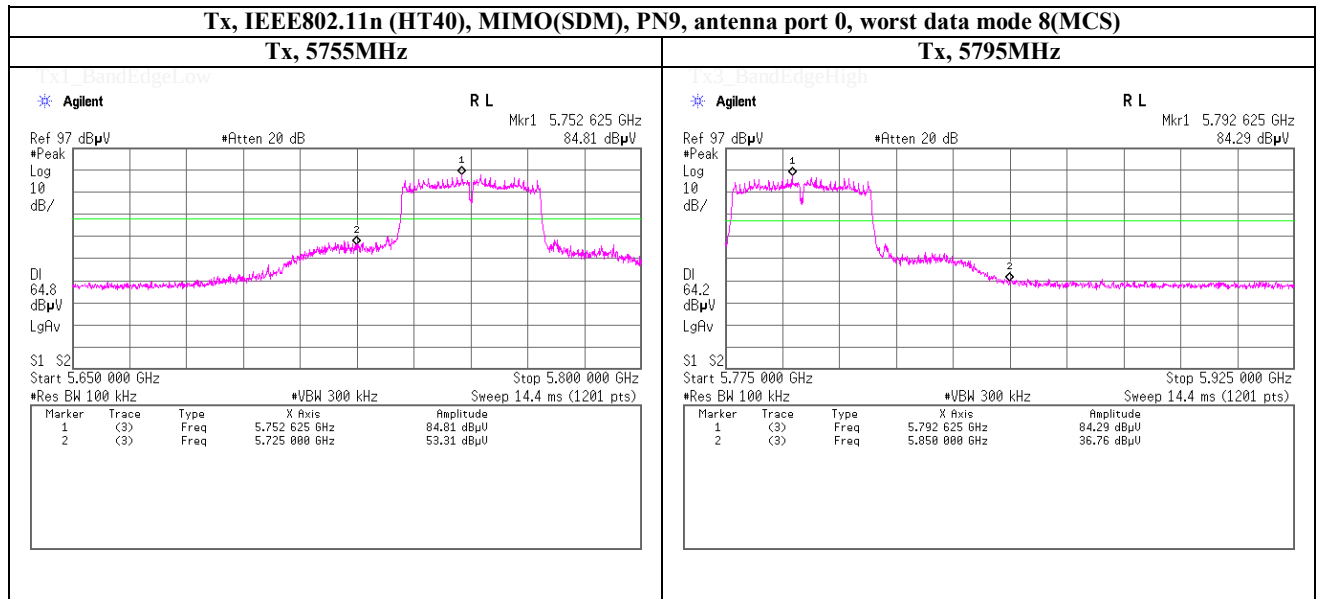


Test place UL Japan, Inc. Shonan EMC Lab. No.5 Shielded Room
Date November 12, 2013
Temperature / Humidity 23deg.C , 38%RH
Engineer Shinichi Takano

Spurious emission (Conducted)

Band Edge compliance



UL Japan, Inc.

Shonan EMC Lab.

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Maximum Power Spectral Density

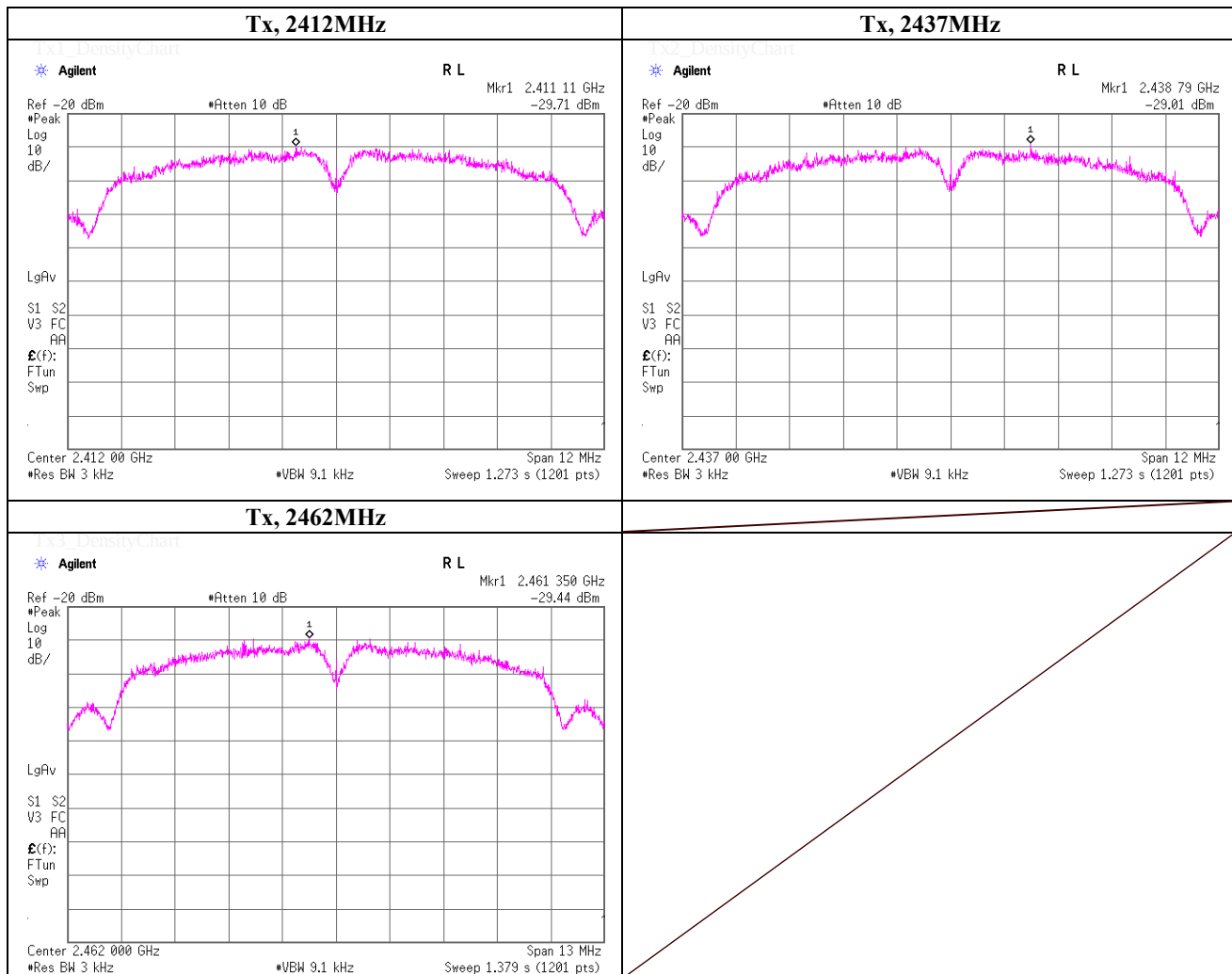
(PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	February 7, 2013	
Temperature / Humidity	22deg.C , 31%RH	
Engineer	Shinichi Takano	
Mode	Tx, IEEE802.11b, PN9, worst antenna port 0, 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	2411.11	-29.71	1.11	20.21	-8.39	8.00	16.39
2437.0000	2438.79	-29.01	1.10	20.21	-7.70	8.00	15.70
2462.0000	2461.35	-29.44	1.11	20.21	-8.12	8.00	16.12

Sample Calculation:

Result = Reading + Cable Loss + Atten. Loss

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Maximum Power Spectral Density

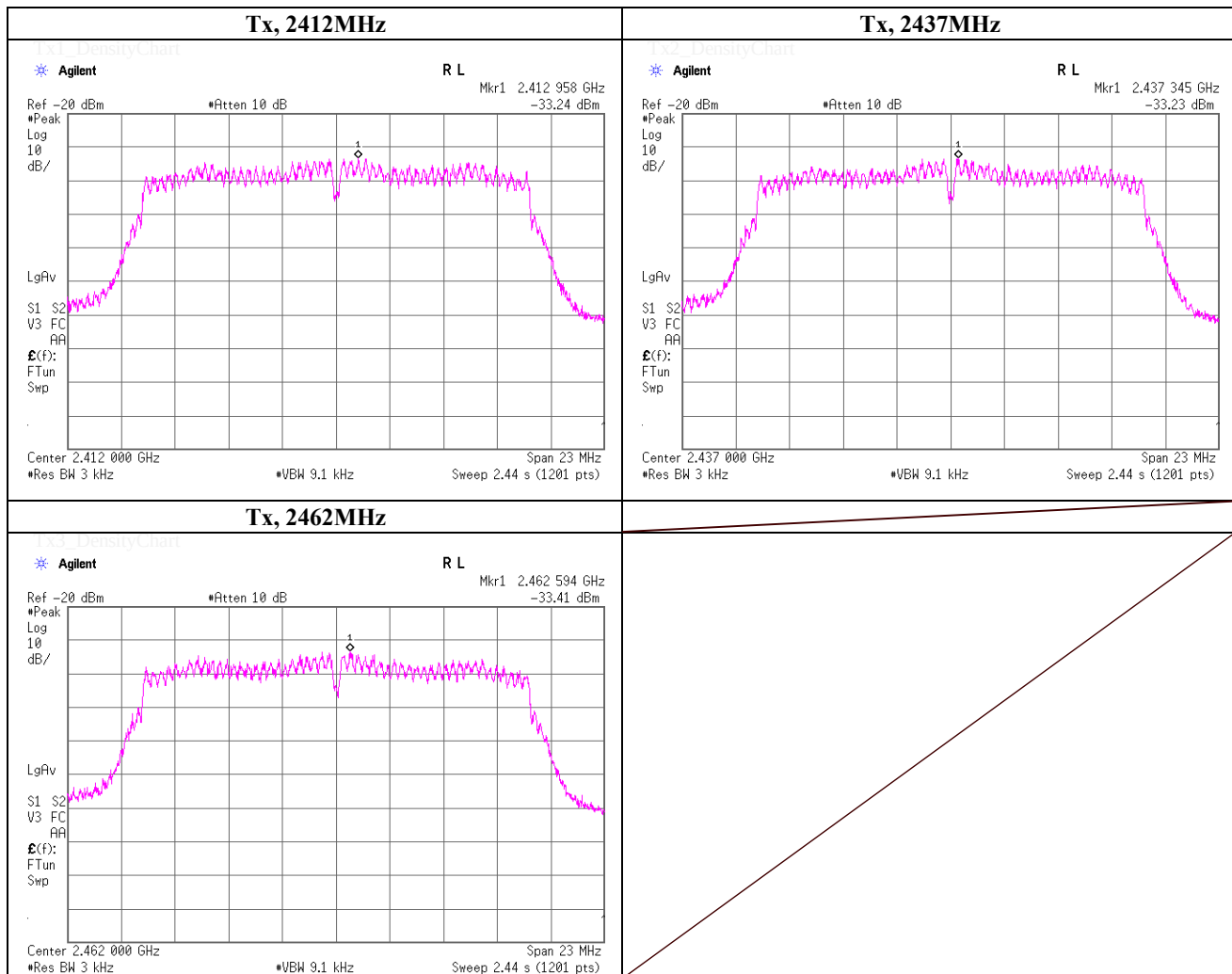
(PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	February 7, 2013	
Temperature / Humidity	22deg.C , 31%RH	
Engineer	Shinichi Takano	
Mode	Tx, IEEE802.11g, PN9, worst antenna port 0, 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	2412.96	-33.24	1.11	20.21	-11.92	8.00	19.92
2437.0000	2437.35	-33.23	1.10	20.21	-11.92	8.00	19.92
2462.0000	2462.59	-33.41	1.11	20.21	-12.09	8.00	20.09

Sample Calculation:

Result = Reading + Cable Loss + Atten. Loss

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Maximum Power Spectral Density

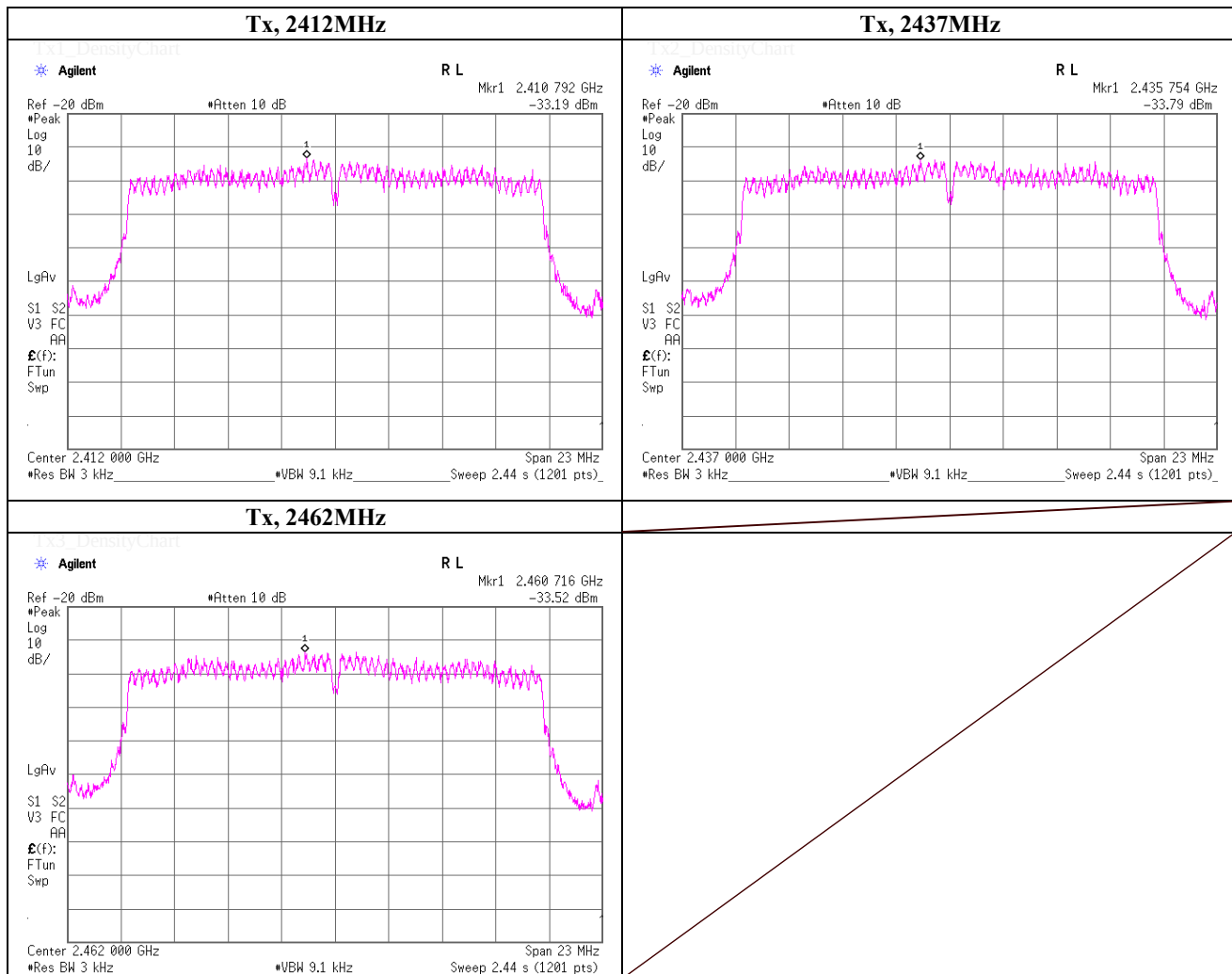
(PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	January 31, 2014	
Temperature / Humidity	26deg.C , 44%RH	
Engineer	Shinichi Takano	
Mode	Tx, IEEE802.11n(HT20), SISO, PN9, worst antenna port 0, worst data mode 2(MCS)	

Ch. Freq. [MHz]	Freq. Reading [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
2412.0000	2410.79	-33.19	1.11	20.21	-11.87	8.00	19.87
2437.0000	2435.75	-33.79	1.10	20.21	-12.48	8.00	20.48
2462.0000	2460.72	-33.52	1.11	20.21	-12.20	8.00	20.20

Sample Calculation:

Result = Reading + Cable Loss + Atten. Loss

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Maximum Power Spectral Density

(PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	January 31, 2014	
Temperature / Humidity	26deg.C , 44%RH	
Engineer	Shinichi Takano	
Mode	Tx, IEEE802.11n (HT20), CDD, PN9, worst data mode 2(MCS)	

Antenna 0

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	2412.33	-33.15	1.11	20.21	3.01	-8.82	8.00	16.82
2437.0000	2436.75	-32.96	1.10	20.21	3.01	-8.63	8.00	16.63
2462.0000	2462.69	-33.71	1.11	20.21	3.01	-9.38	8.00	17.38

Sample Calculation:

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

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	2411.71	-33.19	1.11	20.21	3.01	-8.86	8.00	16.86
2437.0000	2437.67	-33.78	1.10	20.21	3.01	-9.46	8.00	17.46
2462.0000	2462.35	-33.78	1.11	20.21	3.01	-9.45	8.00	17.45

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 D1)"

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

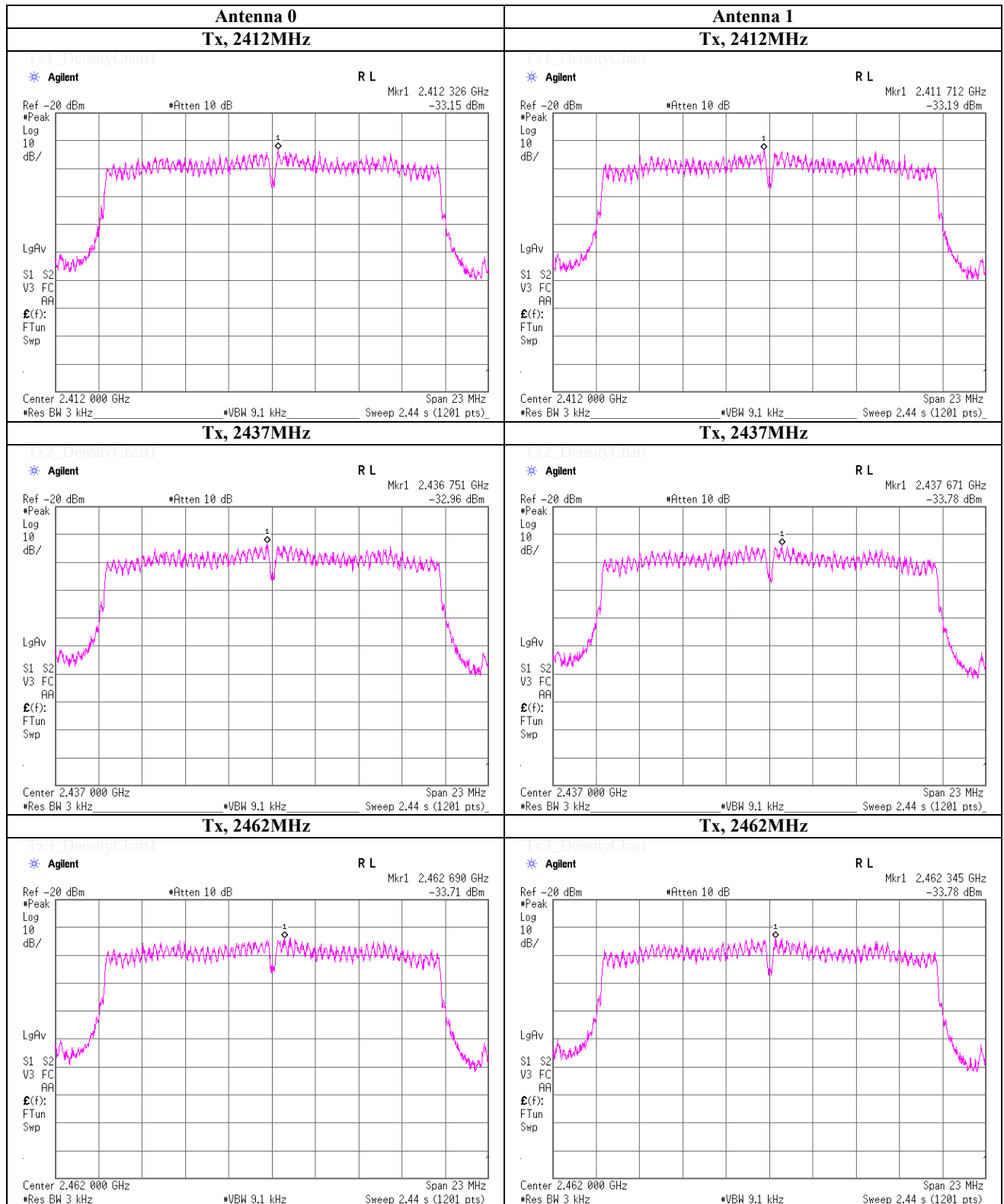
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Test place UL Japan, Inc. Shonan EMC Lab. No.5 Shielded Room
Date January 31, 2014
Temperature / Humidity 26deg.C , 44%RH
Engineer Shinichi Takano

Power Density



UL Japan, Inc.

Shonan EMC Lab.

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Maximum Power Spectral Density

(PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	January 31, 2014	
Temperature / Humidity	26deg.C , 44%RH	
Engineer	Shinichi Takano	
Mode	Tx, IEEE802.11n (HT20), MIMO(SDM), PN9, worst data mode 10(MCS)	

Antenna 0

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	2413.55	-33.56	1.11	20.21	3.01	-9.23	8.00	17.23
2437.0000	2435.79	-32.94	1.10	20.21	3.01	-8.62	8.00	16.62
2462.0000	2461.71	-34.09	1.11	20.21	3.01	-9.76	8.00	17.76

Sample Calculation:

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

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	2411.75	-31.75	1.11	20.21	3.01	-7.42	8.00	15.42
2437.0000	2436.71	-33.96	1.10	20.21	3.01	-9.64	8.00	17.64
2462.0000	2461.08	-34.23	1.11	20.21	3.01	-9.90	8.00	17.90

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 D1)"

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

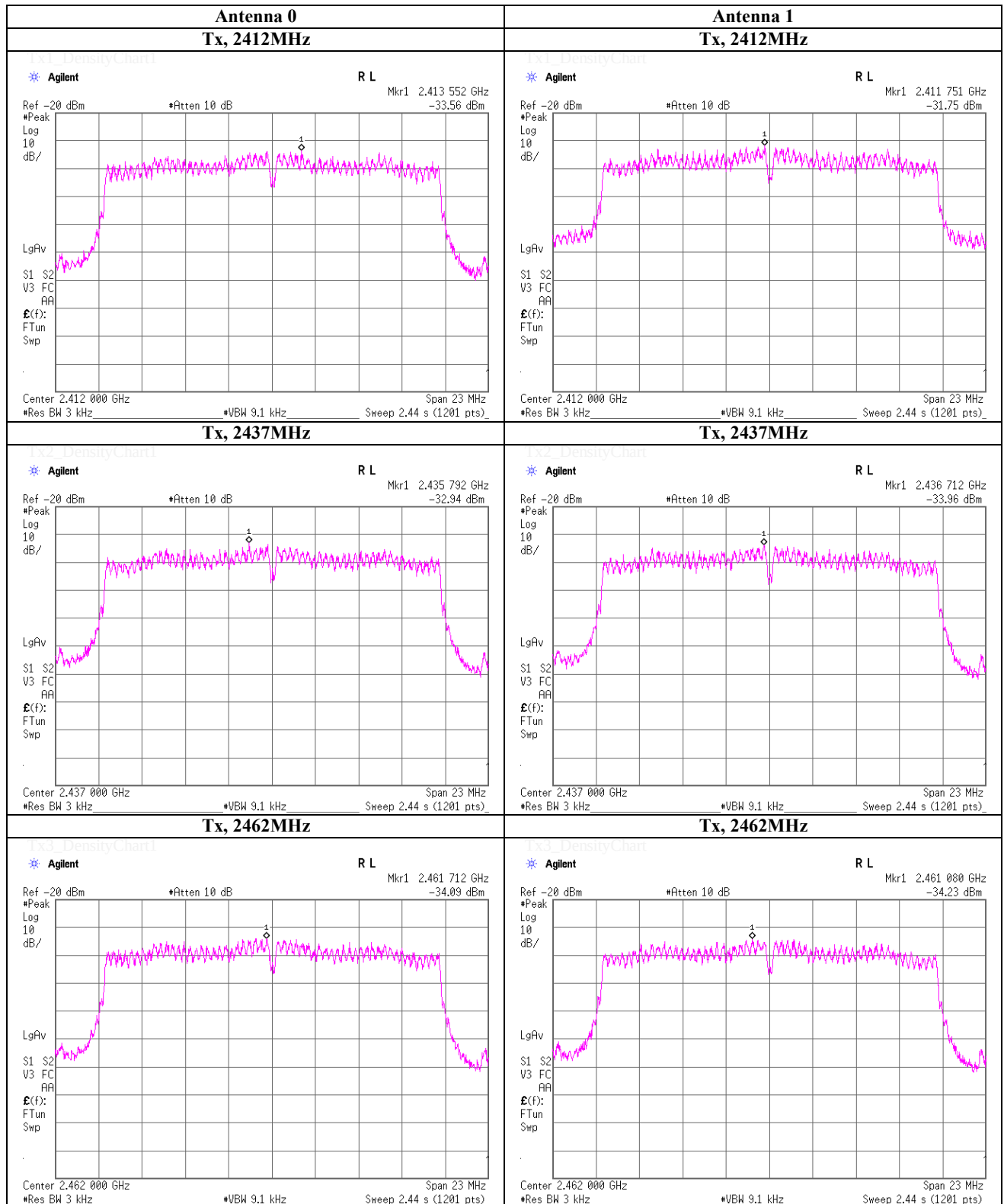
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Test place UL Japan, Inc. Shonan EMC Lab. No.5 Shielded Room
Date January 31, 2014
Temperature / Humidity 26deg.C , 44%RH
Engineer Shinichi Takano

Power Density



UL Japan, Inc.

Shonan EMC Lab.

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Maximum Power Spectral Density

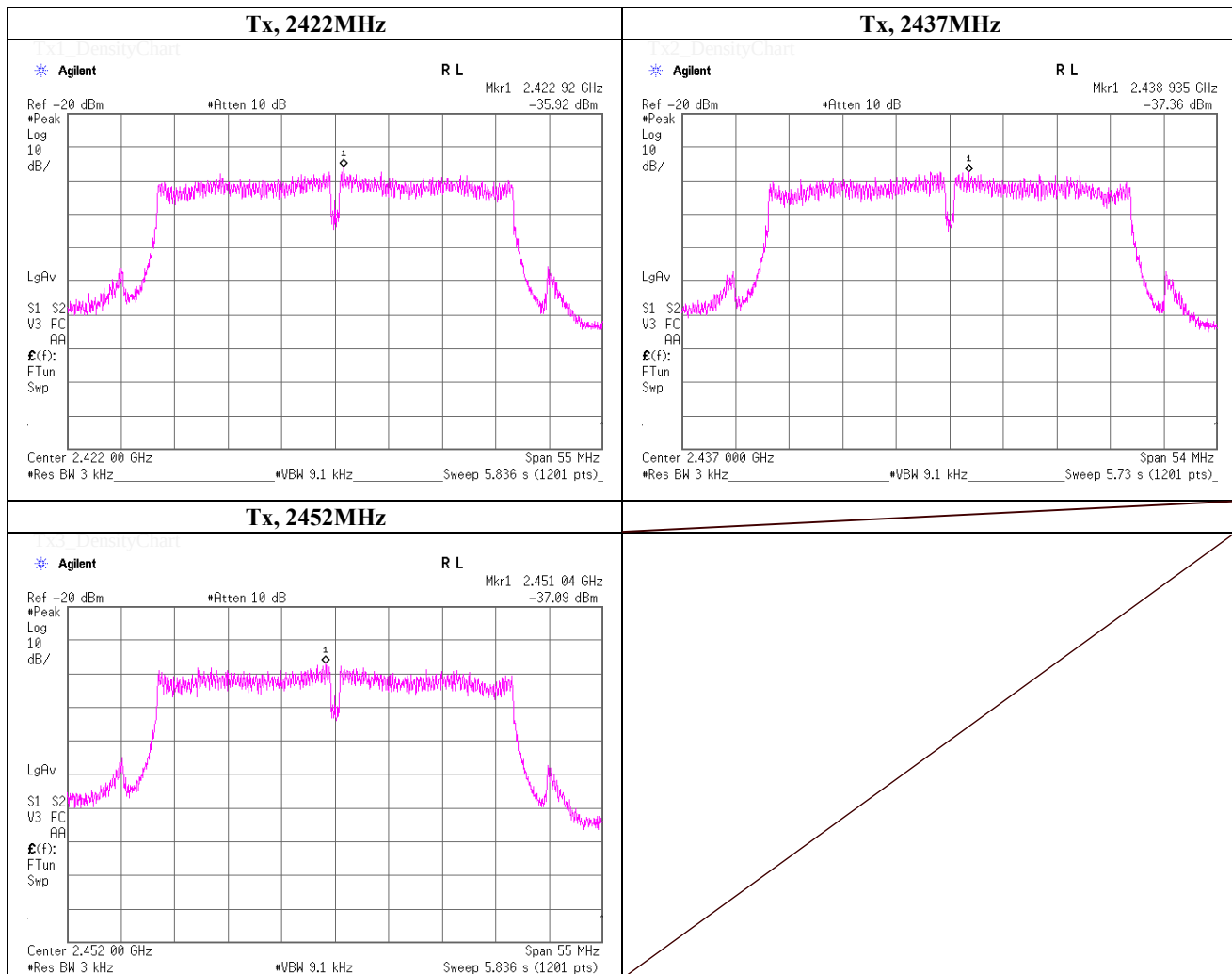
(PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	January 31, 2014	
Temperature / Humidity	26deg.C , 44%RH	
Engineer	Shinichi Takano	
Mode	Tx, IEEE802.11n (HT40), SISO, PN9, worst antenna port 0, 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	2422.92	-35.92	1.11	20.21	-14.60	8.00	22.60
2437.0000	2438.94	-37.36	1.10	20.21	-16.05	8.00	24.05
2452.0000	2451.04	-37.09	1.10	20.21	-15.78	8.00	23.78

Sample Calculation:

Result = Reading + Cable Loss + Atten. Loss

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Maximum Power Spectral Density

(PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	January 31, 2014	
Temperature / Humidity	26deg.C , 44%RH	
Engineer	Shinichi Takano	
Mode	Tx, IEEE802.11n (HT40), CDD, PN9, worst data mode 0(MCS)	

Antenna 0

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	2422.96	-36.20	1.11	20.21	3.01	-11.87	8.00	19.87
2437.0000	2437.95	-37.19	1.10	20.21	3.01	-12.87	8.00	20.87
2452.0000	2453.60	-37.56	1.10	20.21	3.01	-13.24	8.00	21.24

Sample Calculation:

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

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	2420.76	-36.67	1.11	20.21	3.01	-12.34	8.00	20.34
2437.0000	2437.68	-35.73	1.10	20.21	3.01	-11.41	8.00	19.41
2452.0000	2452.64	-36.12	1.10	20.21	3.01	-11.80	8.00	19.80

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 D1)"

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

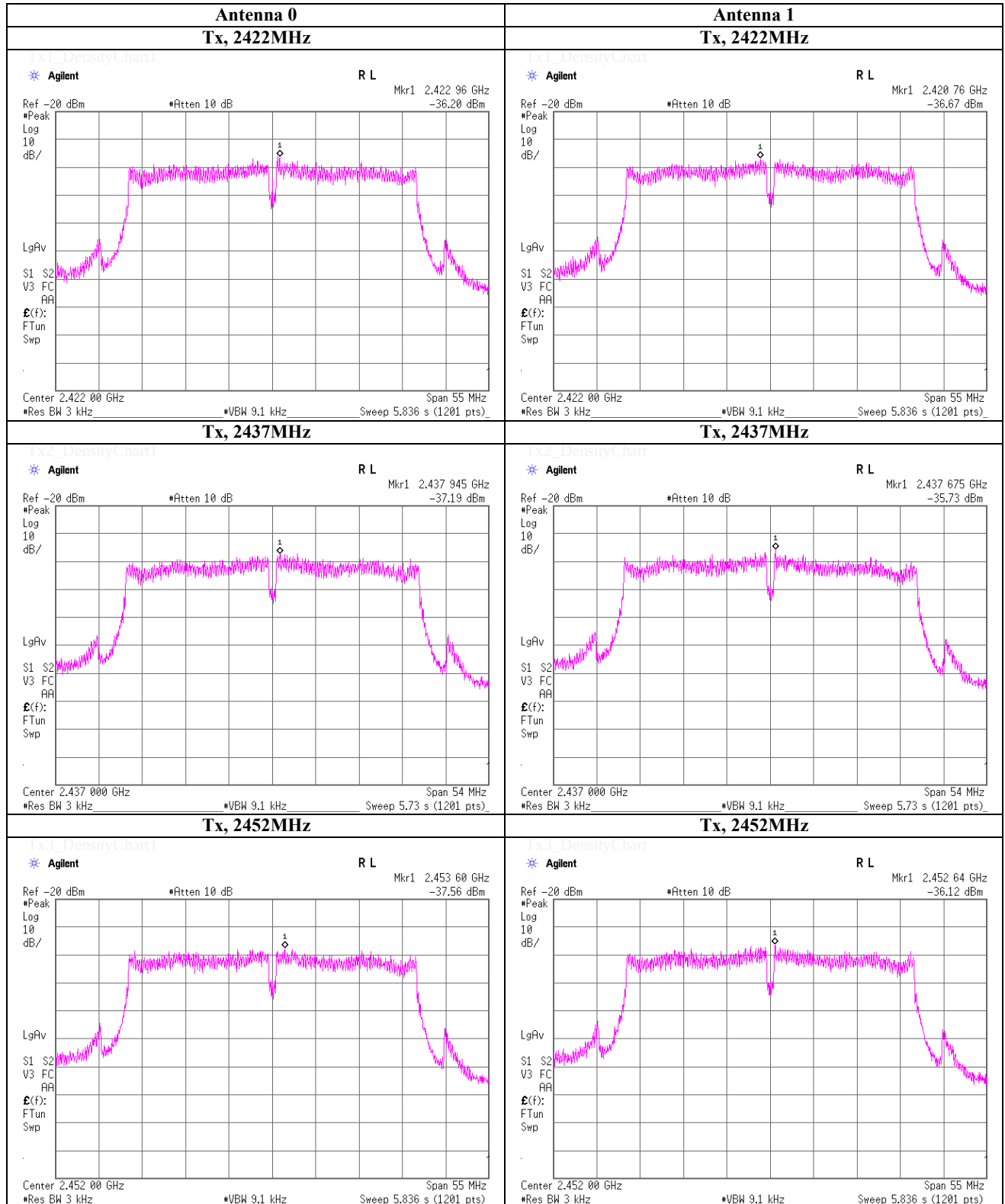
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

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Facsimile : +81 463 50 6401

Test place UL Japan, Inc. Shonan EMC Lab. No.5 Shielded Room
Date January 31, 2014
Temperature / Humidity 26deg.C , 44%RH
Engineer Shinichi Takano

Power Density



UL Japan, Inc.

Shonan EMC Lab.

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

Telephone : +81 463 50 6400

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Maximum Power Spectral Density

(PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	January 31, 2014	
Temperature / Humidity	26deg.C , 44%RH	
Engineer	Shinichi Takano	
Mode	Tx, IEEE802.11n (HT40), MIMO(SDM), PN9, worst data mode 8(MCS)	

Antenna 0

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	2420.81	-36.03	1.11	20.21	3.01	-11.70	8.00	19.70
2437.0000	2435.79	-36.21	1.10	20.21	3.01	-11.89	8.00	19.89
2452.0000	2455.80	-36.67	1.10	20.21	3.01	-12.35	8.00	20.35

Sample Calculation:

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

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	2420.17	-37.27	1.11	20.21	3.01	-12.94	8.00	20.94
2437.0000	2437.99	-36.44	1.10	20.21	3.01	-12.12	8.00	20.12
2452.0000	2449.25	-37.60	1.10	20.21	3.01	-13.28	8.00	21.28

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 D1)"

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

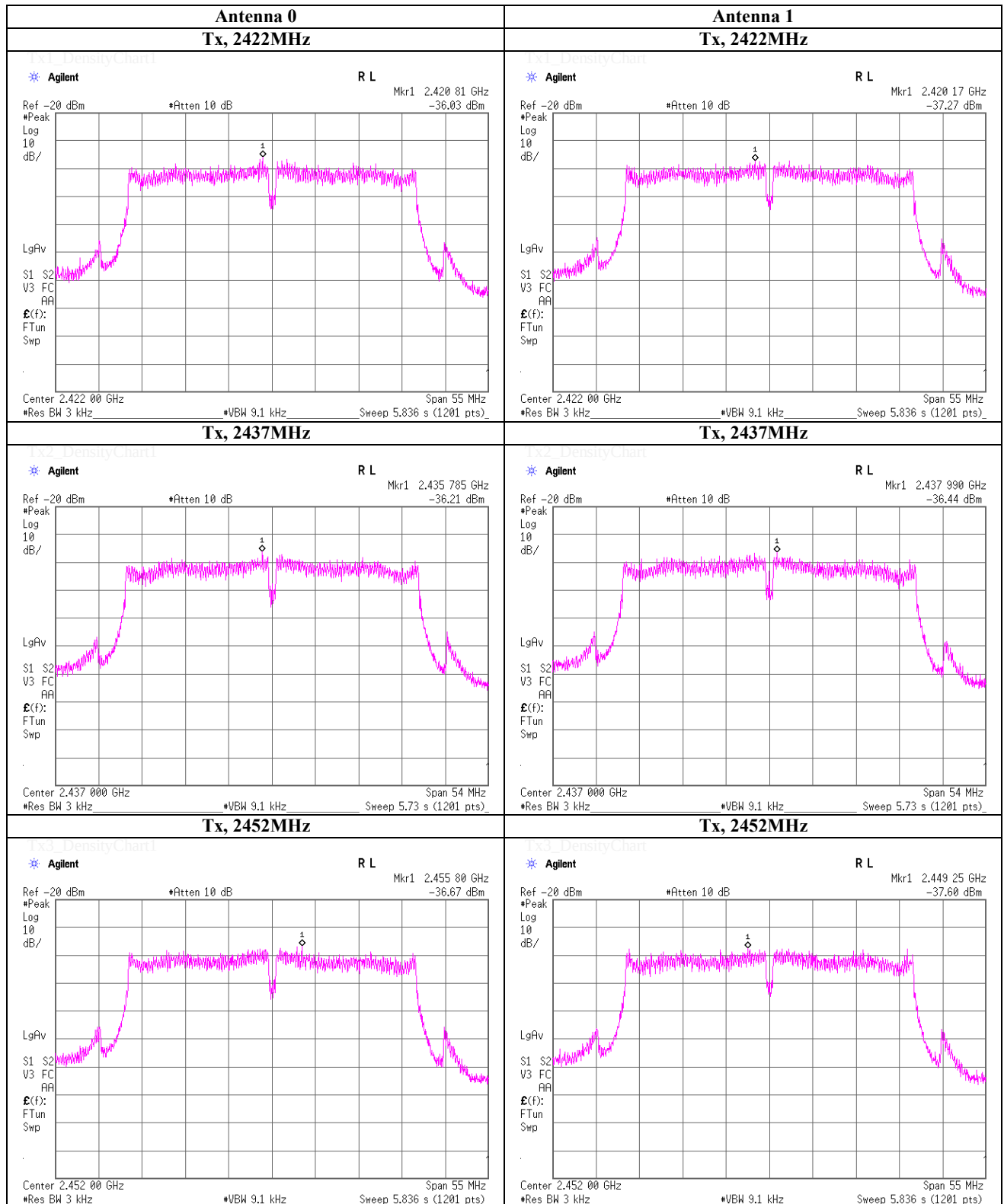
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Test place UL Japan, Inc. Shonan EMC Lab. No.5 Shielded Room
 Date January 31, 2014
 Temperature / Humidity 26deg.C , 44%RH
 Engineer Shinichi Takano

Power Density



UL Japan, Inc.

Shonan EMC Lab.

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Maximum Power Spectral Density

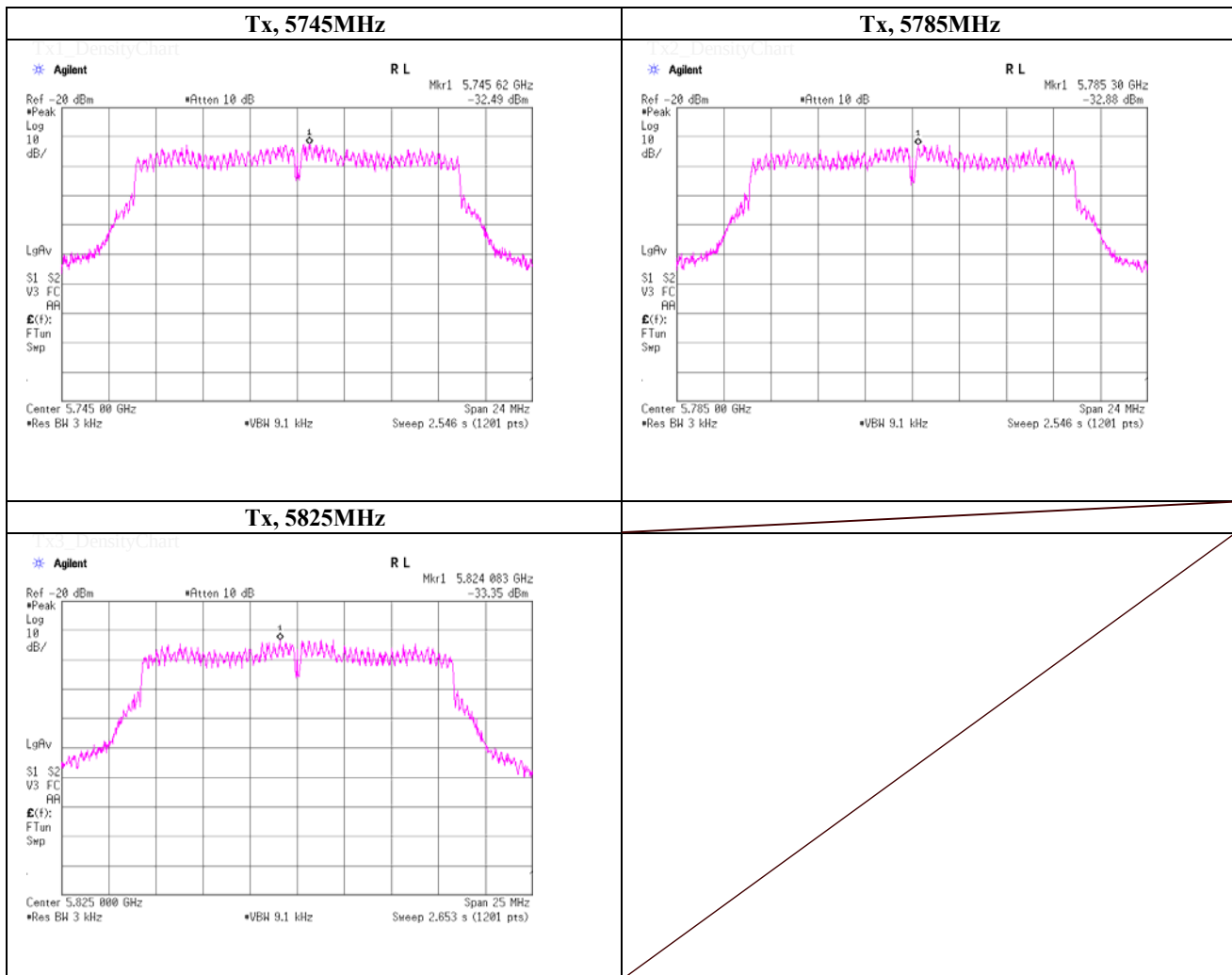
(PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	November 20, 2013	
Temperature / Humidity	22deg.C , 33%RH	
Engineer	Akio Hayashi	
Mode	Tx, IEEE802.11a, PN9, worst antenna port 0, worst data mode 6Mbps	

Ch. Freq. [MHz]	Freq. Reading [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5745.0000	5745.62	-32.49	1.76	20.09	-10.64	8.00	18.64
5785.0000	5785.30	-32.88	1.75	20.09	-11.04	8.00	19.04
5825.0000	5824.08	-33.35	2.06	20.10	-11.19	8.00	19.19

Sample Calculation:

Result = Reading + Cable Loss + Atten. Loss

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Maximum Power Spectral Density

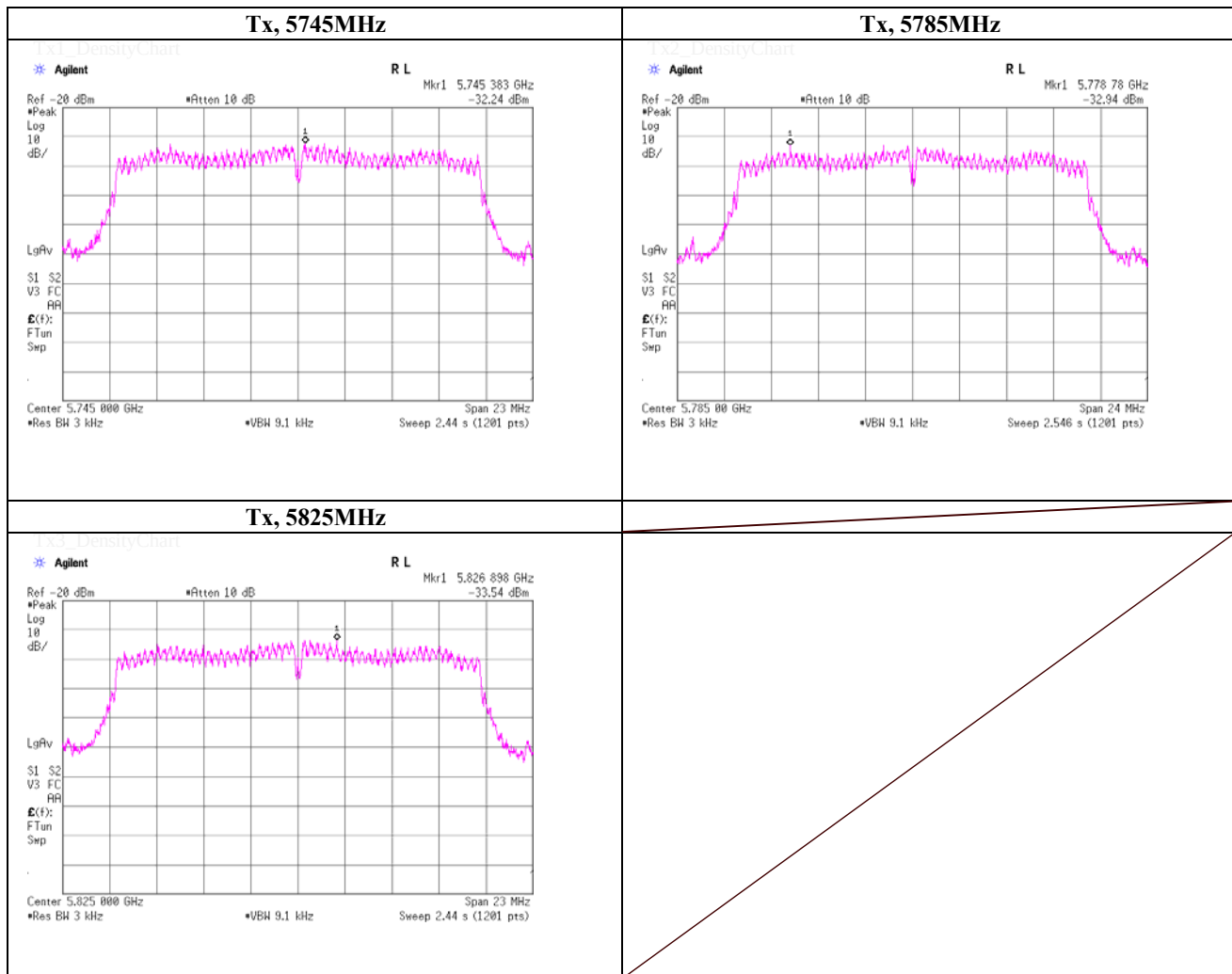
(PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	November 20, 2013	
Temperature / Humidity	22deg.C , 33%RH	
Engineer	Akio Hayashi	
Mode	Tx, IEEE802.11n (HT20), SISO, PN9, worst antenna port 0, 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	5745.38	-32.24	1.76	20.09	-10.39	8.00	18.39
5785.0000	5778.78	-32.94	1.75	20.09	-11.10	8.00	19.10
5825.0000	5826.90	-33.54	2.06	20.10	-11.38	8.00	19.38

Sample Calculation:

Result = Reading + Cable Loss + Atten. Loss

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Maximum Power Spectral Density

(PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	November 20, 2013	
Temperature / Humidity	22deg.C , 33%RH	
Engineer	Akio Hayashi	
Mode	Tx, IEEE802.11n (HT20), CDD, PN9, worst data mode 0(MCS)	

Antenna 0

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	5744.40	-32.50	1.76	20.09	3.01	-7.64	8.00	15.64
5785.0000	5785.44	-32.56	1.75	20.09	3.01	-7.71	8.00	15.71
5825.0000	5824.77	-32.76	2.06	20.10	3.01	-7.59	8.00	15.59

Sample Calculation:

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

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	5744.06	-33.78	1.76	20.09	3.01	-8.92	8.00	16.92
5785.0000	5784.44	-33.80	1.75	20.09	3.01	-8.95	8.00	16.95
5825.0000	5824.50	-34.82	2.06	20.10	3.01	-9.65	8.00	17.65

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 D1)"

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

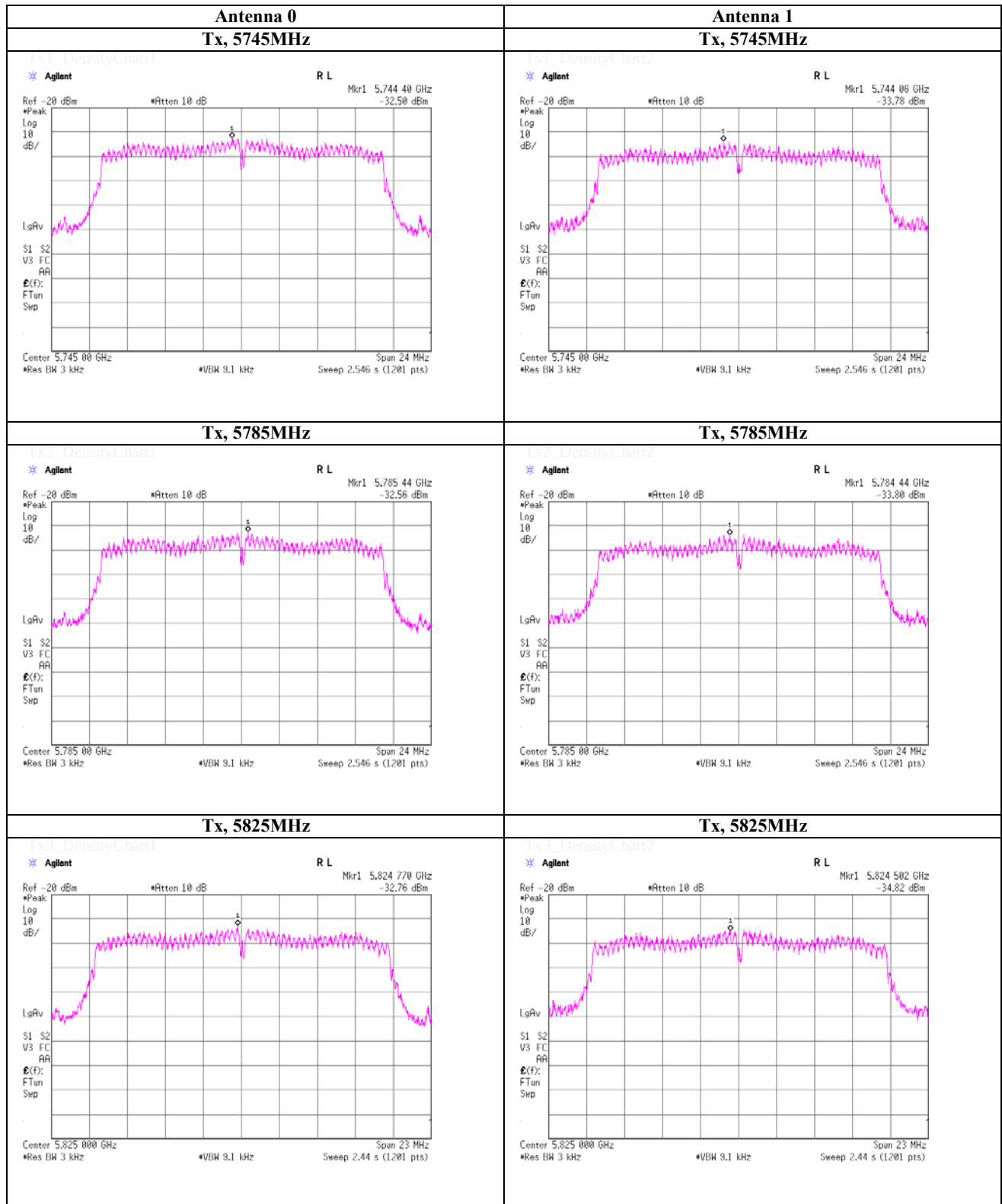
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

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Facsimile : +81 463 50 6401

Test place UL Japan, Inc. Shonan EMC Lab. No.5 Shielded Room
 Date November 20, 2013
 Temperature / Humidity 22deg.C , 33%RH
 Engineer Akio Hayashi

Power Density



UL Japan, Inc.

Shonan EMC Lab.

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

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Maximum Power Spectral Density

(PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	November 20, 2013	
Temperature / Humidity	22deg.C , 33%RH	
Engineer	Akio Hayashi	
Mode	Tx, IEEE802.11n (HT20), MIMO(SDM), PN9, worst data mode 8(MCS)	

Antenna 0

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	5744.41	-32.45	1.76	20.09	3.01	-7.59	8.00	15.59
5785.0000	5785.40	-32.61	1.75	20.09	3.01	-7.76	8.00	15.76
5825.0000	5824.79	-32.46	2.06	20.10	3.01	-7.29	8.00	15.29

Sample Calculation:

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

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	5746.04	-33.93	1.76	20.09	3.01	-9.07	8.00	17.07
5785.0000	5786.94	-33.70	1.75	20.09	3.01	-8.85	8.00	16.85
5825.0000	5824.41	-33.56	2.06	20.10	3.01	-8.39	8.00	16.39

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 D1)"

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

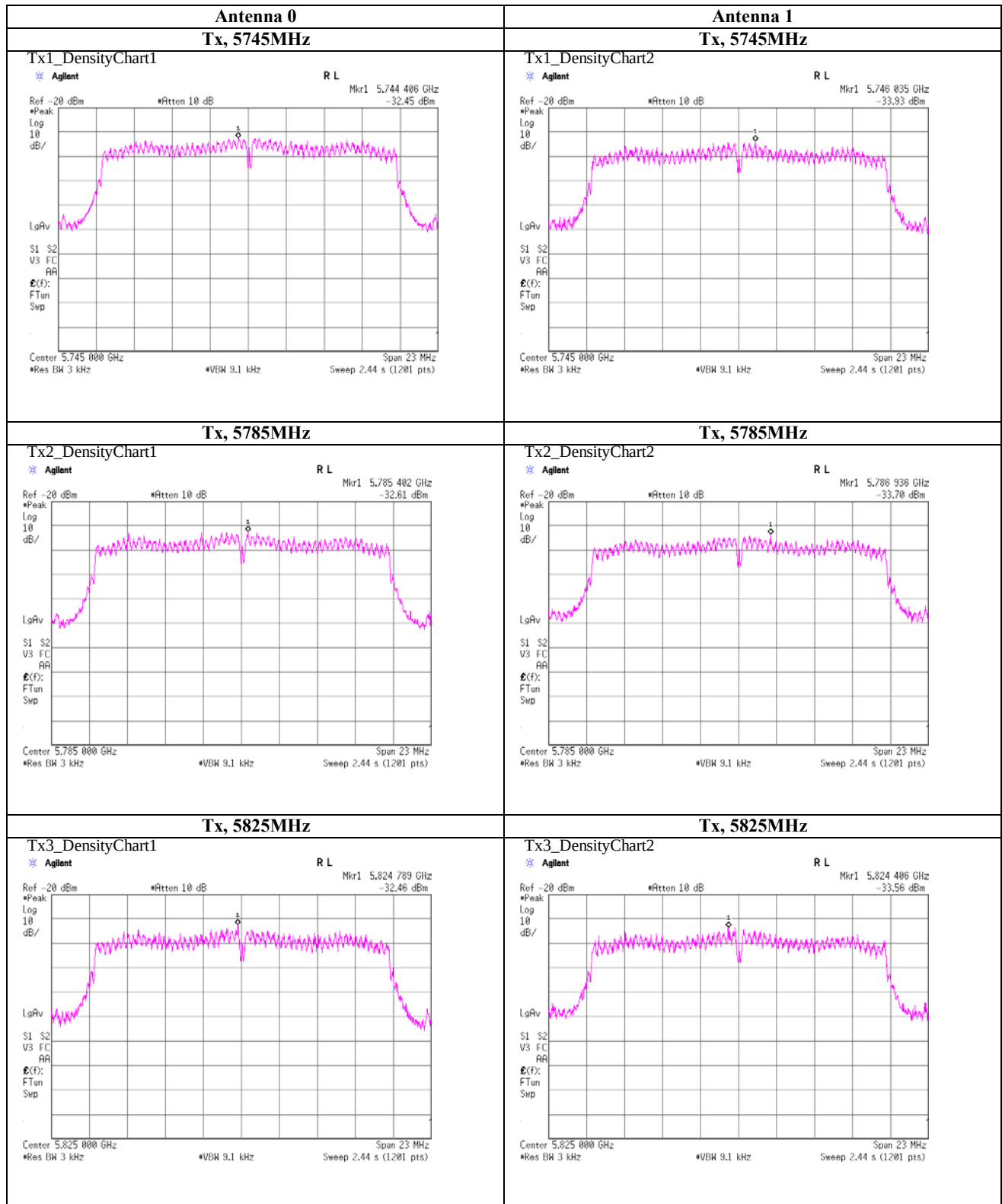
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

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Test place UL Japan, Inc. Shonan EMC Lab. No.5 Shielded Room
 Date November 20, 2013
 Temperature / Humidity 22deg.C , 33%RH
 Engineer Akio Hayashi

Power Density



UL Japan, Inc.

Shonan EMC Lab.

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Facsimile : +81 463 50 6401

Maximum Power Spectral Density

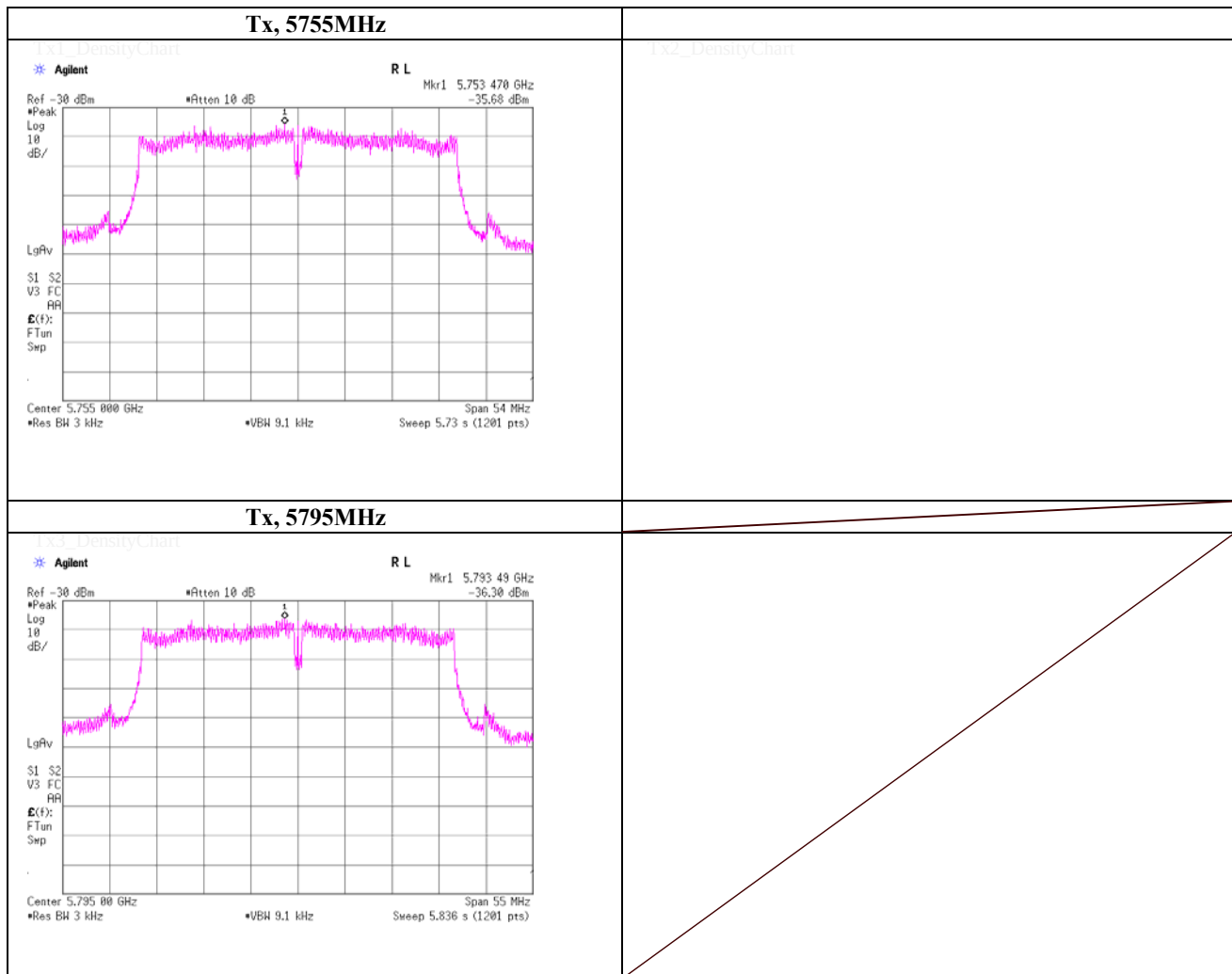
(PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	November 20, 2013	
Temperature / Humidity	22deg.C , 33%RH	
Engineer	Akio Hayashi	
Mode	Tx, IEEE802.11n (HT40), SISO, PN9, worst antenna port 0, 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	5753.47	-35.68	1.76	20.09	-13.83	8.00	21.83
					-	8.00	-
5795.0000	5793.49	-36.30	1.75	20.09	-14.46	8.00	22.46

Sample Calculation:

Result = Reading + Cable Loss + Atten. Loss

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Maximum Power Spectral Density

(PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	November 20, 2013	
Temperature / Humidity	22deg.C , 33%RH	
Engineer	Akio Hayashi	
Mode	Tx, IEEE802.11n (HT40), CDD, PN9, worst data mode 0(MCS)	

Antenna 0

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	5753.79	-35.91	1.76	20.09	3.01	-11.05	8.00	19.05
					3.01	-	8.00	-
5795.0000	5796.58	-35.88	1.75	20.09	3.01	-11.03	8.00	19.03

Sample Calculation:

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

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	5794.42	-37.17	1.76	20.09	3.01	-12.31	8.00	20.31
					3.01	-	8.00	-
5795.0000	5743.84	-36.97	1.75	20.09	3.01	-12.12	8.00	20.12

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 D1)"

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

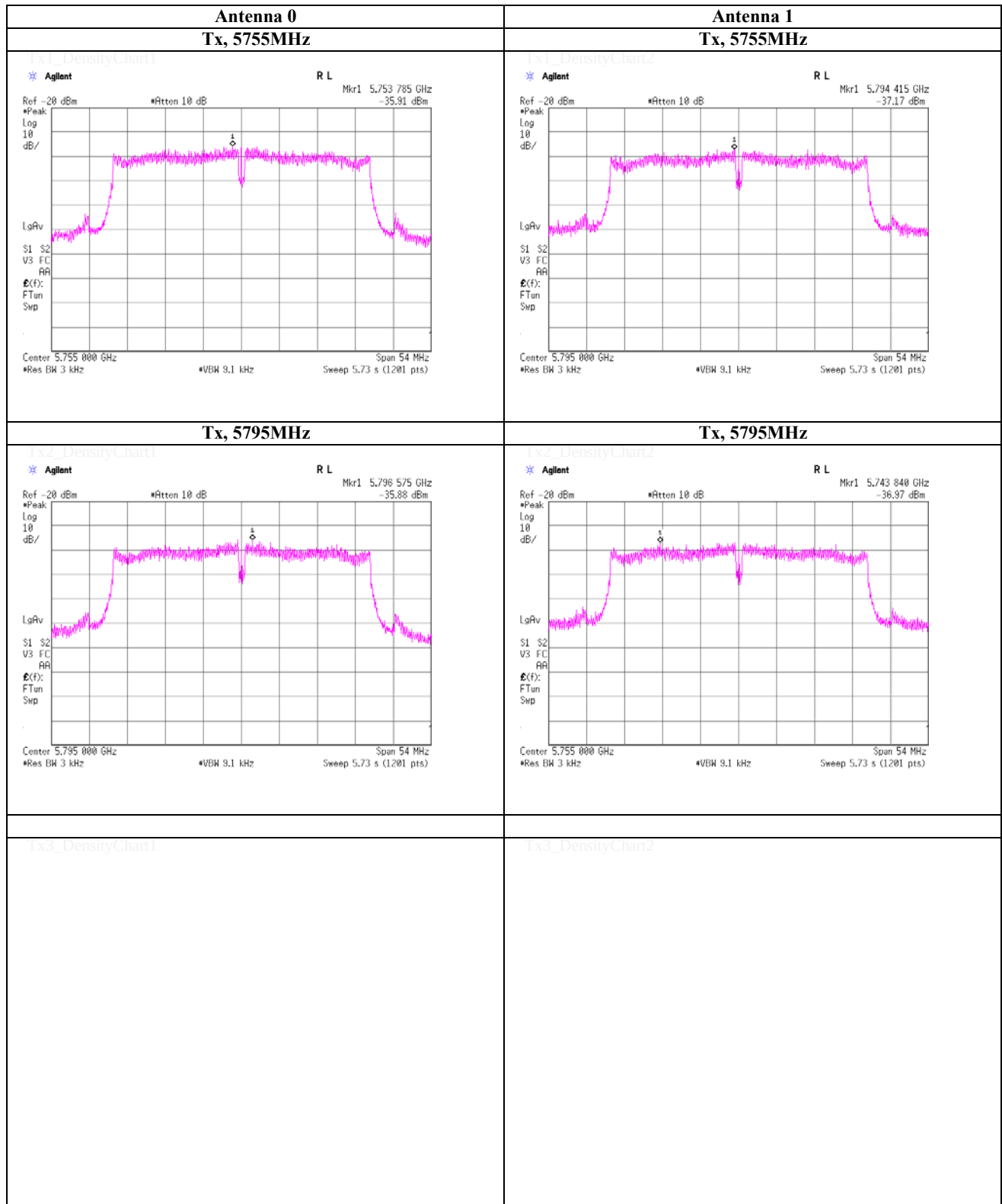
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

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Test place UL Japan, Inc. Shonan EMC Lab. No.5 Shielded Room
Date November 20, 2013
Temperature / Humidity 22deg.C , 33%RH
Engineer Akio Hayashi

Power Density



UL Japan, Inc.

Shonan EMC Lab.

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Maximum Power Spectral Density

(PKPSD)

Test place	UL Japan, Inc. Shonan EMC Lab.	No.5 Shielded Room
Date	November 20, 2013	
Temperature / Humidity	22deg.C , 33%RH	
Engineer	Akio Hayashi	
Mode	Tx, IEEE802.11n (HT40), MIMO(SDM), PN9, worst data mode 8(MCS)	

Antenna 0

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	5754.13	-34.70	1.76	20.09	3.01	-9.84	8.00	17.84
					3.01	-	8.00	-
5795.0000	5796.92	-35.29	1.75	20.09	3.01	-10.44	8.00	18.44

Sample Calculation:

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

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	5755.92	-36.07	1.76	20.09	3.01	-11.21	8.00	19.21
					3.01	-	8.00	-
5795.0000	5792.57	-36.80	1.75	20.09	3.01	-11.95	8.00	19.95

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 D1)"

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

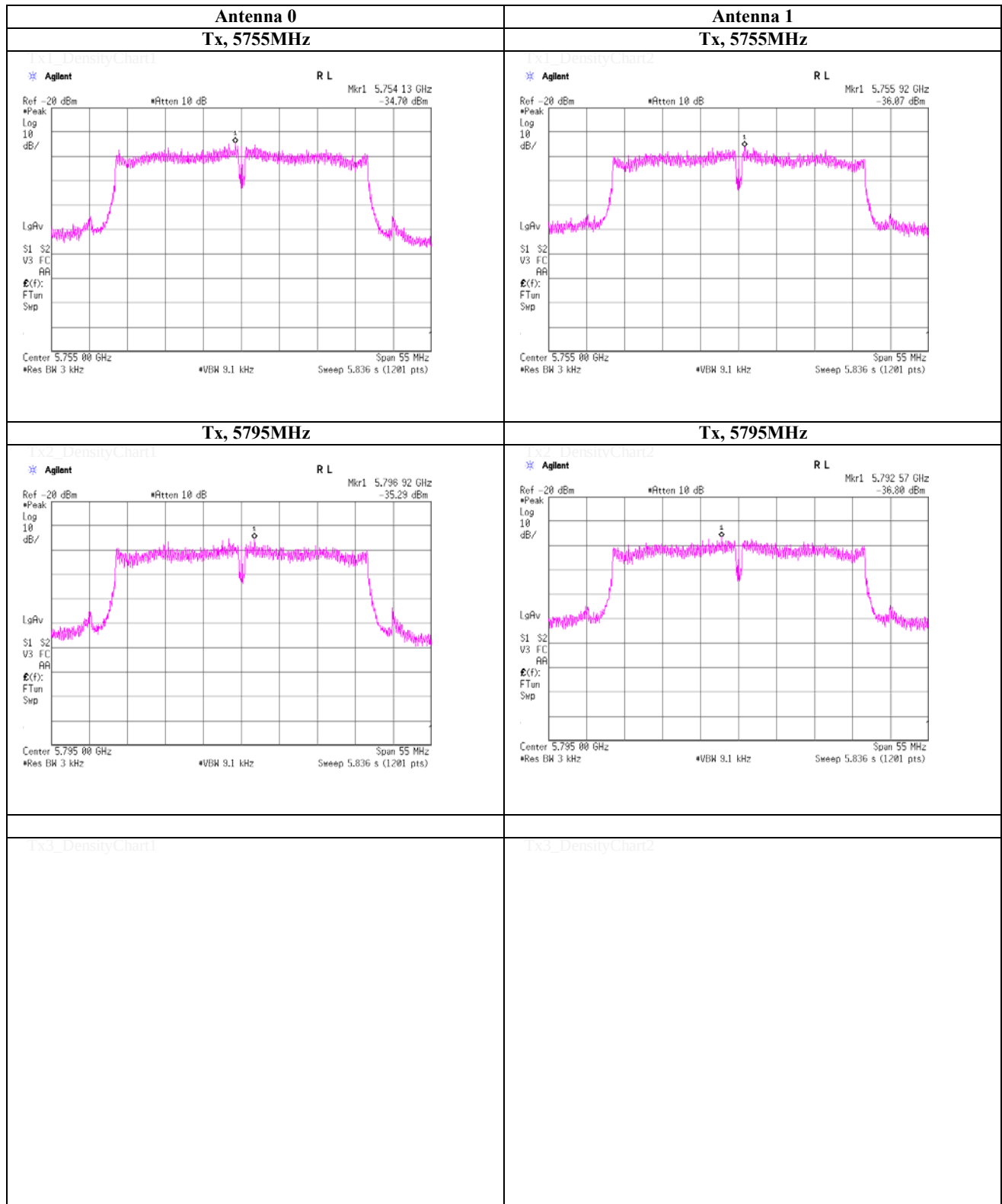
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

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Test place UL Japan, Inc. Shonan EMC Lab. No.5 Shielded Room
Date November 20, 2013
Temperature / Humidity 22deg.C , 33%RH
Engineer Akio Hayashi

Power Density



UL Japan, Inc.

Shonan EMC Lab.

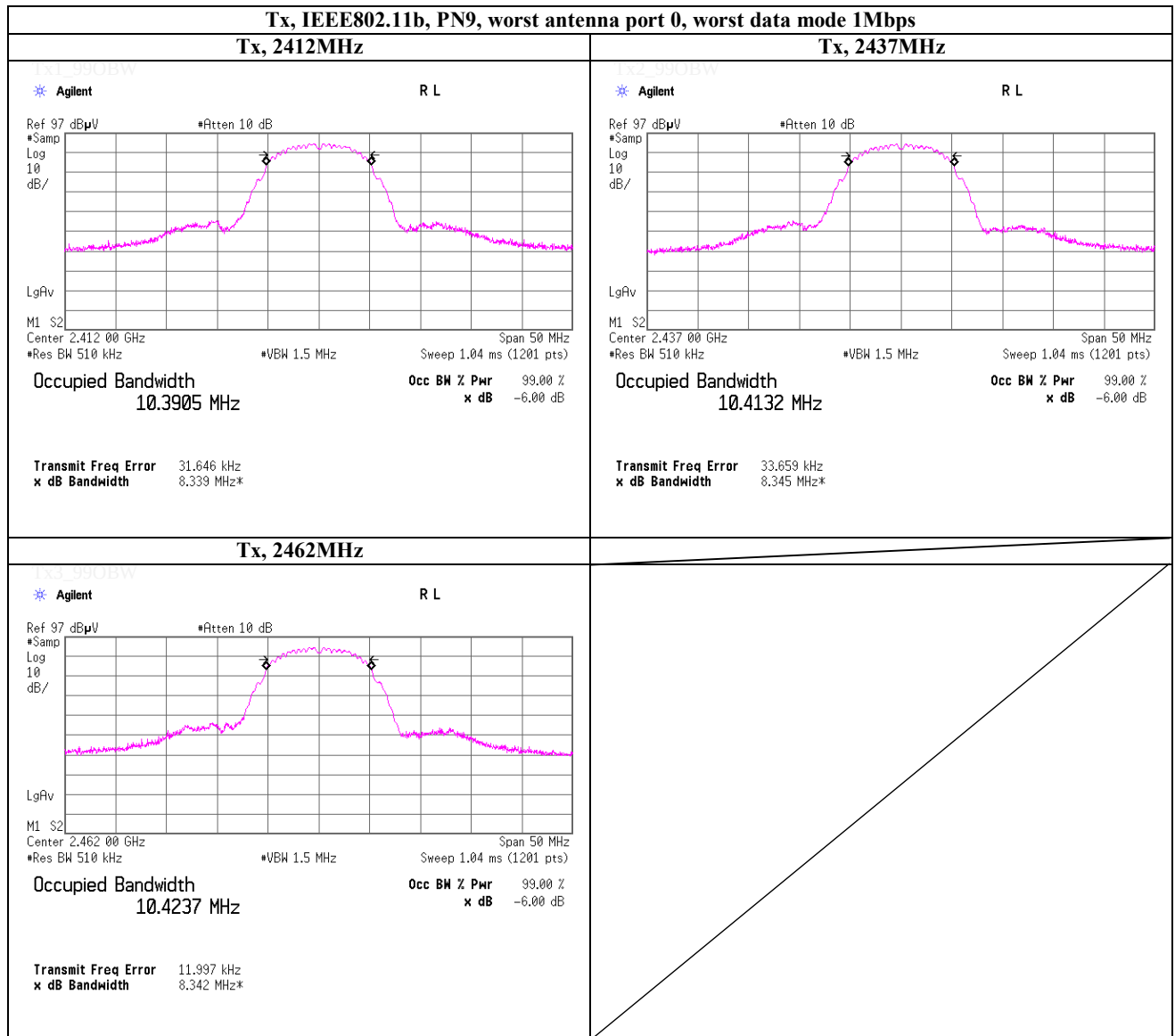
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Test place UL Japan, Inc. Shonan EMC Lab. No.5 Shielded Room
Date February 7, 2013
Temperature / Humidity 22deg.C , 31%RH
Engineer Shinichi Takano

99% Occupied Bandwidth



UL Japan, Inc.

Shonan EMC Lab.

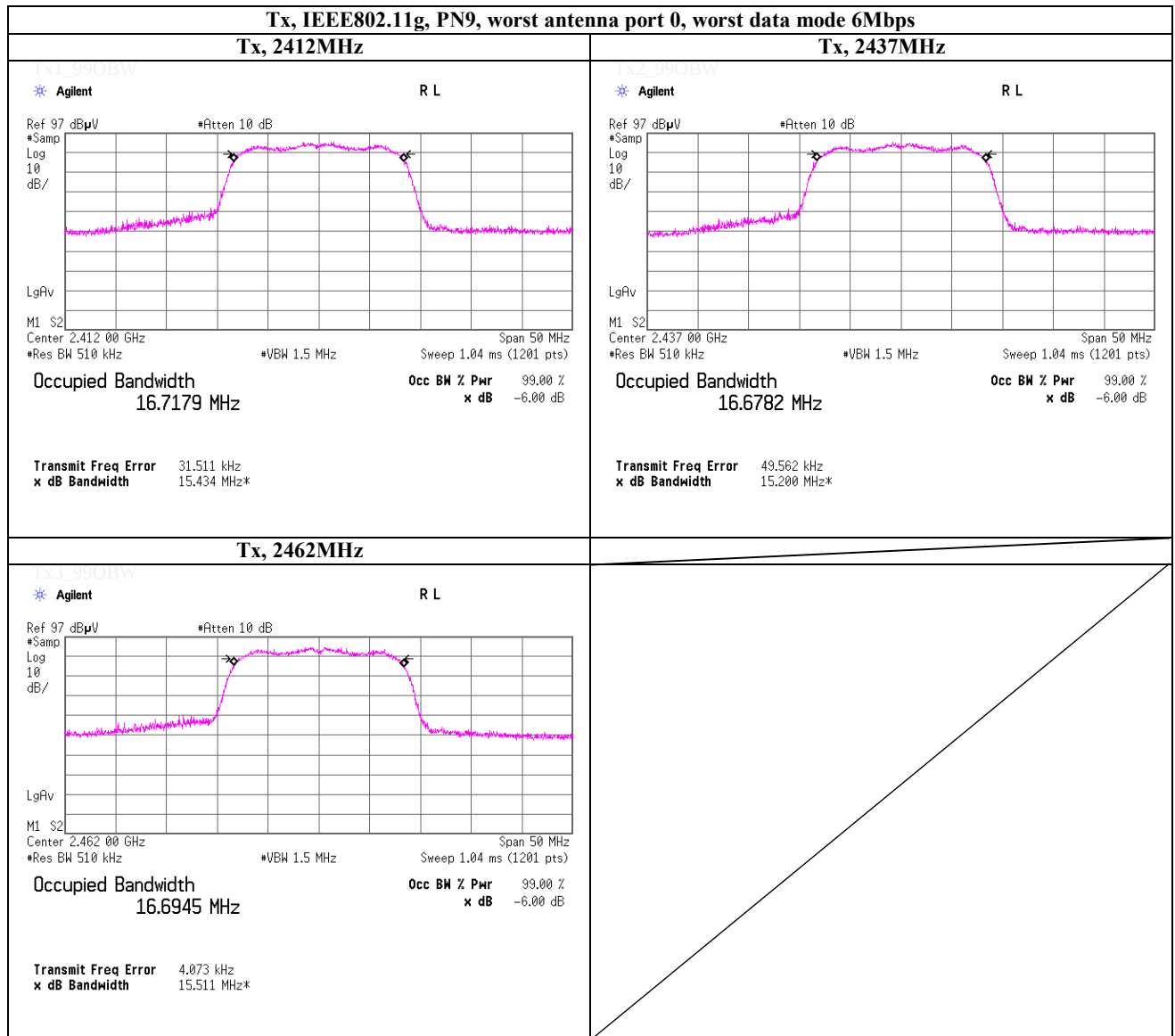
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Test place UL Japan, Inc. Shonan EMC Lab. No.5 Shielded Room
Date February 7, 2013
Temperature / Humidity 22deg.C , 31%RH
Engineer Shinichi Takano

99% Occupied Bandwidth



UL Japan, Inc.

Shonan EMC Lab.

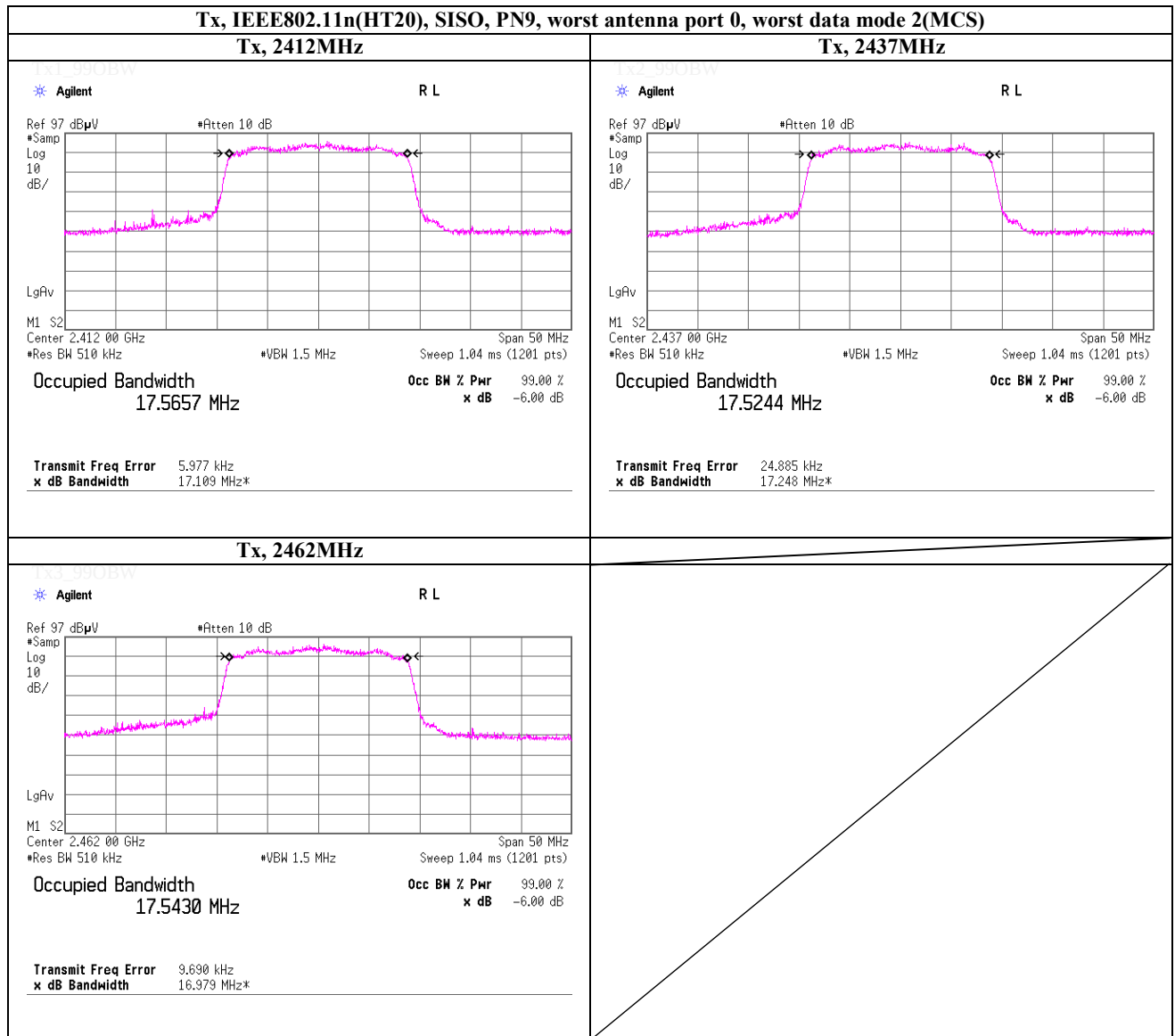
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Test place UL Japan, Inc. Shonan EMC Lab. No.5 Shielded Room
Date January 31, 2014
Temperature / Humidity 26deg.C , 44%RH
Engineer Shinichi Takano

99% Occupied Bandwidth



UL Japan, Inc.

Shonan EMC Lab.

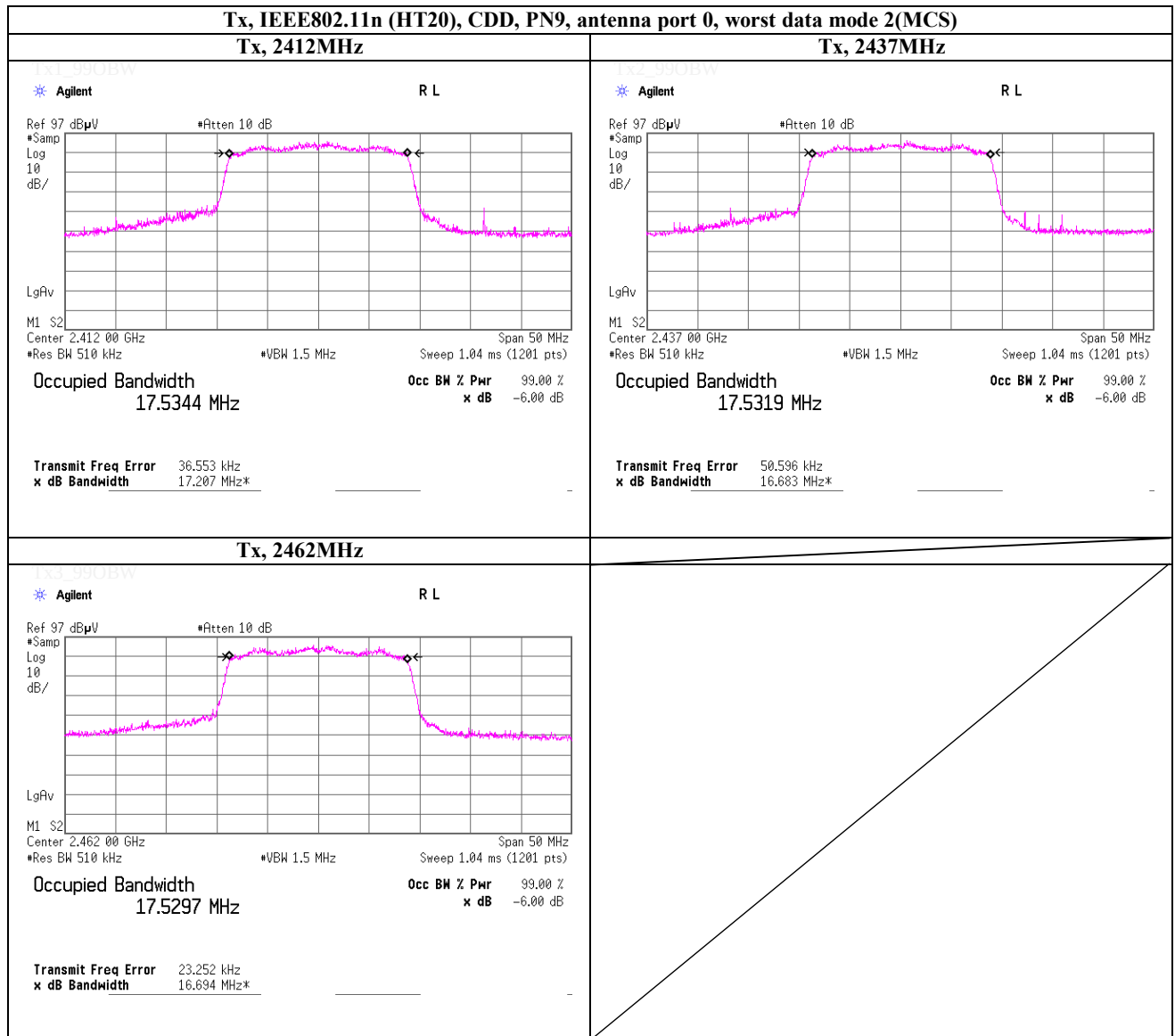
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

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Date January 31, 2014
Temperature / Humidity 26deg.C , 44%RH
Engineer Shinichi Takano

99% Occupied Bandwidth



UL Japan, Inc.

Shonan EMC Lab.

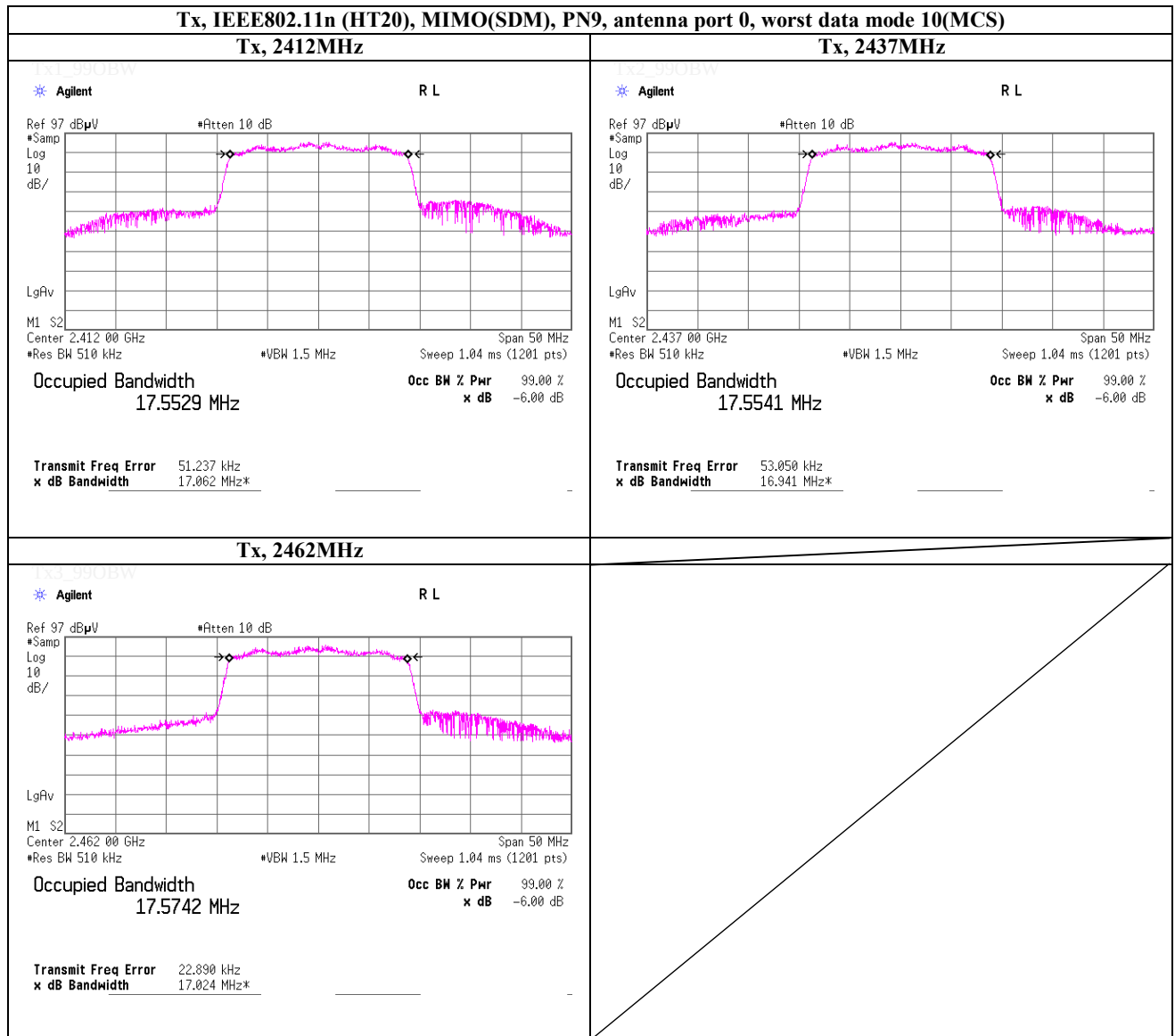
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Engineer Shinichi Takano

99% Occupied Bandwidth



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Shonan EMC Lab.

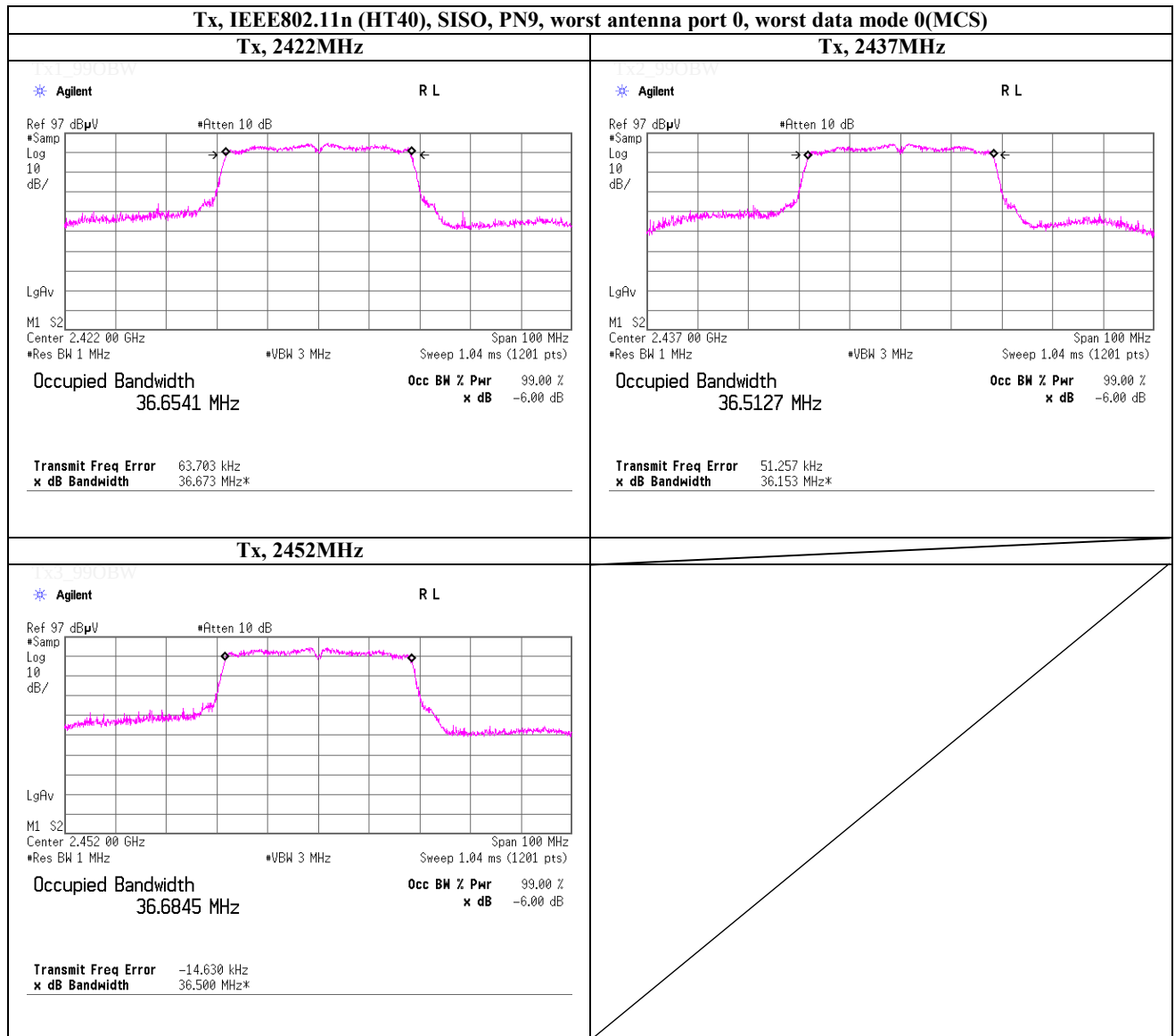
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

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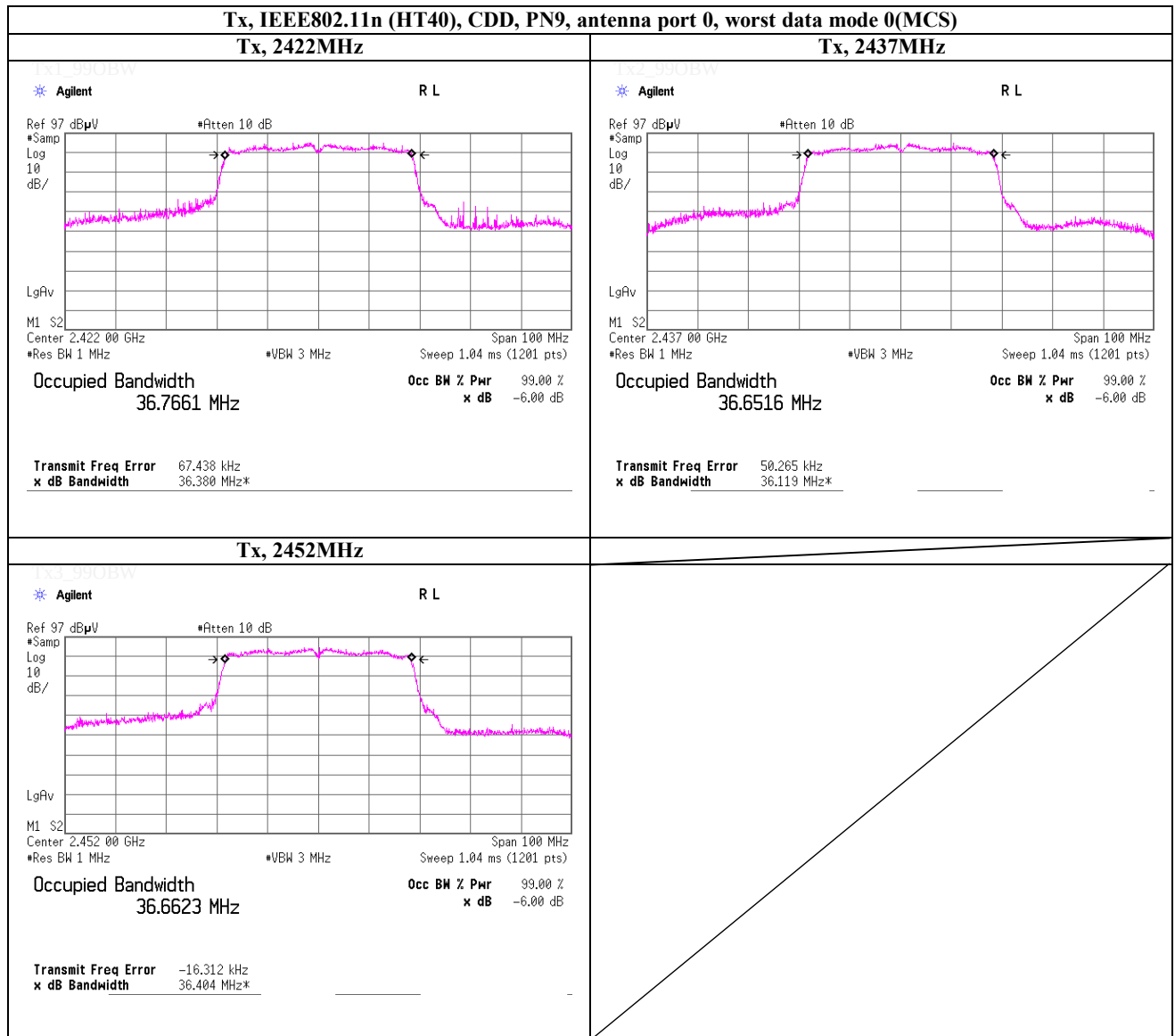
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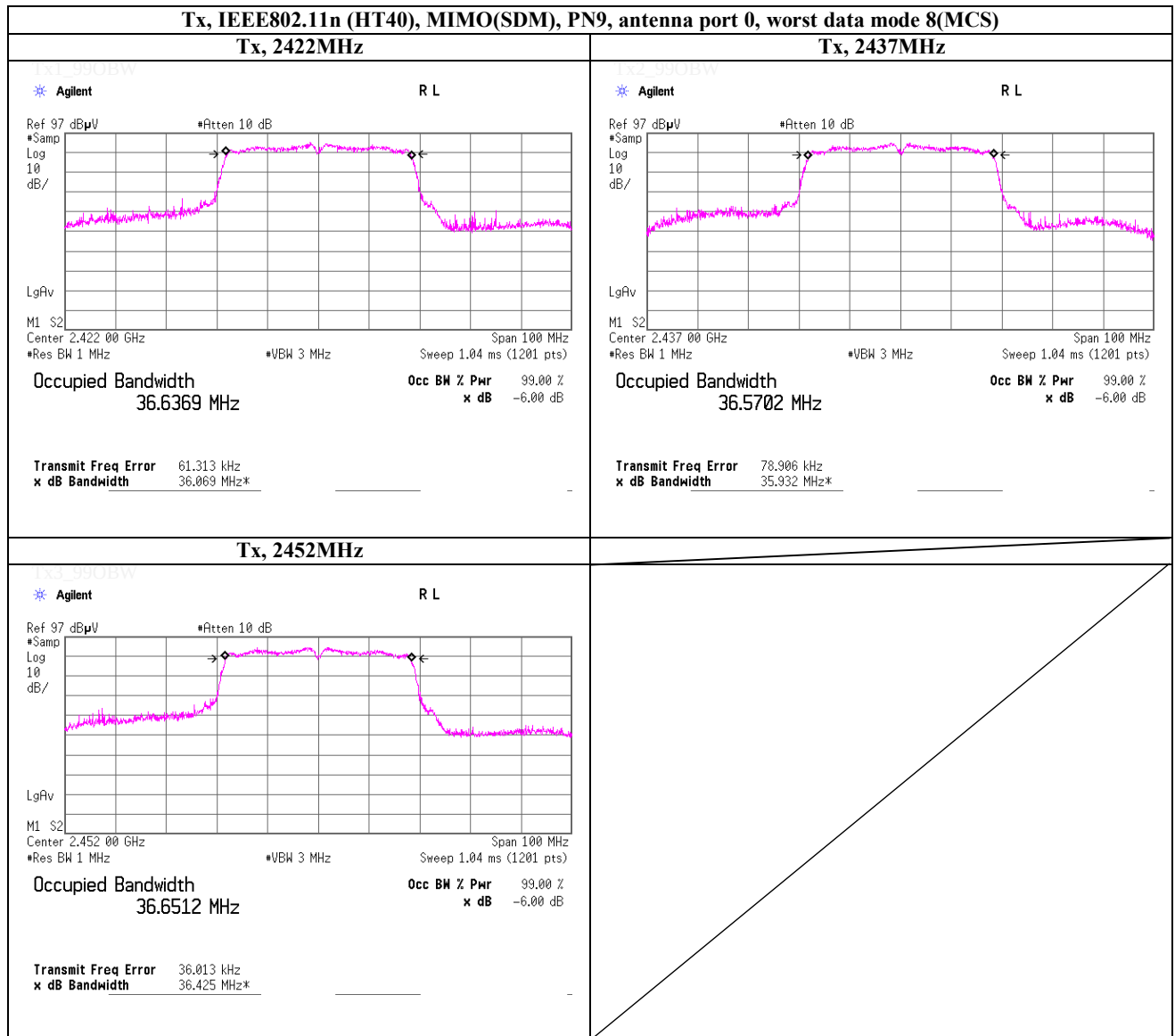
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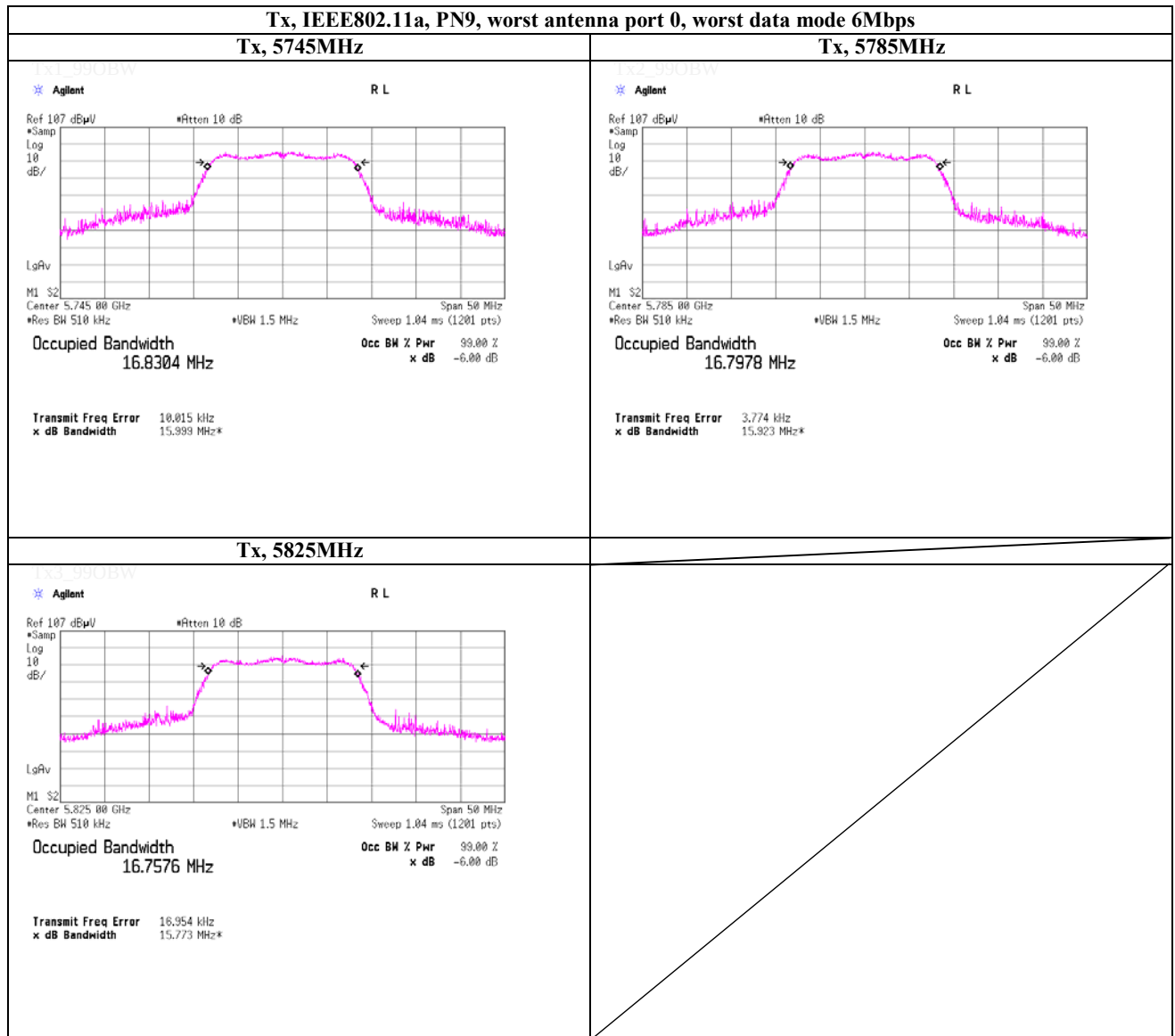
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 Date November 20, 2013
 Temperature / Humidity 22deg.C , 33%RH
 Engineer Akio Hayashi

99% Occupied Bandwidth



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Shonan EMC Lab.

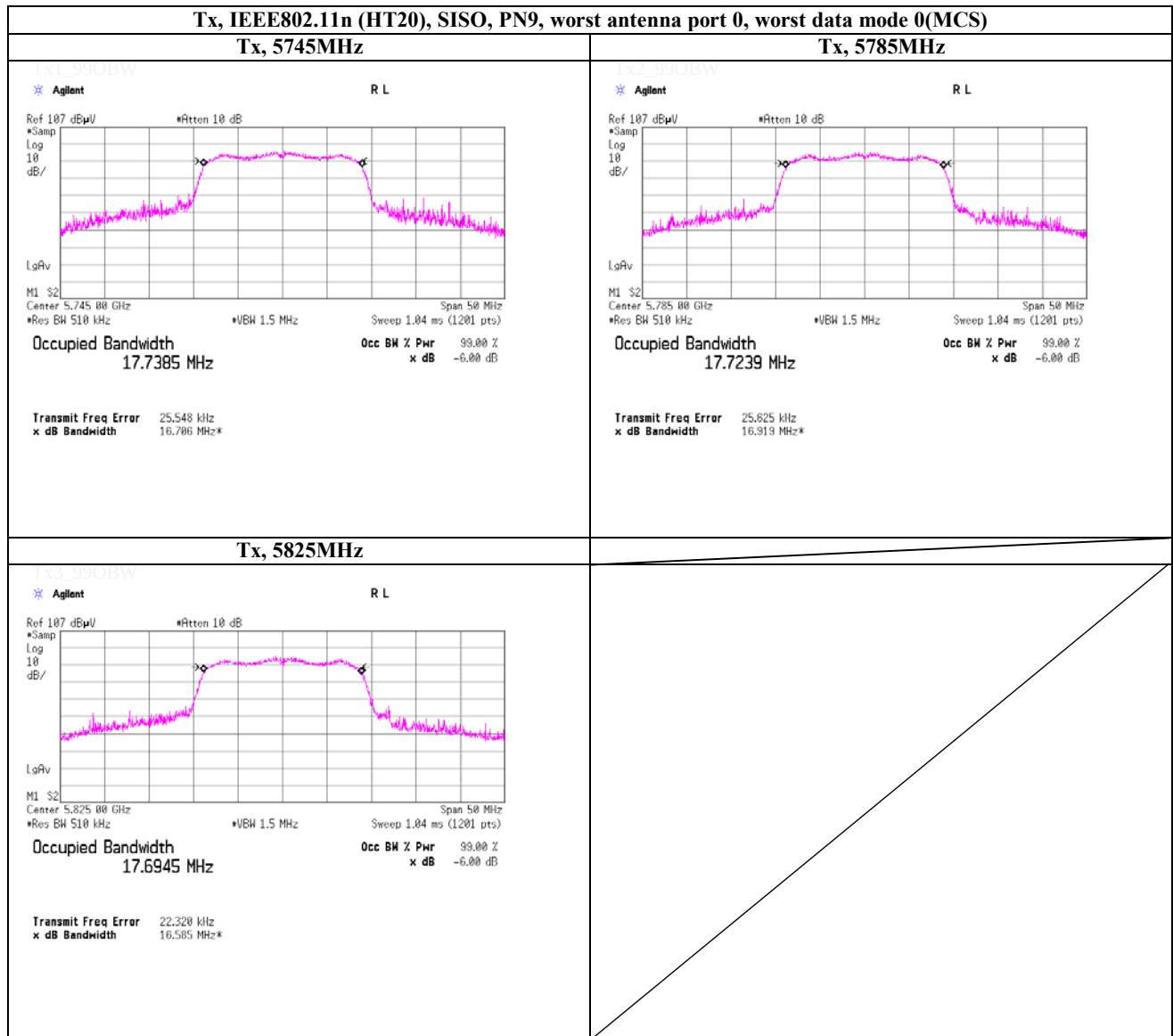
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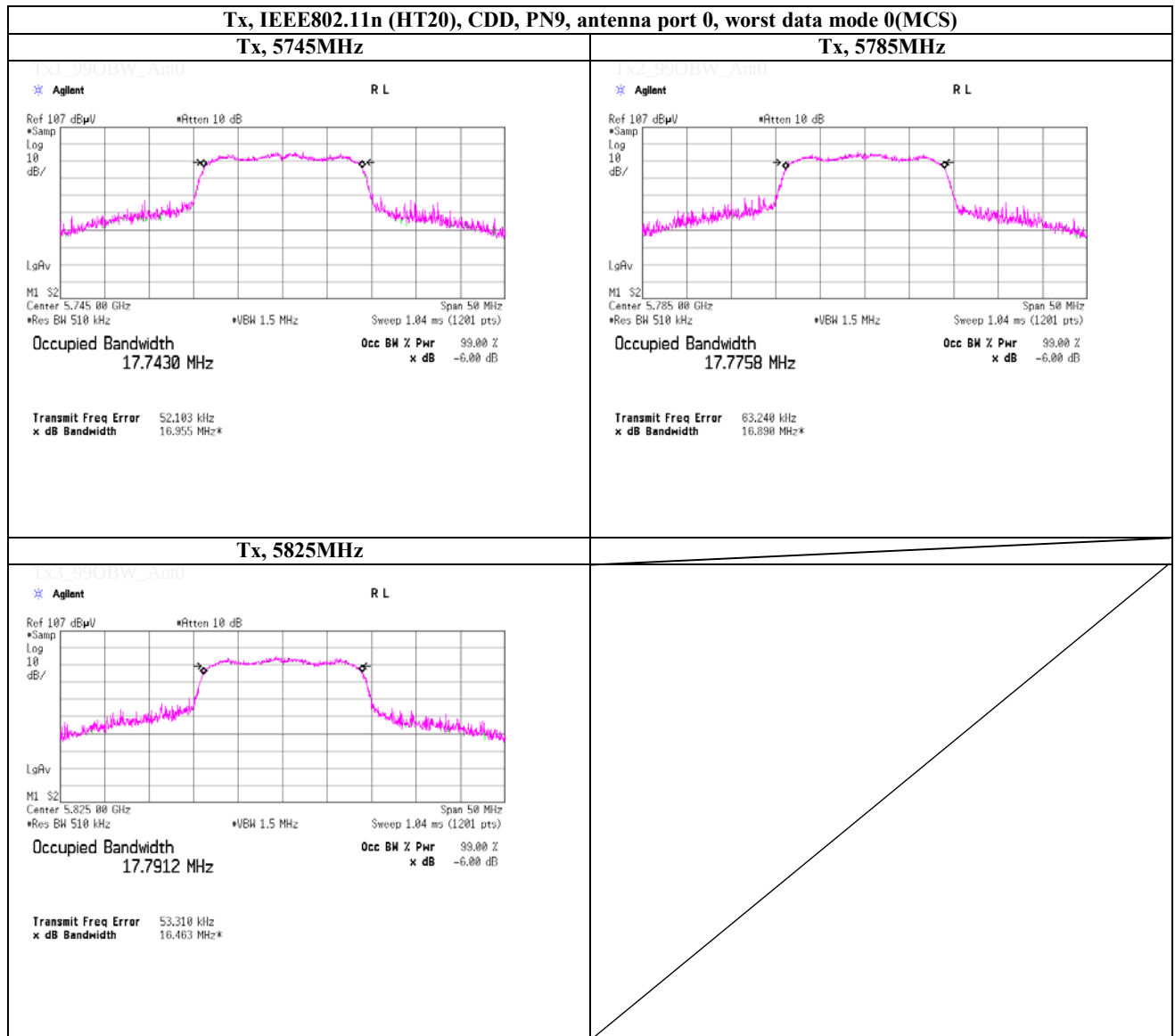
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

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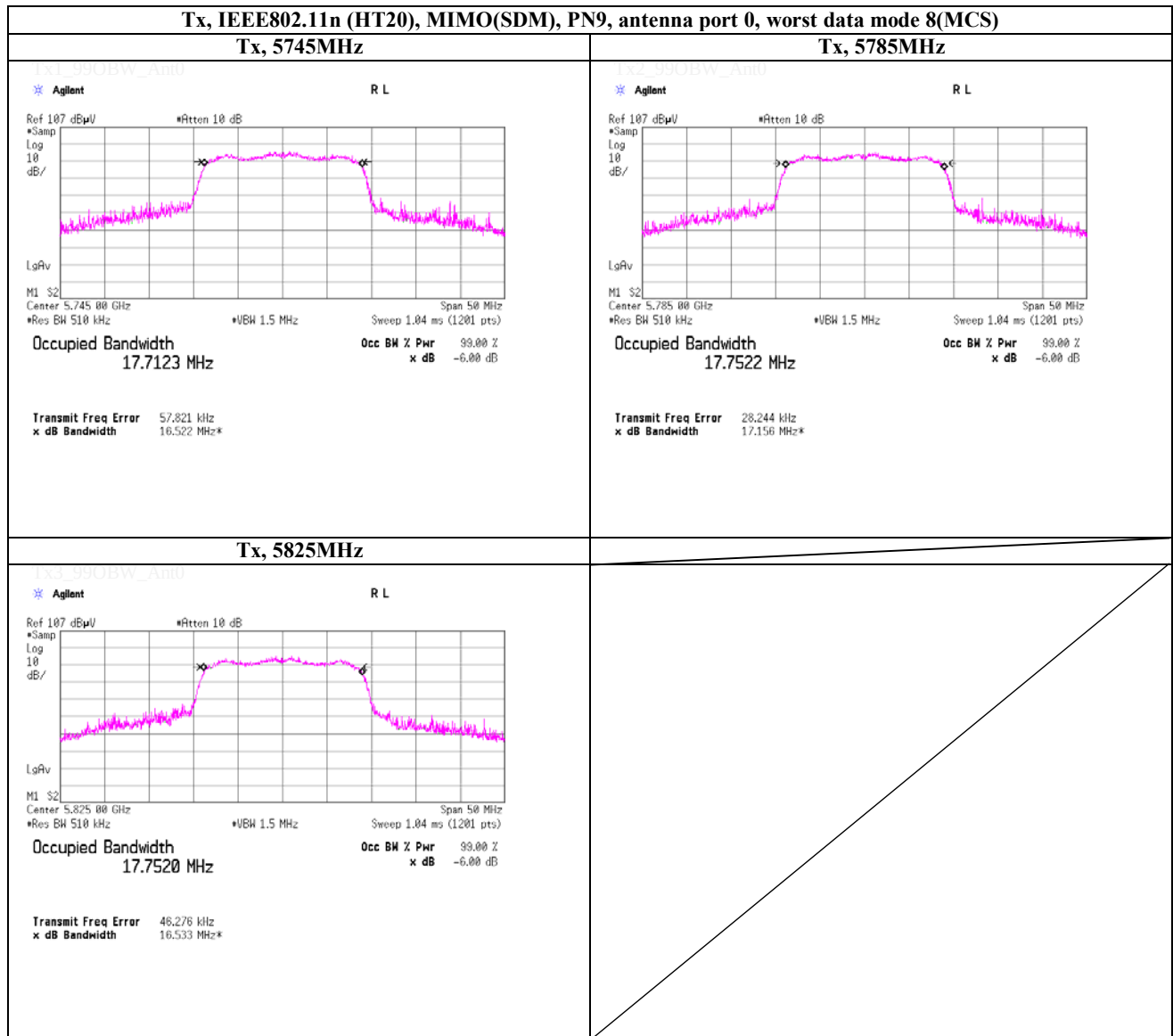
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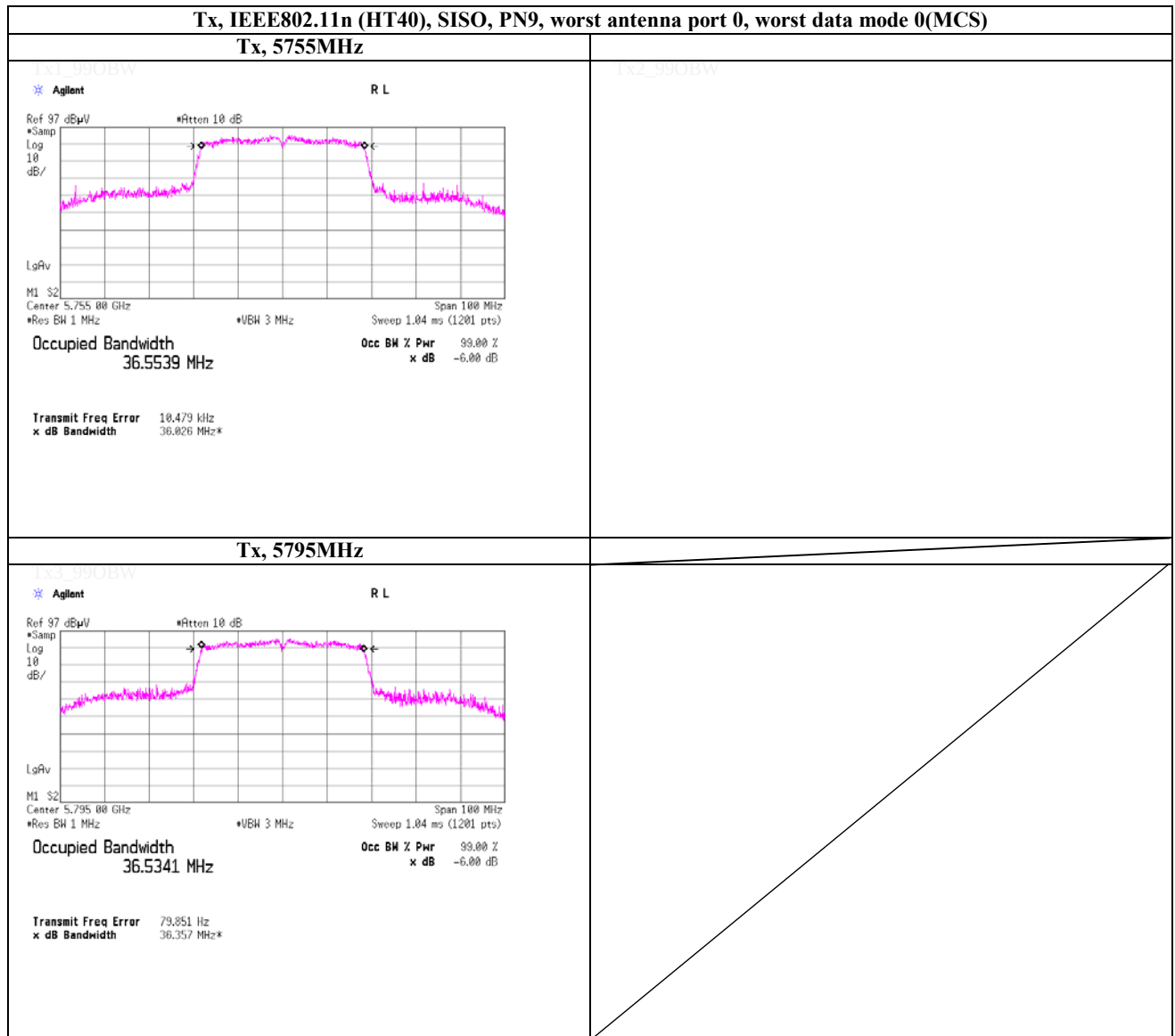
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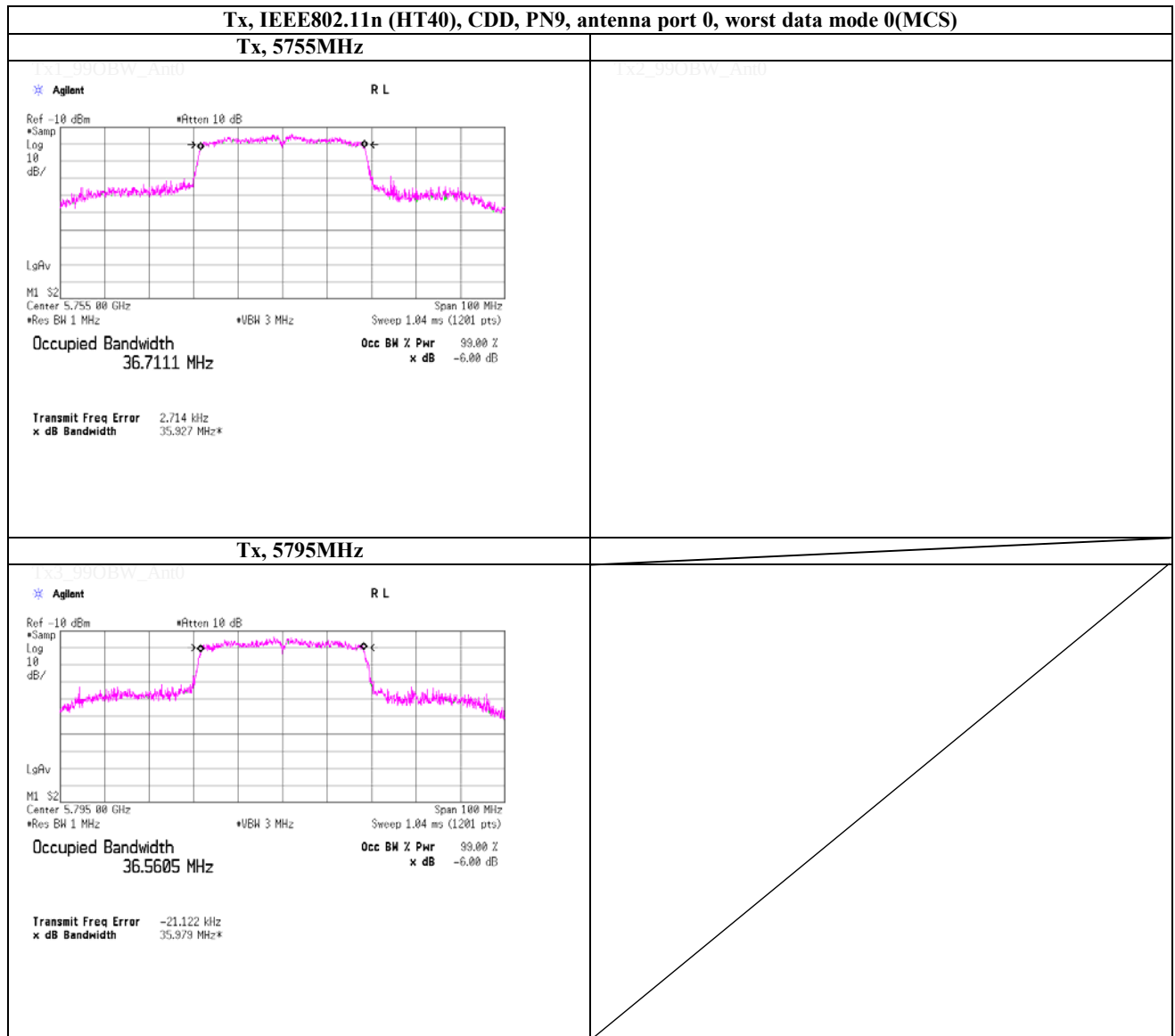
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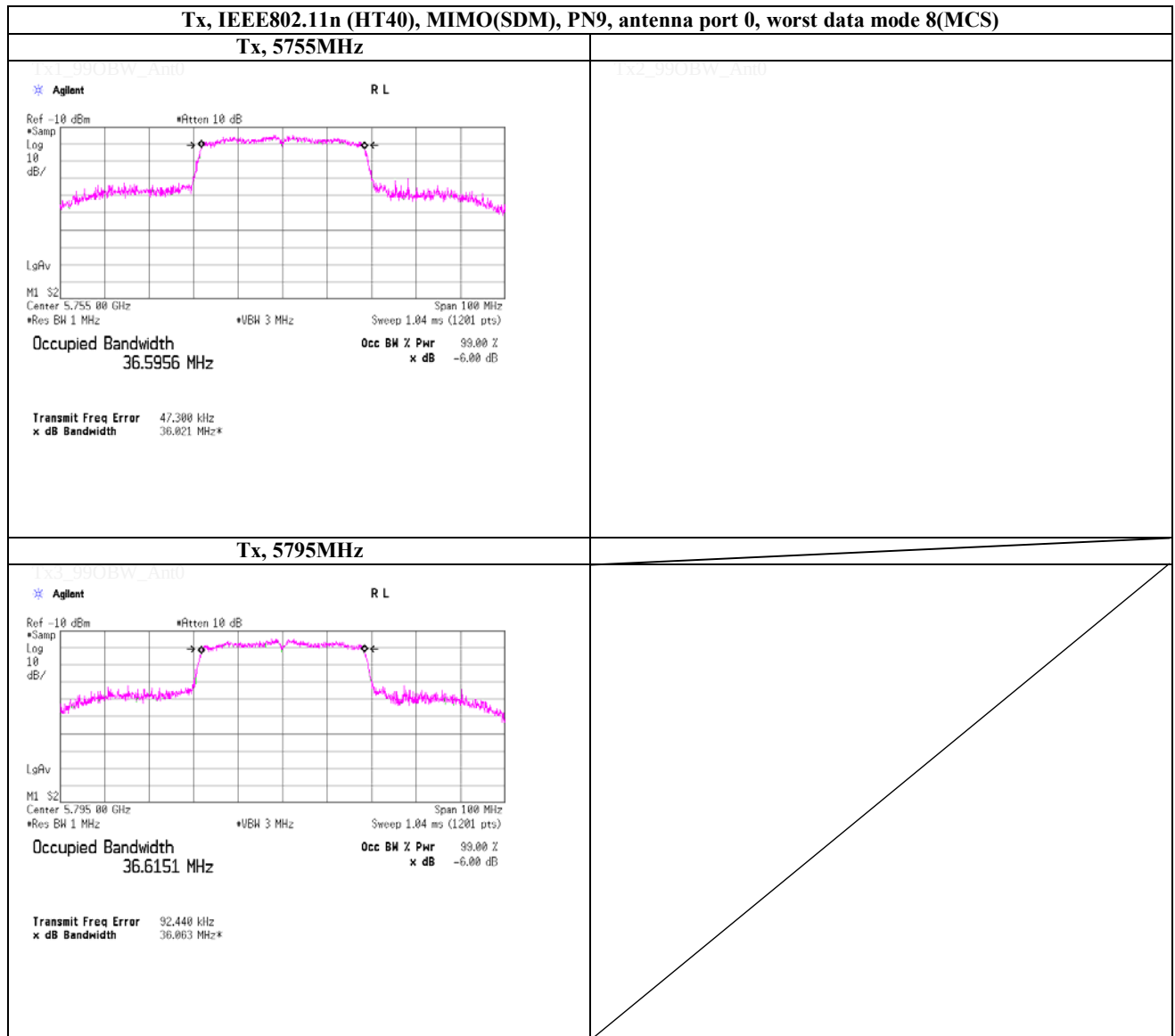
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APPENDIX 2

Test Instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
SSA-02	Spectrum Analyzer	Agilent	E4448A	MY48250106	AT,RE	2013/03/28 * 12
SCC-G11	Coaxial Cable	Suhner	SUCOFLEX 102	31595/2	AT	2013/03/16 * 12
SAT20-05	Attenuator	Weinschel Corp.	54A-20	Y5649	AT	2013/11/27 * 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
SOS-10	Humidity Indicator	A&D	AD-5681	4064561	AT	2013/02/27 * 12
SOS-09	Humidity Indicator	A&D	AD-5681	4061484	AT	2013/03/07 * 12
SAEC-03(NSA)	Semi-Anechoic Chamber	TDK	SAEC-03(NSA)	3	RE	2013/07/09 * 12
SAF-06	Pre Amplifier	TOYO Corporation	TPA0118-36	1440491	RE	2013/07/22 * 12
SCC-G03	Coaxial Cable	Suhner	SUCOFLEX 104A	46499/4A	RE	2013/04/11 * 12
SCC-G23	Coaxial Cable	Suhner	SUCOFLEX 104	297342/4	RE	2013/05/22 * 12
SHA-03	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-739	RE	2013/08/19 * 12
SOS-05	Humidity Indicator	A&D	AD-5681	4062518	RE	2013/02/27 * 12
SFL-02	Highpass Filter	MICRO-TRONICS	HPM50111	051	RE	2013/11/22 * 12
SAT10-06	Attenuator	Agilent	8493C-010	74865	RE,AT	2013/11/22 * 12
SJM-11	Measure	PROMART	SEN1935	-	RE,CE	-
COTS-SEMI-1	EMI Software	TSJ	TEPTO-DV(RE,CE,RFI,MF)	-	RE,CE	-
SAEC-02(NSA)	Semi-Anechoic Chamber	TDK	SAEC-02(NSA)	2	RE	2013/07/06 * 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	2013/05/22 * 12
SHA-02	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-726	RE	2013/08/12 * 12
SOS-03	Humidity Indicator	A&D	AD-5681	4063325	RE	2013/02/27 * 12
SJM-02	Measure	KOMELON	KMC-36	-	RE	-
SOS-02	Humidity Indicator	A&D	AD-5681	4063343	AT	2013/03/07 * 12
KSA-08	Spectrum Analyzer	Agilent	E4446A	MY46180525	AT,RE	2013/03/04 * 12
SSA-01	Spectrum Analyzer	Agilent	N9010A-526	MY48031482	RE	2013/04/09 * 12
SSA-03	Spectrum Analyzer	Agilent	E4448A	MY48250152	RE	2013/01/08 * 12
SFL-03	Highpass Filter	MICRO-TRONICS	HPM50112	028	RE	2013/11/22 * 12
SAF-04	Pre Amplifier	TOYO Corporation	TPA0118-36	1440489	RE	2013/03/19 * 12
SFL-18	Highpass Filter	MICRO-TRONICS	HPM50111	119	RE	2013/11/22 * 12
SAF-05	Pre Amplifier	TOYO Corporation	TPA0118-36	1440490	RE	2013/11/22 * 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 conducted tests

APPENDIX 2

Test Instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
SHA-04	Horn Antenna	ETS LINDGREN	3160-09	LM3640	RE	2013/03/14 * 12
SAF-08	Pre Amplifier	TOYO Corporation	HAP18-26W	00000019	RE	2013/03/19 * 12
SCC-G15	Coaxial Cable	Suhner	SUCOFLEX 102	32703/2	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
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
SAF-03	Pre Amplifier	SONOMA	310N	290213	RE	2013/02/12 * 12
SAT6-06	Attenuator	JFW	50HF-006N	-	RE	2013/02/12 * 12
SBA-03	Biconical Antenna	Schwarzbeck	BBA9106	91032666	RE	2013/10/26 * 12
SCC-C1/C2/C3/C4/C5/C10/SRSE-03	Coaxial Cable&RF Selector	Fujikura/Fujikura/Suhner/Suhner/Suhner/Suhner/TOYO	8D2W/12DSFA/141PE/141PE/141PE/141PE/NS4906	-/0901-271 (RF Selector)	RE	2013/04/03 * 12
SLA-03	Logperiodic Antenna	Schwarzbeck	UHALP9108A	UHALP9108-A 0901	RE	2013/10/26 * 12
STR-06	Test Receiver	Rohde & Schwarz	ESCI	101259	RE,CE	2013/02/27 * 12
SCC-C9/C10/SRSE-03	Coaxial Cable&RF Selector	Suhner/Suhner/TOYO	RG223U/141PE/NS4906	-/0901-271 (RF Selector)	CE	2013/04/03 * 12
SLS-05	LISN	Rohde & Schwarz	ENV216	100516	CE	2013/02/25 * 12
SAT3-05	Attenuator	JFW	50HF-003N	-	CE	2013/02/12 * 12
SOS-06	Humidity Indicator	A&D	AD-5681	4062118	CE	2013/03/07 * 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