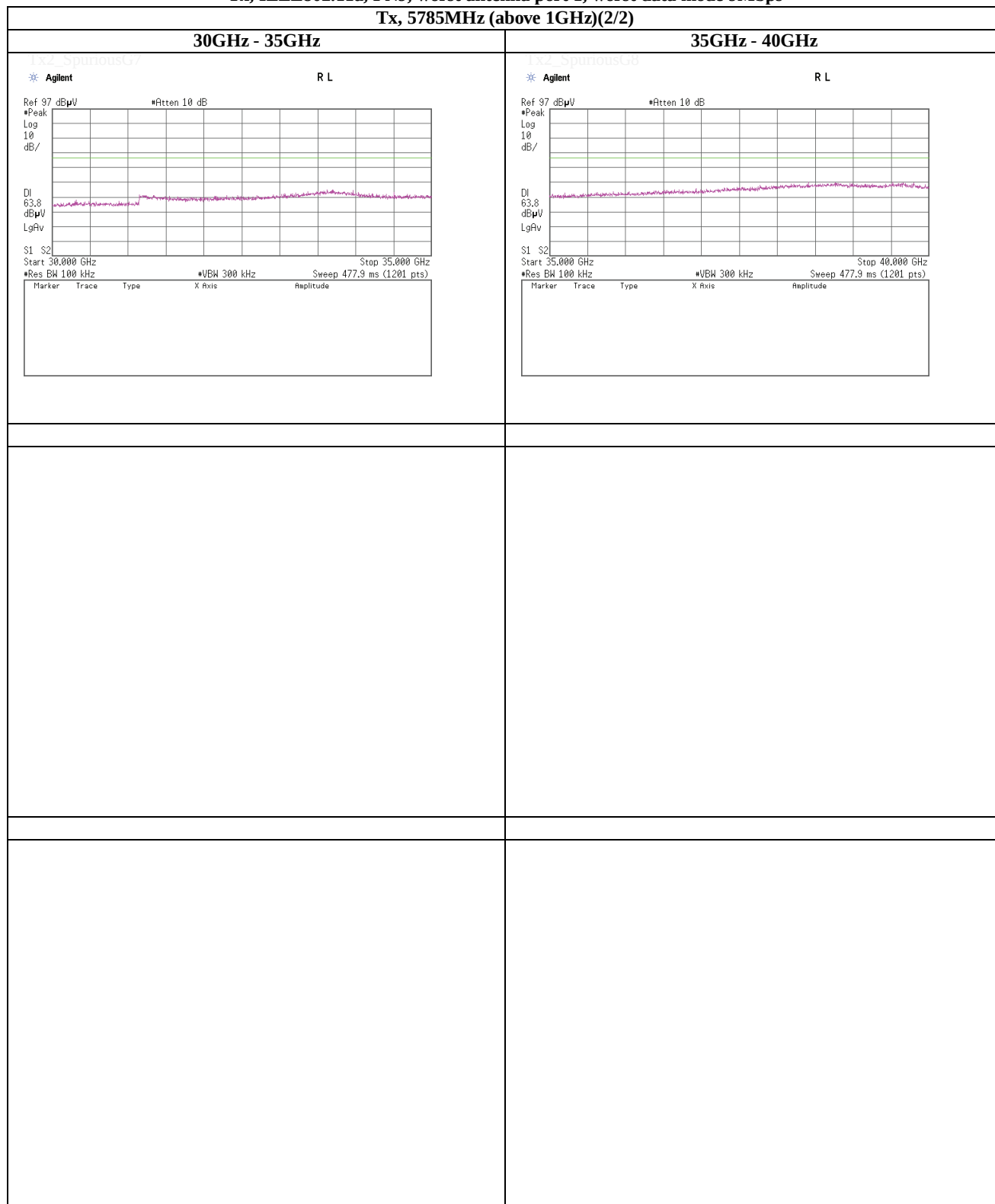


(Reference chart) Spurious emission (Conducted)

Tx, IEEE802.11a, PN9, worst antenna port 1, worst data mode 9Mbps

Tx, 5785MHz (above 1GHz)(2/2)



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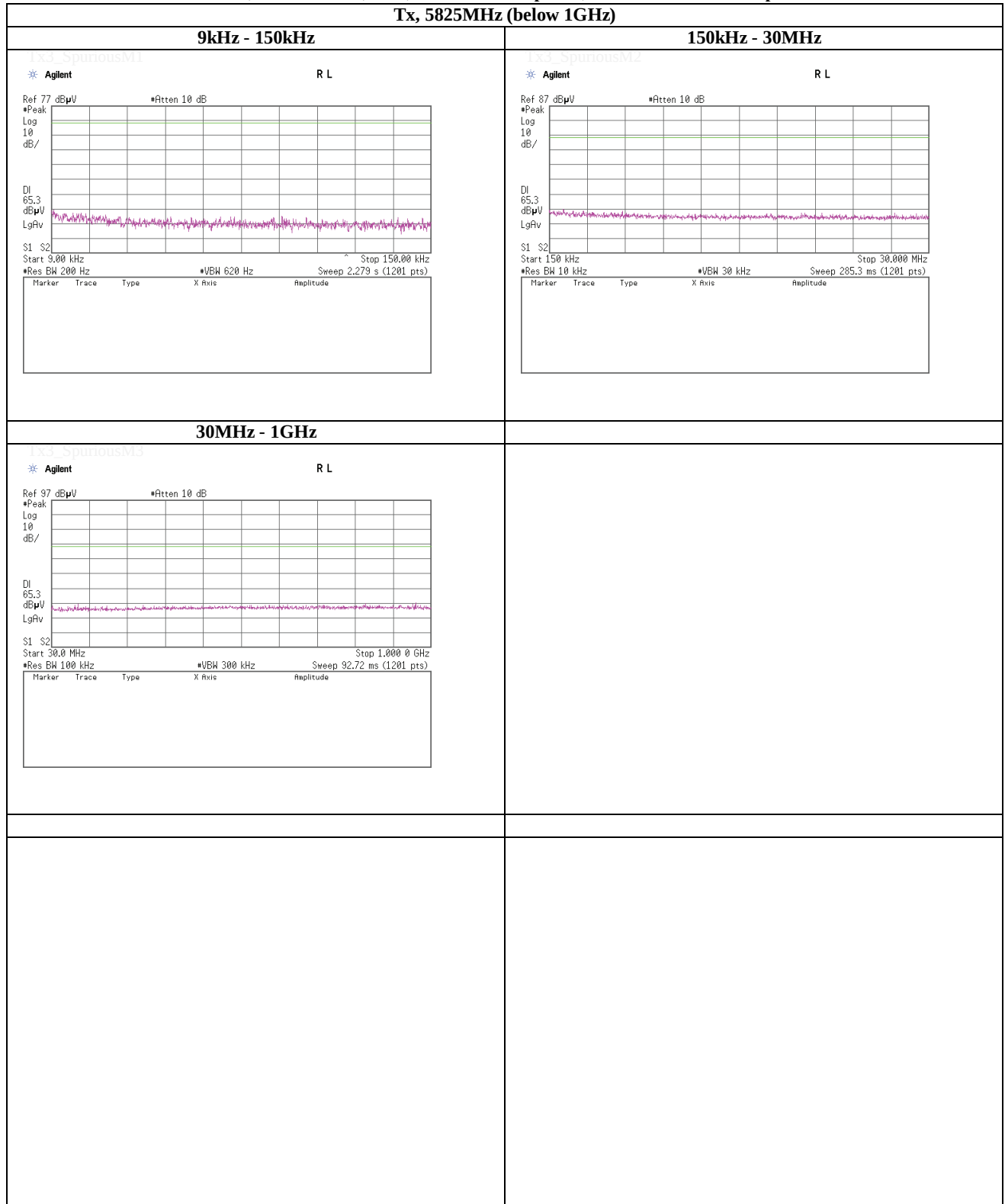
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

(Reference chart) Spurious emission (Conducted)

Tx, IEEE802.11a, PN9, worst antenna port 1, worst data mode 9Mbps

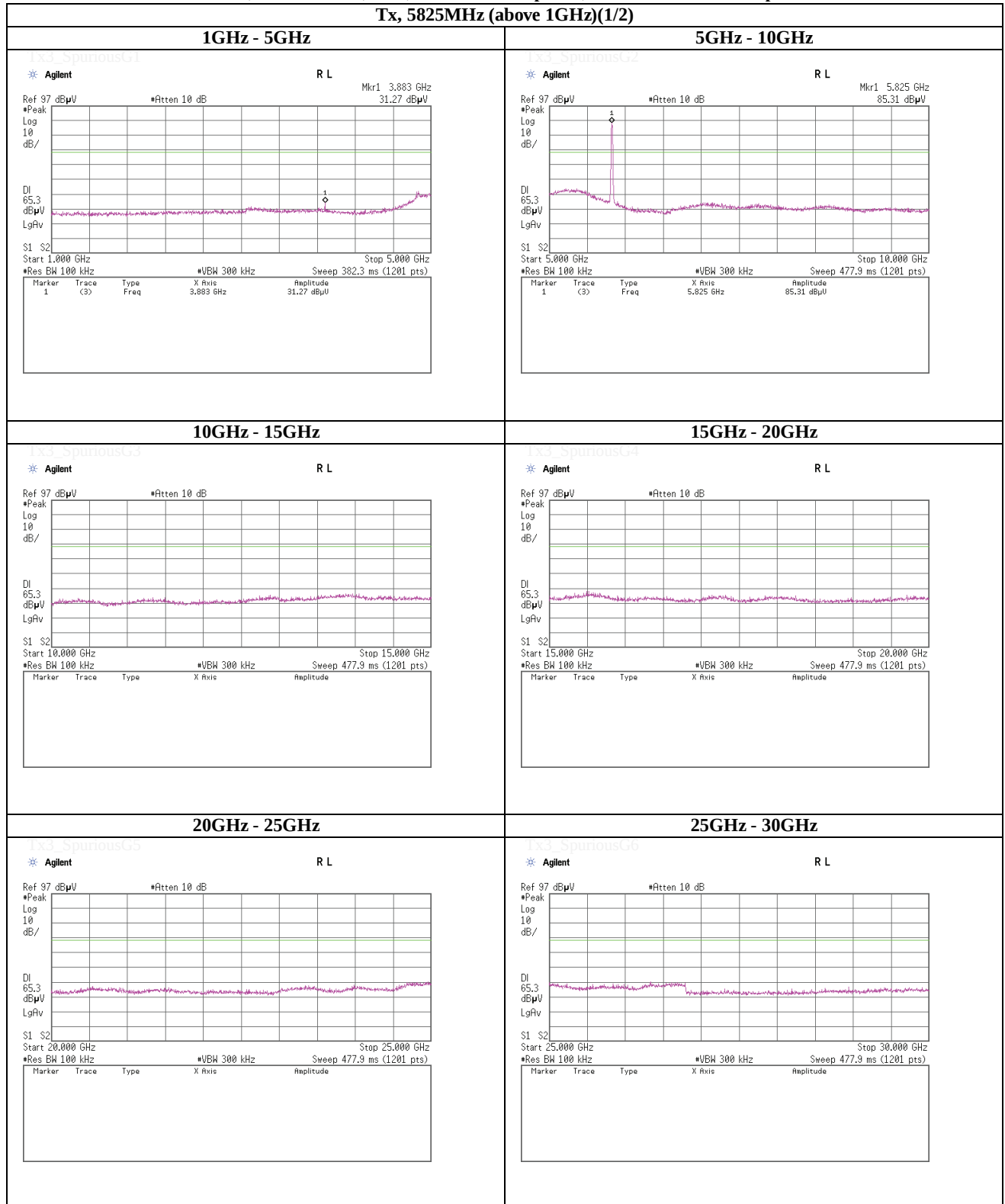
Tx, 5825MHz (below 1GHz)

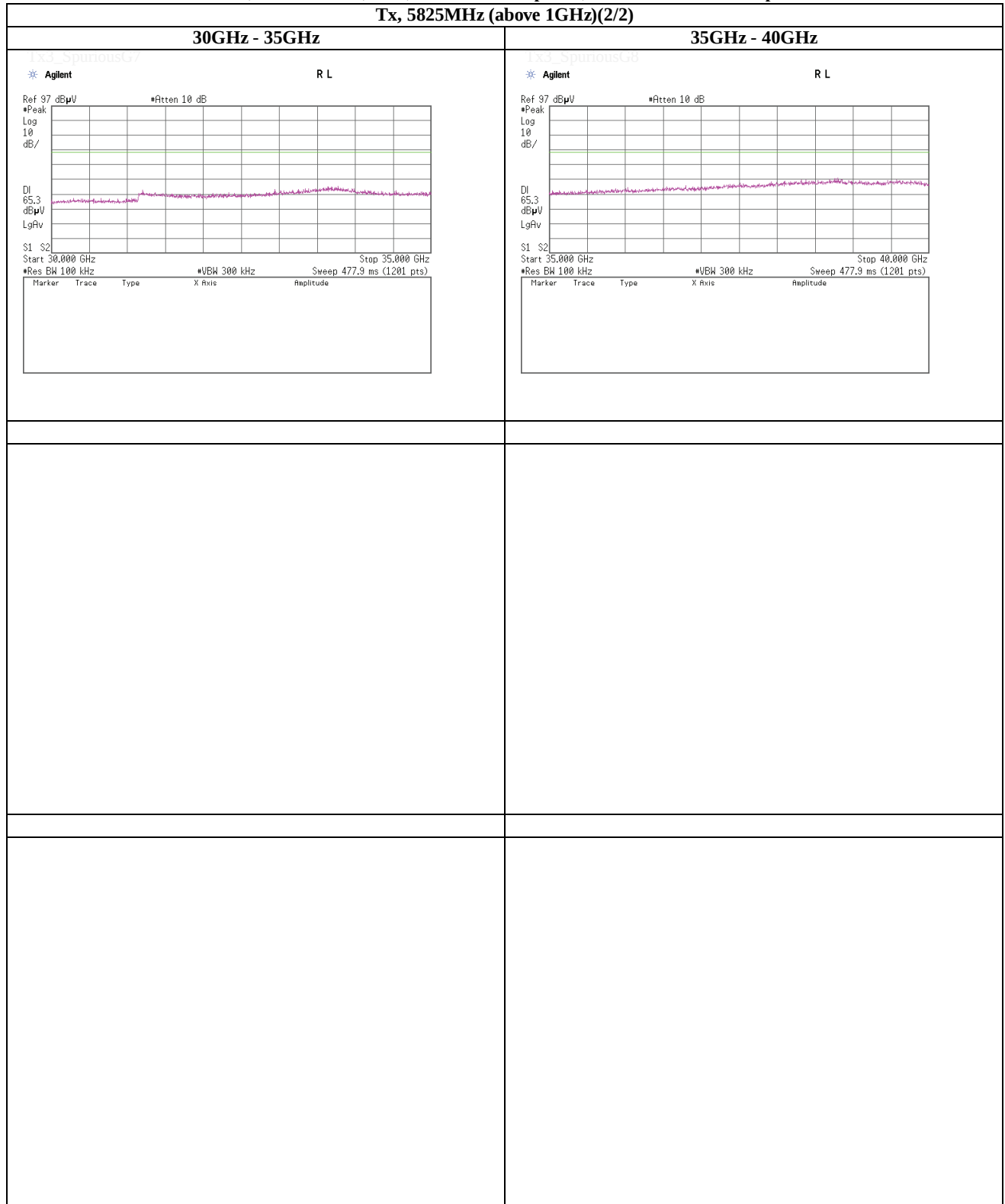
**UL Japan, Inc.****Shonan EMC Lab.**

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Facsimile : +81 463 50 6401

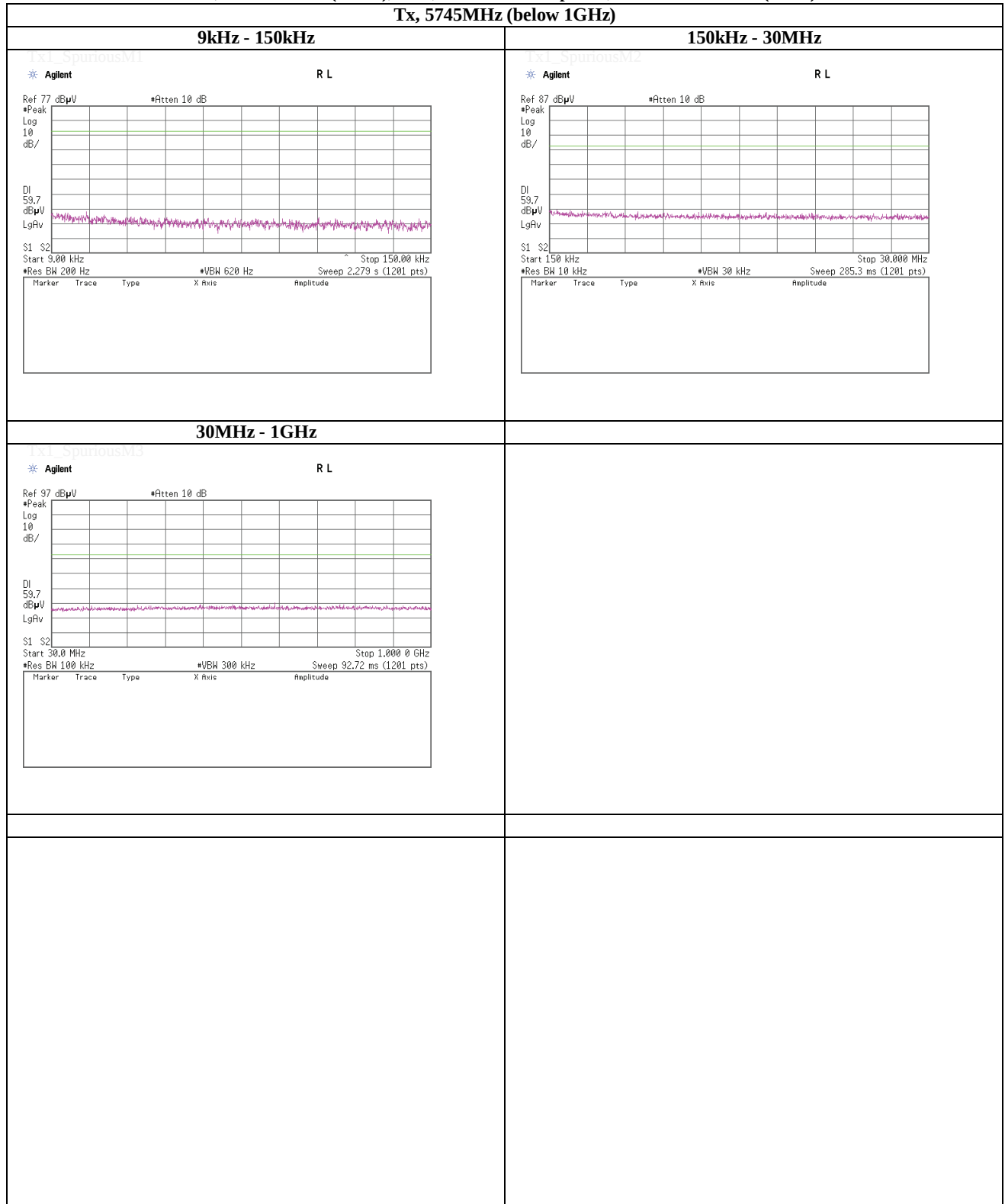
(Reference chart) Spurious emission (Conducted)**Tx, IEEE802.11a, PN9, worst antenna port 1, worst data mode 9Mbps****Tx, 5825MHz (above 1GHz)(1/2)****UL Japan, Inc.****Shonan EMC Lab.****1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN****Telephone : +81 463 50 6400****Facsimile : +81 463 50 6401**

(Reference chart) Spurious emission (Conducted)**Tx, IEEE802.11a, PN9, worst antenna port 1, worst data mode 9Mbps****Tx, 5825MHz (above 1GHz)(2/2)****UL Japan, Inc.****Shonan EMC Lab.**

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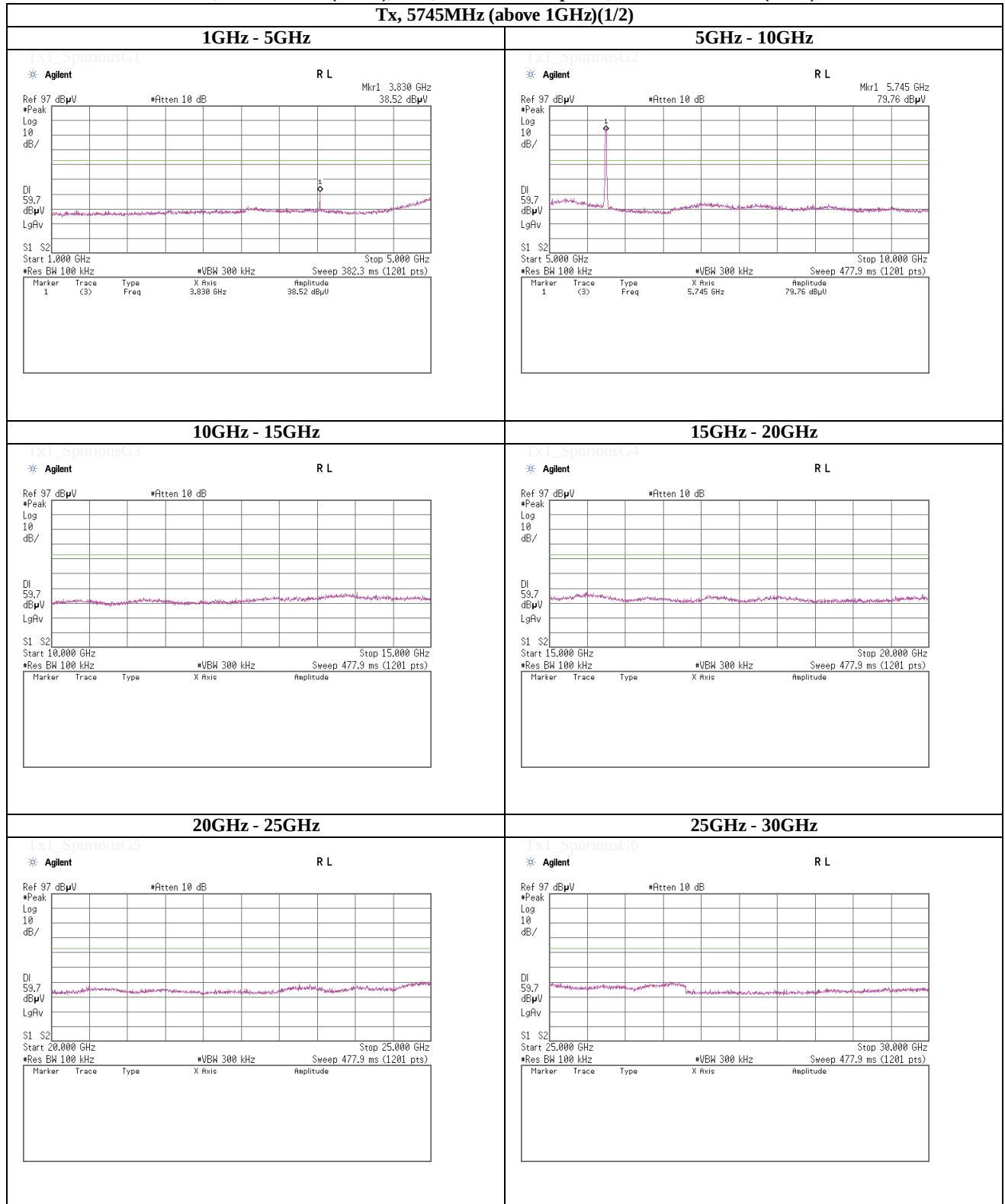
Facsimile : +81 463 50 6401

(Reference chart) Spurious emission (Conducted)**Tx, IEEE802.11n(HT20), PN9, worst antenna port 2, worst data mode 0(MCS)****Tx, 5745MHz (below 1GHz)****UL Japan, Inc.****Shonan EMC Lab.**

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(Reference chart) Spurious emission (Conducted)**Tx, IEEE802.11n(HT20), PN9, worst antenna port 2, worst data mode 0(MCS)****Tx, 5745MHz (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 chart) Spurious emission (Conducted)

Tx, IEEE802.11n(HT20), PN9, worst antenna port 2, worst data mode 0(MCS)

Tx, 5745MHz (above 1GHz)(2/2)



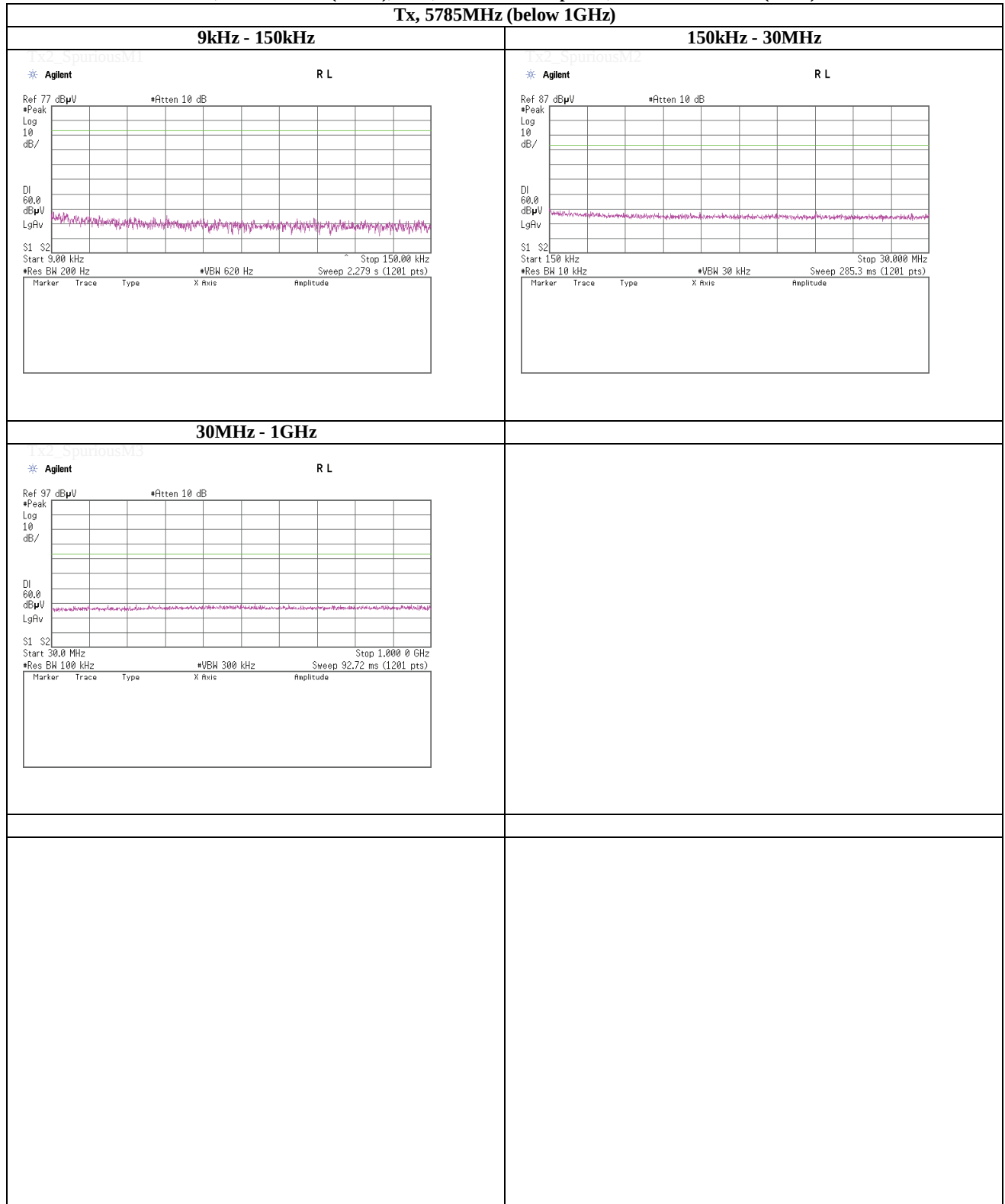
UL Japan, Inc.

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Telephone : +81 463 50 6400

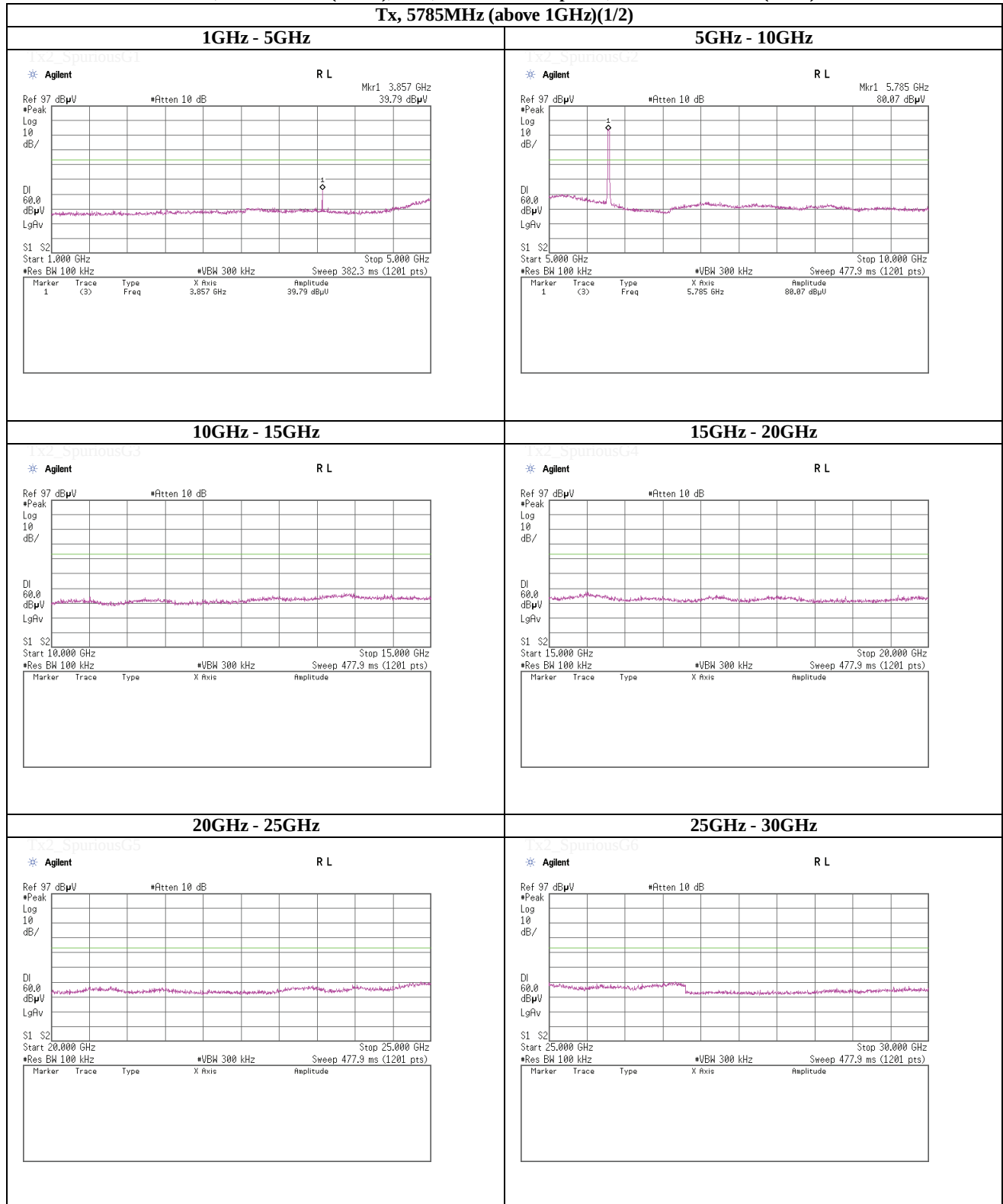
Facsimile : +81 463 50 6401

(Reference chart) Spurious emission (Conducted)**Tx, IEEE802.11n(HT20), PN9, worst antenna port 2, worst data mode 0(MCS)****Tx, 5785MHz (below 1GHz)****UL Japan, Inc.****Shonan EMC Lab.**

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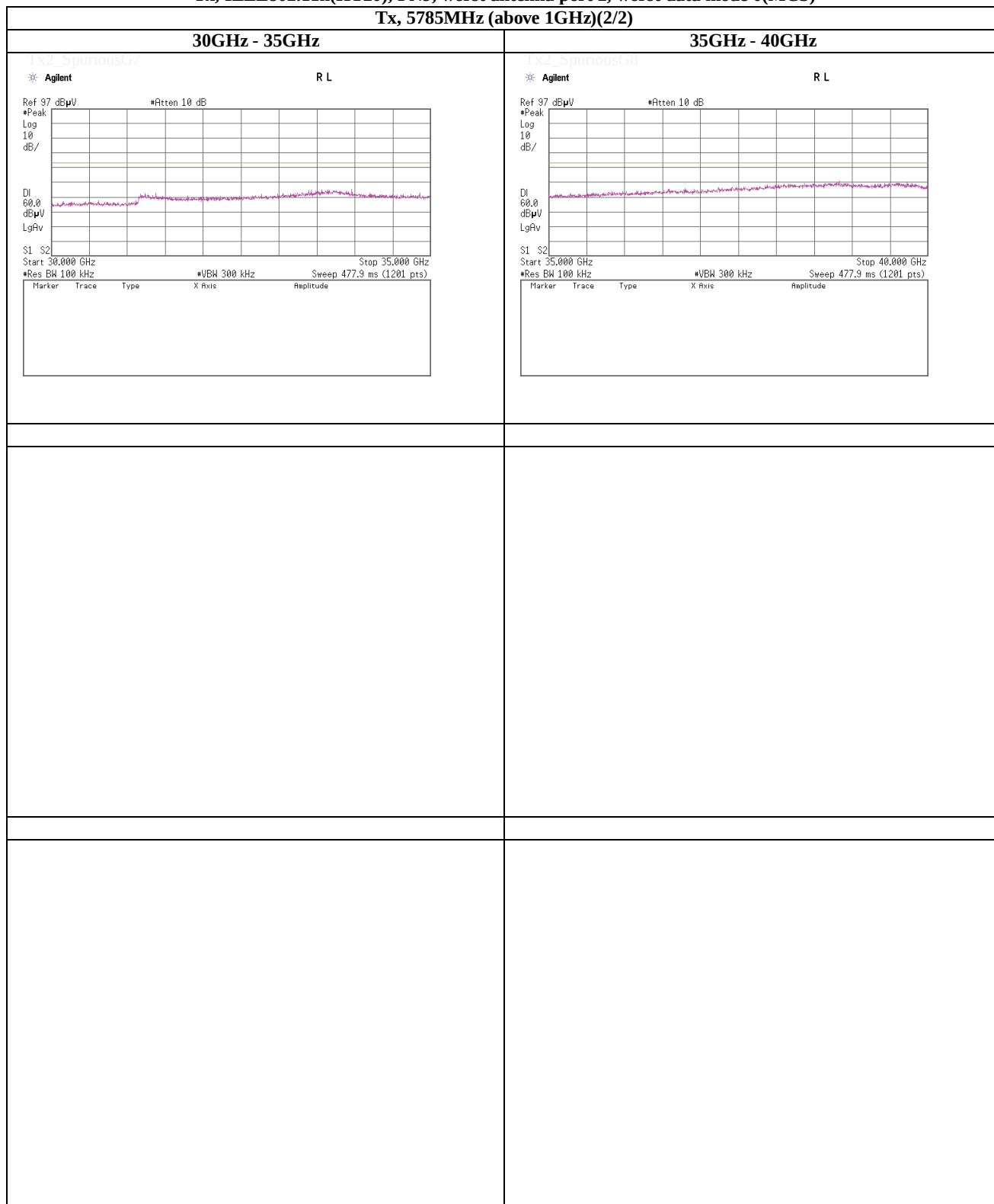
Facsimile : +81 463 50 6401

(Reference chart) Spurious emission (Conducted)**Tx, IEEE802.11n(HT20), PN9, worst antenna port 2, worst data mode 0(MCS)****Tx, 5785MHz (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 chart) Spurious emission (Conducted)

Tx, IEEE802.11n(HT20), PN9, worst antenna port 2, worst data mode 0(MCS)

Tx, 5785MHz (above 1GHz)(2/2)



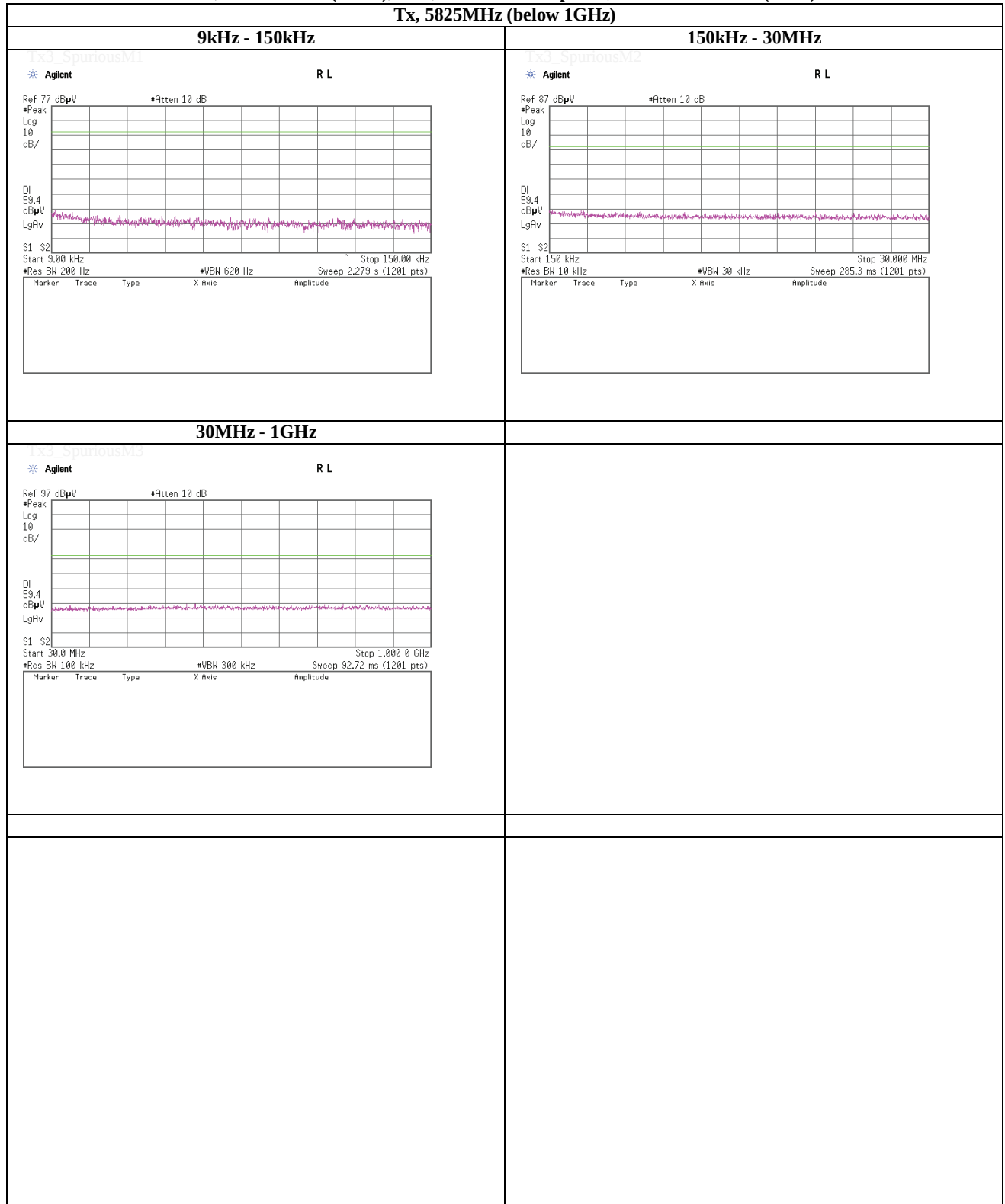
UL Japan, Inc.

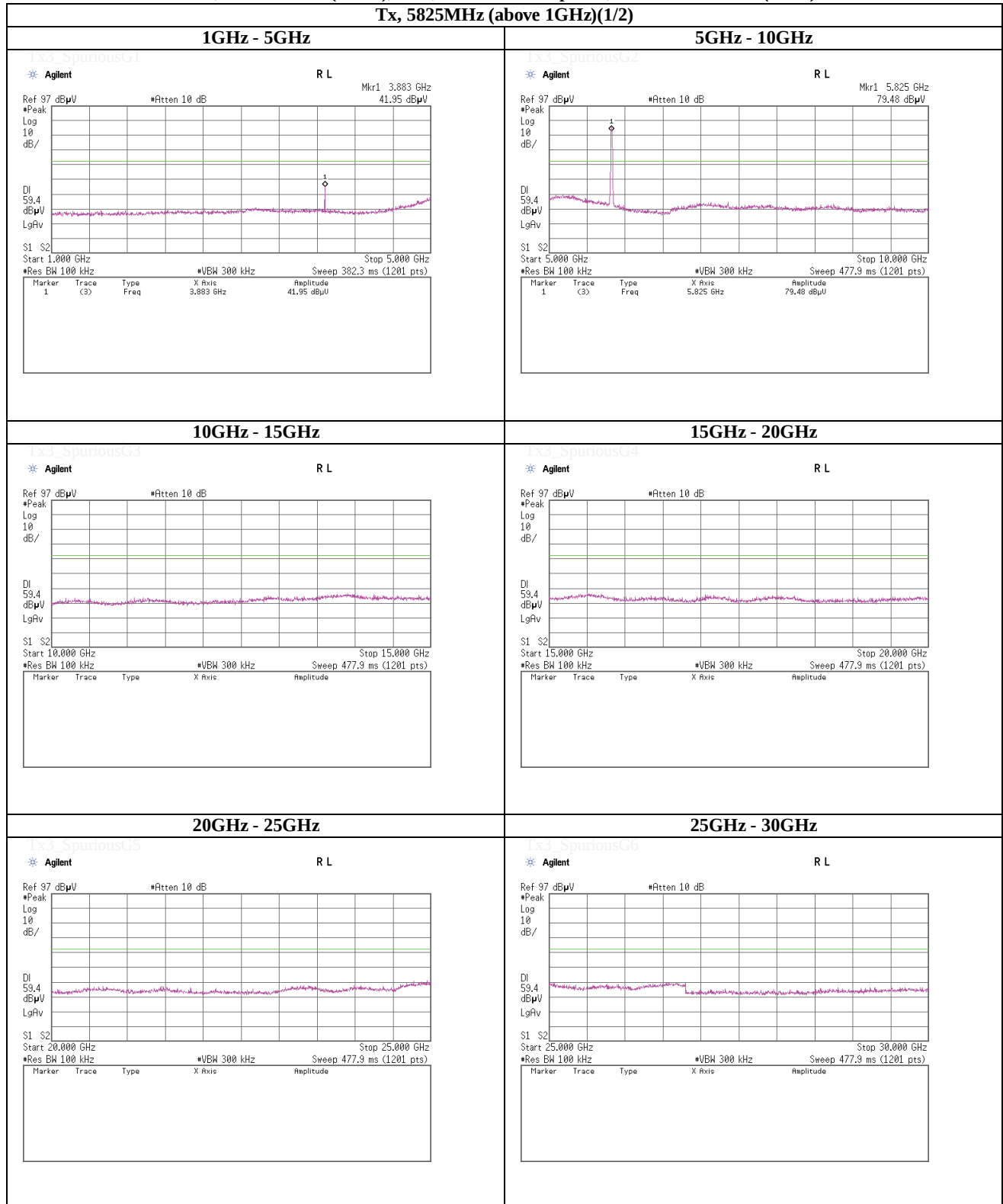
Shonan EMC Lab.

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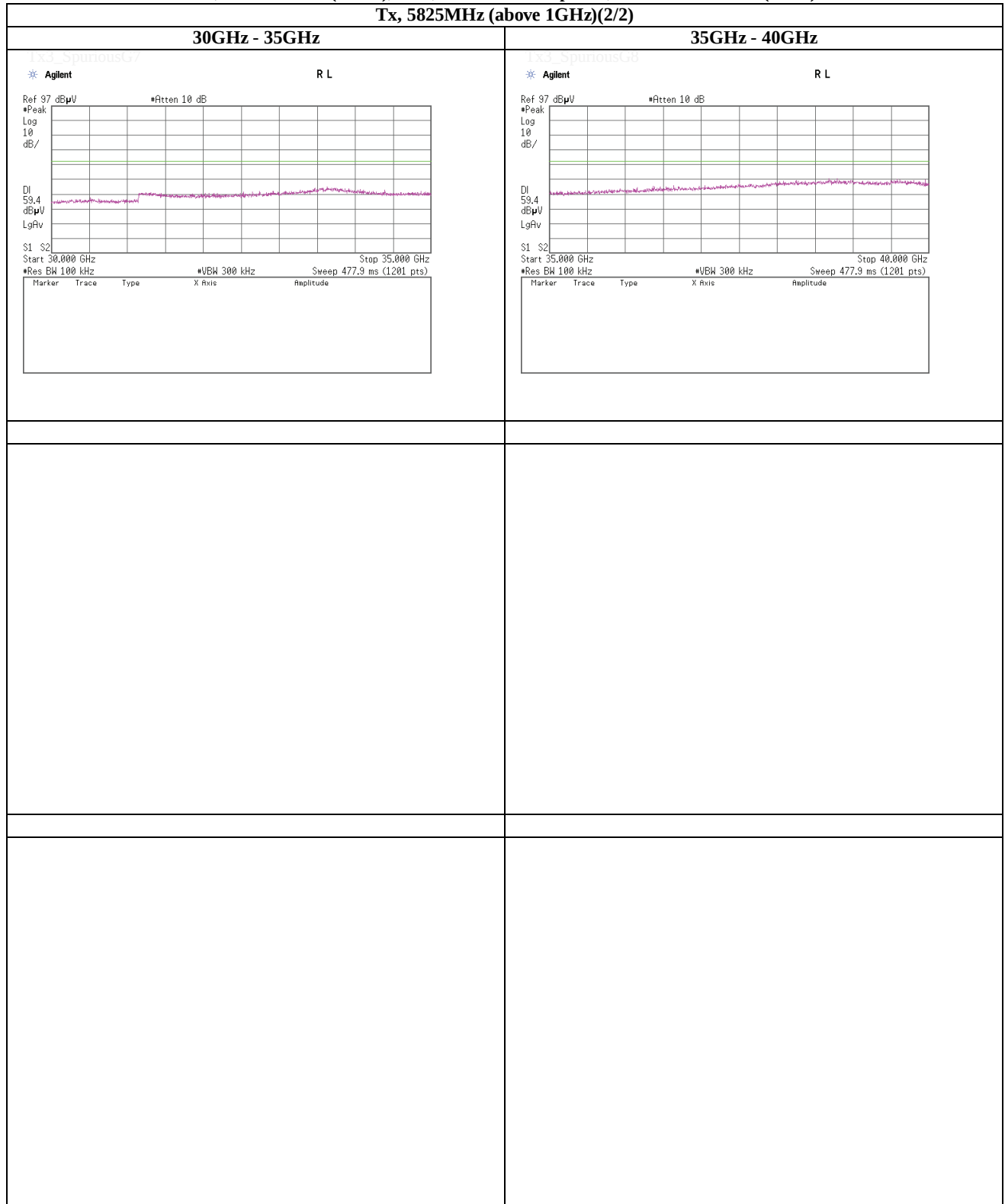
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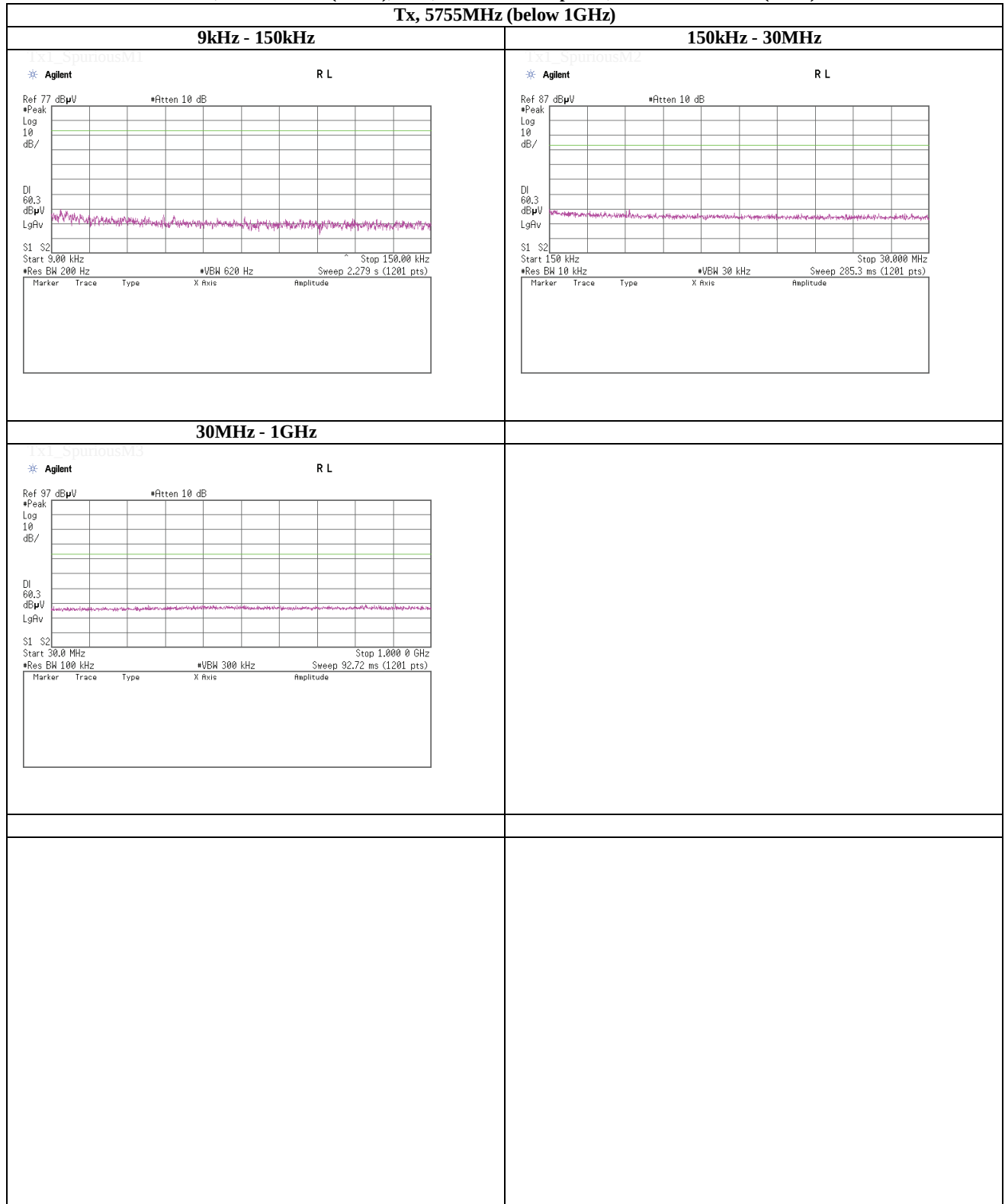
Facsimile : +81 463 50 6401

(Reference chart) Spurious emission (Conducted)**Tx, IEEE802.11n(HT20), PN9, worst antenna port 2, worst data mode 0(MCS)****Tx, 5825MHz (below 1GHz)****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 chart) Spurious emission (Conducted)**Tx, IEEE802.11n(HT20), PN9, worst antenna port 2, worst data mode 0(MCS)****Tx, 5825MHz (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 chart) Spurious emission (Conducted)
Tx, IEEE802.11n(HT20), PN9, worst antenna port 2, worst data mode 0(MCS)
Tx, 5825MHz (above 1GHz)(2/2)

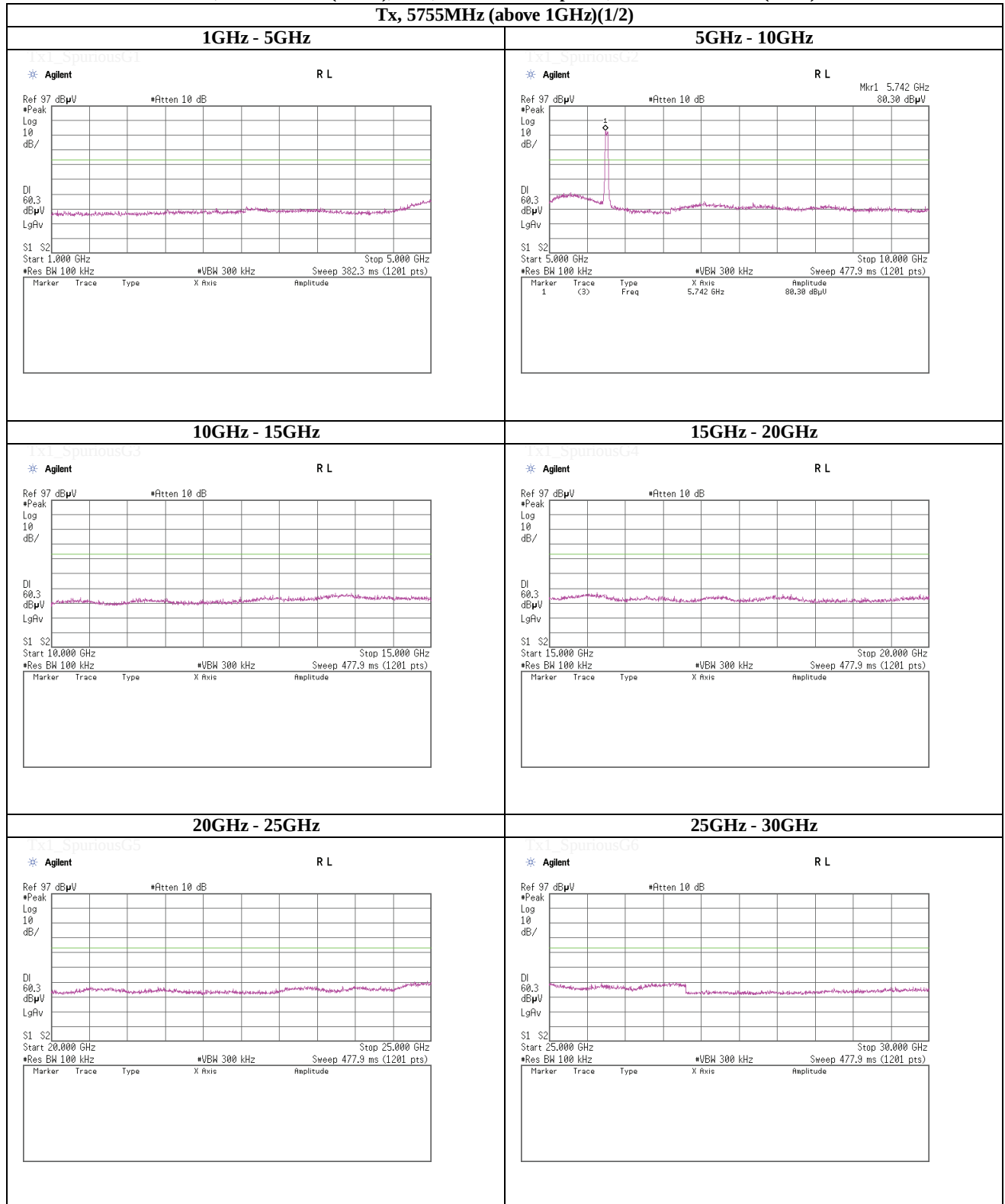


(Reference chart) Spurious emission (Conducted)**Tx, IEEE802.11n(HT40), PN9, worst antenna port 1, worst data mode 0(MCS)****Tx, 5755MHz (below 1GHz)****UL Japan, Inc.****Shonan EMC Lab.**

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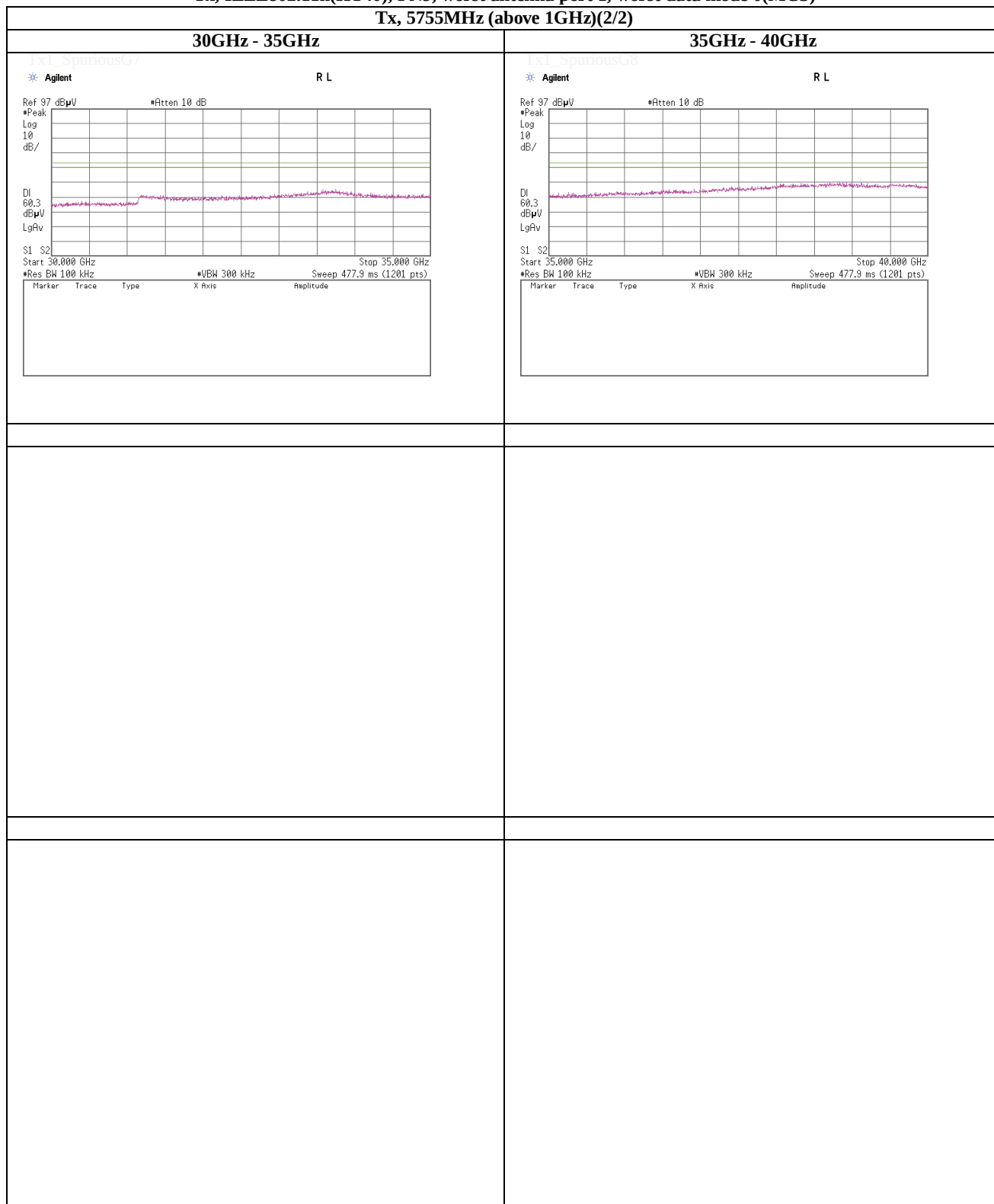
Facsimile : +81 463 50 6401

(Reference chart) Spurious emission (Conducted)**Tx, IEEE802.11n(HT40), PN9, worst antenna port 1, worst data mode 0(MCS)****Tx, 5755MHz (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 chart) Spurious emission (Conducted)

Tx, IEEE802.11n(HT40), PN9, worst antenna port 1, worst data mode 0(MCS)

Tx, 5755MHz (above 1GHz)(2/2)



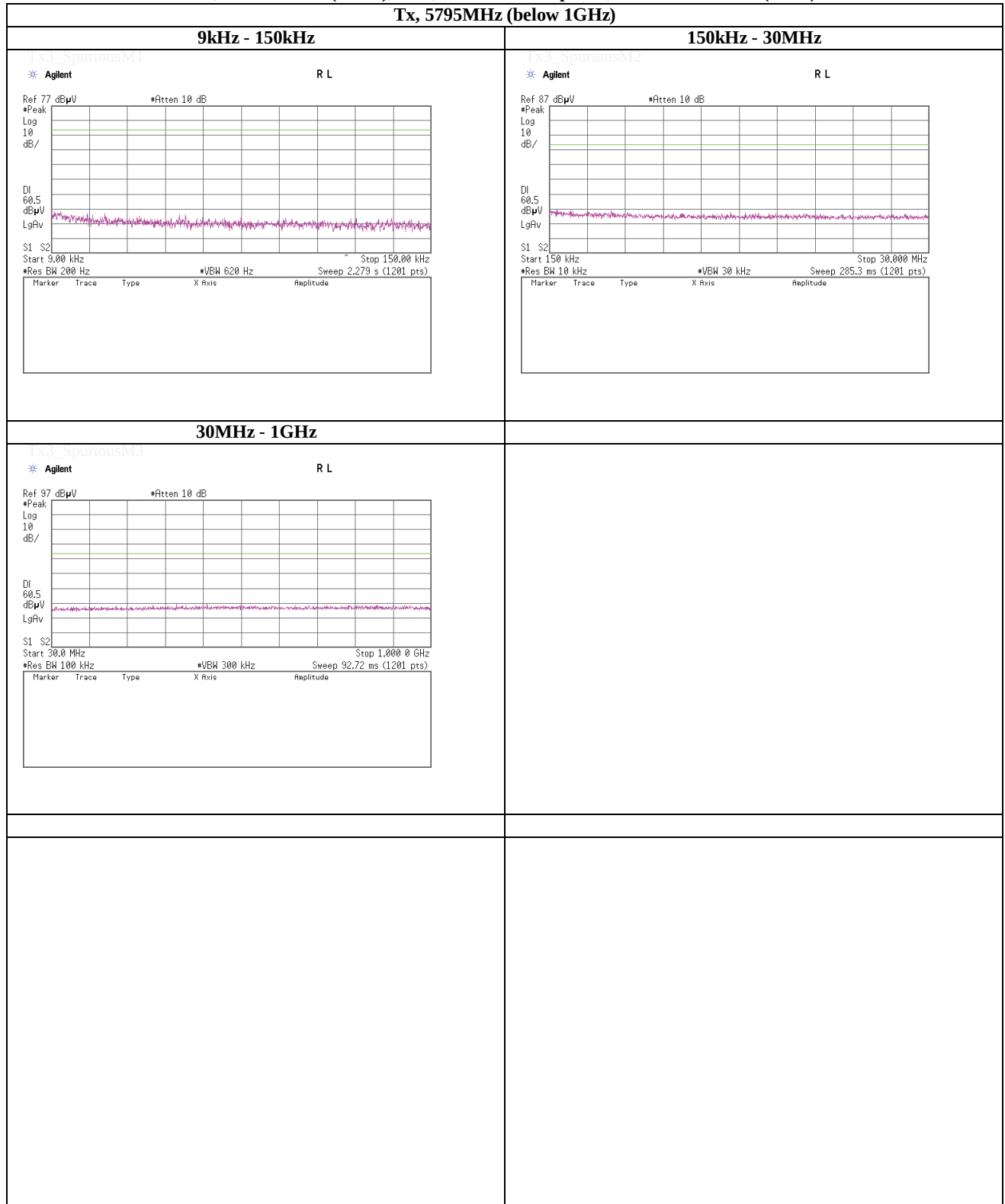
UL Japan, Inc.

Shonan EMC Lab.

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Telephone : +81 463 50 6400

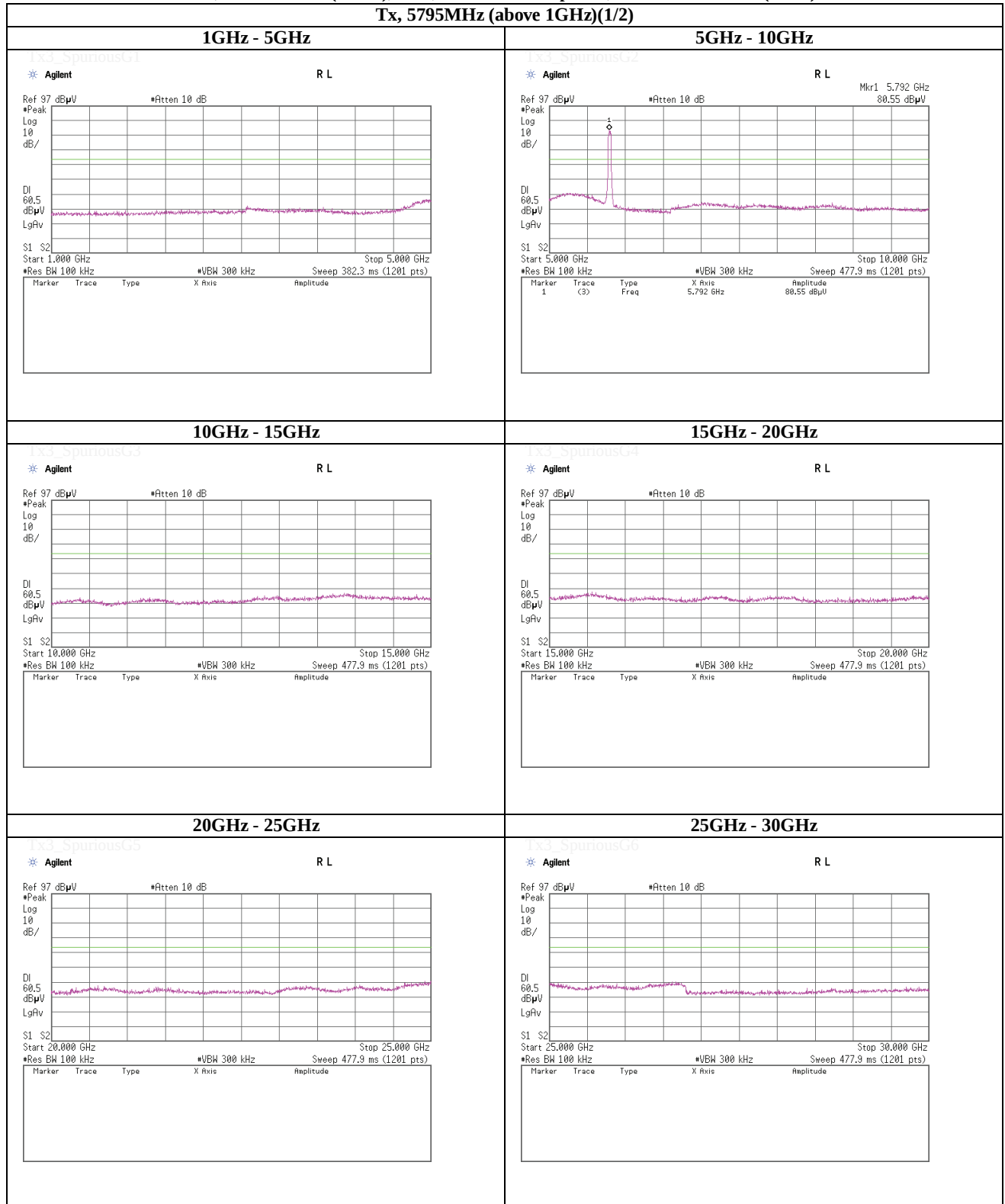
Facsimile : +81 463 50 6401

(Reference chart) Spurious emission (Conducted)**Tx, IEEE802.11n(HT40), PN9, worst antenna port 1, worst data mode 0(MCS)****Tx, 5795MHz (below 1GHz)****UL Japan, Inc.****Shonan EMC Lab.**

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Telephone : +81 463 50 6400

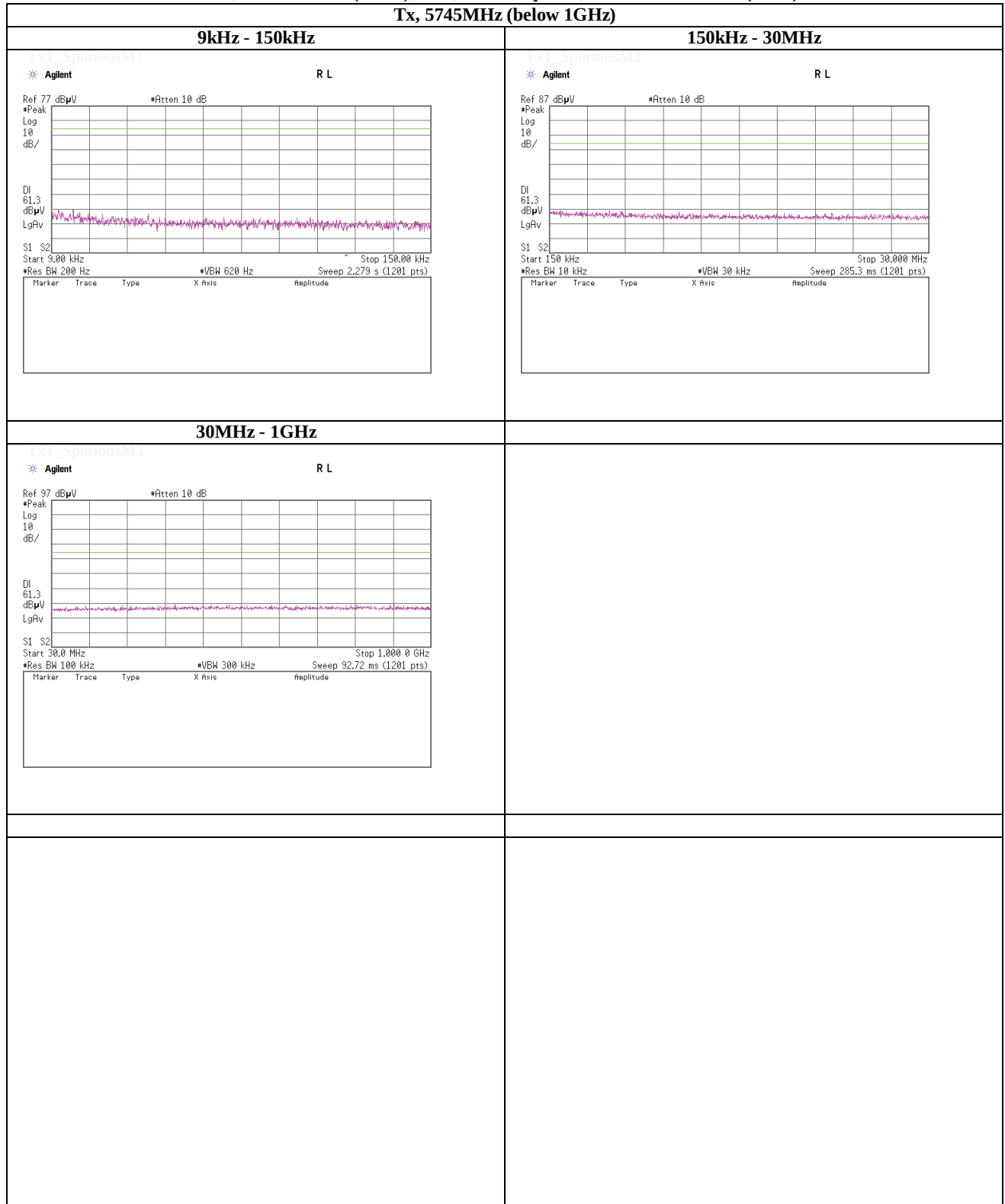
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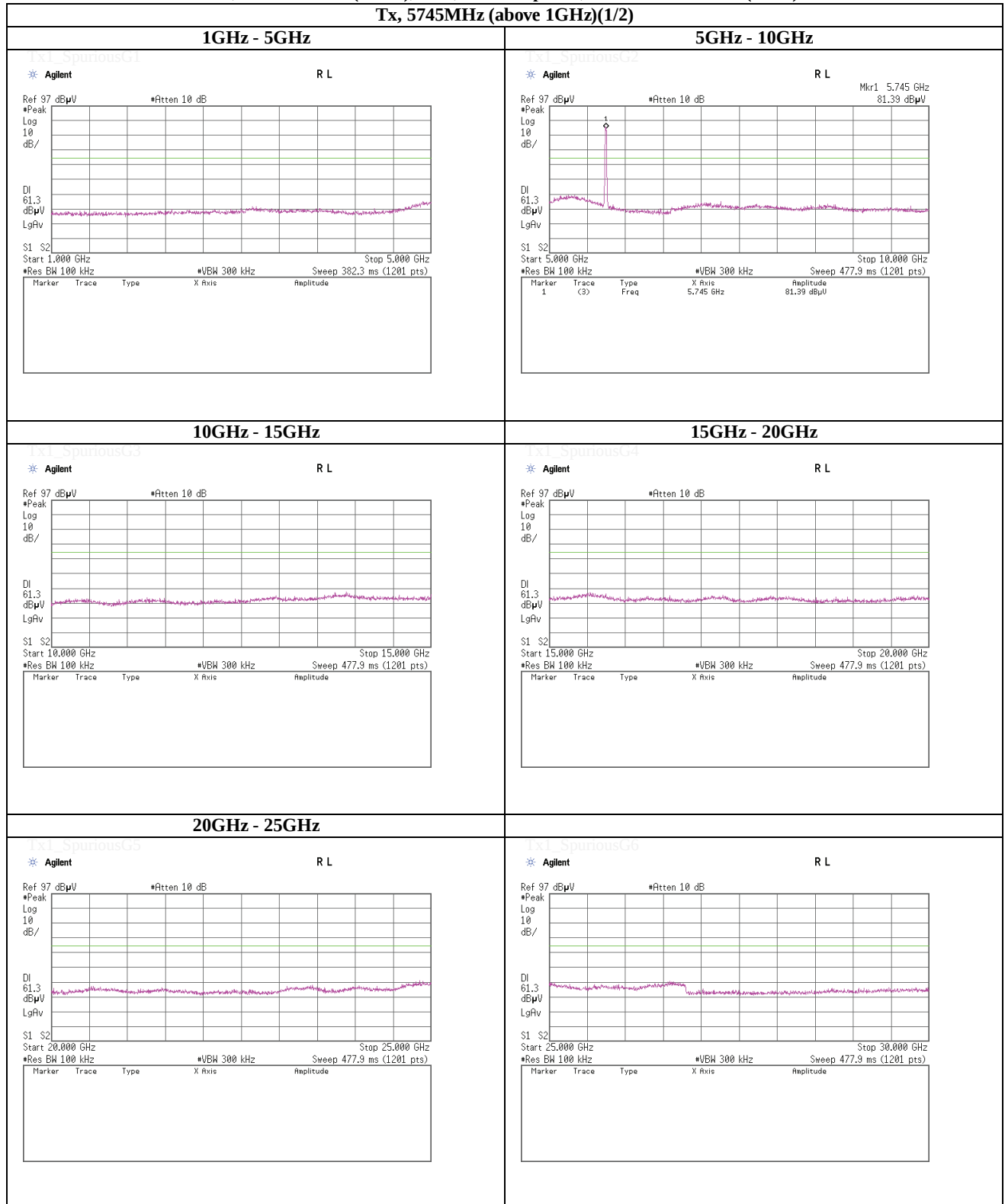
(Reference chart) Spurious emission (Conducted)**Tx, IEEE802.11n(HT40), PN9, worst antenna port 1, worst data mode 0(MCS)****Tx, 5795MHz (above 1GHz)(1/2)****UL Japan, Inc.****Shonan EMC Lab.****1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN****Telephone : +81 463 50 6400****Facsimile : +81 463 50 6401**

Tx, IEEE802.11n(HT40), PN9, worst antenna port 1, worst data mode 0(MCS)

5705MH (1	1CH) (2/2)
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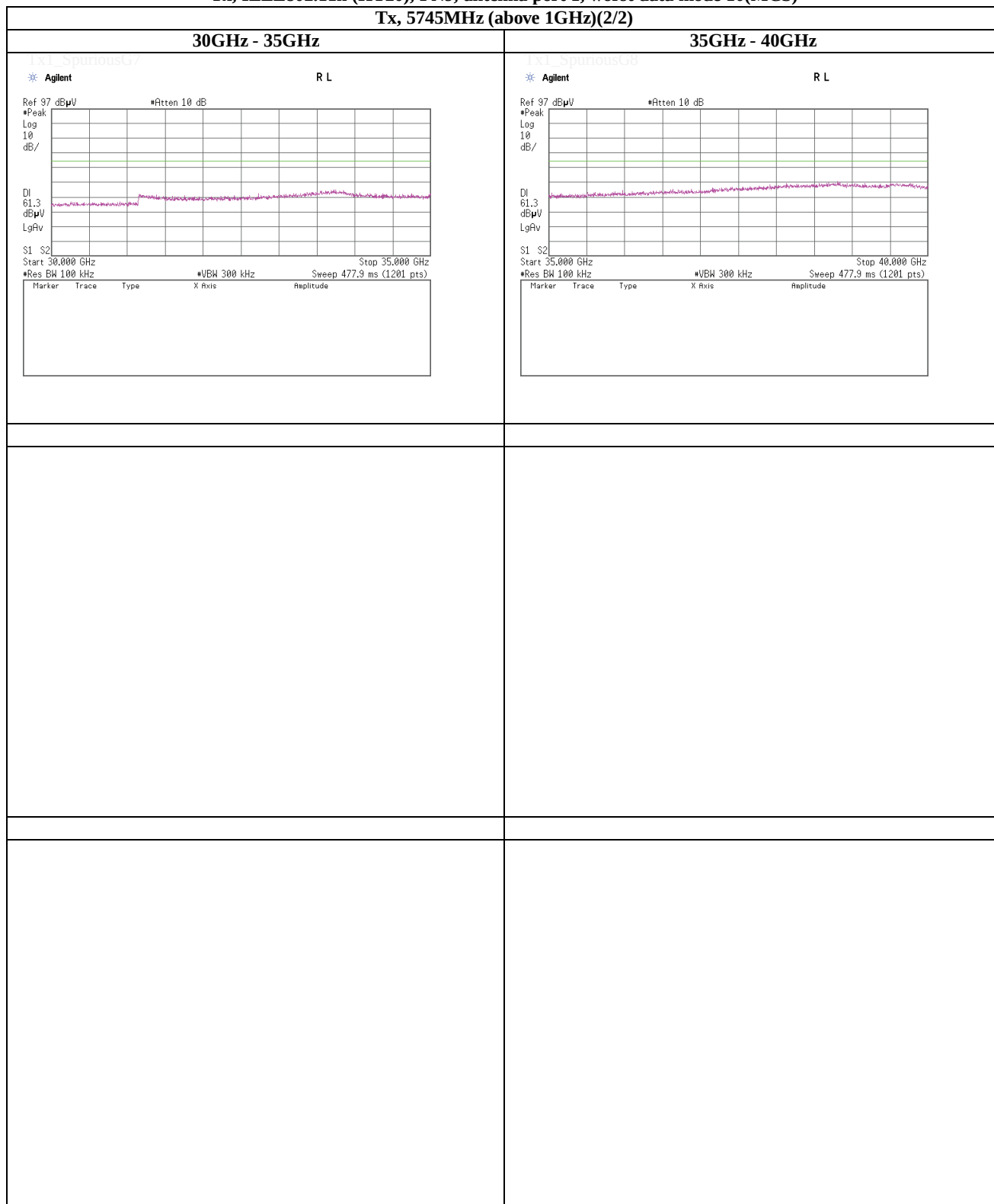
Spurious emission (Conducted)**Tx, IEEE802.11n (HT20), PN9, antenna port 1, worst data mode 10(MCS)****Tx, 5745MHz (below 1GHz)****UL Japan, Inc.****Shonan EMC Lab.****1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN****Telephone : +81 463 50 6400****Facsimile : +81 463 50 6401**

Spurious emission (Conducted)**Tx, IEEE802.11n (HT20), PN9, antenna port 1, worst data mode 10(MCS)****Tx, 5745MHz (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**

Spurious emission (Conducted)

Tx, IEEE802.11n (HT20), PN9, antenna port 1, worst data mode 10(MCS)

Tx, 5745MHz (above 1GHz)(2/2)



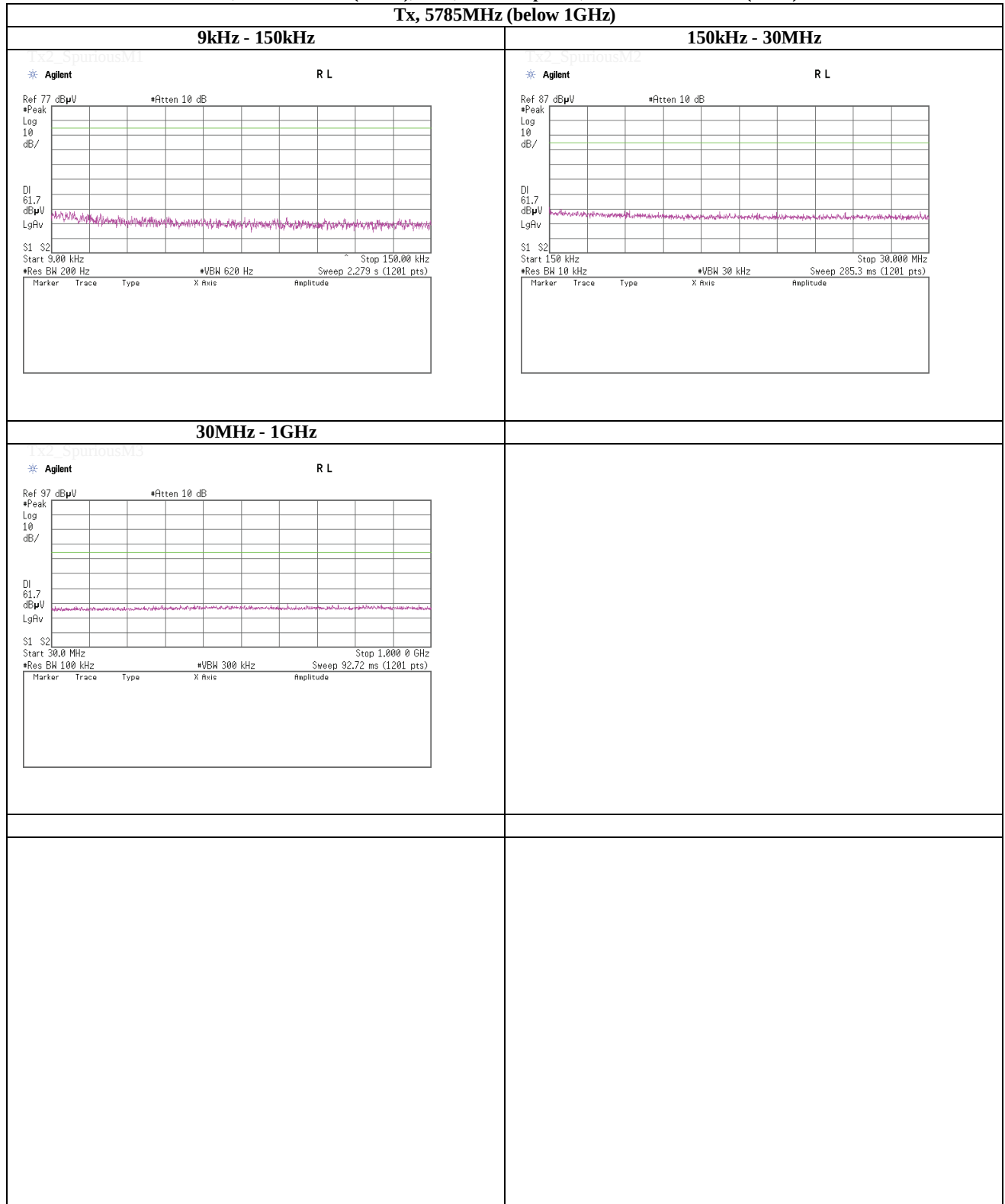
UL Japan, Inc.

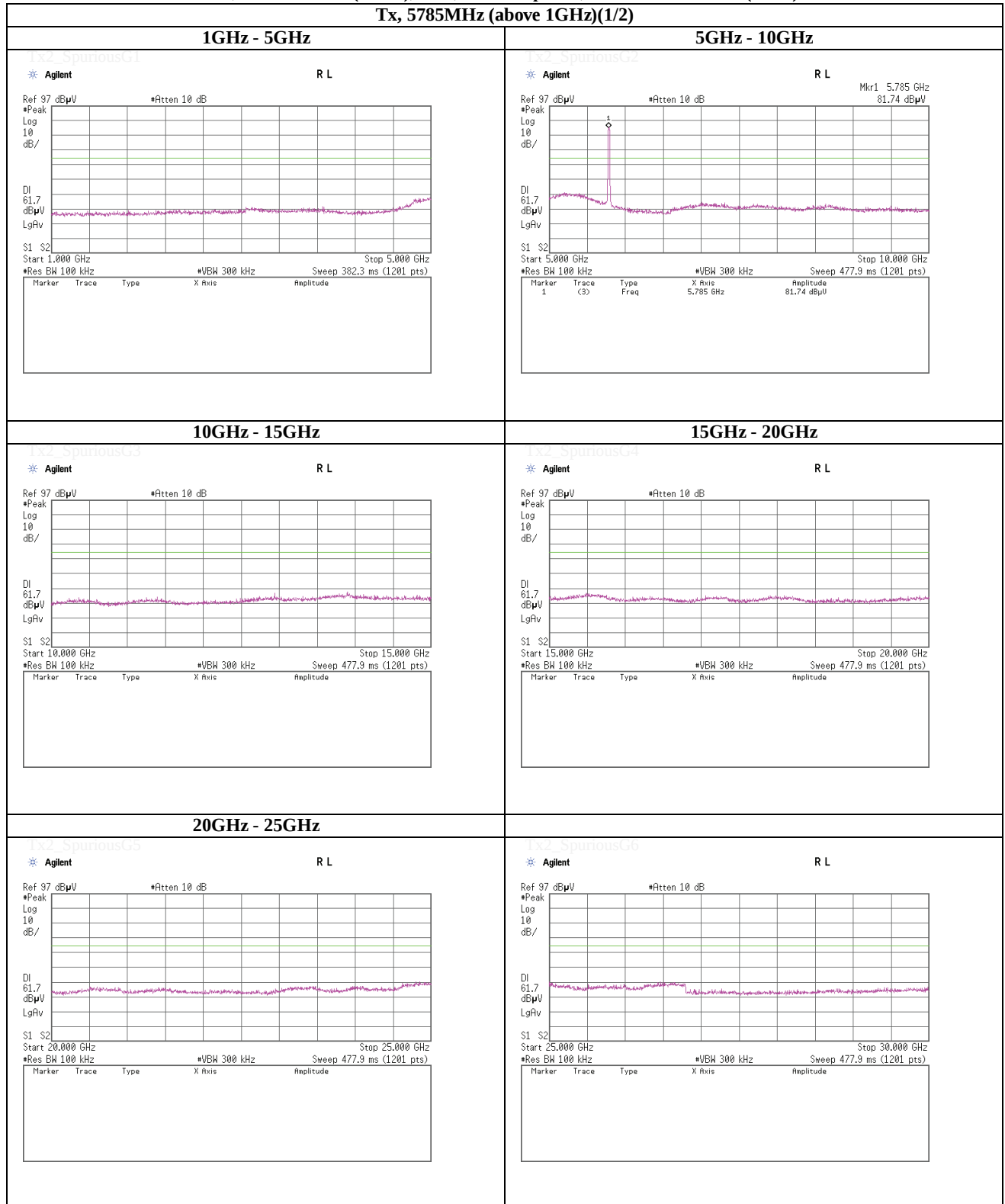
Shonan EMC Lab.

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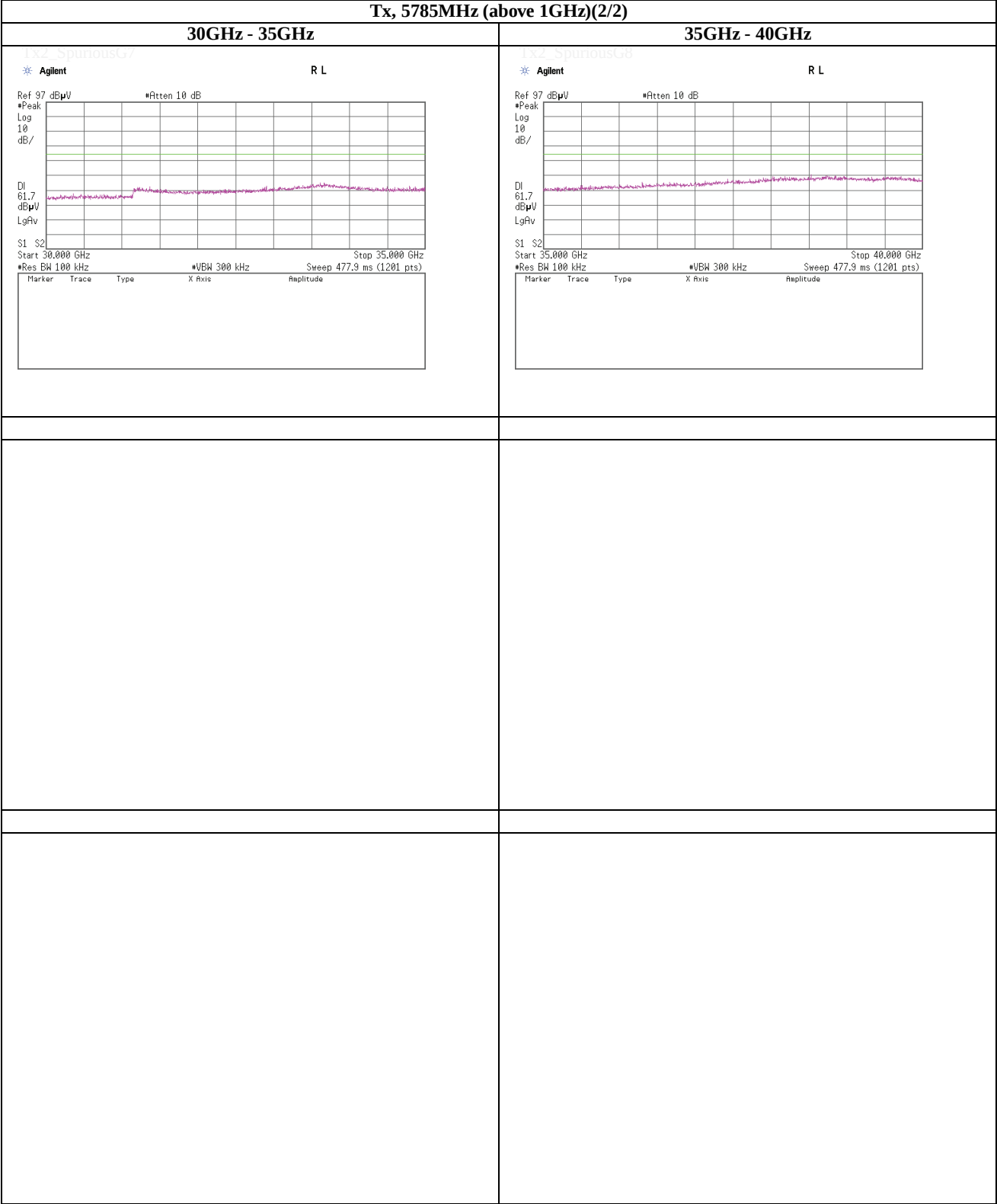
Spurious emission (Conducted)**Tx, IEEE802.11n (HT20), PN9, antenna port 1, worst data mode 10(MCS)****Tx, 5785MHz (below 1GHz)****UL Japan, Inc.****Shonan EMC Lab.****1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN****Telephone : +81 463 50 6400****Facsimile : +81 463 50 6401**

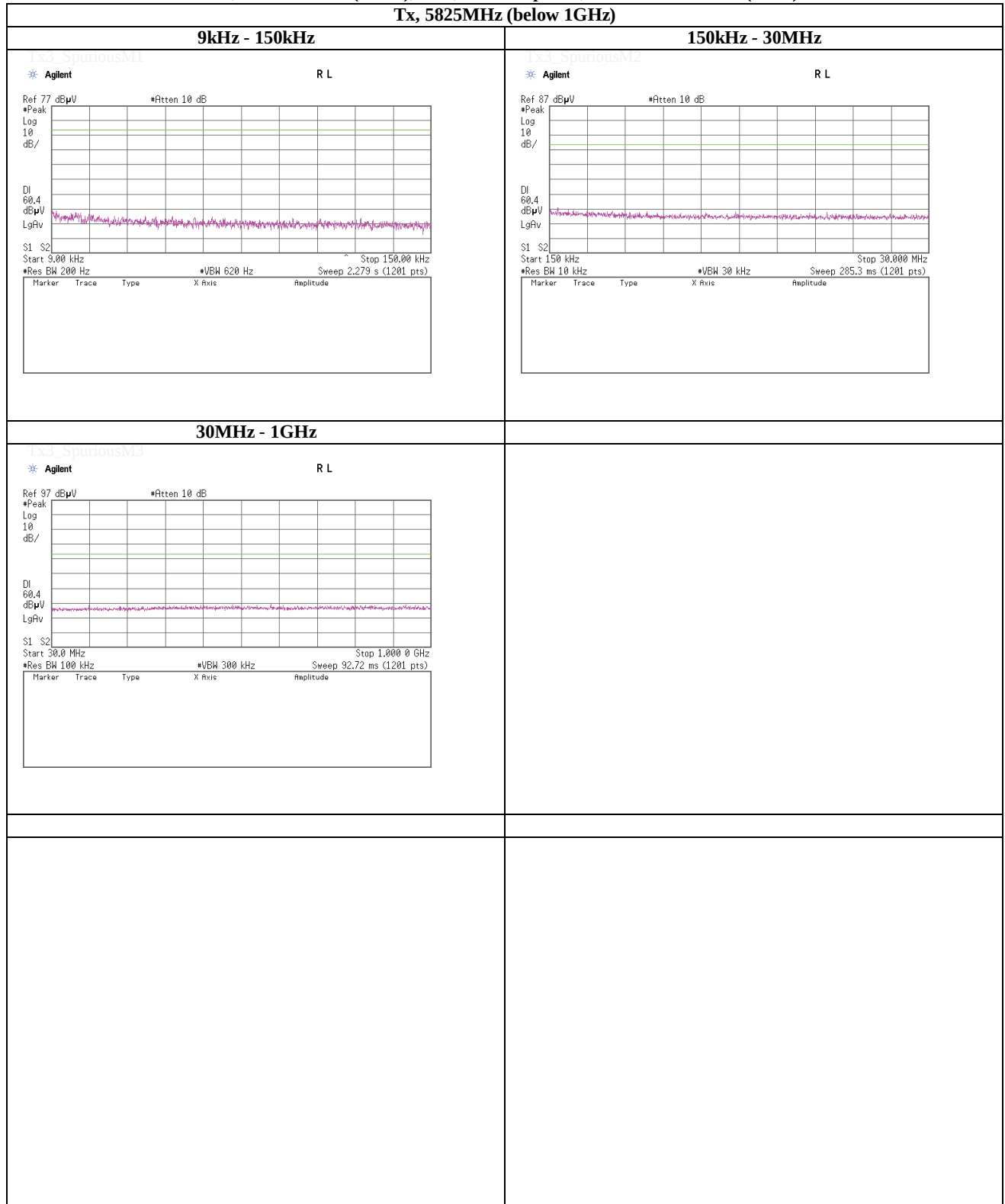
Spurious emission (Conducted)**Tx, IEEE802.11n (HT20), PN9, antenna port 1, worst data mode 10(MCS)****Tx, 5785MHz (above 1GHz)(1/2)****UL Japan, Inc.****Shonan EMC Lab.****1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN****Telephone : +81 463 50 6400****Facsimile : +81 463 50 6401**

Spurious emission (Conducted)

Tx, IEEE802.11n (HT20), PN9, antenna port 1, worst data mode 10(MCS)

Tx, 5785MHz (above 1GHz)(2/2)

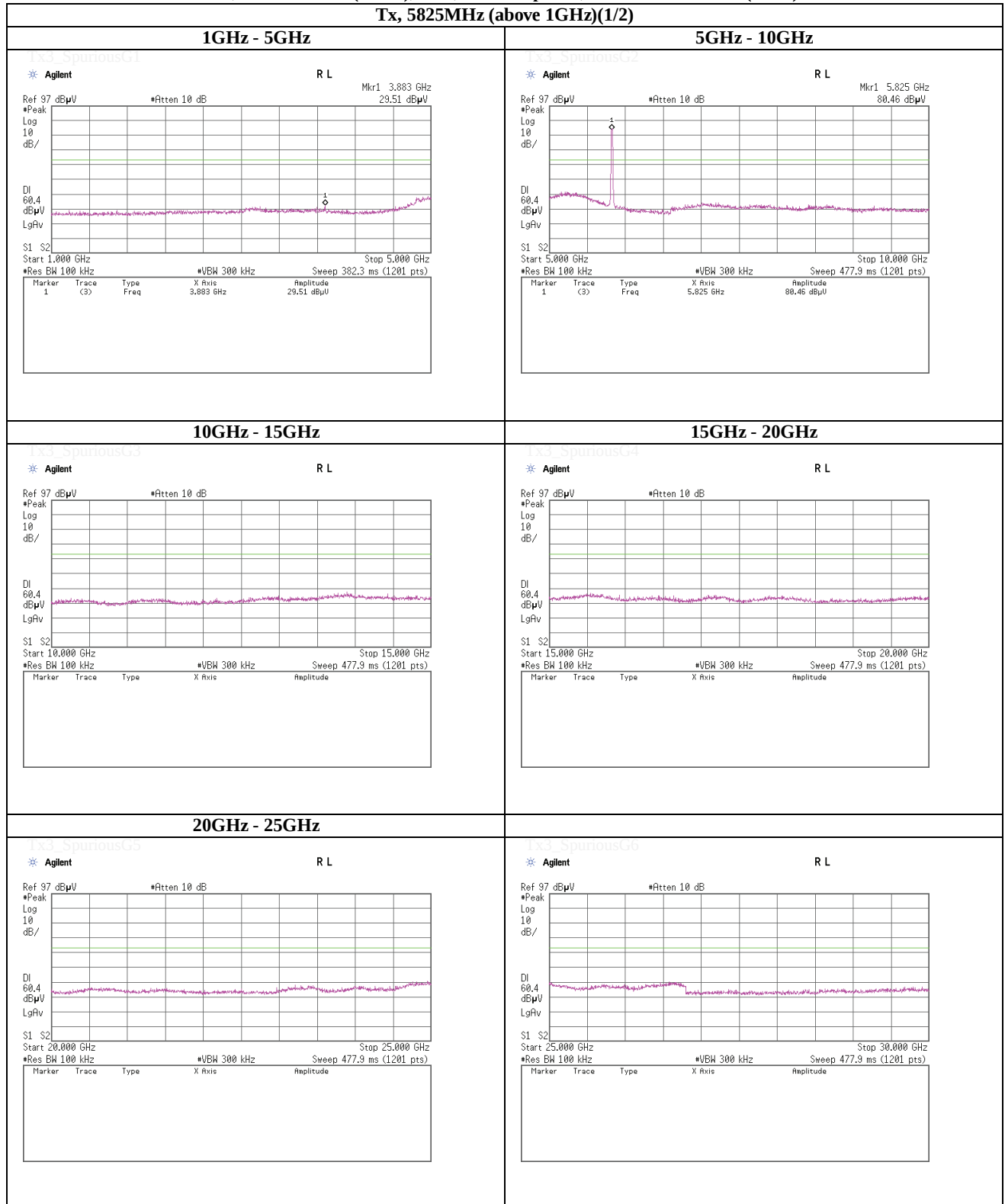


Spurious emission (Conducted)**Tx, IEEE802.11n (HT20), PN9, antenna port 1, worst data mode 10(MCS)****Tx, 5825MHz (below 1GHz)****UL Japan, Inc.****Shonan EMC Lab.**

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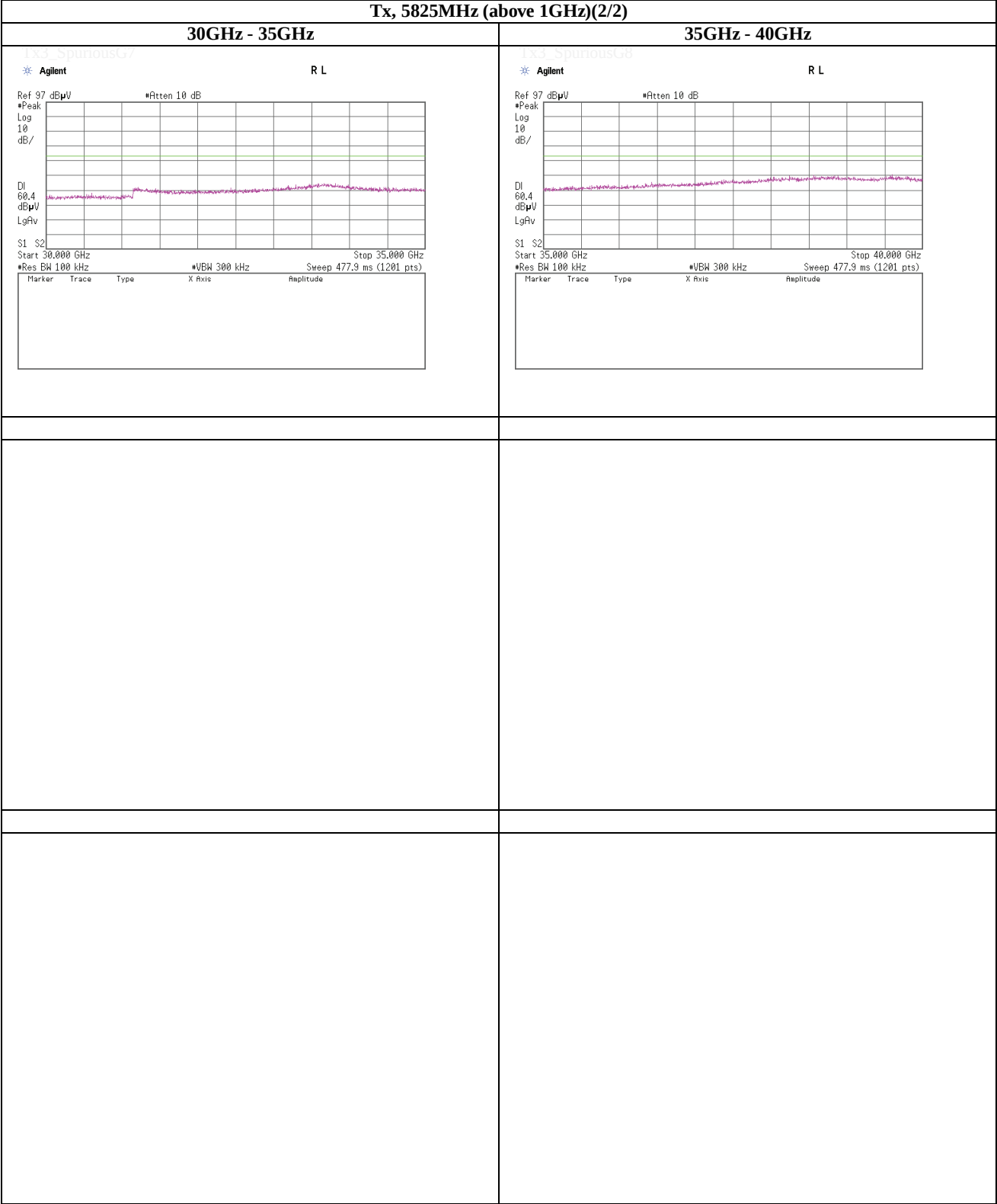
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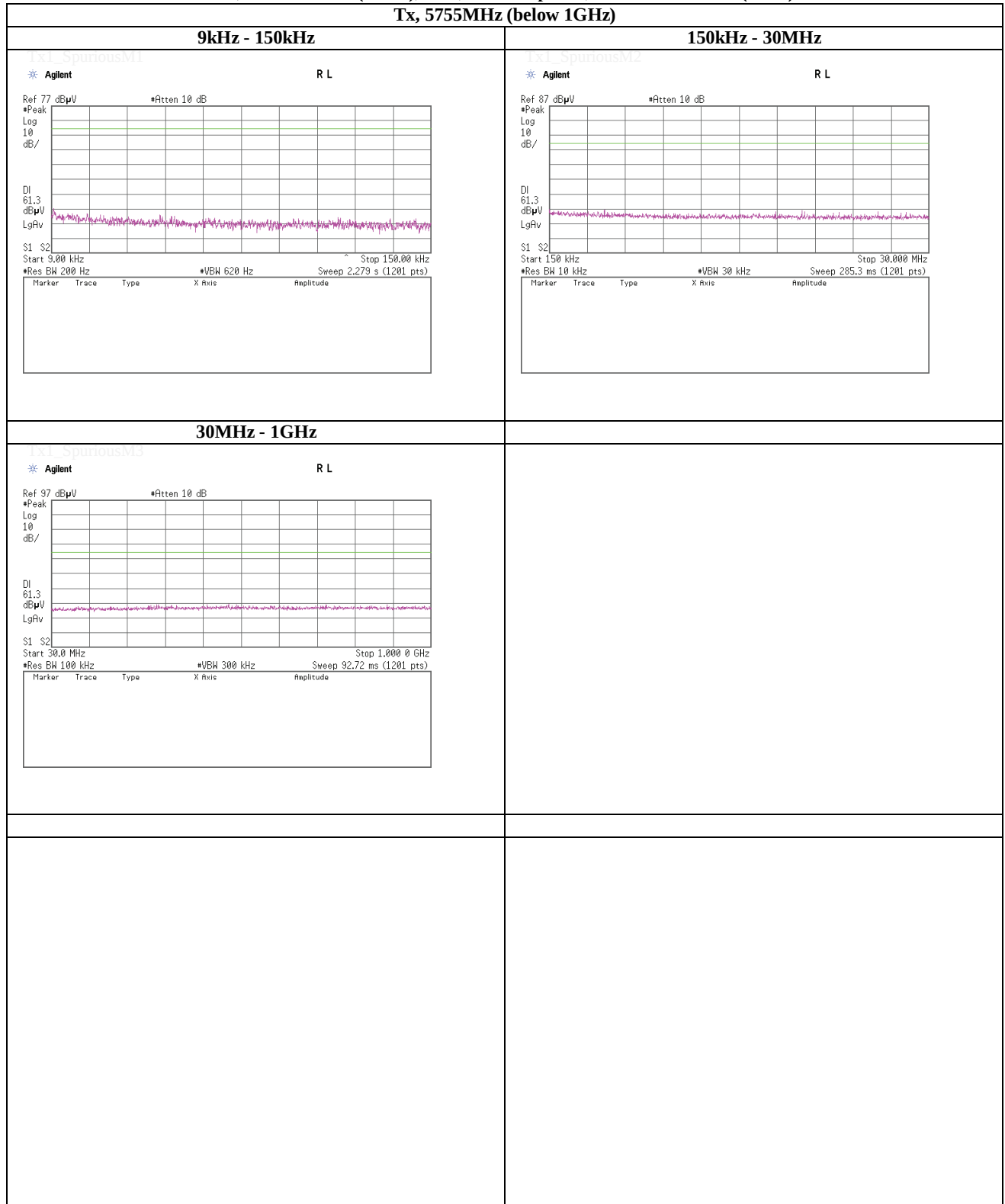
Facsimile : +81 463 50 6401

Spurious emission (Conducted)**Tx, IEEE802.11n (HT20), PN9, antenna port 1, worst data mode 10(MCS)****Tx, 5825MHz (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**

Spurious emission (Conducted)

Tx, IEEE802.11n (HT20), PN9, antenna port 1, worst data mode 10(MCS)
Tx, 5825MHz (above 1GHz)(2/2)



Spurious emission (Conducted)**Tx, IEEE802.11n (HT40), PN9, antenna port 2, worst data mode 8(MCS)****Tx, 5755MHz (below 1GHz)****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**

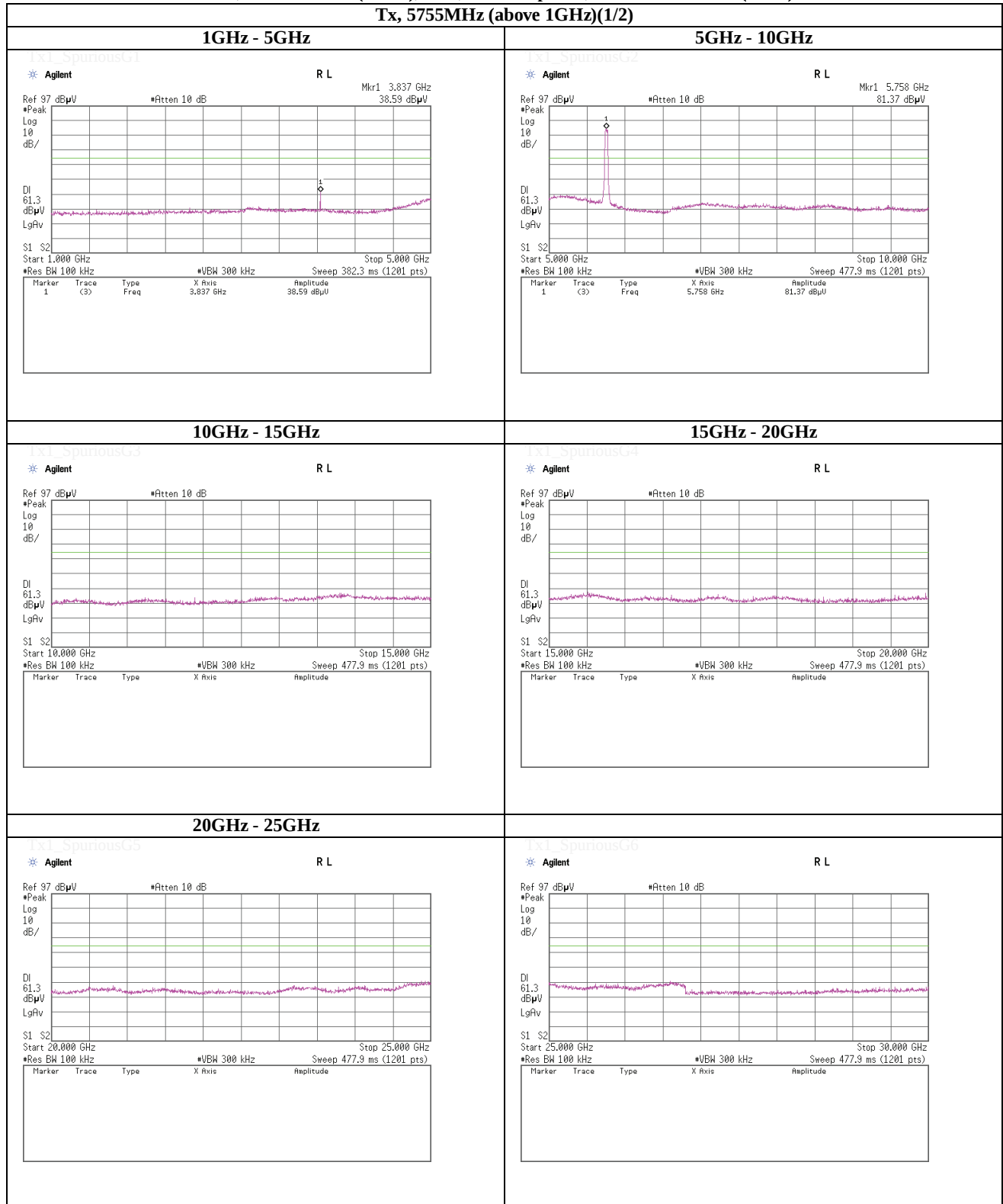
Spurious emission (Conducted)**Tx, IEEE802.11n (HT40), PN9, antenna port 2, worst data mode 8(MCS)****Tx, 5755MHz (above 1GHz)(1/2)****UL Japan, Inc.****Shonan EMC Lab.****1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN****Telephone : +81 463 50 6400****Facsimile : +81 463 50 6401**

Table 1 Demographic characteristics of study population

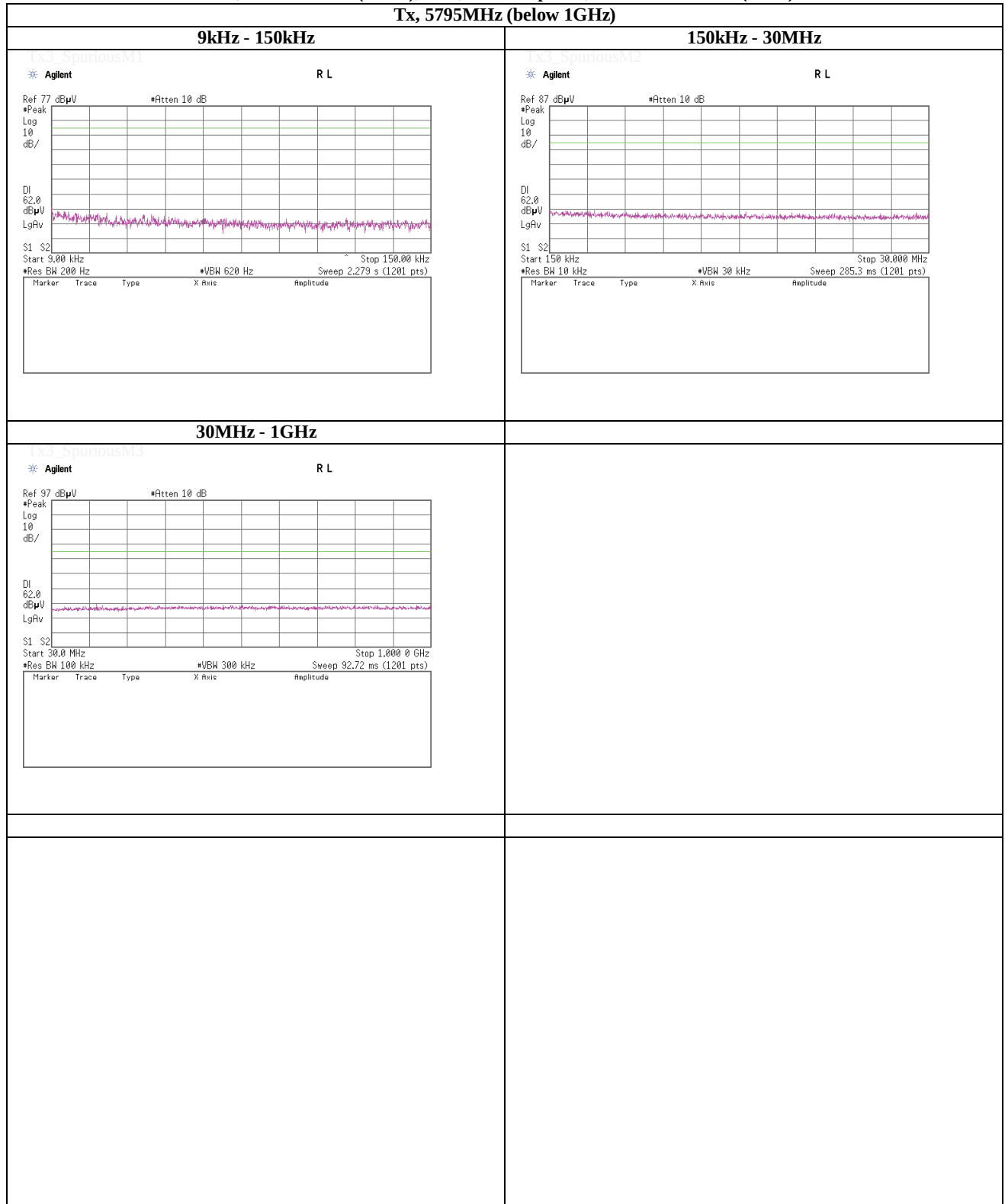
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Spurious emission (Conducted)

Tx, IEEE802.11n (HT40), PN9, antenna port 2, worst data mode 8(MCS)

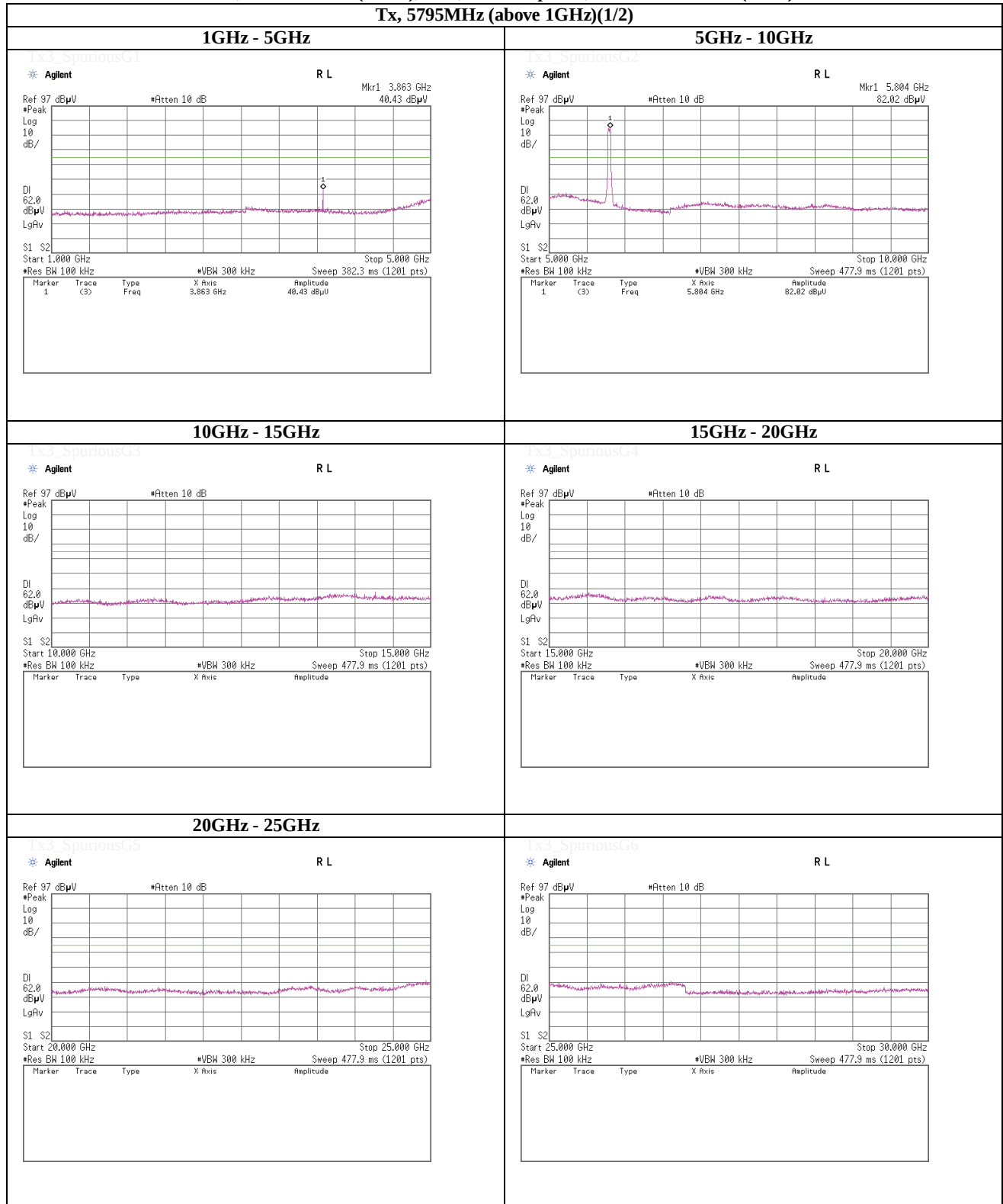
Tx, 5795MHz (below 1GHz)

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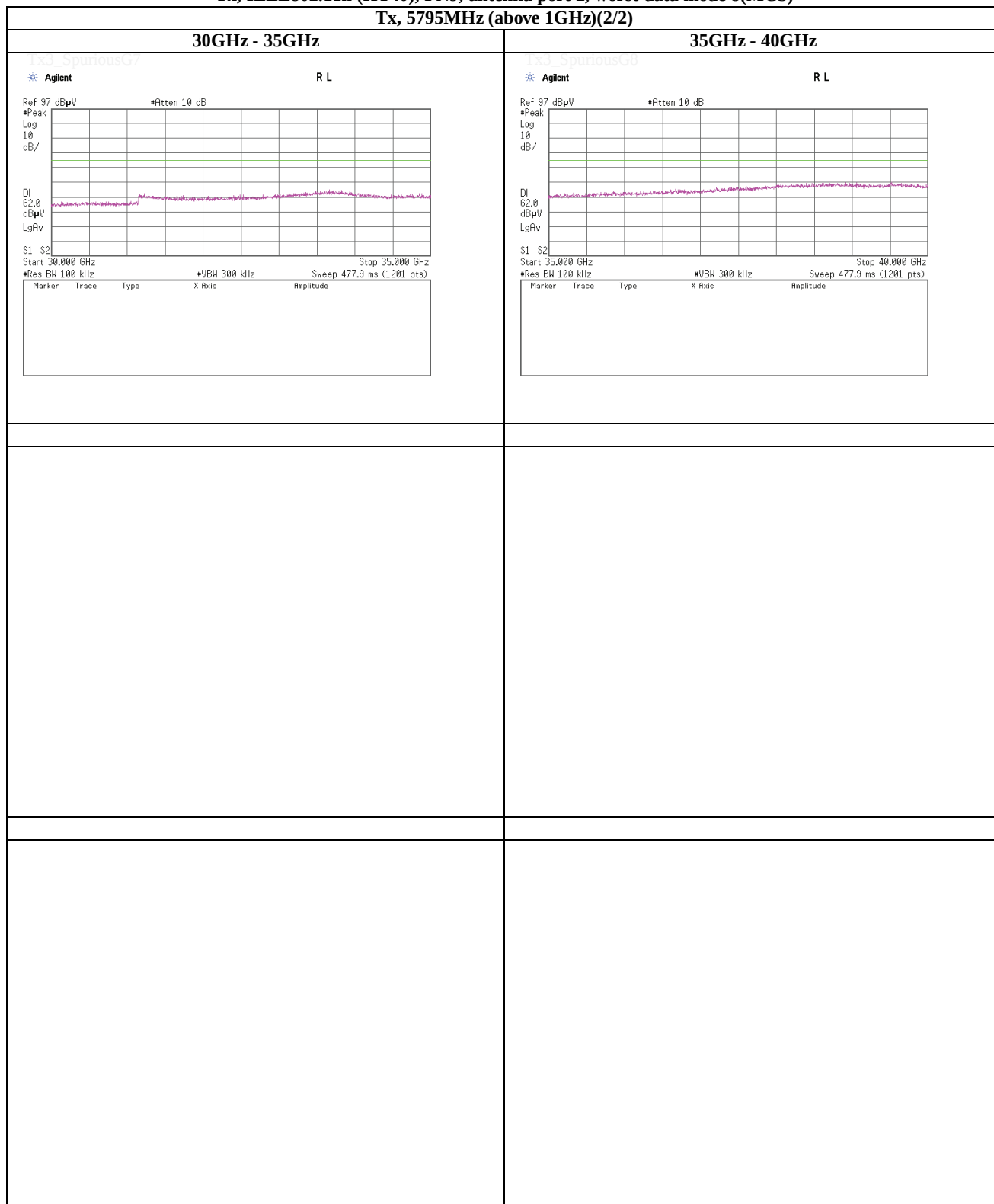
Facsimile : +81 463 50 6401

Spurious emission (Conducted)**Tx, IEEE802.11n (HT40), PN9, antenna port 2, worst data mode 8(MCS)****Tx, 5795MHz (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**

Spurious emission (Conducted)

Tx, IEEE802.11n (HT40), PN9, antenna port 2, worst data mode 8(MCS)

Tx, 5795MHz (above 1GHz)(2/2)



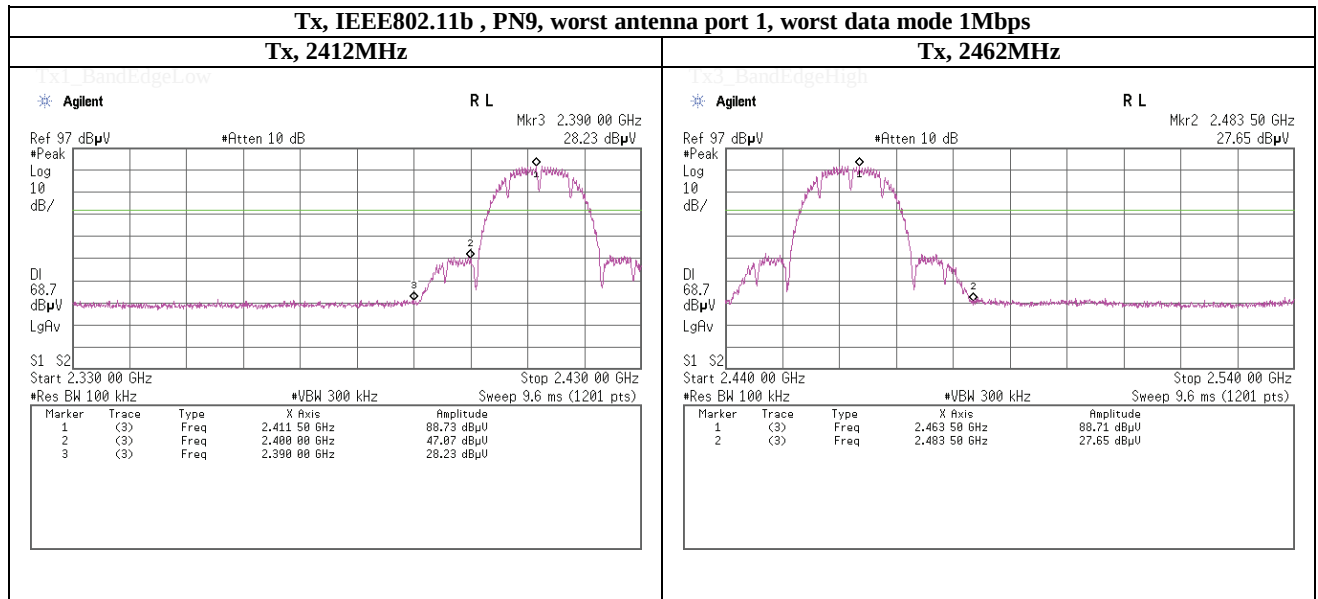
UL Japan, Inc.

Shonan EMC Lab.

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Telephone : +81 463 50 6400

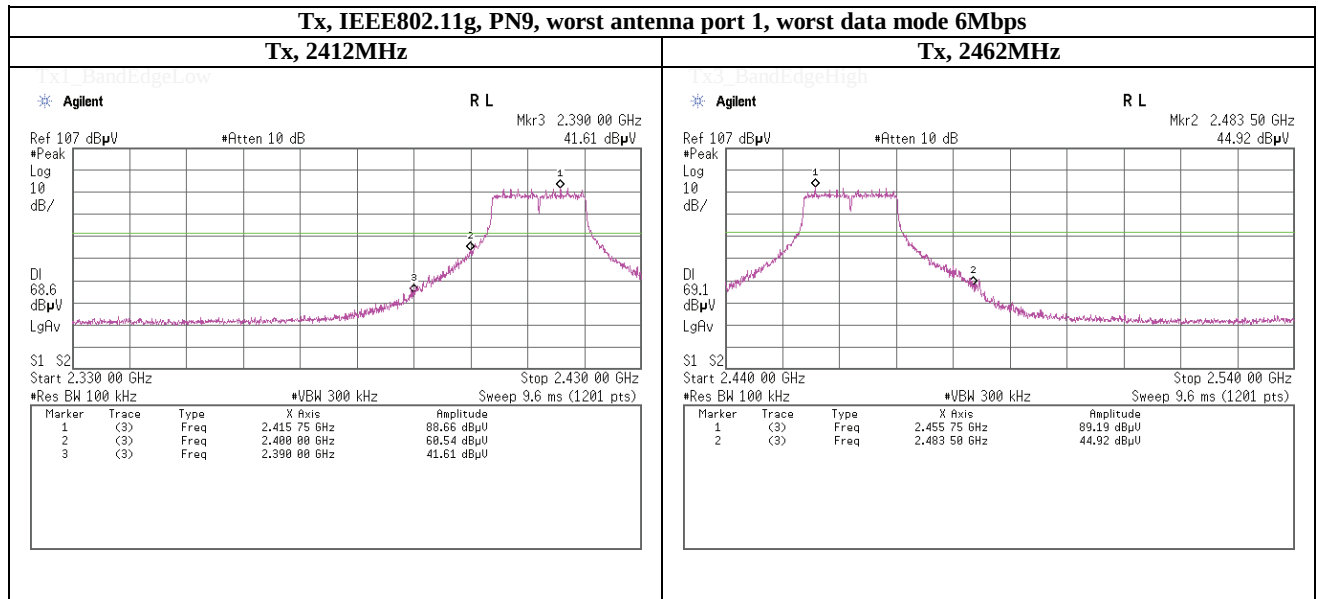
Facsimile : +81 463 50 6401

(Reference chart) Spurious emission (Conducted)**Band Edge compliance****UL Japan, Inc.****Shonan EMC Lab.**

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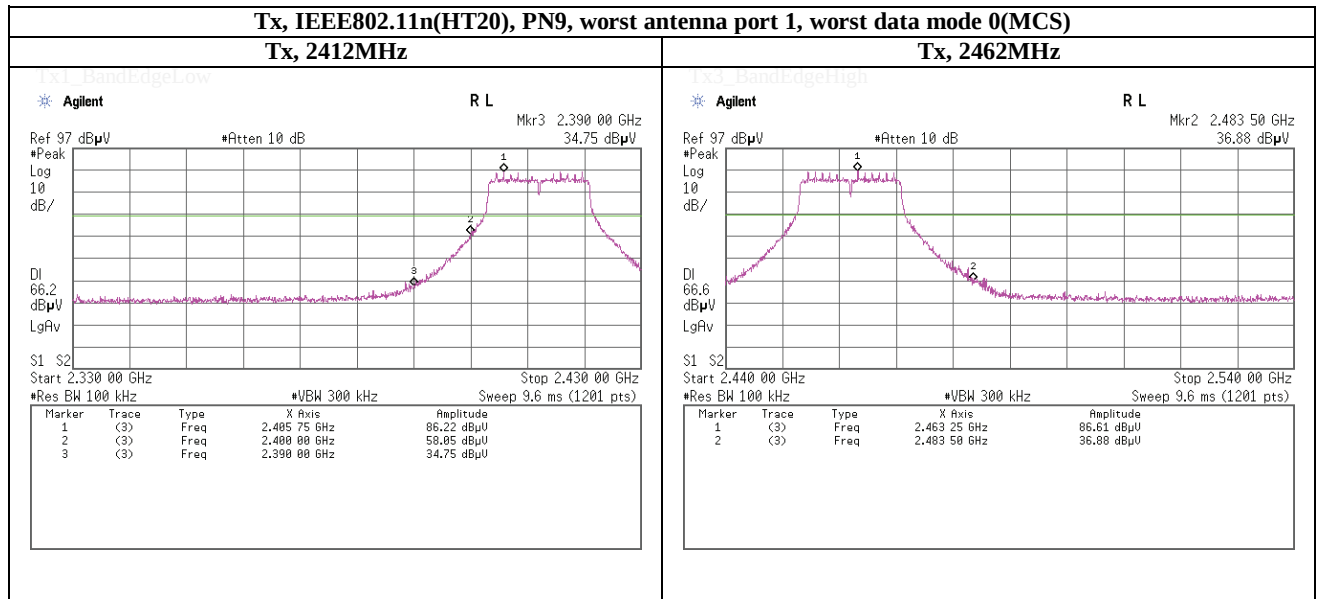
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(Reference chart) Spurious emission (Conducted)**Band Edge compliance****UL Japan, Inc.****Shonan EMC Lab.**

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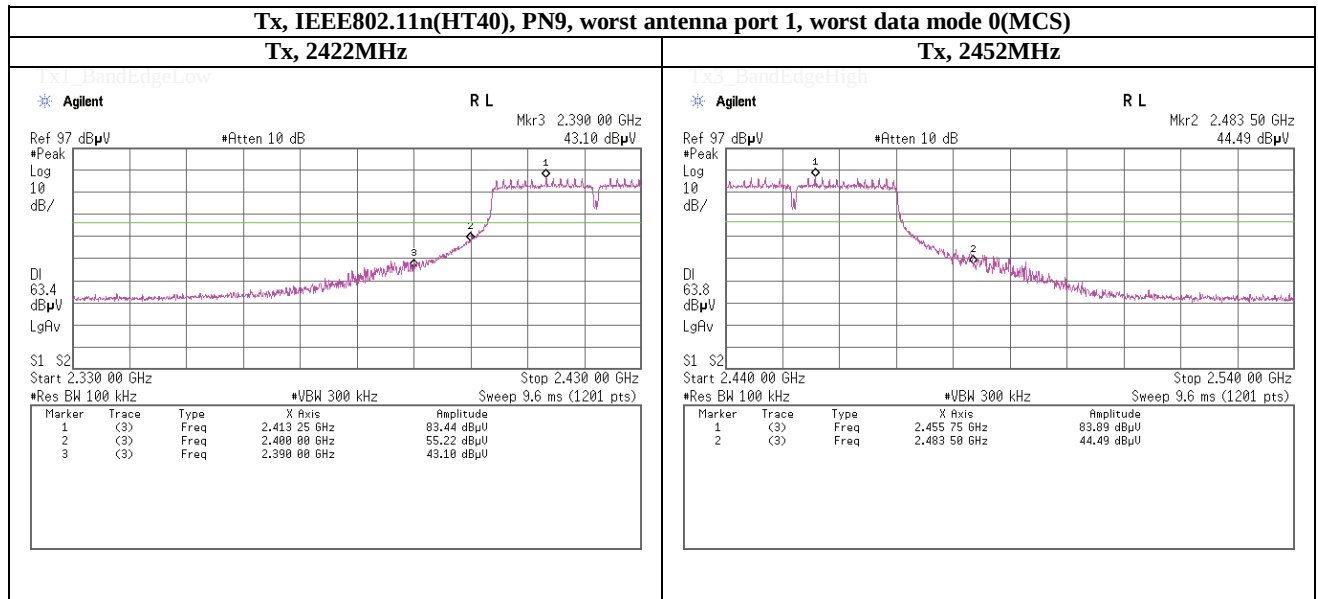
Facsimile : +81 463 50 6401

(Reference chart) Spurious emission (Conducted)**Band Edge compliance****UL Japan, Inc.****Shonan EMC Lab.**

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(Reference chart) Spurious emission (Conducted)**Band Edge compliance****UL Japan, Inc.****Shonan EMC Lab.**

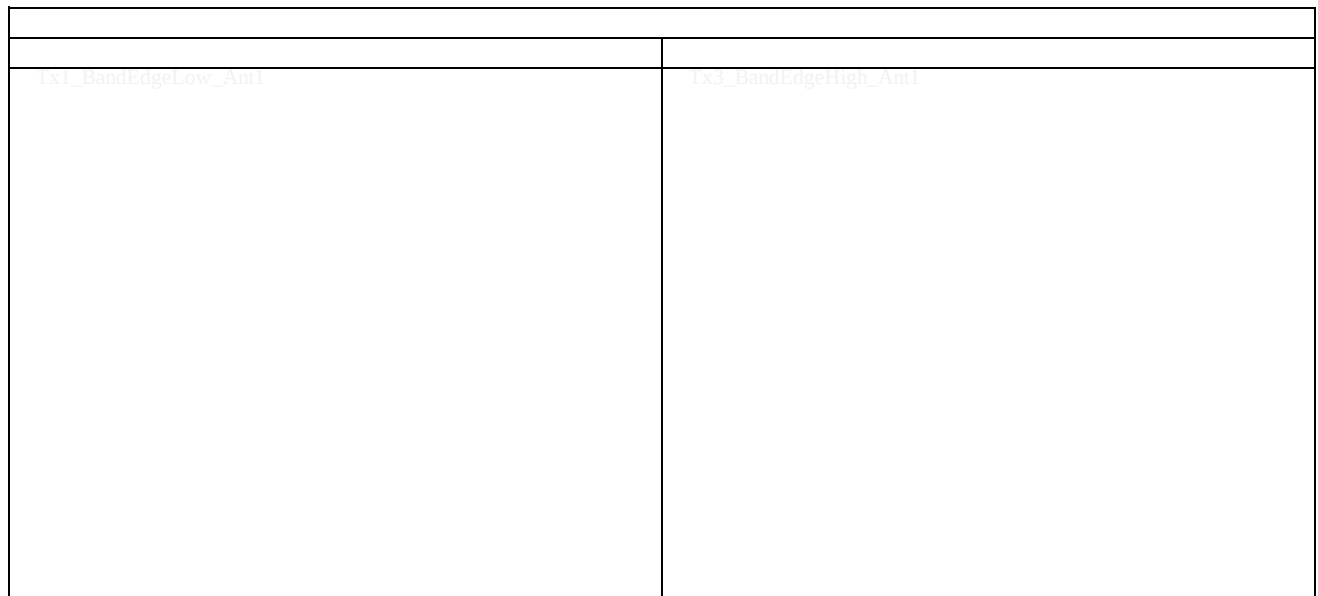
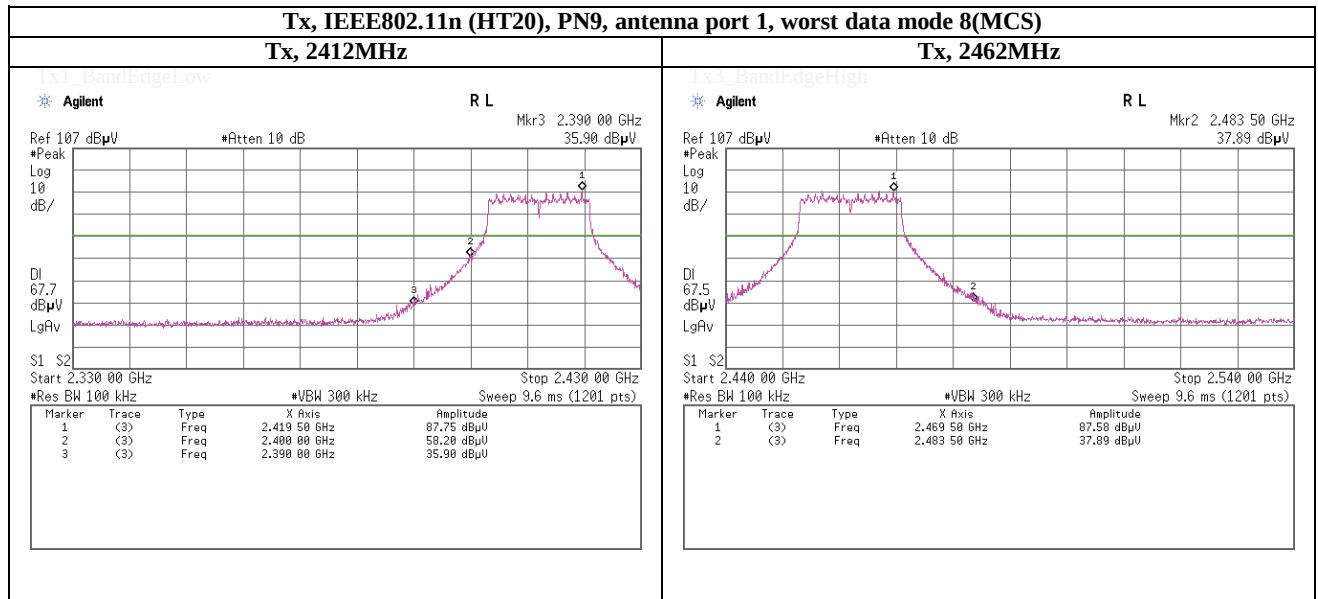
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

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Spurious emission (Conducted)

Band Edge compliance



UL Japan, Inc.

Shonan EMC Lab.

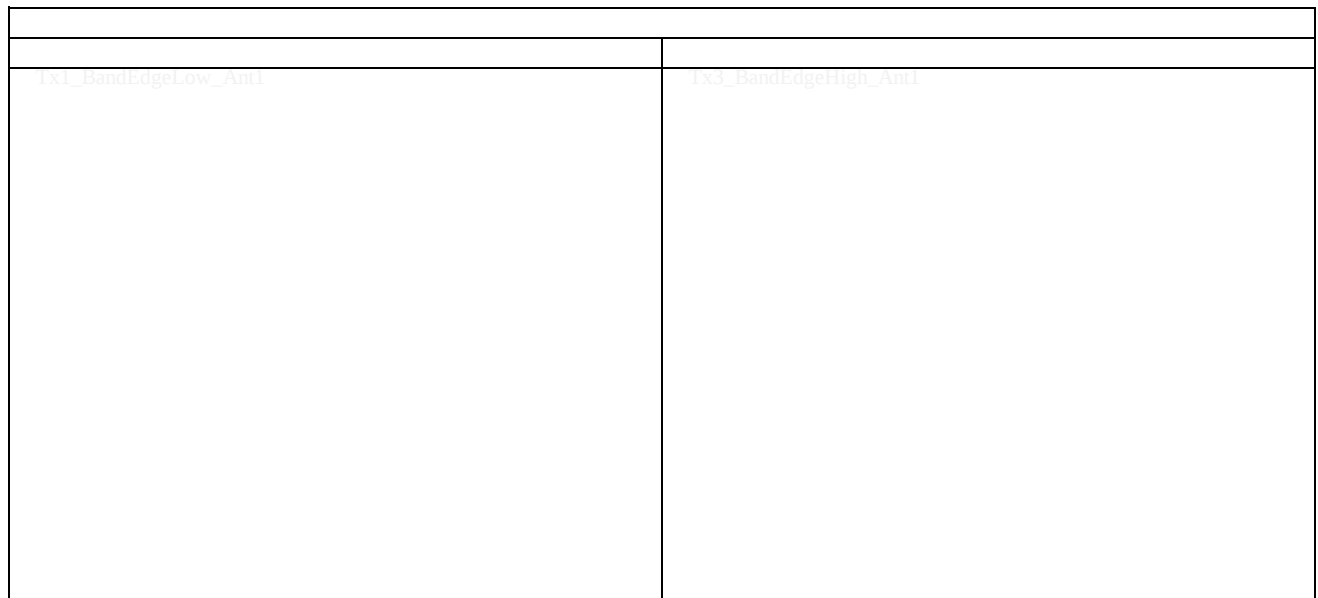
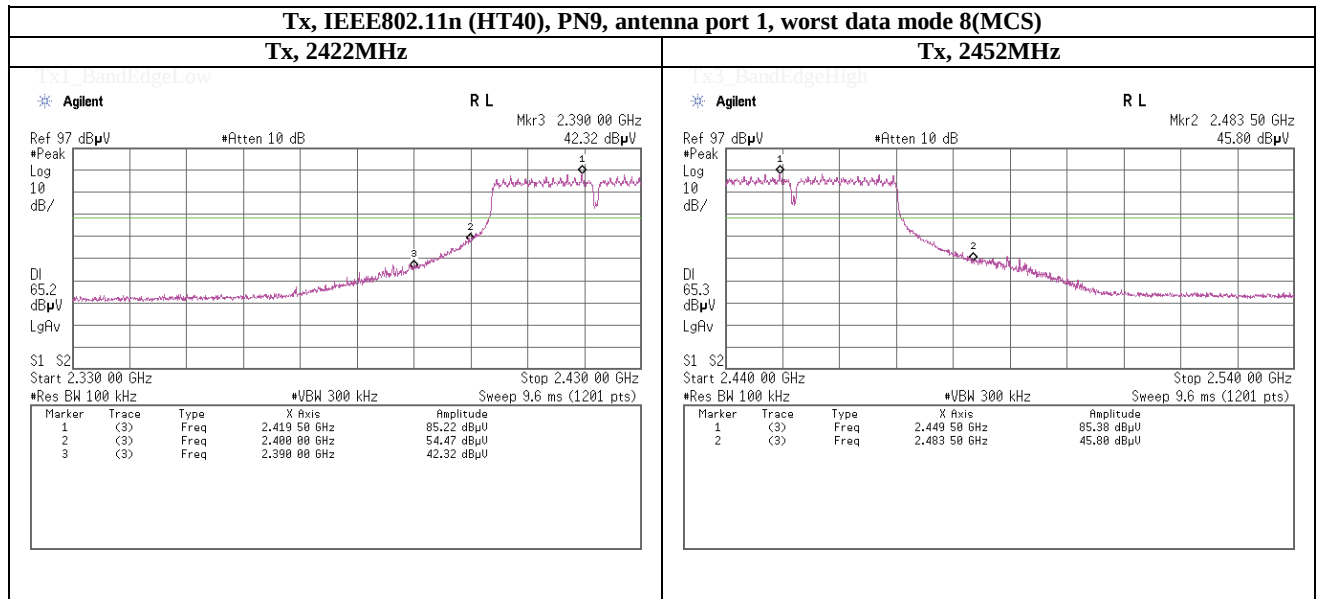
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Spurious emission (Conducted)

Band Edge compliance



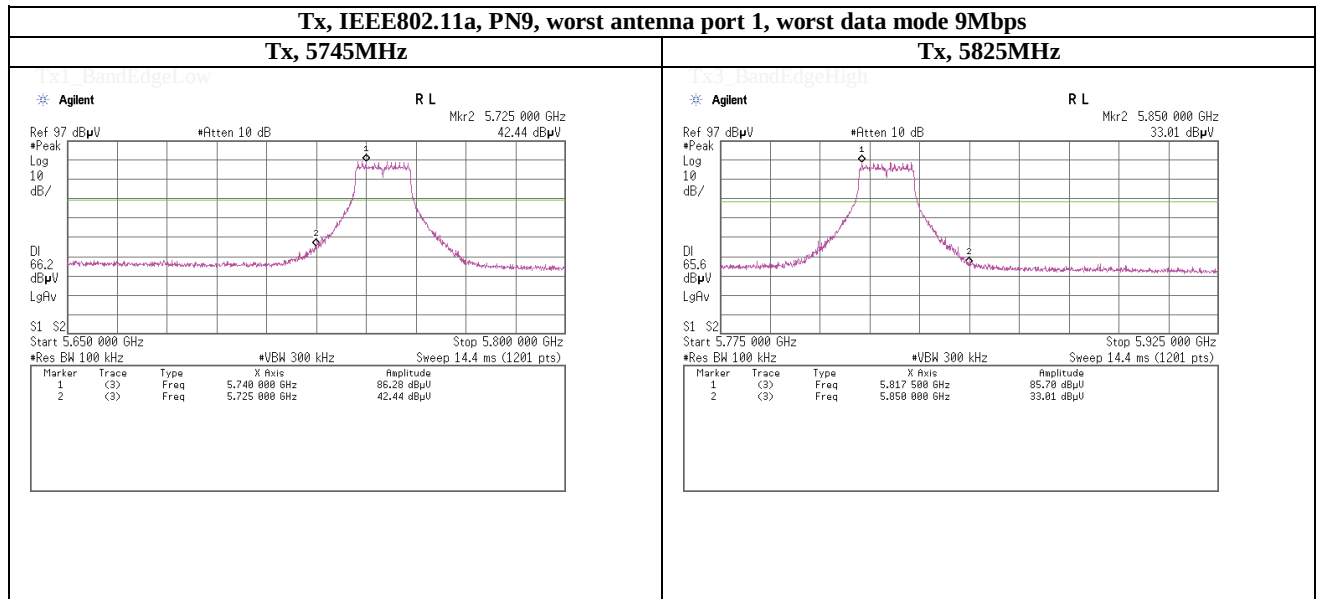
UL Japan, Inc.

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(Reference chart) Spurious emission (Conducted)**Band Edge compliance****UL Japan, Inc.****Shonan EMC Lab.**

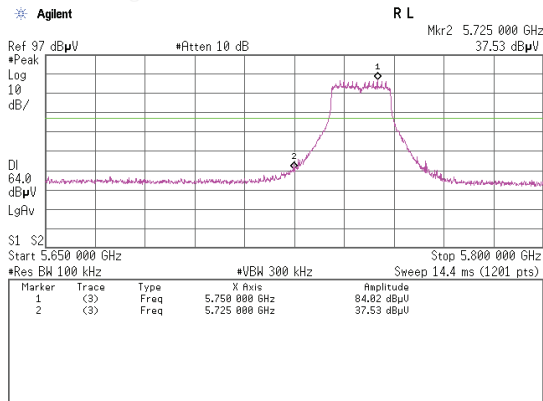
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

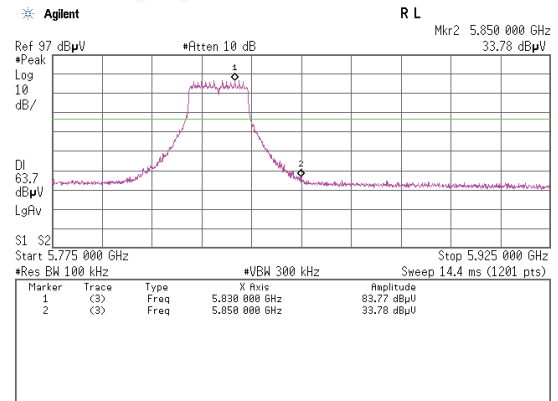
Facsimile : +81 463 50 6401

(Reference chart) Spurious emission (Conducted)**Band Edge compliance****Tx, IEEE802.11n(HT20), PN9, worst antenna port 2, worst data mode 0(MCS)****Tx, 5745MHz**

Tx1_BandEdgeLow

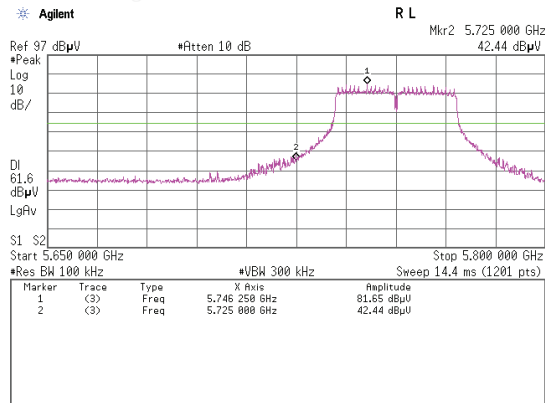
**Tx, 5825MHz**

Tx3_BandEdgeHigh

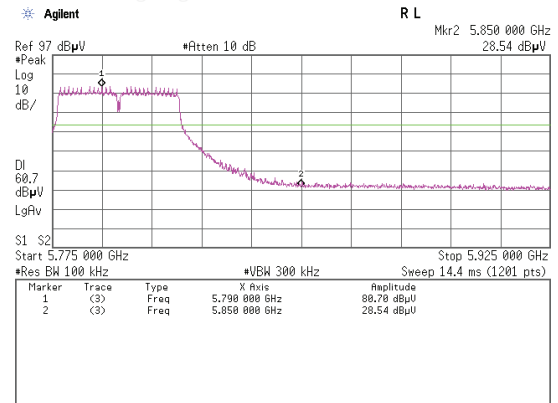
**UL Japan, Inc.****Shonan EMC Lab.****1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN****Telephone : +81 463 50 6400****Facsimile : +81 463 50 6401**

(Reference chart) Spurious emission (Conducted)**Band Edge compliance****Tx, IEEE802.11n(HT40), PN9, worst antenna port 1, worst data mode 0(MCS)****Tx, 5755MHz**

Tx1_BandEdgeLow

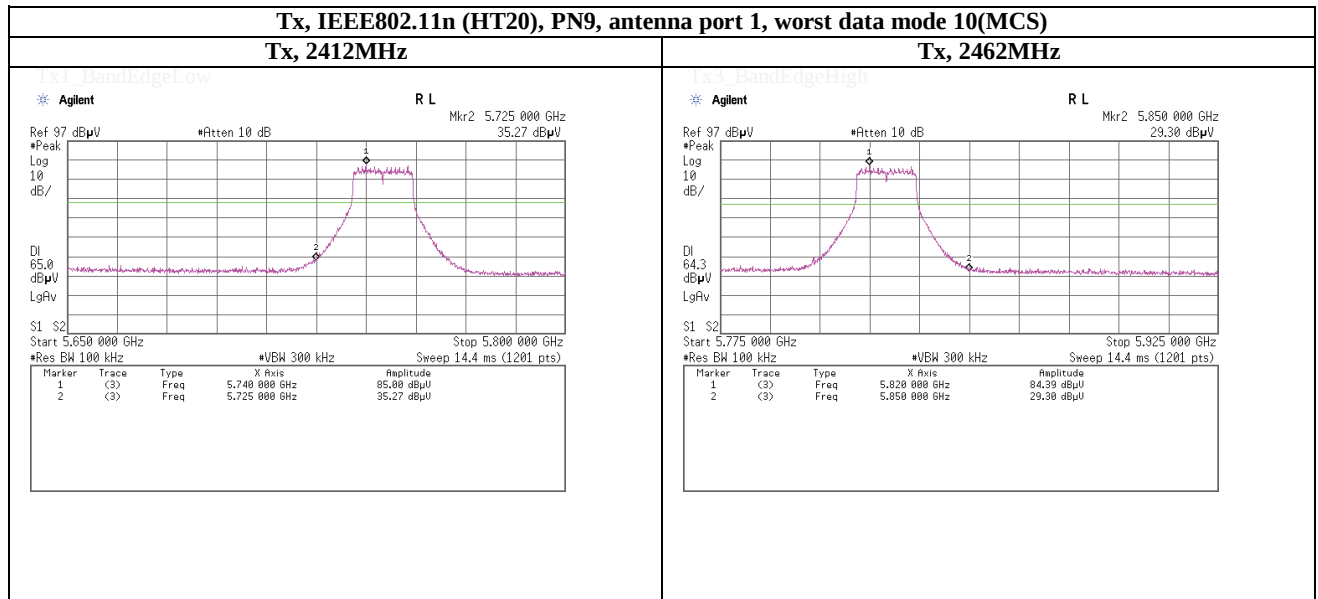
**Tx, 5795MHz**

Tx3_BandEdgeHigh

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Spurious emission (Conducted)

Band Edge compliance



Tx1_BandEdgeLow_Ant1

Tx3_BandEdgeHigh_Ant1

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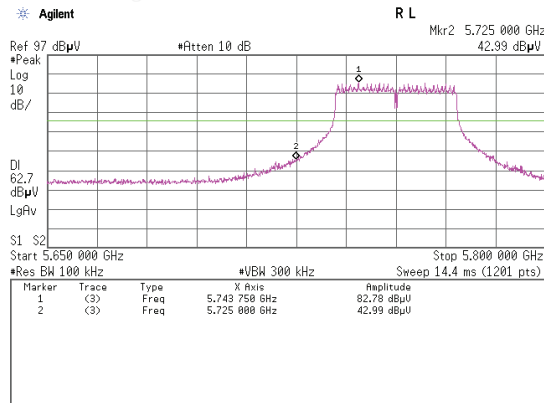
Spurious emission (Conducted)

Band Edge compliance

Tx, IEEE802.11n (HT40), PN9, antenna port 2, worst data mode 8(MCS)

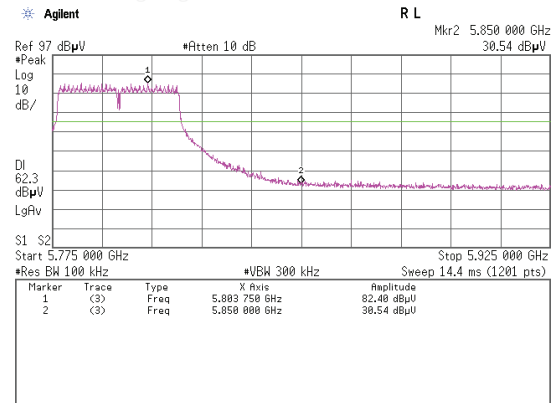
Tx, 5755MHz

1x1_BandEdgeLow



Tx, 5795MHz

1x1_BandEdgeHigh



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Maximum Power Spectral Density

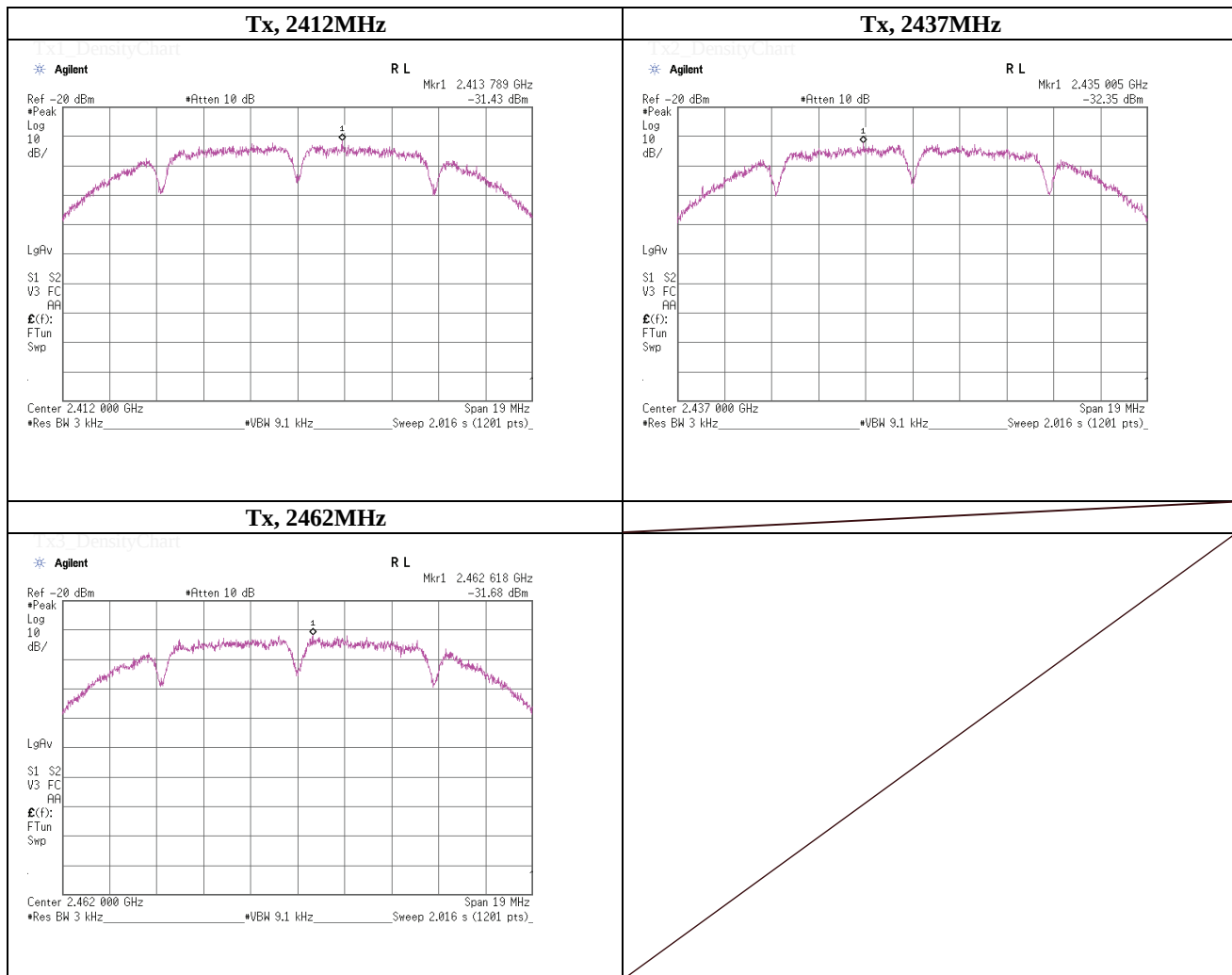
(Method 10.2 PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	May 2, 2013	
Temperature / Humidity	24deg.C , 40%RH	
Engineer	Makoto Hosaka	
Mode	Tx, IEEE802.11b , PN9, worst antenna port 1, worst data mode 1Mbps	

Ch. Freq. [MHz]	Freq. Reading [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
2412.0000	2413.79	-31.43	1.50	20.21	-9.72	8.00	17.72
2437.0000	2435.01	-32.35	1.50	20.21	-10.64	8.00	18.64
2462.0000	2462.62	-31.68	1.51	20.21	-9.96	8.00	17.96

Sample Calculation:

Result = Reading + Cable Loss + Atten. Loss

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Maximum Power Spectral Density

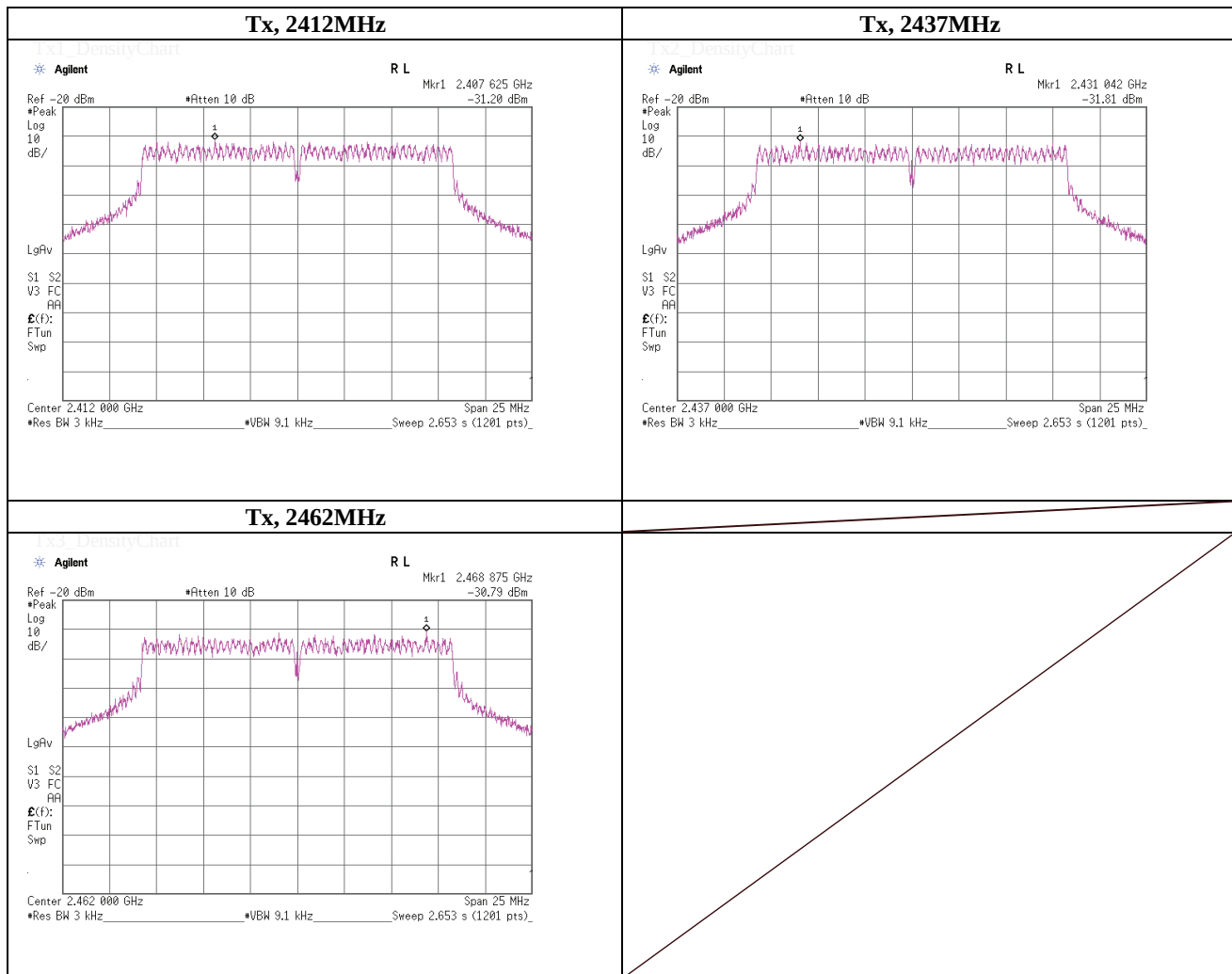
(Method 10.2 PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	May 2, 2013	
Temperature / Humidity	24deg.C , 40%RH	
Engineer	Makoto Hosaka	
Mode	Tx, IEEE802.11g, PN9, worst antenna port 1, worst data mode 6Mbps	

Ch. Freq. [MHz]	Freq. Reading [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
2412.0000	2407.63	-31.20	1.50	20.21	-9.49	8.00	17.49
2437.0000	2431.04	-31.81	1.50	20.21	-10.10	8.00	18.10
2462.0000	2468.88	-30.79	1.51	20.21	-9.07	8.00	17.07

Sample Calculation:

Result = Reading + Cable Loss + Atten. Loss

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Maximum Power Spectral Density

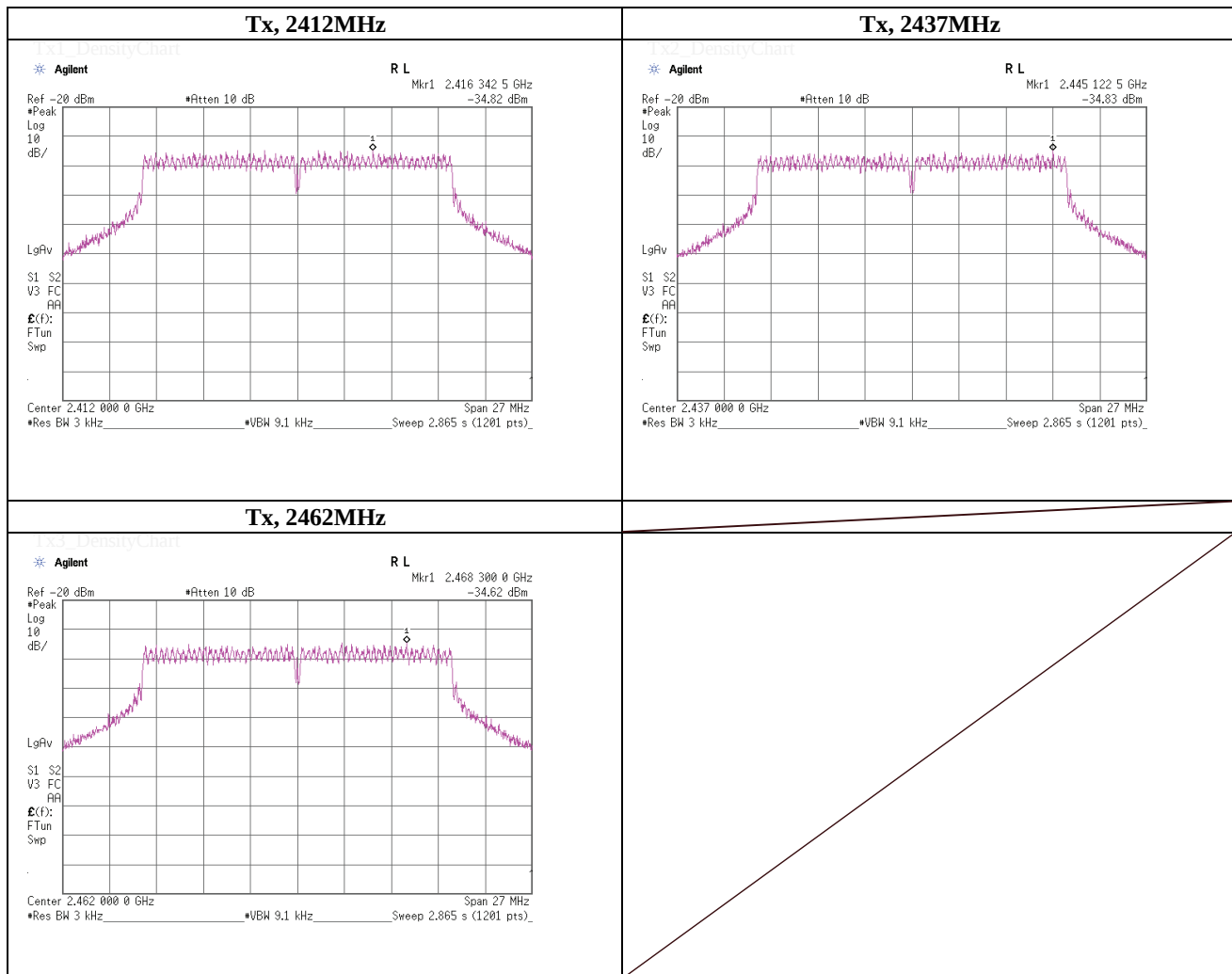
(Method 10.2 PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	May 2, 2013	
Temperature / Humidity	24deg.C , 40%RH	
Engineer	Makoto Hosaka	
Mode	Tx, IEEE802.11n(HT20), PN9, worst antenna port 1, worst data mode 0(MCS)	

Ch. Freq. [MHz]	Freq. Reading [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
2412.0000	2416.34	-34.82	1.50	20.21	-13.11	8.00	21.11
2437.0000	2445.12	-34.83	1.50	20.21	-13.12	8.00	21.12
2462.0000	2468.30	-34.62	1.51	20.21	-12.90	8.00	20.90

Sample Calculation:

Result = Reading + Cable Loss + Atten. Loss

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Maximum Power Spectral Density

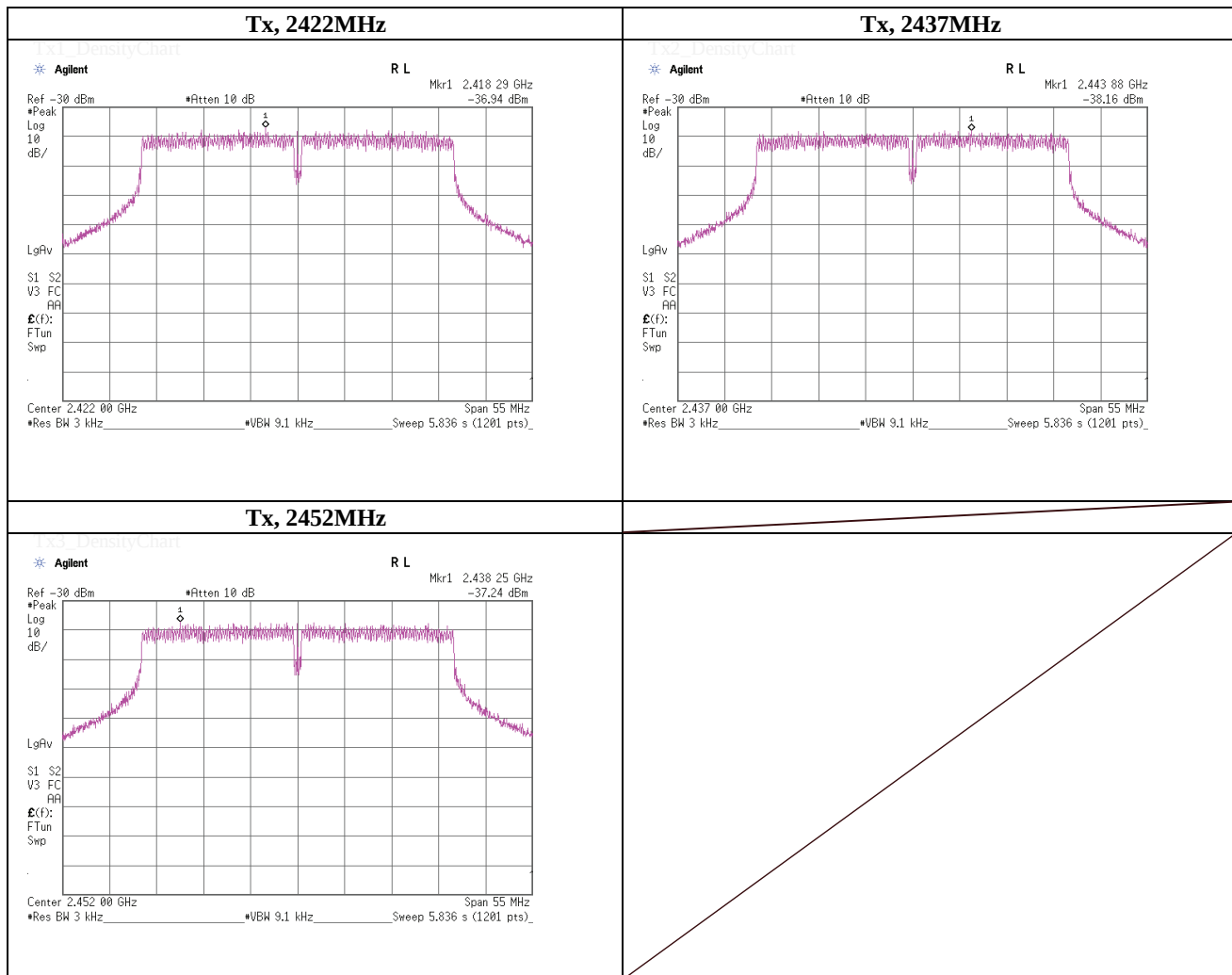
(Method 10.2 PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	May 2, 2013	
Temperature / Humidity	24deg.C , 40%RH	
Engineer	Makoto Hosaka	
Mode	Tx, IEEE802.11n(HT40), PN9, worst antenna port 1, worst data mode 0(MCS)	

Ch. Freq. [MHz]	Freq. Reading [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
2422.0000	2418.29	-36.94	1.50	20.21	-15.23	8.00	23.23
2437.0000	2443.88	-38.16	1.50	20.21	-16.45	8.00	24.45
2452.0000	2438.25	-37.24	1.50	20.21	-15.53	8.00	23.53

Sample Calculation:

Result = Reading + Cable Loss + Atten. Loss

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Maximum Power Spectral Density

(Method 10.2 PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	May 2, 2013	
Temperature / Humidity	24deg.C , 40%RH	
Engineer	Makoto Hosaka	
Mode	Tx, IEEE802.11n (HT20), PN9, worst data mode 8(MCS)	

Antenna 1

Ch. Freq. [MHz]	Freq. Reading [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	10log (N _{ANT})* [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
2412.0000	2418.26	-34.66	1.50	20.21	3.01	-9.94	8.00	17.94
2437.0000	2431.40	-34.85	1.50	20.21	3.01	-10.13	8.00	18.13
2462.0000	2453.61	-34.35	1.51	20.21	3.01	-9.62	8.00	17.62

Sample Calculation:

Result = Reading + Cable Loss + Atten. Loss + 10log(NANT)

Antenna 2

Ch. Freq. [MHz]	Freq. Reading [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	10log (N _{ANT})* [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
2412.0000	2410.76	-33.97	1.52	20.21	3.01	-9.23	8.00	17.23
2437.0000	2429.51	-33.17	1.51	20.21	3.01	-8.43	8.00	16.43
2462.0000	2462.97	-34.78	1.51	20.21	3.01	-10.05	8.00	18.05

Sample Calculation:

Result = Reading + Cable Loss + Atten. Loss + 10log(NANT)

*) This test was measured based on Method In-Band Power Spectral Density (PSD) Measurements (2) of
 "Emissions Testing of Transmitters with Multiple Outputs in the Same Band (KDB662911 D01 v01r02)"

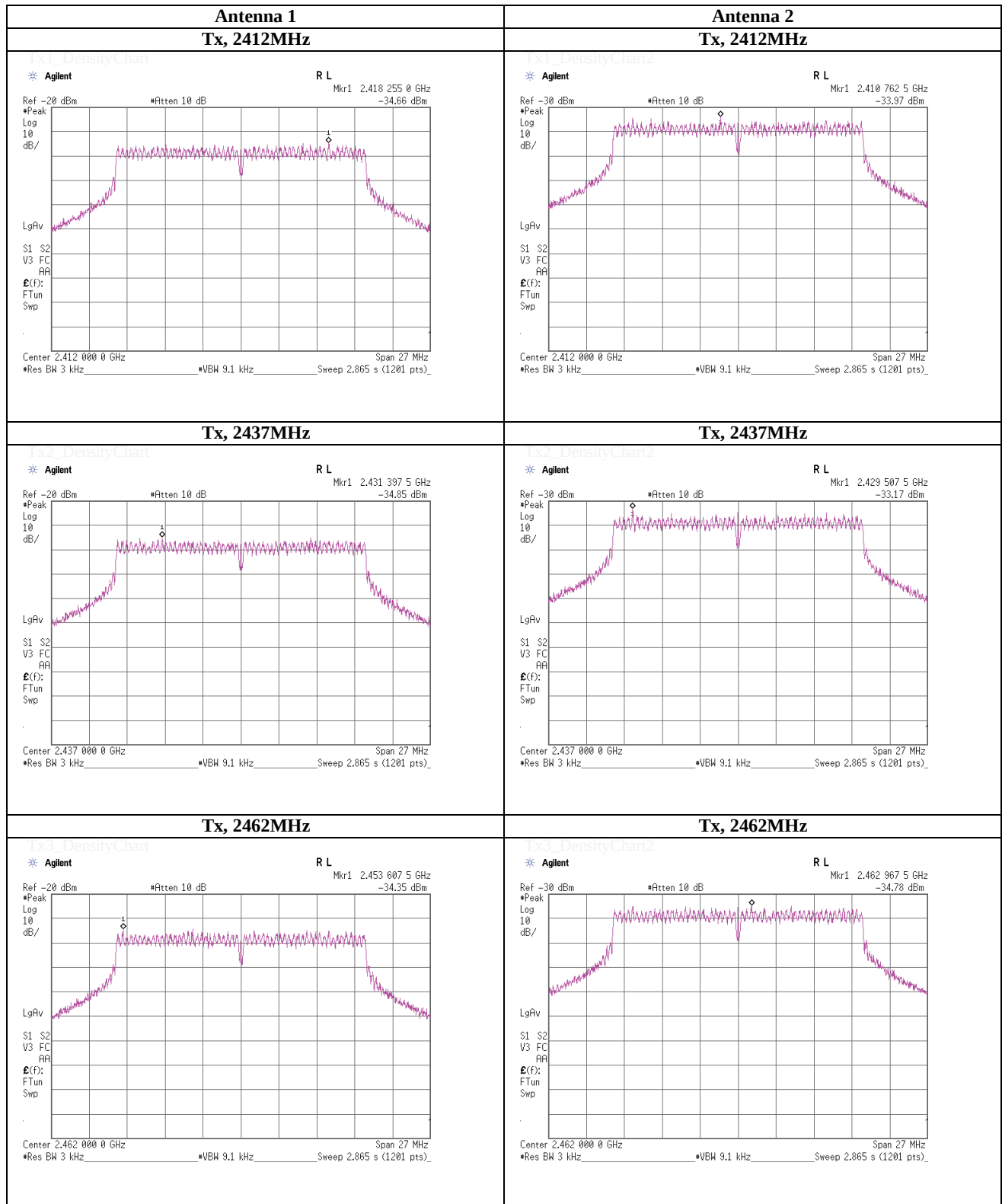
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Maximum Power Spectral Density

(Method 10.2 PKPSD)

Test place UL Japan, Inc. Shonan EMC Lab. No.5 Shielded Room
 Date May 2, 2013
 Temperature / Humidity 24deg.C , 40%RH
 Engineer Makoto Hosaka
 Mode Tx, IEEE802.11n (HT40), PN9, worst data mode 8(MCS)

Antenna 1

Ch. Freq. [MHz]	Freq. Reading [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	10log (N _{ANT})* [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
2422.0000	2434.51	-36.78	1.50	20.21	3.01	-12.06	8.00	20.06
2437.0000	2436.06	-36.52	1.50	20.21	3.01	-11.80	8.00	19.80
2452.0000	2464.51	-35.54	1.50	20.21	3.01	-10.82	8.00	18.82

Sample Calculation:

Result = Reading + Cable Loss + Atten. Loss + 10log(NANT)

Antenna 2

Ch. Freq. [MHz]	Freq. Reading [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	10log (N _{ANT})* [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
2422.0000	2430.75	-35.87	1.52	20.21	3.01	-11.13	8.00	19.13
2437.0000	2438.28	-37.23	1.51	20.21	3.01	-12.50	8.00	20.50
2452.0000	2452.00	-36.25	1.51	20.21	3.01	-11.52	8.00	19.52

Sample Calculation:

Result = Reading + Cable Loss + Atten. Loss + 10log(NANT)

*) This test was measured based on Method In-Band Power Spectral Density (PSD) Measurements (2) of
 "Emissions Testing of Transmitters with Multiple Outputs in the Same Band (KDB662911 D01 v01r02)"

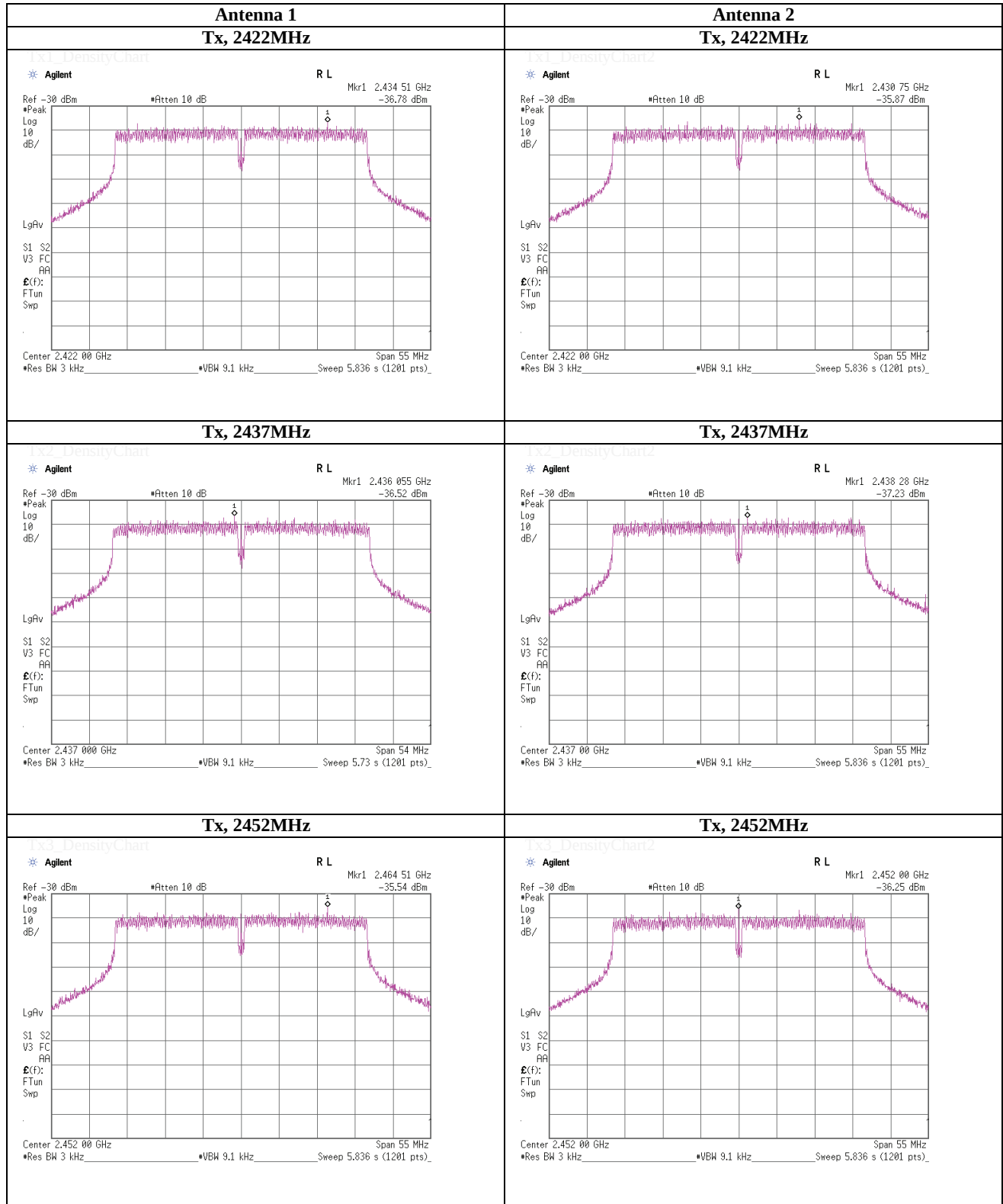
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Maximum Power Spectral Density

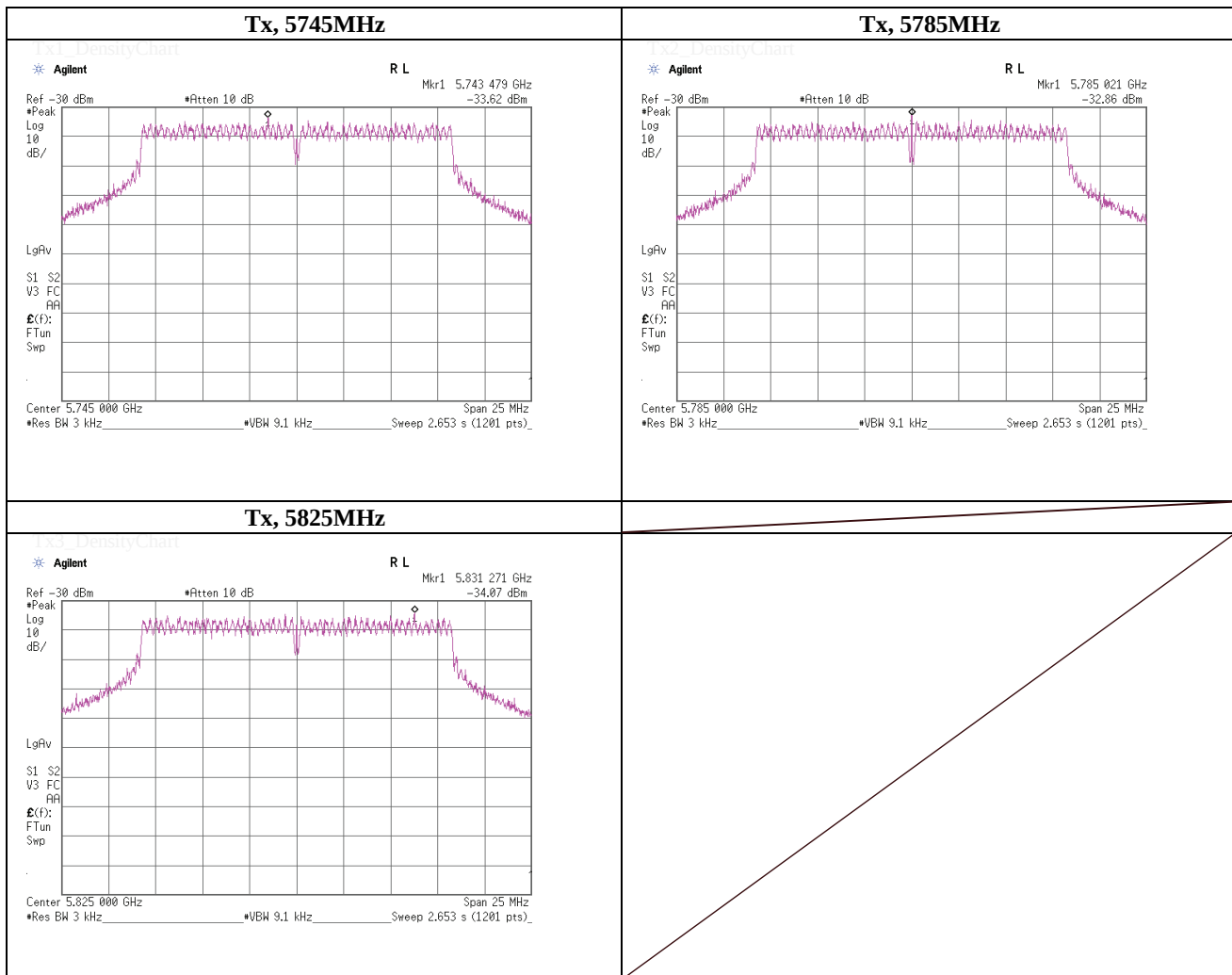
(Method 10.2 PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	May 2, 2013	
Temperature / Humidity	24deg.C , 40%RH	
Engineer	Makoto Hosaka	
Mode	Tx, IEEE802.11a, PN9, worst antenna port 1, worst data mode 9Mbps	

Ch. Freq. [MHz]	Freq. Reading [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5745.0000	5743.48	-33.62	2.31	20.09	-11.22	8.00	19.22
5785.0000	5785.02	-32.86	2.32	20.09	-10.45	8.00	18.45
5825.0000	5831.27	-34.07	2.65	20.10	-11.32	8.00	19.32

Sample Calculation:

Result = Reading + Cable Loss + Atten. Loss

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Maximum Power Spectral Density

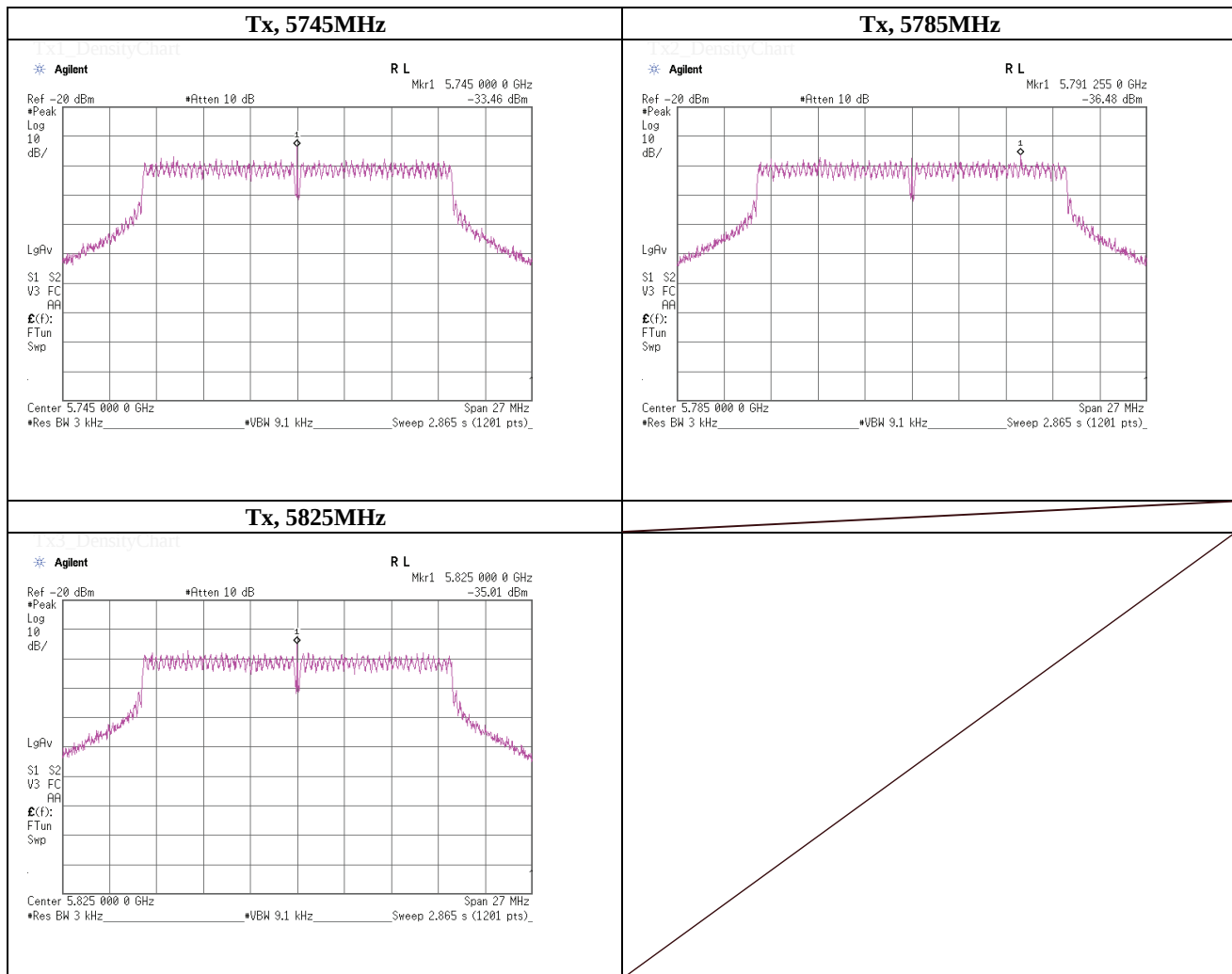
(Method 10.2 PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	May 2, 2013	
Temperature / Humidity	24deg.C , 40%RH	
Engineer	Makoto Hosaka	
Mode	Tx, IEEE802.11n(HT20), PN9, worst antenna port 2, worst data mode 0(MCS)	

Ch. Freq. [MHz]	Freq. Reading [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5745.0000	5745.00	-33.46	2.36	20.09	-11.01	8.00	19.01
5785.0000	5791.26	-36.48	2.38	20.09	-14.01	8.00	22.01
5825.0000	5825.00	-35.01	2.42	20.10	-12.49	8.00	20.49

Sample Calculation:

Result = Reading + Cable Loss + Atten. Loss

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Maximum Power Spectral Density

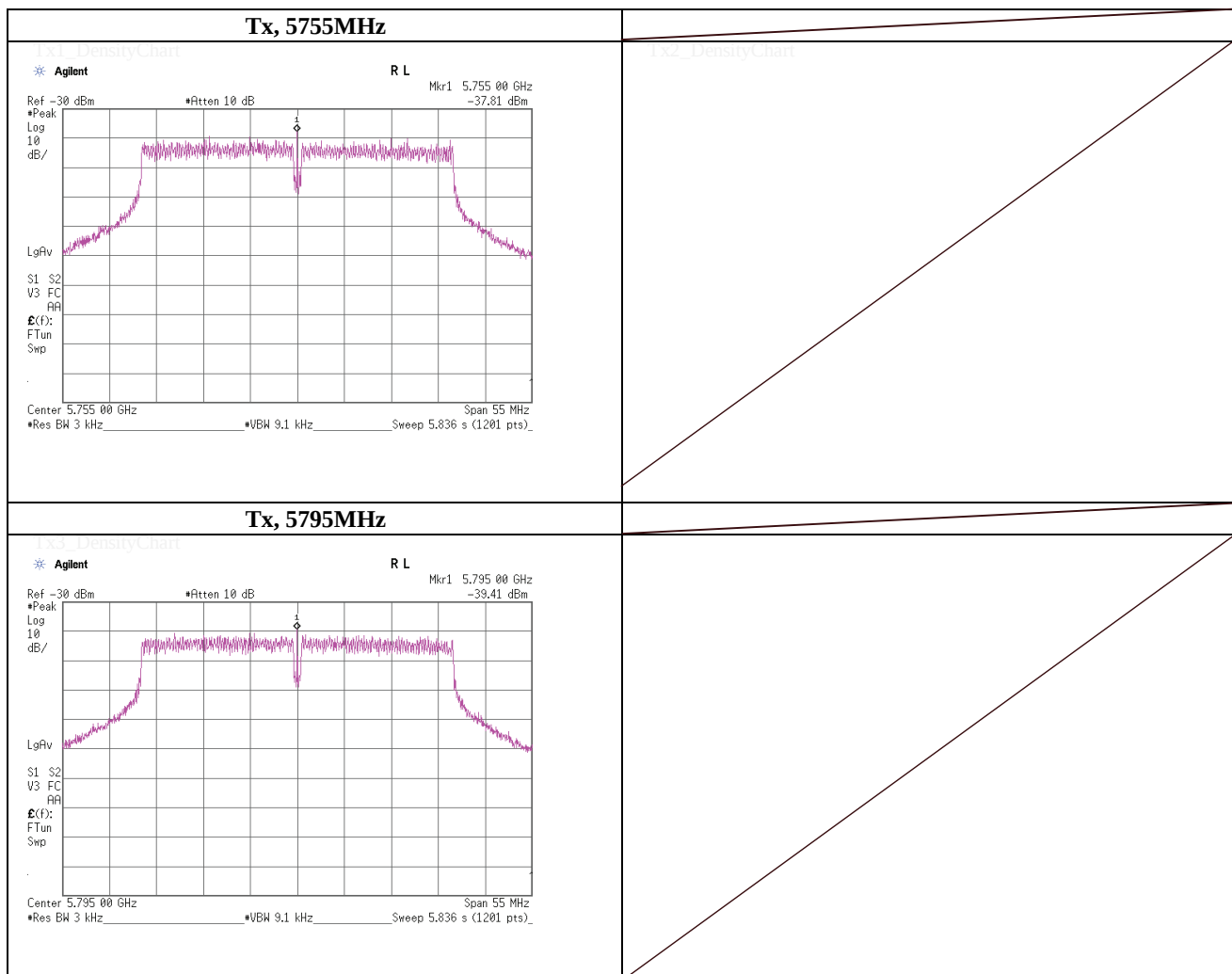
(Method 10.2 PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	May 2, 2013	
Temperature / Humidity	24deg.C , 40%RH	
Engineer	Makoto Hosaka	
Mode	Tx, IEEE802.11n(HT40), PN9, worst antenna port 1, worst data mode 0(MCS)	

Ch. Freq. [MHz]	Freq. Reading [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5755.0000	5755.00	-37.81	2.31	20.09	-15.41	8.00	23.41
5795.0000	5795.00	-39.41	2.32	20.09	-17.00	8.00	25.00

Sample Calculation:

Result = Reading + Cable Loss + Atten. Loss

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Maximum Power Spectral Density

(Method 10.2 PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	May 2, 2013	
Temperature / Humidity	24deg.C , 40%RH	
Engineer	Makoto Hosaka	
Mode	Tx, IEEE802.11n (HT20), PN9, worst data mode 10(MCS)	

Antenna 1

Ch. Freq. [MHz]	Freq. Reading [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	10log (N _{ANT})* [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5745.0000	5739.96	-38.09	2.31	20.09	3.01	-12.68	8.00	20.68
5785.0000	5780.01	-37.49	2.32	20.09	3.01	-12.07	8.00	20.07
5825.0000	5820.01	-38.03	2.65	20.10	3.01	-12.27	8.00	20.27

Sample Calculation:

Result = Reading + Cable Loss + Atten. Loss + 10log(NANT)

Antenna 2

Ch. Freq. [MHz]	Freq. Reading [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	10log (N _{ANT})* [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5745.0000	5745.00	-35.49	2.36	20.09	3.01	-10.03	8.00	18.03
5785.0000	5778.77	-37.11	2.38	20.09	3.01	-11.63	8.00	19.63
5825.0000	5825.00	-36.66	2.42	20.10	3.01	-11.13	8.00	19.13

Sample Calculation:

Result = Reading + Cable Loss + Atten. Loss + 10log(NANT)

*) This test was measured based on Method In-Band Power Spectral Density (PSD) Measurements (2) of
 "Emissions Testing of Transmitters with Multiple Outputs in the Same Band (KDB662911 D01 v01r02)"

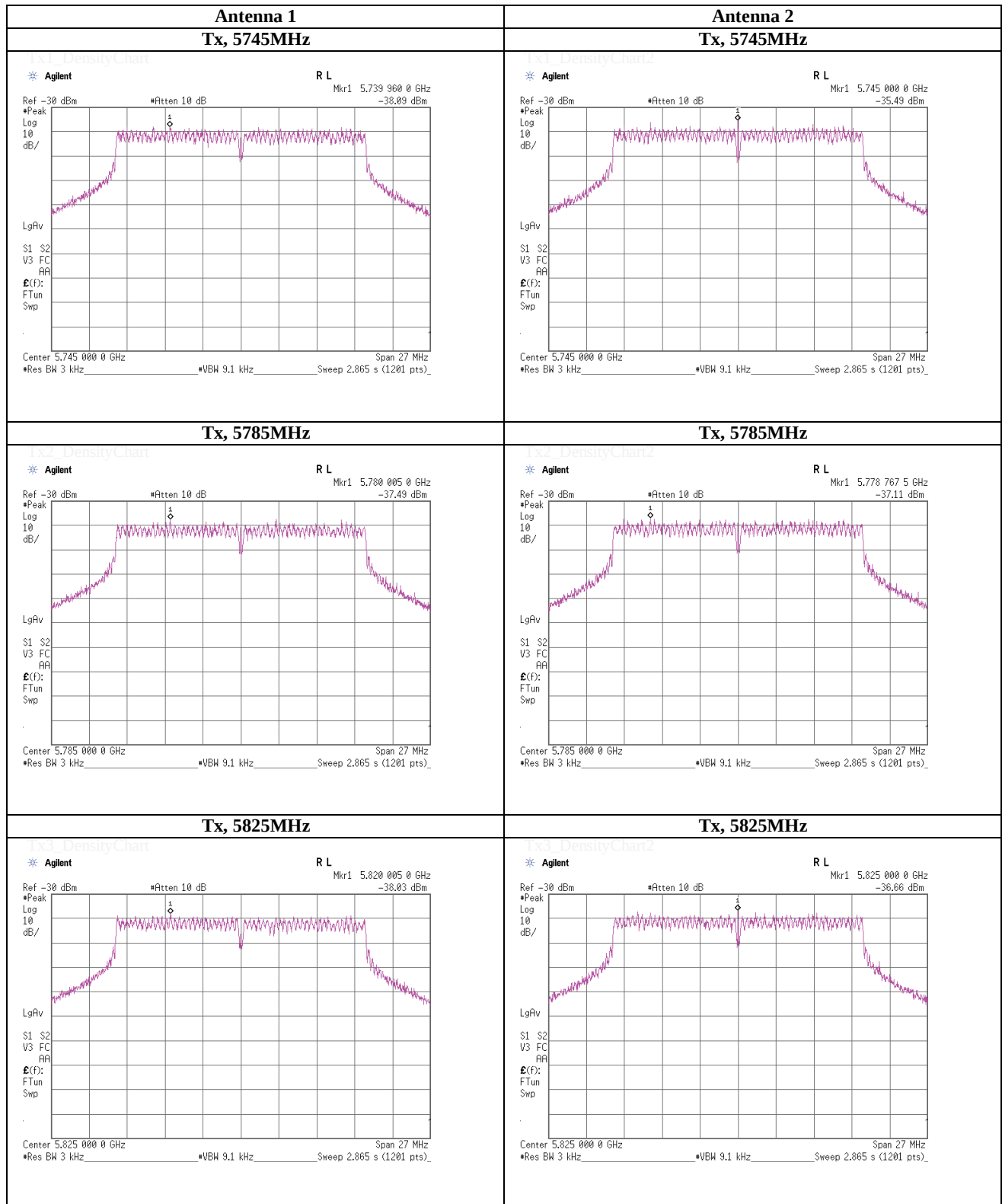
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Power Density



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Maximum Power Spectral Density

(Method 10.2 PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	May 2, 2013	
Temperature / Humidity	24deg.C , 40%RH	
Engineer	Makoto Hosaka	
Mode	Tx, IEEE802.11n (HT40), PN9, worst data mode 8(MCS)	

Antenna 1

Ch. Freq. [MHz]	Freq. Reading [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	10log (N _{ANT})* [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5755.0000	5755.00	-37.02	2.31	20.09	3.01	-11.61	8.00	19.61
5795.0000	5795.00	-37.46	2.32	20.09	3.01	-12.04	8.00	20.04

Sample Calculation:

Result = Reading + Cable Loss + Atten. Loss + 10log(NANT)

Antenna 2

Ch. Freq. [MHz]	Freq. Reading [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	10log (N _{ANT})* [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5755.0000	5755.00	-34.37	2.37	20.09	3.01	-8.90	8.00	16.90
5795.0000	5795.00	-32.34	2.38	20.09	3.01	-6.86	8.00	14.86

Sample Calculation:

Result = Reading + Cable Loss + Atten. Loss + 10log(NANT)

*) This test was measured based on Method In-Band Power Spectral Density (PSD) Measurements (2) of
 "Emissions Testing of Transmitters with Multiple Outputs in the Same Band (KDB662911 D01 v01r02)"

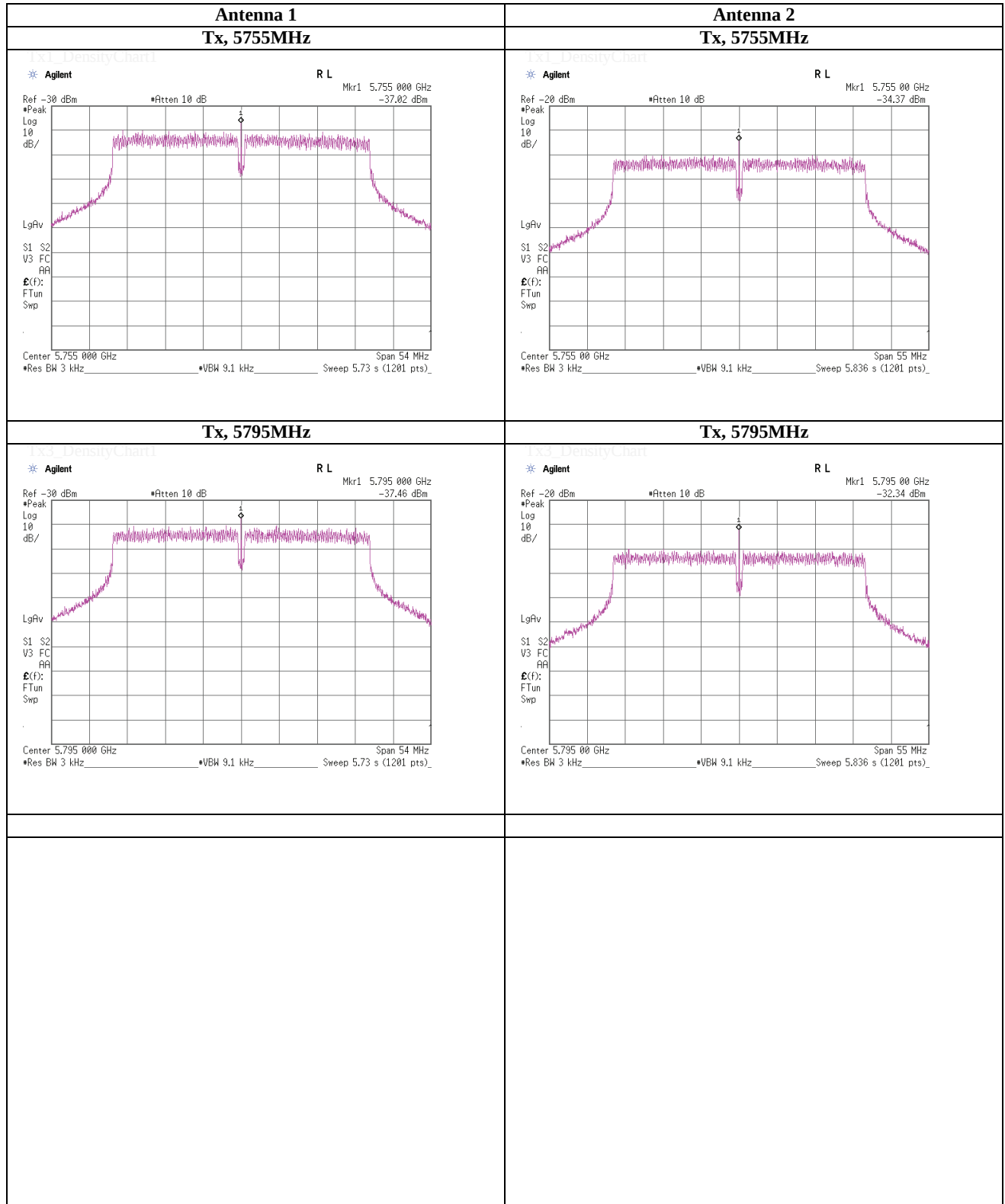
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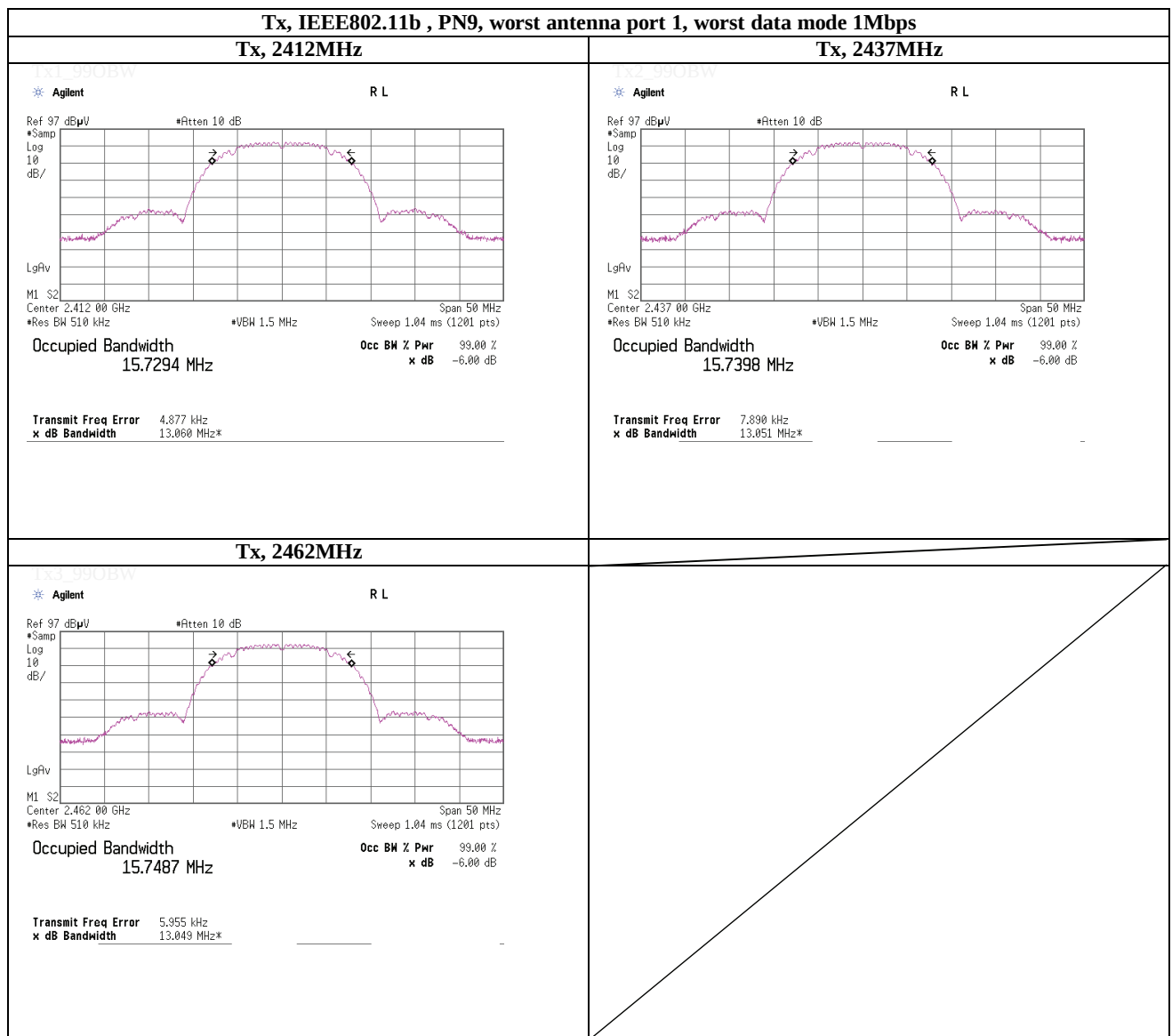
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99% Occupied Bandwidth



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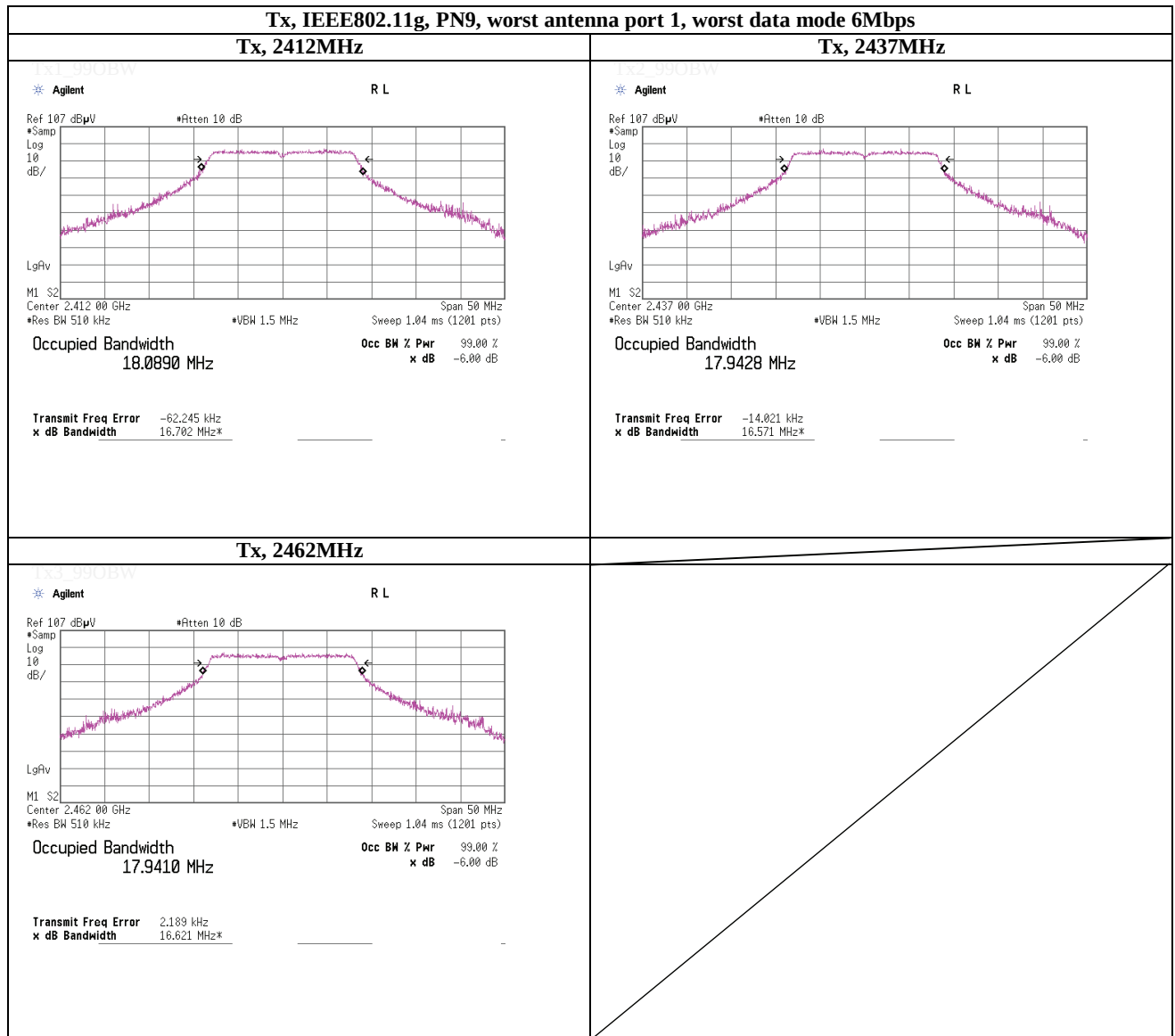
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99% Occupied Bandwidth



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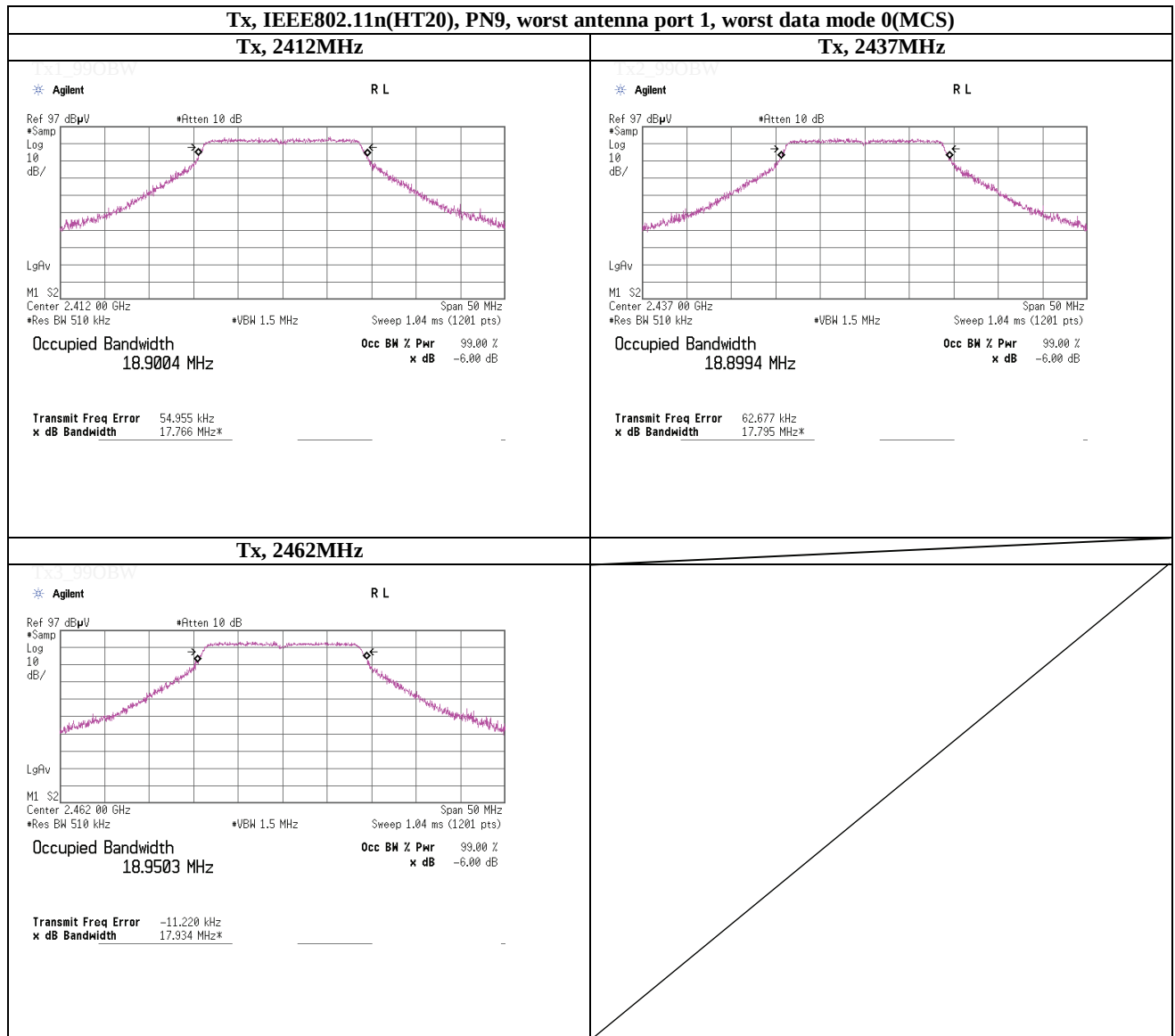
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99% Occupied Bandwidth



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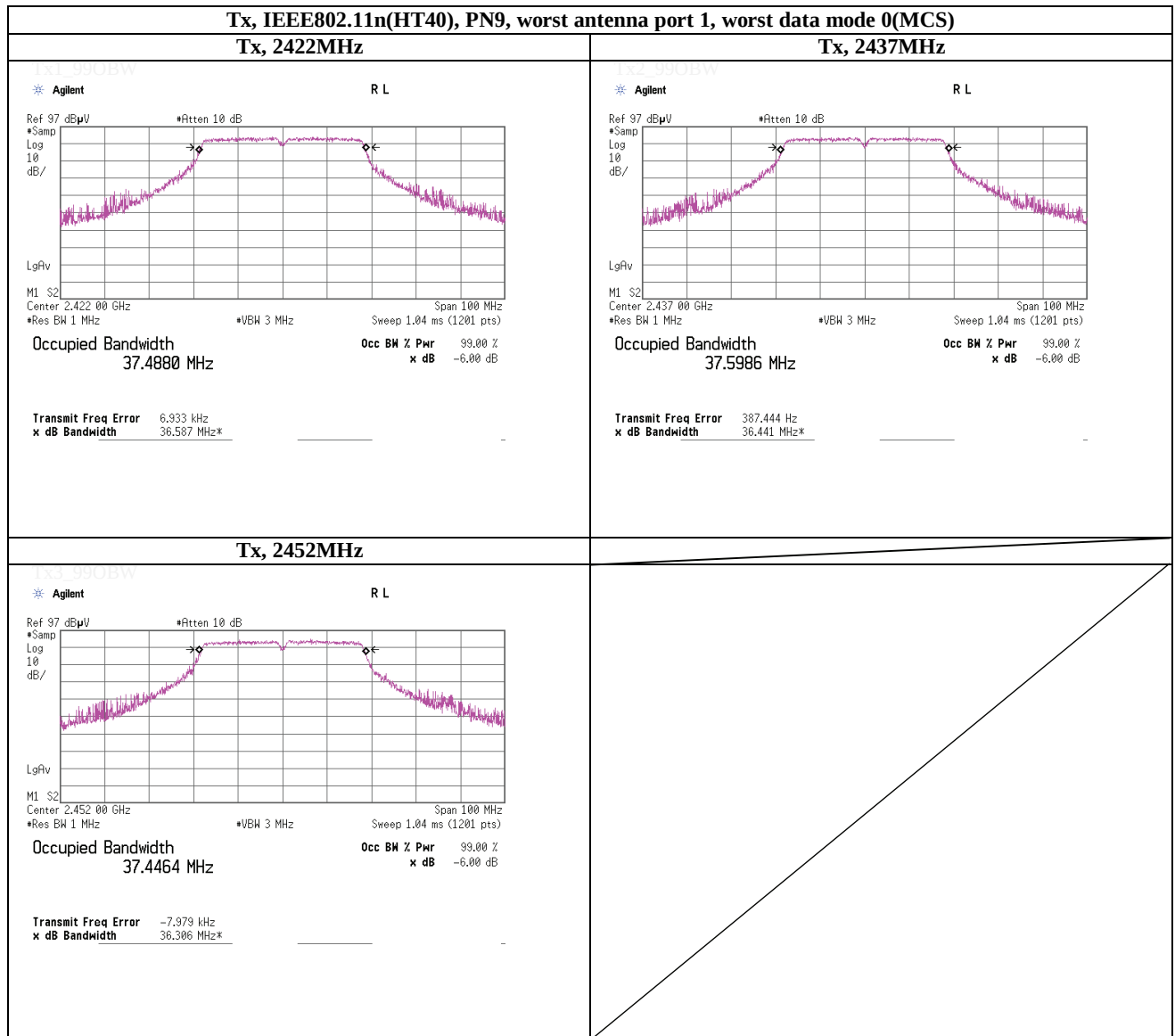
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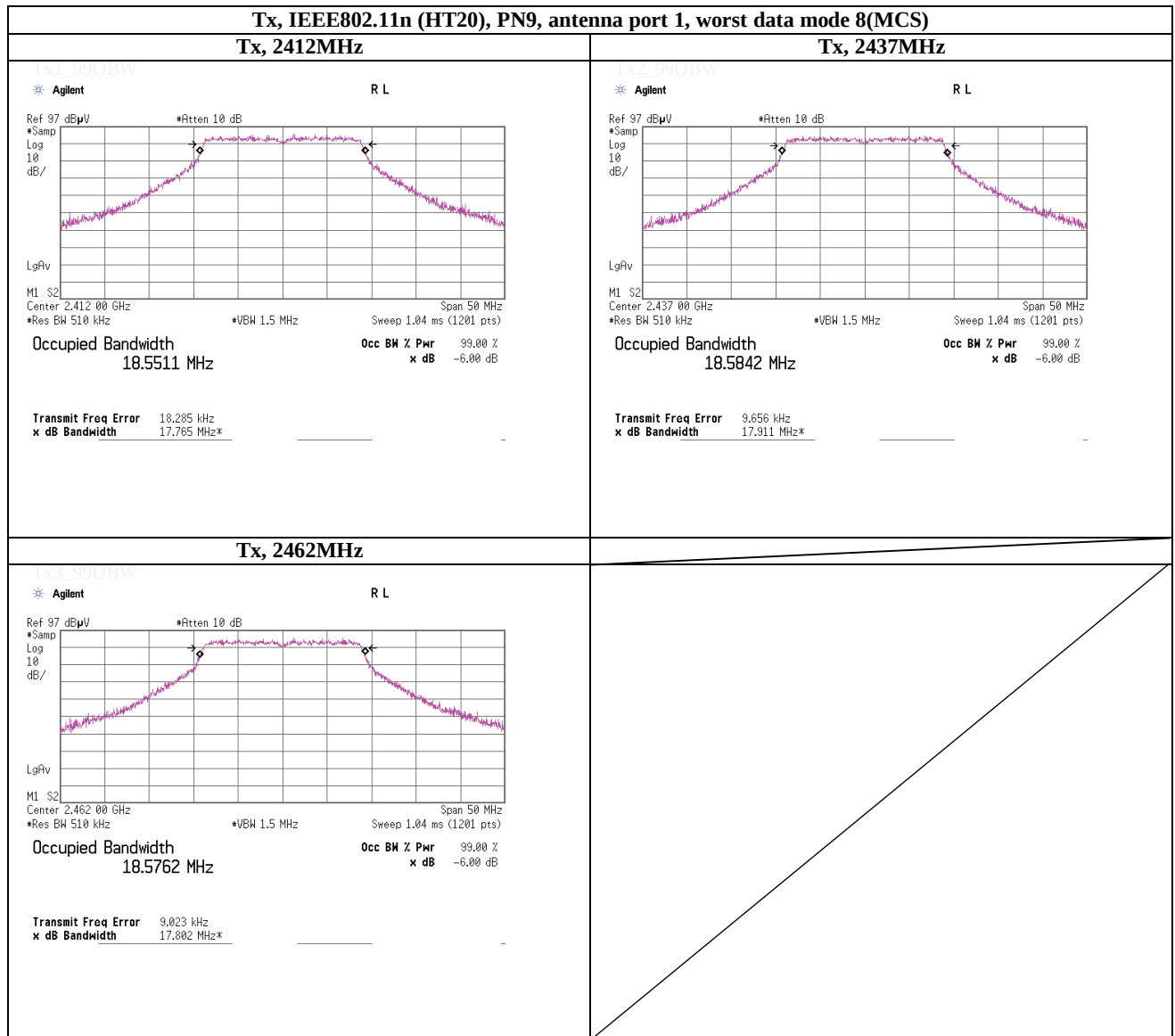
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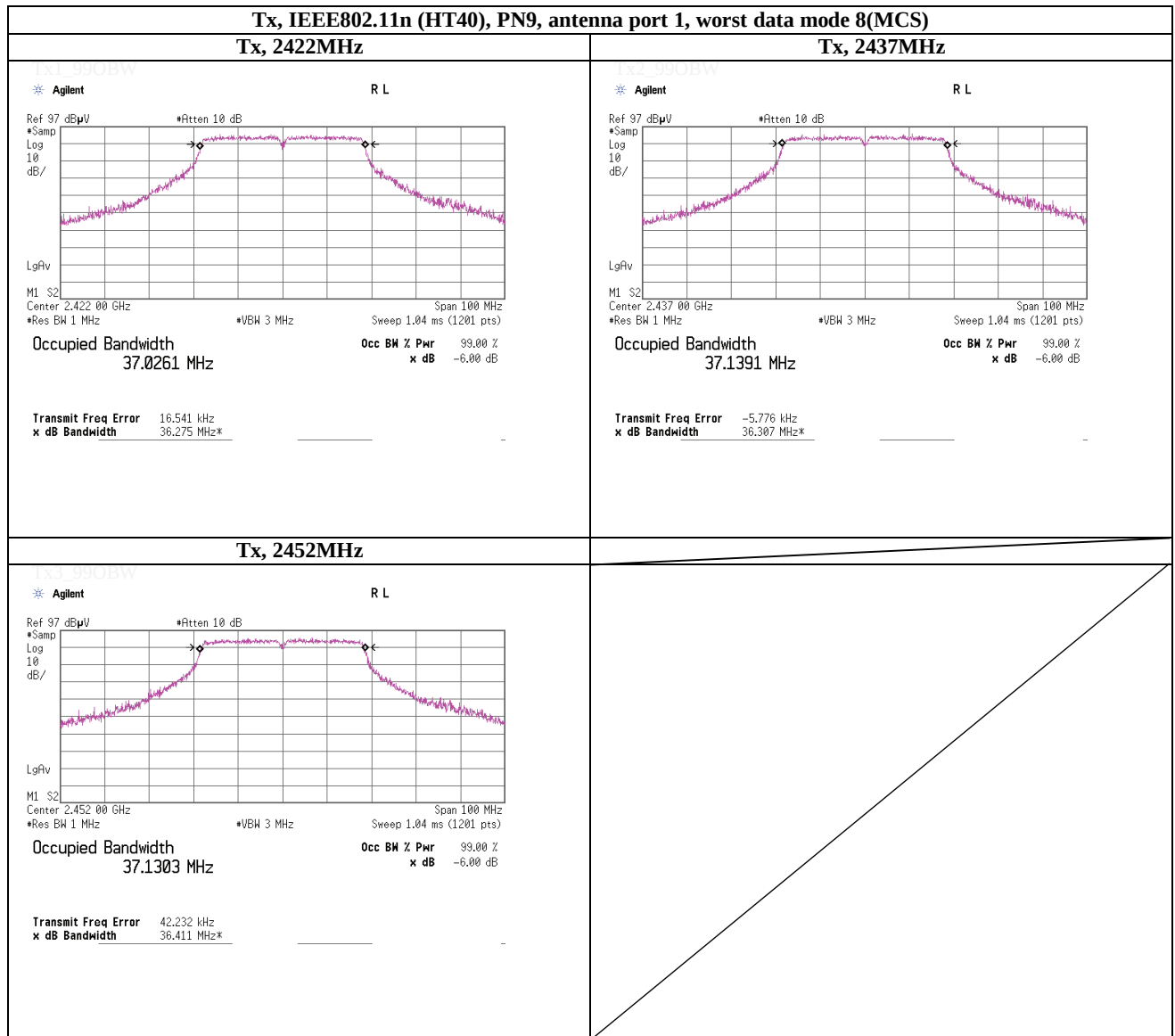
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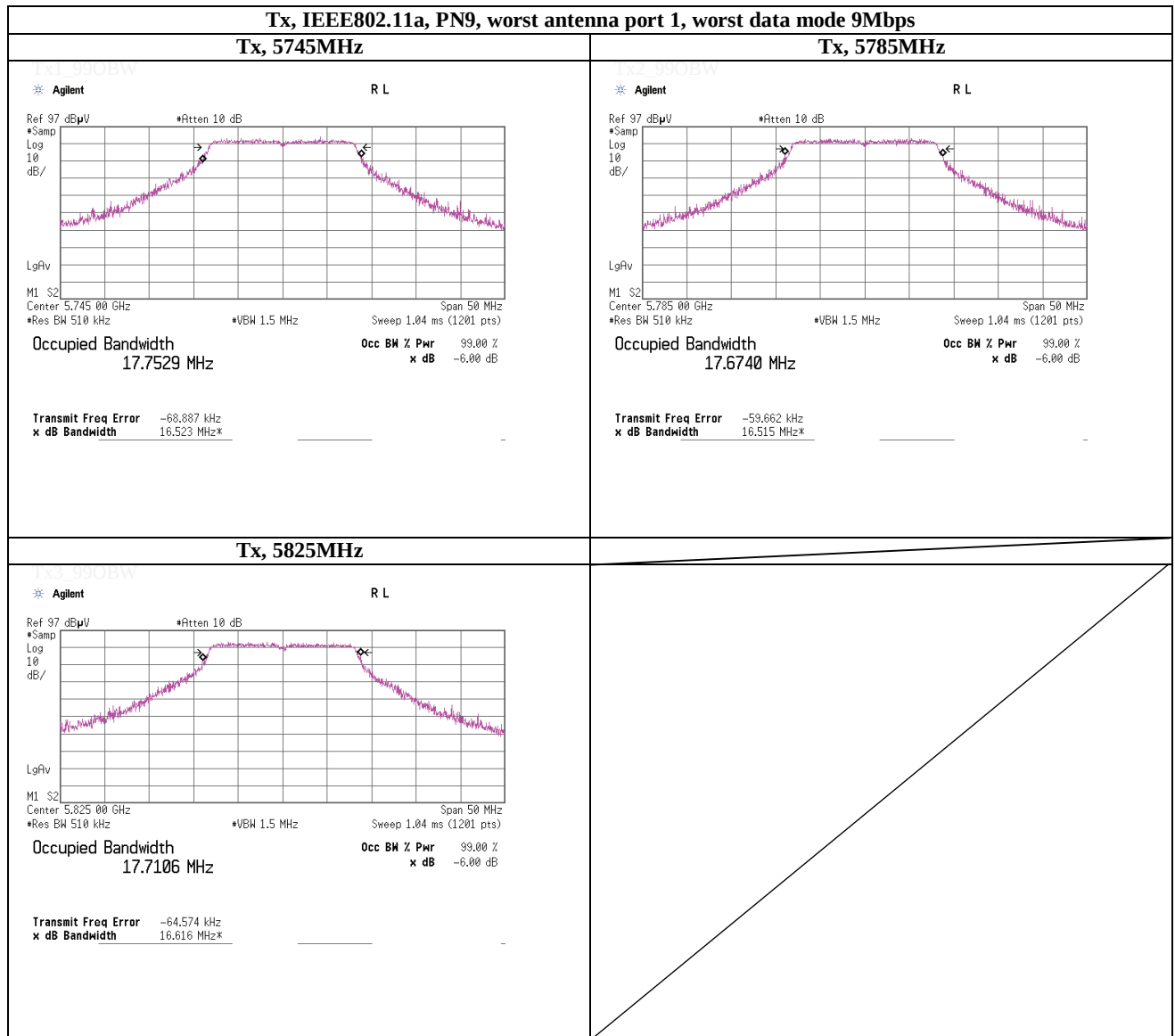
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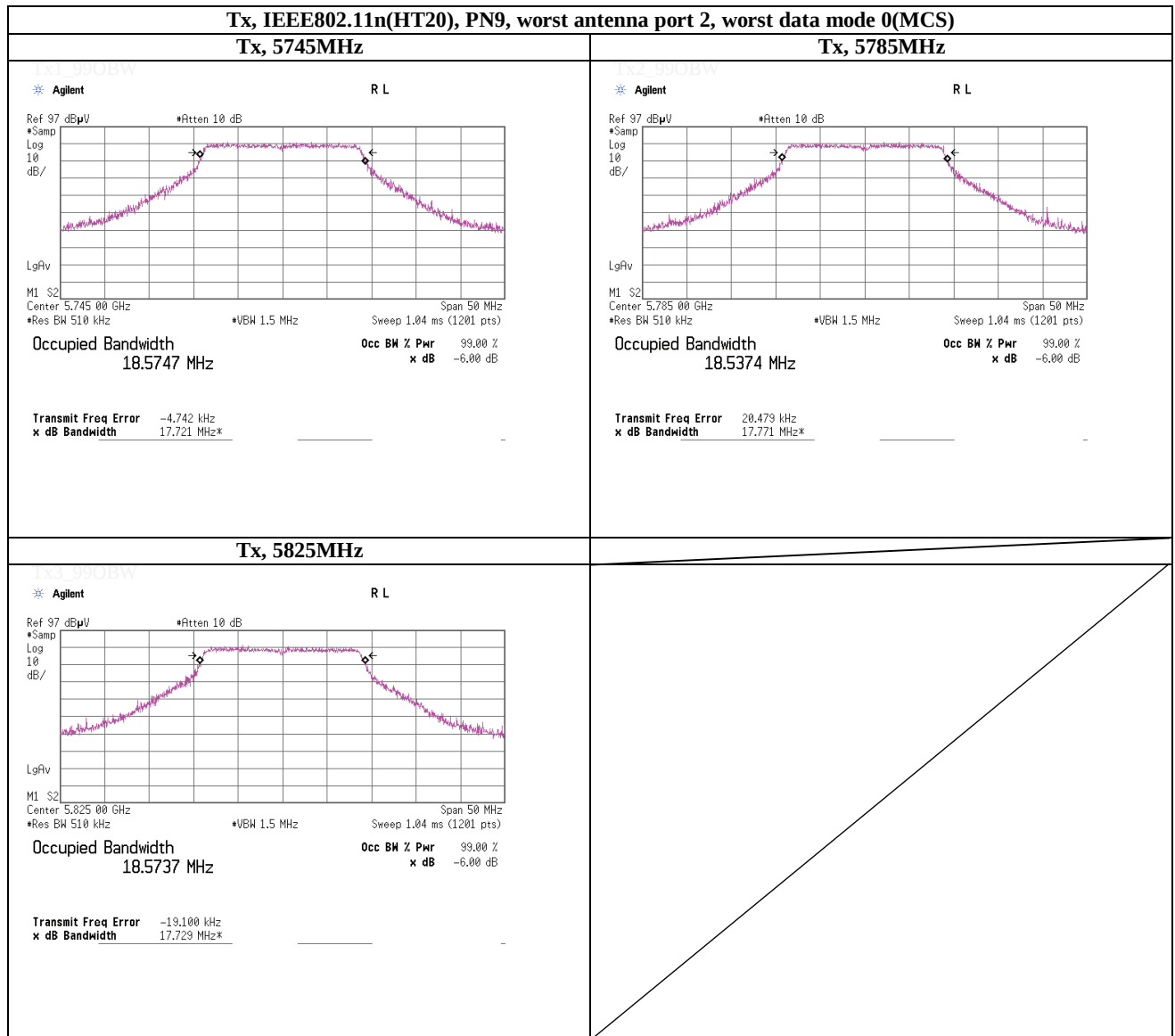
Shonan EMC Lab.

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

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

99% Occupied Bandwidth



UL Japan, Inc.

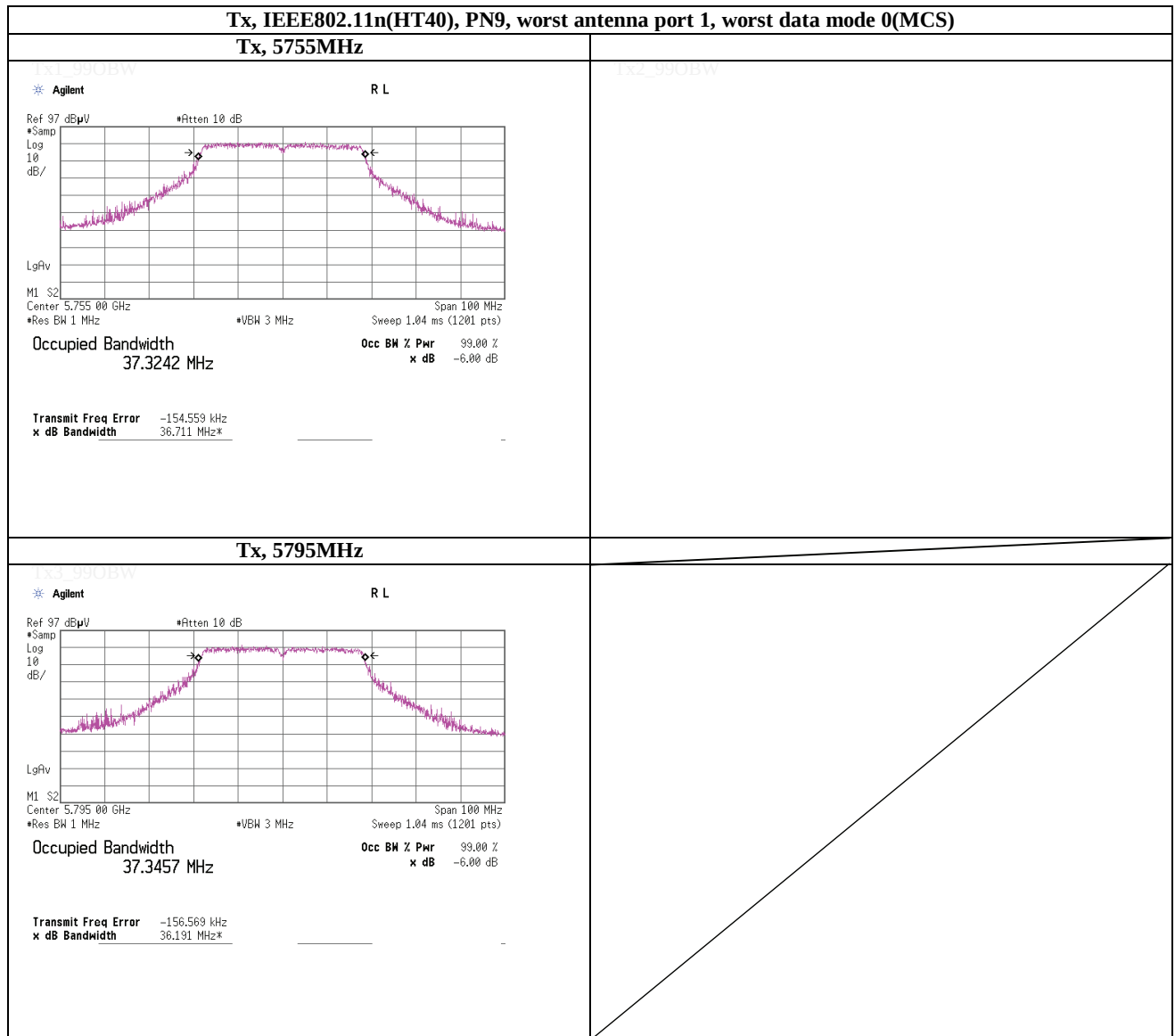
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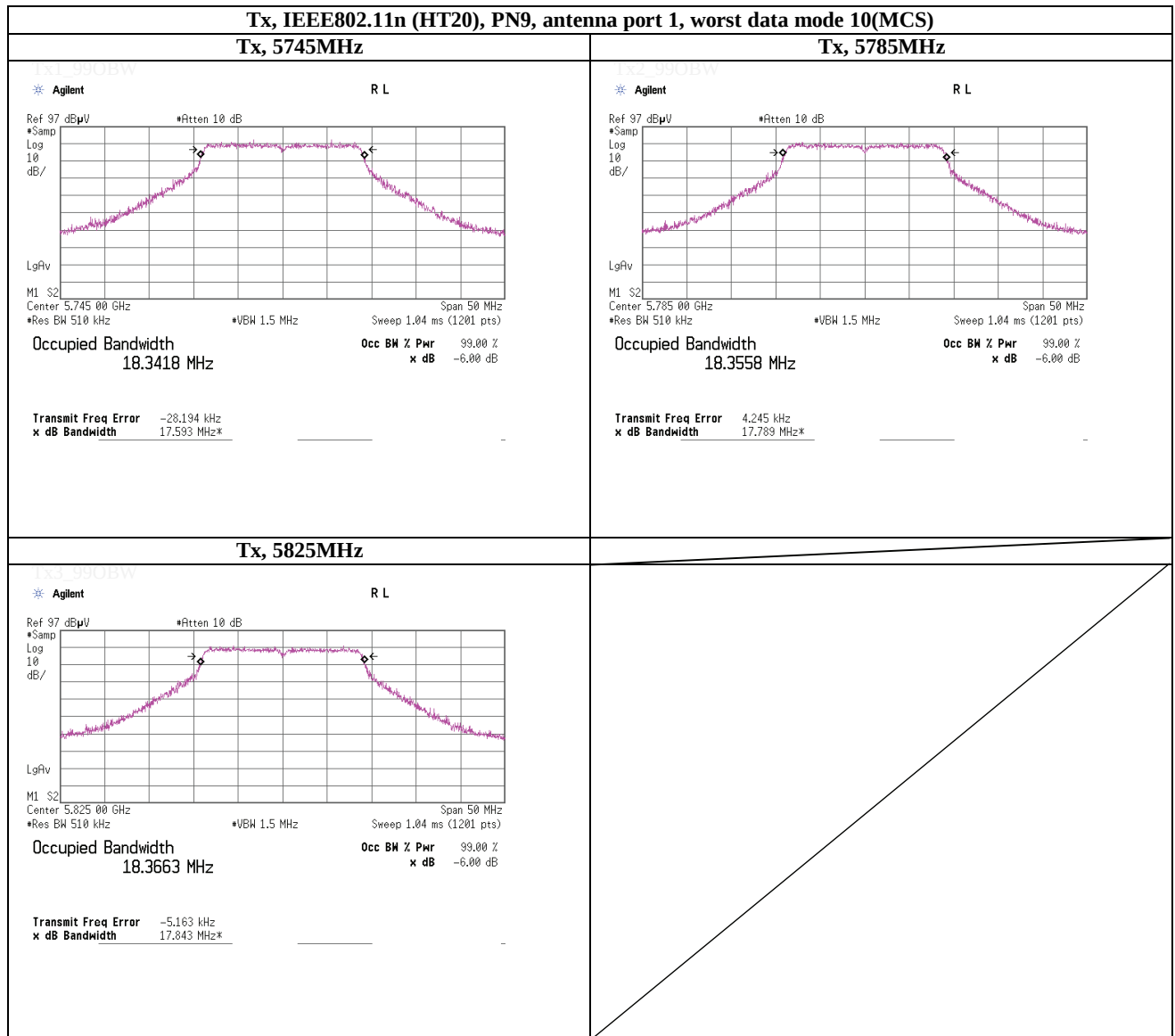
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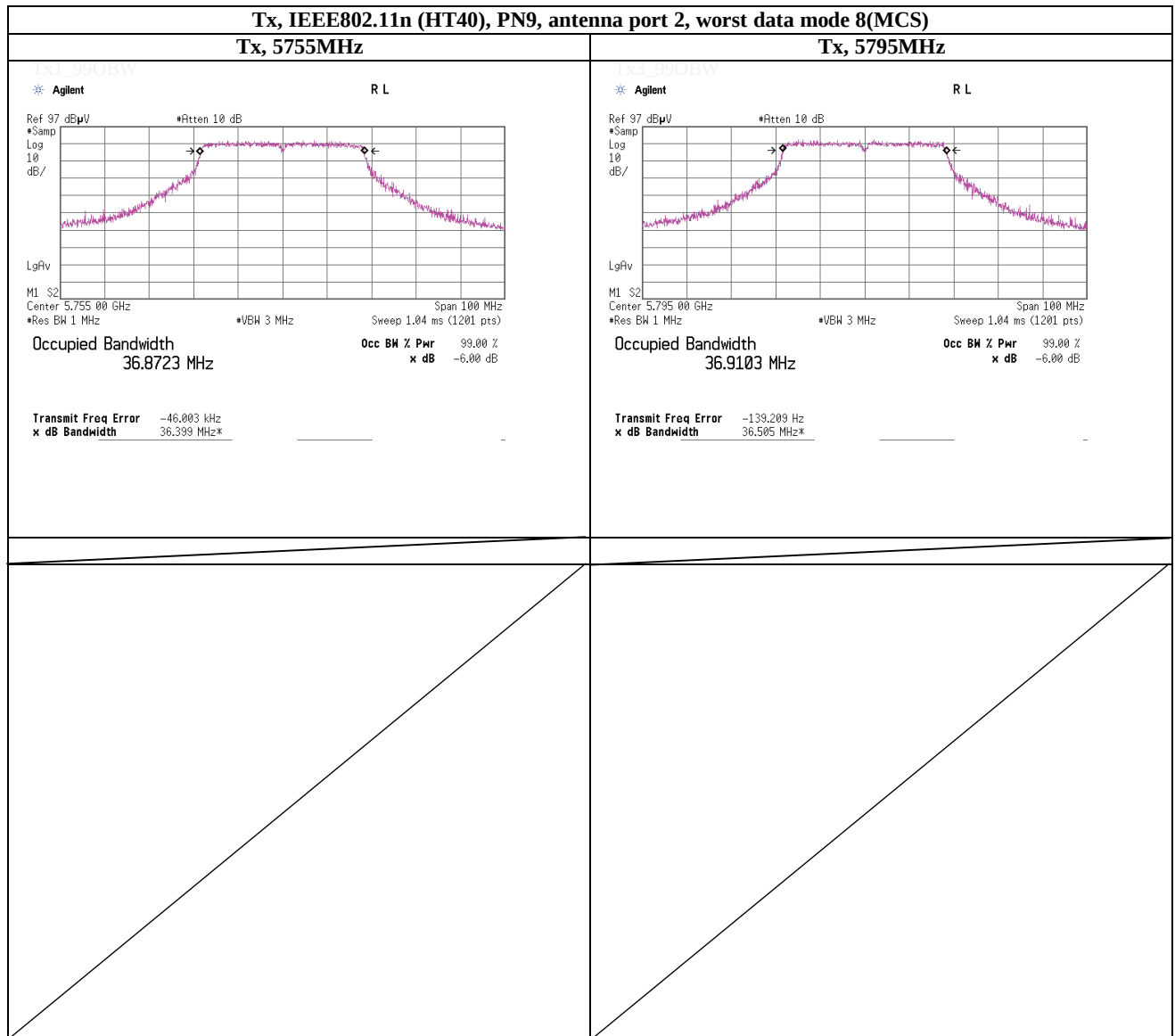
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APPENDIX 2

Test Instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
KSA-08	Spectrum Analyzer	Agilent	E4446A	MY46180525	AT/RE	2013/03/04 * 12
SPM-06	Power Meter	Anritsu	ML2495A	0850009	AT	2013/04/09 * 12
SPSS-03	Power sensor	Anritsu	MA2411B	0917063	AT	2013/04/09 * 12
SAT20-05	Attenuator	Weinschel Corp.	54A-20	Y5649	AT	2012/11/15 * 12
SCC-G12	Coaxial Cable	Suhner	SUCOFLEX 102	30790/2	AT	2013/03/16 * 12
SCC-H5	Microwave cable	Hirose Electric	U.FL-2LP-066J1-A-(200)	-	AT	Pre Check
SCC-H2	Microwave cable	Hirose Electric	U.FL-2LP-066J1-A-(200)	-	AT	Pre Check
STM-G5	Terminator	Weinschel	M1459A	U6594	AT	2012/07/18 * 12
SOS-09	Humidity Indicator	A&D	AD-5681	4061484	AT	2013/03/07 * 12
SAEC-02(NSA)	Semi-Anechoic Chamber	TDK	SAEC-02(NSA)	2	RE	2012/09/21 * 12
SAF-05	Pre Amplifier	TOYO Corporation	TPA0118-36	1440490	RE	2013/03/19 * 12
SCC-G02	Coaxial Cable	Suhner	SUCOFLEX 104A	46498/4A	RE	2013/04/09 * 12
SCC-G22	Coaxial Cable	Suhner	SUCOFLEX 104	296199/4	RE	2012/05/22 * 12
SHA-02	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-726	RE	2012/08/17 * 12
SOS-03	Humidity Indicator	A&D	AD-5681	4063325	RE	2013/02/27 * 12
SJM-02	Measure	KOMELON	KMC-36	-	RE	-
COTS-SEMI-I	EMI Software	TSJ	TEPTO-DV(RE,CE,RFI,MF)	-	RE	-
SAT20-01	Attenuator(above1GHz)	Agilent	8493C-020	74889	RE	2012/12/18 * 12
SAT10-06	Attenuator	Agilent	8493C-010	74865	RE	2012/12/18 * 12
SFL-02	Highpass Filter	MICRO-TRONICS	HPM50111	051	RE	2012/12/18 * 12
SFL-03	Highpass Filter	MICRO-TRONICS	HPM50112	028	RE	2012/12/18 * 12
SAEC-01(NSA)	Semi-Anechoic Chamber	TDK	SAEC-01(NSA)	1	RE	2012/09/11 * 12
SAF-04	Pre Amplifier	TOYO Corporation	TPA0118-36	1440489	RE	2013/03/19 * 12
SCC-G01	Coaxial Cable	Suhner	SUCOFLEX 104A	46497/4A	RE	2013/04/09 * 12
SCC-G21	Coaxial Cable	Suhner	SUCOFLEX 104	296169/4	RE	2012/05/22 * 12
SHA-01	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-725	RE	2012/08/20 * 12
SOS-01	Humidity Indicator	A&D	AD-5681	4062555	RE	2013/02/27 * 12
SSA-02	Spectrum Analyzer	Agilent	E4448A	MY48250106	RE	2013/03/28 * 12
SJM-08	Measure	PROMART	SEN1935	-	RE	-
SHA-05	Horn Antenna	ETS LINDGREN	3160-09	LM4210	RE	2013/03/14 * 12
SAF-09	Pre Amplifier	TOYO Corporation	HAP18-26W	00000018	RE	2013/03/19 * 12
SCC-G18	Coaxial Cable	Suhner	SUCOFLEX 104A	46292/4A	RE	2013/03/16 * 12
SHA-06	Horn Antenna	ETS LINDGREN	3160-10	LM3459	RE	2013/03/14 * 12
SAF-10	Pre Amplifier	TOYO Corporation	HAP26-40W	00000010	RE	2013/03/19 * 12
SCC-G19	Coaxial Cable	Suhner	SUCOFLEX 102A	1188/2A	RE	2013/03/16 * 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 :

RE: Radiated emission ,

AT: Antenna terminal disturbance voltage

APPENDIX 2

Test Instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
SAF-02	Pre Amplifier	SONOMA	310N	290212	RE	2013/02/12 * 12
SAT6-02	Attenuator	JFW	50HF-006N	-	RE	2013/02/12 * 12
KAT3-11	Attenuator	JFW IND. INC.	50HF-003N	-	RE	2012/08/07 * 12
SBA-02	Biconical Antenna	Schwarzbeck	BBA9106	91032665	RE	2012/11/18 * 12
SCC-B1/B3/B5/B7/B8/B13/SRSE-02	Coaxial Cable&RF Selector	Fujikura/Fujikura/Suhner/Suhner/Suhner/TOYO	8D2W/12DSFA/141PE/141PE/141PE/141PE/NS4906	-/0901-270(RF Selector)	RE	2013/04/03 * 12
SCC-B2/B4/B6/B7/B8/B13/SRSE-02	Coaxial Cable&RF Selector	Fujikura/Fujikura/Suhner/Suhner/Suhner/TOYO	8D2W/12DSFA/141PE/141PE/141PE/141PE/NS4906	-/0901-270(RF Selector)	RE	2013/04/03 * 12
SLA-02	Logperiodic Antenna	Schwarzbeck	UHALP9108A	UHALP9108-A 0893	RE	2012/11/18 * 12
SOS-03	Humidity Indicator	A&D	AD-5681	4063325	RE	2013/02/27 * 12
STR-02	Test Receiver	Rohde & Schwarz	ESCI	100575	RE	2012/09/03 * 12
SJM-02	Measure	KOMELON	KMC-36	-	RE	-
SAEC-02(NSA)	Semi-Anechoic Chamber	TDK	SAEC-02(NSA)	2	RE	2012/09/21 * 12
COTS-SEMI-1	EMI Software	TSJ	TEPTO-DV(RE,CE,RF,IMF)	-	RE	-
SCC-B12/B13/SRSE-02	Coaxial Cable&RF Selector	Suhner/Suhner/TOYO	RG223U/141PE/NS4906	-/0901-270(RF Selector)	CE	2013/04/03 * 12
SLS-03	LISN	Rohde & Schwarz	ENV216	100513	CE	2013/02/22 * 12
SAT3-05	Attenuator	JFW	50HF-003N	-	CE	2013/02/12 * 12
SOS-04	Humidity Indicator	A&D	AD-5681	4061512	CE	2013/03/07 * 12
STM-03	Terminator	TME	CT-01 BP	-	CE	2013/01/16 * 12
STR-02	Test Receiver	Rohde & Schwarz	ESCI	100575	CE	2012/09/03 * 12
SJM-02	Measure	KOMELON	KMC-36	-	CE	-
COTS-SEMI-1	EMI Software	TSJ	TEPTO-DV(RE,CE,RF,IMF)	-	CE	-

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