



FCC LISTED, REGISTRATION NUMBER: 2764.01

ISED LISTED REGISTRATION NUMBER: 23595-1

Test Report No: 4892ERM.006

Test report

USA FCC Part 15.207, 15.209, 15.247, 15.249, 15.31(h), 15.407, 22, 24, 27 CANADA RSS-Gen, RSS-130, RSS-132, RSS-133, RSS-139, RSS-247

(*) Identification of item tested	Wireless Alarm System with Integrated Home Automation
(*) Trademark	Qolsys
(*) Model and /or type reference	IQPanel5
(*) Derived model not tested	IQ5 Hub, IQ5 NS
Other identification of the product	FCC ID: 2AAJXQSIQP5 IC ID: 11205A-QSIQP5
(*) Features	LTE, BLE, Wi-Fi, Z-Wave, Power G
Manufacturer	Qolsys Inc. 1919 S Bascom Ave., Suite 600, Campbell, CA 95008, USA
Test method requested, standard	USA FCC Part 15.247, 06-1-20 Edition: Operation within the bands 902 - 928 MHz, 2400 -2483.5 MHz, and 5725 - 5850 MHz. USA FCC Part 15.249 10-1-20 Edition: Operation within the bands 902 - 928 MHz, 2400 -2483.5 MHz, 5725 - 5875 MHz, and 24.0 – 24.25 GHz. USA FCC Part 15.407 03-8-24 Edition: Unlicensed National Information Infrastructure Devices. General technical requirements. USA FCC Part 15.209 06-8-21 Edition: Radiated emission limits; general requirements. FCC Part 22, 24 & 27 (10-1-21 Edition). CANADA RSS-247 Issue 3, August 2023. CANADA RSS-130 Issue 2, February 2019. CANADA RSS-130 Issue 2, February 2019. CANADA RSS-133 Issue 6, Amendment 1 (March 2019). CANADA RSS-139 Issue 4, September 2022. FCC KDB 971168 D01 v03r01 Power Meas License Digital Systems FCC KDB 558074 D01 15.247 Meas Guidance v05r02. Guidance for Compliance Measurements on Digital Transmission Systems, Frequency Hopping Spread Spectrum System, and Hybrid System Devices Operating Under section §15.247 of the FCC Rules ANSI C63.10-2013: American National Standard for Testing Unlicensed Wireless Devices.
Summary	IN COMPLIANCE
Approved by (name / position & signature)	Domingo Galvez EMC&RF Lab Manager
Date of issue	02-21-2025
Report template No	FDT08_23 (*) "Data provided by the client"



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Acronyms

Acronym ID	Acronym Description
# of Tx Chains	Number of Transmission Chains
BEL	Band Edge Left
BER	Band Edge Right
DC	Duty Cycle
Freq	Frequency
Freq Rng	Frequency Range
Lvl Meas Pk	Level Pre Measurement Peak
MP	Measurement Point
MU	Medium Utilization Factor
Max EIRP	Maximum Burst EIRP
Max RMS	Maximum Burst RMS
Max Tx Seq	Maximum Transmission Sequence Time
Min Tx Gap	Minimum Transmission Gap Time
Mod	Modulation
Occ Ch BW	Occupied Channel Bandwidth
PSD	Power Spectrum Density
Port	Active Port
Т	Temperature
Unwanted Freq	Unwanted Emissions Frequency
Unwanted Lvl	Unwanted Emissions Level

Competences and guarantees

DEKRA Certification Inc. is a testing laboratory accredited by A2LA (The American Association for Laboratory Accreditation), to perform the tests indicated in the Certificate 2764.01

DEKRA Certification Inc. is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA Certification Inc. has a calibration and maintenance program for its measurement equipment.

DEKRA Certification Inc. guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated on the report and, it is based on the knowledge and technical facilities available at DEKRA Certification at the time of performance of the test.

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The results presented in this Test Report apply only to the particular item under test established in this document.

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Uncertainty

Uncertainty (factor k=2) was calculated according to the DEKRA Certification internal document PODT000.

Test case	Frequency (MHz)	U (k=2)	Units
Radiated Spurious Emission	30-180	4.27	dB
	180-1000	3.14	dB
	1000-18000	3.30	dB
	18000-40000	3.49	dB

Data provided by the client

The following data has been provided by the client:

- 1. Information relating to the description of the sample ("Identification of the item tested", "Trademark", "Model and/or type reference tested").
- 2. The sample consists of IQPanel5 is a wireless alarm system that monitors protected premises and sends alarms via LTE cellular network or Wi-Fi to a compatible alarm receiver at the monitoring station. It receives alarms from PowerG fire/intrusion initiating devices, it has integral siren and touch screen display. It also contains Z-Wave interface for controlling home automation devices. It is powered via an external power adapter rated 12Vdc/1A and it has an internal back-up battery for 24h standby.

DEKRA declines any responsibility with respect to the information provided by the client and that may affect the validity of results.



Usage of samples

Samples undergoing test have been selected by: The client. Sample S/01 is composed of the following elements, accessories and auxiliary equipment:

ld	Control Number	Description	Manufacturer/ Model	Serial Nº	Date of Reception	Application
S/01	4892/04	Colocation (TX)(Radiated)	Qolsys/IQPanel5	QP5017X062447G09149	02/03/2025	Element Under Test
S/01	4892/09	Laptop	DELL/ Latitude 5400	8H6J733	12/18/2024	Accessory
S/01	4892/12	USB to Micro USB			12/18/2024	Accessory

1. Sample S/01 was used for the test(s): All Radiated tests indicated in appendix A.



Test sample description

Ports:			Cable				
	Port name and description		Specified length [m]	Attached during test	Shielded	Coupled to patient	
	Ether card i	net (when EThernet s populated)					
Supplementary information to the ports	No da	ta provided	1			1	
Rated power supply	Voltage and Frequency			Reference poles			
			L1	L2 I	.3 N	PE	
		AC: 120Vac/60Hz/0.68A					
		AC:					
		DC: 12V/1A external a	dapter (par	t of the EU	Г)		
		DC: rechargeable 3.7	/, 3000mAh	lithium-ion	battery		
Rated Power:	12W						
Clock frequencies:	24MHz, 39MHz, 38.4 MHz						
Other parameters	No Data Provided						
Software version	5.0.1						
Hardware version:	QB9501 Rev. OA						
Dimensions in cm (W x H x D):	15.5 x 19.1 x 2.6						
Mounting position	Table top equipment						
		Wall/Ceiling mounted	equipment				
		Floor standing equipm	ent				
		Hand-held equipment					
		Other:					



Modules/parts	Module/parts of test item	Туре	Manufacturer
	IQPanel5 Control Panel	Panel	Qolsys
	AC/DC Power adapter (use	Power Supply	Sure-Power
	for conducted EMC)		
	Ethernet card (optional) (use	Card	Qolsys
	for EMC testing)		
	SRF319 security receiver card	Card	Qolsys
	(optional)(use for EMC		
Accessories (not part of the test item)	Description	Туре	Manufacturer
	No data provided		
Documents as provided by the	Description	File name	Issue date
	Block Diagram and	FDT30_18 Declaration	01/28/2025
	Operational description	Equipment Data signed	
	Internal/External photos		
	Manual/Labels		
	Copy of marking plate:		
MODEL: IQPanel: P/N:IQP5017 Rated 7V=== ,1.0A	SN: QP5017X06	2447G09150 Made in China	

Identification of the client

Qolsys Inc., 1919 S Bascom Ave., Suite 600, Campbell, CA 95008, USA

Testing period and place

Test Location	DEKRA Certification Inc.
Date (start)	02-03-2025
Date (finish)	02-04-2025



Document history

Report number	Date	Description
4892ERM.006	02-21-2025	First release

Environmental conditions

In the control chamber, the following limits were not exceeded during the test:

Temperature	Min. = 15 °C Max. = 35 °C
Relative humidity	Min. = 30 % Max. = 75 %
Air pressure	Min. = 860 mbar Max. = 1060 mbar

In the semi-anechoic chamber, the following limits were not exceeded during the test.

Temperature	Min. = 15 °C Max. = 35 °C
Relative humidity	Min. = 30 % Max. = 75 %
Air pressure	Min. = 860 mbar Max. = 1060 mbar

In the chamber for conducted measurements, the following limits were not exceeded during the test:

Temperature	Min. = 15 °C Max. = 35 °C
Relative humidity	Min. = 30 % Max. = 60 %
Air pressure	Min. = 860 mbar Max. = 1060 mbar

Remarks and comments

The tests have been performed by the technical personnel: Madhava Gooduru, and Koji Nishimoto.



Testing verdicts

Fail	F
Not applicable	N/A
Not measured	N/M
Pass	Р

Summary

FCC PART 15 PARAGRAPH / RSS-247 (Bluetooth LE & Power G)			
Requirement – Test case	Verdict	Remark	
FCC 15.247 (a) (1) / RSS-247 5.1 (b) - 20 dB Bandwidth	N/M	Refer 1	
FCC 2.1049 / RSS-GEN 6.7 - 99dBw Occupied Channel Bandwidth 99%	N/M	Refer 1	
FCC 15.247 (a) (1) / RSS-247 5.1 (b) - Carrier Frequency Separation	N/M	Refer 1	
FCC 15.247 (a) (1) (iii) / RSS-247 5.1 (d) - Time of Occupancy (Dwell Time)	N/M	Refer 1	
FCC 15.247 (a) (1) (iii) / RSS-247 5.1 (d) - Number of hopping channels	N/M	Refer 1	
FCC 15.247 (b) (3)/ RSS-247 5.4 (d) - Maximum Peak Conducted output power & Antenna gain	N/M	Refer 1	
FCC 15.247 (d) / RSS-247 5.5 - Band-edge emissions compliance (Transmitter) - Conducted	N/M	Refer 1	
FCC 15.247 (d) / RSS-247 5.2 (b) - Power Spectral Density	N/M	Refer 1	
FCC 15.247 (d) / RSS-247 5.5 - Emissions compliance (Transmitter) - Conducted	N/M	Refer 1	
FCC 15.247 (d) / RSS-247 5.5 - Emissions compliance (Transmitter) - Radiated	Pass	N/A	
Supplementary information and remarks:			
1. Only multi-transmitter radiated spurious emission test was requested.			

FCC PART 15 PARAGRAPH / RSS-247 (Z-Wave (long range) & Wi-Fi 2.4GHz)			
Requirement – Test case	Requirement – Test case Verdict Remark		
FCC 2.1049 / RSS-GEN 6.7 - 99dBw Occupied Channel Bandwidth 99%	N/M	Refer 1	
FCC 15.247 (a) (2) / RSS-247 5.2 (a) - 6dB Bandwidth	N/M	Refer 1	
FCC 15.247 (b) (3) / RSS-247 5.4 (d) - Maximum Peak Conducted output power & Antenna gain	N/M	Refer 1	
FCC 15.247 (d) / RSS-247 5.5 - Band-edge emissions compliance (Transmitter) - Conducted N/M		Refer 1	
FCC 15.247 (d) / RSS-247 5.2 (b) - Power Spectral Density N/M Refe		Refer 1	
FCC 15.247 (d) / RSS-247 5.5 - Emissions compliance (Transmitter) - Conducted N/M Refer 1			
FCC 15.247 (d) / RSS-247 5.5 - Emissions compliance (Transmitter) - Radiated	Pass	N/A	
Supplementary information and remarks:			
1. Only multi-transmitter radiated spurious emission test was requested.			



FCC PART 15 PARAGRAPH / RSS-247 (Wi-Fi 5GHz)			
Requirement – Test case	Verdict	Remark	
FCC 15.407 (a) / RSS-247 6.2 - Power Limits. Maximum Output Power	N/M	Refer 1	
FCC 15.407 (a) / RSS-247 6.2 - Maximum Power Spectral Density	N/M	Refer 1	
FCC 2.1049 / RSS-Gen 6.7 - 99% Occupied Bandwidth	N/M	Refer 1	
FCC 15.403 / RSS-Gen 6.7 - 26 dB Emission Bandwidth N/M Ref		Refer 1	
FCC 15.407 (b) / RSS-247 6.2 - Band-edge Conducted Emissions N/M R		Refer 1	
FCC 15.407 (e) / RSS 247 6.2.4.1 - 6 dB Emission Bandwidth N/M Refer			
FCC 15.407 (b), 15.205 & 15.209 / RSS-Gen 8.9 & 8.10 - Undesirable radiated emissions Pass N/A			
Supplementary information and remarks:			

FCC PART 22/ IC RSS-132 PARAGRAPH - Public Mobile Services			
Requirement – Test case Verdict Remark			
FCC 2.1046 & 22.913/ RSS-132 Clause 5.4 RF Output power	N/M	Refer 1	
FCC 2.1047 /RSS-132 Clause 5.2 Modulation characteristics N/M Refer 1		Refer 1	
FCC 2.1055 & 22.355/ RSS-132 Clause 5.3 Frequency stability N/M Refer 1		Refer 1	
FCC 2.1049 Occupied Bandwidth N/M Re		Refer 1	
FCC 2.1051 & 22.917/ RSS-132 Clause 5.5 Spurious emissions at antenna terminals N/M Refer 1			
FCC 22.917/ RSS-132 Clause 5.5 Radiated Emissions Pass N/A			
Supplementary information and remarks:			
1. Only multi-transmitter radiated spurious emission test was requested.			

FCC PART 24/ IC RSS-133 PARAGRAPH - Personal Communications Services			
Requirement – Test case	Verdict	Remark	
FCC 24.232/ RSS-133 Clause 6.4 RF Output power	N/M	Refer 1	
FCC 2.1047/ RSS-133 Clause 6.2 Modulation characteristics	N/M	Refer 1	
FCC 24.235/ RSS-133 Clause 6.3 Frequency stability N/M Refer		Refer 1	
FCC 2.1049 Occupied Bandwidth N/M Ref		Refer 1	
FCC 24.238/ RSS-133 Clause 6.5 Spurious emissions at antenna terminals N/M Refer		Refer 1	
FCC 24.238/ RSS-133 Clause 6.5 Radiated Emissions Pass N/A			
Supplementary information and remarks:			
1. Only multi-transmitter radiated spurious emission test was requested.			



FCC PART 27/ IC RSS-139/ IC RSS-130 PARAGRAPH – Miscellaneous Wireless Communications Services			
Requirement – Test case	Verdict	Remark	
FCC 27.50/ RSS-139 Clause 6.5/ RSS-130 Clause 4.4 RF Output power	N/M	Refer 1	
FCC 2.1047/ RSS-139 Clause 6.2/ RSS-130 Clause 4.1 Modulation characteristics	N/M	Refer 1	
FCC 27.54/ RSS-139 Clause 6.4/ RSS-130 Clause 4.3 Frequency stability N/M Refer			
FCC 2.1049 Occupied Bandwidth	N/M	Refer 1	
FCC 27.53/ RSS-139 Clause 6.6/ RSS-130 Clause 4.6 Spurious emissions at antenna terminals N/M Refer 1			
FCC 27.53/ RSS-139 Clause 6.6/ RSS-130 Clause 4.6 Radiated Emissions	Pass	N/A	
Supplementary information and remarks:			
1. Only multi-transmitter radiated spurious emission test was requested.			

List of equipment used during the test

Radiated Measurements

CONTROL NUMBER	DESCRIPTION	MANUFACTURER MODEL		LAST CALIBRATION	NEXT CALIBRATION
981	RF pre-amplifier	Bonn Elektronik	BLMA0118-2A	2024-02-21	2026-02-21
1014	FSV40 Signal Analyzer 40GHz	Rohde & Schwarz	FSV40	2024-10-04	2026-10-04
1056	3116C Double-Ridged Waveguide Horn Antennas	ETS Lindgren	3116C	2024-07-01	2027-07-01
1057	Double-ridge Waveguide Horn antenna	ETS Lindgren	3115	2023-07-18	2026-07-18
1064	Biconical Log antenna	ETS Lindgren	3142E	2021-12-16	2025-2-16
1108	Ethernet SNMP Thermometer- CR Room	HW Group	HWg-STE Plain	2022-10-18	2025-10-18
1111	Ethernet SNMP T Thermometer	HW Group	HWg-STE Plain	2022-10-18	2025-10-18
1179	Semi anechoic Absorber Lined Chamber	Frankonia	SAC 3 plus "L"	N/A	N/A
1314	Wireless Measurement Software R&S EMC32	Rohde & Schwarz	N/A	N/A	N/A
1374	EMI Test Receiver	Rohde & Schwarz	ESR7	2024-06-05	2026-06-05



Appendix A: FCC Multi-transmitters Test Results



Appendix A Content

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PRODUCT INFORMATION

The following information is provided by the supplier

Information	Description
Modulation	Cellular LTE: QPSK, 16QAM
	BLE 2.4GHz: GFSK
	PowerG: GFSK
	Z-Wave (normal): FSK, GFSK
	Z-Wave (long range): FSK, GFSK
	Wi-Fi 2.4GHz: DSSS, OFDM, MIMO-OFDM
	Wi-Fi 5GHz: DSSS, OFDM, MIMO-OFDM
Operation mode 1: Single Antenna Equipment	
 Operating Frequency Range 	Cellular LTE: 2,4,5,7,12,13,14,25,26,66,71
	BLE 2.4GHz: 2400 - 2483.5 MHz
	PowerG: 912.75 - 919.107MHz
	Z-Wave (normal): 908.4MHz, 916MHz
	Z-Wave (long range): 912MHz, 920MHz
	Wi-Fi 2.4GHz: 2402 - 2483.5 MHz
	Wi-Fi 5GHz: 5150 - 5250 MHz, 5250 – 5350 MHz, 5470 – 5725 MHz, 5725 – 5875 MHz
- RF Output Power	Cellular LTE: +23dBm +/-2dB
	BLE 2.4GHz: +7dBm +/-3dB
	PowerG: +14dBm
	Z-Wave (normal): +14dBm
	Z-Wave (long range): +20dBm
	Wi-Fi 2.4GHz: +16.5dBm +/-3dB
	Wi-Fi 5GHz: +15.5dBm +/-3dB
Antenna type	chip antenna (ANT3, Vigorconn P/N 3.N101.0770) on the main board
Antenna gain	Cellular LTE:
	Band 71: 617-698 MHz -1.1 dBi
	Band 12: 699-746 MHz -0.9 dBi
	Band 13: 746-787 MHz +1.5 dBi
	Band 14: 758-798 MHz +2.4 dBi
	Bands 5, 26: 814-894 MHz +1.7 dBi
	Bands 4, 66: 1710-1780 MHz +4.1 dBi
	Bands 2, 25: 1850-1995 MHz +3.0 dBi
	Band 7: 2500-2690 MHz +0.4 dBi
	BLE 2.4GHz: 3dBi
	PowerG: 0.41dBi
	Z-Wave (normal): -2.16dBi (908.4MHz), -0.66dBi (916MHz)
	Z-Wave (long range): N/A
	WI-FI 2.4GHZ: 3dBi
	WI-FI 5GHZ: 40BI
Nominal Voltage	
- Supply Voltage	12 Vdc
- Type of power source	DC Voltage
Equipment type	Cellular LTE, BLE 2.4GHz, PowerG, Z-wave (long range), Wi- Fi 2.4 GHz, Wi-Fi 5 GHz



TEST CONDITIONS

	DESCRIPTION					
	Power supply (V):					
	12 Vdc Test Frequencies for Radiated	tests:				
						_
	Technology	Tested Frequency (MHz)	BW (MHz)	Modulation	Mode	
TC/01 ⁽¹⁾	Cellular LTE	1732.5	10	QPSK	Band 4	1
	Z-Wave (long range)	920	1.5	GFSK		1
	PowerG	919.12	0.118	GFSK		1
	Wi-Fi 2.4 GHz	2412	20	OFDM	g mode	_
TEST	The test was performed with the 2.4GHz radios simultaneously. of the multi-transmitter of all radios	ne equipment tran These measurem dio interfaces that	smitting w ents have can be tra	ith Cellular LTE been performed nsmitting simult	, Z-wave, PowerG ar I in order to check the aneously.	ıd Wi-Fi ∍ impact
CONDITIONS		DESCI	RIPTION			
	Power supply (V): 12 Vdc Test Frequencies for Radiated	<u>tests:</u>				
	Technology	Tested Frequency (MHz)	BW (MHz)	Modulation	Mode	
TC/02 ⁽¹⁾	Cellular LTE	1732.5	10	QPSK	Band 4	1
	Z-Wave (long range)	920	1.5	GFSK]
	PowerG	919.12	0.118	GFSK		
	BTLE	2440	1	GFSK	1 mbps	
TEST CONDITIONS	The test was performed with the equipment transmitting with Cellular LTE, Z-wave, PowerG and BTLE radios simultaneously. These measurements have been performed in order to check the impact of the multi-transmitter of all radio interfaces that can be transmitting simultaneously. DESCRIPTION					
	Power supply (V): 12 Vdc Test Frequencies for Radiated	tests:				
	Technology	Tested Frequency (MHz)	BW (MHz)	Modulation	Mode	
TC/03 ⁽¹⁾	Cellular LTE	1732.5	10	QPSK	Band 4]
	Z-Wave (long range)	920	1.5	GFSK]
	PowerG	919.12	0.118	GFSK		
	Wi-Fi 5 GHz	5755	40	OFDM	ac mode	
	The test was performed with th radios simultaneously. These r	e equipment trans neasurements ha	smitting wit ve been po	h Cellular, Z-wa erformed in orde	ive, PowerG and Wi- er to check the impac	Fi 5GHz ct of the

Multi-transmitter of all radio interfaces that can be transmitting simultaneously. Note (1): The following tables and plots show the results for the worst case in Cellular LTE, Z-Wave (long range), Power G, BTLE, Wi-Fi 2.4 GHz, and Wi-Fi 5 GHz



TEST A.1: EMISSION LIMITATIONS RADIATED (TRANSMITTER)

	Product standard:	USA FCC Part 15.207, 15.209, 15.247, 15.249, 15.407, Part 22,24,27 CANADA RSS-247, RSS-132,133,139,130, RSS-Gen
LIMITS:	Test standard:	Part 15 Subpart C §15.247 (d), 15.407 (b), FCC §2.1053 and §22.917, FCC §2.1046 and §24.232, FCC §2.1046 and §27.50 and RSS-Gen 8.9 and 8.10, RSS-132 Clause 5.5, RSS-133 Clause 6.4, RSS-139 Clause 6.6, RSS-130 Clause 4.6

<u>LIMITS</u>

According to specification. the power of emissions shall be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB. P in watts.

At Po transmitting power, the specified minimum attenuation becomes 43+10log (Po), and the level in dBm relative Po becomes:

Po (dBm) – [43 + 10 log (Po in mwatts) - 30] = -13 dBm

TEST SETUP

All radiated tests were performed in a semi-anechoic chamber. The measurement antenna is situated at 3 m for the frequency range 30-1000 MHz (Bilog antenna) and 1-18 GHz (Double ridge horn antenna), and 1m for the frequency range 18 GHz- 40 GHz (Double ridge horn antenna).

For radiated emissions in the range 18 - 40 GHz that is performed at a distance closer than the specified distance, an inverse proportionality factor of 20 dB per decade is used to normalize the measured data for determining compliance.

The equipment under test was set up on a non-conductive platform above the ground plane and the situation and orientation was varied to find the maximum radiated emission. It was also rotated 360° and the antenna height was varied from 1 to 4 meters to find the maximum radiated emission.

Measurements were made in both horizontal and vertical planes of polarization.

The field strength is calculated by adding correction factor to the measured level from the spectrum analyzer. This correction factor includes antenna factor, cable loss and pre-amplifiers gain.















RESU		(Cont.): 18 - 26 GHz										
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			20	∠ I	Ζ.		20		F			20
	PK+_M	AXH —	TX I	limits to Spi	Frequen	icy in GHz	CC22, 24	4, 27				20
	PK+_M Freq (N	ахн uency IHz)	— тхт РК+_ (dE	limits to Spo MAXH 3m)	Frequen urious Err POI	icy in GHz nissions FC Margi	in - Pl dB)	4, 27 K+	Limi (c	it - Pk dBm)	(+	20
	PK+_M Freq (M 25254	Axh uency IHz) .750000	PK+_ (dE -4	Iimits to Spo MAXH 3m) 1.1	Frequen urious Err Pol H	nissions FC Margi	in - Pl dB)	4, 27 K+	Limi (c	it - PK JBm) 13.0	(+	
	PK+_M Freq (M 25254	axh uency IHz) .750000	тхт РК+_ (dE -4	MAXH 3m) 1.1	Frequen urious Err Pol H	Margi Margi (2 er Para	20 20 22, 24 in - Pl dB) 28.1	4, 27 K+	Limi (c	it - Pk JBm) 13.0	(+]
	PK+_M Freq (M 25254	AXH uency IHz) .750000 Sub	PK+_ (dE -4 Spectr range	MAXH 3m) 1.1 rum An Dete	Frequen urious En Pol H nalyze	Margi Margi (2 er Para Bandy	20 20 22, 24 dB) 28.1 28.1	4, 27 K+ ers Pre	Limi (c -	it - Pk JBm) 13.0	(+]
	PK+_M Freq (M 25254	AXH IHz) .750000 Sub 30 MHz	PK+_ (dE -4 Spectr range z - 1 GH	MAXH 3m) 1.1 rum An Dete z P	Pol H H H H H H H H H H H H H H H H H H H	Margi Margi (2 er Para Bandy 100	20 20 20 22, 24 dB) 28.1 28.1 1 meto width kHz	4, 27 K+ ers Pre 20	Limi (c - amp) dB	it - PK JBm) 13.0	(+	
	PK+_M Freq (M 25254	AXH IHz) .750000 Sub 30 MHz	PK+_ (dE -4 Spectr range z - 1 GH	Iimits to Spu MAXH 3m) 1.1 rum An Dete z P rum An	Pol H H H H H H H H H H H H H H H H H H H	Margi Margi (2 er Para Bandy 100 er Para	in - Pl dB) 28.1 meto width kHz	4, 27 K+ ers Pre 20 ers	Limi (c - amp) dB	it - PK JBm) 13.0	(+	
	PK+_M Freq (N 25254	AXH uency IHz) .750000 Sub 30 MH2 Sub	PK+_ (dE -4 Spectr range z - 1 GH Spectr range	Imits to Spu MAXH 3m) 1.1 rum An Dete z P rum An Dete	Pol H H H H H H H H H H H H H H H H H H H	Margi Margi (2 er Para Bandy 100 er Para Bandy	in - Pl dB) 28.1 meto width kHz meto width	4, 27 K+ ers Pre 20 ers Pre	Limi (c - amp) dB amp	it - PK JBm) 13.0	(+	
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45.261333	-60.4	V	47.4	-13.0	
100.260333	-62.7	V	49.7	-13.0	
131.785333	-61.8	V	48.8	-13.0	
413.602667	-52.0	H	39.0	-13.0	
919.748667	20.6	V			PowerG Fundamental
920.201333	20.4	V			Z-Wave (long range) Fundamental







RE	SULT	S (Cont.):		18 - 26 GHz							
	0т										
	-5				_						
	-10+										
	-15-					TX I	imits to \$	purious l	Emission	s FCC2	<u>2, 24,</u> 27
	-20+				_						
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in dB	-30										
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	245	24.750000	-41	.7	V	2	28.7		-13	.0	
		Sub	Spectro range	um An Dete	alyze ctors	er Para Bandy	amete width	ers Broo	mp		
		30 MH.	z - 1 GHz Spectr i range	z P um An Dete	K+ alyze	100 er Para	kHz mete	20 c e rs Prea	iB mp		
		30 MH. Sub 1 GHz	z - 1 GHz Spectru range : - 7 GHz	z P um An Dete	K+ alyze ctors K+	100 er Para Bandy 1 M	kHz amete width Hz	20 c 20 c ers Prea 20 c	iB mp iB		
		30 MH Sub 1 GHz 7 GHz	z - 1 GHz Spectr i range : - 7 GHz - 18 GHz	z P um An Dete z P	K+ alyze ctors K+ K+	100 er Para Bandy 1 M 1 M	kHz amete width Hz Hz	20 c ers Prea 20 c 20 c	iB mp iB iB		
		30 MH Sub 1 GHz 7 GHz	z - 1 GHz Spectri range : - 7 GHz - 18 GHz Spectri	z P um An Dete z P um An	K+ ctors K+ K+ alyze	100 er Para Bandy 1 M 1 M er Para	kHz amete width Hz Hz amete	20 c ers Prea 20 c 20 c 20 c	IB IB IB		
		30 MH Sub 1 GHz 7 GHz Sub	z - 1 GHz Spectro range : - 7 GHz - 18 GHz Spectro range - 26 GH	z P um An Dete z P um An Dete	K+ ctors K+ K+ K+ alyze ectors	100 er Para Bandy 1 M 1 M er Para Band	kHz mete width Hz Hz mete width	20 c ers Prea 20 c 20 c 20 c ers Prea 20 c	mp IB IB IB		
		30 MH Sub 1 GHz 7 GHz Sub 18 GHz	z - 1 GHz Spectro range - 7 GHz - 18 GHz Spectro range - 26 GH	z P um An Dete z P um An Dete z F	K+ ctors K+ K+ alyze ectors K+	100 er Para Bandy 1 M 1 M er Para Band 1 M	kHz width Hz Hz width Mz	20 c ers Prea 20 c 20 c ers Prea 20 c	iB iB iB iB dB		











