

**Test Mode:** TX / IEEE 802.11b (CH High)**Tested by:** Sam Zeng**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** July 31, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
3754.000	44.67	0.55	45.22	74.00	-28.78	V	Peak
4645.000	42.38	3.82	46.20	74.00	-27.80	V	Peak
4924.000	48.65	4.73	53.38	74.00	-20.62	V	Peak
4924.000	46.73	4.73	51.46	54.00	-2.54	V	AVG
4996.000	48.37	4.97	53.34	74.00	-20.66	V	Peak
4996.000	48.01	4.97	52.98	54.00	-1.02	V	AVG
5725.000	41.57	5.96	47.53	74.00	-26.47	V	Peak
6715.000	41.56	7.24	48.80	74.00	-25.20	V	Peak
2530.000	46.49	-2.21	44.28	74.00	-29.72	H	Peak
3358.000	44.67	-0.76	43.91	74.00	-30.09	H	Peak
3754.000	43.64	0.55	44.19	74.00	-29.81	H	Peak
4555.000	42.46	3.53	45.99	74.00	-28.01	H	Peak
4924.000	50.90	4.73	55.63	74.00	-18.37	H	Peak
4924.000	47.71	4.73	52.44	54.00	-1.56	H	AVG
6445.000	41.10	6.80	47.90	74.00	-26.10	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Antenna 0****Test Mode:** TX / IEEE 802.11g(CH Low)**Tested by:** Sam Zeng**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** July 31, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
2809.000	45.19	-1.70	43.49	74.00	-30.51	V	Peak
3214.000	45.81	-1.00	44.81	74.00	-29.19	V	Peak
3835.000	42.97	0.89	43.86	74.00	-30.14	V	Peak
4816.000	52.19	4.38	56.57	74.00	-17.43	V	Peak
4816.000	44.50	4.38	48.88	54.00	-5.12	V	AVG
6211.000	41.08	6.42	47.50	74.00	-26.50	V	Peak
6877.000	42.79	7.50	50.29	74.00	-23.71	V	Peak
1630.000	46.63	-6.64	39.99	74.00	-34.01	H	Peak
3943.000	42.40	1.35	43.75	74.00	-30.25	H	Peak
4825.000	52.67	4.41	57.08	74.00	-16.92	H	Peak
4825.000	48.19	4.41	52.60	54.00	-1.40	H	Peak
5131.000	42.17	5.21	47.38	74.00	-26.62	H	Peak
6256.000	41.44	6.49	47.93	74.00	-26.07	H	AVG
6922.000	41.33	7.57	48.90	74.00	-25.10	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Test Mode:** TX / IEEE 802.11g (CH Mid)**Tested by:** Sam Zeng**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** July 31, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
2521.000	46.64	-2.22	44.42	74.00	-29.58	V	Peak
3223.000	44.68	-0.99	43.69	74.00	-30.31	V	Peak
4231.000	42.46	2.40	44.86	74.00	-29.14	V	Peak
4879.000	51.67	4.59	56.26	74.00	-17.74	V	Peak
4879.000	41.96	4.59	46.55	54.00	-7.45	V	AVG
5914.000	41.87	6.04	47.91	74.00	-26.09	V	Peak
6490.000	42.62	6.87	49.49	74.00	-24.51	V	Peak
3079.000	43.71	-1.23	42.48	74.00	-31.52	H	Peak
4060.000	42.60	1.80	44.40	74.00	-29.60	H	Peak
4204.000	42.70	2.31	45.01	74.00	-28.99	H	Peak
4879.000	55.79	4.59	60.38	74.00	-13.62	H	Peak
4879.000	45.85	4.59	50.44	54.00	-3.56	H	AVG
5554.000	41.58	5.89	47.47	74.00	-26.53	H	Peak
6742.000	42.55	7.28	49.83	74.00	-24.17	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Test Mode:** TX / IEEE 802.11g (CH High)**Tested by:** Sam Zeng**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** July 31, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1297.000	49.65	-7.44	42.21	74.00	-31.79	V	Peak
3079.000	44.34	-1.23	43.11	74.00	-30.89	V	Peak
4312.000	42.97	2.69	45.66	74.00	-28.34	V	Peak
4924.000	46.79	4.73	51.52	74.00	-22.48	V	Peak
4996.000	49.63	4.97	54.60	74.00	-19.40	V	Peak
4996.000	39.60	4.97	44.57	54.00	-9.43	V	AVG
5797.000	42.03	5.99	48.02	74.00	-25.98	V	Peak
1576.000	47.38	-6.74	40.64	74.00	-33.36	H	Peak
3349.000	45.92	-0.77	45.15	74.00	-28.85	H	Peak
3898.000	43.04	1.16	44.20	74.00	-29.80	H	Peak
4924.000	49.77	4.73	54.50	74.00	-19.50	H	Peak
4924.000	41.82	4.73	46.55	54.00	-7.45	H	AVG
4996.000	46.06	4.97	51.03	74.00	-22.97	H	Peak
5617.000	42.69	5.92	48.61	74.00	-25.39	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Antenna 1****Test Mode:** TX / IEEE 802.11g(CH Low)**Tested by:** Sam Zeng**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** July 31, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
2512.000	46.49	-2.24	44.25	74.00	-29.75	V	Peak
4276.000	42.91	2.56	45.47	74.00	-28.53	V	Peak
4825.000	50.87	4.41	55.28	74.00	-18.72	V	Peak
4825.000	48.03	4.41	52.44	54.00	-1.56	V	AVG
4996.000	48.82	4.97	53.79	74.00	-20.21	V	Peak
4996.000	47.69	4.97	52.66	54.00	-1.34	V	AVG
5689.000	42.28	5.95	48.23	74.00	-25.77	V	Peak
6247.000	42.75	6.48	49.23	74.00	-24.77	V	Peak
1918.000	47.64	-5.52	42.12	74.00	-31.88	H	Peak
2854.000	44.72	-1.62	43.10	74.00	-30.90	H	Peak
3718.000	43.83	0.40	44.23	74.00	-29.77	H	Peak
4420.000	43.07	3.07	46.14	74.00	-27.86	H	Peak
4825.000	50.87	4.41	55.28	74.00	-18.72	H	Peak
4825.000	48.25	4.41	52.66	54.00	-1.34	H	AVG
5347.000	41.98	5.60	47.58	74.00	-26.42	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Test Mode: TX / IEEE 802.11g (CH Mid)

Tested by: Sam Zeng

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: July 31, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
3043.000	44.60	-1.29	43.31	74.00	-30.69	V	Peak
3367.000	43.60	-0.74	42.86	74.00	-31.14	V	Peak
4231.000	43.22	2.40	45.62	74.00	-28.38	V	Peak
4879.000	50.67	4.59	55.26	74.00	-18.74	V	Peak
4879.000	44.18	4.59	48.77	54.00	-5.23	V	AVG
4996.000	48.67	4.97	53.64	74.00	-20.36	V	Peak
4996.000	47.64	4.97	52.61	54.00	-1.39	V	AVG
5194.000	41.77	5.33	47.10	74.00	-26.90	V	Peak
2827.000	44.76	-1.67	43.09	74.00	-30.91	H	Peak
3808.000	43.62	0.78	44.40	74.00	-29.60	H	Peak
4609.000	41.67	3.71	45.38	74.00	-28.62	H	Peak
4879.000	43.13	4.59	47.72	74.00	-26.28	H	Peak
5005.000	45.49	4.99	50.48	74.00	-23.52	H	Peak
6094.000	41.46	6.23	47.69	74.00	-26.31	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Test Mode:** TX / IEEE 802.11g (CH High)**Tested by:** Sam Zeng**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** July 31, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
3061.000	44.83	-1.26	43.57	74.00	-30.43	V	Peak
3997.000	43.58	1.58	45.16	74.00	-28.84	V	Peak
4672.000	42.48	3.91	46.39	74.00	-27.61	V	Peak
4789.000	42.61	4.29	46.90	74.00	-27.10	V	Peak
4924.000	47.55	4.73	52.28	74.00	-21.72	V	Peak
4996.000	48.56	4.97	53.53	74.00	-20.47	V	Peak
4996.000	47.34	4.97	52.31	54.00	-1.69	V	AVG
2548.000	45.80	-2.17	43.63	74.00	-30.37	H	Peak
3673.000	43.31	0.21	43.52	74.00	-30.48	H	Peak
4555.000	41.77	3.53	45.30	74.00	-28.70	H	Peak
4924.000	55.83	4.73	60.56	74.00	-13.44	H	Peak
4924.000	46.71	4.73	51.44	54.00	-2.56	H	AVG
5707.000	41.46	5.96	47.42	74.00	-26.58	H	Peak
6238.000	41.98	6.47	48.45	74.00	-25.55	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Combine with Antenna 0 and Antenna 1****Test Mode:** TX / IEEE 802.11n HT20 MHz (CH Low)**Tested by:** Sam Zeng**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** July 31, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
2539.000	46.13	-2.19	43.94	74.00	-30.06	V	Peak
3340.000	44.33	-0.79	43.54	74.00	-30.46	V	Peak
4186.000	43.50	2.24	45.74	74.00	-28.26	V	Peak
4825.000	49.98	4.41	54.39	74.00	-19.61	V	Peak
4825.000	41.74	4.41	46.15	54.00	-7.85	V	AVG
4996.000	48.38	4.97	53.35	74.00	-20.65	V	Peak
4996.000	47.20	4.97	52.17	54.00	-1.83	V	AVG
5608.000	41.62	5.92	47.54	74.00	-26.46	V	Peak
3781.000	43.36	0.67	44.03	74.00	-29.97	H	Peak
4240.000	43.04	2.43	45.47	74.00	-28.53	H	Peak
4816.000	56.13	4.38	60.51	74.00	-13.49	H	Peak
4816.000	45.88	4.38	50.26	54.00	-3.74	H	AVG
5005.000	46.78	4.99	51.77	74.00	-22.23	H	Peak
5383.000	42.03	5.66	47.69	74.00	-26.31	H	Peak
6058.000	41.59	6.17	47.76	74.00	-26.24	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



**Test Mode:** TX / IEEE 802.11n HT20 MHz (CH Mid)**Tested by:** Sam Zeng**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** July 31, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
3070.000	44.90	-1.24	43.66	74.00	-30.34	V	Peak
3754.000	44.62	0.55	45.17	74.00	-28.83	V	Peak
4627.000	42.25	3.76	46.01	74.00	-27.99	V	Peak
4879.000	49.50	4.59	54.09	74.00	-19.91	V	Peak
4879.000	45.19	4.59	49.78	54.00	-4.22	V	AVG
4996.000	48.09	4.97	53.06	74.00	-20.94	V	Peak
4996.000	47.65	4.97	52.62	54.00	-1.38	V	AVG
5536.000	41.84	5.89	47.73	74.00	-26.27	V	Peak
3358.000	44.18	-0.76	43.42	74.00	-30.58	H	Peak
4339.000	43.03	2.78	45.81	74.00	-28.19	H	Peak
4879.000	53.16	4.59	57.75	74.00	-16.25	H	Peak
4879.000	45.29	4.59	49.88	54.00	-4.12	H	AVG
4996.000	45.28	4.97	50.25	74.00	-23.75	H	Peak
5239.000	42.29	5.41	47.70	74.00	-26.30	H	Peak
6265.000	41.43	6.51	47.94	74.00	-26.06	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

Test Mode: TX / EEE 802.11n HT20 MHz (CH High)Tested by: Sam ZengAmbient temperature: 24°CRelative humidity: 52% RHDate: July 31, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
2530.000	46.01	-2.21	43.80	74.00	-30.20	V	Peak
3358.000	44.25	-0.76	43.49	74.00	-30.51	V	Peak
3916.000	43.32	1.24	44.56	74.00	-29.44	V	Peak
4762.000	42.48	4.20	46.68	74.00	-27.32	V	Peak
4924.000	49.43	4.73	54.16	74.00	-19.84	V	Peak
4924.000	42.73	4.73	47.46	54.00	-6.54	V	AVG
4996.000	48.84	4.97	53.81	74.00	-20.19	V	Peak
4996.000	47.47	4.97	52.44	54.00	-1.56	V	AVG
3106.000	44.84	-1.18	43.66	74.00	-30.34	H	Peak
3385.000	44.93	-0.71	44.22	74.00	-29.78	H	Peak
4249.000	43.33	2.47	45.80	74.00	-28.20	H	Peak
4924.000	53.77	4.73	58.50	74.00	-15.50	H	Peak
4924.000	45.68	4.73	50.41	54.00	-3.59	H	AVG
4996.000	44.51	4.97	49.48	74.00	-24.52	H	Peak
5896.000	41.89	6.04	47.93	74.00	-26.07	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Combine with Antenna 0 and Antenna 1****Test Mode:** TX/ IEEE 802.11n HT40 MHz (CH Low)**Tested by:** Sam Zeng**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** July 31, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
2530.000	45.57	-2.21	43.36	74.00	-30.64	V	Peak
3376.000	44.32	-0.73	43.59	74.00	-30.41	V	Peak
4276.000	42.90	2.56	45.46	74.00	-28.54	V	Peak
4834.000	47.93	4.44	52.37	74.00	-21.63	V	Peak
5005.000	48.49	4.99	53.48	74.00	-20.52	V	Peak
5005.000	47.47	4.99	52.46	54.00	-1.54	V	AVG
5608.000	41.70	5.92	47.62	74.00	-26.38	V	Peak
2665.000	46.01	-1.96	44.05	74.00	-29.95	H	Peak
3349.000	45.11	-0.77	44.34	74.00	-29.66	H	Peak
3898.000	43.60	1.16	44.76	74.00	-29.24	H	Peak
4555.000	42.75	3.53	46.28	74.00	-27.72	H	Peak
4843.000	53.09	4.47	57.56	74.00	-16.44	H	Peak
4843.000	43.04	4.47	47.51	54.00	-6.49	H	AVG
5545.000	41.56	5.89	47.45	74.00	-26.55	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

Test Mode: TX / IEEE 802.11n HT40 MHz (CH Mid)Tested by: Sam ZengAmbient temperature: 24°CRelative humidity: 52% RHDate: July 31, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
2521.000	46.81	-2.22	44.59	74.00	-29.41	V	Peak
3754.000	43.82	0.55	44.37	74.00	-29.63	V	Peak
4312.000	42.84	2.69	45.53	74.00	-28.47	V	Peak
4879.000	47.08	4.59	51.67	74.00	-22.33	V	Peak
4996.000	48.64	4.97	53.61	74.00	-20.39	V	Peak
4996.000	47.39	4.97	52.36	54.00	-1.64	V	AVG
5599.000	41.75	5.91	47.66	74.00	-26.34	V	Peak
2638.000	45.40	-2.01	43.39	74.00	-30.61	H	Peak
3871.000	43.09	1.05	44.14	74.00	-29.86	H	Peak
4303.000	42.60	2.66	45.26	74.00	-28.74	H	Peak
4879.000	50.78	4.59	55.37	74.00	-18.63	H	Peak
4879.000	40.63	4.59	45.22	54.00	-8.78	H	AVG
5410.000	41.56	5.71	47.27	74.00	-26.73	H	Peak
6454.000	41.20	6.82	48.02	74.00	-25.98	H	Peak

**Remark:**

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

Test Mode: TX / IEEE 802.11n HT40 MHz (CH High)Tested by: Sam ZengAmbient temperature: 24°C Relative humidity: 52% RHDate: July 31, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
3349.000	44.69	-0.77	43.92	74.00	-30.08	V	Peak
3754.000	43.94	0.55	44.49	74.00	-29.51	V	Peak
4249.000	42.56	2.47	45.03	74.00	-28.97	V	Peak
4897.000	49.43	4.64	54.07	74.00	-19.93	V	Peak
4897.000	41.94	4.64	46.58	54.00	-7.42	V	AVG
4996.000	48.14	4.97	53.11	74.00	-20.89	V	Peak
4996.000	47.41	4.97	52.38	54.00	-1.62	V	AVG
6166.000	41.27	6.35	47.62	74.00	-26.38	V	Peak
3817.000	43.65	0.82	44.47	74.00	-29.53	H	Peak
4312.000	42.94	2.69	45.63	74.00	-28.37	H	Peak
4915.000	51.73	4.70	56.43	74.00	-17.57	H	Peak
4915.000	40.96	4.70	45.66	54.00	-8.34	H	AVG
4996.000	45.34	4.97	50.31	74.00	-23.69	H	Peak
5653.000	41.74	5.93	47.67	74.00	-26.33	H	Peak
7183.000	40.79	8.06	48.85	74.00	-25.15	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**GL-AR750S-EXT****Above 1 GHz****Antenna 0****Test Mode:** TX / IEEE 802.11b(CH Low)**Tested by:** Sam Zeng**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** August 14, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1747.000	57.79	-6.38	51.41	74.00	-22.59	V	peak
1918.000	54.52	-5.52	49.00	74.00	-25.00	V	peak
3484.000	50.98	-0.55	50.43	74.00	-23.57	V	peak
4825.000	48.68	4.41	53.09	74.00	-20.91	V	peak
4996.000	46.21	4.97	51.18	74.00	-22.82	V	peak
6247.000	42.15	6.48	48.63	74.00	-25.37	V	peak
1918.000	51.38	-5.52	45.86	74.00	-28.14	H	Peak
2530.000	45.93	-2.21	43.72	74.00	-30.28	H	Peak
3484.000	53.04	-0.55	52.49	74.00	-21.51	H	Peak
4825.000	44.93	4.41	49.34	74.00	-24.66	H	peak
4996.000	46.76	4.97	51.73	74.00	-22.27	H	peak
5932.000	41.20	6.05	47.25	74.00	-26.75	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Test Mode:** TX / IEEE 802.11b (CH Mid)**Tested by:** Sam Zeng**Ambient temperature:** 24°C **Relative humidity:** 52% RH**Date:** August 14, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1747.000	57.31	-6.38	50.93	74.00	-23.07	V	Peak
1918.000	54.46	-5.52	48.94	74.00	-25.06	V	Peak
3484.000	51.04	-0.55	50.49	74.00	-23.51	V	Peak
4870.000	46.21	4.56	50.77	74.00	-23.23	V	Peak
5005.000	45.91	4.99	50.90	74.00	-23.10	V	Peak
6247.000	42.25	6.48	48.73	74.00	-25.27	V	Peak
1918.000	52.31	-5.52	46.79	74.00	-27.21	H	Peak
2521.000	45.38	-2.22	43.16	74.00	-30.84	H	Peak
3484.000	52.39	-0.55	51.84	74.00	-22.16	H	Peak
4348.000	42.08	2.81	44.89	74.00	-29.11	H	Peak
4996.000	46.95	4.97	51.92	74.00	-22.08	H	Peak
5572.000	41.60	5.90	47.50	74.00	-26.50	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Test Mode:** TX / IEEE 802.11b (CH High)**Tested by:** Sam Zeng**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** August 14, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1621.000	52.97	-6.65	46.32	74.00	-27.68	V	Peak
1918.000	53.86	-5.52	48.34	74.00	-25.66	V	Peak
3484.000	50.72	-0.55	50.17	74.00	-23.83	V	Peak
4312.000	42.97	2.69	45.66	74.00	-28.34	V	Peak
4996.000	46.51	4.97	51.48	74.00	-22.52	V	Peak
6247.000	43.02	6.48	49.50	74.00	-24.50	V	Peak
1918.000	51.94	-5.52	46.42	74.00	-27.58	H	Peak
2629.000	44.71	-2.03	42.68	74.00	-31.32	H	Peak
3484.000	52.41	-0.55	51.86	74.00	-22.14	H	Peak
4996.000	46.32	4.97	51.29	74.00	-22.71	H	Peak
5617.000	41.17	5.92	47.09	74.00	-26.91	H	Peak
6634.000	41.03	7.11	48.14	74.00	-25.86	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



**Antenna 1****Test Mode:** TX / IEEE 802.11b(CH Low)**Tested by:** Sam Zeng**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** August 14, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1918.000	55.13	-5.52	49.61	74.00	-24.39	V	peak
3484.000	51.94	-0.55	51.39	74.00	-22.61	V	peak
4825.000	49.80	4.41	54.21	74.00	-19.79	V	peak
4825.000	46.59	4.41	51.00	54.00	-3.00	V	AVG
4996.000	46.12	4.97	51.09	74.00	-22.91	V	peak
6094.000	42.17	6.23	48.40	74.00	-25.60	V	peak
1918.000	51.63	-5.52	46.11	74.00	-27.89	H	Peak
2530.000	45.77	-2.21	43.56	74.00	-30.44	H	Peak
3484.000	52.32	-0.55	51.77	74.00	-22.23	H	Peak
4825.000	50.44	4.41	54.85	74.00	-19.15	H	peak
4825.000	47.94	4.41	52.35	54.00	-1.65	H	AVG
4996.000	46.73	4.97	51.70	74.00	-22.30	H	peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Test Mode:** TX / IEEE 802.11b (CH Mid)**Tested by:** Sam Zeng**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** August 14, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1918.000	56.22	-5.52	50.70	74.00	-23.30	V	Peak
2530.000	46.01	-2.21	43.80	74.00	-30.20	V	Peak
3484.000	51.21	-0.55	50.66	74.00	-23.34	V	Peak
4870.000	50.49	4.56	55.05	74.00	-18.95	V	Peak
4870.000	47.46	4.56	52.02	54.00	-1.98	V	AVG
4996.000	46.73	4.97	51.70	74.00	-22.30	V	Peak
6562.000	41.69	6.99	48.68	74.00	-25.32	V	Peak
1630.000	51.41	-6.64	44.77	74.00	-29.23	H	Peak
2521.000	44.48	-2.22	42.26	74.00	-31.74	H	Peak
3754.000	44.93	0.55	45.48	74.00	-28.52	H	Peak
4870.000	49.49	4.56	54.05	74.00	-19.95	H	Peak
4870.000	47.47	4.56	52.03	54.00	-1.97	H	AVG
5005.000	46.76	4.99	51.75	74.00	-22.25	H	Peak
6454.000	39.50	6.82	46.32	74.00	-27.68	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Test Mode:** TX / IEEE 802.11b (CH High)**Tested by:** Sam Zeng**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** August 14, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1918.000	54.81	-5.52	49.29	74.00	-24.71	V	Peak
2530.000	46.58	-2.21	44.37	74.00	-29.63	V	Peak
3484.000	50.47	-0.55	49.92	74.00	-24.08	V	Peak
3943.000	43.17	1.35	44.52	74.00	-29.48	V	Peak
4924.000	49.74	4.73	54.47	74.00	-19.53	V	Peak
4924.000	47.39	4.73	52.12	54.00	-1.88	V	AVG
6247.000	43.10	6.48	49.58	74.00	-24.42	V	Peak
1918.000	51.36	-5.52	45.84	74.00	-28.16	H	Peak
2521.000	45.95	-2.22	43.73	74.00	-30.27	H	Peak
3484.000	52.28	-0.55	51.73	74.00	-22.27	H	Peak
4330.000	41.95	2.75	44.70	74.00	-29.30	H	Peak
4924.000	46.04	4.73	50.77	74.00	-23.23	H	Peak
4996.000	46.56	4.97	51.53	74.00	-22.47	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Antenna 0****Test Mode:** TX / IEEE 802.11g(CH Low)**Tested by:** Sam Zeng**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** August 14, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1630.000	54.20	-6.64	47.56	74.00	-26.44	V	Peak
1918.000	54.41	-5.52	48.89	74.00	-25.11	V	Peak
3484.000	50.87	-0.55	50.32	74.00	-23.68	V	Peak
4834.000	51.14	4.44	55.58	74.00	-18.42	V	Peak
4834.000	39.12	4.44	43.56	54.00	-10.44	V	AVG
4996.000	45.03	4.97	50.00	74.00	-24.00	V	Peak
7228.000	44.39	8.14	52.53	74.00	-21.47	V	Peak
1630.000	54.80	-6.64	48.16	74.00	-25.84	H	Peak
3484.000	50.87	-0.55	50.32	74.00	-23.68	H	Peak
4339.000	42.83	2.78	45.61	74.00	-28.39	H	Peak
4825.000	45.59	4.41	50.00	74.00	-24.00	H	Peak
4996.000	46.25	4.97	51.22	74.00	-22.78	H	Peak
5590.000	41.84	5.91	47.75	74.00	-26.25	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Test Mode:** TX / IEEE 802.11g (CH Mid)**Tested by:** Sam Zeng**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** August 14, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1747.000	51.13	-6.38	44.75	74.00	-29.25	V	Peak
2530.000	45.61	-2.21	43.40	74.00	-30.60	V	Peak
3484.000	50.85	-0.55	50.30	74.00	-23.70	V	Peak
4879.000	48.20	4.59	52.79	74.00	-21.21	V	Peak
4996.000	45.83	4.97	50.80	74.00	-23.20	V	Peak
5734.000	41.45	5.97	47.42	74.00	-26.58	V	Peak
1630.000	53.27	-6.64	46.63	74.00	-27.37	H	Peak
1918.000	50.63	-5.52	45.11	74.00	-28.89	H	Peak
3484.000	48.89	-0.55	48.34	74.00	-25.66	H	Peak
4870.000	45.50	4.56	50.06	74.00	-23.94	H	Peak
4996.000	45.83	4.97	50.80	74.00	-23.20	H	Peak
6517.000	40.98	6.92	47.90	74.00	-26.10	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Test Mode: TX / IEEE 802.11g (CH High)

Tested by: Sam Zeng

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: August 14, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1630.000	55.85	-6.64	49.21	74.00	-24.79	V	Peak
1918.000	54.35	-5.52	48.83	74.00	-25.17	V	Peak
2512.000	47.11	-2.24	44.87	74.00	-29.13	V	Peak
3484.000	50.90	-0.55	50.35	74.00	-23.65	V	Peak
4924.000	49.86	4.73	54.59	74.00	-19.41	V	Peak
4924.000	43.39	4.73	48.12	54.00	-5.88	V	AVG
5617.000	41.85	5.92	47.77	74.00	-26.23	V	Peak
1909.000	51.37	-5.58	45.79	74.00	-28.21	H	Peak
3484.000	52.25	-0.55	51.70	74.00	-22.30	H	Peak
3997.000	42.87	1.58	44.45	74.00	-29.55	H	Peak
4996.000	46.72	4.97	51.69	74.00	-22.31	H	Peak
6391.000	41.13	6.71	47.84	74.00	-26.16	H	Peak
7201.000	41.03	8.09	49.12	74.00	-24.88	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Antenna 1****Test Mode:** TX / IEEE 802.11g(CH Low)**Tested by:** Sam Zeng**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** August 14, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1918.000	54.95	-5.52	49.43	74.00	-24.57	V	Peak
2521.000	45.74	-2.22	43.52	74.00	-30.48	V	Peak
3484.000	50.55	-0.55	50.00	74.00	-24.00	V	Peak
4825.000	54.61	4.41	59.02	74.00	-14.98	V	Peak
4825.000	43.82	4.41	48.23	54.00	-5.77	V	AVG
4996.000	46.21	4.97	51.18	74.00	-22.82	V	Peak
6247.000	42.74	6.48	49.22	74.00	-24.78	V	Peak
1621.000	55.53	-6.65	48.88	74.00	-25.12	H	Peak
1918.000	51.22	-5.52	45.70	74.00	-28.30	H	Peak
3484.000	52.27	-0.55	51.72	74.00	-22.28	H	Peak
4834.000	54.86	4.44	59.30	74.00	-14.70	H	Peak
4834.000	42.88	4.44	47.32	54.00	-6.68	H	AVG
5005.000	46.36	4.99	51.35	74.00	-22.65	H	Peak
6625.000	41.87	7.09	48.96	74.00	-25.04	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Test Mode: TX / IEEE 802.11g (CH Mid)

Tested by: Sam Zeng

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: August 14, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1918.000	54.98	-5.52	49.46	74.00	-24.54	V	Peak
2629.000	45.19	-2.03	43.16	74.00	-30.84	V	Peak
3484.000	50.92	-0.55	50.37	74.00	-23.63	V	Peak
4879.000	57.40	4.59	61.99	74.00	-12.01	V	Peak
4879.000	44.33	4.59	48.92	54.00	-5.08	V	AVG
4996.000	46.45	4.97	51.42	74.00	-22.58	V	Peak
6247.000	41.66	6.48	48.14	74.00	-25.86	V	Peak
1918.000	50.92	-5.52	45.40	74.00	-28.60	H	Peak
3484.000	52.44	-0.55	51.89	74.00	-22.11	H	Peak
4870.000	56.61	4.56	61.17	74.00	-12.83	H	Peak
4870.000	44.67	4.56	49.23	54.00	-4.77	H	AVG
4996.000	46.99	4.97	51.96	74.00	-22.04	H	Peak
5446.000	41.96	5.77	47.73	74.00	-26.27	H	Peak
6814.000	41.06	7.40	48.46	74.00	-25.54	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



**Test Mode:** TX / IEEE 802.11g (CH High)**Tested by:** Sam Zeng**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** August 14, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1918.000	53.83	-5.52	48.31	74.00	-25.69	V	Peak
3484.000	50.97	-0.55	50.42	74.00	-23.58	V	Peak
4231.000	43.32	2.40	45.72	74.00	-28.28	V	Peak
4924.000	59.58	4.73	64.31	74.00	-9.69	V	Peak
4924.000	45.39	4.73	50.12	54.00	-3.88	V	Peak
6247.000	42.84	6.48	49.32	74.00	-24.68	V	Peak
6742.000	42.32	7.28	49.60	74.00	-24.40	V	AVG
1918.000	51.07	-5.52	45.55	74.00	-28.45	H	Peak
3484.000	52.66	-0.55	52.11	74.00	-21.89	H	Peak
4573.000	42.10	3.59	45.69	74.00	-28.31	H	Peak
4924.000	54.25	4.73	58.98	74.00	-15.02	H	Peak
4924.000	42.16	4.73	46.89	54.00	-7.11	H	AVG
5662.000	41.58	5.94	47.52	74.00	-26.48	H	Peak
6985.000	40.91	7.68	48.59	74.00	-25.41	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Combine with Antenna 0 and Antenna 1****Test Mode:** TX / IEEE 802.11n HT20 MHz (CH Low)**Tested by:** Sam Zeng**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** August 14, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1621.000	54.40	-6.65	47.75	74.00	-26.25	V	Peak
1918.000	54.86	-5.52	49.34	74.00	-24.66	V	Peak
3484.000	50.07	-0.55	49.52	74.00	-24.48	V	Peak
4816.000	54.87	4.38	59.25	74.00	-14.75	V	Peak
4816.000	43.96	4.38	48.34	54.00	-5.66	V	AVG
4996.000	46.12	4.97	51.09	74.00	-22.91	V	Peak
5392.000	42.30	5.68	47.98	74.00	-26.02	V	Peak
1918.000	51.73	-5.52	46.21	74.00	-27.79	H	Peak
2503.000	46.00	-2.25	43.75	74.00	-30.25	H	Peak
3484.000	52.23	-0.55	51.68	74.00	-22.32	H	Peak
4825.000	53.75	4.41	58.16	74.00	-15.84	H	Peak
4825.000	44.84	4.41	49.25	54.00	-4.75	H	AVG
4996.000	47.22	4.97	52.19	74.00	-21.81	H	Peak
6814.000	41.94	7.40	49.34	74.00	-24.66	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

Test Mode: TX / IEEE 802.11n HT20 MHz (CH Mid)Tested by: Sam ZengAmbient temperature: 24°CRelative humidity: 52% RHDate: August 14, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1891.000	54.92	-5.69	49.23	74.00	-24.77	V	Peak
2512.000	45.77	-2.24	43.53	74.00	-30.47	V	Peak
3484.000	50.77	-0.55	50.22	74.00	-23.78	V	Peak
4870.000	57.47	4.56	62.03	74.00	-11.97	V	Peak
4870.000	45.89	4.56	50.45	54.00	-3.55	V	AVG
4996.000	45.78	4.97	50.75	74.00	-23.25	V	Peak
6157.000	41.50	6.33	47.83	74.00	-26.17	V	Peak
1918.000	51.19	-5.52	45.67	74.00	-28.33	H	Peak
2530.000	45.60	-2.21	43.39	74.00	-30.61	H	Peak
3484.000	52.67	-0.55	52.12	74.00	-21.88	H	Peak
4870.000	55.47	4.56	60.03	74.00	-13.97	H	AVG
4870.000	44.23	4.56	48.79	54.00	-5.21	H	Peak
5005.000	45.52	4.99	50.51	74.00	-23.49	H	Peak
5941.000	41.42	6.06	47.48	74.00	-26.52	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Test Mode:** TX / EEE 802.11n HT20 MHz (CH High)**Tested by:** Sam Zeng**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** August 14, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1918.000	54.69	-5.52	49.17	74.00	-24.83	V	Peak
2467.000	48.28	-2.44	45.84	74.00	-28.16	V	Peak
3484.000	50.98	-0.55	50.43	74.00	-23.57	V	Peak
4924.000	58.51	4.73	63.24	74.00	-10.76	V	Peak
4924.000	44.50	4.73	49.23	54.00	-4.77	V	AVG
6247.000	41.36	6.48	47.84	74.00	-26.16	V	Peak
6949.000	41.06	7.62	48.68	74.00	-25.32	V	Peak
1909.000	55.42	-5.58	49.84	74.00	-24.16	H	Peak
2647.000	45.37	-2.00	43.37	74.00	-30.63	H	Peak
3484.000	52.25	-0.55	51.70	74.00	-22.30	H	Peak
4384.000	42.95	2.94	45.89	74.00	-28.11	H	Peak
4924.000	53.32	4.73	58.05	74.00	-15.95	H	Peak
4924.000	41.48	4.73	46.21	54.00	-7.79	H	AVG
5959.000	40.88	6.06	46.94	74.00	-27.06	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Combine with Antenna 0 and Antenna 1****Test Mode:** TX/ IEEE 802.11n HT40 MHz (CH Low)**Tested by:** Sam Zeng**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** August 14, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1909.000	54.89	-5.58	49.31	74.00	-24.69	V	Peak
2503.000	46.27	-2.25	44.02	74.00	-29.98	V	Peak
3484.000	50.45	-0.55	49.90	74.00	-24.10	V	Peak
4861.000	54.25	4.53	58.78	74.00	-15.22	V	Peak
4861.000	40.05	4.53	44.58	54.00	-9.42	V	AVG
4996.000	46.10	4.97	51.07	74.00	-22.93	V	Peak
6751.000	41.32	7.30	48.62	74.00	-25.38	V	Peak
1918.000	51.32	-5.52	45.80	74.00	-28.20	H	Peak
2431.000	46.66	-2.64	44.02	74.00	-29.98	H	Peak
3484.000	52.17	-0.55	51.62	74.00	-22.38	H	Peak
4861.000	52.66	4.53	57.19	74.00	-16.81	H	Peak
4861.000	38.72	4.53	43.25	54.00	-10.75	H	AVG
5806.000	41.59	6.00	47.59	74.00	-26.41	H	Peak
7282.000	40.98	8.25	49.23	74.00	-24.77	H	Peak

**Remark:**

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

Test Mode: TX / IEEE 802.11n HT40 MHz (CH Mid)Tested by: Sam ZengAmbient temperature: 24°CRelative humidity: 52% RHDate: August 14, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1747.000	56.05	-6.38	49.67	74.00	-24.33	V	Peak
1918.000	54.65	-5.52	49.13	74.00	-24.87	V	Peak
2512.000	46.40	-2.24	44.16	74.00	-29.84	V	Peak
3484.000	50.74	-0.55	50.19	74.00	-23.81	V	Peak
4888.000	57.35	4.61	61.96	74.00	-12.04	V	Peak
4888.000	45.67	4.61	50.28	54.00	-3.72	V	AVG
5005.000	45.77	4.99	50.76	74.00	-23.24	V	Peak
1621.000	52.30	-6.65	45.65	74.00	-28.35	H	Peak
1909.000	52.62	-5.58	47.04	74.00	-26.96	H	Peak
2494.000	45.74	-2.29	43.45	74.00	-30.55	H	Peak
3484.000	52.52	-0.55	51.97	74.00	-22.03	H	Peak
4897.000	53.35	4.64	57.99	74.00	-16.01	H	Peak
4897.000	43.69	4.64	48.33	54.00	-5.67	H	AVG
5905.000	40.97	6.04	47.01	74.00	-26.99	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

Test Mode: TX / IEEE 802.11n HT40 MHz (CH High)Tested by: Sam ZengAmbient temperature: 24°C Relative humidity: 52% RHDate: August 14, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1909.000	57.19	-5.58	51.61	74.00	-22.39	V	Peak
2467.000	47.03	-2.44	44.59	74.00	-29.41	V	Peak
3484.000	50.42	-0.55	49.87	74.00	-24.13	V	Peak
4924.000	56.70	4.73	61.43	74.00	-12.57	V	Peak
4924.000	45.40	4.73	50.13	54.00	-3.87	V	AVG
5644.000	42.32	5.93	48.25	74.00	-25.75	V	Peak
6571.000	41.29	7.01	48.30	74.00	-25.70	V	Peak
1918.000	50.94	-5.52	45.42	74.00	-28.58	H	Peak
2530.000	46.68	-2.21	44.47	74.00	-29.53	H	Peak
3484.000	52.67	-0.55	52.12	74.00	-21.88	H	Peak
4375.000	42.29	2.91	45.20	74.00	-28.80	H	AVG
4924.000	53.26	4.73	57.99	74.00	-16.01	H	Peak
4924.000	42.89	4.73	47.62	54.00	-6.38	H	Peak
5797.000	41.20	5.99	47.19	74.00	-26.81	H	Peak

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



## 7.3. 6dB BANDWIDTH MEASUREMENT

### 7.3.1. LIMITS

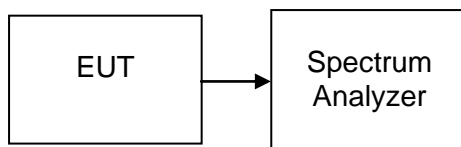
According to §15.247(a) (2), systems using digital modulation techniques may operate in the 902 - 928 MHz, 2400 - 2483.5 MHz. The minimum 6 dB bandwidth shall be at least 500 kHz.

### 7.3.2. TEST PROCEDURES (please refer to measurement standard)

#### 8.1 Option 2:

The automatic bandwidth measurement capability of an instrument may be employed using the X dB bandwidth mode with X set to 6 dB, if the functionality described above (i.e., RBW = 100 kHz, VBW  $\geq$  3 RBW, peak detector with maximum hold) is implemented by the instrumentation function. When using this capability, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be  $\geq$  6 dB.

### 7.3.3. TEST SETUP





**7.3.4. TEST RESULTS***No non-compliance noted***Test Data****Test mode: IEEE 802.11b**

Channel	Frequency (MHz)	Bandwidth (kHz)		Limit (kHz)	Test Result
		Antenna 0	Antenna 1		
Low	2412	7071	7075	>500	PASS
Mid	2437	7079	7085		PASS
High	2462	7086	6577		PASS

**Test mode: IEEE 802.11g**

Channel	Frequency (MHz)	Bandwidth (kHz)		Limit (kHz)	Test Result
		Antenna 0	Antenna 1		
Low	2412	15120	15120	>500	PASS
Mid	2437	15110	15120		PASS
High	2462	15110	15110		PASS

**Test mode: IEEE 802.11n HT20 MHz**

Channel	Frequency (MHz)	Bandwidth (kHz)		Limit (kHz)	Test Result
		Antenna 0	Antenna 1		
Low	2412	15100	15100	>500	PASS
Mid	2437	15110	15120		PASS
High	2462	15110	15120		PASS

**Test mode: IEEE 802.11n HT40 MHz**

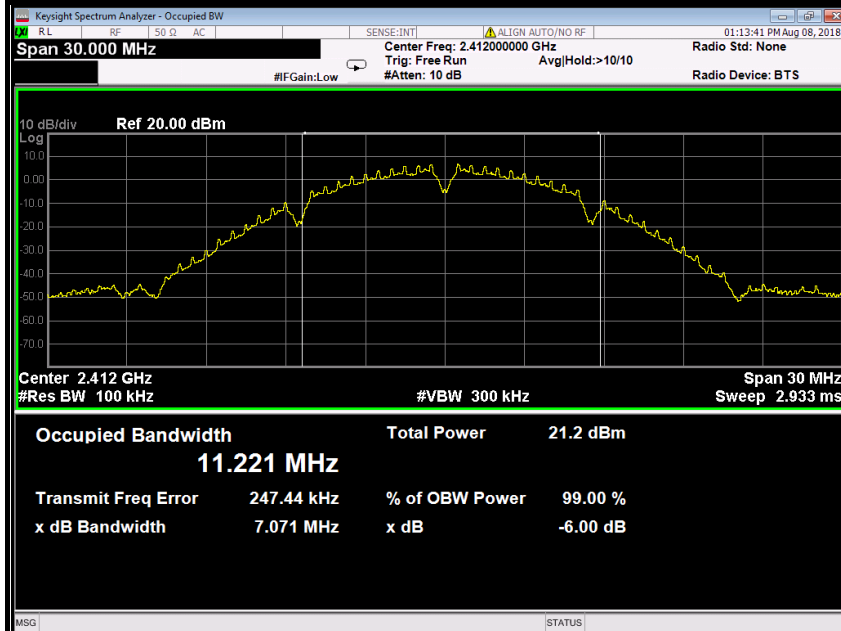
Channel	Frequency (MHz)	Bandwidth (kHz)		Limit (kHz)	Test Result
		Antenna 0	Antenna 1		
Low	2422	30090	30090	>500	PASS
Mid	2437	33811	33810		PASS
High	2452	33800	33800		PASS



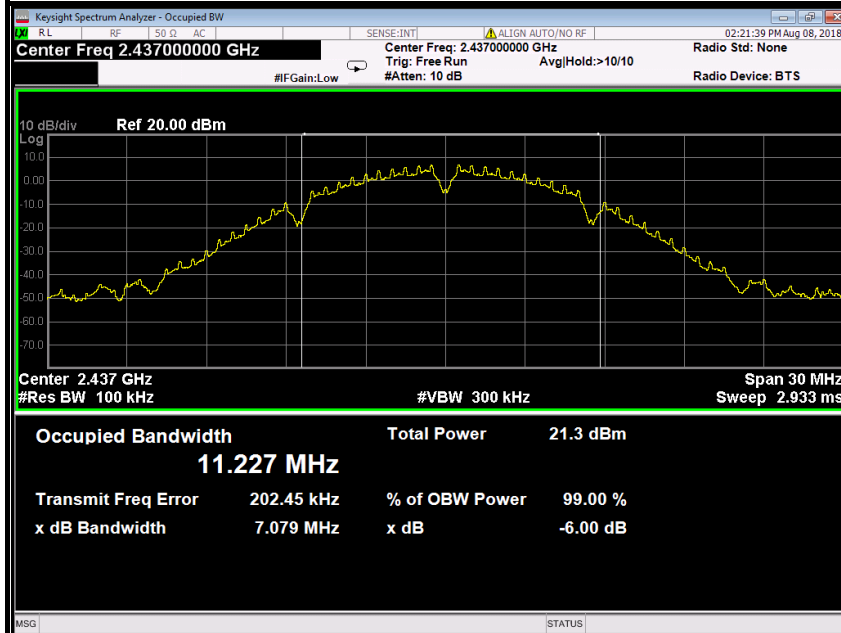
## Test Plot

### IEEE 802.11b mode (Antenna 0)

#### 6dB Bandwidth (CH Low)

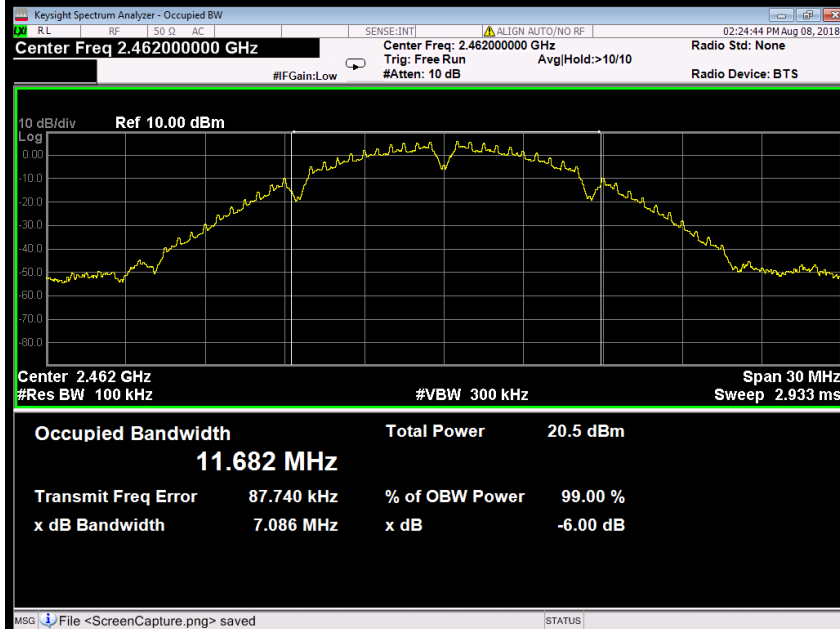


#### 6dB Bandwidth (CH Mid)



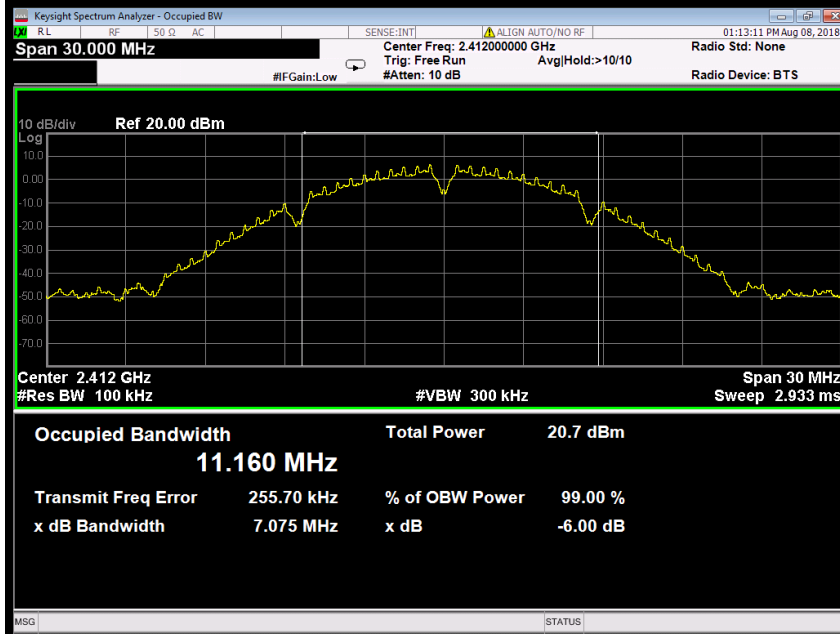


### 6dB Bandwidth (CH High)



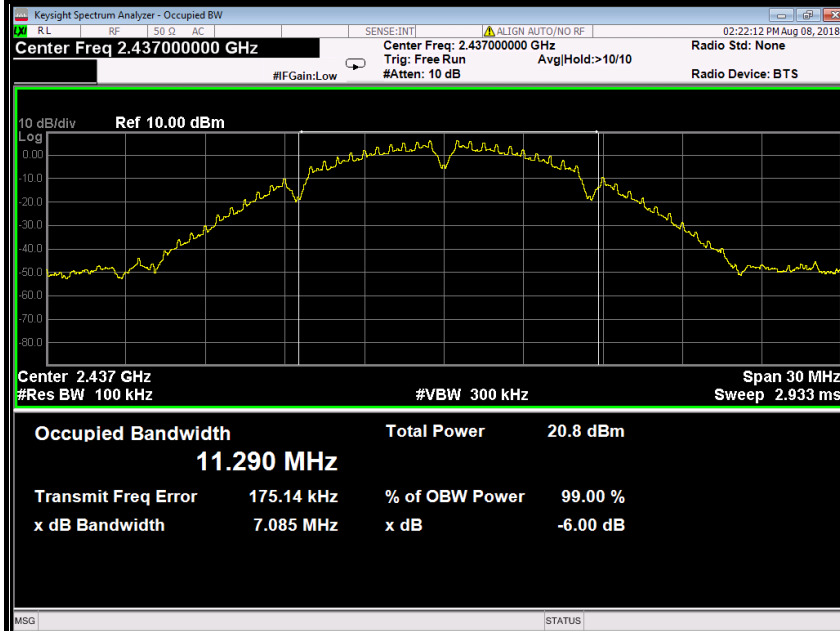
### IEEE 802.11b mode (Antenna 1)

### 6dB Bandwidth (CH Low)

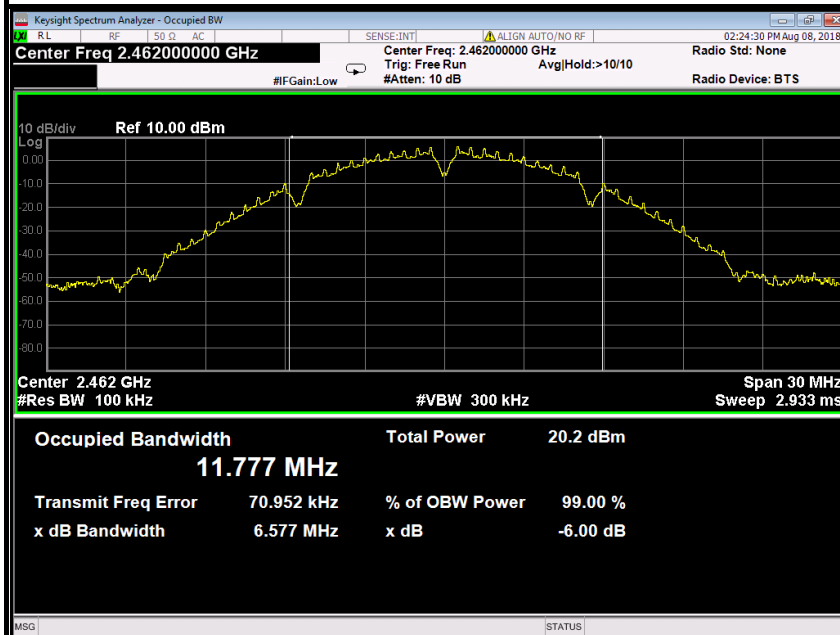




### 6dB Bandwidth (CH Mid)



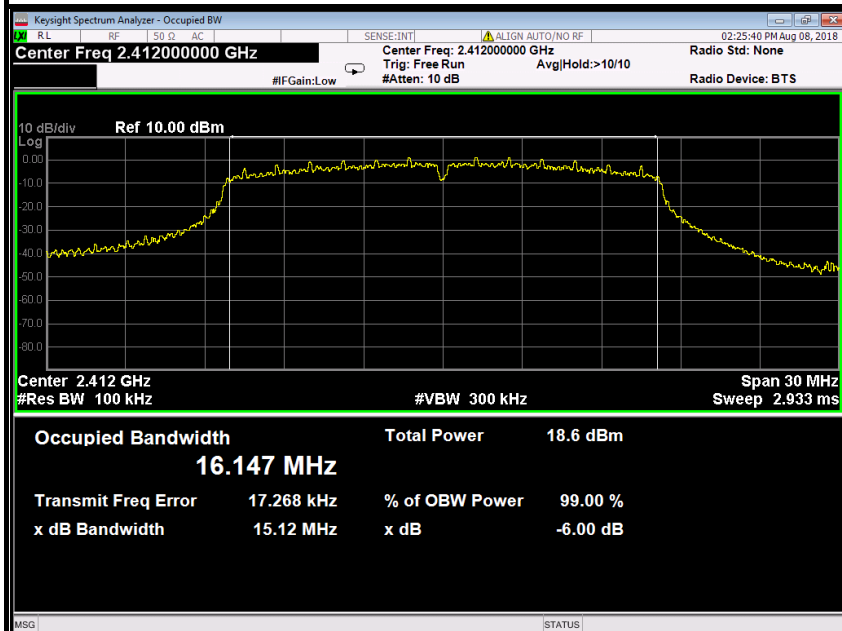
### 6dB Bandwidth (CH High)



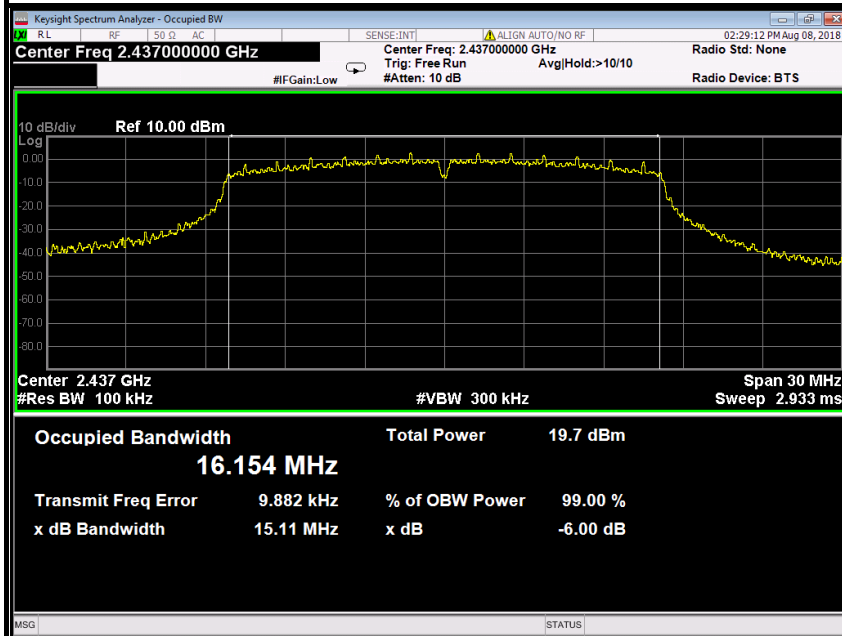


## IEEE 802.11g mode (Antenna 0)

### 6dB Bandwidth (CH Low)

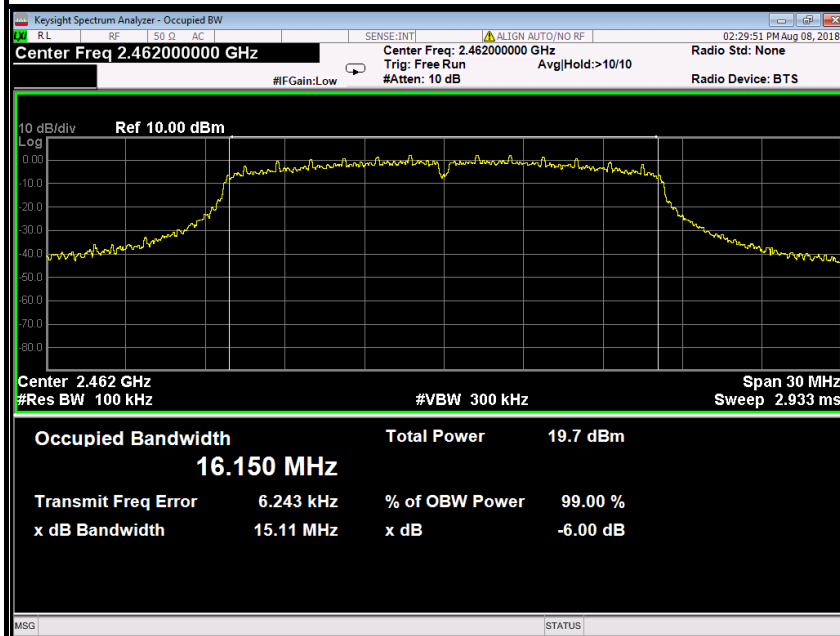


### 6dB Bandwidth (CH Mid)



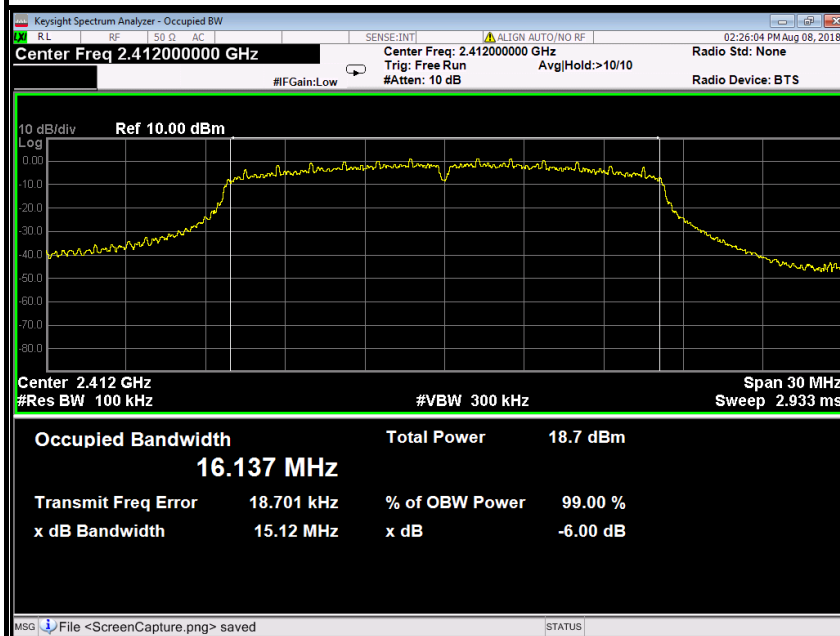


### 6dB Bandwidth (CH High)



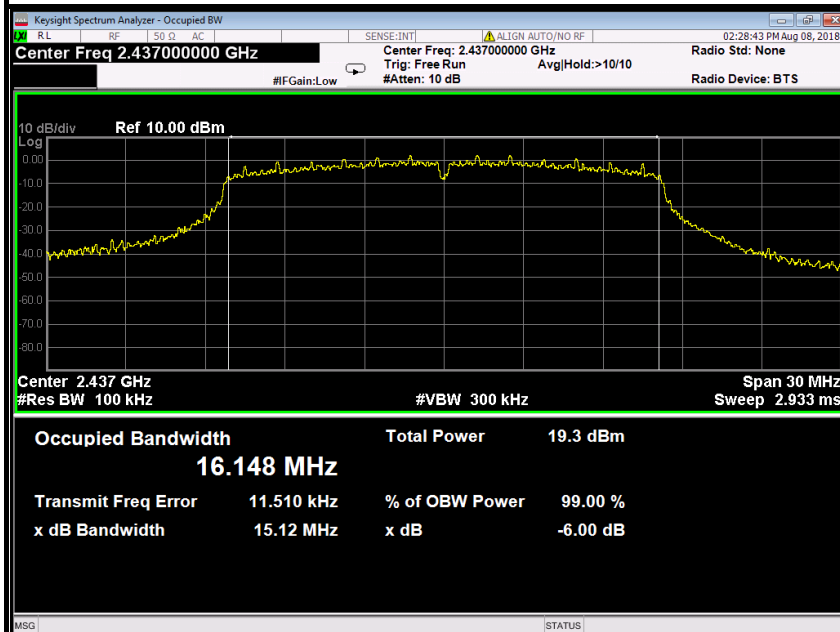
### IEEE 802.11g mode (Antenna 1)

### 6dB Bandwidth (CH Low)

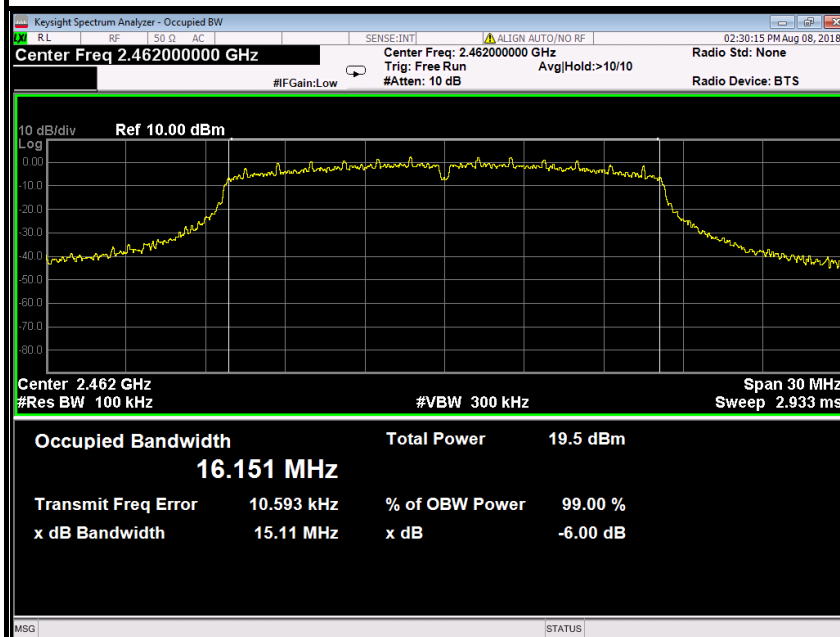




### 6dB Bandwidth (CH Mid)



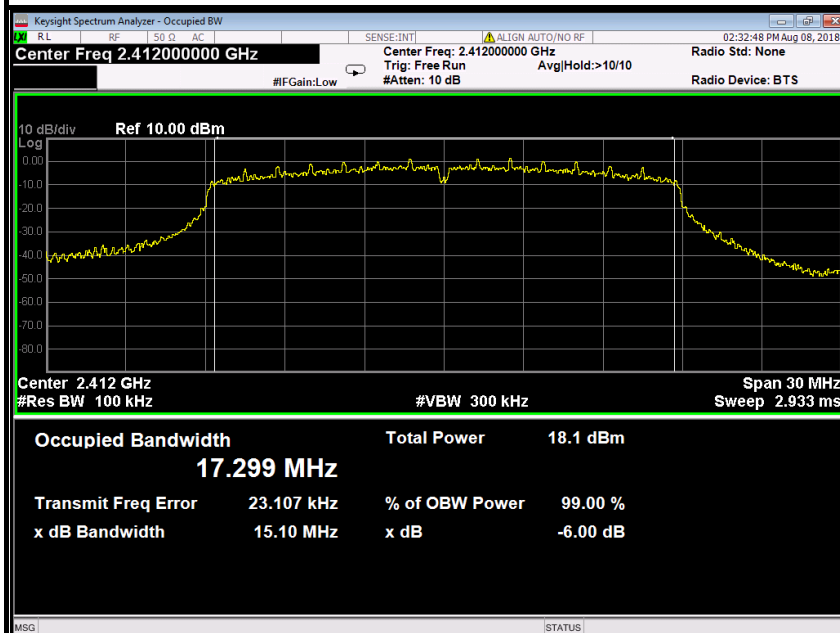
### 6dB Bandwidth (CH High)



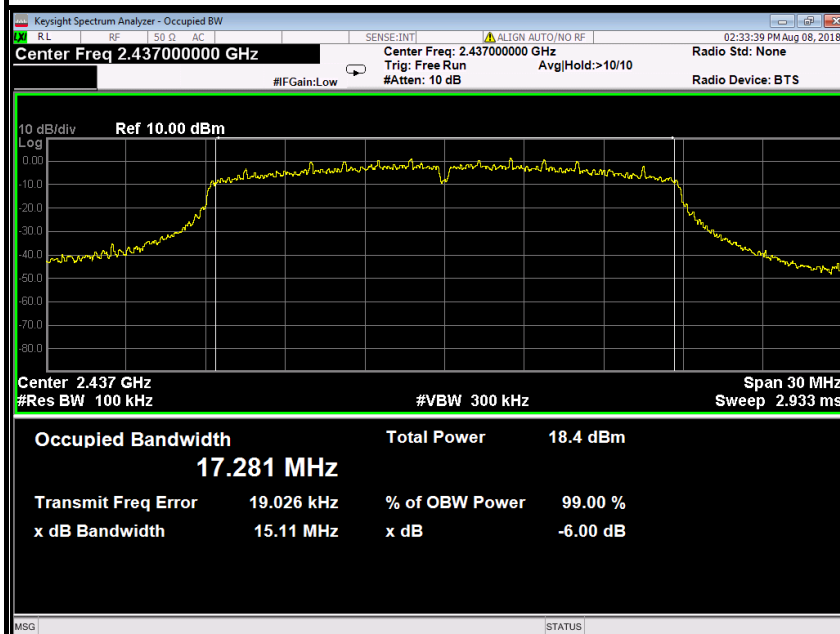


## IEEE 802.11n HT20 MHz mode (Antenna 0)

### 6dB Bandwidth (CH Low)



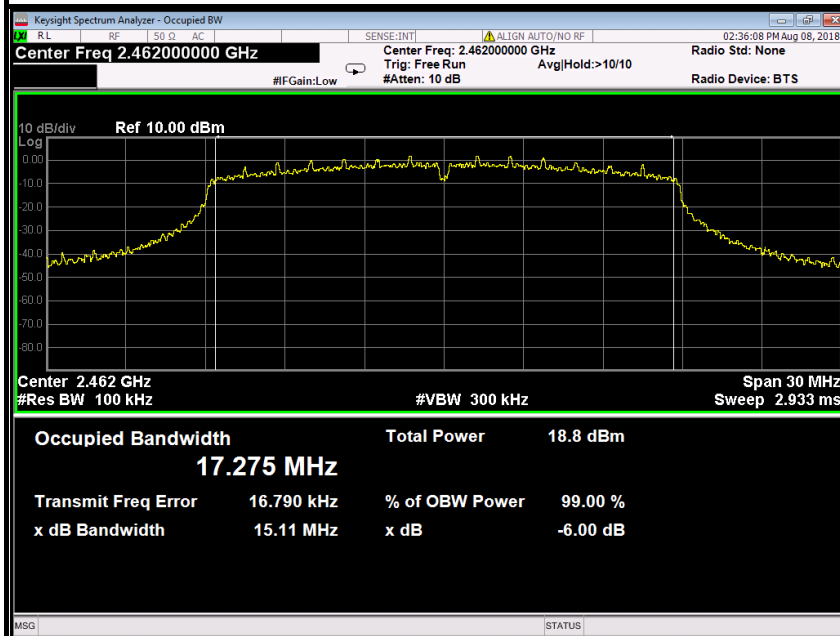
### 6dB Bandwidth (CH Mid)





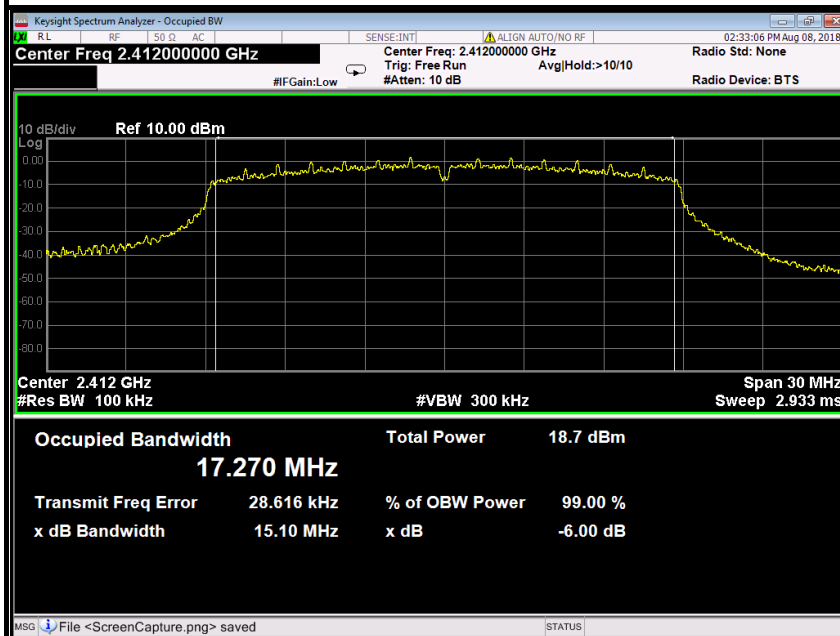


### 6dB Bandwidth (CH High)



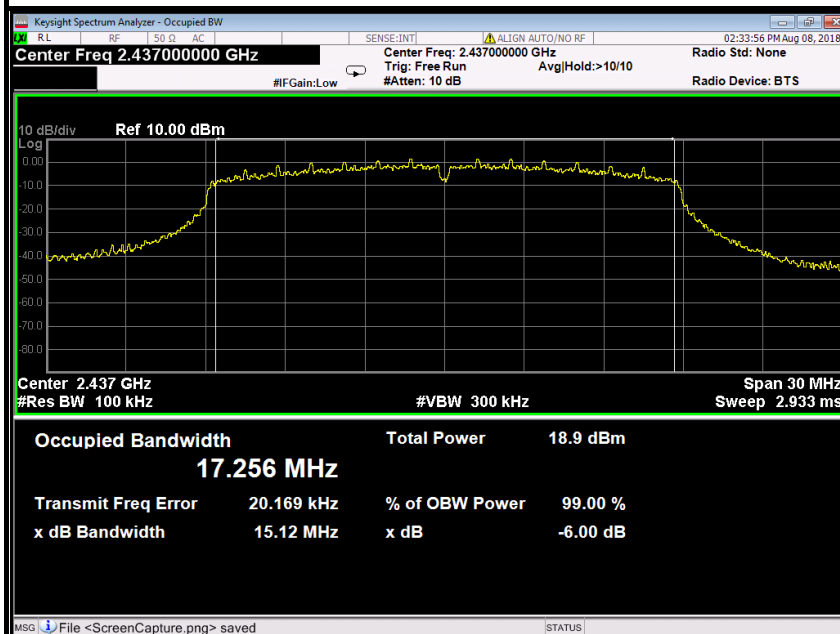
### IEEE 802.11n HT20 MHz mode (Antenna 1)

### 6dB Bandwidth (CH Low)

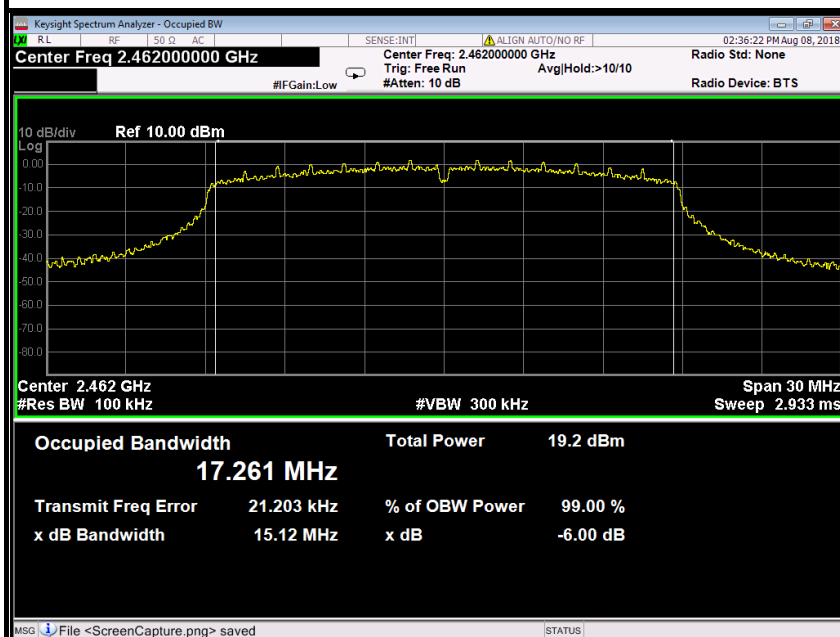




## 6dB Bandwidth (CH Mid)



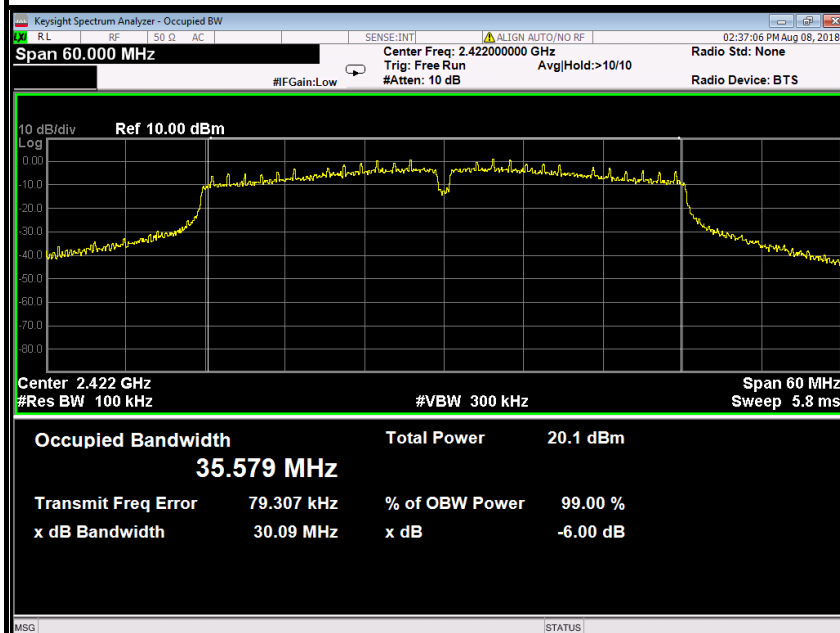
## 6dB Bandwidth (CH High)



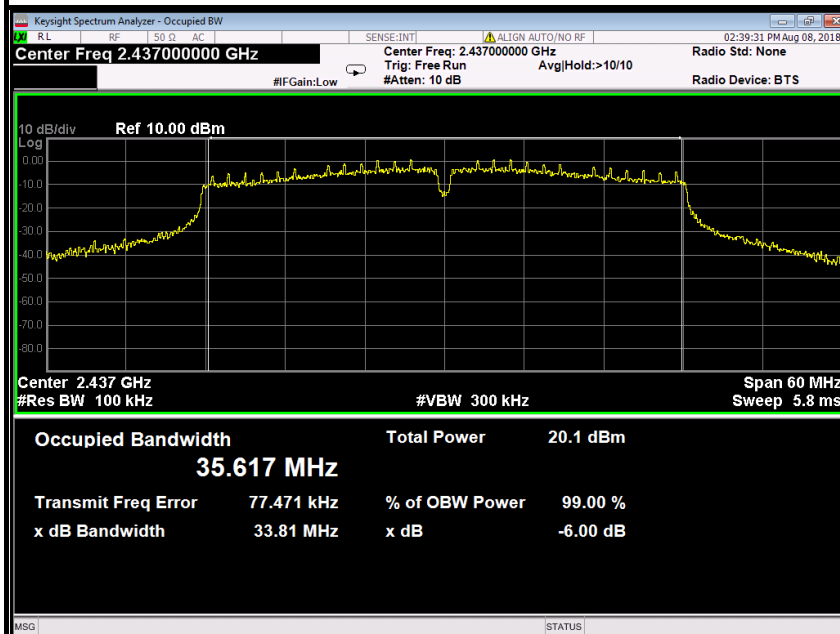


## IEEE 802.11n HT40 MHz mode (Antenna 0)

### 6dB Bandwidth (CH Low)

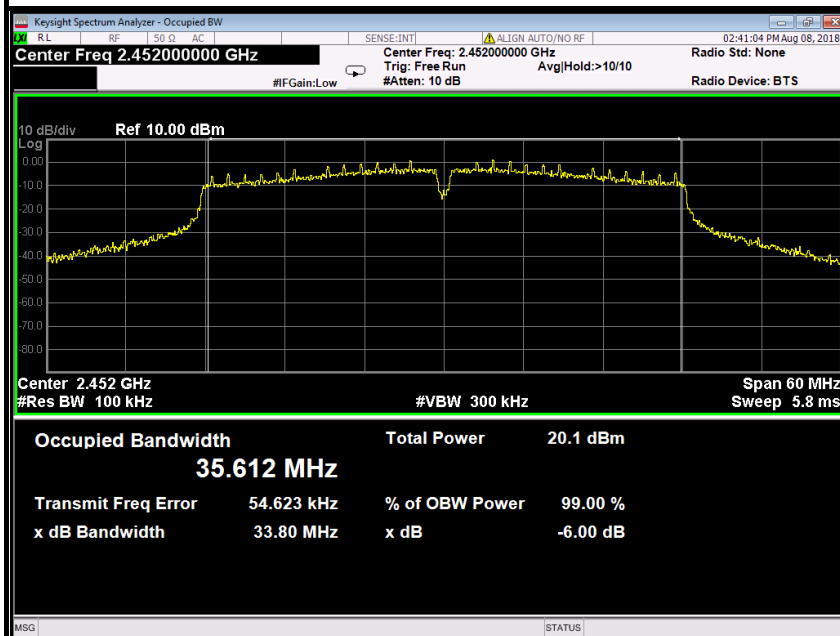


### 6dB Bandwidth (CH Mid)



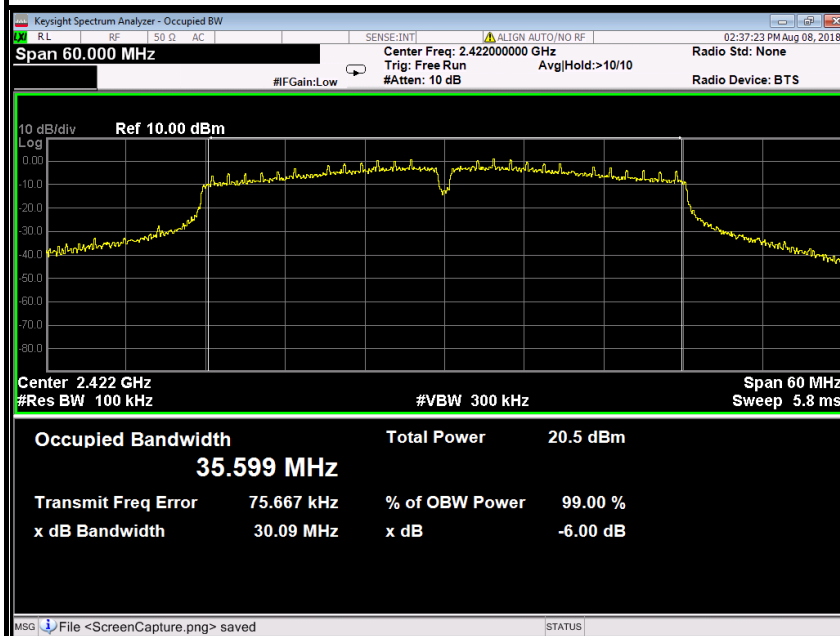


### 6dB Bandwidth (CH High)



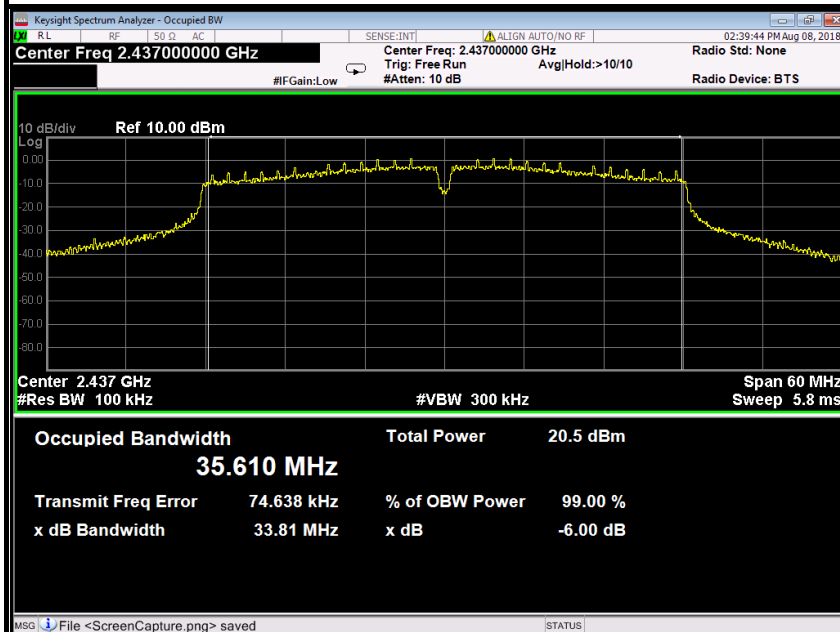
### IEEE 802.11n HT40 MHz mode (Antenna 1)

### 6dB Bandwidth (CH Low)

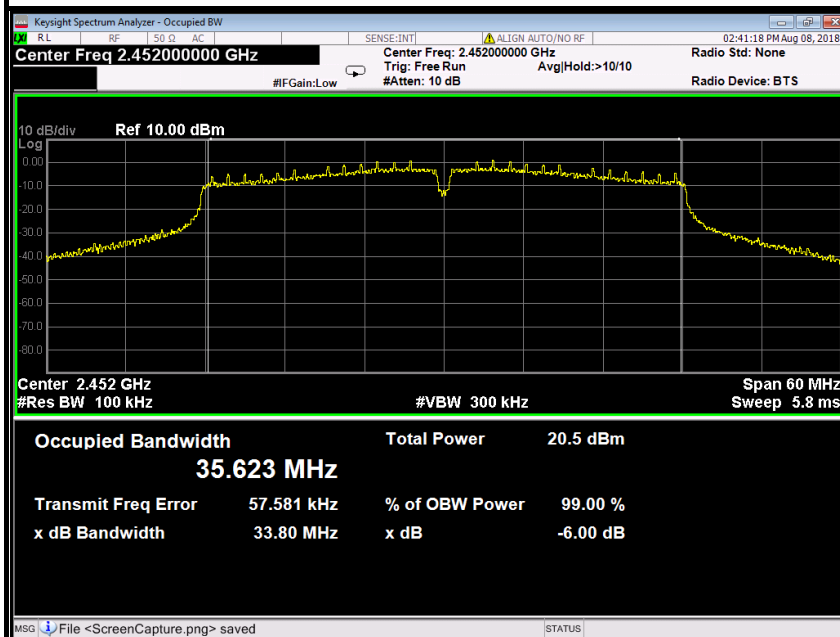




## 6dB Bandwidth (CH Mid)



## 6dB Bandwidth (CH High)





## 7.4. ANTENNA GAIN

### MEASUREMENT

The antenna gain of the complete system is calculated by the difference of radiated power in EIRP and the conducted power of the module. For normal WLAN devices, the DSSS mode is used.

### MEASUREMENT PARAMETERS

Measurement parameter	
Detector	Peak
Sweep time	Auto
Resolution bandwidth	3 MHz
Video bandwidth	3 MHz
Trace-Mode	Max hold

### LIMITS

FCC	IC
Antenna Gain	
6 dBi	



## **TEST RESULTS**

### **Antenna 0**

<b>T<sub>nom</sub></b>	<b>V<sub>nom</sub></b>	<b>Lowest channel 2412MHz</b>	<b>Middle channel 2437MHz</b>	<b>Highest channel 2462MHz</b>
Conducted power [dBm/MHz] Measured with DSSS modulation		3.99	3.80	3.25
Radiated power [dBm/MHz] Measured with DSSS modulation		7.21	6.80	6.39
Gain [dBi] Calculated		3.22	3.00	3.14
Measurement uncertainty		$\pm 1.5$ dB (cond.) / $\pm 3$ dB (rad.)		

### **Antenna 1**

<b>T<sub>nom</sub></b>	<b>V<sub>nom</sub></b>	<b>Lowest channel 2412MHz</b>	<b>Middle channel 2437MHz</b>	<b>Highest channel 2462MHz</b>
Conducted power [dBm/MHz] Measured with DSSS modulation		3.87	2.26	1.10
Radiated power [dBm/MHz] Measured with DSSS modulation		7.05	5.63	4.21
Gain [dBi] Calculated		3.18	3.37	3.11
Measurement uncertainty		$\pm 1.5$ dB (cond.) / $\pm 3$ dB (rad.)		



## 7.5. PEAK OUTPUT POWER

### 7.5.1. LIMITS

The maximum peak output power of the intentional radiator shall not exceed the following:

1. According to §15.247(b)(3), for systems using digital modulation in the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz: 1 Watt.
2. According to §15.247(b)(4), the conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### 7.5.2. TEST PROCEDURES (please refer to measurement standard)

#### 9.1.1 RBW $\geq$ DTS bandwidth

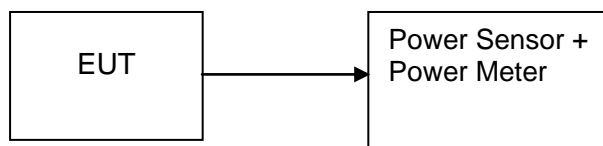
This procedure shall be used when the measurement instrument has available a resolution bandwidth that is greater than the *DTS bandwidth*.

- a) Set the RBW  $\geq$  DTS bandwidth.
- b) Set VBW  $\geq$  3 RBW.
- c) Set span  $\geq$  3 x RBW
- d) Sweep time = auto couple.
- e) Detector = peak.
- f) Trace mode = max hold.
- g) Allow trace to fully stabilize.
- h) Use peak marker function to determine the peak amplitude level.

#### 9.1.2 PKPM1 Peak power meter method

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall utilize a fast-responding diode detector.

### 7.5.3. TEST SETUP







#### 7.5.4. TEST RESULTS

*No non-compliance noted*

##### Test Data

##### **Test mode: IEEE 802.11b (Antenna 0)**

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Peak / AVG	Limit (W)	Result
Low	2412	14.50	0.02818	Peak	1	PASS
Mid	2437	14.30	0.02692			PASS
High	2462	13.93	0.02472			PASS
Low	2412	11.56	0.01432	AVG	1	PASS
Mid	2437	11.34	0.01361			PASS
High	2462	11.26	0.01337			PASS

##### **Test mode: IEEE 802.11b (Antenna 1)**

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Peak / AVG	Limit (W)	Result
Low	2412	14.35	0.02723	Peak	1	PASS
Mid	2437	12.79	0.01901			PASS
High	2462	11.81	0.01517			PASS
Low	2412	11.38	0.01374	AVG	1	PASS
Mid	2437	9.84	0.00964			PASS
High	2462	8.89	0.00774			PASS

##### **Test mode: IEEE 802.11g (Antenna 0)**

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Peak / AVG	Limit (W)	Result
Low	2412	18.16	0.06546	Peak	1	PASS
Mid	2437	18.71	0.07430			PASS
High	2462	17.62	0.05781			PASS
Low	2412	9.44	0.00879	AVG	1	PASS
Mid	2437	9.87	0.00971			PASS
High	2462	9.61	0.00914			PASS

**Test mode: IEEE 802.11g (Antenna 1)**

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Peak / AVG	Limit (W)	Result
Low	2412	18.20	0.06607	Peak	1	PASS
Mid	2437	18.46	0.07015			PASS
High	2462	18.93	0.07816			PASS
Low	2412	9.39	0.00869	AVG	1	PASS
Mid	2437	9.50	0.00891			PASS
High	2462	9.71	0.00935			PASS

**Test mode: IEEE 802.11n HT20 MHz(Combine with Antenna 0 and Antenna 1)**

Channel	Frequency (MHz)	Output Power (dBm)			Output Power (W)	Peak / AVG	Limit (W)	Result
		Antenna 0	Antenna 1	Total				
Low	2412	17.73	17.16	20.46	0.11129	Peak	1	PASS
Mid	2437	18.75	17.64	21.24	0.13307			PASS
High	2462	17.95	17.87	20.92	0.12361			PASS
Low	2412	9.29	9.16	12.24	0.01673	AVG	1	PASS
Mid	2437	9.57	9.41	12.50	0.01779			PASS
High	2462	9.64	9.61	12.64	0.01835			PASS

**Test mode: IEEE 802.11n HT40 MHz(Combine with Antenna 0 and Antenna 1)**

Channel	Frequency (MHz)	Output Power (dBm)			Output Power (W)	Peak / AVG	Limit (W)	Result
		Antenna 0	Antenna 1	Total				
Low	2422	17.96	17.43	20.71	0.11785	Peak	1	PASS
Mid	2437	17.91	16.98	20.48	0.11169			PASS
High	2452	17.95	17.41	20.70	0.11745			PASS
Low	2422	10.41	9.93	13.19	0.02083	AVG	1	PASS
Mid	2437	10.57	9.72	13.18	0.02078			PASS
High	2452	10.69	10.19	13.46	0.02217			PASS

## 7.6. BAND EDGES MEASUREMENT

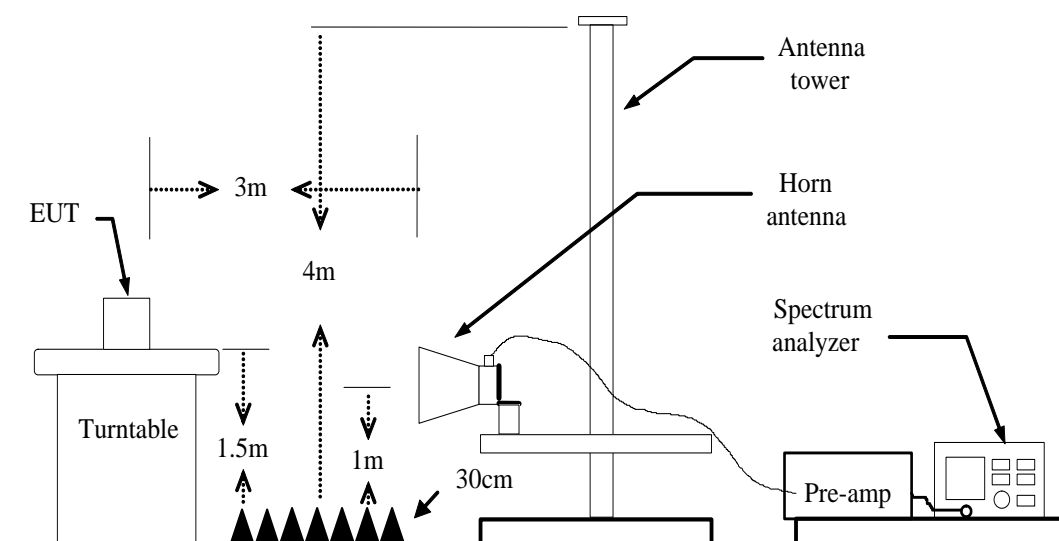
### 7.6.1. LIMITS

According to §15.247(d), in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in 15.209(a) (see Section 15.205(c)).

### 7.6.2. TEST PROCEDURES (please refer to measurement standard)

1. The EUT is placed on a turntable, which is 1.5m above the ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
  - (a) PEAK: RBW=1MHz / VBW=3MHz / Sweep=AUTO
  - (b) AVERAGE: RBW=1MHz / VBW=1/T / Sweep=AUTO / Detector=PEAK
5. Repeat the procedures until all the PEAK and AVERAGE versus POLARIZATION are

### 7.6.3. TEST SETUP



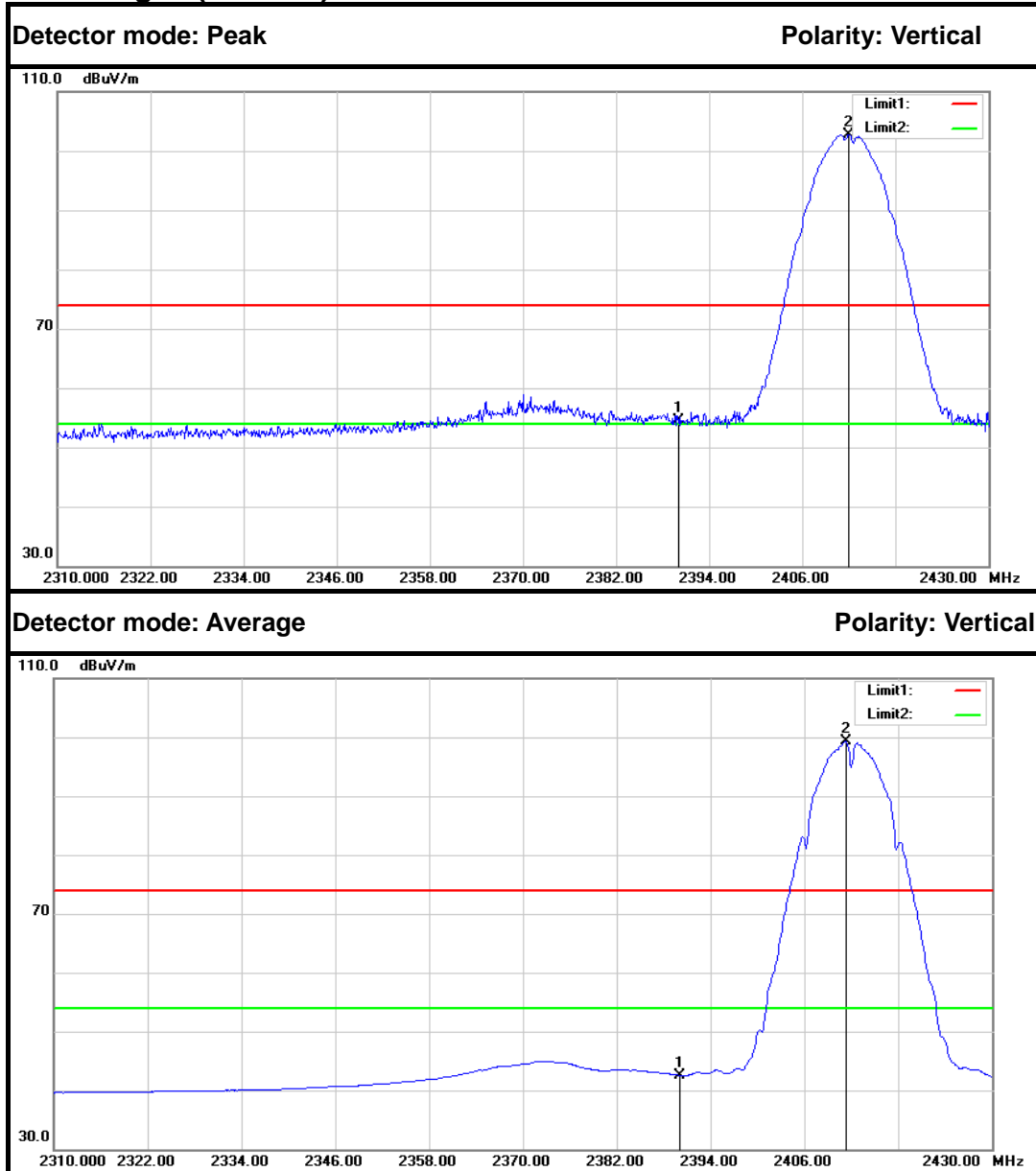


#### 7.6.4. TEST RESULTS

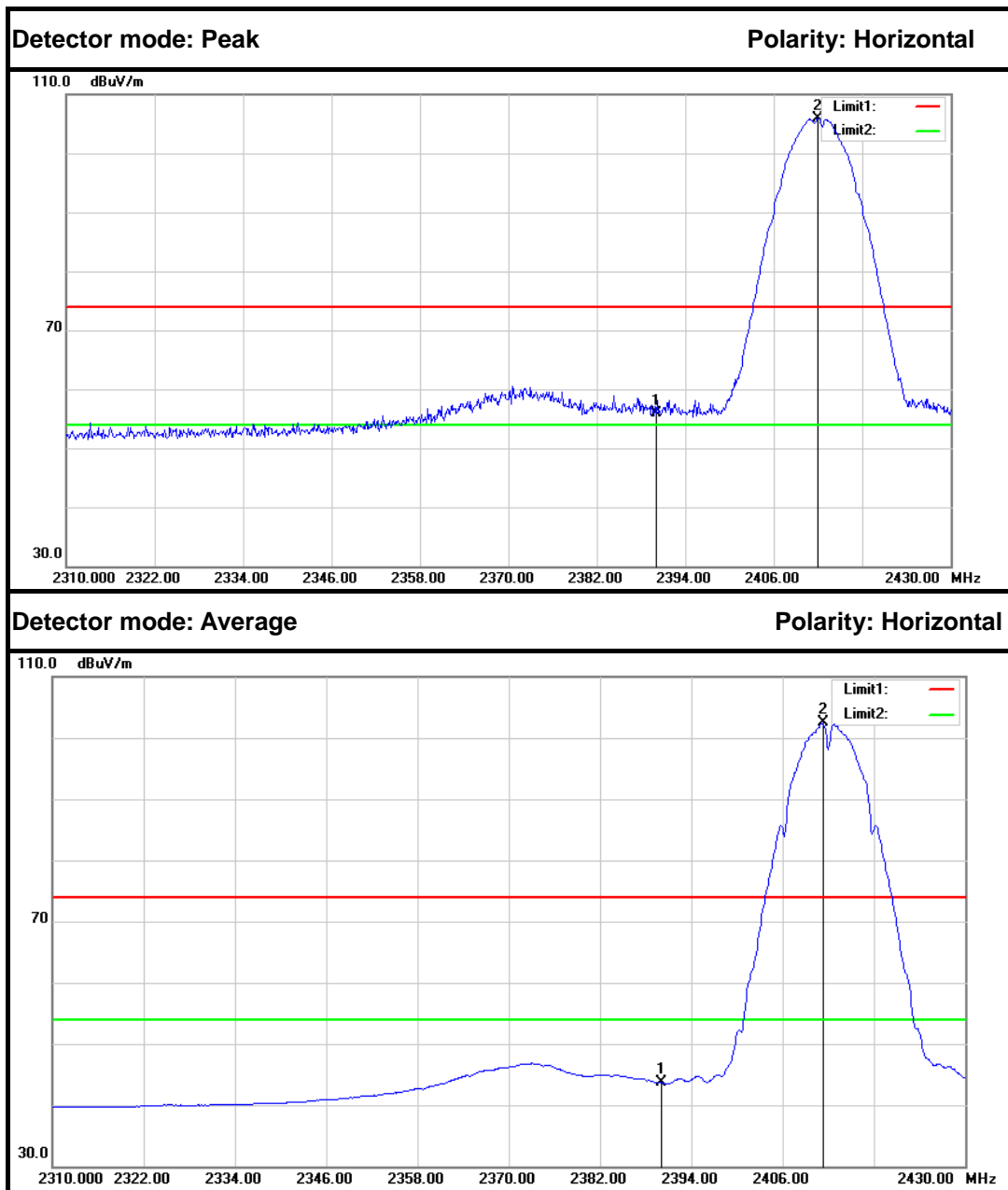
##### GL-AR750S

##### Test Plot

IEEE 802.11b mode (Antenna 0)  
Band Edges (CH Low)



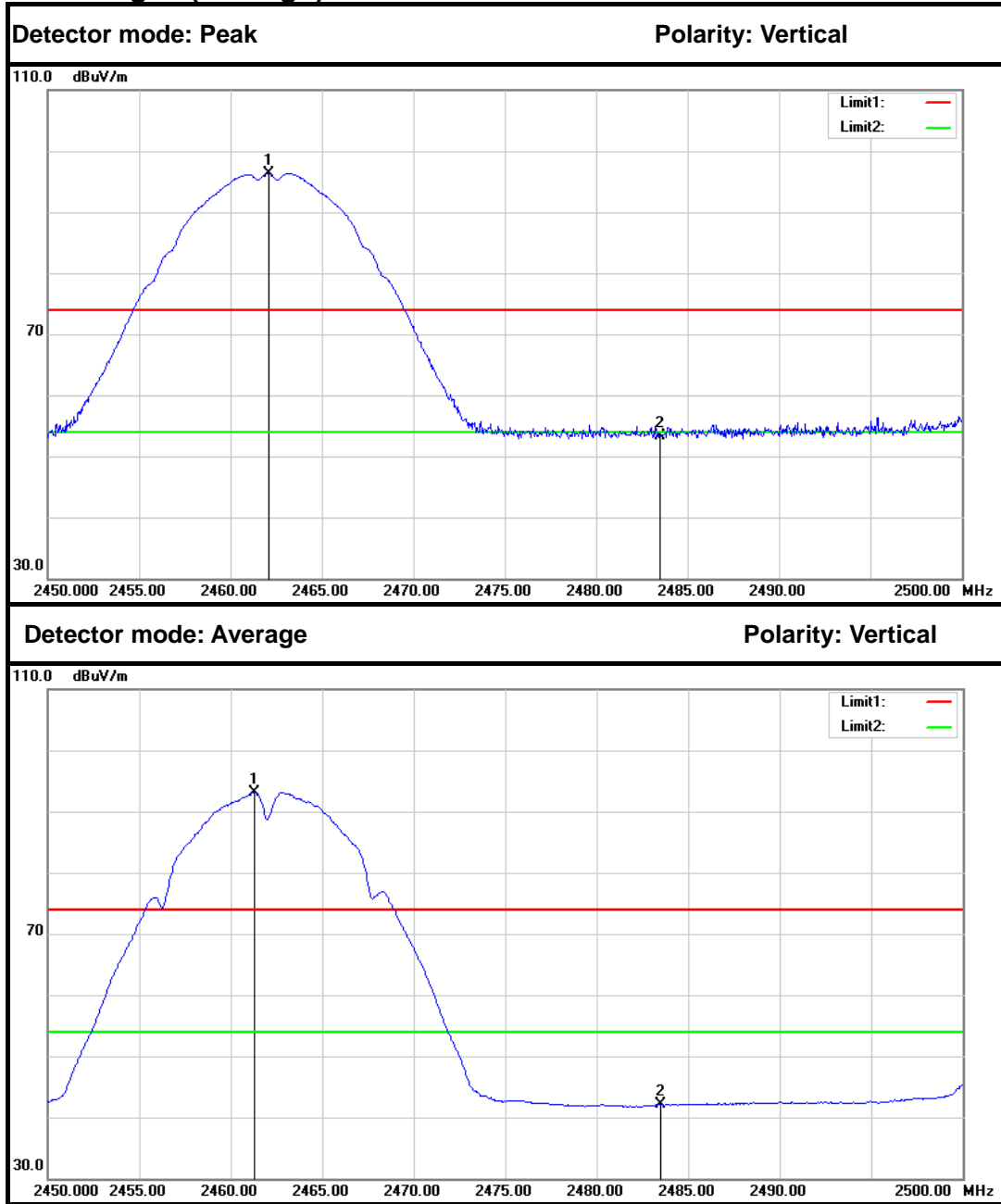
No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	2390.000	57.28	-2.86	54.42	74.00	-19.58	Peak	Vertical
2	2412.000	105.47	-2.74	102.73	---	---	Peak	Vertical
1	2390.000	45.44	-2.86	42.58	54.00	-11.42	Average	Vertical
2	2411.280	102.10	-2.75	99.35	---	---	Average	Vertical



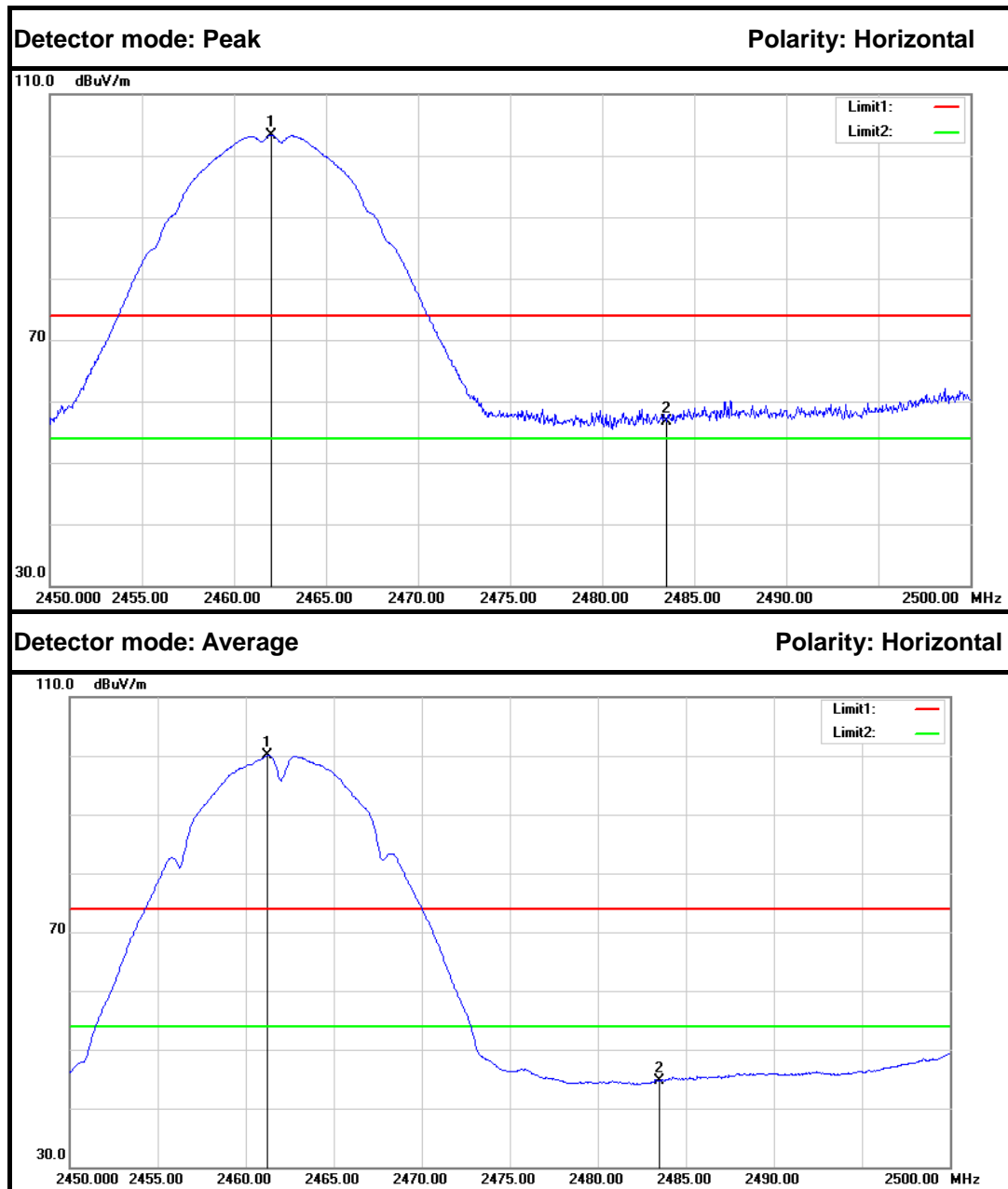
No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	2390.000	58.82	-2.86	55.96	74.00	-18.04	Peak	Horizontal
2	2412.000	108.62	-2.74	105.88	---	---	Peak	Horizontal
1	2390.000	46.47	-2.86	43.61	54.00	-10.39	Average	Horizontal
2	2411.280	105.19	-2.75	102.44	---	---	Average	Horizontal



### Band Edges (CH High)



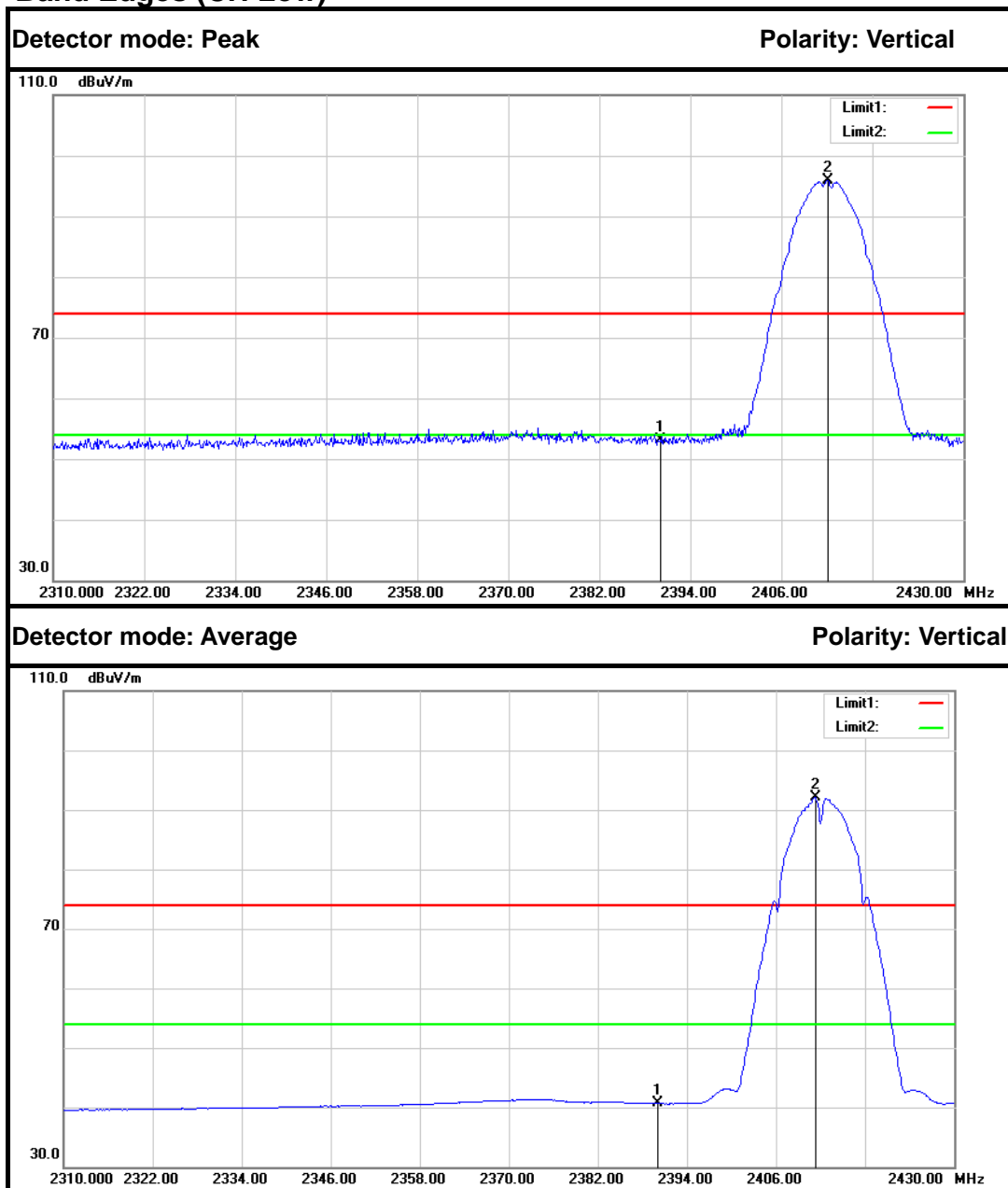
No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	2462.100	98.83	-2.47	96.36	---	---	Peak	Vertical
2	2483.500	55.62	-2.35	53.27	74.00	-20.73	Peak	Vertical
1	2461.300	95.66	-2.47	93.19	---	---	Average	Vertical
2	2483.500	44.39	-2.35	42.04	54.00	-11.96	Average	Vertical



No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	2462.050	105.81	-2.47	103.34	---	---	Peak	Horizontal
2	2483.500	58.97	-2.35	56.62	74.00	-17.38	Peak	Horizontal
1	2461.250	102.57	-2.47	100.10	---	---	Average	Horizontal
2	2483.500	47.04	-2.35	44.69	54.00	-9.31	Average	Horizontal

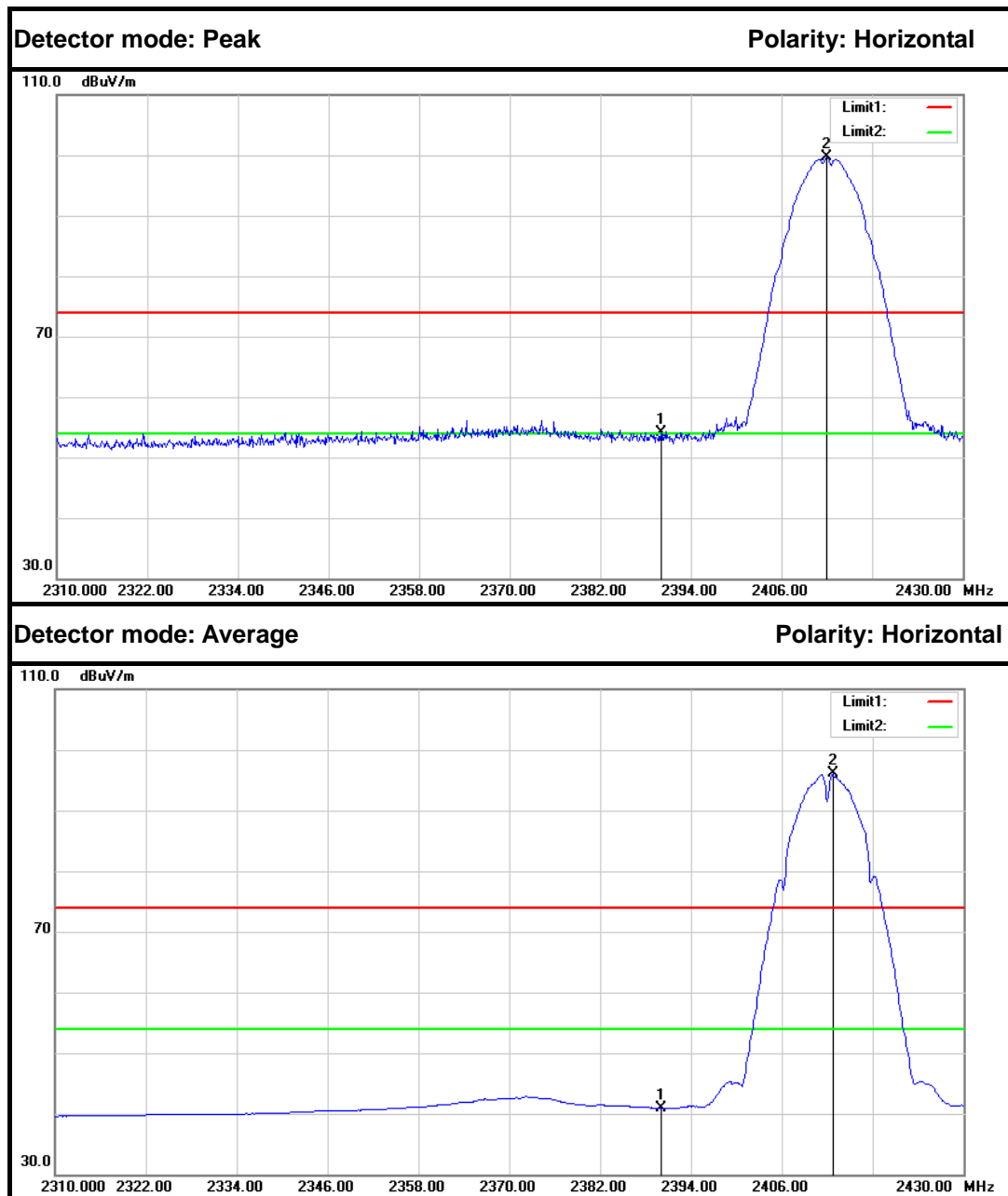


IEEE 802.11b mode (Antenna 1)  
Band Edges (CH Low)



No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	2390.000	55.97	-2.86	53.11	74.00	-20.89	Peak	Vertical
2	2412.120	98.60	-2.74	95.86	---	---	Peak	Vertical
1	2390.000	43.50	-2.86	40.64	54.00	-13.36	Average	Vertical
2	2412.280	94.82	-2.75	92.07	---	---	Average	Vertical

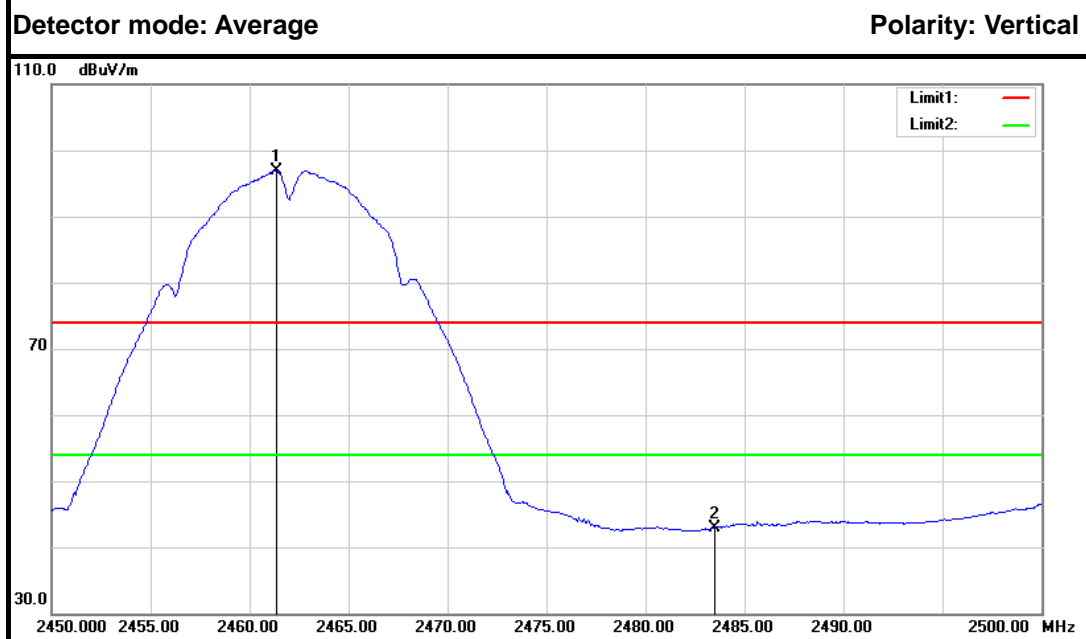
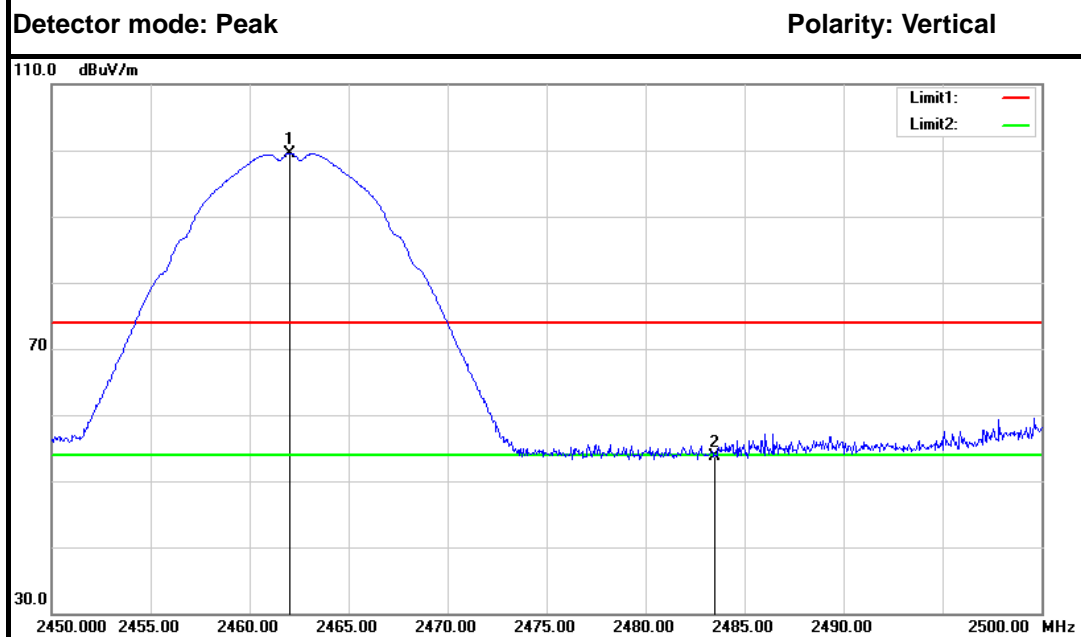




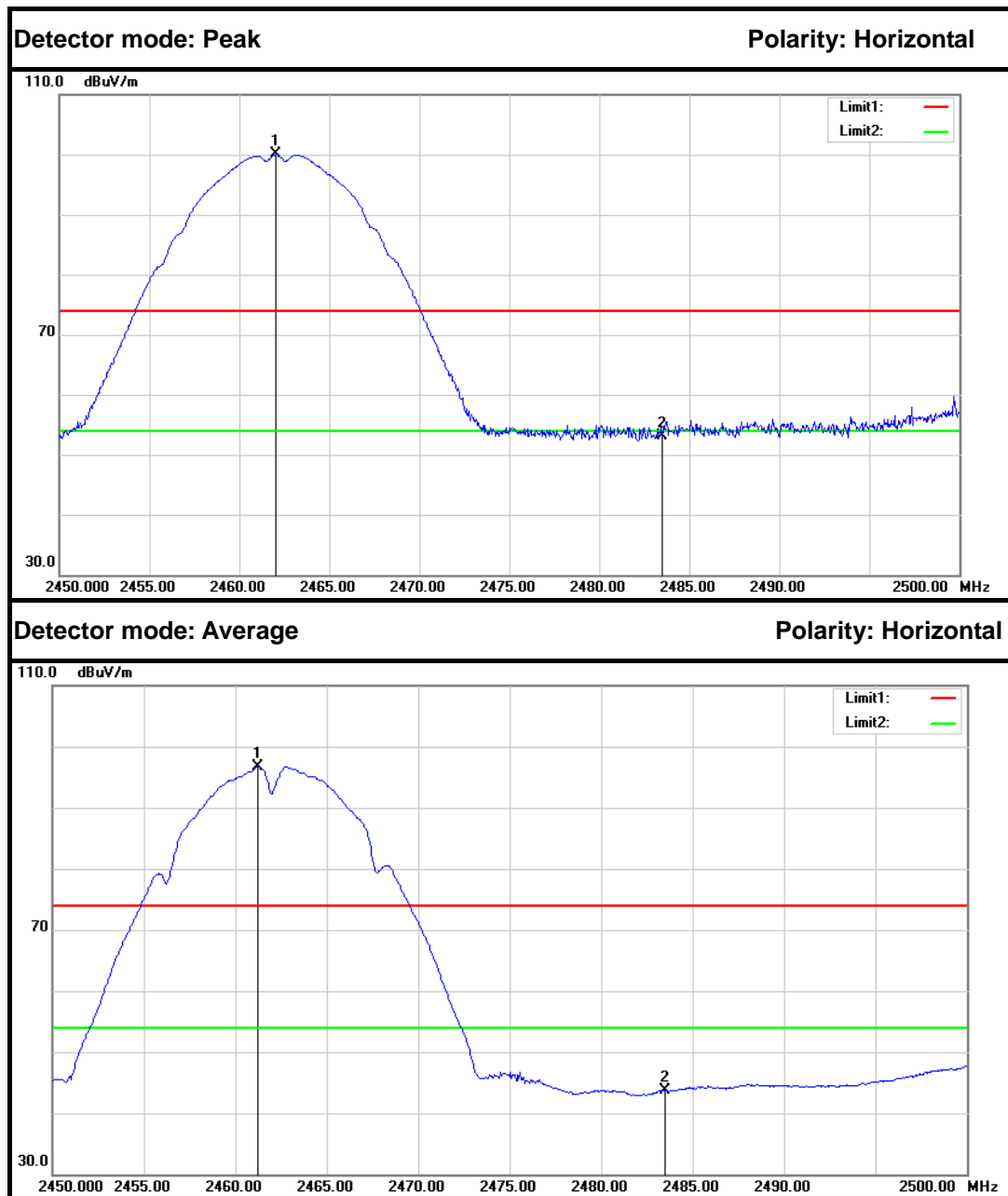
No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	2390.000	56.91	-2.86	54.05	74.00	-19.95	Peak	Horizontal
2	2412.000	102.35	-2.74	99.61	---	---	Peak	Horizontal
1	2390.000	43.83	-2.86	40.97	54.00	-13.03	Average	Horizontal
2	2412.720	98.82	-2.74	96.08	---	---	Average	Horizontal



### Band Edges (CH High)



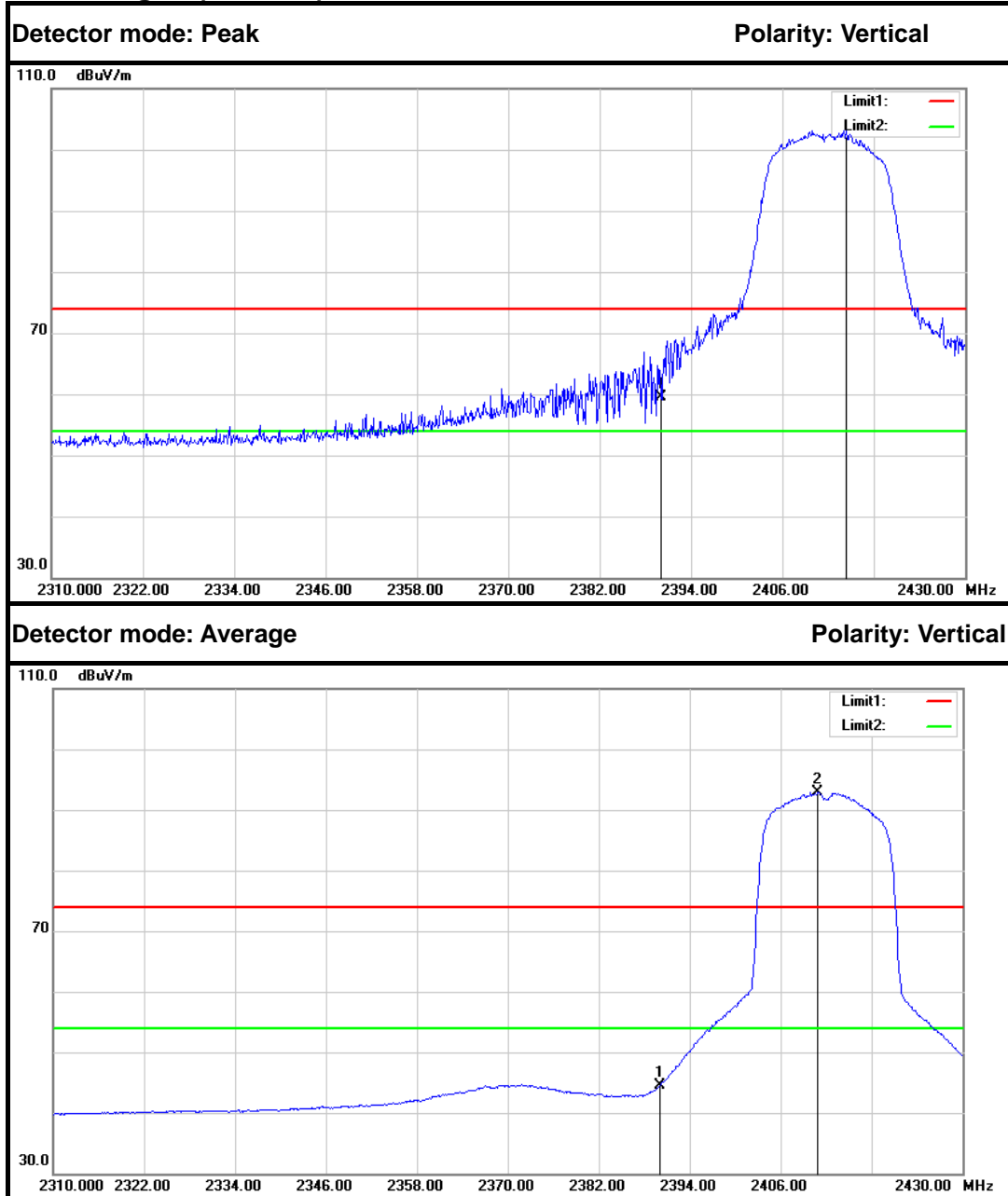
No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	2462.000	102.07	-2.47	99.60	---	---	Peak	Vertical
2	2483.500	56.15	-2.35	53.80	74.00	-20.20	Peak	Vertical
1	2461.350	99.42	-2.47	96.95	---	---	Average	Vertical
2	2483.500	45.31	-2.35	42.96	54.00	-11.04	Average	Vertical



No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	2462.050	102.49	-2.47	100.02	---	---	Peak	Horizontal
2	2483.500	55.44	-2.35	53.09	74.00	-20.91	Peak	Horizontal
1	2461.250	99.18	-2.47	96.71	---	---	Average	Horizontal
2	2483.500	46.04	-2.35	43.69	54.00	-10.31	Average	Horizontal



IEEE 802.11g mode (Antenna 0)  
Band Edges (CH Low)



No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	2390.000	62.33	-2.86	59.47	74.00	-14.53	Peak	Vertical
2	2414.400	105.83	-2.73	103.10	---	---	Peak	Vertical
1	2390.000	47.40	-2.86	44.54	54.00	-9.46	Average	Vertical
2	2410.920	95.63	-2.75	92.88	---	---	Average	Vertical