



MPE TEST REPORT

FCC Per 47 CFR 2.1091(b)

FCC ID: **Q5EPT800003**

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Date of issue.....: Oct 27, 2008

Testing Laboratory Name: **Shenzhen Huatongwei International Inspection Co., Ltd**

Address.....: Keji Nan No.12 Road, Hi-tech Park, Shenzhen, China

Applicant's name.....: **KIRISUN ELECTRONICS(SHENZHEN) CO., LTD.**

Address.....: 6/F., BLDG. H-2, EAST INDUSTRIAL ZONE OF OVERSEAS CHINESE TOWN NANSHAN DIST. SHENZHEN P.R. CHINA

Test specification:

Standard: **FCC Per 47 CFR 2.1091(b)**

TRF Originator.....: Shenzhen Huatongwei International Inspection CO., Ltd

Master TRF.....: Dated 2006-06

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Test item description : Mobile Radio

Trade Mark: Kirisun

Manufacturer: KIRISUN ELECTRONICS(SHENZHEN) CO., LTD.

Model/Type reference.....: PT8000-03

Listed Models: /

Ratings.....: DC 13.6V

Frequency Range: 438 MHz -490 MHz

Result.....: **Positive**

M P E T E S T R E P O R T

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Model /Type : PT8000-03

Listed Models : /

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The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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1. Measurement Uncertainty

The information below presents an estimate of the possible errors that are associated with the measurement system.

<u>Description</u>	<u>Error</u>
NARDA Survey Meter	± 3%
Repeatability Accuracy	± 7%

2. Method of measurement

2.1. EME measurements made on trunk mounted antennas

2.1.1. External vehicle EME measurement

(Antenna mounted in trunk center)

With the survey meter and probe, take ten (10) measurements, at the standard test distance of 60 cm to the antenna, from the back of the vehicle in a vertical line and then average the results. These measurements are taken and recorded at every twenty (20) centimeters over a range starting at twenty (20) centimeters above ground and ending at 2.0 meters.

2.1.2. Internal vehicle EME measurement

(Antenna mounted in trunk center)

While rotating survey meter probe through 180 degrees to ensure that the highest level is found, scan the inside of the vehicle, both front and back seating areas, for the highest level in each location. After the highest level is found, scan vertically making two (2) additional measurements within an area approximately 40 cm wide (representing the width of a person) so as to have a total of three (3) measured points as indicated below that will be averaged

- a) Head area
- b) Chest area
- c) Lower Trunk area

2.2. EME measurements made on center roof mounted antennas

2.2.1. External vehicle EME measurement

With the survey meter and probe, take ten (10) measurements, at the standard test distance of 110 cm from the vehicle-mounted antenna, in a vertical line and then average the results. These measurements are taken and recorded at every twenty (20) centimeters over a range starting at twenty (20) centimeters above ground and ending at 2.0 meters; this would be representative of a person standing next to a vehicle during a mobile radio transmission.

2.2.2. Internal vehicle EME measurement

While rotating survey meter probe through 180 degrees to ensure that the highest level is found, scan the inside of the vehicle, both front and back seating areas, for the highest level in each location. After the highest level is found, scan vertically making two (2) additional measurements within an area approximately 40 cm wide (representing the width of a person) so as to have a total of three (3) measured points as indicated below that will be averaged.

- a) Head area
- b) Chest area
- c) Lower Trunk area

3. Test Result

Measurement Information			
Measurement Freq.(MHz)	438.000	464.000	490.000
Raw Data Power(W)	25.7	26.9	19.5
Controlled Limit	1.	1.	1.
Uncontrolled Limit	0.	0.	0.
Cal.	1	1	1
Antenna / gain(dBi)	Whip / 0	Whip / 0	Whip / 0
External Vehicle Power Density(50%	average over body/2		
Internal Vehicle Power Density(50%	average over (head/chest/leg)/2		

External Vehicle MPE Assessment at 438.000 MHz						
Antenna Location	Antenna/ gain	Meas. Distance (cm)	E/H Field	Calibration Factor	Average Over Body	Pwr. Density (mW/cm ²)
Trunk	Whip / 0	60	E	1	0.114	0.057
Measurement grid						
Test position	Height (cm)	% of controlled limit	Test position	Height(cm)	% of controlled limit	
1	20	4	6	120	15	
2	40	7	7	140	18	
3	60	8	8	160	16	
4	80	6	9	180	10	
5	100	10	10	200	7	

External Vehicle MPE Assessment at 464.000 MHz						
Antenna Location	Antenna/ gain	Meas. Distance (cm)	E/H Field	Calibration Factor	Average Over Body	Pwr. Density (mW/cm ²)
Trunk	Whip / 0	60	E	1	0.118	0.059
Measurement grid						
Test position	Height (cm)	% of controlled limit	Test position	Height(cm)	% of controlled limit	
1	20	5	6	120	14	
2	40	7	7	140	19	
3	60	9	8	160	15	
4	80	7	9	180	10	
5	100	11	10	200	8	

External Vehicle MPE Assessment at 490.000 MHz						
Antenna Location	Antenna/gain	Meas. Distance (cm)	E/H Field	Calibration Factor	Average Over Body	Pwr. Density (mW/cm ²)
Trunk	Whip / 0	60	E	1	0.106	0.053
Measurement grid						
Test position	Height (cm)	% of controlled limit	Test position	Height(cm)	% of controlled limit	
1	20	4	6	120	10	
2	40	5	7	140	14	
3	60	7	8	160	12	
4	80	8	9	180	7	
5	100	6	10	200	4	

External Vehicle MPE Assessment at 438.000 MHz						
Antenna Location	Antenna/gain	Meas. Distance (cm)	E/H Field	Calibration Factor	Average Over Body	Pwr. Density (mW/cm ²)
Roof	Whip / 0	110	E	1	0.060	0.030
Measurement grid						
Test position	Height (cm)	% of controlled limit	Test position	Height(cm)	% of controlled limit	
1	20	3	6	120	8	
2	40	5	7	140	8	
3	60	5	8	160	7	
4	80	7	9	180	6	
5	100	6	10	200	4	

Internal Vehicle MPE Assessment at 438.000 MHz						
Antenna Location	Antenna/gain	Meas. Distance (cm)	E/H Field	Calibration Factor	Average over Head,Chest,Leg Back/Front Seats (mW/cm ²)	Pwr. Density of Higher Level (mW/cm ²)
Trunk	Whip / 0	Highest Reading	E	1	0.040/0.008	0.020/0.004
Measurement grid						
Test position	% of controlled limit Head		% of controlled limit Ches		% of controlled limit Leg	
Back Seat	6		3		1	
Front Seat	4		2		1	

Internal Vehicle MPE Assessment at 464.000 MHz						
Antenna Location	Antenna/gain	Meas. Distance (cm)	E/H Field	Calibration Factor	Average over Head,Chest,Leg Back/Front Seats	Pwr. Density of Higher Level
Trunk	Whip / 0	Highest Reading	E	1	0.044/0.010	0.022/0.005
Measurement grid						
Test position	% of controlled limit Head		% of controlled limit Ches		% of controlled limit Leg	
Back Seat	7		4		1	
Front Seat	5		3		1	

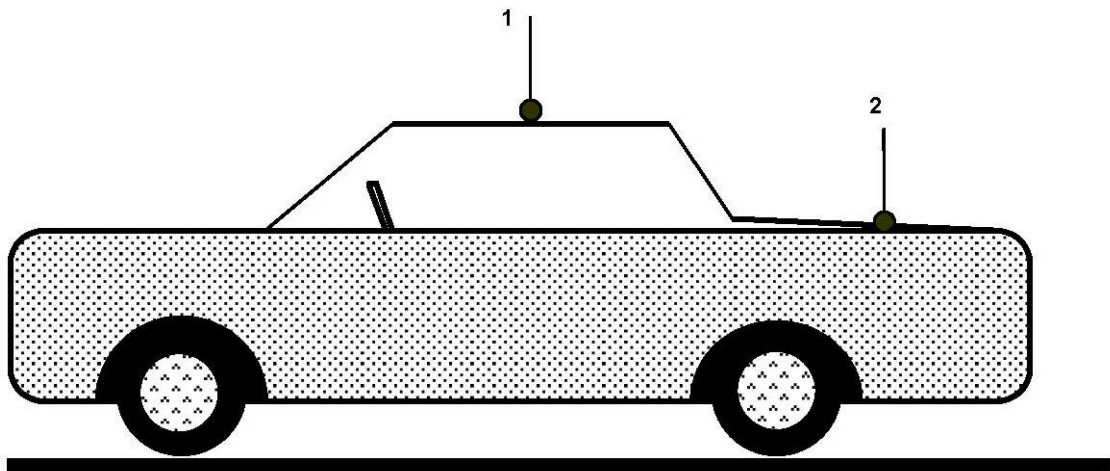
Internal Vehicle MPE Assessment at 490.000 MHz						
Antenna Location	Antenna/gain	Meas. Distance (cm)	E/H Field	Calibration Factor	Average over Head,Chest,Leg Back/Front Seats (mW/cm^2)	Pwr. Density of Higher Level (mW/cm^2)
Trunk	Whip / 0	Highest Reading	E	1	0.032/0.006	0.016/0.003
Measurement grid						
Test position	% of controlled limit Head		% of controlled limit Ches		% of controlled limit Leg	
Back Seat	5		3		1	
Front Seat	4		3		1	

Internal Vehicle MPE Assessment at 490.000 MHz						
Antenna Location	Antenna/gain	Meas. Distance (cm)	E/H Field	Calibration Factor	Average over Head,Chest,Leg Back/Front Seats	Pwr. Density of Higher Level
Roof	Whip / 0	Highest Reading	E	1	0.028/0.005	0.014/0.003
Measurement grid						
Test position	% of controlled limit Head		% of controlled limit Ches		% of controlled limit Leg	
Back Seat	4		2		1	
Front Seat	3		2		1	

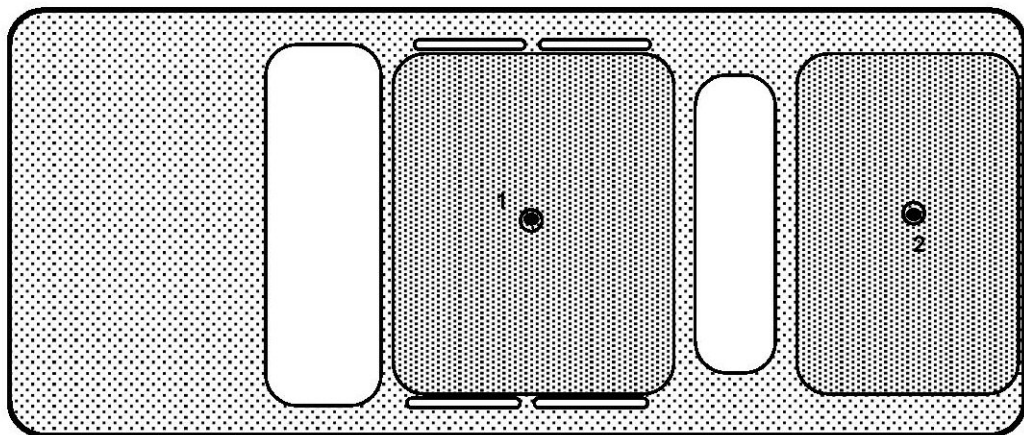
4. Conclusion

The measurement results comply with the FCC Limit Per 47 CFR 2.1091 (b) for the controlled RF Exposure.

5. Antenna Location Drawing



- 1 - Roof (center)
- 2 - Trunk (center)



.....End of Report.....