

Test Report No.50182791 001

Appendix D: Radiated Spurious Emission Data

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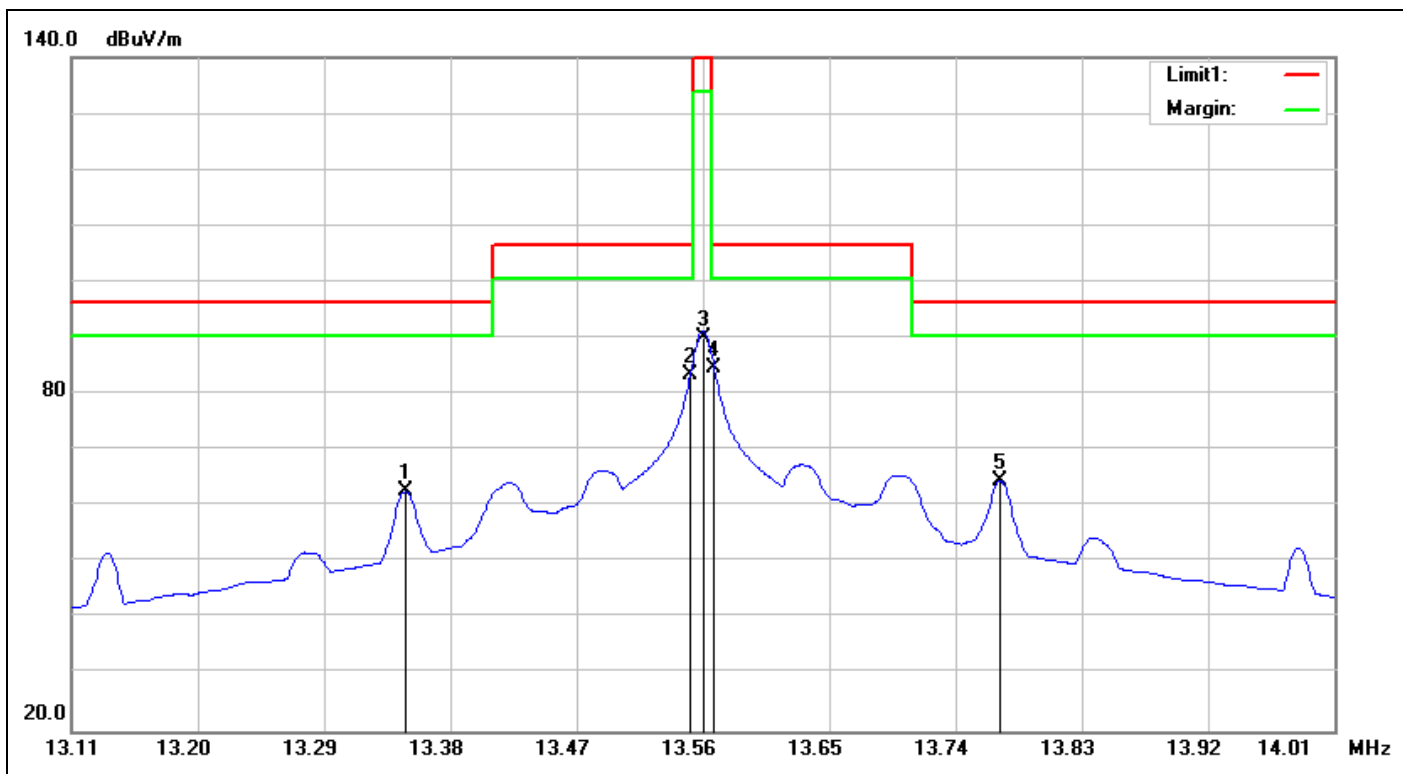
Emissions, Fundamental Mask



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Service No.:	114080733	Test Distance:	1.2m
Test Standard:	FCC 15.225_Fundamental_1.2m(dBuV/m)	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2018/9/13 21:37:57
Applicant:	Pamex	Test Rating:	DC 12V
Product:	Wall Reader	Temp.(°C)/Hum.(%):	21.2(°C)/56%
Model No.:	Kapture KA-WR1S	Test Engineer:	Kevin Kuo
Test Mode:	Mask		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	13.3476	20.83	41.85	62.68	96.40	-33.72	Peak	100	125	
2	13.5510	20.85	62.75	83.60	106.40	-22.80	Peak	100	29	
3	13.5600	20.85	69.75	90.60	139.90	-49.30	QP	100	13	
4	13.5681	20.85	63.78	84.63	106.40	-21.77	Peak	100	336	
5	13.7715	20.87	43.65	64.52	96.40	-31.88	Peak	100	24	

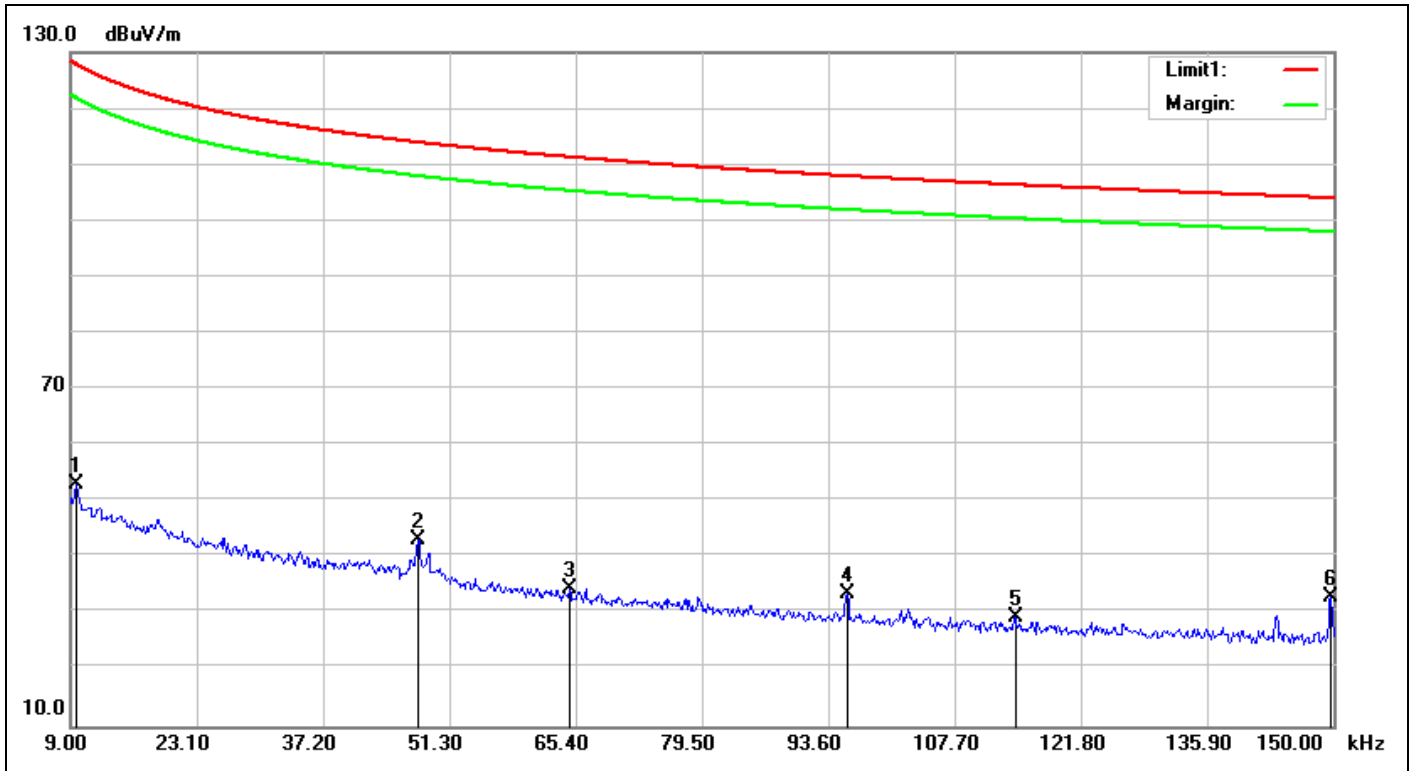
Spurious Emissions, TX+RX Mode, 9K-30M



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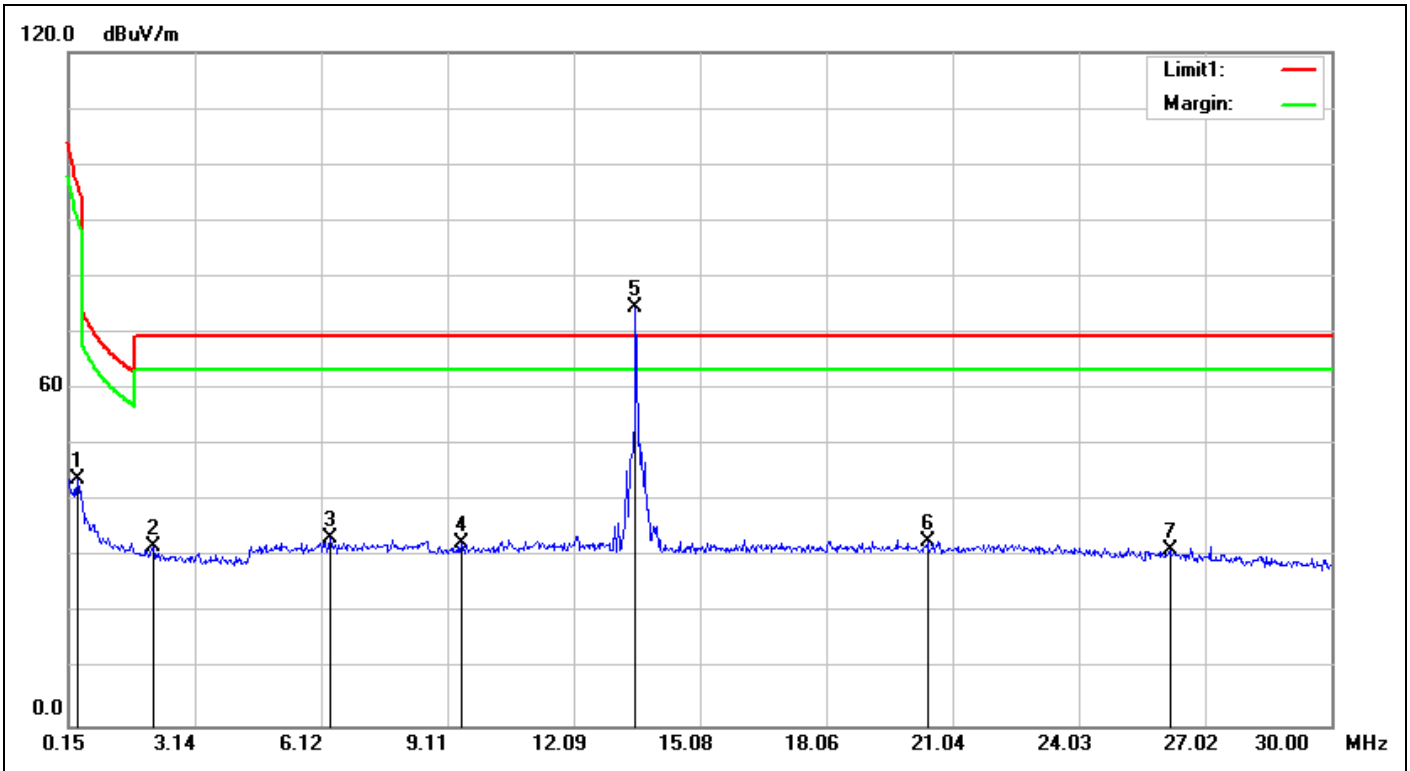
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Service No.:	114080733	Test Distance:	3m
Test Standard:	FCC15.209_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2018/9/11 20:16:47
Applicant:	Pamex	Test Rating:	DC 12V
Product:	Wall Reader	Temp.(°C)/Hum.(%):	19(°C)/51%
Model No.:	Kapture KA-WR1S	Test Engineer:	Kevin Kuo
Test Mode:	13.56M-TX+RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.0096	18.45	34.64	53.09	127.84	-74.75	QP	100	144	
2	0.0478	18.96	24.19	43.15	113.95	-70.80	QP	100	57	
3	0.0646	18.74	15.66	34.40	111.34	-76.94	QP	100	26	
4	0.0957	18.38	15.12	33.50	107.94	-74.44	QP	100	18	
5	0.1145	18.34	11.07	29.41	106.38	-76.97	QP	100	312	
6	0.1497	18.35	14.52	32.87	104.06	-71.19	QP	100	2	



Service No.:	114080733	Test Distance:	3m
Test Standard:	FCC15.209_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2018/9/11 20:24:03
Applicant:	Pamex	Test Rating:	DC 12V
Product:	Wall Reader	Temp.(°C)/Hum.(%):	19(°C)/51%
Model No.:	Kapture KA-WR1S	Test Engineer:	Kevin Kuo
Test Mode:	13.56M-TX+RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.3589	18.50	25.31	43.81	96.49	-52.68	QP	100	28	
2	2.1500	18.59	13.32	31.91	69.50	-37.59	QP	100	356	
3	6.3289	19.73	13.82	33.55	69.50	-35.95	QP	100	121	
4	9.4334	20.33	12.27	32.60	69.50	-36.90	QP	100	35	
5	13.5600	20.85	53.66	74.51	69.50	5.01	QP	100	27	Fundamental
6	20.4480	21.62	11.14	32.76	69.50	-36.74	QP	100	118	
7	26.1792	21.84	9.39	31.23	69.50	-38.27	QP	100	203	

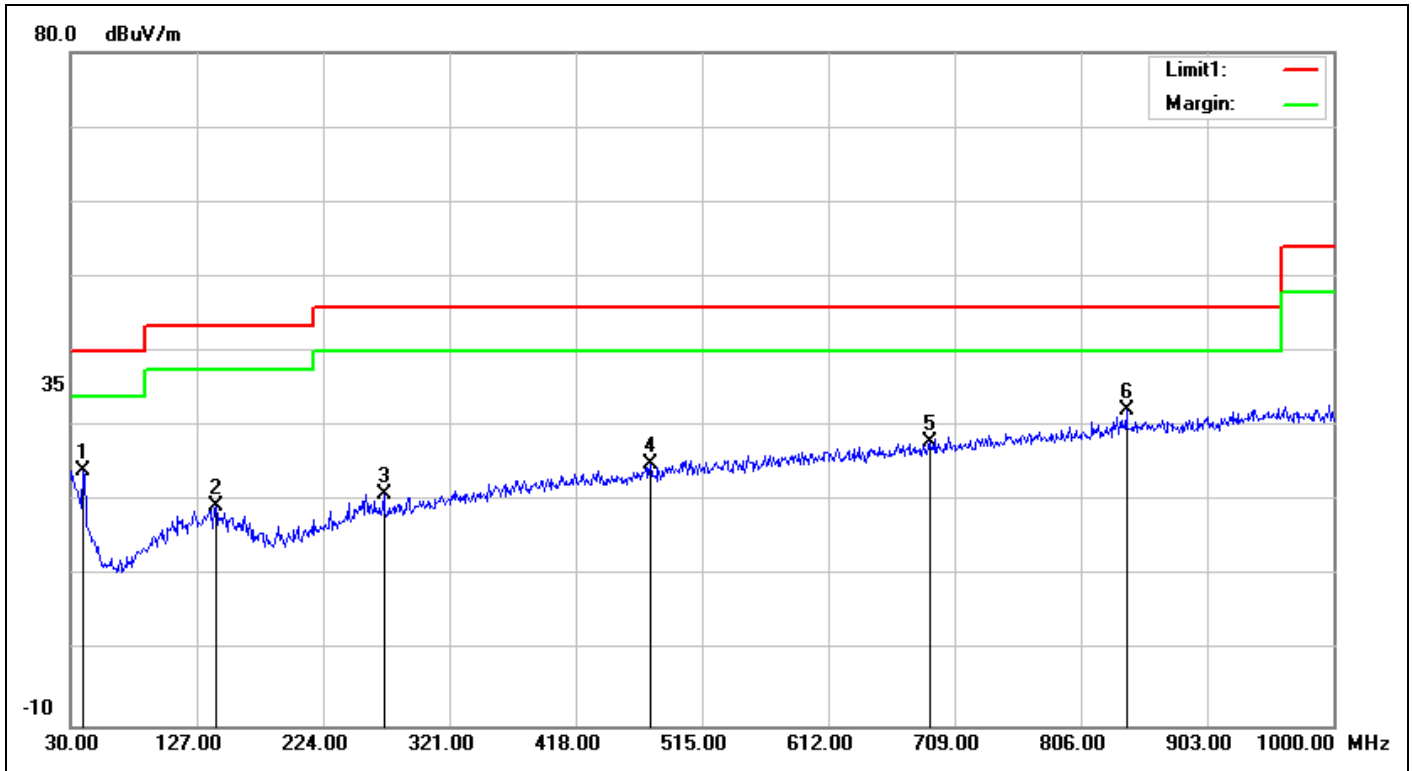
Spurious Emissions, TX+RX Mode,30M-1G



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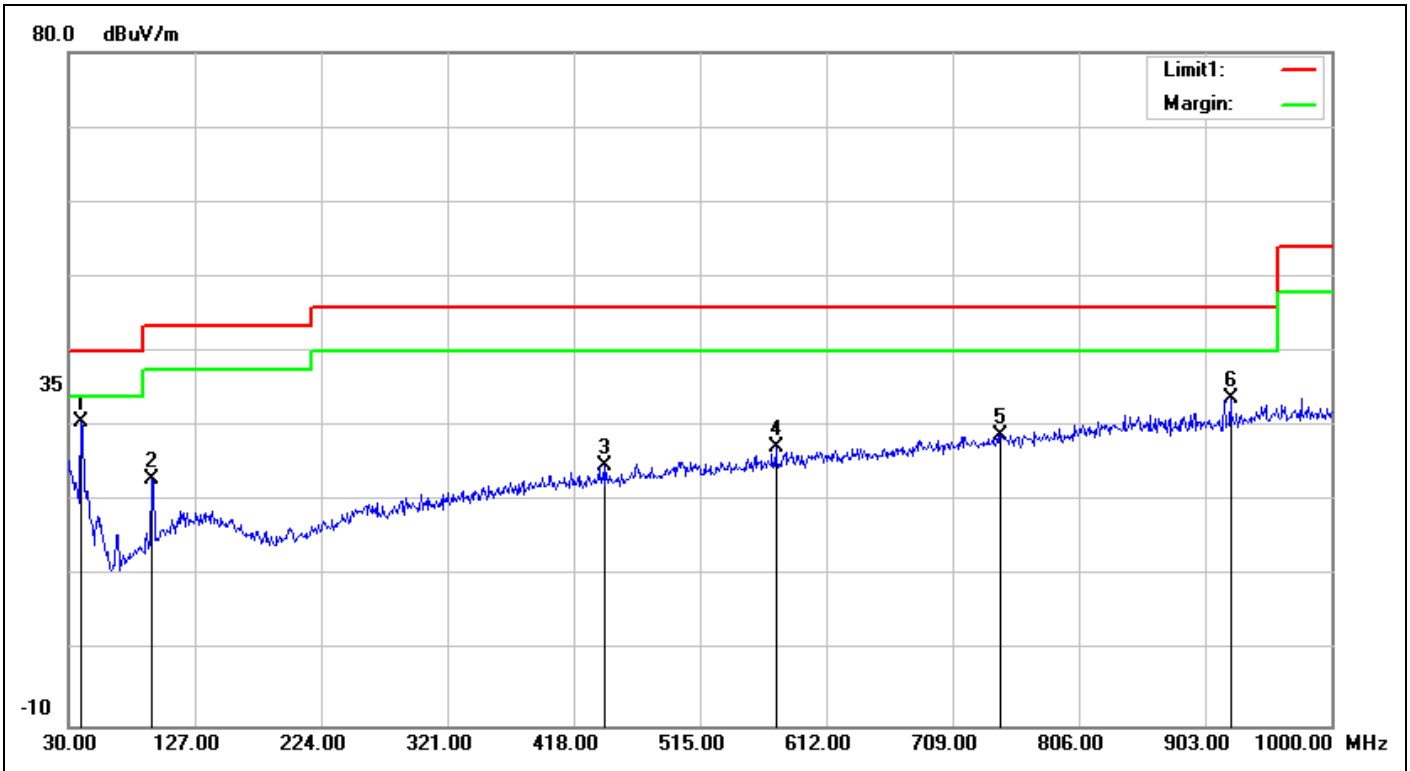
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Service No.:	114080733	Test Distance:	3m
Test Standard:	FCC 15.209_30M-40G_3m	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/9/11 20:37:25
Applicant:	Pamex	Test Rating:	DC 12V
Product:	Wall Reader	Temp.(°C)/Hum.(%):	19(°C)/51%
Model No.:	Kapture KA-WR1S	Test Engineer:	Kevin Kuo
Test Mode:	13.56M-TX+RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	39.7000	-5.47	29.61	24.14	40.00	-15.86	QP	100	64	
2	141.5500	-6.96	26.41	19.45	43.52	-24.07	QP	100	230	
3	270.5600	-5.38	26.38	21.00	46.02	-25.02	QP	100	120	
4	475.2300	-1.58	26.63	25.05	46.02	-20.97	QP	100	211	
5	689.6000	1.27	26.74	28.01	46.02	-18.01	QP	100	325	
6	840.9199	4.14	28.14	32.28	46.02	-13.74	QP	100	136	



Service No.:	114080733	Test Distance:	3m
Test Standard:	FCC 15.209_30M-40G_3m	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/9/11 20:38:28
Applicant:	Pamex	Test Rating:	DC 12V
Product:	Wall Reader	Temp.(°C)/Hum.(%):	19(°C)/51%
Model No.:	Kapture KA-WR1S	Test Engineer:	Kevin Kuo
Test Mode:	13.56M-TX+RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	39.7000	-5.47	35.98	30.51	40.00	-9.49	QP	100	21	
2	94.0199	-10.25	33.21	22.96	43.52	-20.56	QP	100	144	
3	442.2500	-2.11	26.93	24.82	46.02	-21.20	QP	100	277	
4	573.2000	-0.19	27.43	27.24	46.02	-18.78	QP	100	15	
5	745.8600	2.31	26.52	28.83	46.02	-17.19	QP	100	159	
6	922.4000	5.24	28.55	33.79	46.02	-12.23	QP	100	5	

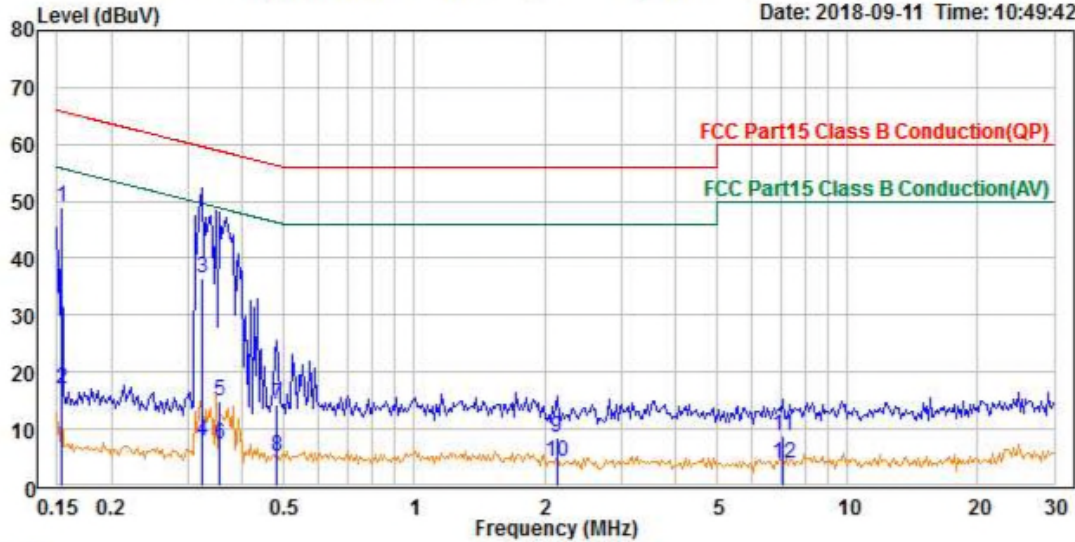
Spurious Emissions, Main



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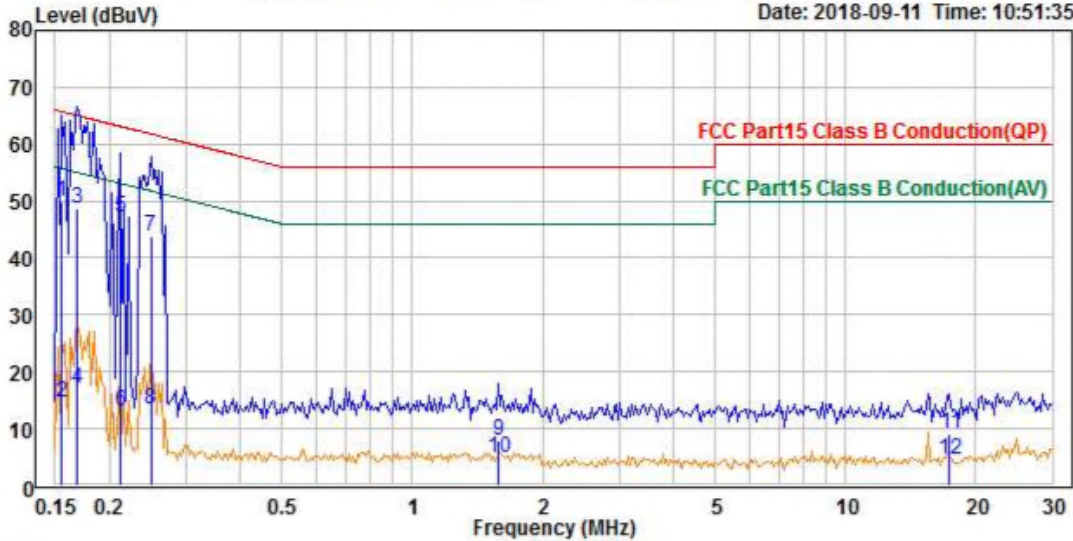
Trace: 1

Site : Conduction room
 Condition : FCC Part15 Class B Conduction(QP) line1
 Test Engineer: Joe Tien
 Applicant : Pamex
 Product :
 Model No. : Kapture KA-WR1S
 Test Rating : 120Vac/60Hz
 Tmp/Hum : 22.8 °C / 43 %
 Memo : RFID tag +WIFI link

	Read Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.153	39.22	9.68	48.90	65.83	-16.93	QP
2	0.153	7.32	9.68	17.00	55.83	-38.83	Average
3	0.322	26.82	9.68	36.50	59.64	-23.14	QP
4	0.322	-1.62	9.68	8.06	49.64	-41.58	Average
5	0.356	5.15	9.69	14.84	58.82	-43.98	QP
6	0.356	-2.26	9.69	7.43	48.82	-41.39	Average
7	0.480	4.47	9.69	14.16	56.34	-42.18	QP
8	0.480	-4.46	9.69	5.23	46.34	-41.11	Average
9	2.132	-1.10	9.72	8.62	56.00	-47.38	QP
10	2.132	-5.60	9.72	4.12	46.00	-41.88	Average
11	7.098	-1.00	9.79	8.79	60.00	-51.21	QP
12	7.098	-5.69	9.79	4.10	50.00	-45.90	Average

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Date: 2018-09-11 Time: 10:51:35



Trace: 1
 Site : Conduction room
 Condition : FCC Part15 Class B Conduction(QP) neutral
 Test Engineer: Joe Tien
 Applicant : Pamex
 Product :
 Model No. : Kapture KA-WR1S
 Test Rating : 120Vac/60Hz
 Tmp/Hum : 22.8 °C / 43 %
 Memo : RFID tag +WIFI link

	Freq	Read Level	Factor	Level	Limit	Over	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.155	40.25	9.68	49.93	65.75	-15.82	QP
2	0.155	4.90	9.68	14.58	55.75	-41.17	Average
3	0.169	39.08	9.68	48.76	65.01	-16.25	QP
4	0.169	7.38	9.68	17.06	55.01	-37.95	Average
5	0.212	37.33	9.68	47.01	63.11	-16.10	QP
6	0.212	3.30	9.68	12.98	53.11	-40.13	Average
7	0.249	34.22	9.68	43.90	61.79	-17.89	QP
8	0.249	3.74	9.68	13.42	51.79	-38.37	Average
9	1.582	-1.78	9.72	7.94	56.00	-48.06	QP
10	1.582	-4.70	9.72	5.02	46.00	-40.98	Average
11	17.365	-0.69	9.89	9.20	60.00	-50.80	QP
12	17.365	-5.41	9.89	4.48	50.00	-45.52	Average