



FCC ID: P4Q-N653  
 Report No.: T200407W01-RP7

IC: 2420C-N653

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 Rev.: 01

**FCC 47 CFR PART 27 SUBPART L  
 +  
 INDUSTRY CANADA RSS-139**

**TEST REPORT**

**For**

**PRO 8475**

**Trade Name:  
 MiTAC, Webfleet Solutions**

**Model: N653**

*Issued to*

<b>FCC:</b>	<b>Mitac Digital Technology Corporation    No.200, Wen Hwa 2nd Rd.,Kuei Shan Dist. Taoyuan, 33383 Taiwan</b>
<b>IC:</b>	<b>MiTAC Digital Technology Corporation    No.200, Wenhua 2nd Rd.,, Guishan Dist. Taoyuan City 333 Taiwan</b>

*Issued by*

**Compliance Certification Services Inc.  
 Wugu Laboratory  
 No.11, Wugong 6th Rd., Wugu Dist.,  
 New Taipei City, Taiwan. (R.O.C.)  
 Issued Date: June 9, 2020**

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.  
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### Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	May 21, 2020	Initial Issue	ALL	Allison Chen
01	June 9, 2020	See the following note Rev.(01)	ALL	Allison Chen

**Rev.(01)**

1. Added test data for power table and radiated emission.
2. Revised product name: PRO 8475, and model name: N653.

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## 1 TEST RESULT CERTIFICATION

**FCC Applicant:** Mitac Digital Technology Corporation  
No.200, Wen Hwa 2nd Rd.,Kuei Shan Dist. Taoyuan, 33383  
Taiwan

**IC Applicant:** MITAC Digital Technology Corporation  
No.200, Wenhua 2nd Rd., Guishan Dist. Taoyuan City 333  
Taiwan

**Manufacturer:** MITAC COMPUTER (KUNSHAN) CO., LTD.  
No. 269, 2nd Avenue, District A, Comprehensive Free Trade  
Zone, Kunshan, Jiangsu, P.R. China

**Equipment Under Test:** PRO 8475

**Trade Name:** MiTAC, Webfleet Solutions

**Model:** N653

**Date of Test:** June 1 ~ 6, 2020

APPLICABLE STANDARDS	
STANDARD	TEST RESULT
FCC 47 CFR PART 27 SUBPART L + RSS-139 Issue 3 2015	No non-compliance noted
Statements of Conformity	
Determination of compliance is based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.	

### We hereby certify that:

The above equipment was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in TIA-603-E and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC Rule FCC PART 27 Subpart L and IC RSS-139 Issue 3. The test results of this report relate only to the tested sample identified in this report.

Approved by:




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Kevin Tsai  
Deputy Manager  
Compliance Certification Services Inc.

## 2 EUT DESCRIPTION

<b>Product</b>	PRO 8475
<b>Model</b>	N653
<b>Model Discrepancy</b>	Difference of the those trade names (list on this report) are just for marketing purpose only.
<b>Trade</b>	MiTAC, Webfleet Solutions
<b>Received Date</b>	April 7, 2020
<b>Power Supply</b>	1. Powered from Rechargeable Li-ion Polymer Battery. Rating: 3.7VDC, 4000mAh, 14.8Wh 2. Powered from Cradle Fleet cable 12/24V (Pogo power pin) USB Type-C 5V
<b>Frequency Range</b>	WCDMA / HSDPA / HSUPA Band IV: 1712.4-1752.6 MHz
<b>Transmit Power (EIRP Power)</b>	WCDMA Band IV: 23.17 dBm
<b>Antenna Specification</b>	Antenna type: Integral Band IV: 3.19 dBi

**Remark:** 1. The sample selected for test was engineering sample that approximated to production product and was provided by manufacturer.  
2. For test mode WCDMA, HSUPA and HSDPA were pretest. The worst case was WCDMA in this test report

### **3 TEST METHODOLOGY**

Both conducted and radiated testing were performed according to the procedures document on TIA-603-E and FCC CFR 47, Part 27 Subpart L.

Both conducted and radiated testing were performed according to the procedures document on ANSI C63.26: 2015 and RSS-139.

#### **3.1 EUT CONFIGURATION**

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

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### 3.2 DESCRIPTION OF TEST MODES

The EUT (model: N653) had been tested under operating condition.

The EUT be set in maximum power transmission via call box during testing.

#### 3.2.1 The worst mode of measurement

Radiated Emission Measurement Above 1G	
Test Condition	Radiated Emission Above 1G
Power supply Mode	Mode 1: EUT power by Battery Mode 2: EUT+Cradle
Worst Mode	<input checked="" type="checkbox"/> Mode 1 <input type="checkbox"/> Mode 2 <input type="checkbox"/> Mode 3 <input type="checkbox"/> Mode 4
Worst Position	<input type="checkbox"/> Placed in fixed position. <input type="checkbox"/> Placed in fixed position at X-Plane (E2-Plane) <input type="checkbox"/> Placed in fixed position at Y-Plane (E1-Plane) <input checked="" type="checkbox"/> Placed in fixed position at Z-Plane (H-Plane)

Radiated Emission Measurement Below 1G	
Test Condition	Radiated Emission Below 1G
Power supply Mode	Mode 1: EUT power by Battery Mode 2: EUT+Cradle
Worst Mode	<input checked="" type="checkbox"/> Mode 1 <input type="checkbox"/> Mode 2 <input type="checkbox"/> Mode 3 <input type="checkbox"/> Mode 4

**Remark:**

1. The worst mode was record in this test report.
2. EUT pre-scanned in three axis ,X,Y, Z and two polarity, for radiated measurement. The worst case(Z-Plane) were recorded in this report

## 4 TEST SUMMERY

FCC Standard Section	IC Standard Section	Report Section	Test Item	Result
-	-	2	Antenna Requirement	Pass
27.50(d)	RSS-132, section 5.4 RSS-133, section 6.4	8.1	EIRP Measurement	Pass
27.53(h)	RSS-132 section 5.5 RSS-133 section 6.5	8.2	Spurious Radiation Measurement	Pass



## 5 INSTRUMENT CALIBRATION

### 5.1 MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

### 5.2 MEASUREMENT EQUIPMENT USED

#### Equipment Used for Emissions Measurement

*Remark: Each piece of equipment is scheduled for calibration*

RF Conducted Test Site					
Equipment	Manufacturer	Model	S/N	Cal Date	Cal Due
Coaxial Cable	Woken	WC12	CC003	06/28/2019	06/27/2020
Wideband Radio Communication Tester	R&S	CMW 500	116875	07/29/2019	07/28/2020
Software	N/A				

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3M 966 Chamber Test Site					
Equipment	Manufacturer	Model	S/N	Cal Date	Cal Due
Band Reject Filters	MICRO TRONICS	BRM 50702	120	02/25/2020	02/24/2021
Bilog Antenna	Sunol Sciences	JB3	A030105	07/26/2019	07/25/2020
Coaxial Cable	HUBER SUHNER	SUCOFLEX 104PEA	20995	02/25/2020	02/24/2021
Coaxial Cable	EMCI	EMC105	190914+25111	09/20/2019	09/19/2020
Digital Thermo-Hygro Meter	WISEWIND	1206	D07	01/15/2020	01/14/2021
double Ridged Guide Horn Antenna	ETC	MCTD 1209	DRH13M02003	10/04/2019	10/03/2020
High Pass Filter	SOLVANG TECHNOLOGY INC.	STI15	9923	02/25/2020	02/24/2021
High Pass Filters	MICRO TRONICS	HPM13195	003	02/25/2020	02/24/2021
Horn Antenna	ETS LINDGREN	3116	00026370	12/18/2019	12/17/2020
Horn Antenna / Harmonic Mixer	A-INFOMW / ROHDE&SCHWARZ	LB-19-20-A / FS-Z60	J202020872 / 100142	12/09/2019	12/08/2021
Horn Antenna / Harmonic Mixer	ROHDE&SCHWARZ	FH-PP-110 / FS-Z110	10003 / 100096	12/09/2019	12/08/2021
Horn Antenna / Harmonic Mixer	ROHDE&SCHWARZ	FH-PP-75 / FS-Z75	10001 / 100162	12/09/2019	12/08/2021
Horn Antenna / Spectrum Analyzer Mixer	Radiometer Physics GmbH	FH-PP-170 / SAM-170	10003 / 20011	12/09/2019	12/08/2021
Horn Antenna / Spectrum Analyzer Mixer	Radiometer Physics GmbH	FH-PP-220 / SAM-220	10003 / 20013	12/09/2019	12/08/2021
Horn Antenna / Spectrum Analyzer Mixer	Radiometer Physics GmbH	FH-PP-325 / SAM-325	10007 / 20048	12/09/2019	12/08/2021
Loop Ant	COM-POWER	AL-130	121051	03/27/2020	03/26/2021
Pre-Amplifier	EMEC	EM330	060609	02/25/2020	02/24/2021
Pre-Amplifier	HP	8449B	3008A00965	02/25/2020	02/24/2021
Pre-Amplifier	MITEQ	AMF-6F-180040 00-37-8P	985646	06/18/2019	06/17/2020
Signal Analyzer	Agilent	N9010A	MY52220817	03/19/2020	03/18/2021
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R	N.C.R
Controller	CCS	CC-C-1F	N/A	N.C.R	N.C.R
Turn Table	CCS	CC-T-1F	N/A	N.C.R	N.C.R
Software	e3 6.11-20180413				

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### 5.3 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
AC Powerline Conducted Emission	+/- 1.2575
Emission bandwidth, 20dB bandwidth	+/- 0.0014
RF output power, conducted	+/- 1.14
Power density, conducted	+/- 1.40
3M Semi Anechoic Chamber / 30M~200M	+/- 4.12
3M Semi Anechoic Chamber / 200M~1000M	+/- 4.68
3M Semi Anechoic Chamber / 1G~8G	+/- 5.18
3M Semi Anechoic Chamber / 8G~18G	+/- 5.47
3M Semi Anechoic Chamber / 18G~26G	+/- 3.81
3M Semi Anechoic Chamber / 26G~40G	+/- 3.87

**Remark:** This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k=2$ .

## 6 FACILITIES AND ACCREDITATIONS

### 6.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

No.199, Chunghsen Road, Hsintien City, Taipei Hsien, Taiwan, R.O.C.

Tel: 886-2-2217-0894 / Fax: 886-2-2217-1029

No.11, Wugong 6th Rd., Wugu Dist., New Taipei City, Taiwan. (R.O.C.)

Tel: 886-2-2299-9720 / Fax: 886-2-2298-4045

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.10: 2013 and CISPR Publication 22.

### 6.2 EQUIPMENT

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

### 6.3 LABORATORY ACCREDITATIONS AND LISTING

The test facilities used to perform radiated and conducted emissions tests are accredited by American Association for Laboratory Accreditation Program for the specific scope accreditation under Lab Code: 0824-01 to perform Electromagnetic Interference tests according to FCC Part 15 and CISPR 22 requirements. In addition, the test facilities are listed with Industry Canada, Certification and Engineering Bureau, IC 2324G-1 for 3M Semi Anechoic Chamber A, 2324G-2 for 3M Semi Anechoic Chamber B.

## 7 SETUP OF EQUIPMENT UNDER TEST

### 7.1 SETUP CONFIGURATION OF EUT

See test photographs attached in Appendix II for the actual connections between EUT and support equipment.

### 7.2 SUPPORT EQUIPMENT

Support Equipment						
No.	Equipment	Brand	Model	Series No.	FCC ID	IC ID
1	NB(L)	Toshiba	PORTEGE R30-A	N/A	PD97260H	N/A
2	DC Power Source	Agilent	E3640A	N/A	N/A	N/A

**Remark:**

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

## 8 FCC PART 27 REQUIREMENTS & INDUSTRY CANADA RSS-139

### 8.1 EIRP MEASUREMENT

#### LIMIT

FCC Part 27.50(d)(4)

Fixed, mobile, and portable (handheld) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

RSS-139 section 6.5

The equivalent isotropically radiated power (e.i.r.p.) for mobile and portable transmitters shall not exceed one watt. The e.i.r.p. for fixed and base stations in the band 1710-1780 MHz shall not exceed 1 watt.

#### TEST PROCEDURES

##### CONDUCTED POWER MEASUREMENT:

1. The transmitter output power was connected to the call box.
2. Set EUT at maximum output power via call box.
3. Set Call box at lowest, middle and highest channels for each band and modulation.

#### TEST RESULTS

*No non-compliance noted.*

**Remark:** *The value of factor includes both the loss of cable and external attenuator*

### Band VI WCDMA:

Band	Data Rate or Sub-test	UL/DL Channel No.	Frequency (MHz)	Average power (dBm)	EIRP (dBm)	Output Power (W)
WCDMA Band VI	RMC 12.2Kbps	1312/1537	1712.4	21.3	24.5	0.2818
		1413/1638	1732.6	21.7	<b>24.9</b>	0.3090
		1513/1738	1752.6	21.5	24.7	0.2951

### HSUPA:

Band	Data Rate or Sub-test	UL/DL Channel No.	Frequency (MHz)	Average power (dBm)	EIRP (dBm)	Output Power (W)
HSUPA VI	1	1312/1537	1712.4	21.0	24.2	0.2630
		1413/1638	1732.6	22.2	25.4	0.3467
		1513/1738	1752.6	22.4	<b>25.6</b>	0.3631
	2	1312/1537	1712.4	22.4	25.6	0.3631
		1413/1638	1732.6	22.1	25.3	0.3388
		1513/1738	1752.6	22.0	25.2	0.3311
	3	1312/1537	1712.4	22.1	25.3	0.3388
		1413/1638	1732.6	22.2	25.4	0.3467
		1513/1738	1752.6	22.1	25.3	0.3388
	4	1312/1537	1712.4	21.8	25.0	0.3162
		1413/1638	1732.6	21.8	25.0	0.3162
		1513/1738	1752.6	21.7	24.9	0.3090
	5	1312/1537	1712.4	21.1	24.3	0.2692
		1413/1638	1732.6	22.4	25.6	0.3631
		1513/1738	1752.6	22.2	25.4	0.3467

### HSDPA:

Band	Data Rate or Sub-test	UL/DL Channel No.	Frequency (MHz)	Average power (dBm)	EIRP (dBm)	Output Power (W)
HSDPA VI	1	1312/1537	1712.4	21.4	24.6	0.2884
		1413/1638	1732.6	21.8	25.0	0.3162
		1513/1738	1752.6	21.8	25.0	0.3162
	2	1312/1537	1712.4	21.7	24.9	0.3090
		1413/1638	1732.6	21.8	<b>25.0</b>	0.3162
		1513/1738	1752.6	21.7	24.9	0.3090
	3	1312/1537	1712.4	21.3	24.5	0.2818
		1413/1638	1732.6	21.7	24.9	0.3090
		1513/1738	1752.6	21.4	24.6	0.2884
	4	1312/1537	1712.4	21.2	24.4	0.2754
		1413/1638	1732.6	21.7	24.9	0.3090
		1513/1738	1752.6	21.7	24.8	0.3020

## 8.2 SPURIOUS RADIATION MEASUREMENT

### LIMIT

FCC §27.53 (h)

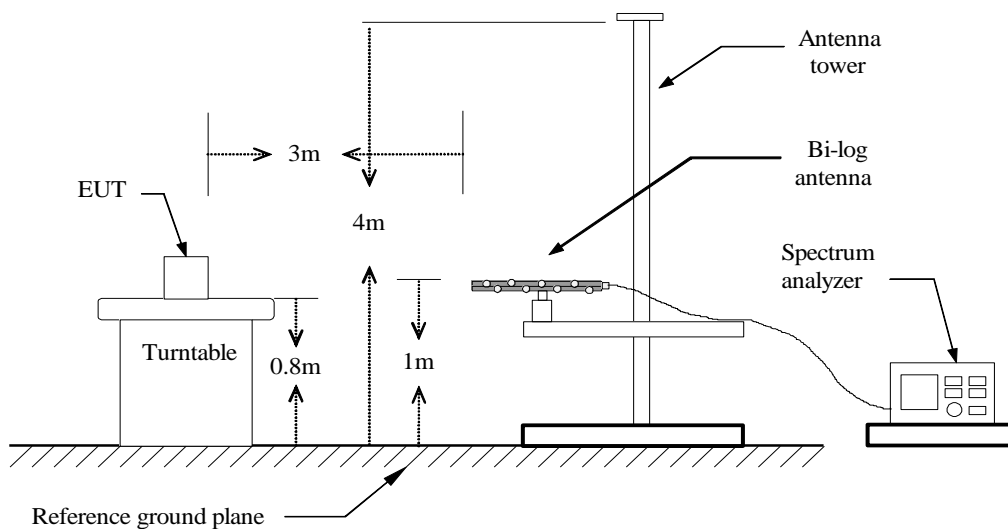
The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log_{10} (P)$  dB.

RSS-139 section 6.6

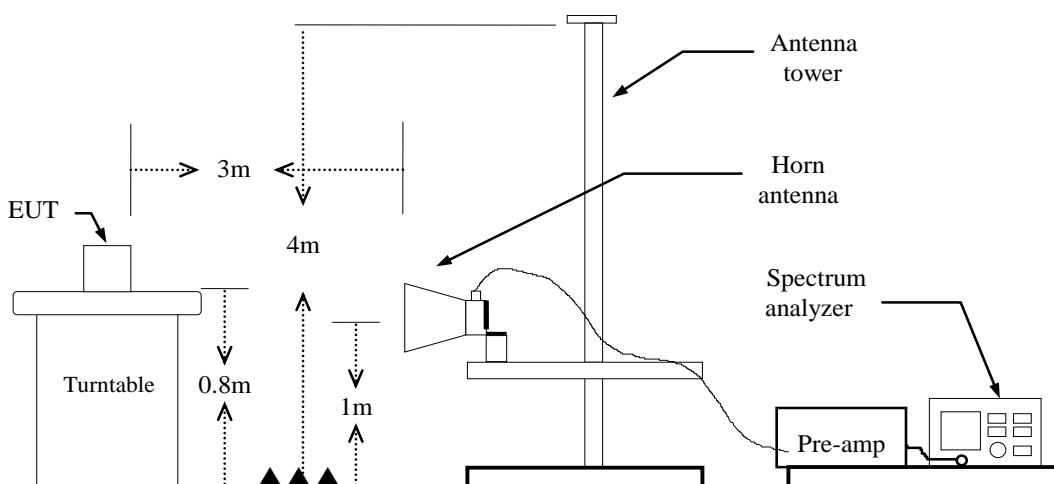
The mean power of emission must be attenuated below the mean power of the non-modulated carrier (P) on any frequency twice or more than twice the fundamental frequency by at least  $43 + 10 \log P$  dB.

### Test Configuration

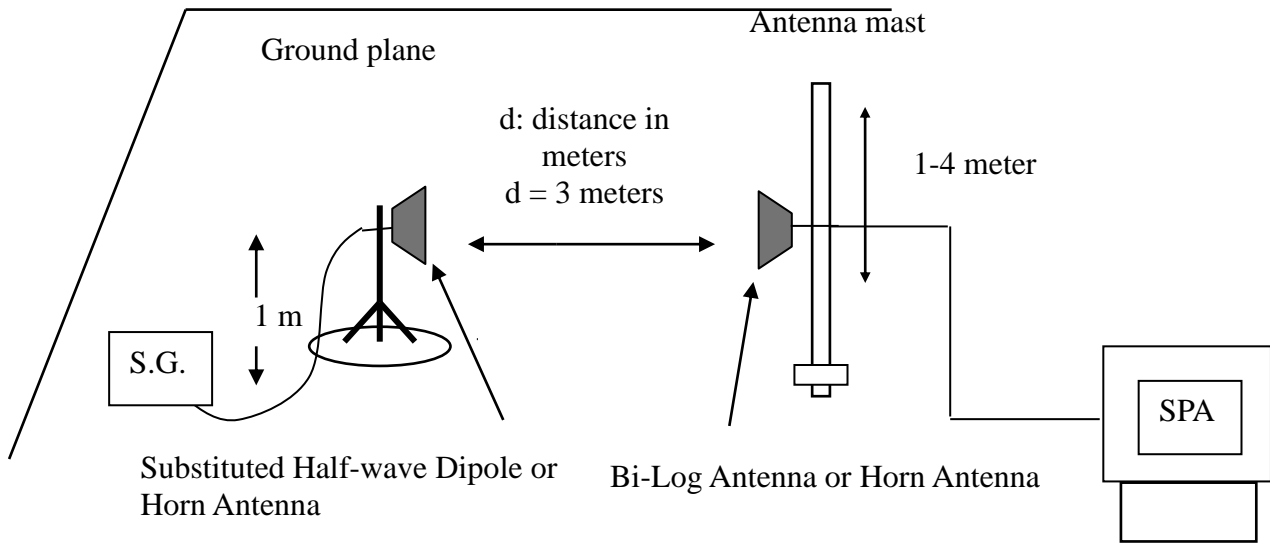
#### Below 1 GHz



#### Above 1 GHz





**Substituted Method Test Set-up****TEST PROCEDURE**

1. According to KDB 971168 D01 Power Meas License Digital System and TIA-603-E Section 2.2.12.
2. The EUT was placed on a turntable
  - (1) Below 1G : 0.8m
  - (2) Above 1G : 0.8m
  - (3) EUT set 3m from the receiving antenna
  - (4) The table was rotated 360 degrees of the highest spurious emission to determine the position.
3. Set the spectrum analyzer , RBW=1MHz, VBW=3MHz.
4. A horn antenna was driven by a signal generator.
5. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission

$$\text{ERP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable (dB)} - 2.15$$

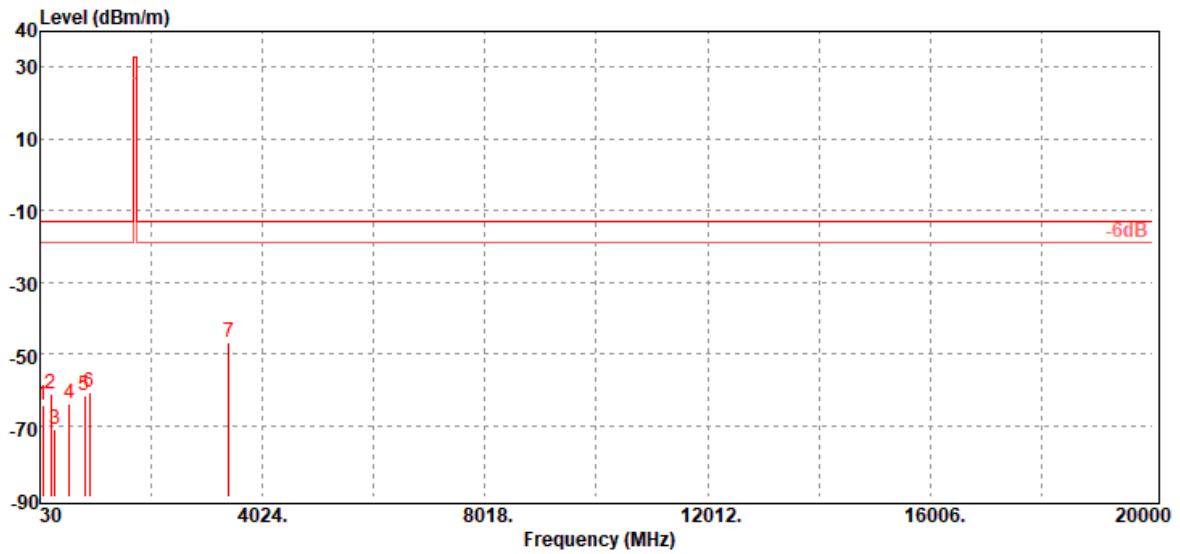
$$\text{EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable (dB)}$$

**TEST RESULTS**

*Refer to the attached tabular data sheets.*

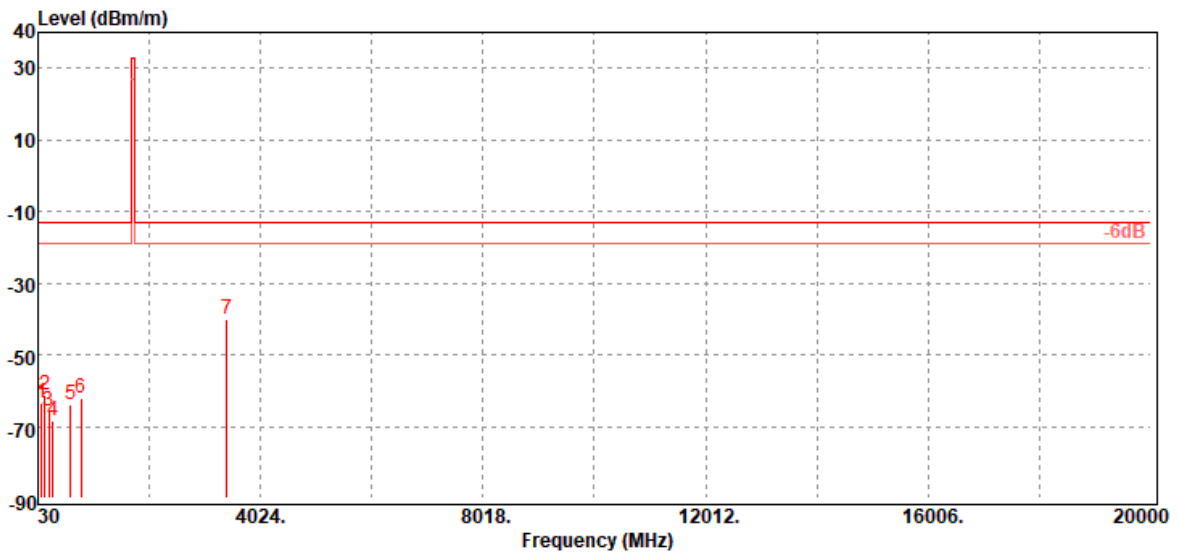
## Radiated Spurious Emission Measurement Result

<b>Operation Mode:</b>	WCDMA 12.2k RMC Band IV / TX / Low CH	<b>Test Date:</b>	June 6, 2020
<b>Temperature:</b>	24.9°C	<b>Tested by:</b>	Jerry Chang
<b>Humidity:</b>	51 %RH	<b>Polarity:</b>	Ver.



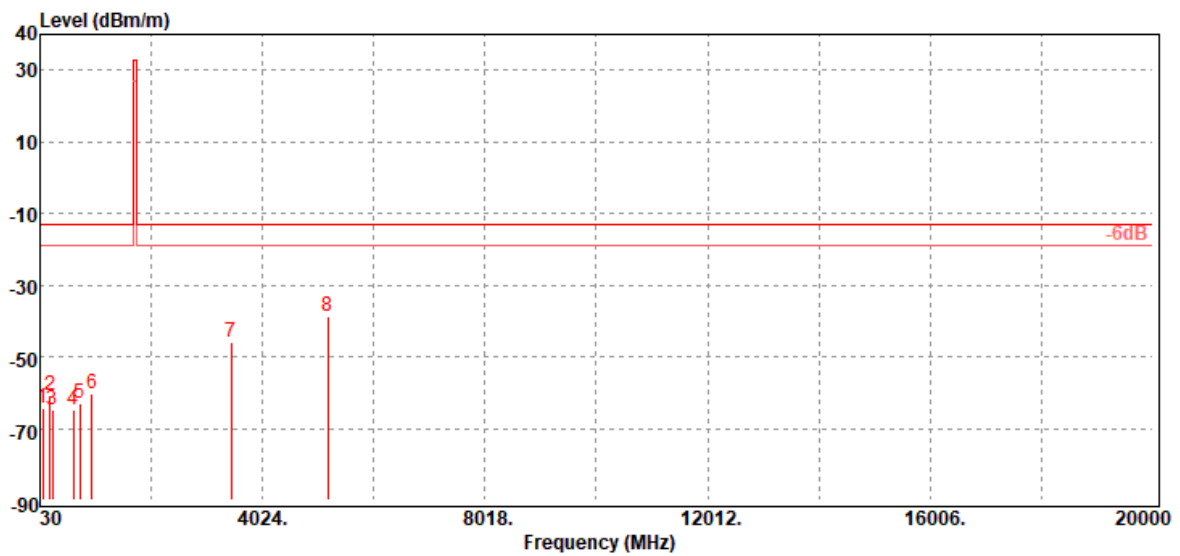
Freq. (MHz)	ERP/EIRP (dBm)	SG Output Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
77.53	-64.50	-55.13	-8.65	-0.72	-13.00	-51.50	V
219.15	-61.41	-58.17	-2.02	-1.22	-13.00	-48.41	V
298.69	-70.90	-67.44	-2.03	-1.43	-13.00	-57.90	V
555.74	-64.03	-60.76	-1.31	-1.96	-13.00	-51.03	V
835.10	-61.87	-57.94	-1.50	-2.43	-13.00	-48.87	V
922.40	-60.59	-56.71	-1.30	-2.58	-13.00	-47.59	V
3424.80	-46.94	-54.19	12.75	-5.50	-13.00	-33.94	V

<b>Operation Mode:</b>	WCDMA 12.2k RMC Band IV / TX / Low CH	<b>Test Date:</b>	June 6, 2020
<b>Temperature:</b>	24.9°C	<b>Tested by:</b>	Jerry Chang
<b>Humidity:</b>	51 %RH	<b>Polarity:</b>	Hor.



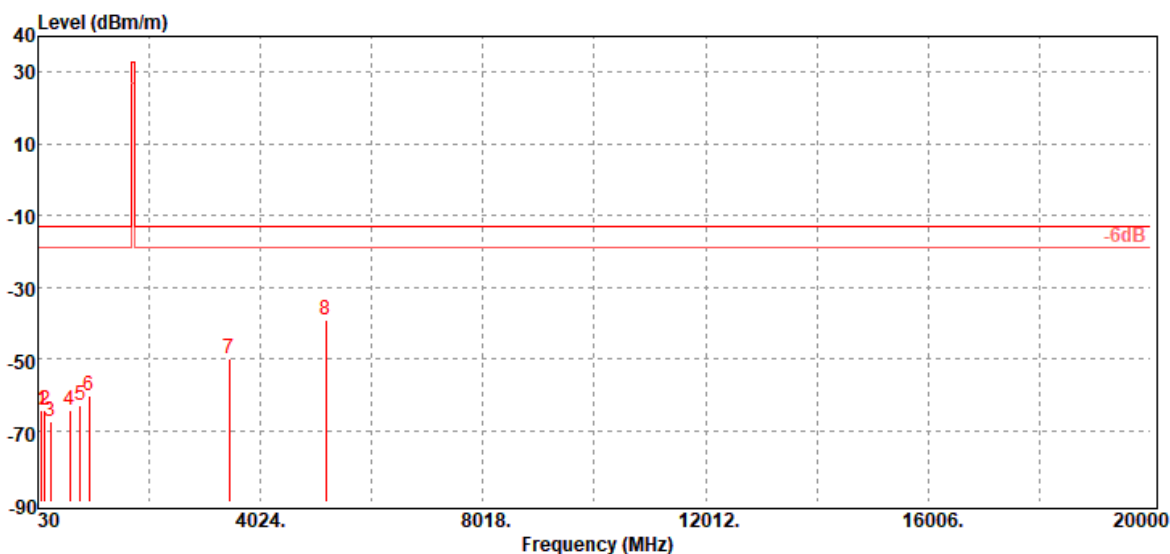
Freq. (MHz)	ERP/EIRP (dBm)	SG Output Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
91.11	-63.54	-55.85	-6.91	-0.78	-13.00	-50.54	H
158.04	-61.10	-53.67	-6.40	-1.03	-13.00	-48.10	H
222.06	-65.54	-62.36	-1.96	-1.22	-13.00	-52.54	H
296.75	-68.62	-65.13	-2.07	-1.42	-13.00	-55.62	H
619.76	-64.13	-60.63	-1.40	-2.10	-13.00	-51.13	H
799.21	-62.10	-58.45	-1.28	-2.37	-13.00	-49.10	H
3424.80	-39.88	-47.13	12.75	-5.50	-13.00	-26.88	H

<b>Operation Mode:</b>	WCDMA 12.2k RMC Band IV / TX / Mid CH	<b>Test Date:</b>	June 6, 2020
<b>Temperature:</b>	24.9°C	<b>Tested by:</b>	Jerry Chang
<b>Humidity:</b>	51 %RH	<b>Polarity:</b>	Ver.



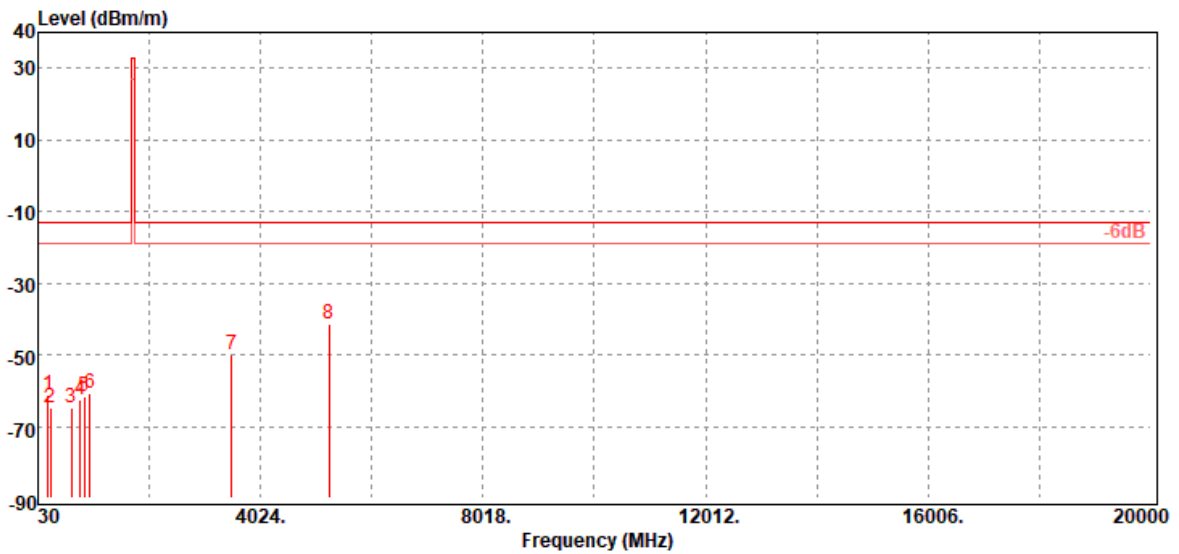
Freq. (MHz)	ERP/EIRP (dBm)	SG Output Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
76.56	-64.35	-54.84	-8.79	-0.72	-13.00	-51.35	V
207.51	-60.91	-57.28	-2.45	-1.18	-13.00	-47.91	V
255.04	-64.92	-62.01	-1.60	-1.31	-13.00	-51.92	V
629.46	-64.84	-61.23	-1.49	-2.12	-13.00	-51.84	V
742.95	-62.89	-59.23	-1.36	-2.30	-13.00	-49.89	V
966.05	-60.53	-56.60	-1.30	-2.63	-13.00	-47.53	V
3465.20	-46.07	-53.18	12.64	-5.53	-13.00	-33.07	V
5197.80	-38.87	-45.11	12.99	-6.75	-13.00	-25.87	V

<b>Operation Mode:</b>	WCDMA 12.2k RMC Band IV / TX / Mid CH	<b>Test Date:</b>	June 6, 2020
<b>Temperature:</b>	24.9°C	<b>Tested by:</b>	Jerry Chang
<b>Humidity:</b>	51 %RH	<b>Polarity:</b>	Hor.



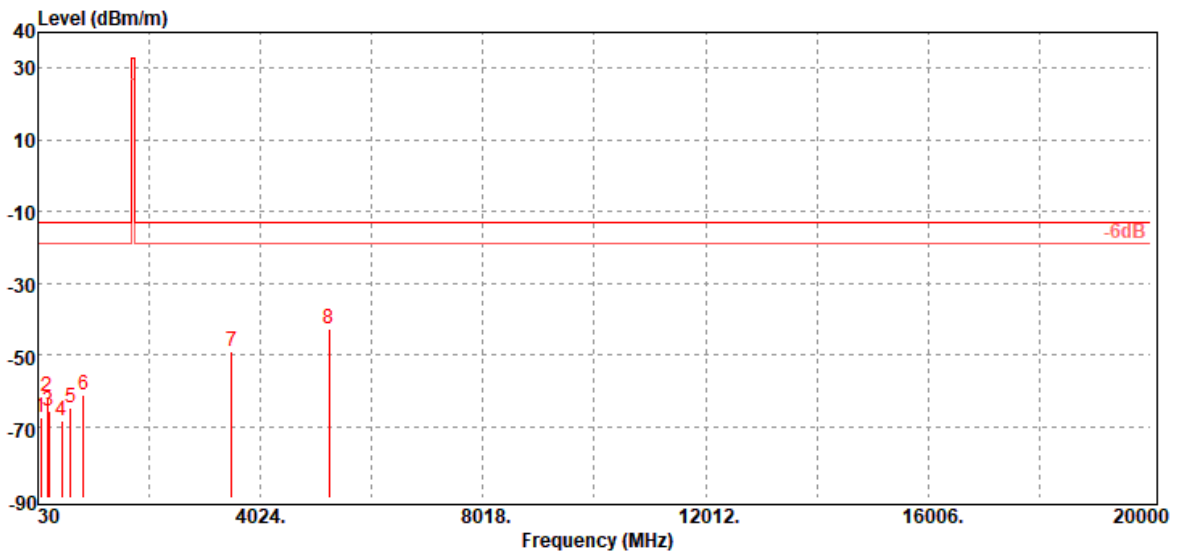
Freq. (MHz)	ERP/EIRP (dBm)	SG Output Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
88.20	-64.42	-56.49	-7.16	-0.77	-13.00	-51.42	H
149.31	-64.24	-56.07	-7.17	-1.00	-13.00	-51.24	H
255.04	-67.44	-64.53	-1.60	-1.31	-13.00	-54.44	H
595.51	-64.14	-61.27	-0.81	-2.06	-13.00	-51.14	H
783.69	-63.05	-59.35	-1.35	-2.35	-13.00	-50.05	H
952.47	-60.25	-56.43	-1.20	-2.62	-13.00	-47.25	H
3465.20	-50.01	-57.12	12.64	-5.53	-13.00	-37.01	H
5197.80	-39.31	-45.55	12.99	-6.75	-13.00	-26.31	H

<b>Operation Mode:</b>	WCDMA 12.2k RMC Band IV / TX / High CH	<b>Test Date:</b>	June 6, 2020
<b>Temperature:</b>	24.9°C	<b>Tested by:</b>	Jerry Chang
<b>Humidity:</b>	51 %RH	<b>Polarity:</b>	Ver.



Freq. (MHz)	ERP/EIRP (dBm)	SG Output Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
212.36	-61.06	-57.76	-2.10	-1.20	-13.00	-48.06	V
248.25	-64.97	-61.84	-1.83	-1.30	-13.00	-51.97	V
623.64	-64.74	-61.23	-1.40	-2.11	-13.00	-51.74	V
791.45	-62.49	-58.86	-1.27	-2.36	-13.00	-49.49	V
866.14	-61.51	-57.75	-1.28	-2.48	-13.00	-48.51	V
961.20	-60.69	-56.76	-1.30	-2.63	-13.00	-47.69	V
3505.20	-49.86	-56.79	12.49	-5.56	-13.00	-36.86	V
5257.80	-41.43	-47.82	13.20	-6.81	-13.00	-28.43	V

<b>Operation Mode:</b>	WCDMA 12.2k RMC Band IV / TX / High CH	<b>Test Date:</b>	June 6, 2020
<b>Temperature:</b>	24.9°C	<b>Tested by:</b>	Jerry Chang
<b>Humidity:</b>	51 %RH	<b>Polarity:</b>	Hor.



Freq. (MHz)	ERP/EIRP (dBm)	SG Output Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
86.26	-67.65	-59.34	-7.55	-0.76	-13.00	-54.65	H
190.05	-61.56	-56.43	-4.00	-1.13	-13.00	-48.56	H
226.91	-65.70	-62.48	-1.98	-1.24	-13.00	-52.70	H
450.01	-68.42	-64.56	-2.10	-1.76	-13.00	-55.42	H
618.79	-64.71	-61.23	-1.38	-2.10	-13.00	-51.71	H
852.56	-61.33	-57.57	-1.30	-2.46	-13.00	-48.33	H
3505.20	-49.28	-56.21	12.49	-5.56	-13.00	-36.28	H
5257.80	-42.79	-49.18	13.20	-6.81	-13.00	-29.79	H



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### 8.3 TEST DATA RE-USE SUMMARY

#### **Introduction Section:**

The application re-uses data collected on a similar device. The subject device of this application (Model: N653, FCC ID: P4Q-N653, IC: 2420C-N653) is electrically identical to the reference device (Model: N635, FCC ID: P4Q-N635A, IC: 2420C-N635A) for the portions of the circuitry corresponding to the data being re-used, as treated by KDB Publication 484596 D01.

#### **Differences Brief Description:**

The WLAN, WWAN, BT and RFID hardware of this device are identical to the implementation in

FCC ID: P4Q-N653.

IC: 2420C-N653

The Product Equality Declaration document includes detailed information about the changes between the devices. The data from that application has been verified through appropriate spot checks to demonstrate compliance for this device as shown in the summary table below.



**Spot Check Verification Result Summary**

Equipment Class	Reference FCC ID / IC No.	Folder Test	Report Title/ Section
Part 27 / RSS-139	P4Q-N635A / 2420C-N635A	T191105W01-RP7	All Section ( <i>Except for EIRP Measurement, Spurious Radiation Measurement</i> )

**Summery of the spot check for Unlicensed bands and Licensed bands**

In order to confirm hardware similarity of the subject device with the reference device, we used same setting power to radiated emission measurement were performed on the subject device for the Band edge and Harmonic, the test result were similar with FCC ID: P4Q-N635A / IC: 2420C-N635A.

**WWAN: WCDMA**

Report	Test Item	Frequency (MHz)	P4Q-N635A / 2420C-N635A		P4Q-N653 / 2420C-N653		Gap (dB)
			Measured Frequency (MHz)	EIRP/ERP	Measured Frequency (MHz)	EIRP/ERP	
Band IV	RSE	1732.6	5197.8	-38.79	5197.8	-38.87	0.08

**- End of Test Report -**