

Test Report No.50182725 001

Appendix D: Radiated Spurious Emission Data

(File: 50182725 001Appendix D)

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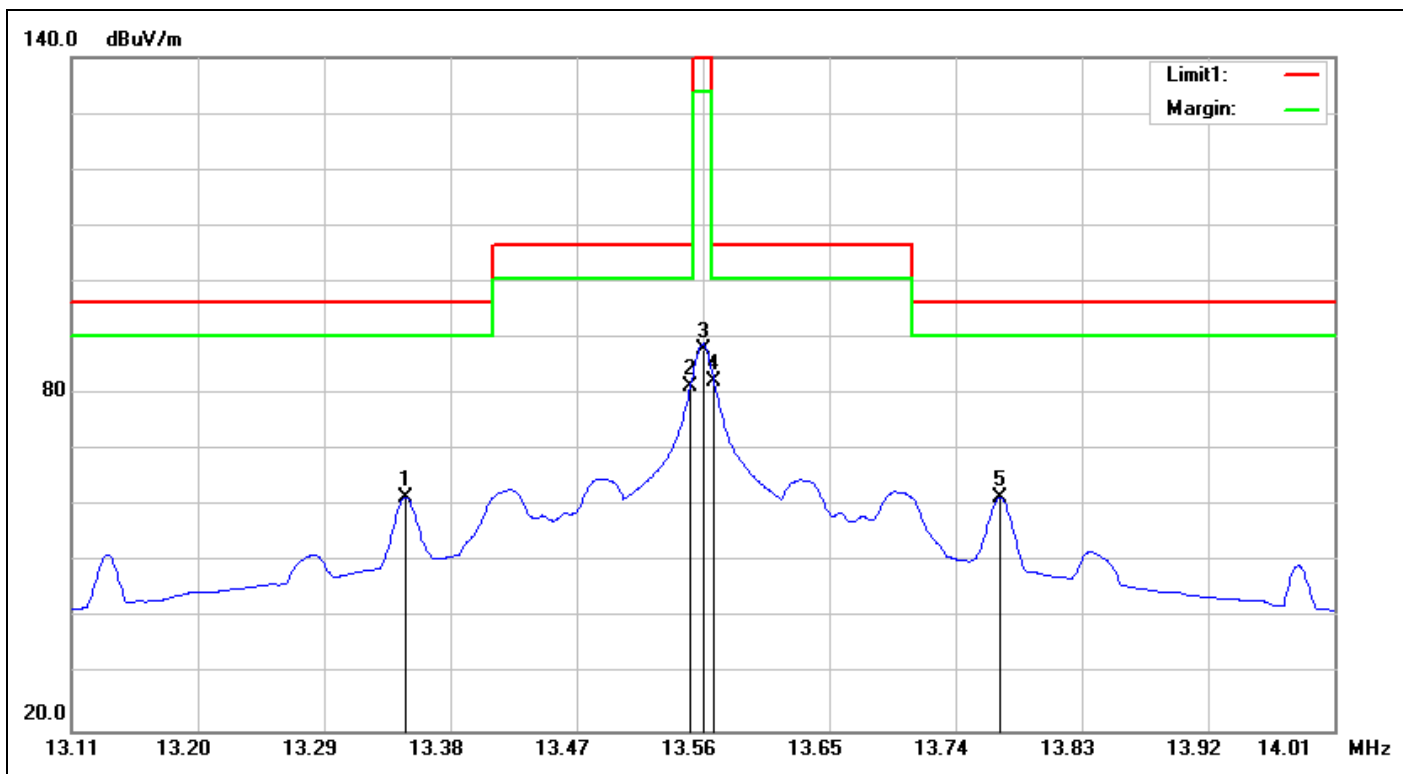
Emissions, Fundamental Mask



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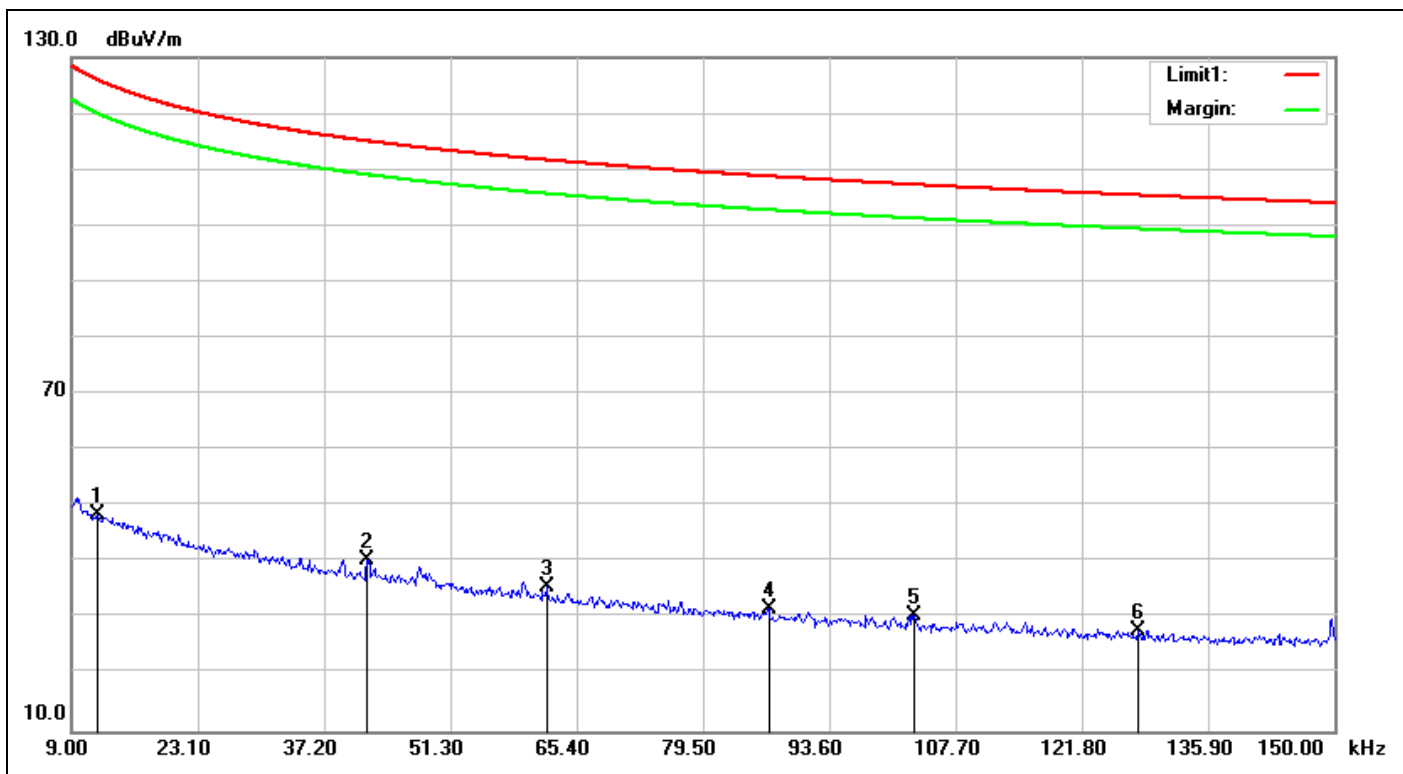
| | | | |
|-----------------------|--|---------------------------|---------------------------|
| Service No.: | 114080743 | Test Distance: | 1.2m |
| Test Standard: | FCC 15.225_Fundamental_1.2m(dBuV/m) | Ant. Polarization: | |
| Test item: | Radiation Emission | Test Time: | 2018/9/13 21:28:28 |
| Applicant: | Pamex | Test Rating: | DC 12V |
| Product: | Wall Reader | Temp.(°C)/Hum.(%): | 21.2(°C)/56% |
| Model No.: | Kapture KA-WR1N | 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 | 40.82 | 61.65 | 96.40 | -34.75 | QP | 100 | 35 | |
| 2 | 13.5510 | 20.85 | 60.58 | 81.43 | 106.40 | -24.97 | QP | 100 | 201 | |
| 3 | 13.5600 | 20.85 | 67.25 | 88.10 | 139.90 | -51.80 | QP | 100 | 337 | |
| 4 | 13.5681 | 20.85 | 61.31 | 82.16 | 106.40 | -24.24 | QP | 100 | 189 | |
| 5 | 13.7715 | 20.87 | 40.72 | 61.59 | 96.40 | -34.81 | QP | 100 | 54 | |

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

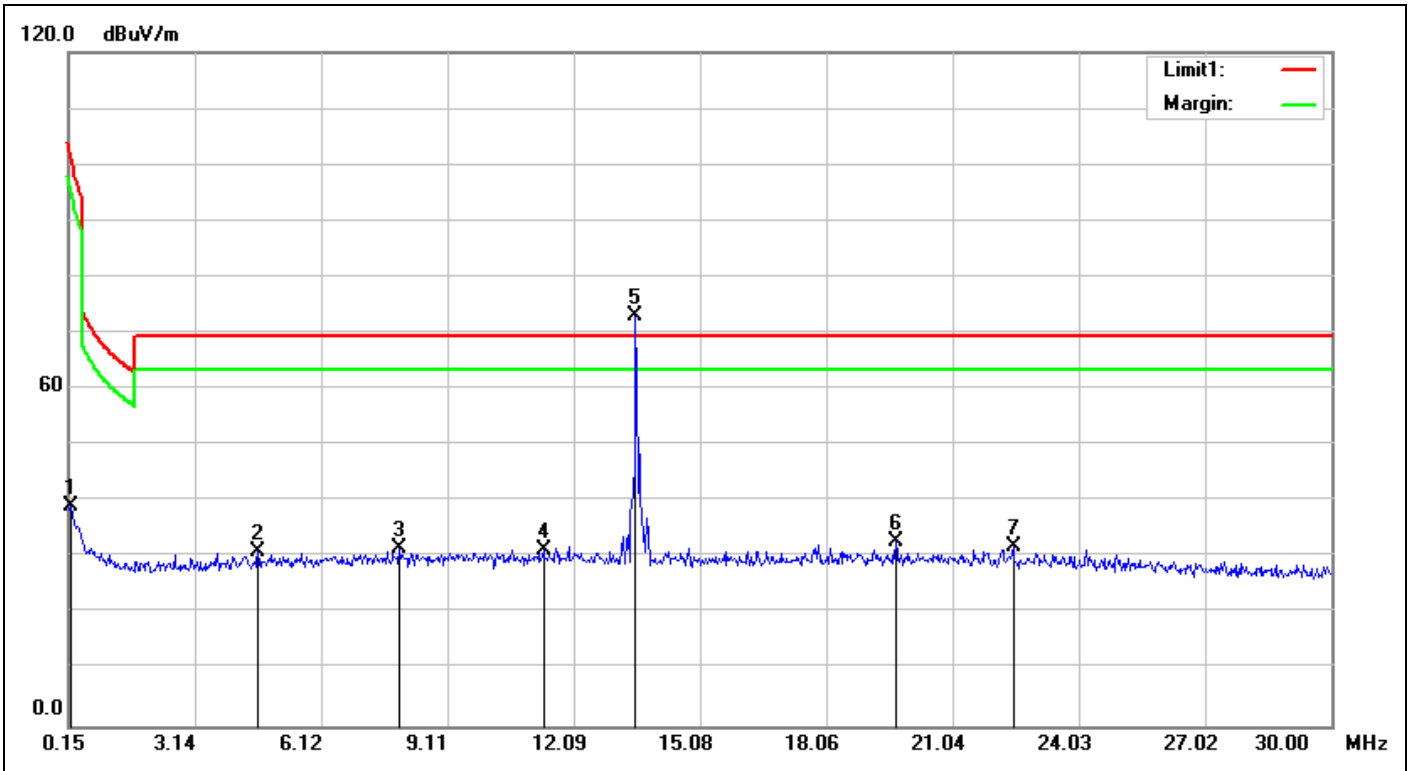


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| | | | |
|-----------------------|---------------------------|---------------------------|---------------------------|
| Service No.: | 114080743 | Test Distance: | 3m |
| Test Standard: | FCC15.209_9k-1G_3m | Ant. Polarization: | |
| Test item: | Radiation Emission | Test Time: | 2018/9/11 21:05:01 |
| Applicant: | Pamex | Test Rating: | DC 12V |
| Product: | Wall Reader | Temp.(°C)/Hum.(%): | 19(°C)/51% |
| Model No.: | Kapture KA-WR1N | Test Engineer: | Kevin Kuo |
| Test Mode: | 13.56-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 | 0.0120 | 18.60 | 29.96 | 48.56 | 125.91 | -77.35 | QP | 100 | 18 | |
| 2 | 0.0420 | 19.08 | 21.41 | 40.49 | 115.07 | -74.58 | QP | 100 | 39 | |
| 3 | 0.0620 | 18.78 | 16.78 | 35.56 | 111.70 | -76.14 | QP | 100 | 224 | |
| 4 | 0.0868 | 18.48 | 13.37 | 31.85 | 108.78 | -76.93 | QP | 100 | 58 | |
| 5 | 0.1030 | 18.33 | 12.27 | 30.60 | 107.30 | -76.70 | QP | 100 | 317 | |
| 6 | 0.1280 | 18.34 | 9.55 | 27.89 | 105.42 | -77.53 | QP | 100 | 12 | |



| | | | |
|-----------------------|---------------------------|---------------------------|---------------------------|
| Service No.: | 114080743 | Test Distance: | 3m |
| Test Standard: | FCC15.209_9k-1G_3m | Ant. Polarization: | |
| Test item: | Radiation Emission | Test Time: | 2018/9/11 21:06:57 |
| Applicant: | Pamex | Test Rating: | DC 12V |
| Product: | Wall Reader | Temp.(°C)/Hum.(%): | 19(°C)/51% |
| Model No.: | Kapture KA-WR1N | Test Engineer: | Kevin Kuo |
| Test Mode: | 13.56-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 | 0.2097 | 18.39 | 20.81 | 39.20 | 101.15 | -61.95 | QP | 100 | 13 | |
| 2 | 4.6275 | 19.29 | 11.66 | 30.95 | 69.50 | -38.55 | QP | 100 | 109 | |
| 3 | 7.9707 | 20.04 | 11.49 | 31.53 | 69.50 | -37.97 | QP | 100 | 27 | |
| 4 | 11.3736 | 20.60 | 10.78 | 31.38 | 69.50 | -38.12 | QP | 100 | 144 | |
| 5 | 13.5600 | 20.85 | 52.11 | 72.96 | 69.50 | 3.46 | QP | 100 | 69 | Fundamental |
| 6 | 19.7018 | 21.57 | 11.16 | 32.73 | 69.50 | -36.77 | QP | 100 | 288 | |
| 7 | 22.4778 | 21.69 | 10.20 | 31.89 | 69.50 | -37.61 | QP | 100 | 156 | |

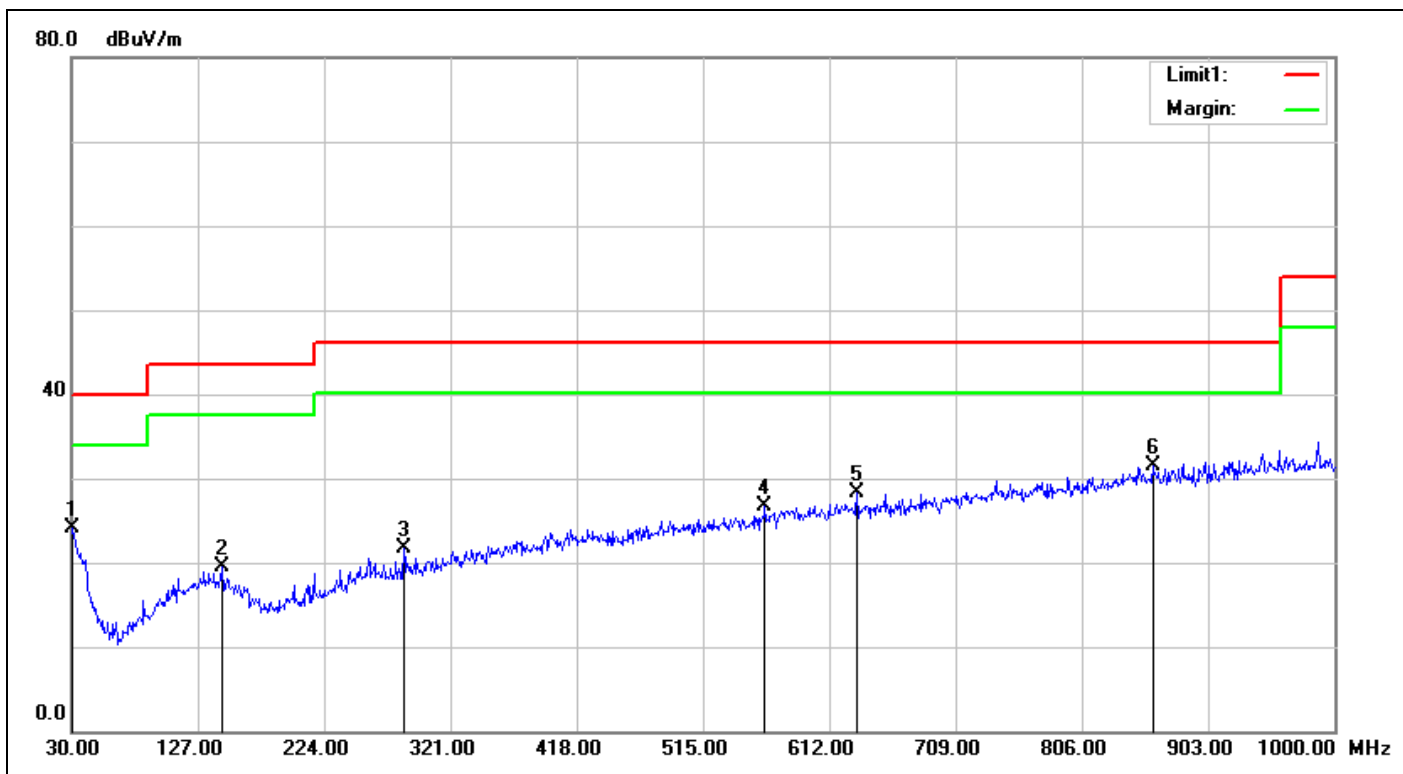
Spurious Emissions, TX+RX Mode,30M-1G



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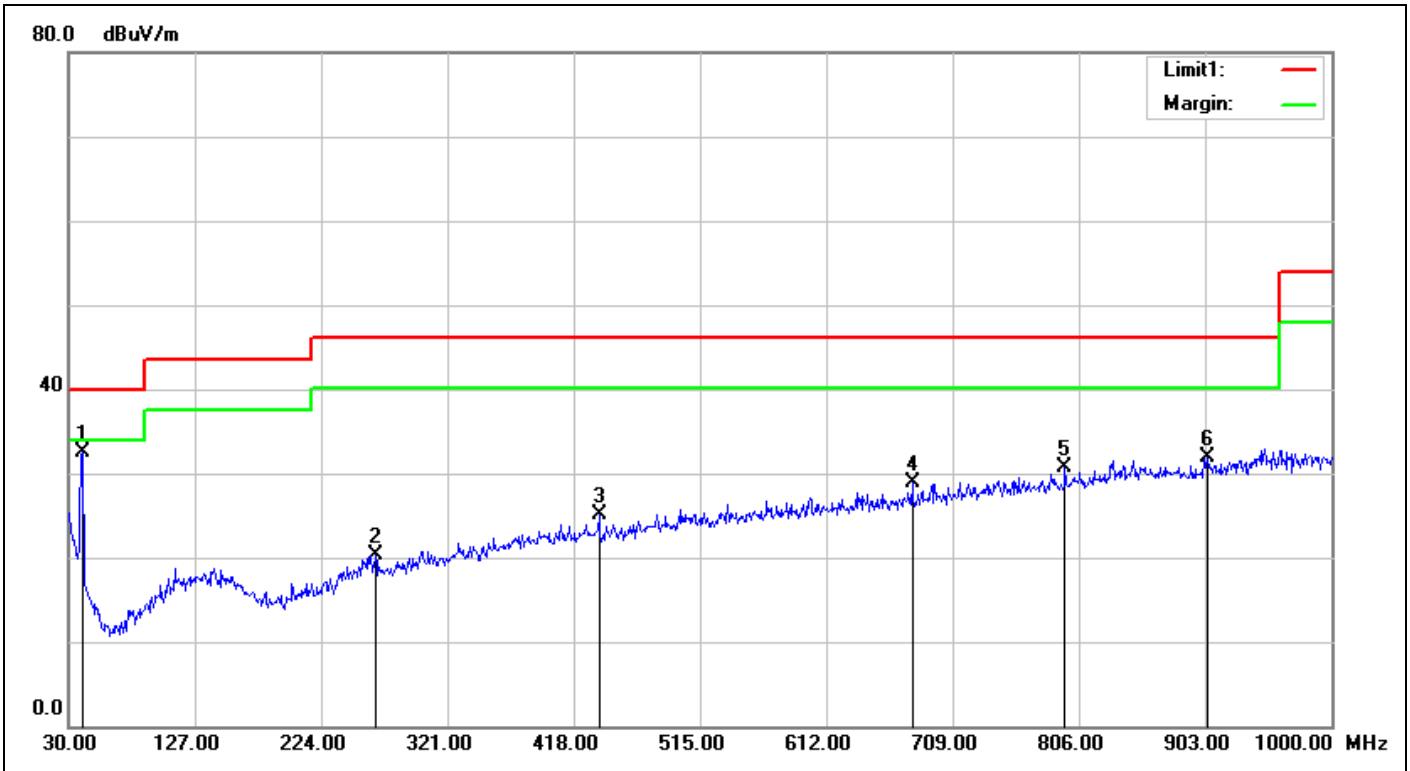
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| | | | |
|-----------------------|------------------------------|---------------------------|---------------------------|
| Service No.: | 114080743 | Test Distance: | 3m |
| Test Standard: | FCC 15.209_30M-40G_3m | Ant. Polarization: | Horizontal |
| Test item: | Radiation Emission | Test Time: | 2018/9/11 21:23:10 |
| Applicant: | Pamex | Test Rating: | DC 12V |
| Product: | Wall Reader | Temp.(°C)/Hum.(%): | 19(°C)/51% |
| Model No.: | Kapture KA-WR1N | Test Engineer: | Kevin Kuo |
| Test Mode: | 13.56-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 | 30.0000 | 0.07 | 23.94 | 24.01 | 40.00 | -15.99 | QP | 100 | 142 | |
| 2 | 145.4299 | -7.13 | 26.69 | 19.56 | 43.52 | -23.96 | QP | 100 | 70 | |
| 3 | 285.1099 | -4.97 | 26.63 | 21.66 | 46.02 | -24.36 | QP | 100 | 0 | |
| 4 | 562.5299 | -0.36 | 26.97 | 26.61 | 46.02 | -19.41 | QP | 100 | 158 | |
| 5 | 633.3400 | 0.47 | 27.74 | 28.21 | 46.02 | -17.81 | QP | 100 | 245 | |
| 6 | 860.3200 | 4.41 | 27.13 | 31.54 | 46.02 | -14.48 | QP | 100 | 33 | |



| | | | |
|-----------------------|------------------------------|---------------------------|---------------------------|
| Service No.: | 114080743 | Test Distance: | 3m |
| Test Standard: | FCC 15.209_30M-40G_3m | Ant. Polarization: | Vertical |
| Test item: | Radiation Emission | Test Time: | 2018/9/11 21:24:14 |
| Applicant: | Pamex | Test Rating: | DC 12V |
| Product: | Wall Reader | Temp.(°C)/Hum.(%): | 19(°C)/51% |
| Model No.: | Kapture KA-WR1N | Test Engineer: | Kevin Kuo |
| Test Mode: | 13.56-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 | 40.6699 | -6.02 | 38.57 | 32.55 | 40.00 | -7.45 | QP | 100 | 224 | |
| 2 | 265.7100 | -5.20 | 25.58 | 20.38 | 46.02 | -25.64 | QP | 100 | 189 | |
| 3 | 437.4000 | -2.14 | 27.25 | 25.11 | 46.02 | -20.91 | QP | 100 | 1 | |
| 4 | 677.9600 | 1.08 | 27.78 | 28.86 | 46.02 | -17.16 | QP | 100 | 360 | |
| 5 | 795.3300 | 3.05 | 27.57 | 30.62 | 46.02 | -15.40 | QP | 100 | 51 | |
| 6 | 904.9400 | 4.75 | 27.20 | 31.95 | 46.02 | -14.07 | QP | 100 | 256 | |

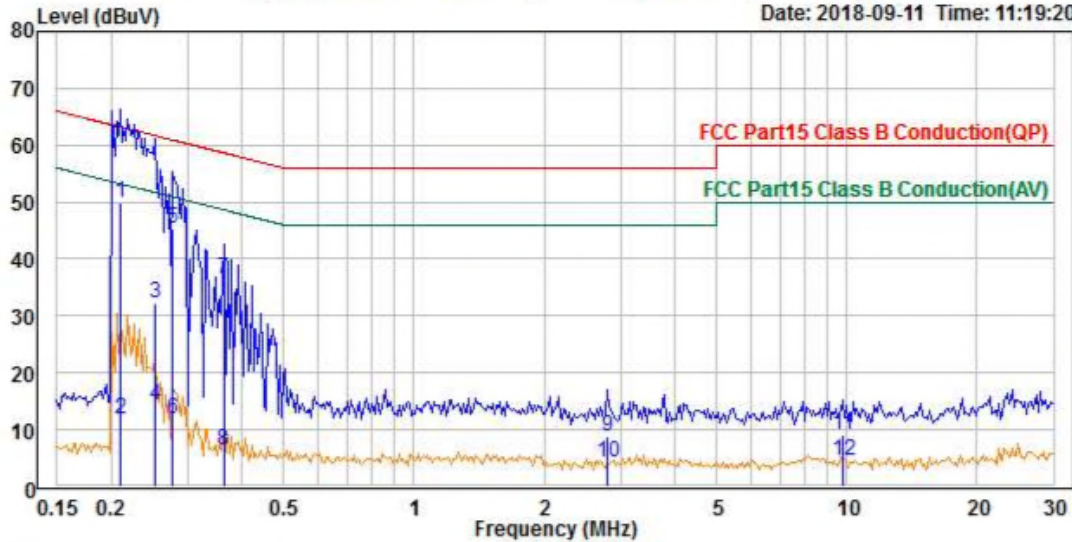
Spurious Emissions, Main



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Date: 2018-09-11 Time: 11:19:20



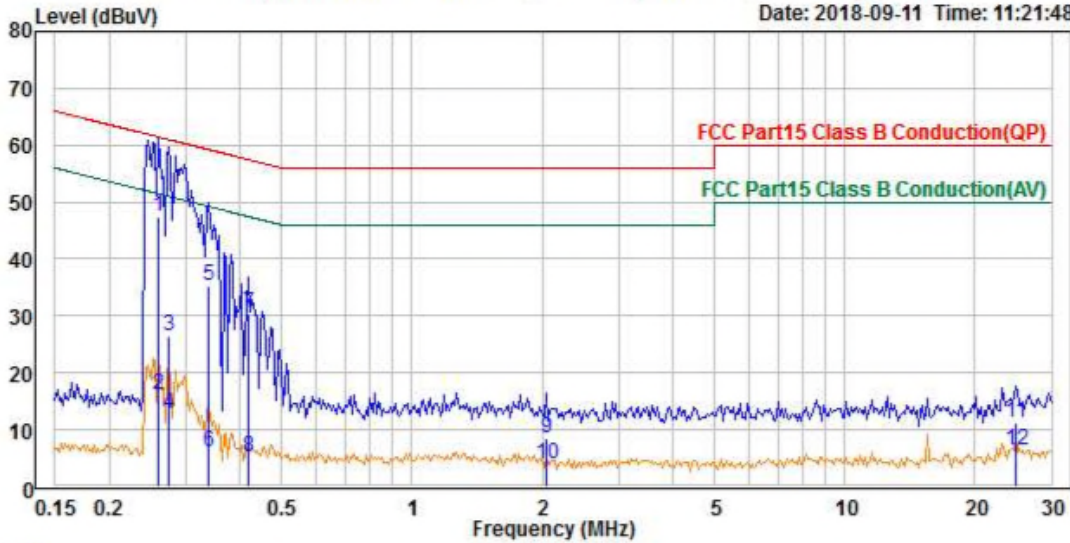
Trace: 1

Site : Conduction room
 Condition : FCC Part15 Class B Conduction(QP) line1
 Test Engineer: Joe Tien
 Applicant : Pamex
 Product :
 Model No. : Kapture KA-WR1N
 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 | 0.210 | 40.18 | 9.68 | 49.86 | 63.19 | -13.33 | QP |
| 2 | 0.210 | 2.10 | 9.68 | 11.78 | 53.19 | -41.41 | Average |
| 3 | 0.252 | 22.55 | 9.68 | 32.23 | 61.71 | -29.48 | QP |
| 4 | 0.252 | 4.60 | 9.68 | 14.28 | 51.71 | -37.43 | Average |
| 5 | 0.278 | 35.64 | 9.68 | 45.32 | 60.88 | -15.56 | QP |
| 6 | 0.278 | 2.04 | 9.68 | 11.72 | 50.88 | -39.16 | Average |
| 7 | 0.363 | 26.88 | 9.69 | 36.57 | 58.65 | -22.08 | QP |
| 8 | 0.363 | -3.25 | 9.69 | 6.44 | 48.65 | -42.21 | Average |
| 9 | 2.788 | -0.95 | 9.73 | 8.78 | 56.00 | -47.22 | QP |
| 10 | 2.788 | -5.59 | 9.73 | 4.14 | 46.00 | -41.86 | Average |
| 11 | 9.756 | -0.64 | 9.83 | 9.19 | 60.00 | -50.81 | QP |
| 12 | 9.756 | -5.38 | 9.83 | 4.45 | 50.00 | -45.55 | Average |

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Date: 2018-09-11 Time: 11:21:48



Trace: 1
 Site : Conduction room
 Condition : FCC Part15 Class B Conduction(QP) neutral
 Test Engineer: Joe Tien
 Applicant : Pamex
 Product :
 Model No. : Kapture KA-WR1N
 Test Rating : 120Vac/60Hz
 Tmp/Hum : 22.8 °C / 43 %
 Memo : RFID tag +WIFI link

| | Read Freq | Level | Factor | Level | Limit | Over | Remark |
|----|-----------|-------|--------|-------|-------|--------|---------|
| | MHz | dBuV | dB | dBuV | dBuV | dB | |
| 1 | 0.259 | 37.82 | 9.68 | 47.50 | 61.46 | -13.96 | QP |
| 2 | 0.259 | 6.35 | 9.68 | 16.03 | 51.46 | -35.43 | Average |
| 3 | 0.275 | 16.76 | 9.68 | 26.44 | 60.96 | -34.52 | QP |
| 4 | 0.275 | 3.08 | 9.68 | 12.76 | 50.96 | -38.20 | Average |
| 5 | 0.339 | 25.56 | 9.67 | 35.23 | 59.23 | -24.00 | QP |
| 6 | 0.339 | -3.61 | 9.67 | 6.06 | 49.23 | -43.17 | Average |
| 7 | 0.418 | 20.61 | 9.68 | 30.29 | 57.50 | -27.21 | QP |
| 8 | 0.418 | -4.51 | 9.68 | 5.17 | 47.50 | -42.33 | Average |
| 9 | 2.049 | -1.18 | 9.72 | 8.54 | 56.00 | -47.46 | QP |
| 10 | 2.049 | -5.67 | 9.72 | 4.05 | 46.00 | -41.95 | Average |
| 11 | 24.837 | 1.40 | 9.94 | 11.34 | 60.00 | -48.66 | QP |
| 12 | 24.837 | -3.44 | 9.94 | 6.50 | 50.00 | -43.50 | Average |