

FCC Test Report

FCC ID : MXF-WMDS-203

Equipment : LPWAN Module

Model No. : GL6509
Brand Name : Gemtek

Applicant : Gemtek Technology Co., Ltd.

Address : No.15-1 Zhoughua Rd, Hsinchu Industrial

Park, Hukou, Hsinchu, Taiwan, R.O.C

Standard : 47 CFR FCC Part 15.247

Received Date : Apr. 15, 2016

Tested Date : Apr. 15 ~ May 19, 2016

We, International Certification Corp., would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Approved & Reviewed by:

Gary Chang / Manager

Ilac-MRA

TAF)
Testing Laboratory

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Release Record

Report No.	Version	Description	Issued Date
FR641901	Rev. 01	Initial issue	Jun. 03, 2016

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Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 17.755MHz 30.26 (Margin -19.74dB) - AV	Pass
15.247(d) 15.209	Radiated Emissions		Pass
15.247(d)	Band Edge	Meet the requirement of limit	Pass
15.247(b)(2)(3)	Conducted Output Power	Power [dBm]: 18.98	Pass
15.247(a)(1)(i)	Number of Hopping Channels	Meet the requirement of limit	Pass
15.247(a)(1)	Hopping Channel Separation	Meet the requirement of limit	Pass
15.247(f)	Dwell Time	Meet the requirement of limit	Pass
15.247(f)	Power spectral density	Meet the requirement of limit	Pass
15.203	Antenna Requirement	Meet the requirement of limit	Pass

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1 General Description

1.1 Information

1.1.1 Specification of the Equipment under Test (EUT)

RF General Information						
Frequency Range (MHz) Ch. Freq. (MHz) Channel Bandwidth (kHz) Channel Bandwidth (kHz)						
902 ~ 928	902.3 ~ 924.375	1-96 [80]	125	7 ~ 10	200 / 250	

Note 1: RF output power specifies that Maximum Conducted (Average) Output Power.

Note 2: The device uses CSS modulation.

1.1.2 Antenna Details

Ant. No	Brand	Model	Туре	Connector	Gain (dBi)
1	GSC-Tech	OMA-G01	Fiberglass Omni Antenna	N-style Jack	8

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	3.3Vdc from host
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1.1.4 Accessories

N/A

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1.1.5 Channel List

	Channel spacing 200 kHz								spacing kHz	
Gro	Group 1		Group 3		Group 5		Group 7		Group 9	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	
1	902.3	17	905.5	33	908.7	49	911.9	81	920.625	
2	902.5	18	905.7	34	908.9	50	912.1	82	920.875	
3	902.7	19	905.9	35	909.1	51	912.3	83	921.125	
4	902.9	20	906.1	36	909.3	52	912.5	84	921.375	
5	903.1	21	906.3	37	909.5	53	912.7	85	921.625	
6	903.3	22	906.5	38	909.7	54	912.9	86	921.875	
7	903.5	23	906.7	39	909.9	55	913.1	87	922.125	
8	903.7	24	906.9	40	910.1	56	913.3	88	922.375	
Gro	up 2	Gro	up 4	Group 6		Group 8		Group 10		
9	903.9	25	907.1	41	910.3	57	913.5	89	922.625	
10	904.1	26	907.3	42	910.5	58	913.7	90	922.875	
11	904.3	27	907.5	43	910.7	59	913.9	91	923.125	
12	904.5	28	907.7	44	910.9	60	914.1	92	923.375	
13	904.7	29	907.9	45	911.1	61	914.3	93	923.625	
14	904.9	30	908.1	46	911.3	62	914.5	94	923.875	
15	905.1	31	908.3	47	911.5	63	914.7	95	924.125	
16	905.3	32	908.5	48	911.7	64	914.9	96	924.375	

Note:

The device supports 3 operation modes as below:

Mode	Operation Channels	Operation Group
1	8 Channels	1/2/3/4/5/6/7/8/9/10
2	16 Channels	1 + 2 , 3 + 4 , 5 + 6 , 7 + 8 , 9 + 10
3	64 Channels	1+2+3+4+5+6+7+8

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1.1.6 Test Tool and Duty Cycle

Test Tool	Putty, Ver. 0.60.0.0
1001 1001	1. day, 10.1. 0.00.0.0

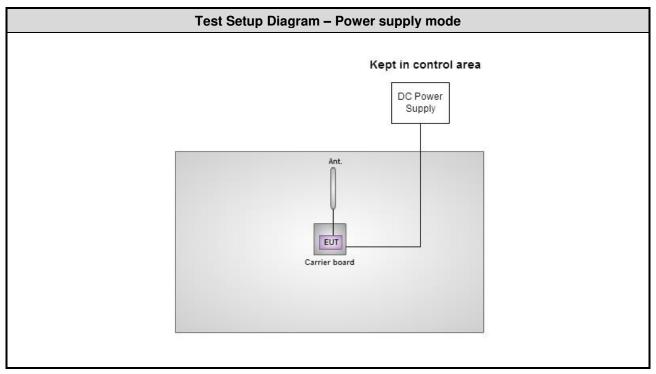
1.1.7 Power Setting

Madulation Mada	Test Frequency (MHz)			
Modulation Mode	902.3	910.1	924.375	
CSS	20	20	20	

1.2 Local Support Equipment List

	Support Equipment List							
No.	No. Equipment Brand Model S/N Signal cable / Length (m)							
1	DC Power Supply	GWINSTEK	GPC-60300	EM884797				
2	Notebook	DELL	Latitude E6430	F2JB4X1				
3	Carrier board							

1.3 Test Setup Chart



Note: The notebook is disconnected from EUT and removed from test table when EUT is set to transmit continuously.

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1.4 The Equipment List

Test Item	Conducted Emission	Conducted Emission							
Test Site	Conduction room 1 /	Conduction room 1 / (CO01-WS)							
Instrument	Manufacturer	Manufacturer Model No. Serial No. Calibration Date Calibration Until							
EMC Receiver	R&S	ESCS 30	100169	Oct. 21, 2015	Oct. 20, 2016				
LISN	SCHWARZBECK	Schwarzbeck 8127	8127-667	Nov. 13, 2015	Nov. 12, 2016				
RF Cable-CON	EMC	EMCCFD300-BM-BM-6000	50821	Dec. 21, 2015	Dec. 20, 2016				
Measurement Software	AUDIX	e3	6.120210k	NA	NA				
Note: Calibration Int	Note: Calibration Interval of instruments listed above is one year.								

Test Item	Radiated Emission					
Test Site	966 chamber 3 / (03	CH03-WS)				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until	
Spectrum Analyzer	Agilent	N9010A	MY53400091	Sep. 14, 2015	Sep. 13, 2016	
Receiver	Agilent	N9038A	MY53290044	Oct. 14, 2015	Oct. 13, 2016	
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-563	Dec. 29, 2015	Dec. 28, 2016	
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Feb. 24, 2016	Feb. 23, 2017	
Preamplifier	EMC	EMC02325	980187	Sep. 21, 2015	Sep. 20, 2016	
Preamplifier	Agilent	83017A	MY53270014	Sep. 07, 2015	Sep. 06, 2016	
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Feb. 05, 2016	Feb. 04, 2017	
RF cable-8M	HUBER+SUHNER	SUCOFLEX104	MY22600/4	Feb. 05, 2016	Feb. 04, 2017	
RF cable-1M	HUBER+SUHNER	SUCOFLEX104	MY22624/4	Feb. 05, 2016	Feb. 04, 2017	
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800-001	Feb. 05, 2016	Feb. 04, 2017	
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Feb. 05, 2016	Feb. 04, 2017	
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Feb. 05, 2016	Feb. 04, 2017	
Measurement Software	AUDIX	e3	6.120210g	NA	NA	
Note: Calibration I	nterval of instruments	listed above is one year.				

Test Item	RF Conducted											
Test Site	(TH01-WS)											
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until							
Spectrum Analyzer	R&S	FSV40	101063	Feb. 17, 2016	Feb. 16, 2017							
Power Meter	Anritsu	ML2495A	1241002	Sep. 21, 2015	Sep. 20, 2016							
Power Sensor	Anritsu	MA2411B	1207366	Sep. 21, 2015	Sep. 20, 2016							
Measurement Software	Sporton	Sporton_1	1.3.30	NA	NA							
Note: Calibration Interval of instruments listed above is one year.												

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1.5 Test Standards

According to the specification of EUT, the EUT must comply with following standards and KDB documents. 47 CFR FCC Part 15.247

ANSI C63.10-2013

1.6 Measurement Uncertainty

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

Measurement Uncertainty								
Parameters	Uncertainty							
Bandwidth	±34.134 Hz							
Conducted power	±0.808 dB							
Power density	±0.463 dB							
Conducted emission	±2.670 dB							
AC conducted emission	±2.90 dB							
Radiated emission ≤ 1GHz	±3.66 dB							
Radiated emission > 1GHz	±5.37 dB							

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2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	20°C / 60%	Howard Huang
Radiated Emissions	03CH03-WS	21°C / 69%	Warren Lee
RF Conducted	TH01-WS	23°C / 65%	Felix Sung

FCC site registration No.: 207696IC site registration No.: 10807C-1

2.2 The Worst Test Modes and Channel Details

Test item	Test Frequency (MHz)	Modulation / SF	Test Configuration
Conducted Emissions	902.3 / 910.1 / 924.375	CSS / 9	
Radiated Emissions ≤ 1GHz	902.3 / 910.1 / 924.375	CSS / 9	
Radiated Emissions > 1GHz Conducted Output Power	902.3 / 910.1 / 924.375	CSS / 9	
Number of Hopping Channels	902.3 ~ 924.375	CSS/9	
Hopping Channel Separation	902.3 / 910.1 / 914.9 920.625 / 924.375	CSS / 9	
Dwell Time	902.9 / 904.5 / 906.1 / 907.7 / 909.3 910.9 / 912.5 / 914.1 / 921.375 / 923.375 903.7 / 906.9 / 910.1 / 913.3 / 922.375 / 908.7	CSS: 7 ~ 10	
Power spectral density	902.3 / 910.1 / 924.375	CSS / 9	

NOTE:

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The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The Y-plane results were found as the worst case and were shown in this report.



3 Transmitter Test Results

3.1 Conducted Emissions

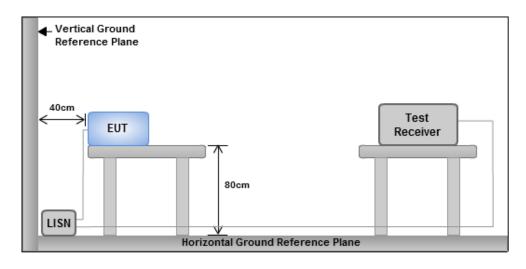
3.1.1 Limit of Conducted Emissions

Conducted Emissions Limit										
Frequency Emission (MHz) Quasi-Peak Average										
0.15-0.5	66 - 56 *	56 - 46 *								
0.5-5	56	46								
5-30	60	50								
Note 1: * Decreases with the logarithm of the frequency.										

3.1.2 Test Procedures

- 1. The device is placed on a test table, raised 80 cm above the reference ground plane. The vertical conducting plane is located 40 cm to the rear of the device.
- 2. The device is connected to line impedance stabilization network (LISN) and other accessories are connected to other LISN. Measured levels of AC power line conducted emission are across the 50 Ω LISN port.
- 3. AC conducted emission measurements is made over frequency range from 150 kHz to 30 MHz.
- 4. This measurement was performed with AC 120V/60Hz

3.1.3 Test Setup



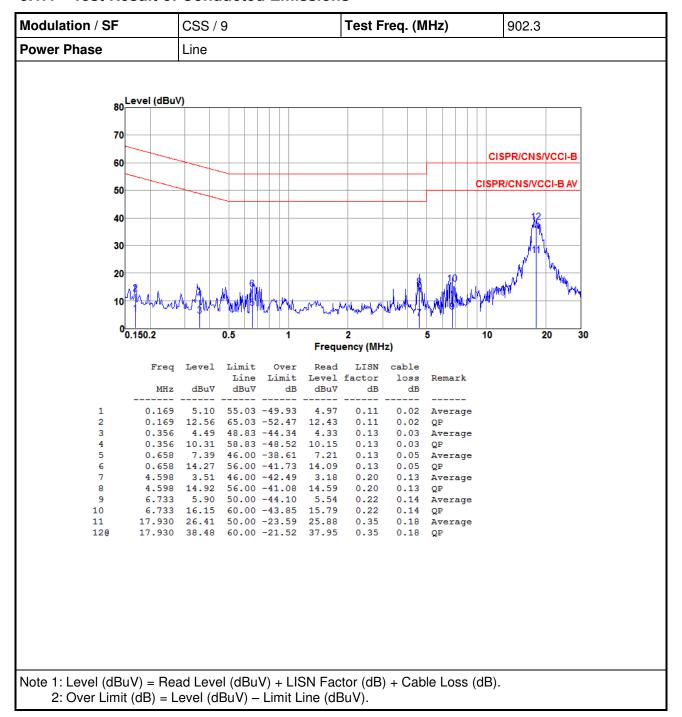
Note: 1. Support units were connected to second LISN.

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

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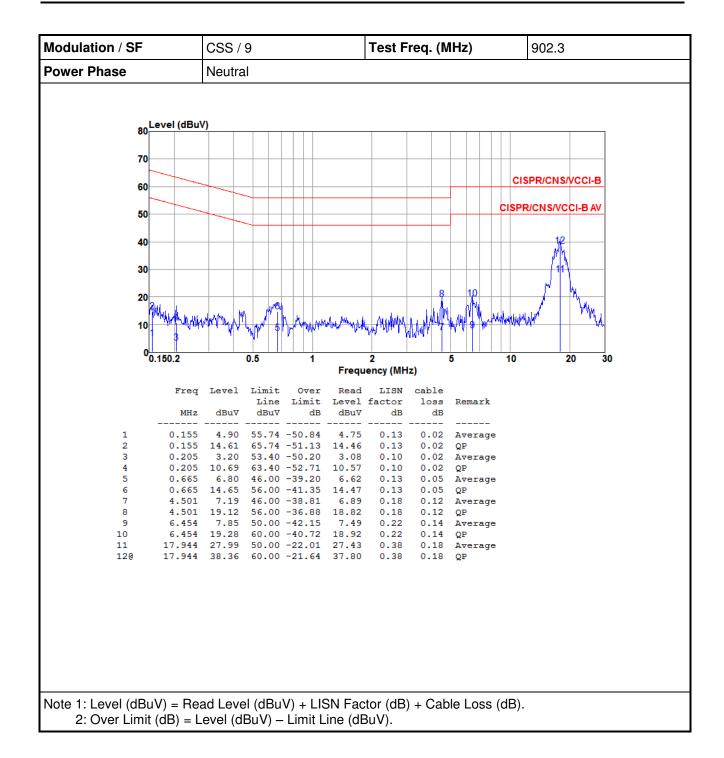


3.1.4 Test Result of Conducted Emissions



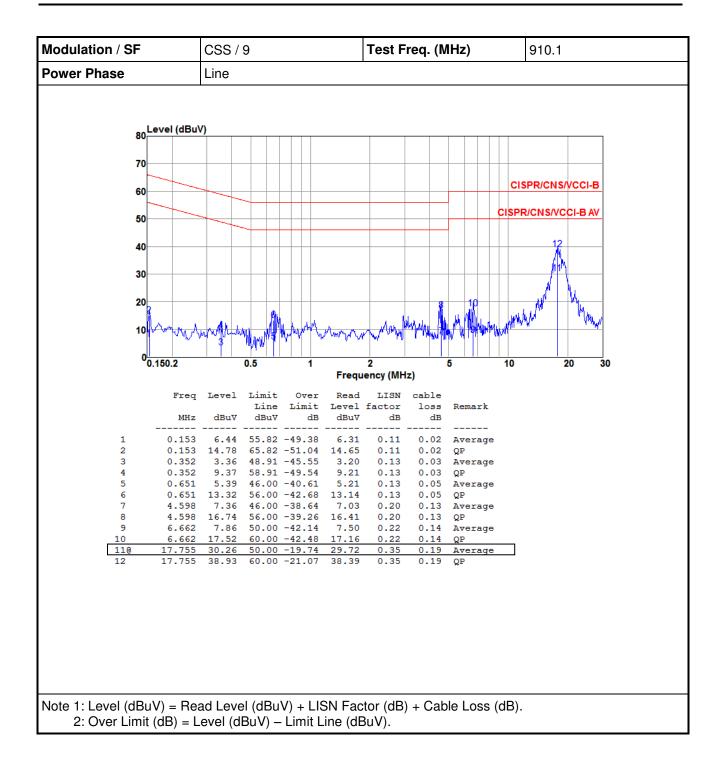
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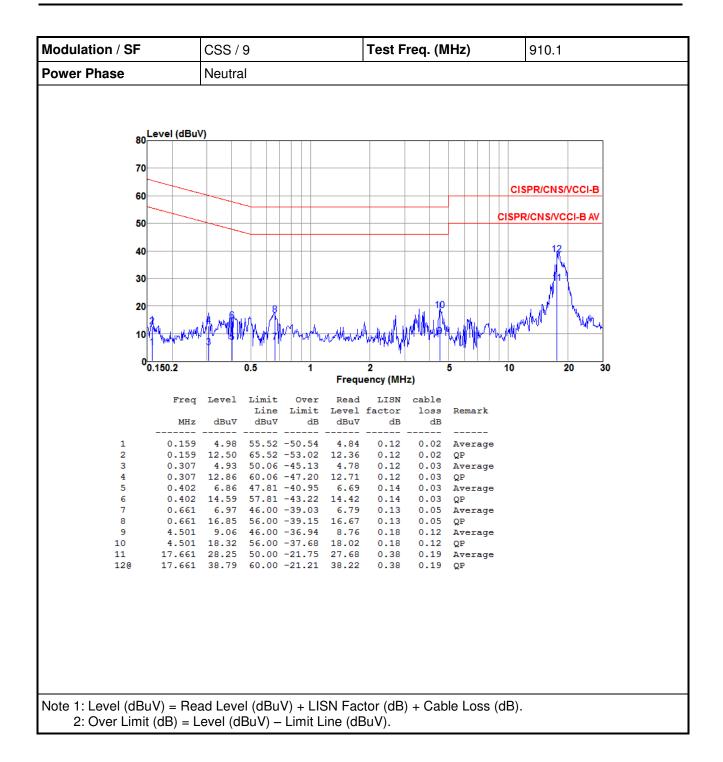
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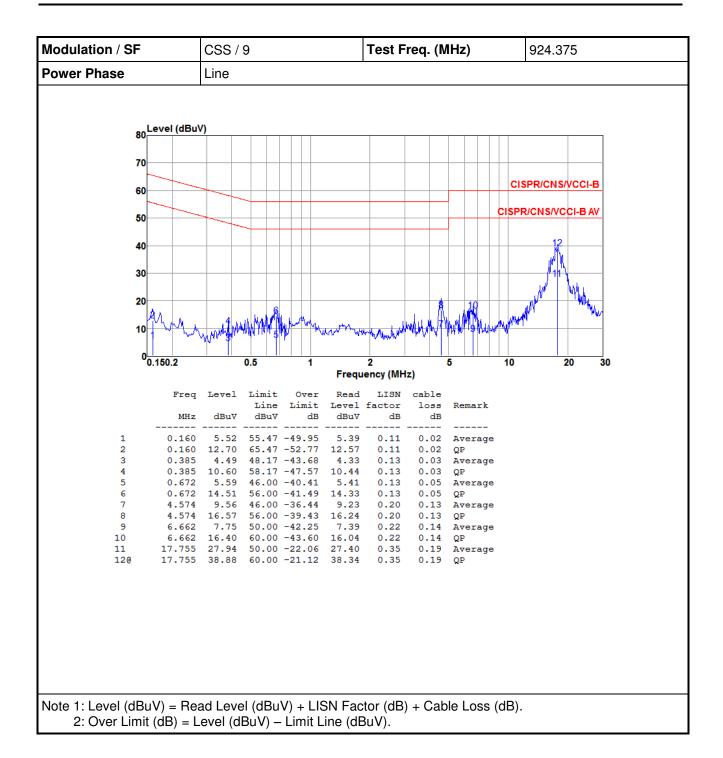
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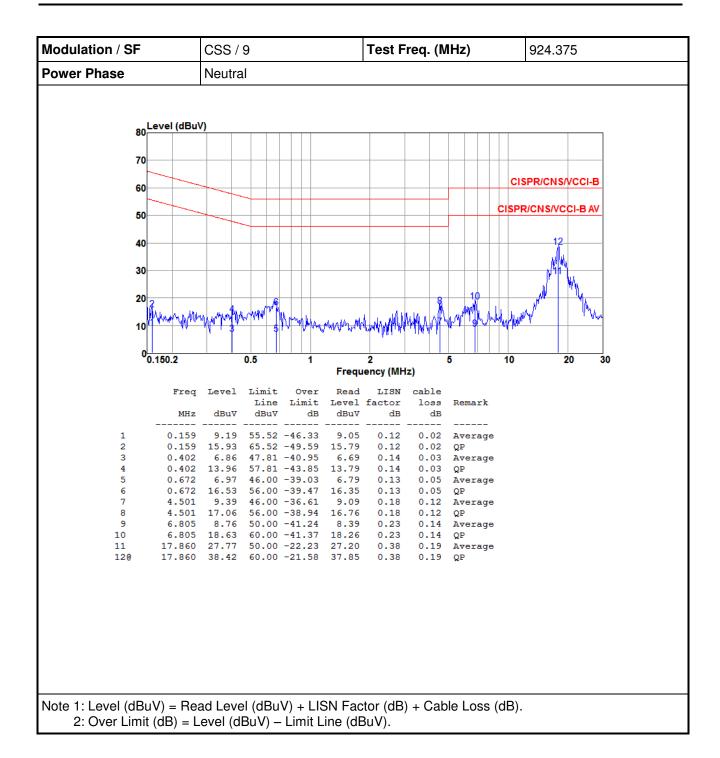
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3.2 Unwanted Emissions into Restricted Frequency Bands

3.2.1 Limit of Unwanted Emissions into Restricted Frequency Bands

Restricted Band Emissions Limit											
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)								
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300								
0.490~1.705	24000/F(kHz)	33.8 - 23	30								
1.705~30.0	30	29	30								
30~88	100	40	3								
88~216	150	43.5	3								
216~960	200	46	3								
Above 960	500	54	3								

Note 1:

Qusai-Peak value is measured for frequency below 1GHz except for 9–90 kHz, 110–490 kHz frequency band. Peak and average value are measured for frequency above 1GHz. The limit on average radio frequency emission is as above table. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit **Note 2:**

Measurements may be performed at a distance other than what is specified provided. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor as below, Frequency at or above 30 MHz: 20 dB/decade Frequency below 30 MHz: 40 dB/decade.

3.2.2 Test Procedures

- 1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at test table. For emissions testing at or below 1 GHz, the table height is 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height is 1.5 m
- 2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
- 3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.

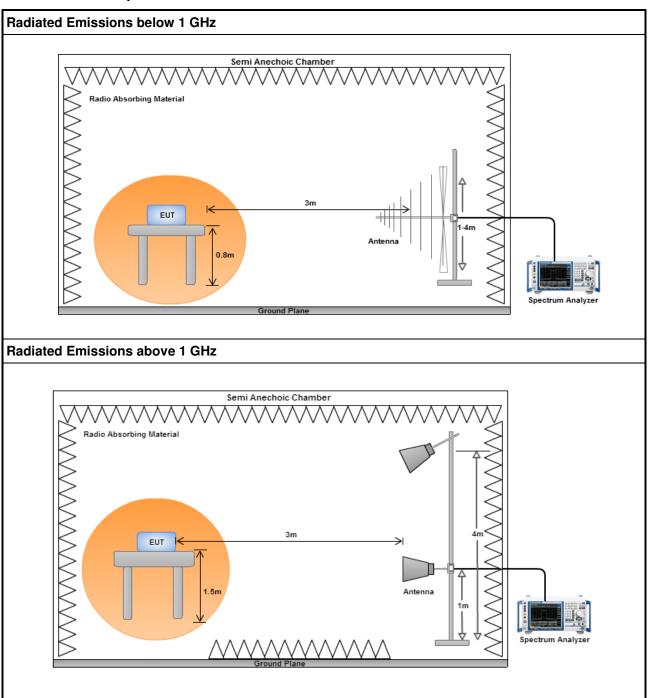
Note:

- 1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
- 2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
- RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above 1GHz.

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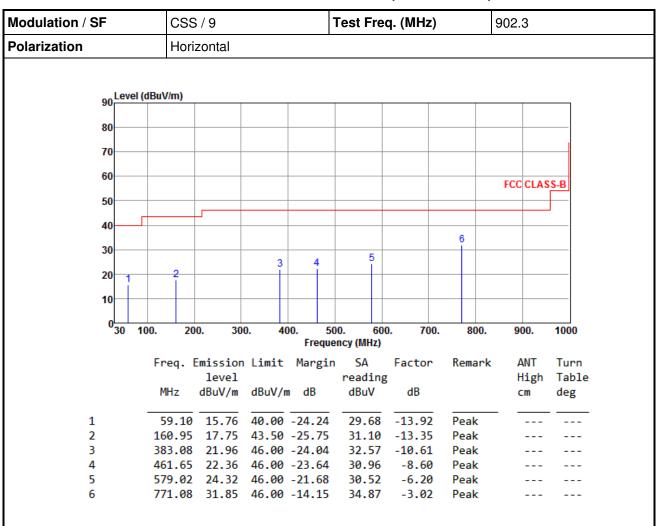
3.2.3 Test Setup



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3.2.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)



Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) - Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

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Modulation / SF			CSS / 9 Test Freq. (MHz) 902.3											
Polarization			Vertical											
	Lovo	l (dBu\	//m)											
9	Oreve	i (ubu\	//III)											
8	0													
7	0													
6	0									500	C1 A C			
										FCC	CLASS	5-B		
5	U													
4	0													
3	0					4	5		6					
	١.			,										
2	0		2											
10	0													
'	30	100.	20	0. 30	00. 40	00. 50		0. 700.	800.	90	0.	1000		
							ncy (MHz)					_		
		Fr	eq. I	emissior level	n Limit	Margin		Factor	Remark		NT iab	Turn		
		M	Hz		dBuV/r	n dB	reading dBuV	dB		CI	_	Table deg		
				abav/III	abav/1	. 40	abav	ub.				a-8		
1		6	2.01	18.28	40.00	-21.72	32.62	-14.34	Peak					
2			5.13			-26.17		-13.36	Peak					
3			8.99			-27.07		-13.07	Peak					
4		40	3.45	28.82	46.00	-1/.18	38.91	-10.09	Peak					

-7.16

-3.01

Peak

Peak

Note 1: Emission Level $(dBuV/m) = SA Reading (dBuV/m) + Factor^* (dB)$

*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

537.31 29.48 46.00 -16.52 36.64

772.05 32.45 46.00 -13.55 35.46

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Modulation / SF	F		CSS	/ 9			Test F	rec	դ. (M	Hz)		910	.1		
Polarization			Horizontal												
!	90 Leve	el (dBuV	//m)												
	80														
,	80														
	70							+							
	60	_						+		_		EC	CLAS	ee D	
	50											rci	CLAS	ээ-Б	
		_						+						_	
•	40	_						\top			6				
:	30						4	+			Ť				
	20 1		2	3			l i	_							
	Ηi														
	10														
	030	100.	20	0. 3	00. 4		00.	600).	700.	80	0. 9	000.	1000	
							ency (Mi								
		Fr	eq. E	missio level		Margir	n SA read:		Fact	or	Rema		ANT High	Turn Table	
		М	Hz		dBuV/	m dB	dBu\		dE	3			cw	deg	
					. <u> </u>			_							
1						-24.37	28.		-13.		Peak				
2			0.95 7.05	18.18		-25.32 -27.98	31.1 31.1		-13. -13.		Peak Peak				
4			0.89	23.49		-27.96	30.		-6.		Peak				
5			6.99	25.79		-20.21	30.		-4.		Peak				
6		77	2.05	31.06		-14.94	34.0		-3.		Peak				

*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

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Modulation / SF	CSS	/ 9		-	Test Fre	q. (MHz)		910.	1					
Polarization	Verti	Vertical												
oo Lev	el (dBuV/m)													
90														
80														
70														
60								FCC	CLASS-B					
50														
40														
40							5	6						
30				3	4		Ť							
20	2													
10														
030	100. 20	0. 30	0 40	00. 50	00. 600	0. 700.	800	Q	00. 100					
	1001				ency (MHz)		000							
	Freq. E		Limit	Margin		Factor	Remar	k A	ANT Tui					
		level			reading			H	ligh Tal					
	MHz	dBuV/m	dBuV/n	n dB	dBuV	dB		C	m deg					
1	39.70	21.14	10 00	-18.86	34.49	-13.35	Peak							
2	160.95			-25.32	31.53		Peak							
3	405.39			-17.89	38.14		Peak							
4	540.22			-16.74	36.36	-7.10	Peak							
5	772.05	31.06	46.00	-14.94	34.07	-3.01	Peak							

-1.73

Peak

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

845.77 34.10 46.00 -11.90 35.83

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Modulation / SF		CSS	CSS / 9 Test Freq. (MHz) 924.375										
Polarization		Horiz	Horizontal										
		1											
1	,												
90	Level (d	dBuV/m)									\neg		
80-													
00													
70													
60													
									FCC	CLAS	S-B		
50													
40													
20													
30					4		5	6					
20	1	2		3							_		
10													
0	30 10	00. 20	0. 30	0. 40	00. 50	00. 60	0. 700	. 800.	90	00.	1000		
					Freque	ency (MHz)							
		Freq. E	mission	Limit	Margin		Factor	Remark	с Д	ANT	Turn		
			level			reading				_	Table		
		MHz	dBuV/m	dBuV/r	n dB	dBuV	dB		C	m	deg		
1		59.10	15.20	40 00	-24.80	29.12	-13.92	Peak					
2		146.40			-26.89	30.12		Peak					
3		384.05			-27.15	29.44		Peak					
4		496.57	22.32	46.00	-23.68	30.28	-7.96	Peak					

-5.58

-3.59

Peak

Peak

Note 1: Emission Level $(dBuV/m) = SA Reading (dBuV/m) + Factor^* (dB)$

*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

612.00 25.02 46.00 -20.98 30.60

736.16 26.48 46.00 -19.52 30.07

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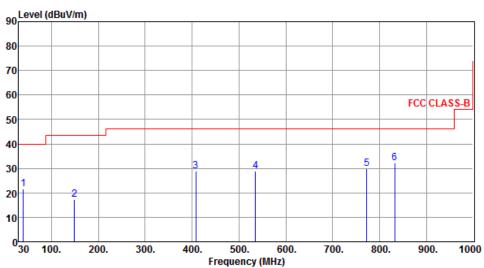
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Modulation / SF	CSS / 9	Test Freq. (MHz)	924.375
Polarization	Vertical		



	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	39.70	21.43	40.00	-18.57	34.78	-13.35	Peak		
2	149.31	17.26	43.50	-26.24	30.70	-13.44	Peak		
3	408.30	28.90	46.00	-17.10	38.85	-9.95	Peak		
4	535.37	28.96	46.00	-17.04	36.15	-7.19	Peak		
5	773.02	29.73	46.00	-16.27	32.73	-3.00	Peak		
6	832.19	32.25	46.00	-13.75	34.23	-1.98	Peak		

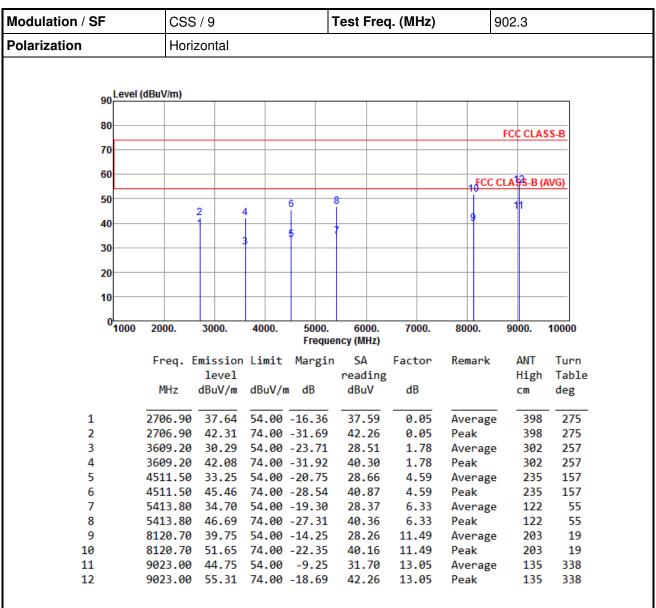
*Factor includes antenna factor , cable loss and amplifier gain Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

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3.2.5 Transmitter Radiated Unwanted Emissions (Above 1GHz)



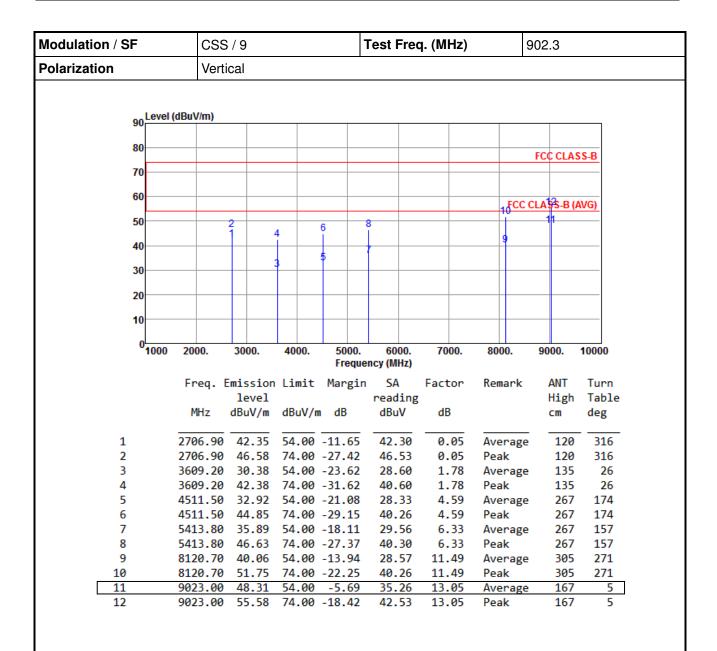
Note 1: Emission Level $(dBuV/m) = SA Reading (dBuV/m) + Factor^* (dB)$

*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) - Limit (dBuV/m).

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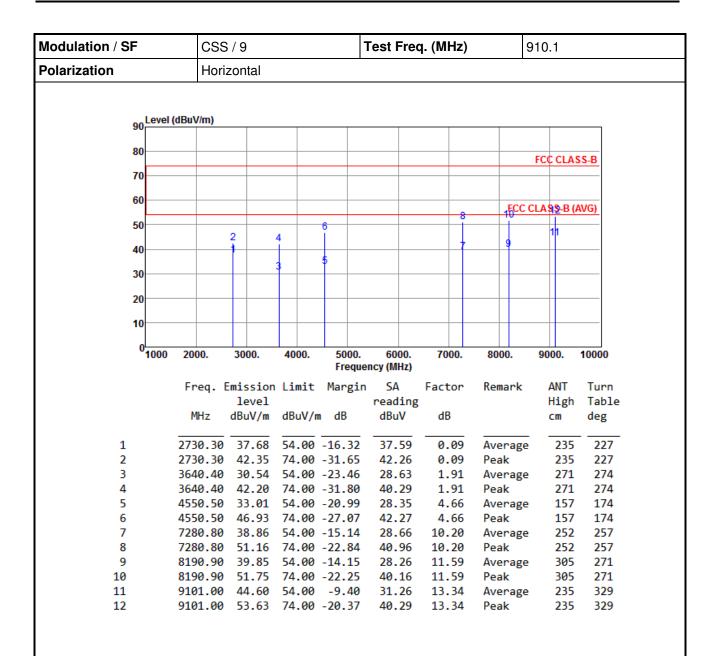


*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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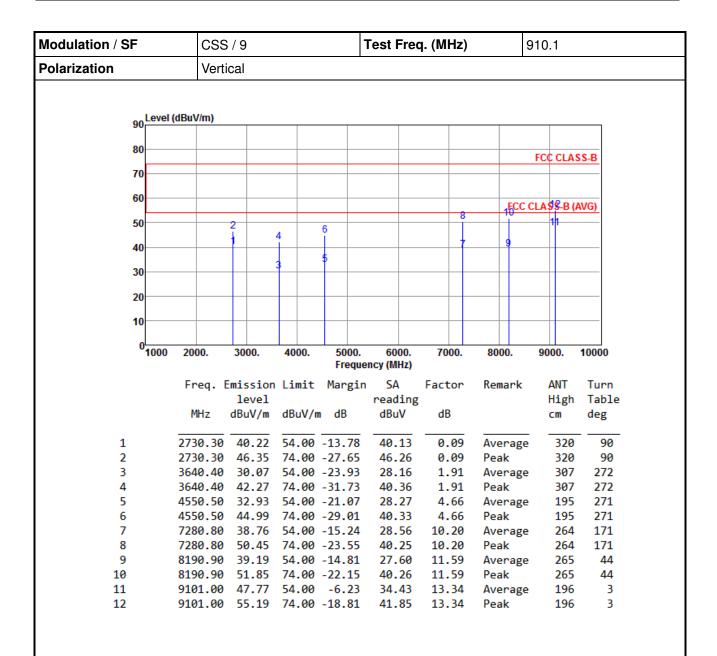


*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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Modulation / SF Polarization		CSS / 9				Test Freq. (MHz)			924.375		
		Horizontal									
	•										
90 <mark>Le</mark>	vel (dBuV/m)										
80											
70								FCC CLAS	SS-B		
60							FGC	CLASS-B (AVG)		
50		2	4	6		Ť					
40			-	1		- 7	9				
30			3	3							
20											
20											
10											
0 <mark>1</mark> 0	00 2000.	3000.	4000.	5000.	6000.	7000.	8000.	9000.	10000		
	Гпол	Emission	limi+		ency (MHz) SA	Factor	Remark	ANT	Turn		
	rreq.	level	LIMIT	Margin	reading		Kelliark	High	Table		
	MHz	dBuV/m	dBuV/n	ı dB	dBuV	dB		cm	deg		
1	2773.13	35.42	54.00	-18.58	35.26	0.16	Average	120	225		
2	2773.13			-29.58	44.26	0.16	Peak	120	225		
3	3697.50			-23.19	28.69	2.12	Average		136		
4	3697.50				40.42	2.12	Peak	265	136		
5		33.16			28.36	4.80	Average		172		
6	4621.88			-28.80	40.40	4.80	Peak	305	172		
7 8		39.39			28.97	10.42	Average Peak		171 171		
8	7395.00	40.56		-23.25 -13.44	40.33 28.98	10.42 11.58		125 207	35		
9	0319.30	40.30	34.00	-13.44	20.90	11.50	Average	207	22		

Peak

11.58

35

207

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

8319.38 52.56 74.00 -21.44 40.98

*Factor includes antenna factor , cable loss and amplifier gain Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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Modulation / SF Polarization		CSS	CSS / 9 Test Freq. (MHz) 924.375							
		Verti	Vertical							
on L	Level (d	dBuV/m)								
30										
80-									FCC CLAS	S-B
70										
60										
00							- 8	FGC	CLASS-B (A	(VG)
50				4	6					
40-			2	-			7	- 9		
30-			1	3	1					
30										
20										
10										
0										
01	1000	2000.	3000.	4000.	5000. Freque	6000. ncy (MHz)	7000.	8000.	9000.	10000
		Freq. E	mission	Limit	Margin		Factor	Remark	ANT	Turn
			level	15.144		reading			High	Table
		MHz	dBuV/m	dBuV/n	ı dB	dBuV	dB		CM	deg
1		2773.13	30.41	54.00	-23.59	30.25	0.16	Average	235	158
2		2773.13	40.47	74.00	-33.53	40.31	0.16	Peak	235	158
3		3697.50	32.02	54.00	-21.98	29.90	2.12	Average	235	158
4		3697.50			-31.61	40.27	2.12	Peak	235	158
5		4621.88	34.67		-19.33	29.87	4.80	Average		251
6		4621.88			-28.97	40.23	4.80	Peak	271	251
7		7395.00			-13.96	29.62	10.42	Average		123
8		7395.00			-23.35	40.23	10.42	Peak	305	123
9		8319.38	41.94	54.00	-12.06	30.36	11.58	Average	302	32
10		8319.38	52.84	74.00	-21.16	41.26	11.58	Peak	302	32

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) - Limit (dBuV/m).

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