RF TEST REPORT

FCC ID: 2BCFY-HT580

Test Report No……..:	RF240130006-01-004
Product(s) Name……...:	XGSPON Gateway
Model(s)……..:	HT-580AXT, HT-580AET
Trade Mark……....:	HEIGHTS
Applicant……:	Heights Telecom T LTD
Address……..…..:	Ha-Sakhlav 6, Irus, 7680900, Israel
Receipt Date……..:	2024.02.01
Test Date……....:	2024.02.02~2024.03.26
Issued Date……..:	2024.03.26
Standards……..:	47 CFR FCC Part 15, Subpart E(Section 15.407); ANSI C63.10:2013
Testing Laboratory……:	Shenzhen Haiyun Standard Technical Co., Ltd.

Prepared By:	Checked By:	Approved By:	
Black Ding	Tim Zhang	Misue Su	Shenzhen Haiyun Standard Technical Co., Ltd. HAIYUN Report Seal
Black Ding	Tim.zhang	Misue Su	

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History of this test report

Original Report Issue Date: 2024.03.26

● No additional attachment

○ Additional attachments were issued following record

Attachment No.	Issue Date	Description

1. General Information

1.1 Applicant

Heights Telecom T LTD

Ha-Sakhlav 6, Irus, 7680900, Israel

1.2 Manufacturer

Heights Telecom T LTD

Ha-Sakhlav 6, Irus, 7680900, Israel

1.3 Basic Description of Equipment Under Test

Product No.	POC240130006-S001, POC240130006-S002	
Equipment Name	XGSPON Gateway	
Model Number	HT-580AXT, HT-580AET	
Model difference	Only WAN port and optical fiber port part of the circuit is different	
Trademark	HEIGHTS	
Power Supply	DC 12V from adapter	
Adapter Information	Model: SOY-1200350US-056 Input: 100-240V~ 50/60Hz 1.2A Max Output: 12V⎓ 3.5A	
Operating Temperature	0℃-45℃	
EUT Stage	○ Product Unit	●Final-Sample
Frequency Range	For 802.11a: 5955 ~ 7115MHz For 802.11ax-HE20: 5955 ~ 7115MHz For 802.11ax-HE40: 5965 ~ 7085MHz For 802.11ax-HE80: 5985 ~ 7025MHz For 802.11ax-HE160: 6025 ~ 6985MHz	
Modulation	OFDM, OFDMA	
Data Rate (Mbps)	IEEE 11a mode : 6/9/12/18/24/36/48/54 IEEE 11ax mode : up to 4803.9	
Type of Device	Master device	
Antenna gain	Ant1: 4.40dBi, Ant2: 4.60dBi, Ant3: 4.90dBi, Ant4: 4.50dBi	
Directional gain	2.26dBi(from the antenna report)	
Beamforming Function	Beamforming gain: 1.5dB	

1.4 Working Frequencies

802.11a, 802.11ax-HE20

Channel	Frequency	Channel	Frequency	Channel	Frequency
01	5955 MHz	05	5975 MHz	09	5995 MHz
13	6015 MHz	17	6035 MHz	21	6055 MHz
25	6075 MHz	29	6095 MHz	33	6115 MHz
37	6135 MHz	41	6155 MHz	45	6175 MHz
49	6195 MHz	53	6215 MHz	57	6235 MHz
61	6255 MHz	65	6275 MHz	69	6295 MHz
73	6315 MHz	77	6335 MHz	81	6355 MHz
85	6375 MHz	89	6395 MHz	93	6415 MHz
97	6435 MHz	101	6455 MHz	105	6475 MHz
109	5495 MHz	113	6515 MHz	117	6535 MHz
121	6555 MHz	125	6575 MHz	129	6595 MHz
133	6615 MHz	137	6635 MHz	141	6655 MHz
145	6675 MHz	149	6695 MHz	153	6715 MHz
157	6735 MHz	161	6755 MHz	165	6775 MHz
169	6795 MHz	173	6815 MHz	177	6835 MHz
181	6855 MHz	185	6875 MHz	189	6895 MHz
193	6915 MHz	197	6935 MHz	201	6955 MHz
205	6975 MHz	209	6995 MHz	213	7015 MHz
217	7035 MHz	221	7055 MHz	225	7075 MHz
229	7095 MHz	233	7115	--	--

802.11ax-HE40

Channel	Frequency	Channel	Frequency	Channel	Frequency
03	5965 MHz	11	6005 MHz	19	6045 MHz
27	6085 MHz	35	6125 MHz	43	6165 MHz
51	6205 MHz	59	6245 MHz	67	6285 MHz
75	6325 MHz	83	6365 MHz	91	6405 MHz
99	6445 MHz	107	6485 MHz	115	6525 MHz
123	6565 MHz	131	6605 MHz	139	6645 MHz
147	6685 MHz	155	6725 MHz	163	6765 MHz
171	6805 MHz	179	6845 MHz	187	6885 MHz
195	6925 MHz	203	6965 MHz	211	7005 MHz
219	7045 MHz	227	7085 MHz	--	--

802.11ax-HE80

Channel	Frequency	Channel	Frequency	Channel	Frequency
07	5985 MHz	23	6065 MHz	39	6145 MHz
55	6225 MHz	71	6305 MHz	87	6385 MHz
103	6465 MHz	119	6545 MHz	135	6625 MHz
151	6705 MHz	167	6785 MHz	183	6865 MHz
199	6945 MHz	215	7025 MHz	--	--

802.11ax-HE160

Channel	Frequency	Channel	Frequency	Channel	Frequency
15	6025 MHz	47	6185 MHz	79	6345 MHz
111	6505 MHz	143	6665 MHz	175	6825 MHz
207	6985 MHz	--	--	--	--

2. Summary of Test Results

2.1 Summary of Test Items

FCC Section(s)	Test Description	Test Condition	Verdict
15.407(a)	26dB & 99% Bandwidth	Conducted	Pass
15.407(b)(7)	In-Band Emission		Pass
15.407(a)(5), (a)(6)	Transmitter power		Pass
15.407(a)(5), (a)(6)	Peak Power Spectral Density (E.I.R.P)		Pass
15.407(d)(6)	Contention-Based Protocol		Pass
15.407(g)	Frequency Stability		Pass
15.407(b)(6)	Unwanted Emissions	Radiated	Pass
15.207	AC Conducted Emissions	Line Conducted	Pass
15.203	Antenna Requirements	/	Note4

Remark:

1. The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
2. Output power test was verified over all data rates of each mode, and then choose the maximum power output (low data rate) for final test of each channel.
3. For radiated emission test, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst-case emissions.
4. The EUT have 4 PCB antennas arrangement which was permanently attached.
5. EUT supports one configuration only in 802.11ax full RU mode.

2.2 Standards or specification

47 CFR FCC Part 15, Subpart E

KDB 662911 D01 Multiple Transmitter Output v02r01

KDB 789033 D02 General UNII Test Procedures New Rules v02r01

KDB987594 D01 U-NII 6GHz General Requirements v01r03

KDB 414788 D01 Radiated Test Site v01r01

ANSI C63.10:2013

2.3 Test Instruments

Radiated Emissions						
No.	Equipment	Manufacturer	Type No.	Serial No.	Cal. date (yyyy/mm/dd)	Cal. Due date (yyyy/mm/dd)
1	Test receiver	Rohde&Schwarz	ESU	100184	2023/5/3	2024/5/2
2	Horn Antenna	Schwarzbeck	BBHA 9120 D	9120D-1273	2023/5/4	2024/5/3
3	Low frequency amplifier	Unknown	LNA 0920N	2014	2023/5/3	2024/5/2
4	High frequency amplifier	Schwarzbeck	BBV 9718	284	2023/5/3	2024/5/2
5	Loop Antenna	Schwarzbeck	FMZB1519 B	00029	2023/7/16	2024/7/15
6	Log periodic antenna	Schwarzbeck	VULB 9168	1151	2023/5/4	2024/5/3
7	Horn Antenna	Schwarzbeck	BBHA 9120 D	9120D-1273	2023/5/4	2024/5/3
8	Horn Antenna	Schwarzbeck	BBHA 9170	9170#685	2023/7/16	2024/7/15
9	Temp&Humidity Recorder	Meideshi	JR900	/	2023/5/3	2024/5/2
10	RF cable(966 chamber)9kHz-1GHz	Unknown	Unknown	Unknown	2023/5/3	2024/5/2
11	RF cable(966 chamber)1GHz-18GHz	Unknown	Unknown	Unknown	2023/5/3	2024/5/2
12	RF cable(966 chamber)18GHz-40GHz	Unknown	Unknown	Unknown	2023/5/3	2024/5/2
13	Test software	Farad Technology Co., Ltd	EZ-EMC Ver.TW-03A2			
Conducted Emission						
1	Test receiver	Rohde&Schwarz	ESCI	100718	2023/5/3	2024/5/2
2	LISN	Rohde&Schwarz	ENV216	100075	2023/5/3	2024/5/2
3	Pulse limiter	Rohde&Schwarz	ESH3-Z2	102299	2023/5/3	2024/5/2
4	RF cable (9kHz-30MHz)	Unknown	Unknown	Unknown	2023/5/3	2024/5/2
5	Test software	Farad Technology Co., Ltd	EZ-EMC Ver.TW-03A2			
RF Conducted Emission						
1	MXA Signal Analyzer	Keysight	N9021B	MY60080169	2023/4/23	2024/4/22
2	RF Control Unit	dsusoft	JS0806-2	21G8060449	2023/4/23	2024/4/22
3	power supply unit	dsusoft	JS0806-4ADC	N/A	2023/4/23	2024/4/22
4	VXG Signal Generator	Keysight	M9384B	MY61270787	2023/4/23	2024/4/22
5	EXG Analog Signal Generator	Keysight	N5173B	MY59101282	2023/4/23	2024/4/22
6	Test software	dsusoft	JS1120-3 Ver.3.2.22.0			

2.4 Test Mode

The EUT was supplied by and it was run in TX mode that was controlled by Master provided RF testing program. The worst case test result was showed in the report.

Mode 1: Transmit by 802.11a (6Mbps)
Mode 2: Transmit by 802.11ax-HE20 (MCS0)
Mode 3: Transmit by 802.11ax-HE40 (MCS0)
Mode 4: Transmit by 802.11ax-HE80 (MCS0)
Mode 5: Transmit by 802.11ax-HE160 (MCS0)

2.5 Test Condition

Applicable to	Environmental conditions	Input Power	Tested by
26dB & 99% Bandwidth	24.3°C, 51% RH	DC 12V	Henry Huang
In-Band Emission	24.2°C, 55% RH	DC 12V	Henry Huang
Contention-Based Protocol	24.2°C, 52% RH	DC 12V	Henry Huang
Frequency Stability	24.2°C, 52% RH	DC 12V	Henry Huang
Transmitter power	24.2°C, 52% RH	DC 12V	Henry Huang
Peak Power Spectral Density	24.2°C, 52% RH	DC 12V	Henry Huang
Unwanted Emissions	24.3°C, 54% RH	AC 120V/60Hz	Albert Fan
AC Conducted Emissions	24.3°C, 54% RH	AC 120V/60Hz	Albert Fan

Note: Adapter supply voltage AC 120V/60Hz.

The applicant declare the operating environment of EUT as below:

Normal conditions: DC 12V, 0~60°C

Extreme conditions: NV: 12V

NT: 20℃

LV: 10.8V

HV: 13.2V

2.6 Duty Cycle of Test Signal

If duty cycle is ≥ 98 %, duty factor is not required.

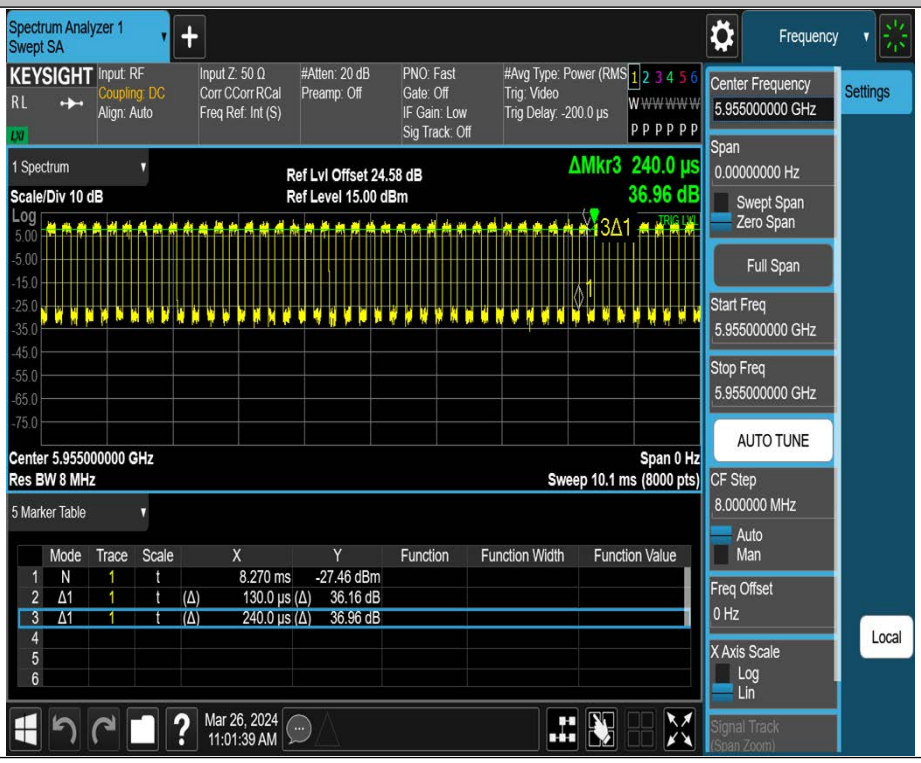
If duty cycle is < 98 %, duty factor shall be considered.

All the duty factor of other test mode have been considered.

Test Mode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A-CDD	Ant1	5955	0.13	0.24	54.17
11AX20MIMO	Ant1	5955	0.32	0.35	91.43
11AX40MIMO	Ant1	5965	0.31	0.34	91.18
11AX80MIMO	Ant1	5985	0.30	0.33	90.91
11AX160MIMO	Ant1	6025	0.45	0.48	93.75

Test Graphs

11A-CDD_Ant1_5955



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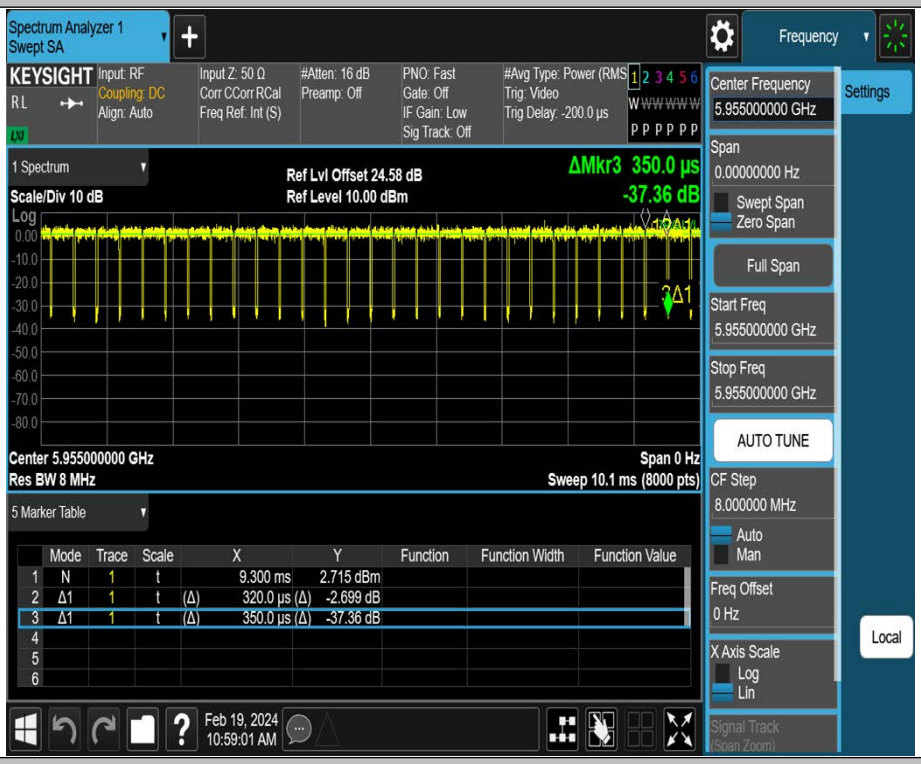
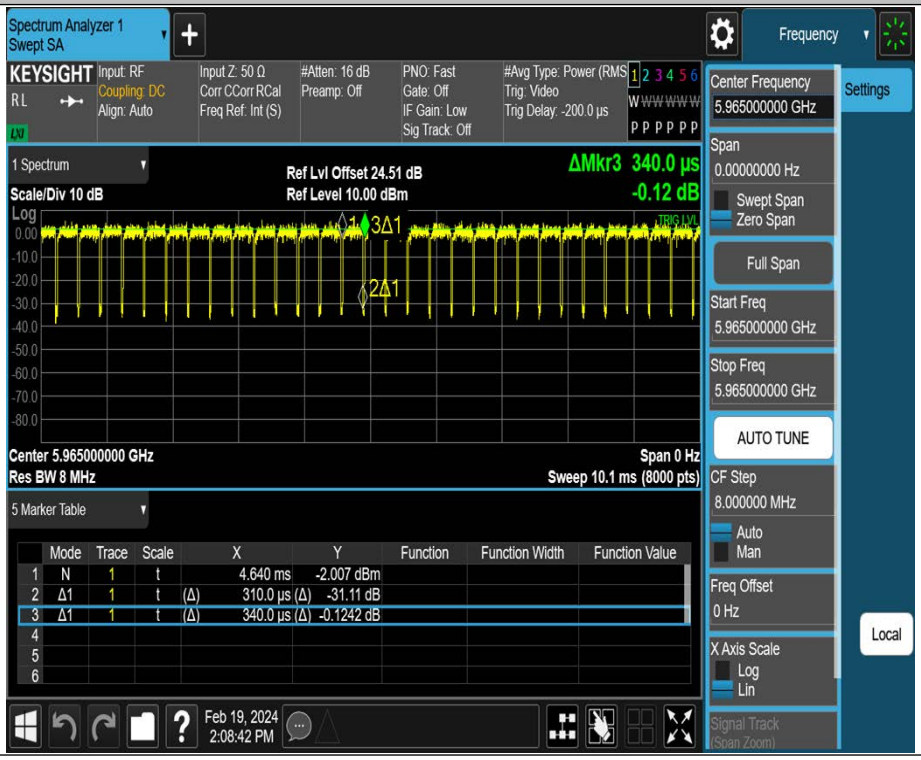
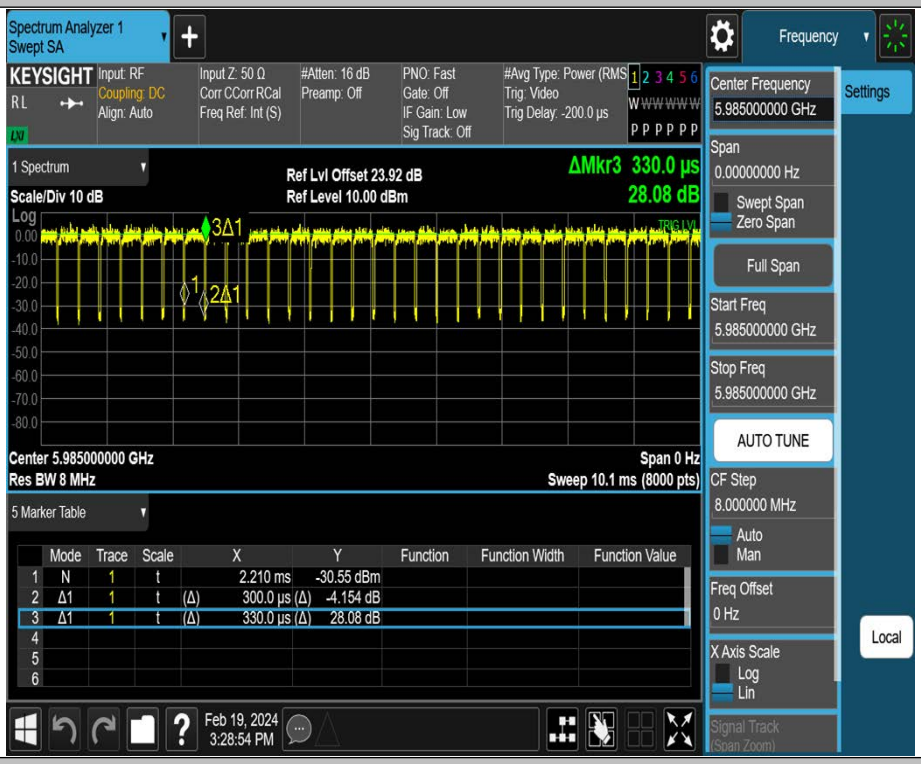
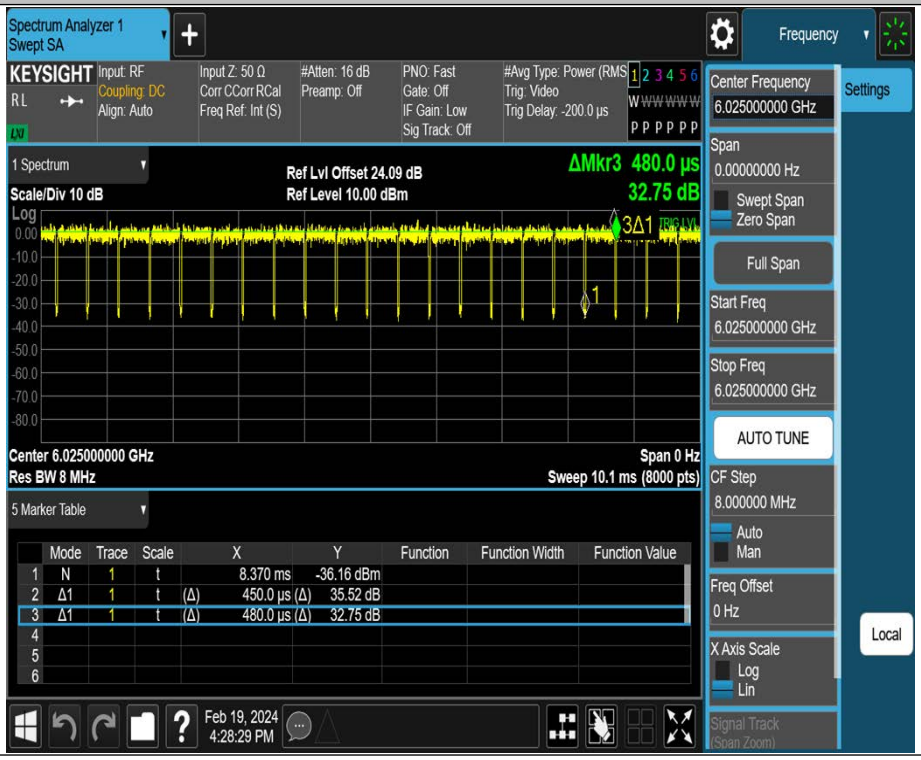

11AX40MIMO_Ant1_5965


11AX80MIMO_Ant1_5985

11AX160MIMO_Ant1_6025


2.7 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT.
This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Uncertainty	
Parameter	Uncertainty
Occupied Channel Bandwidth	±143.88 kHz
Power Spectral Density	±0.743dB
Conducted Spurious Emission	±1.328dB
RF power conducted	±0.384dB
Conducted emission(9kHz~30MHz) AC main	±2.72dB
Radiated emission(9kHz~30MHz)	±2.66dB
Radiated emission (30MHz～1GHz)	±4.62dB
Radiated emission (1GHz～18GHz)	±4.86dB
Radiated emission (18GHz～40GHz)	±3.80dB

2.8 Test Location

Company:	Shenzhen Haiyun Standard Technical CO., Ltd.
Address:	No. 110-113, 115, 116, Block B, Jinyuan Business Building, Bao'an District, Shenzhen, China
CNAS Registration Number:	CNAS L18252
CAB identifier:	CN0145
A2LA Certificate Number:	6823.01
Telephone:	0755-26024411

2.9 Deviation from Standards

None

3. Test Procedure And Results

3.1 26dB & 99% Bandwidth Measurement

3.1.1 Limit

The upper and lower frequency limits of the transmitter 99 % emission power bandwidth shall at all times remain within the operating frequency limits.
Some transmitter categories require a specific limit for emission bandwidth. In such cases, the emission bandwidth shall be established by testing in accordance with the relevant specified Standard.

3.1.2 Test Procedure

KDB 789033 D02v02r01- Section II)C)1) (26dB Bandwidth)
KDB 789033 D02v02r01- Section II)D) (99% Bandwidth)

3.1.3 Test Setup

26dB Bandwidth

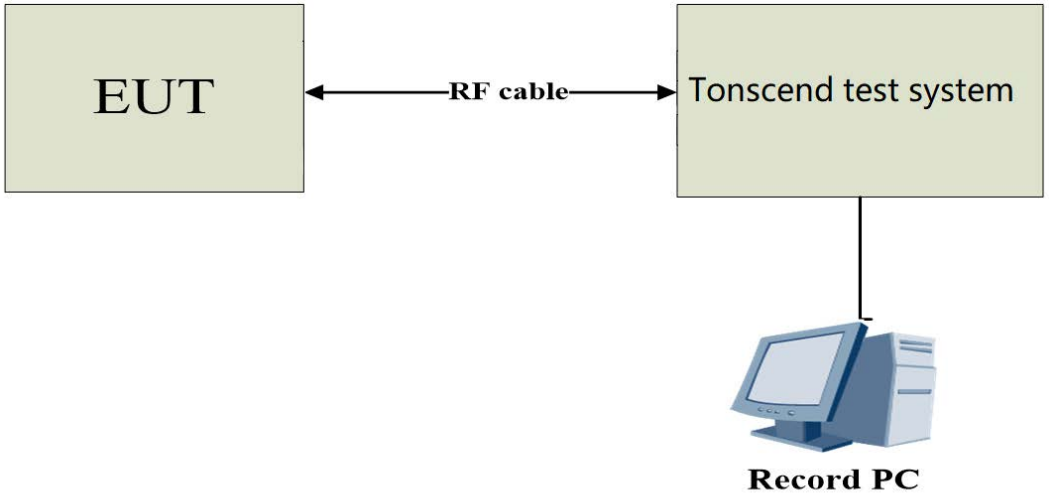
1. The analyzers' automatic bandwidth measurement capability was used to perform the 26dB bandwidth
2. RBW = approximately 1% of the emission bandwidth.
3. VBW > RBW
4. Detector = Peak.
5. Trace mode = max hold.
6. Measure the maximum width of the emission that is 26 dB down from the maximum of the emission.

Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

99% Bandwidth

1. Set center frequency to the nominal EUT channel center frequency.
2. RBW = 1% to 5% of the OBW
3. VBW ≥ 3 RBW
4. Span = 1.5 times to 5 times the OBW
5. Detector = peak
6. Trace mode = max hold
7. Allow the trace to stabilize
8. Use the 99% power bandwidth function of the instrument.

3.1.4 Test Setup



3.1.5 Test Result

Emission Bandwidth

Test Mode	Antenna	Channel	26dB EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A-CDD	Ant1	5955	21.640	5944.080	5965.720	---	---
	Ant2	5955	22.360	5944.320	5966.680	---	---
	Ant3	5955	21.680	5944.080	5965.760	---	---
	Ant4	5955	21.400	5944.360	5965.760	---	---
	Ant1	6175	21.480	6164.240	6185.720	---	---
	Ant2	6175	21.560	6164.120	6185.680	---	---
	Ant3	6175	21.400	6164.240	6185.640	---	---
	Ant4	6175	22.320	6164.280	6186.600	---	---
	Ant1	6415	21.600	6404.040	6425.640	---	---
	Ant2	6415	21.280	6404.400	6425.680	---	---
	Ant3	6415	21.640	6404.120	6425.760	---	---
	Ant4	6415	21.560	6404.320	6425.880	---	---
	Ant1	6435	21.120	6424.280	6445.400	---	---
	Ant2	6435	21.400	6424.160	6445.560	---	---
	Ant3	6435	21.840	6423.920	6445.760	---	---
	Ant4	6435	21.360	6424.280	6445.640	---	---
	Ant1	6475	21.560	6464.200	6485.760	---	---
	Ant2	6475	22.320	6463.600	6485.920	---	---
	Ant3	6475	22.560	6464.080	6486.640	---	---
	Ant4	6475	21.400	6464.360	6485.760	---	---
	Ant1	6515	21.440	6504.080	6525.520	---	---
	Ant2	6515	21.480	6504.360	6525.840	---	---
	Ant3	6515	21.800	6504.080	6525.880	---	---

	Ant4	6515	21.480	6504.240	6525.720	---	---
	Ant1	6535	21.480	6524.080	6545.560	---	---
	Ant2	6535	21.400	6524.160	6545.560	---	---
	Ant3	6535	21.720	6524.480	6546.200	---	---
	Ant4	6535	21.720	6524.080	6545.800	---	---
	Ant1	6695	21.600	6684.120	6705.720	---	---
	Ant2	6695	21.440	6684.200	6705.640	---	---
	Ant3	6695	21.640	6684.080	6705.720	---	---
	Ant4	6695	21.600	6684.280	6705.880	---	---
	Ant1	6855	21.240	6844.360	6865.600	---	---
	Ant2	6855	23.280	6844.080	6867.360	---	---
	Ant3	6855	21.760	6844.120	6865.880	---	---
	Ant4	6855	21.560	6844.200	6865.760	---	---
	Ant1	6875	21.480	6864.200	6885.680	---	---
	Ant2	6875	21.880	6864.120	6886.000	---	---
	Ant3	6875	21.480	6864.240	6885.720	---	---
	Ant4	6875	21.560	6864.280	6885.840	---	---
	Ant1	6895	21.440	6884.200	6905.640	---	---
	Ant2	6895	22.040	6884.160	6906.200	---	---
	Ant3	6895	21.920	6884.080	6906.000	---	---
	Ant4	6895	22.440	6884.040	6906.480	---	---
	Ant1	6995	21.280	6984.400	7005.680	---	---
	Ant2	6995	21.920	6984.280	7006.200	---	---
	Ant3	6995	21.440	6984.320	7005.760	---	---
	Ant4	6995	21.520	6984.200	7005.720	---	---
	Ant1	7095	21.720	7083.960	7105.680	---	---
	Ant2	7095	22.760	7083.920	7106.680	---	---
	Ant3	7095	21.640	7084.120	7105.760	---	---
	Ant4	7095	22.200	7084.160	7106.360	---	---
	Ant1	7115	22.240	7103.560	7125.800	---	---
	Ant2	7115	21.440	7104.240	7125.680	---	---
	Ant3	7115	21.640	7104.080	7125.720	---	---
	Ant4	7115	21.520	7104.200	7125.720	---	---
11AX20MIMO	Ant1	5955	24.000	5943.920	5967.920	---	---
	Ant2	5955	24.880	5942.280	5967.160	---	---
	Ant3	5955	24.000	5943.080	5967.080	---	---
	Ant4	5955	21.840	5944.000	5965.840	---	---
	Ant1	6175	22.160	6164.200	6186.360	---	---
	Ant2	6175	21.960	6163.920	6185.880	---	---
	Ant3	6175	26.600	6162.160	6188.760	---	---
	Ant4	6175	21.800	6164.120	6185.920	---	---
	Ant1	6415	21.600	6404.240	6425.840	---	---
	Ant2	6415	27.200	6402.360	6429.560	---	---

	Ant3	6415	23.360	6403.800	6427.160	---	---
	Ant4	6415	23.720	6402.240	6425.960	---	---
	Ant1	6435	25.760	6420.280	6446.040	---	---
	Ant2	6435	22.120	6423.960	6446.080	---	---
	Ant3	6435	25.000	6421.240	6446.240	---	---
	Ant4	6435	22.520	6423.640	6446.160	---	---
	Ant1	6475	21.800	6463.840	6485.640	---	---
	Ant2	6475	22.200	6463.840	6486.040	---	---
	Ant3	6475	22.160	6464.320	6486.480	---	---
	Ant4	6475	25.280	6460.680	6485.960	---	---
	Ant1	6515	24.640	6502.880	6527.520	---	---
	Ant2	6515	21.880	6504.040	6525.920	---	---
	Ant3	6515	24.480	6503.600	6528.080	---	---
	Ant4	6515	21.960	6503.800	6525.760	---	---
	Ant1	6535	22.920	6523.080	6546.000	---	---
	Ant2	6535	22.800	6522.840	6545.640	---	---
	Ant3	6535	21.800	6524.400	6546.200	---	---
	Ant4	6535	22.640	6523.720	6546.360	---	---
	Ant1	6695	22.080	6683.920	6706.000	---	---
	Ant2	6695	24.360	6683.400	6707.760	---	---
	Ant3	6695	23.360	6682.960	6706.320	---	---
	Ant4	6695	22.360	6683.800	6706.160	---	---
	Ant1	6855	21.920	6844.120	6866.040	---	---
	Ant2	6855	21.240	6844.280	6865.520	---	---
	Ant3	6855	22.520	6843.280	6865.800	---	---
	Ant4	6855	24.680	6842.640	6867.320	---	---
	Ant1	6895	21.760	6884.080	6905.840	---	---
	Ant2	6895	22.200	6883.880	6906.080	---	---
	Ant3	6895	25.840	6881.840	6907.680	---	---
	Ant4	6895	23.520	6883.920	6907.440	---	---
	Ant1	6995	22.880	6983.320	7006.200	---	---
	Ant2	6995	24.840	6983.200	7008.040	---	---
	Ant3	6995	24.800	6982.320	7007.120	---	---
	Ant4	6995	21.840	6984.080	7005.920	---	---
	Ant1	7095	21.560	7084.120	7105.680	---	---
	Ant2	7095	23.200	7083.680	7106.880	---	---
	Ant3	7095	25.000	7083.440	7108.440	---	---
	Ant4	7095	22.160	7083.680	7105.840	---	---
	Ant1	7115	23.760	7104.040	7127.800	---	---
	Ant2	7115	23.040	7103.360	7126.400	---	---
	Ant3	7115	21.960	7103.800	7125.760	---	---
	Ant4	7115	22.400	7104.360	7126.760	---	---
11AX40MIMO	Ant1	5965	40.960	5944.760	5985.720	---	---

	Ant2	5965	44.480	5941.240	5985.720	---	---
	Ant3	5965	41.920	5944.520	5986.440	---	---
	Ant4	5965	44.160	5943.160	5987.320	---	---
	Ant1	6165	46.320	6139.960	6186.280	---	---
	Ant2	6165	42.080	6143.720	6185.800	---	---
	Ant3	6165	41.440	6144.360	6185.800	---	---
	Ant4	6165	42.720	6143.400	6186.120	---	---
	Ant1	6405	41.840	6384.440	6426.280	---	---
	Ant2	6405	40.560	6384.440	6425.000	---	---
	Ant3	6405	49.040	6381.000	6430.040	---	---
	Ant4	6405	42.320	6383.480	6425.800	---	---
	Ant1	6445	40.800	6424.520	6465.320	---	---
	Ant2	6445	41.760	6423.800	6465.560	---	---
	Ant3	6445	41.120	6424.600	6465.720	---	---
	Ant4	6445	48.240	6418.120	6466.360	---	---
	Ant1	6485	40.240	6464.920	6505.160	---	---
	Ant2	6485	45.680	6460.280	6505.960	---	---
	Ant3	6485	41.360	6464.360	6505.720	---	---
	Ant4	6485	40.560	6464.680	6505.240	---	---
	Ant1	6565	40.960	6544.600	6585.560	---	---
	Ant2	6565	42.320	6544.040	6586.360	---	---
	Ant3	6565	42.080	6543.400	6585.480	---	---
	Ant4	6565	41.600	6543.640	6585.240	---	---
	Ant1	6685	48.240	6657.640	6705.880	---	---
	Ant2	6685	41.360	6663.880	6705.240	---	---
	Ant3	6685	41.760	6663.720	6705.480	---	---
	Ant4	6685	48.400	6657.800	6706.200	---	---
	Ant1	6845	42.400	6823.800	6866.200	---	---
	Ant2	6845	45.600	6823.320	6868.920	---	---
	Ant3	6845	41.920	6823.560	6865.480	---	---
	Ant4	6845	60.160	6817.720	6877.880	---	---
	Ant1	6925	42.400	6903.240	6945.640	---	---
	Ant2	6925	42.240	6903.400	6945.640	---	---
	Ant3	6925	42.080	6904.280	6946.360	---	---
	Ant4	6925	43.360	6903.320	6946.680	---	---
	Ant1	6965	42.560	6943.080	6985.640	---	---
	Ant2	6965	41.280	6944.280	6985.560	---	---
	Ant3	6965	47.280	6943.560	6990.840	---	---
	Ant4	6965	41.920	6943.960	6985.880	---	---
	Ant1	7085	41.360	7064.040	7105.400	---	---
	Ant2	7085	45.120	7063.640	7108.760	---	---
	Ant3	7085	42.720	7062.920	7105.640	---	---
	Ant4	7085	43.520	7063.160	7106.680	---	---

11AX80MIMO	Ant1	5985	87.520	5939.400	6026.920	---	---
	Ant2	5985	89.280	5943.400	6032.680	---	---
	Ant3	5985	81.280	5944.360	6025.640	---	---
	Ant4	5985	84.960	5942.760	6027.720	---	---
	Ant1	6145	82.880	6102.760	6185.640	---	---
	Ant2	6145	81.920	6103.880	6185.800	---	---
	Ant3	6145	81.120	6104.360	6185.480	---	---
	Ant4	6145	83.680	6103.880	6187.560	---	---
	Ant1	6385	85.280	6341.000	6426.280	---	---
	Ant2	6385	82.880	6342.920	6425.800	---	---
	Ant3	6385	84.320	6341.160	6425.480	---	---
	Ant4	6385	84.640	6341.160	6425.800	---	---
	Ant1	6465	83.360	6422.920	6506.280	---	---
	Ant2	6465	84.160	6422.760	6506.920	---	---
	Ant3	6465	83.840	6423.240	6507.080	---	---
	Ant4	6465	82.240	6424.200	6506.440	---	---
	Ant1	6625	84.320	6581.960	6666.280	---	---
	Ant2	6625	80.960	6584.360	6665.320	---	---
	Ant3	6625	83.200	6582.920	6666.120	---	---
	Ant4	6625	89.760	6577.800	6667.560	---	---
	Ant1	6705	81.600	6664.360	6745.960	---	---
	Ant2	6705	85.280	6663.720	6749.000	---	---
	Ant3	6705	83.200	6663.080	6746.280	---	---
	Ant4	6705	83.040	6664.200	6747.240	---	---
	Ant1	6785	82.400	6743.880	6826.280	---	---
	Ant2	6785	81.920	6743.720	6825.640	---	---
	Ant3	6785	81.760	6744.520	6826.280	---	---
	Ant4	6785	81.920	6743.560	6825.480	---	---
	Ant1	6945	85.760	6902.120	6987.880	---	---
	Ant2	6945	82.560	6903.560	6986.120	---	---
	Ant3	6945	82.080	6903.560	6985.640	---	---
	Ant4	6945	82.400	6903.880	6986.280	---	---
	Ant1	7025	84.480	6983.240	7067.720	---	---
	Ant2	7025	83.200	6983.240	7066.440	---	---
	Ant3	7025	82.400	6984.040	7066.440	---	---
	Ant4	7025	82.720	6983.720	7066.440	---	---
11AX160MIMO	Ant1	6025	163.840	5943.400	6107.240	---	---
	Ant2	6025	163.200	5943.080	6106.280	---	---
	Ant3	6025	164.160	5942.760	6106.920	---	---
	Ant4	6025	164.800	5943.080	6107.880	---	---
	Ant1	6185	163.520	6103.080	6266.600	---	---
	Ant2	6185	163.520	6103.080	6266.600	---	---
	Ant3	6185	163.840	6103.400	6267.240	---	---

	Ant4	6185	164.480	6103.080	6267.560	---	---
	Ant1	6345	163.840	6263.400	6427.240	---	---
	Ant2	6345	162.880	6263.400	6426.280	---	---
	Ant3	6345	164.480	6262.440	6426.920	---	---
	Ant4	6345	164.800	6263.080	6427.880	---	---
	Ant1	6665	162.560	6583.400	6745.960	---	---
	Ant2	6665	163.200	6583.080	6746.280	---	---
	Ant3	6665	163.200	6582.760	6745.960	---	---
	Ant4	6665	162.880	6584.040	6746.920	---	---
	Ant1	6985	164.480	6902.120	7066.600	---	---
	Ant2	6985	163.840	6903.400	7067.240	---	---
	Ant3	6985	164.480	6903.080	7067.560	---	---
	Ant4	6985	166.400	6901.800	7068.200	---	---

Test Graphs

11A-CDD_Ant1_5955

11A-CDD_Ant2_5955

11A-CDD_Ant3_5955

11A-CDD_Ant4_5955

11A-CDD_Ant1_6175

11A-CDD_Ant2_6175


11A-CDD_Ant3_6175

11A-CDD_Ant4_6175


11A-CDD_Ant1_6415

11A-CDD_Ant2_6415


11A-CDD_Ant3_6415

11A-CDD_Ant4_6415


11A-CDD_Ant1_6435

11A-CDD_Ant2_6435


11A-CDD_Ant3_6435

11A-CDD_Ant4_6435


11A-CDD_Ant1_6475

11A-CDD_Ant2_6475


11A-CDD_Ant3_6475

11A-CDD_Ant4_6475


11A-CDD_Ant1_6515

11A-CDD_Ant2_6515


11A-CDD_Ant3_6515

11A-CDD_Ant4_6515

11A-CDD_Ant1_6535

11A-CDD_Ant2_6535


11A-CDD_Ant3_6535

11A-CDD_Ant4_6535

11A-CDD_Ant1_6695

11A-CDD_Ant2_6695

11A-CDD_Ant3_6695

11A-CDD_Ant4_6695


11A-CDD_Ant1_6855

11A-CDD_Ant2_6855


11A-CDD_Ant3_6855

11A-CDD_Ant4_6855


11A-CDD_Ant1_6875

11A-CDD_Ant2_6875

11A-CDD_Ant3_6875

11A-CDD_Ant4_6875


11A-CDD_Ant1_6895

11A-CDD_Ant2_6895