

Appendix of Test Report-2.4GHz (Report No.: RF190220D10)

Radiated Emission and Bandedge Measurement

ABOVE 1GHz DATA

802.11g

CHANNEL	TX Channel 2	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	72.67 PK	74.00	-1.33	1.00 H	344	72.89	-0.22
2	2390.00	52.65 AV	54.00	-1.35	1.00 H	344	52.87	-0.22
3	4834.00	47.02 PK	74.00	-26.98	1.61 H	227	40.69	6.33
4	4834.00	34.84 AV	54.00	-19.16	1.61 H	227	28.51	6.33
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	68.50 PK	74.00	-5.50	3.35 V	79	68.72	-0.22
2	2390.00	46.59 AV	54.00	-7.41	3.35 V	79	46.81	-0.22
3	4834.00	46.41 PK	74.00	-27.59	2.17 V	159	40.08	6.33
4	4834.00	33.66 AV	54.00	-20.34	2.17 V	159	27.33	6.33

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 10	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2483.50	72.87 PK	74.00	-1.13	1.00 H	348	73.03	-0.16
2	2483.50	52.32 AV	54.00	-1.68	1.00 H	348	52.48	-0.16
3	4914.00	46.77 PK	74.00	-27.23	1.54 H	233	40.66	6.11
4	4914.00	33.70 AV	54.00	-20.30	1.54 H	233	27.59	6.11
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2483.50	67.40 PK	74.00	-6.60	3.40 V	88	67.56	-0.16
2	2483.50	47.02 AV	54.00	-6.98	3.40 V	88	47.18	-0.16
3	4914.00	46.08 PK	74.00	-27.92	2.33 V	178	39.97	6.11
4	4914.00	33.49 AV	54.00	-20.51	2.33 V	178	27.38	6.11

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11n (20MHz)

CHANNEL	TX Channel 2	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	72.62 PK	74.00	-1.38	1.04 H	345	72.84	-0.22
2	2390.00	52.15 AV	54.00	-1.85	1.04 H	345	52.37	-0.22
3	4834.00	46.88 PK	74.00	-27.12	1.69 H	215	40.55	6.33
4	4834.00	34.80 AV	54.00	-19.20	1.69 H	215	28.47	6.33
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	68.70 PK	74.00	-5.30	3.31 V	72	68.92	-0.22
2	2390.00	46.15 AV	54.00	-7.85	3.31 V	72	46.37	-0.22
3	4834.00	46.25 PK	74.00	-27.75	1.98 V	170	39.92	6.33
4	4834.00	33.80 AV	54.00	-20.20	1.98 V	170	27.47	6.33

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 10	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2483.50	72.65 PK	74.00	-1.35	1.00 H	349	72.81	-0.16
2	2483.50	52.93 AV	54.00	-1.07	1.00 H	349	53.09	-0.16
3	4914.00	46.49 PK	74.00	-27.51	1.34 H	251	40.38	6.11
4	4914.00	34.00 AV	54.00	-20.00	1.34 H	251	27.89	6.11
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2483.50	68.75 PK	74.00	-5.25	3.33 V	77	68.91	-0.16
2	2483.50	46.95 AV	54.00	-7.05	3.33 V	77	47.11	-0.16
3	4914.00	45.99 PK	74.00	-28.01	2.06 V	191	39.88	6.11
4	4914.00	33.34 AV	54.00	-20.66	2.06 V	191	27.23	6.11

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

Conducted Output Power Measurement

802.11g

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
2	2417	17.25	18.06	117.061	20.68	30	Pass
10	2457	17.12	18.04	115.203	20.61	30	Pass

802.11n (20MHz)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
2	2417	17.53	18.16	122.088	20.87	30	Pass
10	2457	16.76	17.57	104.572	20.19	30	Pass