

RF TEST REPORT

FCC ID: 2AWDM-A17D

Test Report No.....: RF260512009-01-001

Product(s) Name.....: Dash Cam

Model(s).....: COXPAL A17D, COXPAL A17S

Trade Mark.....: COXPAL

Applicant.....: Winpal Electronics Co.,Ltd.

Address.....: R602, Building A1, Huafeng HiTech Industrial Park Hangkong Road,
Gushu, Xixiang, Baoan, Shenzhen, China 518102

Receipt Date.....: 2026.06.15

Test Date.....: 2026.06.16 ~ 2026.06.22

Issued Date.....: 2026.06.23

Standards.....: 47 CFR FCC Part 15, Subpart C(Section 15.247);
ANSI C63.10: 2020

Testing Laboratory.....: Shenzhen Haiyun Standard Technical Co., Ltd.

Prepared By:	Checked By:	Approved By:	
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<i>Jason Huang</i>	<i>Black Ding</i>	<i>Tim Zhang</i>	

Table of Contents

History of this test report.....	4
1. General Information	5
1.1 Applicant.....	5
1.2 Manufacturer	5
1.3 Basic Description of Equipment Under Test.....	5
1.4 Transmit Operating Mode.....	6
2. Summary of Test Results	7
2.1 Summary of Test Items	7
2.2 Application of Standard	7
2.3 Test Instruments.....	8
2.4 Test Mode.....	9
2.5 Test Condition	10
2.6 Duty Cycle of Test Signal	10
2.7 Measurement Uncertainty	15
2.8 Test Location	15
2.9 Description of Support Units.....	15
3. Test Procedure And Results	16
3.1 AC Power Line Conducted Emission.....	16
3.1.1 Limit.....	16
3.1.2 Test Procedure	16
3.1.3 Test Setup	16
3.1.4 Test Result	16
3.2 Radiated Emission and Band Edge.....	17
3.2.1 Limit.....	17
3.2.2 Test Procedure	17
3.2.3 Test Setup	18
3.2.4 Test Result	20
3.3 Spurious Emission at Antenna Port.....	42
3.3.1 Limit.....	42
3.3.2 Test Procedure	42
3.3.3 Test Setup	43
3.3.4 The Result	43

3.4	6dB Bandwidth	61
3.4.1	Limit	61
3.4.2	Test Procedure	61
3.4.3	Test Setup	61
3.4.4	Test Result	62
3.5	Maximum conducted output power.....	72
3.5.1	Limit	72
3.5.2	Test Procedure	72
3.5.3	Test Setup	72
3.5.4	Table of Parameters of Text Software Setting.....	73
3.5.5	The Result	74
3.6	Power Spectral Density	75
3.6.1	Limit.....	75
3.6.2	Test Procedure	75
3.6.3	Test Setup	75
3.6.4	The Result	76

History of this test report

Original Report Issue Date: 2026.06.23

- ☒ No additional attachment
- ☐ Additional attachments were issued following record

Attachment No.	Issue Date	Description

1. General Information

1.1 Applicant

Winpal Electronics Co.,Ltd.

R602, Building A1, Huafeng HiTech Industrial Park Hangkong Road, Gushu, Xixiang, Baoan, Shenzhen, China 518102

1.2 Manufacturer

Winpal Electronics Co.,Ltd

R602, Building A1, Huafeng HiTech Industrial Park Hangkong Road, Gushu, Xixiang, Baoan, Shenzhen, China 518102

1.3 Basic Description of Equipment Under Test

Sample No.	POC260512009-S001, POC260512009-S002	
Product name	Dash Cam	
Model name	COXPAL A17D, COXPAL A17S	
Test model	COXPAL A17D	
Model difference	COXPAL A17D represents Dual Dash Cam Front and Rear, while COXPAL A17S represents Single Front Dash Cam	
Trade Mark	COXPAL	
Power supply	DC 12-24V from car charger	
Operate temperature	-20℃~70℃	
EUT Stage	○ Product Unit	● Final-Sample
Operating Band and Conducted Output Power (Max power)	2400MHz ~ 2483.5MHz	●IEEE 802.11b:14.23dBm(0.0265W)
Product Type	IEEE 802.11b/g/n: WLAN (SISO)	
Nominal Bandwidth	20MHz / 40MHz	
Modulation	DSSS, OFDM	
Data Rate (Mbps)	IEEE 802.11b mode: 1/2/5.5/11 IEEE 802.11g mode: 6/9/12/18/24/36/48/54 IEEE 802.11n mode: up to 150	
Antenna gain	3.13dBi	
Antenna type	FPC Antenna	

Eleven channels are provided for 802.11b, 802.11g, 802.11n20:

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
2400MHz ~ 2483.5 MHz	01	2412MHz	07	2442MHz
	02	2417MHz	08	2447MHz
	03	2422MHz	09	2452MHz
	04	2427MHz	10	2457MHz
	05	2432MHz	11	2462MHz
	06	2437MHz	/	/

Seven channels are provided for 802.11n40:

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
2400MHz ~ 2483.5 MHz	03	2422 MHz	07	2442MHz
	04	2427MHz	08	2447MHz
	05	2432MHz	09	2452MHz
	06	2437MHz	/	/

1.4 Transmit Operating Mode

Transmit Operating Mode				Transmit Multiple Antennas			
☒	Operating mode 1 (single antenna)			☒	1TX		
☐	Operating mode 2 (multiple antenna, no beam forming)			☐	2TX	☐	3TX ☐ 4TX
☐	Operating mode 3 (multiple antenna, with beam forming)			☐	2TX	☐	3TX ☐ 4TX
☒	802.11b	Operating mode	☒ 1TX ☐ 2TX	☐	3TX		
☒	802.11g	Operating mode	☒ 1TX ☐ 2TX	☐	3TX		
☒	802.11n20	Operating mode	☒ 1TX ☐ 2TX	☐	3TX		
☒	802.11n40	Operating mode	☒ 1TX ☐ 2TX	☐	3TX		

2. Summary of Test Results

2.1 Summary of Test Items

47 CFR FCC Part 15, Subpart C (Section 15.247)			
Test item	FCC Clause	Results	Remarks
AC Power Conducted Emission	15.207	-----	N/A
Radiated Emission and Band Edge Measurement	15.205/15.209 /15.247(d)	Pass	Meet the requirement of the limit
Spurious Emission at Antenna Port	15.247(d)	Pass	Meet the requirement of the limit
6dB Bandwidth	15.247(a)(2)	Pass	Meet the requirement of the limit
Maximum Conducted Power	15.247(b)	Pass	Meet the requirement of the limit
Power Spectral Density	15.247(e)	Pass	Meet the requirement of the limit
Antenna Requirements	15.203	Compliance	Note
Note: The EUT has one Integrated antenna arrangement which was permanently attached.			

2.2 Application of Standard

47 CFR FCC Part 15, Subpart C (Section 15.247)

KDB 558074 D01 15.247 Meas Guidance v05r02

ANSI C63.10: 2020

2.3 Test Instruments

No.	Name of Equipment	Manufacturer	Model Number	Serial Number	Inventory No.	Last Calibration	Due Calibration
Radiated Emission							
1	Test receiver	Rohde&Schwarz	ESU	100184	JLE011	2026/2/27	2027/2/26
2	Log periodic antenna	Schwarzbeck	VULB 9168	1151	JLE012	2025/4/12	2028/4/11
3	Low frequency amplifier	/	LNA 0920N	2014	JLE023	2026/2/27	2027/2/26
4	High frequency amplifier	Schwarzbeck	BBV 9718	9718-284	JLE024	2026/2/27	2027/2/26
5	Horn Antenna	SCHWARZBECK	BBHA 9120 D	02670	JLE028	2025/4/12	2028/4/11
6	Temp&Humidity Recorder	Meideshi	JR900	/	JLE021	2026/4/08	2027/4/07
7	Horn Antenna	SCHWARZBECK	BBHA 9170	9170#685	JLE029	2024/7/15	2027/7/14
8	Loop Antenna	SCHWARZBECK	FMZB1519B	00029	JLE030	2024/7/15	2027/7/14
9	Broadband preamplifier	Schwarzbeck	BBV9721	9721-019	JLE025	2026/2/27	2027/2/26
10	Test software	Farad Technology Co., Ltd	EZ-EMC Ver.TW-03A2				
RF Conducted Emissions							
1	MXA Signal Analyzer	Keysight	N9010A	MY51440158	JLE087	2025/9/15	2026/9/14
2	RF Control Unit	dsusoft	JS0806-2	21G8060449	JLE053	2026/2/27	2027/2/26
3	power supply unit	dsusoft	JS0806-4ADC	N/A	JLE055	2026/2/27	2027/2/26
4	VXG Signal Generator	Keysight	N5182B	MY59100855	JLE068	2026/4/14	2027/4/13
5	EXG Analog Signal Generator	Keysight	N5173B	MY59101282	JLE052	2026/2/27	2027/2/26
6	Wideband Radio Communication Tester	Rohde&Schwarz	CMW500	1201.0002K5 0-116064-Dt	JLE054	2026/2/27	2027/2/26
7	Test software	dsusoft	JS1120-3 Ver.3.2.22.0				

2.4 Test Mode

Test Items	Mode	Data Rate	Channel
Radiated Emission and Band Edge Measurement	802.11b	1Mbps	01/06/11
	802.11g	6Mbps	01/06/11
	802.11n20SISO	MCS0	01/06/11
	802.11n40SISO	MCS0	03/06/09
Spurious Emission at Antenna Port	802.11b	1Mbps	01/06/11
	802.11g	6Mbps	01/06/11
	802.11n20SISO	MCS0	01/06/11
	802.11n40SISO	MCS0	03/06/09
6dB Bandwidth	802.11b	1Mbps	01/06/11
	802.11g	6Mbps	01/06/11
	802.11n20SISO	MCS0	01/06/11
	802.11n40SISO	MCS0	03/06/09
Maximum Conducted Power	802.11b	1Mbps	01/06/11
	802.11g	6Mbps	01/06/11
	802.11n20SISO	MCS0	01/06/11
	802.11n40SISO	MCS0	03/06/09
Power Spectral Density	802.11b	1Mbps	01/06/11
	802.11g	6Mbps	01/06/11
	802.11n20SISO	MCS0	01/06/11
	802.11n40SISO	MCS0	03/06/09

Note: For Radiated Emission below 1GHz, only worst case was recorded.

2.5 Test Condition

Applicable to	Environmental conditions	Input Power	Tested by
Radiated Emission and Band Edge Measurement	23.9°C, 50% RH	DC 12V	Keith Huang
Spurious Emission at Antenna Port	23.2°C, 46% RH	DC 12V	Lemon He
6dB Bandwidth	23.2°C, 46% RH	DC 12V	Lemon He
Maximum Conducted Power	23.2°C, 46% RH	DC 12V	Lemon He
Power Spectral Density	23.2°C, 46% RH	DC 12V	Lemon He

Note: The car charger is powered by DC 12V.

The applicant declare the operating environment of EUT as below:

Normal conditions: DC 12V, 0~45°C

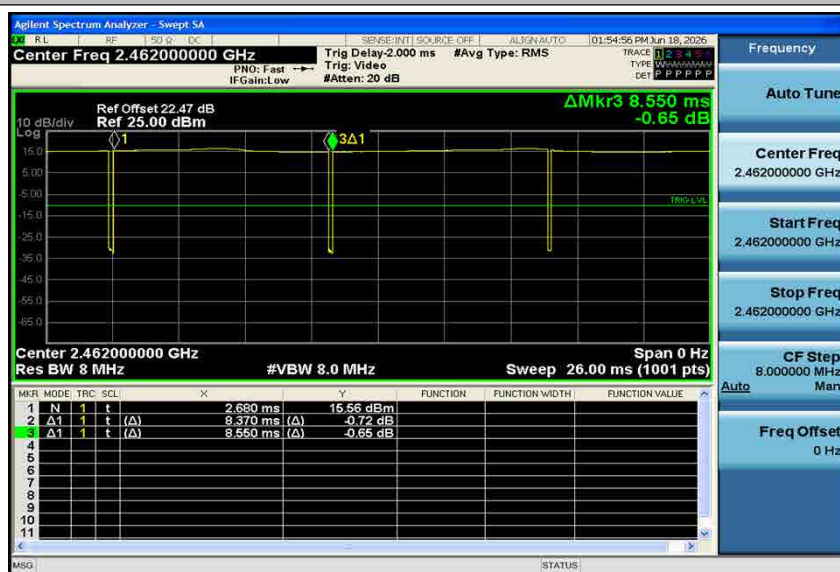
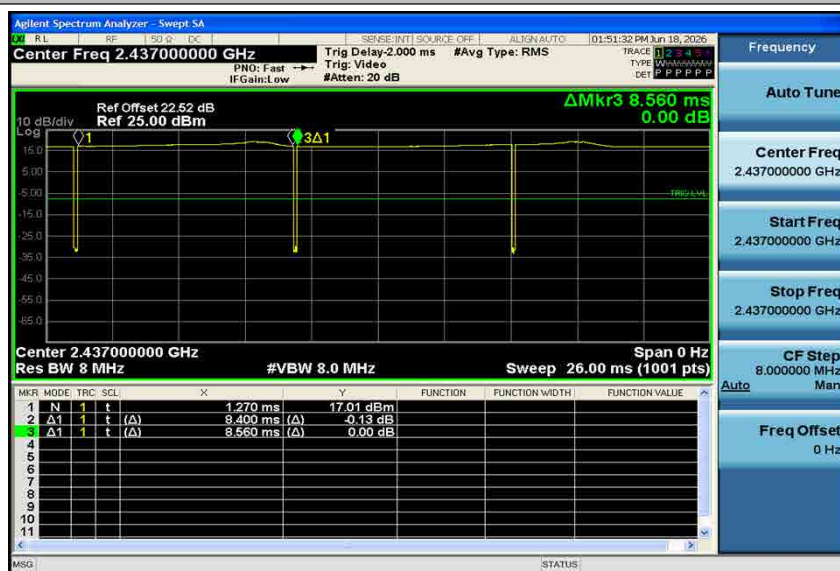
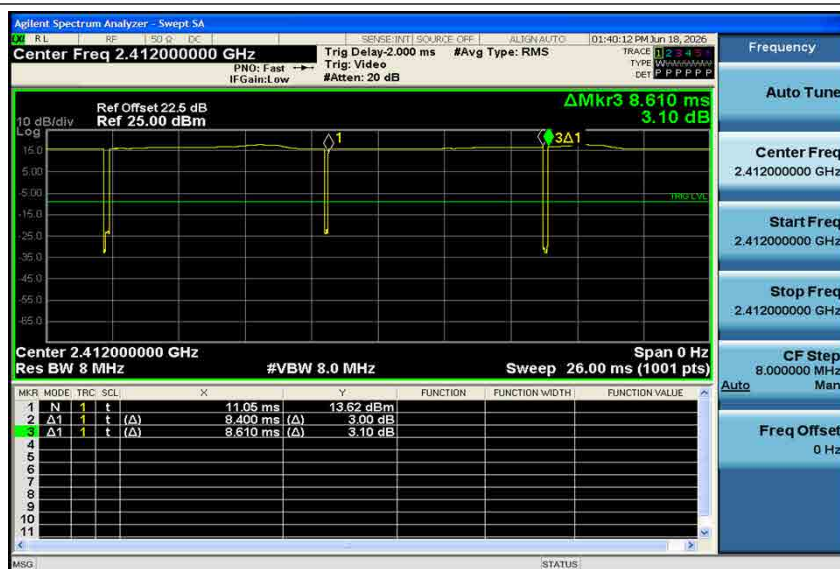
2.6 Duty Cycle of Test Signal

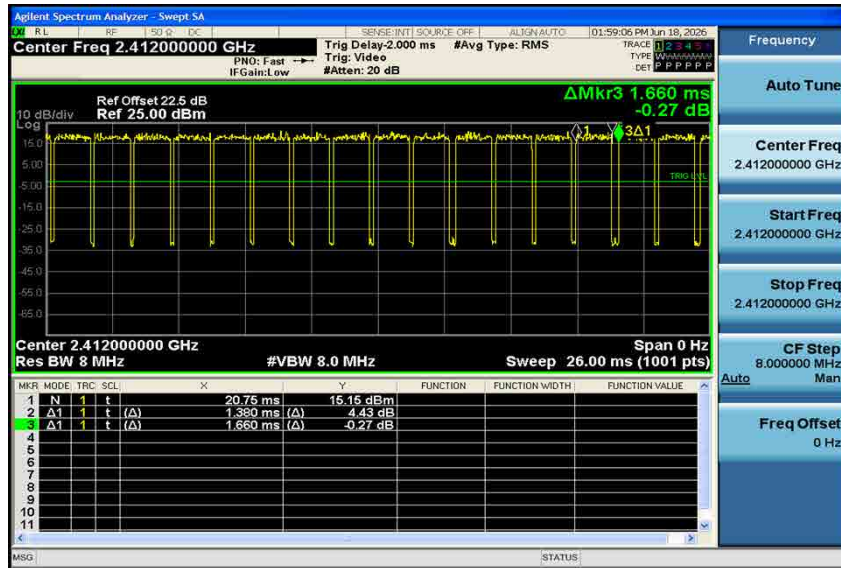
If duty cycle is $\geq 98\%$, duty factor is not required.

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

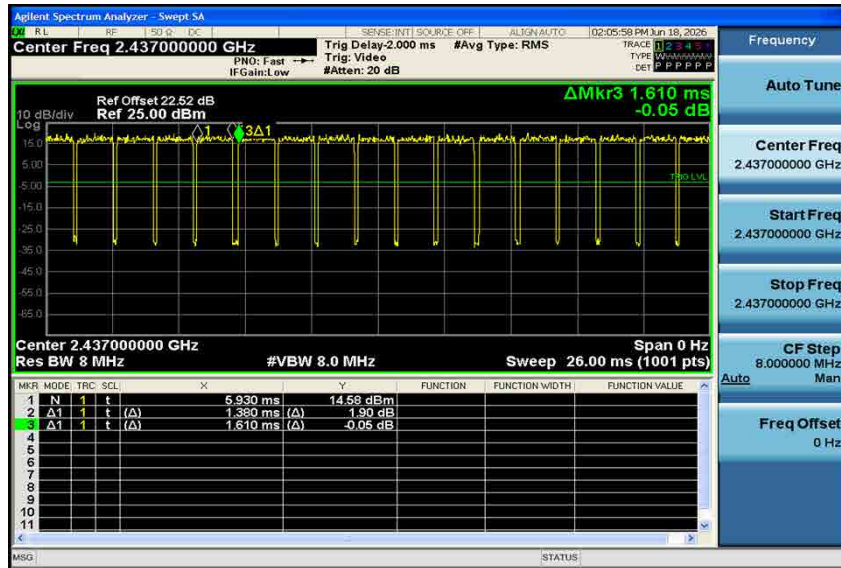
All the duty factor of other test mode have been considered.

TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Factor
11B	Ant1	2412	8.40	8.61	97.56	0.11
11B	Ant1	2437	8.40	8.56	98.13	0.08
11B	Ant1	2462	8.37	8.55	97.89	0.09
11G	Ant1	2412	1.38	1.66	83.13	0.80
11G	Ant1	2437	1.38	1.61	85.71	0.67
11G	Ant1	2462	1.38	1.58	87.34	0.59
11N20SISO	Ant1	2412	1.17	1.41	82.98	0.81
11N20SISO	Ant1	2437	1.17	1.40	83.57	0.78
11N20SISO	Ant1	2462	1.17	1.40	83.57	0.78
11N40SISO	Ant1	2422	0.57	0.81	70.37	1.53
11N40SISO	Ant1	2437	0.57	0.81	70.37	1.53
11N40SISO	Ant1	2452	0.60	0.86	69.77	1.56

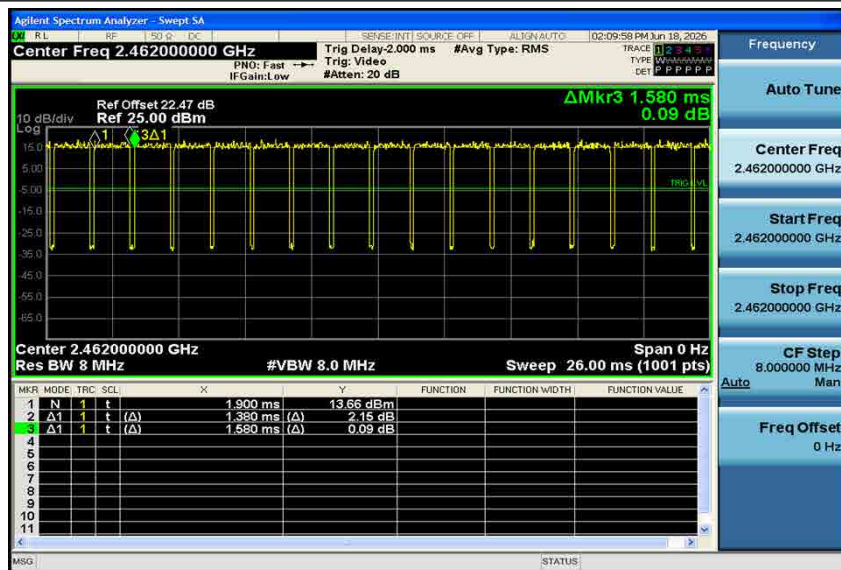




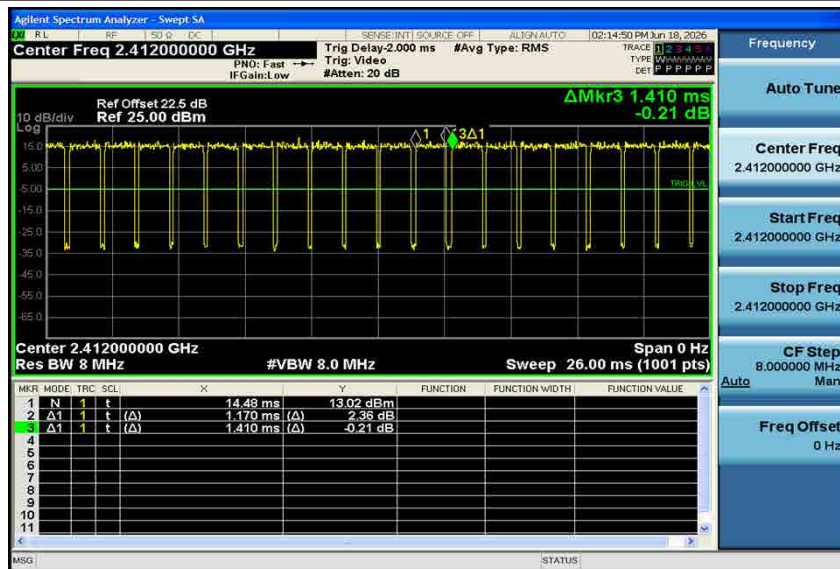
NTNV-11G-Ant1-2412



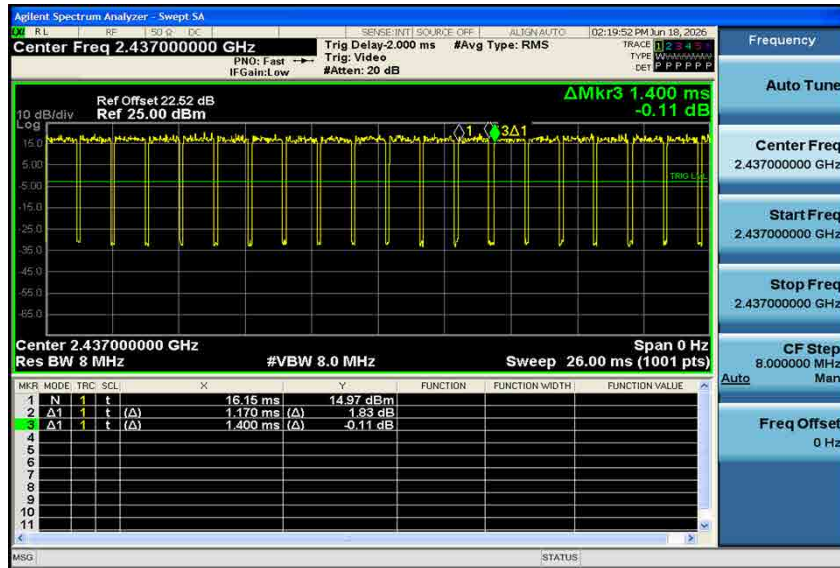
NTNV-11G-Ant1-2437



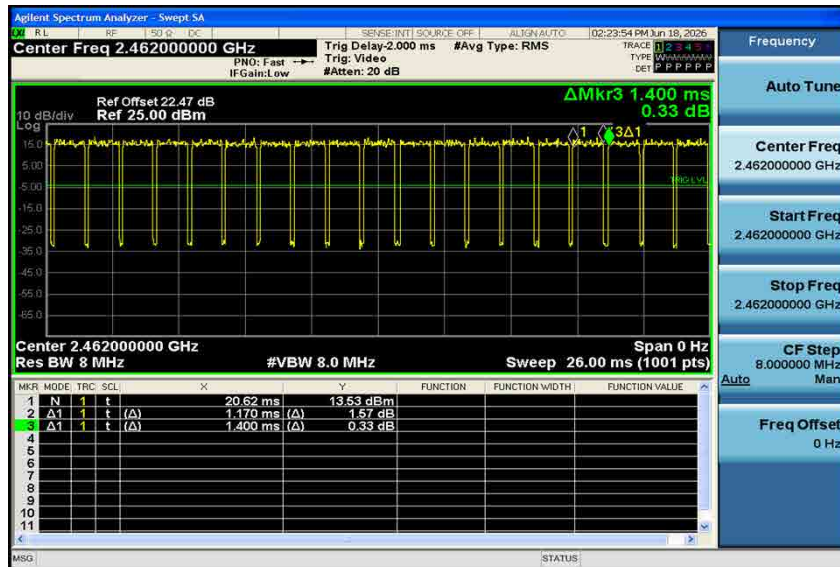
NTNV-11G-Ant1-2462



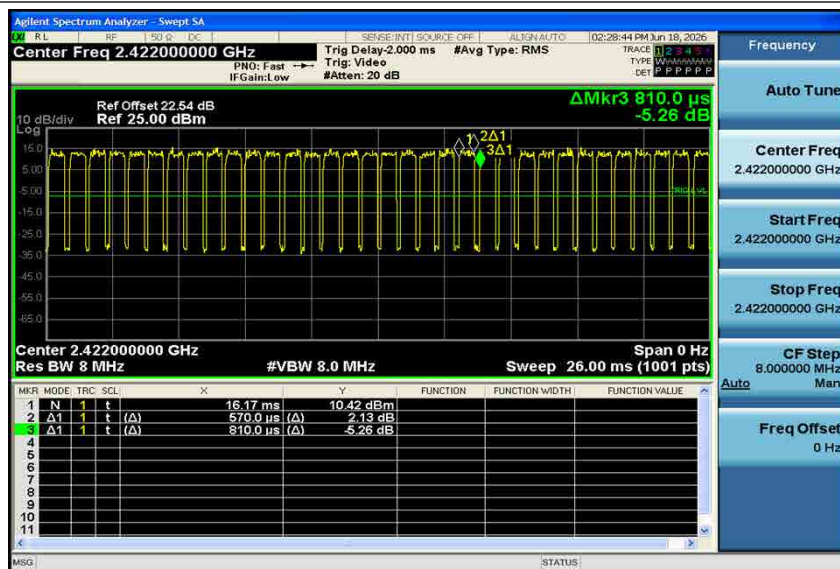
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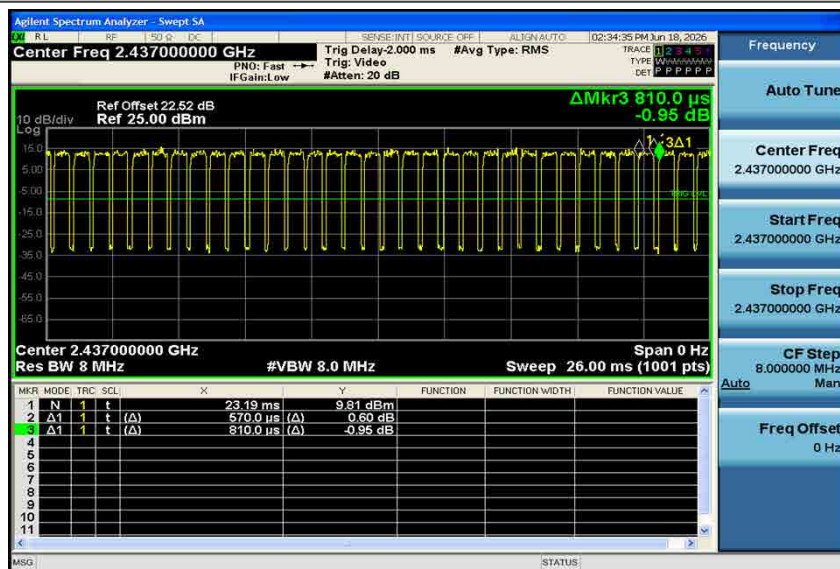
NTNV-11N20SISO-Ant1-2437



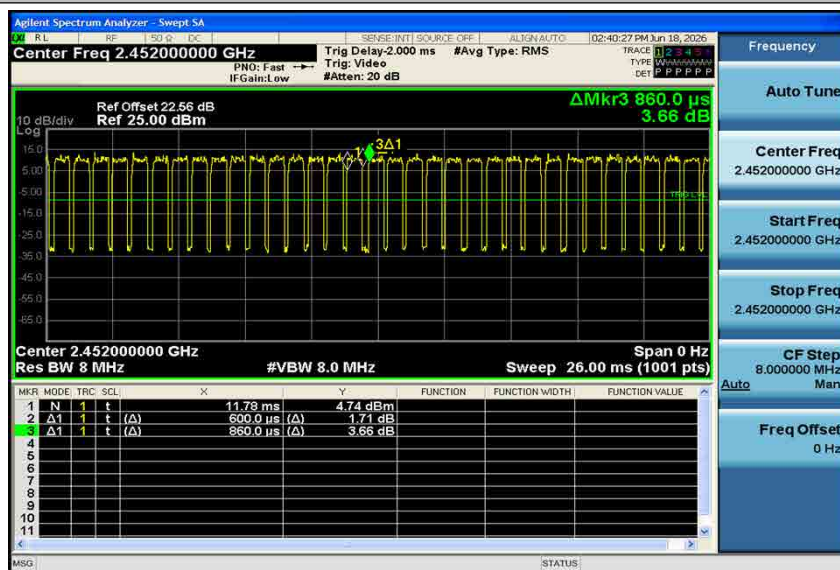
NTNV-11N20SISO-Ant1-2462



NTNV-11N40S|SO-Ant1-2422



NTNV-11N40S|SO-Ant1-2437



NTNV-11N40S|SO-Ant1-2452

2.7 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor ($k=2$))

Uncertainty	
Parameter	Uncertainty
Occupied Channel Bandwidth	$\pm 102\text{kHz}$
RF power conducted	$\pm 0.243\text{dB}$
Power Spectral Density	$\pm 0.743\text{dB}$
Conducted Spurious Emission	$\pm 1.328\text{dB}$
Conducted emission(9kHz~30MHz) AC main	$\pm 2.68\text{dB}$
Radiated emission(9kHz~30MHz)	$\pm 3.50\text{dB}$
Radiated emission (30MHz~1GHz)	$\pm 4.20\text{dB}$
Radiated emission (1GHz~18GHz)	$\pm 5.10\text{dB}$
Radiated emission (18GHz~40GHz)	$\pm 5.26\text{dB}$

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

2.9 Description of Support Units

No.	Equipment	Model	Manufacturer	Rating	Series No
1	PC	M4500T	Thinkpad	/	M032004854IT
2	Car charger	/	/	Input: DC 12-24V Output: DC 5.0V/4.8A Total: 24W	/
3	/	/	/	/	/

3. Test Procedure And Results

3.1 AC Power Line Conducted Emission

3.1.1 Limit

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μ V)	Average Level dB(μ V)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Notes: 1. * Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

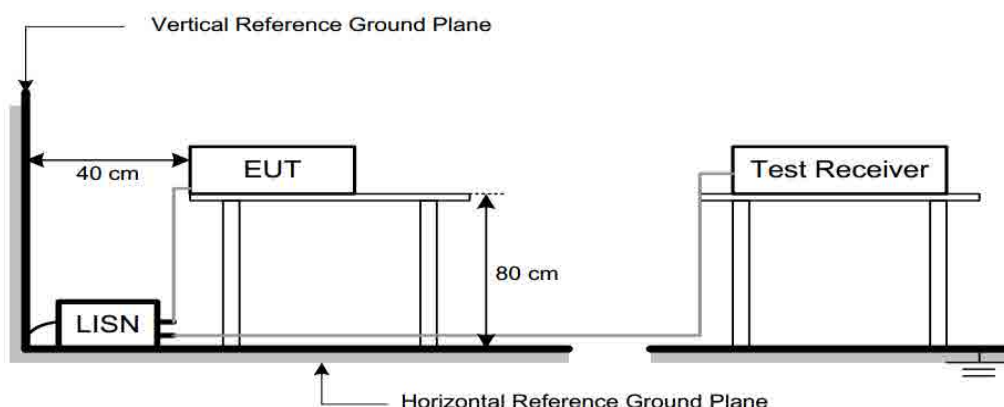
3.1.2 Test Procedure

Test Method	
☒ Conducted Measurement	☐ Radiated Measurement
Test Channels	
☐ Lowest, Middle and Highest Channel	☐ Lowest and Highest Channel
Environmental conditions	
☒ Normal	☐ Normal and Extreme

Note: ☒ : Test ☐ : No Test

- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

3.1.3 Test Setup



3.1.4 Test Result

The EUT is powered by car battery, so this test item is not applicable for the EUT.

3.2 Radiated Emission and Band Edge

3.2.1 Limit

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

Frequency (MHz)	Distance Meters(m)	Field Strength Limit	
		$\mu\text{V/m}$	$\text{dB}(\mu\text{V})/\text{m}$
0.009 – 0.49	300	$2400/\text{F}(\text{kHz})$	-
0.490 – 1.705	30	$24000/\text{F}(\text{kHz})$	-
1.705 – 30	30	30	-
30~88	3	100	40.0
88~216	3	150	43.5
216~960	3	200	46.0
960~1000	3	500	54.0
Above 1000	3	74.0 $\text{dB}(\mu\text{V})/\text{m}$ (Peak) 54.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average)	

- Note: (1) Emission level $\text{dB}\mu\text{V} = 20 \log \text{Emission level } \mu\text{V/m}$
(2) The smaller limit shall apply at the cross point between two frequency bands.
(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

3.2.2 Test Procedure

Test Method	
☐ Conducted Measurement	☒ Radiated Measurement
Test Channels	
☒ Lowest, Middle and Highest Channel	☐ Lowest and Highest Channel
Environmental conditions	
☒ Normal	☐ Normal and Extreme

Note: ☒ : Test ☐ : No Test

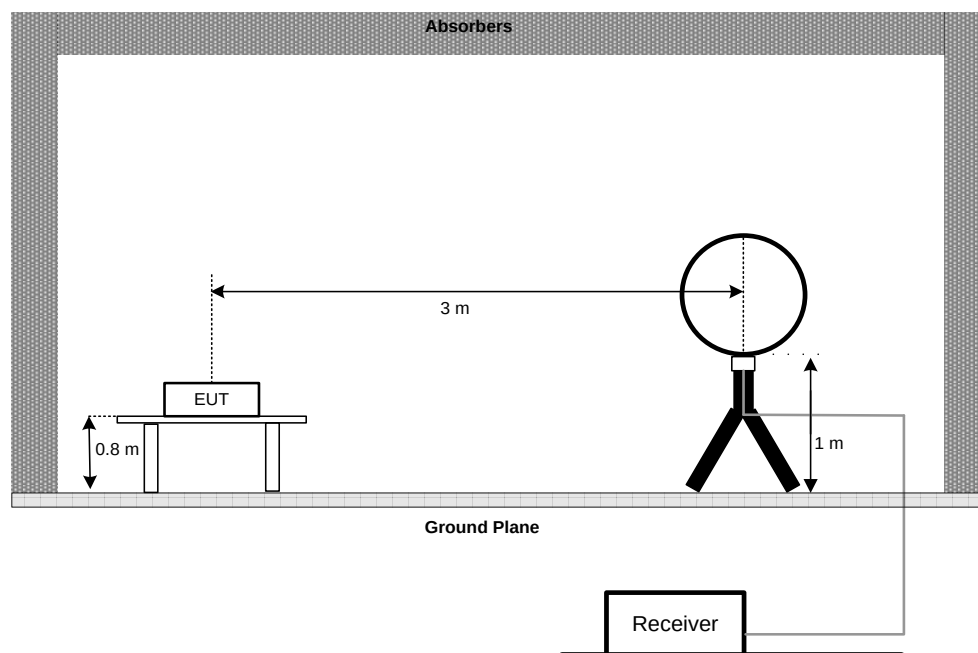
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
- The measuring distance of 3 m or 1.5m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna

was tuned to heights find the maximum reading (used Bore sight function).

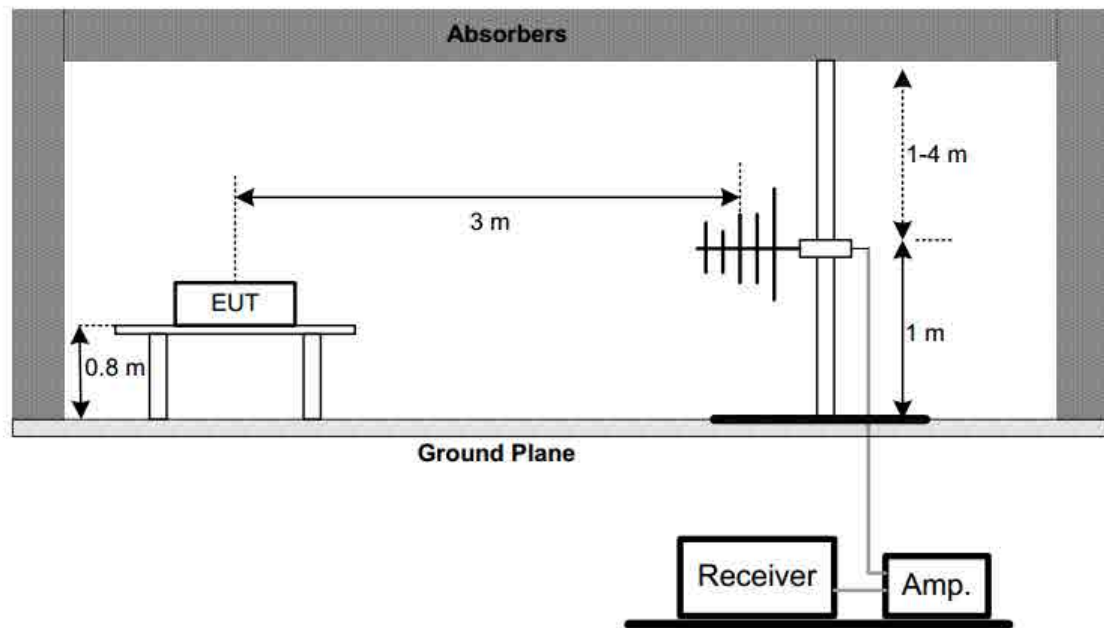
- e) The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.
- f) The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- g) All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1 GHz)
- h) All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1 GHz)
- i) For the actual test configuration, please refer to the related Item -EUT Test Photos.

3.2.3 Test Setup

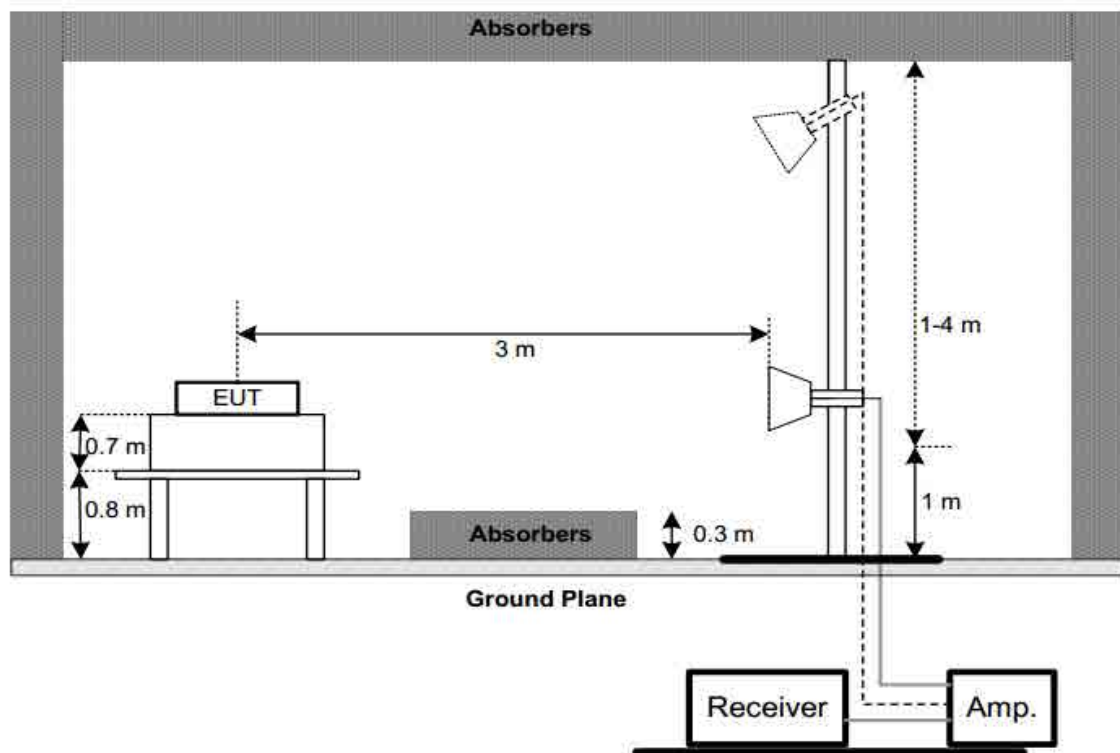
(A) Radiated Emission Test Set-Up Frequency Below 30 MHz



(B) Radiated Emission Test Set-Up Frequency 30 MHz-1000 MHz



(C) Radiated Emission Test Set-Up Frequency Above 1 GHz



3.2.4 Test Result

1) Radiated emission: 9kHz-30MHz

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not recorded in this report.

2) Radiated emission: 30MHz-1GHz

Note:

1. Measurement = Reading + Correct Factor.
2. Over = Measurement – Limit

We only recorded the data of the worst mode. Please see the following:

VERTICAL

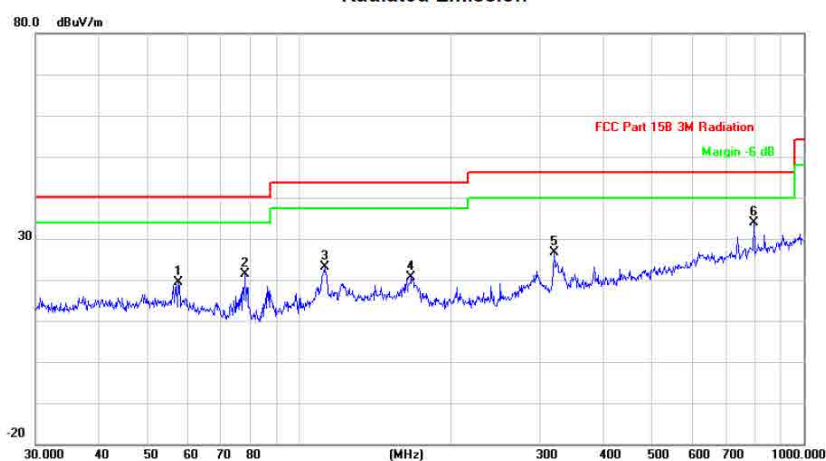
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		39.5757	42.71	-10.35	32.36	40.00	-7.64	peak		
2		46.6664	44.74	-10.98	33.76	40.00	-6.24	peak		
3	*	57.5940	47.09	-11.90	35.19	40.00	-4.81	peak		
4		77.8654	47.71	-13.84	33.87	40.00	-6.13	peak		
5		85.5977	46.85	-14.52	32.33	40.00	-7.67	peak		
6		168.4138	38.10	-9.93	28.17	43.50	-15.33	peak		

HORIZONTAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		57.5940	31.23	-11.90	19.33	40.00	-20.67	peak		
2		78.1388	35.25	-13.91	21.34	40.00	-18.66	peak		
3		112.1304	34.69	-11.48	23.21	43.50	-20.29	peak		
4		166.6513	30.53	-9.89	20.64	43.50	-22.86	peak		
5		319.9370	35.96	-9.23	26.73	46.00	-19.27	peak		
6	*	796.1830	33.73	0.11	33.84	46.00	-12.16	peak		

3) Radiated emission: Above 1GHz

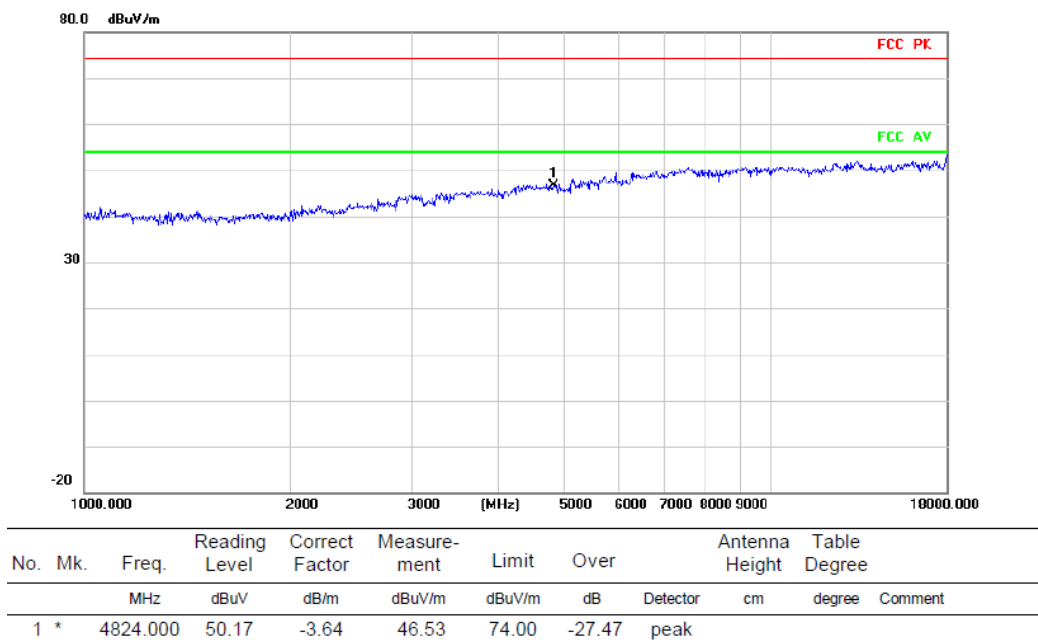
Note:

1. Measurement = Reading + Correct Factor.
2. Over = Measurement – Limit

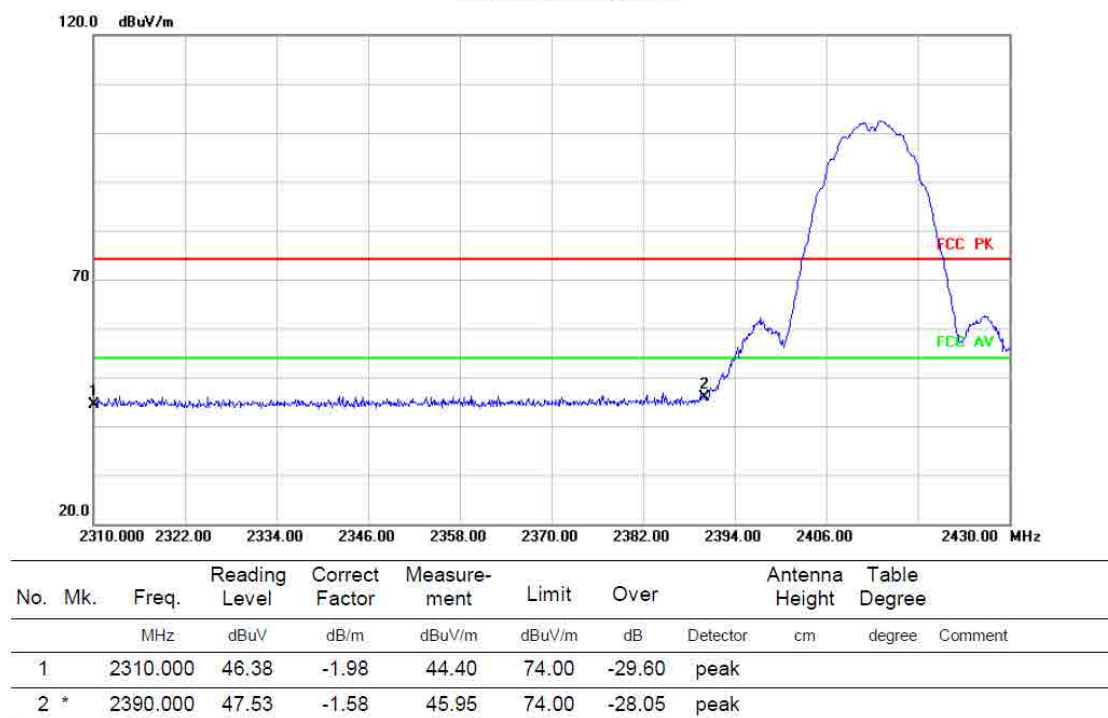
Above 1GHz (1GHz~18GHz)	Test mode:11B	Test Channel:1
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VERTICAL

Radiated Emission

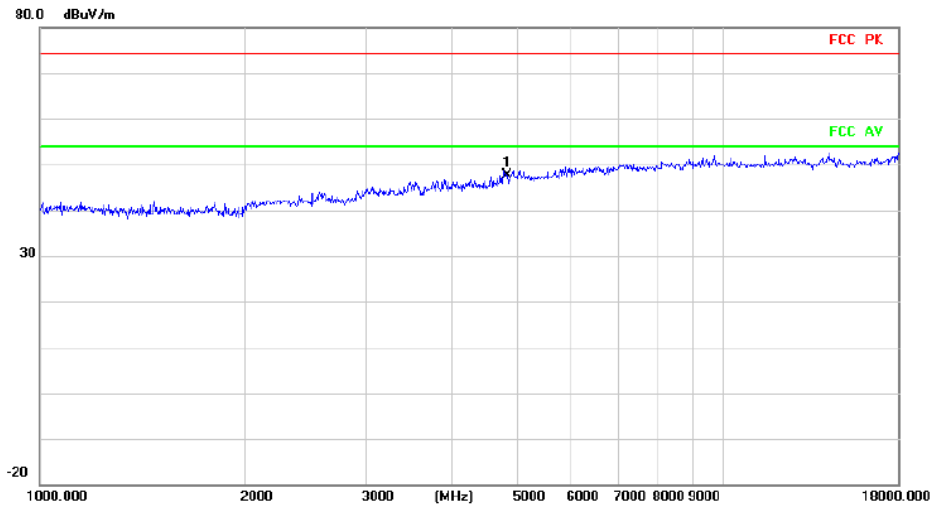


Radiated Emission



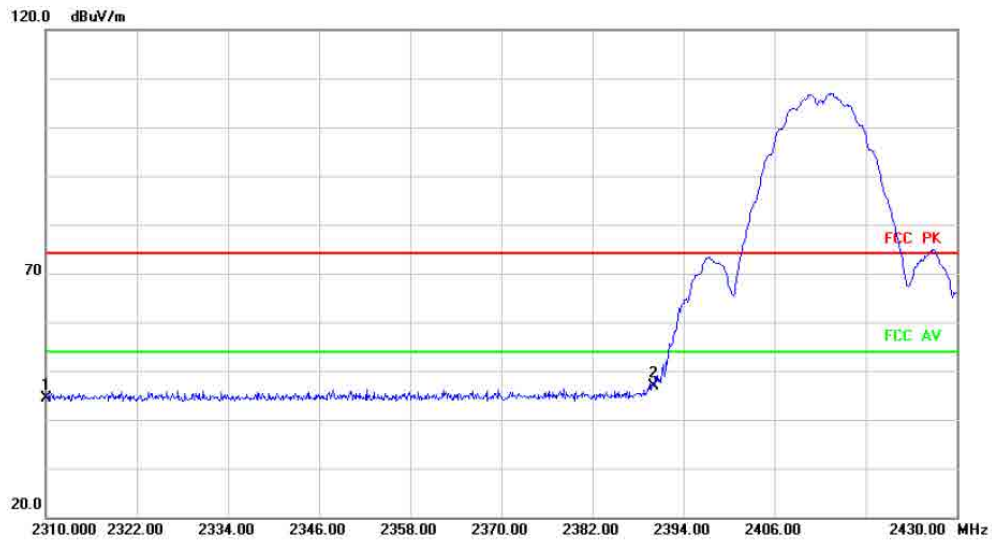
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4824.000	51.30	-3.64	47.66	74.00	-26.34	peak	

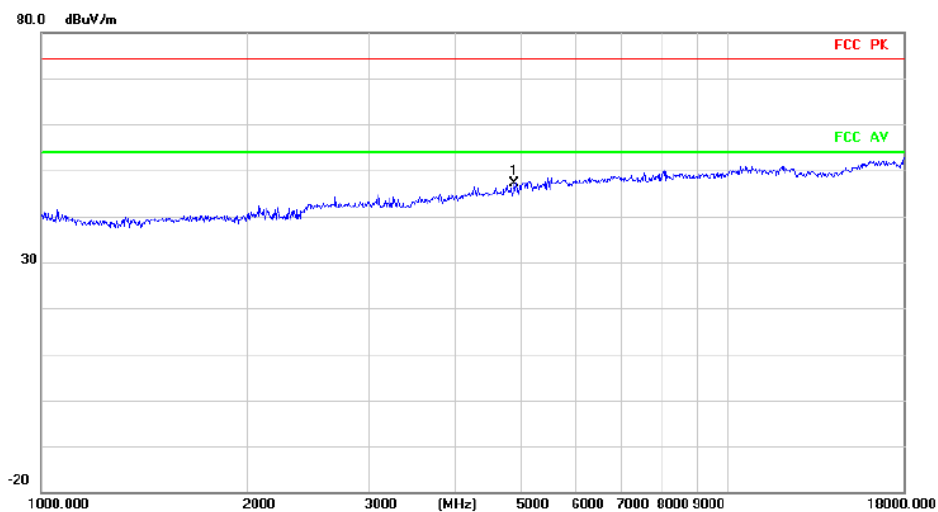
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2310.000	46.34	-1.98	44.36	74.00	-29.64	peak	
2	*	2390.000	48.46	-1.58	46.88	74.00	-27.12	peak	

VERTICAL

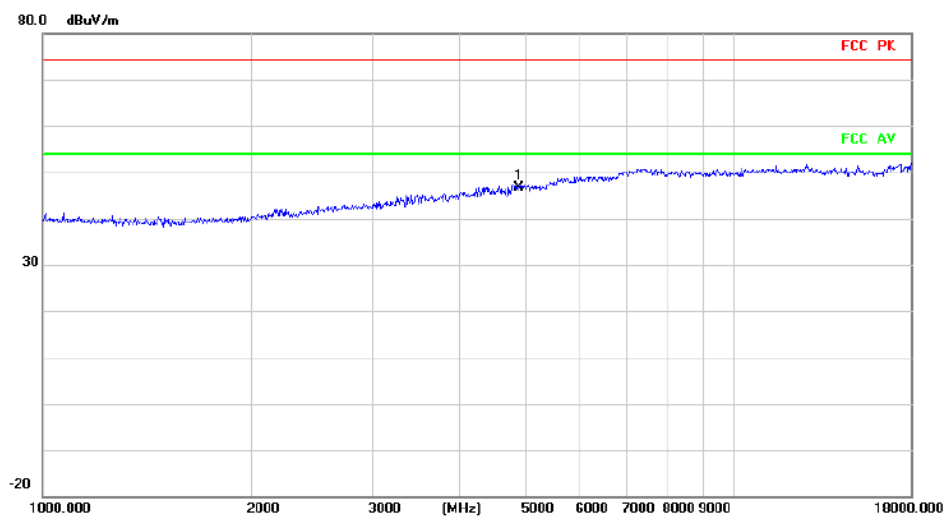
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4874.000	50.58	-3.56	47.02	74.00	-26.98	peak	

HORIZONTAL

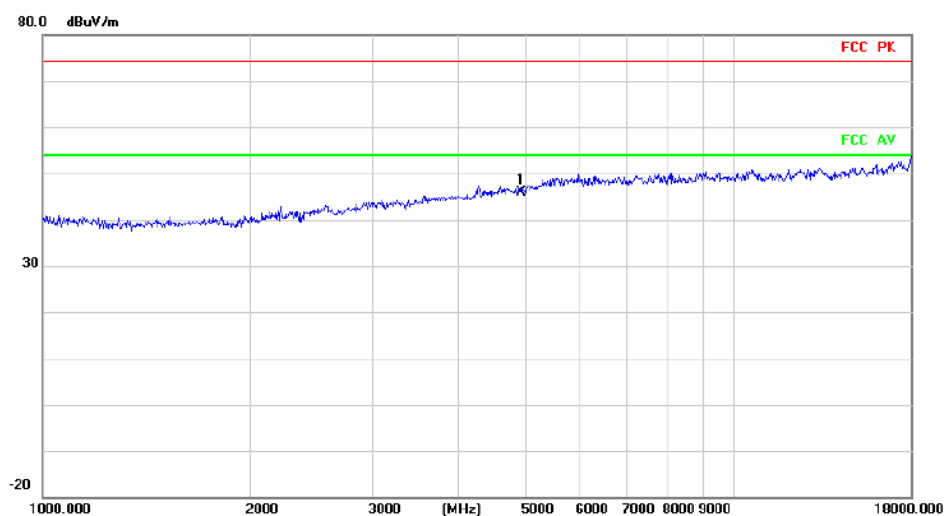
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4874.000	50.23	-3.56	46.67	74.00	-27.33	peak	

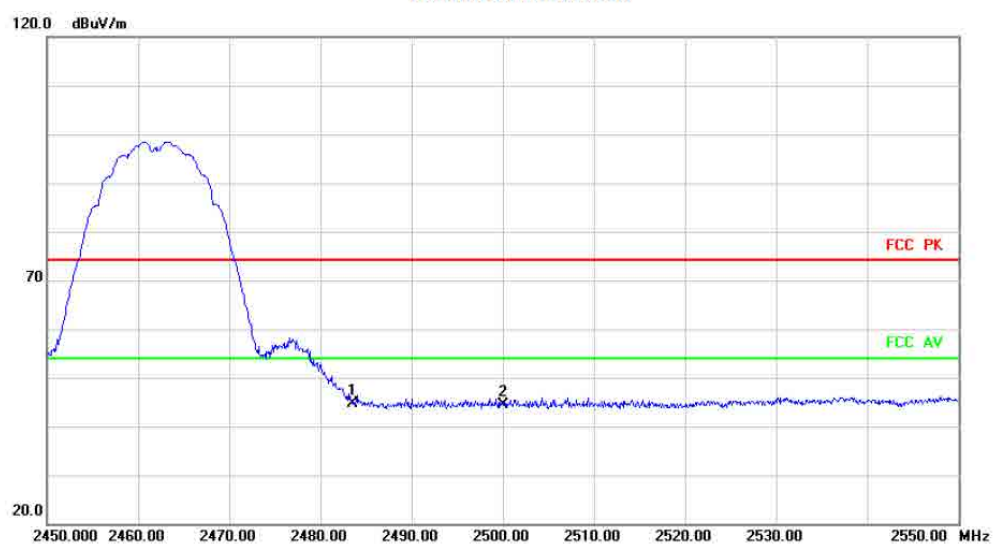
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	4924.000	49.22	-3.33	45.89	74.00	-28.11	peak		Comment

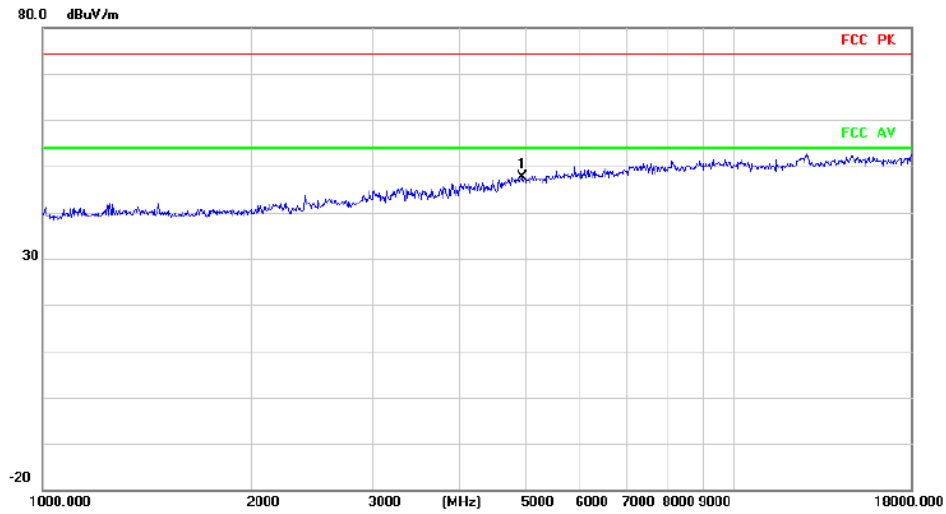
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	2483.500	45.36	-0.62	44.74	74.00	-29.26	peak		Comment
2		2500.000	44.81	-0.45	44.36	74.00	-29.64	peak		Comment

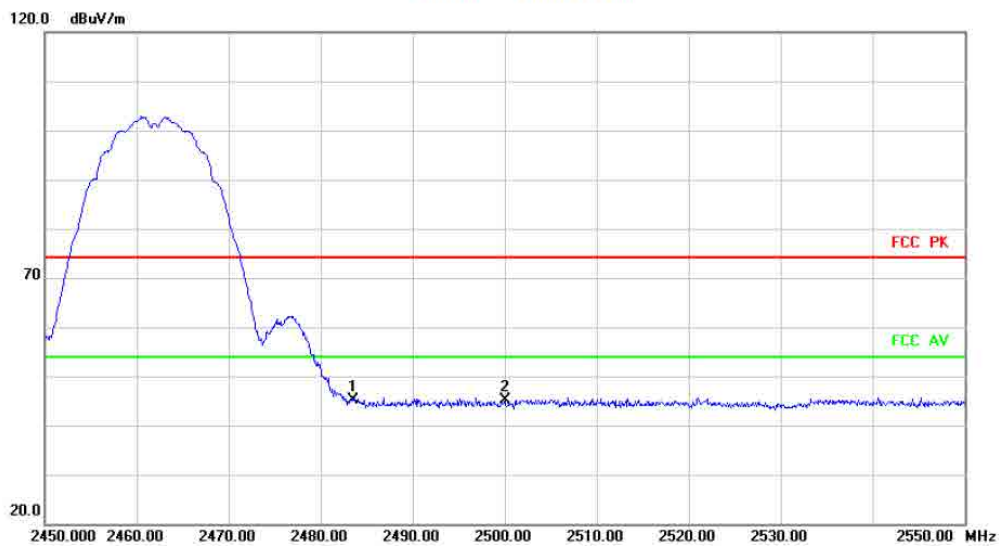
HORIZONTA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	4924.000	51.06	-3.33	47.73	74.00	-26.27	peak		

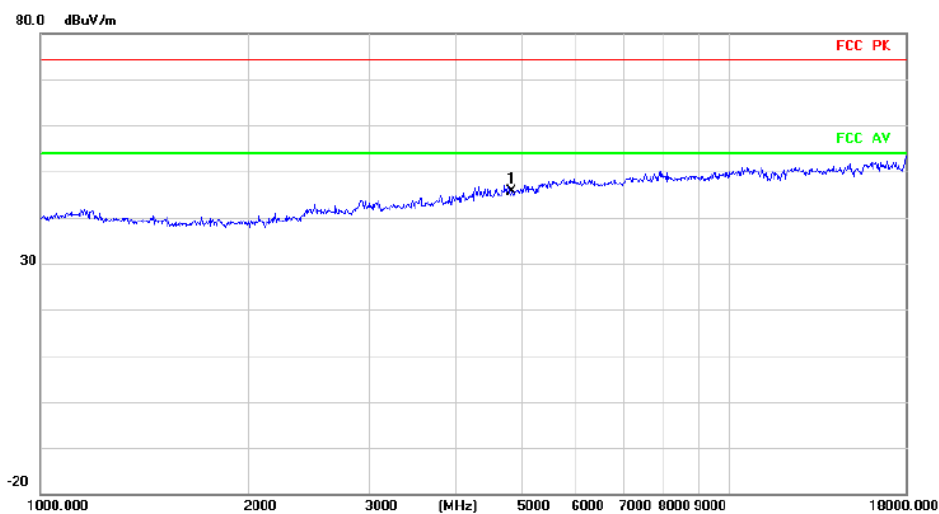
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	2483.500	45.79	-0.62	45.17	74.00	-28.83	peak		
2		2500.000	45.49	-0.45	45.04	74.00	-28.96	peak		

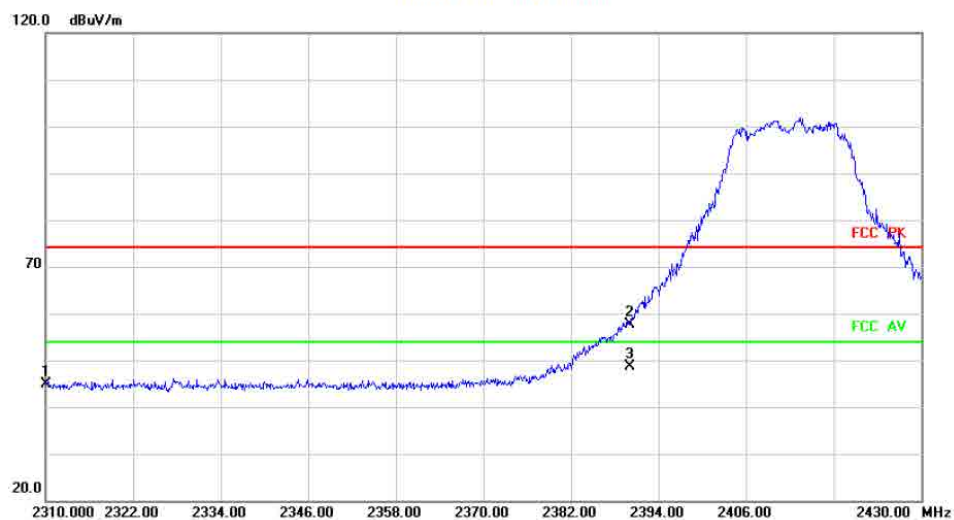
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4824.000	49.17	-3.64	45.53	74.00	-28.47	peak		

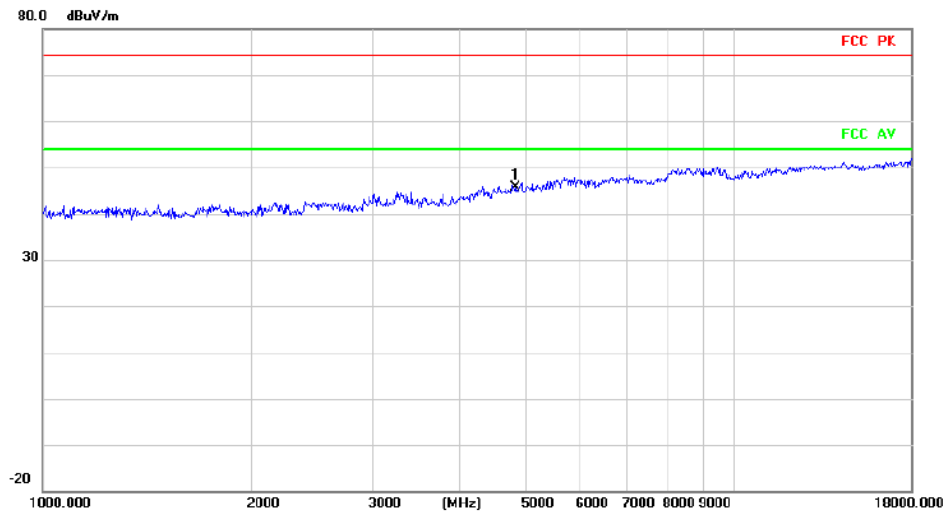
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	46.83	-1.98	44.85	74.00	-29.15	peak		
2		2390.000	59.32	-1.58	57.74	74.00	-16.26	peak		
3	*	2390.000	50.25	-1.58	48.67	54.00	-5.33	AVG		

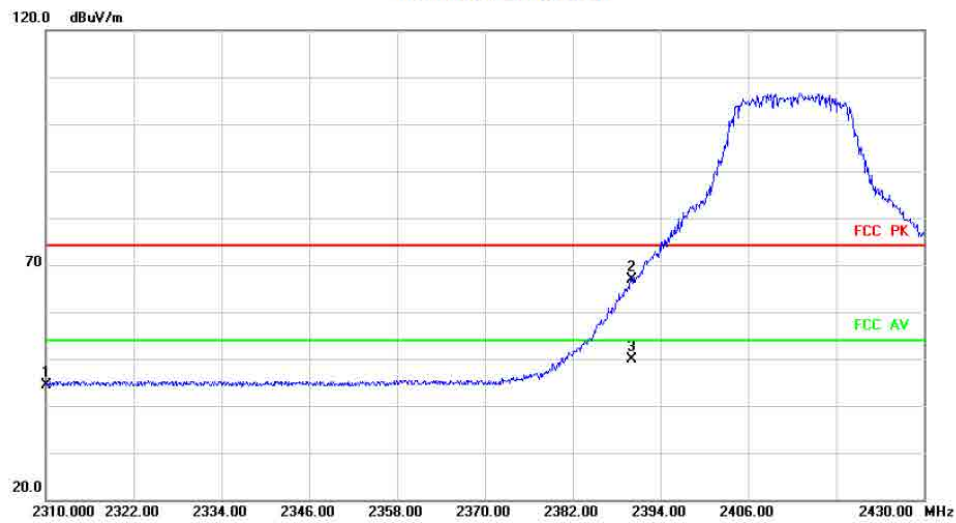
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4824.000	49.30	-3.64	45.66	74.00	-28.34	peak	

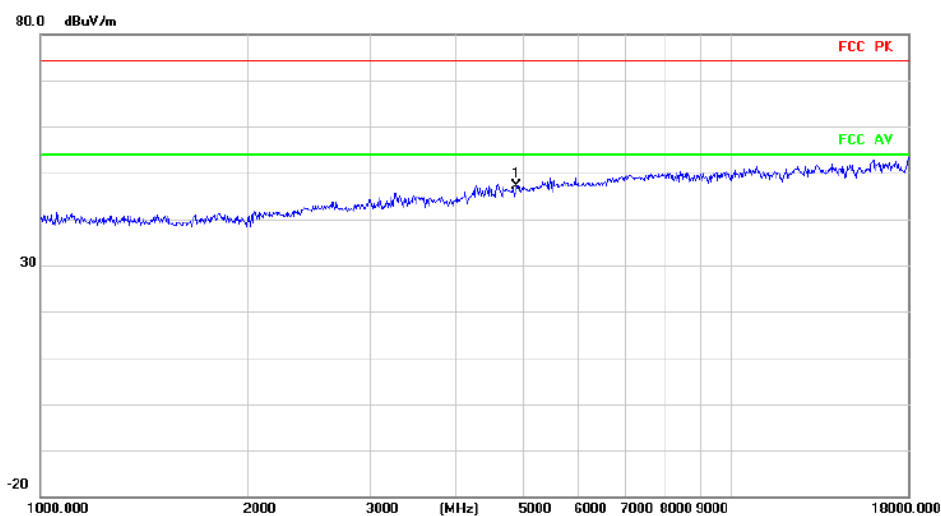
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2310.000	46.26	-1.98	44.28	74.00	-29.72	peak	
2		2390.000	68.39	-1.58	66.81	74.00	-7.19	peak	
3	*	2390.000	51.47	-1.58	49.89	54.00	-4.11	AVG	

VERTICAL

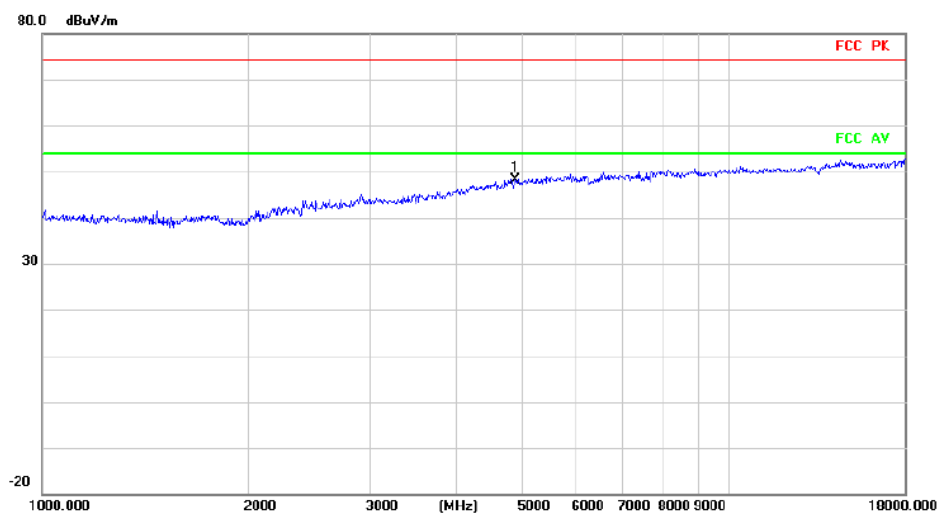
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	4874.000	50.58	-3.56	47.02	74.00	-26.98	peak		

HORIZONTAL

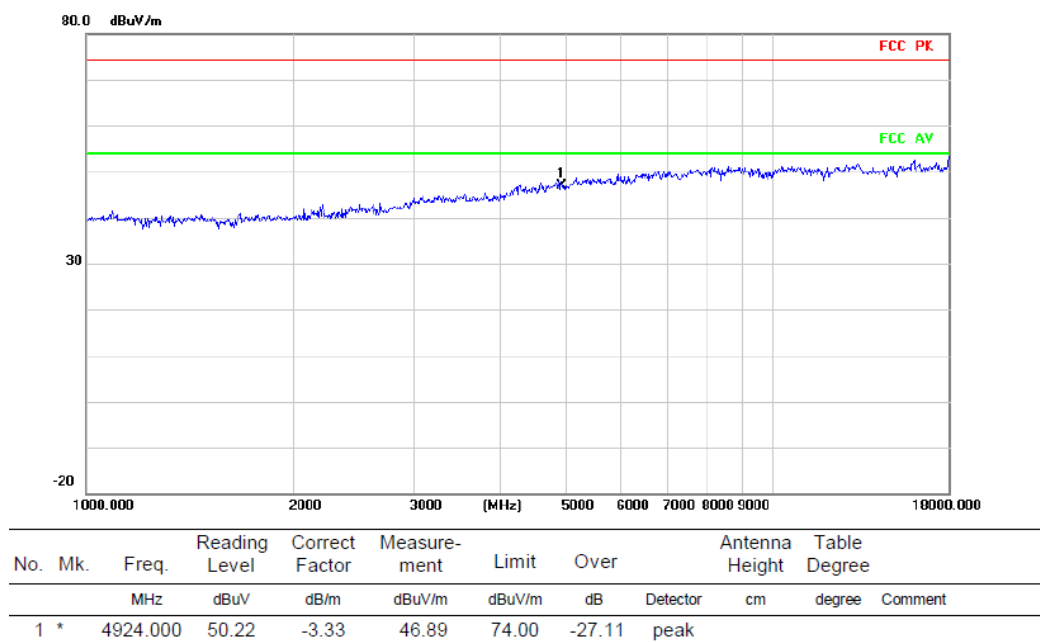
Radiated Emission



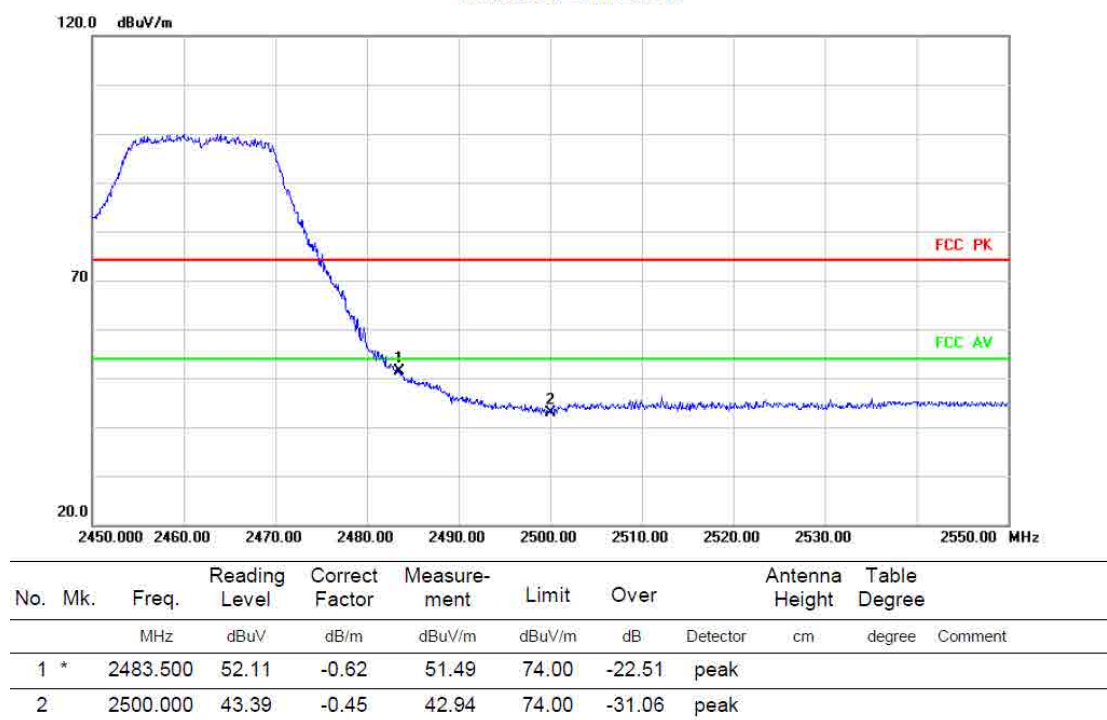
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	4874.000	51.73	-3.56	48.17	74.00	-25.83	peak		

VERTICAL

Radiated Emission

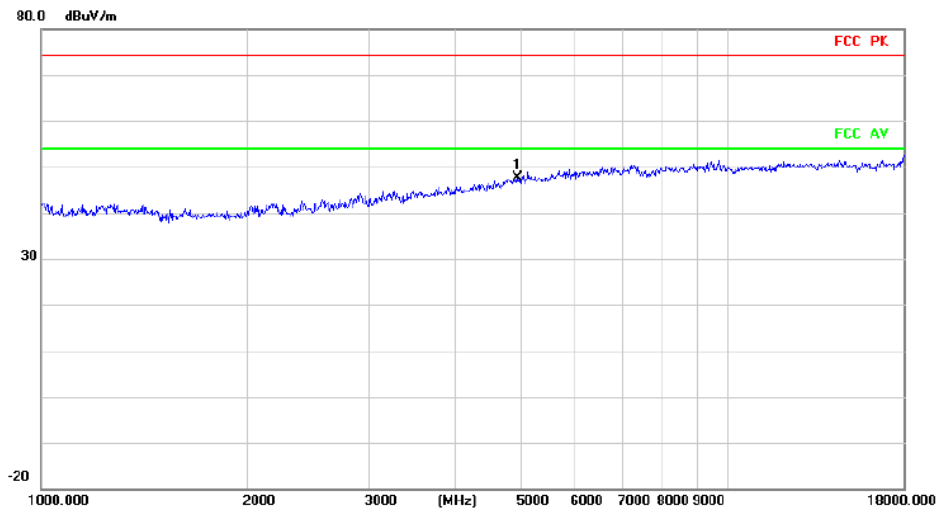


Radiated Emission



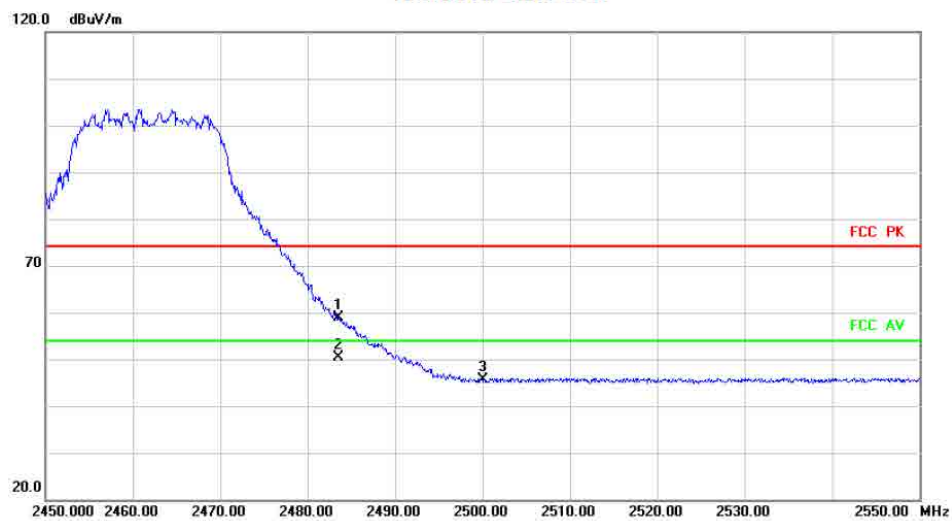
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4924.000	51.06	-3.33	47.73	74.00	-26.27	peak	

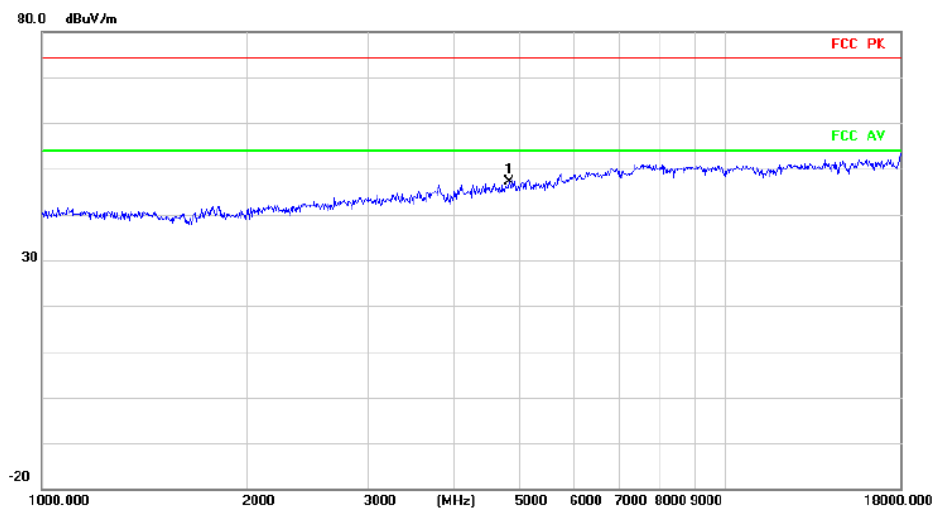
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2483.500	59.39	-0.62	58.77	74.00	-15.23	peak	
2	*	2483.500	50.96	-0.62	50.34	54.00	-3.66	AVG	
3		2500.000	46.01	-0.45	45.56	74.00	-28.44	peak	

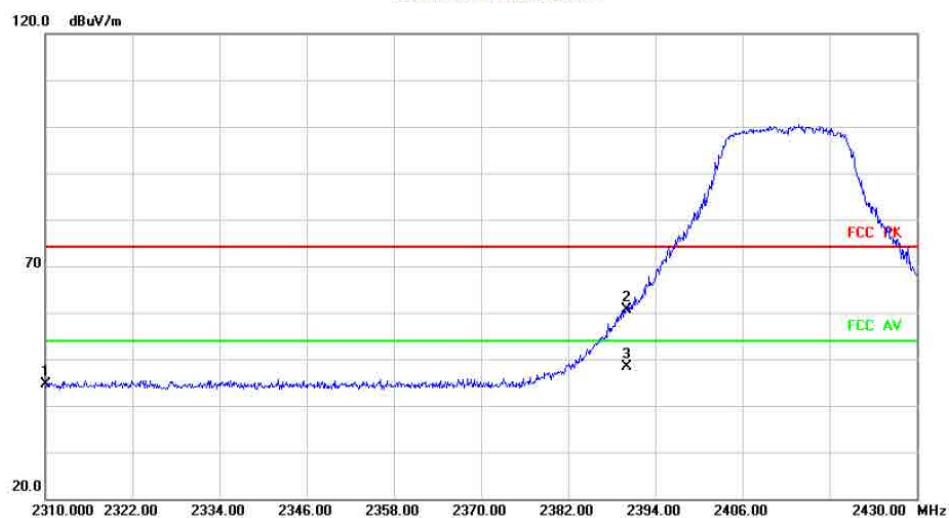
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4824.000	50.67	-3.64	47.03	74.00	-26.97	peak	

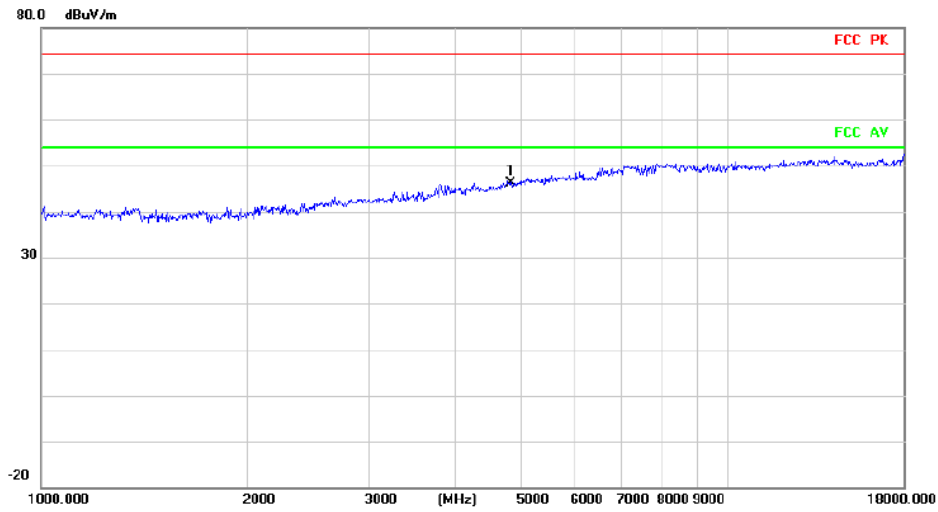
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2310.000	46.67	-1.98	44.69	74.00	-29.31	peak	
2		2390.000	62.17	-1.58	60.59	74.00	-13.41	peak	
3	*	2390.000	49.92	-1.58	48.34	54.00	-5.66	AVG	

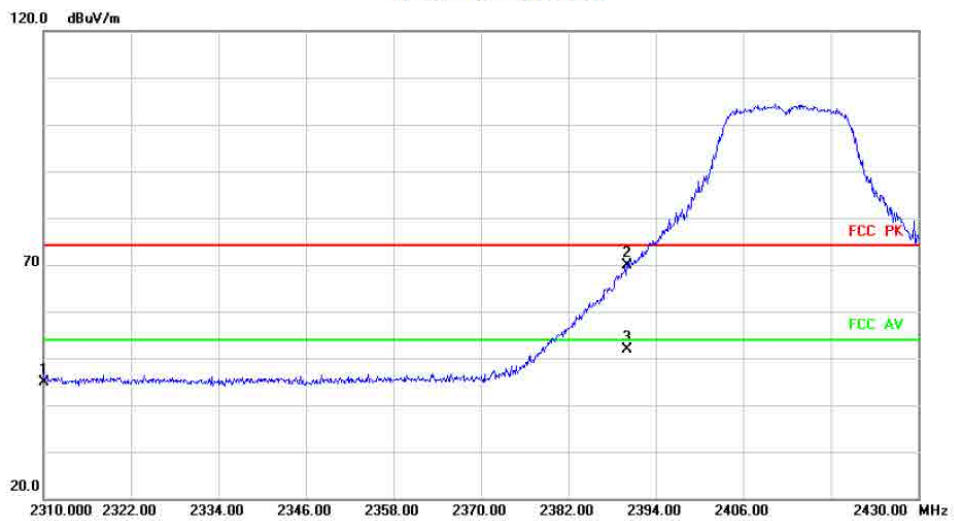
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4824.000	49.80	-3.64	46.16	74.00	-27.84 peak		

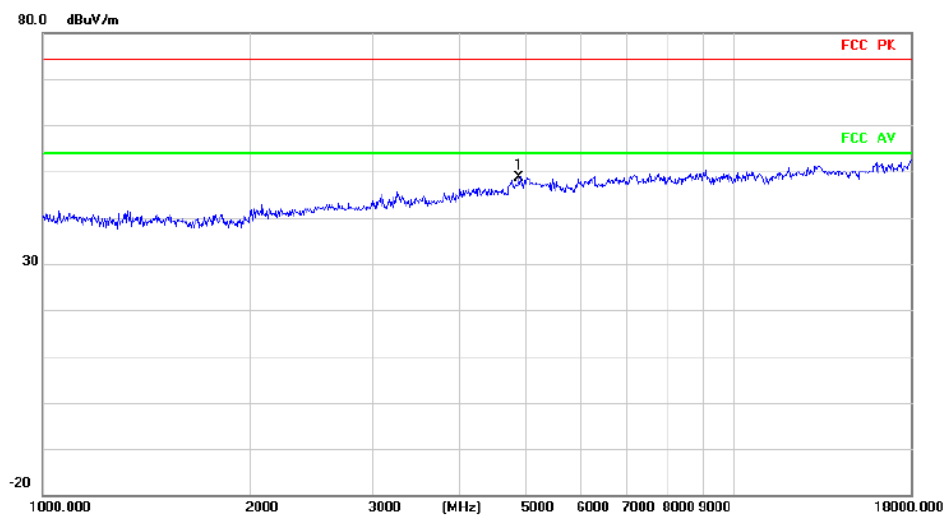
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2310.000	46.77	-1.98	44.79	74.00	-29.21 peak		
2		2390.000	71.36	-1.58	69.78	74.00	-4.22 peak		
3	*	2390.000	53.56	-1.58	51.98	54.00	-2.02 AVG		

VERTICAL

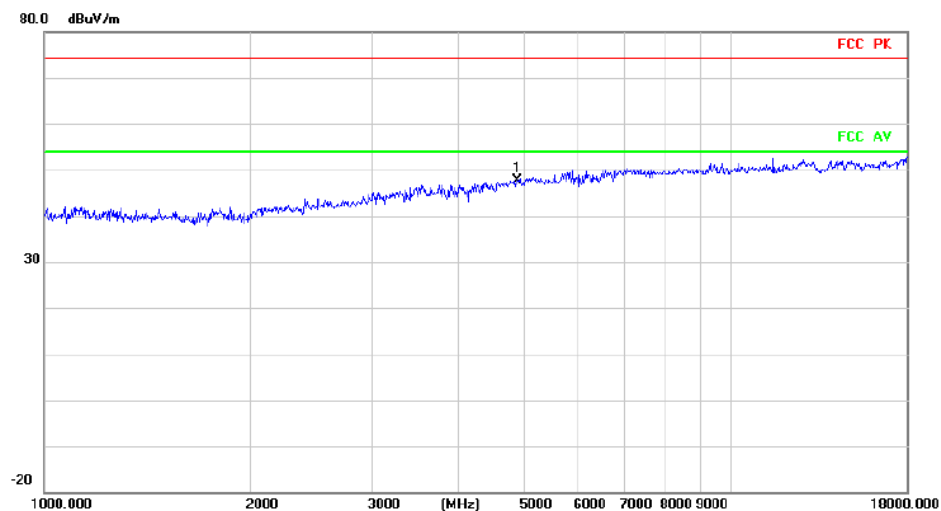
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	4874.000	52.08	-3.56	48.52	74.00	-25.48	peak		Comment

HORIZONTAL

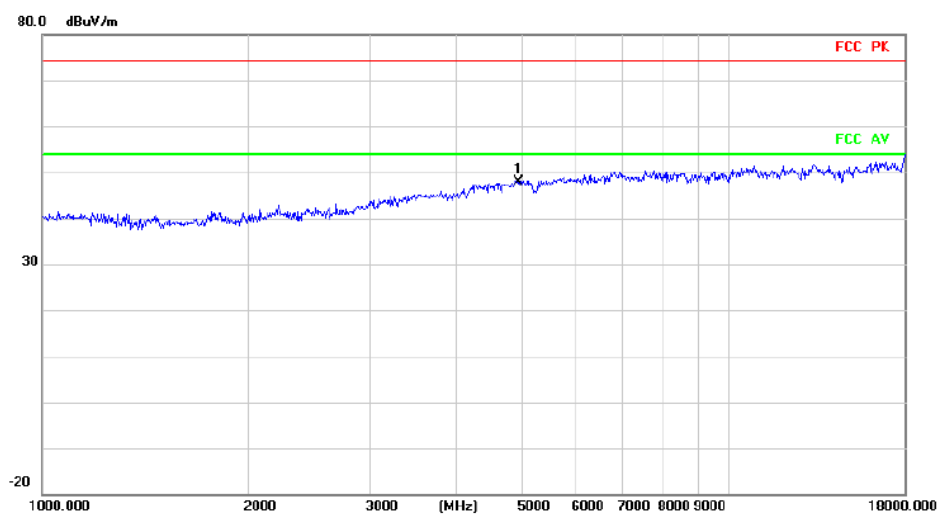
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	4874.000	51.23	-3.56	47.67	74.00	-26.33	peak		Comment

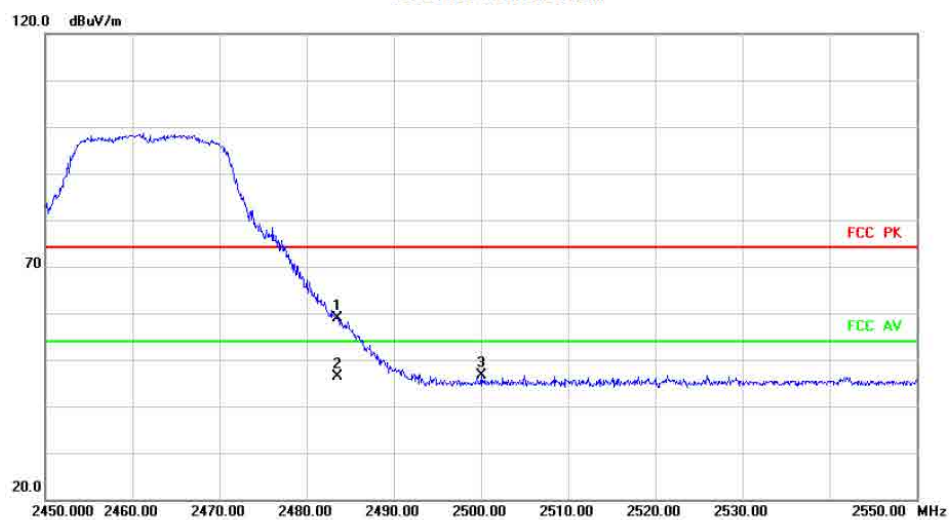
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4924.000	51.22	-3.33	47.89	74.00	-26.11	peak	

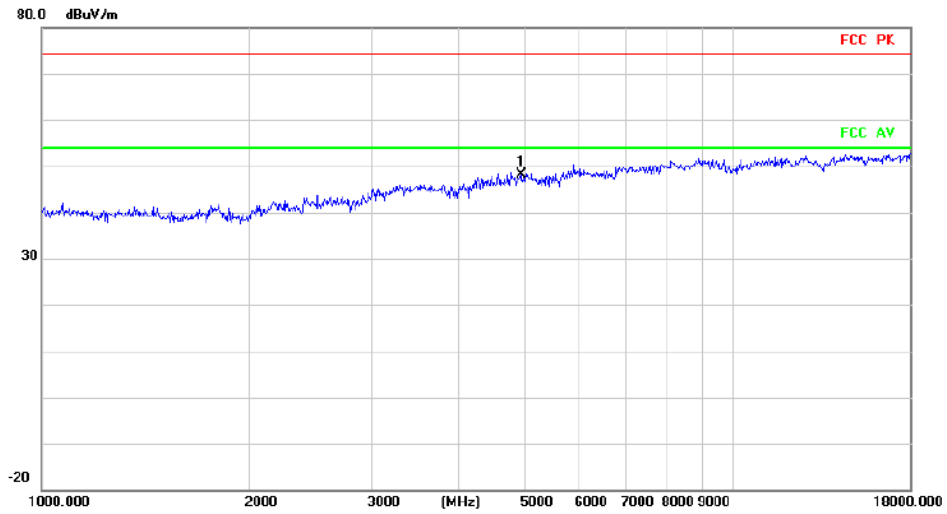
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2483.500	59.57	-0.62	58.95	74.00	-15.05	peak	
2	*	2483.500	47.05	-0.62	46.43	54.00	-7.57	AVG	
3		2500.000	47.04	-0.45	46.59	74.00	-27.41	peak	

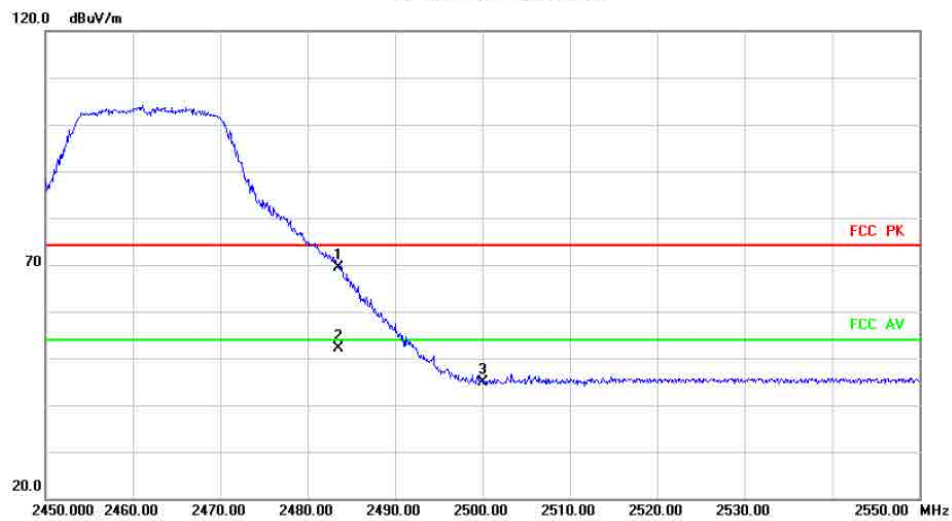
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4924.000	51.56	-3.33	48.23	74.00	-25.77	peak	

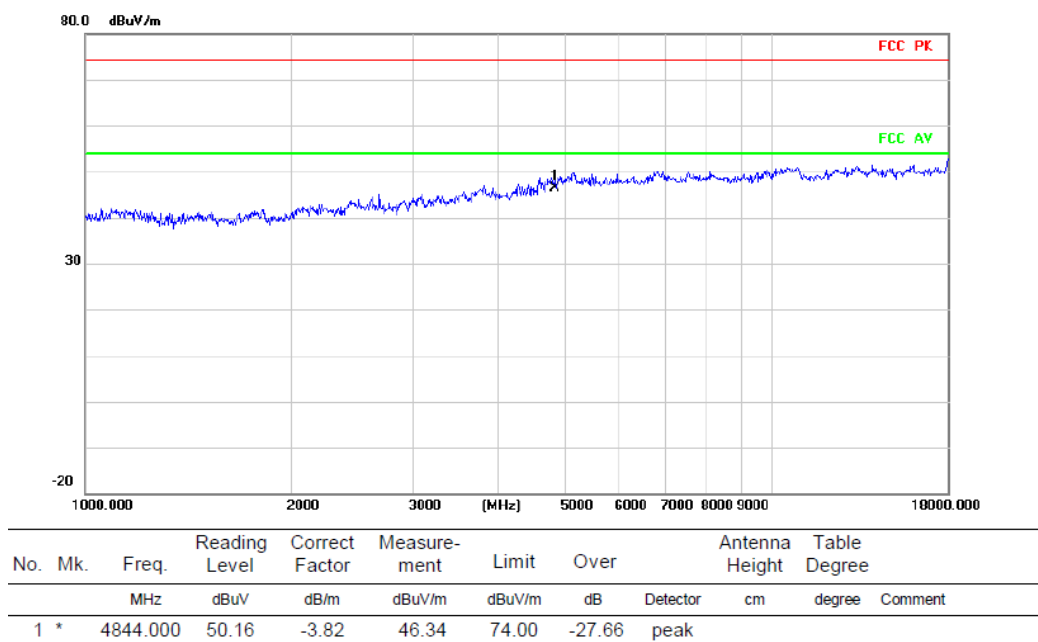
Radiated Emission



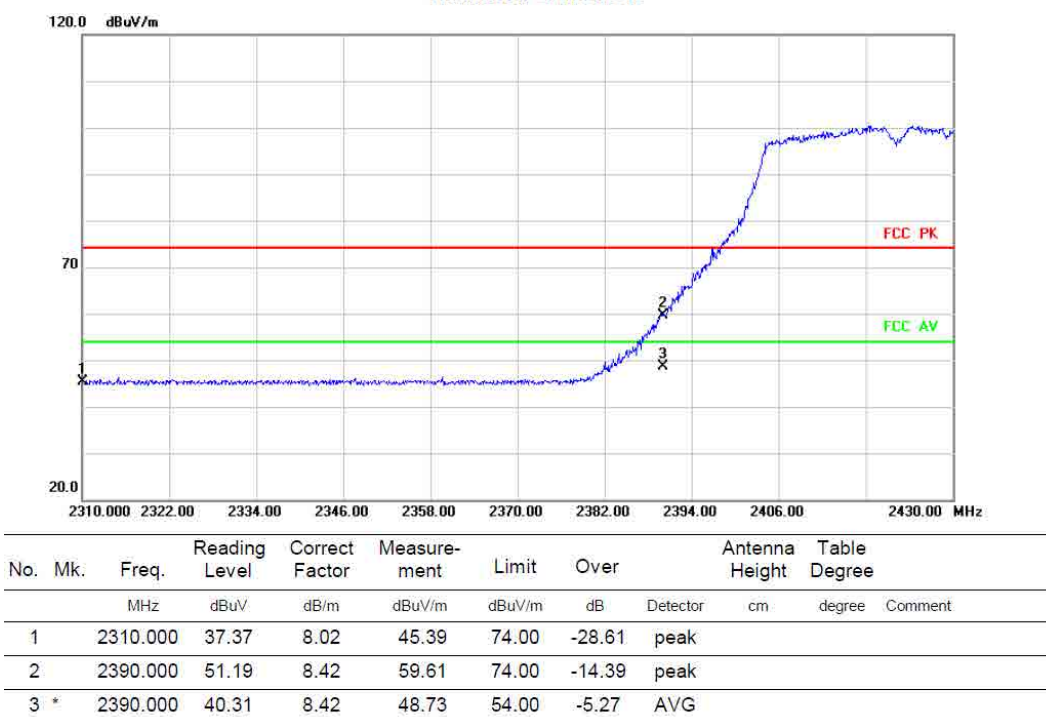
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2483.500	69.88	-0.62	69.26	74.00	-4.74	peak	
2	*	2483.500	52.78	-0.62	52.16	54.00	-1.84	AVG	
3		2500.000	45.45	-0.45	45.00	74.00	-29.00	peak	

VERTICAL

Radiated Emission

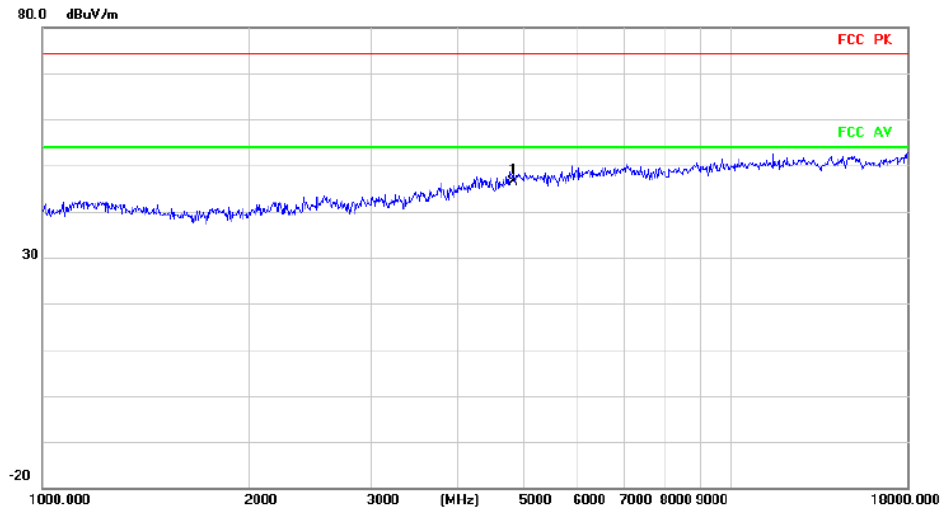


Radiated Emission



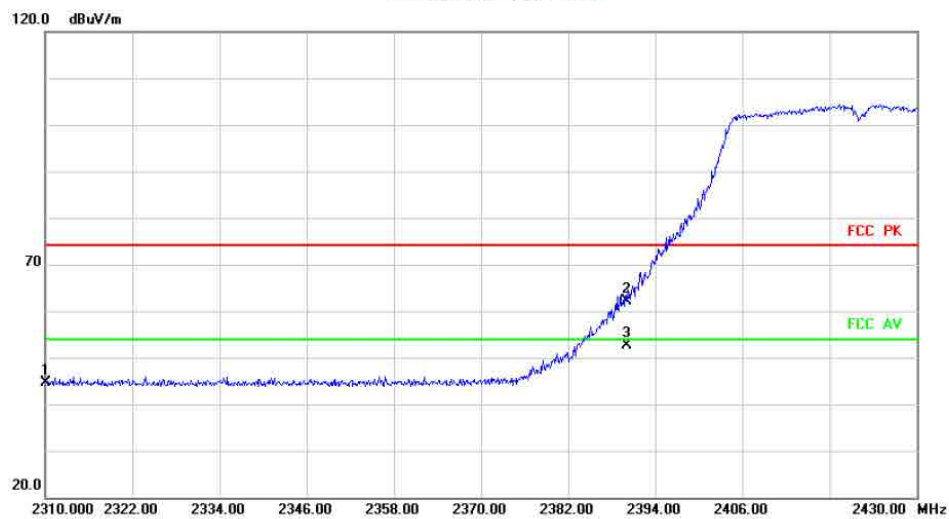
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4844.000	50.24	-3.82	46.42	74.00	-27.58 peak		

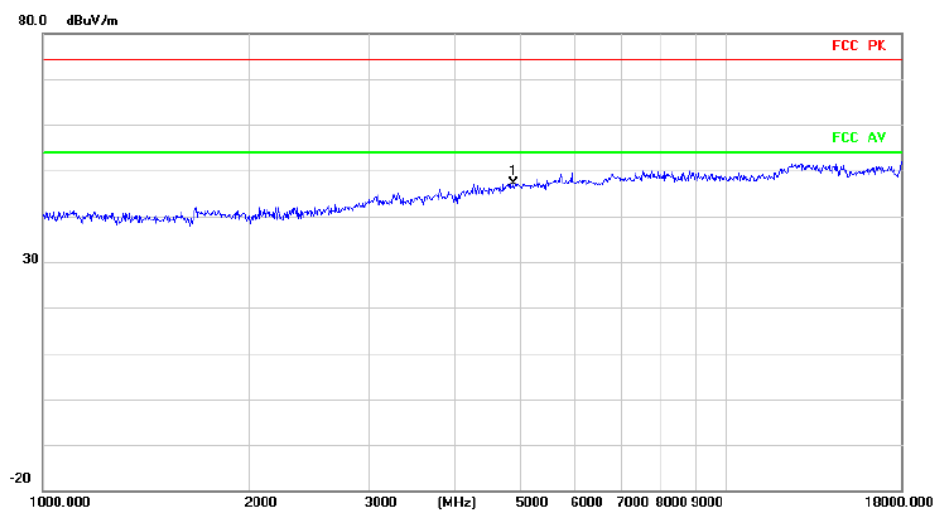
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2310.000	36.51	8.02	44.53	74.00	-29.47 peak		
2		2390.000	53.79	8.42	62.21	74.00	-11.79 peak		
3	*	2390.000	44.11	8.42	52.53	54.00	-1.47 AVG		

VERTICAL

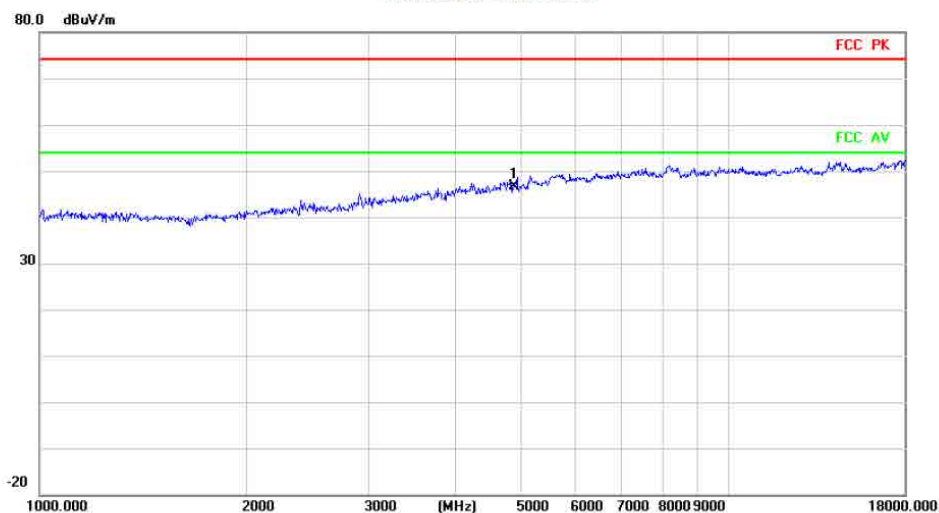
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	4874.000	50.58	-3.56	47.02	74.00	-26.98	peak		Comment

HORIZONTAL

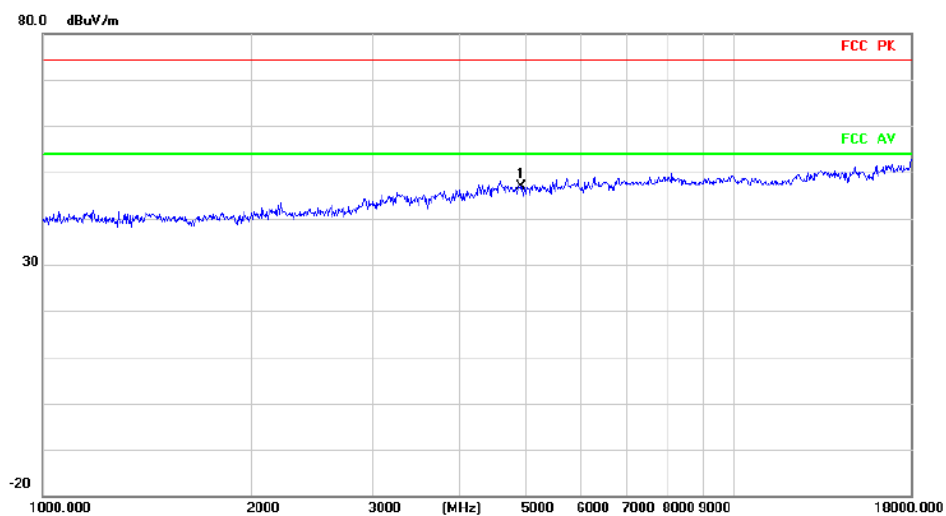
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	4874.000	50.23	-3.56	46.67	74.00	-27.33	peak		Comment

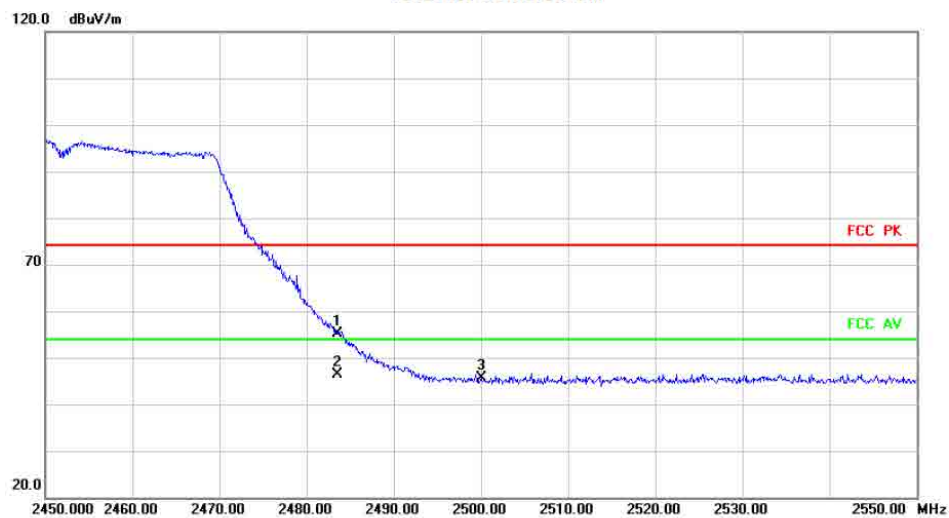
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4904.000	50.03	-3.24	46.79	74.00	-27.21	peak	

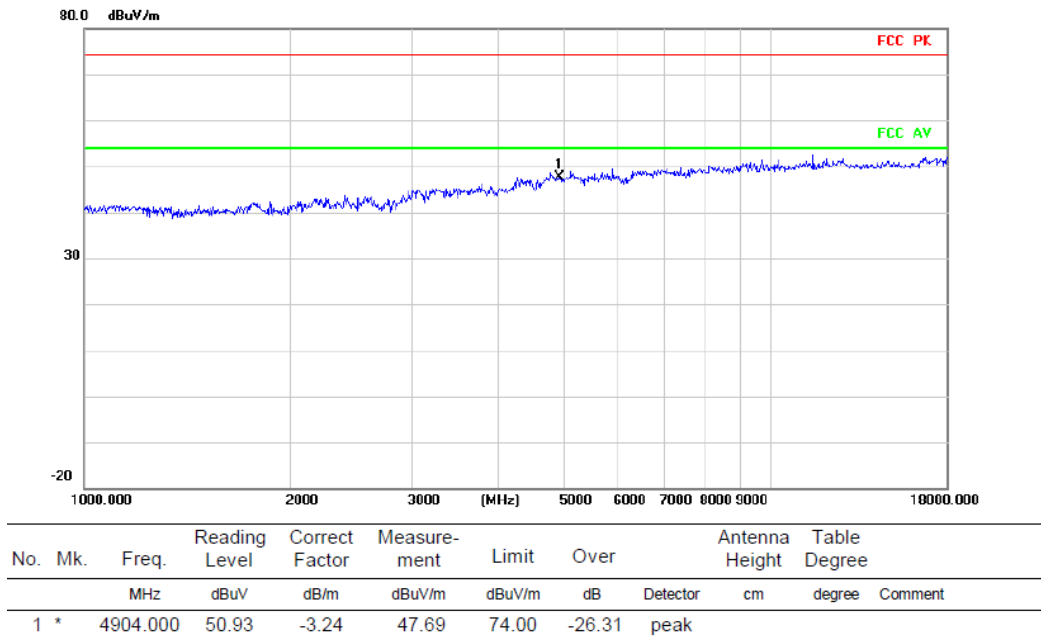
Radiated Emission



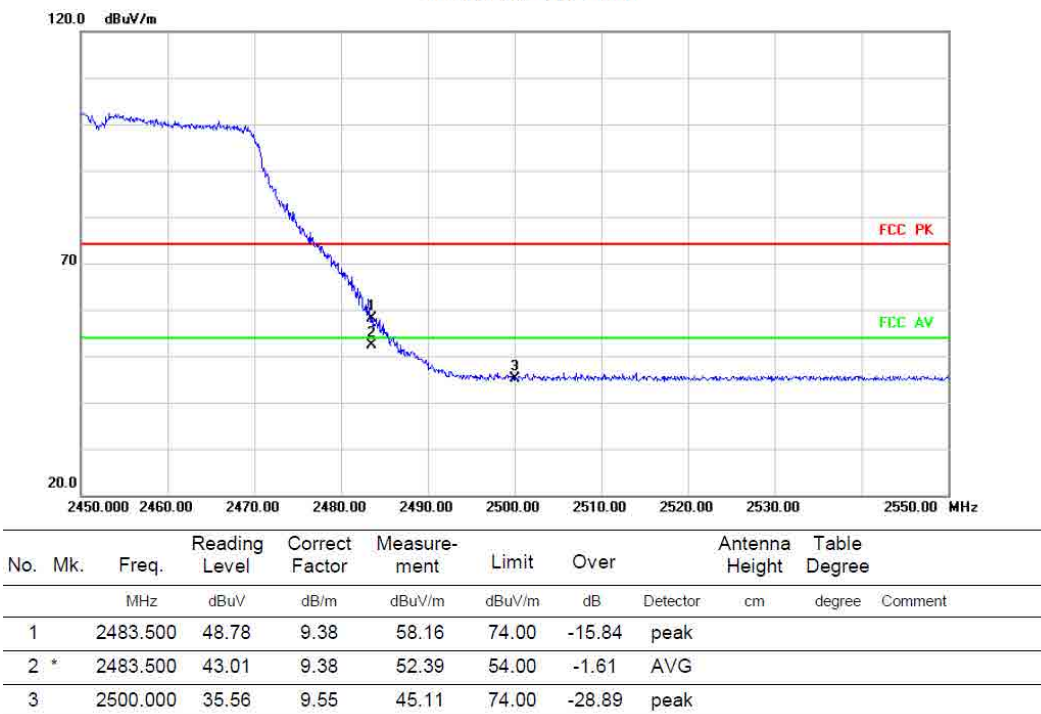
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2483.500	45.84	9.38	55.22	74.00	-18.78	peak	
2	*	2483.500	37.05	9.38	46.43	54.00	-7.57	AVG	
3		2500.000	36.08	9.55	45.63	74.00	-28.37	peak	

HORIZONTALA

Radiated Emission



Radiated Emission



The high frequency, which started from 18GHz to 26.5GHz, was pre-scanned and the result which was 20dB lower than the limit line was not recorded in this report.

3.3 Spurious Emission at Antenna Port

3.3.1 Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak Output Power limits. If the transmitter complies with the Output Power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

3.3.2 Test Procedure

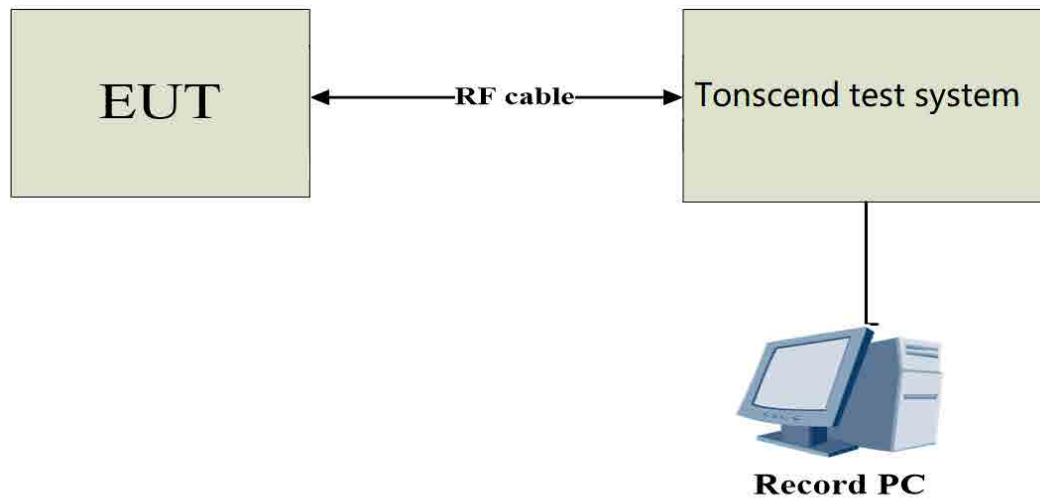
Test Method	
☒ Conducted Measurement	☐ Radiated Measurement
Test Channels	
☒ Lowest, Middle and Highest Channel	☐ Lowest and Highest Channel
Environmental conditions	
☒ Normal	☐ Normal and Extreme
Note: ☒ : Test ☐ : No Test	

a) The EUT was directly connected to the tonscond test system and antenna output port as show in the block diagram below.

b) Spectrum Setting as below:

Centre Frequency	The centre frequency of the channel under test
Spectrum Parameters	Setting
Start Frequency	30 MHz
Stop Frequency	26.5 GHz
RBW	100 kHz
VBW	300 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

3.3.3 Test Setup



3.3.4 The Result

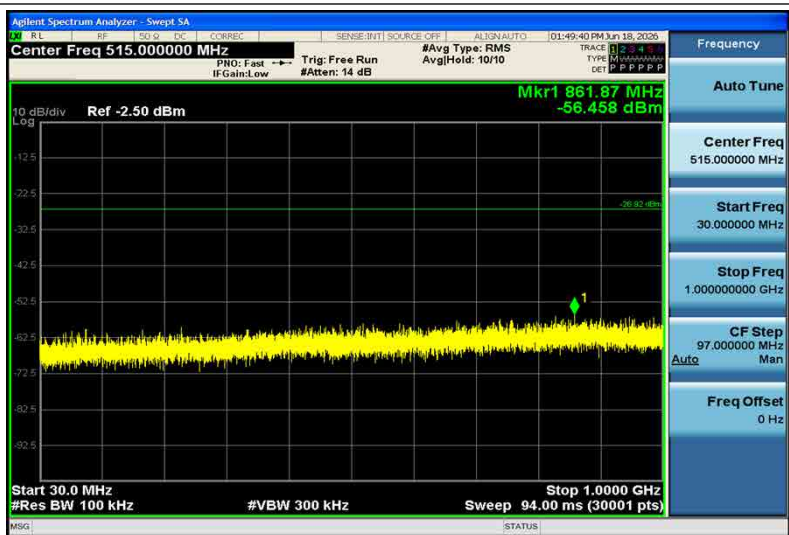
Conducted Spurious Emission

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	0~Reference	3.08	3.08	---	PASS
11B	Ant1	2412	30~1000	3.08	-56.46	≤-26.92	PASS
11B	Ant1	2412	1000~26500	3.08	-39.26	≤-26.92	PASS
11B	Ant1	2437	0~Reference	4.68	4.68	---	PASS
11B	Ant1	2437	30~1000	4.68	-57.09	≤-25.32	PASS
11B	Ant1	2437	1000~26500	4.68	-39.34	≤-25.32	PASS
11B	Ant1	2462	0~Reference	1.19	1.19	---	PASS
11B	Ant1	2462	30~1000	1.19	-56.82	≤-28.81	PASS
11B	Ant1	2462	1000~26500	1.19	-39.45	≤-28.81	PASS
11G	Ant1	2412	0~Reference	1.22	1.22	---	PASS
11G	Ant1	2412	30~1000	1.22	-56.45	≤-28.78	PASS
11G	Ant1	2412	1000~26500	1.22	-39.61	≤-28.78	PASS
11G	Ant1	2437	0~Reference	-0.84	-0.84	---	PASS
11G	Ant1	2437	30~1000	-0.84	-56.33	≤-30.84	PASS
11G	Ant1	2437	1000~26500	-0.84	-39.44	≤-30.84	PASS
11G	Ant1	2462	0~Reference	-1.52	-1.52	---	PASS
11G	Ant1	2462	30~1000	-1.52	-56.14	≤-31.52	PASS
11G	Ant1	2462	1000~26500	-1.52	-40.04	≤-31.52	PASS
11N20SISO	Ant1	2412	0~Reference	0.08	0.08	---	PASS
11N20SISO	Ant1	2412	30~1000	0.08	-56.05	≤-29.92	PASS
11N20SISO	Ant1	2412	1000~26500	0.08	-39.37	≤-29.92	PASS
11N20SISO	Ant1	2437	0~Reference	-1.06	-1.06	---	PASS
11N20SISO	Ant1	2437	30~1000	-1.06	-56.02	≤-31.06	PASS
11N20SISO	Ant1	2437	1000~26500	-1.06	-39.58	≤-31.06	PASS
11N20SISO	Ant1	2462	0~Reference	-2.46	-2.46	---	PASS
11N20SISO	Ant1	2462	30~1000	-2.46	-56.03	≤-32.46	PASS
11N20SISO	Ant1	2462	1000~26500	-2.46	-38.9	≤-32.46	PASS
11N40SISO	Ant1	2422	0~Reference	-3.12	-3.12	---	PASS

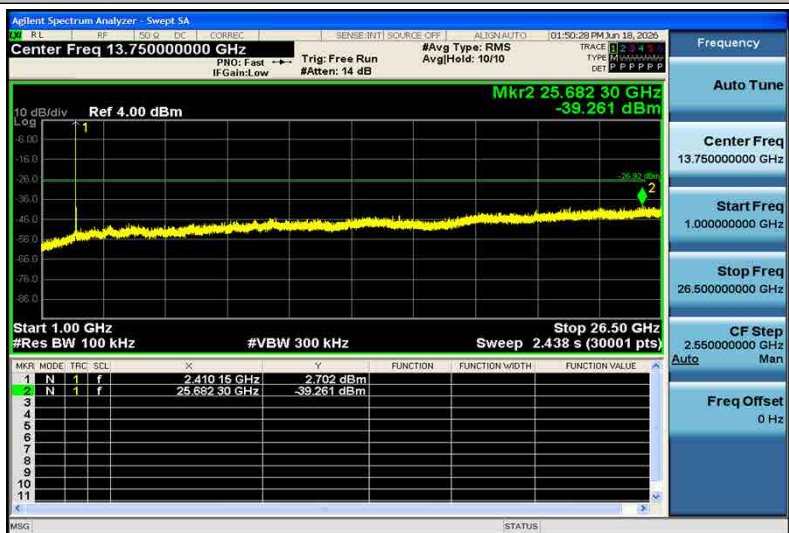
11N40SIS O	Ant1	2422	30~1000	-3.12	-55.64	≤-33.12	PASS
11N40SIS O	Ant1	2422	1000~26500	-3.12	-39.58	≤-33.12	PASS
11N40SIS O	Ant1	2437	0~Reference	-0.24	-0.24	---	PASS
11N40SIS O	Ant1	2437	30~1000	-0.24	-55.5	≤-30.24	PASS
11N40SIS O	Ant1	2437	1000~26500	-0.24	-39.13	≤-30.24	PASS
11N40SIS O	Ant1	2452	0~Reference	-3.76	-3.76	---	PASS
11N40SIS O	Ant1	2452	30~1000	-3.76	-56.05	≤-33.76	PASS
11N40SIS O	Ant1	2452	1000~26500	-3.76	-38.59	≤-33.76	PASS



11B-Ant1-2412-0~Reference-PASS



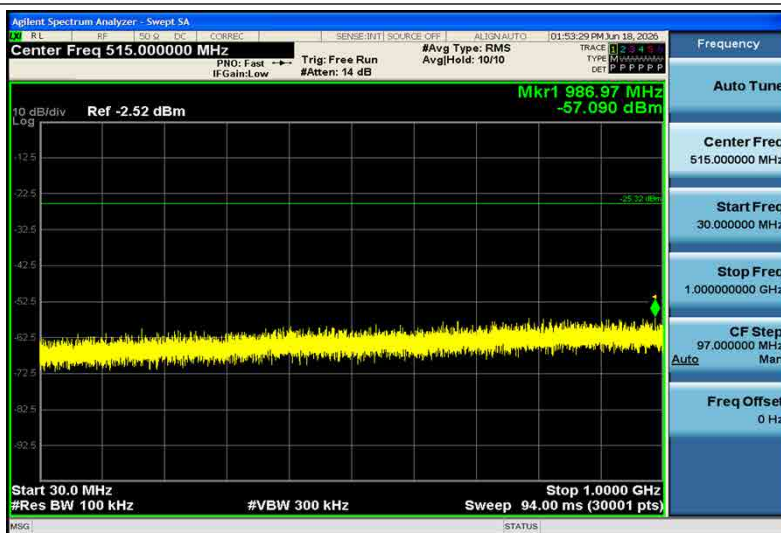
11B-Ant1-2412-30~1000-PASS



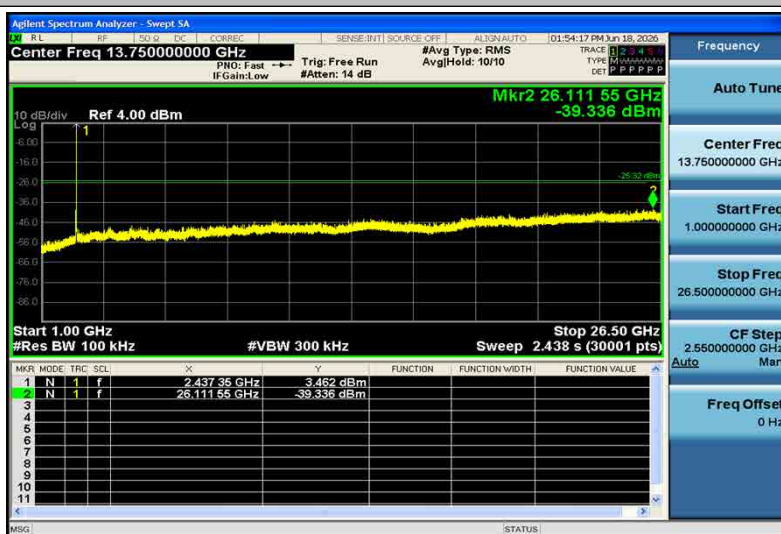
11B-Ant1-2412-1000~26500-PASS



11B-Ant1-2437-0~Reference-PASS



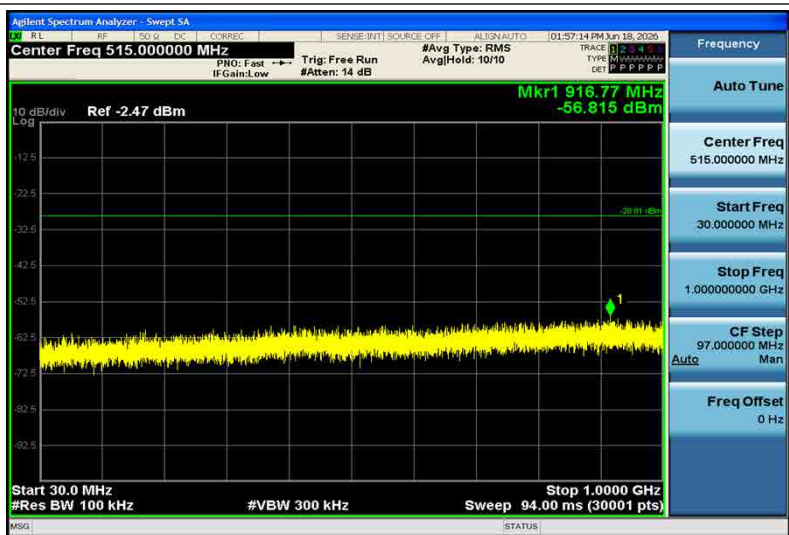
11B-Ant1-2437-30~1000-PASS



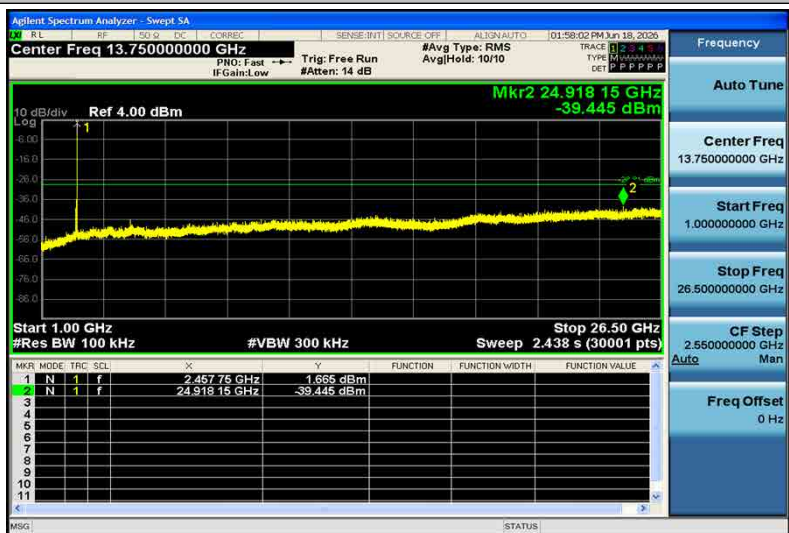
11B-Ant1-2437-1000~26500-PASS



11B-Ant1-2462-0-Reference-PASS



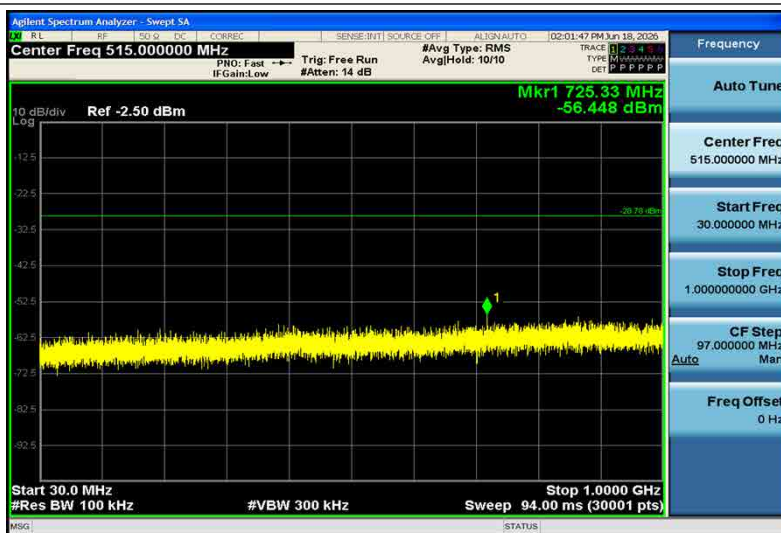
11B-Ant1-2462-30~1000-PASS



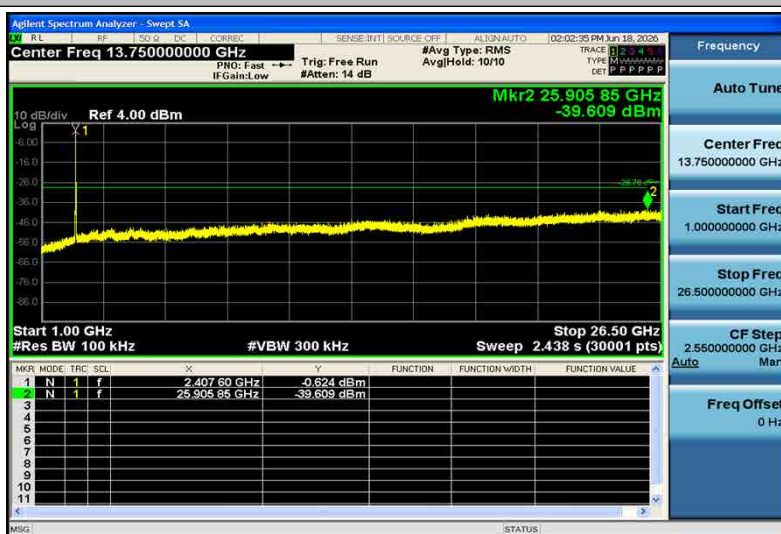
11B-Ant1-2462-1000~26500-PASS



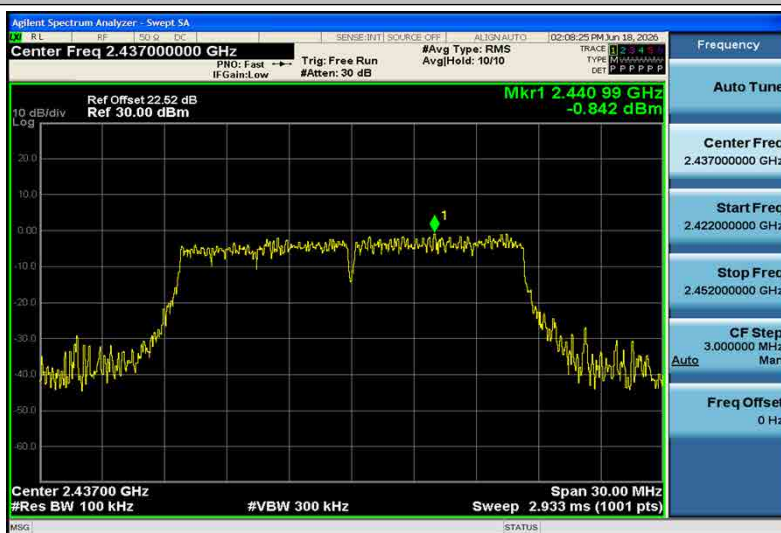
11G-Ant1-2412-0~Reference-PASS



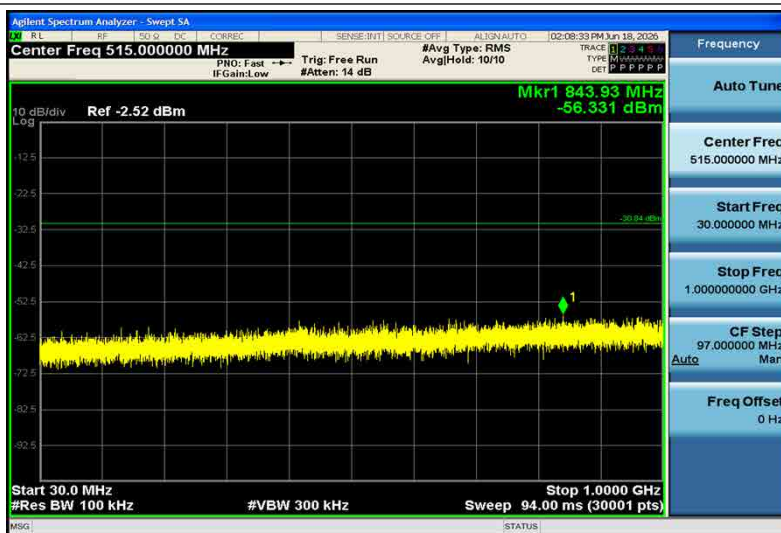
11G-Ant1-2412-30~1000-PASS



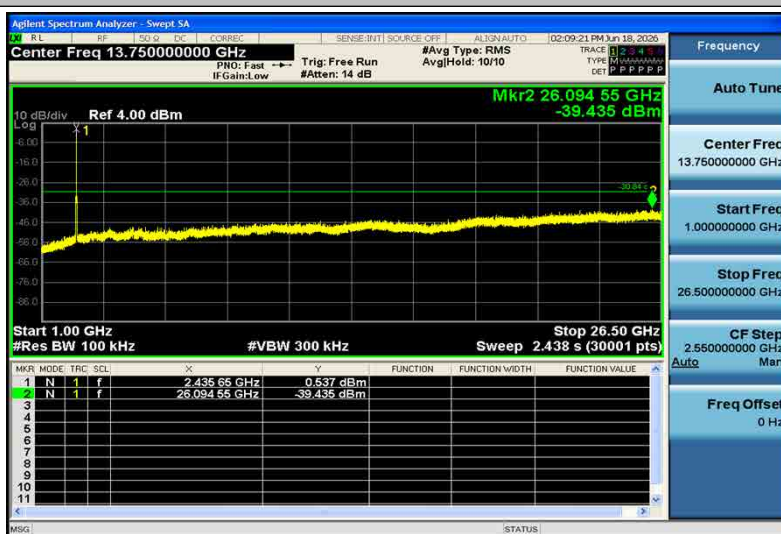
11G-Ant1-2412-1000~26500-PASS



11G-Ant1-2437-0~Reference-PASS



11G-Ant1-2437-30~1000-PASS



11G-Ant1-2437-1000~26500-PASS



11G-Ant1-2462-0~Reference-PASS