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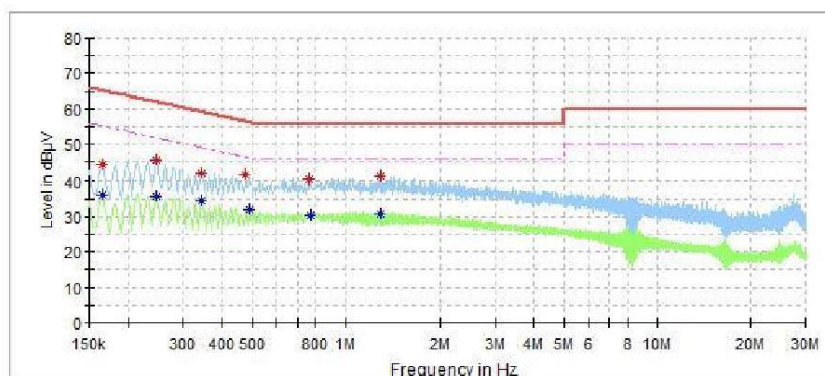
Appendix C.1: Test Plots of Conducted Emission on AC Mains

Auto mode with High wind

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Order No.:	168148278(70)
Test Mode:	High Speed
Test Voltage:	AC 120V/60Hz
Test By:	Tom Guo
Review By:	Gary Chen
Remark:	FCC Part 15B



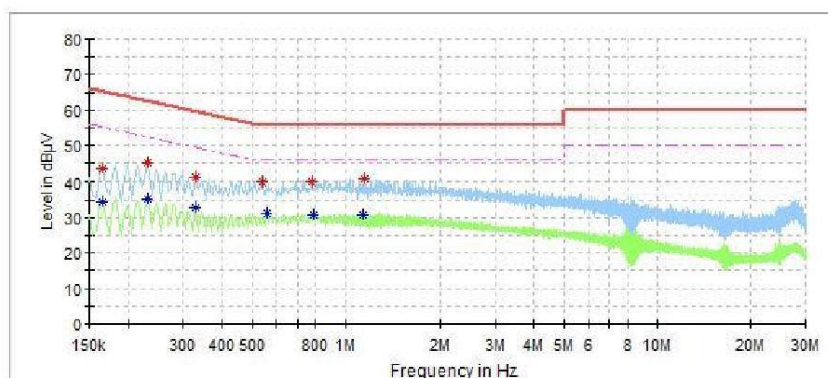
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.166000	44.15	---	65.16	21.01	---	---	L1	9.6
0.166000	---	36.05	55.16	19.11	---	---	L1	9.6
0.246000	45.49	---	61.89	16.40	---	---	L1	9.6
0.246000	---	35.75	51.89	16.14	---	---	L1	9.6
0.346000	---	34.45	49.06	14.60	---	---	L1	9.7
0.346000	41.98	---	59.06	17.08	---	---	L1	9.7
0.478000	41.45	---	56.37	14.92	---	---	L1	9.7
0.494000	---	31.86	46.10	14.24	---	---	L1	9.7
0.764000	40.25	---	56.00	15.75	---	---	L1	9.7
0.772000	---	30.47	46.00	15.53	---	---	L1	9.7
1.300000	41.11	---	56.00	14.89	---	---	L1	9.7
1.300000	---	30.78	46.00	15.22	---	---	L1	9.7

Test Report

EUT Information

EUT Name:	SmartAir Purifier
Model:	VAP1
Order No.:	168148278(70)
Test Mode:	High Speed
Test Voltage:	AC 120V/60Hz
Test By:	Tom Guo
Review By:	Gary Chen
Remark:	FCC Part 15B



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.166000	43.67	---	65.16	21.48	---	---	N	9.6
0.166000	---	34.64	55.16	20.52	---	---	N	9.6
0.230000	45.09	---	62.45	17.36	---	---	N	9.6
0.230000	---	35.15	52.45	17.30	---	---	N	9.6
0.330000	41.09	---	59.45	18.36	---	---	N	9.7
0.330000	---	32.81	49.45	16.64	---	---	N	9.7
0.540000	39.77	---	56.00	16.23	---	---	N	9.7
0.560000	---	31.31	46.00	14.69	---	---	N	9.7
0.780000	39.59	---	56.00	16.41	---	---	N	9.7
0.780000	---	30.73	46.00	15.27	---	---	N	9.7
1.136000	---	30.73	46.00	15.27	---	---	N	9.7
1.152000	40.71	---	56.00	15.29	---	---	N	9.7

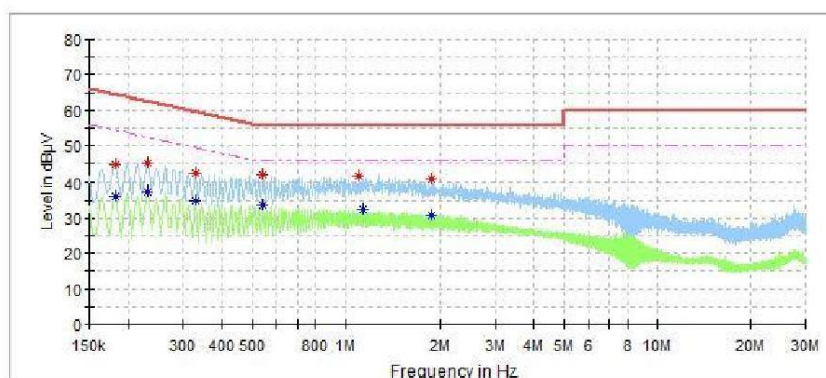
Auto mode with middle wind

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Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Order No.:	168148278(70)
Test Mode:	Middle Speed
Test Voltage:	AC 120V/60Hz
Test By:	Tom Guo
Review By:	Gary Chen
Remark:	FCC Part 15B



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.182000	---	36.13	54.39	18.26	---	---	L1	9.6
0.182000	44.84	---	64.39	19.55	---	---	L1	9.6
0.230000	---	37.51	52.45	14.94	---	---	L1	9.6
0.230000	45.29	---	62.45	17.16	---	---	L1	9.6
0.330000	---	34.81	49.45	14.64	---	---	L1	9.7
0.330000	42.29	---	59.45	17.16	---	---	L1	9.7
0.544000	41.70	---	56.00	14.30	---	---	L1	9.7
0.544000	---	33.76	46.00	12.24	---	---	L1	9.7
1.104000	41.42	---	56.00	14.58	---	---	L1	9.7
1.136000	---	32.52	46.00	13.48	---	---	L1	9.7
1.876000	---	30.69	46.00	15.31	---	---	L1	9.7
1.876000	40.60	---	56.00	15.40	---	---	L1	9.7

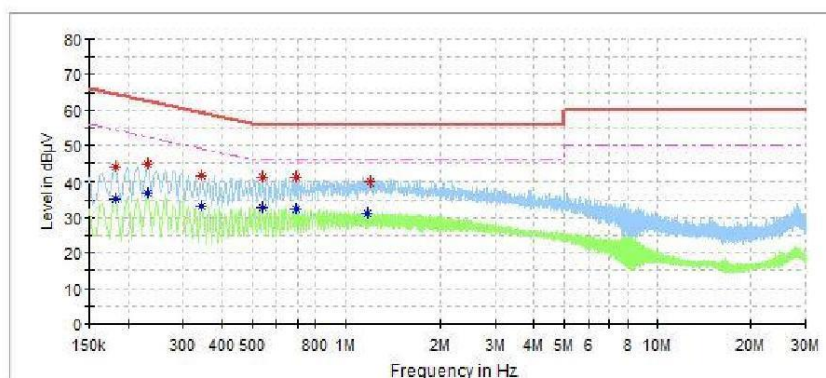
3/3/2020

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Test Report

EUT Information

EUT Name:	SmartAir Purifier
Model:	VAP1
Order No.:	168148278(70)
Test Mode:	Middle Speed
Test Voltage:	AC 120V/60Hz
Test By:	Tom Guo
Review By:	Gary Chen
Remark:	FCC Part 15B



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.182000	43.81	---	64.39	20.59	---	---	N	9.6
0.182000	---	35.35	54.39	19.04	---	---	N	9.6
0.230000	44.78	---	62.45	17.67	---	---	N	9.6
0.230000	---	36.89	52.45	15.56	---	---	N	9.6
0.346000	41.50	---	59.06	17.56	---	---	N	9.7
0.346000	---	33.31	49.06	15.75	---	---	N	9.7
0.544000	---	32.91	46.00	13.09	---	---	N	9.7
0.544000	40.91	---	56.00	15.09	---	---	N	9.7
0.692000	---	32.45	46.00	13.55	---	---	N	9.7
0.692000	41.08	---	56.00	14.92	---	---	N	9.7
1.184000	---	31.23	46.00	14.77	---	---	N	9.7
1.200000	39.96	---	56.00	16.04	---	---	N	9.7

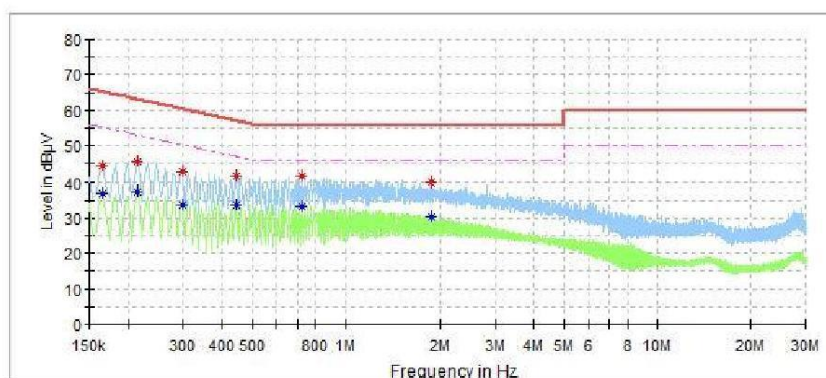
Auto mode with Low wind

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Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Order No.:	168148278(70)
Test Mode:	Auto Speed
Test Voltage:	AC 120V/60Hz
Test By:	Tom Guo
Review By:	Gary Chen
Remark:	FCC Part 15B



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.166000	44.32	---	65.16	20.83	---	---	L1	9.6
0.166000	---	36.84	55.16	18.32	---	---	L1	9.6
0.214000	---	37.21	53.05	15.84	---	---	L1	9.6
0.214000	45.49	---	63.05	17.56	---	---	L1	9.6
0.298000	42.70	---	60.30	17.60	---	---	L1	9.6
0.298000	---	33.70	50.30	16.59	---	---	L1	9.6
0.446000	---	33.57	46.95	13.38	---	---	L1	9.7
0.446000	41.27	---	56.95	15.68	---	---	L1	9.7
0.724000	---	33.15	46.00	12.85	---	---	L1	9.7
0.724000	41.47	---	56.00	14.53	---	---	L1	9.7
1.876000	39.78	---	56.00	16.22	---	---	L1	9.7
1.876000	---	30.38	46.00	15.62	---	---	L1	9.7

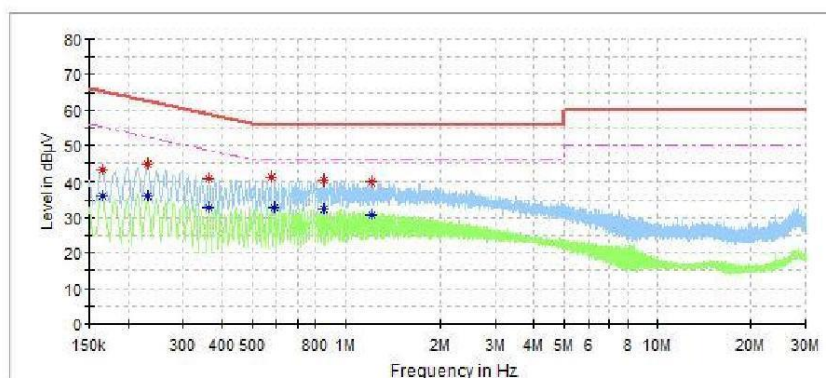
3/3/2020

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Test Report

EUT Information

EUT Name:	SmartAir Purifier
Model:	VAP1
Order No.:	168148278(70)
Test Mode:	Auto Speed
Test Voltage:	AC 120V/60Hz
Test By:	Tom Guo
Review By:	Gary Chen
Remark:	FCC Part 15B



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.166000	---	36.13	55.16	19.03	---	---	N	9.6
0.166000	43.17	---	65.16	21.98	---	---	N	9.6
0.230000	---	35.90	52.45	16.55	---	---	N	9.6
0.230000	44.72	---	62.45	17.73	---	---	N	9.6
0.362000	---	32.68	48.68	16.00	---	---	N	9.7
0.362000	40.53	---	58.68	18.15	---	---	N	9.7
0.576000	40.84	---	56.00	15.16	---	---	N	9.7
0.592000	---	32.96	46.00	13.04	---	---	N	9.7
0.856000	---	32.25	46.00	13.75	---	---	N	9.7
0.856000	40.01	---	56.00	15.99	---	---	N	9.7
1.216000	39.68	---	56.00	16.32	---	---	N	9.7
1.220000	---	30.57	46.00	15.43	---	---	N	9.7

Appendix C.2: Test Plots of Radiated Emission, Below 1GHz

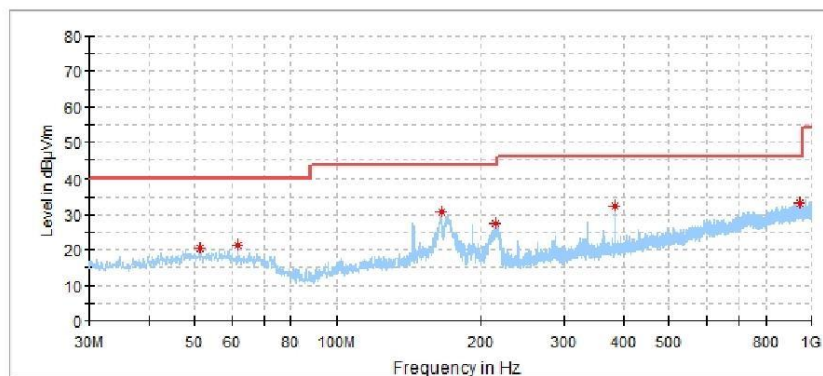
Auto mode with High wind

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EMC32 Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Order No:	168148278 70
Test Mode:	High speed wind
Test Voltage:	AC 120V/60Hz
Test By:	Tom Guo
Review By:	Gary Chen
Remark:	



Critical Freqs

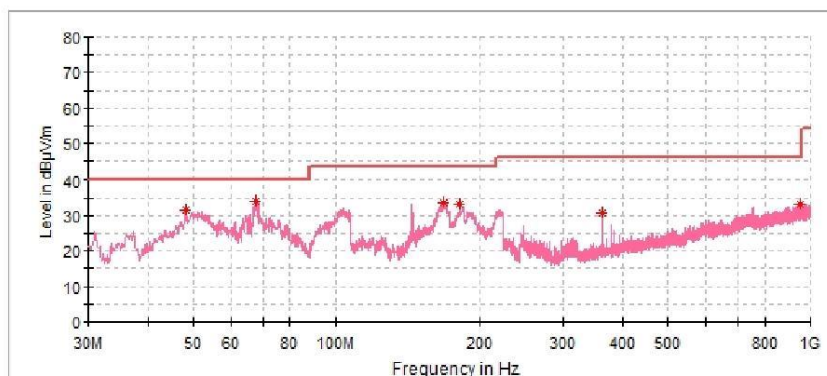
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
61.719000	21.45	40.00	18.55	100.0	H	53.0
383.856000	32.57	46.00	13.43	100.0	H	165.0
943.158000	33.05	46.00	12.95	100.0	H	270.0
51.243000	20.63	40.00	19.37	200.0	H	39.0
165.606000	30.95	43.50	12.55	200.0	H	63.0
214.688000	27.35	43.50	16.15	200.0	H	237.0

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EMC32 Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Order No:	168148278 70
Test Mode:	High speed wind
Test Voltage:	AC 120V/60Hz
Test By:	Tom Guo
Review By:	Gary Chen
Remark:	



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
48.139000	31.42	40.00	8.58	100.0	V	81.0
363.389000	30.77	46.00	15.23	100.0	V	261.0
167.449000	33.82	43.50	9.68	100.0	V	299.0
181.611000	33.04	43.50	10.46	100.0	V	299.0
67.539000	33.86	40.00	6.14	100.0	V	343.0
952.082000	33.27	46.00	12.73	400.0	V	82.0

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EMC32 V10.50.0

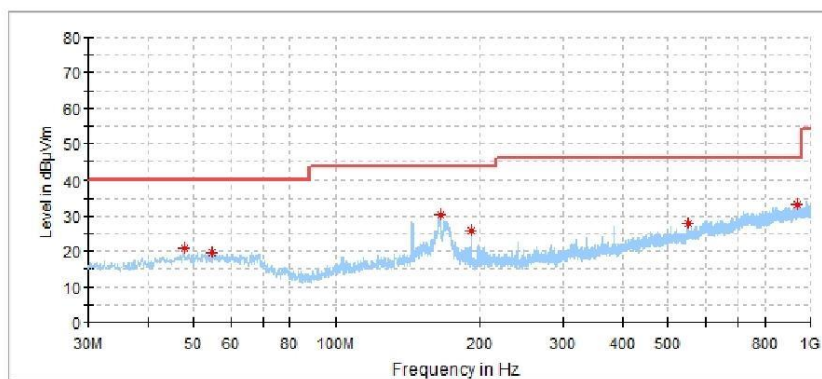
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Auto mode with middle wind

EMC32 Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Order No:	168148278 70
Test Mode:	Medium speed wind
Test Voltage:	AC 120V/60Hz
Test By:	Tom Guo
Review By:	Gary Chen
Remark:	



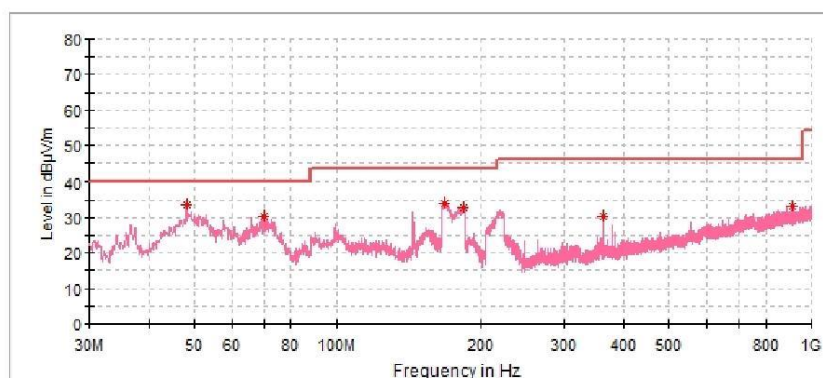
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
552.054000	27.97	46.00	18.03	---	---	100.0	H	195.0
165.606000	30.27	43.50	13.23	---	---	200.0	H	12.0
47.751000	20.83	40.00	19.17	---	---	200.0	H	18.0
191.893000	25.86	43.50	17.64	---	---	200.0	H	206.0
941.024000	33.39	46.00	12.61	---	---	300.0	H	278.0
54.929000	19.51	40.00	20.49	---	---	300.0	H	282.0

EMC32 Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Order No:	168148278 70
Test Mode:	Medium speed wind
Test Voltage:	AC 120V/60Hz
Test By:	Tom Guo
Review By:	Gary Chen
Remark:	



Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
48.139000	33.76	40.00	6.24	100.0	V	77.0
167.934000	34.25	43.50	9.25	100.0	V	81.0
183.648000	32.74	43.50	10.76	100.0	V	81.0
363.292000	30.35	46.00	15.65	100.0	V	292.0
70.255000	30.48	40.00	9.52	200.0	V	44.0
909.402000	33.31	46.00	12.69	400.0	V	280.0

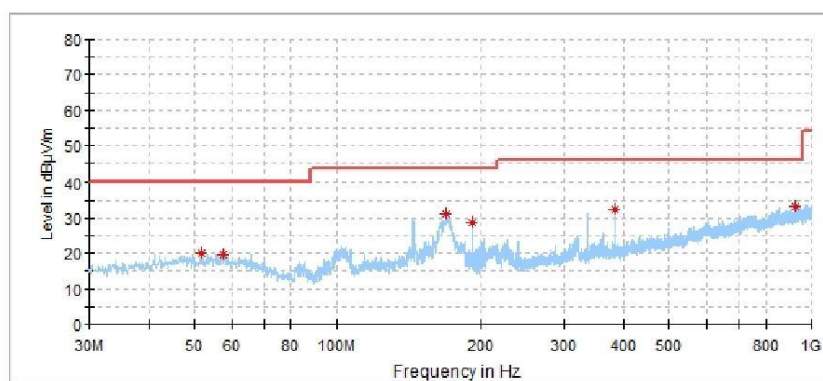
Auto mode with Low wind

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EMC32 Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Order No:	168148278 70
Test Mode:	Auto speed mode
Test Voltage:	AC 120V/60Hz
Test By:	Tom Guo
Review By:	Gary Chen
Remark:	



Critical_Freqs

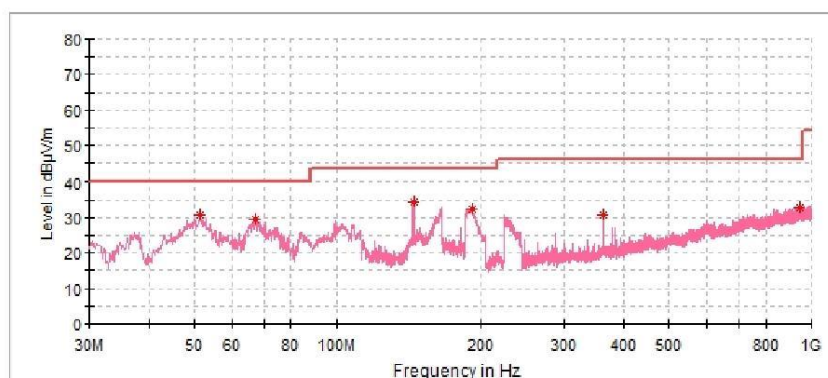
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
169.292000	31.08	43.50	12.42	100.0	H	101.0
383.856000	32.60	46.00	13.40	100.0	H	135.0
191.990000	28.83	43.50	14.67	200.0	H	182.0
51.825000	20.08	40.00	19.92	200.0	H	193.0
927.347000	33.14	46.00	12.86	400.0	H	136.0
57.451000	19.70	40.00	20.30	400.0	H	261.0

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EMC32 Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Order No:	168148278 70
Test Mode:	Auto speed mode
Test Voltage:	AC 120V/60Hz
Test By:	Tom Guo
Review By:	Gary Chen
Remark:	



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
144.072000	34.29	43.50	9.21	100.0	V	181.0
51.437000	30.93	40.00	9.07	100.0	V	279.0
192.087000	32.34	43.50	11.16	100.0	V	339.0
363.389000	30.82	46.00	15.18	100.0	V	350.0
67.345000	29.65	40.00	10.35	200.0	V	98.0
942.576000	32.94	46.00	13.06	400.0	V	240.0

3/11/2020

EMC32 V10.50.0

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Appendix C.3: Test Plots of Radiated Emission, Above 1GHz

Auto mode with High wind

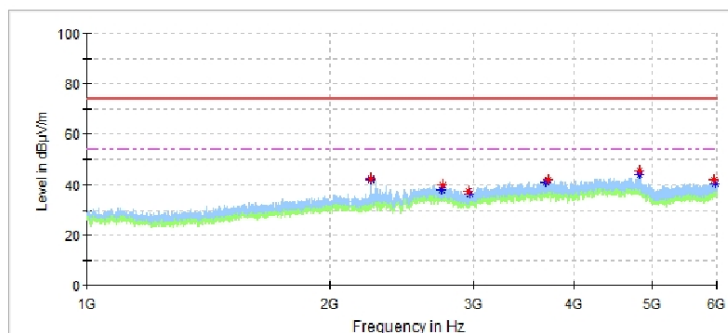
1-6G-120V60Hz High speed wind

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EMC32 Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Order No:	168148278 70
Test Mode:	High speed wind
Test Voltage:	AC 120V/60Hz
Test By:	Tom Guo
Review By:	Gary Chen
Remark:	



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
5966.500000	42.20	---	74.00	31.80	100.0	H	0.0
2968.500000	---	36.27	54.00	17.73	100.0	H	52.0
2754.000000	39.89	---	74.00	34.11	200.0	H	58.0
2955.000000	37.34	---	74.00	36.66	200.0	H	115.0
2240.000000	42.39	---	74.00	31.61	100.0	H	234.0
2240.000000	---	41.87	54.00	12.13	100.0	H	234.0
4824.500000	---	44.15	54.00	9.85	100.0	H	276.0
4824.500000	45.80	---	74.00	28.20	100.0	H	276.0
2742.000000	---	37.73	54.00	16.27	300.0	H	290.0
3718.500000	42.23	---	74.00	31.77	300.0	H	299.0
5969.500000	---	40.43	54.00	13.57	100.0	H	299.0
3683.000000	---	41.20	54.00	12.80	100.0	H	356.0

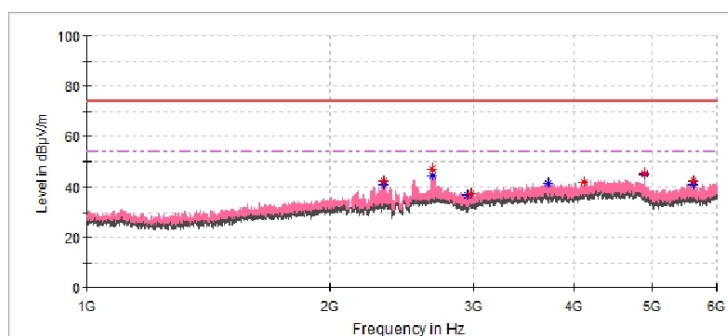
1-6G-120V60Hz High speed wind

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EMC32 Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Order No:	168148278 70
Test Mode:	High speed wind
Test Voltage:	AC 120V/60Hz
Test By:	Tom Guo
Review By:	Gary Chen
Remark:	



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
2323.000000	42.76	---	74.00	31.24	100.0	V	68.0
2325.500000	---	41.16	54.00	12.84	100.0	V	68.0
2672.000000	47.39	---	74.00	26.61	200.0	V	105.0
2672.500000	---	44.69	54.00	9.31	200.0	V	105.0
2944.000000	---	36.74	54.00	17.26	100.0	V	263.0
2979.000000	37.58	---	74.00	36.42	100.0	V	250.0
3718.000000	---	41.33	54.00	12.67	100.0	V	309.0
4121.000000	42.18	---	74.00	31.82	200.0	V	350.0
4894.500000	---	45.10	54.00	8.90	200.0	V	87.0
4894.500000	45.65	---	74.00	28.35	200.0	V	87.0
5619.000000	---	41.16	54.00	12.84	400.0	V	241.0
5619.000000	42.80	---	74.00	31.20	400.0	V	241.0

Auto mode with middle wind

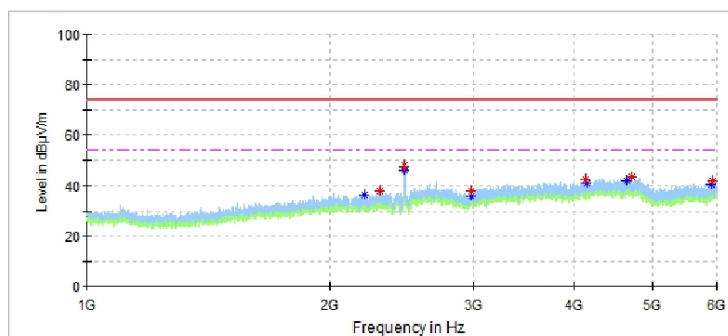
1-6G-120V60Hz Medium speed wind

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EMC32 Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Order No:	168148278 70
Test Mode:	Medium speed wind
Test Voltage:	AC 120V/60Hz
Test By:	Tom Guo
Review By:	Gary Chen
Remark:	



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
2465.000000	---	45.98	54.00	8.02	100.0	H	31.0
2466.500000	47.59	---	74.00	26.41	100.0	H	31.0
2975.500000	37.82	---	74.00	36.18	100.0	H	54.0
2977.500000	---	36.08	54.00	17.92	100.0	H	58.0
5933.500000	42.00	---	74.00	32.00	100.0	H	64.0
2198.000000	---	36.52	54.00	17.48	100.0	H	73.0
2297.500000	37.95	---	74.00	36.05	100.0	H	110.0
4650.500000	---	41.99	54.00	12.01	100.0	H	125.0
4144.500000	---	40.92	54.00	13.08	300.0	H	223.0
4127.000000	42.57	---	74.00	31.43	300.0	H	228.0
4714.000000	43.58	---	74.00	30.42	100.0	H	242.0
5908.500000	---	40.44	54.00	13.56	100.0	H	303.0

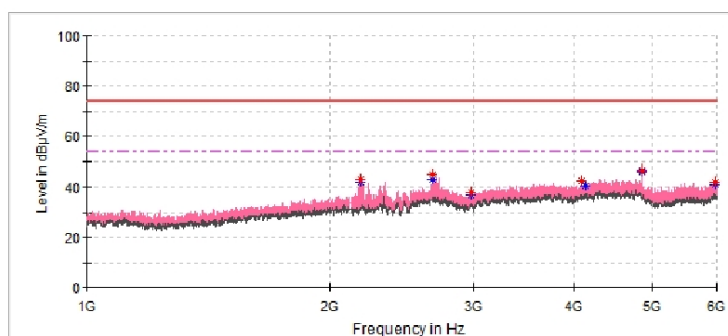
1-6G-120V60Hz Medium speed wind

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EMC32 Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Order No:	168148278 70
Test Mode:	Medium speed wind
Test Voltage:	AC 120V/60Hz
Test By:	Tom Guo
Review By:	Gary Chen
Remark:	



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
2665.500000	45.38	---	74.00	28.62	100.0	V	108.0
2671.000000	---	43.25	54.00	10.75	100.0	V	108.0
4125.500000	---	40.38	54.00	13.62	200.0	V	122.0
2178.000000	42.85	---	74.00	31.15	100.0	V	149.0
2178.000000	---	42.07	54.00	11.93	100.0	V	149.0
4078.000000	42.68	---	74.00	31.32	400.0	V	176.0
4854.500000	46.83	---	74.00	27.17	400.0	V	199.0
4854.500000	---	46.30	54.00	7.70	100.0	V	199.0
5974.000000	---	41.04	54.00	12.96	100.0	V	230.0
5974.000000	41.88	---	74.00	32.12	400.0	V	230.0
2983.000000	37.71	---	74.00	36.29	400.0	V	248.0
2983.000000	---	36.73	54.00	17.27	100.0	V	248.0

Auto mode with Low wind

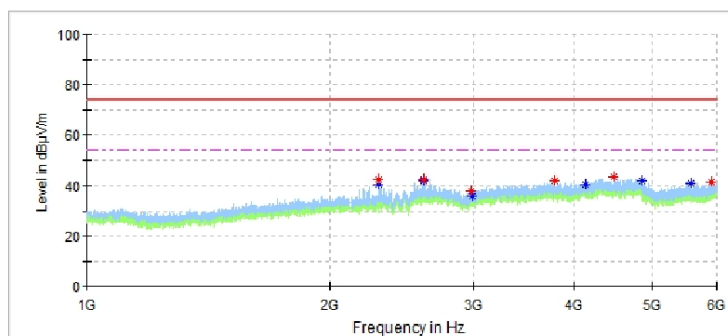
1-6G-120V60Hz Auto speed mode

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EMC32 Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Order No:	168148278 70
Test Mode:	Auto speed mode
Test Voltage:	AC 120V/60Hz
Test By:	Tom Guo
Review By:	Gary Chen
Remark:	



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
2994.500000	---	36.13	54.00	17.87	100.0	H	0.0
5575.500000	---	41.18	54.00	12.82	100.0	H	43.0
2604.000000	---	41.91	54.00	12.09	300.0	H	61.0
2604.000000	42.69	---	74.00	31.31	300.0	H	61.0
5905.500000	41.74	---	74.00	32.26	100.0	H	65.0
4481.000000	43.35	---	74.00	30.65	100.0	H	84.0
4844.500000	---	42.25	54.00	11.75	100.0	H	179.0
2286.500000	42.81	---	74.00	31.19	100.0	H	201.0
2286.500000	---	40.45	54.00	13.55	400.0	H	201.0
3781.500000	42.12	---	74.00	31.88	400.0	H	215.0
4127.000000	---	40.75	54.00	13.25	100.0	H	219.0
2980.000000	37.81	---	74.00	36.19	100.0	H	286.0

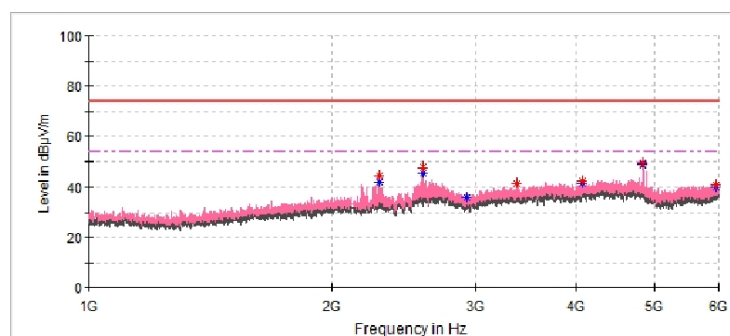
1-6G-120V60Hz Auto speed mode

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EMC32 Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Order No:	168148278 70
Test Mode:	Auto speed mode
Test Voltage:	AC 120V/60Hz
Test By:	Tom Guo
Review By:	Gary Chen
Remark:	



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
5965.000000	40.91	---	74.00	33.09	100.0	V	16.0
5967.000000	---	39.81	54.00	14.19	100.0	V	63.0
2277.000000	44.79	---	74.00	29.21	200.0	V	104.0
2277.000000	---	42.30	54.00	11.70	200.0	V	104.0
4834.500000	---	48.82	54.00	5.18	100.0	V	173.0
4834.500000	49.36	---	74.00	24.64	100.0	V	173.0
2931.000000	---	35.93	54.00	18.07	100.0	V	186.0
2580.000000	47.61	---	74.00	26.39	100.0	V	192.0
2580.000000	---	45.41	54.00	8.59	400.0	V	192.0
3376.000000	41.36	---	74.00	32.64	400.0	V	260.0
4066.000000	---	41.35	54.00	12.65	100.0	V	275.0
4066.000000	42.50	---	74.00	31.50	100.0	V	275.0