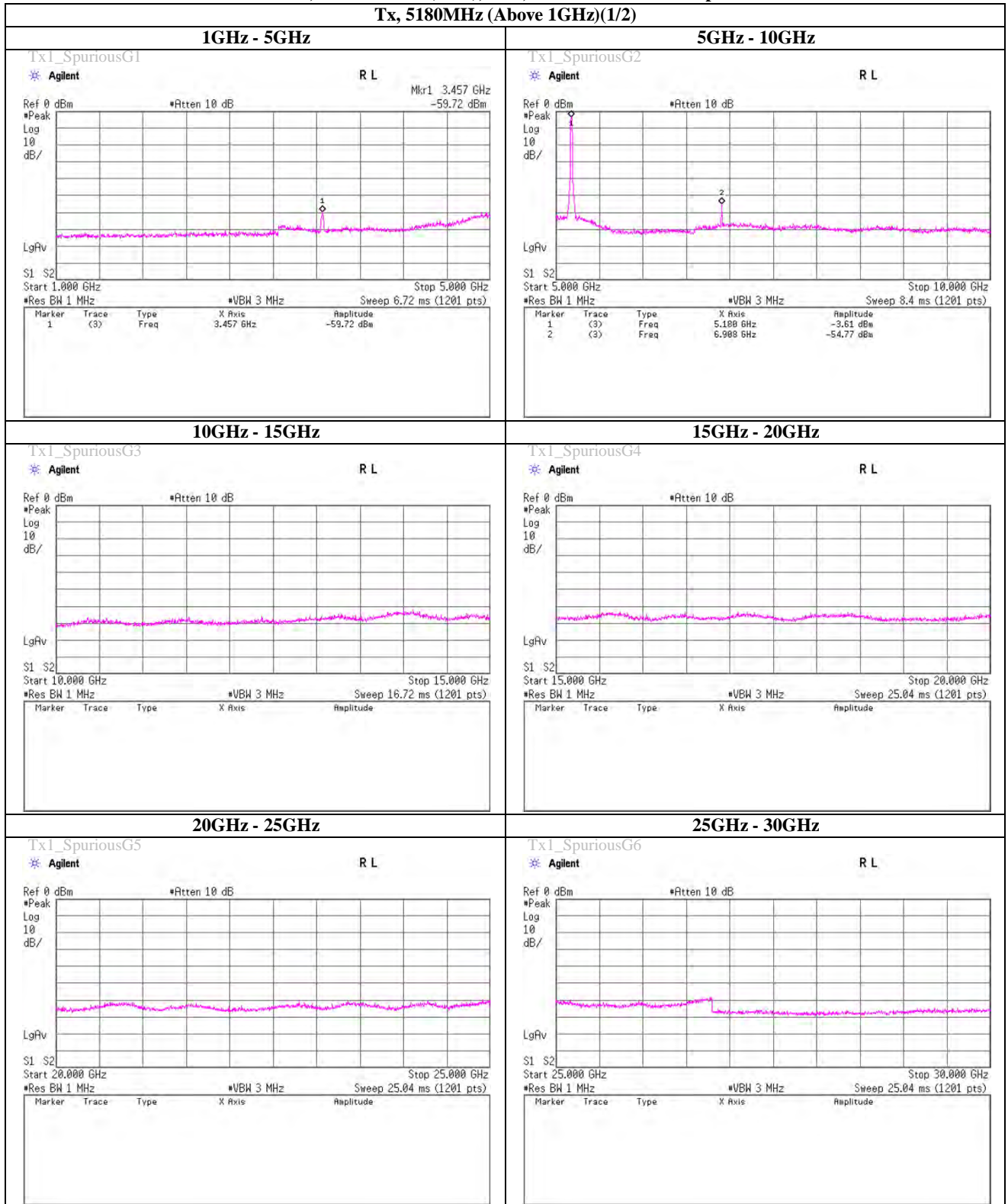


**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11a (W52), PN9, worst data mode 6Mbps**

**Tx, 5180MHz (Above 1GHz)(1/2)**



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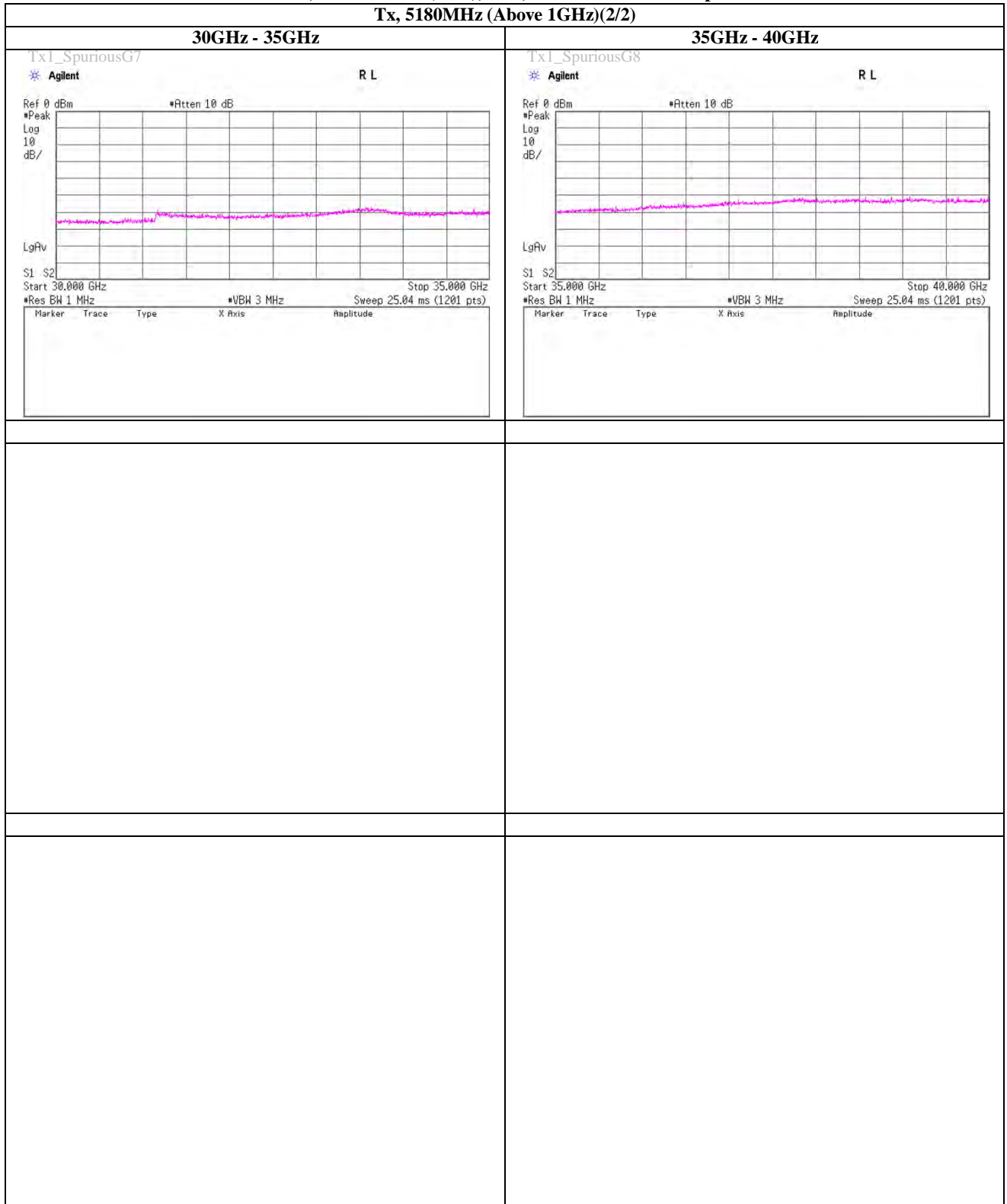
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11a (W52), PN9, worst data mode 6Mbps**

**Tx, 5180MHz (Above 1GHz)(2/2)**



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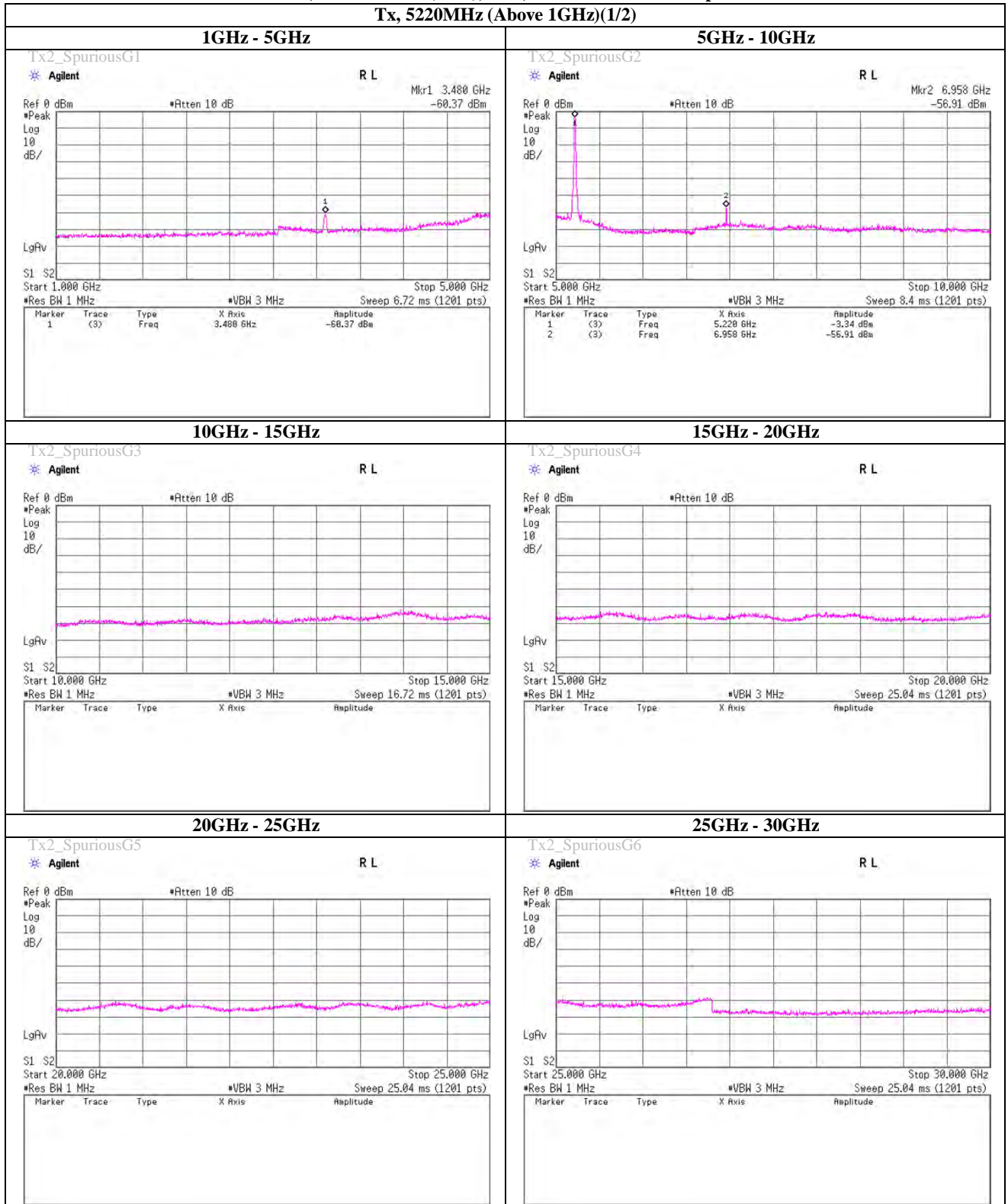
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11a (W52), PN9, worst data mode 6Mbps**

**Tx, 5220MHz (Above 1GHz)(1/2)**



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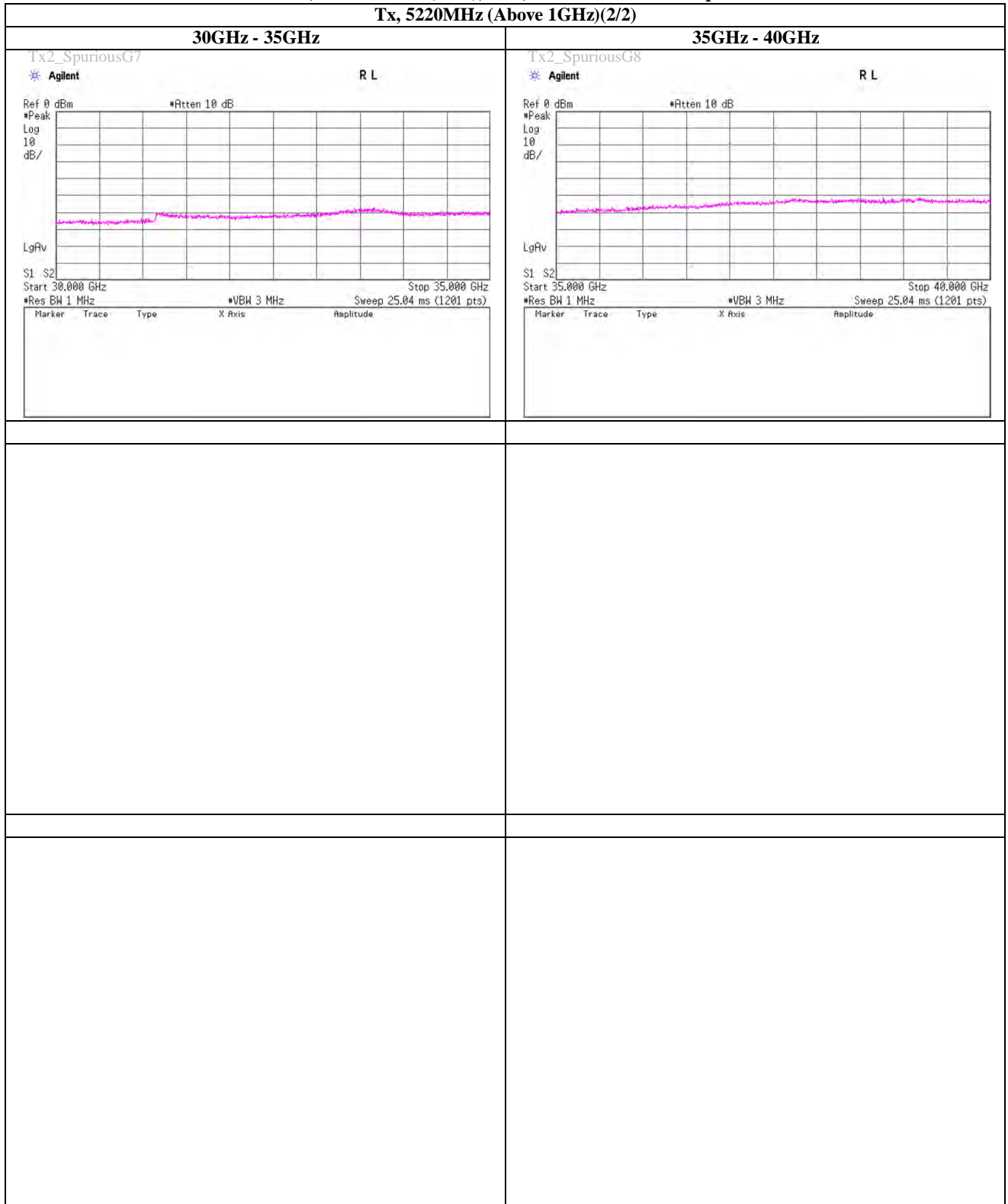
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11a (W52), PN9, worst data mode 6Mbps**

**Tx, 5220MHz (Above 1GHz)(2/2)**



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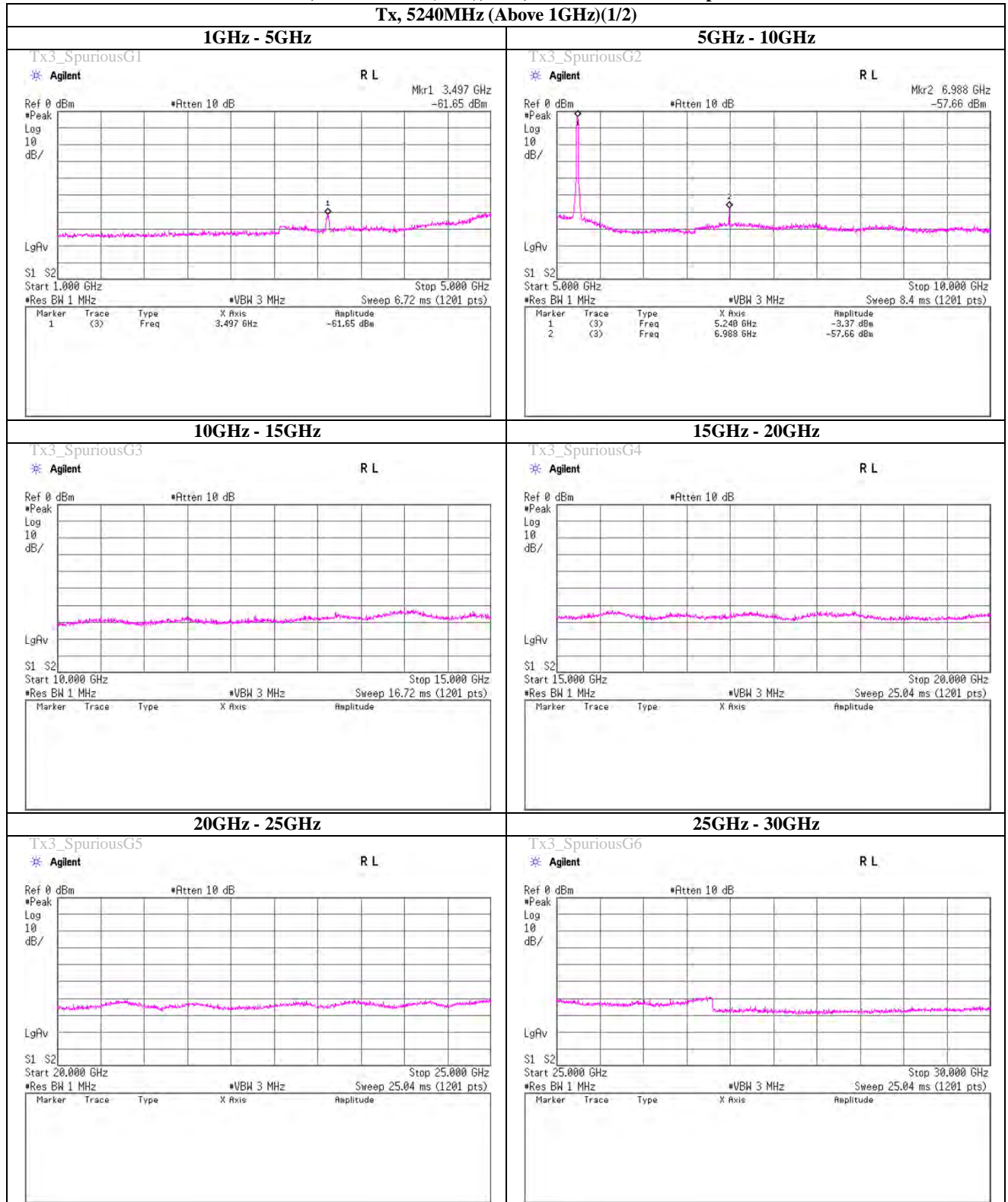
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11a (W52), PN9, worst data mode 6Mbps**

**Tx, 5240MHz (Above 1GHz)(1/2)**



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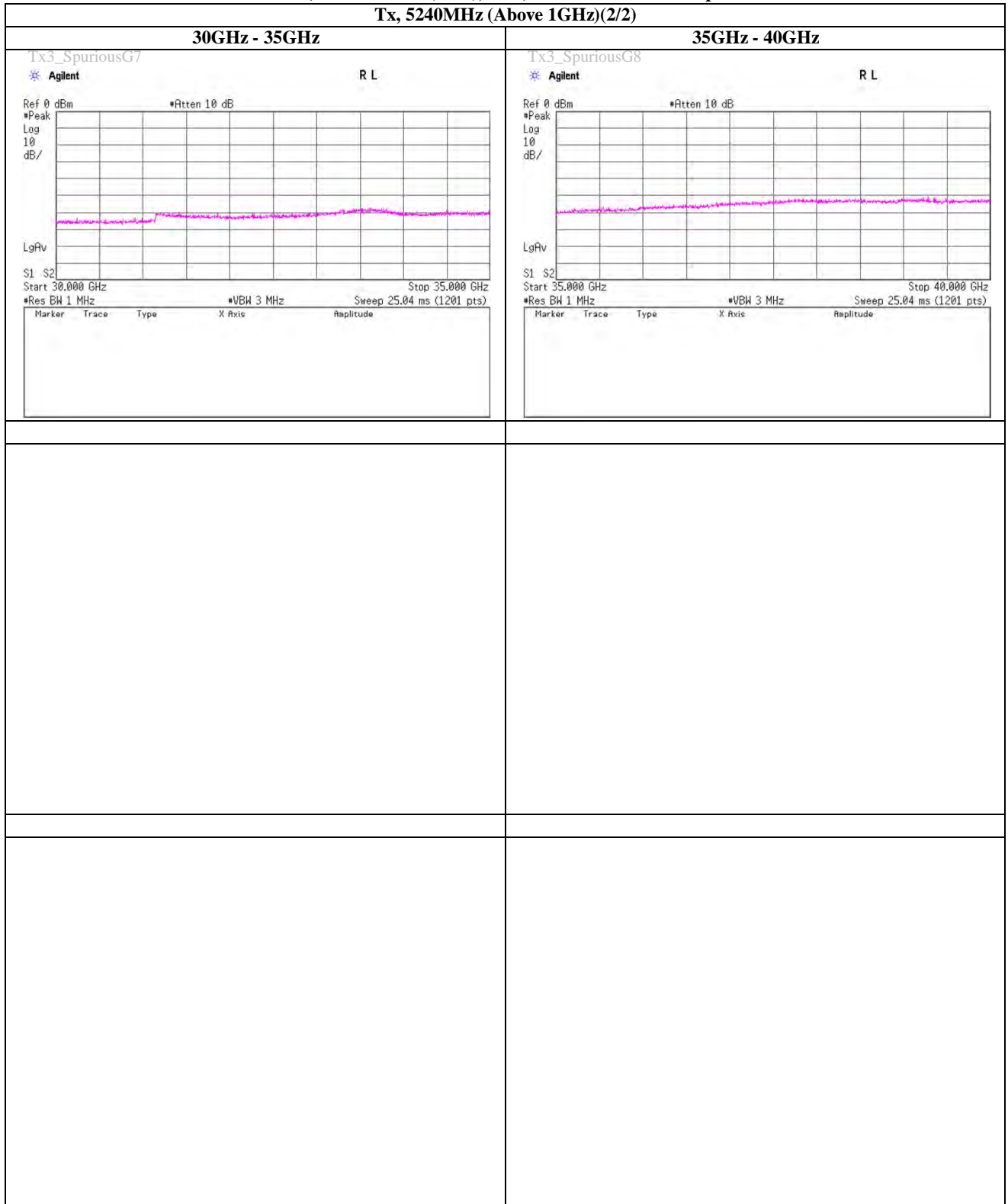
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11a (W52), PN9, worst data mode 6Mbps**

**Tx, 5240MHz (Above 1GHz)(2/2)**



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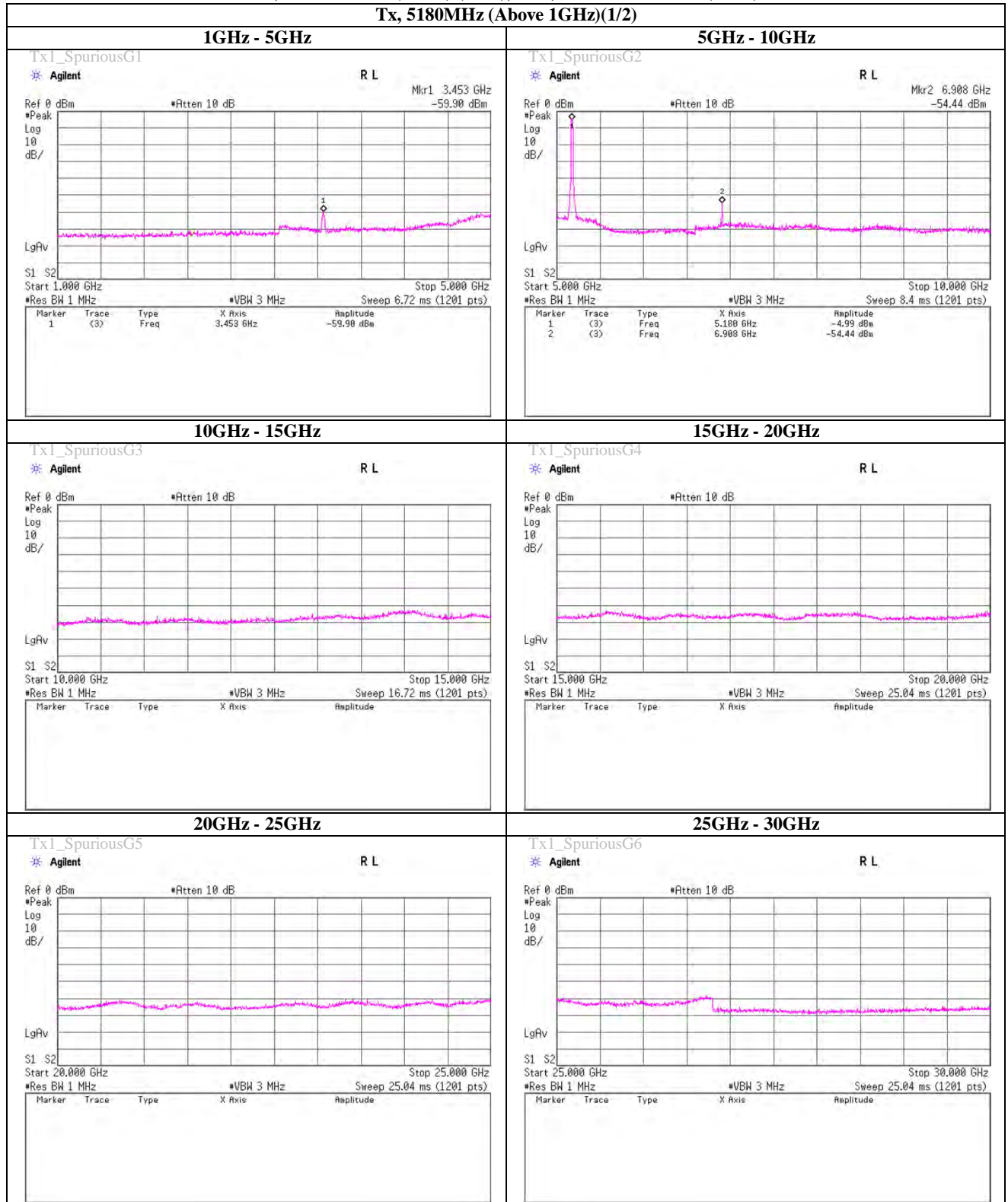
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11n (HT20) (W52), PN9, worst data mode 3(MCS)**

**Tx, 5180MHz (Above 1GHz)(1/2)**



**UL Japan, Inc.**

**Shonan EMC Lab.**

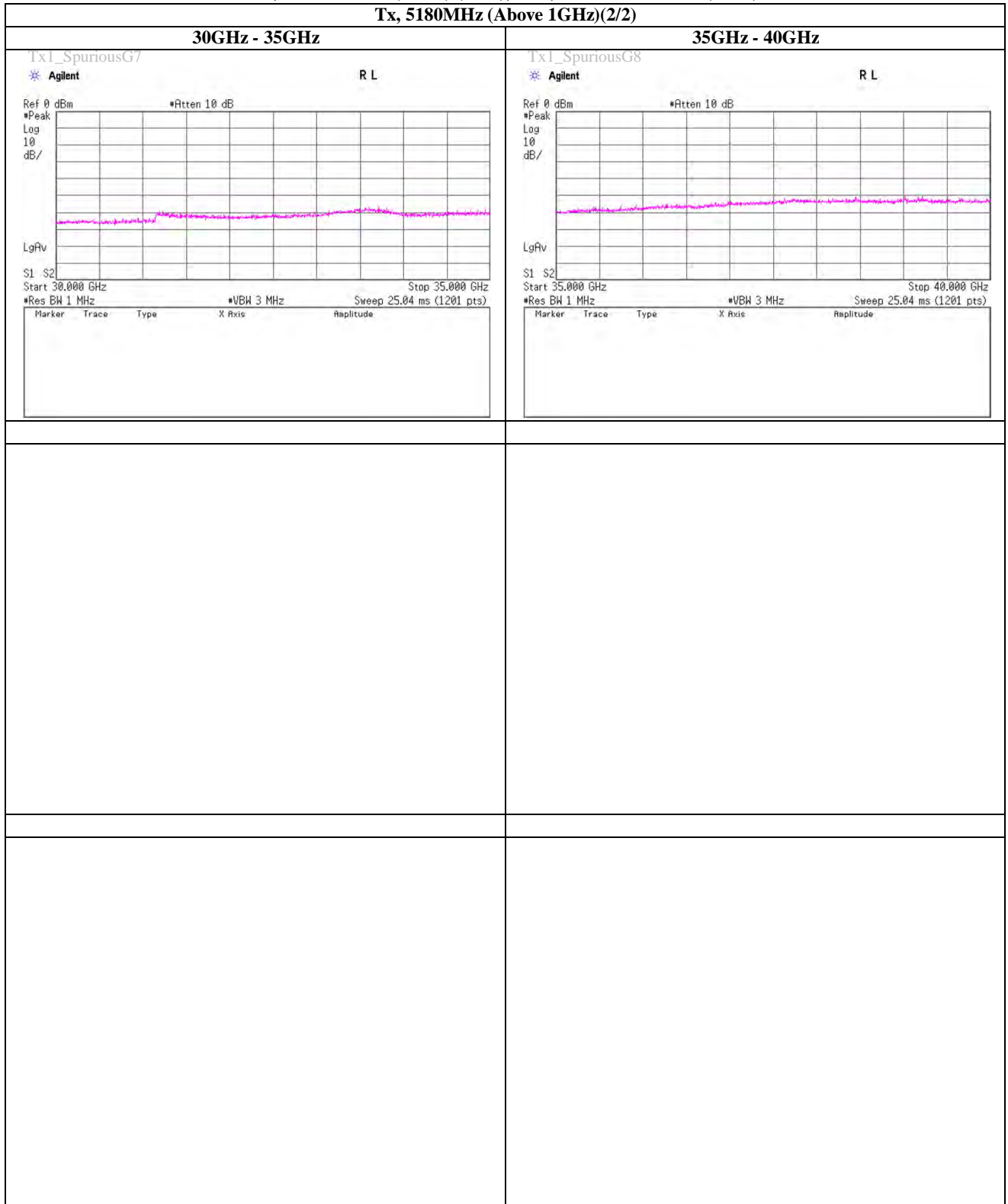
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**  
**Tx, IEEE802.11n (HT20) (W52), PN9, worst data mode 3(MCS)**

**Tx, 5180MHz (Above 1GHz)(2/2)**

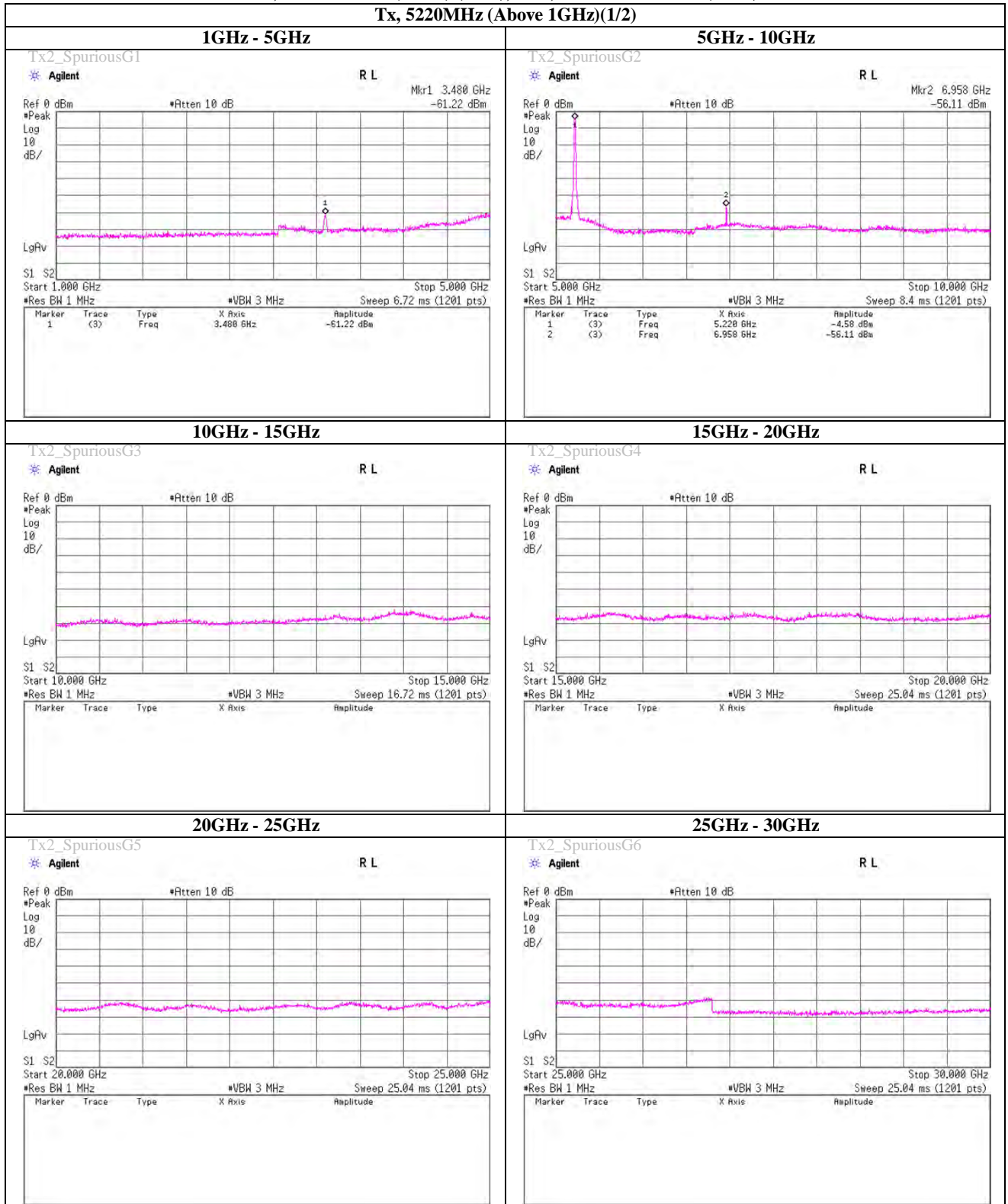




**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11n (HT20) (W52), PN9, worst data mode 3(MCS)**

**Tx, 5220MHz (Above 1GHz)(1/2)**



**UL Japan, Inc.**

**Shonan EMC Lab.**

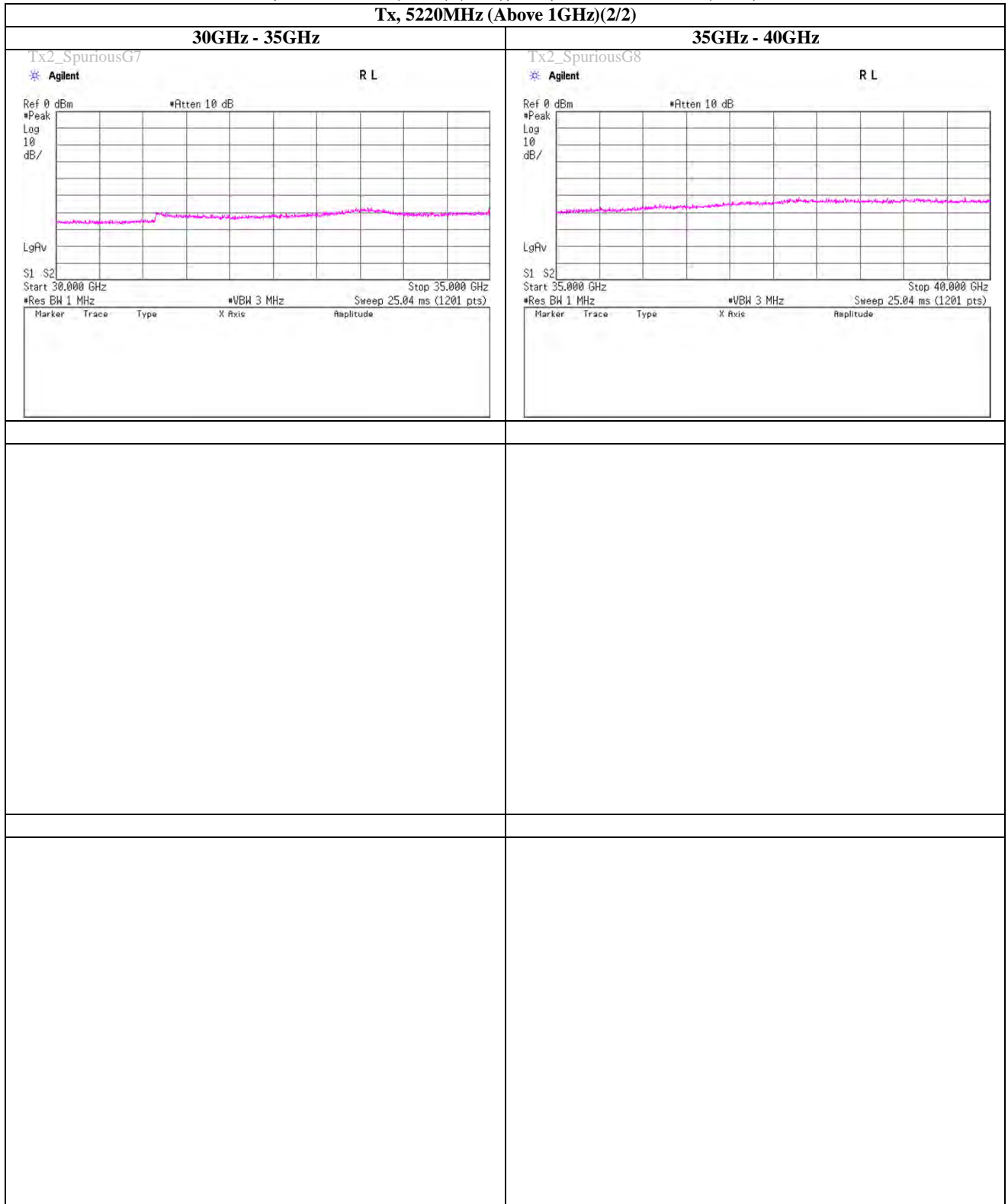
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**  
**Tx, IEEE802.11n (HT20) (W52), PN9, worst data mode 3(MCS)**

**Tx, 5220MHz (Above 1GHz)(2/2)**



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**Shonan EMC Lab.**

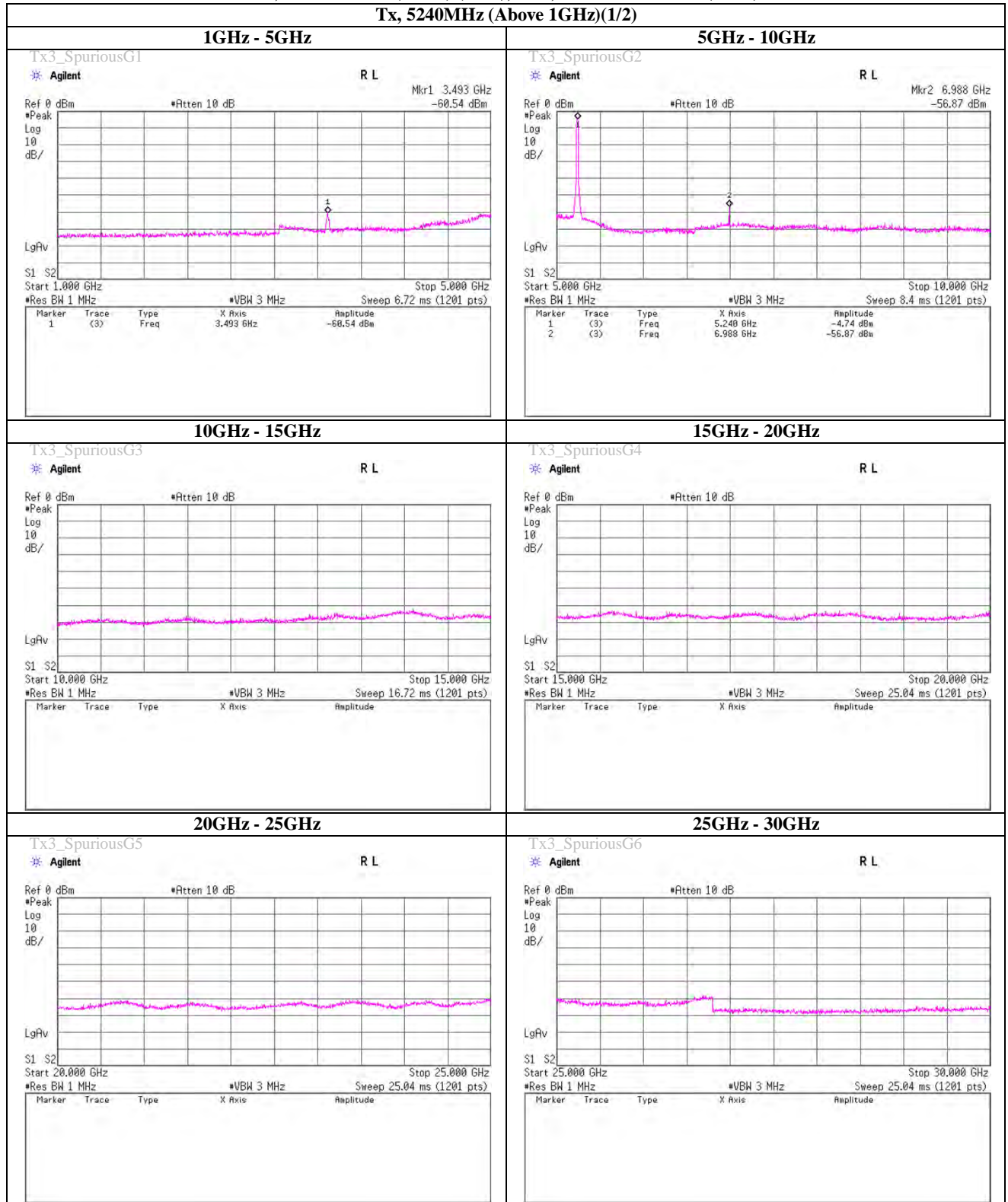
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

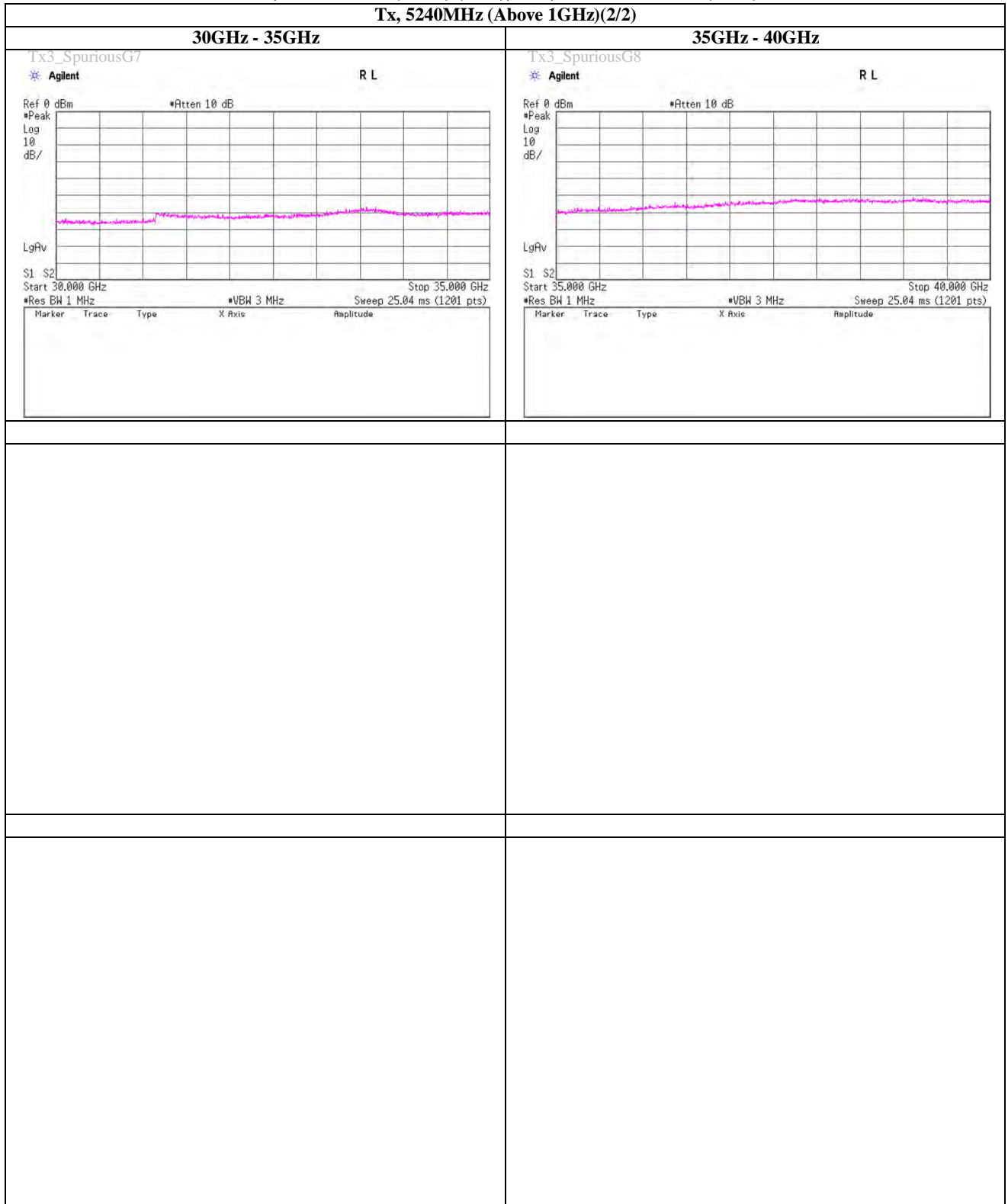
Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**  
Tx, IEEE802.11n (HT20) (W52), PN9, worst data mode 3(MCS)

Tx, 5240MHz (Above 1GHz)(1/2)



**(Reference) Spurious emission (Conducted)**  
**Tx, IEEE802.11n (HT20) (W52), PN9, worst data mode 3(MCS)**



**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11a (W53), PN9, worst data mode 6Mbps**

**Tx, 5260MHz (Below 1GHz)**



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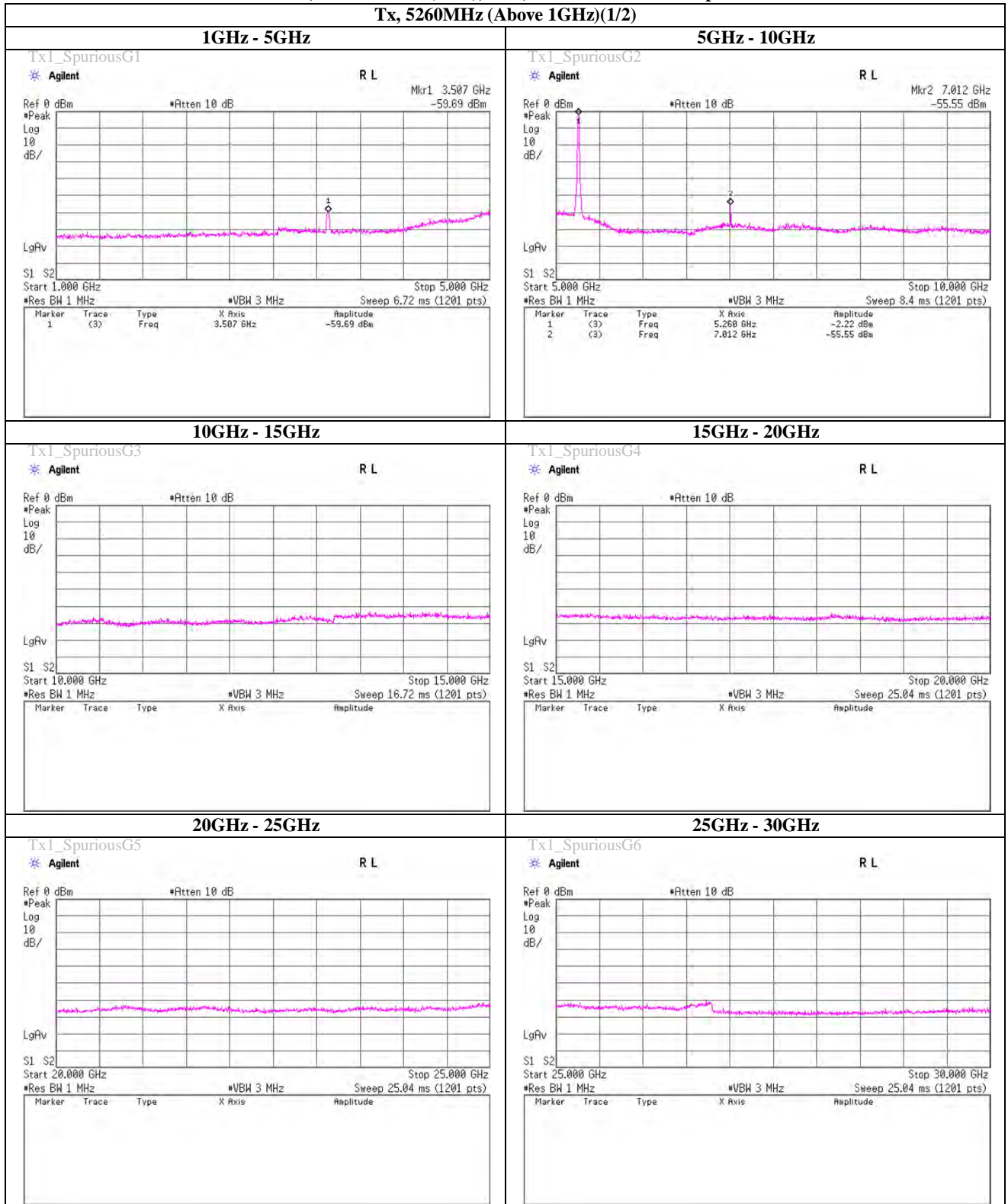
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11a (W53), PN9, worst data mode 6Mbps**

**Tx, 5260MHz (Above 1GHz)(1/2)**



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**Shonan EMC Lab.**

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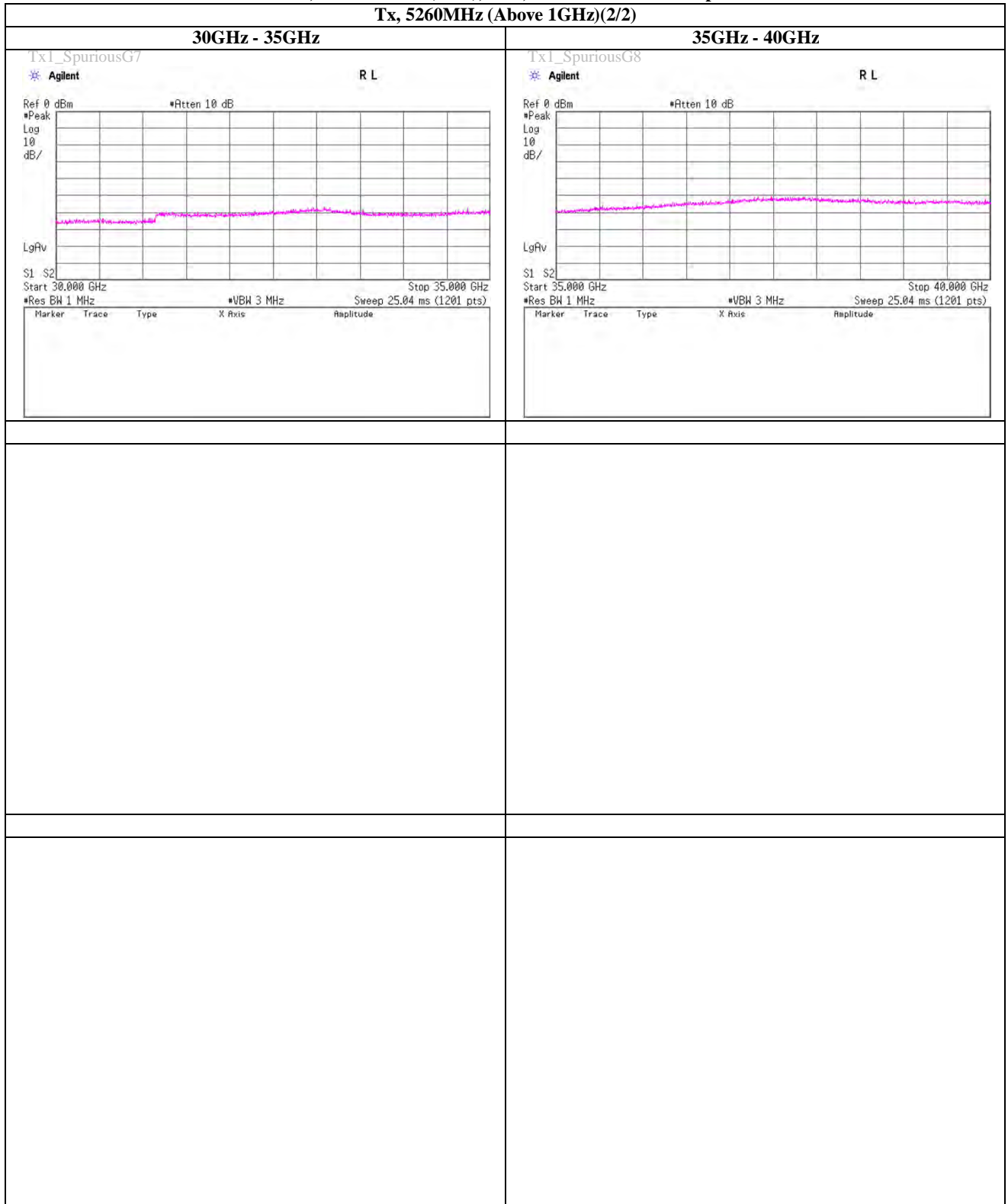
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11a (W53), PN9, worst data mode 6Mbps**

**Tx, 5260MHz (Above 1GHz)(2/2)**



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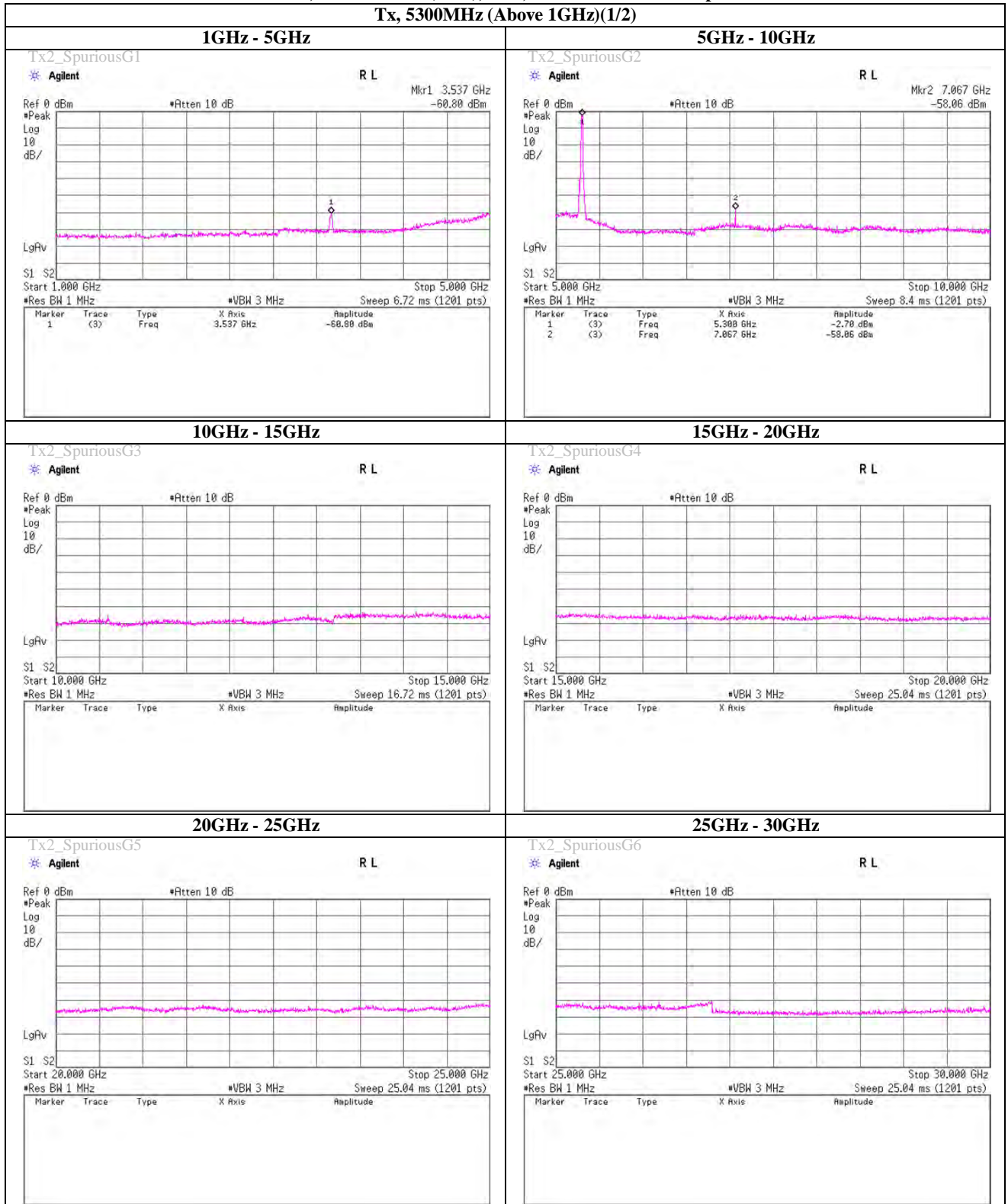
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11a (W53), PN9, worst data mode 6Mbps**

**Tx, 5300MHz (Above 1GHz)(1/2)**



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Telephone : +81 463 50 6400

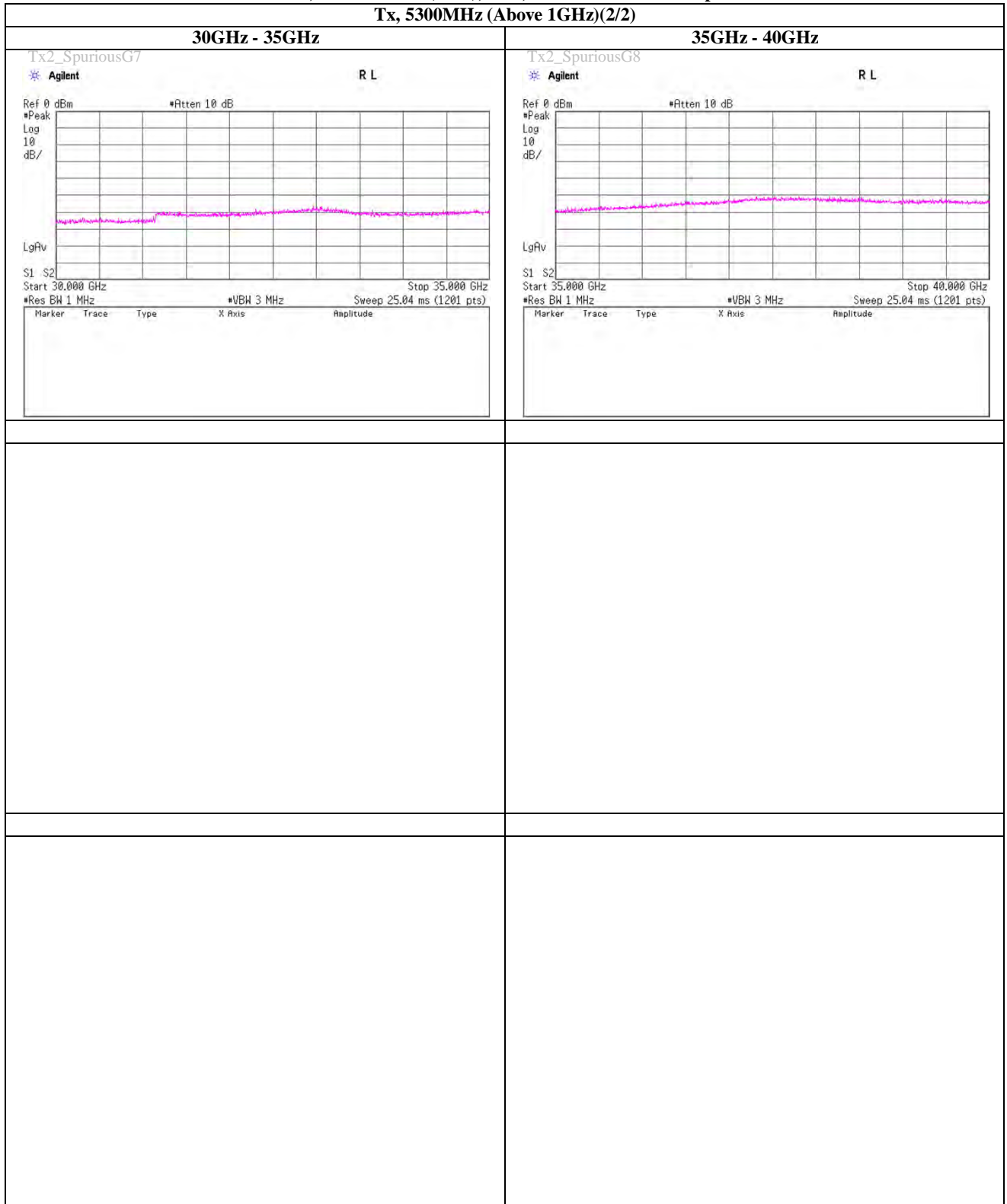
Facsimile : +81 463 50 6401



**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11a (W53), PN9, worst data mode 6Mbps**

**Tx, 5300MHz (Above 1GHz)(2/2)**



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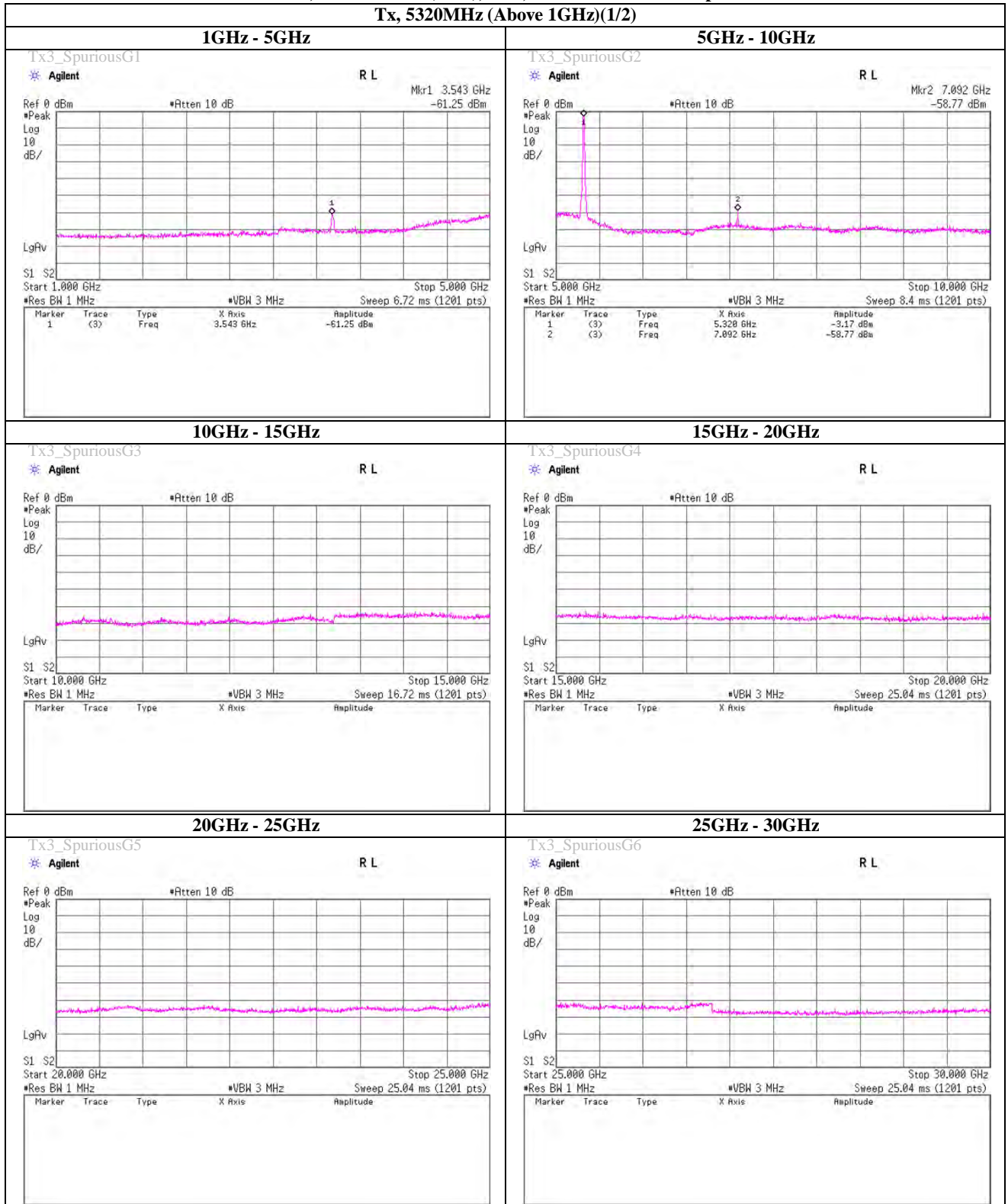
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11a (W53), PN9, worst data mode 6Mbps**

**Tx, 5320MHz (Above 1GHz)(1/2)**



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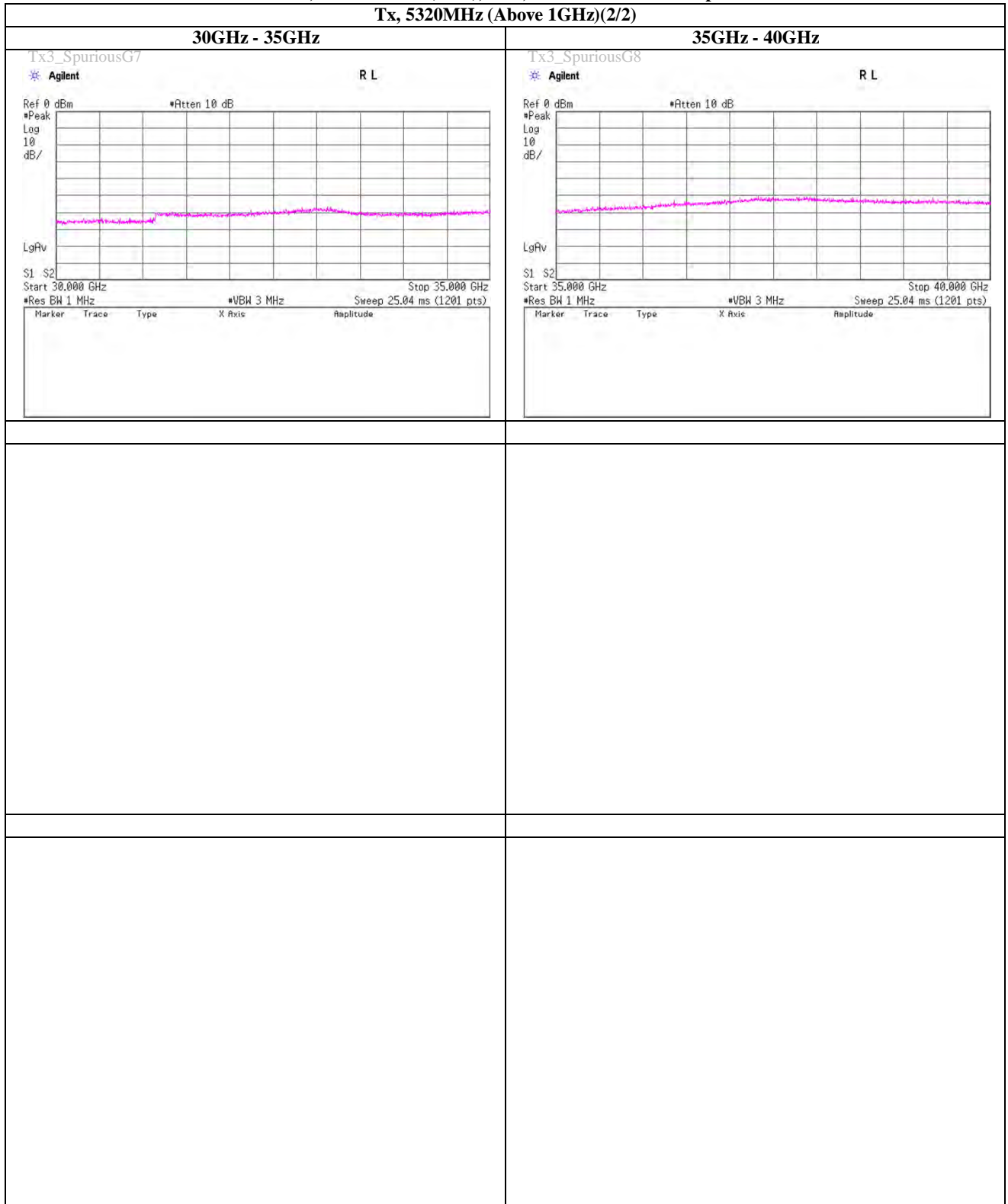
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11a (W53), PN9, worst data mode 6Mbps**

**Tx, 5320MHz (Above 1GHz)(2/2)**



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**Shonan EMC Lab.**

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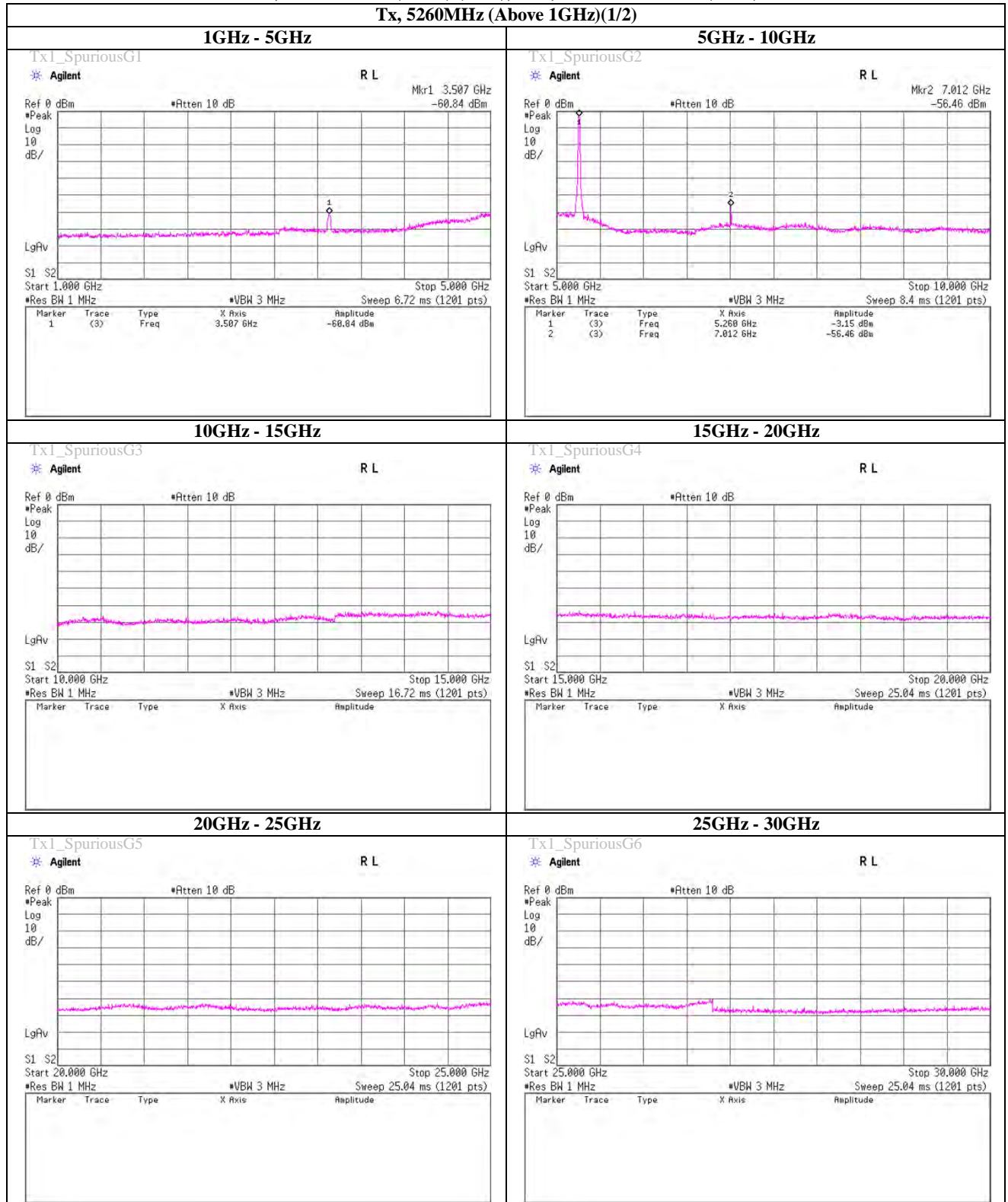
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11n (HT20) (W53), PN9, worst data mode 3(MCS)**

**Tx, 5260MHz (Above 1GHz)(1/2)**



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**Shonan EMC Lab.**

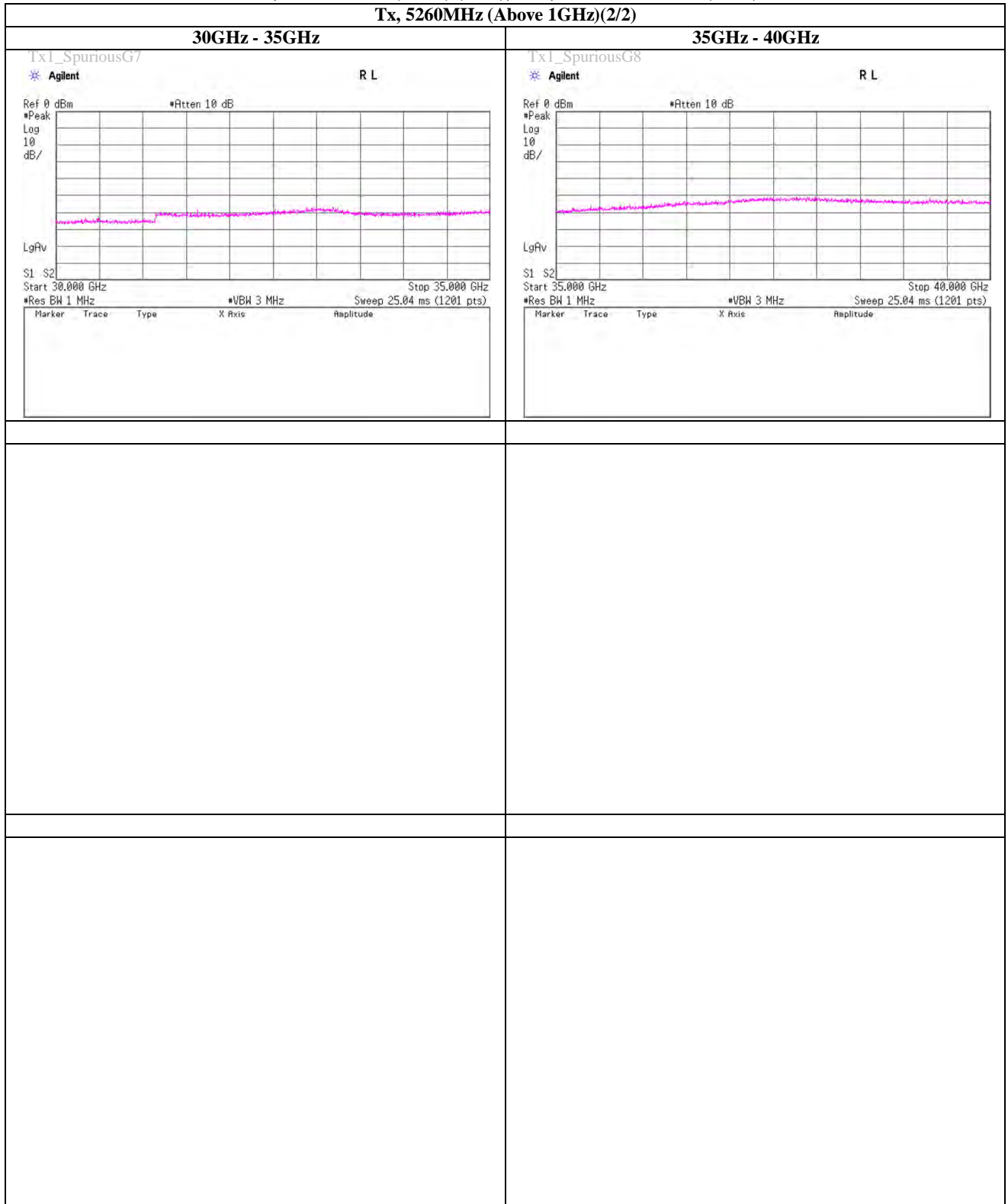
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**  
**Tx, IEEE802.11n (HT20) (W53), PN9, worst data mode 3(MCS)**

**Tx, 5260MHz (Above 1GHz)(2/2)**



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**Shonan EMC Lab.**

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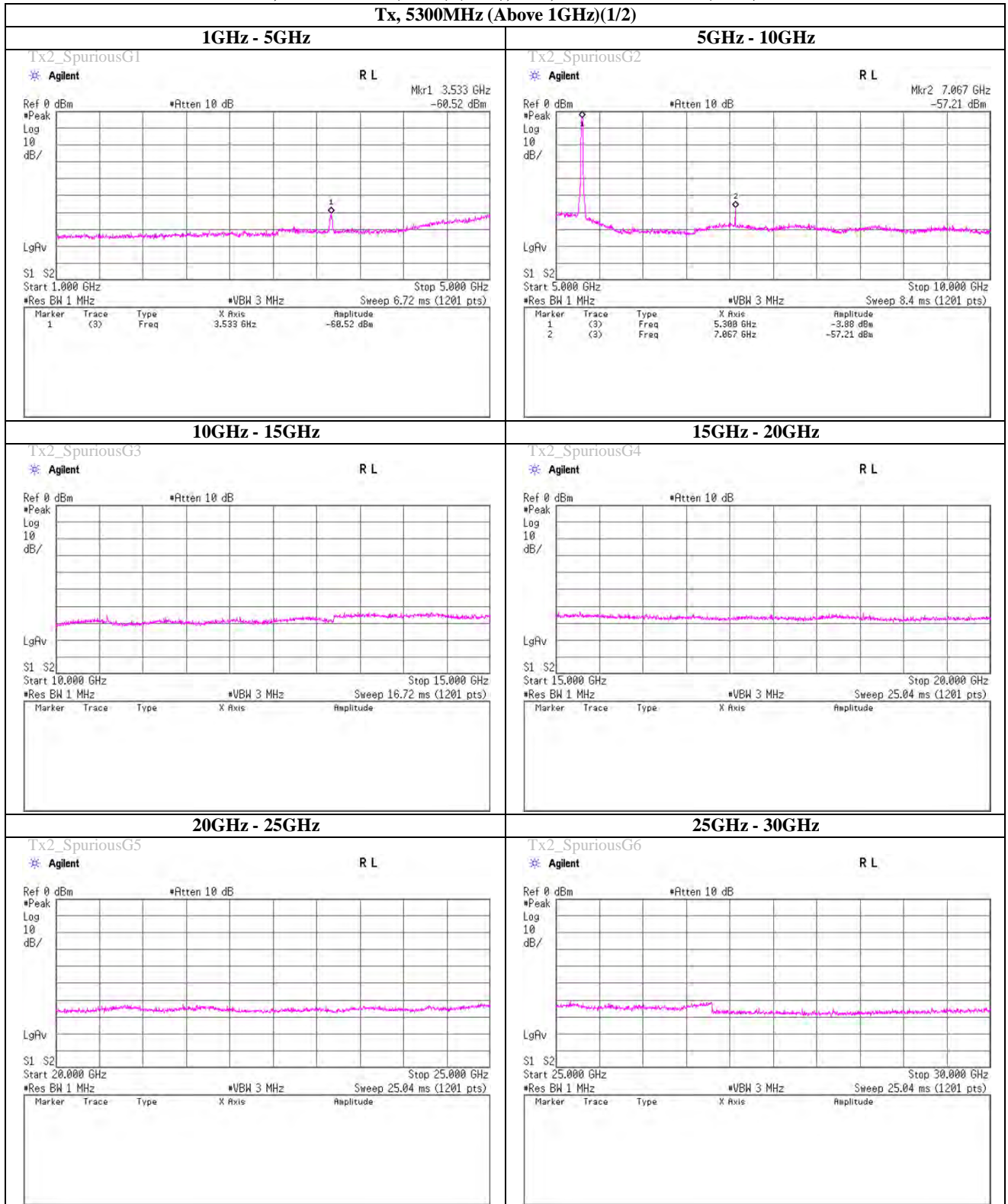
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11n (HT20) (W53), PN9, worst data mode 3(MCS)**

**Tx, 5300MHz (Above 1GHz)(1/2)**



**UL Japan, Inc.**

**Shonan EMC Lab.**

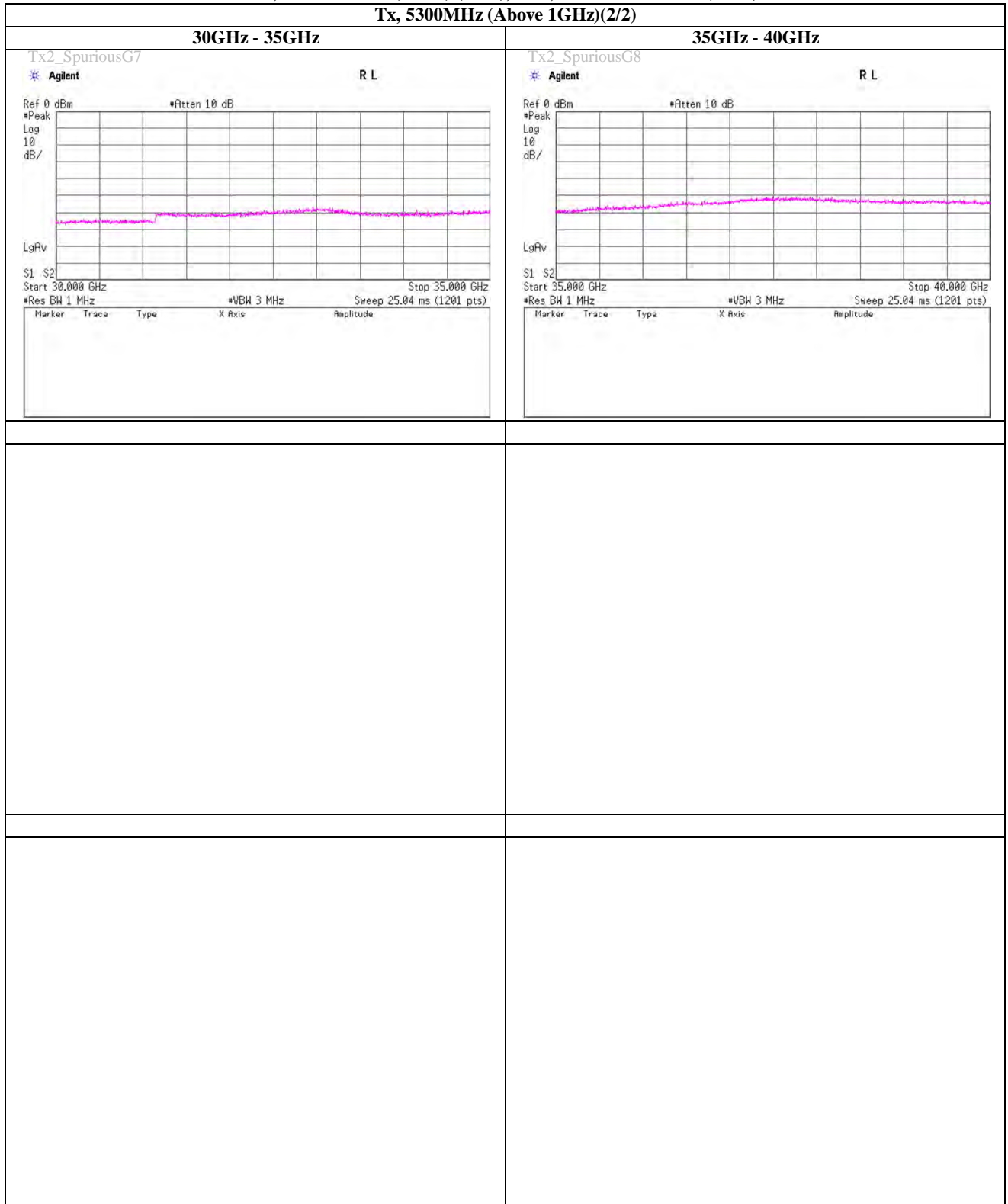
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**  
**Tx, IEEE802.11n (HT20) (W53), PN9, worst data mode 3(MCS)**

**Tx, 5300MHz (Above 1GHz)(2/2)**



**UL Japan, Inc.**

**Shonan EMC Lab.**

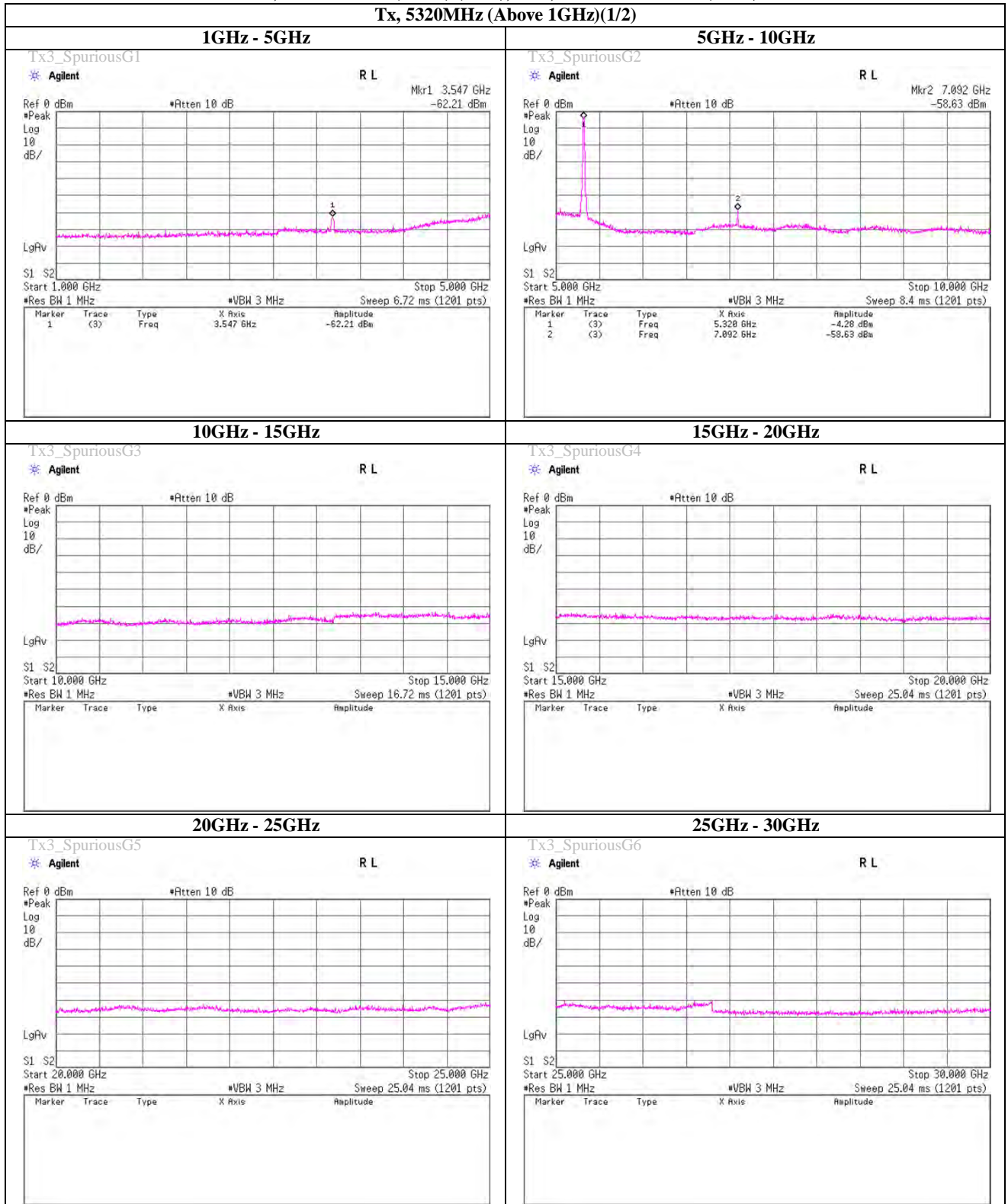
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

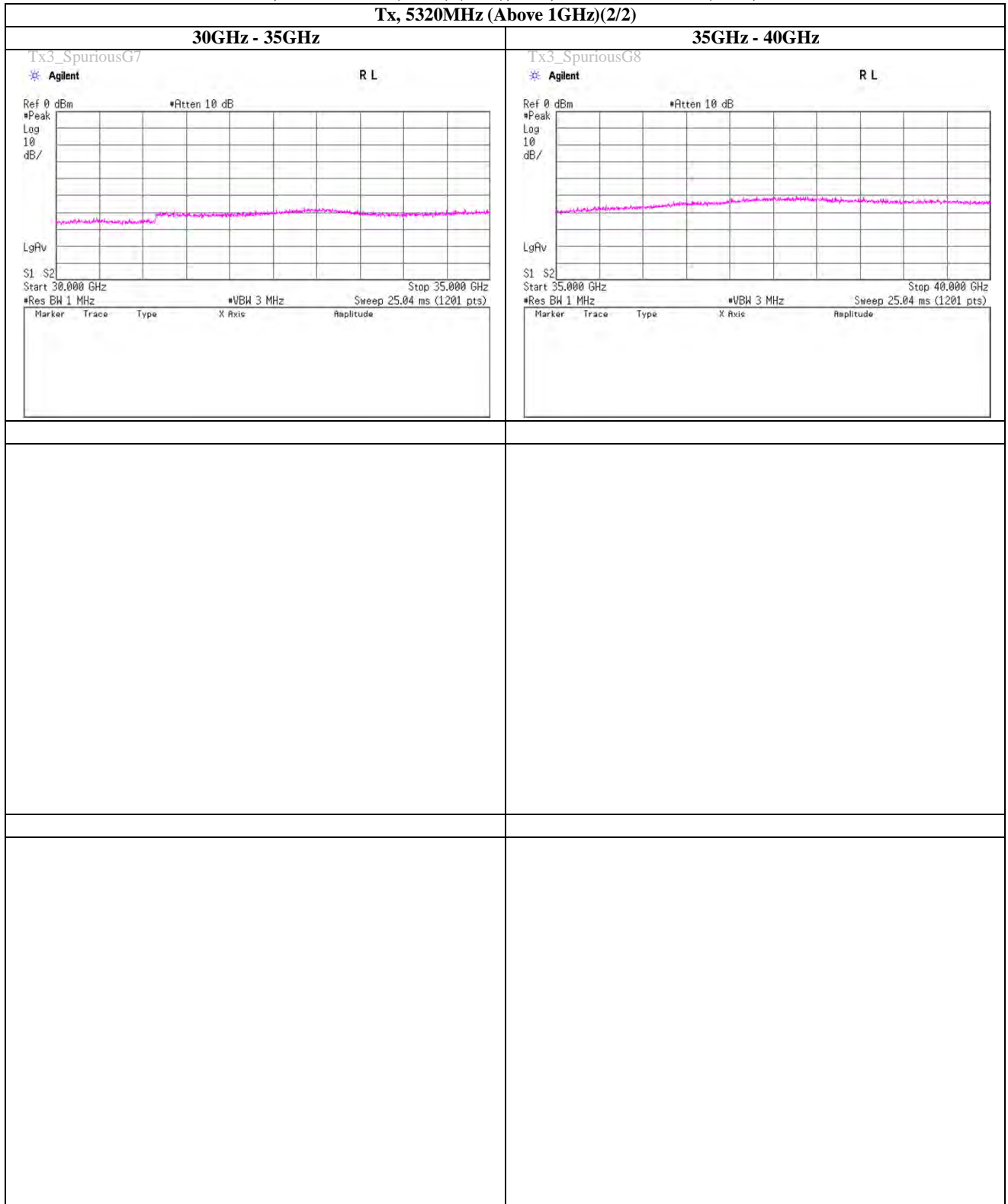
**(Reference) Spurious emission (Conducted)**  
Tx, IEEE802.11n (HT20) (W53), PN9, worst data mode 3(MCS)

Tx, 5320MHz (Above 1GHz)(1/2)





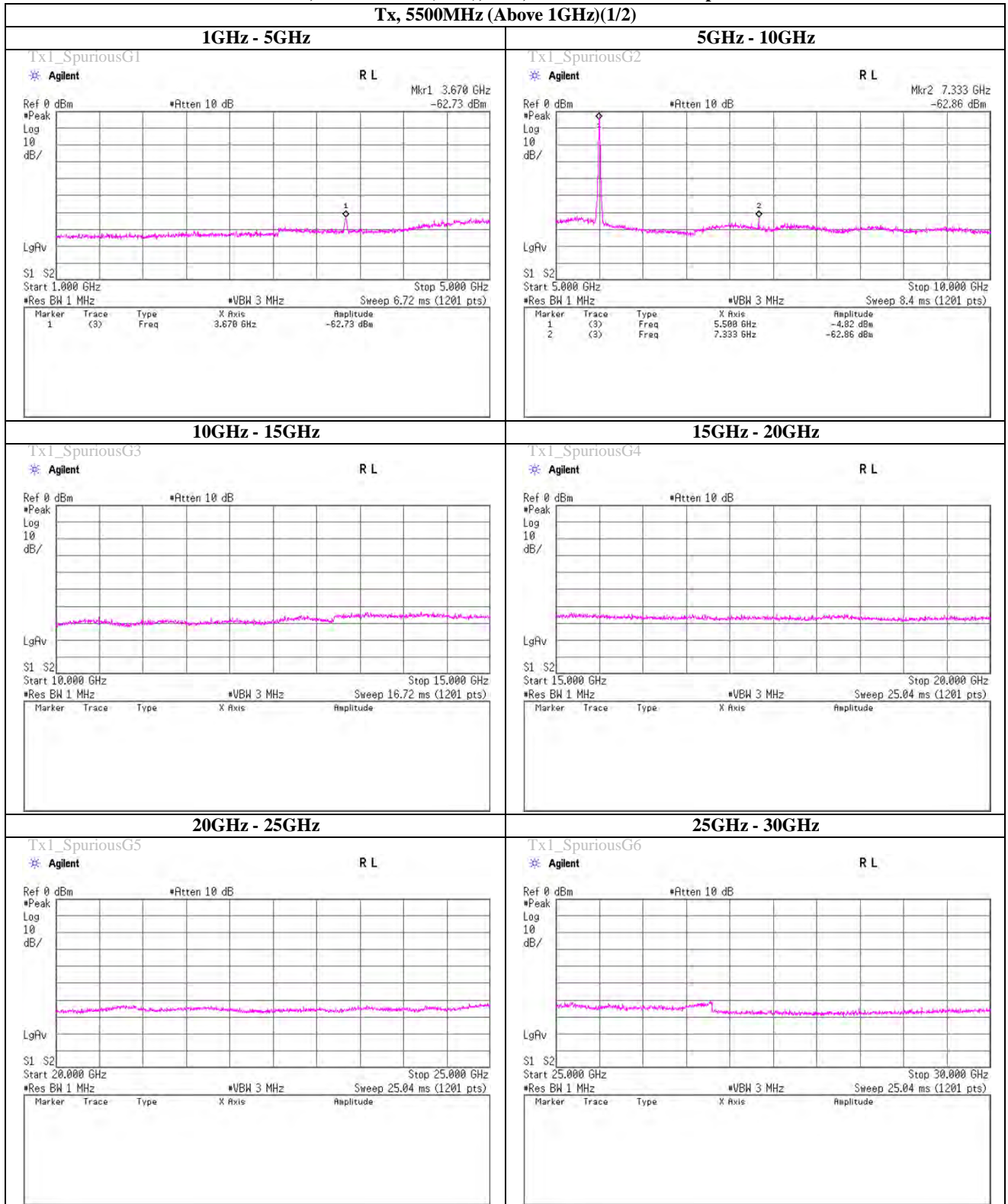
**(Reference) Spurious emission (Conducted)**  
**Tx, IEEE802.11n (HT20) (W53), PN9, worst data mode 3(MCS)**



**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11a (W56), PN9, worst data mode 6Mbps**

**Tx, 5500MHz (Above 1GHz)(1/2)**



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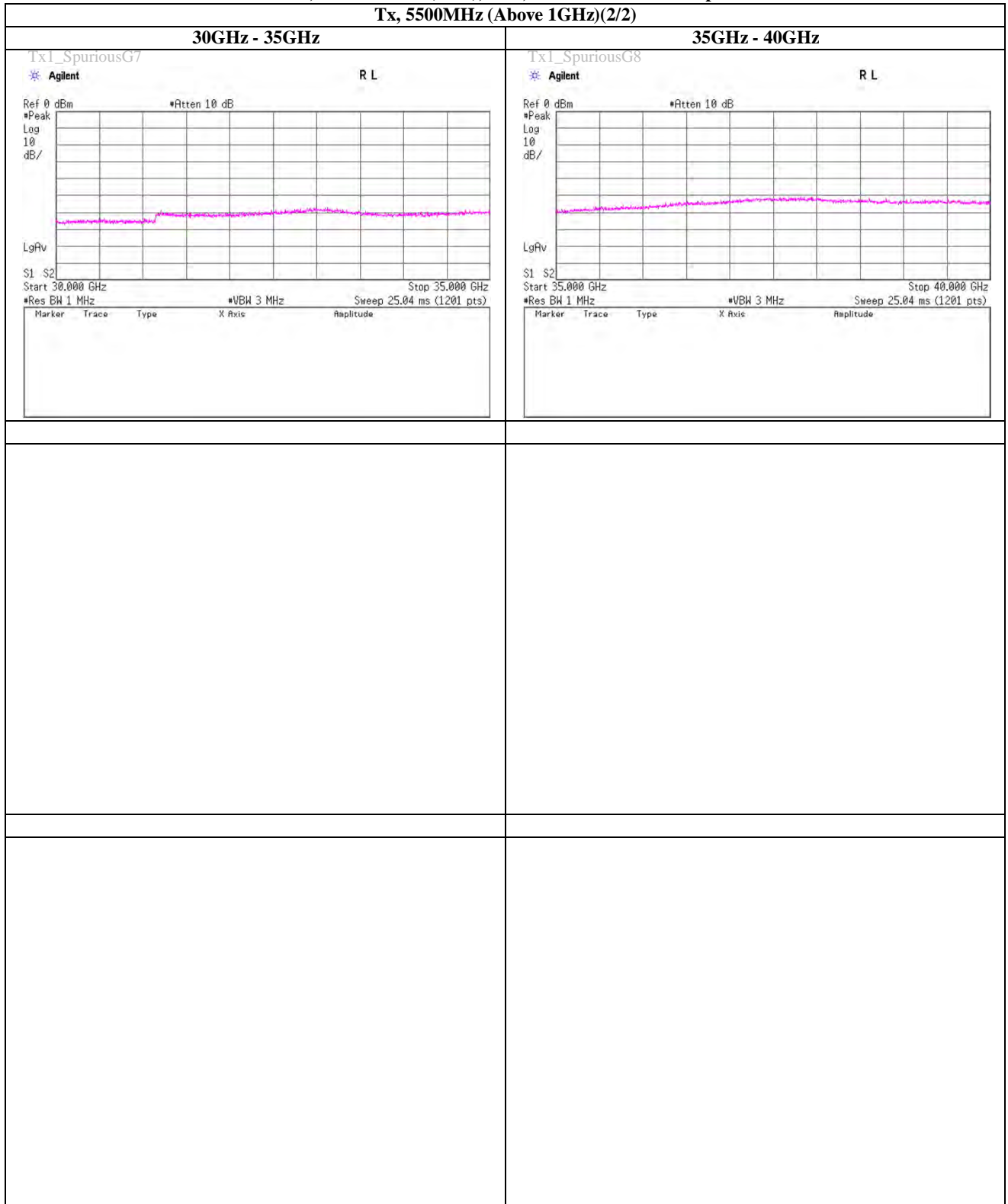
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11a (W56), PN9, worst data mode 6Mbps**

**Tx, 5500MHz (Above 1GHz)(2/2)**



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Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11a (W56), PN9, worst data mode 6Mbps**

**Tx, 5580MHz (Below 1GHz)**



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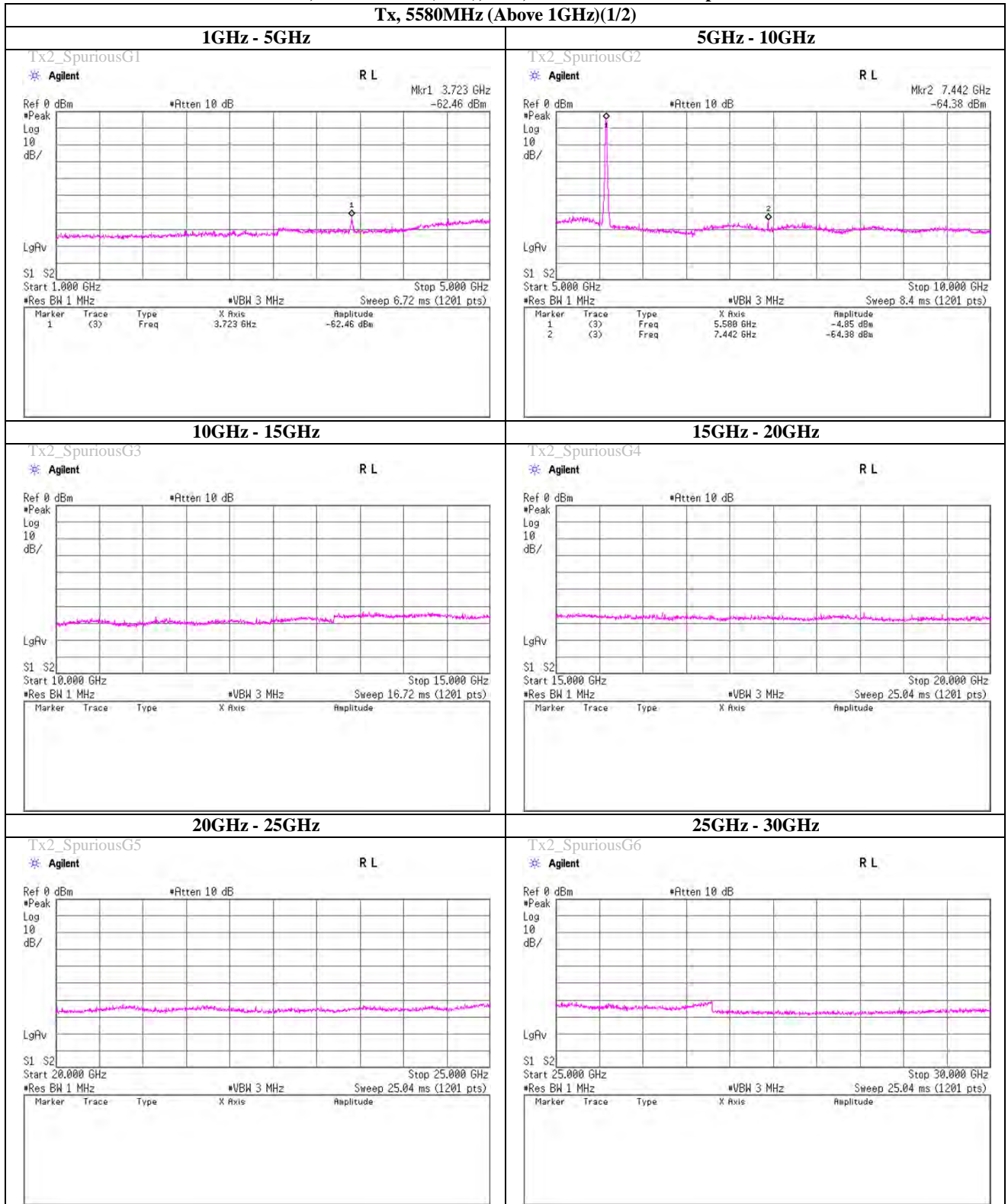
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11a (W56), PN9, worst data mode 6Mbps**

**Tx, 5580MHz (Above 1GHz)(1/2)**



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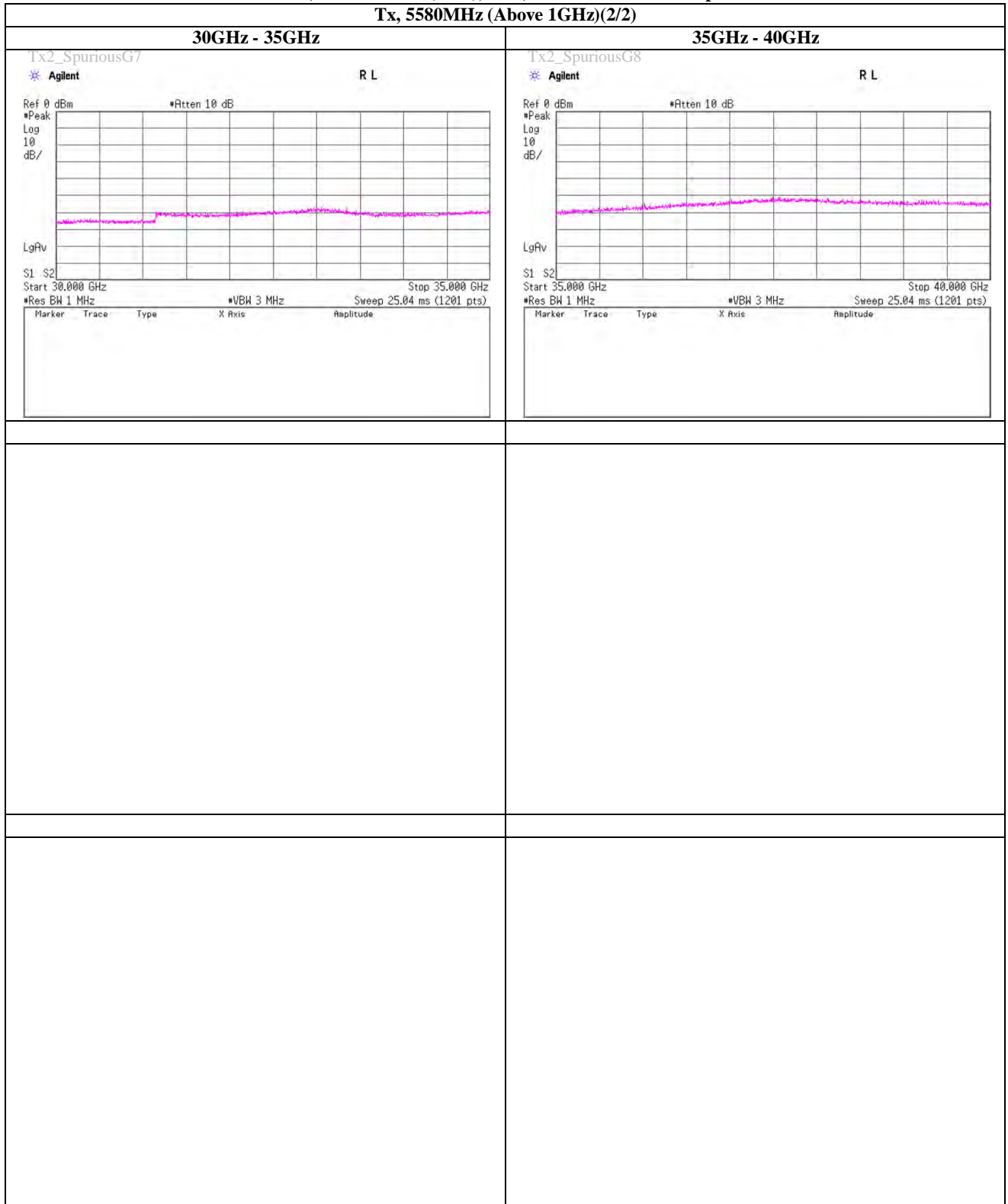
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11a (W56), PN9, worst data mode 6Mbps**

**Tx, 5580MHz (Above 1GHz)(2/2)**



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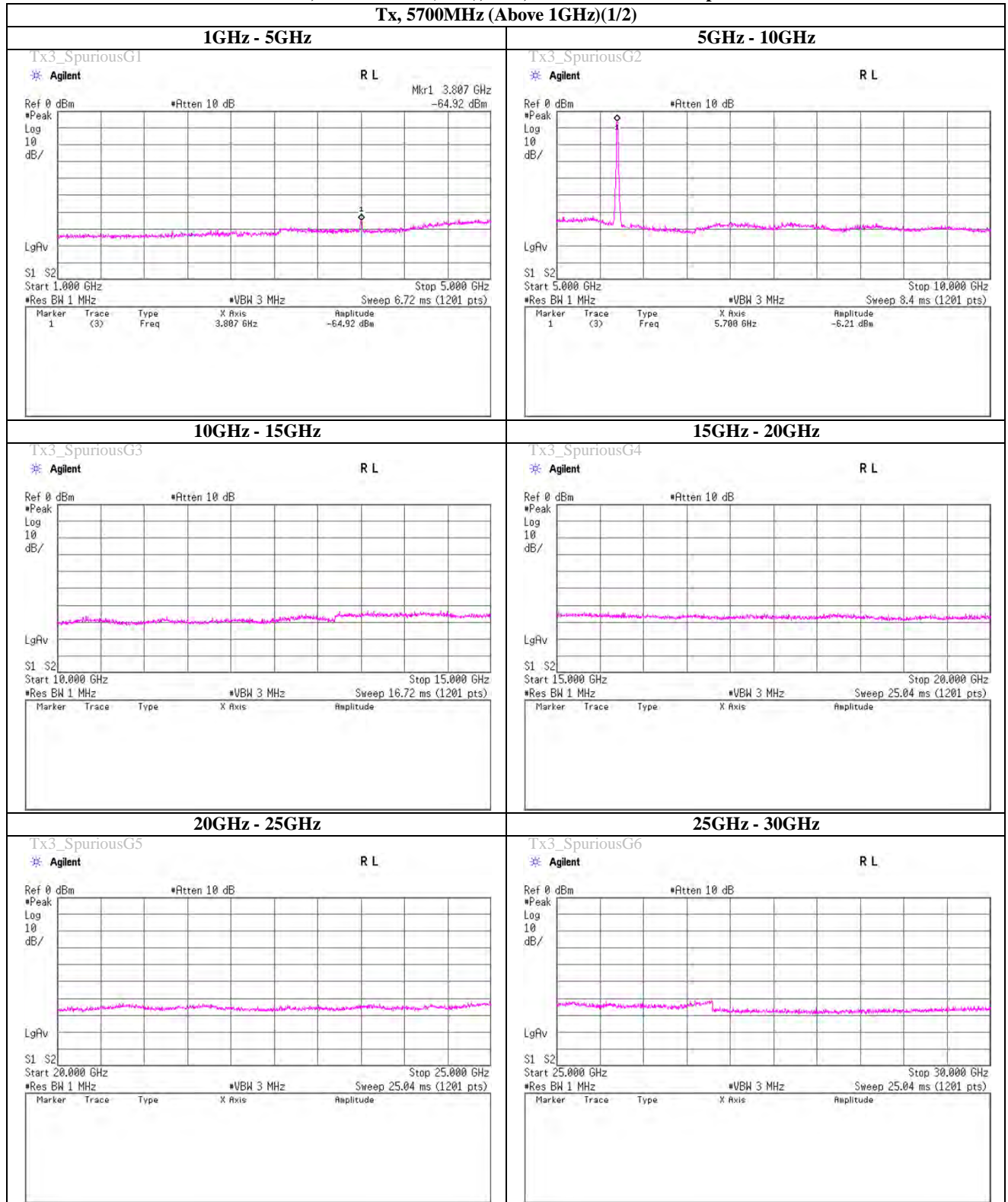
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11a (W56), PN9, worst data mode 6Mbps**

**Tx, 5700MHz (Above 1GHz)(1/2)**



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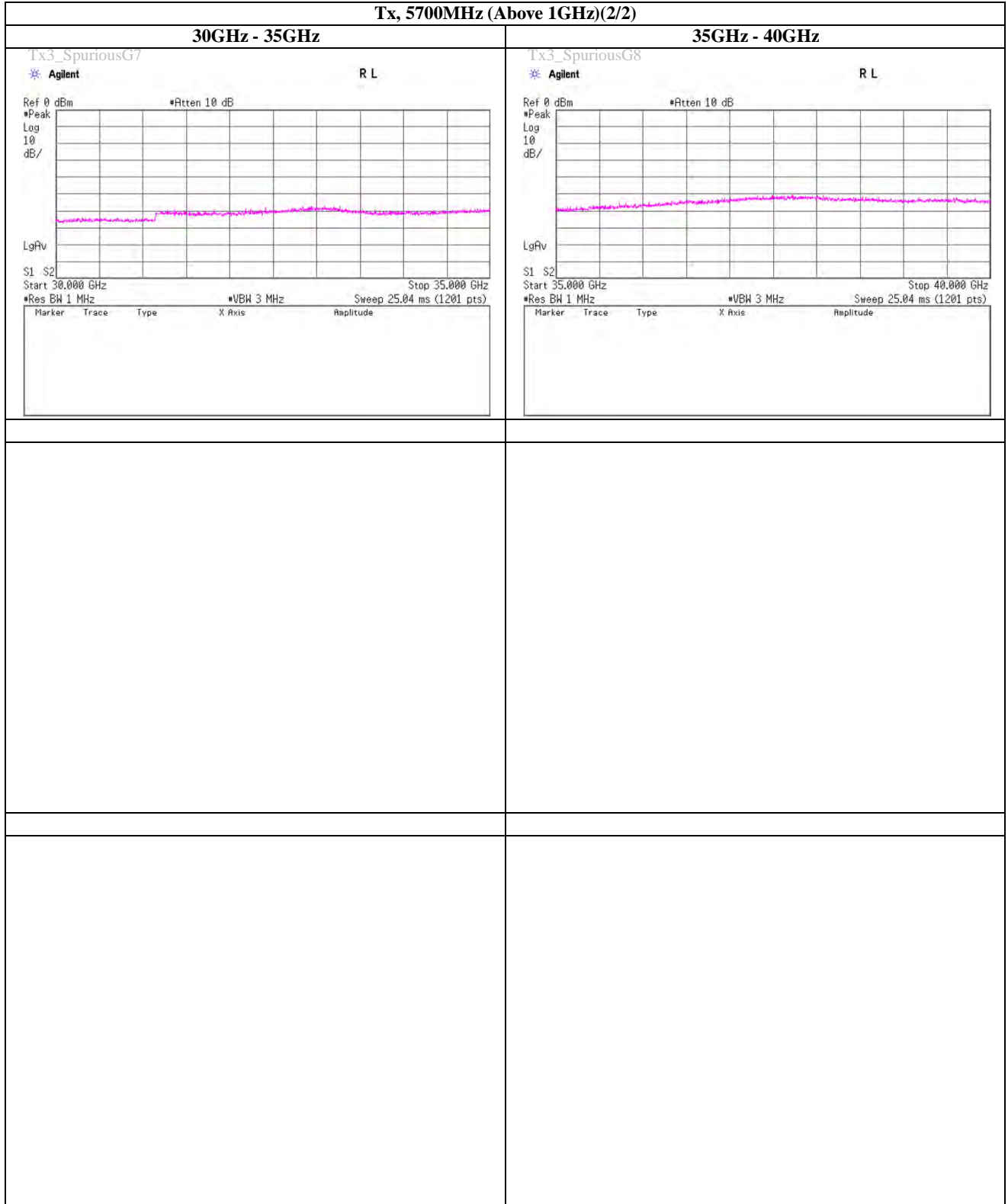
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11a (W56), PN9, worst data mode 6Mbps**

**Tx, 5700MHz (Above 1GHz)(2/2)**



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Telephone : +81 463 50 6400

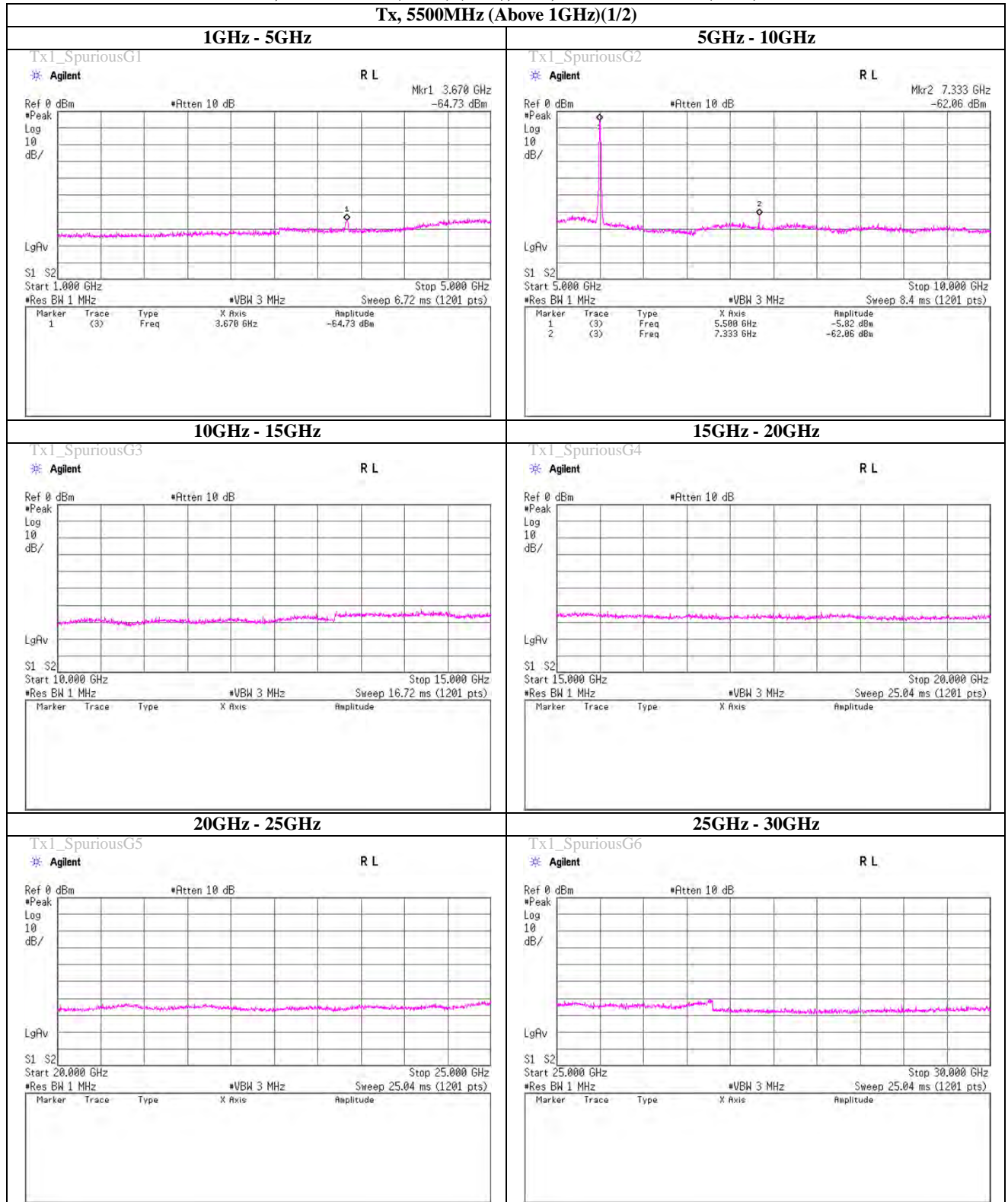
Facsimile : +81 463 50 6401



**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11n (HT20) (W56), PN9, worst data mode 3(MCS)**

**Tx, 5500MHz (Above 1GHz)(1/2)**



**UL Japan, Inc.**

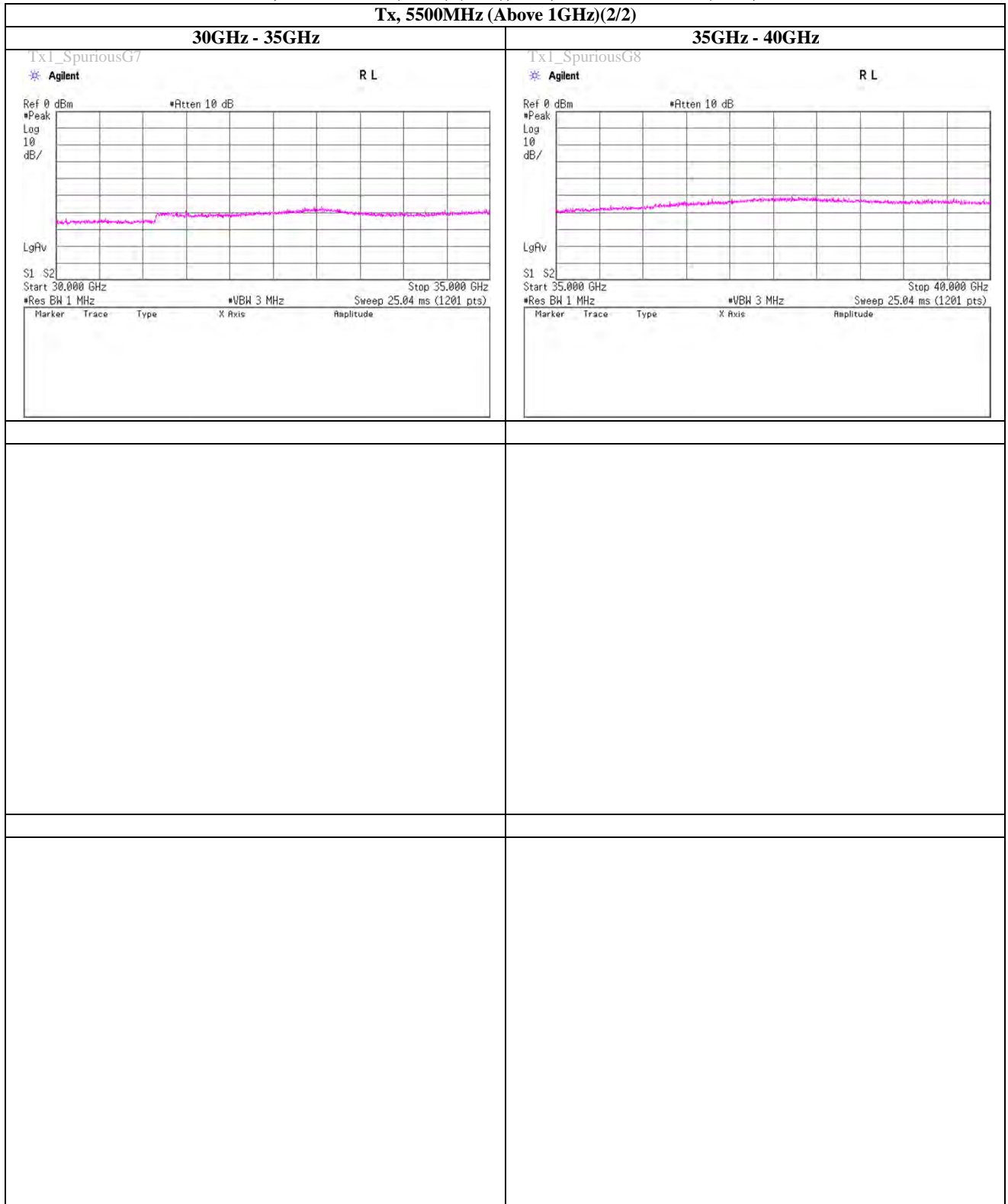
**Shonan EMC Lab.**

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

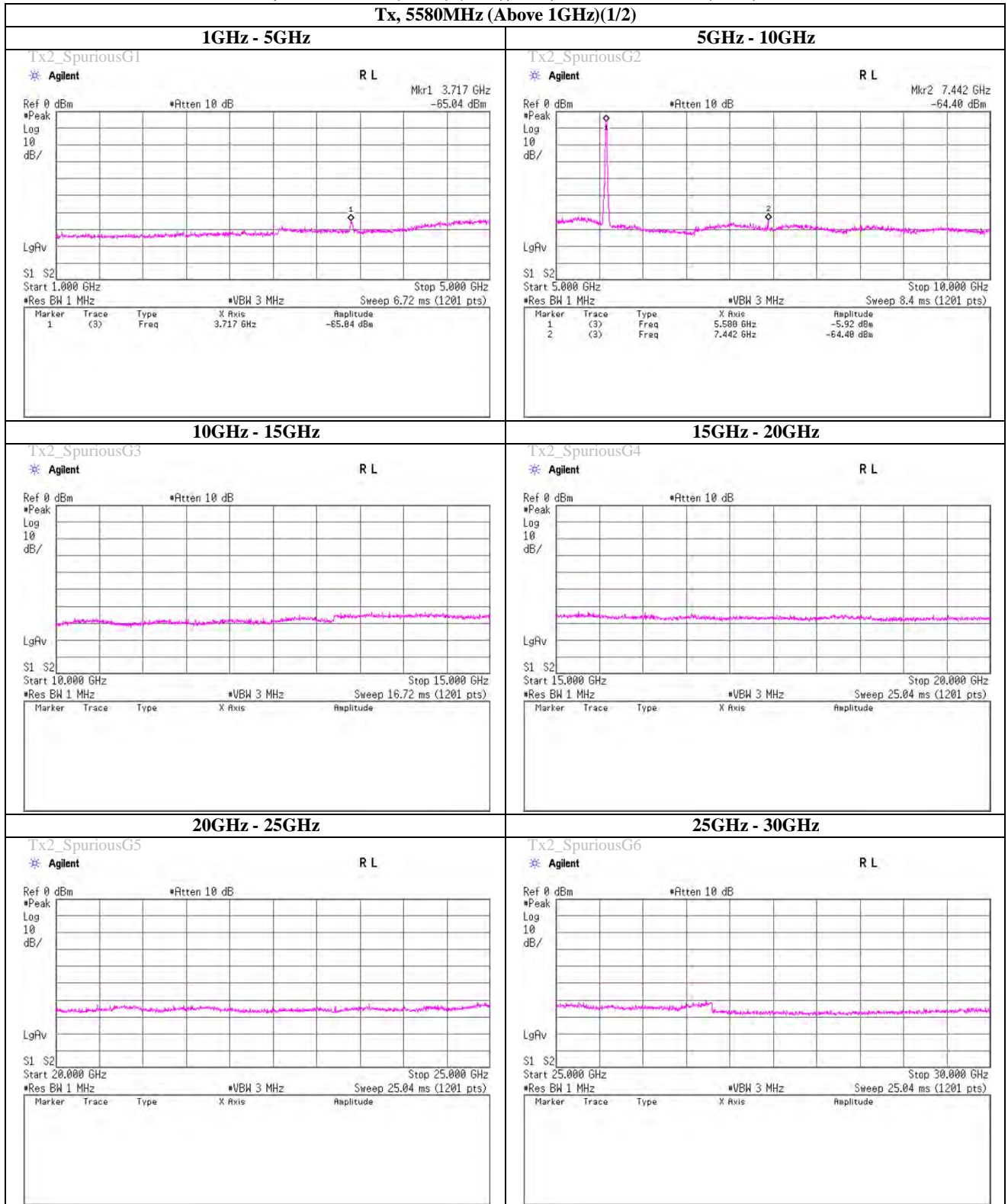
Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**  
**Tx, IEEE802.11n (HT20) (W56), PN9, worst data mode 3(MCS)**



**(Reference) Spurious emission (Conducted)**  
Tx, IEEE802.11n (HT20) (W56), PN9, worst data mode 3(MCS)

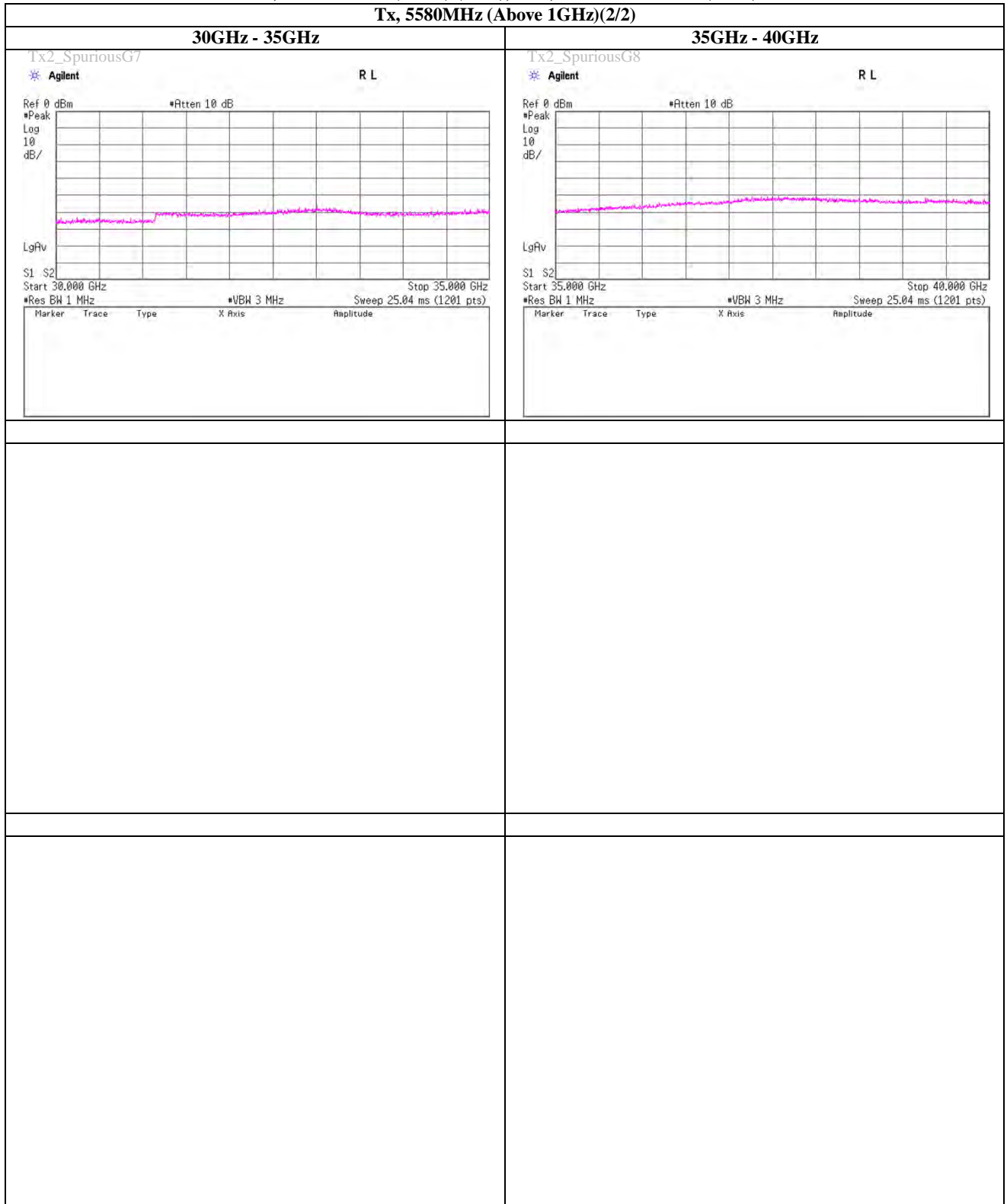
Tx, 5580MHz (Above 1GHz)(1/2)



**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11n (HT20) (W56), PN9, worst data mode 3(MCS)**

**Tx, 5580MHz (Above 1GHz)(2/2)**



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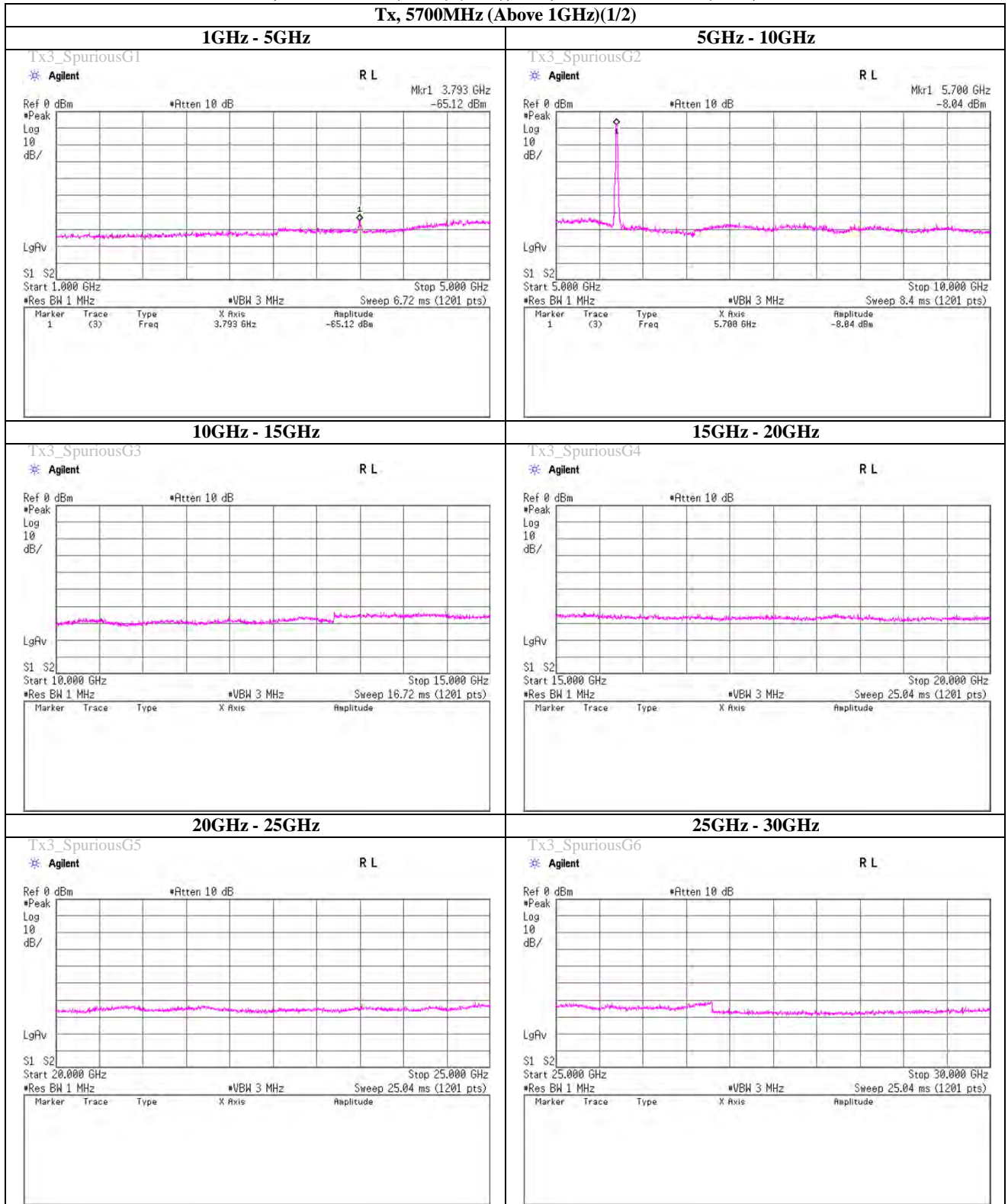
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**

**Tx, IEEE802.11n (HT20) (W56), PN9, worst data mode 3(MCS)**

**Tx, 5700MHz (Above 1GHz)(1/2)**



**UL Japan, Inc.**

**Shonan EMC Lab.**

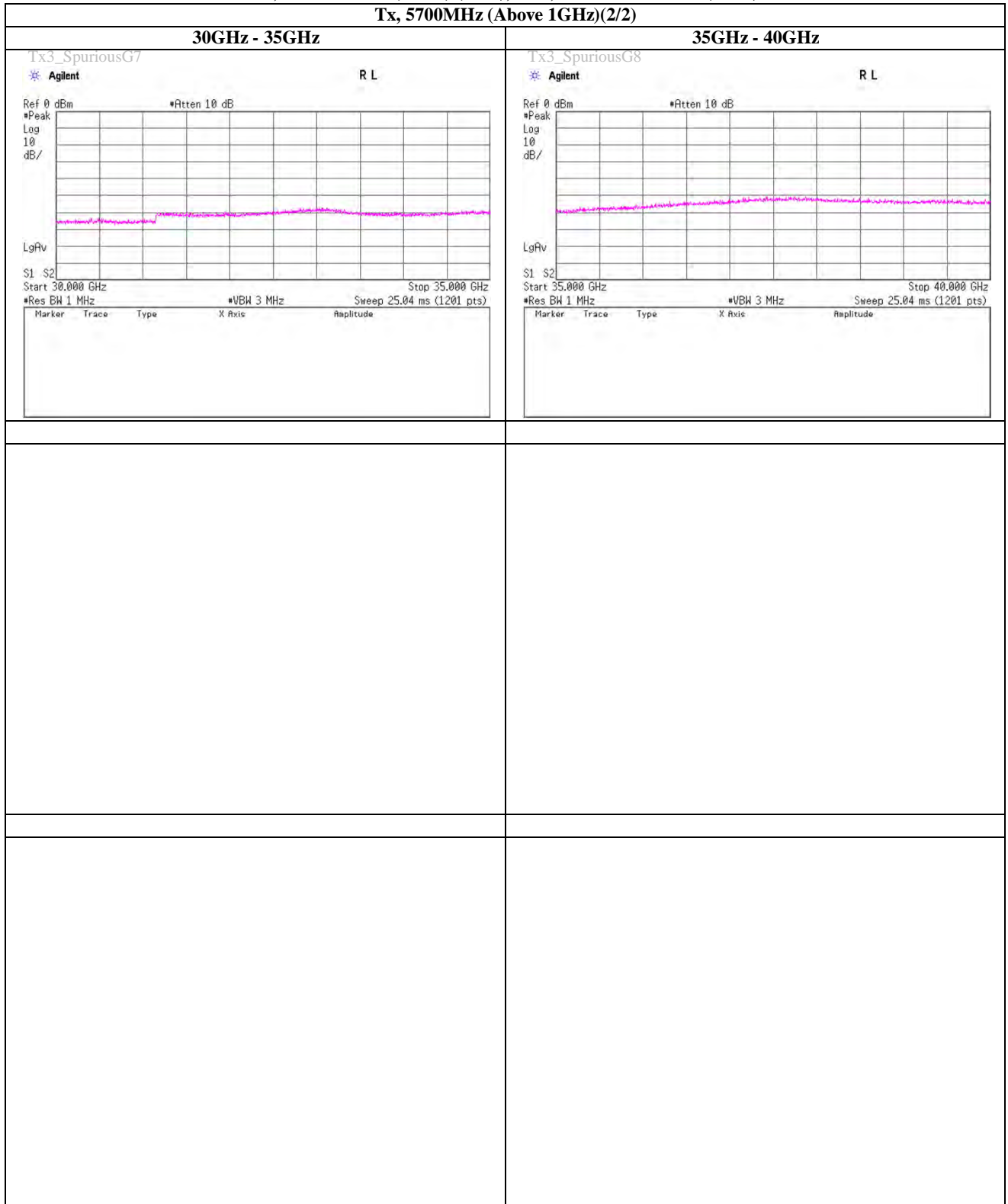
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

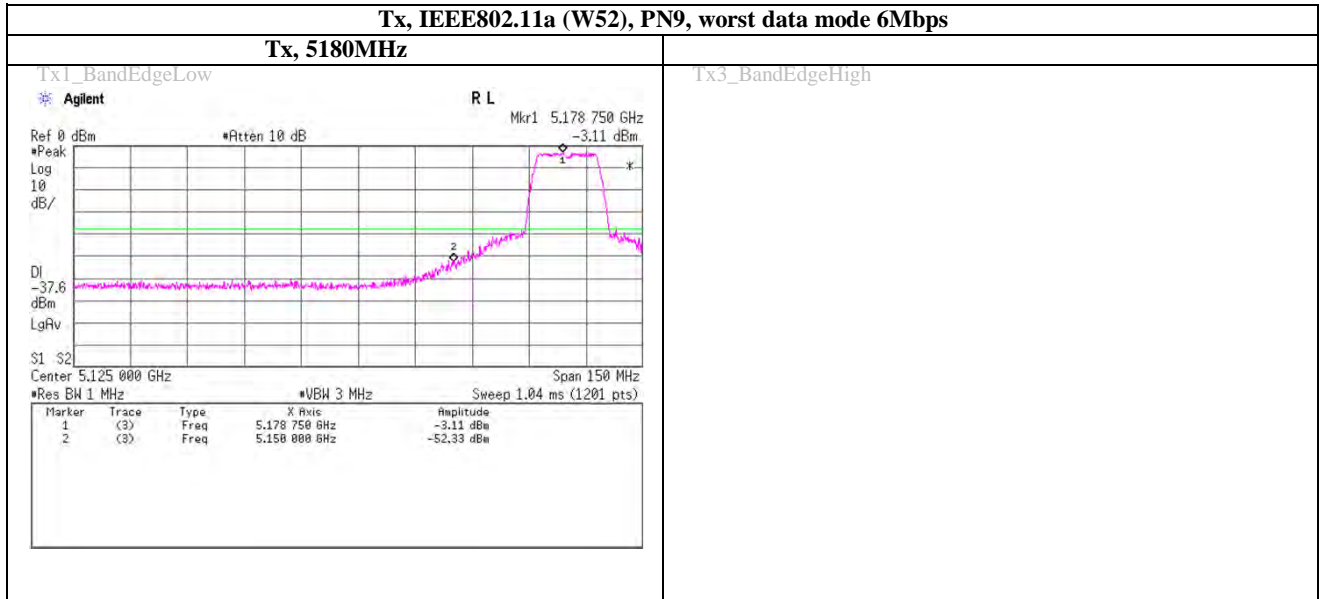
**(Reference) Spurious emission (Conducted)**  
**Tx, IEEE802.11n (HT20) (W56), PN9, worst data mode 3(MCS)**

**Tx, 5700MHz (Above 1GHz)(2/2)**



**(Reference) Spurious emission (Conducted)**

**Band Edge compliance**



Specified value in the Regulation - Cable Loss (including the cable(s) customer supplied) - Atten. Loss - Antenna Gain = Limit line

| FREQ    | Regulation | Cable | Atten. | Antenna | Limit  |
|---------|------------|-------|--------|---------|--------|
| [MHz]   | [dBm]      | Loss  | Loss   | Gain    | line   |
|         |            | [dB]  | [dB]   | [dBi]   | [dBm]  |
| 5150.00 | -27.00     | 1.06  | 10.02  | -0.50   | -37.58 |
| 5350.00 | -27.00     | 1.06  | 10.03  | -0.50   | -37.59 |

**UL Japan, Inc.**

**Shonan EMC Lab.**

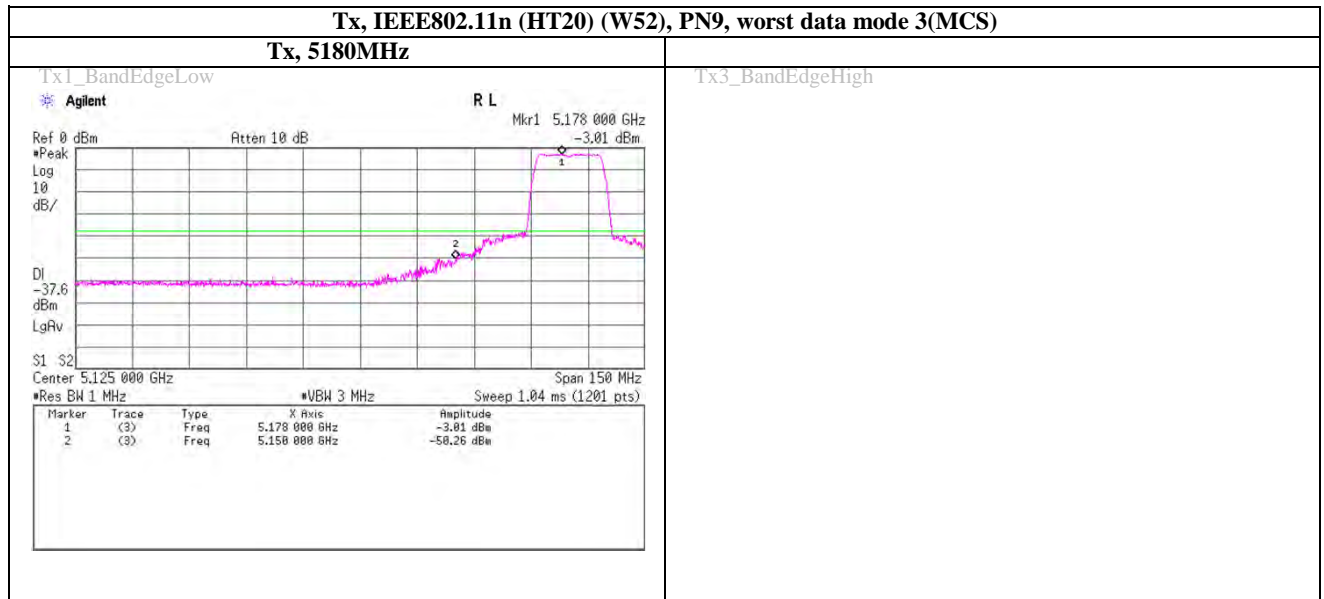
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**

**Band Edge compliance**



Specified value in the Regulation - Cable Loss (including the cable(s) customer supplied) - Atten. Loss - Antenna Gain = Limit line

| FREQ<br>[MHz] | Regulation<br>[dBm] | Cable<br>Loss<br>[dB] | Atten.<br>Loss<br>[dB] | Antenna<br>Gain<br>[dBi] | Limit<br>line<br>[dBm] |
|---------------|---------------------|-----------------------|------------------------|--------------------------|------------------------|
| 5150.00       | -27.00              | 1.06                  | 10.02                  | -0.50                    | -37.58                 |
| 5350.00       | -27.00              | 1.06                  | 10.03                  | -0.50                    | -37.59                 |

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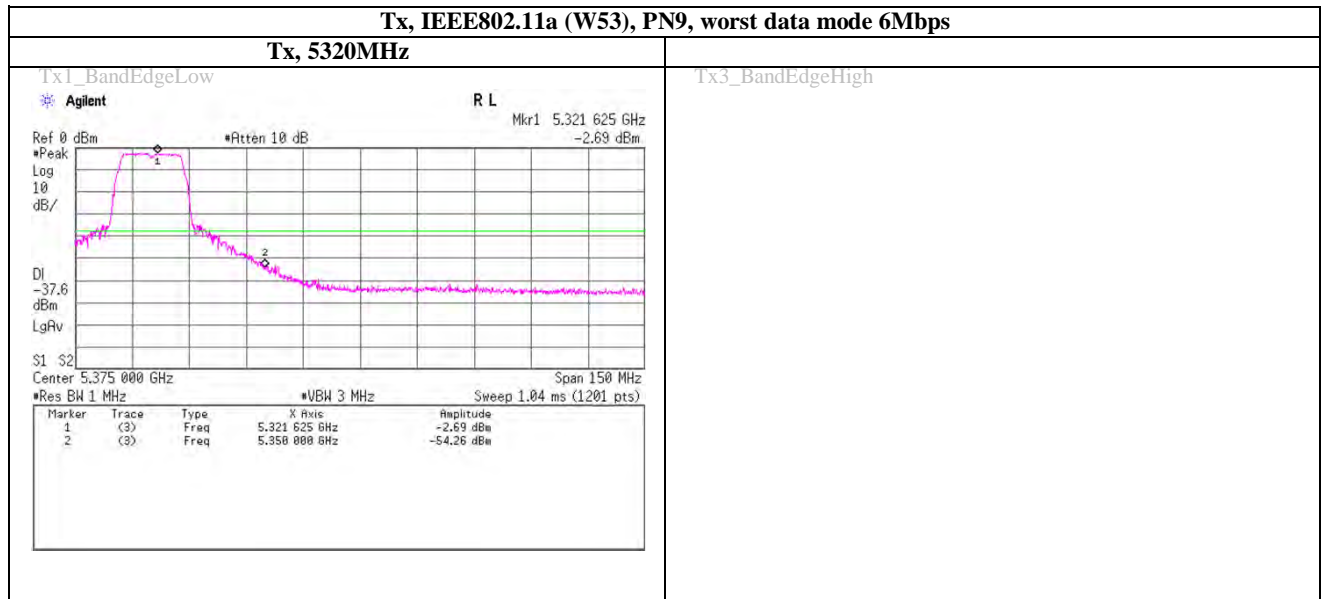
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401



**(Reference) Spurious emission (Conducted)**

**Band Edge compliance**



Specified value in the Regulation - Cable Loss (including the cable(s) customer supplied) - Atten. Loss - Antenna Gain = Limit line

| FREQ    | Regulation | Cable | Atten. | Antenna | Limit  |
|---------|------------|-------|--------|---------|--------|
| [MHz]   | [dBm]      | Loss  | Loss   | Gain    | line   |
|         |            | [dB]  | [dB]   | [dBi]   | [dBm]  |
| 5150.00 | -27.00     | 1.06  | 10.02  | -0.50   | -37.58 |
| 5350.00 | -27.00     | 1.06  | 10.03  | -0.50   | -37.59 |

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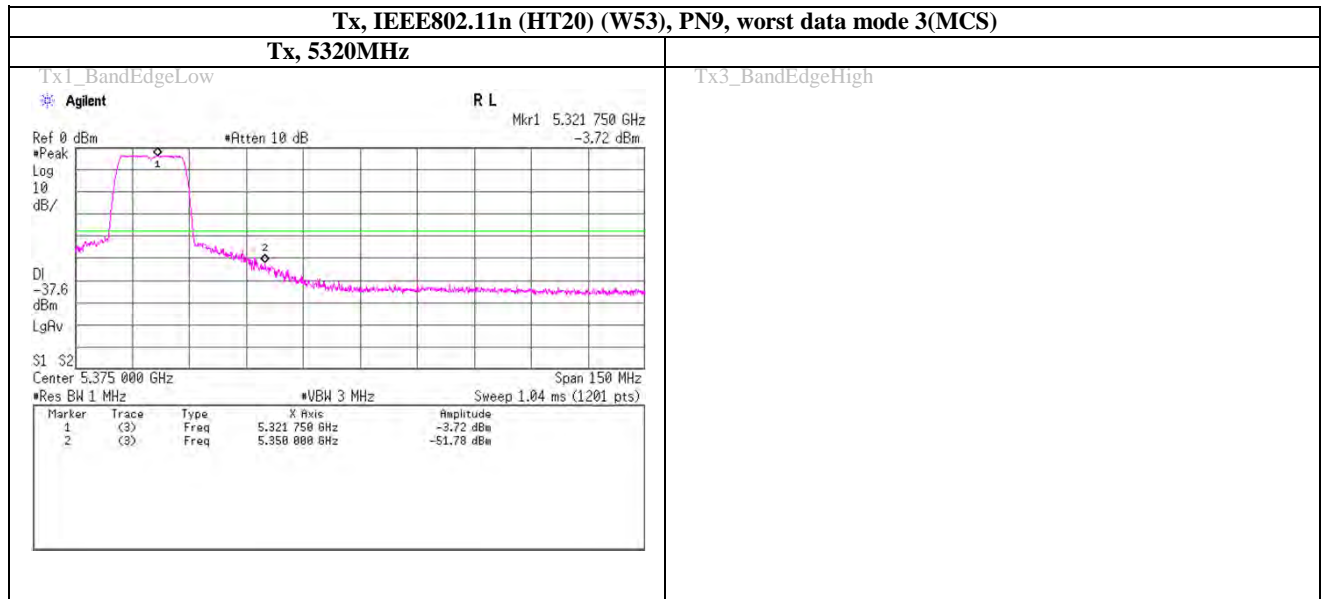
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

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Facsimile : +81 463 50 6401

**(Reference) Spurious emission (Conducted)**

**Band Edge compliance**



Specified value in the Regulation - Cable Loss (including the cable(s) customer supplied) - Atten. Loss - Antenna Gain = Limit line

| FREQ    | Regulation | Cable | Atten. | Antenna | Limit  |
|---------|------------|-------|--------|---------|--------|
| [MHz]   | [dBm]      | Loss  | Loss   | Gain    | line   |
|         |            | [dB]  | [dB]   | [dBi]   | [dBm]  |
| 5150.00 | -27.00     | 1.06  | 10.02  | -0.50   | -37.58 |
| 5350.00 | -27.00     | 1.06  | 10.03  | -0.50   | -37.59 |

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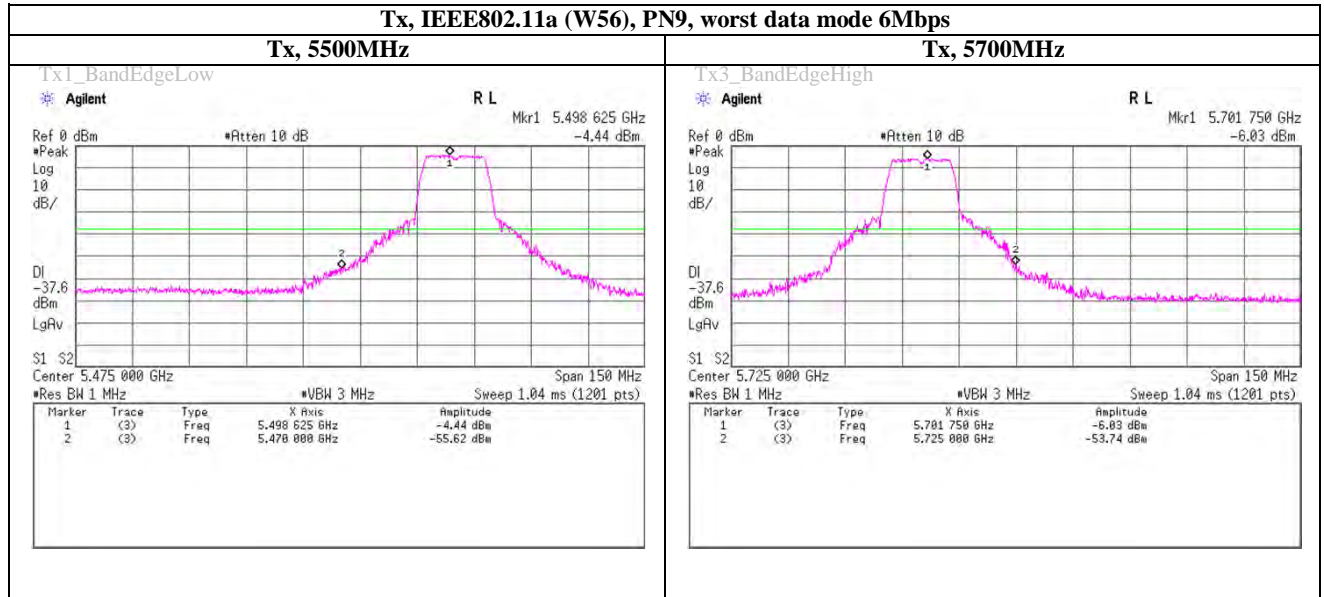
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**(Reference) Spurious emission (Conducted)**

**Band Edge compliance**



Specified value in the Regulation - Cable Loss (including the cable(s) customer supplied) - Atten. Loss - Antenna Gain = Limit line

| FREQ    | Regulation | Cable | Atten. | Antenna | Limit  |
|---------|------------|-------|--------|---------|--------|
| [MHz]   | [dBm]      | Loss  | Loss   | Gain    | line   |
|         |            | [dB]  | [dB]   | [dBi]   | [dBm]  |
| 5470.00 | -27.00     | 1.06  | 10.03  | -0.50   | -37.59 |
| 5725.00 | -27.00     | 1.05  | 10.01  | -0.50   | -37.56 |

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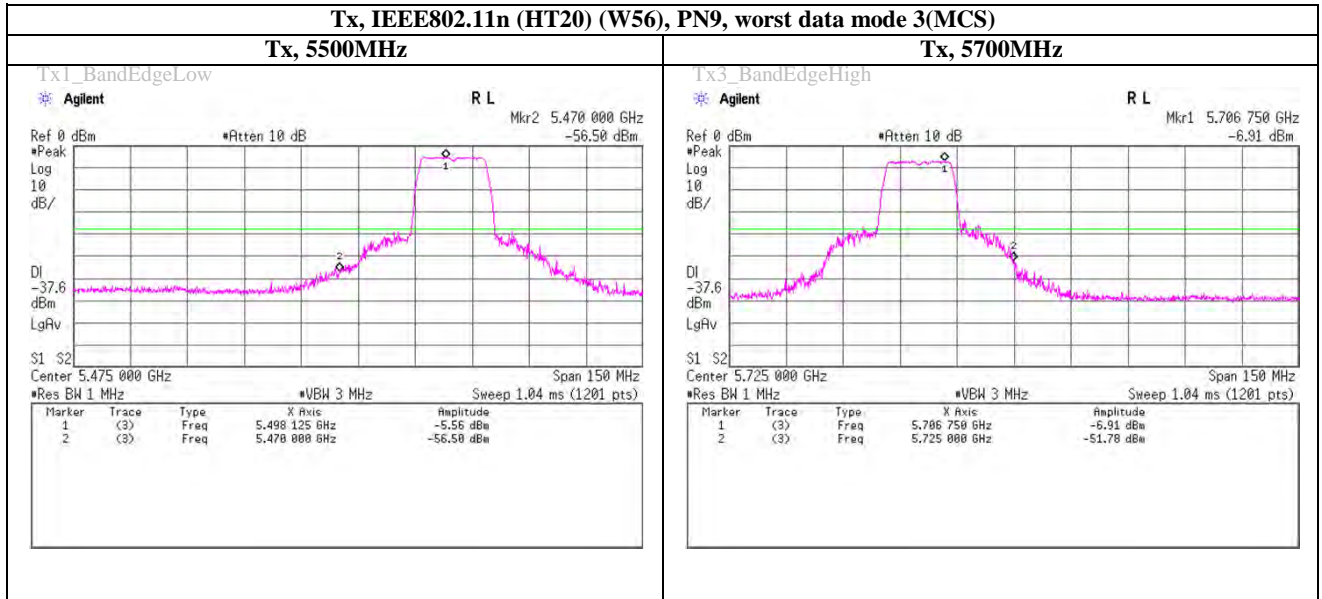
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**(Reference) Spurious emission (Conducted)**

**Band Edge compliance**



Specified value in the Regulation - Cable Loss (including the cable(s) customer supplied) - Atten. Loss - Antenna Gain = Limit line

| FREQ    | Regulation | Cable | Atten. | Antenna | Limit  |
|---------|------------|-------|--------|---------|--------|
| [MHz]   | [dBm]      | Loss  | Loss   | Gain    | line   |
|         |            | [dB]  | [dB]   | [dBi]   | [dBm]  |
| 5470.00 | -27.00     | 1.06  | 10.03  | -0.50   | -37.59 |
| 5725.00 | -27.00     | 1.05  | 10.01  | -0.50   | -37.56 |

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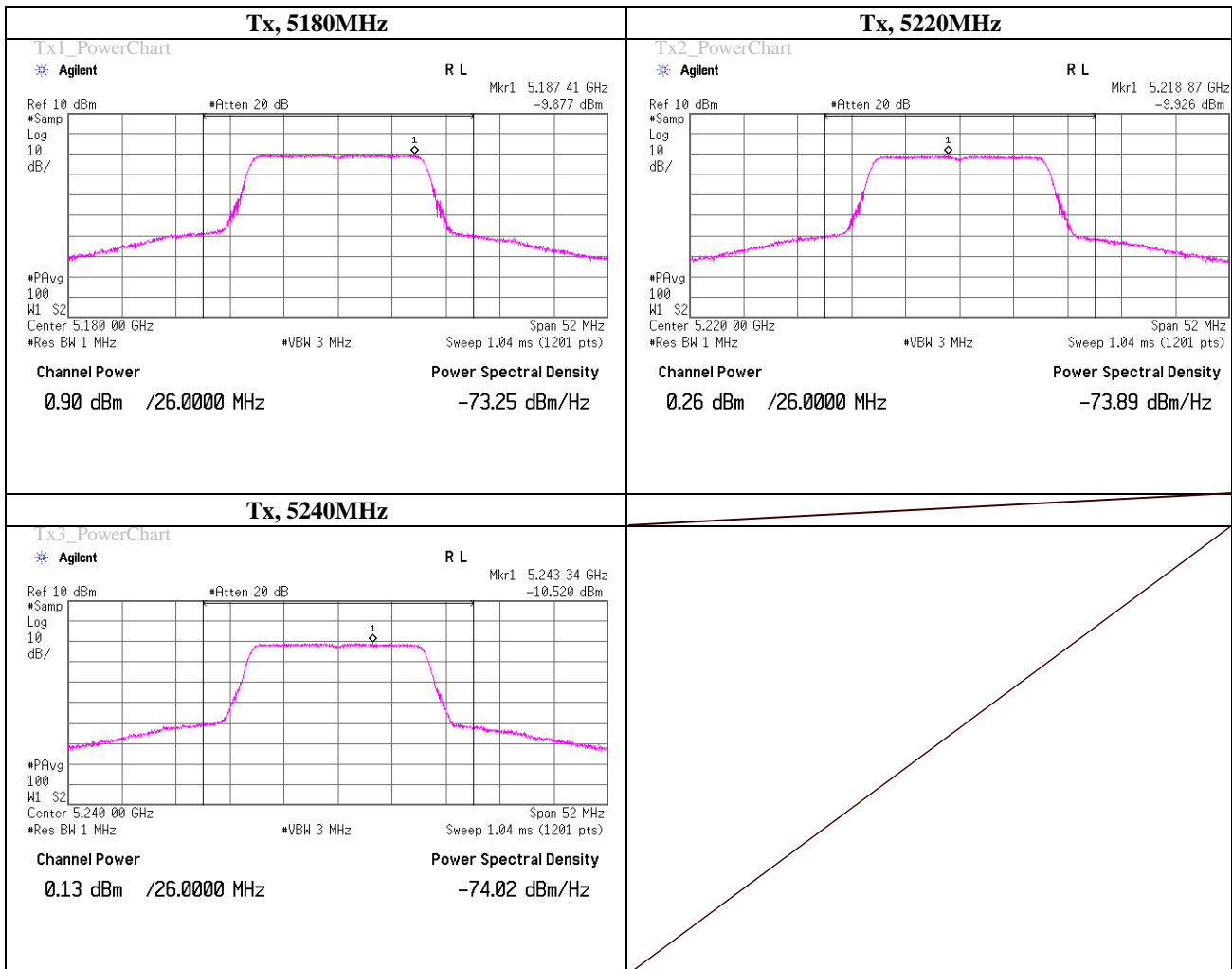
## Power Density

|                        |   |                    |
|------------------------|---|--------------------|
| Test place             | UL Japan, Inc. Shonan EMC Lab.                    | No.5 Shielded Room |
| Date                   | June 20, 2012                                     |                    |
| Temperature / Humidity | 25deg.C , 60%RH                                   |                    |
| Engineer               | Wataru Kojima                                     |                    |
| Mode                   | Tx, IEEE802.11a (W52), PN9, worst data mode 6Mbps |                    |

| Ch. Freq.<br>[MHz] | Freq.<br>Reading<br>[MHz] | Reading<br>[dBm/MHz] | Cable<br>Loss<br>[dB] | Atten.<br>Loss<br>[dB] |  |  | Result<br>[dBm/MHz] | Limit<br>[dBm] | Margin<br>[dB] |
|--------------------|---------------------------|----------------------|-----------------------|------------------------|--|--|---------------------|----------------|----------------|
| 5180.0000          | 5187.41                   | -9.88                | 1.06                  | 10.02                  |  |  | 1.21                | 4.00           | 2.79           |
| 5220.0000          | 5218.87                   | -9.93                | 1.06                  | 10.02                  |  |  | 1.16                | 4.00           | 2.84           |
| 5240.0000          | 5243.34                   | -10.52               | 1.06                  | 10.02                  |  |  | 0.56                | 4.00           | 3.44           |

Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss



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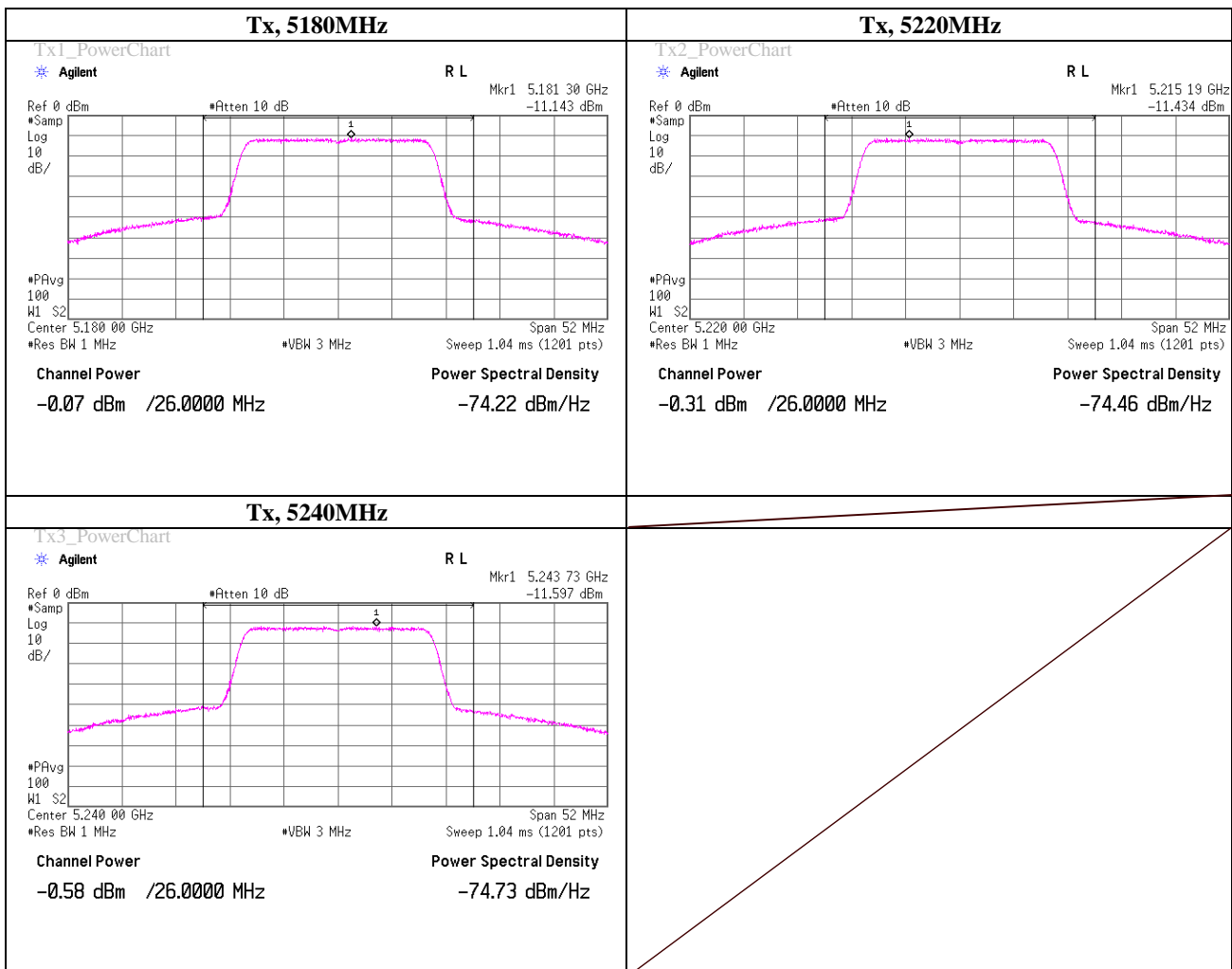
## Power Density

|                        |   |                    |
|------------------------|---|--------------------|
| Test place             | UL Japan, Inc. Shonan EMC Lab.                            | No.5 Shielded Room |
| Date                   | June 20, 2012   |                    |
| Temperature / Humidity | 25deg.C , 60%RH   |                    |
| Engineer               | Wataru Kojima   |                    |
| Mode                   | Tx, IEEE802.11n (HT20) (W52), PN9, worst data mode 3(MCS) |                    |

| Ch. Freq.<br>[MHz] | Freq.<br>Reading<br>[MHz] | Reading<br>[dBm/MHz] | Cable<br>Loss<br>[dB] | Atten.<br>Loss<br>[dB] |  |  | Result<br>[dBm/MHz] | Limit<br>[dBm] | Margin<br>[dB] |
|--------------------|---------------------------|----------------------|-----------------------|------------------------|--|--|---------------------|----------------|----------------|
| 5180.0000          | 5181.30                   | -11.14               | 1.59                  | 10.02                  |  |  | 0.47                | 4.00           | 3.53           |
| 5220.0000          | 5215.19                   | -11.43               | 1.59                  | 10.02                  |  |  | 0.18                | 4.00           | 3.82           |
| 5240.0000          | 5243.73                   | -11.60               | 1.59                  | 10.02                  |  |  | 0.02                | 4.00           | 3.98           |

Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss



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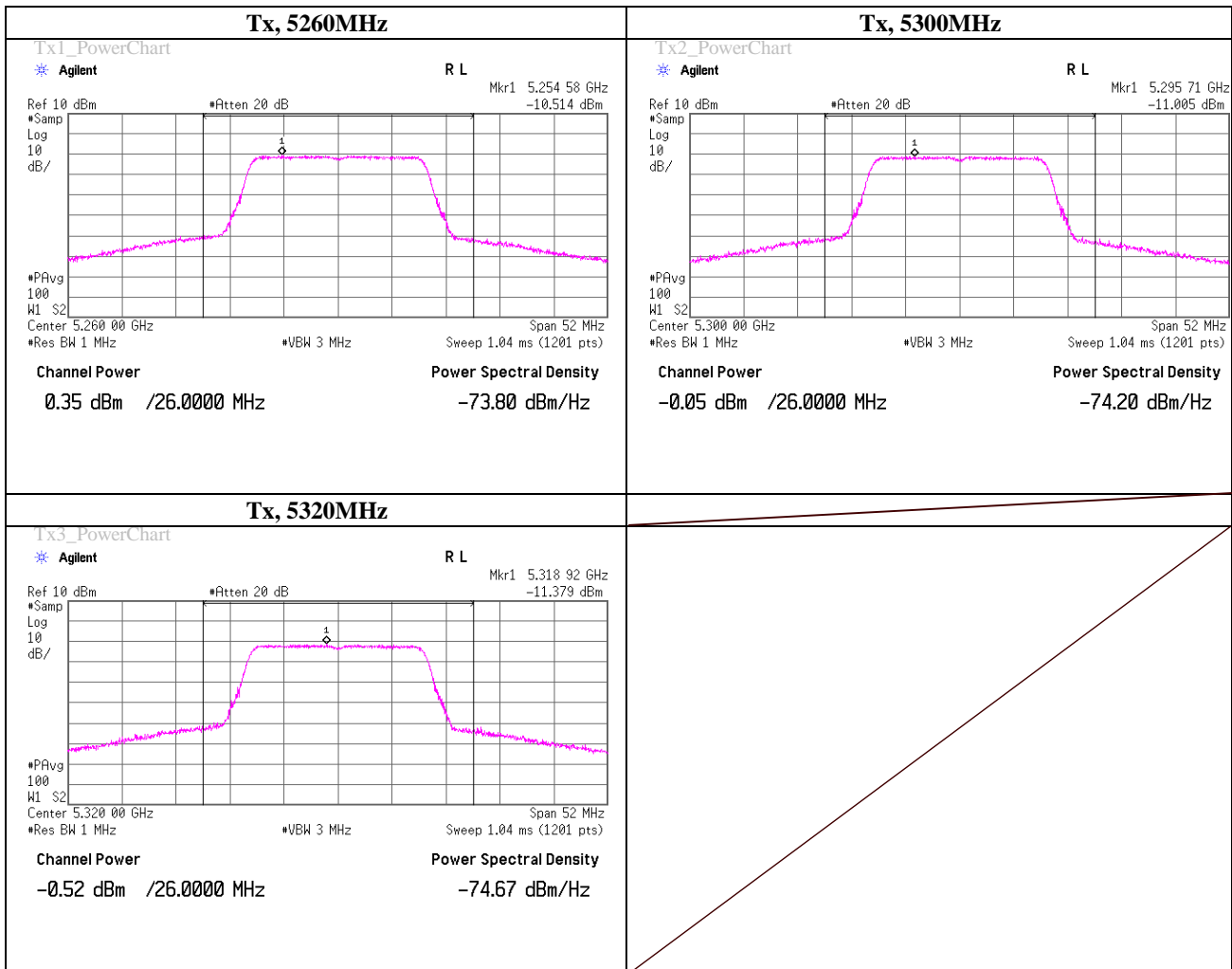
## Power Density

|                        |   |                    |
|------------------------|---|--------------------|
| Test place             | UL Japan, Inc. Shonan EMC Lab.                    | No.5 Shielded Room |
| Date                   | June 20, 2012                                     |                    |
| Temperature / Humidity | 25deg.C , 60%RH                                   |                    |
| Engineer               | Wataru Kojima                                     |                    |
| Mode                   | Tx, IEEE802.11a (W53), PN9, worst data mode 6Mbps |                    |

| Ch. Freq.<br>[MHz] | Freq.<br>Reading<br>[MHz] | Reading<br>[dBm/MHz] | Cable<br>Loss<br>[dB] | Atten.<br>Loss<br>[dB] |  |  | Result<br>[dBm/MHz] | Limit<br>[dBm] | Margin<br>[dB] |
|--------------------|---------------------------|----------------------|-----------------------|------------------------|--|--|---------------------|----------------|----------------|
| 5260.0000          | 5254.58                   | -10.51               | 1.06                  | 10.03                  |  |  | 0.57                | 11.00          | 10.43          |
| 5300.0000          | 5295.71                   | -11.01               | 1.06                  | 10.03                  |  |  | 0.08                | 11.00          | 10.92          |
| 5320.0000          | 5318.92                   | -11.38               | 1.06                  | 10.03                  |  |  | -0.29               | 11.00          | 11.29          |

Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss



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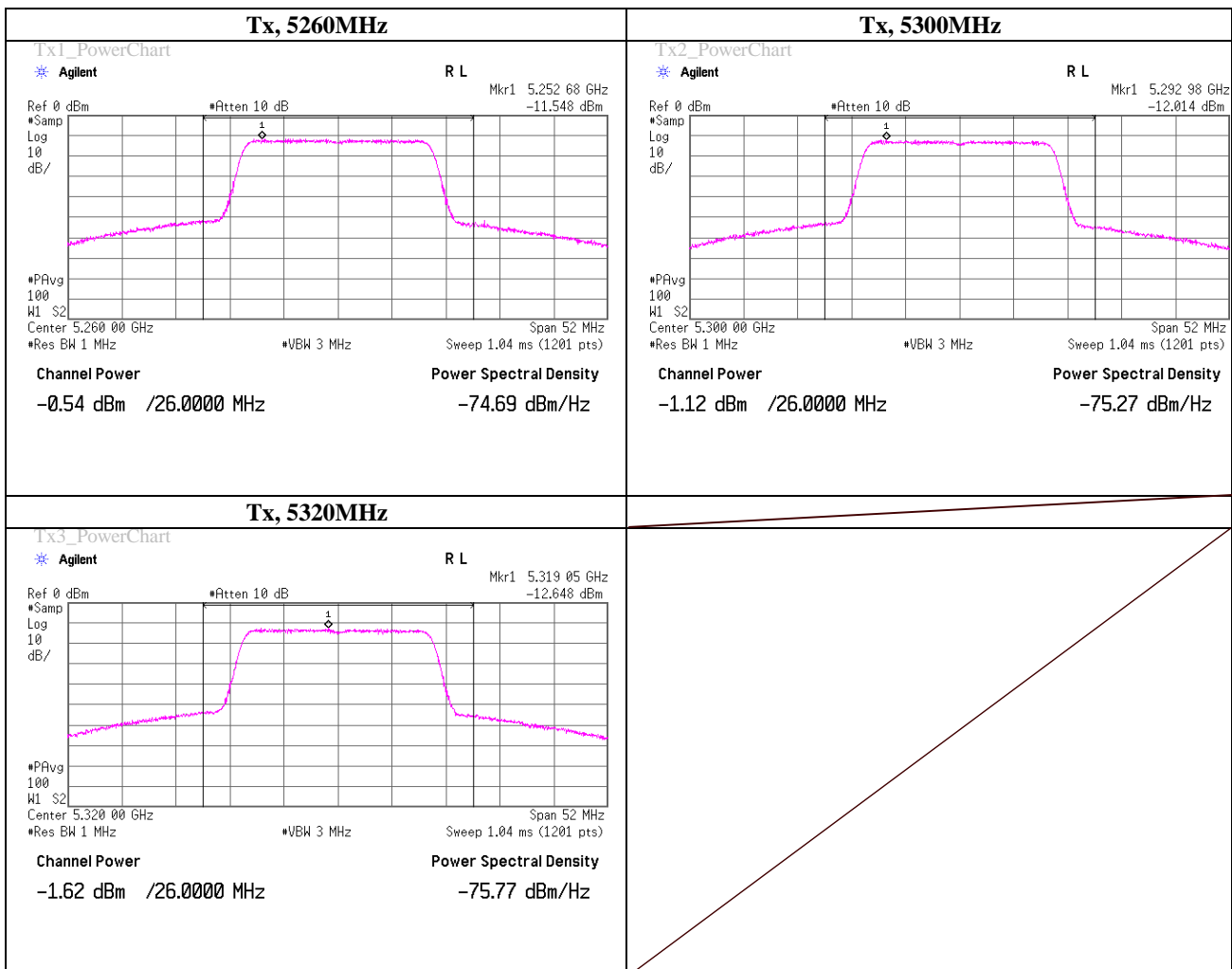
## Power Density

|                        |   |                    |
|------------------------|---|--------------------|
| Test place             | UL Japan, Inc. Shonan EMC Lab.                            | No.5 Shielded Room |
| Date                   | June 20, 2012   |                    |
| Temperature / Humidity | 25deg.C , 60%RH   |                    |
| Engineer               | Wataru Kojima   |                    |
| Mode                   | Tx, IEEE802.11n (HT20) (W53), PN9, worst data mode 3(MCS) |                    |

| Ch. Freq.<br>[MHz] | Freq.<br>Reading<br>[MHz] | Reading<br>[dBm/MHz] | Cable<br>Loss<br>[dB] | Atten.<br>Loss<br>[dB] |  |  | Result<br>[dBm/MHz] | Limit<br>[dBm] | Margin<br>[dB] |
|--------------------|---------------------------|----------------------|-----------------------|------------------------|--|--|---------------------|----------------|----------------|
| 5260.0000          | 5252.68                   | -11.55               | 1.06                  | 10.03                  |  |  | -0.46               | 11.00          | 11.46          |
| 5300.0000          | 5292.98                   | -12.01               | 1.06                  | 10.03                  |  |  | -0.93               | 11.00          | 11.93          |
| 5320.0000          | 5319.05                   | -12.65               | 1.06                  | 10.03                  |  |  | -1.56               | 11.00          | 12.56          |

Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss



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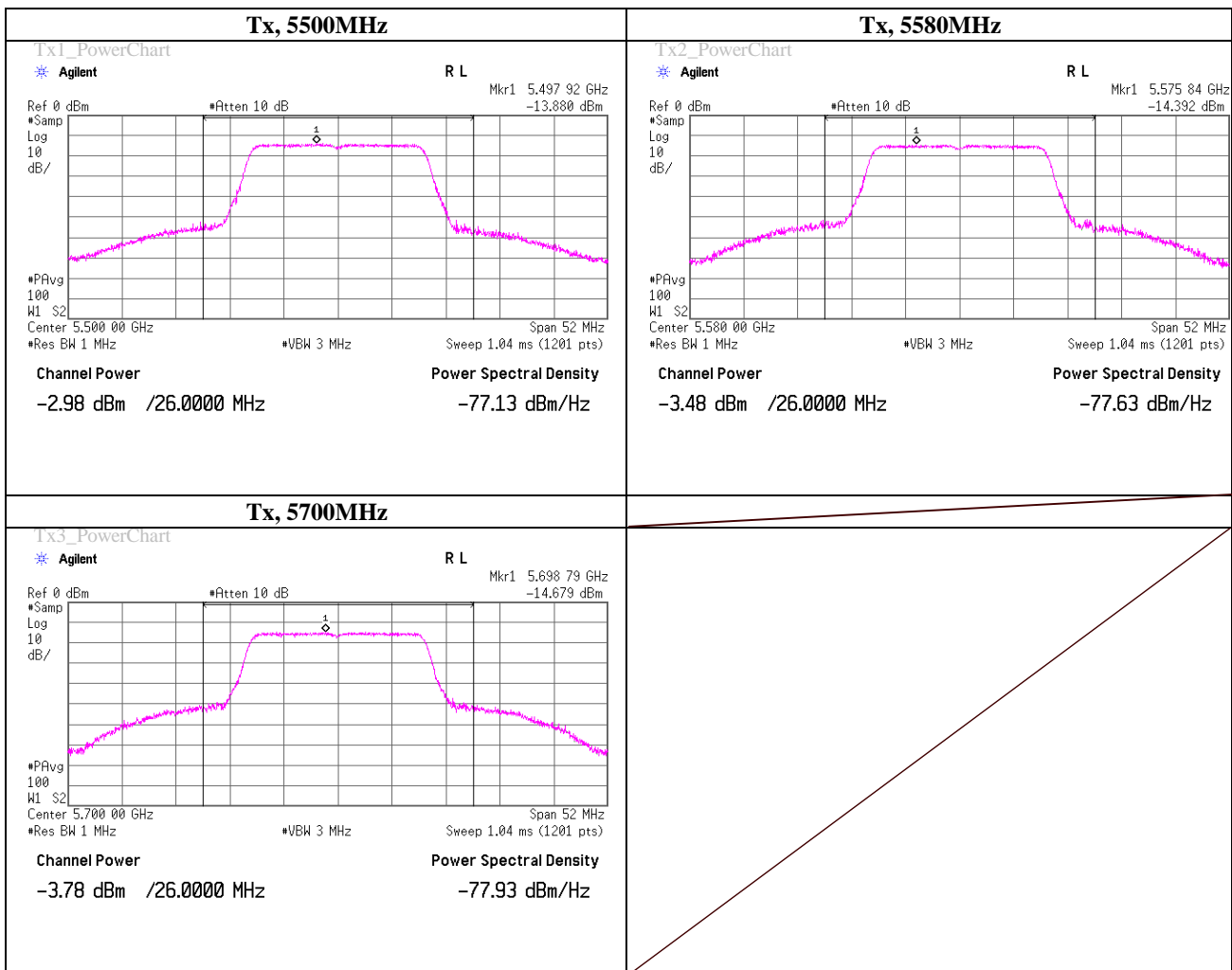
## Power Density

|                        |   |                    |
|------------------------|---|--------------------|
| Test place             | UL Japan, Inc. Shonan EMC Lab.                    | No.5 Shielded Room |
| Date                   | June 20, 2012                                     |                    |
| Temperature / Humidity | 25deg.C , 60%RH                                   |                    |
| Engineer               | Wataru Kojima                                     |                    |
| Mode                   | Tx, IEEE802.11a (W56), PN9, worst data mode 6Mbps |                    |

| Ch. Freq.<br>[MHz] | Freq.<br>Reading<br>[MHz] | Reading<br>[dBm/MHz] | Cable<br>Loss<br>[dB] | Atten.<br>Loss<br>[dB] |  |  | Result<br>[dBm/MHz] | Limit<br>[dBm] | Margin<br>[dB] |
|--------------------|---------------------------|----------------------|-----------------------|------------------------|--|--|---------------------|----------------|----------------|
| 5500.0000          | 5497.92                   | -13.88               | 1.06                  | 10.03                  |  |  | -2.79               | 11.00          | 13.79          |
| 5580.0000          | 5575.84                   | -14.39               | 1.06                  | 10.02                  |  |  | -3.31               | 11.00          | 14.31          |
| 5700.0000          | 5698.79                   | -14.68               | 1.05                  | 10.01                  |  |  | -3.62               | 11.00          | 14.62          |

Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss



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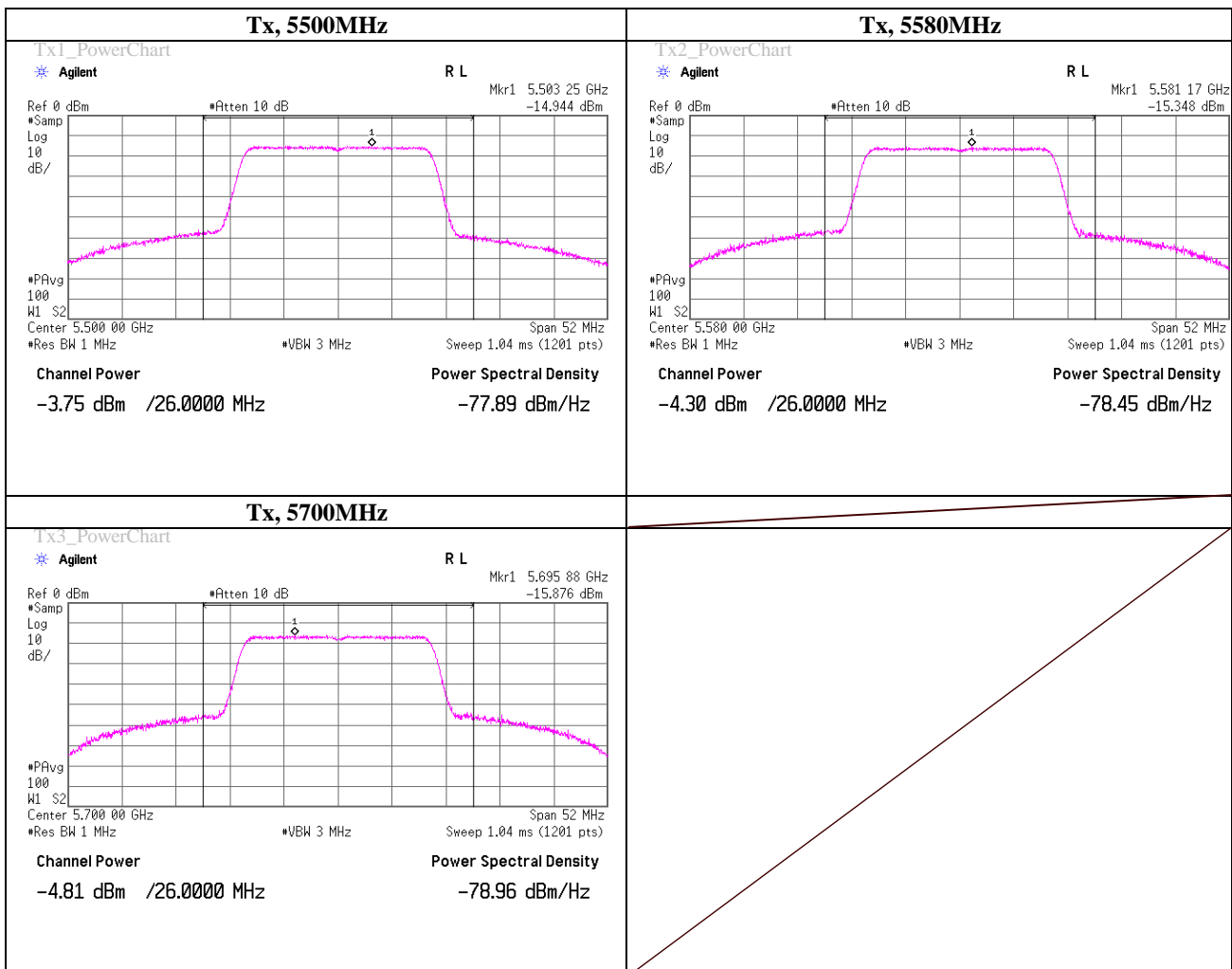
## Power Density

|                        |   |                    |
|------------------------|---|--------------------|
| Test place             | UL Japan, Inc. Shonan EMC Lab.                            | No.5 Shielded Room |
| Date                   | June 20, 2012   |                    |
| Temperature / Humidity | 25deg.C , 60%RH   |                    |
| Engineer               | Wataru Kojima   |                    |
| Mode                   | Tx, IEEE802.11n (HT20) (W56), PN9, worst data mode 3(MCS) |                    |

| Ch. Freq.<br>[MHz] | Freq.<br>Reading<br>[MHz] | Reading<br>[dBm/MHz] | Cable<br>Loss<br>[dB] | Atten.<br>Loss<br>[dB] |  |  | Result<br>[dBm/MHz] | Limit<br>[dBm] | Margin<br>[dB] |
|--------------------|---------------------------|----------------------|-----------------------|------------------------|--|--|---------------------|----------------|----------------|
| 5500.0000          | 5503.25                   | -14.94               | 1.06                  | 10.03                  |  |  | -3.85               | 11.00          | 14.85          |
| 5580.0000          | 5581.17                   | -15.35               | 1.06                  | 10.02                  |  |  | -4.26               | 11.00          | 15.26          |
| 5700.0000          | 5695.88                   | -15.88               | 1.05                  | 10.01                  |  |  | -4.81               | 11.00          | 15.81          |

Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss



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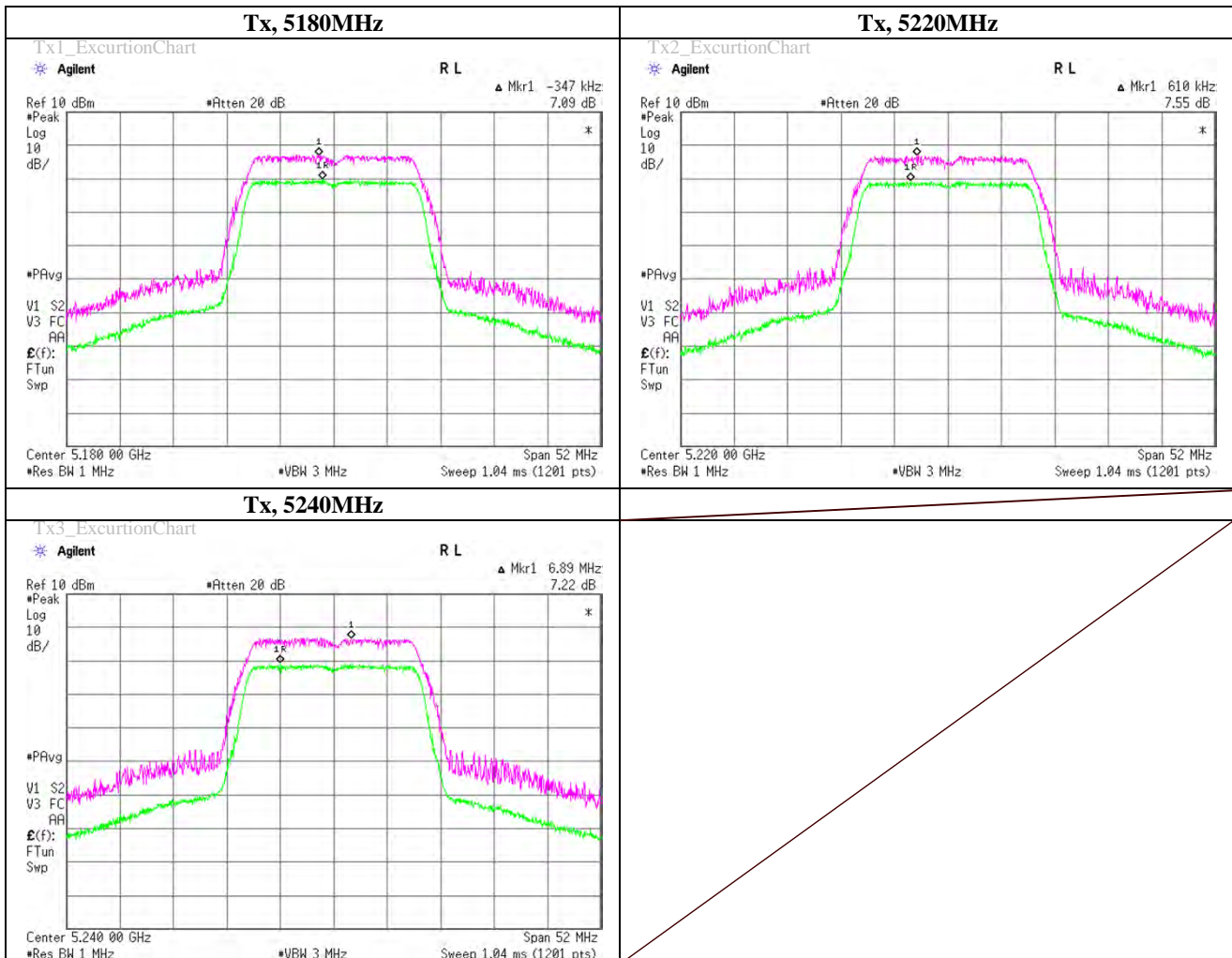
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Facsimile : +81 463 50 6401

### Peak Excursion Ratio

|                        |   |                    |
|------------------------|---|--------------------|
| Test place             | UL Japan, Inc. Shonan EMC Lab.                    | No.5 Shielded Room |
| Date                   | July 2, 2012                                      |                    |
| Temperature / Humidity | 22deg.C , 42%RH                                   |                    |
| Engineer               | Kenichi Adachi                                    |                    |
| Mode                   | Tx, IEEE802.11a (W52), PN9, worst data mode 6Mbps |                    |

| Ch. Freq.<br>[MHz] | Peak Power<br>Excursion<br>[dB] | Limit<br>[dB] | Margin<br>[dB] |
|--------------------|---------------------------------|---------------|----------------|
| 5180.0000          | 7.09                            | =<13.0        | 5.91           |
| 5220.0000          | 7.55                            | =<13.0        | 5.45           |
| 5240.0000          | 7.22                            | =<13.0        | 5.78           |

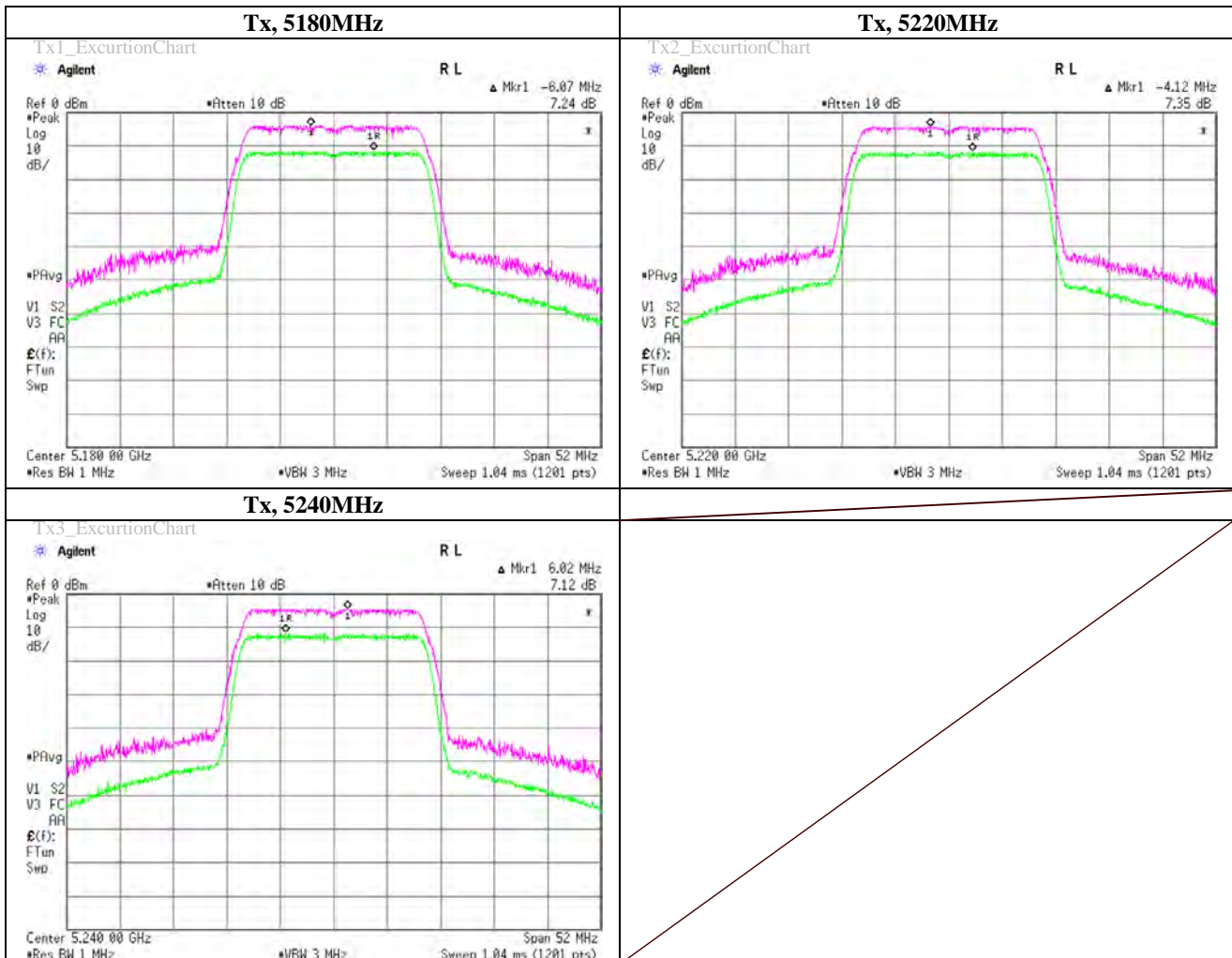


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## Peak Excursion Ratio

|                        |   |                    |
|------------------------|---|--------------------|
| Test place             | UL Japan, Inc. Shonan EMC Lab.                            | No.5 Shielded Room |
| Date                   | July 2, 2012  |                    |
| Temperature / Humidity | 22deg.C , 42%RH   |                    |
| Engineer               | Kenichi Adachi  |                    |
| Mode                   | Tx, IEEE802.11n (HT20) (W52), PN9, worst data mode 3(MCS) |                    |

| Ch. Freq.<br>[MHz] | Peak Power<br>Excursion<br>[dB] | Limit<br>[dB] | Margin<br>[dB] |
|--------------------|---------------------------------|---------------|----------------|
| 5180.0000          | 7.24                            | =<13.0        | 5.76           |
| 5220.0000          | 7.35                            | =<13.0        | 5.65           |
| 5240.0000          | 7.12                            | =<13.0        | 5.88           |

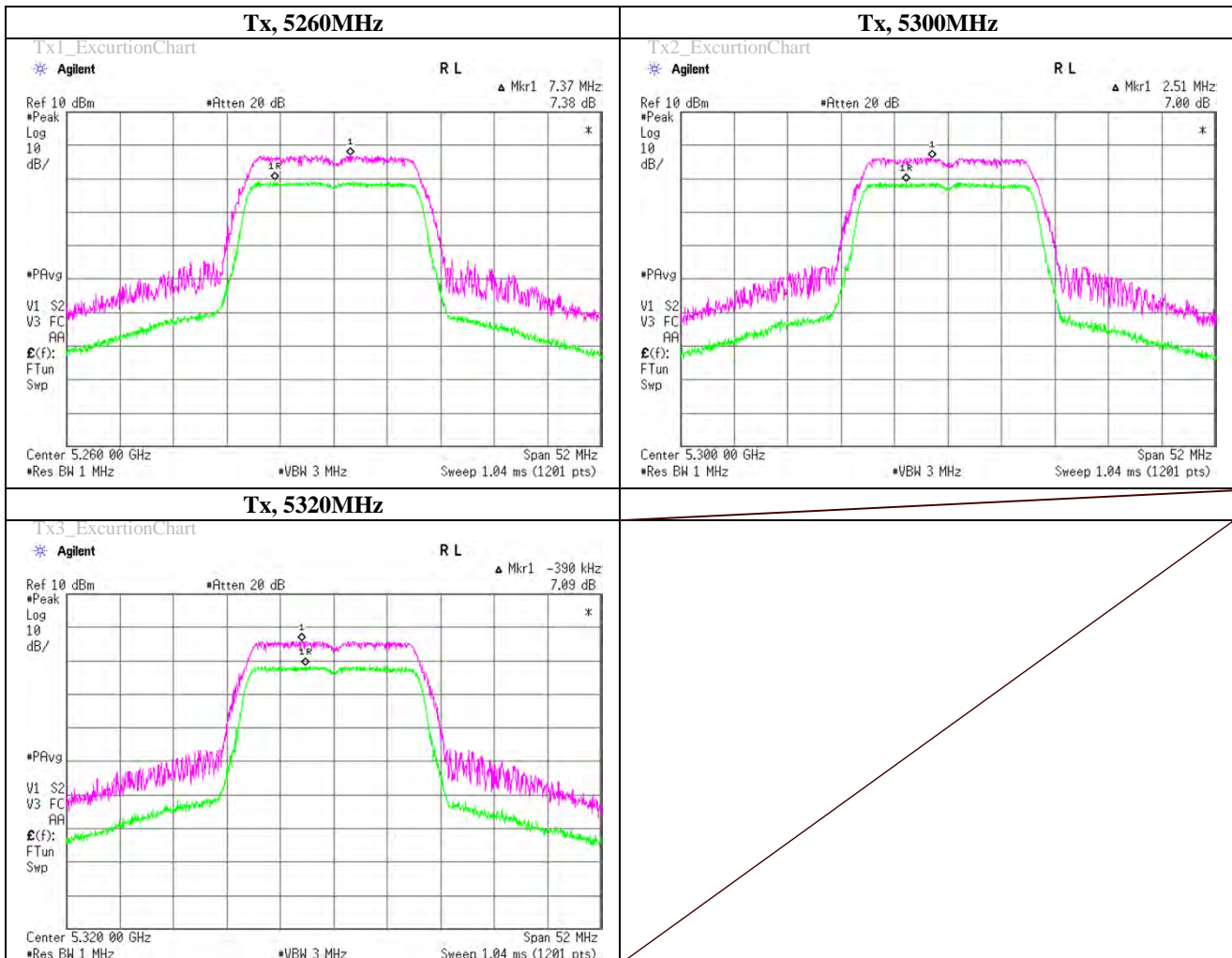


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## Peak Excursion Ratio

|                        |   |                    |
|------------------------|---|--------------------|
| Test place             | UL Japan, Inc. Shonan EMC Lab.                    | No.5 Shielded Room |
| Date                   | July 2, 2012                                      |                    |
| Temperature / Humidity | 22deg.C , 42%RH                                   |                    |
| Engineer               | Kenichi Adachi                                    |                    |
| Mode                   | Tx, IEEE802.11a (W53), PN9, worst data mode 6Mbps |                    |

| Ch. Freq.<br>[MHz] | Peak Power<br>Excursion<br>[dB] | Limit<br>[dB] | Margin<br>[dB] |
|--------------------|---------------------------------|---------------|----------------|
| 5260.0000          | 7.38                            | =<13.0        | 5.62           |
| 5300.0000          | 7.00                            | =<13.0        | 6.01           |
| 5320.0000          | 7.09                            | =<13.0        | 5.91           |

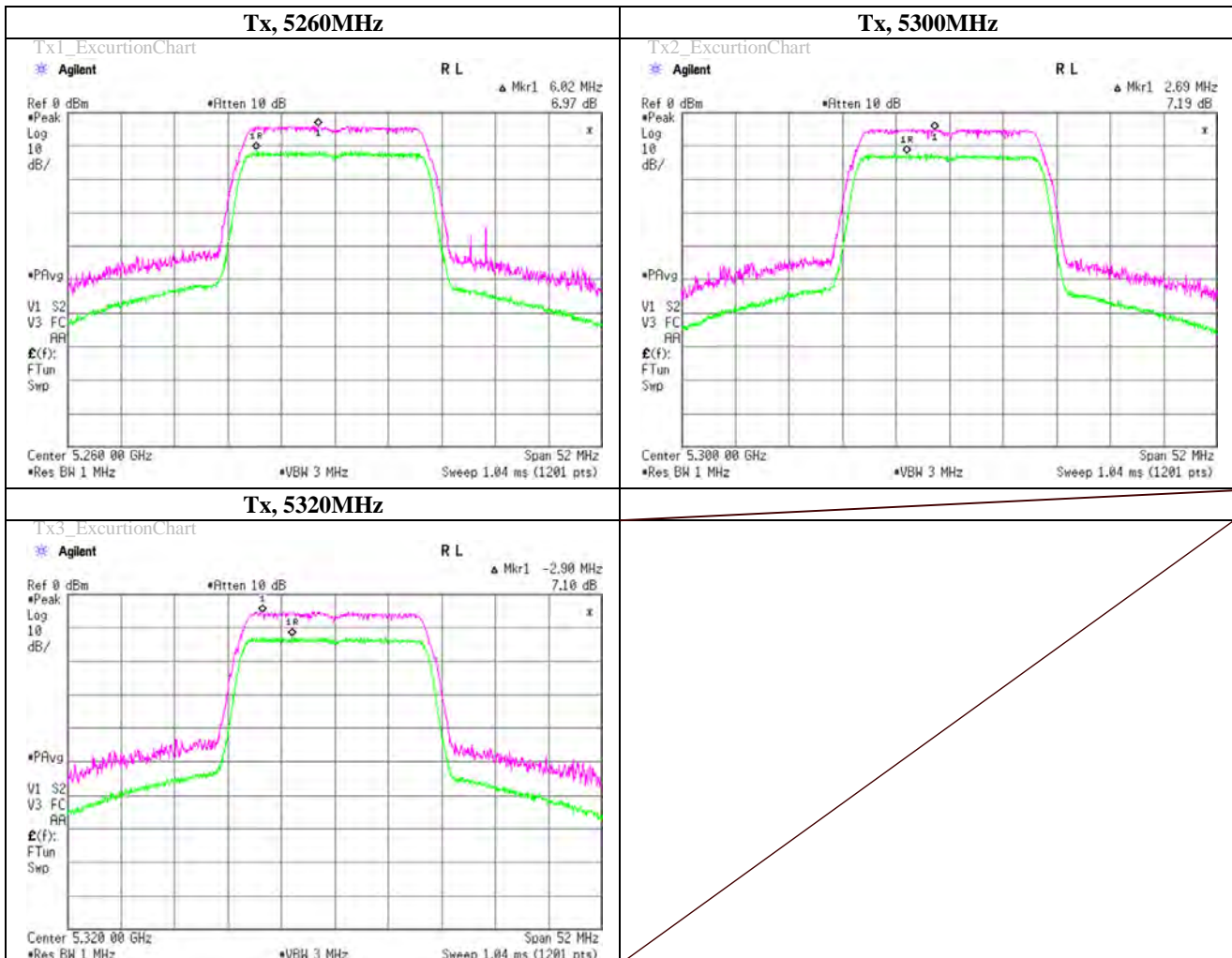


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## Peak Excursion Ratio

|                        |   |                    |
|------------------------|---|--------------------|
| Test place             | UL Japan, Inc. Shonan EMC Lab.                            | No.5 Shielded Room |
| Date                   | July 2, 2012  |                    |
| Temperature / Humidity | 22deg.C , 42%RH   |                    |
| Engineer               | Kenichi Adachi  |                    |
| Mode                   | Tx, IEEE802.11n (HT20) (W53), PN9, worst data mode 3(MCS) |                    |

| Ch. Freq.<br>[MHz] | Peak Power<br>Excursion<br>[dB] | Limit<br>[dB] | Margin<br>[dB] |
|--------------------|---------------------------------|---------------|----------------|
| 5260.0000          | 6.97                            | =<13.0        | 6.03           |
| 5300.0000          | 7.19                            | =<13.0        | 5.81           |
| 5320.0000          | 7.10                            | =<13.0        | 5.90           |

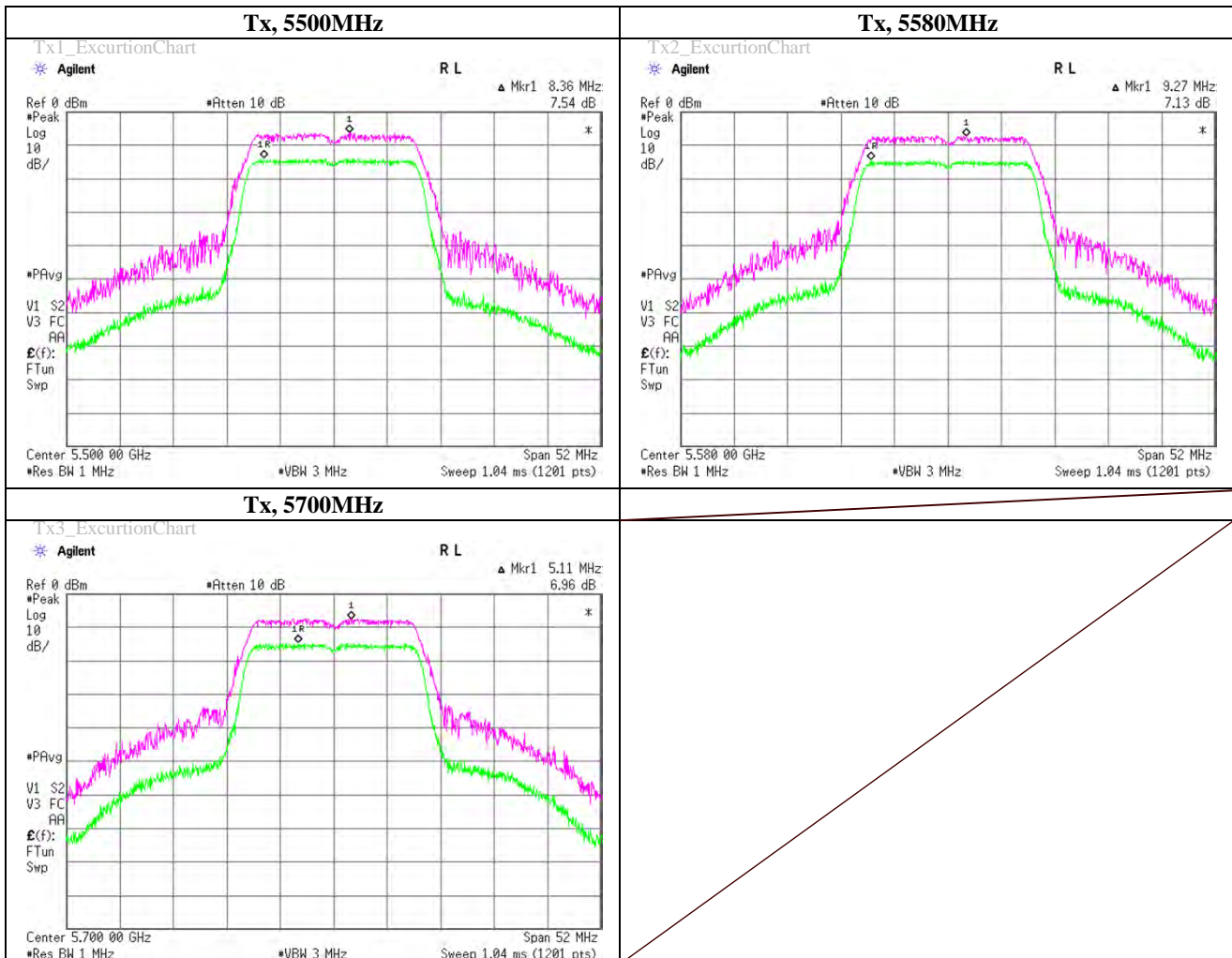


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## Peak Excursion Ratio

|                        |   |                    |
|------------------------|---|--------------------|
| Test place             | UL Japan, Inc. Shonan EMC Lab.                    | No.5 Shielded Room |
| Date                   | July 2, 2012                                      |                    |
| Temperature / Humidity | 22deg.C , 42%RH                                   |                    |
| Engineer               | Kenichi Adachi                                    |                    |
| Mode                   | Tx, IEEE802.11a (W56), PN9, worst data mode 6Mbps |                    |

| Ch. Freq.<br>[MHz] | Peak Power<br>Excursion<br>[dB] | Limit<br>[dB] | Margin<br>[dB] |
|--------------------|---------------------------------|---------------|----------------|
| 5500.0000          | 7.54                            | =<13.0        | 5.46           |
| 5580.0000          | 7.13                            | =<13.0        | 5.87           |
| 5700.0000          | 6.96                            | =<13.0        | 6.04           |

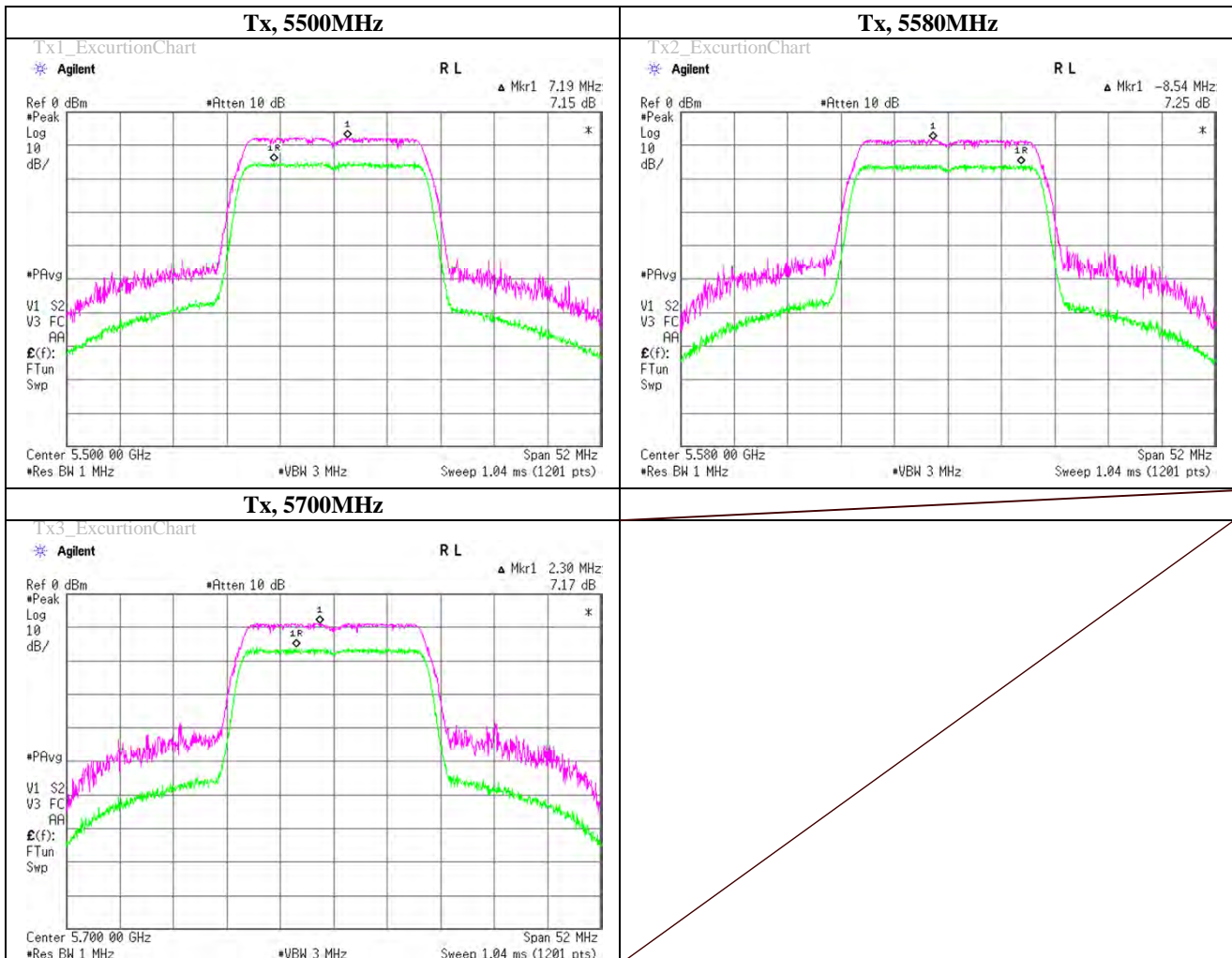


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## Peak Excursion Ratio

|                        |   |                    |
|------------------------|---|--------------------|
| Test place             | UL Japan, Inc. Shonan EMC Lab.                            | No.5 Shielded Room |
| Date                   | July 2, 2012  |                    |
| Temperature / Humidity | 22deg.C , 42%RH   |                    |
| Engineer               | Kenichi Adachi  |                    |
| Mode                   | Tx, IEEE802.11n (HT20) (W56), PN9, worst data mode 3(MCS) |                    |

| Ch. Freq.<br>[MHz] | Peak Power<br>Excursion<br>[dB] | Limit<br>[dB] | Margin<br>[dB] |
|--------------------|---------------------------------|---------------|----------------|
| 5500.0000          | 7.15                            | =<13.0        | 5.85           |
| 5580.0000          | 7.25                            | =<13.0        | 5.75           |
| 5700.0000          | 7.17                            | =<13.0        | 5.83           |



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Test Report No : 32FE0117-SH-02-B

**APPENDIX 2**  
**Test Instruments**

**EMI test equipment (1/2)**

| Control No.                    | Instrument                | Manufacturer                                | Model No                                   | Serial No               | Test Item | Calibration Date * Interval(month) |
|--------------------------------|---------------------------|---|--|-------------------------|-----------|------------------------------------|
| SAF-04                         | Pre Amplifier             | TOYO Corporation                            | TPA0118-36                                 | 1440489                 | RE        | 2012/03/12 * 12                    |
| SCC-G01                        | Coaxial Cable             | Suhner                                      | SUCOFLEX 104A                              | 46497/4A                | RE        | 2012/04/10 * 12                    |
| SCC-G21                        | Coaxial Cable             | Suhner                                      | SUCOFLEX 104                               | 296169/4                | RE        | 2012/05/22 * 12                    |
| SHA-01                         | Horn Antenna              | Schwarzbeck                                 | BBHA9120D                                  | 9120D-725               | RE        | 2011/08/11 * 12                    |
| SOS-01                         | Humidity Indicator        | A&D   | AD-5681                                    | 4062555                 | RE        | 2012/02/06 * 12                    |
| SSA-01                         | Spectrum Analyzer         | Agilent                                     | N9010A-526                                 | MY48031482              | RE        | 2012/04/11 * 12                    |
| SJM-11                         | Measure                   | PROMART                                     | SEN1935                                    | -                       | RE, CE    | -                                  |
| COTS-SEMI-1                    | EMI Software              | TSJ   | TEPTO-DV(RE,CE,RF,LF)                      | -                       | RE, CE    | -                                  |
| SAT10-05                       | Attenuator(above1GHz)     | Agilent                                     | 8493C-010                                  | 74864                   | RE        | 2011/12/27 * 12                    |
| SFL-03                         | Highpass Filter           | MICRO-TRONICS                               | HPM50112                                   | 028                     | RE        | 2011/12/27 * 12                    |
| SHA-04                         | Horn Antenna              | ETS LINDGREN                                | 3160-09                                    | LM3640                  | RE        | 2012/03/30 * 12                    |
| SAF-08                         | Pre Amplifier             | TOYO Corporation                            | HAP18-26W                                  | 00000019                | RE        | 2012/03/12 * 12                    |
| SCC-G17                        | Coaxial Cable             | Suhner                                      | SUCOFLEX 104A                              | 46291/4A                | RE        | 2012/03/12 * 12                    |
| SHA-06                         | Horn Antenna              | ETS LINDGREN                                | 3160-10                                    | LM3459                  | RE        | 2012/03/30 * 12                    |
| SAF-10                         | Pre Amplifier             | TOYO Corporation                            | HAP26-40W                                  | 00000010                | RE        | 2012/03/12 * 12                    |
| SCC-G19                        | Coaxial Cable             | Suhner                                      | SUCOFLEX 102A                              | 1188/2A                 | RE        | 2012/03/12 * 12                    |
| SSA-02                         | Spectrum Analyzer         | Agilent                                     | E4448A                                     | MY48250106              | RE        | 2012/03/16 * 12                    |
| SAF-01                         | Pre Amplifier             | SONOMA                                      | 310N                                       | 290211                  | RE        | 2012/02/10 * 12                    |
| SAT6-05                        | Attenuator                | JFW   | 50HF-006N                                  | -                       | RE        | 2012/02/10 * 12                    |
| SAT3-04                        | Attenuator                | JFW   | 50HF-003N                                  | -                       | RE        | 2012/02/10 * 12                    |
| SBA-01                         | Biconical Antenna         | Schwarzbeck                                 | BBA9106                                    | 91032664                | RE        | 2011/10/15 * 12                    |
| SCC-A1/A3/A5/A7/A8/A13/SRSE-01 | Coaxial Cable&RF Selector | Fujikura/Fujikura/Suhner/Suhner/Suhner/TOYO | 8D2W/12DSFA/141PE/141PE/141PE/141PE/NS4906 | -/0901-269(RF Selector) | RE        | 2012/04/10 * 12                    |
| SCC-A2/A4/A6/A7/A8/A13/SRSE-01 | Coaxial Cable&RF Selector | Fujikura/Fujikura/Suhner/Suhner/Suhner/TOYO | 8D2W/12DSFA/141PE/141PE/141PE/141PE/NS4906 | -/0901-269(RF Selector) | RE        | 2012/04/10 * 12                    |
| SLA-01                         | Logperiodic Antenna       | Schwarzbeck                                 | UHALP9108A                                 | UHALP 9108-A 0888       | RE        | 2011/11/23 * 12                    |
| STR-01                         | Test Receiver             | Rohde & Schwarz                             | ESU40                                      | 100093                  | RE, CE    | 2011/10/22 * 12                    |
| SAEC-01(NSA)                   | Semi-Anechoic Chamber     | TDK   | SAEC-01(NSA)                               | 1                       | RE        | 2011/09/01 * 12                    |
| SCC-G11                        | Coaxial Cable             | Suhner                                      | SUCOFLEX 102                               | 31595/2                 | AT        | 2012/03/12 * 12                    |
| SPM-06                         | Power Meter               | Anritsu                                     | ML2495A                                    | 0850009                 | AT        | 2012/04/19 * 12                    |
| SPSS-03                        | Power sensor              | Anritsu                                     | MA2411B                                    | 0917063                 | AT        | 2012/04/19 * 12                    |
| SSA-03                         | Spectrum Analyzer         | Agilent                                     | E4448A                                     | MY48250152              | AT        | 2011/12/05 * 12                    |
| SAT10-08                       | Attenuator                | Weinschel                                   | W54-10                                     | -                       | AT        | 2012/03/12 * 12                    |
| SOS-09                         | Humidity Indicator        | A&D   | AD-5681                                    | 4061484                 | AT        | 2012/03/26 * 12                    |
|                                |                           |   |  |                         |           |                                    |
|                                |                           |   |  |                         |           |                                    |

The expiration date of the calibration is the end of the expired month .  
As for some calibrations performed after the tested dates , those test equipment have been controlled by means of an unbroken chains of calibrations .

All equipment is calibrated with valid calibrations . Each measurement data is traceable to the national or international standards .

Test Item :

- CE: Conducted emission ,
- RE: Radiated emission ,
- AT: Antenna terminal disturbance voltage

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**APPENDIX 2**  
**Test Instruments**

**EMI test equipment (2/2)**

| Control No.         | Instrument                | Manufacturer       | Model No             | Serial No                | Test Item | Calibration Date * Interval(month) |
|---------------------|---------------------------|--------------------|----------------------|--------------------------|-----------|------------------------------------|
| SCC-A12/A13/SRSE-01 | Coaxial Cable&RF Selector | Suhner/Suhner/TOYO | RG223U/141PE/N S4906 | -/0901-269 (RF Selector) | CE        | 2012/04/10 * 12                    |
| SLS-01              | LISN                      | Rohde & Schwarz    | ENV216               | 100511                   | CE (EUT)  | 2012/02/20 * 12                    |
| SLS-02              | LISN                      | Rohde & Schwarz    | ENV216               | 100512                   | CE (AE)   | 2012/02/28 * 12                    |
| SAT3-06             | Attenuator                | JFW                | 50HF-003N            | -                        | CE        | 2012/02/17 * 12                    |
| STM-01              | Terminator                | TME                | CT-01 BP             | -                        | CE        | 2012/01/05 * 12                    |
| SOS-02              | Humidity Indicator        | A&D                | AD-5681              | 4063343                  | CE        | 2012/03/26 * 12                    |
|                     |                           |                    |                      |                          |           |                                    |
|                     |                           |                    |                      |                          |           |                                    |
|                     |                           |                    |                      |                          |           |                                    |

The expiration date of the calibration is the end of the expired month .  
As for some calibrations performed after the tested dates , those test equipment have been controlled by means of an unbroken chains of calibrations .  
All equipment is calibrated with valid calibrations . Each measurement data is traceable to the national or international standards .

Test Item :

- CE: Conducted emission ,
- RE: Radiated emission ,
- AT: Antenna terminal disturbance voltage