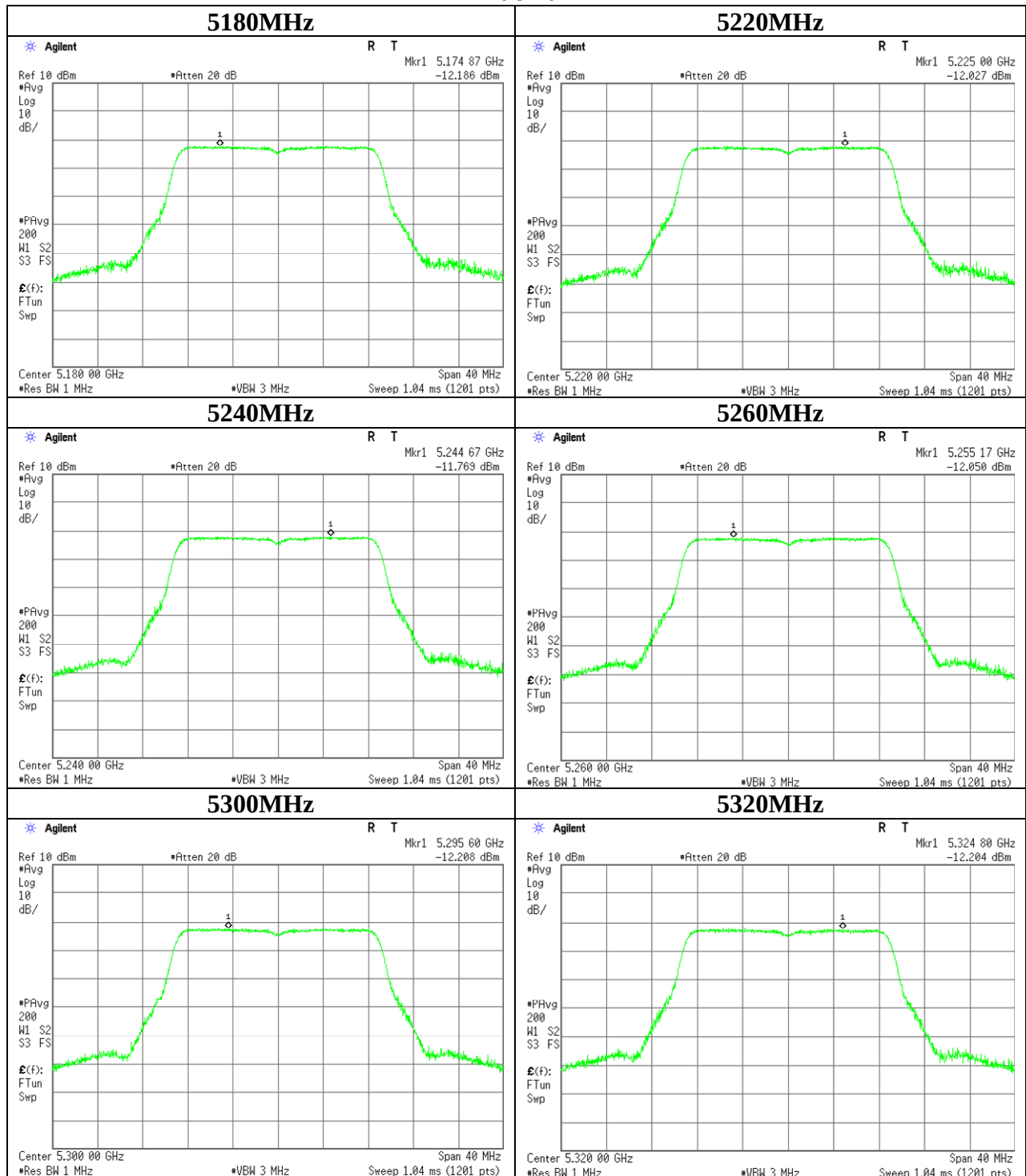


Maximum Power Spectral Density

11ac-20



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Ise EMC Lab.

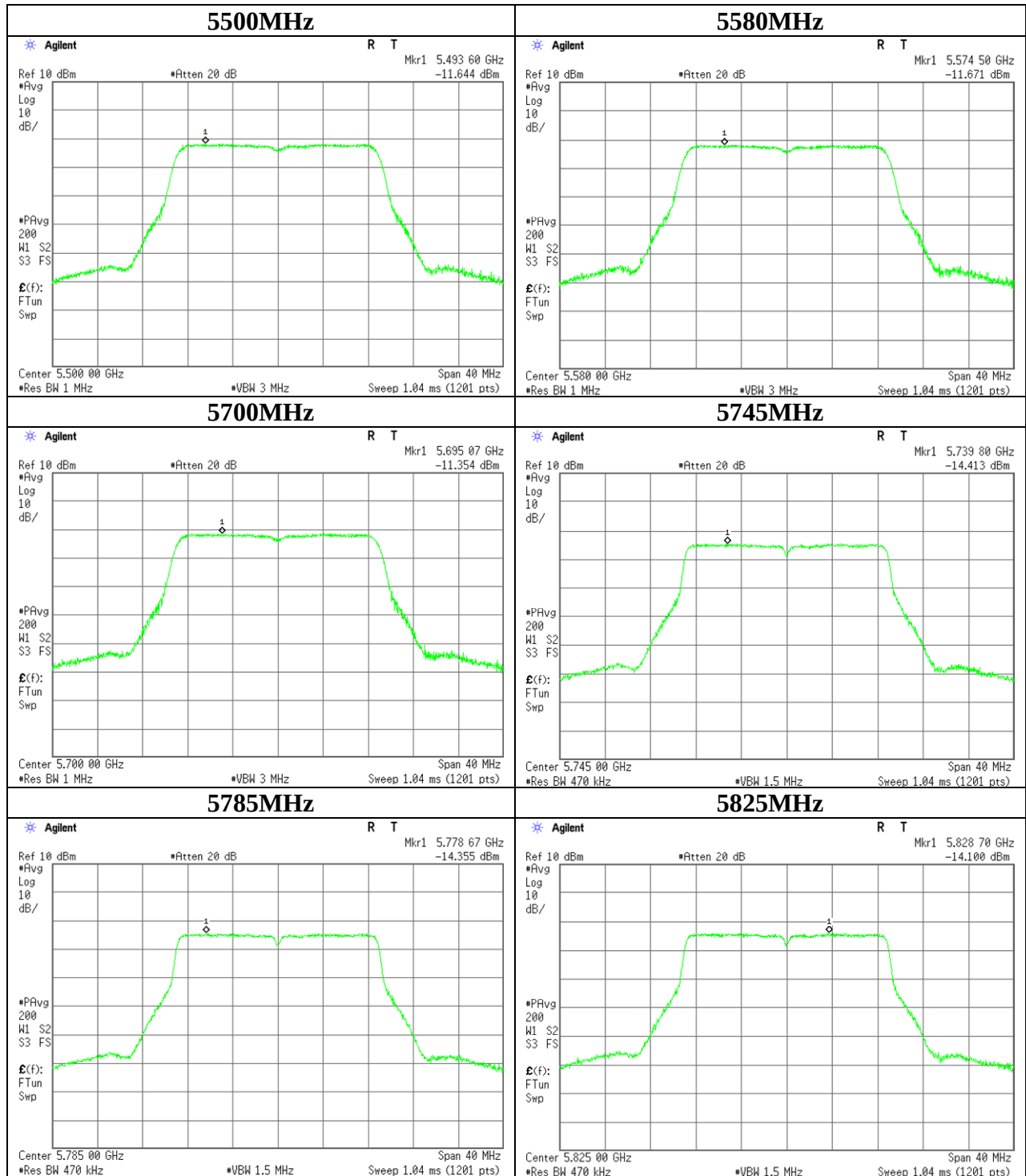
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

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Maximum Power Spectral Density

11ac-20



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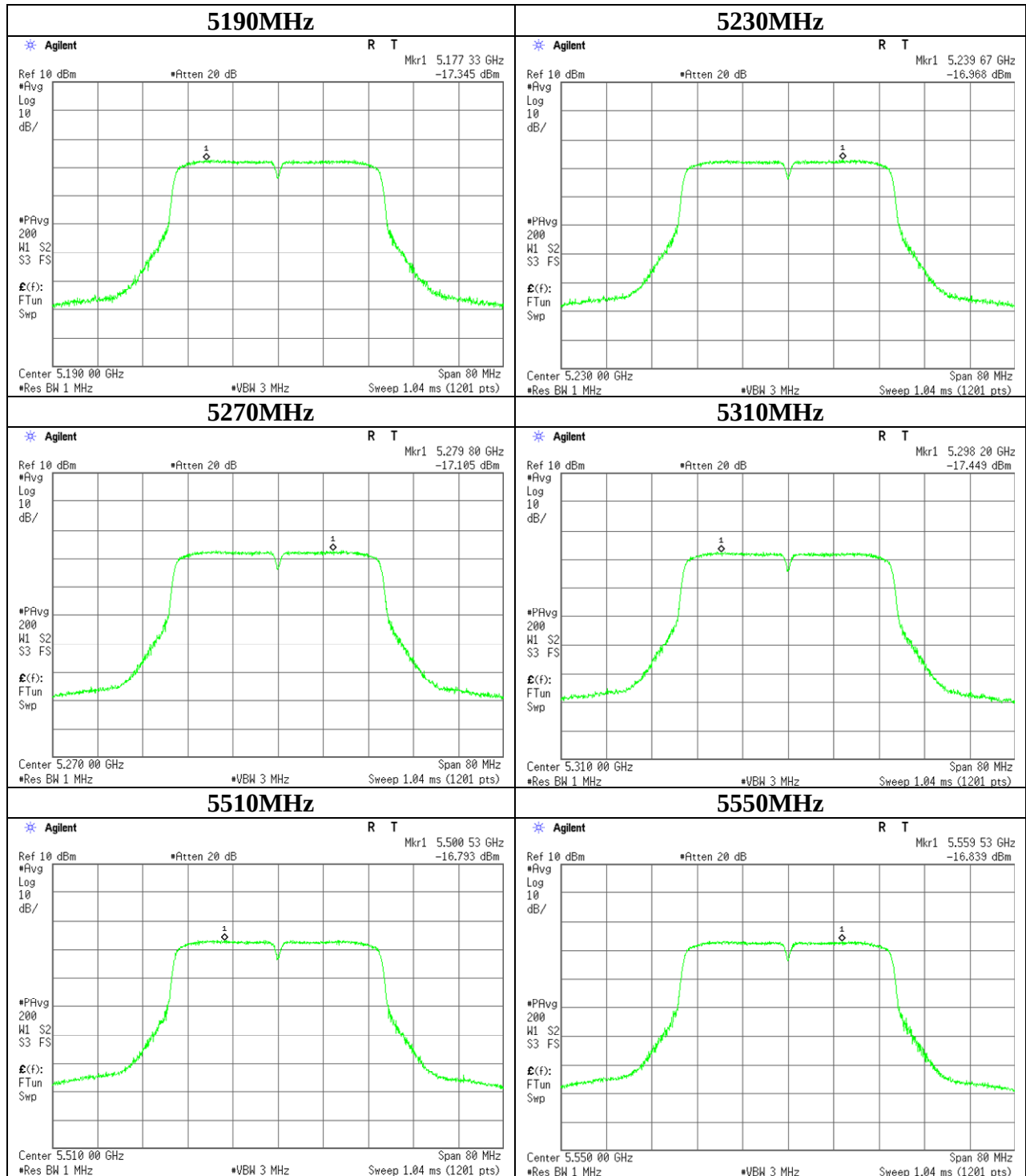
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

11n-40



UL Japan, Inc.

Ise EMC Lab.

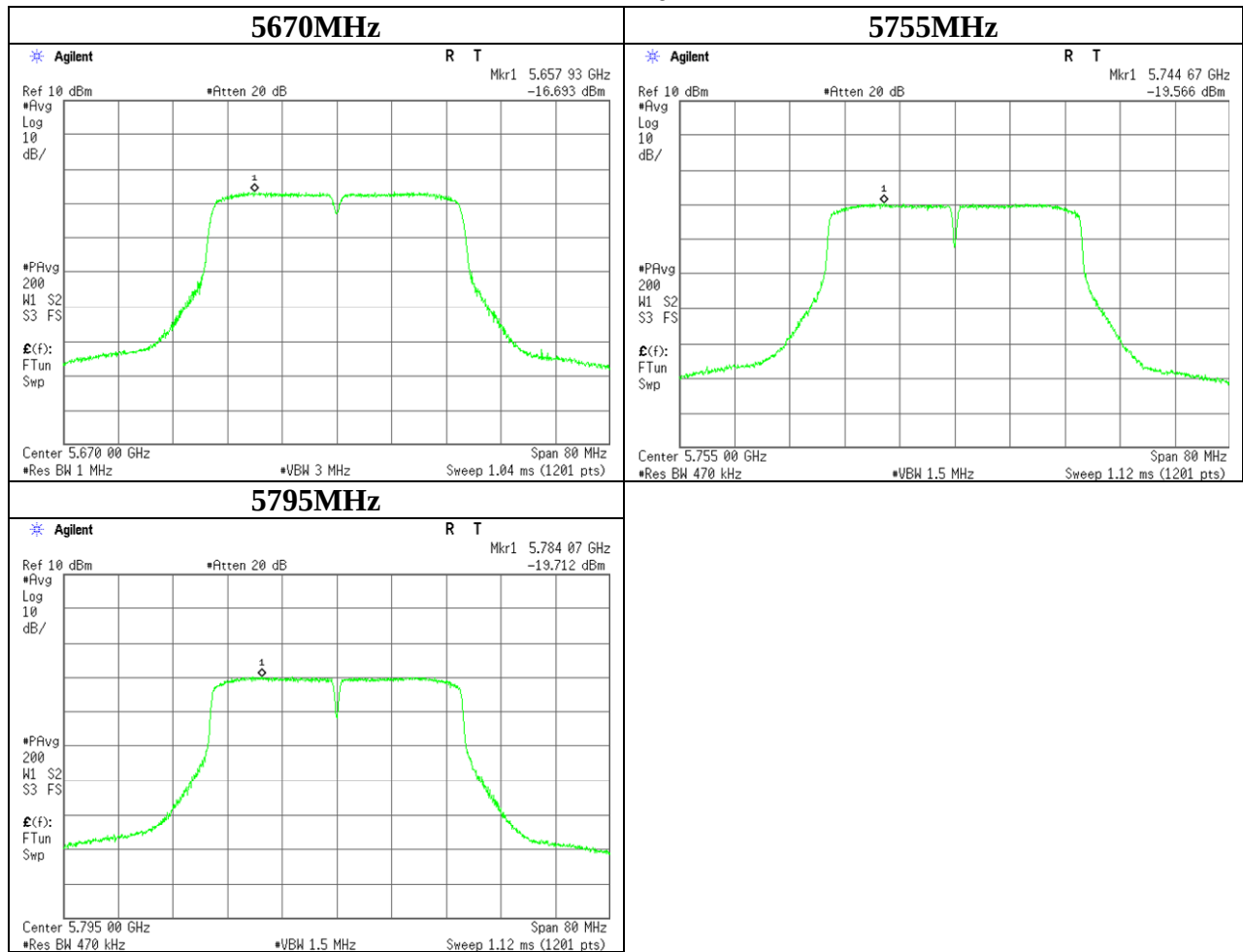
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

11n-40



UL Japan, Inc.

Ise EMC Lab.

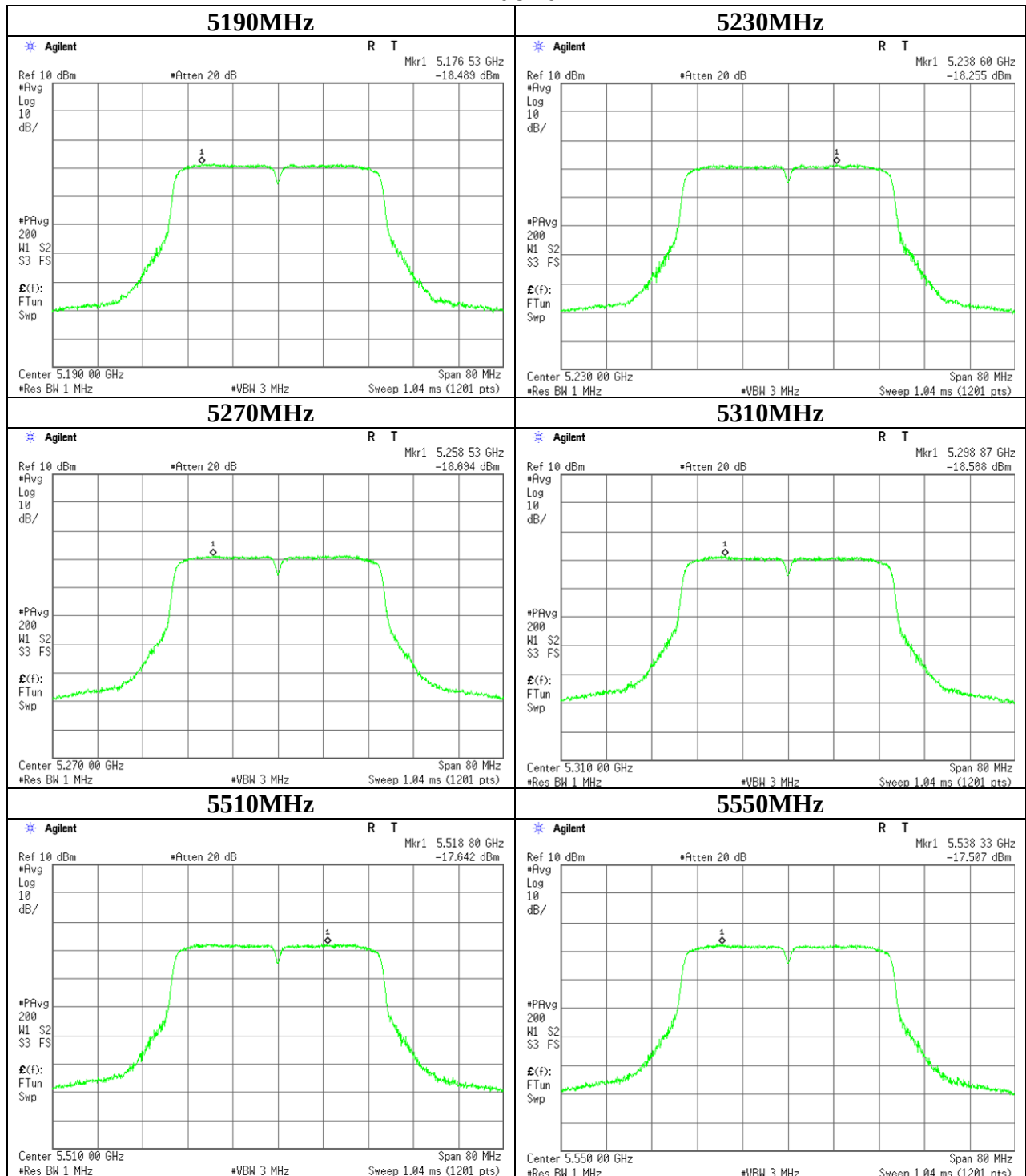
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Maximum Power Spectral Density

11ac-40



UL Japan, Inc.

Ise EMC Lab.

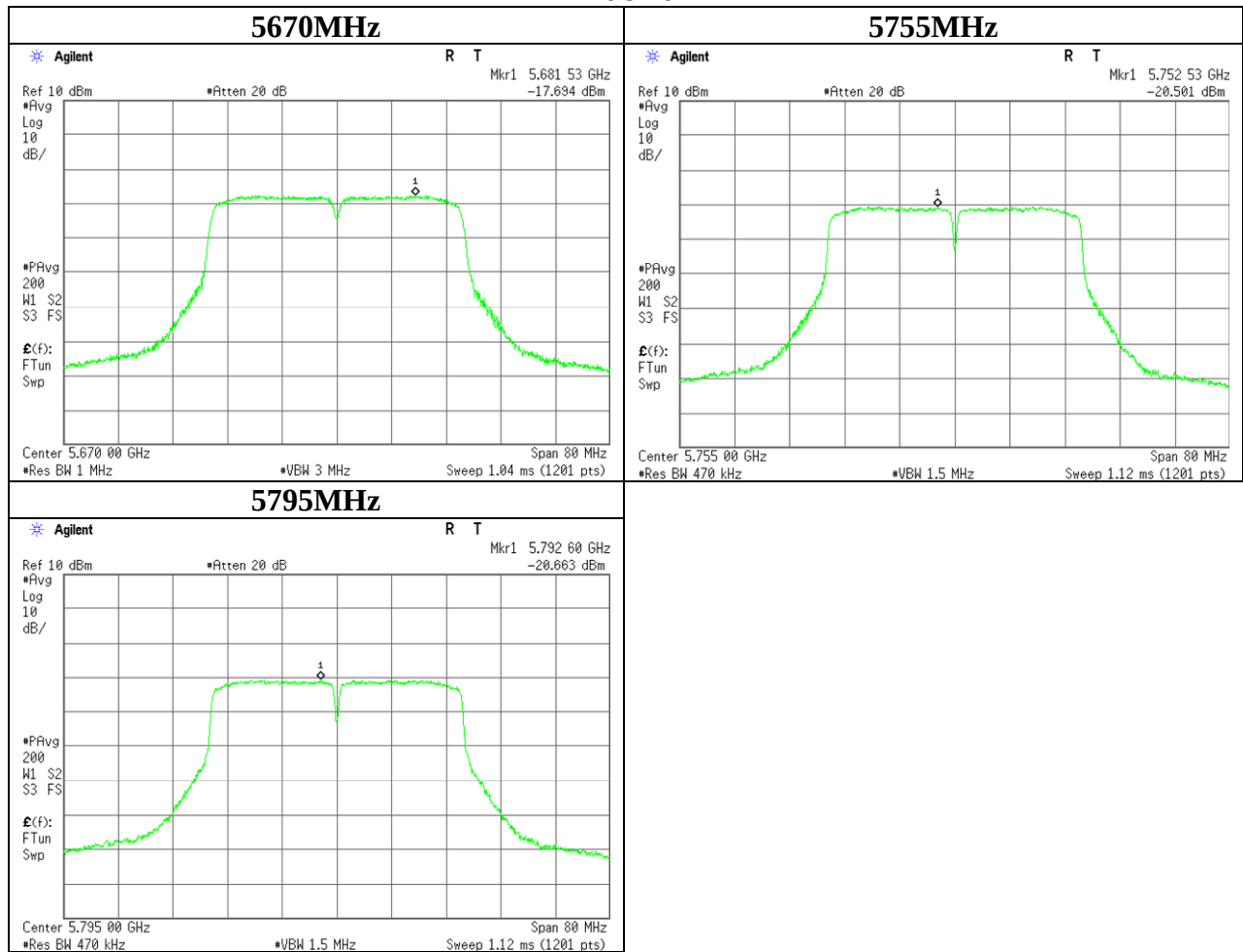
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Facsimile : +81 596 24 8124

Maximum Power Spectral Density

11ac-40



UL Japan, Inc.

Ise EMC Lab.

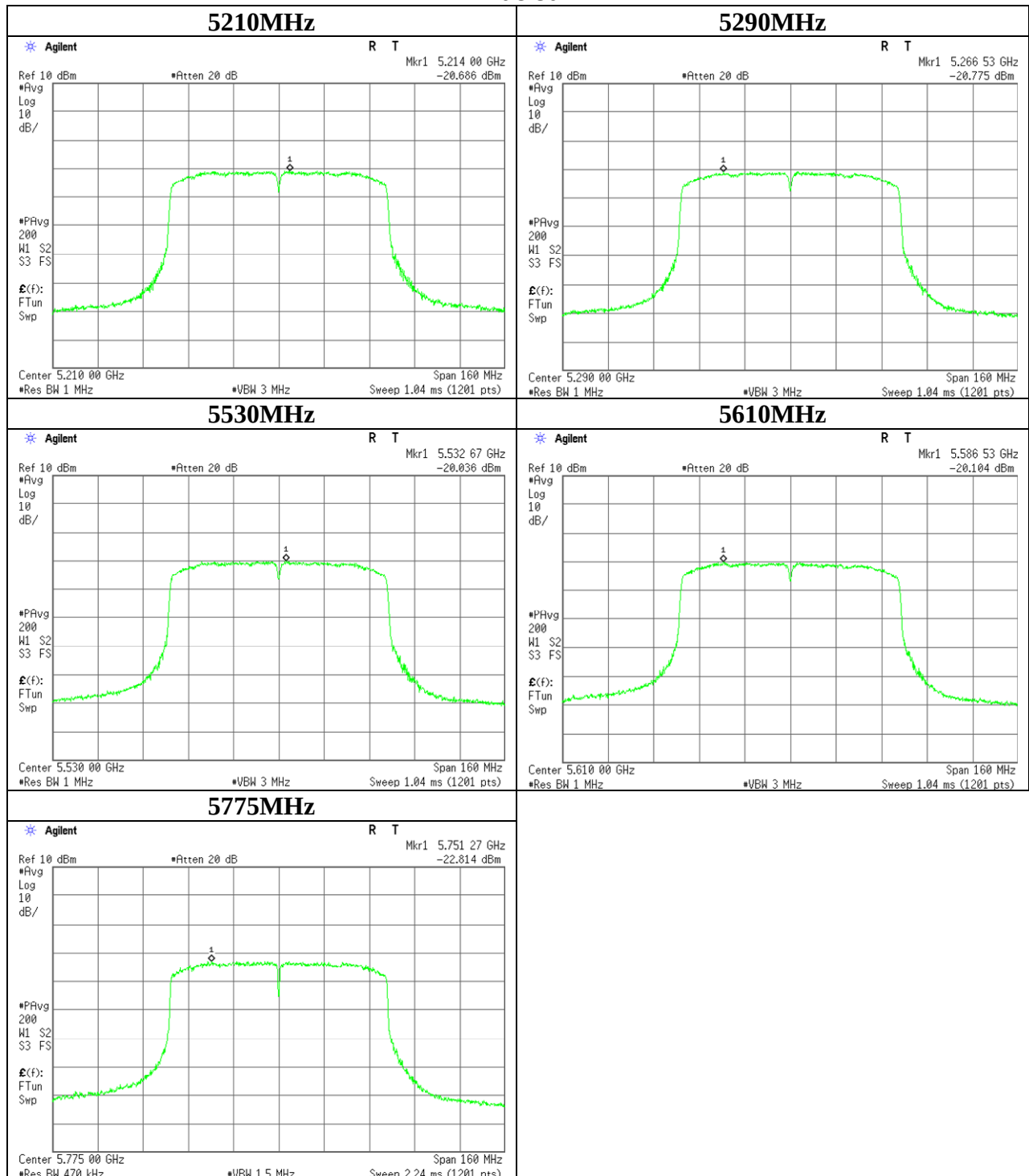
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Maximum Power Spectral Density

11ac-80



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Radiated Spurious Emission

Test place : Ise EMC Lab. No.4 Anechoic Chamber
Report No. : 10636726H
Date : 01/15/2015 01/17/2015 01/19/2015
Temperature/ Humidity : 24deg. C / 40% RH 24deg. C / 37% RH 24deg. C / 32% RH
Engineer : Kazuya Yoshioka Takumi Shimada Takumi Shimada
(1-10GHz) (10-18GHz) (18-40GHz)
Mode : 11a Tx 5180MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5150.000	PK	40.8	32.2	3.8	31.9	44.9	68.2	23.3	Bandedge	
Hori	10360.000	PK	45.7	39.8	-2.4	33.6	49.5	68.2	18.7	Outside	
Hori	15540.000	PK	43.6	39.4	-1.2	32.7	49.1	73.9	24.8	Inside	Floor Noise
Hori	20720.000	PK	45.0	38.0	-1.6	33.1	48.3	73.9	25.6	Inside	Floor Noise
Hori	5150.000	AV	32.3	32.2	3.8	31.9	36.4	53.9	17.5	Bandedge	
Hori	15540.000	AV	35.7	39.4	-1.2	32.7	41.2	53.9	12.7	Inside	Floor Noise
Hori	20720.000	AV	36.5	38.0	-1.6	33.1	39.8	53.9	14.1	Inside	Floor Noise
Vert	5150.000	PK	40.8	32.2	3.8	31.9	44.9	68.2	23.3	Bandedge	
Vert	10360.000	PK	44.4	39.8	-2.4	33.6	48.2	68.2	20.0	Outside	
Vert	15540.000	PK	44.2	39.4	-1.2	32.7	49.7	73.9	24.2	Inside	Floor Noise
Vert	20720.000	PK	45.0	38.0	-1.6	33.1	48.3	73.9	25.6	Inside	Floor Noise
Vert	5150.000	AV	32.5	32.2	3.8	31.9	36.6	53.9	17.3	Bandedge	
Vert	15540.000	AV	35.5	39.4	-1.2	32.7	41.0	53.9	12.9	Inside	Floor Noise
Vert	20720.000	AV	36.3	38.0	-1.6	33.1	39.6	53.9	14.3	Inside	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
 26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

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Radiated Spurious Emission

Test place : Ise EMC Lab. No.4 Anechoic Chamber
Report No. : 10636726H
Date : 01/15/2015 01/17/2015 01/19/2015 01/20/2015
Temperature/ Humidity : 24deg. C / 40% RH 24deg. C / 37% RH 24deg. C / 32% RH 23deg. C / 35% RH
Engineer : Kazuya Yoshioka Takumi Shimada Takumi Shimada Koji Yamamoto
: (1-10GHz) (10-18GHz) (18-40GHz) (Below 1GHz)
Mode : 11a Tx 5260MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	71.170	QP	33.3	6.3	7.8	32.1	15.3	40.0	24.7	Outside	
Hori	83.026	QP	33.8	6.9	7.9	32.1	16.5	40.0	23.5	Outside	
Hori	95.998	QP	43.0	9.3	8.1	32.1	28.3	43.5	15.2	Outside	
Hori	206.522	QP	25.0	16.7	9.2	31.9	19.0	43.5	24.5	Outside	
Hori	295.115	QP	24.3	19.5	9.9	31.9	21.8	46.0	24.2	Outside	
Hori	933.552	QP	23.1	25.3	13.5	31.0	30.9	46.0	15.1	Outside	
Hori	10520.000	PK	46.1	40.1	-2.4	33.6	50.2	68.2	18.0	Outside	
Hori	15780.000	PK	43.5	38.6	-1.1	32.8	48.2	73.9	25.7	Inside	
Hori	21040.000	PK	45.4	38.2	-1.6	33.3	48.7	73.9	25.2	Inside	
Hori	15780.000	AV	35.8	38.6	-1.1	32.8	40.5	53.9	13.4	Inside	
Hori	21040.000	AV	36.7	38.2	-1.6	33.3	40.0	53.9	13.9	Inside	
Vert	57.605	QP	32.3	8.4	7.6	32.1	16.2	40.0	23.8	Outside	
Vert	79.549	QP	37.1	6.3	7.9	32.1	19.2	40.0	20.8	Outside	
Vert	96.002	QP	37.5	9.3	8.1	32.1	22.8	43.5	20.7	Outside	
Vert	139.299	QP	27.5	14.3	8.6	32.0	18.4	43.5	25.1	Outside	
Vert	295.115	QP	22.9	19.5	9.9	31.9	20.4	46.0	25.6	Outside	
Vert	933.552	QP	23.0	25.3	13.5	31.0	30.8	46.0	15.2	Outside	
Vert	10520.000	PK	43.2	40.1	-2.4	33.6	47.3	68.2	20.9	Outside	
Vert	15780.000	PK	43.8	38.6	-1.1	32.8	48.5	73.9	25.4	Inside	
Vert	21040.000	PK	45.2	38.2	-1.6	33.3	48.5	73.9	25.4	Inside	
Vert	15780.000	AV	35.8	38.6	-1.1	32.8	40.5	53.9	13.4	Inside	
Vert	21040.000	AV	36.6	38.2	-1.6	33.3	39.9	53.9	14.0	Inside	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
 26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

Radiated Spurious Emission

Test place : Ise EMC Lab. No.4 Anechoic Chamber
Report No. : 10636726H
Date : 01/15/2015 01/17/2015 01/19/2015
Temperature/ Humidity : 24deg. C / 40% RH 24deg. C / 37% RH 24deg. C / 32% RH
Engineer : Kazuya Yoshioka Takumi Shimada Takumi Shimada
Mode : 11a Tx 5320MHz (1-10GHz) (10-18GHz) (18-40GHz)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5350.000	PK	45.8	32.3	3.8	32.0	49.9	68.2	18.3	Bandedge	
Hori	10640.000	PK	45.8	40.3	-2.4	33.7	50.0	73.9	23.9	Inside	
Hori	15960.000	PK	43.5	38.1	-1.2	32.8	47.6	73.9	26.3	Inside	Floor Noise
Hori	21280.000	PK	45.2	38.4	-1.5	33.2	48.9	73.9	25.0	Inside	Floor Noise
Hori	5350.000	AV	33.0	32.3	3.8	32.0	37.1	53.9	16.8	Bandedge	
Hori	10640.000	AV	39.5	40.3	-2.4	33.7	43.7	53.9	10.2	Inside	
Hori	15960.000	AV	35.5	38.1	-1.2	32.8	39.6	53.9	14.3	Inside	Floor Noise
Hori	21280.000	AV	36.9	38.4	-1.5	33.2	40.6	53.9	13.3	Inside	Floor Noise
Vert	5350.000	PK	45.2	32.3	3.8	32.0	49.3	68.2	18.9	Bandedge	
Vert	10640.000	PK	44.4	40.3	-2.4	33.7	48.6	73.9	25.3	Inside	
Vert	15960.000	PK	44.2	38.1	-1.2	32.8	48.3	73.9	25.6	Inside	Floor Noise
Vert	21280.000	PK	45.6	38.4	-1.5	33.2	49.3	73.9	24.6	Inside	Floor Noise
Vert	5350.000	AV	34.0	32.3	3.8	32.0	38.1	53.9	15.8	Bandedge	
Vert	10640.000	AV	36.4	40.3	-2.4	33.7	40.6	53.9	13.3	Inside	
Vert	15960.000	AV	35.6	38.1	-1.2	32.8	39.7	53.9	14.2	Inside	Floor Noise
Vert	21280.000	AV	37.0	38.4	-1.5	33.2	40.7	53.9	13.2	Inside	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz $20\log(3.0\text{m}/1.0\text{m})= 9.5\text{dB}$
 26.5GHz-40GHz $20\log(3.0\text{m}/0.5\text{m})=15.6\text{dB}$

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Radiated Spurious Emission

Test place : Ise EMC Lab. No.4 Anechoic Chamber
Report No. : 10636726H
Date : 01/15/2015
Temperature/ Humidity : 24deg. C / 40% RH
Engineer : Kazuya Yoshioka
Mode : 11n-20 Tx 5180MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5150.000	PK	40.7	32.2	3.8	31.9	44.8	68.2	23.4	Bandedge	
Hori	5150.000	AV	32.3	32.2	3.8	31.9	36.4	53.9	17.5	Bandedge	
Vert	5150.000	PK	40.7	32.2	3.8	31.9	44.8	68.2	23.4	Bandedge	
Vert	5150.000	AV	32.4	32.2	3.8	31.9	36.5	53.9	17.4	Bandedge	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz $20\log(3.0\text{m}/1.0\text{m})= 9.5\text{dB}$
 26.5GHz-40GHz $20\log(3.0\text{m}/0.5\text{m})=15.6\text{dB}$

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Radiated Spurious Emission

Test place Ise EMC Lab. No.4 Anechoic Chamber
Report No. 10636726H
Date 01/15/2015
Temperature/ Humidity 24deg. C / 40% RH
Engineer Kazuya Yoshioka
Mode 11n-20 Tx 5320MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5350.000	PK	41.0	32.3	3.8	32.0	45.1	68.2	23.1	Bandedge	
Hori	5350.000	AV	32.6	32.3	3.8	32.0	36.7	53.9	17.2	Bandedge	
Vert	5350.000	PK	43.0	32.3	3.8	32.0	47.1	68.2	21.1	Bandedge	
Vert	5350.000	AV	32.2	32.3	3.8	32.0	36.3	53.9	17.6	Bandedge	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz $20\log(3.0\text{m}/1.0\text{m})= 9.5\text{dB}$
 26.5GHz-40GHz $20\log(3.0\text{m}/0.5\text{m})=15.6\text{dB}$

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Radiated Spurious Emission

Test place	Ise EMC Lab. No.4 Anechoic Chamber		
Report No.	10636726H		
Date	01/15/2015	01/17/2015	01/19/2015
Temperature/ Humidity	24deg. C / 40% RH	24deg. C / 37% RH	24deg. C / 32% RH
Engineer	Kazuya Yoshioka	Takumi Shimada	Takumi Shimada
	(1-10GHz)	(10-18GHz)	(18-40GHz)
Mode	11a Tx 5500MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5460.000	PK	40.1	32.4	3.9	32.0	44.4	73.9	29.5	Inside	
Hori	5470.000	PK	46.7	32.4	3.9	32.0	51.0	68.2	17.2	Outside	
Hori	11000.000	PK	49.8	40.9	-2.4	33.8	54.5	73.9	19.4	Inside	
Hori	16500.000	PK	44.1	39.1	-0.9	33.0	49.3	68.2	18.9	Outside	Floor Noise
Hori	22000.000	PK	46.5	38.9	-1.1	32.9	51.4	68.2	16.8	Outside	Floor Noise
Hori	5460.000	AV	32.7	32.4	3.9	32.0	37.0	53.9	16.9	Inside	
Hori	11000.000	AV	40.5	40.9	-2.4	33.8	45.2	53.9	8.7	Inside	
Vert	5460.000	PK	40.9	32.4	3.9	32.0	45.2	73.9	28.7	Inside	
Vert	5470.000	PK	46.0	32.4	3.9	32.0	50.3	68.2	17.9	Outside	
Vert	11000.000	PK	44.2	40.9	-2.4	33.8	48.9	73.9	25.0	Inside	
Vert	16500.000	PK	43.8	39.1	-0.9	33.0	49.0	68.2	19.2	Outside	Floor Noise
Vert	22000.000	PK	46.4	38.9	-1.1	32.9	51.3	68.2	16.9	Outside	Floor Noise
Vert	5460.000	AV	32.8	32.4	3.9	32.0	37.1	53.9	16.8	Inside	
Vert	11000.000	AV	36.5	40.9	-2.4	33.8	41.2	53.9	12.7	Inside	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
 26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

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Radiated Spurious Emission

Test place	Ise EMC Lab. No.4 Anechoic Chamber		
Report No.	10636726H		
Date	01/15/2015	01/17/2015	01/19/2015
Temperature/ Humidity	24deg. C / 40% RH	24deg. C / 37% RH	24deg. C / 32% RH
Engineer	Kazuya Yoshioka	Takumi Shimada	Takumi Shimada
	(1-10GHz)	(10-18GHz)	(18-40GHz)
Mode	11a Tx 5580MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	11160.000	PK	46.3	40.8	-2.3	33.7	51.1	73.9	22.8	Inside	
Hori	16740.000	PK	43.9	39.6	-0.9	33.0	49.6	68.2	18.6	Outside	Floor Noise
Hori	22320.000	PK	45.6	39.0	-1.1	32.6	50.9	73.9	23.0	Inside	Floor Noise
Hori	11160.000	AV	37.2	40.8	-2.3	33.7	42.0	53.9	11.9	Inside	Floor Noise
Hori	22320.000	AV	37.6	39.0	-1.1	32.6	42.9	53.9	11.0	Inside	Floor Noise
Vert	11160.000	PK	47.7	40.8	-2.3	33.7	52.5	73.9	21.4	Inside	
Vert	16740.000	PK	43.5	39.6	-0.9	33.0	49.2	68.2	19.0	Outside	Floor Noise
Vert	22320.000	PK	45.9	39.0	-1.1	32.6	51.2	73.9	22.7	Inside	Floor Noise
Vert	11160.000	AV	38.5	40.8	-2.3	33.7	43.3	53.9	10.6	Inside	Floor Noise
Vert	22320.000	AV	37.5	39.0	-1.1	32.6	42.8	53.9	11.1	Inside	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
 26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

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Radiated Spurious Emission

Test place	Ise EMC Lab. No.4 Anechoic Chamber		
Report No.	10636726H		
Date	01/15/2015	01/17/2015	01/19/2015
Temperature/ Humidity	24deg. C / 40% RH	24deg. C / 37% RH	24deg. C / 32% RH
Engineer	Kazuya Yoshioka	Takumi Shimada	Takumi Shimada
	(1-10GHz)	(10-18GHz)	(18-40GHz)
Mode	11a Tx 5700MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5725.000	PK	48.2	32.9	4.0	32.0	53.1	68.2	15.1	Outside	
Hori	11400.000	PK	47.3	40.7	-2.2	33.7	52.1	73.9	21.8	Inside	
Hori	17100.000	PK	45.0	40.7	-0.7	33.1	51.9	68.2	16.3	Outside	Floor Noise
Hori	22800.000	PK	45.4	39.2	-1.0	32.2	51.4	73.9	22.5	Inside	Floor Noise
Hori	11400.000	AV	39.2	40.7	-2.2	33.7	44.0	53.9	9.9	Inside	
Hori	22800.000	AV	37.0	39.2	-1.0	32.2	43.0	53.9	10.9	Inside	Floor Noise
Vert	5725.000	PK	51.7	32.9	4.0	32.0	56.6	68.2	11.6	Outside	
Vert	11400.000	PK	47.0	40.7	-2.2	33.7	51.8	73.9	22.1	Inside	
Vert	17100.000	PK	44.8	40.7	-0.7	33.1	51.7	68.2	16.5	Outside	Floor Noise
Vert	22800.000	PK	45.7	39.2	-1.0	32.2	51.7	73.9	22.2	Inside	Floor Noise
Vert	11400.000	AV	38.6	40.7	-2.2	33.7	43.4	53.9	10.5	Inside	
Vert	22800.000	AV	37.0	39.2	-1.0	32.2	43.0	53.9	10.9	Inside	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
 26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

UL Japan, Inc.

Ise EMC Lab.

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Facsimile : +81 596 24 8124

Radiated Spurious Emission

Test place : Ise EMC Lab. No.4 Anechoic Chamber
Report No. : 10636726H
Date : 01/15/2015
Temperature/ Humidity : 24deg. C / 40% RH
Engineer : Kazuya Yoshioka
Mode : 11n-20 Tx 5500MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5460.000	PK	41.2	32.4	3.9	32.0	45.5	73.9	28.4	Inside	
Hori	5470.000	PK	43.8	32.4	3.9	32.0	48.1	68.2	20.1	Outside	
Hori	5460.000	AV	32.4	32.4	3.9	32.0	36.7	53.9	17.2	Inside	
Vert	5460.000	PK	41.6	32.4	3.9	32.0	45.9	73.9	28.0	Inside	
Vert	5470.000	PK	50.9	32.4	3.9	32.0	55.2	68.2	13.0	Outside	
Vert	5460.000	AV	32.6	32.4	3.9	32.0	36.9	53.9	17.0	Inside	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
 26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

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Radiated Spurious Emission

Test place
Report No.
Date
Temperature/ Humidity
Engineer
Mode

Ise EMC Lab. No.4 Anechoic Chamber
10636726H
01/15/2015
24deg. C / 40% RH
Kazuya Yoshioka
11n-20 Tx 5700MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands
Hori	5725.000	PK	49.9	32.9	4.0	32.0	54.8	68.2	13.4	Outside
Vert	5725.000	PK	50.8	32.9	4.0	32.0	55.7	68.2	12.5	Outside

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz $20\log(3.0\text{m}/1.0\text{m})= 9.5\text{dB}$
 26.5GHz-40GHz $20\log(3.0\text{m}/0.5\text{m})=15.6\text{dB}$

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Radiated Spurious Emission

Test place : Ise EMC Lab. No.4 Anechoic Chamber
Report No. : 10636726H
Date : 01/15/2015 01/17/2015 01/19/2015
Temperature/ Humidity : 24deg. C / 40% RH 24deg. C / 37% RH 24deg. C / 32% RH
Engineer : Kazuya Yoshioka Takumi Shimada Takumi Shimada
Mode : (1-10GHz) (10-18GHz) (18-40GHz)
11a Tx 5745MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5715.000	PK	43.9	32.8	4.0	32.0	48.7	68.2	19.5	Outside	
Hori	5725.000	PK	53.9	32.9	4.0	32.0	58.8	68.2	9.4	Outside	
Hori	11490.000	PK	46.1	40.7	-2.2	33.7	50.9	73.9	23.0	Inside	
Hori	17235.000	PK	45.0	41.5	-0.6	33.1	52.8	68.2	15.4	Outside	Floor Noise
Hori	22980.000	PK	45.2	39.3	-1.0	32.1	51.4	73.9	22.5	Inside	Floor Noise
Hori	11490.000	AV	38.5	40.7	-2.2	33.7	43.3	53.9	10.6	Inside	
Hori	22980.000	AV	37.2	39.3	-1.0	32.1	43.4	53.9	10.5	Inside	Floor Noise
Vert	5715.000	PK	47.8	32.8	4.0	32.0	52.6	68.2	15.6	Outside	
Vert	5725.000	PK	54.3	32.9	4.0	32.0	59.2	68.2	9.0	Outside	
Vert	11490.000	PK	44.3	40.7	-2.2	33.7	49.1	73.9	24.8	Inside	
Vert	17235.000	PK	44.7	41.5	-0.6	33.1	52.5	68.2	15.7	Outside	Floor Noise
Vert	22980.000	PK	45.8	39.3	-1.0	32.1	52.0	73.9	21.9	Inside	Floor Noise
Vert	11490.000	AV	36.7	40.7	-2.2	33.7	41.5	53.9	12.4	Inside	
Vert	22980.000	AV	37.2	39.3	-1.0	32.1	43.4	53.9	10.5	Inside	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
 26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

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Radiated Spurious Emission

Test place : Ise EMC Lab. No.4 Anechoic Chamber
Report No. : 10636726H
Date : 01/15/2015 01/17/2015 01/19/2015
Temperature/ Humidity : 24deg. C / 40% RH 24deg. C / 37% RH 24deg. C / 32% RH
Engineer : Kazuya Yoshioka Takumi Shimada Takumi Shimada
(1-10GHz) (10-18GHz) (18-40GHz)
Mode : 11a Tx 5785MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	11570.000	PK	47.2	40.6	-2.2	33.7	51.9	73.9	22.0	Inside	
Hori	17355.000	PK	43.8	42.2	-0.6	33.0	52.4	68.2	15.8	Outside	Floor Noise
Hori	23140.000	PK	46.5	39.3	-1.0	32.0	52.8	68.2	15.4	Outside	Floor Noise
Hori	11570.000	AV	39.4	40.6	-2.2	33.7	44.1	53.9	9.8	Inside	
Vert	11570.000	PK	44.2	40.6	-2.2	33.7	48.9	73.9	25.0	Inside	
Vert	17355.000	PK	43.7	42.2	-0.6	33.0	52.3	68.2	15.9	Outside	Floor Noise
Vert	23140.000	PK	47.0	39.3	-1.0	32.0	53.3	68.2	14.9	Outside	Floor Noise
Vert	11570.000	AV	37.8	40.6	-2.2	33.7	42.5	53.9	11.4	Inside	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

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Radiated Spurious Emission

Test place : Ise EMC Lab. No.4 Anechoic Chamber
Report No. : 10636726H
Date : 01/15/2015 01/17/2015 01/19/2015
Temperature/ Humidity : 24deg. C / 40% RH 24deg. C / 37% RH 24deg. C / 32% RH
Engineer : Kazuya Yoshioka Takumi Shimada Takumi Shimada
(1-10GHz) (10-18GHz) (18-40GHz)
Mode : 11a Tx 5825MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5850.000	PK	46.5	33.1	4.0	32.1	51.5	68.2	16.7	Outside	
Hori	5860.000	PK	40.3	33.1	4.0	32.1	45.3	68.2	22.9	Outside	
Hori	11650.000	PK	47.3	40.5	-2.1	33.7	52.0	73.9	21.9	Inside	
Hori	17475.000	PK	43.8	42.8	-0.5	33.0	53.1	68.2	15.1	Outside	Floor Noise
Hori	23300.000	PK	46.5	39.3	-0.9	32.1	52.8	68.2	15.4	Outside	Floor Noise
Hori	11650.000	AV	39.1	40.5	-2.1	33.7	43.8	53.9	10.1	Inside	
Vert	5850.000	PK	51.1	33.1	4.0	32.1	56.1	68.2	12.1	Outside	
Vert	5860.000	PK	41.9	33.1	4.0	32.1	46.9	68.2	21.3	Outside	
Vert	11650.000	PK	45.0	40.5	-2.1	33.7	49.7	73.9	24.2	Inside	
Vert	17475.000	PK	44.0	42.8	-0.5	33.0	53.3	68.2	14.9	Outside	Floor Noise
Vert	23300.000	PK	45.9	39.3	-0.9	32.1	52.2	68.2	16.0	Outside	Floor Noise
Vert	11650.000	AV	37.8	40.5	-2.1	33.7	42.5	53.9	11.4	Inside	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
 26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

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Radiated Spurious Emission

Test place : Ise EMC Lab. No.4 Anechoic Chamber
Report No. : 10636726H
Date : 01/15/2015
Temperature/ Humidity : 24deg. C / 40% RH
Engineer : Kazuya Yoshioka
Mode : 11n-20 Tx 5745MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5715.000	PK	44.3	32.8	4.0	32.0	49.1	68.2	19.1	Outside	
Hori	5725.000	PK	51.3	32.9	4.0	32.0	56.2	68.2	12.0	Outside	
Vert	5715.000	PK	49.1	32.8	4.0	32.0	53.9	68.2	14.3	Outside	
Vert	5725.000	PK	55.8	32.9	4.0	32.0	60.7	68.2	7.5	Outside	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
 26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

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Radiated Spurious Emission

Test place : Ise EMC Lab. No.4 Anechoic Chamber
Report No. : 10636726H
Date : 01/15/2015
Temperature/ Humidity : 24deg. C / 40% RH
Engineer : Kazuya Yoshioka
Mode : 11n-20 Tx 5825MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5850.000	PK	52.0	33.1	4.0	32.1	57.0	68.2	11.2	Outside	
Hori	5860.000	PK	42.0	33.1	4.0	32.1	47.0	68.2	21.2	Outside	
Vert	5850.000	PK	52.3	33.1	4.0	32.1	57.3	68.2	10.9	Outside	
Vert	5860.000	PK	42.4	33.1	4.0	32.1	47.4	68.2	20.8	Outside	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz $20\log(3.0\text{m}/1.0\text{m})= 9.5\text{dB}$
 26.5GHz-40GHz $20\log(3.0\text{m}/0.5\text{m})=15.6\text{dB}$

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Radiated Spurious Emission

Test place : Ise EMC Lab. No.4 Anechoic Chamber
Report No. : 10636726H
Date : 01/16/2015 01/17/2015 01/19/2015
Temperature/ Humidity : 24deg. C / 50% RH 24deg. C / 37% RH 24deg. C / 32% RH
Engineer : Koji Yamamoto Takumi Shimada Takumi Shimada
(1-10GHz) (10-18GHz) (18-40GHz)
Mode : 11n-40 Tx 5190MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5150.000	PK	43.3	32.2	3.8	31.9	47.4	68.2	20.8	Bandedge	
Hori	10380.000	PK	45.1	39.8	-2.4	33.6	48.9	68.2	19.3	Outside	
Hori	15570.000	PK	43.9	39.3	-1.1	32.7	49.4	73.9	24.5	Inside	Floor Noise
Hori	20760.000	PK	45.8	38.1	-1.6	33.2	49.1	73.9	24.8	Inside	Floor Noise
Hori	5150.000	AV	32.9	32.2	3.8	31.9	37.0	53.9	16.9	Bandedge	
Hori	15570.000	AV	35.7	39.3	-1.1	32.7	41.2	53.9	12.7	Inside	Floor Noise
Hori	20760.000	AV	36.6	38.1	-1.6	33.2	39.9	53.9	14.0	Inside	Floor Noise
Vert	5150.000	PK	42.6	32.2	3.8	31.9	46.7	68.2	21.5	Bandedge	
Vert	10380.000	PK	43.5	39.8	-2.4	33.6	47.3	68.2	20.9	Outside	
Vert	15570.000	PK	43.7	39.3	-1.1	32.7	49.2	73.9	24.7	Inside	Floor Noise
Vert	20760.000	PK	46.3	38.1	-1.6	33.2	49.6	73.9	24.3	Inside	Floor Noise
Vert	5150.000	AV	32.6	32.2	3.8	31.9	36.7	53.9	17.2	Bandedge	
Vert	15570.000	AV	35.6	39.3	-1.1	32.7	41.1	53.9	12.8	Inside	Floor Noise
Vert	20760.000	AV	36.7	38.1	-1.6	33.2	40.0	53.9	13.9	Inside	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz $20\log(3.0\text{m}/1.0\text{m})= 9.5\text{dB}$
 26.5GHz-40GHz $20\log(3.0\text{m}/0.5\text{m})=15.6\text{dB}$

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Radiated Spurious Emission

Test place : Ise EMC Lab. No.4 Anechoic Chamber
Report No. : 10636726H
Date : 01/16/2015 01/17/2015 01/19/2015
Temperature/ Humidity : 24deg. C / 50% RH 24deg. C / 37% RH 24deg. C / 32% RH
Engineer : Koji Yamamoto Takumi Shimada Takumi Shimada
(1-10GHz) (10-18GHz) (18-40GHz)
Mode : 11n-40 Tx 5270MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	10540.000	PK	44.7	40.1	-2.4	33.7	48.7	68.2	19.5	Outside	
Hori	15810.000	PK	44.5	38.5	-1.1	32.8	49.1	73.9	24.8	Inside	Floor Noise
Hori	21080.000	PK	46.0	38.3	-1.6	33.3	49.4	73.9	24.5	Inside	Floor Noise
Hori	15810.000	AV	35.5	38.5	-1.1	32.8	40.1	53.9	13.8	Inside	Floor Noise
Hori	21080.000	AV	36.8	38.3	-1.6	33.3	40.2	53.9	13.7	Inside	Floor Noise
Vert	10540.000	PK	43.2	40.1	-2.4	33.7	47.2	68.2	21.0	Outside	
Vert	15810.000	PK	44.5	38.5	-1.1	32.8	49.1	73.9	24.8	Inside	Floor Noise
Vert	21080.000	PK	45.2	38.3	-1.6	33.3	48.6	73.9	25.3	Inside	Floor Noise
Vert	15810.000	AV	35.5	38.5	-1.1	32.8	40.1	53.9	13.8	Inside	Floor Noise
Vert	21080.000	AV	36.7	38.3	-1.6	33.3	40.1	53.9	13.8	Inside	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
 26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

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Radiated Spurious Emission

Test place : Ise EMC Lab. No.4 Anechoic Chamber
Report No. : 10636726H
Date : 01/16/2015 01/17/2015 01/19/2015
Temperature/ Humidity : 24deg. C / 50% RH 24deg. C / 37% RH 24deg. C / 32% RH
Engineer : Koji Yamamoto Takumi Shimada Takumi Shimada
(1-10GHz) (10-18GHz) (18-40GHz)
Mode : 11n-40 Tx 5310MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5350.000	PK	42.6	32.3	3.8	32.0	46.7	68.2	21.5	Bandedge	
Hori	10620.000	PK	45.2	40.3	-2.3	33.7	49.5	73.9	24.4	Inside	
Hori	15930.000	PK	44.0	38.2	-1.2	32.8	48.2	73.9	25.7	Inside	Floor Noise
Hori	21240.000	PK	45.7	38.4	-1.5	33.2	49.4	73.9	24.5	Inside	Floor Noise
Hori	5350.000	AV	32.8	32.3	3.8	32.0	36.9	53.9	17.0	Bandedge	
Hori	10620.000	AV	39.4	40.3	-2.3	33.7	43.7	53.9	10.2	Inside	
Hori	15930.000	AV	35.6	38.2	-1.2	32.8	39.8	53.9	14.1	Inside	Floor Noise
Hori	21240.000	AV	37.2	38.4	-1.5	33.2	40.9	53.9	13.0	Inside	Floor Noise
Vert	5350.000	PK	45.4	32.3	3.8	32.0	49.5	68.2	18.7	Bandedge	
Vert	10620.000	PK	44.0	40.3	-2.3	33.7	48.3	73.9	25.6	Inside	
Vert	15930.000	PK	43.8	38.2	-1.2	32.8	48.0	73.9	25.9	Inside	Floor Noise
Vert	21240.000	PK	45.7	38.4	-1.5	33.2	49.4	73.9	24.5	Inside	Floor Noise
Vert	5350.000	AV	33.1	32.3	3.8	32.0	37.2	53.9	16.7	Bandedge	
Vert	10620.000	AV	36.3	40.3	-2.3	33.7	40.6	53.9	13.3	Inside	
Vert	15930.000	AV	35.8	38.2	-1.2	32.8	40.0	53.9	13.9	Inside	Floor Noise
Vert	21240.000	AV	37.3	38.4	-1.5	33.2	41.0	53.9	12.9	Inside	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
 26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

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Radiated Spurious Emission

Test place : Ise EMC Lab. No.4 Anechoic Chamber
Report No. : 10636726H
Date : 01/16/2015 01/17/2015 01/19/2015
Temperature/ Humidity : 24deg. C / 50% RH 24deg. C / 37% RH 24deg. C / 32% RH
Engineer : Koji Yamamoto Takumi Shimada Takumi Shimada
(1-10GHz) (10-18GHz) (18-40GHz)
Mode : 11n-40 Tx 5510MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5460.000	PK	42.0	32.4	3.9	32.0	46.3	73.9	27.6	Inside	
Hori	5470.000	PK	44.3	32.4	3.9	32.0	48.6	68.2	19.6	Outside	
Hori	11020.000	PK	43.3	40.9	-2.4	33.7	48.1	73.9	25.8	Inside	
Hori	16530.000	PK	43.8	39.1	-0.9	33.0	49.0	68.2	19.2	Outside	Floor Noise
Hori	22040.000	PK	46.0	38.9	-1.1	32.9	50.9	73.9	23.0	Inside	Floor Noise
Hori	5460.000	AV	32.3	32.4	3.9	32.0	36.6	53.9	17.3	Inside	
Hori	11020.000	AV	35.7	40.9	-2.4	33.7	40.5	53.9	13.4	Inside	
Hori	22040.000	AV	37.5	38.9	-1.1	32.9	42.4	53.9	11.5	Inside	Floor Noise
Vert	5460.000	PK	44.1	32.4	3.9	32.0	48.4	73.9	25.5	Inside	
Vert	5470.000	PK	48.6	32.4	3.9	32.0	52.9	68.2	15.3	Outside	
Vert	11020.000	PK	42.9	40.9	-2.4	33.7	47.7	73.9	26.2	Inside	
Vert	16530.000	PK	44.4	39.1	-0.9	33.0	49.6	68.2	18.6	Outside	Floor Noise
Vert	22040.000	PK	46.5	38.9	-1.1	32.9	51.4	73.9	22.5	Inside	Floor Noise
Vert	5460.000	AV	33.6	32.4	3.9	32.0	37.9	53.9	16.0	Inside	
Vert	11020.000	AV	35.2	40.9	-2.4	33.7	40.0	53.9	13.9	Inside	
Vert	22040.000	AV	37.4	38.9	-1.1	32.9	42.3	53.9	11.6	Inside	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
 26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

UL Japan, Inc.

Ise EMC Lab.

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Facsimile : +81 596 24 8124

Radiated Spurious Emission

Test place : Ise EMC Lab. No.4 Anechoic Chamber
Report No. : 10636726H
Date : 01/16/2015 01/17/2015 01/19/2015
Temperature/ Humidity : 24deg. C / 50% RH 24deg. C / 37% RH 24deg. C / 32% RH
Engineer : Koji Yamamoto Takumi Shimada Takumi Shimada
(1-10GHz) (10-18GHz) (18-40GHz)
Mode : 11n-40 Tx 5550MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	11100.000	PK	43.6	40.9	-2.3	33.7	48.5	73.9	25.4	Inside	
Hori	16650.000	PK	45.0	39.4	-0.9	33.0	50.5	68.2	17.7	Outside	Floor Noise
Hori	22200.000	PK	46.4	39.0	-1.1	32.7	51.6	73.9	22.3	Inside	Floor Noise
Hori	11100.000	AV	35.5	40.9	-2.3	33.7	40.4	53.9	13.5	Inside	
Hori	22200.000	AV	37.5	39.0	-1.1	32.7	42.7	53.9	11.2	Inside	Floor Noise
Vert	11100.000	PK	44.0	40.9	-2.3	33.7	48.9	73.9	25.0	Inside	
Vert	16650.000	PK	43.9	39.4	-0.9	33.0	49.4	68.2	18.8	Outside	Floor Noise
Vert	22200.000	PK	46.0	39.0	-1.1	32.7	51.2	73.9	22.7	Inside	Floor Noise
Vert	11100.000	AV	36.0	40.9	-2.3	33.7	40.9	53.9	13.0	Inside	
Vert	22200.000	AV	37.7	39.0	-1.1	32.7	42.9	53.9	11.0	Inside	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
 26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

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Radiated Spurious Emission

Test place : Ise EMC Lab. No.4 Anechoic Chamber
Report No. : 10636726H
Date : 01/16/2015 01/17/2015 01/19/2015
Temperature/ Humidity : 24deg. C / 50% RH 24deg. C / 37% RH 24deg. C / 32% RH
Engineer : Koji Yamamoto Takumi Shimada Takumi Shimada
(1-10GHz) (10-18GHz) (18-40GHz)
Mode : 11n-40 Tx 5670MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5725.000	PK	40.9	32.9	4.0	32.0	45.8	68.2	22.4	Outside	
Hori	11340.000	PK	43.7	40.8	-2.3	33.7	48.5	73.9	25.4	Inside	
Hori	17010.000	PK	43.7	40.2	-0.8	33.1	50.0	68.2	18.2	Outside	Floor Noise
Hori	22680.000	PK	45.7	39.2	-1.0	32.3	51.6	73.9	22.3	Inside	Floor Noise
Hori	11340.000	AV	36.7	40.8	-2.3	33.7	41.5	53.9	12.4	Inside	
Hori	22680.000	AV	37.5	39.2	-1.0	32.3	43.4	53.9	10.5	Inside	Floor Noise
Vert	5725.000	PK	42.3	32.9	4.0	32.0	47.2	68.2	21.0	Outside	
Vert	11340.000	PK	44.1	40.8	-2.3	33.7	48.9	73.9	25.0	Inside	
Vert	17010.000	PK	43.7	40.2	-0.8	33.1	50.0	68.2	18.2	Outside	Floor Noise
Vert	22680.000	PK	46.2	39.2	-1.0	32.3	52.1	73.9	21.8	Inside	Floor Noise
Vert	11340.000	AV	35.7	40.8	-2.3	33.7	40.5	53.9	13.4	Inside	
Vert	22680.000	AV	37.1	39.2	-1.0	32.3	43.0	53.9	10.9	Inside	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz $20\log(3.0\text{m}/1.0\text{m})= 9.5\text{dB}$
 26.5GHz-40GHz $20\log(3.0\text{m}/0.5\text{m})=15.6\text{dB}$

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Radiated Spurious Emission

Test place : Ise EMC Lab. No.4 Anechoic Chamber
Report No. : 10636726H
Date : 01/16/2015 01/17/2015 01/19/2015
Temperature/ Humidity : 24deg. C / 50% RH 24deg. C / 37% RH 24deg. C / 32% RH
Engineer : Koji Yamamoto Takumi Shimada Takumi Shimada
(1-10GHz) (10-18GHz) (18-40GHz)
Mode : 11n-40 Tx 5755MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5725.000	PK	47.5	32.9	4.0	32.0	52.4	68.2	15.8	Outside	
Hori	11510.000	PK	44.8	40.7	-2.2	33.7	49.6	73.9	24.3	Inside	
Hori	17265.000	PK	44.8	41.7	-0.6	33.1	52.8	68.2	15.4	Outside	Floor Noise
Hori	23020.000	PK	45.5	39.3	-1.0	32.0	51.8	73.9	22.1	Inside	Floor Noise
Hori	11510.000	AV	36.6	40.7	-2.2	33.7	41.4	53.9	12.5	Inside	
Hori	23020.000	AV	37.2	39.3	-1.0	32.0	43.5	53.9	10.4	Inside	Floor Noise
Vert	5725.000	PK	53.3	32.9	4.0	32.0	58.2	68.2	10.0	Outside	
Vert	11510.000	PK	44.2	40.7	-2.2	33.7	49.0	73.9	24.9	Inside	
Vert	17265.000	PK	44.9	41.7	-0.6	33.1	52.9	68.2	15.3	Outside	Floor Noise
Vert	23020.000	PK	45.7	39.3	-1.0	32.0	52.0	73.9	21.9	Inside	Floor Noise
Vert	11510.000	AV	37.8	40.7	-2.2	33.7	42.6	53.9	11.3	Inside	
Vert	23020.000	AV	37.3	39.3	-1.0	32.0	43.6	53.9	10.3	Inside	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz $20\log(3.0\text{m}/1.0\text{m})= 9.5\text{dB}$
 26.5GHz-40GHz $20\log(3.0\text{m}/0.5\text{m})=15.6\text{dB}$

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Radiated Spurious Emission

Test place : Ise EMC Lab. No.4 Anechoic Chamber
Report No. : 10636726H
Date : 01/16/2015 01/17/2015 01/19/2015
Temperature/ Humidity : 24deg. C / 50% RH 24deg. C / 37% RH 24deg. C / 32% RH
Engineer : Koji Yamamoto Takumi Shimada Takumi Shimada
(1-10GHz) (10-18GHz) (18-40GHz)
Mode : 11n-40 Tx 5795MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5850.000	PK	40.5	33.1	4.0	32.1	45.5	68.2	22.7	Outside	
Hori	11590.000	PK	44.9	40.6	-2.1	33.7	49.7	73.9	24.2	Inside	
Hori	17385.000	PK	44.8	42.3	-0.6	33.0	53.5	68.2	14.7	Outside	Floor Noise
Hori	23180.000	PK	46.4	39.3	-0.9	32.1	52.7	68.2	15.5	Outside	Floor Noise
Hori	11590.000	AV	37.4	40.6	-2.1	33.7	42.2	53.9	11.7	Inside	
Vert	5850.000	PK	40.3	33.1	4.0	32.1	45.3	68.2	22.9	Outside	
Vert	11590.000	PK	44.4	40.6	-2.1	33.7	49.2	73.9	24.7	Inside	
Vert	17385.000	PK	44.4	42.3	-0.6	33.0	53.1	68.2	15.1	Outside	Floor Noise
Vert	23180.000	PK	46.2	39.3	-0.9	32.1	52.5	68.2	15.7	Outside	Floor Noise
Vert	11590.000	AV	37.5	40.6	-2.1	33.7	42.3	53.9	11.6	Inside	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
 26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

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Radiated Spurious Emission

Test place : Ise EMC Lab. No.4 Anechoic Chamber
Report No. : 10636726H
Date : 01/16/2015 01/17/2015 01/19/2015
Temperature/ Humidity : 24deg. C / 50% RH 24deg. C / 37% RH 24deg. C / 32% RH
Engineer : Koji Yamamoto Takumi Shimada Takumi Shimada
(1-10GHz) (10-18GHz) (18-40GHz)
Mode : 11ac-80 Tx 5210MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5150.000	PK	42.3	32.2	3.8	31.9	-	46.4	68.2	21.8	Bandedge	
Hori	10420.000	PK	44.6	39.9	-2.4	33.6	-	48.5	68.2	19.7	Outside	
Hori	15630.000	PK	45.0	39.1	-1.1	32.8	-	50.2	73.9	23.7	Inside	Floor Noise
Hori	20840.000	PK	45.0	38.1	-1.6	33.2	-	48.3	73.9	25.6	Inside	Floor Noise
Hori	5150.000	AV	33.3	32.2	3.8	31.9	0.2	37.6	53.9	16.4	Bandedge	*1)
Hori	15630.000	AV	35.7	39.1	-1.1	32.8	-	40.9	53.9	13.0	Inside	Floor Noise
Hori	20840.000	AV	36.5	38.1	-1.6	33.2	-	39.8	53.9	14.1	Inside	Floor Noise
Vert	5150.000	PK	41.5	32.2	3.8	31.9	-	45.6	68.2	22.6	Bandedge	
Vert	10420.000	PK	43.7	39.9	-2.4	33.6	-	47.6	68.2	20.6	Outside	
Vert	15630.000	PK	44.3	39.1	-1.1	32.8	-	49.5	73.9	24.4	Inside	Floor Noise
Vert	20840.000	PK	46.3	38.1	-1.6	33.2	-	49.6	73.9	24.3	Inside	Floor Noise
Vert	5150.000	AV	32.7	32.2	3.8	31.9	0.2	37.0	53.9	17.0	Bandedge	*1)
Vert	15630.000	AV	35.9	39.1	-1.1	32.8	-	41.1	53.9	12.8	Inside	Floor Noise
Vert	20840.000	AV	36.6	38.1	-1.6	33.2	-	39.9	53.9	14.0	Inside	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier) + Duty Factor

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

*1) Not Out of Band emission (Leakage Power)

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Radiated Spurious Emission

Test place	Ise EMC Lab. No.4 Anechoic Chamber		
Report No.	10636726H		
Date	01/16/2015	01/17/2015	01/19/2015
Temperature/ Humidity	24deg. C / 50% RH	24deg. C / 37% RH	24deg. C / 32% RH
Engineer	Koji Yamamoto	Takumi Shimada	Takumi Shimada
	(1-10GHz)	(10-18GHz)	(18-40GHz)
Mode	11ac-80 Tx 5290MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5350.000	PK	41.9	32.3	3.8	32.0	-	46.0	68.2	22.2	Bandedge	
Hori	10580.000	PK	44.1	40.2	-2.4	33.7	-	48.2	68.2	20.0	Outside	
Hori	15870.000	PK	44.0	38.3	-1.2	32.8	-	48.3	73.9	25.6	Inside	Floor Noise
Hori	21160.000	PK	46.5	38.3	-1.5	33.3	-	50.0	73.9	23.9	Inside	Floor Noise
Hori	5350.000	AV	32.6	32.3	3.8	32.0	0.2	36.9	53.9	17.1	Bandedge	*1)
Hori	15870.000	AV	35.5	38.3	-1.2	32.8	-	39.8	53.9	14.1	Inside	Floor Noise
Hori	21160.000	AV	36.7	38.3	-1.5	33.3	-	40.2	53.9	13.7	Inside	Floor Noise
Vert	5350.000	PK	41.6	32.3	3.8	32.0	-	45.7	68.2	22.5	Bandedge	
Vert	10580.000	PK	43.6	40.2	-2.4	33.7	-	47.7	68.2	20.5	Outside	
Vert	15970.000	PK	43.8	38.0	-1.2	32.8	-	47.8	73.9	26.1	Inside	Floor Noise
Vert	21160.000	PK	45.5	38.3	-1.5	33.3	-	49.0	73.9	24.9	Inside	Floor Noise
Vert	5350.000	AV	32.7	32.3	3.8	32.0	0.2	37.0	53.9	17.0	Bandedge	*1)
Vert	15970.000	AV	35.3	38.0	-1.2	32.8	-	39.3	53.9	14.6	Inside	Floor Noise
Vert	21160.000	AV	36.7	38.3	-1.5	33.3	-	40.2	53.9	13.7	Inside	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Ampriplier) + Duty Factor

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
 26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

*1) Not Out of Band emission (Leakage Power)

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Radiated Spurious Emission

Test place : Ise EMC Lab. No.4 Anechoic Chamber
Report No. : 10636726H
Date : 01/16/2015 01/17/2015 01/19/2015
Temperature/ Humidity : 24deg. C / 50% RH 24deg. C / 37% RH 24deg. C / 32% RH
Engineer : Koji Yamamoto Takumi Shimada Takumi Shimada
(1-10GHz) (10-18GHz) (18-40GHz)
Mode : 11ac-80 Tx 5530MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5460.000	PK	43.8	32.4	3.9	32.0	-	48.1	73.9	25.8	Inside	
Hori	5470.000	PK	45.3	32.4	3.9	32.0	-	49.6	68.2	18.6	Outside	
Hori	11060.000	PK	44.3	40.9	-2.4	33.7	-	49.1	73.9	24.8	Inside	
Hori	16590.000	PK	43.9	39.3	-0.9	33.0	-	49.3	68.2	18.9	Outside	Floor Noise
Hori	22120.000	PK	46.0	38.9	-1.1	32.8	-	51.0	73.9	22.9	Inside	Floor Noise
Hori	5460.000	AV	34.1	32.4	3.9	32.0	0.2	38.6	53.9	15.4	Inside	*1)
Hori	11060.000	AV	35.0	40.9	-2.4	33.7	0.2	40.0	53.9	14.0	Inside	
Hori	22120.000	AV	37.3	38.9	-1.1	32.8	-	42.3	53.9	11.6	Inside	Floor Noise
Vert	5460.000	PK	45.5	32.4	3.9	32.0	-	49.8	73.9	24.1	Inside	
Vert	5470.000	PK	47.0	32.4	3.9	32.0	-	51.3	68.2	16.9	Outside	
Vert	11060.000	PK	43.6	40.9	-2.4	33.7	-	48.4	73.9	25.5	Inside	
Vert	16590.000	PK	43.5	39.3	-0.9	33.0	-	48.9	68.2	19.3	Outside	Floor Noise
Vert	22120.000	PK	46.4	38.9	-1.1	32.8	-	51.4	73.9	22.5	Inside	Floor Noise
Vert	5460.000	AV	35.0	32.4	3.9	32.0	0.2	39.5	53.9	14.5	Inside	*1)
Vert	11060.000	AV	35.7	40.9	-2.4	33.7	0.2	40.7	53.9	13.3	Inside	
Vert	22120.000	AV	37.6	38.9	-1.1	32.8	-	42.6	53.9	11.3	Inside	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier) + Duty Factor

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
 26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

*1) Not Out of Band emission (Leakage Power)

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Radiated Spurious Emission

Test place : Ise EMC Lab. No.4 Anechoic Chamber
Report No. : 10636726H
Date : 01/16/2015 01/17/2015 01/19/2015
Temperature/ Humidity : 24deg. C / 50% RH 24deg. C / 37% RH 24deg. C / 32% RH
Engineer : Koji Yamamoto Takumi Shimada Takumi Shimada
(1-10GHz) (10-18GHz) (18-40GHz)
Mode : 11ac-80 Tx 5610MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5725.000	PK	40.9	32.9	4.0	32.0	-	45.8	68.2	22.4	Outside	
Hori	11220.000	PK	43.2	40.8	-2.3	33.7	-	48.0	73.9	25.9	Inside	
Hori	16830.000	PK	44.0	39.8	-0.8	33.1	-	49.9	68.2	18.3	Outside	Floor Noise
Hori	22440.000	PK	46.0	39.1	-1.0	32.5	-	51.6	73.9	22.3	Inside	Floor Noise
Hori	11220.000	AV	35.4	40.8	-2.3	33.7	0.2	40.4	53.9	13.6	Inside	
Hori	22440.000	AV	37.1	39.1	-1.0	32.5	-	42.7	53.9	11.2	Inside	Floor Noise
Vert	5725.000	PK	41.6	32.9	4.0	32.0	-	46.5	68.2	21.7	Outside	
Vert	11220.000	PK	43.5	40.8	-2.3	33.7	-	48.3	73.9	25.6	Inside	
Vert	16830.000	PK	43.4	39.8	-0.8	33.1	-	49.3	68.2	18.9	Outside	Floor Noise
Vert	22440.000	PK	46.3	39.1	-1.0	32.5	-	51.9	73.9	22.0	Inside	Floor Noise
Vert	11220.000	AV	35.1	40.8	-2.3	33.7	0.2	40.1	53.9	13.9	Inside	
Vert	22440.000	AV	37.0	39.1	-1.0	32.5	-	42.6	53.9	11.3	Inside	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier) + Duty Factor

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz $20\log(3.0\text{m}/1.0\text{m})= 9.5\text{dB}$
 26.5GHz-40GHz $20\log(3.0\text{m}/0.5\text{m})=15.6\text{dB}$

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Radiated Spurious Emission

Test place : Ise EMC Lab. No.4 Anechoic Chamber
Report No. : 10636726H
Date : 01/16/2015 01/17/2015 01/19/2015
Temperature/ Humidity : 24deg. C / 50% RH 24deg. C / 37% RH 24deg. C / 32% RH
Engineer : Koji Yamamoto Takumi Shimada Takumi Shimada
(1-10GHz) (10-18GHz) (18-40GHz)
Mode : 11ac-80 Tx 5775MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5725.000	PK	45.7	32.9	4.0	32.0	-	50.6	68.2	17.6	Outside	
Hori	5850.000	PK	41.2	33.1	4.0	32.1	-	46.2	68.2	22.0	Outside	
Hori	11550.000	PK	44.2	40.6	-2.2	33.7	-	48.9	73.9	25.0	Inside	
Hori	17325.000	PK	45.0	42.0	-0.6	33.1	-	53.3	68.2	14.9	Outside	
Hori	23100.000	PK	46.3	39.3	-1.0	32.0	-	52.6	73.9	21.3	Inside	
Hori	11550.000	AV	37.5	40.6	-2.2	33.7	0.2	42.4	53.9	11.6	Inside	
Hori	23100.000	AV	37.4	39.3	-1.0	32.0	0.2	43.9	53.9	10.1	Inside	
Vert	5725.000	PK	47.9	32.9	4.0	32.0	-	52.8	68.2	15.4	Outside	
Vert	5850.000	PK	42.0	33.1	4.0	32.1	-	47.0	68.2	21.2	Outside	
Vert	11550.000	PK	44.0	40.6	-2.2	33.7	-	48.7	73.9	25.2	Inside	
Vert	17325.000	PK	44.2	42.0	-0.6	33.1	-	52.5	68.2	15.7	Outside	
Vert	23100.000	PK	45.9	39.3	-1.0	32.0	-	52.2	73.9	21.7	Inside	
Vert	11550.000	AV	36.4	40.6	-2.2	33.7	0.2	41.3	53.9	12.7	Inside	
Vert	23100.000	AV	37.5	39.3	-1.0	32.0	0.2	44.0	53.9	10.0	Inside	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier) + Duty Factor

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
 26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

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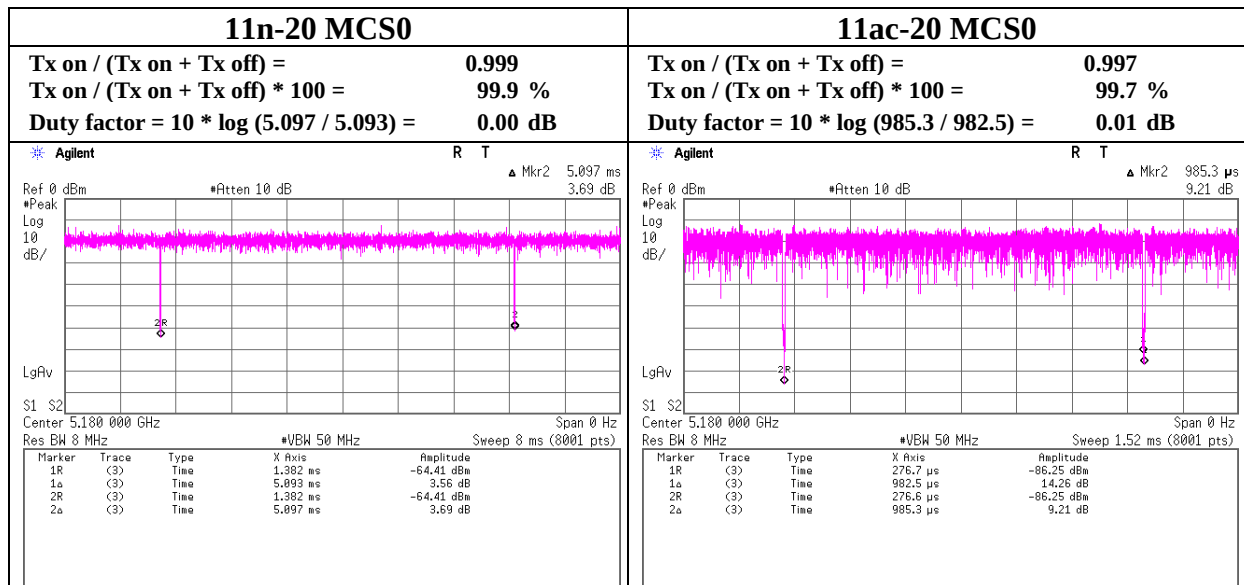
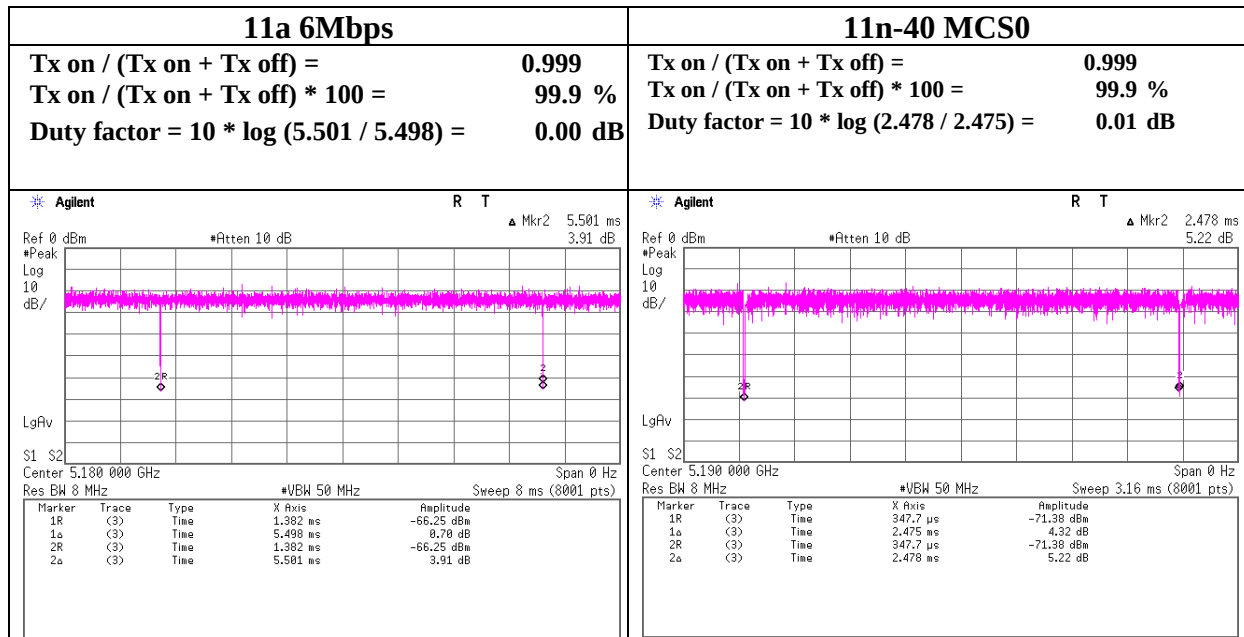
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Duty cycle

Test place Ise EMC Lab. No.4 Anechoic Chamber
Report No. 10636726H
Date 01/15/2015
Temperature/ Humidity 24deg. C / 40% RH
Engineer Kazuya Yoshioka
Mode 11a/n-20/n-40/ac-20 Tx



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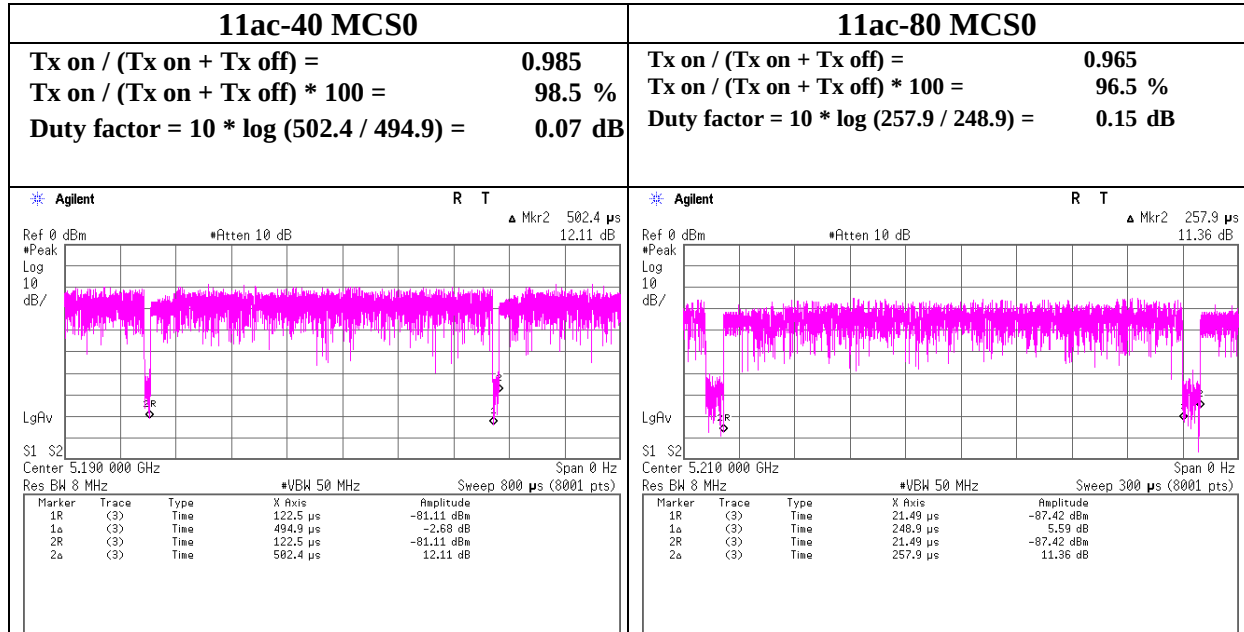
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Duty cycle

Test place	Ise EMC Lab. No.4 Anechoic Chamber
Report No.	10636726H
Date	01/15/2015
Temperature/ Humidity	24deg. C / 40% RH
Engineer	Kazuya Yoshioka
Mode	11ac-40/ac-80 Tx



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Ise EMC Lab.

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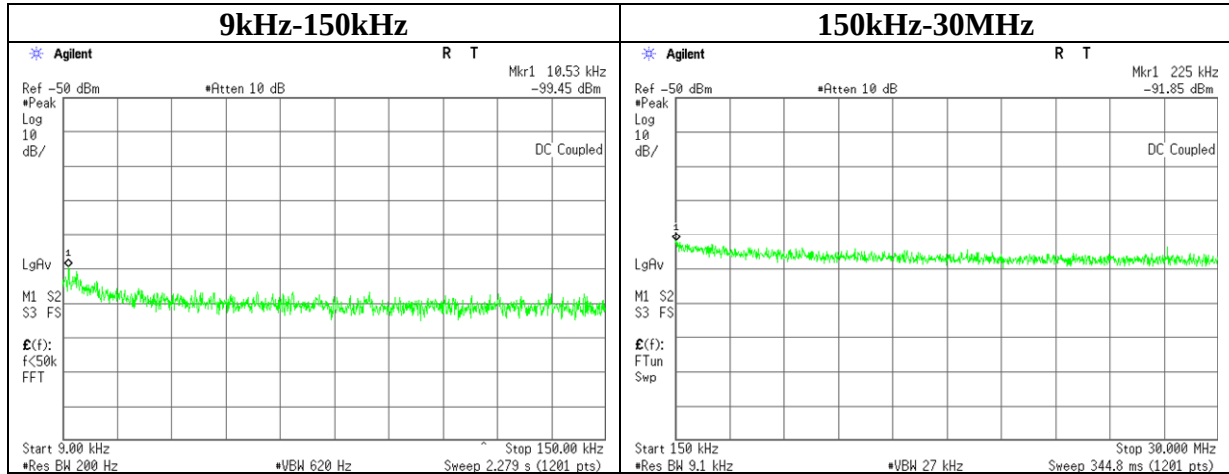
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Conducted Spurious Emission

Test place : Ise EMC Lab. No.3 Measurement Room
Report No. : 10636726H
Date : 01/30/2015
Temperature/ Humidity : 25deg. C / 30% RH
Engineer : Shinichi Miyazono
Mode : Tx

11a Tx 5260MHz



Frequency [kHz]	Reading [dBm]	Cable Loss [dB]	Attenuator [dB]	Antenna Gain [dBi]	N (Number of Output)	EIRP [dBm]	Distance [m]	Ground bounce [dB]	E (field strength) [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
10.53	-99.5	0.00	9.8	2.0	1	-87.6	300	6.0	-26.4	67.1	93.5	
225.00	-91.9	0.00	9.8	2.0	1	-80.0	300	6.0	-18.8	40.5	59.3	

$E = EIRP - 20 \log(D) + \text{Ground bounce} + 104.8 [\text{dBuV/m}]$

$EIRP = \text{Reading} + \text{Cable Loss} + \text{Attenuator} + \text{Antenna Gain} + 10 * \log(N)$

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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)
MOS-23	Thermo-Hygrometer	Custom	CTH-201	0004	AT	2014/12/22 * 12
MPM-16	Power Meter	Agilent	8990B	MY51000271	AT	2014/04/04 * 12
MPSE-23	Power sensor	Agilent	N1923A	MY54070004	AT	2014/04/04 * 12
MAT-58	Attenuator(10dB)	Suhner	6810.19.A	-	AT	2015/01/09 * 12
MAEC-04	Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-10005	RE/CE	2014/02/28 * 12
MOS-15	Thermo-Hygrometer	Custom	CTH-180	1501	RE/CE	2015/01/13 * 12
MJM-23	Measure	ASKUL	-	-	RE/CE	-
COTS-MEMI	EMI measurement program	TSJ	TEPTO-DV	-	RE/CE	-
MSA-03	Spectrum Analyzer	Agilent	E4448A	MY44020357	RE	2014/04/08 * 12
MHA-21	Horn Antenna 1-18GHz	Schwarzbeck	BBHA9120D	9120D-557	RE	2014/08/12 * 12
MCC-141	Microwave Cable	Junkosha	MWX221	1305S002R(1m) / 1405S146(5m)	RE	2014/06/11 * 12
MPA-12	MicroWave System Amplifier	Agilent	83017A	MY39500780	RE	2014/03/11 * 12
MHF-23	High Pass Filter 7-20GHz	TOKIMEC	TF37NCCC	603	RE	2015/01/27 * 12
MCC-79	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	278923/4	RE	2014/12/15 * 12
MHA-29	Horn Antenna 26.5-40GHz	ETS LINDGREN	3160-10	00152399	RE	2014/09/02 * 12
MCC-54	Microwave Cable	Suhner	SUCOFLEX101	2873(1m) / 2876(5m)	RE	2014/03/11 * 12
MPA-22	Pre Amplifier	MITEQ, Inc	AMF-6F-2600400-33-8P / AMF-4F-2600400-33-8P	1871355 /1871328	RE	2014/09/11 * 12
MTR-01	Test Receiver	Rohde & Schwarz	ESI40	100084	RE	2014/11/10 * 12
MBA-05	Biconical Antenna	Schwarzbeck	BBA9106	1302	RE	2014/11/22 * 12
MLA-08	Logperiodic Antenna	Schwarzbeck	UKLP9140-A	N/A	RE	2014/11/22 * 12
MCC-50	Coaxial Cable	UL Japan	-	-	RE	2014/06/02 * 12
MAT-68	Attenuator	Anritsu	MP721B	6200961025	RE	2014/11/11 * 12
MPA-14	Pre Amplifier	SONOMA INSTRUMENT	310	260833	RE	2014/03/14 * 12
MLS-23	LISN(AMN)	Schwarzbeck	NSLK8127	8127-729	CE(EUT)	2014/07/10 * 12
MAT-67	Attenuator	JFW Industries, Inc.	50FP-013H2 N	-	CE	2015/01/29 * 12
MCC-113	Coaxial cable	Fujikura/Suhner/TSJ	5D-2W(10m)/SFM141(5m)/421-010(1m)/sucoform141-PE(1m)/RFM-E121(Switcher)	-/04178	CE	2014/07/15 * 12
MOS-12	Thermo-Hygrometer	Custom	CTH-180	1201	AT	2015/01/13 * 12
MSA-15	Spectrum Analyzer	Agilent	E4440A	MY46187105	AT	2014/11/11 * 12
MAT-23	Attenuator(10dB) 1-18GHz	Orient Microwave	BX10-0476-00	-	AT	2014/03/13 * 12
MCC-96	Microwave Cable 1G-40GHz	Suhner	SUCOFLEX102	30817/2	AT	2014/05/16 * 12
MAT-10	Attenuator(10dB)	Weinschel Corp	2	BL1173	AT	2014/11/19 * 12
MCC-38	Coaxial Cable	UL Japan	-	-	AT	2014/12/02 * 12

The expiration date of the calibration is the end of the expired month.

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

As for some calibrations performed after the tested dates, those test equipment have been controlled by means of an unbroken chains of calibrations.

Test Item: CE: Conducted Emission

RE: Radiated Emission

AT: Antenna Terminal Conducted test

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