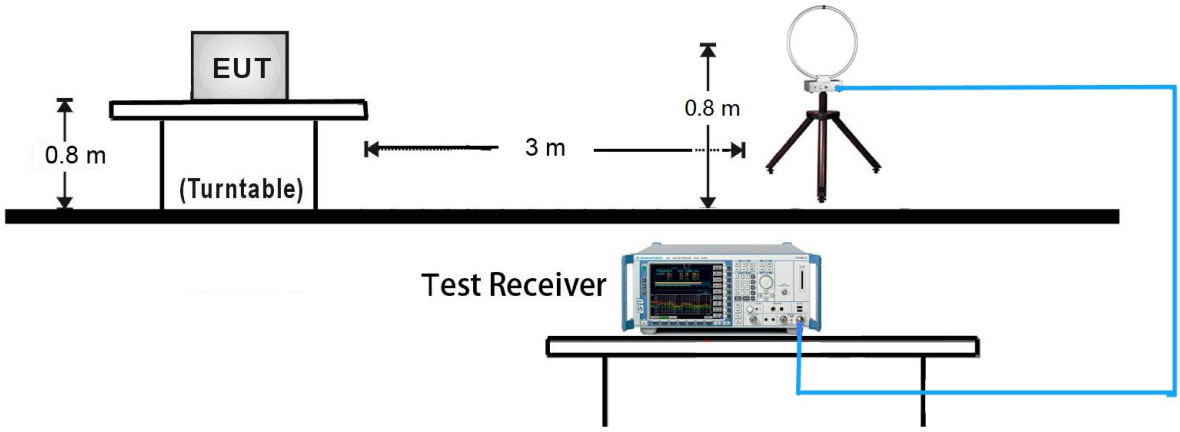
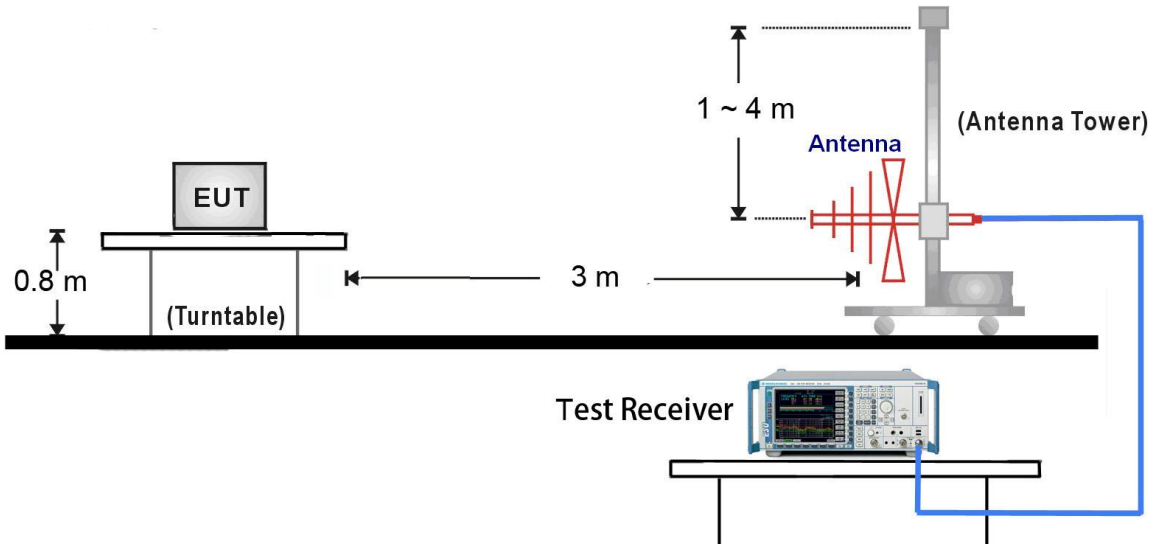
7.6.4. Test Setup

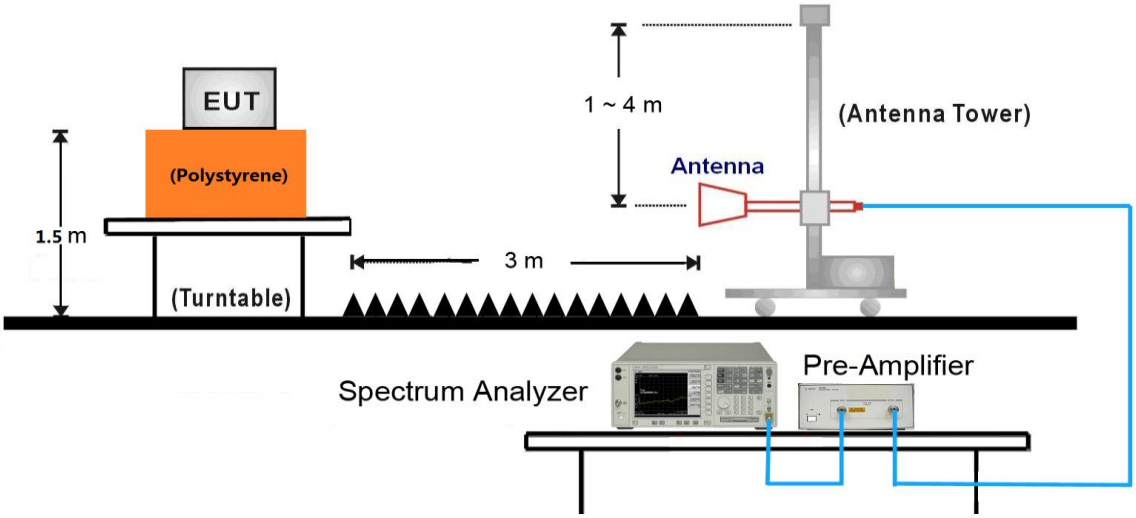
9kHz ~ 30MHz Test Setup:



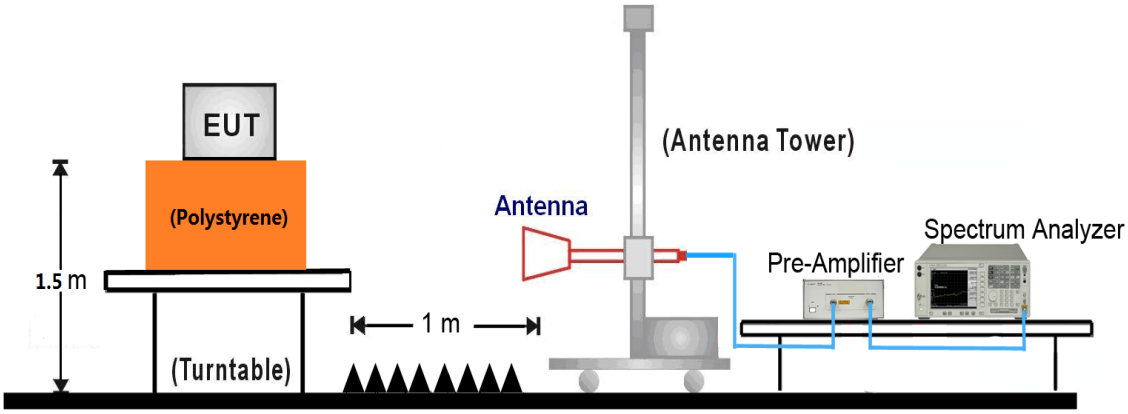
30MHz ~ 1GHz Test Setup:



1GHz ~ 18GHz Test Setup:



18GHz ~25GHz Test Setup:



7.6.5. Test Result

Test Mode:	802.11b - Ant 0 + 1	Test Site:	AC1
Test Channel:	01	Test Engineer:	Roy Cheng
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 30dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3218.5	49.4	-2.5	46.9	88.6	-41.7	Peak	Horizontal
	4723.0	31.4	6.9	38.3	74.0	-35.7	Peak	Horizontal
*	6185.0	33.1	7.9	41.0	88.6	-47.6	Peak	Horizontal
	9109.0	37.2	9.0	46.2	74.0	-27.8	Peak	Horizontal
*	3218.5	59.1	-2.5	56.6	88.6	-32.0	Peak	Vertical
	5046.0	31.9	7.7	39.6	74.0	-34.4	Peak	Vertical
*	7179.5	36.4	7.9	44.3	88.6	-44.3	Peak	Vertical
	11089.5	40.1	8.9	49.0	74.0	-25.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (118.6dBμV/m) or FCC 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11b - Ant 0 + 1	Test Site:	AC1
Test Channel:	06	Test Engineer:	Roy Cheng
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 30dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3252.5	46.8	-2.5	44.3	89.4	-45.1	Peak	Horizontal
	4757.0	31.5	6.2	37.7	74.0	-36.3	Peak	Horizontal
*	7502.5	36.7	7.6	44.3	89.4	-45.1	Peak	Horizontal
	10953.5	40.3	8.1	48.4	74.0	-25.6	Peak	Horizontal
*	3252.5	55.2	-2.5	52.7	89.4	-36.7	Peak	Vertical
	4621.0	31.1	6.8	37.9	74.0	-36.1	Peak	Vertical
*	6916.0	35.1	8.0	43.1	89.4	-46.3	Peak	Vertical
	10911.0	40.3	8.1	48.4	74.0	-25.6	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 30dBc of the fundamental emission level (119.4dBμV/m) or FCC 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11b - Ant 0 + 1	Test Site:	AC1
Test Channel:	11	Test Engineer:	Roy Cheng
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 30dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3286.5	43.8	-2.4	41.4	90.0	-48.6	Peak	Horizontal
	4306.5	30.4	7.2	37.6	74.0	-36.4	Peak	Horizontal
*	6108.5	32.9	8.3	41.2	90.0	-48.8	Peak	Horizontal
	11200.0	40.0	8.8	48.8	74.0	-25.2	Peak	Horizontal
*	3286.5	50.0	-2.4	47.6	90.0	-42.4	Peak	Vertical
	4332.0	30.5	6.7	37.2	74.0	-36.8	Peak	Vertical
*	5972.5	32.7	8.2	40.9	90.0	-49.1	Peak	Vertical
	11608.0	40.0	9.6	49.6	74.0	-24.4	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 30dBc of the fundamental emission level (120.0dBμV/m) or FCC 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11g - Ant 0 + 1	Test Site:	AC1
Test Channel:	01	Test Engineer:	Roy Cheng
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 30dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3218.5	48.4	-2.5	45.9	87.0	-41.1	Peak	Horizontal
	4689.0	31.3	6.4	37.7	74.0	-36.3	Peak	Horizontal
*	7757.5	36.6	9.1	45.7	87.0	-41.3	Peak	Horizontal
	10613.5	39.7	8.4	48.1	74.0	-25.9	Peak	Horizontal
*	3218.5	58.5	-2.5	56.0	87.0	-31.0	Peak	Vertical
	4876.0	31.6	7.0	38.6	74.0	-35.4	Peak	Vertical
*	7154.0	36.3	7.3	43.6	87.0	-43.4	Peak	Vertical
	11548.5	40.2	8.9	49.1	74.0	-24.9	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 30dBc of the fundamental emission level (117.0dBμV/m) or FCC 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11g - Ant 0 + 1	Test Site:	AC1
Test Channel:	06	Test Engineer:	Roy Cheng
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 30dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3252.5	45.3	-2.5	42.8	91.4	-48.6	Peak	Horizontal
	4655.0	31.2	8.0	39.2	74.0	-34.8	Peak	Horizontal
*	6992.5	35.4	8.2	43.6	91.4	-47.8	Peak	Horizontal
	10639.0	39.7	8.3	48.0	74.0	-26.0	Peak	Horizontal
*	3252.5	53.9	-2.5	51.4	91.4	-40.0	Peak	Vertical
	4298.0	30.4	8.0	38.4	74.0	-35.6	Peak	Vertical
*	7069.0	35.9	7.6	43.5	91.4	-47.9	Peak	Vertical
	11089.5	40.1	8.4	48.5	74.0	-25.5	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 30dBc of the fundamental emission level (121.4dBμV/m) or FCC 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11g - Ant 0 + 1	Test Site:	AC1
Test Channel:	11	Test Engineer:	Roy Cheng
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 30dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3286.5	42.9	-2.4	40.5	89.1	-48.6	Peak	Horizontal
	4621.0	31.1	7.2	38.3	74.0	-35.7	Peak	Horizontal
*	7060.5	35.8	7.3	43.1	89.1	-46.0	Peak	Horizontal
	11548.5	40.2	9.3	49.5	74.0	-24.5	Peak	Horizontal
*	3286.5	48.4	-2.4	46.0	89.1	-43.1	Peak	Vertical
	4646.5	31.2	6.6	37.8	74.0	-36.2	Peak	Vertical
*	7111.5	36.1	7.0	43.1	89.1	-46.0	Peak	Vertical
	11625.0	40.0	9.3	49.3	74.0	-24.7	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 30dBc of the fundamental emission level (119.1dBμV/m) or FCC 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11n-HT20 - Ant 0 + 1	Test Site:	AC1
Test Channel:	01	Test Engineer:	Roy Cheng
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 30dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3218.5	-2.5	46.4	43.9	87.2	-43.3	Peak	Horizontal
	4638.0	7.2	31.1	38.3	74.0	-35.7	Peak	Horizontal
*	5853.5	7.3	32.7	40.0	87.2	-47.2	Peak	Horizontal
	7460.0	8.3	36.6	44.9	74.0	-29.1	Peak	Horizontal
*	3218.5	-2.5	55.5	53.0	87.2	-34.2	Peak	Vertical
	4332.0	7.0	30.5	37.5	74.0	-36.5	Peak	Vertical
*	5964.0	7.6	32.7	40.3	87.2	-46.9	Peak	Vertical
	9321.5	7.9	37.9	45.8	74.0	-28.2	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 30dBc of the fundamental emission level (117.2dBμV/m) or FCC 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11n-HT20 - Ant 0 + 1	Test Site:	AC1
Test Channel:	06	Test Engineer:	Roy Cheng
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 30dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3252.5	-2.5	45.0	42.5	90.3	-47.8	Peak	Horizontal
	4646.5	6.9	31.2	38.1	74.0	-35.9	Peak	Horizontal
*	6491.0	6.6	34.4	41.0	90.3	-49.3	Peak	Horizontal
	10707.0	8.9	39.7	48.6	74.0	-25.4	Peak	Horizontal
*	3252.5	-2.5	54.1	51.6	90.3	-38.7	Peak	Vertical
	4689.0	7.1	31.3	38.4	74.0	-35.6	Peak	Vertical
*	7910.5	7.9	37.0	44.9	90.3	-45.4	Peak	Vertical
	11089.5	8.7	40.1	48.8	74.0	-25.2	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 30dBc of the fundamental emission level (120.3dBμV/m) or FCC 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11n-HT20 - Ant 0 + 1	Test Site:	AC1
Test Channel:	11	Test Engineer:	Roy Cheng
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 30dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3286.5	-2.4	43.0	40.6	88.8	-48.2	Peak	Horizontal
	4357.5	6.7	30.5	37.2	74.0	-36.8	Peak	Horizontal
*	6134.0	7.2	33.0	40.2	88.8	-48.6	Peak	Horizontal
	9117.5	8.1	37.3	45.4	74.0	-28.6	Peak	Horizontal
*	3286.5	-2.4	48.7	46.3	88.8	-42.5	Peak	Vertical
	4646.5	6.8	31.2	38.0	74.0	-36.0	Peak	Vertical
*	6202.0	7.9	33.2	41.1	88.8	-47.7	Peak	Vertical
	9338.5	7.0	37.9	44.9	74.0	-29.1	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 30dBc of the fundamental emission level (118.8dBμV/m) or FCC 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11n-HT40 - Ant 0 + 1	Test Site:	AC1
Test Channel:	03	Test Engineer:	Roy Cheng
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 30dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3227.0	-2.4	44.2	41.8	80.7	-38.9	Peak	Horizontal
	4621.0	6.9	31.1	38.0	74.0	-36.0	Peak	Horizontal
*	6253.0	8.1	33.3	41.4	80.7	-39.3	Peak	Horizontal
	11098.0	9.2	40.1	49.3	74.0	-24.7	Peak	Horizontal
*	3227.0	-2.4	52.7	50.3	80.7	-30.4	Peak	Vertical
	4578.5	7.1	31.0	38.1	74.0	-35.9	Peak	Vertical
*	6176.5	8.6	33.1	41.7	80.7	-39.0	Peak	Vertical
	10902.5	8.0	40.3	48.3	74.0	-25.7	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 30dBc of the fundamental emission level (110.7dBμV/m) or FCC 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11n-HT40 - Ant 0 + 1	Test Site:	AC1
Test Channel:	06	Test Engineer:	Roy Cheng
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 30dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3252.5	-2.5	46.5	44.0	91.2	-47.2	Peak	Horizontal
	4349.0	7.3	30.5	37.8	74.0	-36.2	Peak	Horizontal
*	6312.5	7.0	33.5	40.5	91.2	-50.7	Peak	Horizontal
	11506.0	9.4	40.3	49.7	74.0	-24.3	Peak	Horizontal
*	3252.5	-2.5	54.8	52.3	91.2	-38.9	Peak	Vertical
	4604.0	7.2	31.0	38.2	74.0	-35.8	Peak	Vertical
*	6159.5	7.8	33.0	40.8	91.2	-50.4	Peak	Vertical
	9194.0	7.5	37.6	45.1	74.0	-28.9	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 30dBc of the fundamental emission level (121.2dBμV/m) or FCC 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11n-HT40 - Ant 0 + 1	Test Site:	AC1
Test Channel:	09	Test Engineer:	Roy Cheng
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 30dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3269.5	-2.5	42.5	40.0	84.6	-44.6	Peak	Horizontal
	3924.0	8.7	29.8	38.5	74.0	-35.5	Peak	Horizontal
*	6720.5	8.5	34.4	42.9	84.6	-41.7	Peak	Horizontal
	11574.0	8.8	40.1	48.9	74.0	-25.1	Peak	Horizontal
*	3269.5	-2.5	50.4	47.9	84.6	-36.7	Peak	Vertical
	4621.0	7.0	31.1	38.1	74.0	-35.9	Peak	Vertical
*	6839.5	7.8	34.7	42.5	84.6	-42.1	Peak	Vertical
	11200.0	8.6	40.0	48.6	74.0	-25.4	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 30dBc of the fundamental emission level (114.6dBμV/m) or FCC 15.209 which is higher.

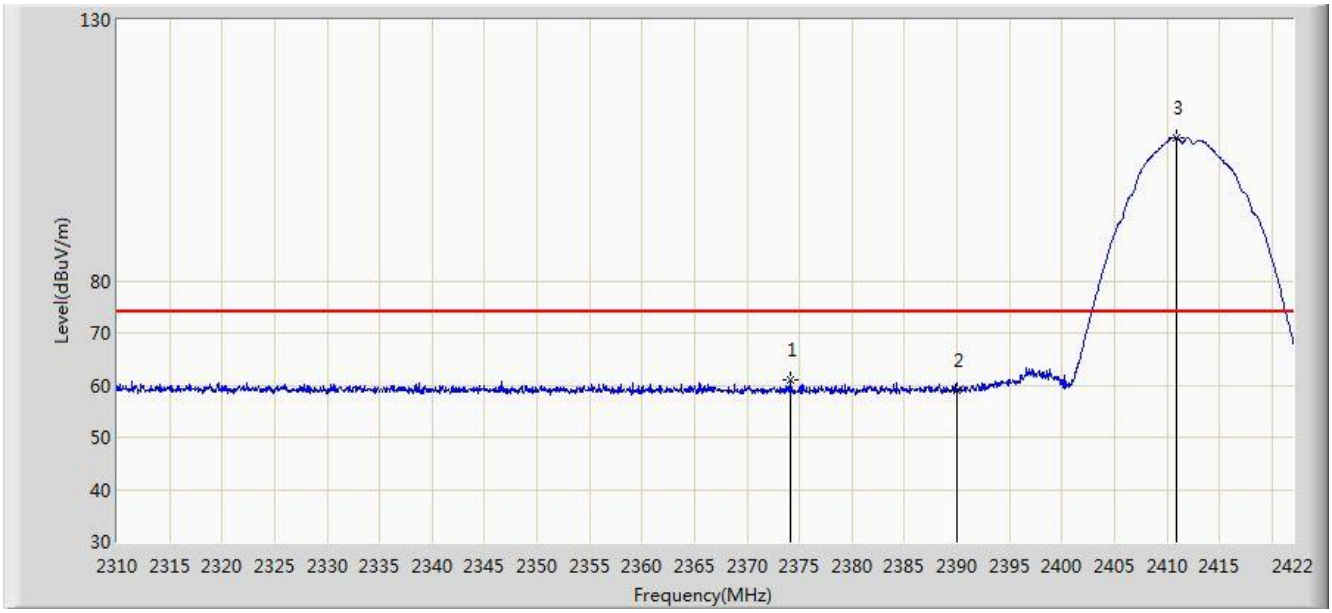
Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

7.7. Radiated Restricted Band Edge Measurement

7.7.1. Test Result

Site: AC2	Time: 2017/01/15 - 15:17
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11b at Channel 2412 Ant 0 + 1	

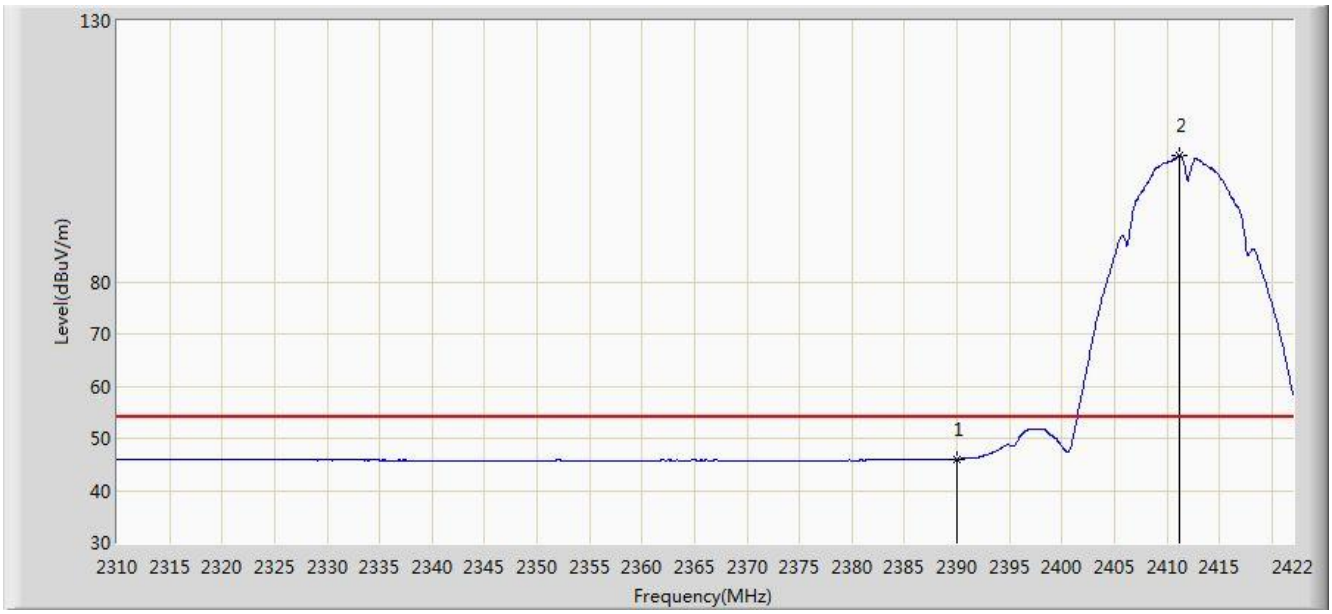


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2374.120	61.157	28.944	-12.843	74.000	32.213	PK
2			2390.000	59.120	26.842	-14.880	74.000	32.278	PK
3		*	2410.912	107.491	75.247	N/A	N/A	32.244	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 15:19
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11b at Channel 2412 Ant 0 + 1	

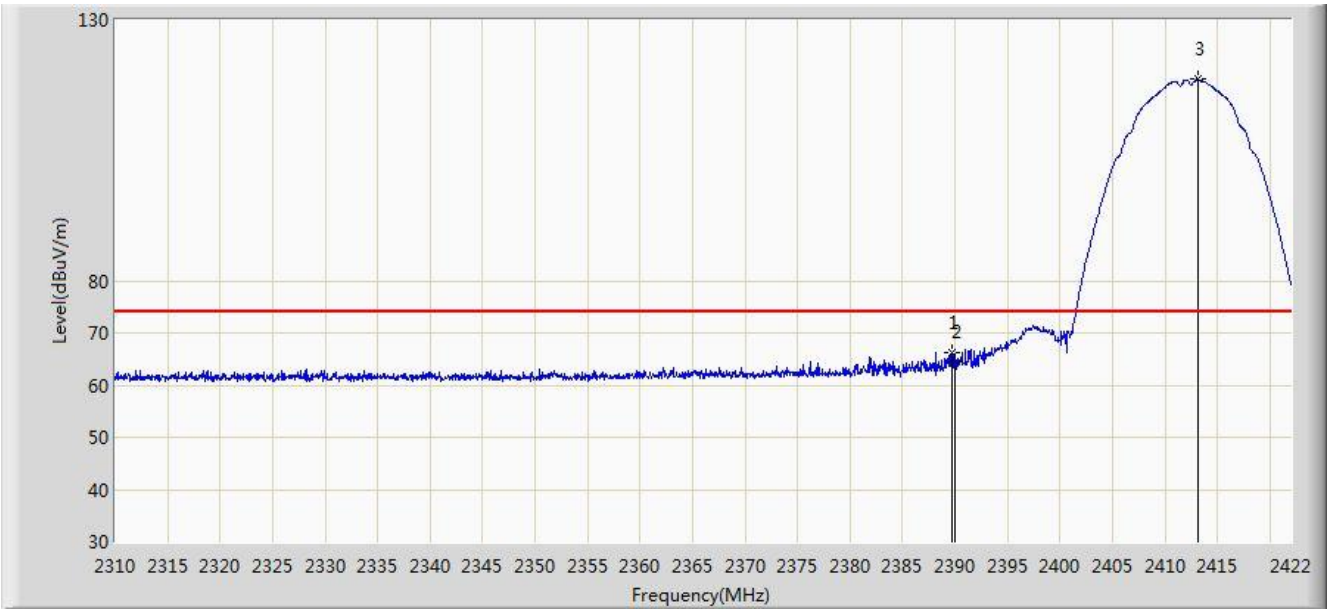


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	46.032	13.754	-7.968	54.000	32.278	AV
2		*	2411.192	104.167	71.924	N/A	N/A	32.243	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 15:22
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11b at Channel 2412 Ant 0 + 1	

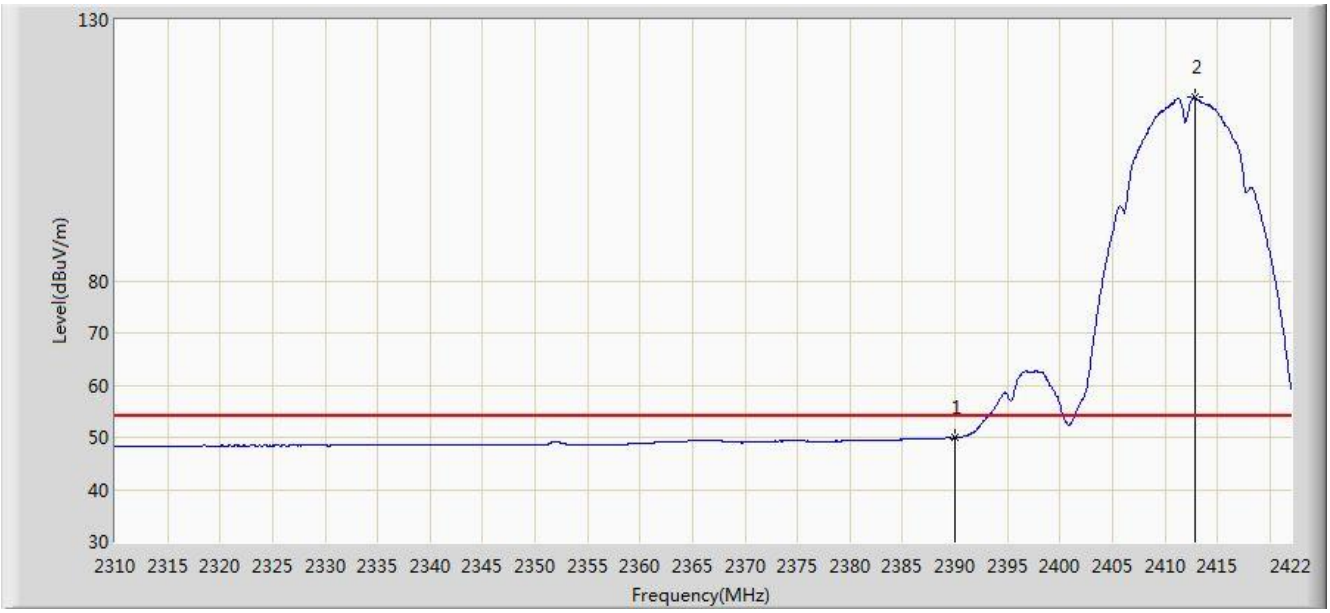


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.688	66.350	34.074	-7.650	74.000	32.277	PK
2			2390.000	64.556	32.278	-9.444	74.000	32.278	PK
3		*	2413.096	118.584	86.349	N/A	N/A	32.235	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 15:34
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11b at Channel 2412 Ant 0 + 1	

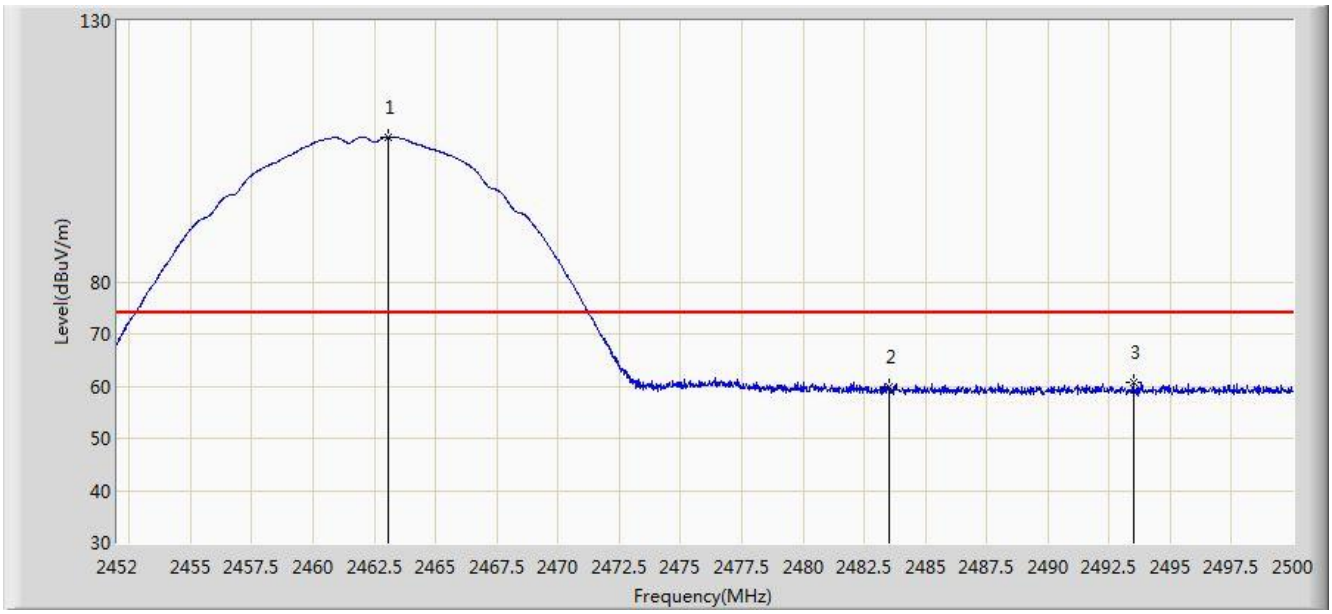


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	49.917	17.639	-4.083	54.000	32.278	AV
2		*	2412.816	115.114	82.878	N/A	N/A	32.236	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 15:39
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11b at Channel 2462 Ant 0 + 1	

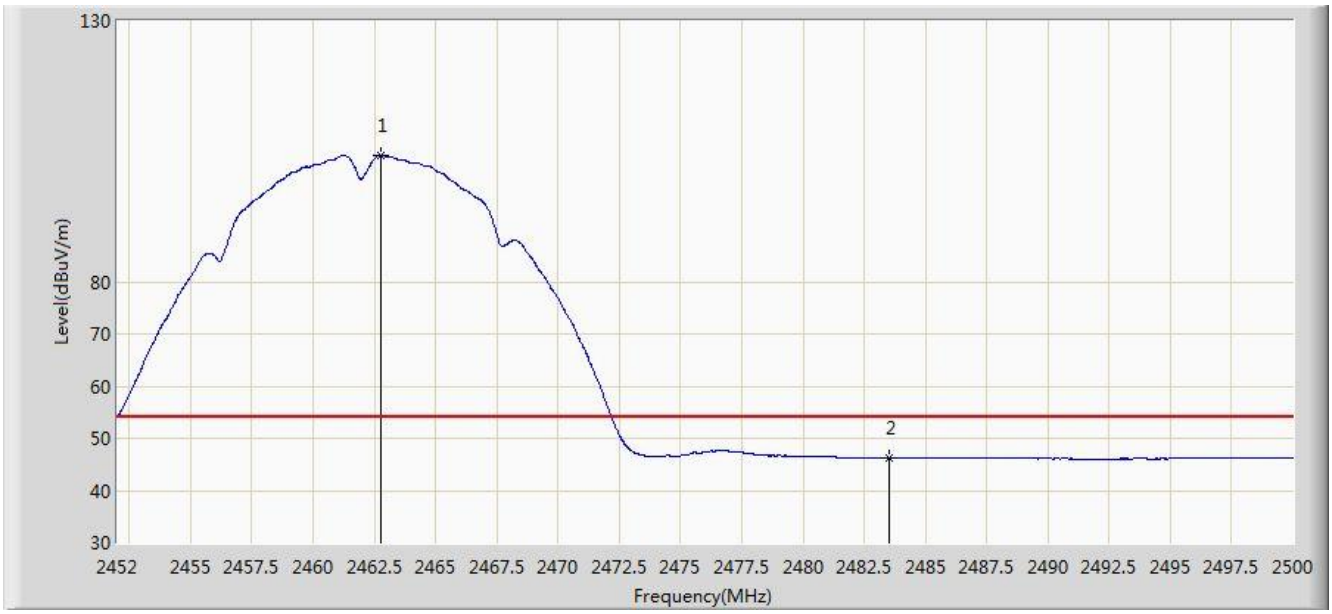


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2463.088	107.799	75.560	N/A	N/A	32.239	PK
2			2483.500	59.712	27.431	-14.288	74.000	32.282	PK
3			2493.496	60.781	28.465	-13.219	74.000	32.316	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 15:50
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11b at Channel 2462 Ant 0 + 1	

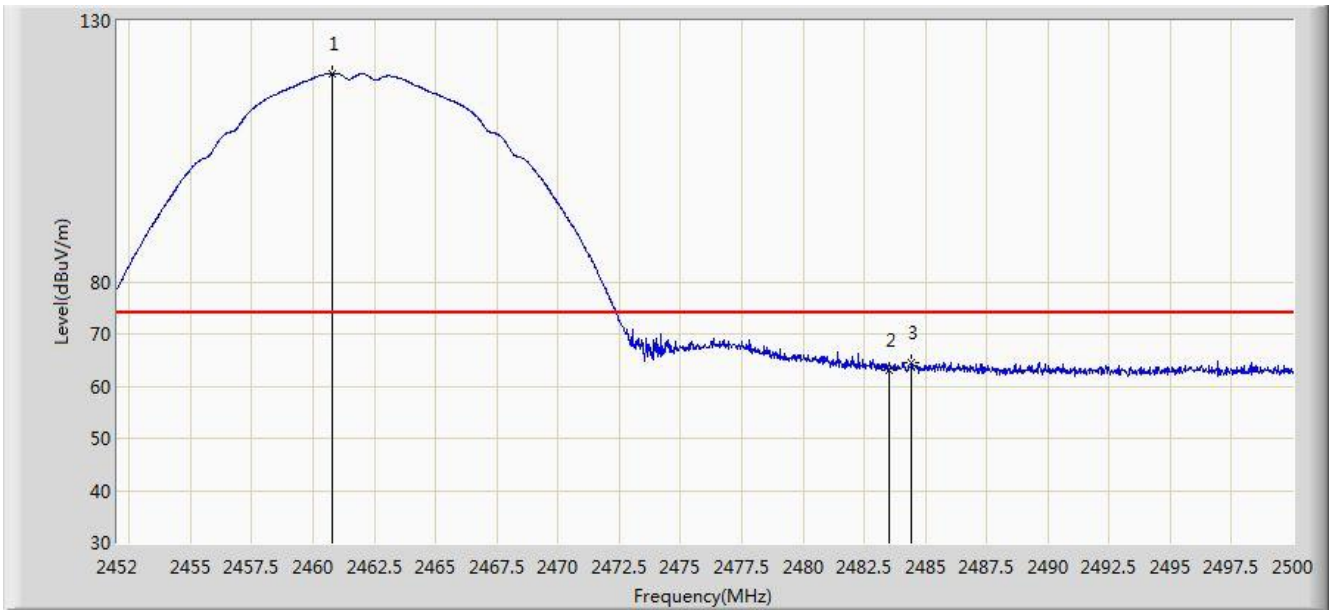


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2462.776	104.253	72.014	N/A	N/A	32.239	AV
2			2483.500	46.264	13.983	-7.736	54.000	32.282	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 15:51
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11b at Channel 2462 Ant 0 + 1	

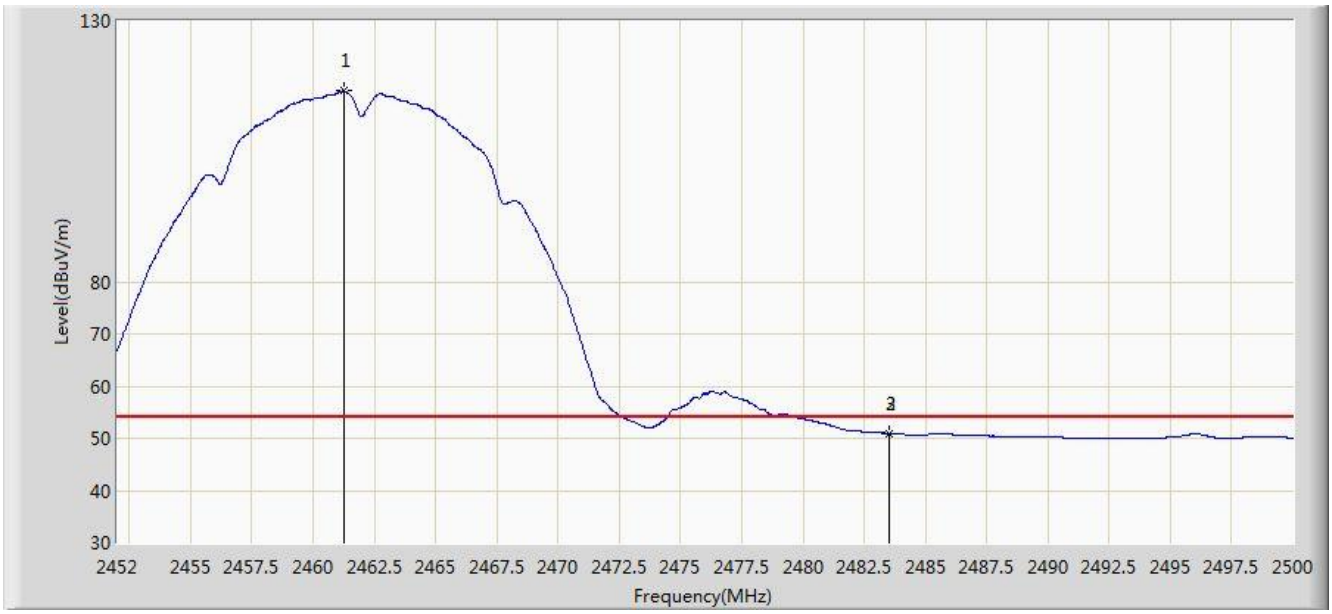


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2460.808	119.962	87.729	N/A	N/A	32.233	PK
2			2483.500	63.131	30.850	-10.869	74.000	32.282	PK
3			2484.448	64.548	32.264	-9.452	74.000	32.284	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 15:55
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11b at Channel 2462 Ant 0 + 1	

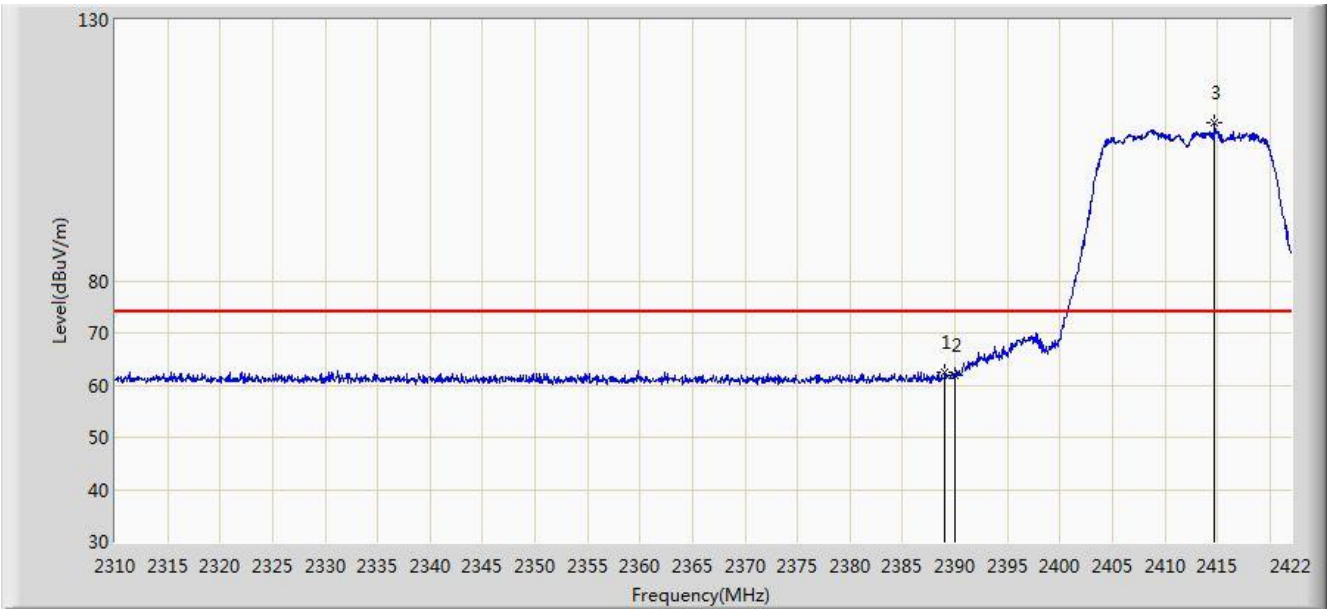


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.288	116.576	84.341	N/A	N/A	32.235	AV
2			2483.500	50.927	18.646	-3.073	54.000	32.282	AV
3			2483.536	50.939	18.658	-3.061	54.000	32.282	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 16:10
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11g at Channel 2412 Ant 0 + 1	

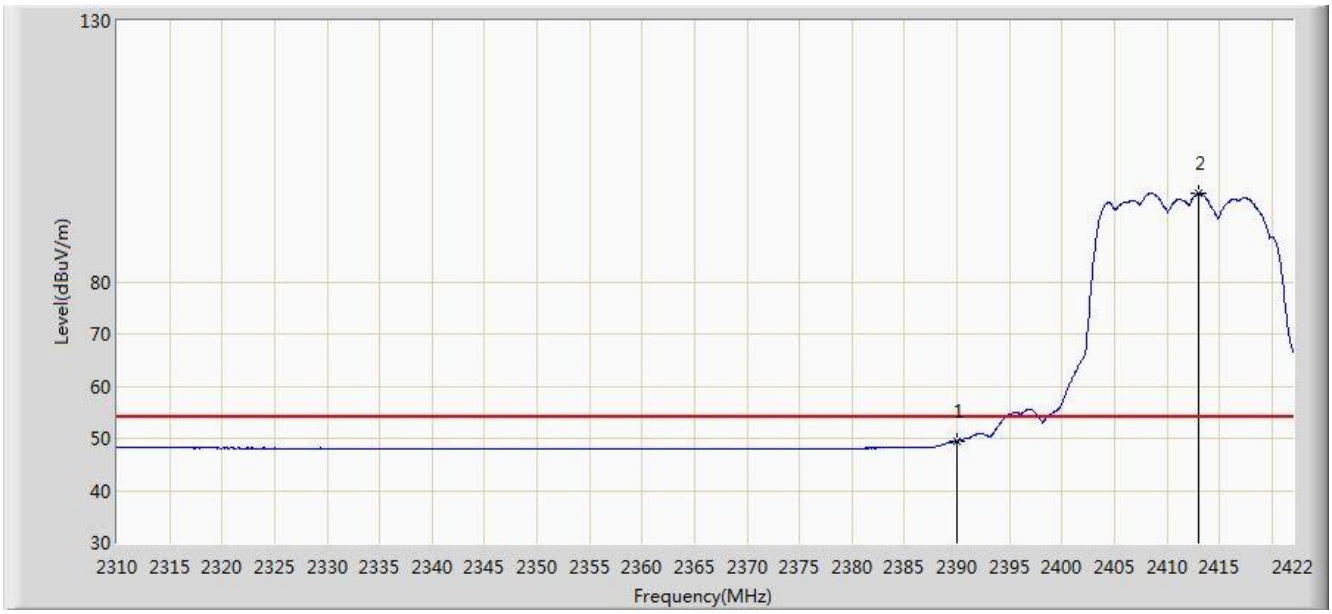


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.016	62.586	30.313	-11.414	74.000	32.272	PK
2			2390.000	61.824	29.546	-12.176	74.000	32.278	PK
3		*	2414.720	110.145	77.917	N/A	N/A	32.228	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 16:13
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11g at Channel 2412 Ant 0 + 1	

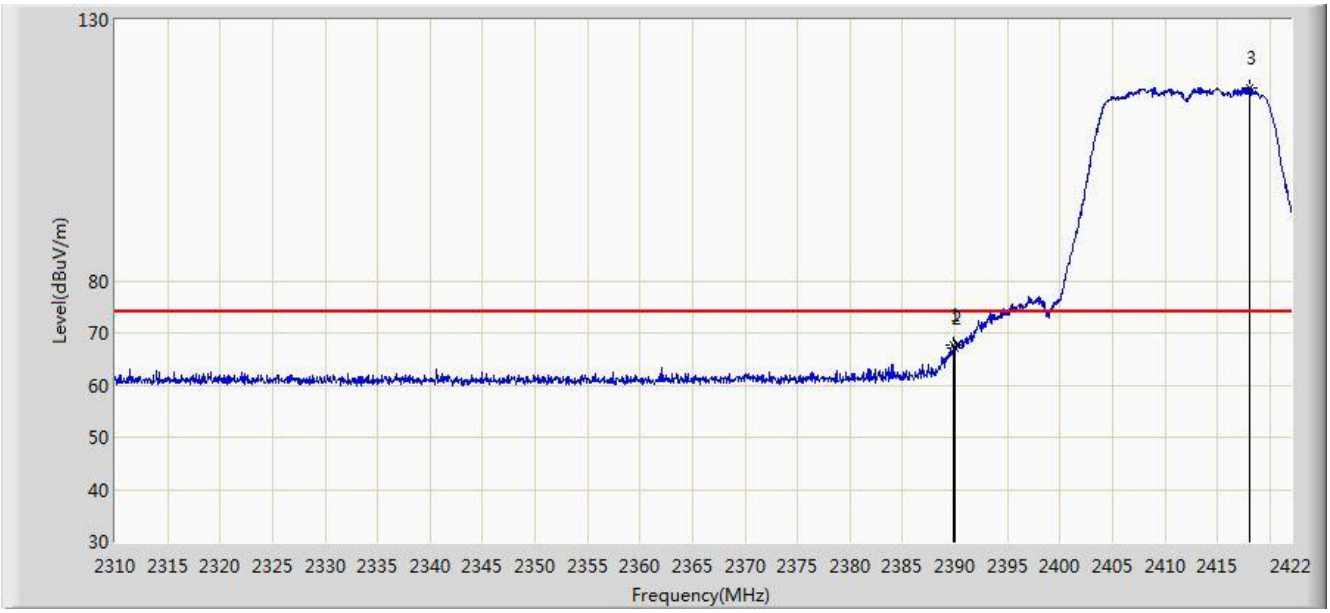


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	49.359	17.081	-4.641	54.000	32.278	AV
2		*	2413.040	96.938	64.703	N/A	N/A	32.235	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 16:09
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11g at Channel 2412 Ant 0 + 1	

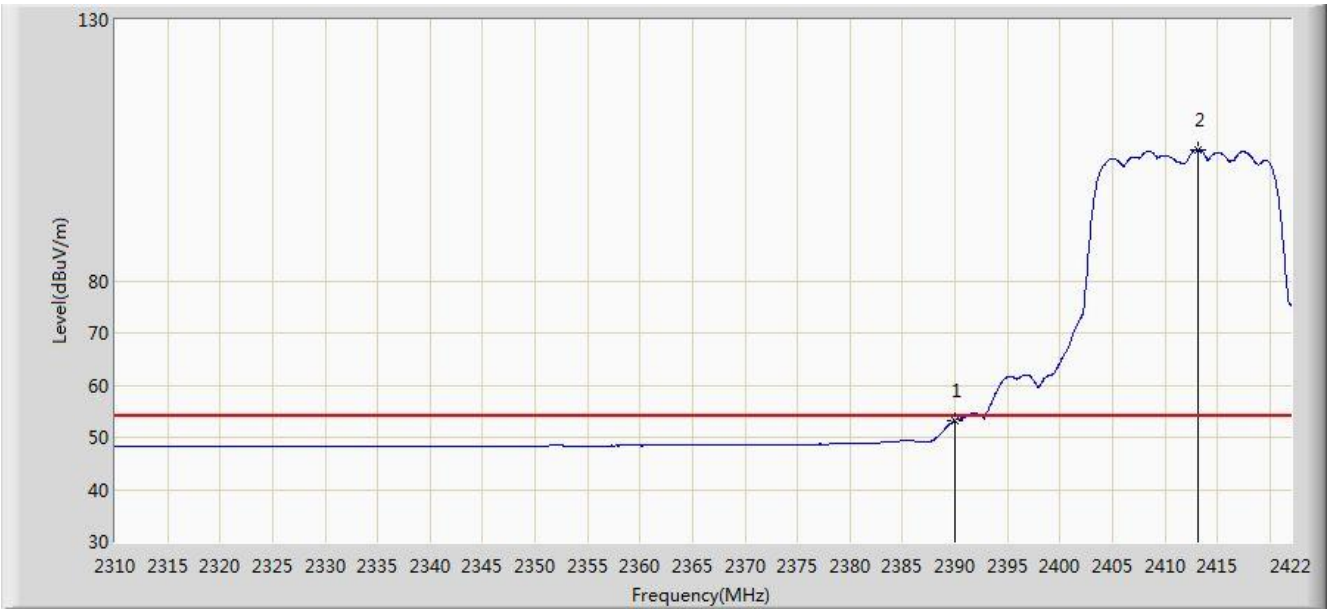


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.912	67.748	35.470	-6.252	74.000	32.278	PK
2			2390.000	66.982	34.704	-7.018	74.000	32.278	PK
3		*	2418.080	116.965	84.751	N/A	N/A	32.214	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 16:06
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11g at Channel 2412 Ant 0 + 1	

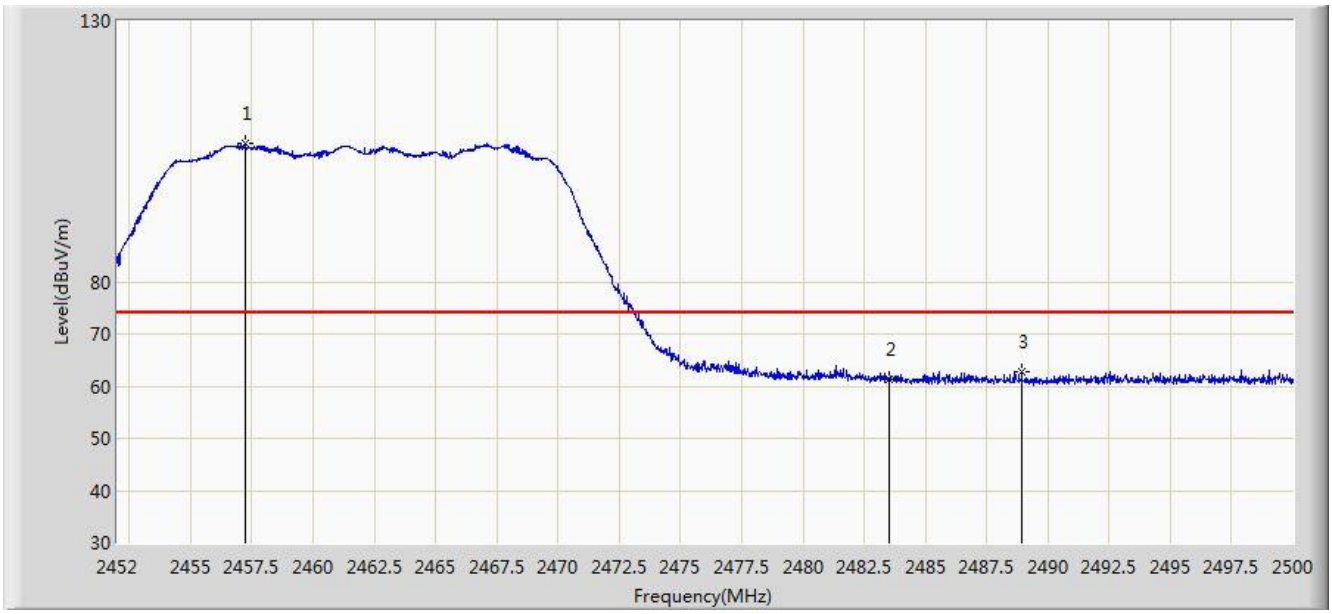


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	53.278	21.000	-0.722	54.000	32.278	AV
2		*	2413.152	105.193	72.958	N/A	N/A	32.235	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 16:37
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11g at Channel 2462 Ant 0 + 1	

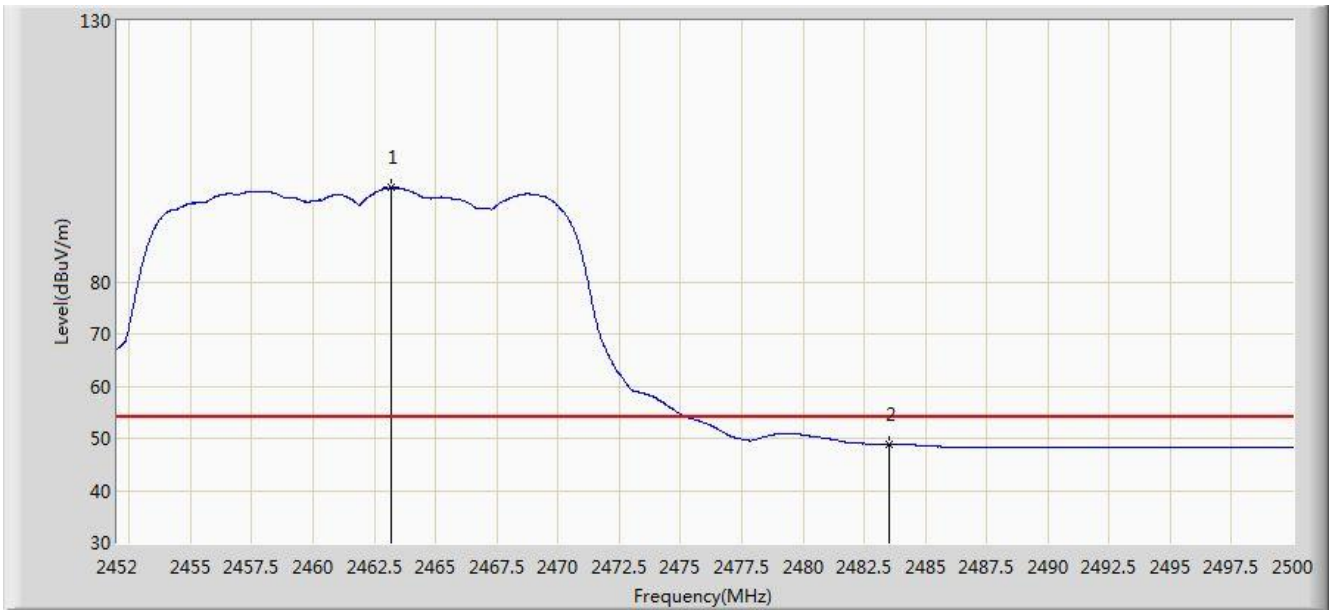


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2457.232	106.656	74.438	N/A	N/A	32.218	PK
2			2483.500	61.435	29.154	-12.565	74.000	32.282	PK
3			2488.936	62.757	30.457	-11.243	74.000	32.300	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 16:40
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11g at Channel 2462 Ant 0 + 1	

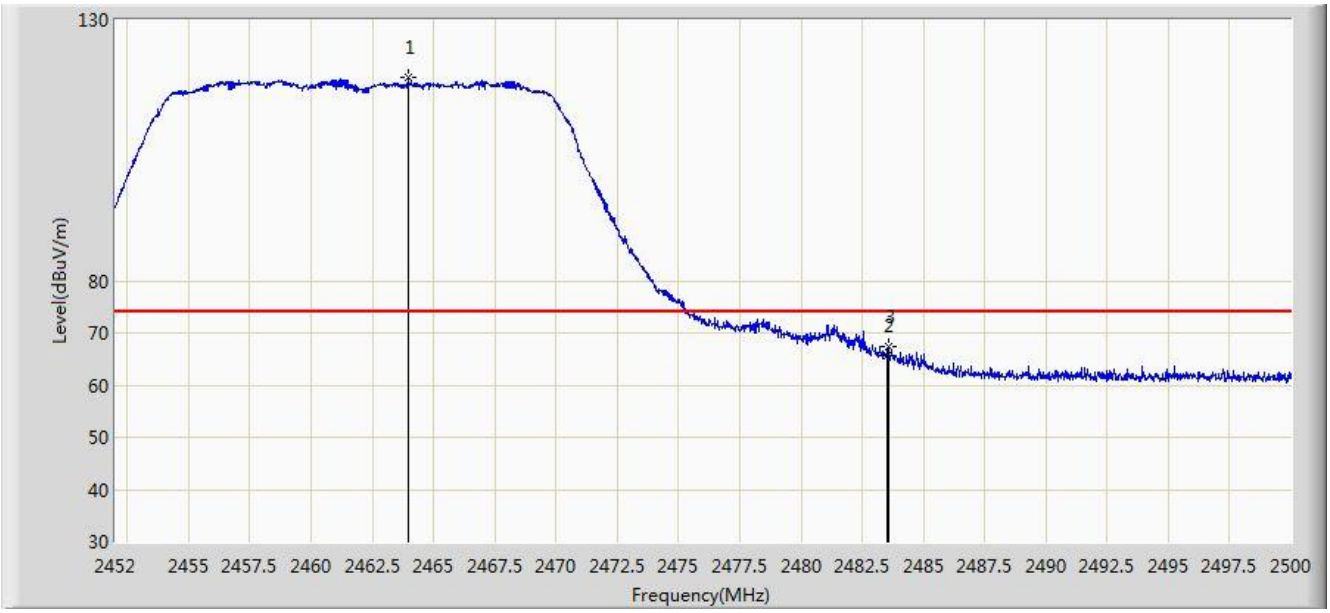


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2463.160	98.005	65.766	N/A	N/A	32.239	AV
2			2483.500	48.840	16.559	-5.160	54.000	32.282	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 16:36
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11g at Channel 2462 Ant 0 + 1	

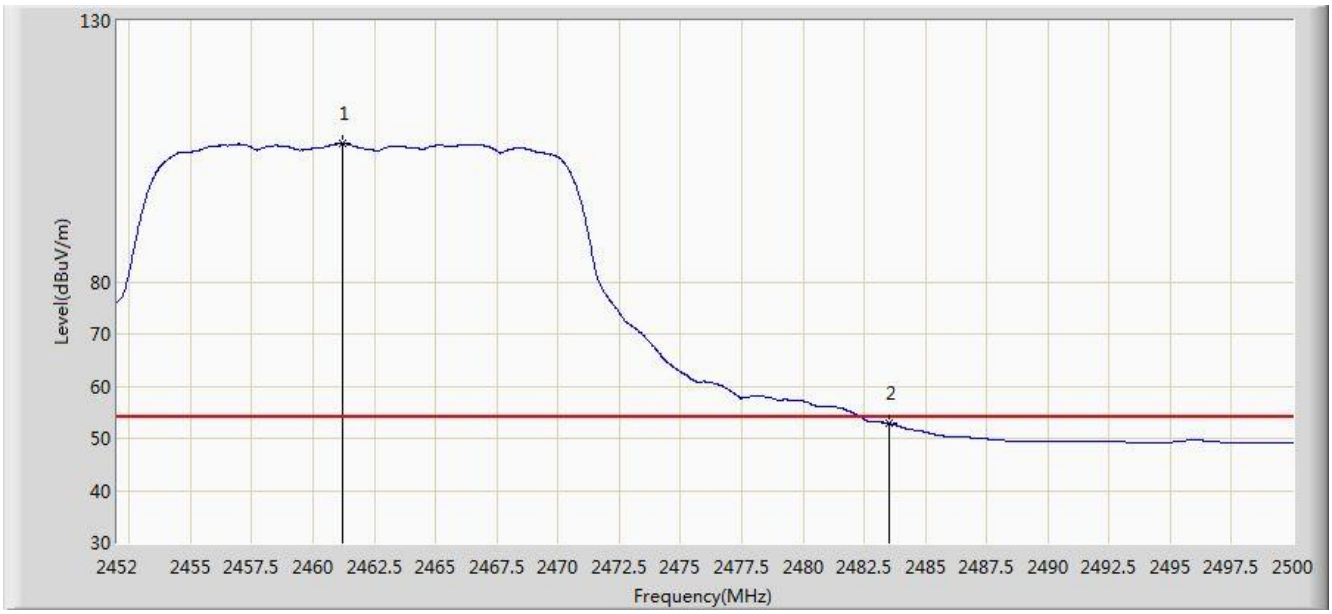


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2463.952	119.084	86.844	N/A	N/A	32.240	PK
2			2483.500	65.540	33.259	-8.460	74.000	32.282	PK
3			2483.560	67.247	34.966	-6.753	74.000	32.282	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 16:33
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11g at Channel 2462 Ant 0 + 1	

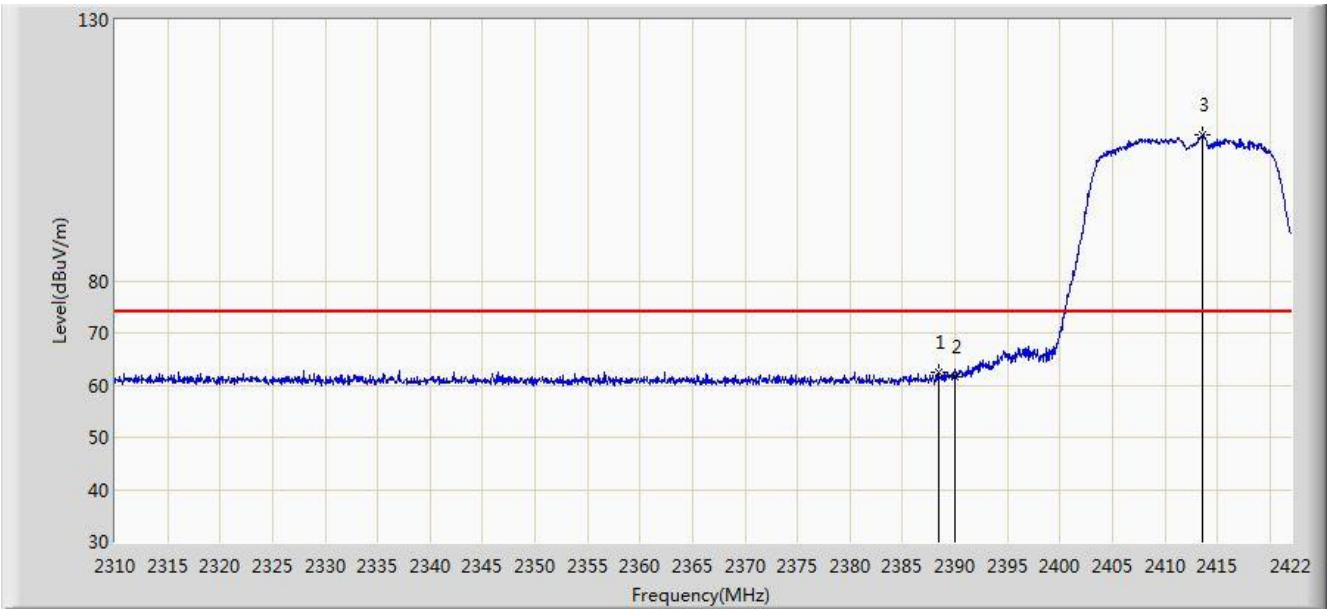


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.216	106.467	74.232	N/A	N/A	32.235	AV
2			2483.500	52.838	20.557	-1.162	54.000	32.282	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 16:52
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11n-HT20 at Channel 2412 Ant 0 + 1	

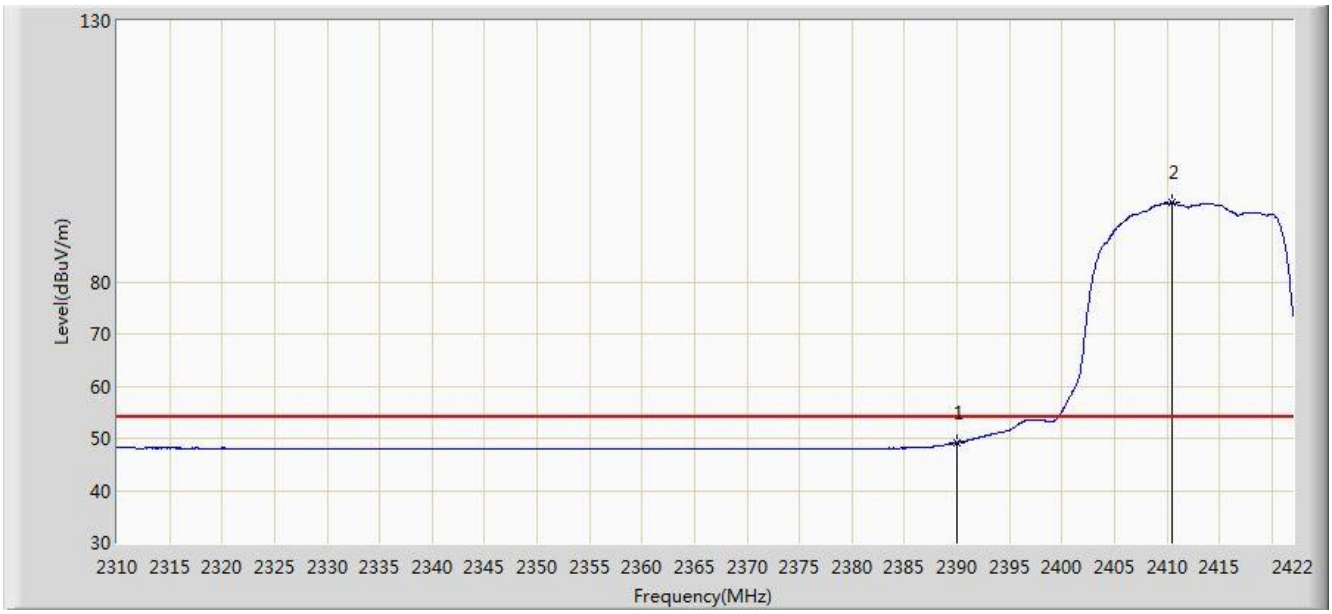


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.400	62.572	30.303	-11.428	74.000	32.269	PK
2			2390.000	61.712	29.434	-12.288	74.000	32.278	PK
3		*	2413.600	107.996	75.763	N/A	N/A	32.233	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 16:54
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11n-HT20 at Channel 2412 Ant 0 + 1	

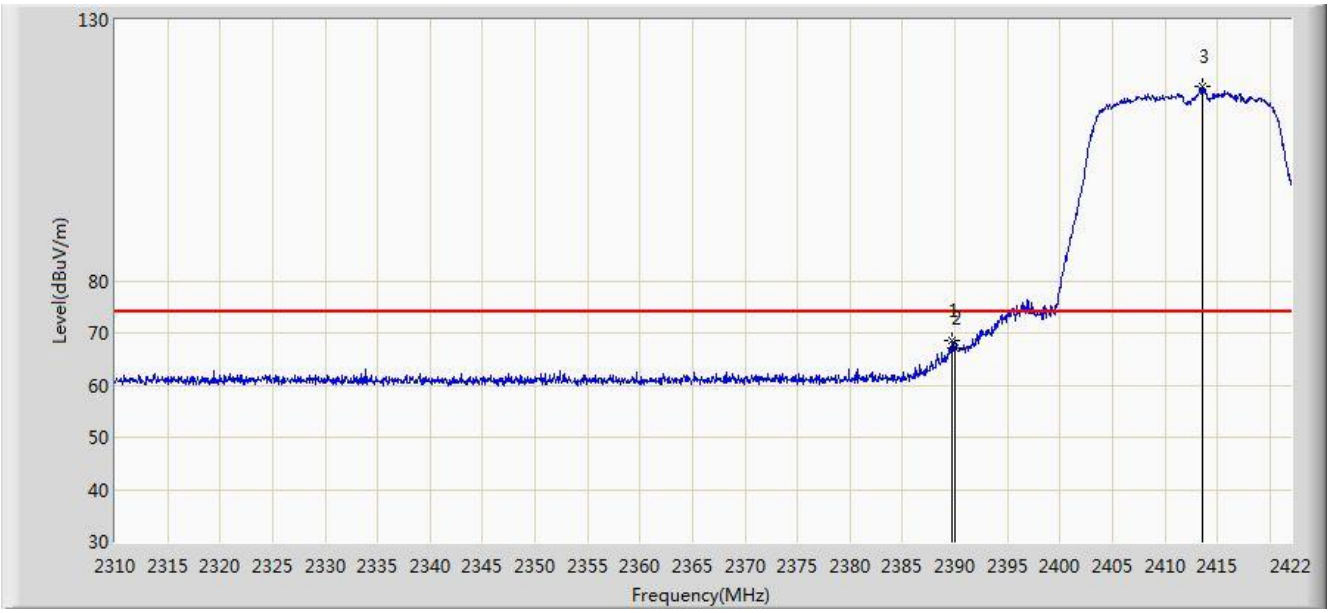


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	49.203	16.925	-4.797	54.000	32.278	AV
2		*	2410.520	95.119	62.874	N/A	N/A	32.245	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 16:51
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11n-HT20 at Channel 2412 Ant 0 + 1	

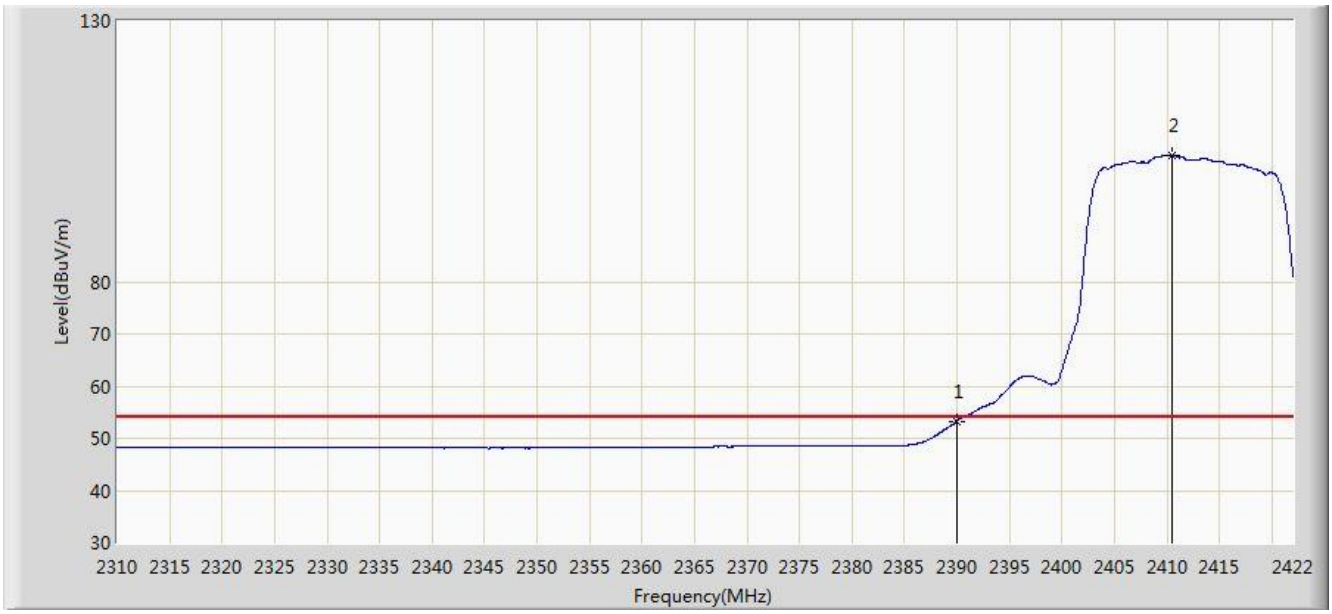


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.744	68.575	36.298	-5.425	74.000	32.276	PK
2			2390.000	67.055	34.777	-6.945	74.000	32.278	PK
3		*	2413.544	117.176	84.943	N/A	N/A	32.233	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 16:49
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11n-HT20 at Channel 2412 Ant 0 + 1 Power=18.5	

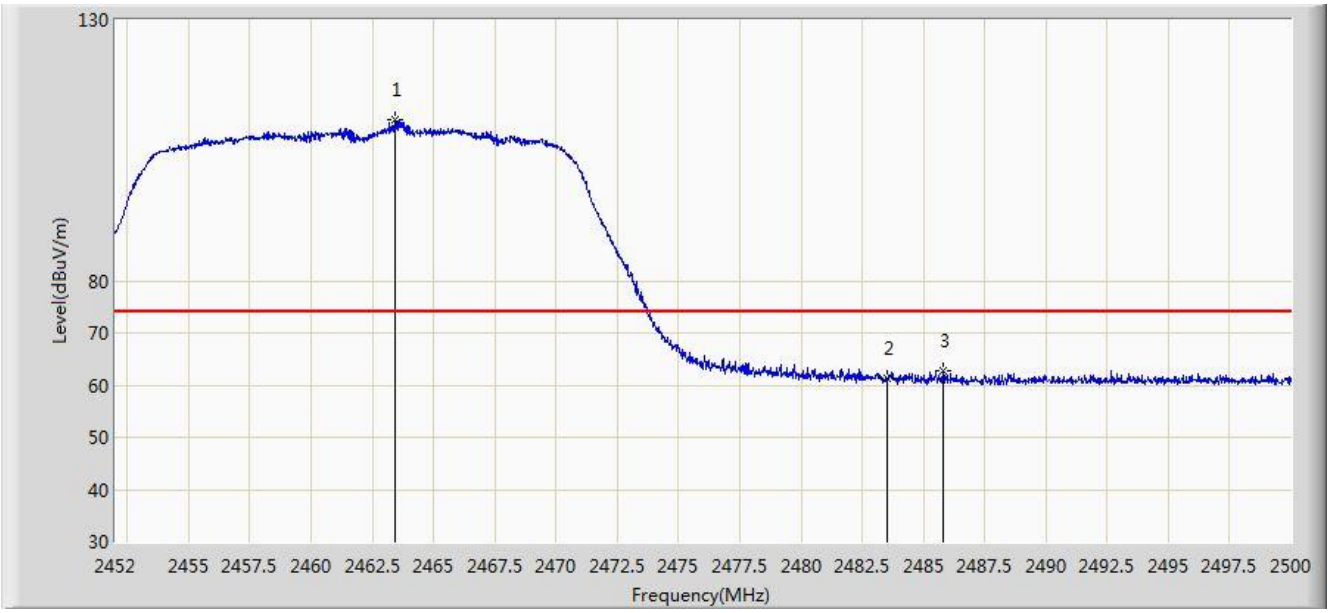


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	53.309	21.031	-0.691	54.000	32.278	AV
2		*	2410.520	104.303	72.058	N/A	N/A	32.245	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 17:22
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11n-HT20 at Channel 2462 Ant 0 + 1	

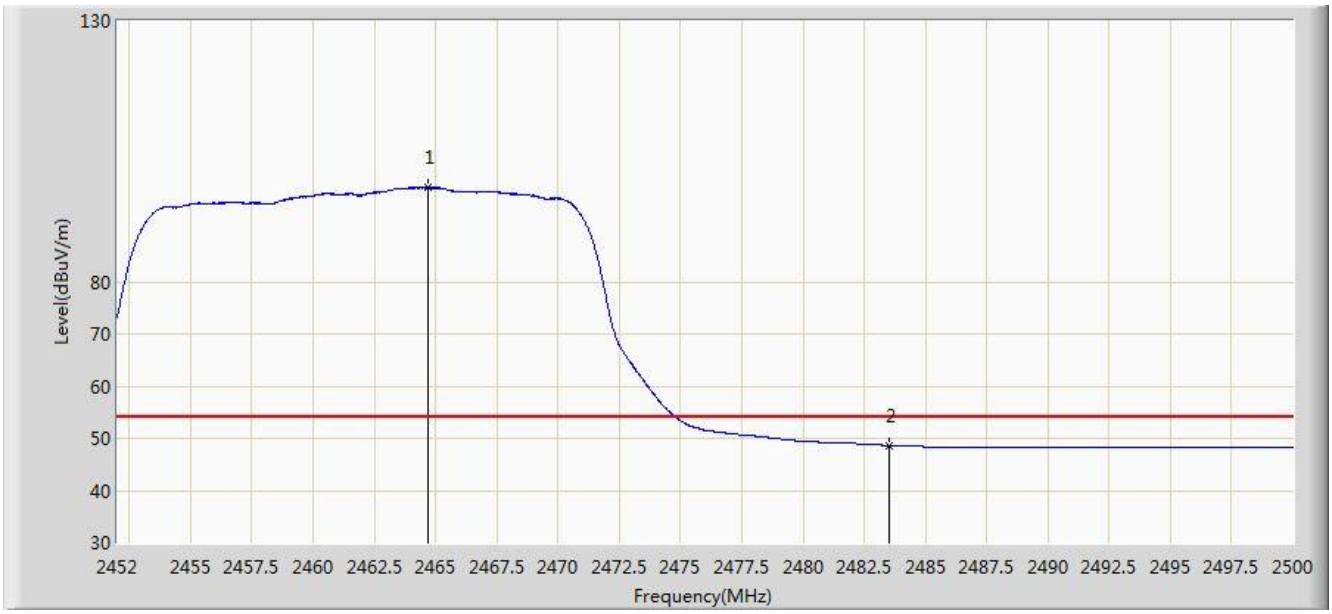


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2463.400	110.742	78.503	N/A	N/A	32.240	PK
2			2483.500	61.262	28.981	-12.738	74.000	32.282	PK
3			2485.792	62.785	30.496	-11.215	74.000	32.289	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 17:24
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11n-HT20 at Channel 2462 Ant 0 + 1	

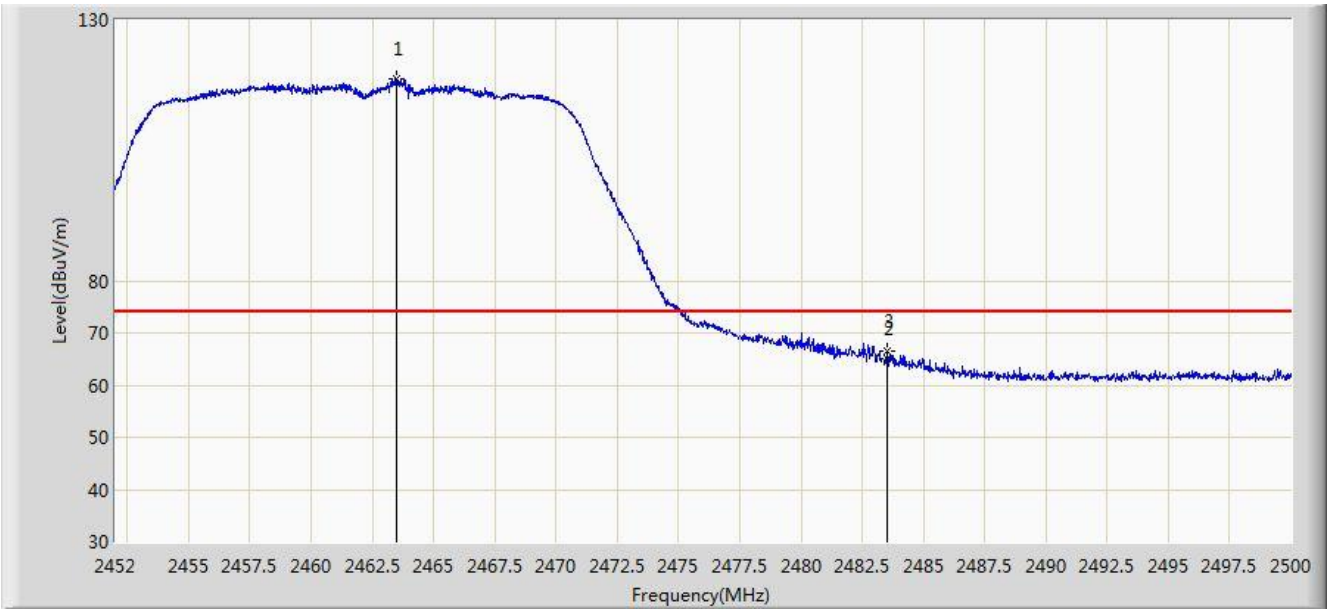


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2464.720	98.056	65.815	N/A	N/A	32.242	AV
2			2483.500	48.680	16.399	-5.320	54.000	32.282	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 17:21
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11n-HT20 at Channel 2462 Ant 0 + 1 Power=19.5	

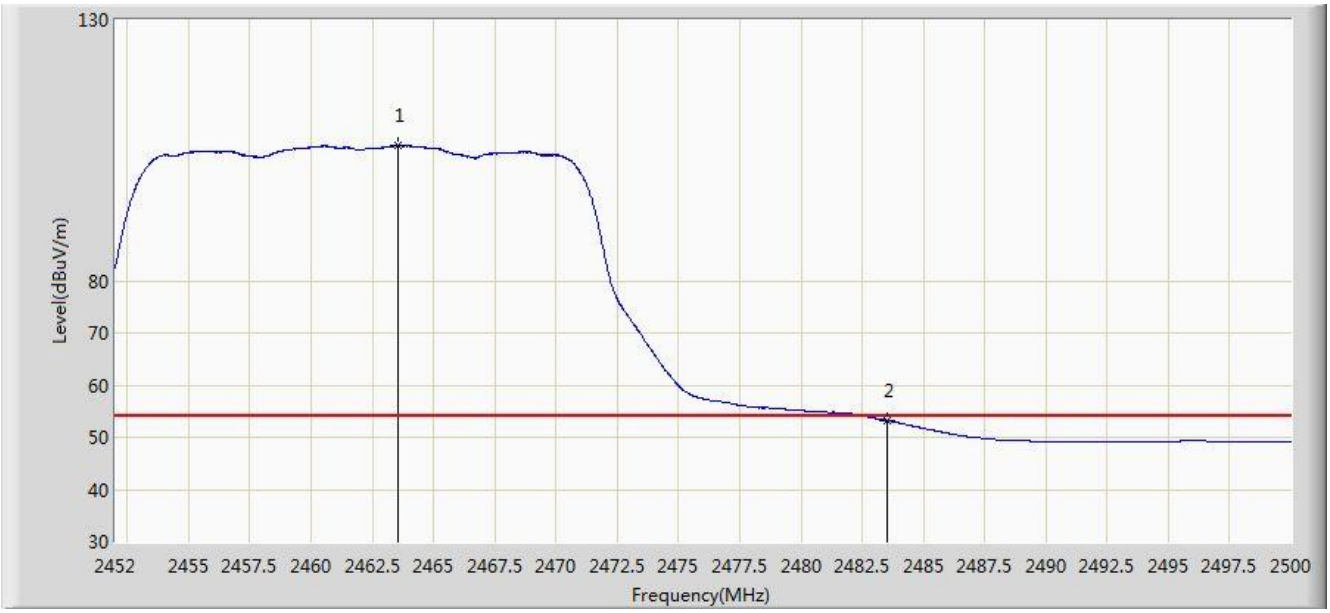


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2463.496	118.777	86.538	N/A	N/A	32.240	PK
2			2483.500	65.100	32.819	-8.900	74.000	32.282	PK
3			2483.536	66.522	34.241	-7.478	74.000	32.282	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 17:19
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11n-HT20 at Channel 2462 Ant 0 + 1	

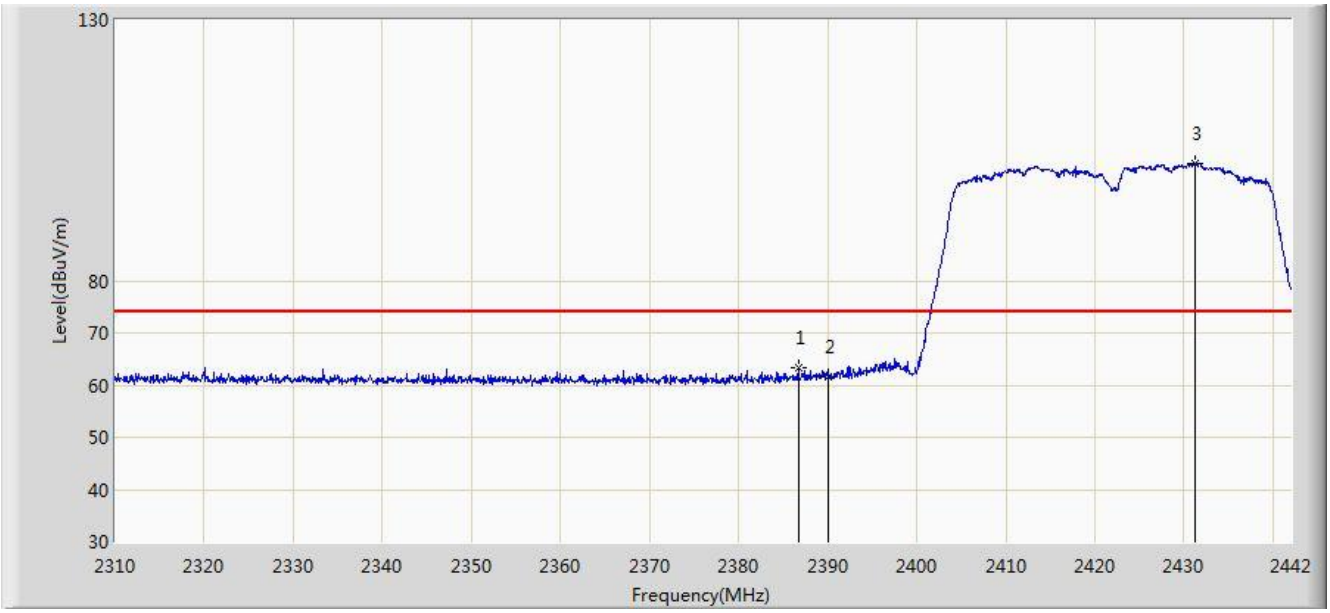


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2463.520	105.937	73.698	N/A	N/A	32.240	AV
2			2483.500	53.240	20.959	-0.760	54.000	32.282	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 17:52
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11n-HT40 at Channel 2422 Ant 0 + 1	

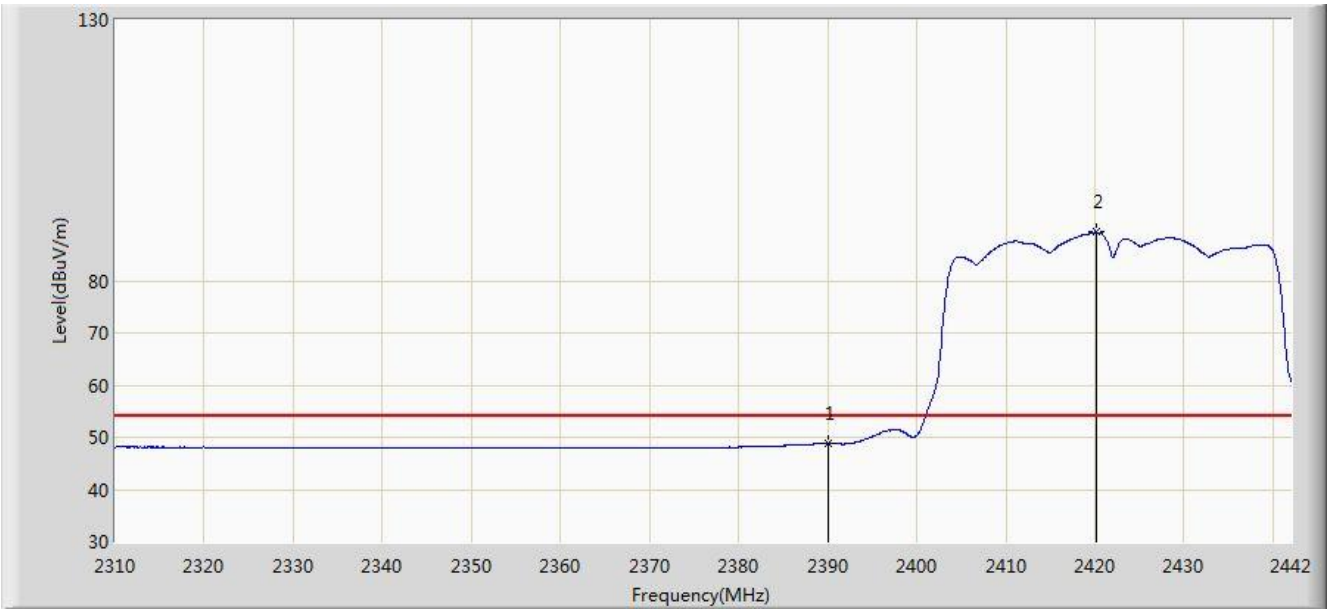


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2386.692	63.259	30.999	-10.741	74.000	32.259	PK
2			2390.000	61.619	29.341	-12.381	74.000	32.278	PK
3		*	2431.242	102.581	70.409	N/A	N/A	32.172	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 17:54
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11n-HT40 at Channel 2422 Ant 0 + 1	

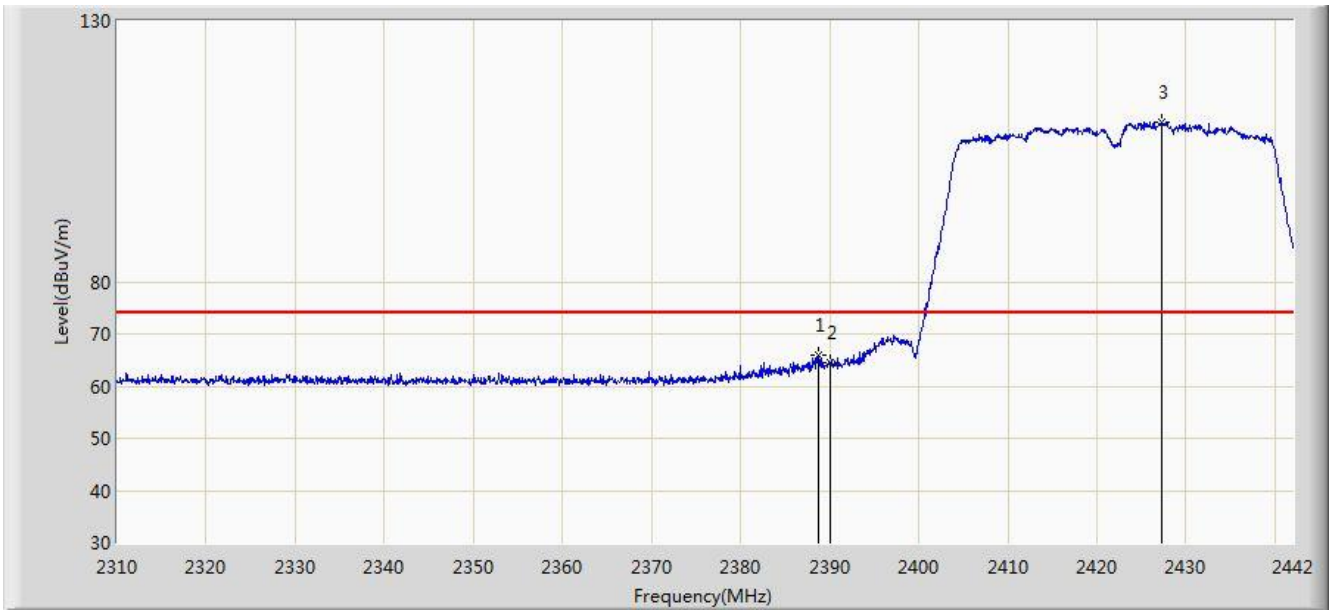


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	48.730	16.452	-5.270	54.000	32.278	AV
2		*	2420.088	89.301	57.095	N/A	N/A	32.206	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 17:49
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11n-HT40 at Channel 2422 Ant 0 + 1	

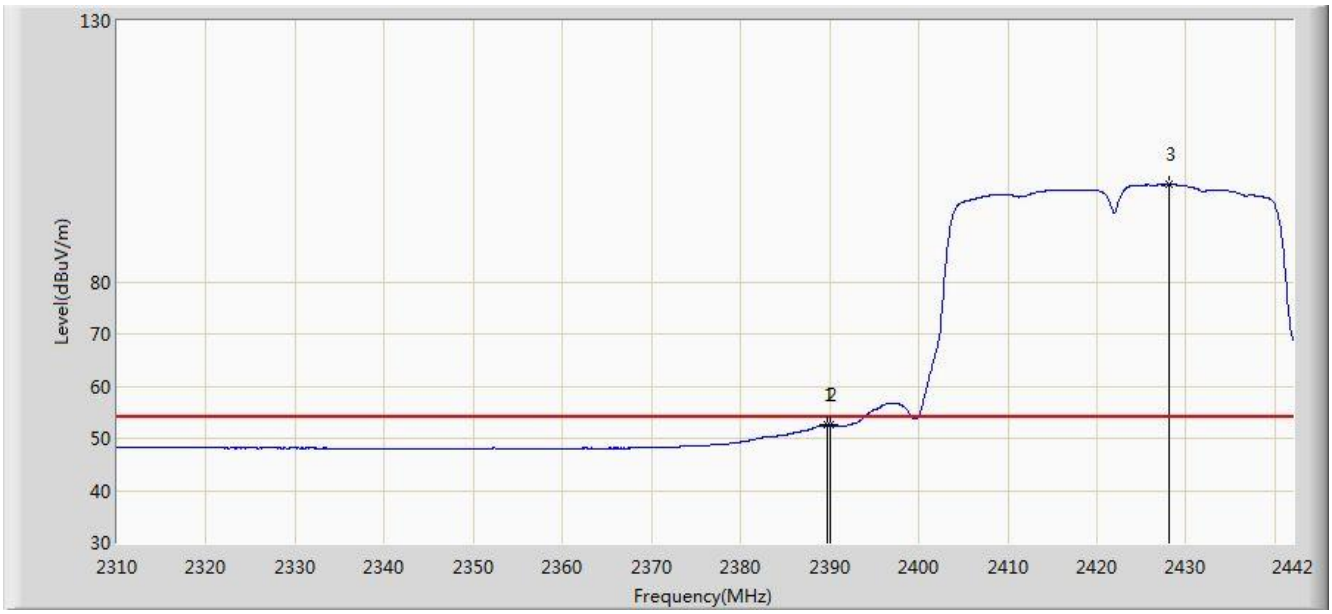


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.672	65.861	33.590	-8.139	74.000	32.270	PK
2			2390.000	64.523	32.245	-9.477	74.000	32.278	PK
3		*	2427.348	110.673	78.497	N/A	N/A	32.175	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 17:44
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11n-HT40 at Channel 2422 Ant 0 + 1	

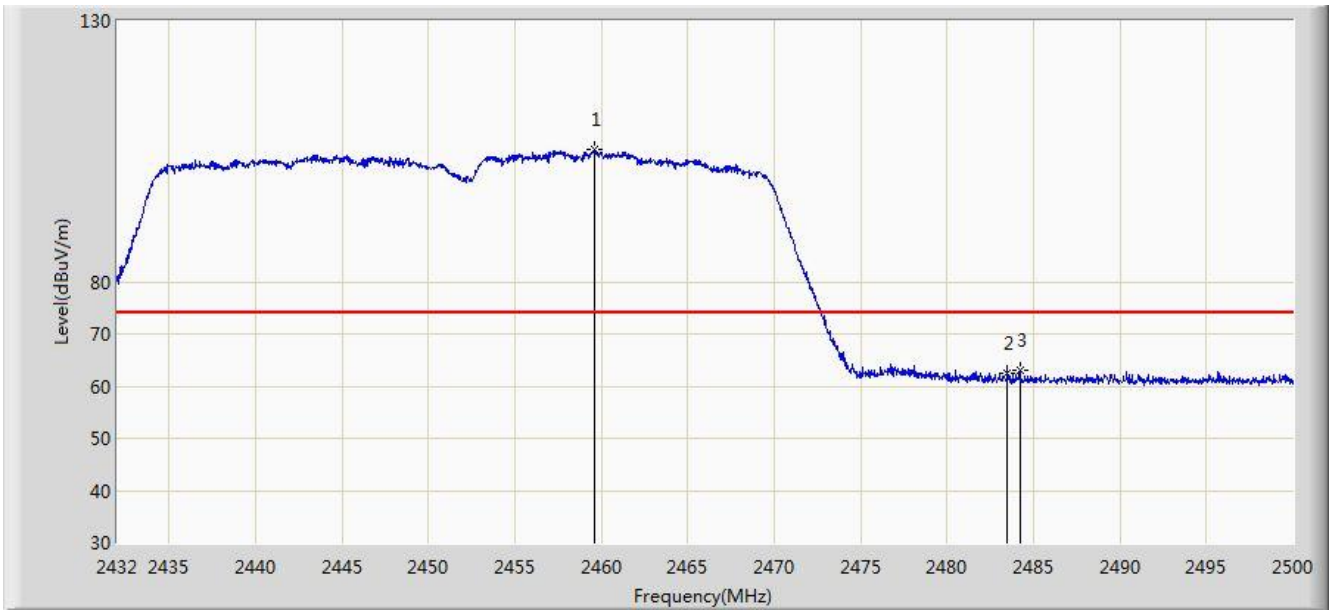


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.794	52.496	20.219	-1.504	54.000	32.277	AV
2			2390.000	52.477	20.199	-1.523	54.000	32.278	AV
3		*	2428.140	98.659	66.486	N/A	N/A	32.174	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 18:12
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11n-HT40 at Channel 2452 Ant 0 + 1	

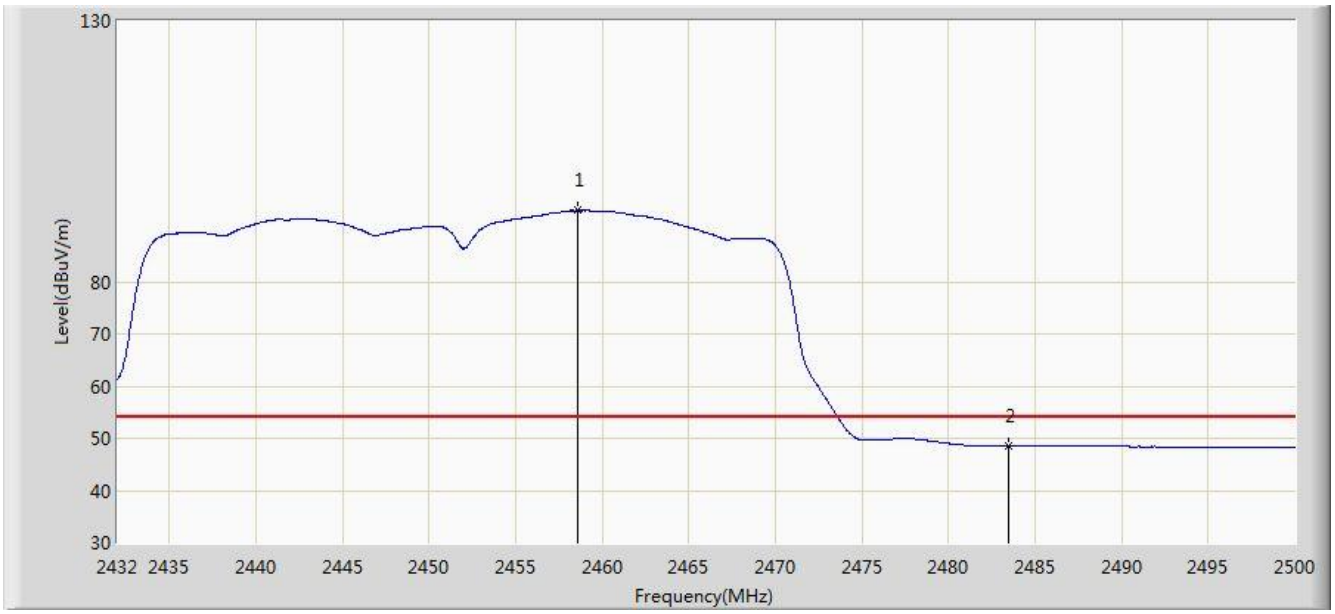


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2459.642	105.237	73.009	N/A	N/A	32.228	PK
2			2483.500	62.426	30.145	-11.574	74.000	32.282	PK
3			2484.224	62.900	30.616	-11.100	74.000	32.284	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 18:17
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11n-HT40 at Channel 2452 Ant 0 + 1	

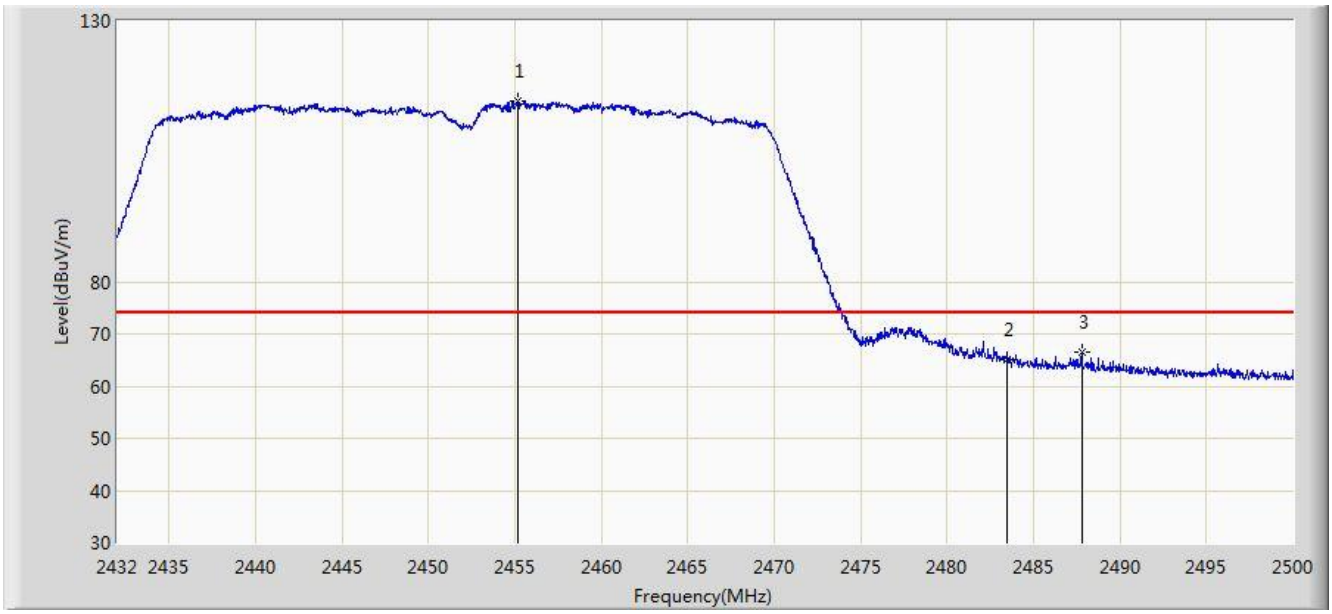


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2458.622	93.657	61.433	N/A	N/A	32.223	AV
2			2483.500	48.585	16.304	-5.415	54.000	32.282	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 18:11
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11n-HT40 at Channel 2452 Ant 0 + 1	

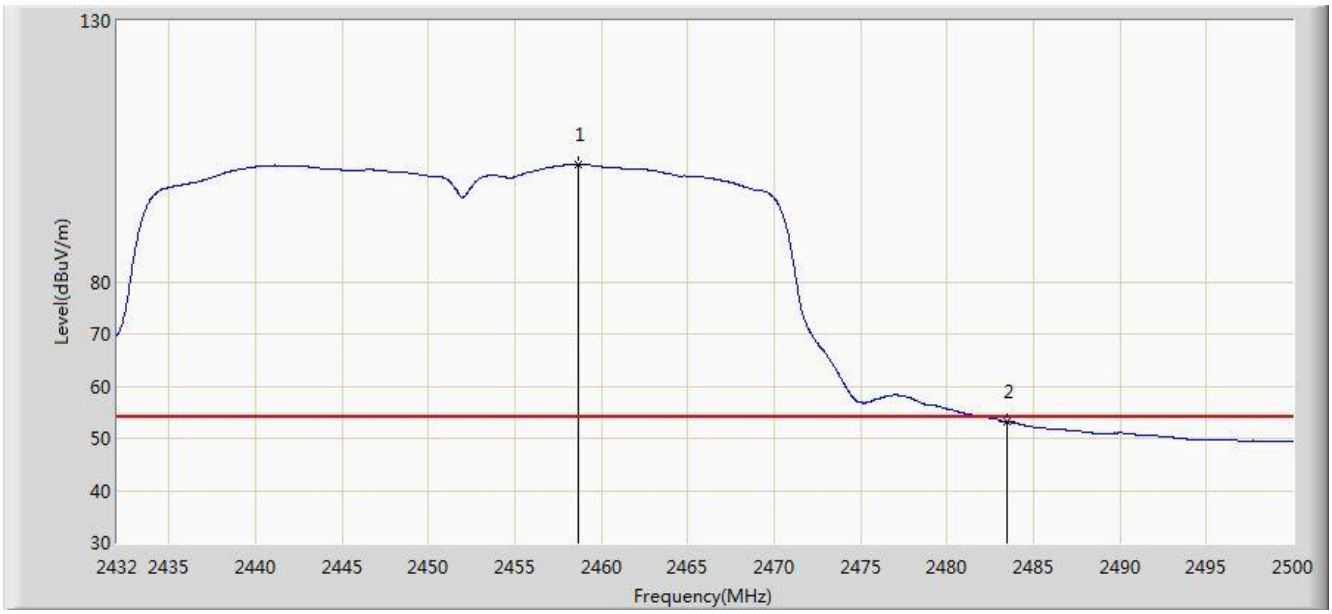


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2455.154	114.630	82.421	N/A	N/A	32.209	PK
2			2483.500	65.177	32.896	-8.823	74.000	32.282	PK
3			2487.794	66.415	34.119	-7.585	74.000	32.296	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/01/15 - 18:09
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: X33 MeshRanger	Power: DC 54V
Test Mode: Transmit by 802.11n-HT40 at Channel 2452 Ant 0 + 1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2458.656	102.514	70.290	N/A	N/A	32.223	AV
2			2483.500	53.216	20.935	-0.784	54.000	32.282	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

7.8. AC Conducted Emissions Measurement

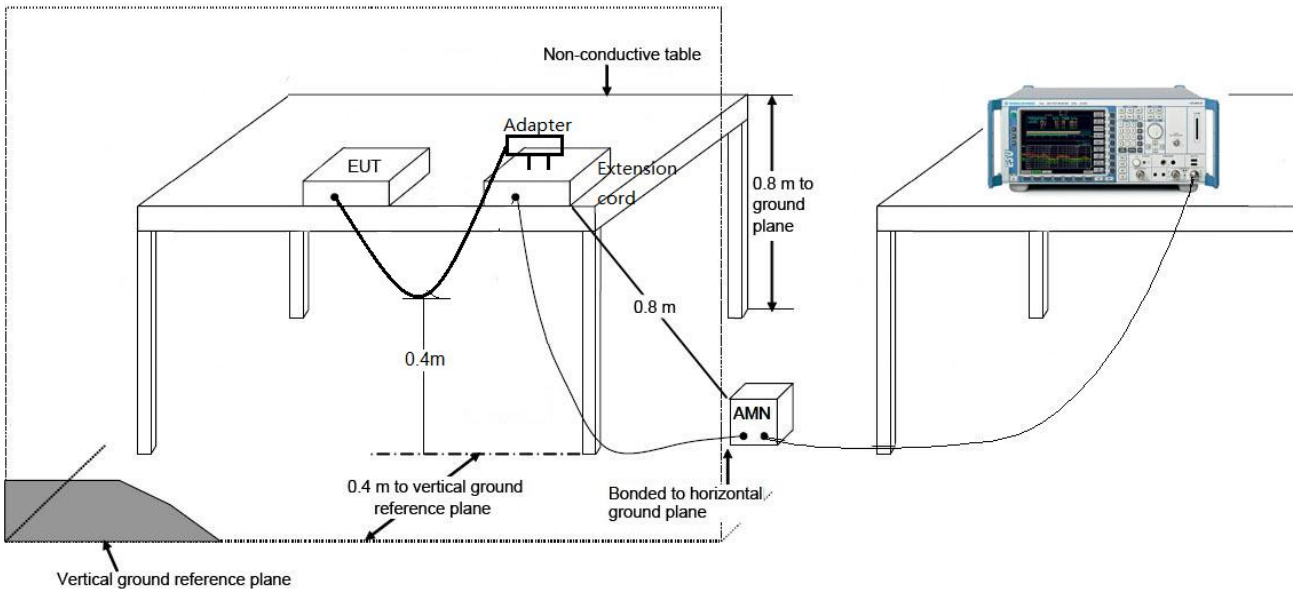
7.8.1. Test Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	66 - 56	56 – 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

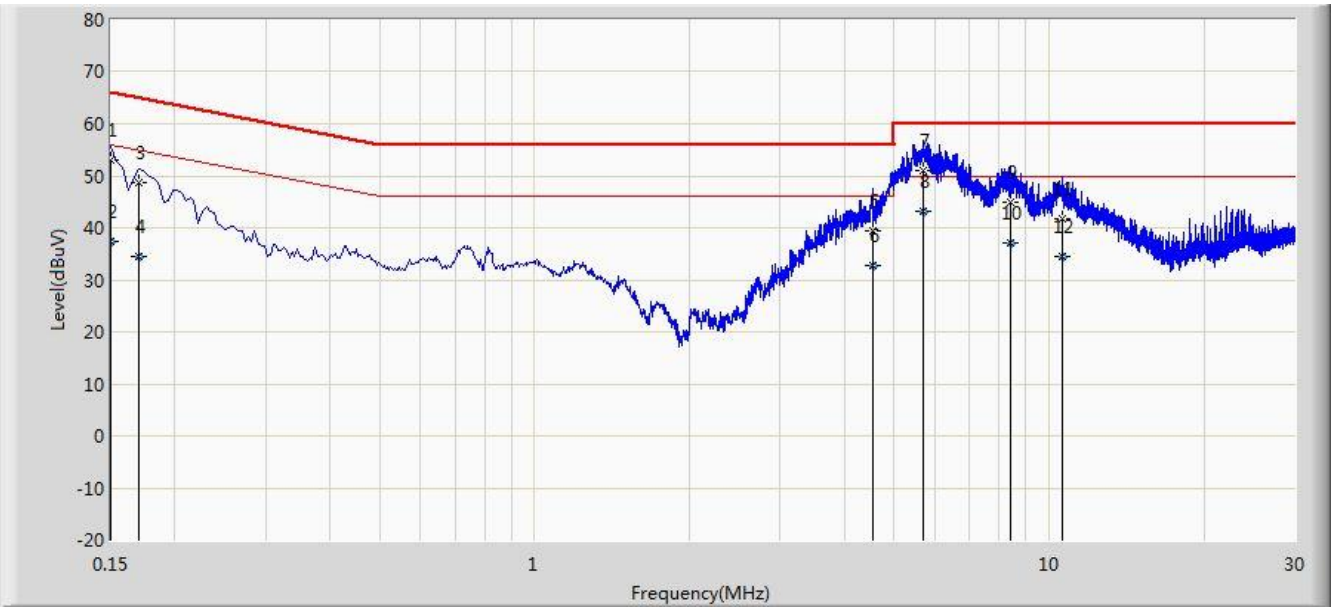
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

7.8.2. Test Setup



7.8.3. Test Result

Site: SR2	Time: 2017/02/21 - 11:44
Limit: FCC_Part15.207_CE_AC Power	Engineer: Bruce Wang
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: X33 MeshRanger	Power: AC 120V/60Hz
Test Mode 1	

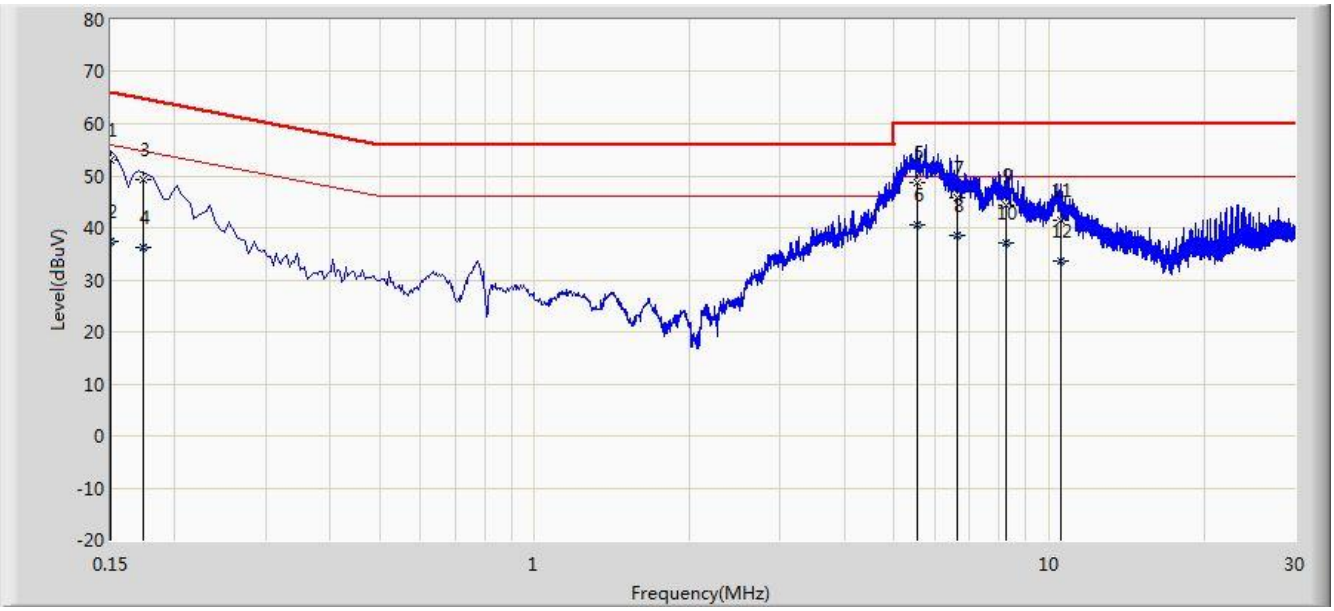


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.150	53.168	42.000	-12.832	66.000	11.168	QP
2			0.150	37.468	26.300	-18.532	56.000	11.168	AV
3			0.170	48.778	38.700	-16.183	64.960	10.078	QP
4			0.170	34.378	24.300	-20.583	54.960	10.078	AV
5			4.534	39.293	29.300	-16.707	56.000	9.993	QP
6			4.534	32.693	22.700	-13.307	46.000	9.993	AV
7			5.686	50.997	40.900	-9.003	60.000	10.097	QP
8		*	5.686	43.097	33.000	-6.903	50.000	10.097	AV
9			8.390	44.870	34.700	-15.130	60.000	10.170	QP
10			8.390	37.170	27.000	-12.830	50.000	10.170	AV
11			10.630	41.626	31.500	-18.374	60.000	10.126	QP
12			10.630	34.526	24.400	-15.474	50.000	10.126	AV

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)

Site: SR2	Time: 2017/02/21 - 12:01
Limit: FCC_Part15.207_CE_AC Power	Engineer: Bruce Wang
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: X33 MeshRanger	Power: AC 120V/60Hz
Test Mode 1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.150	53.042	41.900	-12.958	66.000	11.142	QP
2			0.150	37.342	26.200	-18.658	56.000	11.142	AV
3			0.174	49.157	39.100	-15.611	64.767	10.057	QP
4			0.174	36.257	26.200	-18.511	54.767	10.057	AV
5			5.526	48.783	38.700	-11.217	60.000	10.083	QP
6		*	5.526	40.683	30.600	-9.317	50.000	10.083	AV
7			6.642	45.663	35.500	-14.337	60.000	10.163	QP
8			6.642	38.563	28.400	-11.437	50.000	10.163	AV
9			8.246	44.279	34.100	-15.721	60.000	10.179	QP
10			8.246	36.979	26.800	-13.021	50.000	10.179	AV
11			10.518	41.546	31.400	-18.454	60.000	10.146	QP
12			10.518	33.546	23.400	-16.454	50.000	10.146	AV

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)

8. CONCLUSION

The data collected relate only the item(s) tested and show that the **X33/X32/X32e MeshRanger FCC ID: 2AD6M-X30** is in compliance with Part 15C of the FCC Rules.

The End