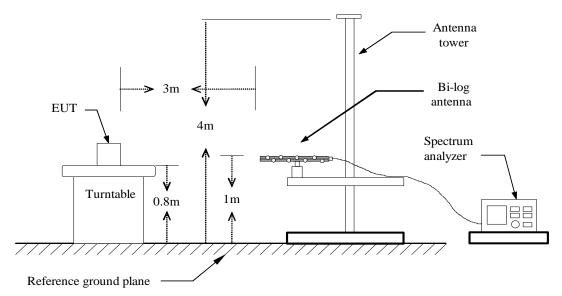
# 7.6 FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

# <u>LIMIT</u>

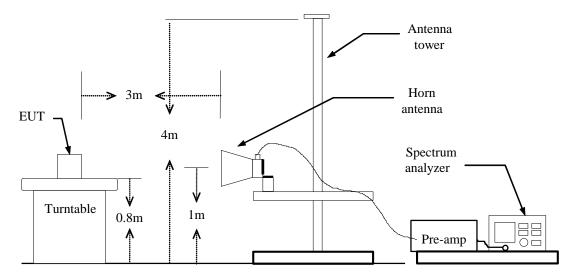
According to FCC §2.1053

# **Test Configuration**

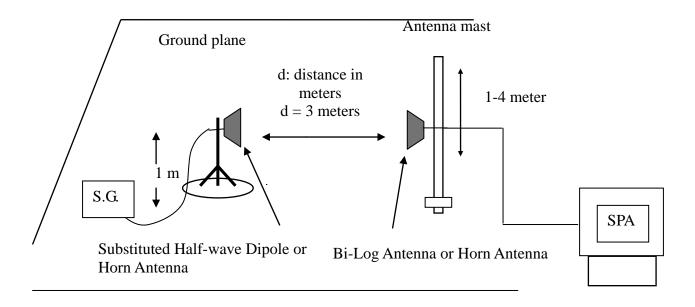
Below 1 GHz



## Above 1 GHz



# Substituted Method Test Set-up



# TEST PROCEDURE

The EUT was placed on a non-conductive, the measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels). Once spurious emission were identified, the power of the emission was determined using the substitution method.

The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency.

ERP = S.G. output (dBm) + Antenna Gain (dBd) – Cable (dB)

EIRP = S.G. output (dBm) + Antenna Gain (dBi) – Cable (dB)

# TEST RESULTS

Refer to the attached tabular data sheets.

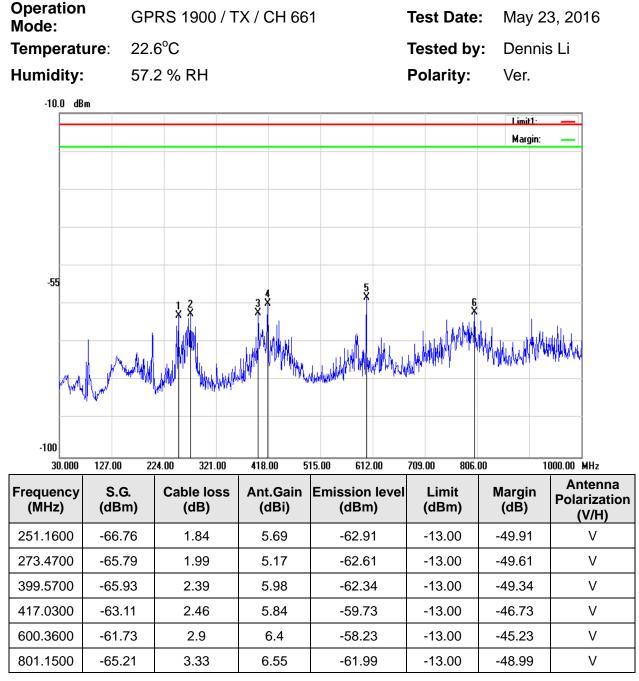
## **Radiated Spurious Emission Measurement Result / Below 1GHz**

Operation Mode:	GF	PRS 850 / T	X / CH 190	)	<b>Test Date:</b> May 23, 2016			
Temperat		.6°C				by: Dennis	S LI	
Humidity:	57	.2 % RH			Polarity	: Ver.		
-10.0 dB	m		î			11.14		
						Limit1 Margin:		
						<b>_</b>		
-55								
		2	3	5 X				
		×	X X	6		1		
	1		L. MAN					
Ν.,	A MAN	WAR WANNY	MAN THE MAKE	development with the states	y many work the most	here have not the providence	whenthe	
r way	1000 11	Madal						
-100								
30.000	127.00 22	24.00 321.00	418.00 5	15.00 612.00	709.00 806.	00 1	000.00 MHz	
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)	
174.5300	-74.19	1.59	3	-72.78	-13.00	-59.78	V	
273.4700	-65.5	1.99	5.17	-62.32	-13.00	-49.32	V	
399.5700	-66.75	2.39	5.98	-63.16	-13.00	-50.16	V	
433.5200	-67.72	2.5	5.83	-64.39	-13.00	-51.39	V	
600.3600	-62.62	2.9	6.4	-59.12	-13.00	-46.12	V	
633.3400	-72.13	2.99	6.18	-68.94	-13.00	-55.94	V	

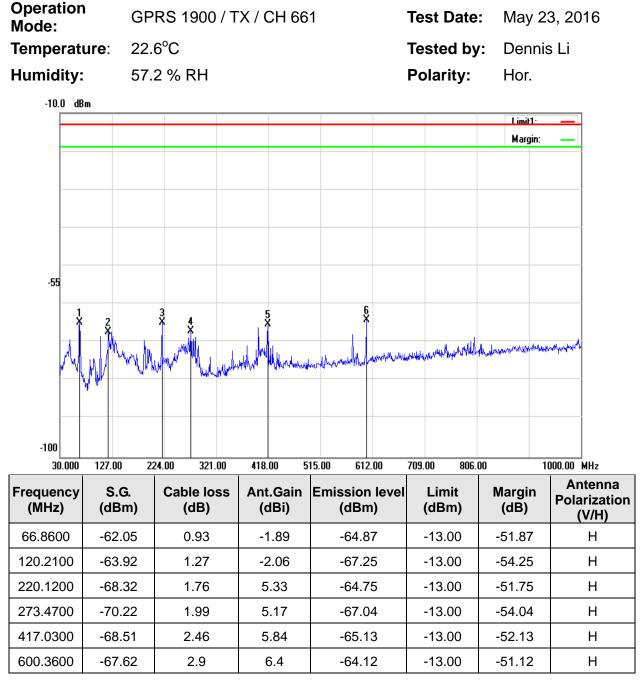
- 1. The emission behaviour belongs to narrowband spurious emission.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode:	GF	PRS 850 / T	X / CH 190	)	Test Date: May 23, 2016			
Temperate	u <b>re:</b> 22	.6°C			Tested b	<b>y:</b> Dennis	s Li	
Humidity:	57	.2 % RH			Polarity	: Hor.		
-10.0 dB	m							
						Limit1.		
						Margin:		
-55								
	1 2	34	5 X	6 X				
	Malin			بالد ا	h a deal deal		where M	
$\sim$	M/ MM	W The hash	and foll Whythere was	Not the second state of the second	www.harmana	tedadi antere e ser concer	IN THE REAL PROPERTY OF	
	p or							
-100 30.000	127.00 22	24.00 321.00	418.00 5	15.00 612.00	709.00 806.	00 1	000.00 MHz	
							Antenna	
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Polarization	
			. ,				(V/H)	
126.0300	-63.79	1.32	-1.69	-66.80	-13.00	-53.80	Н	
175.5000	-69.16	1.59	3.1	-67.65	-13.00	-54.65	Н	
251.1600	-71.2	1.84	5.69	-67.35	-13.00	-54.35	Н	
269.5900	-70.39	1.98	5.12	-67.25	-13.00	-54.25	Н	
399.5700	-70.63	2.39	5.98	-67.04	-13.00	-54.04	Н	
600.3600	-68.79	2.9	6.4	-65.29	-13.00	-52.29	Н	

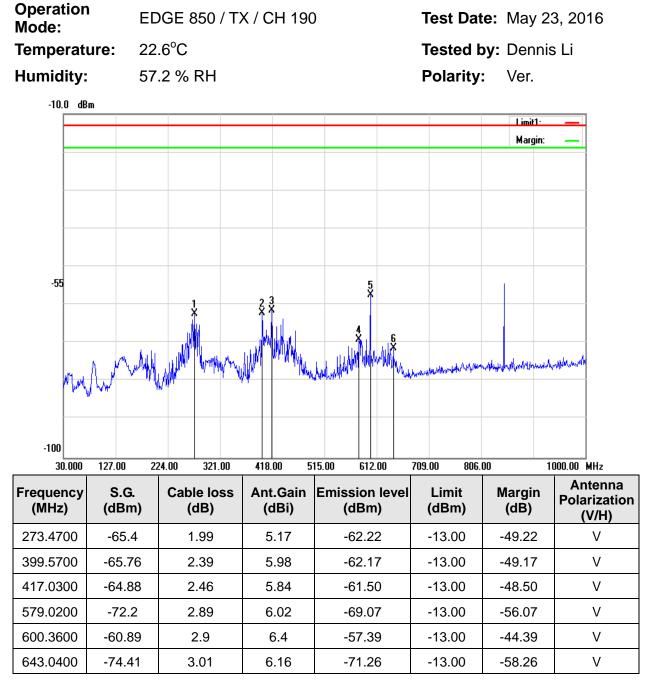
- 1. The emission behaviour belongs to narrowband spurious emission.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



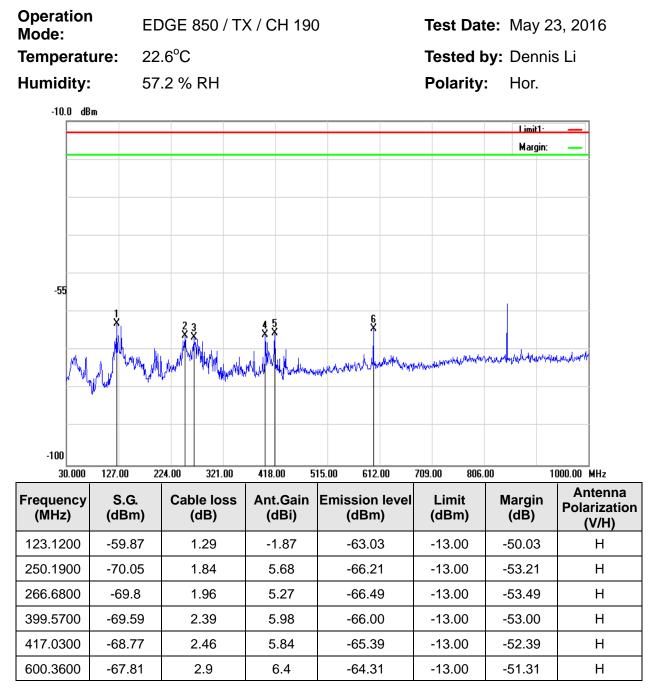
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



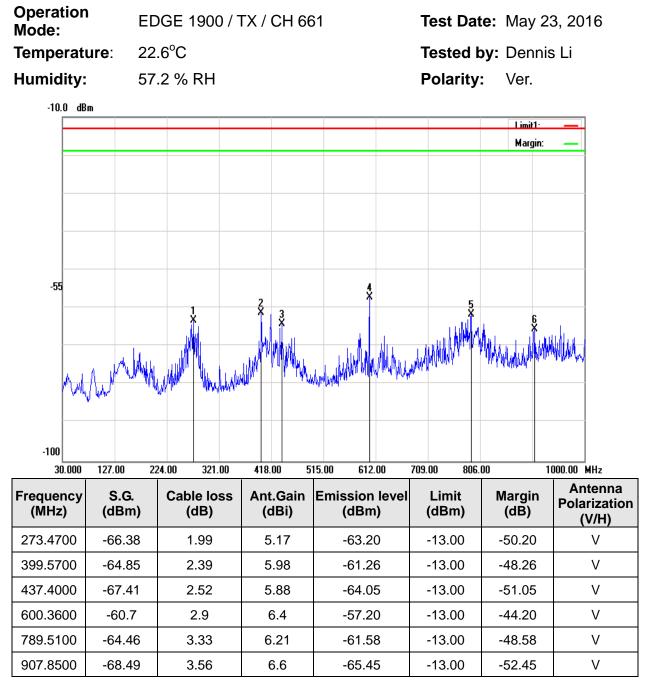
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



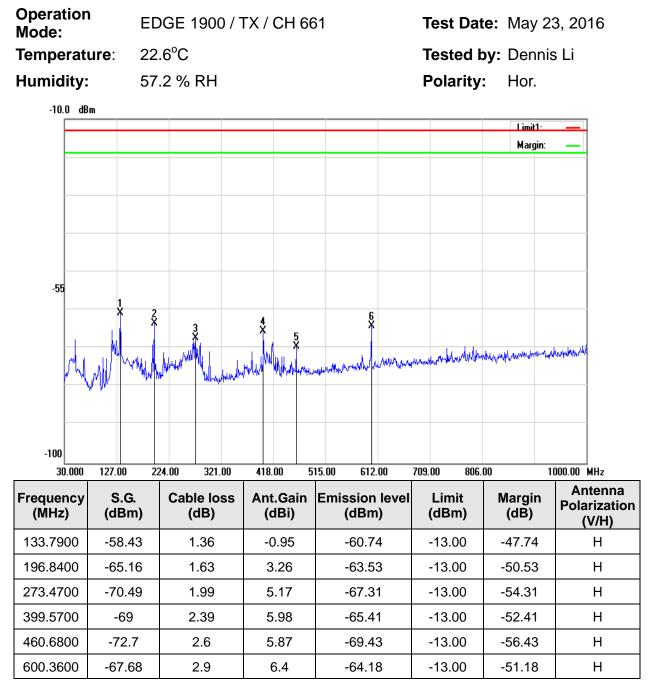
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

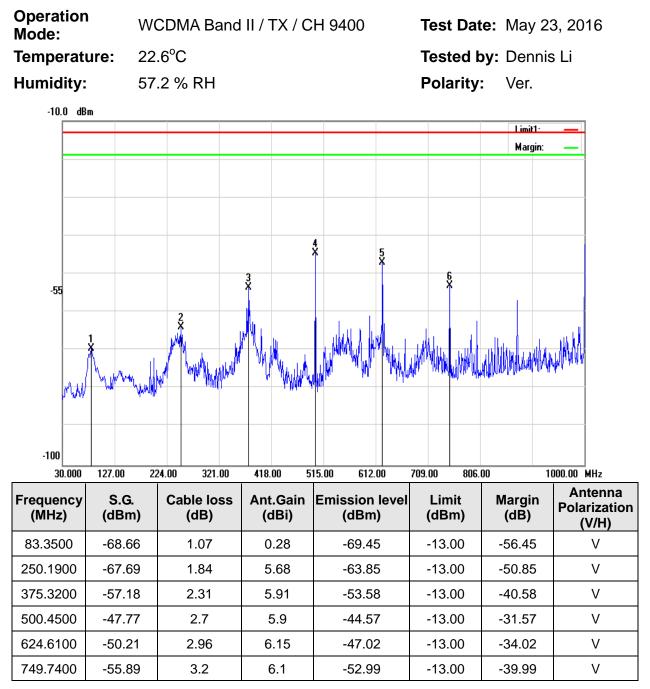


- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



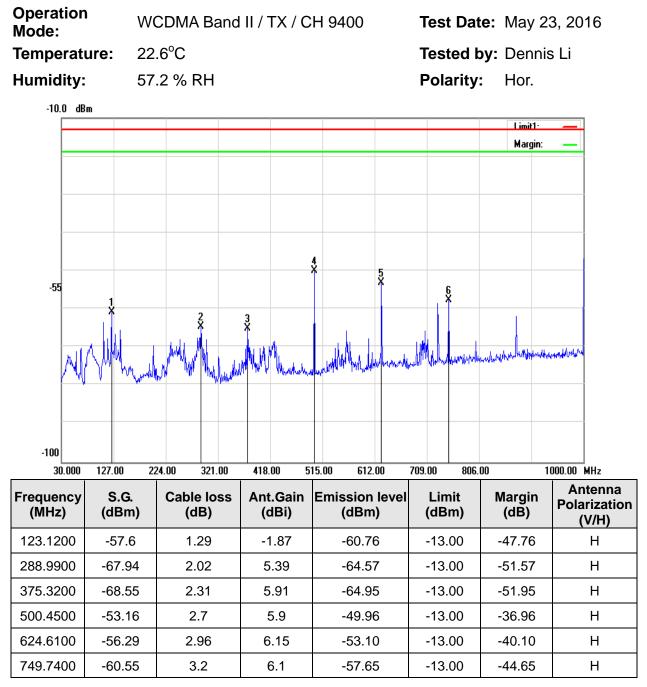
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.





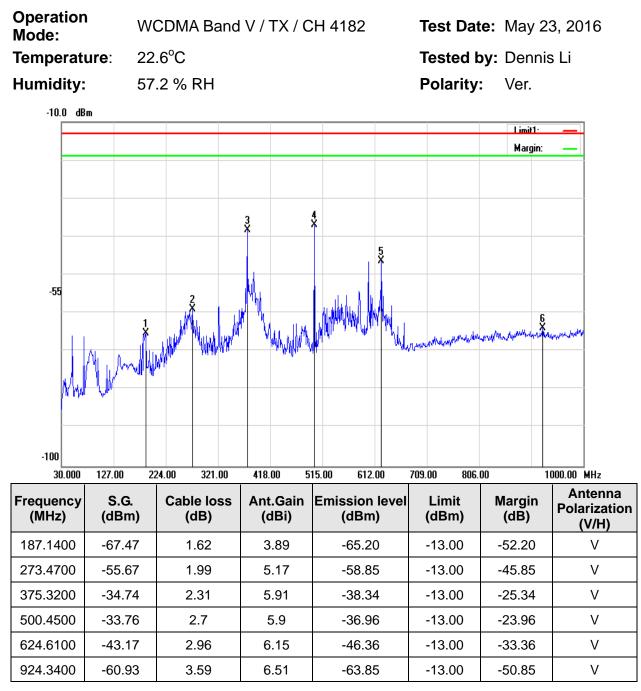
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
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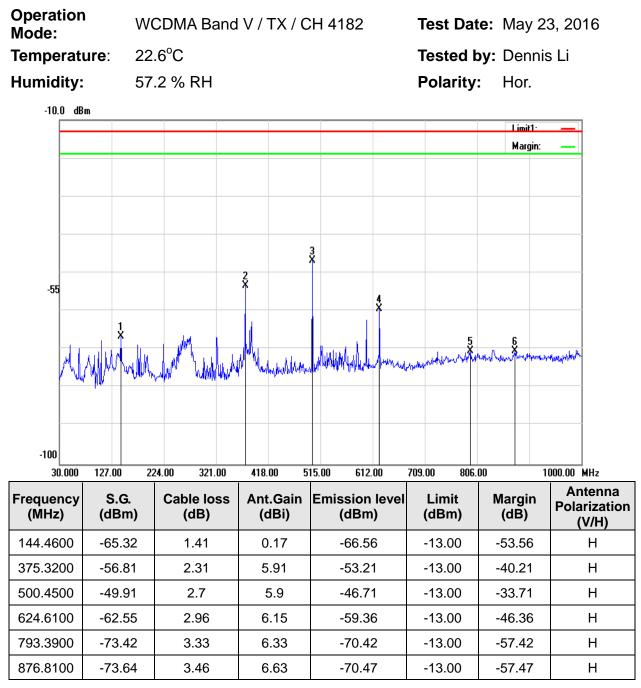
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.





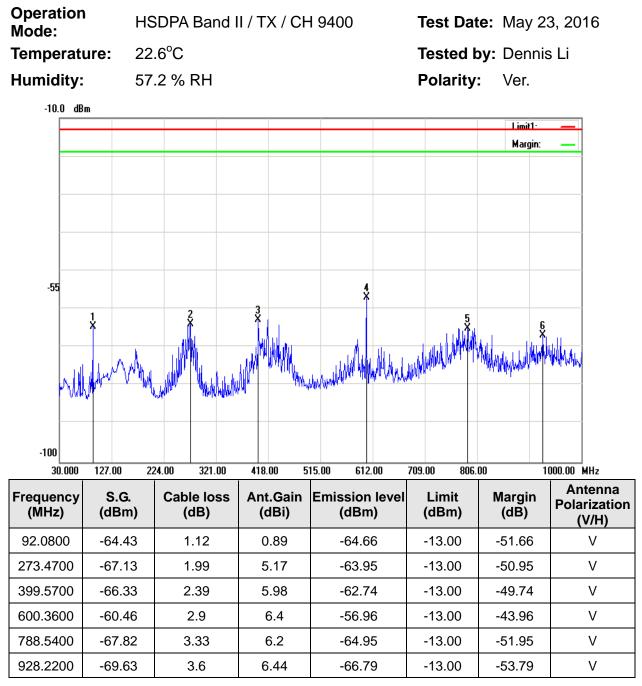
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.





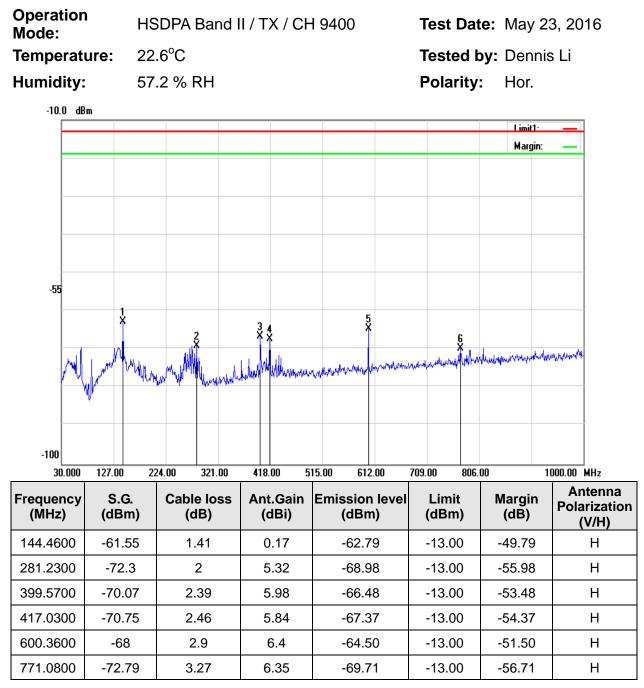
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.





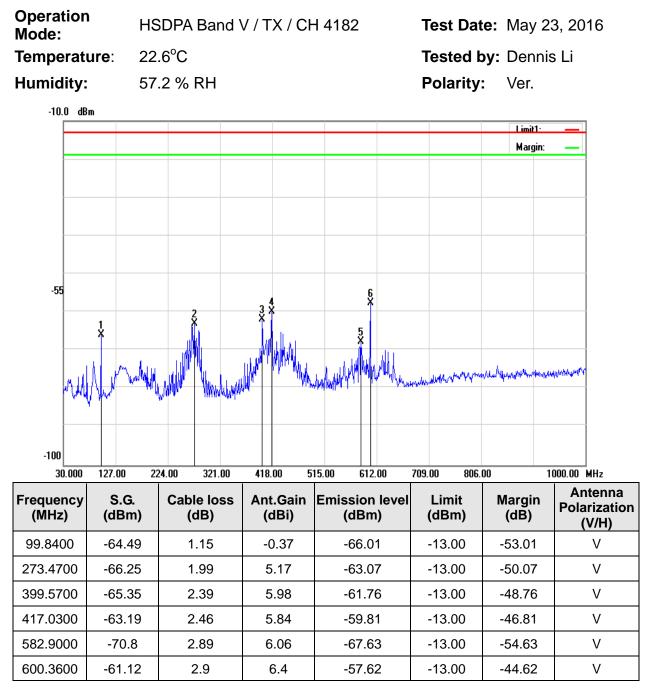
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.





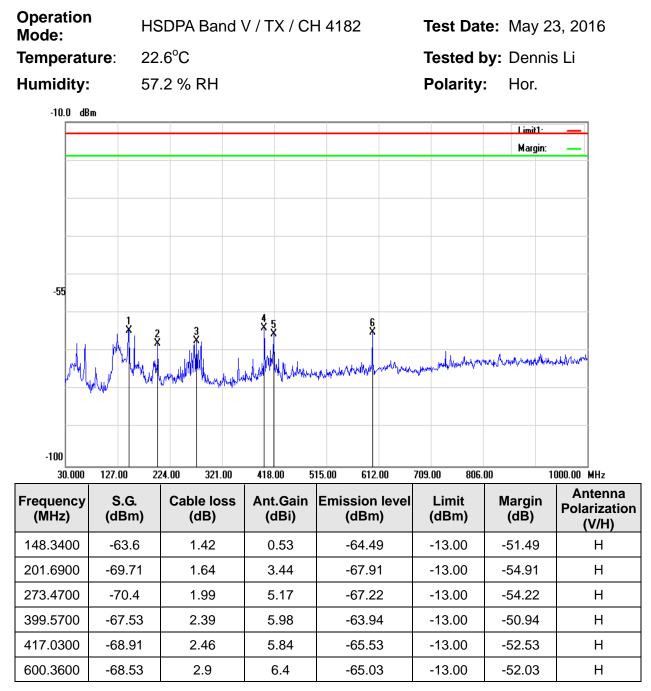
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.





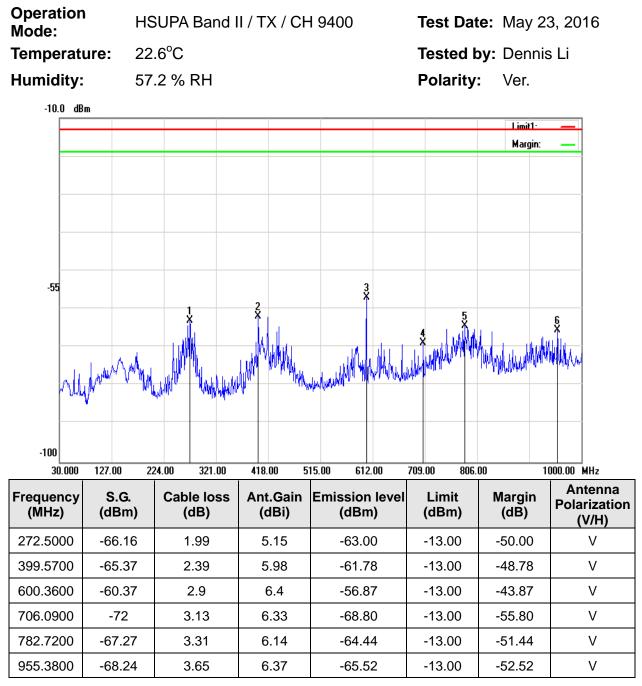
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.





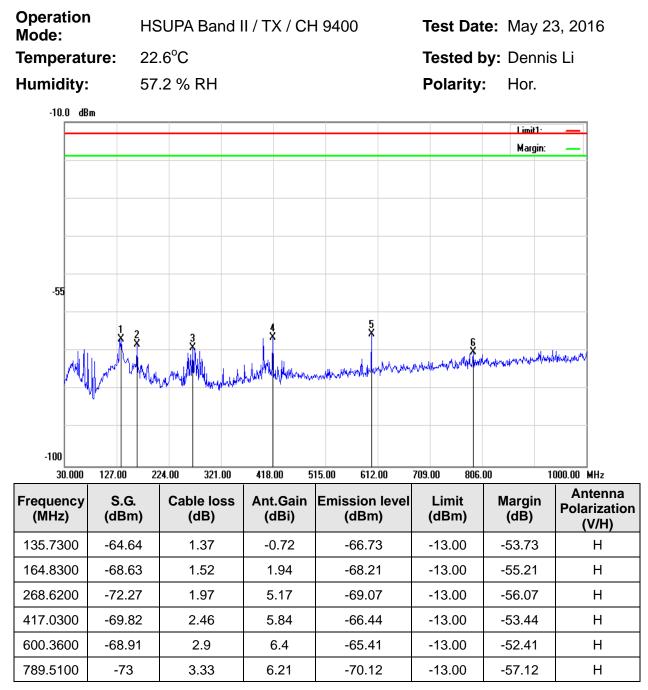
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.





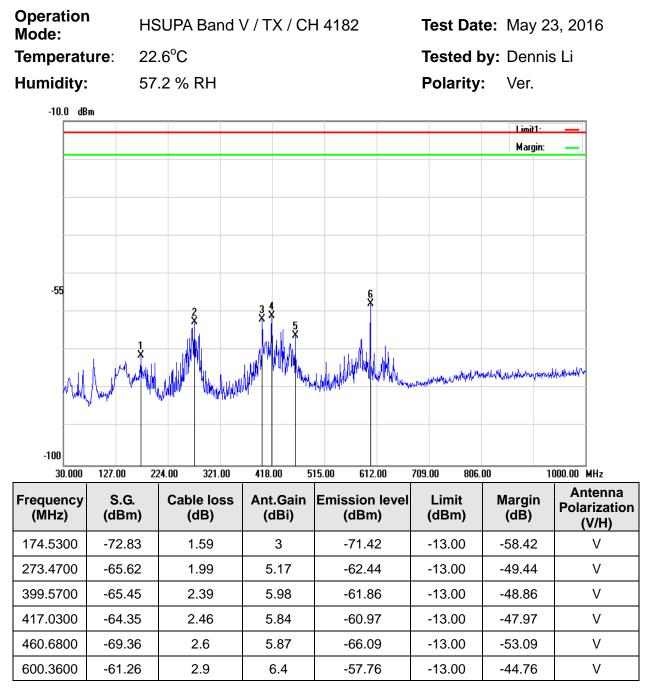
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.





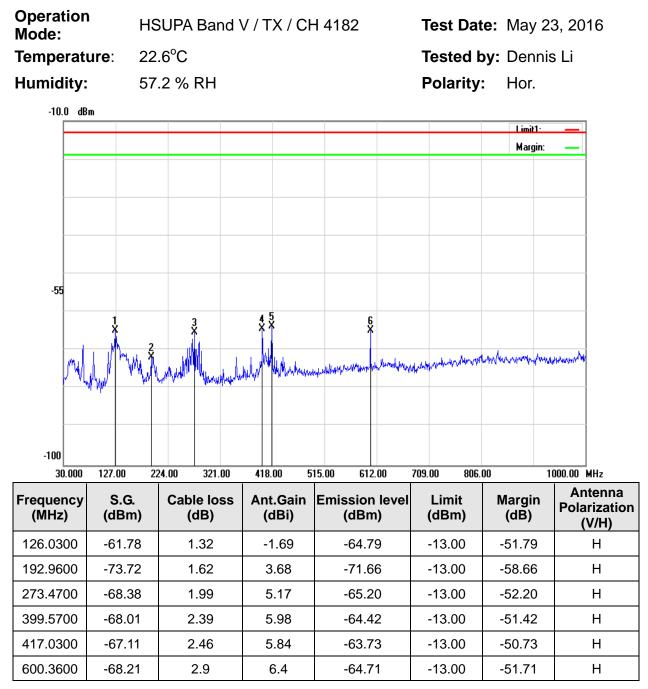
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.





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- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

#### Above 1GHz

Operation Mode: Temperat Humidity: 20.0 df	ure: 22 : 57	PRS 850 / T) .6°C .2 % RH	X / CH 128	3		e: April 1 by: Dennis Ver. Limit1: Margin:	
-25	2 X )0 2900.00 4	800.00 6700.00	8600.00 11		14300.00 1620	0.00 2	0000.00 MHz
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)		Emission level (dBm)		Margin (dB)	Antenna Polarization (V/H)
1651.000	-59.6	5.05	6.03	-58.62	-13.00	-45.62	V
2631.000	-54.84	6.56	6.44	-54.96	-13.00	-41.96	V
N/A							

- 1. The emission behaviour belongs to narrowband spurious emission.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode:	GF	PRS 850 / T	X / CH 128	3	Test Date: April 14, 2016			
Temperat	<b>ure:</b> 22	.6°C			Tested <b>k</b>	y: Dennis	s Li	
Humidity:	57	.2 % RH			Polarity	: Hor.		
20.0 dB	m					Limit1: Margin:	-	
-25 1 ×	2×							
	0 2900.00 44	800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	0.00 20	0000.00 MHz	
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)	
1651.000	-59.41	5.05	6.03	-58.43	-13.00	-45.43	Н	
2631.000	-54.92	6.56	6.44	-55.04	-13.00	-42.04	Н	
N/A								

- 1. The emission behaviour belongs to narrowband spurious emission.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode:	GF	PRS 850 / T	X / CH 190	)	Test Date: April 14, 2016			
Temperatu	<b>re:</b> 22	.6°C			Tested by: Dennis Li			
Humidity:	57	.2 % RH			Polarity	Ver.		
20.0 dBm								
						Limit1: Margin:	_	
-25								
	2							
1 X	×							
-70								
1000.000	2900.00 44	800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	0.00 2	0000.00 MHz	
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)	
1644.000	-58.97	5.04	6.04	-57.97	-13.00	-44.97	V	
2582.000	-54.56	6.46	6.31	-54.71	-13.00	-41.71	V	
N/A								

- 1. The emission behaviour belongs to narrowband spurious emission.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode:		PRS 850 / T	X / CH 190	)	Test Date: May 23, 2016			
Temperatu		.6°C				by: Dennis	s Li	
Humidity:	57	.2 % RH			Polarity	: Hor.		
20.0 dBm	1							
						Limit1: Margin:		
						inargin.		
-25								
	2 X							
-70								
1000.000	2900.00 4	800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	)0.00 2	0000.00 MHz	
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)	
1644.000	-57.91	5.04	6.04	-56.91	-13.00	-43.91	Н	
2582.000	-53.97	6.46	6.31	-54.12	-13.00	-41.12	Н	
N/A								

- 1. The emission behaviour belongs to narrowband spurious emission.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



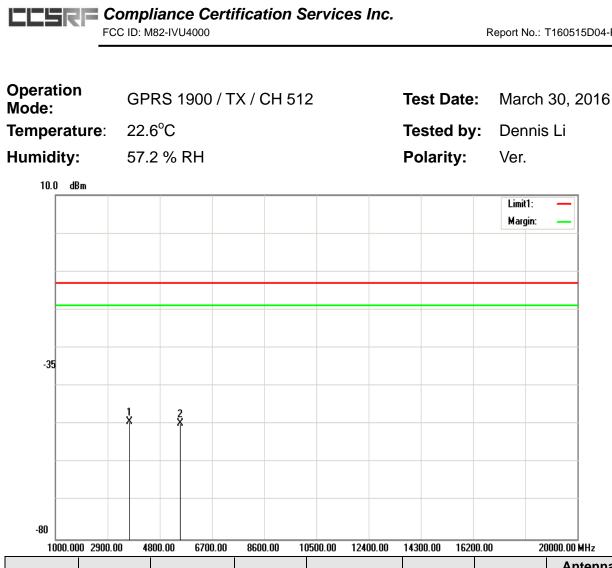
Operatio Mode:	on	GPI	GPRS 850 / TX / CH 251					Test Date: May 23, 2016			
Tempera	ature:	22.6	5°C					Tested b	<b>y:</b> Denni	s Li	
Humidit	t <b>y:</b>	57.2	2 % RH					Polarity	Ver.		
20.0	dBm								Limit1: Margin:		
-25											
-70	0.000 2900.0	NN 480	0.00 670	1 NN 8F	00.00 1	0500.00 124	00.00 1	14300.00 1620	10 00 2	0000.00 MHz	
Frequenc (MHz)		G.	Cable lo (dB)	ss Ai		Emission (dBrr	level	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)	
1721.000	0 -55	.31	5.15		5.9	-54.5	6	-13.00	-41.56	V	
2526.000	0 -54	.32	6.39		6.17	-54.5	4	-13.00	-41.54	V	
N/A											

- 1. The emission behaviour belongs to narrowband spurious emission.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode:	G	PRS 850 / T	X / CH 251	I	Test Date: May 23, 2016			
Temperat		6°C				<b>y:</b> Dennis	s Li	
Humidity:	57	.2 % RH			Polarity	: Hor.		
20.0 dB	m					Limit1: Margin:	_	
-25								
	0 2900.00 4	800.00 6700.00		0500.00 12400.00	14300.00 1620		0000.00 MHz Antenna	
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Polarization (V/H)	
1721.000	-55.06	5.15	5.9	-54.31	-13.00	-41.31	н	
2526.000	-51.87	6.39	6.17	-52.09	-13.00	-39.09	Н	
N/A								

- 1. The emission behaviour belongs to narrowband spurious emission.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3702.000	-50.28	8.2	9.1	-49.38	-13.00	-36.38	V
5550.000	-50.39	10.06	10.81	-49.64	-13.00	-36.64	V
N/A							

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental 1. frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

LESRF	Compliance Certification Services Inc.
	FCC ID: M82-IVU4000

Operation Mode:	GP	RS 1900 / T	X / CH 51	2	Test Date:	March	30, 2016
Temperat	ure: 22.	6°C			Tested by	: Dennis	s Li
Humidity:	57.	2 % RH			Polarity:	Hor.	
10.0 dB	m					Limit1: Margin:	
-35	1	2					
		800.00 6700.00			14300.00 16200		D000.00 MHz Antenna
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Polarization (V/H)
3702.000	-50.28	8.2	9.1	-49.38	-13.00	-36.38	Н
5550.000	-50.39	10.06	10.81	-49.64	-13.00	-36.64	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operatior Mode:	GP	RS 1900 / T	<sup>-</sup> X / CH 66	1	Test Date:	March	30, 2016
Temperat	<b>ure</b> : 22.	6°C			Tested by	: Dennis	s Li
Humidity:	57.	2 % RH			Polarity:	Ver.	
10.0 dB	lm					Limit1: Margin:	_
-35		2 X					
-80	0 2900.00 4	800.00 6700.00	8600.00 10	0500.00 12400.00	14300.00 16200	1 00 20	0000.00 MHz
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)		Margin (dB)	Antenna Polarization (V/H)
3758.000	-52.72	8.23	9.16	-51.79	-13.00	-38.79	V
5697.000	-52.47	10.16	10.84	-51.79	-13.00	-38.79	V
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode:	GPRS 1900 / TX / CH 661				Test Date:	March	30, 2016
Temperate	nperature: 22.6°C				Tested by: Dennis Li		
Humidity:	57.	2 % RH			Polarity:	Hor.	
10.0 dB	m					Limit1: Margin:	_
-35		2					
-80	0 2900.00 44	300.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 16200	1 00 21	0000.00 MHz
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)		Margin (dB)	Antenna Polarization (V/H)
3758.000	-53.19	8.23	9.16	-52.26	-13.00	-39.26	Н
5697.000	-51.29	10.16	10.84	-50.61	-13.00	-37.61	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Temperat Humidity:	ure: 22.	2RS 1900 / T 6°C 2 % RH	X / CH 81		Test Date Tested by Polarity:		30, 2016 s Li
-35	3m	2×				Limit1: Margin:	
-80		800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	0.00 2	0000.00 MHz
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3779.000	-52.45	8.25	9.18	-51.52	-13.00	-38.52	V
5732.000	-49.31	10.24	10.85	-48.70	-13.00	-35.70	V
N/A							

FCC ID: M82-IVU4000

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Mode:Temperature:22Humidity:57		RS 1900 / T 6°C 2 % RH		Tested by:		March 30, 2016 Dennis Li Hor.	
-35	3m 					Limit1: Margin:	
		300.00 6700.00			14300.00 1620	0.00 21	D000.00 MHz Antenna
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Polarization (V/H)
3779.000	-51.91	8.25	9.18	-50.98	-13.00	-37.98	Н
5732.000	-51.68	10.24	10.85	-51.07	-13.00	-38.07	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operatior Mode:	EC	)GE 850 / T)	3	Test Date: April 14, 2016					
Temperat	ure: 22	.6°C			Tested <b>b</b>	<b>y:</b> Dennis	s Li		
Humidity:	57	.2 % RH			Polarity	Polarity: Ver.			
20.0 dB	lm 					Limit1: Margin:			
-25	2×								
-70	0 2900.00 44	200 00 6700 00	0000 00 1	0500.00 12400.00	14300.00 1620	0.00 0	0000 00 MU		
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)		0500.00 12400.00 Emission level (dBm)		Margin (dB)	0000.00 MHz Antenna Polarization (V/H)		
1714.000	-49.87	5.14	5.91	-49.10	-13.00	-36.10	V		
2442.000	-53.57	6.25	6.02	-53.80	-13.00	-40.80	V		
N/A									

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode:	ED	OGE 850 / T	X / CH 128	Test Dat	Test Date: April 14, 2016			
Temperature: 22.6°C					Tested by: Dennis Li			
Humidity:	57	.2 % RH			Polarity	: Hor.		
20.0 dBn	n					Limit1:	]	
						Margin:	_	
-25								
	2 X							
-70								
	) 2900.00 44	800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	0.00 2	0000.00 MHz	
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)	
1714.000	-48.71	5.14	5.91	-47.94	-13.00	-34.94	Н	
2442.000	-51.88	6.25	6.02	-52.11	-13.00	-39.11	н	
N/A								

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode:	E	DGE 850 / 1	TX / CH 190	)	Test Date: April 14, 2016			
Temperatu	u <b>re:</b> 22	2.6°C			Tested k	<b>y:</b> Dennis	s Li	
Humidity:	5	7.2 % RH			Polarity	Ver.		
20.0 dBr	m							
						Limit1:	—	
						Margin:		
-25								
-23								
1	2 X							
1 X								
-70								
	) 2900.00	4800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	10.00 20	0000.00 MHz	
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)	
1651.000	-58.68	5.05	6.03	-57.70	-13.00	-44.70	V	
2526.000	-55.16	6.39	6.17	-55.38	-13.00	-42.38	V	
N/A								

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperate Humidity:	ure: 22	EDGE 850 / TX / CH 190 Test Date:   22.6°C Tested by:   57.2 % RH Polarity:					
20.0 dB					i olaniy	: Hor.	
20.0 06						Limit1: Margin:	_
-25							
1	2						
-70	0 2900.00 4	800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	0.00 2	0000.00 MHz
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1651.000	-58.29	5.05	6.03	-57.31	-13.00	-44.31	Н
2526.000	-55.15	6.39	6.17	-55.37	-13.00	-42.37	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operatior Mode:	n EC	DGE 850 / T	X / CH 251	I	Test Date: April 14, 2016			
Temperat	<b>ure:</b> 22	.6°C			Tested <b>b</b>	<b>y:</b> Dennis	s Li	
Humidity	: 57	.2 % RH			Polarity	Ver.		
20.0 dE	3m					Limit1: Margin:	_	
-25	2 2							
-70	0 2900.00 4	800.00 6700.00	8600.00 10	0500.00 12400.00	14300.00 1620	0.00 20	0000.00 MHz	
Frequency (MHz)		Cable loss (dB)		Emission level (dBm)		Margin (dB)	Antenna Polarization (V/H)	
1714.000	-49.24	5.14	5.91	-48.47	-13.00	-35.47	V	
2519.000	-54.97	6.38	6.15	-55.20	-13.00	-42.20	V	
N/A								

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operatio Mode:	n	EDGE 850 / TX / CH 251					Test Date: April 14, 2016				16				
Tempera	ture:	22.6	°℃							Te	ested b	y: De	ennis	s Li	
Humidity	/:	57.2	2 % RH							Ρ	olarity	: Ho	or.		
20.0 d	1Bm												imit1: argin:	_	
-25															
-70	00 2900.00	4800	).00 6700	1.00	8600.0	00 10	500.00	124	)0.00	14300	).00 1620	0.00	2	0000.00	MHz
Frequency (MHz)		1	Cable lo (dB)		Ant.		Emi		level	I	Limit dBm)	Mar (dl	gin	An Pola	itenna rization V/H)
1714.000	-53.85	5	5.14		5.9	91		-53.0	8	-	13.00	-40.	08		Н
2519.000	-55.58	3	6.38		6.	15		-55.8	1	-	13.00	-42.	81		Н
N/A															

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperate Humidity:	ure: 22	DGE 1900 / <sup>-</sup> .6°C .2 % RH	TX / CH 51	2		e: March by: Dennis Ver.	
-35	m					Limit1: Margin:	
-80 1000.00 Frequency (MHz)	0 2900.00 44 S.G. (dBm)	800.00 6700.00 Cable loss (dB)	8600.00 1 Ant.Gain (dBi)	0500.00 12400.00 Emission level (dBm)		0.00 2 Margin (dB)	0000.00 MHz Antenna Polarization (V/H)
3723.000	-52.69	8.21	9.12	-51.78	-13.00	-38.78	V
5620.000 N/A	-50.89	10.18	10.82	-50.25	-13.00	-37.25	V

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperature Humidity:	<b>e</b> : 22.	GE 1900 / <sup>-</sup> 6°C 2 % RH	TX / CH 51	2		e: March by: Dennis Hor.	
10.0 dBm						Limit1: Margin: 	
-80	900.00 48	00.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	0.00 2	0000.00 MHz
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3723.000	-51.42	8.21	9.12	-52.33	-13.00	-39.33	Н
5620.000	-50.07	10.18	10.82	-50.71	-13.00	-37.71	н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperat	ure: 22	DGE 1900 / <sup>-</sup> 2.6°C	TX / CH 66	51	Tested k	te: March	
Humidity:	57	'.2 % RH			Polarity	: Ver.	
0.0 dB	m					Limit1: Margin:	
-45	1 X	2 *					
-90	0.0000.00		0000.00			20.00	
Frequency (MHz)	0 2900.00 4 S.G. (dBm)	800.00 6700.00 Cable loss (dB)	8600.00 1 Ant.Gain (dBi)	0500.00 12400.00 Emission level (dBm)		00.00 2 Margin (dB)	Antenna Polarization (V/H)
3737.000	-53.79	8.22	9.14	-52.87	-13.00	-39.87	V
5550.000	-52.83	10.06	10.81	-52.08	-13.00	-39.08	V
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperate	EL	DGE 1900 / 2.6°C	TX / CH 66	51	Test Date: March 30, 2016 Tested by: Dennis Li		
Humidity:	57	7.2 % RH			Polarity	Hor.	
0.0 dB	m 					Limit1: Margin:	
-45	1 X	2 X					
-90	0 2900.00 4	800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	0.00 2	0000.00 MHz
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)		Margin (dB)	Antenna Polarization (V/H)
3737.000	-53.55	8.22	9.14	-52.63	-13.00	-39.63	н
5550.000	-52.54	10.06	10.81	-51.79	-13.00	-38.79	н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



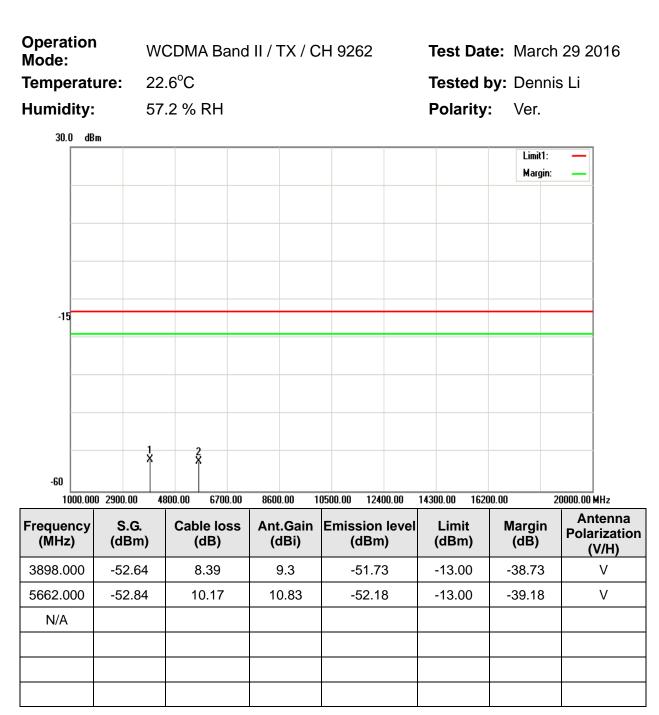
Operation Mode: Temperate Humidity:	ure: 22	0GE 1900 / <sup>-</sup> .6°C .2 % RH	0	Test Date: March 30, 2016 Tested by: Dennis Li Polarity: Ver.			
-35	m	2 X				Limit1: Margin:	
-80	0 2900.00 44	300.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	0.00 20	0000.00 MHz
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3793.000	-52.79	8.26	9.19	-51.86	-13.00	-38.86	V
5760.000	-50.8	10.32	10.85	-50.27	-13.00	-37.27	V
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperatu	<b>ire</b> : 22	)GE 1900 / <sup>.</sup> .6°C	TX / CH 81	0	Test Date: March 30, 2016 Tested by: Dennis Li			
Humidity:	57	.2 % RH			Polarity	Hor.		
10.0 dBn						Limit1: Margin:		
-35								
	*	2						
-80	2900.00 44	800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	0.00 24	0000.00 MHz	
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)	
3793.000	-51.9	8.26	9.19	-50.97	-13.00	-37.97	Н	
5760.000	-51.16	10.32	10.85	-50.63	-13.00	-37.63	Н	
N/A								

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



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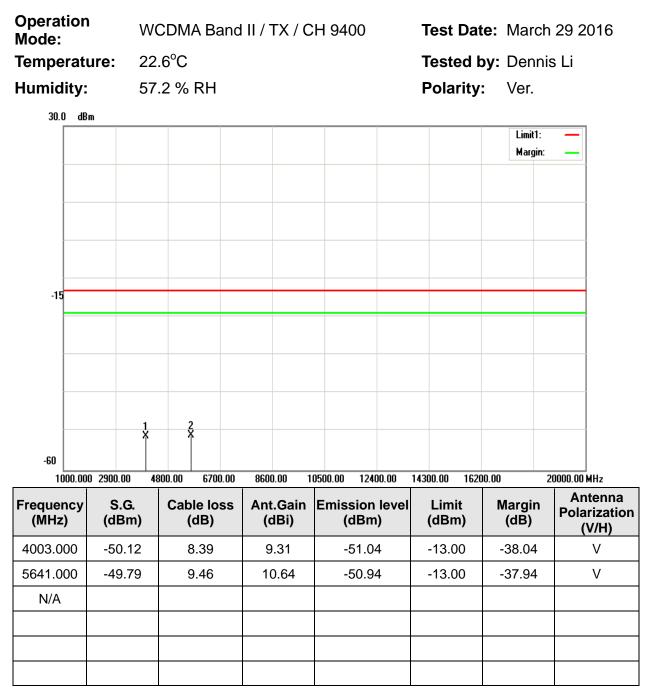
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperate Humidity: 30.0 dB	ure: 22 57	CDMA Band .6°C .2 % RH	II / TX / C	H 9262		e: March by: Dennis Hor.	
-15 -60 1000.00	1	2	8600.00 1	0500.00 12400.00	14300.00 1620	0.00 2	0000.00 MHz
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3709.000	-52.17	8.21	9.11	-51.27	-13.00	-38.27	H
5557.000	-50.91	10.08	10.81	-50.18	-13.00	-37.18	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



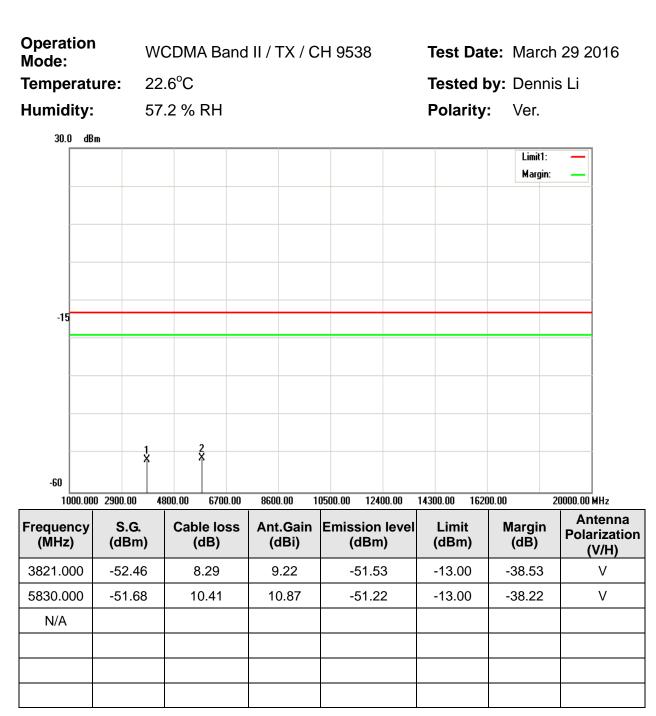


- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperat Humidity	ure: 22	CDMA Band 6°C 7.2 % RH	/ TX / C	H 9400	Test Date: March 29 2016 Tested by: Dennis Li Polarity: Hor.			
30.0 di	3m					Limit1: Margin:		
-60	0 2900.00 4	800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	0.00 21	0000.00 MHz	
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)	
4003.000	-49.91	8.39	9.31	-50.83	-13.00	-37.83	Н	
5641.000	-48.69	9.46	10.64	-49.87	-13.00	-36.87	Н	
N/A								

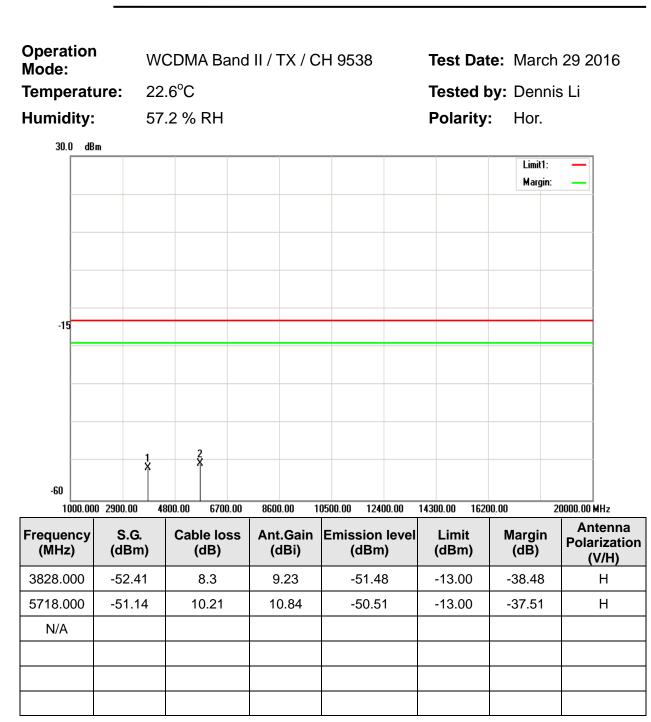
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



CERE Compliance Certification Services Inc.

FCC ID: M82-IVU4000

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



CERE Compliance Certification Services Inc.

FCC ID: M82-IVU4000

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperatu Humidity:	ure: 22	CDMA Band .6°C .2 % RH	V/TX/C	CH 4132	Test Date: March 30, 2016 Tested by: Dennis Li Polarity: Ver.			
-35						Limit1: Margin:		
-80 1000.000 Frequency (MHz)	2 X 0 2900.00 4 S.G. (dBm)	800.00 6700.00 Cable loss (dB)	8600.00 1 Ant.Gain (dBi)	0500.00 12400.00 Emission level (dBm)		00.00 2 Margin (dB)	0000.00 MHz Antenna Polarization (V/H)	
1658.000 2288.000 N/A	-58.52 -55.19	5.06 6.06	6.02 5.8	-57.56 -55.45	-13.00 -13.00	-44.56 -42.45	V V V	

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperate Humidity:	vv u <b>re</b> : 22	CDMA Band 2.6°C 7.2 % RH	V / TX / C	:H 4132	Test Date: March 30, 2016 Tested by: Dennis Li Polarity: Hor.			
10.0 dB	m					Limit1: Margin:		
-35								
1 X	2 X							
-80	0 2900.00 4	800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	10.00 2	0000.00 MHz	
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)	
1532.000	-60.53	4.9	6.24	-59.19	-13.00	-46.19	Н	
2344.000	-54.97	6.12	5.88	-55.21	-13.00	-42.21	Н	
N/A								

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperate Humidity:	u <b>re</b> : 22	CDMA Band .6°C .2 % RH	V / TX / C	CH 4182	Test Date: March 30, 2016 Tested by: Dennis Li Polarity: Ver.			
10.0 dB	m					Limit1: Margin:		
-80 1000.00 Frequency (MHz)	0 2900.00 44 S.G. (dBm)	300.00 6700.00 Cable loss (dB)	8600.00 1 Ant.Gain (dBi)	0500.00 12400.00 Emission level (dBm)		0.00 2 Margin (dB)	0000.00 MHz Antenna Polarization (V/H)	
1497.000	-50.54	5.3	5.75	-50.99	-13.00	-37.99	V	
2435.000 N/A	-55.18	6.24	6.01	-54.95	-13.00	-41.95		

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperate Humidity:	ure: 2	VCDMA Banc 22.6°C 57.2 % RH	CH 4182	Test Date: March 30, 2016 Tested by: Dennis Li Polarity: Hor.			
-35	2					Limit1: Margin: 	
-80 1000.00 Frequency (MHz)	0 2900.00 S.G. (dBm)	4800.00 6700.00 Cable loss (dB)	8600.00 1 Ant.Gain (dBi)	0500.00 12400.00 Emission level (dBm)		0.00 2 Margin (dB)	0000.00 MHz Antenna Polarization (V/H)
1805.000	-55.82	5.3	5.75	-56.27	-13.00	-43.27	Н
2435.000 N/A	-54.76	6.24	6.01	-54.53	-13.00	-41.53	H

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperat Humidity:	ure: 22	CDMA Band 2.6°C 7.2 % RH	V/TX/C	CH 4233	Test Date: March 30, 2016 Tested by: Dennis Li Polarity: Ver.			
-35						Limit1: Margin:		
-80	0 2900.00 4	800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	00.00 2	0000.00 MHz	
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)	
1693.000	-57.79	5.1	5.95	-56.94	-13.00	-43.94	V	
2540.000	-55.86	6.41	6.2	-56.07	-13.00	-43.07	V	
N/A								

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

LESRF	Compliance Certification Services Inc.
	FCC ID: M82-IVU4000

Operation Mode: Temperat	VV	CDMA Banc .6°C	IV/TX/C	CH 4233	Test Date: March 30, 2016 Tested by: Dennis Li			
Humidity:	57	.2 % RH			Polarity	Hor.		
10.0 dB	m					Limit1: Margin:		
-35								
1	2							
-80	0 2900.00 4	800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	0.00 21	0000.00 MHz	
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)		Emission level (dBm)		Margin (dB)	Antenna Polarization (V/H)	
1672.000	-58.76	5.07	5.99	-57.84	-13.00	-44.84	Н	
2582.000	-54.84	6.46	6.31	-54.99	-13.00	-41.99	Н	
N/A								

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperat Humidity:	ure: 22	SDPA Band 2.6°C 7.2 % RH	II / TX / CH	1 9262	Test Date: March 30, 2016 Tested by: Dennis Li Polarity: Ver.			
-35						Limit1: Margin:		
-80	0 2900.00 4	800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	0.00 20	0000.00 MHz	
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)		Emission level (dBm)		Margin (dB)	Antenna Polarization (V/H)	
3704.000	-49.69	8.2	9.1	-48.79	-13.00	-35.79	V	
5557.000	-51.19	10.08	10.81	-50.46	-13.00	-37.46	V	
N/A								

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperature:	HSDP/ 22.6°C		/ TX / CH	9262	Test Date: March 30, 2016 Tested by: Dennis Li			
Humidity:	57.2 %				Polarity:	-		
10.0 dBm					_			
						Limit1: Margin:		
-35								
	1 X	2						
-80								
1000.000 2900.0	0 4800.00	6700.00	8600.00 10	0500.00 12400.00	14300.00 1620	0.00 20	0000.00 MHz	
Frequency S.C (MHz) (dB		ble loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)	
3704.000 -52.	83	8.2	9.1	-51.93	-13.00	-38.93	Н	
5557.000 -50.	61 1	10.08	10.81	-49.88	-13.00	-36.88	Н	
N/A								

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperat Humidity:	ure: 22	SDPA Band .6°C .2 % RH	II / TX / CH	1 9400		e: March by: Dennis : Ver.	
-35	m					Limit1: Margin:	
-80	0 2900.00 4	800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	0.00 20	0000.00 MHz
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3760.000	-49.2	8.24	9.16	-48.28	-13.00	-35.28	V
5640.000	-49.78	10.18	10.83	-49.13	-13.00	-36.13	V
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperate Humidity:	ure: 22	SDPA Band I .6°C .2 % RH	II / TX / CH	1 9400		e: March by: Dennis : Hor.	
-35	m					Limit1: Margin:	
-80	1 × 0 2900.00 44	2 X 800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	0.00 21	0000.00 MHz
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)		Margin (dB)	Antenna Polarization (V/H)
3760.000	-52.17	8.24	9.16	-51.25	-13.00	-38.25	н
5640.000 N/A	-51.37	10.18	10.83	-50.72	-13.00	-37.72	Н

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperate Humidity:	ure: 22	SDPA Band .6°C .2 % RH	II / TX / CH	1 9538	Test Date: March 30, 2016 Tested by: Dennis Li Polarity: Ver.			
-35	m					Limit1: Margin:		
-80	0 2900.00 4	800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	0.00 20	0000.00 MHz	
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)	
3814.000	-49.49	8.28	9.21	-48.56	-13.00	-35.56	V	
5721.000	-50.5	10.21	10.84	-49.87	-13.00	-36.87	V	
N/A								

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperat Humidity:	ure: 22	HSDPA Band II / TX / CH 9538 22.6°C 57.2 % RH				Test Date:March 30, 2016Tested by:Dennis LiPolarity:Hor.		
-35						Limit1: Margin:		
-80	0 2900.00 4	800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	0.00 20	0000.00 MHz	
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)	
3814.000	-49.88	8.28	9.21	-48.95	-13.00	-35.95	Н	
5721.000	-51.96	10.21	10.84	-51.33	-13.00	-38.33	Н	
N/A								

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

LESRF	Compliance Certification Services Inc.
	FCC ID: M82-IVU4000

Operation Mode: Temperat Humidity:	г ure: 2	HSDPA Band ` 22.6°C 57.2 % RH	V / TX / CH	1 4132	Test Date: March 30, 2016 Tested by: Dennis Li Polarity: Ver.			
10.0 dB	tm					Limit1: Margin:		
-35								
1 ×	2							
-80	0 2900.00	4800.00 6700.00	8600.00 10	0500.00 12400.00	14300.00 1620	0.00 20	0000.00 MHz	
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)	
1652.000	-56.85	5.05	6.03	-55.87	-13.00	-42.87	V	
2479.000	-55.9	6.31	6.07	-56.14	-13.00	-43.14	V	
N/A								

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperat Humidity:	ure: 22	SDPA Band 6°C 2 % RH	v / TX / Cŀ	H 4132		te: March by: Dennis : Hor.	
-35 -35	3m					Limit1: Margin:	
-80 1000.00 Frequency (MHz)		800.00 6700.00 Cable loss (dB)	8600.00 1 Ant.Gain (dBi)	0500.00 12400.00 Emission level (dBm)		00.00 20 Margin (dB)	0000.00 MHz Antenna Polarization (V/H)
1652.000	-56.22	5.05	6.03	-55.24	-13.00	-42.24	Н
2479.000 N/A	-55.53	6.31	6.07	-55.77	-13.00	-42.77	H

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

LESRF	Compliance Certification Services Inc.
	FCC ID: M82-IVU4000

Operation Mode: Temperat Humidity	t <b>ure</b> : 22	HSDPA Band V / TX / CH 4182 22.6°C 57.2 % RH				Test Date: March 30, 2016 Tested by: Dennis Li Polarity: Ver.		
0.0 d	Bm					Limit1: Margin:		
-90	00 2900.00 4	1800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	0.00 2	0000.00 MHz	
Frequency (MHz)		Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)		Margin (dB)	Antenna Polarization (V/H)	
1693.000	-67.22	5.1	5.95	-66.37	-13.00	-53.37	V	
2509.000	-68.62	6.36	6.12	-68.86	-13.00	-55.86	V	
N/A								

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

LESRF	Compliance Certification Services Inc.
	FCC ID: M82-IVU4000

Operation Mode: Temperat	П	SDPA Band 2.6°C	V / TX / Cł	H 4182	Test Date: March 30, 2016 Tested by: Dennis Li		
Humidity	5	7.2 % RH			Polarity	Hor.	
10.0 di	3m					Limit1: Margin:	-
-35							
1 ×	2						
-80							
Frequency (MHz)		4800.00 6700.00 Cable loss (dB)		0500.00 12400.00 Emission level (dBm)		0.00 20 Margin (dB)	Antenna Polarization (V/H)
1567.000	-58.25	4.94	6.18	-57.01	-13.00	-44.01	Н
2561.000	-54.6	6.44	6.26	-54.78	-13.00	-41.78	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperate Humidity:	ure: 22	SDPA Band V .6°C .2 % RH	/ / TX / Cŀ	1 4233		e: March by: Dennis Ver.	
-35	m					Limit1: Margin:	
-80 1000.00	0 2900.00 4	800.00 6700.00	8600.00 10	0500.00 12400.00	14300.00 1620	0.00 20	0000.00 MHz
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1693.000	-58.01	5.1	5.95	-57.16	-13.00	-44.16	V
2539.000	-52.22	6.4	6.2	-52.42	-13.00	-39.42	V
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

LESRF	Compliance Certification Services Inc.
	FCC ID: M82-IVU4000

Operation Mode:		SDPA Band	V / TX / Cŀ	H 4233	Test Date: March 30, 2016		
Temperati	u <b>re</b> : 22	2.6°C			Tested k	<b>y:</b> Dennis	s Li
Humidity:	57	'.2 % RH			Polarity	Hor.	
10.0 dB	m						
						Limit1: Margin:	
-35							
1	2						
×							
-80							
		800.00 6700.00		0500.00 12400.00	14300.00 1620		0000.00 MHz Antenna
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Polarization (V/H)
1637.000	-69.93	5.03	6.05	-68.91	-13.00	-55.91	Н
2435.000	-67.22	6.24	6.01	-67.45	-13.00	-54.45	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperate Humidity:	ure: 22	SUPA Band .6°C .2 % RH	II / TX / CH	1 9262		e: March by: Dennis Ver.	
-35	m					Limit1: Margin:	
-80	0 2900.00 44	800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	0.00 2	0000.00 MHz
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3704.000	-49.53	8.2	9.1	-48.63	-13.00	-35.63	V
5557.000	-51.14	10.08	10.81	-50.41	-13.00	-37.41	V
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperat Humidity	ure: 22	HSUPA Band II / TX / CH 9262 22.6°C 57.2 % RH				Test Date: March 30, 2016 Tested by: Dennis Li Polarity: Hor.		
-35	3m 					Limit1: Margin:		
-80	0 2900.00	1800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	10.00 20	0000.00 MHz	
Frequency (MHz)		Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)	
3704.000	-52.51	8.2	9.1	-51.61	-13.00	-38.61	H	
5557.000	-51.25	10.08	10.81	-50.52	-13.00	-37.52	Н	
N/A								

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperatu Humidity:	i <b>re:</b> 22	SUPA Band I .6°C .2 % RH	II / TX / CH	1 9400	Test Date: March 30, 2016 Tested by: Dennis Li Polarity: Ver.				
10.0 dBm						Limit1: Margin:			
-35	1	2							
-80									
1000.000 Frequency (MHz)	2900.00 48 S.G. (dBm)	Cable loss (dB)		0500.00 12400.00 Emission level (dBm)	14300.00 1620 Limit (dBm)	0.00 20 Margin (dB)	Antenna Polarization		
3760.000	-51.6	8.24	9.16	-50.68	-13.00	-37.68	(V/H) ∨		
5640.000	-50.91	10.18	10.83	-50.26	-13.00	-37.26	V		
N/A									

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperate Humidity:	u <b>re:</b> 22	SUPA Band I .6°C .2 % RH	II / TX / CH	19400	Test Date: March 30, 2016 Tested by: Dennis Li Polarity: Hor.				
10.0 dB	m 					Limit1: Margin:			
-35	1	2							
-80	0 2900.00 44	800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	0.00 21	0000.00 MHz		
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)		
3760.000	-53.27	8.24	9.16	-52.35	-13.00	-39.35	н		
5640.000	-52.89	10.18	10.83	-52.24	-13.00	-39.24	Н		
N/A									

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperate Humidity:	u <b>re:</b> 22	SUPA Band .6°C .2 % RH	II / TX / CH	1 9538	Test Date: March 30, 2016 Tested by: Dennis Li Polarity: Ver.				
-35	m					Limit1: Margin:			
-80	D 2900.00 44	800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	10.00 2	0000.00 MHz		
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)		
3814.000	-49.43	8.28	9.21	-48.50	-13.00	-35.50	V		
5721.000	-49.85	10.21	10.84	-49.22	-13.00	-36.22	V		
N/A									

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperate Humidity:	ure: 22	SUPA Band .6°C .2 % RH	II / TX / CH	1 9538	Test Date: March 30, 2016 Tested by: Dennis Li Polarity: Hor.			
-35	m					Limit1: Margin:		
-80	0 2900.00 4	800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	0.00 20	0000.00 MHz	
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)	
3814.000	-50.84	8.28	9.21	-49.91	-13.00	-36.91	H	
5721.000	-51.11	10.21	10.84	-50.48	-13.00	-37.48	Н	
N/A								

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

LESRF	Compliance Certification Services Inc.
	FCC ID: M82-IVU4000

Operation Mode: Temperate	пс	SUPA Band ` .6°C	V / TX / CH	H 4132	Test Date: March 30, 2016 Tested by: Dennis Li				
Humidity:	57	.2 % RH			Polarity	Ver			
10.0 dB	m					Limit1: Margin:	-		
-35	2 X								
-80   1000.00	0 2900.00 44	BOO.OO 6700.00	8600.00 10	0500.00 12400.00	14300.00 1620	0.00 20	)000.00 MHz		
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)		
1652.000	-56.58	5.05	6.03	-55.60	-13.00	-42.60	V		
2479.000	-54.74	6.31	6.07	-54.98	-13.00	-41.98	V		
N/A									

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

LESRF	Compliance Certification Services Inc.
	FCC ID: M82-IVU4000

Operation Mode: Temperate	пс	SUPA Band ` .6°C	V / TX / Cŀ	H 4132	Test Date: March 30, 2016 Tested by: Dennis Li				
Humidity:	57	.2 % RH			Polarity	: Hor.			
10.0 dB	m					Limit1: Margin:	_		
-35	2								
-80 1000.00	0 2900.00 44 S.G.	300.00 6700.00 Cable loss		0500.00 12400.00 Emission level	14300.00 1620 Limit	0.00 20 Margin	0000.00 MHz Antenna		
(MHz)	(dBm)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	Polarization (V/H)		
1652.000	-56.49	5.05	6.03	-55.51	-13.00	-42.51	H		
2479.000	-55.41	6.31	6.07	-55.65	-13.00	-42.65	Н		
N/A									

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

LESRF	Compliance Certification Services Inc.
	FCC ID: M82-IVU4000

Operation Mode: Temperat Humidity:	ure: 22	SUPA Band .6°C .2 % RH	V / TX / Cŀ	H 4182	Test Date: March 30, 2016 Tested by: Dennis Li Polarity: Ver.				
-		.2 /0 1111			rolanty	. vei.			
						Limit1: Margin:			
-35									
-80	2 X								
	0 2900.00 4	300.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	0.00 20	)000.00 MHz		
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)		
1672.000	-55.34	5.07	5.99	-54.42	-13.00	-41.42	V		
2509.000	-54.89	6.36	6.12	-55.13	-13.00	-42.13	V		
N/A									

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperat Humidity:	ure: 22	SUPA Band <sup>*</sup> 2.6°C 7.2 % RH	V / TX / Cł	H 4182	Test Date: March 30, 2016 Tested by: Dennis Li Polarity: Hor.				
-35						Limit1: Margin:			
-80 1000.00 Frequency (MHz)	0 2900.00 S.G. (dBm)	4800.00 6700.00 Cable loss (dB)	8600.00 1 Ant.Gain (dBi)	0500.00 12400.00 Emission level (dBm)		0.00 20 Margin (dB)	0000.00 MHz Antenna Polarization (V/H)		
1672.000	-54.45	5.07	5.99	-53.53	-13.00	-40.53	Н		
2509.000 N/A	-53.91	6.36	6.12	-54.15	-13.00	-41.15	Н		

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Tempera Humidity	iture:	HSUPA Band V / TX / CH 4233 22.6°C 57.2 % RH								Test Date: March 30, 2016 Tested by: Dennis Li Polarity: Ver.					
-45	dBm											Limit			
-90 1000. Frequenc (MHz)	000 2900.00 y S.C (dB)	G.	0.00 6700 Cable los (dB)		8600.00 Ant.G	Sain	)500.00 Emiss ((		level	14300.00 Limi (dBm		00 Margi (dB)	n	Pola	tenna rization
1693.000	-56.	82	5.1		5.9	95	-{	55.9	7	-13.0	0	-42.97	7	(	<mark>∨/H)</mark> ∨
2539.000 N/A	-54.	63	6.4		6.2	2	-{	54.8	3	-13.0	0	-41.83	3		V

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: Temperat Humidity:	ure: 22	SUPA Band \ 2.6°C 7.2 % RH	/ / TX / Cł	1 4233		e: March by: Dennis Hor.	
-45	3m 					Limit1: Margin:	
-90 1000.00	0 2900.00 4	800.00 6700.00	8600.00 1	0500.00 12400.00	14300.00 1620	0.00 20	0000.00 MHz
Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1693.000	-55.99	5.1	5.95	-55.14	-13.00	-42.14	H
2539.000	-55.14	6.4	6.2	-55.34	-13.00	-42.34	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

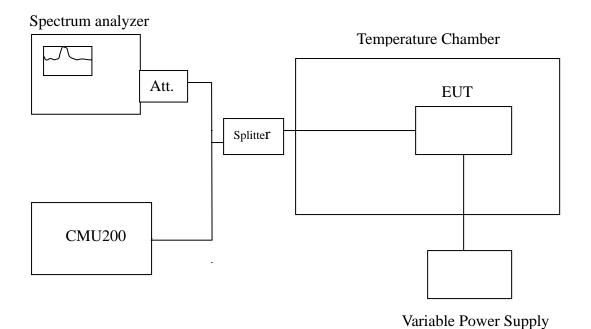
# 7.7 FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT

## <u>LIMIT</u>

According to FCC §2.1055, FCC §22.355, .FCC §24.235.

Frequency Tolerance: 2.5 ppm

### **Test Configuration**



Remark: Measurement setup for testing on Antenna connector

## TEST PROCEDURE

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to  $-30^{\circ}$ C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with  $10^{\circ}$ C increased per stage until the highest temperature of  $+50^{\circ}$ C reached.

# TEST RESULTS

	Reference Frequency: GPRS Mid Channel 836.6 MHz @ 20°C					
	Limit: +/- 2	2.5 ppm = 2091.5 l	Ηz			
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Frequency Error (ppm)	Limit (ppm)		
	50	-5.16	-0.0062			
	40	-6.89	-0.0082			
	30	-6.23	-0.0074			
	20	-5.4	-0.0065			
12	10	3.61	0.0043	2.5		
	0	-1.27	-0.0015			
	-10	-6.72	-0.0080			
	-20	-5.2	-0.0062			
	-30	-6.26	-0.0075			

#### No non-compliance noted.

Refere	Reference Frequency: GPRS Mid Channel 1880 MHz @ 20°C				
	Limit: ± 2	2.5 ppm = 4700 H	<u>Z</u>		
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Frequency Error (ppm)	Limit (ppm)	
	50	5.53	0.0029		
	40	-6.02	-0.0032		
	30	-6.89	-0.0037		
	20	-7.87	-0.0042		
12	10	-8.16	-0.0043	2.5	
	0	4.41	0.0023		
	-10	-5.44	-0.0029		
	-20	-6.59	-0.0035		
	-30	-6.23	-0.0033		

Reference Frequency: EDGE Mid Channel 836.6 MHz @ 20°C				
	Limit: +/- 2	2.5 ppm = 2091.5 ł	Ηz	
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Frequency Error (ppm)	Limit (ppm)
	50	-10.42	-0.0125	
	40	-10.48	-0.0125	
	30	-9.86	-0.0118	
	20	-10.17	-0.0122	
12	10	-9.13	-0.0109	2.5
	0	-10.25	-0.0123	
	-10	-10.12	-0.0121	
	-20	-11.03	-0.0132	
	-30	-11.46	-0.0137	

Refere	Reference Frequency: EDGE Mid Channel 1880 MHz @ 20°C					
	Limit: ± 2	2.5 ppm = 4700 Hz	2			
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Frequency Error (ppm)	Limit (ppm)		
	50	-15.93	-0.0085			
	40	-12.77	-0.0068			
	30	-13.38	-0.0071			
	20	-12.22	-0.0065			
12	10	-12.63	-0.0067	2.5		
	0	-7.44	-0.0040			
	-10	-12.34	-0.0066			
	-20	-12.84	-0.0068			
	-30	-6.12	-0.0033			

Reference	Reference Frequency: WCDMA Band II Mid Channel 1880 MHz @ 20°C					
	Limit: ± 2	2.5 ppm = 4700 Hz	Z			
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Frequency Error (ppm)	Limit (ppm)		
	50	-15.93	-0.0085			
	40	-12.77	-0.0068			
	30	-13.38	-0.0071			
	20	-12.22	-0.0065			
12	10	-12.63	-0.0067	2.5		
	0	-7.44	-0.0040			
	-10	-12.34	-0.0066			
	-20	-12.84	-0.0068			
	-30	-6.12	-0.0033			

Reference F	Reference Frequency: WCDMA Band V Mid Channel 836.6 MHz @ 20°C					
	Limit: +/- 2	2.5 ppm = 2091.5 ł	Ηz			
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Frequency Error (ppm)	Limit (ppm)		
	50	-10.42	-0.0125			
	40	-10.48	-0.0125			
	30	-9.86	-0.0118			
	20	-10.17	-0.0122			
12	10	-9.13	-0.0109	2.5		
	0	-10.25	-0.0123			
	-10	-10.12	-0.0121			
	-20	-11.03	-0.0132			
	-30	-11.46	-0.0137			

Reference	Reference Frequency: HSDPA Band II Mid Channel 1880 MHz @ 20°C				
	Limit: ± 2	2.5 ppm = 4700 Hz	2		
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Frequency Error (ppm)	Limit (ppm)	
	50	-5.16	-0.0027		
	40	-6.89	-0.0037		
	30	-6.23	-0.0033		
	20	-7.87	-0.0042		
12	10	-8.16	-0.0043	2.5	
	0	4.41	0.0023		
	-10	-7.44	-0.0040		
	-20	-6.12	-0.0033		
	-30	-9.13	-0.0049		

Reference I	Reference Frequency: HSDPA Band V Mid Channel 836.6 MHz @ 20°C					
	Limit: +/- 2	2.5 ppm = 2091.5 ł	Ηz			
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Frequency Error (ppm)	Limit (ppm)		
	50	-5.16	-0.0062			
	40	-6.89	-0.0082			
	30	-6.23	-0.0074			
	20	-5.40	-0.0065			
12	10	3.61	0.0043	2.5		
	0	-1.27	-0.0015			
	-10	-6.72	-0.0080			
	-20	-5.20	-0.0062			
	-30	-6.26	-0.0075			

Reference	Reference Frequency: HSUPA Band II Mid Channel 1880 MHz @ 20°C					
	Limit: ± 2	2.5 ppm = 4700 Hz	2			
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Frequency Error (ppm)	Limit (ppm)		
	50	-6.72	-0.0036			
	40	-5.20	-0.0028			
	30	-6.26	-0.0033			
	20	-5.53	-0.0029			
12	10	-6.02	-0.0032	2.5		
	0	-6.89	-0.0037			
	-10	-10.17	-0.0054			
	-20	-9.13	-0.0049			
	-30	-10.25	-0.0055			

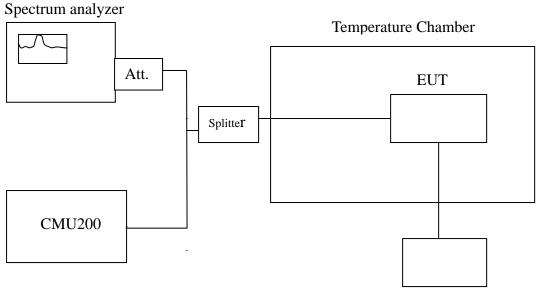
Reference	Reference Frequency: HSUPA Band V Mid Channel 836.6 MHz @ 20°C					
	Limit: +/- 2	2.5 ppm = 2091.5 ł	Ηz			
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Frequency Error (ppm)	Limit (ppm)		
	50	-10.42	-0.0125			
	40	-10.48	-0.0125			
	30	-9.86	-0.0118			
	20	-10.17	-0.0122			
12	10	-9.13	-0.0109	2.5		
	0	-1.27	-0.0015			
	-10	-6.72	-0.0080			
	-20	-5.20	-0.0062			
	-30	-6.26	-0.0075			

# 7.8 FREQUENCY STABILITY V.S. VOLTAGE MEASUREMENT

### <u>LIMIT</u>

According to FCC §2.1055, FCC §22.355, .FCC §24.235,

### **Test Configuration**



Variable Power Supply

Remark: Measurement setup for testing on Antenna connector.

## TEST PROCEDURE

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation ( $\pm$  15%) and endpoint, record the maximum frequency change.

# TEST RESULTS

No non-compliance noted.

Reference Frequency: GPRS Mid Channel 836.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2091.5Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (ppm)	Limit (ppm)
10.2		-5.55	-0.0066	
12	20	-5.40	-0.0065	2.5
13.8		-5.82	-0.0070	

Reference Frequency: GPRS Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (ppm)	Limit (ppm)
10.2		-7.53	-0.0040	
12	20	-7.87	-0.0042	2.5
13.8		-7.41	-0.0039	

Reference Frequency: EDGE Mid Channel 836.6 MHz @ 20°C					
	Limit: ± 2.5 ppm = 2091.5Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (ppm)	Limit (ppm)	
10.2		-10.47	-0.0125		
12	20	-10.17	-0.0122	2.5	
13.8		-10.35	-0.0124		

Reference Frequency: EDGE Mid Channel 1880 MHz @ 20°C				
	Limit: ± 2	2.5 ppm = 4700 Hz	2	
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (ppm)	Limit (ppm)
10.2		-12.58	-0.0067	
12	20	-12.22	-0.0065	2.5
13.8		-12.69	-0.0068	

Reference Frequency: WCDMA Band II Mid Channel 1880 MHz @ 20°C					
	Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (ppm)	Limit (ppm)	
10.2		-12.58	-0.0067		
12	20	-12.22	-0.0065	2.5	
13.8		-13.25	-0.0070		

Reference Frequency: WCDMA Band V Mid Channel 836.6 MHz @ 20°C					
	Limit: ± 2.5 ppm = 2091.5Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (ppm)	Limit (ppm)	
10.2		-9.85	-0.0118		
12	20	-10.17	-0.0122	2.5	
13.8		-10.23	-0.0122		

Reference Frequency: HSDPA Band II Mid Channel 1880 MHz @ 20°C					
	Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (ppm)	Limit (ppm)	
10.2		-8.58	-0.0046		
12	20	-7.87	-0.0042	2.5	
13.8		-8.55	-0.0045		

Reference Frequency: HSDPA Band V Mid Channel 836.6 MHz @ 20°C					
	Limit: ± 2.5 ppm = 2091.5Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (ppm)	Limit (ppm)	
10.2		-6.32	-0.0076		
12	20	-5.40	-0.0065	2.5	
13.8		-7.14	-0.0085		

Reference Frequency: HSUPA Band II Mid Channel 1880 MHz @ 20°C					
	Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (ppm)	Limit (ppm)	
10.2		-6.32	-0.0034		
12	20	-5.53	-0.0029	2.5	
13.8		-7.29	-0.0039		

Reference Frequency: HSUPA Band V Mid Channel 836.6 MHz @ 20°C				
	Limit: ± 2	.5 ppm = 2091.5H	Z	
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (ppm)	Limit (ppm)
10.2		-11.58	-0.0138	
12	20	-10.17	-0.0122	2.5
13.8		-12.54	-0.0150	