

Test Report No.50232957 001

Appendix D: Radiated and Mains Spurious Emission Data

(File: 50232957AppendixD)

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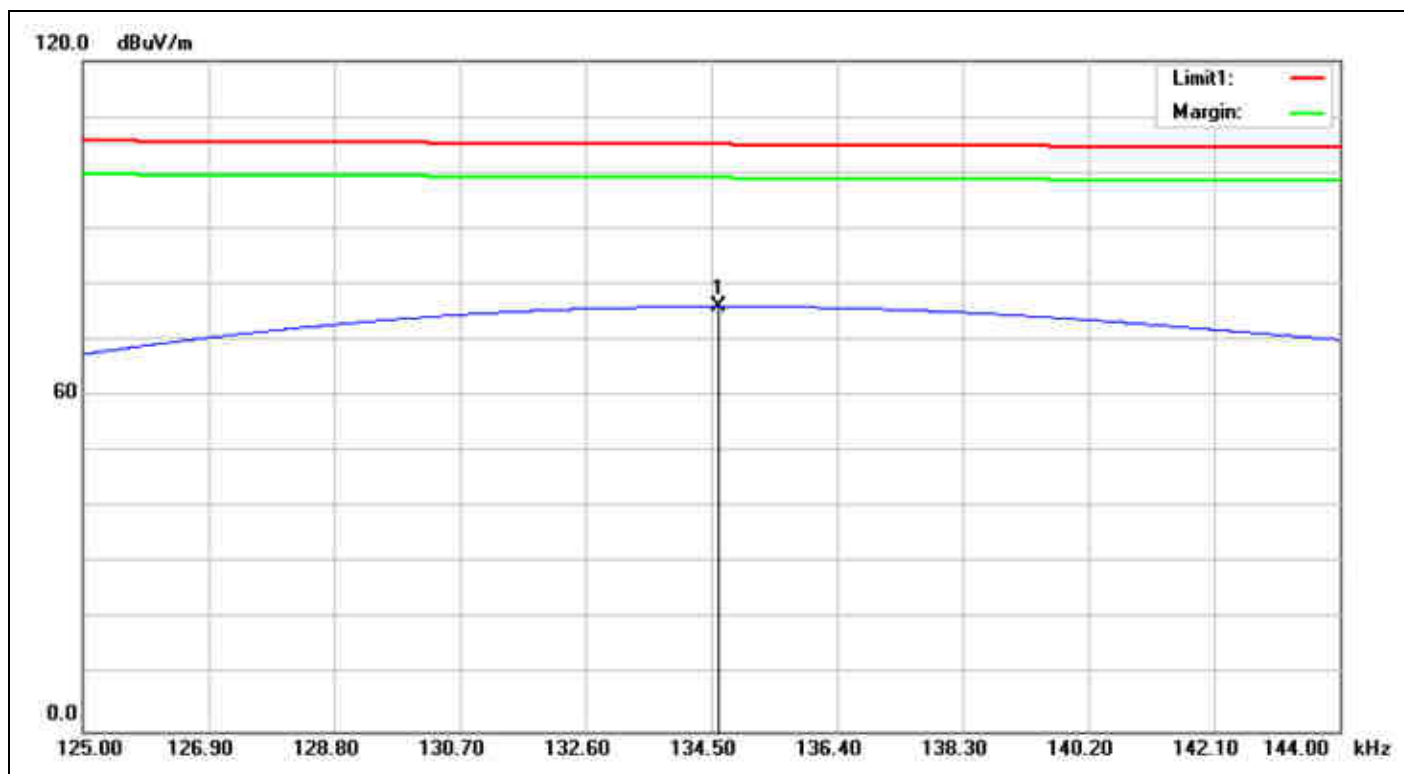
Emissions, Fundamental



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Service No.:	238100781	Test Distance:	3m
Test Standard:	NCC2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2019/2/15 14:57:21
Applicant:	Kingston	Test Rating:	AC 110V/60Hz
Product:	HyperX ChargePlay Base	Temp.(°C)/Hum.(%):	25(°C)/66%
Model No.:	HX-CPBS-A	Test Engineer:	Kevin Kuo
Test Mode:			
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.1346	18.35	58.18	76.53	105.02	-24.72	peak	100	214	
2	0.1346	18.35	57.67	76.02	105.02	-29.00	QP	100	211	

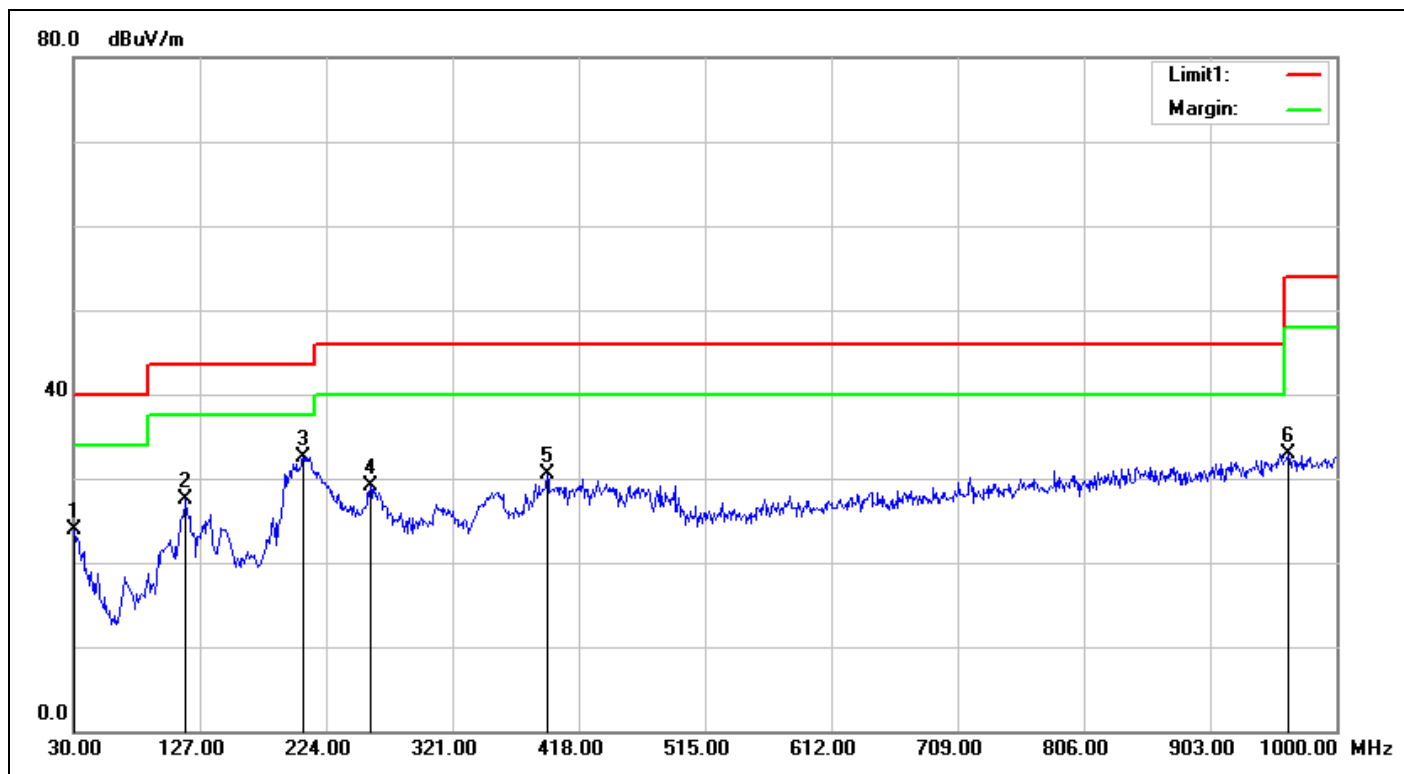
Spurious Emissions, TX Mode, 30M-1G



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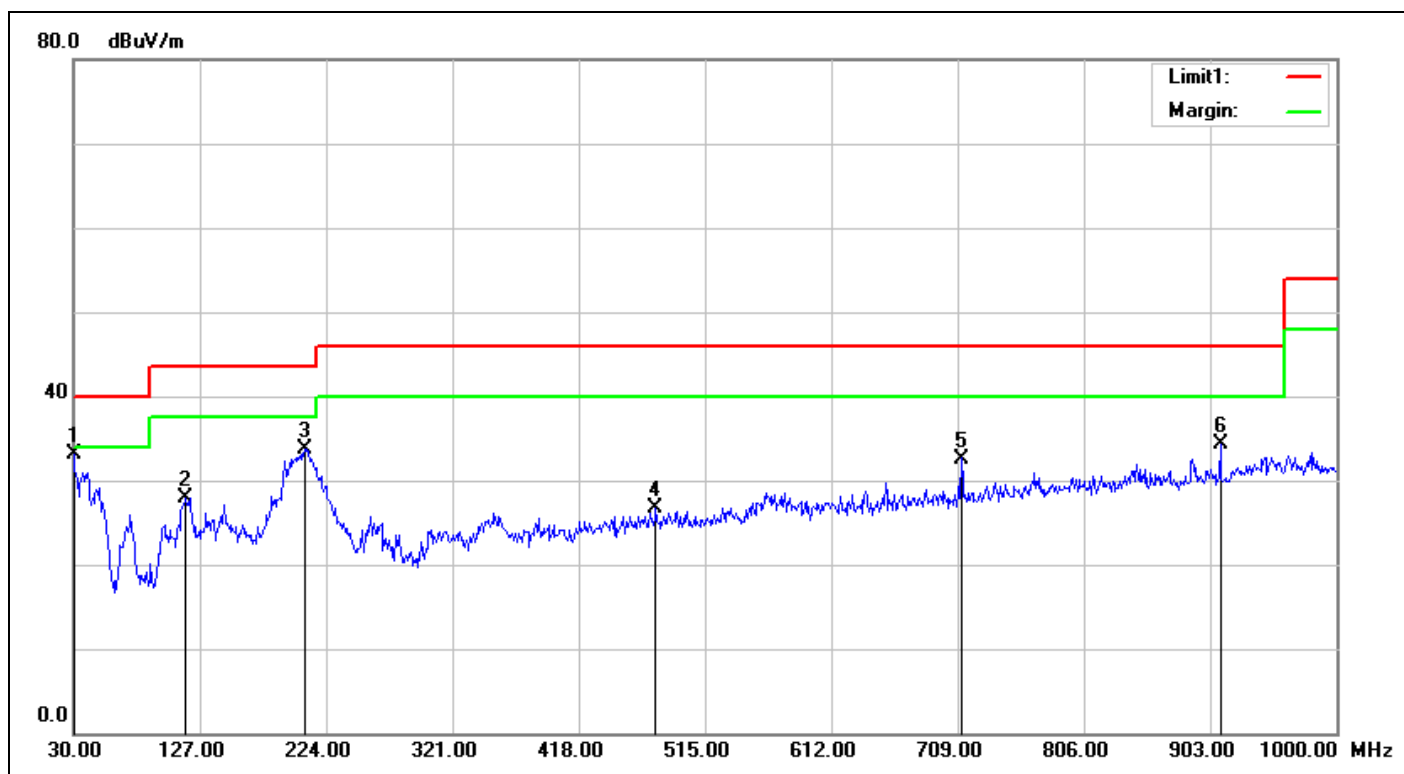
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Service No.:	238100781	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2019/2/15 16:18:51
Applicant:	Kingston	Test Rating:	AC 110V/60Hz
Product:	HyperX ChargePlay Base	Temp.(°C)/Hum.(%):	25(°C)/66%
Model No.:	HX-CPBS-A	Test Engineer:	Kevin Kuo
Test Mode:	TX-30M-1G		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	30.9700	-0.51	24.43	23.92	40.00	-16.08	QP	100	34	
2	116.3300	-7.66	35.09	27.43	43.50	-16.07	QP	100	120	
3	206.5400	-8.60	41.19	32.59	43.50	-10.91	QP	100	242	
4	257.9500	-5.01	34.13	29.12	46.00	-16.88	QP	100	245	
5	393.7500	-2.61	33.14	30.53	46.00	-15.47	QP	100	291	
6	963.1400	5.95	26.97	32.92	54.00	-21.08	QP	100	150	



Service No.:	238100781	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2019/2/15 16:19:44
Applicant:	Kingston	Test Rating:	AC 110V/60Hz
Product:	HyperX ChargePlay Base	Temp.(°C)/Hum.(%)	25(°C)/66%
Model No.:	HX-CPBS-A	Test Engineer:	Kevin Kuo
Test Mode:	TX-30M-1G		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	30.0000	-0.03	33.05	33.02	40.00	-6.98	QP	100	227	
2	116.3300	-7.66	35.61	27.95	43.50	-15.55	QP	100	197	
3	207.5100	-8.59	42.20	33.61	43.50	-9.89	QP	100	283	
4	477.1700	-1.56	28.20	26.64	46.00	-19.36	QP	100	145	
5	711.9100	1.47	31.13	32.60	46.00	-13.40	QP	100	16	
6	910.7600	4.47	29.79	34.26	46.00	-11.74	QP	100	0	

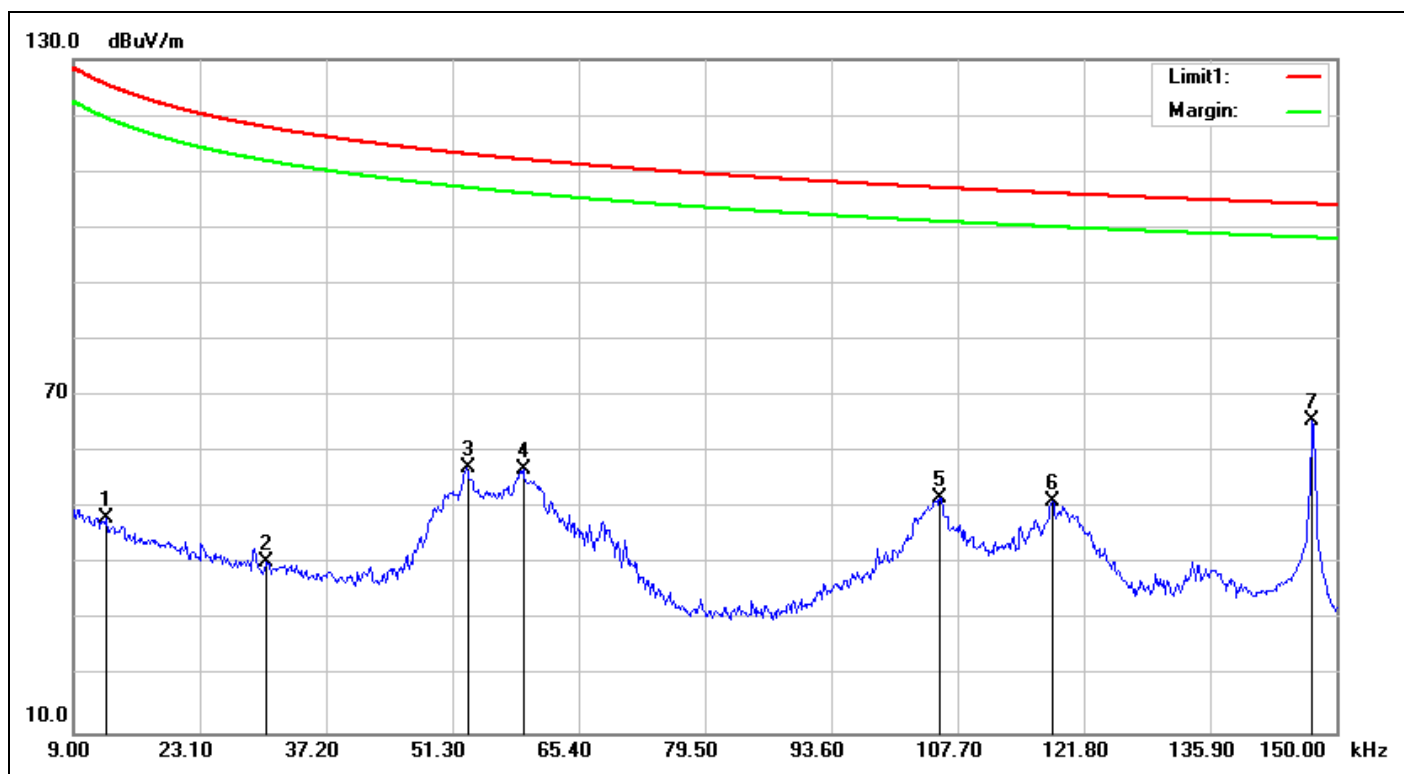
Spurious Emissions, TX Mode, 9kHz-30M



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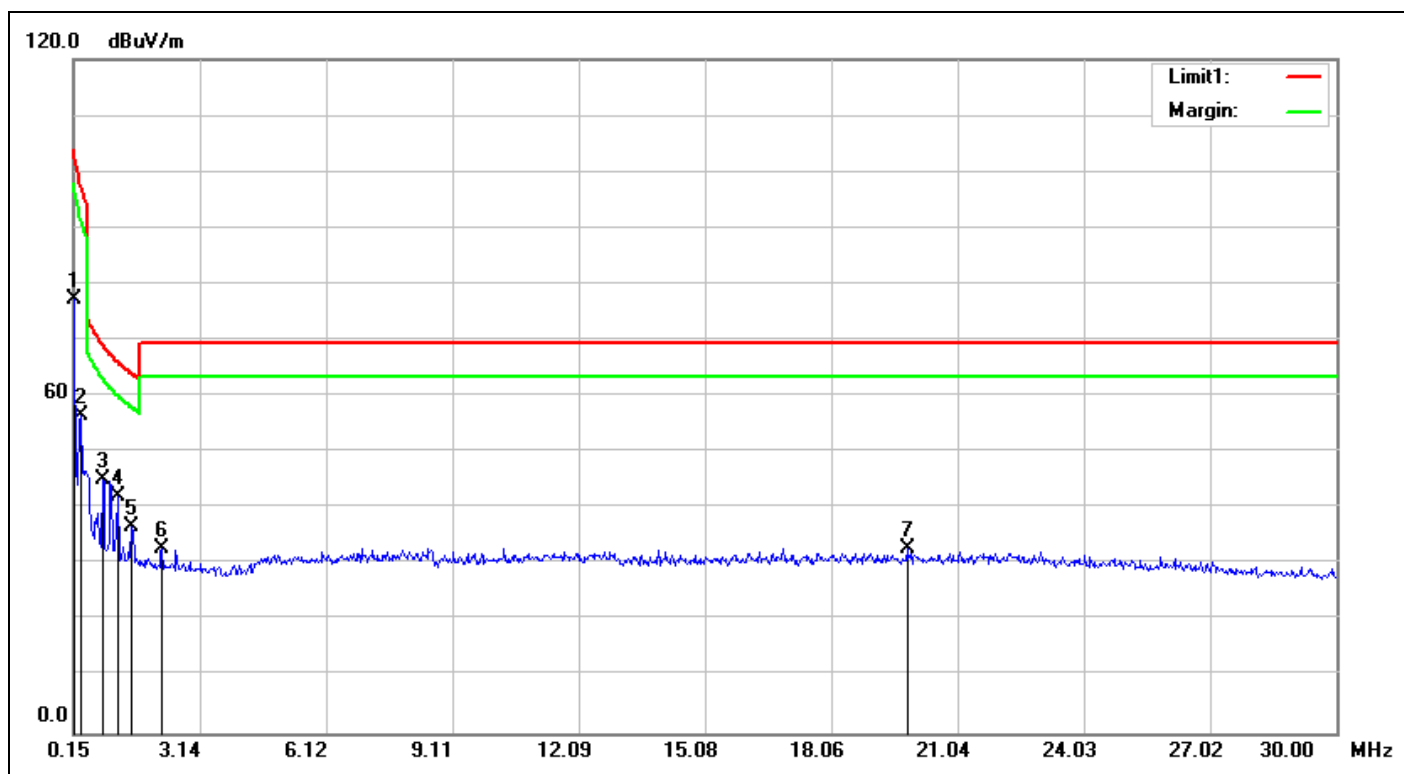
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Service No.:	238100781	Test Distance:	3m
Test Standard:	NCC2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2019/2/15 15:55:06
Applicant:	Kingston	Test Rating:	AC 110V/60Hz
Product:	HyperX ChargePlay Base	Temp.(°C)/Hum.(%)	25(°C)/66%
Model No.:	HX-CPBS-A	Test Engineer:	Kevin Kuo
Test Mode:	TX-9K-150K		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.0127	18.63	29.50	48.13	125.51	-77.38	QP	100	34	
2	0.0306	19.31	21.17	40.48	117.88	-77.40	QP	100	115	
3	0.0529	18.89	38.23	57.12	113.12	-56.00	QP	100	29	
4	0.0592	18.81	38.09	56.90	112.15	-55.25	QP	100	30	
5	0.1057	18.33	33.50	51.83	107.12	-55.29	QP	100	285	
6	0.1183	18.34	33.03	51.37	106.14	-54.77	QP	100	331	
7	0.1473	18.35	47.30	65.65	104.23	-38.58	QP	100	25	Board TX

Spurious Emissions, RX Mode, 30M-1G



Service No.:	238100781	Test Distance:	3m
Test Standard:	NCC2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2019/2/15 16:00:18
Applicant:	Kingston	Test Rating:	AC 110V/60Hz
Product:	HyperX ChargePlay Base	Temp.(°C)/Hum.(%):	25(°C)/66%
Model No.:	HX-CPBS-A	Test Engineer:	Kevin Kuo
Test Mode:	TX-150K-30M		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.1620	18.36	58.83	77.19	103.41	-26.22	QP	100	97	Fundamental
2	0.3291	18.47	37.96	56.43	97.26	-40.83	QP	100	94	
3	0.8366	18.67	26.35	45.02	69.17	-24.15	QP	100	94	
4	1.1948	18.66	23.41	42.07	66.08	-24.01	QP	100	119	
5	1.5231	18.64	18.18	36.82	63.98	-27.16	QP	100	112	
6	2.2395	18.59	14.37	32.96	69.50	-36.54	QP	100	90	
7	19.8510	21.58	11.16	32.74	69.50	-36.76	QP	100	108	

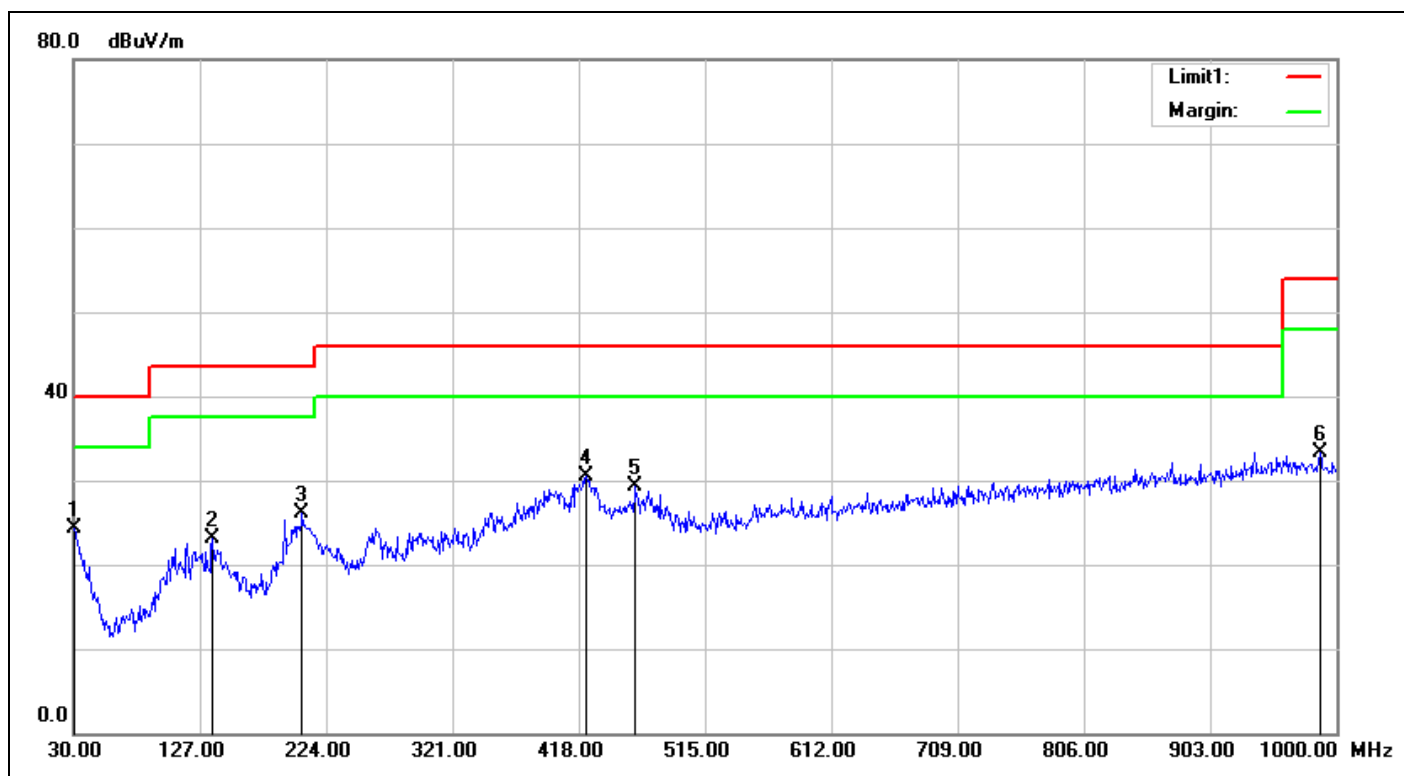
Spurious Emissions, RX Mode, 30M-1G



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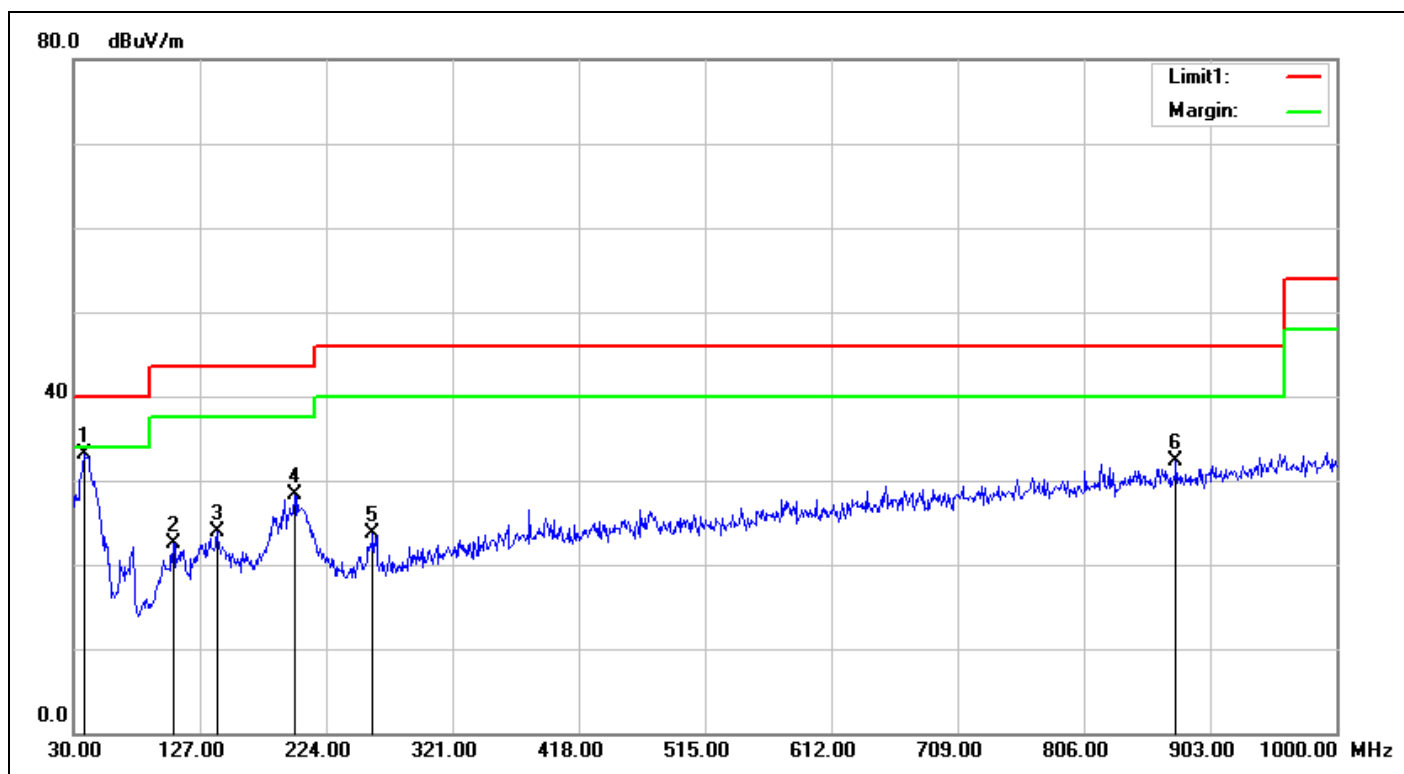
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Service No.:	238100781	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2019/2/15 16:11:37
Applicant:	Kingston	Test Rating:	AC 110V/60Hz
Product:	HyperX ChargePlay Base	Temp.(°C)/Hum.(%)	25(°C)/66%
Model No.:	HX-CPBS-A	Test Engineer:	Kevin Kuo
Test Mode:	RX-30M-1G		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	30.9700	-0.51	24.76	24.25	40.00	-15.75	QP	100	14	
2	136.7000	-7.02	30.20	23.18	43.50	-20.32	QP	100	268	
3	205.5700	-8.60	34.77	26.17	43.50	-17.33	QP	100	231	
4	423.8200	-2.00	32.59	30.59	46.00	-15.41	QP	100	354	
5	461.6500	-1.79	31.12	29.33	46.00	-16.67	QP	100	0	
6	987.3900	5.89	27.46	33.35	54.00	-20.65	QP	100	166	

Spurious Emissions, RX Mode, 30M-1G



Service No.:	238100781	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2019/2/15 16:12:30
Applicant:	Kingston	Test Rating:	AC 110V/60Hz
Product:	HyperX ChargePlay Base	Temp.(°C)/Hum.(%)	25(°C)/66%
Model No.:	HX-CPBS-A	Test Engineer:	Kevin Kuo
Test Mode:	RX-30M-1G		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	37.7600	-4.53	37.67	33.14	40.00	-6.86	QP	100	260	
2	106.6300	-8.56	31.04	22.48	43.50	-21.02	QP	100	83	
3	140.5800	-7.00	30.91	23.91	43.50	-19.59	QP	100	162	
4	199.7500	-8.85	37.10	28.25	43.50	-15.25	QP	100	293	
5	259.8900	-4.85	28.52	23.67	46.00	-22.33	QP	100	92	
6	876.8100	4.10	28.19	32.29	46.00	-13.71	QP	100	175	

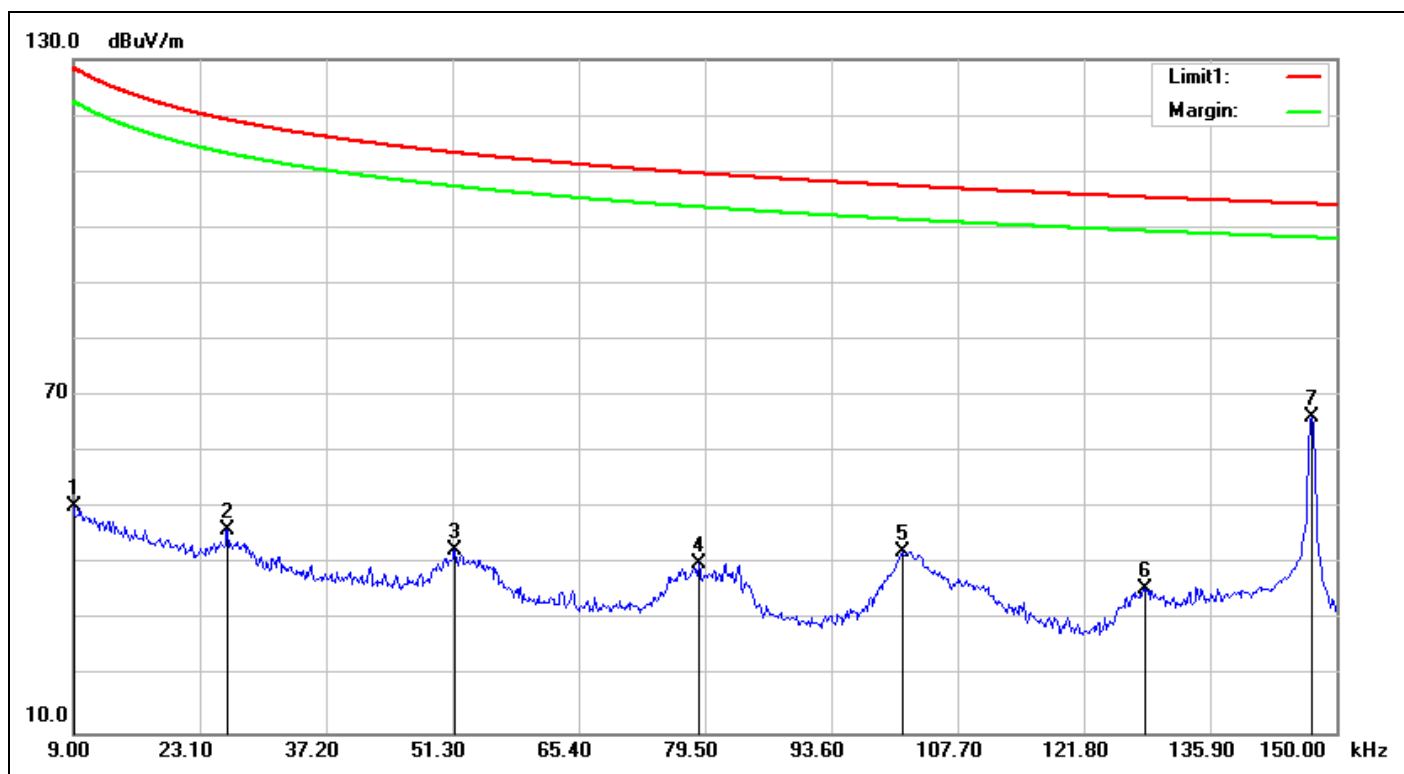
Spurious Emissions, RX Mode, 9kHz-30M



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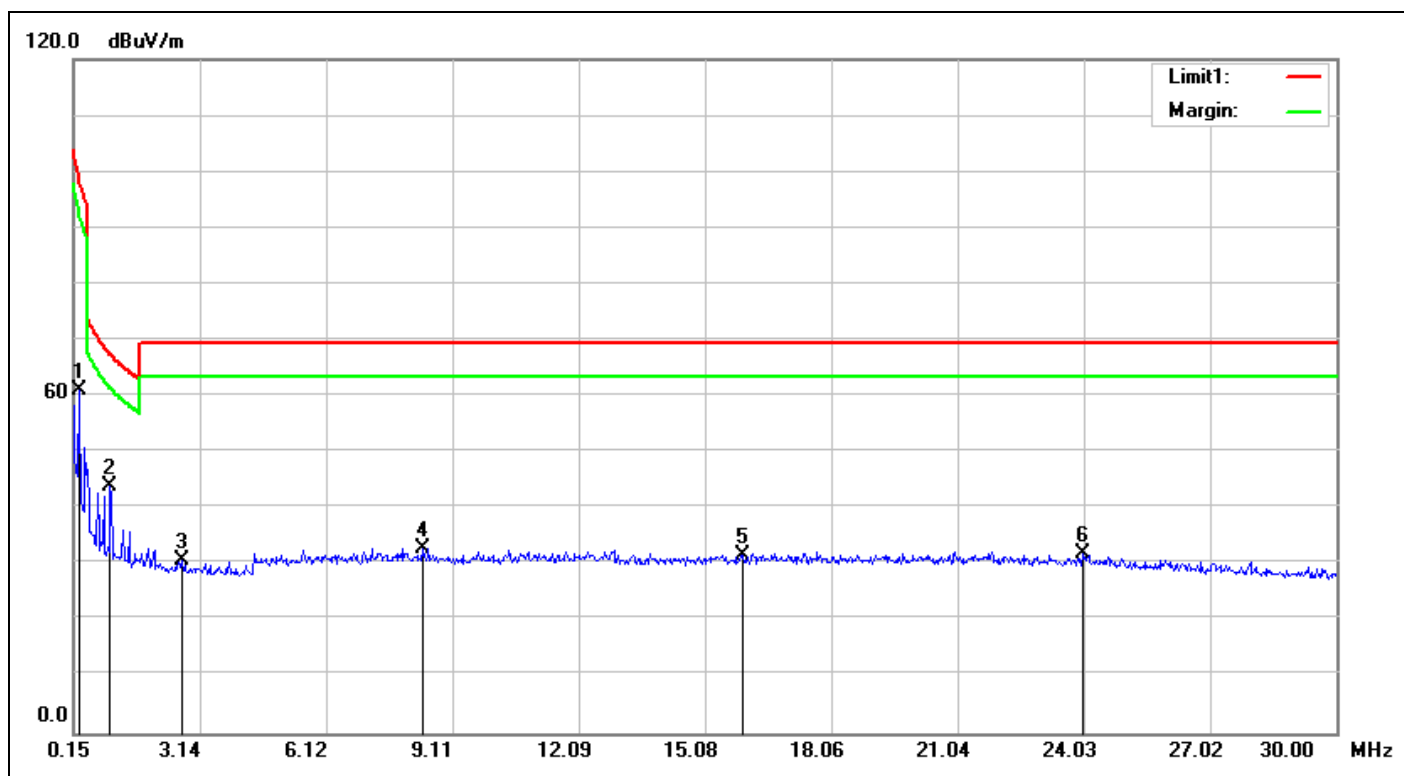
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Service No.:	238100781	Test Distance:	3m
Test Standard:	NCC2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2019/2/15 16:03:25
Applicant:	Kingston	Test Rating:	AC 110V/60Hz
Product:	HyperX ChargePlay Base	Temp.(°C)/Hum.(%):	25(°C)/66%
Model No.:	HX-CPBS-A	Test Engineer:	Kevin Kuo
Test Mode:	RX-9K-150		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.0090	18.32	31.93	50.25	128.50	-78.25	QP	100	170	
2	0.0262	19.17	27.02	46.19	119.22	-73.03	QP	100	177	
3	0.0516	18.90	23.55	42.45	113.34	-70.89	QP	100	185	
4	0.0788	18.57	21.63	40.20	109.66	-69.46	QP	100	177	
5	0.1015	18.33	23.93	42.26	107.47	-65.21	QP	100	49	
6	0.1286	18.34	17.43	35.77	105.41	-69.64	QP	100	188	
7	0.1472	18.35	47.88	66.23	104.24	-38.01	QP	100	313	Board TX

Spurious Emissions, RX Mode, 9kHz-30M



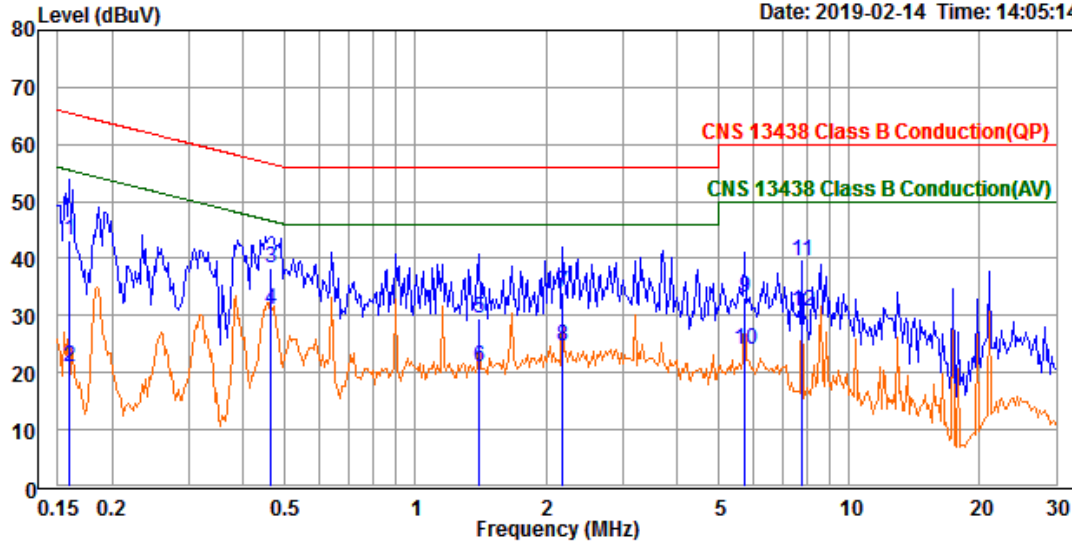
Service No.:	238100781	Test Distance:	3m
Test Standard:	NCC2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2019/2/15 16:05:53
Applicant:	Kingston	Test Rating:	AC 110V/60Hz
Product:	HyperX ChargePlay Base	Temp.(°C)/Hum.(%)	25(°C)/66%
Model No.:	HX-CPBS-A	Test Engineer:	Kevin Kuo
Test Mode:	RX-150K-30M		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.2694	18.42	42.54	60.96	98.99	-38.03	QP	100	348	
2	1.0157	18.68	25.40	44.08	67.49	-23.41	QP	100	307	
3	2.7171	18.55	12.07	30.62	69.50	-38.88	QP	100	321	
4	8.3886	20.13	12.77	32.90	69.50	-36.60	QP	100	153	
5	15.9705	21.14	10.56	31.70	69.50	-37.80	QP	100	303	
6	24.0002	21.75	10.08	31.83	69.50	-37.67	QP	100	175	

Mains Spurious Emissions

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Date: 2019-02-14 Time: 14:05:14



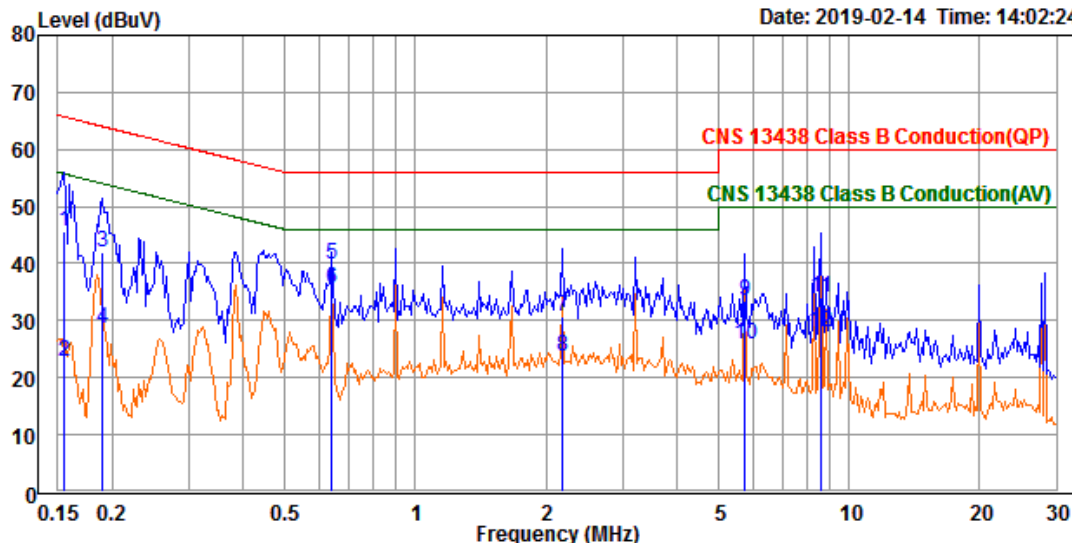
Trace: 1

Site : Conduction room
Condition : CNS 13438 Class B Conduction(QP) neutral
Test Engineer: Wade Cheng
Applicant : Kingston
Product : HyperX ChargePlay Base
Model No. : HX-CPBS-A
Test Rating : 110Vac/60Hz
Tmp/Hum : 19.3°C/54%
Memo : Wireless charging mode(Total 15W)

	Read			Limit	Over	
Freq	Level	Factor	Level	Line	Limit	Remark
MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.159	33.40	9.68	43.08	65.50	-22.42 QP
2	0.159	11.25	9.68	20.93	55.50	-34.57 Average
3	0.466	28.56	9.68	38.24	56.59	-18.35 QP
4	0.466	21.23	9.68	30.91	46.59	-15.68 Average
5	1.404	19.73	9.70	29.43	56.00	-26.57 QP
6	1.404	11.19	9.70	20.89	46.00	-25.11 Average
7	2.175	24.21	9.72	33.93	56.00	-22.07 QP
8	2.175	14.82	9.72	24.54	46.00	-21.46 Average
9	5.761	23.32	9.77	33.09	60.00	-26.91 QP
10	5.761	14.21	9.77	23.98	50.00	-26.02 Average
11	7.762	29.67	9.81	39.48	60.00	-20.52 QP
12	7.762	20.95	9.81	30.76	50.00	-19.24 Average

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Date: 2019-02-14 Time: 14:02:24



Trace: 1

Site : Conduction room
Condition : CNS 13438 Class B Conduction(QP) line1
Test Engineer: Wade Cheng
Applicant : Kingston
Product : HyperX ChargePlay Base
Model No. : HX-CPBS-A
Test Rating : 110Vac/60Hz
Tmp/Hum : 19.3°C/54%
Memo : Wireless charging mode(Total 15W)

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.155	35.89	9.68	45.57	65.75	-20.18	QP
2	0.155	13.19	9.68	22.87	55.75	-32.88	Average
3	0.190	32.29	9.68	41.97	64.02	-22.05	QP
4	0.190	18.91	9.68	28.59	54.02	-25.43	Average
5	0.640	30.19	9.69	39.88	56.00	-16.12	QP
6	0.640	25.95	9.69	35.64	46.00	-10.36	Average
7	2.175	21.04	9.72	30.76	56.00	-25.24	QP
8	2.175	14.14	9.72	23.86	46.00	-22.14	Average
9	5.761	23.81	9.77	33.58	60.00	-26.42	QP
10	5.761	16.01	9.77	25.78	50.00	-24.22	Average
11	8.574	24.21	9.81	34.02	60.00	-25.98	QP
12	8.574	18.11	9.81	27.92	50.00	-22.08	Average