

Product	PORTABLE BLUETOOTH SPEAKER	Temperature	25°C			
Test Engineer	Max Wang	Relative Humidity	56%			
Test Site	AC1	Test Date	2019/01/18			
Test Mode:	2DH5 (Model: M2-MI10)	Test Channel:	00			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit (54dBμV/m).					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	4816.5	36.6	5.9	42.4	74.0	-31.6	Peak	Horizontal
	7383.5	35.6	12.6	48.3	74.0	-25.7	Peak	Horizontal
*	7842.5	35.1	13.3	48.3	79.2	-30.9	Peak	Horizontal
*	8701.0	35.3	13.0	48.3	79.2	-30.9	Peak	Horizontal
	4808.0	36.2	5.9	42.1	74.0	-31.9	Peak	Vertical
	7536.5	36.5	12.9	49.4	74.0	-24.6	Peak	Vertical
*	8692.5	33.0	13.0	46.0	79.2	-33.2	Peak	Vertical
*	9755.0	32.7	16.2	48.9	79.2	-30.3	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (99.2dBµV/m) or 15.209 which is higher.

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

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

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Product	PORTABLE BLUETOOTH SPEAKER	Temperature	25°C					
Test Engineer	Max Wang	Relative Humidity	56%					
Test Site	AC1	Test Date	2019/01/18					
Test Mode:	2DH5 (Model: M2-MI10)	Test Channel:	39					
Remark:	Average measurement was n	ot performed if peak	level lower than average					
	limit (54dBμV/m).							
	2. Other frequency was 20dB be	Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.							

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	4017.5	37.8	3.4	41.2	74.0	-32.8	Peak	Horizontal
	4884.5	37.5	6.0	43.5	74.0	-30.5	Peak	Horizontal
*	5887.5	35.3	7.8	43.1	79.4	-36.3	Peak	Horizontal
*	7086.0	35.9	11.9	47.8	79.4	-31.6	Peak	Horizontal
	3975.0	38.2	3.1	41.4	74.0	-32.6	Peak	Vertical
	4723.0	36.4	5.6	42.0	74.0	-32.0	Peak	Vertical
*	6006.5	35.4	7.9	43.3	79.4	-36.1	Peak	Vertical
*	6797.0	34.4	10.3	44.7	79.4	-34.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (99.4dBµV/m) or 15.209 which is higher.

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

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

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Product	PORTABLE BLUETOOTH SPEAKER	Temperature	25°C			
Test Engineer	Max Wang	Relative Humidity	56%			
Test Site	AC1	Test Date	2019/01/18			
Test Mode:	2DH5 (Model: M2-MI10)	Test Channel:	78			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit (54dBμV/m).					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	4774.0	37.1	5.7	42.7	74.0	-31.3	Peak	Horizontal
	7511.0	34.2	12.7	47.0	74.0	-27.0	Peak	Horizontal
*	7919.0	37.5	13.4	50.9	79.7	-28.8	Peak	Horizontal
*	8701.0	35.4	13.0	48.5	79.7	-31.2	Peak	Horizontal
	5097.0	36.1	6.6	42.6	74.0	-31.4	Peak	Vertical
	7443.0	35.0	12.9	48.0	74.0	-26.0	Peak	Vertical
*	8616.0	34.0	12.9	46.8	79.7	-32.9	Peak	Vertical
*	9644.5	34.4	15.5	49.9	79.7	-29.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (99.7dBµV/m) or 15.209 which is higher.

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

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

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Product	PORTABLE BLUETOOTH SPEAKER	Temperature	25°C			
Test Engineer	Max Wang	Relative Humidity	56%			
Test Site	AC1	Test Date	2019/01/18			
Test Mode:	3DH5 (Model: M2-MI10)	Test Channel:	00			
Remark:	1. Average measurement was no	t performed if peak l	level lower than average			
	limit (54dBμV/m).					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	4128.0	37.2	3.8	41.0	74.0	-33.0	Peak	Horizontal
	4799.5	37.9	5.8	43.7	74.0	-30.3	Peak	Horizontal
*	5709.0	35.9	7.2	43.1	79.4	-36.3	Peak	Horizontal
*	6516.5	36.1	9.9	46.0	79.4	-33.4	Peak	Horizontal
	4102.5	37.3	3.6	40.9	74.0	-33.1	Peak	Vertical
	4833.5	36.4	5.9	42.3	74.0	-31.7	Peak	Vertical
*	6006.5	35.4	7.9	43.3	79.4	-36.1	Peak	Vertical
*	7851.0	34.2	13.3	47.6	79.4	-31.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (99.4dBµV/m) or 15.209 which is higher.

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

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

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Product	PORTABLE BLUETOOTH SPEAKER	Temperature	25°C			
Test Engineer	Max Wang	Relative Humidity	56%			
Test Site	AC1	Test Date	2019/01/18			
Test Mode:	3DH5 (Model: M2-MI10)	Test Channel:	39			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit (54dBμV/m).					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	4213.0	36.0	4.0	40.0	74.0	-34.0	Peak	Horizontal
	4825.0	37.1	5.9	43.0	74.0	-31.0	Peak	Horizontal
*	5751.5	36.2	7.4	43.6	79.8	-36.2	Peak	Horizontal
*	6737.5	35.5	10.1	45.6	79.8	-34.2	Peak	Horizontal
	4315.0	37.1	4.4	41.5	74.0	-32.5	Peak	Vertical
	4884.5	36.4	6.0	42.3	74.0	-31.7	Peak	Vertical
*	5760.0	34.9	7.4	42.4	79.8	-37.4	Peak	Vertical
*	6831.0	36.0	10.5	46.5	79.8	-33.3	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (99.8dBµV/m) or 15.209 which is higher.

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

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

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Product	PORTABLE BLUETOOTH SPEAKER	Temperature	25°C				
Test Engineer	Max Wang	Relative Humidity	56%				
Test Site	AC1	Test Date	2019/01/18				
Test Mode:	3DH5 (Model: M2-MI10)	Test Channel:	78				
Remark:	1. Average measurement was no	t performed if peak	level lower than average				
	limit (54dBμV/m).						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	4289.5	37.6	4.3	41.8	74.0	-32.2	Peak	Horizontal
	4961.0	37.1	6.1	43.2	74.0	-30.8	Peak	Horizontal
*	5734.5	35.3	7.4	42.7	80.1	-37.4	Peak	Horizontal
*	6610.0	35.7	10.2	45.9	80.1	-34.2	Peak	Horizontal
	4298.0	37.3	4.4	41.6	74.0	-32.4	Peak	Vertical
	5097.0	36.5	6.6	43.0	74.0	-31.0	Peak	Vertical
*	5768.5	36.1	7.4	43.6	80.1	-36.5	Peak	Vertical
*	6899.0	35.5	10.8	46.2	80.1	-33.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (100.1dBµV/m) or 15.209 which is higher.

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

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

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Product	PORTABLE BLUETOOTH SPEAKER	Temperature	25°C
Test Engineer	Max Wang	Relative Humidity	56%
Test Site	AC1	Test Date	2019/01/18
Test Mode	DH5 (Model: M4)	Test Channel	00
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average
	limit (54dBμV/m).		
	2. Other frequency was 20dB bel	ow limit line within 1	-18GHz, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	4077.0	38.5	3.5	42.0	74.0	-32.0	Peak	Horizontal
	4808.0	42.9	5.9	48.8	74.0	-25.2	Peak	Horizontal
*	6499.5	35.9	9.9	45.9	81.3	-35.4	Peak	Horizontal
*	7205.0	38.8	12.6	51.4	81.3	-29.9	Peak	Horizontal
	4213.0	37.4	4.0	41.4	74.0	-32.6	Peak	Vertical
	4808.0	39.2	5.9	45.1	74.0	-28.9	Peak	Vertical
*	5768.5	36.6	7.4	44.0	81.3	-37.3	Peak	Vertical
*	7205.0	36.5	12.6	49.1	81.3	-32.2	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (101.3dBµV/m) or 15.209 which is higher.

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

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

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Product	PORTABLE BLUETOOTH SPEAKER	Temperature	25°C
Test Engineer	Max Wang	Relative Humidity	56%
Test Site	AC1	Test Date	2019/01/18
Test Mode:	DH5 (Model: M4)	Test Channel:	39
Remark:	 Average measurement was no limit (54dBµV/m). Other frequency was 20dB bel in the report. 		•

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	4884.5	42.2	6.0	48.2	74.0	-25.8	Peak	Horizontal
	7324.0	39.4	12.6	52.0	74.0	-22.0	Peak	Horizontal
*	7876.5	34.9	13.3	48.2	81.5	-33.3	Peak	Horizontal
*	8692.5	34.8	13.0	47.8	81.5	-33.7	Peak	Horizontal
	4884.5	39.4	6.0	45.3	74.0	-28.7	Peak	Vertical
	7324.0	39.5	12.6	52.1	74.0	-21.9	Peak	Vertical
*	7851.0	35.2	13.3	48.5	81.5	-33.0	Peak	Vertical
*	8820.0	35.8	13.3	49.2	81.5	-32.3	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (101.5dBµV/m) or 15.209 which is higher.

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

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

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Product	PORTABLE BLUETOOTH SPEAKER	Temperature	25°C		
Test Engineer	Max Wang	Relative Humidity	56%		
Test Site	AC1	Test Date	2019/01/18		
Test Mode:	DH5 (Model: M4)	Test Channel:	78		
Remark:	1. Average measurement was no	t performed if peak I	evel lower than average		
	limit (54dBμV/m).				
	2. Other frequency was 20dB below limit line within 1-18GHz, there is r				
	in the report.				

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	4961.0	39.6	6.1	45.7	74.0	-28.3	Peak	Horizontal
	7443.0	40.7	12.9	53.7	74.0	-20.3	Peak	Horizontal
*	7910.5	35.7	13.4	49.1	82.2	-33.1	Peak	Horizontal
*	8718.0	35.7	13.0	48.7	82.2	-33.5	Peak	Horizontal
	4961.0	40.2	6.1	46.3	74.0	-27.7	Peak	Vertical
	7443.0	39.7	12.9	52.7	74.0	-21.3	Peak	Vertical
*	8021.0	36.9	13.7	50.6	82.2	-31.6	Peak	Vertical
*	8735.0	35.9	13.0	48.9	82.2	-33.3	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (102.2dBµV/m) or 15.209 which is higher.

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

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

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Product	PORTABLE BLUETOOTH SPEAKER	Temperature	25°C		
Test Engineer	Max Wang	Relative Humidity	56%		
Test Site	AC1	Test Date	2019/01/18		
Test Mode:	2DH5 (Model: M4)	Test Channel:	00		
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average		
	limit (54dBμV/m).				
	2. Other frequency was 20dB below limit line within 1-18GHz, there is no				
	in the report.				

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	4051.5	39.0	3.5	42.4	74.0	-31.6	Peak	Horizontal
	4808.0	39.9	5.9	45.8	74.0	-28.2	Peak	Horizontal
*	6372.0	36.3	9.1	45.5	79.4	-33.9	Peak	Horizontal
*	7205.0	37.0	12.6	49.6	79.4	-29.8	Peak	Horizontal
	3677.5	39.6	2.2	41.9	74.0	-32.1	Peak	Vertical
	4799.5	37.6	5.8	43.4	74.0	-30.6	Peak	Vertical
*	6287.0	36.7	8.7	45.4	79.4	-34.0	Peak	Vertical
*	6788.5	37.4	10.2	47.6	79.4	-31.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (99.4dBµV/m) or 15.209 which is higher.

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

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

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Product	PORTABLE BLUETOOTH SPEAKER	Temperature	25°C			
Test Engineer	Max Wang	Relative Humidity	56%			
Test Site	AC1	Test Date	2019/01/18			
Test Mode:	2DH5 (Model: M4)	Test Channel:	39			
Remark:	1. Average measurement was no	t performed if peak	level lower than average			
	limit (54dBμV/m).					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not s					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	4884.5	39.6	6.0	45.6	74.0	-28.4	Peak	Horizontal
	7324.0	37.7	12.6	50.3	74.0	-23.7	Peak	Horizontal
*	7910.5	35.4	13.4	48.8	79.5	-30.7	Peak	Horizontal
*	8735.0	34.7	13.0	47.7	79.5	-31.8	Peak	Horizontal
	3771.0	39.2	2.5	41.7	74.0	-32.3	Peak	Vertical
	4884.5	37.3	6.0	43.3	74.0	-30.7	Peak	Vertical
*	5845.0	35.8	7.8	43.6	79.5	-35.9	Peak	Vertical
*	6525.0	36.2	10.0	46.2	79.5	-33.3	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (99.5dBµV/m) or 15.209 which is higher.

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

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

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Product	PORTABLE BLUETOOTH SPEAKER	Temperature	25°C			
Test Engineer	Max Wang	Relative Humidity	56%			
Test Site	AC1	Test Date	2019/01/18			
Test Mode:	2DH5 (Model: M4)	Test Channel:	78			
Remark:	1. Average measurement was no	t performed if peak	level lower than average			
	limit (54dBμV/m).					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not sho					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	4315.0	38.2	4.4	42.6	74.0	-31.4	Peak	Horizontal
	7443.0	37.3	12.9	50.2	74.0	-23.8	Peak	Horizontal
*	7919.0	35.3	13.4	48.7	80.0	-31.3	Peak	Horizontal
*	8811.5	34.7	13.3	48.0	80.0	-32.0	Peak	Horizontal
	3813.5	38.0	2.8	40.8	74.0	-33.2	Peak	Vertical
	4995.0	36.8	6.3	43.1	74.0	-30.9	Peak	Vertical
*	6159.5	36.0	8.3	44.3	80.0	-35.7	Peak	Vertical
*	6593.0	36.0	10.2	46.3	80.0	-33.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (100.0dBµV/m) or 15.209 which is higher.

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

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

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Test Engineer	Max Wang	Relative Humidity	56%				
Test Site	AC1	Test Date	2019/01/18				
Test Mode:	3DH5 (Model: M4)	Test Channel:	00				
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average				
	limit (54dBμV/m).						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not sho						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	4323.5	37.7	4.4	42.1	74.0	-31.9	Peak	Horizontal
	4808.0	38.5	5.9	44.4	74.0	-29.6	Peak	Horizontal
*	6066.0	37.1	8.0	45.0	79.1	-34.1	Peak	Horizontal
*	7757.5	37.5	13.0	50.4	79.1	-28.7	Peak	Horizontal
	4026.0	38.2	3.4	41.6	74.0	-32.4	Peak	Vertical
	4825.0	37.2	5.9	43.1	74.0	-30.9	Peak	Vertical
*	5581.5	37.0	7.0	43.9	79.1	-35.2	Peak	Vertical
*	6542.0	36.1	10.1	46.2	79.1	-32.9	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 ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

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

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Test Engineer	Max Wang	Relative Humidity	56%				
Test Site	AC1	Test Date	2019/01/18				
Test Mode:	3DH5 (Model: M4)	Test Channel:	39				
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average				
	limit (54dBμV/m).						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	4884.5	38.5	6.0	44.5	74.0	-29.5	Peak	Horizontal
	7324.0	37.0	12.6	49.6	74.0	-24.4	Peak	Horizontal
*	7978.5	36.2	13.6	49.9	79.5	-29.6	Peak	Horizontal
*	8735.0	35.9	13.0	48.9	79.5	-30.6	Peak	Horizontal
	4034.5	37.7	3.4	41.1	74.0	-32.9	Peak	Vertical
	4884.5	37.3	6.0	43.3	74.0	-30.7	Peak	Vertical
*	6550.5	36.4	10.2	46.6	79.5	-32.9	Peak	Vertical
*	7196.5	35.9	12.5	48.4	79.5	-31.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (99.5dBµV/m) or 15.209 which is higher.

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

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

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Product	PORTABLE BLUETOOTH SPEAKER	Temperature	25°C				
Test Engineer	Max Wang	Relative Humidity	56%				
Test Site	AC1	Test Date	2019/01/18				
Test Mode:	3DH5 (Model: M4)	Test Channel:	78				
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average				
	limit (54dBμV/m).						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not sh						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	4740.0	36.9	5.7	42.6	74.0	-31.4	Peak	Horizontal
	4961.0	36.9	6.1	43.0	74.0	-31.0	Peak	Horizontal
*	6227.5	36.7	8.6	45.3	81.1	-35.8	Peak	Horizontal
*	6550.5	36.2	10.2	46.3	81.1	-34.8	Peak	Horizontal
	4306.5	37.9	4.4	42.2	74.0	-31.8	Peak	Vertical
	4927.0	37.8	6.1	43.9	74.0	-30.1	Peak	Vertical
*	7086.0	36.7	11.9	48.6	81.1	-32.5	Peak	Vertical
*	7978.5	37.2	13.6	50.8	81.1	-30.3	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (101.1dBµV/m) or 15.209 which is higher.

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

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

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The Worst Case of Radiated Emission below 1GHz:

Test Mode: Worst Case (Model: M2-MI10)	
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery
Probe: VULB 9168 _20-2000MHz	Polarity: Horizontal
Limit: FCC_Part15.209_RSE(3m)	Engineer: David Lv
Site: AC1	Time: 2019/01/18 - 23:03

90 80 70 60 20 10 30 100 Frequency(MHz)

No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			30.000	29.188	15.473	-10.812	40.000	13.715	QP
2			131.850	24.360	10.387	-19.140	43.500	13.973	QP
3			155.130	25.713	10.417	-17.787	43.500	15.296	QP
4			201.205	26.916	15.690	-16.584	43.500	11.226	QP
5			276.380	33.170	19.369	-12.830	46.000	13.801	QP
6		*	438.370	23.492	5.873	-22.508	46.000	17.619	QP

Note 1: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

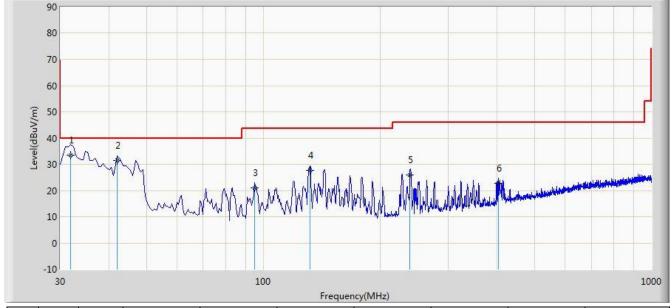
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

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: $9kHz \sim 30MHz$, $18GHz \sim 25GHz$), therefore no data appear in the report.

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Test Mode: Worst Case (Model: M2-MI10)	
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery
Probe: VULB 9168 _20-2000MHz	Polarity: Vertical
Limit: FCC_Part15.209_RSE(3m)	Engineer: David Lv
Site: AC1	Time: 2019/01/18 - 23:11



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			31.940	33.450	19.638	-6.550	40.000	13.812	QP
2			42.125	31.324	16.834	-8.676	40.000	14.490	QP
3		*	94.990	21.137	10.449	-22.363	43.500	10.688	QP
4			131.850	27.547	13.574	-15.953	43.500	13.973	QP
5			239.035	26.054	13.211	-19.946	46.000	12.844	QP
6			402.965	22.755	6.090	-23.245	46.000	16.665	QP

Note 1: Measure Level $(dB\mu V/m)$ = Reading Level $(dB\mu V)$ + Factor (dB)

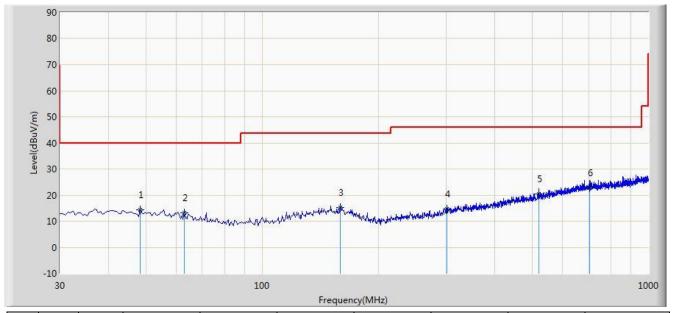
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

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: $9kHz \sim 30MHz$, $18GHz \sim 25GHz$), therefore no data appear in the report.

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Test Mode: Worst Case (Model: M4)	
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery
Probe: VULB 9168 _20-2000MHz	Polarity: Horizontal
Limit: FCC_Part15.209_RSE(3m)	Engineer: David Lv
Site: AC1	Time: 2019/02/12 - 17:08



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			48.430	14.234	0.016	-25.766	40.000	14.218	QP
2			62.980	13.044	0.140	-26.956	40.000	12.904	QP
3			159.495	15.300	0.020	-28.200	43.500	15.280	QP
4			300.630	14.555	0.140	-31.445	46.000	14.414	QP
5			519.365	20.570	1.610	-25.430	46.000	18.959	QP
6		*	703.665	22.676	0.538	-23.324	46.000	22.137	QP

Note 1: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

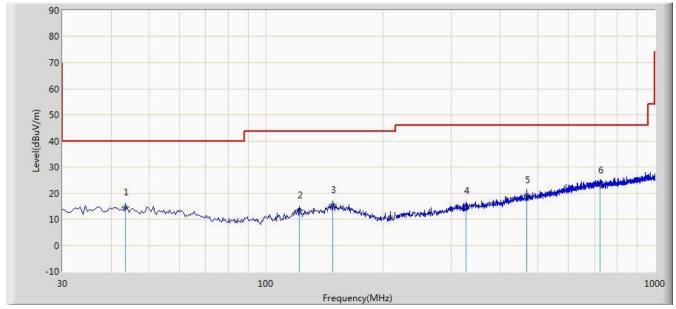
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

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: $9kHz \sim 30MHz$, $18GHz \sim 25GHz$), therefore no data appear in the report.

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Test Mode: Worst Case (Model: M4)	
EUT: PORTABLE BLUETOOTH SPEAKER 2#	Power: By Battery
Probe: VULB 9168 _20-2000MHz	Polarity: Vertical
Limit: FCC_Part15.209_RSE(3m)	Engineer: David Lv
Site: AC1	Time: 2019/02/12 - 17:09



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			43.580	14.519	0.140	-25.481	40.000	14.379	QP
2			122.150	13.420	0.050	-30.080	43.500	13.369	QP
3		*	148.340	15.530	0.360	-27.970	43.500	15.170	QP
4			326.820	15.339	0.221	-30.661	46.000	15.118	QP
5			468.440	19.315	1.171	-26.685	46.000	18.144	QP
6			722.580	23.049	0.624	-22.951	46.000	22.425	QP

Note 1: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + 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: $9kHz \sim 30MHz$, $18GHz \sim 25GHz$), therefore no data appear in the report.

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7.10. Radiated Restricted Band Edge Measurement

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	8.025 - 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			

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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	Field Strength	Measured Distance						
[MHz]	[V/m]	[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						

7.10.1. Test Procedure Used

ANSI C63.10 Section 6.3 (General Requirements)

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

7.10.2. 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

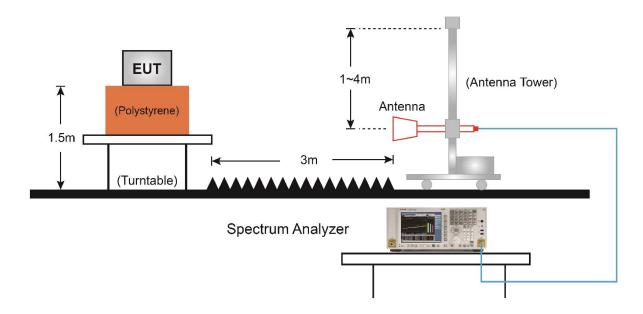
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Average Measurements above 1GHz (Method VB)

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- VBW; If the EUT is configured to transmit with duty cycle ≥ 98%, set VBW = 10 Hz.
 If the EUT duty cycle is < 98%, set VBW ≥ 1/T. T is the minimum transmission duration.
- 4. Detector = Peak
- 5. Sweep time = auto
- 6. Trace mode = max hold
- 7. Trace was allowed to stabilize

7.10.3. Test Setup

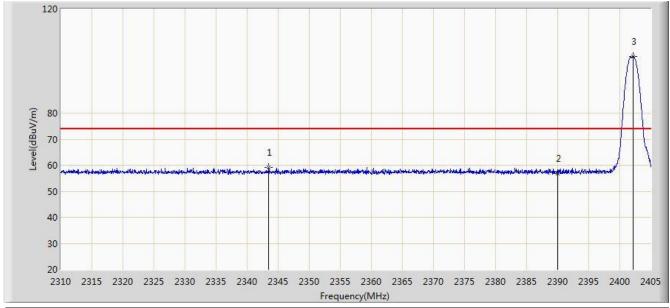


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7.10.4. Test Result

Site: AC1	Time: 2019/01/18 - 11:07			
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang			
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal			
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery			
Test Mode: Transmit by DH5 at Channel 2402MHz (Model: M2-MI10)				



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2343.488	59.079	26.660	-14.921	74.000	32.419	PK
2			2390.000	56.694	24.367	-17.306	74.000	32.327	PK
3		*	2402.198	101.655	69.351	N/A	N/A	32.304	PK

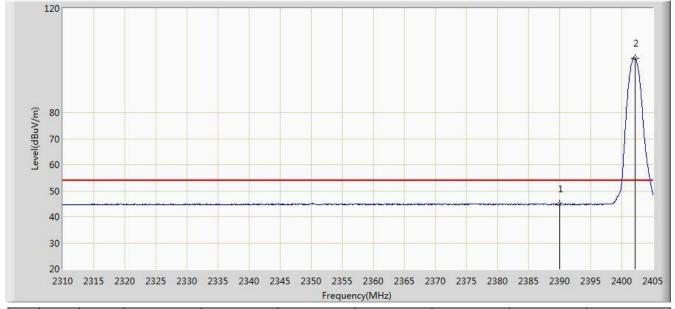
Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

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

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Site: AC1	Time: 2019/01/18 - 11:09			
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang			
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal			
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery			
Test Mode: Transmit by DH5 at Channel 2402MHz (Model: M2-MI10)				



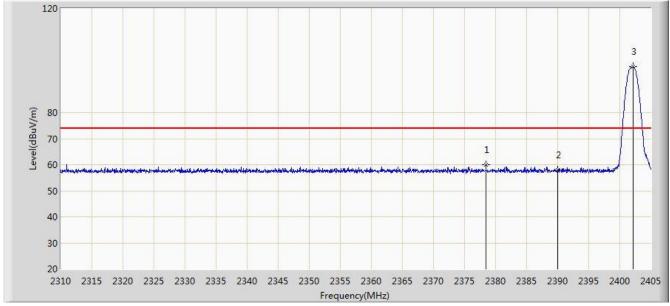
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2390.000	44.794	12.467	-9.206	54.000	32.327	AV
2		*	2402.150	100.943	68.639	N/A	N/A	32.304	AV

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

FCC ID: 2AD2MM1A Page Number: 84 of 137



Site: AC1	Time: 2019/01/18 - 11:14				
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by DH5 at Channel 2402MHz (Model: M2-MI10)					



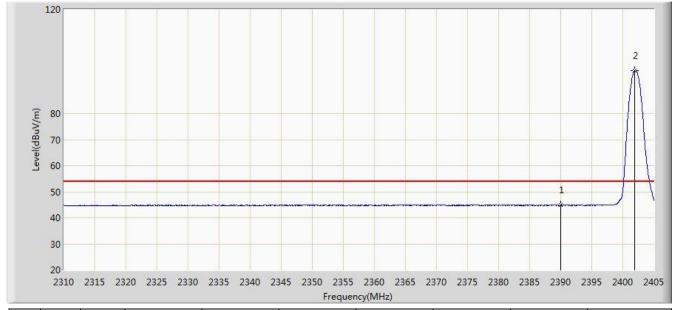
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2378.448	60.074	27.731	-13.926	74.000	32.343	PK
2			2390.000	57.986	25.659	-16.014	74.000	32.327	PK
3		*	2402.150	97.549	65.245	N/A	N/A	32.304	PK

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

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Site: AC1	Time: 2019/01/18 - 11:17			
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang			
Probe: BBHA9120D_1-18GHz	Polarity: Vertical			
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery			
Test Mode: Transmit by DH5 at Channel 2402MHz (Model: M2-MI10)				



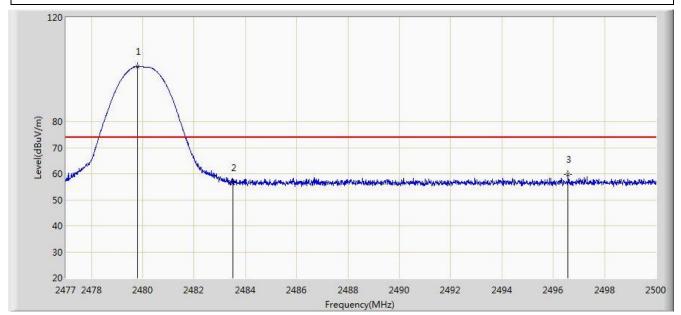
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2390.000	44.862	12.535	-9.138	54.000	32.327	AV
2		*	2401.913	96.559	64.254	N/A	N/A	32.305	AV

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

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Site: AC1	Time: 2019/01/18 - 11:19				
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by DH5 at Channel 2480MHz (Model: M2-MI10)					



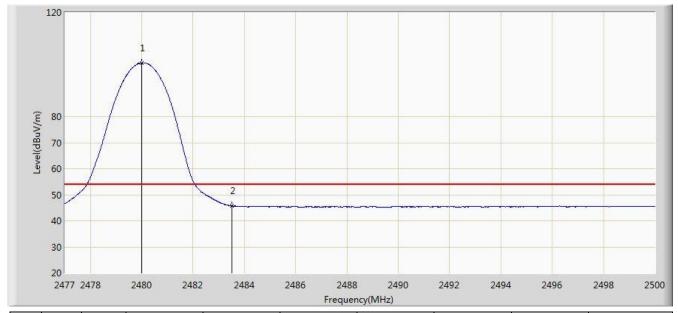
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2479.783	101.159	68.834	N/A	N/A	32.325	PK
2			2483.500	56.574	24.235	-17.426	74.000	32.340	PK
3			2496.584	59.768	27.379	-14.232	74.000	32.389	PK

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

FCC ID: 2AD2MM1A Page Number: 87 of 137



Site: AC1	Time: 2019/01/18 - 11:20				
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by DH5 at Channel 2480MHz (Model: M2-MI10)					



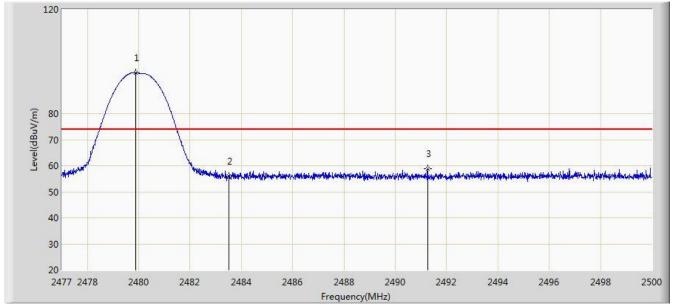
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2479.990	100.641	68.316	N/A	N/A	32.325	AV
2			2483.500	45.684	13.345	-8.316	54.000	32.340	AV

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

FCC ID: 2AD2MM1A Page Number: 88 of 137



Site: AC1	Time: 2019/01/18 - 11:21					
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang					
Probe: BBHA9120D_1-18GHz	Polarity: Vertical					
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery					
Test Mode: Transmit by DH5 at Channel 2480MHz (Model: M2-MI10)						



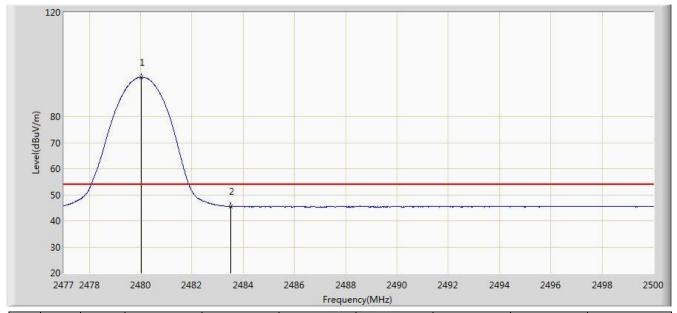
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2479.886	95.649	63.324	N/A	N/A	32.325	PK
2			2483.500	55.957	23.618	-18.043	74.000	32.340	PK
3			2491.260	58.815	26.445	-15.185	74.000	32.370	PK

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

FCC ID: 2AD2MM1A Page Number: 89 of 137



Site: AC1	Time: 2019/01/18 - 11:22				
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by DH5 at Channel 2480MHz (Model: M2-MI10)					



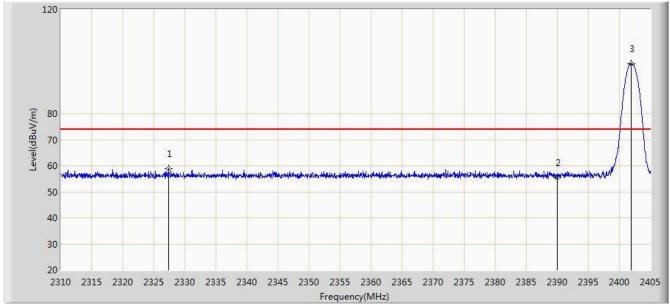
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2480.024	95.168	62.843	N/A	N/A	32.325	AV
2			2483.500	45.462	13.123	-8.538	54.000	32.340	AV

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

FCC ID: 2AD2MM1A Page Number: 90 of 137



Site: AC1	Time: 2019/01/18 - 11:24					
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang					
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal					
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery					
Test Mode: Transmit by 2DH5 at Channel 2402MHz (Model: M2-MI10)						



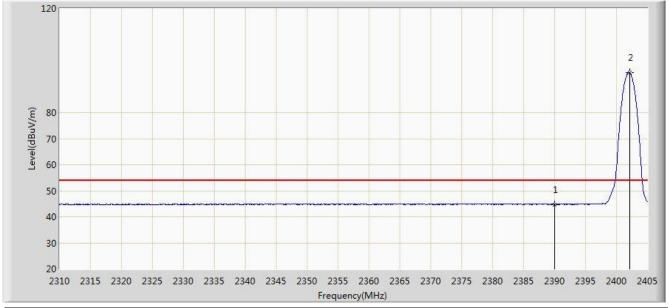
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2327.433	58.737	26.250	-15.263	74.000	32.487	PK
2			2390.000	55.476	23.149	-18.524	74.000	32.327	PK
3		*	2401.865	99.239	66.934	N/A	N/A	32.305	PK

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

FCC ID: 2AD2MM1A Page Number: 91 of 137



Site: AC1	Time: 2019/01/18 - 11:25					
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang					
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal					
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery					
Test Mode: Transmit by 2DH5 at Channel 2402MHz (Model: M2-MI10)						



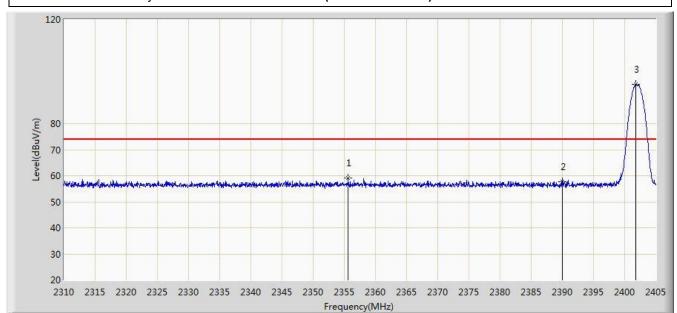
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2390.000	44.776	12.449	-9.224	54.000	32.327	AV
2		*	2402.150	95.341	63.037	N/A	N/A	32.304	AV

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

FCC ID: 2AD2MM1A Page Number: 92 of 137



Site: AC1	Time: 2019/01/18 - 11:28			
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang			
Probe: BBHA9120D_1-18GHz	Polarity: Vertical			
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery			
Test Mode: Transmit by 2DH5 at Channel 2402MHz (Model: M2-MI10)				



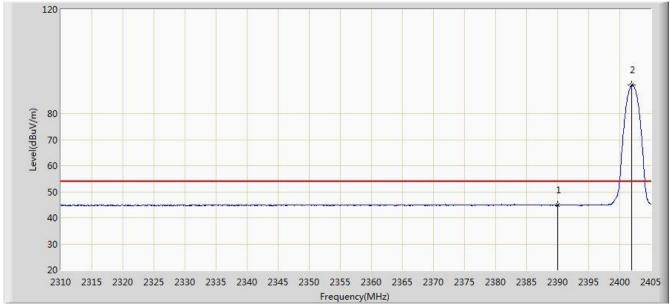
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2355.647	59.182	26.797	-14.818	74.000	32.385	PK
2			2390.000	57.547	25.220	-16.453	74.000	32.327	PK
3		*	2401.770	95.008	62.703	N/A	N/A	32.305	PK

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

FCC ID: 2AD2MM1A Page Number: 93 of 137



Site: AC1	Time: 2019/01/18 - 11:28			
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang			
Probe: BBHA9120D_1-18GHz	Polarity: Vertical			
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery			
Test Mode: Transmit by 2DH5 at Channel 2402MHz (Model: M2-MI10)				



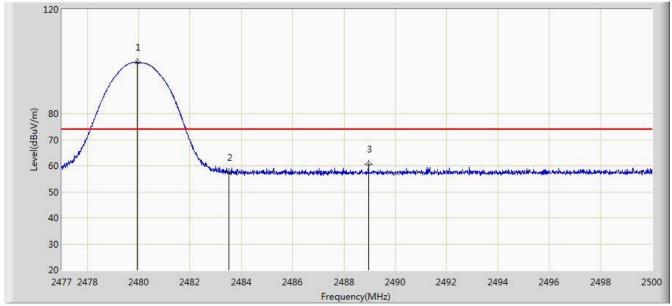
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2390.000	44.832	12.505	-9.168	54.000	32.327	AV
2		*	2401.960	91.004	58.699	N/A	N/A	32.305	AV

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

FCC ID: 2AD2MM1A Page Number: 94 of 137



Site: AC1	Time: 2019/01/18 - 11:29				
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by 2DH5 at Channel 2480MHz (Model: M2-MI10)					



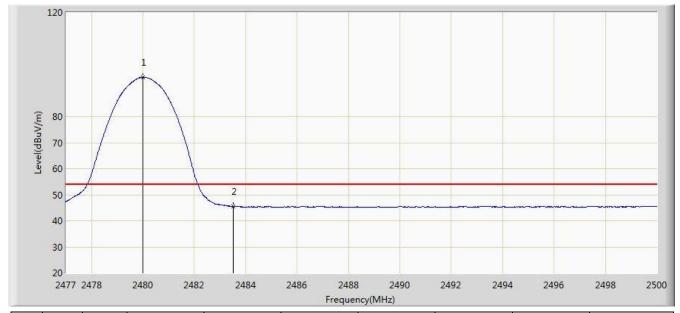
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2479.933	99.693	67.368	N/A	N/A	32.325	PK
2			2483.500	57.337	24.998	-16.663	74.000	32.340	PK
3			2488.948	60.454	28.093	-13.546	74.000	32.360	PK

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

FCC ID: 2AD2MM1A Page Number: 95 of 137



Site: AC1	Time: 2019/01/18 - 11:30			
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang			
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal			
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery			
Test Mode: Transmit by 2DH5 at Channel 2480MHz (Model: M2-MI10)				



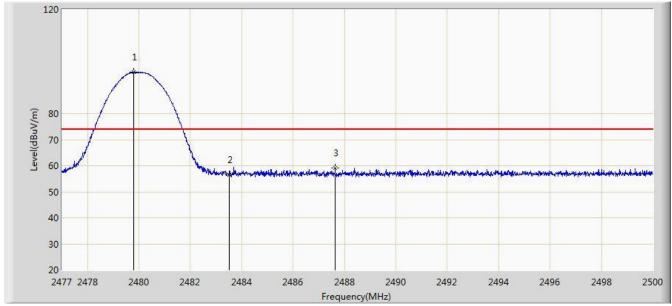
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2479.990	95.140	62.815	N/A	N/A	32.325	AV
2			2483.500	45.471	13.132	-8.529	54.000	32.340	AV

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

FCC ID: 2AD2MM1A Page Number: 96 of 137



Site: AC1	Time: 2019/01/18 - 11:31				
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by 2DH5 at Channel 2480MHz (Model: M2-MI10)					



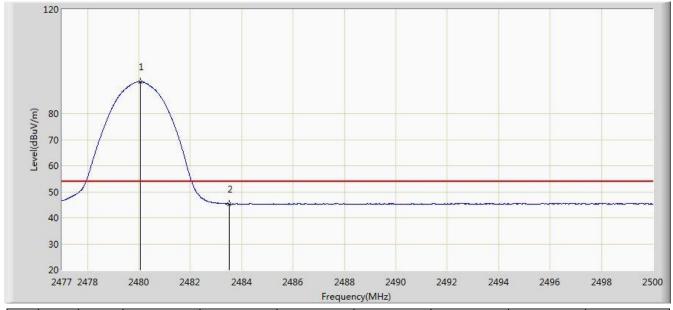
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2479.783	96.024	63.699	N/A	N/A	32.325	PK
2			2483.500	56.660	24.321	-17.340	74.000	32.340	PK
3			2487.637	59.123	26.768	-14.877	74.000	32.355	PK

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

FCC ID: 2AD2MM1A Page Number: 97 of 137



Site: AC1	Time: 2019/01/18 - 11:32				
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by 2DH5 at Channel 2480MHz (Model: M2-MI10)					



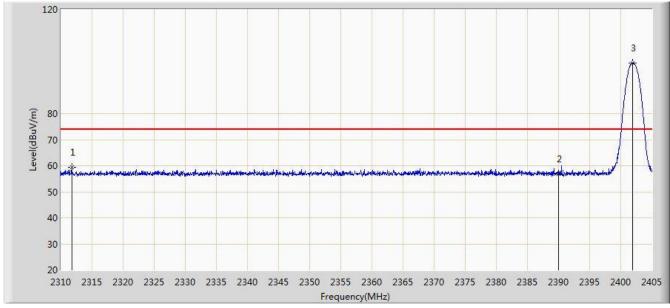
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2480.059	92.206	59.880	N/A	N/A	32.325	AV
2			2483.500	45.321	12.982	-8.679	54.000	32.340	AV

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

FCC ID: 2AD2MM1A Page Number: 98 of 137



Site: AC1	Time: 2019/01/18 - 11:34				
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by 3DH5 at Channel 2402MHz (Model: M2-MI10)					



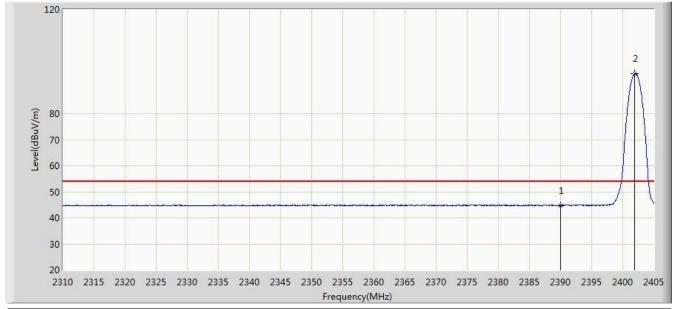
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2311.758	59.459	26.913	-14.541	74.000	32.547	PK
2			2390.000	56.777	24.450	-17.223	74.000	32.327	PK
3		*	2401.865	99.384	67.079	N/A	N/A	32.305	PK

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

FCC ID: 2AD2MM1A Page Number: 99 of 137



Site: AC1	Time: 2019/01/18 - 11:36				
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by 3DH5 at Channel 2402MHz (Model: M2-MI10)					



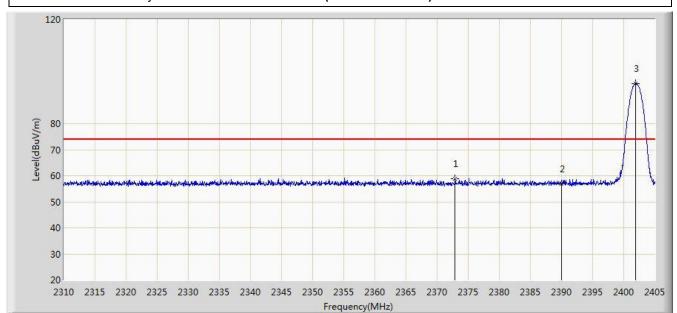
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2390.000	44.748	12.421	-9.252	54.000	32.327	AV
2		*	2401.960	95.354	63.049	N/A	N/A	32.305	AV

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

FCC ID: 2AD2MM1A Page Number: 100 of 137



Site: AC1	Time: 2019/01/18 - 11:39				
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by 3DH5 at Channel 2402MHz (Model: M2-MI10)					



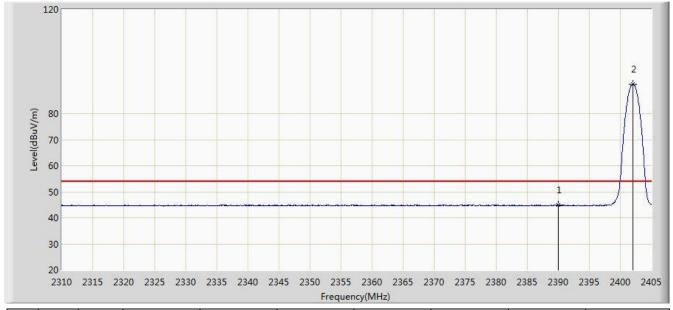
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2372.890	58.925	26.573	-15.075	74.000	32.352	PK
2			2390.000	56.948	24.621	-17.052	74.000	32.327	PK
3		*	2401.913	95.444	63.139	N/A	N/A	32.305	PK

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

FCC ID: 2AD2MM1A Page Number: 101 of 137



Site: AC1	Time: 2019/01/18 - 11:40				
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by 3DH5 at Channel 2402MHz (Model: M2-MI10)					



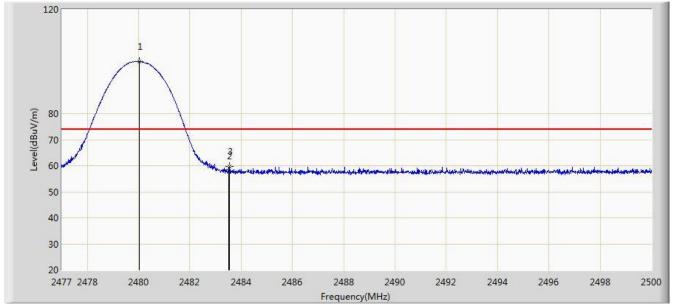
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2390.000	45.001	12.674	-8.999	54.000	32.327	AV
2		*	2402.008	91.277	58.973	N/A	N/A	32.305	AV

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

FCC ID: 2AD2MM1A Page Number: 102 of 137



Site: AC1	Time: 2019/01/18 - 11:41					
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang					
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal					
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery					
Test Mode: Transmit by 3DH5 at Channel 2480MHz (Model: M2-MI10)						



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2480.024	100.106	67.781	N/A	N/A	32.325	PK
2			2483.500	58.029	25.690	-15.971	74.000	32.340	PK
3			2483.532	59.777	27.438	-14.223	74.000	32.340	PK

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

FCC ID: 2AD2MM1A Page Number: 103 of 137



Site: AC1	Time: 2019/01/18 - 11:44				
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by 3DH5 at Channel 2480MHz (Model: M2-MI10)					

Level(dBuV/m) 2477 2478

No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2479.990	95.810	63.485	N/A	N/A	32.325	AV
2			2483.500	45.630	13.291	-8.370	54.000	32.340	AV

Frequency(MHz)

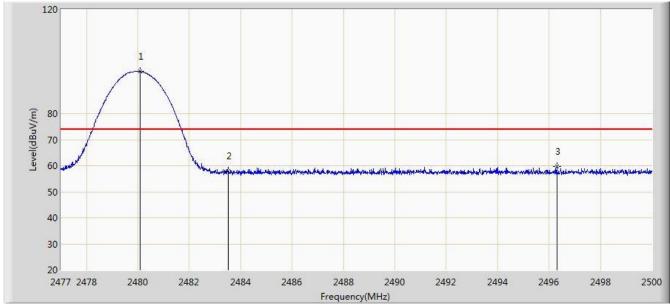
Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

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

FCC ID: 2AD2MM1A Page Number: 104 of 137



Site: AC1	Time: 2019/01/18 - 11:44					
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang					
Probe: BBHA9120D_1-18GHz	Polarity: Vertical					
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery					
Test Mode: Transmit by 3DH5 at Channel 2480MHz (Model: M2-MI10)						



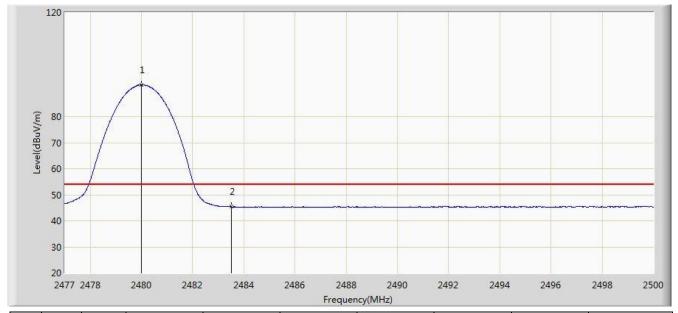
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2480.071	96.262	63.936	N/A	N/A	32.325	PK
2			2483.500	58.062	25.723	-15.938	74.000	32.340	PK
3			2496.297	59.714	27.325	-14.286	74.000	32.389	PK

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

FCC ID: 2AD2MM1A Page Number: 105 of 137



Site: AC1	Time: 2019/01/18 - 11:46				
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by 3DH5 at Channel 2480MHz (Model: M2-MI10)					



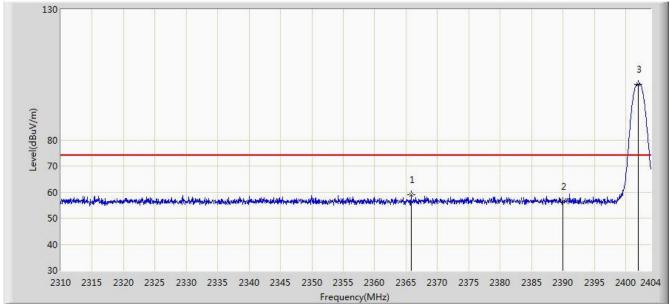
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2479.990	92.158	59.833	N/A	N/A	32.325	AV
2			2483.500	45.411	13.072	-8.589	54.000	32.340	AV

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

FCC ID: 2AD2MM1A Page Number: 106 of 137



Site: AC1	Time: 2019/02/12 - 10:09				
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by BT3.0 DH5 at channel 2402MHz (Model: M4)					



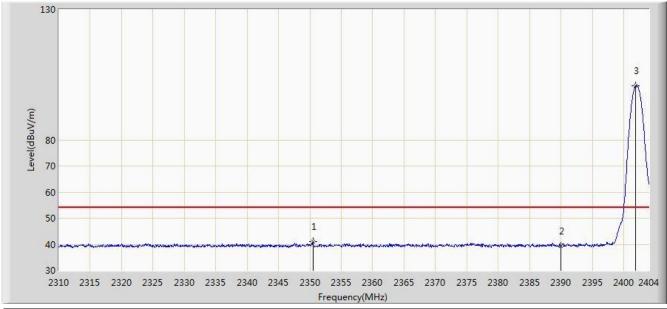
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2365.789	58.958	26.592	-15.042	74.000	32.366	PK
2			2390.000	56.330	24.003	-17.670	74.000	32.327	PK
3		*	2401.979	101.312	69.008	N/A	N/A	32.305	PK

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

FCC ID: 2AD2MM1A Page Number: 107 of 137



Site: AC1	Time: 2019/02/12 - 10:15				
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by BT3.0 DH5 at channel 2402MHz (Model: M4)					



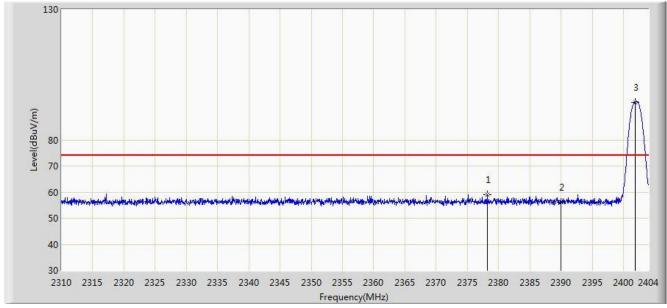
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2350.467	41.072	8.673	-12.928	54.000	32.399	AV
2			2390.000	39.383	7.056	-14.617	54.000	32.327	AV
3		*	2401.932	100.720	68.415	N/A	N/A	32.305	AV

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

FCC ID: 2AD2MM1A Page Number: 108 of 137



Site: AC1	Time: 2019/02/12 - 10:15				
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by BT3.0 DH5 at channel 2402MHz (Model: M4)					



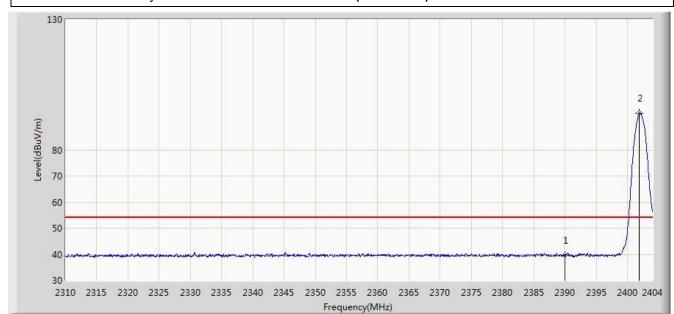
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2378.150	58.908	26.565	-15.092	74.000	32.343	PK
2			2390.000	56.074	23.747	-17.926	74.000	32.327	PK
3		*	2401.885	94.491	62.186	N/A	N/A	32.305	PK

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

FCC ID: 2AD2MM1A Page Number: 109 of 137



Site: AC1	Time: 2019/02/12 - 10:17				
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by BT3.0 DH5 at channel 2402MHz (Model: M4)					



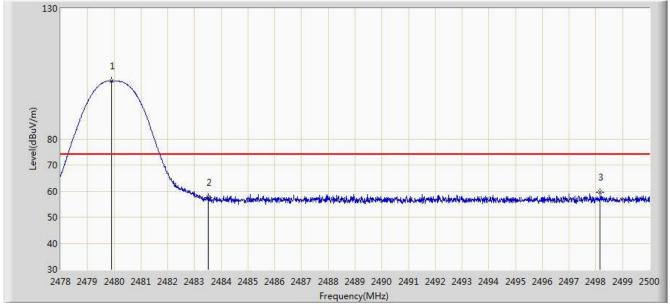
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2390.000	39.582	7.255	-14.418	54.000	32.327	AV
2		*	2401.932	93.940	61.635	N/A	N/A	32.305	AV

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

FCC ID: 2AD2MM1A Page Number: 110 of 137



Site: AC1	Time: 2019/02/12 - 10:18				
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by BT3.0 DH5 at channel 2480MHz (Model: M4)					



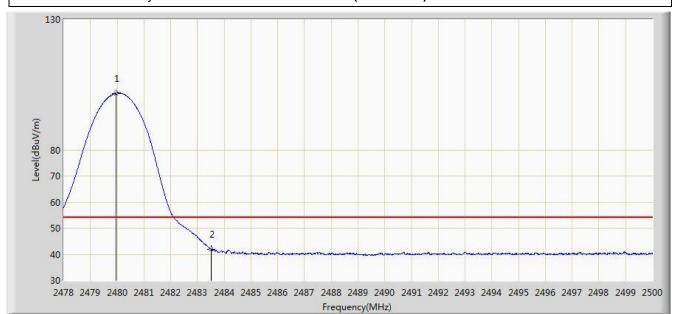
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2479.903	102.213	69.888	N/A	N/A	32.325	PK
2			2483.500	57.506	25.167	-16.494	74.000	32.340	PK
3			2498.163	59.422	27.030	-14.578	74.000	32.392	PK

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

FCC ID: 2AD2MM1A Page Number: 111 of 137



Site: AC1	Time: 2019/02/12 - 10:21				
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by BT3.0 DH5 at channel 2480MHz (Model: M4)					



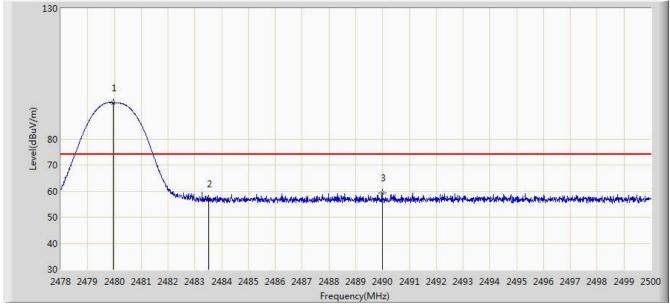
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2479.969	101.726	69.401	N/A	N/A	32.325	AV
2			2483.500	41.919	9.580	-12.081	54.000	32.340	AV

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

FCC ID: 2AD2MM1A Page Number: 112 of 137



Site: AC1	Time: 2019/02/12 - 10:23				
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by BT3.0 DH5 at channel 2480MHz (Model: M4)					



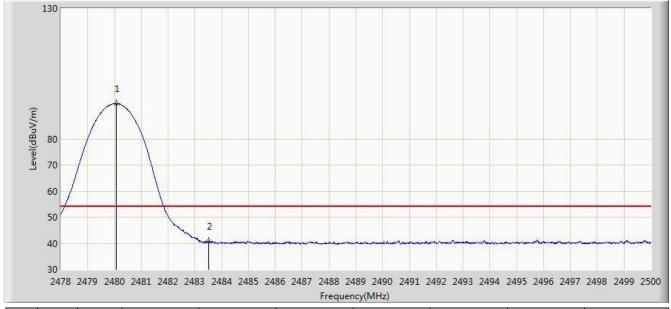
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2479.969	93.830	61.505	N/A	N/A	32.325	PK
2			2483.500	57.025	24.686	-16.975	74.000	32.340	PK
3			2489.979	59.222	26.857	-14.778	74.000	32.364	PK

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

FCC ID: 2AD2MM1A Page Number: 113 of 137



Site: AC1	Time: 2019/02/12 - 10:25				
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by BT3.0 DH5 at channel 2480MHz (Model: M4)					



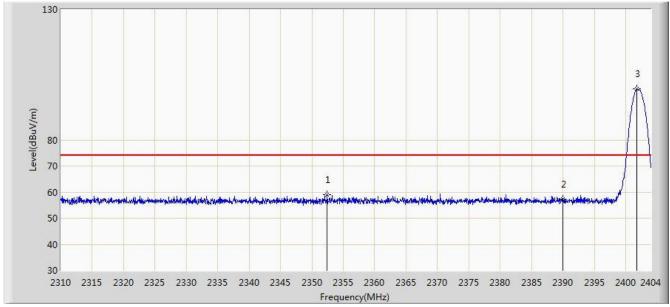
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2480.079	93.513	61.187	N/A	N/A	32.325	AV
2			2483.500	40.659	8.320	-13.341	54.000	32.340	AV

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

FCC ID: 2AD2MM1A Page Number: 114 of 137



Site: AC1	Time: 2019/02/12 - 10:26				
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by BT3.0 2DH5 at channel 2402MHz (Model: M4)					



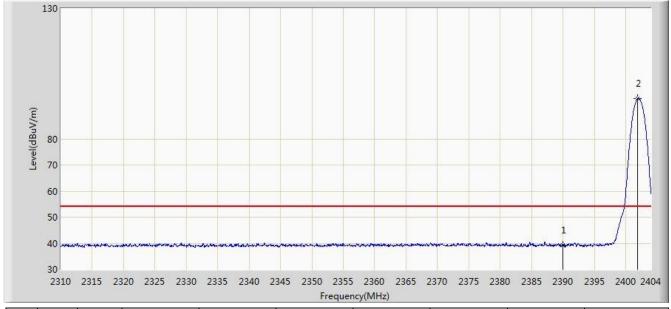
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2352.441	58.856	26.462	-15.144	74.000	32.394	PK
2			2390.000	57.391	25.064	-16.609	74.000	32.327	PK
3		*	2401.791	99.428	67.123	N/A	N/A	32.305	PK

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

FCC ID: 2AD2MM1A Page Number: 115 of 137



Site: AC1	Time: 2019/02/12 - 10:30					
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv					
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal					
EUT: PORTABLE BLUETOOTH SPEAKER Power: By Battery						
Test Mode: Transmit by BT3.0 2DH5 at channel 2402MHz (Model: M4)						



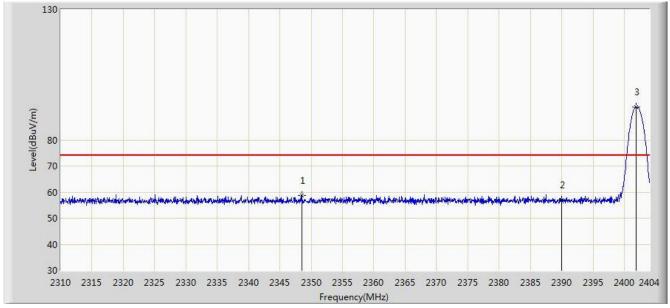
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2390.000	39.342	7.015	-14.658	54.000	32.327	AV
2		*	2401.885	95.470	63.165	N/A	N/A	32.305	AV

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

FCC ID: 2AD2MM1A Page Number: 116 of 137



Site: AC1	Time: 2019/02/12 - 10:31				
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by BT3.0 2DH5 at channel 2402MHz (Model: M4)					



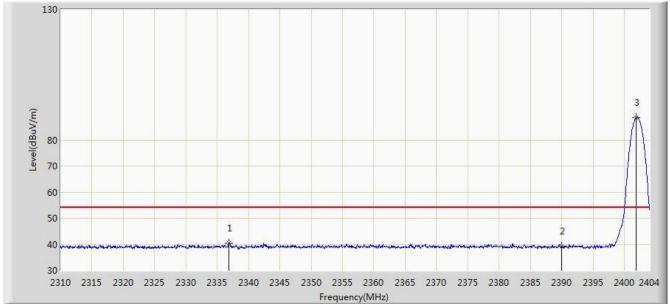
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2348.493	58.837	26.432	-15.163	74.000	32.405	PK
2			2390.000	57.030	24.703	-16.970	74.000	32.327	PK
3		*	2401.885	92.709	60.404	N/A	N/A	32.305	PK

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

FCC ID: 2AD2MM1A Page Number: 117 of 137



Site: AC1	Time: 2019/02/12 - 10:33					
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv					
Probe: BBHA9120D_1-18GHz	Polarity: Vertical					
EUT: PORTABLE BLUETOOTH SPEAKER Power: By Battery						
Test Mode: Transmit by BT3.0 2DH5 at channel 2402MHz (Model: M4)						



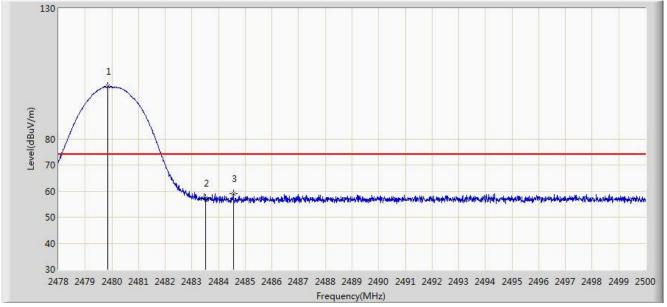
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2336.884	40.454	8.010	-13.546	54.000	32.444	AV
2			2390.000	39.145	6.818	-14.855	54.000	32.327	AV
3		*	2401.885	88.637	56.332	N/A	N/A	32.305	AV

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

FCC ID: 2AD2MM1A Page Number: 118 of 137



Site: AC1	Time: 2019/02/12 - 10:34					
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv					
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal					
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery					
Test Mode: Transmit by BT3.0 2DH5 at channel 2480MHz (Model: M4)						



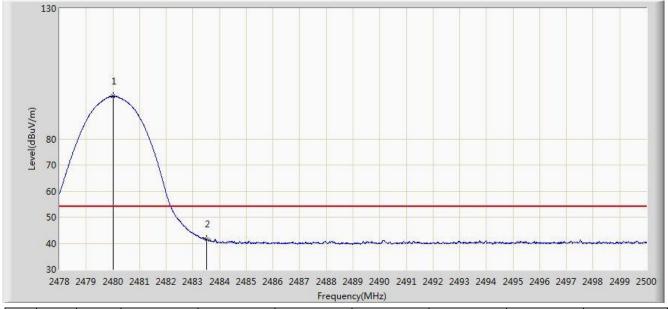
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2479.859	100.041	67.716	N/A	N/A	32.325	PK
2			2483.500	57.175	24.836	-16.825	74.000	32.340	PK
3			2484.556	58.983	26.640	-15.017	74.000	32.344	PK

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

FCC ID: 2AD2MM1A Page Number: 119 of 137



Site: AC1	Time: 2019/02/12 - 10:36					
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv					
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal					
EUT: PORTABLE BLUETOOTH SPEAKER Power: By Battery						
Test Mode: Transmit by BT3.0 2DH5 at channel 2480MHz (Model: M4)						



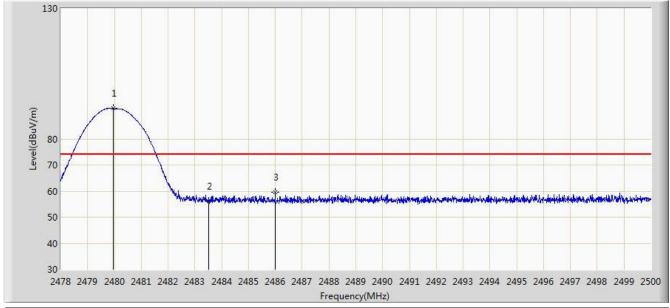
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2480.013	96.306	63.981	N/A	N/A	32.325	AV
2			2483.500	41.485	9.146	-12.515	54.000	32.340	AV

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

FCC ID: 2AD2MM1A Page Number: 120 of 137



Site: AC1	Time: 2019/02/12 - 10:37				
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by BT3.0 2DH5 at channel 2480MHz (Model: M4)					



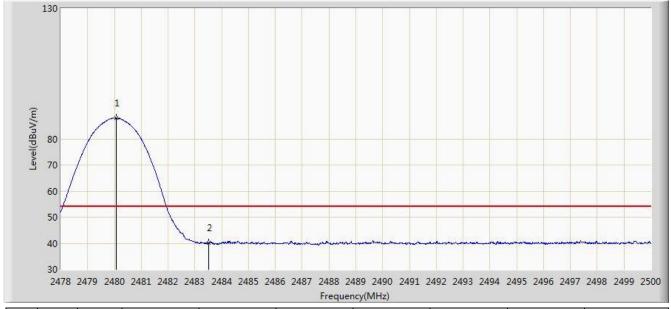
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2479.969	91.683	59.358	N/A	N/A	32.325	PK
2			2483.500	56.042	23.703	-17.958	74.000	32.340	PK
3			2485.997	59.515	27.166	-14.485	74.000	32.349	PK

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

FCC ID: 2AD2MM1A Page Number: 121 of 137



Site: AC1	Time: 2019/02/12 - 10:39				
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by BT3.0 2DH5 at channel 2480MHz (Model: M4)					



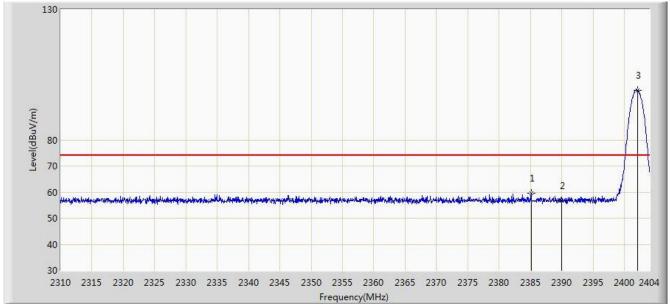
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2480.079	87.965	55.639	N/A	N/A	32.325	AV
2			2483.500	40.278	7.939	-13.722	54.000	32.340	AV

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

FCC ID: 2AD2MM1A Page Number: 122 of 137



Site: AC1	Time: 2019/02/12 - 10:40				
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by BT3.0 3DH5 at channel 2402MHz (Model: M4)					



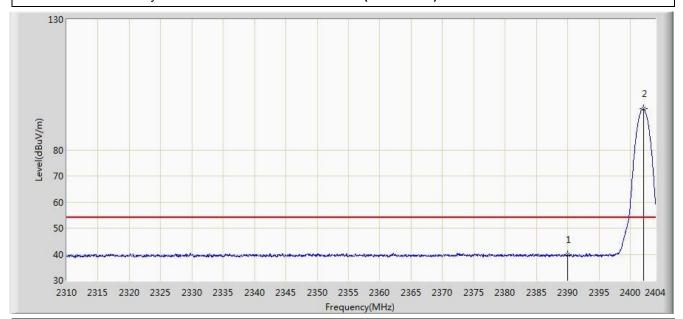
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2385.106	59.590	27.256	-14.410	74.000	32.334	PK
2			2390.000	56.523	24.196	-17.477	74.000	32.327	PK
3		*	2402.073	99.104	66.800	N/A	N/A	32.304	PK

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

FCC ID: 2AD2MM1A Page Number: 123 of 137



Site: AC1	Time: 2019/02/12 - 10:45				
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by BT3.0 3DH5 at channel 2402MHz (Model: M4)					



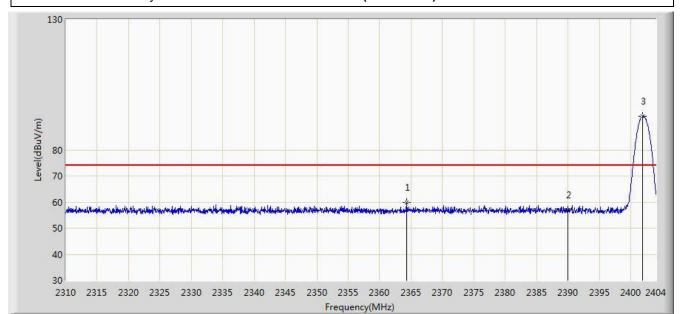
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2390.000	39.881	7.554	-14.119	54.000	32.327	AV
2		*	2402.073	95.666	63.362	N/A	N/A	32.304	AV

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

FCC ID: 2AD2MM1A Page Number: 124 of 137



Site: AC1	Time: 2019/02/12 - 10:47				
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by BT3.0 3DH5 at channel 2402MHz (Model: M4)					



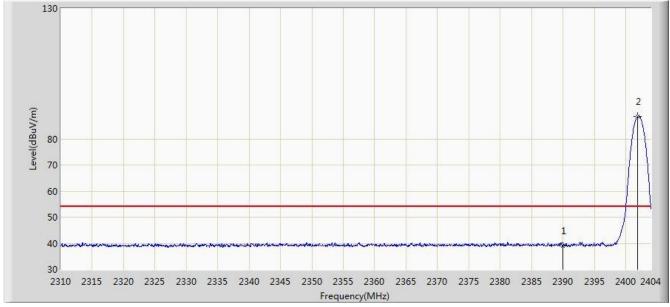
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2364.285	59.853	27.484	-14.147	74.000	32.369	PK
2			2390.000	56.933	24.606	-17.067	74.000	32.327	PK
3		*	2401.932	92.961	60.656	N/A	N/A	32.305	PK

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

FCC ID: 2AD2MM1A Page Number: 125 of 137



Site: AC1	Time: 2019/02/12 - 10:49				
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by BT3.0 3DH5 at channel 2402MHz (Model: M4)					



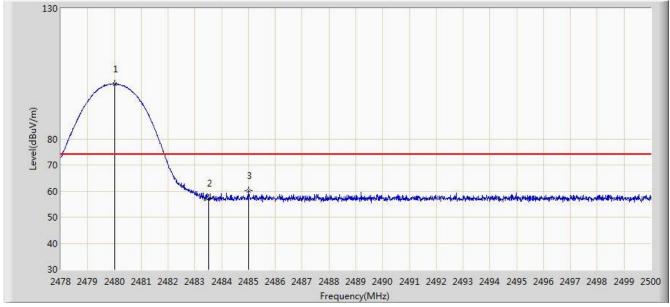
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2390.000	38.952	6.625	-15.048	54.000	32.327	AV
2		*	2401.885	88.592	56.287	N/A	N/A	32.305	AV

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

FCC ID: 2AD2MM1A Page Number: 126 of 137



Site: AC1	Time: 2019/02/12 - 10:50				
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by BT3.0 3DH5 at channel 2480MHz (Model: M4)					



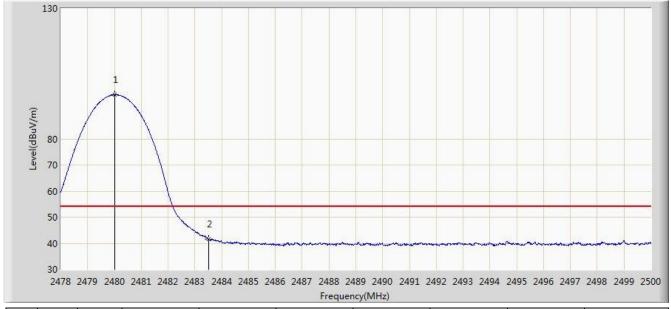
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2480.002	101.120	68.795	N/A	N/A	32.325	PK
2			2483.500	57.349	25.010	-16.651	74.000	32.340	PK
3			2484.996	60.007	27.662	-13.993	74.000	32.345	PK

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

FCC ID: 2AD2MM1A Page Number: 127 of 137



Site: AC1	Time: 2019/02/12 - 10:54			
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv			
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal			
EUT: PORTABLE BLUETOOTH SPEAKER Power: By Battery				
Test Mode: Transmit by BT3.0 3DH5 at channel 2480MHz (Model: M4)				



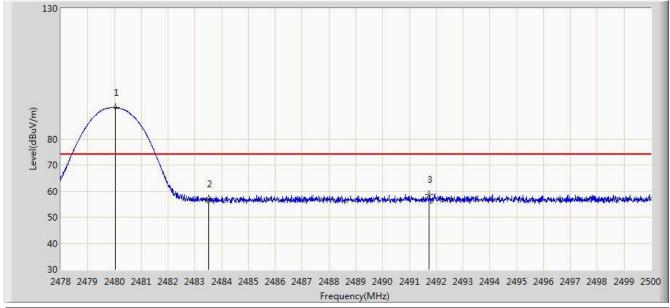
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2480.002	96.861	64.536	N/A	N/A	32.325	AV
2			2483.500	41.515	9.176	-12.485	54.000	32.340	AV

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

FCC ID: 2AD2MM1A Page Number: 128 of 137



Site: AC1	Time: 2019/02/12 - 10:55				
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: By Battery				
Test Mode: Transmit by BT3.0 3DH5 at channel 2480MHz (Model: M4)					



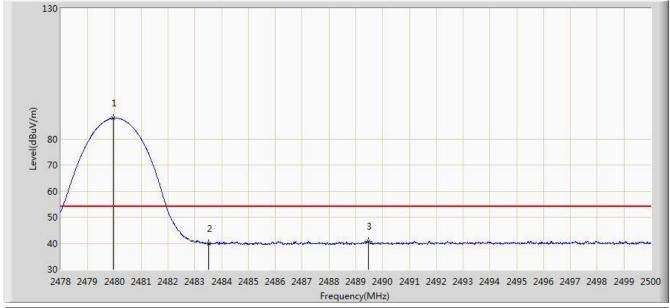
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2480.046	92.111	59.785	N/A	N/A	32.325	PK
2			2483.500	56.941	24.602	-17.059	74.000	32.340	PK
3			2491.739	58.745	26.374	-15.255	74.000	32.372	PK

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

FCC ID: 2AD2MM1A Page Number: 129 of 137



Site: AC1	Time: 2019/02/12 - 10:56			
Limit: FCC_Part15_Band Edge(3m)	Engineer: David Lv			
Probe: BBHA9120D_1-18GHz	Polarity: Vertical			
EUT: PORTABLE BLUETOOTH SPEAKER Power: By Battery				
Test Mode: Transmit by BT3.0 3DH5 at channel 2480MHz (Model: M4)				



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2479.969	87.936	55.611	N/A	N/A	32.325	AV
2			2483.500	39.797	7.458	-14.203	54.000	32.340	AV
3			2489.462	40.812	8.449	-13.188	54.000	32.362	AV

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

FCC ID: 2AD2MM1A Page Number: 130 of 137



7.11. AC Conducted Emissions Measurement

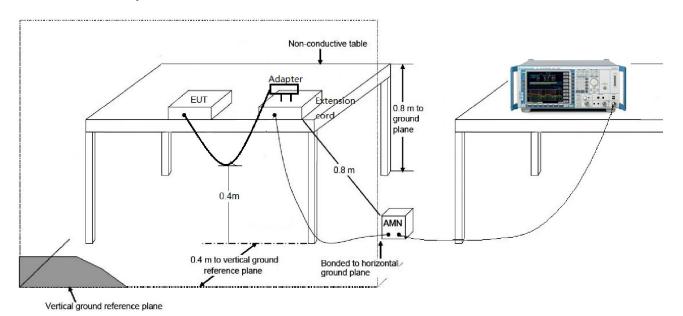
7.11.1.Test Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits							
Frequency (MHz)	QP (dBµV)	Average (dBµV)					
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.

7.11.2.Test Setup

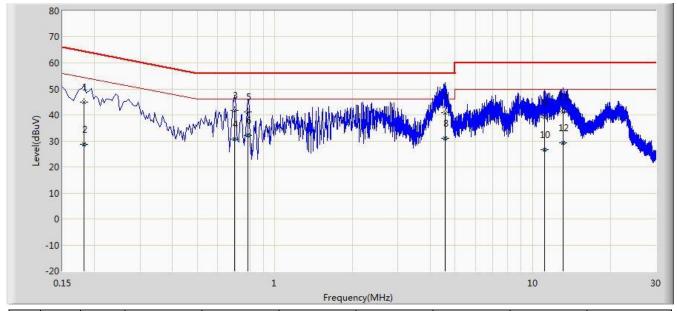


FCC ID: 2AD2MM1A Page Number: 131 of 137



7.11.3.Test Result

Site: SR2	Time: 2019/02/19 - 15:31				
Limit: FCC_Part15.107_CE_Class B	Engineer: Ternence Wang				
Probe: ENV216_101683_Filter On	Polarity: Line				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: AC 120V/60Hz				
Test Mode: Transmit at Channel 2402MHz By DH5 (Model: M2-MI10)					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV)	(dB)	
				(dBuV)	(dBuV)				
1			0.182	45.022	34.973	-19.372	64.394	10.048	QP
2			0.182	28.556	18.507	-25.838	54.394	10.048	AV
3			0.698	41.692	31.629	-14.308	56.000	10.064	QP
4			0.698	30.752	20.688	-15.248	46.000	10.064	AV
5			0.786	41.090	31.072	-14.910	56.000	10.018	QP
6		*	0.786	32.065	22.047	-13.935	46.000	10.018	AV
7			4.562	40.822	30.828	-15.178	56.000	9.994	QP
8			4.562	31.158	21.163	-14.842	46.000	9.994	AV
9			11.110	39.146	29.044	-20.854	60.000	10.102	QP
10			11.110	26.613	16.511	-23.387	50.000	10.102	AV
11			13.102	41.092	31.023	-18.908	60.000	10.070	QP
12			13.102	29.317	19.248	-20.683	50.000	10.070	AV

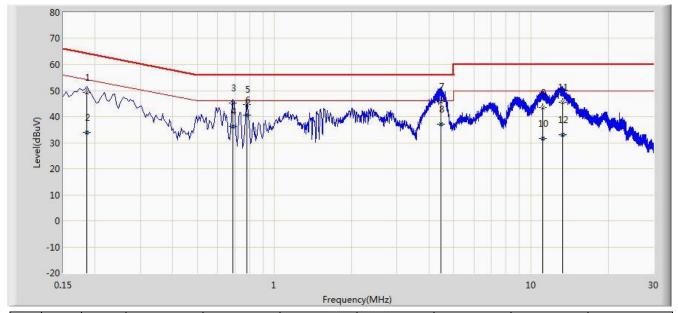
Note: Measure Level (dB μ V) = Reading Level (dB μ V) + Factor (dB)

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

FCC ID: 2AD2MM1A Page Number: 132 of 137



Site: SR2	Time: 2019/02/19 - 15:39				
Limit: FCC_Part15.107_CE_Class B	Engineer: Ternence Wang				
Probe: ENV216_101683_Filter On	Polarity: Neutral				
EUT: PORTABLE BLUETOOTH SPEAKER Power: AC 120V/60Hz					
Test Mode: Transmit at Channel 2402MHz By DH5 (Model: M2-MI10)					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV)	(dB)	
				(dBuV)	(dBuV)				
1			0.186	49.138	39.103	-15.075	64.213	10.035	QP
2			0.186	33.924	23.889	-20.289	54.213	10.035	AV
3			0.686	45.252	35.169	-10.748	56.000	10.083	QP
4			0.686	36.254	26.171	-9.746	46.000	10.083	AV
5			0.782	44.535	34.506	-11.465	56.000	10.029	QP
6		*	0.782	40.503	30.473	-5.497	46.000	10.029	AV
7			4.466	45.732	35.735	-10.268	56.000	9.996	QP
8			4.466	37.025	27.029	-8.975	46.000	9.996	AV
9			11.098	43.620	33.490	-16.380	60.000	10.129	QP
10			11.098	31.483	21.353	-18.517	50.000	10.129	AV
11			13.322	45.616	35.504	-14.384	60.000	10.111	QP
12			13.322	32.950	22.838	-17.050	50.000	10.111	AV

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

FCC ID: 2AD2MM1A Page Number: 133 of 137



Site: SR2	Time: 2019/02/19 - 16:01				
Limit: FCC_Part15.107_CE_Class B	Engineer: Ternence Wang				
Probe: ENV216_101683_Filter On	Polarity: Line				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: AC 120V/60Hz				
Test Mode: Transmit at Channel 2402MHz Bv DH5 (Model: M4)					

Frequency(MHz)

No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV)	(dB)	
				(dBuV)	(dBuV)				
1			0.154	27.974	17.234	-37.807	65.781	10.740	QP
2			0.154	6.188	-4.552	-49.593	55.781	10.740	AV
3		*	0.744	25.867	15.827	-30.133	56.000	10.040	QP
4			0.744	12.669	2.628	-33.331	46.000	10.040	AV
5			1.494	18.792	8.903	-37.208	56.000	9.889	QP
6			1.494	6.081	-3.808	-39.919	46.000	9.889	AV
7			2.526	17.732	7.876	-38.268	56.000	9.856	QP
8			2.526	5.085	-4.771	-40.915	46.000	9.856	AV
9			3.410	17.752	7.851	-38.248	56.000	9.901	QP
10			3.410	5.180	-4.721	-40.820	46.000	9.901	AV
11			7.326	15.569	5.403	-44.431	60.000	10.166	QP
12			7.326	3.790	-6.376	-46.210	50.000	10.166	AV

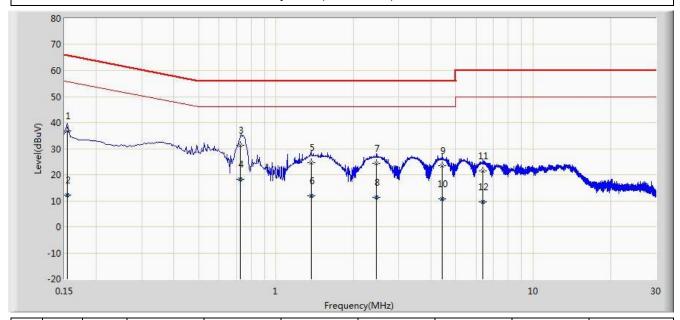
Note: Measure Level (dB μ V) = Reading Level (dB μ V) + Factor (dB)

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

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Site: SR2	Time: 2019/02/19 - 16:07				
Limit: FCC_Part15.107_CE_Class B	Engineer: Ternence Wang				
Probe: ENV216_101683_Filter On	Polarity: Neutral				
EUT: PORTABLE BLUETOOTH SPEAKER	Power: AC 120V/60Hz				
Test Mode: Transmit at Channel 2402MHz By DH5 (Model: M4)					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV)	(dB)	
				(dBuV)	(dBuV)				
1			0.154	36.674	25.958	-29.107	65.781	10.716	QP
2			0.154	12.073	1.357	-43.709	55.781	10.716	AV
3		*	0.726	31.263	21.203	-24.737	56.000	10.060	QP
4			0.726	18.158	8.097	-27.842	46.000	10.060	AV
5			1.366	24.769	14.873	-31.231	56.000	9.896	QP
6			1.366	12.012	2.117	-33.988	46.000	9.896	AV
7			2.454	24.348	14.486	-31.652	56.000	9.862	QP
8			2.454	11.445	1.583	-34.555	46.000	9.862	AV
9			4.438	23.370	13.376	-32.630	56.000	9.994	QP
10			4.438	10.800	0.805	-35.200	46.000	9.994	AV
11			6.358	21.544	11.405	-38.456	60.000	10.140	QP
12			6.358	9.499	-0.641	-40.501	50.000	10.140	AV

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

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8. CONCLUSION

The data collected relate only the item(s) tested and show that the **PORTABLE BLUETOOTH SPEAKER** is in compliance with Part 15C of the FCC rules.

———— The End



Appendix A - Test Setup Photograph

Refer to "1901WSU007-UT" file.

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