

NCC RADIO TEST REPORT

Product name	葫蘆機器人/KettyBot
Applicant	深圳市普渡科技有限公司
Manufacture	深圳市普渡科技有限公司
Rating(s)	DC29V from adapter or DC25.55V from battery
Trademark	PUDU
Model and/or type reference	PNT
Standard	LP0002:2020
Test Result	PASS

Date of receipt : 07-09-2021

Date of Issue : 08-06-2021

signature :



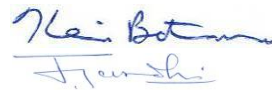
NCC RADIO TEST REPORT

Report Reference No.: M210809N3-04

Compiled by (+ signature): Kevin Bothmann

Approved by (+ signature): Jay Gandhi

Date of issue: 2021-08-06



Applicant's name: 深圳市普渡科技有限公司

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A 座 501

Manufacture's Name: 深圳市普渡科技有限公司

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A 座 501

Test specification:

Standard: LP0002:2020

Test procedure: EIA 603、ANSI、FCC/47 CFR/2.1046、2.1047、2.1049、2.1051、
2.1053 and 2.1055

Non-standard test method: N/A

Test item description

Product name: 葫蘆機器人/KettyBot

Trademark: PUDU

Model and/or type reference: PNT

Rating(s): DC29V from adapter or DC25.55V from battery

Testing Laboratory information:

Testing Laboratory Name: Electro Magnetic Test, Inc.

Address: 1547 Plymouth Street, Mountain View, CA 94043

CAB Identifier Number: US0036

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Fax: (650) 965-3000

E-mail: jgandhi@emtlabs.com

Testing

Date of receipt of test item: Jul. 09, 2021

Date (s) of performance of tests: Jul. 09~ Aug. 06, 2021

Date of Issue: Aug. 06, 2021

Test Result: **Pass**

GENERAL REPORT SUMMARY

This electromagnetic emission test report is generated by Electro Magnetic Test, Inc., which is an independent testing and consulting firm. The test report is based on testing performed Electro Magnetic Test, Inc. personnel according to the measurement procedure described in the test specification given below and in the "Test Procedures" section of this report.

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced in any form unless done so in full.

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Federal Government.

Electro Magnetic Test, Inc. is recognized by the following agencies for performing EMI/EMC testing:

COUNTRY	AGENCY	IDENTIFYING #
USA	Federal Communications Commission (FCC) (EMT's test site is recognized by the FCC)	Registration Number: 90576
USA, Canada, Taiwan, Australia/New Zealand, European Community	National Voluntary Lab Accreditation Program (NVLAP) (EMT is accredited by NVLAP. A copy of the NVLAP Scope Of Accreditation is available upon request.)	Lab Code: 200147-0
Canada	Industry Canada	File No.: IC 2804
Japan	Voluntary Control Council For Interference (VCCI)	A-0118
	Open Field Test Site "A"	-
	Mains Conducted Emissions Test Site "A"	-
	Telecom Conducted Emissions Test Site "A"	-
	3 Meter Semi-Anechoic Chamber Site "E"	-
	3 Meter Semi-Anechoic Chamber Site "E" (1GHz – 6GHz)	-
	Mains Conducted Emissions Test Site "E"	-
	Telecom Conducted Emissions Test Site "E"	-
Korea	Ministry of Information and Communication's Radio Research Laboratory (RRL) under the Asia Pacific Economic Cooperation (APEC) Mutual Recognition Arrangement (A copy of the Scope Of Accreditation is available upon request)	US0036
Taiwan	Bureau Of Standards, Metrology and Inspection (BSMI)	Reference Number: SL2-IN-E-1024
Australia / New Zealand	Australian Communications Authority (AUSTEL)	*

***THESE AGENCIES DO NOT ISSUE AN IDENTIFYING NUMBER TO TEST LABS.**

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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

LP0002:2020			
Standard Section	Test Item	Judgment	Remark
5.7.3.4(2)	26 dB Emissions Bandwidth	PASS	None
5.7.3.1	Peak Transmit Power	PASS	None
5.7.3.1	Peak Power Spectral Density	PASS	None
5.7.4.5/3.3	AC Power Line Emissions	PASS	None
5.7.4/3.6	Radiated Emissions	PASS	None
5.7.4/3.6	Band Edge	PASS	None

NOTE:

- (1) "N/A" denotes test is not applicable in this Test Report.
- (2) Reference to the KDB-789033 and KDB-662911.

1.1 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded 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	1.38dB
2	Radiated Emission Test	3.17dB
3	RF power,conducted	0.16dB
4	Spurious emissions,conducted	0.21dB
5	All emissions,radiated(<1G)	4.68dB
6	All emissions,radiated(>1G)	4.89dB

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	葫蘆機器人/KettyBot	
Trade Name	PUDU	
Model Name	PNT	
Serial Model Name	N/A	
Product Description	The EUT is a 葫蘆機器人/KettyBot	
	Operation Frequency:	5.18GHz-5.24GHz 5.25GHz-5.35GHz 5.47GHz-5.725GHz
	Modulation Type:	IEEE for 802.11a: OFDM (BPSK/QPSK/16QAM/64QAM) IEEE for 802.11n: OFDM (BPSK/QPSK/16QAM/64QAM) IEEE for 802.11ac:OFDM (QPSK/BPSK/16QAM/64QAM/256 QAM)
	Number Of Channel	Please see Note 2.
	Antenna Designation:	Please see Note 3.
	Antenna Gain(Peak)	Antenna 1: 3.5 dBi Antenna 2:3.5 dBi
	Output Power:	802.11a: 15.72Bm 802.11n 20: 18.52dBm 802.11ac 20: 18.06dBm 802.11n 40: 17.66dBm 802.11ac 40: 17.25dBm 802.11ac 80: 16.91dBm
Channel List	Please refer to the Note 2.	
Power Rating	DC29V from adapter or DC25.55V from battery	
Adapter Manufacturer /Model No.	N/A	
Connecting I/O Port(s)	Please refer to the User's Manual	
Products Covered	N/A	
EUT Modification(s)	N/A	
Model difference	N/A	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.

Channel List							
802.11a/n/ac (20MHz) (5.15-5.25GHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	40	5200	44	5220	48	5240
38	5190	42	5210	46	5230	-	-
802.11a/n/ac(20MHz) (5.25-5.35GHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	56	5280	60	5300	64	5320
802.11a/n/ac(20MHz) (5.47-5.725GHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	104	5520	108	5540	112	5560
116	5580	120	5600	124	5620	128	5640
132	5660	136	5680	140	5700	-	-
802.11n/ac (40MHz) (5.15-5.25GHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	42	5210	46	5230	-	-
40	5200	44	5220	-	-	-	-
802.11n/ac(40MHz) (5.25-5.35GHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
54	5270	62	5310	-	-	-	-
802.11n/ac(40MHz) (5.47-5.725GHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
102	5510	110	5550	118	5590	126	5630
134	5670	-	-	-	-	-	-
802.11ac (80MHz) (5.15-5.25GHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
42	5210	-	-	-	-	-	-
802.11 ac(80MHz) (5.25-5.35GHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
58	5290	-	-	-	-	-	-
802.11 ac(80MHz) (5.47-5.725GHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
106	5530	-	-	-	-	-	-

3.

Table for Filed Antenna

Ant	Manufacture's	Model Name	Antenna Type	Connector	Gain (dBi)
1	Shenzhen eyebook Technology Co., Ltd	PNT	FPCB Antenna	N/A	3.5 dBi
2	Shenzhen eyebook Technology Co., Ltd	PNT	FPCB Antenna	N/A	3.5 dBi

Note: For MIMO mode: Directional gain=GANT +10log(N)dbi =6.51dBi

2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possibly 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	802.11a : All Rate
Mode 2	802.11n(20/40) : All Rate
Mode 3	802.11ac(20/40) : All Rate
Mode 4	802.11ac(80) : All Rate
Mode 5	RX Mode
Mode 6	Charging Mode

For Conducted Emission	
Final Test Mode	Description
Mode 6	Charging Mode

For Radiated Emission	
Final Test Mode	Description
Mode 1	802.11a
Mode 2	802.11n(20/40)
Mode 3	802.11ac(20/40)
Mode 4	802.11ac(80)
Mode 5	RX Mode

Note:

- (1) The measurements are performed at the highest, middle, lowest available channels.
- (2) This product can be powered by adapter, have pretested powered by adapter, found to be the worst case is powered by the adapter, and recorded the data in the report.

2.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

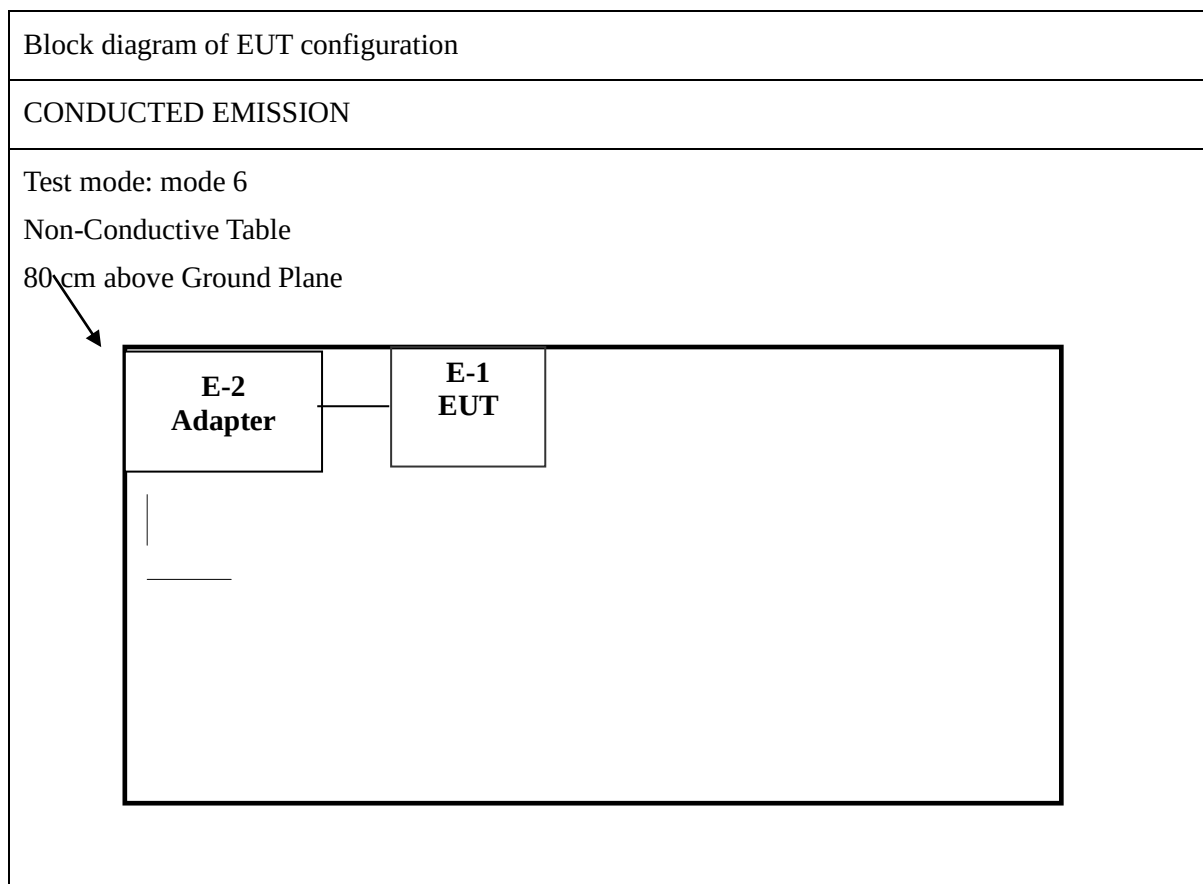
During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters.

Test software Version:V5.4	Test program: Ampak RF Test Tool		
Frequency	5180 MHz	5200 MHz	5240 MHz
Frequency	5260 MHz	5300 MHz	5320 MHz
Frequency	5500 MHz	5580 MHz	5700 MHz
Frequency	5190 MHz	5230 MHz	-
Frequency	5270 MHz	5310 MHz	-
Frequency	5510 MHz	5590 MHz	5670 MHz
Frequency	5210 MHz	5290 MHz	5530 MHz

Mode	Power setting
802.11 a/n/ac	17

1. The PC is connected to Type-C port, open the RFTesTTool software in the monitor.
2. WIFI TEST: Click Wifi and the color will turn blue to success.
3. Click **FUNCTIONS** to enter test mode,Select the MODULATION.
- 4.Select the channel and click Start.

2.4 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



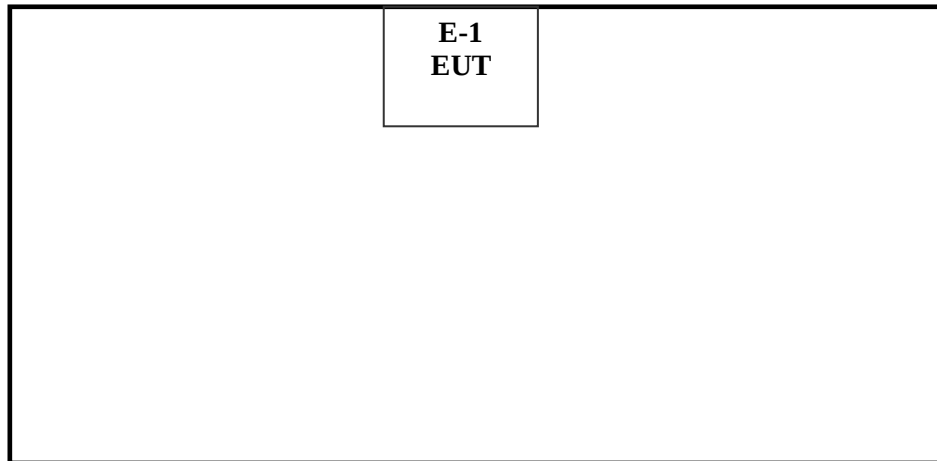
Block diagram of EUT configuration

RADIATED EMISSION

Test mode: mode 1, 2, 3, 4, 5

Non-Conductive Table

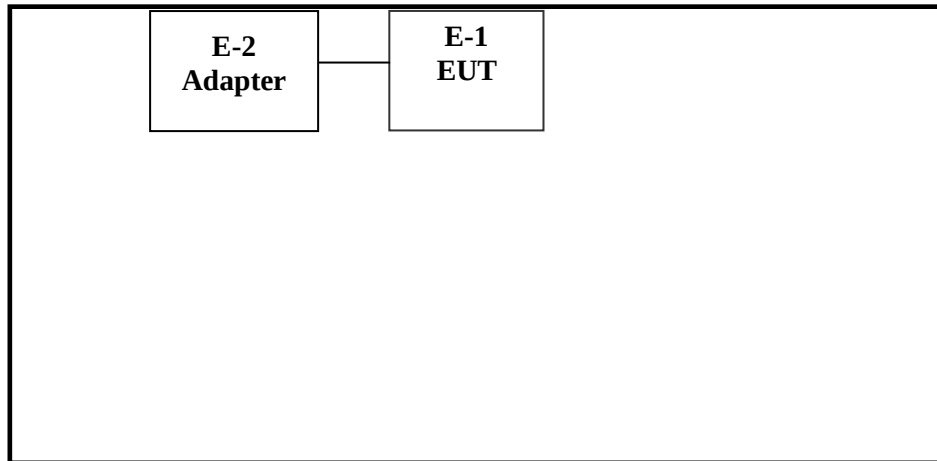
10 cm above Ground Plane



Test mode: mode6

Non-Conductive Table

10 cm above Ground Plane



2.5 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	Mfr/Brand	Model/Type No.	FCC ID	Series No.	Note
E-1	葫蘆機器人 /KettyBot	PUDU	PNT	N/A	N/A	EUT
E-2	Battery Charger	東莞市福洋電子有限公司	FY29008000	N/A	N/A	Test Accessory*

Item	Equipment	Mfr/Brand	Model/Type No.	Note
1	Rechargeable Li-ion Battery	XINYU GANFENG ELECTRONICS CO.,LTD	7S8P SDI 1865032E	EUT
2	鑰匙	PUDU	PNT	EUT
3	Relay router	WAVLINK	WL-WN575A3	Test Accessory*

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.
- (3) “YES” means “shielded” or “with ferrite core”; “NO” means “unshielded” or “without ferrite core”
- (4) “*”:In this report, the applicant did not provide the accompanying accessories with the equipment. The accessories were provided by the laboratory (or the applicant) and inspected simultaneously.

EQUIPMENTS LIST FOR ALL TEST ITEMS

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CAL. DATE	CAL. CYCLE
Spectrum Analyzer	Keysight	N9020A	MY53300466	April 29, 2021	1 Year
RF Preselector	Hewlett Packard	85685A	3010A01157	April 29, 2021	1 Year
Quasi-Peak Adapter	Hewlett Packard	85650	2521A00584	April 29, 2021	1 Year
Preamplifier	Com Power	PA-102	1482	April 29, 2021	1 Year
RF Attenuator	Mini-Circuits	CAT-10	Asset #1000	September 09, 2020	1 Year
LISN	Com Power	LI-200	12012	September 09, 2020	1 Year
LISN	Com Power	LI-200	12214	September 09, 2020	1 Year
LISN	Com Power	LI-200	1767	September 09, 2020	1 Year
LISN	Com Power	LI-200	1768	December 29, 2020	1 Year
Biconical Antenna	Com Power	AB-100	01557	December 22, 2020	1 Year
Log Periodic Antenna	Com Power	AL-100	16037	December 22, 2020	1 Year
Horn Antenna	Com Power	AHA-118	711054	September 09, 2020	1 Year
Antenna Mast	Com Power	AM-400	N/A	N/A	N/A
Turntable	Com Power	TT-100	N/A	N/A	N/A
Computer	Dell, Inc.	DHS	DNSV641	N/A	N/A

EMI Test Equipment (Continued)

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CAL. DATE	CAL. CYCLE
EMI Receiver	Rohde & Schwarz	ESU40	100127	June 12, 2021	1 Year
BiConiLog Antenna	ETS-Lindgren	3142D	00102183	August 14, 2020	1 Year
Horn Antenna (1GHz-18GHz)	ETS-Lindgren	3117	00109294	May 6, 2021	1 Year
Horn Antenna (15GHz-40GHz)	SCHWARZBECK	BBHA 9170	BBHA9170242	May 6, 2021	1 Year
Preamplifier	Rohde & Schwarz	TS-PR18	100056	June 12, 2021	1 Year
Pre-Amplifier	Agilent	8449B	3008A00409	June 12, 2021	1 Year
Antenna Mast	ETS-Lindgren	2175	00095727	N/A	N/A
Turntable	ETS-Lindgren	2187-3.0	00118231	N/A	N/A
Computer	Acer	Aspire 8930	85100050123	N/A	N/A
Multi-Function Controller	ETS-Lindgren	2090	00102270	N/A	N/A
Loop Antenna	ARA	PLA-1030/B	1029	May 19, 2021	1 Year

2.6.ON TIME, DUTY CYCLE AND MEASUREMENT METHODS

2.6.1 LIMITS

None; for reporting purposes only.

2.6.2 ON TIME AND DUTY CYCLE RESULTS

5.18GHz-5.24GHz

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	10log(1/x)Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
802.11a	1.298	1.346	0.964	96.43%	0.158	0.770
802.11N20(MHz)	1.304	1.354	0.963	96.31%	0.163	0.767
802.11AC20(MHz)	1.386	1.436	0.965	96.52%	0.154	0.722
802.11N40(MHz)	0.614	0.687	0.894	89.37%	0.488	1.629
802.11AC40(MHz)	0.622	0.697	0.892	89.24%	0.494	1.608
802.11AC80(MHz)	0.290	0.364	0.797	79.67%	0.987	3.448

Agilent Spectrum Analyzer - Sweep SA

Marker 2 Δ 1.3460 ms

PNO: Fast $\rightarrow$ Trig: Free Run
IFGain: Low Atten: 24 dB

Avg Type: Log-Pwr

TRACE 1 2 3 4 5 6
TYPE Δ Δ Δ Δ Δ Δ
DET P Δ Δ Δ Δ Δ Δ

Ref Offset 6.5 dB
Ref 20.0 dBm

Δ Mkr2 1.346 ms
-1.20 dB

10 dB/div
Log

Center 5.180000000 GHz Span 0 Hz
Res BW 1.0 MHz #VBW 1.0 MHz Sweep 2.000 ms (1001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	1.570 ms	-1.01 dBm			
2	Δ 3	1	t (Δ)	1.346 ms (Δ)	-1.20 dB			
3	F	1	t	272.0 μ s	-1.51 dBm			
4								
5								
6								
7								
8								
9								
10								
11								

MSG

STATUS

Marker

Select Marker

Normal

Delta

Fixed

On

Properties

More

1 of 1

Agilent Spectrum Analyzer - Swept A

Marker 2 Δ 1.3540 ms

Ref Offset 6.5 dB
Ref 20.00 dBm

Δ Mkr2 1.354 ms
-1.24 dB

Center 5.180000000 GHz
Res BW 1.0 MHz
Sweep 2.000 ms (1001 pts)

Span 0 Hz

Marker Table:

Mkr	Mode	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	1.808 ms	-0.23 dBm			
2	A3	1	t	1.354 ms (Δ)	-1.24 dB			
3	F	1	t	504.0 μ s	-1.94 dBm			
4								
5								
6								
7								
8								
9								
10								
11								

Agilent Spectrum Analyzer - Sweep SA

Marker 2 Δ 1.4360 ms

Ref Offset 6.5 dB
Ref 20.00 dBm

10 dB/div
Log

Δ Mkr2 1.436 ms
-0.03 dB

Center 5.180000000 GHz
Res BW 1.0 MHz
#VBW 1.0 MHz
Sweep 2.000 ms (1001 pts)

Span 0 Hz

Mkr	Mode	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	1.534 ms	-1.56 dBm			
2	Δ 3	1	t	1.436 ms (Δ)	-0.03 dB			
3	F	1	t	148.0 μ s	-1.47 dBm			
4								
5								
6								
7								
8								
9								
10								
11								

MSG

STATUS

Agilent Spectrum Analyzer - Sweep SA

Marker 2 Δ 687.000 μ s

Ref Offset 6.5 dB
Ref 20.00 dBm

10 dB/div
Log

Center 5.190000000 GHz
Res BW 1.0 MHz

#VBW 1.0 MHz

Sweep 1.000 ms (1001 pts)

Span 0 Hz

Marker 2 Δ 687.0 μ s
-1.65 dB

Marker 1 X
Marker 2 Δ 687.0 μ s
Marker 3 F

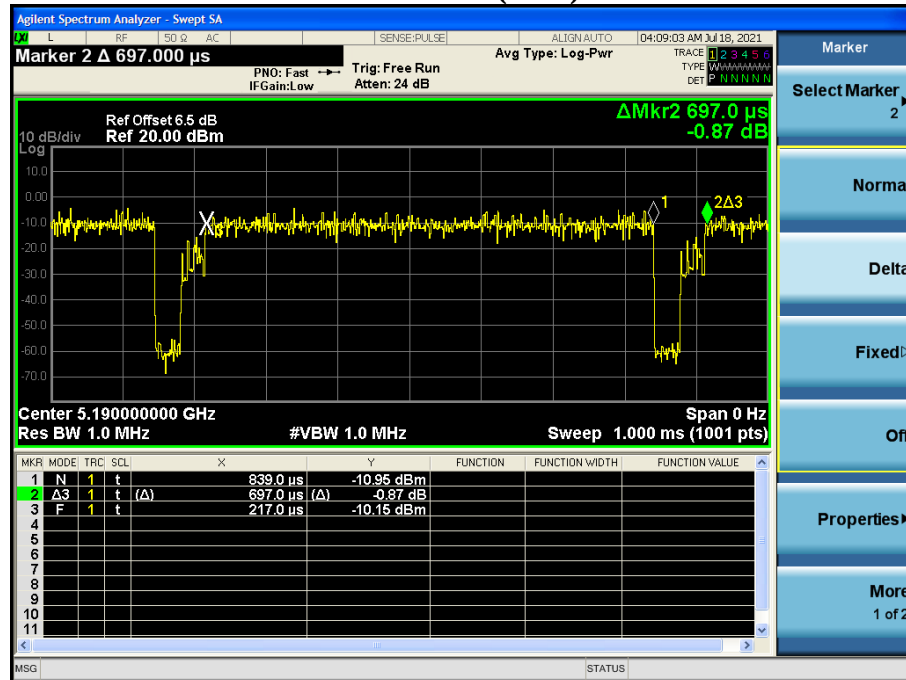
MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	785.0 μ s	-8.48 dBm			
2	Δ 3	1	t (Δ)	687.0 μ s (Δ)	-1.65 dBm			
3	F	1	t	171.0 μ s	-10.41 dBm			
4								
5								
6								
7								
8								
9								
10								
11								

MSG

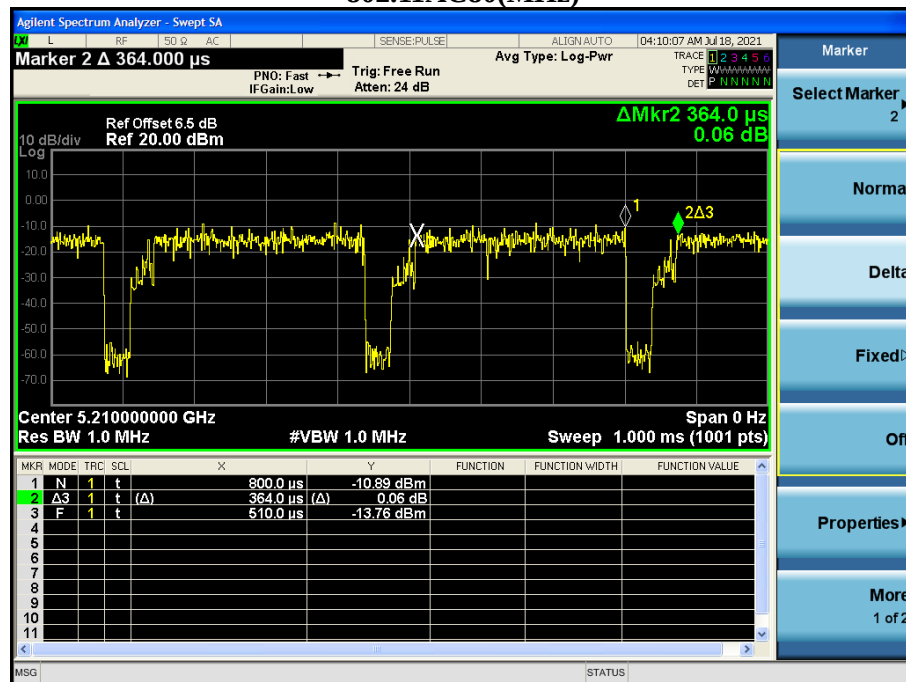
STATUS

Properties

802.11AC40(MHz)



802.11AC80(MHz)



5.25GHz-5.35GHz

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	10log(1/x)Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
802.11a	1.384	1.436	0.964	96.38%	0.160	0.723
802.11N20(MHz)	1.298	1.348	0.963	96.29%	0.164	0.770
802.11AC20(MHz)	1.304	1.356	0.962	96.17%	0.170	0.767
802.11N40(MHz)	0.611	0.686	0.891	89.07%	0.503	1.637
802.11AC40(MHz)	0.621	0.695	0.894	89.35%	0.489	1.610
802.11AC80(MHz)	0.289	0.727	0.398	39.75%	0.401	3.460

Agilent Spectrum Analyzer - Sweep SA

Marker 2 Δ 1.4360 ms

Ref Offset 6.5 dB
Ref 20.00 dBm

Δ Mkr2 1.436 ms
0.77 dB

Center 5.260000000 GHz
Res BW 1.0 MHz
Sweep 2.000 ms (1001 pts)

Span 0 Hz

Mkr	Mode	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	1.596 ms	-1.77 dBm			
2	Δ 3	1	t (Δ)	1.436 ms	0.77 dB			
3	F	1	t	212.0 μ s	-4.37 dBm			
4								
5								
6								
7								
8								
9								
10								
11								

MSG

STATUS

Agilent Spectrum Analyzer - Sweep SA

Marker 2 Δ 1.34800 ms

PNO: Fast → Trg: Free Run
IF Gain: Low Atten: 24 dB

Avg Type: Log-Pwr

Ref Offset 6.5 dB
Ref 20.00 dBm

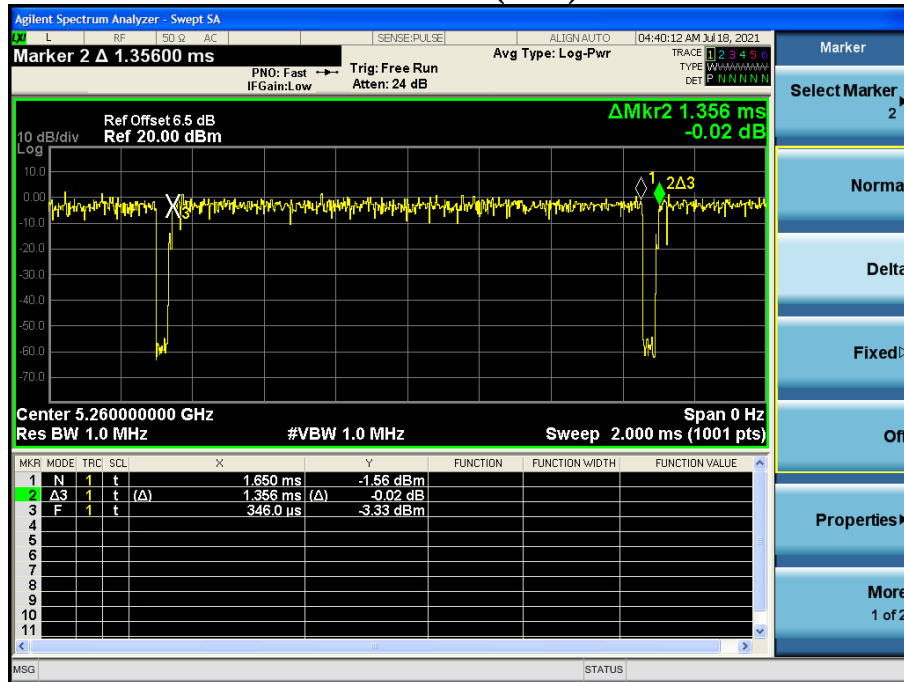
ΔMkr2 1.348 ms
0.22 dB

The figure shows a spectrum analyzer screen with a yellow trace representing the signal power across a frequency range. A prominent peak is visible at approximately 5.26 GHz. Two vertical cursors are placed on the trace, with a double-headed arrow between them indicating a time difference of 1.348 ms. The y-axis is labeled 'Log' and ranges from -70.0 to 10 dB/div. The x-axis represents frequency.

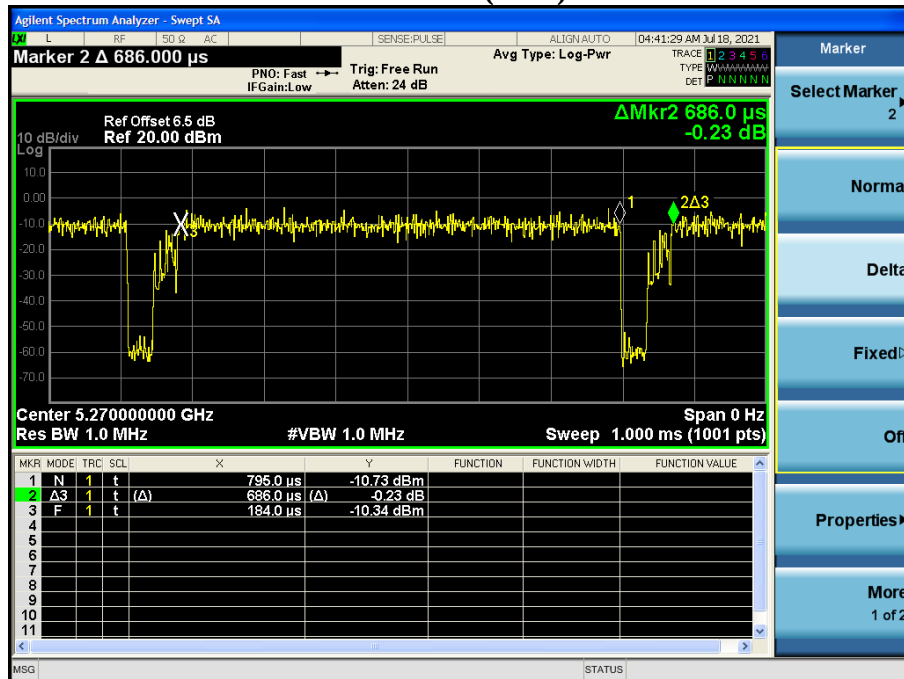
MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t		1.754 ms	-1.54 dBm		
2	Δ3	1	t (Δ)		1.348 ms (Δ)	0.22 dB		
3	F	1	t		456.0 μs	-3.50 dBm		

Center 5.260000000 GHz Span 0 Hz
Res BW 1.0 MHz #VBW 1.0 MHz Sweep 2.000 ms (1001 pts)

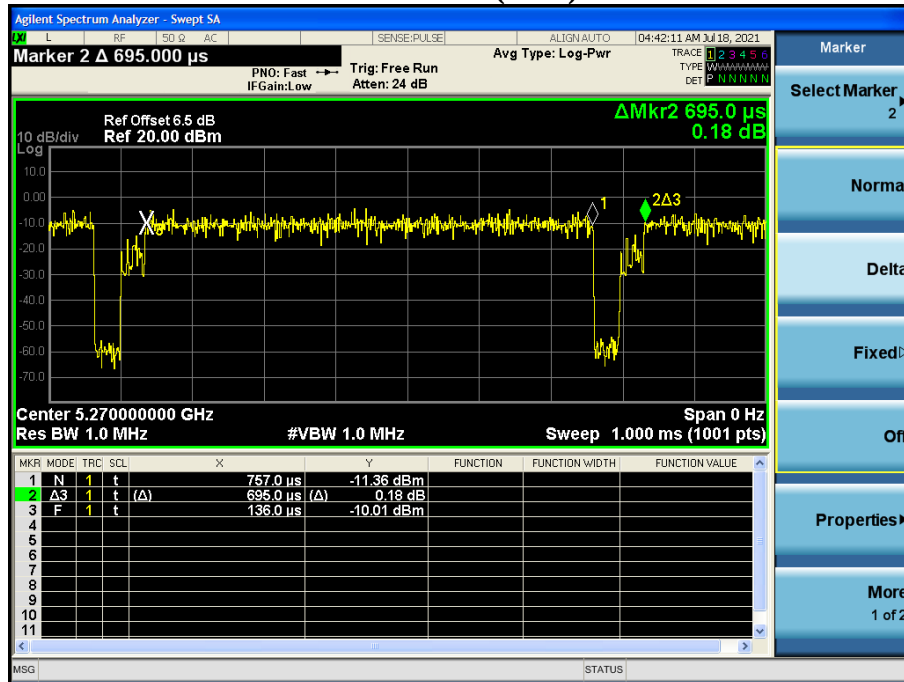
802.11AC20(MHz)



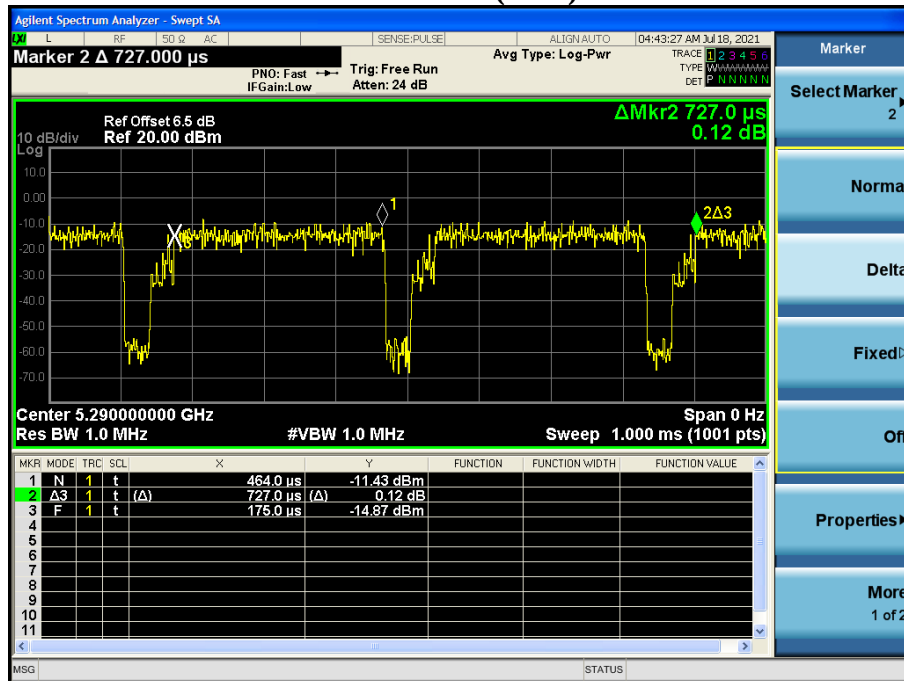
802.11N40(MHz)



802.11AC40(MHz)



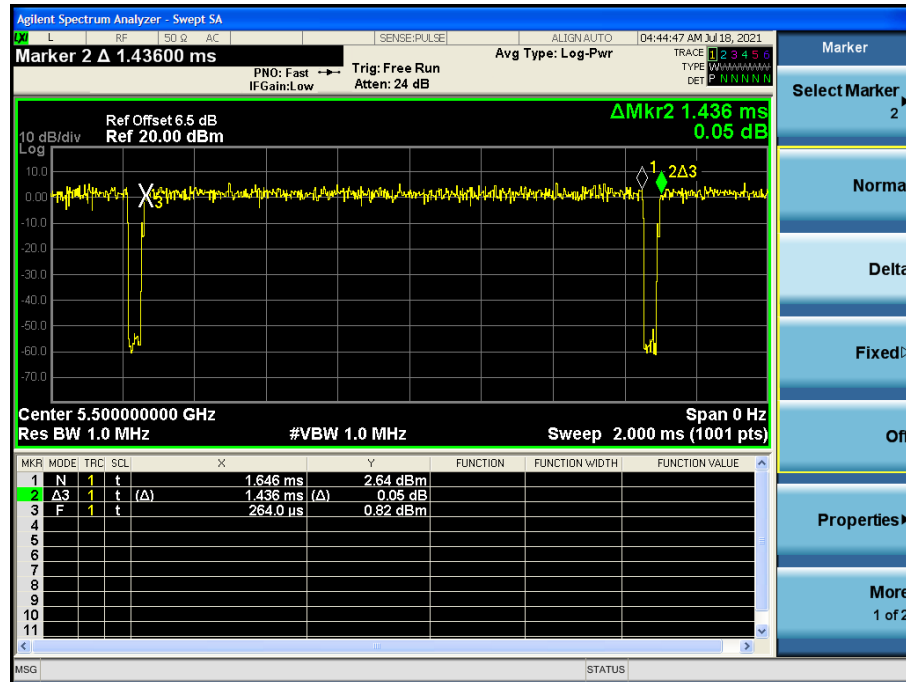
802.11AC80(MHz)



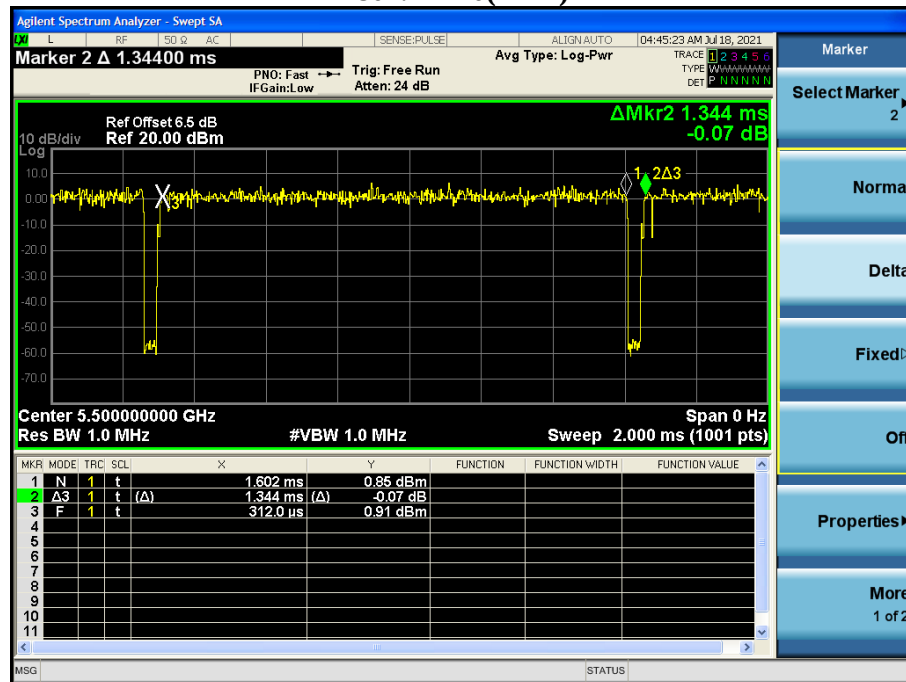
5.47GHz-5.725GHz

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	10log(1/x)Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
802.11a	1.382	1.436	0.962	96.24%	0.166	0.724
802.11N20(MHz)	1.29	1.344	0.960	95.98%	0.178	0.775
802.11AC20(MHz)	1.304	1.356	0.962	96.17%	0.170	0.767
802.11N40(MHz)	0.612	0.687	0.891	89.08%	0.502	1.634
802.11AC40(MHz)	0.621	0.696	0.892	89.22%	0.495	1.610
802.11AC80(MHz)	0.291	0.364	0.799	79.95%	0.972	3.436

802.11a



802.11N20(MHz)



Agilent Spectrum Analyzer - Swept SA

Marker 2 Δ 1.3560 ms

Ref Offset 6.5 dB
Ref 20.0 dBm

Δ Mkr2 1.356 ms
0.01 dB

Center 5.500000000 GHz
Res BW 1.0 MHz
Sweep 2.000 ms (1001 pts)

Span 0 Hz

Mkr	Mode	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	1.604 ms	1.78 dBm			
2	Δ 3	1	t (Δ)	1.356 ms (Δ)	0.01 dB			
3	F	1	t	300.0 μ s	0.69 dBm			
4								
5								
6								
7								
8								
9								
10								
11								

Agilent Spectrum Analyzer - Swept SA

Marker 2 Δ 687.000 μ s

Ref Offset 6.5 dB
Ref 20.00 dBm

Center 5.510000000 GHz
Res BW 1.0 MHz
Sweep 1.000 ms (1001 pts)

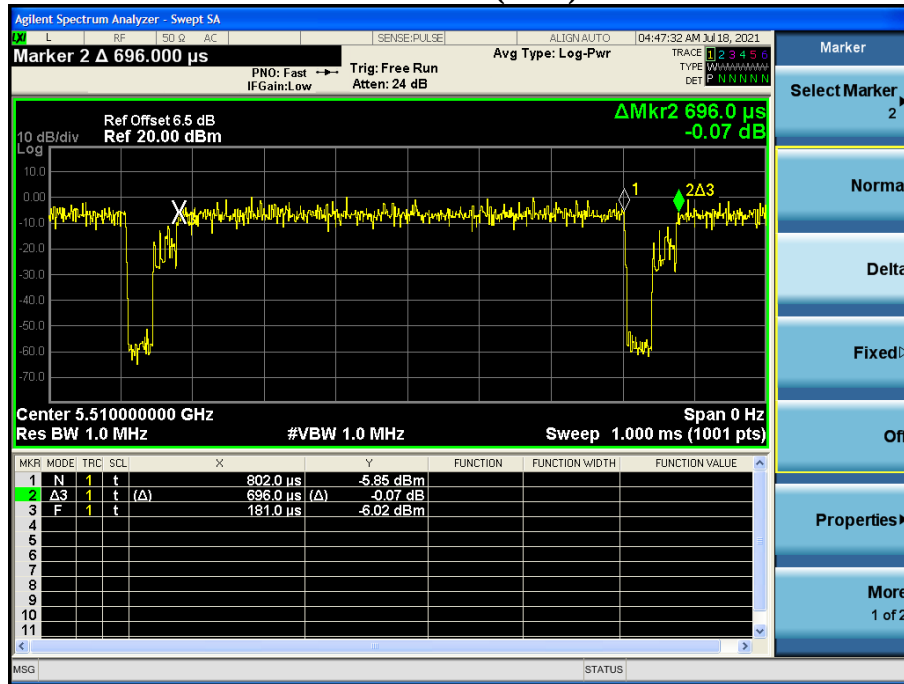
Span 0 Hz

10 dB/div
Log

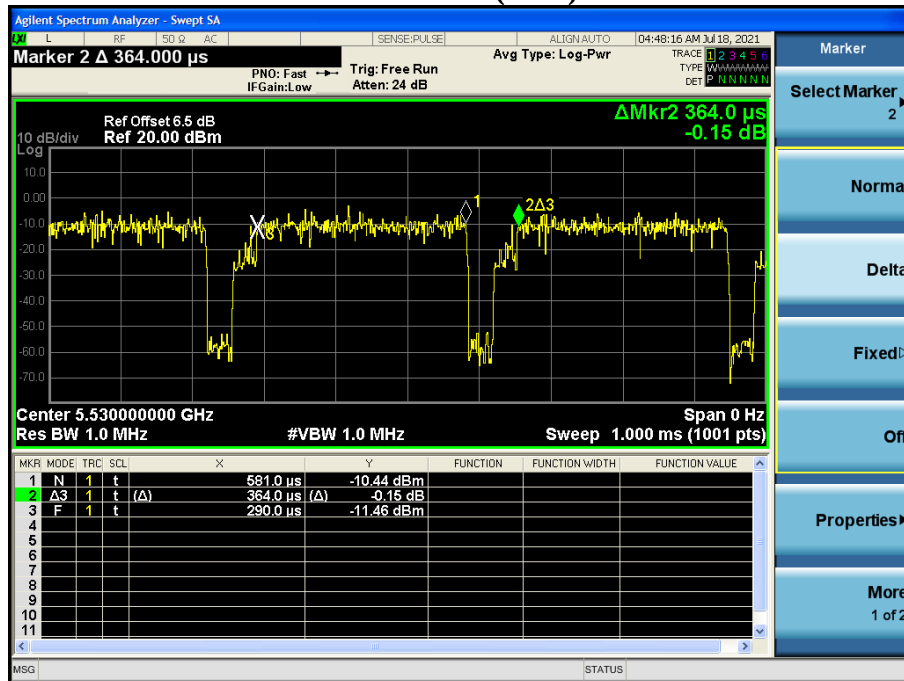
Δ Mkr2 687.0 μ s
0.18 dB

Mkr	Mode	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t		817.0 μ s	-9.29 dBm		
2	Δ 3	1	t	(Δ)	687.0 μ s (Δ)	0.18 dB		
3	F	1	t		205.0 μ s	-6.24 dBm		

802.11AC40(MHz)



802.11AC80(MHz)



3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION LIMITS (Frequency Range 150kHz-30MHz)

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)		Standard
	Quasi-peak	Average	Quasi-peak	Average	
0.15 -0.5			66 - 56 *	56 - 46 *	CISPR
0.50 -5.0			56.00	46.00	
5.0 -30.0			60.00	50.00	

0.15 -0.5			66 - 56 *	56 - 46 *	Section 15.407 (b)
0.50 -5.0			56.00	46.00	
5.0 -30.0			60.00	50.00	

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

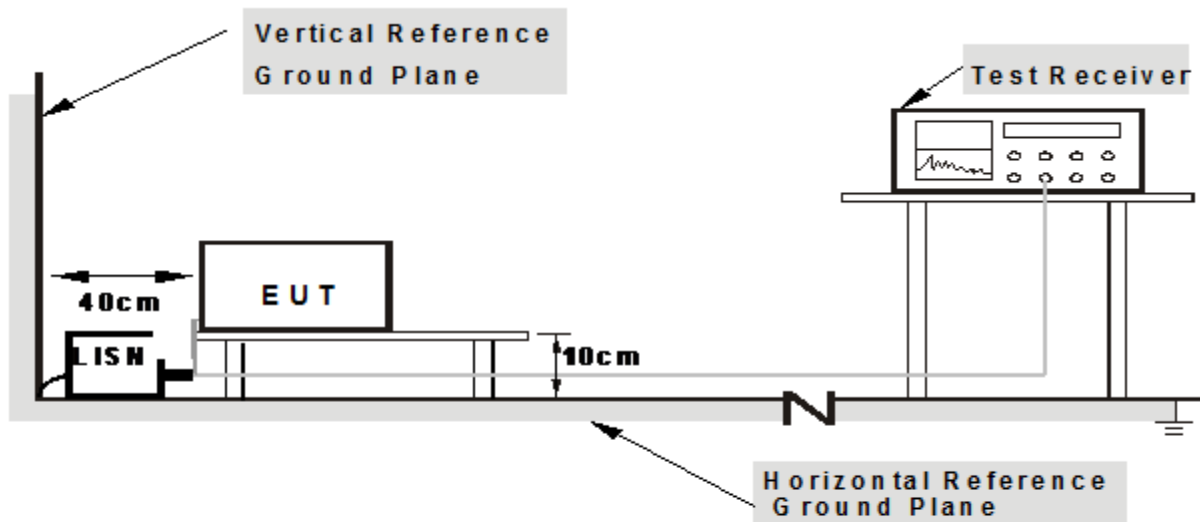
3.1.2 TEST PROCEDURE

- The EUT was placed 0.4 meters from the horizontal ground plane with EUT being connected 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.
- 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 40 cm long.
- 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.
- LISN at least 80 cm from nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.3 DEVIATION FROM TEST STANDARD

No deviation

3.1.4 TEST SETUP

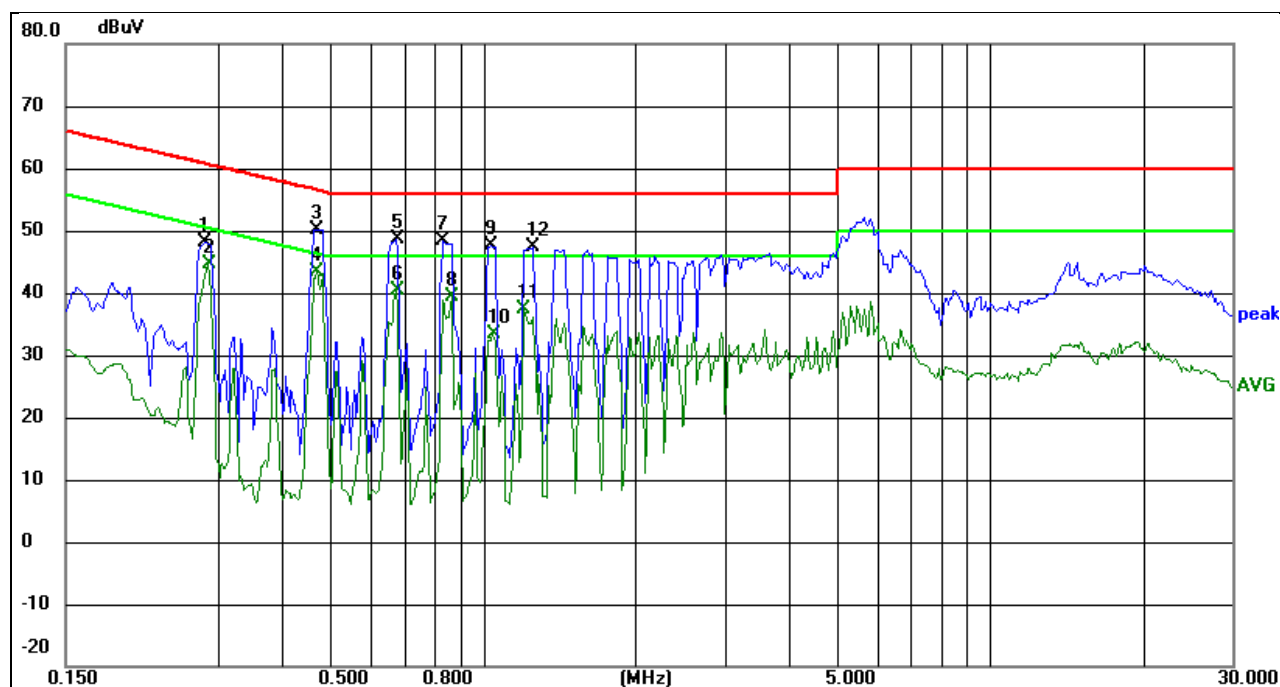


Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

3.1.5 TEST RESULTS

EUT :	葫蘆機器人/KettyBot	Model Name. :	PNT
Temperature :	26℃	Relative Humidity :	54%
Pressure :	1010hPa	Test Date :	2021-07-18
Test Mode :	TX(802.11a CH48 worst case)	Phase :	L
Test Voltage :	AC 110V/60Hz for Adapter		

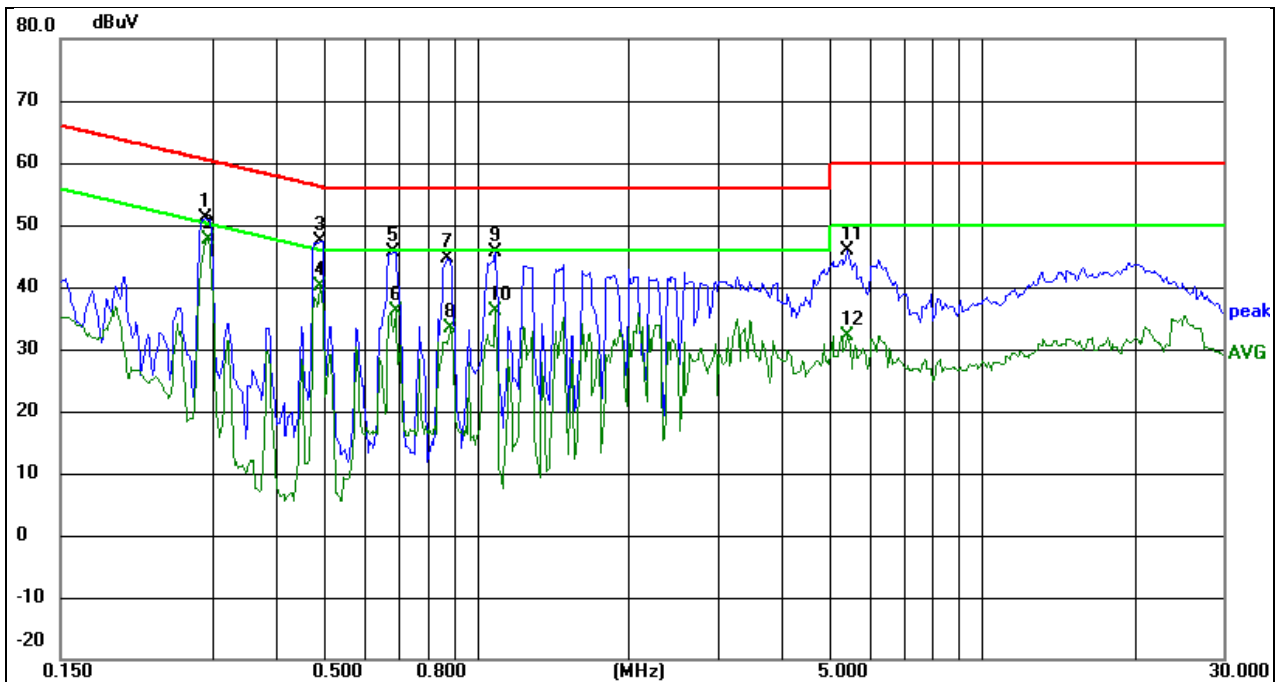


Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = LISNfactor + Cable Loss + Pulse limiter.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.2826	38.47	9.76	48.23	60.74	-12.51	peak	P
2	0.2864	34.87	9.76	44.63	50.63	-6.00	AVG	P
3	0.4697	40.48	9.77	50.25	56.52	-6.27	peak	P
4 *	0.4697	33.63	9.77	43.40	46.52	-3.12	AVG	P
5	0.6725	38.79	9.78	48.57	56.00	-7.43	peak	P
6	0.6725	30.61	9.78	40.39	46.00	-5.61	AVG	P
7	0.8325	38.50	9.78	48.28	56.00	-7.72	peak	P
8	0.8676	29.64	9.79	39.43	46.00	-6.57	AVG	P
9	1.0353	37.90	9.79	47.69	56.00	-8.31	peak	P
10	1.0430	23.57	9.79	33.36	46.00	-12.64	AVG	P
11	1.2030	27.50	9.79	37.29	46.00	-8.71	AVG	P
12	1.2536	37.48	9.79	47.27	56.00	-8.73	peak	P

EUT :	葫蘆機器人/KettyBot	Model Name. :	PNT
Temperature :	26℃	Relative Humidity :	54%
Pressure :	1010hPa	Test Date :	2021-07-18
Test Mode :	TX(802.11a CH48 worst case)	Phase :	N
Test Voltage :	AC 110V/60Hz for Adapter		



Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = LISNfactor + Cable Loss + Pulse limiter.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.2903	41.28	9.76	51.04	60.52	-9.48	peak	P
2 *	0.2943	37.91	9.76	47.67	50.40	-2.73	AVG	P
3	0.4893	37.50	9.77	47.27	56.18	-8.91	peak	P
4	0.4893	30.25	9.77	40.02	46.18	-6.16	AVG	P
5	0.6843	35.81	9.78	45.59	56.00	-10.41	peak	P
6	0.6920	26.35	9.78	36.13	46.00	-9.87	AVG	P
7	0.8715	34.76	9.79	44.55	56.00	-11.45	peak	P
8	0.8870	23.59	9.79	33.38	46.00	-12.62	AVG	P
9	1.0938	35.89	9.79	45.68	56.00	-10.32	peak	P
10	1.0938	26.29	9.79	36.08	46.00	-9.92	AVG	P
11	5.4141	36.00	9.95	45.95	60.00	-14.05	peak	P
12	5.4141	22.28	9.95	32.23	50.00	-17.77	AVG	P

3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS

LIMITS OF RADIATED EMISSION MEASUREMENT (Frequency Range 9kHz-1000MHz)

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(kHz)	300
0.490~1.705	24000/F(kHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

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

Notes:

- (1) The tighter limit applies at the band edges.
- (2) Emission level (dBuV/m)=20log Emission level (uV/m).

FREQUENCY RANGE OF RADIATED MEASUREMENT (For unintentional radiators)

Frequency measurement range:

1 The spectrum shall be measured from the lowest radio frequency signal generated in the device (without going below 9 kHz), and the upper limit of the measurement range shall be decided according to the maximum operating frequency.

1.1 Maximum operating frequency less than 10 GHz: to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

1.2 Maximum operating frequency between 10 GHz~30 GHz: to the fifth harmonic of the highest fundamental frequency or to 100 GHz, whichever is lower.

1.3 Maximum operating frequency over 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 200 GHz, whichever is lower.

2 Particular attention should be paid to harmonics and subharmonics of the carrier frequency as well as to those frequencies removed from the carrier by multiples of the oscillator frequency. Radiation at the frequencies of multiplier stages should also be checked.

Spectrum Parameter		Setting	
Attenuation		Auto	
Start Frequency		1000 MHz	
Stop Frequency		10th carrier harmonic	
Measurement	Duty cycle	RBW	Video B/W
PK	Any	1MHz	3MHz
AV	≥98%	1MHz	10Hz
	<98%	1MHz	1/T

NOTE:KDB 558074 Zero-Span Spectrum Analyzer Method

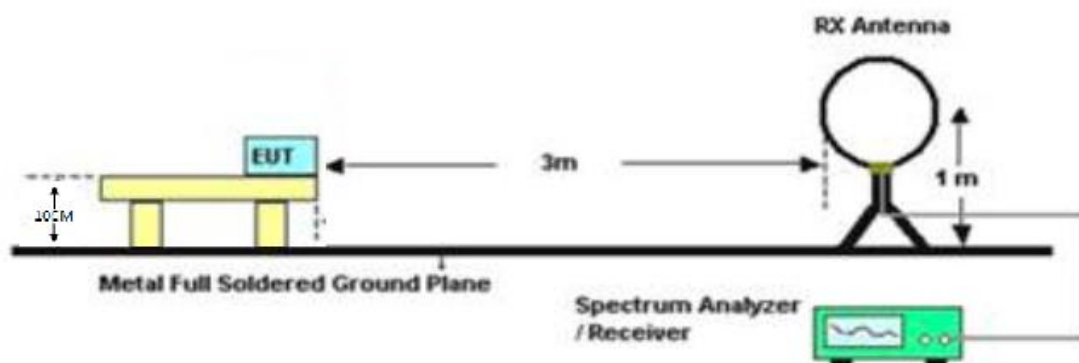
Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

3.2.2 TEST PROCEDURE

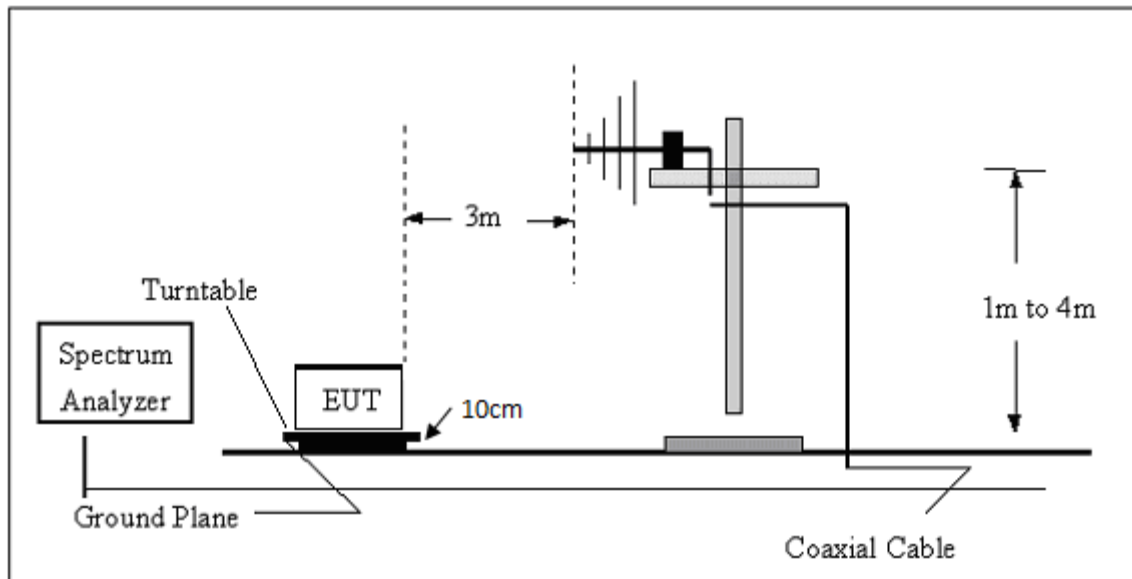
- The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the Antenna 1#re set to make the measurement.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then QuasiPeak detector mode re-measured.
- If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

2 TEST SETUP

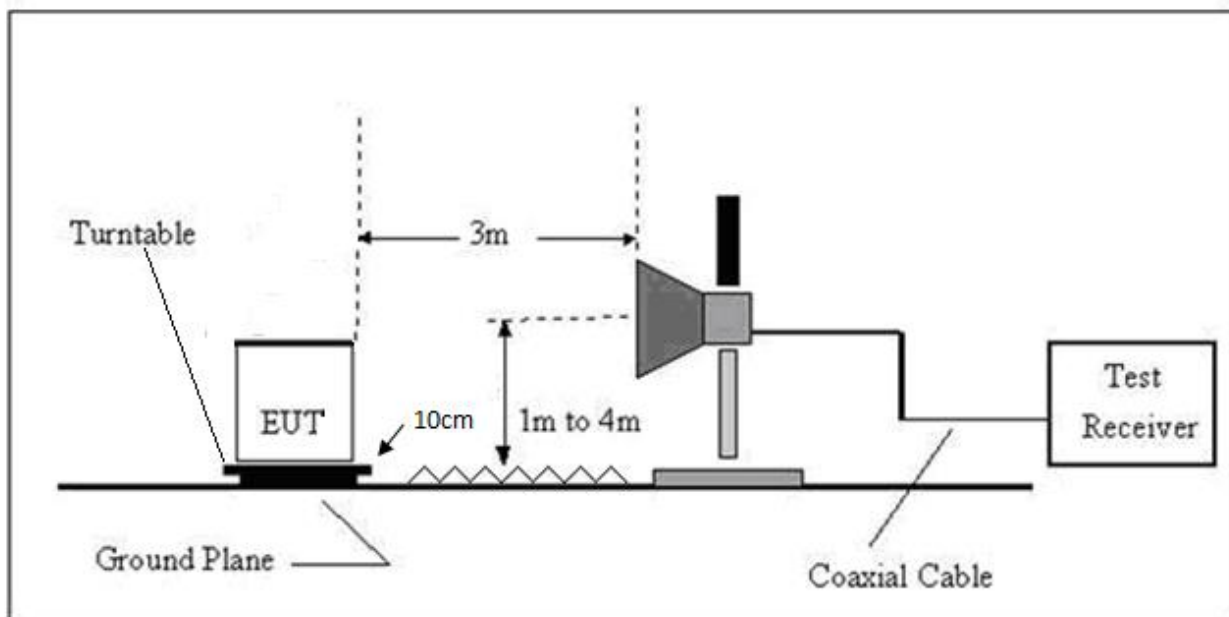
(A) Radiated Emission Test-Up Frequency Below 30MHz



(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



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



3EUT OPERATING 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.

3.2.4 TEST RESULTS

Between 9KHz – 30 MHz

EUT :	葫蘆機器人/KettyBot	Model Name. :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	TX(802.11a CH48 worst case)	Polarization:	--

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

NOTE:

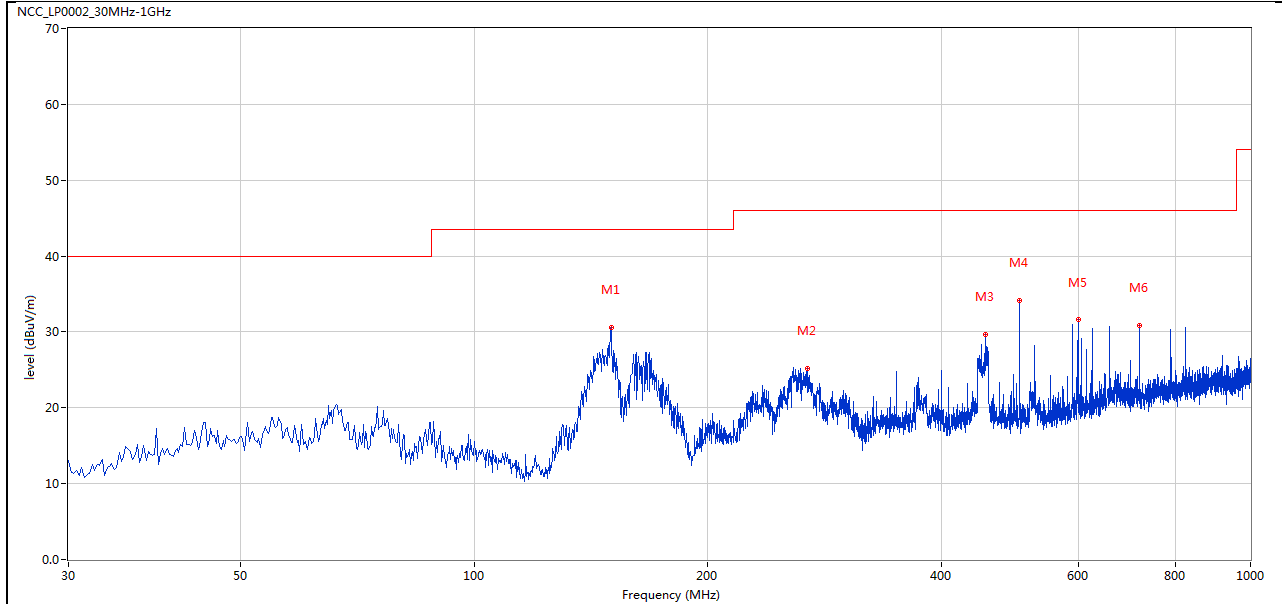
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor = $40 \log (\text{specific distance/test distance})$ (dB);

Limit line = specific limits(dBuv) + distance extrapolation factor.

BETWEEN 30 – 1000 MHZ

EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	TX(802.11a CH48 worst case)	Polarization :	Vertical
Test Power :	DC25.55V from battery		

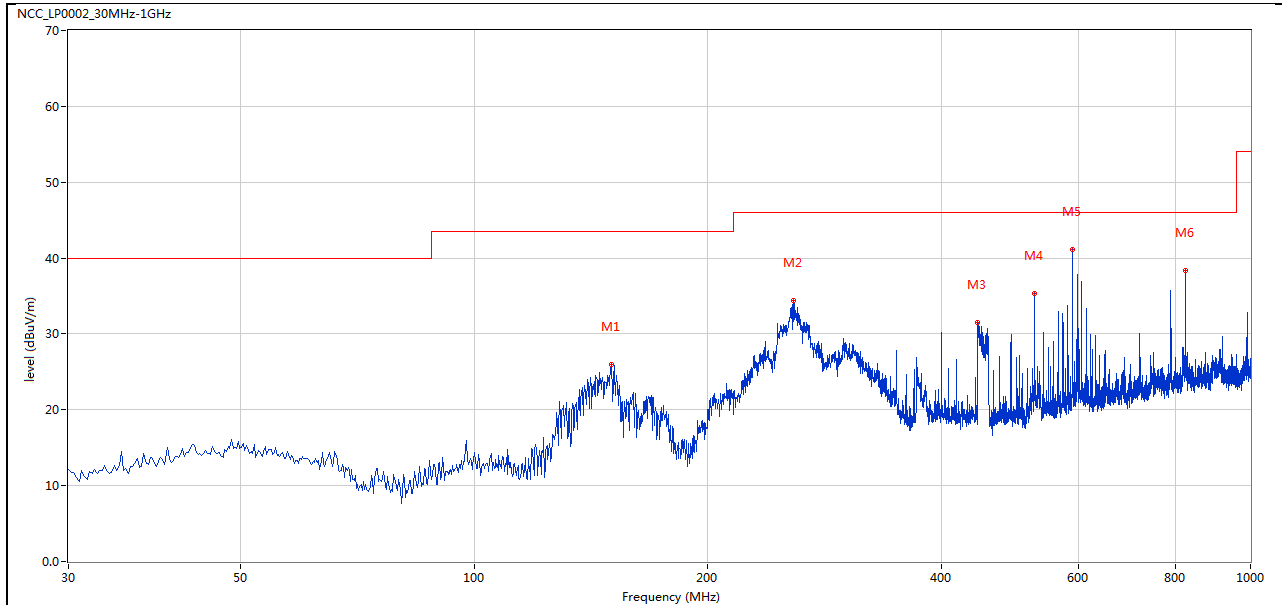


Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	ANT	Verdict
1	150.007	30.55	-17.03	43.5	-12.95	Peak	Vertical	Pass
2	269.045	25.24	-11.73	46.0	-20.76	Peak	Vertical	Pass
3	455.966	29.62	-7.95	46.0	-16.38	Peak	Vertical	Pass
4	503.969	34.10	-7.05	46.0	-11.90	Peak	Vertical	Pass
5	599.975	31.66	-4.95	46.0	-14.34	Peak	Vertical	Pass
6	720.225	30.87	-4.04	46.0	-15.13	Peak	Vertical	Pass

EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	TX(802.11a CH48 worst case)	Polarization :	Horizontal
Test Power :	DC25.55V from battery		

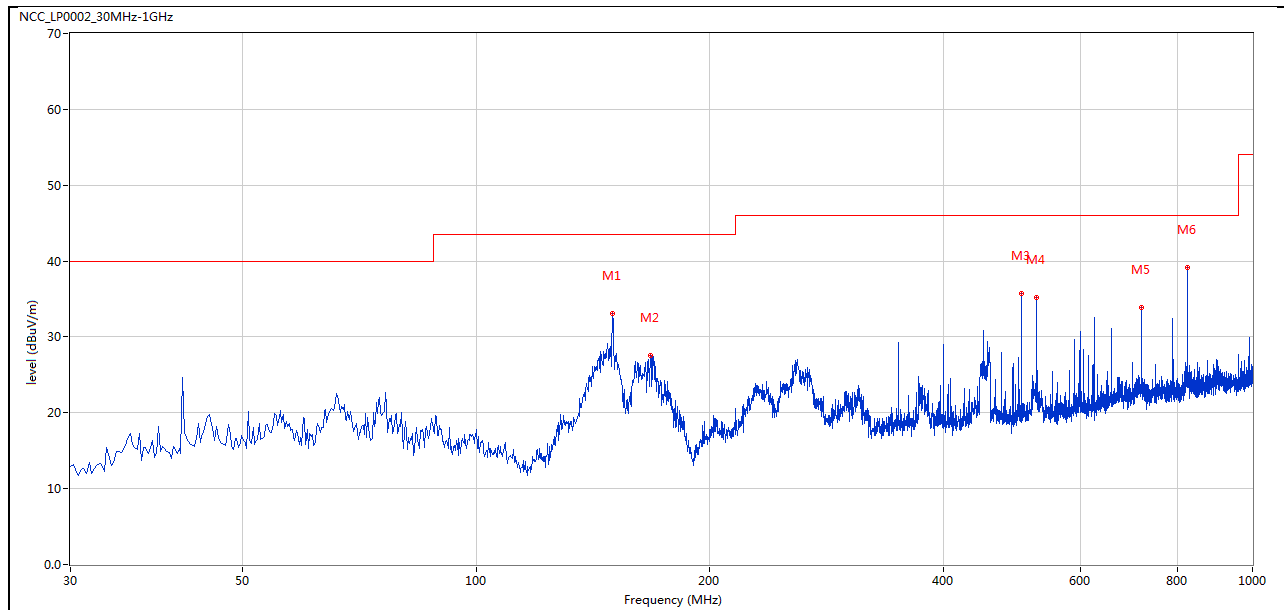


Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	ANT	Verdict
1	150.007	26.01	-17.03	43.5	-17.49	Peak	Horizontal	Pass
2	257.893	34.41	-11.84	46.0	-11.59	Peak	Horizontal	Pass
3	445.541	31.51	-8.02	46.0	-14.49	Peak	Horizontal	Pass
4	526.516	35.28	-6.55	46.0	-10.72	Peak	Horizontal	Pass
5	589.793	41.18	-5.08	46.0	-4.82	Peak	Horizontal	Pass
6	824.959	38.38	-2.91	46.0	-7.62	Peak	Horizontal	Pass

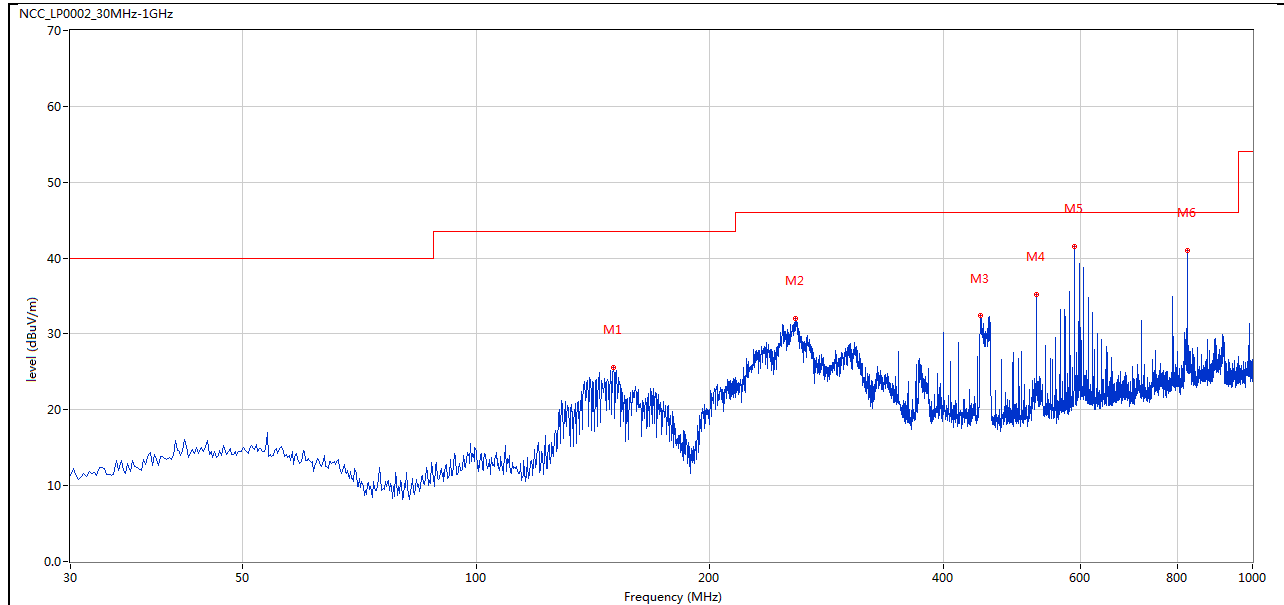
EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	RX	Polarization :	Vertical
Test Power :	DC25.55V from battery		



Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	ANT	Verdict
1	149.765	33.10	-17.05	43.5	-10.40	Peak	Vertical	Pass
2	167.706	27.52	-16.13	43.5	-15.98	Peak	Vertical	Pass
3	503.969	35.68	-7.05	46.0	-10.32	Peak	Vertical	Pass
4	526.516	35.26	-6.55	46.0	-10.74	Peak	Vertical	Pass
5	719.983	33.85	-4.06	46.0	-12.15	Peak	Vertical	Pass
6	824.959	39.15	-2.91	46.0	-6.85	Peak	Vertical	Pass

EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	RX	Polarization :	Horizontal
Test Power :	DC25.55V from battery		



Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	ANT	Verdict
1	150.250	25.58	-17.02	43.5	-17.92	Peak	Horizontal	Pass
2	257.893	31.98	-11.84	46.0	-14.02	Peak	Horizontal	Pass
3	446.511	32.37	-8.05	46.0	-13.63	Peak	Horizontal	Pass
4	526.516	35.19	-6.55	46.0	-10.81	Peak	Horizontal	Pass
5	589.793	41.51	-5.08	46.0	-4.49	Peak	Horizontal	Pass
6	824.959	41.02	-2.91	46.0	-4.98	Peak	Horizontal	Pass

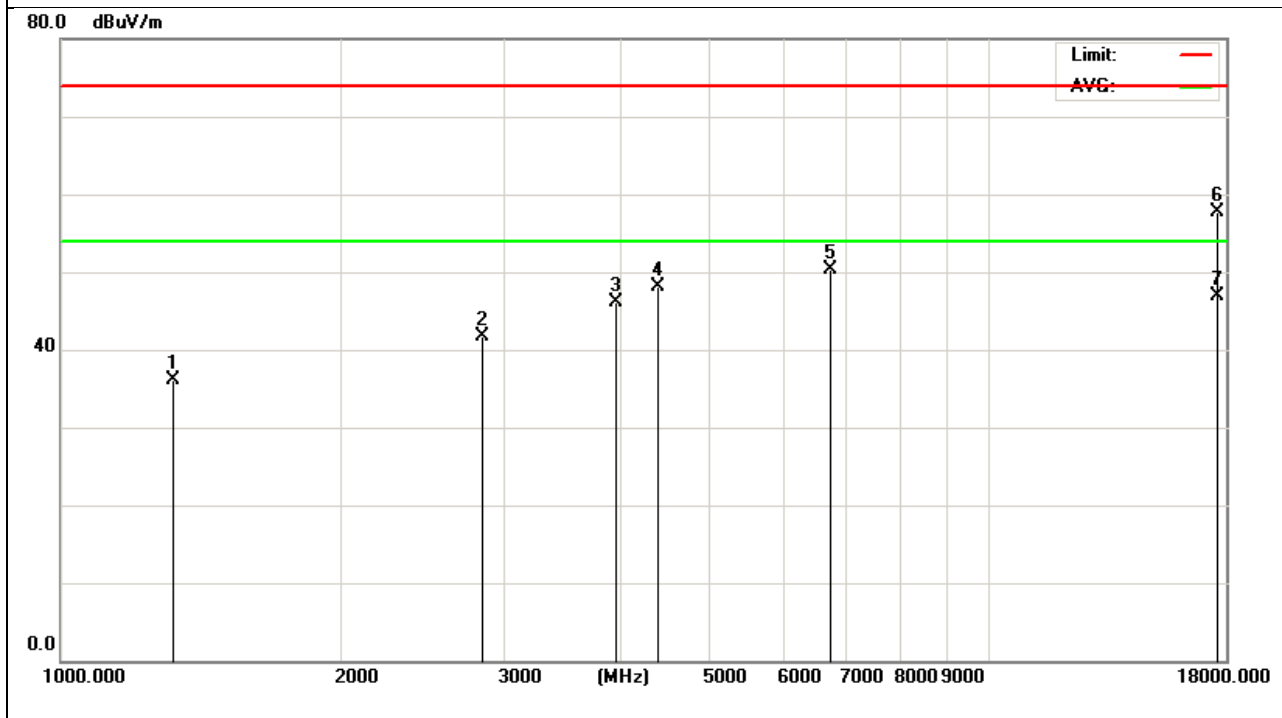
3.2.5 TEST RESULTS (ABOVE 1000 MHZ)

5.15GHz~5.25GHz:

EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 36	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1322.547	46.54	-10.31	36.23	74.00	-37.77	peak
2842.005	44.46	-2.65	41.81	74.00	-32.19	peak
3948.169	42.67	3.45	46.12	74.00	-27.88	peak
4388.877	43.72	4.50	48.22	74.00	-25.78	peak
6755.594	44.17	6.01	50.18	74.00	-23.82	peak
17622.270	32.93	24.95	57.88	74.00	-16.12	peak
17622.270	22.54	24.95	47.49	54.00	-6.51	AVG

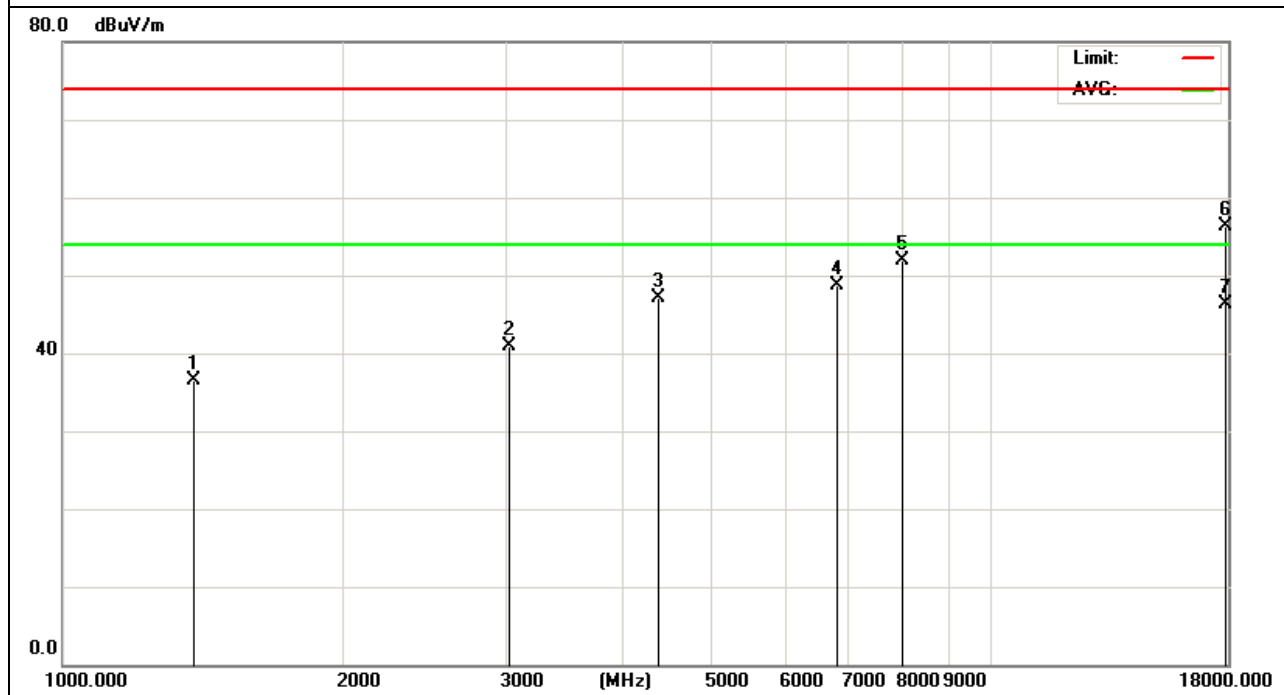
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 36	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1385.227	46.93	-10.3	36.63	74.00	-37.37	peak
3023.027	42.35	-1.62	40.73	74.00	-33.27	peak
4370.514	42.68	4.47	47.15	74.00	-26.85	peak
6830.897	42.84	6.07	48.91	74.00	-25.09	peak
8015.211	41.62	10.4	52.02	74.00	-21.98	peak
17881.254	31.63	24.77	56.4	74.00	-17.6	peak
17881.254	21.74	24.77	46.51	54.00	-7.49	AVG

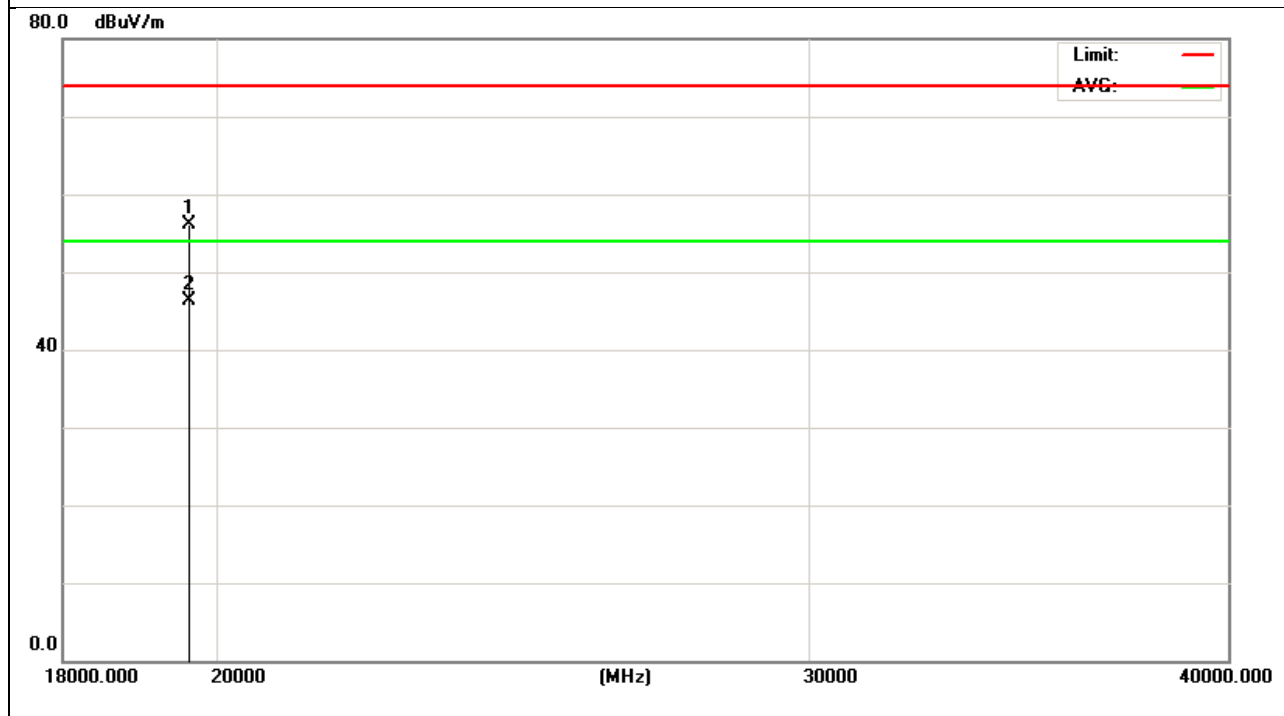
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 36	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
19622.000	41.28	14.7	55.98	74.00	-18.02	peak
19622.000	31.85	14.7	46.55	54.00	-7.45	AVG

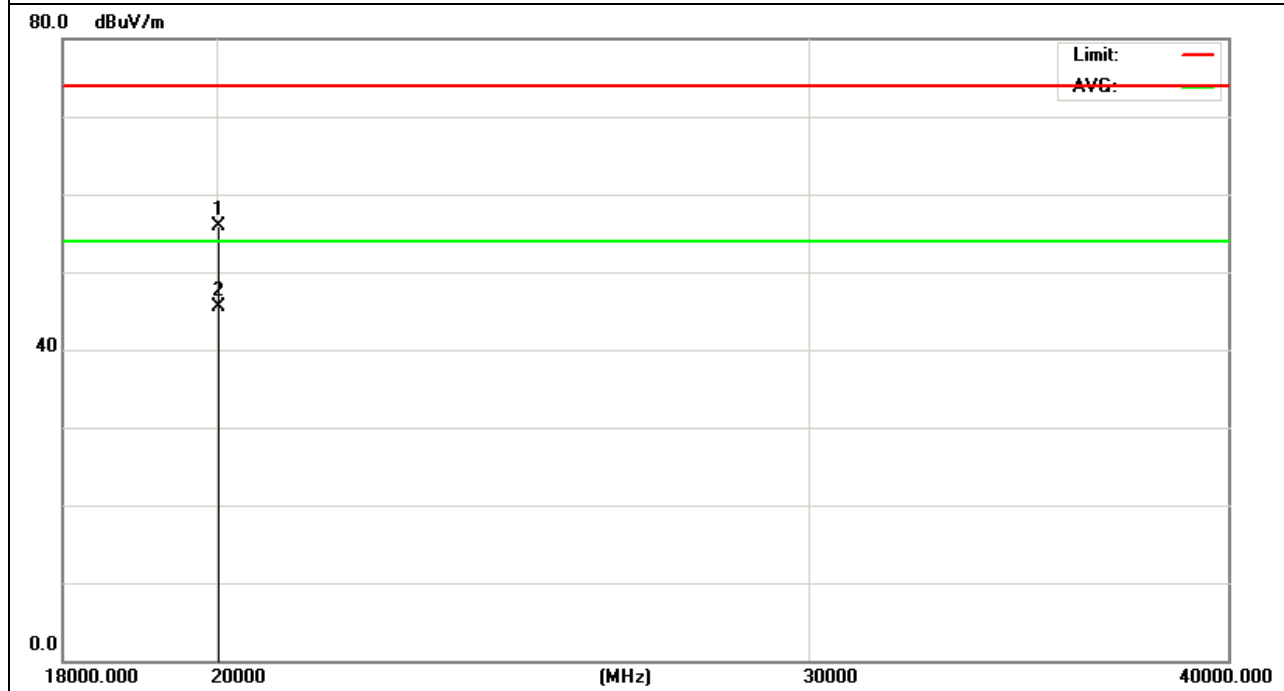
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 36	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
20020.000	40.63	15.29	55.92	74.00	-18.08	peak
20020.000	30.47	15.29	45.76	54.00	-8.24	AVG

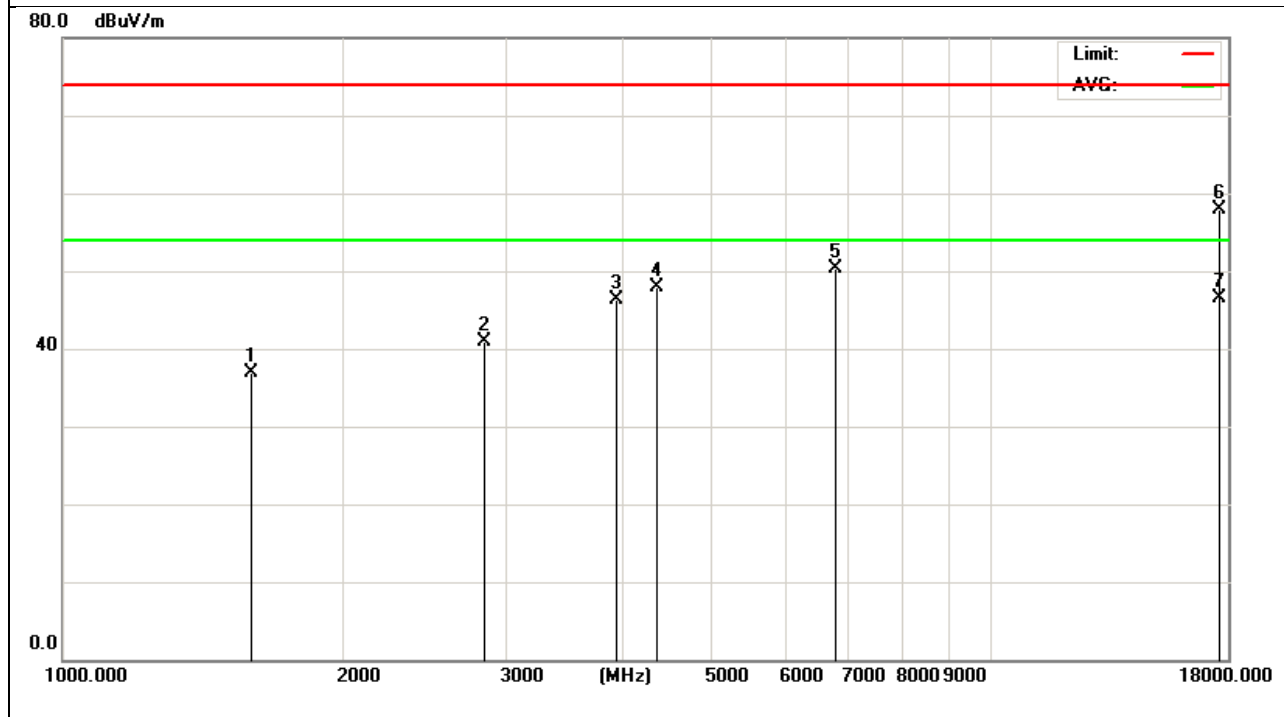
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 40	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1593.067	46.74	-9.89	36.85	74.00	-37.15	peak
2840.664	43.63	-2.65	40.98	74.00	-33.02	peak
3946.572	42.78	3.44	46.22	74.00	-27.78	peak
4359.871	43.52	4.45	47.97	74.00	-26.03	peak
6789.013	44.36	6.04	50.40	74.00	-23.60	peak
17615.335	32.87	24.95	57.82	74.00	-16.18	peak
17615.335	21.49	24.95	46.44	54.00	-7.56	AVG

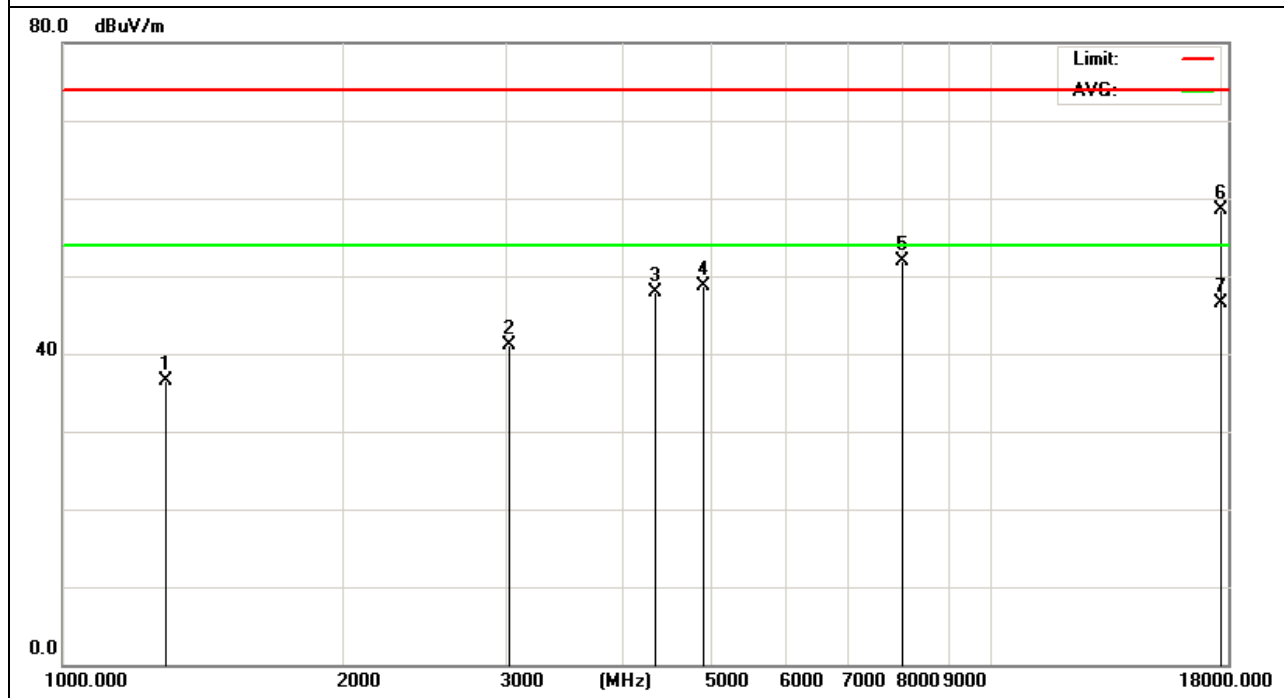
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 40	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1287.631	46.79	-10.37	36.42	74.00	-37.58	peak
3016.983	42.74	-1.64	41.10	74.00	-32.90	peak
4334.752	43.58	4.40	47.98	74.00	-26.02	peak
4889.320	43.63	5.15	48.78	74.00	-25.22	peak
8016.427	41.49	10.40	51.89	74.00	-22.11	peak
17644.328	33.56	24.93	58.49	74.00	-15.51	peak
17644.328	21.57	24.93	46.50	54.00	-7.50	AVG

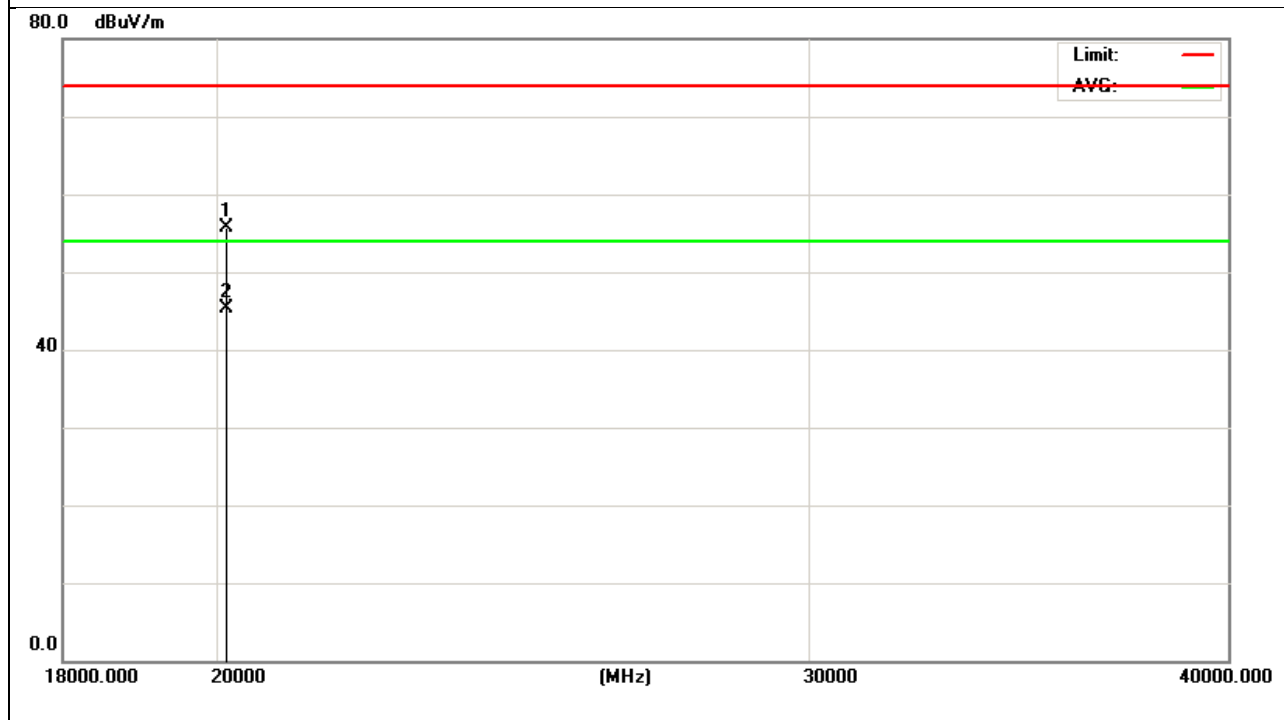
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 40	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
20143.000	40.32	15.48	55.80	74.00	-18.20	peak
20143.000	29.87	15.48	45.35	54.00	-8.65	AVG

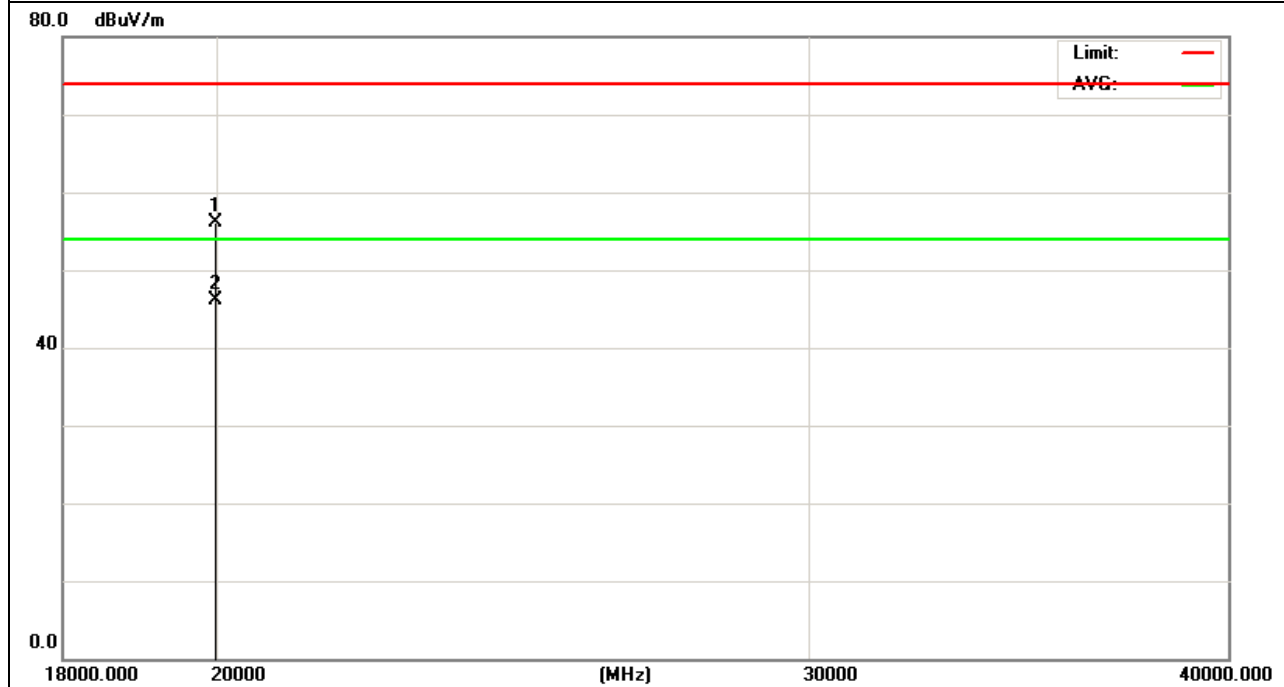
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 40	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
19981.000	40.79	15.23	56.02	74.00	-17.98	peak
19981.000	30.82	15.23	46.05	54.00	-7.95	AVG

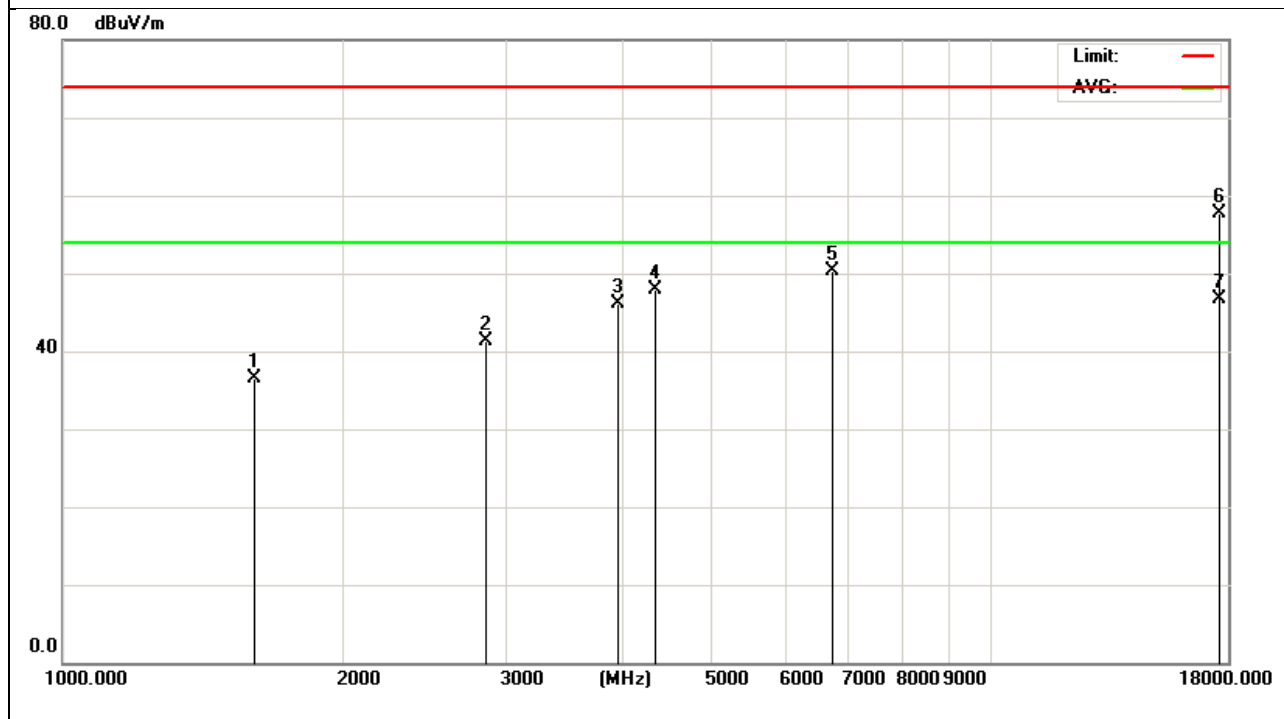
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 48	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1603.325	46.42	-9.88	36.54	74.00	-37.46	peak
2849.665	43.89	-2.61	41.28	74.00	-32.72	peak
3947.014	42.63	3.45	46.08	74.00	-27.92	peak
4332.145	43.47	4.40	47.87	74.00	-26.13	peak
6750.983	44.25	6.02	50.27	74.00	-23.73	peak
17561.221	32.63	24.99	57.62	74.00	-16.38	peak
17561.221	21.68	24.99	46.67	54.00	-7.33	AVG

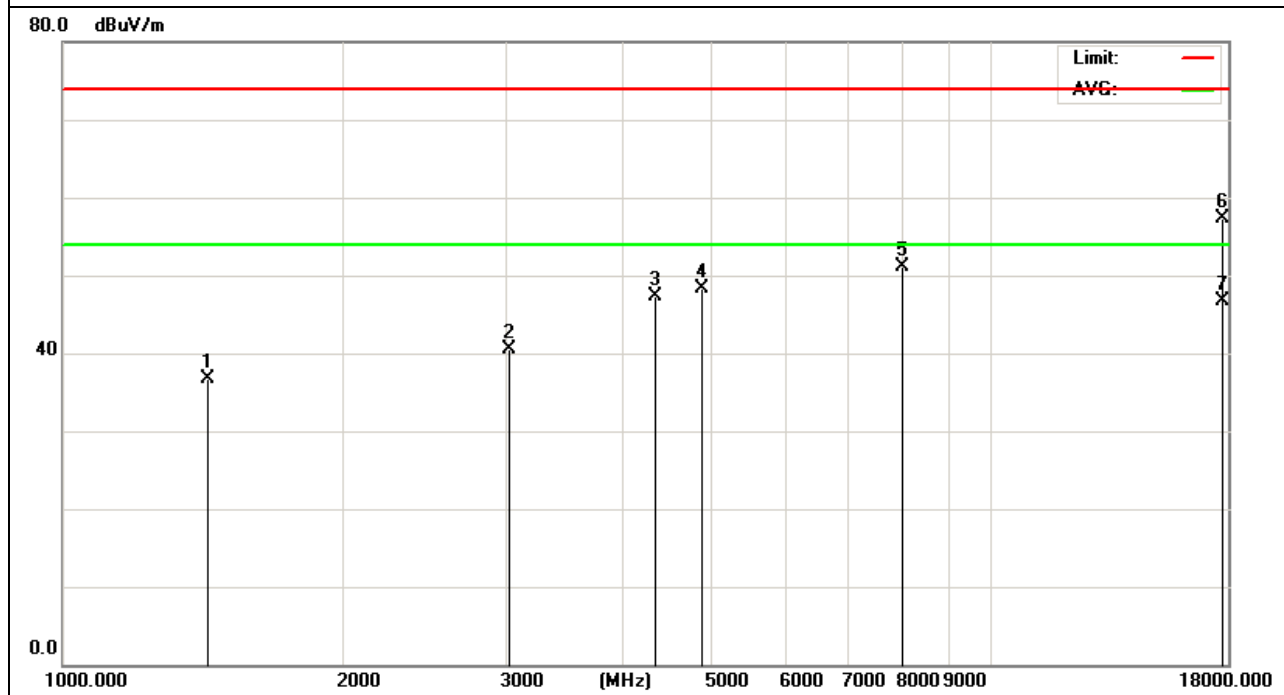
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 48	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1428.206	46.97	-10.18	36.79	74.00	-37.21	peak
3016.983	42.22	-1.64	40.58	74.00	-33.42	peak
4354.248	42.89	4.44	47.33	74.00	-26.67	peak
4862.503	43.25	5.12	48.37	74.00	-25.63	peak
8011.423	40.63	10.40	51.03	74.00	-22.97	peak
17692.367	32.41	24.90	57.31	74.00	-16.69	peak
17692.367	21.78	24.90	46.68	54.00	-7.32	AVG

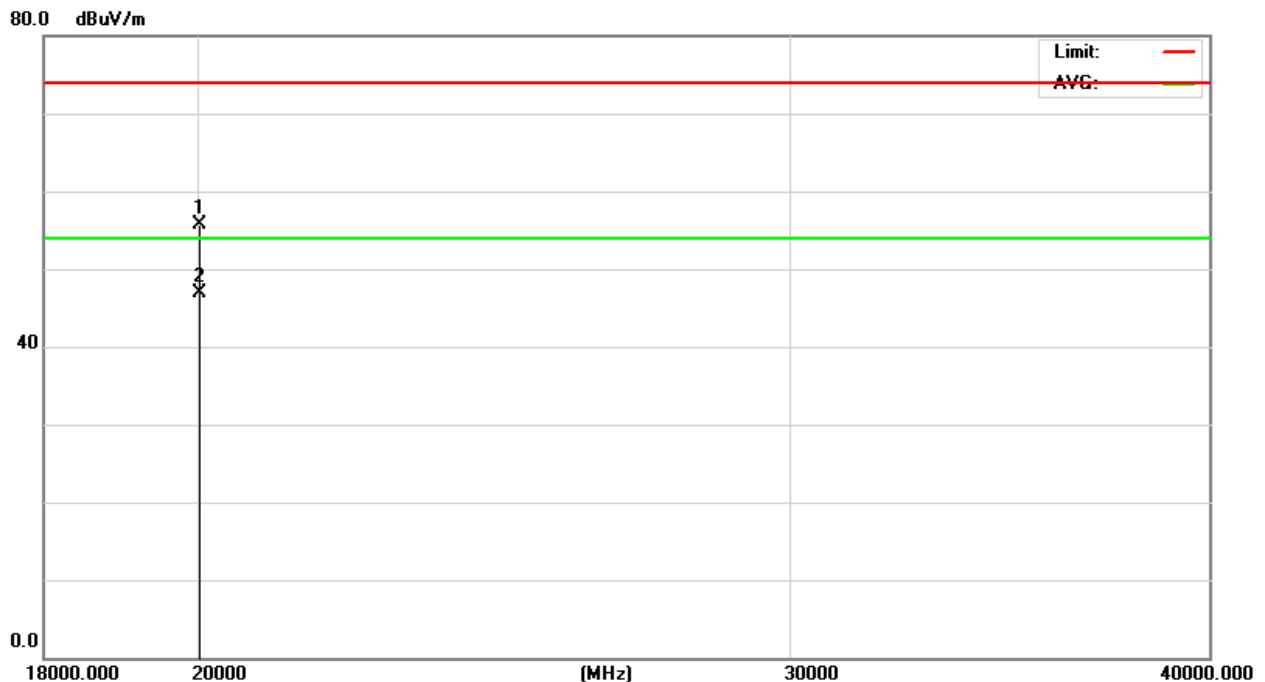
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 48	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
20032.000	40.36	15.31	55.67	74.00	-18.33	peak
20032.000	31.58	15.31	46.89	54.00	-7.11	AVG

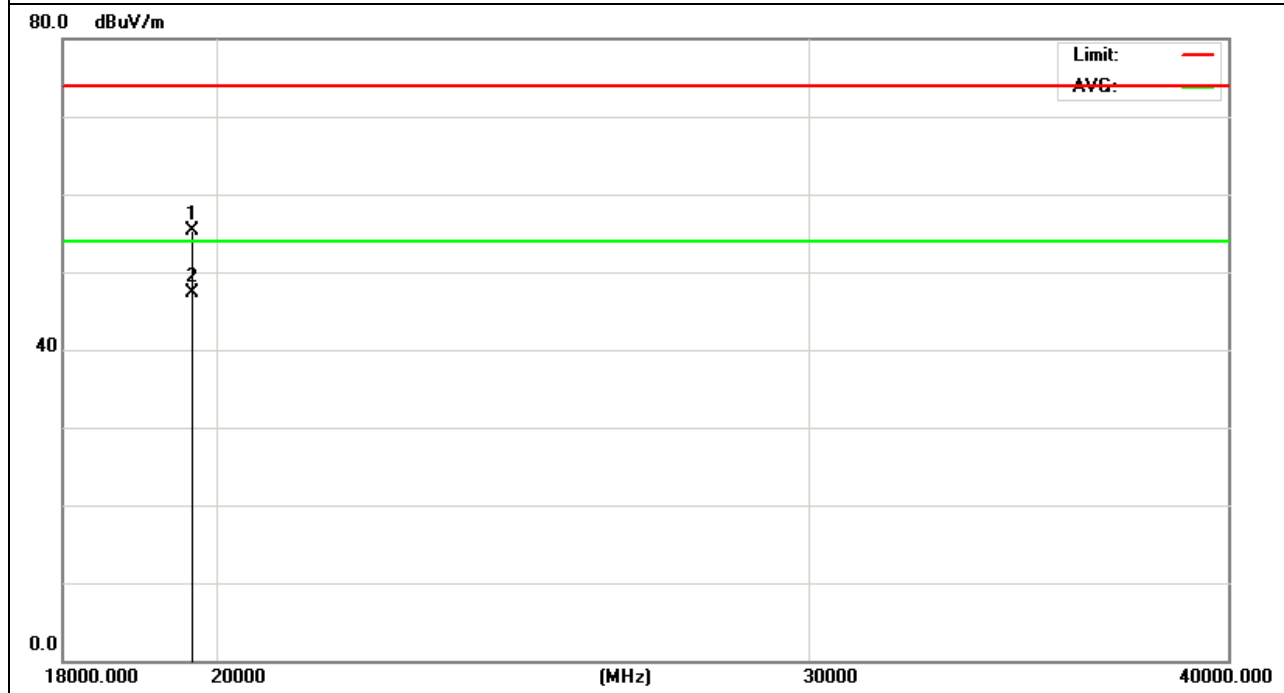
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 48	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
19657.000	40.58	14.76	55.34	74.00	-18.66	peak
19657.000	32.47	14.76	47.23	54.00	-6.77	AVG

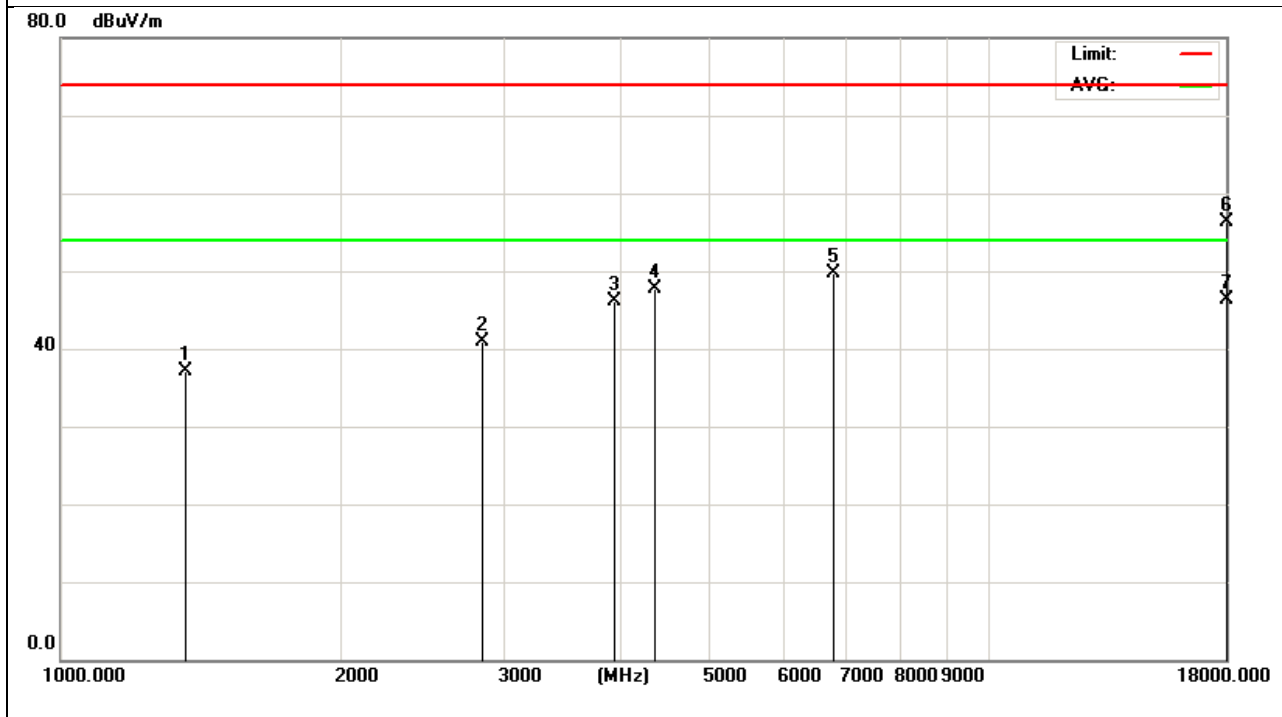
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 36	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1358.914	47.33	-10.29	37.04	74.00	-36.96	peak
2846.221	43.58	-2.63	40.95	74.00	-33.05	peak
3946.582	42.65	3.44	46.09	74.00	-27.91	peak
4367.014	43.19	4.46	47.65	74.00	-26.35	peak
6789.336	43.62	6.04	49.66	74.00	-24.34	peak
17951.201	31.67	24.71	56.38	74.00	-17.62	peak
17951.201	21.55	24.71	46.26	54.00	-7.74	AVG

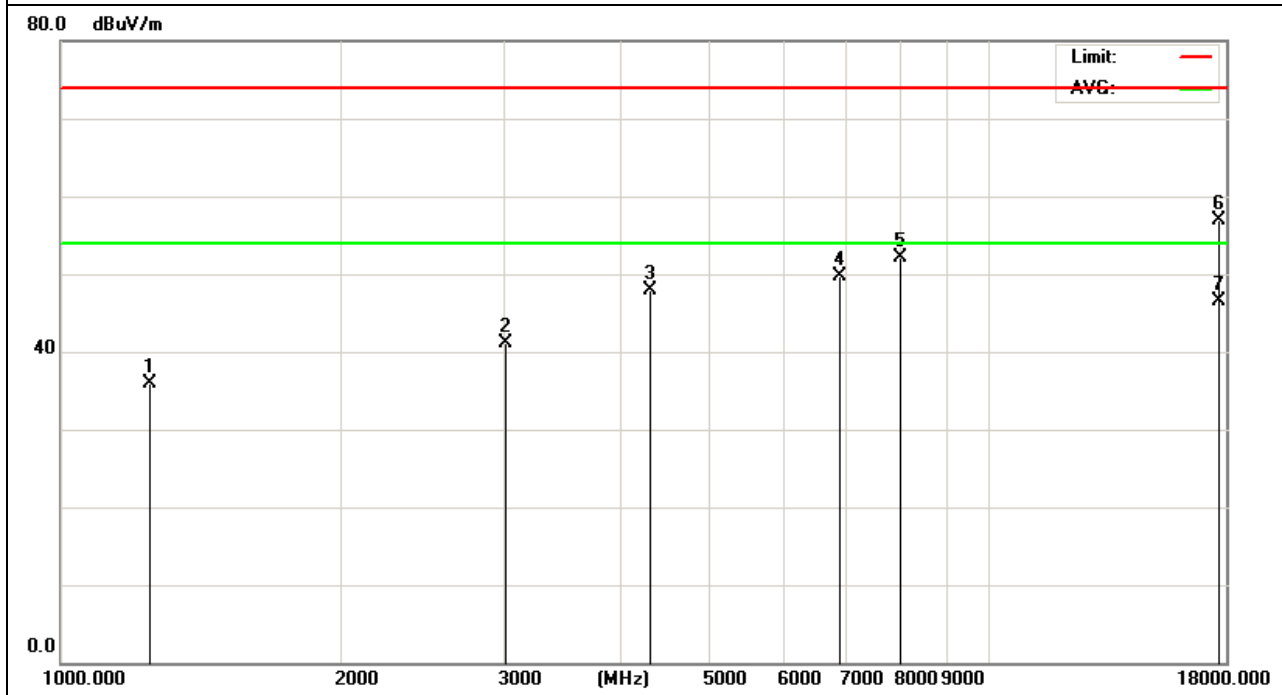
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 36	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1243.659	46.36	-10.48	35.88	74.00	-38.12	peak
3016.565	42.74	-1.64	41.10	74.00	-32.90	peak
4315.123	43.59	4.36	47.95	74.00	-26.05	peak
6879.424	43.55	6.10	49.65	74.00	-24.35	peak
8014.326	41.63	10.40	52.03	74.00	-21.97	peak
17659.354	32.02	24.92	56.94	74.00	-17.06	peak
17659.354	21.58	24.92	46.50	54.00	-7.50	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 36	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
20643.000	39.87	16.22	56.09	74.00	-17.91	peak
20643.000	29.65	16.22	45.87	54.00	-8.13	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 36	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
20031.000	40.69	15.31	56.00	74.00	-18.00	peak
20031.000	30.57	15.31	45.88	54.00	-8.12	AVG

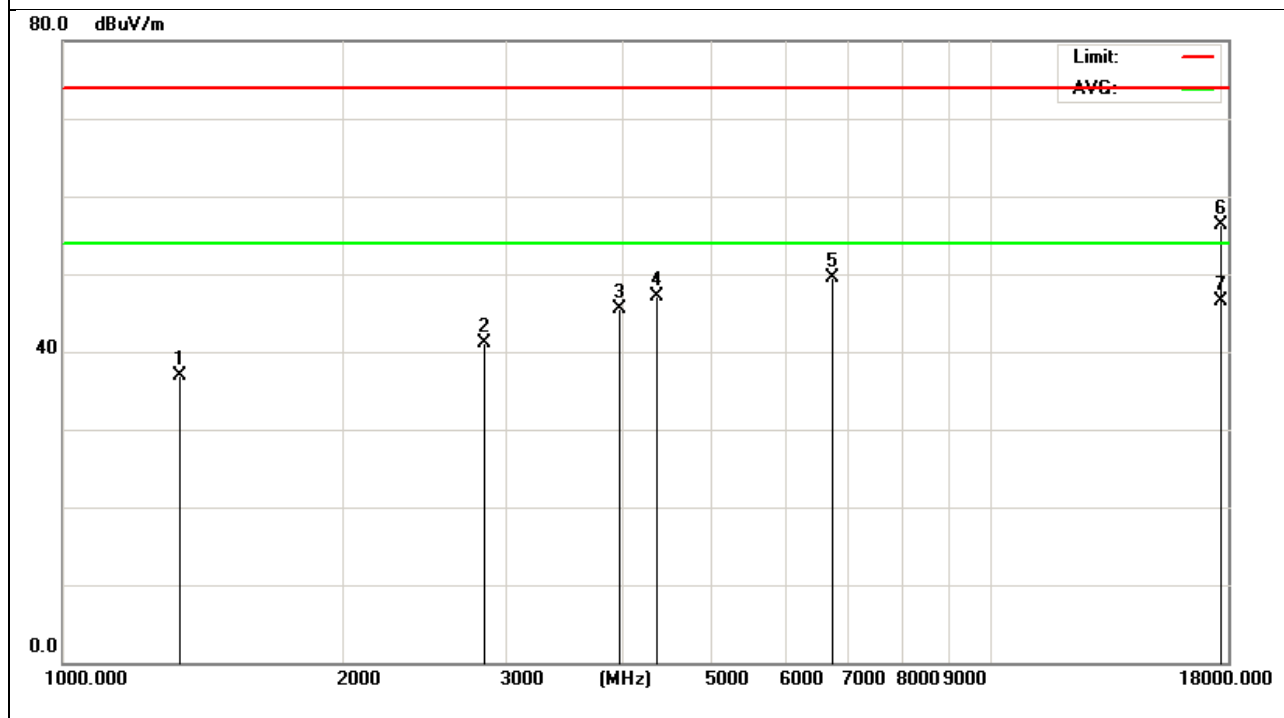
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 40	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1332.988	47.25	-10.30	36.95	74.00	-37.05	peak
2846.321	43.66	-2.63	41.03	74.00	-32.97	peak
3980.423	41.85	3.70	45.55	74.00	-28.45	peak
4362.698	42.68	4.46	47.14	74.00	-26.86	peak
6749.855	43.56	6.01	49.57	74.00	-24.43	peak
17658.628	31.47	24.92	56.39	74.00	-17.61	peak
17658.628	21.68	24.92	46.60	54.00	-7.40	AVG

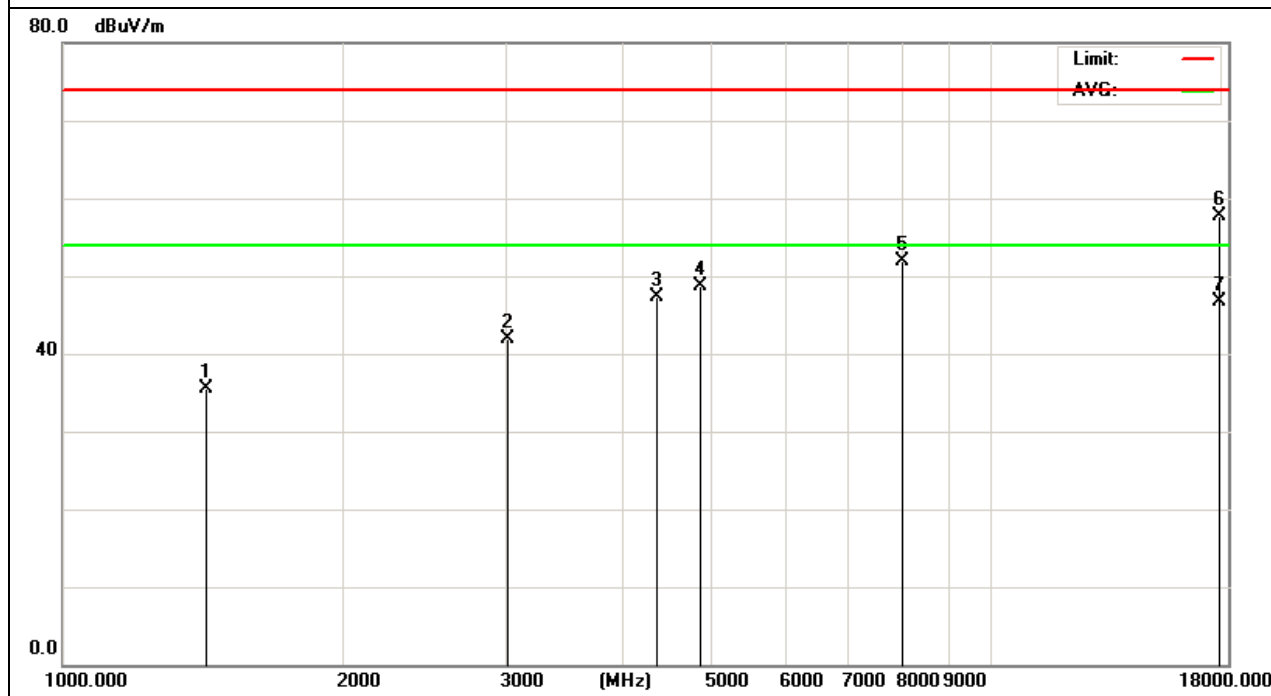
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 40	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1422.931	45.72	-10.21	35.51	74.00	-38.49	peak
3016.549	43.63	-1.64	41.99	74.00	-32.01	peak
4365.872	42.87	4.46	47.33	74.00	-26.67	peak
4850.064	43.59	5.11	48.70	74.00	-25.30	peak
8019.658	41.57	10.41	51.98	74.00	-22.02	peak
17557.243	32.65	24.99	57.64	74.00	-16.36	peak
17557.243	21.69	24.99	46.68	54.00	-7.32	AVG

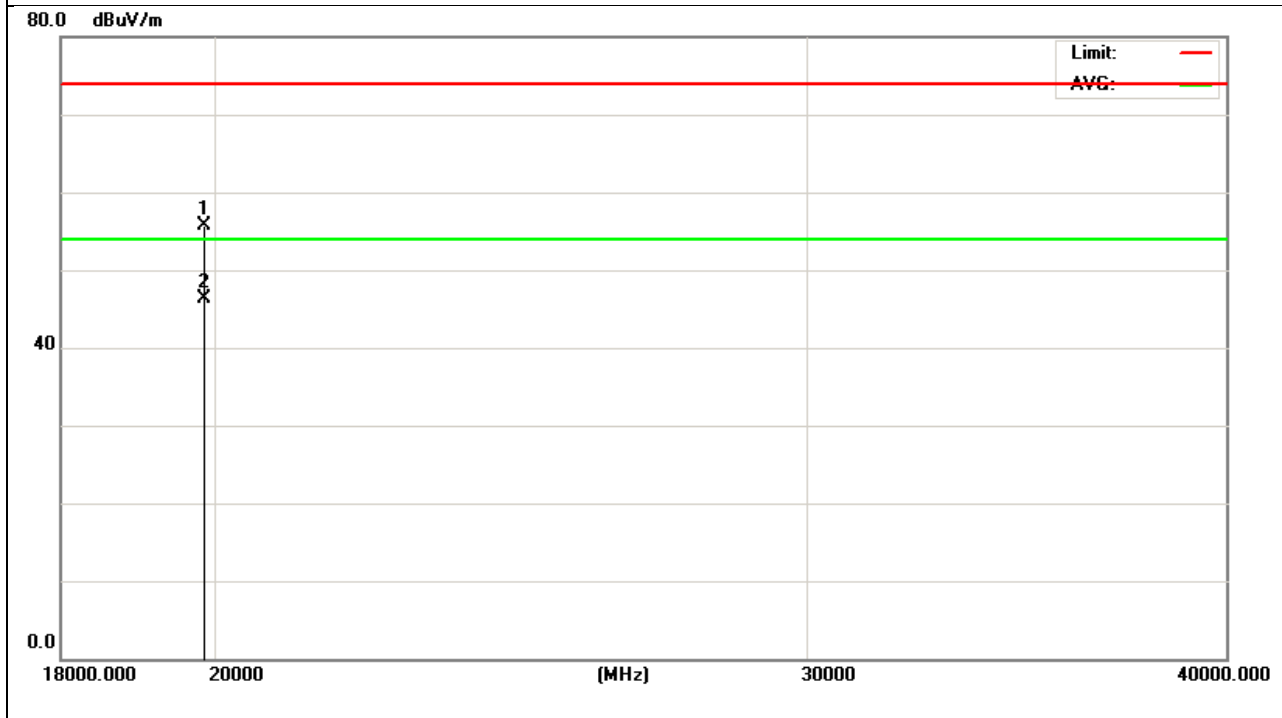
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 40	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
19852.000	40.56	15.05	55.61	74.00	-18.39	peak
19852.000	31.22	15.05	46.27	54.00	-7.73	AVG

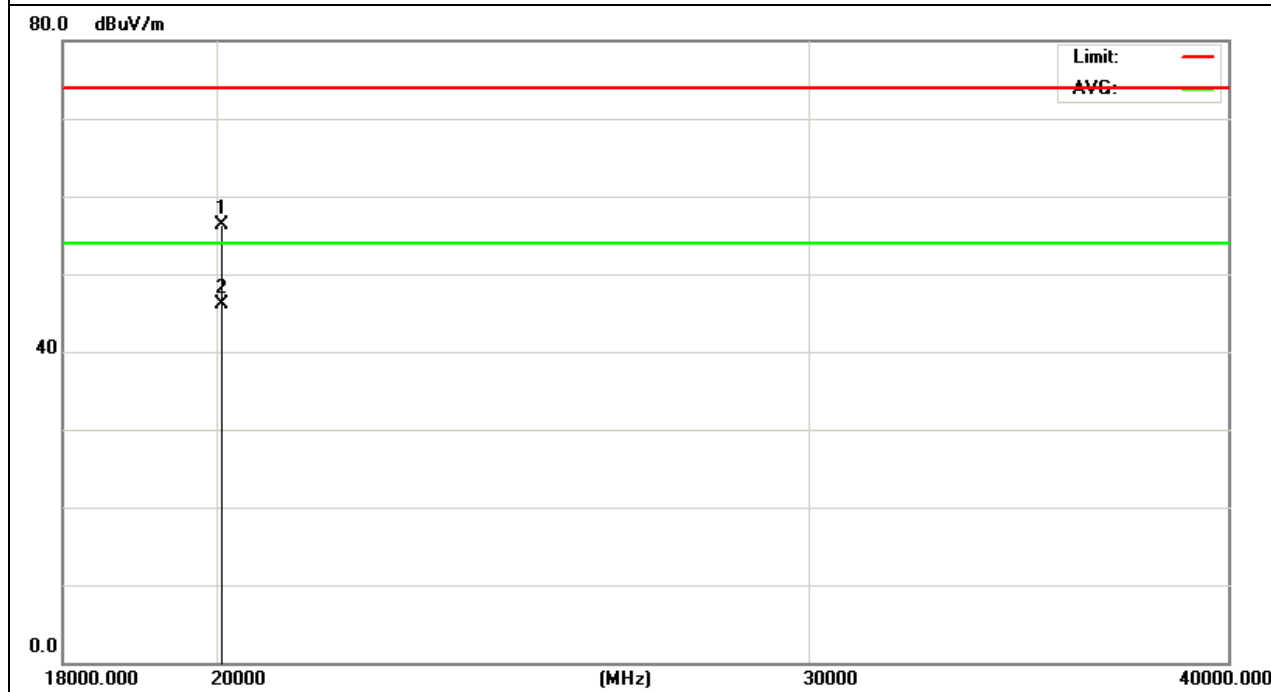
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 40	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
20054.000	40.98	15.35	56.33	74.00	-17.67	peak
20054.000	30.74	15.35	46.09	54.00	-7.91	AVG

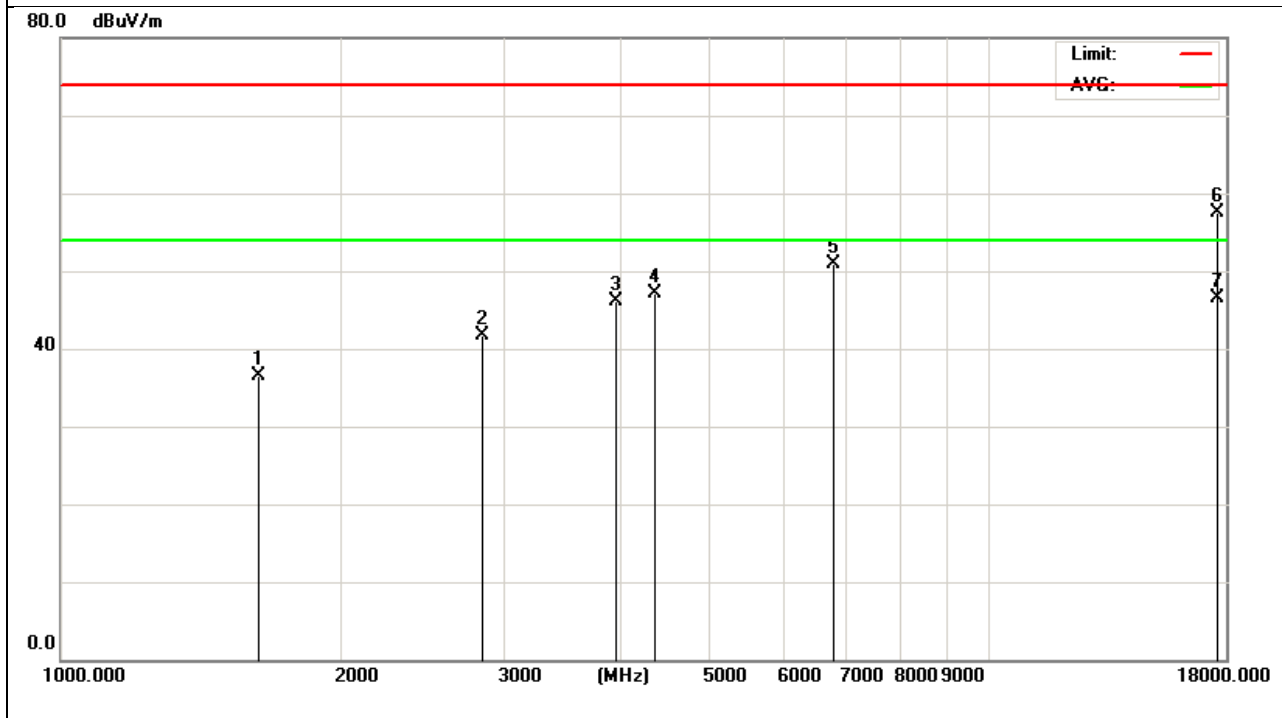
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 48	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1632.088	46.35	-9.81	36.54	74.00	-37.46	peak
2846.653	44.27	-2.63	41.64	74.00	-32.36	peak
3949.742	42.56	3.47	46.03	74.00	-27.97	peak
4363.520	42.63	4.46	47.09	74.00	-26.91	peak
6784.069	44.85	6.04	50.89	74.00	-23.11	peak
17542.639	32.41	25.01	57.42	74.00	-16.58	peak
17542.639	21.56	25.01	46.57	54.00	-7.43	AVG

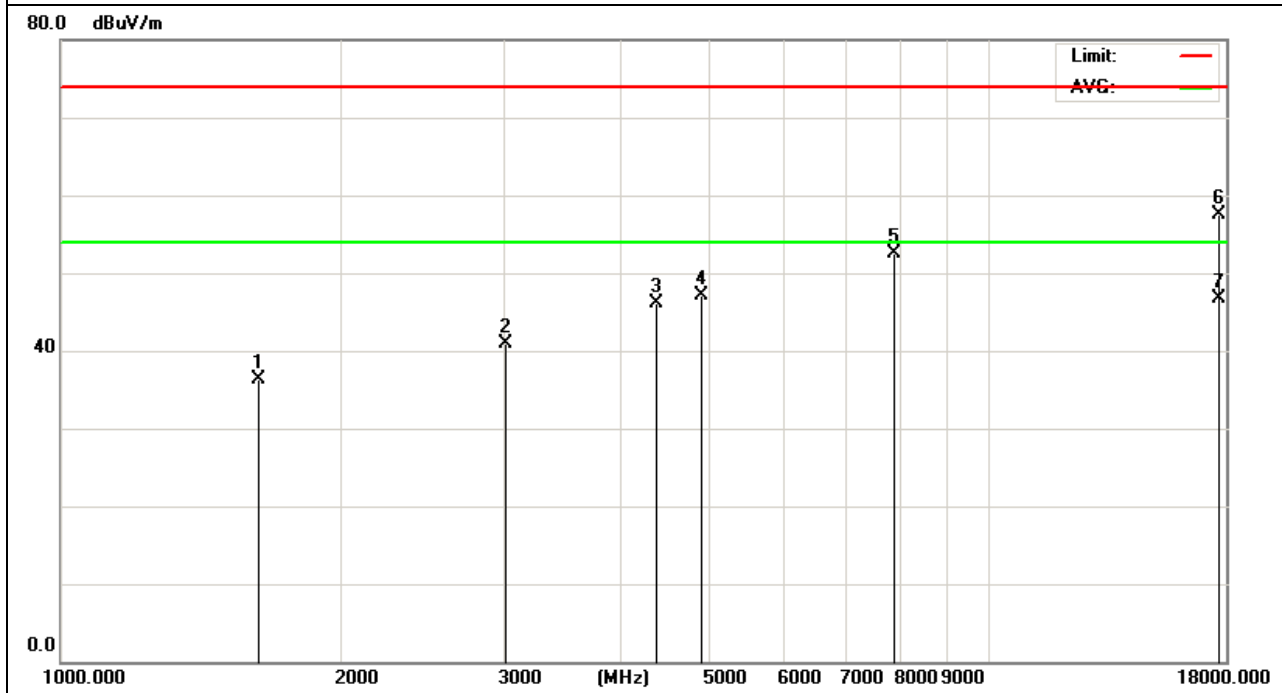
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 48	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1632.657	46.16	-9.81	36.35	74.00	-37.65	peak
3014.004	42.57	-1.65	40.92	74.00	-33.08	peak
4369.687	41.66	4.47	46.13	74.00	-27.87	peak
4892.537	42.02	5.16	47.18	74.00	-26.82	peak
7888.353	42.58	9.92	52.50	74.00	-21.50	peak
17654.189	32.63	24.92	57.55	74.00	-16.45	peak
17654.189	21.76	24.92	46.68	54.00	-7.32	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 48	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
18723.000	42.47	13.38	55.85	74.00	-18.15	peak
18723.000	33.63	13.38	47.01	54.00	-6.99	AVG

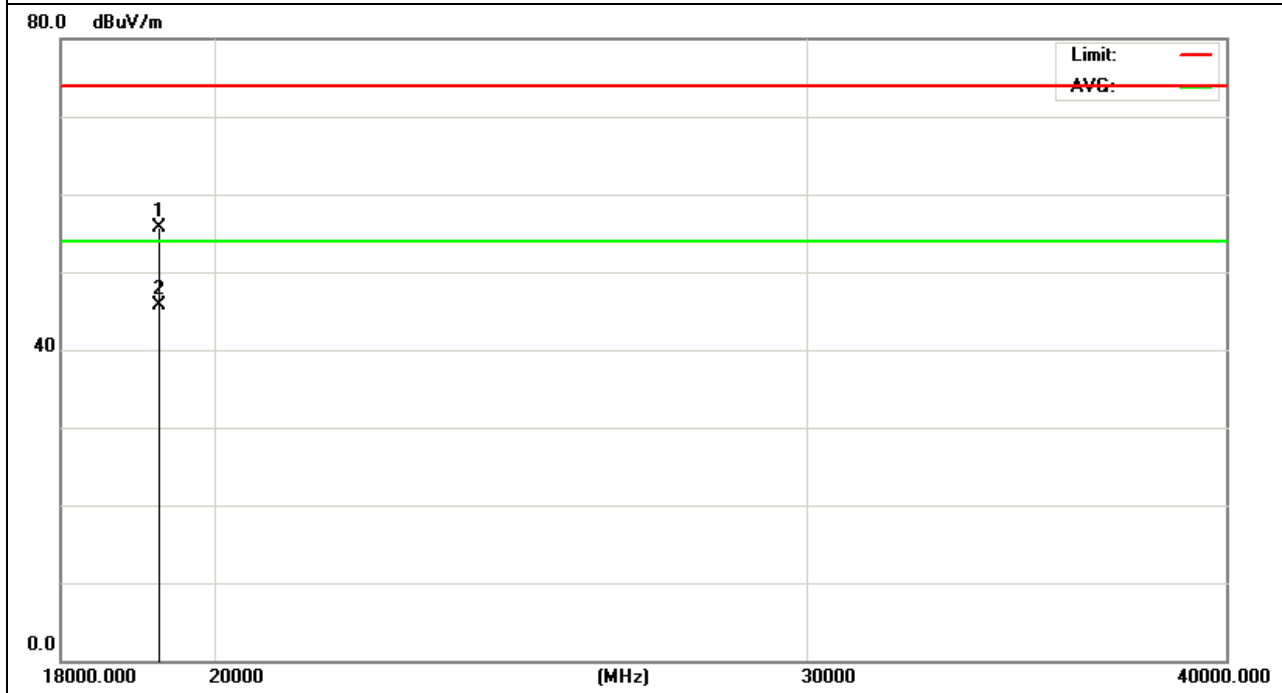
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 48	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
19234.000	41.63	14.13	55.76	74.00	-18.24	peak
19234.000	31.57	14.13	45.70	54.00	-8.30	AVG

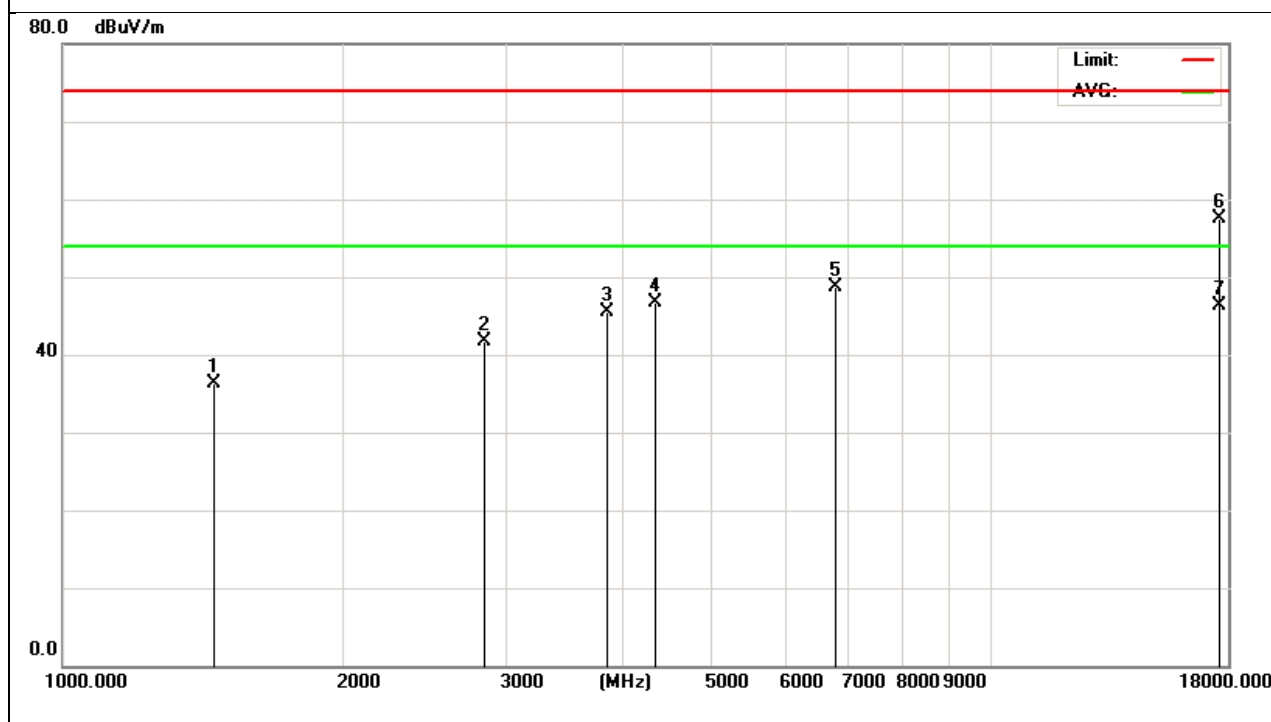
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 38	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1453.968	46.37	-10.06	36.31	74.00	-37.69	peak
2842.336	44.25	-2.64	41.61	74.00	-32.39	peak
3846.210	42.79	2.71	45.50	74.00	-28.50	peak
4331.687	42.36	4.39	46.75	74.00	-27.25	peak
6794.342	42.57	6.05	48.62	74.00	-25.38	peak
17596.351	32.49	24.97	57.46	74.00	-16.54	peak
17596.351	21.26	24.97	46.23	54.00	-7.77	AVG

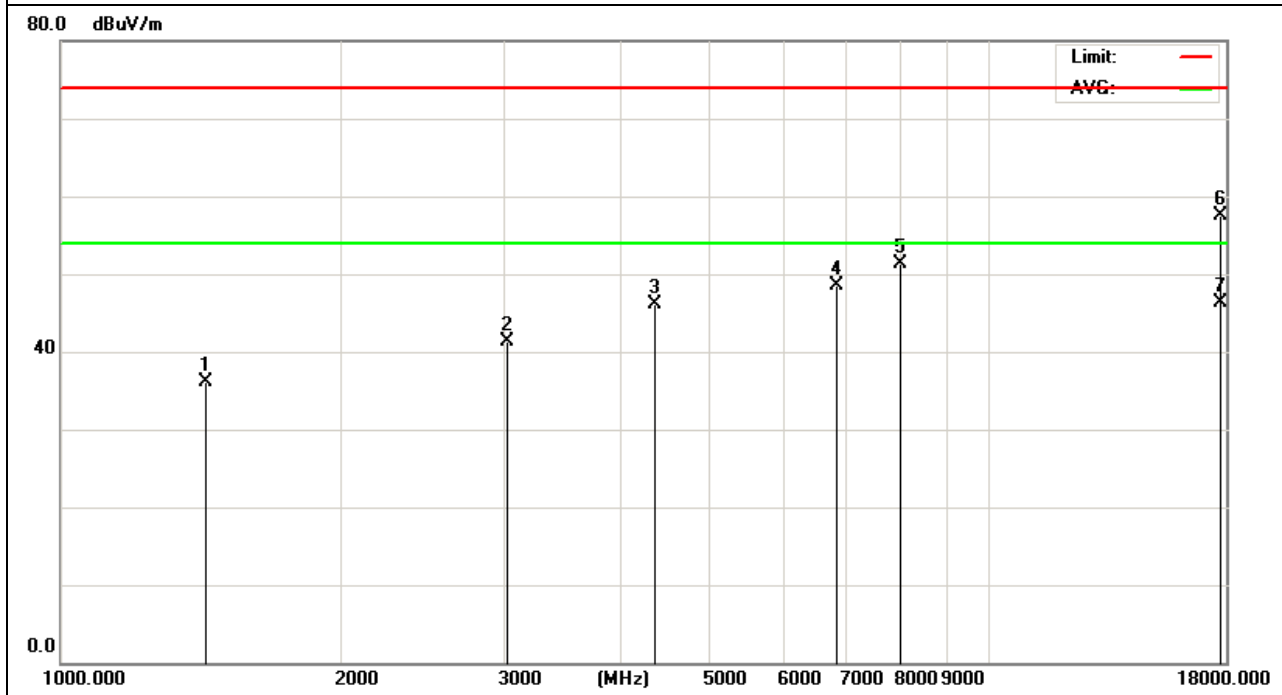
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 38	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1427.013	46.32	-10.18	36.14	74.00	-37.86	peak
3016.988	42.87	-1.64	41.23	74.00	-32.77	peak
4364.821	41.63	4.46	46.09	74.00	-27.91	peak
6849.332	42.49	6.08	48.57	74.00	-25.43	peak
8014.505	40.87	10.40	51.27	74.00	-22.73	peak
17695.350	32.56	24.90	57.46	74.00	-16.54	peak
17695.350	21.49	24.90	46.39	54.00	-7.61	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 38	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
19564.000	41.79	14.62	56.41	74.00	-17.59	peak
19564.000	30.52	14.62	45.14	54.00	-8.86	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 38	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
20074.000	40.59	15.37	55.96	74.00	-18.04	peak
20074.000	30.63	15.37	46.00	54.00	-8.00	AVG

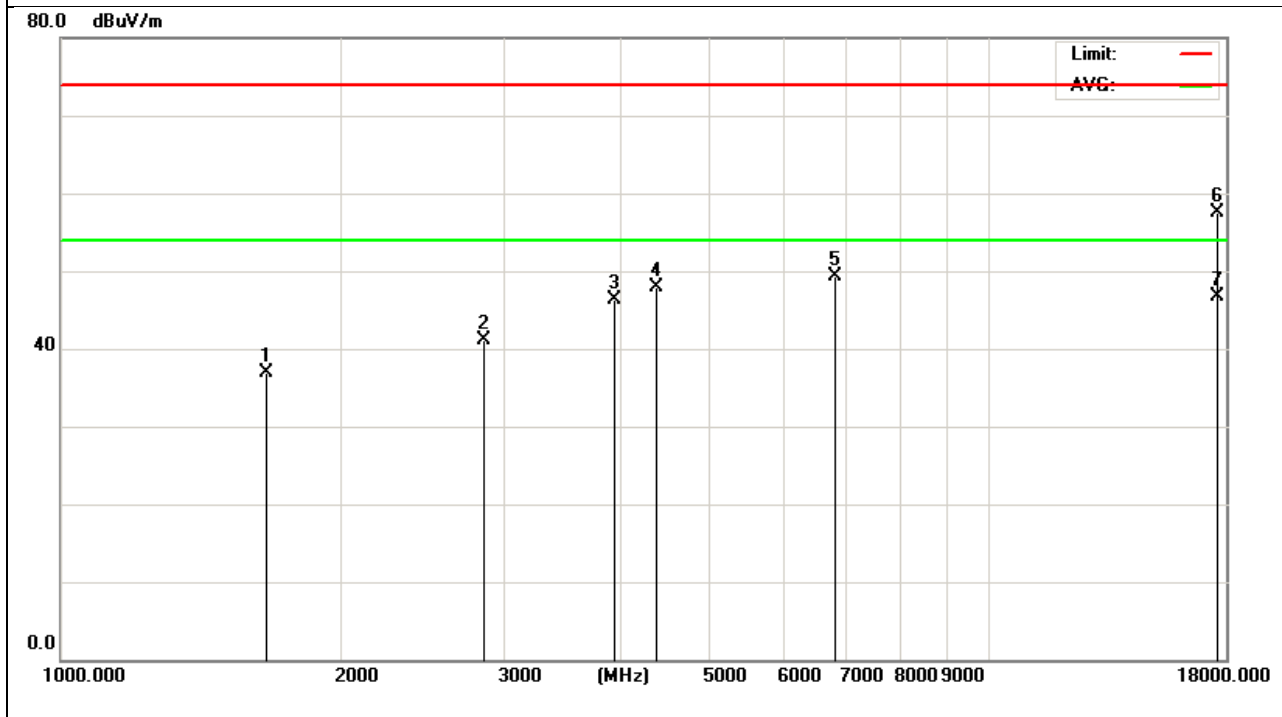
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 46	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1662.471	46.57	-9.73	36.84	74.00	-37.16	peak
2849.336	43.63	-2.61	41.02	74.00	-32.98	peak
3942.202	42.98	3.42	46.40	74.00	-27.60	peak
4379.662	43.37	4.49	47.86	74.00	-26.14	peak
6811.491	43.25	6.06	49.31	74.00	-24.69	peak
17547.638	32.49	25.00	57.49	74.00	-16.51	peak
17547.638	21.63	25.00	46.63	54.00	-7.37	AVG

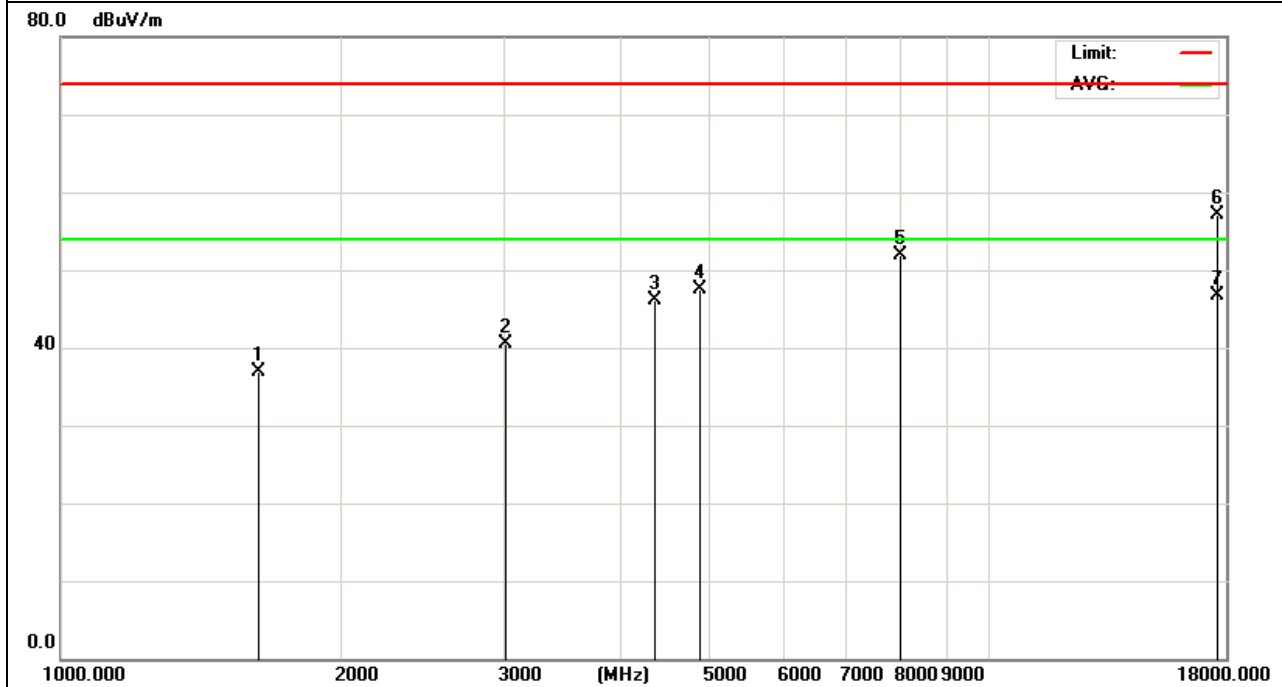
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 46	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1631.687	46.63	-9.81	36.82	74.00	-37.18	peak
3015.557	42.22	-1.65	40.57	74.00	-33.43	peak
4360.174	41.69	4.45	46.14	74.00	-27.86	peak
4863.697	42.36	5.13	47.49	74.00	-26.51	peak
8016.201	41.58	10.40	51.98	74.00	-22.02	peak
17596.354	32.14	24.97	57.11	74.00	-16.89	peak
17596.354	21.69	24.97	46.66	54.00	-7.34	AVG

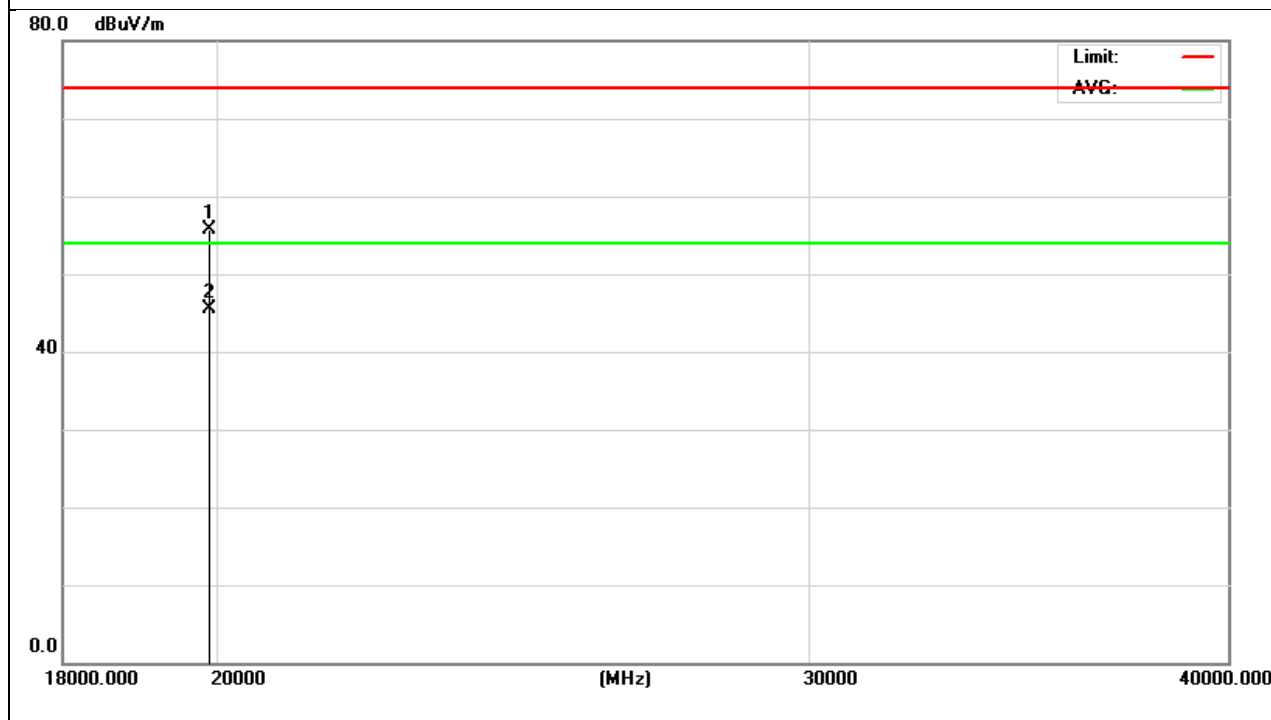
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 46	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
19895.000	40.63	15.11	55.74	74.00	-18.26	peak
19895.000	30.49	15.11	45.60	54.00	-8.40	AVG

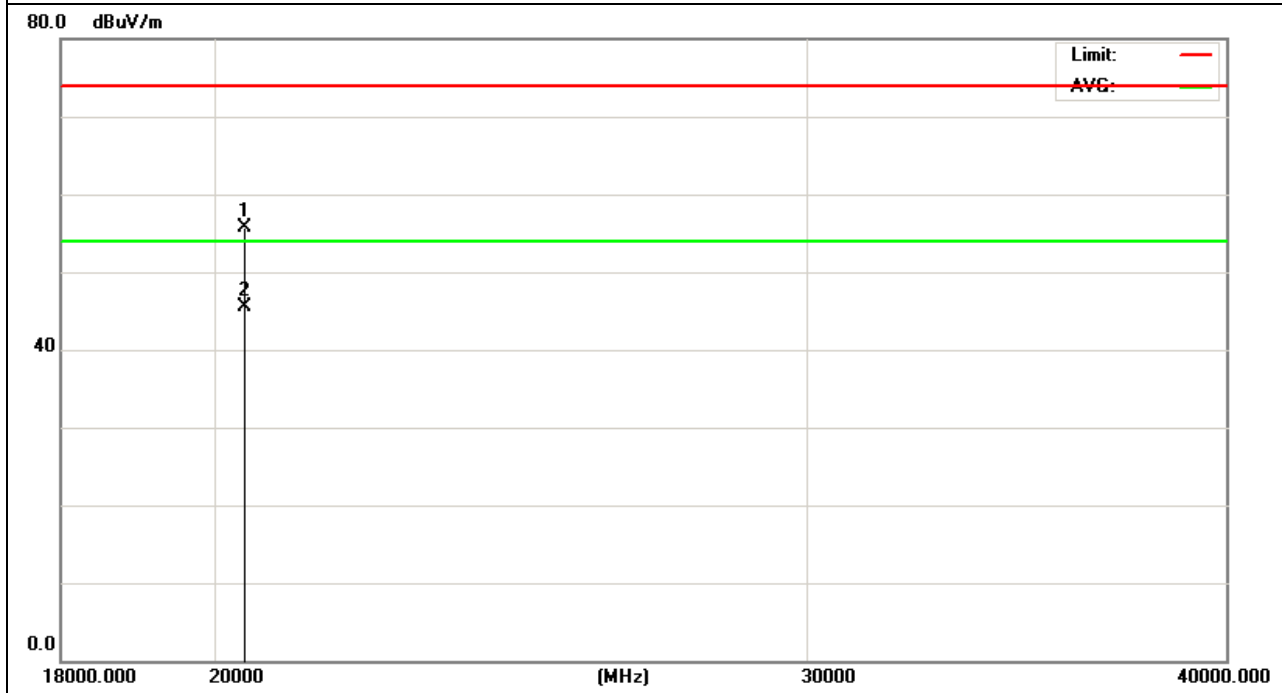
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 46	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
20415.000	39.90	15.88	55.78	74.00	-18.22	peak
20415.000	29.58	15.88	45.46	54.00	-8.54	AVG

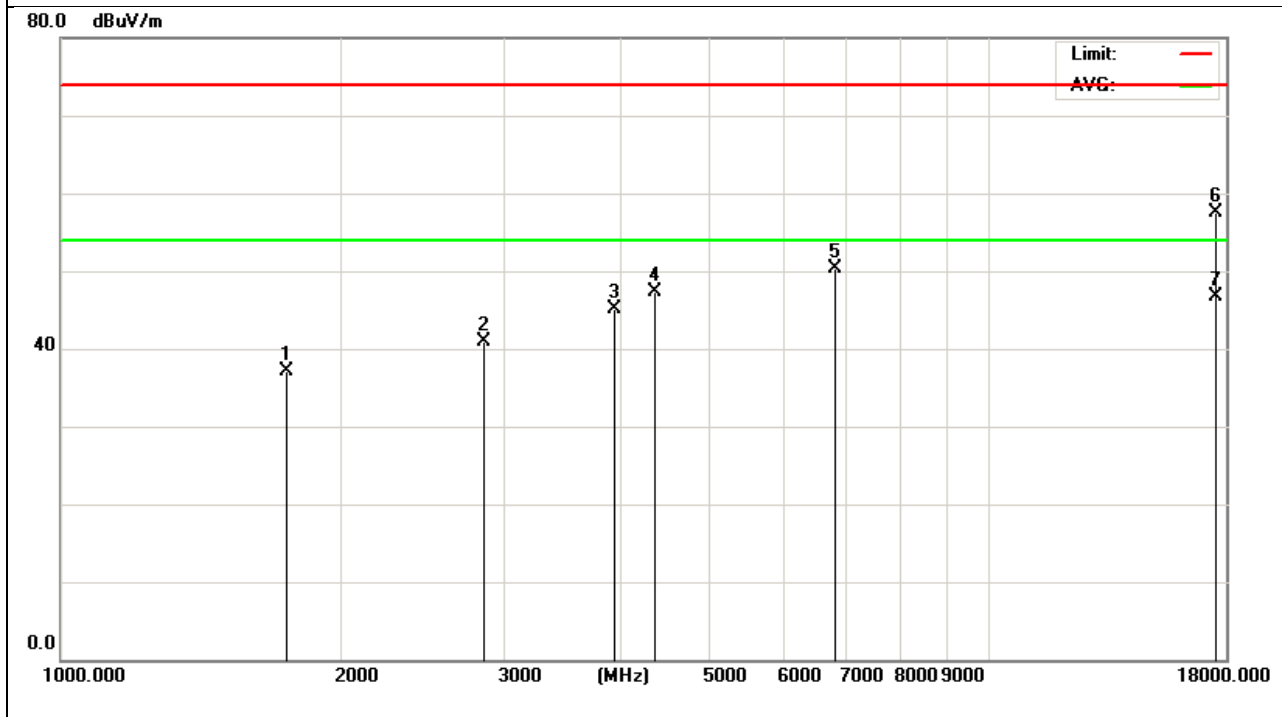
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11ac80 Channel 42	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1749.587	46.77	-9.48	37.29	74.00	-36.71	peak
2850.032	43.49	-2.61	40.88	74.00	-33.12	peak
3946.635	41.72	3.44	45.16	74.00	-28.84	peak
4367.710	42.91	4.46	47.37	74.00	-26.63	peak
6797.481	44.21	6.04	50.25	74.00	-23.75	peak
17526.336	32.72	25.01	57.73	74.00	-16.27	peak
17526.336	21.78	25.01	46.79	54.00	-7.21	AVG

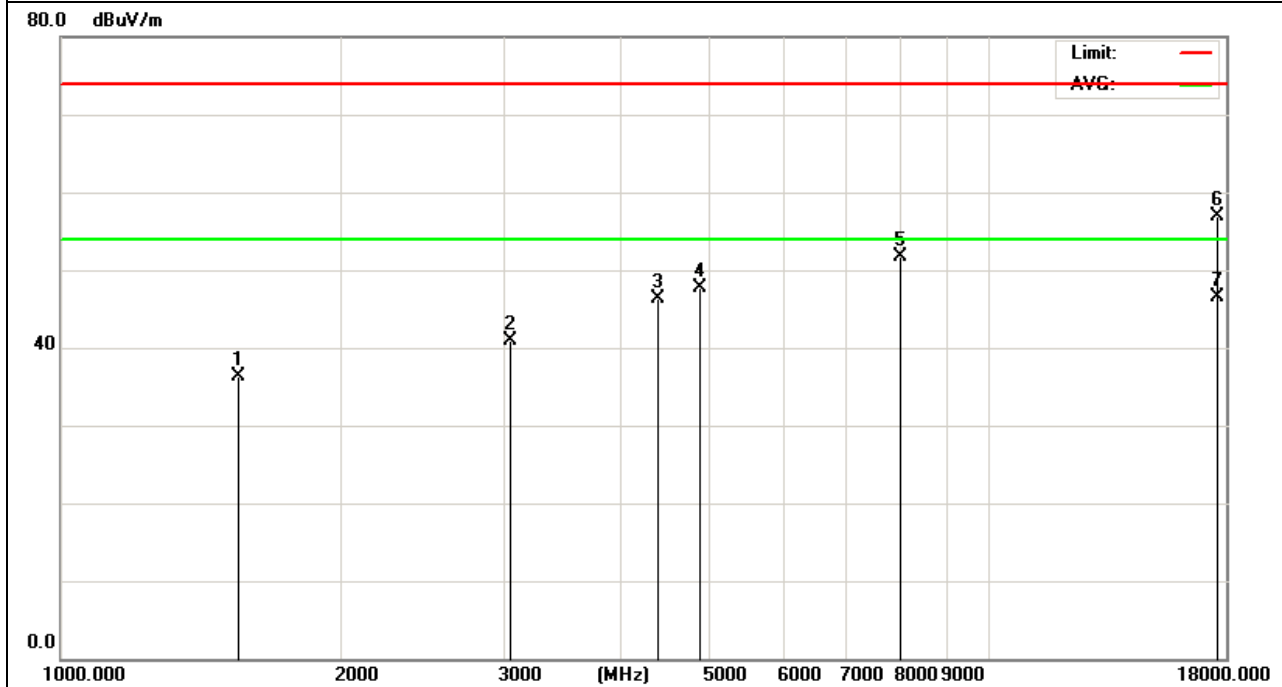
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11 ac80 Channel 42	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1555.068	46.38	-9.87	36.51	74.00	-37.49	peak
3045.277	42.51	-1.56	40.95	74.00	-33.05	peak
4393.621	41.92	4.52	46.44	74.00	-27.56	peak
4861.124	42.86	5.12	47.98	74.00	-26.02	peak
8016.058	41.21	10.4	51.61	74.00	-22.39	peak
17556.337	32.03	25	57.03	74.00	-16.97	peak
17556.337	21.55	25	46.55	54.00	-7.45	AVG

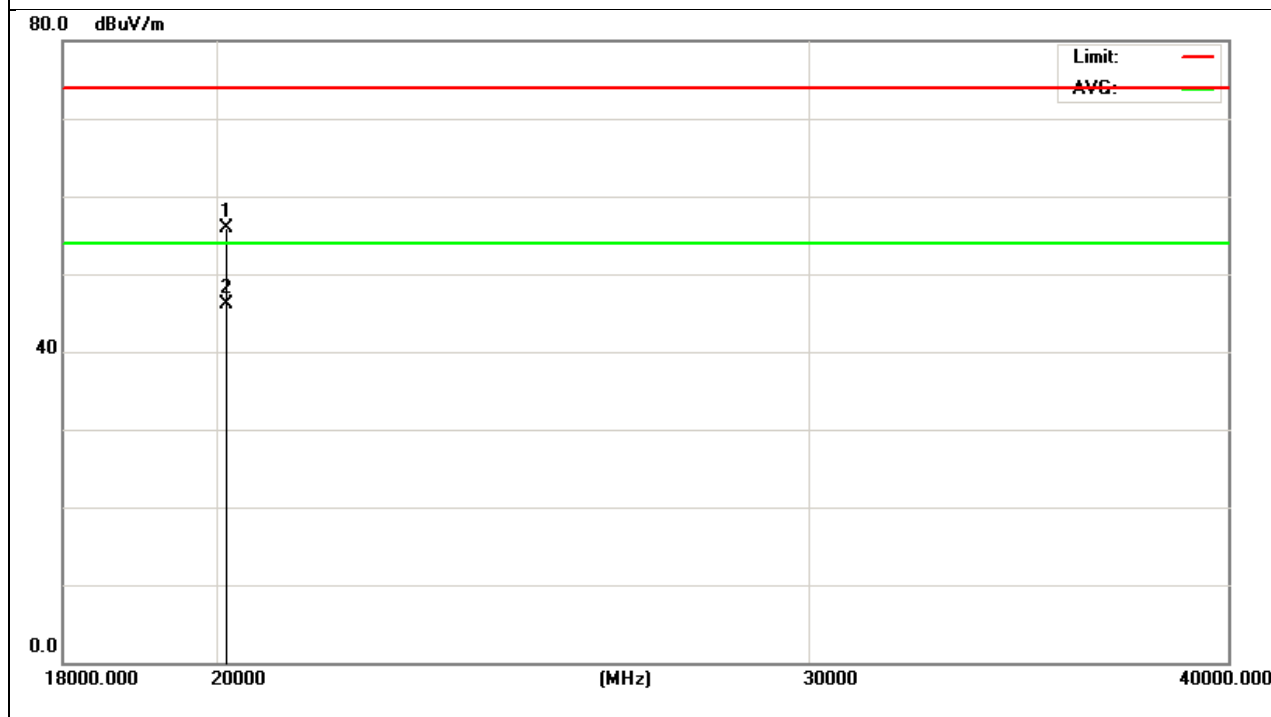
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11ac80 Channel 42	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
20143.000	40.31	15.48	55.79	74.00	-18.21	peak
20143.000	30.69	15.48	46.17	54.00	-7.83	AVG

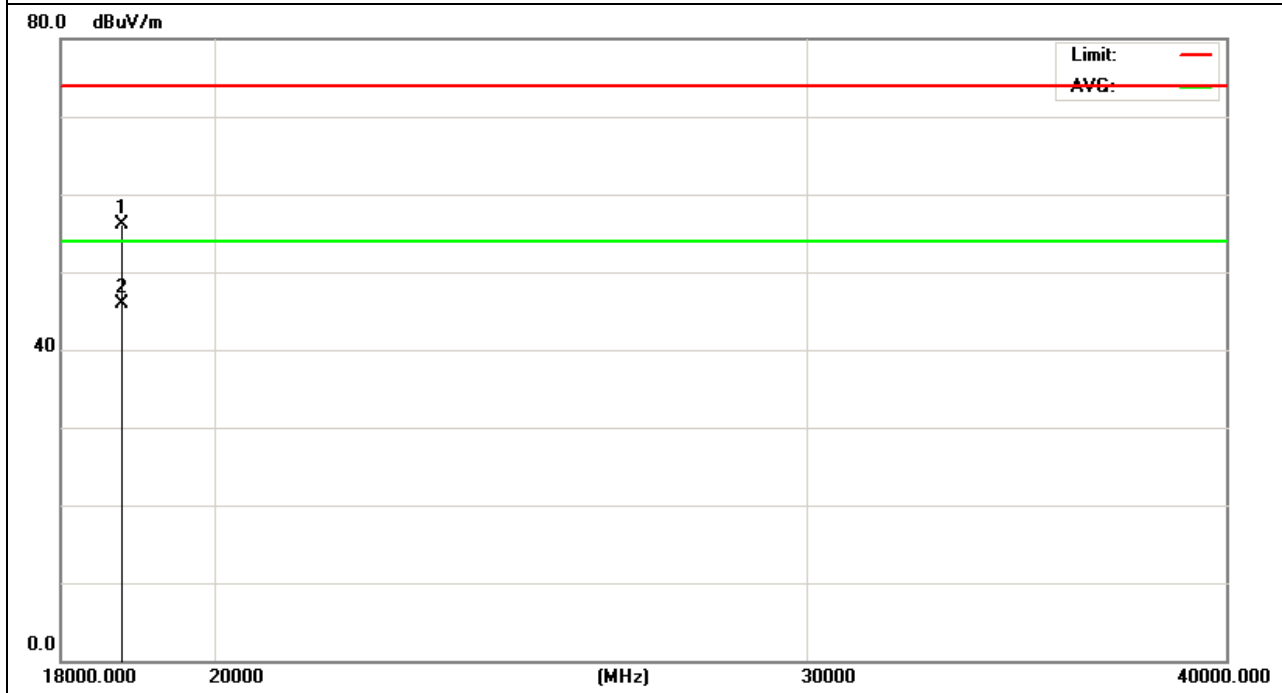
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11 ac80 Channel 42	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
18770.000	42.59	13.44	56.03	74.00	-17.97	peak
18770.000	32.74	13.44	46.18	54.00	-7.82	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.

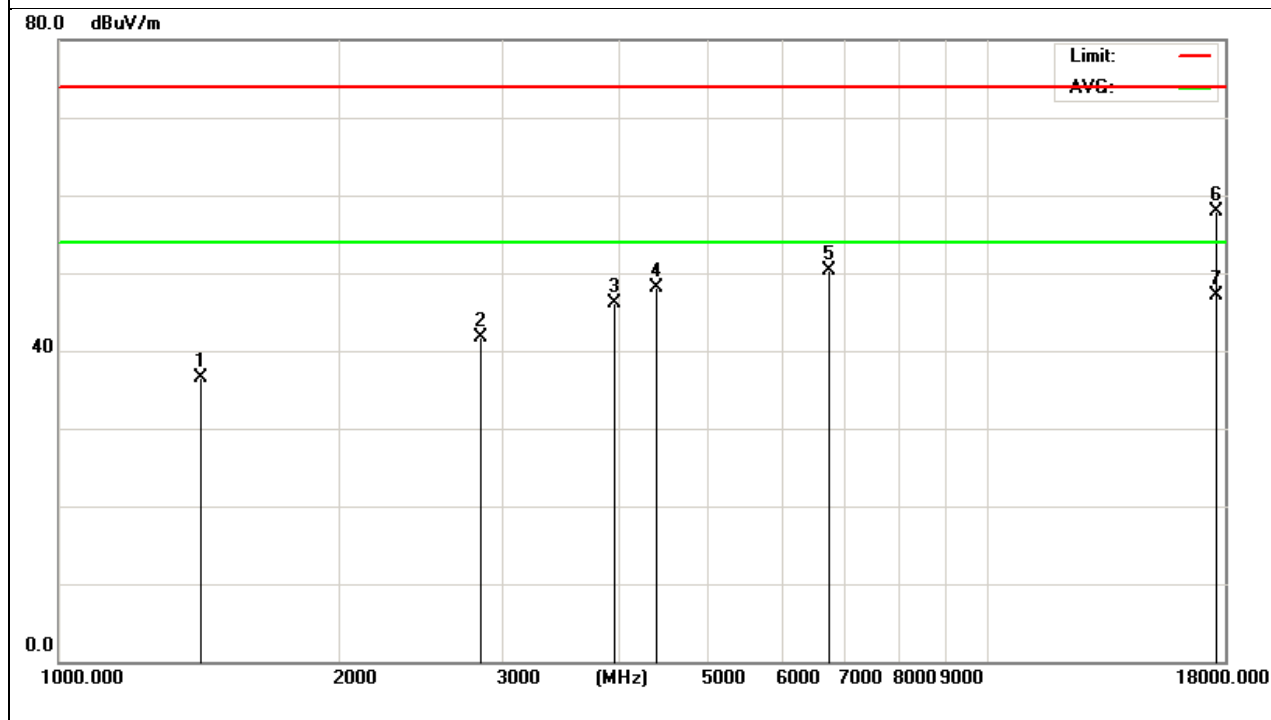


5.25GHz~5.35GHz:

EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 52	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1436.669	47.22	-10.21	37.01	74.00	-36.99	peak
2847.225	44.58	-2.66	41.92	74.00	-32.08	peak
3951.256	42.77	3.45	46.22	74.00	-27.78	peak
4389.013	44.62	4.50	49.12	74.00	-24.88	peak
6754.684	44.37	6.02	50.39	74.00	-23.61	peak
17620.005	33.05	24.96	58.01	74.00	-15.99	peak
17620.005	22.71	24.96	47.67	54.00	-6.33	AVG

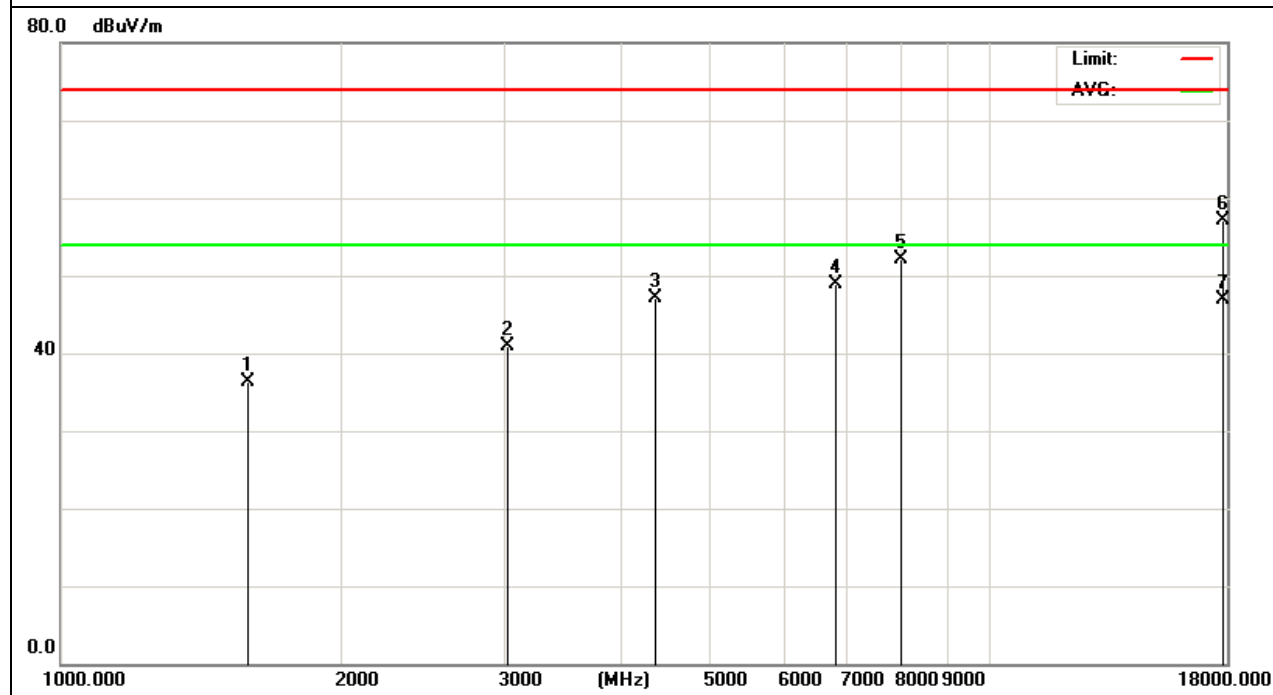
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 52	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1608.221	46.42	-9.89	36.53	74.00	-37.47	peak
3033.056	42.74	-1.62	41.12	74.00	-32.88	peak
4369.277	43.09	4.46	47.55	74.00	-26.45	peak
6835.841	43.62	6.07	49.69	74.00	-24.31	peak
8011.611	40.95	10.40	51.35	74.00	-22.65	peak
17805.249	31.95	24.82	56.77	74.00	-17.23	peak
17805.249	22.71	24.82	47.53	54.00	-6.47	AVG

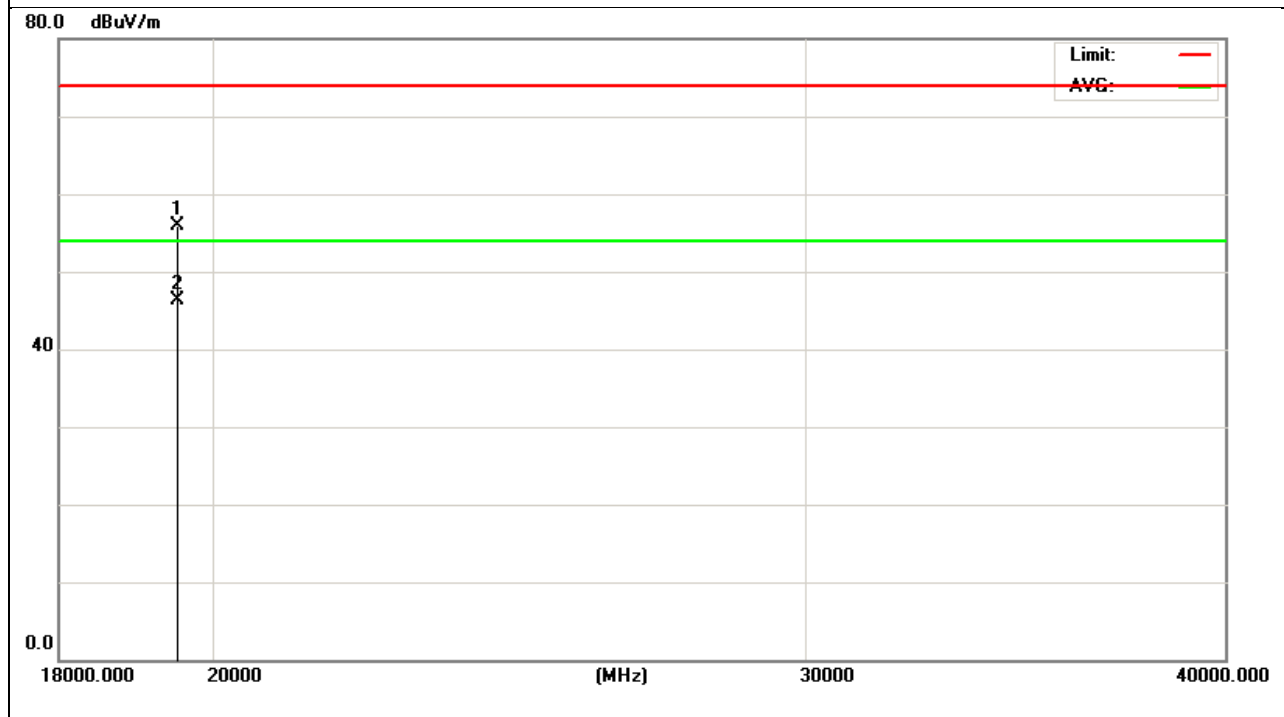
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 52	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
19520.246	40.82	14.56	55.38	74.00	-18.62	peak
19520.246	31.59	14.56	46.15	54.00	-7.85	AVG

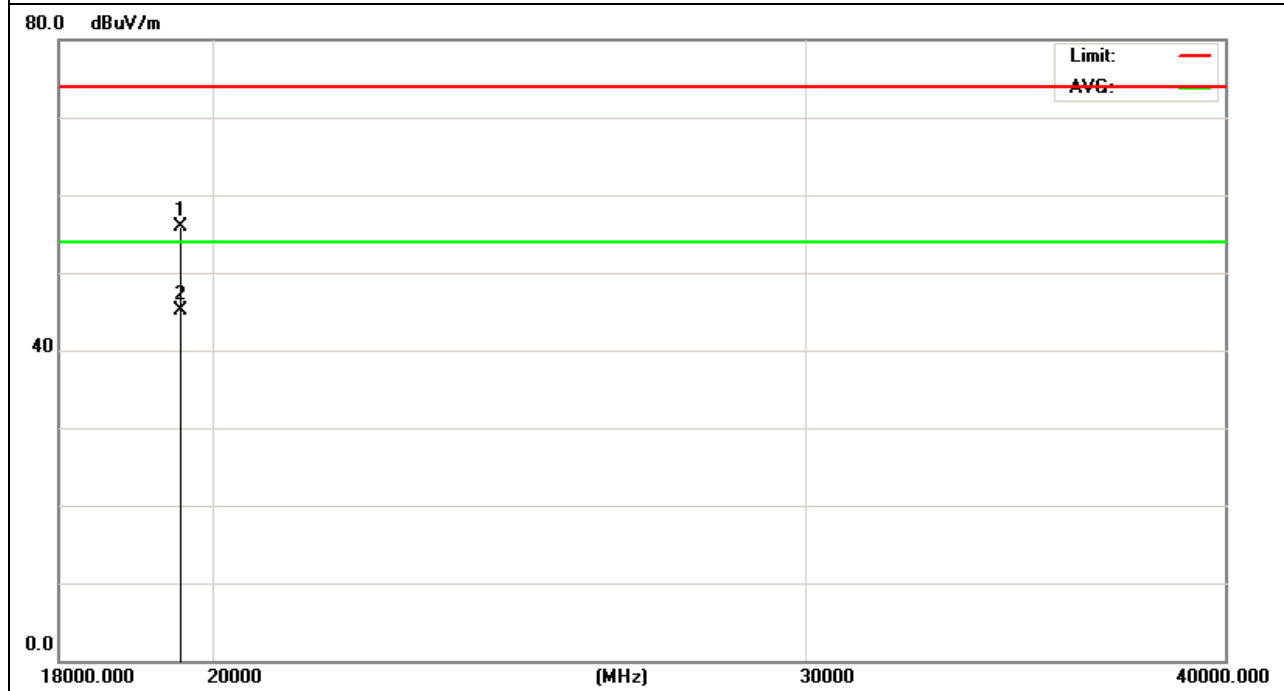
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 52	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
19557.884	41.38	14.6	55.98	74.00	-18.02	peak
19557.884	30.99	14.6	45.59	54.00	-8.41	AVG

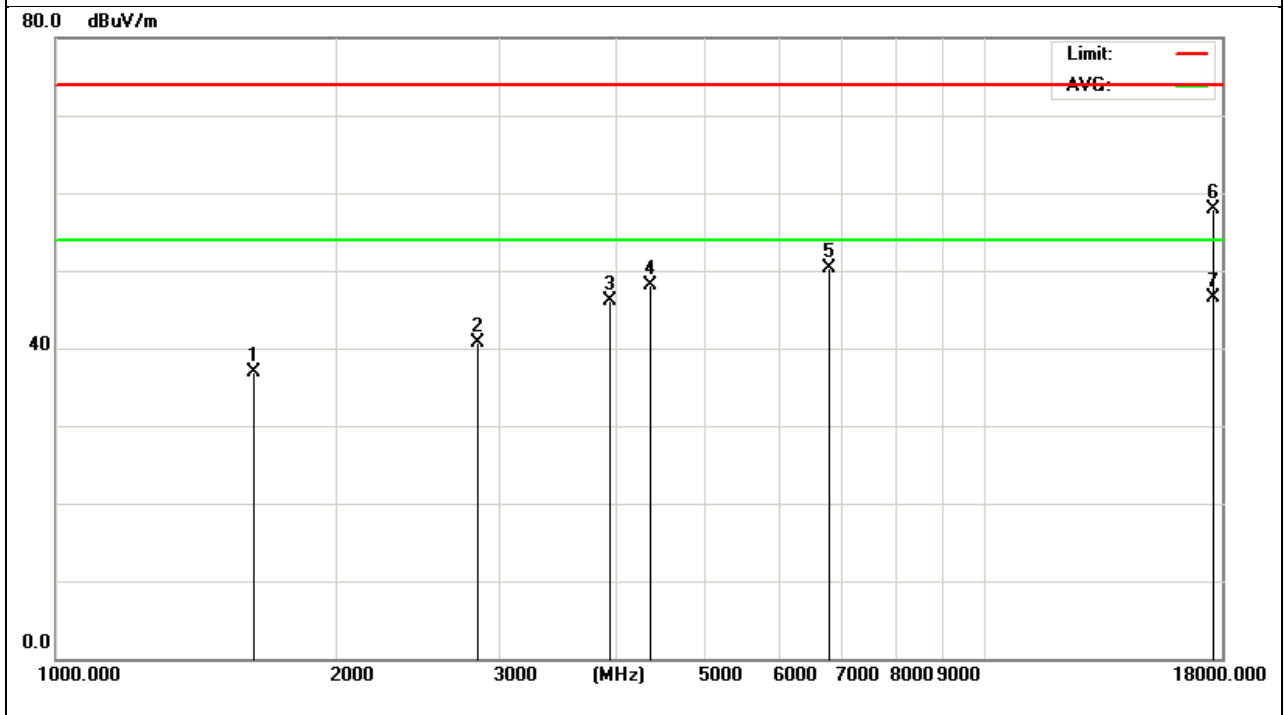
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11aChannel 60	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1646.466	47.59	-9.81	37.78	74.00	-36.22	peak
2847.845	43.97	-2.65	41.32	74.00	-32.68	peak
3948.598	42.42	3.44	45.86	74.00	-28.14	peak
4364.590	44.75	4.46	49.21	74.00	-24.79	peak
6784.227	44.31	6.04	50.35	74.00	-23.65	peak
17589.385	33.02	24.97	57.99	74.00	-16.01	peak
17589.385	21.94	24.97	46.91	54.00	-7.09	AVG

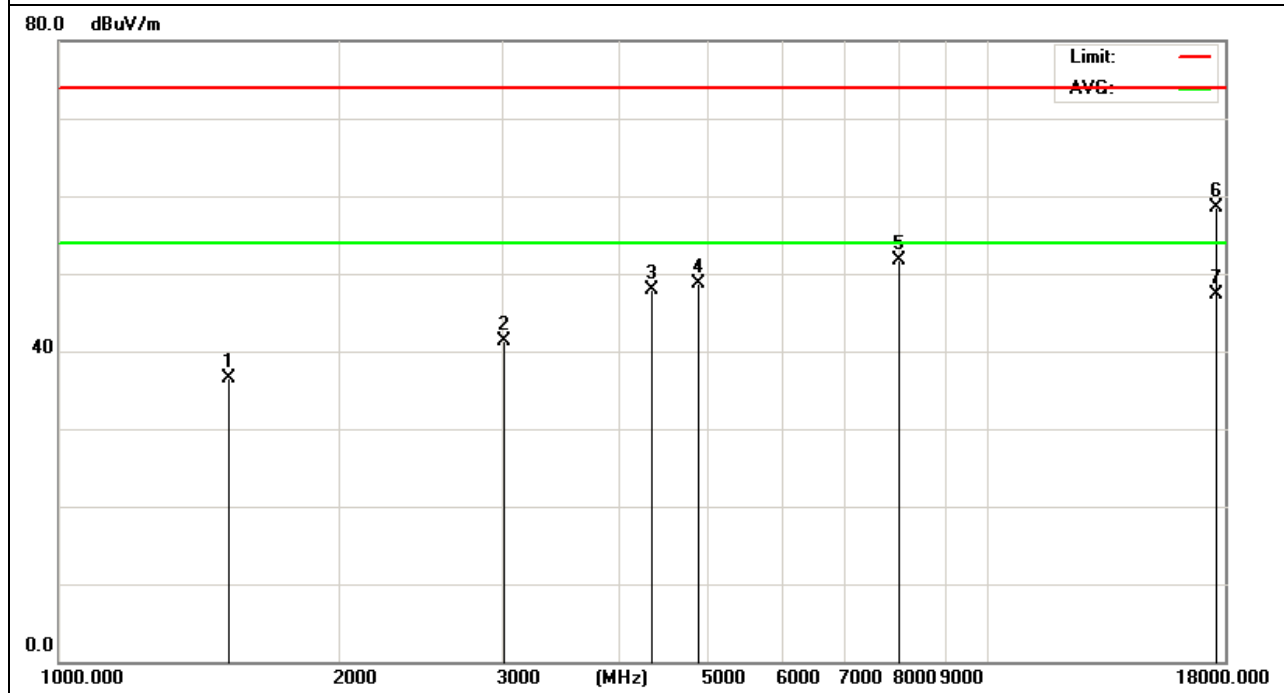
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11aChannel 60	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1537.246	47.30	-9.86	37.44	74.00	-36.56	peak
3022.416	43.47	-1.65	41.82	74.00	-32.18	peak
4341.362	43.46	4.42	47.88	74.00	-26.12	peak
4889.786	44.62	5.15	49.77	74.00	-24.23	peak
8011.483	41.48	10.40	51.88	74.00	-22.12	peak
17599.236	33.64	24.97	58.61	74.00	-15.39	peak
17599.236	22.63	24.97	47.60	54.00	-6.40	AVG

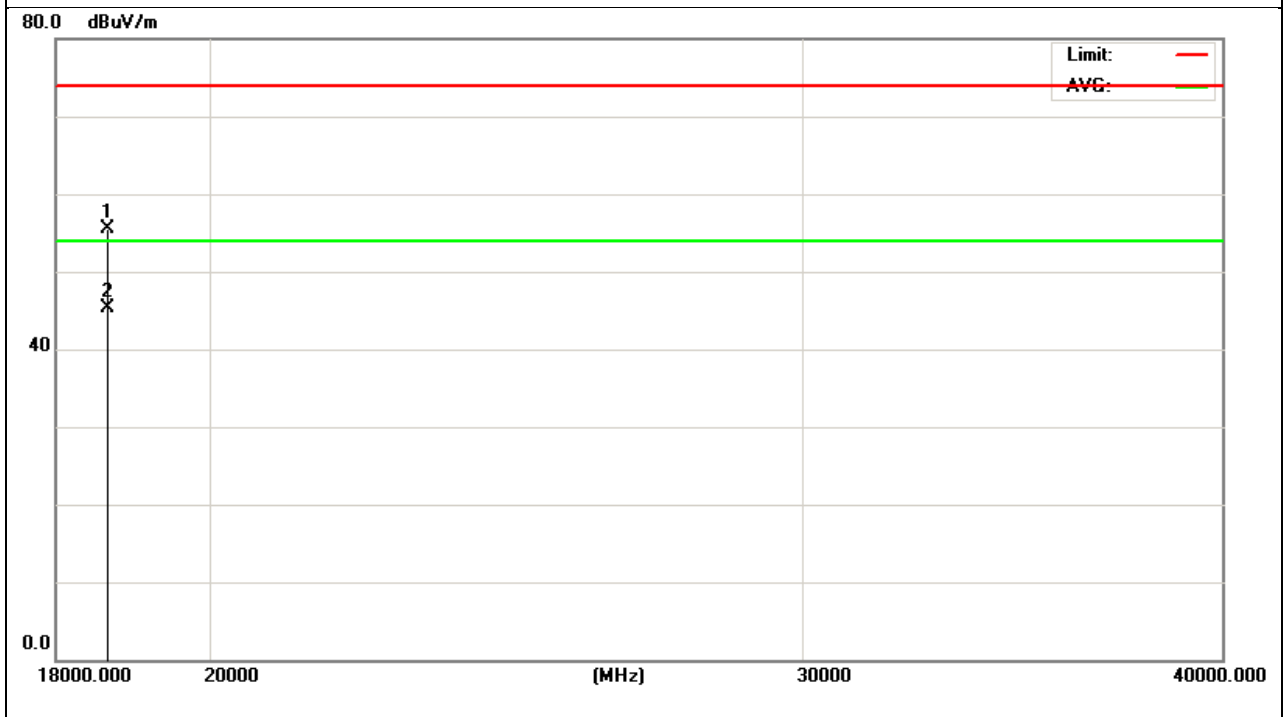
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11aChannel 60	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
18650.663	42.17	13.26	55.43	74.00	-18.57	peak
18650.663	32.84	13.26	46.10	54.00	-7.90	AVG

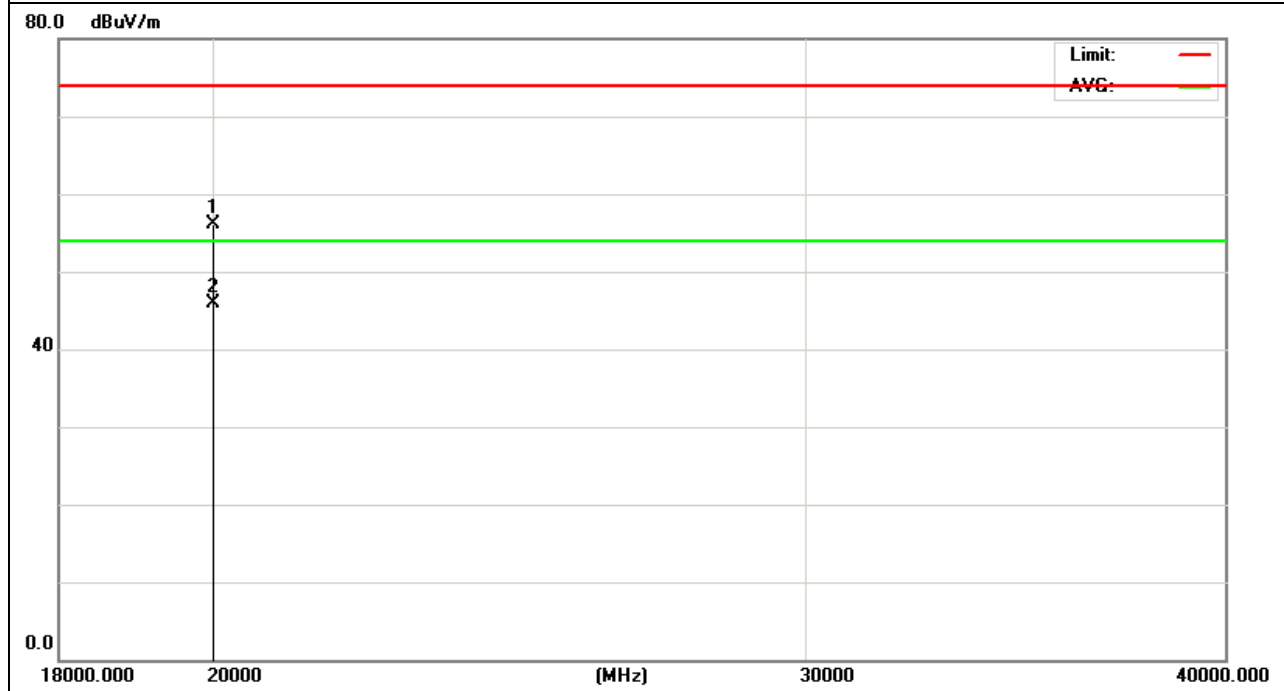
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11aChannel 60	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
20019.845	41.09	15.29	56.38	74.00	-17.62	peak
20019.845	31.86	15.29	47.15	54.00	-6.85	AVG

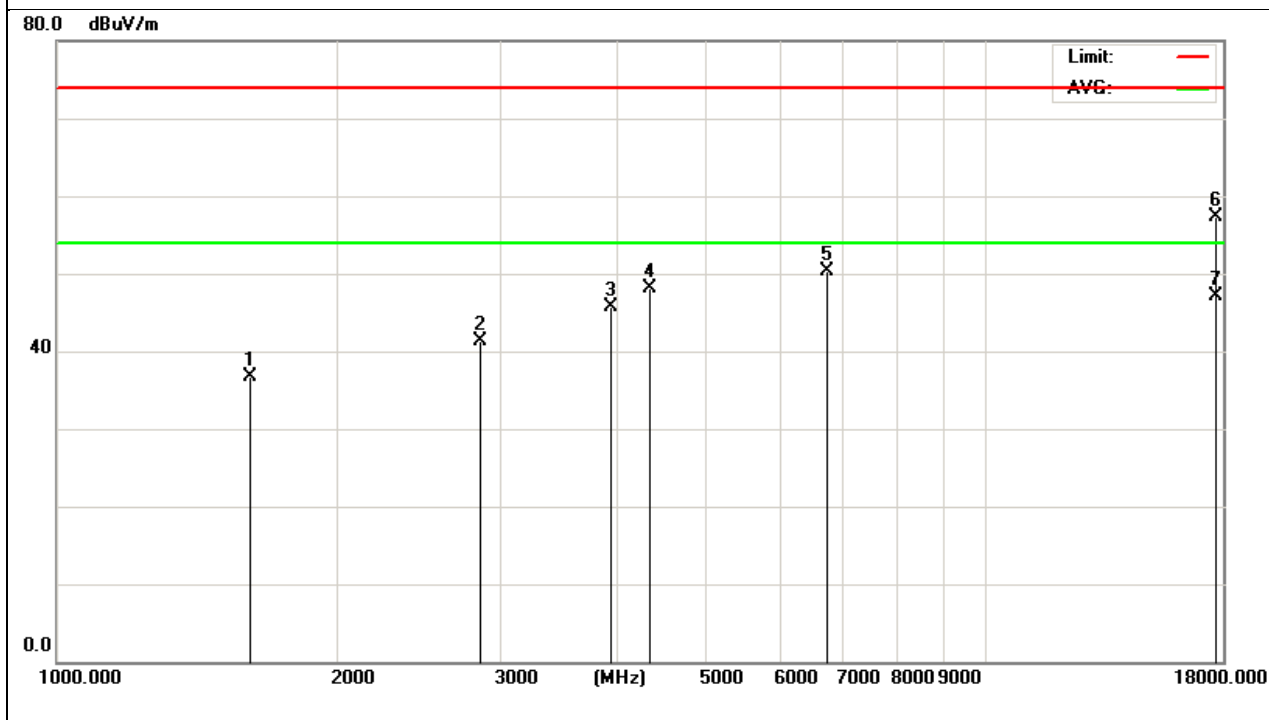
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 64	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1626.517	46.79	-9.86	36.93	74.00	-37.07	peak
2856.905	44.07	-2.61	41.46	74.00	-32.54	peak
3948.237	42.88	3.44	46.32	74.00	-27.68	peak
4338.012	44.42	4.40	48.82	74.00	-25.18	peak
6747.534	43.67	6.01	49.68	74.00	-24.32	peak
17693.295	31.80	24.90	56.7	74.00	-17.3	peak
17693.295	22.61	24.90	47.51	54.00	-6.49	AVG

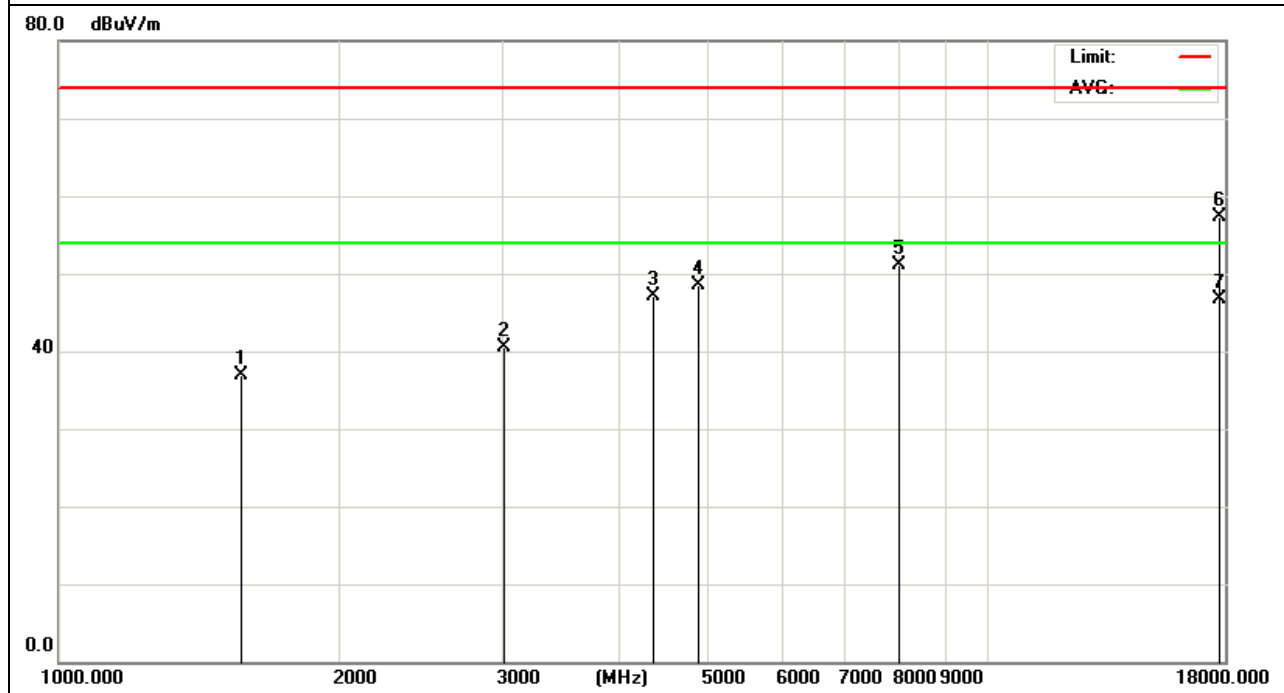
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 64	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1583.435	47.19	-9.88	37.31	74.00	-36.69	peak
3022.600	42.64	-1.65	40.99	74.00	-33.01	peak
4357.081	42.62	4.45	47.07	74.00	-26.93	peak
4868.836	44.71	5.13	49.84	74.00	-24.16	peak
8011.694	40.17	10.40	50.57	74.00	-23.43	peak
17700.369	32.57	24.89	57.46	74.00	-16.54	peak
17700.369	22.32	24.89	47.21	54.00	-6.79	AVG

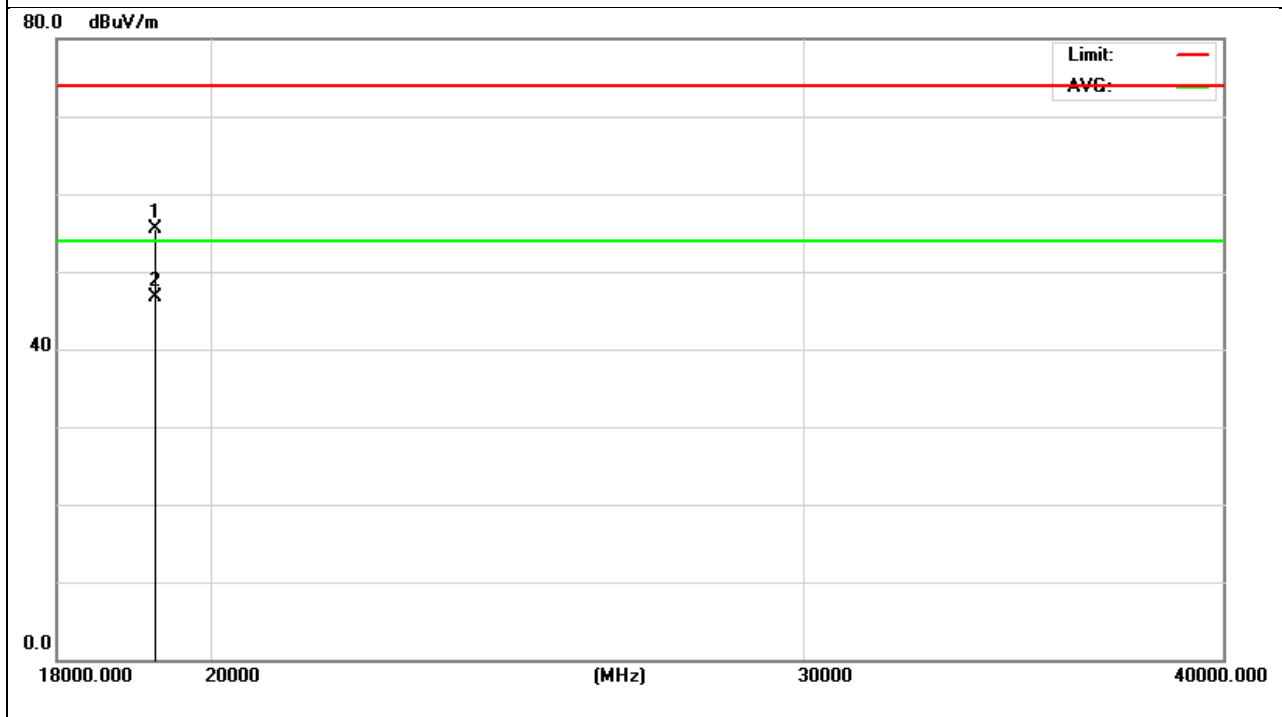
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 64	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
19244.698	40.74	14.15	54.89	74.00	-19.11	peak
19244.698	32.02	14.15	46.17	54.00	-7.83	AVG

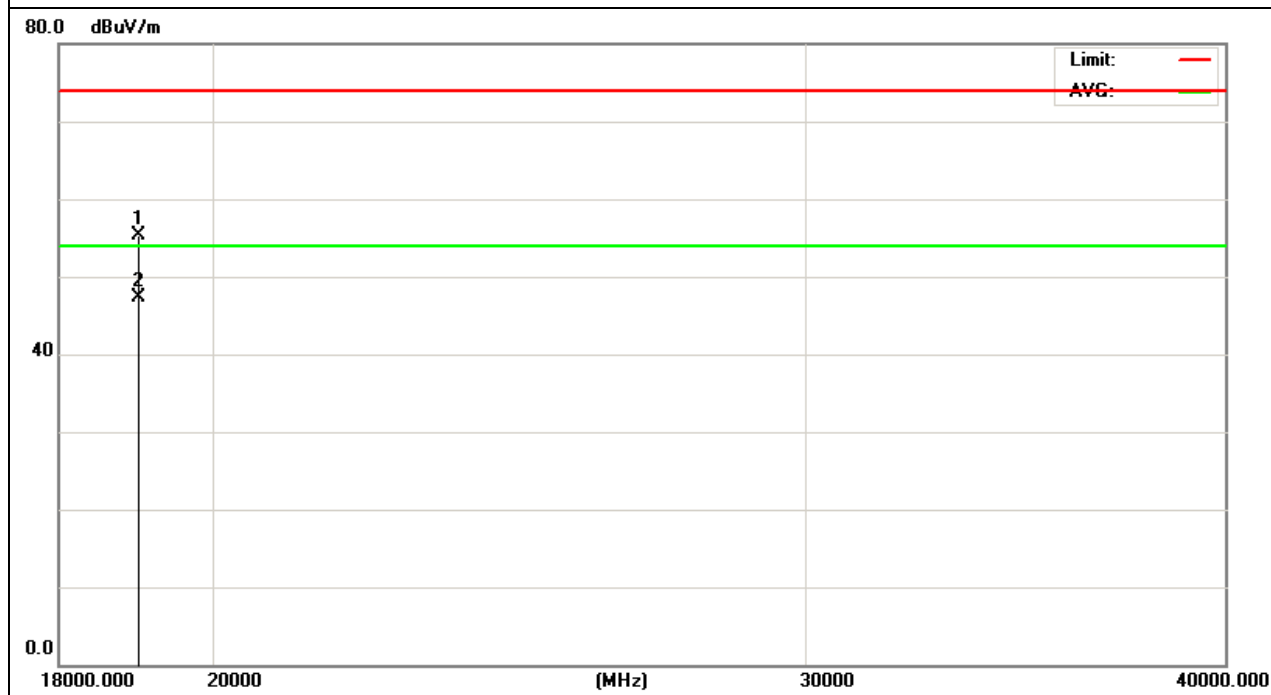
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 64	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
19000.375	41.55	13.77	55.32	74.00	-18.68	peak
19000.375	34.28	13.77	48.05	54.00	-5.95	AVG

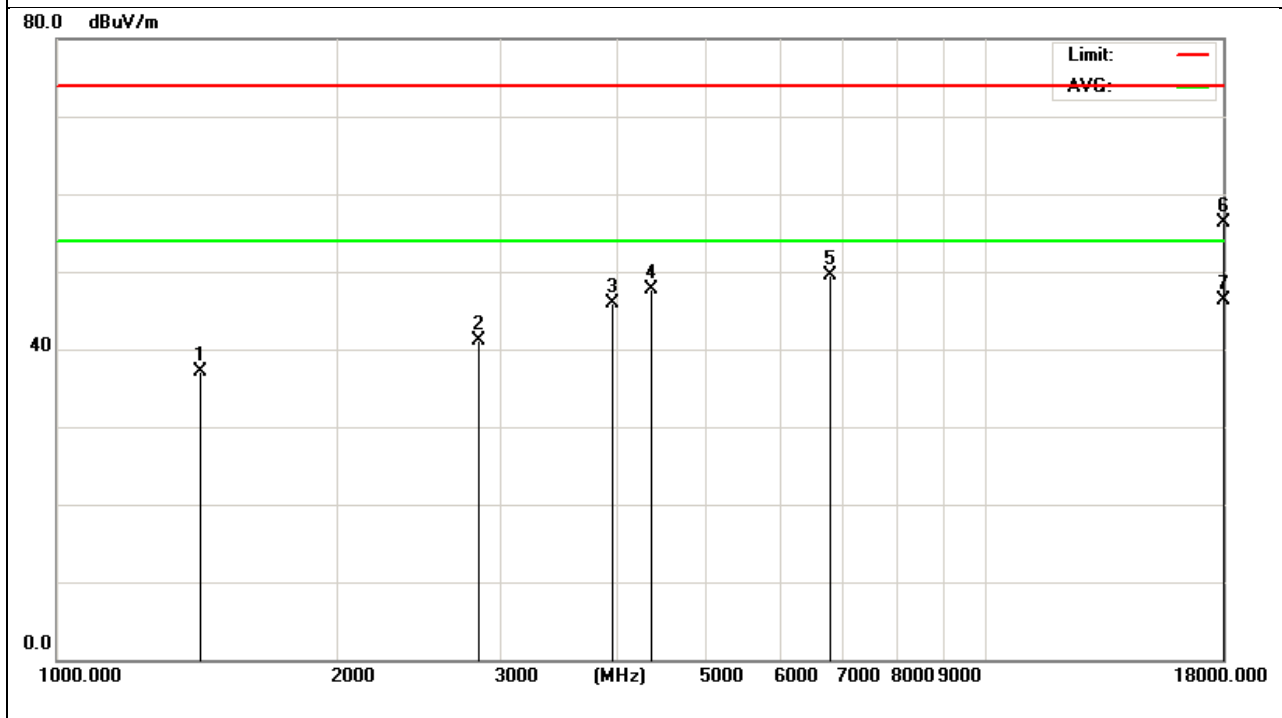
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 52	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1438.328	48.43	-10.20	38.23	74.00	-35.77	peak
2853.558	44.43	-2.63	41.8	74.00	-32.2	peak
3951.730	42.04	3.47	45.51	74.00	-28.49	peak
4367.520	44.82	4.46	49.28	74.00	-24.72	peak
6784.590	43.02	6.04	49.06	74.00	-24.94	peak
17956.963	31.12	24.71	55.83	74.00	-18.17	peak
17956.963	22.02	24.71	46.73	54.00	-7.27	AVG

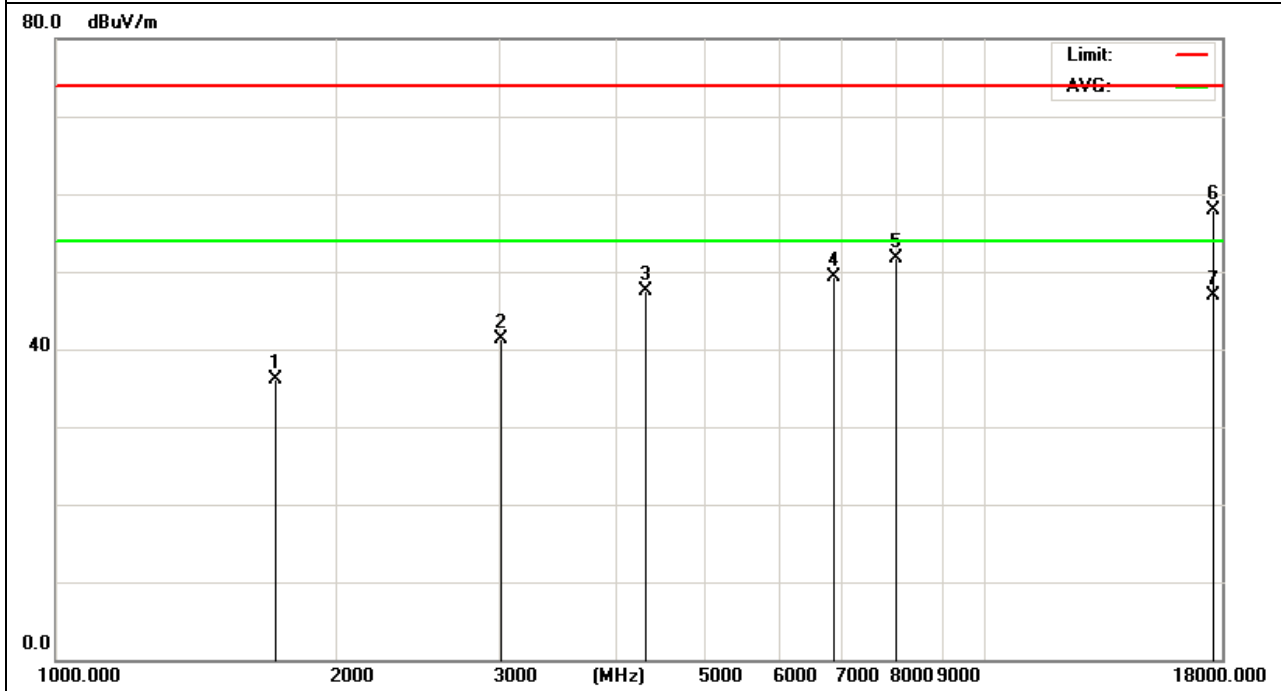
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 52	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1735.816	46.33	-9.57	36.76	74.00	-37.24	peak
3021.219	43.70	-1.65	42.05	74.00	-31.95	peak
4317.148	43.01	4.36	47.37	74.00	-26.63	peak
6876.574	44.48	6.11	50.59	74.00	-23.41	peak
8015.417	41.45	10.40	51.85	74.00	-22.15	peak
17600.114	32.31	24.96	57.27	74.00	-16.73	peak
17600.114	22.41	24.96	47.37	54.00	-6.63	AVG

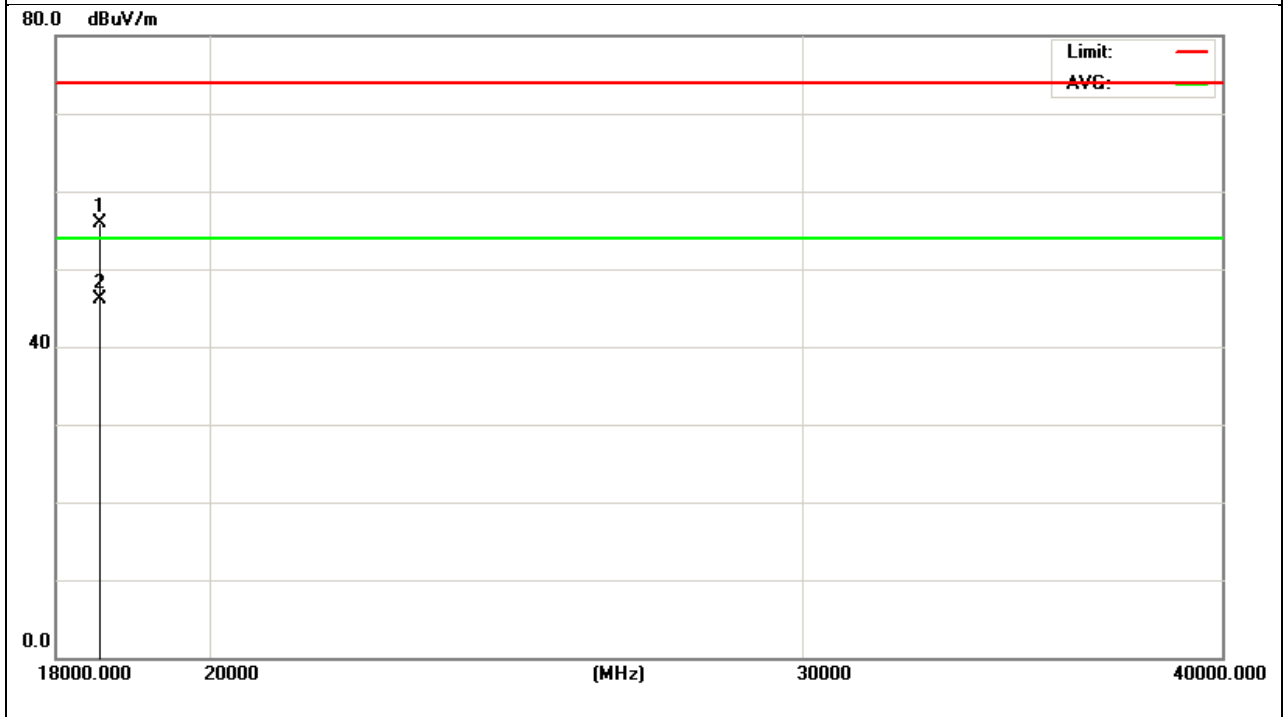
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 52	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
18548.165	42.47	13.11	55.58	74.00	-18.42	peak
18548.165	33.31	13.11	46.42	54.00	-7.58	AVG

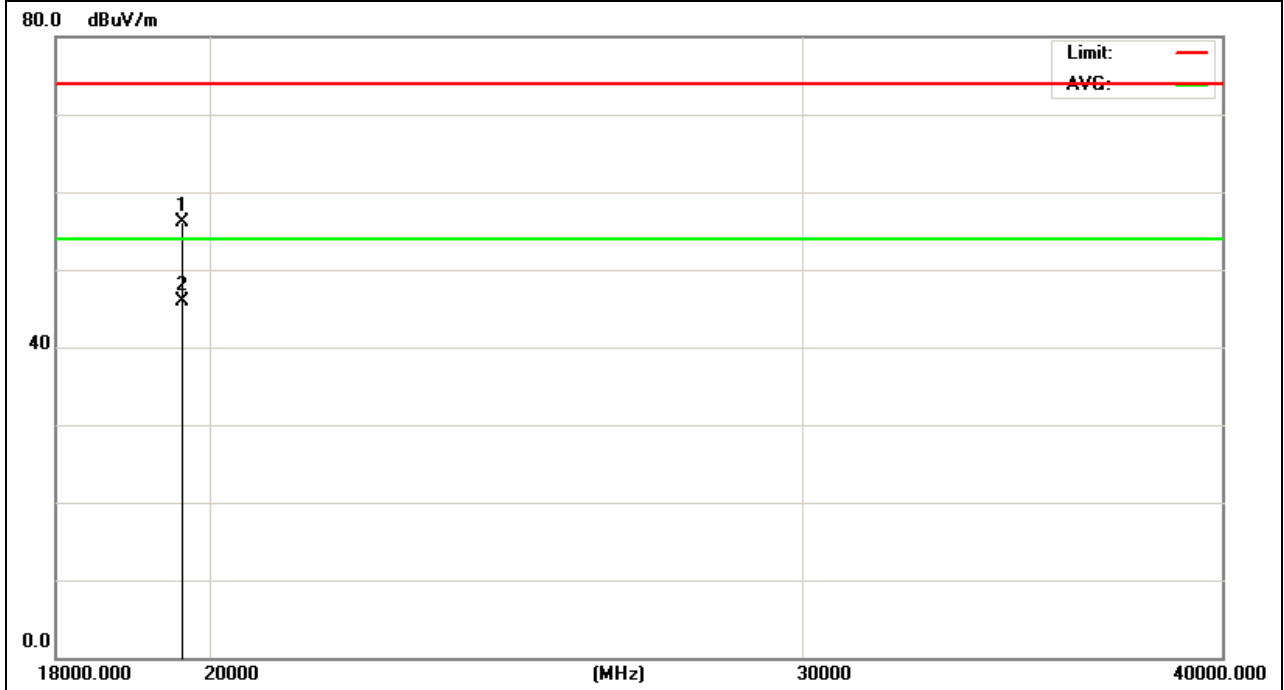
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 52	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
19635.000	41.32	14.72	56.04	74.00	-17.96	peak
19635.000	31.25	14.72	45.97	54.00	-8.03	AVG

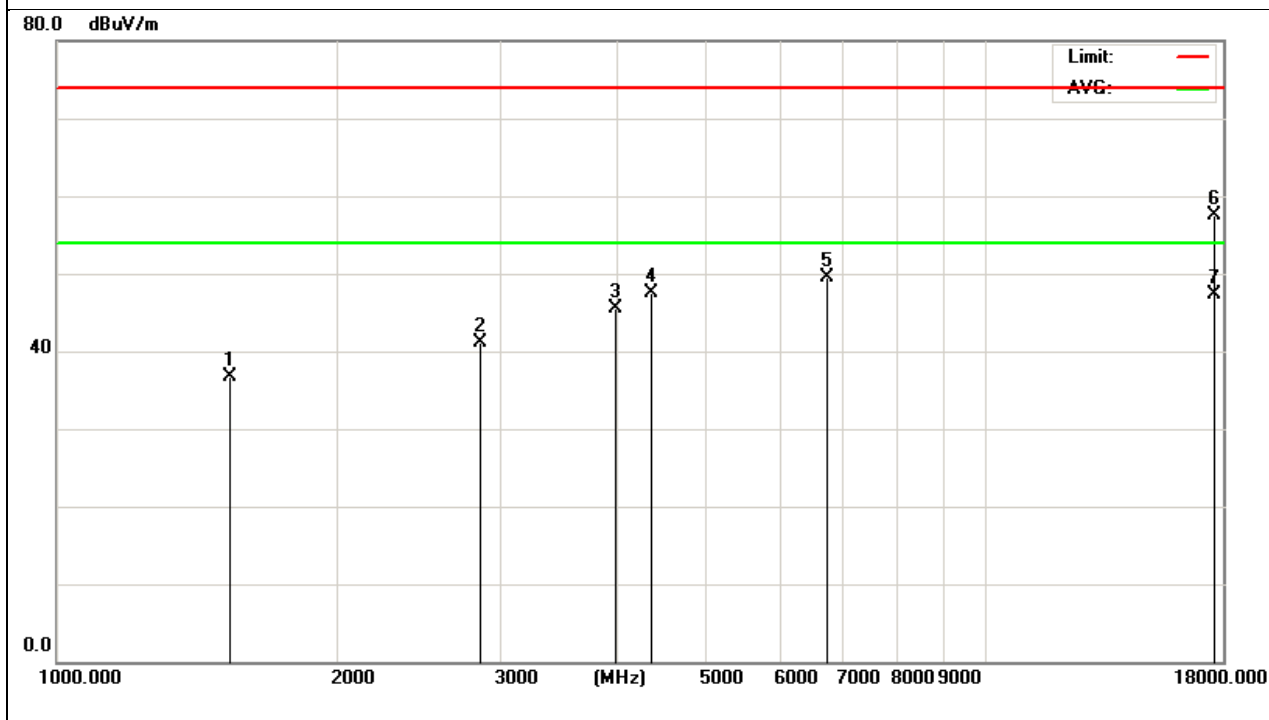
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20Channel 60	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1547.239	47.46	-9.86	37.6	74.00	-36.4	peak
2854.986	43.61	-2.62	40.99	74.00	-33.01	peak
3987.498	42.10	3.74	45.84	74.00	-28.16	peak
4368.377	44.56	4.46	49.02	74.00	-24.98	peak
6748.820	43.69	6.01	49.7	74.00	-24.3	peak
17552.099	32.40	25.00	57.4	74.00	-16.6	peak
17552.099	23.38	25.00	48.38	54.00	-5.62	AVG

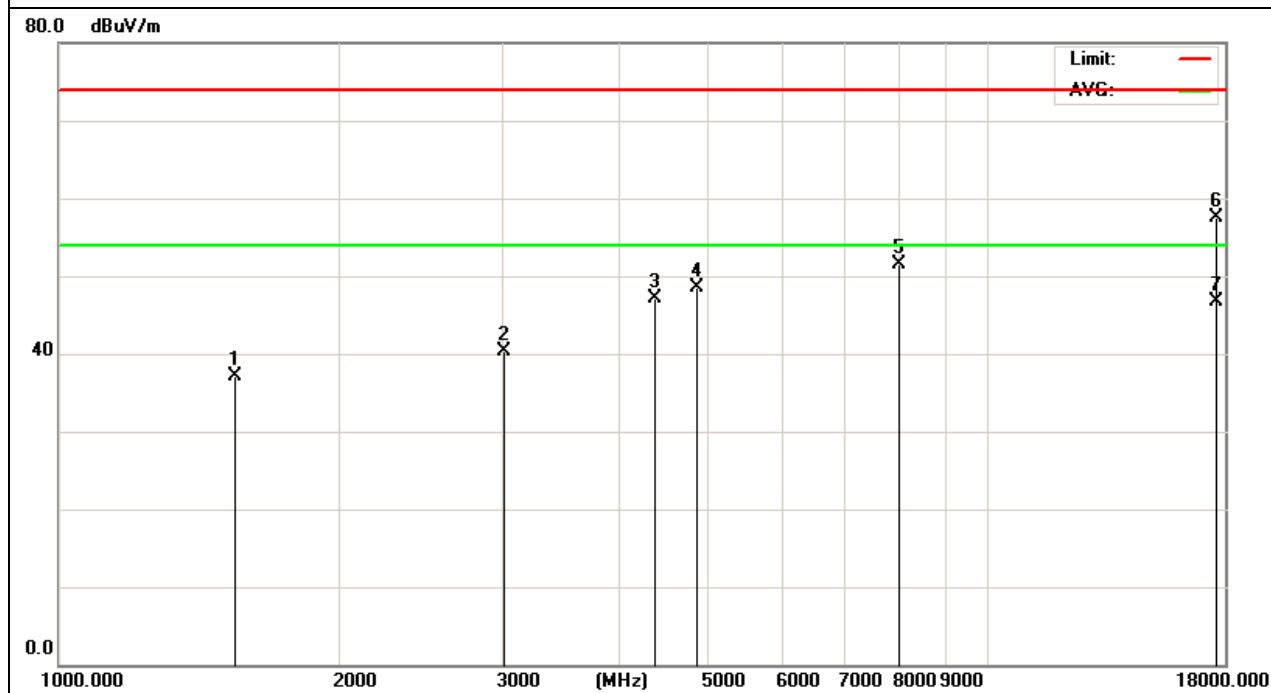
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20Channel 60	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1557.891	48.13	-9.87	38.26	74.00	-35.74	peak
3021.894	42.11	-1.65	40.46	74.00	-33.54	peak
4370.914	42.20	4.47	46.67	74.00	-27.33	peak
4849.259	44.90	5.11	50.01	74.00	-23.99	peak
8013.326	41.19	10.40	51.59	74.00	-22.41	peak
17595.618	32.74	24.97	57.71	74.00	-16.29	peak
17595.618	22.21	24.97	47.18	54.00	-6.82	AVG

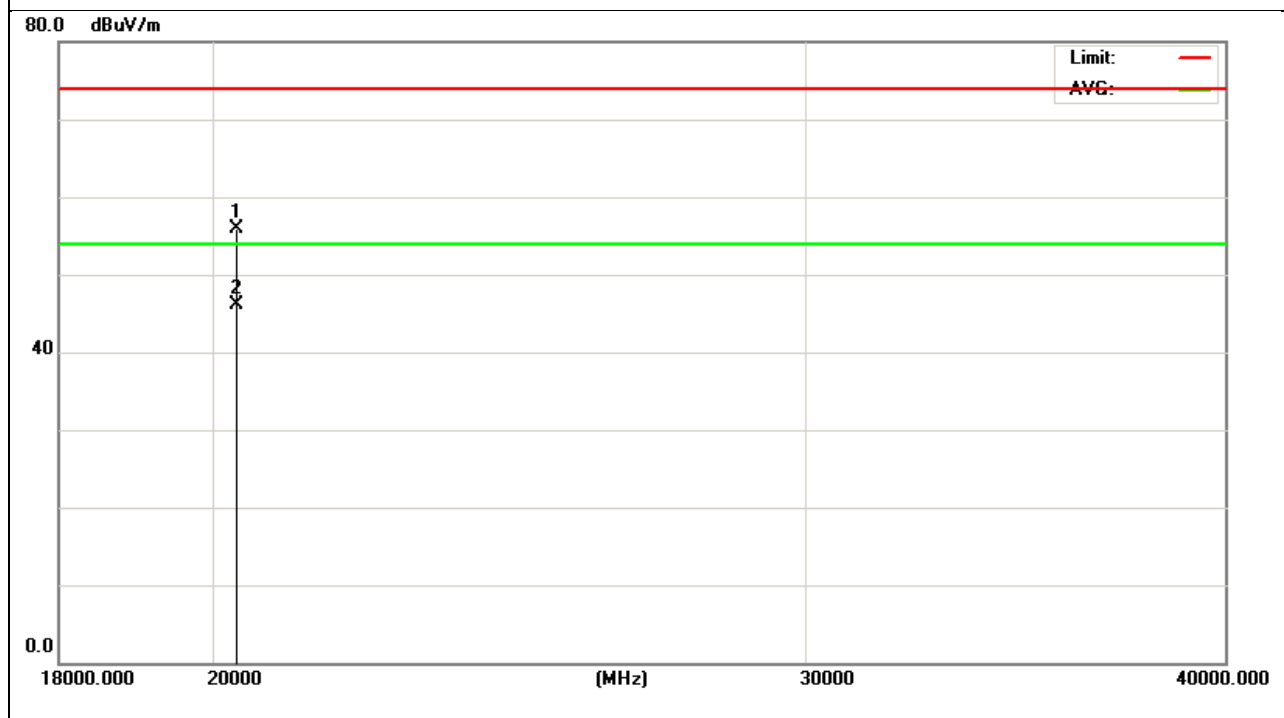
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20Channel 60	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
20314.364	39.54	15.74	55.28	74.00	-18.72	peak
20314.364	30.48	15.74	46.22	54.00	-7.78	AVG

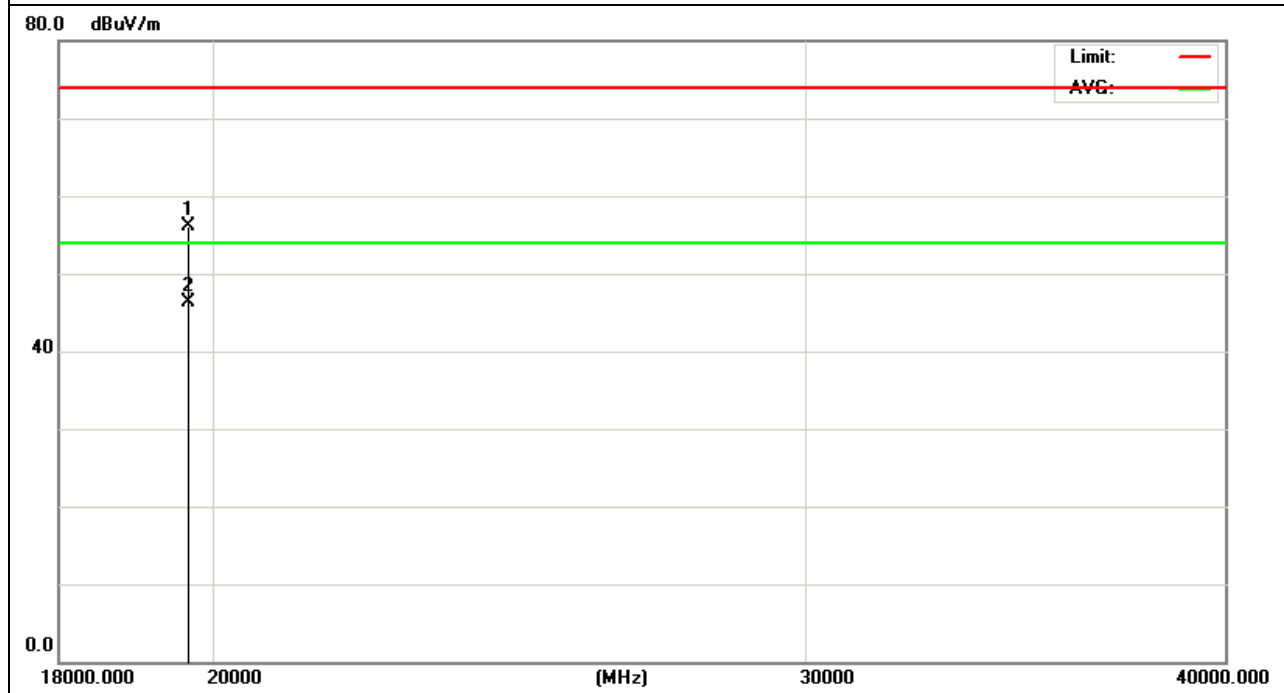
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20Channel 60	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
19667.056	41.74	14.77	56.51	74.00	-17.49	peak
19667.056	32.98	14.77	47.75	54.00	-6.25	AVG

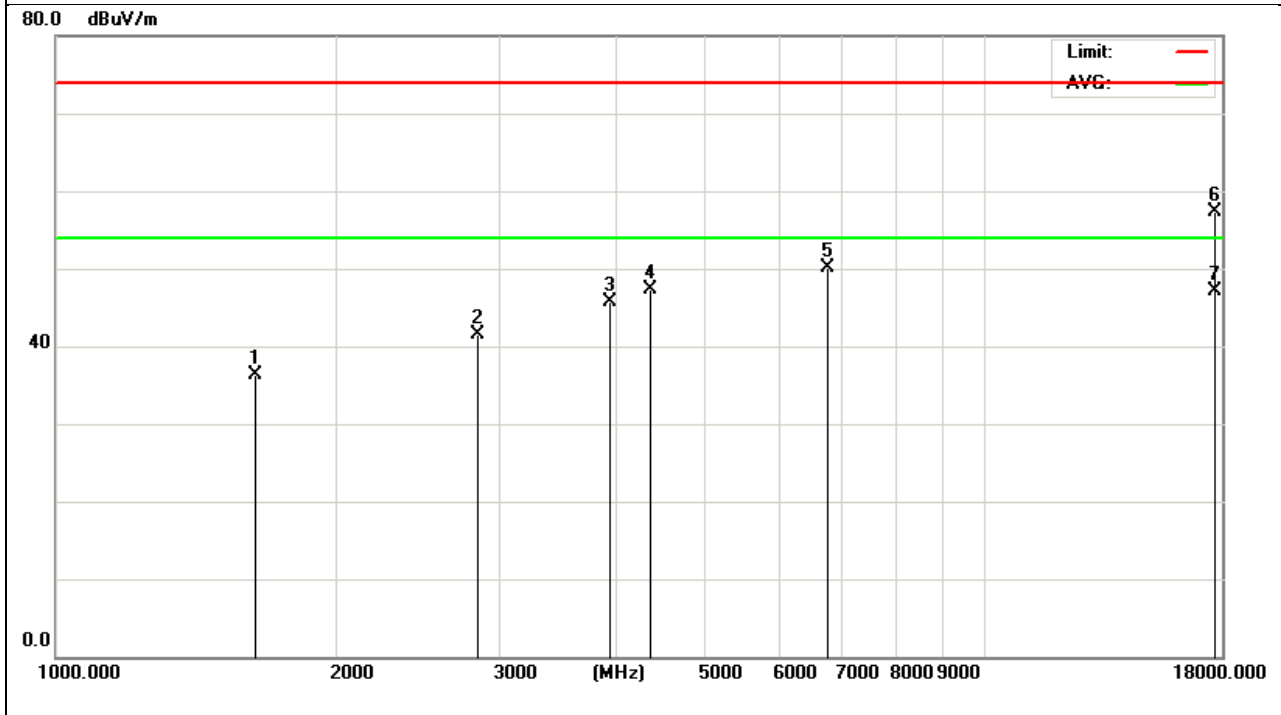
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 64	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1650.095	46.53	-9.79	36.74	74.00	-37.26	peak
2853.120	44.36	-2.63	41.73	74.00	-32.27	peak
3948.663	42.79	3.44	46.23	74.00	-27.77	peak
4365.461	44.13	4.46	48.59	74.00	-25.41	peak
6775.113	44.18	6.03	50.21	74.00	-23.79	peak
17659.929	32.45	24.92	57.37	74.00	-16.63	peak
17659.929	22.96	24.92	47.88	54.00	-6.12	AVG

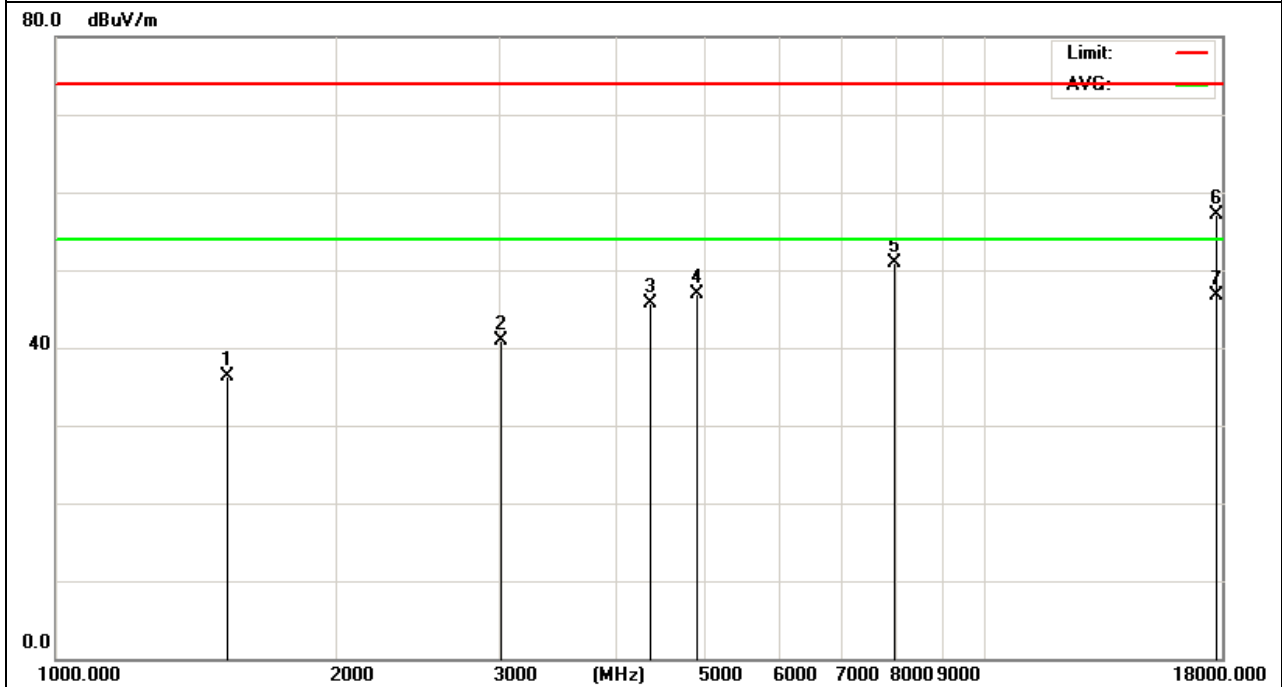
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 64	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1542.844	47.21	-9.86	37.35	74.00	-36.65	peak
3022.811	43.19	-1.64	41.55	74.00	-32.45	peak
4366.914	41.41	4.46	45.87	74.00	-28.13	peak
4898.105	42.97	5.16	48.13	74.00	-25.87	peak
7983.259	40.09	10.32	50.41	74.00	-23.59	peak
17702.320	31.93	24.89	56.82	74.00	-17.18	peak
17702.320	22.25	24.89	47.14	54.00	-6.86	AVG

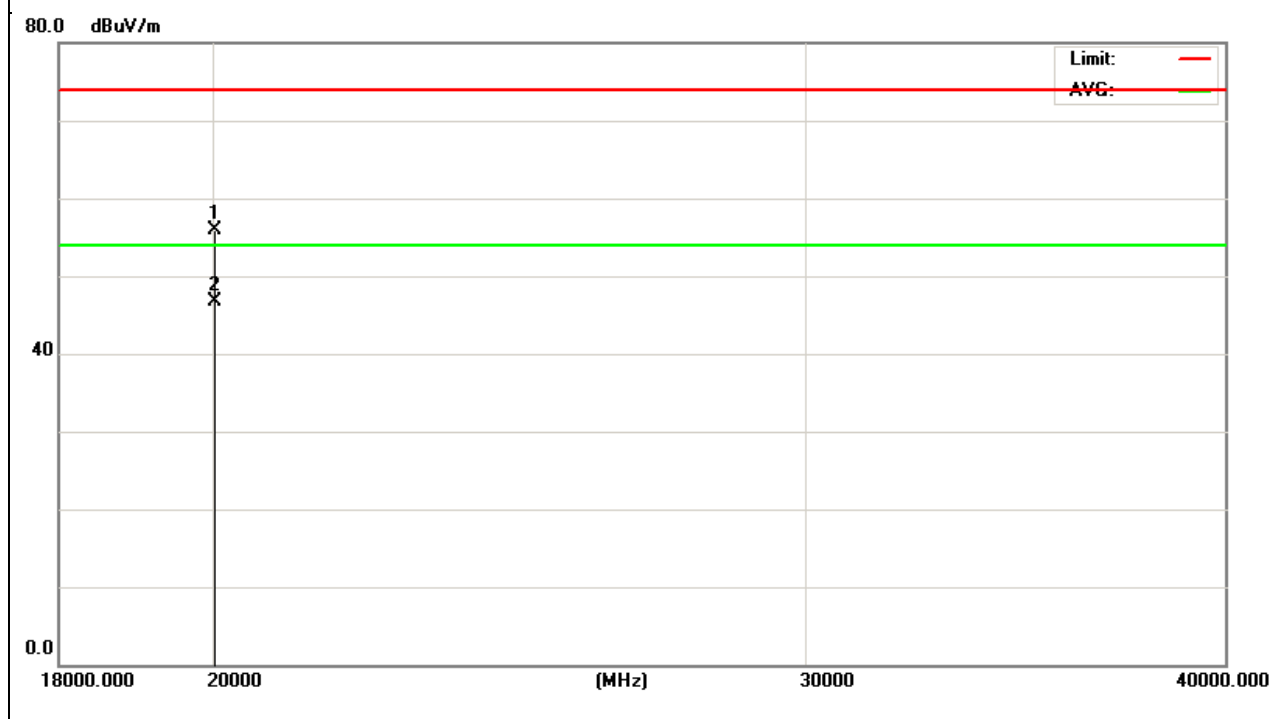
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 64	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
20029.719	40.40	15.31	55.71	74.00	-18.29	peak
20029.719	32.12	15.31	47.43	54.00	-6.57	AVG

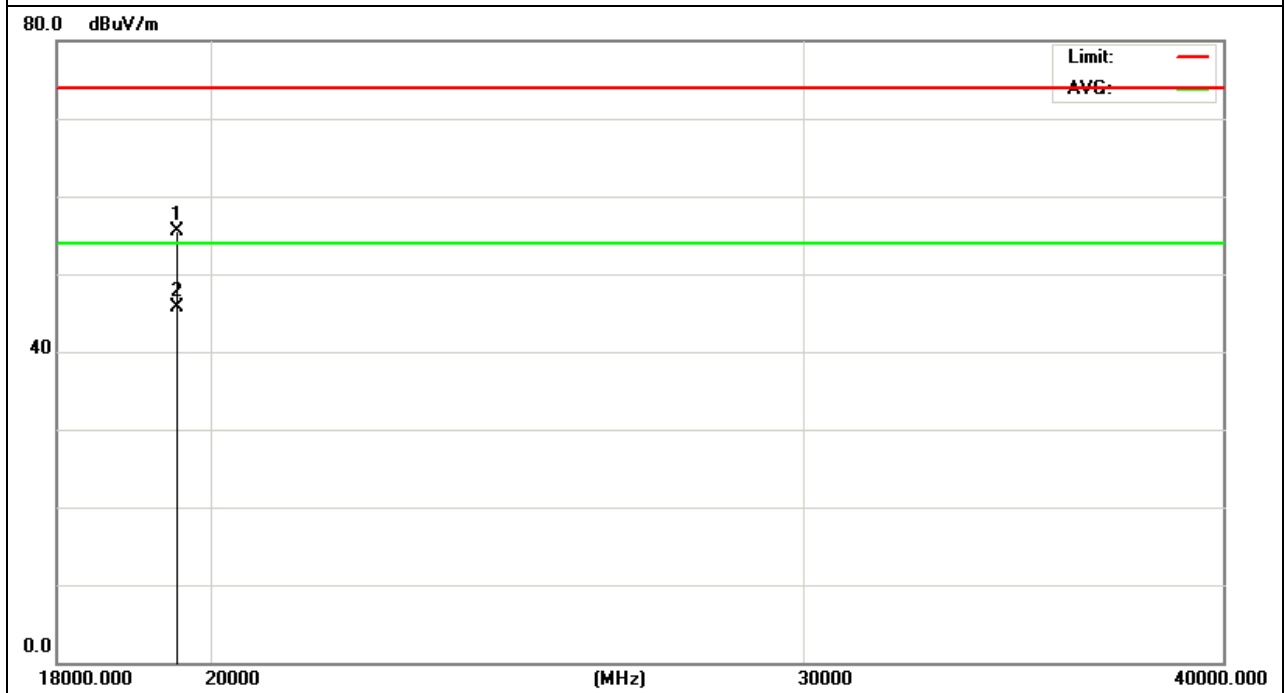
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 64	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
19527.533	40.95	14.56	55.51	74.00	-18.49	peak
19527.533	31.14	14.56	45.7	54.00	-8.3	AVG

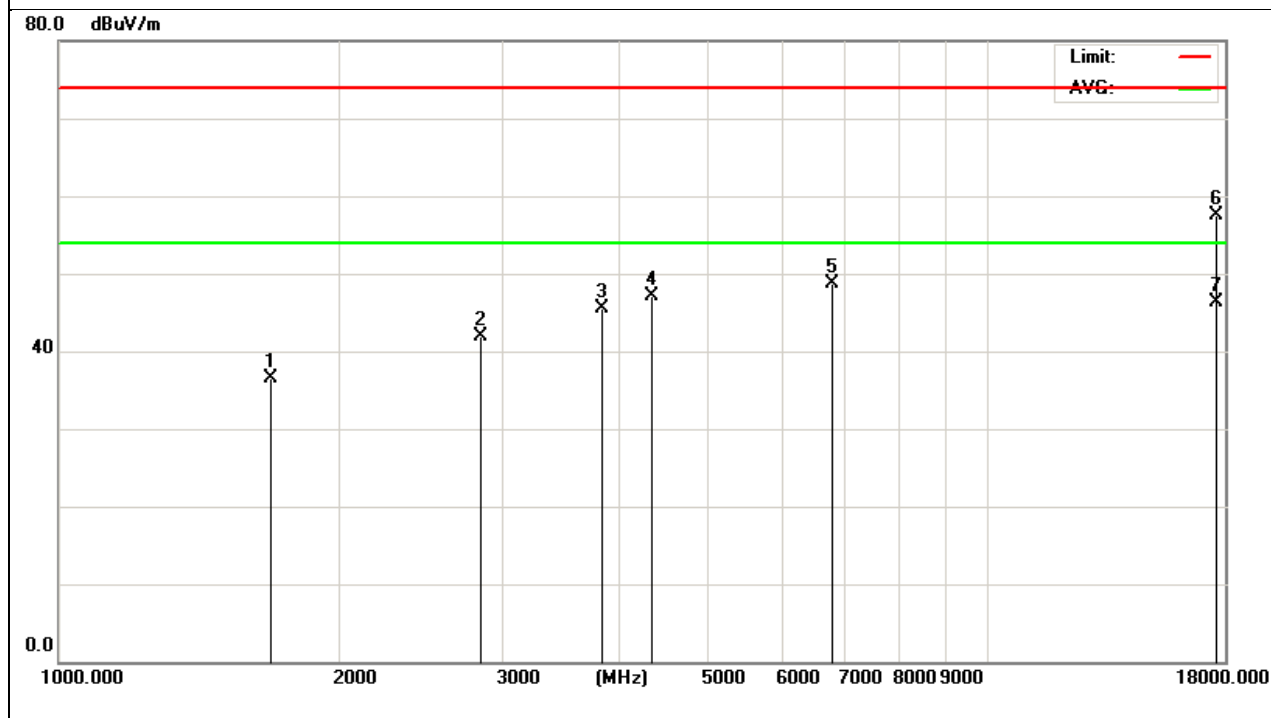
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 54	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1703.739	47.08	-9.66	37.42	74.00	-36.58	peak
2850.814	44.77	-2.65	42.12	74.00	-31.88	peak
3845.907	43.02	2.69	45.71	74.00	-28.29	peak
4332.621	43.51	4.39	47.9	74.00	-26.1	peak
6784.264	42.38	6.03	48.41	74.00	-25.59	peak
17632.166	32.54	24.94	57.48	74.00	-16.52	peak
17632.166	22.41	24.94	47.35	54.00	-6.65	AVG

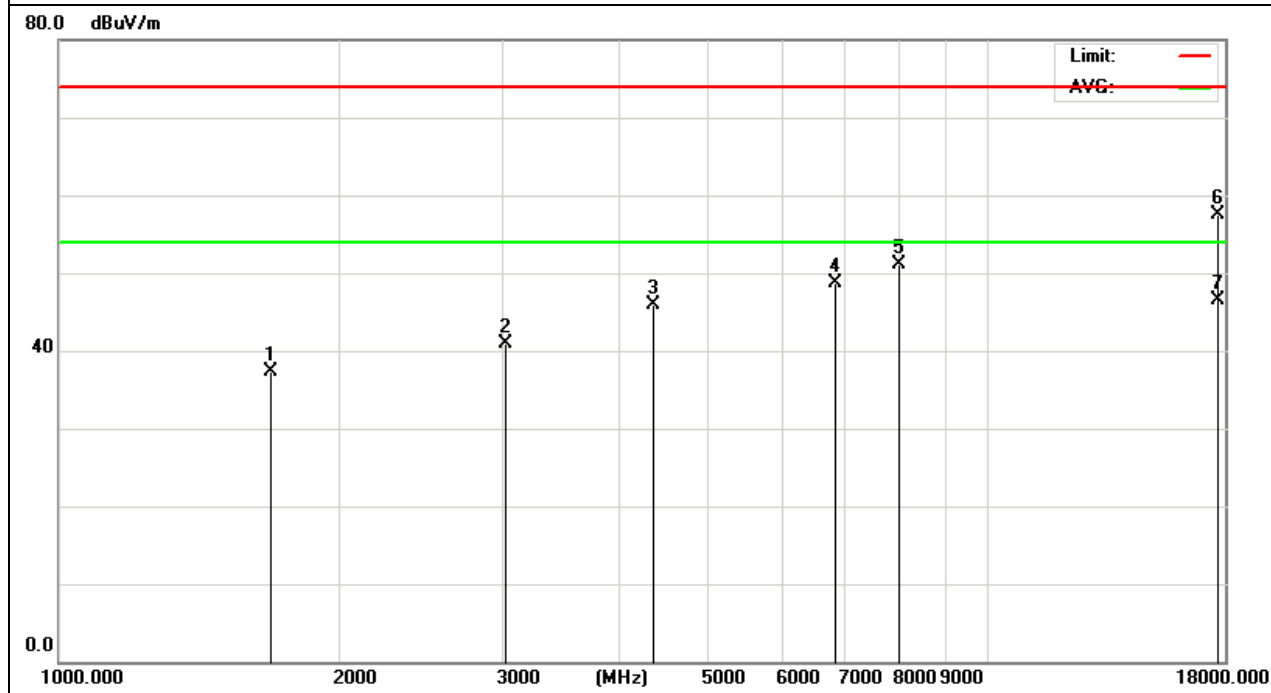
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 54	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1707.121	47.15	-9.66	37.49	74.00	-36.51	peak
3024.906	43.03	-1.64	41.39	74.00	-32.61	peak
4367.187	41.19	4.46	45.65	74.00	-28.35	peak
6847.817	43.37	6.08	49.45	74.00	-24.55	peak
8015.111	40.87	10.40	51.27	74.00	-22.73	peak
17656.032	31.87	24.93	56.8	74.00	-17.2	peak
17656.032	22.70	24.93	47.63	54.00	-6.37	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 54	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
19659.080	41.07	14.76	55.83	74.00	-18.17	peak
19659.080	31.34	14.76	46.10	54.00	-7.90	AVG

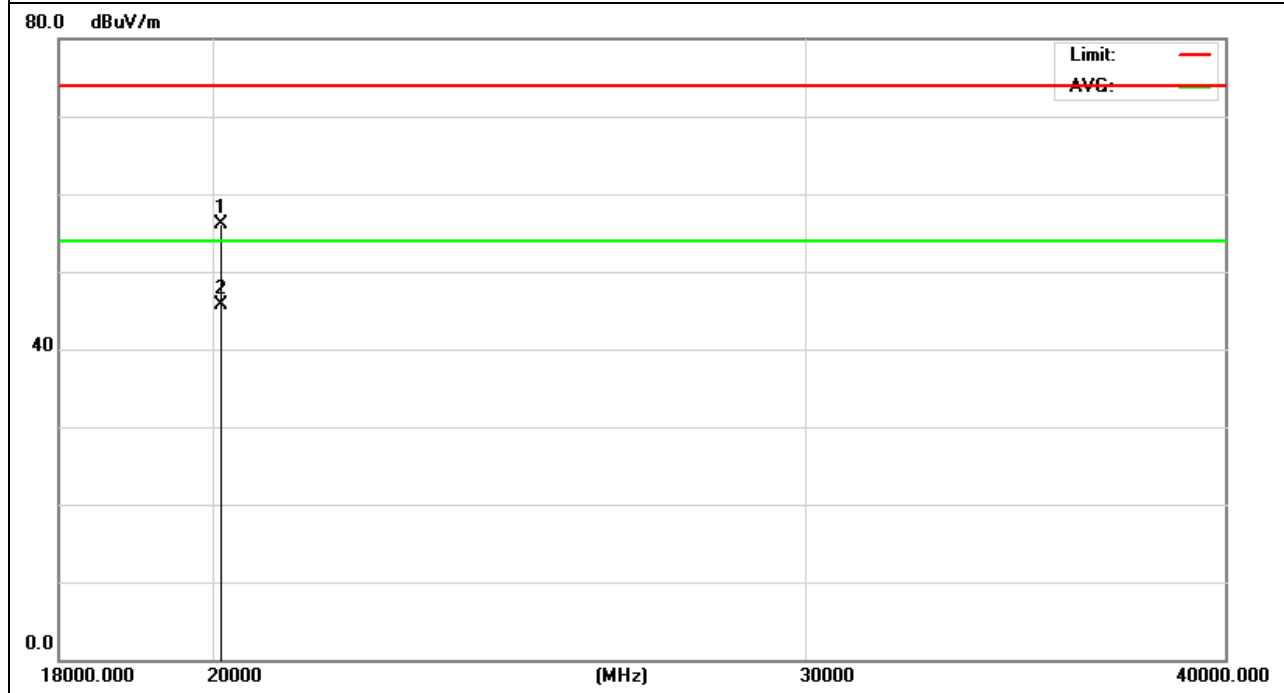
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 54	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
20106.894	40.23	15.42	55.65	74.00	-18.35	peak
20106.894	31.14	15.42	46.56	54.00	-7.44	AVG

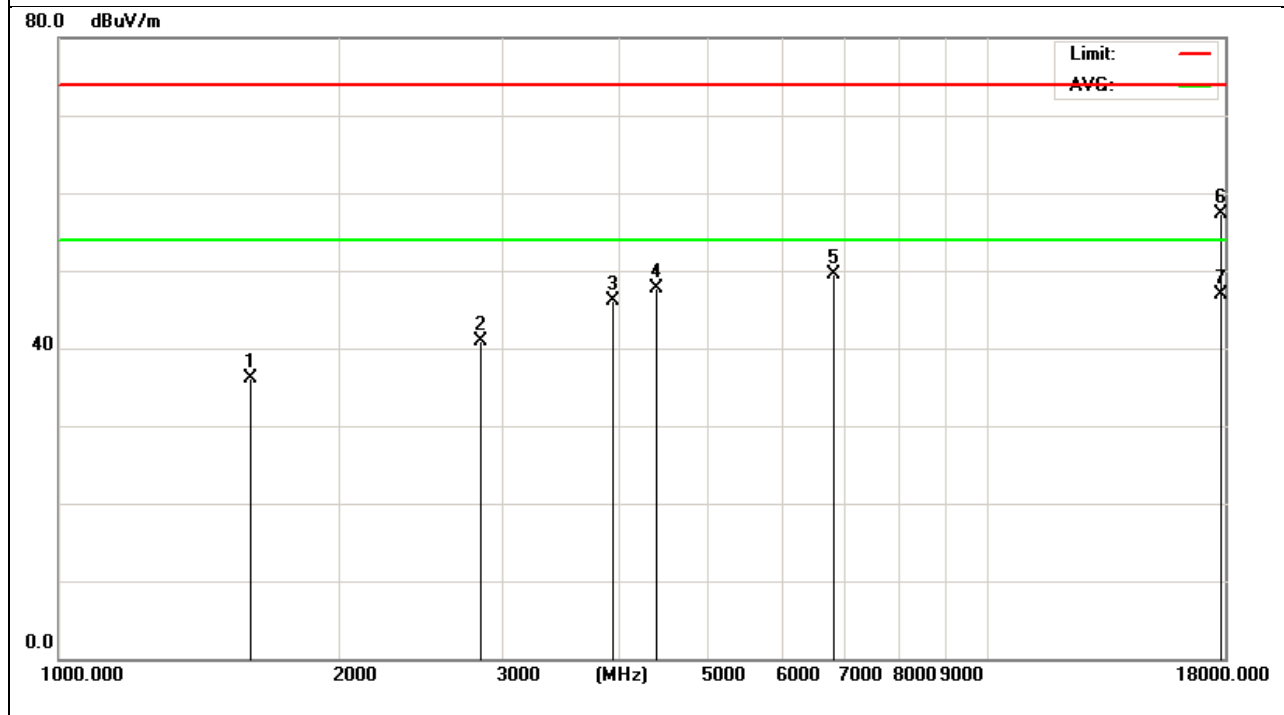
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 62	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1617.159	46.99	-9.89	37.10	74.00	-36.90	peak
2850.739	43.81	-2.64	41.17	74.00	-32.83	peak
3947.004	43.04	3.43	46.47	74.00	-27.53	peak
4390.265	44.17	4.50	48.67	74.00	-25.33	peak
6831.894	43.30	6.08	49.38	74.00	-24.62	peak
17761.936	31.71	24.85	56.56	74.00	-17.44	peak
17761.936	22.91	24.85	47.76	54.00	-6.24	AVG

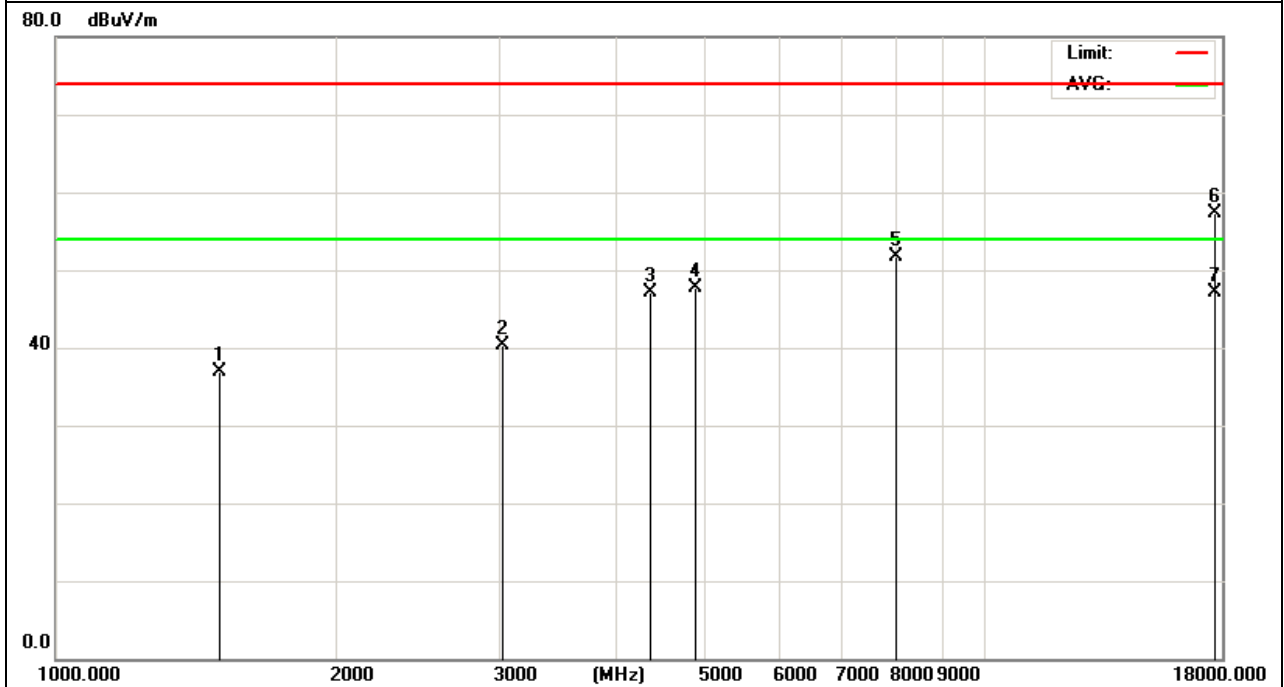
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 62	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1514.563	47.82	-9.85	37.97	74.00	-36.03	peak
3023.626	42.46	-1.64	40.82	74.00	-33.18	peak
4360.364	43.15	4.45	47.6	74.00	-26.4	peak
4865.168	44.01	5.13	49.14	74.00	-24.86	peak
8013.310	40.71	10.40	51.11	74.00	-22.89	peak
17664.928	31.99	24.92	56.91	74.00	-17.09	peak
17664.928	22.51	24.92	47.43	54.00	-6.57	AVG

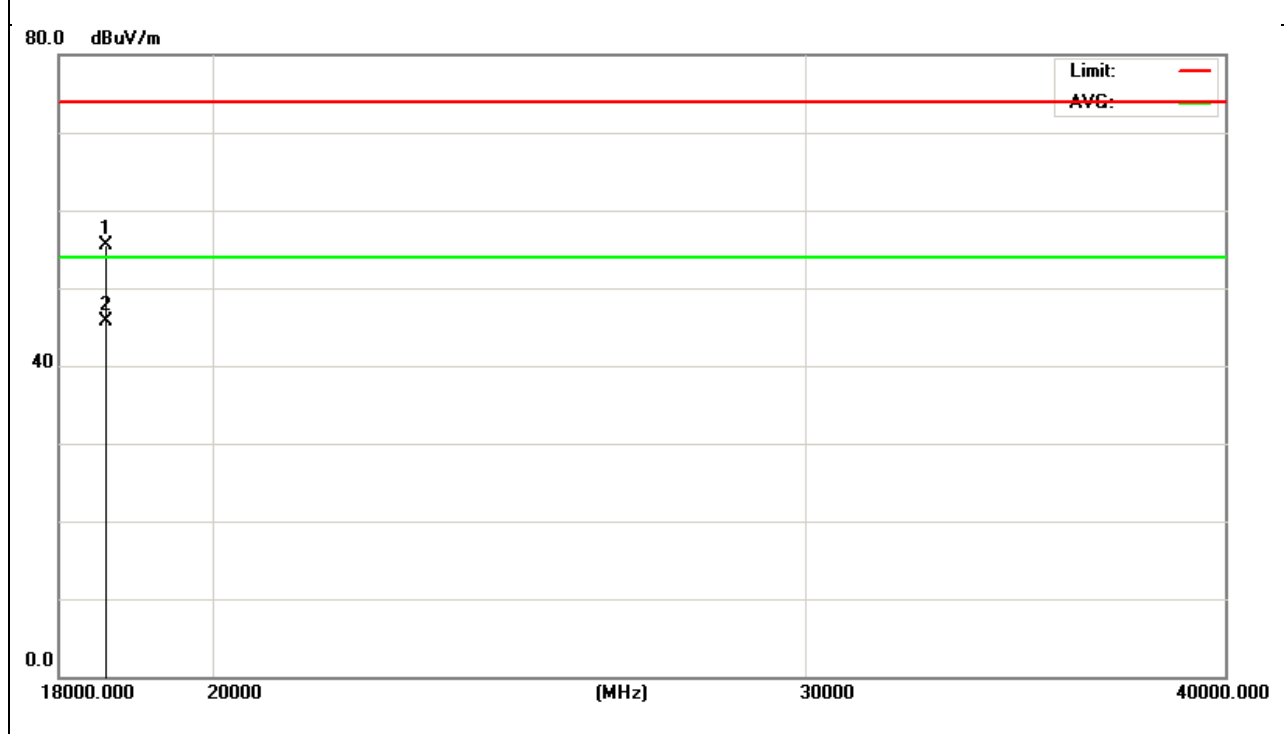
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 62	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
18601.449	42.01	13.18	55.19	74.00	-18.81	peak
18601.449	33.00	13.18	46.18	54.00	-7.82	AVG

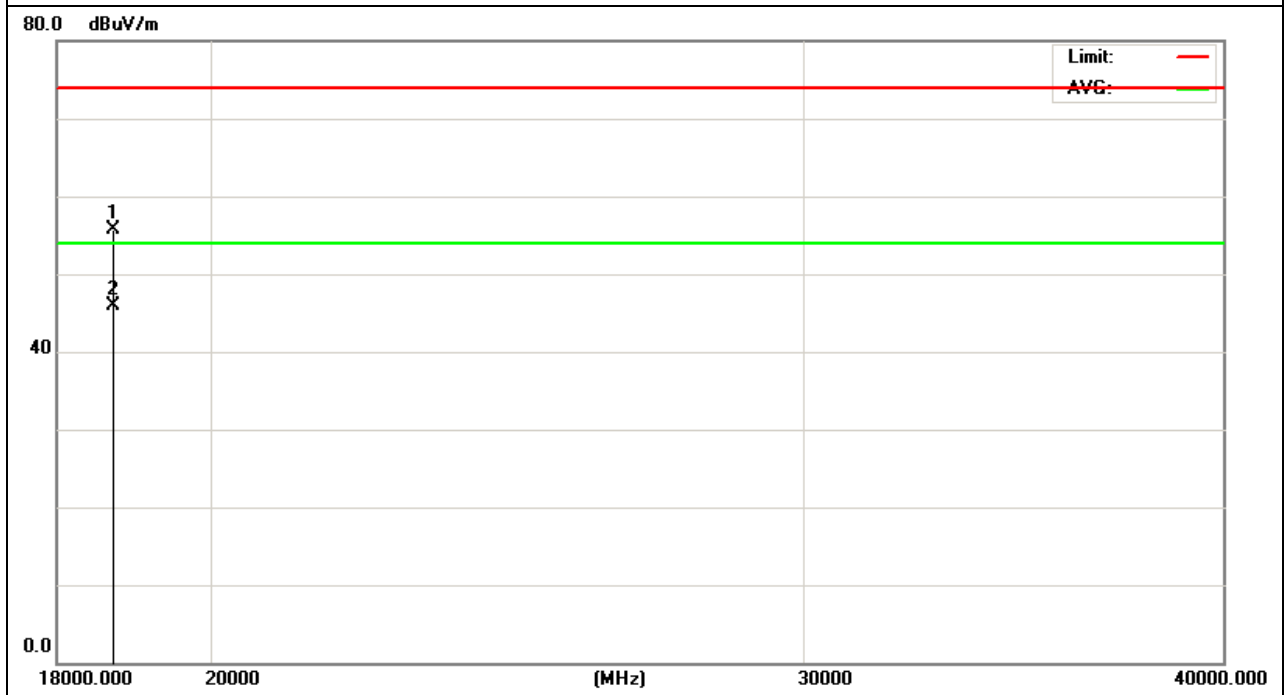
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 62	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
18704.810	42.22	13.34	55.56	74.00	-18.44	peak
18704.810	32.80	13.34	46.14	54.00	-7.86	AVG

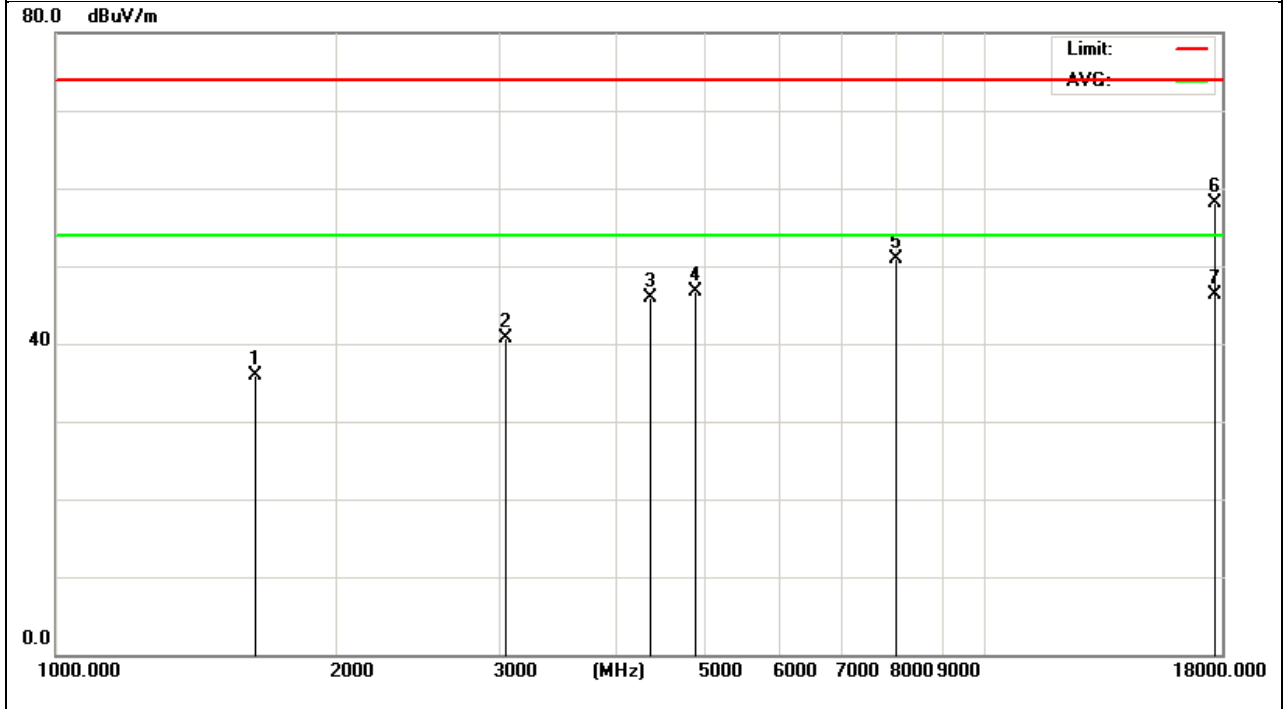
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11ac80 Channel 58	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1653.061	46.29	-9.80	36.49	74.00	-37.51	peak
3053.661	42.11	-1.57	40.54	74.00	-33.46	peak
4369.403	41.18	4.46	45.64	74.00	-28.36	peak
4861.860	42.61	5.12	47.73	74.00	-26.27	peak
8015.181	40.22	10.40	50.62	74.00	-23.38	peak
17696.207	33.20	24.90	58.1	74.00	-15.9	peak
17696.207	22.03	24.90	46.93	54.00	-7.07	AVG

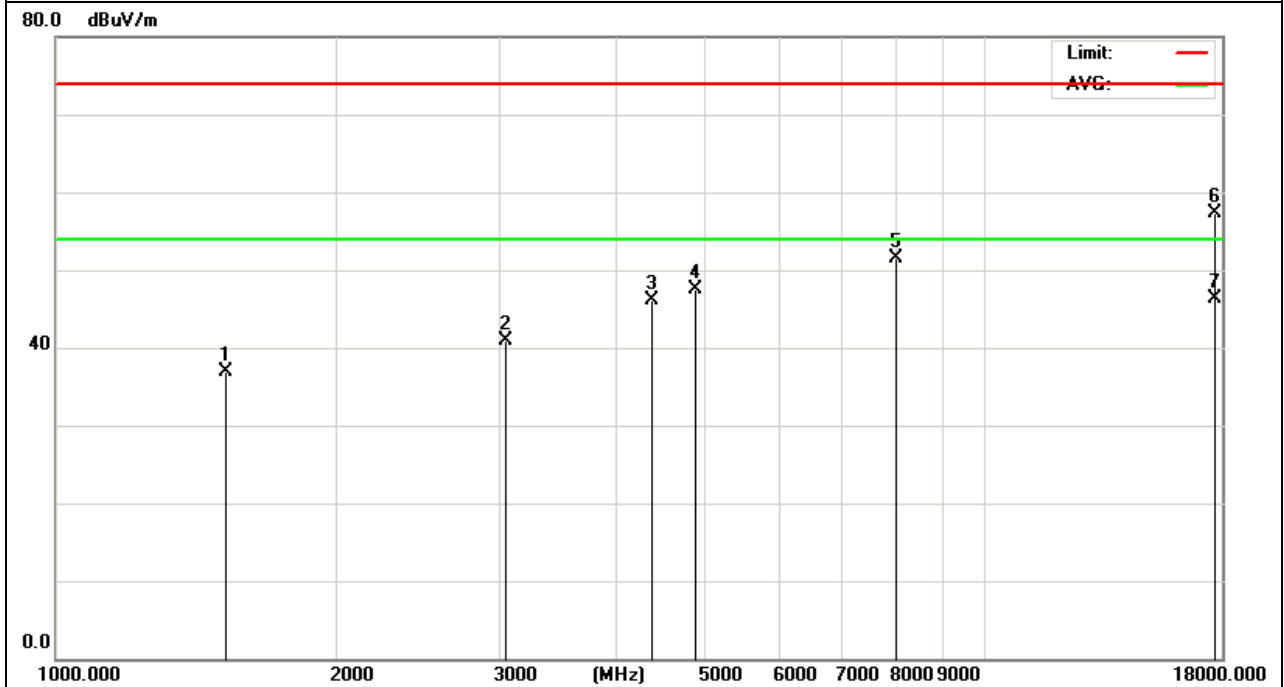
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11ac80 Channel 58	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1536.461	47.38	-9.86	37.52	74.00	-36.48	peak
3052.458	42.85	-1.57	41.28	74.00	-32.72	peak
4371.698	41.88	4.47	46.35	74.00	-27.65	peak
4868.325	43.29	5.13	48.42	74.00	-25.58	peak
8013.498	41.03	10.40	51.43	74.00	-22.57	peak
17694.899	32.39	24.90	57.29	74.00	-16.71	peak
17694.899	22.62	24.90	47.52	54.00	-6.48	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11ac80 Channel 58	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
19230.103	40.70	14.11	54.81	74.00	-19.19	
19230.103	33.35	14.11	47.46	54.00	-6.54	AVG

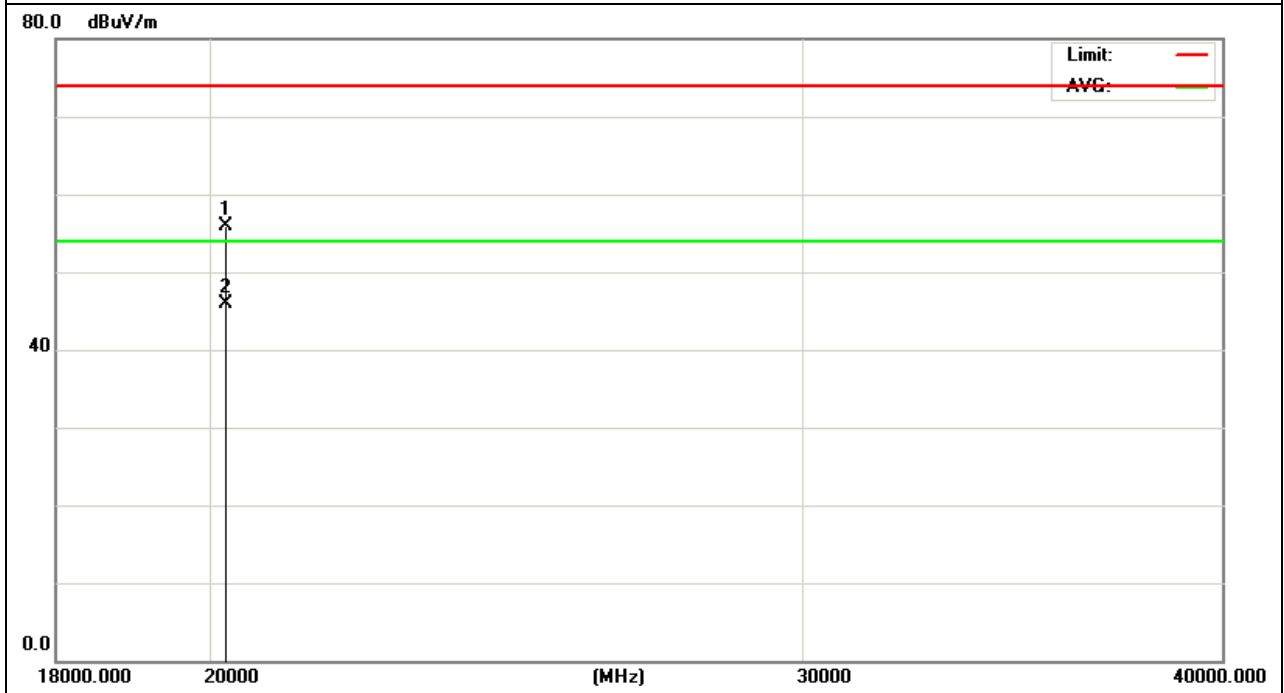
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11ac80 Channel 58	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
20211.450	41.14	15.58	56.72	74.00	-17.28	peak
20211.450	30.32	15.58	45.9	54.00	-8.1	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.

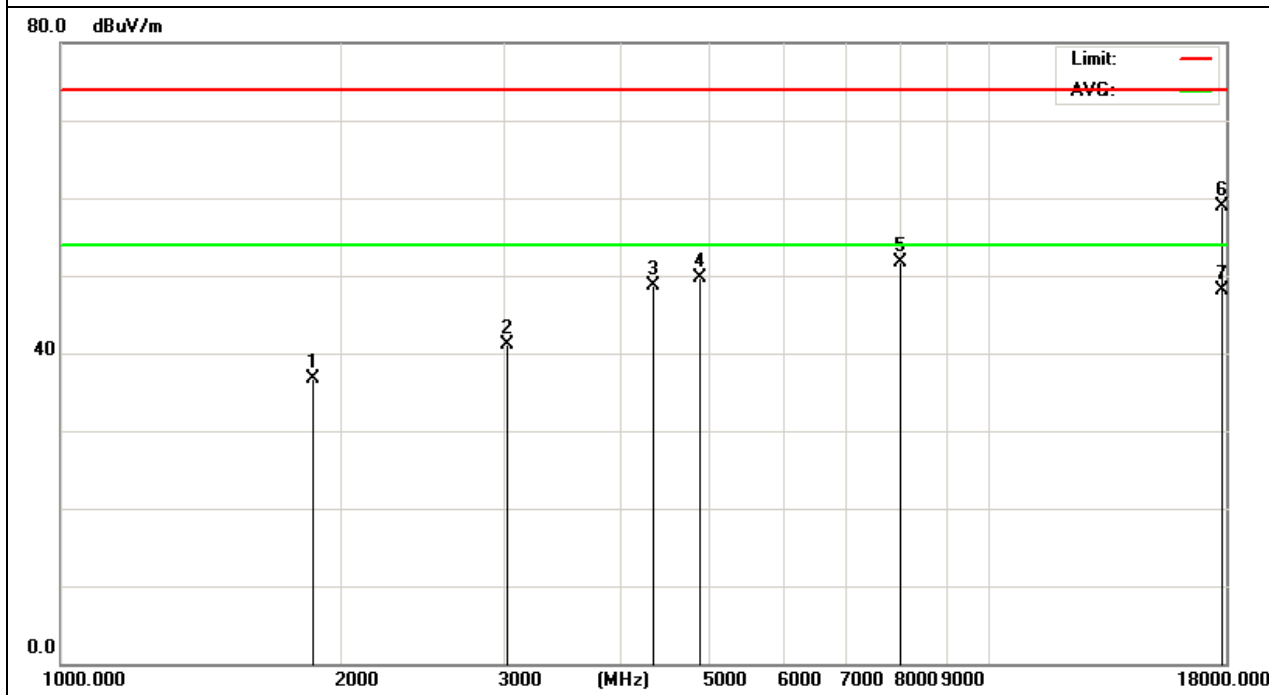


5.47GHz~5.725GHz:

EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 100	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1869.567	46.26	-9.46	36.80	74.00	-37.20	peak
3021.248	42.71	-1.63	41.08	74.00	-32.92	peak
4335.206	44.28	4.40	48.68	74.00	-25.32	peak
4887.559	44.56	5.14	49.70	74.00	-24.30	peak
8011.547	41.33	10.40	51.73	74.00	-22.27	peak
17789.000	34.05	24.83	58.88	74.00	-15.12	peak
17789.000	23.36	24.83	48.19	54.00	-5.81	AVG

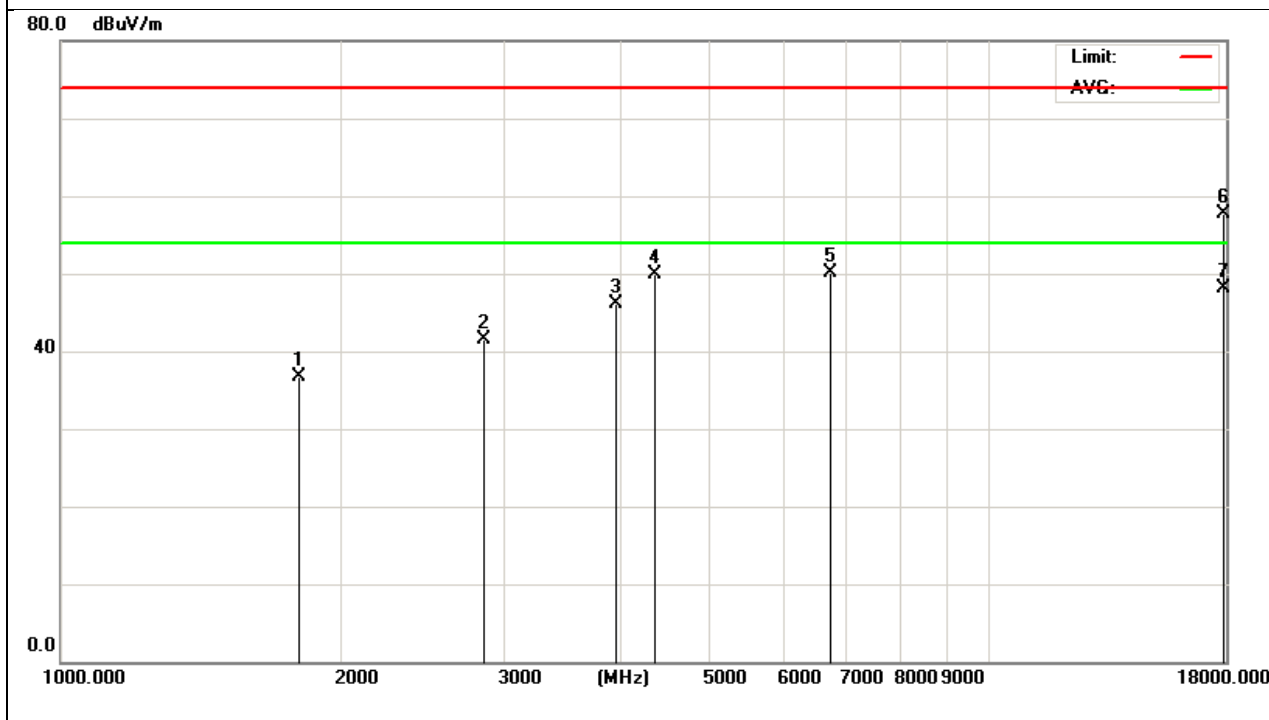
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 100	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1798.367	46.13	-9.34	36.79	74.00	-37.21	peak
2854.159	44.01	-2.59	41.42	74.00	-32.58	peak
3955.650	42.58	3.51	46.09	74.00	-27.91	peak
4356.591	45.36	4.45	49.81	74.00	-24.19	peak
6744.258	44.17	6.02	50.19	74.00	-23.81	peak
17889.232	33.02	24.76	57.78	74.00	-16.22	peak
17889.232	23.41	24.76	48.17	54.00	-5.83	AVG

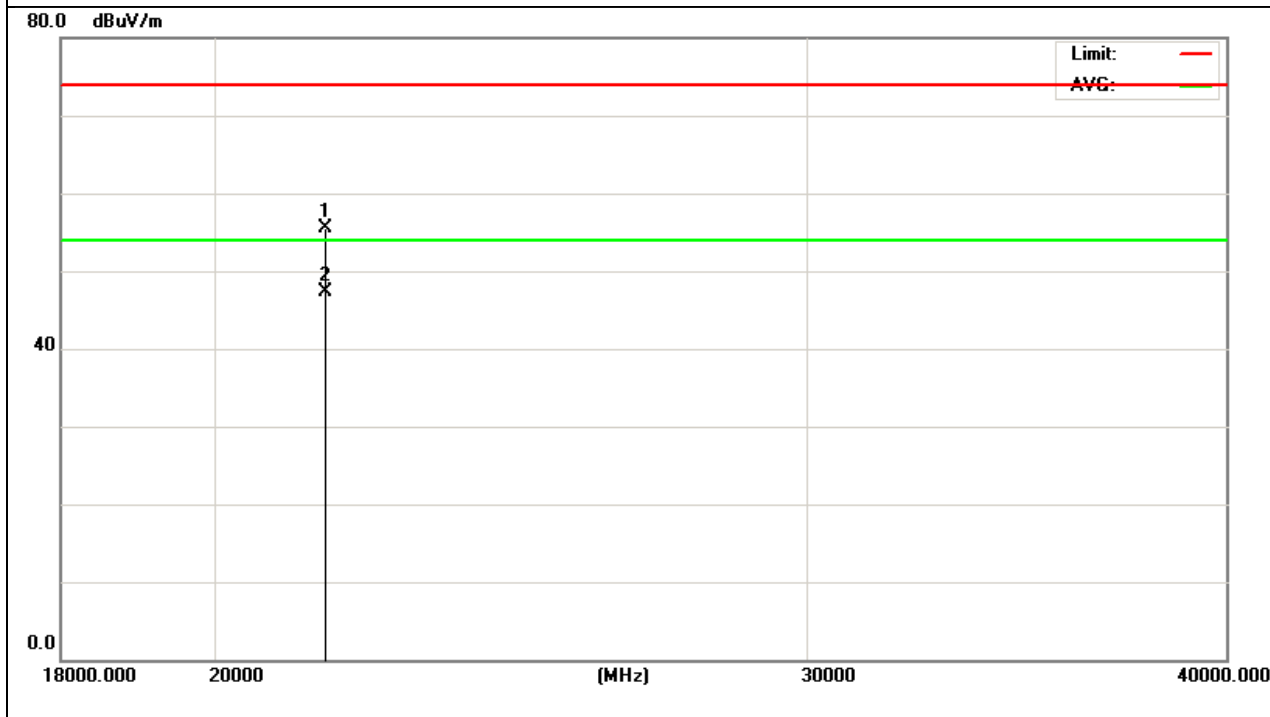
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 100	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
21571.000	37.92	17.59	55.51	74.00	-18.49	peak
21571.000	29.66	17.59	47.25	54.00	-6.75	AVG

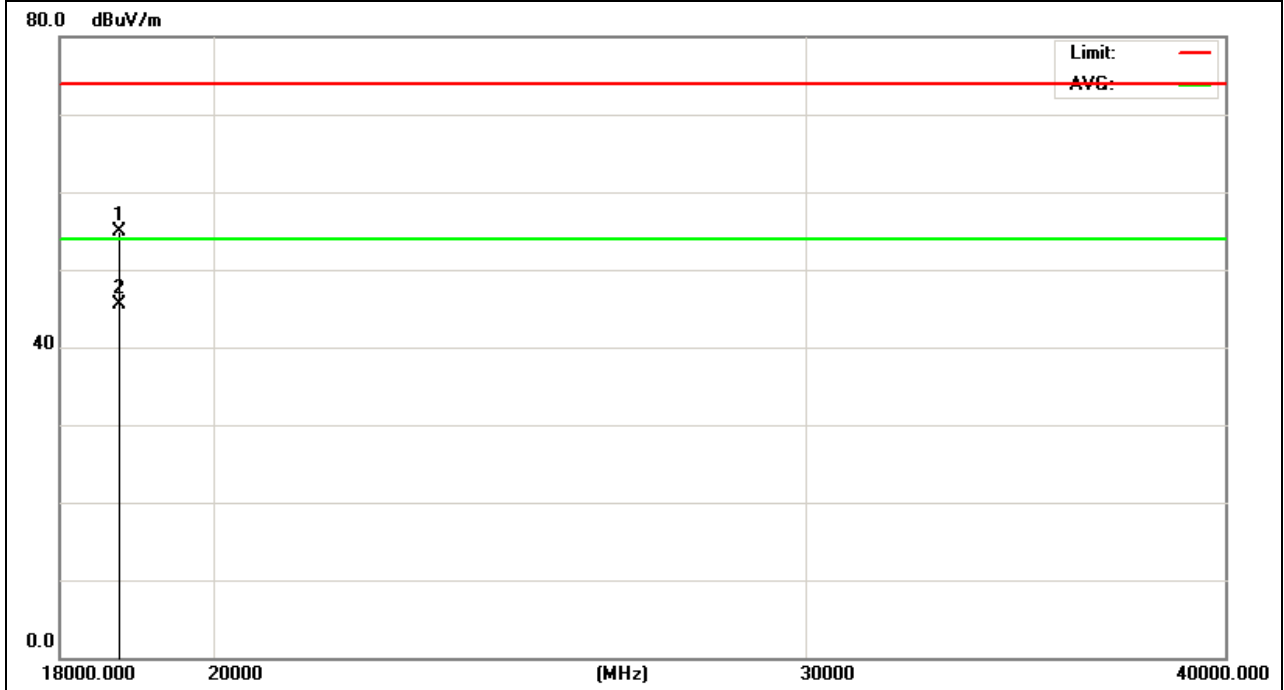
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 100	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
18741.000	41.56	13.40	54.96	74.00	-19.04	peak
18741.000	32.17	13.40	45.57	54.00	-8.43	AVG

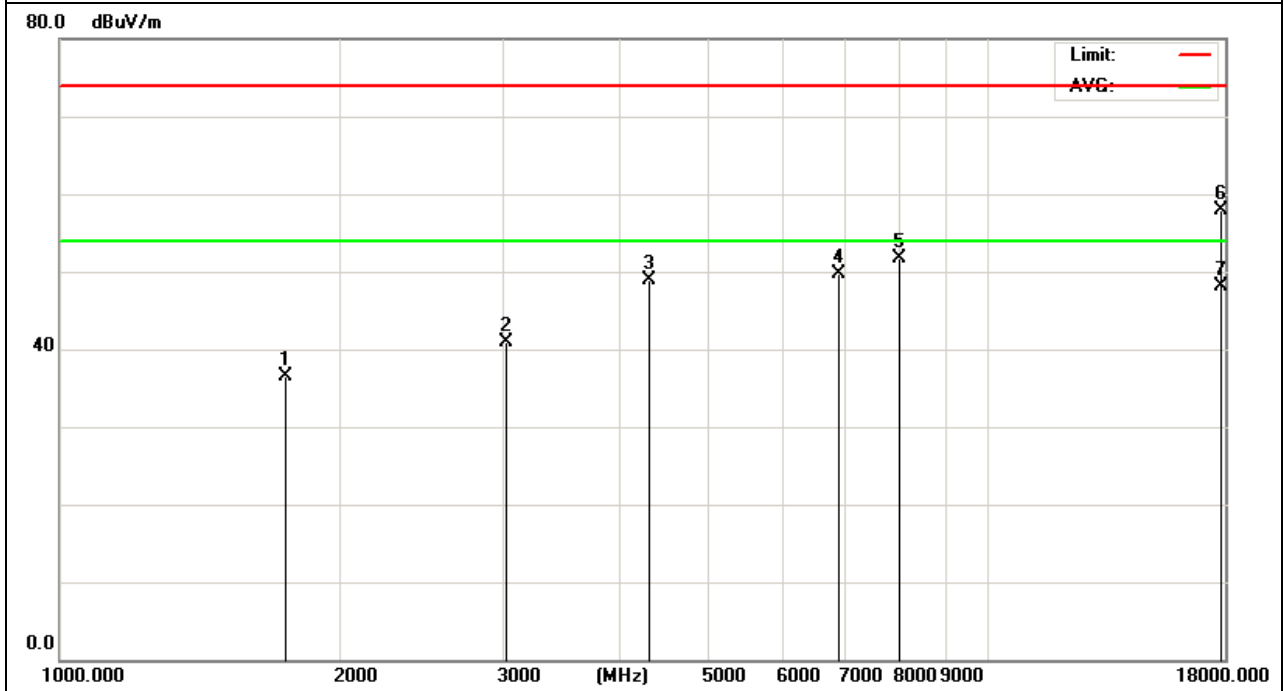
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 116	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1748.947	46.03	-9.49	36.54	74.00	-37.46	peak
3022.478	42.57	-1.62	40.95	74.00	-33.05	peak
4315.394	44.55	4.36	48.91	74.00	-25.09	peak
6881.225	43.57	6.11	49.68	74.00	-24.32	peak
8004.267	41.26	10.38	51.64	74.00	-22.36	peak
17785.181	33.14	24.83	57.97	74.00	-16.03	peak
17785.181	23.24	24.83	48.07	54.00	-5.93	AVG

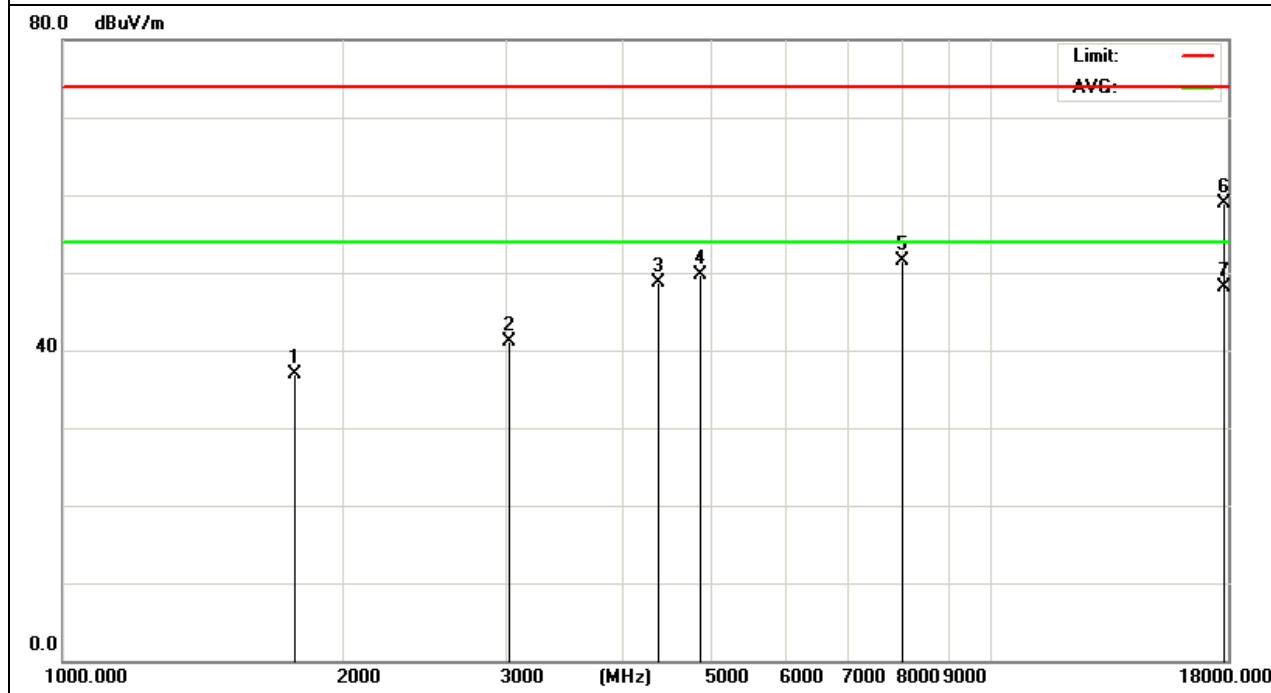
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 116	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1776.592	46.34	-9.40	36.94	74.00	-37.06	peak
3022.336	42.69	-1.62	41.07	74.00	-32.93	peak
4369.657	44.25	4.47	48.72	74.00	-25.28	peak
4855.548	44.68	5.11	49.79	74.00	-24.21	peak
8022.032	41.02	10.41	51.43	74.00	-22.57	peak
17789.000	34.14	24.83	58.97	74.00	-15.03	peak
17789.000	23.26	24.83	48.09	54.00	-5.91	AVG

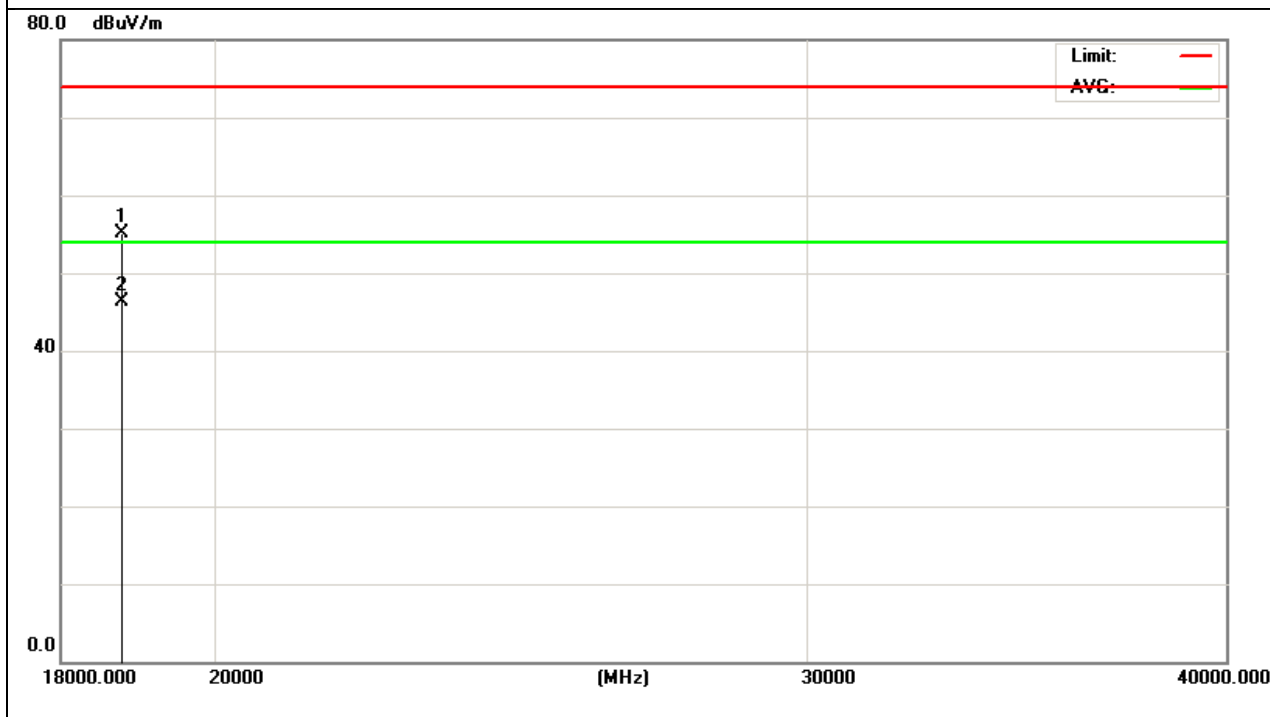
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 116	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
18752.000	41.63	13.42	55.05	74.00	-18.95	peak
18752.000	32.89	13.42	46.31	54.00	-7.69	AVG

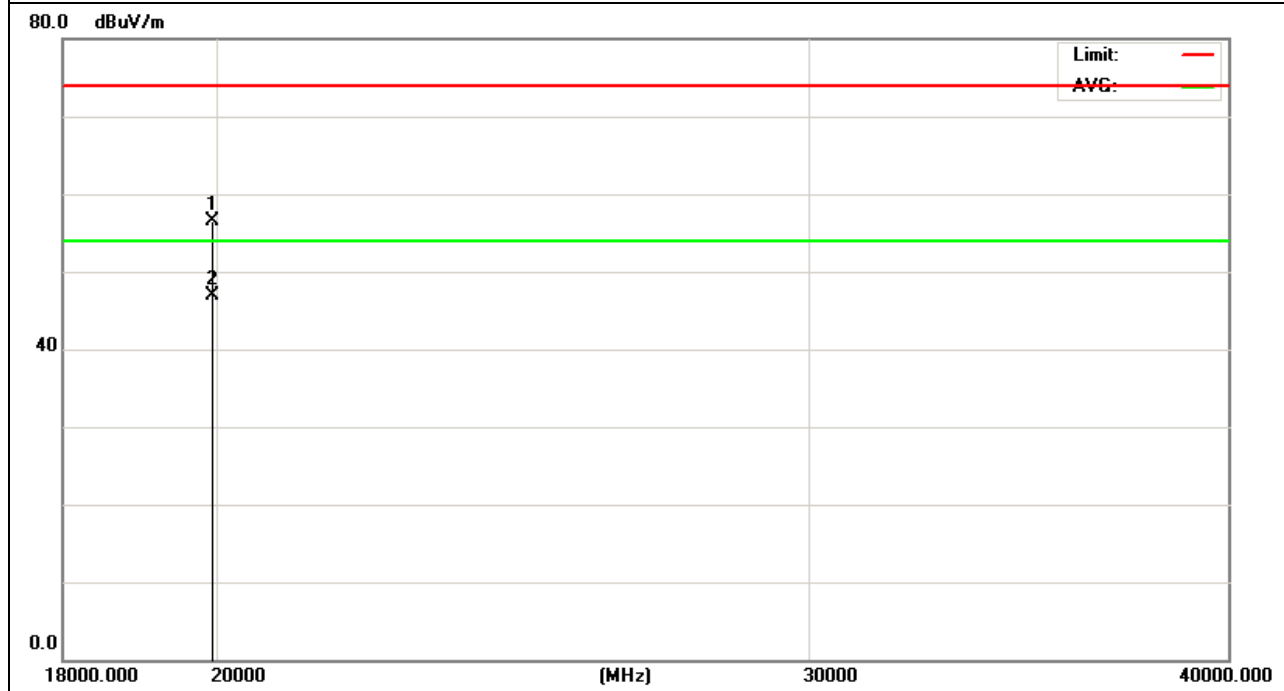
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 116	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
19947.000	41.32	15.19	56.51	74.00	-17.49	peak
19947.000	31.65	15.19	46.84	54.00	-7.16	AVG

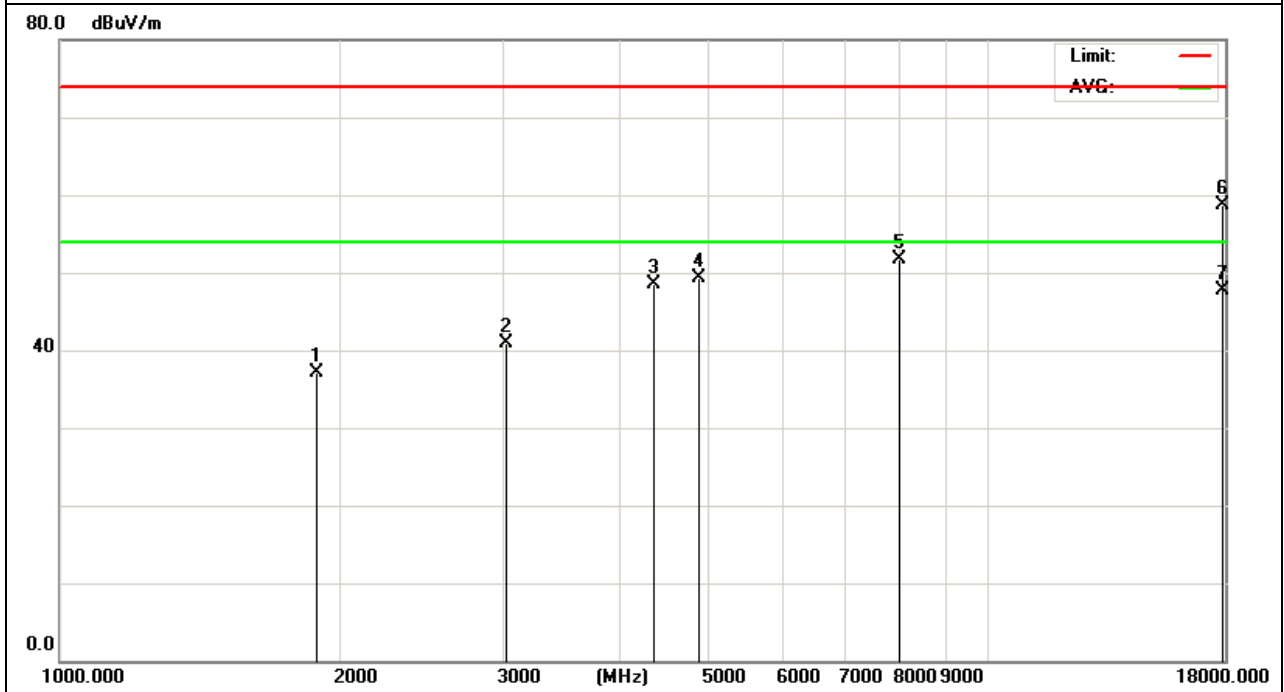
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 140	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1889.569	46.62	-9.50	37.12	74.00	-36.88	peak
3021.224	42.47	-1.63	40.84	74.00	-33.16	peak
4365.198	44.02	4.46	48.48	74.00	-25.52	peak
4887.565	44.23	5.14	49.37	74.00	-24.63	peak
8026.234	41.26	10.41	51.67	74.00	-22.33	peak
17896.199	33.97	24.75	58.72	74.00	-15.28	peak
17896.199	23.03	24.75	47.78	54.00	-6.22	AVG

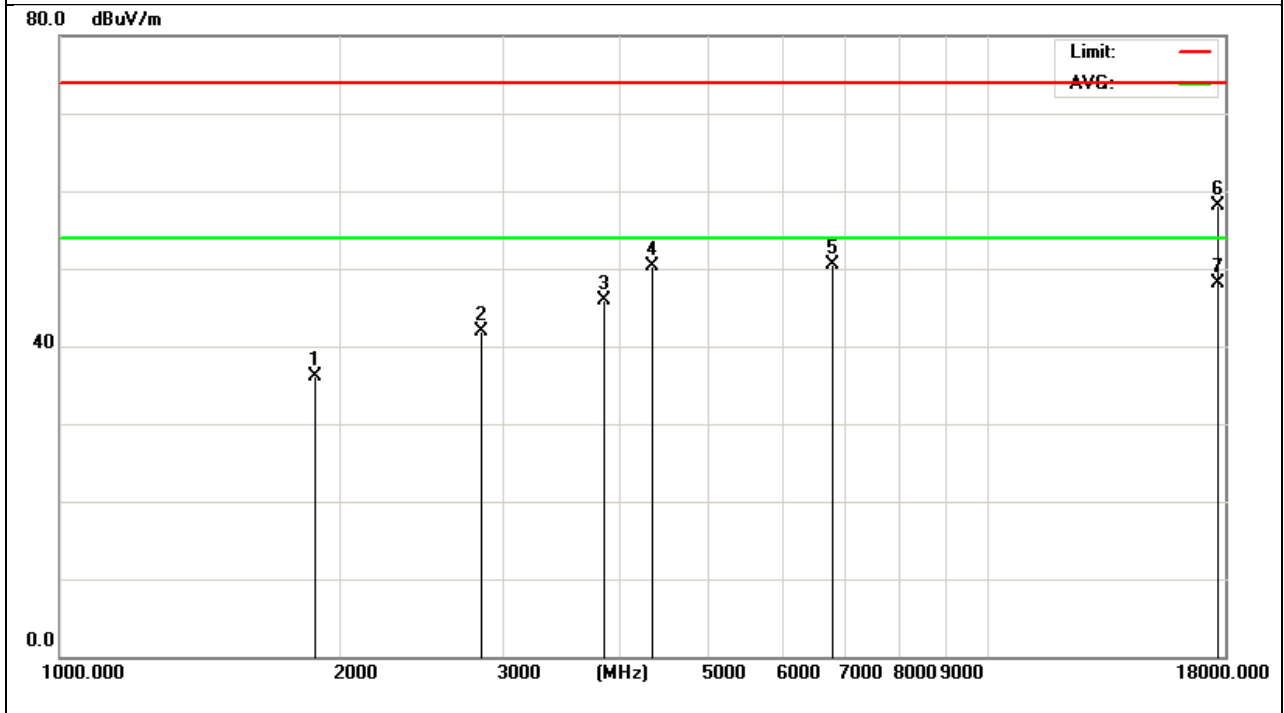
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 140	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1880.264	45.69	-9.49	36.20	74.00	-37.80	peak
2844.179	44.55	-2.64	41.91	74.00	-32.09	peak
3846.352	43.29	2.71	46.00	74.00	-28.00	peak
4333.252	45.97	4.40	50.37	74.00	-23.63	peak
6788.921	44.56	6.04	50.60	74.00	-23.40	peak
17653.266	33.14	24.93	58.07	74.00	-15.93	peak
17653.266	23.26	24.93	48.19	54.00	-5.81	AVG

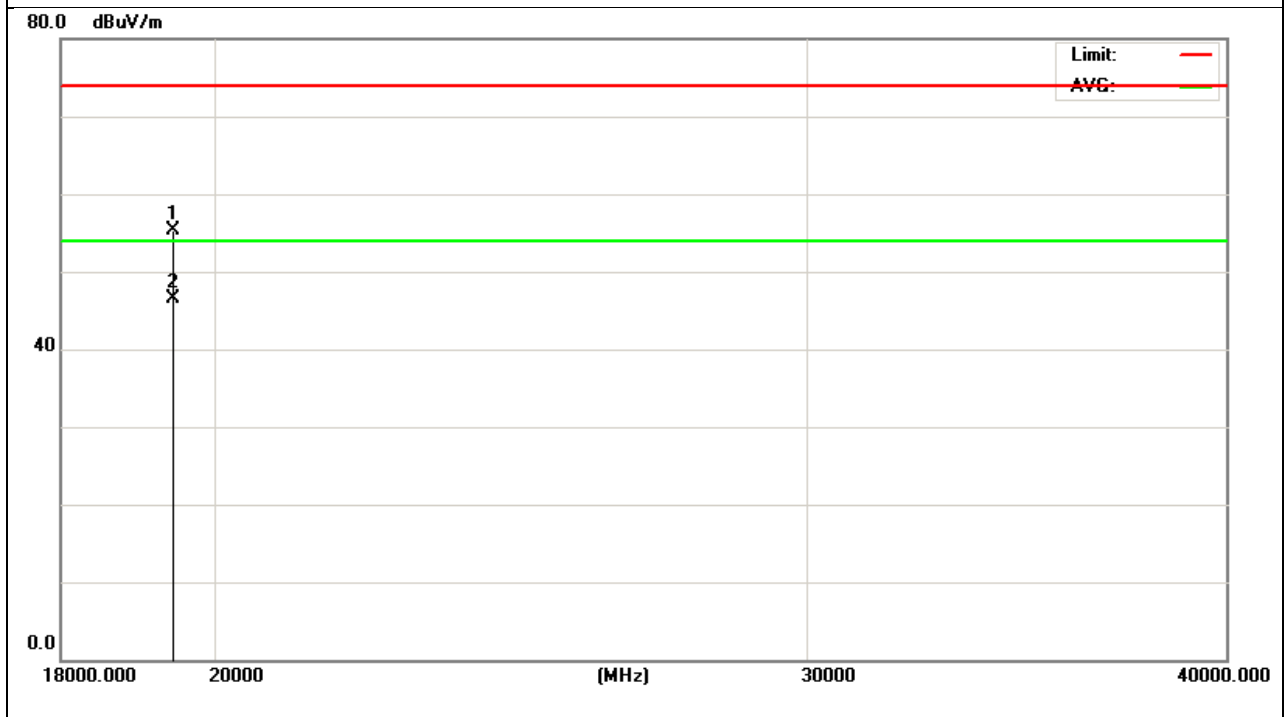
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 140	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
19436.000	40.84	14.43	55.27	74.00	-18.73	peak
19436.000	32.06	14.43	46.49	54.00	-7.51	AVG

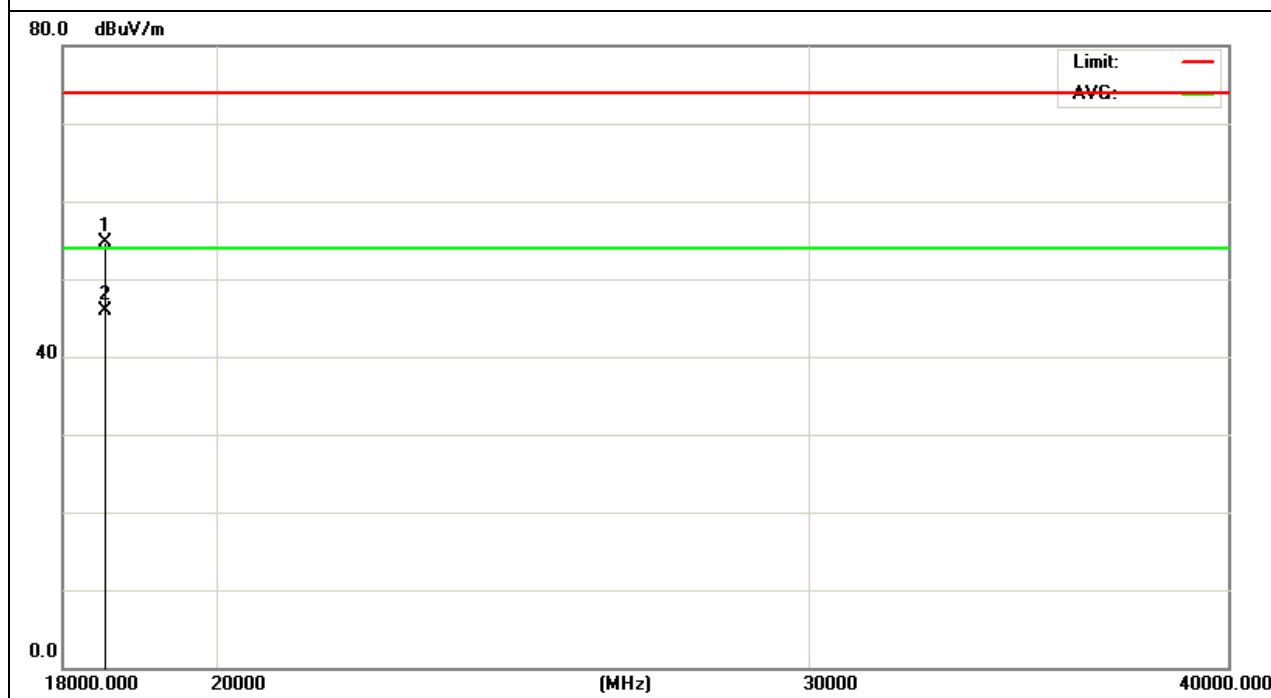
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11a Channel 140	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
18533.000	41.65	13.09	54.74	74.00	-19.26	peak
18533.000	32.77	13.09	45.86	54.00	-8.14	AVG

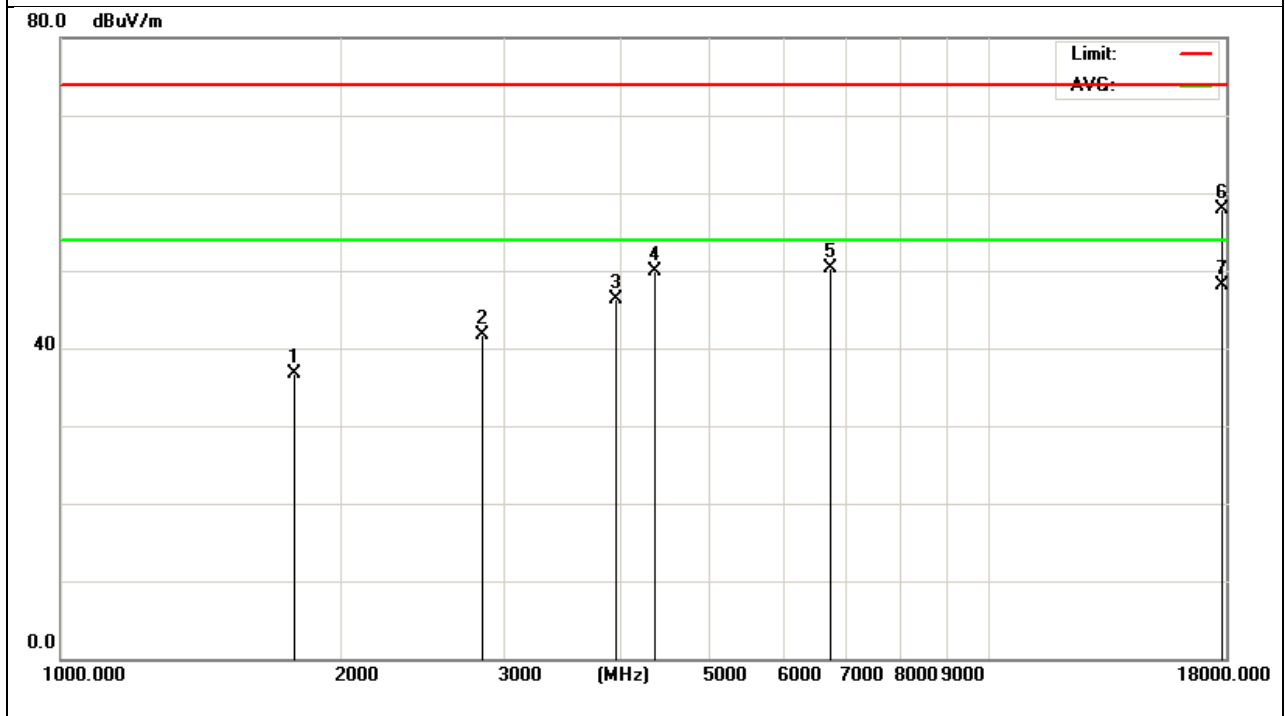
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 100	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1785.047	46.15	-9.37	36.78	74.00	-37.22	peak
2844.692	44.26	-2.64	41.62	74.00	-32.38	peak
3948.365	42.84	3.46	46.30	74.00	-27.70	peak
4358.774	45.36	4.45	49.81	74.00	-24.19	peak
6749.659	44.23	6.01	50.24	74.00	-23.76	peak
17782.014	33.14	24.83	57.97	74.00	-16.03	peak
17782.014	23.25	24.83	48.08	54.00	-5.92	AVG

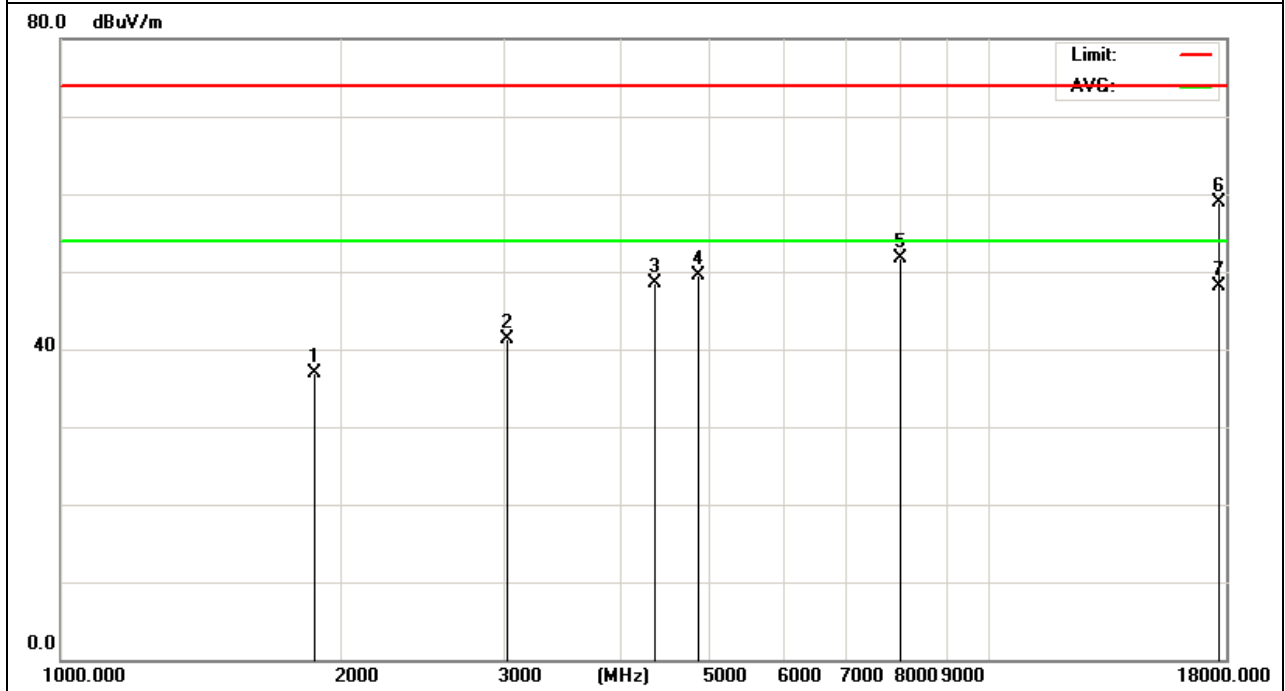
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 100	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1876.334	46.36	-9.48	36.88	74.00	-37.12	peak
3024.289	42.88	-1.62	41.26	74.00	-32.74	peak
4359.417	44.15	4.45	48.60	74.00	-25.40	peak
4855.334	44.36	5.11	49.47	74.00	-24.53	peak
8020.165	41.23	10.41	51.64	74.00	-22.36	peak
17689.225	34.02	24.90	58.92	74.00	-15.08	peak
17689.225	23.21	24.90	48.11	54.00	-5.89	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 100	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
20458.000	39.60	15.94	55.54	74.00	-18.46	
20458.000	29.94	15.94	45.88	54.00	-8.12	AVG

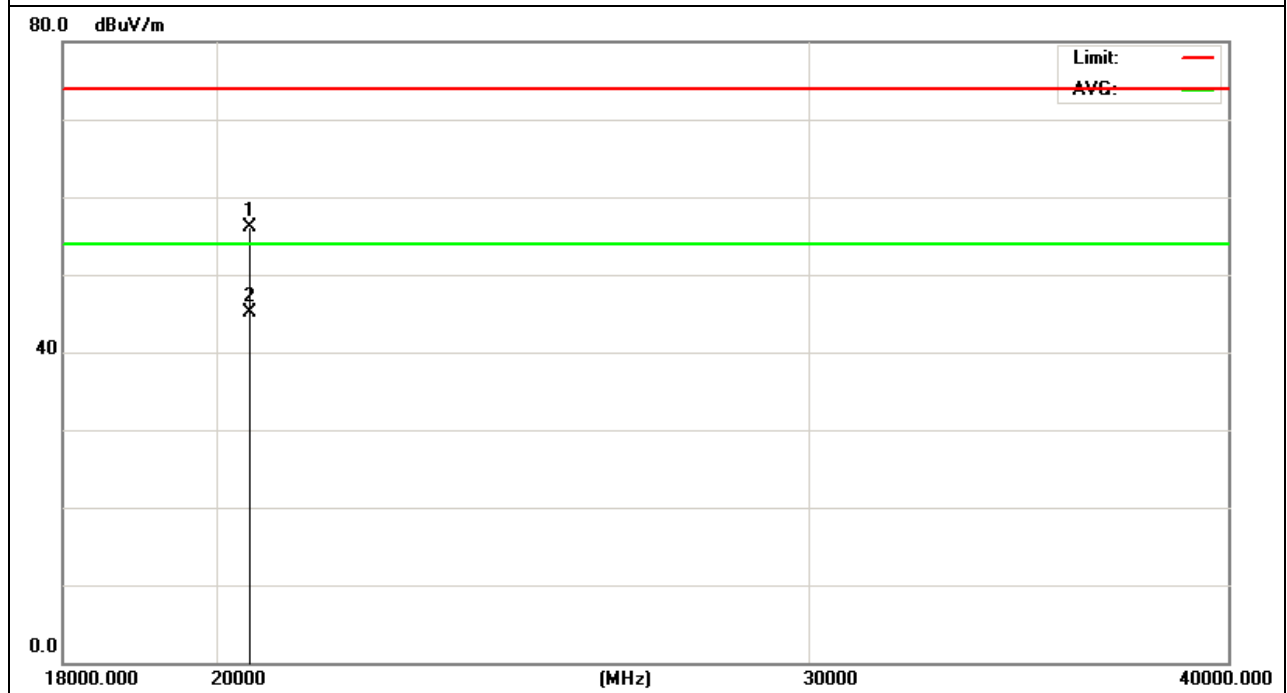
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 100	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
20447.000	40.09	15.93	56.02	74.00	-17.98	peak
20447.000	29.24	15.93	45.17	54.00	-8.83	AVG

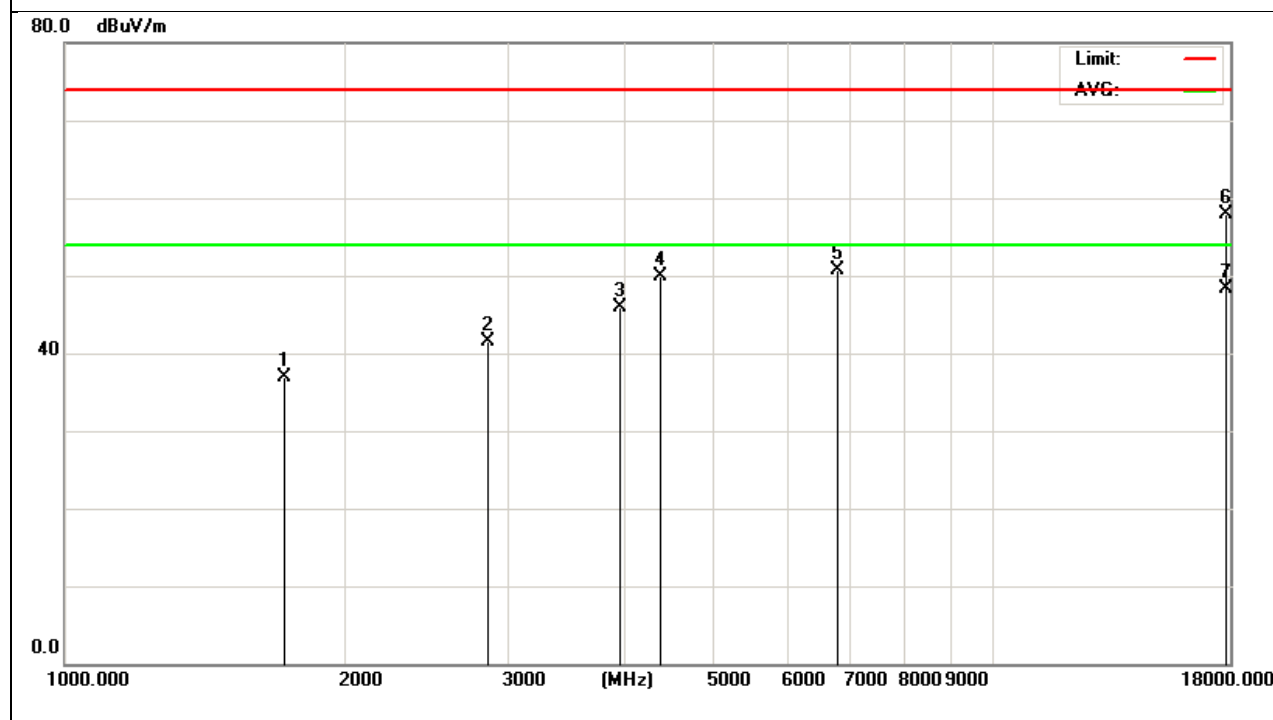
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel116	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1720.114	46.38	-9.57	36.81	74.00	-37.19	peak
2848.659	44.19	-2.62	41.57	74.00	-32.43	peak
3956.202	42.47	3.52	45.99	74.00	-28.01	peak
4367.336	45.36	4.46	49.82	74.00	-24.18	peak
6780.257	44.58	6.04	50.62	74.00	-23.38	peak
17754.000	33.10	24.85	57.95	74.00	-16.05	peak
17754.000	23.54	24.85	48.39	54.00	-5.61	AVG

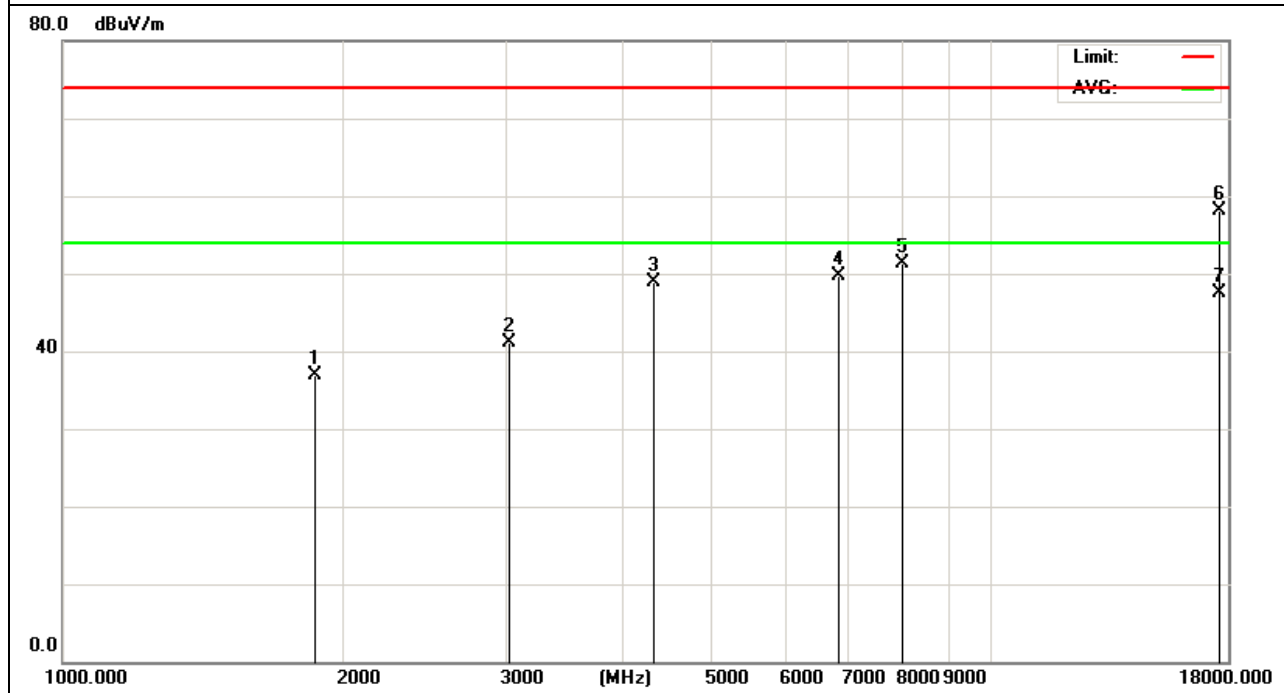
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 116	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1864.066	46.39	-9.46	36.93	74.00	-37.07	peak
3021.235	42.78	-1.63	41.15	74.00	-32.85	peak
4326.789	44.50	4.39	48.89	74.00	-25.11	peak
6848.554	43.66	6.08	49.74	74.00	-24.26	peak
8024.223	40.87	10.41	51.28	74.00	-22.72	peak
17602.334	33.14	24.97	58.11	74.00	-15.89	peak
17602.334	22.47	24.97	47.44	54.00	-6.56	AVG

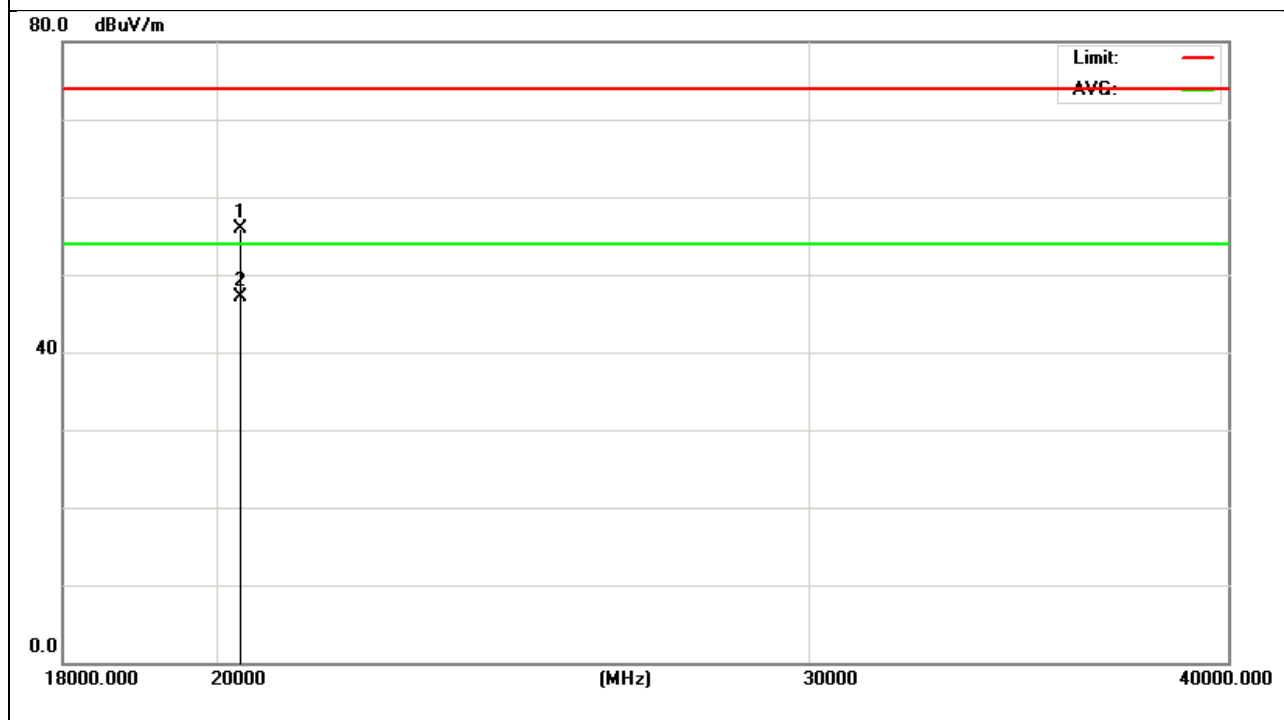
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 116	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
20323.000	40.12	15.74	55.86	74.00	-18.14	peak
20323.000	31.32	15.74	47.06	54.00	-6.94	AVG

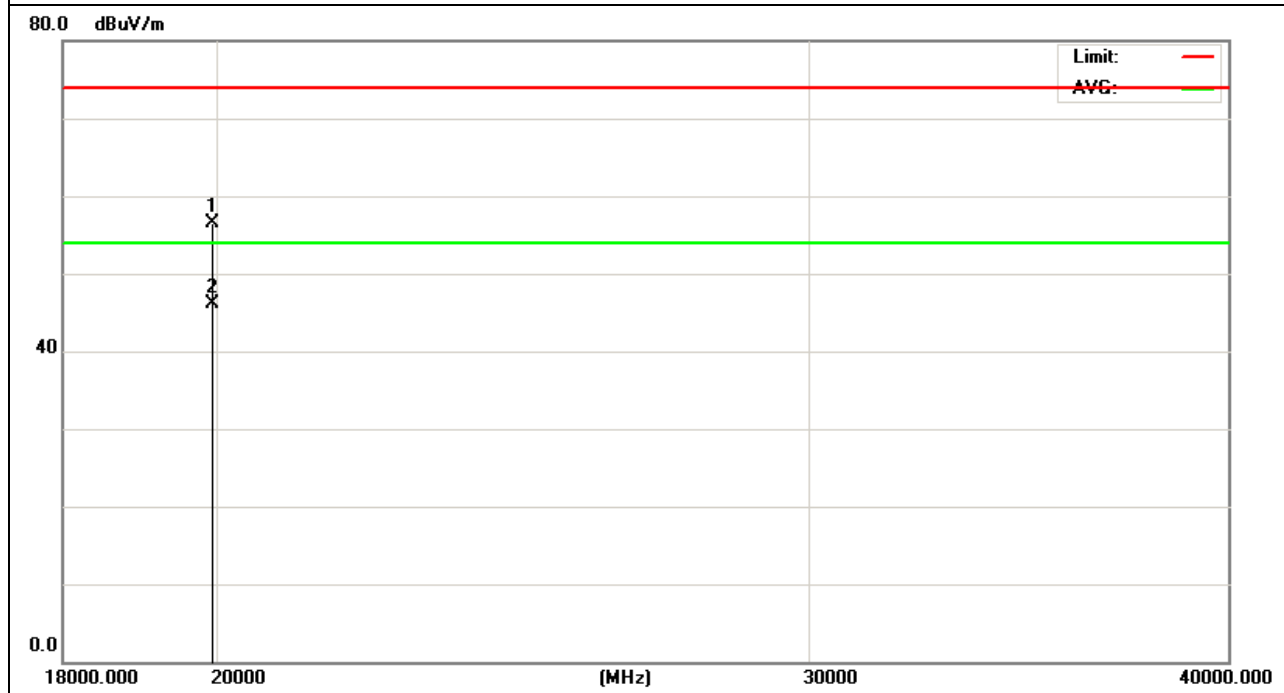
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 116	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
19934.000	41.32	15.17	56.49	74.00	-17.51	peak
19934.000	30.85	15.17	46.02	54.00	-7.98	AVG

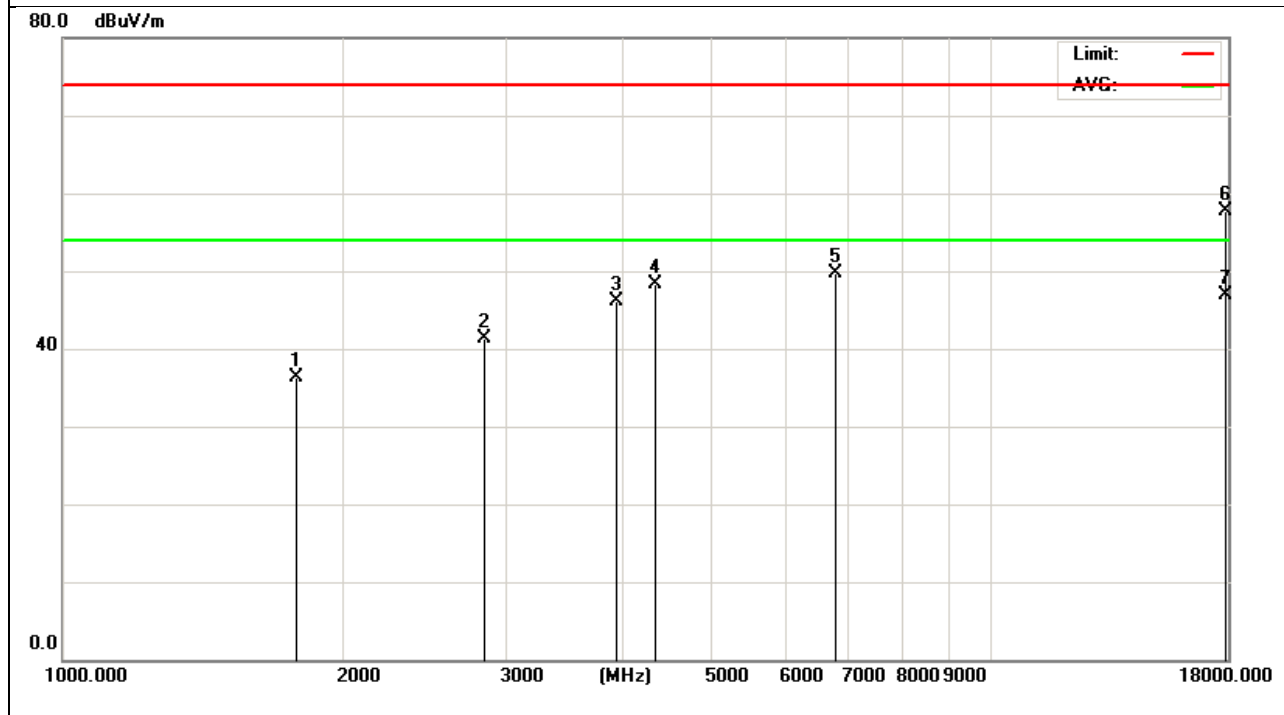
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 140	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1784.523	46.32	-9.39	36.93	74.00	-37.07	peak
2843.335	43.52	-2.64	40.88	74.00	-33.12	peak
3946.667	43.11	3.44	46.55	74.00	-27.45	peak
4331.478	44.08	4.39	48.47	74.00	-25.53	peak
6777.775	43.54	6.03	49.57	74.00	-24.43	peak
17879.115	32.99	24.76	57.75	74.00	-16.25	peak
17879.115	22.48	24.76	47.24	54.00	-6.76	AVG

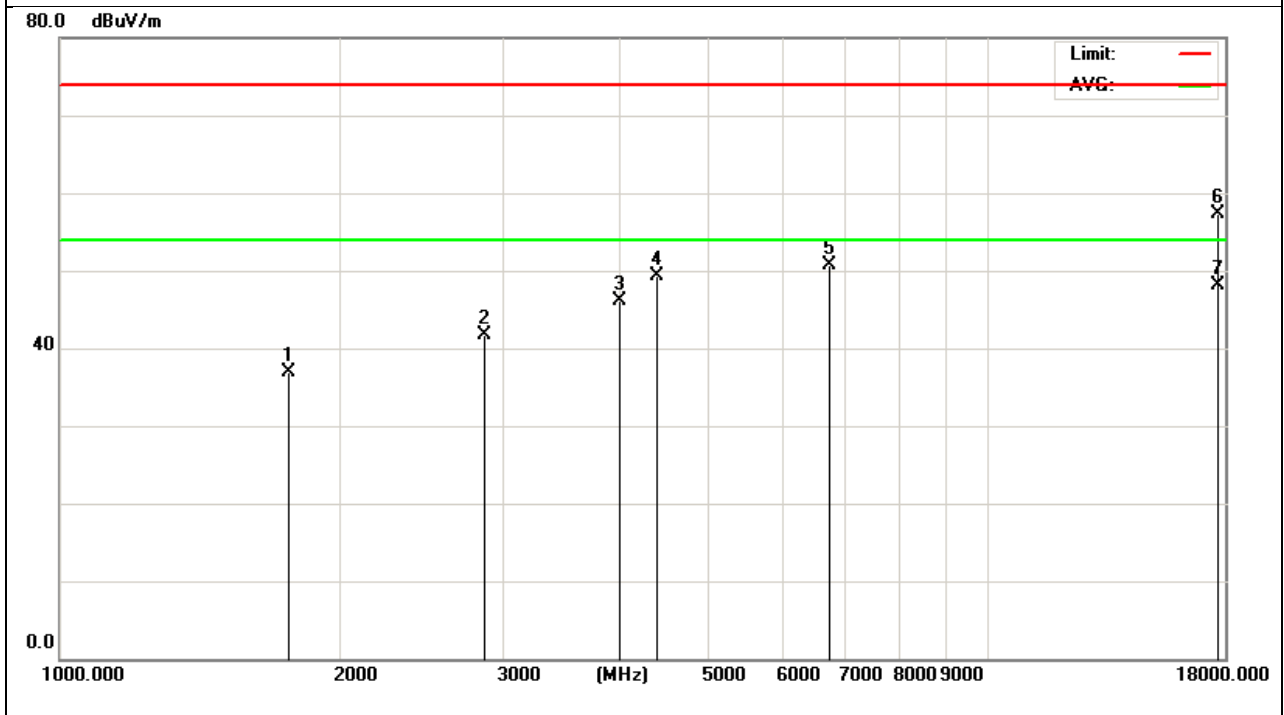
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 140	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1763.249	46.39	-9.45	36.94	74.00	-37.06	peak
2864.232	44.33	-2.55	41.78	74.00	-32.22	peak
3994.019	42.32	3.79	46.11	74.00	-27.89	peak
4385.301	44.88	4.50	49.38	74.00	-24.62	peak
6755.583	44.65	6.01	50.66	74.00	-23.34	peak
17653.325	32.47	24.92	57.39	74.00	-16.61	peak
17653.325	23.14	24.92	48.06	54.00	-5.94	AVG

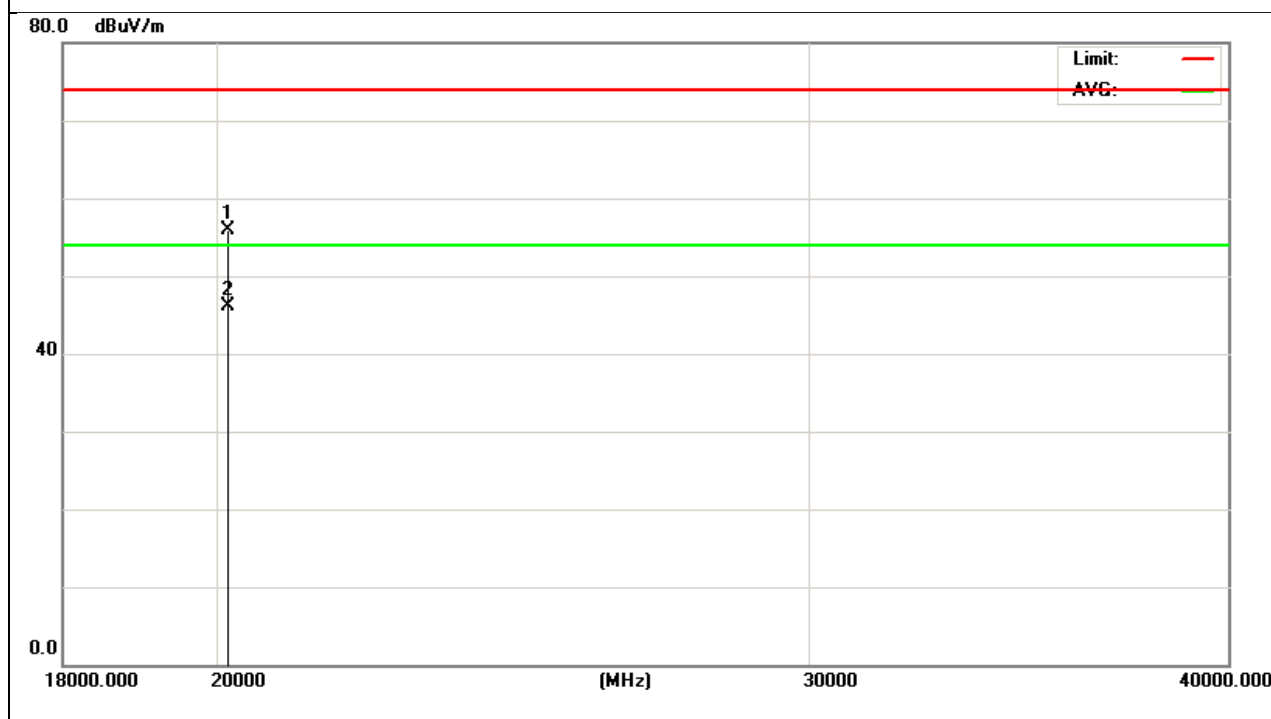
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 140	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
20147.000	40.36	15.49	55.85	74.00	-18.15	peak
20147.000	30.66	15.49	46.15	54.00	-7.85	AVG

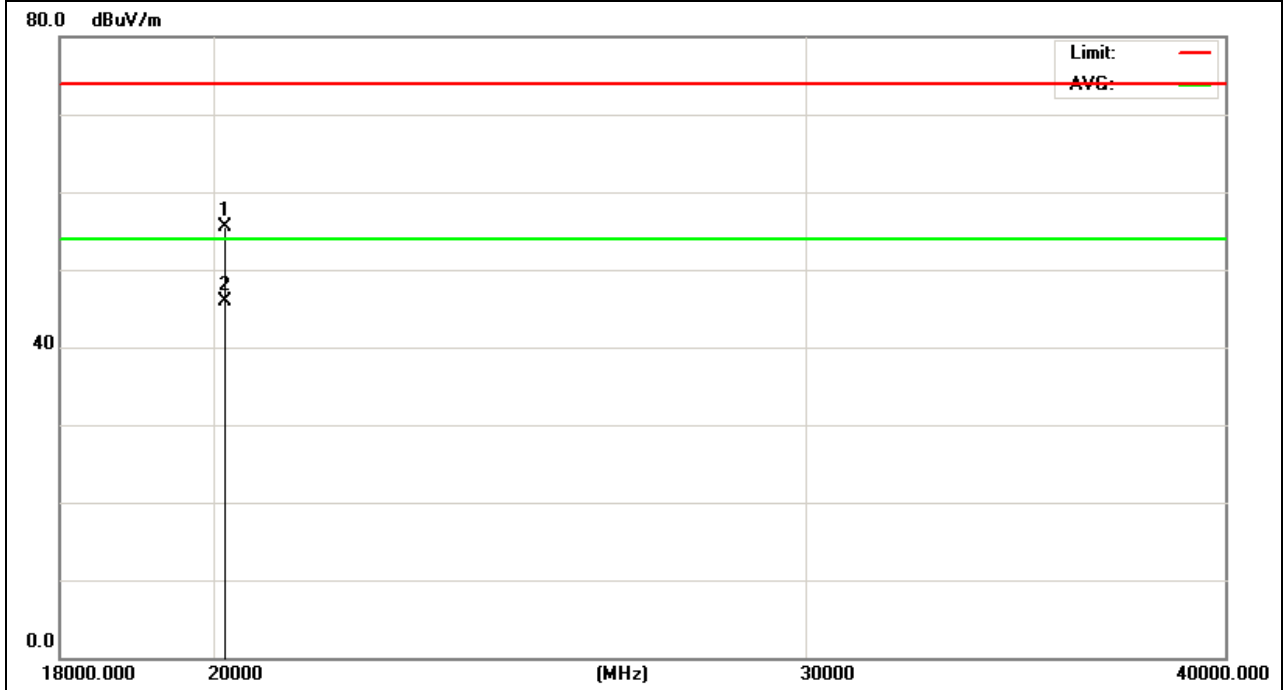
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n20 Channel 140	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
20148.000	40.09	15.49	55.58	74.00	-18.42	peak
20148.000	30.40	15.49	45.89	54.00	-8.11	AVG

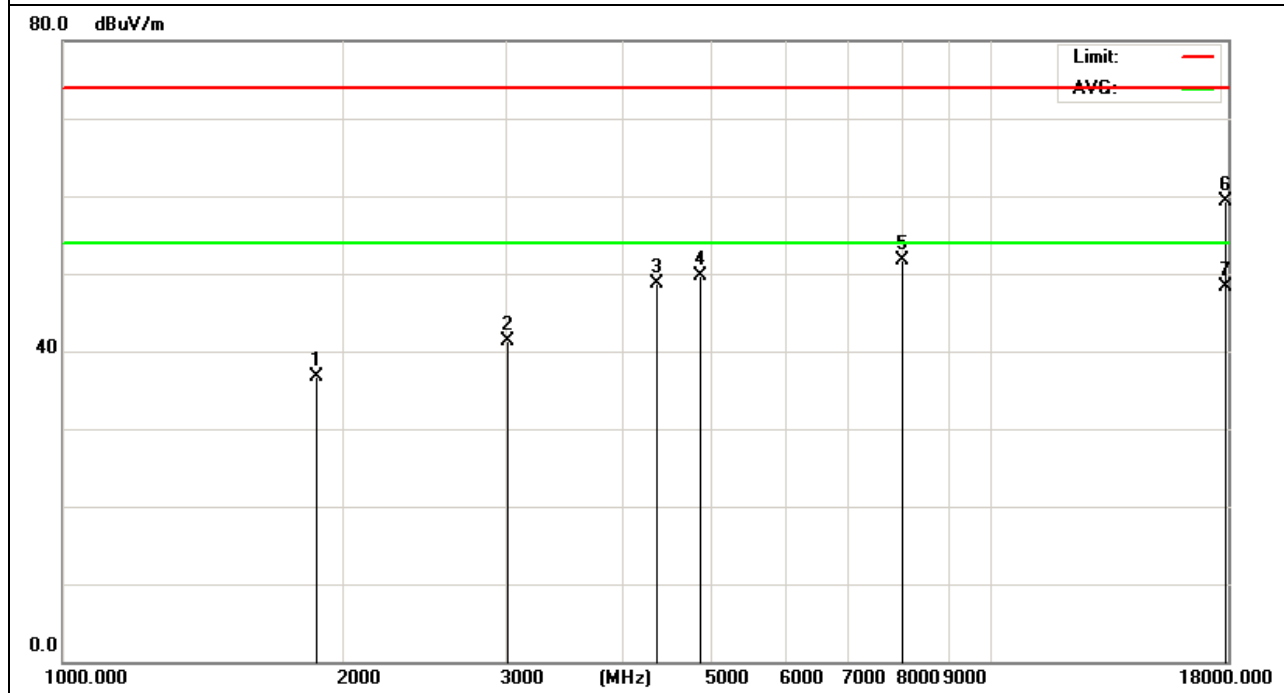
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 102	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1874.024	46.24	-9.48	36.76	74.00	-37.24	peak
3014.168	42.92	-1.65	41.27	74.00	-32.73	peak
4355.226	44.34	4.45	48.79	74.00	-25.21	peak
4856.235	44.60	5.11	49.71	74.00	-24.29	peak
8021.004	41.21	10.41	51.62	74.00	-22.38	peak
17891.021	34.61	24.75	59.36	74.00	-14.64	peak
17891.021	23.58	24.75	48.33	54.00	-5.67	AVG

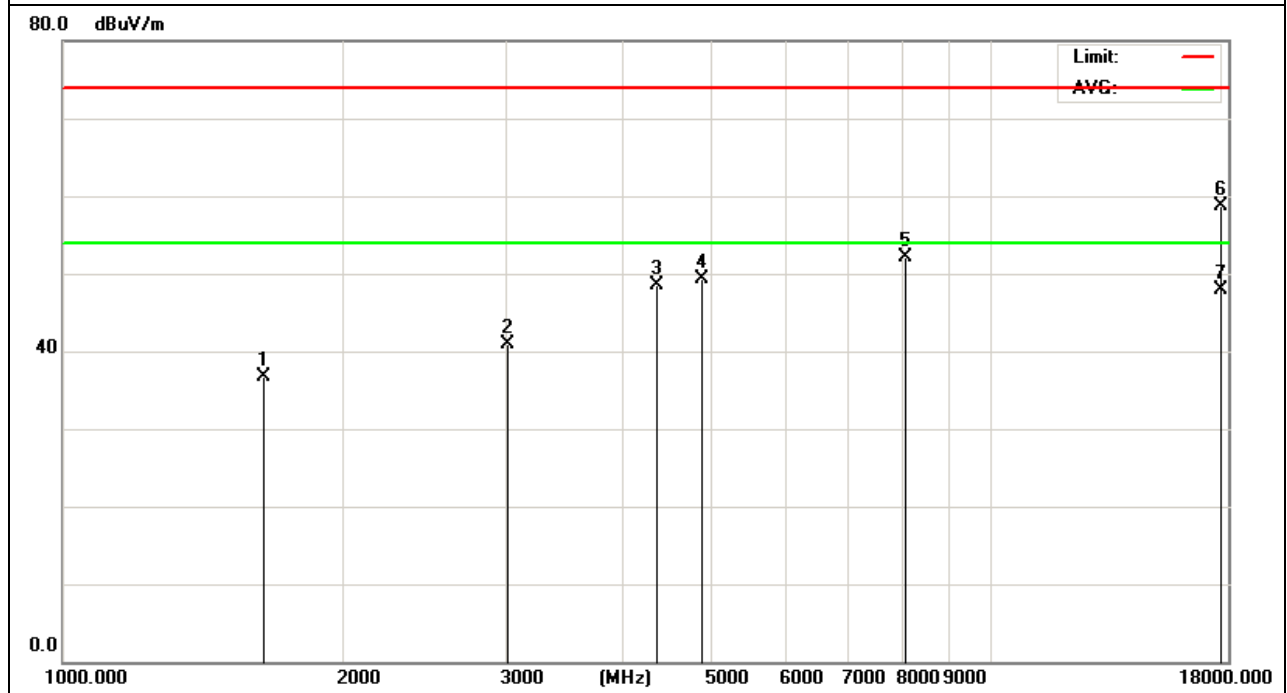
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 102	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1643.069	46.51	-9.79	36.72	74.00	-37.28	peak
3011.591	42.63	-1.65	40.98	74.00	-33.02	peak
4365.898	44.02	4.46	48.48	74.00	-25.52	peak
4871.021	44.26	5.13	49.39	74.00	-24.61	peak
8066.365	41.63	10.46	52.09	74.00	-21.91	peak
17648.209	33.76	24.92	58.68	74.00	-15.32	peak
17648.209	22.89	24.92	47.81	54.00	-6.19	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 102	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
19943.000	41.11	15.19	56.30	74.00	-17.70	
19943.000	31.47	15.19	46.66	54.00	-7.34	AVG

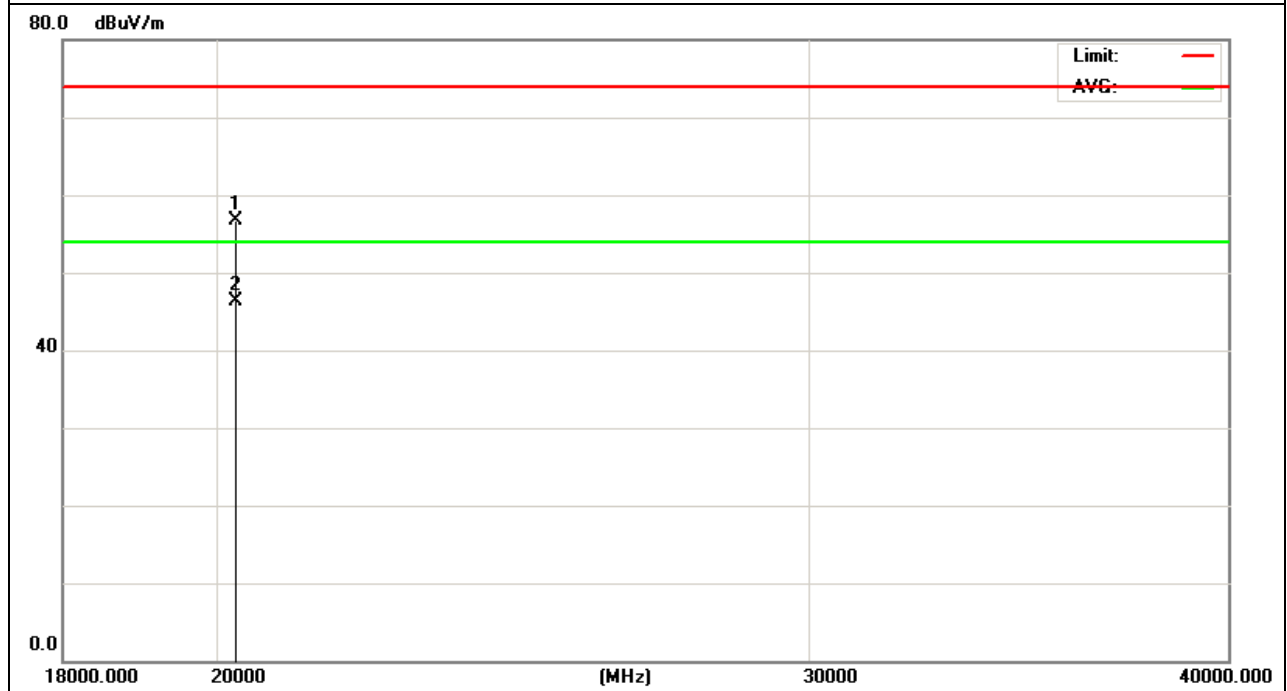
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 102	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
20256.000	41.02	15.65	56.67	74.00	-17.33	peak
20256.000	30.66	15.65	46.31	54.00	-7.69	AVG

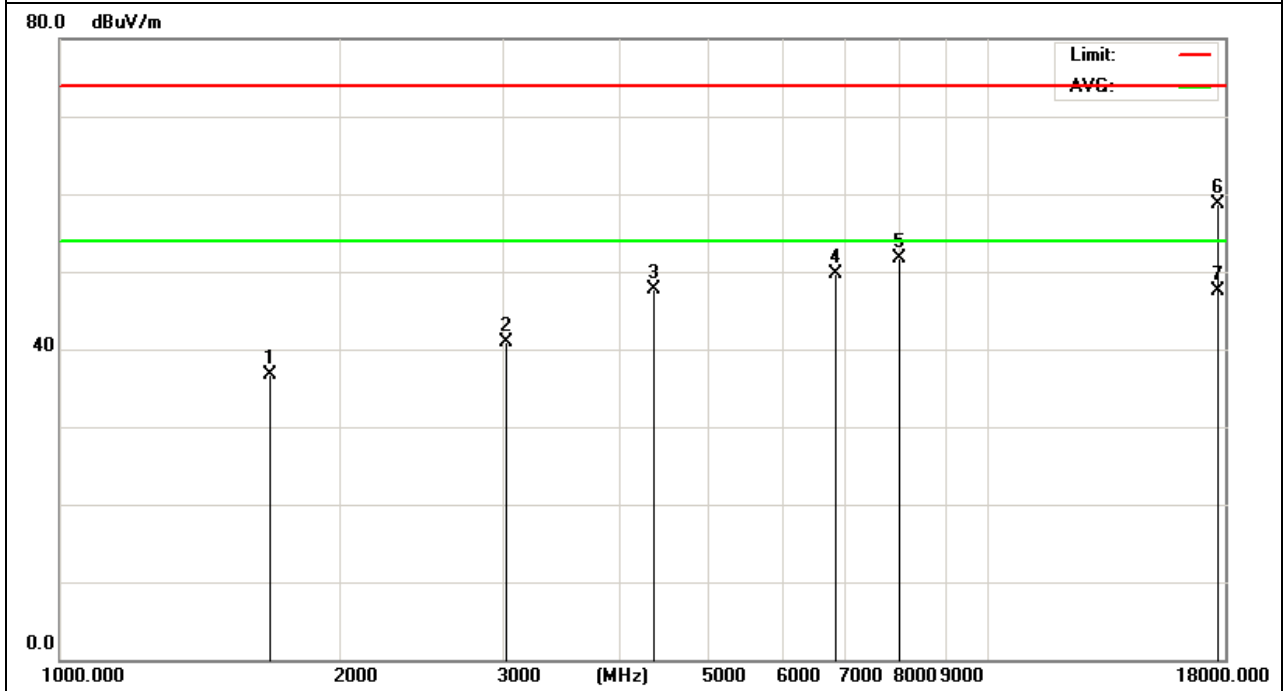
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 118	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1687.229	46.28	-9.66	36.62	74.00	-37.38	peak
3016.679	42.59	-1.64	40.95	74.00	-33.05	peak
4358.264	43.17	4.45	47.62	74.00	-26.38	peak
6846.542	43.54	6.08	49.62	74.00	-24.38	peak
8001.326	41.23	10.38	51.61	74.00	-22.39	peak
17669.158	33.78	24.91	58.69	74.00	-15.31	peak
17669.158	22.63	24.91	47.54	54.00	-6.46	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.

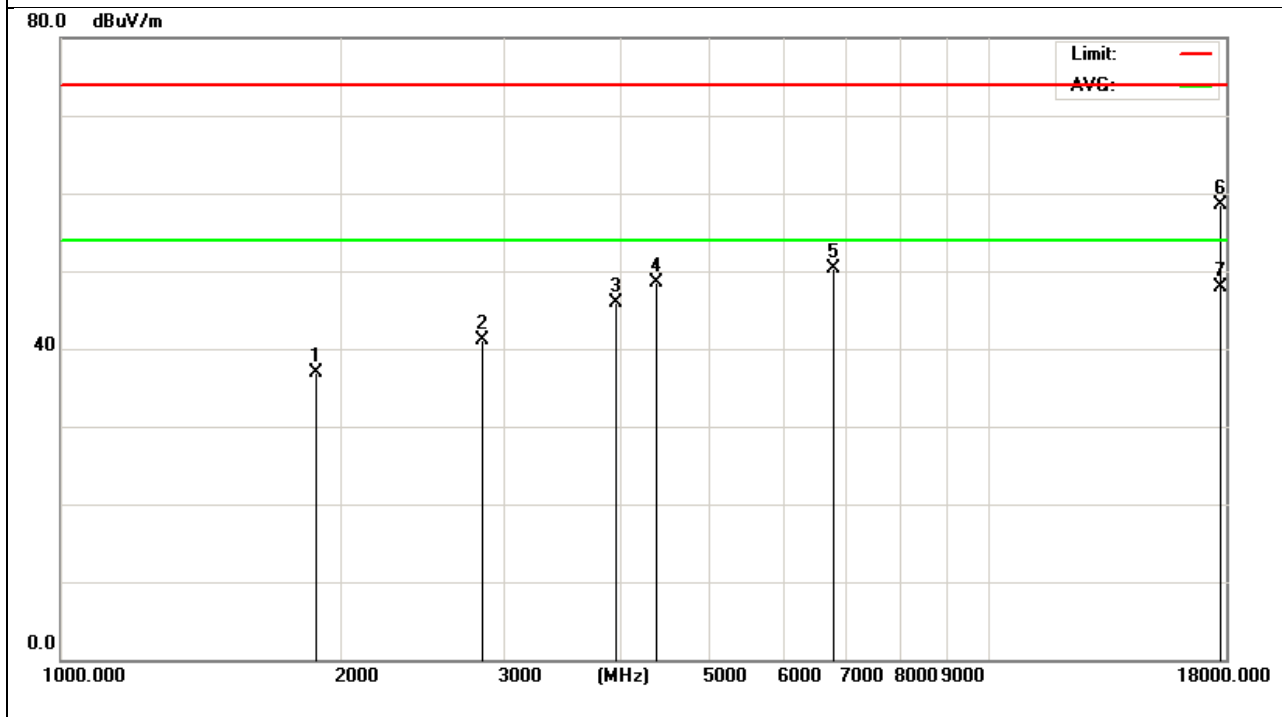


EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
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Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 118	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1881.329	46.41	-9.49	36.92	74.00	-37.08	peak
2844.362	43.67	-2.64	41.03	74.00	-32.97	peak
3948.206	42.50	3.46	45.96	74.00	-28.04	peak
4377.478	43.97	4.49	48.46	74.00	-25.54	peak
6780.319	44.32	6.04	50.36	74.00	-23.64	peak
17702.898	33.63	24.89	58.52	74.00	-15.48	peak
17702.898	22.98	24.89	47.87	54.00	-6.13	AVG

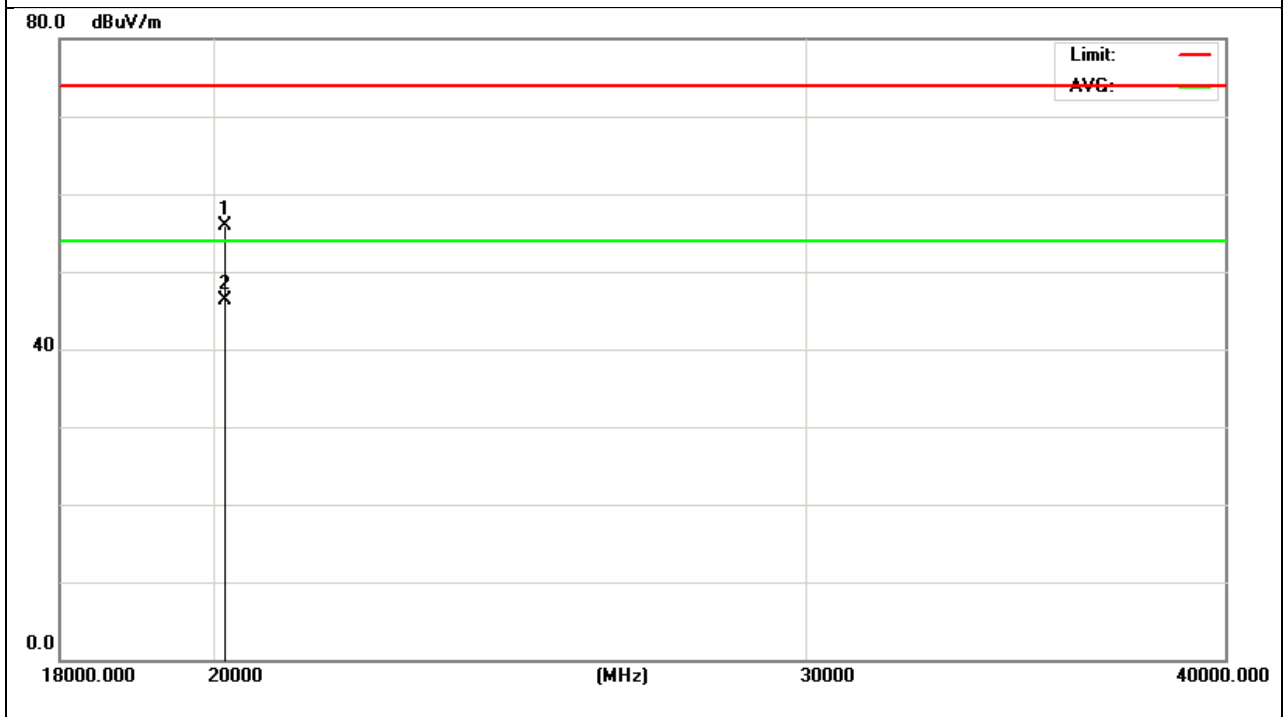
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 118	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
20149.000	40.45	15.49	55.94	74.00	-18.06	peak
20149.000	30.82	15.49	46.31	54.00	-7.69	AVG

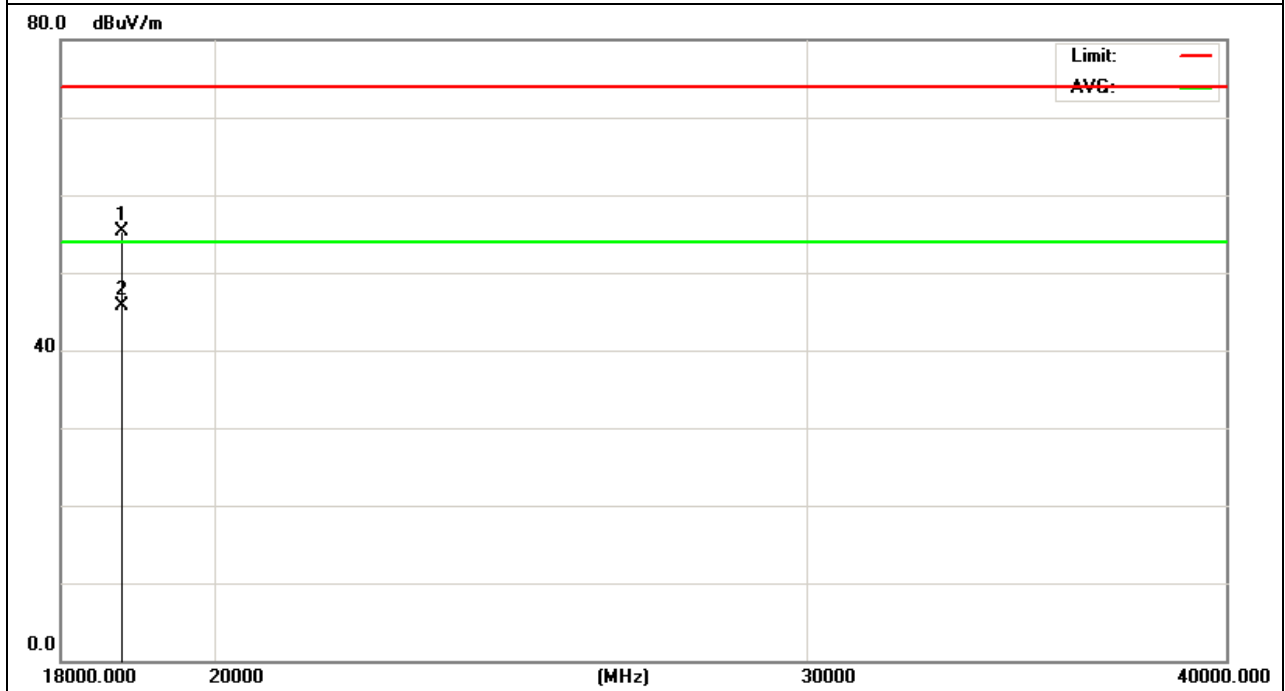
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel118	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
18774.000	41.82	13.44	55.26	74.00	-18.74	peak
18774.000	32.29	13.44	45.73	54.00	-8.27	AVG

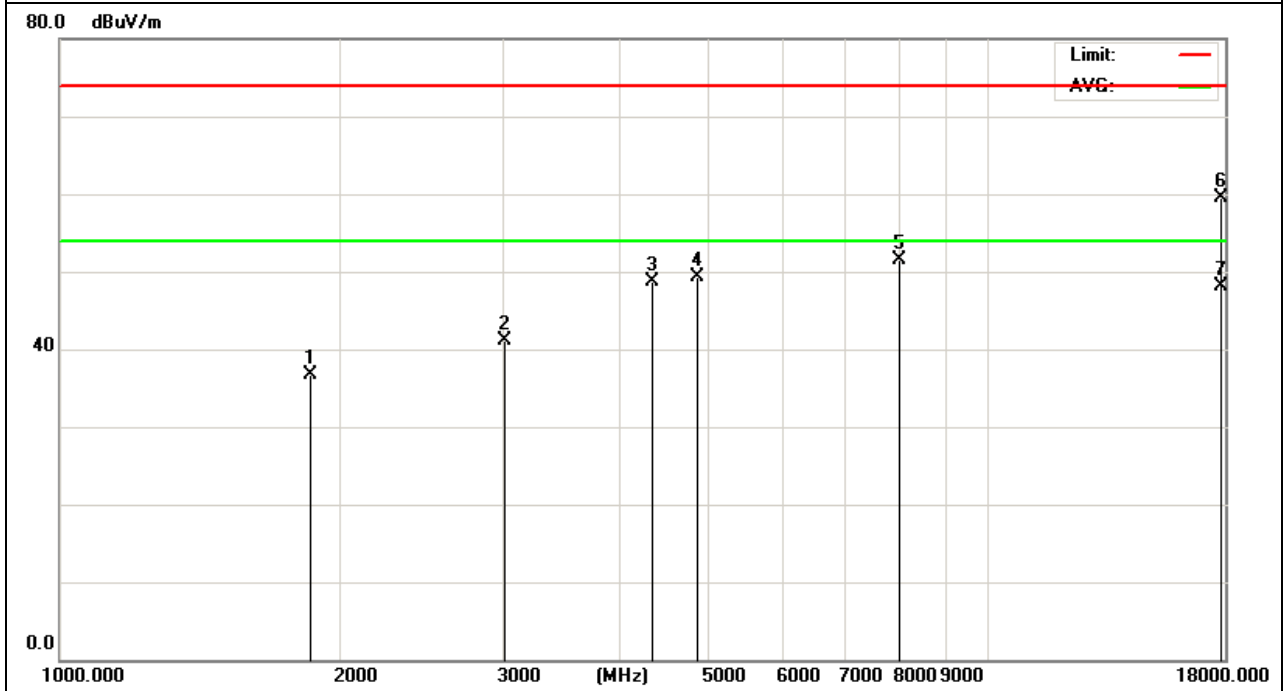
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 134	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1857.202	46.17	-9.44	36.73	74.00	-37.27	peak
3014.693	42.82	-1.65	41.17	74.00	-32.83	peak
4352.167	44.33	4.43	48.76	74.00	-25.24	peak
4856.325	44.26	5.11	49.37	74.00	-24.63	peak
8022.024	41.02	10.41	51.43	74.00	-22.57	peak
17798.265	34.71	24.83	59.54	74.00	-14.46	peak
17798.265	23.24	24.83	48.07	54.00	-5.93	AVG

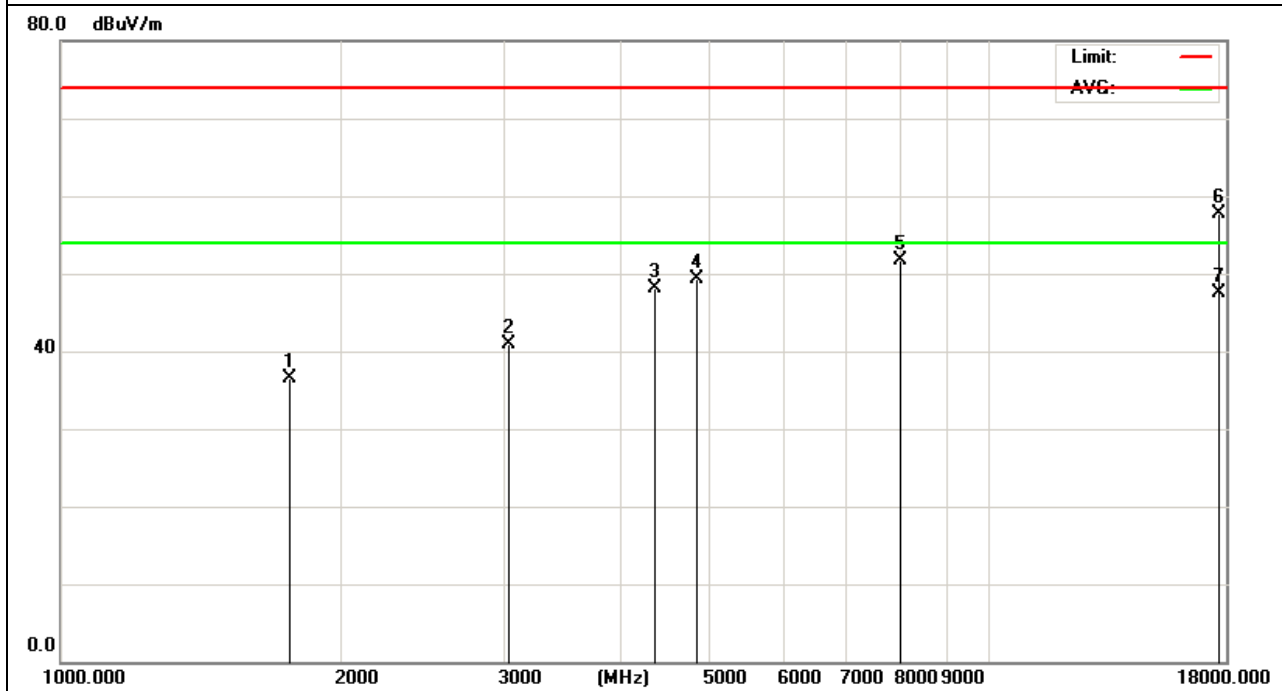
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 134	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1758.247	46.02	-9.46	36.56	74.00	-37.44	peak
3040.162	42.55	-1.59	40.96	74.00	-33.04	peak
4355.334	43.56	4.45	48.01	74.00	-25.99	peak
4839.489	44.26	5.10	49.36	74.00	-24.64	peak
8011.265	41.32	10.40	51.72	74.00	-22.28	peak
17689.364	32.90	24.90	57.80	74.00	-16.20	peak
17689.364	22.69	24.90	47.59	54.00	-6.41	AVG

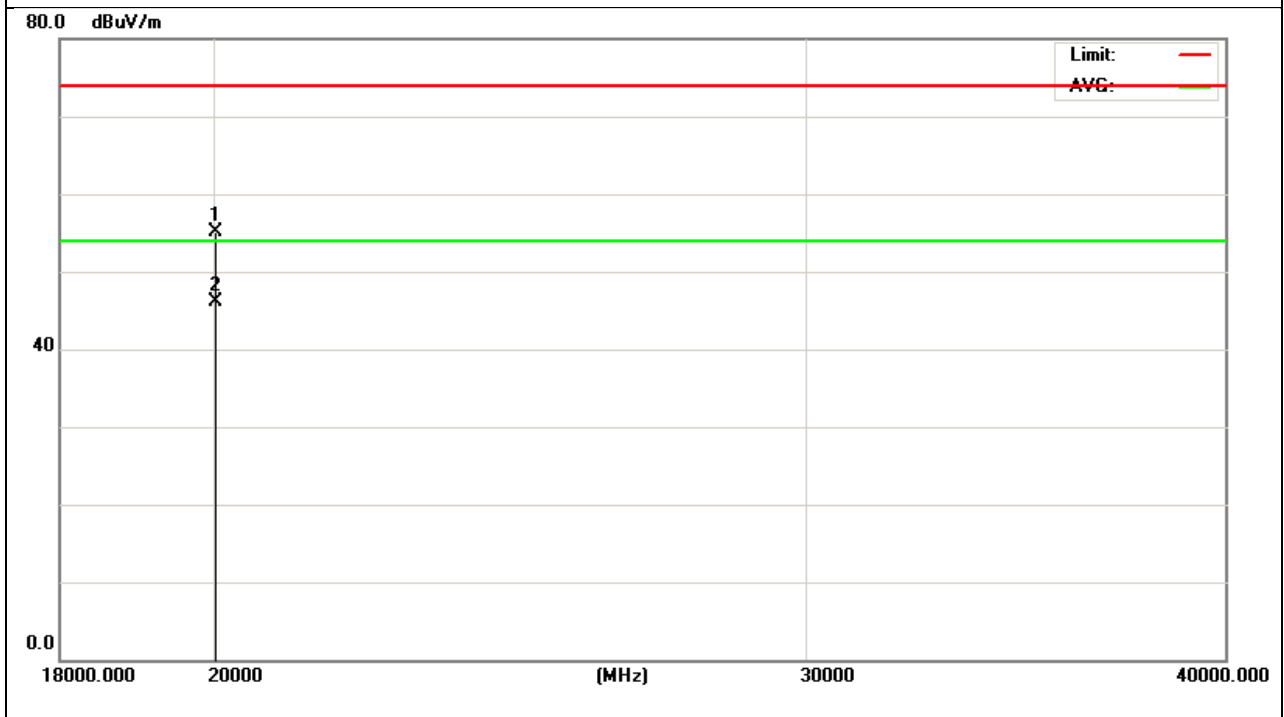
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 134	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
20018.000	39.76	15.29	55.05	74.00	-18.95	peak
20018.000	30.72	15.29	46.01	54.00	-7.99	AVG

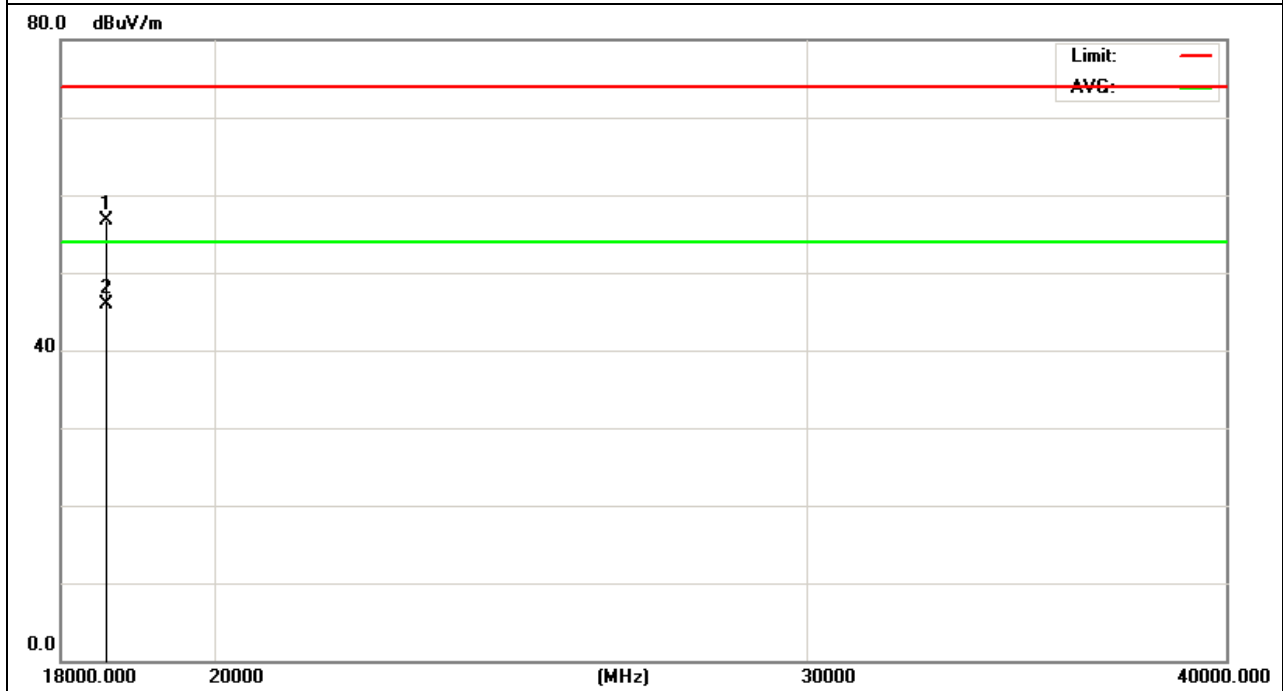
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11n40 Channel 134	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
18558.000	43.54	13.13	56.67	74.00	-17.33	peak
18558.000	32.69	13.13	45.82	54.00	-8.18	AVG

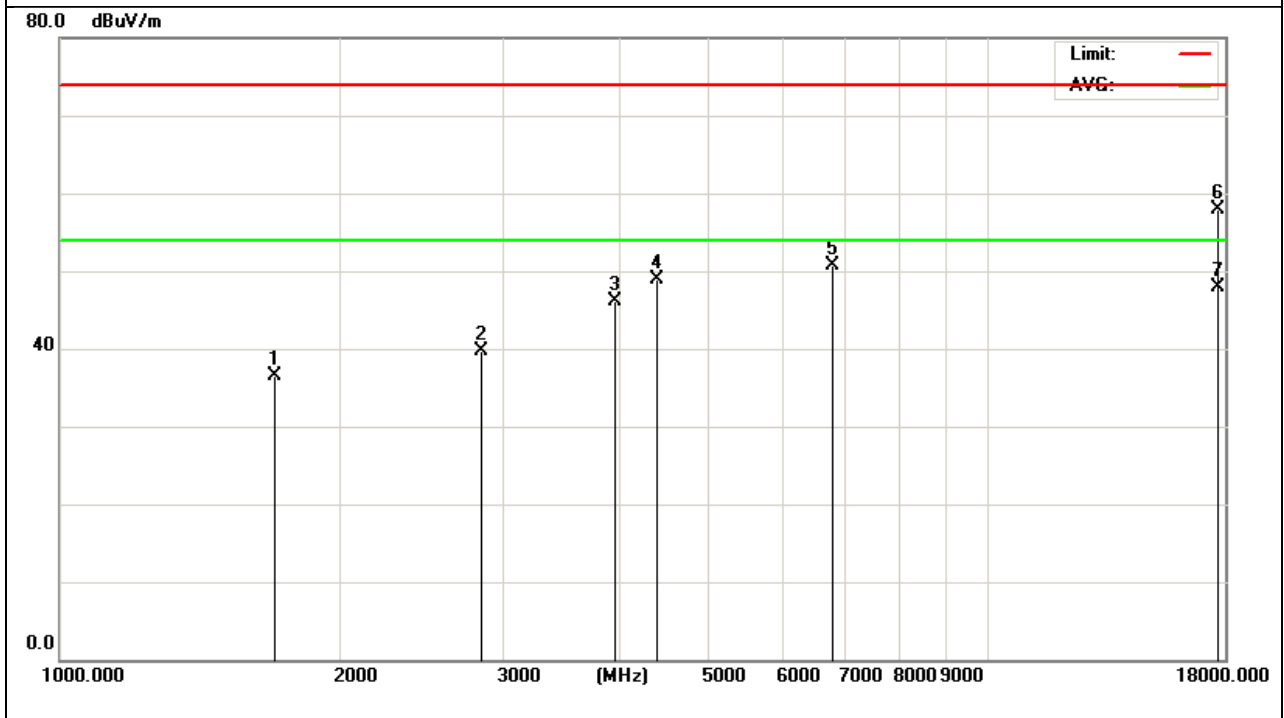
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11ac80 Channel 106	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1700.241	46.14	-9.63	36.51	74.00	-37.49	peak
2842.026	42.33	-2.65	39.68	74.00	-34.32	peak
3948.661	42.63	3.46	46.09	74.00	-27.91	peak
4398.476	44.28	4.53	48.81	74.00	-25.19	peak
6790.047	44.63	6.04	50.67	74.00	-23.33	peak
17648.006	32.89	24.92	57.81	74.00	-16.19	peak
17648.006	22.97	24.92	47.89	54.00	-6.11	AVG

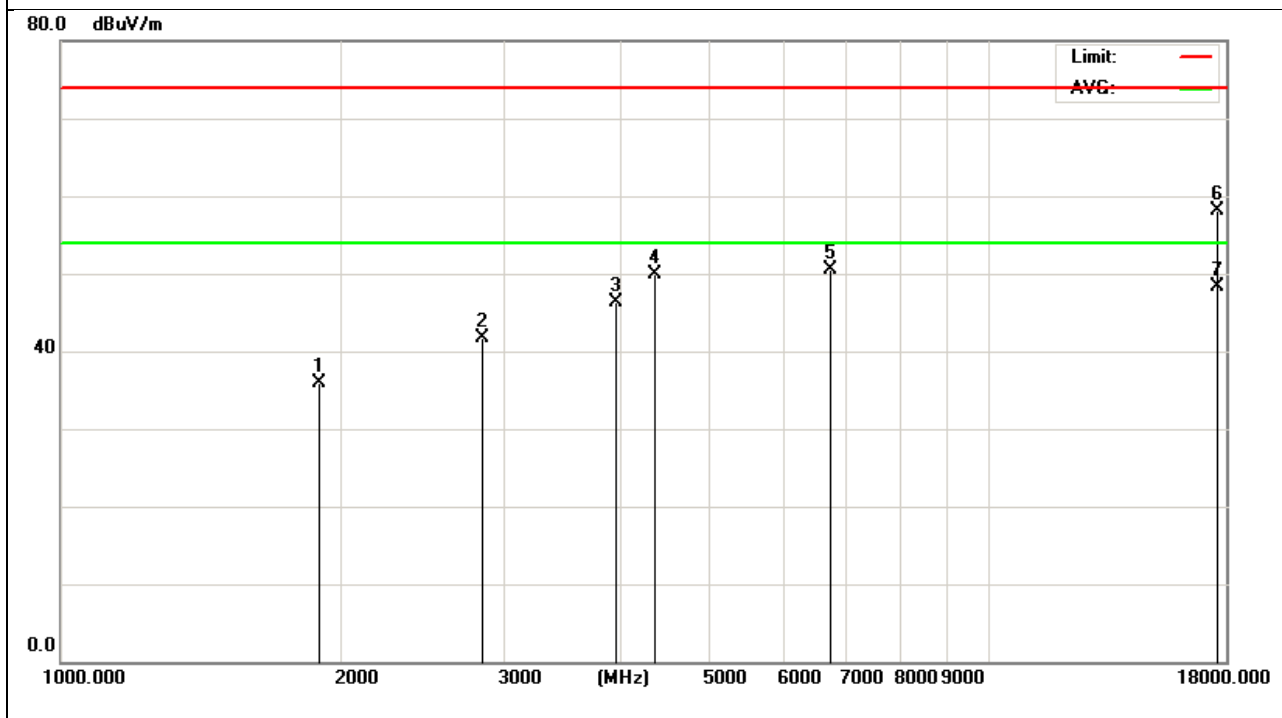
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11ac80 Channel 106	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1898.251	45.42	-9.52	35.90	74.00	-38.10	peak
2844.326	44.29	-2.64	41.65	74.00	-32.35	peak
3950.214	42.82	3.47	46.29	74.00	-27.71	peak
4361.014	45.52	4.46	49.98	74.00	-24.02	peak
6754.368	44.57	6.02	50.59	74.00	-23.41	peak
17558.689	33.05	24.99	58.04	74.00	-15.96	peak
17558.689	23.27	24.99	48.26	54.00	-5.74	AVG

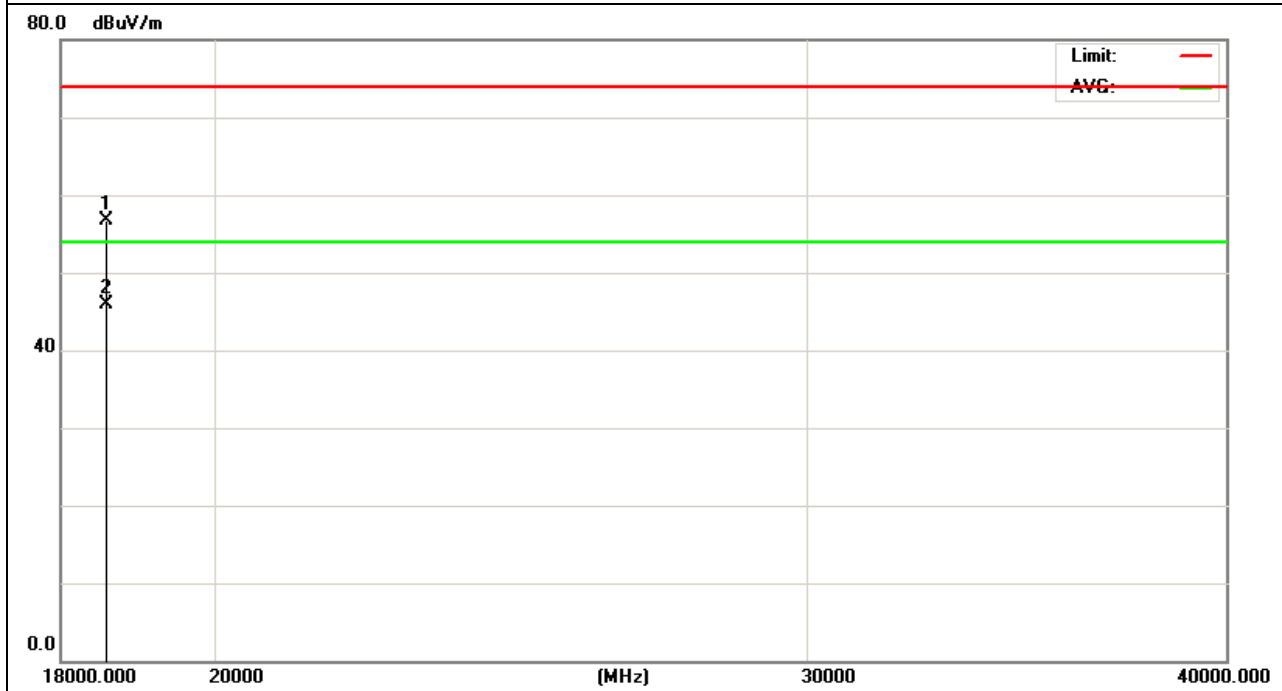
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11ac80 Channel 106	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
18558.000	43.54	13.13	56.67	74.00	-17.33	peak
18558.000	32.69	13.13	45.82	54.00	-8.18	AVG

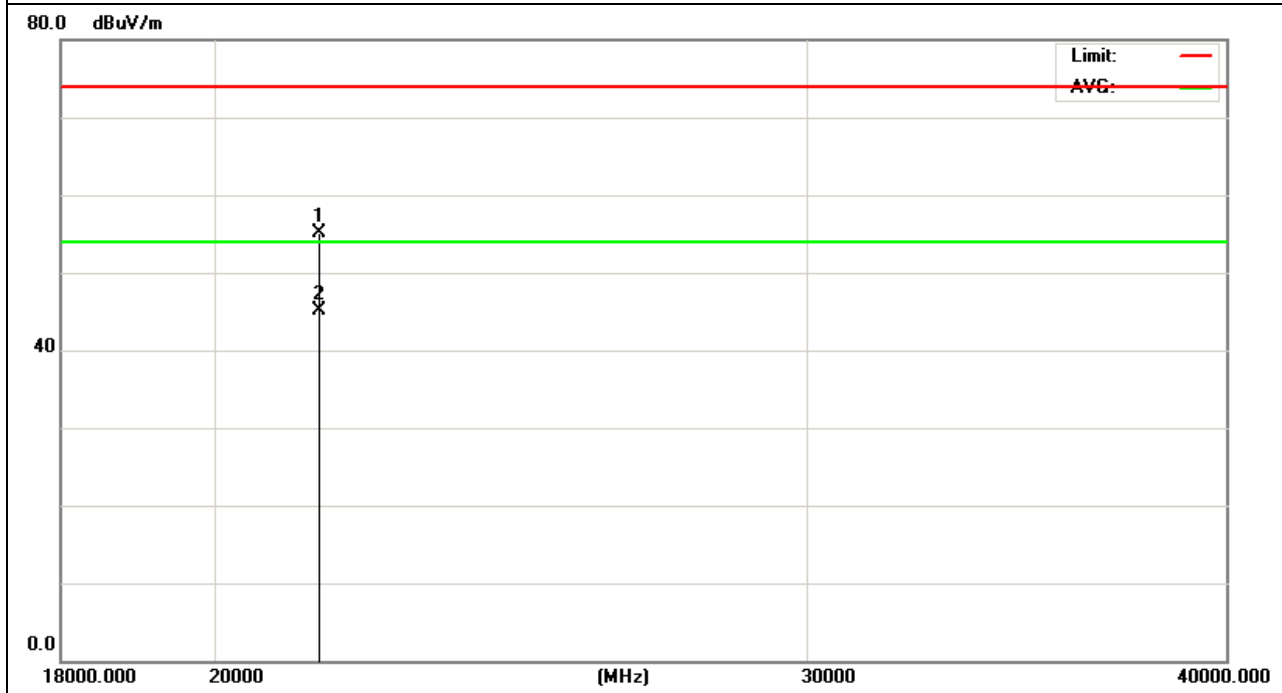
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	802.11ac80 Channel 106	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
21475.000	37.56	17.45	55.01	74.00	-18.99	peak
21475.000	27.74	17.45	45.19	54.00	-8.81	AVG

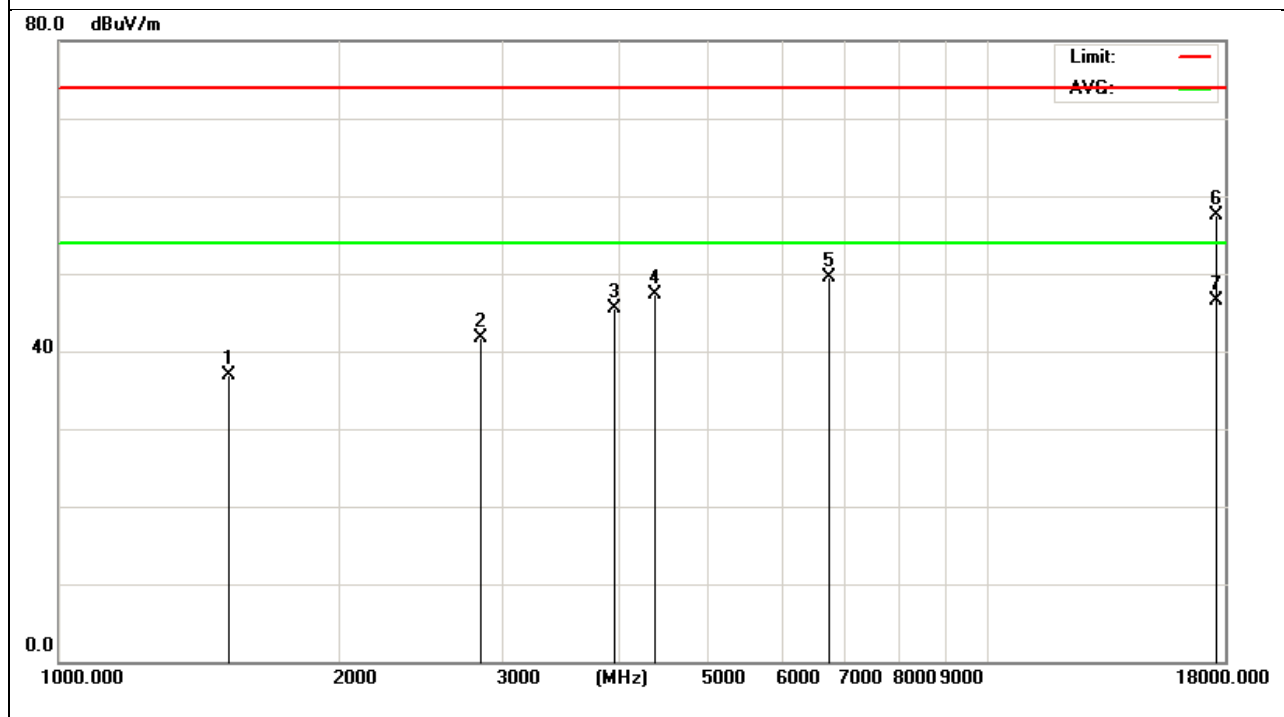
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	RX	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1536.535	47.34	-9.86	37.48	74.00	-36.52	peak
2849.885	45.00	-2.64	42.36	74.00	-31.64	peak
3950.734	41.91	3.46	45.37	74.00	-28.63	peak
4368.977	44.11	4.46	48.57	74.00	-25.43	peak
6748.782	43.69	6.01	49.70	74.00	-24.30	peak
17602.284	32.06	24.97	57.03	74.00	-16.97	peak
17602.284	22.85	24.97	47.82	54.00	-6.18	AVG

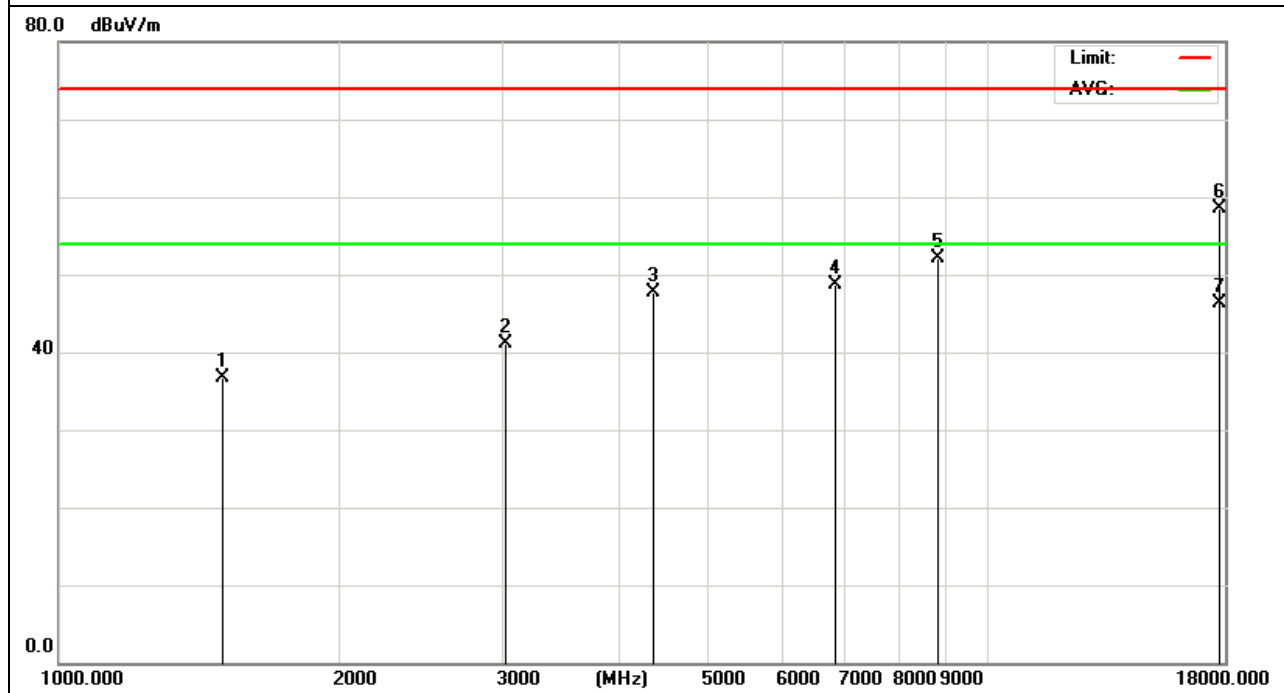
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	RX	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1511.578	46.95	-9.86	37.09	74.00	-36.91	peak
3025.875	42.65	-1.64	41.01	74.00	-32.99	peak
4364.035	43.34	4.46	47.80	74.00	-26.20	peak
6844.696	43.76	6.08	49.84	74.00	-24.16	peak
8825.714	41.28	10.62	51.90	74.00	-22.10	peak
17697.298	33.16	24.90	58.06	74.00	-15.94	peak
17697.298	21.87	24.90	46.77	54.00	-7.23	AVG

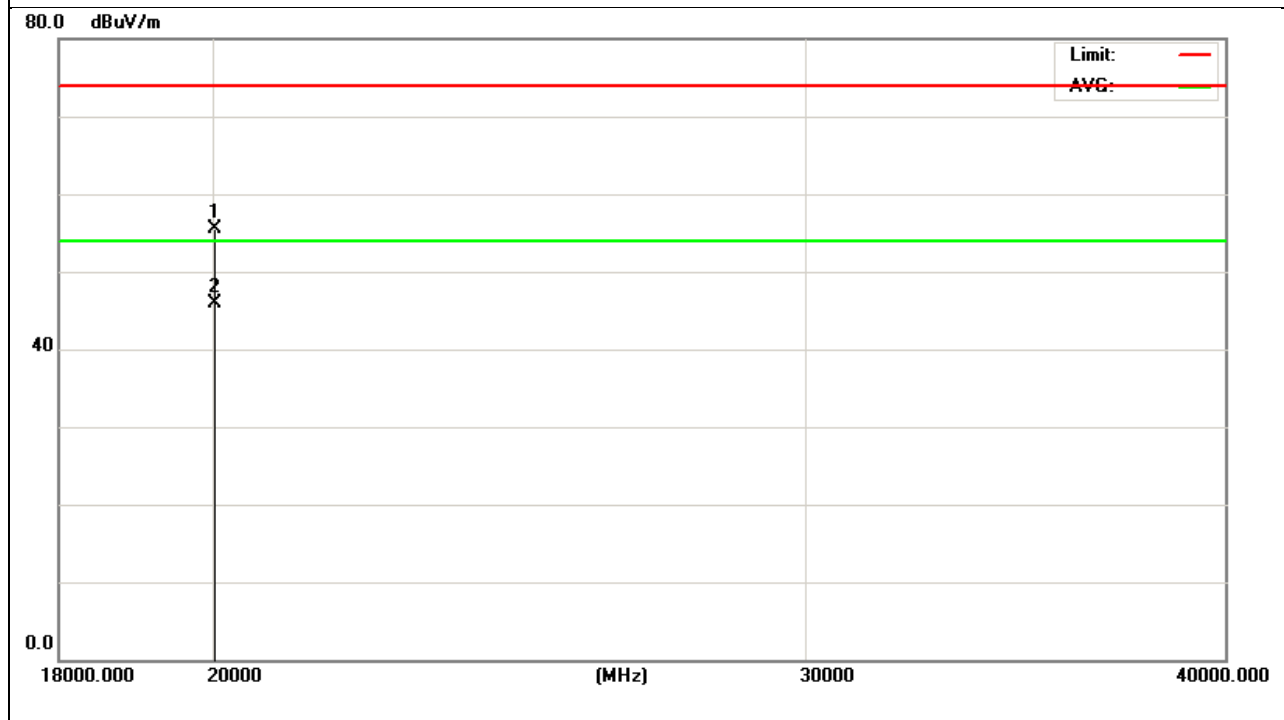
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	RX	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
20045.976	40.98	15.31	56.29	74.00	-17.71	peak
20045.976	30.65	15.31	45.96	54.00	-8.04	AVG

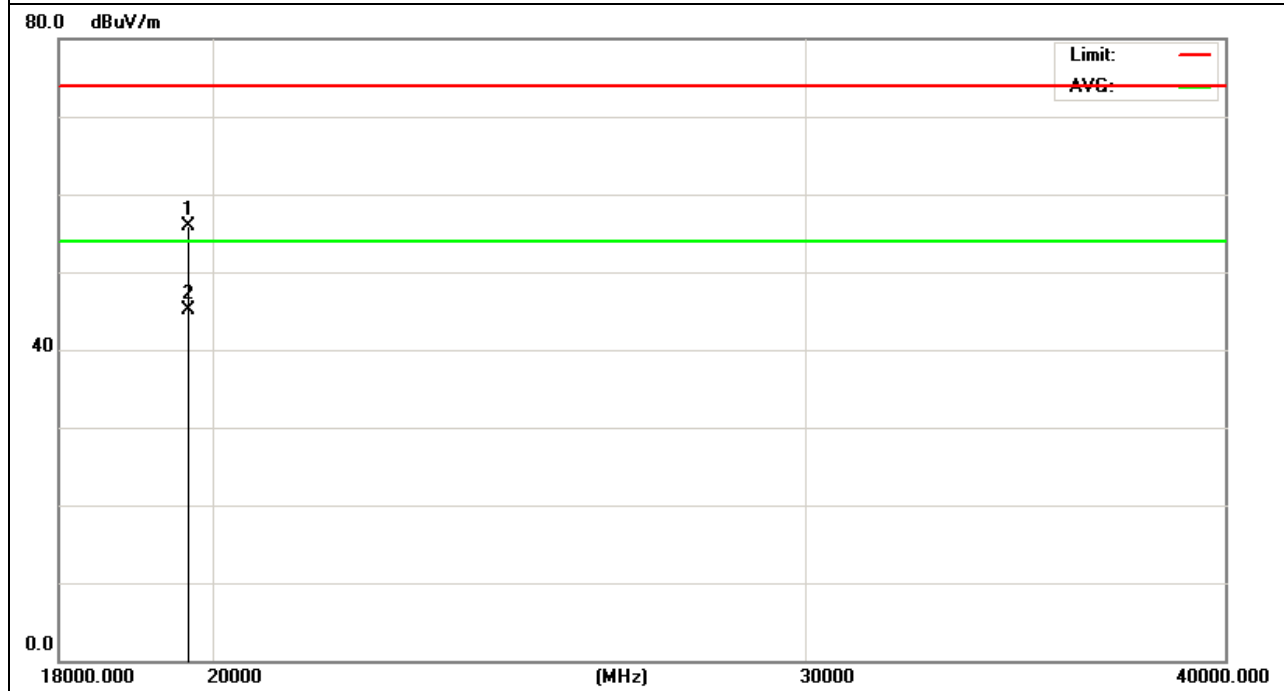
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-07-27
Test Mode :	RX	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC25.55V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
19663.722	40.94	14.76	55.70	74.00	-18.30	peak
19663.722	31.04	14.76	45.80	54.00	-8.20	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



No any other emissions level which are attenuated less than 20dB below the limit. No recording in the test report.

3.2.6 TEST RESULTS (RESTRICTED BANDS REQUIREMENTS)

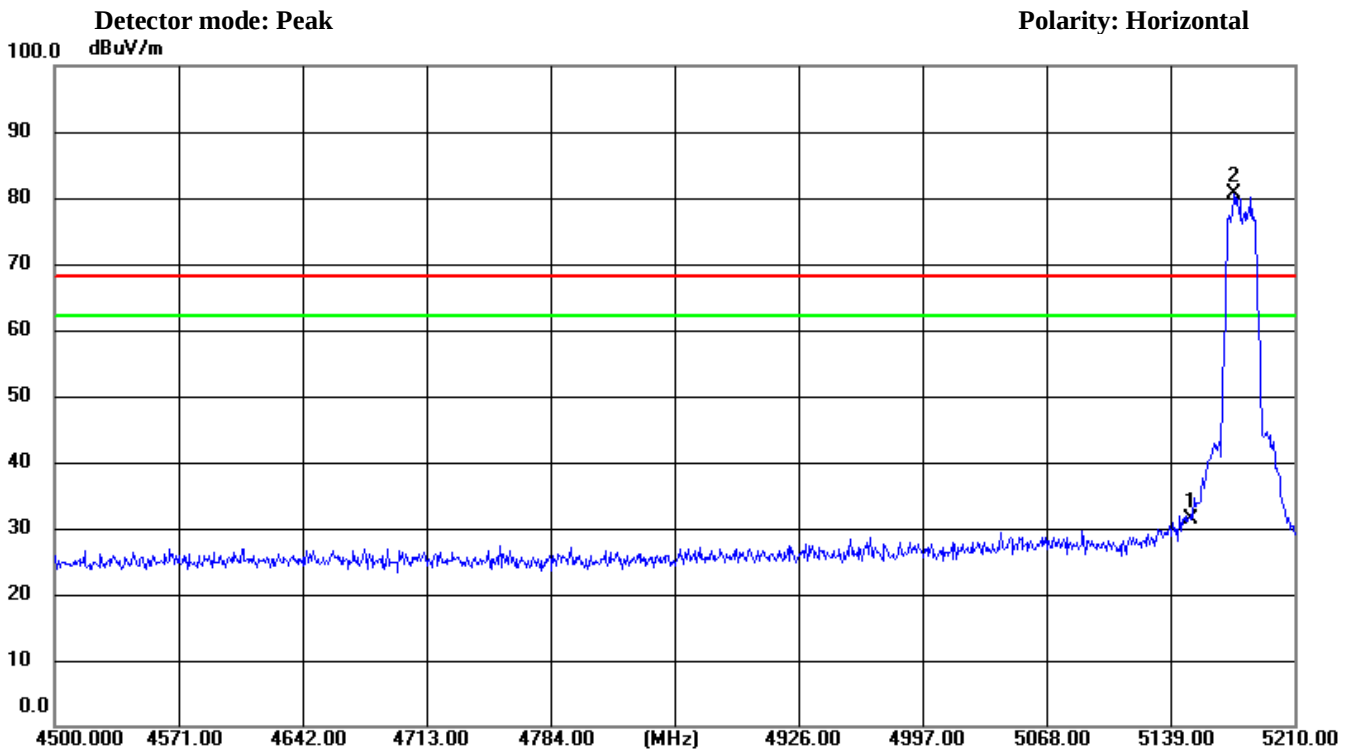
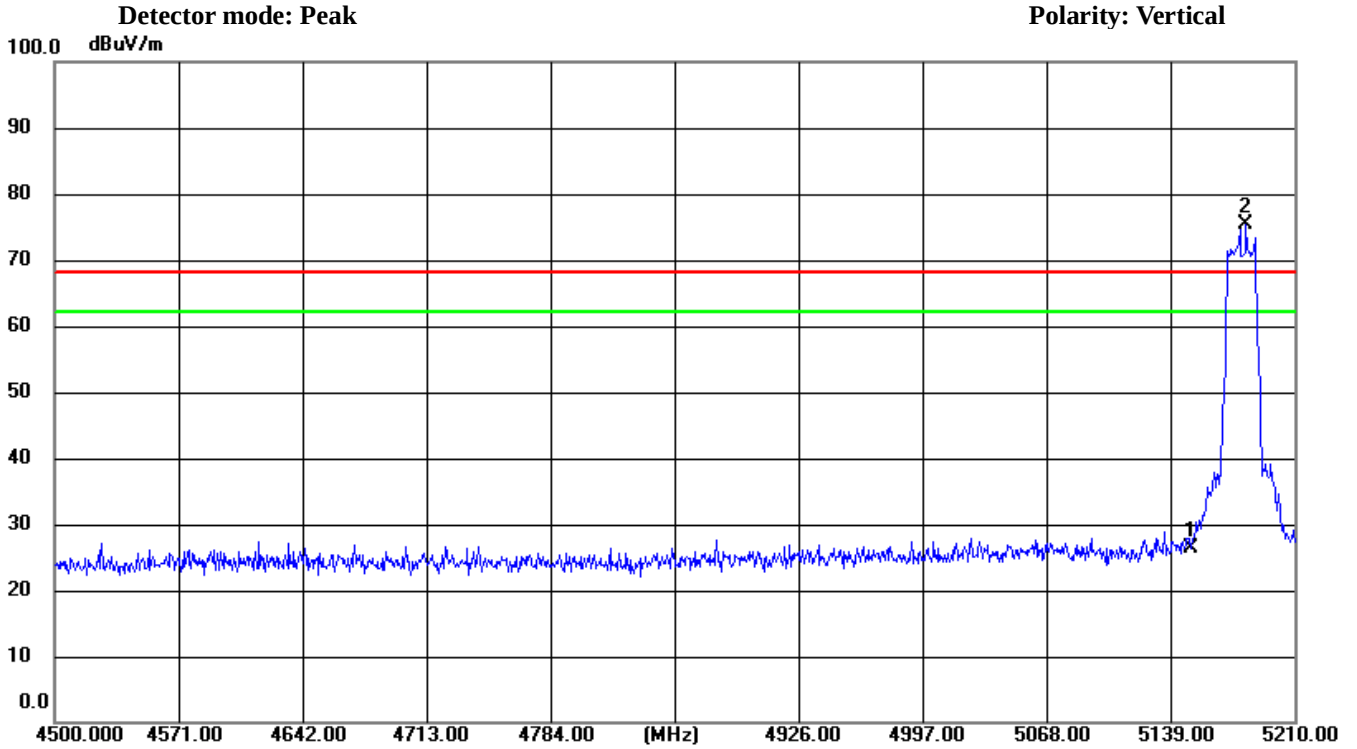
EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24°C	Relative Humidity :	51%
Pressure :	1010 hPa	Test Voltage :	DC25.55V from battery
Test Mode :	802.11a		
Test Date :	2021-07-27		
Note :	1. The transmitter was setup to transmit at the lowest channel (CH36). Then the field strength was measured at 4500-5150 MHz. 2. The transmitter was setup to transmit at the highest channel (CH48). Then the field strength was measured at 5190-5410 MHz. 3. The data of 5150MHz and 5350MHz was the worst.		

Freq. (MHz) (Peak)	Ant.Pol. H/V	Reading	Ant/CF	Act	Limit	Note
		Peak (dBuv)	Peak (dB)	Peak (dBuv/m)	Peak (dBuv/m)	
5150.000	V	21.57	4.78	26.35	68.20	CH36
5182.310	V	70.65	4.68	---	---	CH36
5150.000	H	26.56	4.78	31.34	68.20	CH36
5175.210	H	75.95	4.70	---	---	CH36
5242.580	V	70.86	4.52	---	---	CH48
5350.000	V	20.88	4.30	25.18	68.20	CH48
5245.000	H	75.91	4.51	---	---	CH48
5350.000	H	21.29	4.30	25.59	68.20	CH48

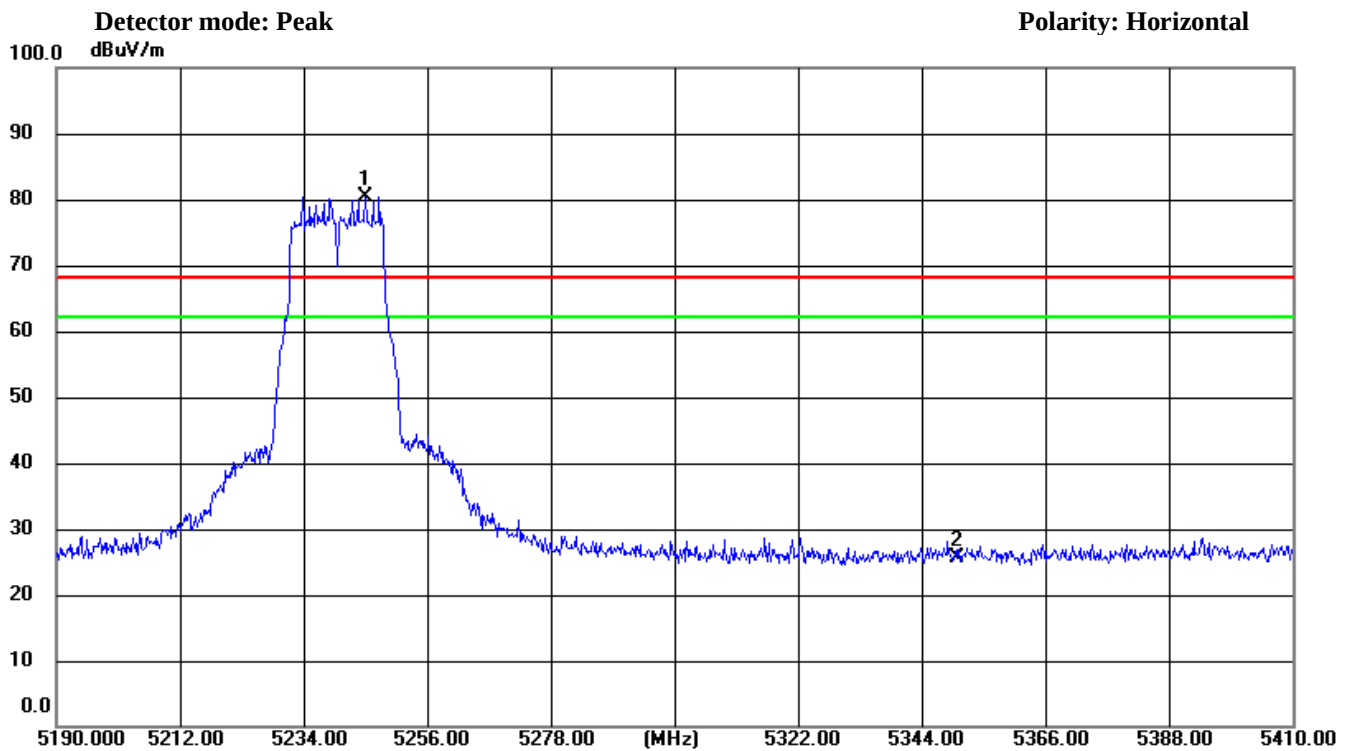
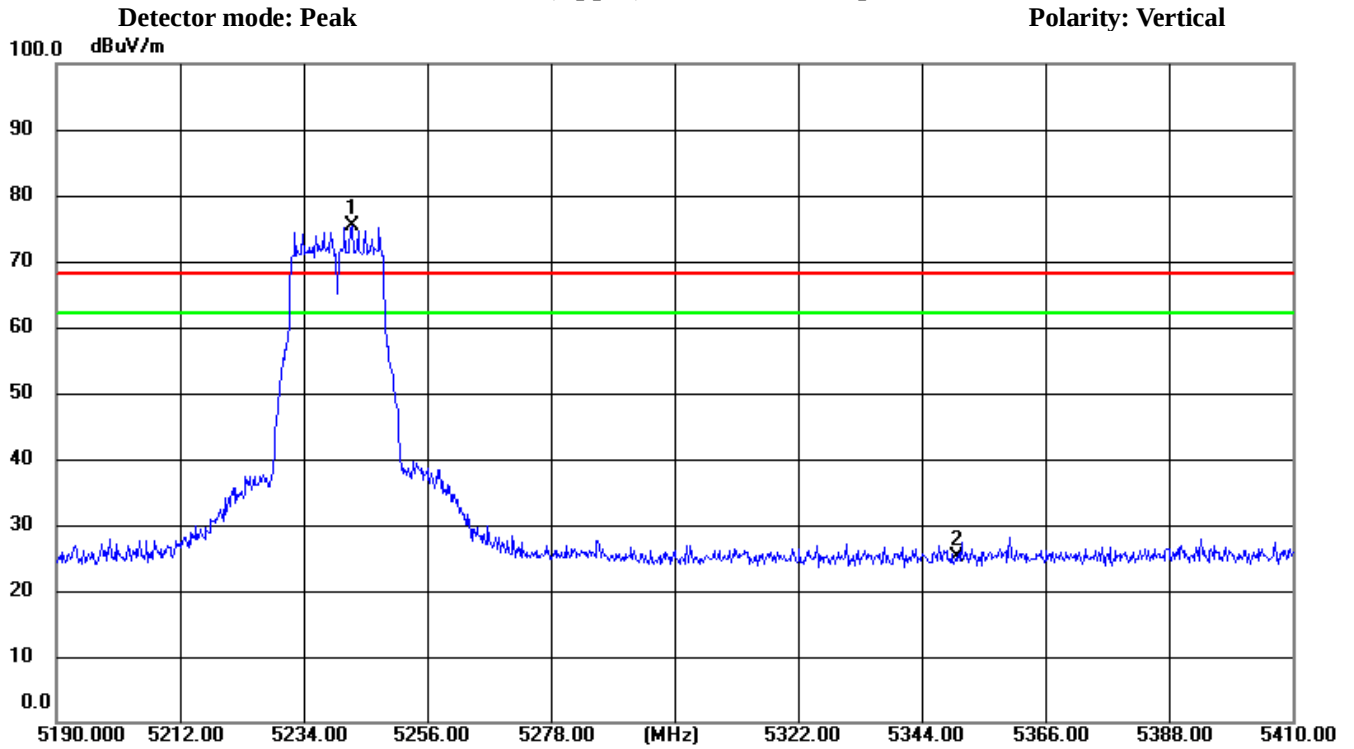
Remark :

- (1) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode
- (2) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (3) Corr.Factor = Antenna Factor + Cable Loss – Pre-amplifier.

802.11a (5.15GHz-5.25GHz)
CH 36 (Lower) Data rate 6Mbps



802.11a (5.15GHz-5.25GHz) CH 48 (Upper) Data rate 6Mbps



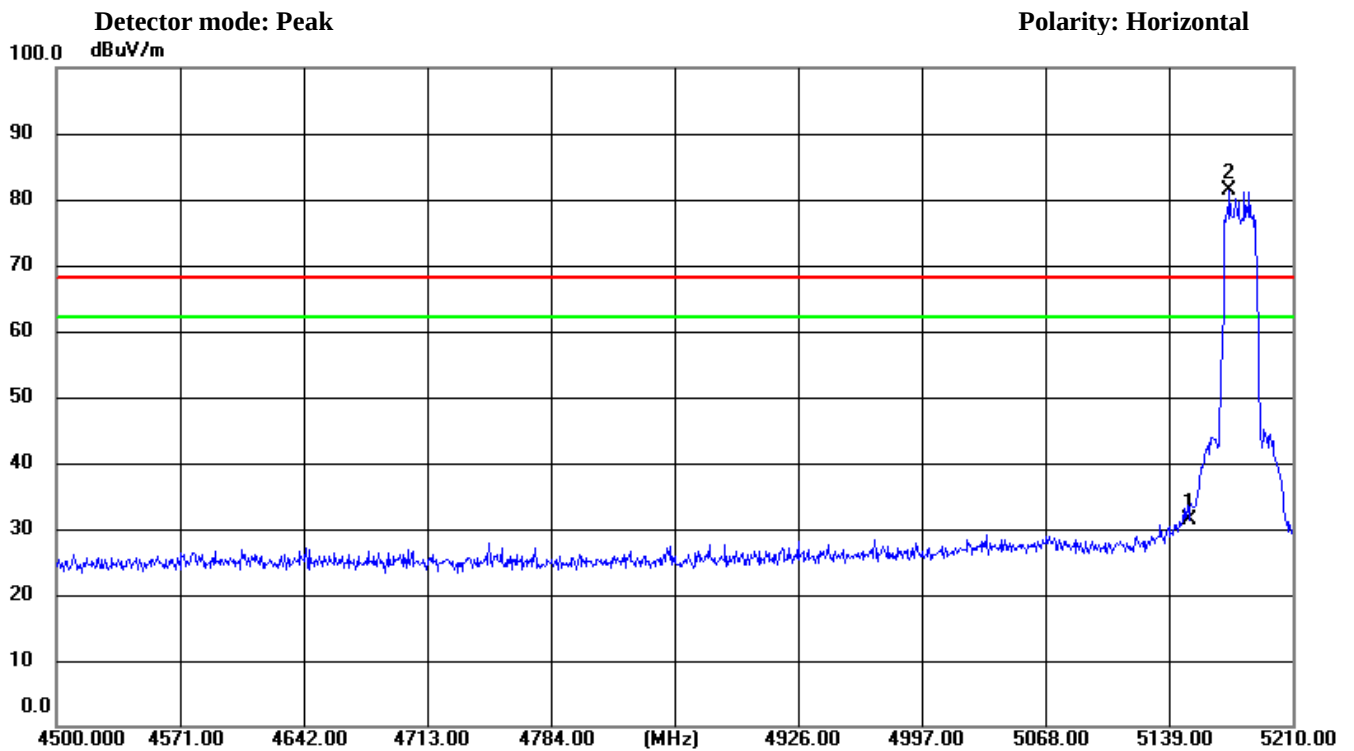
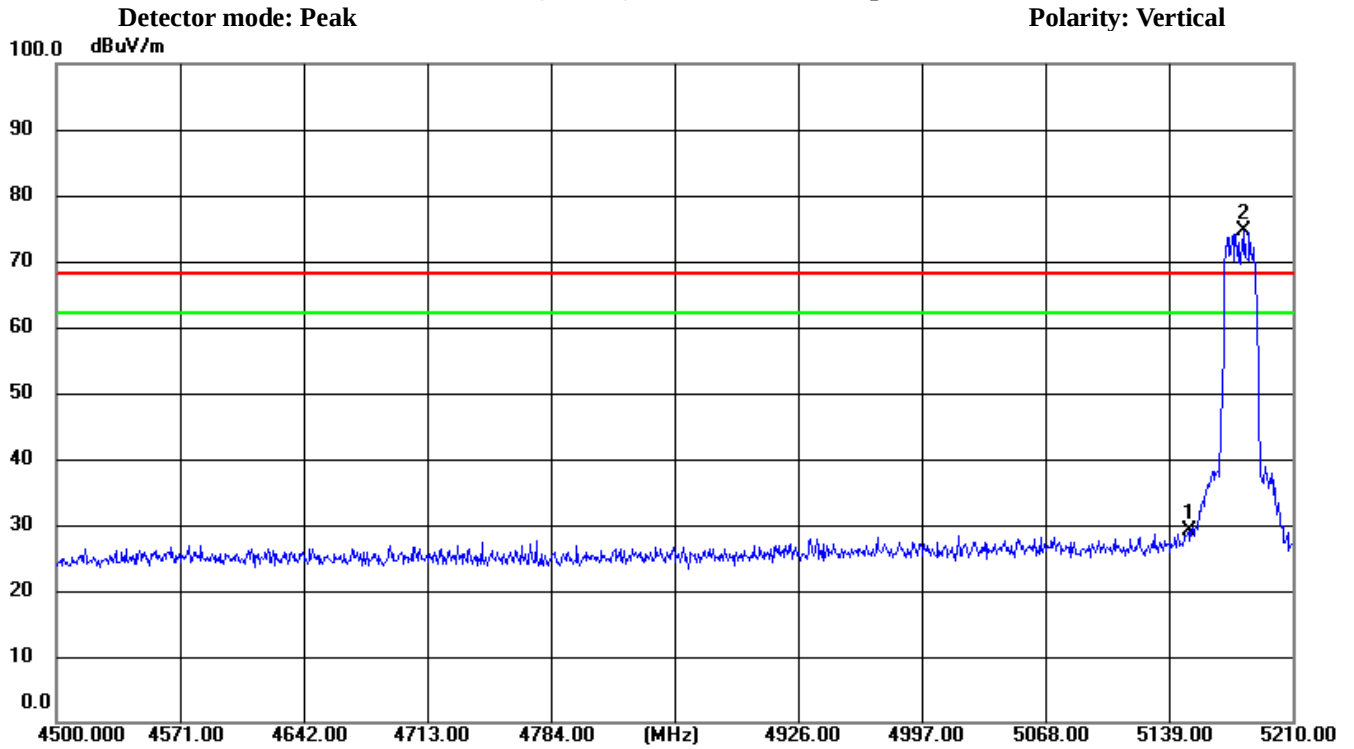
EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24°C	Relative Humidity :	51%
Pressure :	1010 hPa	Test Voltage :	DC25.55V from battery
Test Mode :	802.11n BW20MHz		
Test Date :	2021-07-27		
Note :	1. The transmitter was setup to transmit at the lowest channel (CH36). Then the field strength was measured at 4500-5150 MHz. 2. The transmitter was setup to transmit at the highest channel (CH48). Then the field strength was measured at 5190-5410 MHz. 3. The data of 5150MHz and 5350MHz was the worst.		

Freq. (MHz) (Peak)	Ant.Pol. H/V	Reading	Ant/CF	Act	Limit	Note
		Peak (dBuv)	Peak (dB)	Peak (dBuv/m)	Peak (dBuv/m)	
5150.000	V	24.29	4.78	29.07	68.20	CH36
5182.310	V	69.86	4.68	---	---	CH36
5150.000	H	26.49	4.78	31.27	68.20	CH36
5173.790	H	76.70	4.68	---	---	CH36
5245.000	V	68.91	4.51	---	---	CH48
5350.000	V	19.02	4.30	23.32	68.20	CH48
5241.260	H	75.57	4.52	---	---	CH48
5350.000	H	22.15	4.30	26.45	68.20	CH48

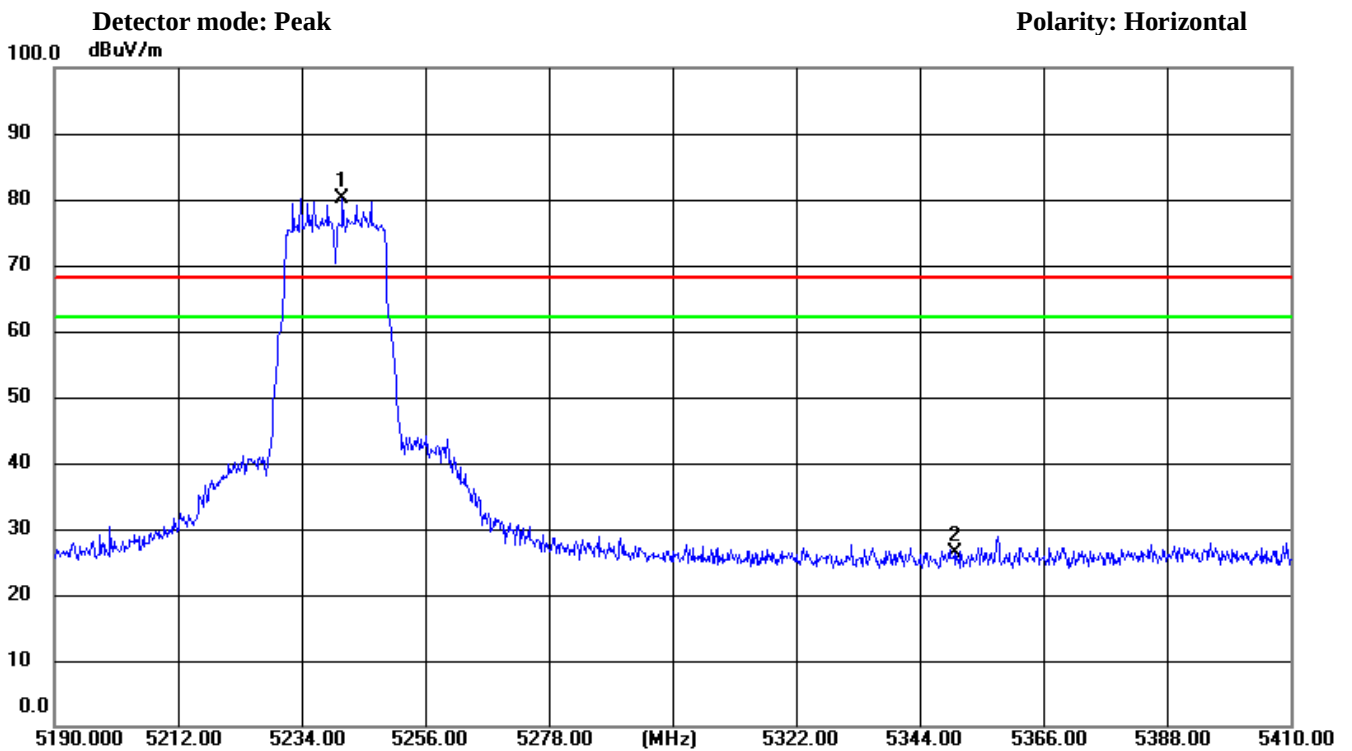
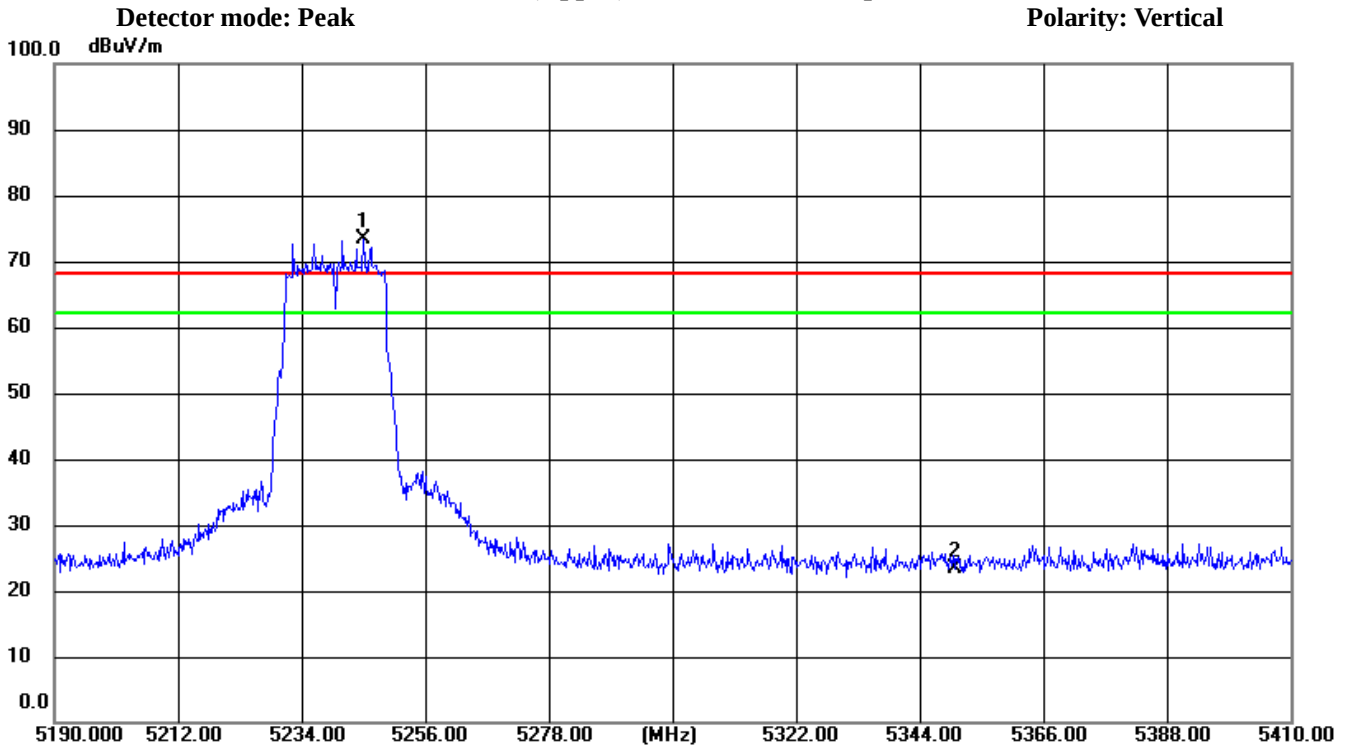
Remark :

- (1) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode
- (2) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (3) Corr.Factor = Antenna Factor + Cable Loss – Pre-amplifier.

802.11n(20M) (5.15GHz-5.25GHz)
CH 36 (Lower) Data rate 7.2Mbps



802.11n(20M) (5.15GHz-5.25GHz)
CH 48(Upper) Data rate 7.2Mbps



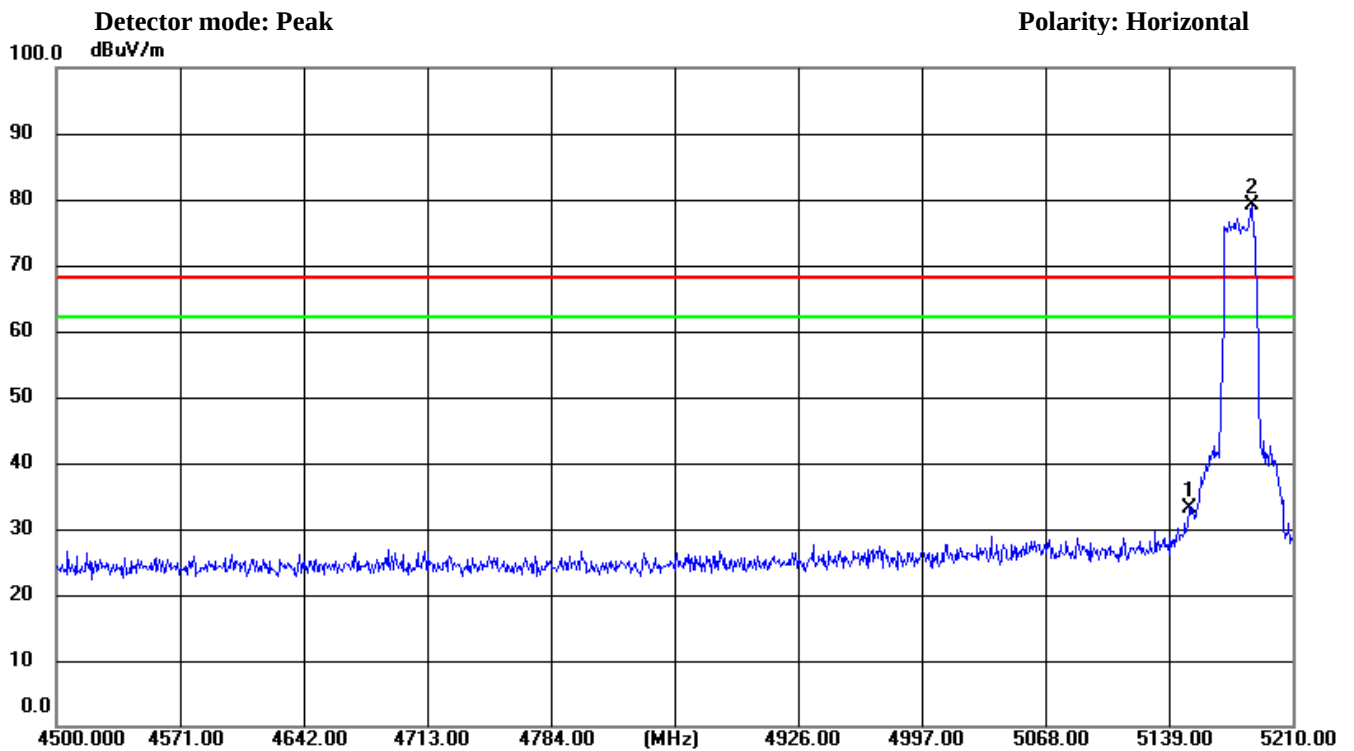
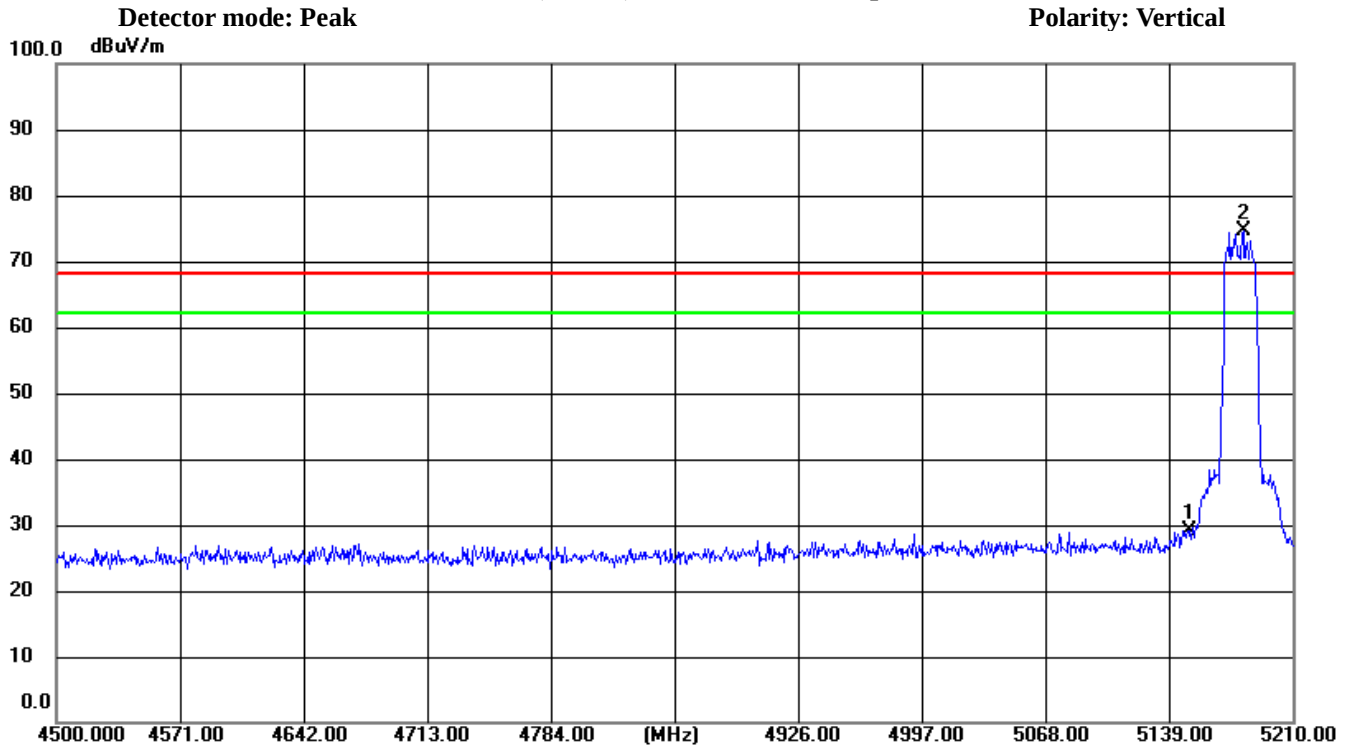
EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24°C	Relative Humidity :	51%
Pressure :	1010 hPa	Test Voltage :	DC25.55V from battery
Test Mode :	802.11ac BW20MHz		
Test Date :	2021-07-27		
Note :	1. The transmitter was setup to transmit at the lowest channel (CH36). Then the field strength was measured at 4500-5150 MHz. 2. The transmitter was setup to transmit at the highest channel (CH48). Then the field strength was measured at 5190-5410 MHz. 3. The data of 5150MHz and 5350MHz was the worst.		

Freq. (MHz) (Peak)	Ant.Pol. H/V	Reading	Ant/CF	Act	Limit	Note
		Peak (dBuV)	Peak (dB)	Peak (dBuV/m)	Peak (dBuV/m)	
5150.000	V	24.38	4.78	29.16	68.20	CH36
5182.310	V	70.02	4.68	---	---	CH36
5150.000	H	28.41	4.78	33.19	68.20	CH36
5186.570	H	74.39	4.66	---	---	CH36
5242.580	V	68.81	4.52	---	---	CH48
5350.000	V	21.36	4.30	25.66	68.20	CH48
5242.580	H	73.40	4.52	---	---	CH48
5350.000	H	21.25	4.30	25.55	68.20	CH48

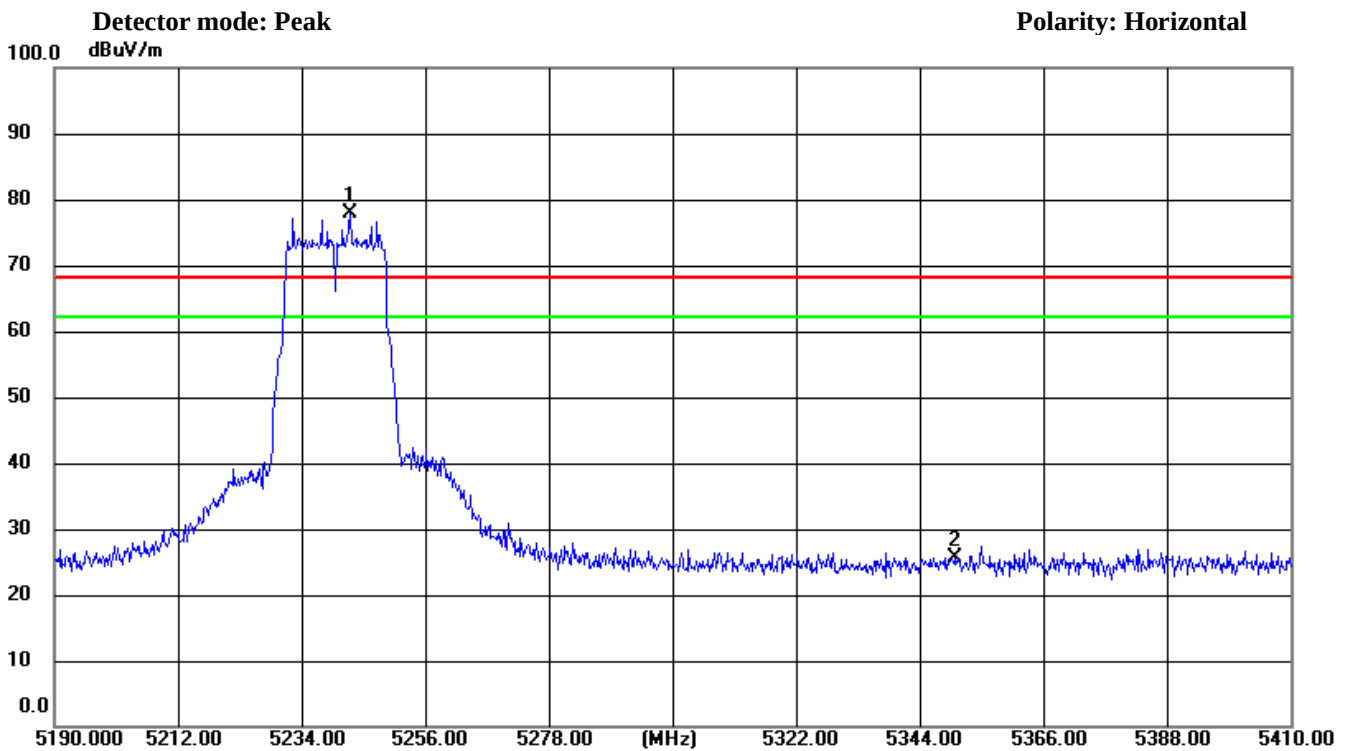
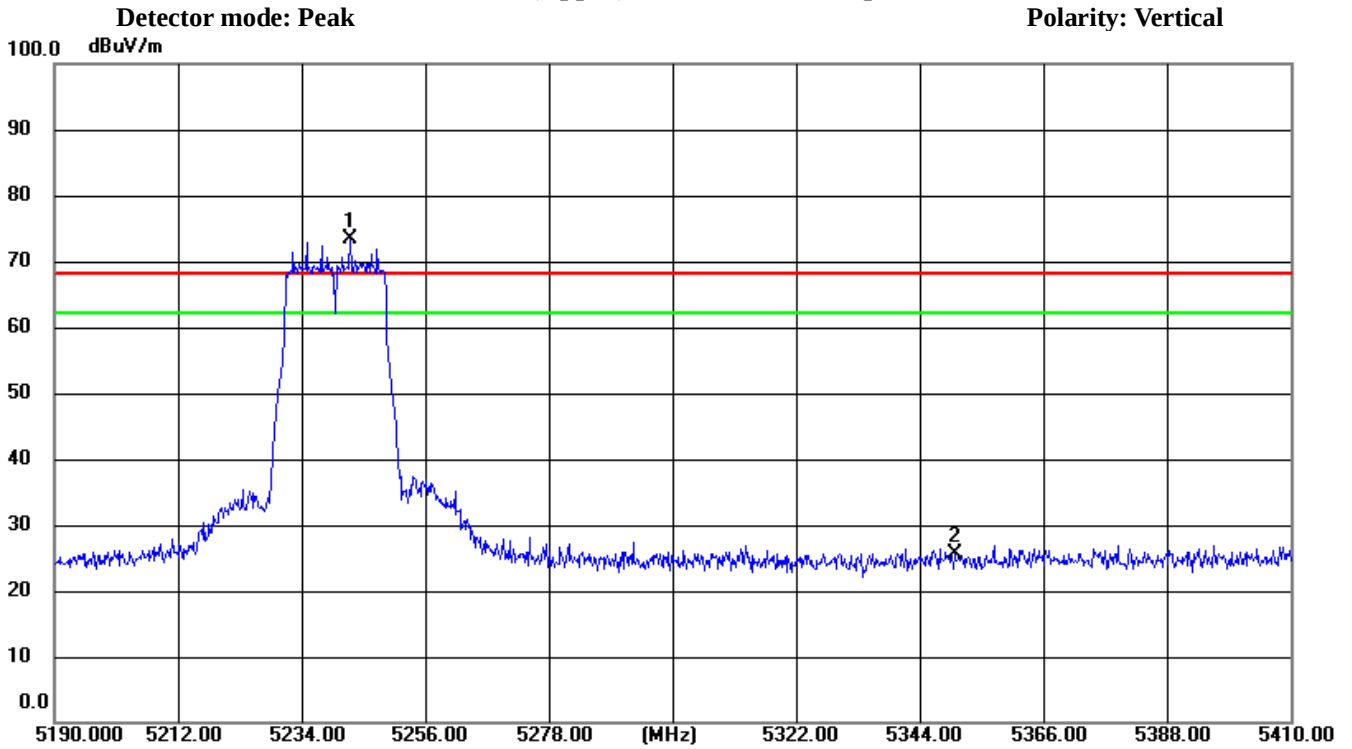
Remark :

- (1) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode
- (2) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (3) Corr.Factor = Antenna Factor + Cable Loss – Pre-amplifier.

802.11n(20M) (5.15GHz-5.25GHz)
CH 36 (Lower) Data rate 7.2Mbps



802.11n(20M) (5.15GHz-5.25GHz)
CH 48(Upper) Data rate 7.2Mbps



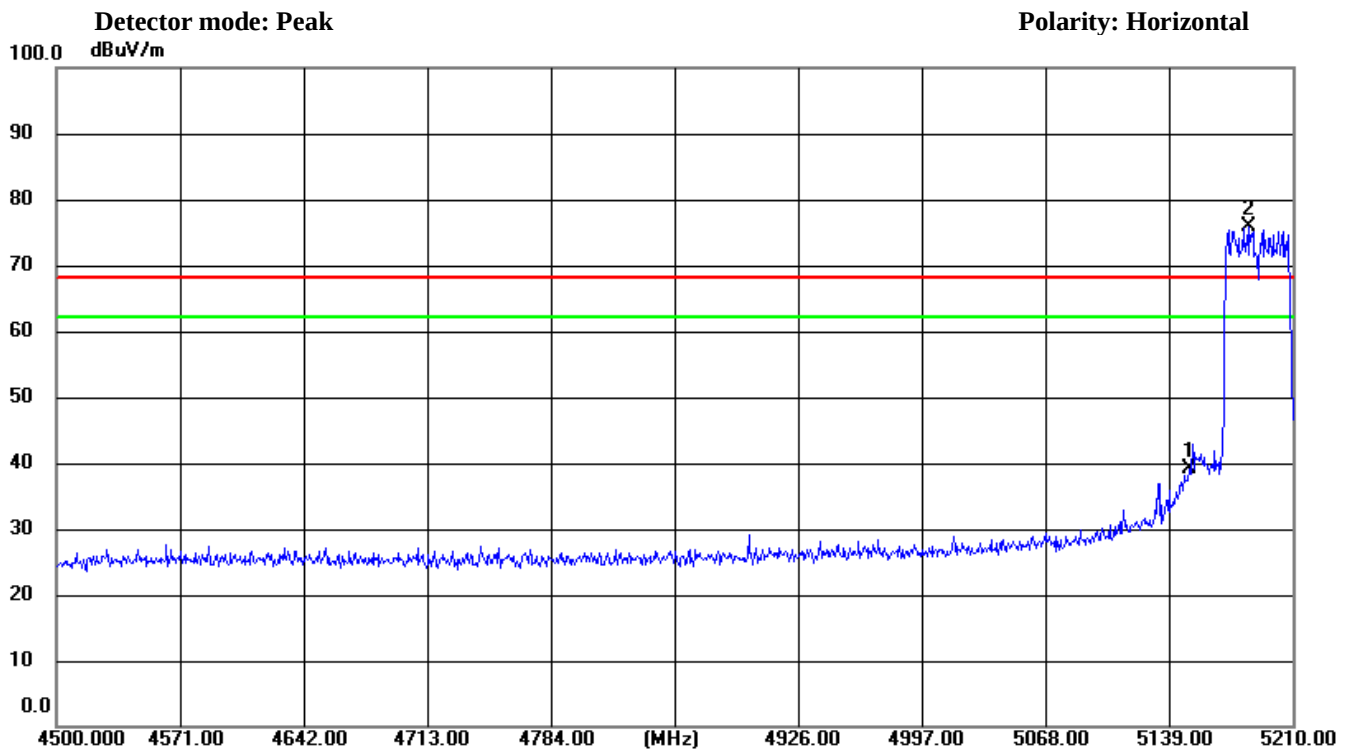
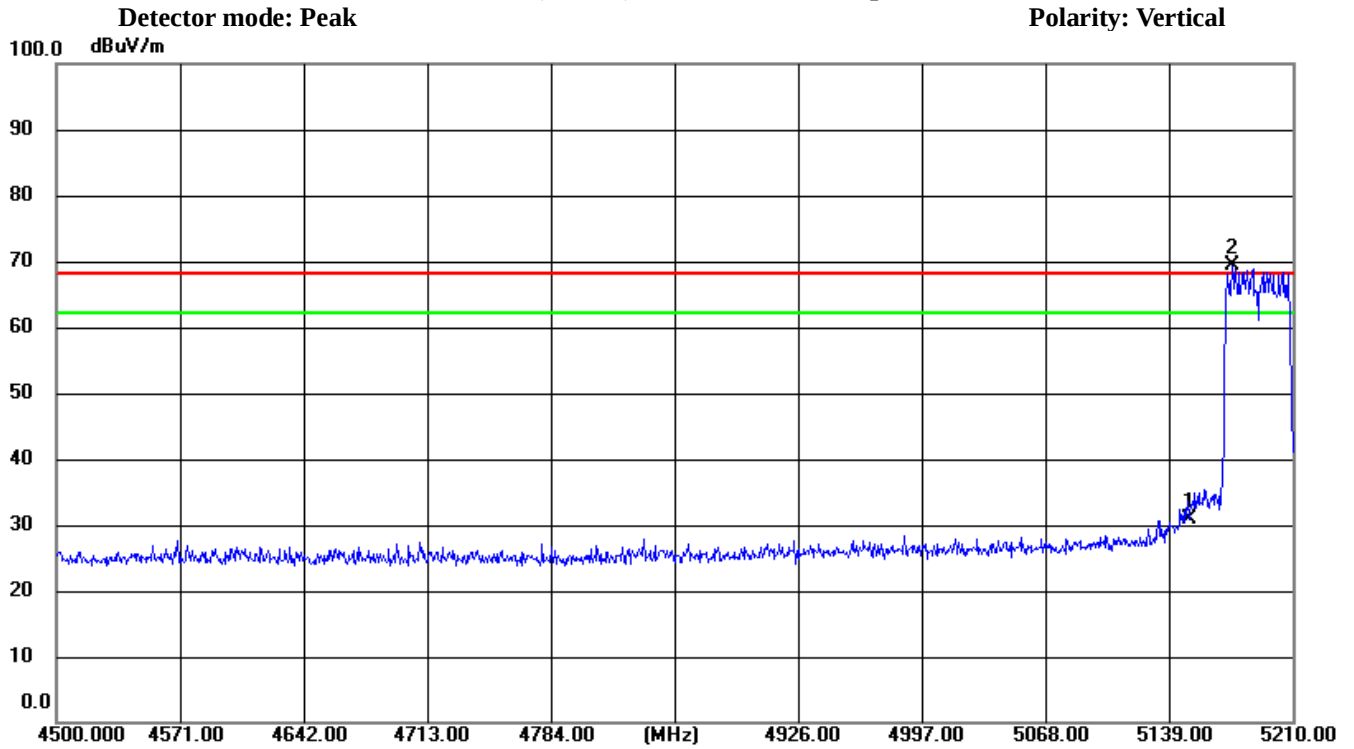
EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24°C	Relative Humidity :	51%
Pressure :	1010 hPa	Test Voltage :	DC25.55V from battery
Test Mode :	802.11n BW40MHz		
Test Date :	2021-07-27		
Note :	1. The transmitter was setup to transmit at the lowest channel (CH38). Then the field strength was measured at 4500-5150 MHz. 2. The transmitter was setup to transmit at the highest channel (CH46). Then the field strength was measured at 5190-5410 MHz. 3. The data of 5150MHz and 5350MHz was the worst.		

Freq. (MHz) (Peak)	Ant.Pol. H/V	Reading	Ant/CF	Act	Limit	Note
		Peak (dBuv)	Peak (dB)	Peak (dBuv/m)	Peak (dBuv/m)	
5150.000	V	26.13	4.78	30.91	68.20	CH38
5175.210	V	64.60	4.70	---	---	CH38
5150.000	H	34.27	4.78	39.05	68.20	CH38
5185.150	H	71.31	4.67	---	---	CH38
5233.780	V	62.81	4.54	---	---	CH46
5350.000	V	20.12	4.30	24.42	68.20	CH46
5234.880	H	69.94	4.54	---	---	CH46
5350.000	H	20.04	4.30	24.34	68.20	CH46

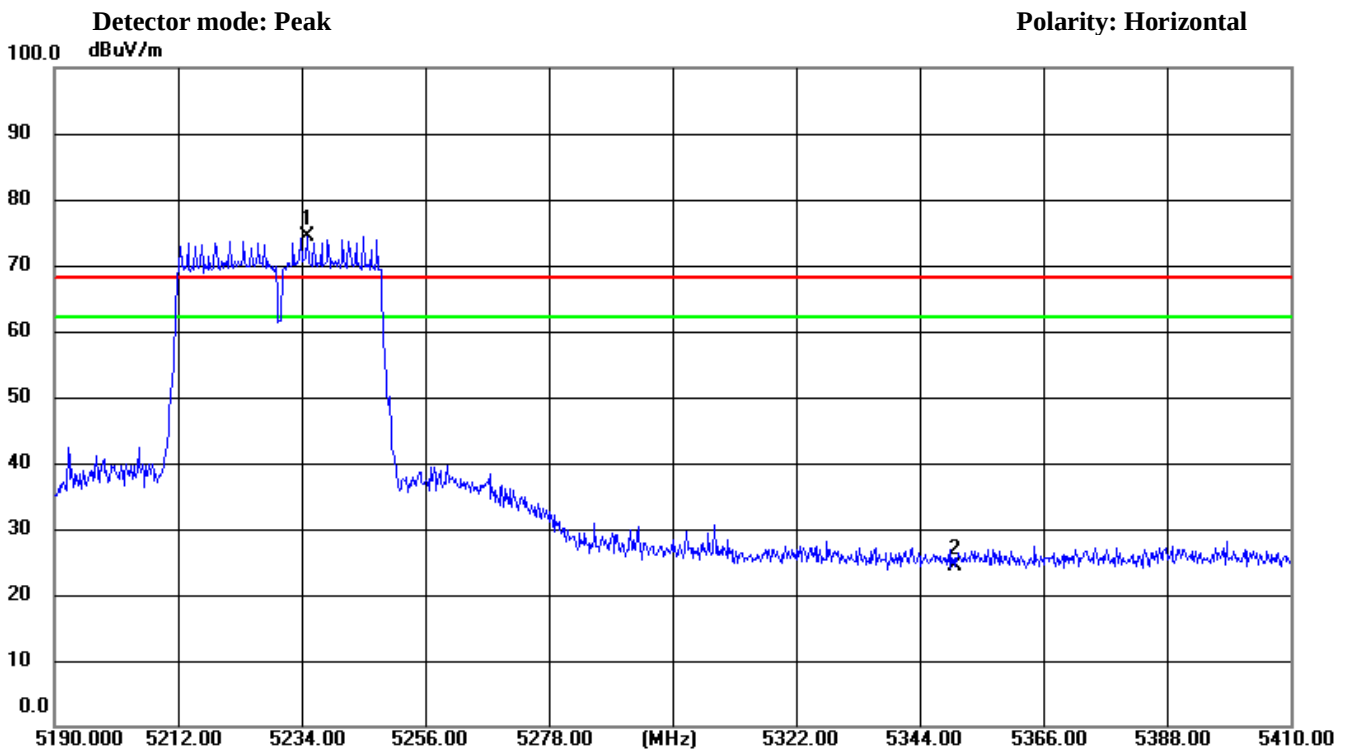
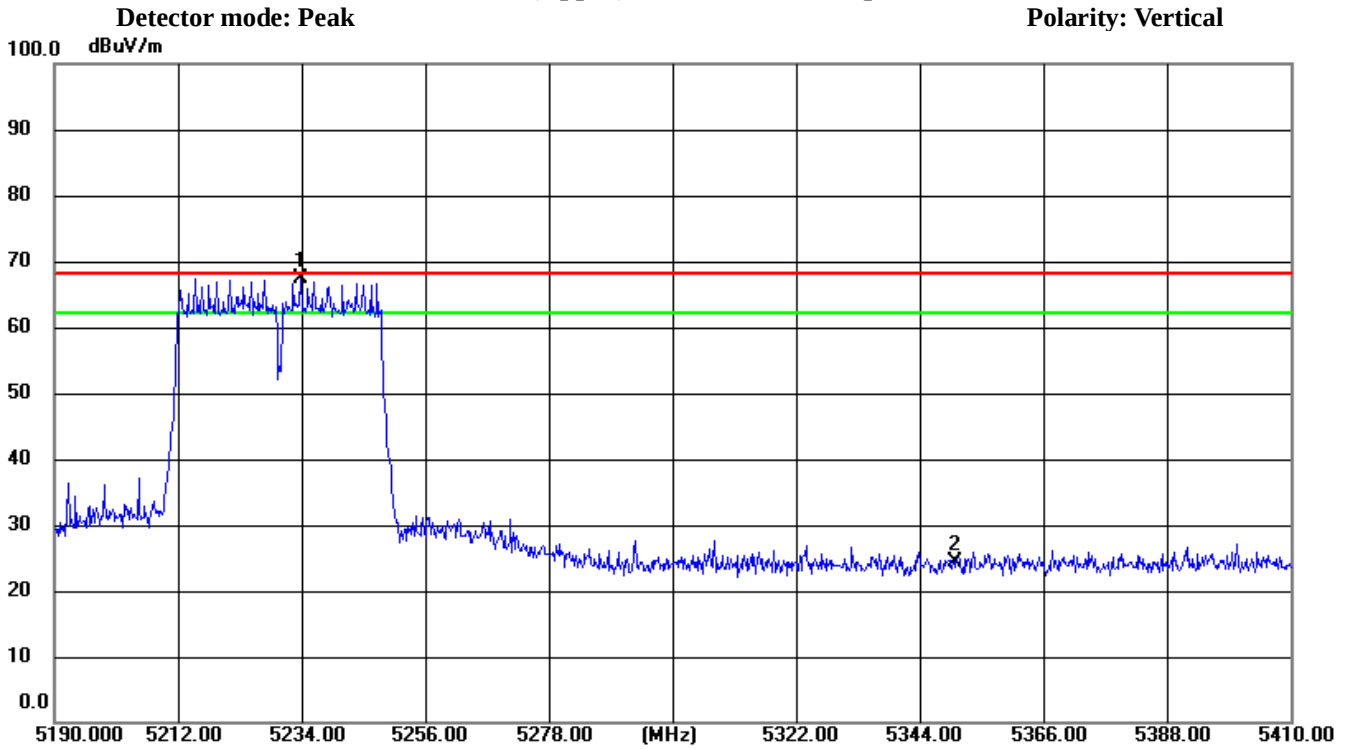
Remark :

- (1) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode
- (2) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (3) Corr.Factor = Antenna Factor + Cable Loss – Pre-amplifier.

802.11n(40M) (5.15GHz-5.25GHz)
CH 38 (Lower) Data rate 7.2Mbps



802.11n(40M) (5.15GHz-5.25GHz)
CH 46(Upper) Data rate 7.2Mbps



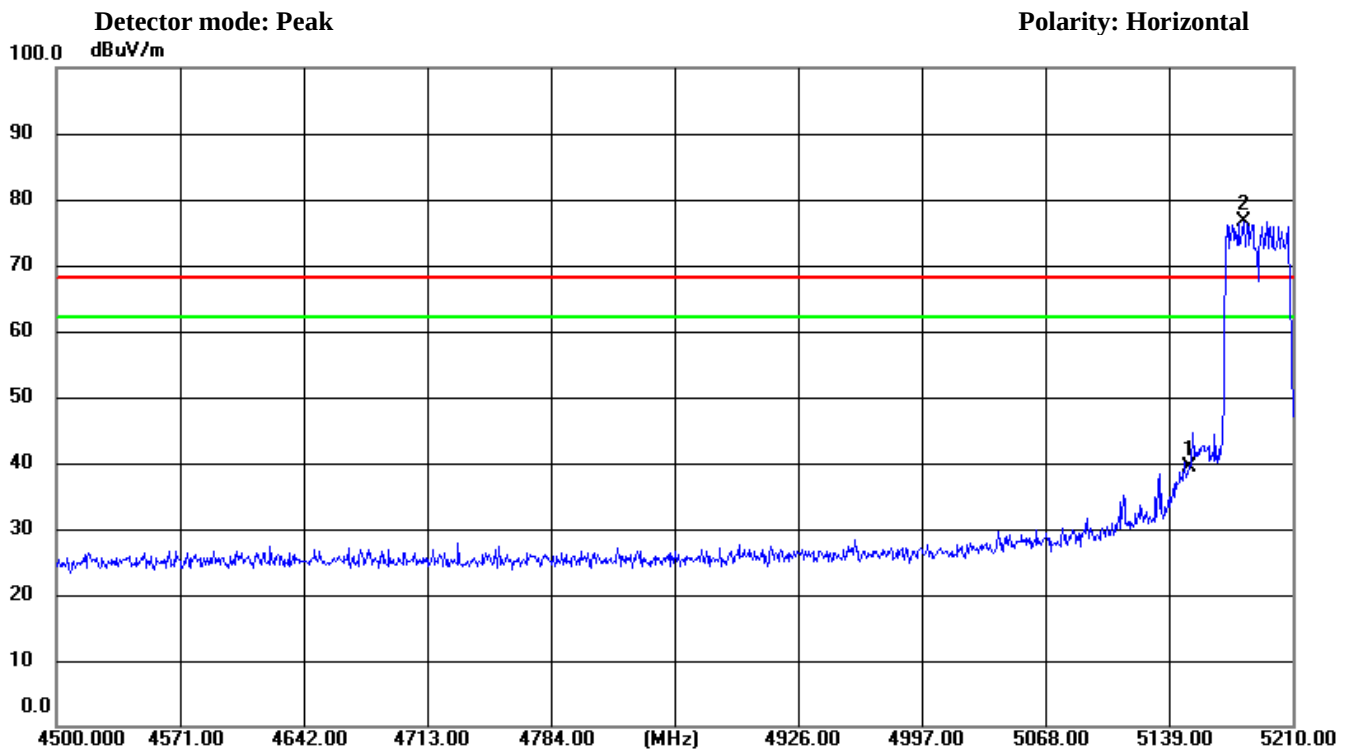
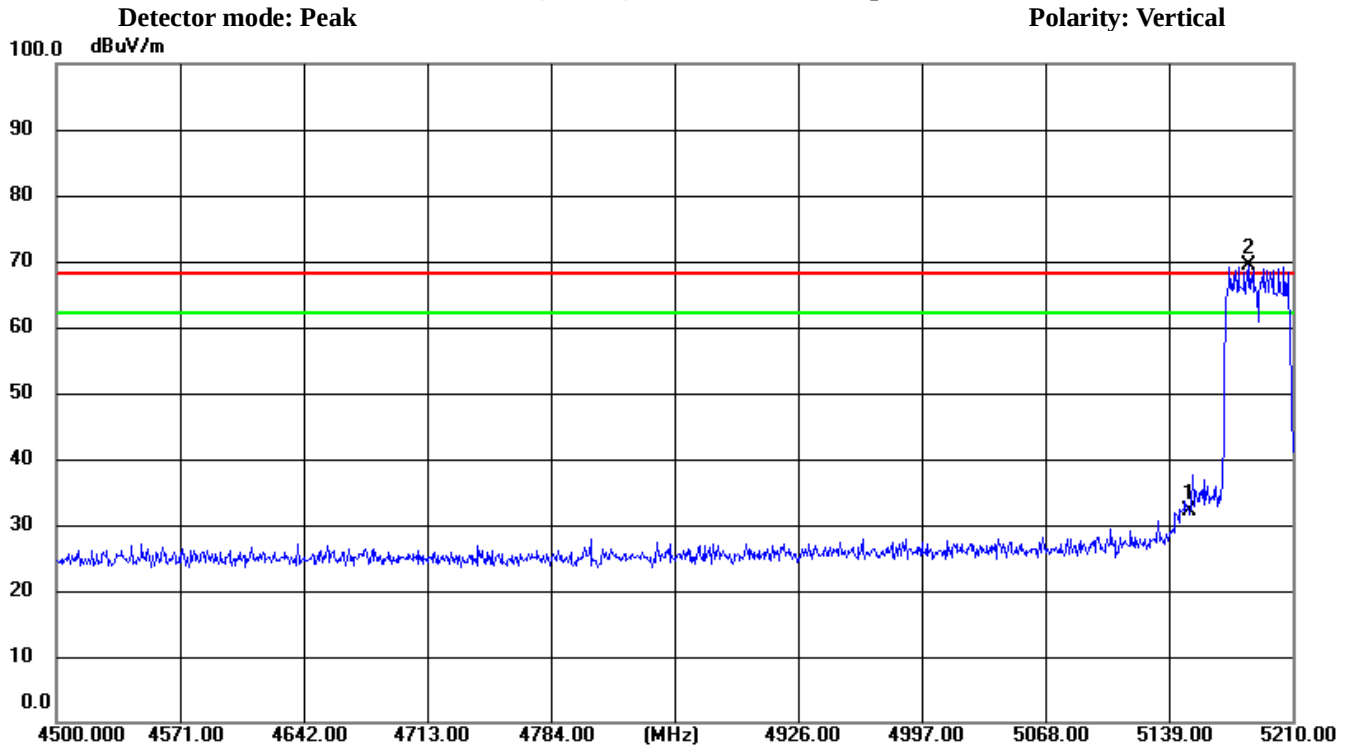
EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24°C	Relative Humidity :	51%
Pressure :	1010 hPa	Test Voltage :	DC25.55V from battery
Test Mode :	802.11ac BW40MHz		
Test Date :	2021-07-27		
Note :	1. The transmitter was setup to transmit at the lowest channel (CH38). Then the field strength was measured at 4500-5150 MHz. 2. The transmitter was setup to transmit at the highest channel (CH46). Then the field strength was measured at 5190-5410 MHz. 3. The data of 5150MHz and 5350MHz was the worst.		

Freq. (MHz) (Peak)	Ant.Pol. H/V	Reading	Ant/CF	Act	Limit	Note
		Peak (dBuv)	Peak (dB)	Peak (dBuv/m)	Peak (dBuv/m)	
5150.000	V	27.41	4.78	32.19	68.20	CH38
5185.150	V	64.64	4.67	---	---	CH38
5150.000	H	34.50	4.78	39.28	68.20	CH38
5181.600	H	72.03	4.68	---	---	CH38
5234.880	V	63.19	4.54	---	---	CH46
5350.000	V	20.23	4.30	24.53	68.20	CH46
5234.880	H	67.77	4.54	---	---	CH46
5350.000	H	19.92	4.30	24.22	68.20	CH46

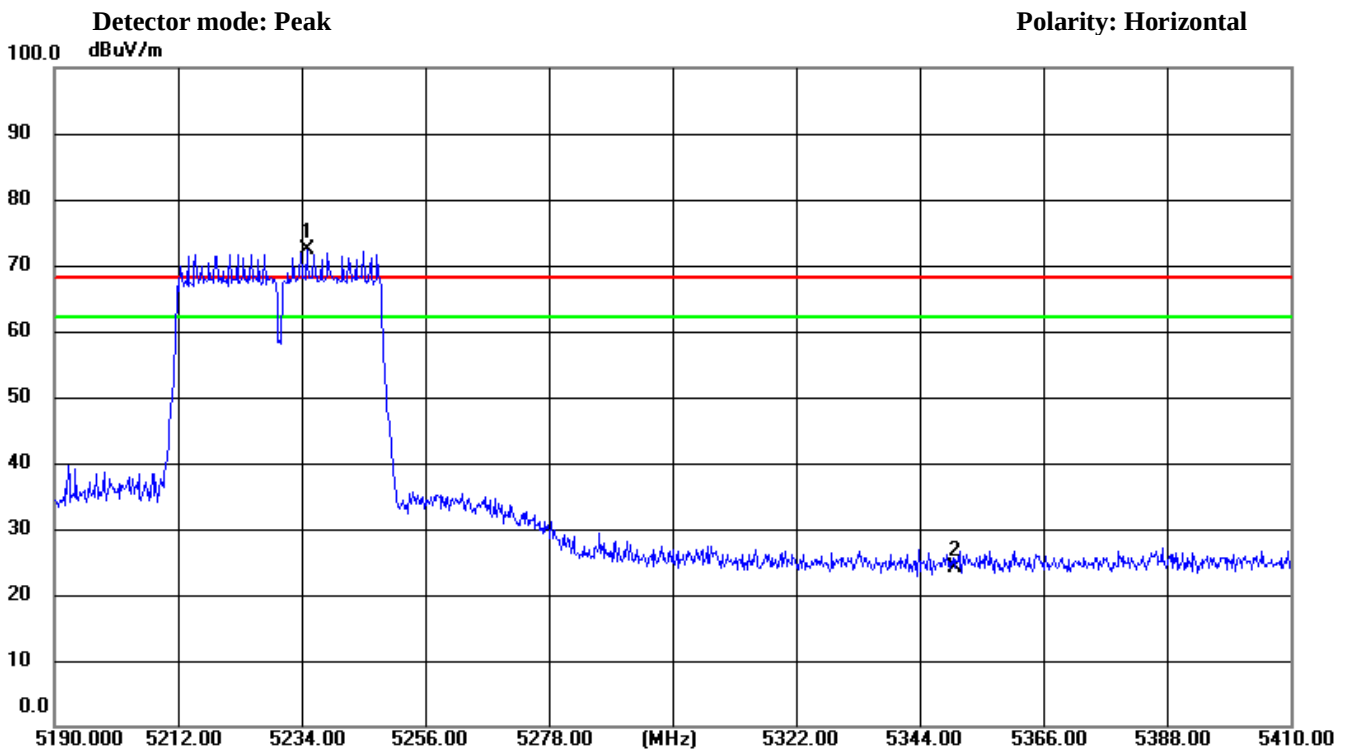
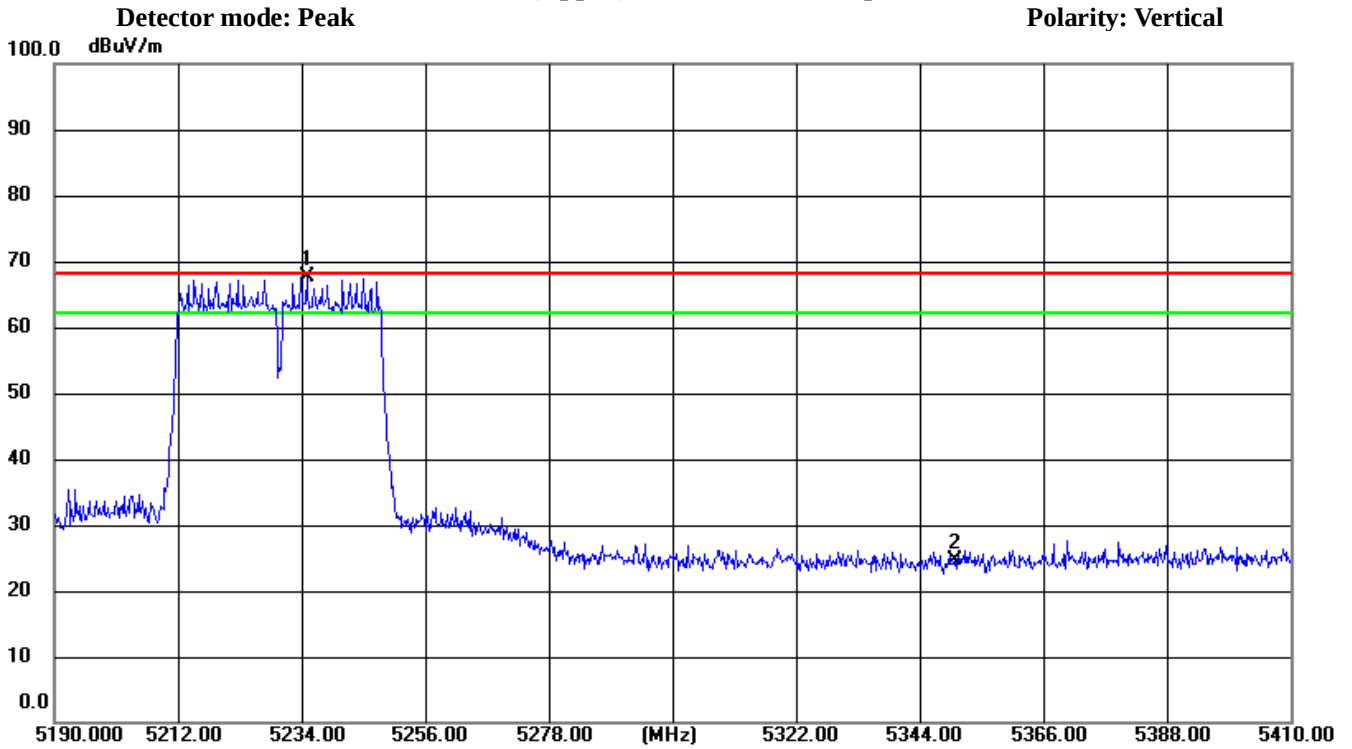
Remark :

- (1) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode
- (2) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (3) Corr.Factor = Antenna Factor + Cable Loss – Pre-amplifier.

802.11ac(40M) (5.15GHz-5.25GHz)
CH 38 (Lower) Data rate 7.2Mbps



802.11ac(40M) (5.15GHz-5.25GHz)
CH 46(Upper) Data rate 7.2Mbps



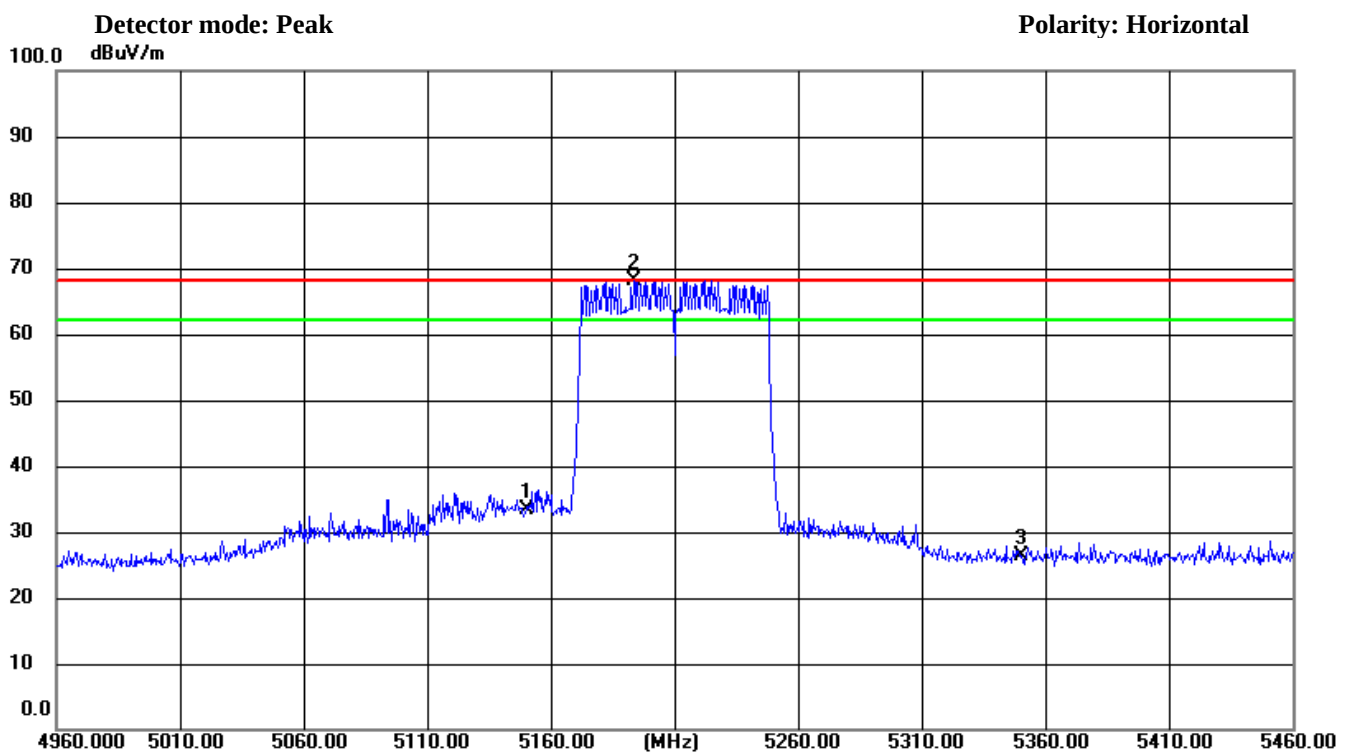
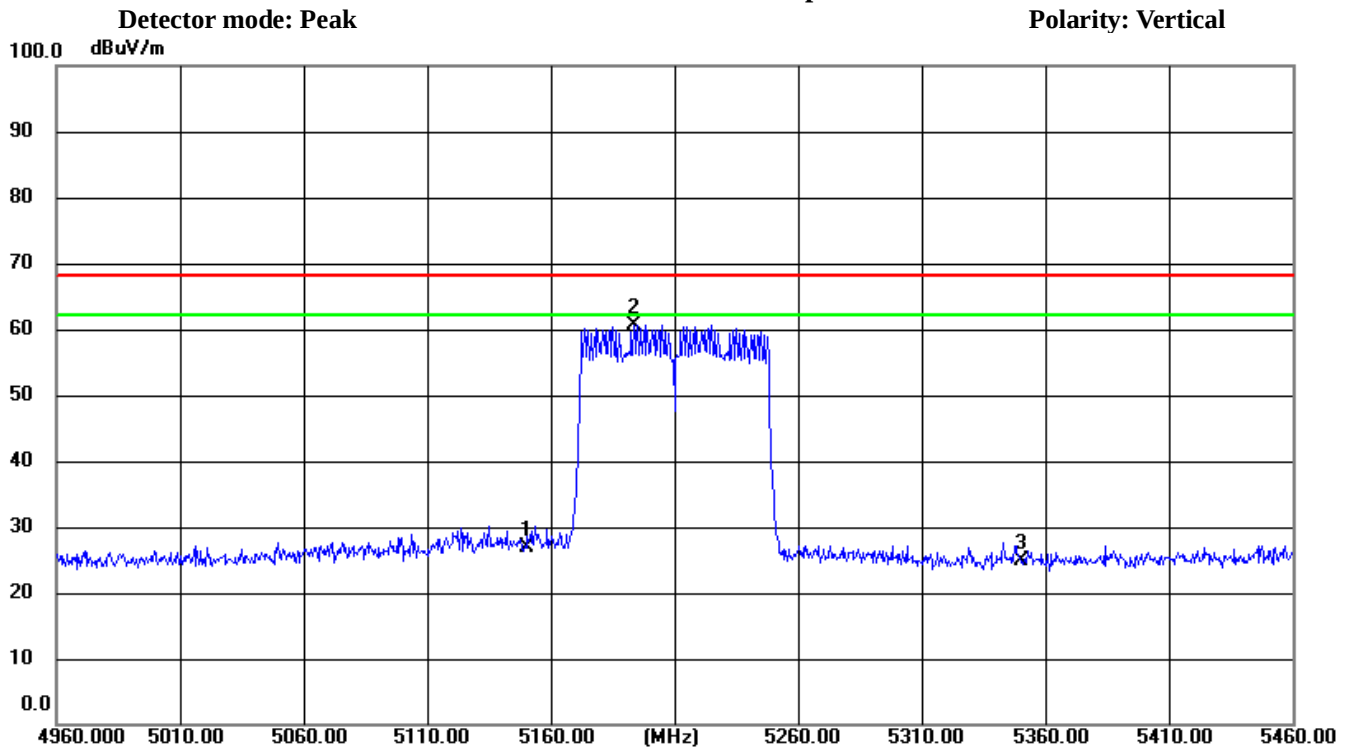
EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	24°C	Relative Humidity :	51%
Pressure :	1010 hPa	Test Voltage :	DC25.55V from battery
Test Mode :	802.11ac BW80MHz		
Test Date :	2021-07-27		
Note :	1. The transmitter was setup to transmit at the lowest channel (CH42). Then the field strength was measured at 4960-5460 MHz. 2. The data of 5150MHz and 5350MHz was the worst.		

Freq. (MHz) (Peak)	Ant.Pol. H/V	Reading	Ant/CF	Act	Limit	Note
		Peak (dBuv)	Peak (dB)	Peak (dBuv/m)	Peak (dBuv/m)	
5150.000	V	22.06	4.78	26.84	68.20	CH42
5193.500	V	56.10	4.64	---	---	CH42
5350.000	V	20.63	4.30	24.93	68.20	CH42
5150.000	H	28.51	4.78	33.29	68.20	CH42
5193.500	H	63.45	4.64	---	---	CH42
5350.000	H	22.05	4.30	26.35	68.20	CH42

Remark :

- (1) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode
- (2) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (3) Corr.Factor = Antenna Factor + Cable Loss – Pre-amplifier.

802.11ac(80M) (5.15GHz-5.25GHz) CH 42 Data rate 7.2Mbps



4 OCCUPIED BANDWIDTH TEST

4.1 26DB BANDWIDTH TEST

According to §15.303(c), for purposes of this subpart the emission bandwidth shall be determined by measuring the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, that are 26 dB down relative to the maximum level of the modulated carrier. Compliance with the emissions limits is based on the use of measurement instrumentation employing a peak detector function with an instrument resolutions bandwidth approximately equal to 1.0 percent of the emission bandwidth of the device under measurement.

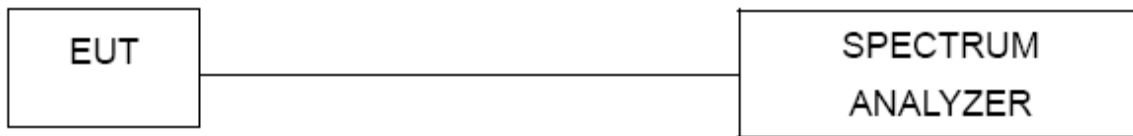
4.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting: RBW= 300kHz(802.11a/n20/ac20), RBW=510kHz(802.11n40/ac40), RBW=1MHz(802.11ac80), VBW $\geq$ RBW, Sweep time = Auto.

4.3 DEVIATION FROM STANDARD

No deviation.

4.4 TEST SETUP



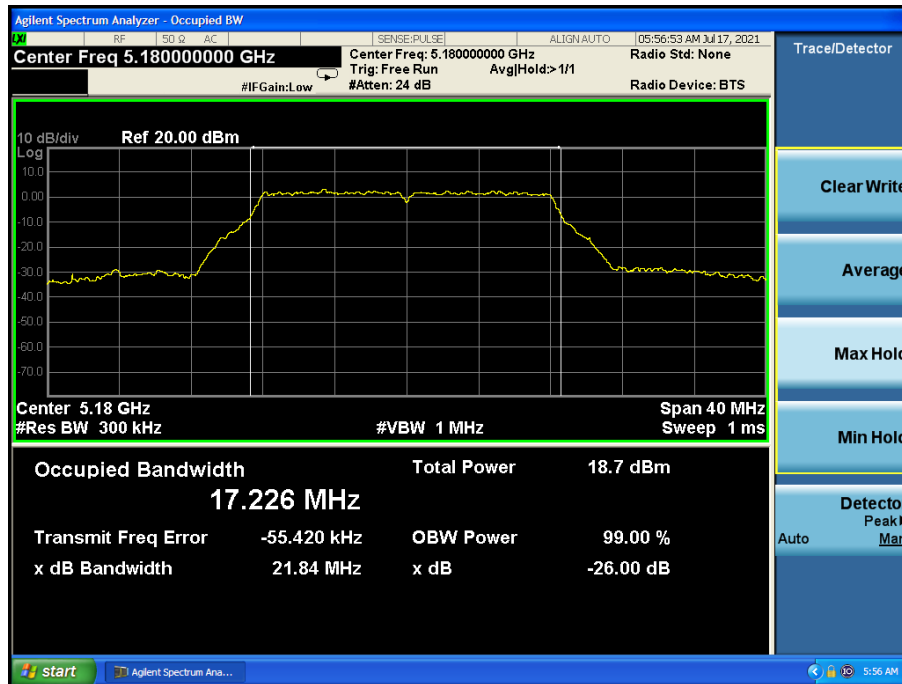
4.5 TEST RESULTS

ANT 1(2) Represent the value of antenna 1 and 2, The worst data is 1 Antenna a ,only shown Antenna 1 Plot

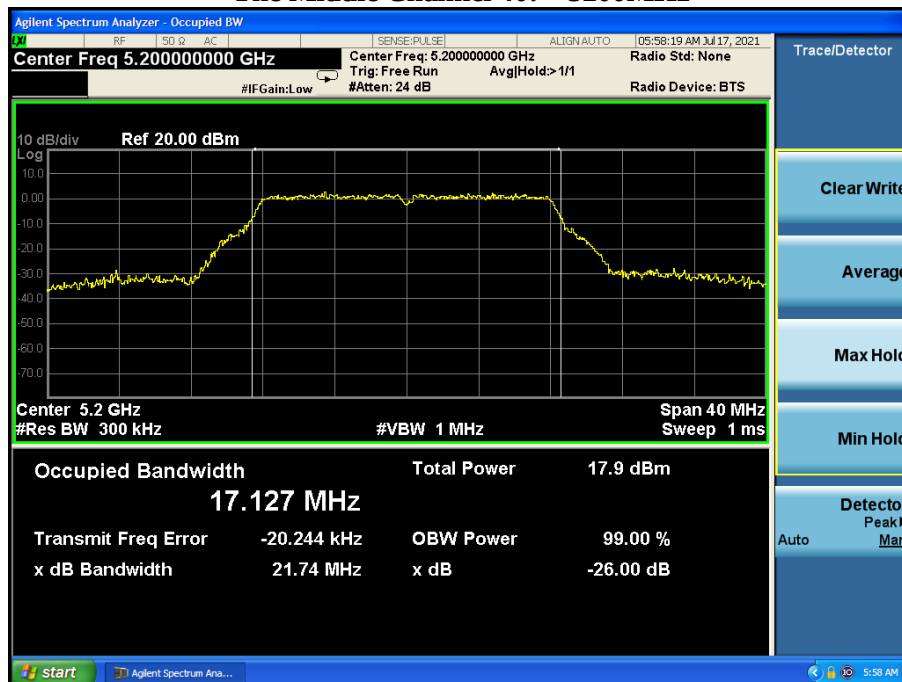
EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	26°C	Relative Humidity :	53%
Pressure :	1010 hPa	Test Power :	DC25.55V from battery
Test Mode :	802.11a/n20/ac20/n40/ac40/ac 80 (worst case)		
Test Date :	2021-07-17		

Test Mode	Test Channel	Frequency (MHz)	26 dB Bandwidth (MHz) ANT 1	26 dB Bandwidth (MHz) ANT 2
802.11a (5.15GHz-5.25GHz) Data rate 6Mbps	CH36	5180	21.84	21.55
	CH40	5200	21.74	21.42
	CH48	5240	21.76	20.46
802.11n(20M) (5.15GHz-5.25GHz) Data rate 13Mbps	CH36	5180	21.80	21.37
	CH40	5200	21.82	21.41
	CH48	5240	21.89	21.46
802.11ac(20M) (5.15GHz-5.25GHz) Data rate 13Mbps	CH36	5180	21.91	21.67
	CH40	5200	21.77	21.33
	CH48	5240	21.92	21.59
802.11n(40M) (5.15GHz-5.25GHz) Data rate 27Mbps	CH38	5190	39.96	39.36
	CH46	5230	40.35	39.87
802.11ac(40M) (5.15GHz-5.25GHz) Data rate 27Mbps	CH38	5190	39.98	39.26
	CH46	5230	39.93	39.41
802.11ac(80M) (5.15GHz-5.25GHz) Data rate 58.6Mbps	CH42	5210	83.04	81.22

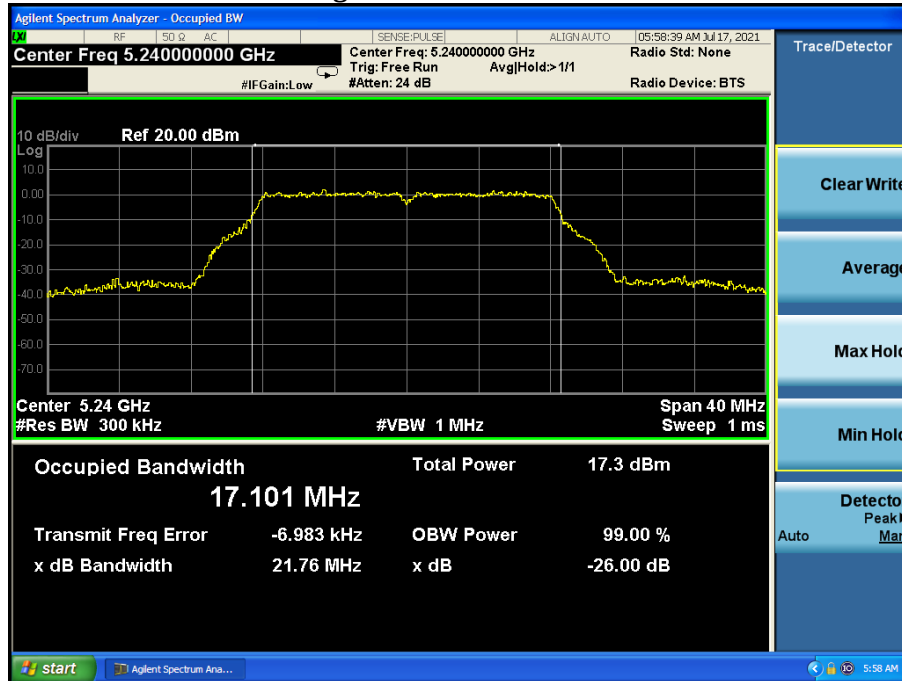
802.11a (5.15GHz-5.25GHz)
The Low Channel 36: 5180MHz



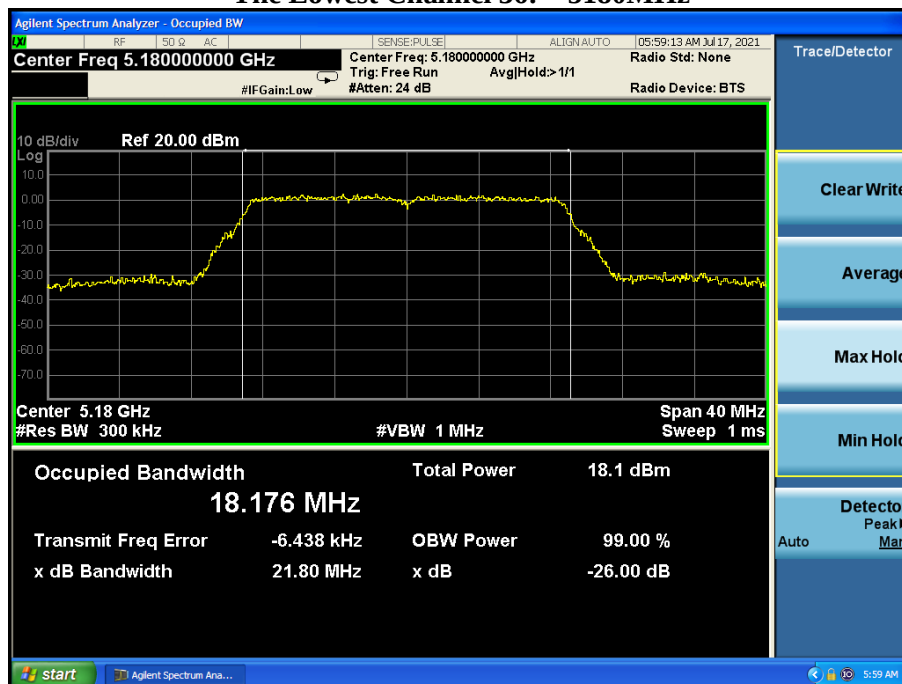
802.11a (5.15GHz-5.25GHz)
The Middle Channel 40: 5200MHz



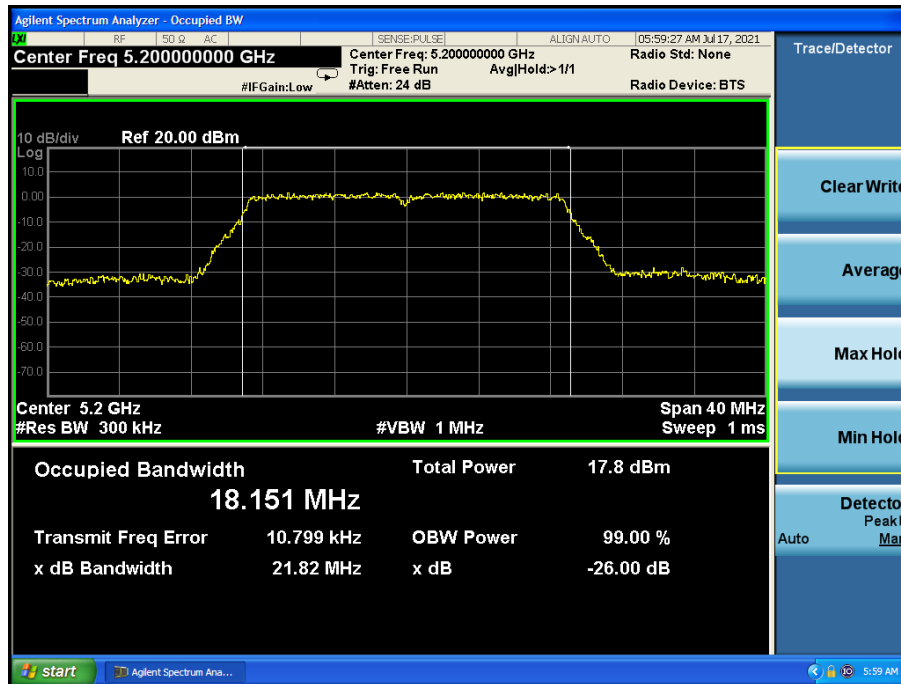
802.11a (5.15GHz-5.25GHz) The High Channel 48: 5240MHz



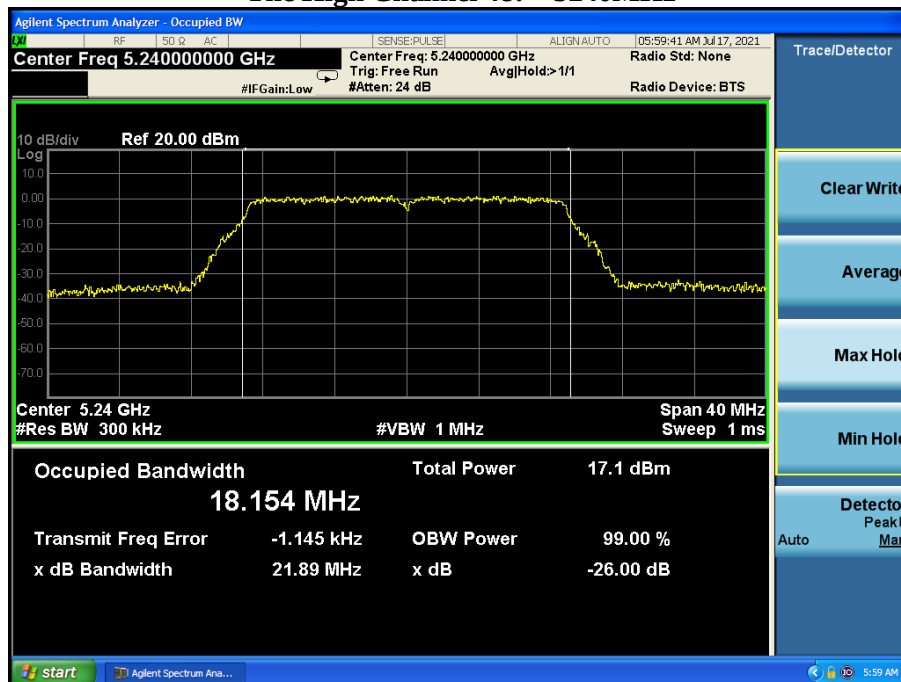
802.11n(20M) (5.15GHz-5.25GHz) The Lowest Channel 36: 5180MHz



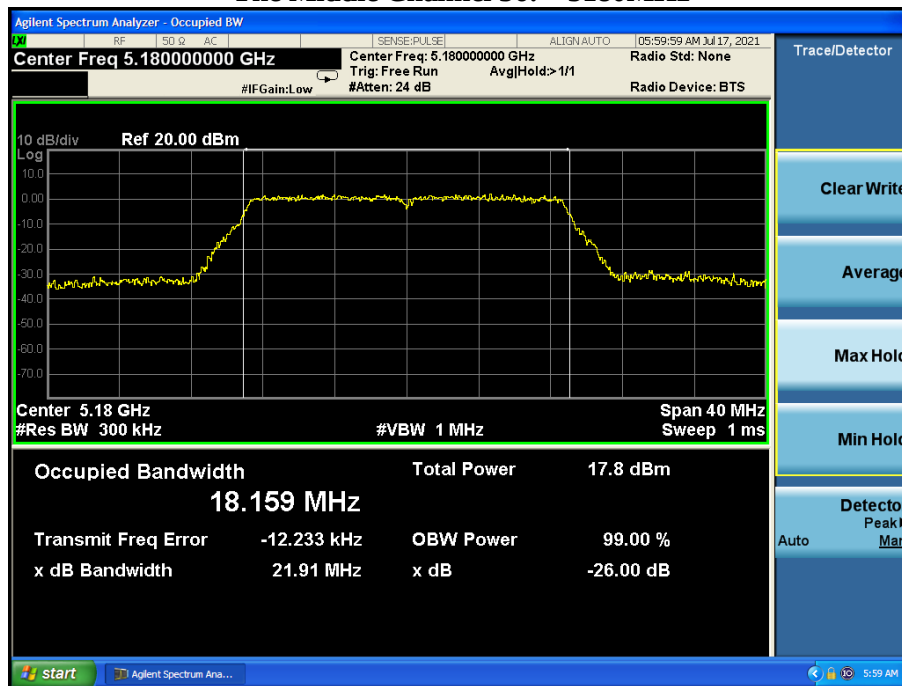
802.11n(20M) (5.15GHz-5.25GHz)
The Middle Channel 40: 5200MHz



802.11n(20M) (5.15GHz-5.25GHz)
The High Channel 48: 5240MHz



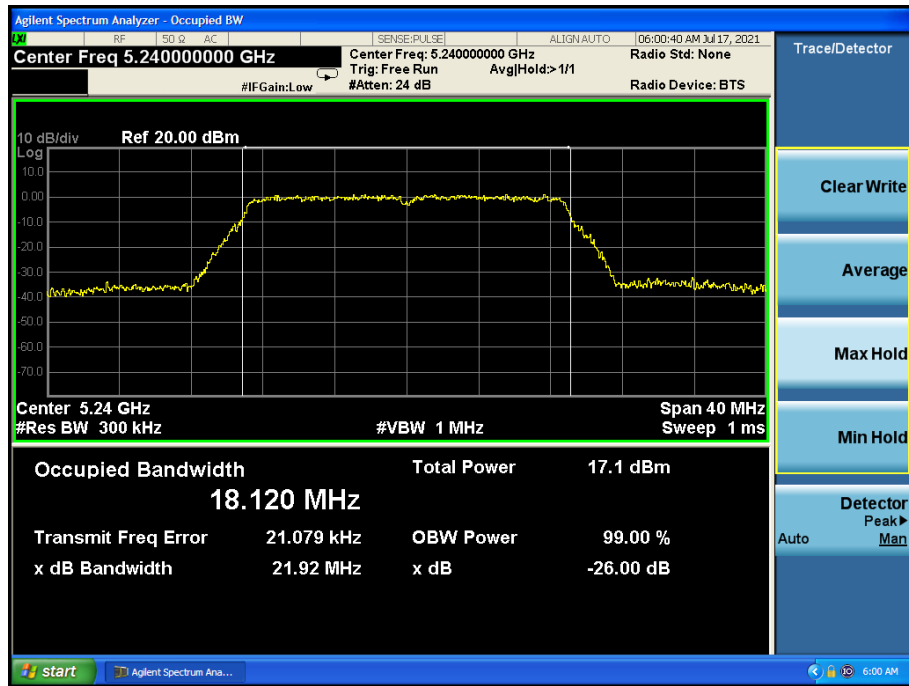
802.11ac(20M) (5.15GHz-5.25GHz) The Middle Channel 36: 5180MHz



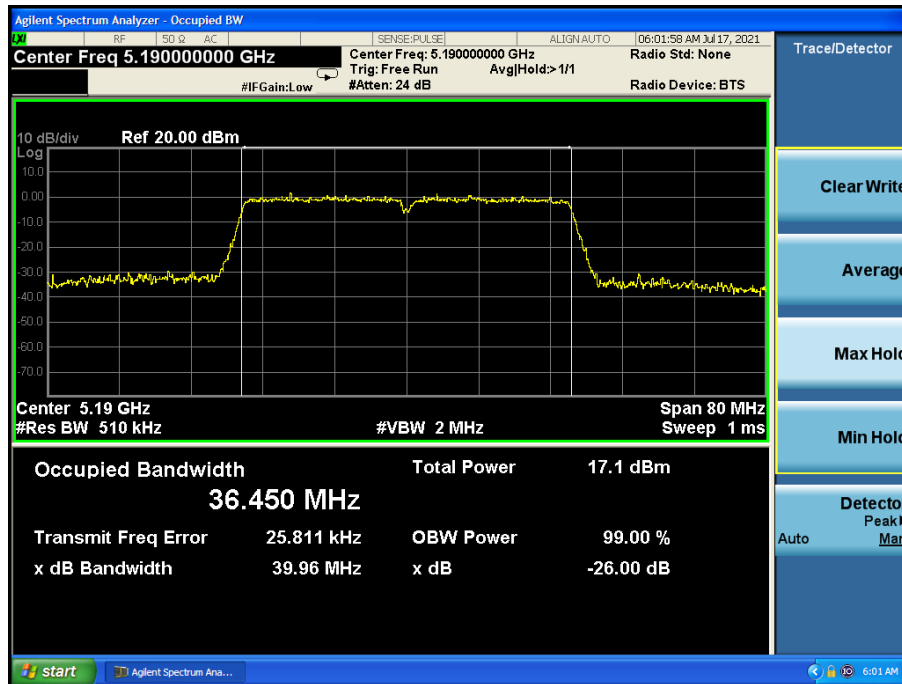
802.11n(20M) (5.15GHz-5.25GHz) The High Channel 40: 5200MHz



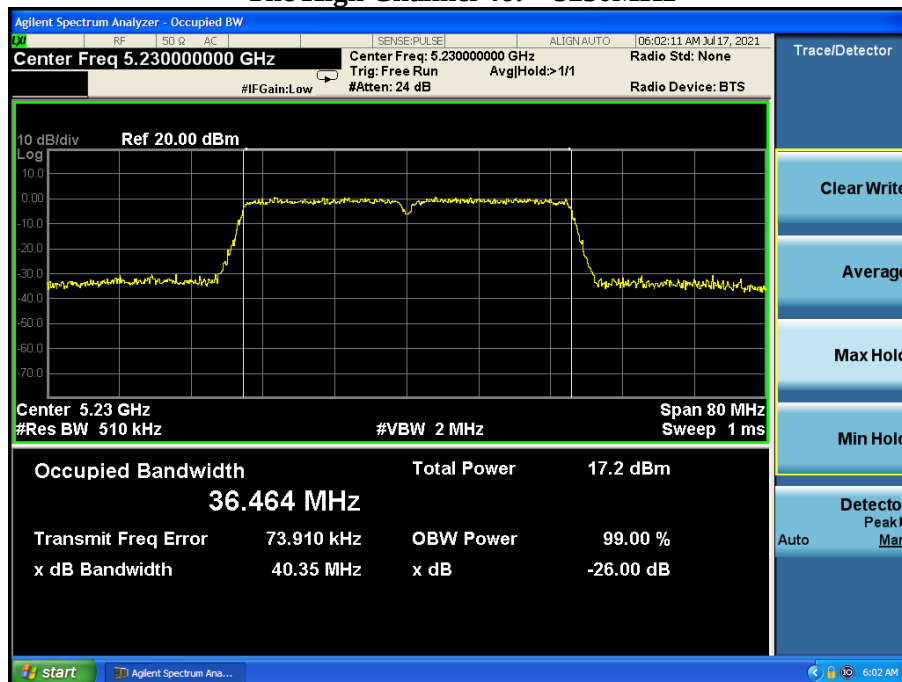
802.11ac(20M) (5.15GHz-5.25GHz) The Middle Channel 48: 5240MHz



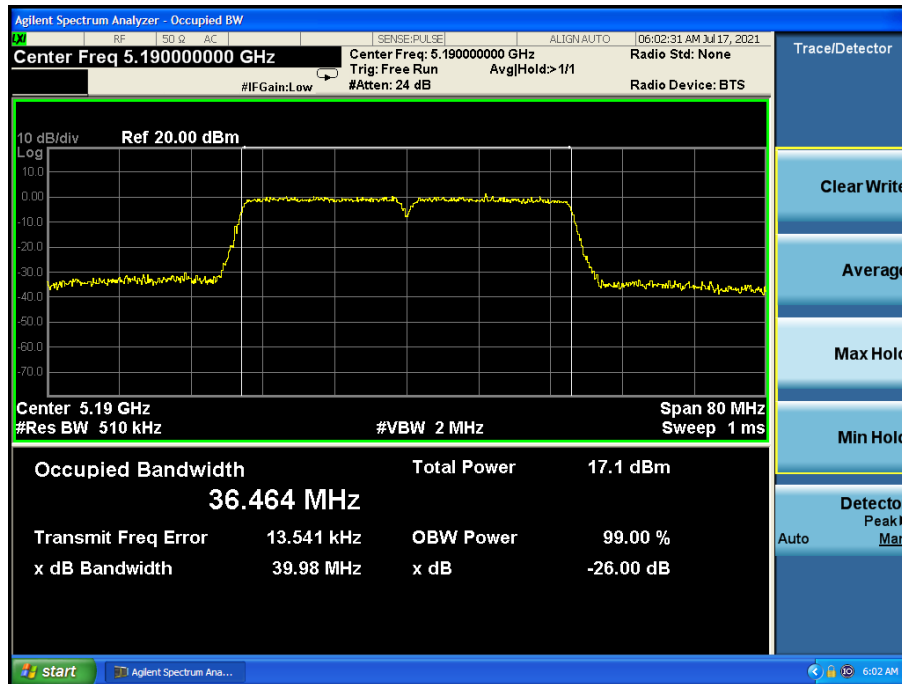
802.11n(40M) (5.15GHz-5.25GHz) The Lowest Channel 38: 5190MHz



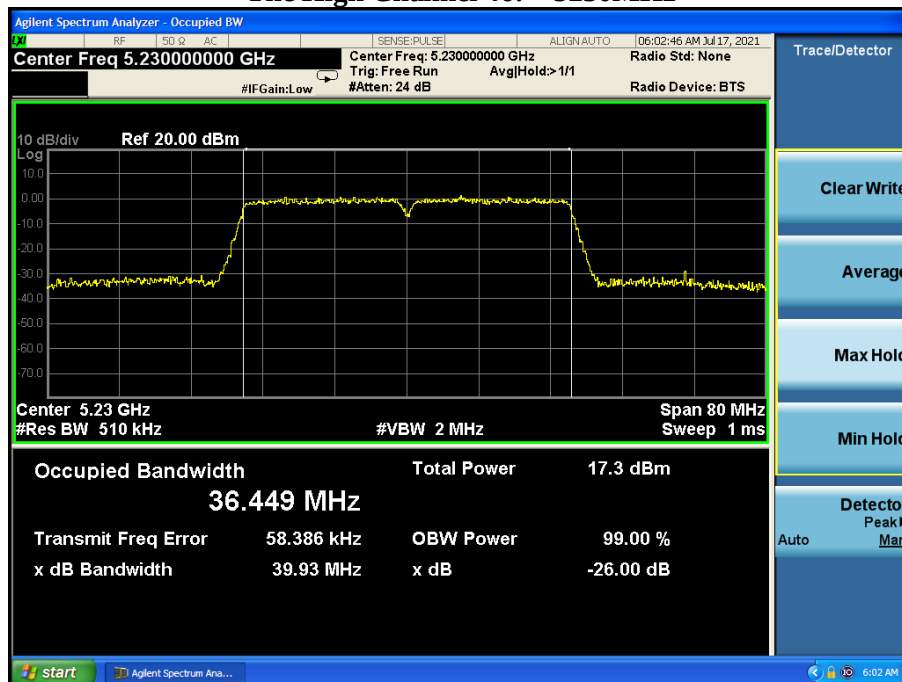
802.11n(40M) (5.15GHz-5.25GHz) The High Channel 46: 5230MHz



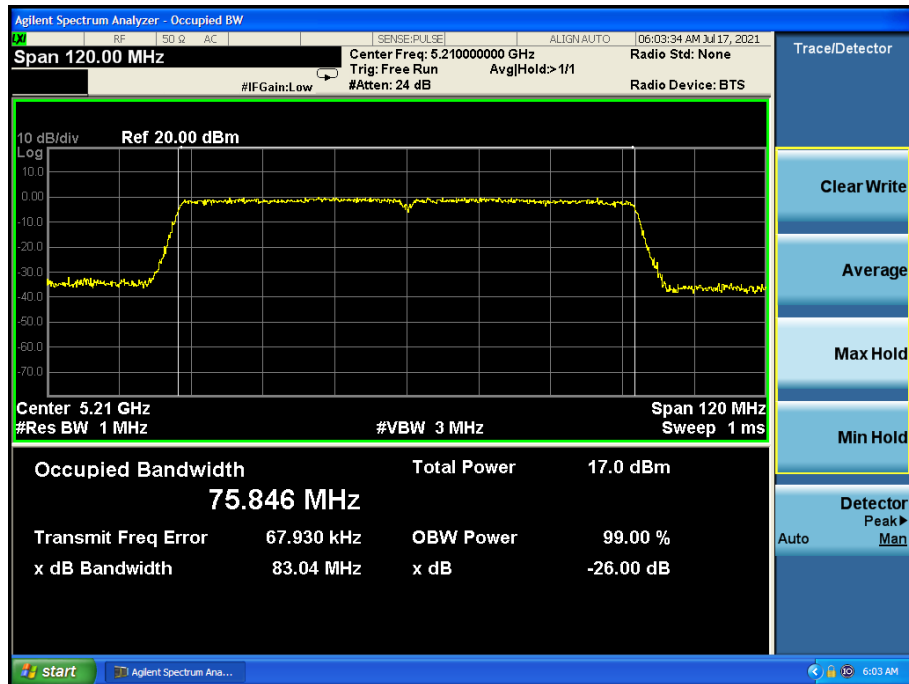
802.11ac(40M) (5.15GHz-5.25GHz) The Lowest Channel 38: 5190MHz



802.11ac(40M) (5.15GHz-5.25GHz) The High Channel 46: 5230MHz



802.11ac(80M) (5.15GHz-5.25GHz) The Lowest Channel 42: 5210MHz

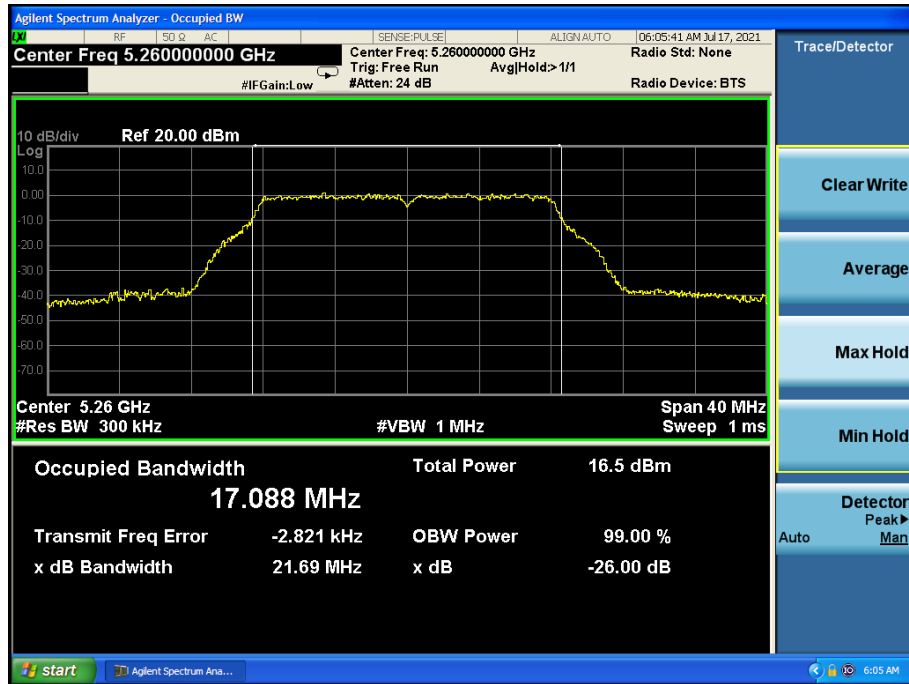


ANT 1(2) Represent the value of antenna 1 and 2, The worst data is 1 Antenna a ,only shown
Antenna 1 Plot

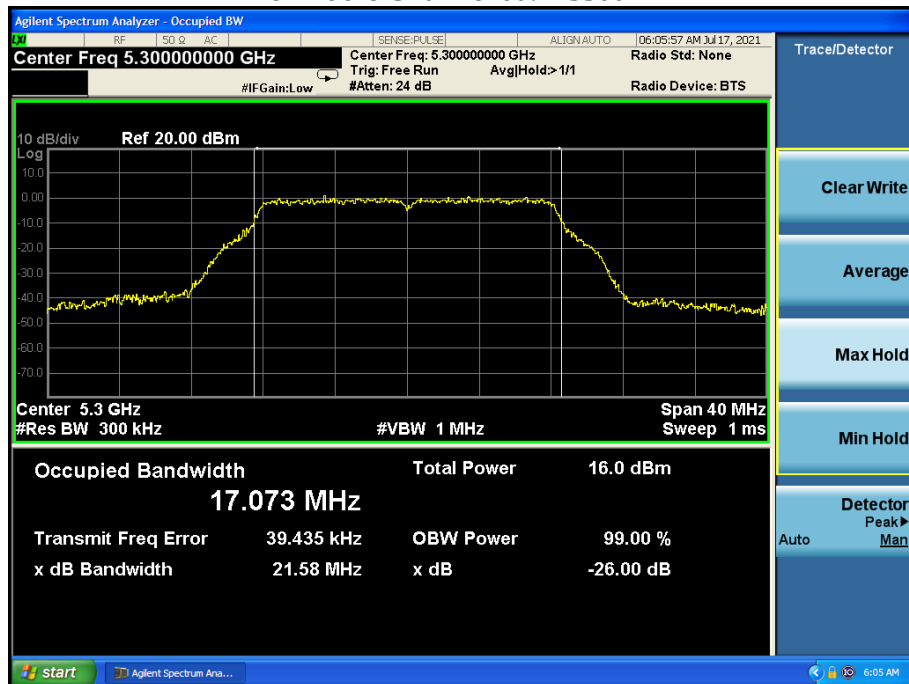
EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	26℃	Relative Humidity :	53%
Pressure :	1010 hPa	Test Power :	DC25.55V from battery
Test Mode :	802.11a/n20/ac20/n40/ac40/ac 80 (worst case)		
Test Date :	2021-07-17		

Test Mode	Test Channel	Frequency (MHz)	26 dB Bandwidth (MHz) ANT 1	26 dB Bandwidth (MHz) ANT 2
802.11a (5.25GHz-5.35GHz) Data rate 6Mbps	CH52	5260	21.69	21.12
	CH60	5300	21.58	21.13
	CH64	5320	21.70	21.17
802.11n(20M) (5.25GHz-5.35GHz) Data rate 13Mbps	CH52	5260	21.95	21.25
	CH60	5300	21.85	21.29
	CH64	5320	21.89	21.27
802.11ac(20M) (5.25GHz-5.35GHz) Data rate 13Mbps	CH52	5260	21.79	21.19
	CH60	5300	21.76	21.42
	CH64	5320	21.88	21.36
802.11n(40M) (5.25GHz-5.35GHz) Data rate 27Mbps	CH54	5270	40.15	40.02
	CH62	5310	40.16	39.88
802.11ac(40M) (5.25GHz-5.35GHz) Data rate 27Mbps	CH54	5270	39.90	39.27
	CH62	5310	40.07	39.38
802.11ac(80M) (5.25GHz-5.35GHz) Data rate 58.6Mbps	CH58	5290	81.66	81.02

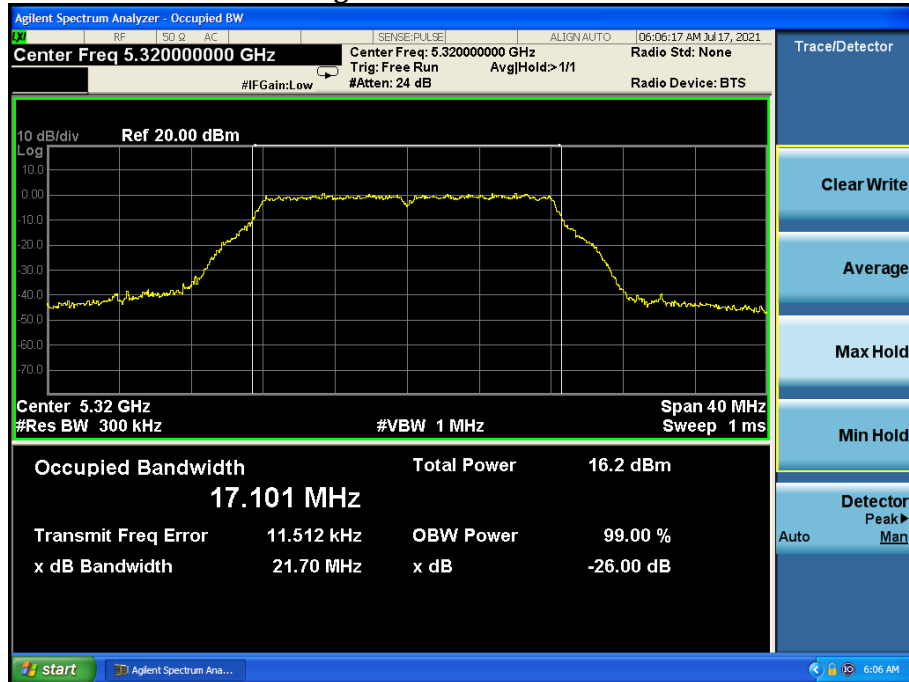
802.11a (5.25GHz-5.35GHz) The Lowest Channel 52: 5260MHz



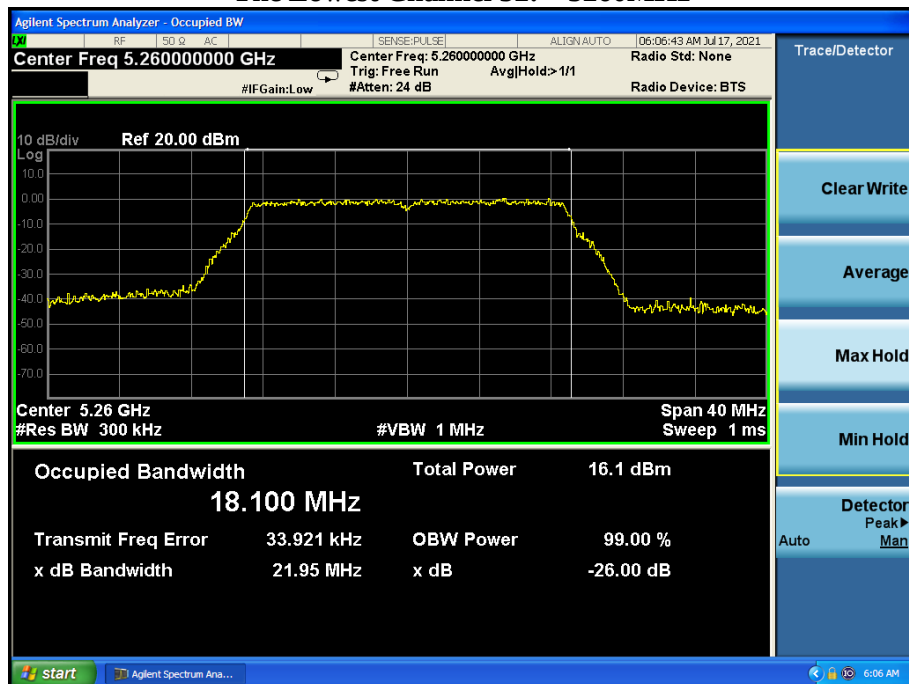
802.11a (5.25GHz-5.35GHz) The Middle Channel 60: 5300MHz



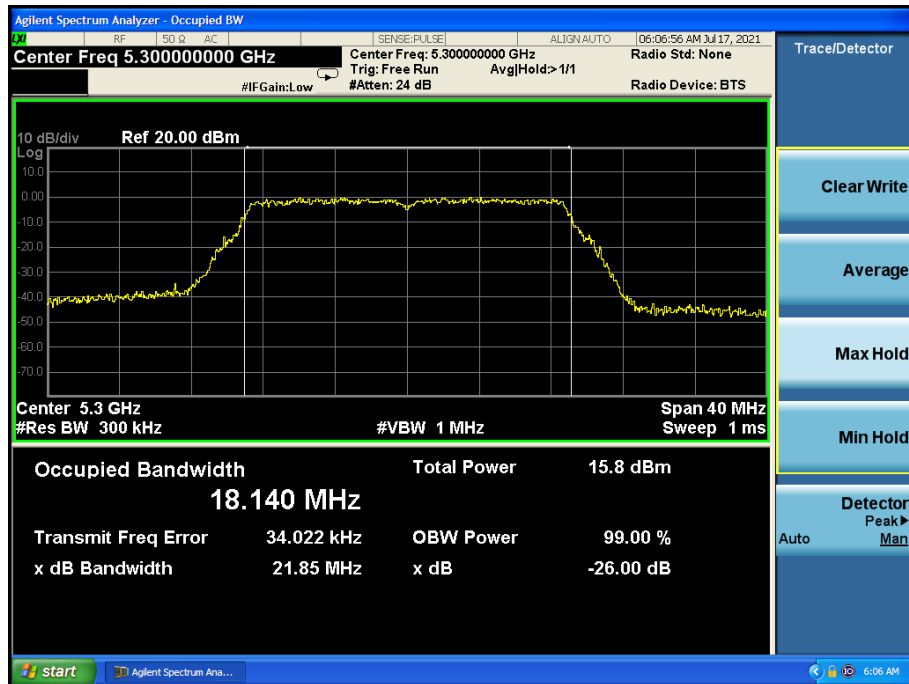
802.11a (5.25GHz-5.35GHz) The High Channel 64: 5320MHz



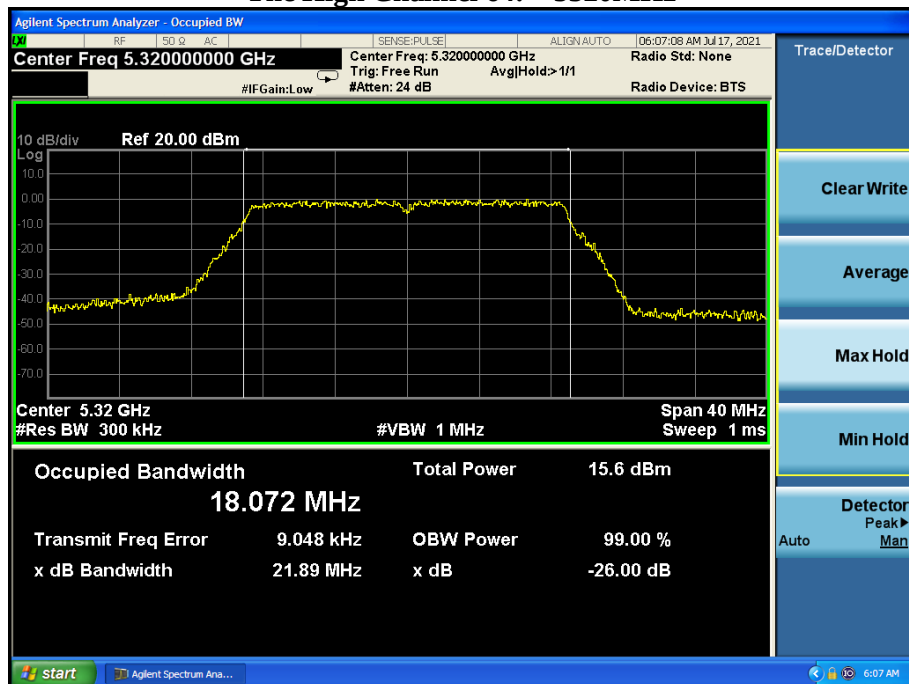
802.11n(20M) (5.25GHz-5.35GHz) The Lowest Channel 52: 5260MHz



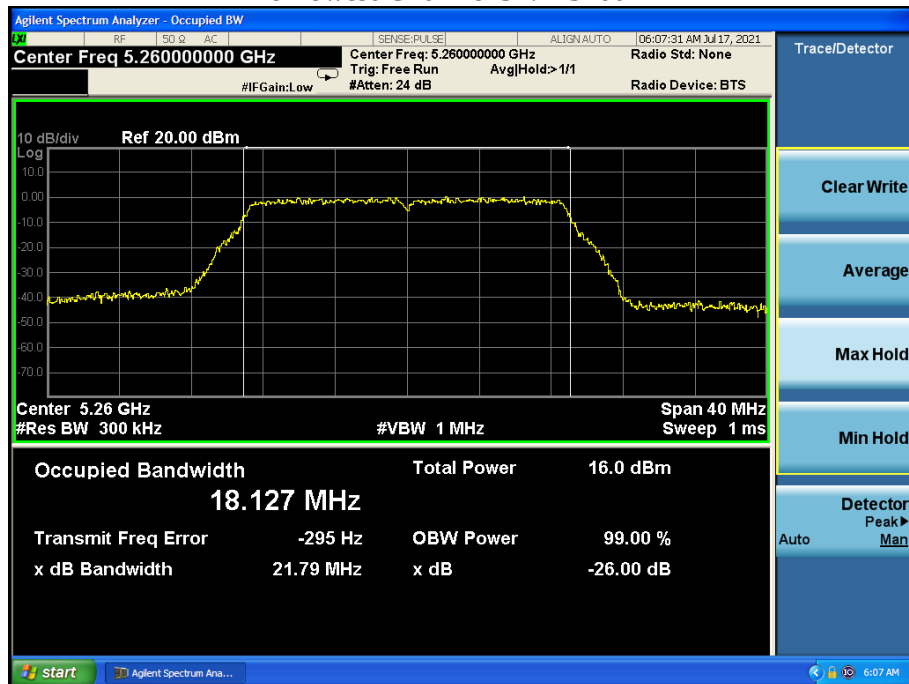
802.11n(20M) (5.25GHz-5.35GHz) The Middle Channel 60: 5300MHz



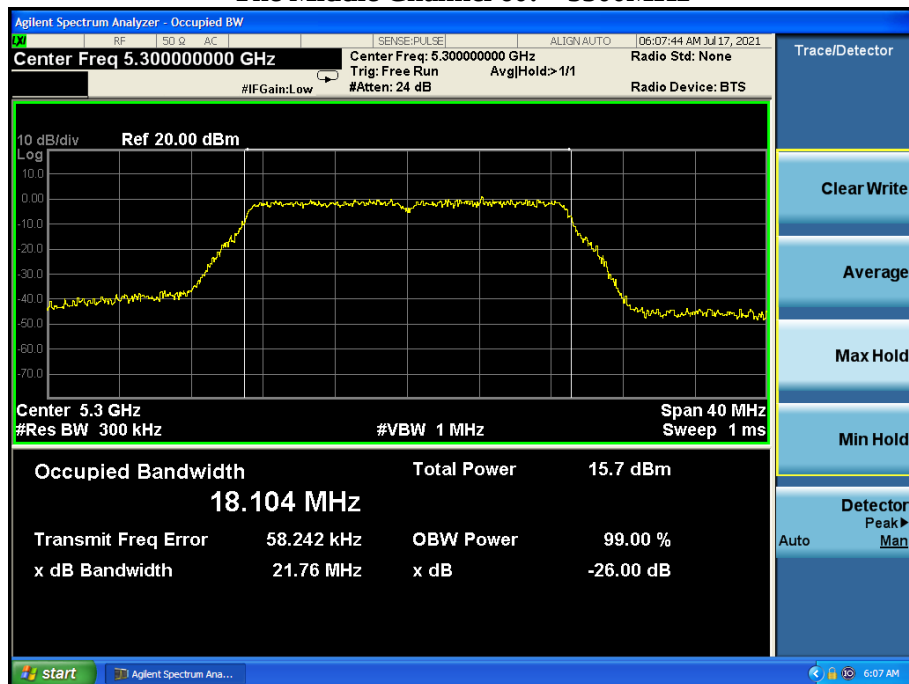
802.11n(20M) (5.25GHz-5.35GHz) The High Channel 64: 5320MHz



802.11ac (5.25GHz-5.35GHz) The Lowest Channel 52: 5260MHz



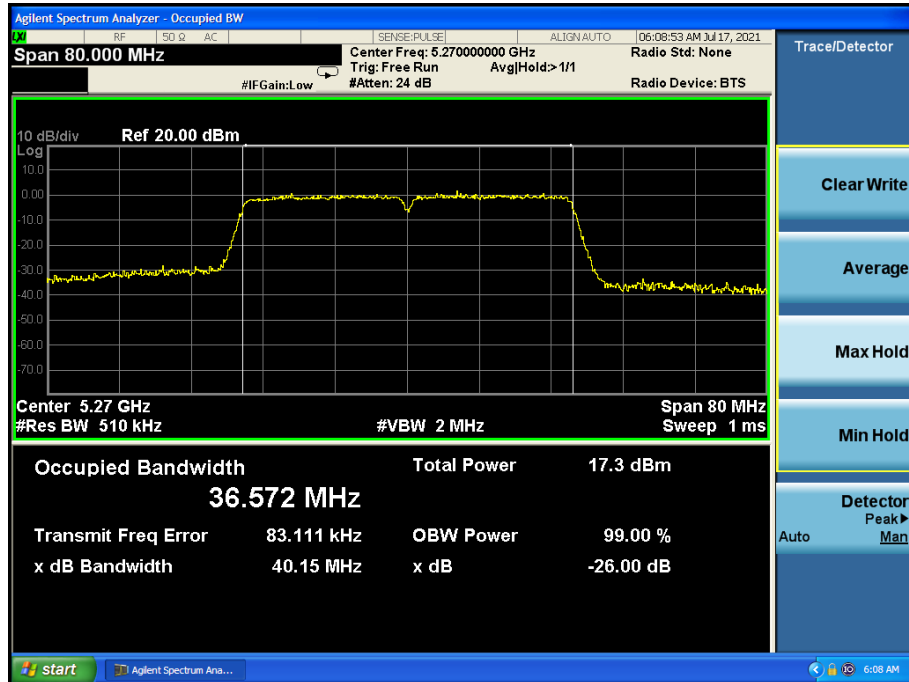
802.11ac (5.25GHz-5.35GHz) The Middle Channel 60: 5300MHz



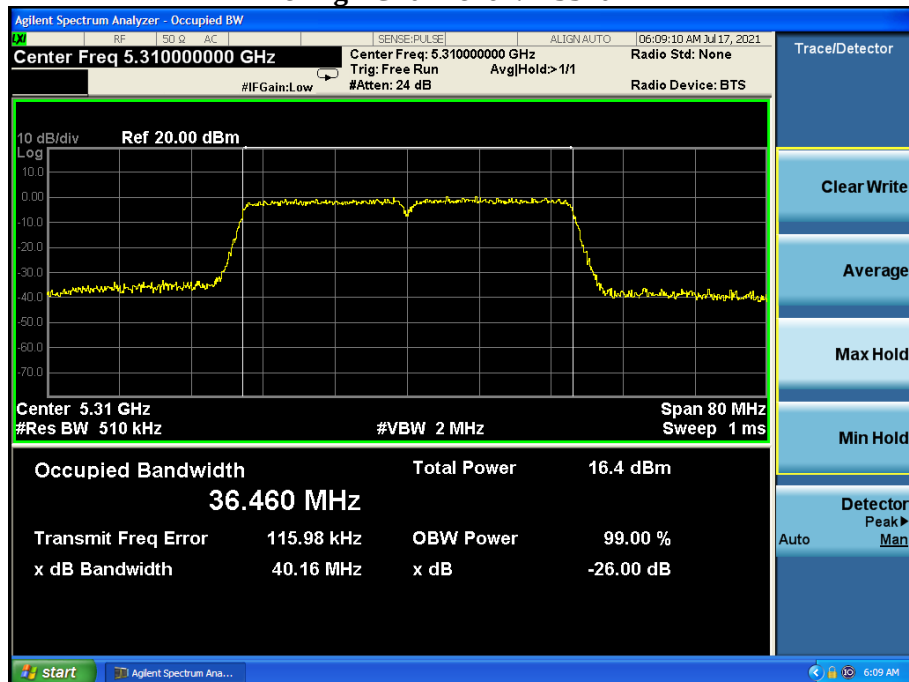
802.11ac (5.25GHz-5.35GHz) The High Channel 64: 5320MHz



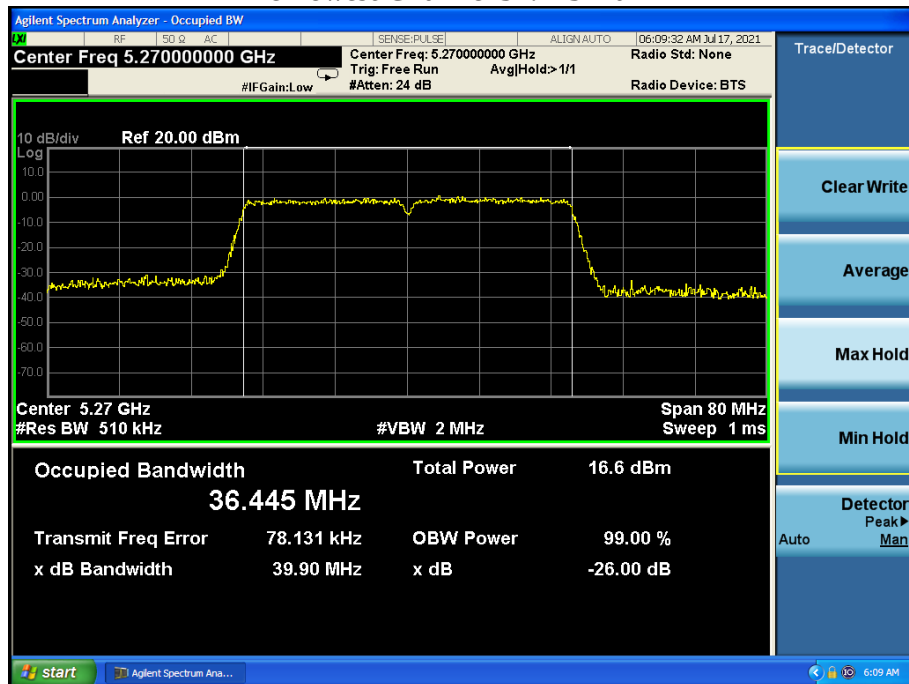
802.11n(40M) (5.25GHz-5.35GHz) The Lowest Channel 54: 5270MHz



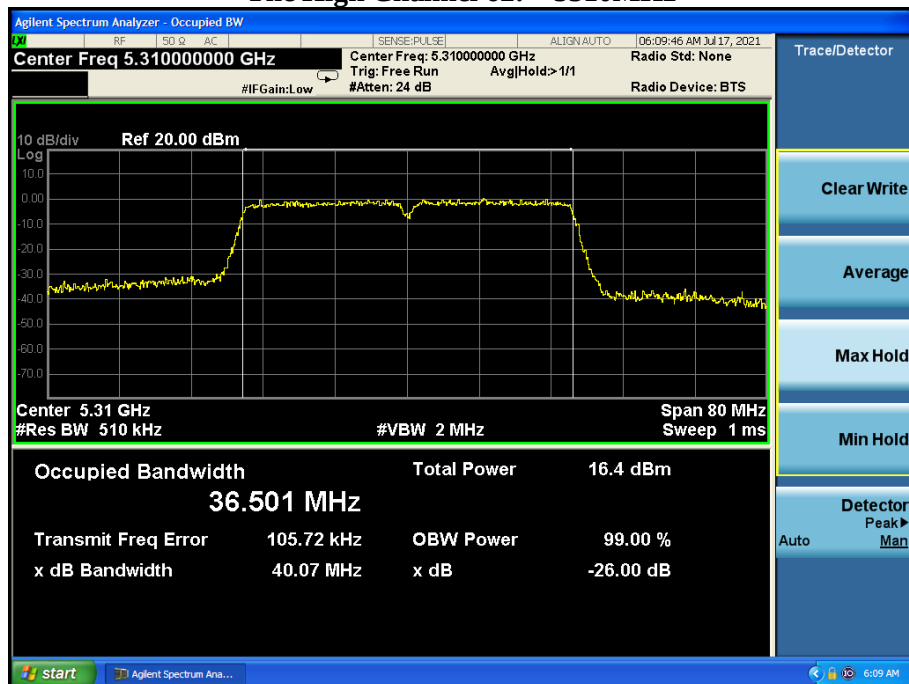
802.11n(40M) (5.25GHz-5.35GHz) The High Channel 62: 5310MHz



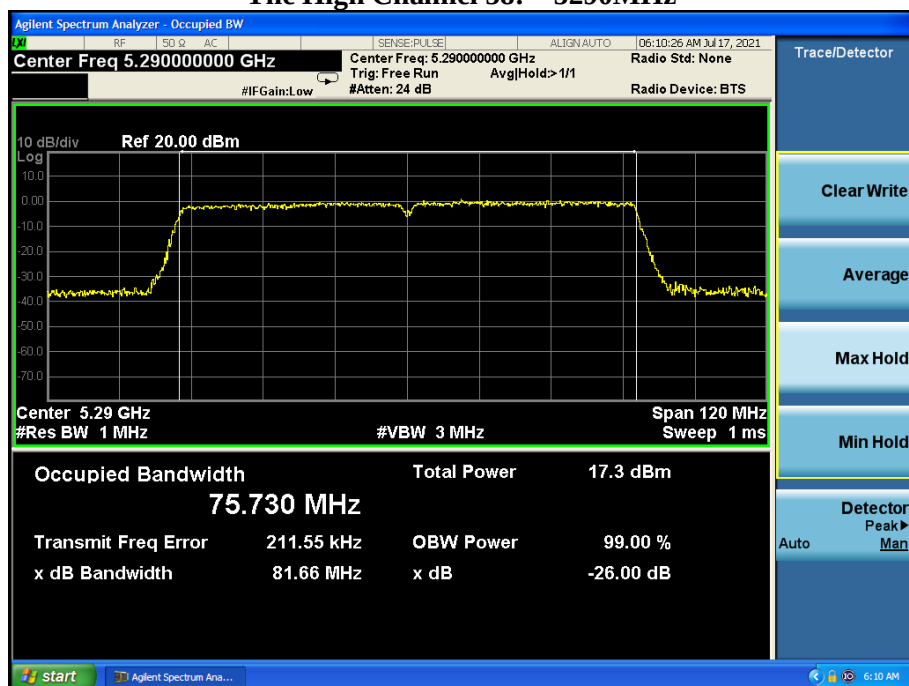
802.11ac(40M) (5.25GHz-5.35GHz) The Lowest Channel 54: 5270MHz



802.11ac(40M) (5.25GHz-5.35GHz) The High Channel 62: 5310MHz



802.11ac(80M) (5.25GHz-5.35GHz) The High Channel 58: 5290MHz

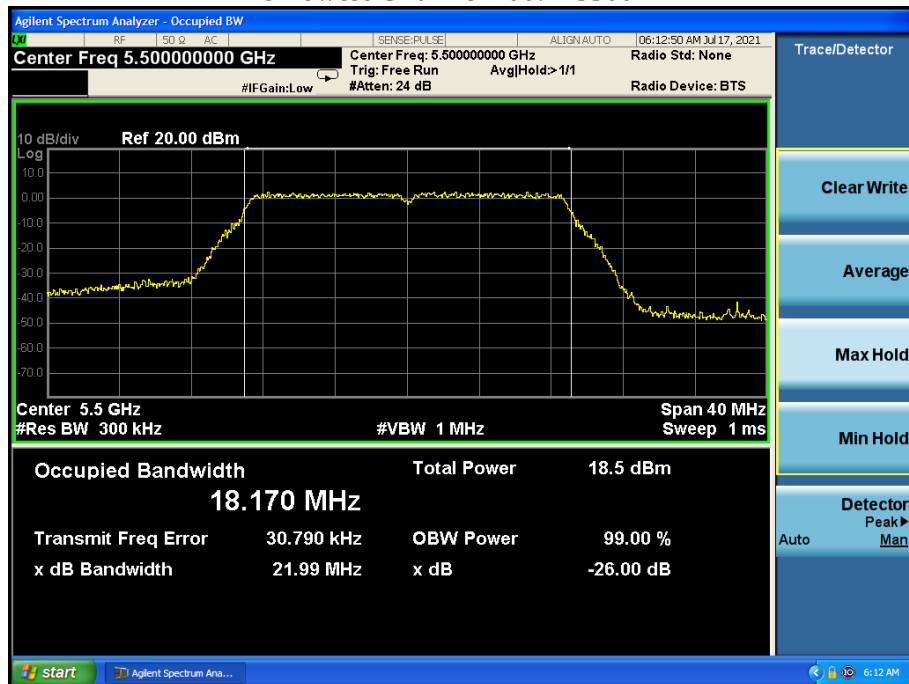


ANT 1(2) Represent the value of antenna 1 and 2, The worst data is 1 Antenna a ,only shown Antenna 1 Plot

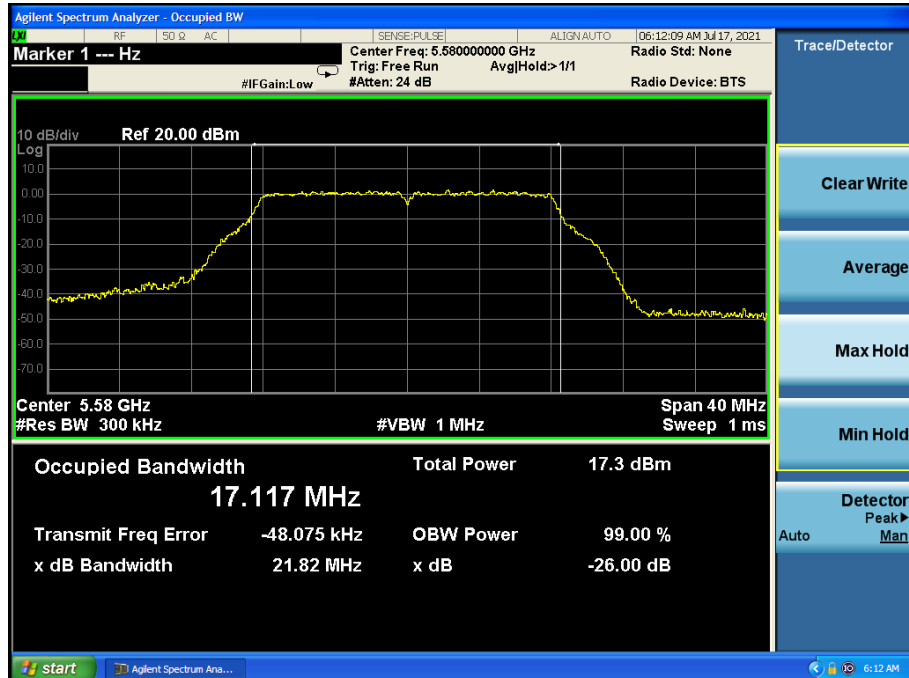
EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	26°C	Relative Humidity :	53%
Pressure :	1010 hPa	Test Power :	DC25.55V from battery
Test Mode :	802.11a/n20/ac20/n40/ac40/ac80 (worst case)		
Test Date :	2021-07-17		

Test Mode	Test Channel	Frequency (MHz)	26 dB Bandwidth (MHz) ANT 1	26 dB Bandwidth (MHz) ANT 2
802.11a (5.47GHz-5.725GHz) Data rate 6Mbps	CH100	5500	21.99	21.52
	CH116	5580	21.82	21.36
	CH140	5700	21.61	21.21
802.11n(20M) (5.47GHz-5.725GHz) Data rate 13Mbps	CH100	5500	21.87	21.44
	CH116	5580	21.85	21.63
	CH140	5700	21.97	21.57
802.11ac(20M) (5.47GHz-5.725GHz) Data rate 13Mbps	CH100	5500	21.87	21.35
	CH116	5580	21.99	21.41
	CH140	5700	21.97	21.63
802.11n(40M) (5.47GHz-5.725GHz) Data rate 27Mbps	CH102	5510	40.18	40.10
	CH118	5590	40.24	39.77
	CH134	5670	40.48	39.92
802.11ac(40M) (5.47GHz-5.725GHz) Data rate 27Mbps	CH102	5510	40.36	39.64
	CH118	5590	40.00	39.66
	CH134	5670	40.45	39.49
802.11ac(80M) (5.47GHz-5.725GHz) Data rate 58.6Mbps	CH106	5530	83.06	81.93

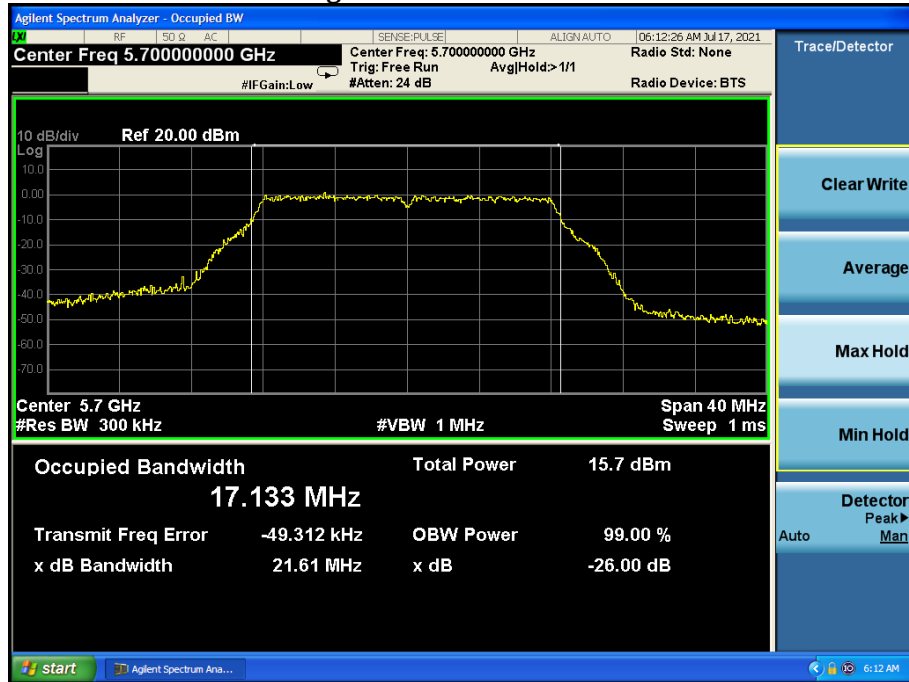
802.11a (5.47GHz-5.725GHz) The Lowest Channel 100: 5500MHz



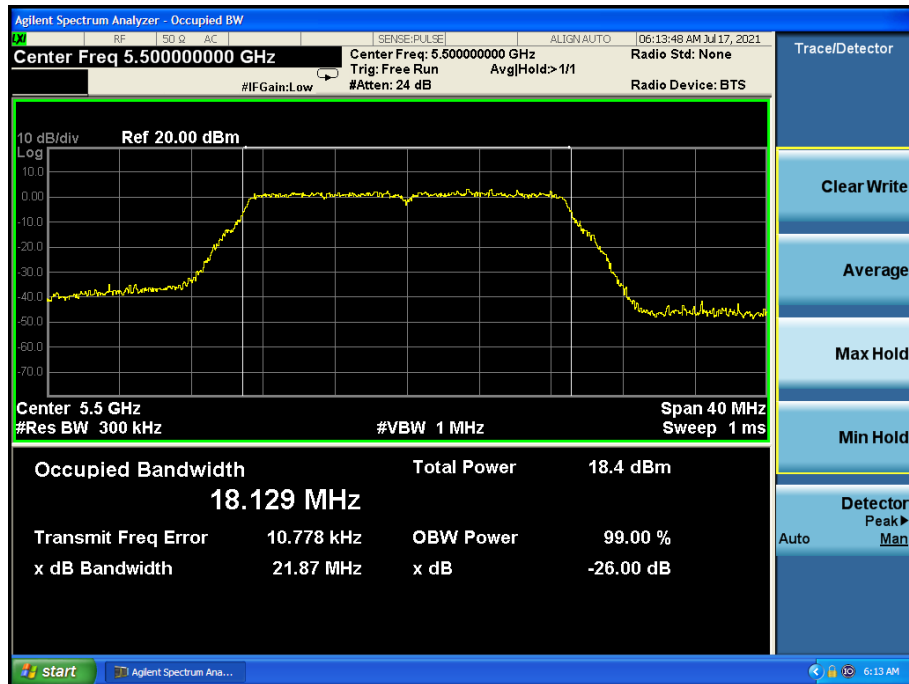
802.11a (5.47GHz-5.725GHz) The Middle Channel 116: 5580MHz



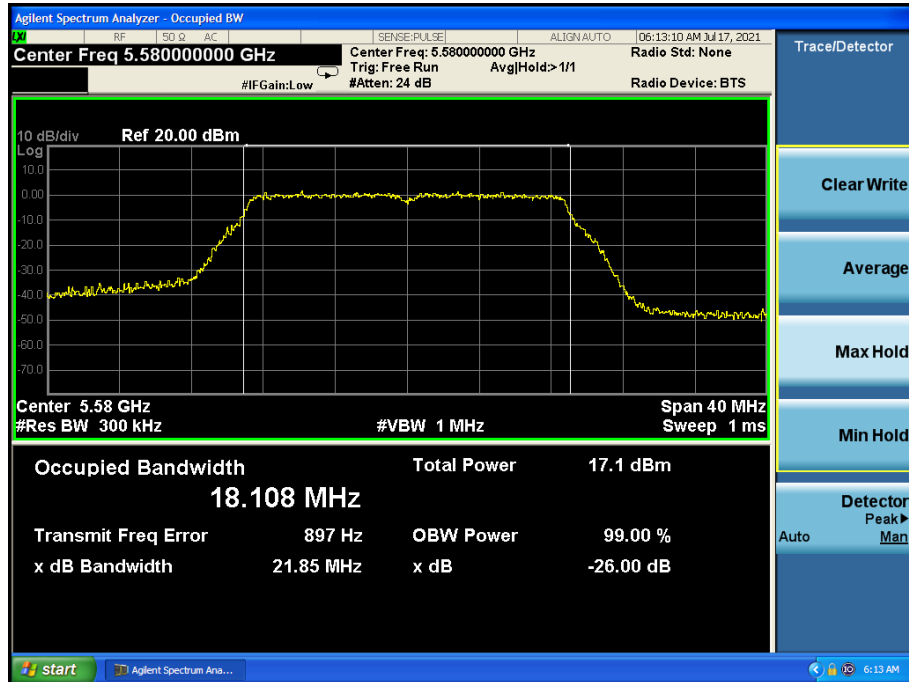
802.11a (5.47GHz-5.725GHz) The High Channel 140: 5700MHz



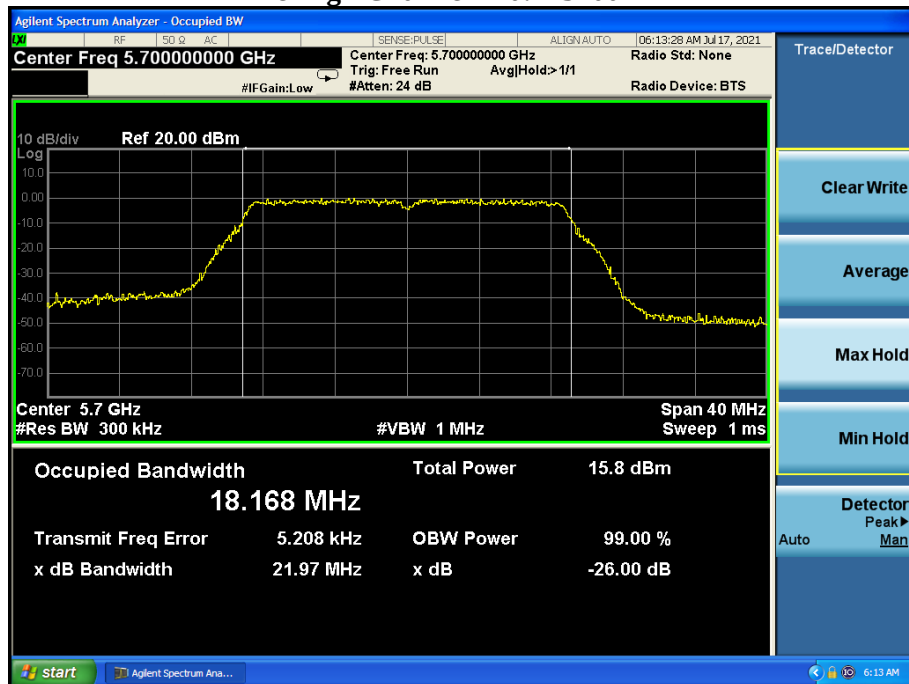
802.11n(20M) (5.47GHz-5.725GHz) The Lowest Channel 100: 5500MHz



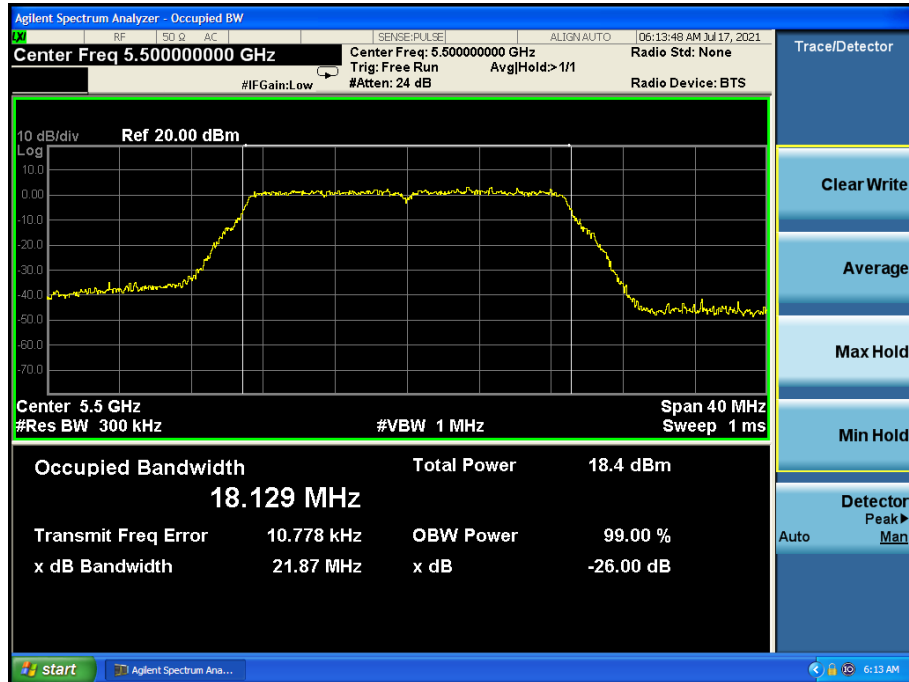
802.11n(20M) (5.47GHz-5.725GHz) The Middle Channel 116: 5580MHz



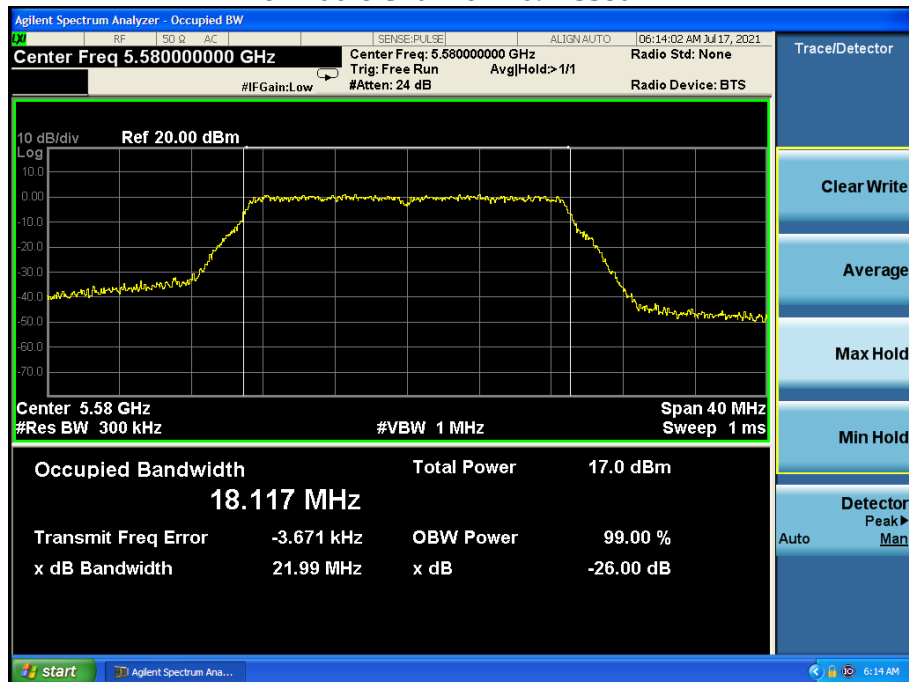
802.11n(20M) (5.47GHz-5.725GHz) The High Channel 140: 5700MHz



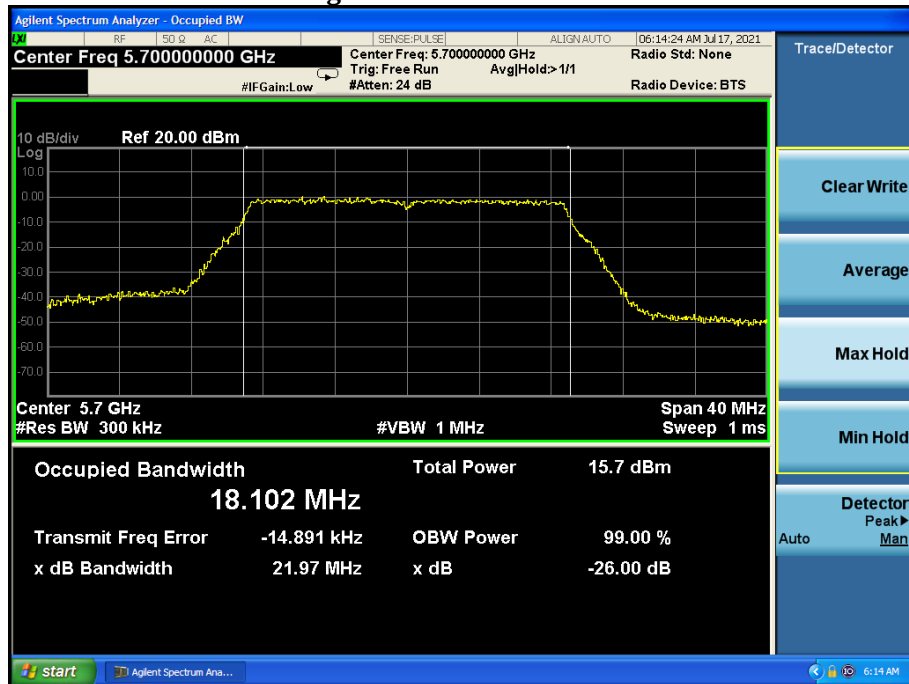
802.11ac (5.47GHz-5.725GHz) The Lowest Channel 100: 5500MHz



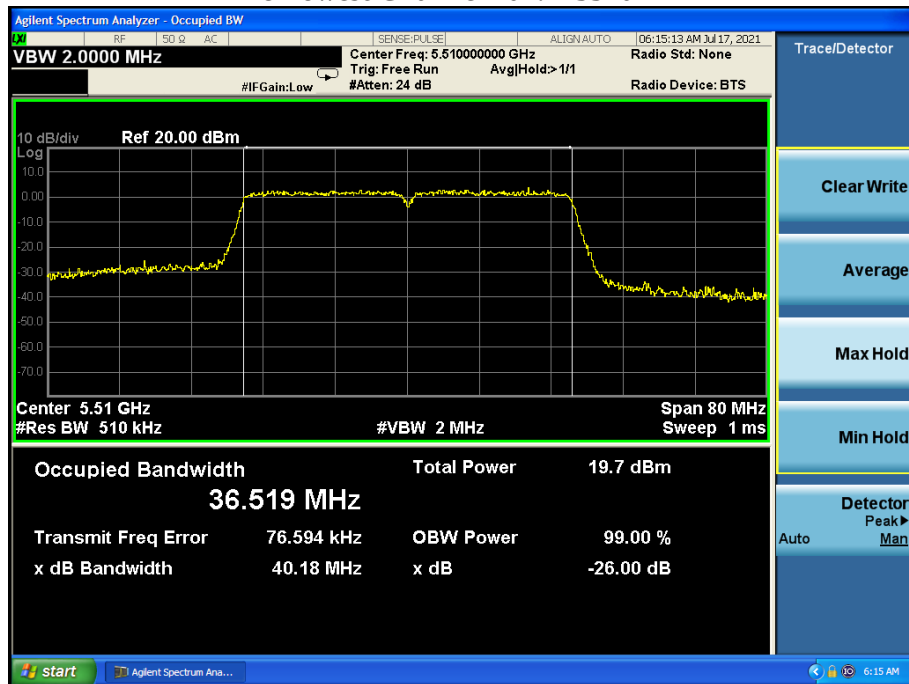
802.11ac (5.47GHz-5.725GHz) The Middle Channel 116: 5580MHz



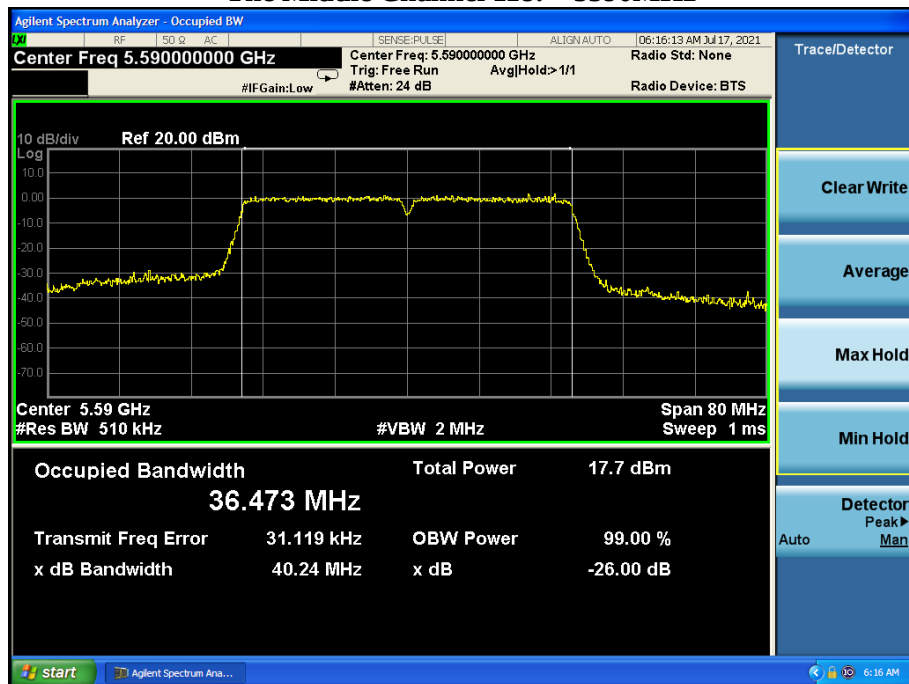
802.11ac (5.47GHz-5.725GHz) The High Channel 140: 5700MHz



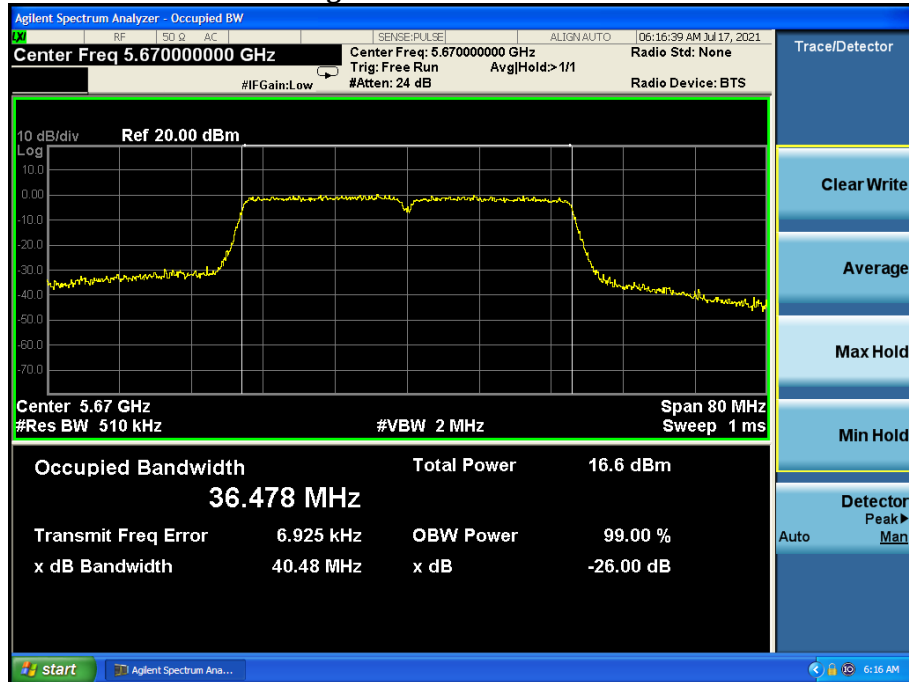
802.11n(40M) (5.47GHz-5.725GHz) The Lowest Channel 102: 5510MHz



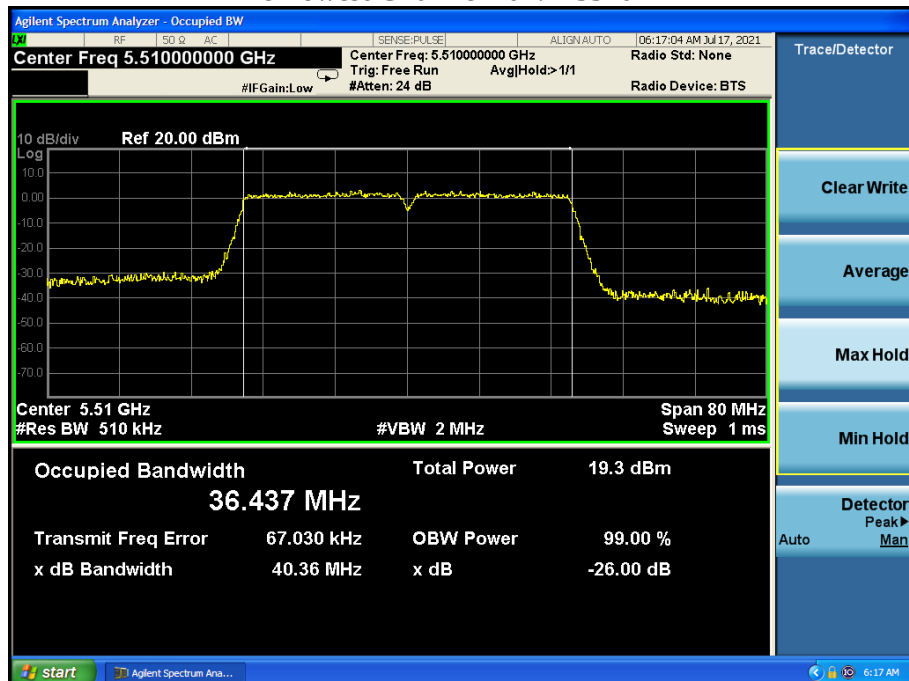
802.11n(40M) (5.47GHz-5.725GHz) The Middle Channel 118: 5590MHz



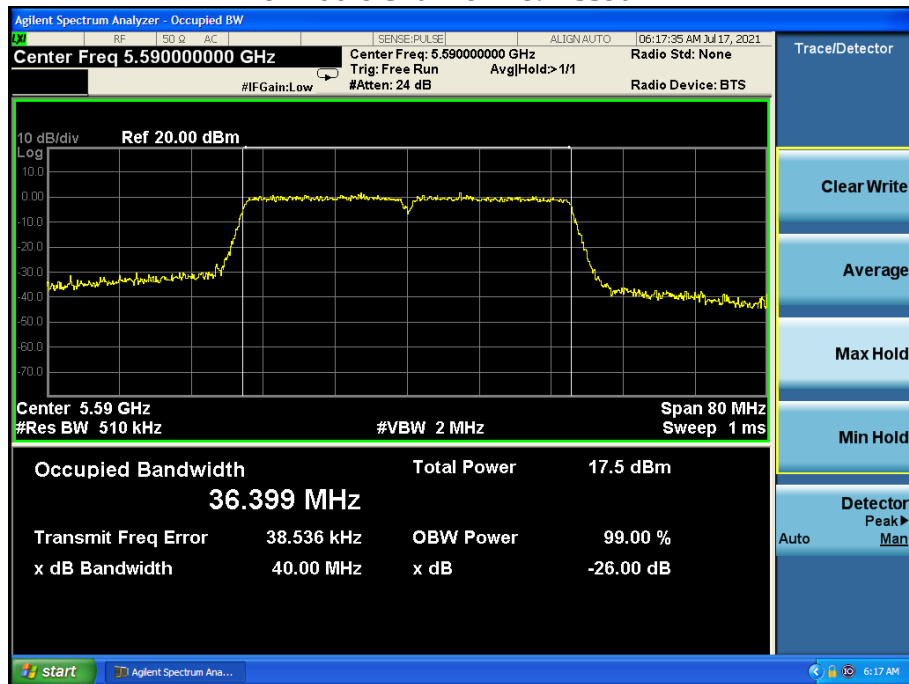
802.11n(40M) (5.47GHz-5.725GHz) The High Channel 134: 5670MHz



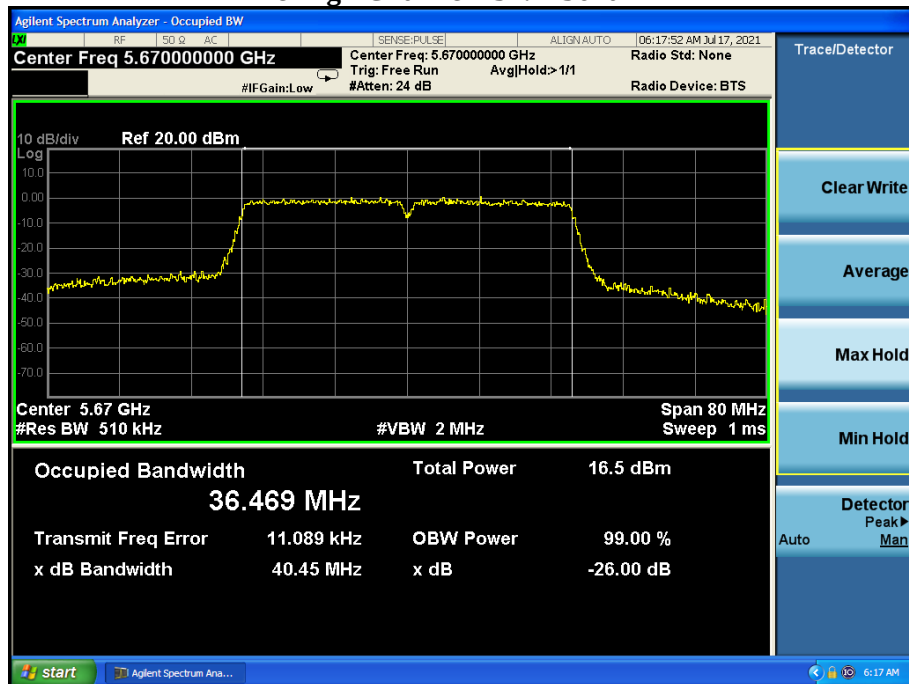
802.11ac(40M) (5.47GHz-5.725GHz) The Lowest Channel 102: 5510MHz



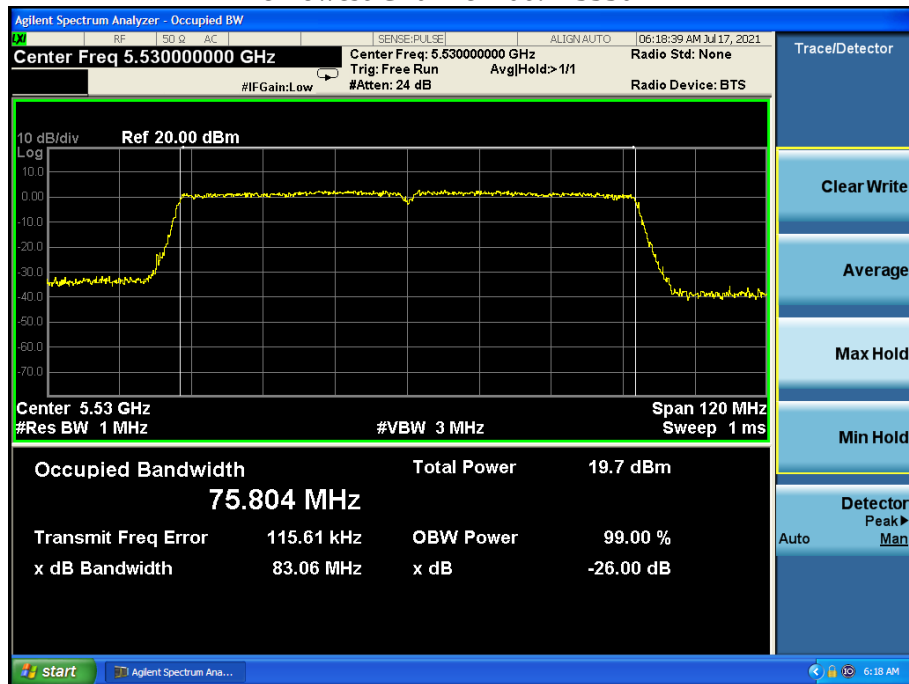
802.11ac(40M) (5.47GHz-5.725GHz) The Middle Channel 118: 5590MHz



802.11ac(40M) (5.47GHz-5.725GHz) The High Channel 134: 5670MHz



802.11ac(80M) (5.47GHz-5.725GHz) The Lowest Channel 106: 5530MHz



5 PEAK POWER DENSITY

5.1 APPLIED PROCEDURES / LIMIT

15.407(a) For UNII Device in the 5.15-5.25GHz, 5.25-5.35 GHz and 5.47-5.725GHz bands; peak power Density as follow.

Frequency Band	Limit
5.15 – 5.25 GHz	11dBm
5.25– 5.35GHz	11dBm
5.47 – 5.725 GHz	11dBm

5.2 TEST PROCEDURE

- a. The Transmitter output of EUT was connected to the spectrum analyzer.

Equipment mode: Spectrum analyzer

Detector function: Peak mode

SPAN: 40MHz/80MHz/120MHz

RBW: 1MHz

VBW: 3MHz

Center frequency: fundamental frequency tested.

Sweep time= 1msec.

- b. Using Peak Search to read the peak power after Maximum Hold function is completed.

5.3 DEVIATION FROM STANDARD

No deviation.

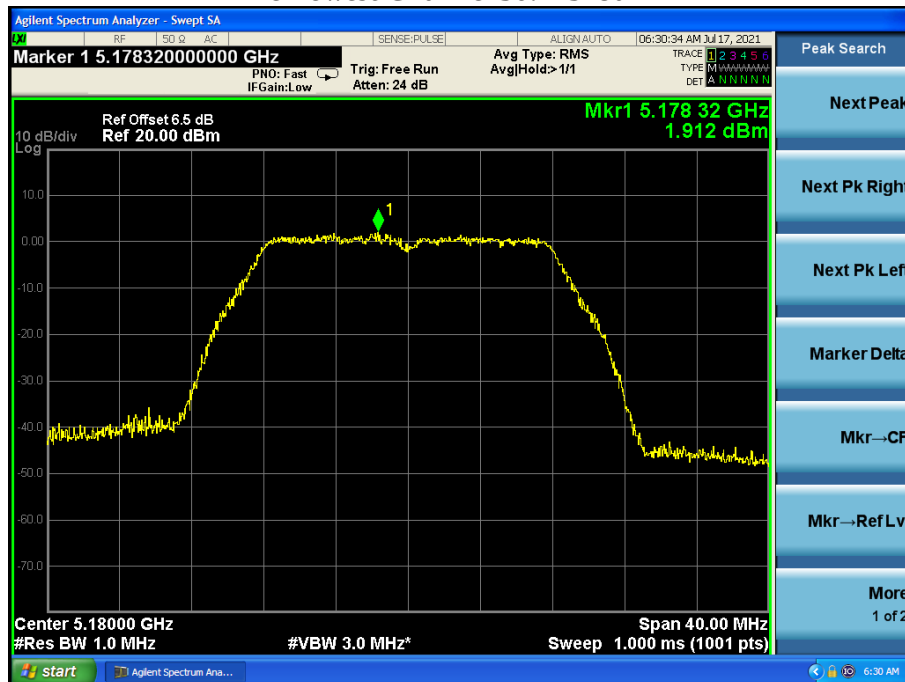
5.4 TEST RESULTS

ANT 1(2) Represent the value of antenna 1 and 2, The worst data is 1 Antenna a, only shown Antenna 1 Plot

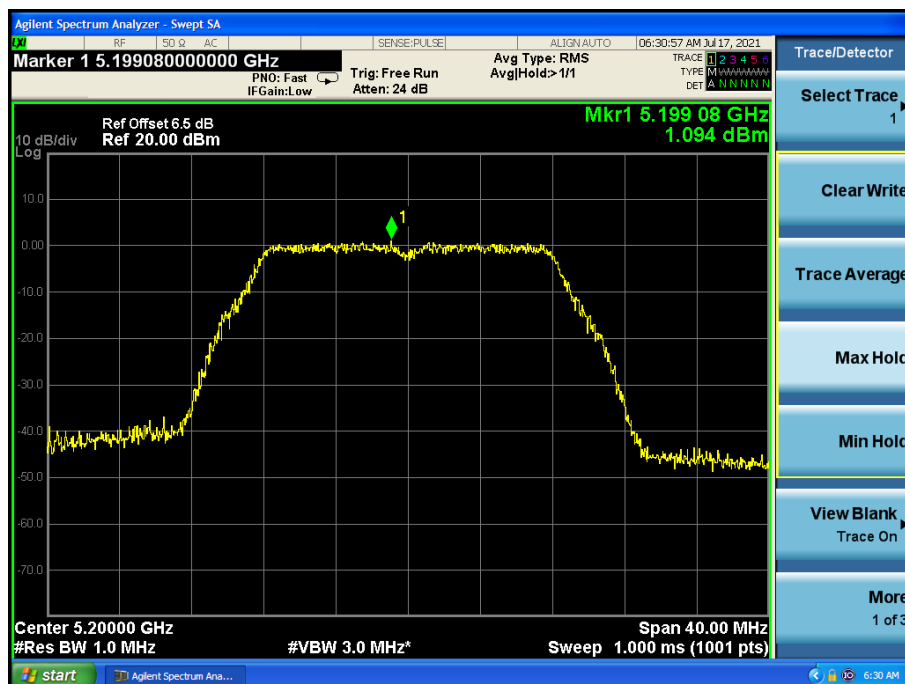
EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	22°C	Relative Humidity :	53%
Pressure :	1010 hPa	Test Power :	DC25.55V from battery
Test Mode :	802.11a/n20/ac20/n40/ac40/ac80		
Test Date :	2021-07-17		

Test Mode	Channel	Channel Frequency (MHz)	Power Density (MHz) ANT 1	Power Density (MHz) ANT 2	Total Power Density (MHz)	Limit (dBm)	Result
802.11a (5.15GHz-5.25GHz) Data rate 6Mbps	Low	5180	1.912	0.926	--	11	Pass
	Middle	5200	1.094	0.774	--	11	Pass
	Highest	5240	0.991	0.536	--	11	Pass
802.11n(20M) (5.15GHz-5.25GHz) Data rate 13Mbps	Low	5180	0.921	0.339	3.65	10.49	Pass
	Middle	5200	0.982	0.574	3.79	10.49	Pass
	Highest	5240	0.245	0.003	3.14	10.49	Pass
802.11ac(20M) (5.15GHz-5.25GHz) Data rate 13Mbps	Low	5180	1.231	0.987	4.12	10.49	Pass
	Middle	5200	0.551	0.266	3.42	10.49	Pass
	Highest	5240	0.144	-0.0114	3.08	10.49	Pass
802.11n(40M) (5.15GHz-5.25GHz) Data rate 27Mbps	Low	5190	-1.088	-1.695	1.63	10.49	Pass
	Highest	5230	-1.667	-1.994	1.18	10.49	Pass
802.11ac(40M) (5.15GHz-5.25GHz) Data rate 27Mbps	Low	5190	-1.426	-1.856	1.37	10.49	Pass
	Highest	5230	-2.429	-2.778	0.41	10.49	Pass
802.11ac(80M) (5.15GHz-5.25GHz) Data rate 58.6Mbps	---	5210	-4.202	-5.032	-1.59	10.49	Pass

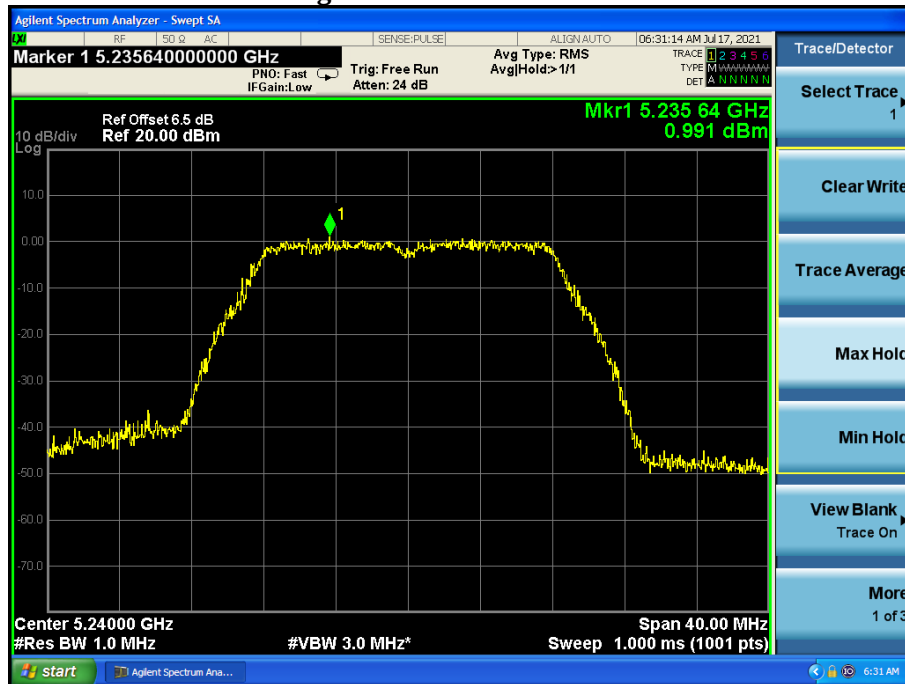
802.11a (5.15GHz-5.25GHz) The Lowest Channel 36: 5180MHz



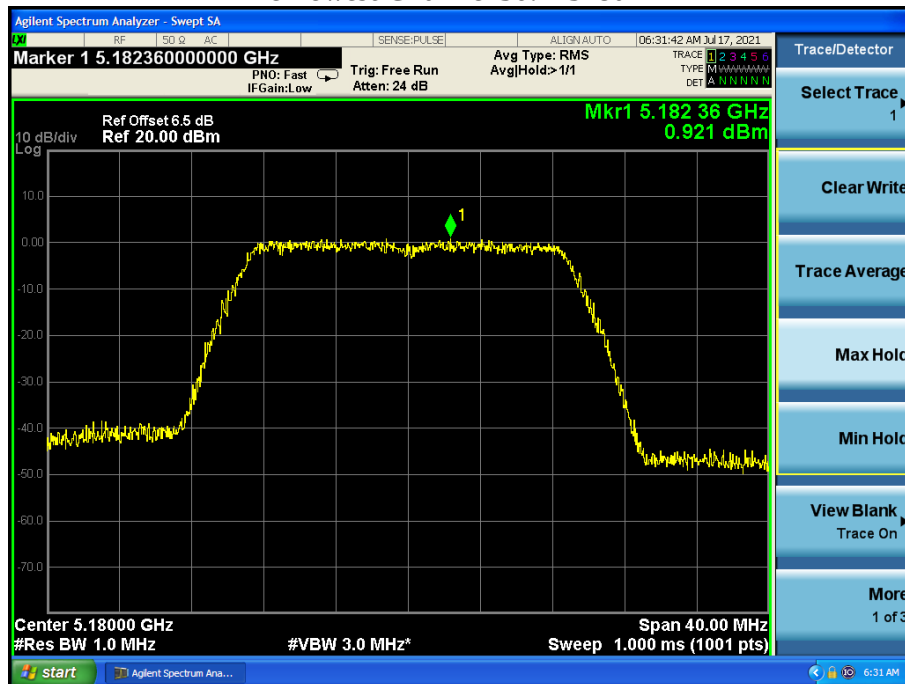
802.11a (5.15GHz-5.25GHz) The Middle Channel 40: 5200MHz



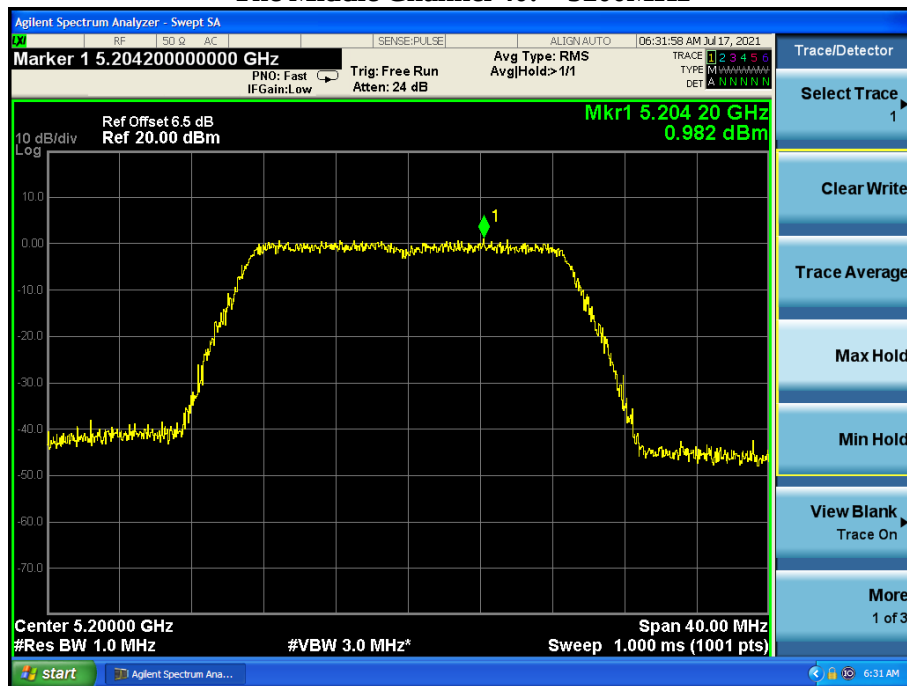
802.11a (5.15GHz-5.25GHz) The Highest Channel 48: 5240MHz



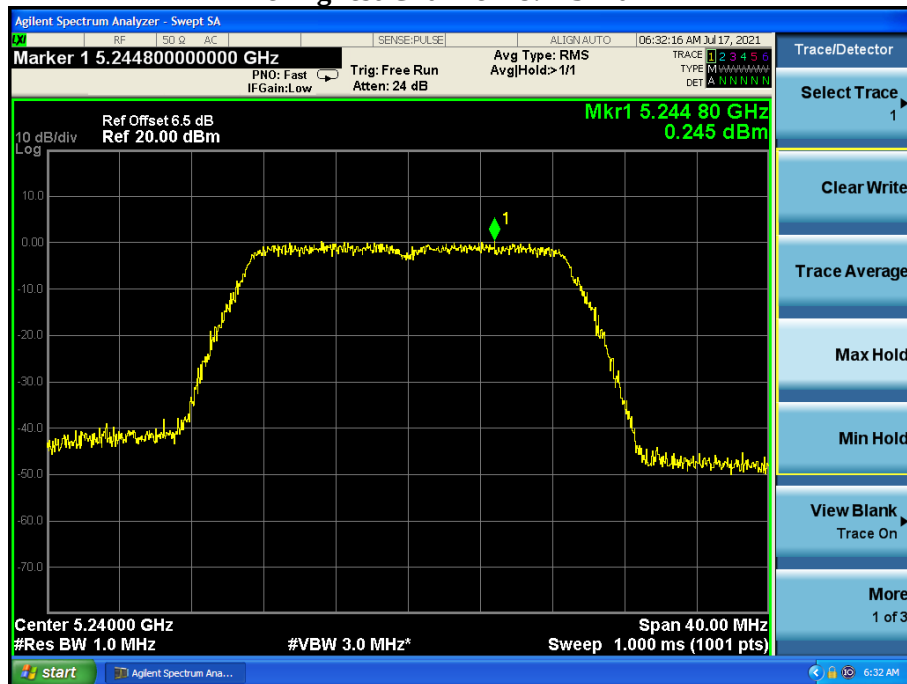
802.11n(20M) (5.15GHz-5.25GHz) The Lowest Channel 36: 5180MHz



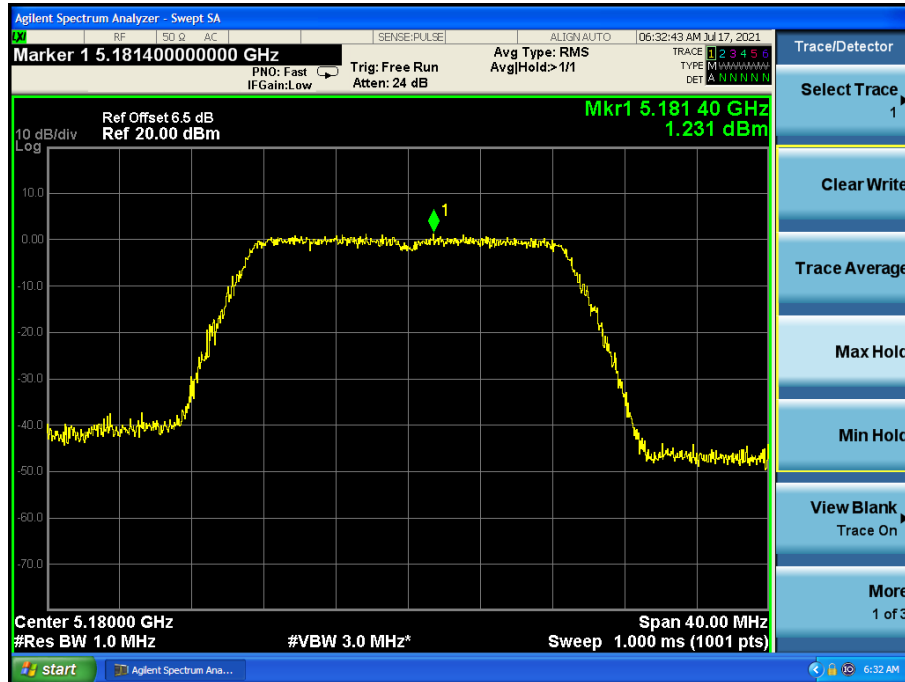
802.11n(20M) (5.15GHz-5.25GHz) The Middle Channel 40: 5200MHz



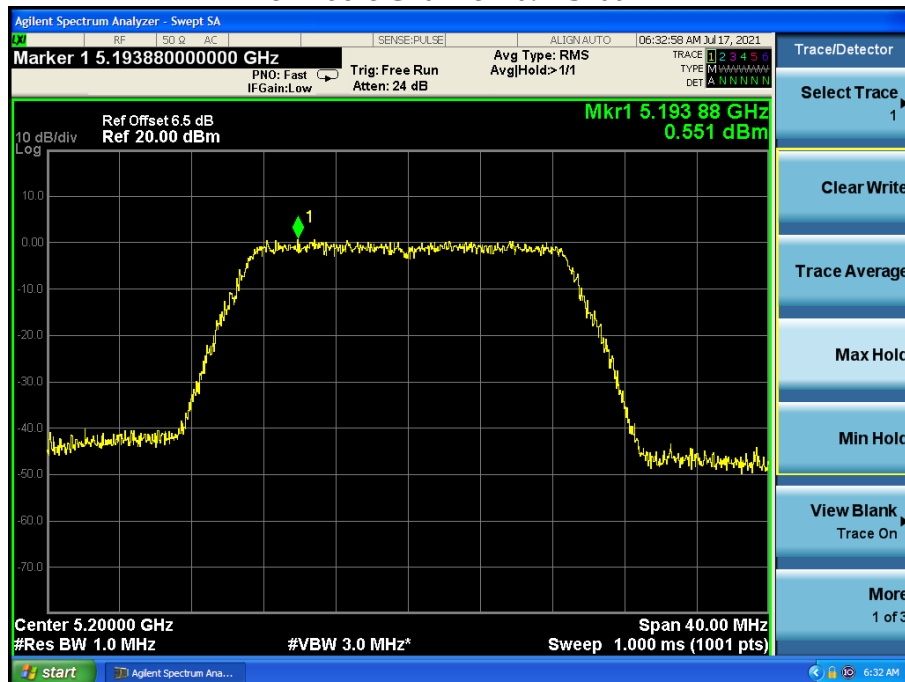
802.11n(20M) (5.15GHz-5.25GHz) The Highest Channel 48: 5240MHz



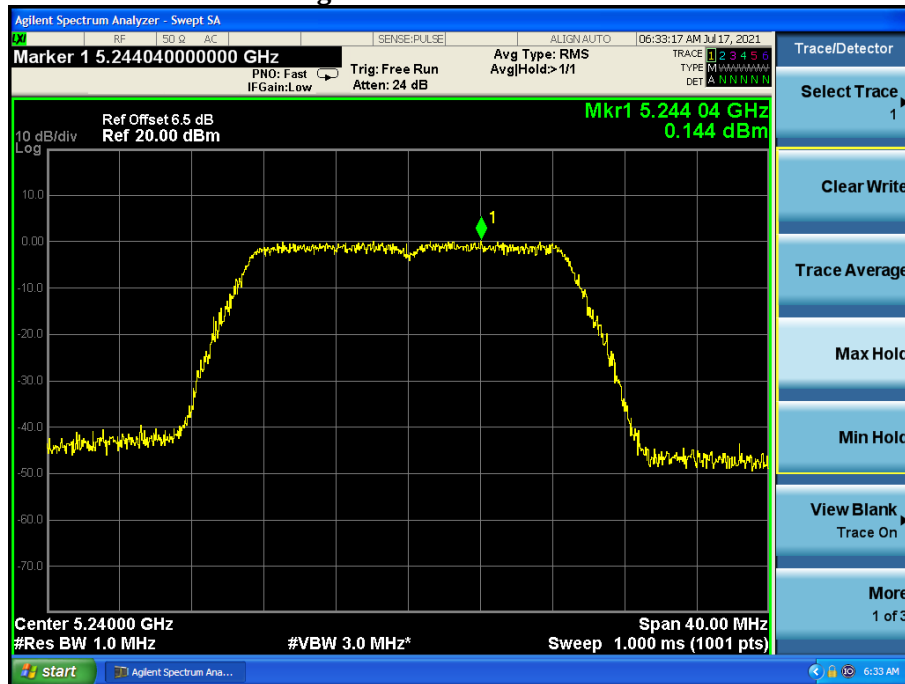
802.11ac (5.15GHz-5.25GHz) The Lowest Channel 36: 5180MHz



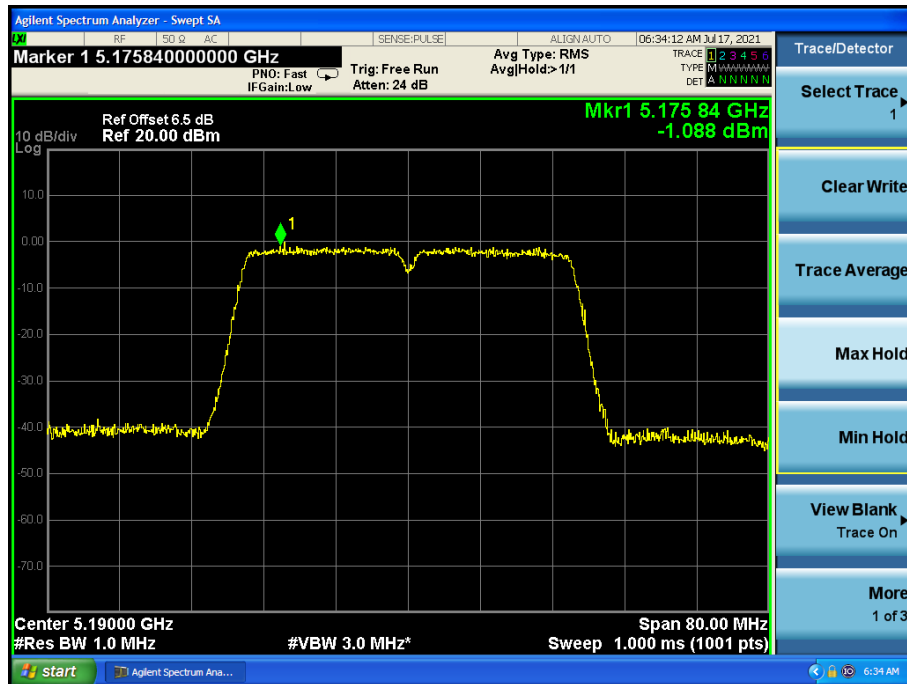
802.11ac (5.15GHz-5.25GHz) The Middle Channel 40: 5200MHz



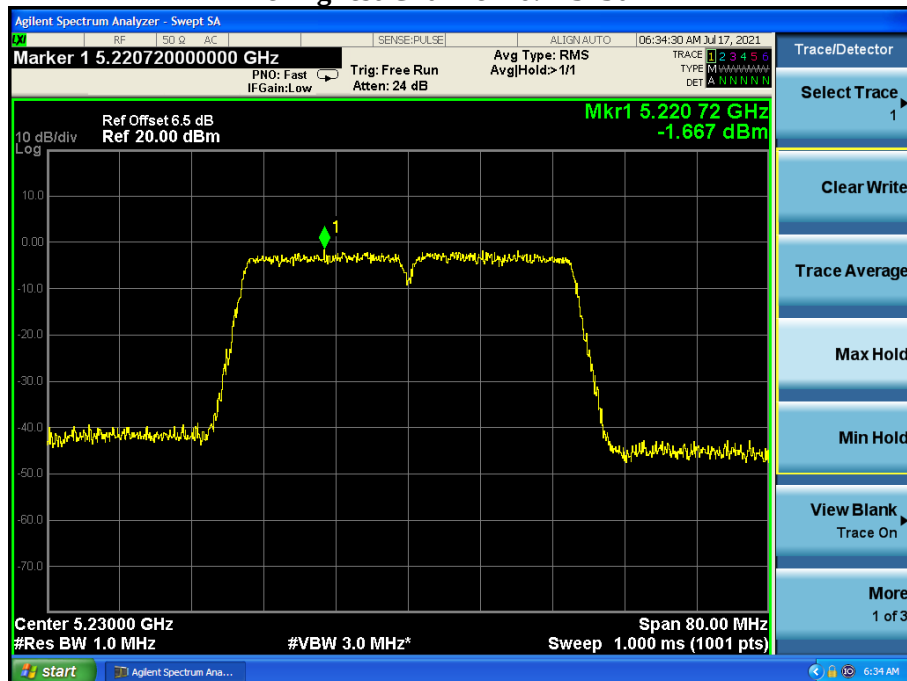
802.11ac (5.15GHz-5.25GHz)
The Highest Channel 48: 5240MHz



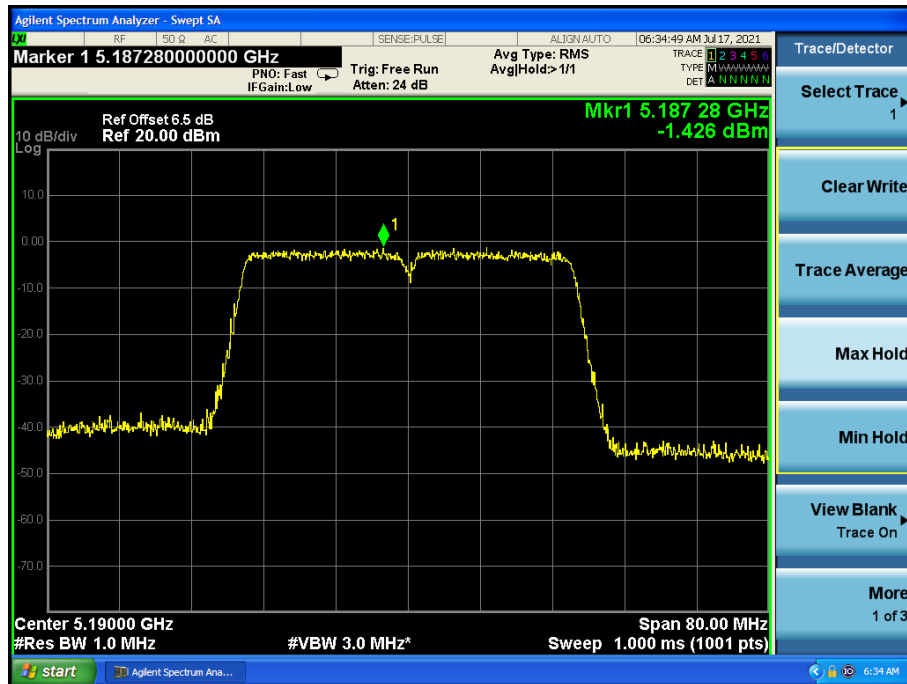
802.11n(40M) (5.15GHz-5.25GHz)
The Lowest Channel 38: 5190MHz



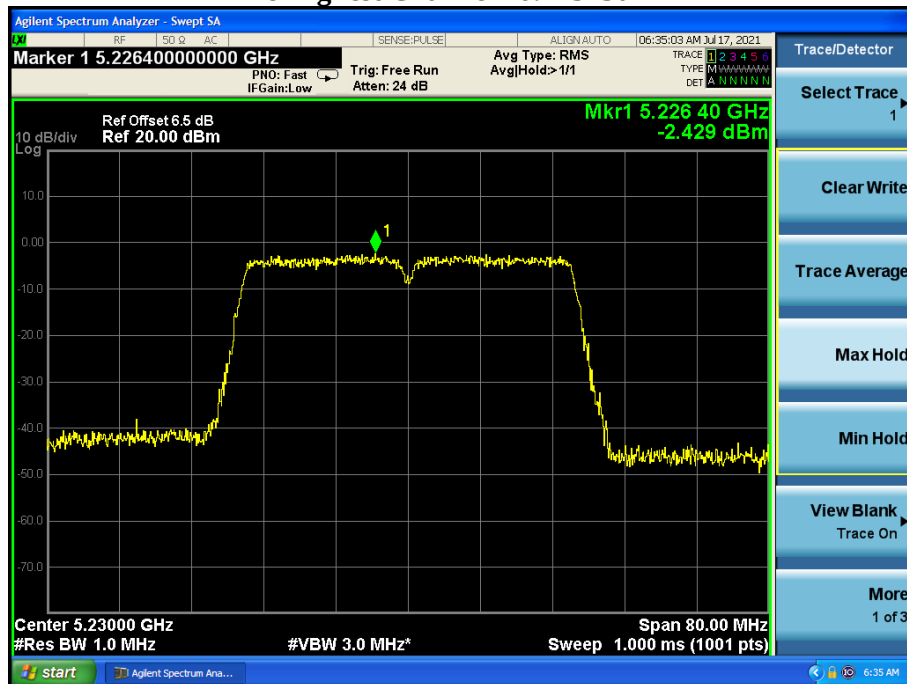
802.11n(40M) (5.15GHz-5.25GHz)
The Highest Channel 46: 5230MHz



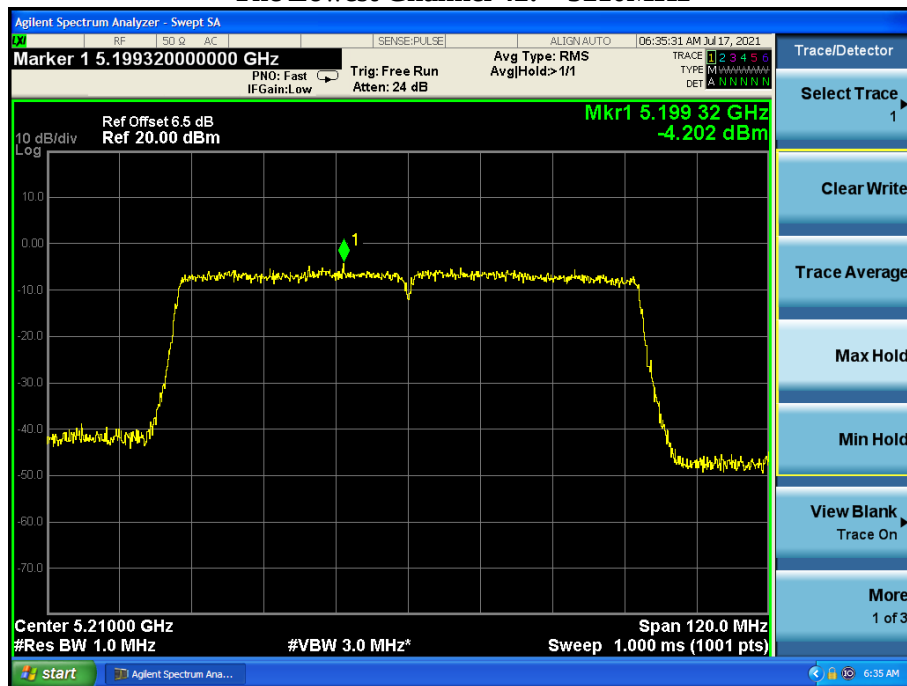
802.11ac(40M) (5.15GHz-5.25GHz) The Lowest Channel 38: 5190MHz



802.11ac(40M) (5.15GHz-5.25GHz) The Highest Channel 46: 5230MHz



802.11ac(80M) (5.15GHz-5.25GHz) The Lowest Channel 42: 5210MHz

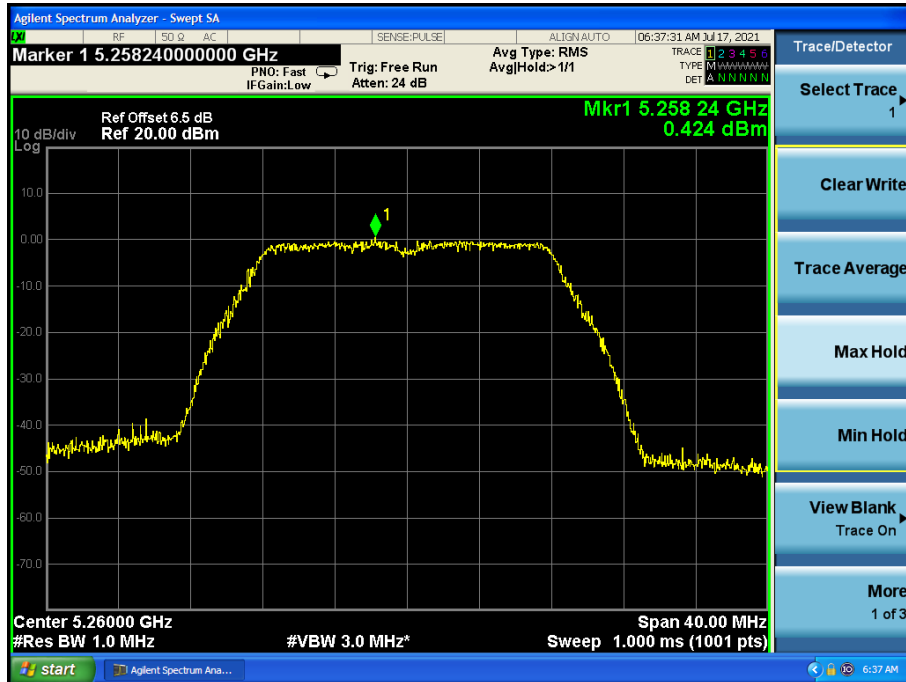


ANT 1(2) Represent the value of antenna 1 and 2, The worst data is 1 Antenna a, only shown
Antenna 1 Plot

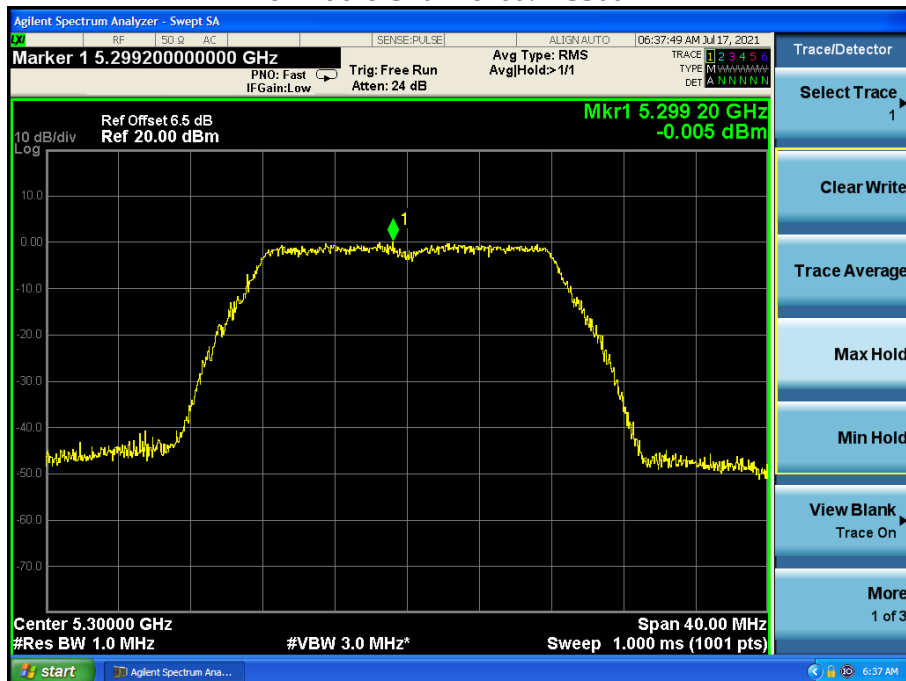
EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	22℃	Relative Humidity :	53%
Pressure :	1010 hPa	Test Power :	DC25.55V from battery
Test Mode :	802.11a/n20/ac20/n40/ac40/ac80		
Test Date :	2021-07-17		

Test Mode	Channel	Channel Frequency (MHz)	Power Density (MHz) ANT 1	Power Density (MHz) ANT 2	Total Power Density (MHz)	Limit (dBm)	Result
802.11a (5.25GHz-5.35GHz) Data rate 6Mbps	Low	5260	0.424	0.114	--	11	Pass
	Middle	5300	-0.005	-0.224	--	11	Pass
	Highest	5320	0.223	-0.106	--	11	Pass
802.11n(20M) (5.25GHz-5.35GHz) Data rate 13Mbps	Low	5260	-1.308	-2.354	1.21	10.49	Pass
	Middle	5300	-0.737	-1.168	2.06	10.49	Pass
	Highest	5320	-1.336	-1.987	1.36	10.49	Pass
802.11ac(20M) (5.25GHz-5.35GHz) Data rate 13Mbps	Low	5260	-1.332	-1.687	1.50	10.49	Pass
	Middle	5300	-1.500	-1.942	1.29	10.49	Pass
	Highest	5320	-1.991	-2.258	0.89	10.49	Pass
802.11n(40M) (5.25GHz-5.35GHz) Data rate 27Mbps	Low	5270	-3.702	-4.874	-1.24	10.49	Pass
	Highest	5310	-3.867	-4.036	-0.94	10.49	Pass
802.11ac(40M) (5.25GHz-5.35GHz) Data rate 27Mbps	Low	5270	-4.031	-4.859	-1.41	10.49	Pass
	Highest	5310	-3.875	-4.974	-1.38	10.49	Pass
802.11ac(80M) (5.25GHz-5.35GHz) Data rate 58.6Mbps	---	5290	-6.557	-6.889	-3.71	10.49	Pass

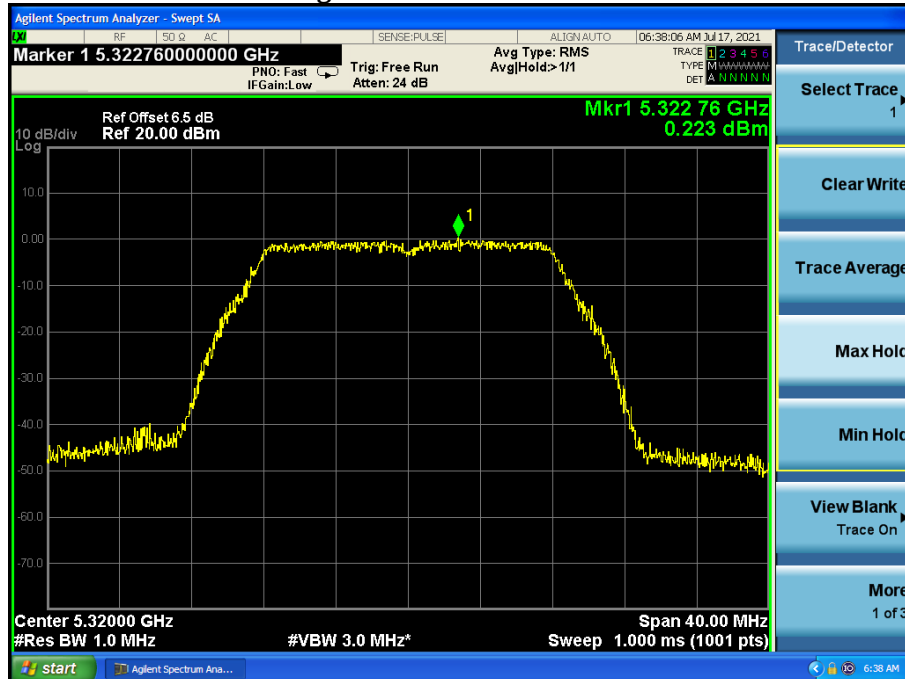
802.11a (5.25GHz-5.35GHz) The Lowest Channel 52: 5260MHz



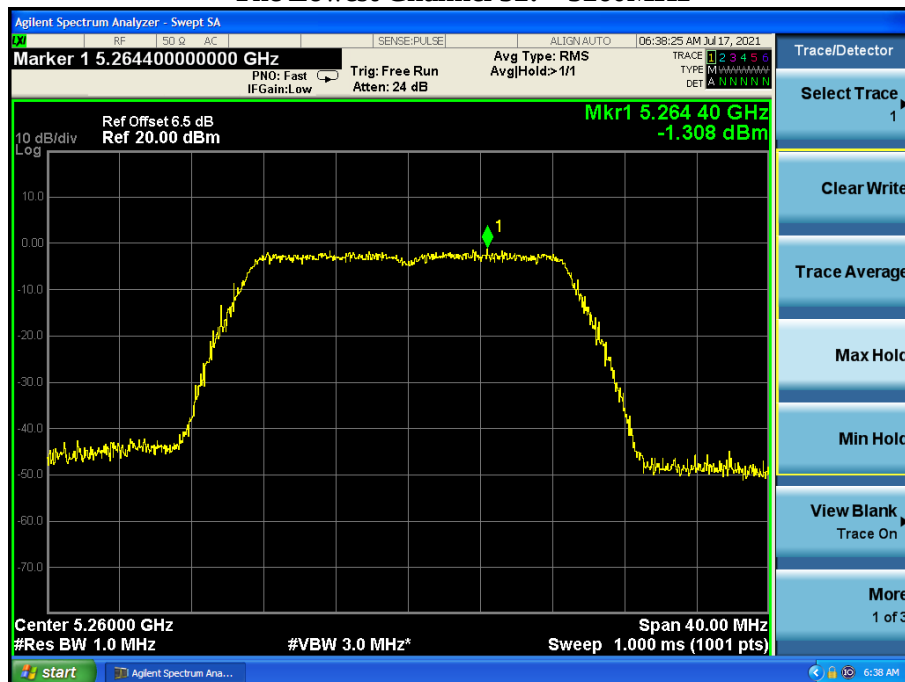
802.11a (5.25GHz-5.35GHz) The Middle Channel 60: 5300MHz



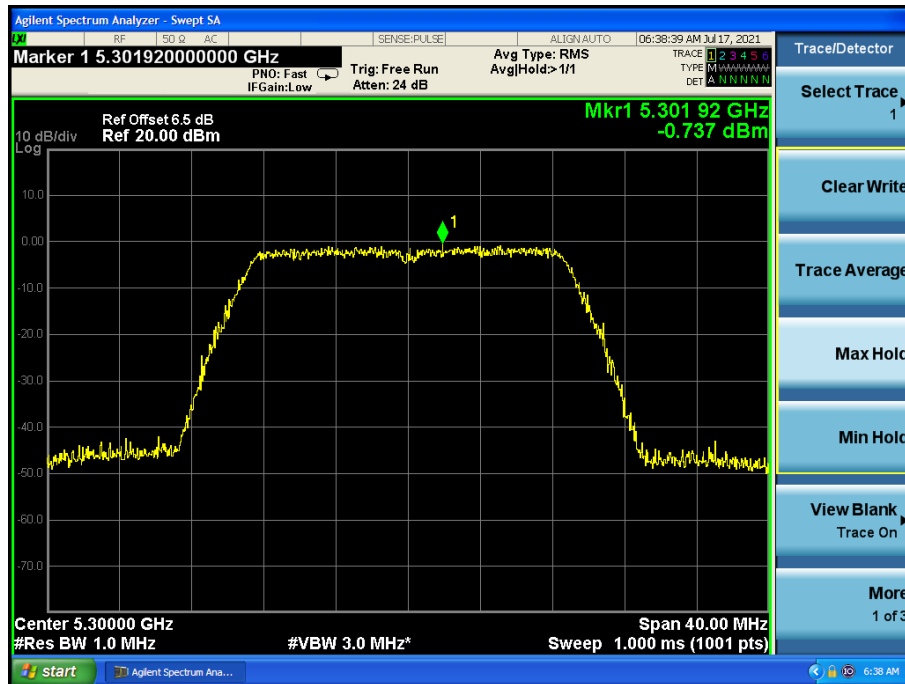
802.11a (5.25GHz-5.35GHz) The Highest Channel 64: 5320MHz



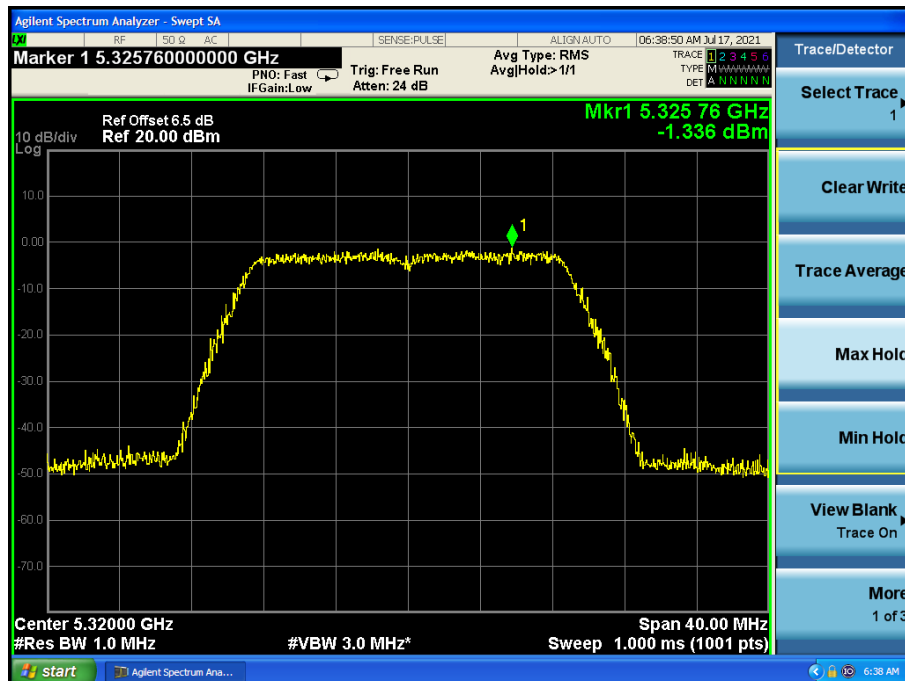
802.11n(20M) (5.25GHz-5.35GHz) The Lowest Channel 52: 5260MHz



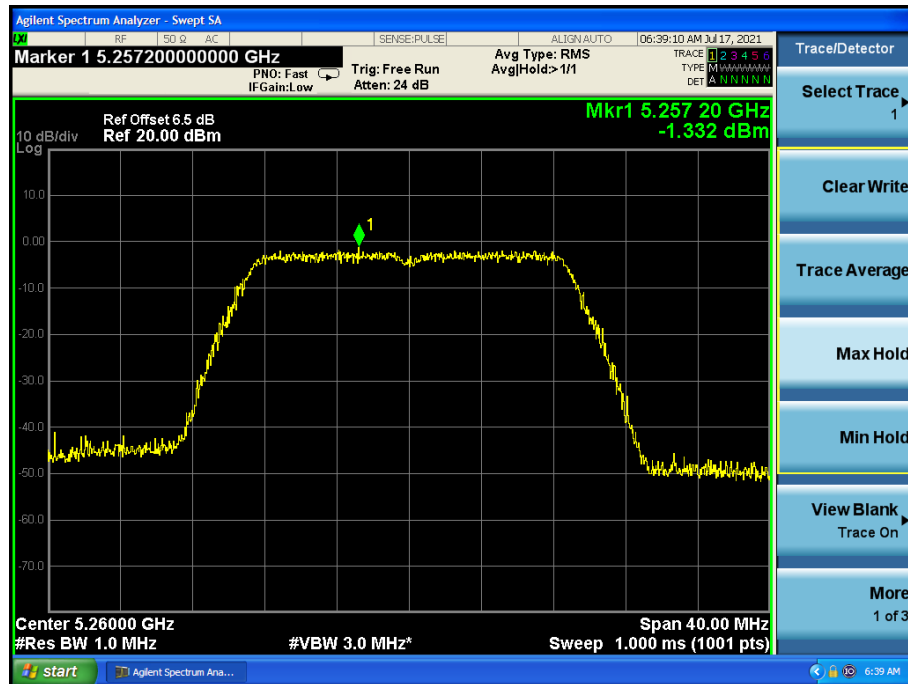
802.11n(20M) (5.25GHz-5.35GHz) The Middle Channel 60: 5300MHz



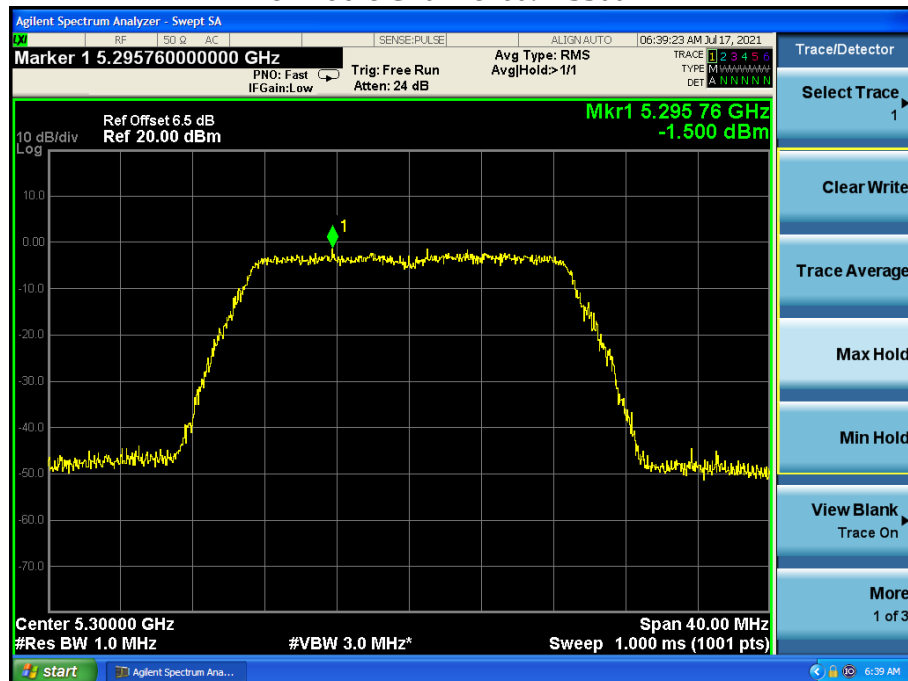
802.11n(20M) (5.25GHz-5.35GHz) The Highest Channel 64: 5320MHz



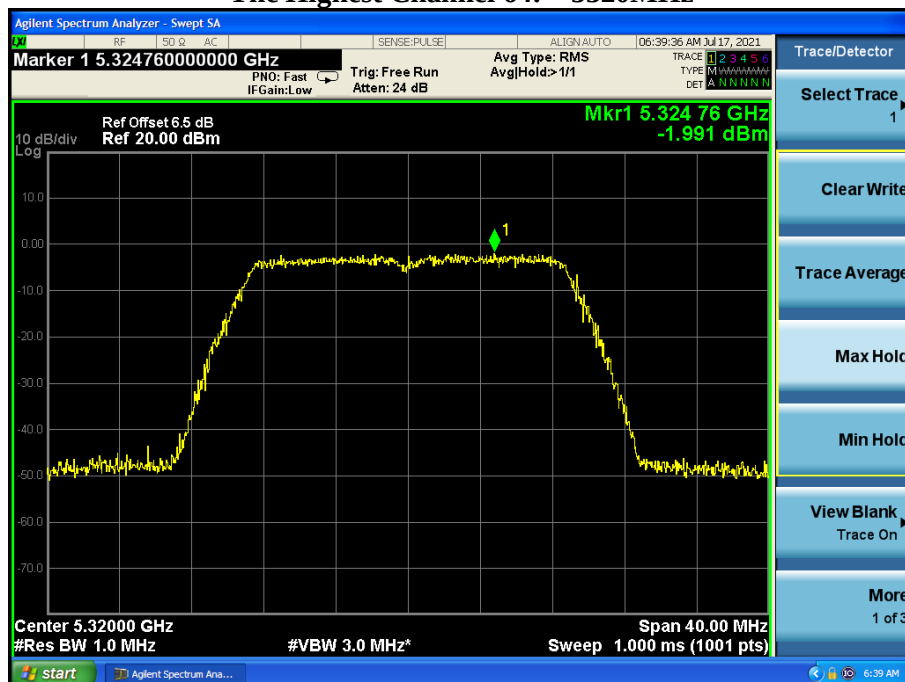
802.11ac (5.25GHz-5.35GHz) The Lowest Channel 52: 5260MHz



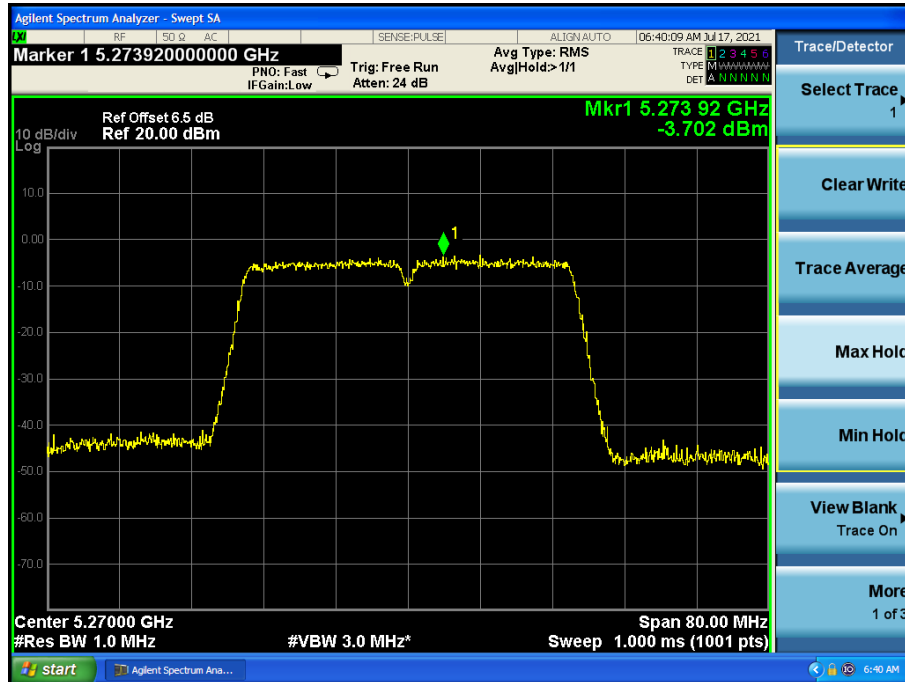
802.11ac (5.25GHz-5.35GHz) The Middle Channel 60: 5300MHz



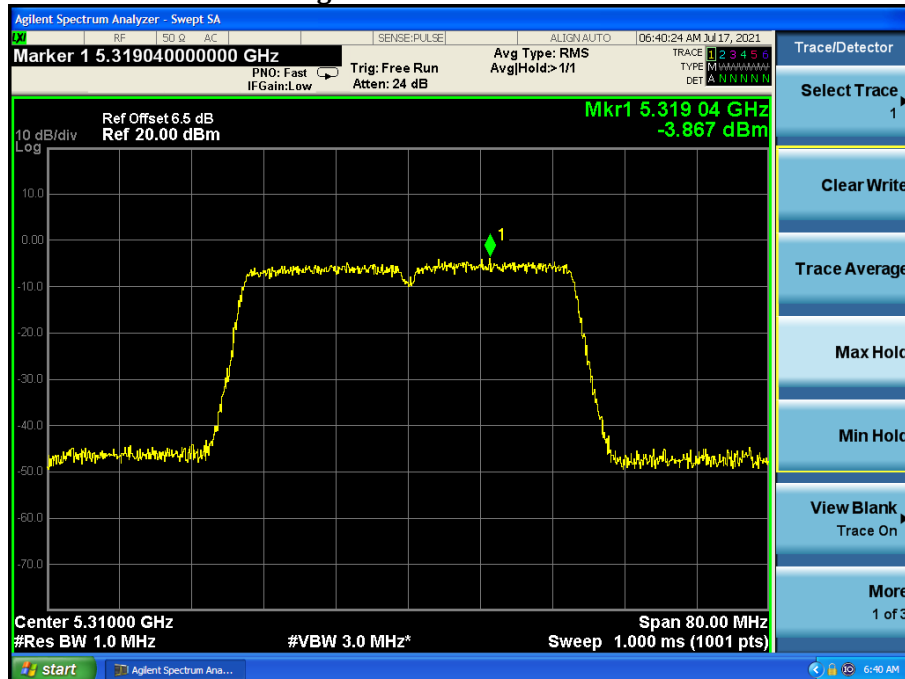
802.11ac (5.25GHz-5.35GHz)
The Highest Channel 64: 5320MHz



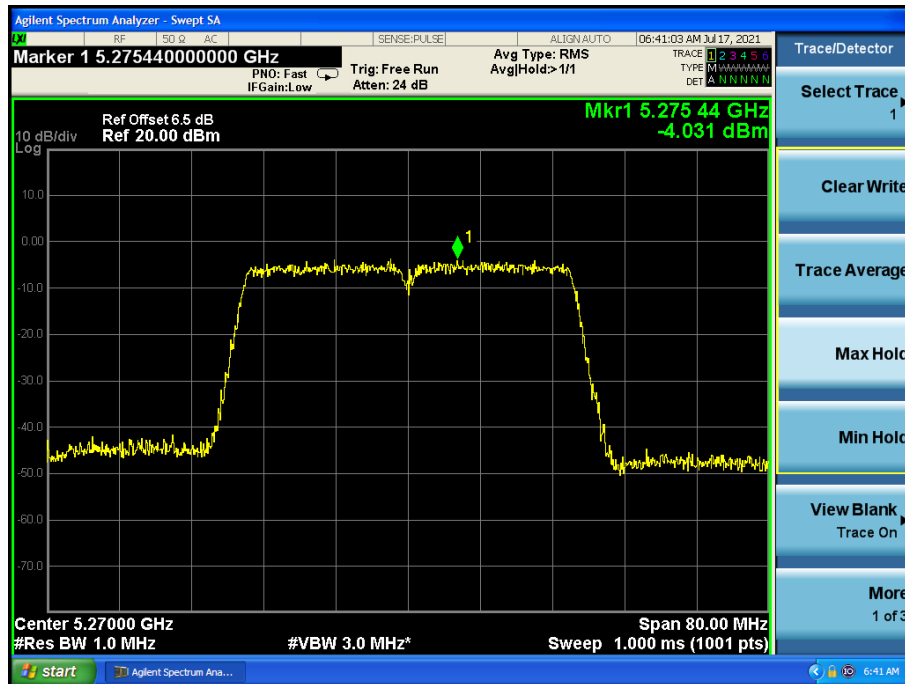
802.11n(40M) (5.25GHz-5.35GHz) The Lowest Channel 54: 5270MHz



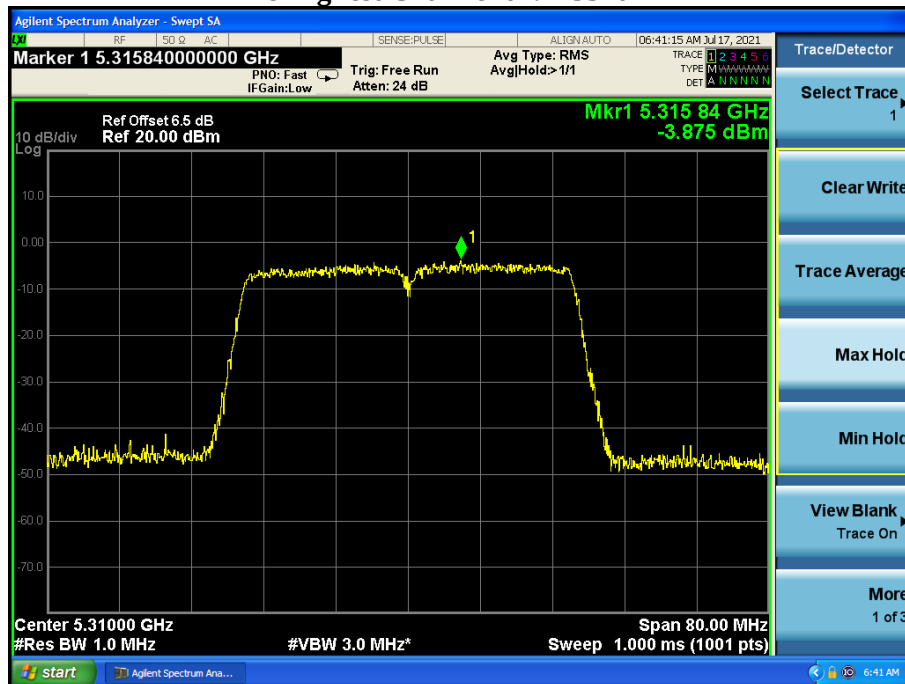
802.11n(40M) (5.25GHz-5.35GHz) The Highest Channel 62: 5310MHz



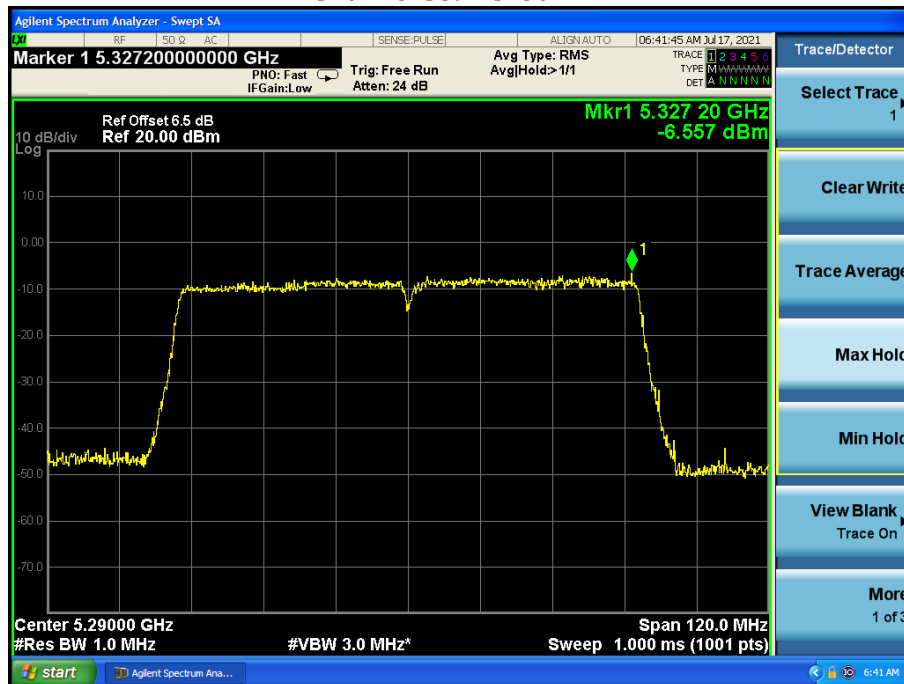
802.11ac(40M) (5.25GHz-5.35GHz) The Lowest Channel 54: 5270MHz



802.11ac(40M) (5.25GHz-5.35GHz) The Highest Channel 62: 5310MHz



802.11ac(80M) (5.25GHz-5.35GHz) Channel 58: 5290MHz



ANT 1(2) Represent the value of antenna 1 and 2, The worst data is 1 Antenna a ,only shown
Antenna 1 Plot

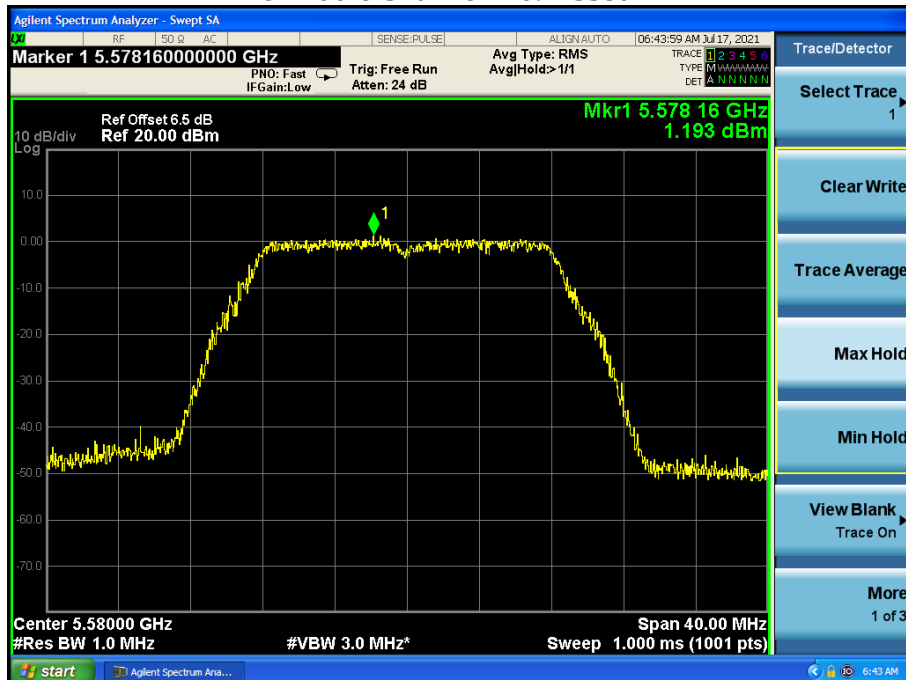
EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	22°C	Relative Humidity :	60%
Pressure :	1010 hPa	Test Voltage :	DC25.55V from battery
Test Mode :	802.11a/n20/ac20/n40/ac40/ac80		
Test Date :	2021-07-17		

Test Mode	Channel	Channel Frequency (MHz)	Power Density (MHz) ANT 1	Power Density (MHz) ANT 2	Total Power Density (MHz)	Limit (dBm)	Result
802.11a (5.47GHz-5.725GHz) Data rate 6Mbps	Low	5500	2.356	2.002	--	11	Pass
	Middle	5580	1.193	0.897	--	11	Pass
	Highest	5700	-0.619	-0.984	--	11	Pass
802.11n(20M) (5.47GHz-5.725GHz) Data rate 13Mbps	Low	5500	2.443	1.156	4.86	10.49	Pass
	Middle	5580	0.669	0.123	3.41	10.49	Pass
	Highest	5700	-1.042	-1.563	1.72	10.49	Pass
802.11ac(20M) (5.47GHz-5.725GHz) Data rate 13Mbps	Low	5500	2.736	1.614	5.22	10.49	Pass
	Middle	5580	0.448	-0.887	2.84	10.49	Pass
	Highest	5700	-0.649	-0.974	2.20	10.49	Pass
802.11n(40M) (5.47GHz-5.725GHz) Data rate 27Mbps	Low	5510	1.263	0.265	3.80	10.49	Pass
	Middle	5590	-1.434	-1.887	1.36	10.49	Pass
	Highest	5670	-2.702	-2.947	0.19	10.49	Pass
802.11ac(40M) (5.47GHz-5.725GHz) Data rate 27Mbps	Low	5510	-0.875	-0.974	2.09	10.49	Pass
	Middle	5590	-1.822	-2.147	1.03	10.49	Pass
	Highest	5670	-2.120	-3.664	0.19	10.49	Pass
802.11ac(80M) (5.47GHz-5.725GHz) Data rate 58.6Mbps	---	5530	-2.044	-3.748	0.20	10.49	Pass

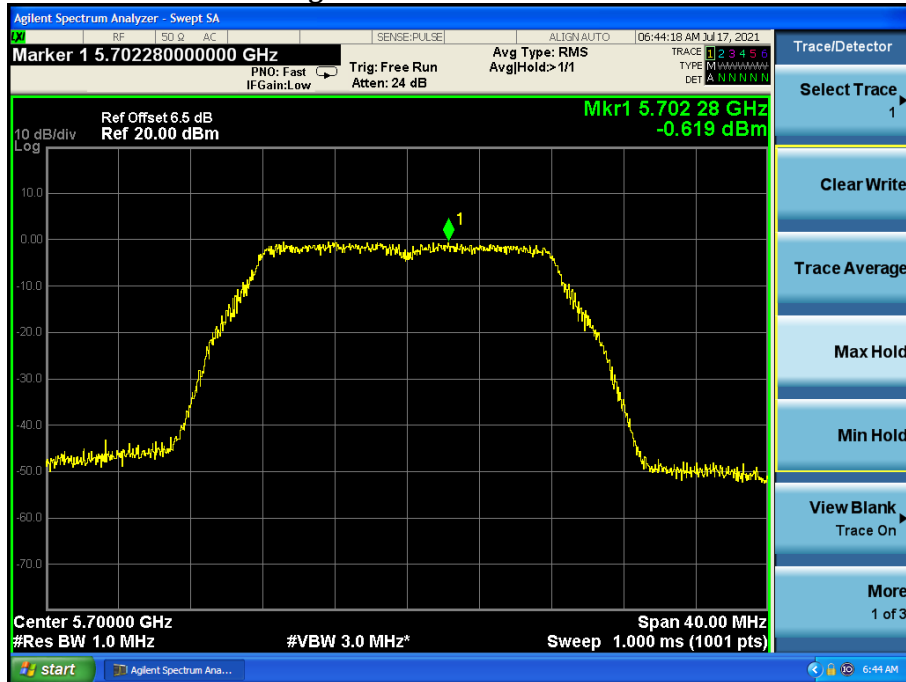
802.11a (5.47GHz-5.725GHz) The Lowest Channel 100: 5500MHz



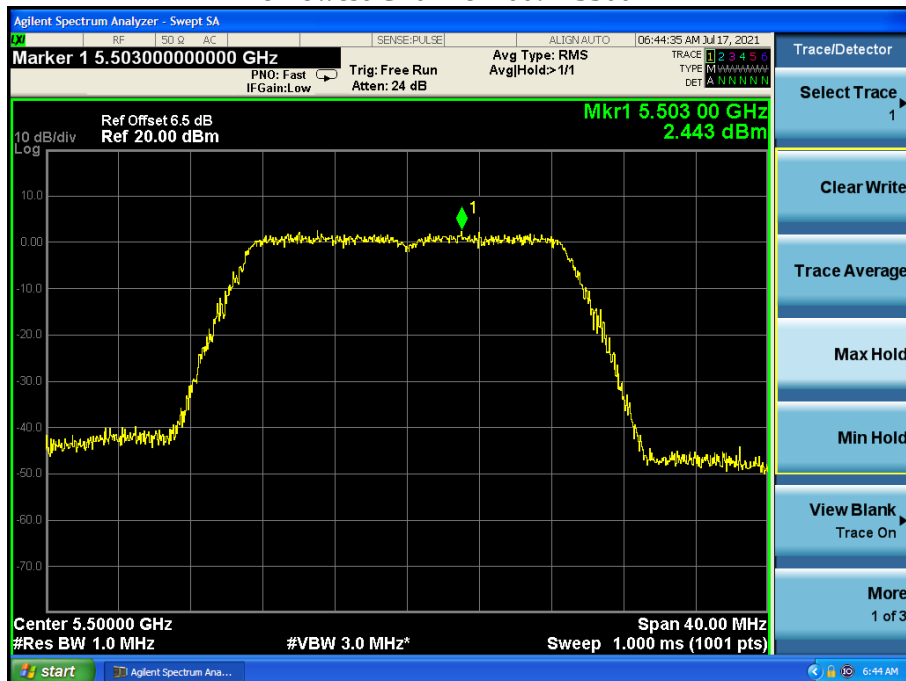
802.11a (5.47GHz-5.725GHz) The Middle Channel 116: 5580MHz



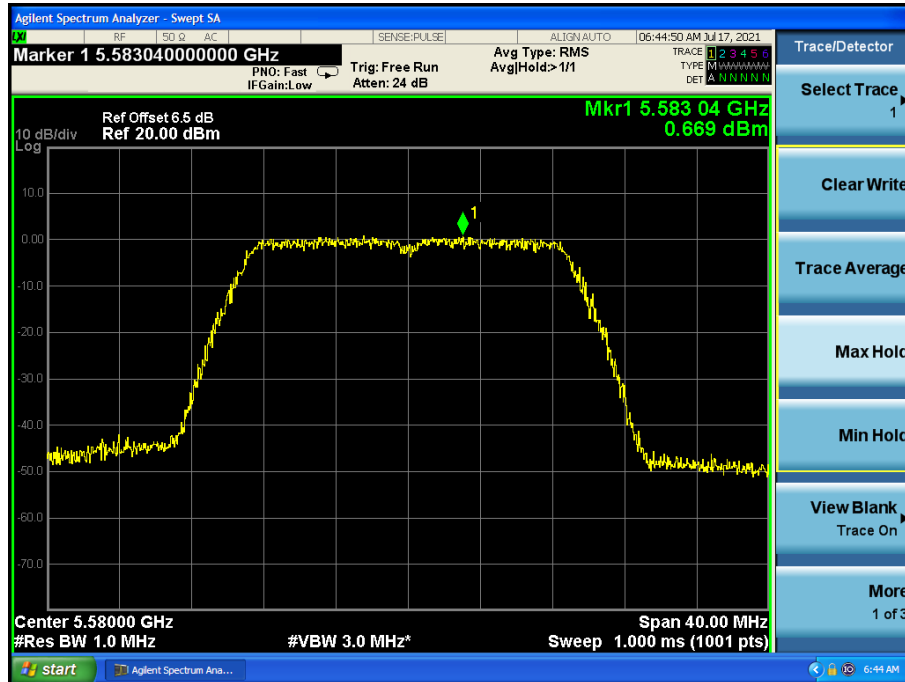
802.11a (5.47GHz-5.725GHz) The Highest Channel 140: 5700MHz



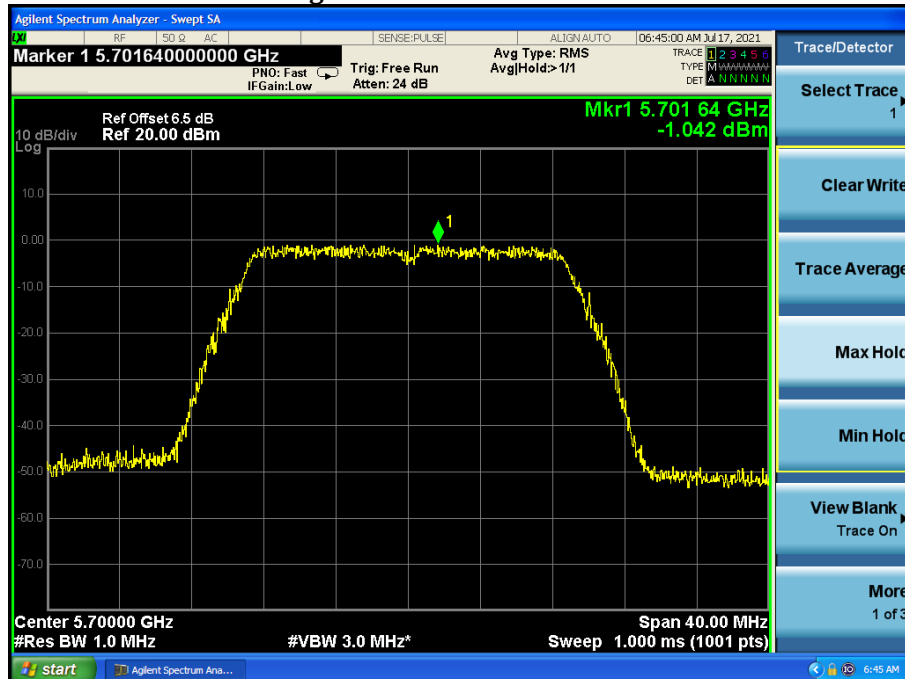
802.11n(20M) (5.47GHz-5.725GHz) The Lowest Channel 100: 5500MHz



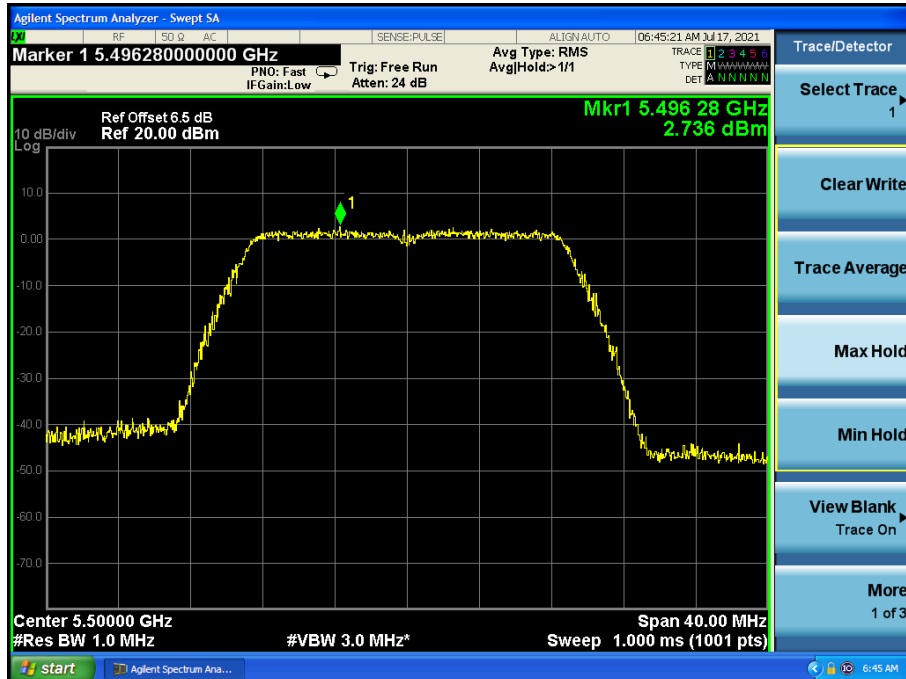
802.11n(20M) (5.47GHz-5.725GHz) The Middle Channel 116: 5580MHz



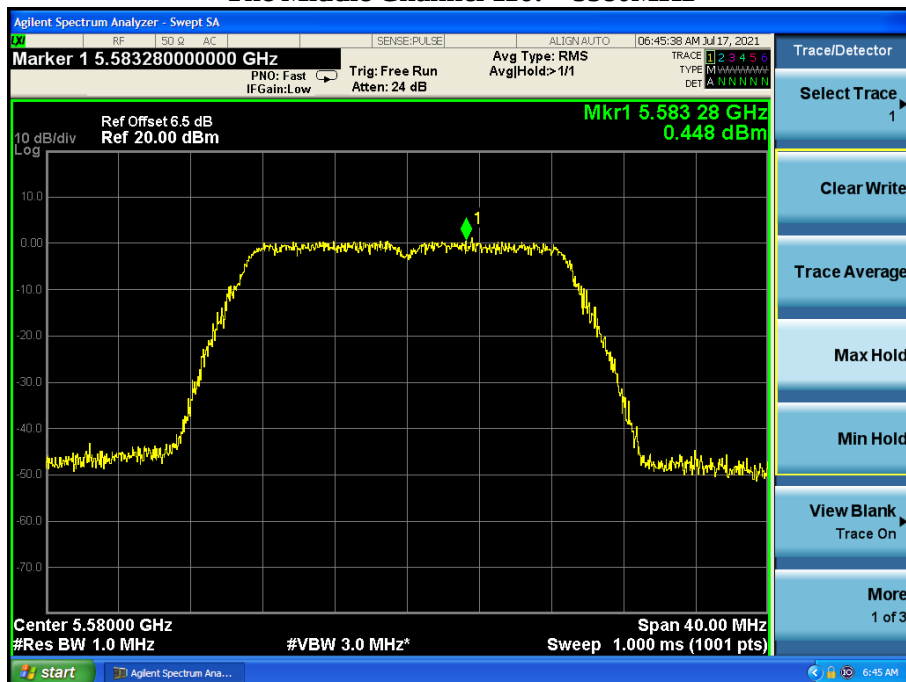
802.11n(20M) (5.47GHz-5.725GHz) The Highest Channel 140: 5700MHz



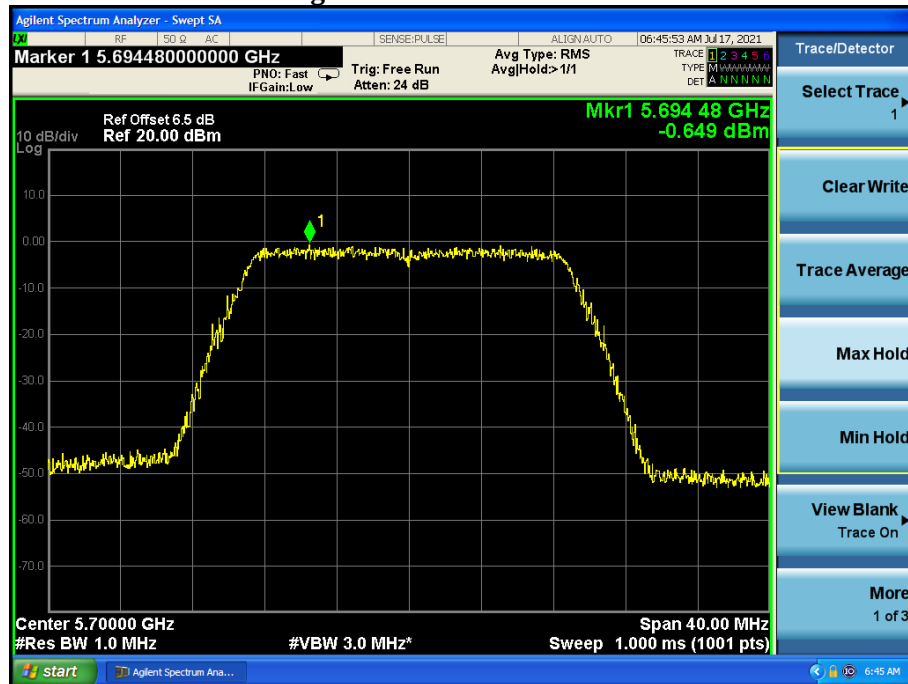
802.11ac (5.47GHz-5.725GHz) The Lowest Channel 100: 5500MHz



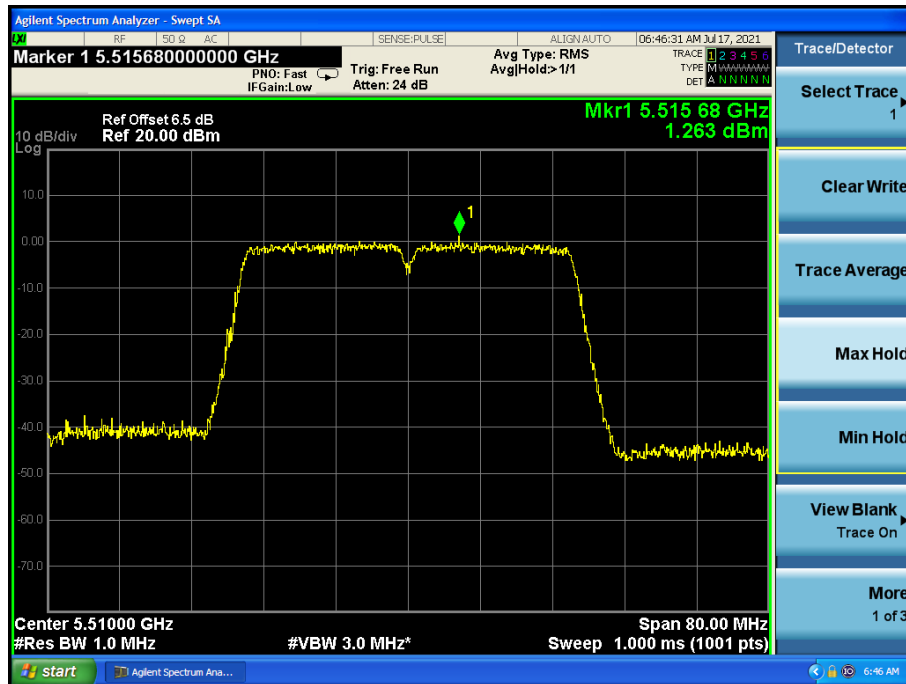
802.11ac (5.47GHz-5.725GHz) The Middle Channel 116: 5580MHz



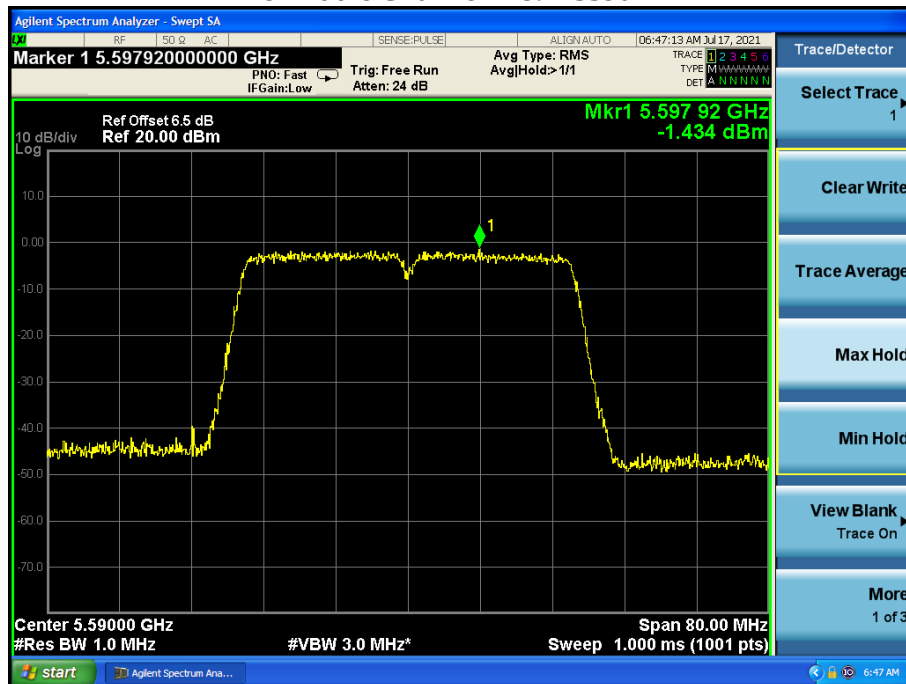
802.11ac (5.47GHz-5.725GHz)
The Highest Channel 140: 5700MHz



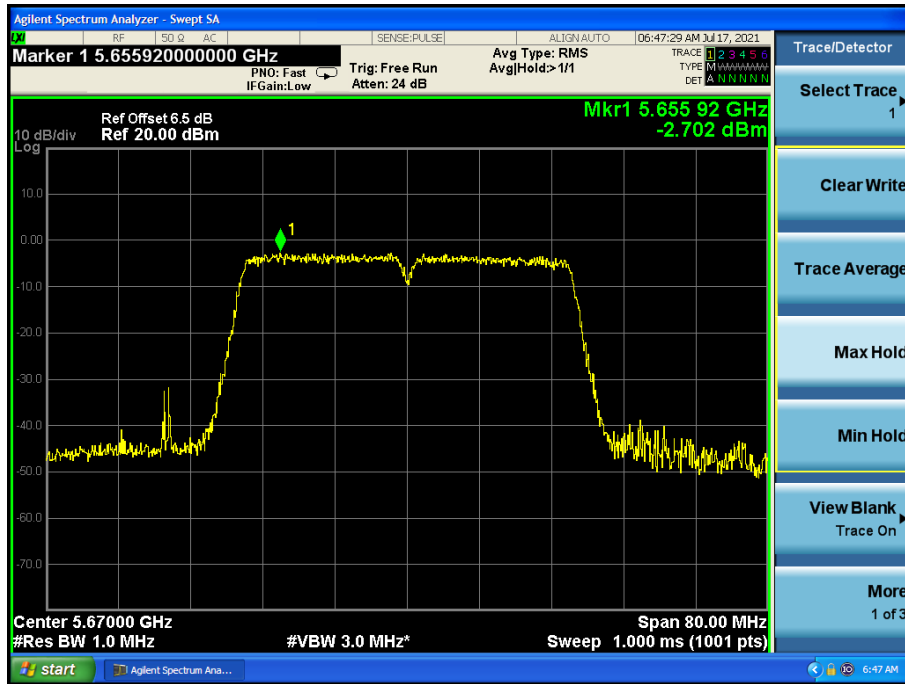
802.11n(40M) (5.47GHz-5.725GHz) The Lowest Channel 102: 5510MHz



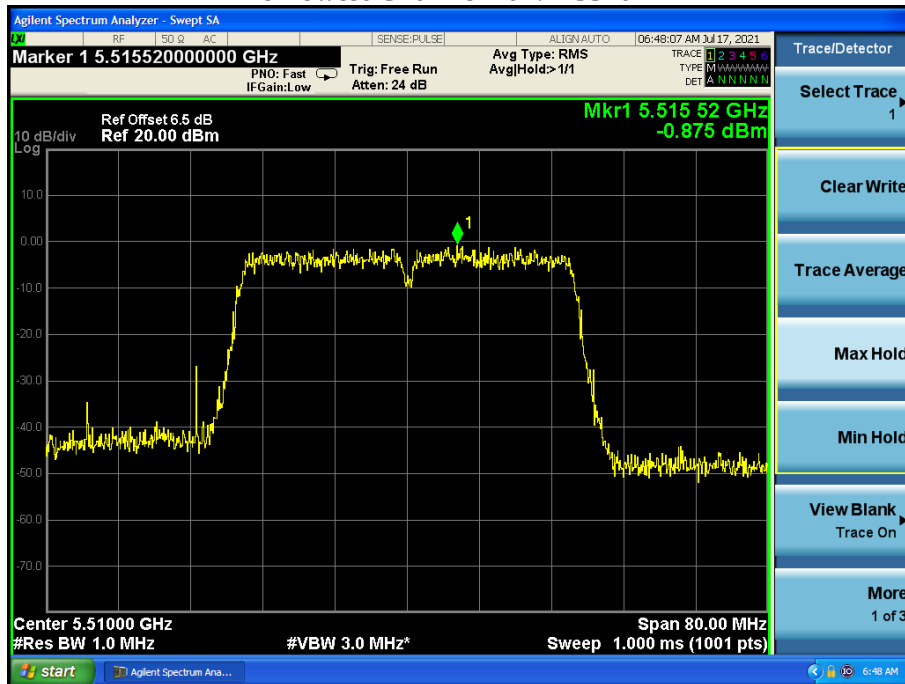
802.11n(40M) (5.47GHz-5.725GHz) The Middle Channel 118: 5590MHz



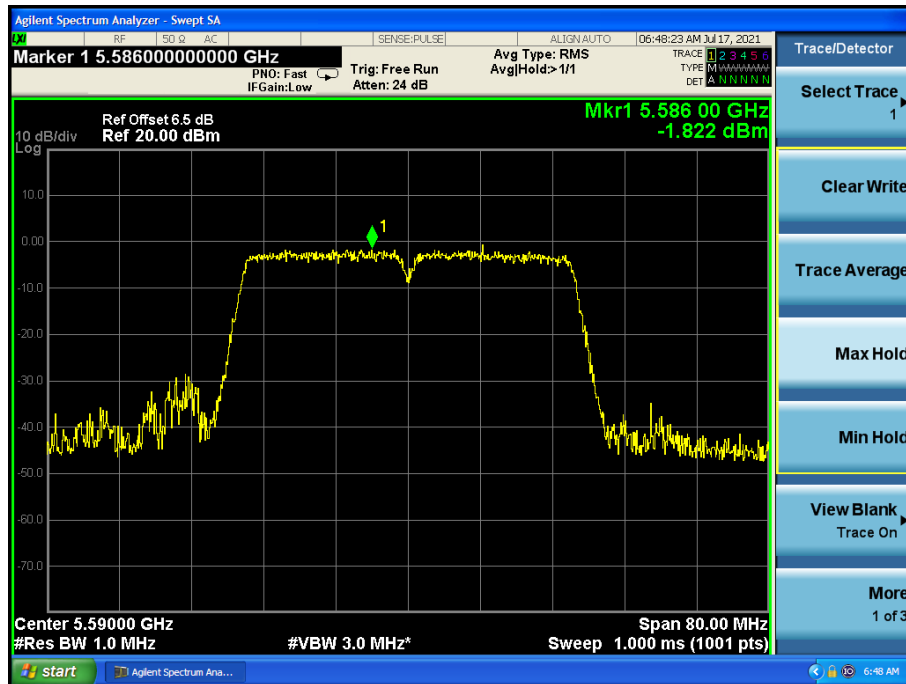
802.11n(40M) (5.47GHz-5.725GHz) The Highest Channel 134: 5670MHz



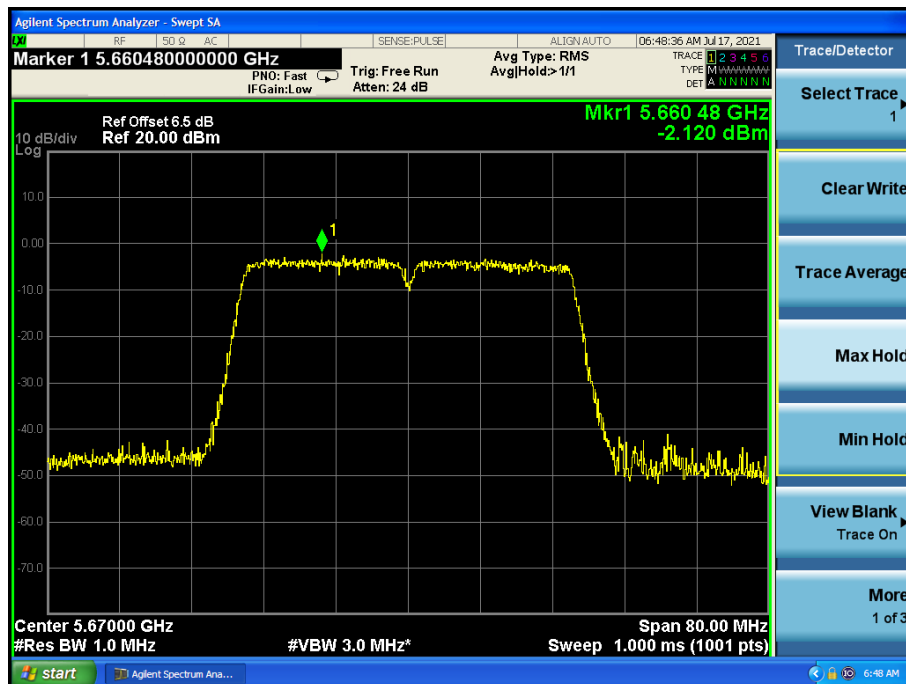
802.11n(40M) (5.47GHz-5.725GHz) The Lowest Channel 102: 5510MHz



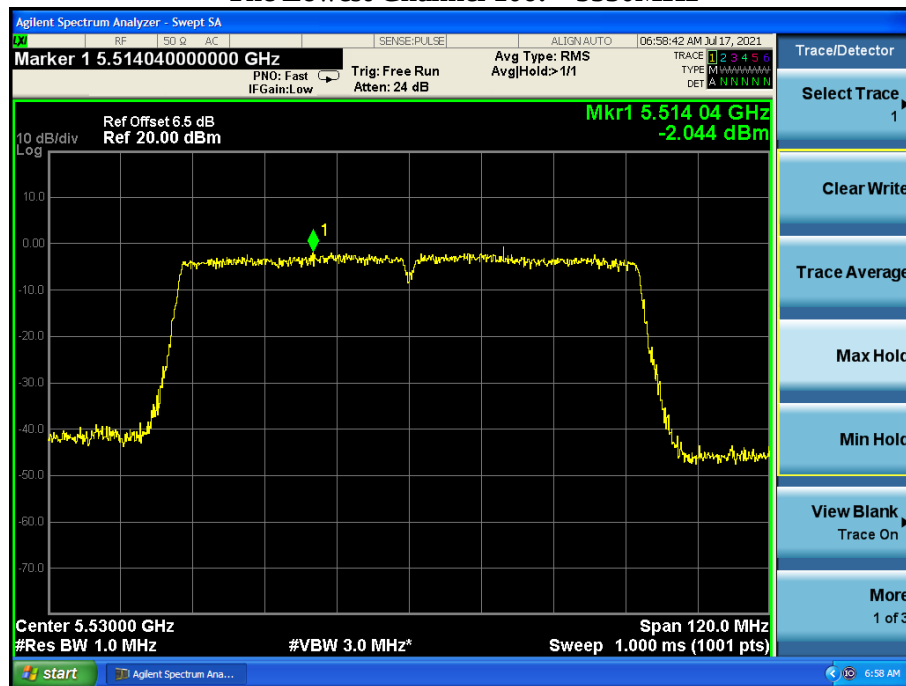
802.11ac(40M) (5.47GHz-5.725GHz) The Middle Channel 118: 5590MHz



802.11ac(40M) (5.47GHz-5.725GHz) The Highest Channel 134: 5670MHz



802.11ac(80M) (5.47GHz-5.725GHz) The Lowest Channel 106: 5530MHz



6 MAXIMUM PEAK OUTPUT POWER

6.1 APPLIED PROCEDURES / LIMIT

For UNII Device in the 5.15-5.25 GHz, 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm +10 log (26 dB BW).

If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Frequency Band	Limit
5.15 – 5.25 GHz	24 dBm
5.25-5.35 GHz	24 dBm
5.47 – 5.725 GHz	24 dBm

6.2 TEST PROCEDURE

- a. The EUT was directly connected to the power meter and antenna output port as shown in the block diagram below.

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 TEST RESULTS

EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	22°C	Relative Humidity :	60%
Pressure :	1010 hPa	Test Voltage :	DC25.55V from battery
Test Mode :	802.11a/n20/ac20/n40/ac40/ac80		
Test Date :	2021-07-17		

Test Mode	Channel	Channel Frequency (MHz)	Output Power 1 (dBm)	Output Power 2 (dBm)	Total Power (dBm)	Limit (dBm)	Result
802.11a (5.15GHz-5.25GHz) Data rate 6Mbps	CH36	5180	15.72	15.58	/	24	Pass
	CH40	5200	15.68	15.11	/	24	Pass
	CH48	5240	15.55	14.92	/	24	Pass
802.11n(20M) (5.15GHz-5.25GHz) Data rate 13Mbps	CH36	5180	15.62	15.39	18.52	23.49	Pass
	CH40	5200	15.50	15.07	18.30	23.49	Pass
	CH48	5240	15.37	14.62	18.02	23.49	Pass
802.11ac(20M) (5.15GHz-5.25GHz) Data rate 13Mbps	CH36	5180	15.31	14.77	18.06	23.49	Pass
	CH40	5200	15.22	14.36	17.82	23.49	Pass
	CH48	5240	15.06	14.55	17.82	23.49	Pass
802.11n(40M) (5.15GHz-5.25GHz) Data rate 27Mbps	CH38	5190	15.09	14.17	17.66	23.49	Pass
	CH46	5230	14.47	13.88	17.20	23.49	Pass
802.11ac(40M) (5.15GHz-5.25GHz) Data rate 27Mbps	CH38	5190	14.54	13.92	17.25	23.49	Pass
	CH46	5230	14.43	13.24	16.89	23.49	Pass
802.11ac(80M) (5.15GHz-5.25GHz) Data rate 58.6Mbps	CH42	5210	14.21	13.57	16.91	23.49	Pass

EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	22℃	Relative Humidity:	60%
Pressure :	1010 hPa	Test Voltage :	DC25.55V from battery
Test Mode :	802.11a/n20/ac20/n40/ac40/ac80		
Test Date :	2021-07-17		

Test Mode	Channel	Channel Frequency (MHz)	Output Power 1 (dBm)	Output Power 2 (dBm)	Total Power (dBm)	Limit (dBm)	Result
802.11a (5.25GHz-5.35GHz) Data rate 6Mbps	CH52	5260	15.11	14.95	/	24	Pass
	CH60	5300	15.31	14.84	/	24	Pass
	CH64	5320	15.24	14.63	/	24	Pass
802.11n(20M) (5.25GHz-5.35GHz) Data rate 13Mbps	CH52	5260	14.95	13.92	17.48	23.49	Pass
	CH60	5300	15.01	13.87	17.49	23.49	Pass
	CH64	5320	14.82	13.75	17.33	23.49	Pass
802.11ac(20M) (5.25GHz-5.35GHz) Data rate 13Mbps	CH52	5260	14.79	13.60	17.25	23.49	Pass
	CH60	5300	14.83	13.54	17.24	23.49	Pass
	CH64	5320	14.56	13.72	17.17	23.49	Pass
802.11n(40M) (5.25GHz-5.35GHz) Data rate 27Mbps	CH54	5270	14.34	13.69	17.04	23.49	Pass
	CH62	5310	14.01	13.15	16.61	23.49	Pass
802.11ac(40M) (5.25GHz-5.35GHz) Data rate 27Mbps	CH54	5270	14.23	13.11	16.72	23.49	Pass
	CH62	5310	14.11	13.24	16.71	23.49	Pass
802.11ac(80M) (5.25GHz-5.35GHz) Data rate 58.6Mbps	CH58	5290	13.88	13.01	16.48	23.49	Pass

EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	22℃	Relative Humidity:	60%
Pressure :	1010 hPa	Test Voltage :	DC25.55V from battery
Test Mode :	802.11a/n20/ac20/n40/ac40/ac80		
Test Date :	2021-07-17		

Test Mode	Channel	Channel Frequency (MHz)	Output Power 1 (dBm)	Output Power 2 (dBm)	Total Power (dBm)	Limit (dBm)	Result
802.11a (5.47GHz-5.725GHz) Data rate 6Mbps	CH100	5500	14.45	14.11	/	24	Pass
	CH116	5580	14.76	14.37	/	24	Pass
	CH140	5700	14.36	14.01	/	24	Pass
802.11n(20M) (5.47GHz-5.725GHz) Data rate 13Mbps	CH100	5500	13.84	13.03	16.46	23.49	Pass
	CH116	5580	13.27	12.88	16.09	23.49	Pass
	CH140	5700	13.39	12.94	16.18	23.49	Pass
802.11ac(20M) (5.47GHz-5.725GHz) Data rate 13Mbps	CH100	5500	12.92	12.05	15.52	23.49	Pass
	CH116	5580	12.74	12.14	15.46	23.49	Pass
	CH140	5700	12.65	12.07	15.38	23.49	Pass
802.11n(40M) (5.47GHz-5.725GHz) Data rate 27Mbps	CH102	5510	12.74	12.25	15.51	23.49	Pass
	CH118	5590	12.51	12.16	15.35	23.49	Pass
	CH134	5670	12.26	11.77	15.03	23.49	Pass
802.11ac(40M) (5.47GHz-5.725GHz) Data rate 27Mbps	CH102	5510	12.44	11.82	15.15	23.49	Pass
	CH118	5590	12.39	11.94	15.18	23.49	Pass
	CH134	5670	12.12	11.66	14.91	23.49	Pass
802.11ac(80M) (5.47GHz-5.725GHz) Data rate 58.6Mbps	CH106	5530	11.94	11.51	14.74	23.49	Pass

7. DYNAMIC FREQUENCY SELECTION (DFS)

7.1 APPLICABILITY OF DFS REQUIREMENTS

Table 1: Applicability of DFS Requirements Prior to Use of a Channel

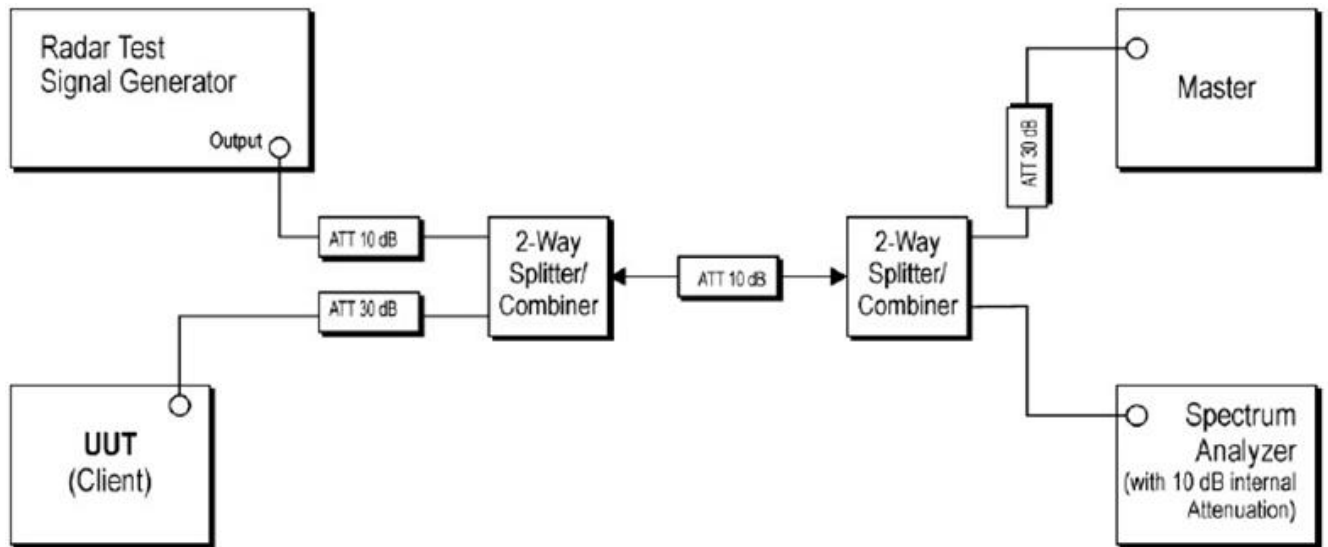
Requirement	Operational Mode		
	☐ Master	☒ Client Without Radar Detection	☐ Client With Radar Detection
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
U-NII Detection Bandwidth	Yes	Not required	Yes

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode	
	Master Device or Client with Radar Detection	☒ Client Without Radar Detection
DFS Detection Threshold	Yes	Not required
Channel Closing Transmission Time	Yes	Yes
Channel Move Time	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required

Additional requirements for devices with multiple bandwidth modes	Master Device or Client with Radar Detection	☒ Client Without Radar Detection
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required
Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.		

7.2 TEST SET-UP



7.3 LIMITS

Table 3: DFS Detection Thresholds for Master Devices and Client Devices with Radar Detection

Maximum Transmit Power	Value(See Notes 1, 2, and 3)
EIRP $\geq$ 200 milliwatt	-64 dBm
EIRP < 200 milliwatt and power spectral density < 10dBm/MHz	-62 dBm
EIRP < 200 milliwatt that do not meet the power spectral density requirement	-64 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna. Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response. Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.	

RADAR TEST WAVEFORMS

Table 5 – Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1

7.4 TEST PROCEDURE

1. When a Client Device without Radar Detection is the UUT, the Master Device is the Radar Detection Device.
2. A spectrum analyzer is used to establish the test signal level for each radar type.
3. During this process, there are no transmissions by either the Master Device or Client Device.
4. The spectrum analyzer is switched to the zero span (time domain) mode at the frequency of the Radar Waveform generator. The peak detector function of the spectrum analyzer is utilized. The spectrum analyzer resolution bandwidth (RBW) and video bandwidth (VBW) are set to at least 3MHz.
5. The measured channels are 5530MHz in 80MHz Bandwidth and 5290MHz in 80MHz Bandwidth.

The Radar signal was the same as transmitted channels, and injected into the antenna port of AP(master), measured the DFS parameters. The master transmitted the test data to client, the transmitted duty cycle is 30.8%.

7.5 TEST RESULT

DFS DETECTION THRESHOLD

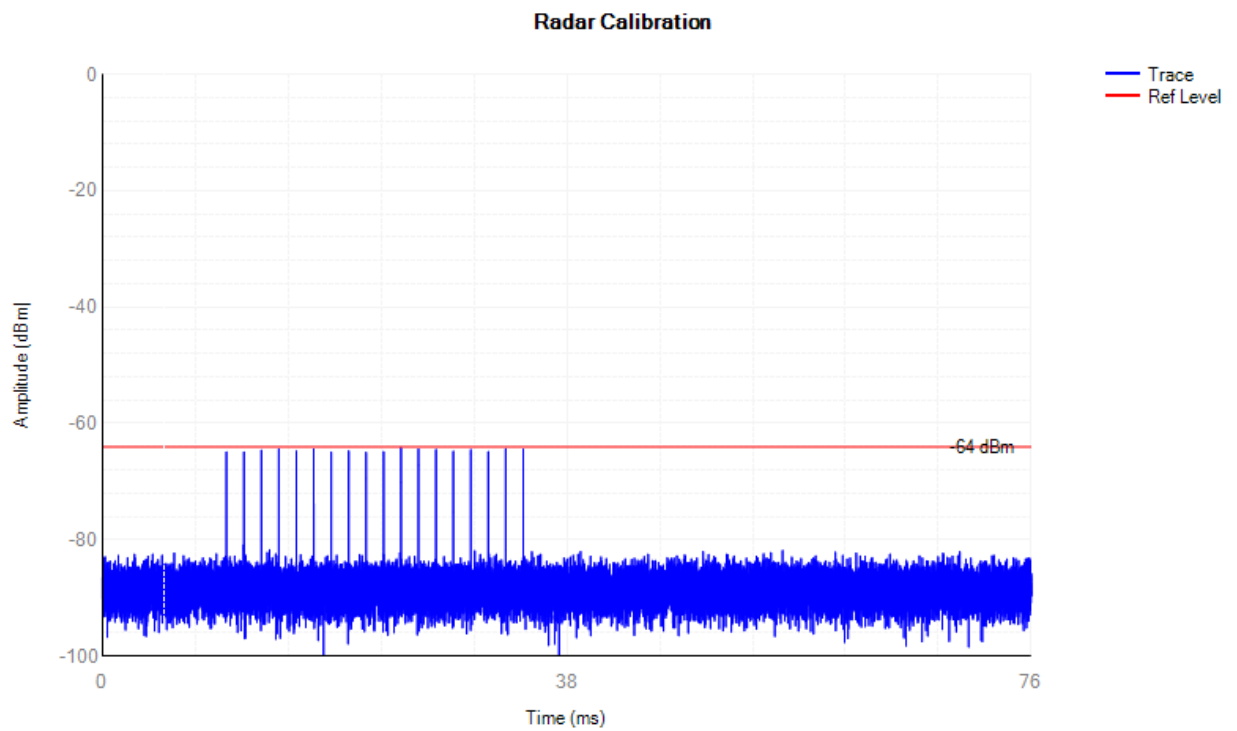
Calibration:

For a detection threshold level of -64dBm and the antenna gain is 2.28dBi, required detection threshold is -61.72 dBm ($= -64 + 2.28$).

Note: Maximum Transmit Power is greater than 200 milliwatt in this report, so detection threshold level is -64dBm.

Note : This EUT does not support TPC.

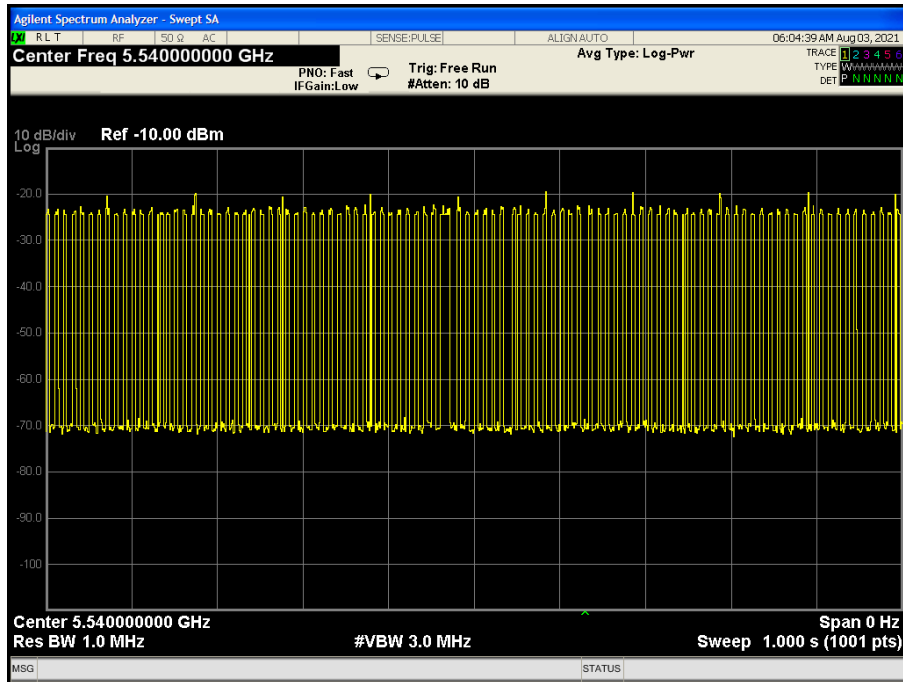
Radar Type 0



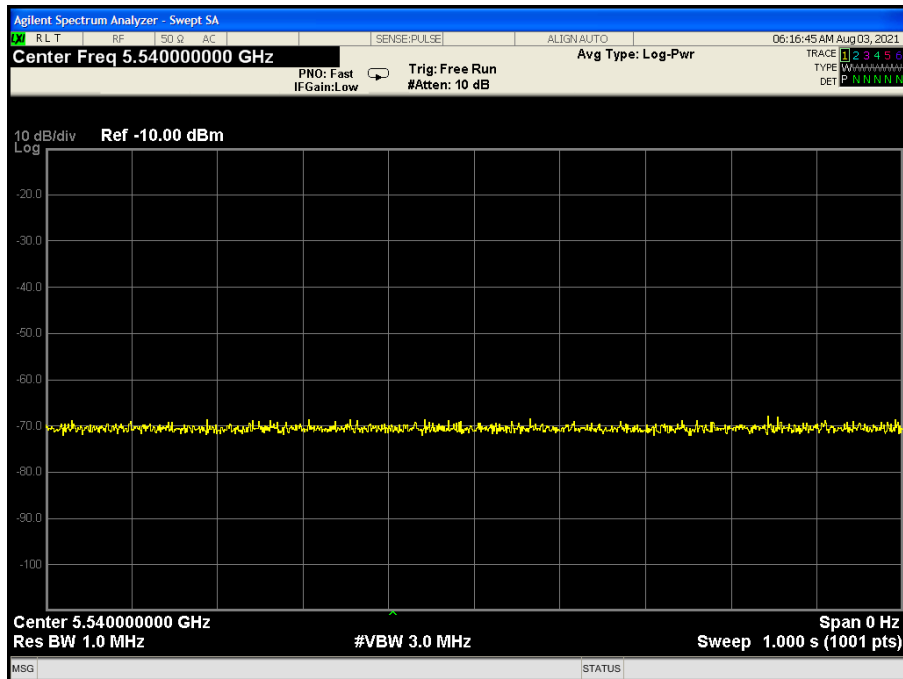
Note: The report only displays Radar Type 0.

7.6 TEST RESULT

Data Traffic Plot



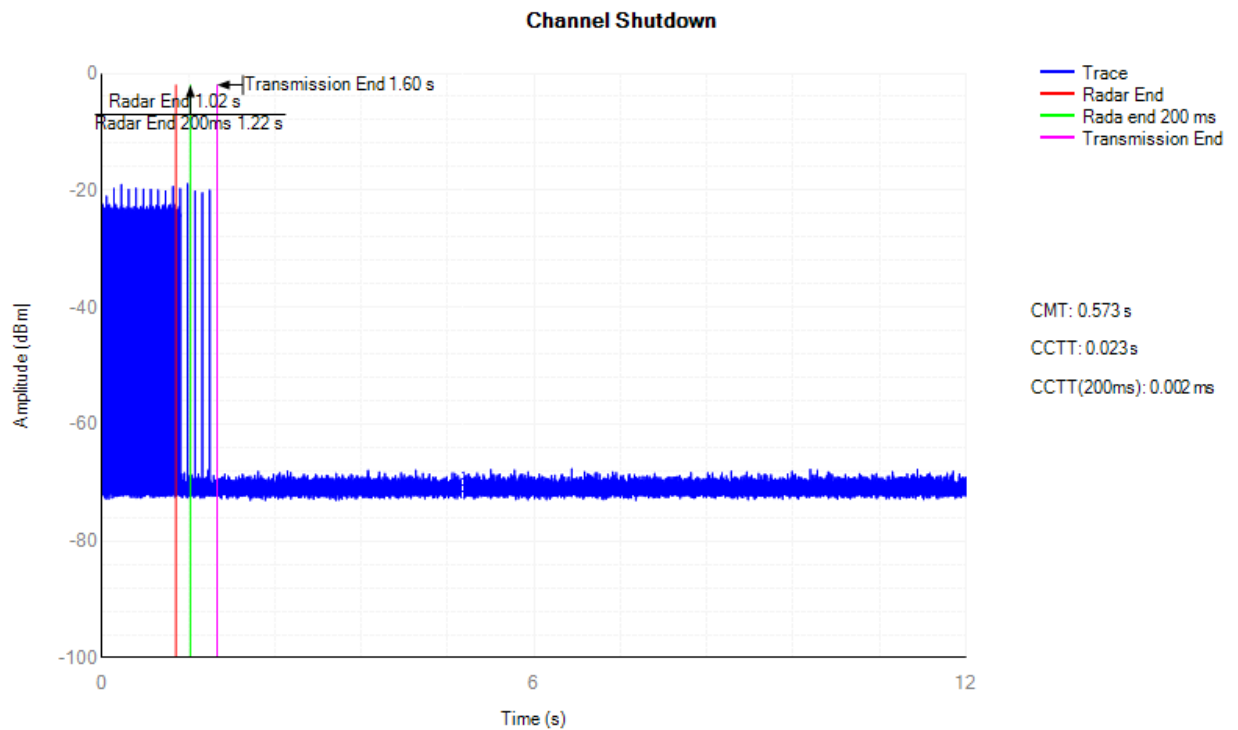
Noise Floor (No transmission)



Channel Move Time and Channel Closing Transmission Time

Test Frequency	Requirement	Measurement Level	Limit
5540MHz	Channel Closing Transmission Time	0.023s	$\leq 0.26s$
	Channel Move Time	0.573s	$\leq 10s$

Radar Type 0(ac80MHz/5540MHz) Channel Shutdown



8 BAND EDGE

8.1 APPLIED PROCEDURES / LIMIT

15.407 (b) In any 1 MHz bandwidth outside the frequency band in which the spread spectrum, the radio frequency power that is produced by the intentional radiator shall be below -27 dBm.

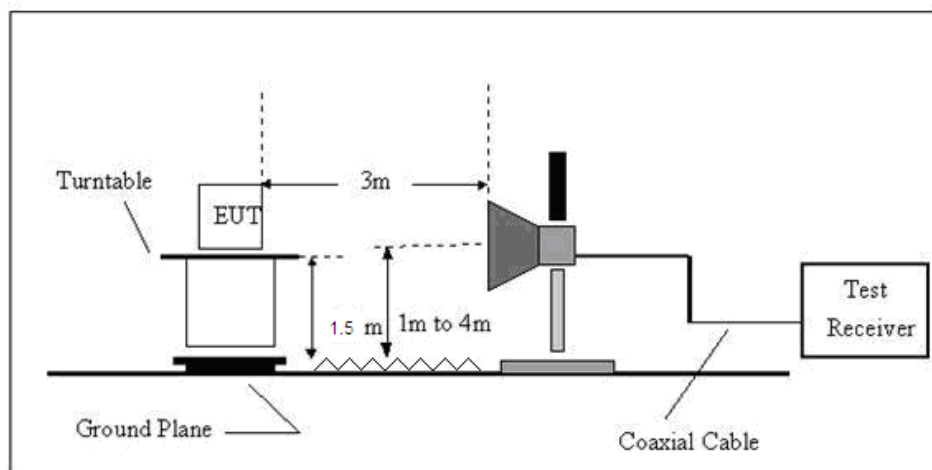
8.2 TEST PROCEDURE

- The Transmitter output of EUT was connected to the spectrum analyzer.
Equipment mode: Spectrum analyzer
Detector function: Peak mode
SPAN: 100MHz
RBW: 1 MHz
VBW: 1 MHz
Sweep time= Auto.
- Using Peak Search to read the peak power of Carrier frequencies after Maximum Hold function is completed.
- Find the next peak frequency outside the operation frequency band.

8.3 DEVIATION FROM STANDARD

No deviation.

8.4 TEST SETUP



The field strength is calculated by adding the Antenna Factor, Cable Loss & Pre-amplifier. The basic equation with a sample calculation is as follows:

Final Test Level = Receiver Reading + Antenna Factor + Cable Loss – Pre-amplifier Factor

Remark:

For measurements above 1000 MHz @ 3m distance, the limit of field strength is computed as follows:

$$E[\text{dBuV/m}] = \text{EIRP}[\text{dBm}] + 95.2;$$

For example, if EIRP = -27dBm

$$E[\text{dBuV/m}] = -27 + 95.2 = 68.2\text{dBuV/m}.$$

8.5 TEST RESULTS

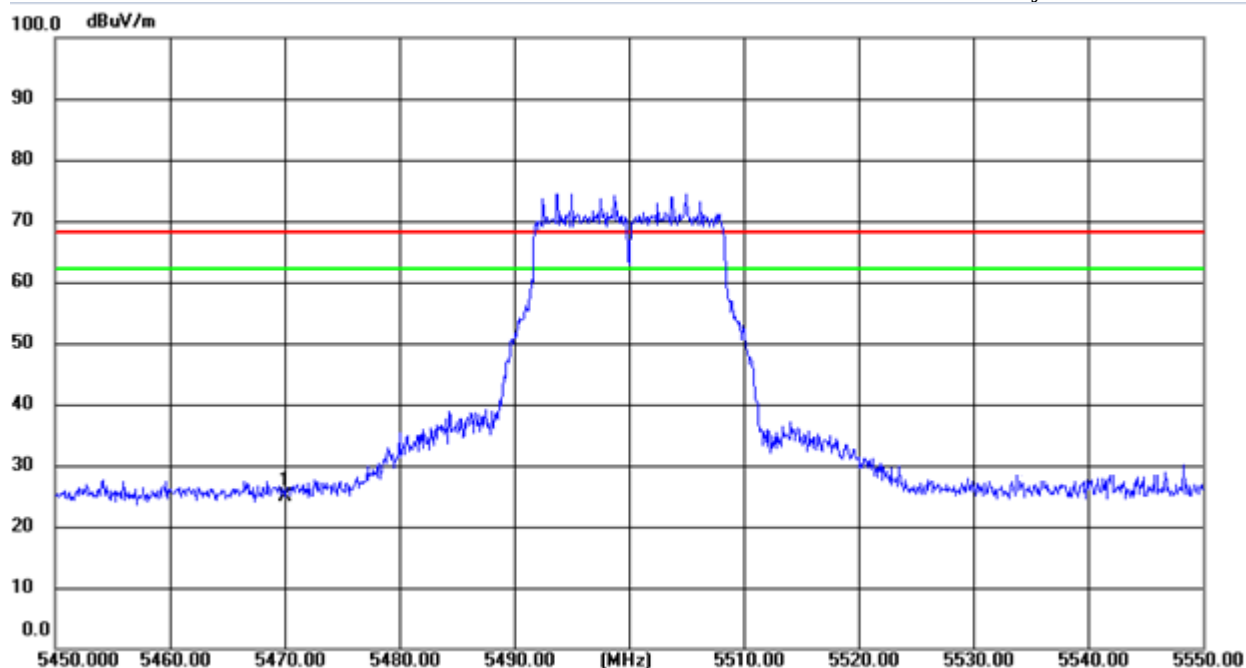
EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	25 °C	Relative Humidity :	56%
Pressure :	1010 hPa	Test Voltage :	DC25.55V from battery
Test Mode :	802.11a		
Test Date :	2021-07-18		
Note :	In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.		

Freq. (MHz)	Ant.Pol. H/V	Reading (dBuv)	Ant/CF (dB)	Act (dBuv/m)	Limit (dBuv/m)	Note
5470.000	V	20.91	3.96	24.87	68.20	CH 100
5470.000	H	22.74	3.96	26.70	68.20	CH 100
5725.000	V	22.90	3.95	26.85	68.20	CH 140
5725.000	H	23.48	3.95	27.43	68.20	CH 140

802.11a (5.47GHz-5.725GHz) CH 100(Lower)

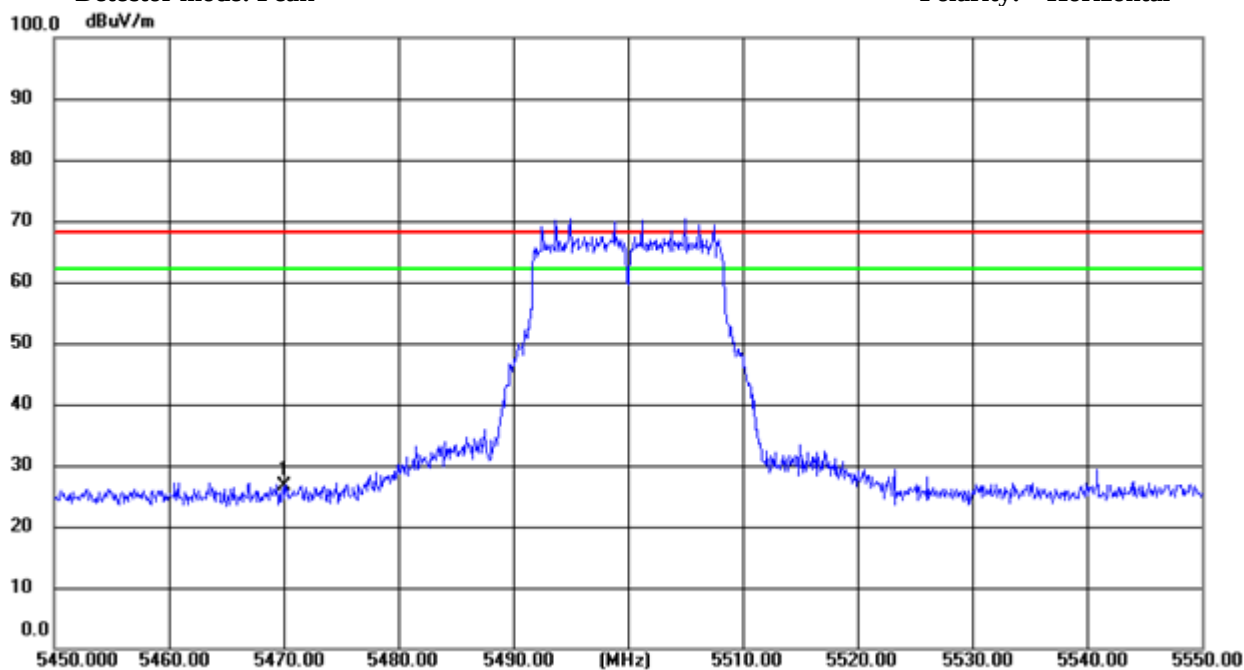
Detector mode: Peak

Polarity: Vertical



Detector mode: Peak

Polarity: Horizontal

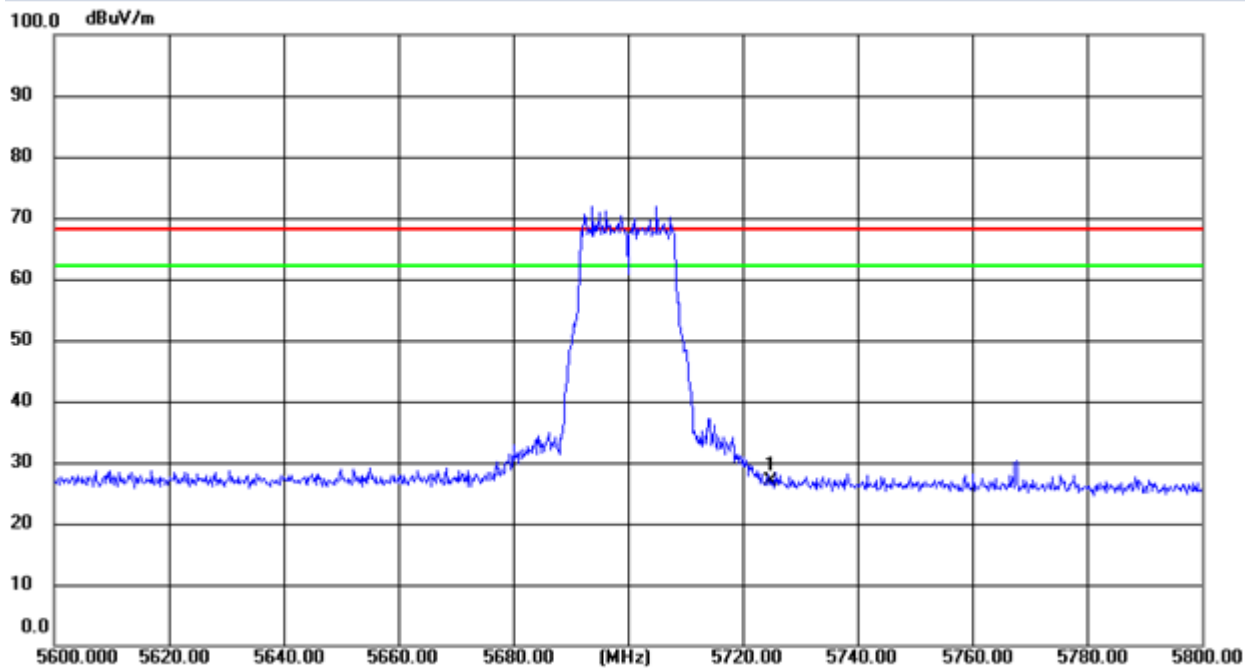


802.11a (5.47GHz-5.725GHz)

CH 140 (Lower)

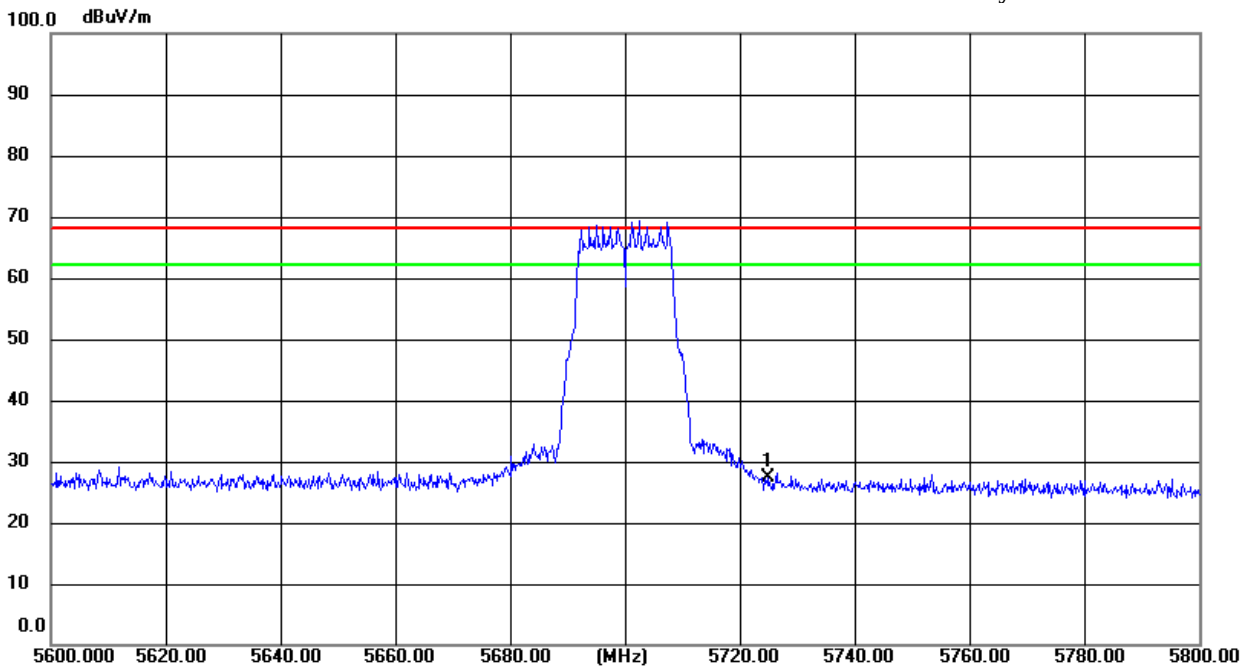
Detector mode: Peak

Polarity: Vertical



Detector mode: Peak

Polarity: Horizontal



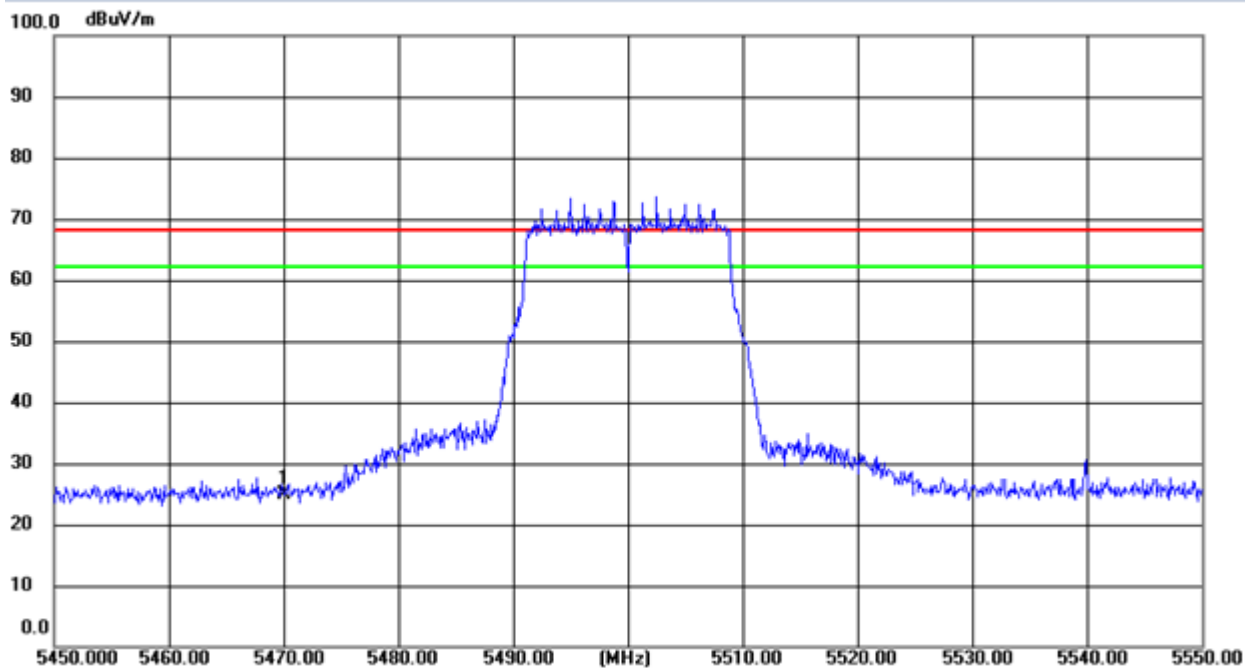
EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	25 °C	Relative Humidity :	56%
Pressure :	1010 hPa	Test Voltage :	DC25.55V from battery
Test Mode :	802.11n20(5G)		
Test Date :	2021-07-18		
Note :	In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.		

Freq. (MHz)	Ant.Pol. H/V	Reading (dBuv)	Ant/CF (dB)	Act (dBuv/m)	Limit (dBuv/m)	Note
5470.000	V	21.04	3.96	25.00	68.20	CH 100
5470.000	H	20.64	3.96	24.60	68.20	CH 100
5725.000	V	23.44	3.95	27.39	68.20	CH 140
5725.000	H	23.58	3.95	27.53	68.20	CH 140

802.11n(20M) (5.47GHz-5.725GHz) CH 100 (Lower)

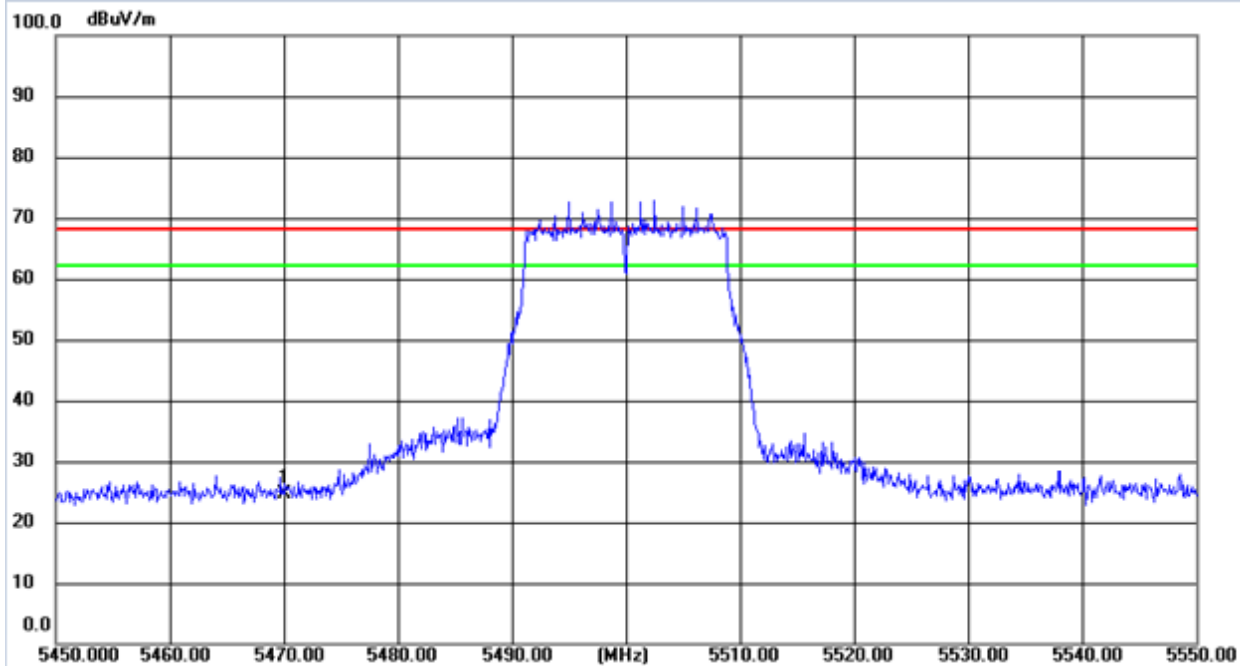
Detector mode: Peak

Polarity: Vertical

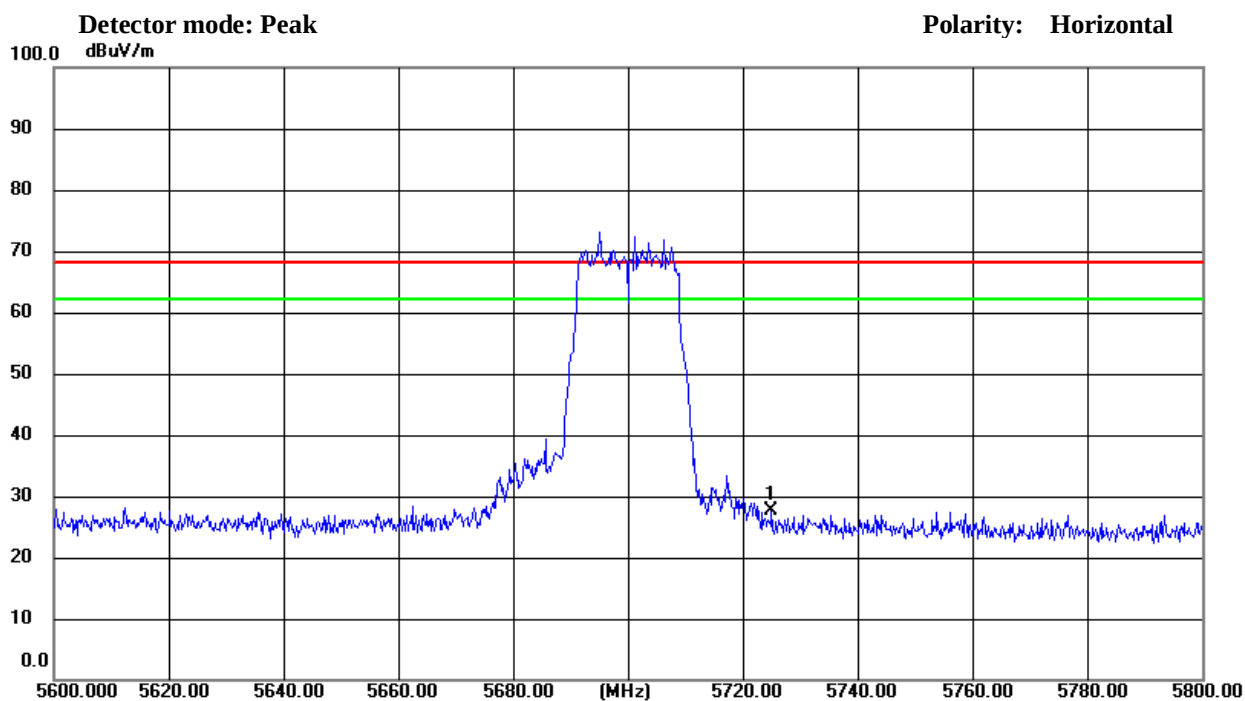
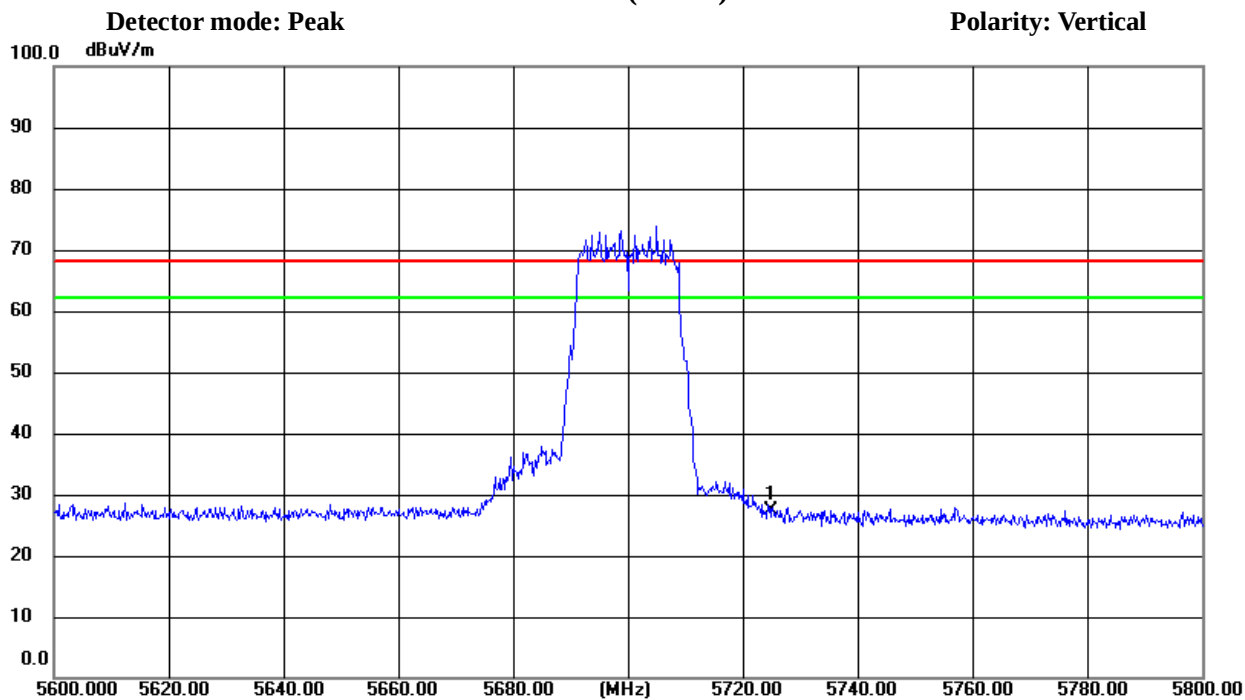


Detector mode: Peak

Polarity: Horizontal



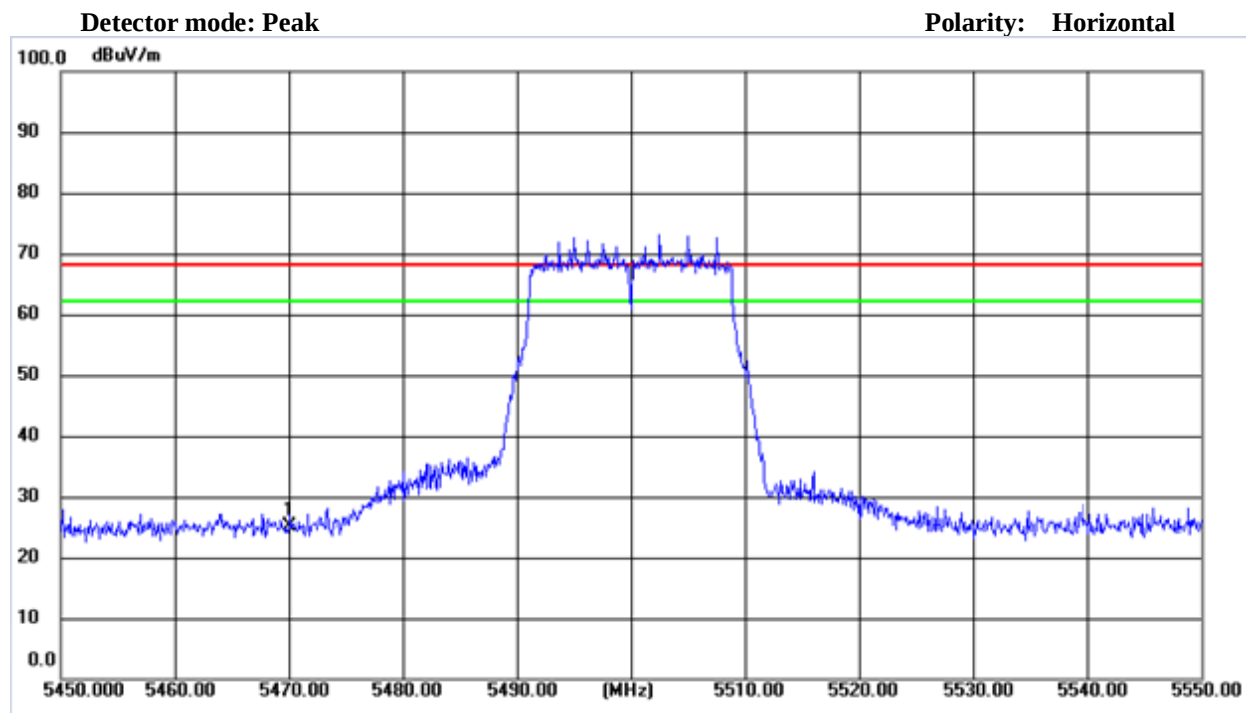
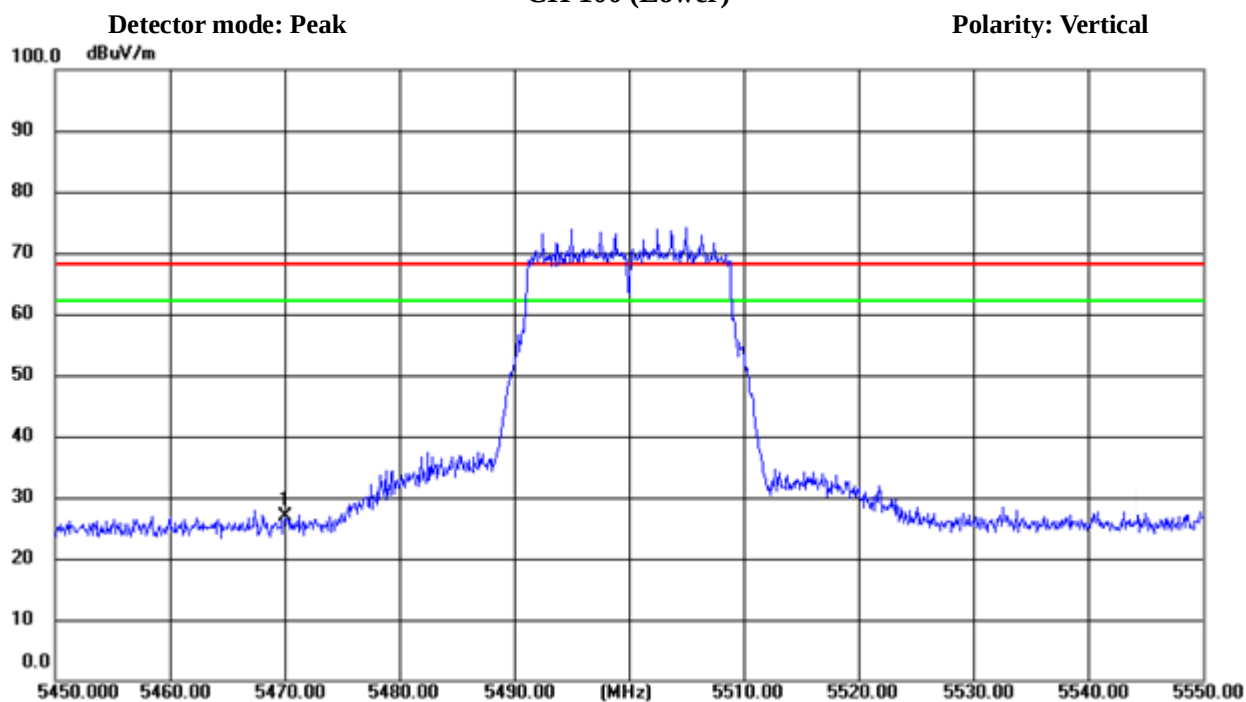
802.11n(20M) (5.47GHz-5.725GHz) CH 140 (Lower)



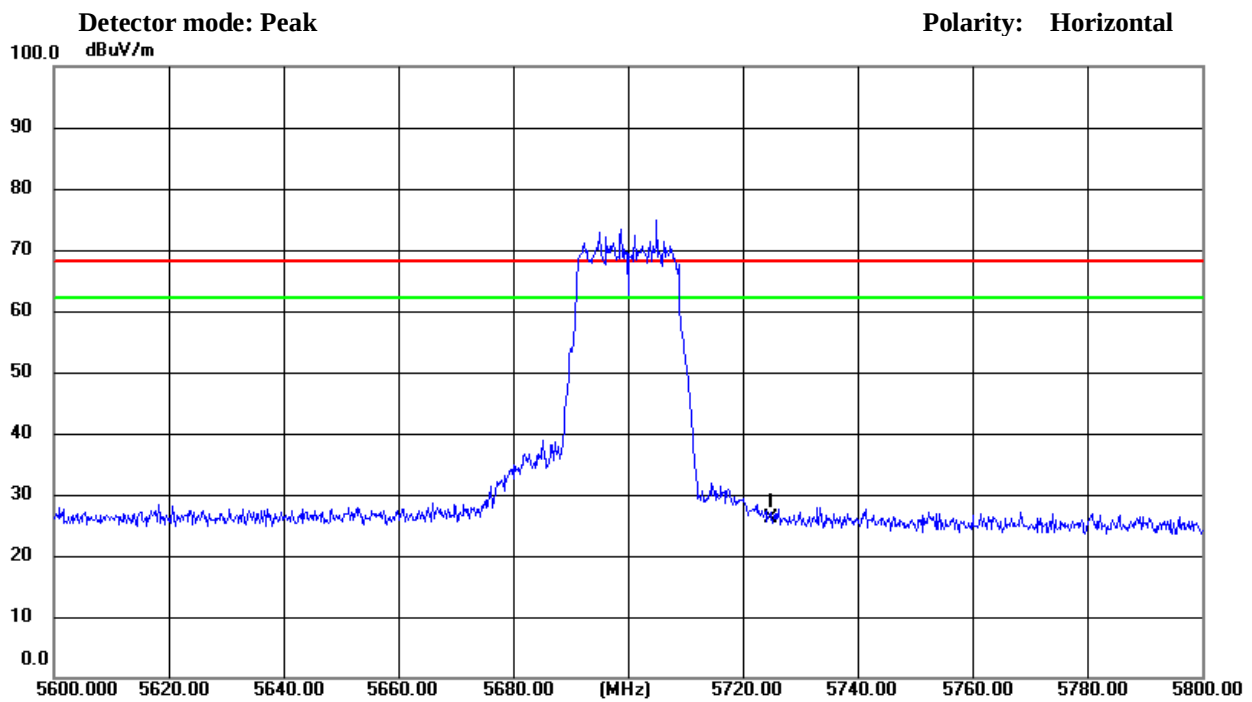
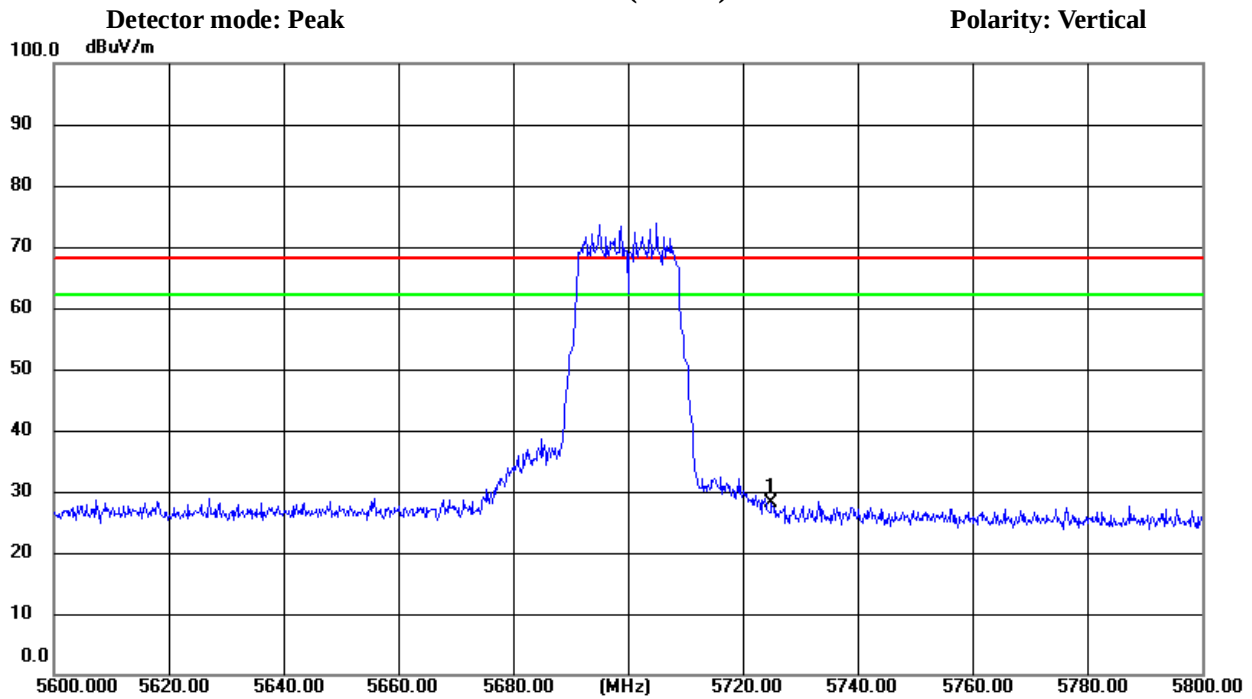
EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	25 °C	Relative Humidity :	56%
Pressure :	1010 hPa	Test Voltage :	DC25.55V from battery
Test Mode :	802.11ac20(5G)		
Test Date :	2021-07-18		
Note :	In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.		

Freq. (MHz)	Ant.Pol. H/V	Reading (dBuv)	Ant/CF (dB)	Act (dBuv/m)	Limit (dBuv/m)	Note
5470.000	V	22.94	3.96	26.90	68.20	CH 100
5470.000	H	21.08	3.96	25.04	68.20	CH 100
5725.000	V	24.10	3.95	28.05	68.20	CH 140
5725.000	H	22.21	3.95	26.16	68.20	CH 140

802.11ac (5.47GHz-5.725GHz) CH 100 (Lower)



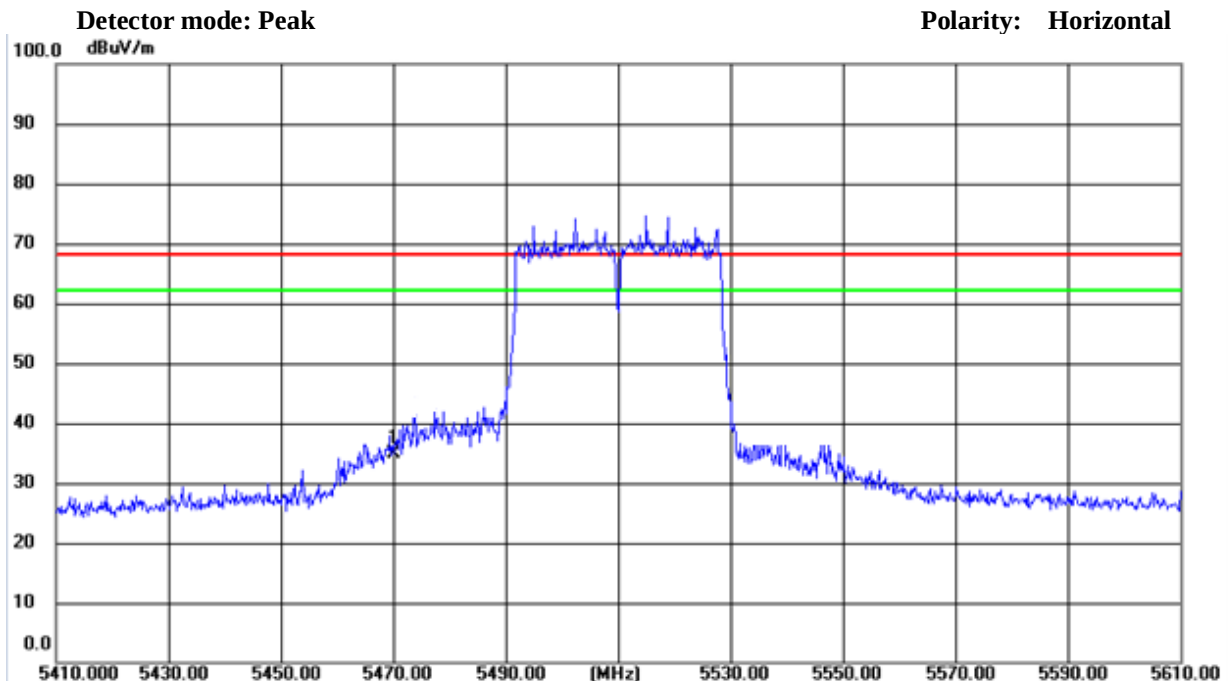
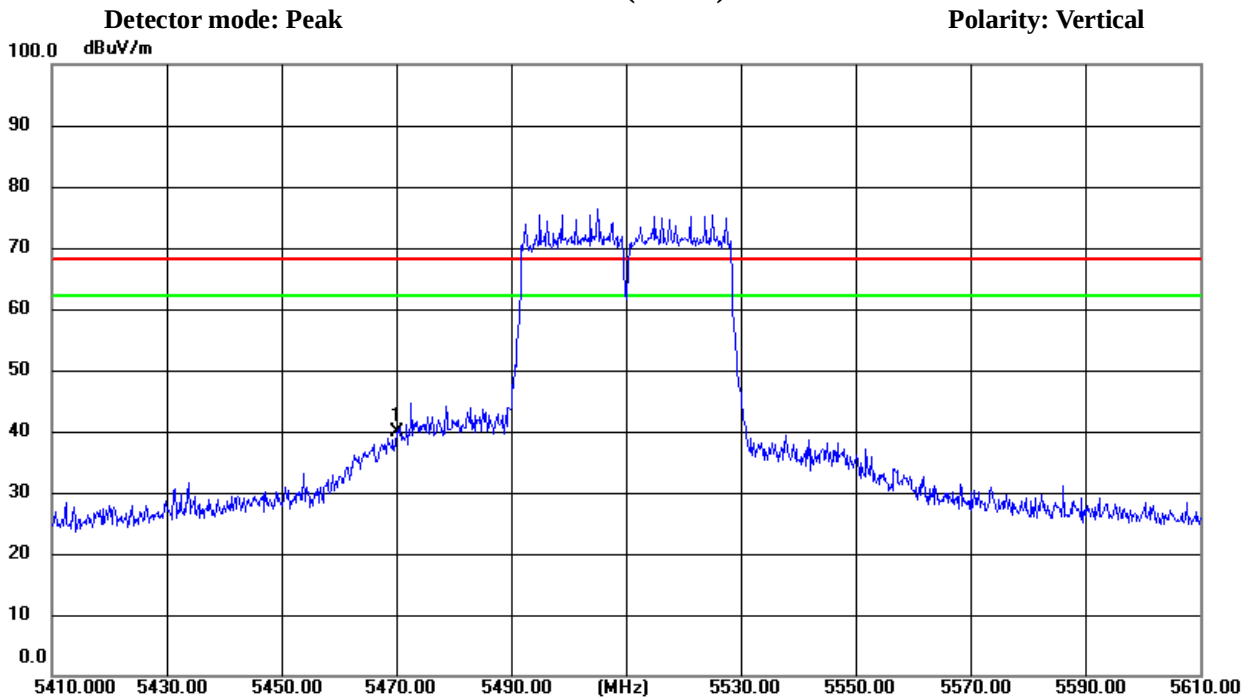
802.11ac (5.47GHz-5.725GHz) CH 140 (Lower)



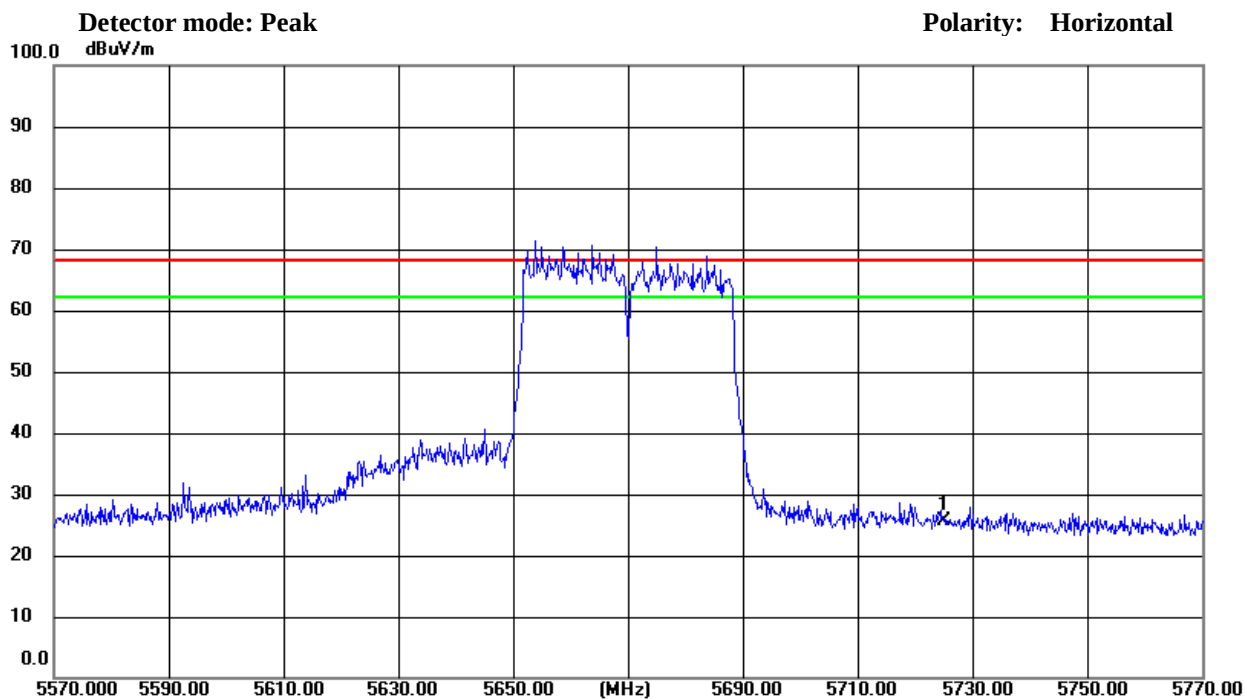
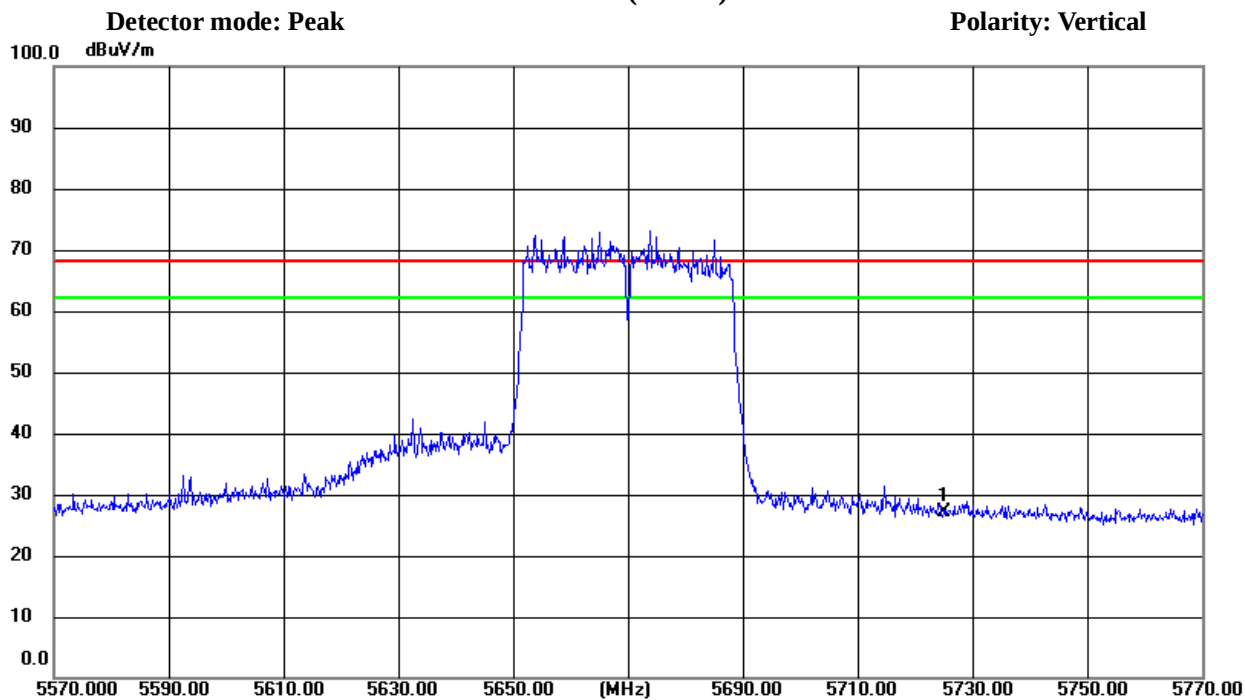
EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	25 °C	Relative Humidity :	56%
Pressure :	1010 hPa	Test Voltage :	DC25.55V from battery
Test Mode :	802.11n40(5G)		
Test Date :	2021-07-18		
Note :	In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.		

Freq. (MHz)	Ant.Pol. H/V	Reading (dBuv)	Ant/CF (dB)	Act (dBuv/m)	Limit (dBuv/m)	Note
5470.000	V	35.80	3.96	39.76	68.20	CH 102
5470.000	H	31.04	3.96	35.00	68.20	CH 102
5725.000	V	23.12	3.95	27.07	68.20	CH 134
5725.000	H	21.63	3.95	25.58	68.20	CH 134

802.11n(40M) (5.47GHz-5.725GHz)
CH 102 (Lower)



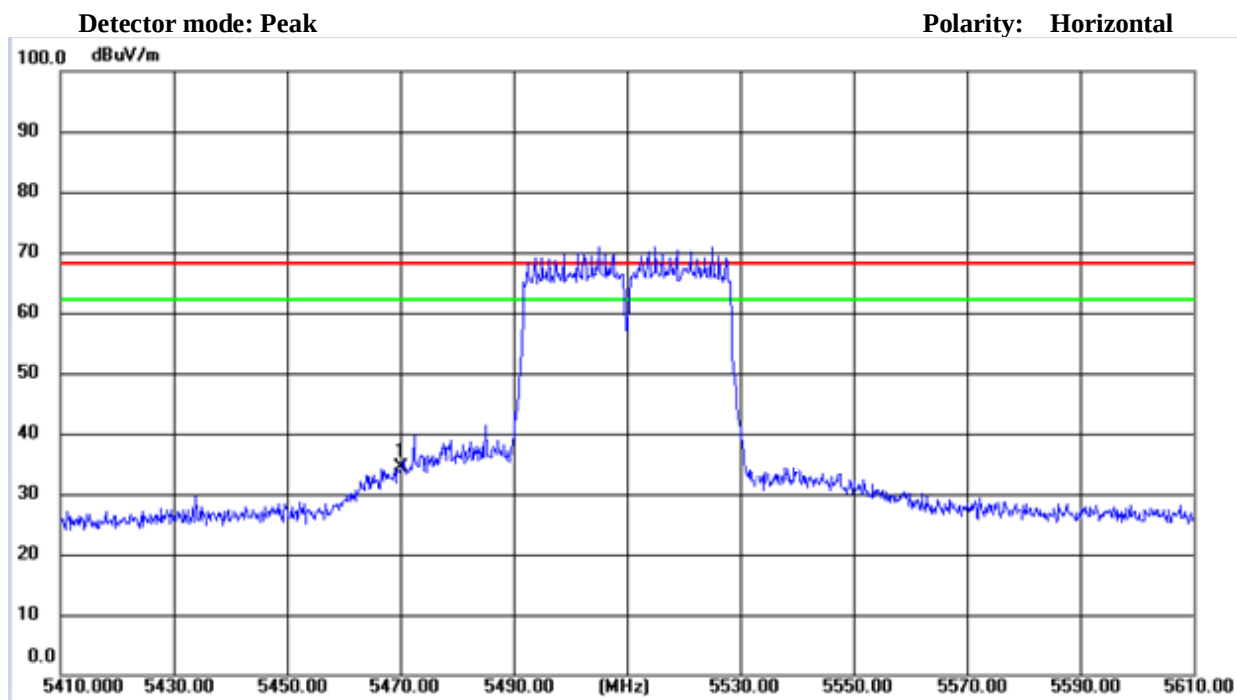
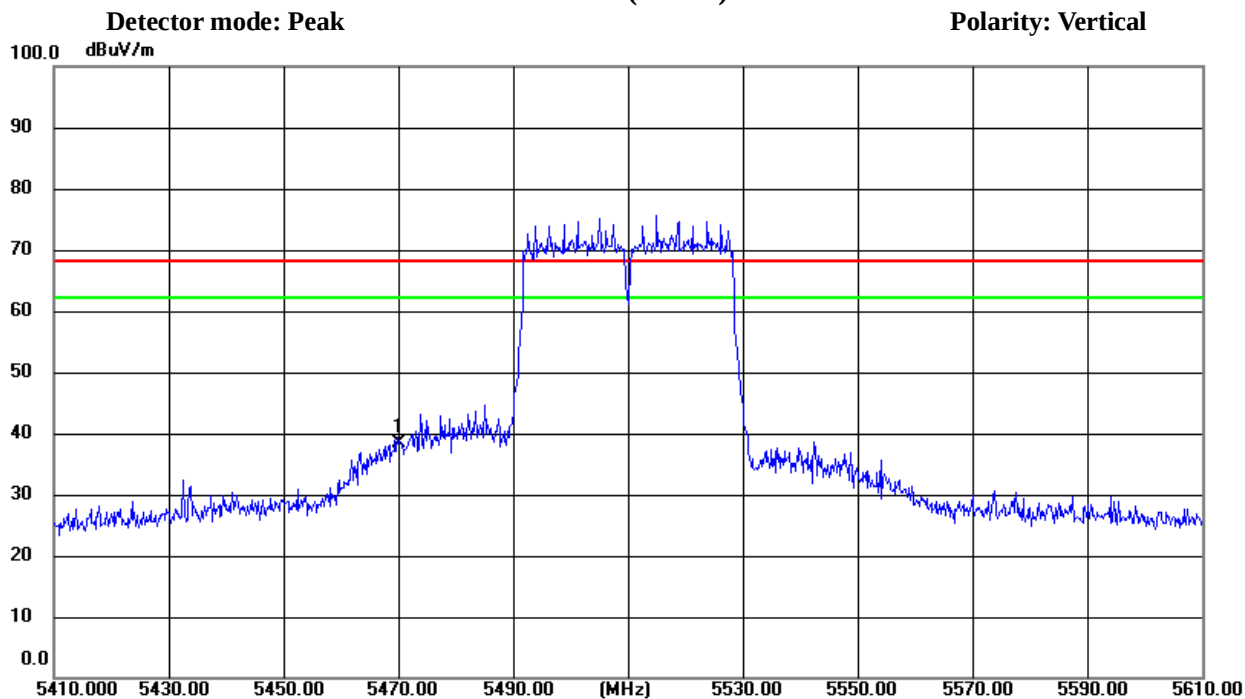
802.11n(40M) (5.47GHz-5.725GHz)
CH 134 (Lower)



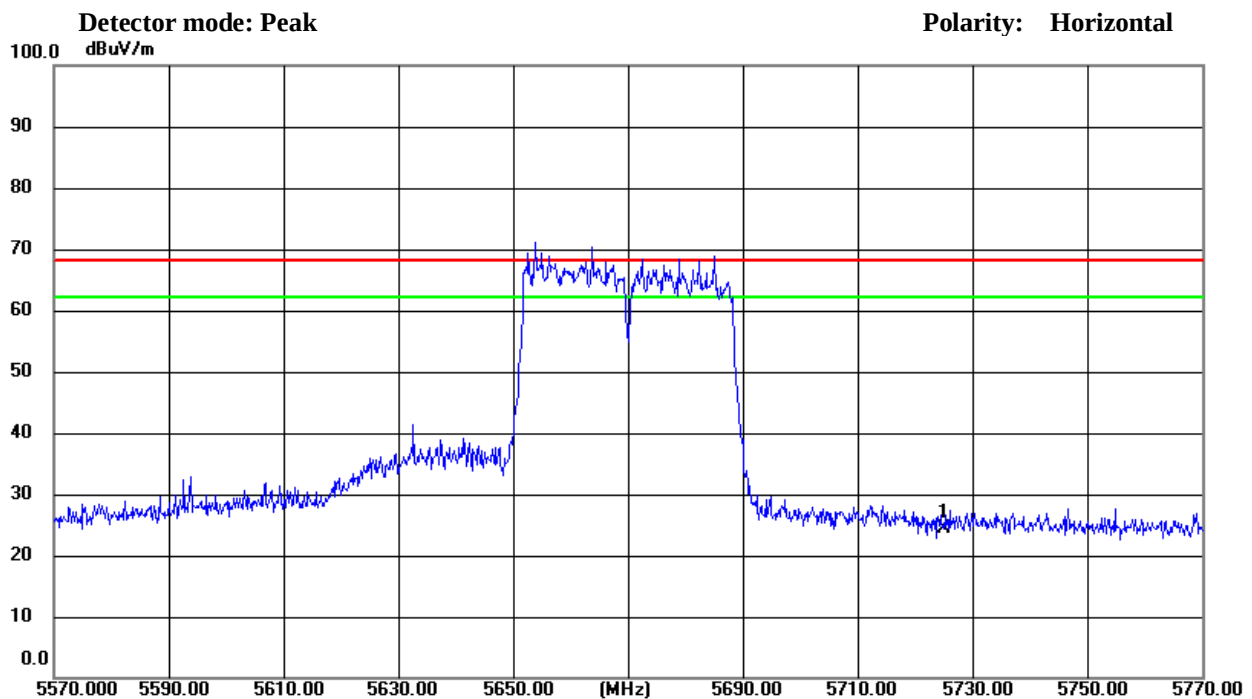
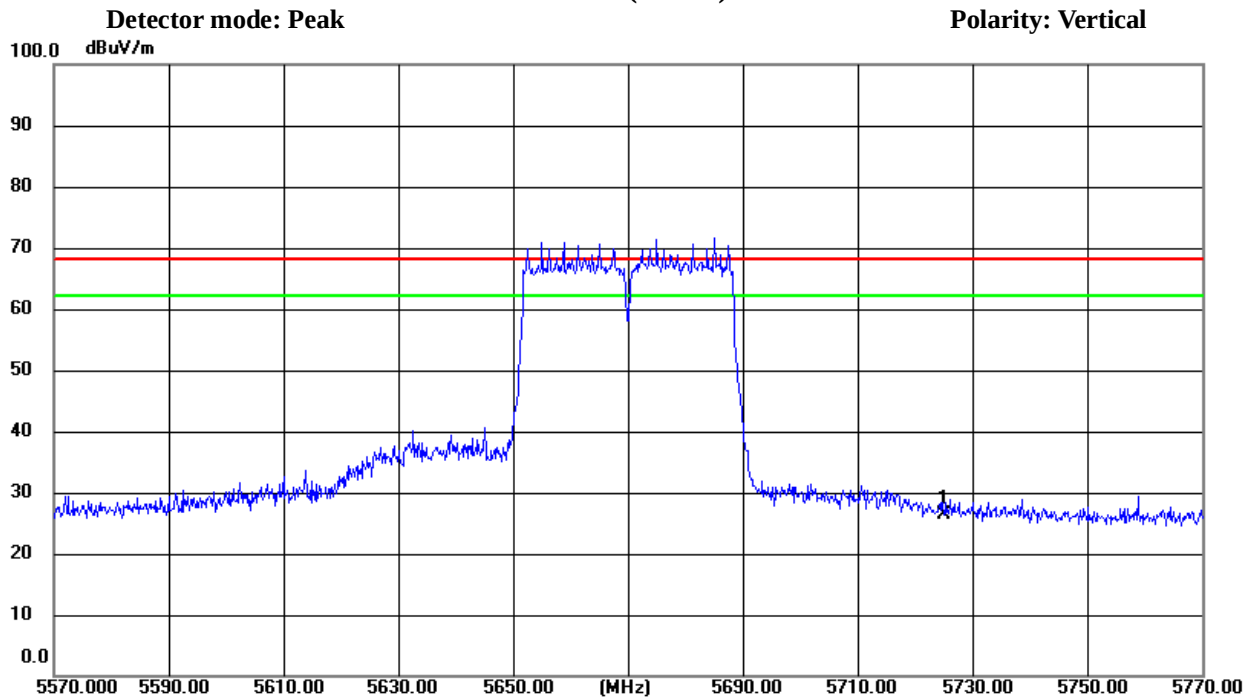
EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	25 °C	Relative Humidity :	56%
Pressure :	1010 hPa	Test Voltage :	DC25.55V from battery
Test Mode :	802.11ac40(5G)		
Test Date :	2021-07-18		
Note :	In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.		

Freq. (MHz)	Ant.Pol. H/V	Reading (dBuv)	Ant/CF (dB)	Act (dBuv/m)	Limit (dBuv/m)	Note
5470.000	V	34.31	3.96	38.27	68.20	CH 102
5470.000	H	30.46	3.96	34.42	68.20	CH 102
5725.000	V	22.51	3.95	26.46	68.20	CH 134
5725.000	H	20.45	3.95	24.40	68.20	CH 134

802.11ac(40M) (5.47GHz-5.725GHz)
CH 102 (Lower)



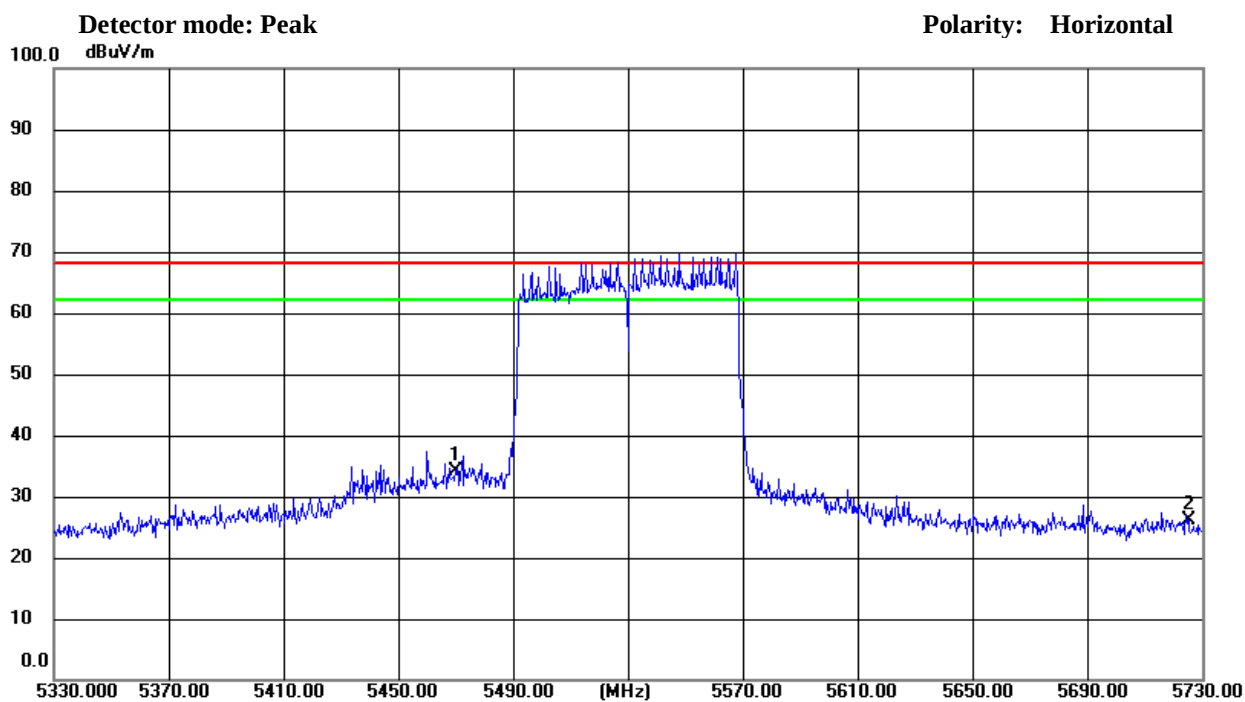
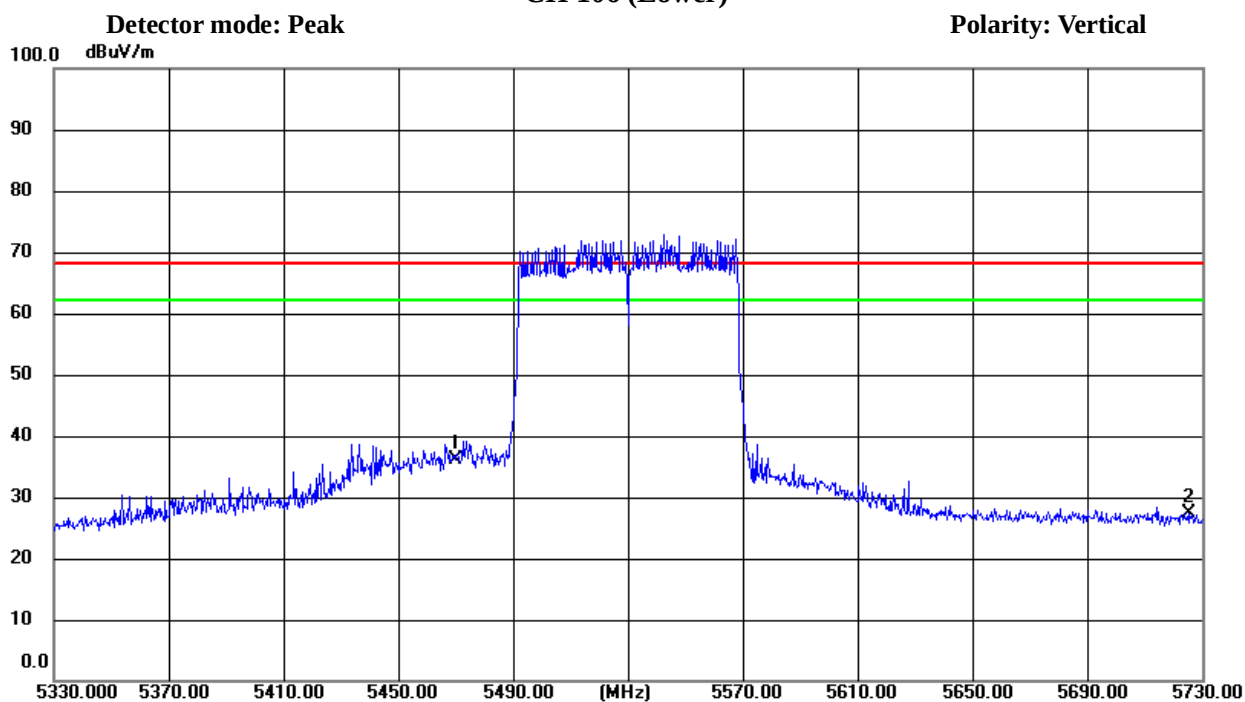
802.11ac(40M) (5.47GHz-5.725GHz) CH 134 (Lower)



EUT :	葫蘆機器人/KettyBot	Model Name :	PNT
Temperature :	25 °C	Relative Humidity :	56%
Pressure :	1010 hPa	Test Voltage :	DC25.55V from battery
Test Mode :	802.11 AC80(5G)		
Test Date :	2021-07-18		
Note :	In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.		

Freq. (MHz)	Ant.Pol. H/V	Reading (dBuv)	Ant/CF (dB)	Act (dBuv/m)	Limit (dBuv/m)	Note
5470.000	V	32.29	3.96	36.25	68.20	CH 106
5725.000	V	23.53	3.95	27.48	68.20	CH 106
5470.000	H	30.12	3.96	34.08	68.20	CH 106
5725.000	H	22.15	3.95	26.10	68.20	CH 106

802.11ac(80M) (5.31GHz-5.775GHz) CH 106 (Lower)



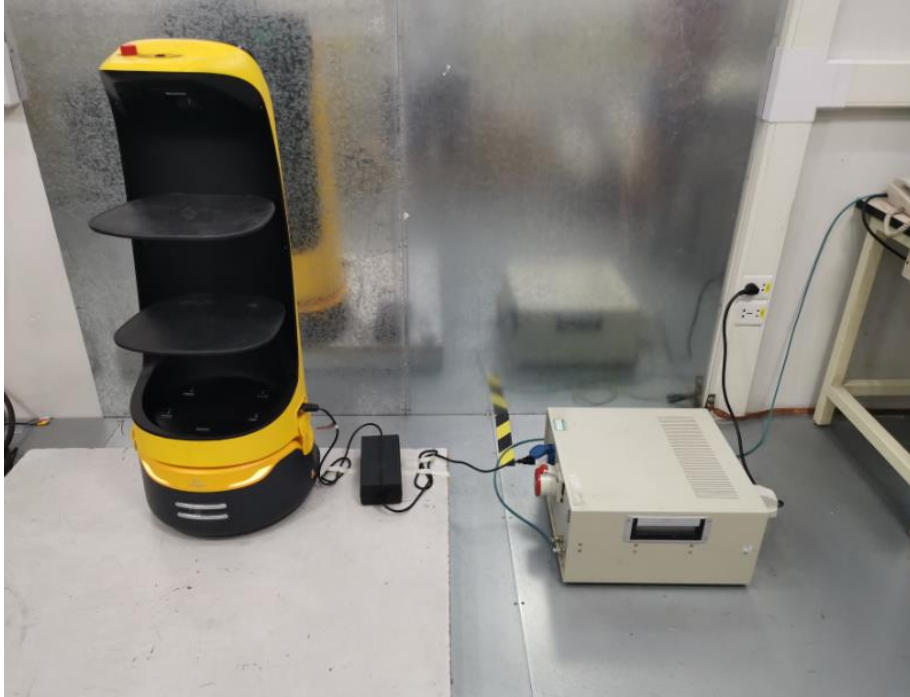
10. EUT TEST PHOTO

**Radiated Measurement Photos
30MHz-1GHz**



**Radiated Measurement Photos
Above 1GHz**



Conducted Measurement Photos**DFS Measurement Photos****11. APPENDIX-Photographs of EUT Constructional Details**

Please refer to report APPENDIX.

**** End of Report ****