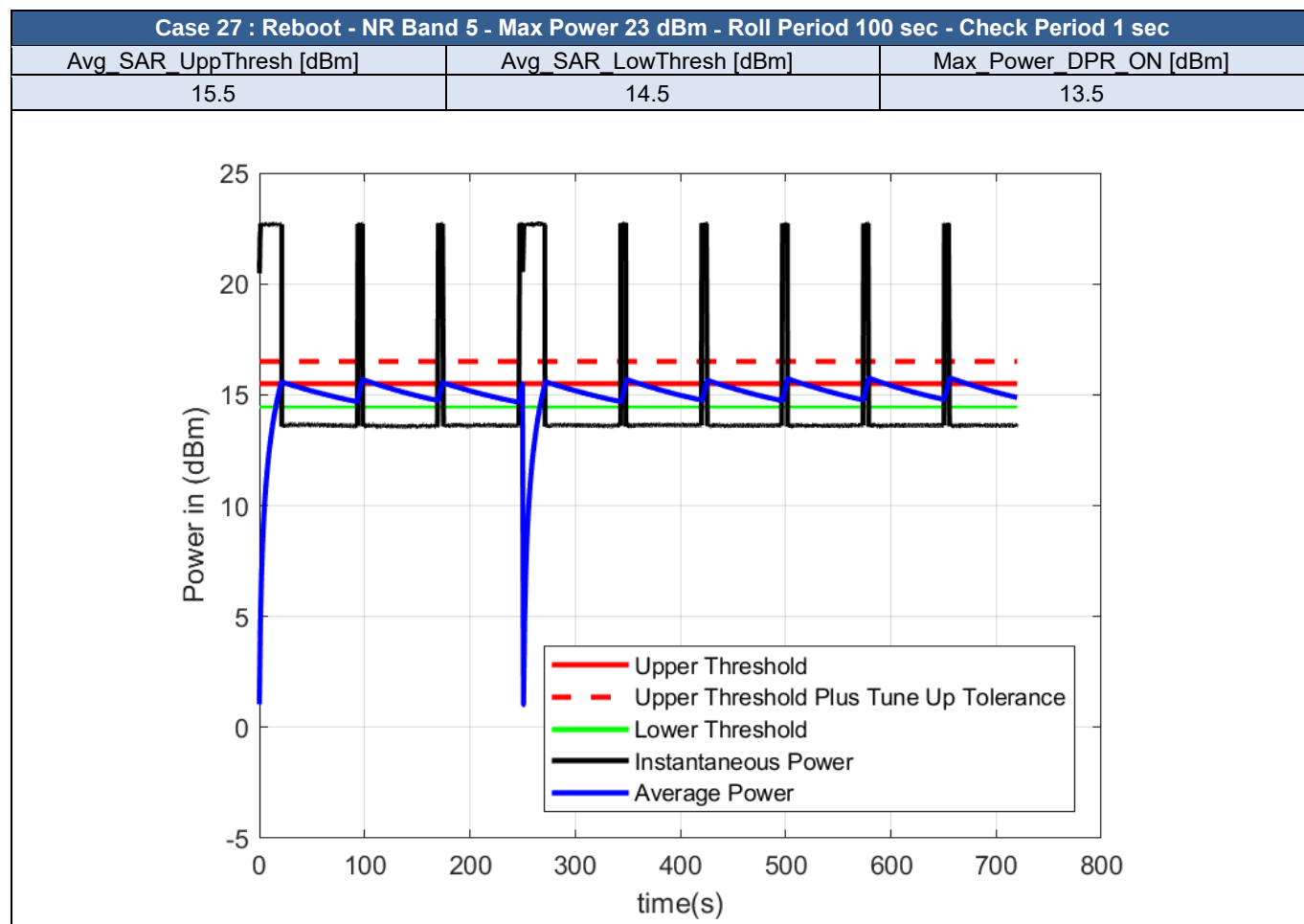
Case 25 : Call Drop - NR Band 5 - Max Power 23 dBm - Roll Period 100 sec - Check Period 1 sec

Avg_SAR_UppThresh [dBm]	Avg_SAR_LowThresh [dBm]	Max_Power_DPR_ON [dBm]
15.5	14.5	13.5



4.8 Connection Reboot Scenario Validation





Conclusion

The TAS functionality of RW350R-GL Module Integrated inside HP Model HSN-I65C-4 Notebook computer is tested. All test cases and corresponding test configurations work properly.