Test Report

Report No.:	MTi220225001-01E1
Date of issue:	2022-07-25
Applicant:	Promaster Electronic LLC
Product name:	GPS TRACKER
Model(s):	AVT-200, APT-100, APT-110, APT-120, AVT-210
FCC ID:	2A6P9-AUTOSKYUS

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TEST RESULT CERTIFICATION	
Applicant's name ..... :	Promaster Electronic LLC
Address ..... :	25511 Budde Rd, Ste 1602, The Woodlands, Texas, 77380, USA
Manufacturer's Name ..... :	Promaster Electronic LLC
Address ..... :	25511 Budde Rd, Ste 1602, The Woodlands, Texas, 77380, USA
Product description	
Product name ..... :	GPS TRACKER
Trademark ..... :	AUTOSKY
Model Name ..... :	AVT-200
Serial Model	APT-100, APT-110, APT-120, AVT-210
Standards ..... :	FCC Part 22 Subpart H FCC Part 24 Subpart E
Test procedure ..... :	FCC Part 2 ANSI/TIA-603-E-2016 ANSI C63.26:2015 KDB 971168 D01 Power Meas License Digital Systems v03r01
Date of Test	
Date (s) of performance of tests..... :	2022-06-14 ~2022-07-25
Test Result ..... :	Pass
This device described above has been tested by Shenzhen Microtest Co., Ltd. and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.	

Testing Engineer : Eugene Qiu

(Eugene Qiu)

Technical Manager : Leon Chen

(Leon Chen)

Authorized Signatory : Tom Xue

(Tom Xue)

1 General description

1.1 Feature of equipment under test (EUT)

Product name:	GPS TRACKER
Trade name：	AVT-200
Model name:	APT-100, APT-110, APT-120, AVT-210
Difference in series models:	All the models are the same circuit and RF module, except the model name and plastic casings.
Frequency range:	GSM850: TX824.2MHz~848.8MHz /RX869.2MHz~893.8MHz; PCS1900: TX1850.2MHz~1909.8MHz /RX1930.2MHz~1989.8MHz;
Modulation type:	GMSK for GPRS; GMSK&8PSK for EGPRS;
Power class:	Multi-Class12 Only 4 timeslots are used for GPRS
Antenna Type:	FPC Antenna
Antenna gain:	GSM 850 Gain: 0.8dBi GSM 1900 Gain: 1.8dBi
Hardware version：	G101S-4G_V1.1
Software version：	A101_4G_NM_Apr 22 2022 153027
Power supply:	Input: DC 12V/24V Battery: DC 3.7V 0.55Wh 150mAh
Adapter information:	N/A
EUT serial number:	MTi220225001-01-S0001

1.2 Test frequency channel

Frequency Band	Frequency	Channel	Frequency(MHz)
GSM 850	Low	128	824.2
	Middle	190	836.6
	High	251	848.8
GSM 1900	Low	512	1850.2
	Middle	661	1880
	High	810	1909.8

1.3 EUT operation mode

During testing, RF test program provided by the manufacture to control the Tx operation followed the test requirement. The EUT is configured to transmit continuously (duty cycle > 98 %) at the maximum power control level.

1.4 Ancillary equipment list

Equipment	Model	S/N	Manufacturer	Certificate type
/	/	/	/	/

2 Summary of Test Result

Item	FCC Part No.	Description of Test	Result
1	2.1046, 22.913(a); 24.232(c)	Maximum output power	Pass*
2	2.1046, 22.913(d); 24.232(d)	Peak to average power radio(PAPR)	Pass*
3	2.1046, 22.913(a); 24.232(c)	Transmitter Radiated Power (EIRP/ERP)	Pass
4	2.1049; 22.917(b); 24.238(b)	Occupied Bandwidth	Pass*
5	2.1051; 22.917(a); 24.238(a)	Conducted spurious emissions	Pass*
6	2.1051; 22.917(b); 24.238(b)	Spurious emissions at band edge	Pass*
7	2.1053; 22.917(a); 24.238(a)	Radiated spurious emissions	Pass
8	2.1055; 22.355; 24.235	Frequency Stability	Pass*

Note:
**reference to the module which FCC ID is 2AJYU-8BAE002*

3 Test facilities and accreditations

1.1 Test laboratory

Test Laboratory	Shenzhen Microtest Co., Ltd
Location	101, No. 7, Zone 2, Xinxing Industrial Park, Fuhai Avenue, Xinhe Community, Fuhai Street, Bao' an District, Shenzhen, Guangdong, China.
FCC Registration No.:	448573

1.2 Environmental conditions

Temperature:	15ºC~35ºC
Humidity	20%~75%
Atmospheric pressure	98kPa~101kPa

1.3 Measurement uncertainty

Measurement Uncertainty for a Level of Confidence of 95 %, U=2xUc(y)

Radiated emission(30MHz~1GHz)	± 4.2 dB
Radiated emission (above 1GHz)	± 4.3 dB
Temperature	±1 degree
Humidity	± 5 %

1.4 Test software

Software Name	Manufacturer	Model	Version
GSM	Shenzhen JS tonscend co., ltd	JS1120-4	2.1.6

4 List of test equipment

Equipment No.	Equipment Name	Manufacturer	Model	Serial No.	Calibration date	Due date
MTI-E043	EMI Test Receiver	Rohde&schwarz	ESCI7	101166	2022/05/03	2023/05/02
MTI-E044	TRILOG Broadband Antenna	schwarabeck	VULB 9163	9163-1338	2021/05/30	2023/05/29
MTI-E047	Amplifier	Hewlett-Packard	8447F	3113A06150	2022/05/03	2023/05/02
MTI-E089	ESG Vector Signal Generator	Agilent	N5182A	MY49060455	2022/05/03	2023/05/02
MTI-E058	ESG Series Analog Ssignal Generator	Agilent	E4421B	GB40051240	2022/05/03	2023/05/02
MTI-E062	PXA Signal Analyzer	Agilent	N9030A	MY51350296	2022/05/03	2023/05/02
MTI-E066	MXA Signal Analyzer	Agilent	N9020A	MY50143483	2022/05/03	2023/05/02
MTI-E078	Synthesized Sweeper	Agilent	83752A	3610A01957	2022/05/03	2023/05/02
MTI-E079	DC Power Supply	Agilent	E3632A	MY40027695	2022/05/03	2023/05/02
MTI-E045	Double Ridged Broadband Horn Antenna	schwarabeck	BBHA 9120D	9120D-2278	2021/05/30	2023/05/29
MTI-E021	EMI Test Receiver	Rohde&schwarz	ESCS30	100210	2022/05/03	2023/05/02
MTI-E022	Pulse Limiter	Schwarzbeck	VSTD 9561-F	00679	2022/05/03	2023/05/02
MTI-E023	Artificial mains network	Schwarzbeck	NSLK 8127	NSLK 8127 #841	2022/05/03	2023/05/02
MTI-E046	Active Loop Antenna	Schwarzbeck	FMZB 1519 B	00044	2021/05/30	2023/05/29
MTI-E048	Amplifier	Agilent	8449B	3008A02400	2022/05/03	2023/05/02
MTI-E072	Thermometer Clock Humidity Monitor	-	HTC-1	/	2022/05/03	2023/05/02
MTI-E057	Wideband Radio Communication Tester	Rohde&schwarz	CMW500	149155	2022/05/03	2023/05/02
Note: the calibration interval of the above test instruments is 12 or 24 months and the calibrations are traceable to international system unit (SI).						

5 Test Result

5.1 Radiated Power (ERP/EIRP)

5.1.1 Limit

GSM 850: 7W (38.45dBm) ERP
PCS 1900: 2W (33dBm) EIRP

5.1.2 Method of Measurement

1. According to the power tested in section 5.1, select the maximum power in each mode, and use the following formula to calculate the corresponding ERP/EIRP.
2. ERP = conducted power + Gain(dBd)
3. EIRP = conducted power + Gain(dBi)

ERP=EIRP-2.15

5.1.3 Test results

GSM 850 Measurement result

Band	Mode	Conducted Power (dBm)	Antenna Gain (dBi)	ERP		Limit (W)	Verdict
				(dBm)	(W)		
GSM850	GPRS 1TS-Low	32.20	0.8	30.85	1.216	7	PASS
	GPRS 1TS-Middle	32.50	0.8	31.15	1.303	7	PASS
	GPRS 1TS-High	32.70	0.8	31.35	1.365	7	PASS
	GPRS 2TS-Low	32.10	0.8	30.75	1.189	7	PASS
	GPRS 2TS-Middle	32.30	0.8	30.95	1.245	7	PASS
	GPRS 2TS-High	32.50	0.8	31.15	1.303	7	PASS
	GPRS 3TS-Low	30.30	0.8	28.95	0.785	7	PASS
	GPRS 3TS-Middle	30.50	0.8	29.15	0.822	7	PASS
	GPRS 3TS-High	31.00	0.8	29.65	0.923	7	PASS
	GPRS 4TS-Low	28.30	0.8	26.95	0.495	7	PASS
	GPRS 4TS-Middle	28.40	0.8	27.05	0.507	7	PASS
	GPRS 4TS-High	28.70	0.8	27.35	0.543	7	PASS
	EGPRS-GMSK 1TS Low	34.00	0.8	32.65	1.841	7	PASS

	EGPRS-GMSK 1TS Middle	33.70	0.8	32.35	1.718	7	PASS
	EGPRS-GMSK 1TS High	33.20	0.8	31.85	1.531	7	PASS
	EGPRS-GMSK 2TS Low	32.80	0.8	31.45	1.396	7	PASS
	EGPRS-GMSK 2TS Middle	32.70	0.8	31.35	1.365	7	PASS
	EGPRS-GMSK 2TS High	32.30	0.8	30.95	1.245	7	PASS
	EGPRS-GMSK 3TS Low	32.50	0.8	31.15	1.303	7	PASS
	EGPRS-GMSK 3TS Middle	32.50	0.8	31.15	1.303	7	PASS
	EGPRS-GMSK 3TS High	32.10	0.8	30.75	1.189	7	PASS
	EGPRS-GMSK 4TS Low	32.40	0.8	31.05	1.274	7	PASS
	EGPRS-GMSK 4TS Middle	32.20	0.8	30.85	1.216	7	PASS
	EGPRS-GMSK 4TS High	31.80	0.8	30.45	1.109	7	PASS
	EGPRS-8PSK 1TS Low	30.20	0.8	28.85	0.767	7	PASS
	EGPRS-8PSK 1TS Middle	30.20	0.8	28.85	0.767	7	PASS
	EGPRS-8PSK 1TS High	29.90	0.8	28.55	0.716	7	PASS
	EGPRS-8PSK 2TS Low	29.20	0.8	27.85	0.610	7	PASS
	EGPRS-8PSK 2TS Middle	29.10	0.8	27.75	0.596	7	PASS
	EGPRS-8PSK 2TS High	28.90	0.8	27.55	0.569	7	PASS
	EGPRS-8PSK 3TS Low	29.20	0.8	27.85	0.610	7	PASS
	EGPRS-8PSK 3TS Middle	29.00	0.8	27.65	0.582	7	PASS
	EGPRS-8PSK 3TS High	28.60	0.8	27.25	0.531	7	PASS

	EGPRS-8PSK 4TS Low	29.00	0.8	27.65	0.582	7	PASS
	EGPRS-8PSK 4TS Middle	28.90	0.8	27.55	0.569	7	PASS
	EGPRS-8PSK 4TS High	28.60	0.8	27.25	0.531	7	PASS

PCS 1900 Measurement result

Band	Mode	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP		Limit (W)	Verdict
				(dBm)	(W)		
PCS 1900	GPRS 1TS-Low	30.00	1.8	31.80	1.514	2	PASS
	GPRS 1TS-Middle	29.80	1.8	31.60	1.445	2	PASS
	GPRS 1TS-High	29.80	1.8	31.60	1.445	2	PASS
	GPRS 2TS-Low	29.90	1.8	31.70	1.479	2	PASS
	GPRS 2TS-Middle	29.70	1.8	31.50	1.413	2	PASS
	GPRS 2TS-High	29.80	1.8	31.60	1.445	2	PASS
	GPRS 3TS-Low	28.20	1.8	30.00	1.000	2	PASS
	GPRS 3TS-Middle	28.00	1.8	29.80	0.955	2	PASS
	GPRS 3TS-High	28.20	1.8	30.00	1.000	2	PASS
	GPRS 4TS-Low	26.60	1.8	28.40	0.692	2	PASS
	GPRS 4TS-Middle	26.50	1.8	28.30	0.676	2	PASS
	GPRS 4TS-High	26.30	1.8	28.10	0.646	2	PASS
	EGPRS-GMSK 1TS Low	30.70	1.8	32.50	1.778	2	PASS
	EGPRS-GMSK 1TS Middle	31.00	1.8	32.80	1.905	2	PASS
	EGPRS-GMSK 1TS High	30.60	1.8	32.40	1.738	2	PASS
	EGPRS-GMSK 2TS Low	30.10	1.8	31.90	1.549	2	PASS
	EGPRS-GMSK 2TS Middle	30.40	1.8	32.20	1.660	2	PASS
	EGPRS-GMSK 2TS High	29.70	1.8	31.50	1.413	2	PASS

	EGPRS-GMSK 3TS Low	30.10	1.8	31.90	1.549	2	PASS
	EGPRS-GMSK 3TS Middle	30.30	1.8	32.10	1.622	2	PASS
	EGPRS-GMSK 3TS High	29.50	1.8	31.30	1.349	2	PASS
	EGPRS-GMSK 4TS Low	29.80	1.8	31.60	1.445	2	PASS
	EGPRS-GMSK 4TS Middle	30.10	1.8	31.90	1.549	2	PASS
	EGPRS-GMSK 4TS High	29.80	1.8	31.60	1.445	2	PASS
	EGPRS-8PSK 1TS Low	29.40	1.8	31.20	1.318	2	PASS
	EGPRS-8PSK 1TS Middle	29.50	1.8	31.30	1.349	2	PASS
	EGPRS-8PSK 1TS High	29.30	1.8	31.10	1.288	2	PASS
	EGPRS-8PSK 2TS Low	28.40	1.8	30.20	1.047	2	PASS
	EGPRS-8PSK 2TS Middle	28.60	1.8	30.40	1.096	2	PASS
	EGPRS-8PSK 2TS High	28.20	1.8	30.00	1.000	2	PASS
	EGPRS-8PSK 3TS Low	28.30	1.8	30.10	1.023	2	PASS
	EGPRS-8PSK 3TS Middle	28.50	1.8	30.30	1.072	2	PASS
	EGPRS-8PSK 3TS High	28.20	1.8	30.00	1.000	2	PASS
	EGPRS-8PSK 4TS Low	28.10	1.8	29.90	0.977	2	PASS
	EGPRS-8PSK 4TS Middle	28.30	1.8	30.10	1.023	2	PASS
	EGPRS-8PSK 4TS High	28.20	1.8	30.00	1.000	2	PASS

5.2 Radiated spurious emission

5.2.1 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+10log (P) dB.

5.2.2 Test method

1. Place the EUT in the center of the turntable.

a) For radiated emissions measurements performed at frequencies less than or equal to 1 GHz, the EUT shall be placed on a RF-transparent table at a nominal height of 80 cm above the reference ground plane

b) For radiated measurements performed at frequencies above 1 GHz, the EUT shall be placed on an RF transparent table at a nominal height of 1.5 m above the ground plane.

2. Unless the EUT uses an integral antenna, the EUT shall be terminated with a non-radiating transmitter load. In cases where the EUT uses an adjustable antenna, the antenna shall be adjusted through typical positions and lengths to maximize emissions levels.

3. The EUT shall be tested while operating on the frequency per manufacturer specification. Set the transmitter to operate in continuous transmit mode.

4. Receiver or Spectrum set as follow:

Below 1GHz, RBW=100kHz, VBW=300kHz, Detector=Peak, Sweep time=Auto Above 1GHz, RBW=1MHz, VBW=3MHz, Detector=Peck, Sweep time=Auto

5. Each emission under consideration shall be evaluated:

a) Raise and lower the measurement antenna from 1 m to 4 m, as necessary to enable detection of the maximum emission amplitude relative to measurement antenna height.

b) Rotate the EUT through 360° to determine the maximum emission level relative to the axial position.

c) Return the turntable to the azimuth where the highest emission amplitude level was observed.

d) Vary the measurement antenna height again through 1 m to 4 m again to find the height associated with the maximum emission amplitude.

e) Record the measured emission amplitude level and frequency

6. Repeat step 5 for each emission frequency with the measurement antenna oriented in both the horizontal and vertical polarizations to determine the orientation that gives the maximum emissions amplitude.

7. Set-up the substitution measurement with the reference point of the substitution antenna located as near as possible to where the center of the EUT radiating element was located during the initial EUT measurement.

8. Maintain the previous measurement instrument settings and test set-up, with the exception that the EUT is removed and replaced by the substitution antenna.

9. Connect a signal generator to the substitution antenna; locate the signal generator so as to minimize any potential influences on the measurement results. Set the signal generator to the frequency where emissions are detected, and set an output power level such that the radiated signal can be detected by the measurement instrument, with sufficient dynamic range relative to the noise floor.

10. For each emission that was detected and measured in the initial test

a) Vary the measurement antenna height between 1 m to 4 m to maximize the received (measured) signal amplitude.

b) Adjust the signal generator output power level until the amplitude detected by the measurement instrument equals the amplitude level of the emission previously measured directly in step 5 and step 6.

c) Record the output power level of the signal generator when equivalence is achieved in step b).

11. Repeat step 8 through step 10 with the measurement antenna oriented in the opposite polarization.

12. Calculate the emission power in dBm referenced to a half-wave dipole using the following equation: Pe = Ps(dBm) − cable loss (dB) + antenna gain (dBd)

where

Pe = equivalent emission power in dBm

Ps = source (signal generator) power in dBm

NOTE—dBd refers to the measured antenna gain in decibels relative to a half-wave dipole.

13. Correct the antenna gain of the substitution antenna if necessary to reference the emission power to a half-wave dipole. When using measurement antennas with the gain specified in dBi, the equivalent dipole-referenced gain can be determined from:

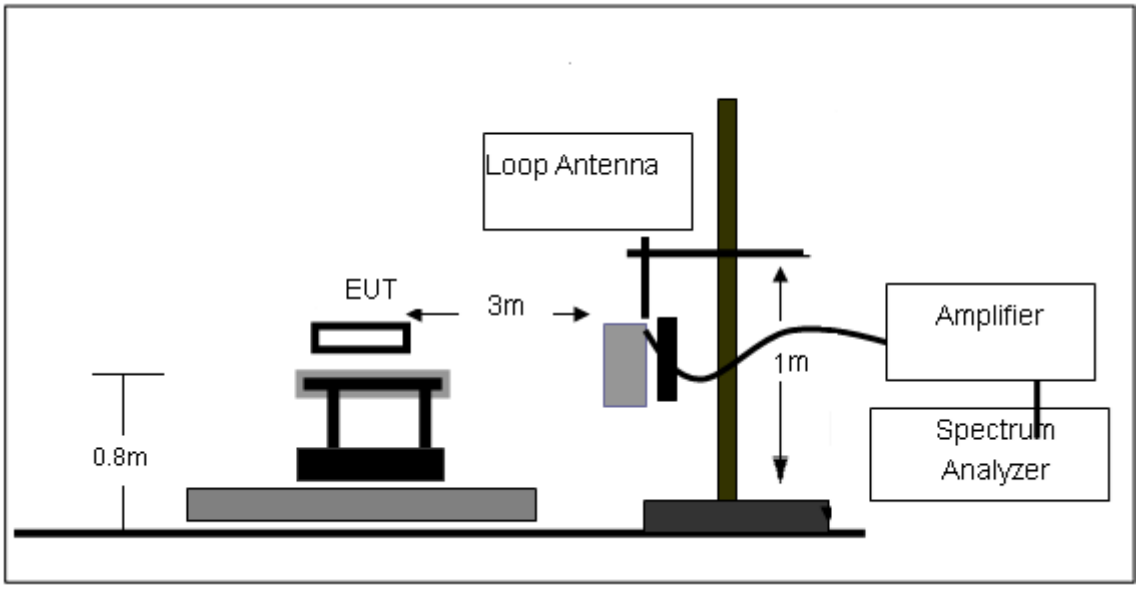
gain (dBd) = gain (dBi) − 2.15 dB.

If necessary, the antenna gain can be calculated from calibrated antenna factor information

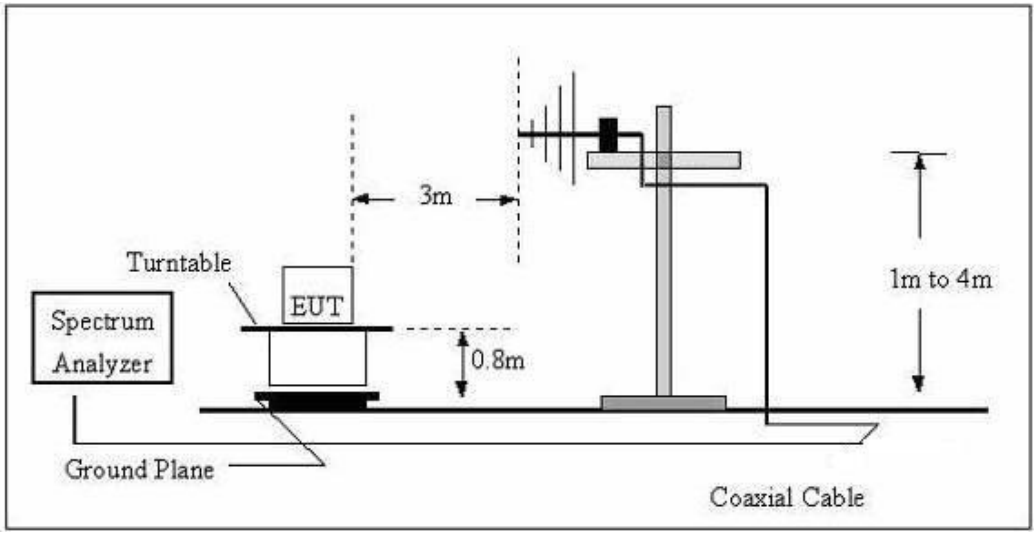
14. Provide the complete measurement results as a part of the test report.

5.2.3 Test setup

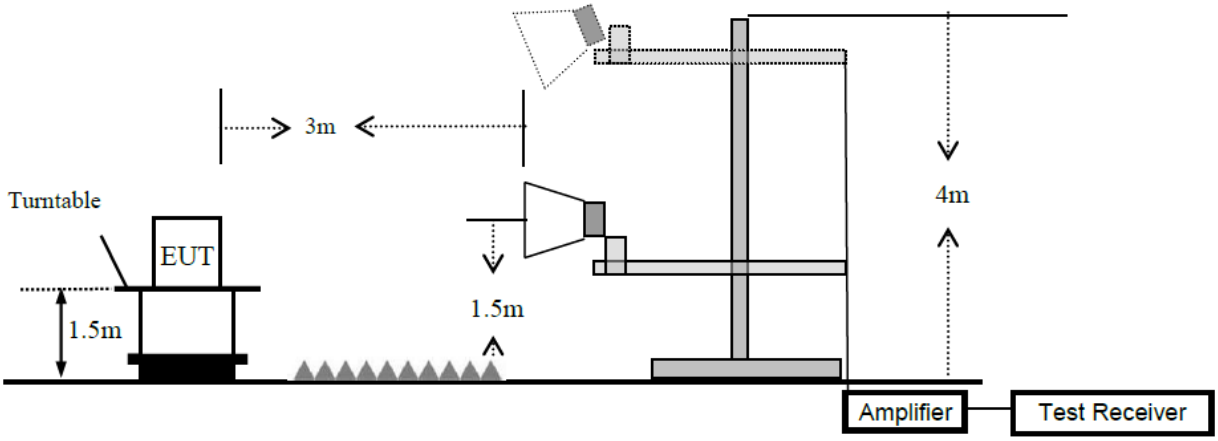
Radiated emission test-up frequency below 30MHz



Radiated emission test-up frequency 30MHz~1GHz



Radiated emission test-up frequency above 1GHz



5.2.4 Test Result

For GSM850 (30MHz – 9GHz)

GPRS850_ Low Channel							
Frequency	SG Level	Cable Loss	Antenna Gain	Absolute Level	Limit	Margin	Polarization
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dB)	H/V
214.2	-53.97	0.44	5.5	-48.91	-13	-35.91	H
497.5	-54.20	0.45	5.9	-48.75	-13	-35.75	H
1648.4	-42.06	5.98	9.11	-38.93	-13	-25.93	H
2472.6	-46.11	6.84	9.56	-43.39	-13	-30.39	H
257.9	-54.93	0.44	5.5	-49.87	-13	-36.87	V
398.3	-54.59	0.45	5.9	-49.14	-13	-36.14	V
1648.4	-36.70	5.98	9.11	-33.57	-13	-20.57	V
2472.6	-42.14	6.84	9.56	-39.42	-13	-26.42	V
GPRS850_ Middle Channel							
Frequency	SG Level	Cable Loss	Antenna Gain	Absolute Level	Limit	Margin	Polarization
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dB)	H/V
217.9	-54.38	0.44	5.5	-49.32	-13	-36.32	H
367.6	-54.51	0.45	5.9	-49.06	-13	-36.06	H
1673.2	-39.68	5.98	9.11	-36.55	-13	-23.55	H
2509.8	-42.03	6.84	9.56	-39.31	-13	-26.31	H
217.9	-53.97	0.44	5.5	-48.91	-13	-35.91	V
393.3	-54.57	0.45	5.9	-49.12	-13	-36.12	V
1673.2	-35.07	5.98	9.11	-31.94	-13	-18.94	V
2509.8	-37.68	6.84	9.56	-34.96	-13	-21.96	V
GPRS850_ High Channel							
Frequency	SG Level	Cable Loss	Antenna Gain	Absolute Level	Limit	Margin	Polarization
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dB)	H/V
209.6	-55.91	0.44	5.5	-50.85	-13	-37.85	H
347.1	-54.64	0.45	5.9	-49.19	-13	-36.19	H
1697.6	-45.66	5.98	9.11	-42.53	-13	-29.53	H
2546.4	-50.26	6.84	9.56	-47.54	-13	-34.54	H
217.9	-54.69	0.44	5.5	-49.63	-13	-36.63	V
396.7	-54.20	0.45	5.9	-48.75	-13	-35.75	V
1697.6	-41.51	5.98	9.11	-38.38	-13	-25.38	V
2546.4	-45.4	6.84	9.56	-42.68	-13	-29.68	V

EGPRS850_ Low Channel							
Frequency	SG Level	Cable Loss	Antenna Gain	Absolute Level	Limit	Margin	Polarization
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dB)	H/V
214.2	-53.97	0.44	5.5	-48.91	-13	-35.91	H
497.5	-54.02	0.45	5.9	-48.57	-13	-35.57	H
1648.4	-41.80	5.98	9.11	-38.67	-13	-25.67	H
2472.6	-46.04	6.84	9.56	-43.32	-13	-30.32	H
257.9	-54.06	0.44	5.5	-49.00	-13	-36.00	V
398.3	-54.41	0.45	5.9	-48.96	-13	-35.96	V
1648.4	-36.72	5.98	9.11	-33.59	-13	-20.59	V
2472.6	-41.78	6.84	9.56	-39.06	-13	-26.06	V
EGPRS850_ Middle Channel							
Frequency	SG Level	Cable Loss	Antenna Gain	Absolute Level	Limit	Margin	Polarization
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dB)	H/V
217.9	-53.73	0.44	5.5	-48.67	-13	-35.67	H
367.6	-54.00	0.45	5.9	-48.55	-13	-35.55	H
1673.2	-39.68	5.98	9.11	-36.55	-13	-23.55	H
2509.8	-42.03	6.84	9.56	-39.31	-13	-26.31	H
217.9	-54.23	0.44	5.5	-49.17	-13	-36.17	V
393.3	-54.29	0.45	5.9	-48.84	-13	-35.84	V
1673.2	-35.07	5.98	9.11	-31.94	-13	-18.94	V
2509.8	-37.68	6.84	9.56	-34.96	-13	-21.96	V
EGPRS850_ High Channel							
Frequency	SG Level	Cable Loss	Antenna Gain	Absolute Level	Limit	Margin	Polarization
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dB)	H/V
209.6	-55.37	0.44	5.5	-50.31	-13	-37.31	H
347.1	-54.14	0.45	5.9	-48.69	-13	-35.69	H
1697.6	-45.66	5.98	9.11	-42.53	-13	-29.53	H
2546.4	-50.26	6.84	9.56	-47.54	-13	-34.54	H
217.9	-54.95	0.44	5.5	-49.89	-13	-36.89	V
396.7	-53.99	0.45	5.9	-48.54	-13	-35.54	V
1697.6	-41.51	5.98	9.11	-38.38	-13	-25.38	V
2546.4	-45.4	6.84	9.56	-42.68	-13	-29.68	V

For GSM1900(30MHz – 26.5GHz)

GPRS1900_ Low Channel							
Frequency	SG Level	Cable Loss	Antenna Gain	Absolute Level	Limit	Margin	Polarization
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dB)	H/V
351.6	-55.11	0.44	5.5	-50.05	-13	-37.05	H
536.1	-54.53	0.45	5.9	-49.08	-13	-36.08	H
3700.4	-42.42	5.26	9.88	-37.80	-13	-24.80	H
5550.6	-46.39	6.11	11.36	-41.14	-13	-28.14	H
351.6	-55.68	0.44	5.5	-50.62	-13	-37.62	V
536.1	-54.42	0.45	5.9	-48.97	-13	-35.97	V
3700.4	-45.15	5.26	9.88	-40.53	-13	-27.53	V
5550.6	-48.88	6.11	11.36	-43.63	-13	-30.63	V
GPRS1900_ Middle Channel							
Frequency	SG Level	Cable Loss	Antenna Gain	Absolute Level	Limit	Margin	Polarization
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dB)	H/V
351.6	-55.58	0.44	5.5	-50.52	-13	-37.52	H
536.1	-54.61	0.45	5.9	-49.16	-13	-36.16	H
3760	-39.47	5.26	9.88	-34.85	-13	-21.85	H
5640	-44.03	6.11	11.36	-38.78	-13	-25.78	H
351.6	-55.59	0.44	5.5	-50.53	-13	-37.53	V
536.1	-53.78	0.45	5.9	-48.33	-13	-35.33	V
3760	-42.73	5.26	9.88	-38.11	-13	-25.11	V
5640	-47.30	6.11	11.36	-42.05	-13	-29.05	V
GPRS1900_ High Channel							
Frequency	SG Level	Cable Loss	Antenna Gain	Absolute Level	Limit	Margin	Polarization
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dB)	H/V
351.6	-55.21	0.44	5.5	-50.15	-13	-37.15	H
536.1	-54.15	0.45	5.9	-48.70	-13	-35.70	H
3819.6	-46.38	5.26	9.88	-41.76	-13	-28.76	H
5729.4	-48.45	6.11	11.36	-43.20	-13	-30.20	H
351.6	-55.27	0.44	5.5	-50.21	-13	-37.21	V
536.1	-54.05	0.45	5.9	-48.60	-13	-35.60	V
3819.6	-49.00	5.26	9.88	-44.38	-13	-31.38	V
5729.4	-48.29	6.11	11.36	-43.04	-13	-30.04	V

EGPRS1900_ Low Channel							
Frequency	SG Level	Cable Loss	Antenna Gain	Absolute Level	Limit	Margin	Polarization
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dB)	H/V
351.6	-55.46	0.44	5.5	-50.40	-13	-37.40	H
536.1	-54.36	0.45	5.9	-48.91	-13	-35.91	H
3700.4	-42.17	5.26	9.88	-37.55	-13	-24.55	H
5550.6	-46.45	6.11	11.36	-41.20	-13	-28.20	H
351.6	-55.80	0.44	5.5	-50.74	-13	-37.74	V
536.1	-54.62	0.45	5.9	-49.17	-13	-36.17	V
3700.4	-44.52	5.26	9.88	-39.90	-13	-26.90	V
5550.6	-48.88	6.11	11.36	-43.63	-13	-30.63	V
EGPRS1900_ Middle Channel							
Frequency	SG Level	Cable Loss	Antenna Gain	Absolute Level	Limit	Margin	Polarization
351.6	-55.18	0.44	5.5	-50.12	-13	-37.12	H/V
536.1	-53.78	0.45	5.9	-48.33	-13	-35.33	H
3760	-40.02	5.26	9.88	-35.40	-13	-22.40	H
5640	-43.89	6.11	11.36	-38.64	-13	-25.64	H
351.6	-55.55	0.44	5.5	-50.49	-13	-37.49	H
536.1	-54.23	0.45	5.9	-48.78	-13	-35.78	V
3760	-42.60	5.26	9.88	-37.98	-13	-24.98	V
5640	-46.60	6.11	11.36	-41.35	-13	-28.35	V
351.6	-55.18	0.44	5.5	-50.12	-13	-37.12	V
EGPRS1900_ High Channel							
Frequency	SG Level	Cable Loss	Antenna Gain	Absolute Level	Limit	Margin	Polarization
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dB)	H/V
351.6	-55.79	0.44	5.5	-50.73	-13	-37.73	H
536.1	-54.05	0.45	5.9	-48.60	-13	-35.60	H
3819.6	-46.31	5.26	9.88	-41.69	-13	-28.69	H
5729.4	-49.16	6.11	11.36	-43.91	-13	-30.91	H
351.6	-55.35	0.44	5.5	-50.29	-13	-37.29	V
536.1	-54.43	0.45	5.9	-48.98	-13	-35.98	V
3819.6	-48.63	5.26	9.88	-44.01	-13	-31.01	V
5729.4	-47.49	6.11	11.36	-42.24	-13	-29.24	V

Photographs of the Test Setup

Photographs of the EUT

See the APPENDIX 1- EUT PHOTO.

----END OF REPORT----