



FCC 47 CFR PART 22H and 24E

Test Report

Applicant : Daviscomms (S) Pte Ltd

Product Type : POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS
POCSAG ALPHANUMERIC PAGER with 3G/GSM

Trade Name : DAVISCOMMS

Model Number : BR828PGT, BR828PG

Test Specification : FCC 47 CFR PART 22H
FCC 47 CFR PART 24E
ANSI/TIA-603-D 2010

Receive Date : Oct. 14, 2016

Test Period : Oct. 29 ~ Nov. 23, 2016

Issue Date : Dec. 26, 2016

Issue by

A Test Lab Techno Corp.
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Taiwan Accreditation Foundation accreditation number: 1330

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Revision History

Rev.	Issue Date	Revisions	Revised By
00	Dec. 26, 2016	Initial Issue	Snow Wang



Verification of Compliance

Issued Date: Dec. 26, 2016

Applicant : Daviscomms (S) Pte Ltd

Product Type : POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS
POCSAG ALPHANUMERIC PAGER with 3G/GSM

Trade Name : DAVISCOMMS

Model Number : BR828PGT, BR828PG

FCC ID : VEQ828-01

EUT Rated Voltage : DC 5V, 1A

Test Voltage : 120 Vac / 60 Hz
DC 3.50V, DC3.70V, DC4.25V

Applicable Standard : FCC 47 CFR PART 22H
FCC 47 CFR PART 24E
ANSI/TIA-603-D 2010

Test Result : Complied

Performing Lab. : A Test Lab Techno Corp.
No. 140-1, Changan Street, Bade District,
Taoyuan City 33465, Taiwan (R.O.C)
Tel : +886-3-2710188 / Fax : +886-3-2710190
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<http://www.atl-lab.com.tw/e-index.htm>



A Test Lab Techno Corp. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by A Test Lab Techno Corp. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Approved By

Fly Lu

(Manager)

(Fly Lu)

Reviewed By

Eric Ou Yang

(Testing Engineer)

(Eric Ou Yang)

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1 General Information

1.1. EUT Description

Applicant	Daviscomms (S) Pte Ltd Blk 70 Ubi Crescent #01-07, Ubi Techpark 408570 Singapore			
Manufacturer	Daviscomms (Malaysia) Sdn Bhd Plot 18, Lorong Perusahaan Maju 1, Kawasan Perusahaan Perai 4, 13600 Perai, Malaysia			
Product Type	POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS POCSAG ALPHANUMERIC PAGER with 3G/GSM (Product type different description, please refer below table)			
Trade Name	DAVISCOMMS			
Model Number	BR828PGT, BR828PG (Model number different description, please refer below table)			
FCC ID	VDQ828-01			
IMEI No.	352253062755292			
Mode	Band	UL Frequency (MHz)	DL Frequency (MHz)	Modulation
GSM/GPRS/EGPRS	850	824.2 ~ 848.8	869.2 ~ 893.8	GMSK/8PSK
	1900	1850.2 ~ 1909.8	1930.2 ~ 1989.8	GMSK/8PSK
WCDMA HSDPA/ HSUPA	Band	UL Frequency (MHz)	DL Frequency (MHz)	Modulation
	II	1852.4 ~ 1907.6	1932.4 ~ 1987.6	QPSK
	V	826.4 ~ 846.6	871.4 ~ 891.6	QPSK
Channel Control	Auto			
Antenna information	Type	Max. Gain (dBi)		
	Internal Antenna	GSM/GPRS/EGPRS 850	7.8	
		GSM/GPRS/EGPRS 1900	6.7	
		WCDMA/ HSDPA/ HSUPA Band II	6.7	
		WCDMA/ HSDPA/ HSUPA Band V	7.8	

Product type and model number different description :

Product type	Model number	GSM / WCDMA	GPS
POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS	BR828PGT	V	V
POCSAG ALPHANUMERIC PAGER with 3G/GSM	BR828PG	V	X

Frequency Band	Max. RF Output Power (W)	E.R.P. /E.I.R.P. (W)	
GSM 850	2.118	1.429	(E.R.P.)
EGPRS 850	1.268	0.547	(E.R.P.)
GSM 1900	1.169	1.180	(E.I.R.P.)
EGPRS 1900	1.012	0.581	(E.I.R.P.)
WCDMA/ HSDPA/ HSUPA Band II	0.485	0.283	(E.I.R.P.)
WCDMA/ HSDPA/ HSUPA Band V	0.486	0.270	(E.R.P.)

Frequency Band	Occupied Bandwidth (MHz)	Emission Designator
GSM 850	0.247	247KG7W
EGPRS 850	0.249	249KG7D
GSM 1900	0.246	246KG7W
EGPRS 1900	0.245	245KG7D
WCDMA/ HSDPA/ HSUPA Band II	4.083	4M08F9W
WCDMA/ HSDPA/ HSUPA Band V	4.097	4M10F9W

1.2. Mode of Operation

In the test report use EUT model: BR828PGT to operate testing.

ATL has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: GSM 850 Link Mode
Mode 2: GSM 1900 Link Mode
Mode 3: EGPRS 850 Link Mode
Mode 4: EGPRS 1900 Link Mode
Mode 5: WCDMA Band II Link Mode
Mode 6: WCDMA Band V Link Mode

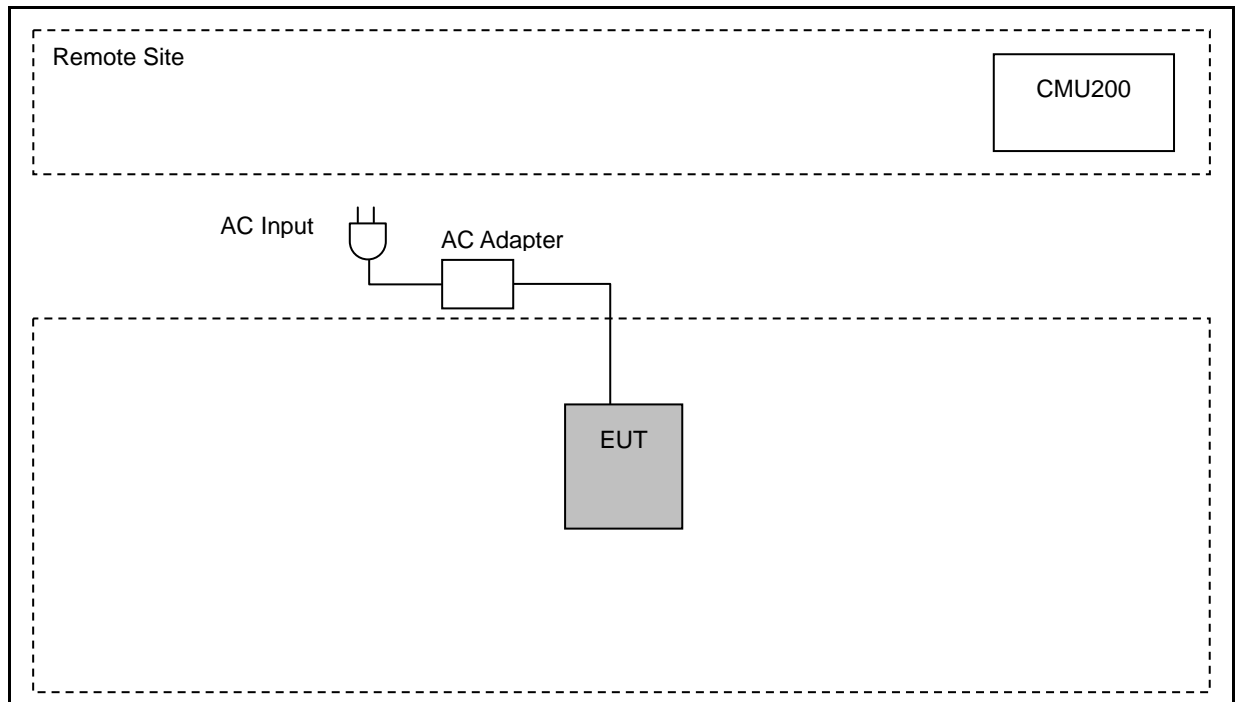
Note: Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.

By preliminary testing and verifying three axis (X, Y and Z) position of EUT transmitted status, it was found that "X axis" position was the worst, then the final test was executed the worst condition and test data were recorded in this report.

1.3. EUT Exercise Software

1	Setup the EUT and Base Station (CMU200) as shown on 1.4.
2	Turn on the power of all equipment.

1.4. Configuration of Test System Details



1.5. Test Site Environment

Items	Required (IEC 60068-1)	Actual
Temperature (°C)	15-35	26
Humidity (%RH)	25-75	60
Barometric pressure (mbar)	860-1060	950



1.6. Summary of Test Result

FCC Rule	Description	Result
§2.1046	Conducted Output Power	Pass
§22.913(a)(2)	Effective Radiated Power	Pass
§24.232(c)	Equivalent Isotropic Radiated Power	Pass
§24.232(d) KDB 971168 D01 (5.7.1)	Peak to average ratio	Pass
§2.1049 §22.917(a) §24.238(a)	Emission Bandwidth & Occupied Bandwidth	Pass
§2.1051 §22.917(a) §24.238(a)	Band Edge Measurement	Pass
§2.1051 §22.917(a) §24.238(a)	Conducted Spurious Emission	Pass
§2.1053 §22.917(a) §24.238(a)	Field Strength of Spurious Radiation	Pass
§2.1055 §22.355 §24.235	Frequency Stability for Temperature & Voltage	Pass



2 Test Results

2.1. RF Output Power Test

■ Limit

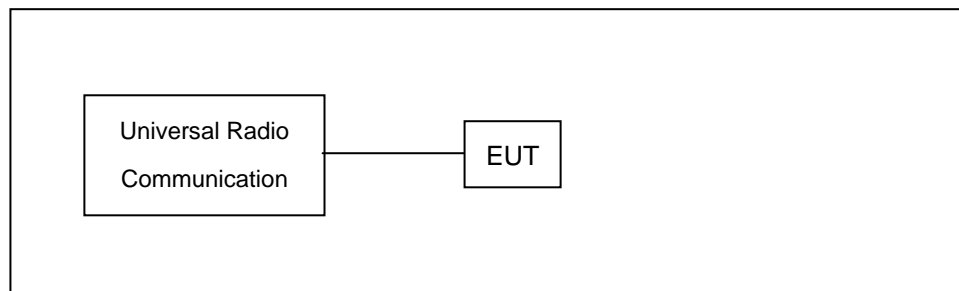
N/A

■ Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Cycle
Universal Radio Communication Tester	R & S	CMU200	112387	02/25/2016	1 year
Test Site	ATL	TE05	TE05	N.C.R.	-----

Note: N.C.R. = No Calibration Request.

■ Test Setup



■ Test Procedure

- The EUT was set up for the maximum power with with simulator.
- Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

■ Uncertainty

The measurement uncertainty is defined as for RF output power measurement is 1.2 dB.



Test Result

Date of Test	10/29/2016						
Bands	Modulation Type	Data Rate	Frequency (MHz)	Burst Average Power		Peak Power	
				(dBm)	(W)	(dBm)	(W)
GSM 850	GMSK	-----	824.2	32.98	1.986	33.14	2.061
			836.6	33.01	2.000	33.19	2.084
			848.8	33.09	2.037	33.26	2.118
GRRS 850 Multi Class :12 Max Up:4 Max Down:4 Sum:5	GMSK	4Down1Up (Duty Factor 1/8)	824.2	32.86	1.932	33.04	2.014
			836.6	32.90	1.950	33.06	2.023
			848.8	32.97	1.982	33.14	2.061
		3Down2Up (Duty Factor 2/8)	824.2	32.61	1.824	32.75	1.884
			836.6	32.65	1.841	32.82	1.914
			848.8	32.71	1.866	32.88	1.941
		2Down3Up (Duty Factor 3/8)	824.2	32.19	1.656	32.36	1.722
			836.6	32.23	1.671	32.39	1.734
			848.8	32.31	1.702	32.47	1.766
		1Down4Up (Duty Factor 4/8)	824.2	31.24	1.330	31.41	1.384
			836.6	31.26	1.337	31.43	1.390
			848.8	31.33	1.358	31.51	1.416
EGPRS 850 Multi Class :12 Max Up:4 Max Down:4 Sum:5	8PSK	4Down1Up (Duty Factor 1/8)	824.2	27.66	0.583	30.91	1.233
			836.6	27.74	0.594	30.97	1.250
			848.8	27.78	0.600	31.03	1.268
		3Down2Up (Duty Factor 2/8)	824.2	27.52	0.565	30.74	1.186
			836.6	27.63	0.579	30.86	1.219
			848.8	27.66	0.583	30.89	1.227
		2Down3Up (Duty Factor 3/8)	824.2	27.37	0.546	30.59	1.146
			836.6	27.44	0.555	30.68	1.169
			848.8	27.53	0.566	30.76	1.191
		1Down4Up (Duty Factor 4/8)	824.2	27.21	0.526	30.47	1.114
			836.6	27.33	0.541	30.55	1.135
			848.8	27.41	0.551	30.64	1.159

Note: The peak power testing result was used peak detector.

Date of Test	10/29/2016						
Bands	Modulation Type	Data Rate	Frequency (MHz)	Burst Average Power		Peak Power	
				(dBm)	(W)	(dBm)	(W)
GSM 1900	GMSK	-----	1850.2	30.38	1.091	30.55	1.135
			1880.0	30.42	1.102	30.61	1.151
			1909.8	30.49	1.119	30.68	1.169
GRRS 1900 Multi Class :12 Max Up:4 Max Down:4 Sum:5	GMSK	4Down1Up (Duty Factor 1/8)	1850.2	30.21	1.050	30.40	1.096
			1880.0	30.28	1.067	30.44	1.107
			1909.8	30.34	1.081	30.52	1.127
		3Down2Up (Duty Factor 2/8)	1850.2	30.07	1.016	30.23	1.054
			1880.0	30.12	1.028	30.29	1.069
			1909.8	30.19	1.045	30.35	1.084
		2Down3Up (Duty Factor 3/8)	1850.2	29.12	0.817	29.31	0.853
			1880.0	29.23	0.838	29.39	0.869
			1909.8	29.29	0.849	29.46	0.883
		1Down4Up (Duty Factor 4/8)	1850.2	27.96	0.625	28.13	0.650
			1880.0	28.06	0.640	28.23	0.665
			1909.8	28.15	0.653	28.35	0.684
EGPRS 1900 Multi Class :12 Max Up:4 Max Down:4 Sum:5	8PSK	4Down1Up (Duty Factor 1/8)	1850.2	26.51	0.448	29.73	0.940
			1880.0	26.66	0.463	29.89	0.975
			1909.8	26.81	0.480	30.05	1.012
		3Down2Up (Duty Factor 2/8)	1850.2	26.36	0.433	29.60	0.912
			1880.0	26.52	0.449	29.76	0.946
			1909.8	26.69	0.467	29.91	0.979
		2Down3Up (Duty Factor 3/8)	1850.2	26.24	0.421	29.46	0.883
			1880.0	26.41	0.438	29.62	0.916
			1909.8	26.56	0.453	29.80	0.955
		1Down4Up (Duty Factor 4/8)	1850.2	26.09	0.406	29.33	0.857
			1880.0	26.22	0.419	29.45	0.881
			1909.8	26.44	0.441	29.70	0.933

Note: The peak power testing result was used peak detector.



Date of Test	10/29/2016						
Bands	Modulation Type	Sub-Test	Frequency (MHz)	Burst Average Power		Peak Power	
				(dBm)	(W)	(dBm)	(W)
WCDMA Band II	QPSK	-----	1852.4	23.56	0.227	26.80	0.479
			1880.0	23.64	0.231	26.86	0.485
			1907.6	23.27	0.212	26.50	0.447
HSDPA Band II	QPSK	1	1852.4	22.55	0.180	25.77	0.378
			1880.0	22.64	0.184	25.87	0.386
			1907.6	22.22	0.167	25.45	0.351
		2	1852.4	22.44	0.175	25.66	0.368
			1880.0	22.52	0.179	25.72	0.373
			1907.6	22.08	0.161	25.30	0.339
		3	1852.4	22.01	0.159	25.26	0.336
			1880.0	22.12	0.163	25.36	0.344
			1907.6	21.66	0.147	24.90	0.309
		4	1852.4	21.98	0.158	25.24	0.334
			1880.0	22.07	0.161	25.30	0.339
			1907.6	21.62	0.145	24.87	0.307
HSUPA Band II	QPSK	1	1852.4	21.92	0.156	25.15	0.327
			1880.0	22.01	0.159	25.24	0.334
			1907.6	21.59	0.144	24.81	0.303
		2	1852.4	19.92	0.098	23.17	0.207
			1880.0	20.00	0.100	23.23	0.210
			1907.6	19.56	0.090	22.79	0.190
		3	1852.4	20.86	0.122	24.11	0.258
			1880.0	20.99	0.126	24.23	0.265
			1907.6	20.54	0.113	23.78	0.239
		4	1852.4	19.88	0.097	23.11	0.205
			1880.0	19.96	0.099	23.22	0.210
			1907.6	19.54	0.090	22.79	0.190
		5	1852.4	21.82	0.152	25.05	0.320
			1880.0	21.88	0.154	25.09	0.323
			1907.6	21.45	0.140	24.66	0.292

Note: The peak power testing result was used peak detector.



Date of Test	10/29/2016						
Bands	Modulation Type	Sub-Test	Frequency (MHz)	Burst Average Power		Peak Power	
				(dBm)	(W)	(dBm)	(W)
WCDMA Band V	QPSK	-----	826.4	23.46	0.222	26.69	0.467
			836.6	23.64	0.231	26.87	0.486
			846.6	23.42	0.220	26.67	0.465
HSDPA Band V	QPSK	1	826.4	22.45	0.176	25.67	0.369
			836.6	22.62	0.183	25.86	0.385
			846.6	22.39	0.173	25.61	0.364
		2	826.4	22.36	0.172	25.58	0.361
			836.6	22.55	0.180	25.76	0.377
			846.6	22.29	0.169	25.51	0.356
		3	826.4	21.94	0.156	25.16	0.328
			836.6	22.12	0.163	25.35	0.343
			846.6	21.84	0.153	25.07	0.321
		4	826.4	21.91	0.155	25.14	0.327
			836.6	22.05	0.160	25.28	0.337
			846.6	21.81	0.152	25.05	0.320
HSUPA Band V	QPSK	1	826.4	21.77	0.150	24.98	0.315
			836.6	21.95	0.157	25.16	0.328
			846.6	21.71	0.148	24.92	0.310
		2	826.4	19.77	0.095	22.98	0.199
			836.6	19.93	0.098	23.17	0.207
			846.6	19.68	0.093	22.92	0.196
		3	826.4	20.71	0.118	23.95	0.248
			836.6	20.87	0.122	24.12	0.258
			846.6	20.62	0.115	23.86	0.243
		4	826.4	19.71	0.094	22.98	0.199
			836.6	19.87	0.097	23.11	0.205
			846.6	19.62	0.092	22.88	0.194
		5	826.4	21.66	0.147	24.87	0.307
			836.6	21.81	0.152	25.03	0.318
			846.6	21.55	0.143	24.80	0.302

Note: The peak power testing result was used peak detector.



2.2. Effective Radiated Power / Equivalent Isotropic Radiated Power Test

■ Limit

For FCC Part 22.913(a)(2): The E.R.P. of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

For FCC Part 24.232(c): The E.I.R.P. of mobile transmitters and auxiliary test transmitters must not exceed 2 Watts.

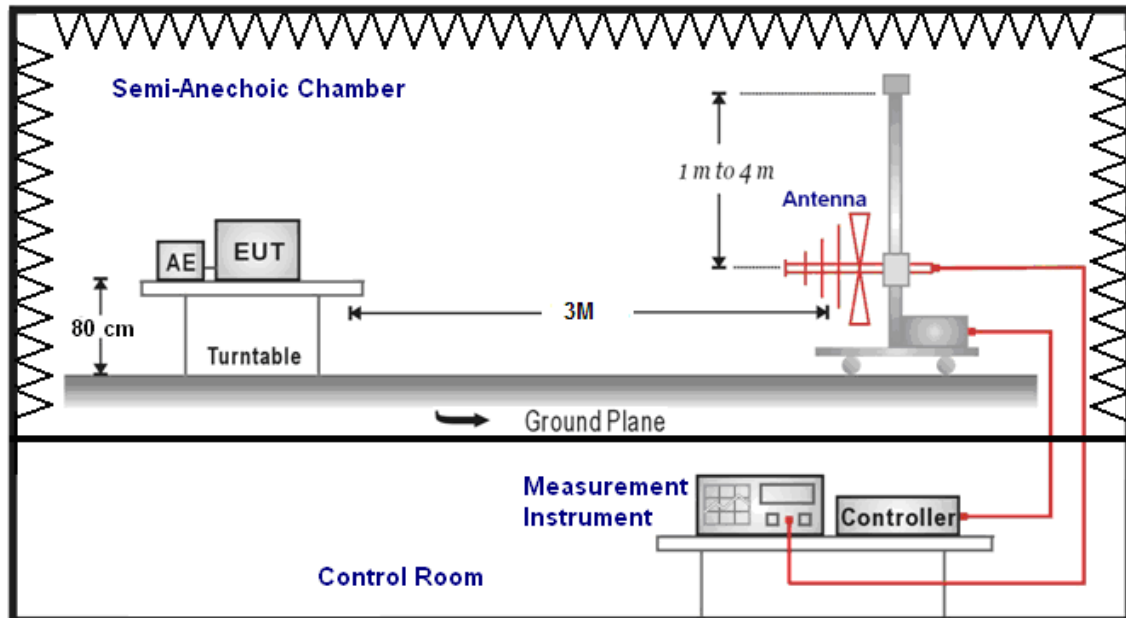
■ Test Instruments

3 Meter Chamber					
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Cycle
RF Pre-selector	Agilent	N9039A	MY46520256	01/08/2016	1 year
Spectrum Analyzer	Agilent	E4446A	MY46180578	01/08/2016	1 year
Pre Amplifier	Agilent	8449B	3008A02237	10/11/2016	1 year
Pre Amplifier	Agilent	8447D	2944A11119	01/11/2016	1 year
Broadband Antenna (30MHz~1GHz)	SCHWARZBECK MESS-ELEKTRONIK	VULB9168	416	10/13/2016	1 year
Broadband Antenna (30MHz~1GHz)	SCHWARZBECK MESS-ELEKTRONIK	VULB 9168	419	11/03/2016	1 year
Horn Antenna (1~18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	06/06/2016	1 year
Horn Antenna (18~40GHz)	ETS	3116	00086467	09/05/2016	1 year
Horn Antenna (18~40GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	07/18/2016	1 year
Microwave Cable	EMCI	EMC102-KM-KM- 14000	151001	02/23/2016	1 year
Microwave Cable	EMCI	EMC-104-SM-SM -14000	140202	02/23/2016	1 year
Microwave Cable	EMCI	EMC104-SM-SM- 600	140301	02/23/2016	1 year
Signal Generator	Agilent	E8257D	MY44320425	02/25/2016	1 year
Test Site	ATL	TE01	888001	08/29/2016	1 year

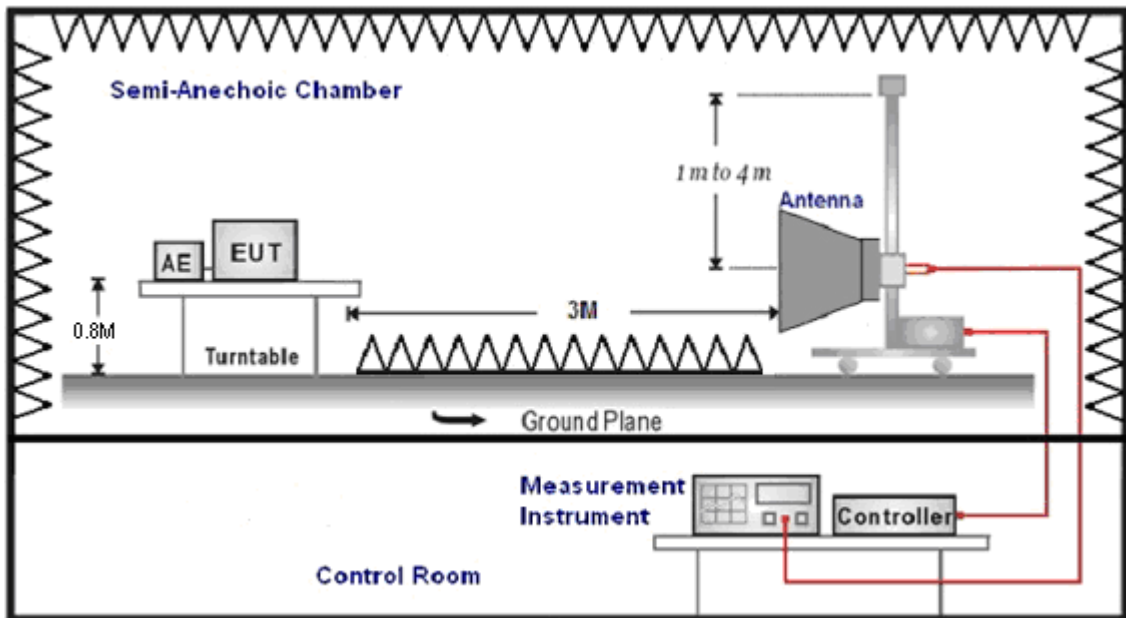
Note: N.C.R. = No Calibration Request.

■ Setup

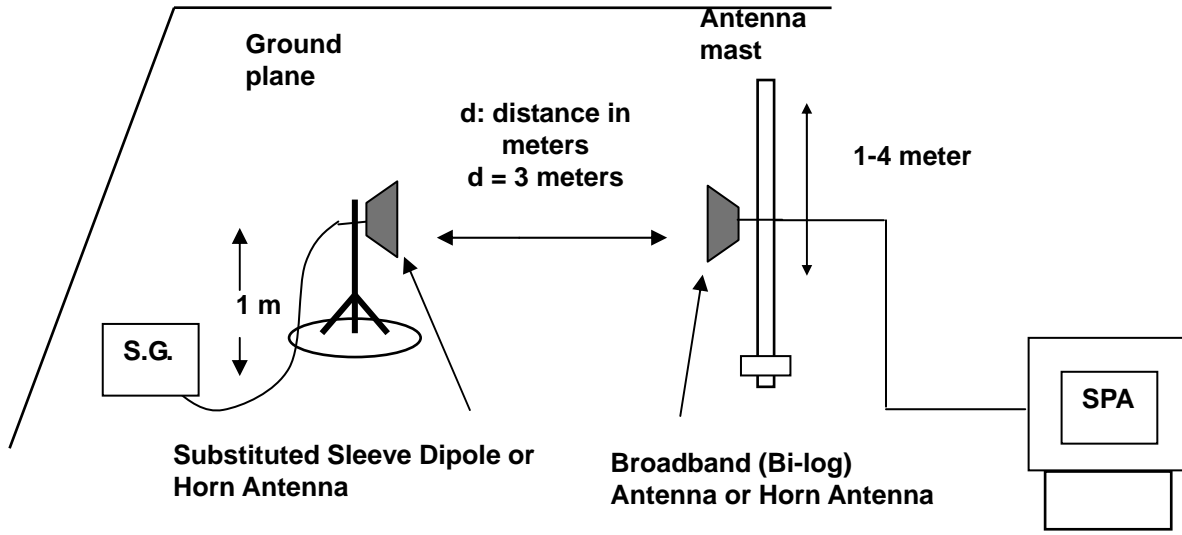
Below 1 GHz



Above 1 GHz



For Substituted Method Test Set-UP



■ Test Procedure

- The EUT was set up for the maximum power with LTE link data modulation. The power was measured with Spectrum Analyzer. All measurements were done at 3 channels (low, middle and high operational frequency range). RWB and VBW is 5MHz for LTE mode.
- E.I.R.P power measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- The substitution antenna (Note:1 & 2) is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G.
- $E.I.R.P. = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$
- $E.R.P. = E.I.R.P. - 2.15 \text{ dB}$

Note: 1. Below 1 GHz Substituted Method Test : Sleeve dipole antenna to Bi-Log Antenna

2. Above 1 GHz Substituted Method Test : Horn antenna to Horn Antenna

■ Uncertainty

The measurement uncertainty is defined as for Field Strength of Spurious Radiation measurement is $\pm 3.072 \text{ dB}$.



■ Test Result

Date of Test	11/21/2016							
Bands	Modulation Type	Frequency (MHz)	Ant. Polar.	Read Level (dBm)	Correction Factor (dBm)	E.R.P.		Limit (W)
						(dBm)	(W)	
GSM 850	GMSK	824.2	H	15.17	11.24	26.41	0.438	< 7
			V	20.31	11.24	31.55	1.429	< 7
		836.6	H	15.86	11.42	27.28	0.535	< 7
			V	19.68	11.43	31.11	1.291	< 7
		848.8	H	15.60	11.60	27.20	0.525	< 7
			V	19.25	11.60	30.85	1.216	< 7
EGPRS 850	8PSK	824.2	H	11.55	11.24	22.79	0.190	< 7
			V	15.82	11.24	27.06	0.508	< 7
		836.6	H	13.98	11.42	25.40	0.347	< 7
			V	15.95	11.43	27.38	0.547	< 7
		848.8	H	12.58	11.60	24.18	0.262	< 7
			V	14.63	11.60	26.23	0.420	< 7

Date of Test	11/21/2016							
Bands	Modulation Type	Frequency (MHz)	Ant. Polar.	Read Level (dBm)	Correction Factor (dBm)	E.I.R.P.		Limit (W)
						(dBm)	(W)	
GSM 1900	GMSK	1850.20	H	16.91	9.56	26.47	0.444	< 2
			V	20.96	9.56	30.52	1.127	< 2
		1880.00	H	16.98	9.67	26.65	0.462	< 2
			V	21.05	9.67	30.72	1.180	< 2
		1909.80	H	16.80	9.80	26.60	0.457	< 2
			V	20.73	9.80	30.53	1.130	< 2
EGPRS 1900	8PSK	1850.20	H	16.03	9.56	25.59	0.362	< 2
			V	18.08	9.56	27.64	0.581	< 2
		1880.00	H	15.58	9.67	25.25	0.335	< 2
			V	17.85	9.67	27.52	0.565	< 2
		1909.80	H	15.51	9.80	25.31	0.340	< 2
			V	17.74	9.80	27.54	0.568	< 2

Note: 1. E.R.P./E.I.R.P. = Read Level + Correction factor.

2. For WCDMA and CDMA signals, a peak detector is used with RBW = VBW = 5MHz.

3. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW= 1 MHz.



Date of Test	11/21/2016							
Bands	Modulation Type	Frequency (MHz)	Ant. Polar.	Read Level (dBm)	Correction Factor (dBm)	E.I.R.P.		Limit
						(dBm)	(W)	
WCDMA Band II	QPSK	1852.4	H	12.63	9.56	22.19	0.166	< 2W
			V	14.96	9.56	24.52	0.283	< 2W
		1880.0	H	12.57	9.67	22.24	0.167	< 2W
			V	14.58	9.67	24.25	0.266	< 2W
		1907.6	H	12.20	9.78	21.98	0.158	< 2W
			V	14.57	9.79	24.36	0.273	< 2W

Date of Test	11/21/2016							
Bands	Modulation Type	Frequency (MHz)	Ant. Polar.	Read Level (dBm)	Correction Factor (dBm)	E.R.P.		Limit
						(dBm)	(W)	
WCDMA Band V	QPSK	826.4	H	10.75	11.27	22.02	0.159	< 7W
			V	12.86	11.27	24.13	0.259	< 7W
		836.6	H	10.69	11.42	22.11	0.163	< 7W
			V	12.61	11.44	24.05	0.254	< 7W
		846.6	H	10.57	11.57	22.14	0.164	< 7W
			H	12.74	11.57	24.31	0.270	< 7W

Note: 1. E.R.P./E.I.R.P. = Read Level + Correction factor.

2. For WCDMA signals, a peak detector is used with RBW = VBW = 5MHz.

3. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW= 1 MHz.

2.3. Peak to Average Ratio Test

■ Limit

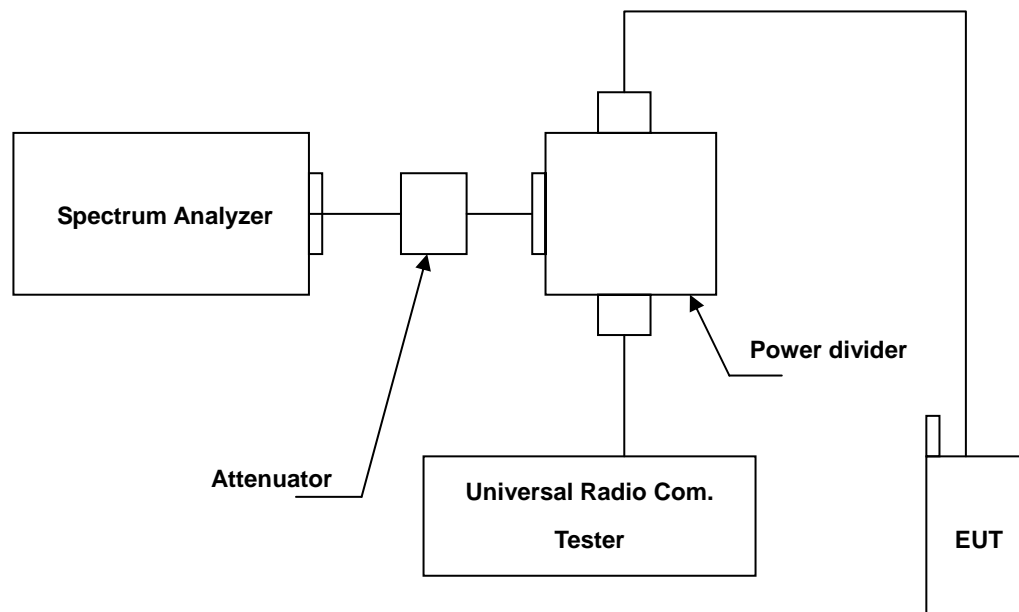
In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB.

■ Test Instruments

Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Cycle
Universal Radio Communication Tester	R & S	CMU200	112387	02/25/2016	1 year
Spectrum Analyzer	Agilent	E4445A	MY45300744	12/15/2015	1 year
Spectrum Analyzer	Agilent	N9030A	MY53120541	12/14/2015	1 year
Attenuator	Woken	WK0602-10	001	06/06/2016	2 year
Power Divider	Agilent	87302C	3239A00760	N.C.R.	-----
Test Site	ATL	TE05	TE05	N.C.R.	-----

Note: N.C.R. = No Calibration Request.

■ Setup





■ Test Procedure

The measurement is made according to FCC rules:

- Set resolution/measurement bandwidth signal's occupied bandwidth;
- Set the number of counts to a value that stabilizes the measured CCDF curve;
- Record the maximum PAPR level associated with a probability of 0.1%.

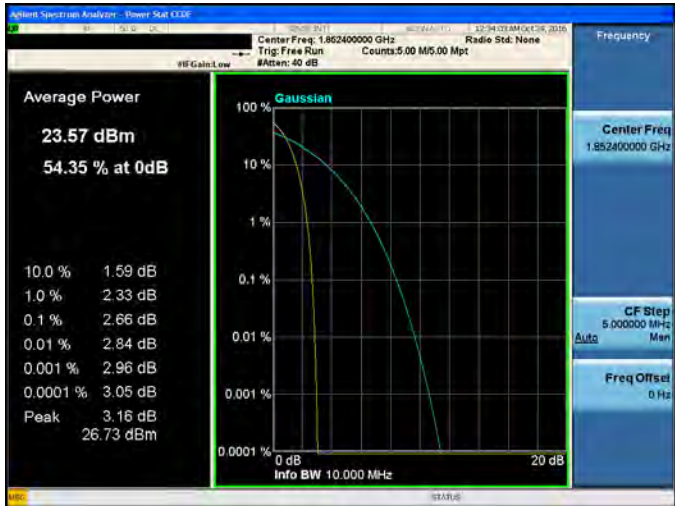
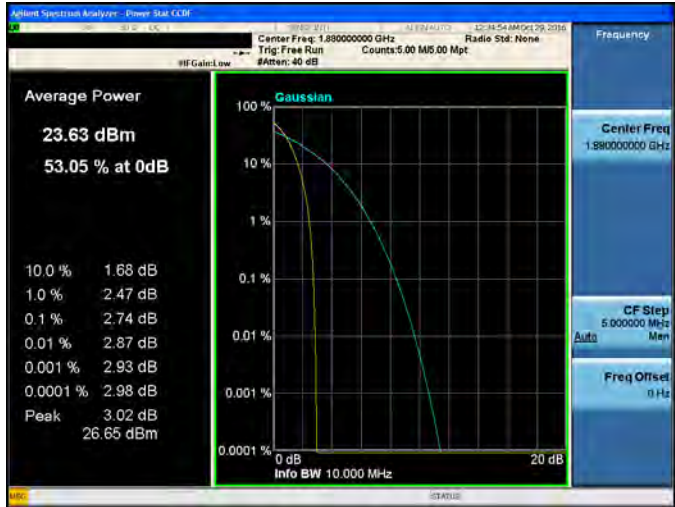

■ Uncertainty

The measurement uncertainty is defined as for Conducted Power measurement is 1.2 dB.

■ Test Result

Date of Test	10/29/2016			
Bands	Channel	Frequency (MHz)	Peak to Average Ratio (dB)	Limit (dB)
WCDMA Band II	9262	1852.4	2.66	< 13
	9400	1880.0	2.74	< 13
	9538	1907.6	2.96	< 13

Test Graphs

Mode 5: WCDMA Band II Link Mode																	
1850.20 MHz	 <p>Average Power 23.57 dBm 54.35 % at 0dB</p> <table border="1"> <tr><td>10.0 %</td><td>1.59 dB</td></tr> <tr><td>1.0 %</td><td>2.33 dB</td></tr> <tr><td>0.1 %</td><td>2.66 dB</td></tr> <tr><td>0.01 %</td><td>2.84 dB</td></tr> <tr><td>0.001 %</td><td>2.96 dB</td></tr> <tr><td>0.0001 %</td><td>3.05 dB</td></tr> <tr><td>Peak</td><td>3.16 dB</td></tr> <tr><td></td><td>26.73 dBm</td></tr> </table> <p>Center Freq: 1.852400000 GHz Trig: Free Run Counts: 5.00 M/5.00 Mpt Radio Std: None CF Step: 5.000000 MHz Freq Offset: 0 Hz Info BW: 10.000 MHz</p>	10.0 %	1.59 dB	1.0 %	2.33 dB	0.1 %	2.66 dB	0.01 %	2.84 dB	0.001 %	2.96 dB	0.0001 %	3.05 dB	Peak	3.16 dB		26.73 dBm
10.0 %	1.59 dB																
1.0 %	2.33 dB																
0.1 %	2.66 dB																
0.01 %	2.84 dB																
0.001 %	2.96 dB																
0.0001 %	3.05 dB																
Peak	3.16 dB																
	26.73 dBm																
1880.00 MHz	 <p>Average Power 23.63 dBm 53.05 % at 0dB</p> <table border="1"> <tr><td>10.0 %</td><td>1.68 dB</td></tr> <tr><td>1.0 %</td><td>2.47 dB</td></tr> <tr><td>0.1 %</td><td>2.74 dB</td></tr> <tr><td>0.01 %</td><td>2.87 dB</td></tr> <tr><td>0.001 %</td><td>2.93 dB</td></tr> <tr><td>0.0001 %</td><td>2.98 dB</td></tr> <tr><td>Peak</td><td>3.02 dB</td></tr> <tr><td></td><td>26.65 dBm</td></tr> </table> <p>Center Freq: 1.880000000 GHz Trig: Free Run Counts: 5.00 M/5.00 Mpt Radio Std: None CF Step: 5.000000 MHz Freq Offset: 0 Hz Info BW: 10.000 MHz</p>	10.0 %	1.68 dB	1.0 %	2.47 dB	0.1 %	2.74 dB	0.01 %	2.87 dB	0.001 %	2.93 dB	0.0001 %	2.98 dB	Peak	3.02 dB		26.65 dBm
10.0 %	1.68 dB																
1.0 %	2.47 dB																
0.1 %	2.74 dB																
0.01 %	2.87 dB																
0.001 %	2.93 dB																
0.0001 %	2.98 dB																
Peak	3.02 dB																
	26.65 dBm																
1909.80 MHz	 <p>Average Power 23.25 dBm 53.06 % at 0dB</p> <table border="1"> <tr><td>10.0 %</td><td>1.70 dB</td></tr> <tr><td>1.0 %</td><td>2.54 dB</td></tr> <tr><td>0.1 %</td><td>2.96 dB</td></tr> <tr><td>0.01 %</td><td>3.19 dB</td></tr> <tr><td>0.001 %</td><td>3.34 dB</td></tr> <tr><td>0.0001 %</td><td>3.41 dB</td></tr> <tr><td>Peak</td><td>3.48 dB</td></tr> <tr><td></td><td>26.73 dBm</td></tr> </table> <p>Center Freq: 1.907800000 GHz Trig: Free Run Counts: 5.00 M/5.00 Mpt Radio Std: None CF Step: 5.000000 MHz Freq Offset: 0 Hz Info BW: 10.000 MHz</p>	10.0 %	1.70 dB	1.0 %	2.54 dB	0.1 %	2.96 dB	0.01 %	3.19 dB	0.001 %	3.34 dB	0.0001 %	3.41 dB	Peak	3.48 dB		26.73 dBm
10.0 %	1.70 dB																
1.0 %	2.54 dB																
0.1 %	2.96 dB																
0.01 %	3.19 dB																
0.001 %	3.34 dB																
0.0001 %	3.41 dB																
Peak	3.48 dB																
	26.73 dBm																

2.4. Emission Bandwidth & Occupied Bandwidth Test

■ Limit

The Occupied Bandwidth Limit:

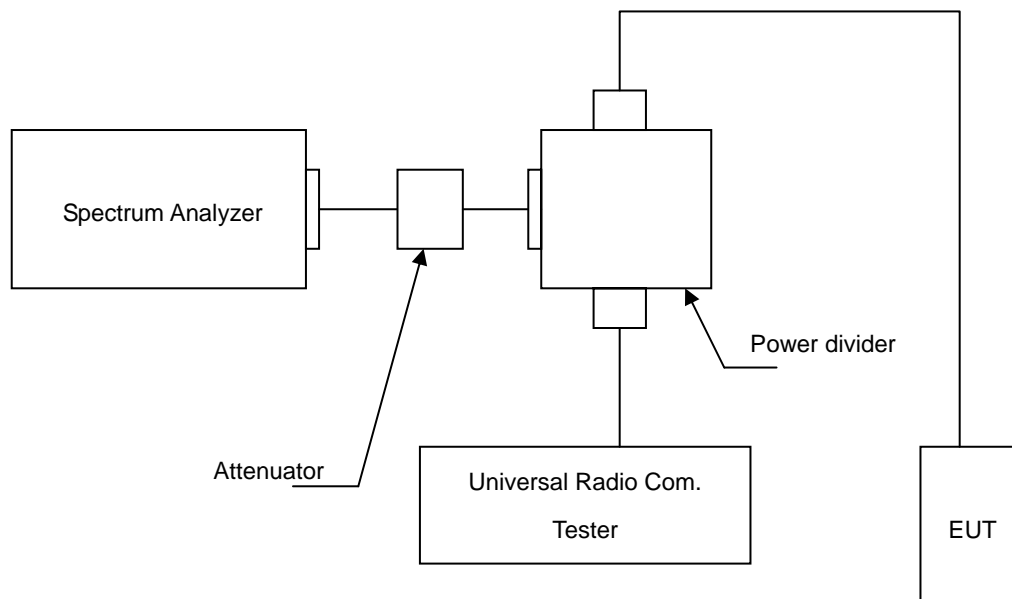
N/A.

■ Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Cycle
Spectrum Analyzer	Agilent	E4445A	MY45300744	12/15/2015	1 year
Spectrum Analyzer	Agilent	N9030A	MY53120541	12/14/2015	1 year
Universal Radio Communication Tester	R & S	CMU200	112387	02/25/2016	1 year
Attenuator	Woken	WK0602-10	001	06/06/2016	2 year
Power divider	Agilent	87302C	3239A00760	N.C.R.	-----
Test Site	ATL	TE05	TE05	N.C.R.	-----

Note: N.C.R. = No Calibration Request.

■ Setup



■ Test Procedure

The measurement is made according to FCC rules part 22 and 24:

1. The EUT was connected to Spectrum Analyzer and Base Station via Power Divider.
2. The occupied bandwidth of middle channel for the highest and lowest RF powers was measured.

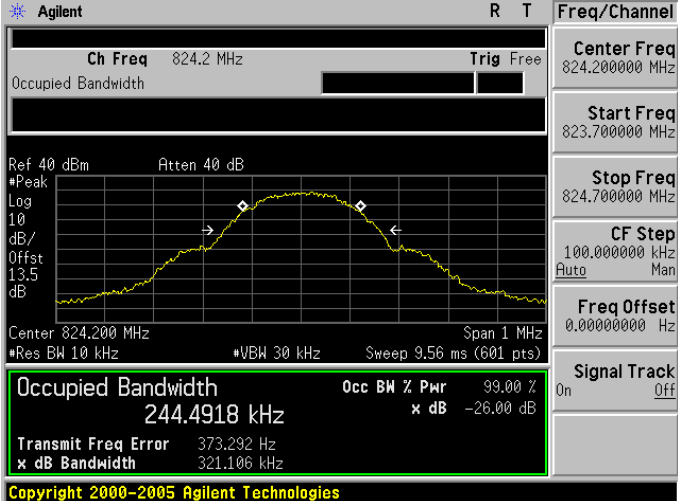
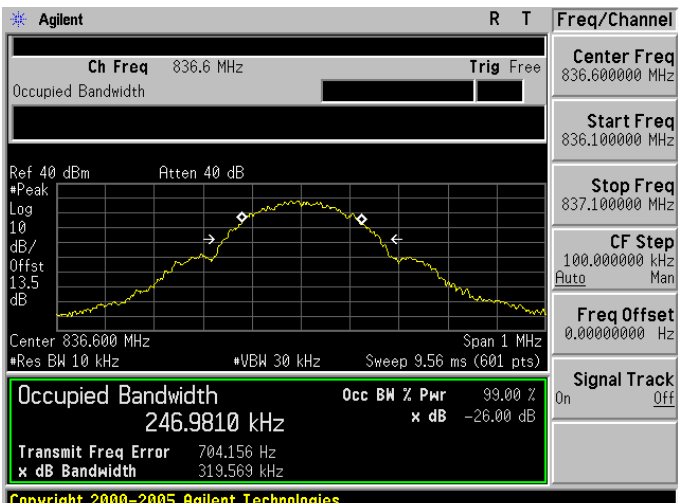
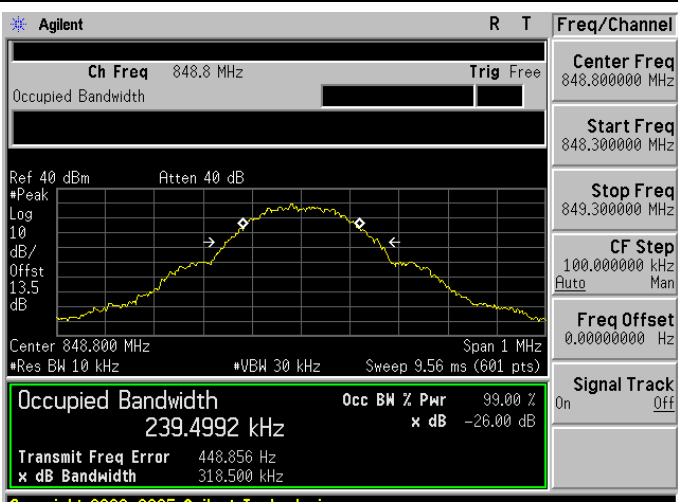
■ Uncertainty



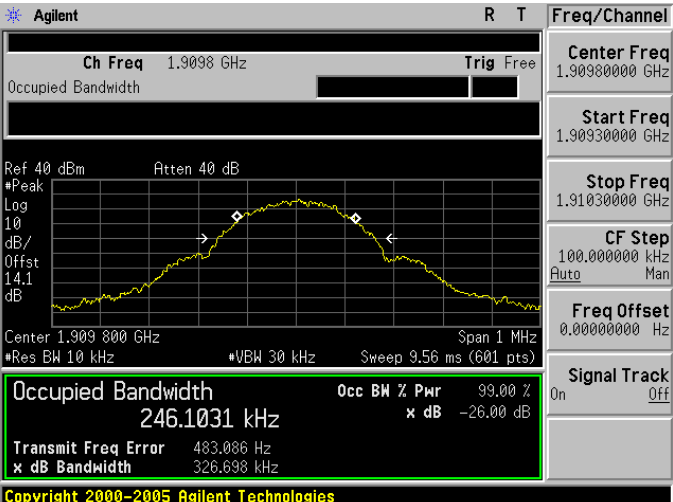
The measurement uncertainty is defined as $\pm 10\text{Hz}$

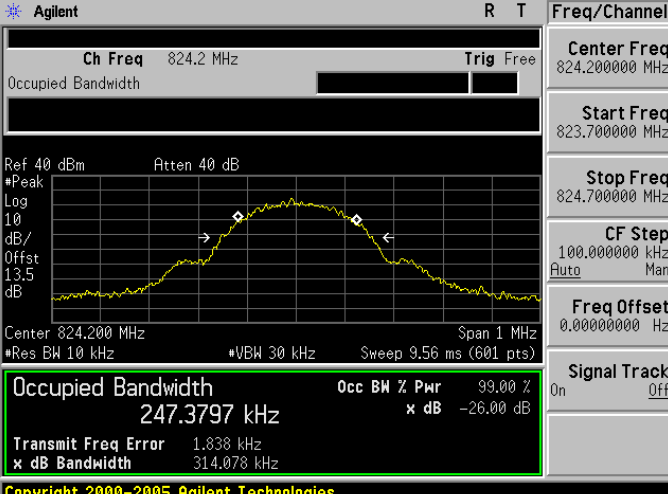
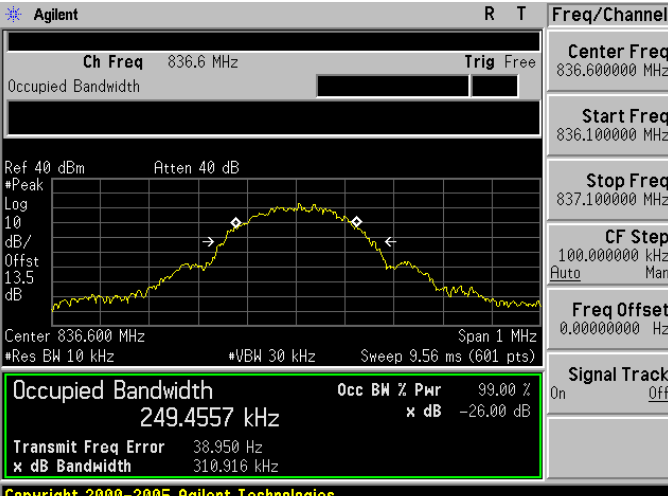
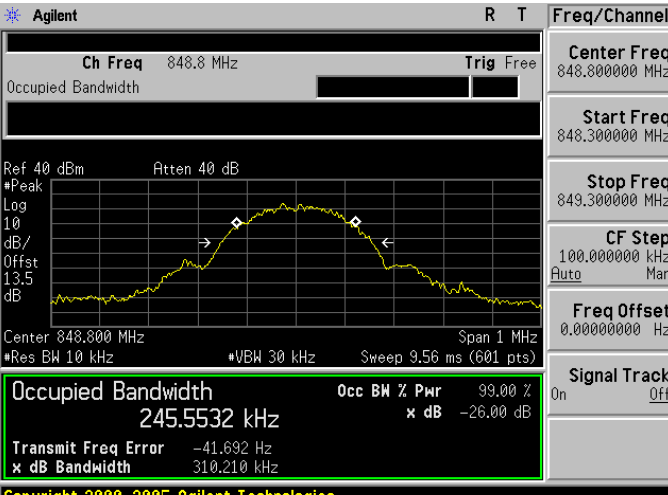
■ Test Result

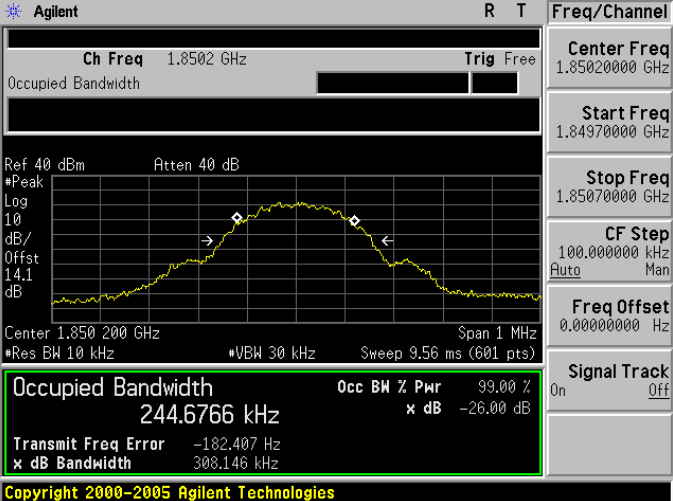
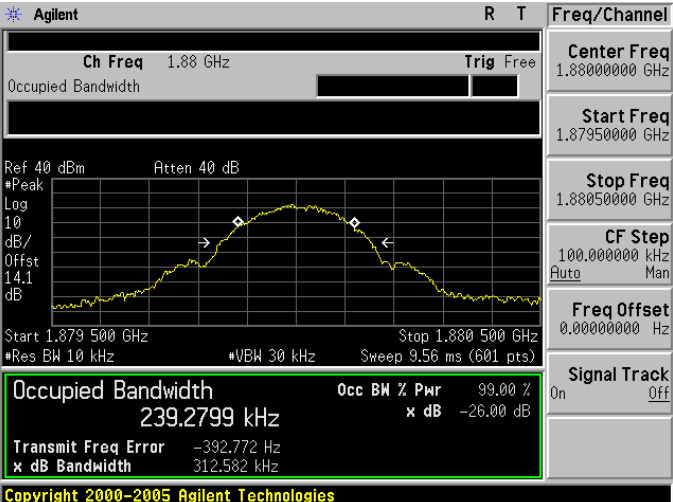
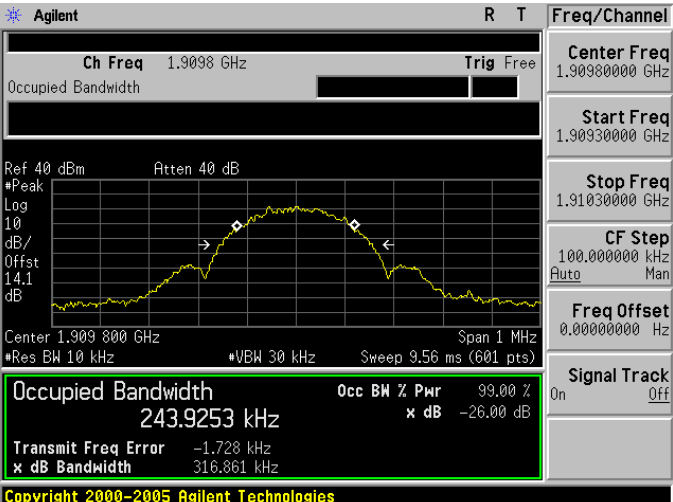
Date of Test	11/02/2016				
Bands	Channel	Frequency (MHz)	-26dB Bandwidth (kHz)	99% Bandwidth (kHz)	Note
GSM 850	128	824.2	321.106	244.4918	RBW:10KHz , VBW:30KHz
	190	836.6	319.569	246.9810	RBW:10KHz , VBW:30KHz
	251	848.8	318.500	239.4992	RBW:10KHz , VBW:30KHz
GSM 1900	512	1850.20	323.318	244.9870	RBW:10KHz , VBW:30KHz
	661	1880.00	319.227	239.2407	RBW:10KHz , VBW:30KHz
	810	1909.80	326.698	246.1031	RBW:10KHz , VBW:30KHz
EGPRS 850	128	824.2	314.078	247.3797	RBW:10KHz , VBW:30KHz
	190	836.6	310.916	249.4557	RBW:10KHz , VBW:30KHz
	251	848.8	310.210	245.5532	RBW:10KHz , VBW:30KHz
EGPRS 1900	512	1850.20	308.146	244.6766	RBW:10KHz , VBW:30KHz
	661	1880.00	312.582	239.2799	RBW:10KHz , VBW:30KHz
	810	1909.80	316.861	243.9253	RBW:10KHz , VBW:30KHz
WCDMA Band II	9262	1852.4	4.648	4.0684	RBW:100KHz , VBW:300KHz
	9400	1880.0	4.673	4.0658	RBW:100KHz , VBW:300KHz
	9538	1907.6	4.672	4.0832	RBW:100KHz , VBW:300KHz
WCDMA Band V	4132	826.4	4.679	4.0965	RBW:100KHz , VBW:300KHz
	4183	836.6	4.689	4.0761	RBW:100KHz , VBW:300KHz
	4233	846.6	4.629	4.0796	RBW:100KHz , VBW:300KHz

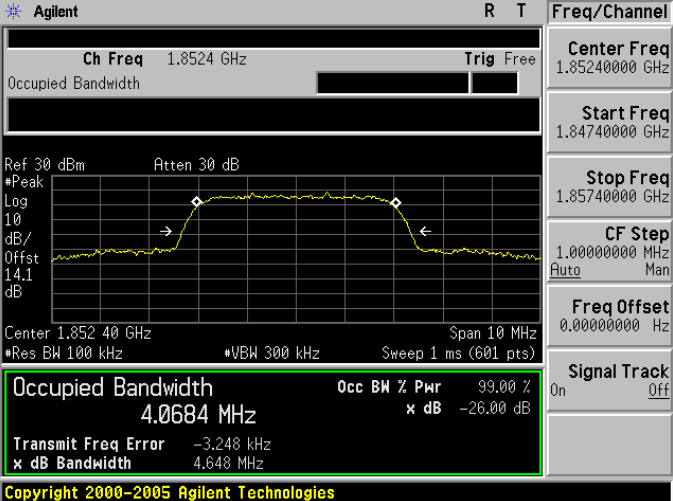
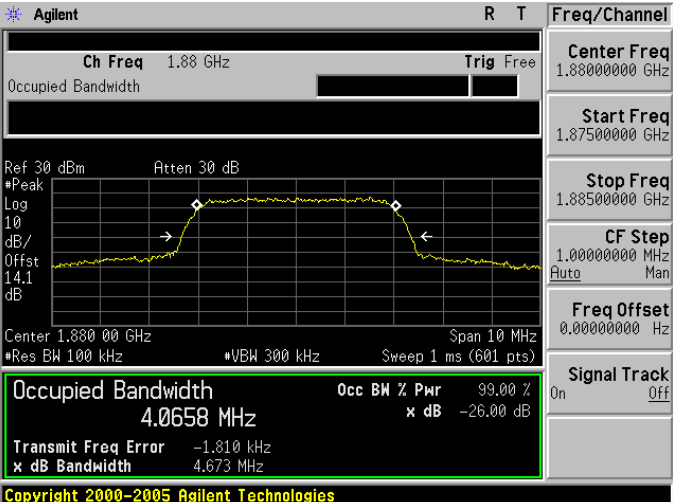
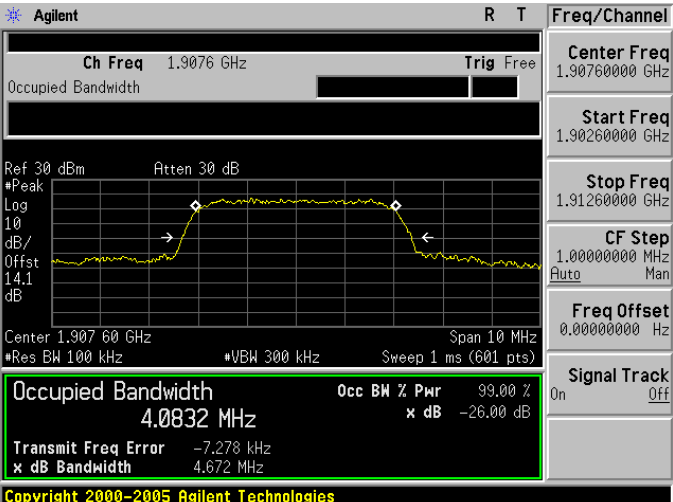
■ Test Graphs

Mode 1: GSM 850 Link Mode	
824.2 MHz	 <p>Agilent R T Freq/Channel</p> <p>Ch Freq 824.2 MHz Trig Free</p> <p>Center Freq 824.200000 MHz</p> <p>Start Freq 823.700000 MHz</p> <p>Stop Freq 824.700000 MHz</p> <p>CF Step 100.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 40 dBm Atten 40 dB</p> <p>*Peak Log 10 dB/Offst 13.5 dB</p> <p>Center 824.200 MHz Span 1 MHz</p> <p>*Res BW 10 kHz *VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p>Occupied Bandwidth 244.4918 kHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 373.292 Hz x dB Bandwidth 321.106 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
836.6 MHz	 <p>Agilent R T Freq/Channel</p> <p>Ch Freq 836.6 MHz Trig Free</p> <p>Center Freq 836.600000 MHz</p> <p>Start Freq 836.100000 MHz</p> <p>Stop Freq 837.100000 MHz</p> <p>CF Step 100.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 40 dBm Atten 40 dB</p> <p>*Peak Log 10 dB/Offst 13.5 dB</p> <p>Center 836.600 MHz Span 1 MHz</p> <p>*Res BW 10 kHz *VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p>Occupied Bandwidth 246.9810 kHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 704.156 Hz x dB Bandwidth 319.569 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
848.8 MHz	 <p>Agilent R T Freq/Channel</p> <p>Ch Freq 848.8 MHz Trig Free</p> <p>Center Freq 848.800000 MHz</p> <p>Start Freq 848.300000 MHz</p> <p>Stop Freq 849.300000 MHz</p> <p>CF Step 100.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 40 dBm Atten 40 dB</p> <p>*Peak Log 10 dB/Offst 13.5 dB</p> <p>Center 848.800 MHz Span 1 MHz</p> <p>*Res BW 10 kHz *VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p>Occupied Bandwidth 239.4992 kHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 448.856 Hz x dB Bandwidth 318.500 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>

Mode 2: GSM 1900 Link Mode	
1850.20 MHz	 <p>Agilent R L Freq/Channel</p> <p>Ch Freq 1.8502 GHz Trig Free</p> <p>Center Freq 1.85020000 GHz</p> <p>Start Freq 1.84970000 GHz</p> <p>Stop Freq 1.85070000 GHz</p> <p>CF Step 100.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 40 dBm Atten 40 dB</p> <p>Peak Log 10 dB/Offst 14.1 dB</p> <p>Center 1.850 200 GHz Span 1 MHz</p> <p>*Res BW 10 kHz *VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p>Occupied Bandwidth 244.9870 kHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 828.774 Hz</p> <p>x dB Bandwidth 323.318 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
1880.00 MHz	 <p>Agilent R T Freq/Channel</p> <p>Ch Freq 1.88 GHz Trig Free</p> <p>Center Freq 1.88000000 GHz</p> <p>Start Freq 1.87950000 GHz</p> <p>Stop Freq 1.88050000 GHz</p> <p>CF Step 100.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 40 dBm Atten 40 dB</p> <p>Peak Log 10 dB/Offst 14.1 dB</p> <p>Center 1.880 000 GHz Span 1 MHz</p> <p>*Res BW 10 kHz *VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p>Occupied Bandwidth 239.2407 kHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 960.492 Hz</p> <p>x dB Bandwidth 319.227 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
1909.80 MHz	 <p>Agilent R T Freq/Channel</p> <p>Ch Freq 1.9098 GHz Trig Free</p> <p>Center Freq 1.90980000 GHz</p> <p>Start Freq 1.90930000 GHz</p> <p>Stop Freq 1.91030000 GHz</p> <p>CF Step 100.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 40 dBm Atten 40 dB</p> <p>Peak Log 10 dB/Offst 14.1 dB</p> <p>Center 1.909 800 GHz Span 1 MHz</p> <p>*Res BW 10 kHz *VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p>Occupied Bandwidth 246.1031 kHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 483.086 Hz</p> <p>x dB Bandwidth 326.698 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>

Mode 3: EGPRS 850 Link Mode	
824.2 MHz	 <p>Agilent R T Freq/Channel</p> <p>Ch Freq 824.2 MHz Trig Free</p> <p>Center Freq 824.200000 MHz</p> <p>Start Freq 823.700000 MHz</p> <p>Stop Freq 824.700000 MHz</p> <p>CF Step 100.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 40 dBm Atten 40 dB</p> <p>Peak Log 10 dB/Offst 13.5 dB</p> <p>Center 824.200 MHz Span 1 MHz</p> <p>Res BW 10 kHz VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p>Occupied Bandwidth 247.3797 kHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 1.838 kHz</p> <p>x dB Bandwidth 314.078 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
836.6 MHz	 <p>Agilent R T Freq/Channel</p> <p>Ch Freq 836.6 MHz Trig Free</p> <p>Center Freq 836.600000 MHz</p> <p>Start Freq 836.100000 MHz</p> <p>Stop Freq 837.100000 MHz</p> <p>CF Step 100.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 40 dBm Atten 40 dB</p> <p>Peak Log 10 dB/Offst 13.5 dB</p> <p>Center 836.600 MHz Span 1 MHz</p> <p>Res BW 10 kHz VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p>Occupied Bandwidth 249.4557 kHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 38.950 Hz</p> <p>x dB Bandwidth 310.916 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
848.8 MHz	 <p>Agilent R T Freq/Channel</p> <p>Ch Freq 848.8 MHz Trig Free</p> <p>Center Freq 848.800000 MHz</p> <p>Start Freq 848.300000 MHz</p> <p>Stop Freq 849.300000 MHz</p> <p>CF Step 100.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 40 dBm Atten 40 dB</p> <p>Peak Log 10 dB/Offst 13.5 dB</p> <p>Center 848.800 MHz Span 1 MHz</p> <p>Res BW 10 kHz VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p>Occupied Bandwidth 245.5532 kHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -41.692 Hz</p> <p>x dB Bandwidth 310.210 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>

Mode 4: EGPRS 1900 Link Mode	
1850.20 MHz	 <p>Agilent R T Freq/Channel</p> <p>Ch Freq 1.8502 GHz Trig Free</p> <p>Center Freq 1.85020000 GHz</p> <p>Start Freq 1.84970000 GHz</p> <p>Stop Freq 1.85070000 GHz</p> <p>CF Step 100.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 40 dBm Atten 40 dB</p> <p>Peak Log 10 dB/Offst 14.1 dB</p> <p>Center 1.850 200 GHz Span 1 MHz</p> <p>Res BW 10 kHz VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p>Occupied Bandwidth 244.6766 kHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -182.407 Hz</p> <p>x dB Bandwidth 308.146 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
1880.00 MHz	 <p>Agilent R T Freq/Channel</p> <p>Ch Freq 1.88 GHz Trig Free</p> <p>Center Freq 1.88000000 GHz</p> <p>Start Freq 1.87950000 GHz</p> <p>Stop Freq 1.88050000 GHz</p> <p>CF Step 100.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 40 dBm Atten 40 dB</p> <p>Peak Log 10 dB/Offst 14.1 dB</p> <p>Start 1.879 500 GHz Stop 1.880 500 GHz</p> <p>Res BW 10 kHz VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p>Occupied Bandwidth 239.2799 kHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -392.772 Hz</p> <p>x dB Bandwidth 312.582 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
1909.80 MHz	 <p>Agilent R T Freq/Channel</p> <p>Ch Freq 1.9098 GHz Trig Free</p> <p>Center Freq 1.90980000 GHz</p> <p>Start Freq 1.90930000 GHz</p> <p>Stop Freq 1.91030000 GHz</p> <p>CF Step 100.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 40 dBm Atten 40 dB</p> <p>Peak Log 10 dB/Offst 14.1 dB</p> <p>Center 1.909 800 GHz Span 1 MHz</p> <p>Res BW 10 kHz VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p>Occupied Bandwidth 243.9253 kHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -1.728 kHz</p> <p>x dB Bandwidth 316.861 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>

Mode 5: WCDMA Band II Link Mode	
1850.20 MHz	 <p>Agilent R T Freq/Channel</p> <p>Ch Freq 1.8524 GHz Trig Free</p> <p>Center Freq 1.85240000 GHz</p> <p>Start Freq 1.84740000 GHz</p> <p>Stop Freq 1.85740000 GHz</p> <p>CF Step 1.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>*Peak Log 10 dB/Offst 14.1 dB</p> <p>Center 1.852 40 GHz Span 10 MHz</p> <p>*Res BW 100 kHz *VBW 300 kHz Sweep 1 ms (601 pts)</p> <p>Occupied Bandwidth 4.0684 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -3.248 kHz x dB Bandwidth 4.648 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
1880.00 MHz	 <p>Agilent R T Freq/Channel</p> <p>Ch Freq 1.88 GHz Trig Free</p> <p>Center Freq 1.88000000 GHz</p> <p>Start Freq 1.87500000 GHz</p> <p>Stop Freq 1.88500000 GHz</p> <p>CF Step 1.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>*Peak Log 10 dB/Offst 14.1 dB</p> <p>Center 1.880 00 GHz Span 10 MHz</p> <p>*Res BW 100 kHz *VBW 300 kHz Sweep 1 ms (601 pts)</p> <p>Occupied Bandwidth 4.0658 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -1.810 kHz x dB Bandwidth 4.673 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
1909.80 MHz	 <p>Agilent R T Freq/Channel</p> <p>Ch Freq 1.9076 GHz Trig Free</p> <p>Center Freq 1.90760000 GHz</p> <p>Start Freq 1.90260000 GHz</p> <p>Stop Freq 1.91260000 GHz</p> <p>CF Step 1.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>*Peak Log 10 dB/Offst 14.1 dB</p> <p>Center 1.907 60 GHz Span 10 MHz</p> <p>*Res BW 100 kHz *VBW 300 kHz Sweep 1 ms (601 pts)</p> <p>Occupied Bandwidth 4.0832 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -7.278 kHz x dB Bandwidth 4.672 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>



Mode 6: WCDMA Band V Link Mode	
826.4 MHz	<div><div><div>Agilent</div><div>R T</div><div>Freq/Channel</div><div>Ch Freq 826.4 MHz</div><div>Trig Free</div><div>Occupied Bandwidth</div><div>Ref 30 dBm</div><div>Atten 30 dB</div><div>Log</div><div>10</div><div>dB/</div><div>Offst</div><div>13.5</div><div>dB</div><div>Center 826.40 MHz</div><div>Span 10 MHz</div><div>Res BW 100 kHz</div><div>VBW 300 kHz</div><div>Sweep 1 ms (601 pts)</div><div>Occupied Bandwidth 4.0965 MHz</div><div>Occ BW % Pwr 99.00 %</div><div>x dB -26.00 dB</div><div>Transmit Freq Error -1.457 kHz</div><div>x dB Bandwidth 4.679 MHz</div><div>Copyright 2000-2005 Agilent Technologies</div></div><div><div>Center Freq 826.400000 MHz</div><div>Start Freq 821.400000 MHz</div><div>Stop Freq 831.400000 MHz</div><div>CF Step 1.00000000 MHz</div><div>Auto Man</div><div>Freq Offset 0.00000000 Hz</div><div>Signal Track On Off</div></div></div>
836.6 MHz	<div><div><div>Agilent</div><div>R T</div><div>Freq/Channel</div><div>Ch Freq 836.6 MHz</div><div>Trig Free</div><div>Occupied Bandwidth</div><div>Ref 30 dBm</div><div>Atten 30 dB</div><div>Log</div><div>10</div><div>dB/</div><div>Offst</div><div>13.5</div><div>dB</div><div>Center 836.60 MHz</div><div>Span 10 MHz</div><div>Res BW 100 kHz</div><div>VBW 300 kHz</div><div>Sweep 1 ms (601 pts)</div><div>Occupied Bandwidth 4.0761 MHz</div><div>Occ BW % Pwr 99.00 %</div><div>x dB -26.00 dB</div><div>Transmit Freq Error 2.409 kHz</div><div>x dB Bandwidth 4.689 MHz</div><div>Copyright 2000-2005 Agilent Technologies</div></div><div><div>Center Freq 836.600000 MHz</div><div>Start Freq 831.600000 MHz</div><div>Stop Freq 841.600000 MHz</div><div>CF Step 1.00000000 MHz</div><div>Auto Man</div><div>Freq Offset 0.00000000 Hz</div><div>Signal Track On Off</div></div></div>
846.6 MHz	<div><div><div>Agilent</div><div>R T</div><div>Freq/Channel</div><div>Ch Freq 846.6 MHz</div><div>Trig Free</div><div>Occupied Bandwidth</div><div>Ref 30 dBm</div><div>Atten 30 dB</div><div>Log</div><div>10</div><div>dB/</div><div>Offst</div><div>13.5</div><div>dB</div><div>Center 846.60 MHz</div><div>Span 10 MHz</div><div>Res BW 100 kHz</div><div>VBW 300 kHz</div><div>Sweep 1 ms (601 pts)</div><div>Occupied Bandwidth 4.0796 MHz</div><div>Occ BW % Pwr 99.00 %</div><div>x dB -26.00 dB</div><div>Transmit Freq Error -5.761 kHz</div><div>x dB Bandwidth 4.629 MHz</div><div>Copyright 2000-2005 Agilent Technologies</div></div><div><div>Center Freq 846.600000 MHz</div><div>Start Freq 841.600000 MHz</div><div>Stop Freq 851.600000 MHz</div><div>CF Step 1.00000000 MHz</div><div>Auto Man</div><div>Freq Offset 0.00000000 Hz</div><div>Signal Track On Off</div></div></div>

2.5. Band Edge Test

■ Limit

The Band Edge Limit:

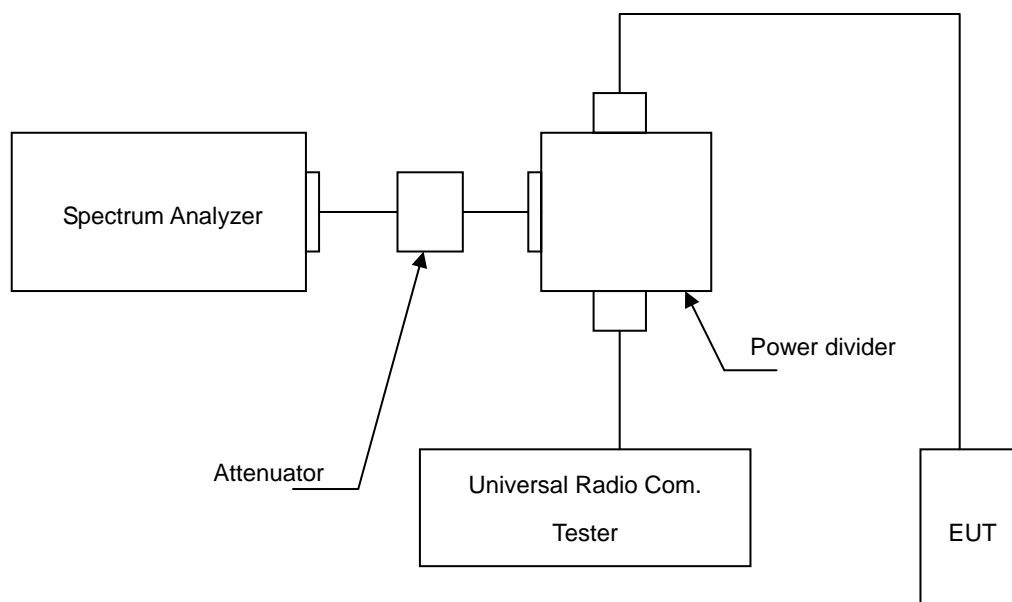
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10\log(P)$ dB.

■ Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Cycle
Universal Radio Communication Tester	R & S	CMU200	112387	02/25/2016	1 year
Spectrum Analyzer	Agilent	E4445A	MY45300744	12/15/2015	1 year
Spectrum Analyzer	Agilent	N9030A	MY53120541	12/14/2015	1 year
Attenuator	Woken	WK0602-10	001	06/06/2016	2 year
Power Divider	Agilent	87302C	3239A00760	N.C.R.	-----
Test Site	ATL	TE05	TE05	N.C.R.	-----

Note: N.C.R. = No Calibration Request.

■ Setup





■ Test Procedure

The measurement is made according to FCC rules part 22 and 24:

1. The EUT was connected to Spectrum Analyzer and Base Station via Power Divider.
2. The band edge of low and high channels for the highest RF powers within the transmitting frequency band were measured. Setting RBW as roughly BW/100.
3. The band edge setting:
 - a. RB=10 kHz; VB=30 kHz for GSM 850 and PCS 1900.
 - b. RB=51 kHz; VB=160 kHz for WCDMA Band V and WCDMA Band II.

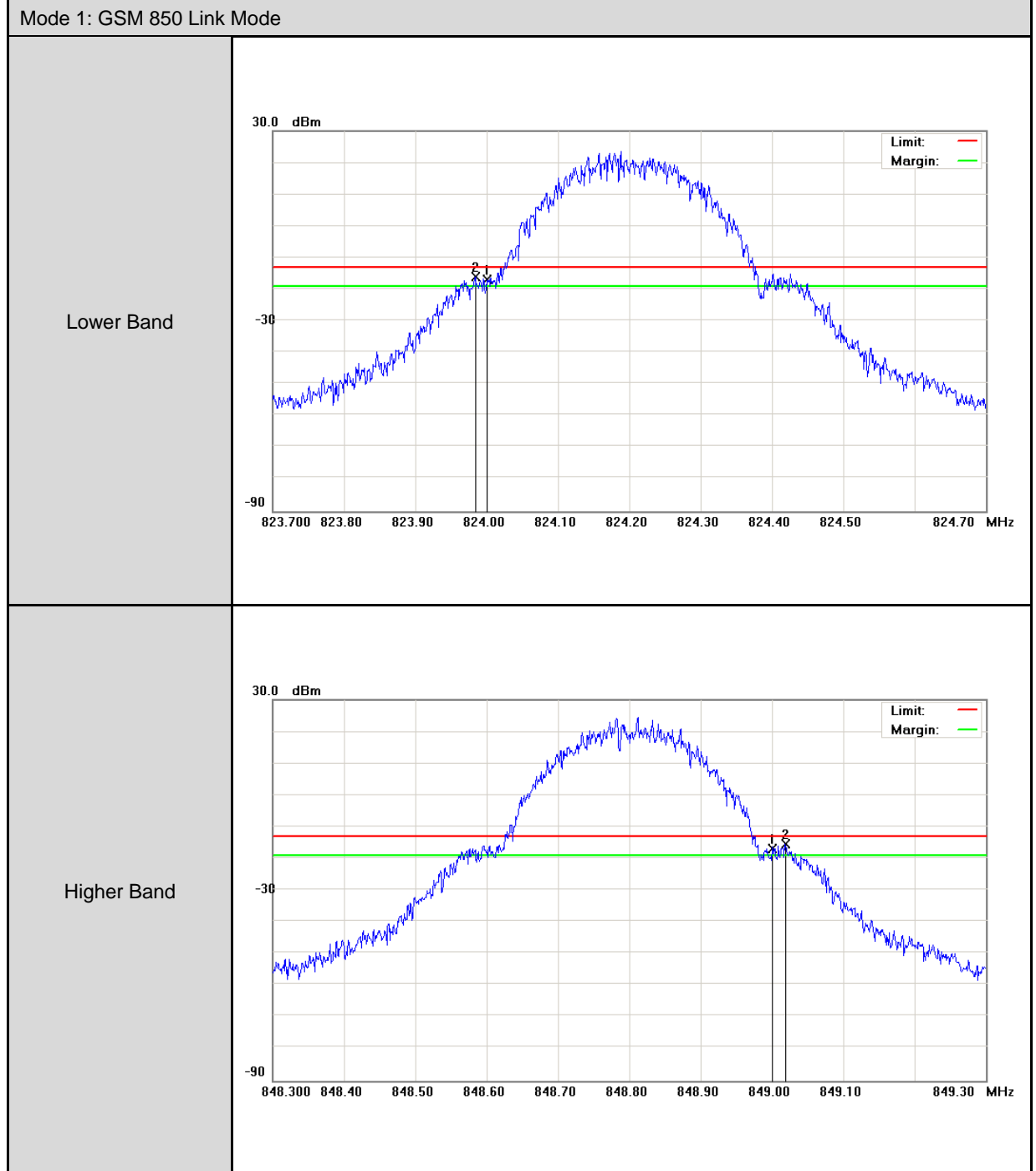
■ Uncertainty

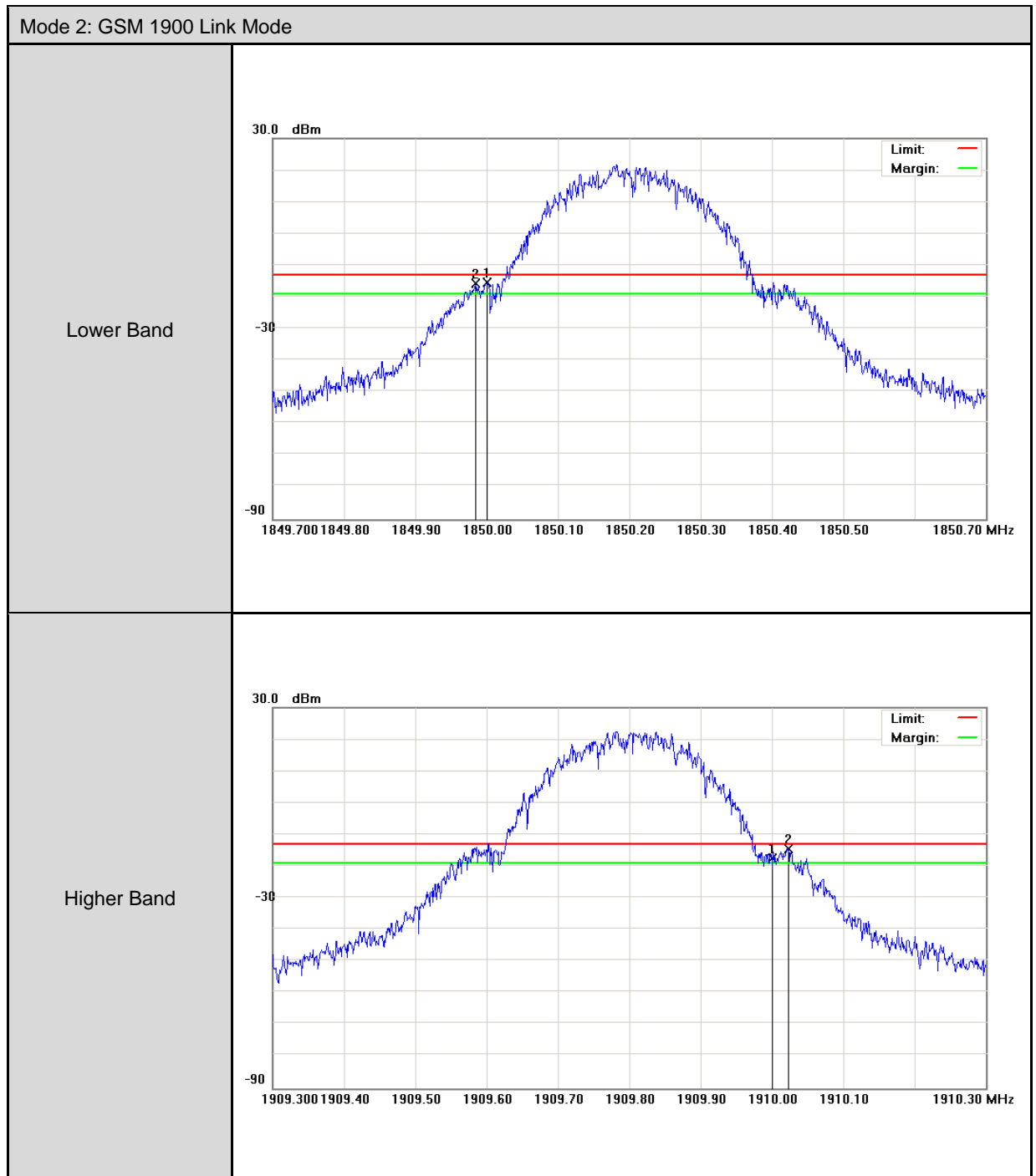
The measurement uncertainty is defined as $\pm 10\text{Hz}$

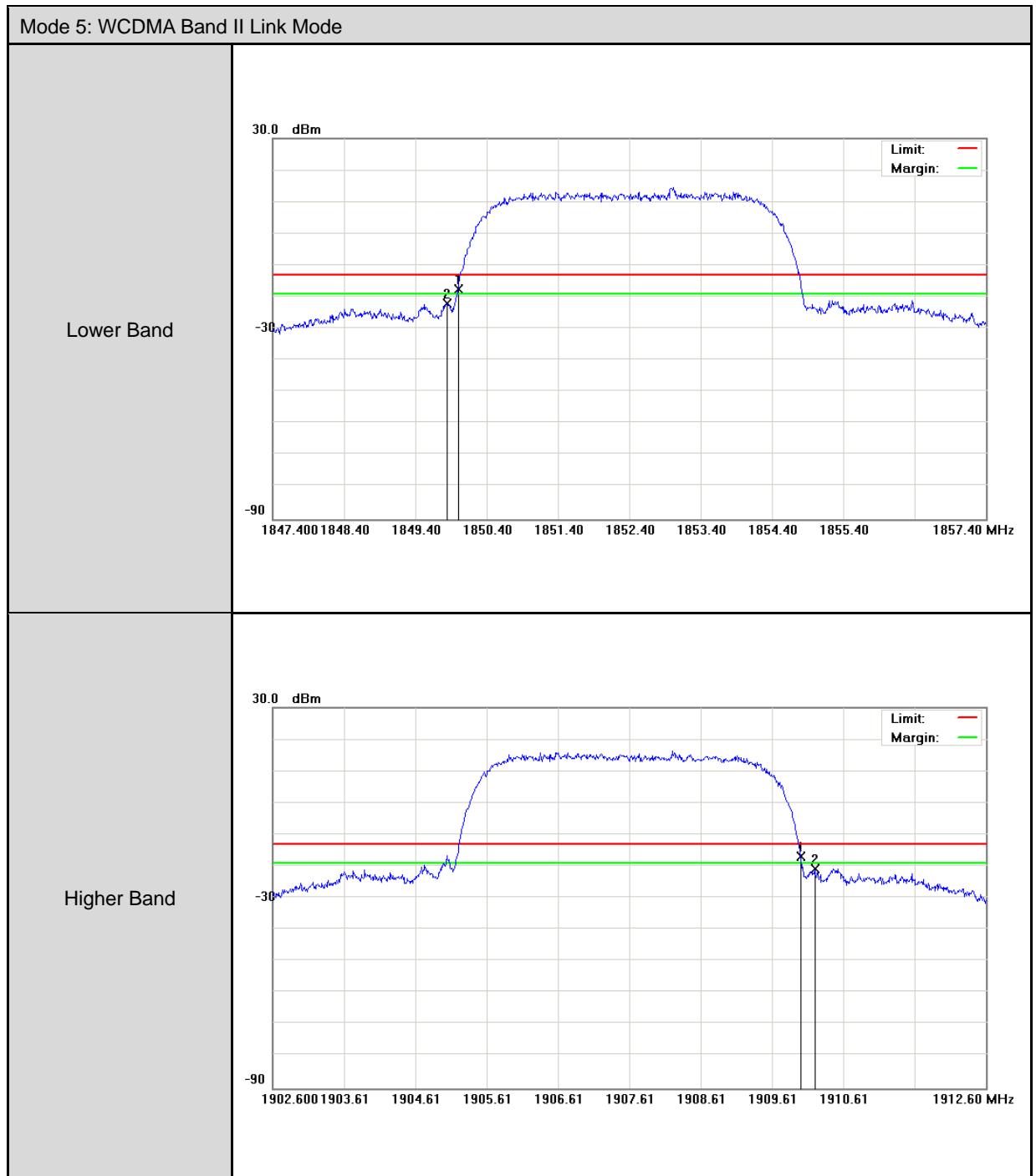
■ Test Result

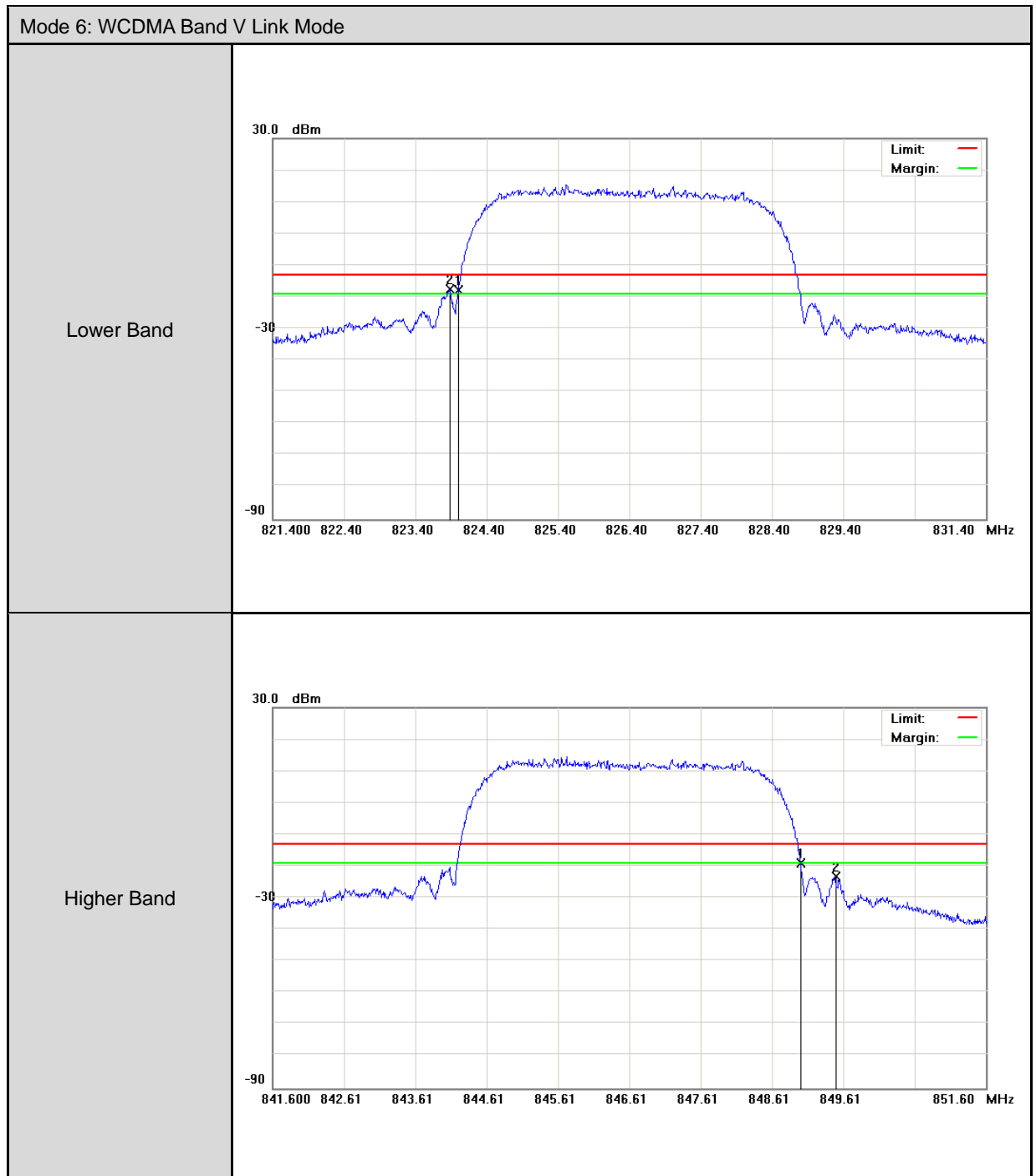
Date of Test		10/29/2016				
Bands		Channel	Frequency (MHz)	Bandwidth (dBm)	Limit (dBm)	Result
GSM 850	Lower	128	824.0000	-16.11	-13	Pass
	Higher	251	849.0000	-15.57	-13	Pass
GSM 1900	Lower	512	1850.000	-15.48	-13	Pass
	Higher	810	1910.000	-14.44	-13	Pass
WCDMA Band II	Lower	9262	1850.000	-17.57	-13	Pass
	Higher	9538	1910.000	-16.81	-13	Pass
WCDMA Band V	Lower	4132	824.0000	-17.63	-13	Pass
	Higher	4233	849.0000	-18.94	-13	Pass

■ Test Graphs









2.6. Conducted Spurious Emission Test

■ Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10\log(P)$ dB.

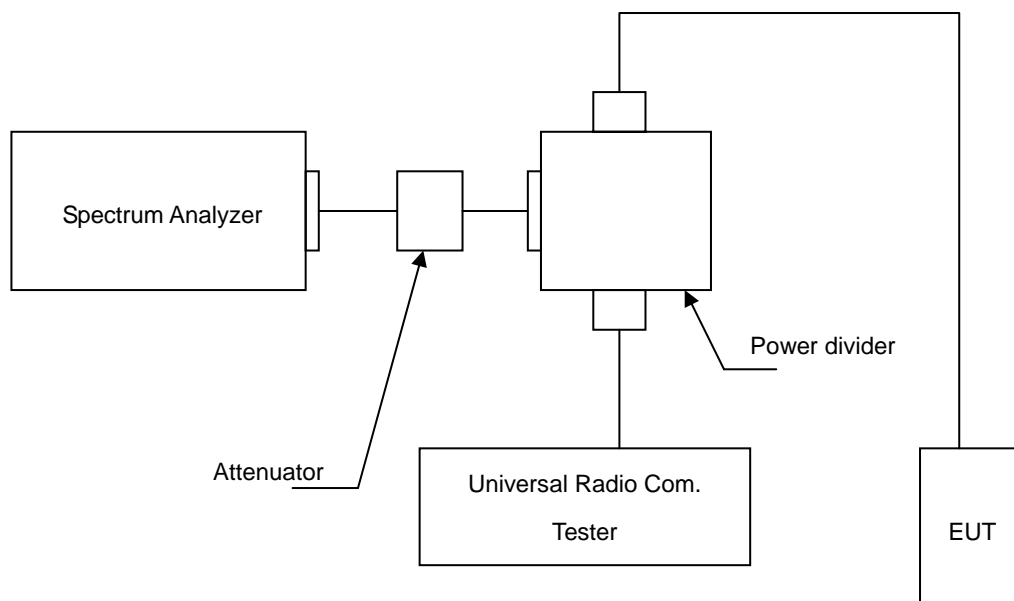
■ Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Cycle
Universal Radio Communication Tester	R & S	CMU200	112387	02/25/2016	1 year
Spectrum Analyzer	Agilent	E4445A	MY45300744	12/15/2015	1 year
Spectrum Analyzer	Agilent	N9030A	MY53120541	12/14/2015	1 year
Attenuator	Woken	WK0602-10	001	06/06/2016	2 year
Power Divider	Agilent	87302C	3239A00760	N.C.R.	-----
Test Site	ATL	TE02	TE02	N.C.R.	-----

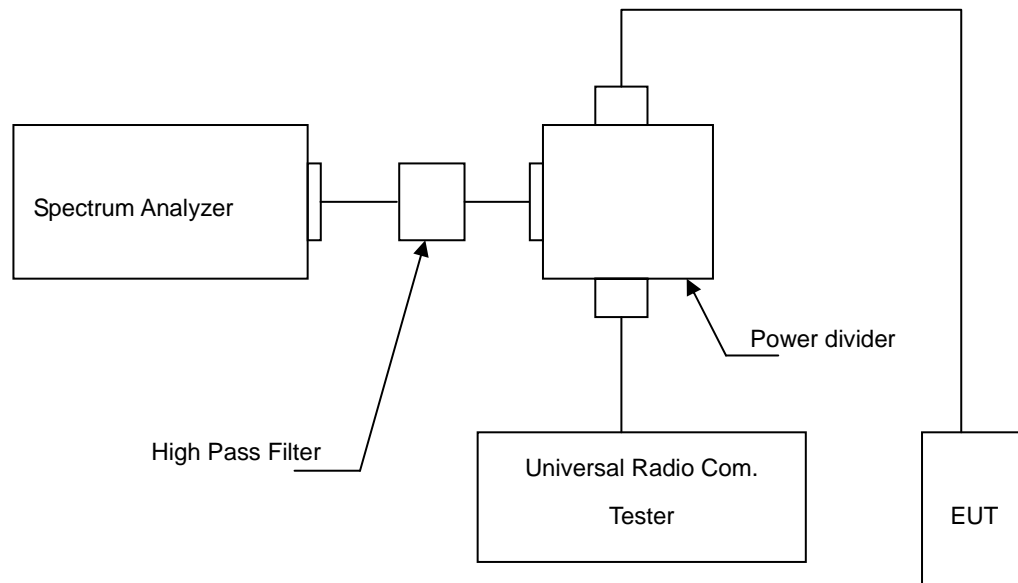
Note: N.C.R. = No Calibration Request.

■ Setup

Below 2.8GHz



Above 2.8GHz



■ Test Procedure

1. The EUT was connected to Spectrum Analyzer and Base Station via Power Divider.
2. The middle channel for the highest RF power within the transmitting frequency was measured.
3. The conducted spurious emission for the whole frequency range was taken.

■ Uncertainty

The measurement uncertainty is evaluated as ± 2.24 dB.

■ Test Result

Test Mode	Mode 1 / Mode 2 / Mode 4 / Mode 5
Date of Test	10/29/2016

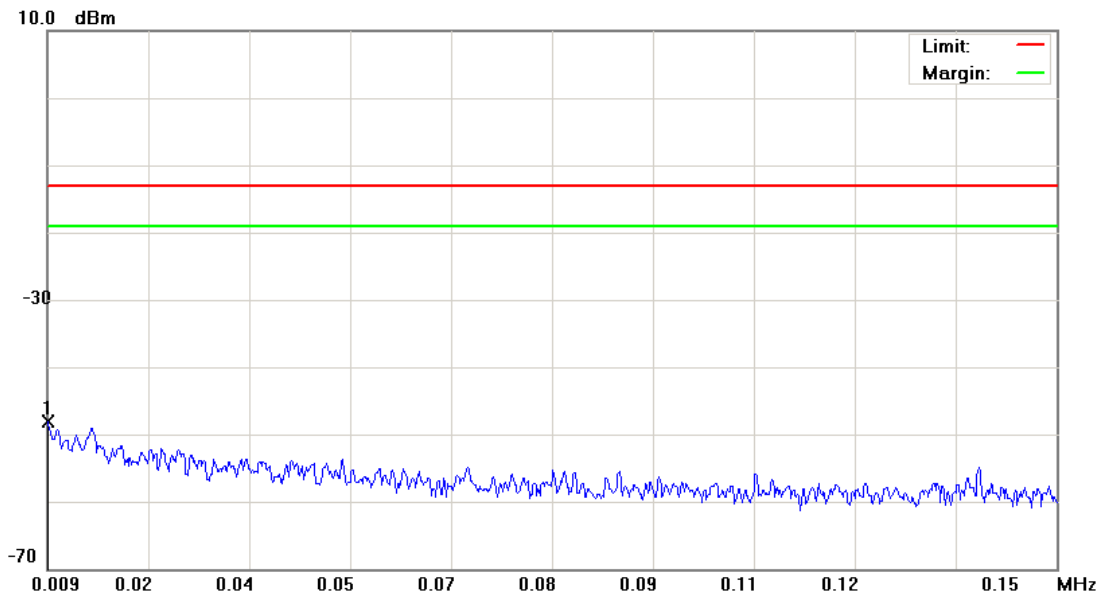


File :Br828P(CH128)

Data :#1

Date: 2016/10/29

Time: 下午 05:02:14



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1 KHz VBW: 3 KHz

M/N: BR828PGT

Mode: GSM 850

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	0.0091	-78.67	30.58	-48.09	-13.00	-35.09	peak		Comment

*:Maximum data x:Over limit !:over margin

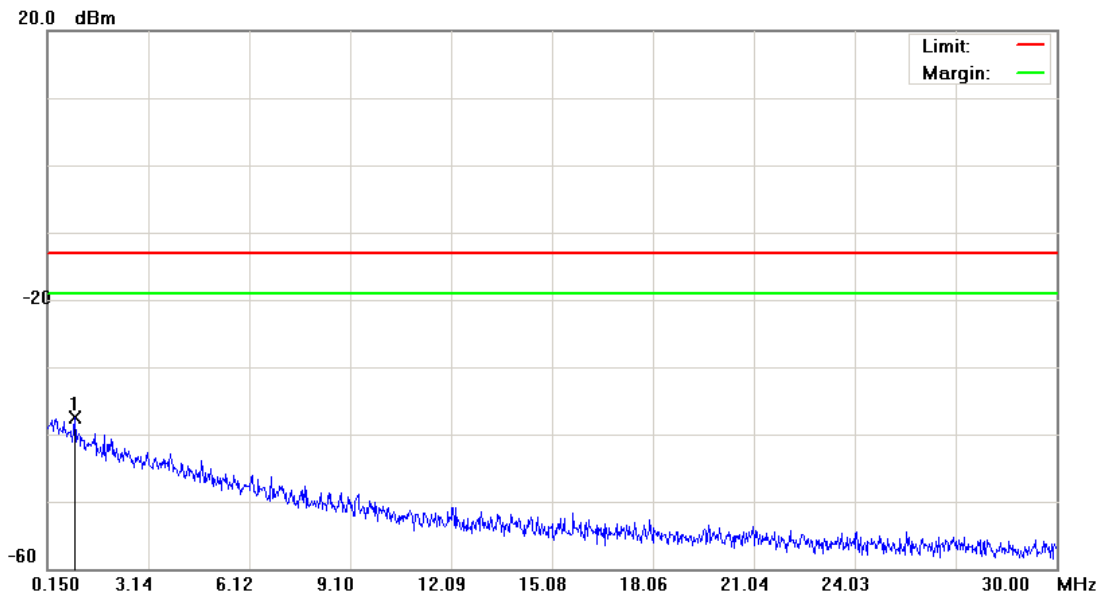


File :Br828P(CH128)

Data :#2

Date: 2016/10/29

Time: 下午 05:02:38



Site: site #1 Polarization: **Conducted** Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G) Power: DC 3.7V Humidity: 55 %
EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS Distance: RBW: 10 KHz VBW: 30 KHz
M/N: BR828PGT
Mode: GSM 850
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	0.9560	-69.48	31.99	-37.49	-13.00	-24.49	peak		Comment

*:Maximum data x:Over limit !:over margin

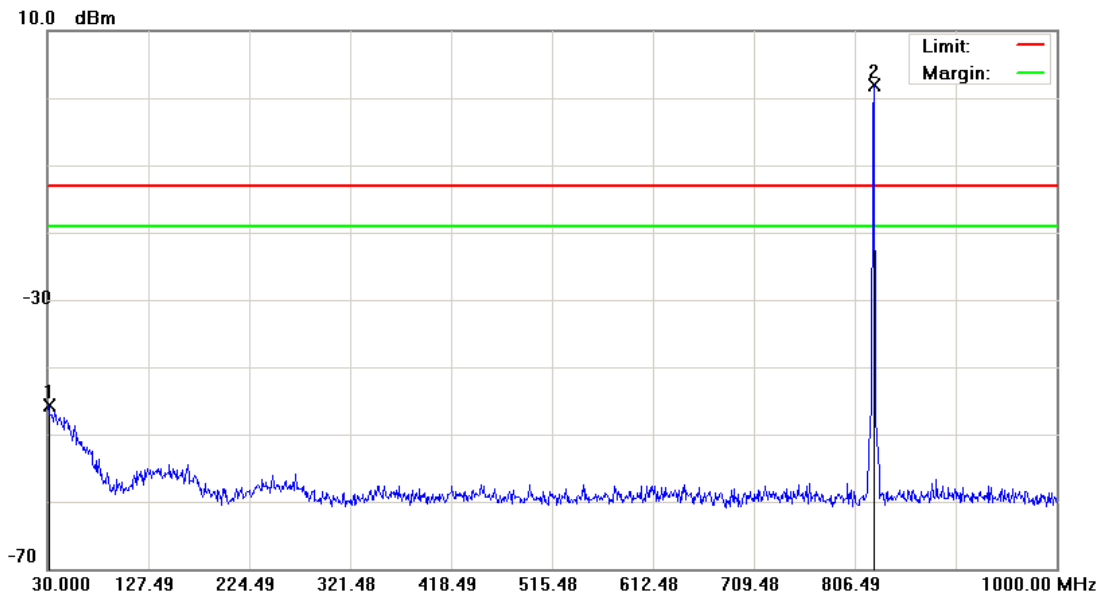


File :Br828P(CH128)

Data :#3

Date: 2016/10/29

Time: 下午 05:03:02



Site: site #1

Polarization: **Conducted**

Temperature: 26

Limit: FCC Part 22 conducted(9k-12.75G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 100 KHz VBW: 300 KHz

M/N: BR828PGT

Mode: GSM 850

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1		31.4550	-62.83	17.05	-45.78	-13.00	-32.78	peak		
2	*	824.4300	-1.94	3.84	1.90	-13.00	14.90	peak		Tx

*:Maximum data x:Over limit !:over margin

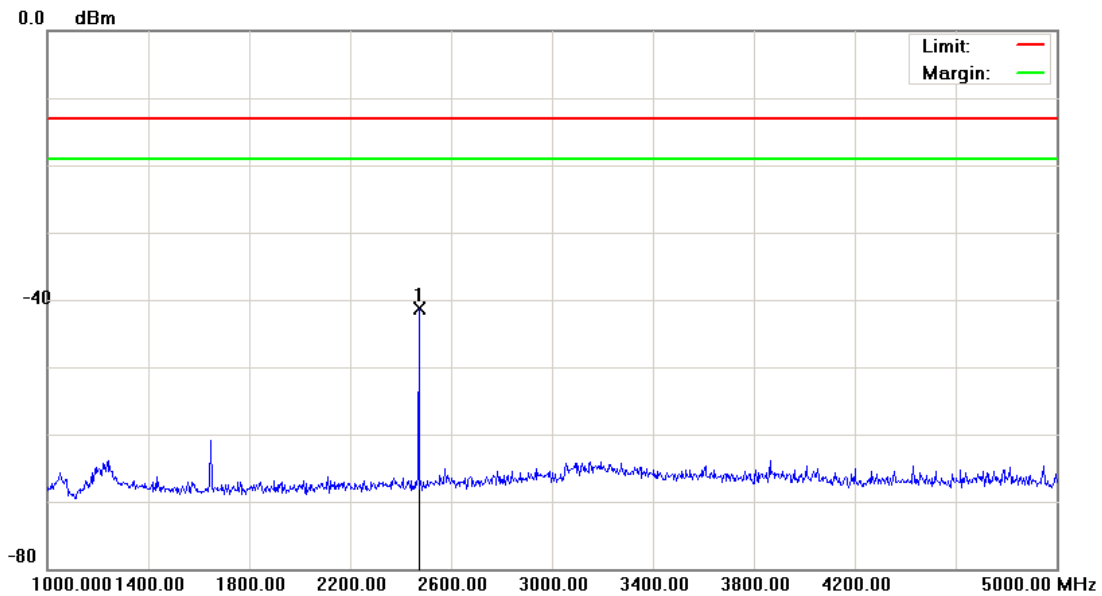


File :Br828P(CH128)

Data :#4

Date: 2016/10/29

Time: 下午 05:11:17



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 3000 KHz

M/N: BR828PGT

Mode: GSM 850

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	2472.000	-45.65	4.45	-41.20	-13.00	-28.20	peak		

*:Maximum data x:Over limit !:over margin

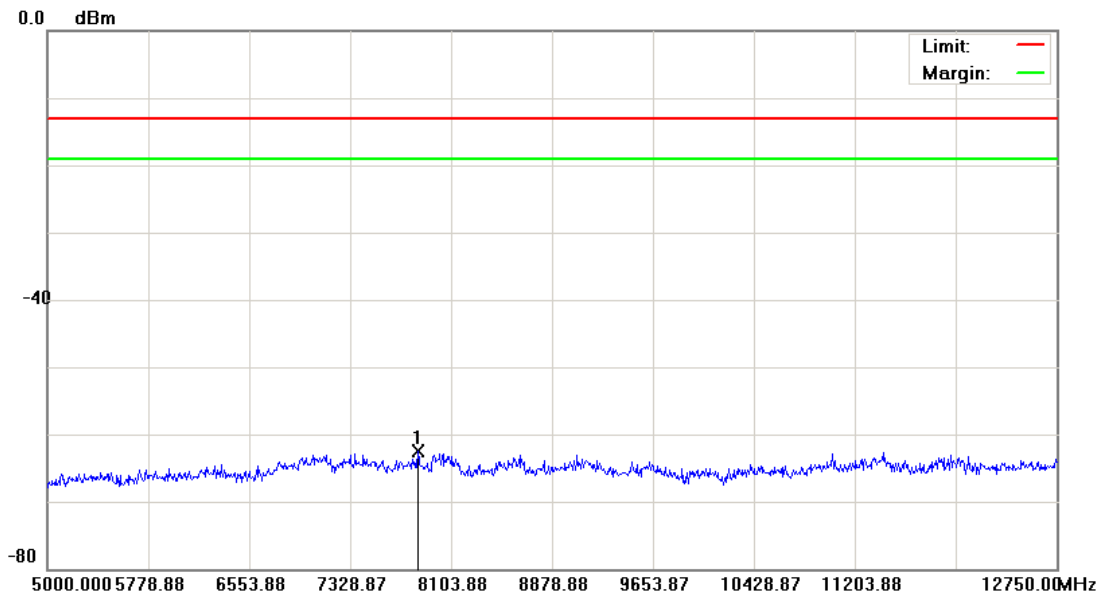


File :Br828P(CH128)

Data :#5

Date: 2016/10/29

Time: 下午 05:11:40



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 3000 KHz

M/N: BR828PGT

Mode: GSM 850

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	7844.250	-68.17	5.61	-62.56	-13.00	-49.56	peak		

*:Maximum data x:Over limit !:over margin

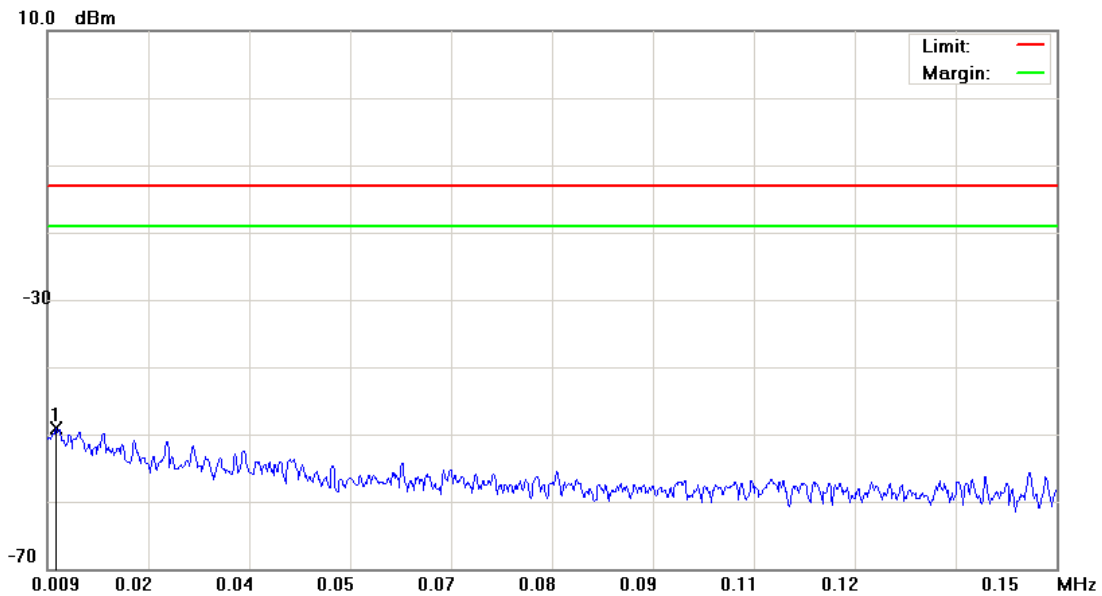


File :Br828P(CH190)

Data :#1

Date: 2016/10/29

Time: 下午 05:04:43



Site: site #1 Polarization: **Conducted** Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G) Power: DC 3.7V Humidity: 55 %
EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS Distance: RBW: 1 KHz VBW: 3 KHz
M/N: BR828PGT
Mode: GSM 850
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	0.0103	-79.73	30.57	-49.16	-13.00	-36.16	peak		Comment

*:Maximum data x:Over limit !:over margin

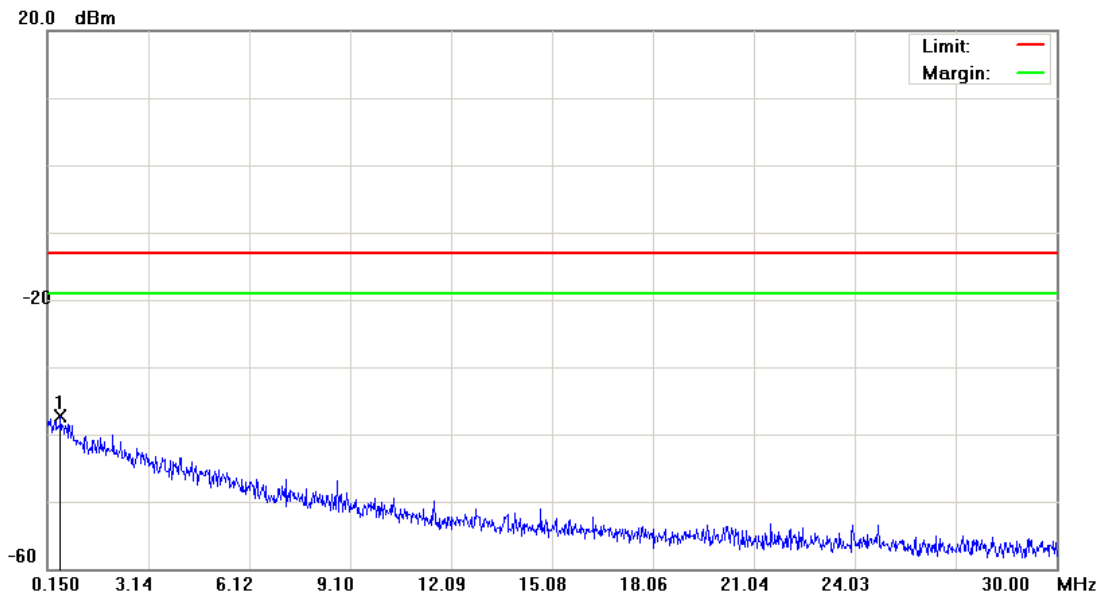


File :Br828P(CH190)

Data :#2

Date: 2016/10/29

Time: 下午 05:05:07



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 10 KHz VBW: 30 KHz

M/N: BR828PGT

Mode: GSM 850

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	0.5381	-69.30	32.00	-37.30	-13.00	-24.30	peak		

*:Maximum data x:Over limit !:over margin

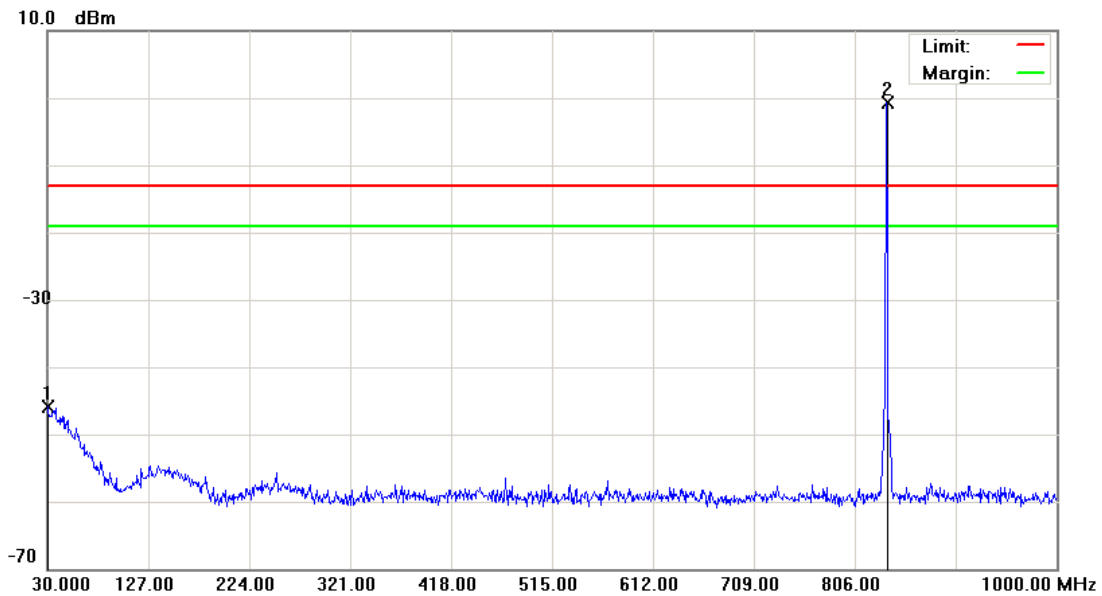


File :Br828P(CH190)

Data :#3

Date: 2016/10/29

Time: 下午 05:05:32



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 100 KHz VBW: 300 KHz

M/N: BR828PGT

Mode: GSM 850

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1		30.0000	-63.02	17.21	-45.81	-13.00	-32.81	peak		
2	*	836.5550	-4.58	3.96	-0.62	-13.00	12.38	peak		Tx

*:Maximum data x:Over limit !:over margin

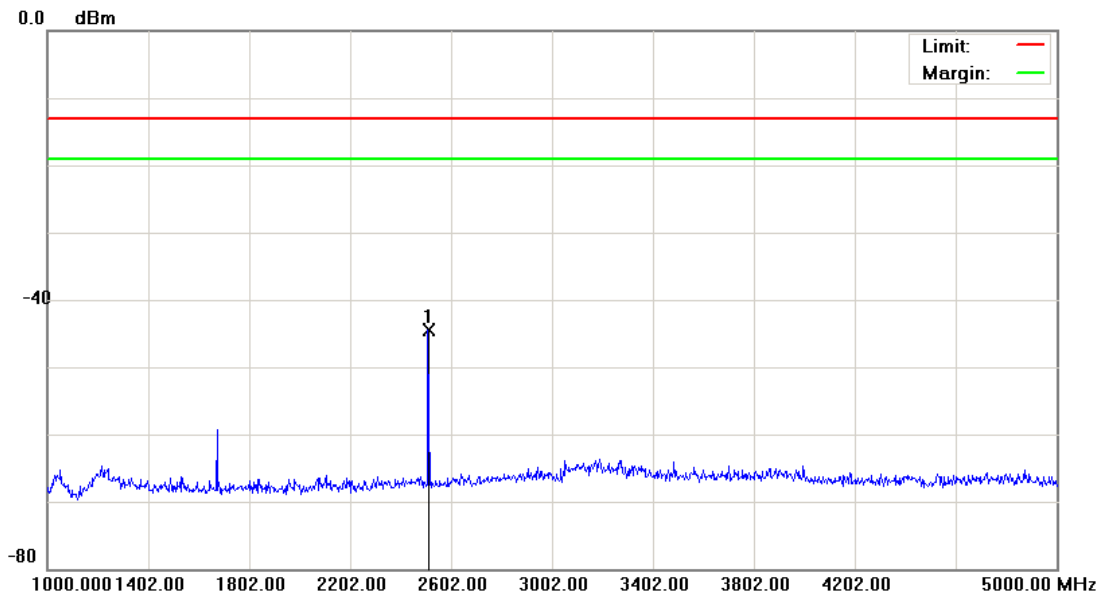


File :Br828P(CH190)

Data :#4

Date: 2016/10/29

Time: 下午 05:12:38



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 3000 KHz

M/N: BR828PGT

Mode: GSM 850

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	2510.000	-48.94	4.36	-44.58	-13.00	-31.58	peak		

*:Maximum data x:Over limit !:over margin

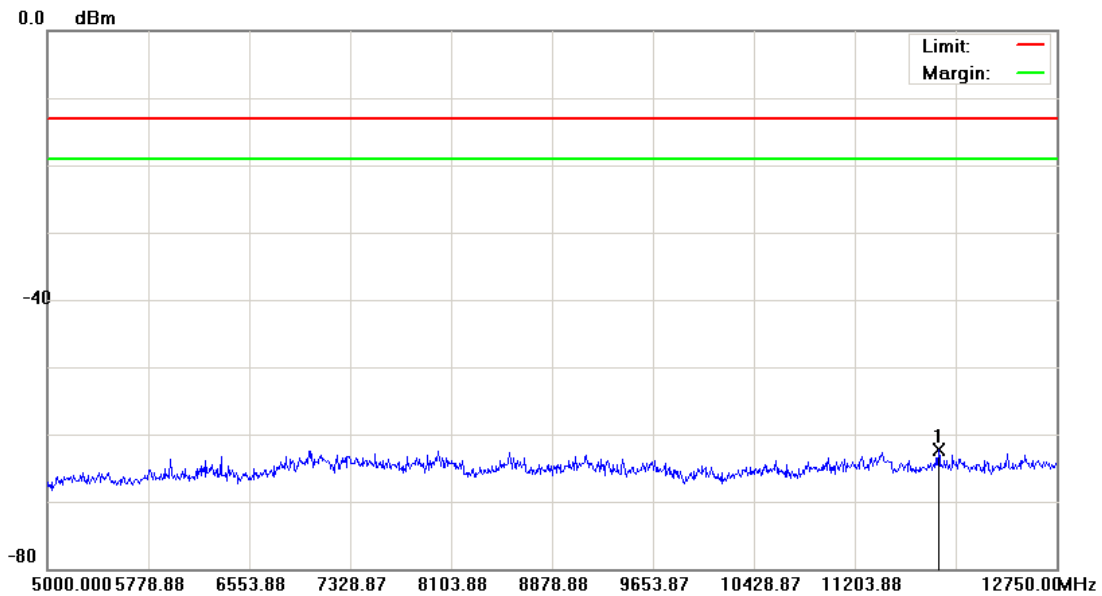


File :Br828P(CH190)

Data :#5

Date: 2016/10/29

Time: 下午 05:13:01



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 3000 KHz

M/N: BR828PGT

Mode: GSM 850

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	11843.250	-68.01	5.66	-62.35	-13.00	-49.35	peak		

*:Maximum data x:Over limit !:over margin

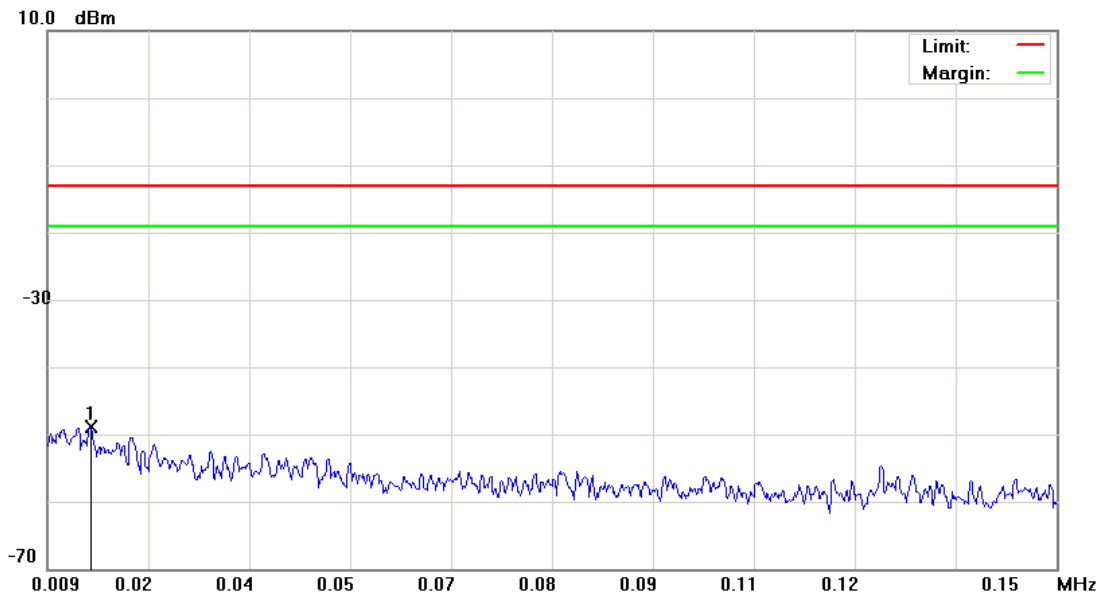


File :Br828P(CH251)

Data :#1

Date: 2016/10/29

Time: 下午 05:06:45



Site: site #1 Polarization: **Conducted** Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G) Power: DC 3.7V Humidity: 55 %
EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS Distance: RBW: 1 KHz VBW: 3 KHz
M/N: BR828PGT
Mode: GSM 850
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	0.0150	-79.52	30.55	-48.97	-13.00	-35.97	peak		Comment

*:Maximum data x:Over limit !:over margin

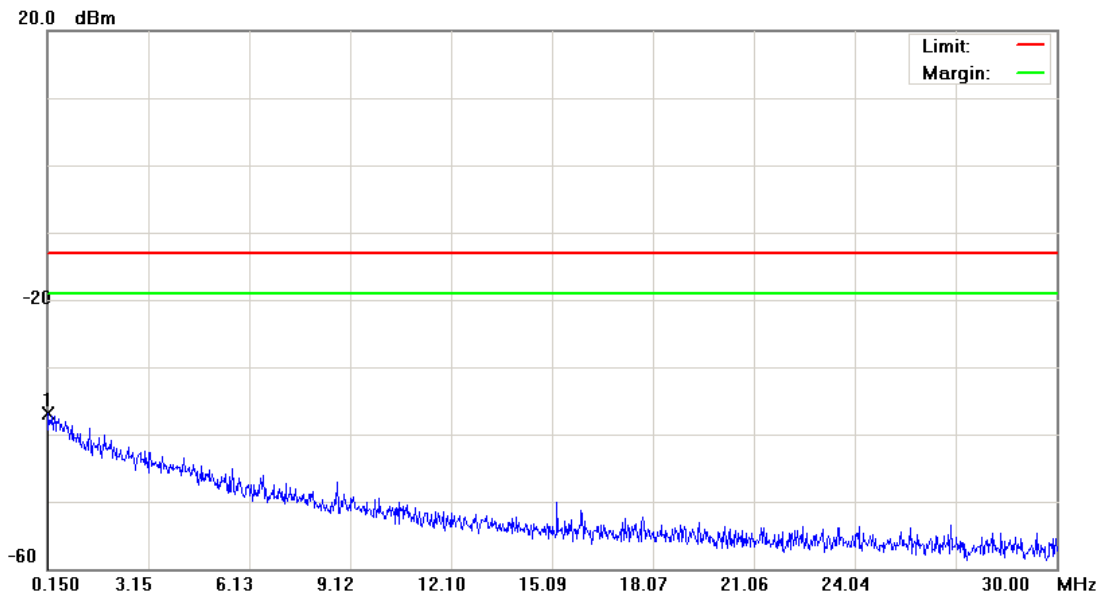


File :Br828P(CH251)

Data :#2

Date: 2016/10/29

Time: 下午 05:07:09



Site: site #1 Polarization: **Conducted** Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G) Power: DC 3.7V Humidity: 55 %
EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS Distance: RBW: 10 KHz VBW: 30 KHz
M/N: BR828PGT
Mode: GSM 850
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	0.1650	-67.59	30.63	-36.96	-13.00	-23.96	peak		Comment

*:Maximum data x:Over limit !:over margin

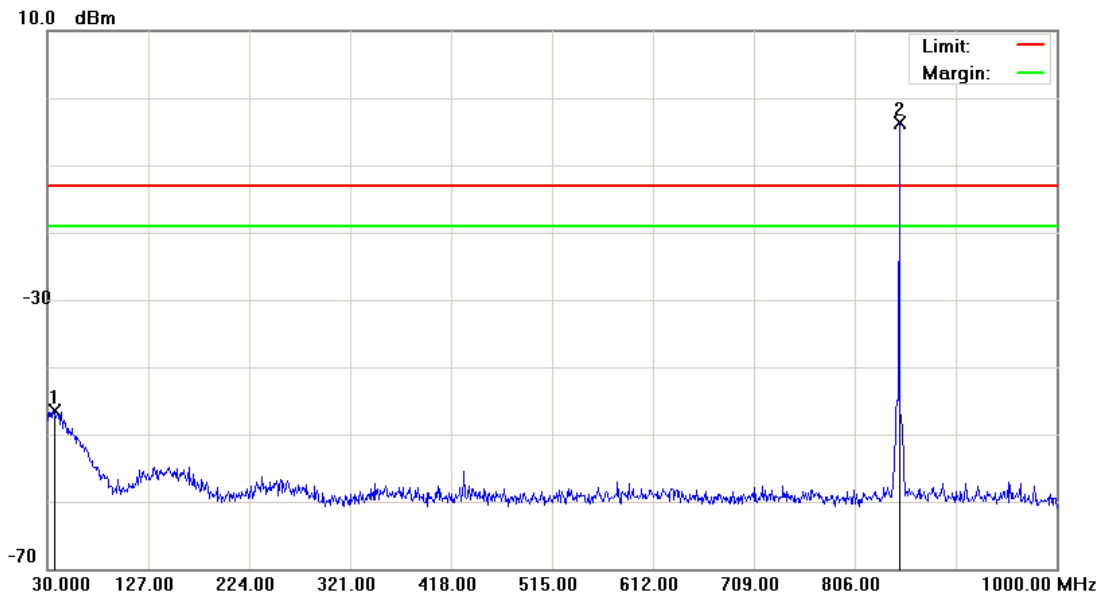


File :Br828P(CH251)

Data :#3

Date: 2016/10/29

Time: 下午 05:07:33



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 100 KHz VBW: 300 KHz

M/N: BR828PGT

Mode: GSM 850

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1		36.3050	-62.95	16.50	-46.45	-13.00	-33.45	peak		
2	*	848.6800	-7.75	3.98	-3.77	-13.00	9.23	peak		Tx

*:Maximum data x:Over limit !:over margin

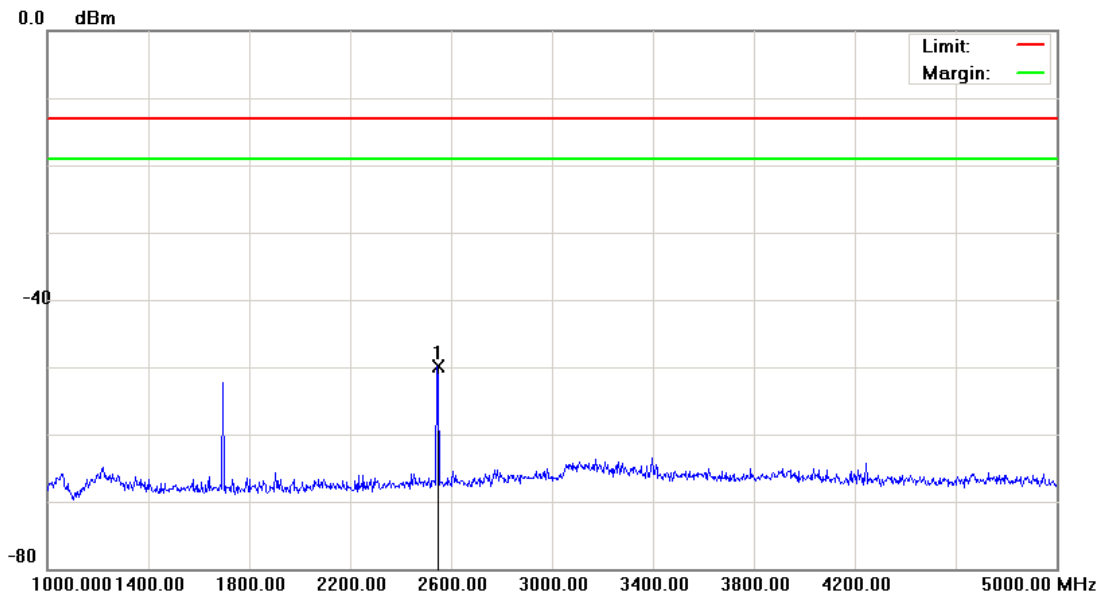


File :Br828P(CH251)

Data :#4

Date: 2016/10/29

Time: 下午 05:13:35



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 3000 KHz

M/N: BR828PGT

Mode: GSM 850

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	2546.000	-54.27	4.45	-49.82	-13.00	-36.82	peak		

*:Maximum data x:Over limit !:over margin

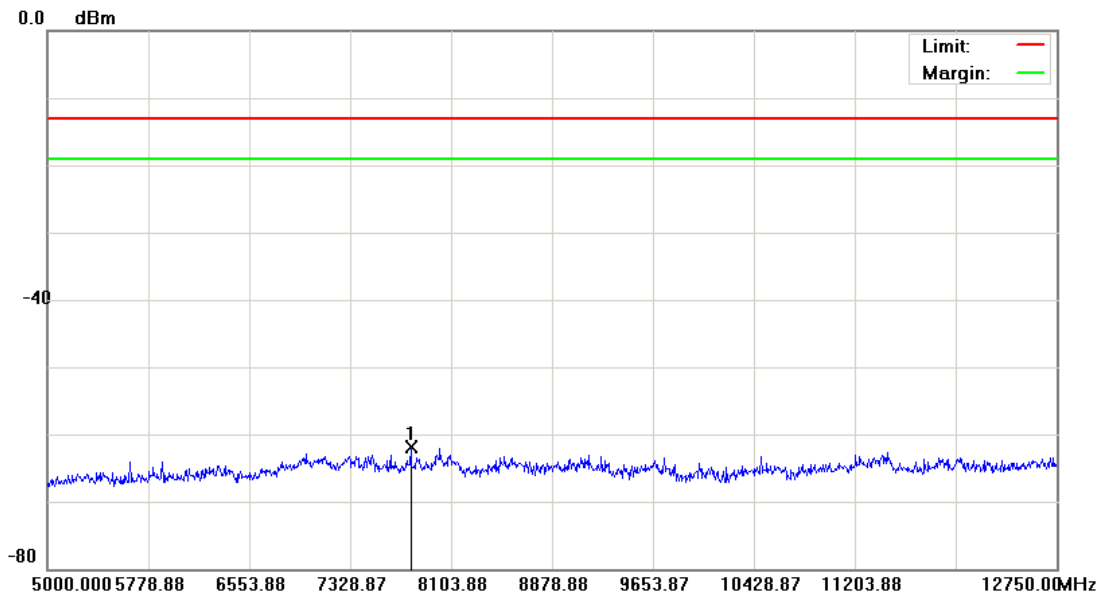


File :Br828P(CH251)

Data :#5

Date: 2016/10/29

Time: 下午 05:13:59



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 3000 KHz

M/N: BR828PGT

Mode: GSM 850

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	7793.875	-67.03	5.20	-61.83	-13.00	-48.83	peak		

*:Maximum data x:Over limit !:over margin

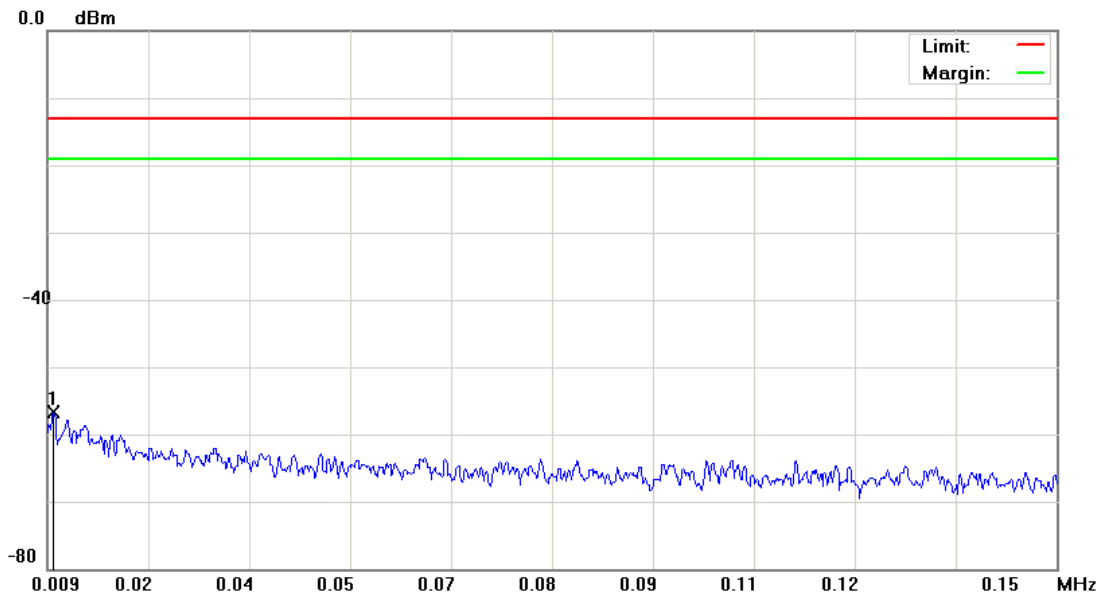


File :Br828P(CH512)

Data :#1

Date: 2016/10/29

Time: 下午 04:17:00



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1 KHz VBW: 3 KHz

M/N: BR828PGT

Mode: GSM 1900

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	0.0098	-68.05	11.33	-56.72	-13.00	-43.72	peak		Comment

*:Maximum data x:Over limit !:over margin

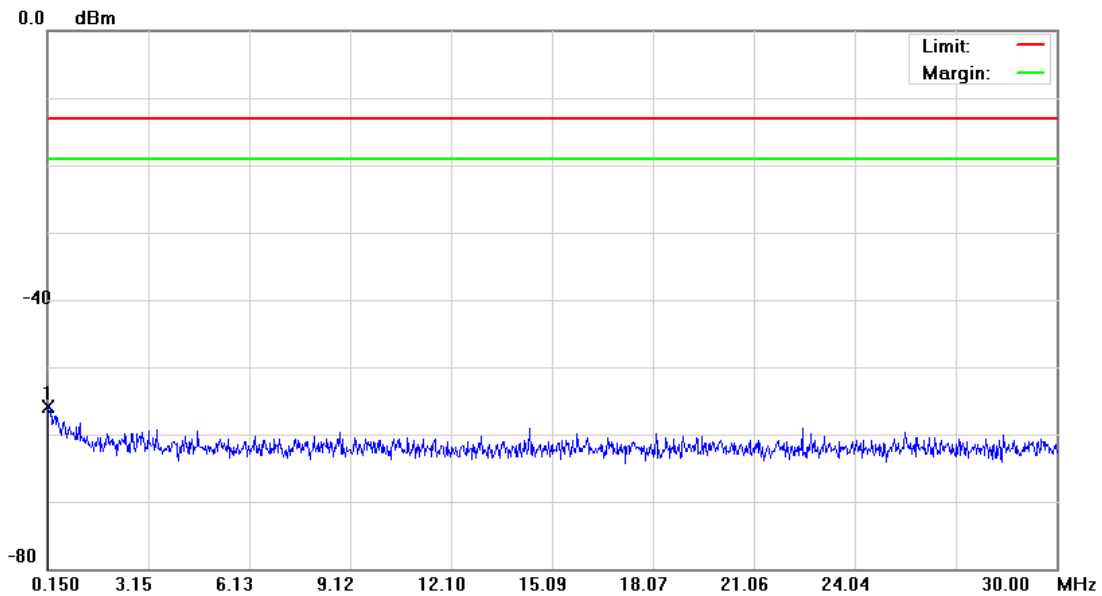


File :Br828P(CH512)

Data :#2

Date: 2016/10/29

Time: 下午 04:17:24



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 10 KHz VBW: 30 KHz

M/N: BR828PGT

Mode: GSM 1900

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	0.1650	-68.32	12.46	-55.86	-13.00	-42.86	peak		Comment

*:Maximum data x:Over limit !:over margin

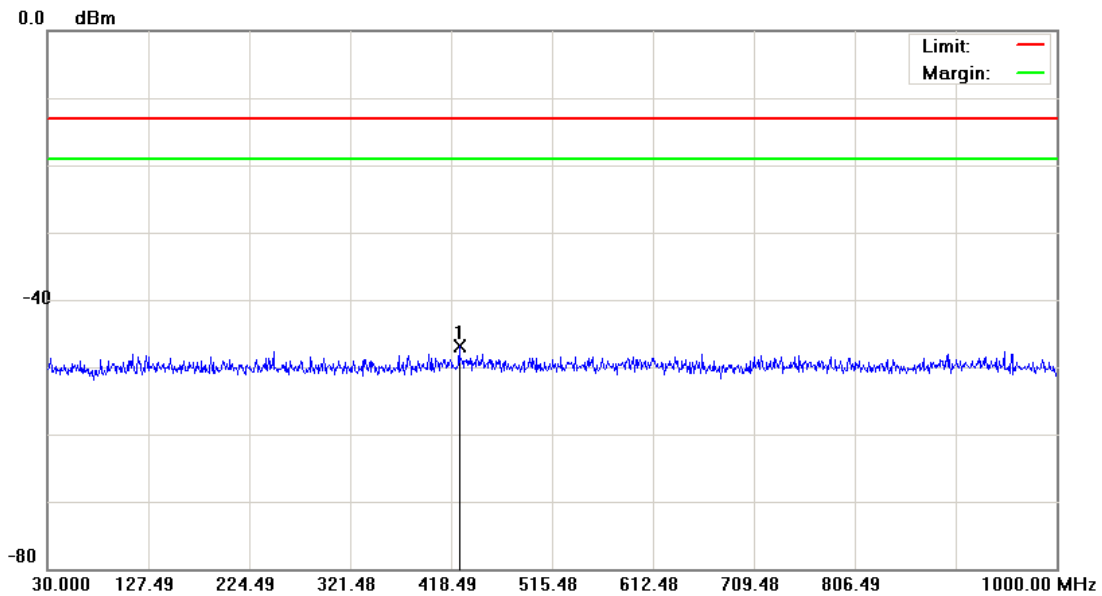


File :Br828P(CH512)

Data :#3

Date: 2016/10/29

Time: 下午 04:17:48



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 100 KHz VBW: 300 KHz

M/N: BR828PGT

Mode: GSM 1900

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	425.7600	-60.22	13.24	-46.98	-13.00	-33.98	peak		

*:Maximum data x:Over limit !:over margin

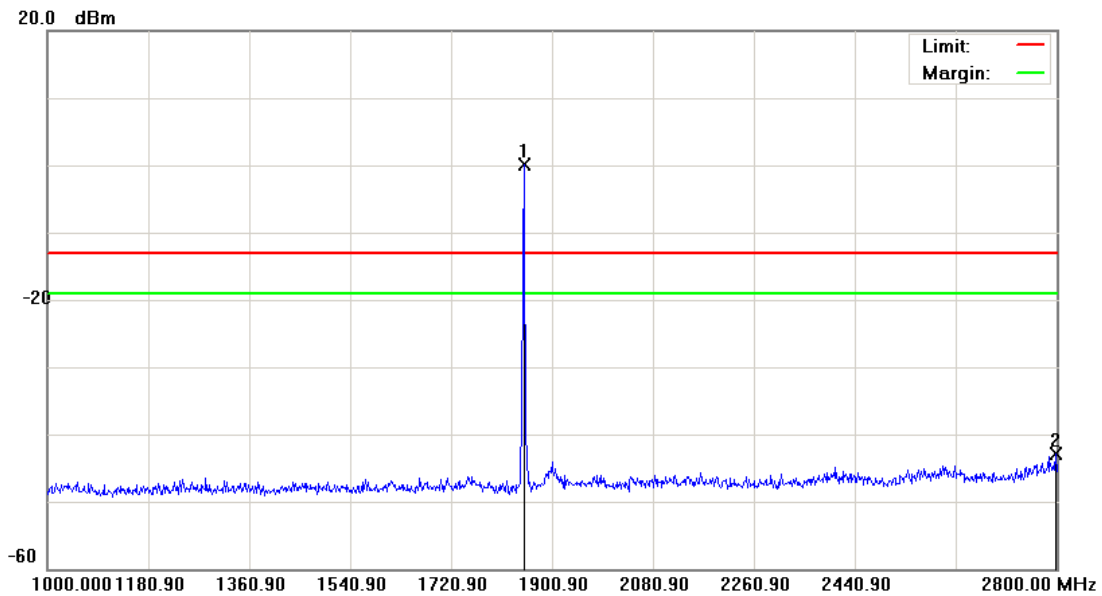


File :Br828P(CH512)

Data :#4

Date: 2016/10/29

Time: 下午 04:31:12



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 3000 KHz

M/N: BR828PGT

Mode: GSM 1900

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	1850.500	-4.22	4.26	0.04	-13.00	13.04	peak		Tx
2		2798.200	-48.87	5.91	-42.96	-13.00	-29.96	peak		

*:Maximum data x:Over limit !:over margin

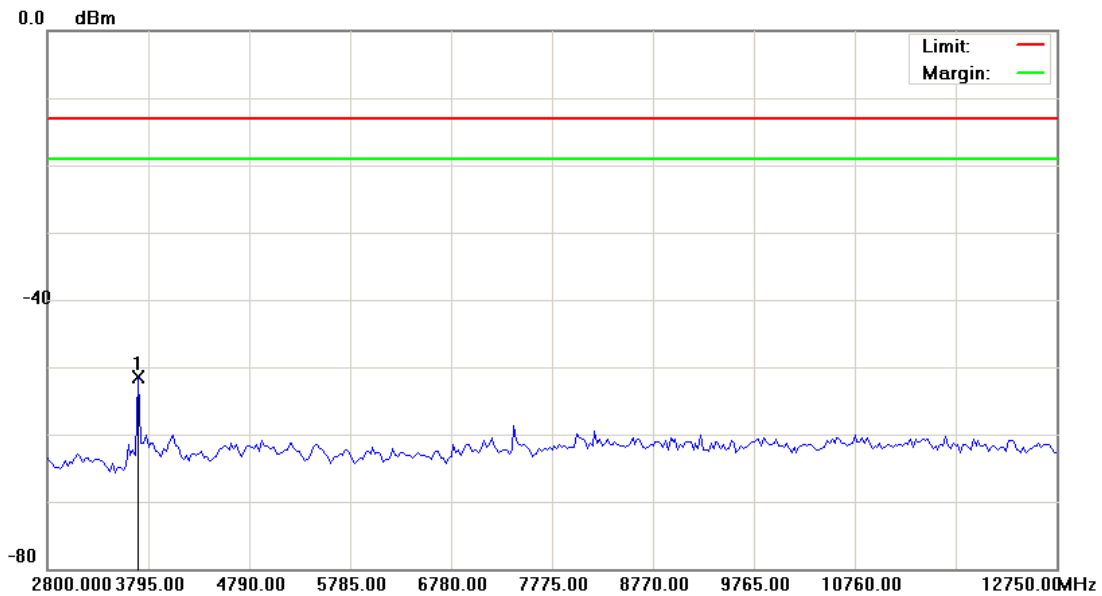


File :Br828P(CH512)

Data :#5

Date: 2016/10/29

Time: 下午 05:29:51



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 3000 KHz

M/N: BR828PGT

Mode: GSM 1900

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	3695.500	-56.36	4.87	-51.49	-13.00	-38.49	peak		

*:Maximum data x:Over limit !:over margin

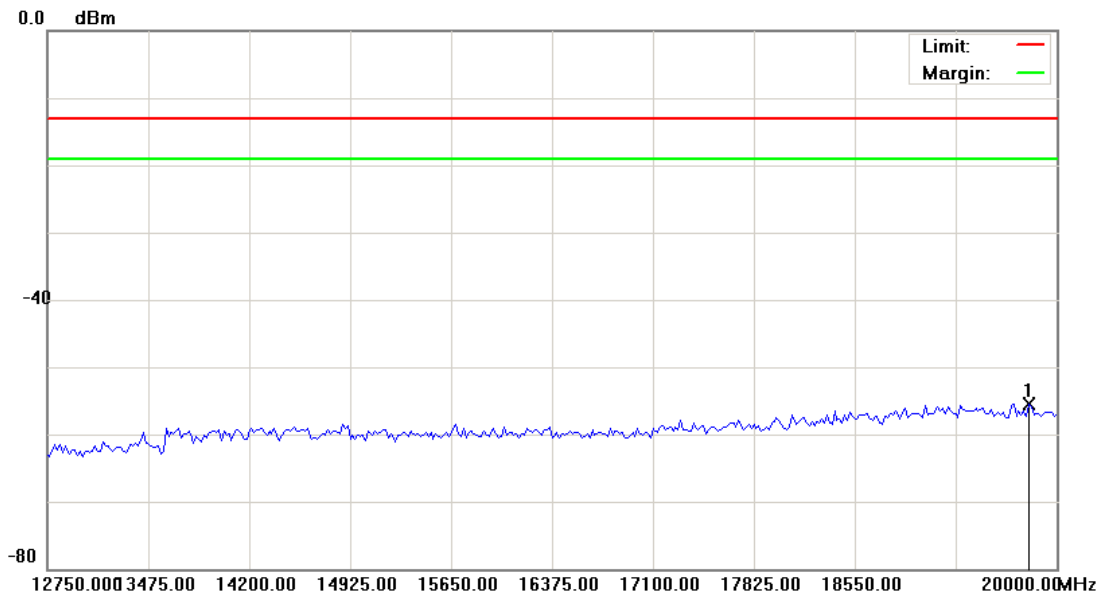


File :Br828P(CH512)

Data :#6

Date: 2016/10/29

Time: 下午 05:30:10



Site: site #1 Polarization: **Conducted** Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G) Power: DC 3.7V Humidity: 55 %
EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS Distance: RBW: 1000 KHz VBW: 3000 KHz
M/N: BR828PGT
Mode: GSM 1900
Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	19800.625	-62.87	7.38	-55.49	-13.00	-42.49	peak		

*:Maximum data x:Over limit !:over margin

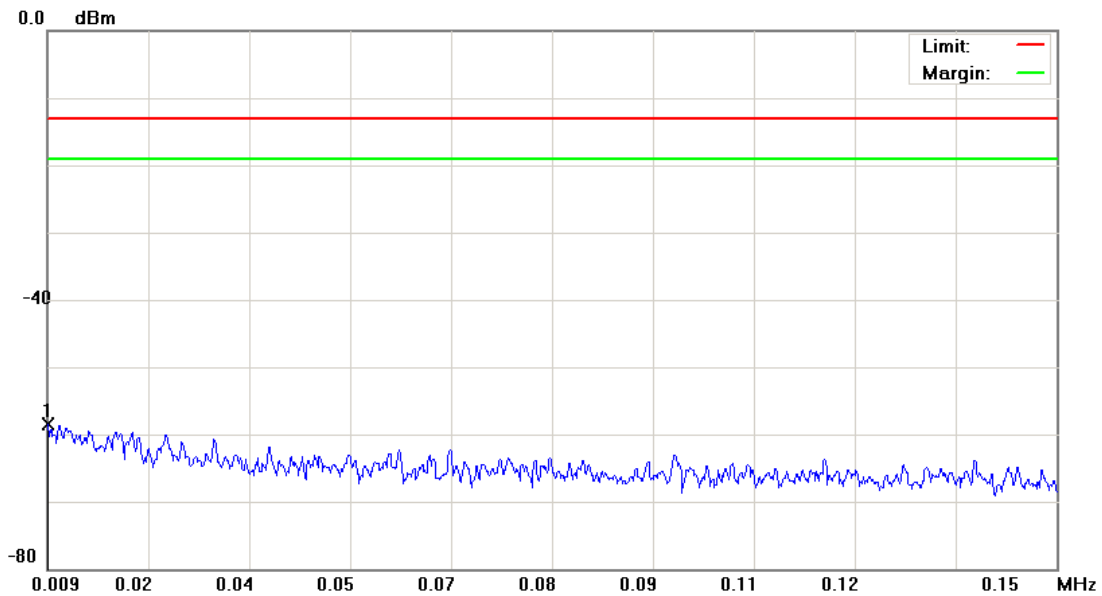


File :Br828P(CH661)

Data :#1

Date: 2016/10/29

Time: 下午 04:19:20



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1 KHz VBW: 3 KHz

M/N: BR828PGT

Mode: GSM 1900

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	0.0090	-69.74	11.32	-58.42	-13.00	-45.42	peak		Comment

*:Maximum data x:Over limit !:over margin

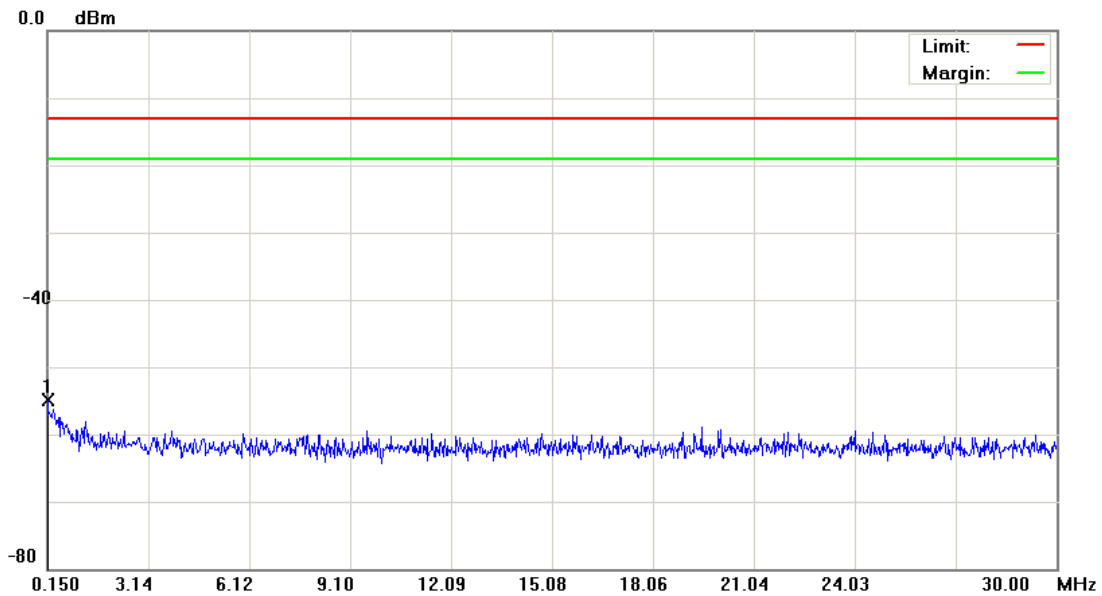


File :Br828P(CH661)

Data :#2

Date: 2016/10/29

Time: 下午 04:19:44



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 10 KHz VBW: 30 KHz

M/N: BR828PGT

Mode: GSM 1900

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	0.1500	-67.46	12.47	-54.99	-13.00	-41.99	peak		Comment

*:Maximum data x:Over limit !:over margin

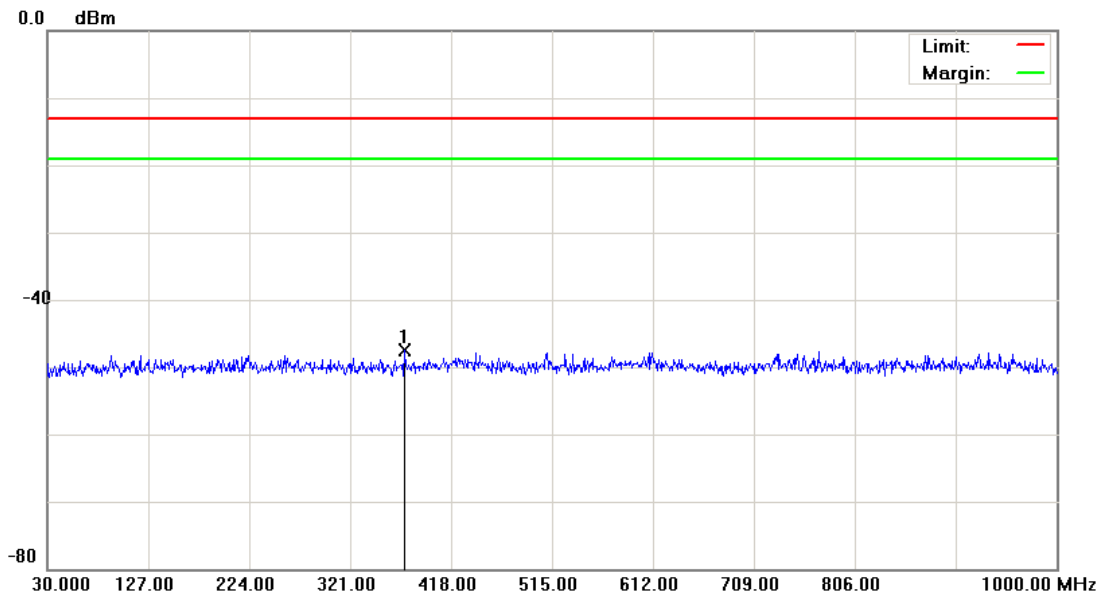


File :Br828P(CH661)

Data :#3

Date: 2016/10/29

Time: 下午 04:20:08



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 100 KHz VBW: 300 KHz

M/N: BR828PGT

Mode: GSM 1900

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	373.3800	-60.80	13.21	-47.59	-13.00	-34.59	peak		

*:Maximum data x:Over limit !:over margin

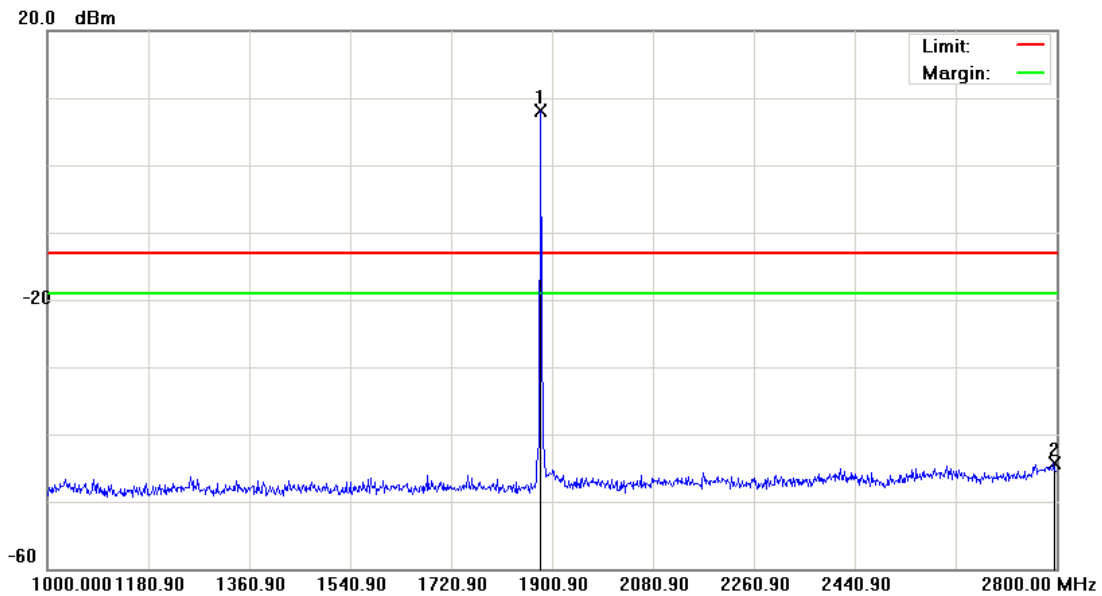


File :Br828P(CH661)

Data :#4

Date: 2016/10/29

Time: 下午 04:33:52



Site: site #1 Polarization: **Conducted** Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G) Power: DC 3.7V Humidity: 55 %
EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS Distance: RBW: 1000 KHz VBW: 3000 KHz
M/N: BR828PGT
Mode: GSM 1900
Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	1880.200	3.40	4.65	8.05	-13.00	21.05	peak		Tx
2		2795.500	-50.22	5.90	-44.32	-13.00	-31.32	peak		

*:Maximum data x:Over limit !:over margin

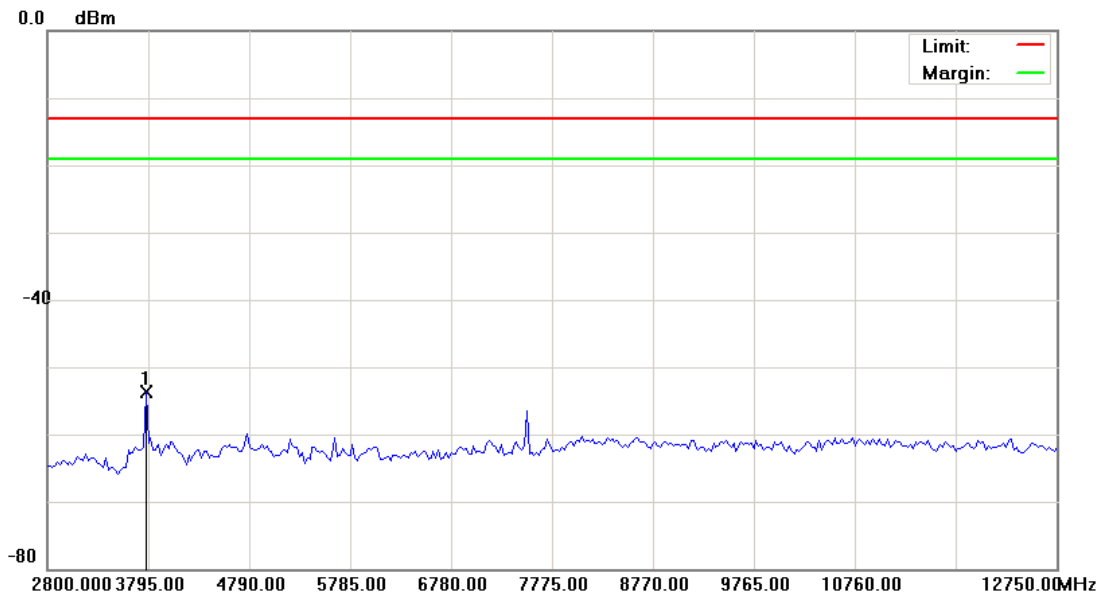


File :Br828P(CH661)

Data :#5

Date: 2016/10/29

Time: 下午 05:30:46



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 3000 KHz

M/N: BR828PGT

Mode: GSM 1900

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	3770.125	-58.65	4.93	-53.72	-13.00	-40.72	peak		

*:Maximum data x:Over limit !:over margin

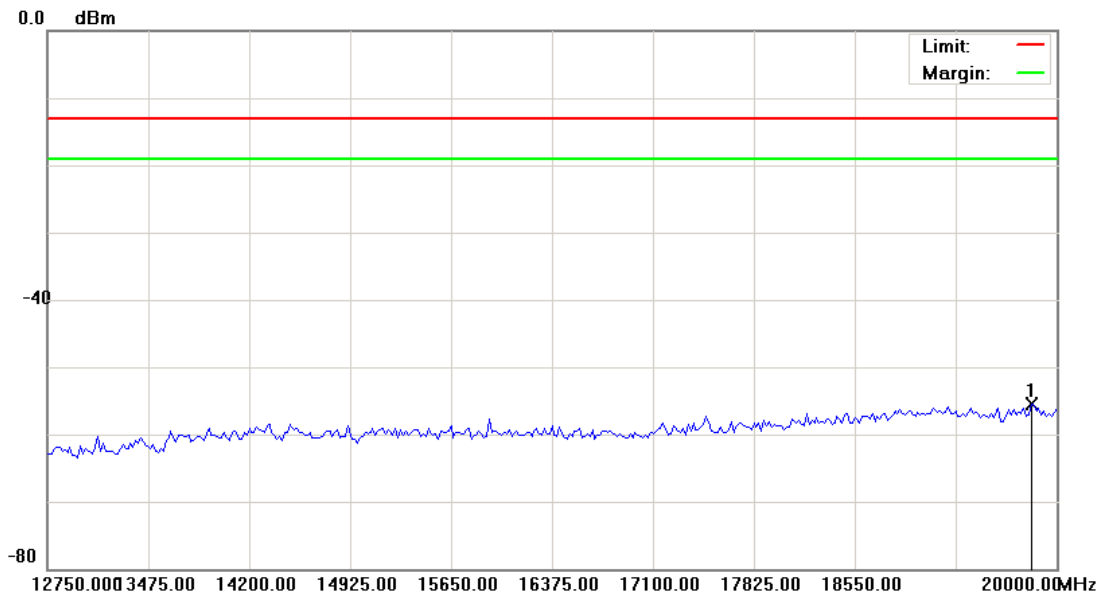


File :Br828P(CH661)

Data :#6

Date: 2016/10/29

Time: 下午 05:31:05



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 3000 KHz

M/N: BR828PGT

Mode: GSM 1900

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	19818.750	-62.82	7.39	-55.43	-13.00	-42.43	peak		

*:Maximum data x:Over limit !:over margin

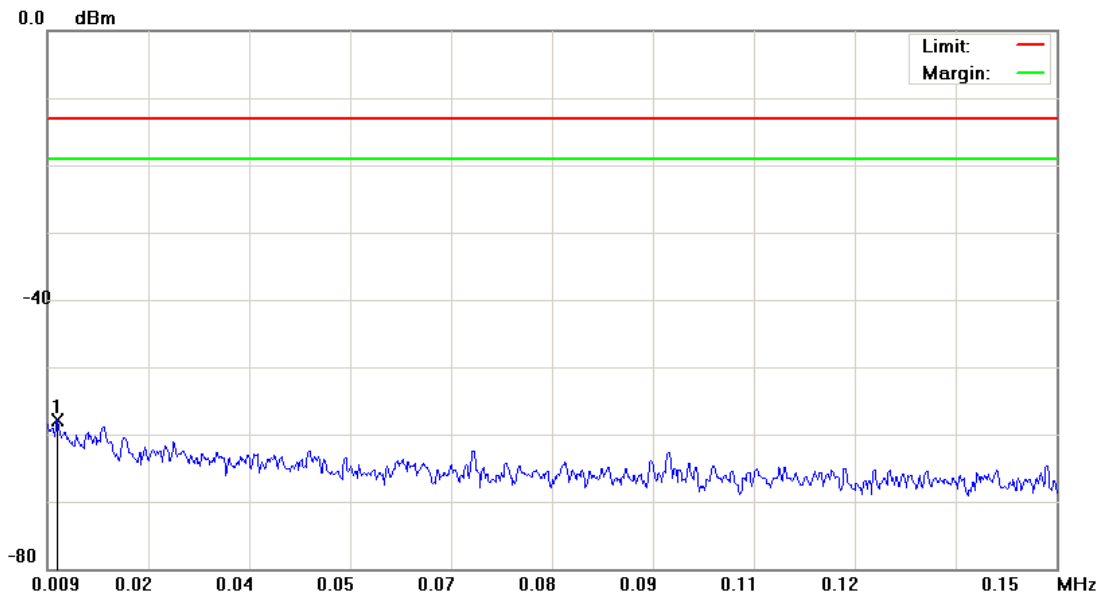


File :Br828P(CH810)

Data :#1

Date: 2016/10/29

Time: 下午 04:22:08



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1 KHz VBW: 3 KHz

M/N: BR828PGT

Mode: GSM 1900

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	0.0104	-69.30	11.34	-57.96	-13.00	-44.96	peak		

*:Maximum data x:Over limit !:over margin

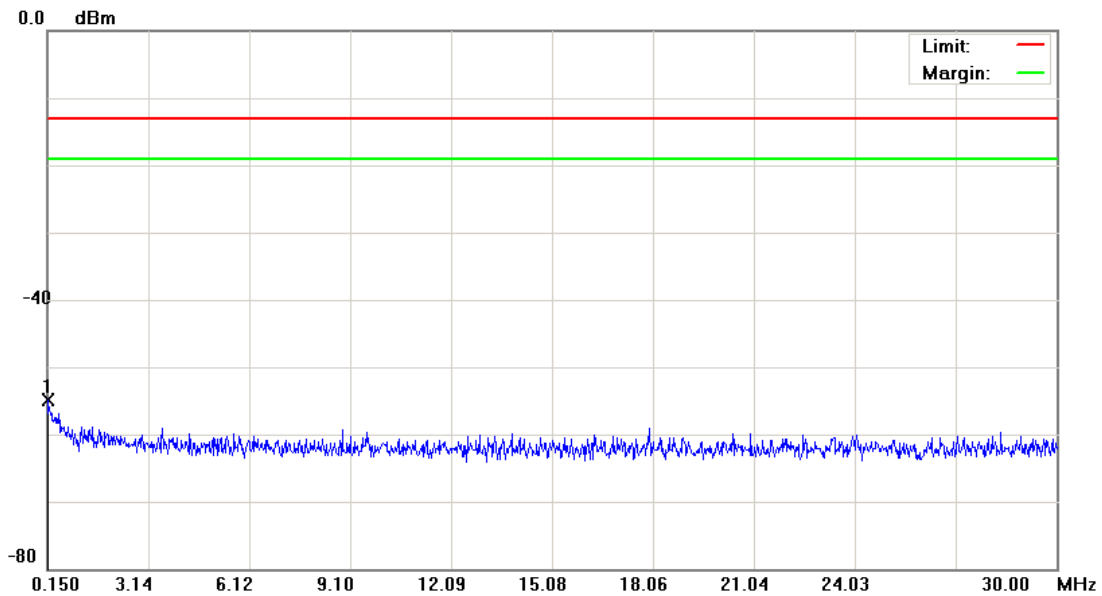


File :Br828P(CH810)

Data :#2

Date: 2016/10/29

Time: 下午 04:22:32



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 10 KHz VBW: 30 KHz

M/N: BR828PGT

Mode: GSM 1900

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	0.1500	-67.43	12.47	-54.96	-13.00	-41.96	peak		Comment

*:Maximum data x:Over limit !:over margin

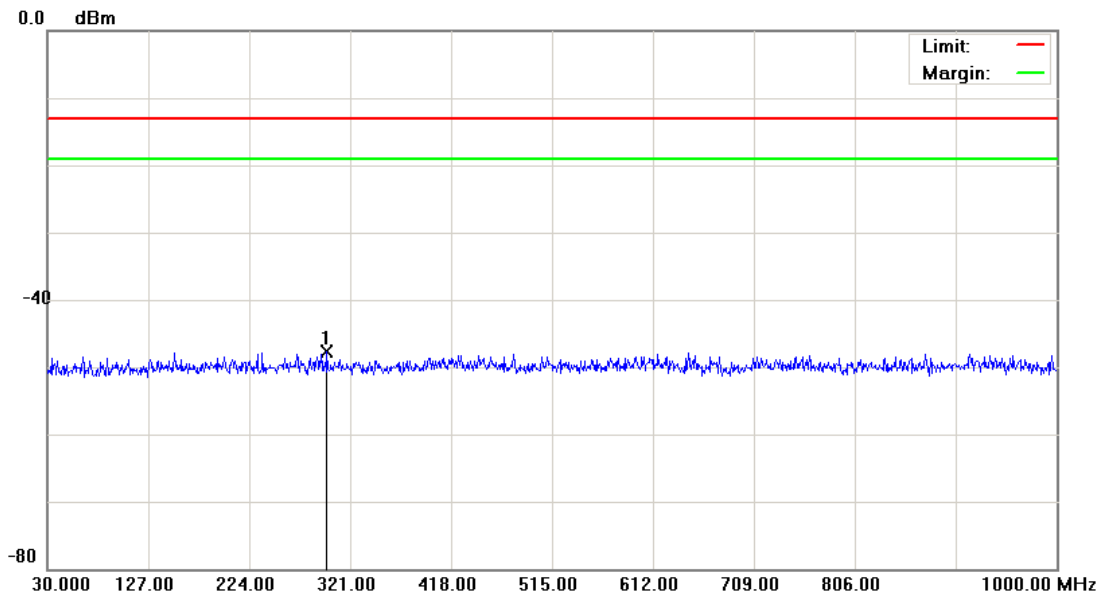


File :Br828P(CH810)

Data :#3

Date: 2016/10/29

Time: 下午 04:22:56



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 100 KHz VBW: 300 KHz

M/N: BR828PGT

Mode: GSM 1900

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	298.6900	-61.04	13.27	-47.77	-13.00	-34.77	peak		

*:Maximum data x:Over limit !:over margin

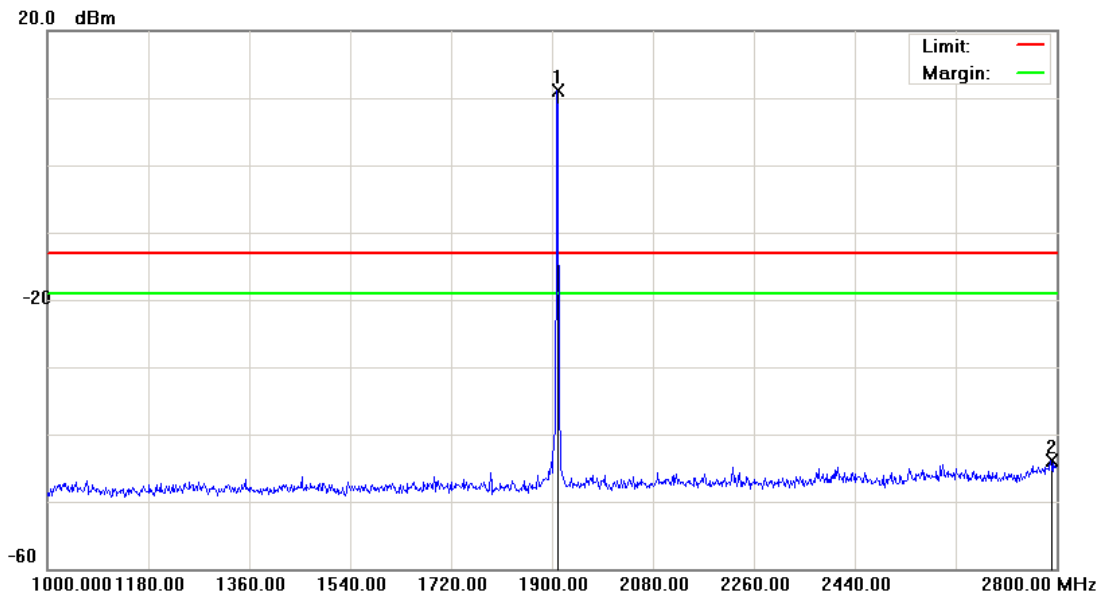


File :Br828P(CH810)

Data :#4

Date: 2016/10/29

Time: 下午 04:38:26



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 3000 KHz

M/N: BR828PGT

Mode: GSM 1900

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	1909.900	5.42	5.71	11.13	-13.00	24.13	peak		Tx
2		2790.100	-49.87	5.90	-43.97	-13.00	-30.97	peak		

*:Maximum data x:Over limit !:over margin

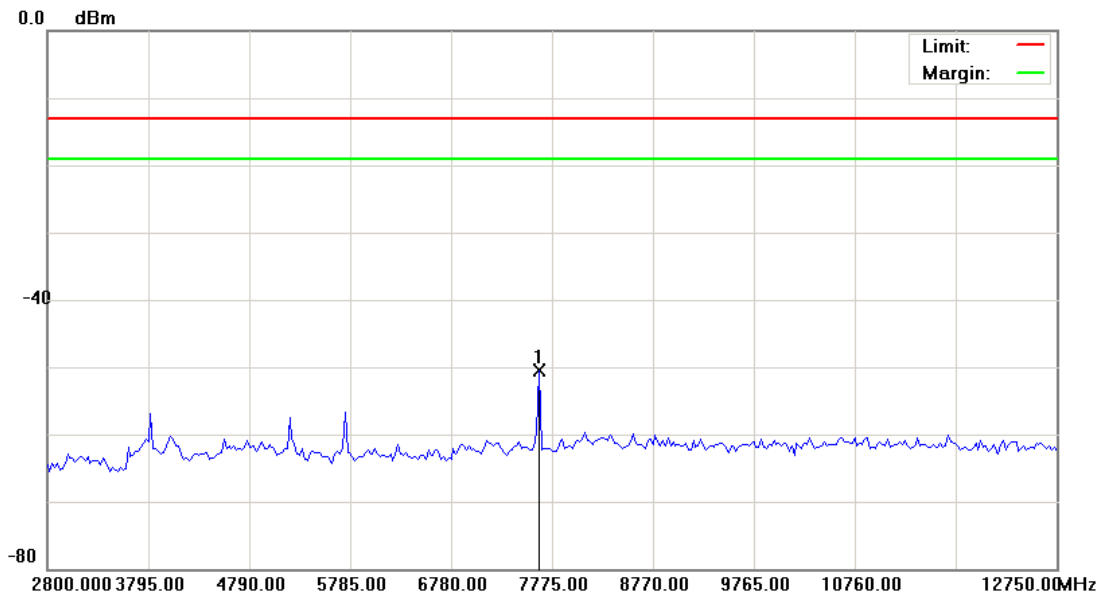


File :Br828P(CH810)

Data :#5

Date: 2016/10/29

Time: 下午 05:31:34



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 3000 KHz

M/N: BR828PGT

Mode: GSM 1900

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	7650.625	-55.61	5.10	-50.51	-13.00	-37.51	peak		

*:Maximum data x:Over limit !:over margin

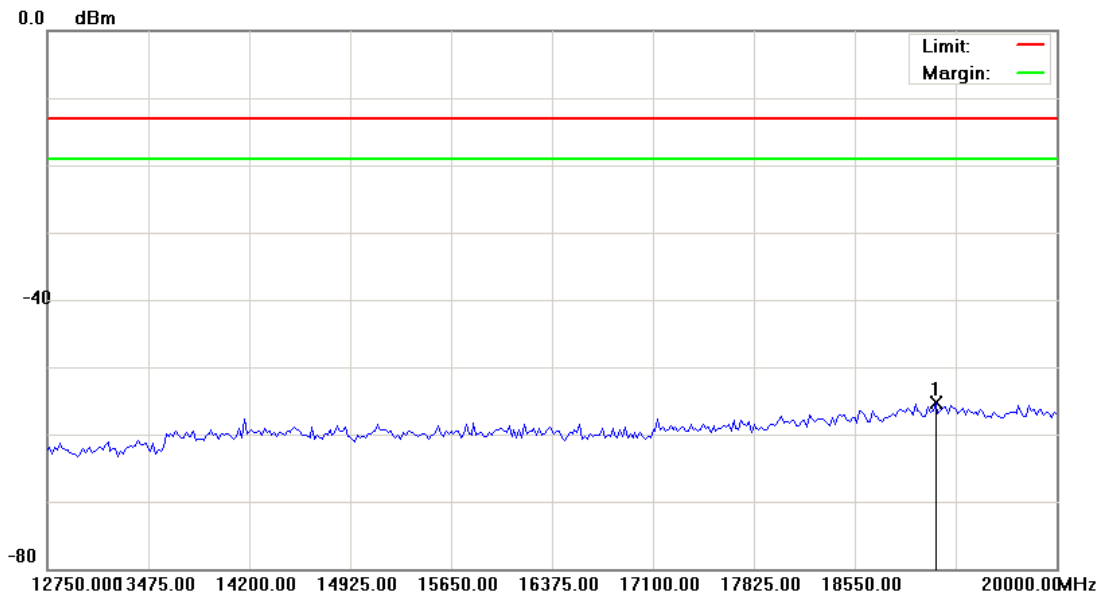


File :Br828P(CH810)

Data :#6

Date: 2016/10/29

Time: 下午 05:31:53



Site: site #1 Polarization: **Conducted** Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G) Power: AC 120V/60Hz Humidity: 55 %
EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS Distance: RBW: 1000 KHz VBW: 3000 KHz
M/N: BR828PGT
Mode: GSM 1900
Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	19130.000	-62.53	7.19	-55.34	-13.00	-42.34	peak		

*:Maximum data x:Over limit !:over margin

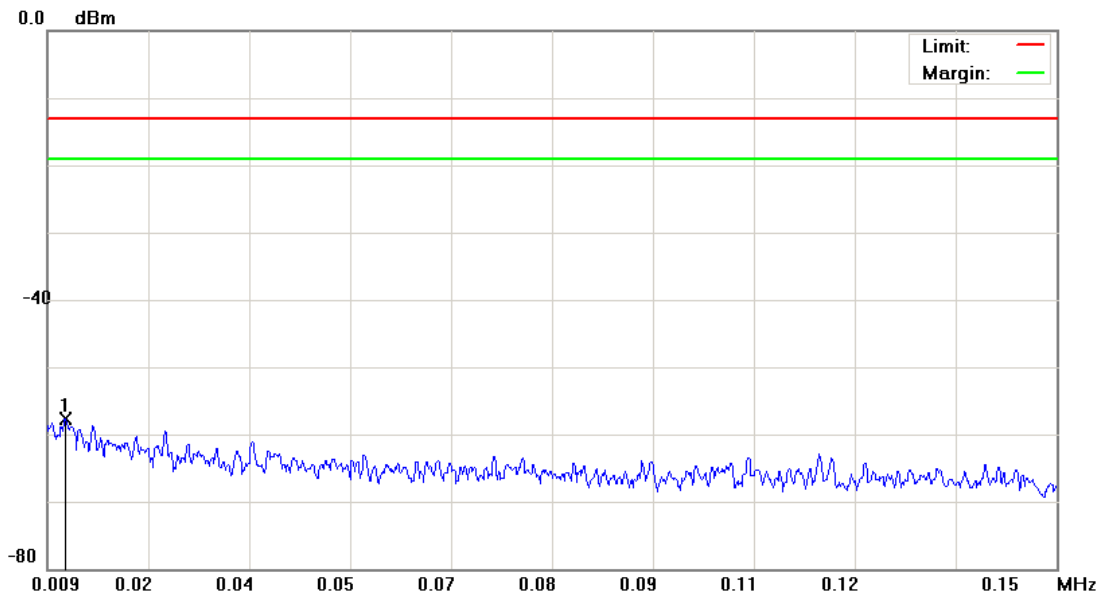


File :Br828P(CH9262)

Data :#1

Date: 2016/10/29

Time: 下午 04:12:10



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1 KHz VBW: 3 KHz

M/N: BR828PGT

Mode: WCDMA Band II

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	0.0115	-69.00	11.35	-57.65	-13.00	-44.65	peak		Comment

*:Maximum data x:Over limit !:over margin

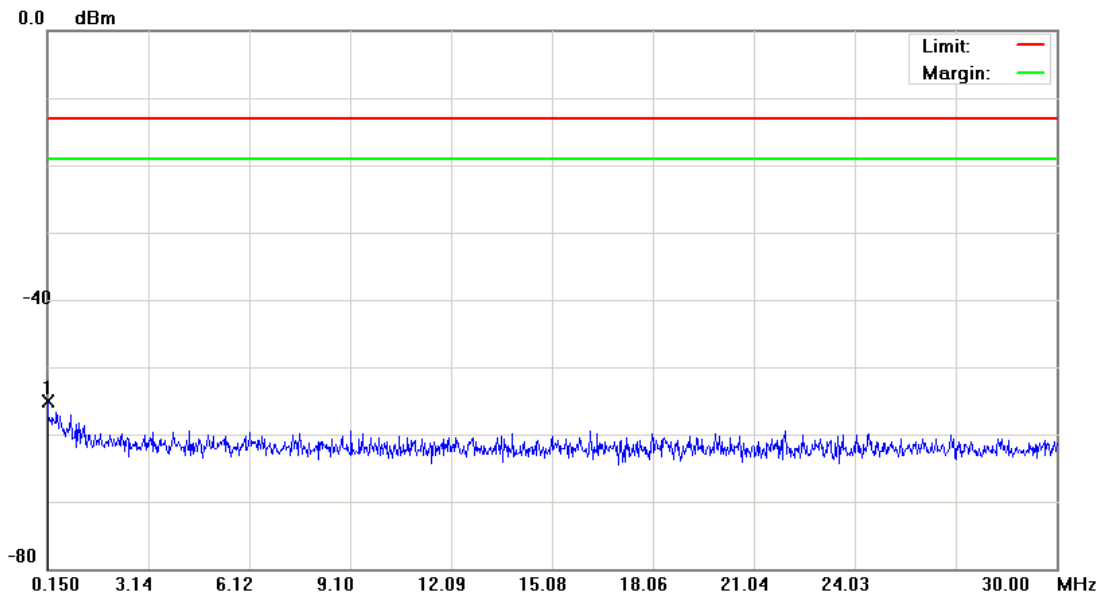


File :Br828P(CH9262)

Data :#2

Date: 2016/10/29

Time: 下午 04:12:34



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 10 KHz VBW: 30 KHz

M/N: BR828PGT

Mode: WCDMA Band II

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	0.1500	-67.51	12.47	-55.04	-13.00	-42.04	peak		Comment

*:Maximum data x:Over limit !:over margin

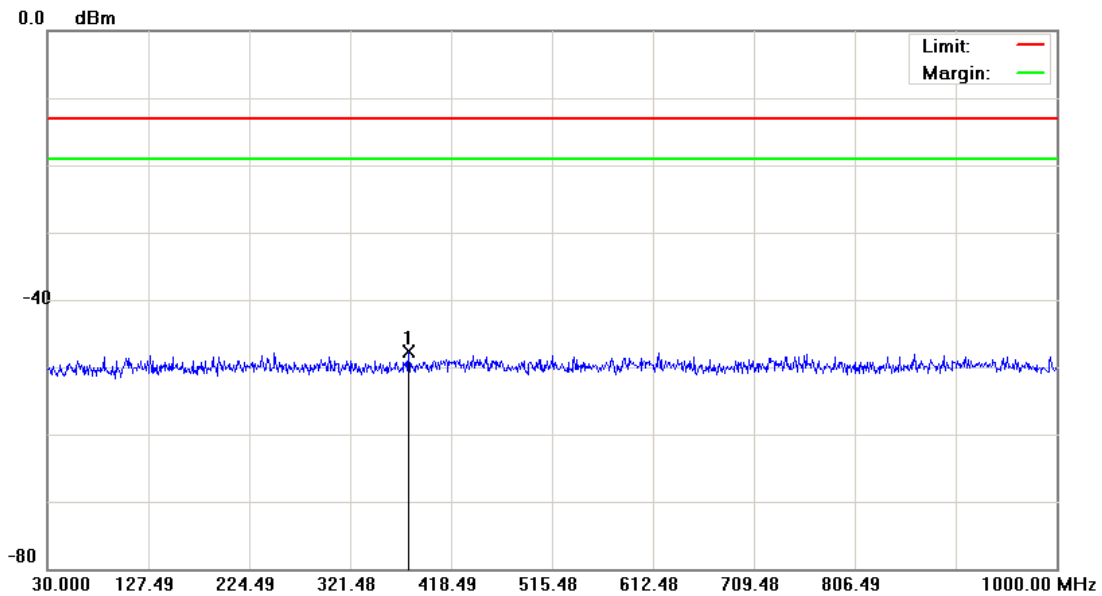


File :Br828P(CH9262)

Data :#3

Date: 2016/10/29

Time: 下午 04:12:58



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 100 KHz VBW: 300 KHz

M/N: BR828PGT

Mode: WCDMA Band II

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	377.2600	-60.87	13.22	-47.65	-13.00	-34.65	peak		

*:Maximum data x:Over limit !:over margin

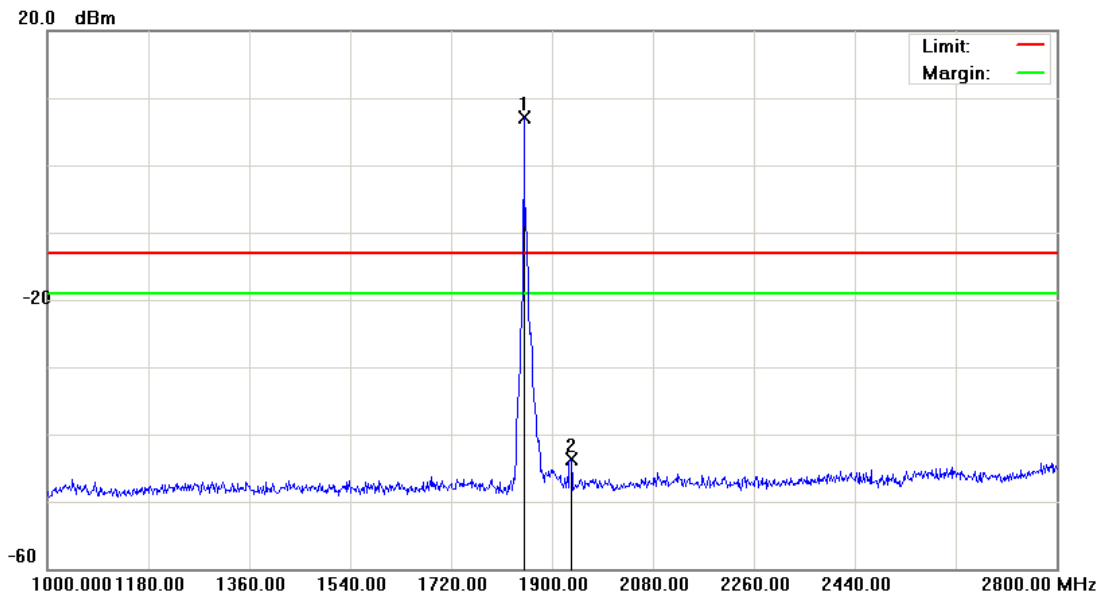


File :Br828P(CH9262)

Data :#4

Date: 2016/10/29

Time: 下午 04:45:47



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 3000 KHz

M/N: BR828PGT

Mode: WCDMA Band II

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	1850.500	2.88	4.26	7.14	-13.00	20.14	peak		Tx
2		1933.300	-48.42	4.66	-43.76	-13.00	-30.76	peak		

*:Maximum data x:Over limit !:over margin

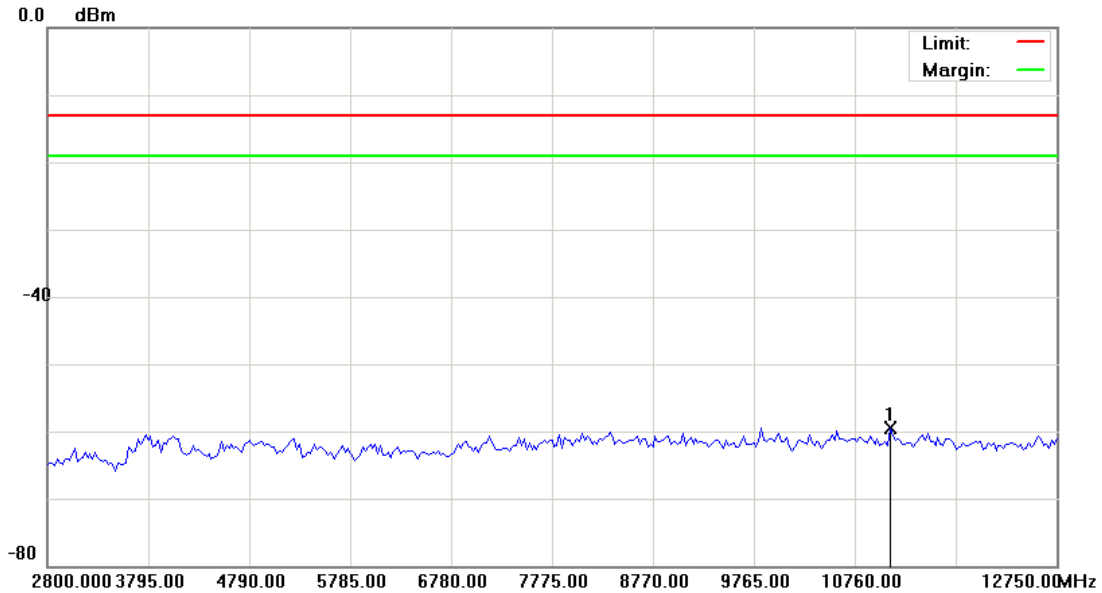


File :Br828P(CH9262)

Data :#5

Date: 2016/10/29

Time: 下午 05:24:50



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 3000 KHz

M/N: BR828PGT

Mode: WCDMA Band II

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	11108.250	-64.48	5.01	-59.47	-13.00	-46.47	peak		

*:Maximum data x:Over limit !:over margin

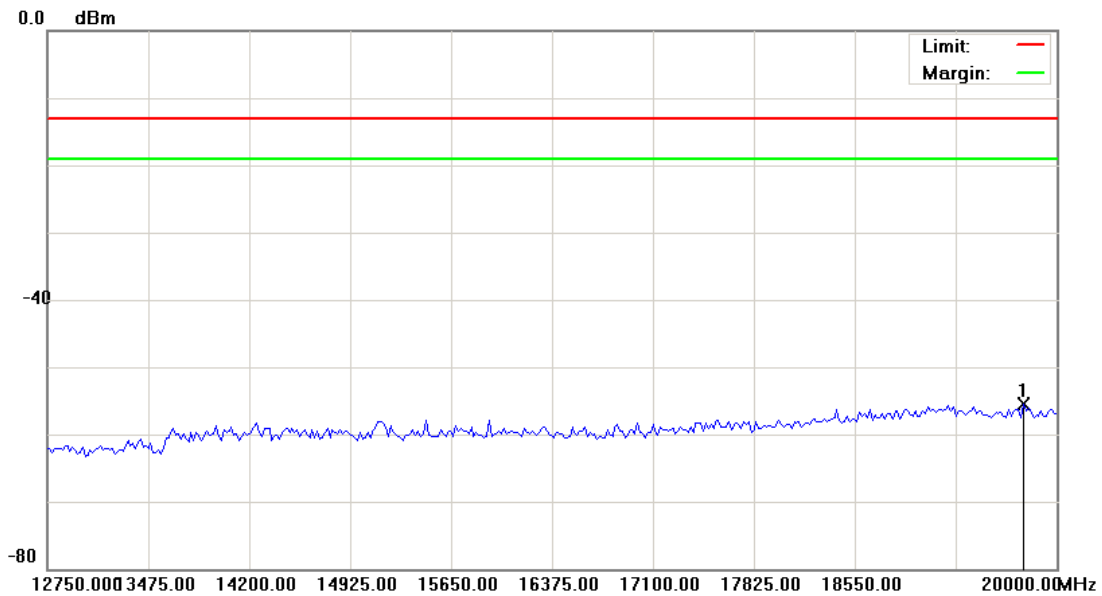


File :Br828P(CH9262)

Data :#6

Date: 2016/10/29

Time: 下午 05:25:09



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 30 KHz00 KHz

M/N: BR828PGT

Mode: WCDMA Band II

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	19764.375	-62.83	7.37	-55.46	-13.00	-42.46	peak		

*:Maximum data x:Over limit !:over margin

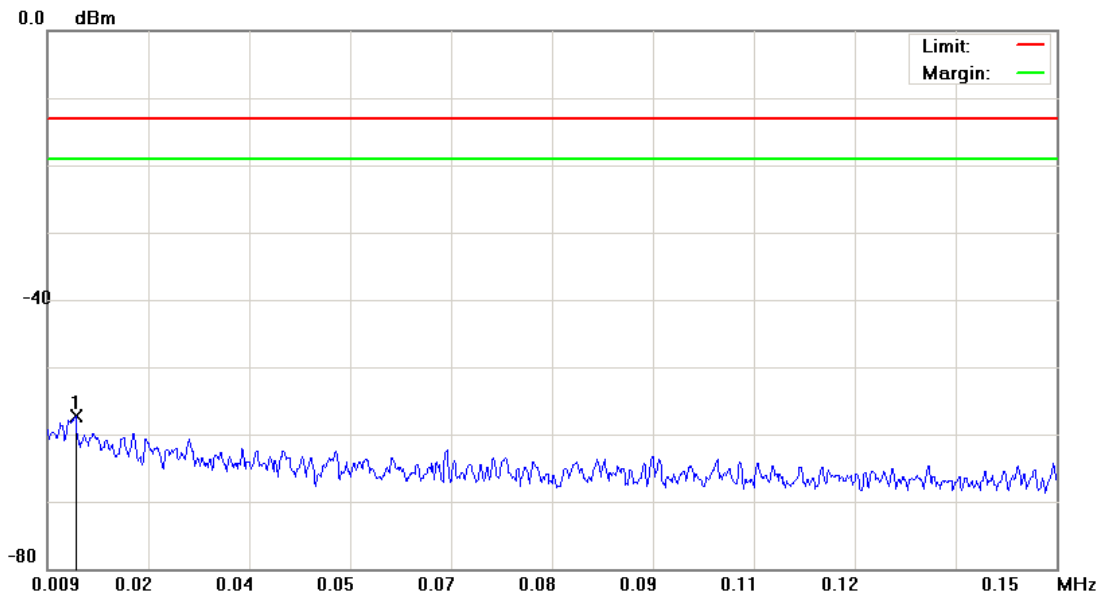


File :Br828P(CH9400)

Data :#1

Date: 2016/10/29

Time: 下午 04:13:38



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1 KHz VBW: 3 KHz

M/N: BR828PGT

Mode: WCDMA Band II

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	0.0130	-68.72	11.37	-57.35	-13.00	-44.35	peak		Comment

*:Maximum data x:Over limit !:over margin

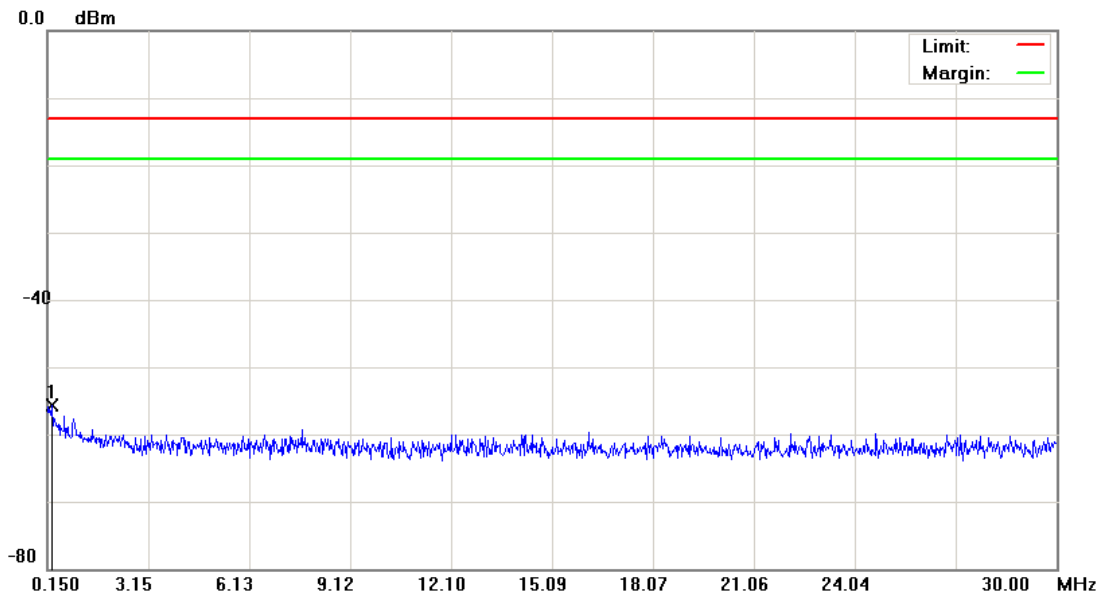


File :Br828P(CH9400)

Data :#2

Date: 2016/10/29

Time: 下午 04:14:03



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 10 KHz VBW: 30 KHz

M/N: BR828PGT

Mode: WCDMA Band II

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	0.2694	-68.20	12.56	-55.64	-13.00	-42.64	peak		Comment

*:Maximum data x:Over limit !:over margin

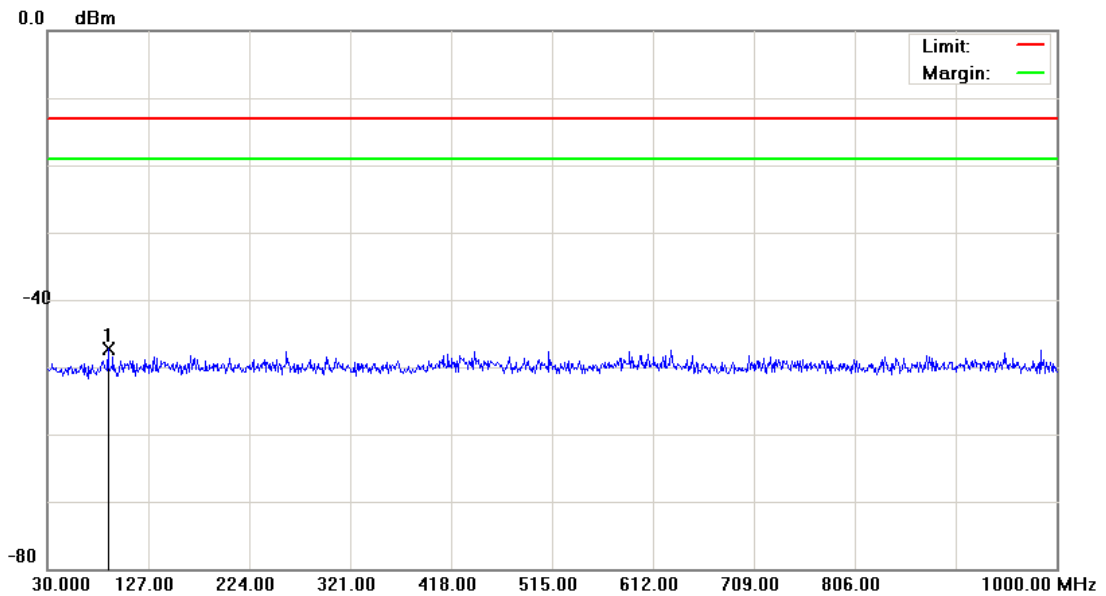


File :Br828P(CH9400)

Data :#3

Date: 2016/10/29

Time: 下午 04:14:29



Site: site #1 Polarization: **Conducted** Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G) Power: DC 3.7V Humidity: 55 %
EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS Distance: RBW: 100 KHz VBW: 300 KHz
M/N: BR828PGT
Mode: WCDMA Band II
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	88.2000	-60.63	13.30	-47.33	-13.00	-34.33	peak		Comment

*:Maximum data x:Over limit !:over margin

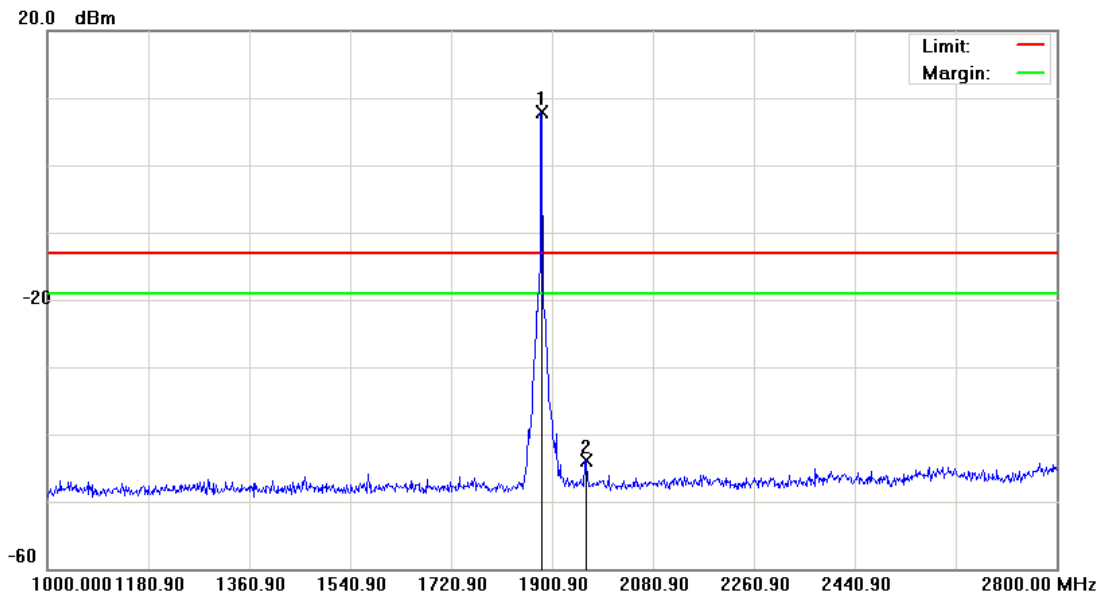


File :Br828P(CH9400)

Data :#4

Date: 2016/10/29

Time: 下午 04:47:23



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 3000 KHz

M/N: BR828PGT

Mode: WCDMA Band II

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	1881.100	3.07	4.74	7.81	-13.00	20.81	peak		Tx
2		1961.200	-48.56	4.73	-43.83	-13.00	-30.83	peak		

*:Maximum data x:Over limit !:over margin

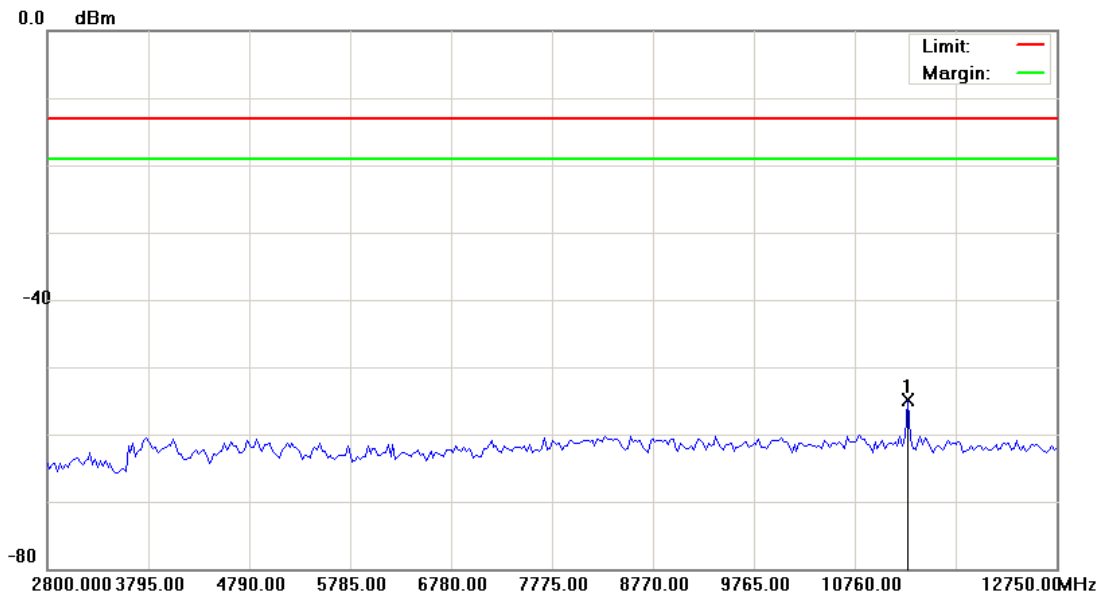


File :Br828P(CH9400)

Data :#5

Date: 2016/10/29

Time: 下午 05:25:40



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 3000 KHz

M/N: BR828PGT

Mode: WCDMA Band II

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	11282.375	-60.45	5.52	-54.93	-13.00	-41.93	peak		

*:Maximum data x:Over limit !:over margin

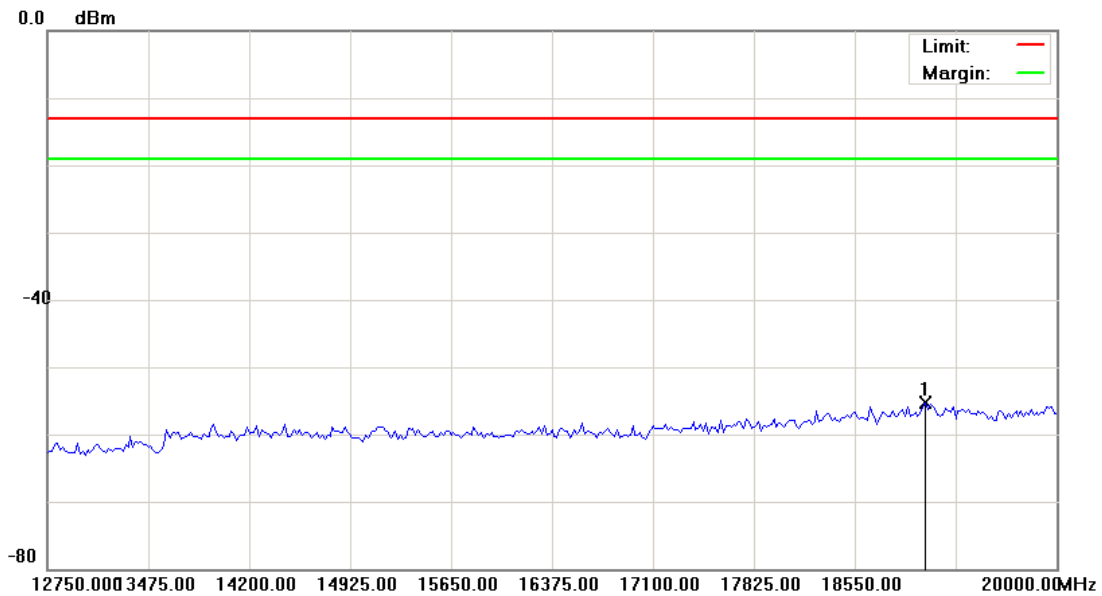


File :Br828P(CH9400)

Data :#6

Date: 2016/10/29

Time: 下午 05:25:59



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 3000 KHz

M/N: BR828PGT

Mode: WCDMA Band II

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	19057.500	-62.52	7.17	-55.35	-13.00	-42.35	peak		

*:Maximum data x:Over limit !:over margin

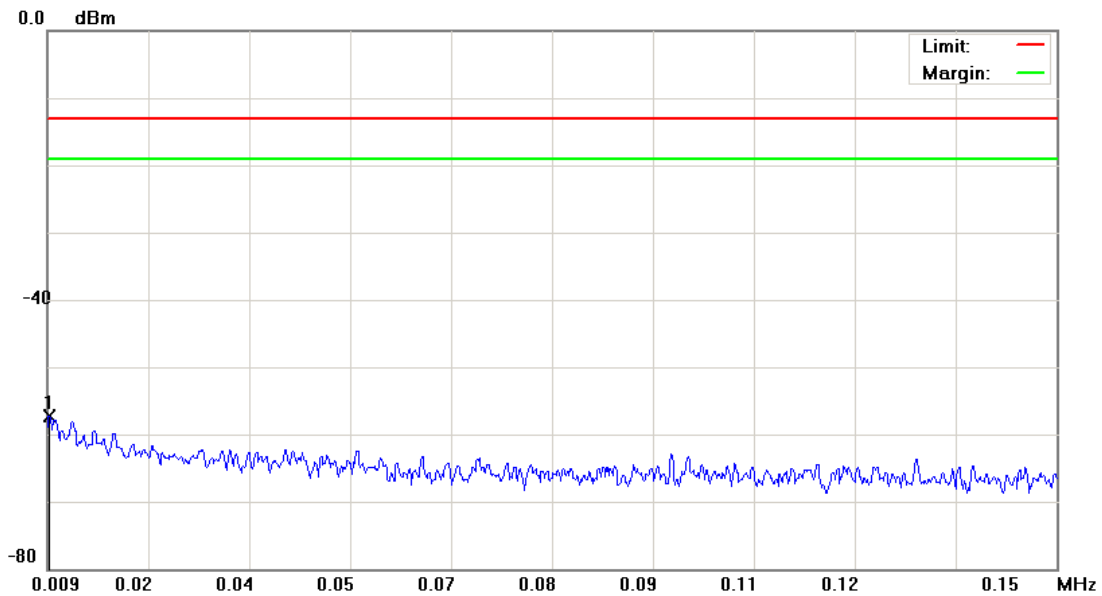


File :Br828P(CH9538)

Data :#1

Date: 2016/10/29

Time: 下午 04:15:11



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1 KHz VBW: 3 KHz

M/N: BR828PGT

Mode: WCDMA Band II

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	0.0093	-68.69	11.33	-57.36	-13.00	-44.36	peak		Comment

*:Maximum data x:Over limit !:over margin

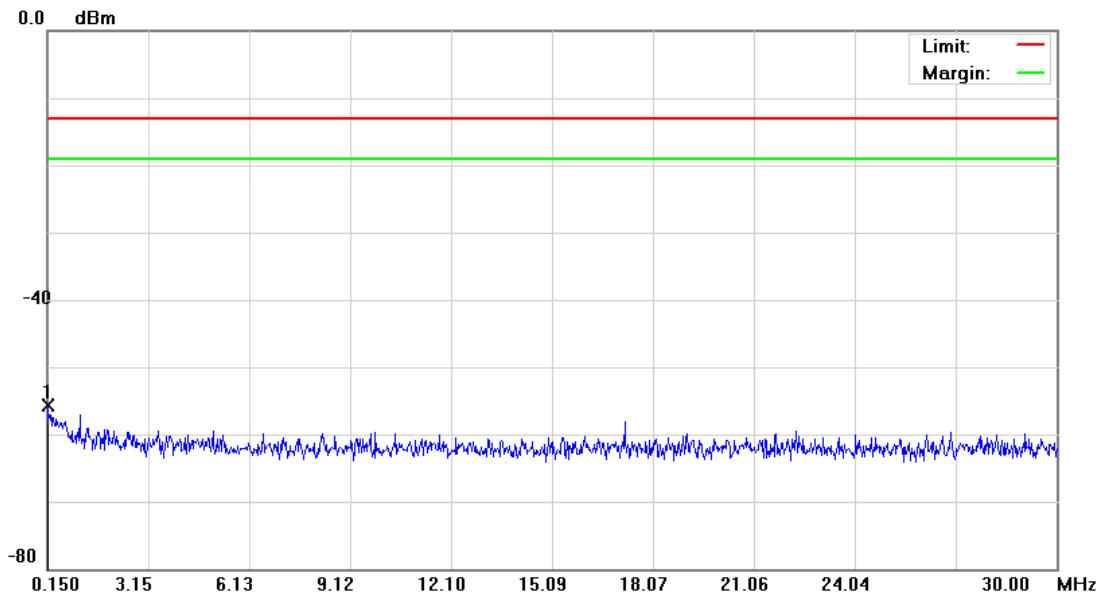


File :Br828P(CH9538)

Data :#2

Date: 2016/10/29

Time: 下午 04:15:35



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 10 KHz VBW: 30 KHz

M/N: BR828PGT

Mode: WCDMA Band II

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	0.1650	-68.21	12.46	-55.75	-13.00	-42.75	peak		

*:Maximum data x:Over limit !:over margin

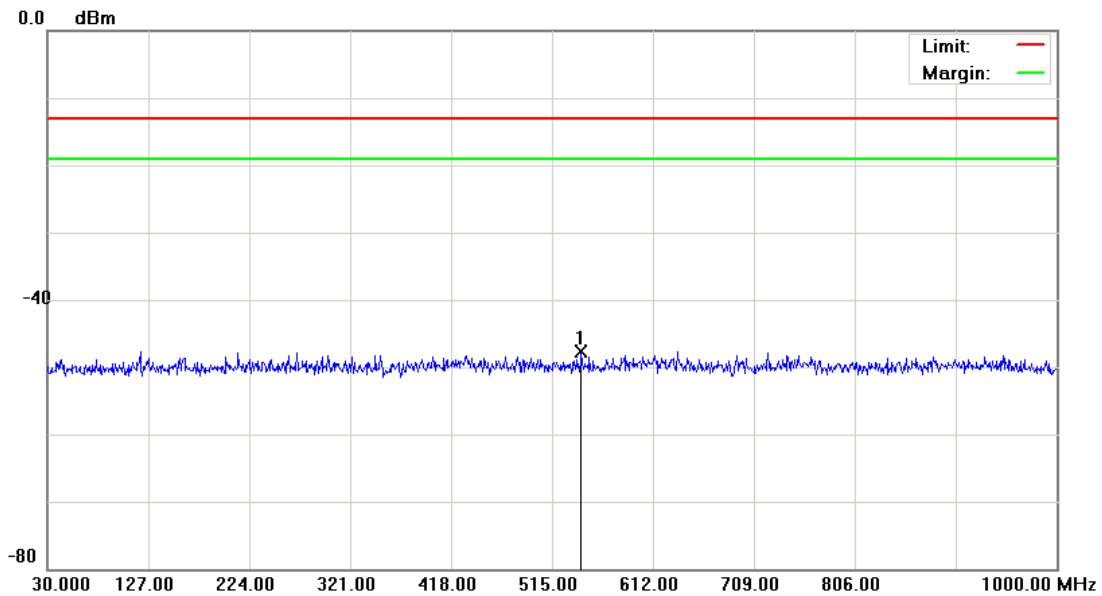


File :Br828P(CH9538)

Data :#3

Date: 2016/10/29

Time: 下午 04:15:59



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 100 KHz VBW: 300 KHz

M/N: BR828PGT

Mode: WCDMA Band II

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	543.1300	-60.90	13.21	-47.69	-13.00	-34.69	peak		

*:Maximum data x:Over limit !:over margin

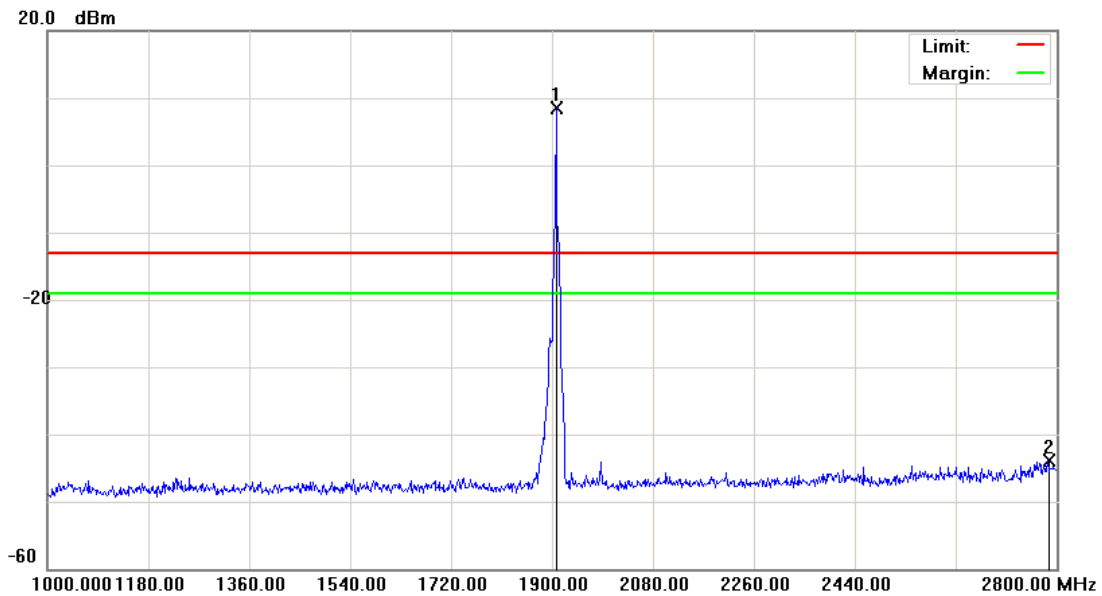


File :Br828P(CH9538)

Data :#4

Date: 2016/10/29

Time: 下午 04:48:58



Site: site #1 Polarization: **Conducted** Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G) Power: DC 3.7V Humidity: 55 %
EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS Distance: RBW: 1000 KHz VBW: 3000 KHz
M/N: BR828PGT
Mode: WCDMA Band II
Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	1908.100	2.67	5.88	8.55	-13.00	21.55	peak		Tx
2		2784.700	-49.81	5.89	-43.92	-13.00	-30.92	peak		

*:Maximum data x:Over limit !:over margin

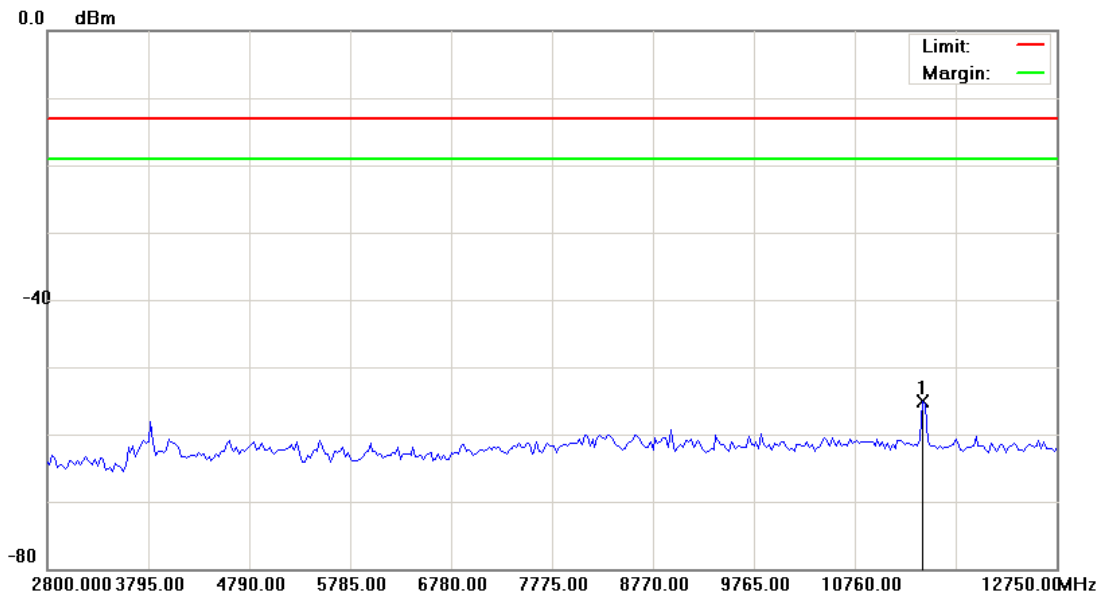


File :Br828P(CH9538)

Data :#5

Date: 2016/10/29

Time: 下午 05:26:34



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 3000 KHz

M/N: BR828PGT

Mode: WCDMA Band II

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	11431.625	-60.66	5.55	-55.11	-13.00	-42.11	peak		

*:Maximum data x:Over limit !:over margin

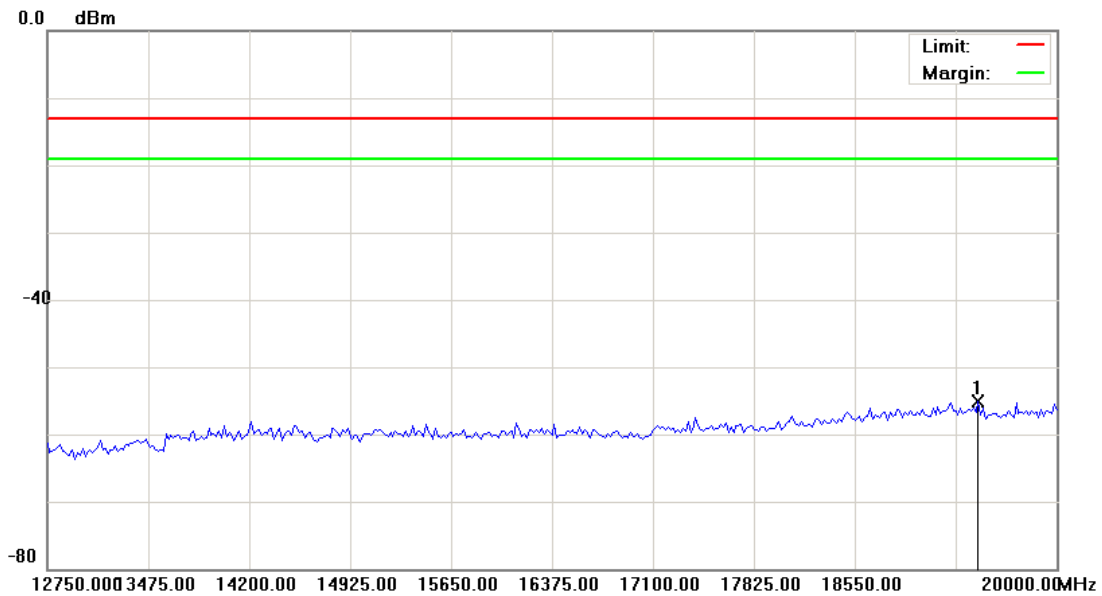


File :Br828P(CH9538)

Data :#6

Date: 2016/10/29

Time: 下午 05:26:53



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 3000 KHz

M/N: BR828PGT

Mode: WCDMA Band II

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	19438.125	-62.37	7.28	-55.09	-13.00	-42.09	peak		

*:Maximum data x:Over limit !:over margin

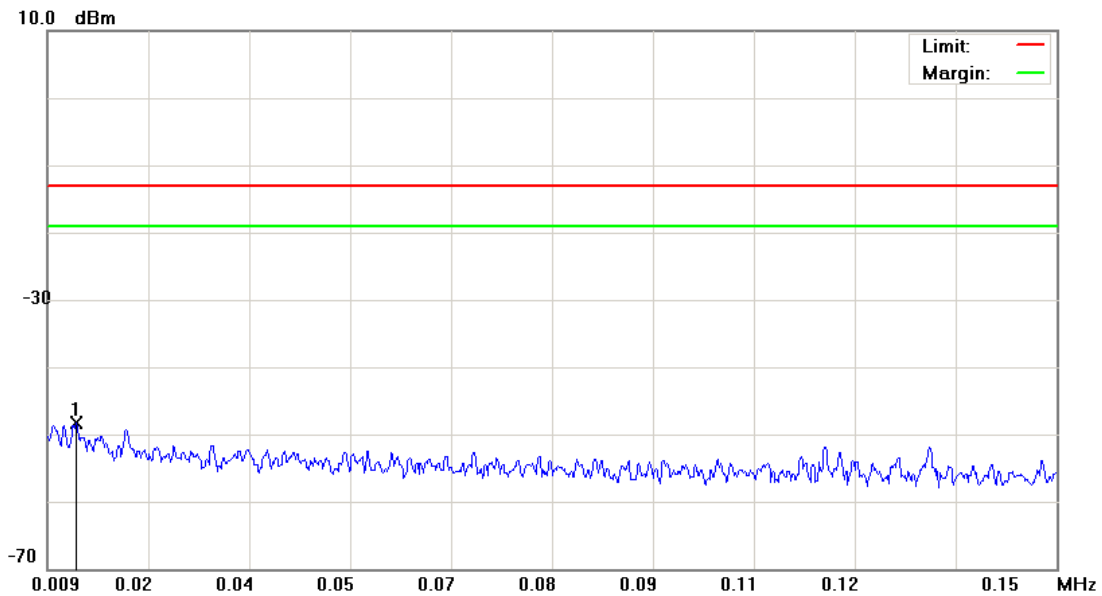


File :Br828P(CH4132)

Data :#1

Date: 2016/10/29

Time: 下午 04:51:27



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1 KHz VBW: 3 KHz

M/N: BR828PGT

Mode: WCDMA Band V

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	0.0130	-78.92	30.56	-48.36	-13.00	-35.36	peak		Comment

*:Maximum data x:Over limit !:over margin

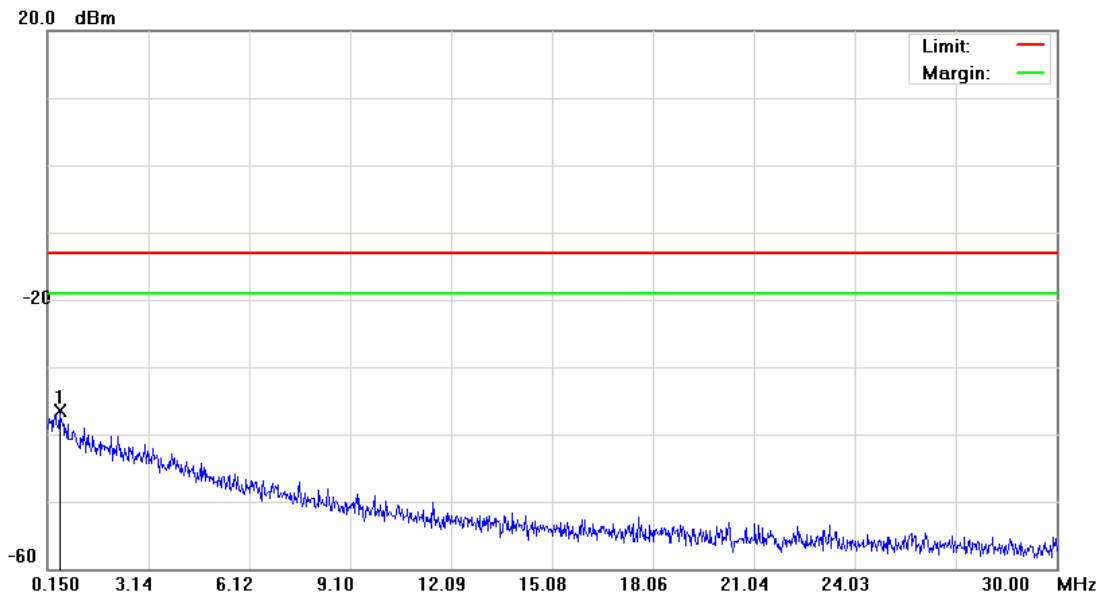


File :Br828P(CH4132)

Data :#2

Date: 2016/10/29

Time: 下午 04:51:51



Site: site #1 Polarization: **Conducted** Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G) Power: DC 3.7V Humidity: 55 %
EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS Distance: RBW: 10 KHz VBW: 30 KHz
M/N: BR828PGT
Mode: WCDMA Band V
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	0.5082	-68.50	32.02	-36.48	-13.00	-23.48	peak		

*:Maximum data x:Over limit !:over margin

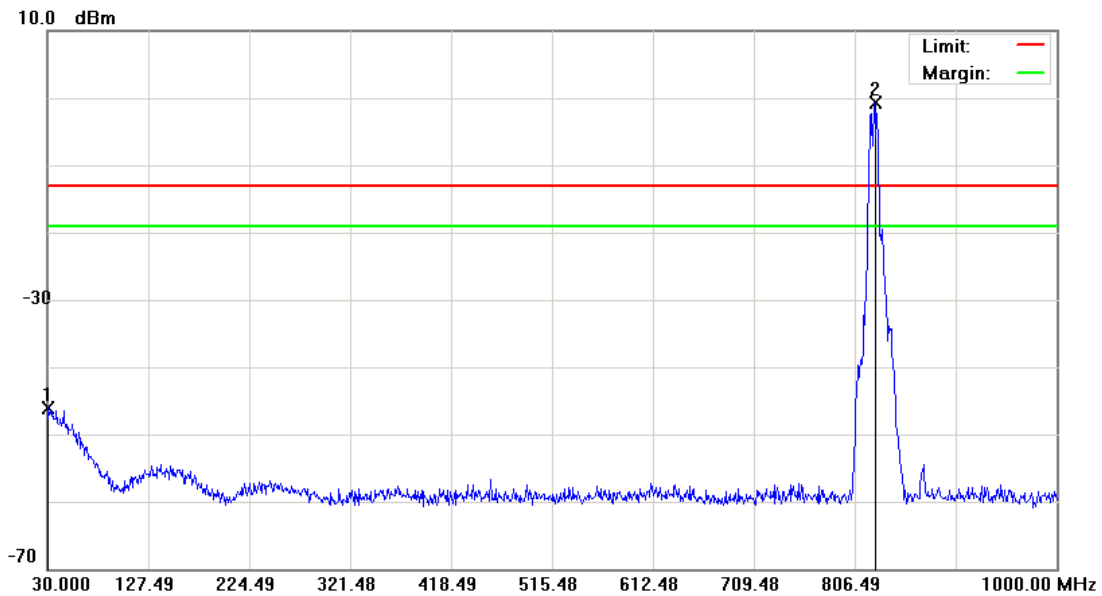


File :Br828P(CH4132)

Data :#3

Date: 2016/10/29

Time: 下午 04:52:15



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 100 KHz VBW: 300 KHz

M/N: BR828PGT

Mode: WCDMA Band V

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1		30.4850	-63.16	17.16	-46.00	-13.00	-33.00	peak		
2	*	824.9150	-4.44	3.84	-0.60	-13.00	12.40	peak		Tx

*:Maximum data x:Over limit !:over margin

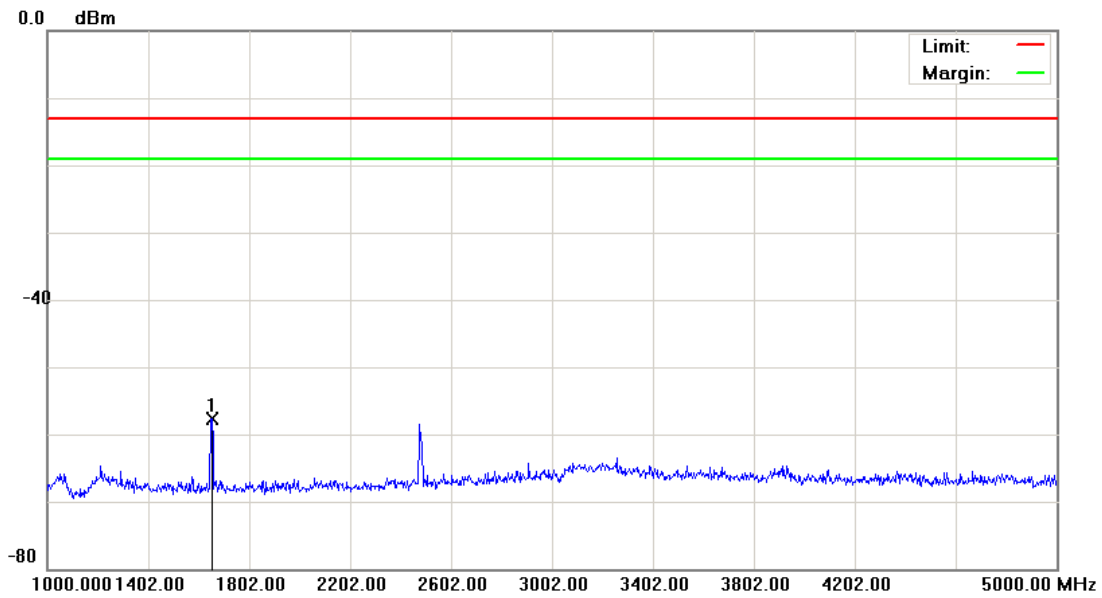


File :Br828P(CH4132)

Data :#4

Date: 2016/10/29

Time: 下午 05:20:18



Site: site #1	Polarization: Conducted	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS	Distance:	RBW: 1000 KHz VBW: 3000 KHz
M/N: BR828PGT		
Mode: WCDMA Band V		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	1652.000	-62.06	4.45	-57.61	-13.00	-44.61	peak		

*:Maximum data x:Over limit !:over margin

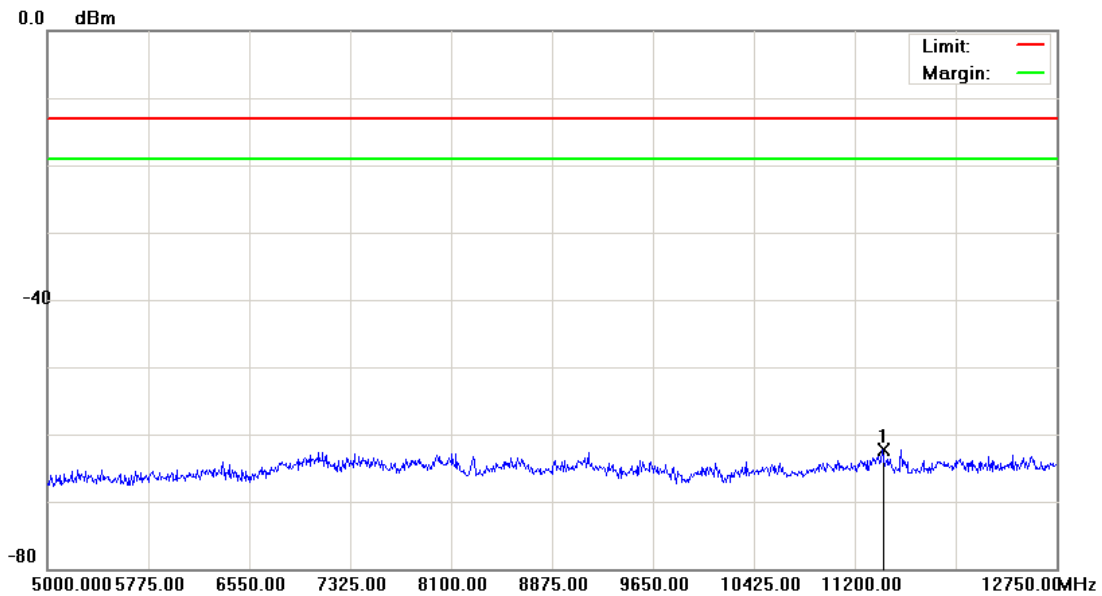


File :Br828P(CH4132)

Data :#5

Date: 2016/10/29

Time: 下午 05:20:41



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 3000 KHz

M/N: BR828PGT

Mode: WCDMA Band V

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	11413.125	-67.81	5.57	-62.24	-13.00	-49.24	peak		

*:Maximum data x:Over limit !:over margin

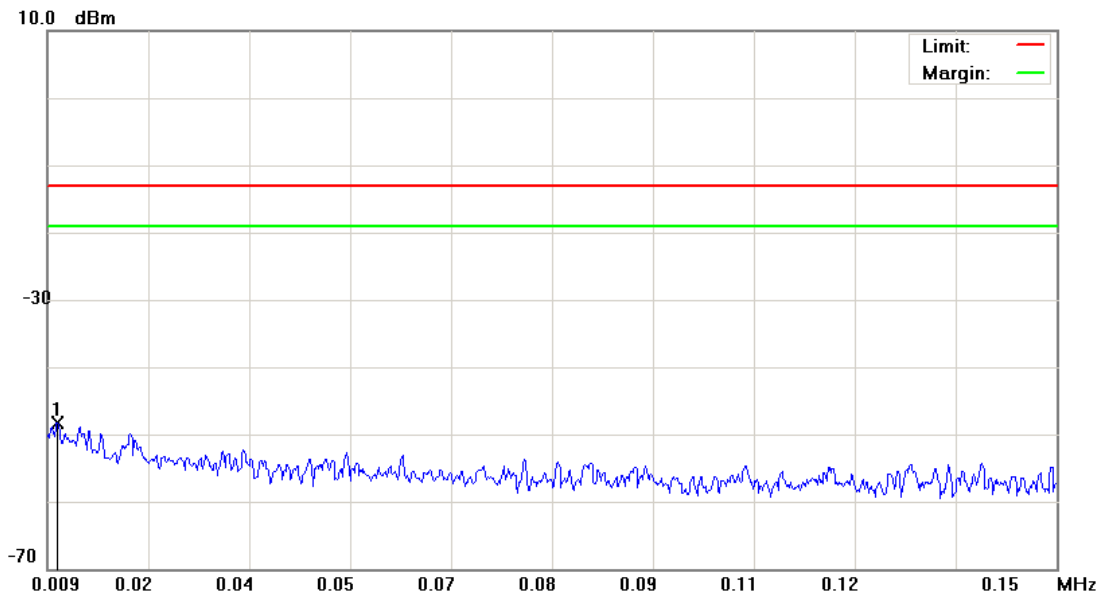


File :Br828P(CH4183)

Data :#1

Date: 2016/10/29

Time: 下午 04:53:55



Site: site #1 Polarization: **Conducted** Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G) Power: DC 3.7V Humidity: 55 %
EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS Distance: RBW: 1 KHz VBW: 3 KHz
M/N: BR828PGT
Mode: WCDMA Band V
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	0.0104	-78.80	30.57	-48.23	-13.00	-35.23	peak		Comment

*:Maximum data x:Over limit !:over margin

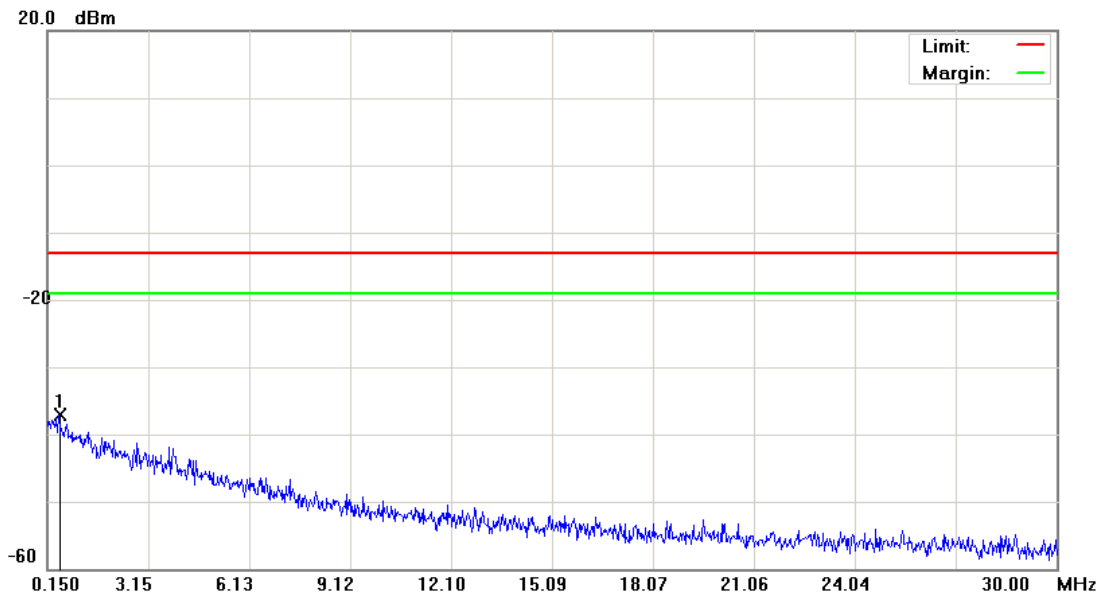


File :Br828P(CH4183)

Data :#2

Date: 2016/10/29

Time: 下午 04:54:19



Site: site #1 Polarization: **Conducted** Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G) Power: DC 3.7V Humidity: 55 %
EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS Distance: RBW: 10 KHz VBW: 30 KHz
M/N: BR828PGT
Mode: WCDMA Band V
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	0.4933	-69.11	32.00	-37.11	-13.00	-24.11	peak		Comment

*:Maximum data x:Over limit !:over margin

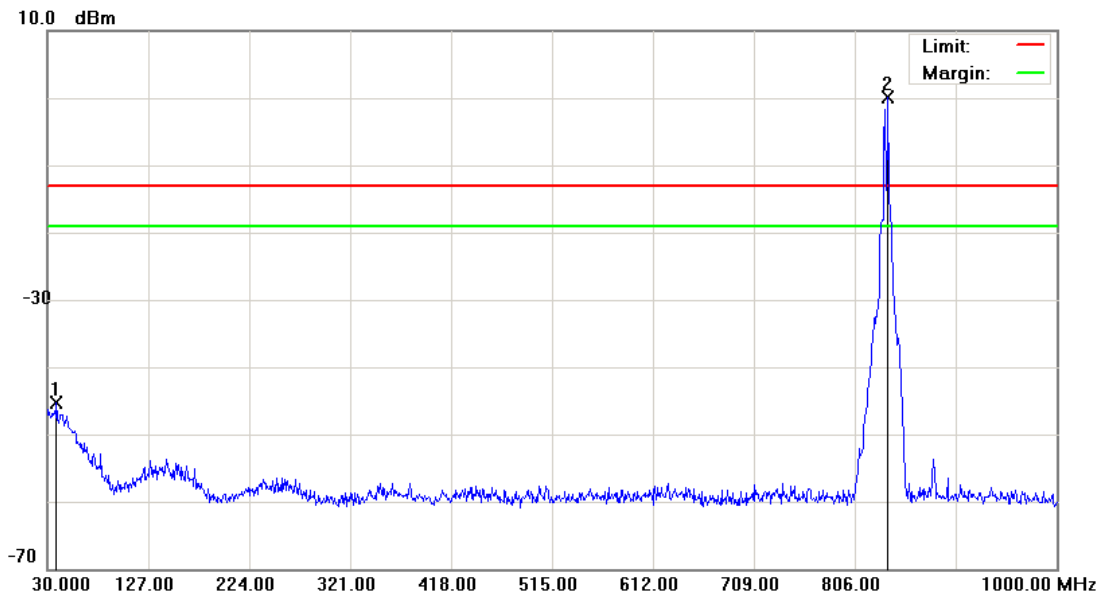


File :Br828P(CH4183)

Data :#3

Date: 2016/10/29

Time: 下午 04:54:43



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 100 KHz VBW: 300 KHz

M/N: BR828PGT

Mode: WCDMA Band V

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1		38.7300	-61.52	16.22	-45.30	-13.00	-32.30	peak		
2	*	838.0100	-3.83	3.97	0.14	-13.00	13.14	peak		Tx

*:Maximum data x:Over limit !:over margin

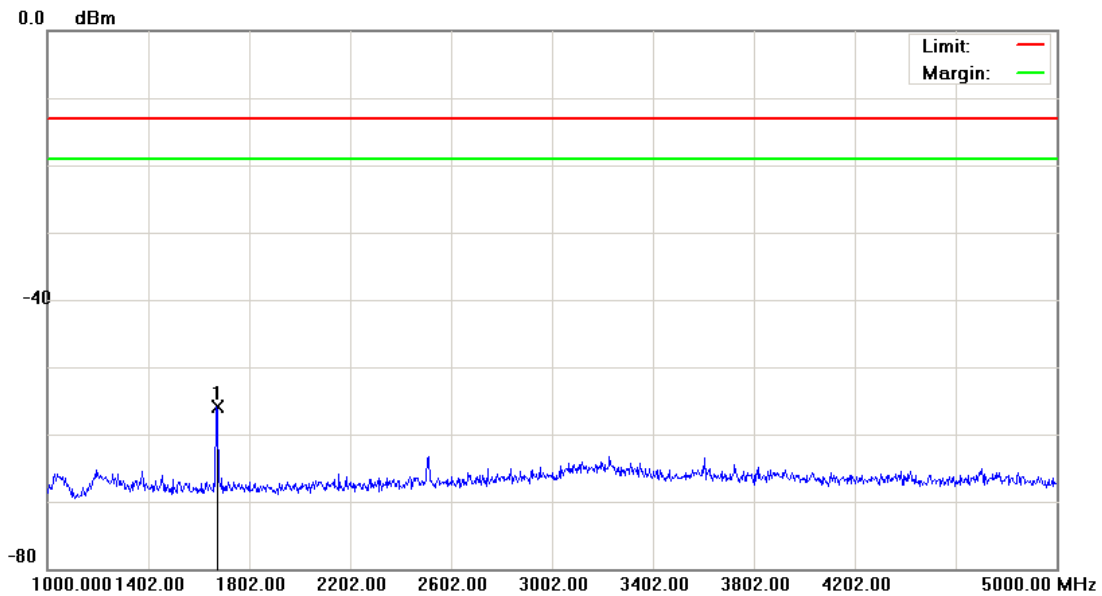


File :Br828P(CH4183)

Data :#4

Date: 2016/10/29

Time: 下午 05:21:23



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 3000 KHz

M/N: BR828PGT

Mode: WCDMA Band V

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	1670.000	-60.33	4.46	-55.87	-13.00	-42.87	peak		

*:Maximum data x:Over limit !:over margin

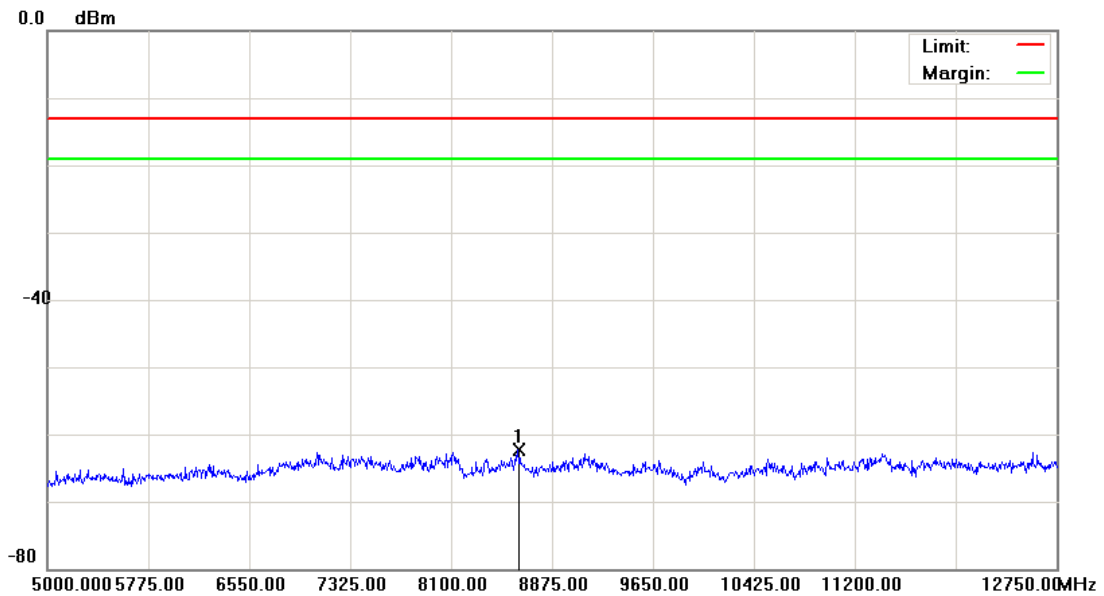


File :Br828P(CH4183)

Data :#5

Date: 2016/10/29

Time: 下午 05:21:46



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 3000 KHz

M/N: BR828PGT

Mode: WCDMA Band V

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	8615.375	-68.05	5.79	-62.26	-13.00	-49.26	peak		

*:Maximum data x:Over limit !:over margin

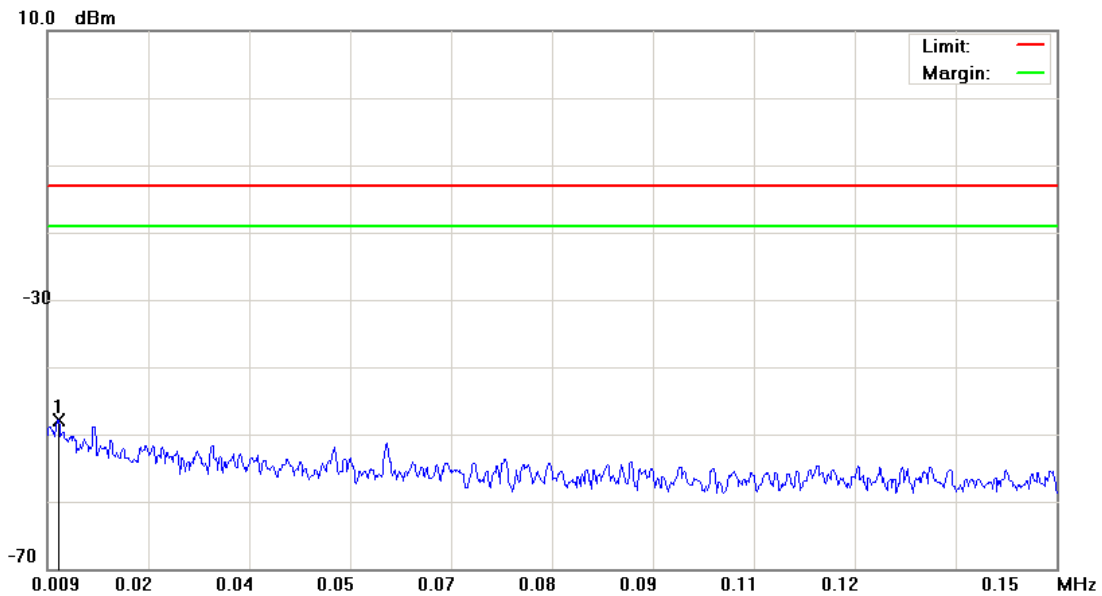


File :Br828P(CH4233)

Data :#1

Date: 2016/10/29

Time: 下午 04:56:20



Site: site #1 Polarization: **Conducted** Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G) Power: DC 3.7V Humidity: 55 %
EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS Distance: RBW: 1 KHz VBW: 3 KHz
M/N: BR828PGT
Mode: WCDMA Band V
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	0.0106	-78.40	30.57	-47.83	-13.00	-34.83	peak		Comment

*:Maximum data x:Over limit !:over margin

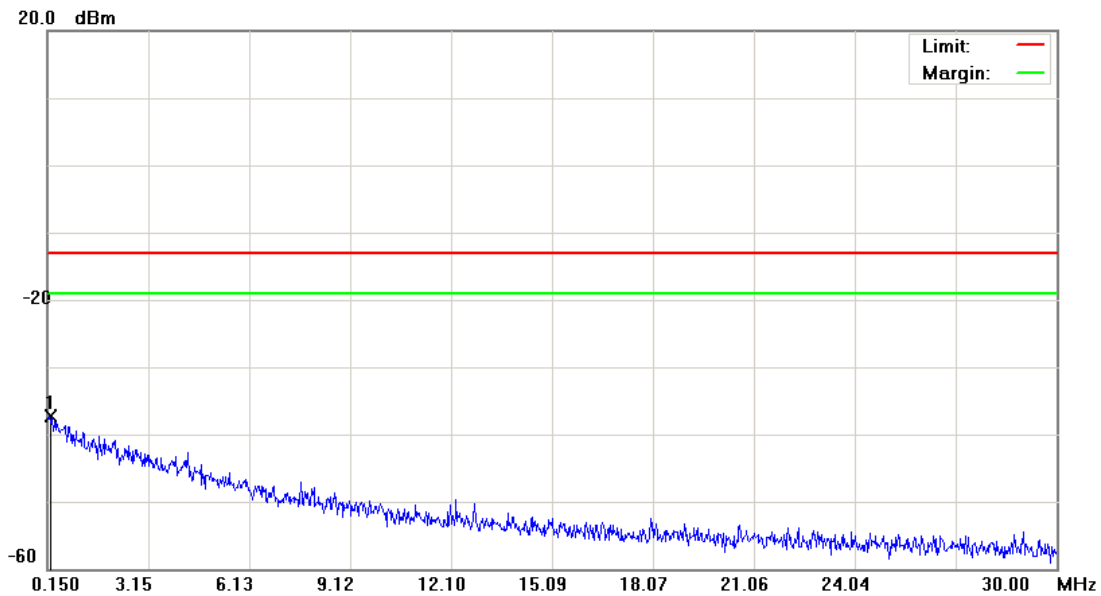


File :Br828P(CH4233)

Data :#2

Date: 2016/10/29

Time: 下午 04:56:44



Site: site #1 Polarization: **Conducted** Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G) Power: DC 3.7V Humidity: 55 %
EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS Distance: RBW: 10 KHz VBW: 30 KHz
M/N: BR828PGT
Mode: WCDMA Band V
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	0.2246	-68.50	31.12	-37.38	-13.00	-24.38	peak		Comment

*:Maximum data x:Over limit !:over margin

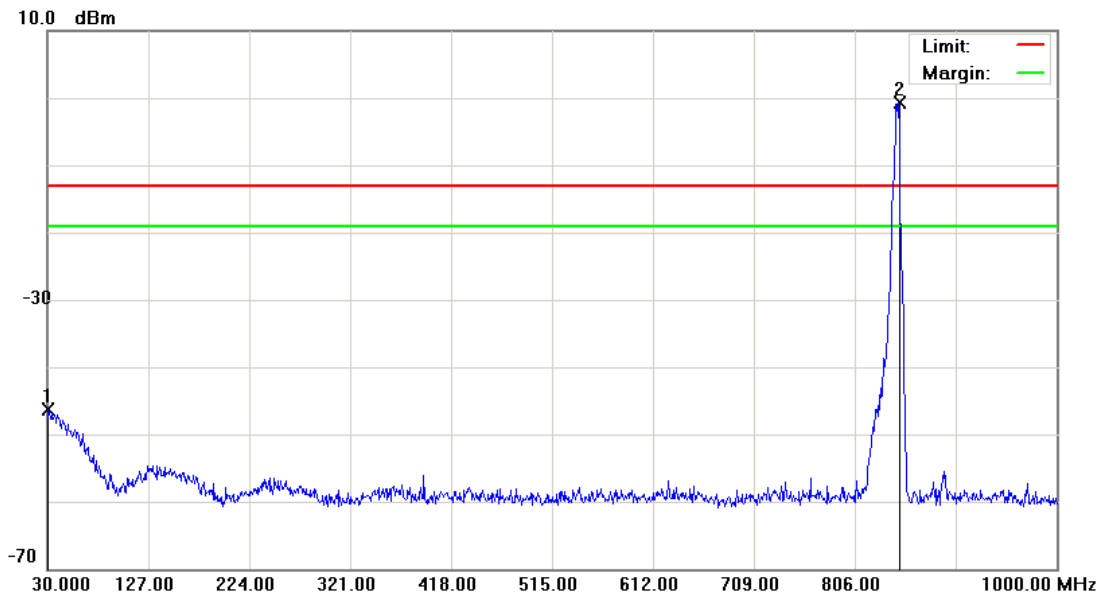


File :Br828P(CH4233)

Data :#3

Date: 2016/10/29

Time: 下午 04:57:08



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 100 KHz VBW: 300 KHz

M/N: BR828PGT

Mode: WCDMA Band V

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1		30.0000	-63.53	17.21	-46.32	-13.00	-33.32	peak		
2	*	848.1950	-4.66	3.98	-0.68	-13.00	12.32	peak		Tx

*:Maximum data x:Over limit !:over margin

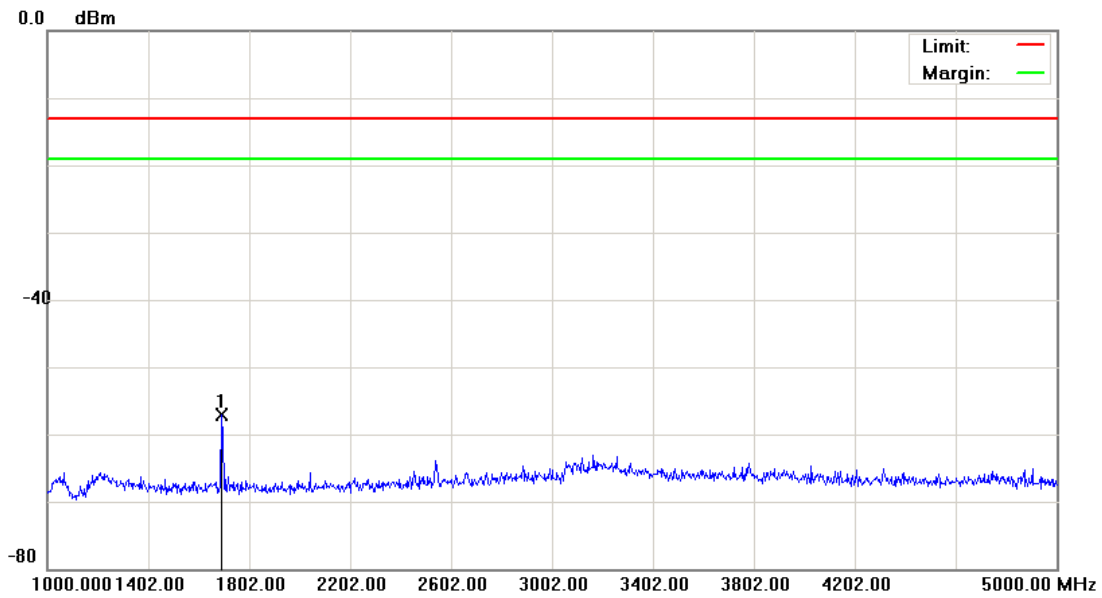


File :Br828P(CH4233)

Data :#4

Date: 2016/10/29

Time: 下午 05:22:20



Site: site #1 Polarization: **Conducted** Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G) Power: DC 3.7V Humidity: 55 %
EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS Distance: RBW: 1000 KHz VBW: 3000 KHz
M/N: BR828PGT
Mode: WCDMA Band V
Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	1690.000	-61.66	4.47	-57.19	-13.00	-44.19	peak		

*:Maximum data x:Over limit !:over margin

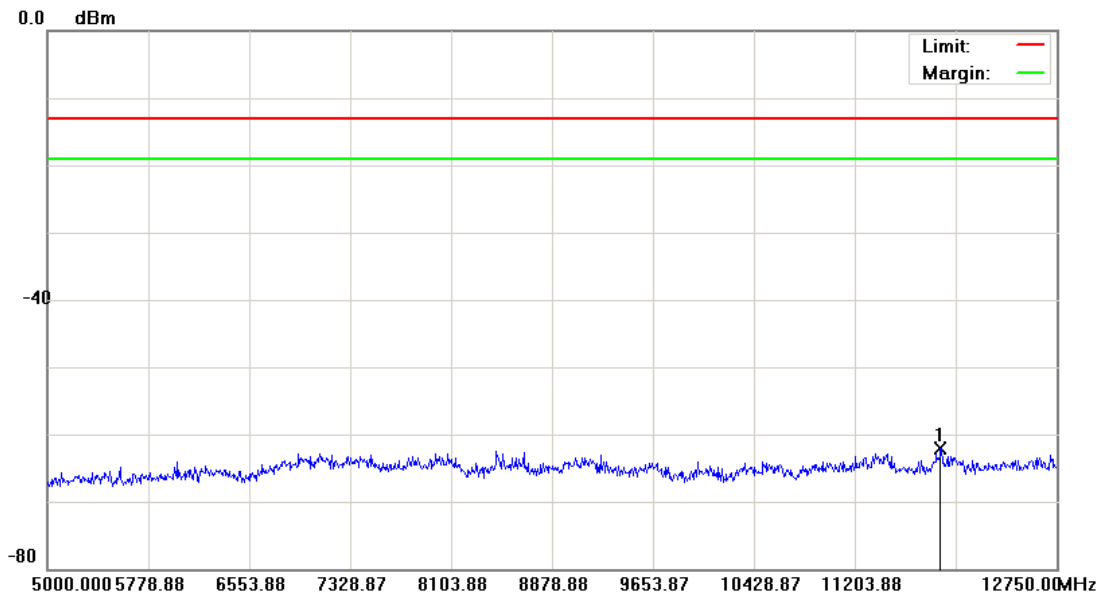


File :Br828P(CH4233)

Data :#5

Date: 2016/10/29

Time: 下午 05:22:43



Site: site #1

Polarization: **Conducted**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: DC 3.7V

Humidity: 55 %

EUT: POCSAG ALPHANUMERIC PAGER with 3G/GSM, GPS

Distance:

RBW: 1000 KHz VBW: 3000 KHz

M/N: BR828PGT

Mode: WCDMA Band V

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	11858.750	-67.80	5.66	-62.14	-13.00	-49.14	peak		Comment

*:Maximum data x:Over limit !:over margin

2.7. Field Strength of Spurious Radiation Test

■ Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10\log(P)$ dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

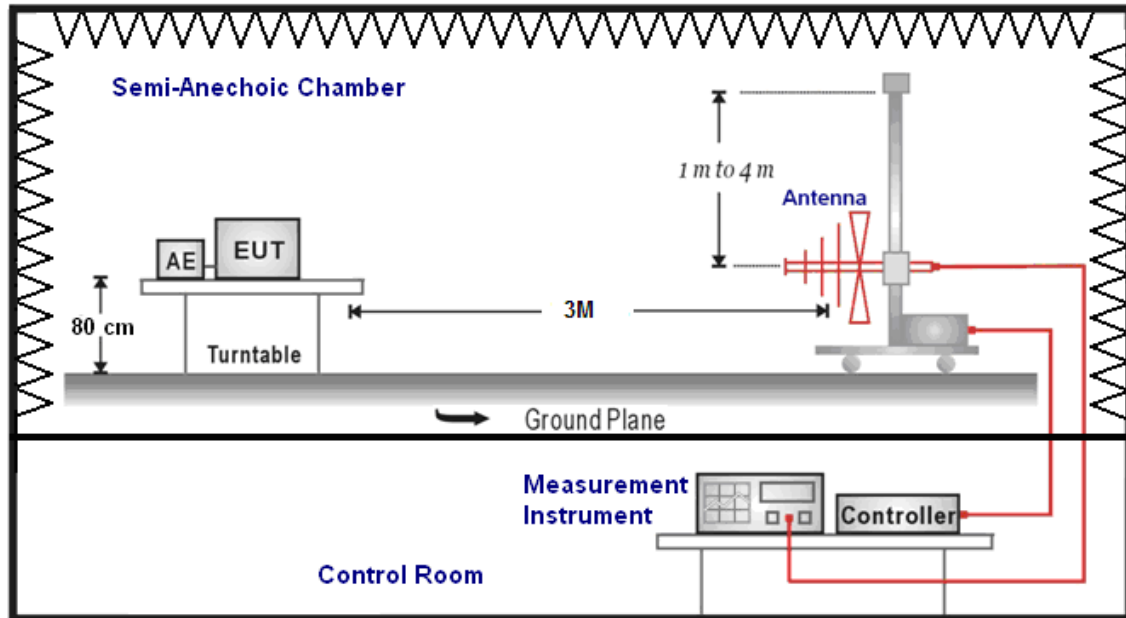
■ Test Instruments

3 Meter Chamber					
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
RF Pre-selector	Agilent	N9039A	MY46520256	01/08/2016	1 year
Spectrum Analyzer	Agilent	E4446A	MY46180578	01/08/2016	1 year
Pre Amplifier	Agilent	8449B	3008A02237	10/11/2016	1 year
Pre Amplifier	Agilent	8447D	2944A11119	01/11/2016	1 year
Broadband Antenna (30MHz~1GHz)	SCHWARZBECK MESS-ELEKTRONIK	VULB9168	416	10/13/2016	1 year
Broadband Antenna (30MHz~1GHz)	SCHWARZBECK MESS-ELEKTRONIK	VULB 9168	419	11/03/2016	1 year
Horn Antenna (1~18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	06/06/2016	1 year
Horn Antenna (18~40GHz)	ETS	3116	00086467	09/05/2016	1 year
Horn Antenna (18~40GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	07/18/2016	1 year
Microwave Cable	EMCI	EMC102-KM-KM-1 4000	151001	02/23/2016	1 year
Microwave Cable	EMCI	EMC-104-SM-SM-1 4000	140202	02/23/2016	1 year
Microwave Cable	EMCI	EMC104-SM-SM-6 00	140301	02/23/2016	1 year
Signal Generator	Agilent	E8257D	MY44320425	02/25/2016	1 year
Test Site	ATL	TE01	888001	08/29/2016	1 year

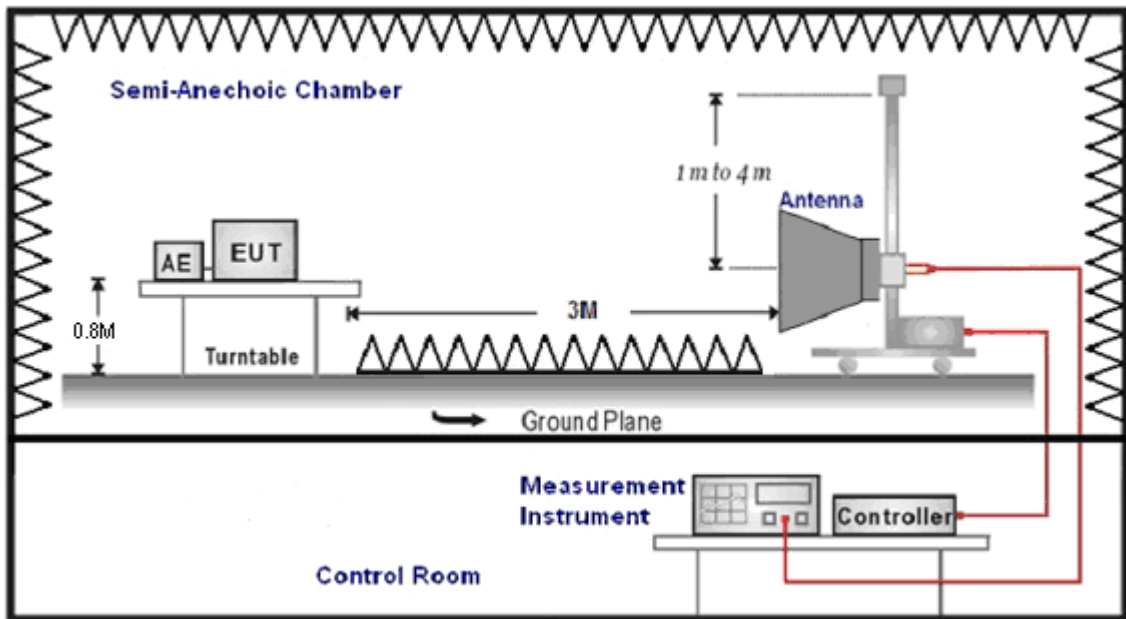
Note: N.C.R. = No Calibration Request.

■ Setup

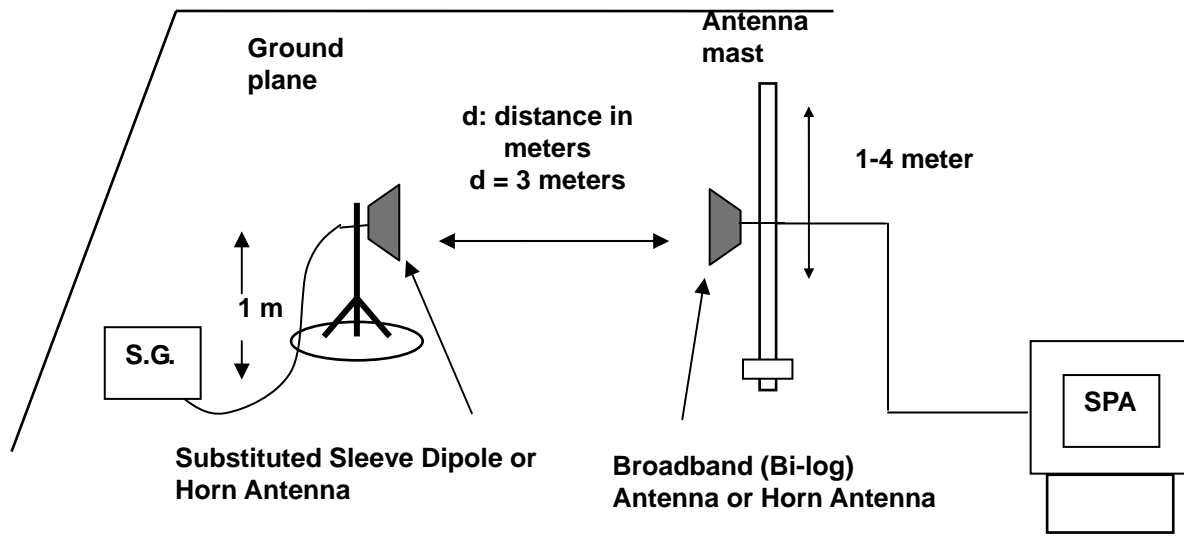
Below 1GHz



Above 1GHz



For Substituted Method Test Set-UP



■ Test Procedure

- The EUT was set up for the maximum power with LTE link data modulation. The power was measured with Spectrum Analyzer. All measurements were done at 3 channels (low, middle and high operational frequency range). RWB and VBW is 5MHz for LTE mode.
- E.I.R.P power measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- The substitution antenna (Note:1 & 2) is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G.
- E.I.R.P. = Output power level of S.G - TX cable loss + Antenna gain of substitution horn
- E.R.P. = E.I.R.P.- 2.15 dB

Note: 1. Below 1 GHz Substituted Method Test : Sleeve dipole antenna to Bi-Log Antenna

2. Above 1 GHz Substituted Method Test : Horn antenna to Horn Antenna

■ Uncertainty

The measurement uncertainty is defined as for Field Strength of Spurious Radiation measurement is ± 3.072 dB.



■ Test Result

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Mode:	1	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Frequency:	824.2 MHz	Date:	11/23/2016

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1648.400	-28.16	-5.44	-33.60	-13.00	-20.60	peak	H
2472.600	-30.06	-2.48	-32.54	-13.00	-19.54	peak	H
3296.800	-32.79	0.18	-32.61	-13.00	-19.61	peak	H
4121.000	-45.19	2.14	-43.05	-13.00	-30.05	peak	H
1648.400	-31.88	-5.44	-37.32	-13.00	-24.32	peak	V
2472.600	-32.34	-2.48	-34.82	-13.00	-21.82	peak	V
3296.800	-27.12	0.18	-26.94	-13.00	-13.94	peak	V
4121.000	-45.88	2.14	-43.74	-13.00	-30.74	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Mode:	1	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Frequency:	836.6 MHz	Date:	11/23/2016

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1673.200	-23.62	-5.35	-28.97	-13.00	-15.97	peak	H
2509.800	-29.77	-2.33	-32.10	-13.00	-19.10	peak	H
3346.400	-32.71	0.40	-32.31	-13.00	-19.31	peak	H
4183.000	-41.39	2.28	-39.11	-13.00	-26.11	peak	H
1673.200	-27.04	-5.35	-32.39	-13.00	-19.39	peak	V
2509.800	-30.22	-2.33	-32.55	-13.00	-19.55	peak	V
3346.400	-26.45	0.40	-26.05	-13.00	-13.05	peak	V
4183.000	-40.99	2.28	-38.71	-13.00	-25.71	peak	V



Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Mode:	1	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Frequency:	848.8 MHz	Date:	11/23/2016

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1697.600	-14.92	-5.28	-20.20	-13.00	-7.20	peak	H
2546.400	-30.56	-2.23	-32.79	-13.00	-19.79	peak	H
3395.200	-30.58	0.61	-29.97	-13.00	-16.97	peak	H
4244.000	-34.07	2.39	-31.68	-13.00	-18.68	peak	H
1697.600	-25.32	-5.28	-30.60	-13.00	-17.60	peak	V
2546.400	-28.75	-2.23	-30.98	-13.00	-17.98	peak	V
3395.200	-22.93	0.61	-22.32	-13.00	-9.32	peak	V
4244.000	-37.84	2.39	-35.45	-13.00	-22.45	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Mode:	2	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Frequency:	1850.2 MHz	Date:	11/23/2016

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
3700.400	-25.49	1.39	-24.10	-13.00	-11.10	peak	H
5550.600	-45.02	5.11	-39.91	-13.00	-26.91	peak	H
7400.800	-53.51	11.52	-41.99	-13.00	-28.99	peak	H
3700.400	-35.24	1.39	-33.85	-13.00	-20.85	peak	V
5550.600	-45.27	5.11	-40.16	-13.00	-27.16	peak	V
7400.800	-52.63	11.52	-41.11	-13.00	-28.11	peak	V



Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Mode:	2	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Frequency:	1880.0 MHz	Date:	11/23/2016

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
3760.000	-28.07	1.49	-26.58	-13.00	-13.58	peak	H
5640.000	-43.52	5.35	-38.17	-13.00	-25.17	peak	H
3760.000	-28.07	1.49	-26.58	-13.00	-13.58	peak	V
5640.000	-43.52	5.35	-38.17	-13.00	-25.17	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Mode:	2	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Frequency:	1909.8 MHz	Date:	11/23/2016

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
3819.600	-28.77	1.58	-27.19	-13.00	-14.19	peak	H
5729.400	-40.87	5.58	-35.29	-13.00	-22.29	peak	H
3819.600	-30.46	1.58	-28.88	-13.00	-15.88	peak	V
5729.400	-42.44	5.58	-36.86	-13.00	-23.86	peak	V
7639.200	-53.32	12.32	-41.00	-13.00	-28.00	peak	V



Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Mode:	5	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Frequency:	1852.4 MHz	Date:	11/23/2016

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
3704.800	-36.63	1.41	-35.22	-13.00	-22.22	peak	H
3704.800	-46.24	1.41	-44.83	-13.00	-31.83	peak	V
5557.200	-49.84	5.14	-44.70	-13.00	-31.70	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Mode:	5	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Frequency:	1880.0 MHz	Date:	11/23/2016

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
3760.000	-32.60	1.49	-31.11	-13.00	-18.11	peak	H
3760.000	-43.22	1.49	-41.73	-13.00	-28.73	peak	V
5640.000	-48.51	5.35	-43.16	-13.00	-30.16	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Mode:	5	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Frequency:	1907.6 MHz	Date:	11/23/2016

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
3815.200	-35.81	1.57	-34.24	-13.00	-21.24	peak	H
3815.200	-41.42	1.57	-39.85	-13.00	-26.85	peak	V



Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Mode:	6	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Frequency:	826.4 MHz	Date:	11/23/2016

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1652.800	-31.70	-5.44	-37.14	-13.00	-24.14	peak	H
2479.200	-39.87	-2.45	-42.32	-13.00	-29.32	peak	H
1652.800	-44.13	-5.44	-49.57	-13.00	-36.57	peak	V
2479.200	-38.50	-2.45	-40.95	-13.00	-27.95	peak	V
3305.600	-44.06	0.21	-43.85	-13.00	-30.85	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Mode:	6	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Frequency:	836.6 MHz	Date:	11/23/2016

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1673.200	-29.62	-5.35	-34.97	-13.00	-21.97	peak	H
2509.800	-39.83	-2.33	-42.16	-13.00	-29.16	peak	H
3346.400	-42.68	0.40	-42.28	-13.00	-29.28	peak	H
1673.200	-35.84	-5.35	-41.19	-13.00	-28.19	peak	V
2509.800	-38.58	-2.33	-40.91	-13.00	-27.91	peak	V
3346.400	-40.02	0.40	-39.62	-13.00	-26.62	peak	V



Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Mode:	6	Temp.(°C)/Hum. (%RH):	26(°C)/60%RH
Frequency:	846.6 MHz	Date:	11/23/2016

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1692.800	-31.52	-5.30	-36.82	-13.00	-23.82	peak	H
2539.200	-40.72	-2.26	-42.98	-13.00	-29.98	peak	H
3385.600	-41.79	0.57	-41.22	-13.00	-28.22	peak	H
1692.800	-39.20	-5.30	-44.50	-13.00	-31.50	peak	V
2539.200	-38.19	-2.26	-40.45	-13.00	-27.45	peak	V
3385.600	-37.83	0.57	-37.26	-13.00	-24.26	peak	V

2.8. Frequency Stability (Temperature & Voltage Variation) Test

■ Limit

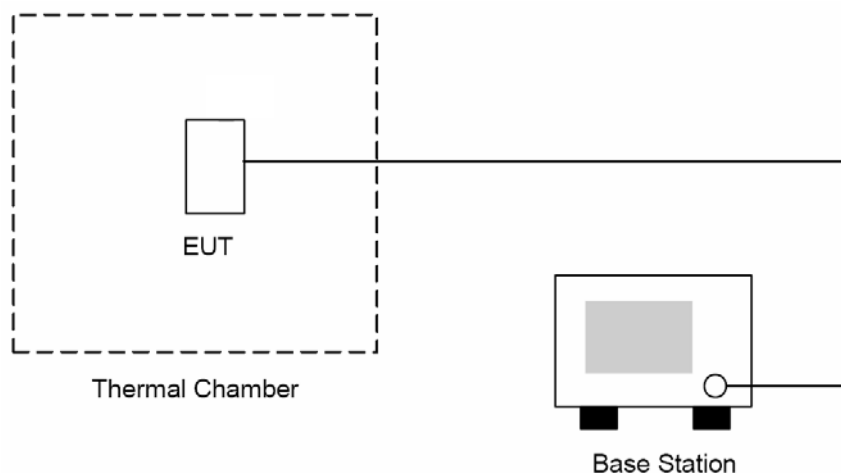
The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ ($\pm 2.5\text{ppm}$) of the center frequency.

■ Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Cycle
Universal Radio Communication Tester	R & S	CMU200	112387	02/25/2016	1 year
Temperature & Humidity Chamber	TAICHY	MHU-225LA	980729	04/18/2016	1 year
Test Site	ATL	TE05	TE05	N.C.R.	-----

Note: N.C.R. = No Calibration Request.

■ Setup





■ Test Procedure

The measurement is made according to FCC rules:

1. The EUT and test equipment were set up as shown on the following section.
2. With all power removed, the temperature was decreased to -30°C and permitted to stabilize for three hours. Power was applied and the maximum change in frequency was note within one minute.
3. With power OFF, the temperature was raised in 10°C steps. The sample was permitted to stabilize at each step for at least one-half hour. Power was applied and the maximum frequency change was noted within one minute.
4. The EUT was placed in a temperature chamber at $25 \pm 5^{\circ}\text{C}$ and connected as the following section.
5. The power supply voltage to the EUT was varied from BEP to 115% of the nominal value measured at the input to the EUT.
6. The temperature tests were performed for the worst case.
7. Test data was recorded.

■ Uncertainty

The measurement uncertainty is defined as for Frequency Stability (Temperature Variation) measurement is $\pm 10\text{Hz}$.

Test Result

Date of Test	11/02/2016					
GSM/GPRS/EGPRS 850						
Voltage						
Frequency (MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
836.6	4.25	20	-6.47	-0.008	±2.5	Pass
	3.70	20	7.64	0.009	±2.5	Pass
	3.50	20	-0.98	-0.001	±2.5	Pass
Temperature						
836.6	3.70	-10	-4.01	-0.005	±2.5	Pass
	3.70	0	13.52	0.016	±2.5	Pass
	3.70	10	-0.43	-0.001	±2.5	Pass
	3.70	30	3.20	0.004	±2.5	Pass
	3.70	40	8.65	0.010	±2.5	Pass
	3.70	50	5.07	0.006	±2.5	Pass

Date of Test	11/02/2016					
GSM/GPRS/EGPRS 1900						
Voltage						
Frequency (MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
1880.0	4.25	20	6.07	0.003	±2.5	Pass
	3.70	20	3.30	0.002	±2.5	Pass
	3.50	20	3.62	0.002	±2.5	Pass
Temperature						
1880.0	3.70	-10	-20.12	-0.011	±2.5	Pass
	3.70	0	14.12	0.008	±2.5	Pass
	3.70	10	-10.55	-0.006	±2.5	Pass
	3.70	30	10.14	0.005	±2.5	Pass
	3.70	40	12.91	0.007	±2.5	Pass
	3.70	50	8.29	0.004	±2.5	Pass



Date of Test	11/02/2016					
WCDMA Band II						
Voltage						
Frequency (MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
1880.0	4.25	20	4.76	0.003	±2.5	Pass
	3.70	20	-9.61	-0.005	±2.5	Pass
	3.50	20	-2.90	-0.002	±2.5	Pass
Temperature						
1880.0	3.70	-10	-9.07	-0.011	±2.5	Pass
	3.70	0	11.89	0.014	±2.5	Pass
	3.70	10	3.05	0.004	±2.5	Pass
	3.70	30	9.20	0.011	±2.5	Pass
	3.70	40	12.70	0.015	±2.5	Pass
	3.70	50	-1.64	-0.002	±2.5	Pass

Date of Test	11/02/2016					
WCDMA Band V						
Voltage						
Frequency (MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
836.6	4.25	20	2.37	0.003	±2.5	Pass
	3.70	20	8.75	0.010	±2.5	Pass
	3.50	20	-7.30	-0.009	±2.5	Pass
Temperature						
836.6	3.70	-10	-12.68	-0.007	±2.5	Pass
	3.70	0	5.68	0.003	±2.5	Pass
	3.70	10	-3.38	-0.002	±2.5	Pass
	3.70	30	7.27	0.004	±2.5	Pass
	3.70	40	0.34	0.000	±2.5	Pass
	3.70	50	4.75	0.003	±2.5	Pass