

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #707

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 60 %

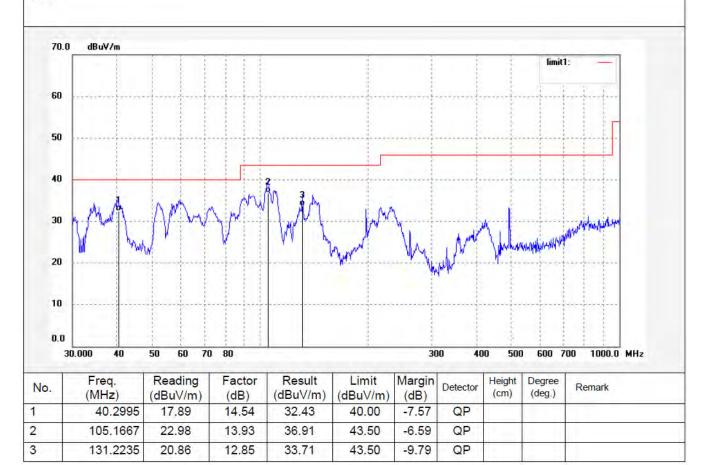
EUT: MIRABOX

Mode: TX 2452MHz(802.11n)(40MHz)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/01/12/ Time: 8/41/59 Engineer Signature: Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #733 Standard: FCC PK

Test item: Radiation Test
Temp.( C)/Hum.(%) 26 C / 60 %

EUT: MIRABOX

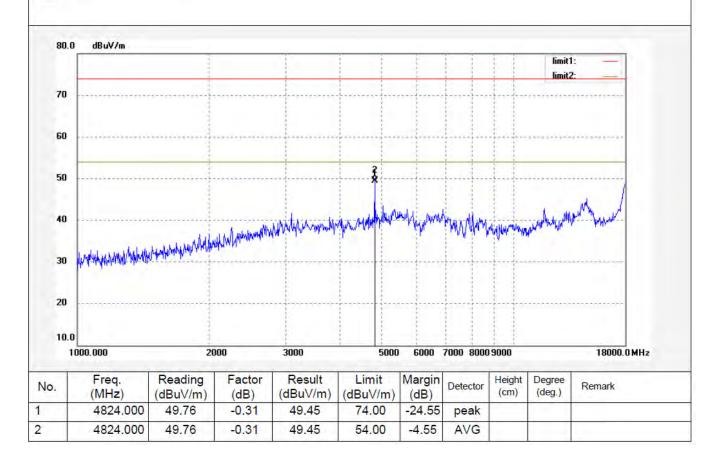
Mode: TX 2412MHz(802.11b)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/1/6/ Time: 9/07/19 Engineer Signature:

Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

18000.0 MHz

Job No.: ALEN #734 Standard: FCC PK

Test item: Radiation Test
Temp.( C)/Hum.(%) 26 C / 60 %

EUT: MIRABOX

Mode: TX 2412MHz(802.11b)

Model: 003-MBX001 Manufacturer: Globalscale

Note:

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Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/1/6/ Time: 9/07/38 Engineer Signature:

Distance: 3m

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2	4824.000	45.61	-0.31	45.30	54.00	-8.70	AVG			, -	

3000

2000



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Job No.: ALEN #735 Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 60 %

EUT: MIRABOX

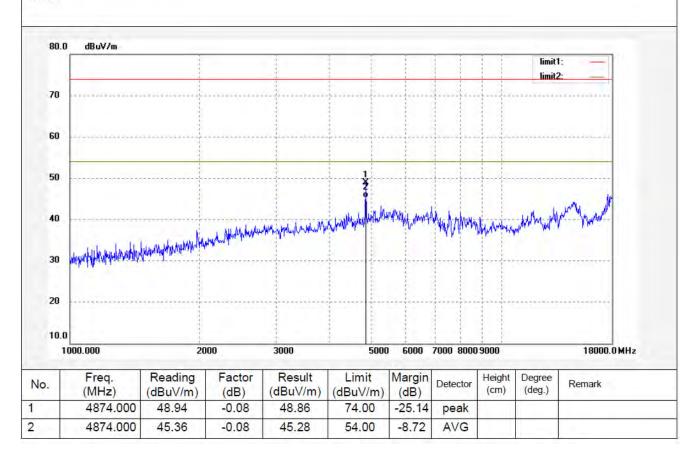
Mode: TX 2437MHz(802.11b)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/1/6/ Time: 9/08/01 Engineer Signature:

Distance: 3m





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Job No.: ALEN #736 Standard: FCC PK Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 60 %

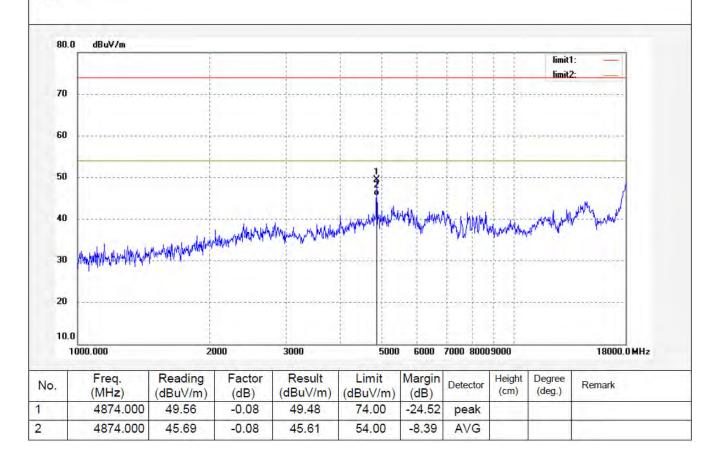
EUT: MIRABOX

Mode: TX 2437MHz(802.11b)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/1/6/
Time: 9/08/28
Engineer Signature:
Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #737 Standard: FCC PK

Test item: Radiation Test
Temp.( C)/Hum.(%) 26 C / 60 %

EUT: MIRABOX

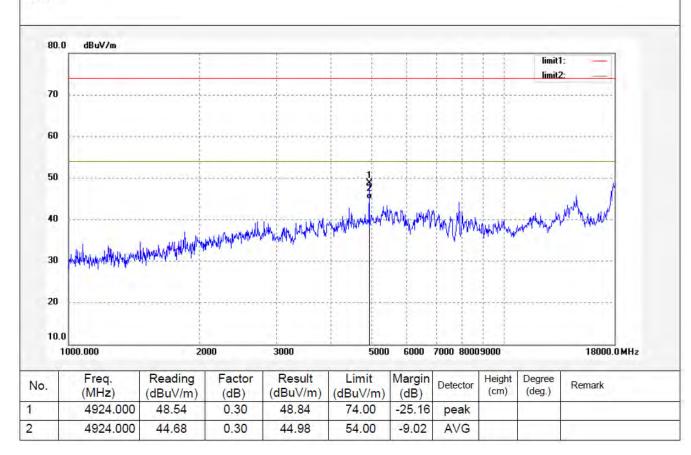
Mode: TX 2462MHz(802.11b)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/1/6/ Time: 9/08/43 Engineer Signature:

Distance: 3m





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Job No.: ALEN #738 Standard: FCC PK

Test item: Radiation Test
Temp.( C)/Hum.(%) 26 C / 60 %

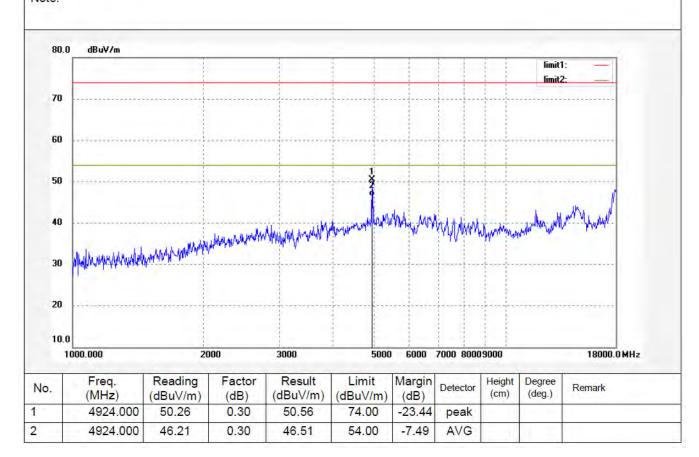
EUT: MIRABOX

Mode: TX 2462MHz(802.11b)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/1/6/ Time: 9/09/03 Engineer Signature: Distance: 3m





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Job No.: ALEN #731 Standard: FCC PK Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 60 %

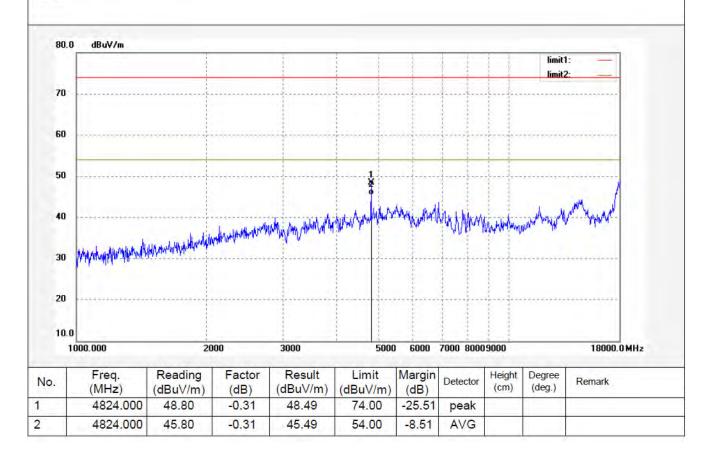
EUT: MIRABOX

Mode: TX 2412MHz(802.11g)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/1/6/ Time: 9/06/37 Engineer Signature: Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #732 Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 60 %

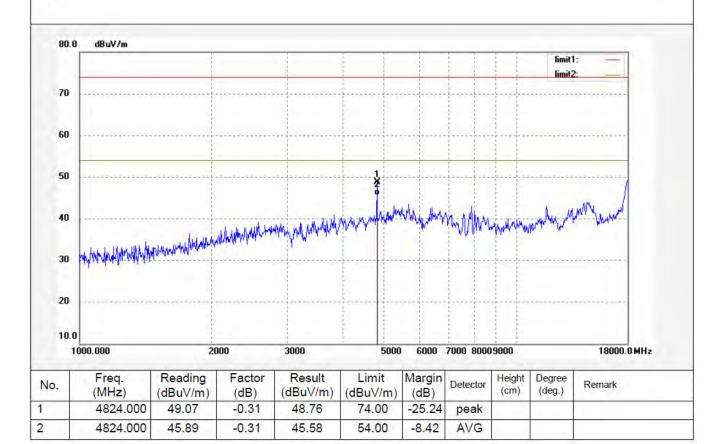
EUT: MIRABOX

Mode: TX 2412MHz(802.11g)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/1/6/ Time: 9/06/57 Engineer Signature: Distance: 3m





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Job No.: ALEN #730 Standard: FCC PK

Test item: Radiation Test
Temp.( C)/Hum.(%) 26 C / 60 %

EUT: MIRABOX

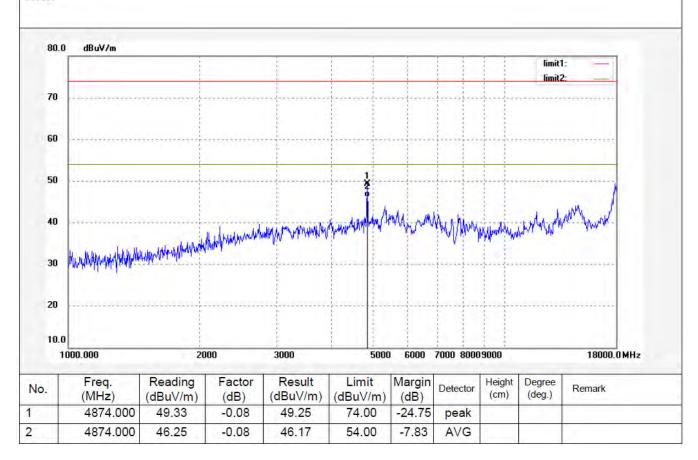
Mode: TX 2437MHz(802.11g)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/1/6/ Time: 9/06/13 Engineer Signature:

Distance: 3m





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Job No.: ALEN #729 Standard: FCC PK Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 60 %

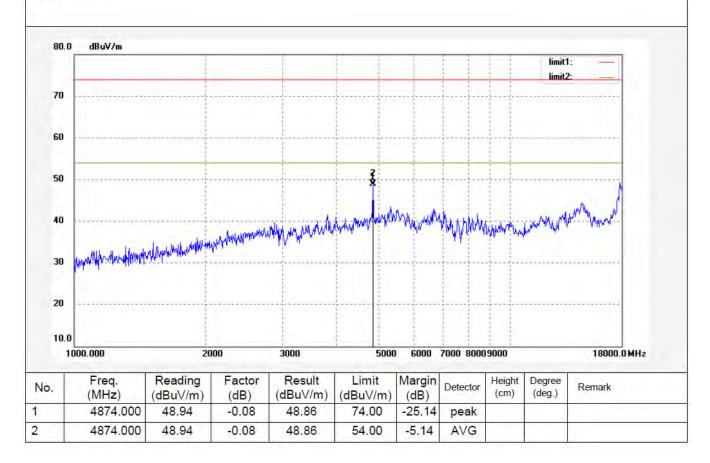
EUT: MIRABOX

Mode: TX 2437MHz(802.11g)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/1/6/ Time: 9/05/51 Engineer Signature: Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #728 Standard: FCC PK

Test item: Radiation Test
Temp.( C)/Hum.(%) 26 C / 60 %

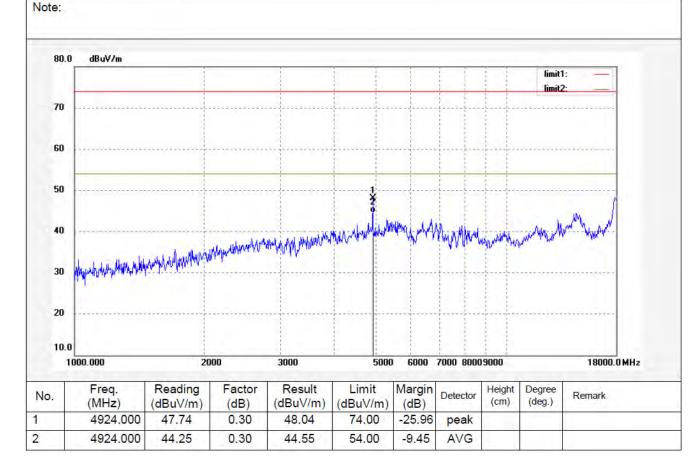
EUT: MIRABOX

Mode: TX 2462MHz(802.11g)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/1/6/ Time: 9/05/32 Engineer Signature: Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #727 Standard: FCC PK

Test item: Radiation Test
Temp.( C)/Hum.(%) 26 C / 60 %

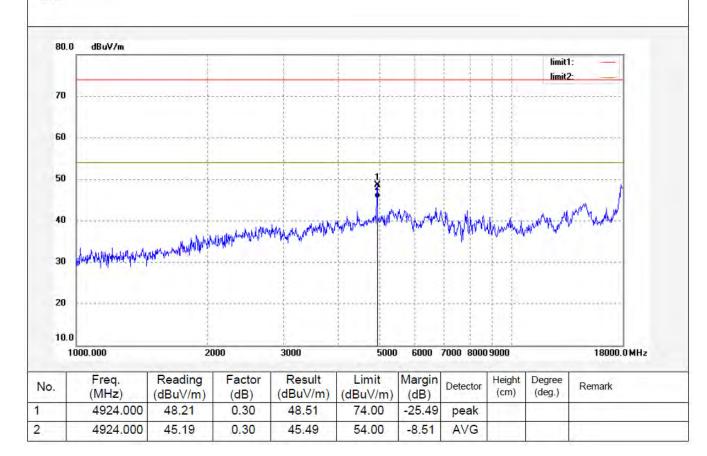
EUT: MIRABOX

Mode: TX 2462MHz(802.11g)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/1/6/ Time: 9/05/17 Engineer Signature: Distance: 3m





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Job No.: ALEN #726 Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 60 %

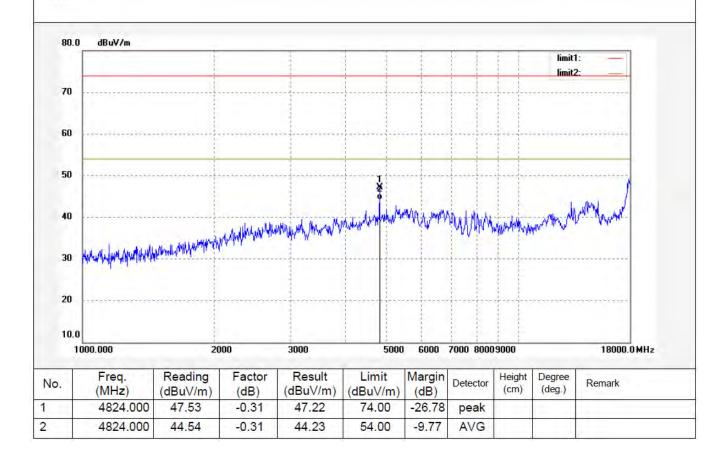
EUT: MIRABOX

Mode: TX 2412MHz(802.11n)(20MHz)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/1/6/
Time: 9/04/53
Engineer Signature:
Distance: 3m





F1, Bldg, A, Changyuan New Material Port Keyuan Rd, Science & Industry Park, Nanshan Shenzhen, P.R. China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #725 Standard: FCC PK

Test item: Radiation Test Temp.( C)/Hum.(%) 26 C / 60 % **MIRABOX** 

Mode: TX 2412MHz(802.11n)(20MHz)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Horizontal

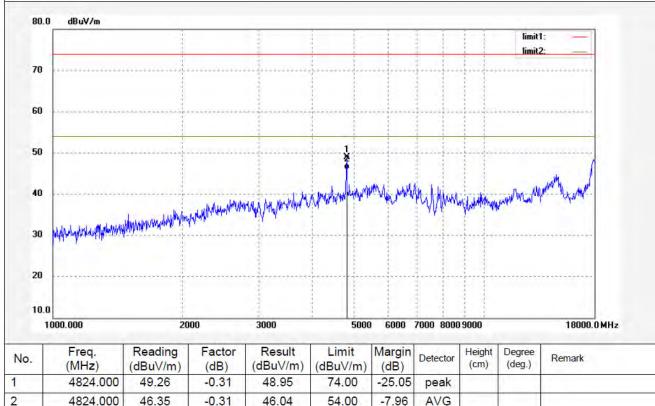
Power Source: AC 120V/60Hz

Date: 13/1/6/ Time: 9/04/30 Engineer Signature:

Distance: 3m

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F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #724 Standard: FCC PK

Test item: Radiation Test
Temp.( C)/Hum.(%) 26 C / 60 %

EUT: MIRABOX

Mode: TX 2437MHz(802.11n)(20MHz)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/1/6/ Time: 9/04/08 Engineer Signature: Distance: 3m

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F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #723 Standard: FCC PK

Test item: Radiation Test
Temp.( C)/Hum.(%) 26 C / 60 %

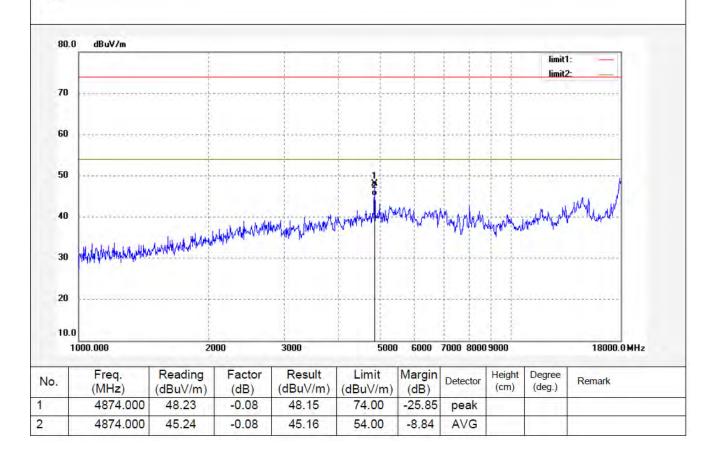
EUT: MIRABOX

Mode: TX 2437MHz(802.11n)(20MHz)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/1/6/ Time: 9/03/39 Engineer Signature: Distance: 3m





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Job No.: ALEN #722 Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 60 %

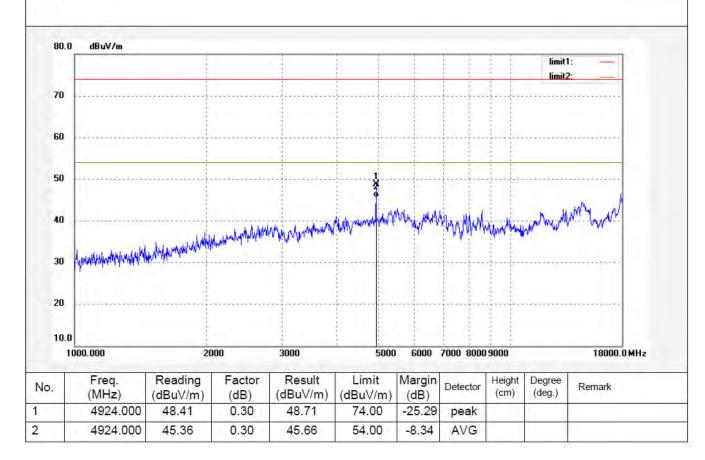
EUT: MIRABOX

Mode: TX 2462MHz(802.11n)(20MHz)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/1/6/ Time: 9/03/20 Engineer Signature: Distance: 3m





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Job No.: ALEN #721 Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 60 %

EUT: MIRABOX

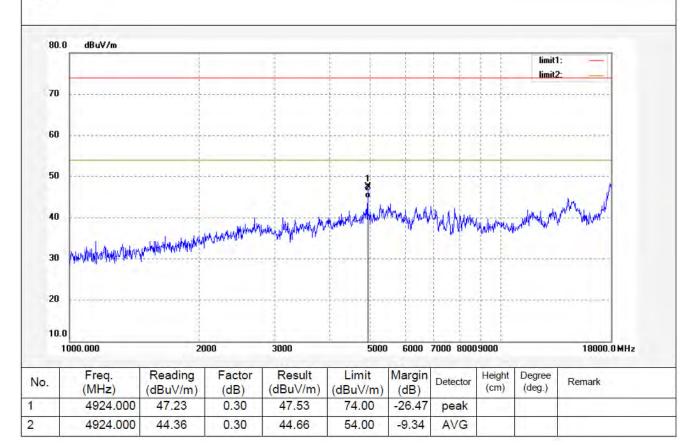
Mode: TX 2462MHz(802.11n)(20MHz)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/1/6/ Time: 8/59/50 Engineer Signature:

Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #715 Standard: FCC PK

Test item: Radiation Test
Temp.( C)/Hum.(%) 26 C / 60 %

EUT: MIRABOX

Mode: TX 2422MHz(802.11n)(40MHz)

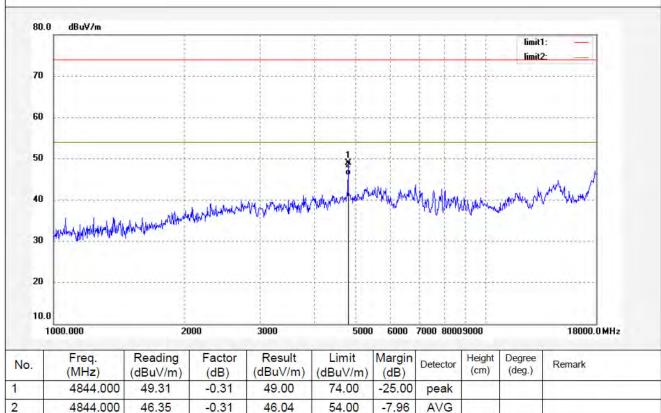
Model: 003-MBX001 Manufacturer: Globalscale Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/1/6/ Time: 8/57/31 Engineer Signature:

Distance: 3m

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F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #716 Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 60 %

EUT: **MIRABOX** 

Mode: TX 2422MHz(802.11n)(40MHz)

Model: 003-MBX001 Manufacturer: Globalscale

Note:

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/1/6/ Time: 8/57/54 Engineer Signature:

Distance: 3m

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20	0		g-1851451			0 6000 Margin (dB)	7000 8000 Detector	9000 Height (cm)	Degree (deg.)	18000.0 MHz
20	0 1000.000 Freq.	200 Reading	00 Factor	3000 Result	5000	Margin		Height	Degree (deg.)	



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #717 Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 60 %

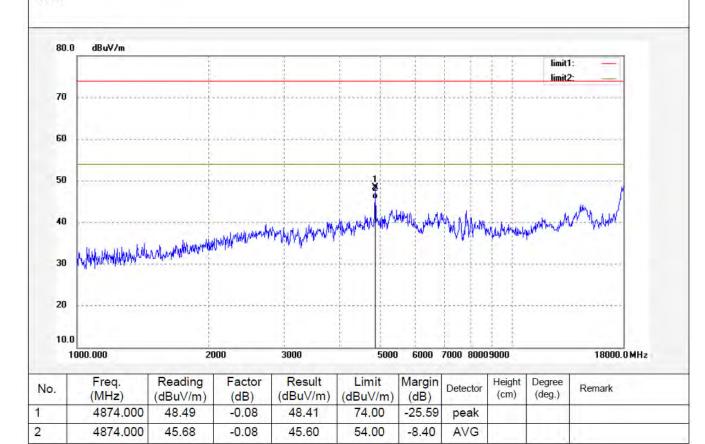
EUT: MIRABOX

Mode: TX 2437MHz(802.11n)(40MHz)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/1/6/ Time: 8/58/14 Engineer Signature: Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #718 Standard: FCC PK

Test item: Radiation Test
Temp.( C)/Hum.(%) 26 C / 60 %

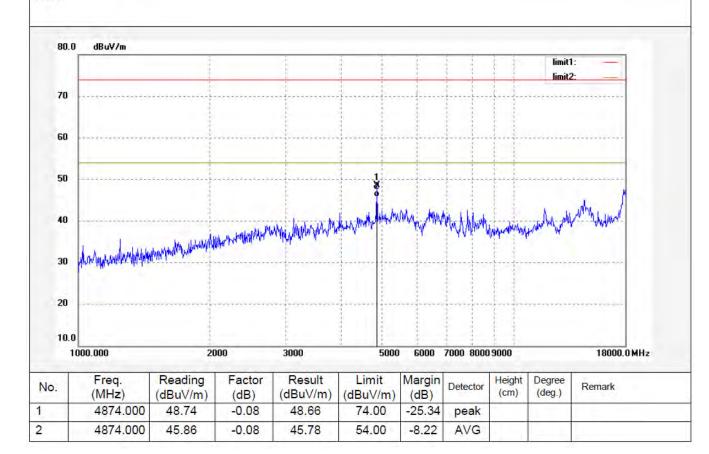
EUT: MIRABOX

Mode: TX 2437MHz(802.11n)(40MHz)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/1/6/ Time: 8/58/41 Engineer Signature: Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park, Nanshan Shenzhen, P.R. China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #719 Standard: FCC PK

Test item: Radiation Test Temp.( C)/Hum.(%) 26 C / 60 %

EUT: **MIRABOX** 

Mode: TX 2452MHz(802.11n)(40MHz)

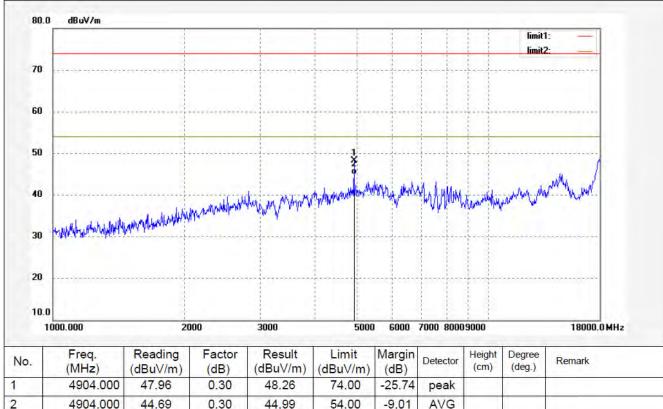
Model: 003-MBX001 Manufacturer: Globalscale Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/1/6/ Time: 8/59/11 Engineer Signature:

Distance: 3m

Note:



FCC ID: YCJ003-MBX001



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #720 Standard: FCC PK

Test item: Radiation Test
Temp.( C)/Hum.(%) 26 C / 60 %

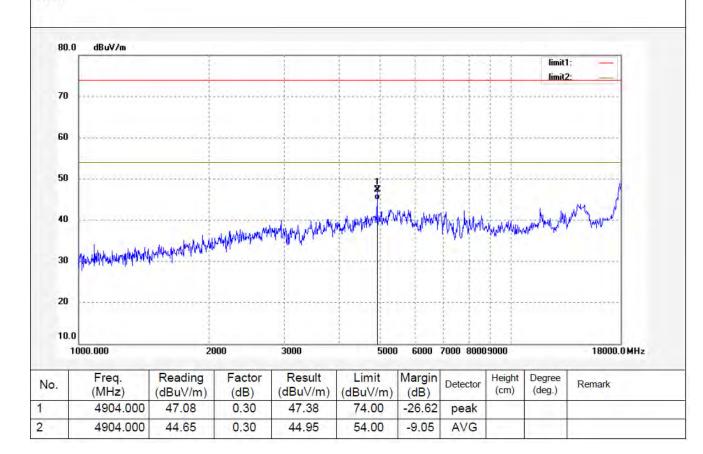
EUT: MIRABOX

Mode: TX 2452MHz(802.11n)(40MHz)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/1/6/ Time: 8/59/29 Engineer Signature: Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #670 Standard: FCC 15C

Test item: Radiation Test
Temp.( C)/Hum.(%) 25 C / 50 %

EUT: MIRABOX

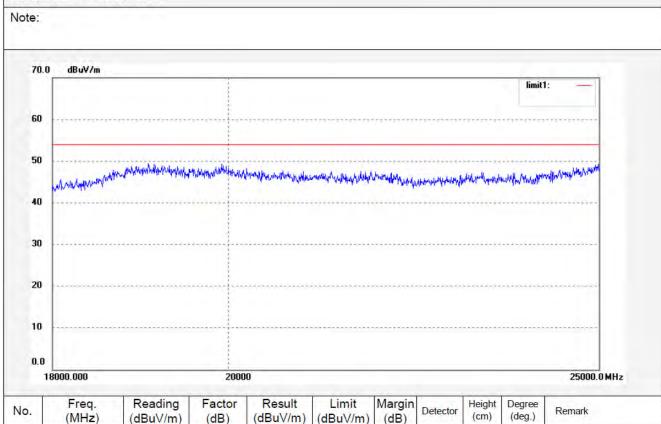
Mode: TX Channel 1 (802.11b)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/1/5/ Time: 11:07:15 Engineer Signature:

Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #671 Standard: FCC 15C

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 50 %

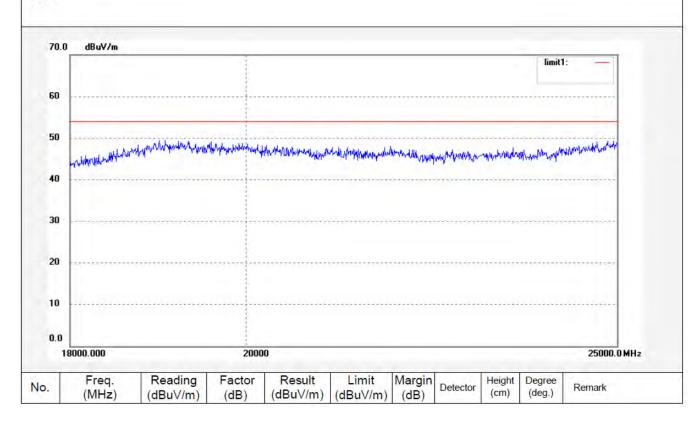
EUT: MIRABOX

Mode: TX Channel 1 (802.11b)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/1/5/ Time: 11:09:22 Engineer Signature: Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #672 Standard: FCC 15C

Test item: Radiation Test
Temp.( C)/Hum.(%) 25 C / 50 %

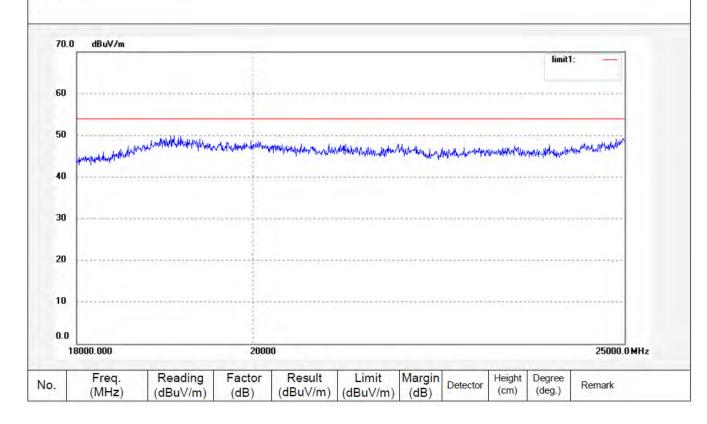
EUT: MIRABOX

Mode: TX Channel 6 (802.11b)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/1/5/
Time: 11:14:45
Engineer Signature:
Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #673 Standard: FCC 15C

Test item: Radiation Test
Temp.( C)/Hum.(%) 25 C / 50 %

EUT: MIRABOX

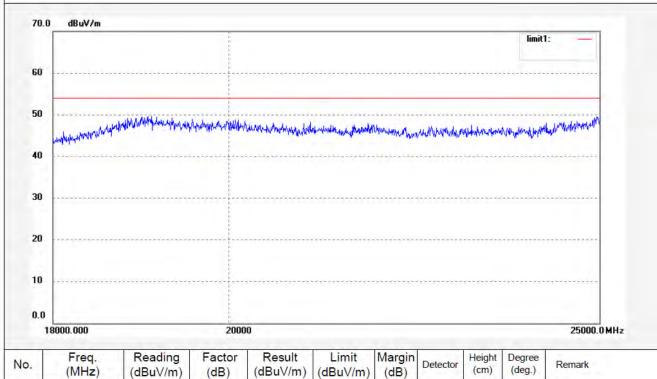
Mode: TX Channel 6 (802.11b)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/1/5/ Time: 11:18:36 Engineer Signature:

Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #674 Standard: FCC 15C Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 50 %

EUT: MIRABOX

Mode: TX Channel 11 (802.11b)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/1/5/ Time: 11:23:55 Engineer Signature:

Distance: 3m



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No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	

20

10



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN#675 Standard: FCC 15C

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 50 %

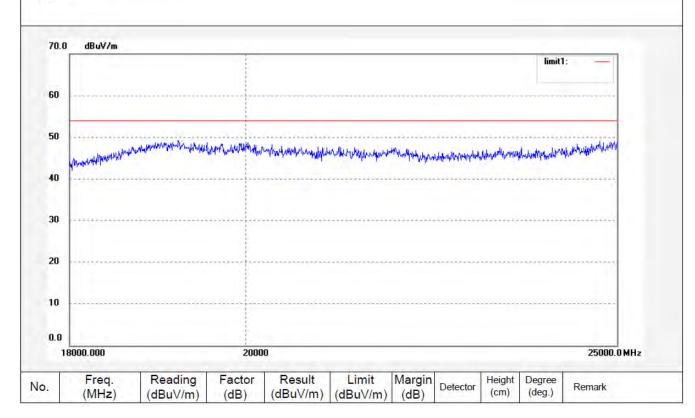
EUT: MIRABOX

Mode: TX Channel 11 (802.11b)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/1/5/ Time: 11:27:11 Engineer Signature: Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #676 Standard: FCC 15C

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 50 %

EUT: MIRABOX

Mode: TX Channel 1 (802.11g)

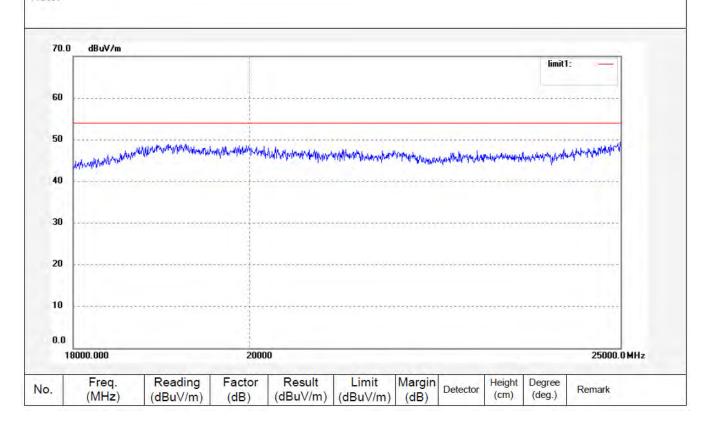
Model: 003-MBX001 Manufacturer: Globalscale Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/1/5/ Time: 11:32:05 Engineer Signature;

Distance: 3m







F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #677 Standard: FCC 15C Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 50 %

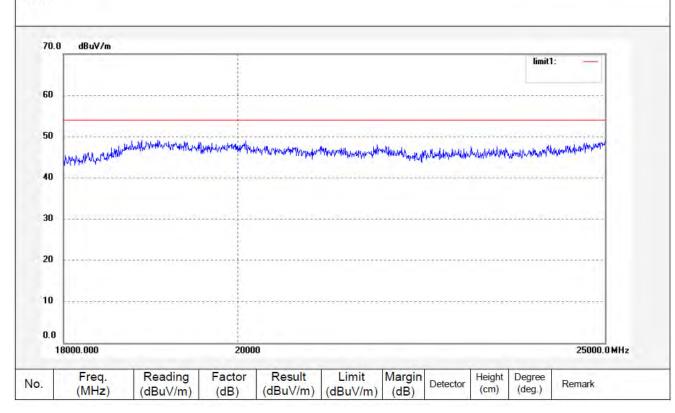
EUT: MIRABOX

Mode: TX Channel 1 (802.11g)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/1/5/ Time: 11:35:56 Engineer Signature: Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #678 Standard: FCC I5C

Test item: Radiation Test
Temp.( C)/Hum.(%) 25 C / 50 %

Temp.( C)/Hum.(%) 25 C/5

EUT: MIRABOX

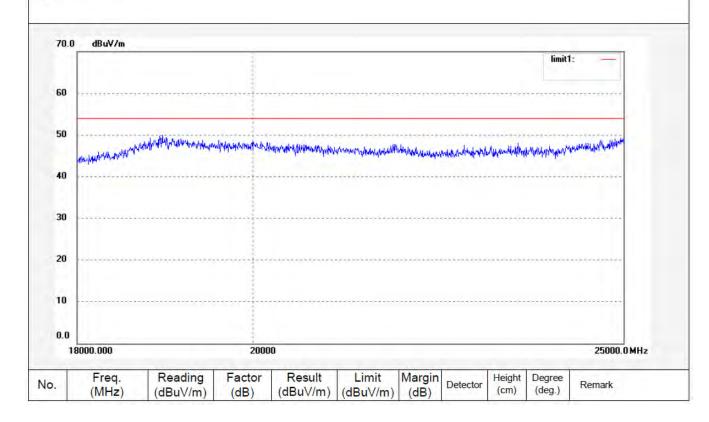
Mode: TX Channel 6 (802.11g)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/1/5/ Time: 11:38:38 Engineer Signature:

Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #679 Standard: FCC 15C

Test item: Radiation Test
Temp.( C)/Hum.(%) 25 C / 50 %

EUT: MIRABOX

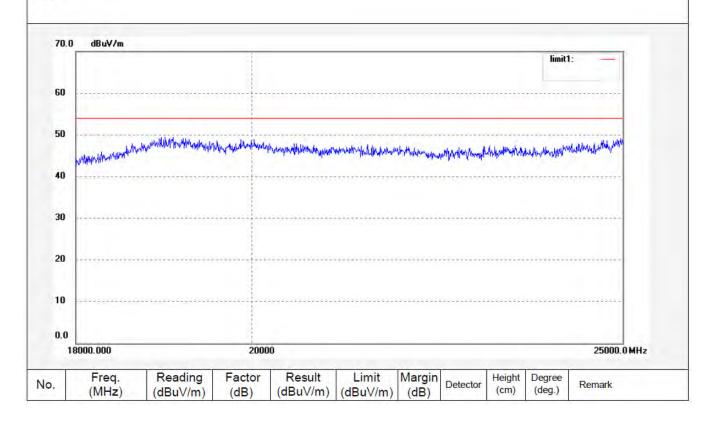
Mode: TX Channel 6 (802.11g)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/1/5/ Time: 11:43:17 Engineer Signature:

Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #680 Standard: FCC 15C

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 50 %

EUT: MIRABOX

Mode: TX Channel 11 (802.11g)

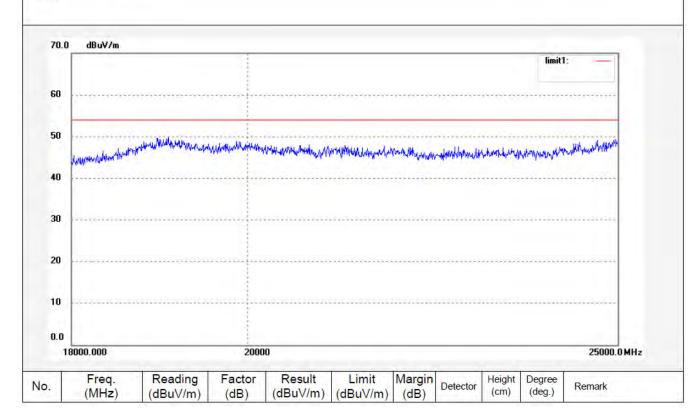
Model: 003-MBX001 Manufacturer: Globalscale Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/1/5/ Time: 11:47:55 Engineer Signature:

Distance: 3m







F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ALEN #681 Standard: FCC 15C Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 50 %

EUT: MIRABOX

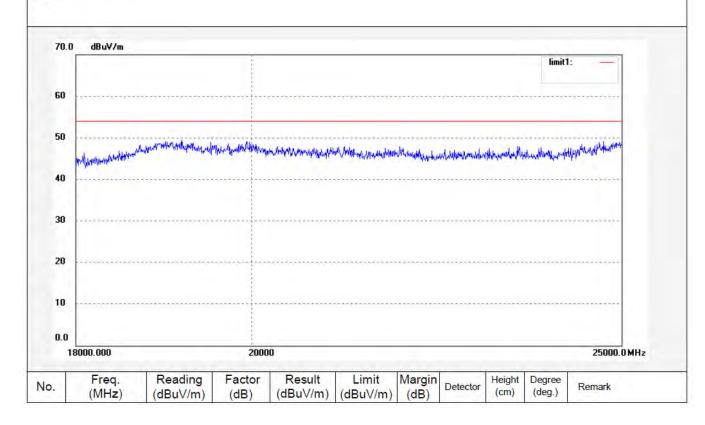
Mode: TX Channel 11 (802.11g)

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/1/5/ Time: 11:50:47 Engineer Signature: Distance: 3m

Note:





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park, Nanshan Shenzhen, P.R. China

Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Alen #682 Standard: FCC 15C

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 50 %

EUT: **MIRABOX** 

Mode: TX Channel 11 (802.11n)

Model: 003-MBX001 Manufacturer: Globalscale Vertical

Power Source: AC 120V/60Hz

Date: 13/1/5/ Time: 12:41:05 Engineer Signature:

Distance: 3m



(dBuV/m)

(dB)

(dB)



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Alen #683 Standard: FCC 15C

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 50 %

EUT: MIRABOX

Mode: TX Channel 11 (802.11n)

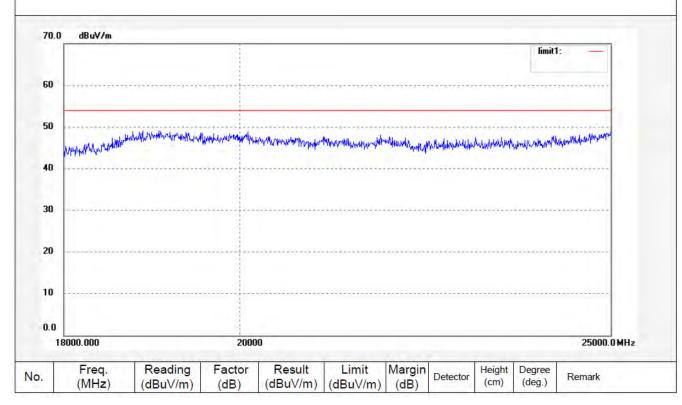
Model: 003-MBX001 Manufacturer: Globalscale Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/1/5/ Time: 12:42:56 Engineer Signature:

Distance: 3m







F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Alen #684 Standard: FCC 15C

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 50 %

EUT: MIRABOX

Mode: TX Channel 6 (802.11n)

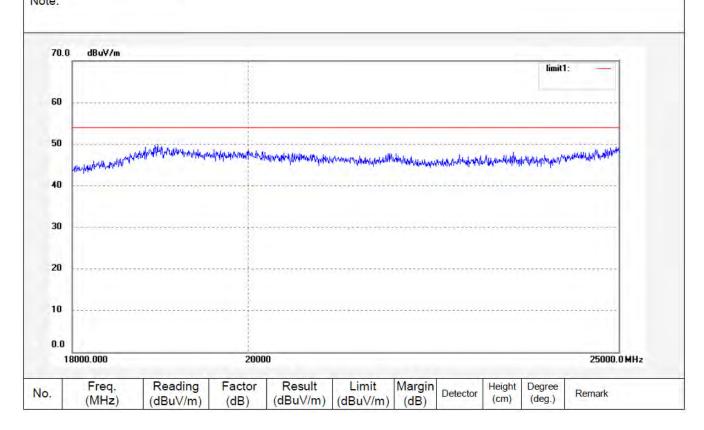
Model: 003-MBX001

Manufacturer: Globalscale

Polarization: Horizontal
Power Source: AC 120V/60Hz

Date: 13/1/5/ Time: 12:44:38 Engineer Signature: Distance: 3m

Note:





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Alen #685 Standard: FCC 15C

Test item: Radiation Test
Temp.( C)/Hum.(%) 25 C / 50 %

EUT: MIRABOX

Mode: TX Channel 6 (802.11n)

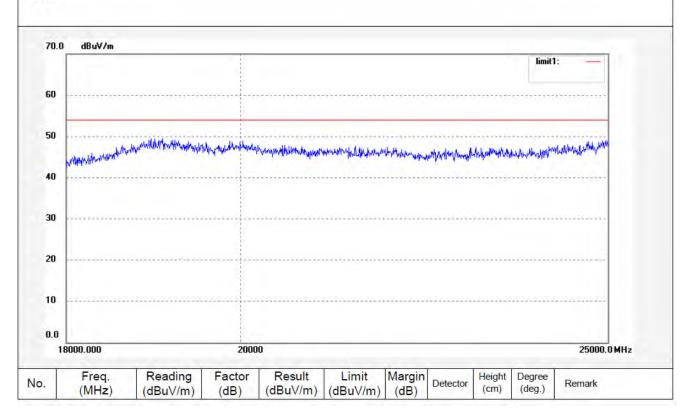
Model: 003-MBX001 Manufacturer: Globalscale Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/1/5/ Time: 12:45:42 Engineer Signature:

Distance: 3m







F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Alen #686 Standard: FCC 15C

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 50 %

EUT: MIRABOX

Mode: TX Channel 1 (802.11n)

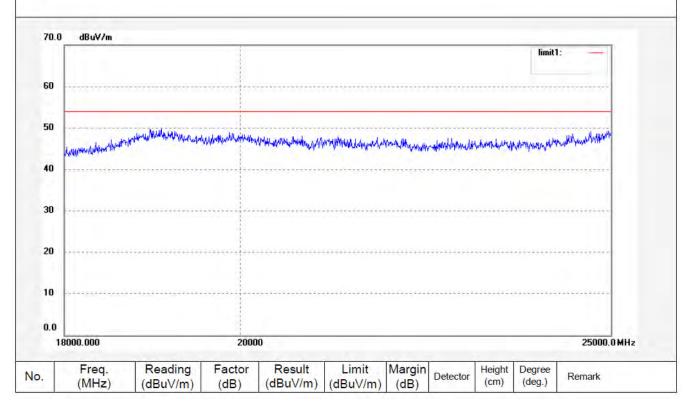
Model: 003-MBX001 Manufacturer: Globalscale Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/1/5/ Time: 12:48:59 Engineer Signature: Distance: 3m

003-MBX001

Note:





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park, Nanshan Shenzhen, P.R. China

Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Alen #687 Standard: FCC 15C Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 50 %

EUT: **MIRABOX** 

TX Channel 1 (802.11n) Mode:

Model: 003-MBX001 Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/1/5/ Time: 12:52:35

Engineer Signature: Alen

Distance: 3m



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F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Alen #688 Standard: FCC 15C

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 50 %

EUT: MIRABOX

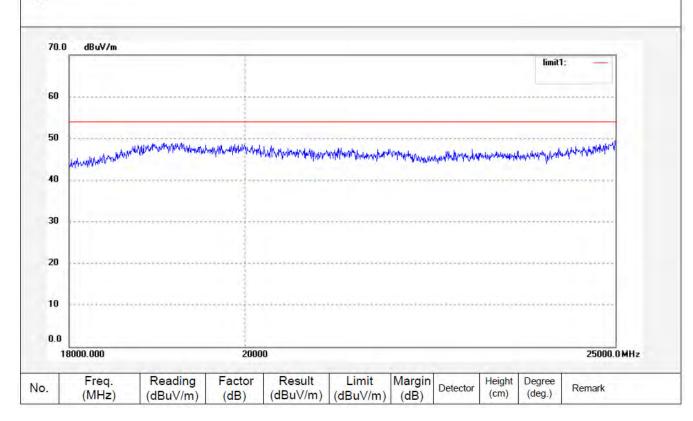
Mode: TX Channel 9 (802.11n)40MHz

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/1/5/ Time: 13:21:05 Engineer Signature: Distance: 3m

Note:





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Alen #689 Standard: FCC 15C

Test item: Radiation Test
Temp.( C)/Hum.(%) 25 C / 50 %

EUT: MIRABOX

Mode: TX Channel 9 (802.11n)40MHz

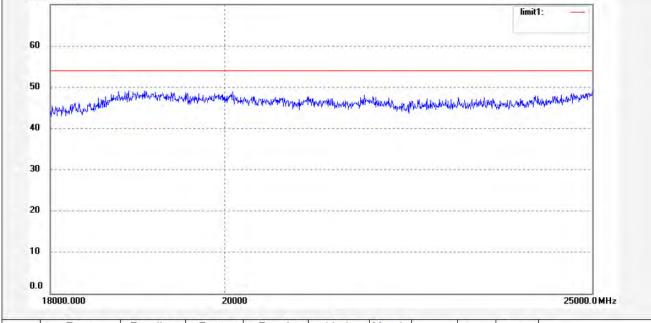
Model: 003-MBX001 Manufacturer: Globalscale Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/1/5/ Time: 13:22:56 Engineer Signature:

Distance: 3m







F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Alen #690 Standard: FCC 15C

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 50 %

EUT: MIRABOX

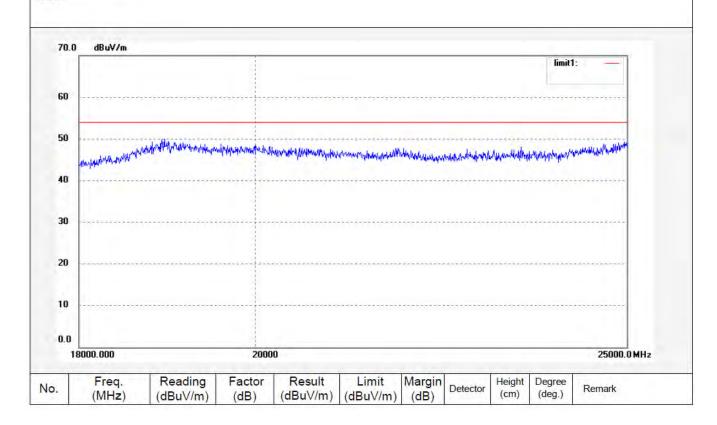
Mode: TX Channel 6 (802.11n)40MHz

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/1/5/ Time: 13:24:38 Engineer Signature: Distance: 3m

Note:





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Alen #691 Standard: FCC 15C

Test item: Radiation Test
Temp.( C)/Hum.(%) 25 C / 50 %

EUT: MIRABOX

Mode: TX Channel 6 (802.11n)40MHz

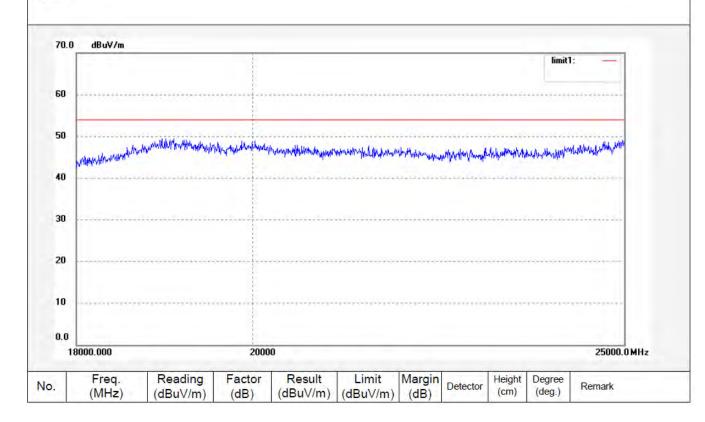
Model: 003-MBX001 Manufacturer: Globalscale Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/1/5/ Time: 13:25:42 Engineer Signature:

Distance: 3m







F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Alen #692 Standard: FCC 15C

Test item: Radiation Test
Temp.( C)/Hum.(%) 25 C / 50 %

EUT: MIRABOX

LUT. WIINABOX

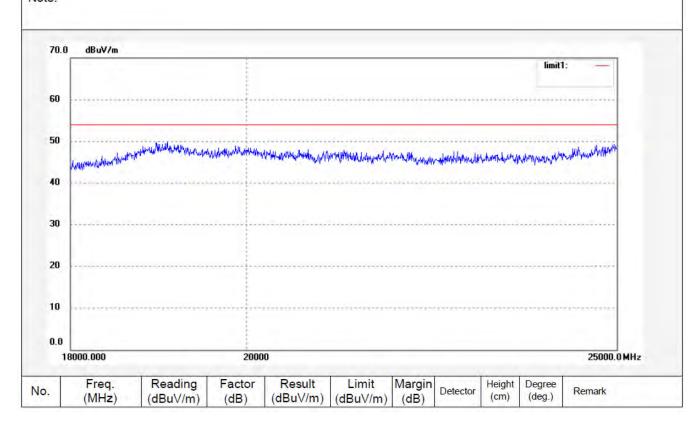
Mode: TX Channel 3 (802.11n)40MHz

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/1/5/ Time: 13:28:59 Engineer Signature: Distance: 3m

Note:





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Alen #693 Standard: FCC 15C Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 50 %

EUT: MIRABOX

Mode: TX Channel 3 (802.11n)40MHz

Model: 003-MBX001 Manufacturer: Globalscale Polarization: Horizontal

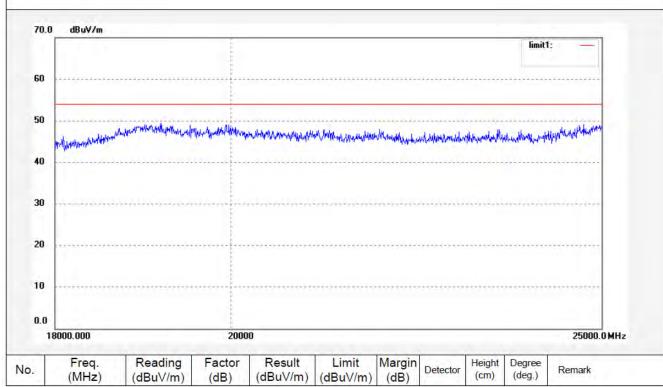
Power Source: AC 120V/60Hz

Date: 13/1/5/ Time: 13:32:35

Engineer Signature: Alen

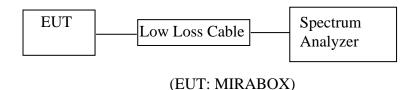
Distance: 3m





#### 10. CONDUCTED SPURIOUS EMISSION COMPLIANCE TEST

# 10.1.Block Diagram of Test Setup



#### 10.2. The Requirement For Section 15.247(d)

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

#### 10.3.EUT Configuration on Measurement

The following equipment is installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

#### 10.3.1. MIRABOX (EUT)

Model Number : 003-MBX001

Serial Number : N/A

Manufacturer : Globalscale Technologies INC

# 10.4. Operating Condition of EUT

- 10.4.1. Setup the EUT and simulator as shown as Section 10.1.
- 10.4.2.Turn on the power of all equipment.
- 10.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462 and 2422-2452MHz. We select 2412MHz, 2437MHz, 2462MHz and 2422MHz, 2437MHz, 2452MHz TX frequency to transmit.

#### 10.5.Test Procedure

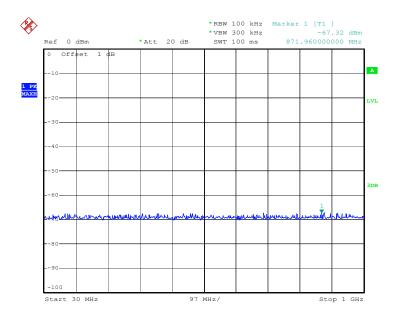
- 10.5.1. The transmitter output was connected to the spectrum analyzer via a low loss cable.
- 10.5.2.Set RBW of spectrum analyzer to 100 kHz and VBW to 300 kHz.
- 10.5.3. The Conducted Spurious Emission was measured and recorded.

#### 10.6.Test Result

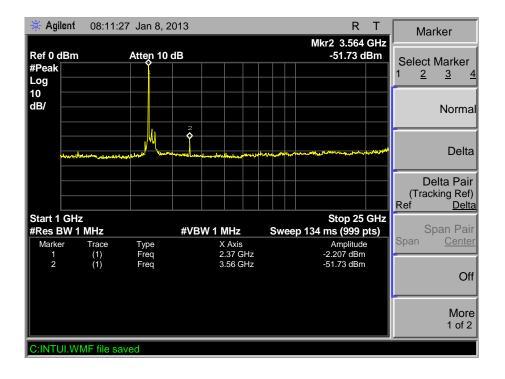
Pass.

The spectrum analyzer plots are attached as below.

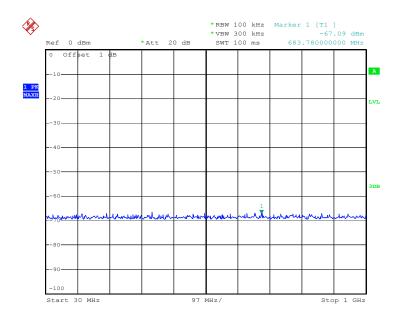
#### TX 802.11b Channel Low 2412MHz



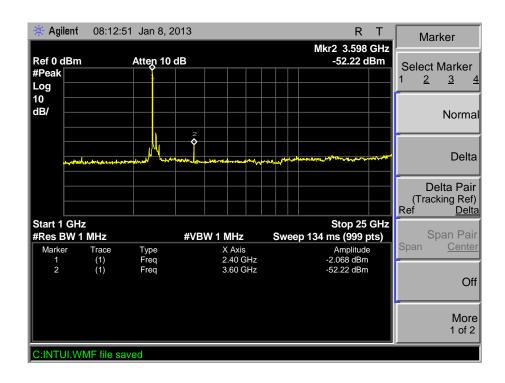
Date: 7.JAN.2013 17:28:38



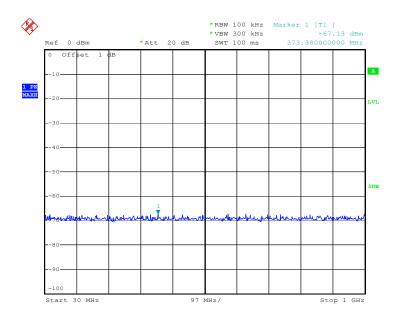
#### TX 802.11b Channel Middle 2437MHz



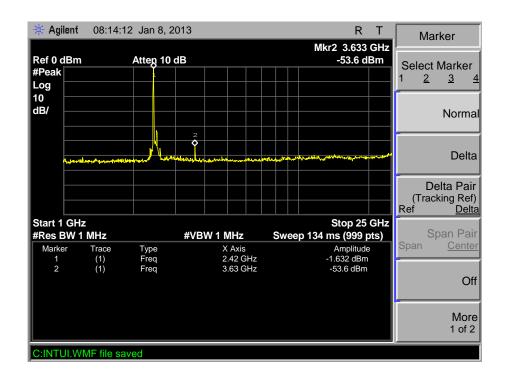
Date: 7.JAN.2013 17:25:42



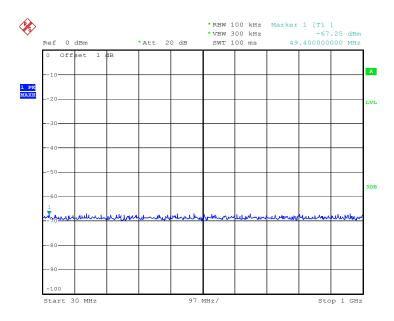
# TX 802.11b Channel High 2462MHz



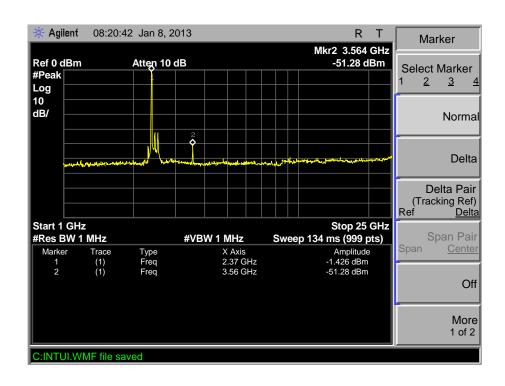
Date: 7.JAN.2013 17:26:55



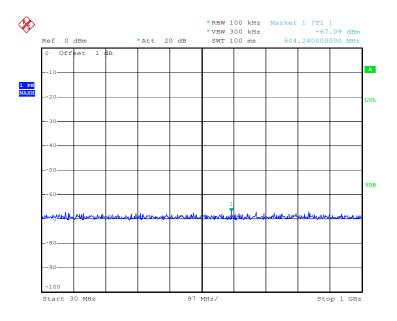
# TX 802.11g Channel Low 2412MHz



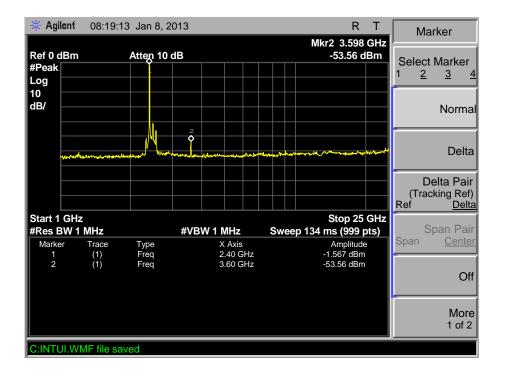
Date: 7.JAN.2013 17:30:17



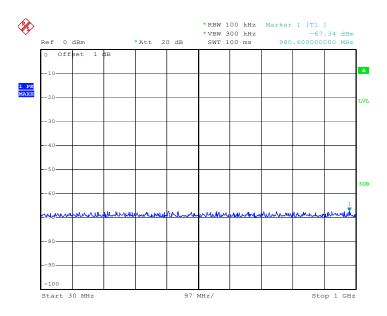
# TX 802.11g Channel Middle 2437MHz



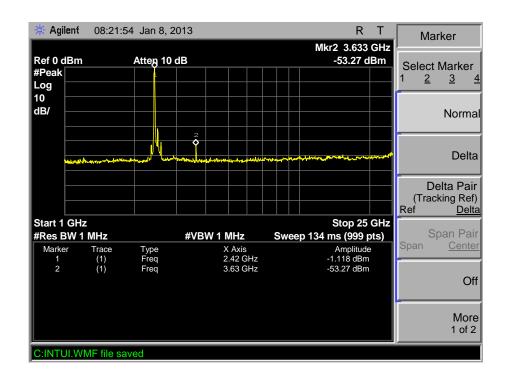
Date: 7.JAN.2013 17:29:03



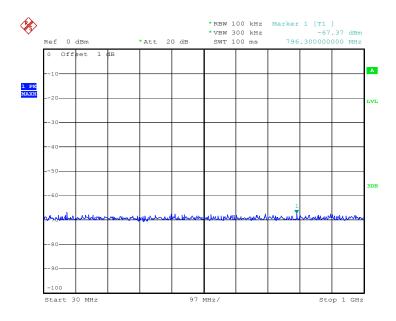
# TX 802.11g Channel High 2462MHz



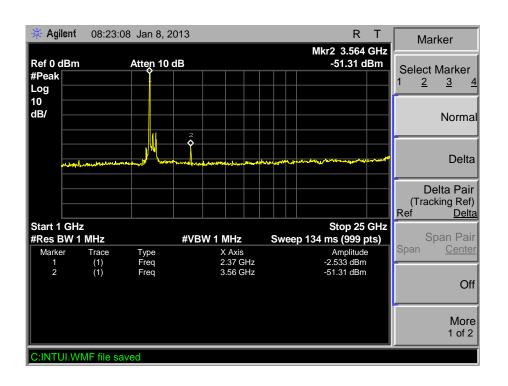
Date: 7.JAN.2013 17:27:56



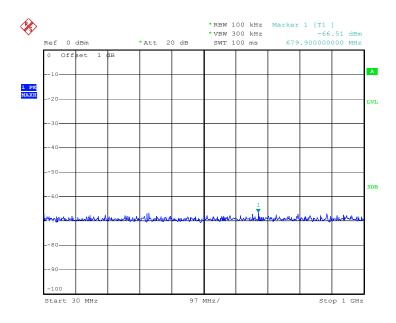
# TX 802.11n Channel Low 2412MHz (20MHz)



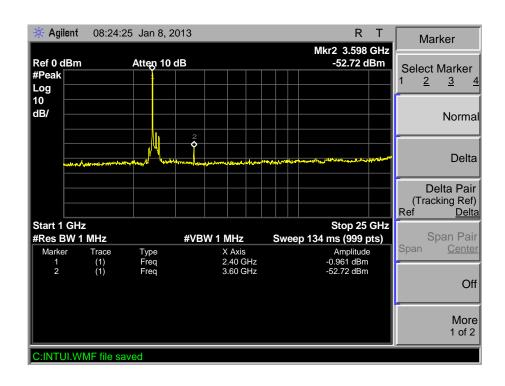
Date: 7.JAN.2013 17:31:35



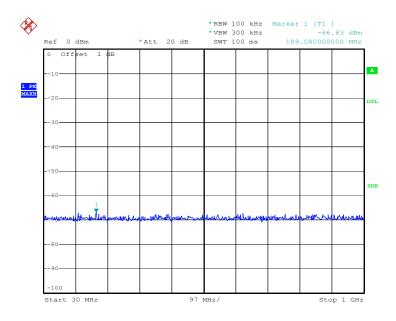
# TX 802.11n Channel Middle 2437MHz (20MHz)



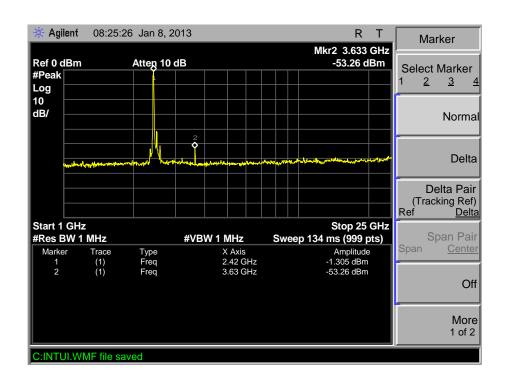
Date: 7.JAN.2013 17:31:08



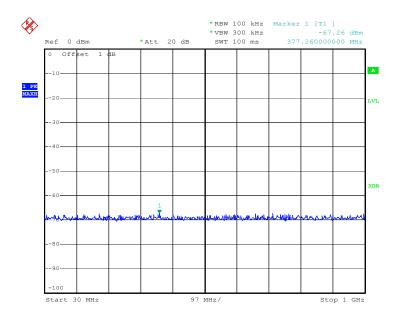
# **TX 802.11n Channel High 2462MHz (20MHz)**



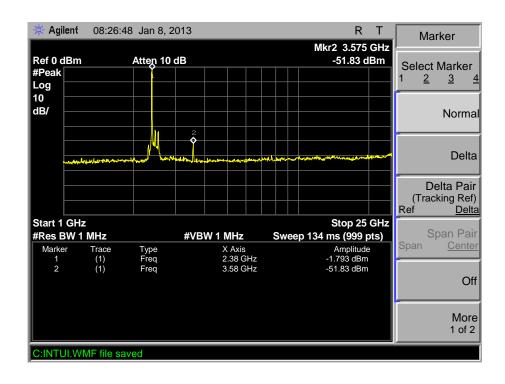
Date: 7.JAN.2013 17:30:41



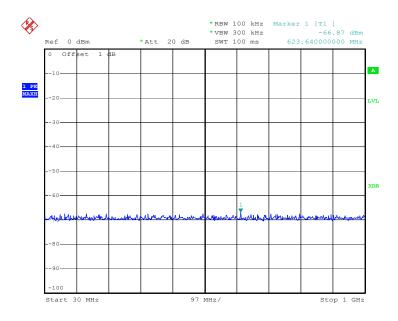
# **TX 802.11n Channel Low 2422MHz (40MHz)**



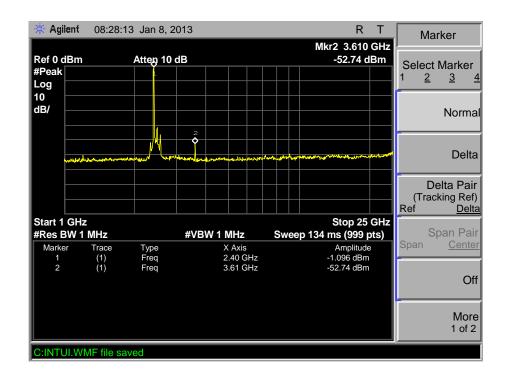
Date: 7.JAN.2013 17:33:00



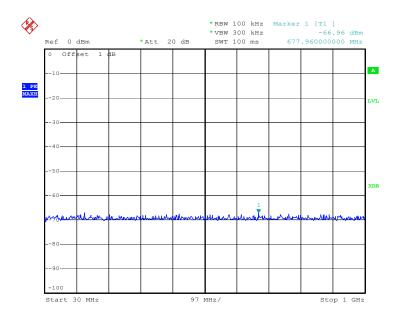
# TX 802.11n Channel Middle 2437MHz (40MHz)



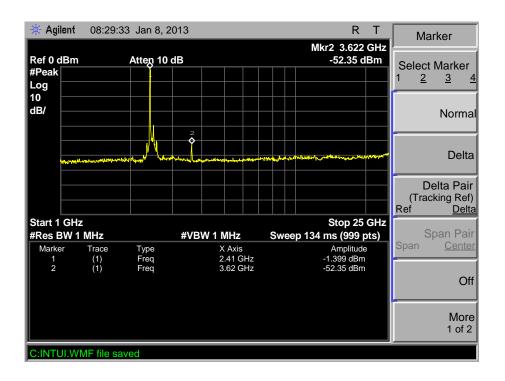
Date: 7.JAN.2013 17:32:31



# **TX 802.11n Channel High 2452MHz (40MHz)**



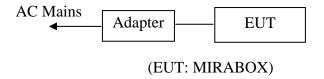
Date: 7.JAN.2013 17:31:59



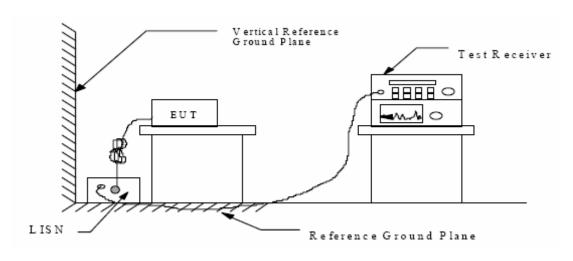
# 11.AC POWER LINE CONDUCTED EMISSION FOR FCC PART 15 SECTION 15.207(A)

# 11.1.Block Diagram of Test Setup

# 11.1.1.Block diagram of connection between the EUT and simulators



# 11.1.2.Shielding Room Test Setup Diagram



(EUT: MIRABOX)

#### 11.2. The Emission Limit

#### 11.2.1.Conducted Emission Measurement Limits According to Section 15.207(a)

Frequency	Limit dB(μV)				
(MHz)	Quasi-peak Level	Average Level			
0.15 - 0.50	66.0 - 56.0 *	56.0 – 46.0 *			
0.50 - 5.00	56.0	46.0			
5.00 - 30.00	60.0	50.0			

<sup>\*</sup> Decreases with the logarithm of the frequency.

# 11.3. Configuration of EUT on Measurement

The following equipment are installed on the Conducted Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

#### 11.3.1. MIRABOX (EUT)

Model Number : 003-MBX001

Serial Number : N/A

Manufacturer : Globalscale Technologies INC

# 11.4. Operating Condition of EUT

11.4.1. Setup the EUT and simulator as shown as Section 11.1.

11.4.2. Turn on the power of all equipment.

11.4.3.Let the EUT work in TX (Charging) mode measure it.

#### 11.5.Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 500hm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4: 2003 on Conducted Emission Measurement.

The bandwidth of test receiver (R & S ESCS30) is set at 9 kHz.

The frequency range from 150 kHz to 30MHz is checked.

# 11.6.Power Line Conducted Emission Measurement Results **PASS.**

The frequency range from 150 kHz to 30MHz is checked.

Date of Test: Jan 8, 2013 Temperature: 25°C

EUT: MIRABOX Humidity: 50%

Model No.: 003-MBX001 Power Supply: AC 120V/60Hz

Test Mode: operation Test Engineer: Allen

Re	esult	Limi	it	Margi	n	Detecto	or	Line
(dB	ΒμV)	(dBµ'	V)	(dB)				
44	1.50	65		20.2		QP		
38	3.20	56		17.8		QP		
31	.80	56		24.2		QP		NT . 1
34	1.60	52		17.7		AV		Neutral
26	5.90	46		19.1		AV		
22	2.70	46		23.3		AV		
42	2.30	65		22.6		QP		
38	3.30	56		17.7		QP		
33	3.60	56		22.4		QP		τ.
33	3.10	55		21.6		AV		Live
25	5.50	46		20.5		AV		
23	3.50	46		22.5		AV		

Emissions attenuated more than 20 dB below the permissible value are not reported. The spectral diagrams are attached as below.

#### CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT. MIRABOX M/N:003-MBX001

Manufacturer: Globalscale Operating Condition: Operation

Test Site: 1#Shielding Room

Operator: Alen

Test Specification: N 120V/60Hz Comment: Mains port

Start of Test: 1/8/2013 / 9:24:29AM

#### SCAN TABLE: "V 150K-30MHz fin"

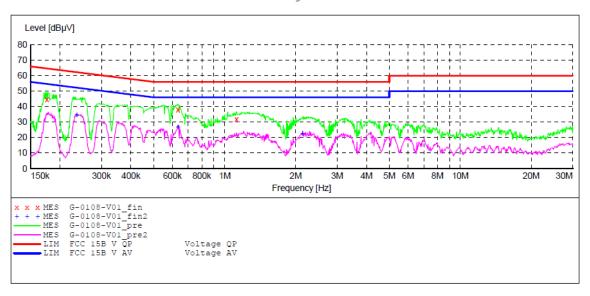
Short Description: SUB STD VTERM2 1.70

Detector Meas. Step IF Start Stop Transducer

Bandw. Time

Frequency Frequency Width 150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s 9 kHz NSLK8126 2008

Average



#### MEASUREMENT RESULT: "G-0108-V01 fin"

1/8/2013 9·26AM

1/0/2013 9.20	API						
Frequency MHz		Transd dB		Margin dB	Detector	Line	PE
0.175970	44.50	11.2	65	20.2	QP	N	GND
0.633814	38.20	11.3	56	17.8	QP	N	GND
1.121715	31.80	11.3	56	24.2	QP	N	GND

#### MEASUREMENT RESULT: "G-0108-V01 fin2"

1/8/2013 9:26AM

-,	0/2013 3.20	1111						
	Frequency MHz	Level dBµV		Limit dBµV	_	Detector	Line	PE
	0.235505	34.60	11.2	52	17.7	AV	N	GND
	0.633814	26.90	11.3	46	19.1	AV	N	GND
	2.141628	22.70	11.3	46	23.3	AV	N	GND

#### CONDUCTED EMISSION STANDARD FCC PART 15 B

MIRABOX M/N:003-MBX001

Manufacturer: Globalscale Operating Condition: Operation

Test Site: 1#Shielding Room

Operator: Alen

Test Specification: L 120V/60Hz Comment:

Mains port 1/8/2013 / 9:28:04AM Start of Test:

#### SCAN TABLE: "V 150K-30MHz fin"

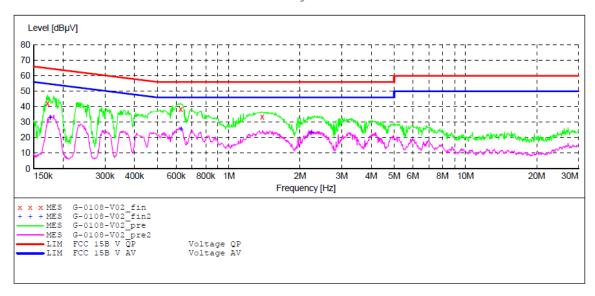
Short Description: SUB STD VTERM2 1.70

Stop Step

Detector Meas. IF Transducer
Time Bandw.

QuasiPeak 1.0 s 9 kHz NSLK8126 2008 Frequency Frequency Width 150.0 kHz 30.0 MHz 0.8 %

Average



#### MEASUREMENT RESULT: "G-0108-V02 fin"

1/8/2013	9:30AM
Freque	ncv I

_ ,	0,2020 2.00.							
	Frequency MHz		Transd dB		_	Detector	Line	PE
	0.171806	42.30	11.2	65	22.6	QP	L1	GND
	0.626268	38.30	11.3	56	17.7	QP	L1	GND
	1.386019	33.60	11.3	56	22.4	QP	L1	GND

#### MEASUREMENT RESULT: "G-0108-V02 fin2"

1/8/2013 9	:	30	MAC	
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Frequency MHz	Level dBuV		Limit dBuV	Margin dB	Detector	Line	PE
0.175970	33.10	11.2	55	21.6	AV	L1	GND
0.628773	25.50	11.3	46	20.5	AV	L1	GND
2.237767	23.50	11.3	46	22.5	AV	L1	GND

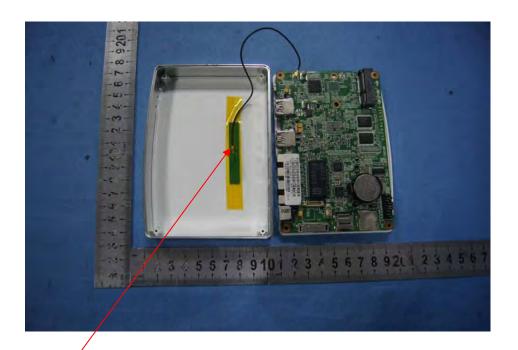
# 12.ANTENNA REQUIREMENT

# 12.1.The Requirement

According to Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

#### 12.2.Antenna Construction

Device is equipped with unique antenna, which isn't displaced by other antenna. Therefore, the equipment complies with the antenna requirement of Section 15.203.



Antenna