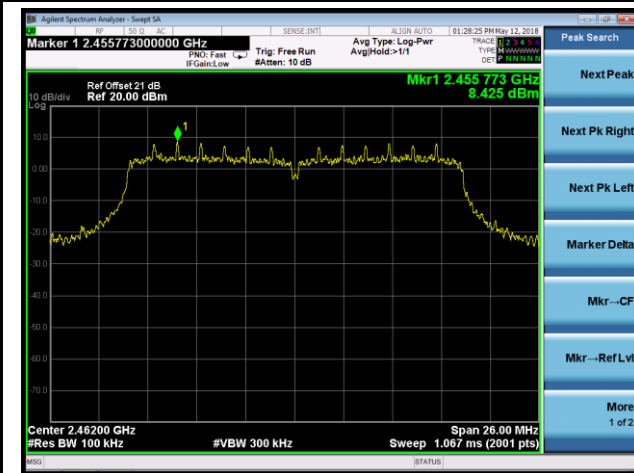


Channel 11 (2462MHz)

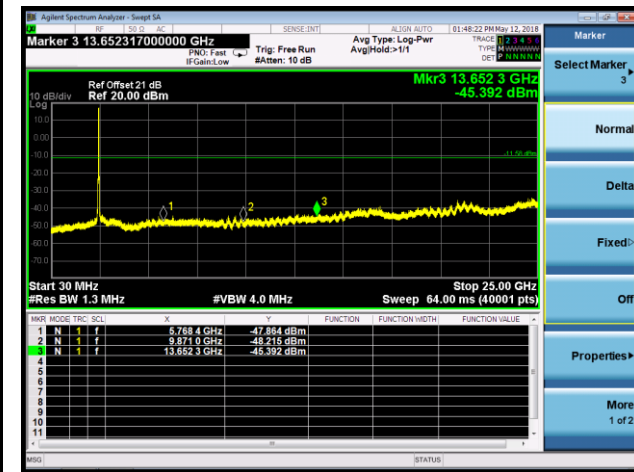
100kHz PSD Reference Level



High Band Edge



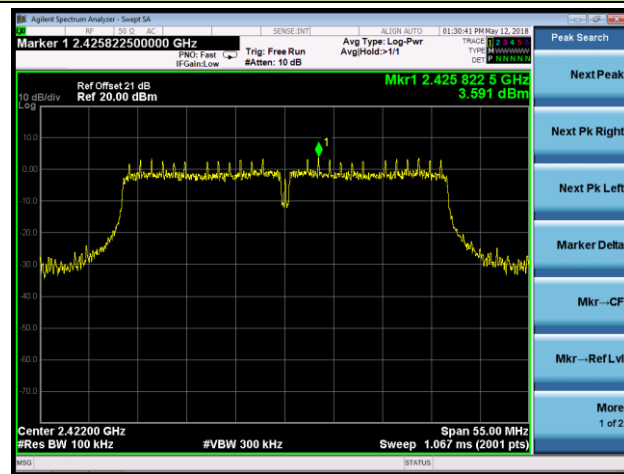
Spurious Emission



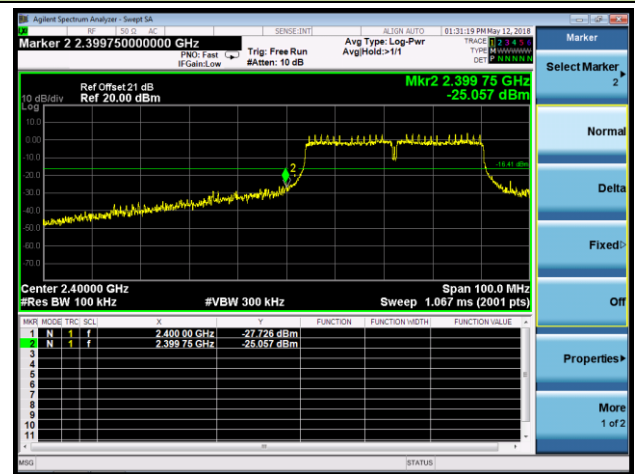
802.11n-HT40 Out-of-Band Emissions

Channel 01 (2422MHz)

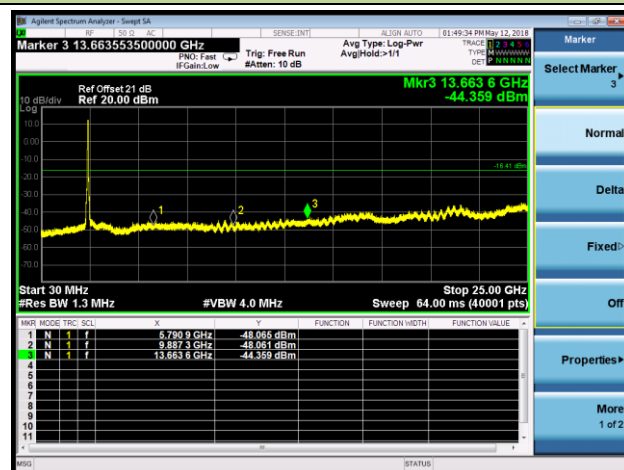
100kHz PSD Reference Level



Low Band Edge

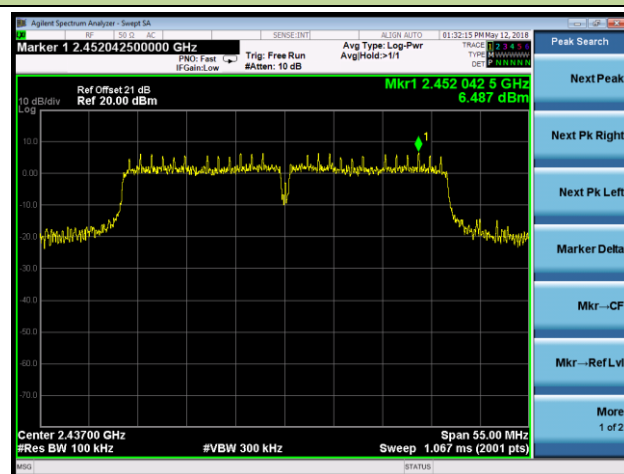


Spurious Emission

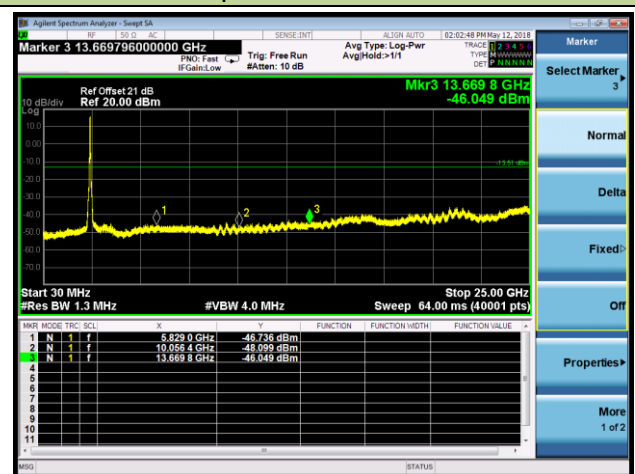


Channel 06 (2437MHz)

100kHz PSD Reference Level

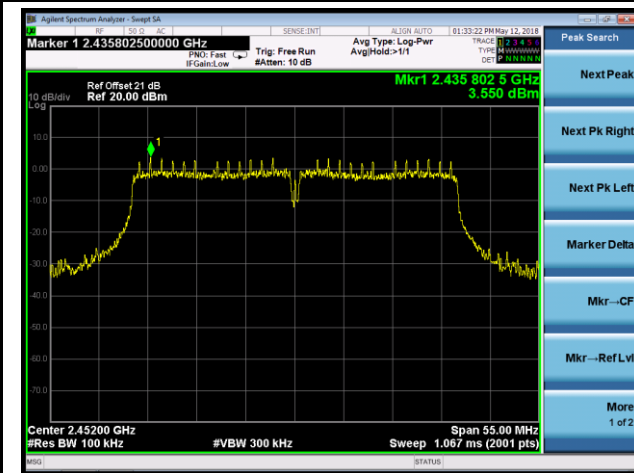


Spurious Emission



Channel 11 (2452MHz)

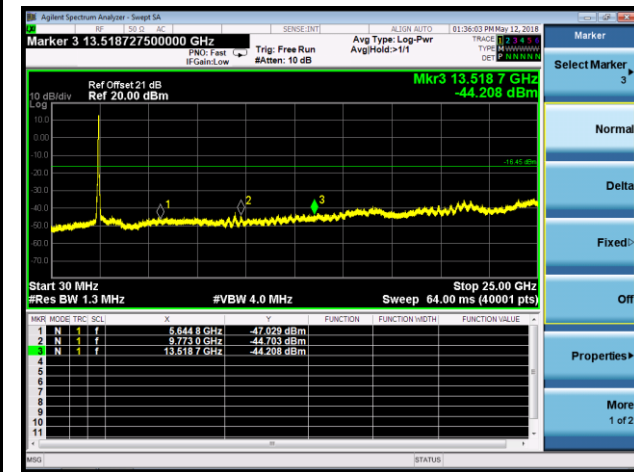
100kHz PSD Reference Level



High Band Edge



Spurious Emission



7.6. Radiated Spurious Emission Measurement

7.6.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

7.6.2. Test Procedure Used

ANSI C63.10 Section 6.3 (General Requirements)

ANSI C63.10 Section 6.4 (Standard test method below 30MHz)

ANSI C63.10 Section 6.5 (Standard test method above 30MHz to 1GHz)

ANSI C63.10 Section 6.6 (Standard test method above 1GHz)

7.6.3. Test Setting

Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = as specified in Table 1
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

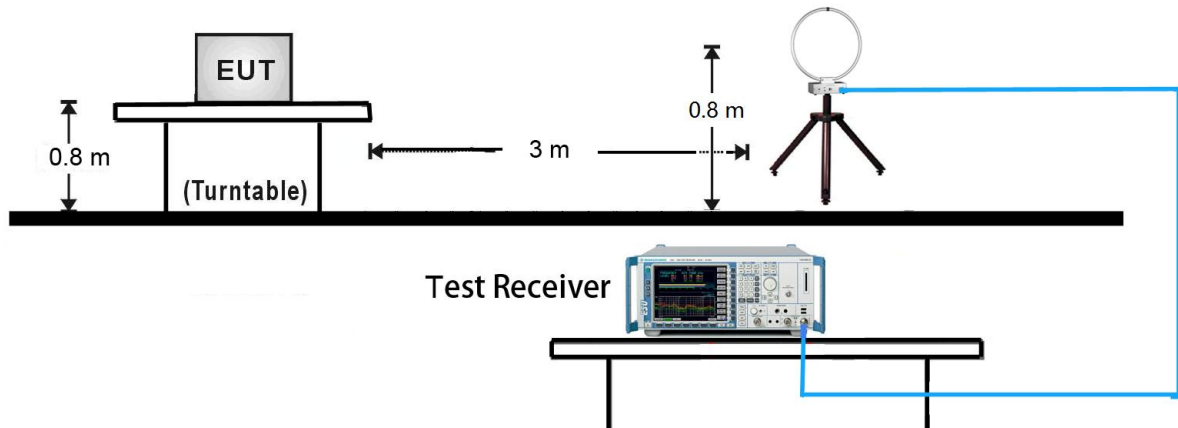
Table 1 - RBW as a function of frequency	
Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Average Field Strength Measurements

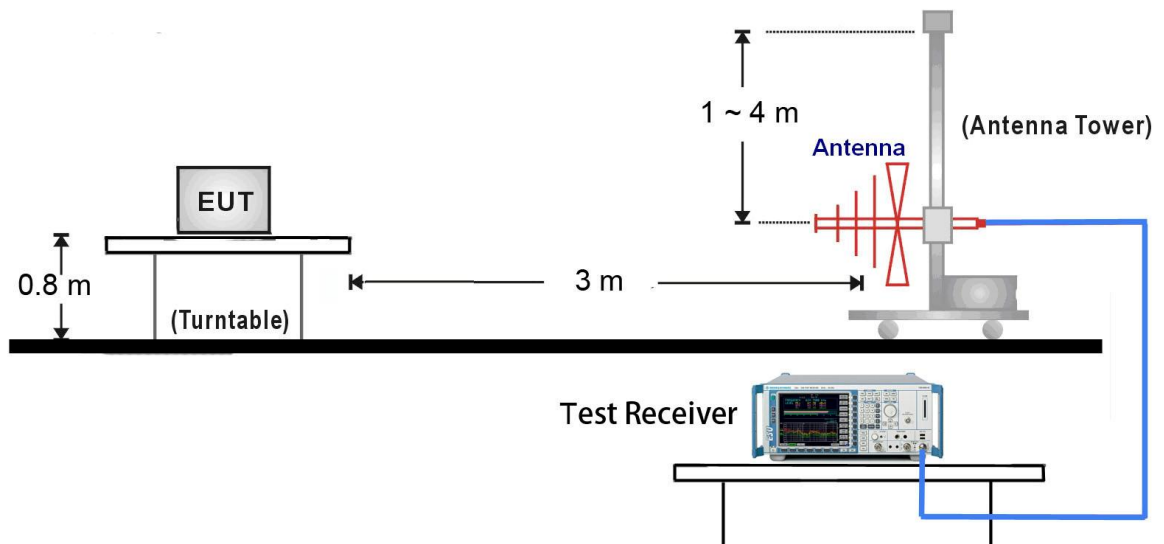
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW $\geq 1/T$
4. De As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode
5. Detector = Peak
6. Sweep time = auto
7. Trace mode = max hold
8. Allow max hold to run for at least 50 times (1/duty cycle) traces

7.6.4. Test Setup

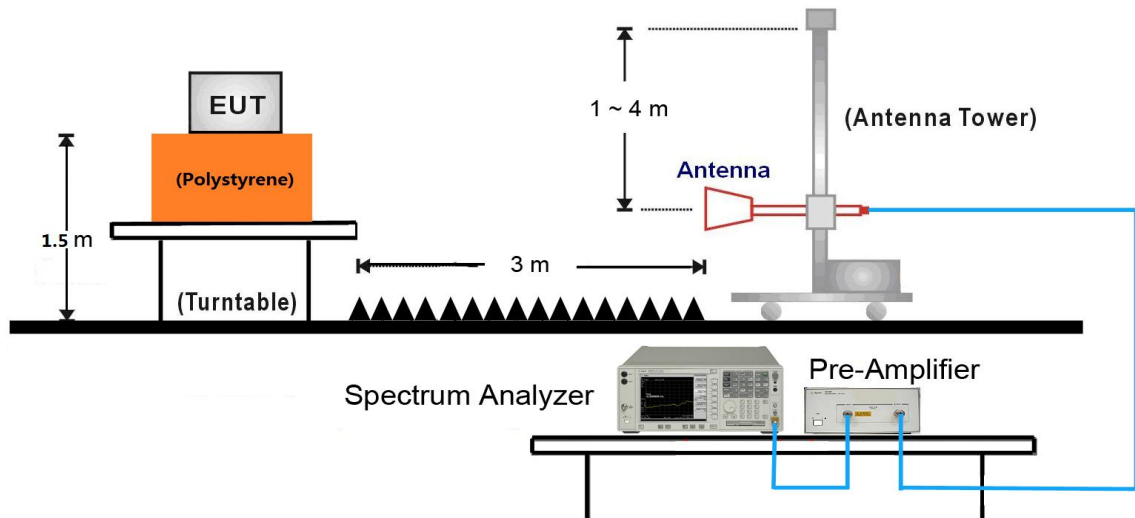
9kHz ~ 30MHz Test Setup:



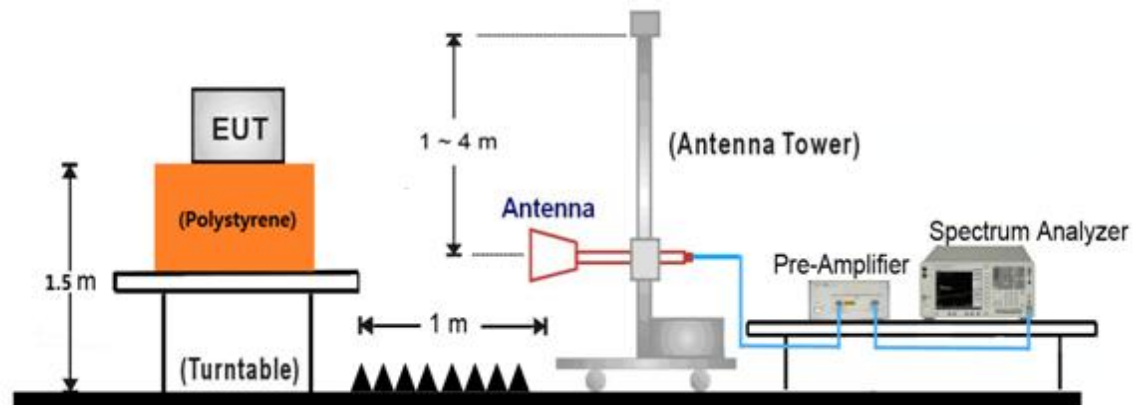
30MHz ~ 1GHz Test Setup:



1GHz ~ 18GHz Test Setup:



18GHz ~ 25GHz Test Setup:



7.6.5.Test Result

Product	network PTZ Camera	Temperature	26°C
Test Engineer	Cat Hu	Relative Humidity	56%
Test Site	AC1	Test Date	2018/05/11
Test Mode:	802.11b	Test Channel:	01
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB 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
	4009.0	39.9	3.4	43.3	74.0	-30.7	Peak	Horizontal
	4825.0	43.1	5.9	49.0	74.0	-25.0	Peak	Horizontal
*	5709.0	36.7	7.2	43.9	78.2	-34.3	Peak	Horizontal
*	7154.0	36.3	12.4	48.7	78.2	-29.5	Peak	Horizontal
	4128.0	39.2	3.8	43.0	74.0	-31.0	Peak	Vertical
	4824.0	47.0	5.9	52.9	54.0	-1.1	Average	Vertical
	4825.0	49.2	5.9	55.1	74.0	-18.9	Peak	Vertical
*	5972.5	36.9	7.9	44.8	78.2	-33.4	Peak	Vertical
*	6958.5	36.9	11.1	48.0	78.2	-30.2	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (98.2dBμV/m) or 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)

Product	network PTZ Camera	Temperature	26°C
Test Engineer	Cat Hu	Relative Humidity	56%
Test Site	AC1	Test Date	2018/05/11
Test Mode:	802.11b	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB 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
	4026.0	38.6	3.4	42.0	74.0	-32.0	Peak	Horizontal
	4876.0	42.6	6.0	48.6	74.0	-25.4	Peak	Horizontal
*	5989.5	36.5	7.9	44.4	77.5	-35.5	Peak	Horizontal
*	6992.5	36.6	11.2	47.8	77.5	-32.1	Peak	Horizontal
	3966.5	39.4	3.1	42.5	74.0	-31.5	Peak	Vertical
	4874.0	46.9	6.0	52.9	54.0	-1.1	Average	Vertical
	4876.0	48.5	6.0	54.5	74.0	-19.5	Peak	Vertical
*	5853.5	36.3	7.8	44.1	77.5	-35.8	Peak	Vertical
*	6652.5	36.7	10.1	46.8	77.5	-33.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (97.5dBμV/m) or 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)

Product	network PTZ Camera	Temperature	26°C
Test Engineer	Cat Hu	Relative Humidity	56%
Test Site	AC1	Test Date	2018/05/11
Test Mode:	802.11b	Test Channel:	11
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB 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
	4009.0	38.6	3.4	42.0	74.0	-32.0	Peak	Horizontal
	4927.0	42.1	6.1	48.2	74.0	-25.8	Peak	Horizontal
*	6321.0	36.5	8.9	45.4	77.0	-31.6	Peak	Horizontal
*	7128.5	36.1	12.3	48.4	77.0	-28.6	Peak	Horizontal
	4051.5	38.3	3.5	41.8	74.0	-32.2	Peak	Vertical
	4924.0	46.5	6.1	52.6	54.0	-1.4	Average	Vertical
	4927.0	47.7	6.1	53.8	74.0	-20.2	Peak	Vertical
*	5955.5	35.8	7.9	43.7	77.0	-33.3	Peak	Vertical
*	7171.0	36.2	12.5	48.7	77.0	-28.3	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (97.0dBμV/m) or 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)

Product	network PTZ Camera	Temperature	26°C
Test Engineer	Cat Hu	Relative Humidity	56%
Test Site	AC1	Test Date	2018/05/11
Test Mode:	802.11g	Test Channel:	01
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB 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
	4204.5	37.5	4.0	41.5	74.0	-32.5	Peak	Horizontal
	4927.0	37.7	6.1	43.8	74.0	-30.2	Peak	Horizontal
*	5709.0	36.8	7.2	44.0	78.6	-34.6	Peak	Horizontal
*	7137.0	36.5	12.4	48.9	78.6	-29.7	Peak	Horizontal
	4255.5	38.2	4.2	42.4	74.0	-31.6	Peak	Vertical
	4927.0	42.2	6.1	48.3	74.0	-25.7	Peak	Vertical
*	5768.5	36.6	7.4	44.0	78.6	-34.6	Peak	Vertical
*	6567.5	37.2	10.2	47.4	78.6	-31.2	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (98.6dBμV/m) or 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)

Product	network PTZ Camera	Temperature	26°C
Test Engineer	Cat Hu	Relative Humidity	56%
Test Site	AC1	Test Date	2018/05/11
Test Mode:	802.11g	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB 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
	4043.0	38.4	3.5	41.9	74.0	-32.1	Peak	Horizontal
	4876.0	39.5	6.0	45.5	74.0	-28.5	Peak	Horizontal
*	5760.0	36.2	7.4	43.6	79.9	-36.3	Peak	Horizontal
*	6873.5	36.6	10.6	47.2	79.9	-32.7	Peak	Horizontal
	4043.0	37.9	3.5	41.4	74.0	-32.6	Peak	Vertical
	4876.0	42.8	6.0	48.8	74.0	-25.2	Peak	Vertical
*	5751.5	36.3	7.4	43.7	79.9	-36.2	Peak	Vertical
*	6627.0	35.7	10.1	45.8	79.9	-34.1	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (99.9dBμV/m) or 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)

Product	network PTZ Camera	Temperature	26°C
Test Engineer	Cat Hu	Relative Humidity	56%
Test Site	AC1	Test Date	2018/05/11
Test Mode:	802.11g	Test Channel:	11
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB 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
	4221.5	37.8	4.1	41.9	74.0	-32.1	Peak	Horizontal
	4927.0	37.2	6.1	43.3	74.0	-30.7	Peak	Horizontal
*	5836.5	36.2	7.7	43.9	76.4	-32.5	Peak	Horizontal
*	6771.5	36.7	10.1	46.8	76.4	-29.6	Peak	Horizontal
	4204.5	37.9	4.0	41.9	74.0	-32.1	Peak	Vertical
	4927.0	42.7	6.1	48.8	74.0	-25.2	Peak	Vertical
*	5913.0	36.8	7.8	44.6	76.4	-31.8	Peak	Vertical
*	7009.5	36.4	11.3	47.7	76.4	-28.7	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (96.4dBμV/m) or 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)

Product	network PTZ Camera	Temperature	26°C
Test Engineer	Cat Hu	Relative Humidity	56%
Test Site	AC1	Test Date	2018/05/11
Test Mode:	802.11n-HT20	Test Channel:	01
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB 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
	4000.5	38.3	3.3	41.6	74.0	-32.4	Peak	Horizontal
	4833.5	39.0	5.9	44.9	74.0	-29.1	Peak	Horizontal
*	5989.5	36.7	7.9	44.6	77.7	-33.1	Peak	Horizontal
*	7086.0	36.7	11.9	48.6	77.7	-29.1	Peak	Horizontal
	3847.5	38.7	2.8	41.5	74.0	-32.5	Peak	Vertical
	4825.0	44.5	5.9	50.4	74.0	-23.6	Peak	Vertical
*	5947.0	35.8	7.8	43.6	77.7	-34.1	Peak	Vertical
*	7128.5	36.0	12.3	48.3	77.7	-29.4	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (97.7dBμV/m) or 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)

Product	network PTZ Camera	Temperature	26°C
Test Engineer	Cat Hu	Relative Humidity	56%
Test Site	AC1	Test Date	2018/05/11
Test Mode:	802.11n-HT20	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB 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
	4034.5	38.1	3.4	41.5	74.0	-32.5	Peak	Horizontal
	4876.0	38.3	6.0	44.3	74.0	-29.7	Peak	Horizontal
*	5692.0	36.6	7.1	43.7	79.1	-35.4	Peak	Horizontal
*	6865.0	36.6	10.6	47.2	79.1	-31.9	Peak	Horizontal
	4094.0	37.5	3.6	41.1	74.0	-32.9	Peak	Vertical
	4859.0	44.2	5.9	50.1	74.0	-23.9	Peak	Vertical
*	5836.5	36.1	7.7	43.8	79.1	-35.3	Peak	Vertical
*	6601.5	35.9	10.2	46.1	79.1	-33.0	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (99.1dBμV/m) or 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)

Product	network PTZ Camera	Temperature	26°C
Test Engineer	Cat Hu	Relative Humidity	56%
Test Site	AC1	Test Date	2018/05/11
Test Mode:	802.11n-HT20	Test Channel:	11
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB 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
	4060.0	39.0	3.5	42.5	74.0	-31.5	Peak	Horizontal
	4935.5	37.2	6.1	43.3	74.0	-30.7	Peak	Horizontal
*	5785.5	36.7	7.5	44.2	76.2	-32.0	Peak	Horizontal
*	6746.0	36.0	10.1	46.1	76.2	-30.1	Peak	Horizontal
	3983.5	38.7	3.2	41.9	74.0	-32.1	Peak	Vertical
	4927.0	41.1	6.1	47.2	74.0	-26.8	Peak	Vertical
*	6032.0	36.6	7.9	44.5	76.2	-31.7	Peak	Vertical
*	7120.0	36.5	12.2	48.7	76.2	-27.5	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (96.2dBμV/m) or 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)

Product	network PTZ Camera	Temperature	26°C
Test Engineer	Cat Hu	Relative Humidity	56%
Test Site	AC1	Test Date	2018/05/11
Test Mode:	802.11n-HT40	Test Channel:	03
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB 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
	4145.0	37.6	3.8	41.4	74.0	-32.6	Peak	Horizontal
	4961.0	36.9	6.1	43.0	74.0	-31.0	Peak	Horizontal
*	5845.0	36.0	7.8	43.8	74.0	-27.9	Peak	Horizontal
*	7111.5	36.1	12.2	48.3	74.0	-23.4	Peak	Horizontal
	3992.0	38.7	3.2	41.9	74.0	-32.1	Peak	Vertical
	4850.5	40.2	5.9	46.1	74.0	-27.9	Peak	Vertical
*	5879.0	35.6	7.8	43.4	74.0	-28.3	Peak	Vertical
*	6916.0	36.4	10.9	47.3	74.0	-24.4	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (91.7dBμV/m) or 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)

Product	network PTZ Camera	Temperature	26°C
Test Engineer	Cat Hu	Relative Humidity	56%
Test Site	AC1	Test Date	2018/05/11
Test Mode:	802.11n-HT40	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB 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
	4009.0	38.2	3.4	41.6	74.0	-32.4	Peak	Horizontal
	4833.5	37.1	5.9	43.0	74.0	-31.0	Peak	Horizontal
*	5930.0	36.8	7.8	44.6	75.6	-29.2	Peak	Horizontal
*	7171.0	36.4	12.5	48.9	75.6	-24.9	Peak	Horizontal
	4009.0	38.3	3.4	41.7	74.0	-32.3	Peak	Vertical
	4867.5	39.5	6.0	45.5	74.0	-28.5	Peak	Vertical
*	5964.0	36.1	7.9	44.0	75.6	-29.8	Peak	Vertical
*	7120.0	36.9	12.2	49.1	75.6	-24.7	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (95.6dBμV/m) or 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)

Product	network PTZ Camera	Temperature	26°C
Test Engineer	Cat Hu	Relative Humidity	56%
Test Site	AC1	Test Date	2018/05/11
Test Mode:	802.11n-HT40	Test Channel:	09
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB 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
	4060.0	38.5	3.5	42.0	74.0	-32.0	Peak	Horizontal
	4816.5	37.5	5.9	43.4	74.0	-30.6	Peak	Horizontal
*	5853.5	36.7	7.8	44.5	75.0	-30.5	Peak	Horizontal
*	6542.0	36.6	10.1	46.7	75.0	-28.3	Peak	Horizontal
	4009.0	38.4	3.4	41.8	74.0	-32.2	Peak	Vertical
	4901.5	39.5	6.0	45.5	74.0	-28.5	Peak	Vertical
*	5760.0	36.2	7.4	43.6	75.0	-31.4	Peak	Vertical
*	7111.5	36.1	12.2	48.3	75.0	-26.7	Peak	Vertical

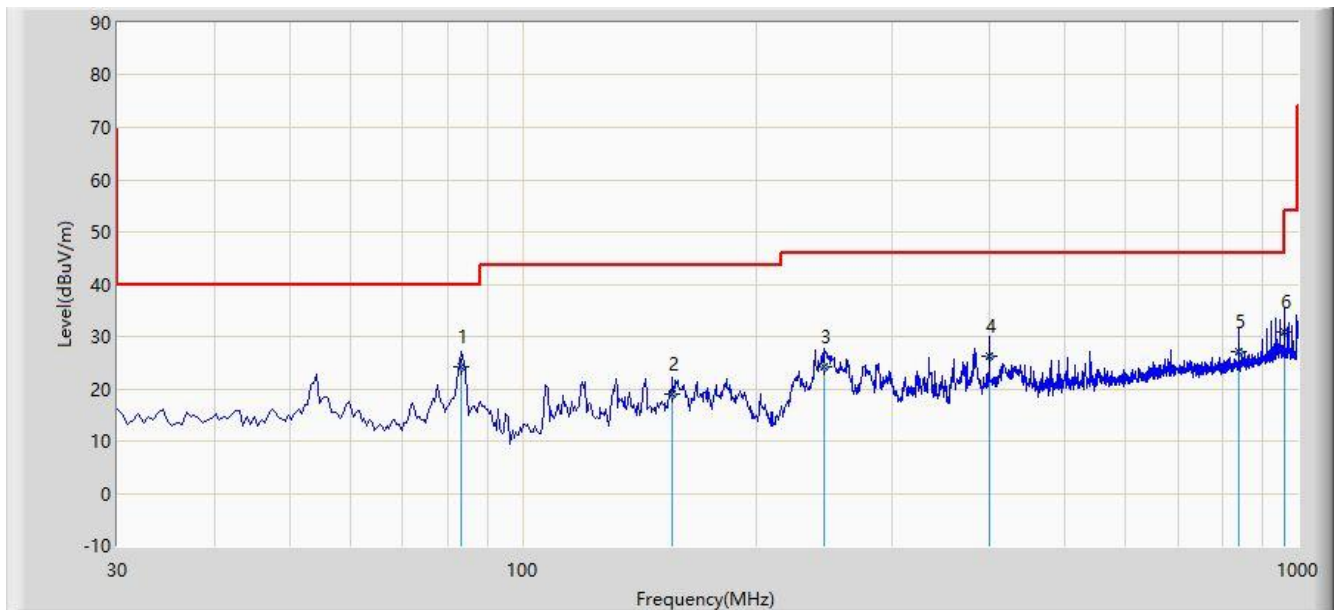
Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (95.0dBμV/m) or 15.209 which is higher.

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

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

The worst case of Radiated Emission below 1GHz:

Site: AC1	Time: 2018/05/10 - 18:52
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: VULB 9168_20-2000MHz	Polarity: Horizontal
EUT: network PTZ Camera	Power: AC 120V/60Hz
Note: There is the worst case within frequency range 30MHz~1GHz.	



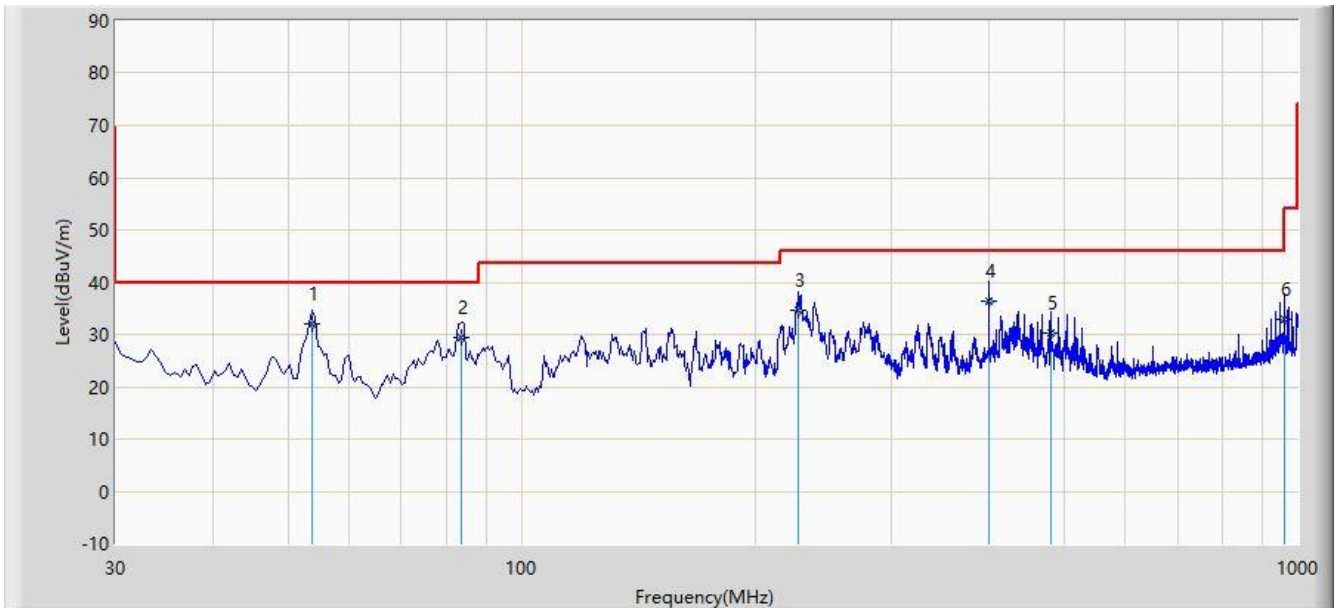
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		*	83.350	24.125	14.785	-15.875	40.000	9.340	QP
2			156.100	19.004	4.856	-24.496	43.500	14.148	QP
3			245.340	24.143	12.629	-21.857	46.000	11.514	QP
4			400.055	26.267	11.525	-19.733	46.000	14.742	QP
5			839.950	27.020	6.048	-18.980	46.000	20.972	QP
6			960.230	30.746	8.578	-23.254	54.000	22.168	QP

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

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

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report.

Site: AC1	Time: 2018/05/10 - 18:54
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: VULB 9168_20-2000MHz	Polarity: Vertical
EUT: network PTZ Camera	Power: AC 120V/60Hz
Note: There is the worst case within frequency range 30MHz~1GHz.	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		*	53.765	32.101	18.858	-7.899	40.000	13.243	QP
2			83.835	29.450	20.103	-10.550	40.000	9.347	QP
3			227.395	34.636	23.575	-11.364	46.000	11.061	QP
4			400.055	36.289	21.547	-9.711	46.000	14.742	QP
5			480.080	30.417	14.154	-15.583	46.000	16.263	QP
6			960.230	33.028	10.860	-20.972	54.000	22.168	QP

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

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

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report.

7.7. Radiated Restricted Band Edge Measurement

7.7.1. Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42-16.423	399.9 - 410	4.5-5.15
¹ 0.495 - 0.505	16.69475-16.69525	608 - 614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960 - 1240	7.25-7.75
4.125-4.128	25.5 -25.67	1300 - 1427	8.25 - 8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660 - 1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123 - 138	2200 - 2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.525	2483.5 - 2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690 - 2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260 - 3267	23.6-24.0
12.29-12.293	167.72-173.2	3332 - 3339	31.2-31.8
12.51975-12.52025	240 - 285	3345.8 - 3358	36.43-36.5
12.57675-12.57725	322-335.4	3600 - 4400	(²)
13.36-13.41	--	--	--

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 – 0.490	2400/F (kHz)	300
0.490 – 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

7.7.2.Test Procedure Used

ANSI C63.10 Section 6.3 (General Requirements)

ANSI C63.10 Section 6.6 (Standard test method above 1GHz)

7.7.3.Test Setting

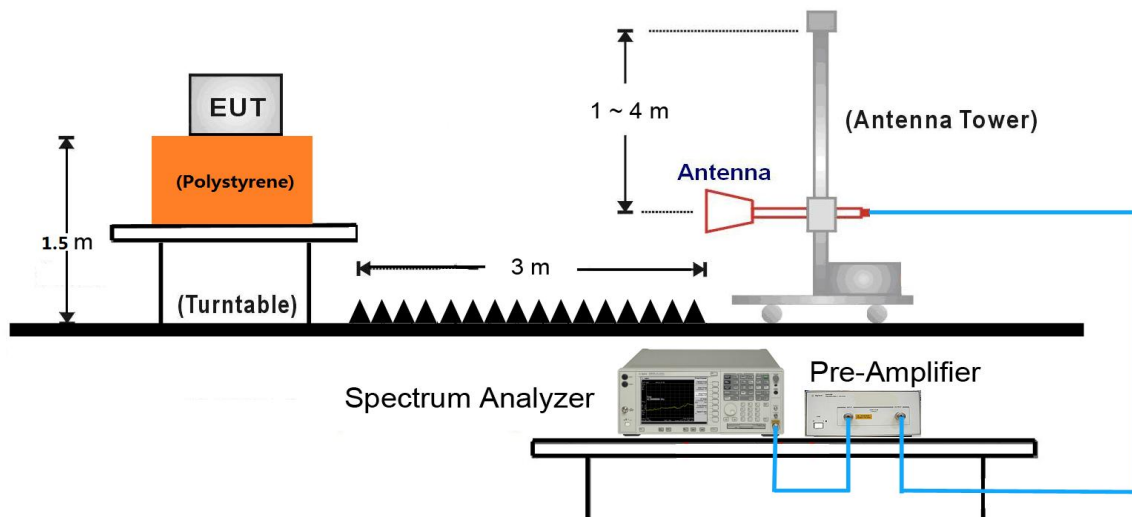
Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Field Strength Measurements

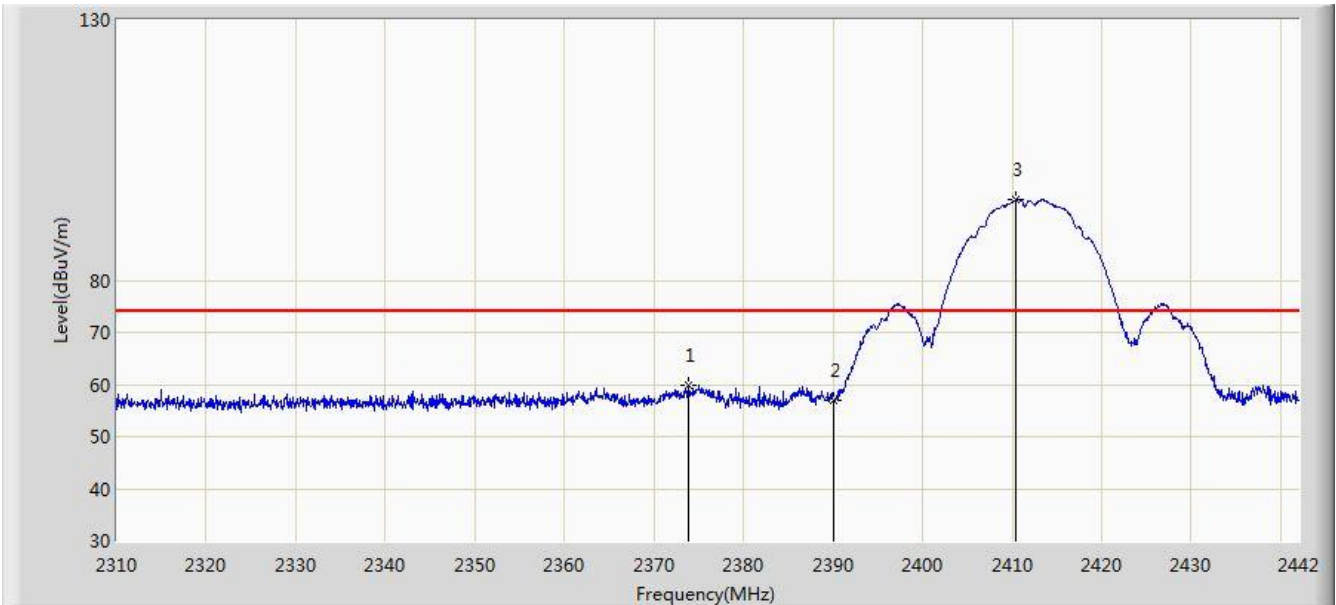
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW $\geq 1/T$
4. De As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode
5. Detector = Peak
6. Sweep time = auto
7. Trace mode = max hold
8. Allow max hold to run for at least 50 times (1/duty cycle) traces

7.7.4.Test Setup



7.7.5.Test Result

Site: AC1	Time: 2018/05/10 - 22:23
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11b at channel 2412MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2373.888	59.735	27.385	-14.265	74.000	32.351	PK
2			2390.000	57.013	24.686	-16.987	74.000	32.327	PK
3		*	2410.452	95.433	63.147	N/A	N/A	32.287	PK

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

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

Site: AC1	Time: 2018/05/10 - 22:49
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11b at channel 2412MHz	

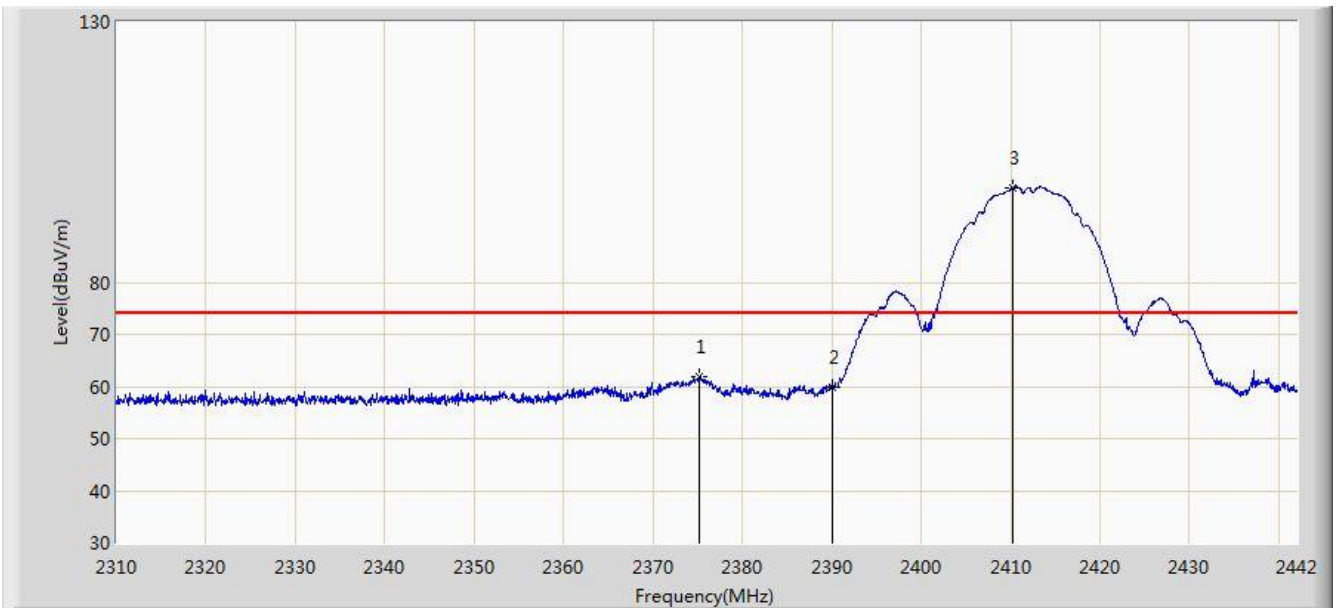


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2375.142	47.566	15.218	-6.434	54.000	32.348	AV
2			2390.000	40.717	8.390	-13.283	54.000	32.327	AV
3		*	2411.112	90.529	58.244	N/A	N/A	32.285	AV

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

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

Site: AC1	Time: 2018/05/10 - 22:50
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11b at channel 2412MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2375.142	61.917	29.569	-12.083	74.000	32.348	PK
2			2390.000	59.871	27.544	-14.129	74.000	32.327	PK
3		*	2410.320	98.177	65.890	N/A	N/A	32.287	PK

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

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

Site: AC1	Time: 2018/05/10 - 22:56
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11b at channel 2412MHz	

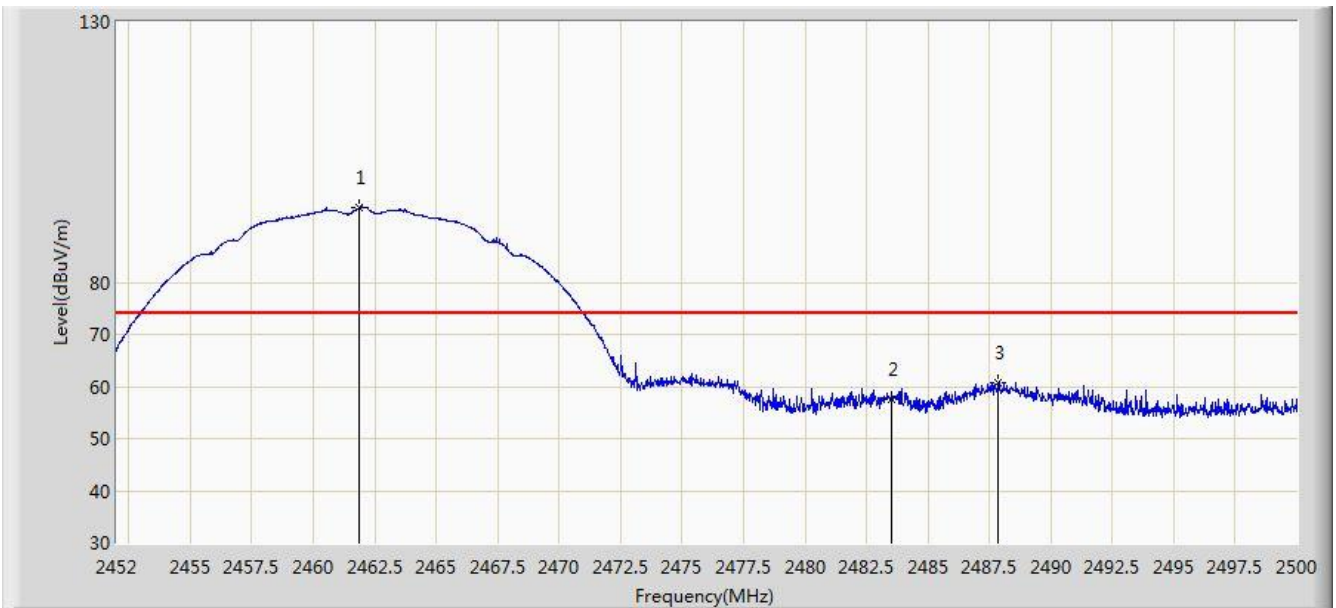


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2375.076	50.397	18.049	-3.603	54.000	32.349	AV
2			2390.000	45.390	13.063	-8.610	54.000	32.327	AV
3		*	2412.630	94.208	61.923	N/A	N/A	32.284	AV

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

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

Site: AC1	Time: 2018/05/10 - 23:20
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11b at channel 2462MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.864	94.484	62.204	N/A	N/A	32.280	PK
2			2483.500	57.432	25.093	-16.568	74.000	32.340	PK
3			2487.856	60.688	28.332	-13.312	74.000	32.356	PK

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

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

Site: AC1	Time: 2018/05/10 - 23:22
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11b at channel 2462MHz	

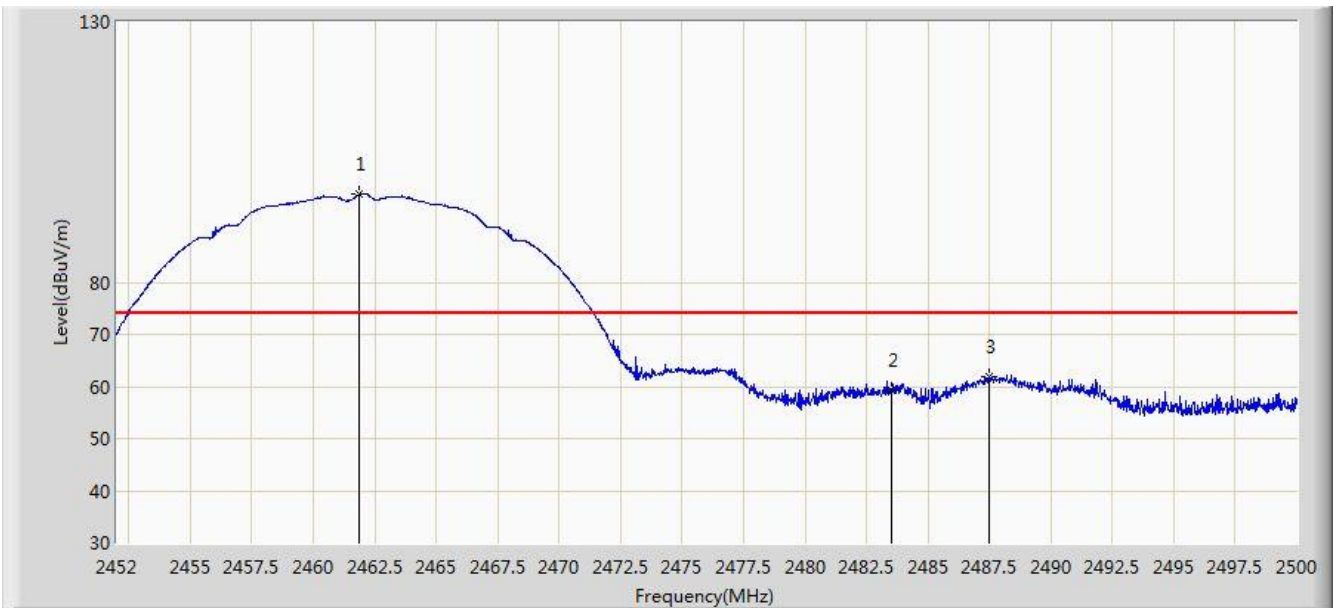


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.168	89.943	57.664	N/A	N/A	32.279	AV
2			2483.500	45.044	12.705	-8.956	54.000	32.340	AV
3			2487.592	49.419	17.064	-4.581	54.000	32.355	AV

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

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

Site: AC1	Time: 2018/05/10 - 23:26
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11b at channel 2462MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.864	96.970	64.690	N/A	N/A	32.280	PK
2			2483.500	59.320	26.981	-14.680	74.000	32.340	PK
3			2487.472	61.952	29.597	-12.048	74.000	32.355	PK

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

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

Site: AC1	Time: 2018/05/10 - 23:19
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11b at channel 2462MHz	

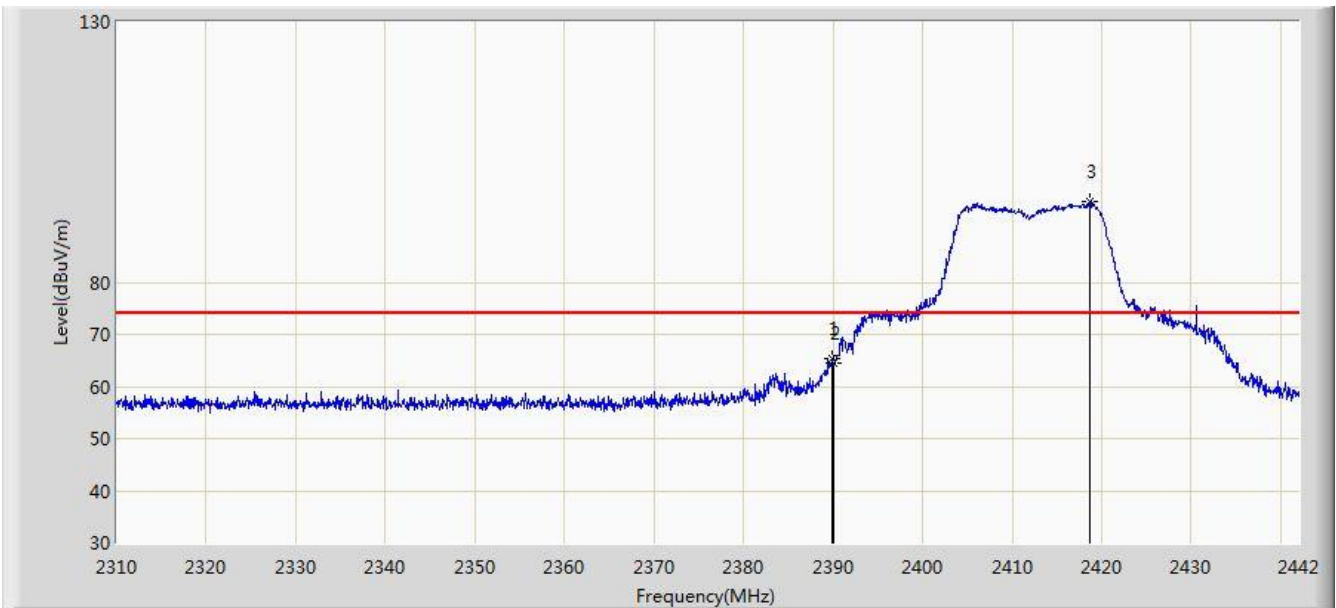


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2462.656	92.611	60.330	N/A	N/A	32.281	AV
2			2483.500	48.416	16.077	-5.584	54.000	32.340	AV
3			2487.664	52.698	20.343	-1.302	54.000	32.355	AV

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

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

Site: AC1	Time: 2018/05/10 - 23:29
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11g at channel 2412MHz	

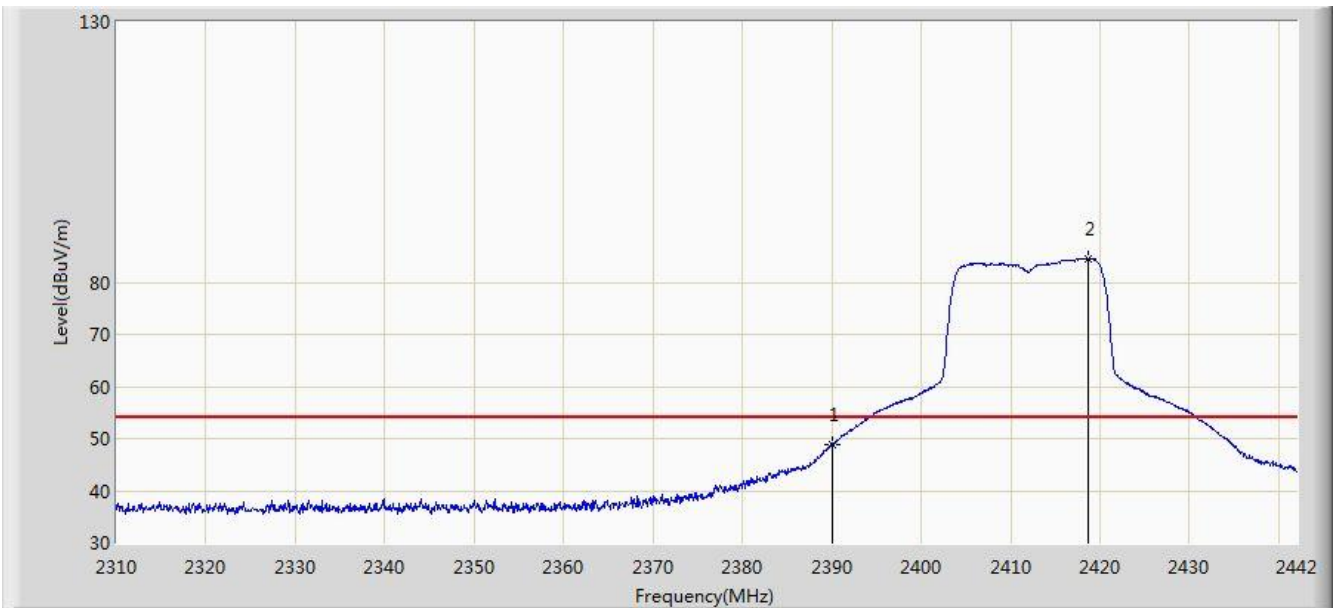


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.860	65.400	33.073	-8.600	74.000	32.327	PK
2			2390.000	64.505	32.178	-9.495	74.000	32.327	PK
3		*	2418.636	95.541	63.259	N/A	N/A	32.282	PK

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

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

Site: AC1	Time: 2018/05/10 - 23:31
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11g at channel 2412MHz	

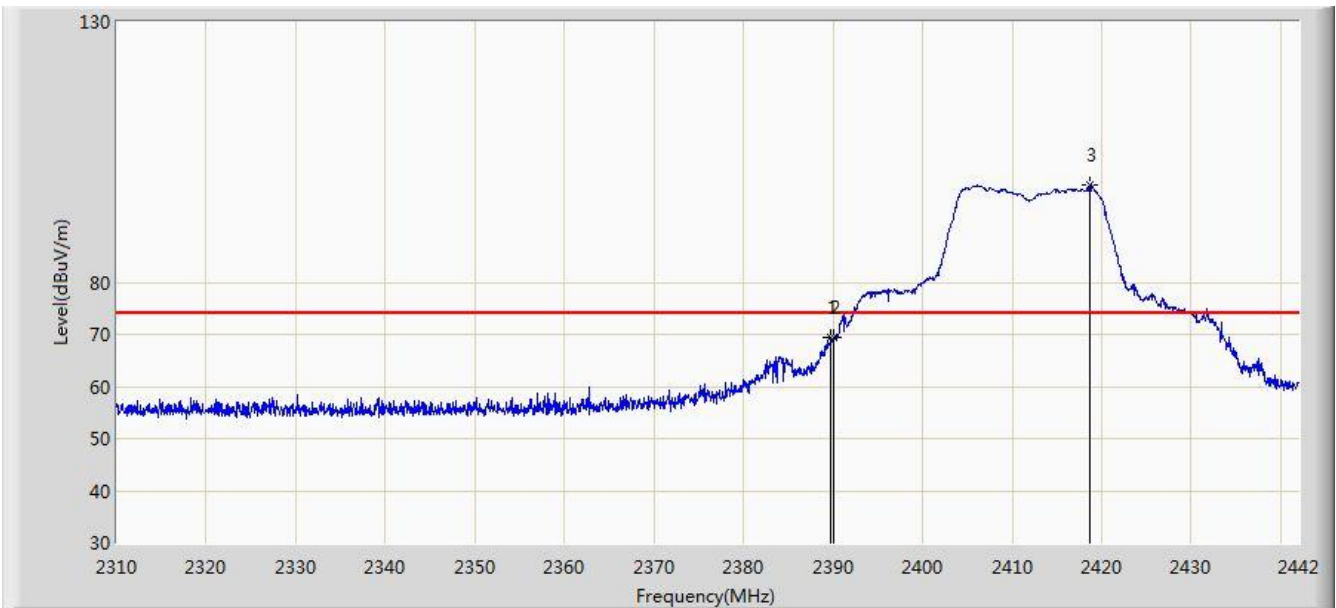


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	48.730	16.403	-5.270	54.000	32.327	AV
2		*	2418.702	84.555	52.273	N/A	N/A	32.282	AV

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

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

Site: AC1	Time: 2018/05/10 - 23:29
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11g at channel 2412MHz	

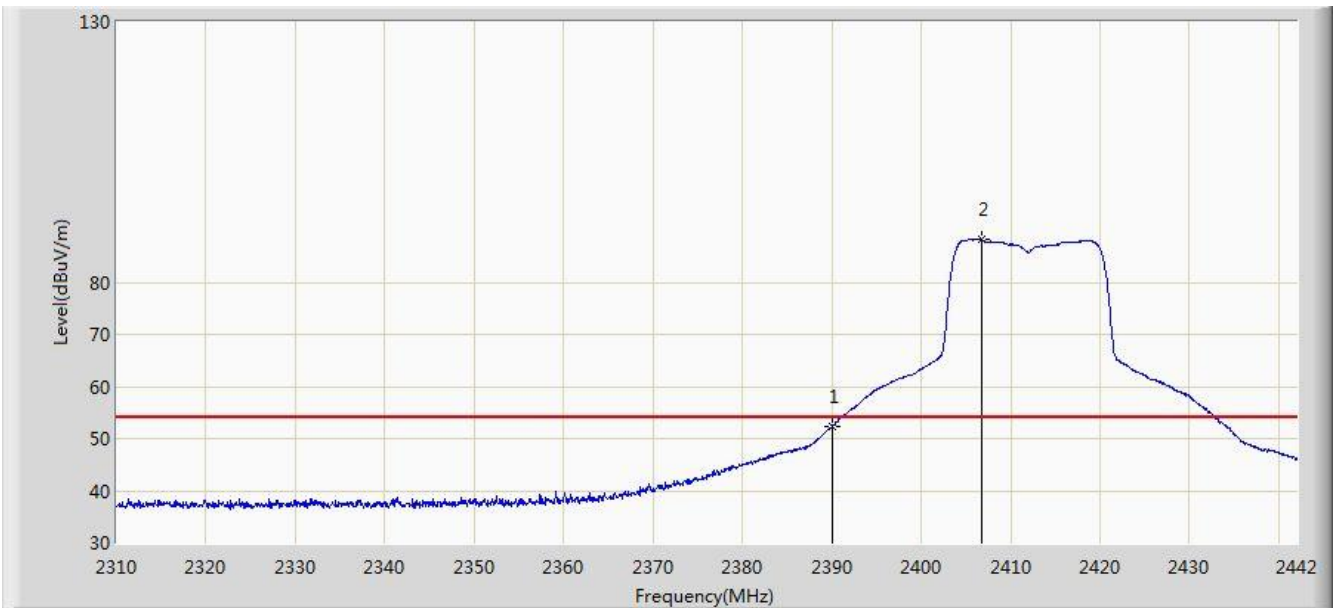


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.794	69.561	37.234	-4.439	74.000	32.327	PK
2			2390.000	69.344	37.017	-4.656	74.000	32.327	PK
3		*	2418.636	98.580	66.298	N/A	N/A	32.282	PK

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

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

Site: AC1	Time: 2018/05/10 - 23:27
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11g at channel 2412MHz	

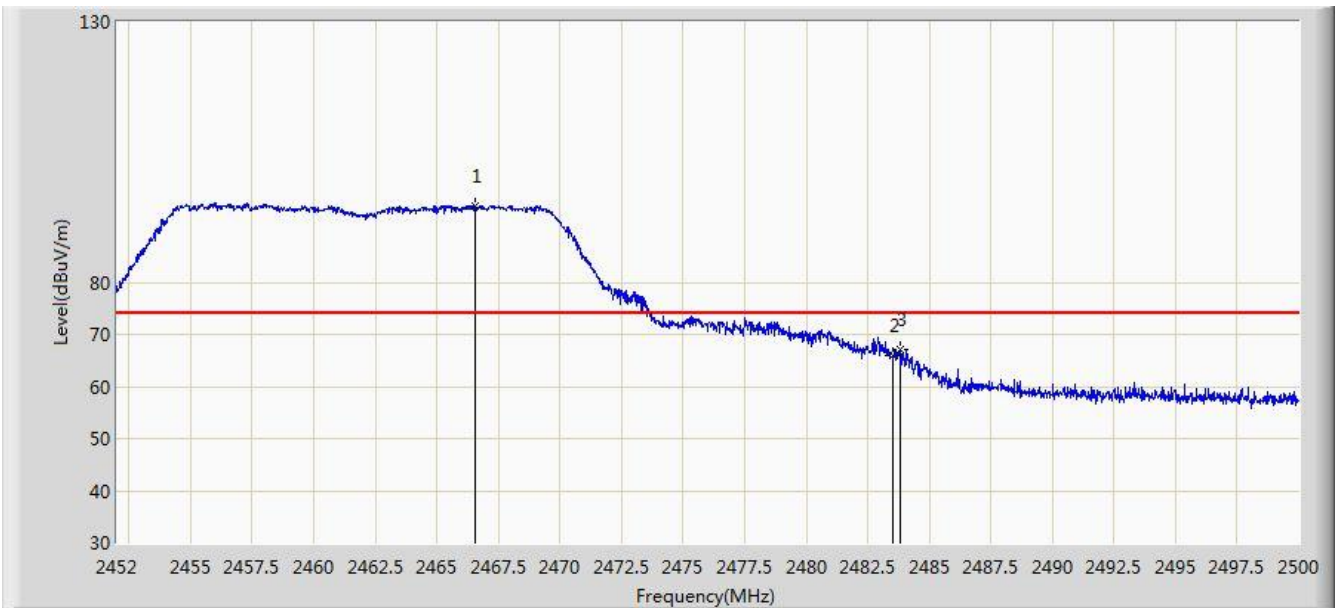


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	52.302	19.975	-1.698	54.000	32.327	AV
2		*	2406.690	88.241	55.947	N/A	N/A	32.294	AV

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

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

Site: AC1	Time: 2018/05/10 - 23:39
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11g at channel 2462MHz	

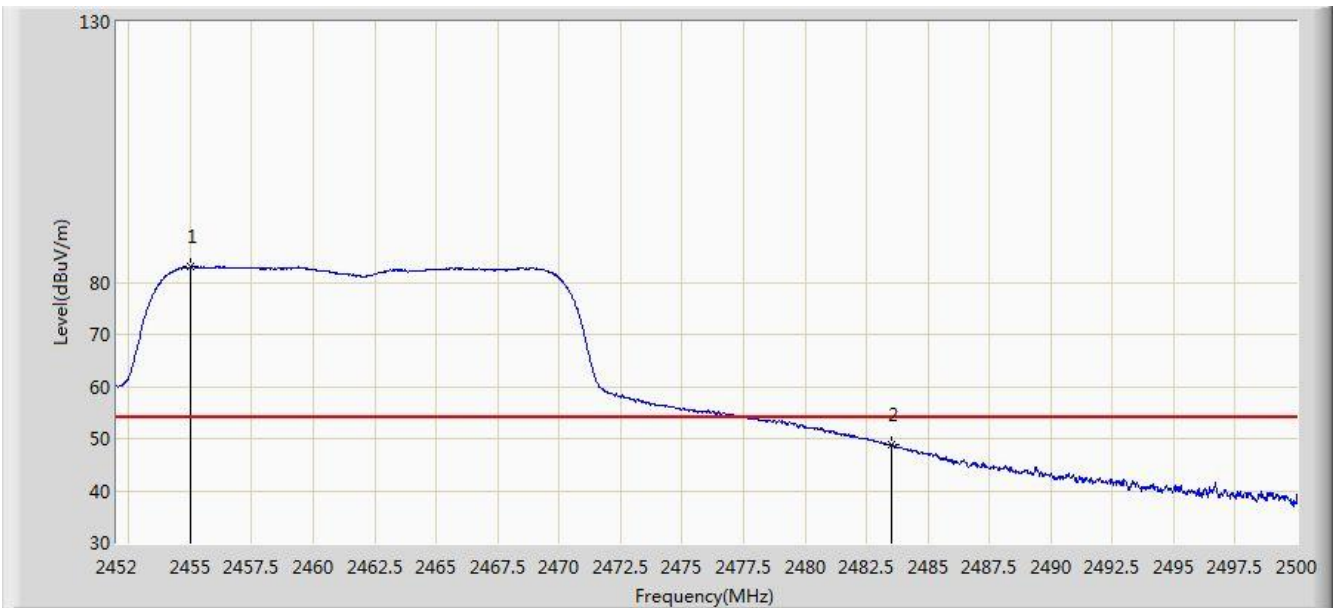


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2466.568	94.649	62.359	N/A	N/A	32.290	PK
2			2483.500	66.030	33.691	-7.970	74.000	32.340	PK
3			2483.824	67.214	34.874	-6.786	74.000	32.340	PK

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

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

Site: AC1	Time: 2018/05/10 - 23:41
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11g at channel 2462MHz	

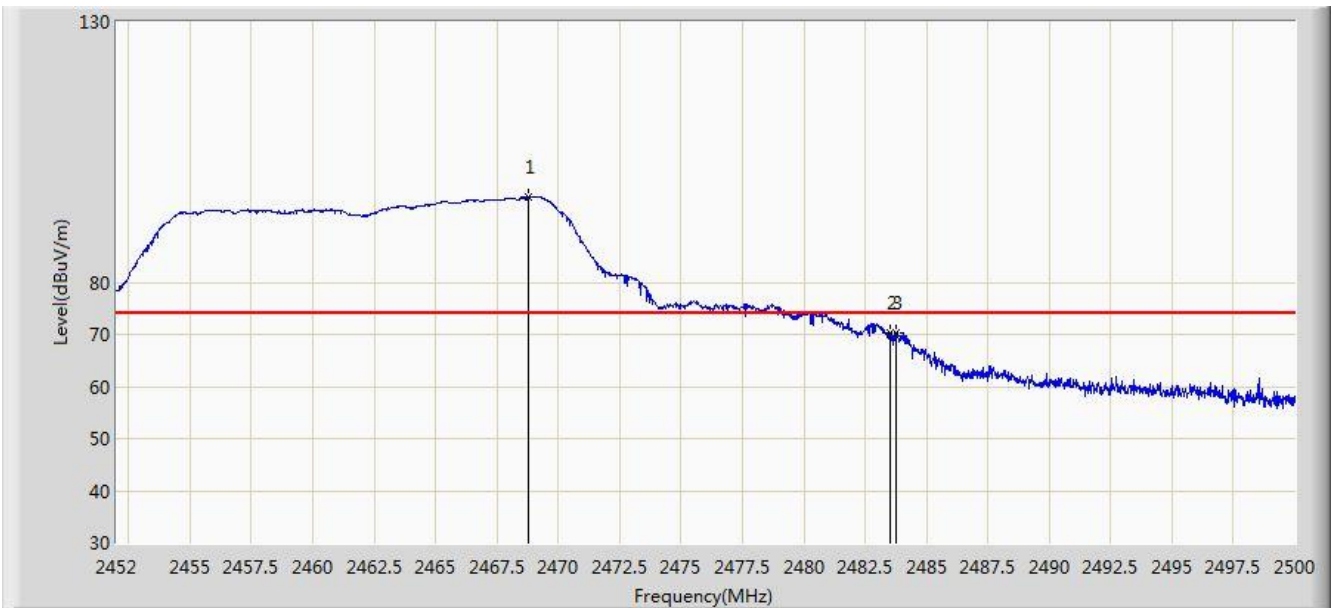


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2455.024	83.026	50.760	N/A	N/A	32.266	AV
2			2483.500	48.824	16.485	-5.176	54.000	32.340	AV

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

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

Site: AC1	Time: 2018/05/10 - 23:38
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11g at channel 2462MHz	

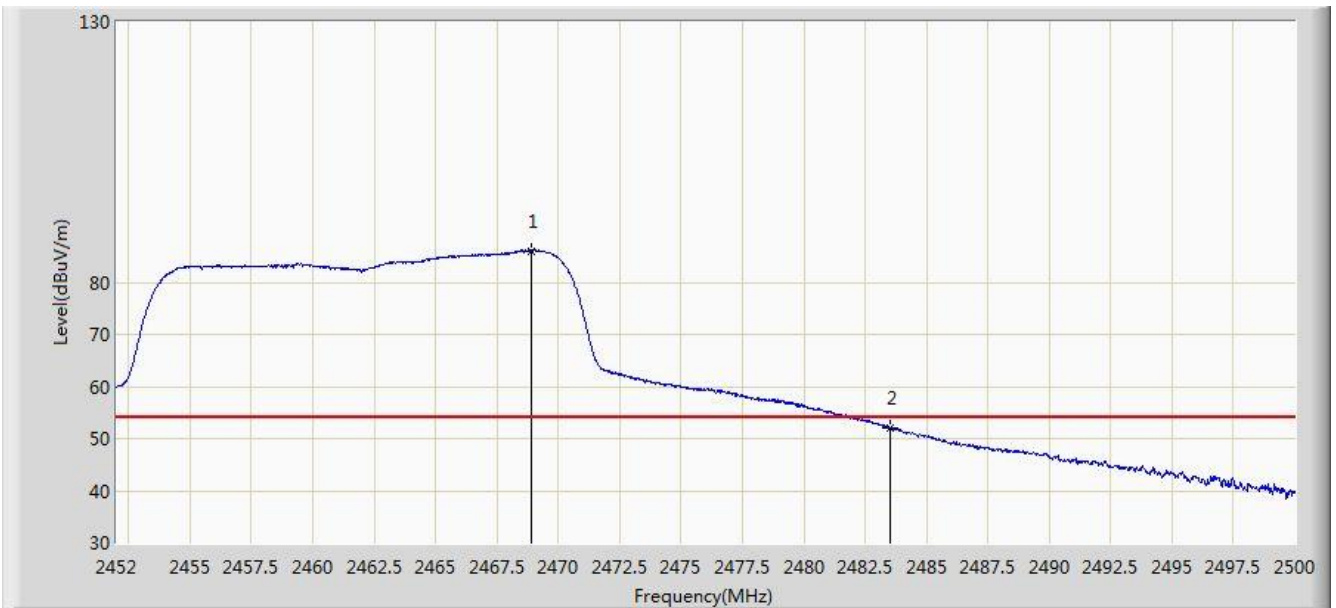


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2468.800	96.408	64.112	N/A	N/A	32.296	PK
2			2483.500	70.266	37.927	-3.734	74.000	32.340	PK
3			2483.752	70.267	37.927	-3.733	74.000	32.340	PK

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

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

Site: AC1	Time: 2018/05/10 - 23:38
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11g at channel 2462MHz	

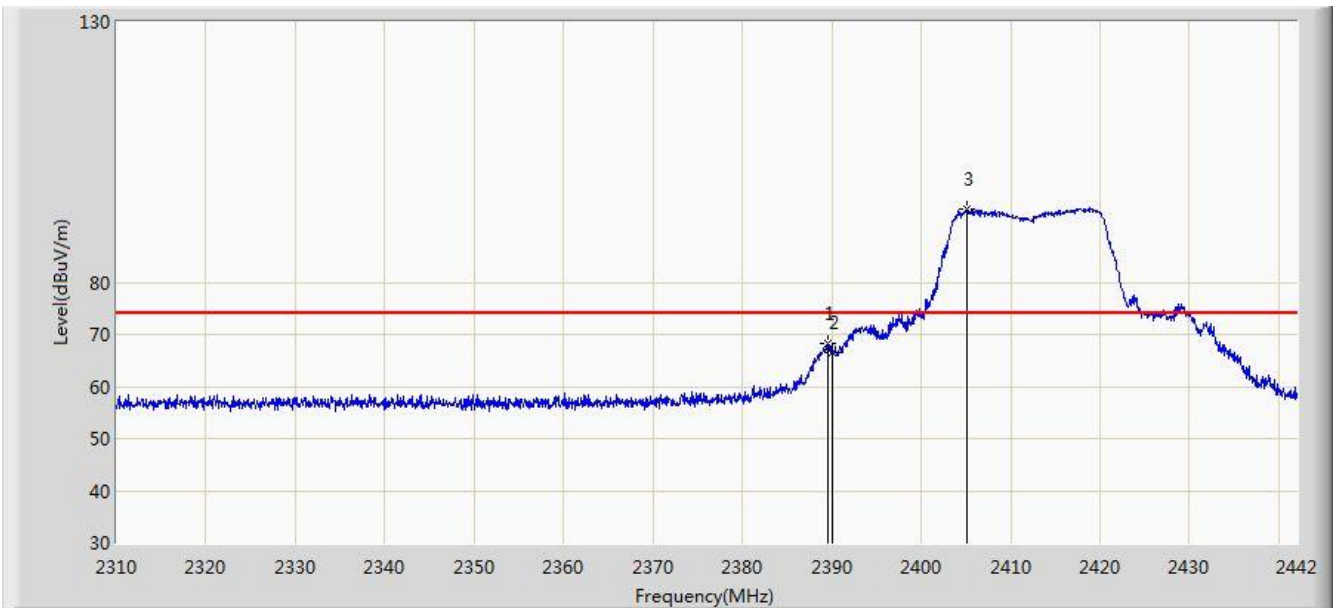


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2468.920	86.069	53.773	N/A	N/A	32.296	AV
2			2483.500	51.946	19.607	-2.054	54.000	32.340	AV

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

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

Site: AC1	Time: 2018/05/10 - 23:49
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11n-HT20 at channel 2412MHz	

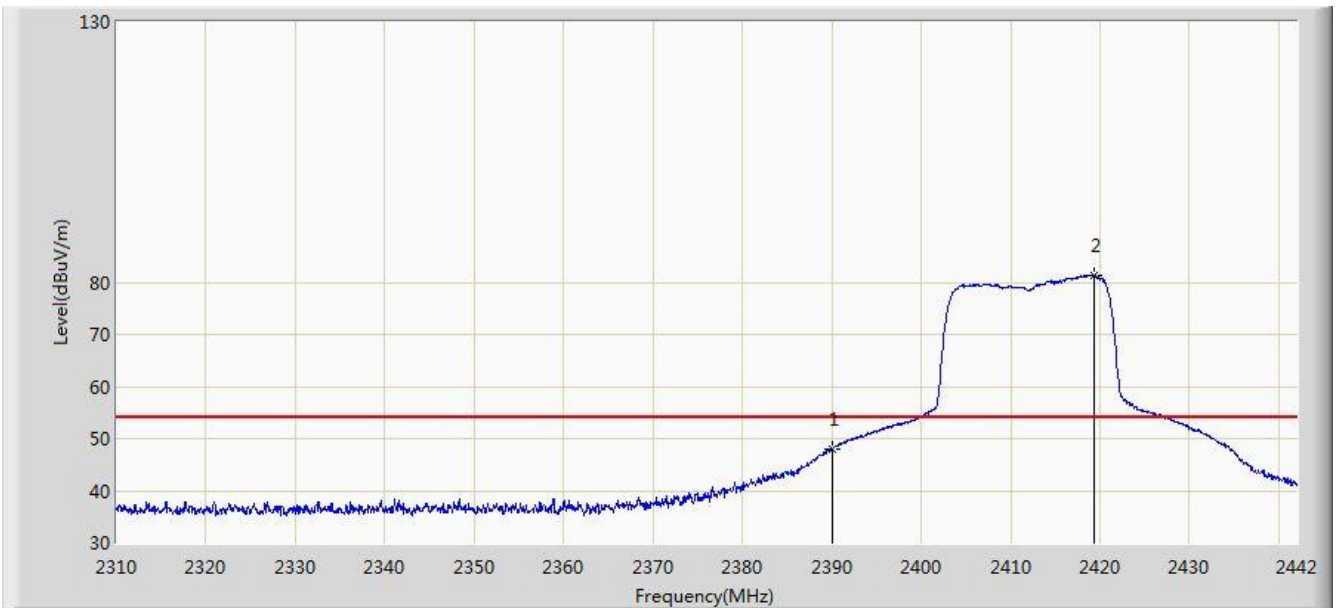


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.596	68.204	35.877	-5.796	74.000	32.328	PK
2			2390.000	66.519	34.192	-7.481	74.000	32.327	PK
3		*	2405.106	94.134	61.836	N/A	N/A	32.298	PK

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

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

Site: AC1	Time: 2018/05/10 - 23:51
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11n-HT20 at channel 2412MHz	

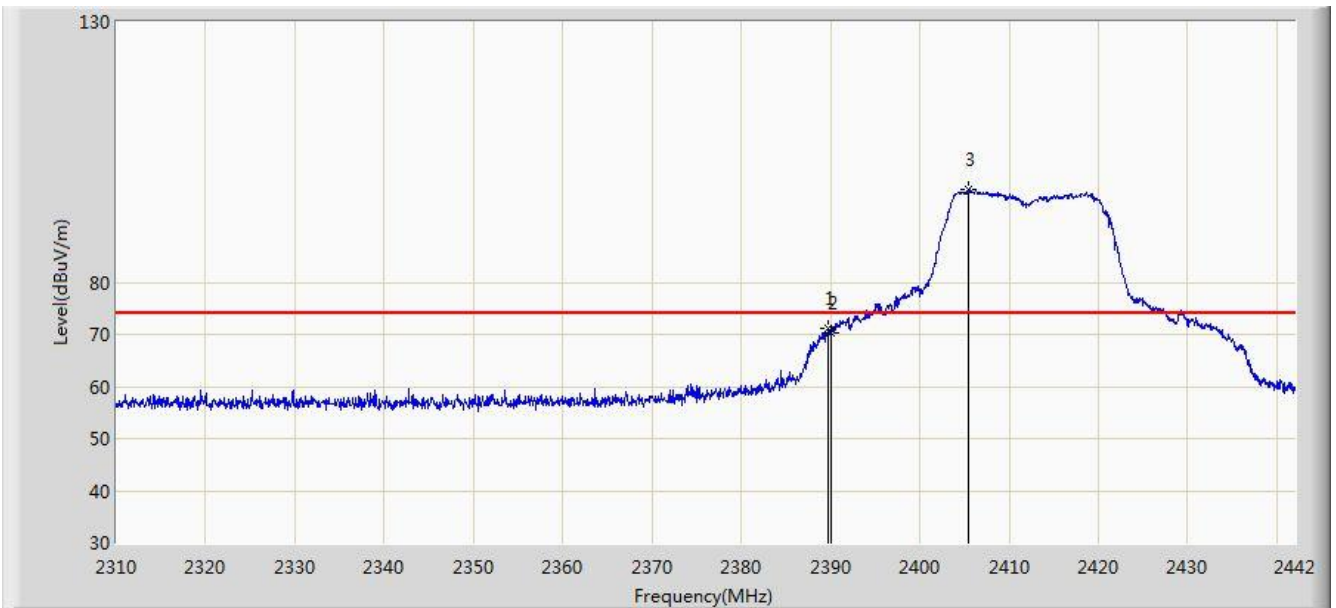


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	47.976	15.649	-6.024	54.000	32.327	AV
2		*	2419.296	81.433	49.151	N/A	N/A	32.282	AV

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

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

Site: AC1	Time: 2018/05/10 - 23:45
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11n-HT20 at channel 2412MHz	

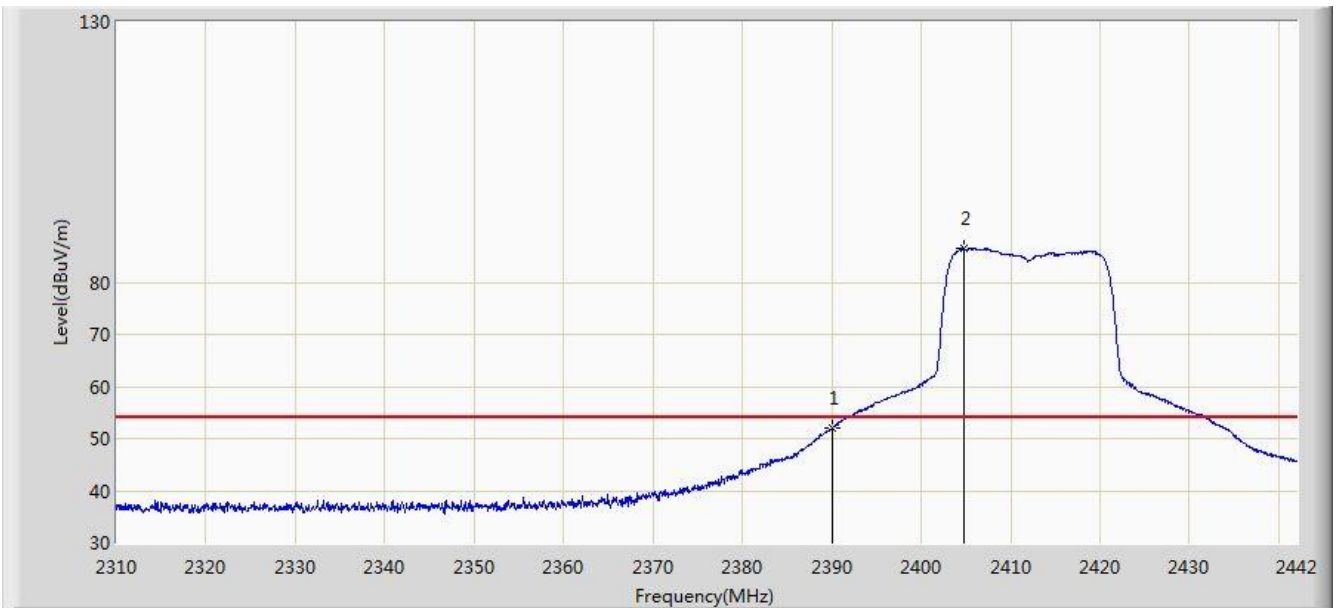


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.728	71.052	38.725	-2.948	74.000	32.328	PK
2			2390.000	70.289	37.962	-3.711	74.000	32.327	PK
3		*	2405.436	97.692	65.395	N/A	N/A	32.297	PK

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

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

Site: AC1	Time: 2018/05/10 - 23:48
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11n-HT20 at channel 2412MHz	

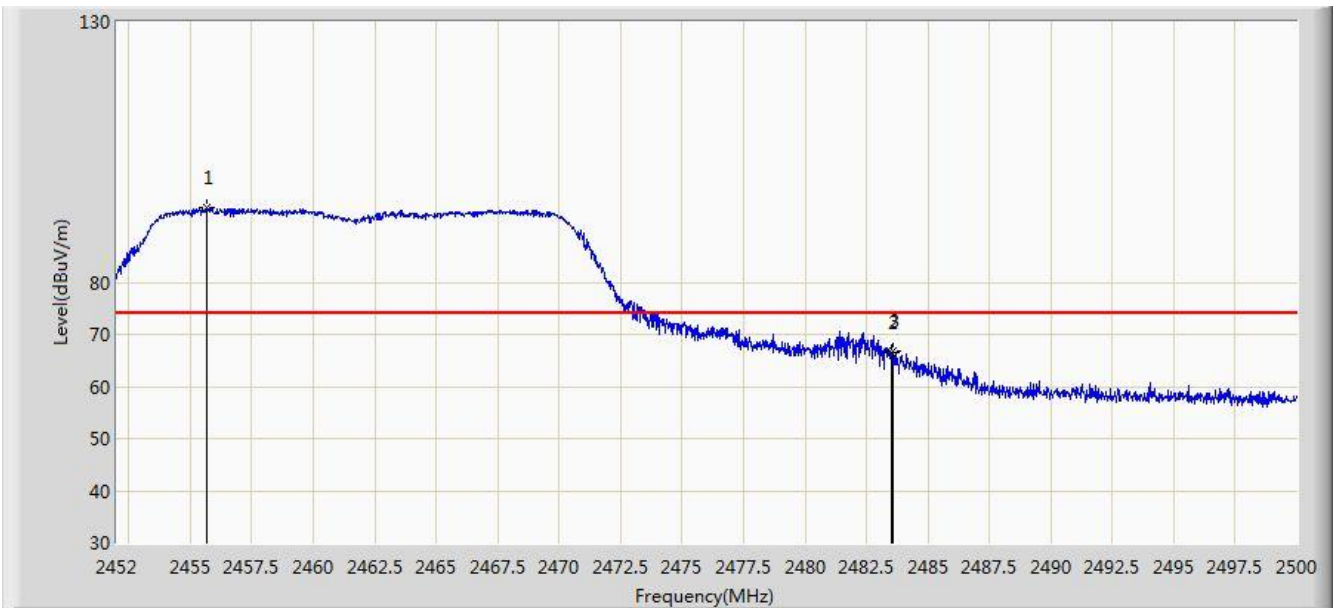


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	51.967	19.640	-2.033	54.000	32.327	AV
2		*	2404.776	86.393	54.094	N/A	N/A	32.299	AV

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

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

Site: AC1	Time: 2018/05/11 - 00:00
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11n-HT20 at channel 2462MHz	

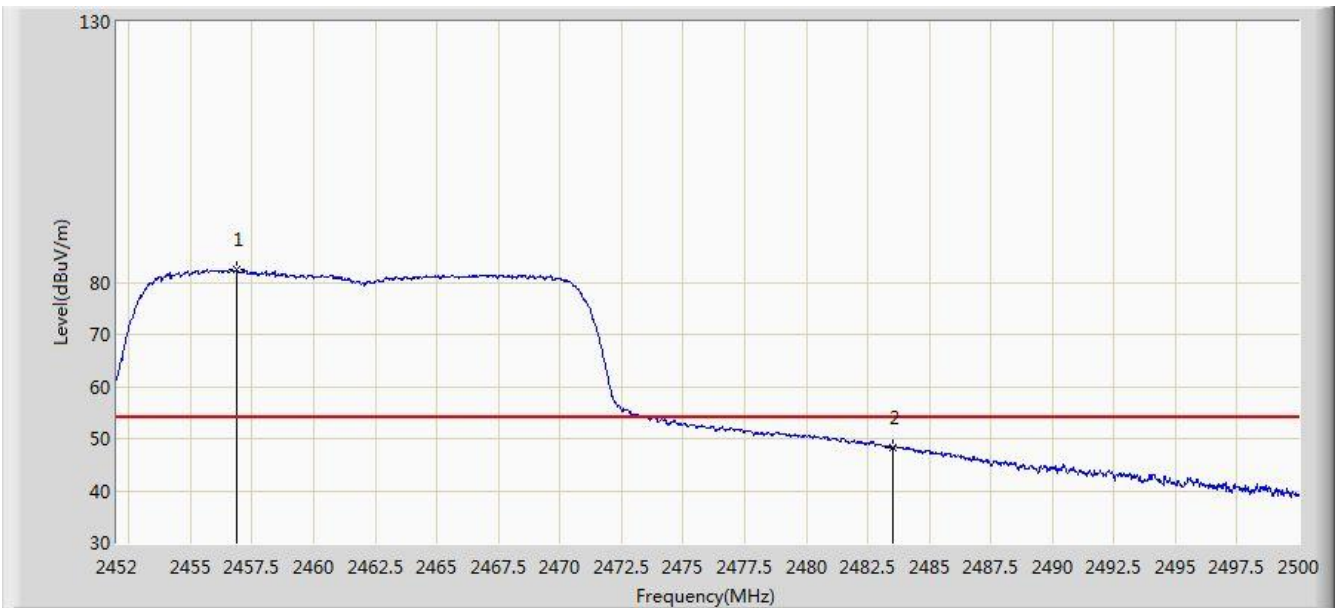


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2455.648	94.333	62.065	N/A	N/A	32.268	PK
2			2483.500	66.450	34.111	-7.550	74.000	32.340	PK
3			2483.608	66.739	34.399	-7.261	74.000	32.340	PK

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

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

Site: AC1	Time: 2018/05/11 - 00:02
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11n-HT20 at channel 2462MHz	

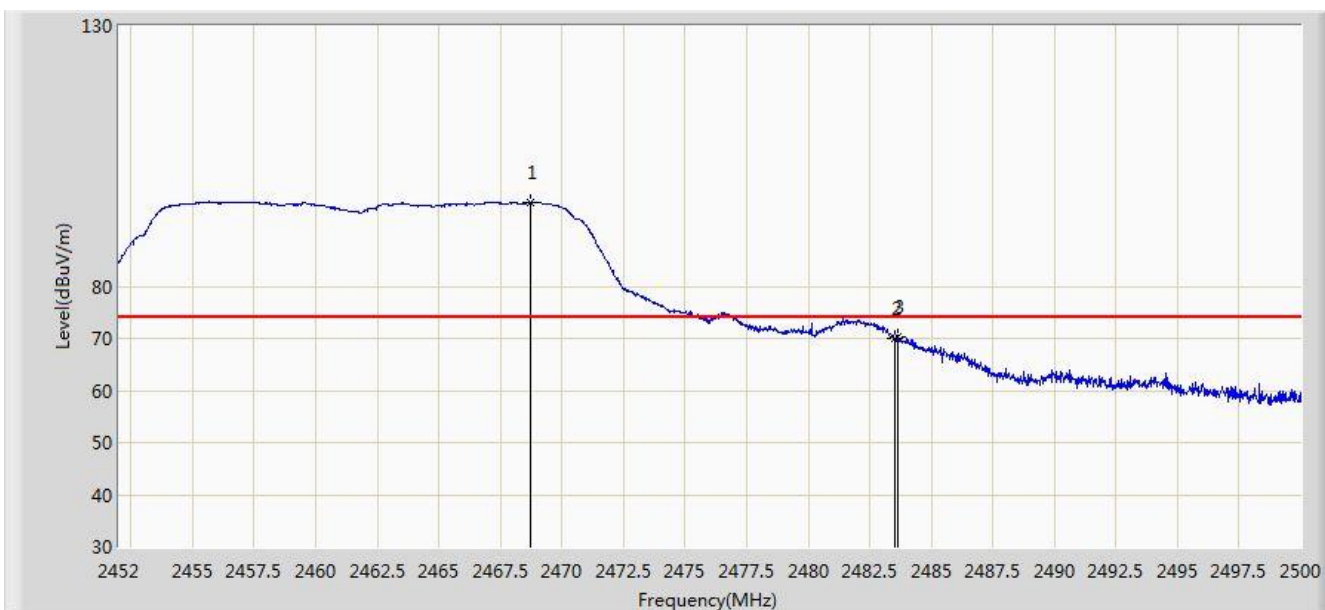


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2456.872	82.372	50.102	N/A	N/A	32.270	AV
2			2483.500	48.377	16.038	-5.623	54.000	32.340	AV

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

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

Site: AC1	Time: 2018/05/10 - 23:59
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11n-HT20 at channel 2462MHz	

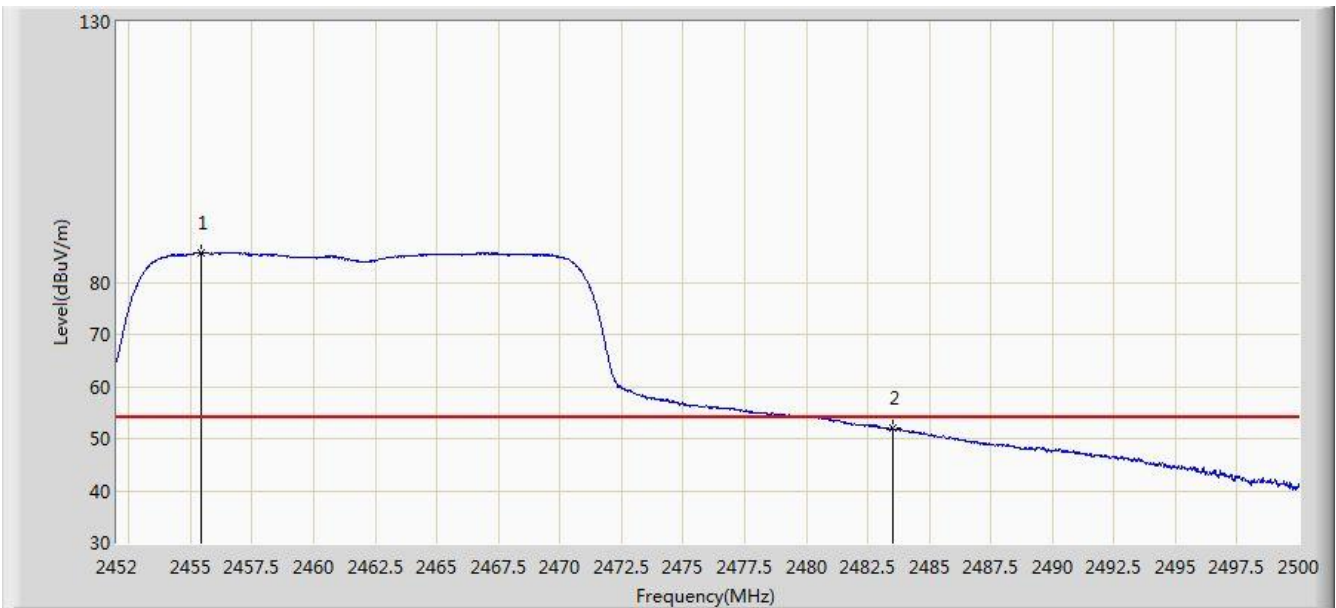


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2468.704	96.145	63.849	N/A	N/A	32.296	PK
2			2483.500	69.890	37.551	-4.110	74.000	32.340	PK
3			2483.632	70.227	37.887	-3.773	74.000	32.340	PK

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

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

Site: AC1	Time: 2018/05/10 - 23:59
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11n-HT20 at channel 2462MHz	

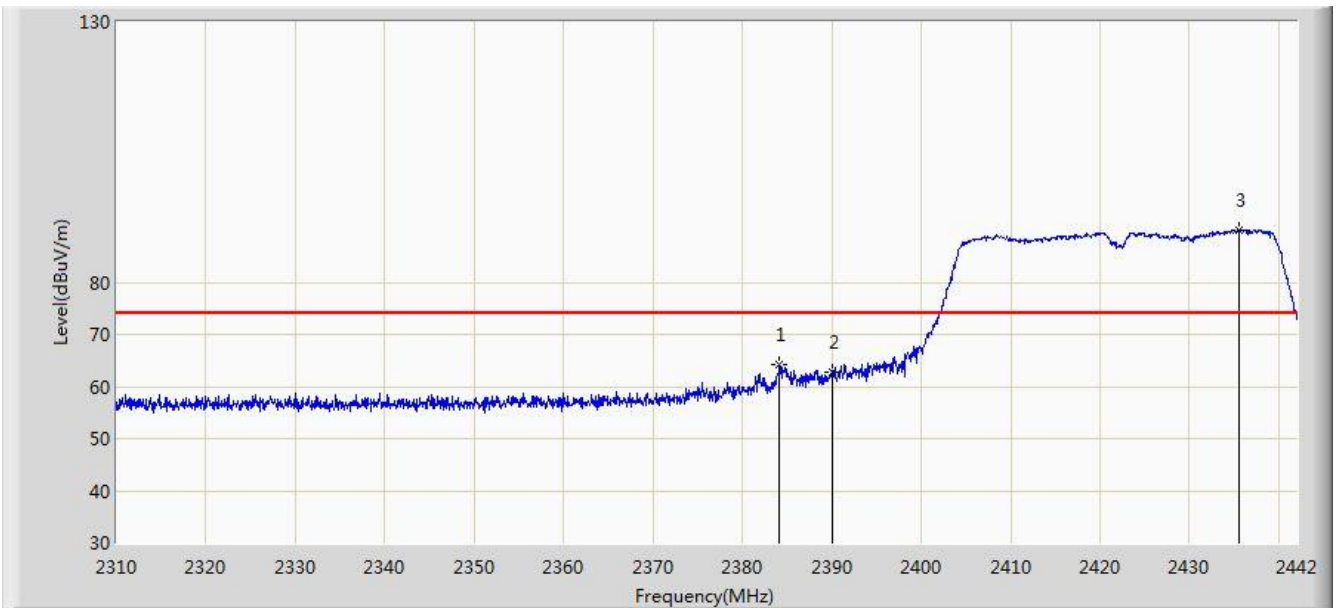


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2455.432	85.746	53.479	N/A	N/A	32.267	AV
2			2483.500	51.918	19.579	-2.082	54.000	32.340	AV

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

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

Site: AC1	Time: 2018/05/11 - 00:10
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11n-HT40 at channel 2422MHz	

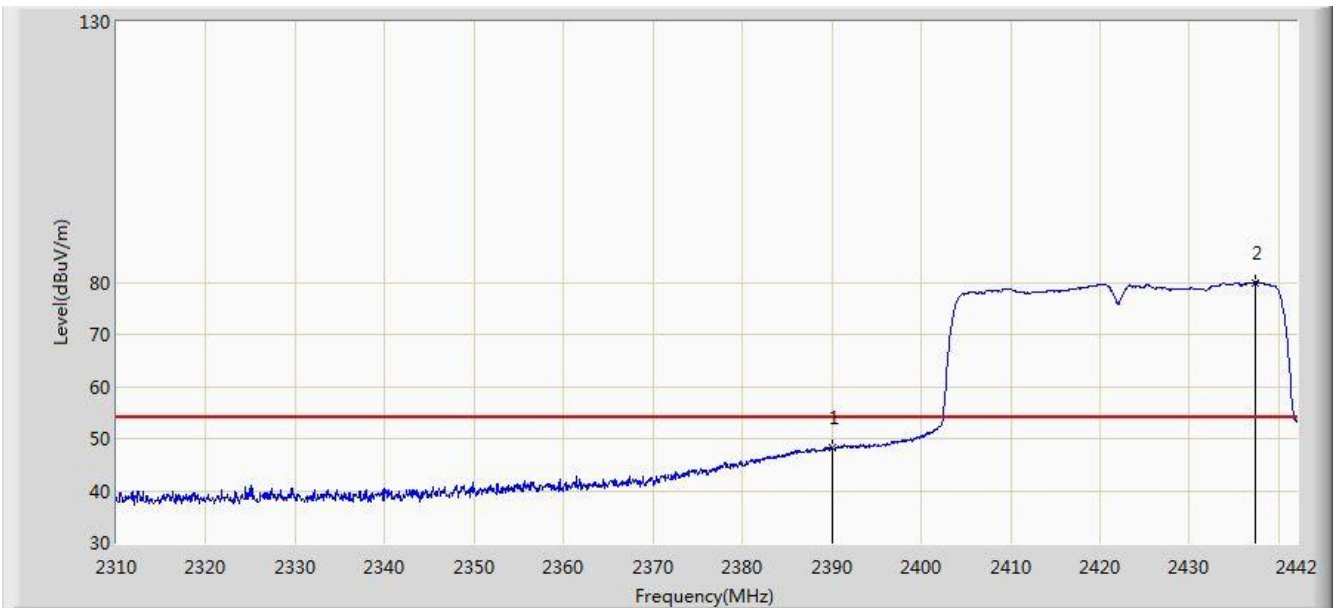


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2384.184	64.060	31.725	-9.940	74.000	32.335	PK
2			2390.000	62.765	30.438	-11.235	74.000	32.327	PK
3		*	2435.532	90.123	57.858	N/A	N/A	32.266	PK

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

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

Site: AC1	Time: 2018/05/11 - 00:12
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11n-HT40 at channel 2422MHz	

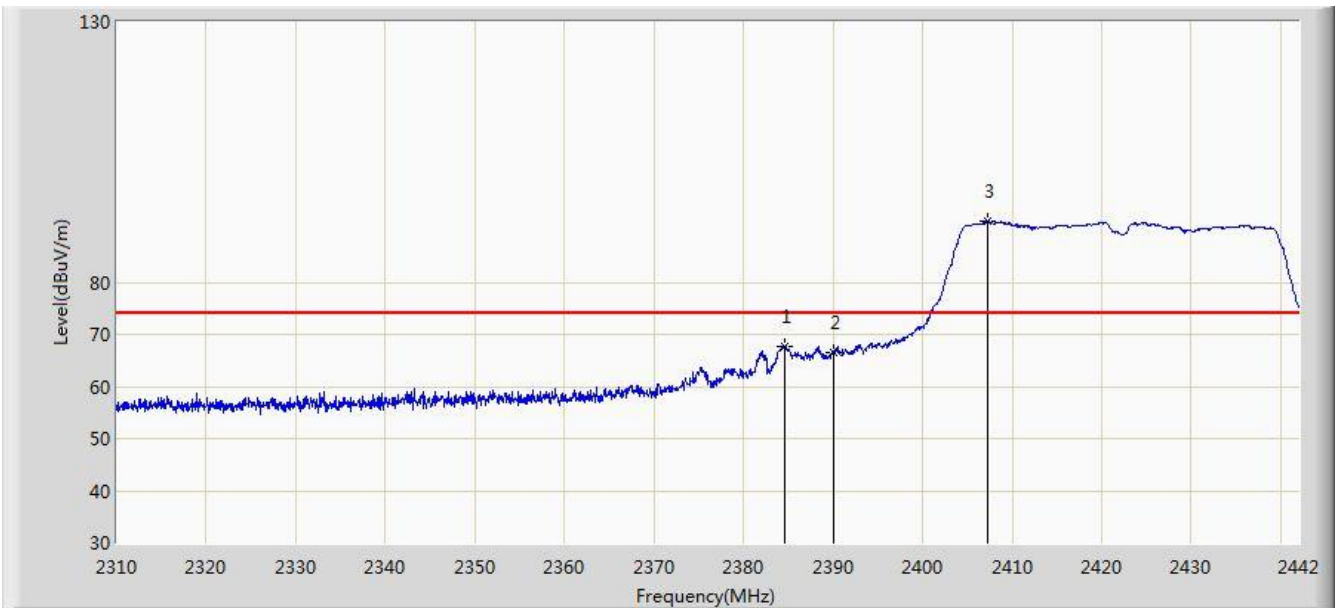


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	48.157	15.830	-5.843	54.000	32.327	AV
2		*	2437.446	79.929	47.667	N/A	N/A	32.262	AV

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

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

Site: AC1	Time: 2018/05/11 - 00:10
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11n-HT40 at channel 2422MHz	

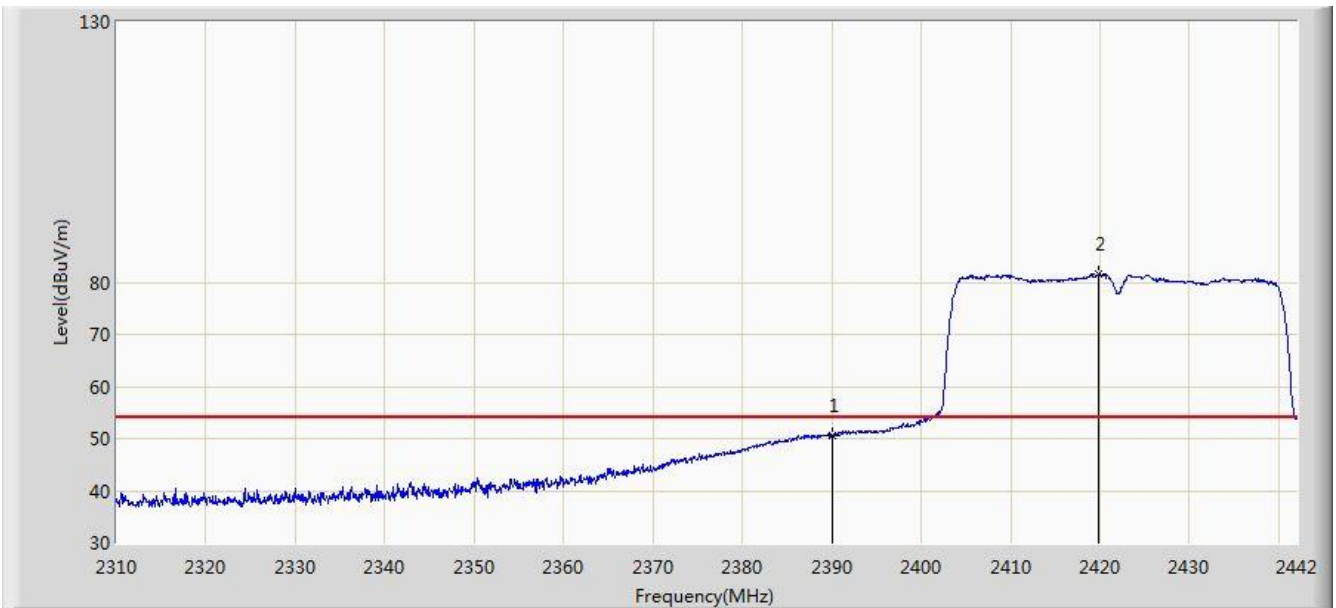


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2384.580	67.792	35.458	-6.208	74.000	32.334	PK
2			2390.000	66.637	34.310	-7.363	74.000	32.327	PK
3		*	2407.218	91.703	59.410	N/A	N/A	32.294	PK

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

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

Site: AC1	Time: 2018/05/11 - 00:09
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11n-HT40 at channel 2422MHz	

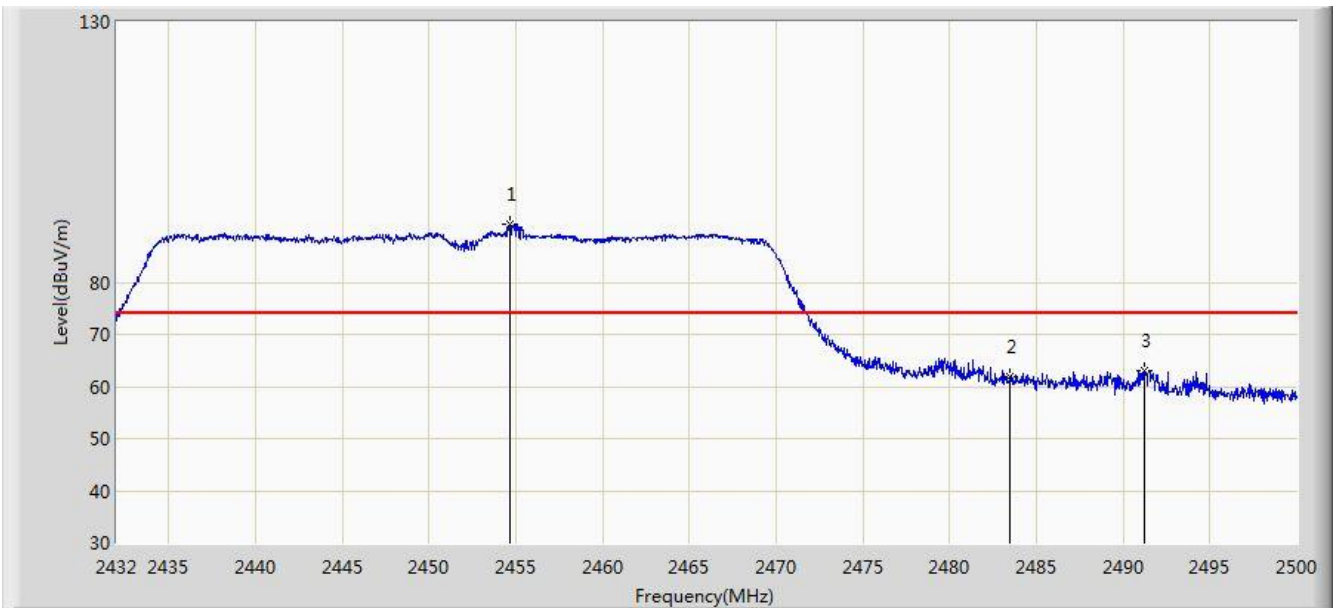


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	50.622	18.295	-3.378	54.000	32.327	AV
2		*	2419.890	81.502	49.221	N/A	N/A	32.281	AV

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

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

Site: AC1	Time: 2018/05/11 - 00:22
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11n-HT40 at channel 2452MHz	

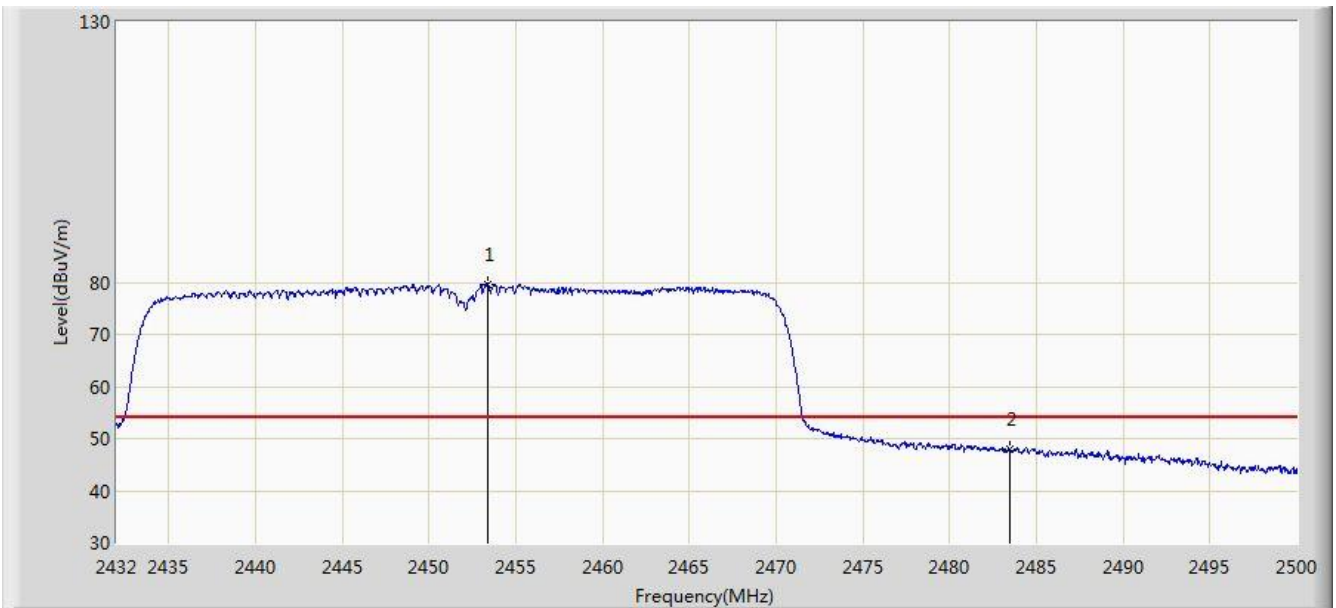


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2454.678	91.107	58.841	N/A	N/A	32.266	PK
2			2483.500	61.899	29.560	-12.101	74.000	32.340	PK
3			2491.228	62.932	30.563	-11.068	74.000	32.370	PK

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

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

Site: AC1	Time: 2018/05/11 - 00:24
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11n-HT40 at channel 2452MHz	

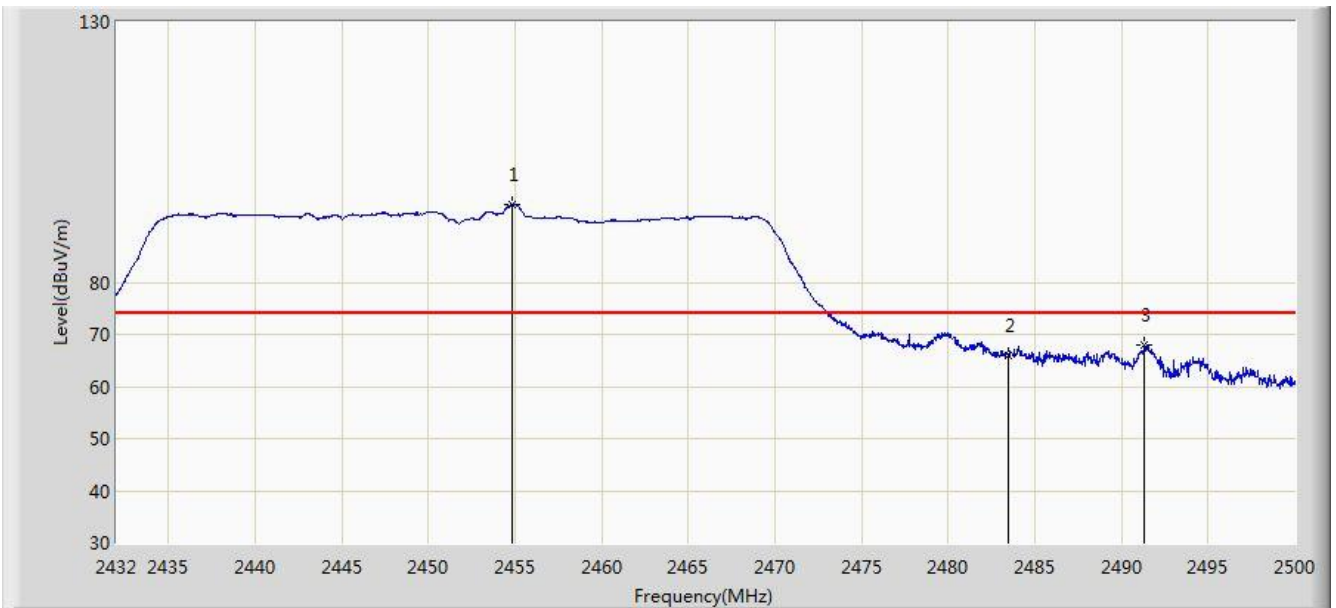


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2453.420	79.606	47.343	N/A	N/A	32.263	AV
2			2483.500	47.884	15.545	-6.116	54.000	32.340	AV

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

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

Site: AC1	Time: 2018/05/11 - 00:21
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11n-HT40 at channel 2452MHz	

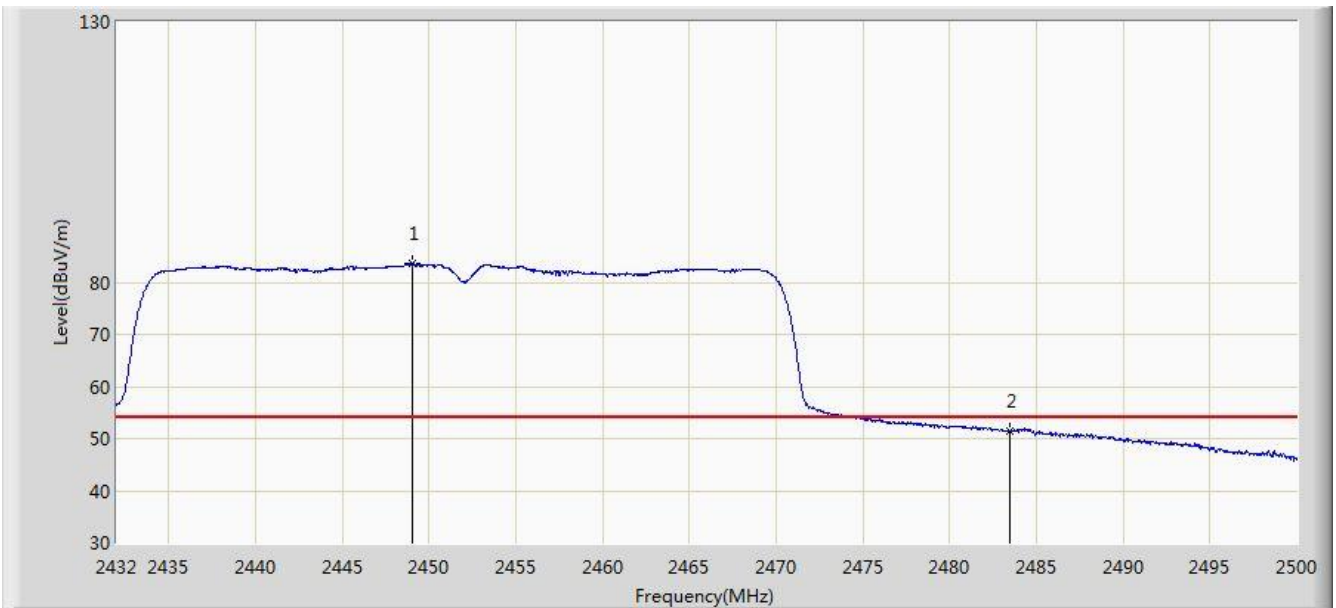


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2454.814	94.986	62.720	N/A	N/A	32.266	PK
2			2483.500	65.998	33.659	-8.002	74.000	32.340	PK
3			2491.330	68.017	35.647	-5.983	74.000	32.370	PK

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

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

Site: AC1	Time: 2018/05/11 - 00:29
Limit: FCC_Part15.209_RE(3m)	Engineer: Cat Hu
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: network PTZ Camera	Power: AC 120V/60Hz
Transmit by 802.11n-HT40 at channel 2452MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2449.068	83.528	51.274	N/A	N/A	32.255	AV
2			2483.500	51.512	19.173	-2.488	54.000	32.340	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

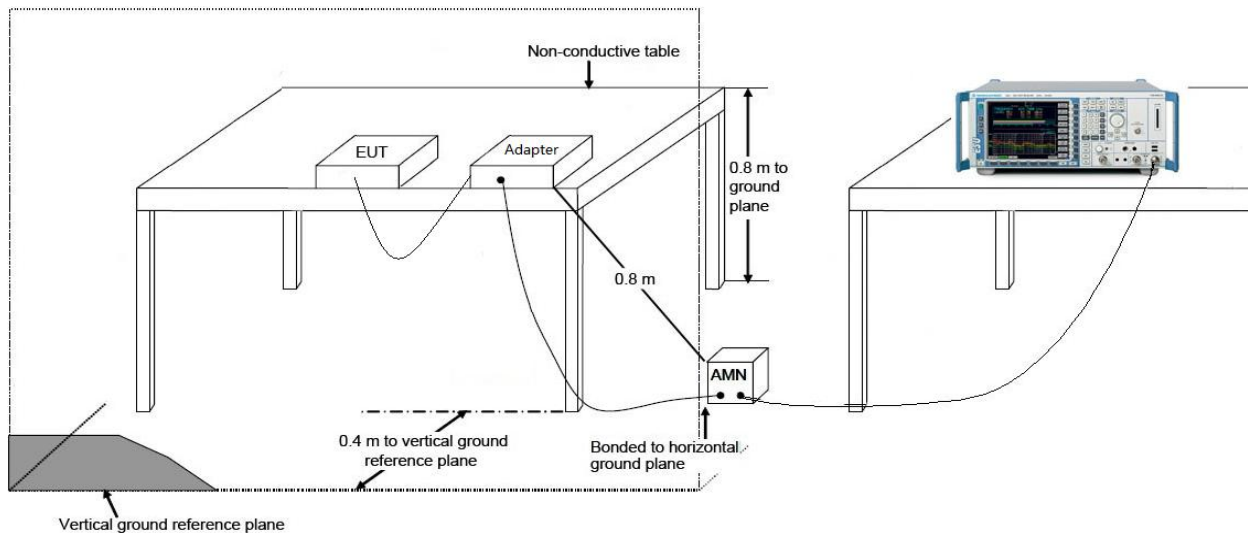
7.8.1. Test Limit

FCC 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.

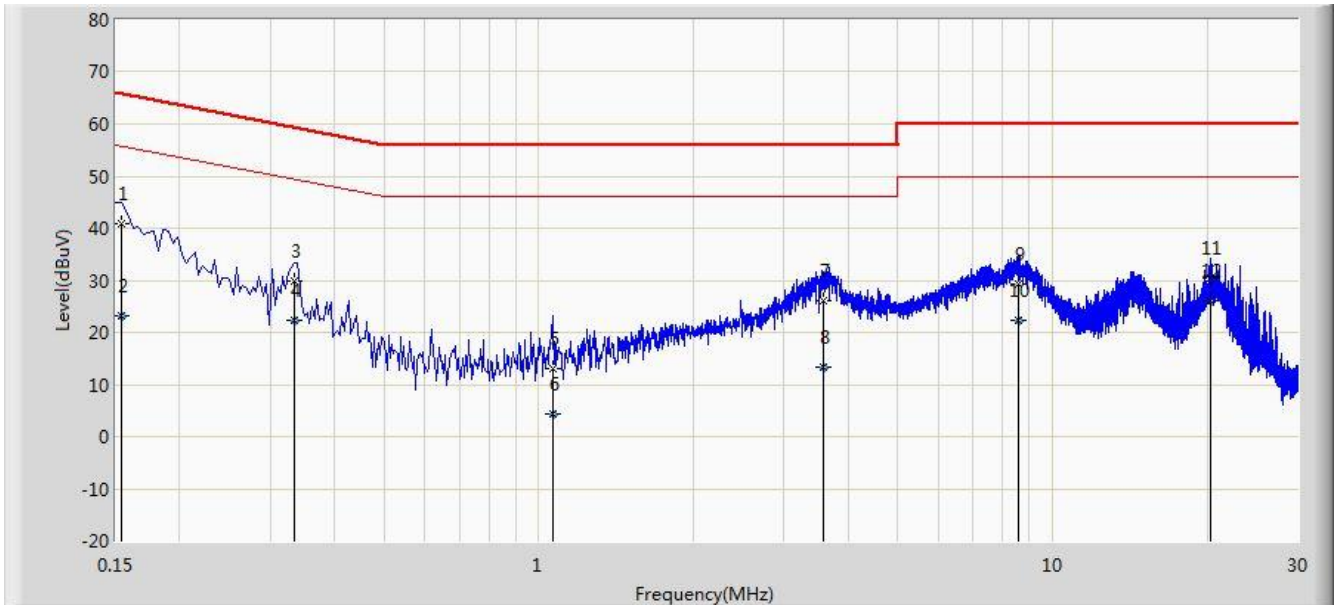
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

7.8.2. Test Setup



7.8.3.Test Result

Site: SR2	Time: 2018/05/12 - 18:46
Limit: FCC_Part15.107_CE_Class B	Engineer: Cat Hu
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: network PTZ Camera	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n20 at Channel 2437MHz	

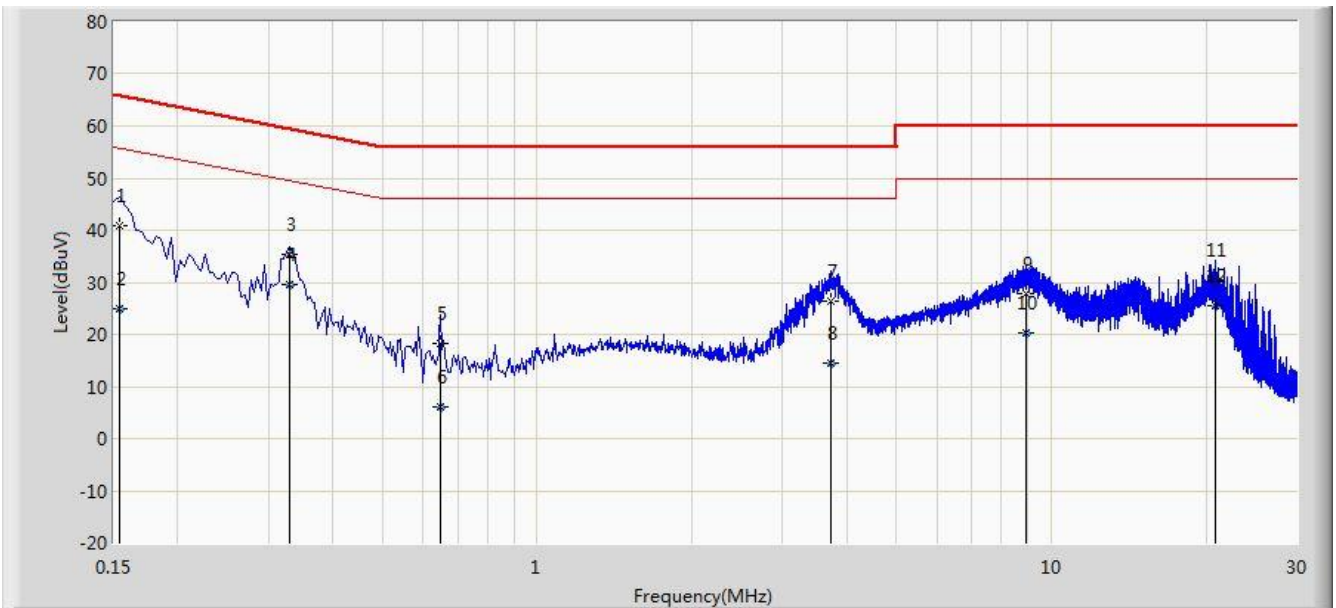


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.154	41.006	30.267	-24.775	65.781	10.740	QP
2			0.154	23.086	12.346	-32.696	55.781	10.740	AV
3			0.334	29.989	19.958	-29.362	59.351	10.031	QP
4			0.334	22.256	12.225	-27.095	49.351	10.031	AV
5			1.062	12.899	2.993	-43.101	56.000	9.906	QP
6			1.062	4.205	-5.701	-41.795	46.000	9.906	AV
7			3.574	26.214	16.300	-29.786	56.000	9.914	QP
8			3.574	13.200	3.285	-32.800	46.000	9.914	AV
9			8.562	29.205	19.019	-30.795	60.000	10.186	QP
10			8.562	22.201	12.015	-27.799	50.000	10.186	AV
11			20.258	30.417	20.277	-29.583	60.000	10.140	QP
12			20.258	26.094	15.954	-23.906	50.000	10.140	AV

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

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

Site: SR2	Time: 2018/05/12 - 18:50
Limit: FCC_Part15.107_CE_Class B	Engineer: Cat Hu
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: network PTZ Camera	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n20 at Channel 2437MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.154	40.809	30.093	-24.972	65.781	10.716	QP
2			0.154	24.870	14.154	-30.912	55.781	10.716	AV
3			0.330	35.220	25.160	-24.231	59.451	10.060	QP
4			0.330	29.631	19.571	-19.820	49.451	10.060	AV
5			0.650	18.153	8.050	-37.847	56.000	10.103	QP
6			0.650	6.226	-3.877	-39.774	46.000	10.103	AV
7			3.722	26.442	16.486	-29.558	56.000	9.956	QP
8			3.722	14.569	4.613	-31.431	46.000	9.956	AV
9			8.922	27.764	17.593	-32.236	60.000	10.171	QP
10			8.922	20.286	10.115	-29.714	50.000	10.171	AV
11			20.810	30.334	20.154	-29.666	60.000	10.181	QP
12			20.810	25.365	15.185	-24.635	50.000	10.181	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 **network PTZ Camera, FCC ID: SVNDH-SD12D** is in compliance with Part 15C of the FCC Rules.

The End