

Shenzhen Toby Technology Co., Ltd.

Report No.: TB-FCC153920

1 of 76 Page:

FCC Radio Test Report FCC ID: 2AM52FN-VRC001

Original Grant

Report No. TB-FCC153920

Shenzhen Funi Digital Technology Co., Ltd **Applicant**

Equipment Under Test (EUT)

EUT Name Panoramic WiFi Camera

Model No. FN-VRC001

Series Model No. FN-VRCXXX(X stands for 0~9,A~Z)

Brand Name Funi

Receipt Date 2017-06-20

2017-06-21 to 2017-06-30 **Test Date**

Issue Date 2017-07-01

Standards FCC Part 15, Subpart C (15.247:2016)

Test Method ANSI C63.10: 2013

PASS Conclusions

In the configuration tested, the EUT complied with the standards specified above,

The EUT technically complies with the FCC and IC requirements

Test/Witness Engineer

Approved&

Authorized

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

TB-RF-074-1.0

Fax: +86 75526509195 Tel: +86 75526509301



Page: 2 of 76

Contents

CON	NTENTS	2
1.	GENERAL INFORMATION ABOUT EUT	4
	1.1 Client Information	4
	1.2 General Description of EUT (Equipment Under Test)	4
	1.3 Block Diagram Showing the Configuration of System Tested	
	1.4 Description of Support Units	
	1.5 Description of Test Mode	6
	1.6 Description of Test Software Setting	7
	1.7 Measurement Uncertainty	7
	1.8 Test Facility	8
2.	TEST SUMMARY	9
3.	TEST EQUIPMENT	10
4.	CONDUCTED EMISSION TEST	11
	4.1 Test Standard and Limit	11
	4.2 Test Setup	
	4.3 Test Procedure	
	4.4 EUT Operating Mode	12
	4.5 Test Data	
5.	RADIATED EMISSION TEST	17
	5.1 Test Standard and Limit	17
	5.2 Test Setup	
	5.3 Test Procedure	
	5.4 EUT Operating Condition	
	5.5 Test Data	20
6.	RESTRICTED BANDS REQUIREMENT	41
	6.1 Test Standard and Limit	41
	6.2 Test Setup	41
	6.3 Test Procedure	41
	6.4 EUT Operating Condition	42
	6.5 Test Data	42
7.	BANDWIDTH TEST	58
	7.1 Test Standard and Limit	
	7.2 Test Setup	
	7.3 Test Procedure	58
	7.4 EUT Operating Condition	58
	7.5 Test Data	
8.	PEAK OUTPUT POWER TEST	65
	8.1 Test Standard and Limit	65
	8.2 Test Setup	65



Page: 3 of 76

	8.3 Test Procedure	65
	8.4 EUT Operating Condition	
	8.5 Test Data	
9.	POWER SPECTRAL DENSITY TEST	69
	9.1 Test Standard and Limit	69
	9.2 Test Setup	
	9.3 Test Procedure	
	9.4 EUT Operating Condition	69
	9.5 Test Data	70
10.	ANTENNA REQUIREMENT	76
	10.1 Standard Requirement	76
	10.2 Antenna Connected Construction	



Page: 4 of 76

1. General Information about EUT

1.1 Client Information

Applicant : Shenzhen Funi Digital Technology Co., Ltd

Address : 401, 4/F, NO.28, Shi Jing Hong Yuan Technology Park, Fu Cheng Shi

Jing Road, Guan Lan Street, Long Hua New district, Shenzhen, China

Manufacturer : Shenzhen Funi Digital Technology Co., Ltd

Address: 401, 4/F, NO.28, Shi Jing Hong Yuan Technology Park, Fu Cheng Shi

Jing Road, Guan Lan Street, Long Hua New district, Shenzhen, China

1.2 General Description of EUT (Equipment Under Test)

EUT Name	1	Panoramic WiFi Camera			
Models No.	7	FN-VRC001, FN-VRC	XXX(X stands for 0~9,A~Z)		
Model Difference					
		Operation Frequency:	802.11b/g/n(HT20): 2412MHz~2462MHz		
		Number of Channel:	802.11b/g/n(HT20):11 channels see note(3)		
		RF Output Power:	802.11b: 17.67dBm 802.11g: 16.20dBm 802.11n (HT20):15.51dBm		
Product		Antenna Gain:	4.5dBi FPC Antenna		
Description		Modulation Type:	802.11b: DSSS(CCK, DQPSK, DBPSK) 802.11g/n: OFDM(BPSK,QPSK,16QAM, 64QAM)		
		Bit Rate of Transmitter:	802.11b:11/5.5/2/1 Mbps 802.11g:54/48/36/24/18/12/9/6 Mbps 802.11n:up to 150Mbps		
Power Supply		DC Voltage by the Host System. DC Voltage Supply from AC/DC Adapter			
Power Rating	:	DC 5V/2A by AC/DC A	dapter		
Connecting I/O Port(S)		Please refer to the Use	Please refer to the User's Manual		

Note:

- (1) This Test Report is FCC Part 15.247 for 802.11b/g/n, the test procedure follows the FCC KDB 558074 D01 DTS Meas Guidance v04.
- (2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
- (3) Channel List:

Channel Frequency Channel Frequency	Channel	Frequency
-------------------------------------	---------	-----------



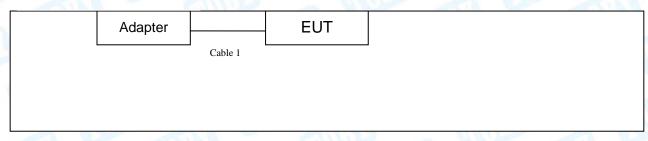
Page: 5 of 76

	(MHz)		(MHz)		(MHz)
01	2412	05	2432	09	2452
02	2417	06	2437	10	2457
03	2422	07	2442	11	2462
04	2427	08	2447		
Note: CH 01~CH 11	1 for 802.11b/g/n(HT2	20)			

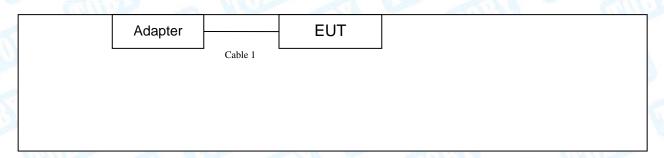
(4) The Antenna information about the equipment is provided by the applicant.

1.3 Block Diagram Showing the Configuration of System Tested

Normal Mode



TX Mode



1.4 Description of Support Units

Equipment Information							
Name Model FCC ID/VOC Manufacturer Used "\							
AC/DC Adapter ETA-U90EWE N/A √							
AC/DC Adapter Input: AC 120-240V 50/60Hz 0.35A Output: DC 5V/2A							
	Cable Information						
Number Shielded Type Ferrite Core Length Note							
Cable 1	NO	NO	1.2M				



Page: 6 of 76

1.5 Description of Test Mode

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

For Conducted Test					
Final Test Mode	Description				
Mode 1	Normal Mode with TX B Mode				

	For Radiated Test					
Final Test Mode		Description				
	Mode 2	TX Mode B Mode Channel 01/06/11				
Mode 3		TX Mode G Mode Channel 01/06/11				
	Mode 4	TX Mode N(HT20) Mode Channel 01/06/11				

Note:

(1) For all test, we have verified the construction and function in typical operation. And all the test modes were carried out with the EUT in transmitting operation in maximum power with all kinds of data rate.

According to ANSI C63.10 standards, the measurements are performed at the highest, Middle, lowest available channels, and the worst case data rate as follows:

802.11b Mode: CCK (1 Mbps) 802.11g Mode: OFDM (6 Mbps)

802.11n (HT20) Mode: MCS 0 (6.5 Mbps)

- (2) During the testing procedure, the continuously transmitting with the maximum power mode was programmed by the customer.
- (3) The EUT is considered a portable unit; in normal use it was positioned on X-plane. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.



Page: 7 of 76

1.6 Description of Test 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 of WLAN.

Test Software Version N/A			
Channel	CH 01	CH 06	CH 11
IEEE 802.11b DSSS	DEF	DEF	DEF
IEEE 802.11g OFDM	DEF	DEF	DEF
IEEE 802.11n (HT20)	DEF	DEF	DEF

1.7 Measurement Uncertainty

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

Test Item	Parameters	Expanded Uncertainty (U _{Lab})
	Level Accuracy:	
Conducted Emission	9kHz~150kHz	±3.42 dB
	150kHz to 30MHz	±3.42 dB
Padiated Emission	Level Accuracy:	. 4 60 dB
Radiated Emission	9kHz to 30 MHz	±4.60 dB
Padiated Emission	Level Accuracy:	±4.40 dB
Radiated Emission	30MHz to 1000 MHz	±4.40 dB
Radiated Emission	Level Accuracy:	±4.20 dB
Radiated Emission	Above 1000MHz	±4.20 dB



Page: 8 of 76

1.8 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1A/F., Bldg.6, Yusheng Industrial Zone, The National Road No.107 Xixiang Section 467, Xixiang, Bao'an, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

CNAS (L5813)

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

FCC List No.: (811562)

The Laboratory is listed in the United States of American Federal Communications Commission (FCC), and the registration number is 811562.

IC Registration No.: (11950A-1)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A-1.



Page: 9 of 76

2. Test Summary

Standa	rd Section			
FCC	IC	Test Item	Judgment	Remark
15.203	1	Antenna Requirement	PASS	N/A
15.207	RSS-GEN 7.2.4	Conducted Emission	PASS	N/A
15.205	RSS-GEN 7.2.2	Restricted Bands	PASS	N/A
15.247(a)(2)	RSS 247 5.2 (1)	6dB Bandwidth	PASS	N/A
15.247(b)	RSS 247 5.4 (4)	Peak Output Power	PASS	N/A
15.247(e)	RSS 247 5.2 (2)	Power Spectral Density	PASS	N/A
15.247(d) RSS 247 5.5		Band Edge	PASS	N/A
15.247(d)& 15.209	RSS 247 5.5	Transmitter Radiated Spurious Emission	PASS	N/A

Note: "/" for no requirement for this test item.

N/A is an abbreviation for Not Applicable.



Page: 10 of 76

3. Test Equipment

Conducte	d Emission Te	st			
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jul. 21, 2016	Jul. 20, 2017
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jul. 21, 2016	Jul. 20, 2017
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jul. 21, 2016	Jul. 20, 2017
LISN	Rohde & Schwarz	ENV216	101131	Jul. 21, 2016	Jul. 20, 2017
Radiation	Emission Tes	t			
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 21, 2016	Jul. 20, 2017
EMI Test Receiver	Rohde & Schwarz	ESPI	100010/007	Jul. 21, 2016	Jul. 20, 2017
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Mar.25, 2017	Mar. 24, 2018
Bilog Antenna	ETS-LINDGREN	3142E	00117542	Mar.25, 2017	Mar. 24, 2018
Horn Antenna	ETS-LINDGREN	3117	00143207	Mar.24, 2017	Mar. 23, 2018
Horn Antenna	ETS-LINDGREN	3117	00143209	Mar.24, 2017	Mar. 23, 2018
Loop Antenna	Laplace instrument	RF300	0701	Mar.24, 2017	Mar. 23, 2018
Pre-amplifier	Sonoma	310N	185903	Mar.25, 2017	Mar. 24, 2018
Pre-amplifier	HP	8449B	3008A00849	Mar.24, 2017	Mar. 23, 2018
Cable	HUBER+SUHNER	100	SUCOFLEX	Mar.25, 2017	Mar. 24, 2018
Positioning Controller	ETS-LINDGREN	2090	N/A	N/A	N/A
Antenna C	Conducted Em	ission			
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 21, 2016	Jul. 20, 2017
Spectrum Analyzer	Rohde & Schwarz	ESCI	100010/007	Jul. 21, 2016	Jul. 20, 2017
Power Meter	Anritsu	ML2495A	25406005	Jul. 21, 2016	Jul. 20, 2017
Power Sensor	Anritsu	ML2411B	25406005	Jul. 21, 2016	Jul. 20, 2017



Page: 11 of 76

4. Conducted Emission Test

4.1 Test Standard and Limit

4.1.1Test Standard FCC Part 15.207

4.1.2 Test Limit

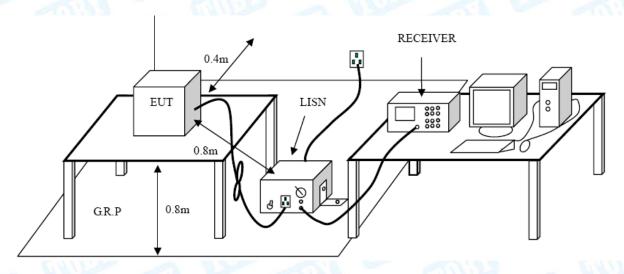
Conducted Emission Test Limit

Eroguanov	Maximum RF Line Voltage (dBμV)			
Frequency	Quasi-peak Level	Average Level		
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *		
500kHz~5MHz	56	46		
5MHz~30MHz	60	50		

Notes:

- (1) *Decreasing linearly with logarithm of the frequency.
- (2) The lower limit shall apply at the transition frequencies.
- (3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

4.2 Test Setup



4.3 Test Procedure

The EUT was placed 0.8 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.



Report No.: TB-FCC153920 Page: 12 of 76

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.

The bandwidth of EMI test receiver is set at 9kHz, and the test frequency band is from 0.15MHz to 30MHz.

4.4 EUT Operating Mode

Please refer to the description of test mode.

4.5 Test Data

Please see the next page.



13 of 76 Page:



EUT:	Panora	mic WiFi C	Camera	Model Na	me :	FN-V	RC001	
Temperature:	25 ℃	CIN!	30	Relative I	Humidity:	55%	55%	
Test Voltage:	AC 120	V/60Hz			GUI	133		
Terminal:	Line		ARGE		1 63			
Test Mode:	Chargii	ng with TX	B Mode	MILLO		a 1	N. Carrie	
Remark:	Only w	orse case i	is reported					
90.0 dBuV						QP:	_	
						AVG:	_	
					X	X		
y Muny	7 / 1	A	ALL AMMAN	min where we was	adject of white problems to the second	A MARINE	Mary Control	
40	V V V	VA AMAMA	AND MANAGE	who who will be the second	and with the	Market Company	boloty.	
W. M.	MYW	AAAAAWW	MMMM,	Appropriation of the second	www.	Marchaelle	1	
							peal	
							`√AVG	
10								
0.150	0.5		(MHz)	5			30.000	
NI- MI- F		Reading	Correct	Measure-	Limit	Over		
	req.	Level	Factor	ment			D	
	MHz	dBuV	dB	dBuV	dBu∀	dB	Detector	
	2100	12.19	10.02	22.21		-40.99	QP	
	2100	-1.95	10.02	8.07		-45.13	AVG	
3 0.6	6460	12.38	10.09	22.47	56.00	-33.53	QP	
4 0.6	6460	2.24	10.09	12.33	46.00	-33.67	AVG	
5 1.9	9380	22.11	10.06	32.17	56.00	-23.83	QP	
6 1.9	9380	5.92	10.06	15.98	46.00	-30.02	AVG	
7 * 2.5	5940	24.22	10.04	34.26	56.00	-21.74	QP	
8 2.	5940	9.83	10.04	19.87	46.00	-26.13	AVG	
9 10.0	0338	11.33	10.16	21.49	60.00	-38.51	QP	
10 10.0	0338	-3.11	10.16	7.05	50.00	-42.95	AVG	
	6018	22.03	10.21	32.24	60.00		QP	
	6018	4.98	10.21	15.19	50.00		AVG	
		1.00	15.21	10.10	00.00	3 7.0 1	,,,,	
Emission Leve	I= Read L	.evel+ Cor	rect Factor					



Page: 14 of 76

EUT:	Panoramic WiFi Can	nera M e	odel Name :		FN-VRC	001
Temperature:	25 ℃		elative Humi	dity:	55%	Line
Test Voltage:	AC 120V/60Hz			G	1139	
Terminal:	Neutral	AMO				
Test Mode:	Charging with TX B I	Mode	THE WAR	9	a \	
Remark:	Only worse case is r	eported	-		33	
90.0 dBuV						
-10 0.150	0.5	(MHz)	May be a first of the forest	are mind of the second	QP: AVG:	peak AVG
No. Mk. F	Reading (Correct Factor	Measure- ment	Limit	Over	
	1Hz dBuV	dB	dBu∀	dBuV	dB	Detector
1 * 0.2	260 32.70	10.11	42.81	62.59	-19.78	QP
2 0.2	260 13.34	10.11	23.45	52.59	-29.14	AVG
3 0.6	540 10.79	10.02	20.81	56.00	-35.19	QP
4 0.6	540 0.18	10.02	10.20	46.00	-35.80	AVG
5 1.2	260 15.38	10.14	25.52	56.00	-30.48	QP
6 1.2	260 5.34	10.14	15.48	46.00	-30.52	AVG
7 1.7	460 22.19	10.09	32.28	56.00	-23.72	QP
8 1.7	460 4.46	10.09	14.55	46.00	-31.45	AVG
9 6.6	779 13.23	10.06	23.29	60.00	-36.71	QP
10 6.6	779 4.19	10.06	14.25	50.00	-35.75	AVG
11 20.3	940 28.94	10.06	39.00	60.00	-21.00	QP
12 20.3	940 10.34	10.06	20.40	50.00	-29.60	AVG
Emission Level=	Read Level+ Correc	ct Factor				



Page: 15 of 76



EUT:		Panor	amic WiFi (Camera	Model Nar	ne:	FN-VR	C001
Гетр	erature:	25 ℃	CILI)	(A)	Relative H	umidity:	55%	Allen
Test \	/oltage:	AC 24	10V/60Hz		118	67	11/20	
Геrmi	inal:	Line		I HID			100	
Test I	Mode:	Charg	ing with TX	B Mode	MILE		1 N	HUL
Rema	ırk:	Only v	worse case	is reported		CITI'	33	
90.0	dBuV						QP:	
40				E MANA CALLINANA	**************************************	gentlefen det de minute	AVG:	pea
0.150		0.5	Reading	(MHz)	Measure-			30.000
No.		req. 1Hz	Level dBuV	Factor dB	ment dBuV	Limit dBuV	Over	Detector
1		460	29.43	10.02	39.45		-22.44	QP
2		460	9.42	10.02	19.44		-32.45	AVG
3		700	15.18	10.10	25.28		-30.72	QP
4		700	5.72	10.10	15.82		-30.18	AVG
5		100	12.78	10.06	22.84		-33.16	QP
6	1.2	100	1.28	10.06	11.34	46.00	-34.66	AVG
7	* 1.6	780	24.21	10.06	34.27	56.00	-21.73	QP
8	1.6	780	9.14	10.06	19.20	46.00	-26.80	AVG
9	2.8	500	12.55	10.03	22.58	56.00	-33.42	QP
10	2.8	500	-1.61	10.03	8.42	46.00	-37.58	AVG
4.4	17.1	818	8.18	10.22	18.40	60.00	-41.60	QP
11								



16 of 76 Page:



	Pano	ramic WiFi Ca	amera	Model Name	:	FN-VRC	001
Temperature:	25 ℃			Relative Hum	nidity:	55%	ABIN
Test Voltage:	AC 2	40V/60Hz		18	(A)	M. D.	
Terminal:	Neutr	al	alla		1 6		MRI I
Test Mode:	Char	ging with TX E	3 Mode	MILE		0 N	MARKET
Remark:	Only	worse case is	reported		CON	333	
90.0 dBuV						QP:	
40		AND THE PROPERTY OF THE PROPER	Mappine and white		Mystarias	Marie Sala Sala Sala Sala Sala Sala Sala Sal	pea
0.150	0.5	Dooding	(MHz)	5			30.000
0.150 No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
0.150 No. Mk.	Freq. MHz	Level dBuV	Correct Factor	Measure- ment	dBuV	dB	Detector
0.150 No. Mk. 1	Freq. MHz 2419	dBuV 11.96	Correct Factor dB 10.11	Measure- ment dBuV 22.07	dBu∨ 62.03	dB -39.96	Detector QP
0.150 No. Mk. 1 1 0. 2 0.	Freq. MHz 2419 2419	dBuV 11.96 -0.51	Correct Factor dB 10.11 10.11	Measure- ment dBuV 22.07 9.60	dBu√ 62.03 52.03	dB -39.96 -42.43	Detector QP AVG
0.150 No. Mk. 1 1 0. 2 0. 3 0.	Freq. MHz 2419 2419 6660	dBuV 11.96 -0.51 14.05	Correct Factor dB 10.11 10.11 10.02	Measure- ment dBuV 22.07 9.60 24.07	dBuV 62.03 52.03 56.00	dB -39.96 -42.43 -31.93	Detector QP AVG QP
0.150 No. Mk. 1 1 0. 2 0. 3 0.	Freq. MHz 2419 2419	dBuV 11.96 -0.51	Correct Factor dB 10.11 10.11 10.02 10.02	Measure- ment dBuV 22.07 9.60 24.07 14.78	dBuV 62.03 52.03 56.00 46.00	dB -39.96 -42.43 -31.93 -31.22	Detector QP AVG QP
0.150 No. Mk. 1 1 0. 2 0. 3 0. 4 0.	Freq. MHz 2419 2419 6660	dBuV 11.96 -0.51 14.05	Correct Factor dB 10.11 10.11 10.02	Measure- ment dBuV 22.07 9.60 24.07	dBuV 62.03 52.03 56.00 46.00	dB -39.96 -42.43 -31.93	Detector QP AVG QP
0.150 No. Mk. 1 0. 2 0. 3 0. 4 0. 5 1.	Freq. MHz 2419 2419 6660	dBuV 11.96 -0.51 14.05 4.76	Correct Factor dB 10.11 10.11 10.02 10.02	Measure- ment dBuV 22.07 9.60 24.07 14.78	dBuV 62.03 52.03 56.00 46.00 56.00	dB -39.96 -42.43 -31.93 -31.22	Detector QP AVG QP AVG
0.150 No. Mk. I 1	Freq. MHz 2419 2419 6660 6660 7259	dBuV 11.96 -0.51 14.05 4.76 20.53	Correct Factor dB 10.11 10.11 10.02 10.02	Measure- ment dBuV 22.07 9.60 24.07 14.78 30.62	dBuV 62.03 52.03 56.00 46.00 56.00 46.00	dB -39.96 -42.43 -31.93 -31.22 -25.38	Detector QP AVG QP AVG
0.150 No. Mk. I 1	Freq. MHz 2419 2419 6660 6660 7259	Level dBuV 11.96 -0.51 14.05 4.76 20.53 7.07	Correct Factor dB 10.11 10.11 10.02 10.02 10.09	Measure- ment dBuV 22.07 9.60 24.07 14.78 30.62 17.16	dBuV 62.03 52.03 56.00 46.00 56.00 56.00	dB -39.96 -42.43 -31.93 -31.22 -25.38 -28.84	Detector QP AVG QP AVG QP AVG
0.150 No. Mk. 1 1 0. 2 0. 3 0. 4 0. 5 1. 6 1. 7 3. 8 3.	Freq. MHz 2419 2419 6660 6660 7259 7259 8500	Level dBuV 11.96 -0.51 14.05 4.76 20.53 7.07 14.24	Correct Factor dB 10.11 10.11 10.02 10.02 10.09 10.09	Measure- ment dBuV 22.07 9.60 24.07 14.78 30.62 17.16 24.30	dBuV 62.03 52.03 56.00 46.00 56.00 46.00 46.00	dB -39.96 -42.43 -31.93 -31.22 -25.38 -28.84 -31.70	Detector QP AVG QP AVG QP AVG
0.150 No. Mk. 1 0.2 0.3 0.4 0.5 1.6 1.7 3.8 3.9 8.8	Freq. MHz 2419 2419 6660 6660 7259 7259 8500	Level dBuV 11.96 -0.51 14.05 4.76 20.53 7.07 14.24 5.01	Correct Factor dB 10.11 10.11 10.02 10.02 10.09 10.09 10.06	Measure- ment dBuV 22.07 9.60 24.07 14.78 30.62 17.16 24.30 15.07	dBuV 62.03 52.03 56.00 46.00 56.00 46.00 46.00 60.00	dB -39.96 -42.43 -31.93 -31.22 -25.38 -28.84 -31.70 -30.93	Detector QP AVG QP AVG QP AVG QP AVG
0.150 No. Mk. 1	Freq. MHz 2419 2419 6660 6660 7259 7259 8500 8500 8899	Level dBuV 11.96 -0.51 14.05 4.76 20.53 7.07 14.24 5.01 10.35	Correct Factor dB 10.11 10.11 10.02 10.02 10.09 10.09 10.06 10.12	Measure- ment dBuV 22.07 9.60 24.07 14.78 30.62 17.16 24.30 15.07 20.47	dBuV 62.03 52.03 56.00 46.00 56.00 46.00 46.00 60.00	dB -39.96 -42.43 -31.93 -31.22 -25.38 -28.84 -31.70 -30.93 -39.53	Detector QP AVG QP AVG QP AVG QP AVG



Page: 17 of 76

5. Radiated Emission Test

5.1 Test Standard and Limit

5.1.1 Test Standard FCC Part 15.209

5.1.2 Test Limit

Radiated Emission Limits (9 kHz~1000 MHz)

Frequency (MHz	Field Strength (microvolt/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

Radiated Emission Limit (Above 1000MHz)

Frequency	Distance of 3m	(dBuV/m)
(MHz)	Peak	Average
Above 1000	74	54

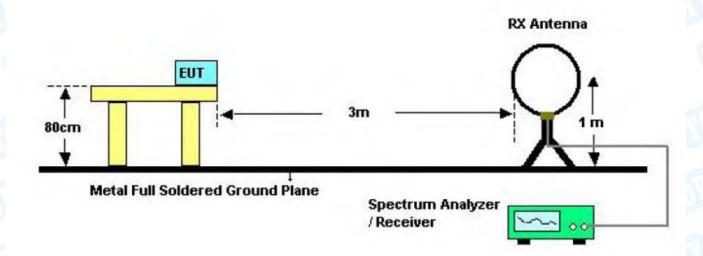
Note:

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

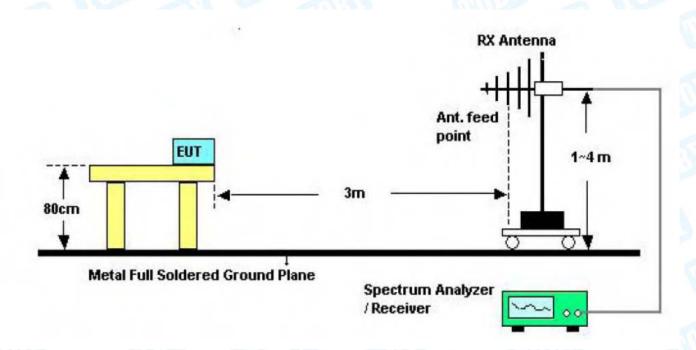


Page: 18 of 76

5.2 Test Setup



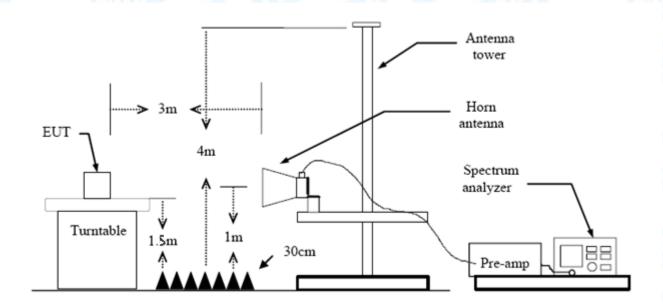
Below 30MHz Test Setup



Below 1000MHz Test Setup



Page: 19 of 76



Above 1GHz Test Setup

5.3 Test Procedure

- (1) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- (2) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- (3) 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 Quasi Peak detector mode re-measured.
- (4) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (5) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (6) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- (7) For the actual test configuration, please see the test setup photo.

5.4 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.



Page: 20 of 76

5.5 Test Data

Remark: During testing above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.

Test data please refer the following pages.



Page: 21 of 76

9KHz~30MHz

From 9KHz to 30MHz: Conclusion: PASS

Note: The amplitude of spurious emissions which are attenuated by more than 20dB

below the permissible value has no need to be reported.

30MHz~1GHz

	T:			Pano	rami	c WiFi	Camera	Model:		FN-VRC	001
Ten	nper	ature	ature: 25 °C			M		Relative H	umidity:	55%	
Tes	t Vo	Itage):	AC 1	20V/6	60HZ	COURSE STATE		BALLE		(A)
Ant	t. Po	I.		Horizontal							
Tes	t Mo	TX B Mode 2412MHz									
Rer	mark	(:		Only	wors	e case	e is reported	-	Hilliam		1 B
80.0	0 dBu	uV/m									
30	* Trade anagonalis	www.	A separate	ANN AN		low death	w.A.Mananda		(RF)FCC	Margin -1	
-20											
30	0.000	40	50	60	70 80		(MHz)	300	400 !	500 600 700	1000.00
	0.000 lo. 1			60 :	Re	eading		Measure- ment	Limit	500 600 700 Оveг	1000.00
				eq.	Re L	ading	Correct	Measure-			
		Иk.	Fre	eq.	Re L	ading evel	Correct Factor	Measure- ment	Limit	Over	
N		Mk.	Fre	eq. Iz 1904	Re Lo	ading evel !BuV	Correct Factor	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		Mk.	Fre MH 228.4	eq. Hz 1904 5457	Re Le 5	eading evel BuV 3.89	Correct Factor dB/m -18.74	Measure- ment dBuV/m 35.15	Limit dBuV/m 46.00	Over dB -10.85	Detector
1 2		Mk.	Fre MH 228.4 132.5	eq. Hz 1904 5457	5- 5- 5-	eading evel BuV 3.89 2.17	Correct Factor dB/m -18.74 -12.30	Measure- ment dBuV/m 35.15 39.87	Limit dBuV/m 46.00 46.00	Over dB -10.85 -6.13	Detector QP QP
1 2 3	lo. I	Mk.	Fre MH 228.4 432.5 552.8	eq. Hz 1904 5457 8832	55.55.4	eading evel dBuV 3.89 2.17 9.19	Correct Factor dB/m -18.74 -12.30 -9.50	Measure- ment dBuV/m 35.15 39.87 39.69	Limit dBuV/m 46.00 46.00 46.00	Over dB -10.85 -6.13 -6.31	Detector QP QP QP



Page: 22 of 76

	T: Panoramic WiFi Can		Camera	Model:		FN-VRC	001	
Temperature:	perature: 25 °C Relative Humidity:			midity:	55%	The same		
Test Voltage:	tage: AC 120V/60HZ							
Ant. Pol.	Pol. Vertical						MIL.	
Test Mode:	TX B	Mode 241	2MHz					
Remark:	Only	worse case	e is reporte	ed		19		
80.0 dBuV/m								
30				1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(RF)FCC 1	15C 3M Radiation Margin -6		
20 30.000 40 50	60 70		(MHz)	300	400 5	500 600 700	1000.00	
30.000 40 50	60 70 eq.		o. A. Columbia	300 Measure-	400 5	000 600 700 Over	1000.00	
30.000 40 50 No. Mk. Fr		80 Reading	(MHz)	300 Measure-			1000.00	
30.000 40 50 No. Mk. Fr	eq. Hz	Reading Level	(MHz) Correct Factor	300 Measure- ment	Limit	Over		
30.000 40 50 No. Mk. Fr	eq. Hz 0994	Reading Level	(MHz) Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over	Detecto	
No. Mk. Fr M 226.0	eq. Hz 0994 9874	Reading Level dBuV 48.25	Correct Factor dB/m -18.85	Measure- ment dBuV/m 29.40	Limit dBuV/m 46.00	Over dB -16.60	Detecto QP	
No. Mk. Fr M 1 226.0 2 239.9 3 432.5	eq. Hz 0994 9874 5457	Reading Level dBuV 48.25 51.68	Correct Factor dB/m -18.85	Measure- ment dBuV/m 29.40 33.50	Limit dBuV/m 46.00 46.00	Over dB -16.60 -12.50	Detecto QP QP	
No. Mk. Fr M 1 226.0 2 239.9 3 432.5	eq. Hz 0994 9874 5457	Reading Level dBuV 48.25 51.68 49.12	(MHz) Correct Factor dB/m -18.85 -18.18	300 Measure- ment dBuV/m 29.40 33.50 36.82	Limit dBuV/m 46.00 46.00 46.00	Over dB -16.60 -12.50 -9.18	Detecto QP QP QP	



Page: 23 of 76

Above 1GHz

EUT:	Panoramic WiFi Camera	Model:	FN-VRC001				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60HZ	01 - 6	THE STATE OF				
Ant. Pol.	Horizontal						
Test Mode:	TX B Mode 2412MHz		THE PARTY OF THE P				
Remark:	No report for the emission	No report for the emission which more than 10 dB below the prescribed					
	limit.	2 m					



No.	Mk.	Freq.	_	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4824.147	37.73	13.56	51.29	54.00	-2.71	AVG
2		4824.351	49.38	13.56	62.94	74.00	-11.06	peak



Page: 24 of 76

EUT:	Panoramic WiFi Camera	Model:	FN-VRC001				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60HZ	37					
Ant. Pol.	Vertical						
Test Mode:	TX B Mode 2412MHz	MILES	2				
Remark:	No report for the emission	No report for the emission which more than 10 dB below the					
	prescribed limit.	- 13 W					



No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4823.427	49.16	13.56	62.72	74.00	-11.28	peak
2	*	4823.970	35.45	13.56	49.01	54.00	-4.99	AVG



Page: 25 of 76

Panoramic WiFi Camera	Model:	FN-VRC001			
25 ℃	55%				
AC 120V/60HZ	31 - 6				
Horizontal					
TX B Mode 2437MHz		THE PARTY OF THE P			
No report for the emission which more than 10 dB below the					
prescribed limit.	A W				
	25 °C AC 120V/60HZ Horizontal TX B Mode 2437MHz No report for the emission	25 °C Relative Humidity: AC 120V/60HZ Horizontal TX B Mode 2437MHz No report for the emission which more than 10 dB			

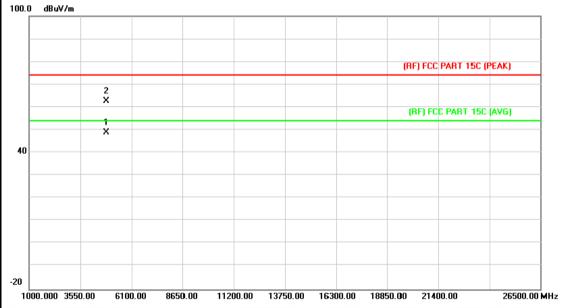


No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4874.009	38.00	13.86	51.86	54.00	-2.14	AVG
2		4874.198	49.71	13.86	63.57	74.00	-10.43	peak



Page: 26 of 76

EUT:	Panoramic WiFi Camera	Model:	FN-VRC001				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60HZ						
Ant. Pol.	Vertical						
Test Mode:	TX B Mode 2437MHz		The same of the sa				
Remark:	No report for the emission which more than 10 dB below the						
	prescribed limit.						



No	o. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4873.991	35.07	13.86	48.93	54.00	-5.07	AVG
2		4874.237	48.74	13.86	62.60	74.00	-11.40	peak



Page: 27 of 76

EUT:	Panoramic WiFi Camera	Model:	FN-VRC001				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60HZ						
Ant. Pol.	Horizontal						
Test Mode:	TX B Mode 2462MHz	WIID S					
Remark:	No report for the emission which more than 10 dB below the						
	prescribed limit.						
			l.				

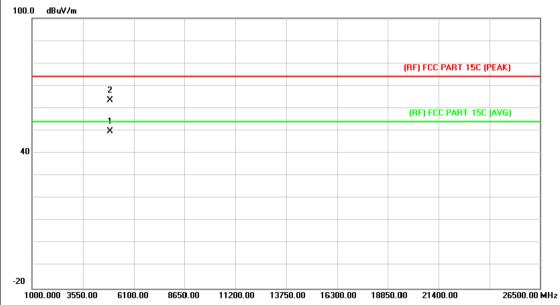


No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4923.706	50.61	14.15	64.76	74.00	-9.24	peak
2	*	4924.051	38.78	14.15	52.93	54.00	-1.07	AVG



Page: 28 of 76

EUT:	Panoramic WiFi Camera	Model:	FN-VRC001			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	AC 120V/60HZ					
Ant. Pol.	Vertical					
Test Mode:	TX B Mode 2462MHz	WIID S	A VIII			
Remark:	No report for the emission	No report for the emission which more than 10 dB below the				
	prescribed limit.					
i						

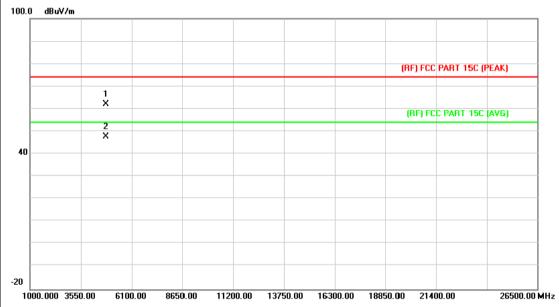


No.	Mk	c. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4924.108	35.70	14.15	49.85	54.00	-4.15	AVG
2		4924.996	49.41	14.15	63.56	74.00	-10.44	peak



Page: 29 of 76

EUT:	Panoramic WiFi Camera Model:		FN-VRC001			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	AC 120V/60HZ	0.0	Tibe			
Ant. Pol.	Horizontal					
Test Mode:	TX G Mode 2412MHz					
Remark:	No report for the emission which more than 10 dB below the prescribed limit.					

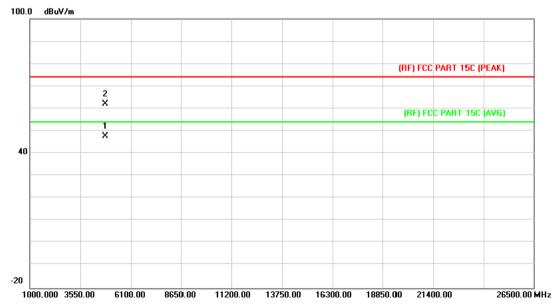


No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4823.013	48.42	13.56	61.98	74.00	-12.02	peak
2	*	4823.016	34.20	13.56	47.76	54.00	-6.24	AVG



Page: 30 of 76

EUT:	Panoramic WiFi Camera Model:		FN-VRC001			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	AC 120V/60HZ	0.0	Time			
Ant. Pol.	Vertical					
Test Mode:	TX G Mode 2412MHz	WIID S				
Remark:	No report for the emission which more than 10 dB below the prescribed limit.					

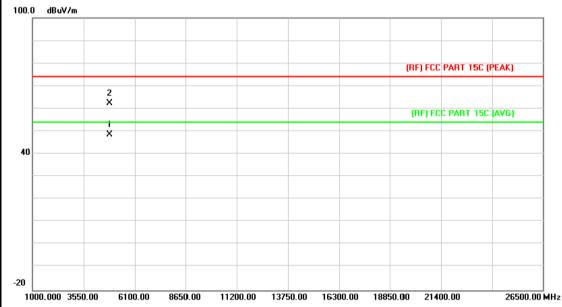


No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4823.652	34.21	13.56	47.77	54.00	-6.23	AVG
2		4823.853	48.48	13.56	62.04	74.00	-11.96	peak



Page: 31 of 76

EUT:	Panoramic WiFi Camera	Model:	FN-VRC001				
Temperature:	25 ℃	25 °C Relative Humidity: 55%					
Test Voltage:	AC 120V/60HZ		TIES OF				
Ant. Pol.	Horizontal						
Test Mode:	TX G Mode 2437MHz		THE REAL PROPERTY OF THE PARTY				
Remark:	No report for the emission which more than 10 dB below the prescribed limit.						

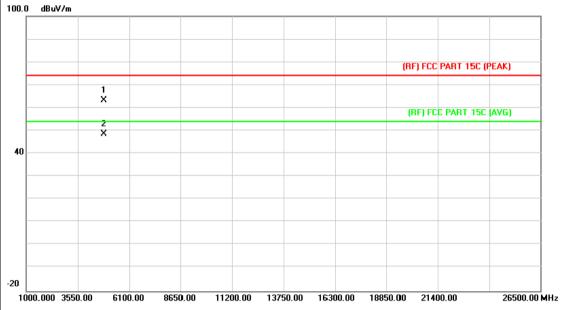


No	. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4873.472	34.64	13.86	48.50	54.00	-5.50	AVG
2		4874.963	48.46	13.86	62.32	74.00	-11.68	peak



Page: 32 of 76

EUT:	Panoramic WiFi Camera	Model:	FN-VRC001				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60HZ						
Ant. Pol.	Vertical						
Test Mode:	TX G Mode 2437MHz		THE PARTY OF THE P				
Remark:	No report for the emission which more than 10 dB below the prescribed limit.						
100 0 ID 111							



No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4872.779	49.29	13.85	63.14	74.00	-10.86	peak
2	*	4874.111	34.61	13.86	48.47	54.00	-5.53	AVG



Page: 33 of 76

EUT:	Panoramic WiFi Camera	Model:	FN-VRC001			
Temperature:	25 ℃	25 °C Relative Humidity: 55%				
Test Voltage:	AC 120V/60HZ	30 6				
Ant. Pol.	Horizontal					
Test Mode:	TX G Mode 2462MHz	WIID S	A VIII			
Remark:	No report for the emission which more than 10 dB below the prescribed limit.					

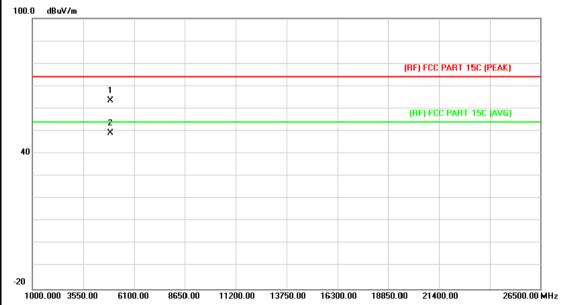


No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4924.765	49.26	14.15	63.41	74.00	-10.59	peak
2	*	4925.002	35.01	14.16	49.17	54.00	-4.83	AVG



Page: 34 of 76

EUT:	Panoramic WiFi Camera	Model:	FN-VRC001				
Temperature:	25 ℃	25 °C Relative Humidity: 55%					
Test Voltage:	AC 120V/60HZ						
Ant. Pol.	Vertical						
Test Mode:	TX G Mode 2462MHz	WIID S	The same of the sa				
Remark:	No report for the emission	No report for the emission which more than 10 dB below the					
	prescribed limit.						
İ							

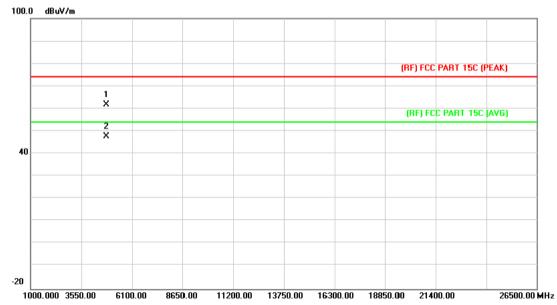


No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4923.730	49.30	14.15	63.45	74.00	-10.55	peak
2	*	4923.811	35.13	14.15	49.28	54.00	-4.72	AVG



Page: 35 of 76

EUT:	Panoramic WiFi Camera	Model:	FN-VRC001			
Temperature:	25 ℃	25 ℃ Relative Humidity: 55%				
Test Voltage:	AC 120V/60HZ		TIES TO THE TOTAL PROPERTY OF THE TOTAL PROP			
Ant. Pol.	Horizontal					
Test Mode:	TX N(HT20) Mode 2412M	Hz				
Remark:	No report for the emission which more than 10 dB below the					
	prescribed limit.					



No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4823.877	48.12	13.56	61.68	74.00	-12.32	peak
2	*	4823.892	34.23	13.56	47.79	54.00	-6.21	AVG



Page: 36 of 76

EUT:	Panoramic WiFi Camera	Model:	FN-VRC001			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	AC 120V/60HZ					
Ant. Pol.	Vertical					
Test Mode:	TX N(HT20) Mode 2412M	Hz				
Remark:	No report for the emission which more than 10 dB below the					
prescribed limit.						

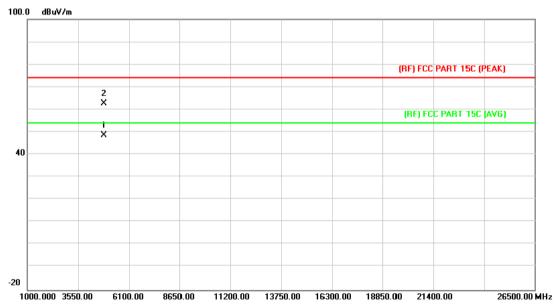


No.	Mk.	Freq.	_	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4822.560	34.21	13.55	47.76	54.00	-6.24	AVG
2		4824.381	47.78	13.56	61.34	74.00	-12.66	peak



Page: 37 of 76

EUT:	Panoramic WiFi Camera	Model:	FN-VRC001					
Temperature:	25 ℃	25 ℃ Relative Humidity:						
Test Voltage:	AC 120V/60HZ	AC 120V/60HZ						
Ant. Pol.	Horizontal							
Test Mode:	TX N(HT20) Mode 2437M	Hz						
Remark:	No report for the emission which more than 10 dB below the							
	prescribed limit.							

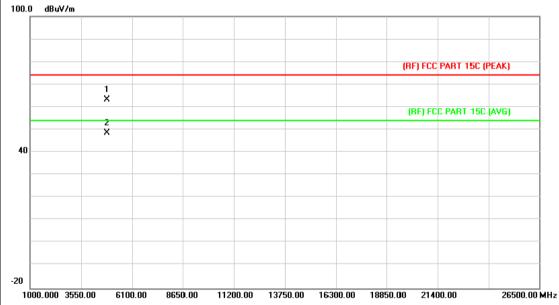


No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4873.475	34.62	13.86	48.48	54.00	-5.52	AVG
2		4873.676	48.90	13.86	62.76	74.00	-11.24	peak



Page: 38 of 76

EUT:	Panoramic WiFi Camera	Model:	FN-VRC001					
Temperature:	25 ℃	25 ℃ Relative Humidity:						
Test Voltage:	AC 120V/60HZ	AC 120V/60HZ						
Ant. Pol.	Vertical							
Test Mode:	TX N(HT20) Mode 2437M	Hz						
Remark:	No report for the emission which more than 10 dB below the							
	prescribed limit.							
			· · · · · · · · · · · · · · · · · · ·					

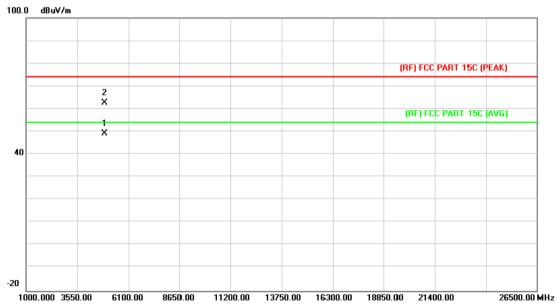


No.	Mk.	Freq.	_	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.937	49.37	13.86	63.23	74.00	-10.77	peak
2	*	4874.486	34.63	13.86	48.49	54.00	-5.51	AVG



Page: 39 of 76

EUT:	Panoramic WiFi Camera	Model:	FN-VRC001					
Temperature:	25 ℃	25 °C Relative Humidity: 55%						
Test Voltage:	AC 120V/60HZ	AC 120V/60HZ						
Ant. Pol.	Horizontal	O						
Test Mode:	TX N(HT20) Mode 2462MH	z	2 100					
Remark:	No report for the emission which more than 10 dB below the							
	prescribed limit.							
100.0 40.44								



No.	M	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4923.631	35.01	14.15	49.16	54.00	-4.84	AVG
2		4924.612	48.45	14.15	62.60	74.00	-11.40	peak



Page: 40 of 76

EUT:	Panoramic WiFi Camera	Model:	FN-VRC001					
Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	AC 120V/60HZ	AC 120V/60HZ						
Ant. Pol.	Vertical	U						
Test Mode:	TX N(HT20) Mode 2462MH	lz (V)	a little					
Remark:	No report for the emission v	No report for the emission which more than 10 dB below the						
	prescribed limit.							
i								



No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4923.574	34.94	14.15	49.09	54.00	-4.91	AVG
2		4924.147	49.64	14.15	63.79	74.00	-10.21	peak



Page: 41 of 76

6. Restricted Bands Requirement

6.1 Test Standard and Limit

6.1.1 Test Standard

FCC Part 15.247(d)

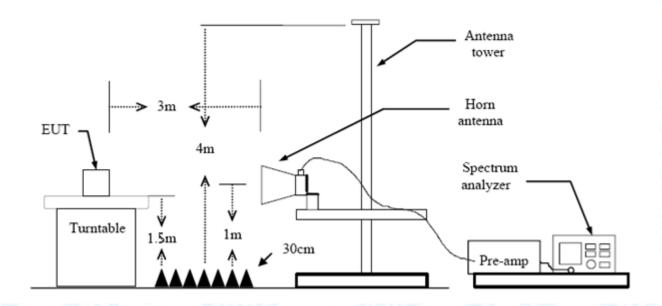
FCC Part 15.209

FCC Part 15.205

6.1.2 Test Limit

Restricted Frequency	Distance of	3m (dBuV/m)
Band (MHz)	Peak	Average
2310 ~2390	74	54
2483.5 ~2500	74	54

6.2 Test Setup



6.3 Test Procedure

- (1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.



Page: 42 of 76

(3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.

- (4) 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 Quasi Peak detector mode re-measured.
- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- (8) For the actual test configuration, please see the test setup photo.

6.4 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.

6.5 Test Data

Please see the next page.



Page: 43 of 76

(1) Radiation Test

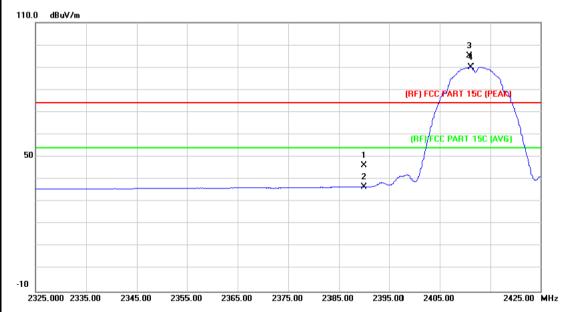
EUT:	Panoramic WiF	i Camera	Model:	FN-VRC001		
Temperature:	25 ℃	25 ℃		55%		
Гest Voltage:	AC 120V/60HZ	CHO.				
Ant. Pol.	Horizontal					
Test Mode:	TX B Mode 241	2MHz	1	33		
Remark:	N/A	CHILD				
110.0 dBuV/m	'					
				4		
				3 ×		
			(RF) FC	C PART 15C (PEAK)		
			RF) F	CC PART 15C (AVG)		
50			x /			
			2 X			
-10 2328.000 2338.00	2348.00 2358.00 23	368.00 2378.00	0 2388.00 2398.00 24	08.00 2428.00 MI		
2320.000 2330.00	2340.00 2330.00 2	2370.00	5 250.00 250.00 240	70.00 2420.00 MI		

No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	48.72	0.77	49.49	74.00	-24.51	peak
2		2390.000	36.62	0.77	37.39	54.00	-16.61	AVG
3	*	2411.200	90.99	0.86	91.85	Fundamental I	requency	AVG
4	X	2413.100	96.48	0.86	97.34	Fundamental I	requency	peak



Page: 44 of 76

EUT:	Panoramic WiFi Camera	Model:	FN-VRC001				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60HZ						
Ant. Pol.	Vertical						
Test Mode:	TX B Mode 2412MHz	MILES					
Remark:	N/A						



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	45.52	0.77	46.29	74.00	-27.71	peak
2		2390.000	35.95	0.77	36.72	54.00	-17.28	AVG
3	X	2410.900	94.27	0.86	95.13	Fundamenta	l Frequency	peak
4	*	2411.200	89.34	0.86	90.20	Fundamenta	I Frequency	AVG



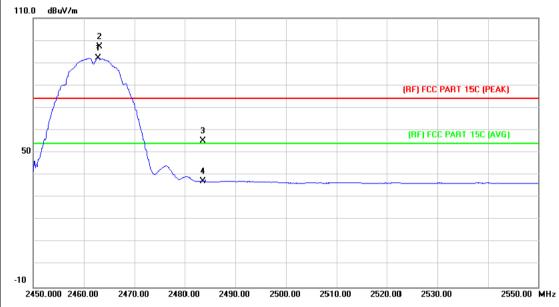
Page: 45 of 76

EUT:			Pan	oram	ic WiF	i Camera	Mode	el:		FN-VRC	001
Tem	peratu	ire:	25 °	Č		30	Relat	ive Hu	midity:	55%	ABOVE
Test	Volta	ge:	AC	120V	/60HZ		Pist		(G)	THE	
Ant.	Pol.		Hori	zonta	al	A DEFE	-		J 6.		
Test	Mode	:	TXE	3 Мо	de 246	2MHz	6	11/10			
Rem	ark:		N/A		Silver .					35	
110.0	dBuV/m										
50		1 32 X				3 X 4				C PART 15C (PE	
-10					1.00 24	184.00 249 4 .	NN 25N	4.00 25	11.00 55	24.00	2544.00 MI
244	4.000 24	54.00 2	464.00	2474			230		514.00 25		
244	4.000 24	54.00 2	464.00	2474					D14.UU 25.		
	4.000 24). Mk			Rea	ading evel	Correct Factor	t Mea	asure- ent	Limit	Over	
			q.	Rea Le	_	Correct	t Mea m				Detecto
		. Fre	q. z	Rea Le	evel	Correct Factor	t Mea m	ent	Limit dBuV/n		naal
No 1	o. Mk	Fre	q. z 900	Rea Le	evel BuV	Correct Factor	t Mea m dB	ent uV/m	Limit dBuV/n	n dB	peak
	o. Mk.	Fre MH 2460.9	eq. z 900	Rea Le dl 95	BuV 5.17	Correct Factor dB/m 1.06	t Mea m dB	ent uV/m 6.23	Limit dBuV/n	m dB ntal Frequency	peak AVG



Page: 46 of 76

EUT:	Panoramic WiFi Camera	Model:	FN-VRC001
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60HZ		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2462MHz		
Remark:	N/A	1 - 0	130



No.	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	2462.800	91.08	1.08	92.16	Fundamental	Frequency	AVG
2	X	2463.100	96.23	1.08	97.31	Fundamental	Frequency	peak
3		2483.500	54.03	1.17	55.20	74.00	-18.80	peak
4		2483.500	36.00	1.17	37.17	54.00	-16.83	AVG



Page: 47 of 76

EUT:			Pano	rami	ic WiF	Fi Cam	era	Mode	l:			FN-VF	RC00)1	
Tempe	eratur	ə :	25 °C	C	e in	CAN		Relati	ive H	lum	idity:	55%			P
Test V	oltage	:	AC 1	20V/	/60HZ	7		18	1		61	11,75)		
Ant. P	ol.		Horiz	onta	ıl	2	MA				6				
Test N	lode:		TX G	Мо	de 24	12MHz	Z	2		W.		a '	W		
Rema	rk:		N/A	M	A. Land		5	7 /				33			V
110.0	BuV/m														1
												3×			
										_/	(HF) FCC	PART 150	IPEAK	J	
50								‡ ×		1	(RF) FC	C PART 1	SCYAVE	i)	
								2							
-10						2373.00	2383.00		3 00	2403	.00 241	3.00	2	433.00	мн
	000 2343.	00 23	353.00	2363	.00	2373.00	2303.0	239	3.00	2400					
	000 2343.	00 23	353.00	2363.	.00	2373.00	2303.0) 239	3.00	2.400					
	000 2343.	00 23	353.00												
2333.	000 2343. Mk.			Rea	ading	g Co	orrect	Mea	asure		Limit	Ov	er		
2333.		Fre	eq.	Rea Le	ading evel	g Co	orrect actor	Mea m	asure ent	e-	Limit			Dete	cto
No.	Mk.	Fre	eq.	Rea Le	ading evel BuV	g Co Fa	orrect actor B/m	Mea m	asure ent uV/m	9-	Limit dBuV/n	n di	В	Deter	
2333. No.	Mk.	Fre MH 2390.0	eq. z	Rea Le	ading evel BuV 3.72	g Co Fa di	orrect actor B/m .77	Mea m dB	asure ent uV/m 9.49	9-	Limit dBuV/m 74.00	n di -24	B .51	pe	ak
No.	Mk.	Fre	eq. z	Rea Le	ading evel BuV	g Co Fa di	orrect actor B/m	Mea m dB	asure ent uV/m	9-	Limit dBuV/n	n di -24	В		ak
2333. No.	Mk.	Fre MH 2390.0	eq. z 0000	Rea Le di 48	ading evel BuV 3.72	g Co Fa di O	orrect actor B/m .77	Mea m dB 49	asure ent uV/m 9.49	9-	Limit dBuV/m 74.00	-24 -14	.51 .92	pe	ak /G



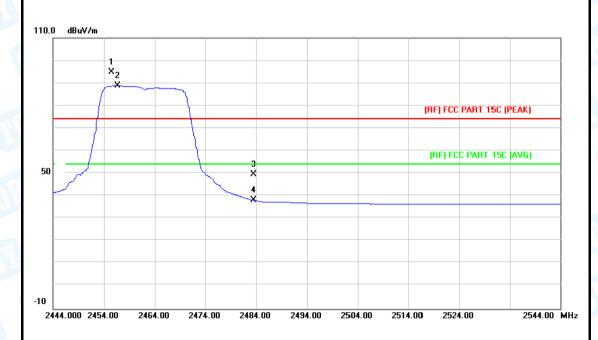
Page: 48 of 76

EUT	emperature:		Pano	oramic	WiFi	Camera	Mod	del:		FN-VRC	2001	ì
Гет	peratu	re:	25 °C	2	M	33	Rela	ative H	umidity:	55%	A BA	
Гest	Volta	ge:	AC 1	20V/6	OHZ	A.	PE		Call	1130		
۹nt.	Pol.		Verti	cal		(A)			10	100	TO THE	
Гest	Mode	:	TX G	Mode	e 2412	2MHz	- 5	4/1/10		a W		
Rem	nark:		N/A	R	de		Ø,			13		K
110.0	dBuV/m											
									(RF) FCC	3 × 4 × PART 15C (PEA	AK)	
50							1 X 2		(RF) FCC	PART 15C (AV	/G)	
					177		×					
-10												
233	34.000 23	44.00 2	354.00	2364.00) 237	74.00 2384.0	0 239	4.00 24	04.00 2414.	.00	2434.00	MH
N	o. Mk	. Fre	 eq.	Rea		Correct Factor		asure- ent	Limit	Over		
		MH	z	dBı	uV	dB/m	dB	uV/m	dBuV/m	dB	Detec	tor
		2390.	000	47.	12	0.77	47	7.89	74.00	-26.11	pea	ak
1				200	17	0.77	36	6.94	54.00	-17.06	AV	G
1		2390.	000	30.	• •							
1 2 3	X	2390. 2418.		93.		0.89	94	4.21	Fundamenta	al Frequency	pea	ak



Page: 49 of 76

EUT:	Panoramic WiFi Camera	Model:	FN-VRC001
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60HZ		The state of the s
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2462MHz	WIII DE	
Remark:	N/A		193 _ [0]

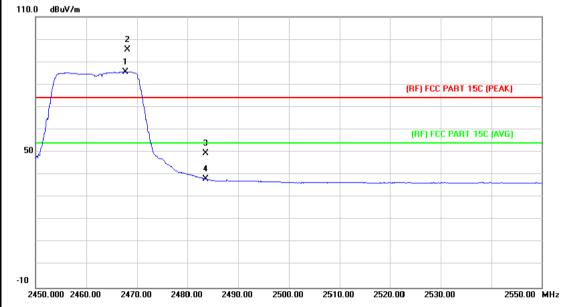


No.	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	X	2455.500	93.69	1.05	94.74	Fundamental	Frequency	peak
2	*	2456.700	87.77	1.05	88.82	Fundamental	Frequency	AVG
3		2483.500	48.39	1.17	49.56	74.00	-24.44	peak
4		2483.500	36.86	1.17	38.03	54.00	-15.97	AVG



Page: 50 of 76

EUT:	Panoramic WiFi Camera	Model:	FN-VRC001
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60HZ	37	1133
Ant. Pol.	Vertical	U	
Test Mode:	TX G Mode 2462MHz		2
Remark:	N/A		15

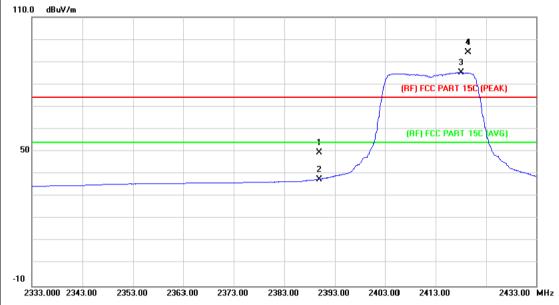


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	2467.700	84.53	1.10	85.63	Fundamenta	l Frequency	AVG
2	X	2468.000	94.43	1.11	95.54	Fundamenta	l Frequency	peak
3		2483.500	48.47	1.17	49.64	74.00	-24.36	peak
4		2483.500	37.05	1.17	38.22	54.00	-15.78	AVG



Page: 51 of 76

EUT:	Panoramic WiFi Camera	Model:	FN-VRC001					
Temperature:	25 ℃	Relative Humidity:	y : 55%					
Test Voltage:	AC 120V/60HZ	31 6	م درا					
Ant. Pol.	U							
Test Mode:	TX N(HT20) Mode 2412MHz							
Remark:	N/A		13 _ 0					
110.0 dBuV/m								
			* ×					



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	48.77	0.77	49.54	74.00	-24.46	peak
2		2390.000	36.92	0.77	37.69	54.00	-16.31	AVG
3	*	2418.100	84.34	0.89	85.23	Fundamental	Frequency	AVG
4	X	2419.500	93.23	0.89	94.12	Fundamental	Frequency	peak



Page: 52 of 76

UT	:		Panoramic WiFi Camer		Fi Camera	Mode	el:		FN-VRC001	
Гет	perati	ure:	25 °	C		Relat	Relative Humidity:		55%	A Birm
est	Volta	ge:	AC 1	120V/60H2	7	Distr		63	11:30	
۸nt.	Pol.		Verti	ical	2 AM			A F		ARIL
est	Mode) :	1XT	N(HT20) M	lode 2412M	Hz	11110			
Rem	ark:		N/A	Bir					33	
110.0	dBuV/	n								
									3 3	
									4 E PART ŤSC (PE/	
								(нгут-ес	PART ISC (PE)	AKJ
								(DE) 50	CC PART 15C (A)	(C)
50						ı X		(nr) re	JE PART 15E IA	raj
						2	_/			
		-				X				
10	34.000 2	244.00	2354.00	2364.00	2374.00 2384.	00 220	4.00 24	104.00 241	4.00	2434.00 MI
233	34.UUU Z	344.00	2334.00	2364.00	2374.00 2384.	00 239	4.00 24	104.00 Z41	4.00	2434.UU MI
				Reading	Correct	Mea	sure-			
No	. Mk	. Fre	eq.	Level	Factor		ent	Limit	Over	
		MH	Ηz	dBuV	dB/m	dBı	uV/m	dBuV/m	n dB	Detecto
1		2390.	.000	47.29	0.77	48	3.06	74.00	-25.94	peak
2		2390.	.000	34.86	0.77	35	5.63	74.00	-38.37	peak
3	*	2418.	700	92.31	0.89	93	3.20	Fundamer	ntal Frequency	peak
4	Χ	2419.	900	79.17	0.89	80	0.06	Fundamer	ntal Frequency	peak
									•	



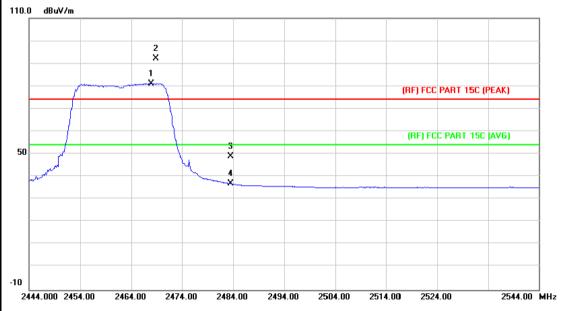
Page: 53 of 76

EUT:		Panc	ramic V	ViFi Camera	Model:		FN-VRC	2001
Tempera	ture:	25 °C		7:35	Relative	Humidity:	55%	A BANK
Test Volt	age:	AC 1	20V/60H	HZ	ALC: N	CIL	1139	
Ant. Pol.		Horiz	ontal					501
Test Mod	e:	TX N	(HT20)	Mode 2462MH	-lz		O W	The same
Remark:		N/A	ARA		1		13	
110.0 dBuV/	'm							
	2 X 1 X					(RF) FCC I	PART 15C (PEA	ıK)
50				3 × 4 ×		(RF) FCC	C PART 15C (AV	'G)
0 2444.000 2	2454.00 2	464.00	2474.00	2484.00 2494.00	0 2504.00	2514.00 2524.	.00	2544.00 M
			2474.00 Readin Level	ng Correct	Measure- ment		.oo Over	2544.00 M
2444.000 2		q.	Readin	ng Correct	Measure-	-		2544.00 M
2444.000 a	c. Fre	q. z	Readin Level	ng Correct Factor dB/m	Measure- ment	- Limit	Over dB	
2444.000 a	k. Fre	q. z	Readin Level	G Correct Factor dB/m 1.05	Measure- ment dBuV/m	Limit dBuV/m	Over dB Frequency	Detecto
No. Mi	к. Fre мн 2456.9	q. z 900	Readin Level dBuV 83.16	Correct Factor dB/m 1.05	Measure- ment dBuV/m 84.21	Limit dBuV/m	Over dB Frequency	Detector AVG peak

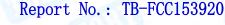


Page: 54 of 76

EUT:	Panoramic WiFi Camera	Model:	FN-VRC001
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60HZ	0.0	Time
Ant. Pol.	Vertical		
Test Mode:	TX N(HT20) Mode 2462M	Hz	
Remark:	N/A		133
110.0 dBuV/m			



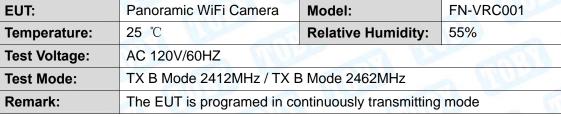
No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	2467.900	80.01	1.10	81.11	Fundamental	Frequency	AVG
2	X	2468.900	91.07	1.11	92.18	Fundamental I	requency	peak
3		2483.500	47.82	1.17	48.99	74.00	-25.01	peak
4		2483.500	35.71	1.17	36.88	54.00	-17.12	AVG

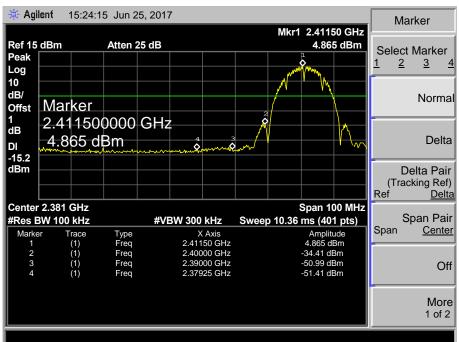


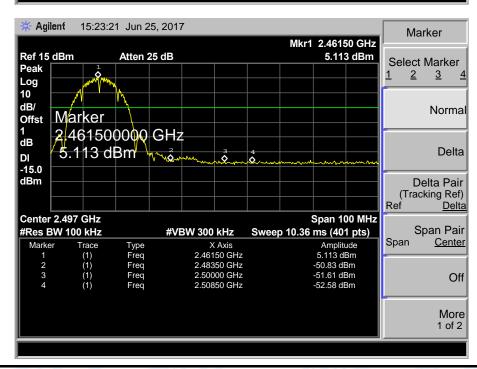


Page: 55 of 76

(2) Conducted Test



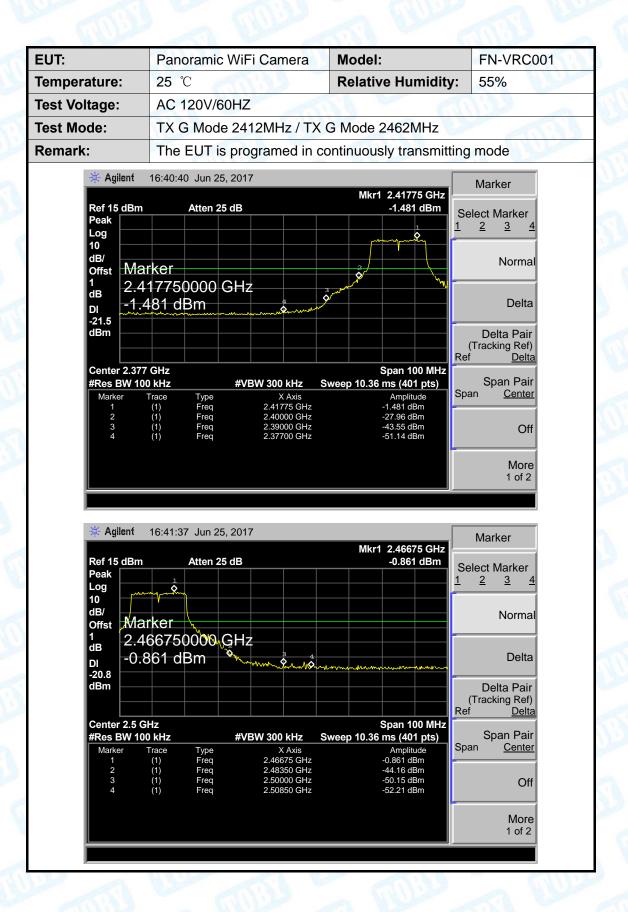








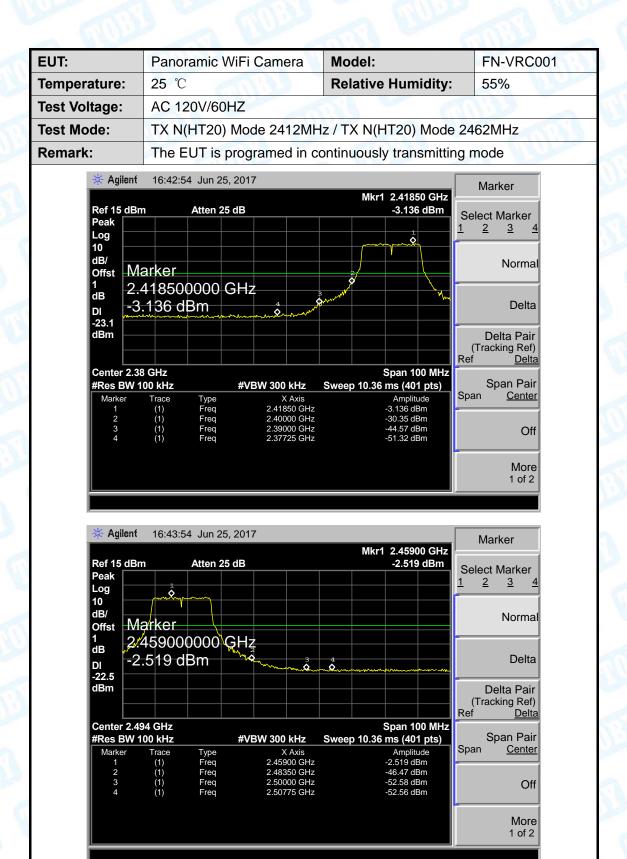
Page: 56 of 76







Page: 57 of 76





Page: 58 of 76

7. Bandwidth Test

7.1 Test Standard and Limit

7.1.1 Test Standard FCC Part 15.247 (a)(2)

7.1.2 Test Limit

FCC	FCC Part 15 Subpart C(15.247)/RSS-210				
Test Item	Test Item Limit Frequency Range(MHz)				
Bandwidth	>=500 KHz (6dB bandwidth)	2400~2483.5			

7.2 Test Setup



7.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) The bandwidth is measured at an amplitude level reduced 6dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst –case (i.e the widest) bandwidth.
- (3)Measure the channel separation the spectrum analyzer was set to Resolution Bandwidth:100 kHz, and Video Bandwidth:300 kHz, Detector: Peak, Sweep Time set auto.

7.4 EUT Operating Condition

The EUT was set to continuously transmitting in each mode and low, Digital photo framesdle and high channel for the test.

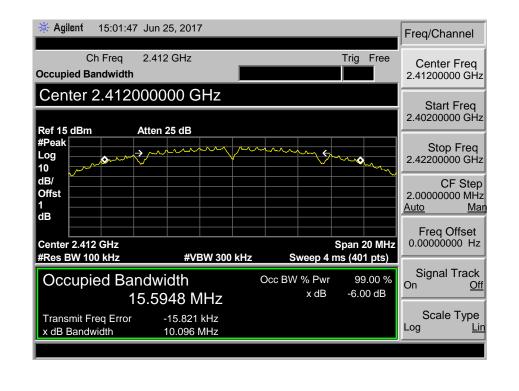


Page: 59 of 76

7.5 Test Data

EUT:	Panoramic WiFi Camera	Model:	FN-VRC001		
Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	AC 120V/60HZ				
Test Mode:	Test Mode: TX 802.11B Mode				
Channel frequence	cy 6dB Bandwidth	99% Bandwidth	Limit		
(MHz)	(MHz)	(MHz)	(MHz)		
2412	10.096	15.5948			
2437	10.094	15.4700	>=0.5		
2462	10.091	15.6018			
802.11B Mode					

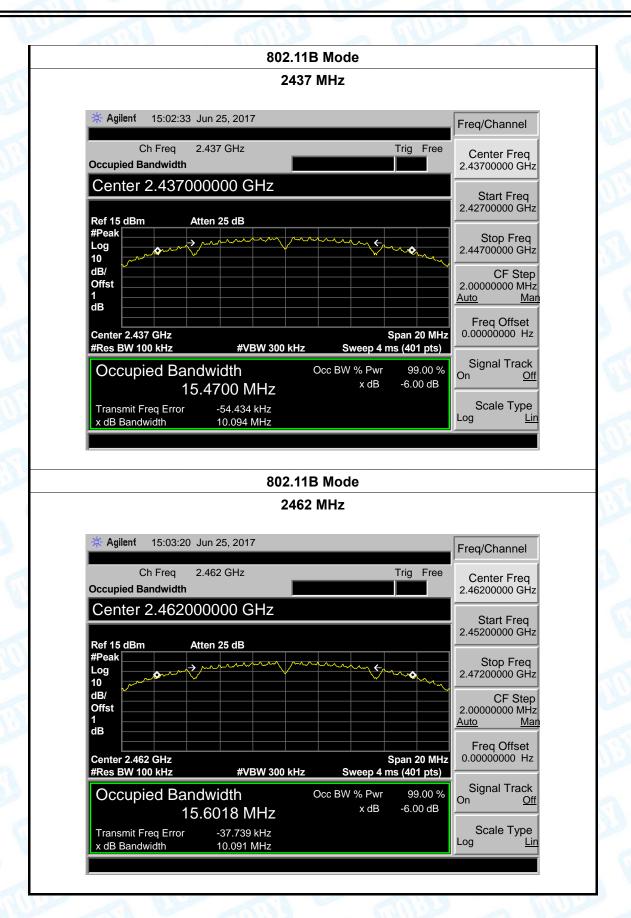
2412 MHz







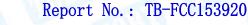
Page: 60 of 76





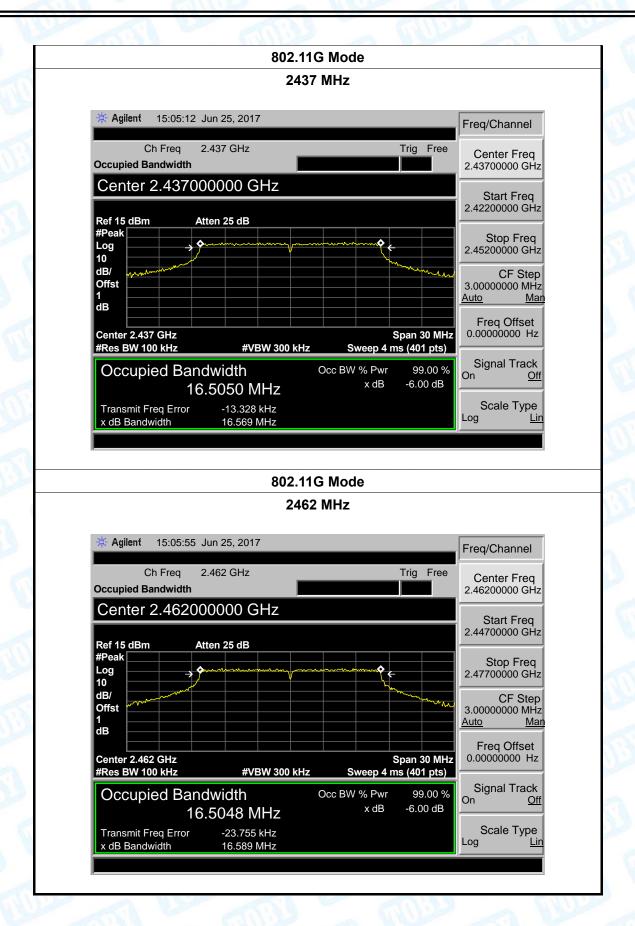
Page: 61 of 76

	Panoramic WiFi Camera	Model:	FN-VRC001
mperature:	25 ℃	Relative Humidity:	55%
est Voltage:	AC 120V/60HZ		1133
est Mode:	TX 802.11G Mode		
hannel frequen	cy 6dB Bandwidth	99% Bandwidth	Limit
(MHz)	(MHz)	(MHz)	(MHz)
2412	16.613	16.5253	
2437	16.569	16.5050	>=0.5
2462	16.589	16.5048	
	802.110	6 Mode	
	2412	MHz	
CI	15:04:22 Jun 25, 2017 n Freq 2.412 GHz	Trig Free	eq/Channel Center Freq
			eq/Channel
	n Freq 2.412 GHz	Trig Free	
Cl Occupied Ba	n Freq 2.412 GHz	Trig Free	Center Freq 41200000 GHz
Occupied Ba	n Freq 2.412 GHz ndwidth 2.412000000 GHz	Trig Free 2.	Center Freq
Center 2 Ref 15 dBm #Peak	n Freq 2.412 GHz	Trig Free 2.	Center Freq 41200000 GHz Start Freq 39700000 GHz
Center 2 Ref 15 dBm #Peak Log 10	n Freq 2.412 GHz ndwidth 2.412000000 GHz	Trig Free 2.	Center Freq 41200000 GHz Start Freq 39700000 GHz
Center 2 Ref 15 dBm #Peak Log	2.412 GHz indwidth 2.412000000 GHz	Trig Free 2.	Center Freq 41200000 GHz Start Freq 39700000 GHz
Center 2 Ref 15 dBm #Peak Log 10 dB/	2.412 GHz indwidth 2.412000000 GHz	Trig Free 2.	Center Freq 41200000 GHz Start Freq 39700000 GHz Stop Freq 42700000 GHz CF Step 00000000 MHz
Ref 15 dBm #Peak Log 10 dB/ Offst 1 dB	2.412 GHz ndwidth 2.412000000 GHz Atten 25 dB	Trig Free 2.	Center Freq 41200000 GHz Start Freq 39700000 GHz Stop Freq 42700000 GHz CF Step 00000000 MHz
Cocupied Ba Center 2 Ref 15 dBm #Peak Log 10 dB/ Offst 1	2.412 GHz ndwidth 2.412000000 GHz Atten 25 dB	Trig Free 2 2 Span 30 MHz Sweep 4 ms (401 pts)	Center Freq 41200000 GHz Start Freq 39700000 GHz Stop Freq 42700000 GHz CF Step 000000000 MHz to Man Freq Offset .00000000 Hz
Conter 2 Ref 15 dBm #Peak Log 10 dB/ Offst 1 dB Center 2.412 #Res BW 10	Atten 25 dB Atten 25 dB GHz O kHz #VBW 300 kHz	Trig Free 2 2 2 Span 30 MHz Sweep 4 ms (401 pts) Occ BW % Pwr 99.00 % On	Center Freq 41200000 GHz Start Freq 39700000 GHz Stop Freq 42700000 GHz CF Step 00000000 MHz to Man Freq Offset .00000000 Hz Signal Track
Conter 2 Ref 15 dBm #Peak Log 10 dB/ Offst 1 dB Center 2.412 #Res BW 10	Atten 25 dB Atten 25 dB GHz O kHz #VBW 300 kHz and Atten 25 dB 1	Trig Free 2 2 Span 30 MHz Sweep 4 ms (401 pts)	Center Freq 41200000 GHz Start Freq 39700000 GHz Stop Freq 42700000 GHz CF Step 00000000 MHz to Man Freq Offset .00000000 Hz Signal Track



Page: 62 of 76







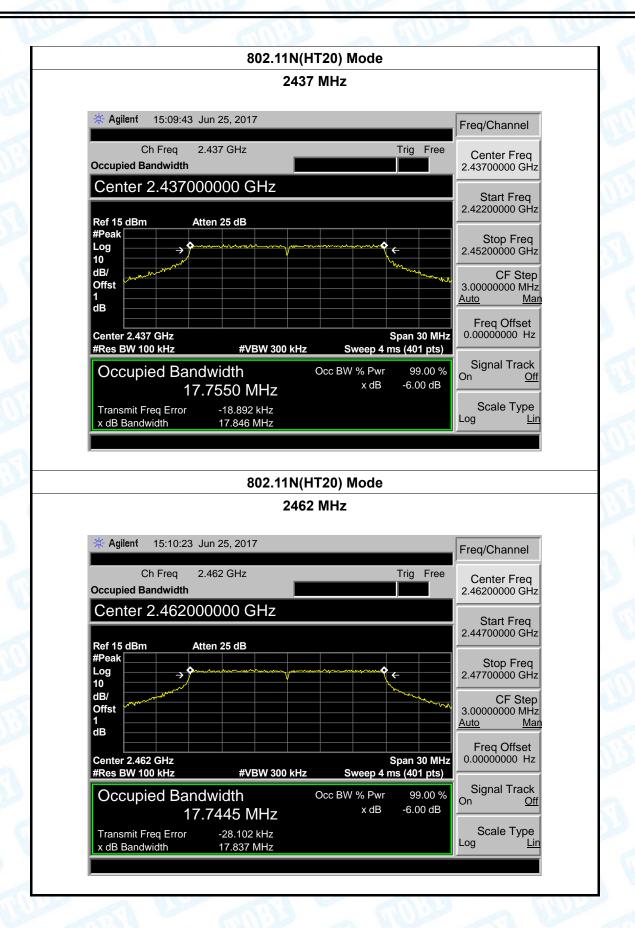
Page: 63 of 76

IT:	Panoramic WiFi Camera	Model:	FN-VRC001
mperature:	25 ℃	Relative Humidity:	55%
st Voltage:	AC 120V/60HZ		1133
st Mode:	TX 802.11N(HT20) Mode		Till
annel frequen	cy 6dB Bandwidth	99% Bandwidth	Limit
(MHz)	(MHz)	(MHz)	(MHz)
2412	17.830	17.7462	
2437	17.846	17.7550	>=0.5
2462	17.837	17.7445	
	802.11N(H	T20) Mode	1
	2412	MHz	
Occupied Ba		Trig Free	eq/Channel Center Freq 41200000 GHz
Occupied Ba	2.412 GHz andwidth 2.412000000 GHz	Trig Free 2.	Center Freq
Center 2 Ref 15 dBm #Peak Log	h Freq 2.412 GHz	Trig Free 2.	Center Freq 41200000 GHz
Cocupied Ba Center 2 Ref 15 dBm #Peak Log 10 dB/ Offst 1	2.412 GHz 2.412000000 GHz Atten 25 dB	Trig Free 2.	Center Freq 41200000 GHz Start Freq 39700000 GHz Stop Freq 42700000 GHz CF Step 000000000 MHz
Coccupied Ba Center 2 Ref 15 dBm #Peak Log 10 dB/ Offst 1 dB Center 2.412	2.412 GHz andwidth 2.412000000 GHz Atten 25 dB	Trig Free 2. 2. 2. 3. Au Span 30 MHz	Center Freq 41200000 GHz Start Freq 39700000 GHz Stop Freq 42700000 GHz CF Step 000000000 MHz
Center 2 Ref 15 dBm #Peak Log 10 dB/ Offst 1 dB Center 2.412 #Res BW 101	Atten 25 dB 2 GHz 0 kHz #VBW 300 kHz	Trig Free 2. 2. 2. Span 30 MHz Sweep 4 ms (401 pts)	Center Freq 41200000 GHz Start Freq 39700000 GHz Stop Freq 42700000 GHz CF Step 000000000 MHz to Man Freq Offset .00000000 Hz Signal Track



Page: 64 of 76







Page: 65 of 76

8. Peak Output Power Test

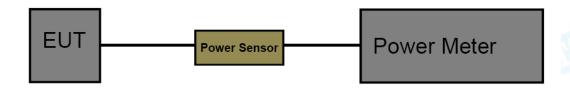
8.1 Test Standard and Limit

8.1.1 Test Standard FCC Part 15.247 (b)

8.1.2 Test Limit

FCC Part 15 Subpart C(15.247)/RSS-210					
Test Item Limit Frequency Range(MHz)					
Peak Output Power 1 Watt or 30 dBm 2400~2483.5					

8.2 Test Setup



8.3 Test Procedure

The measurement is according to section 9.1.2 of KDB 558074 D01 DTS Meas Guidance v04. The EUT was connected to RF power meter via a broadband power sensor as show the block above. The power sensor video bandwidth is greater than or equal to the DTS bandwidth of the equipment.

8.4 EUT Operating Condition

The EUT was set to continuously transmitting in the max power during the test.



Page: 66 of 76

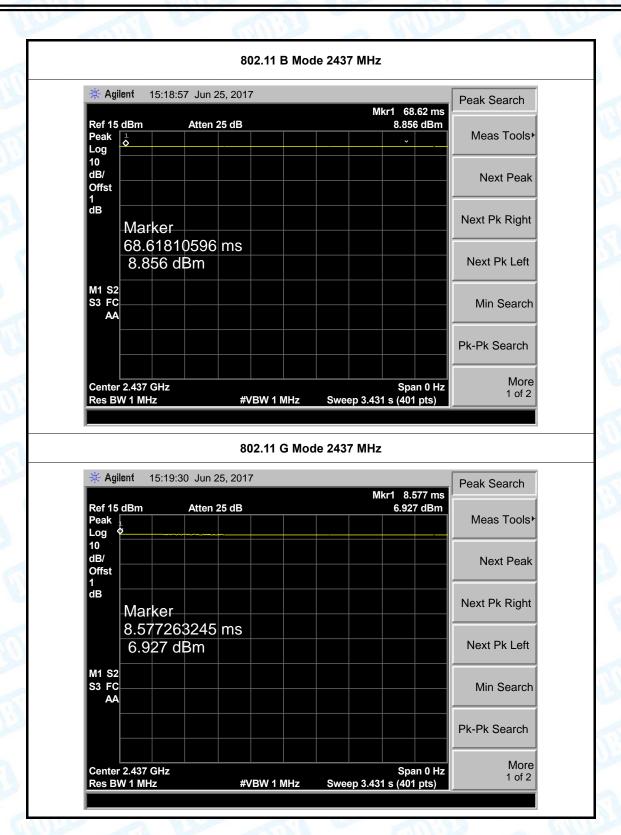
8.5 Test Data

EUT:	Panoramic WiFi Came	era	Model:	FN-VRC001
Temperature:	25 ℃		Relative Humidity	: 55%
Test Voltage:	AC 120V/60HZ	132		
Mode	Channel frequency (MHz)	Te	st Result (dBm)	Limit (dBm)
	2412		17.59	
802.11b	2437	2437 17.67 2462 17.46		
	2462			
	2412		15.84	
802.11g	2437	16.20 16.07 15.07		30
	2462			
000 44	2412			
802.11n (HT20)	2437		15.39	
(11120)	2462	14.93		
	Resu	ılt:	PASS	

Duty Cycle				
Mode	Channel frequency (MHz)	Test Result		
802.11b	2412			
	2437			
	2462			
	2412			
802.11g	2437	>98%		
	2462			
000 44	2412			
802.11n (HT20)	2437			
(11120)	2462			

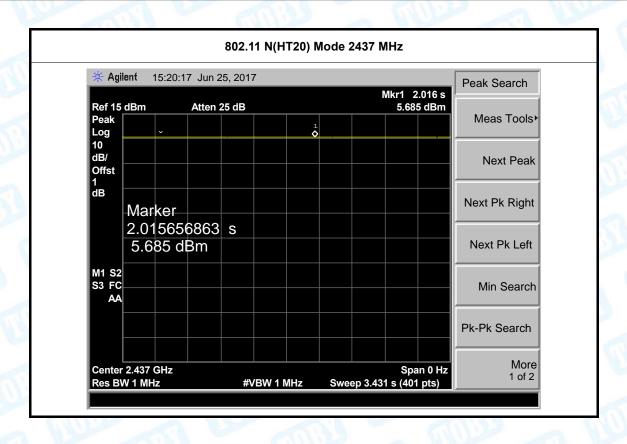


Page: 67 of 76





Page: 68 of 76





Page: 69 of 76

9. Power Spectral Density Test

9.1 Test Standard and Limit

9.1.1 Test Standard FCC Part 15.247 (e)

9.1.2 Test Limit

FCC Part 15 Subpart C(15.247)					
Test Item	Test Item Limit Frequency Range(MHz)				
Power Spectral Density 8dBm(in any 3 kHz) 2400~2483.5					

9.2 Test Setup



9.3 Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement according to section 10.2 of KDB 558074 D01 DTS Meas Guidance v04.

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Set analyser center frequency to DTS channel center frequency.
- (3) Set the span to 1.5 times the DTS bandwidth.
- (4) Set the RBW to: 3 kHz(5) Set the VBW to: 10 kHz
- (6) Detector: peak(7) Sweep time: auto
- (8) Allow trace to fully stabilize. Then use the peak marker function to determine the maximum amplitude level.

9.4 EUT Operating Condition

The EUT was set to continuously transmitting in each mode and low, Digital photo framesdle and high channel for the test.



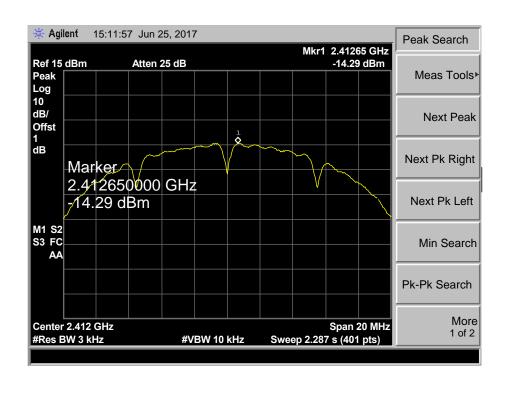
Page: 70 of 76

9.5 Test Data

	EUT:	Panorami	c WiFi Camera	Model:	FN-VRC001	
4	Temperature:	25 ℃		Relative Humidity:	55%	
9	Test Voltage:	AC 120V/60HZ				
ě	Test Mode:	TX 802.11B Mode				
I	Channel Frequency		Power Density		Limit	
	(MHz)		(dBm/3 kHz)		(dBm)	
	2412		-14.2	29		
	2437		-13.65		8	
	2462		-13.0	03		
Ī			002 11D	Mode		

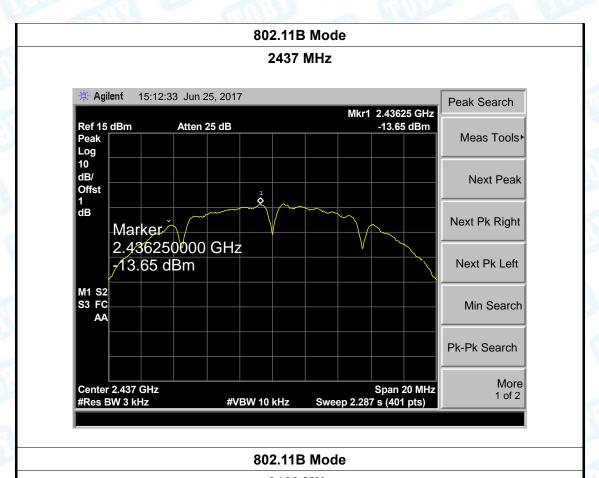
802.11B Mode

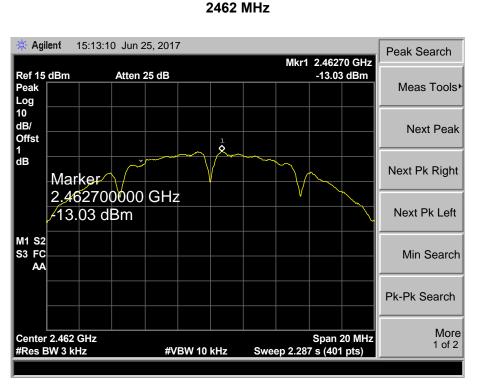
2412 MHz





Report No.: TB-FCC153920 Page: 71 of 76

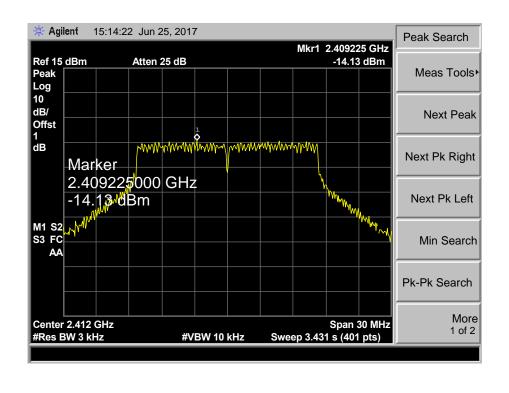






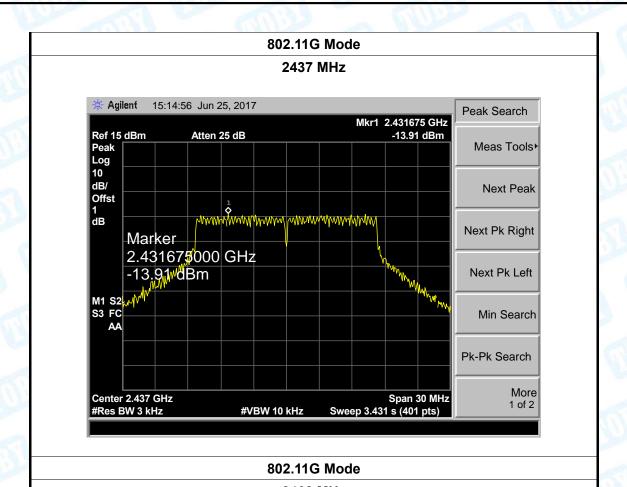
72 of 76 Page:

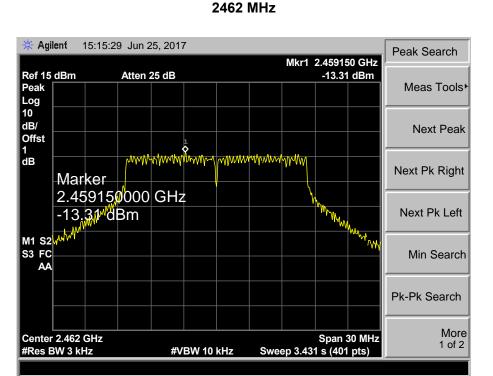
EUT:	Panoram	ic WiFi Camera	Model:	FN-VRC001	
Temperature:	25 ℃		Temperature:	25 ℃	
Test Voltage:	AC 120V	60HZ		M:33	
Test Mode:	TX 802.1	1G Mode			
Channel Frequency		Power Density		Limit	
(MHz)		(dBm/3 kF	łz)	(dBm)	
2412		-14.13			
2437		-13.91		8	
2462		-13.31			
		802.11G M	ode		
		2412 MH	7		





Report No.: TB-FCC153920 Page: 73 of 76



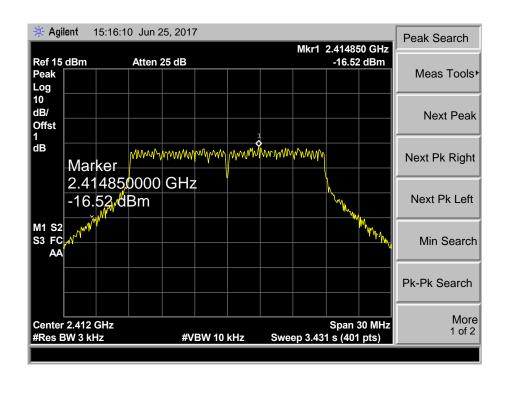




Page: 74 of 76

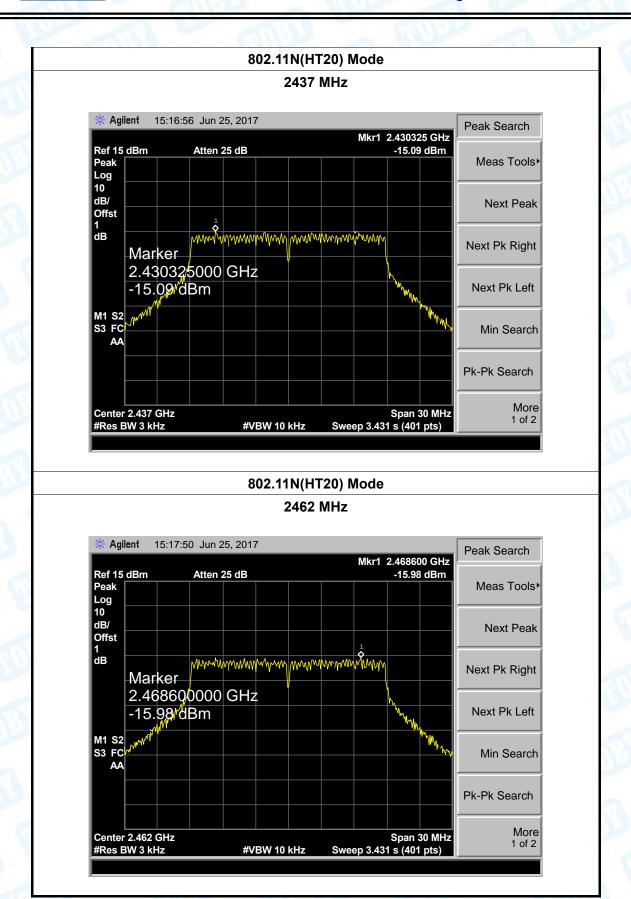
EUT:	Panorami	c WiFi Camera	Model:	FN-VRC001	
Temperature:	25 ℃		Temperature:	25 ℃	
Test Voltage:	AC 120V/60HZ				
Test Mode:	TX 802.11N(HT20) Mode				
Channel Frequency		Power Density		Limit	
(MHz)		(dBm/3 l	kHz)	(dBm)	
2412		-16.52	2		
2437 2462		-15.09 -15.98		8	
		802.11N(HT2	0) Mode		

2412 MHz





Page: 75 of 76





Page: 76 of 76

10. Antenna Requirement

10.1 Standard Requirement

10.1.1 Standard FCC Part 15.203

10.1.2 Requirement

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

10.2 Antenna Connected Construction

The directional gains of the antenna used for transmitting is 4.5dBi, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

Result

The EUT antenna is a FPC Antenna. It complies with the standard requirement.

	Antenna Type	
3	Permanent attached antenna	CHIL
65		
	Professional installation antenna	Miller

----END OF REPORT----