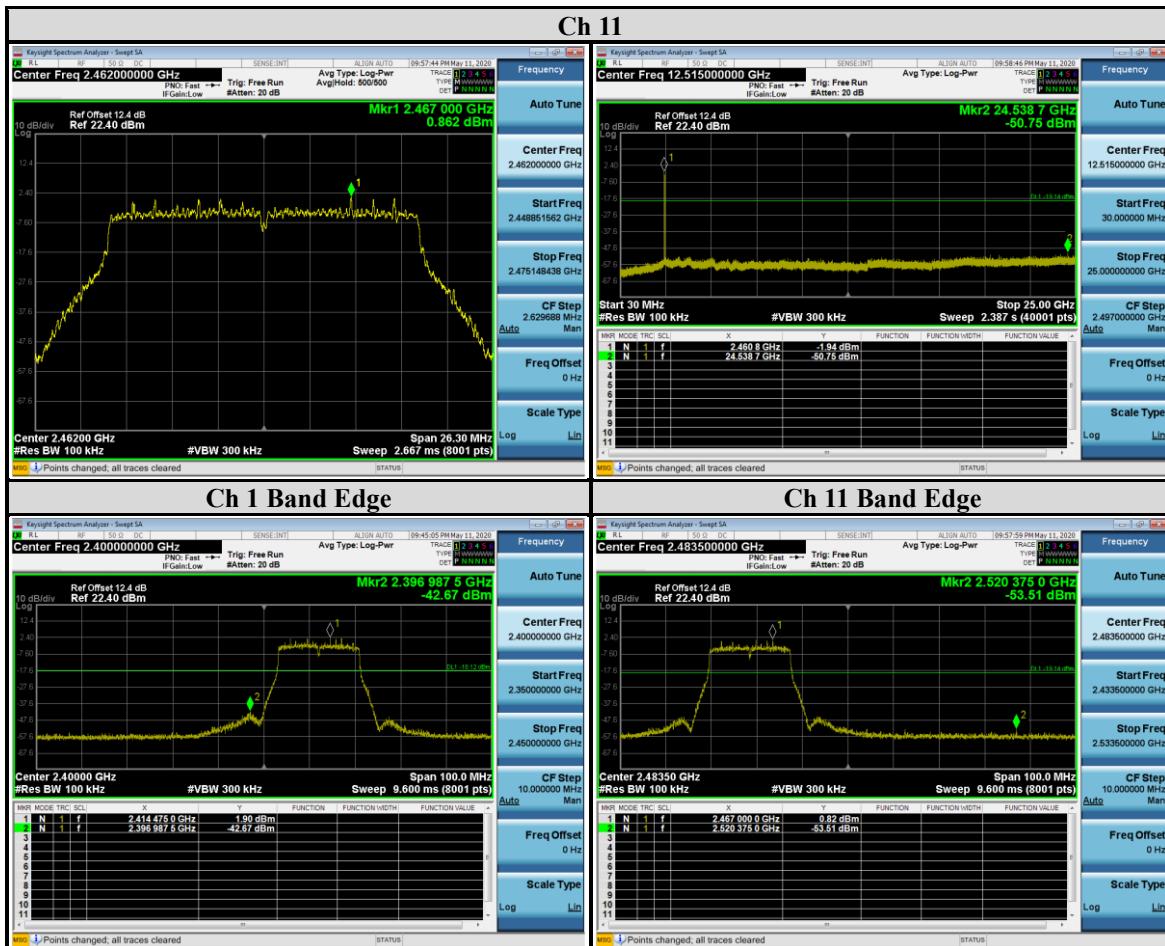




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802.11n (HT40)

CHAIN 0



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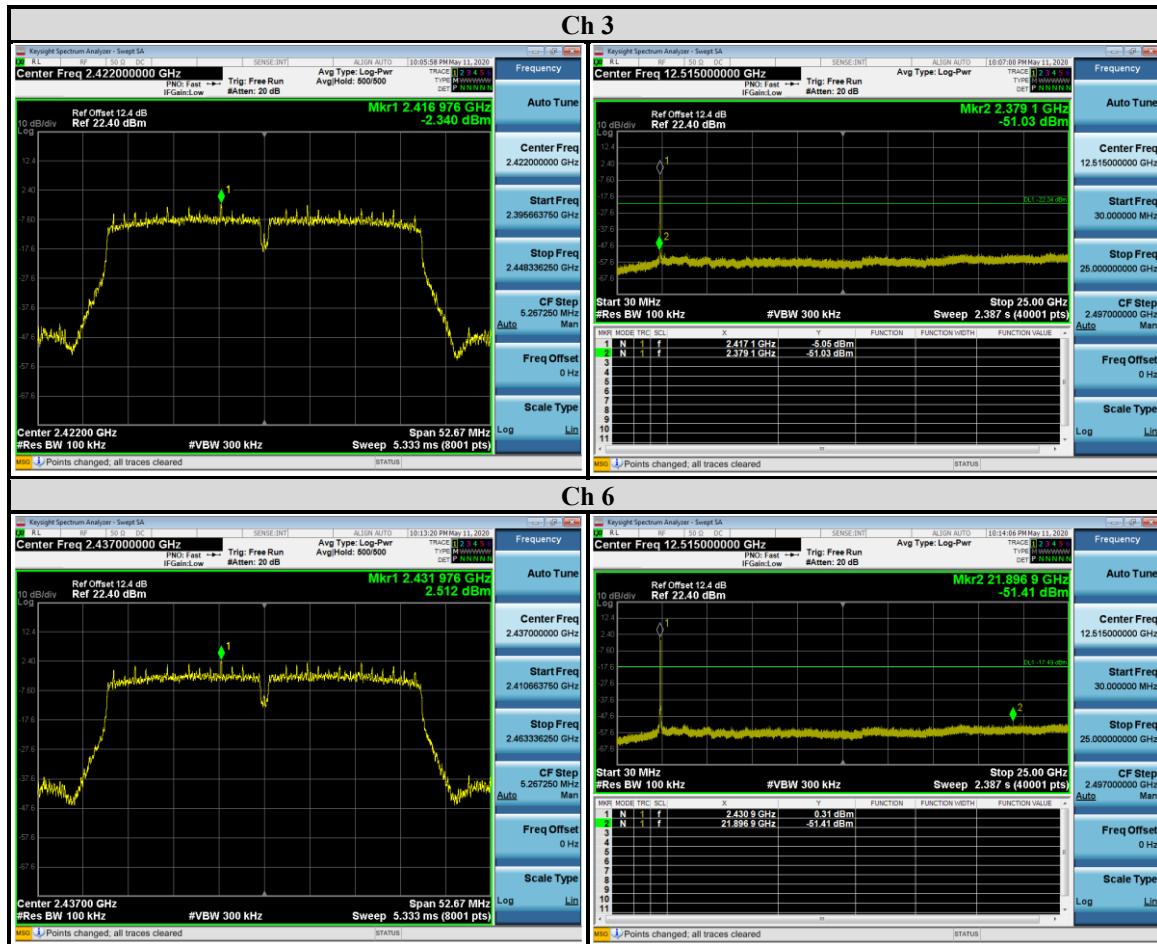
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9.5. Radiated Spurious Emission

Requirements

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

Frequency(MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dB_BV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

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Test Procedures

[For 9 kHz ~ 30 MHz]

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. For measurement below 30MHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

[For above 30 MHz]

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
- f. The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

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Note:

- a. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
- b. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
- c. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98%) or 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz.

Configuration	Average	
	RBW	VBW
802.11b	1MHz	10 Hz
802.11g		1 kHz
802.11n (HT20)		10 Hz
802.11n (HT40)		1 kHz

Note: Refer to section 6.6 for duty cycle.

- d. All modes of operation were investigated (includes all external accessories) and the worst-case emissions are reported.

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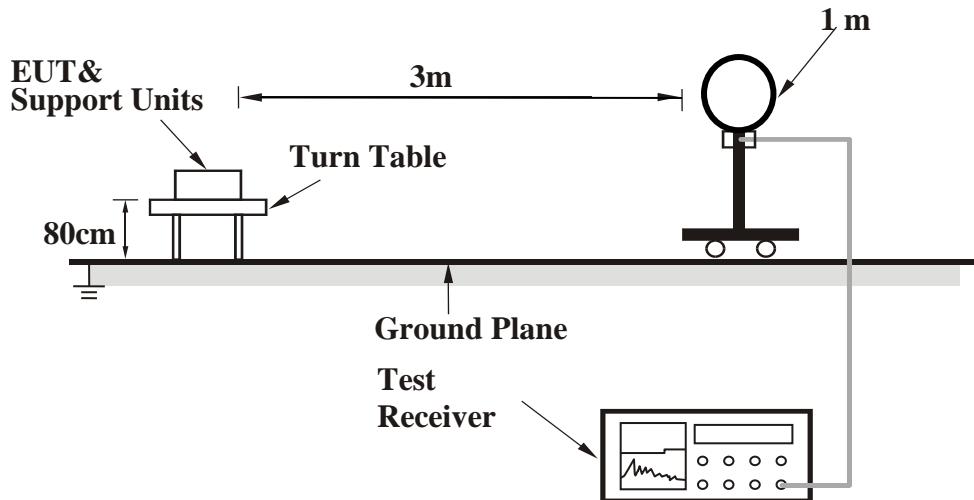
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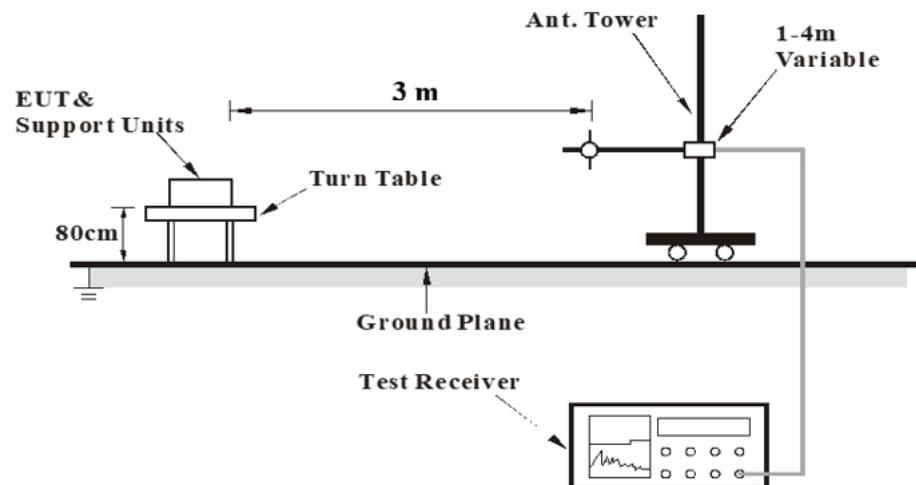
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Test Setup

<Frequency Range 9 kHz ~ 30 MHz>



<Frequency Range 30 MHz ~ 1 GHz >



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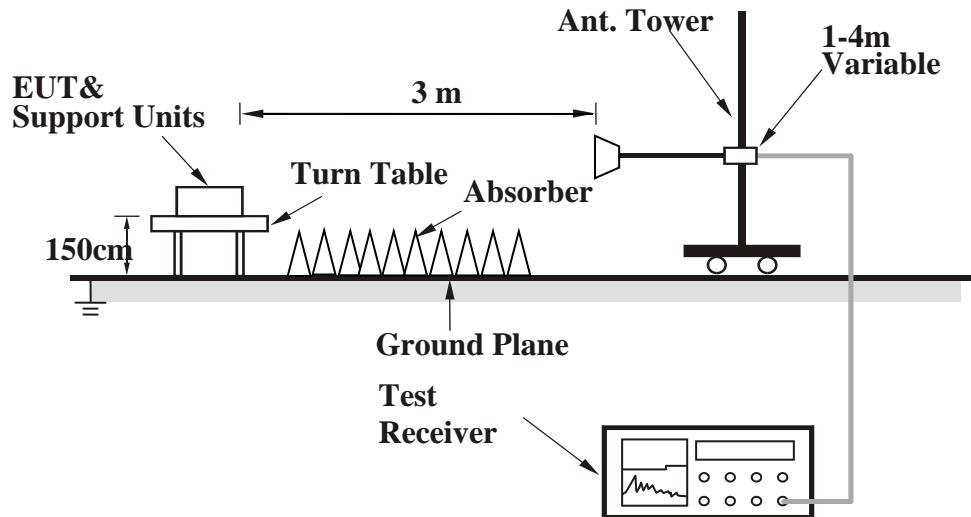
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<Frequency Range above 1 GHz>



For the actual test configuration, please refer to the Setup Configurations.

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Test Data

Model: VigorAP 1000

Above 1GHz Data

Non-Beamforming Mode

802.11b

EUT Test Condition		Measurement Detail					
Channel	Channel 1	Frequency Range			1 GHz ~ 26.5 GHz		

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2369.340	49.29	3.16	52.45	74.00	-21.55	peak
@	2412.000	104.83	3.09	107.92	-	-	peak
-	2375.480	36.64	3.16	39.80	54.00	-14.20	AVG
@	2412.000	101.91	3.09	105.00	-	-	AVG
*	4824.000	47.74	-2.02	45.72	74.00	-28.28	peak
*	7333.350	42.40	4.63	47.03	74.00	-26.97	peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2388.040	55.62	3.14	58.76	74.00	-15.24	peak
@	2412.000	108.16	3.09	111.25	-	-	peak
-	2387.733	49.98	3.14	53.12	54.00	-0.88	AVG
@	2412.000	105.24	3.09	108.33	-	-	AVG
*	4824.000	44.87	-2.02	42.85	74.00	-31.15	peak
#	6250.450	44.18	0.62	44.80	91.25	-46.45	peak
*	7333.350	45.42	4.63	50.05	74.00	-23.95	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@" : Fundamental Frequency.
5. "#": The radiated frequency is out of the restricted band.
6. "*": The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
7. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail					
Channel	Channel 6	Frequency Range			1 GHz ~ 26.5 GHz		

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2354.260	49.72	3.18	52.90	74.00	-21.10	peak
@	2437.000	103.82	2.96	106.78	-	-	peak
-	2489.460	49.45	2.86	52.31	74.00	-21.69	peak
-	2390.000	35.67	3.15	38.82	54.00	-15.18	AVG
@	2437.000	101.02	2.96	103.98	-	-	AVG
-	2483.500	36.02	2.86	38.88	54.00	-15.12	AVG
*	4874.000	44.41	-1.95	42.46	74.00	-31.54	peak
*	7333.350	41.79	4.63	46.42	74.00	-27.58	peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2367.567	49.04	3.16	52.20	74.00	-21.80	peak
@	2437.000	109.75	2.96	112.71	-	-	peak
-	2501.007	49.70	2.85	52.55	74.00	-21.45	peak
-	2390.000	38.31	3.15	41.46	54.00	-12.54	AVG
@	2437.000	106.45	2.96	109.41	-	-	AVG
-	2483.500	38.68	2.86	41.54	54.00	-12.46	AVG
*	4874.000	46.49	-1.95	44.54	74.00	-29.46	peak
*	5389.400	44.12	-1.43	42.69	74.00	-31.31	peak
#	6250.450	43.93	0.62	44.55	92.71	-48.16	peak
*	7333.350	44.75	4.63	49.38	74.00	-24.62	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@" : Fundamental Frequency.
5. "#": The radiated frequency is out of the restricted band.
6. "*": The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
7. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail			
Channel	Channel 11	Frequency Range		1 GHz ~ 26.5 GHz	

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	2462.000	102.99	2.89	105.88	-	-	peak
-	2491.167	49.24	2.86	52.10	74.00	-21.90	peak
@	2462.000	99.84	2.89	102.73	-	-	AVG
-	2483.500	36.34	2.86	39.20	54.00	-14.80	AVG
*	4924.000	42.84	-1.92	40.92	74.00	-33.08	peak
*	7333.350	43.26	4.63	47.89	74.00	-26.11	peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	2462.000	108.45	2.89	111.34	-	-	peak
-	2487.820	55.87	2.85	58.72	74.00	-15.28	peak
@	2462.000	105.58	2.89	108.47	-	-	AVG
-	2486.713	50.94	2.86	53.80	54.00	-0.20	AVG
*	4924.000	47.86	-1.92	45.94	74.00	-28.06	peak
#	6250.450	44.87	0.62	45.49	91.34	-45.85	peak
*	7333.350	45.75	4.63	50.38	74.00	-23.62	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@" : Fundamental Frequency.
5. "#": The radiated frequency is out of the restricted band.
6. "*": The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
7. The other emission levels were very low against the limit.

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802.11g

EUT Test Condition		Measurement Detail		
Channel	Channel 1	Frequency Range	1 GHz ~ 26.5 GHz	

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2373.553	48.59	3.16	51.75	54.00	-2.25	peak
@	2412.000	100.12	3.09	103.21	-	-	peak
-	2390.000	37.20	3.15	40.35	54.00	-13.65	AVG
@	2412.000	90.39	3.09	93.48	-	-	AVG
*	4824.000	42.37	-2.02	40.35	74.00	-33.65	peak
*	7333.350	42.74	4.63	47.37	74.00	-26.63	peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2389.987	63.36	3.15	66.51	74.00	-7.49	peak
@	2412.000	106.56	3.09	109.65	-	-	peak
-	2390.000	50.07	3.15	53.22	54.00	-0.78	AVG
@	2412.000	97.19	3.09	100.28	-	-	AVG
*	4824.000	42.76	-2.02	40.74	74.00	-33.26	peak
#	6250.450	44.56	0.62	45.18	89.65	-44.47	peak
*	7333.350	44.33	4.63	48.96	74.00	-25.04	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "#": The radiated frequency is out of the restricted band.
6. "*": The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
7. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail			
Channel	Channel 6	Frequency Range		1 GHz ~ 26.5 GHz	

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2390.000	47.44	3.15	50.59	74.00	-23.41	peak
@	2437.000	105.15	2.96	108.11	-	-	peak
-	2483.500	46.65	2.86	49.51	74.00	-24.49	peak
-	2390.000	36.33	3.15	39.48	54.00	-14.52	AVG
@	2437.000	95.56	2.96	98.52	-	-	AVG
-	2483.500	36.35	2.86	39.21	54.00	-14.79	AVG
*	4874.000	40.94	-1.95	38.99	74.00	-35.01	peak
*	7333.350	41.96	4.63	46.59	74.00	-27.41	peak

Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2390.000	54.28	3.15	57.43	74.00	-16.57	peak
@	2437.000	111.60	2.96	114.56	-	-	peak
-	2483.500	56.04	2.86	58.90	74.00	-15.10	peak
-	2390.000	42.51	3.15	45.66	54.00	-8.34	AVG
@	2437.000	102.17	2.96	105.13	-	-	AVG
-	2483.500	42.60	2.86	45.46	54.00	-8.54	AVG
*	4874.000	49.09	-1.95	47.14	74.00	-26.86	peak
*	5380.050	47.40	-1.50	45.90	74.00	-28.10	peak
#	6250.450	45.27	0.62	45.89	94.56	-48.67	peak
*	7333.350	45.18	4.63	49.81	74.00	-24.19	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@" : Fundamental Frequency.
5. "#": The radiated frequency is out of the restricted band.
6. "*": The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
7. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail		
Channel	Channel 11	Frequency Range	1 GHz ~ 26.5 GHz	

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	2462.000	97.84	2.89	100.73	-	-	peak
-	2483.500	47.57	2.86	50.43	74.00	-23.57	peak
@	2462.000	87.76	2.89	90.65	-	-	AVG
-	2483.500	36.63	2.86	39.49	54.00	-14.51	AVG
*	4924.000	42.43	-1.92	40.51	74.00	-33.49	peak
*	7333.350	43.21	4.63	47.84	74.00	-26.16	peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	2462.000	106.35	2.89	109.24	-	-	peak
-	2483.500	63.82	2.86	66.68	74.00	-7.32	peak
@	2462.000	97.16	2.89	100.05	-	-	AVG
-	2483.500	50.79	2.86	53.65	54.00	-0.35	AVG
*	4924.000	43.48	-1.92	41.56	74.00	-32.44	peak
#	6250.450	44.51	0.62	45.13	89.24	-44.11	peak
*	7333.350	44.74	4.63	49.37	74.00	-24.63	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@" : Fundamental Frequency.
5. "#": The radiated frequency is out of the restricted band.
6. "*": The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
7. The other emission levels were very low against the limit.

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802.11n (HT20)

EUT Test Condition		Measurement Detail					
Channel	Channel 1	Frequency Range			1 GHz ~ 26.5 GHz		

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2390.000	50.25	3.15	53.40	74.00	-20.60	peak
@	2412.000	100.52	3.09	103.61	-	-	peak
-	2390.000	38.20	3.15	41.35	54.00	-12.65	AVG
@	2412.000	89.97	3.09	93.06	-	-	AVG
*	4824.000	41.60	-2.02	39.58	74.00	-34.42	peak
*	7333.350	41.60	4.63	46.23	74.00	-27.77	peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2389.933	64.63	3.15	67.78	74.00	-6.22	peak
@	2412.000	106.35	3.09	109.44	-	-	peak
-	2390.000	50.13	3.15	53.28	54.00	-0.72	AVG
@	2412.000	96.36	3.09	99.45	-	-	AVG
*	4824.000	43.70	-2.02	41.68	74.00	-32.32	peak
#	6250.450	44.04	0.62	44.66	89.44	-44.78	peak
*	7333.350	45.03	4.63	49.66	74.00	-24.34	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@" : Fundamental Frequency.
5. "#": The radiated frequency is out of the restricted band.
6. "*": The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
7. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail					
Channel	Channel 6	Frequency Range			1 GHz ~ 26.5 GHz		

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2375.573	48.46	3.16	51.62	74.00	-22.38	peak
@	2437.000	105.14	2.96	108.10	-	-	peak
-	2490.553	49.41	2.86	52.27	74.00	-21.73	peak
-	2390.000	36.26	3.15	39.41	54.00	-14.59	AVG
@	2437.000	95.18	2.96	98.14	-	-	AVG
-	2483.500	36.26	2.86	39.12	54.00	-14.88	AVG
*	4874.000	41.46	-1.95	39.51	74.00	-34.49	peak
*	7333.350	41.58	4.63	46.21	74.00	-27.79	peak

Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2390.000	56.04	3.15	59.19	74.00	-14.81	peak
@	2437.000	111.32	2.96	114.28	-	-	peak
-	2483.500	56.27	2.86	59.13	74.00	-14.87	peak
-	2390.000	43.50	3.15	46.65	54.00	-7.35	AVG
@	2437.000	101.75	2.96	104.71	-	-	AVG
-	2483.500	43.84	2.86	46.70	54.00	-7.30	AVG
*	4874.000	47.74	-1.95	45.79	74.00	-28.21	peak
#	6250.450	45.01	0.62	45.63	94.28	-48.65	peak
*	7333.350	44.10	4.63	48.73	74.00	-25.27	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@" : Fundamental Frequency.
5. "#" : The radiated frequency is out of the restricted band.
6. "*" : The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
7. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail			
Channel	Channel 11	Frequency Range		1 GHz ~ 26.5 GHz	

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	2462.000	95.95	2.89	98.84	-	-	peak
-	2485.780	48.91	2.86	51.77	74.00	-22.23	peak
@	2462.000	86.98	2.89	89.87	-	-	AVG
-	2483.500	36.48	2.86	39.34	54.00	-14.66	AVG
*	4924.000	41.39	-1.92	39.47	74.00	-34.53	peak
*	7333.350	42.16	4.63	46.79	74.00	-27.21	peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	2462.000	105.95	2.89	108.84	-	-	peak
-	2484.827	62.59	2.86	65.45	74.00	-8.55	peak
@	2462.000	96.25	2.89	99.14	-	-	AVG
-	2483.500	49.34	2.86	52.20	54.00	-1.80	AVG
*	4924.000	43.56	-1.92	41.64	74.00	-32.36	peak
*	5370.700	46.20	-1.56	44.64	74.00	-29.36	peak
#	6250.450	44.13	0.62	44.75	88.84	-44.09	peak
*	7333.350	45.54	4.63	50.17	74.00	-23.83	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@" : Fundamental Frequency.
5. "#" : The radiated frequency is out of the restricted band.
6. "*" : The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
7. The other emission levels were very low against the limit.

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802.11n (HT40)

EUT Test Condition		Measurement Detail					
Channel	Channel 3	Frequency Range			1 GHz ~ 26.5 GHz		

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2390.000	50.15	3.15	53.30	74.00	-20.70	peak
@	2422.000	94.44	3.03	97.47	-	-	peak
-	2390.000	40.01	3.15	43.16	54.00	-10.84	AVG
@	2422.000	85.12	3.03	88.15	-	-	AVG
*	4844.000	40.44	-1.97	38.47	74.00	-35.53	peak
*	5383.450	42.68	-1.47	41.21	74.00	-32.79	peak
*	7333.350	42.72	4.63	47.35	74.00	-26.65	peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2390.000	63.40	3.15	66.55	74.00	-7.45	peak
@	2422.000	103.06	3.03	106.09	-	-	peak
-	2390.000	49.87	3.15	53.02	54.00	-0.98	AVG
@	2422.000	92.72	3.03	95.75	-	-	AVG
*	4844.000	44.18	-1.97	42.21	74.00	-31.79	peak
*	5380.050	43.38	-1.50	41.88	74.00	-32.12	peak
#	6250.450	44.08	0.62	44.70	86.09	-41.39	peak
*	7333.350	44.81	4.63	49.44	74.00	-24.56	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@" : Fundamental Frequency.
5. "# " : The radiated frequency is out of the restricted band.
6. "* " : The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
7. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail					
Channel	Channel 6	Frequency Range		1 GHz ~ 26.5 GHz			

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2378.867	50.68	3.15	53.83	74.00	-20.17	peak
@	2437.000	98.94	2.96	101.90	-	-	peak
-	2483.813	51.27	2.86	54.13	74.00	-19.87	peak
-	2390.000	39.56	3.15	42.71	54.00	-11.29	AVG
@	2437.000	89.23	2.96	92.19	-	-	AVG
-	2483.500	39.43	2.86	42.29	54.00	-11.71	AVG
*	4874.000	40.19	-1.95	38.24	74.00	-35.76	peak
*	7333.350	41.88	4.63	46.51	74.00	-27.49	peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2389.213	61.78	3.15	64.93	74.00	-9.07	peak
@	2437.000	107.13	2.96	110.09	-	-	peak
-	2483.627	62.95	2.86	65.81	74.00	-8.19	peak
-	2390.000	49.83	3.15	52.98	54.00	-1.02	AVG
@	2437.000	96.87	2.96	99.83	-	-	AVG
-	2483.500	48.57	2.86	51.43	54.00	-2.57	AVG
*	4874.000	46.15	-1.95	44.20	74.00	-29.80	peak
#	5717.500	42.86	-0.90	41.96	90.09	-48.13	peak
#	6250.450	43.56	0.62	44.18	90.09	-45.91	peak
*	7333.350	44.48	4.63	49.11	74.00	-24.89	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@" : Fundamental Frequency.
5. "#": The radiated frequency is out of the restricted band.
6. "*": The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
7. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail			
Channel	Channel 9	Frequency Range		1 GHz ~ 26.5 GHz	

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	2452.000	93.58	2.90	96.48	-	-	peak
-	2483.500	50.66	2.86	53.52	74.00	-20.48	peak
@	2452.000	84.05	2.90	86.95	-	-	AVG
-	2483.500	38.21	2.86	41.07	54.00	-12.93	AVG
*	4904.000	40.60	-1.93	38.67	74.00	-35.33	peak
*	7333.350	41.94	4.63	46.57	74.00	-27.43	peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	2452.000	103.15	2.90	106.05	-	-	peak
-	2483.500	64.00	2.86	66.86	74.00	-7.14	peak
@	2452.000	92.95	2.90	95.85	-	-	AVG
-	2483.500	50.40	2.86	53.26	54.00	-0.74	AVG
*	4904.000	43.79	-1.93	41.86	74.00	-32.14	peak
*	5374.950	42.75	-1.53	41.22	74.00	-32.78	peak
#	6250.450	44.28	0.62	44.90	86.05	-41.15	peak
*	7333.350	45.54	4.63	50.17	74.00	-23.83	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "#": The radiated frequency is out of the restricted band.
6. "*": The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
7. The other emission levels were very low against the limit.

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Co-Location Mode

802.11b+802.11ac (VHT20)

EUT Test Condition		Measurement Detail		
Channel	Channel 6 + Channel 48 + Channel 165	Frequency Range	1 GHz ~ 40 GHz	

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
*	4874.000	43.66	-1.95	41.71	74.00	-32.29	peak
#	10480.000	35.72	10.41	46.13	74.00	-27.87	peak
*	11650.000	34.81	10.70	45.51	74.00	-28.49	peak

Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
*	3249.000	56.66	-5.39	51.27	74.00	-22.73	peak
*	4874.000	48.77	-1.95	46.82	74.00	-27.18	peak
#	7766.500	45.30	4.80	50.10	74.00	-23.90	peak
#	10480.000	36.27	10.41	46.68	74.00	-27.32	peak
*	11650.000	41.32	10.70	52.02	74.00	-21.98	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. " # ": The radiated frequency is out of the restricted band.
5. " * ": The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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Model: VigorAP 1000C

Above 1GHz Data

Non-Beamforming Mode

802.11b

EUT Test Condition		Measurement Detail					
Channel	Channel 1	Frequency Range		1 GHz ~ 26.5 GHz			

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2388.107	50.94	3.80	54.74	74.00	-19.26	peak
@	2412.000	106.57	3.78	110.35	-	-	peak
-	2387.233	41.84	3.81	45.65	54.00	-8.35	AVG
@	2412.000	103.47	3.78	107.25	-	-	AVG
-	4824.000	55.78	-2.02	53.76	74.00	-20.24	peak
-	4824.000	48.43	-2.02	46.41	54.00	-7.59	AVG
#	7236.000	44.02	4.42	48.44	90.35	-41.91	peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2387.253	51.75	3.81	55.56	74.00	-18.44	peak
@	2412.000	107.68	3.78	111.46	-	-	peak
-	2387.727	48.46	3.80	52.26	54.00	-1.74	AVG
@	2412.000	105.13	3.78	108.91	-	-	AVG
-	4824.000	58.17	-2.02	56.15	74.00	-17.85	peak
-	4824.000	55.45	-2.02	53.43	54.00	-0.57	AVG
#	7236.000	46.69	4.42	51.11	91.46	-40.35	peak
#	9648.000	43.25	9.15	52.40	91.46	-39.06	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@" : Fundamental Frequency.
5. "#": The radiated frequency is out of the restricted band.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail					
Channel	Channel 6	Frequency Range			1 GHz ~ 26.5 GHz		

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2379.000	49.80	3.79	53.59	74.00	-20.41	peak
@	2437.000	106.71	3.72	110.43	-	-	peak
-	2497.240	49.42	3.74	53.16	74.00	-20.84	peak
-	2387.013	37.27	3.81	41.08	54.00	-12.92	AVG
@	2437.000	103.86	3.72	107.58	-	-	AVG
-	2495.847	36.74	3.74	40.48	54.00	-13.52	AVG
*	4874.000	54.86	-1.95	52.91	74.00	-21.09	peak
*	7311.000	47.69	4.56	52.25	74.00	-21.75	peak
#	9748.000	40.10	9.12	49.22	90.43	-41.21	peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2382.340	50.70	3.80	54.50	74.00	-19.50	peak
@	2437.000	108.08	3.72	111.80	-	-	peak
-	2501.367	49.57	3.74	53.31	74.00	-20.69	peak
-	2369.060	36.73	3.78	40.51	54.00	-13.49	AVG
@	2437.000	105.23	3.72	108.95	-	-	AVG
-	2495.887	36.90	3.74	40.64	54.00	-13.36	AVG
-	4874.000	58.22	-1.95	56.27	74.00	-17.73	peak
-	4874.000	51.14	-1.95	49.19	54.00	-4.81	AVG
*	7311.000	50.11	4.56	54.67	74.00	-19.33	peak
#	9748.000	48.31	9.12	57.43	91.80	-34.37	peak
#	9748.000	44.20	9.12	53.32	78.95	-25.63	AVG

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@" : Fundamental Frequency.
5. "#": The radiated frequency is out of the restricted band.
6. "*": The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
7. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail			
Channel	Channel 11	Frequency Range		1 GHz ~ 26.5 GHz	

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	2462.000	105.60	3.70	109.30	-	-	peak
-	2485.760	49.63	3.72	53.35	74.00	-20.65	peak
@	2462.000	102.54	3.70	106.24	-	-	AVG
-	2490.507	38.06	3.73	41.79	54.00	-12.21	AVG
*	4924.000	54.11	-1.92	52.19	74.00	-21.81	peak
*	7386.000	45.63	4.77	50.40	74.00	-23.60	peak
#	9848.000	39.14	9.58	48.72	89.30	-40.58	peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	2462.020	107.73	3.70	111.43	-	-	peak
-	2496.387	52.44	3.74	56.18	74.00	-17.82	peak
@	2462.000	104.97	3.70	108.67	-	-	peak
-	2486.667	45.64	3.73	49.37	54.00	-4.63	AVG
*	4924.000	54.99	-1.92	53.07	74.00	-20.93	peak
*	7386.000	47.51	4.77	52.28	74.00	-21.72	peak
#	9848.000	44.79	9.58	54.37	91.43	-37.06	peak
#	9848.000	41.71	9.58	51.29	78.67	-27.38	AVG

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@" : Fundamental Frequency.
5. "#": The radiated frequency is out of the restricted band.
6. "*": The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
7. The other emission levels were very low against the limit.

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802.11g

EUT Test Condition		Measurement Detail		
Channel	Channel 1	Frequency Range	1 GHz ~ 26.5 GHz	

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2389.360	54.48	3.81	58.29	74.00	-15.71	peak
@	2412.000	104.22	3.78	108.00	-	-	peak
-	2390.000	42.12	3.81	45.93	54.00	-8.07	AVG
@	2412.000	93.62	3.78	97.40	-	-	AVG
*	4824.000	43.05	-2.02	41.03	74.00	-32.97	peak
*	7333.350	40.42	4.63	45.05	74.00	-28.95	peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2389.740	64.46	3.81	68.27	74.00	-5.73	peak
@	2412.000	106.08	3.78	109.86	-	-	peak
-	2390.000	49.61	3.81	53.42	54.00	-0.58	AVG
@	2412.000	96.55	3.78	100.33	-	-	AVG
*	4824.000	44.70	-2.02	42.68	74.00	-31.32	peak
*	7333.350	42.19	4.63	46.82	74.00	-27.18	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "*": The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail					
Channel	Channel 6	Frequency Range			1 GHz ~ 26.5 GHz		

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2378.733	52.11	3.79	55.90	74.00	-18.10	peak
@	2437.000	107.38	3.72	111.10	-	-	peak
-	2492.673	49.75	3.73	53.48	74.00	-20.52	peak
-	2390.000	37.42	3.81	41.23	54.00	-12.77	AVG
@	2437.000	97.44	3.72	101.16	-	-	AVG
-	2496.040	37.01	3.74	40.75	54.00	-13.25	AVG
*	4874.000	50.23	-1.95	48.28	74.00	-25.72	peak
*	7311.000	45.65	4.56	50.21	74.00	-23.79	peak

Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2386.373	51.67	3.81	55.48	74.00	-18.52	peak
@	2437.000	109.40	3.72	113.12	-	-	peak
-	2488.520	50.80	3.72	54.52	74.00	-19.48	peak
-	2389.780	37.95	3.81	41.76	54.00	-12.24	AVG
@	2437.000	99.57	3.72	103.29	-	-	AVG
-	2495.893	37.77	3.74	41.51	54.00	-12.49	AVG
*	4874.000	53.65	-1.95	51.70	74.00	-22.30	peak
*	7311.000	47.69	4.56	52.25	74.00	-21.75	peak
#	9748.000	40.26	9.12	49.38	93.12	-43.74	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@" : Fundamental Frequency.
5. "#" : The radiated frequency is out of the restricted band.
6. "*" : The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
7. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail			
Channel	Channel 11	Frequency Range		1 GHz ~ 26.5 GHz	

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	2462.000	103.85	3.70	107.55	-	-	peak
-	2485.147	53.38	3.72	57.10	74.00	-16.90	peak
@	2462.000	94.16	3.70	97.86	-	-	AVG
-	2483.500	42.05	3.71	45.76	54.00	-8.24	AVG
*	4924.000	43.43	-1.92	41.51	74.00	-32.49	peak
*	7333.350	41.16	4.63	45.79	74.00	-28.21	peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	2462.000	106.22	3.70	109.92	-	-	peak
-	2483.807	64.30	3.72	68.02	74.00	-5.98	peak
@	2462.000	96.63	3.70	100.33	-	-	AVG
-	2483.500	49.84	3.71	53.55	54.00	-0.45	AVG
*	4924.000	47.28	-1.92	45.36	74.00	-28.64	peak
*	7333.350	42.96	4.63	47.59	74.00	-26.41	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "*": The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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802.11n (HT20)

EUT Test Condition		Measurement Detail					
Channel	Channel 1	Frequency Range			1 GHz ~ 26.5 GHz		

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2390.000	58.11	3.81	61.92	74.00	-12.08	peak
@	2412.000	103.39	3.78	107.17	-	-	peak
-	2390.000	43.57	3.81	47.38	54.00	-6.62	AVG
@	2412.000	92.94	3.78	96.72	-	-	AVG
*	4824.000	41.54	-2.02	39.52	74.00	-34.48	peak
*	7333.350	40.55	4.63	45.18	74.00	-28.82	peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2389.060	61.65	3.81	65.46	74.00	-8.54	peak
@	2412.000	105.22	3.78	109.00	-	-	peak
-	2390.000	49.21	3.81	53.02	54.00	-0.98	AVG
@	2412.000	96.13	3.78	99.91	-	-	AVG
*	4824.000	43.69	-2.02	41.67	74.00	-32.33	peak
*	7333.350	42.33	4.63	46.96	74.00	-27.04	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "*": The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail			
Channel	Channel 6	Frequency Range		1 GHz ~ 26.5 GHz	

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2358.887	50.50	3.77	54.27	74.00	-19.73	peak
@	2437.000	107.27	3.72	110.99	-	-	peak
-	2487.960	49.39	3.72	53.11	74.00	-20.89	peak
-	2389.360	37.52	3.81	41.33	54.00	-12.67	AVG
@	2437.000	97.81	3.72	101.53	-	-	AVG
-	2496.120	37.14	3.74	40.88	54.00	-13.12	AVG
*	4874.000	50.41	-1.95	48.46	74.00	-25.54	peak
*	7311.000	45.74	4.56	50.30	74.00	-23.70	peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2386.893	51.68	3.81	55.49	74.00	-18.51	peak
@	2437.000	109.15	3.72	112.87	-	-	peak
-	2490.433	51.95	3.73	55.68	74.00	-18.32	peak
-	2389.780	38.45	3.81	42.26	54.00	-11.74	AVG
@	2437.000	100.39	3.72	104.11	-	-	AVG
-	2484.613	38.60	3.72	42.32	54.00	-11.68	AVG
*	4874.000	54.01	-1.95	52.06	74.00	-21.94	peak
*	7311.000	48.44	4.56	53.00	74.00	-21.00	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@" : Fundamental Frequency.
5. "*" : The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail			
Channel	Channel 11	Frequency Range		1 GHz ~ 26.5 GHz	

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	2462.000	103.95	3.70	107.65	-	-	peak
-	2484.727	54.14	3.72	57.86	74.00	-16.14	peak
@	2462.000	93.41	3.70	97.11	-	-	AVG
-	2483.500	42.07	3.71	45.78	54.00	-8.22	AVG
*	4924.000	42.65	-1.92	40.73	74.00	-33.27	peak
*	7333.350	40.64	4.63	45.27	74.00	-28.73	peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	2462.000	105.56	3.70	109.26	-	-	peak
-	2483.900	60.92	3.72	64.64	74.00	-9.36	peak
@	2462.000	96.08	3.70	99.78	-	-	AVG
-	2483.500	49.72	3.71	53.43	54.00	-0.57	AVG
*	4924.000	47.56	-1.92	45.64	74.00	-28.36	peak
*	7333.350	42.45	4.63	47.08	74.00	-26.92	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "*": The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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802.11n (HT40)

EUT Test Condition		Measurement Detail		
Channel	Channel 3	Frequency Range	1 GHz ~ 26.5 GHz	

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2388.173	63.08	3.80	66.88	74.00	-7.12	peak
@	2422.000	101.47	3.76	105.23	-	-	peak
-	2389.053	46.53	3.81	50.34	54.00	-3.66	AVG
@	2422.000	88.68	3.76	92.44	-	-	AVG
*	4844.000	40.66	-1.97	38.69	74.00	-35.31	peak
*	7333.350	41.59	4.63	46.22	74.00	-27.78	peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2388.840	59.44	3.81	63.25	74.00	-10.75	peak
@	2422.000	99.12	3.76	102.88	-	-	peak
-	2390.000	49.85	3.81	53.66	54.00	-0.34	AVG
@	2422.000	91.85	3.76	95.61	-	-	AVG
*	4844.000	41.85	-1.97	39.88	74.00	-34.12	peak
*	7333.350	43.03	4.63	47.66	74.00	-26.34	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@" : Fundamental Frequency.
5. "*" : The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail		
Channel	Channel 6	Frequency Range	1 GHz ~ 26.5 GHz	

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2389.960	63.92	3.81	67.73	74.00	-6.27	peak
@	2437.000	106.05	3.72	109.77	-	-	peak
-	2483.660	60.64	3.71	64.35	74.00	-9.65	peak
-	2390.000	49.60	3.81	53.41	54.00	-0.59	AVG
@	2437.000	96.02	3.72	99.74	-	-	AVG
-	2483.500	48.36	3.71	52.07	54.00	-1.93	AVG
*	4874.000	44.00	-1.95	42.05	74.00	-31.95	peak
*	7333.350	42.04	4.63	46.67	74.00	-27.33	peak

Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	2389.100	58.00	3.81	61.81	74.00	-12.19	peak
@	2437.000	103.44	3.72	107.16	-	-	peak
-	2483.253	57.00	3.71	60.71	74.00	-13.29	peak
-	2389.933	48.78	3.81	52.59	54.00	-1.41	AVG
@	2437.000	93.44	3.72	97.16	-	-	AVG
-	2483.500	46.02	3.71	49.73	54.00	-4.27	AVG
*	4874.000	48.05	-1.95	46.10	74.00	-27.90	peak
*	7333.350	43.06	4.63	47.69	74.00	-26.31	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@" : Fundamental Frequency.
5. "*" : The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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Doc No: 17-EM-F0876 / 5.0



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EUT Test Condition		Measurement Detail		
Channel	Channel 9	Frequency Range	1 GHz ~ 26.5 GHz	

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	2452.000	99.88	3.69	103.57	-	-	peak
-	2484.673	53.83	3.72	57.55	74.00	-16.45	peak
@	2452.000	89.93	3.69	93.62	-	-	AVG
-	2483.500	43.08	3.71	46.79	54.00	-7.21	AVG
*	4904.000	41.35	-1.93	39.42	74.00	-34.58	peak
*	7333.350	42.01	4.63	46.64	74.00	-27.36	peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	2452.000	101.95	3.69	105.64	-	-	peak
	2487.147	61.82	3.73	65.55	74.00	-8.45	peak
@	2452.000	91.99	3.69	95.68	-	-	AVG
-	2483.500	49.30	3.71	53.01	54.00	-0.99	AVG
*	4904.000	42.48	-1.93	40.55	74.00	-33.45	peak
*	7333.350	43.17	4.63	47.80	74.00	-26.20	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "*": The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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Co-Location Mode

802.11b+802.11a

EUT Test Condition		Measurement Detail		
Channel	Channel 6 + Channel 48 + Channel 149	Frequency Range	1 GHz ~ 40 GHz	

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
*	2804.400	65.77	-6.17	59.60	74.00	-14.40	peak
*	4874.000	50.12	-1.95	48.17	74.00	-25.83	peak
#	6249.400	50.98	0.62	51.60	74.00	-22.40	peak
*	7310.200	50.15	4.55	54.70	74.00	-19.30	peak
#	10480.000	34.31	10.41	44.72	74.00	-29.28	peak
*	11490.000	36.27	11.17	47.44	74.00	-26.56	peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
*	2800.500	65.80	-6.19	59.61	74.00	-14.39	peak
*	4874.000	54.79	-1.95	52.84	74.00	-21.16	peak
*	7312.800	50.12	4.57	54.69	74.00	-19.31	peak
#	9749.000	43.45	9.12	52.57	74.00	-21.43	peak
#	10480.000	34.80	10.41	45.21	74.00	-28.79	peak
*	11490.000	41.19	11.17	52.36	74.00	-21.64	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. " # ": The radiated frequency is out of the restricted band.
5. " * ": The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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9 kHz ~ 30 MHz Data

For 9 kHz to 30 MHz radiated emission have performed all modes of operation were investigated. The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

No non-compliance noted:

KDB 414788 D01 OATS and Chamber Correlation Justification

- Base on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.
- OATs and chamber correlation testing had been performed and chamber measured test results is the worst case test result.

Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30m open area test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.

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Model: VigorAP 1000

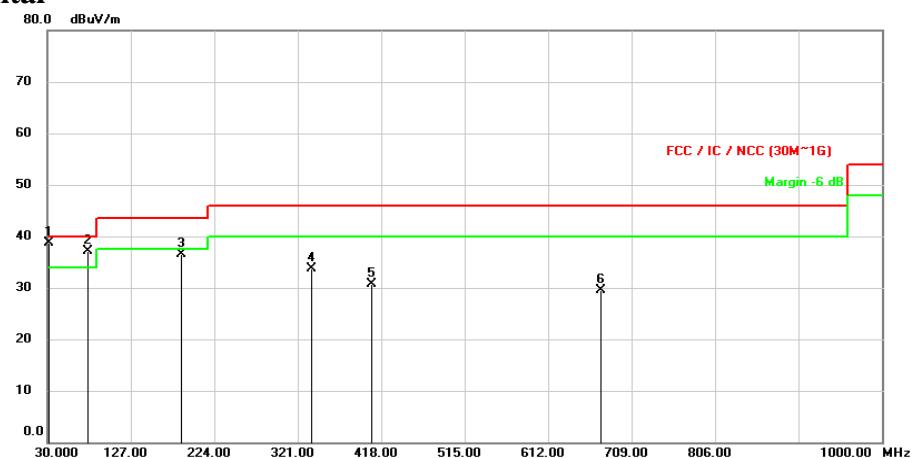
30 MHz ~ 1 GHz Data

Non-Beamforming Mode

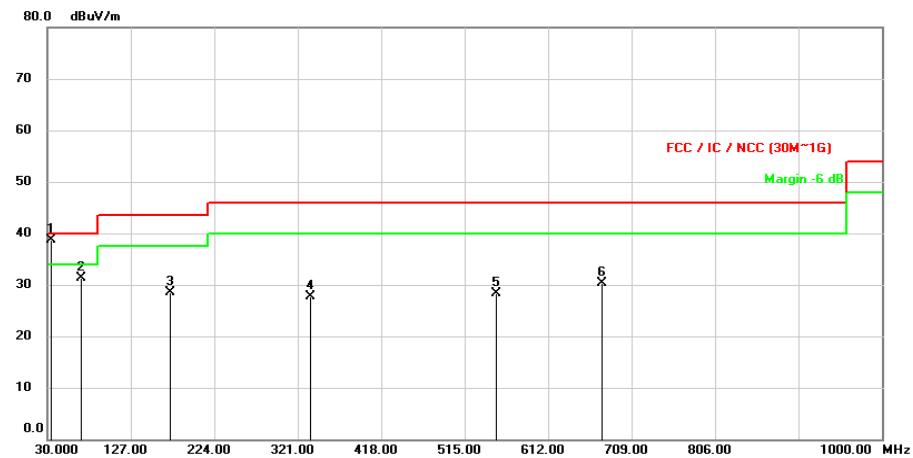
802.11b

EUT Test Condition		Measurement Detail	
Channel	Channel 11	Frequency Range	30 MHz ~ 1 GHz

Horizontal



Vertical



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Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	32.8776	60.14	-21.37	38.77	40.00	-1.23	peak
-	76.8508	61.90	-24.72	37.18	40.00	-2.82	peak
-	184.4885	58.12	-21.61	36.51	43.50	-6.99	peak
-	336.6492	52.52	-18.81	33.71	46.00	-12.29	peak
-	407.9442	47.71	-16.96	30.75	46.00	-15.25	peak
-	673.5303	41.26	-11.71	29.55	46.00	-16.45	peak

Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	34.5266	60.23	-21.62	38.61	40.00	-1.39	peak
-	67.9593	53.94	-22.54	31.40	40.00	-8.60	peak
-	173.1396	49.31	-20.83	28.48	43.50	-15.02	peak
-	336.4229	46.54	-18.81	27.73	46.00	-18.27	peak
-	552.0216	41.63	-13.36	28.27	46.00	-17.73	peak
-	673.5626	42.04	-11.71	30.33	46.00	-15.67	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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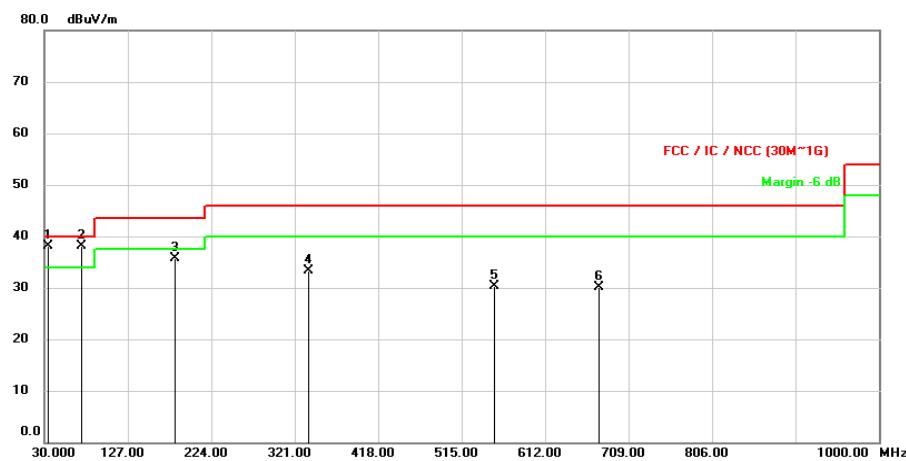
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Co-Location Mode

802.11b+802.11ac (VHT20)

EUT Test Condition		Measurement Detail	
Channel	Channel 6 + Channel 48 + Channel 165	Frequency Range	30 MHz ~ 1 GHz

Horizontal



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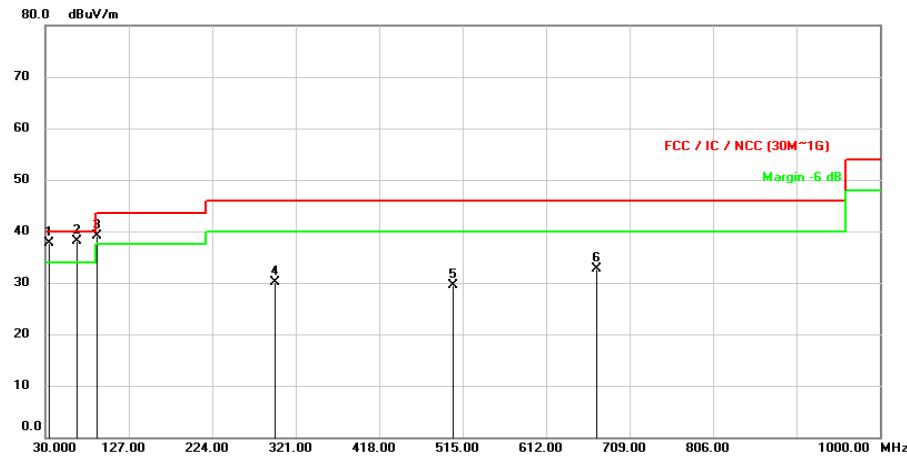
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Vertical



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