Test report no.: *Prüfbericht-Nr.:*	**CN23GXTA 001**	**Order No.:** *Auftragsnr.:*	168430754	**Page 1 of 16** *Seite 1 von 16*
Client reference no.: *Kunden-Referenz-Nr.:*	N/A	**Order date:** *Auftragsdatum:*	2023-05-30	
Client: *Auftraggeber:*	CompanyDeep Ltd St John's Innovation Centre Cowley Road Cambridge CB40WS United Kingdom			
Test item: *Prüfgegenstand:*	IDC7 Bluetooth Module			
Identification / Type no.: *Bezeichnung / Typ-Nr.:*	IDC737 (Trademark: N/A)			
Order content: *Auftrags-Inhalt*:	Type test			
Test specification *Prüfgrundlage:*	CFR47 FCC Part 15: Subpart C Section 15.247		RSS-247 Issue 2 February 2017 RSS-Gen Issue 5 March 2019	
Date of sample receipt: *Wareneingangsdatum:*	2023-06-12	Refer to photos document		
Test sample no: *Prüfmuster-Nr.:*	A003492876-003			
Testing period: *Prüfzeitraum:*	2023-06-13 – 2023-07-06			
Place of testing: *Ort der Prüfung:*	TÜV Rheinland (Shenzhen) Co., Ltd.			
Testing laboratory: *Prüflaboratorium:*	TÜV Rheinland (Shenzhen) Co., Ltd.			
Test result*: *Prüfergebnis*:*	Pass			

tested by: *geprüft von:*	x Signed by: Harry W. C. Wu	**authorized by:** *genehmigt von:*	x Signed by: Alex Lan
Date: 2023-08-02 *Datum:*		**Issue date:** 2023-08-03 *Ausstellungsdatum:*	
Position / *Stellung*:	Project Manager	**Position** / *Stellung*:	Reviewer

Other: *Sonstiges:*
FCC ID: 2A3WYID7 IC: 30237-IDC747 HVIN: IDC737-A
This test report is for Classical Bluetooth function. The report is based on original report TCT220104E013 for Class 2 permissive change, due to extend the antenna, detials as listed in CIIPC letter. It verfified that there is no degradation on radio power, and only the RSE data were reported.

Condition of the test item at delivery: *Zustand des Prüfgegenstandes bei Anlieferung:* Test item complete and undamaged / Prüfmuster vollständig und unbeschädigt

* Legend:	P(ass) = passed a.m. test specification(s)	F(ail) = failed a.m. test specification(s)	N/A = not applicable	N/T = not tested
* Legende:	P(ass) = entspricht o.g. Prüfgrundlage(n)	F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet

This test report only relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.
V05

Remarks
Anmerkungen

1	The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request. *Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben.* *Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.*
2	As contractually agreed, this document has been signed digitally only. TUV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TUV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged. *Wie vertraglich vereinbart, wurde dieses Dokument nur digital unterzeichnet. Der TÜV Rheinland hat nicht überprüft, welche rechtlichen oder sonstigen diesbezüglichen Anforderungen für dieses Dokument gelten. Diese Überprüfung liegt in der Verantwortung des Benutzers dieses Dokuments. Auf Verlangen des Kunden kann der TÜV Rheinland die Gültigkeit der digitalen Signatur durch ein gesondertes Dokument bestätigen. Diese Anfrage ist an unseren Vertrieb zu richten. Eine Umweltgebühr für einen solchen zusätzlichen Service wird erhoben.*
3	Test clauses with remark of * are subcontracted to qualified subcontractors and descripted under the respective test clause in the report. Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report. *Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben. Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt.*
4	The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the “Zero Guard Band Rule” and “Simple Acceptance” in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019. *Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnisen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezueglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019.*

Test Summary

5.1.1 ANTENNA REQUIREMENT
RESULT: Pass

5.1.2 RADIATED SPURIOUS EMISSION
RESULT: Pass

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1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Photographs of the Test Set-up

Appendix B: Test Results.

2 Test Sites

2.1 Test Facilities

TÜV Rheinland (Shenzhen) Co., Ltd.
No.362, Huanguan Middle Road, Songyuansha Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China/518110

FCC Registration No.: 694916

IC Registration No.: 25069 and the CAB identifier is CN0078.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Radio Spectrum Testing (TS8997)				
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Cal. until**
EXA Signal Analyzer, Multi-touch	Keysight	N9010B	MY60241175	2023-10-10
MXG X-Series RF Vector Signal Generator	Keysight	N5182B	MY61250137	2023-10-10
EXG X-Series Microwave Analog Signal Generator	Keysight	N5173B	MY61250141	2023-10-10
DC Power Supply	Keysight	E3642A	MY61276100	2023-10-10
Wireless Connectivity Tester	R&S	CMW270	102505	2023-10-10
Power Control Unit	Tonscend	JS0806-4ADC	N/A	2023-10-10
Automation Control Unit	Tonscend	JS0806-2	21C8060396	2023-10-10
Test Software	Tonscend	JS1120-3	N/A	N/A
Control PC	Lenovo	TianYi510S-071MB	YLX23JMF	N/A
Humid & Temp Programmable Tester	BOST	NTH090-60	19040801	2024-03-15
Shielding Room 8#	Albatross	SR8	APC17151-SR8	2024-06-22
Unwanted Emission Testing (TS9975)				
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Cal. until**
EMI Test Receiver	R&S	ESR 7	102021	2023-08-02
Signal Analyzer	R&S	FSV 40	101439	2023-08-01
System Controller Interface	R&S	SCI-100	S10010038	N/A
Filterbank	R&S	Wlan	100759	2023-08-01
OSP	R&S	OSP 120	102040	N/A
Pre-amplifier	R&S	SCU08F1	08320031	2023-08-02
Amplifier	R&S	SCU-18F	180070	2023-08-02
Amplifier	R&S	SCU40A	100475	2023-08-02
Trilog Broadband Antenna (30 MHz - 7 GHz)	Schwarzbeck	VULB 9162	193	2024-08-06
Double-Ridged Antenna (1 -18 GHz)	ETS-LINDGREN	3117	00218717	2024-08-06
Wideband Ridged Horn Antenna (18-40 GHz)	Steatite	QMS-00880	19067	2024-08-27
Active Loop Antenna	Schwarzbeck	FMZB 1513	302	2023-08-06
Test software	R&S	EMC32 (V10.60.10)	N/A	N/A
Control PC	Dell	OptiPlex 7050	36NV9P2	N/A
3m Semi-Anechoic Chamber	Albatross	SAC-3m	APC17151-SAC	2024-06-22

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basics using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table

Parameter	Uncertainty (k=2)
Occupied Channel Bandwidth	± 2.08 %
RF output power, conducted	± 0.99 dB
RF power density, conducted	± 0.99 dB
Unwanted Emissions, conducted	± 0.89 dB
All emissions, radiated	± 4.17 dB

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A & B & C of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at No.362, Huanguan Middle Road, Songyuansha Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China/518110 is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3 General Product Information

3.1 Product Function and Intended Use

The EUT is Bluetooth Module, which supports Bluetooth dual mode technology.

For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 2: Technical Specification of EUT

General Information of EUT	Value
Kind of Equipment	IDC7 Bluetooth Module
Type Designation	IDC737
Trademark	N/A
FCC ID	2A3WYID7
IC	30237-IDC747
HVIN	IDC737-A
Operating Voltage	DC3.3V
Technical Specification of Classical Bluetooth	
Bluetooth Core Version	Bluetooth 5.2
Operating Frequency band	2402 ~ 2480 MHz
Channel Number	79 channels
Channel separation	1MHz
Modulation	GFSK, π/4DQPSK, 8DPSK
Antenna Type	External chip antenna
Antenna Gain	0 dBi
Technical Specification of Bluetooth Low Energy	
Bluetooth Core Version	Bluetooth 5.2
Operating Frequency band	2402 ~ 2480 MHz
Channel Number	40 channels
Channel separation	2MHz
Data rate	1Mbps, 2Mbps
Modulation	GFSK
Antenna Type	External chip antenna
Antenna Gain	0 dBi

Table 3: RF Channel and Frequency of Classic Bluetooth

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
00	**2402.00**	20	2422.00	40	2442.00	60	2462.00
01	2403.00	21	2423.00	41	2443.00	61	2463.00
02	2404.00	22	2424.00	42	2444.00	62	2464.00
03	2405.00	23	2425.00	43	2445.00	63	2465.00
04	2406.00	24	2426.00	44	2446.00	64	2466.00
05	2407.00	25	2427.00	45	2447.00	65	2467.00
06	2408.00	26	2428.00	46	2448.00	66	2468.00
07	2409.00	27	2429.00	47	2449.00	67	2469.00
08	2410.00	28	2430.00	48	2450.00	68	2470.00
09	2411.00	29	2431.00	49	2451.00	69	2471.00
10	2412.00	30	2432.00	50	2452.00	70	2472.00
11	2413.00	31	2433.00	51	2453.00	71	2473.00
12	2414.00	32	2434.00	52	2454.00	72	2474.00
13	2415.00	33	2435.00	53	2455.00	73	2475.00
14	2416.00	34	2436.00	54	2456.00	74	2476.00
15	2417.00	35	2437.00	55	2457.00	75	2477.00
16	2418.00	36	2438.00	56	2458.00	76	2478.00
17	2419.00	37	2439.00	57	2459.00	77	2479.00
18	2420.00	38	2440.00	58	2460.00	**78**	**2480.00**
19	2421.00	**39**	**2441.00**	59	2461.00	--	--

Table 4: RF Channel and Frequency of Bluetooth Low Energy

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
00	**2402.00**	10	2422.00	20	2442.00	30	2462.00
01	2404.00	11	2424.00	21	2444.00	31	2464.00
02	2406.00	12	2426.00	22	2446.00	32	2466.00
03	2408.00	13	2428.00	23	2448.00	33	2468.00
04	2410.00	14	2430.00	24	2450.00	34	2470.00
05	2412.00	15	2432.00	25	2452.00	35	2472.00
06	2414.00	16	2434.00	26	2454.00	36	2474.00
07	2416.00	17	2436.00	27	2456.00	37	2476.00
08	2418.00	18	2438.00	28	2458.00	38	2478.00
09	2420.00	**19**	**2440.00**	29	2460.00	**39**	**2480.00**

3.3 Independent Operation Modes

The basic operation modes are:

A. On
   1. Bluetooth transmitting mode (BR & EDR mode)
      a) Low Channel
      b) Middle Channel
      c) High Channel

B. On, Transmitting on Hopping channel

C. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- Application Form
- Block Diagram
- Schematics
- Technical Description
- FCC/IC Label and Location Info
- Photo Document
- User Manual

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All testing were performed according to the procedures in ANSI C63.10: 2013.

4.3 Special Accessories and Auxiliary Equipment

Table 5: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N or Rating
Laptop	Lenovo	T480	PF-16A6N8

4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 30MHz)

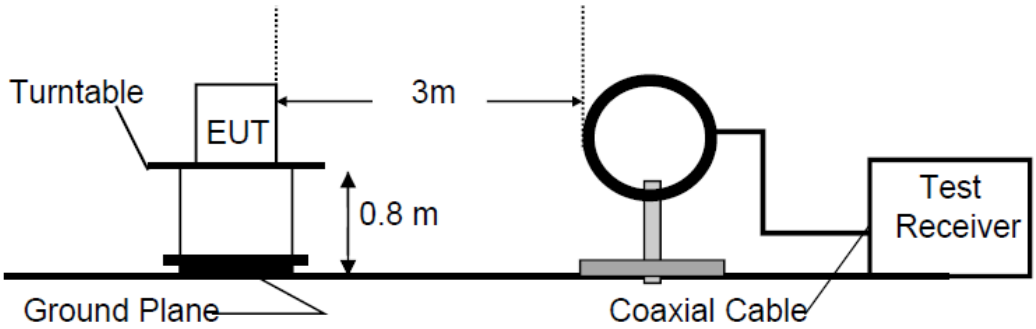


Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

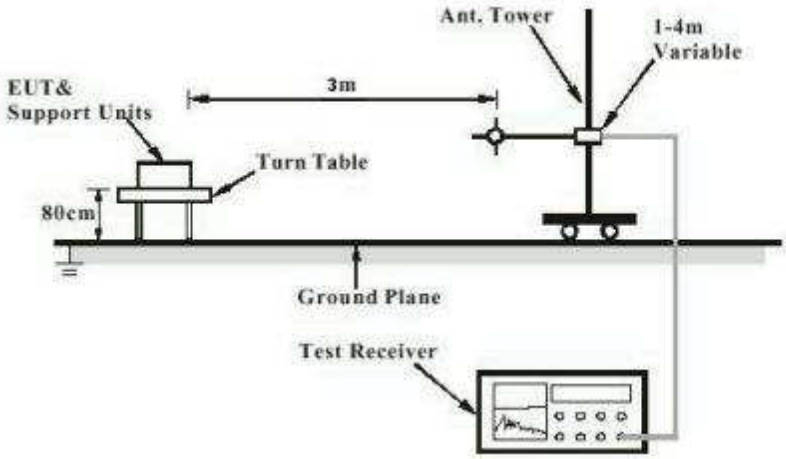


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

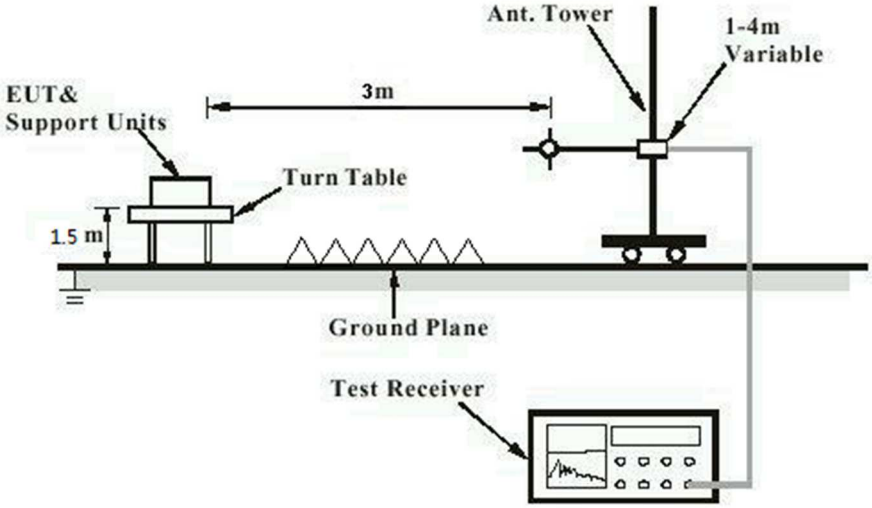
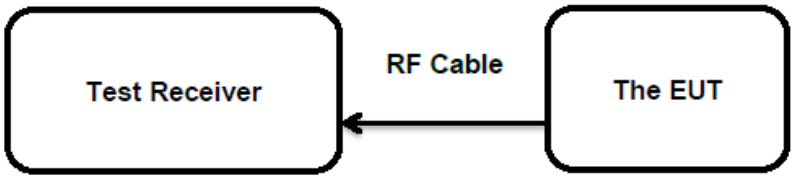


Diagram of Measurement Configuration for Conducted Transmitter Measurement



5 Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(b)(4) and Part 15.203 RSS-Gen Clause 8.3

According to the manufacturer declared, the EUT has one external chip antenna, the directional gain of antenna is 0 dBi , and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

5.1.2 Radiated Spurious Emission

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(d) & FCC Part 15.205 RSS-247 Clause 3.3
Basic standard	:	ANSI C63.10: 2013
Limits	:	Refer to 15.209(a) of FCC part 15.247(d) RSS-Gen Table 6 & Table 7
Kind of test site	:	3m Semi-anechoic Chamber

Test Setup

Date of testing	:	2023-06-13 to 2023-07-06
Input voltage	:	DC3.3V
Operation mode	:	A
Test channel	:	Low/Middle/High
Ambient temperature	:	Refer to test result
Relative humidity	:	Refer to test result
Atmospheric pressure	:	101 kPa

Remark:
During the pretest the EUT was rotated through three orthogonal axes to determine the attitude that maximizes the emissions. After that the EUT was manually handled to find the orientation that has the maximum emission, which is the orientation shown in the test set-up photos.

Testing was carried out within frequency range 9kHz to the tenth harmonics.

For the measurement records, refer to the appendix B

6 Photographs of the Test Set-Up

For photographs of the test set-up, refer to the appendix A.

7 List of Tables

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Appendix B: Test Results

APPENDIX B: TEST RESULTS **1**
APPENDIX B.1: TEST RESULTS OF RADIATED SPURIOUS EMISSIONS 2
30MHz - 1GHz *2*
1GHz - 18GHz *4*
APPENDIX B.2: TEST RESULTS OF RADIATED EMISSIONS IN RESTRICTED BANDS 16

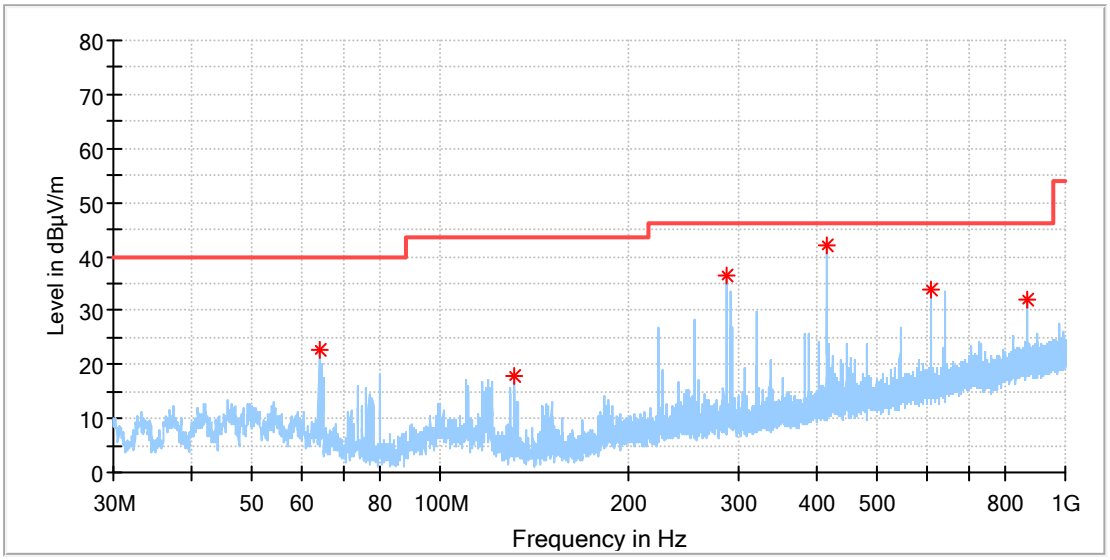
Appendix B.1: Test Results of Radiated Spurious Emissions

Note: 1. Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported. 2. This testing was carried out on different modulations, but only the worst case (GFSK) was presented in this report.

30MHz - 1GHz

EUT Information

EUT Name:	IDC7 Bluetooth Module
Model:	IDC737
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168430754/A003492876-003
Test Voltage::	DC3.3V
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

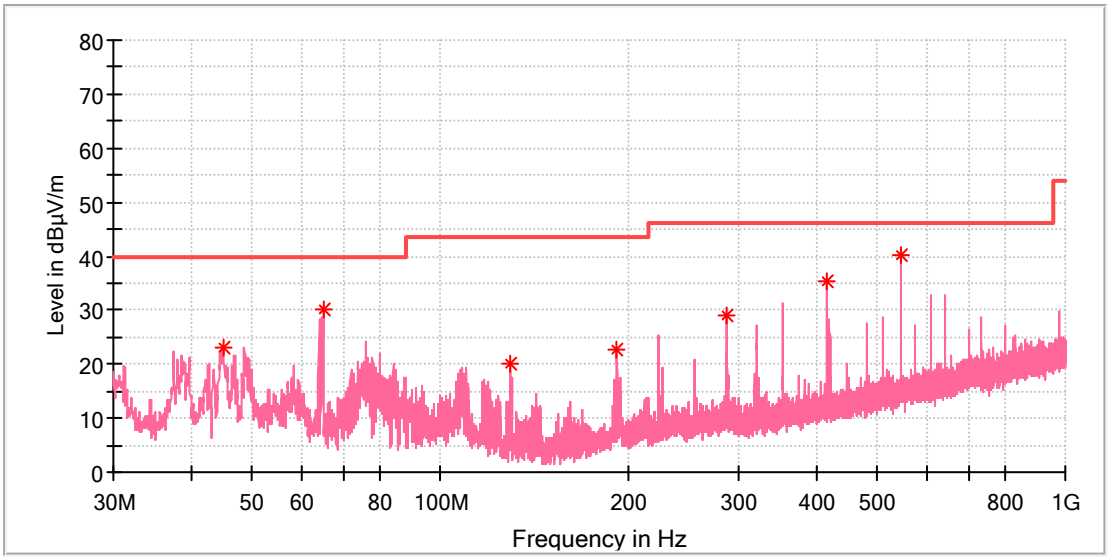


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
63.987308	22.58	40.00	17.42	100.0	H	126.0	-20.2
131.514231	17.68	43.50	25.82	100.0	H	309.0	-22.2
287.982692	36.50	46.00	9.50	100.0	H	210.0	-16.9
415.985385	42.08	46.00	3.92	100.0	H	210.0	-13.8
608.008077	33.77	46.00	12.23	100.0	H	16.0	-10.1
867.669615	32.02	46.00	13.98	100.0	H	134.0	-5.7

EUT Information

EUT Name:	IDC7 Bluetooth Module
Model:	IDC737
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168430754/A003492876-003
Test Voltage::	DC3.3V
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

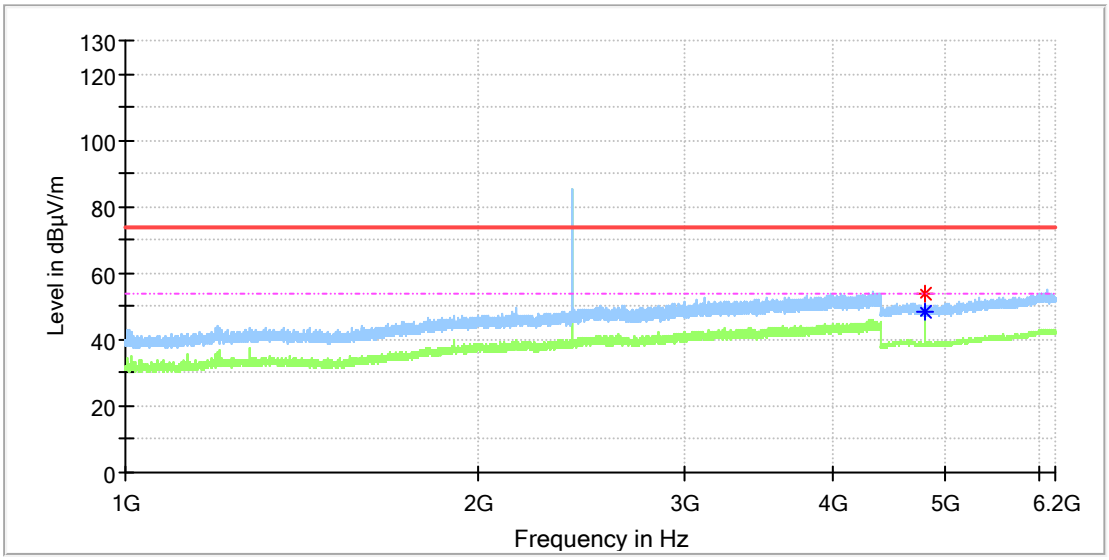
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
44.923077	23.17	40.00	16.83	100.0	V	187.0	-19.2
64.957308	30.29	40.00	9.71	100.0	V	15.0	-20.4
129.425000	19.99	43.50	23.51	100.0	V	348.0	-22.1
191.990000	22.80	43.50	20.70	100.0	V	348.0	-19.7
288.020000	28.98	46.00	17.02	100.0	V	293.0	-16.9
415.985385	35.23	46.00	10.77	100.0	V	71.0	-13.8
543.988077	40.00	46.00	6.00	100.0	V	97.0	-11.3

1GHz - 18GHz

Note: The highest waveform in the figure is Bluetooth Fundamental.

EUT Information

EUT Name:	IDC7 Bluetooth Module
Model:	IDC737
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168430754/A003492876-003
Test Voltage::	DC3.3V
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

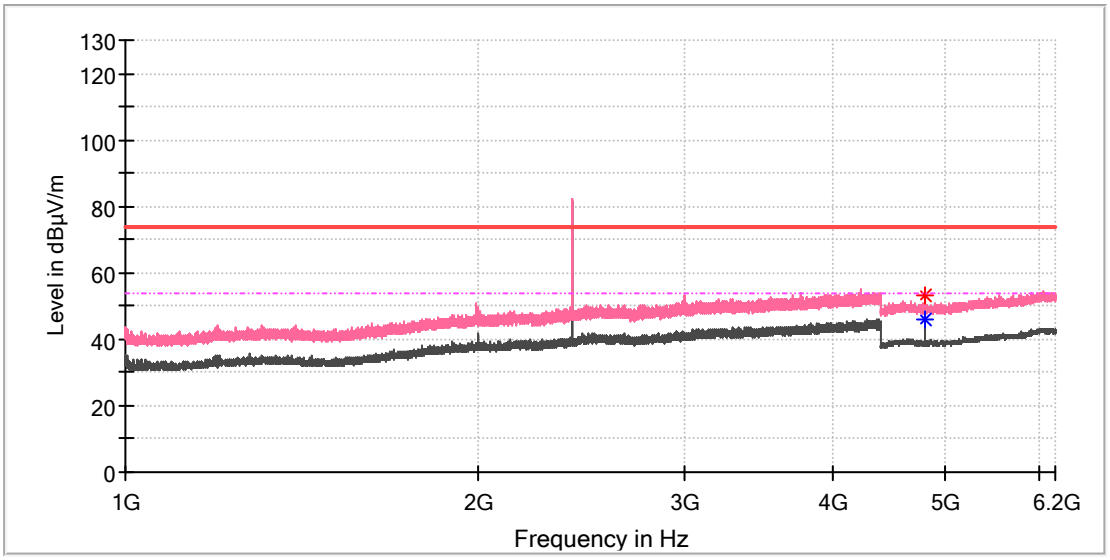


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4804.000000	---	48.59	54.00	5.41	100.0	H	243.0	11.8
4804.500000	53.54	---	74.00	20.46	100.0	H	249.0	11.8

EUT Information

EUT Name:	IDC7 Bluetooth Module
Model:	IDC737
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168430754/A003492876-003
Test Voltage::	DC3.3V
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

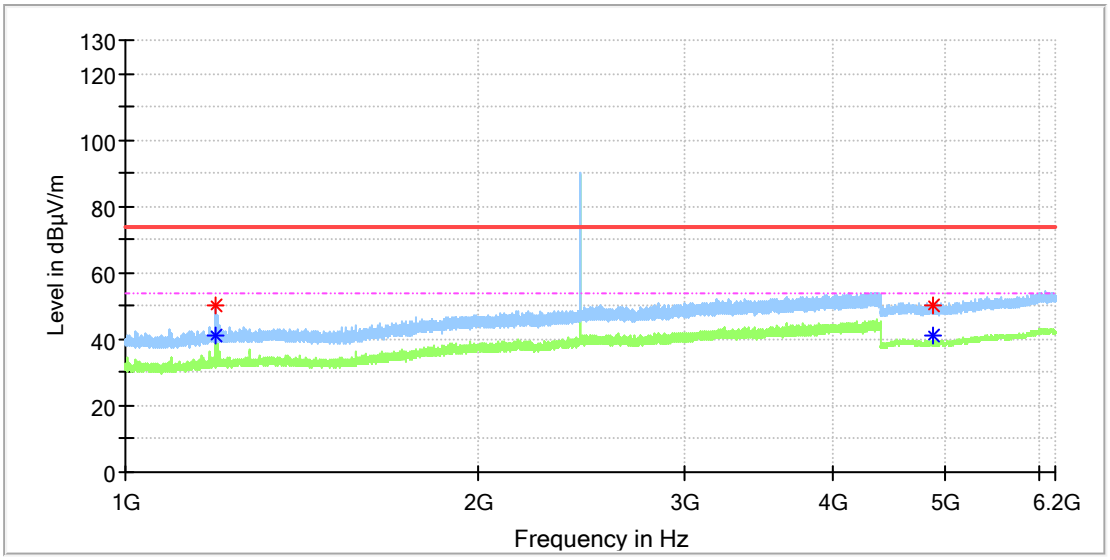


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4803.500000	53.51	---	74.00	20.49	100.0	V	66.0	11.8
4804.000000	---	46.06	54.00	7.94	100.0	V	59.0	11.8

EUT Information

EUT Name:	IDC7 Bluetooth Module
Model:	IDC737
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168430754/A003492876-003
Test Voltage::	DC3.3V
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

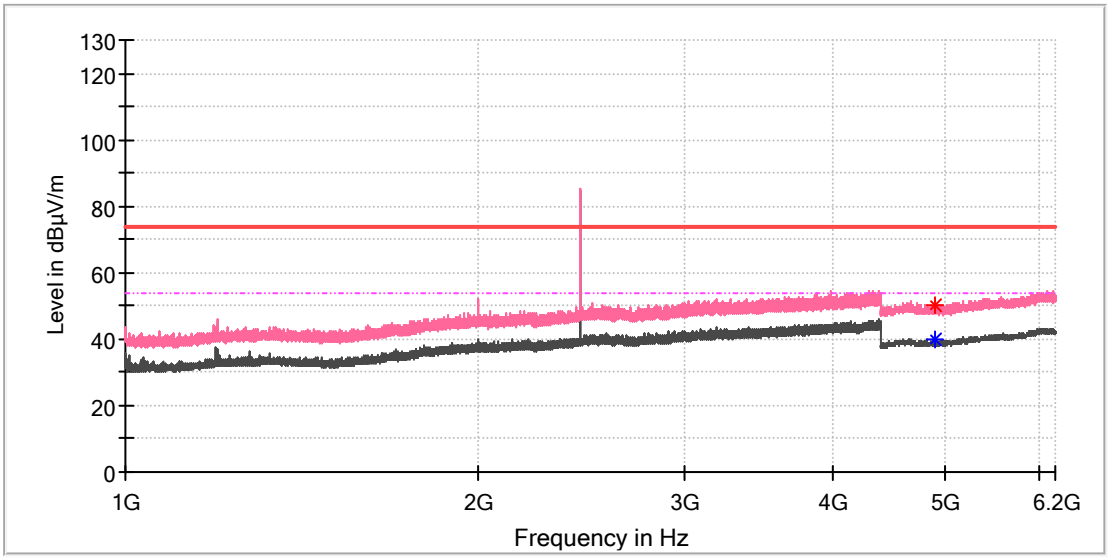


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1195.500000	50.46	---	74.00	23.54	100.0	H	240.0	1.1
1195.670000	---	40.82	54.00	13.18	100.0	H	240.0	1.1
4881.500000	---	40.99	54.00	13.01	100.0	H	202.0	11.8
4882.000000	50.06	---	74.00	23.94	100.0	H	202.0	11.8

EUT Information

EUT Name:	IDC7 Bluetooth Module
Model:	IDC737
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168430754/A003492876-003
Test Voltage::	DC3.3V
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

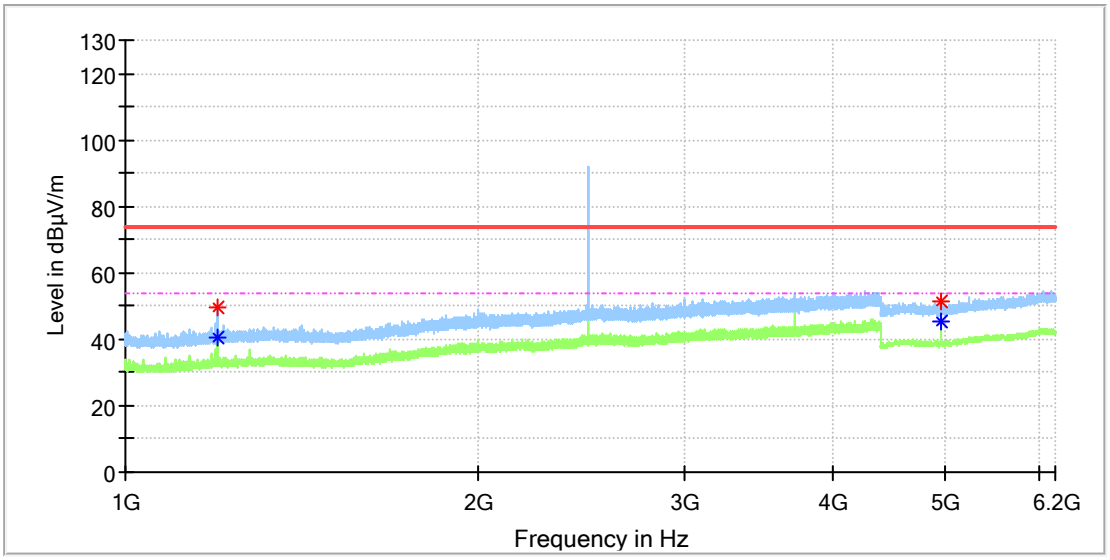


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4891.500000	---	39.66	54.00	14.34	100.0	V	304.0	11.8
4905.500000	50.13	---	74.00	23.87	100.0	V	293.0	11.8

EUT Information

EUT Name:	IDC7 Bluetooth Module
Model:	IDC737
Test Mode:	BR_DH5_High channel
Order No/Sample No:	168430754/A003492876-003
Test Voltage::	DC3.3V
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

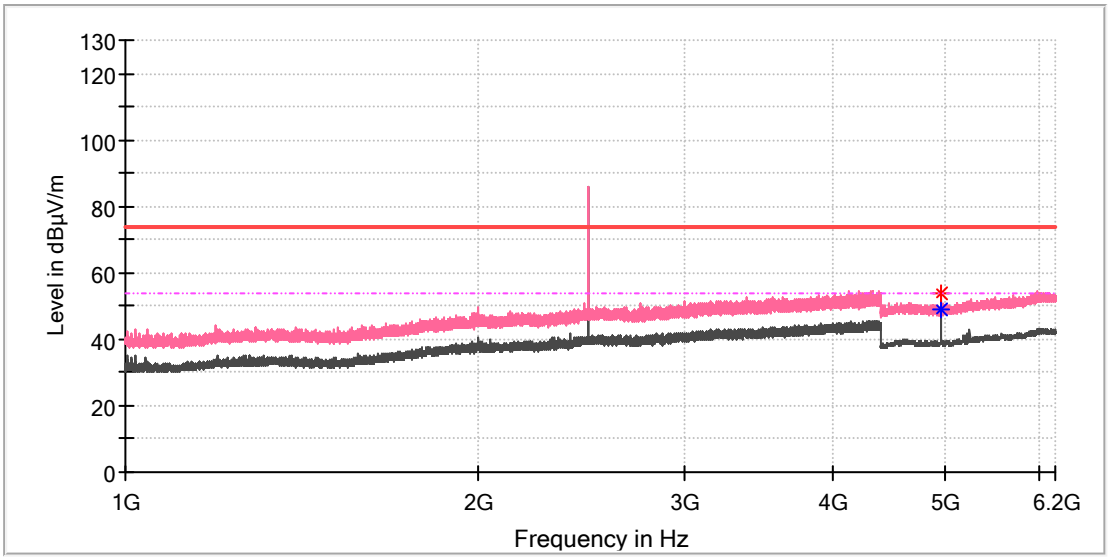


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1199.240000	49.43	---	74.00	24.57	100.0	H	237.0	1.1
1199.240000	---	40.54	54.00	13.46	100.0	H	237.0	1.1
4960.000000	51.19	---	74.00	22.81	100.0	H	204.0	11.8
4960.000000	---	45.23	54.00	8.77	100.0	H	204.0	11.8

EUT Information

EUT Name:	IDC7 Bluetooth Module
Model:	IDC737
Test Mode:	BR_DH5_High channel
Order No/Sample No:	168430754/A003492876-003
Test Voltage::	DC3.3V
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

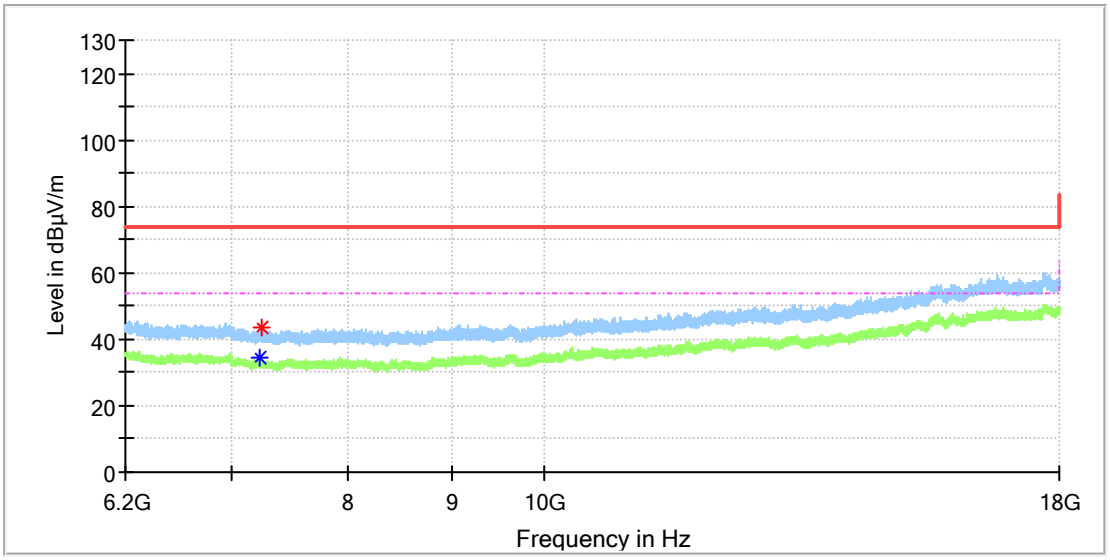


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4960.000000	53.65	---	74.00	20.35	100.0	V	70.0	11.8
4960.000000	---	48.93	54.00	5.07	100.0	V	70.0	11.8

EUT Information

EUT Name:	IDC7 Bluetooth Module
Model:	IDC737
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168430754/A003492876-003
Test Voltage::	DC3.3V
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

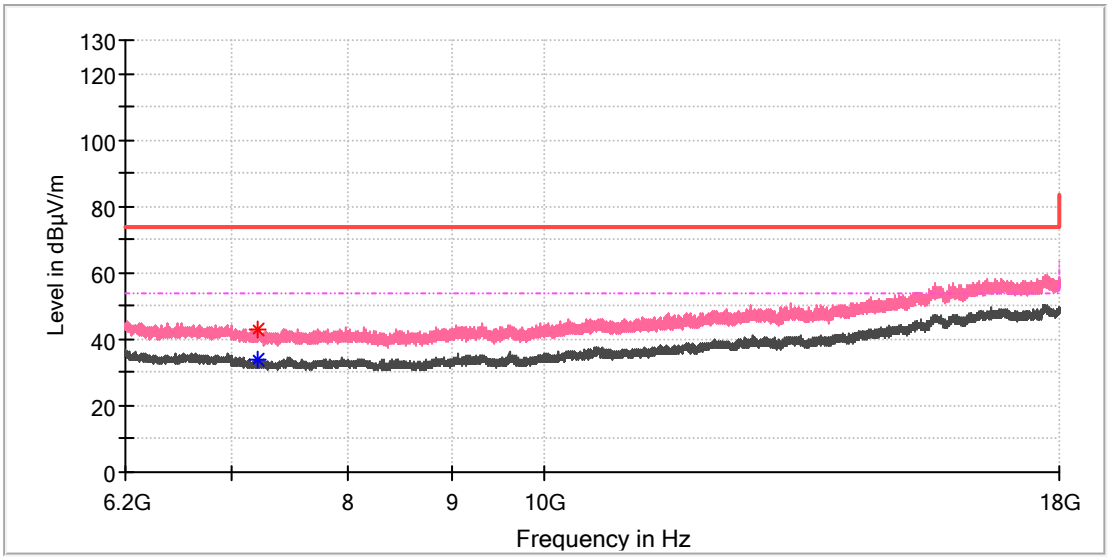


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7223.650000	---	34.41	54.00	19.59	100.0	H	343.0	8.7
7250.200000	43.61	---	74.00	30.39	100.0	H	308.0	8.5

EUT Information

EUT Name:	IDC7 Bluetooth Module
Model:	IDC737
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168430754/A003492876-003
Test Voltage::	DC3.3V
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

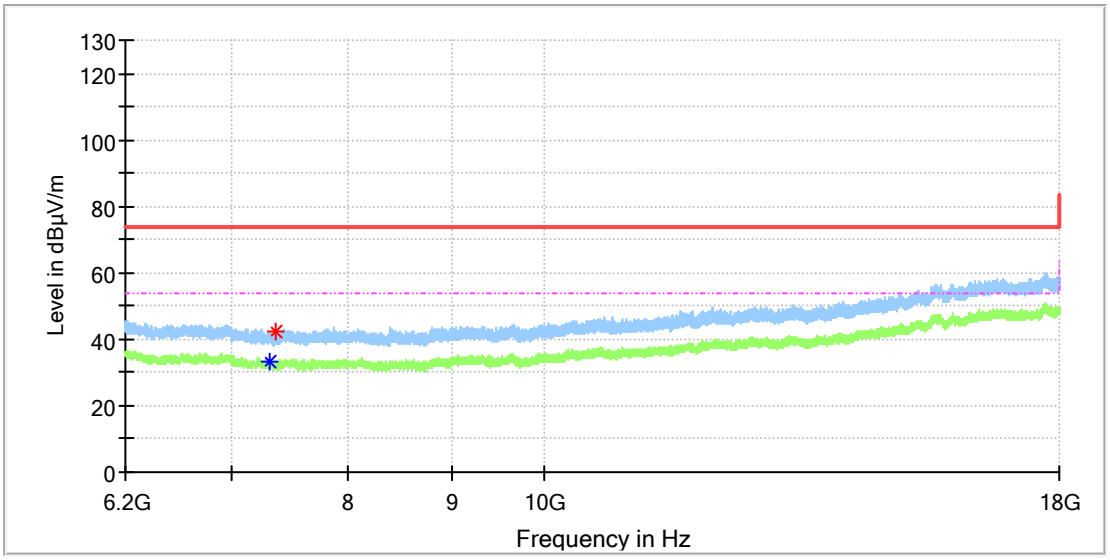


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7204.475000	43.09	---	74.00	30.91	100.0	V	140.0	8.8
7207.425000	---	34.12	54.00	19.88	100.0	V	115.0	8.8

EUT Information

EUT Name:	IDC7 Bluetooth Module
Model:	IDC737
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168430754/A003492876-003
Test Voltage::	DC3.3V
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

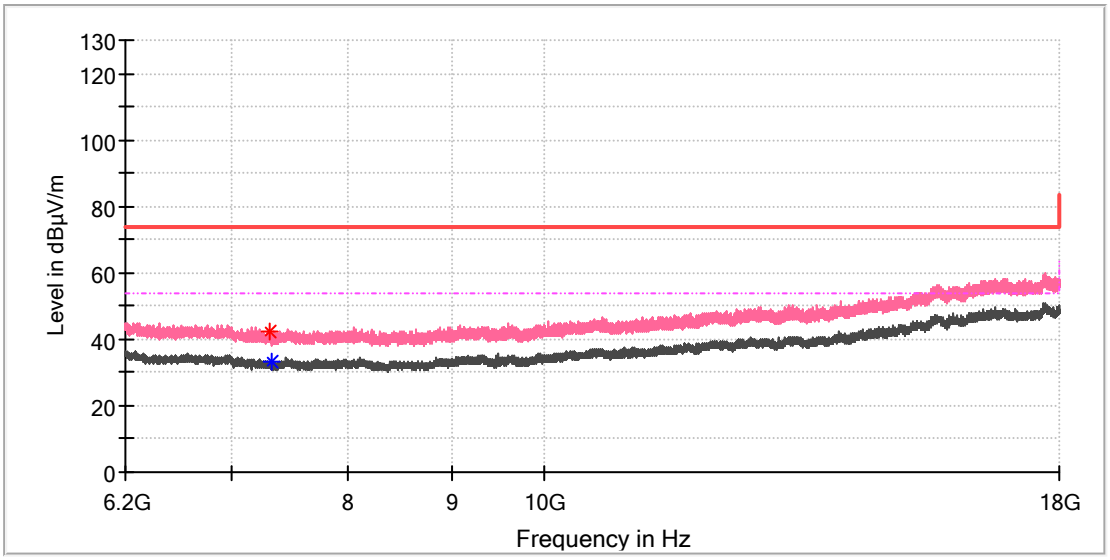


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7307.725000	---	33.01	54.00	20.99	100.0	H	136.0	8.3
7361.808333	42.45	---	74.00	31.55	100.0	H	64.0	8.2

EUT Information

EUT Name:	IDC7 Bluetooth Module
Model:	IDC737
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168430754/A003492876-003
Test Voltage::	DC3.3V
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

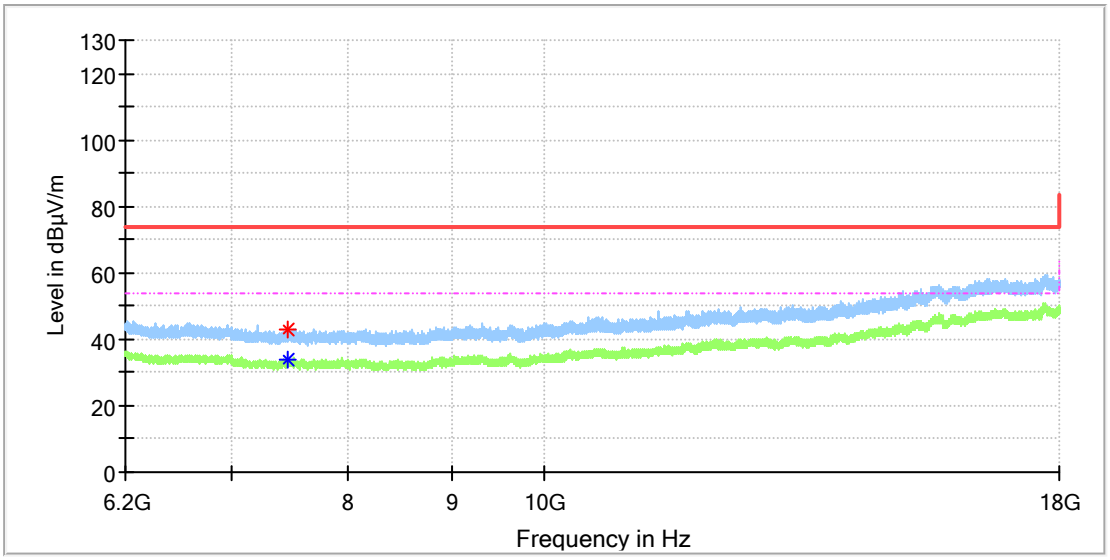


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7306.250000	42.54	---	74.00	31.46	100.0	V	338.0	8.3
7330.341667	---	33.36	54.00	20.64	100.0	V	0.0	8.1

EUT Information

EUT Name:	IDC7 Bluetooth Module
Model:	IDC737
Test Mode:	BR_DH5_High channel
Order No/Sample No:	168430754/A003492876-003
Test Voltage::	DC3.3V
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

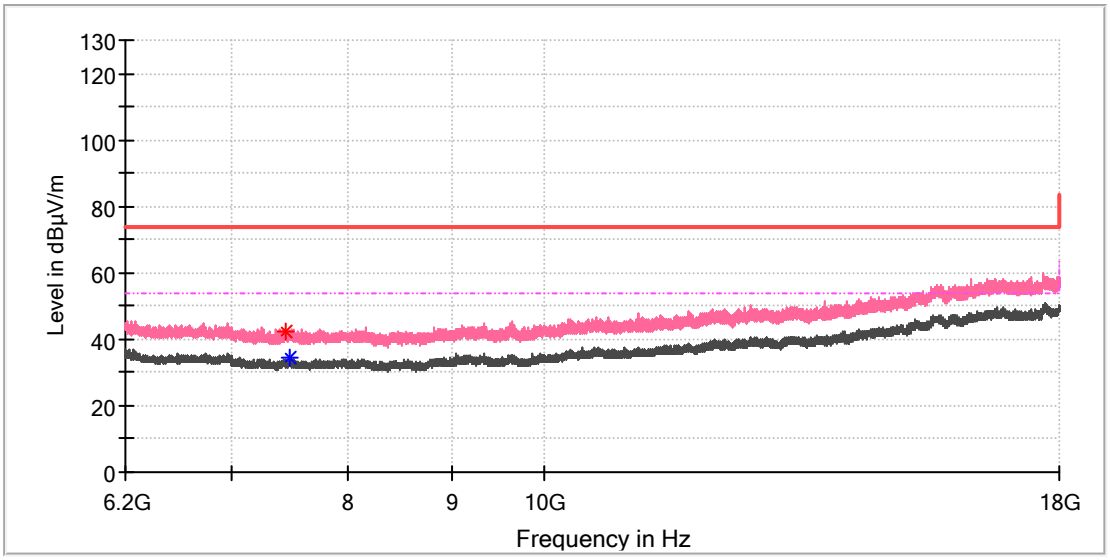


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7461.125000	42.68	---	74.00	31.32	100.0	H	303.0	8.5
7461.125000	---	33.93	54.00	20.07	100.0	H	303.0	8.5

EUT Information

EUT Name:	IDC7 Bluetooth Module
Model:	IDC737
Test Mode:	BR_DH5_High channel
Order No/Sample No:	168430754/A003492876-003
Test Voltage::	DC3.3V
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



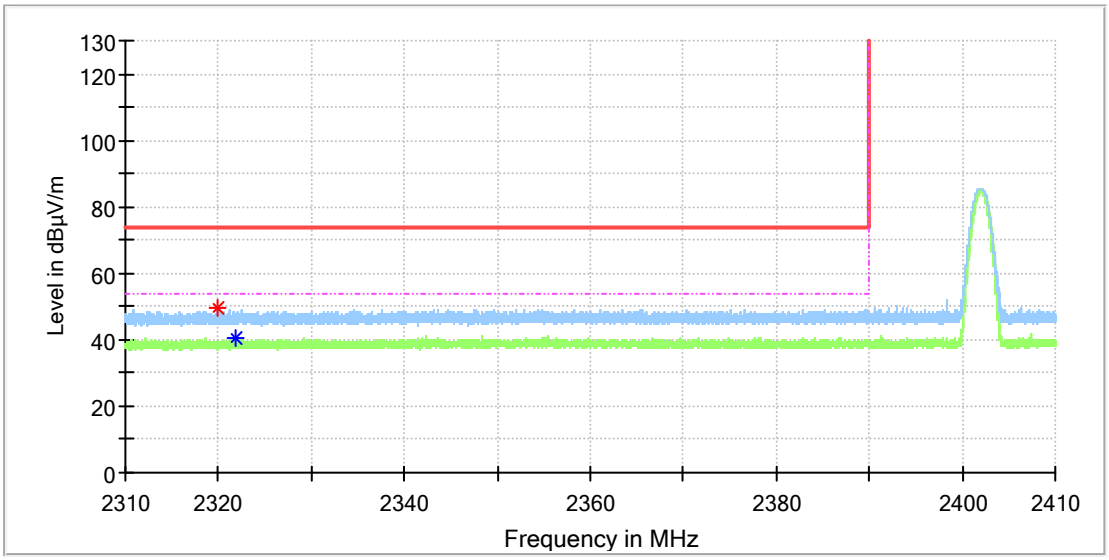
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7439.000000	42.28	---	74.00	31.72	100.0	V	232.0	8.4
7473.416667	---	34.24	54.00	19.76	100.0	V	48.0	8.6

Appendix B.2: Test Results of Radiated Emissions in Restricted Bands

EUT Information

EUT Name:	IDC7 Bluetooth Module
Model:	IDC737
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168430754/A003492876-003
Test Voltage::	DC3.3V
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

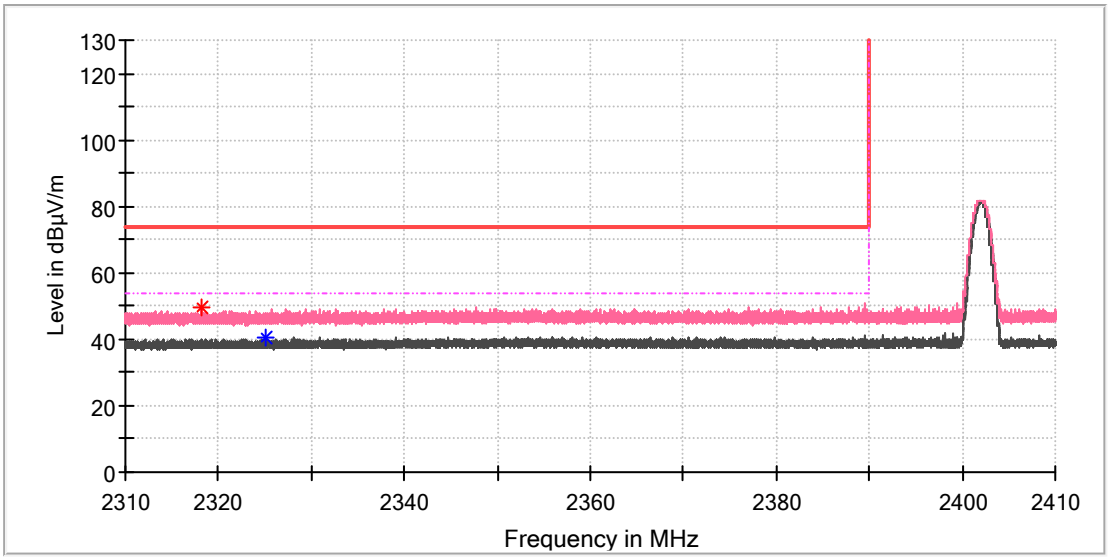


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2319.910000	49.77	---	74.00	24.23	100.0	H	146.0	6.6
2321.760000	---	40.29	54.00	13.71	100.0	H	210.0	6.6

EUT Information

EUT Name:	IDC7 Bluetooth Module
Model:	IDC737
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168430754/A003492876-003
Test Voltage::	DC3.3V
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

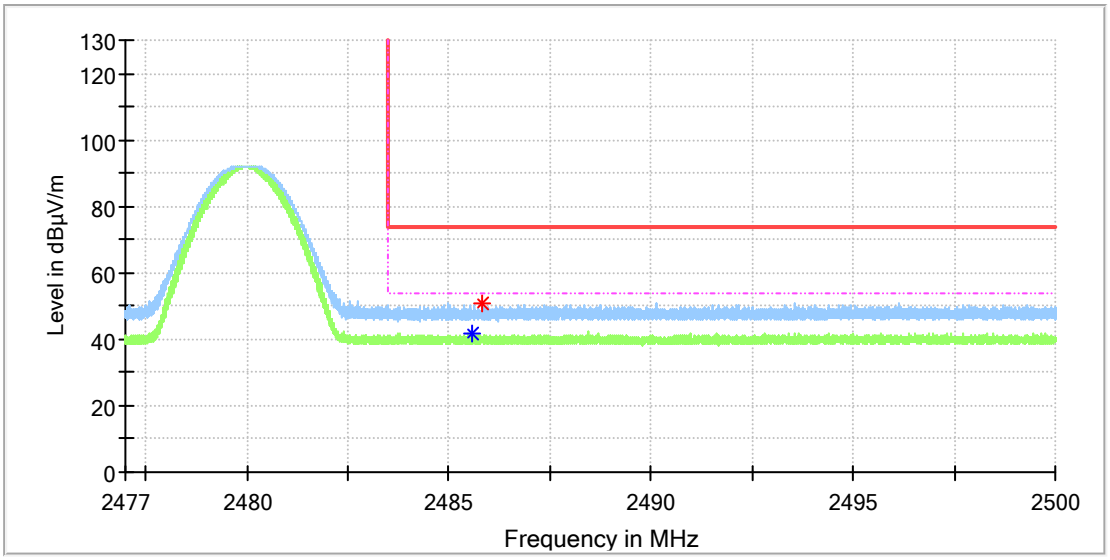


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2318.095000	49.35	---	74.00	24.65	100.0	V	243.0	6.6
2325.000000	---	40.65	54.00	13.35	100.0	V	243.0	6.6

EUT Information

EUT Name:	IDC7 Bluetooth Module
Model:	IDC737
Test Mode:	BR_DH5_High channel
Order No/Sample No:	168430754/A003492876-003
Test Voltage::	DC3.3V
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

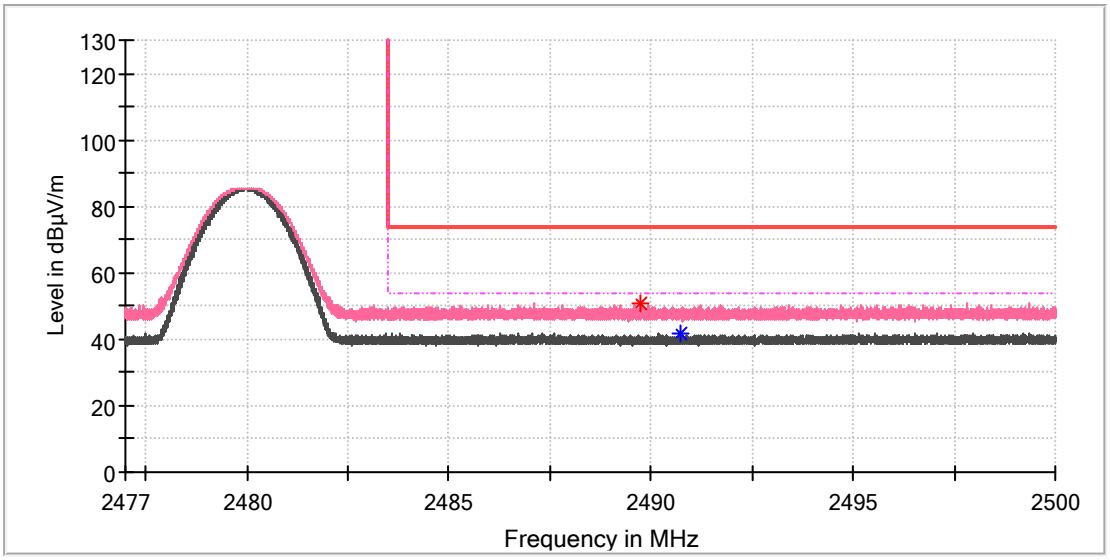


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2485.562900	---	41.89	54.00	12.11	100.0	H	183.0	7.4
2485.843500	50.79	---	74.00	23.21	100.0	H	113.0	7.4

EUT Information

EUT Name:	IDC7 Bluetooth Module
Model:	IDC737
Test Mode:	BR_DH5_High channel
Order No/Sample No:	168430754/A003492876-003
Test Voltage::	DC3.3V
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2489.739700	50.56	---	74.00	23.44	100.0	V	63.0	7.4
2490.724100	---	41.95	54.00	12.05	100.0	V	293.0	7.4