



FCC LISTED, REGISTRATION
NUMBER: 2764.01

ISED LISTED REGISTRATION
NUMBER: 23595-1

Test Report No:
4381ERM.018A1

Partial Test Report

USA FCC Part 15.247, 15.209, & CANADA RSS-247, RSS-Gen

Radio Frequency Devices. Operation within the bands 902 - 928 MHz, 2400 - 2483.5 MHz, and 5725 - 5850 MHz

Digital Transmission Systems (DTSSs), Frequency Hopping Systems (FHSs)
and License-Exempt Local Area Network (LE-LAN) Devices.

(*) Identification of item tested	Motorcycle cockpit domain controller, called Infotainment Front Control Unit (IFCU) of 12.3 inch
(*) Trademark	Visteon
(*) Model and /or type reference	HARLEYIFCU
(*) Derived model not tested	Hw version: 2.F / 2.G
Other identification of the product	FCC ID: NT8- HARLEYIFCU IC: 3043A- HARLEYIFCU FVIN: 2.0 HVIN: 2.E
(*) Features	Audio, Bluetooth (Dual HFP), Wi-Fi (Access Point / Master 5GHz - STA / Slave mode 2.4GHz & 5GHz), A2B (RF Link), GNSS, Display (Capacitive, 12.7") 2.E Variant: AM/FM HD, Tuner and water band 2.G Variant: AM/FM, Tuner 2.F: AM/FM, DAB Tuner and Radio
Manufacturer	Visteon Corporation One Village Center Drive, Van Buren Township, MI 48111, USA
Test method requested, standard	USA FCC Part 15.247 (10-1-20 Edition): Operation within the bands 902 - 928 MHz, 2400 -2483.5 MHz, and 5725 - 5850 MHz USA FCC Part 15.209 (10-1-20 Edition): Radiated emission limits; general requirements. CANADA RSS-247 Issue 3 (August 2023). CANADA RSS-Gen Issue 5 amendment 1 (March 2019). Guidance for Performing Compliance Measurements on Digital Transmission System, Frequency Hopping Spread Spectrum System, and Hybrid Systems Devices Operating Under Section 15.247 of the FCC Rules. 558074 D01 Meas Guidance v05r02 dated April 2, 2019. ANSI C63.10-2013: American National Standard for Testing Unlicensed Wireless Devices.
Summary	See Appendix A & B
Approved by (name / position & signature)	Domingo Galvez EMC&RF Lab Manager
Date of issue	09-10-2024
Report template No	FDT08_23 (*) "Data provided by the client"

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Acronyms

Acronym ID	Acronym Description
	Emission Bandwidth
# of Tx Chains	Number of Transmission Chains
Equipment	Equipment Type
Freq	Frequency
In band Peak Lvl	In band Peak Level
Lvl	Level
MP	Measurement Point
Mod	Modulation
Occ Ch BW	Occupied Channel Bandwidth
PSD	Power Spectrum Density
Peak Power	Maximum Peak Conducted Output Power
Port	Active Port

Competences and guarantees

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In order to assure the traceability to other national and international laboratories, DEKRA Certification Inc. has a calibration and maintenance program for its measurement equipment.

DEKRA Certification Inc. guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated on the report and, it is based on the knowledge and technical facilities available at DEKRA Certification at the time of performance of the test.

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The results presented in this Test Report apply only to the particular item under test established in this document.

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General conditions

1. This report is only referred to the item that has undergone the test.
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Uncertainty

Uncertainty (factor k=2) was calculated according to the DEKRA Certification internal document PODT000.

Test case	Frequency (MHz)	U (k=2)	Units
RF Power and PSD	2402-2483	0.88	dB
Occupied Bandwidth		1.87	%
Dwell Time		0.01	%
Band Edge		0.64	dB
Radiated Spurious Emission	30-180	4.27	dB
	180-1000	3.14	dB
	1000-18000	3.30	dB
	18000-40000	3.49	dB

Data provided by the client

The following data has been provided by the client:

1. Information relating to the description of the sample ("Identification of the item tested", "Trademark", "Model and/or type reference tested").
2. The sample consists of Instrument cluster functionality with Speedometer, Tachometer, Battery, Fuel Main Gages plus common warning lights. Infotainment functionality as included HD Radio NA, DAB Radio EU, or FM/AM Radio RoW, plus connectivity (USB, Bluetooth and Wi-Fi connections for Cellphone and Helmets).
3. Applicant's declaration letter shown below for model similarity.

Visteon

Name
Heidi Sepanik
Corporate Secretary

Visteon Corporation
One Village Center Drive
Van Buren Township, MI, 48111
Tel 734.710.4672
Fax 734.736.5540
hdebol@visteon.com

Date: July 18th, 2024

To:	From:
Regulatory Certification Body DEKRA Testing and Certification, S.A.U. Parque Tecnológico de Andalucía C/ Severo Ochoa 2 & 6, 29590,Málaga, España	Visteon Corporation One Village Center Drive, Van Buren Township, MI, USA. Postcode/Zip Code: 48111

Ref: EU-TEC/FCC/ISED update related to product:

Type of equipment:	Infotainment Control Unit
Brand name:	Visteon
Model name:	HARLEYIFCU

To whom it may concern,

CHANGES		
Model name/PMN:	HARLEYIFCU	Same for 3 HW versions
HW versión / HVIN:	2.E	Audio Hub, Audio Processing, HD digital radio and weather band
HW versión / HVIN:	2.F	Audio Hub, Audio Processing, DAB digital radio and Radion
HW versión / HVIN:	2.G	Audio Hub and Audio Processing
SW version:	V2239	Same for 3 HW versions
FVIN:	2.0	Same for 3 HW versions

*Same PCB, different Tunner Specs, weather band only populated on 2.E variant and Radion only populated on 2.F variant.

*Same electrical and mechanical features.

*Same PCB board is used on the 3 Hardware versions. However, only the 2.F Hardware has the DAB digital radio populated and therefore is being considered as the most complex hardware for RED certification. 2.E hardware has HD radio and water band, which make if the most complex one for FCC.

*For RED certification, partial tests have been performed over 2.E and 2.G hardware to corroborate the behaviour is the same as on 2.F hardware, test report results for 2.F product version are valid and representative for the rest of hardware versions 2.E and 2.G and partial test reports were performer for each variant depending on the product features.

*For FCC/ISED certification, partial tests have been performed over 2.F and 2.G hardware to corroborate the behaviour is the same as on 2.E hardware, test report results for 2.E product version are valid and representative for the rest of hardware versions 2.F and 2.G and partial test reports were performer for each variant depending on the product features.

*According to the geolocation of the product, the features available will be automatically activates or deactivated.

Sincerely,

By:	Heidi Sepanik	
Title:	Corporate Secretary	
Company:	Visteon Corporation	
Telephone:	734.710.4672	
e-mail:	hdebol@visteon.com	

Signature



DEKRA declines any responsibility with respect to the information provided by the client and that may affect the validity of results.

Usage of samples

Samples undergoing test have been selected by: The client.

Sample S/01 is composed of the following elements, accessories and auxiliary equipment:

Id	Control Number	Description	Manufacturer / Model	Serial N°	Date of Reception	Application
S/01	4381/21	IFCU (NA)	Visteon / HARLEYIFCU	P70901090B_41330194	2024-12-07	Element Under Test
S/01	3492/71	Display 12.7"	-	220505003086	2022-11-14	Element Under Test
S/01	3492/79	Break out board & Main harness	-	-	2022-11-14	Accessory
S/01	3492/13	HSD to USB Cable	Visteon	-	2022-11-14	Accessory
S/01	3492/19	USB type A (male) to USB type A (male) Cable	-	-	2022-11-14	Accessory
S/01	3492/85	VCAN	V-CAN / FV 5.2	4300922	2022-11-14	Accessory
S/01	3492/82	Coaxial cable	-	-	2022-11-14	Accessory
S/01	3492/83	Coaxial cable	-	-	2022-11-14	Accessory
S/01	3492/84	Coaxial cable	-	-	2022-11-14	Accessory
S/01	3492/59	USB type A (male) to USB type A (Female) Cable	-	-	2022-11-14	Accessory
S/01	1482	Laptop	LENOVO / V14 G2 ITL	PF3QAFFH	-	Auxiliary

1. Sample S/01, was used for the following test(s): All Conducted tests indicated in appendix A and B.

Test sample description

Test Sample description (compulsory information for EMC and RF testing services)

Ports..... :	Port name and description	Cable					
		Specified length [m]	Attached during test	Shielded	Coupled to patient		
	Main Connector Harness	1.5	☒	☐	☐		
	AM/FM Antenna Connector	0.1	☒	☐	☐		
	GPS Antenna Connector	0.1	☒	☐	☐		
	USB Connector	0.1	☒	☐	☐		
Supplementary information to the ports..... :		No Data Provided					
Rated power supply :	Voltage and Frequency		Reference poles				
			L1	L2	L3	N	PE
	☐	AC:	☐	☐	☐	☐	☐
	☐	AC:	☐	☐	☐	☐	☐
	☒	DC: 13.5 V					
Rated Power :		13.5V					
Clock frequencies :		40 MHz, 8MHz, 38.4MHz, 55.4667MHz					
Other parameters..... :		No Data Provided					
Software version :		v2239					
Hardware version..... :		2.E					
Dimensions in cm (W x H x D) :		36.8 x 15.4 x 6.3					
Mounting position..... :	☐	Table top equipment					
	☐	Wall/Ceiling mounted equipment					
	☐	Floor standing equipment					
	☐	Hand-held equipment					
	☒	Other: Installed in a Motorcycle					
Modules/parts :	Module/parts of test item		Type		Manufacturer		
	No Data Provided						
Accessories (not part of the test item) :	Description		Type		Manufacturer		
	Break Out Board + Main harness						
	Amplifier + Amplifier Harness + Speaker						
	AM/FM or AM/FM/DAF Antenna						
	GPS Antenna						
	VCAN + VCAN Connection						
	Wireless Headset						

Documents as provided by the applicant	Description	File name	Issue date
	Declaration Equipment Data	FDT30_18 Declaration Equipment Data – R2	07/22/2024
	Test Instructions		
	Technical Files		
	DUT Manual		
Copy of marking plate:			

Identification of the client

VISTEON CORPORATION
One Village Center Drive,
Van Buren Township, MI 48111,
USA

Testing period and place

Test Location	DEKRA Certification Inc.
Date (start)	07-16-2024
Date (finish)	07-16-2024

Document history

Report number	Date	Description
4381ERM.018	08-15-2024	First release.
4381ERM.018A1	09-10-2024	Second release. The parameters of the spectrum analyzer's graphs are added in the test results section. This modified test report cancels and replaces the test report 4381ERM.018.

Environmental conditions

In the control chamber, the following limits were not exceeded during the test:

Temperature	Min. = 15 °C Max. = 35 °C
Relative humidity	Min. = 30 % Max. = 75 %
Air pressure	Min. = 860 mbar Max. = 1060 mbar

In the semi anechoic chamber, the following limits were not exceeded during the test.

Temperature	Min. = 15 °C Max. = 35 °C
Relative humidity	Min. = 30 % Max. = 75 %
Air pressure	Min. = 860 mbar Max. = 1060 mbar

In the chamber for conducted measurements, the following limits were not exceeded during the test:

Temperature	Min. = 15 °C Max. = 35 °C
Relative humidity	Min. = 30 % Max. = 75 %
Air pressure	Min. = 860 mbar Max. = 1060 mbar

Remarks and comments

The tests have been performed by the technical personnel: Ivy Yousuf Moutushi and Yuri Barone

List of equipment used during the test

Conducted Measurements

CONTROL NUMBER	DESCRIPTION	Serial No	LAST CALIBRATION	NEXT CALIBRATION
897	Power supply (AMETEK / PROG-DC-PS)	1707A01906	N/A	N/A
1039	Fsv40 Signal Analyzer 40GHz	101627	2022-11-01	2024-11-01
1041	SMB100A Signal Generator	180180	2022-10-06	2024-10-06
1042	SMBV100A Vector Signal Generator	262575	2024-06-06	2026-06-06
1107	Ethernet SNMP Thermometer	60038026952	2022-08-16	2024-10-18
1313	Wireless Measurement Software R&S WMS32	-	N/A	N/A

Testing verdicts

Fail	F
Not applicable	N/A
Not measured	N/M
Pass	P

Summary

Bluetooth EDR

Requirement – Test case	FCC PART 15 PARAGRAPH / RSS-247	Verdict	Remark
RSS-247 5.1 (b) / FCC 15.247 (a) (1) 20 dB Bandwidth		N/M	Refer 1
RSS-247 5.1 (b) / FCC 15.247 (a) (1) Carrier Frequency Separation		N/M	Refer 1
RSS-247 5.1 (d) / FCC 15.247 (a) (1) (iii) Time of Occupancy (Dwell Time)		N/M	Refer 1
RSS-247 5.1 (d) / FCC 15.247 (a) (1) (iii) Number of hopping channels		N/M	Refer 1
RSS-247 5.4 (b) / FCC 15.247 (b) (1) Maximum Peak Conducted output power & Antenna gain		P	N/A
RSS-247 5.5 / FCC 15.247 (d) Band-edge emissions compliance (Transmitter) - Conducted		N/M	Refer 1
FCC 2.1049 / 99dBw Occupied Channel Bandwidth 99%		N/M	Refer 1
RSS-247 5.5 / FCC 15.247 (d) Emissions compliance (Transmitter) - Conducted		N/M	Refer 1
RSS-247 5.5 / FCC 15.247 (d) Emissions compliance (Transmitter) - Radiated		N/M	Refer 1
Supplementary information and remarks: 1. Only Partial testing has been requested			

Wi-Fi 2.4GHz

Requirement – Test case	FCC PART 15 PARAGRAPH / RSS-247	Verdict	Remark
RSS-247 5.2 (a) / FCC 15.247 (a) (2) 6 dB Bandwidth		N/M	Refer 1
RSS-247 5.2 (b) / FCC 15.247 (e) Power spectral density		N/M	Refer 1
RSS-247 5.4 (d) e.i.r.p		N/M	Refer 1
RSS-247 5.4 (d) / FCC 15.247 (b) (1) Maximum Average Conducted output Power		P	N/A
RSS-247 5.5 / FCC 15.247 (d) Band-edge emissions compliance (Transmitter) - Conducted		N/M	Refer 1
FCC 2.1049 / Occupied Channel Bandwidth 99%		N/M	Refer 1
RSS-247 5.5 / FCC 15.247 (d) Emissions compliance (Transmitter) - Conducted		N/M	Refer 1
RSS-247 5.5 / FCC 15.247 (d) Emissions compliance (Transmitter) - Radiated		N/M	Refer 1
Supplementary information and remarks: 1. Only Partial testing has been requested.			

Appendix A: Test results. Bluetooth Classic (BR & EDR)

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PRODUCT INFORMATION

The following information is provided by the supplier

Information	Description
Modulation	GFSK, $\pi/4$ -DQPSK, 8-DPSK
Operation mode 1:	
Operating Frequency Range	2402 – 2480 MHz
Nominal Channel Bandwidth	1 MHz
RF Output Power	4 dBm
Antenna type	Integral Antenna
Antenna gain	1.5 dBi
Nominal Voltage	
- Supply Voltage	13.5 Vdc
- Type of power source	DC power supply
Equipment type	Bluetooth Classic

TEST CONDITIONS

(*): Data provided by the client.

TEST CONDITIONS	DESCRIPTION
TC/01	<u>Power supply (V):</u> V_{nominal}: 13.5 Vdc <u>Temperature:</u> T_{nominal}: +15 to +35 °C <u>Modulation:</u> GFSK <u>Test Frequencies for conducted tests:</u> Lowest range: 2402 MHz (chipset 1 & 2)
TC/02	<u>Power supply (V):</u> V_{nominal}: 13.5 Vdc <u>Temperature:</u> T_{nominal}: +15 to +35 °C <u>Modulation:</u> π/4-DQPSK <u>Test Frequencies for Conducted tests:</u> Lowest range: 2402 MHz (chipset 1 & 2)
TC/03	<u>Power supply (V):</u> V_{nominal}: 13.5 Vdc <u>Temperature:</u> T_{nominal}: +15 to +35 °C <u>Modulation:</u> 8-DPSK <u>Test Frequencies for Conducted tests:</u> Lowest range: 2402 MHz (chipset 1 & 2)

See the comparison table between previous test results (test report 3492ERM.023) and test results with the new sample shown in this test report below:

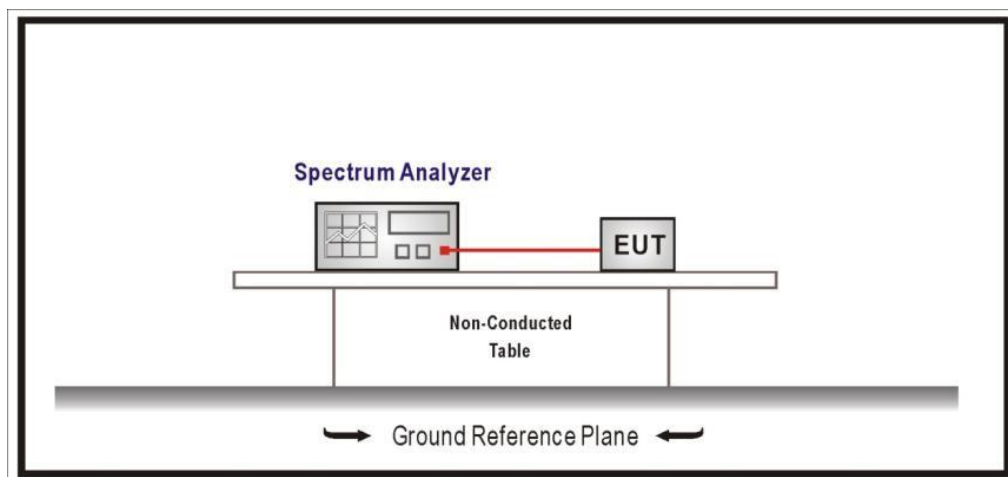
Chipset 1:

Modulation	Frequency (MHz)	Maximum conducted power (dBm)		Delta
		3492 (test report 3492ERM.023)	4381	
GFSK	2402	2.7	2.1	-0.6
$\pi/4$ - DQPSK	2402	6.0	4.8	-1.2
8-DPSK	2402	2.8	2.9	0.1

Chipset 2:

Modulation	Frequency (MHz)	Maximum conducted power (dBm)		Delta
		3492 (test report 3492ERM.023)	4381	
GFSK	2402	0.5	1.4	0.9
$\pi/4$ - DQPSK	2402	3.0	3.4	0.4
8-DPSK	2402	3.3	3.9	0.6

CONDUCTED MEASUREMENTS:



TEST CASE DETAILS

RSS-247 5.4 (b) / FCC 15.247 (b) (1) Maximum Peak Conducted & Antenna gain

Limits

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 hopping channels: 1 watt (30 dBm). The e.i.r.p. shall not exceed 4 W (RSS-247).

Maximum declared antenna gain: 1.5 dBi

Chipset 1:

Modulation: BT (GFSK 1-DH5)

Results

Freq (MHz)	# of Tx Chains	Port	Peak Power (dBm)	Maximum EIRP power (dBm)
2402.00000	1	1	2.1	3.6

Modulation: BT ($\pi/4$ DQPSK 2-DH5)

Results

Freq (MHz)	# of Tx Chains	Port	Peak Power (dBm)	Maximum EIRP power (dBm)
2402.00000	1	1	4.8	6.3

Modulation: BT (8DPSK 3-DH5)

Results

Freq (MHz)	# of Tx Chains	Port	Peak Power (dBm)	Maximum EIRP power (dBm)
2402.00000	1	1	2.9	4.4

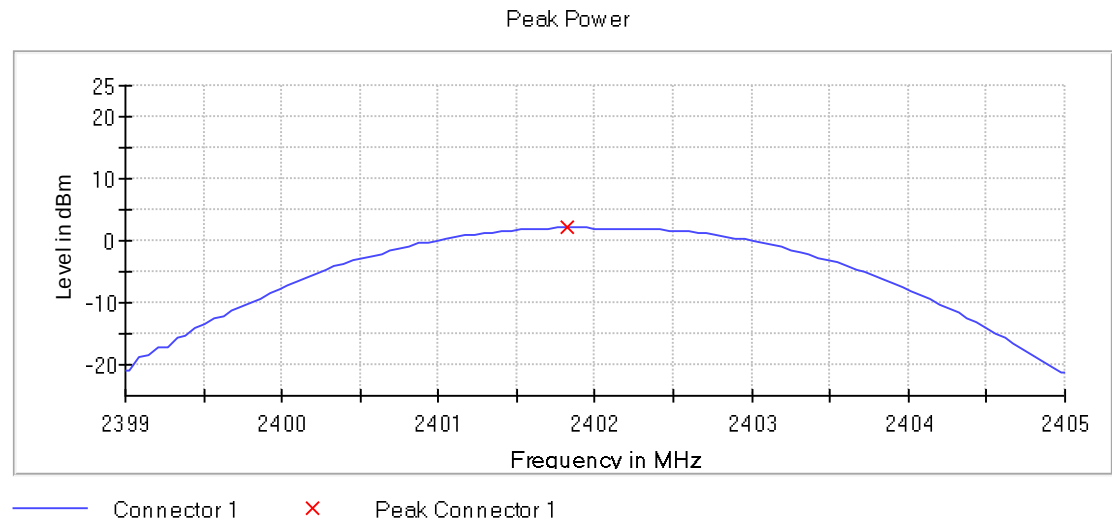
Verdict

Pass

Attachments

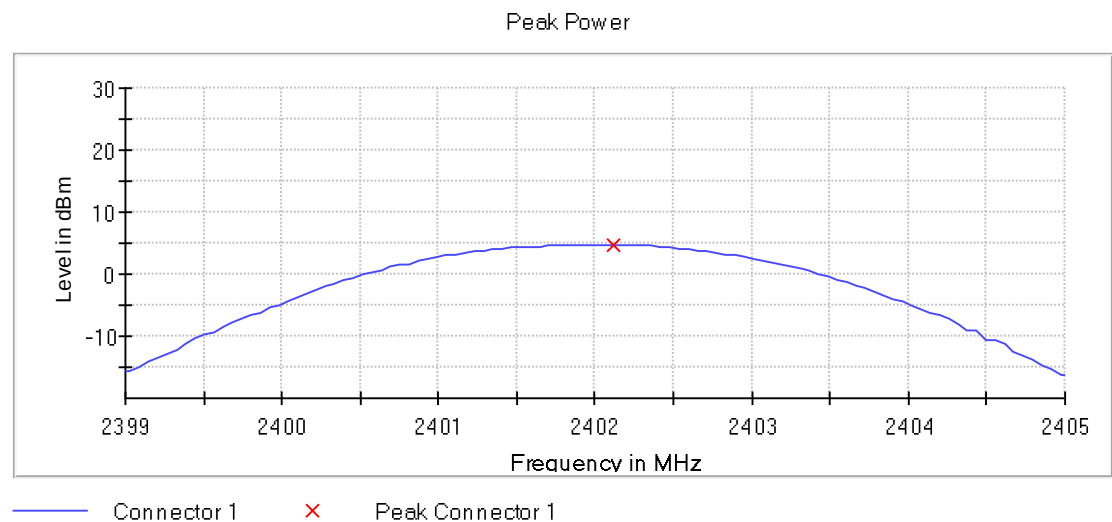
Frequency MHz = 2402.00000, Equipment Type = Frequency Hopping Spread Spectrum systems (DSS),
Modulation = BT (GFSK 1-DH5), Number of Transmission Chains = 1,

Images:



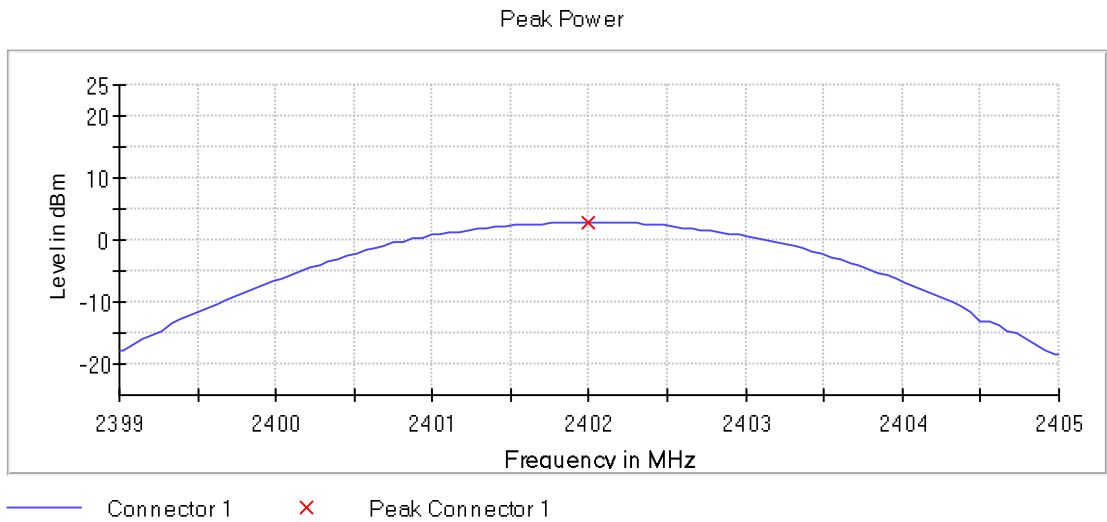
Frequency MHz = 2402.00000, Equipment Type = Frequency Hopping Spread Spectrum systems (DSS),
Modulation = BT ($\pi/4$ DQPSK 2-DH5), Number of Transmission Chains = 1,

Images:



Frequency MHz = 2402.00000, Equipment Type = Frequency Hopping Spread Spectrum systems (DSS),
Modulation = BT (8DPSK 3-DH5), Number of Transmission Chains = 1,

Images:



Chipset 2:

Modulation: BT (GFSK 1-DH5)

Results

Freq (MHz)	# of Tx Chains	Port	Peak Power (dBm)	Maximum EIRP power (dBm)
2402.00000	1	1	1.4	2.9

Modulation: BT ($\pi/4$ DQPSK 2-DH5)

Results

Freq (MHz)	# of Tx Chains	Port	Peak Power (dBm)	Maximum EIRP power (dBm)
2402.00000	1	1	3.4	4.9

Modulation: BT (8DPSK 3-DH5)

Results

Freq (MHz)	# of Tx Chains	Port	Peak Power (dBm)	Maximum EIRP power (dBm)
2402.00000	1	1	3.9	5.4

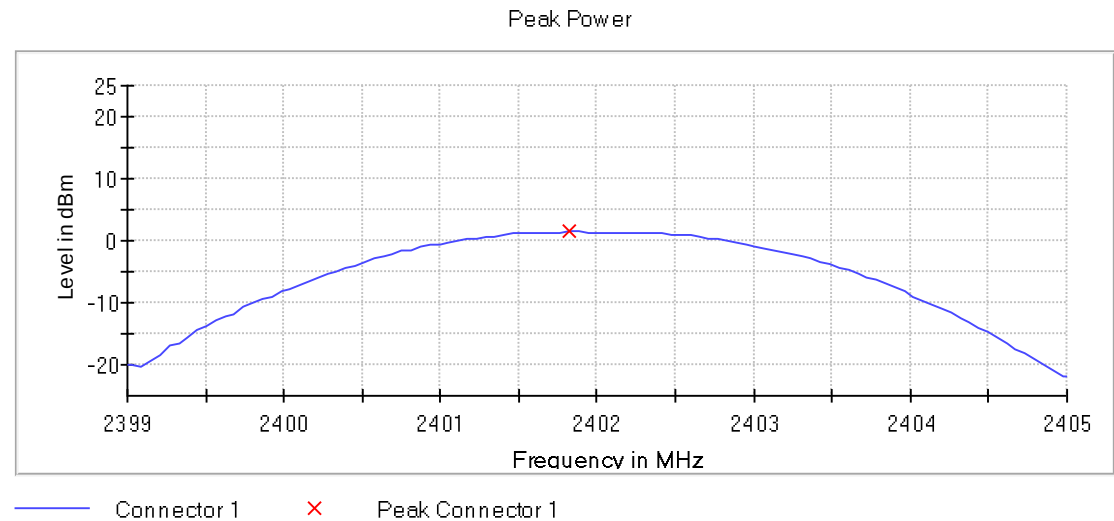
Verdict

Pass

Attachments

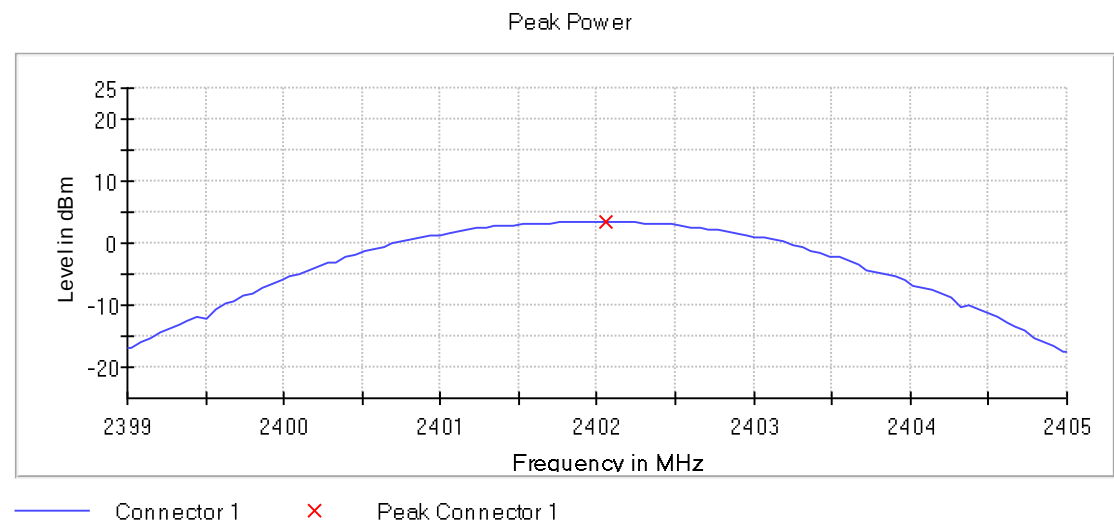
Frequency MHz = 2402.00000, Equipment Type = Frequency Hopping Spread Spectrum systems (DSS),
Modulation = BT (GFSK 1-DH5), Number of Transmission Chains = 1,

Images:



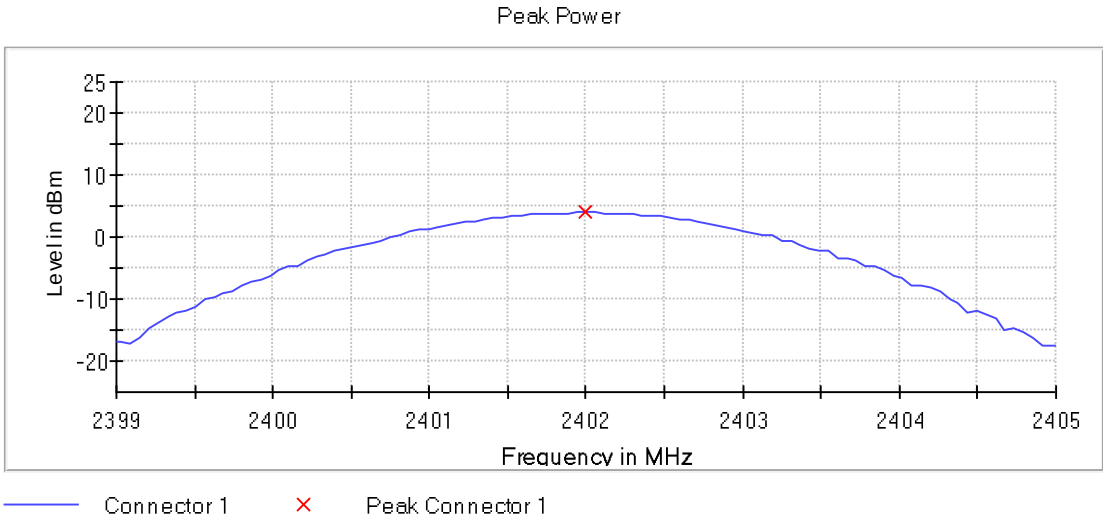
Frequency MHz = 2402.00000, Equipment Type = Frequency Hopping Spread Spectrum systems (DSS),
Modulation = BT ($\pi/4$ DQPSK 2-DH5), Number of Transmission Chains = 1,

Images:



Frequency MHz = 2402.00000, Equipment Type = Frequency Hopping Spread Spectrum systems (DSS),
Modulation = BT (8DPSK 3-DH5), Number of Transmission Chains = 1,

Images:



Spectrum Analyzer Parameters

Setting	Instrument Value
Start Frequency	2.39900 GHz
Stop Frequency	2.40500 GHz
Span	6.000 MHz
RBW	2.000 MHz
VBW	10.000 MHz
SweepPoints	101
Sweeptime	1.000 ms
Reference Level	10.000 dBm
Attenuation	20.000 dB
Detector	MaxPeak
SweepCount	100
Filter	3 dB
Trace Mode	Max Hold
Sweeptype	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.50 dB
Run	4 / max. 150
Stable	3 / 3
Max Stable Difference	0.11 dB

Appendix B: Test results. Wi-Fi 2.4GHz

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PRODUCT INFORMATION

The following information is provided by the supplier

Information	Description
Modulation	non-FHSS
Maximum RF Output Power	Adaptive Equipment without the possibility to switch to a non- adaptive mode.
Operation mode	
- Operating Frequency Range	2400 – 2483.5 MHz
- Nominal Channel Bandwidth	20 MHz 40 MHz
Extreme operating conditions	
- Temperature range	-40 °C to +65 °C
Antenna type	
Antenna gain	1.5 dBi
Nominal Voltage	
- Supply Voltage	13.5 Vdc
- Type of power source	DC voltage
Equipment type	Wi-Fi 2.4 GHz b/g/n20/n40/ax20/ax40
Geo-location capability	No

TEST CONDITIONS

(*): Data provided by the client.

TEST CONDITIONS	DESCRIPTION
TC/01 ⁽¹⁾ (b mode)	<u>Power supply (V):</u> V_{nominal}: 13.5 Vdc <u>Temperature:</u> T_{nominal}: +15 to +35 °C <u>Channel Bandwidth:</u> 20 MHz <u>Test Frequencies for Conducted tests:</u> Lowest channel: 2412 MHz
TC/02 ⁽¹⁾ (g mode)	<u>Power supply (V):</u> V_{nominal}: 13.5 Vdc <u>Temperature:</u> T_{nominal}: +15 to +35 °C <u>Channel Bandwidth:</u> 20 MHz <u>Test Frequencies for Conducted tests:</u> Middle channel: 2437 MHz
TC/03 ⁽¹⁾ (n mode)	<u>Power supply (V):</u> V_{nominal}: 13.5 Vdc <u>Temperature:</u> T_{nominal}: +15 to +35 °C <u>Channel Bandwidth:</u> 20/40 MHz <u>Test Frequencies for Conducted tests:</u> 20 MHz 40 MHz Middle channel: 2437 MHz Middle channel: 2442 MHz
TC/04 ⁽¹⁾ (ax mode)	<u>Power supply (V):</u> V_{nominal}: 13.5 Vdc <u>Temperature:</u> T_{nominal}: +15 to +35 °C <u>Channel Bandwidth:</u> 20/40 MHz <u>Test Frequencies for Conducted tests:</u> 20 MHz 40 MHz Lowest channel: 2412 MHz Highest channel: 2452 MHz

During transmitter test the EUT was controlled by a SW tool provided by the client to operate in a continuous transmit mode on the modulation schemes and test channels as required.

The data rates below were selected as the worst-case ones in terms of conducted power and spurious emissions for each modulation scheme, based on preliminary testing:

- 802.11b: 1 Mbit/s
- 802.11g: 6 Mbit/s
- 802.11n: HT20 (OFDM MCS5)
- 802.11n: HT40 (OFDM MCS5)
- 802.11ax20 OFDM – SU Full-channel allocation: HE20 SS1 (OFDM MCS5)
- 802.11ax40 OFDMA – RU Subcarrier allocation: HE40 SS1 (OFDMA MCS5)

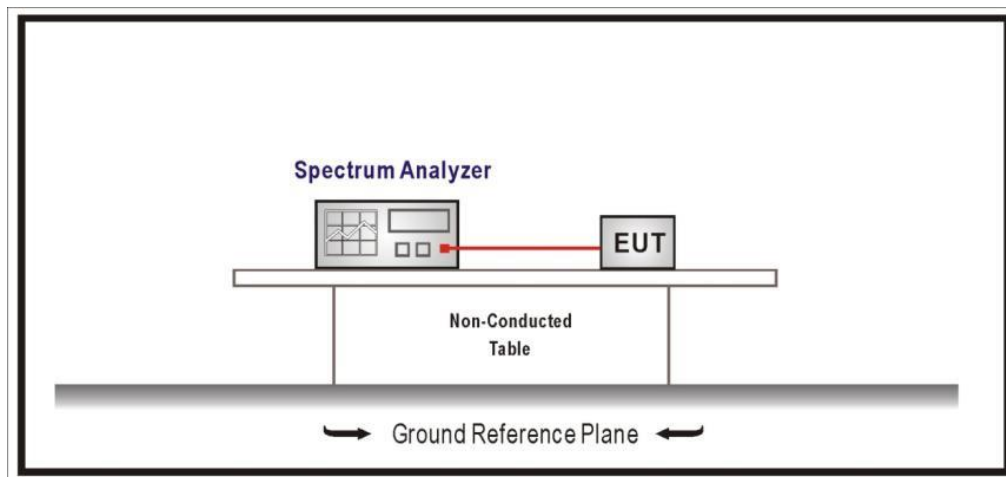
The worst-case RU combinations used in the SISO/MIMO modes measurement are indicated as follows:

- 20 MHz BW: RU996 offset 67 (full Tone)
- 40 MHz BW: RU26 offset 8 (Mid Tone)

See below the comparison table between previous test results (test report 3492ERM.023 and test results with the new sample shown in this test report:

Bandwidth (MHz)	Mode	Frequency (MHz)	Maximum conducted power (dBm)		Delta
			3492 (test report 3492ERM.023)	4381	
20	b	2412	17.0	16.5	-0.5
	g	2437	16.6	15.7	-0.9
	n	2437	16.6	15.6	-1.0
	ax	2412	4.8	5.0	0.2
40	n	2437	16.6	15.5	-1.1
	ax	2452	4.5	3.1	-1.4

CONDUCTED MEASUREMENTS:



TEST CASES DETAILS

RSS-247 5.4 (a) / FCC 15.247 (b) (1) Maximum Average Conducted Output Power

Limits

For systems using digital modulation in the 2400 -2483.5 MHz band: 1 watt (30 dBm).
The e.i.r.p. shall not exceed 4 W (36 dBm) (RSS-247).

Results

Antenna gain: 1.5 dBi
Modulation: 802.11b (DSSS 1 Mbit/s)

Freq (MHz)	BW (MHz)	E.I.R.P. (dBm)
2412.00000	20	18

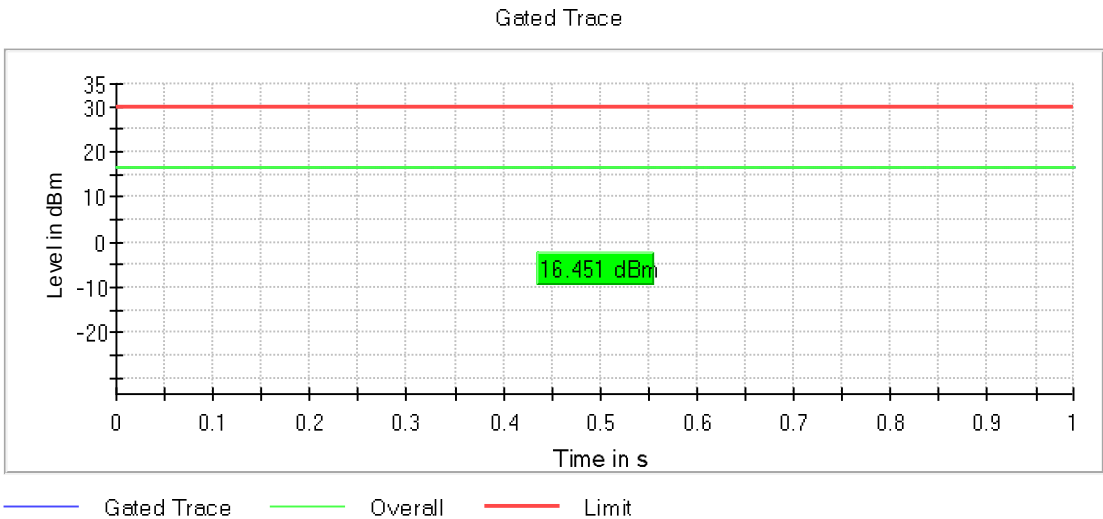
Verdict

Pass

Attachments

Frequency MHz = 2412.00000, Equipment Type = Digital Transmission System (DTS), Bandwidth MHz = 1, Modulation = 802.11b , Number of Transmission Chains = 1,

Images:



Antenna gain: 1.5 dBi

Modulation: 802.11g (OFDM 6 Mbit/s)

Results

Freq (MHz)	BW (MHz)	E.I.R.P. (dBm)
2437.00000	20	17.2

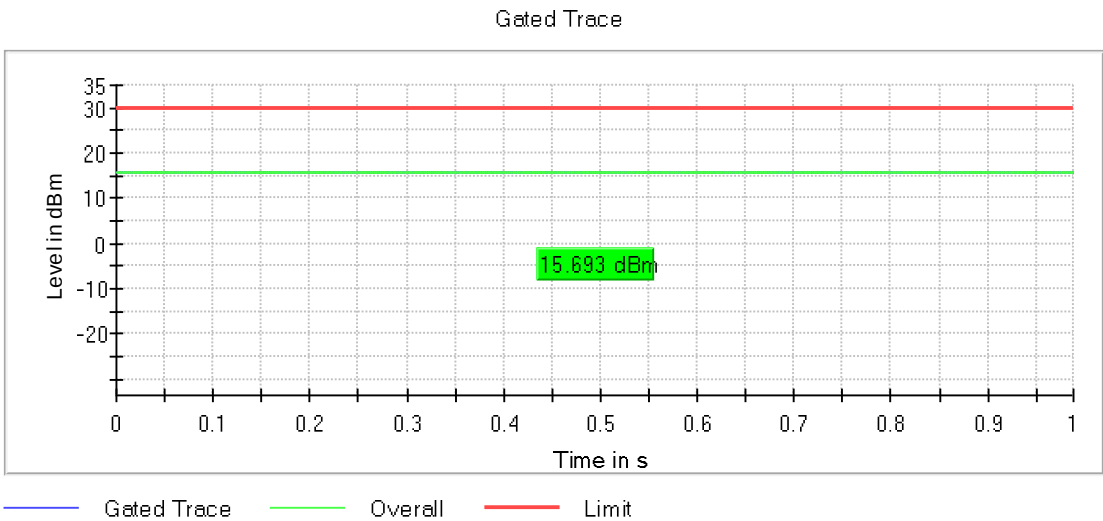
Verdict

Pass

Attachments

Frequency MHz = 2437.00000, Equipment Type = Digital Transmission System (DTS), Bandwidth MHz = 1, Modulation = 802.11g, Number of Transmission Chains = 1,

Images:



Antenna gain: 1.5 dBi

Modulation: 802.11n HT20 (OFDM MCS5)

Results

Freq (MHz)	BW (MHz)	E.I.R.P. (dBm)
2437.00000	20	17.1

Modulation: 802.11n HT40 (OFDM MCS5)

Results

Freq (MHz)	BW (MHz)	E.I.R.P. (dBm)
2437.00000	40	17.0

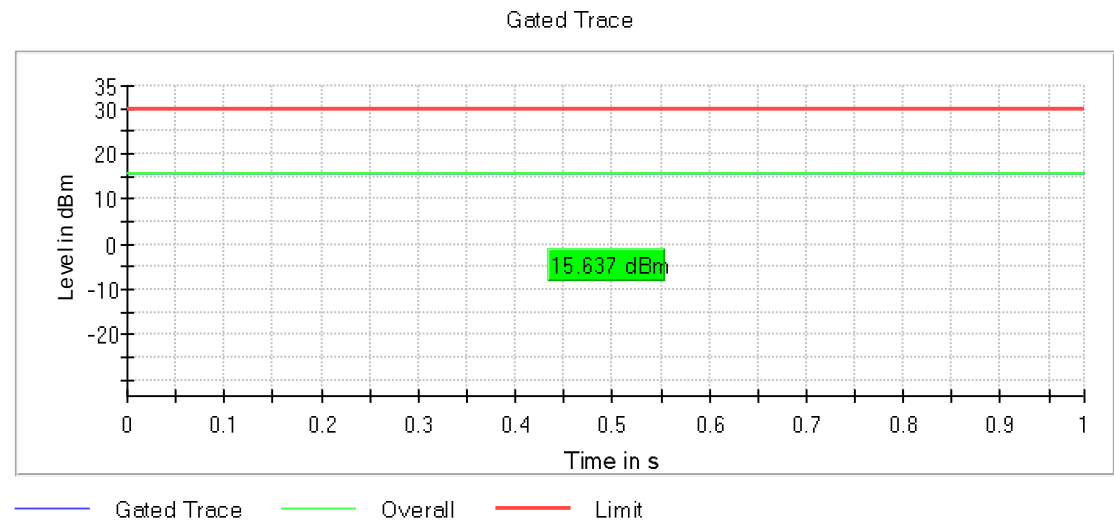
Verdict

Pass

Attachments

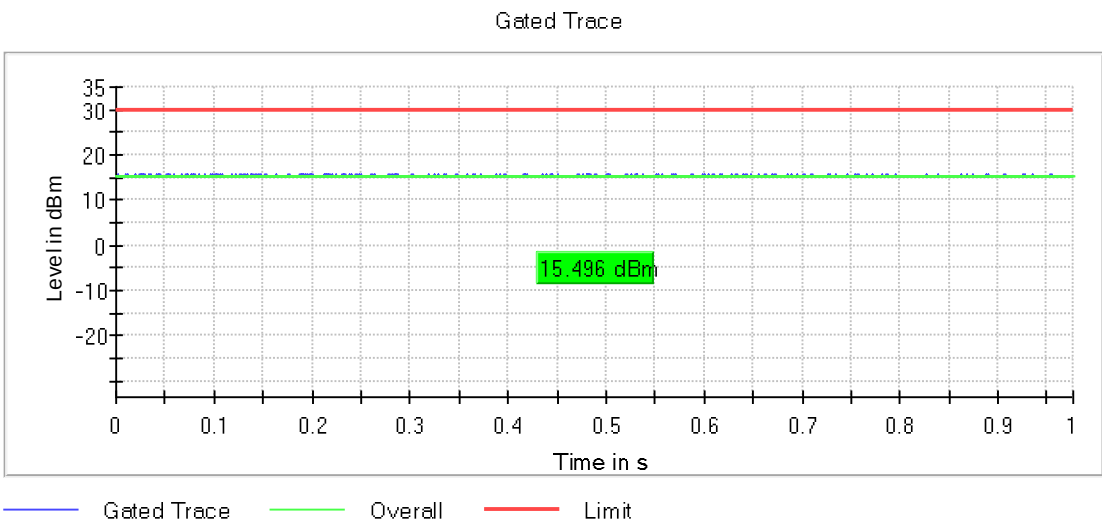
Frequency MHz = 2437.00000, Equipment Type = Digital Transmission System (DTS), Bandwidth MHz = 1,
Modulation = 802.11n , Number of Transmission Chains = 1,

Images:



Frequency MHz = 2437.00000, Equipment Type = Digital Transmission System (DTS), Bandwidth MHz = 1,
Modulation = 802.11n , Number of Transmission Chains = 1,

Images:



17.0

Antenna gain: 1.5 dBi

Modulation: 802.11ax HE20 SS1 (OFDM MCS5) - SU Full-channel allocation

Results

Freq (MHz)	BW (MHz)	E.I.R.P. (dBm)
2412.00000	20	6.5

Modulation: 802.11ax HE40 SS1 (OFDMA MCS5) - RU Subcarrier allocation

Results

Freq (MHz)	BW (MHz)	E.I.R.P. (dBm)
2452.00000	40	4.6

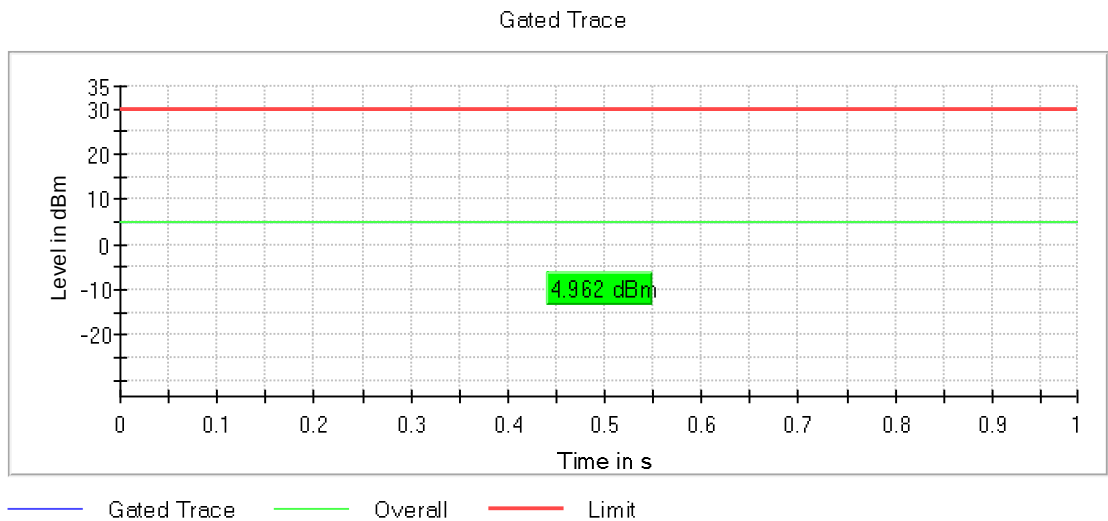
Verdict

Pass

Attachments

Frequency MHz = 2412.00000, Equipment Type = Digital Transmission System (DTS), Bandwidth MHz = 1,
Modulation = 802.11ax HE20 SS1 (OFDM MCS5) - SU Full-channel allocation, Number of Transmission
Chains = 1,

Images:



Frequency MHz = 2452.00000, Equipment Type = Digital Transmission System (DTS), Bandwidth MHz = 40,
Modulation = 802.11ax HE40 SS1 (OFDMA MCS5) - RU Subcarrier allocation, Number of Transmission
Chains = 1,

Images:



OSP PowerMeter settings

Setting	Instrument Value	Target Value
Measurement Time	1.000 s	1.000 s
Points	1000000	1000000
Time resolution	1.000 µs	1.000 µs