FCC RADIO TEST REPORT
FCC ID: 2BQK4FT185I5CAPOBK

Product :	AI shopping desktop Kiosk
Trade Mark :	faytech
Model Name :	FT185I5CAPOBK
Family Model :	FT156I5CAPOBK
Report No. :	S25033104302002

Prepared for

Faytech Tech.Co., Ltd.

Room 202A, 202B, 2F, Building 8, Yunli Intelligent Park,Bantian Street, Longgang District, Shenzhen,China

Prepared by

Shenzhen NTEK Testing Technology Co., Ltd.

No. 24 Xinfa East Road, Xiangshan Community, Xinqiao Street, Baoan District, Shenzhen, Guangdong, People's Republic of China

Tel. 0755-23200050 Website: http://www.ntek.org.cn

TEST RESULT CERTIFICATION

Applicant's name ..... :	Faytech Tech.Co., Ltd.
Address..... :	Room 202A, 202B, 2F, Building 8, Yunli Intelligent Park, Bantian Street, Longgang District, Shenzhen, China
Manufacturer's Name ..... :	Sichuan faytech Tech.co.
Address..... :	FL3, Guojun road no 29, National economic and technological development zone, Suining city, Sichuan province, China
Product description	
Product name.....:	AI shopping desktop Kiosk
Model and/or type reference :	FT185I5CAPOBK
Family Model.....:	FT156I5CAPOBK
Standards ..... :	FCC Part15.407
Test procedure	ANSI C63.10-2020 ANSI C63.10-2020 + Cor.1-2023 ANSI/USEMCSC C63.10a-2024 + Errata to C63.10a-2024 KDB 789033 D02 General UNII Test Procedures New Rules v02r01

This device described above has been tested by NTEK, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements/ the Industry Canada requirements. And it is applicable only to the tested sample identified in the report.

This report shall not be reproduced except in full, without the written approval of NTEK, this document may be altered or revised by NTEK, personnel only, and shall be noted in the revision of the document.

Test Sample Number……: S250331043001

Date of Test .....

Date (s) of performance of tests..... Mar. 31, 2025 ~ Apr. 10, 2026

Date of Issue ..... Jun. 17, 2026

Test Result..... **Pass**

Prepared By :	Reviewed By :	Approved By :
Mary Hu	Aaron Cheng	Alex Li
(Project Engineer)	(Supervisor)	(Manager)

Table of Contents

	Page
1 . SUMMARY OF TEST RESULTS	5
1.1 FACILITIES AND ACCREDITATIONS	6
1.2 MEASUREMENT UNCERTAINTY	6
2 . GENERAL INFORMATION	7
2.1 GENERAL DESCRIPTION OF EUT	7
2.2 DESCRIPTION OF TEST MODES	9
2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	10
2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)	11
2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS	12
3 . TEST REQUIREMENTS	14
3.1 CONDUCTED EMISSION MEASUREMENT	14
3.2 RADIATED EMISSION MEASUREMENT	17
3.3 POWER SPECTRAL DENSITY TEST	33
3.4 26DB & 99% EMISSION BANDWIDTH	36
3.5 MAXIMUM CONDUCTED OUTPUT POWER	38
3.6 OUT OF BAND EMISSIONS	40
3.8 SPURIOUS RF CONDUCTED EMISSIONS	42
3.9 FREQUENCY STABILITY MEASUREMENT	43
4. ANTENNA REQUIREMENT	47
4.1 STANDARD REQUIREMENT	47
4.2 EUT ANTENNA	47
5 TEST RESULTS	48
5.1 DUTY CYCLE	48
5.2 MAXIMUM CONDUCTED OUTPUT POWER	59
5.3 -26DB BANDWIDTH	60
5.4 OCCUPIED CHANNEL BANDWIDTH	71
5.5 MAXIMUM POWER SPECTRAL DENSITY LEVEL	82
5.6 BAND EDGE	93
5.7 CONDUCTED RF SPURIOUS EMISSION	103

Revision History

Report No.	Version	Description	Issued Date
S25033104302002	Rev.01	Initial issue of report	Jun. 17, 2026

1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.407) , Subpart E			
Standard Section	Test Item	Judgment	Remark
15.207	AC Power Line Conducted Emissions	PASS	
15.209(a), 15.407 (b)(1)	Spurious Radiated Emissions	PASS	
15.407 (a)(2)	26 dB Emission Bandwidth	PASS	
N/A	99% Occupation Bandwidth	N/A	
15.407 (a)(1)	Maximum Conducted Output Power	PASS	
15.407(b)(1)	Band Edge	PASS	
15.407 (a)(1)	Power Spectral Density	PASS	
15.407(b)(1)	Spurious Emissions at Antenna Terminals	PASS	
15.203	Antenna Requirement	PASS	
15.407(c)	Automatically discontinue transmission	PASS	

NOTE:

(1)" N/A" denotes test is not applicable in this Test Report

1.1 FACILITIES AND ACCREDITATIONS

FACILITIES

All measurement facilities used to collect the measurement data are located at No. 24 Xinfa East Road, Xiangshan Community, Xinqiao Street, Baoan District, Shenzhen, Guangdong, People's Republic of China.

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.10 and CISPR Publication 22.

LABORATORY ACCREDITATIONS AND LISTINGS

Site Description

CNAS-Lab.	:	The Certificate Registration Number is L5516.
IC-Registration		The Certificate Registration Number is 9270A. CAB identifier:CN0074
FCC- Accredited		Test Firm Registration Number: 463705. Designation Number: CN1184
A2LA-Lab.		The Certificate Registration Number is 4298.01 This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009).
Name of Firm	:	Shenzhen NTEK Testing Technology Co., Ltd.
Site Location	:	No. 24 Xinfa East Road, Xiangshan Community, Xinqiao Street, Baoan District, Shenzhen, Guangdong, People's Republic of China

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement y±U, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	Conducted Emission Test	3.6dB
2	RF power, conducted	1.4dB
3	Spurious emissions, conducted	2.7dB
4	All emissions, radiated(30MHz~1GHz)	4.9dB
5	All emissions, radiated(1GHz~18GHz)	5.1dB
6	All emissions, radiated(> 18GHz)	5.76dB
7	Temperature	±1°C
8	Humidity	±5%
9	All emissions, radiated(9KHz~30MHz)	5.38dB

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	AI shopping desktop Kiosk	
Trade Mark	faytech	
Model Name	FT185I5CAPOBK	
Family Model	FT156I5CAPOBK	
Model Difference	All models have the same circuit and RF module, except for model names.	
FCC ID	2BQK4FT185I5CAPOBK	
Product Description	IEEE 802.11 WLAN Mode Supported	☒802.11a/n/ac/ax (20MHz channel bandwidth) ☒802.11n/ac/ax (40MHz channel bandwidth) ☒802.11ac/ax (80MHz channel bandwidth)
	Data Rate	802.11a: 6,9,12,18,24,36,48,54Mbps; 802.11n(HT20/HT40):MCS0-MCS15; 802.11ac(VHT20):MCS0-MCS8; 802.11ac(VHT40/VHT80):MCS0-MCS9; 802.11ax(VHT20/VHT40/VHT80):MCS0-MCS11;
	Modulation	OFDM with BPSK/QPSK/16QAM/64QAM/256QAM for 802.11a/n/ac; 802.11ax: OFDMA (QPSK/BPSK/16QAM/64QAM/ 256QAM/1024QAM)
	Operating Frequency Range	☒5180-5240MHz for 802.11a/n(HT20)/ac(VHT20)/ax20; 5190-5230MHz for 802.11n(HT40)/ac(VHT40)/ax40; 5210MHz for 802.11ac(VHT80)/ax80
	Number of Channels	☒4 channels for 802.11a/n20/ac20/ax20 in the 5180-5240MHz band ; 2 channels for 802.11 n40/ac40/ax40 in the 5190-5230MHz band ; 1 channels for 802.11 ac80/ax80 in the 5210MHz band ;
	Function:	☐Outdoor AP ☐Indoor AP ☐Fixed P2P ☒Client
	Support TPC	☐YES ☒NO
	Smart system	☒SISO for 802.11a/n/ac/ax ☐MIMO for 802.11n/ac/ax
	Antenna Type	External Antenna
	Antenna Gain	2dBi
	Based on the application, features, or specification exhibited in User's Manual, More details of EUT technical specification, please refer to the User's Manual.	
Adapter	N/A	
Battery	N/A	
Power supply	AC 120V/60Hz	
Connecting I/O Port(s)	Please refer to the User's Manual	
HW Version	N/A	
SW Version	N/A	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
2. Frequency and Channel list for 802.11a/n/ac/ax(20MHz) band I (5180-5240MHz):

802.11a/n/ac/ax(20MHz) Carrier Frequency Channel							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220	-	-	-	-
40	5200	48	5240	-	-	-	-

Frequency and Channel list for 802.11n/ac/ax(40MHz) band I (5190-5230MHz):

802.11n/ac/ax(40MHz) Carrier Frequency Channel							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	-	-	-	-	-	-
46	5230	-	-	-	-	-	-

Frequency and Channel list for 802.11ac/ax(80MHz) band I (5210MHz):

802.11ac/ax(80MHz) Carrier Frequency Channel							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
42	5210	-	-	-	-	-	-

In ax mode, RU allocation is not supported and it is a full carrier. Only the HE SU PPDU format operational mode

2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	Normal Link Mode
Mode 2	802.11a / n 20 /ac 20 / ax20 CH36/ CH40/ CH 48
Mode 3	802.11n40 / ac40 /ax20 CH38/ CH 46
Mode 4	802.11ac80 /ax80 CH 42

For Radiated Emission	
Final Test Mode	Description
Mode 1	Normal Link Mode
Mode 2	802.11a / n 20 /ac 20 / ax20 CH36/ CH40/ CH 48
Mode 3	802.11n40 / ac40 /ax20 CH38/ CH 46
Mode 4	802.11ac80 /ax80 CH 42

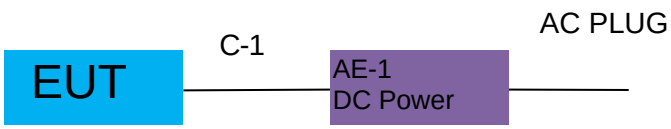
Note:

(1) The measurements are performed at the highest, middle, lowest available channels.

(2) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported

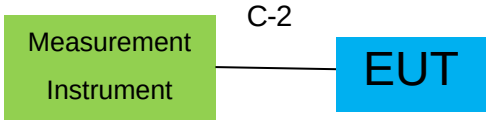
2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

For AC Conducted Emission Mode



For Radiated Test Cases

For Conducted Test Cases



Note: 1.The temporary antenna connector is soldered on the PCB board in order to perform conducted tests and this temporary antenna connector is listed in the equipment list.

2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Model/Type No.	Series No.	Note
AE-1	DC Power	N/A	N/A	Peripherals

Item	Cable Type	Shielded Type	Ferrite Core	Length
C-1	DC Cable	YES	NO	1.2m
C-3	RF Cable	YES	NO	0.1m

Note:

(1) The support equipment was authorized by Declaration of Confirmation.

(2) For detachable type I/O cable should be specified the length in cm in『Length』column.

2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation& Conducted Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Spectrum Analyzer	Aglient	E4440A	MY41000130	2024.04.26 2025.04.24	2025.04.25 2026.04.23	1 year
2	Spectrum Analyzer	Agilent	N9020A	MY49100060	2024.04.25 2025.04.17	2025.04.24 2026.04.16	1 year
3	Spectrum Analyzer	R&S	FSV40	101417	2024.04.25 2025.04.17	2025.04.24 2026.04.16	1 year
4	Test Receiver	R&S	ESPI7	101318	2024.04.26 2025.04.17	2025.04.25 2026.04.16	1 year
5	Bilog Antenna	TESEQ	CBL6111D	31216	2024.05.12 2025.04.17	2025.05.11 2026.04.16	1 year
6	50Ω Coaxial Switch	Anritsu	MP59B	6200983705	2024.04.26	2027.04.25	3 year
7	Horn Antenna	EM	EM-AH-10180	2011071402	2024.05.12	2027.05.11	3 year
8	Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	803	2024.05.12	2027.05.11	3 year
9	Amplifier	EMC	EMC051835SE	980246	2024.04.25 2025.04.17	2025.04.24 2026.04.16	1 year
10	Active Loop Antenna	SCHWARZBECK	FMZB 1519 B	055	2024.05.17	2027.05.16	3 year
11	Power Meter	DARE	RPR3006W	15I00041SNO84	2024.04.25 2025.04.17	2025.04.24 2026.04.16	1 year
12	Test Cable (9KHz-30MHz)	N/A	R-01	N/A	2023.05.06	2026.05.05	3 year
13	Test Cable (30MHz-1GHz)	N/A	R-02	N/A	2023.05.06	2026.05.05	3 year
14	High Test Cable(1G-40GHz)	N/A	R-03	N/A	2023.05.06	2026.05.05	3 year
15	High Test Cable(1G-40GHz)	N/A	R-04	N/A	2023.05.06	2026.05.05	3 year
16	Filter	TRILTHIC	2400MHz	29	2024.04.26	2027.04.25	3 year
17	temporary antenna connector (Note)	NTS	R001	N/A	N/A	N/A	N/A

Note:
We will use the temporary antenna connector (soldered on the PCB board) When conducted test
And this temporary antenna connector is listed within the instrument list

AC Conduction Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Test Receiver	R&S	ESCI	101160	2024.04.26 2025.04.17	2025.04.25 2026.04.16	1 year
2	LISN	R&S	ENV216	101313	2024.04.25 2025.04.16	2025.04.24 2026.04.15	1 year
3	LISN	SCHWARZBECK	NNLK 8129	8129245	2024.04.25 2025.04.16	2025.04.24 2026.04.15	1 year
4	50Ω Coaxial Switch	ANRITSU CORP	MP59B	6200983704	2024.04.26	2027.04.25	3 year
5	Test Cable (9KHz-30MHz)	N/A	C01	N/A	2023.05.06	2026.05.05	3 year
6	Test Cable (9KHz-30MHz)	N/A	C02	N/A	2023.05.06	2026.05.05	3 year
7	Test Cable (9KHz-30MHz)	N/A	C03	N/A	2023.05.06	2026.05.05	3 year

Note: Each piece of equipment is scheduled for calibration once a year except the Test Cable& Aux Equipment which is scheduled for calibration every 3 years.

3. TEST REQUIREMENTS

3.1CONDUCTED EMISSION MEASUREMENT

3.1.1 APPLICABLE STANDARD

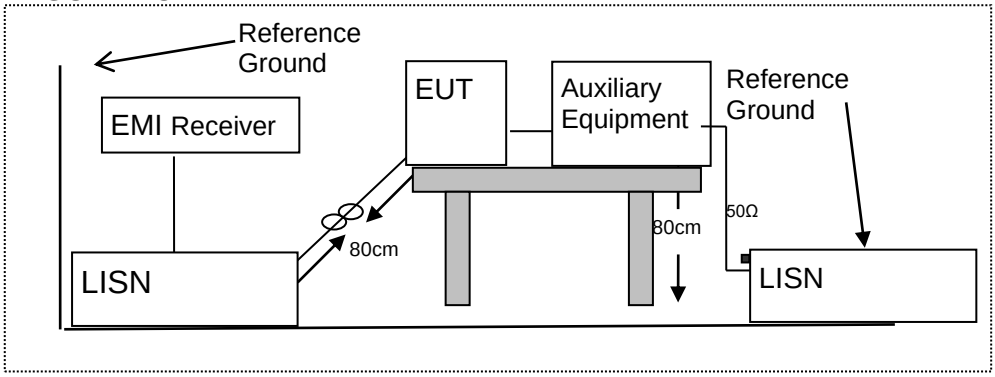
According to FCC Part 15.207(a)

3.1.2 CONFORMANCE LIMIT

Frequency(MHz)	Conducted Emission Limit	
	Quasi-peak	Average
0.15-0.5	66-56*	56-46*
0.5-5.0	56	46
5.0-30.0	60	50

Note: 1. *Decreases with the logarithm of the frequency
2. The lower limit shall apply at the transition frequencies
3. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

3.1.3 TEST CONFIGURATION



3.1.4 TEST PROCEDURE

According to the requirements in Section 6.2 of ANSI C63.10-2020 Conducted emissions the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode.

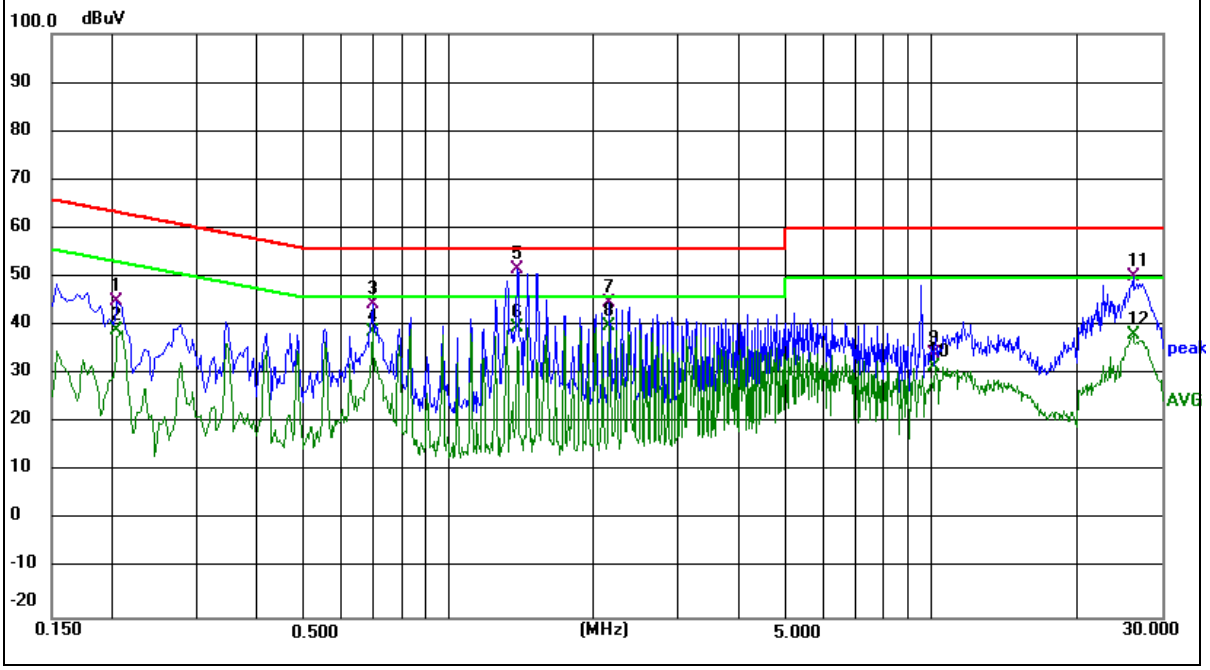
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room.
2. The EUT was placed on a table which is 0.8m above ground plane.
3. Connect EUT to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
4. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40cm long.
5. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
6. LISN at least 80 cm from nearest part of EUT chassis.
7. The frequency range from 150KHz to 30MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth(IF bandwidth=9KHz) with Maximum Hold Mode
9. For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.5 TEST RESULTS

EUT：	AI shopping desktop Kiosk	Model Name ：	FT185I5CAPOBK
Temperature：	21.4℃	Relative Humidity：	55.1%
Pressure：	1010hPa	Phase：	L
Test Voltage ：	AC 120V/60Hz	Test Mode：	Mode 1(5.2G)
Tested By:	Mary Hu		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.2060	34.89	10.07	44.96	63.37	-18.41	QP
0.2060	29.16	10.07	39.23	53.37	-14.14	AVG
0.6940	33.35	11.05	44.40	56.00	-11.60	QP
0.6940	27.85	11.05	38.90	46.00	-7.10	AVG
1.3860	39.14	12.46	51.60	56.00	-4.40	QP
1.3860	27.13	12.46	39.59	46.00	-6.41	AVG
2.1500	34.97	9.69	44.66	56.00	-11.34	QP
2.1500	30.39	9.69	40.08	46.00	-5.92	AVG
10.2018	24.62	9.83	34.45	60.00	-25.55	QP
10.2018	21.90	9.83	31.73	50.00	-18.27	AVG
26.1700	40.07	10.14	50.21	60.00	-9.79	QP
26.1700	27.93	10.14	38.07	50.00	-11.93	AVG

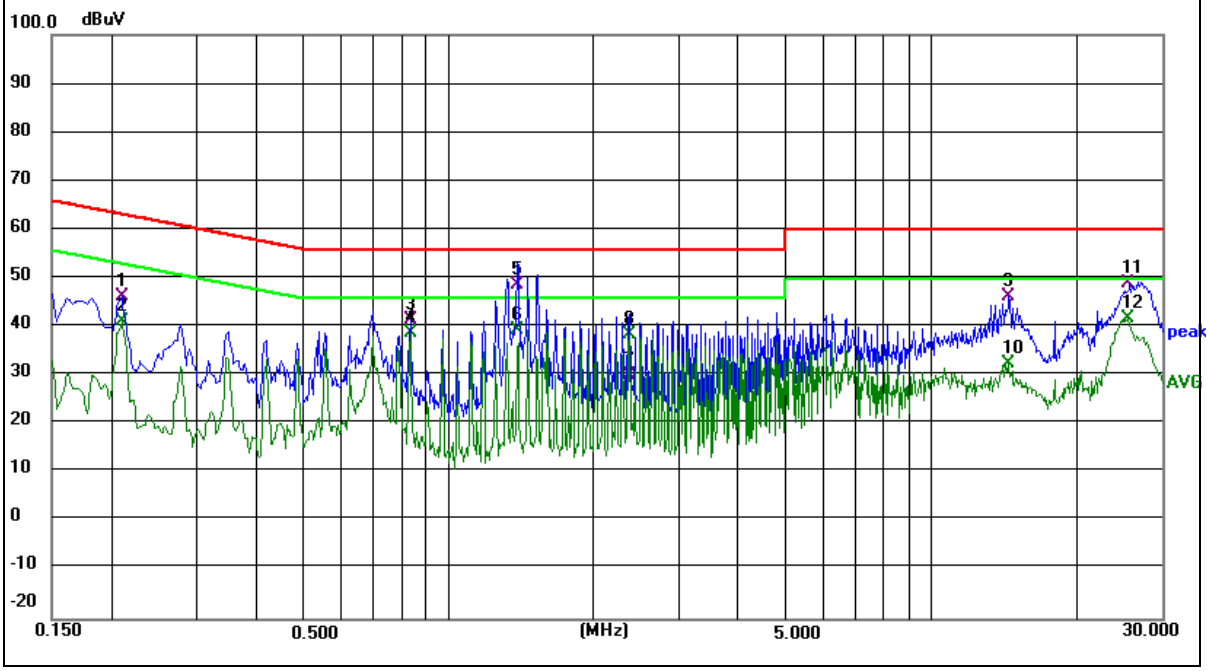
Remark:
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



EUT：	AI shopping desktop Kiosk	Model Name ：	FT185I5CAPOBK
Temperature：	21.4℃	Relative Humidity：	55.1%
Pressure：	1010hPa	Phase：	N
Test Voltage ：	AC 120V/60Hz	Test Mode：	Mode 1(5.2G)
Tested By:	Mary Hu		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.2100	36.31	9.99	46.30	63.21	-16.91	QP
0.2100	31.20	9.99	41.19	53.21	-12.02	AVG
0.8340	30.21	11.38	41.59	56.00	-14.41	QP
0.8340	27.54	11.38	38.92	46.00	-7.08	AVG
1.3860	36.35	12.45	48.80	56.00	-7.20	QP
1.3860	27.10	12.45	39.55	46.00	-6.45	AVG
2.3620	20.39	9.69	30.08	56.00	-25.92	QP
2.3620	28.79	9.69	38.48	46.00	-7.52	AVG
14.3740	36.19	10.08	46.27	60.00	-13.73	QP
14.3740	22.39	10.08	32.47	50.00	-17.53	AVG
25.5540	38.82	10.06	48.88	60.00	-11.12	QP
25.5540	31.72	10.06	41.78	50.00	-8.22	AVG

Remark:
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



3.2 RADIATED EMISSION MEASUREMENT

3.2.1 APPLICABLE STANDARD

According to FCC Part 15.407(b) and 15.209

3.2.2 CONFORMANCE LIMIT

According to FCC Part 15.407(b)(7): radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

According to FCC Part15.205, Restricted bands

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(2)
13.36-13.41			

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Restricted Frequency(MHz)	Field Strength (μV/m)	Field Strength (dBμV/m)	Measurement Distance
0.009~0.490	2400/F(KHz)	20 log (uV/m)	300
0.490~1.705	24000/F(KHz)	20 log (uV/m)	30
1.705~30.0	30	29.5	30
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

Limits of Radiated Emission Measurement(Above 1000MHz)

Frequency(MHz)	Class B (dBuV/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	74	54

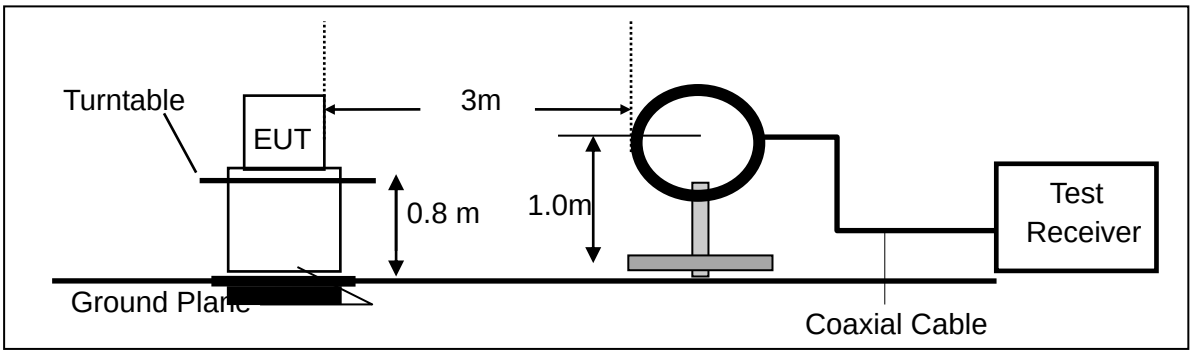
Remark: 1. Emission level in dBuV/m=20 log (uV/m)
2. Measurement was performed at an antenna to the closed point of EUT distance of meters.
3. For Frequency 9kHz~30MHz:
Distance extrapolation factor =40log(Specific distance/ test distance)(dB);
Limit line=Specific limits(dBuV) + distance extrapolation factor.
For Frequency above 30MHz:
Distance extrapolation factor =20log(Specific distance/ test distance)(dB);
Limit line=Specific limits(dBuV) + distance extrapolation factor.

3.2.3 MEASURING INSTRUMENTS

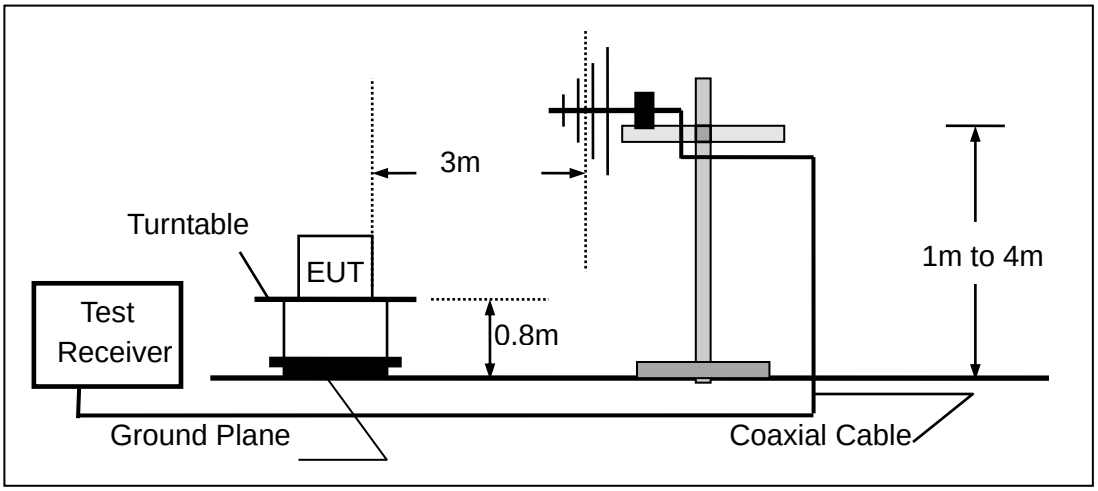
The Measuring equipment is listed in the section 6.3 of this test report.

3.2.4 TEST CONFIGURATION

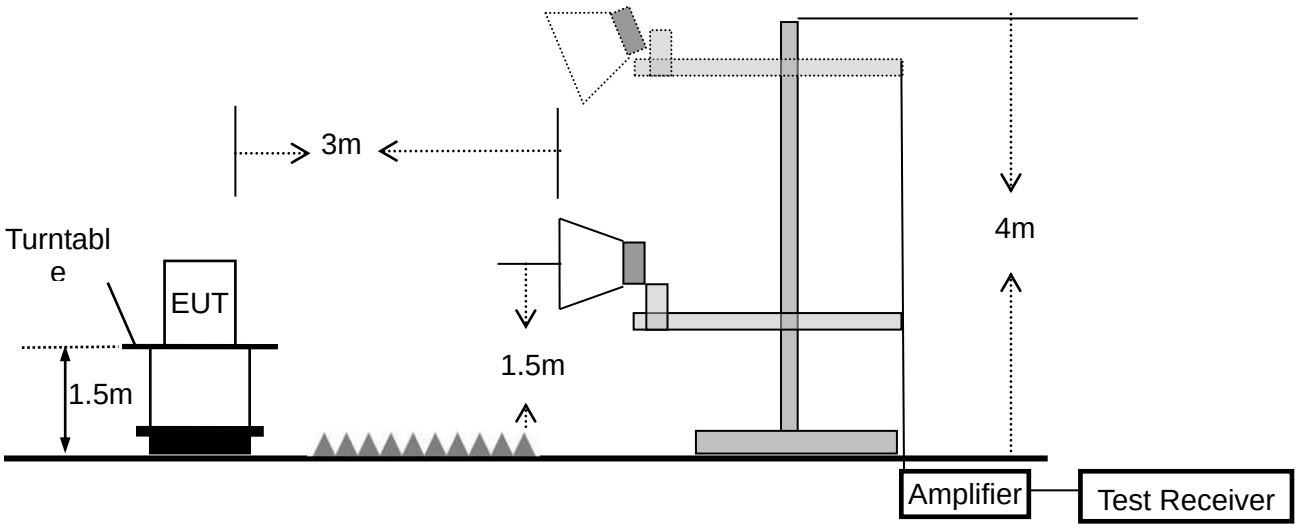
(a) For radiated emissions below 30MHz



(b) For radiated emissions from 30MHz to 1000MHz



(c) For radiated emissions above 1000MHz



3.2.5 TEST PROCEDURE

According to the requirements in Section 6.3, 6.5, 6.6, and 6.10.5 of ANSI C63.10-2020

From 30 MHz to 1GHz test procedure as below:
1) The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3-meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
2) The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3) The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4) For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

Above 1GHz test procedure as below:
1) Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 meter to 1.5 meter.
2) Test the EUT in the lowest channel, middle channel, the highest channel
3) The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and test the worst-case axis positioning.
4) Repeat above procedures until all frequencies measured was complete.

3.2.6 TEST RESULTS (9KHz – 30 MHz)

EUT：	AI shopping desktop Kiosk	Model Name. ：	FT185I5CAPOBK
Temperature：	20 ℃	Relative Humidtity：	48%
Pressure：	1010 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX	Polarization :	--

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	N/A
--	--	--	--	N/A

NOTE:

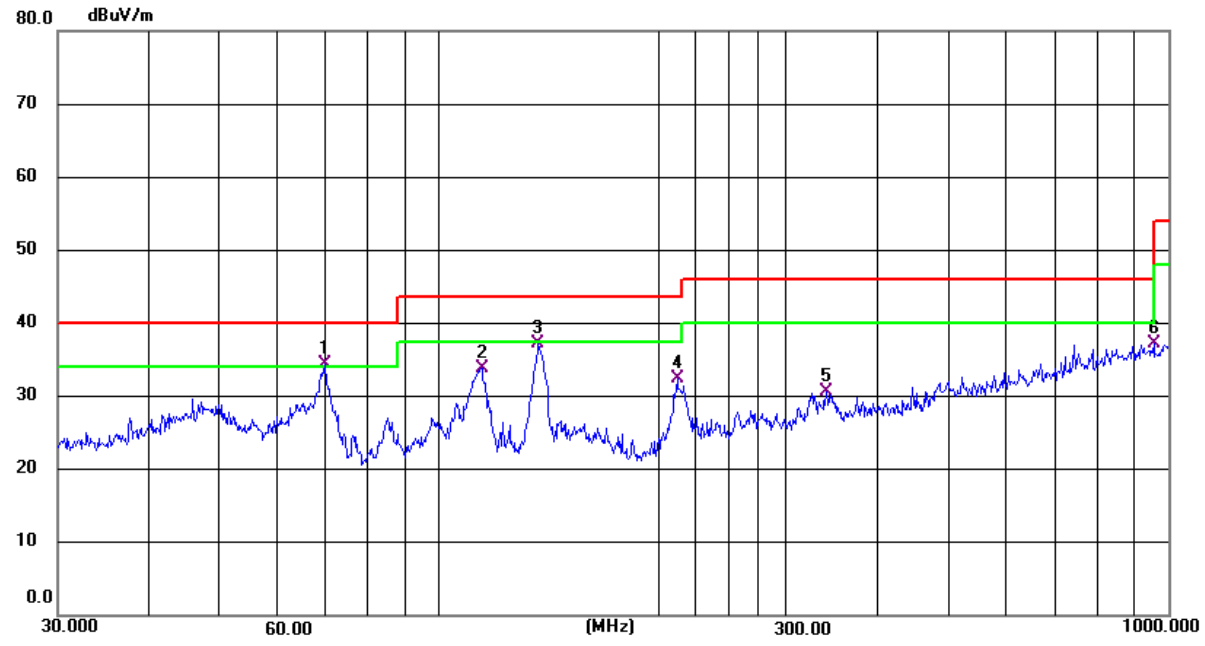
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

3.2.7 TEST RESULTS (30MHz – 1GHz)

EUT：	AI shopping desktop Kiosk	Model Name. ：	FT185I5CAPOBK
Temperature：	25.4℃	Relative Humidity：	52%
Pressure：	1010 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX(5.2G)- 802.11a Ant1 (Mid CH)	Tested By:	Mary Hu

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
V	69.8450	18.03	16.31	34.34	40.00	-5.66	QP
V	114.5146	16.51	17.32	33.83	43.50	-9.67	QP
V	136.9391	22.36	14.86	37.22	43.50	-6.28	QP
V	212.2695	14.56	17.89	32.45	43.50	-11.05	QP
V	339.5888	9.09	21.61	30.70	46.00	-15.30	QP
V	955.4381	6.71	30.59	37.30	46.00	-8.70	QP

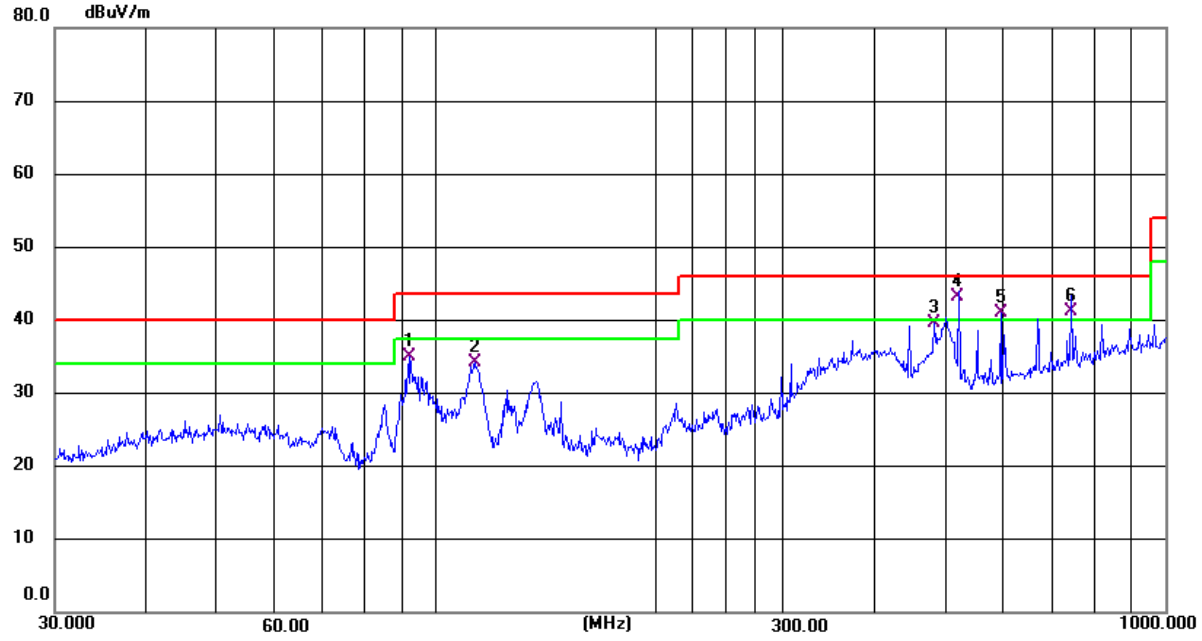
Remark:
Emission Level = Meter Reading + Factor, Margin= Emission Level - Limit



Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
H	92.1388	18.92	16.13	35.05	43.50	-8.45	QP
H	112.9196	16.63	17.52	34.15	43.50	-9.35	QP
H	482.2156	15.03	24.56	39.59	46.00	-6.41	QP
H	519.7282	18.68	24.61	43.29	46.00	-2.71	QP
H	595.1329	15.40	25.66	41.06	46.00	-4.94	QP
H	744.8661	13.29	28.00	41.29	46.00	-4.71	QP

Remark:

Emission Level = Meter Reading + Factor, Margin= Emission Level - Limit



3.2.8 TEST RESULTS (1GHz-18GHz)

EUT：	AI shopping desktop Kiosk	Model Name. ：	FT185I5CAPOBK
Temperature：	25.5 ℃	Relative Humidity：	52%
Pressure：	1010 hPa	Test Voltage：	AC 120V/60Hz
Test Mode ：	TX(5.2G) - 802.11a L CH	Tested By:	Mary Hu

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
V	1289.000	51.15	-7.51	43.64	68.20	-24.56	peak
V	2989.000	46.71	-3.11	43.60	68.20	-24.60	peak
V	6559.000	43.91	5.14	49.05	68.20	-19.15	peak
V	8565.000	43.67	8.38	52.05	68.20	-16.15	peak
V	10435.000	41.81	11.34	53.15	68.20	-15.05	peak
V	15348.000	38.07	13.91	51.98	68.20	-16.22	peak

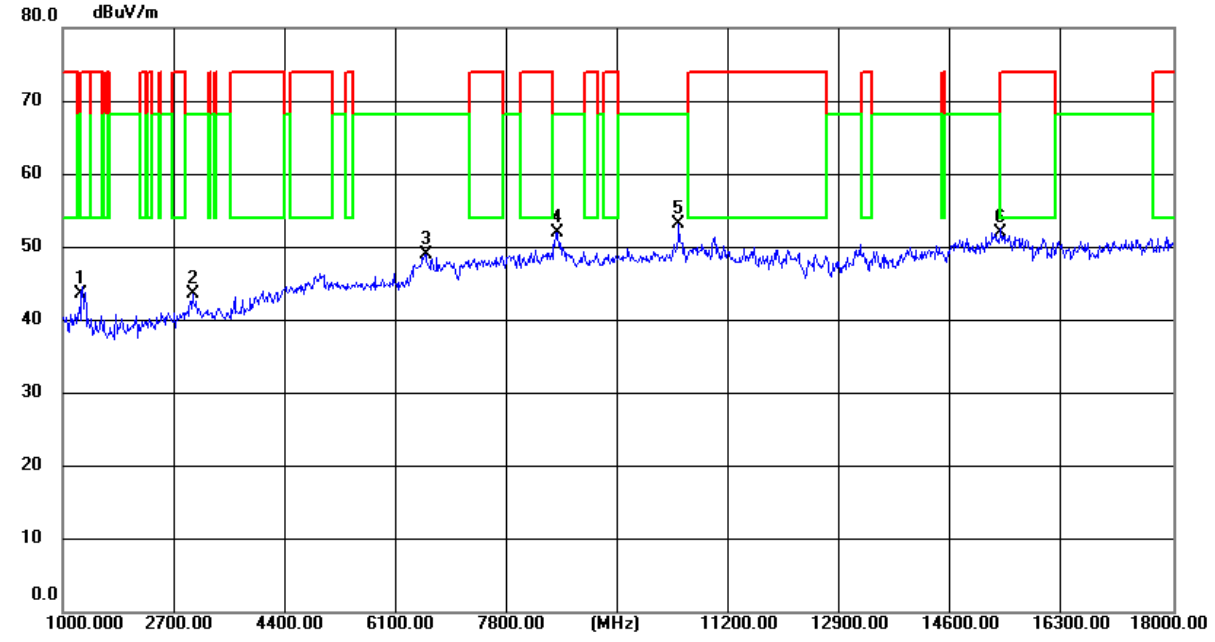
Remark:

(1) Emission Level = Meter Reading+ Factor, Margin= Emission Level- Limit, Factor= Antenna Factor + Cable Loss - Preamp Factor

(2) All the modulation modes and Antenna have been tested, and the worst-case result was 802.11a antenna1. Only the worst-case mode and antenna are reported.

(3) Other emissions are attenuated more than 20dB below the permissible limits, so it does not recorded in the report.

(4) When PK value is lower than the Average value limit, average don't record.



EUT：	AI shopping desktop Kiosk	Model Name. ：	FT185I5CAPOBK
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage：	AC 120V/60Hz
Test Mode ：	TX(5.2G) - 802.11a L CH	Tested By:	Mary Hu

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
H	1374.000	52.91	-7.50	45.41	74.00	-28.59	peak
H	6457.000	43.07	4.69	47.76	68.20	-20.44	peak
H	8803.000	41.54	8.83	50.37	68.20	-17.83	peak
H	10520.000	39.74	11.53	51.27	68.20	-16.93	peak
H	14770.000	36.32	14.61	50.93	68.20	-17.27	peak
H	17592.000	36.26	15.62	51.88	68.20	-16.32	peak

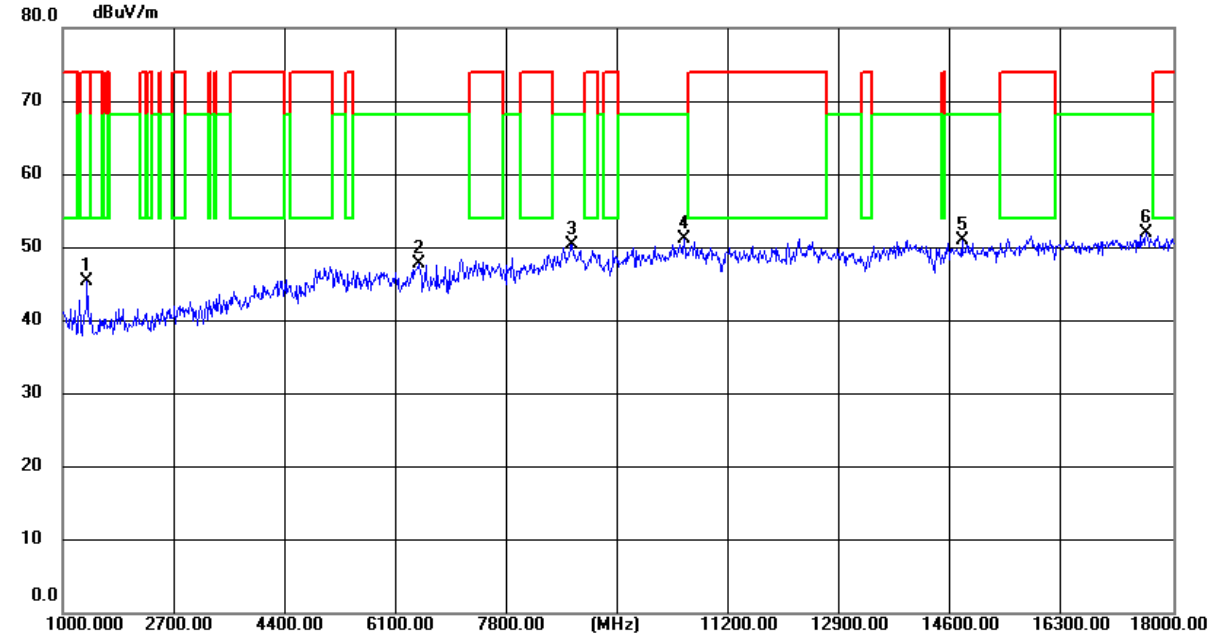
Remark:

(1) Emission Level = Meter Reading+ Factor, Margin= Emission Level- Limit, Factor= Antenna Factor + Cable Loss - Preamp Factor

(2) All the modulation modes and Antenna have been tested, and the worst-case result was 802.11a antenna1. Only the worst-case mode and antenna are reported.

(3) Other emissions are attenuated more than 20dB below the permissible limits, so it does not recorded in the report.

(4) When PK value is lower than the Average value limit, average don't record.



EUT：	AI shopping desktop Kiosk	Model Name. ：	FT185I5CAPOBK
Temperature：	25.5 ℃	Relative Humidity：	52%
Pressure：	1010 hPa	Test Voltage：	AC 120V/60Hz
Test Mode ：	TX(5.2G) - 802.11a M CH	Tested By:	Mary Hu

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
V	1629.000	50.65	-7.66	42.99	68.20	-25.21	peak
V	3227.000	47.66	-2.45	45.21	68.20	-22.99	peak
V	8973.000	40.31	8.97	49.28	68.20	-18.92	peak
V	11115.000	38.65	12.07	50.72	74.00	-23.28	peak
V	15076.000	38.04	14.13	52.17	68.20	-16.03	peak
V	17762.000	35.40	16.75	52.15	74.00	-21.85	peak

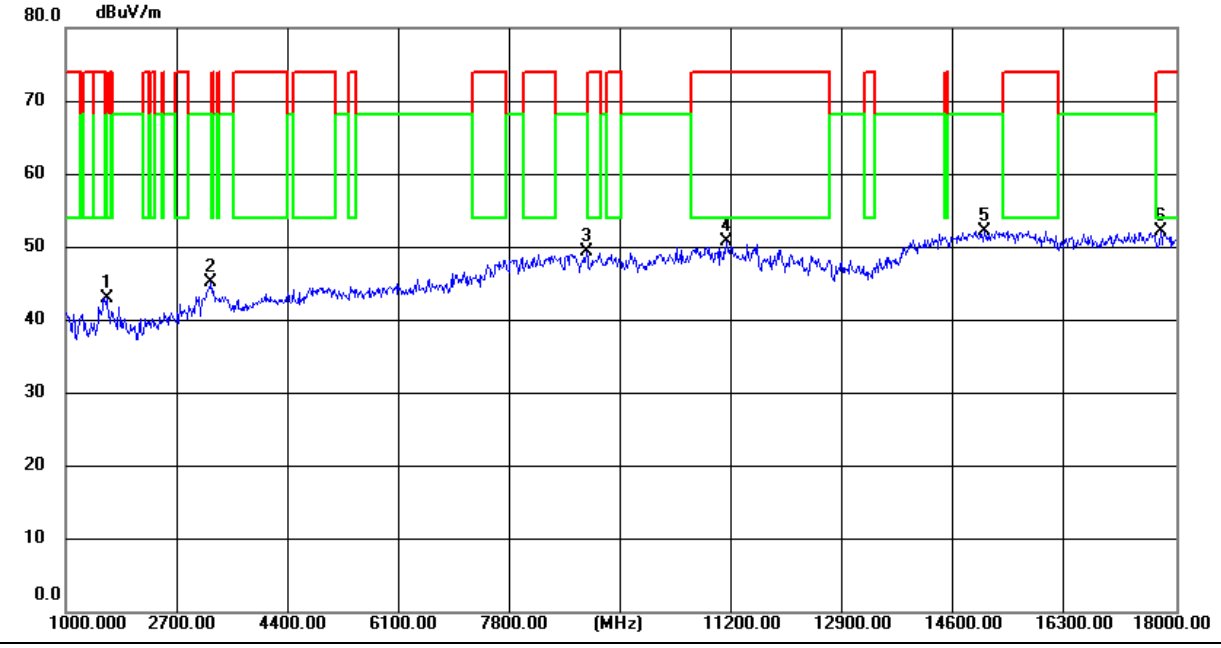
Remark:

(1) Emission Level = Meter Reading+ Factor, Margin= Emission Level- Limit, Factor= Antenna Factor + Cable Loss - Preamp Factor

(2) All the modulation modes and Antenna have been tested, and the worst-case result was 802.11a antenna1. Only the worst-case mode and antenna are reported.

(3) Other emissions are attenuated more than 20dB below the permissible limits, so it does not recorded in the report.

(4) When PK value is lower than the Average value limit, average don't record.



EUT：	AI shopping desktop Kiosk	Model Name. ：	FT185I5CAPOBK
Temperature：	25.5 ℃	Relative Humidity：	52%
Pressure：	1010 hPa	Test Voltage：	AC 120V/60Hz
Test Mode ：	TX(5.2G) - 802.11a M CH	Tested By:	Mary Hu

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
H	1799.000	52.22	-7.49	44.73	68.20	-23.47	peak
H	5012.000	44.67	2.08	46.75	74.00	-27.25	peak
H	8667.000	41.80	8.61	50.41	68.20	-17.79	peak
H	10520.000	38.74	11.53	50.27	68.20	-17.93	peak
H	14379.000	36.31	14.87	51.18	68.20	-17.02	peak
H	17541.000	36.41	15.35	51.76	68.20	-16.44	peak

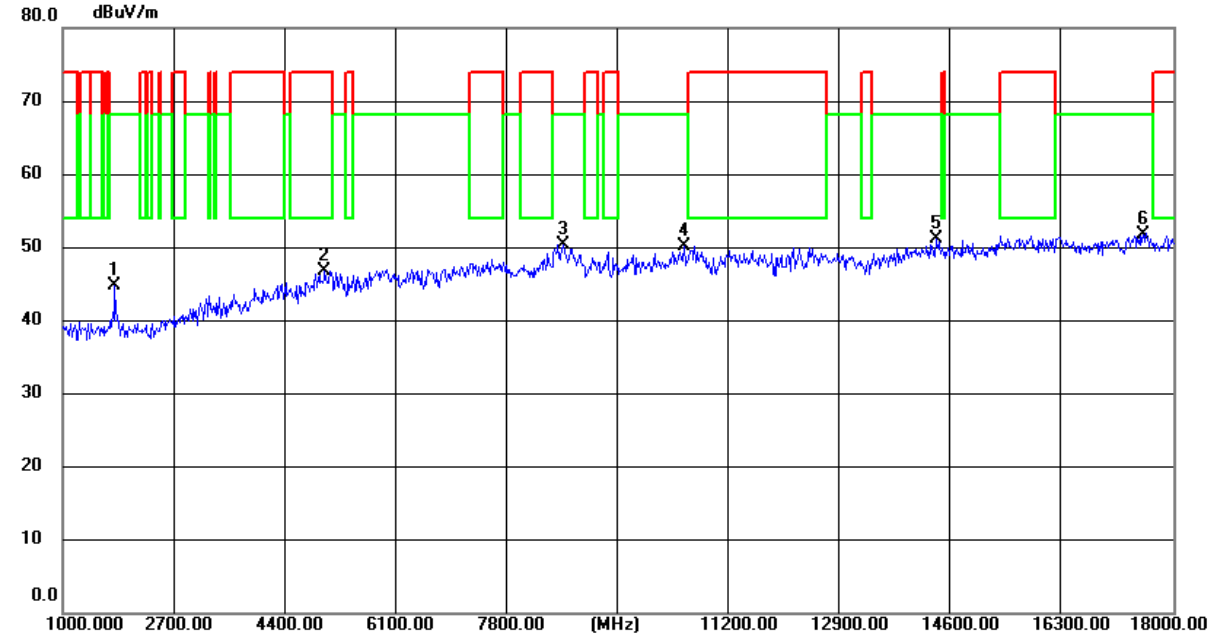
Remark:

(1) Emission Level = Meter Reading+ Factor, Margin= Emission Level- Limit, Factor= Antenna Factor + Cable Loss - Preamp Factor

(2) All the modulation modes and Antenna have been tested, and the worst-case result was 802.11a antenna1. Only the worst-case mode and antenna are reported.

(3) Other emissions are attenuated more than 20dB below the permissible limits, so it does not recorded in the report.

(4) When PK value is lower than the Average value limit, average don't record.



EUT：	AI shopping desktop Kiosk	Model Name. ：	FT185I5CAPOBK
Temperature：	25.5 ℃	Relative Humidity：	52%
Pressure：	1010 hPa	Test Voltage：	AC 120V/60Hz
Test Mode ：	TX(5.2G) - 802.11a H CH	Tested By:	Mary Hu

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
V	1595.000	52.18	-7.61	44.57	74.00	-29.43	peak
V	2989.000	47.21	-3.11	44.10	68.20	-24.10	peak
V	6729.000	43.79	5.76	49.55	68.20	-18.65	peak
V	6916.000	42.92	6.03	48.95	68.20	-19.25	peak
V	8786.000	41.97	8.82	50.79	68.20	-17.41	peak
V	14838.000	36.70	14.52	51.22	68.20	-16.98	peak

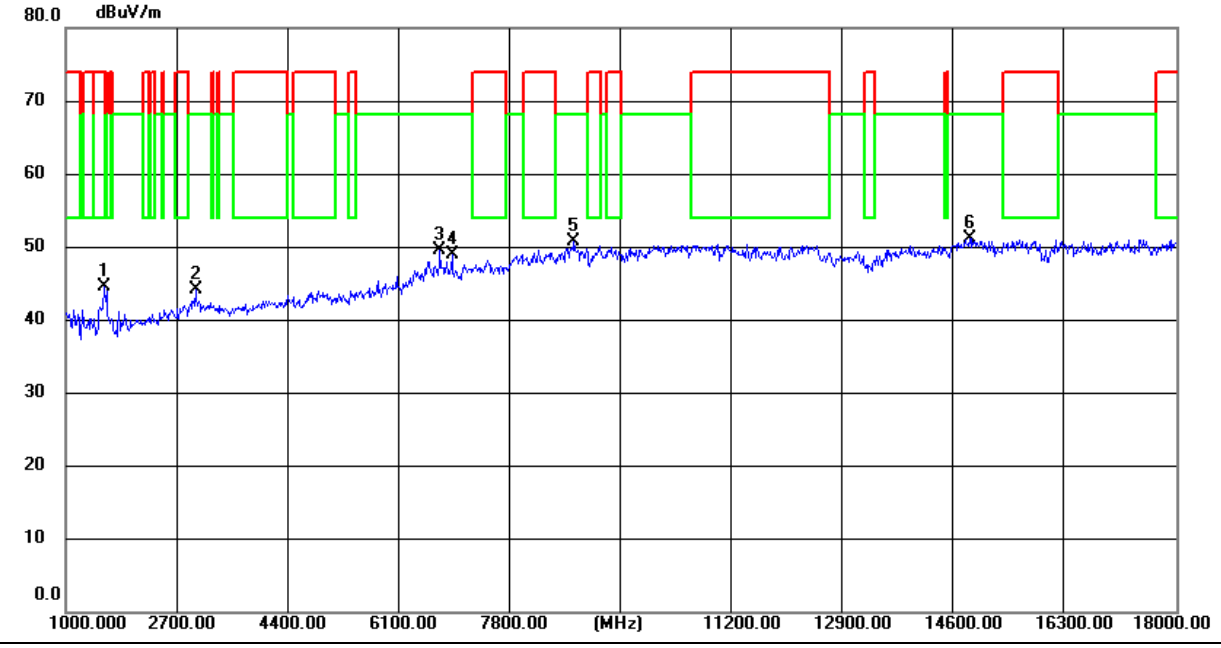
Remark:

(1) Emission Level = Meter Reading+ Factor, Margin= Emission Level- Limit, Factor= Antenna Factor + Cable Loss - Preamp Factor

(2) All the modulation modes and Antenna have been tested, and the worst-case result was 802.11a antenna1. Only the worst-case mode and antenna are reported.

(3) Other emissions are attenuated more than 20dB below the permissible limits, so it does not recorded in the report.

(4) When PK value is lower than the Average value limit, average don't record.



EUT：	AI shopping desktop Kiosk	Model Name. ：	FT185I5CAPOBK
Temperature：	25.5 ℃	Relative Humidity：	52%
Pressure：	1010 hPa	Test Voltage：	AC 120V/60Hz
Test Mode ：	TX(5.2G) - 802.11a H CH	Tested By:	Mary Hu

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
H	1408.000	52.56	-7.53	45.03	74.00	-28.97	peak
H	4876.000	42.78	1.67	44.45	74.00	-29.55	peak
H	9347.000	40.80	9.64	50.44	74.00	-23.56	peak
H	11914.000	40.23	11.30	51.53	74.00	-22.47	peak
H	14923.000	38.66	14.38	53.04	68.20	-15.16	peak
H	17558.000	36.85	15.43	52.28	68.20	-15.92	peak

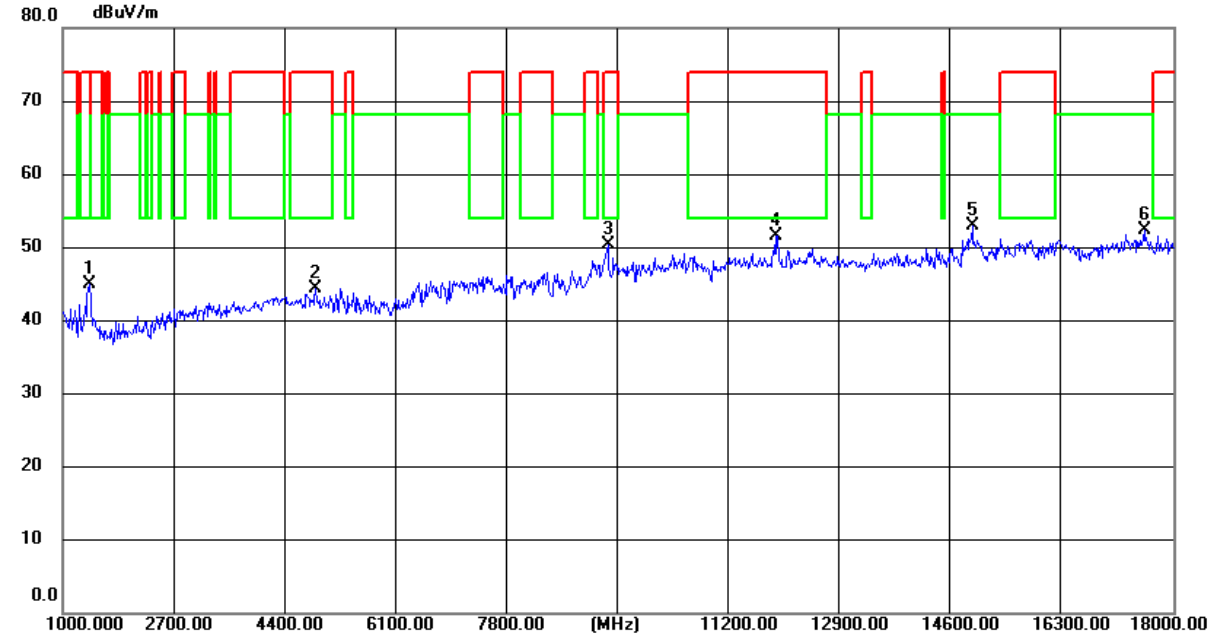
Remark:

(1) Emission Level = Meter Reading+ Factor, Margin= Emission Level- Limit, Factor= Antenna Factor + Cable Loss - Preamp Factor

(2) All the modulation modes and Antenna have been tested, and the worst-case result was 802.11a antenna1. Only the worst-case mode and antenna are reported.

(3) Other emissions are attenuated more than 20dB below the permissible limits, so it does not recorded in the report.

(4) When PK value is lower than the Average value limit, average don't record.



3.2.10 Test Results of Radiated Spurious Emissions (18GHz to 40GHz)

EUT：	AI shopping desktop Kiosk	Model Name. ：	FT185I5CAPOBK
Temperature：	25.3 ℃	Relative Humidity：	52%
Pressure：	1010 hPa	Test Voltage：	AC 120V/60Hz
Test Mode ：	TX(5.2G) - 802.11a H CH	Tested By:	Mary Hu

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
V	20807.200	64.42	-8.69	55.73	74.00	-18.27	peak
V	20807.200	53.24	-8.69	44.55	54.00	-9.45	AVG
V	22745.400	63.07	-7.45	55.62	74.00	-18.38	peak
V	22745.400	51.54	-7.45	44.09	54.00	-9.91	AVG
V	23904.800	49.33	-6.09	43.24	54.00	-10.76	AVG
V	23929.733	60.72	-6.01	54.71	74.00	-19.29	peak
V	30051.600	62.75	-7.41	55.34	68.20	-12.86	peak
V	31548.333	51.62	-5.64	45.98	54.00	-8.02	AVG
V	31609.933	61.61	-5.56	56.05	74.00	-17.95	peak
V	34739.800	59.56	3.02	62.58	68.20	-5.62	peak
V	36446.267	55.91	0.86	56.77	74.00	-17.23	peak
V	36466.067	44.28	0.88	45.16	54.00	-8.84	AVG
V	38770.200	60.04	1.79	61.83	68.20	-6.37	peak

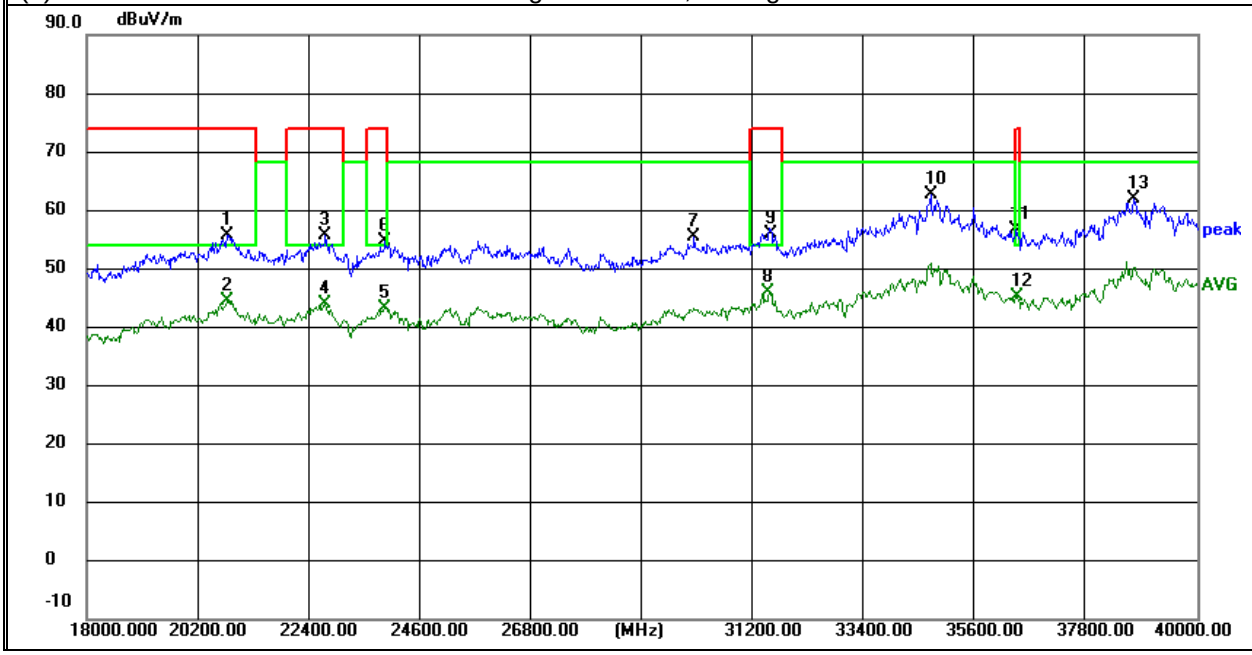
Remark:

(1) Emission Level = Meter Reading+ Factor, Margin= Emission Level- Limit, Factor= Antenna Factor + Cable Loss - Preamp Factor

(2) All the modulation modes and Antenna have been tested, and the worst-case result was 802.11a antenna1. Only the worst-case mode and antenna are reported.

(3) Other emissions are attenuated more than 20dB below the permissible limits, so it does not recorded in the report.

(4) When PK value is lower than the Average value limit, average don't record.



EUT：	AI shopping desktop Kiosk	Model Name. ：	FT185I5CAPOBK
Temperature：	25.3 ℃	Relative Humidity：	52%
Pressure：	1010 hPa	Test Voltage：	AC 120V/60Hz
Test Mode ：	TX(5.2G) - 802.11a H CH	Tested By:	Mary Hu

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
H	19201.200	64.65	-9.75	54.90	74.00	-19.10	peak
H	19213.667	52.83	-9.75	43.08	54.00	-10.92	AVG
H	21555.200	63.54	-8.57	54.97	68.20	-13.23	peak
H	22746.133	63.65	-7.46	56.19	74.00	-17.81	peak
H	22746.133	51.91	-7.46	44.45	54.00	-9.55	AVG
H	29545.600	63.86	-7.76	56.10	68.20	-12.10	peak
H	31219.067	61.84	-5.86	55.98	74.00	-18.02	peak
H	31219.067	50.79	-5.86	44.93	54.00	-9.07	AVG
H	35032.400	59.45	3.67	63.12	68.20	-5.08	peak
H	36464.600	57.44	0.88	58.32	74.00	-15.68	peak
H	36464.600	47.03	0.88	47.91	54.00	-6.09	AVG
H	39813.000	56.27	3.14	59.41	68.20	-8.79	peak

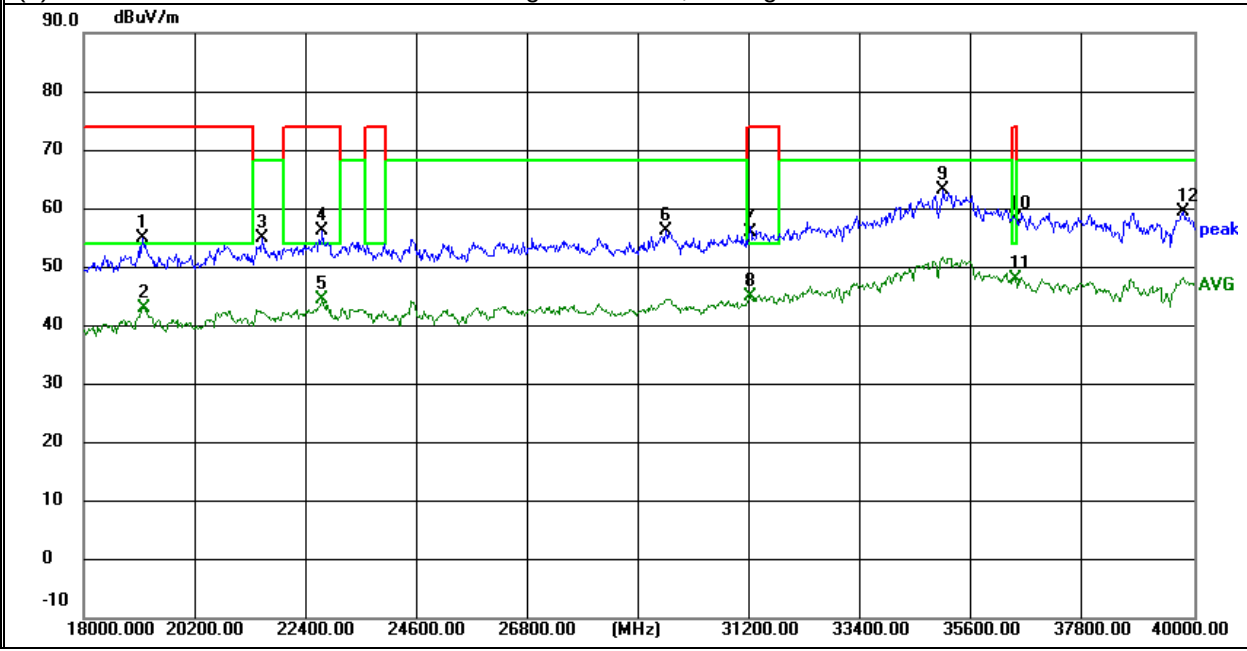
Remark:

(1) Emission Level = Meter Reading+ Factor, Margin= Emission Level- Limit, Factor= Antenna Factor + Cable Loss - Preamp Factor

(2) All the modulation modes and Antenna have been tested, and the worst-case result was 802.11a antenna1. Only the worst-case mode and antenna are reported.

(3) Other emissions are attenuated more than 20dB below the permissible limits, so it does not recorded in the report.

(4) When PK value is lower than the Average value limit, average don't record.



3.2.11 Spurious Emission in Restricted Band and Band Edge

EUT：	AI shopping desktop Kiosk	Model Name. ：	FT185I5CAPOBK
Temperature：	24.2 ℃	Relative Humidity：	49%
Pressure：	1010 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX(5.2G) - 802.11ax40 L CH	Tested By:	Mary Hu

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
V	5150.000	55.19	0.10	55.29	74.00	-18.71	peak
V	5150.000	45.10	0.10	45.20	54.00	-8.80	AVG

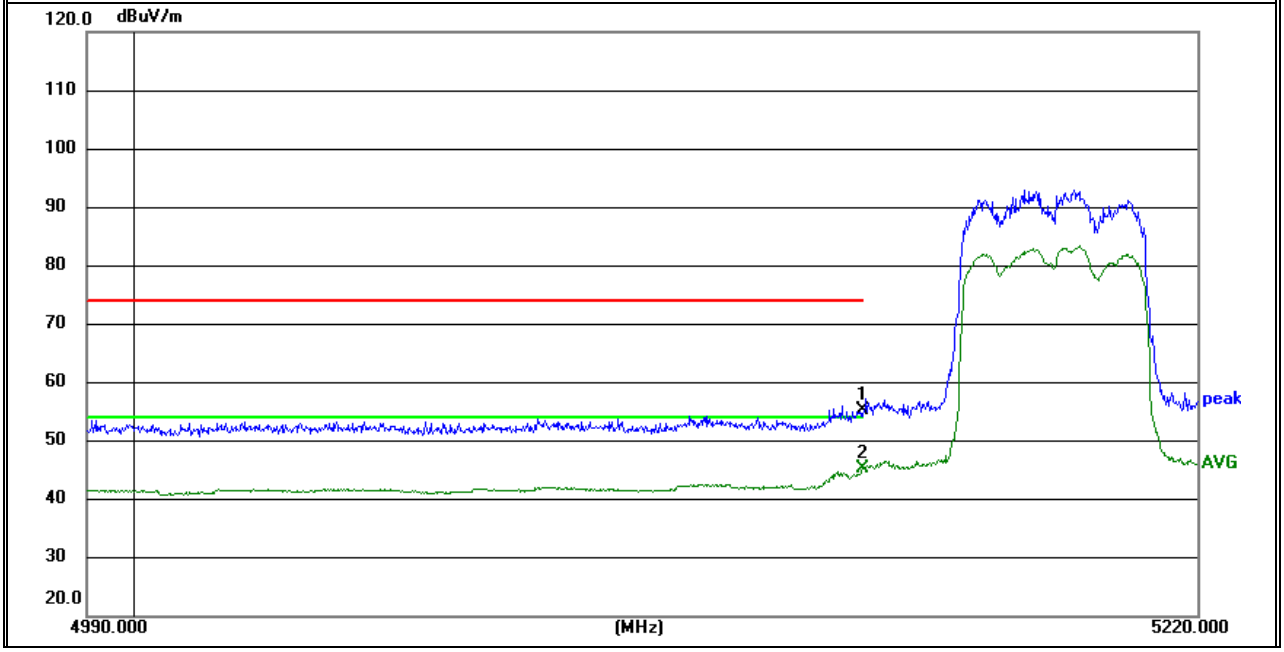
Remark:

(1) Emission Level = Meter Reading+ Factor, Margin= Emission Level- Limit, Factor= Antenna Factor + Cable Loss - Preamp Factor

(2) All the modulation modes and Antenna have been tested, and the worst-case result was 802.11ax40 antenna1. Only the worst-case mode and antenna are reported.

(3) Other emissions are attenuated more than 20dB below the permissible limits, so it does not recorded in the report.

(4) When PK value is lower than the Average value limit, average don't record.



EUT：	AI shopping desktop Kiosk	Model Name. ：	FT185I5CAPOBK
Temperature：	24.2 ℃	Relative Humidity：	49%
Pressure：	1010 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX(5.2G) - 802.11ax40 L CH	Tested By:	Mary Hu

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
H	5150.000	57.66	0.10	57.76	74.00	-16.24	peak
H	5150.000	45.74	0.10	45.84	54.00	-8.16	AVG

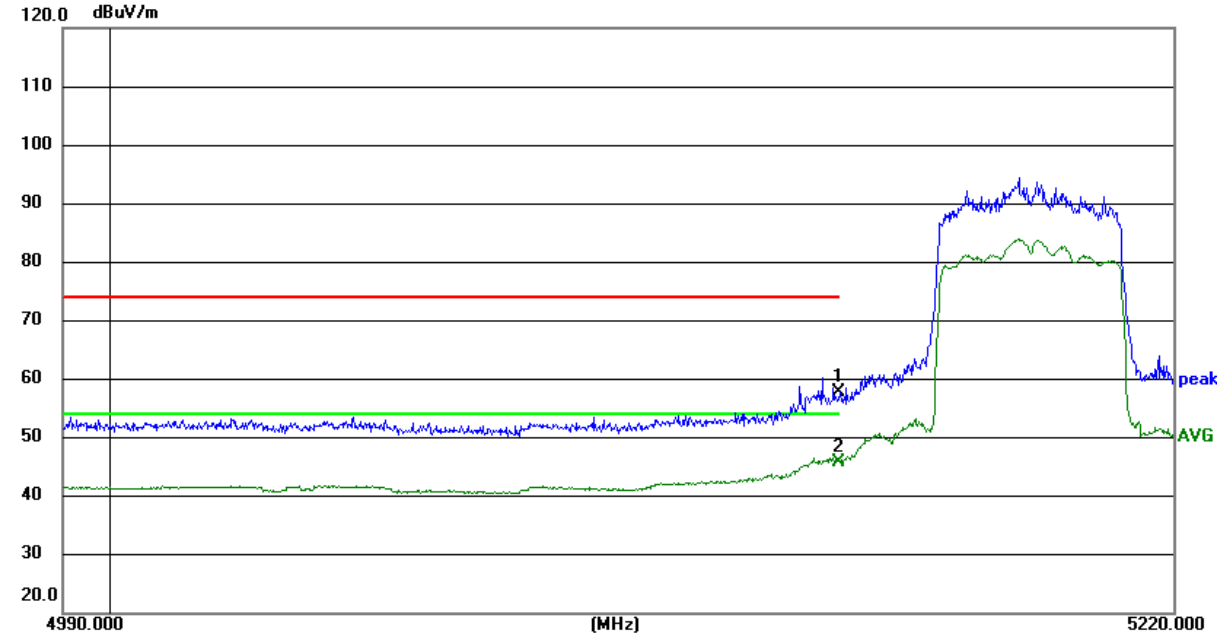
Remark:

(1) Emission Level = Meter Reading+ Factor, Margin= Emission Level- Limit, Factor= Antenna Factor + Cable Loss - Preamp Factor

(2) All the modulation modes and Antenna have been tested, and the worst-case result was 802.11ax40 antenna1. Only the worst-case mode and antenna are reported.

(3) Other emissions are attenuated more than 20dB below the permissible limits, so it does not recorded in the report.

(4) When PK value is lower than the Average value limit, average don't record.



3.3 POWER SPECTRAL DENSITY TEST

3.3.1 Applied procedures / limit

According to FCC §15.407(a)(3)

For the band 5.15-5.25 GHz,

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.3.2 TEST PROCEDURE

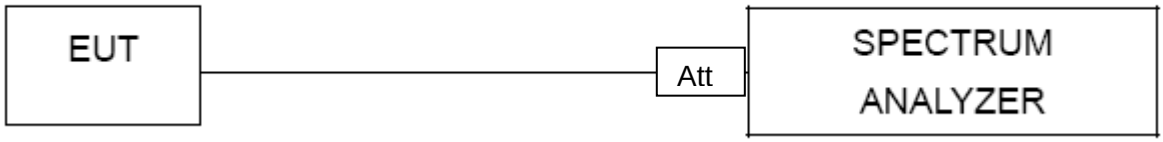
The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.
The path loss was compensated to the results for each measurement.
Set to the maximum power setting and enable the EUT transmit continuously.
The EUT was operating in controlled its channel.

Frequency band 5150~5250MHz:
Use the following spectrum analyzer settings:
Set span to encompass the entire 99% OBW of the signal.
Set RBW = 1 MHz
Set VBW ≥ 3 MHz
Number of points in sweep ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)
Sweep time = auto.
Detector = Power averaging (rms), if available. Otherwise, use sample detector mode.
Do not use sweep triggering. Allow the sweep to “free run.”
Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed such that the average accurately represents the true average over the ON and OFF periods of the transmitter.
Add the duty cycle to the measured power to compute the average power during the actual transmission times.

3.3.3 DEVIATION FROM STANDARD

No deviation.

3.3.4 TEST SETUP



3.3.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.1 Unless otherwise a special operating condition is specified in the follows during the testing.

3.3.6 **TEST RESULTS**

EUT：	AI shopping desktop Kiosk	Model Name. ：	FT185I5CAPOBK
Temperature：	25 ℃	Relative Humidity：	56%
Pressure：	1015 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX Frequency Band I (5150-5250MHz)	Tested By:	Mary Hu

Test data reference attachment.

3.4 26DB & 99% EMISSION BANDWIDTH

3.4.1 Applied procedures / limit

The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

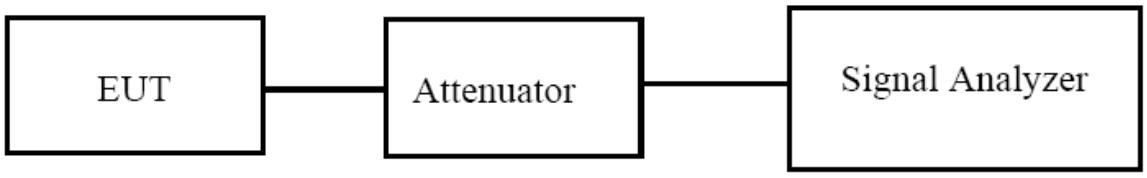
3.4.2 TEST PROCEDURE

26dB Bandwidth

The testing follows ANSI C63.10-2020 clause 12.5.2
The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.
The path loss was compensated to the results for each measurement.
Set to the maximum power setting and enable the EUT transmit continuously.
The EUT was operating in controlled its channel.
Use the following spectrum analyzer settings:
Span = the frequency band of operation
Set RBW = shall be in the range of 1% to 5% of the emission bandwidth.
VBW > RBW
Detector function = peak
Trace = max hold

99% Bandwidth

The testing follows ANSI C63.10-2020 clause 6.9.3
The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.
The path loss was compensated to the results for each measurement.
Set to the maximum power setting and enable the EUT transmit continuously.
The EUT was operating in controlled its channel.
Use the following spectrum analyzer settings:
Span = 1.5 to 5 times the OBW
Set RBW = 1% to 5% of the OBW
Set VBW ≥ 3*RBW
Set Detector = Peak.
Set Trace mode = max hold.
Set Sweep = auto couple



3.4.3 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

3.4.4 **TEST RESULTS**

EUT：	AI shopping desktop Kiosk	Model Name. ：	FT185I5CAPOBK
Temperature：	25 ℃	Relative Humidity：	56%
Pressure：	1012 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX Frequency Band I (5150-5250MHz)	Tested By:	Mary Hu

Test data reference attachment.

3.5 MAXIMUM CONDUCTED OUTPUT POWER

3.5.1 PPLIED PROCEDURES / LIMIT

According to FCC §15.407

The maximum conduced output power should not exceed:

Frequency Band(MHz)	Limit
5150~5250	1W

3.5.2 TEST PROCEDURE

.

The testing follows Measurement Procedure Subclause 12.4.2.4 of ANSI C63.10
The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.
The path loss was compensated to the results for each measurement.
Set to the maximum power setting and enable the EUT transmit continuously.
The EUT was operating in controlled its channel.
Use the following spectrum analyzer settings:
Set span to encompass the entire 99% OBW of the signal.
Set RBW = 1 MHz

Set VBW ≥ 3 MHz

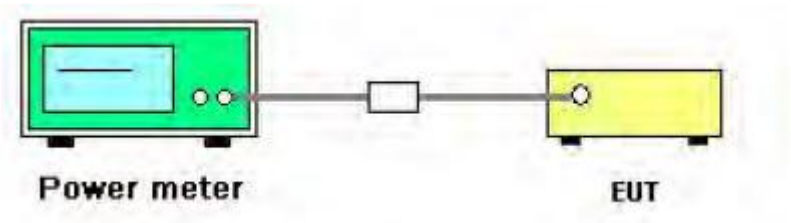
Number of points in sweep ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)
Sweep time = auto.
Detector = Power averaging (rms), if available. Otherwise, use sample detector mode.
Do not use sweep triggering. Allow the sweep to “free run.”
Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed such that the average accurately represents the true average over the ON and OFF periods of the transmitter.
Compute power by integrating the spectrum across the 99% OBW of the signal using the instrument’s band-power measurement function with band limits set equal to the EBW or OBW band-edges.

Add the duty cycle to the measured power to compute the average power during the actual transmission times.

3.5.3 DEVIATION FROM STANDARD

No deviation.

3.5.4 TEST SETUP



3.5.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

3.5.6 TEST RESULTS

EUT：	AI shopping desktop Kiosk	Model Name. ：	FT185I5CAPOBK
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX (5G) Mode Frequency Band I (5150-5250MHz)	Tested By:	Mary Hu

Test data reference attachment.

3.6 OUT OF BAND EMISSIONS

3.6.1 Applicable Standard

According to FCC §15.407(b)

Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

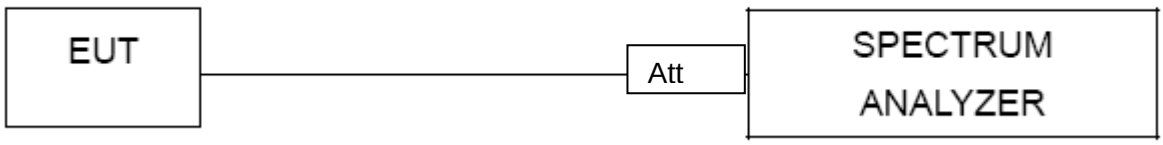
3.6.2 Test Procedure

The testing follows Measurement Procedure Subclause 12.7.6 of ANSI C63.10
The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.
The path loss was compensated to the results for each measurement.
Set to the maximum power setting and enable the EUT transmit continuously.
The EUT was operating in controlled its channel.
Use the following spectrum analyzer settings:
Set RBW = 1 MHz
Set VBW ≥ 3 * RBW
Detector = peak
Sweep time = No faster than coupled (auto) time
Trace mode = max-hold
EIRP = Maximum conducted output power + antenna gain

3.6.3 DEVIATION FROM STANDARD

No deviation.

3.6.4 TEST SETUP



3.6.5 EUT OPERATION CONDITIONS
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

3.6.6 TEST RESULTS

EUT：	AI shopping desktop Kiosk	Model Name. ：	FT185I5CAPOBK
Temperature：	25 ℃	Relative Humidity：	56%
Pressure：	1012 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX (5G) Mode Frequency Band I (5150-5250MHz)	Tested By:	Mary Hu

Test data reference attachment.

3.8 SPURIOUS RF CONDUCTED EMISSIONS

3.8.1Conformance Limit

According to FCC §15.407(b)(1)

3.8.2Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

3.8.3Test Setup

Please refer to Section 6.1 of this test report.

3.8.4Test Procedure

The testing follows Measurement Procedure Subclause 12.7.5 & 12.7.6 of ANSI C63.10

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.

The path loss was compensated to the results for each measurement.

Set to the maximum power setting and enable the EUT transmit continuously.

The EUT was operating in controlled its channel.

Use the following spectrum analyzer settings:

Set RBW = 1 MHz

Set VBW ≥ 3 * RBW

Detector = peak

Sweep time = No faster than coupled (auto) time

Trace mode = max-hold

EIRP = Maximum conducted output power + antenna gain

3.8.5Test Results

Remark: The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the spurious emissions and bandege measurement data.

Test data reference attachment.

3.9 FREQUENCY STABILITY MEASUREMENT

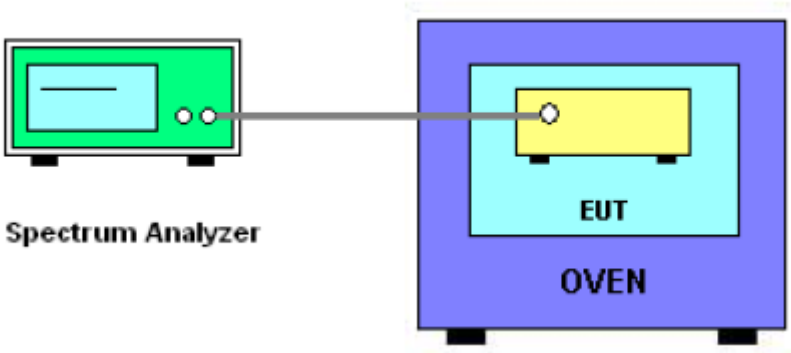
3.9.1 LIMIT

Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

3.9.2 TEST PROCEDURES

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. EUT have transmitted absence of modulation signal and fixed channelize.
3. Set the spectrum analyzer span to view the entire absence of modulation emissions bandwidth.
4. Set RBW = 10 kHz, VBW = 10 kHz with peak detector and maxhold settings.
5. fc is declaring of channel frequency. Then the frequency error formula is (fc-f)/fc × 10_6 ppm .
6. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value
7. Extreme temperature is -20°C~70°C.

3.9.3 TEST SETUP LAYOUT



3.9.4 EUT OPERATION DURING TEST

The EUT was programmed to be in continuously un-modulation transmitting mode.

3.9.5 TEST RESULTS

EUT：	AI shopping desktop Kiosk	Model Name. ：	FT185I5CAPOBK
Temperature：	25 ℃	Relative Humidity：	56%
Pressure：	1012 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX Frequency Band I (5150-5250MHz)	Tested By:	Mary Hu

Note: All modes have been tested, just the 802.11a mode is the worst mode has been recorded in the report.

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	24	5180.0100	5180	0.0100	1.9222
		V max (V)	27.6	5180.0067	5180	0.0067	1.2934
		V min (V)	20.4	5180.0029	5180	0.0029	0.5598
Limits				Within 5150-5250MHz			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	24	T (°C)	-20	5180.0010	5180	0.0010	0.1931
		T (°C)	-10	5180.0011	5180	0.0011	0.2124
		T (°C)	0	5180.0076	5180	0.0076	1.4672
		T (°C)	10	5180.0010	5180	0.0010	0.1931
		T (°C)	20	5180.0095	5180	0.0095	1.8340
		T (°C)	30	5180.0001	5180	0.0001	0.0193
		T (°C)	40	5180.0042	5180	0.0042	0.8108
		T (°C)	50	5180.0087	5180	0.0087	1.6795
		T (°C)	60	5180.0002	5180	0.0002	0.0386
		T (°C)	70	5180.0079	5180	0.0079	1.5251
Limits				Within 5150-5250MHz			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5200MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	24	5200.0070	5200	0.0070	1.3462
		V max (V)	27.6	5200.0099	5200	0.0099	1.9038
		V min (V)	20.4	5200.0083	5200	0.0083	1.5962
Limits				Within 5150-5250MHz			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5200MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	24	T (°C)	-20	5200.0010	5200	0.0010	0.1923
		T (°C)	-10	5200.0018	5200	0.0018	0.3462
		T (°C)	0	5200.0035	5200	0.0035	0.6731
		T (°C)	10	5200.0083	5200	0.0083	1.5962
		T (°C)	20	5200.0024	5200	0.0024	0.4615
		T (°C)	30	5200.0088	5200	0.0088	1.6923
		T (°C)	40	5200.0067	5200	0.0067	1.2885
		T (°C)	50	5200.0086	5200	0.0086	1.6538
		T (°C)	60	5200.0054	5200	0.0054	1.0385
		T (°C)	70	5200.0080	5200	0.0080	1.5385
Limits				Within 5150-5250MHz			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5240MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	24	5240.0005	5240	0.0005	0.0954
		V max (V)	27.6	5240.0012	5240	0.0012	0.2290
		V min (V)	20.4	5240.0008	5240	0.0008	0.1527
Limits				Within 5150-5250MHz			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5240MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	24	T (°C)	-20	5240.0061	5240	0.0061	1.1641
		T (°C)	-10	5240.0044	5240	0.0044	0.8397
		T (°C)	0	5240.0007	5240	0.0007	0.1336
		T (°C)	10	5240.0090	5240	0.0090	1.7176
		T (°C)	20	5240.0027	5240	0.0027	0.5153
		T (°C)	30	5240.0079	5240	0.0079	1.5076
		T (°C)	40	5240.0067	5240	0.0067	1.2786
		T (°C)	50	5240.0046	5240	0.0046	0.8779
		T (°C)	60	5240.0025	5240	0.0025	0.4771
		T (°C)	70	5240.0060	5240	0.0060	1.1450
Limits				Within 5150-5250MHz			
Result				Complies			

4. ANTENNA REQUIREMENT

4.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

4.2 EUT ANTENNA

The EUT antenna is permanent attached External antenna (antenna gain: 2dBi). It comply with the standard requirement.

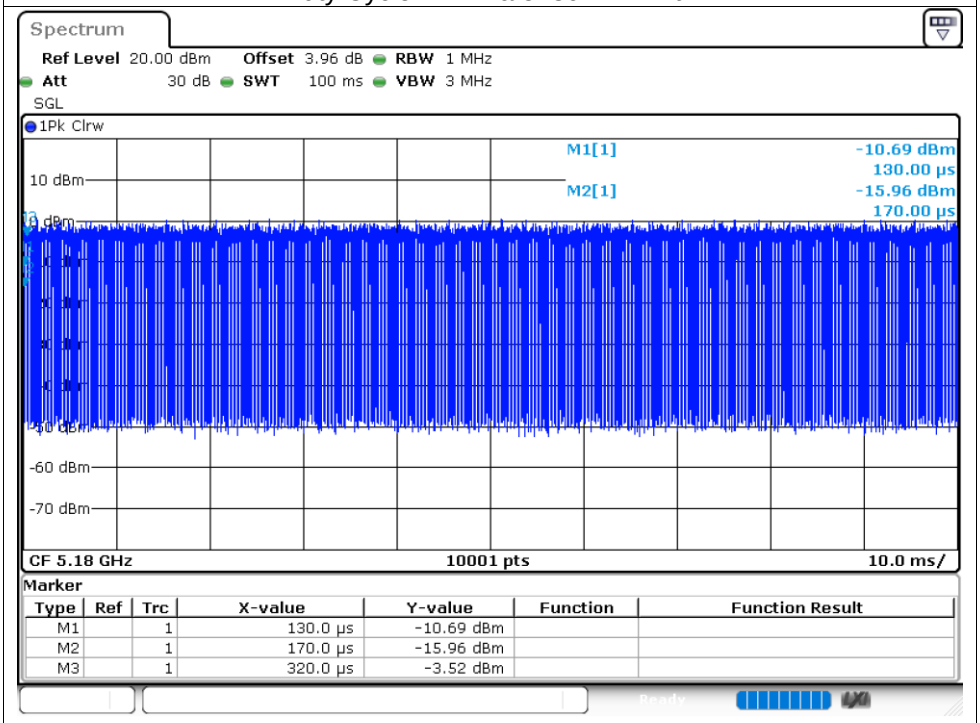
5 TEST RESULTS

5.1 DUTY CYCLE

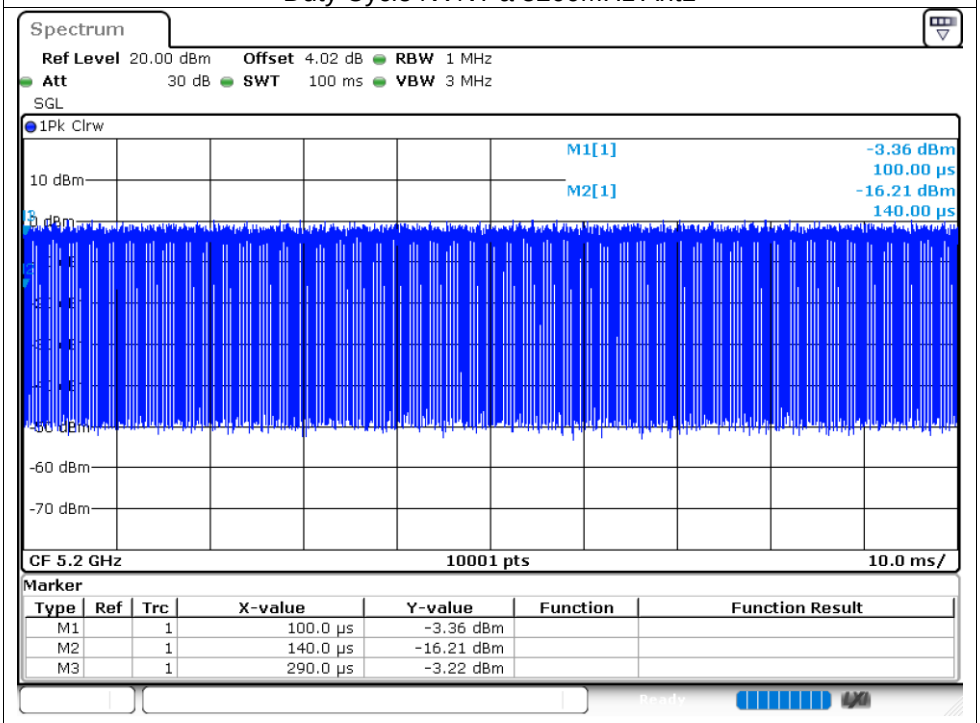
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	80.74	0.93	6.67
NVNT	a	5200	Ant1	80.89	0.92	6.67
NVNT	a	5240	Ant1	80.75	0.93	6.67
NVNT	n20	5180	Ant1	83.27	0.8	5.56
NVNT	n20	5200	Ant1	83.04	0.81	5.56
NVNT	n20	5240	Ant1	83.43	0.79	5.56
NVNT	n40	5190	Ant1	83.49	0.78	5.56
NVNT	n40	5230	Ant1	83.08	0.8	5.56
NVNT	ac20	5180	Ant1	82.31	0.85	5.88
NVNT	ac20	5200	Ant1	82.31	0.85	5.88
NVNT	ac20	5240	Ant1	82.31	0.85	5.88
NVNT	ac40	5190	Ant1	81.69	0.88	6.25
NVNT	ac40	5230	Ant1	81.67	0.88	6.25
NVNT	ac80	5210	Ant1	81.98	0.86	6.25
NVNT	ax20	5180	Ant1	87.5	0.58	4
NVNT	ax20	5200	Ant1	87.55	0.58	3.85
NVNT	ax20	5240	Ant1	87.6	0.57	3.85
NVNT	ax40	5190	Ant1	82.93	0.81	5.56
NVNT	ax40	5230	Ant1	83.09	0.8	5.88
NVNT	ax80	5210	Ant1	81.92	0.87	6.25

Test Graphs

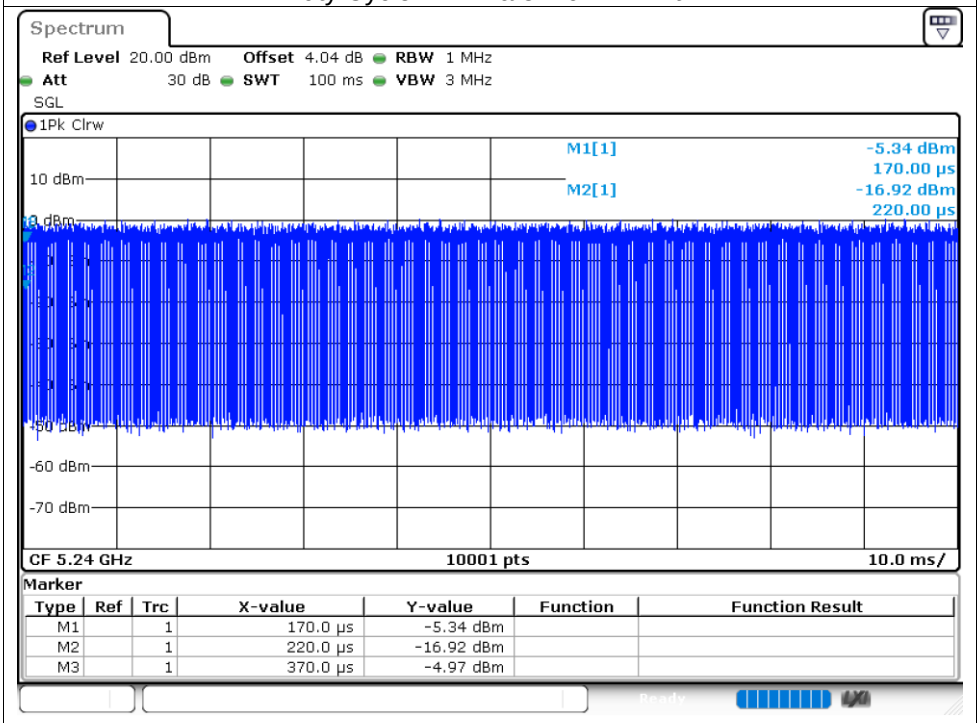
Duty Cycle NVNT a 5180MHz Ant1



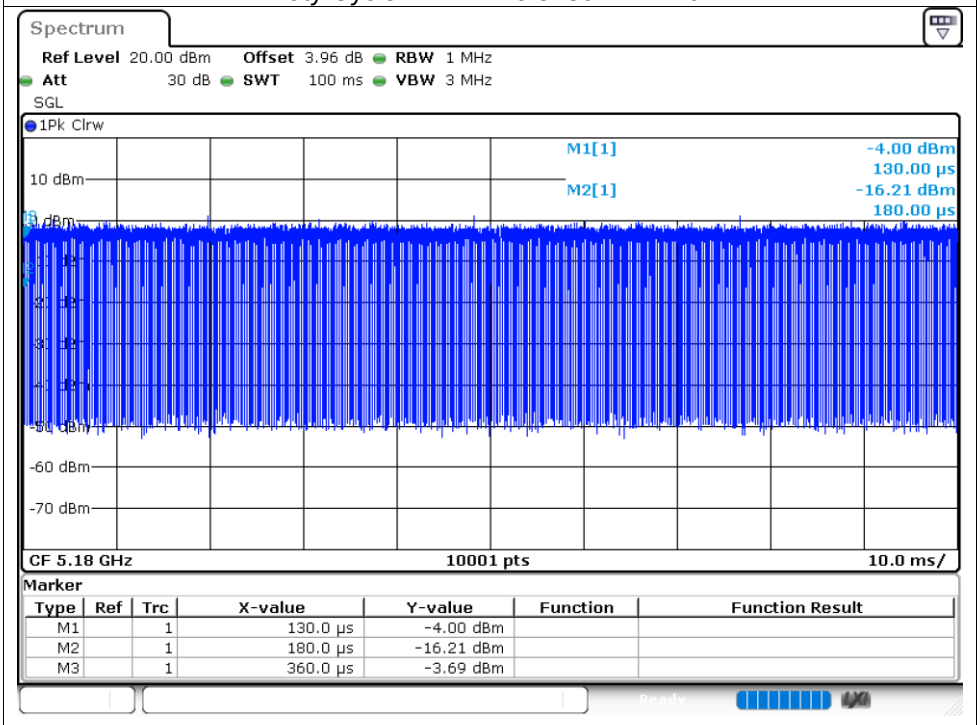
Duty Cycle NVNT a 5200MHz Ant1



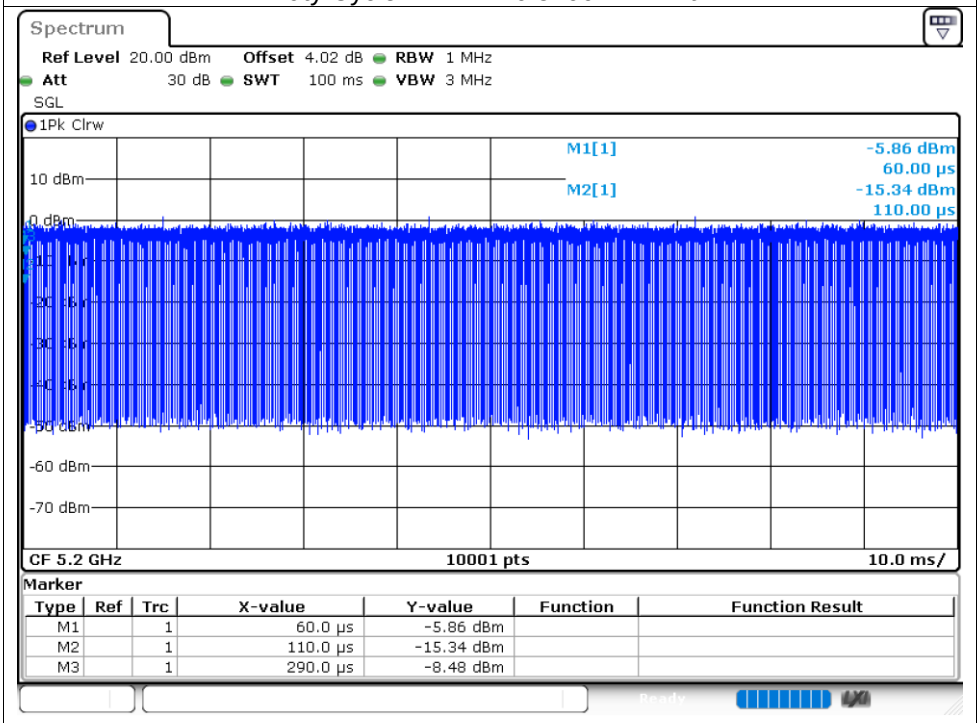
Duty Cycle NVNT a 5240MHz Ant1



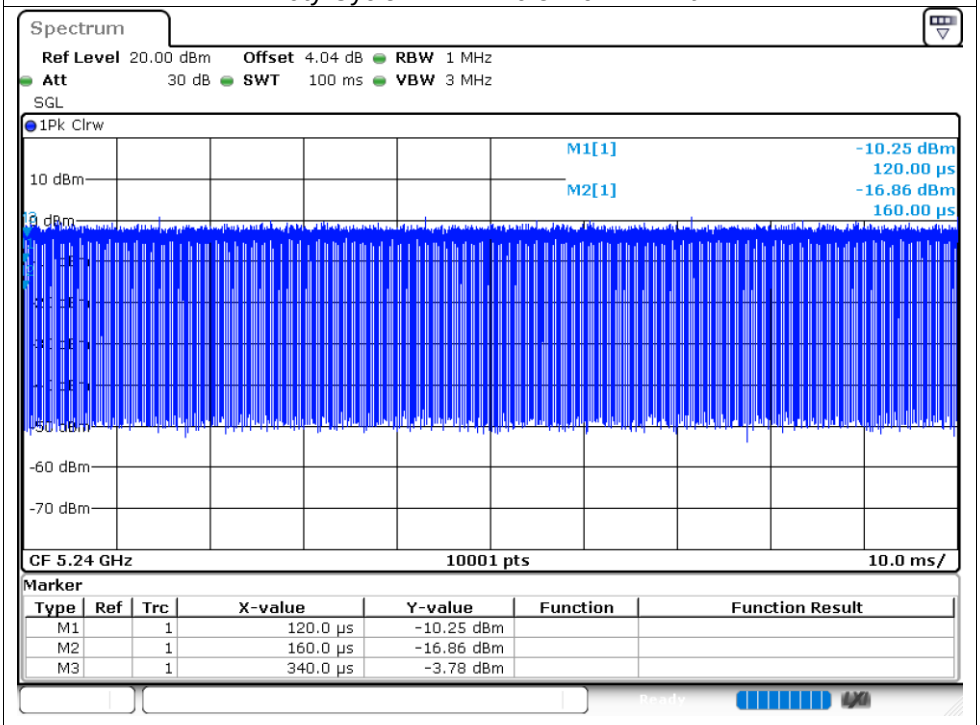
Duty Cycle NVNT n20 5180MHz Ant1



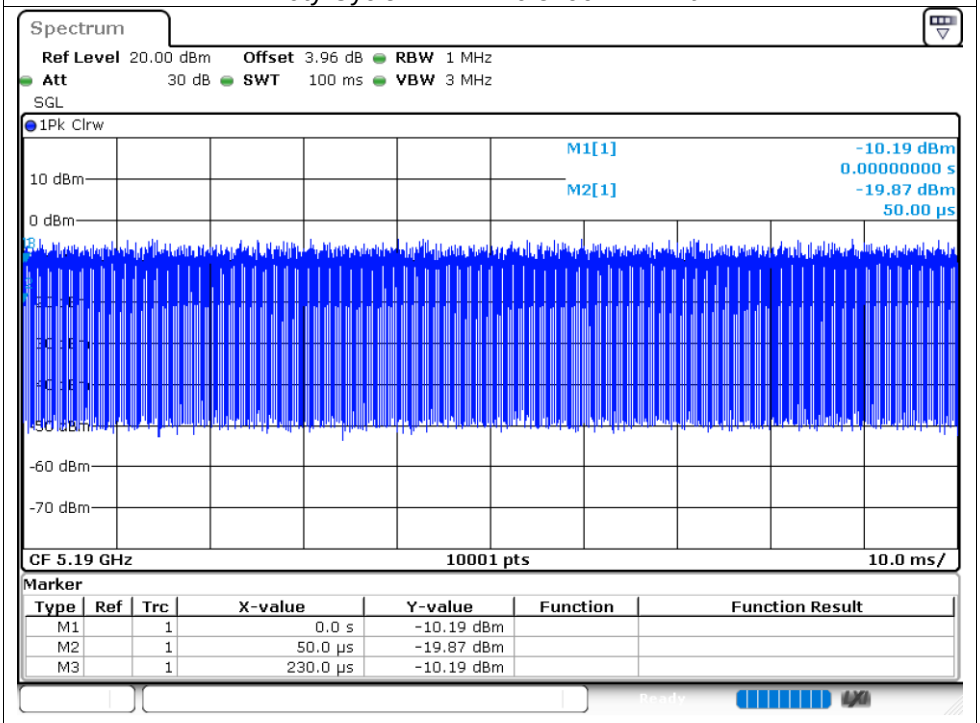
Duty Cycle NVNT n20 5200MHz Ant1



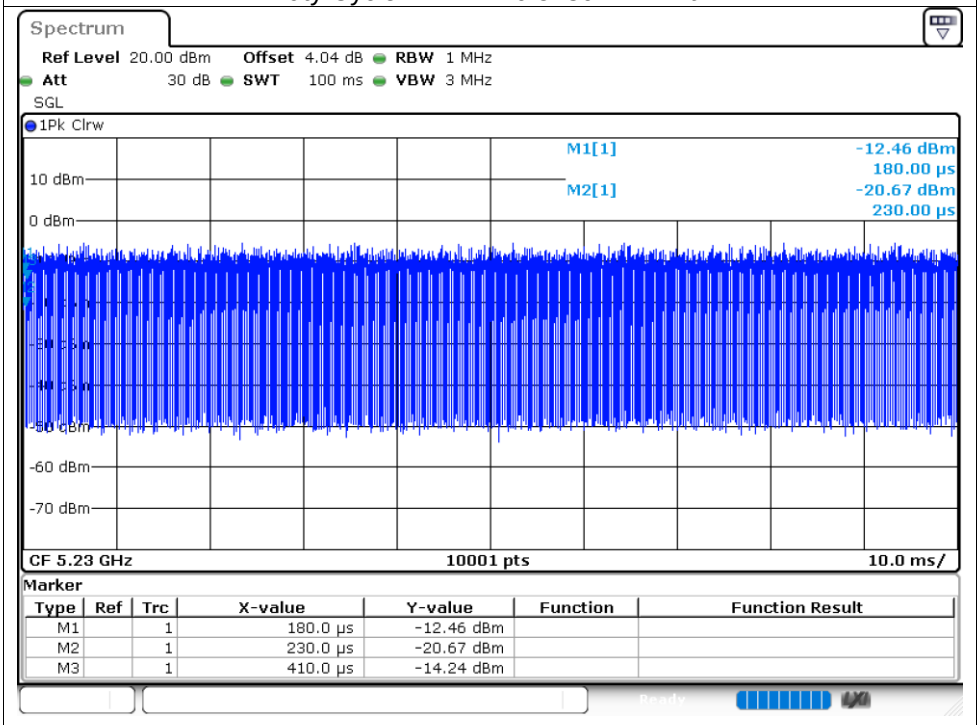
Duty Cycle NVNT n20 5240MHz Ant1



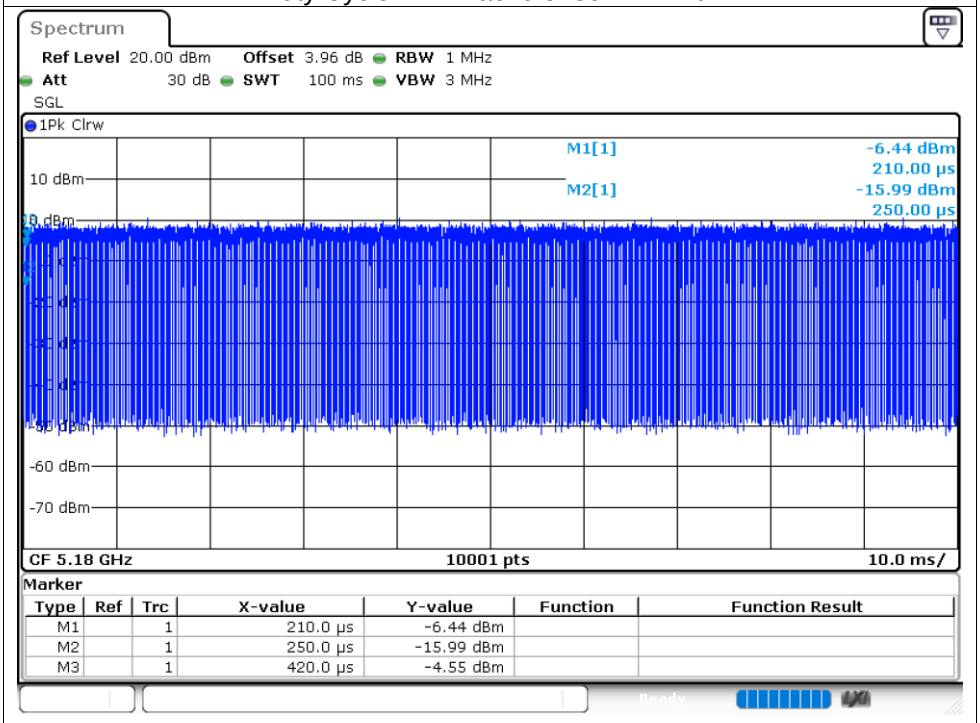
Duty Cycle NVNT n40 5190MHz Ant1



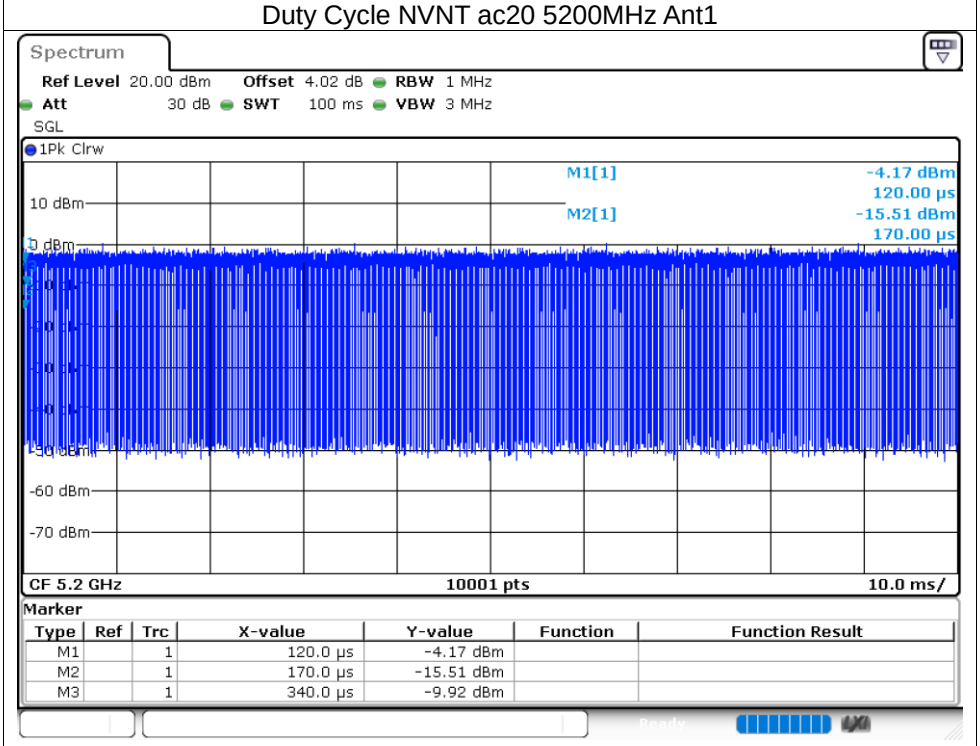
Duty Cycle NVNT n40 5230MHz Ant1



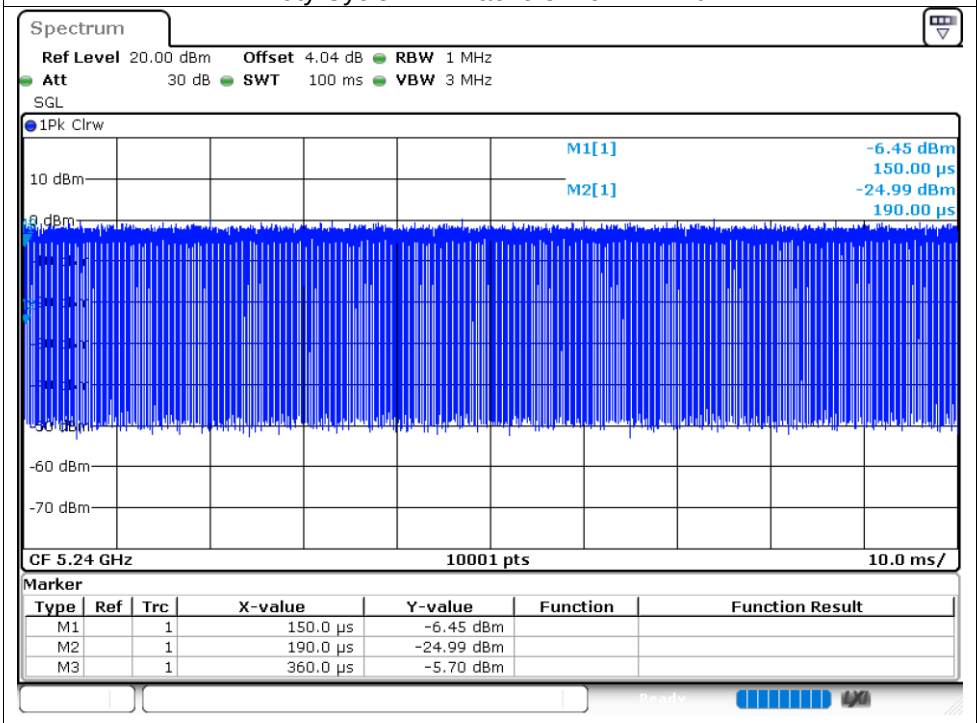
Duty Cycle NVNT ac20 5180MHz Ant1



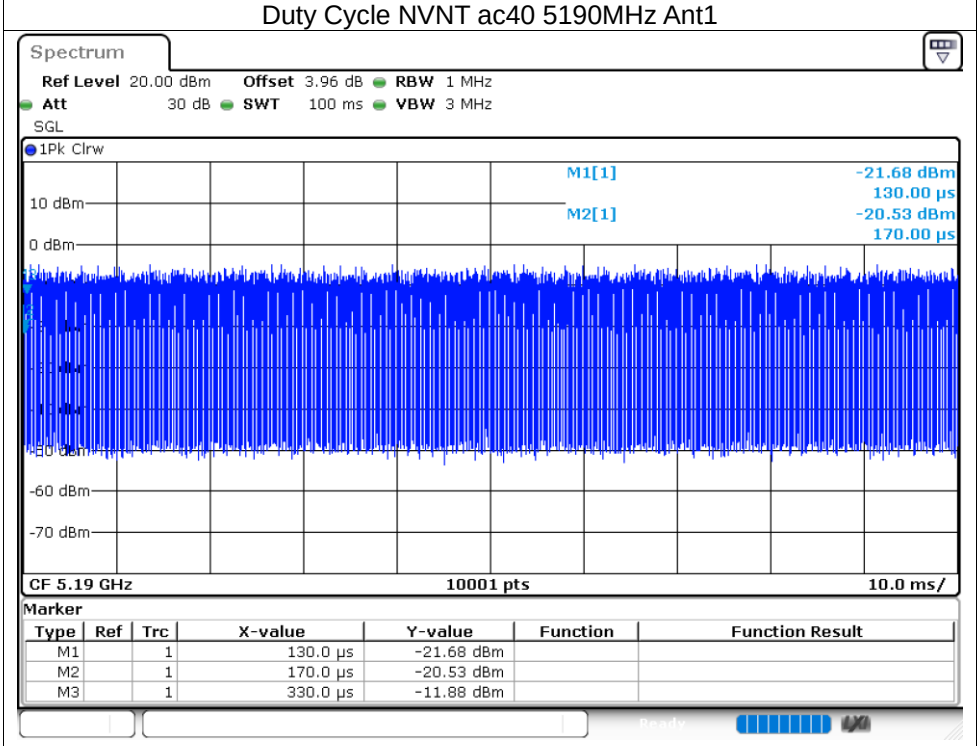
Duty Cycle NVNT ac20 5200MHz Ant1



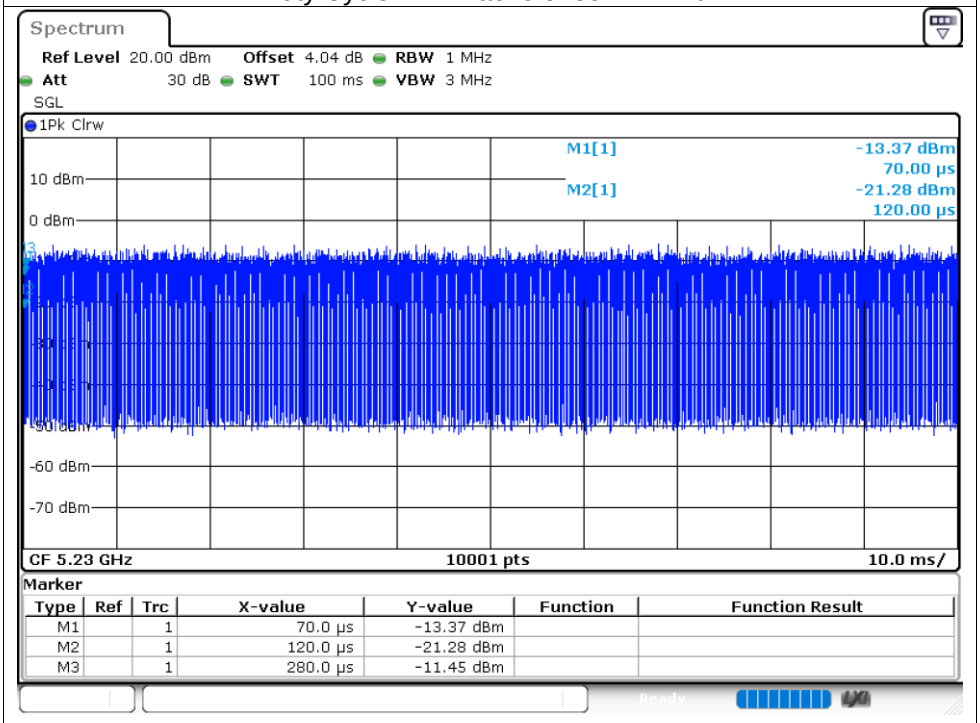
Duty Cycle NVNT ac20 5240MHz Ant1



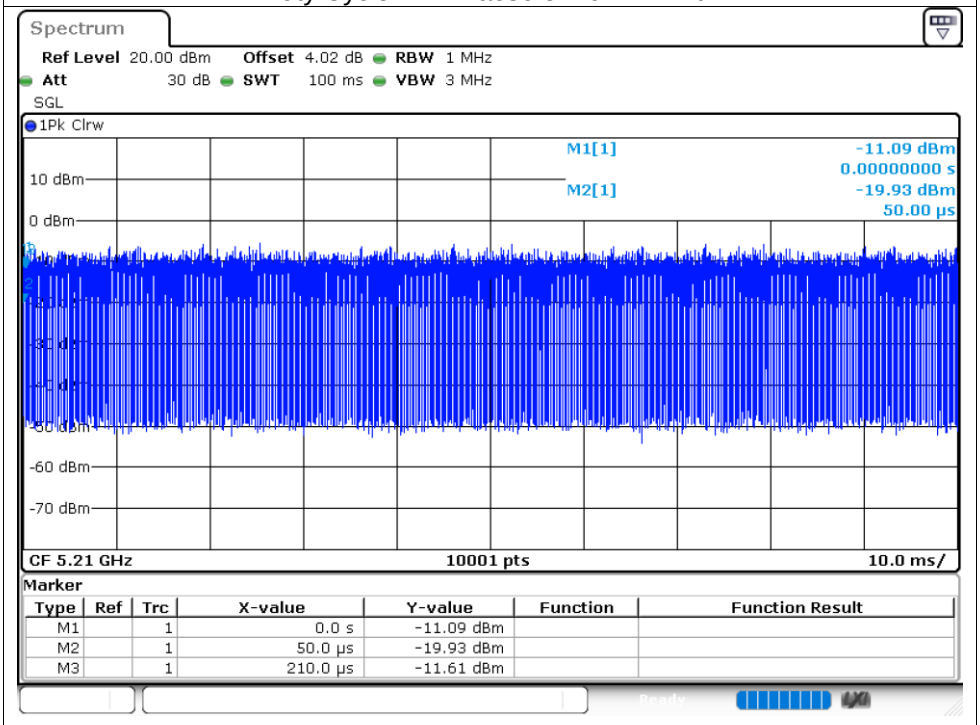
Duty Cycle NVNT ac40 5190MHz Ant1



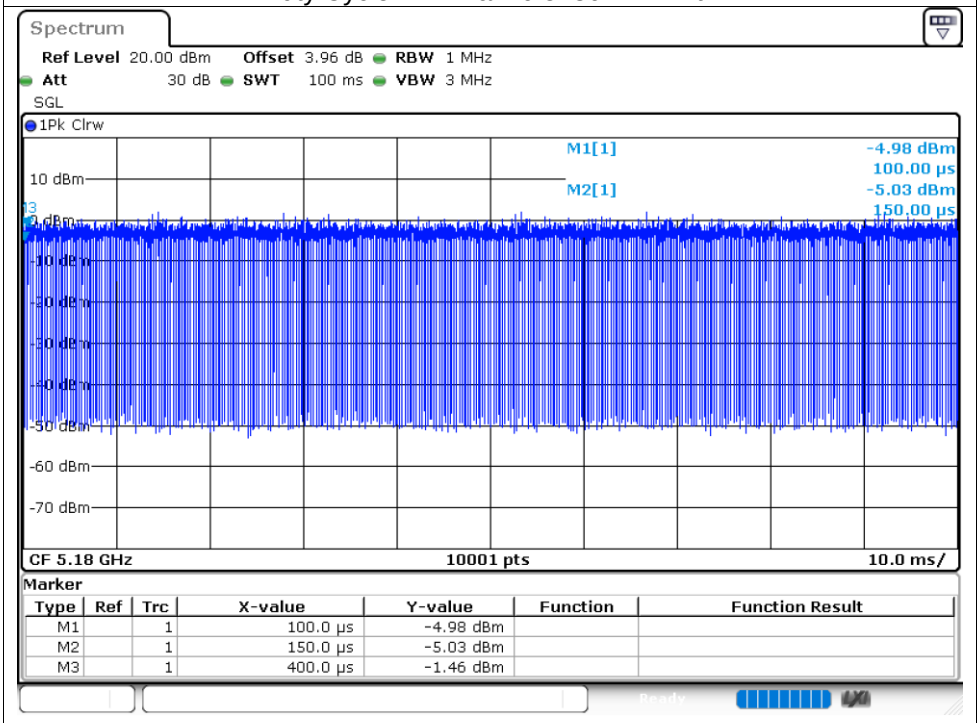
Duty Cycle NVNT ac40 5230MHz Ant1



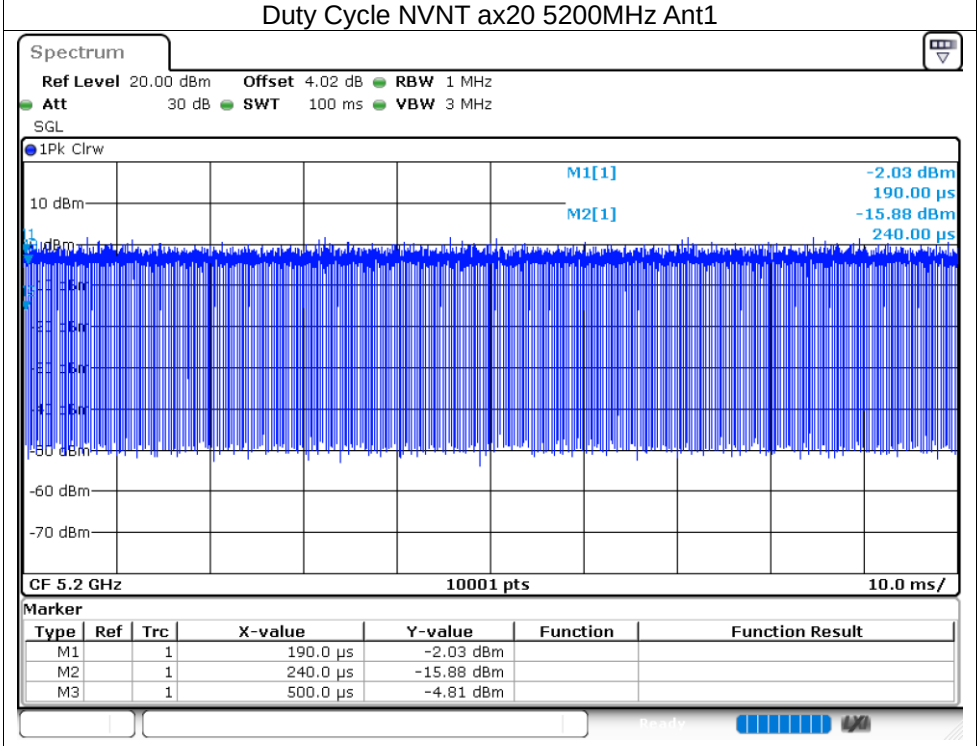
Duty Cycle NVNT ac80 5210MHz Ant1



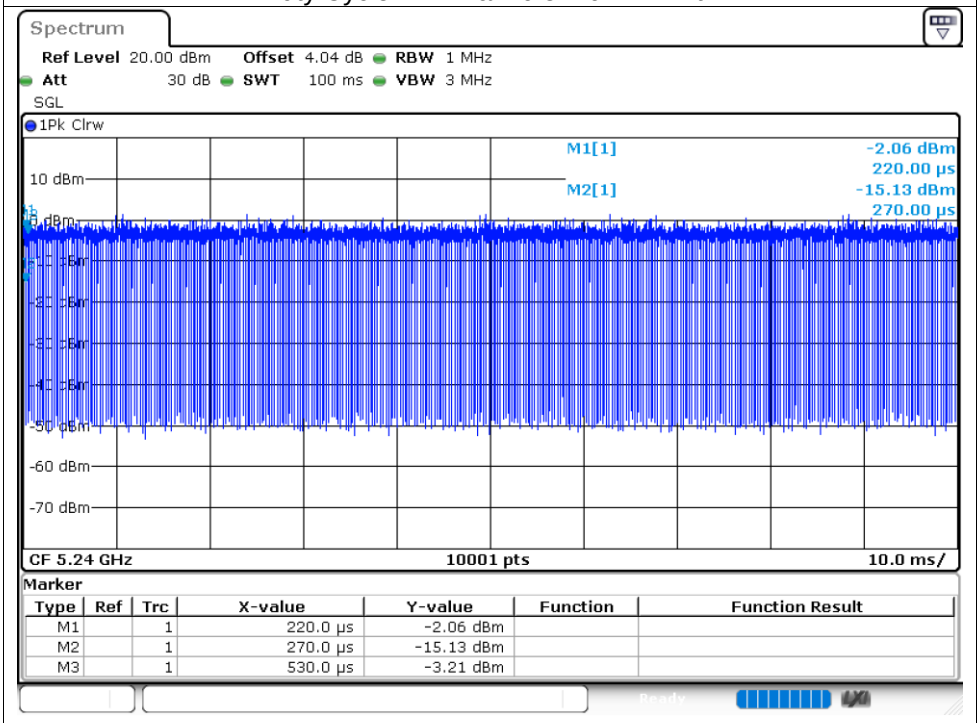
Duty Cycle NVNT ax20 5180MHz Ant1



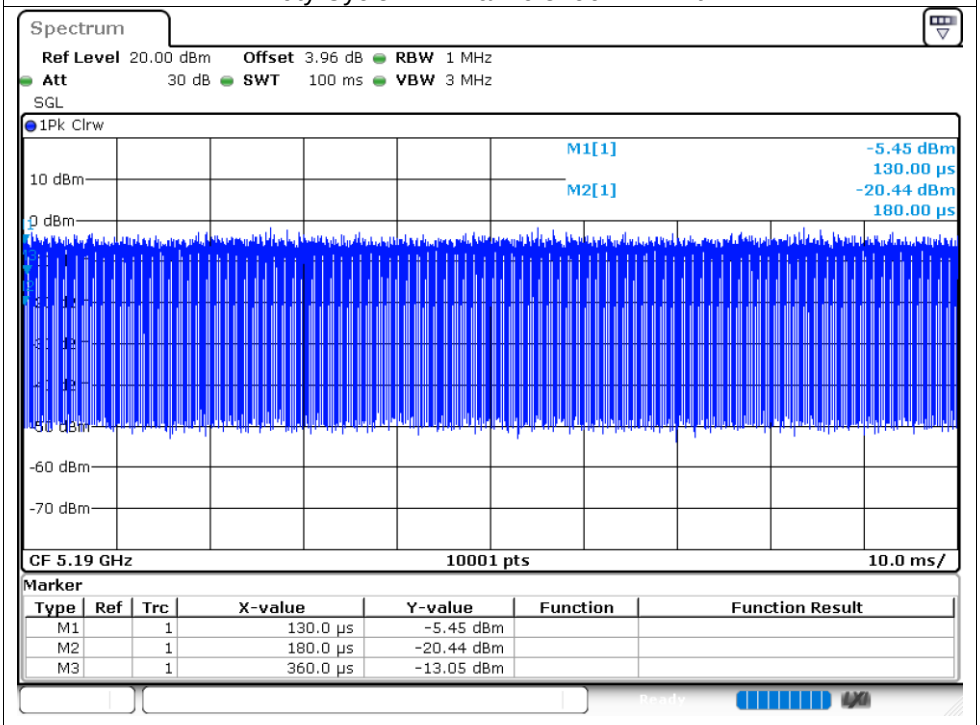
Duty Cycle NVNT ax20 5200MHz Ant1



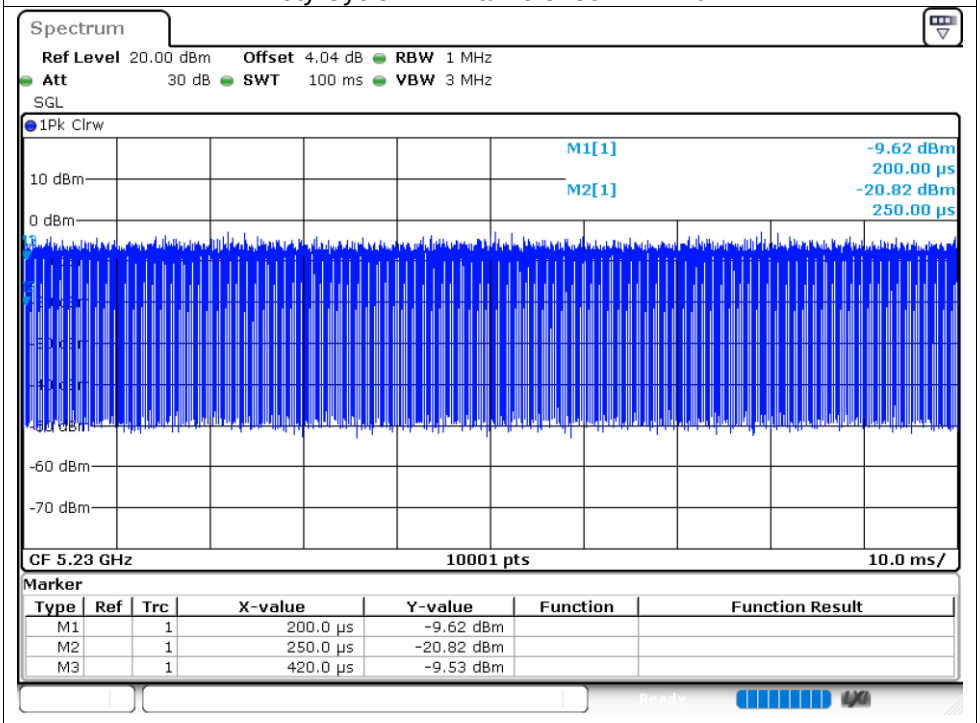
Duty Cycle NVNT ax20 5240MHz Ant1



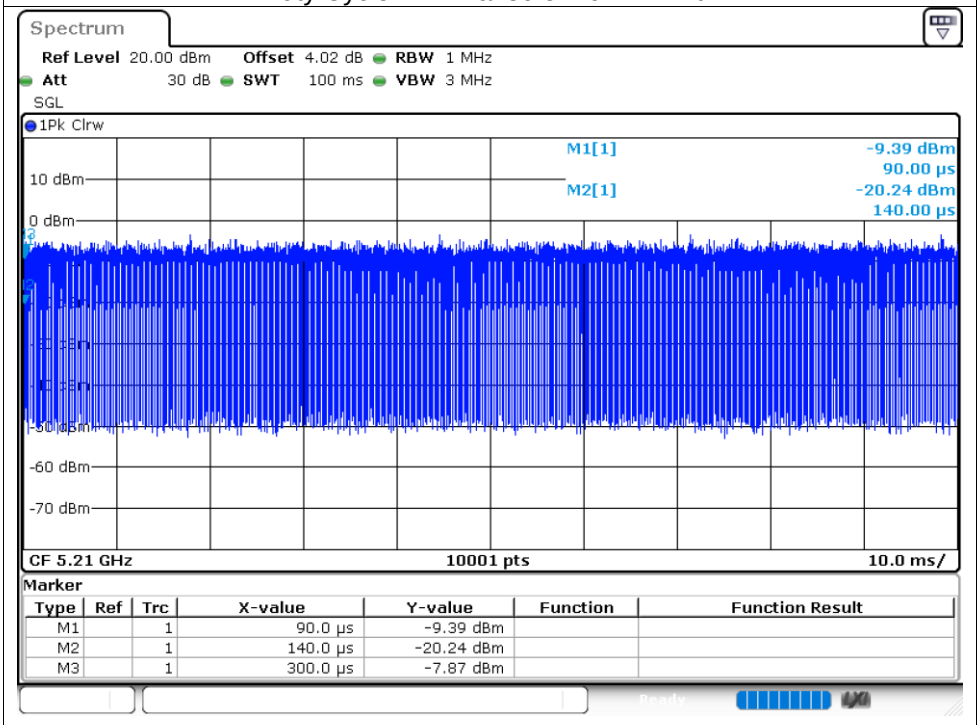
Duty Cycle NVNT ax40 5190MHz Ant1



Duty Cycle NVNT ax40 5230MHz Ant1



Duty Cycle NVNT ax80 5210MHz Ant1



5.2 MAXIMUM CONDUCTED OUTPUT POWER

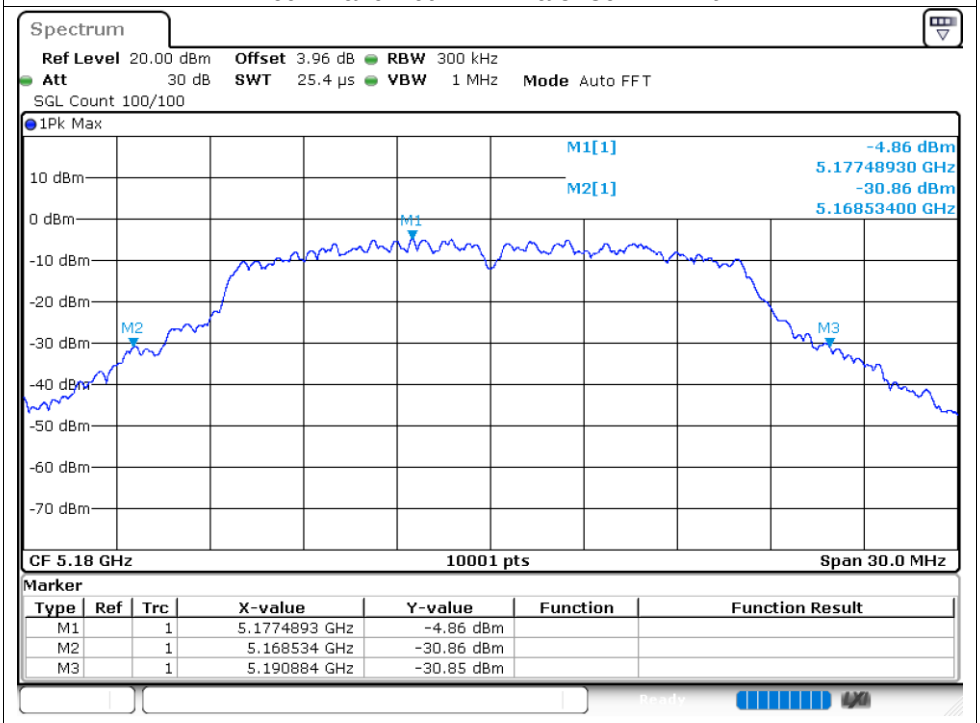
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	4.61	0.93	5.54	24	Pass
NVNT	a	5200	Ant1	5.13	0.92	6.05	24	Pass
NVNT	a	5240	Ant1	4.68	0.93	5.61	24	Pass
NVNT	n20	5180	Ant1	4.57	0.8	5.37	24	Pass
NVNT	n20	5200	Ant1	5	0.81	5.81	24	Pass
NVNT	n20	5240	Ant1	4.41	0.79	5.2	24	Pass
NVNT	n40	5190	Ant1	5.31	0.78	6.09	24	Pass
NVNT	n40	5230	Ant1	4.21	0.8	5.01	24	Pass
NVNT	ac20	5180	Ant1	4.62	0.85	5.47	24	Pass
NVNT	ac20	5200	Ant1	4.76	0.85	5.61	24	Pass
NVNT	ac20	5240	Ant1	4.24	0.85	5.09	24	Pass
NVNT	ac40	5190	Ant1	5.22	0.88	6.1	24	Pass
NVNT	ac40	5230	Ant1	3.97	0.88	4.85	24	Pass
NVNT	ac80	5210	Ant1	6.64	0.86	7.5	24	Pass
NVNT	ax20	5180	Ant1	4.6	0.58	5.18	24	Pass
NVNT	ax20	5200	Ant1	5.05	0.58	5.63	24	Pass
NVNT	ax20	5240	Ant1	4.59	0.57	5.16	24	Pass
NVNT	ax40	5190	Ant1	5.19	0.81	6	24	Pass
NVNT	ax40	5230	Ant1	3.86	0.8	4.66	24	Pass
NVNT	ax80	5210	Ant1	6.47	0.87	7.34	24	Pass

5.3 -26DB BANDWIDTH

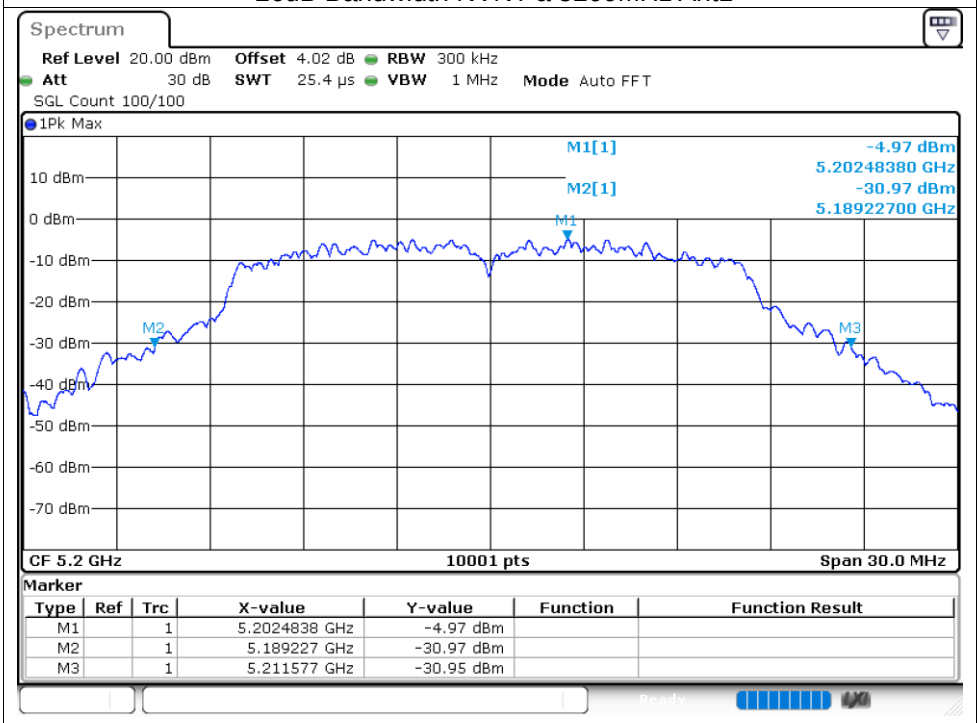
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)
NVNT	a	5180	Ant1	22.35
NVNT	a	5200	Ant1	22.35
NVNT	a	5240	Ant1	22.656
NVNT	n20	5180	Ant1	23.067
NVNT	n20	5200	Ant1	22.737
NVNT	n20	5240	Ant1	23.049
NVNT	n40	5190	Ant1	41.742
NVNT	n40	5230	Ant1	40.158
NVNT	ac20	5180	Ant1	22.359
NVNT	ac20	5200	Ant1	23.397
NVNT	ac20	5240	Ant1	23.394
NVNT	ac40	5190	Ant1	42.738
NVNT	ac40	5230	Ant1	40.716
NVNT	ac80	5210	Ant1	85.164
NVNT	ax20	5180	Ant1	21.627
NVNT	ax20	5200	Ant1	22.11
NVNT	ax20	5240	Ant1	22.359
NVNT	ax40	5190	Ant1	43.638
NVNT	ax40	5230	Ant1	41.424
NVNT	ax80	5210	Ant1	81.96

Test Graphs

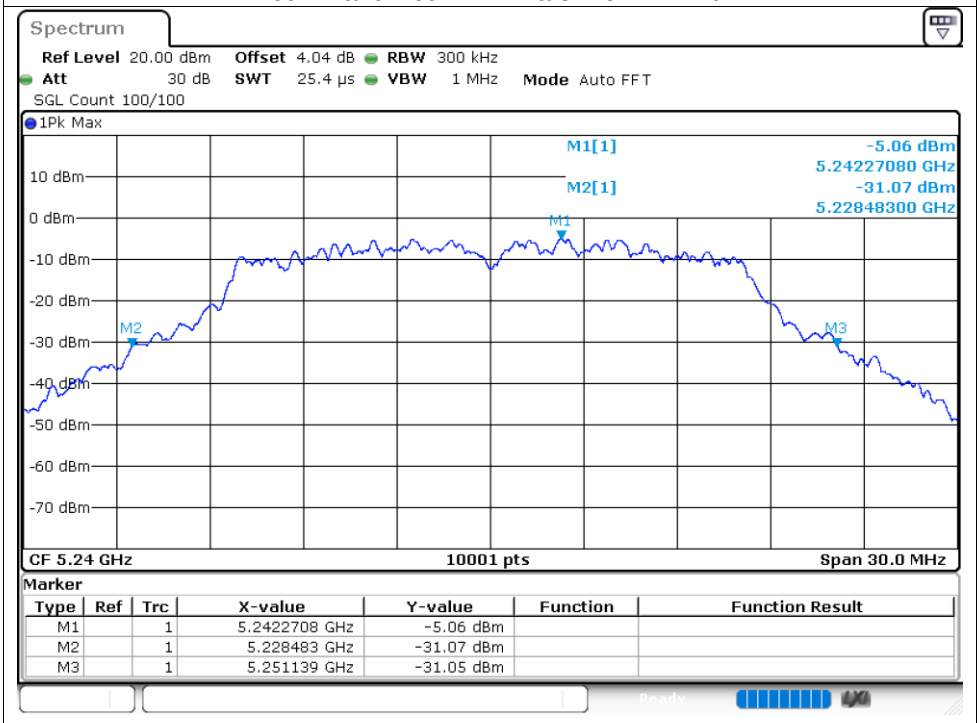
-26dB Bandwidth NVNT a 5180MHz Ant1



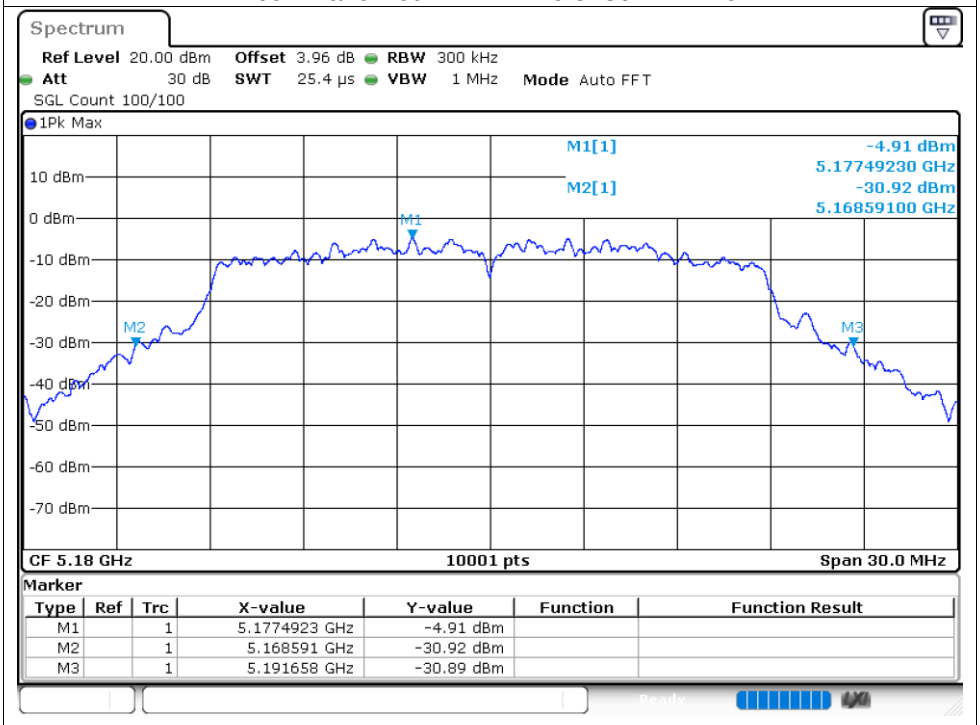
-26dB Bandwidth NVNT a 5200MHz Ant1



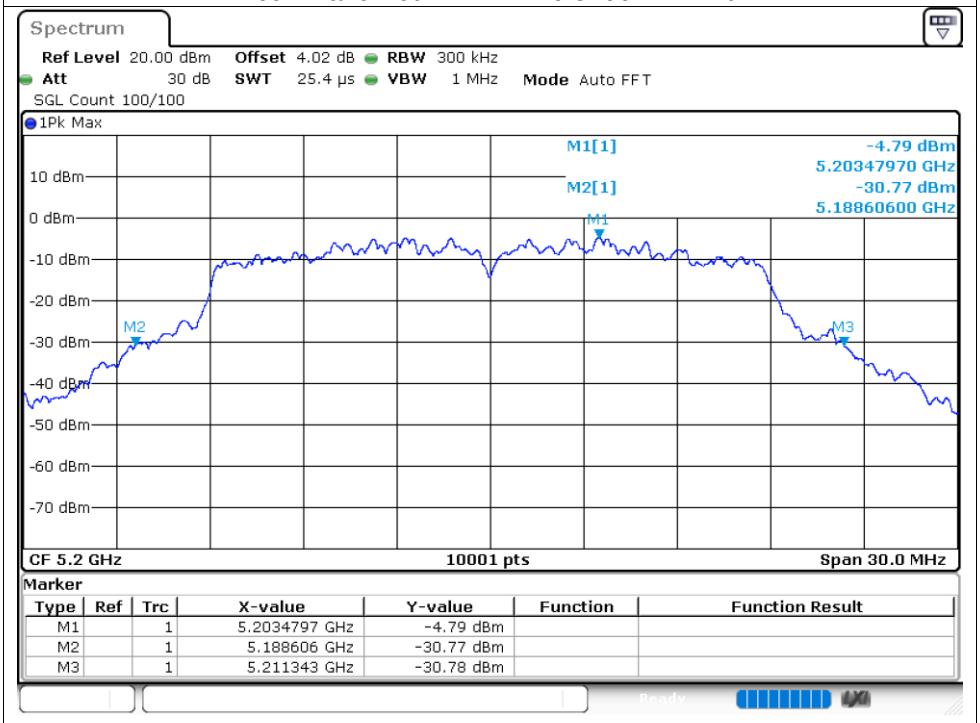
-26dB Bandwidth NVNT a 5240MHz Ant1



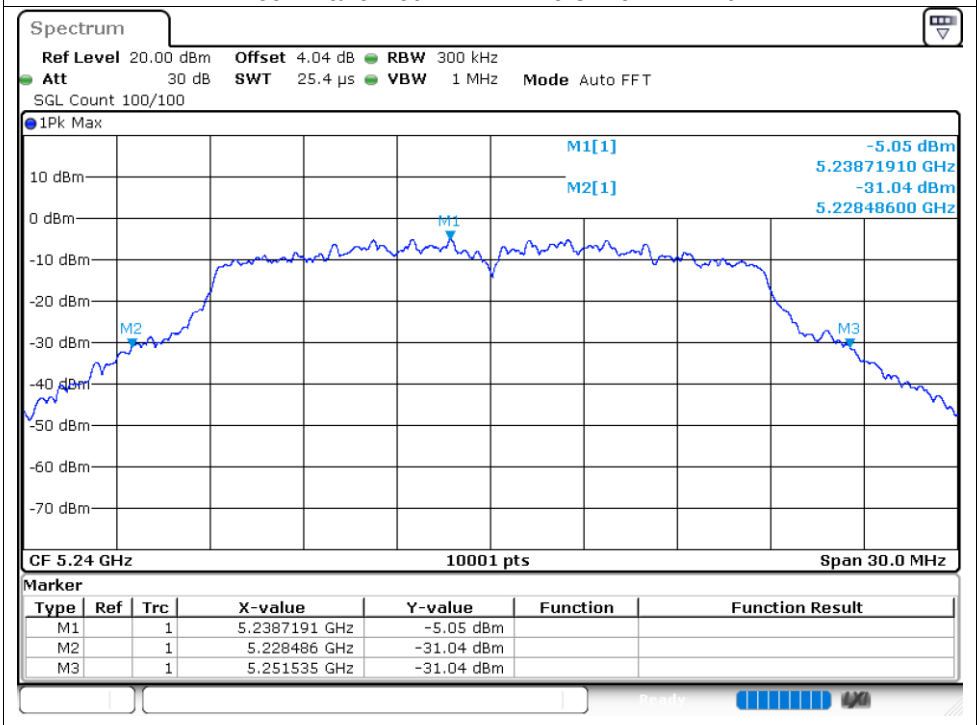
-26dB Bandwidth NVNT n20 5180MHz Ant1



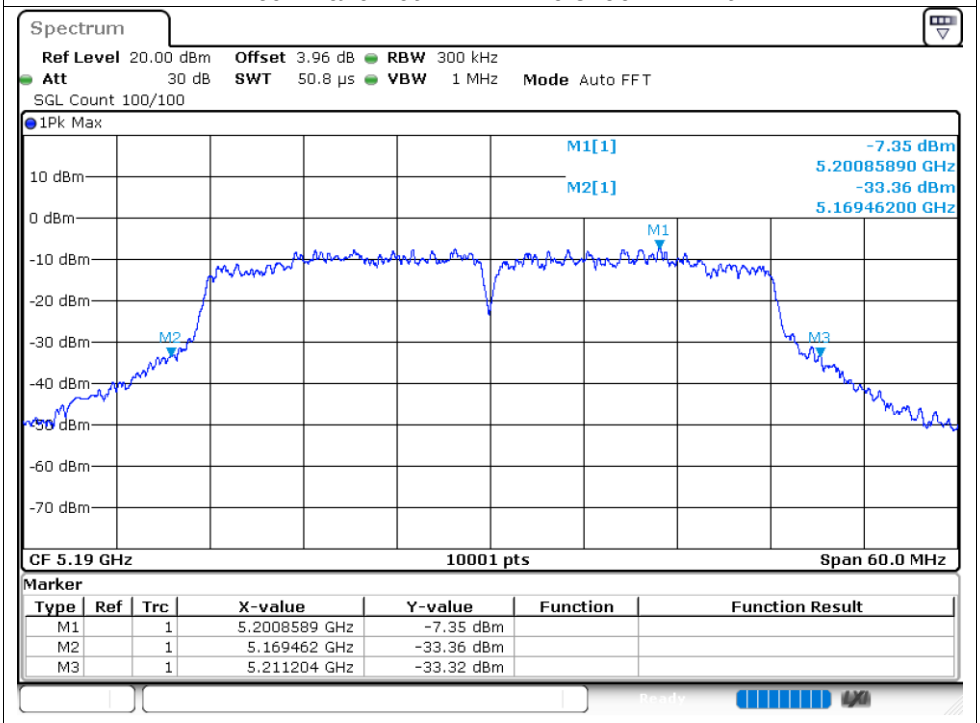
-26dB Bandwidth NVNT n20 5200MHz Ant1



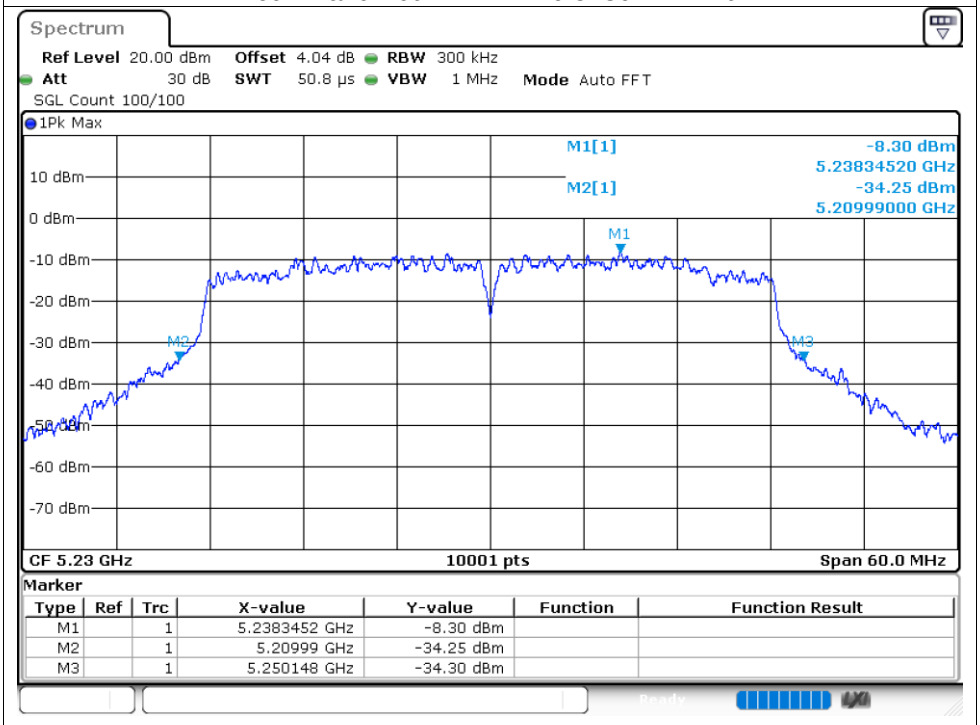
-26dB Bandwidth NVNT n20 5240MHz Ant1



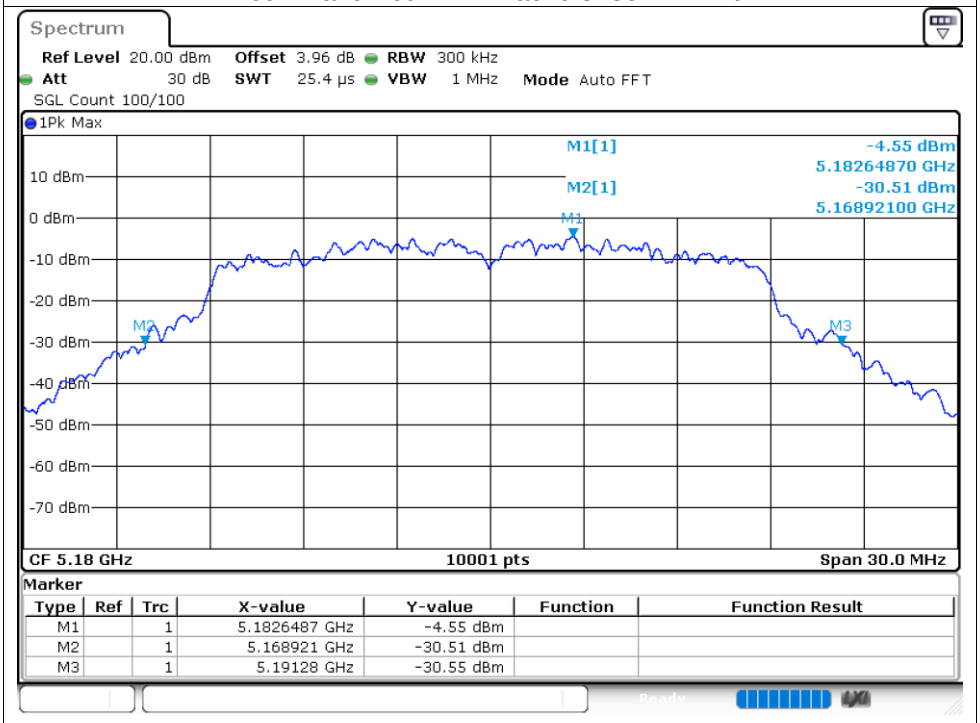
-26dB Bandwidth NVNT n40 5190MHz Ant1



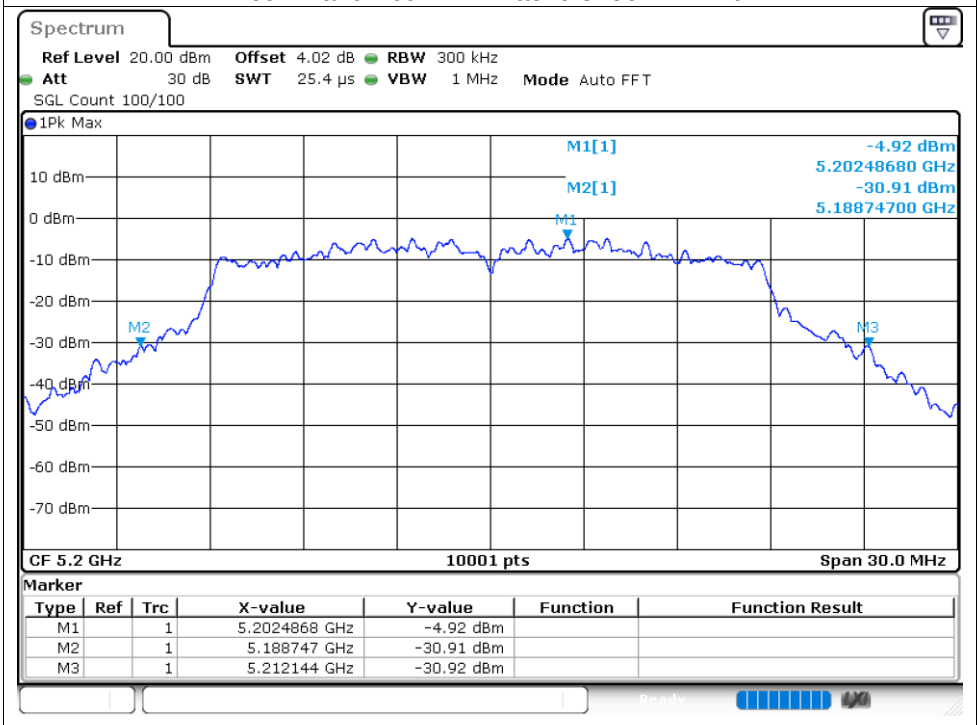
-26dB Bandwidth NVNT n40 5230MHz Ant1



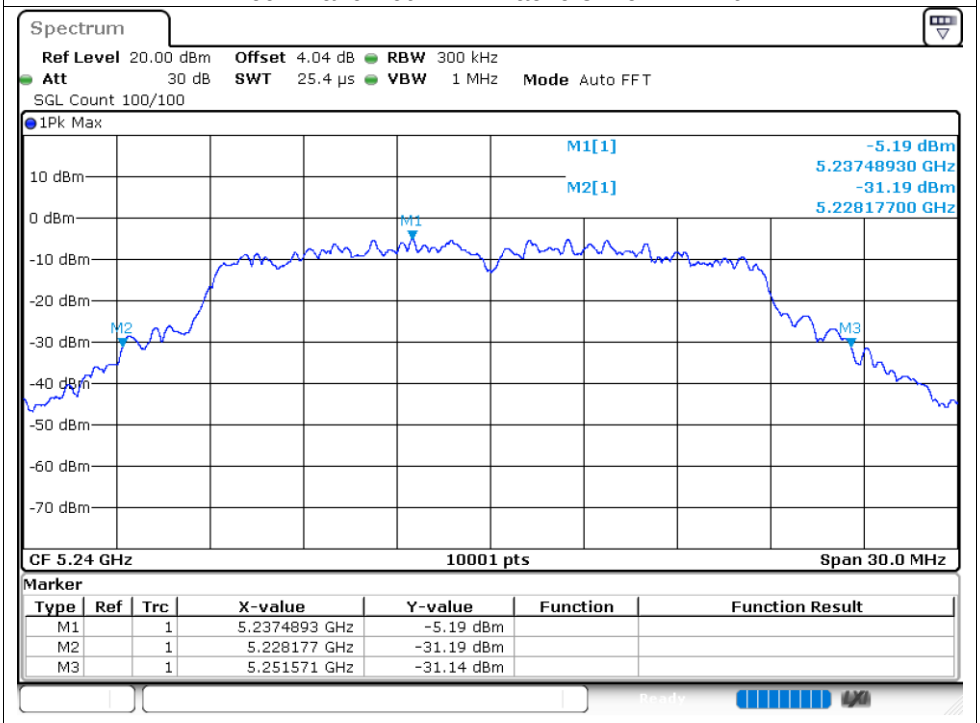
-26dB Bandwidth NVNT ac20 5180MHz Ant1



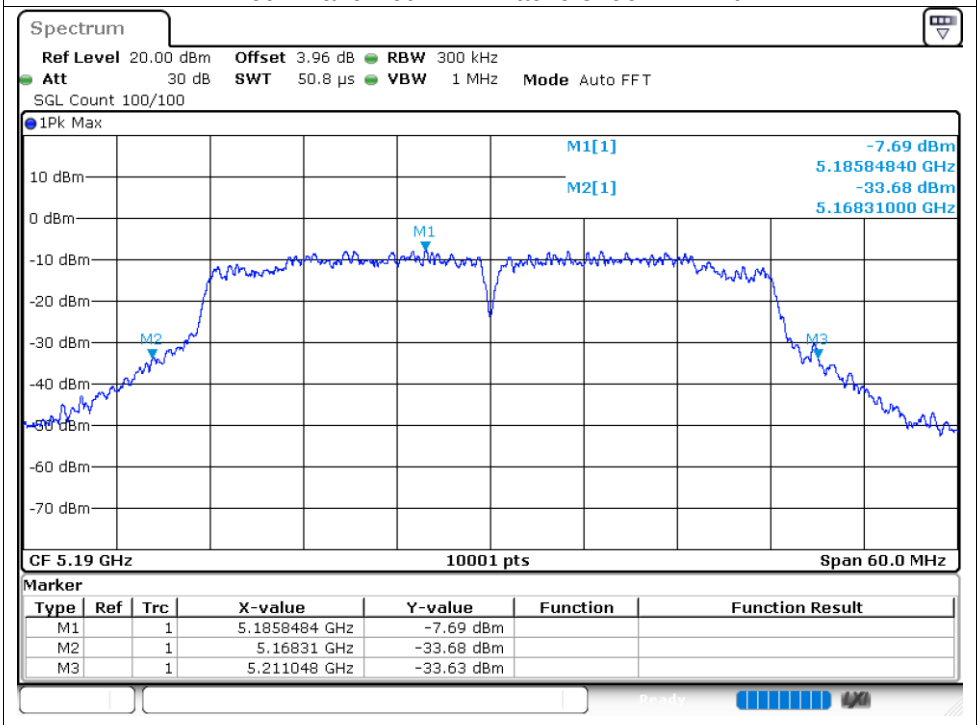
-26dB Bandwidth NVNT ac20 5200MHz Ant1



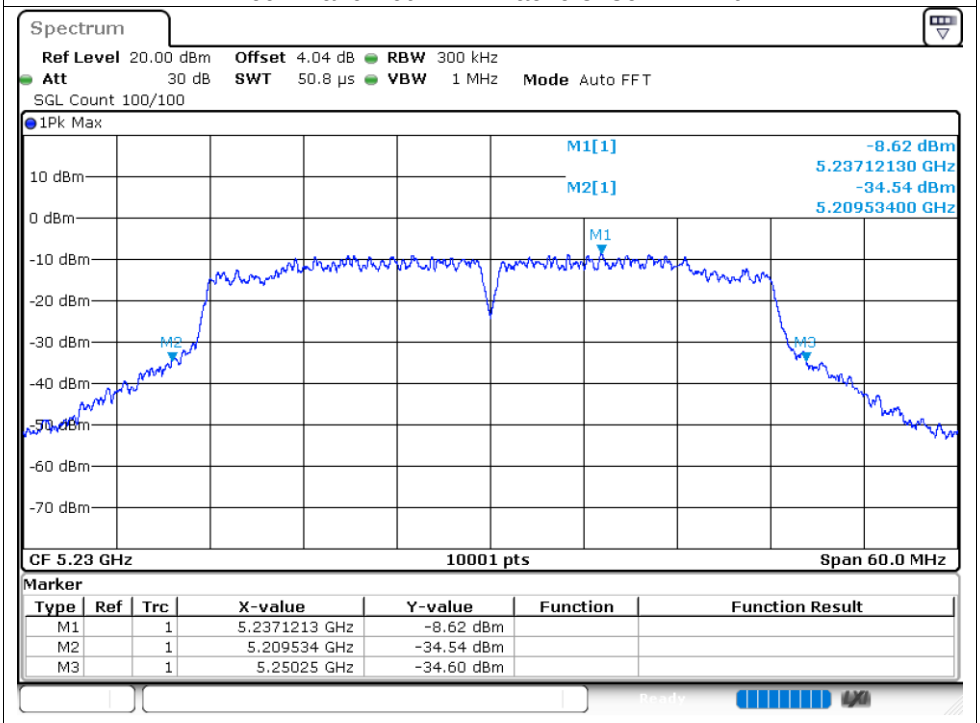
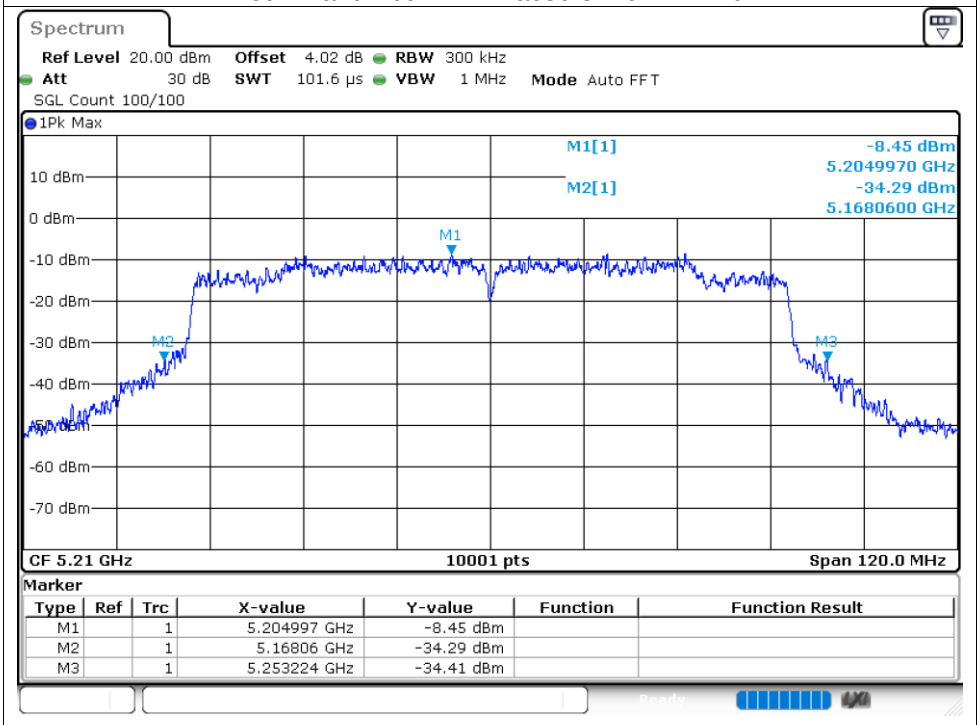
-26dB Bandwidth NVNT ac20 5240MHz Ant1



-26dB Bandwidth NVNT ac40 5190MHz Ant1



-26dB Bandwidth NVNT ac40 5230MHz Ant1



-26dB Bandwidth NVNT ac80 5210MHz Ant1