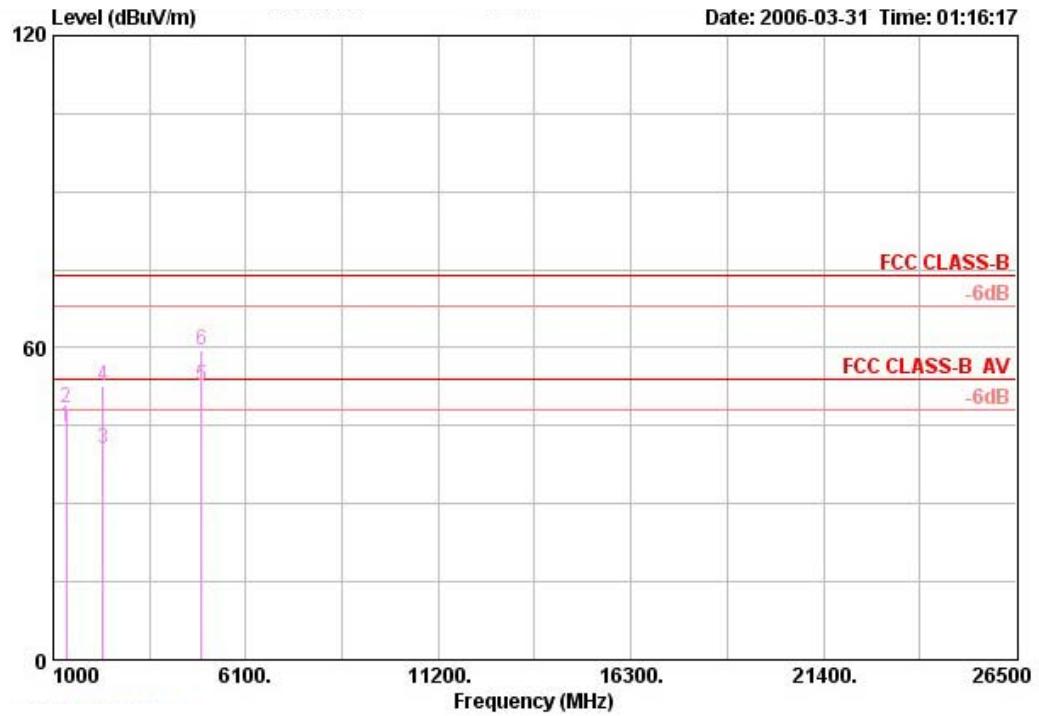




|               |          |                |                                    |
|---------------|----------|----------------|------------------------------------|
| Temperature   | 20°C     | Humidity       | 70%                                |
| Test Engineer | Leo Hung | Configurations | 802.11b 20MHz Channel 11<br>Ant. A |

Vertical

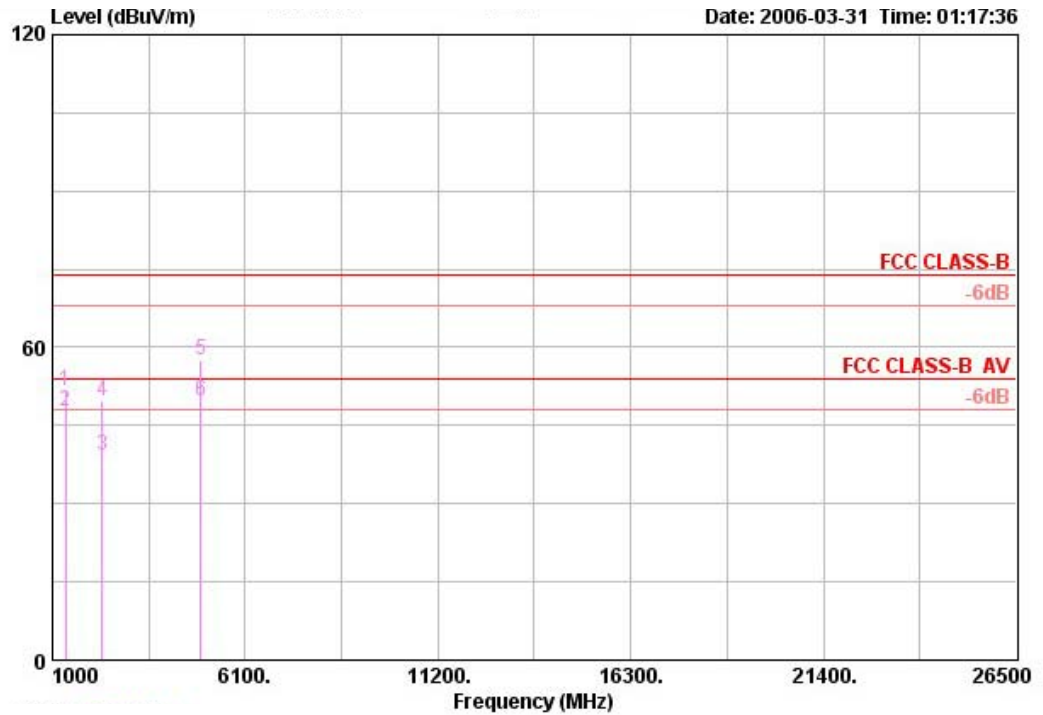


|     | Freq     | Level  | Over Limit | Limit Line | Read Antenna Level | Antenna Factor | Cable Loss | Preamp Factor | Remark  | Ant Pos | Table Pos |
|-----|----------|--------|------------|------------|--------------------|----------------|------------|---------------|---------|---------|-----------|
|     | MHz      | dBuV/m | dB         | dBuV/m     | dBuV               | dB/m           | dB         | dB            |         | cm      | deg       |
| 1   | 1347.464 | 44.94  | -9.06      | 54.00      | 49.36              | 24.87          | 5.29       | 34.57         | AVERAGE | ---     | ---       |
| 2   | 1347.464 | 48.46  | -25.54     | 74.00      | 52.88              | 24.87          | 5.29       | 34.57         | PEAK    | ---     | ---       |
| 3   | 2319.068 | 40.49  | -13.51     | 54.00      | 39.60              | 28.79          | 7.16       | 35.07         | AVERAGE | ---     | ---       |
| 4   | 2319.068 | 52.49  | -21.51     | 74.00      | 51.60              | 28.79          | 7.16       | 35.07         | PEAK    | ---     | ---       |
| 5 * | 4923.000 | 52.68  | -1.32      | 54.00      | 43.00              | 32.93          | 11.89      | 35.14         | AVERAGE | ---     | ---       |
| 6   | 4923.928 | 59.63  | -14.37     | 74.00      | 49.95              | 32.93          | 11.89      | 35.14         | PEAK    | ---     | ---       |



|               |          |                |                                    |
|---------------|----------|----------------|------------------------------------|
| Temperature   | 20°C     | Humidity       | 70%                                |
| Test Engineer | Leo Hung | Configurations | 802.11b 20MHz Channel 11<br>Ant. A |

Horizontal

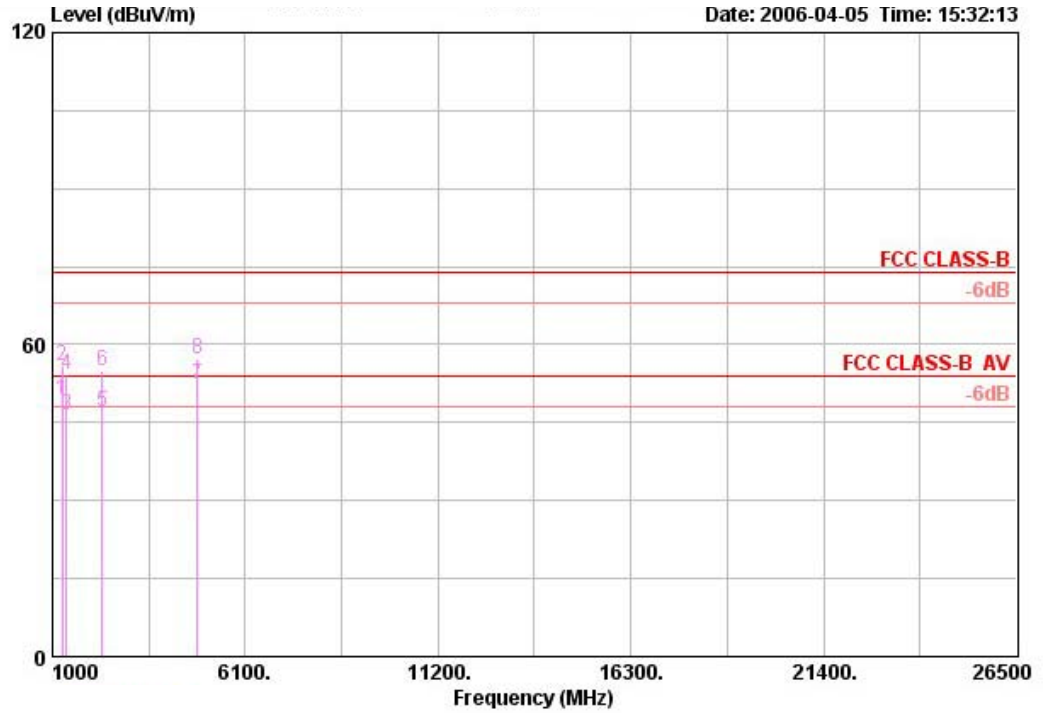


|     | Freq     | Level  | Over   | Limit  | ReadAntenna | Cable | Preamp | Remark        | Ant | Table |
|-----|----------|--------|--------|--------|-------------|-------|--------|---------------|-----|-------|
|     | MHz      | dBuV/m | Limit  | Line   | Level       | Loss  | Factor |               | Pos | Pos   |
|     |          |        | dB     | dBuV/m | dBuV        | dB    | dB     |               | cm  | deg   |
| 1   | 1347.464 | 51.53  | -22.47 | 74.00  | 55.94       | 24.87 | 5.29   | 34.57 PEAK    | --- | ---   |
| 2   | 1347.464 | 47.69  | -6.31  | 54.00  | 52.11       | 24.87 | 5.29   | 34.57 AVERAGE | --- | ---   |
| 3   | 2319.852 | 39.33  | -14.67 | 54.00  | 38.45       | 28.79 | 7.16   | 35.07 AVERAGE | --- | ---   |
| 4   | 2319.852 | 49.81  | -24.19 | 74.00  | 48.92       | 28.79 | 7.16   | 35.07 PEAK    | --- | ---   |
| 5   | 4923.992 | 57.51  | -16.49 | 74.00  | 47.83       | 32.93 | 11.89  | 35.14 PEAK    | --- | ---   |
| 6 * | 4923.992 | 49.56  | -4.44  | 54.00  | 39.88       | 32.93 | 11.89  | 35.14 AVERAGE | --- | ---   |



|               |          |                |   |
|---------------|----------|----------------|---|
| Temperature   | 20°C     | Humidity       | 70%   |
| Test Engineer | Leo Hung | Configurations | Lower Channel 802.11b<br>40MHz Channel 3 Ant. A |

Vertical

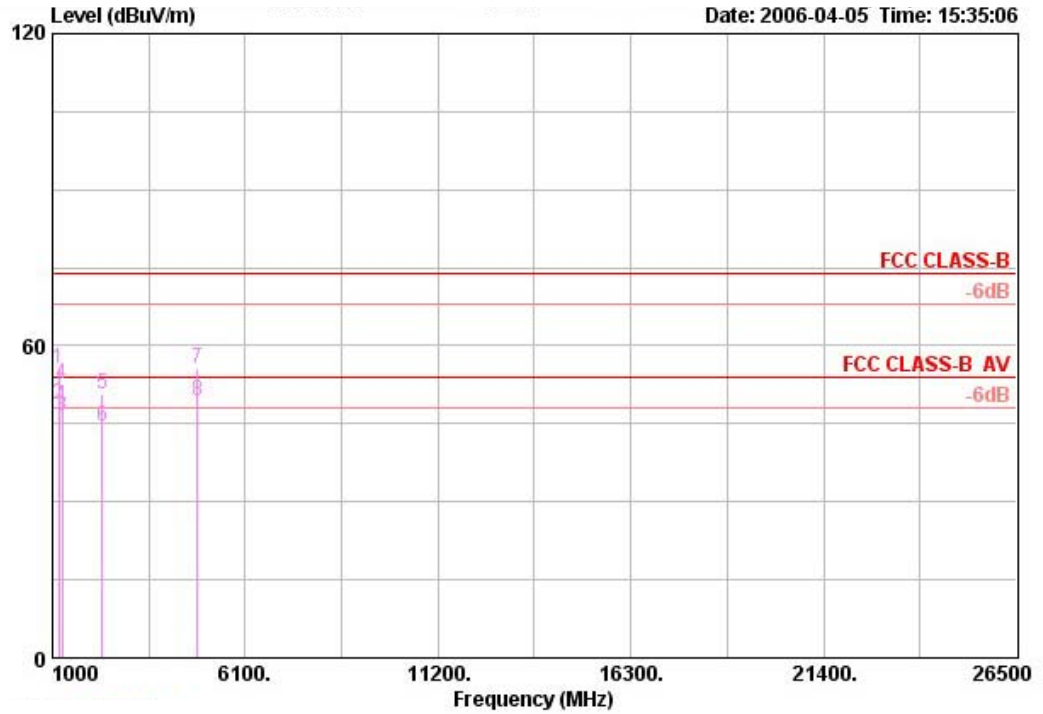


|     | Freq     | Level  | Over Limit | Limit Line | ReadAntenna Level | Antenna Factor | Cable Loss | Preamp Factor | Remark  | Ant Pos | Table Pos |
|-----|----------|--------|------------|------------|-------------------|----------------|------------|---------------|---------|---------|-----------|
|     | MHz      | dBuV/m | dB         | dBuV/m     | dBuV              | dB/m           | dB         | dB            |         | cm      | deg       |
| 1 * | 1250.200 | 49.41  | -4.59      | 54.00      | 54.24             | 24.62          | 5.04       | 34.50         | AVERAGE | ---     | ---       |
| 2   | 1250.200 | 55.88  | -18.12     | 74.00      | 60.71             | 24.62          | 5.04       | 34.50         | PEAK    | ---     | ---       |
| 3   | 1374.000 | 46.33  | -7.67      | 54.00      | 50.58             | 24.96          | 5.37       | 34.59         | AVERAGE | ---     | ---       |
| 4   | 1374.000 | 54.28  | -19.72     | 74.00      | 58.54             | 24.96          | 5.37       | 34.59         | PEAK    | ---     | ---       |
| 5   | 2320.000 | 46.99  | -7.01      | 54.00      | 46.10             | 28.79          | 7.16       | 35.07         | AVERAGE | ---     | ---       |
| 6   | 2320.000 | 54.80  | -19.20     | 74.00      | 53.92             | 28.79          | 7.16       | 35.07         | PEAK    | ---     | ---       |
| 7 B | 4824.320 | 52.46  | -1.54      | 54.00      | 42.97             | 32.83          | 11.82      | 35.16         | AVERAGE | ---     | ---       |
| 8   | 4824.320 | 57.19  | -16.81     | 74.00      | 47.71             | 32.83          | 11.82      | 35.16         | PEAK    | ---     | ---       |



|               |          |                |   |
|---------------|----------|----------------|---|
| Temperature   | 20°C     | Humidity       | 70%   |
| Test Engineer | Leo Hung | Configurations | Lower Channel 802.11b<br>40MHz Channel 3 Ant. A |

Horizontal

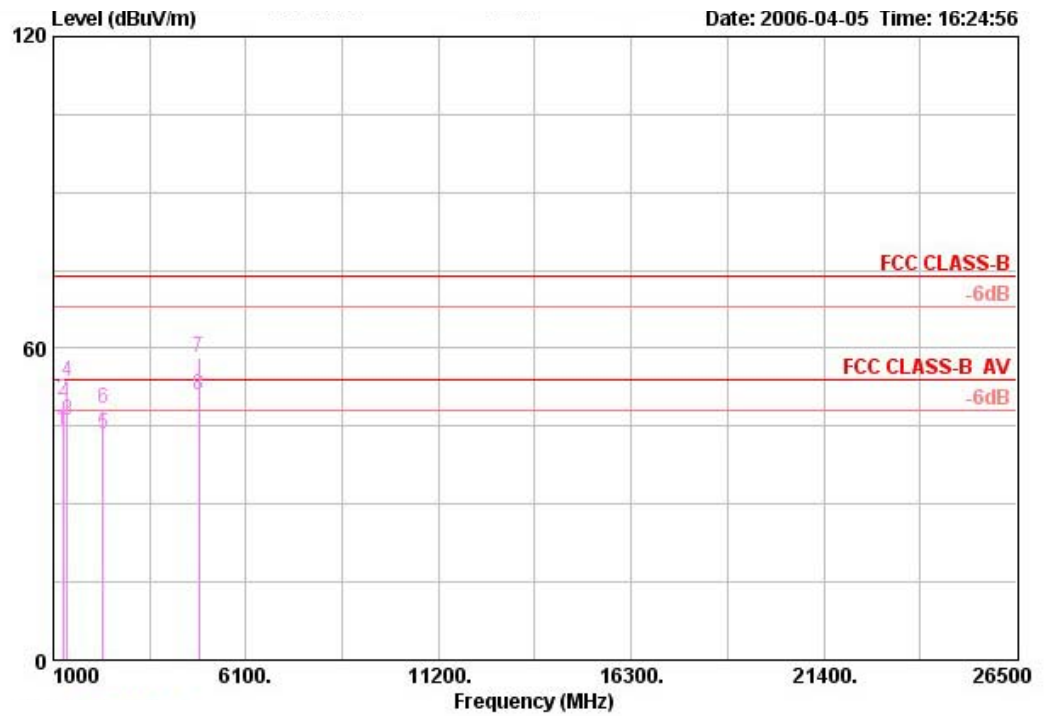


|     | Freq     | Level  | Over Limit | Limit Line | ReadAntenna Level | Antenna Factor | Cable Loss | Preamp Factor | Remark  | Ant Pos | Table Pos |
|-----|----------|--------|------------|------------|-------------------|----------------|------------|---------------|---------|---------|-----------|
|     | MHz      | dBuV/m | dB         | dBuV/m     | dBuV              | dB/m           | dB         | dB            |         | cm      | deg       |
| 1   | 1166.000 | 55.58  | -18.42     | 74.00      | 60.76             | 24.38          | 4.88       | 34.44         | PEAK    | ---     | ---       |
| 2 * | 1166.000 | 48.58  | -5.42      | 54.00      | 53.76             | 24.38          | 4.88       | 34.44         | AVERAGE | ---     | ---       |
| 3   | 1250.040 | 46.46  | -7.54      | 54.00      | 51.29             | 24.62          | 5.04       | 34.50         | AVERAGE | ---     | ---       |
| 4   | 1250.040 | 52.68  | -21.32     | 74.00      | 57.50             | 24.62          | 5.04       | 34.50         | PEAK    | ---     | ---       |
| 5   | 2320.000 | 50.57  | -23.43     | 74.00      | 49.68             | 28.79          | 7.16       | 35.07         | PEAK    | ---     | ---       |
| 6   | 2320.000 | 44.33  | -9.67      | 54.00      | 43.45             | 28.79          | 7.16       | 35.07         | AVERAGE | ---     | ---       |
| 7   | 4824.000 | 55.44  | -18.56     | 74.00      | 45.96             | 32.83          | 11.82      | 35.16         | PEAK    | ---     | ---       |
| 8 * | 4824.000 | 49.30  | -4.70      | 54.00      | 39.82             | 32.83          | 11.82      | 35.16         | AVERAGE | ---     | ---       |



|               |          |                |   |
|---------------|----------|----------------|---|
| Temperature   | 20°C     | Humidity       | 70%   |
| Test Engineer | Leo Hung | Configurations | Lower Channel 802.11b<br>40MHz Channel 6 Ant. A |

Vertical

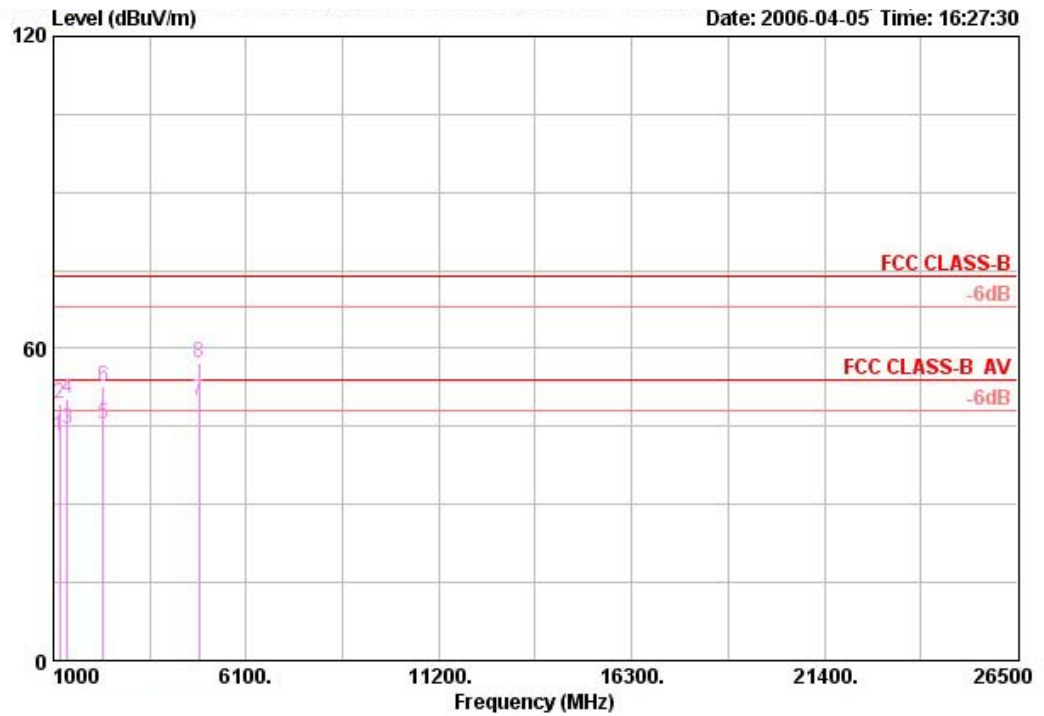


|     | Freq     | Level  | Over   | Limit  | Read  | Antenna | Cable | Preamp | Remark  | Ant | Table |
|-----|----------|--------|--------|--------|-------|---------|-------|--------|---------|-----|-------|
|     | MHz      | dBuV/m | Limit  | Line   | Level | Factor  | Loss  | Factor |         | Pos | Pos   |
|     |          |        | dB     | dBuV/m | dBuV  | dB/m    | dB    | dB     |         | cm  | deg   |
| 1   | 1250.000 | 44.26  | -9.74  | 54.00  | 49.09 | 24.62   | 5.04  | 34.50  | AVERAGE | --- | ---   |
| 2   | 1250.000 | 50.14  | -23.86 | 74.00  | 54.97 | 24.62   | 5.04  | 34.50  | PEAK    | --- | ---   |
| 3   | 1375.000 | 46.25  | -7.75  | 54.00  | 50.51 | 24.96   | 5.37  | 34.59  | AVERAGE | --- | ---   |
| 4   | 1375.000 | 53.60  | -20.40 | 74.00  | 57.85 | 24.96   | 5.37  | 34.59  | PEAK    | --- | ---   |
| 5   | 2320.160 | 43.47  | -10.53 | 54.00  | 42.58 | 28.79   | 7.16  | 35.07  | AVERAGE | --- | ---   |
| 6   | 2320.160 | 48.38  | -25.62 | 74.00  | 47.50 | 28.79   | 7.16  | 35.07  | PEAK    | --- | ---   |
| 7   | 4854.240 | 58.20  | -15.80 | 74.00  | 48.65 | 32.86   | 11.84 | 35.16  | PEAK    | --- | ---   |
| 8 * | 4854.240 | 51.06  | -2.94  | 54.00  | 41.51 | 32.86   | 11.84 | 35.16  | AVERAGE | --- | ---   |



|               |          |                |   |
|---------------|----------|----------------|---|
| Temperature   | 20°C     | Humidity       | 70%   |
| Test Engineer | Leo Hung | Configurations | Lower Channel 802.11b<br>40MHz Channel 6 Ant. A |

Horizontal

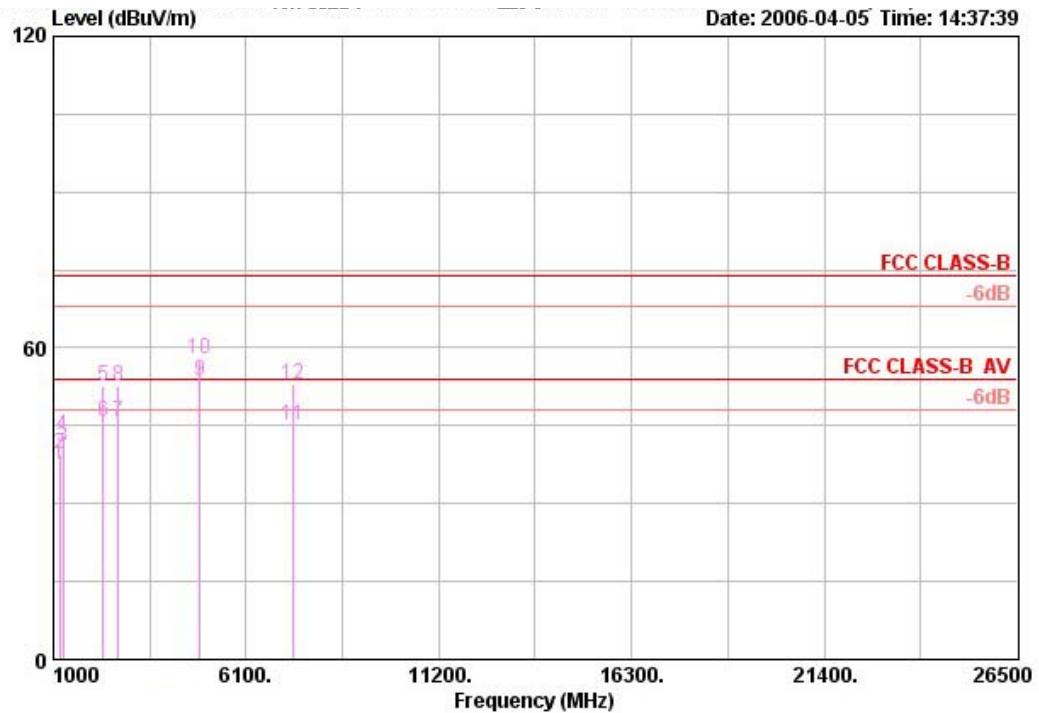


|     | Freq     | Level  | Over Limit | Limit Line | ReadAntenna Level | Antenna Factor | Cable Loss | Preamp Factor | Remark  | Ant Pos | Table Pos |
|-----|----------|--------|------------|------------|-------------------|----------------|------------|---------------|---------|---------|-----------|
|     | MHz      | dBuV/m | dB         | dBuV/m     | dBuV              | dB/m           | dB         | dB            |         | cm      | deg       |
| 1   | 1166.240 | 43.32  | -10.68     | 54.00      | 48.49             | 24.38          | 4.88       | 34.44         | AVERAGE | ---     | ---       |
| 2   | 1166.240 | 49.28  | -24.72     | 74.00      | 54.46             | 24.38          | 4.88       | 34.44         | PEAK    | ---     | ---       |
| 3   | 1374.280 | 44.48  | -9.52      | 54.00      | 48.74             | 24.96          | 5.37       | 34.59         | AVERAGE | ---     | ---       |
| 4   | 1374.280 | 50.50  | -23.50     | 74.00      | 54.76             | 24.96          | 5.37       | 34.59         | PEAK    | ---     | ---       |
| 5   | 2320.160 | 45.32  | -8.68      | 54.00      | 44.44             | 28.79          | 7.16       | 35.07         | AVERAGE | ---     | ---       |
| 6   | 2320.160 | 52.50  | -21.50     | 74.00      | 51.62             | 28.79          | 7.16       | 35.07         | PEAK    | ---     | ---       |
| 7 * | 4854.000 | 50.16  | -3.84      | 54.00      | 40.61             | 32.86          | 11.84      | 35.16         | AVERAGE | ---     | ---       |
| 8   | 4854.000 | 57.19  | -16.81     | 74.00      | 47.65             | 32.86          | 11.84      | 35.16         | PEAK    | ---     | ---       |



|               |          |                |   |
|---------------|----------|----------------|---|
| Temperature   | 20°C     | Humidity       | 70%   |
| Test Engineer | Leo Hung | Configurations | Lower Channel 802.11b<br>40MHz Channel 9 Ant. A |

Vertical



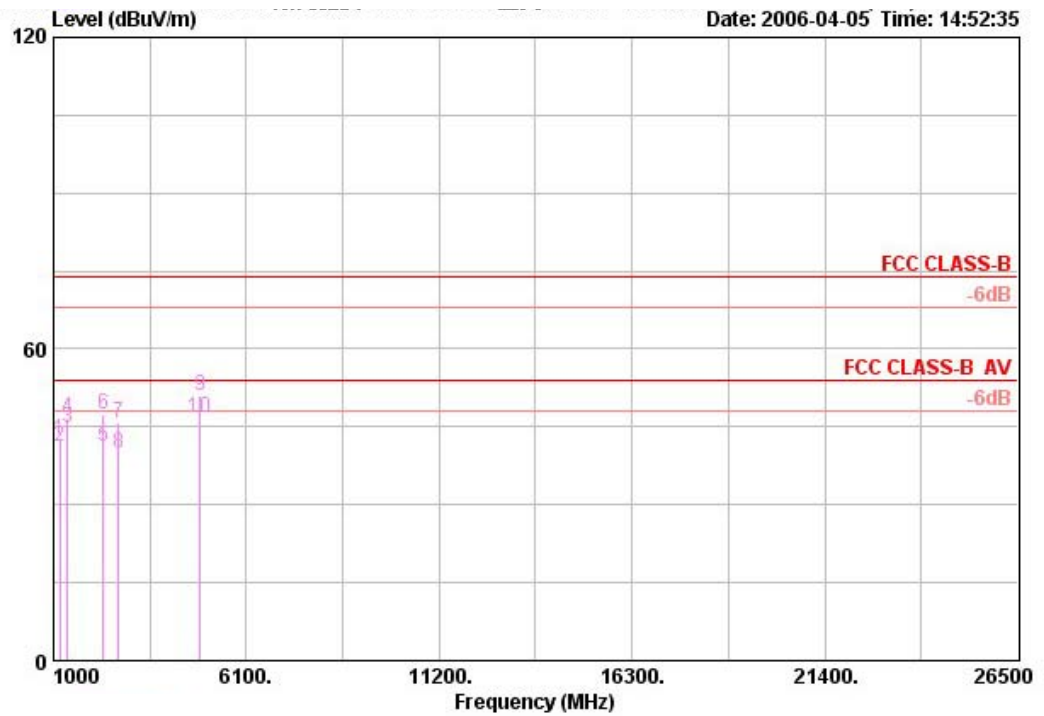
|    | Freq     | Level  | Over   | Limit  | Read  | Antenna | Cable | Preamp | Remark  | Ant | Table |
|----|----------|--------|--------|--------|-------|---------|-------|--------|---------|-----|-------|
|    | MHz      | dBUV/m | Limit  | Line   | Level | Factor  | Loss  | Factor |         | Pos | Pos   |
|    |          |        | dB     | dBUV/m | dBuV  | dB/m    | dB    | dB     |         | cm  | deg   |
| 1  | 1166.600 | 37.71  | -16.29 | 54.00  | 42.88 | 24.38   | 4.88  | 34.44  | AVERAGE | --- | ---   |
| 2  | 1166.660 | 39.68  | -34.32 | 74.00  | 44.85 | 24.38   | 4.88  | 34.44  | PEAK    | --- | ---   |
| 3  | 1250.000 | 40.78  | -13.22 | 54.00  | 45.61 | 24.62   | 5.04  | 34.50  | AVERAGE | --- | ---   |
| 4  | 1250.040 | 43.23  | -30.77 | 74.00  | 48.06 | 24.62   | 5.04  | 34.50  | PEAK    | --- | ---   |
| 5  | 2319.600 | 52.48  | -21.52 | 74.00  | 51.60 | 28.79   | 7.16  | 35.07  | PEAK    | --- | ---   |
| 6  | 2320.000 | 45.89  | -8.11  | 54.00  | 45.01 | 28.79   | 7.16  | 35.07  | AVERAGE | --- | ---   |
| 7  | 2720.000 | 45.72  | -8.28  | 54.00  | 42.98 | 29.65   | 8.24  | 35.15  | AVERAGE | --- | ---   |
| 8  | 2720.040 | 52.56  | -21.44 | 74.00  | 49.82 | 29.65   | 8.24  | 35.15  | PEAK    | --- | ---   |
| 9  | 4883.840 | 53.47  | -0.53  | 54.00  | 43.88 | 32.88   | 11.87 | 35.15  | AVERAGE | --- | ---   |
| 10 | 4883.900 | 57.89  | -16.11 | 74.00  | 48.30 | 32.88   | 11.87 | 35.15  | PEAK    | --- | ---   |
| 11 | 7327.500 | 45.21  | -8.79  | 54.00  | 31.86 | 36.22   | 12.32 | 35.18  | AVERAGE | --- | ---   |
| 12 | 7330.000 | 53.05  | -20.95 | 74.00  | 39.69 | 36.22   | 12.32 | 35.18  | PEAK    | --- | ---   |





|               |          |                |   |
|---------------|----------|----------------|---|
| Temperature   | 20°C     | Humidity       | 70%   |
| Test Engineer | Leo Hung | Configurations | Lower Channel 802.11b<br>40MHz Channel 9 Ant. A |

Horizontal



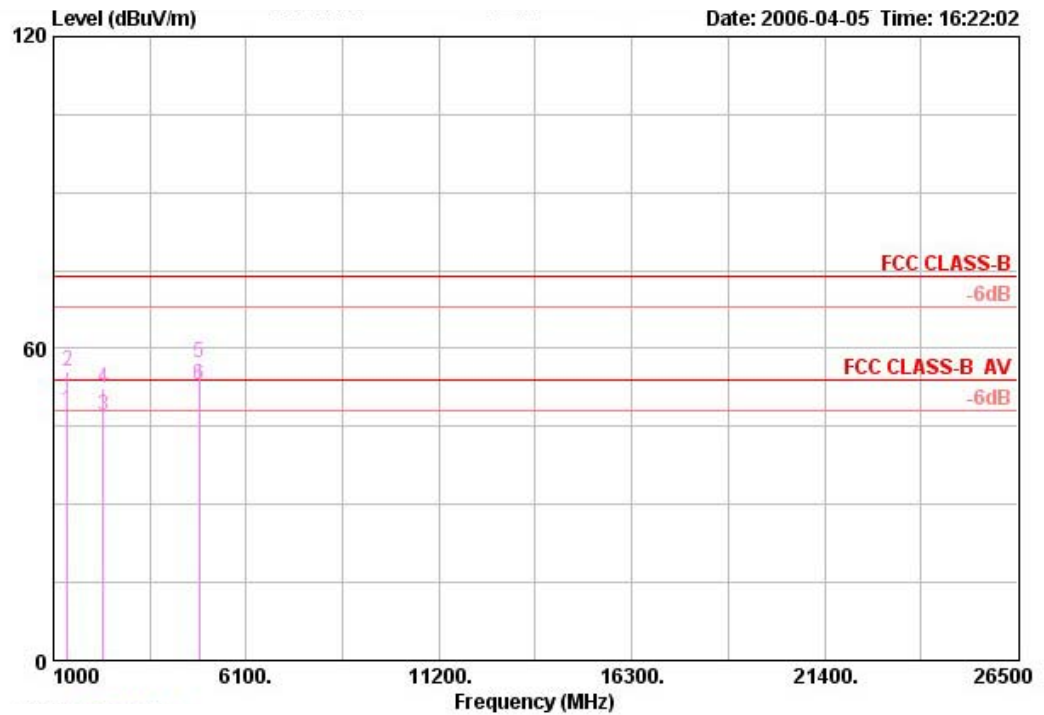
|    | Freq     | Level  | Over   | Limit  | Read  | Antenna | Cable | Preamp | Remark  | Ant | Table |
|----|----------|--------|--------|--------|-------|---------|-------|--------|---------|-----|-------|
|    | MHz      | dBuV/m | Limit  | Line   | Level | Factor  | Loss  | Factor |         | Pos | Pos   |
|    |          |        | dB     | dBuV/m | dBuV  | dB/m    | dB    | dB     |         | cm  | deg   |
| 1  | 1166.560 | 42.45  | -31.55 | 74.00  | 47.62 | 24.38   | 4.88  | 34.44  | PEAK    | --- | ---   |
| 2  | 1166.680 | 41.10  | -12.90 | 54.00  | 46.28 | 24.38   | 4.88  | 34.44  | AVERAGE | --- | ---   |
| 3  | 1375.000 | 44.77  | -9.23  | 54.00  | 49.03 | 24.96   | 5.37  | 34.59  | AVERAGE | --- | ---   |
| 4  | 1375.100 | 46.79  | -27.21 | 74.00  | 51.04 | 24.96   | 5.37  | 34.59  | PEAK    | --- | ---   |
| 5  | 2319.960 | 41.17  | -12.83 | 54.00  | 40.28 | 28.79   | 7.16  | 35.07  | AVERAGE | --- | ---   |
| 6  | 2320.000 | 47.47  | -26.53 | 74.00  | 46.58 | 28.79   | 7.16  | 35.07  | PEAK    | --- | ---   |
| 7  | 2719.840 | 45.62  | -28.38 | 74.00  | 42.88 | 29.65   | 8.24  | 35.15  | PEAK    | --- | ---   |
| 8  | 2720.040 | 40.04  | -13.96 | 54.00  | 37.30 | 29.65   | 8.24  | 35.15  | AVERAGE | --- | ---   |
| 9  | 4883.500 | 51.14  | -22.86 | 74.00  | 41.54 | 32.88   | 11.87 | 35.15  | PEAK    | --- | ---   |
| 10 | 4883.940 | 46.78  | -7.22  | 54.00  | 37.18 | 32.88   | 11.87 | 35.15  | AVERAGE | --- | ---   |





|               |          |                |   |
|---------------|----------|----------------|---|
| Temperature   | 20°C     | Humidity       | 70%   |
| Test Engineer | Leo Hung | Configurations | Upper Channel 802.11b<br>40MHz Channel 3 Ant. A |

Vertical

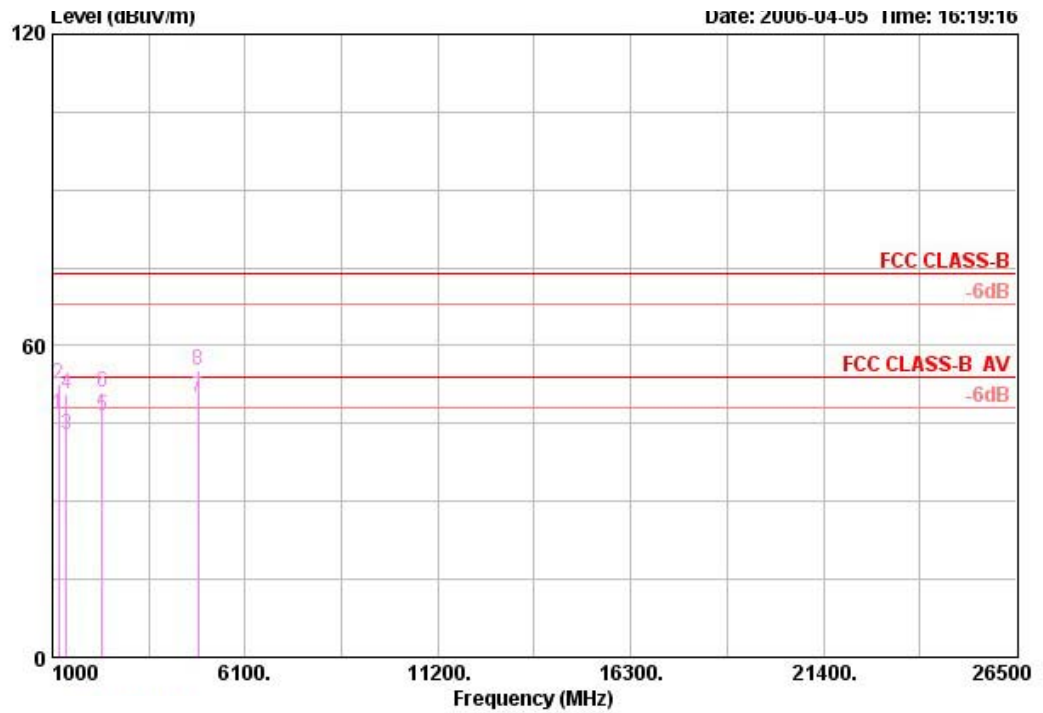


|   | Freq     | Level  | Over   | Limit  | ReadAntenna | Cable | Preamp | Remark        | Ant | Table |
|---|----------|--------|--------|--------|-------------|-------|--------|---------------|-----|-------|
|   | MHz      | dBuV/m | Limit  | Line   | Level       | Loss  | Factor |               | Pos | Pos   |
|   |          |        | dB     | dBuV/m | dBuV        | dB    | dB     |               | cm  | deg   |
| 1 | 1375.000 | 47.91  | -6.09  | 54.00  | 52.17       | 24.96 | 5.37   | 34.59 AVERAGE | --- | ---   |
| 2 | 1375.000 | 55.51  | -18.49 | 74.00  | 59.77       | 24.96 | 5.37   | 34.59 PEAK    | --- | ---   |
| 3 | 2320.000 | 47.17  | -6.83  | 54.00  | 46.28       | 28.79 | 7.16   | 35.07 AVERAGE | --- | ---   |
| 4 | 2320.000 | 52.23  | -21.77 | 74.00  | 51.34       | 28.79 | 7.16   | 35.07 PEAK    | --- | ---   |
| 5 | 4864.280 | 57.33  | -16.67 | 74.00  | 47.78       | 32.86 | 11.84  | 35.15 PEAK    | --- | ---   |
| 6 | 4864.280 | 52.99  | -1.01  | 54.00  | 43.44       | 32.86 | 11.84  | 35.15 AVERAGE | --- | ---   |



|               |          |                |   |
|---------------|----------|----------------|---|
| Temperature   | 20°C     | Humidity       | 70%   |
| Test Engineer | Leo Hung | Configurations | Upper Channel 802.11b<br>40MHz Channel 3 Ant. A |

Horizontal

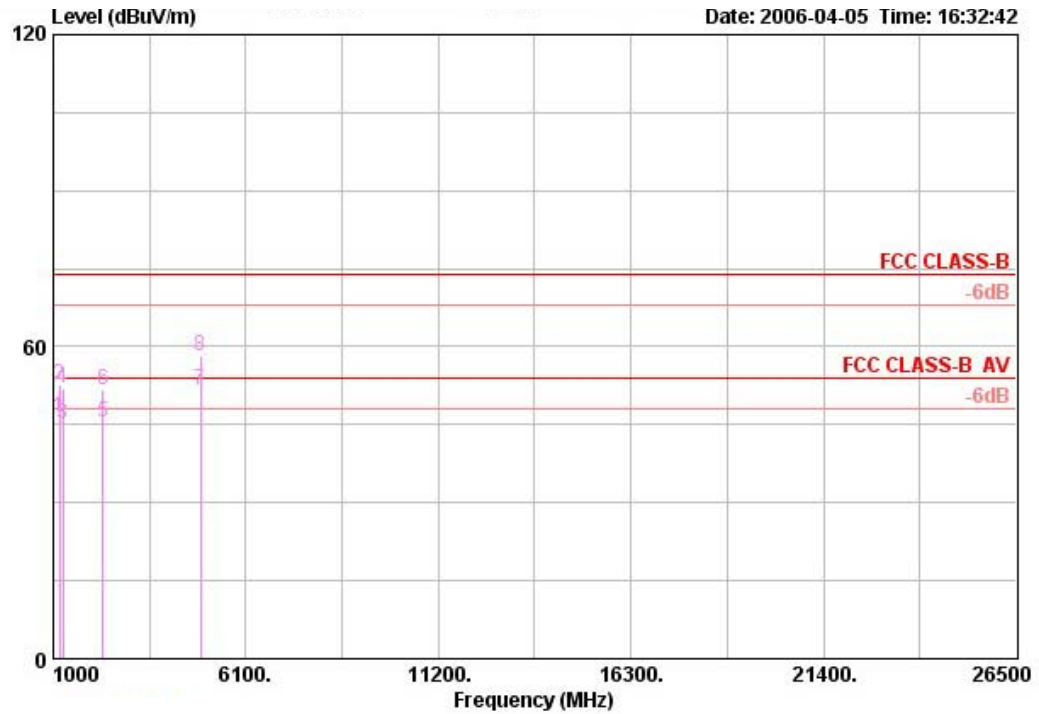


|     | Freq     | Level  | Over   | Limit  | ReadAntenna | Cable | Preamp |               | Ant | Table |
|-----|----------|--------|--------|--------|-------------|-------|--------|---------------|-----|-------|
|     | MHz      | dBuV/m | Limit  | Line   | Level       | Loss  | Factor | Remark        | Pos | Pos   |
|     |          |        | dB     | dBuV/m | dBuV        | dB    | dB     |               | cm  | deg   |
| 1   | 1166.000 | 46.65  | -7.35  | 54.00  | 51.82       | 24.38 | 4.88   | 34.44 AVERAGE | --- | ---   |
| 2   | 1166.120 | 52.55  | -21.45 | 74.00  | 57.73       | 24.38 | 4.88   | 34.44 PEAK    | --- | ---   |
| 3   | 1374.000 | 42.89  | -11.11 | 54.00  | 47.15       | 24.96 | 5.37   | 34.59 AVERAGE | --- | ---   |
| 4   | 1374.000 | 50.53  | -23.47 | 74.00  | 54.78       | 24.96 | 5.37   | 34.59 PEAK    | --- | ---   |
| 5   | 2320.000 | 46.51  | -7.49  | 54.00  | 45.62       | 28.79 | 7.16   | 35.07 AVERAGE | --- | ---   |
| 6   | 2320.000 | 51.11  | -22.89 | 74.00  | 50.23       | 28.79 | 7.16   | 35.07 PEAK    | --- | ---   |
| 7 * | 4863.800 | 50.10  | -3.90  | 54.00  | 40.55       | 32.86 | 11.84  | 35.15 AVERAGE | --- | ---   |
| 8   | 4863.920 | 55.38  | -18.62 | 74.00  | 45.83       | 32.86 | 11.84  | 35.15 PEAK    | --- | ---   |



|               |          |                |   |
|---------------|----------|----------------|---|
| Temperature   | 20°C     | Humidity       | 70%   |
| Test Engineer | Leo Hung | Configurations | Upper Channel 802.11b<br>40MHz Channel 6 Ant. A |

Vertical

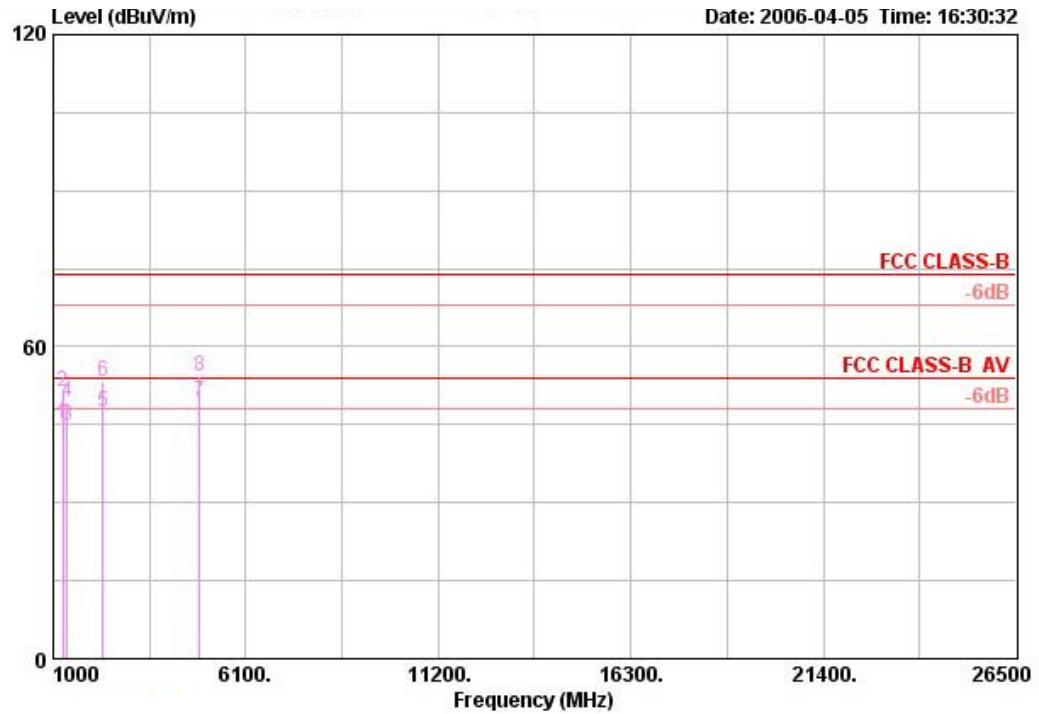


|   | Freq     | Level  | Over   | Limit  | Read  | Antenna | Cable | Preamp | Remark  | Ant | Table |
|---|----------|--------|--------|--------|-------|---------|-------|--------|---------|-----|-------|
|   | MHz      | dBuV/m | Limit  | Line   | Level | Factor  | Loss  | Factor |         | Pos | Pos   |
|   |          |        | dB     | dBuV/m | dBuV  | dB/m    | dB    | dB     |         | cm  | deg   |
| 1 | 1166.000 | 46.46  | -7.54  | 54.00  | 51.64 | 24.38   | 4.88  | 34.44  | AVERAGE | --- | ---   |
| 2 | 1166.000 | 52.51  | -21.49 | 74.00  | 57.69 | 24.38   | 4.88  | 34.44  | PEAK    | --- | ---   |
| 3 | 1250.160 | 45.21  | -8.79  | 54.00  | 50.04 | 24.62   | 5.04  | 34.50  | AVERAGE | --- | ---   |
| 4 | 1250.160 | 52.04  | -21.96 | 74.00  | 56.87 | 24.62   | 5.04  | 34.50  | PEAK    | --- | ---   |
| 5 | 2320.160 | 45.43  | -8.57  | 54.00  | 44.54 | 28.79   | 7.16  | 35.07  | AVERAGE | --- | ---   |
| 6 | 2320.160 | 51.52  | -22.48 | 74.00  | 50.63 | 28.79   | 7.16  | 35.07  | PEAK    | --- | ---   |
| 7 | 4894.360 | 51.66  | -2.34  | 54.00  | 42.04 | 32.90   | 11.87 | 35.15  | AVERAGE | --- | ---   |
| 8 | 4894.360 | 58.32  | -15.68 | 74.00  | 48.70 | 32.90   | 11.87 | 35.15  | PEAK    | --- | ---   |



|               |          |                |   |
|---------------|----------|----------------|---|
| Temperature   | 20°C     | Humidity       | 70%   |
| Test Engineer | Leo Hung | Configurations | Upper Channel 802.11b<br>40MHz Channel 6 Ant. A |

Horizontal

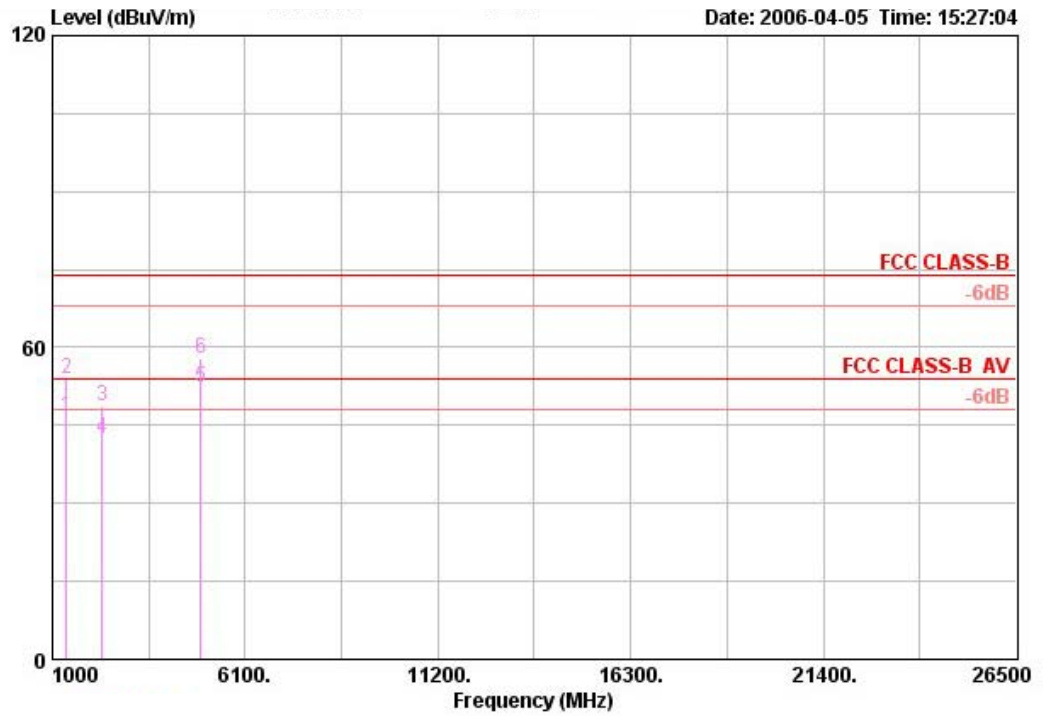


|     | Freq     | Level  | Over Limit | Limit Line | Read Level | Antenna Factor | Cable Loss | Preamp Factor | Remark  | Ant Pos | Table Pos |
|-----|----------|--------|------------|------------|------------|----------------|------------|---------------|---------|---------|-----------|
|     | MHz      | dBuV/m | dB         | dBuV/m     | dBuV       | dB/m           | dB         | dB            |         | cm      | deg       |
| 1   | 1250.440 | 45.10  | -8.90      | 54.00      | 49.85      | 24.62          | 5.13       | 34.50         | AVERAGE | ---     | ---       |
| 2   | 1250.440 | 51.19  | -22.81     | 74.00      | 55.94      | 24.62          | 5.13       | 34.50         | PEAK    | ---     | ---       |
| 3   | 1374.320 | 44.80  | -9.20      | 54.00      | 49.06      | 24.96          | 5.37       | 34.59         | AVERAGE | ---     | ---       |
| 4   | 1374.320 | 49.48  | -24.52     | 74.00      | 53.74      | 24.96          | 5.37       | 34.59         | PEAK    | ---     | ---       |
| 5   | 2320.160 | 47.37  | -6.63      | 54.00      | 46.48      | 28.79          | 7.16       | 35.07         | AVERAGE | ---     | ---       |
| 6   | 2320.160 | 53.16  | -20.84     | 74.00      | 52.27      | 28.79          | 7.16       | 35.07         | PEAK    | ---     | ---       |
| 7 * | 4874.400 | 49.49  | -4.51      | 54.00      | 39.90      | 32.88          | 11.87      | 35.15         | AVERAGE | ---     | ---       |
| 8   | 4874.400 | 54.14  | -19.86     | 74.00      | 44.54      | 32.88          | 11.87      | 35.15         | PEAK    | ---     | ---       |



|               |          |                |   |
|---------------|----------|----------------|---|
| Temperature   | 20°C     | Humidity       | 70%   |
| Test Engineer | Leo Hung | Configurations | Upper Channel 802.11b<br>40MHz Channel 9 Ant. A |

Vertical

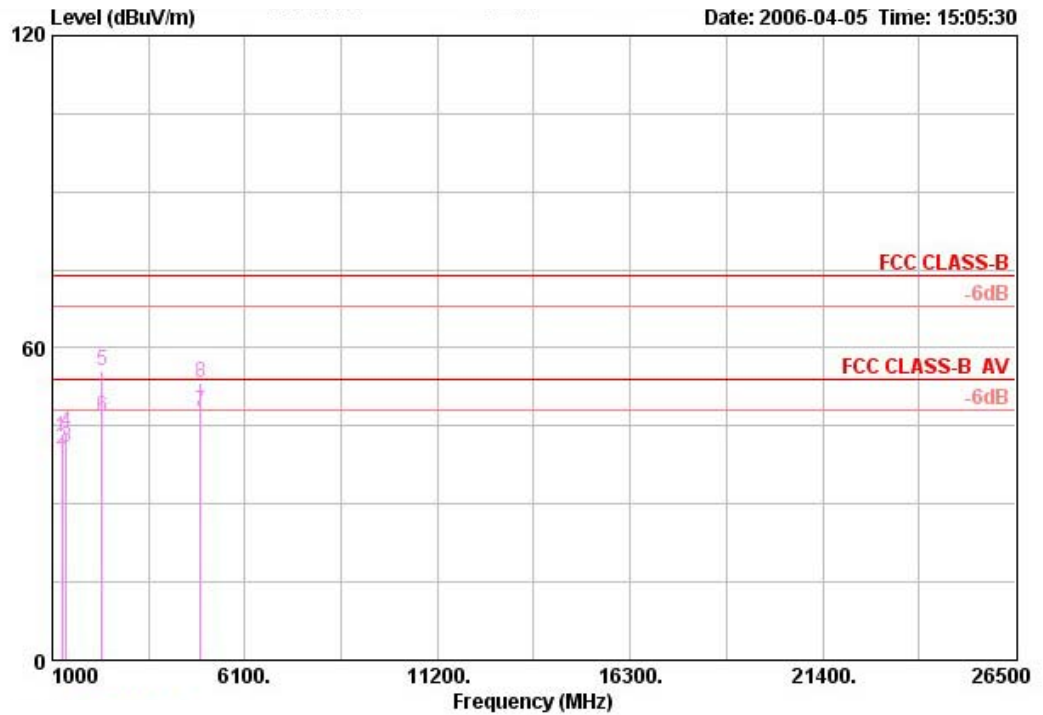


|   | Freq     | Level  | Over   | Limit  | ReadAntenna | Cable | Preamp | Remark        | Ant | Table |
|---|----------|--------|--------|--------|-------------|-------|--------|---------------|-----|-------|
|   | MHz      | dBuV/m | dB     | dBuV/m | dBuV        | dB/m  | dB     | dB            | cm  | deg   |
| 1 | 1374.000 | 46.63  | -7.37  | 54.00  | 50.89       | 24.96 | 5.37   | 34.59 AVERAGE | --- | ---   |
| 2 | 1376.000 | 53.79  | -20.21 | 74.00  | 58.05       | 24.96 | 5.37   | 34.59 PEAK    | --- | ---   |
| 3 | 2314.040 | 48.78  | -25.22 | 74.00  | 47.91       | 28.77 | 7.16   | 35.07 PEAK    | --- | ---   |
| 4 | 2320.000 | 42.66  | -11.34 | 54.00  | 41.77       | 28.79 | 7.16   | 35.07 AVERAGE | --- | ---   |
| 5 | 4924.000 | 52.34  | -1.66  | 54.00  | 42.66       | 32.93 | 11.89  | 35.14 AVERAGE | --- | ---   |
| 6 | 4924.000 | 57.98  | -16.02 | 74.00  | 48.29       | 32.93 | 11.89  | 35.14 PEAK    | --- | ---   |



|               |          |                |   |
|---------------|----------|----------------|---|
| Temperature   | 20°C     | Humidity       | 70%   |
| Test Engineer | Leo Hung | Configurations | Upper Channel 802.11b<br>40MHz Channel 9 Ant. A |

Horizontal

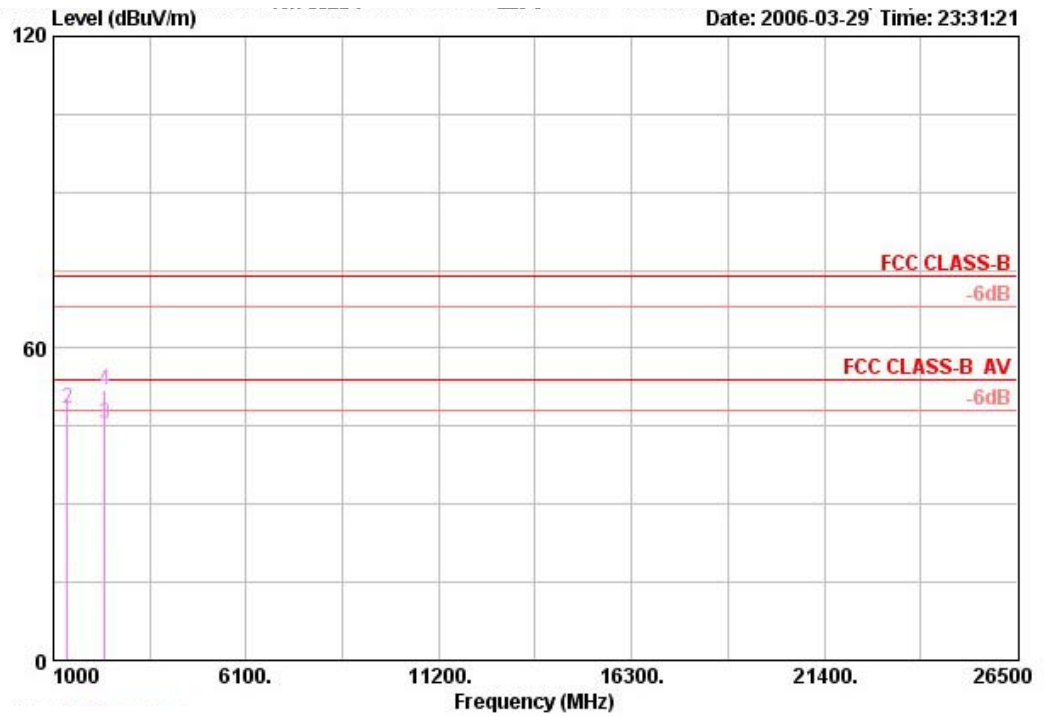


|   | Freq     | Level  | Over   | Limit  | Read  | Antenna | Cable | Preamp | Remark  | Ant | Table |
|---|----------|--------|--------|--------|-------|---------|-------|--------|---------|-----|-------|
|   | MHz      | dBuV/m | Limit  | Line   | Level | Factor  | Loss  | Factor |         | Pos | Pos   |
|   |          |        | dB     | dBuV/m | dBuV  | dB/m    | dB    | dB     |         | cm  | deg   |
| 1 | 1249.960 | 42.74  | -31.26 | 74.00  | 47.57 | 24.62   | 5.04  | 34.50  | PEAK    | --- | ---   |
| 2 | 1250.000 | 40.63  | -13.37 | 54.00  | 45.45 | 24.62   | 5.04  | 34.50  | AVERAGE | --- | ---   |
| 3 | 1375.000 | 40.98  | -13.02 | 54.00  | 45.24 | 24.96   | 5.37  | 34.59  | AVERAGE | --- | ---   |
| 4 | 1375.020 | 43.73  | -30.27 | 74.00  | 47.98 | 24.96   | 5.37  | 34.59  | PEAK    | --- | ---   |
| 5 | 2320.000 | 55.73  | -18.27 | 74.00  | 54.84 | 28.79   | 7.16  | 35.07  | PEAK    | --- | ---   |
| 6 | 2320.000 | 46.73  | -7.27  | 54.00  | 45.84 | 28.79   | 7.16  | 35.07  | AVERAGE | --- | ---   |
| 7 | 4923.920 | 47.86  | -6.14  | 54.00  | 38.18 | 32.93   | 11.89 | 35.14  | AVERAGE | --- | ---   |
| 8 | 4924.160 | 53.25  | -20.75 | 74.00  | 43.57 | 32.93   | 11.89 | 35.14  | PEAK    | --- | ---   |



|               |          |                |                                   |
|---------------|----------|----------------|-----------------------------------|
| Temperature   | 20°C     | Humidity       | 70%                               |
| Test Engineer | Leo Hung | Configurations | 802.11g 20MHz Channel 1<br>Ant. A |

Vertical



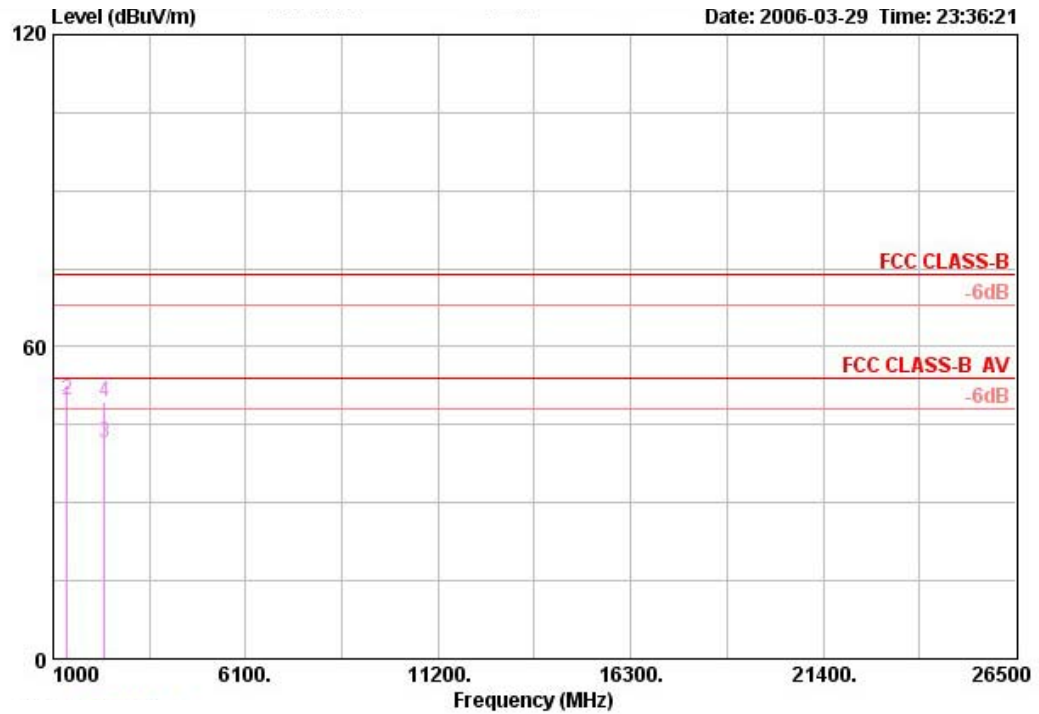
|   | Freq     | Level  | Over   | Limit  | Read  | Antenna | Cable | Preamp | Remark  | Ant | Table |
|---|----------|--------|--------|--------|-------|---------|-------|--------|---------|-----|-------|
|   | MHz      | dBuV/m | Limit  | Line   | Level | Factor  | Loss  | Factor |         | Pos | Pos   |
|   |          |        | dB     | dBuV/m | dBuV  | dB/m    | dB    | dB     |         | cm  | deg   |
| 1 | 1374.980 | 46.35  | -7.65  | 54.00  | 50.60 | 24.96   | 5.37  | 34.59  | AVERAGE | --- | ---   |
| 2 | 1374.980 | 48.43  | -25.57 | 74.00  | 52.68 | 24.96   | 5.37  | 34.59  | PEAK    | --- | ---   |
| 3 | 2367.200 | 45.33  | -8.67  | 54.00  | 44.26 | 28.83   | 7.34  | 35.10  | AVERAGE | --- | ---   |
| 4 | 2367.200 | 51.96  | -22.04 | 74.00  | 50.89 | 28.83   | 7.34  | 35.10  | PEAK    | --- | ---   |





|               |          |                |                                   |
|---------------|----------|----------------|-----------------------------------|
| Temperature   | 20°C     | Humidity       | 70%                               |
| Test Engineer | Leo Hung | Configurations | 802.11g 20MHz Channel 1<br>Ant. A |

Horizontal

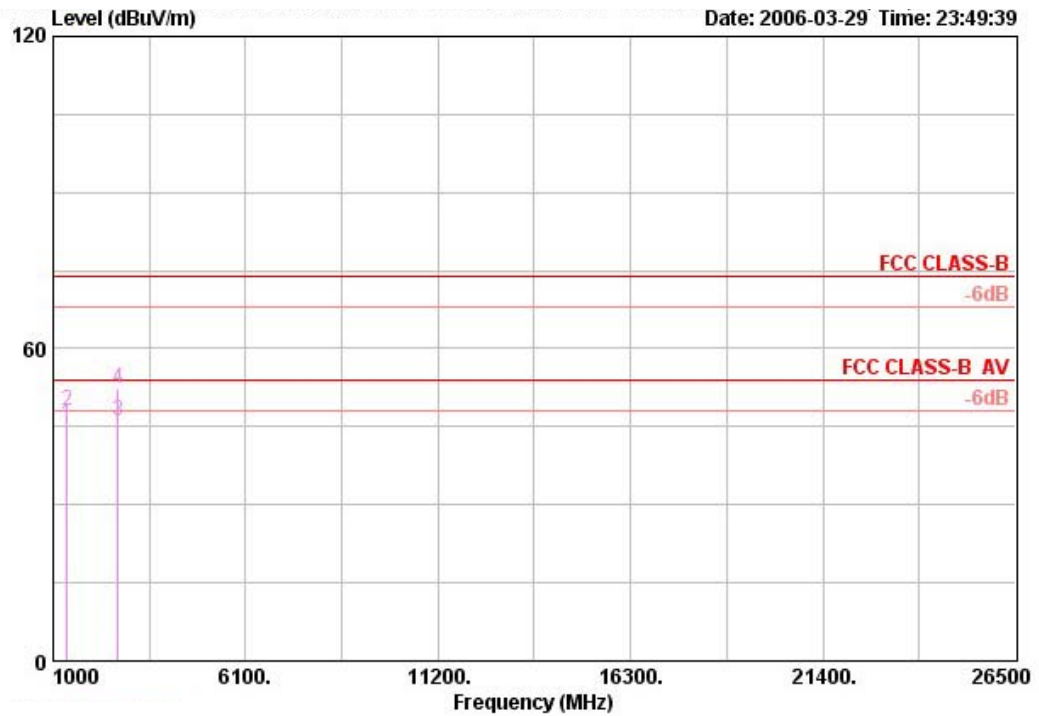


|     | Freq     | Level  | Over Limit | Limit Line | Read Level | Antenna Factor | Cable Loss | Preamp Factor | Remark  | Ant Pos | Table Pos |
|-----|----------|--------|------------|------------|------------|----------------|------------|---------------|---------|---------|-----------|
|     | MHz      | dBuV/m | dB         | dBuV/m     | dBuV       | dB/m           | dB         | dB            |         | cm      | deg       |
| 1 * | 1375.000 | 48.24  | -5.76      | 54.00      | 52.50      | 24.96          | 5.37       | 34.59         | AVERAGE | ---     | ---       |
| 2   | 1375.000 | 49.73  | -24.27     | 74.00      | 53.99      | 24.96          | 5.37       | 34.59         | PEAK    | ---     | ---       |
| 3   | 2367.200 | 41.53  | -12.47     | 54.00      | 40.46      | 28.83          | 7.34       | 35.10         | AVERAGE | ---     | ---       |
| 4   | 2367.200 | 49.53  | -24.47     | 74.00      | 48.45      | 28.83          | 7.34       | 35.10         | PEAK    | ---     | ---       |



|               |          |                |                                   |
|---------------|----------|----------------|-----------------------------------|
| Temperature   | 20°C     | Humidity       | 70%                               |
| Test Engineer | Leo Hung | Configurations | 802.11g 20MHz Channel 6<br>Ant. A |

Vertical

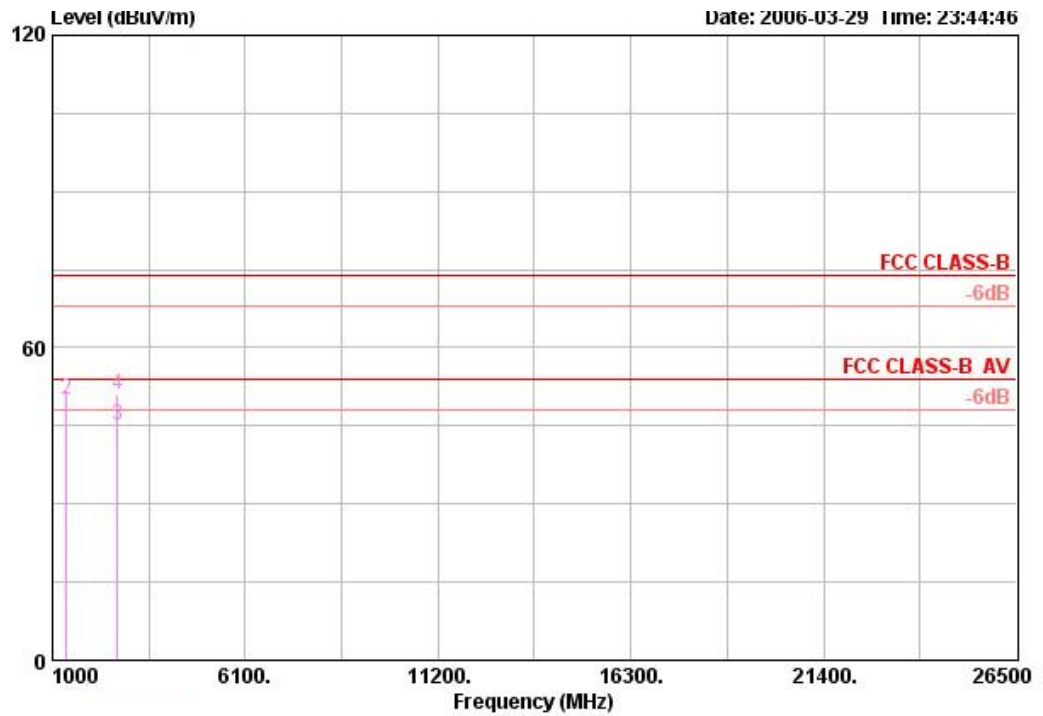


|   | Freq     | Level  | Over   | Limit  | Read  | Antenna | Cable | Preamp | Remark  | Ant | Table |
|---|----------|--------|--------|--------|-------|---------|-------|--------|---------|-----|-------|
|   | MHz      | dBuV/m | dB     | dBuV/m | Level | Factor  | Loss  | Factor |         | Pos | Pos   |
|   |          |        |        |        | dBuV  | dB/m    | dB    | dB     |         | cm  | deg   |
| 1 | 1375.080 | 45.59  | -8.41  | 54.00  | 49.85 | 24.96   | 5.37  | 34.59  | AVERAGE | --- | ---   |
| 2 | 1375.080 | 47.97  | -26.03 | 74.00  | 52.23 | 24.96   | 5.37  | 34.59  | PEAK    | --- | ---   |
| 3 | 2719.960 | 46.13  | -7.87  | 54.00  | 43.39 | 29.65   | 8.24  | 35.15  | AVERAGE | --- | ---   |
| 4 | 2719.960 | 52.25  | -21.75 | 74.00  | 49.51 | 29.65   | 8.24  | 35.15  |         | --- | ---   |



|               |          |                |                                   |
|---------------|----------|----------------|-----------------------------------|
| Temperature   | 20°C     | Humidity       | 70%                               |
| Test Engineer | Leo Hung | Configurations | 802.11g 20MHz Channel 6<br>Ant. A |

Horizontal

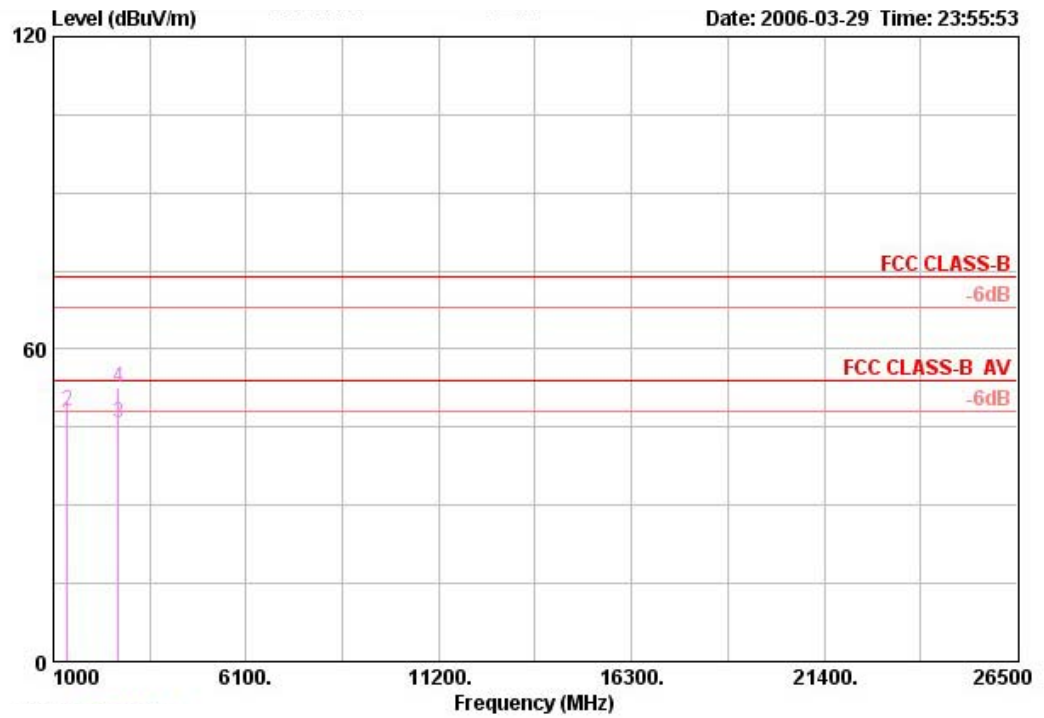


|     | Freq     | Level  | Over Limit | Limit Line | ReadAntenna Level | Antenna Factor | Cable Loss | Preamp Factor | Remark  | Ant Pos | Table Pos |
|-----|----------|--------|------------|------------|-------------------|----------------|------------|---------------|---------|---------|-----------|
|     | MHz      | dBuV/m | dB         | dBuV/m     | dBuV              | dB/m           | dB         | dB            |         | cm      | deg       |
| 1 * | 1375.000 | 48.22  | -5.78      | 54.00      | 52.48             | 24.96          | 5.37       | 34.59         | AVERAGE | ---     | ---       |
| 2   | 1375.000 | 49.90  | -24.10     | 74.00      | 54.16             | 24.96          | 5.37       | 34.59         | PEAK    | ---     | ---       |
| 3   | 2720.000 | 45.25  | -8.75      | 54.00      | 42.50             | 29.65          | 8.24       | 35.15         | AVERAGE | ---     | ---       |
| 4   | 2720.000 | 51.11  | -22.89     | 74.00      | 48.37             | 29.65          | 8.24       | 35.15         | PEAK    | ---     | ---       |



|               |          |                |                                    |
|---------------|----------|----------------|------------------------------------|
| Temperature   | 20°C     | Humidity       | 70%                                |
| Test Engineer | Leo Hung | Configurations | 802.11g 20MHz Channel 11<br>Ant. A |

Vertical

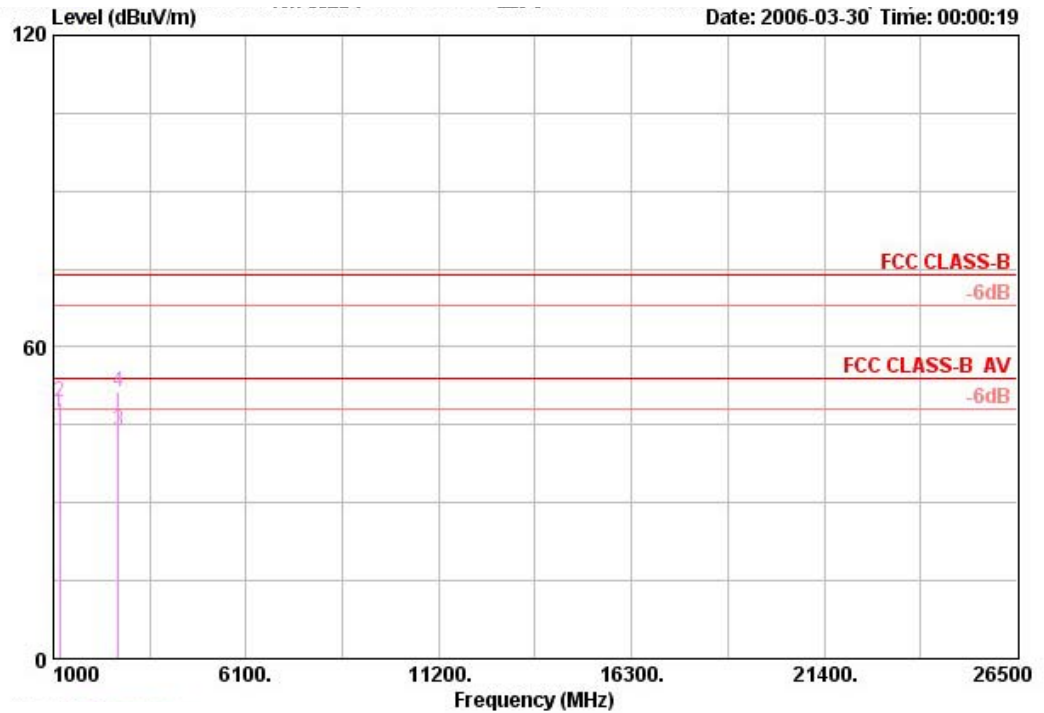


|   | Freq     | Level  | Over Limit | Limit Line | ReadAntenna Level | Antenna Factor | Cable Loss | Preamp Factor | Remark  | Ant Pos | Table Pos |
|---|----------|--------|------------|------------|-------------------|----------------|------------|---------------|---------|---------|-----------|
|   | MHz      | dBuV/m | dB         | dBuV/m     | dBuV              | dB/m           | dB         | dB            |         | cm      | deg       |
| 1 | 1374.960 | 45.78  | -8.22      | 54.00      | 50.04             | 24.96          | 5.37       | 34.59         | AVERAGE | ---     | ---       |
| 2 | 1374.960 | 48.12  | -25.88     | 74.00      | 52.38             | 24.96          | 5.37       | 34.59         | PEAK    | ---     | ---       |
| 3 | 2720.000 | 45.66  | -8.34      | 54.00      | 42.92             | 29.65          | 8.24       | 35.15         | AVERAGE | ---     | ---       |
| 4 | 2720.000 | 52.54  | -21.46     | 74.00      | 49.80             | 29.65          | 8.24       | 35.15         | PEAK    | ---     | ---       |



|               |          |                |                                    |
|---------------|----------|----------------|------------------------------------|
| Temperature   | 20°C     | Humidity       | 70%                                |
| Test Engineer | Leo Hung | Configurations | 802.11g 20MHz Channel 11<br>Ant. A |

Horizontal

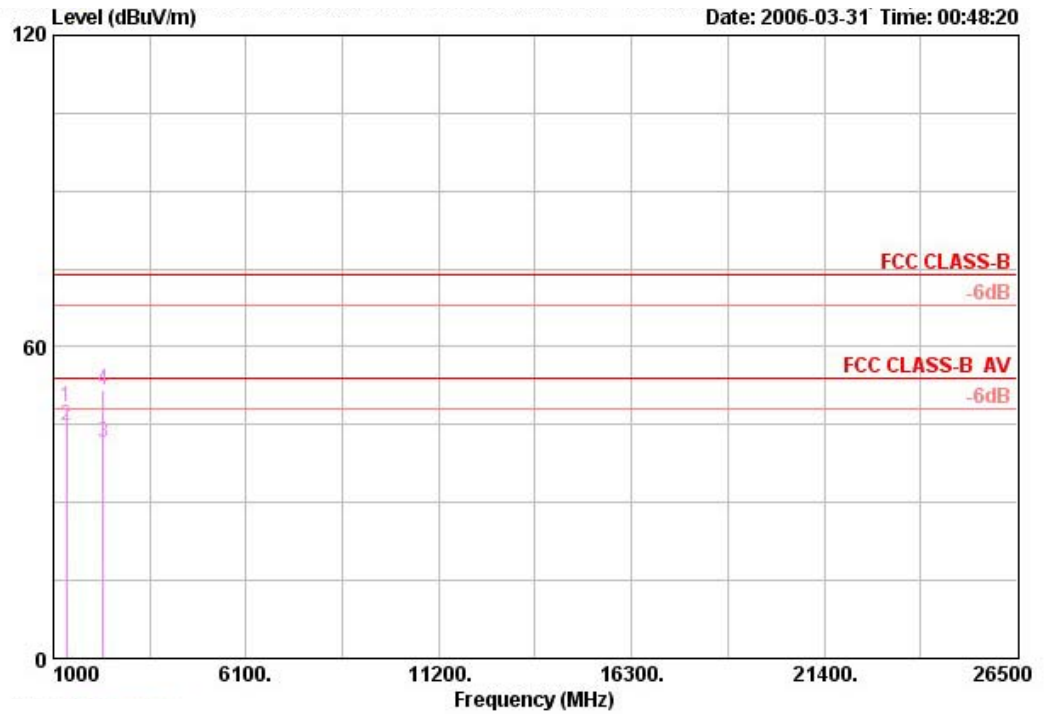


|   | Freq     | Level  | Over Limit | Limit Line | ReadAntenna Level | Antenna Factor | Cable Loss | Preamp Factor | Remark  | Ant Pos | Table Pos |
|---|----------|--------|------------|------------|-------------------|----------------|------------|---------------|---------|---------|-----------|
|   | MHz      | dBuV/m | dB         | dBuV/m     | dBuV              | dB/m           | dB         | dB            |         | cm      | deg       |
| 1 | 1166.680 | 47.56  | -6.44      | 54.00      | 52.73             | 24.38          | 4.88       | 34.44         | AVERAGE | ---     | ---       |
| 2 | 1166.680 | 49.47  | -24.53     | 74.00      | 54.64             | 24.38          | 4.88       | 34.44         | PEAK    | ---     | ---       |
| 3 | 2720.000 | 43.79  | -10.21     | 54.00      | 41.04             | 29.65          | 8.24       | 35.15         | AVERAGE | ---     | ---       |
| 4 | 2720.000 | 51.28  | -22.72     | 74.00      | 48.54             | 29.65          | 8.24       | 35.15         | PEAK    | ---     | ---       |



|               |          |                |  |
|---------------|----------|----------------|--|
| Temperature   | 20°C     | Humidity       | 70%  |
| Test Engineer | Leo Hung | Configurations | 802.11g 40MHz Channel 3<br>Ant. A + Ant. B |

Vertical

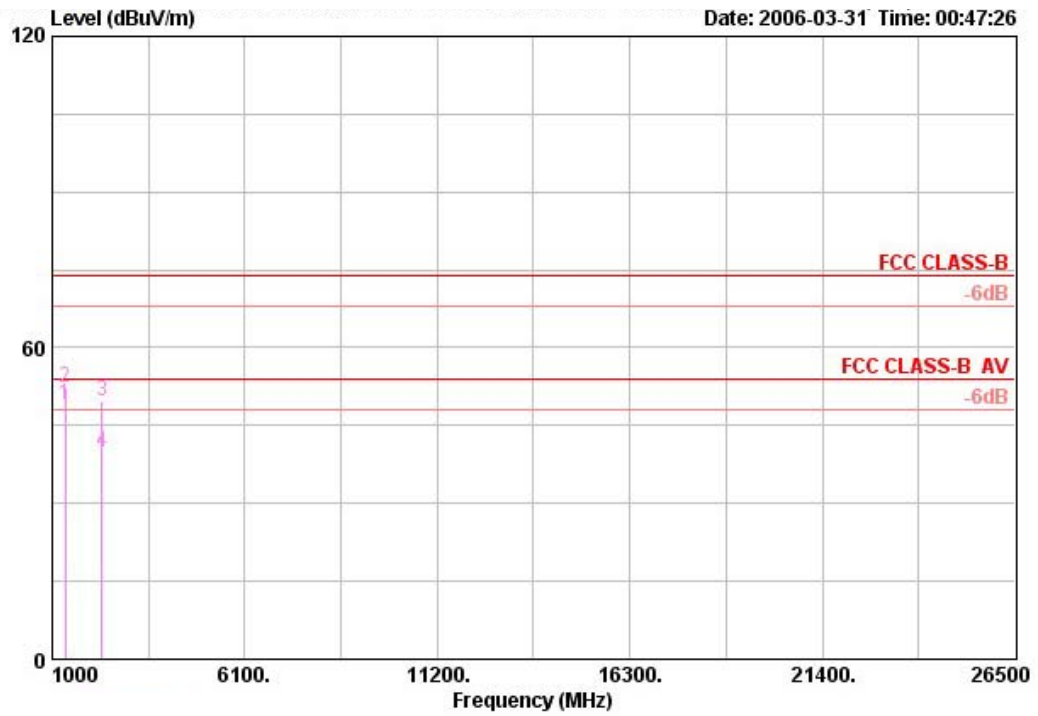


|   | Freq     | Level  | Over Limit | Limit Line | ReadAntenna Level | Antenna Factor | Cable Loss | Preamp Factor | Remark  | Ant Pos | Table Pos |
|---|----------|--------|------------|------------|-------------------|----------------|------------|---------------|---------|---------|-----------|
|   | MHz      | dBuV/m | dB         | dBuV/m     | dBuV              | dB/m           | dB         | dB            |         | cm      | deg       |
| 1 | 1346.900 | 48.35  | -25.65     | 74.00      | 52.76             | 24.87          | 5.29       | 34.57         | PEAK    | ---     | ---       |
| 2 | 1346.900 | 44.69  | -9.31      | 54.00      | 49.11             | 24.87          | 5.29       | 34.57         | AVERAGE | ---     | ---       |
| 3 | 2320.040 | 41.57  | -12.43     | 54.00      | 40.68             | 28.79          | 7.16       | 35.07         | AVERAGE | ---     | ---       |
| 4 | 2320.040 | 51.57  | -22.43     | 74.00      | 50.68             | 28.79          | 7.16       | 35.07         | PEAK    | ---     | ---       |



|               |          |                |  |
|---------------|----------|----------------|--|
| Temperature   | 20°C     | Humidity       | 70%  |
| Test Engineer | Leo Hung | Configurations | 802.11g 40MHz Channel 3<br>Ant. A + Ant. B |

Horizontal



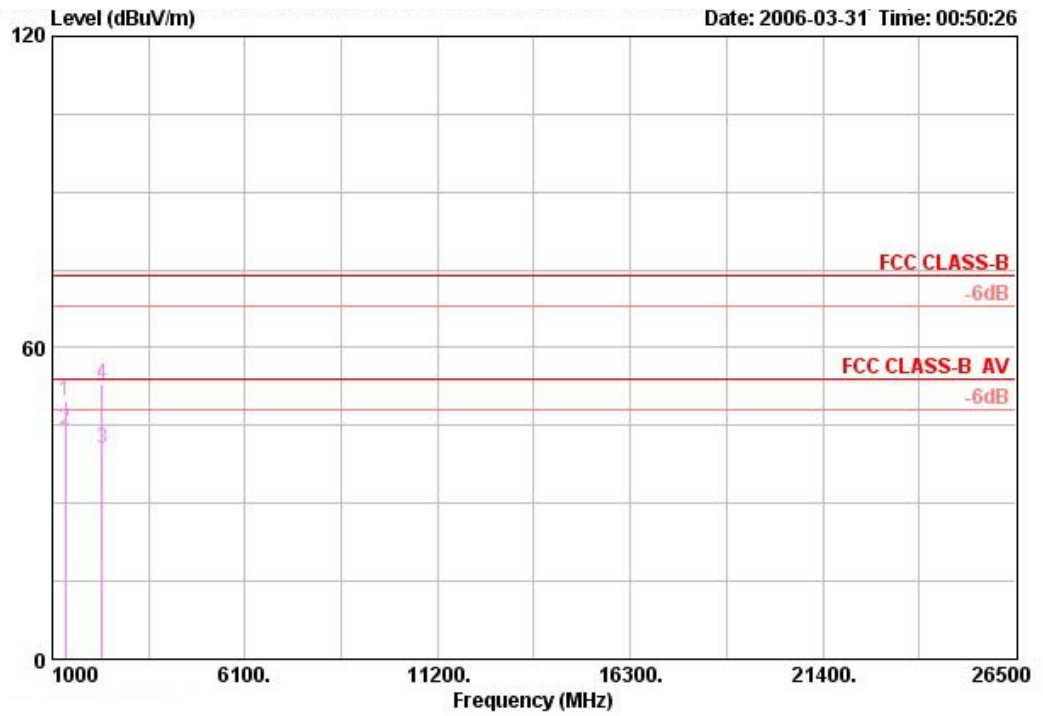
|     | Freq     | Level  | Over Limit | Limit Line | ReadAntenna Level | Antenna Factor | Cable Loss | Preamp Factor | Remark  | Ant Pos | Table Pos |
|-----|----------|--------|------------|------------|-------------------|----------------|------------|---------------|---------|---------|-----------|
|     | MHz      | dBuV/m | dB         | dBuV/m     | dBuV              | dB/m           | dB         | dB            |         | cm      | deg       |
| 1 * | 1345.980 | 49.21  | -4.79      | 54.00      | 53.62             | 24.87          | 5.29       | 34.57         | AVERAGE | ---     | ---       |
| 2   | 1345.980 | 52.21  | -21.79     | 74.00      | 56.62             | 24.87          | 5.29       | 34.57         | PEAK    | ---     | ---       |
| 3   | 2320.040 | 49.65  | -24.35     | 74.00      | 48.76             | 28.79          | 7.16       | 35.07         | PEAK    | ---     | ---       |
| 4   | 2320.040 | 39.76  | -14.24     | 54.00      | 38.87             | 28.79          | 7.16       | 35.07         | AVERAGE | ---     | ---       |





|               |          |                |  |
|---------------|----------|----------------|--|
| Temperature   | 20°C     | Humidity       | 70%  |
| Test Engineer | Leo Hung | Configurations | 802.11g 40MHz Channel 6<br>Ant. A + Ant. B |

Vertical

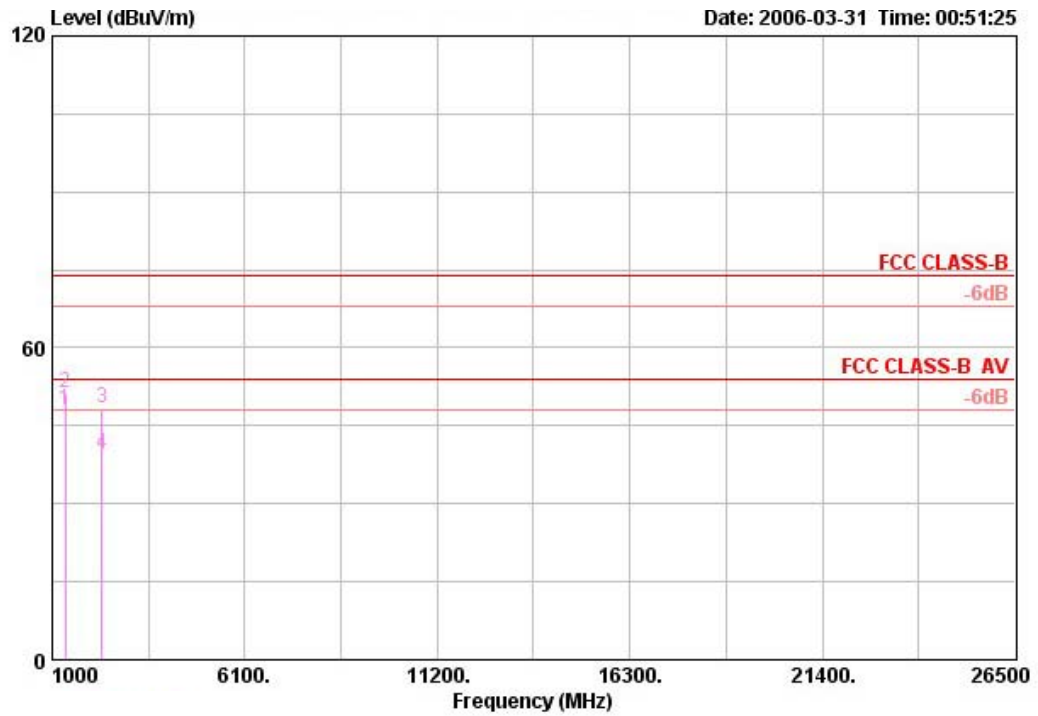


|   | Freq     | Level  | Over   | Limit  | ReadAntenna | Cable | Preamp | Remark        | Ant | Table |
|---|----------|--------|--------|--------|-------------|-------|--------|---------------|-----|-------|
|   | MHz      | dBuV/m | dB     | dBuV/m | dBuV        | dB/m  | dB     | dB            | cm  | deg   |
| 1 | 1346.900 | 49.58  | -24.42 | 74.00  | 54.00       | 24.87 | 5.29   | 34.57 PEAK    | --- | ---   |
| 2 | 1346.900 | 44.23  | -9.77  | 54.00  | 48.64       | 24.87 | 5.29   | 34.57 AVERAGE | --- | ---   |
| 3 | 2315.000 | 40.55  | -13.45 | 54.00  | 39.69       | 28.77 | 7.16   | 35.07 AVERAGE | --- | ---   |
| 4 | 2321.180 | 52.94  | -21.06 | 74.00  | 52.06       | 28.79 | 7.16   | 35.07 PEAK    | --- | ---   |



|               |          |                |  |
|---------------|----------|----------------|--|
| Temperature   | 20°C     | Humidity       | 70%  |
| Test Engineer | Leo Hung | Configurations | 802.11g 40MHz Channel 6<br>Ant. A + Ant. B |

Horizontal

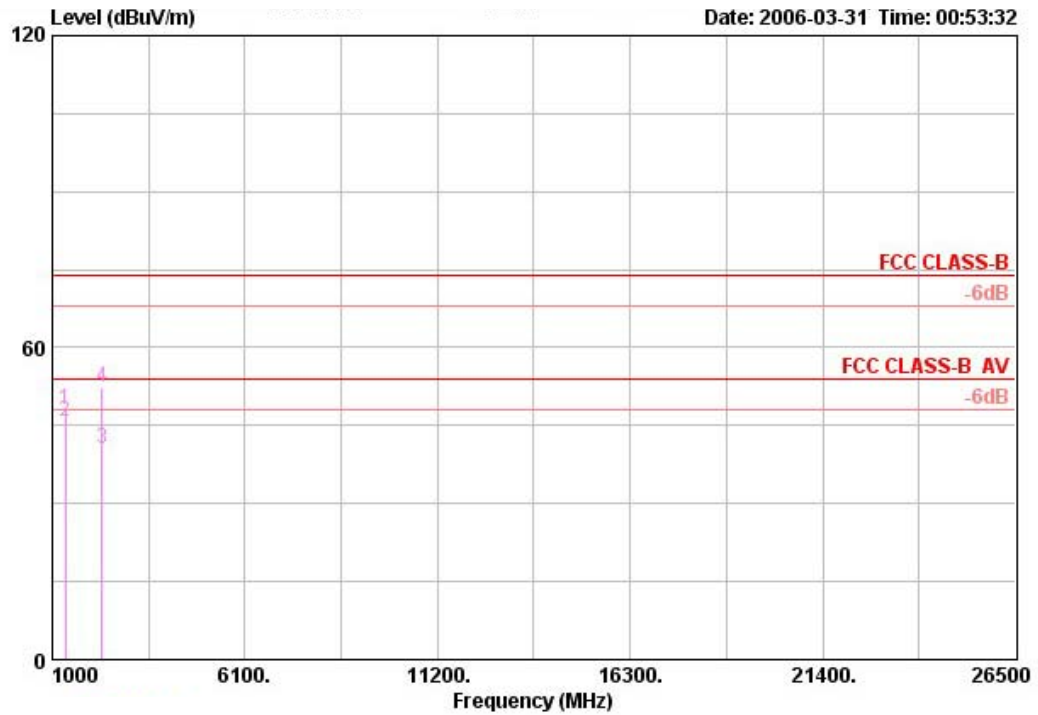


|   | Freq     | Level  | Over   | Limit  | ReadAntenna | Cable | Preamp | Remark        | Ant | Table |
|---|----------|--------|--------|--------|-------------|-------|--------|---------------|-----|-------|
|   | MHz      | dBuV/m | dB     | dBuV/m | dBuV        | dB/m  | dB     |               | cm  | deg   |
| 1 | 1345.940 | 47.99  | -6.01  | 54.00  | 52.40       | 24.87 | 5.29   | 34.57 AVERAGE | --- | ---   |
| 2 | 1345.940 | 51.27  | -22.73 | 74.00  | 55.69       | 24.87 | 5.29   | 34.57 PEAK    | --- | ---   |
| 3 | 2321.180 | 48.55  | -25.45 | 74.00  | 47.67       | 28.79 | 7.16   | 35.07 PEAK    | --- | ---   |
| 4 | 2321.180 | 39.70  | -14.30 | 54.00  | 38.81       | 28.79 | 7.16   | 35.07 AVERAGE | --- | ---   |



|               |          |                |  |
|---------------|----------|----------------|--|
| Temperature   | 20°C     | Humidity       | 70%  |
| Test Engineer | Leo Hung | Configurations | 802.11g 40MHz Channel 9<br>Ant. A + Ant. B |

Vertical

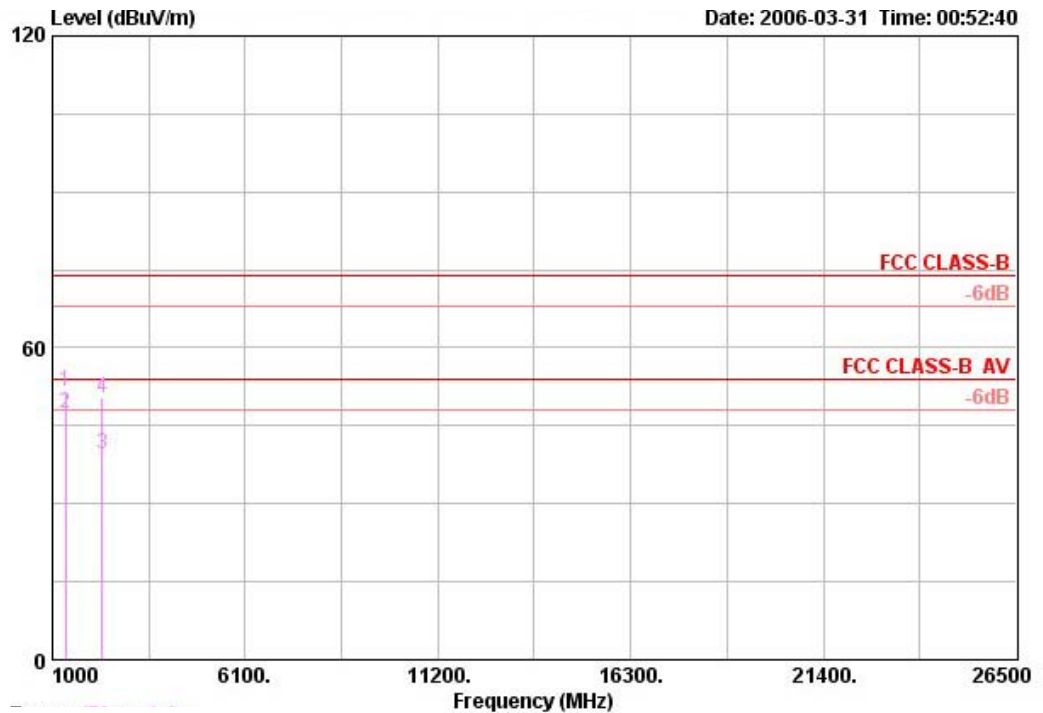


|   | Freq     | Level  | Over Limit | Limit Line | ReadAntenna Level | Antenna Factor | Cable Loss | Preamp Factor | Remark  | Ant Pos | Table Pos |
|---|----------|--------|------------|------------|-------------------|----------------|------------|---------------|---------|---------|-----------|
|   | MHz      | dBuV/m | dB         | dBuV/m     | dBuV              | dB/m           | dB         | dB            |         | cm      | deg       |
| 1 | 1344.040 | 48.11  | -25.89     | 74.00      | 52.51             | 24.87          | 5.29       | 34.55         | PEAK    | ---     | ---       |
| 2 | 1344.040 | 45.67  | -8.33      | 54.00      | 50.07             | 24.87          | 5.29       | 34.55         | AVERAGE | ---     | ---       |
| 3 | 2315.000 | 40.46  | -13.54     | 54.00      | 39.60             | 28.77          | 7.16       | 35.07         | AVERAGE | ---     | ---       |
| 4 | 2315.000 | 52.38  | -21.62     | 74.00      | 51.52             | 28.77          | 7.16       | 35.07         | PEAK    | ---     | ---       |



|               |          |                |  |
|---------------|----------|----------------|--|
| Temperature   | 20°C     | Humidity       | 70%  |
| Test Engineer | Leo Hung | Configurations | 802.11g 40MHz Channel 9<br>Ant. A + Ant. B |

Horizontal



|   | Freq     | Level  | Over Limit | Limit Line | ReadAntenna Level | Antenna Factor | Cable Loss | Preamp Factor | Remark  | Ant Pos | Table Pos |
|---|----------|--------|------------|------------|-------------------|----------------|------------|---------------|---------|---------|-----------|
|   | MHz      | dBuV/m | dB         | dBuV/m     | dBuV              | dB/m           | dB         | dB            |         | cm      | deg       |
| 1 | 1345.940 | 51.64  | -22.36     | 74.00      | 56.06             | 24.87          | 5.29       | 34.57         | PEAK    | ---     | ---       |
| 2 | 1345.940 | 47.46  | -6.54      | 54.00      | 51.88             | 24.87          | 5.29       | 34.57         | AVERAGE | ---     | ---       |
| 3 | 2315.000 | 39.44  | -14.56     | 54.00      | 38.58             | 28.77          | 7.16       | 35.07         | AVERAGE | ---     | ---       |
| 4 | 2315.000 | 50.23  | -23.77     | 74.00      | 49.37             | 28.77          | 7.16       | 35.07         | PEAK    | ---     | ---       |

Note:

The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.

Emission level (dBUV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

## 4.6. Band Edge Emissions Measurement

### 4.6.1. Limit

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

| Frequencies (MHz) | Field Strength (micровolts/meter) | Measurement Distance (meters) |
|-------------------|-----------------------------------|-------------------------------|
| 0.009~0.490       | 2400/F(KHz)                       | 300                           |
| 0.490~1.705       | 24000/F(KHz)                      | 30                            |
| 1.705~30.0        | 30                                | 30                            |
| 30~88             | 100                               | 3                             |
| 88~216            | 150                               | 3                             |
| 216~960           | 200                               | 3                             |
| Above 960         | 500                               | 3                             |

### 4.6.2. Measuring Instruments and Setting

Please refer to section 5 in this report. The following table is the setting of the spectrum analyzer.

| Spectrum Parameter                    | Setting  |
|---------------------------------------|--|
| Attenuation                           | Auto   |
| Span Frequency                        | 100 MHz  |
| RB / VB (emission in restricted band) | 1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average |
| RB / VB (other emission)              | 100 KHz /100 KHz for Peak                      |

### 4.6.3. Test Procedures

1. The test procedure is the same as section 4.5.3, only the frequency range investigated is limited to 100MHz around bandedges.
2. In case the emission is fail due to the used RB/VB is too wide, marker-delta method of FCC Public Notice DA00-705 will be followed.

### 4.6.4. Test Setup Layout

This test setup layout is the same as that shown in section 4.5.4.

### 4.6.5. Test Deviation

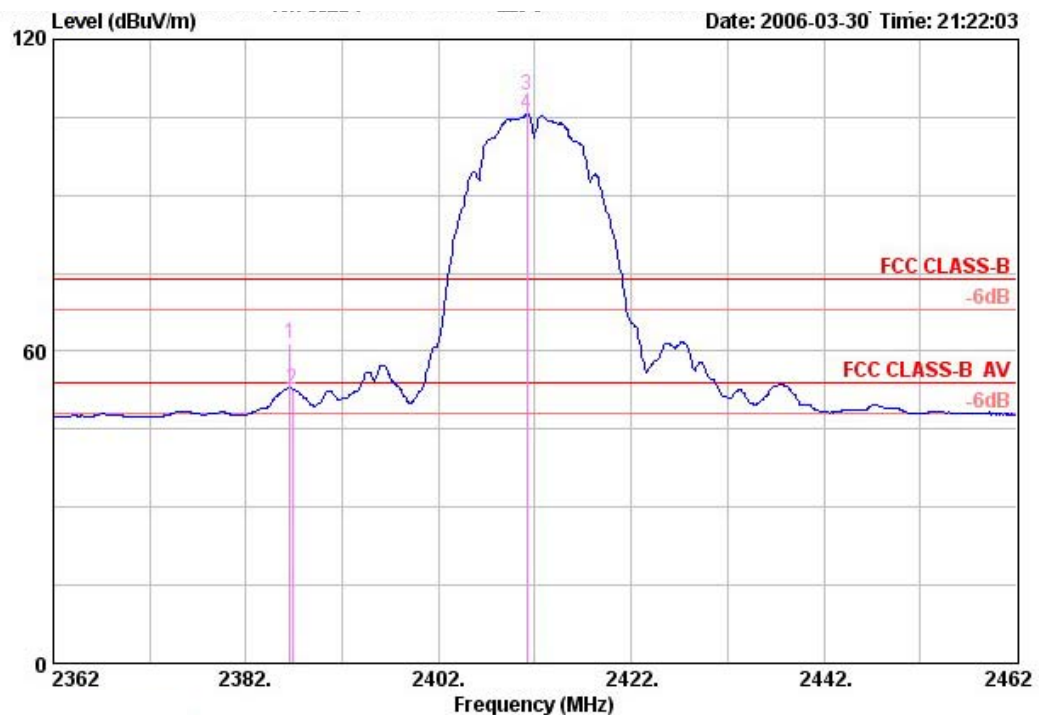
There is no deviation with the original standard.

### 4.6.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.6.7. Test Result of Band Edge and Fundamental Emissions

|               |          |                |                                   |
|---------------|----------|----------------|-----------------------------------|
| Temperature   | 20°C     | Humidity       | 70%                               |
| Test Engineer | Leo Hung | Configurations | 802.11b 20MHz Channel 1<br>Ant. A |

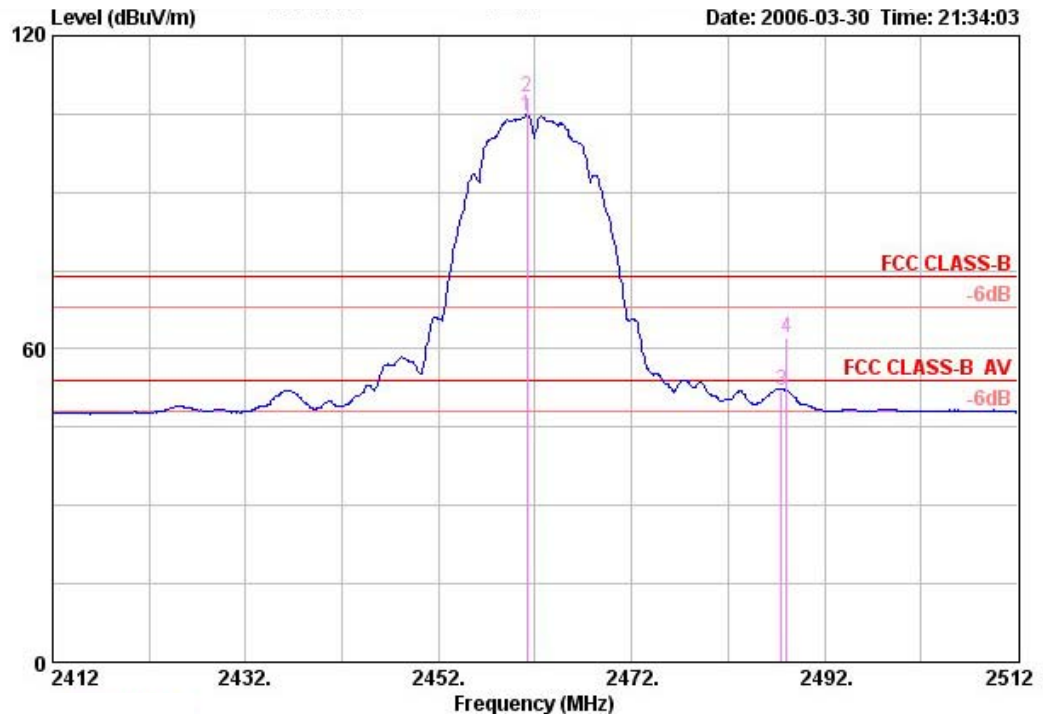


|        | Freq     | Level  | Over Limit | Limit Line | ReadAntenna Level | Antenna Factor | Cable Loss | Preamp Factor | Remark  | Ant Pos | Table Pos |
|--------|----------|--------|------------|------------|-------------------|----------------|------------|---------------|---------|---------|-----------|
|        | MHz      | dBUV/m | dB         | dBUV/m     | dBuV              | dB/m           | dB         | dB            |         | cm      | deg       |
| 1      | 2386.600 | 61.50  | -12.50     | 74.00      | 25.90             | 28.88          | 6.72       | 0.00          | PEAK    | ---     | ---       |
| 2 *    | 2386.800 | 52.80  | -1.20      | 54.00      | 17.20             | 28.88          | 6.72       | 0.00          | AVERAGE | ---     | ---       |
| 3 over | 2411.200 | 109.09 |            |            | 73.40             | 28.90          | 6.80       | 0.00          | PEAK    | ---     | ---       |
| 4 @    | 2411.200 | 105.50 |            |            | 69.81             | 28.90          | 6.80       | 0.00          | AVERAGE | ---     | ---       |

Channel 1 is fundamental frequency at 2412 MHz.



|               |          |                |                                    |
|---------------|----------|----------------|------------------------------------|
| Temperature   | 20°C     | Humidity       | 70%                                |
| Test Engineer | Leo Hung | Configurations | 802.11b 20MHz Channel 11<br>Ant. A |



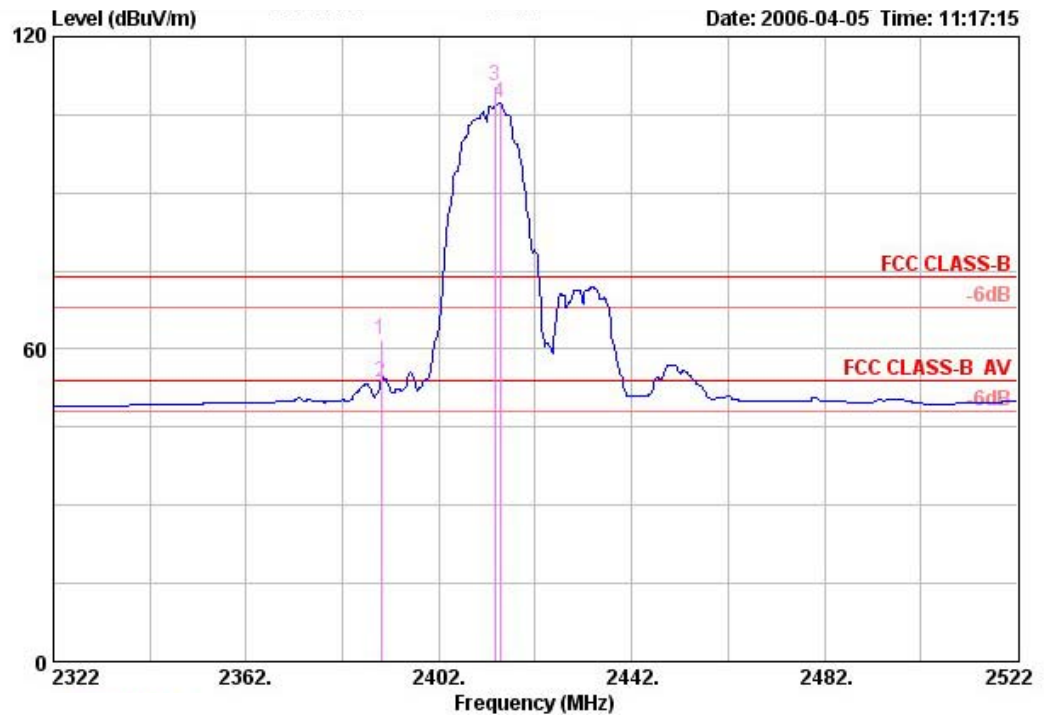
|        | Freq     | Level  | Over Limit | Limit Line | Read Level | Antenna Factor | Cable Loss | Preamp Factor | Remark  | Ant Pos | Table Pos |
|--------|----------|--------|------------|------------|------------|----------------|------------|---------------|---------|---------|-----------|
|        | MHz      | dBuV/m | dB         | dBuV/m     | dBuV       | dB/m           | dB         | dB            |         | cm      | deg       |
| 1 @    | 2461.200 | 104.76 |            |            | 68.93      | 28.96          | 6.87       | 0.00          | AVERAGE | ---     | ---       |
| 2 over | 2461.200 | 108.34 |            |            | 72.51      | 28.96          | 6.87       | 0.00          | PEAK    | ---     | ---       |
| 3 *    | 2487.500 | 52.14  | -1.86      | 54.00      | 16.20      | 29.00          | 6.94       | 0.00          | AVERAGE | ---     | ---       |
| 4      | 2488.100 | 62.20  | -11.80     | 74.00      | 26.26      | 29.00          | 6.94       | 0.00          | PEAK    | ---     | ---       |

Channel 11 is fundamental frequency at 2462 MHz.





|               |          |                |   |
|---------------|----------|----------------|---|
| Temperature   | 20°C     | Humidity       | 70%   |
| Test Engineer | Leo Hung | Configurations | Lower Channel 802.11b<br>40MHz Channel 3 Ant. A |

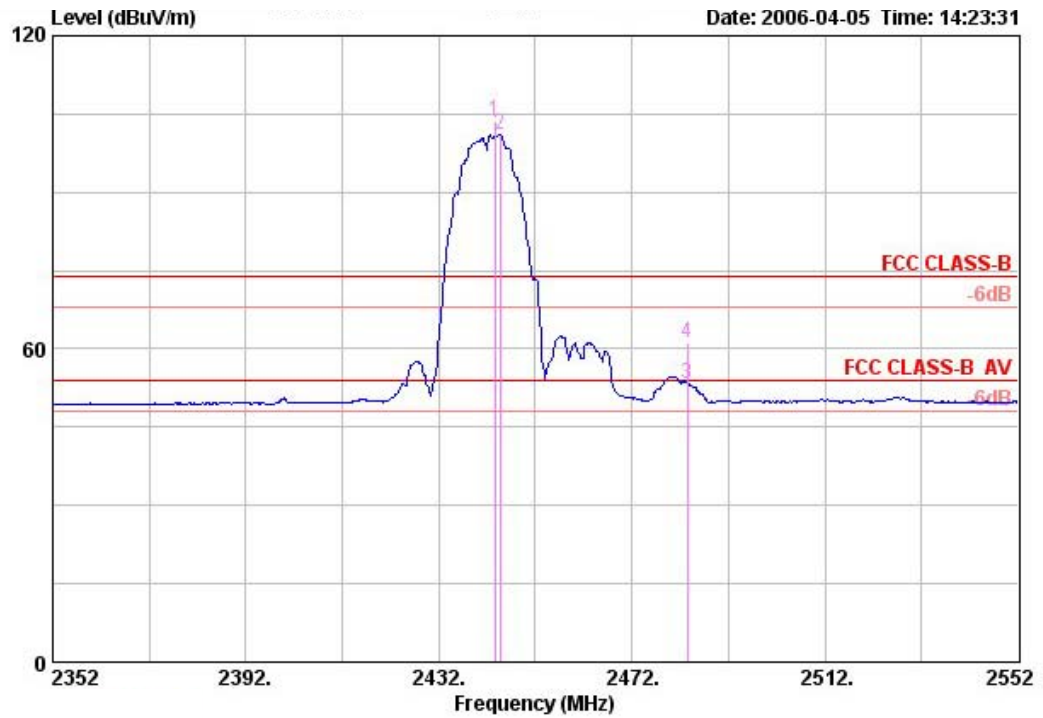


|   | Freq     | Level  | Over Limit | Limit Line | Read Level | Antenna Factor | Cable Loss | Preamp Factor | Remark  | Ant Pos | Table Pos |
|---|----------|--------|------------|------------|------------|----------------|------------|---------------|---------|---------|-----------|
|   | MHz      | dBuV/m | dB         | dBuV/m     | dBuV       | dB/m           | dB         | dB            |         | cm      | deg       |
| 1 | 2390.000 | 61.76  | -12.24     | 74.00      | 26.16      | 28.88          | 6.72       | 0.00          | PEAK    | ---     | ---       |
| 2 | 2390.000 | 53.70  | -0.30      | 54.00      | 18.10      | 28.88          | 6.72       | 0.00          | AVERAGE | ---     | ---       |
| 3 | 2413.600 | 110.57 |            |            | 74.88      | 28.90          | 6.80       | 0.00          | PEAK    | ---     | ---       |
| 4 | 2414.600 | 107.21 |            |            | 71.52      | 28.90          | 6.80       | 0.00          | Average | ---     | ---       |

Channel 3 is fundamental frequency at 2422 MHz.



|               |          |                |   |
|---------------|----------|----------------|---|
| Temperature   | 20°C     | Humidity       | 70%   |
| Test Engineer | Leo Hung | Configurations | Lower Channel 802.11b<br>40MHz Channel 9 Ant. A |

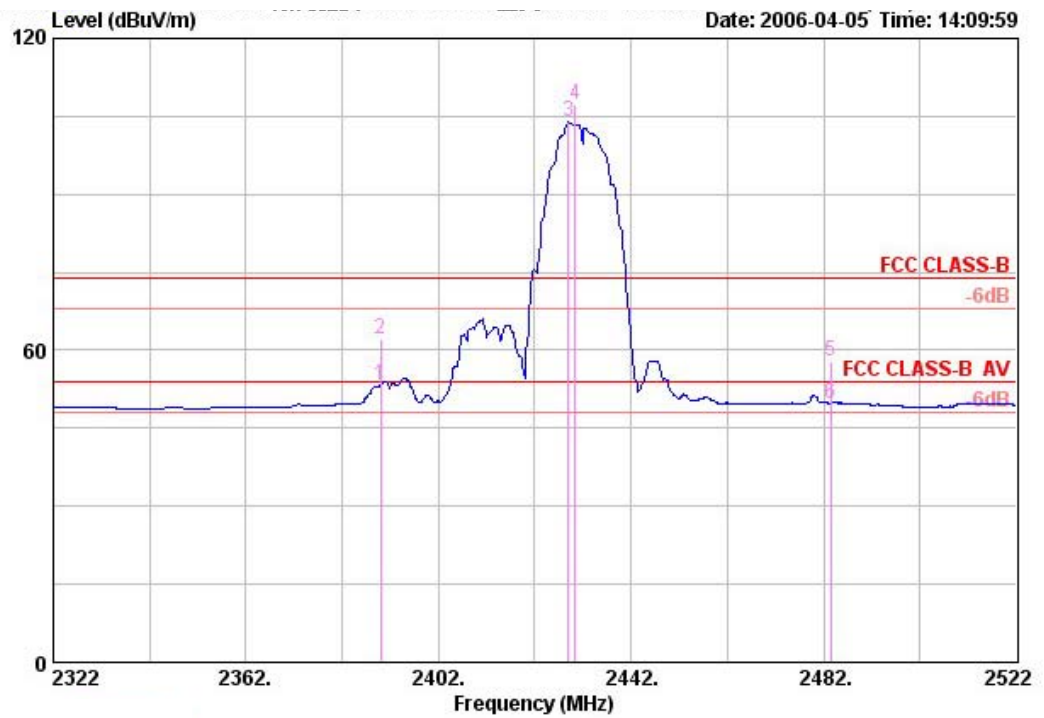


|     | Freq     | Level  | Over   | Limit  | Read  | Antenna | Cable | Preamp | Remark  | Ant | Table |
|-----|----------|--------|--------|--------|-------|---------|-------|--------|---------|-----|-------|
|     | MHz      | dBuV/m | dB     | dBuV/m | dBuV  | dB/m    | dB    | dB     |         | cm  | deg   |
| 1 @ | 2443.600 | 103.72 |        |        | 67.98 | 28.94   | 6.80  | 0.00   | PEAK    | --- | ---   |
| 2 @ | 2444.600 | 101.08 |        |        | 65.28 | 28.94   | 6.87  | 0.00   | Average | --- | ---   |
| 3 @ | 2483.500 | 53.28  | -0.72  | 54.00  | 17.36 | 28.98   | 6.94  | 0.00   | AVERAGE | --- | ---   |
| 4   | 2483.500 | 61.15  | -12.85 | 74.00  | 25.23 | 28.98   | 6.94  | 0.00   | PEAK    | --- | ---   |

Channel 9 is fundamental frequency at 2452 MHz.



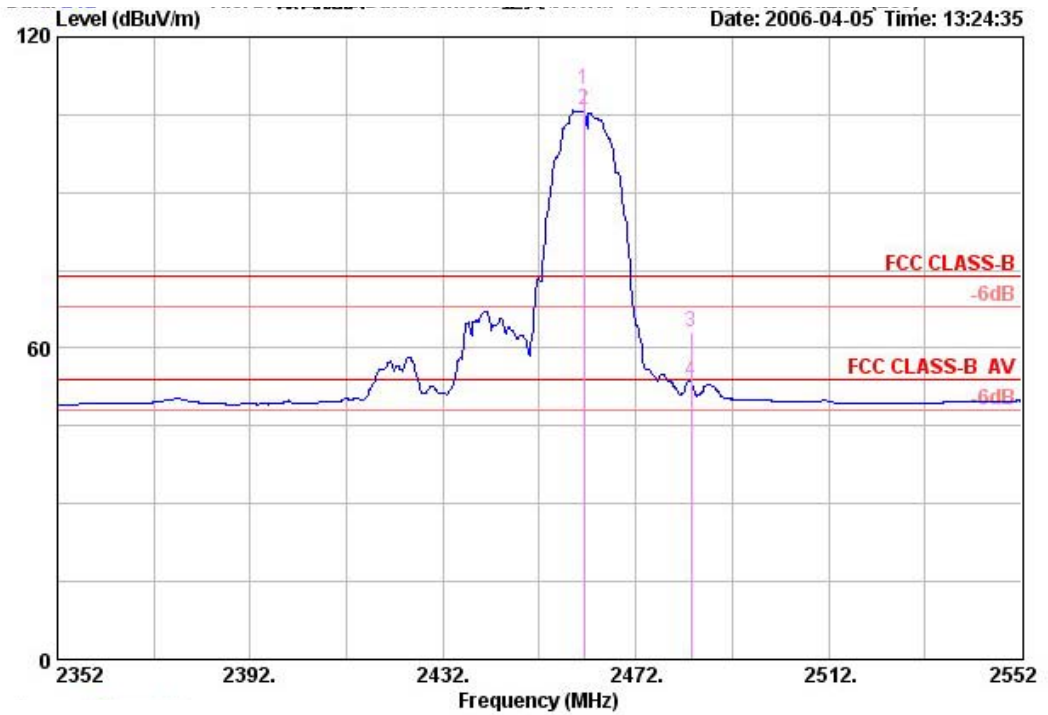
|               |          |                |   |
|---------------|----------|----------------|---|
| Temperature   | 20°C     | Humidity       | 70%   |
| Test Engineer | Leo Hung | Configurations | Upper Channel 802.11b<br>40MHz Channel 3 Ant. A |



|     | Freq     | Level  | Over Limit | Limit Line | ReadAntenna Level | Cable Factor | Preamp Loss | Factor | Remark  | Ant Pos | Table Pos |
|-----|----------|--------|------------|------------|-------------------|--------------|-------------|--------|---------|---------|-----------|
|     | MHz      | dBuV/m | dB         | dBuV/m     | dBuV              | dB/m         | dB          | dB     |         | cm      | deg       |
| 1 @ | 2390.000 | 53.16  | -0.84      | 54.00      | 17.56             | 28.88        | 6.72        | 0.00   | AVERAGE | ---     | ---       |
| 2   | 2390.000 | 62.11  | -11.89     | 74.00      | 26.51             | 28.88        | 6.72        | 0.00   | PEAK    | ---     | ---       |
| 3 @ | 2429.000 | 103.82 |            |            | 68.11             | 28.92        | 6.80        | 0.00   | Average | ---     | ---       |
| 4 @ | 2430.400 | 107.33 |            |            | 71.62             | 28.92        | 6.80        | 0.00   | PEAK    | ---     | ---       |
| 5   | 2483.500 | 57.87  | -16.13     | 74.00      | 21.95             | 28.98        | 6.94        | 0.00   | PEAK    | ---     | ---       |
| 6 * | 2483.500 | 49.84  | -4.16      | 54.00      | 13.92             | 28.98        | 6.94        | 0.00   | AVERAGE | ---     | ---       |

Channel 3 is fundamental frequency at 2422 MHz.

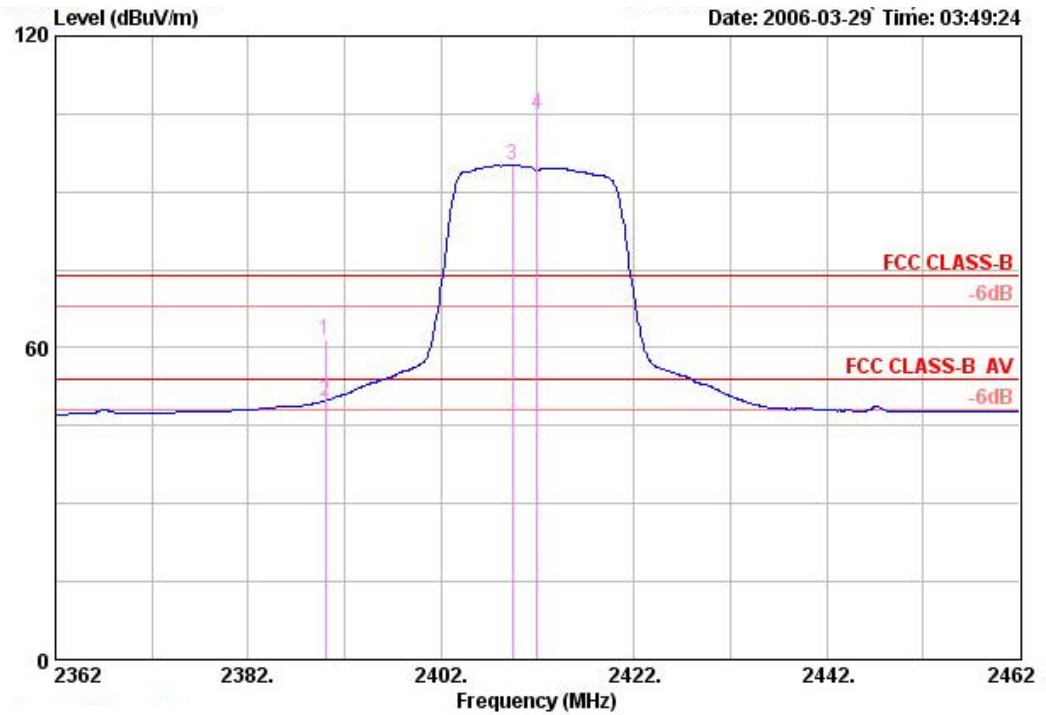
|               |          |                |   |
|---------------|----------|----------------|---|
| Temperature   | 20°C     | Humidity       | 70%   |
| Test Engineer | Leo Hung | Configurations | Upper Channel 802.11b<br>40MHz Channel 9 Ant. A |



|   | Freq     | Level  | Over   | Limit  | Read  | Antenna | Cable | Preamp | Remark  | Ant | Table |
|---|----------|--------|--------|--------|-------|---------|-------|--------|---------|-----|-------|
|   | MHz      | dBuV/m | dB     | dBuV/m | dBuV  | dB/m    | dB    | dB     |         | cm  | deg   |
| 1 | 2461.200 | 109.71 |        |        | 73.88 | 28.96   | 6.87  | 0.00   | PEAK    | --- | ---   |
| 2 | 2461.200 | 105.86 |        |        | 70.03 | 28.96   | 6.87  | 0.00   | Average | --- | ---   |
| 3 | 2483.500 | 63.25  | -10.75 | 74.00  | 27.33 | 28.98   | 6.94  | 0.00   | PEAK    | --- | ---   |
| 4 | 2483.500 | 53.57  | -0.43  | 54.00  | 17.65 | 28.98   | 6.94  | 0.00   | AVERAGE | --- | ---   |

Channel 9 is fundamental frequency at 2452 MHz.

|               |          |                |                                   |
|---------------|----------|----------------|-----------------------------------|
| Temperature   | 20°C     | Humidity       | 70%                               |
| Test Engineer | Leo Hung | Configurations | 802.11g 20MHz Channel 1<br>Ant. A |

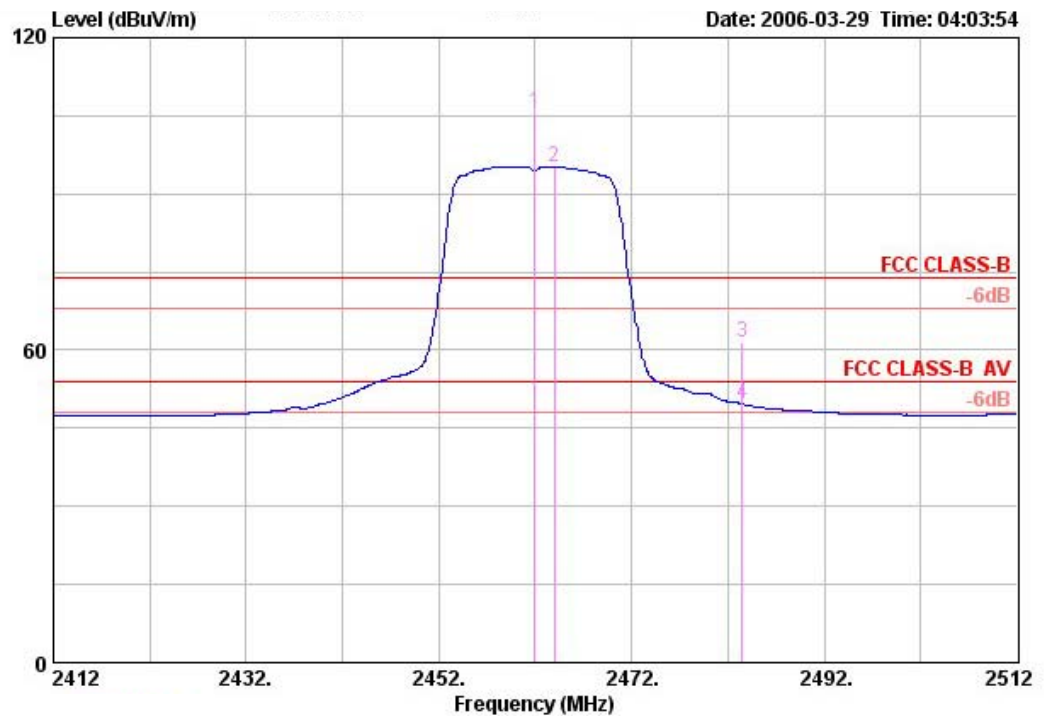


|        | Freq     | Level  | Over Limit | Limit Line | ReadAntenna Level | Antenna Factor | Cable Loss | Preamplifier Factor | Remark  | Ant Pos | Table Pos |
|--------|----------|--------|------------|------------|-------------------|----------------|------------|---------------------|---------|---------|-----------|
|        | MHz      | dBuV/m | dB         | dBuV/m     | dBuV              | dB/m           | dB         | dB                  |         | cm      | deg       |
| 1      | 2390.000 | 61.40  | -12.60     | 74.00      | 25.81             | 28.88          | 6.72       | 0.00                | PEAK    | ---     | ---       |
| 2 *    | 2390.000 | 49.75  | -4.25      | 54.00      | 14.15             | 28.88          | 6.72       | 0.00                | AVERAGE | ---     | ---       |
| 3 @    | 2409.400 | 95.11  |            |            | 59.42             | 28.90          | 6.80       | 0.00                | AVERAGE | ---     | ---       |
| 4 over | 2412.000 | 104.98 |            |            | 69.29             | 28.90          | 6.80       | 0.00                | PEAK    | ---     | ---       |

Channel 1 is fundamental frequency at 2412 MHz.



|               |          |                |                                    |
|---------------|----------|----------------|------------------------------------|
| Temperature   | 20°C     | Humidity       | 70%                                |
| Test Engineer | Leo Hung | Configurations | 802.11g 20MHz Channel 11<br>Ant. A |

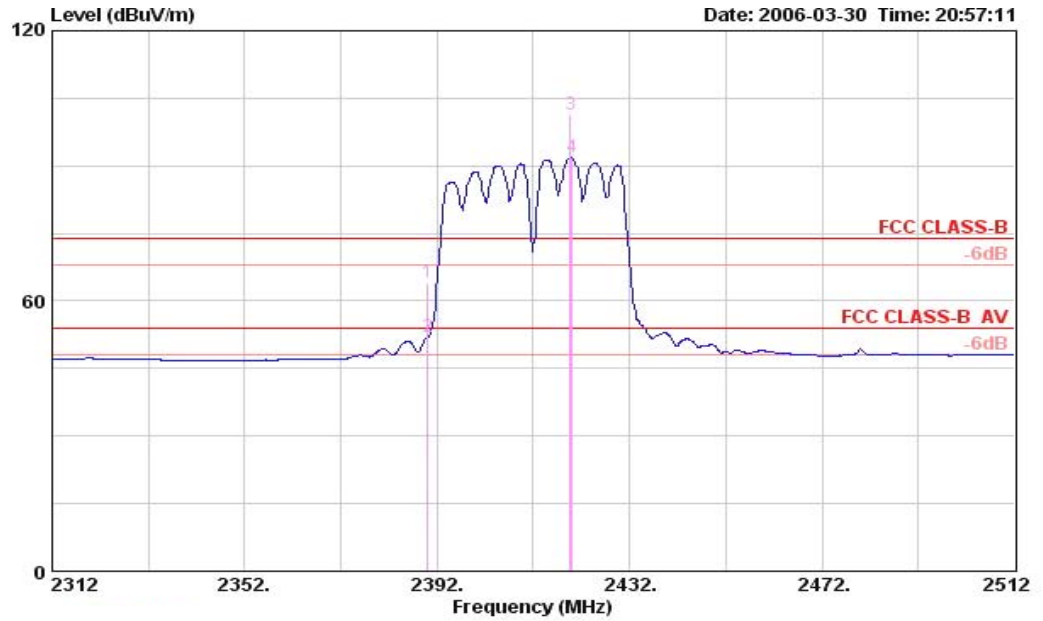


|   | Freq | Level    | Over Limit | Limit Line | Read Level | Antenna Factor | Cable Loss | Preamp Factor | Remark  | Ant Pos | Table Pos |
|---|------|----------|------------|------------|------------|----------------|------------|---------------|---------|---------|-----------|
|   | MHz  | dBuV/m   | dB         | dBuV/m     | dBuV       | dB/m           | dB         | dB            |         | cm      | deg       |
| 1 | over | 2462.000 | 105.77     |            | 69.94      | 28.96          | 6.87       | 0.00          | PEAK    | ---     | ---       |
| 2 | ⊗    | 2464.000 | 95.22      |            | 59.40      | 28.96          | 6.87       | 0.00          | AVERAGE | ---     | ---       |
| 3 |      | 2483.500 | 61.39      | -12.61     | 74.00      | 25.48          | 28.98      | 6.94          | 0.00    | PEAK    | ---       |
| 4 | *    | 2483.500 | 49.56      | -4.44      | 54.00      | 13.64          | 28.98      | 6.94          | 0.00    | AVERAGE | ---       |

Channel 11 is fundamental frequency at 2462 MHz.



|               |          |                |  |
|---------------|----------|----------------|--|
| Temperature   | 20°C     | Humidity       | 70%  |
| Test Engineer | Leo Hung | Configurations | 802.11g 40MHz Channel 3<br>Ant. A + Ant. B |



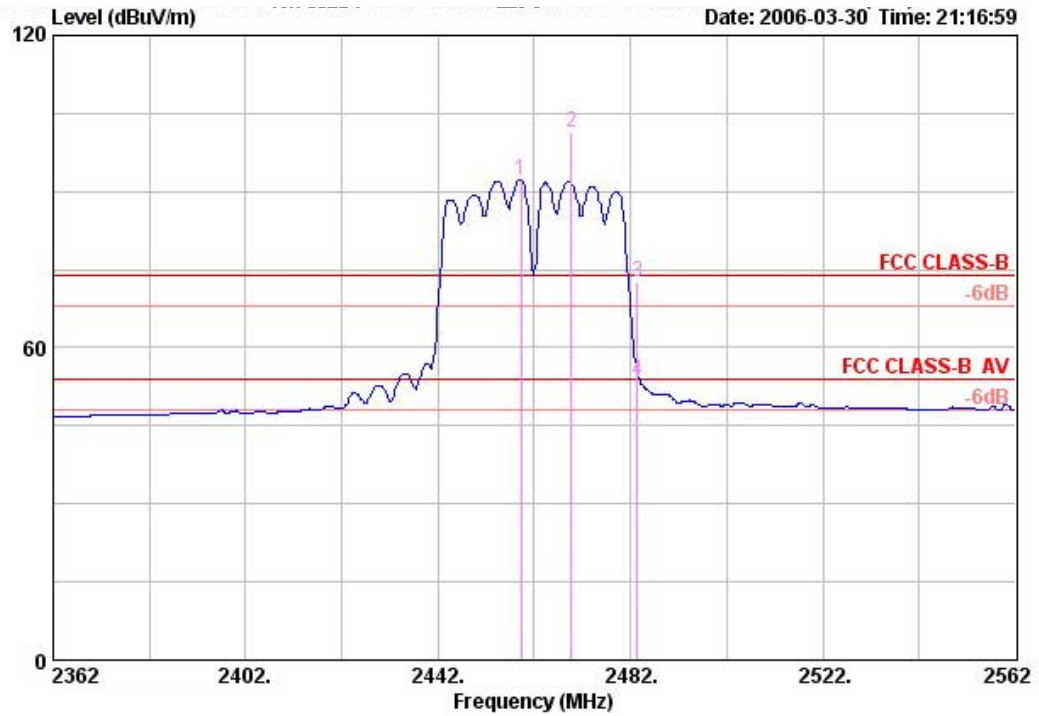
|        | Freq     | Level  | Over Limit | Limit Line | ReadAntenna Level | Antenna Factor | Cable Loss | Preamp Factor | Remark  | Ant Pos | Table Pos |
|--------|----------|--------|------------|------------|-------------------|----------------|------------|---------------|---------|---------|-----------|
|        | MHz      | dBUV/m | dB         | dBUV/m     | dBuV              | dB/m           | dB         | dB            |         | cm      | deg       |
| 1      | 2390.000 | 64.06  | -9.94      | 74.00      | 28.46             | 28.88          | 6.72       | 0.00          | PEAK    | ---     | ---       |
| 2 *    | 2390.000 | 51.84  | -2.16      | 54.00      | 16.24             | 28.88          | 6.72       | 0.00          | AVERAGE | ---     | ---       |
| 3 over | 2419.600 | 101.34 |            |            | 65.63             | 28.92          | 6.80       | 0.00          | PEAK    | ---     | ---       |
| 4 over | 2420.000 | 91.73  |            |            | 56.01             | 28.92          | 6.80       | 0.00          | AVERAGE | ---     | ---       |

Channel 3 is fundamental frequency at 2422 MHz.





|               |          |                |  |
|---------------|----------|----------------|--|
| Temperature   | 20°C     | Humidity       | 70%  |
| Test Engineer | Leo Hung | Configurations | 802.11g 40MHz Channel 9<br>Ant. A + Ant. B |



|        | Freq     | Level  | Over Limit | Limit Line | ReadAntenna Level | Antenna Factor | Cable Loss | Preamp Factor | Remark  | Ant Pos | Table Pos |
|--------|----------|--------|------------|------------|-------------------|----------------|------------|---------------|---------|---------|-----------|
|        | MHz      | dBuV/m | dB         | dBuV/m     | dBuV              | dB/m           | dB         | dB            |         | cm      | deg       |
| 1 over | 2459.200 | 92.13  |            |            | 56.30             | 28.96          | 6.87       | 0.00          | AVERAGE | ---     | ---       |
| 2 over | 2469.600 | 101.48 |            |            | 65.66             | 28.96          | 6.87       | 0.00          | PEAK    | ---     | ---       |
| 3 *    | 2483.500 | 72.47  | -1.53      | 74.00      | 36.55             | 28.98          | 6.94       | 0.00          | PEAK    | ---     | ---       |
| 4 *    | 2483.500 | 53.56  | -0.44      | 54.00      | 17.64             | 28.98          | 6.94       | 0.00          | AVERAGE | ---     | ---       |

Channel 9 is fundamental frequency at 2452 MHz.

Note:

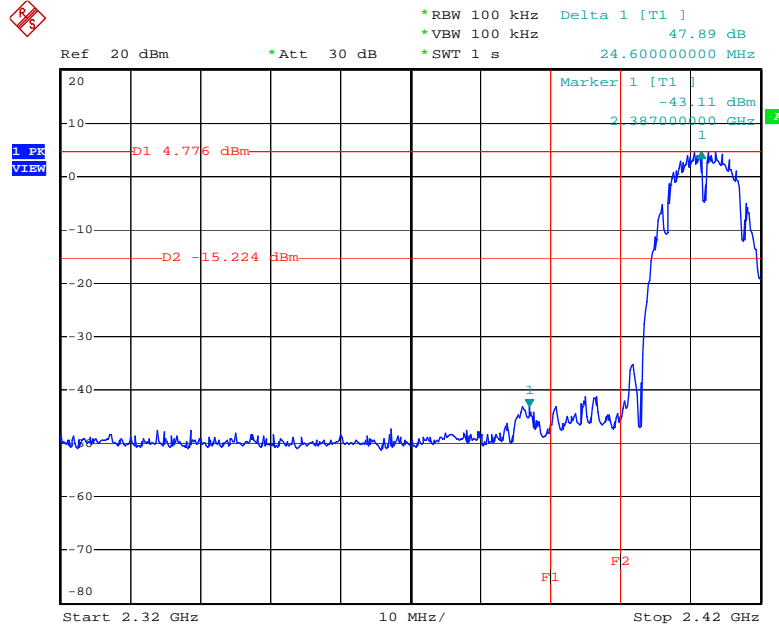
Emission level (dBUV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Receiving maximum band edge emissions are Vertical Polarization.

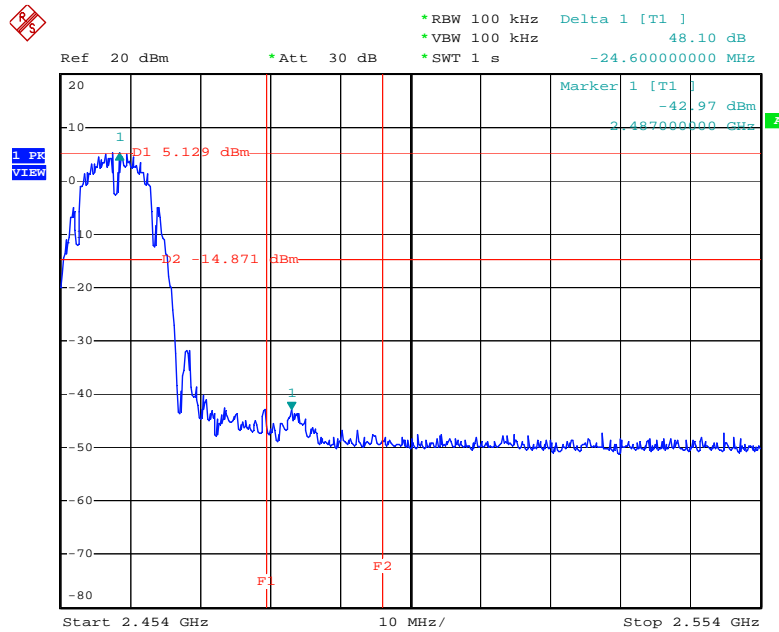
For Emission not in Restricted Band

Low Band Edge Plot on Configuration IEEE 802.11b 20MHz Ant. A / 2412 MHz



Date: 31.MAR.2006 04:21:58

High Band Edge Plot on Configuration IEEE 802.11b 20MHz Ant. A / 2462 MHz

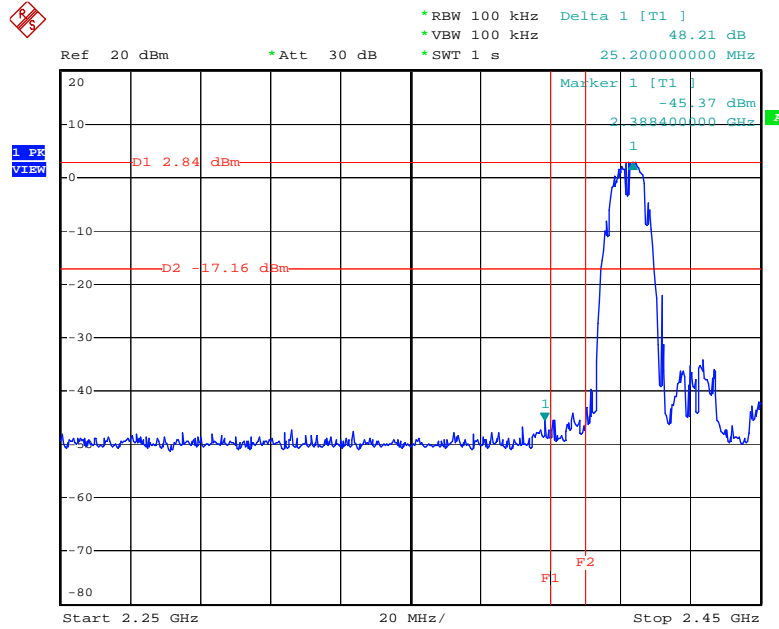


Date: 31.MAR.2006 04:23:44

For Emission not in Restricted Band

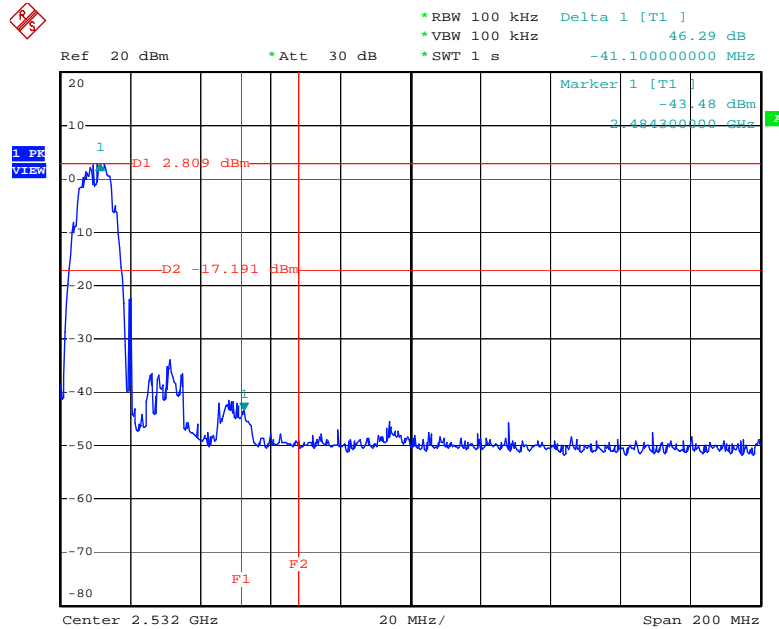
Lower Channel

Low Band Edge Plot on Configuration IEEE 802.11b 40MHz Ant. A / 2422 MHz



Date: 6.APR.2006 09:50:46

High Band Edge Plot on Configuration IEEE 802.11b 40MHz Ant. A / 2452 MHz



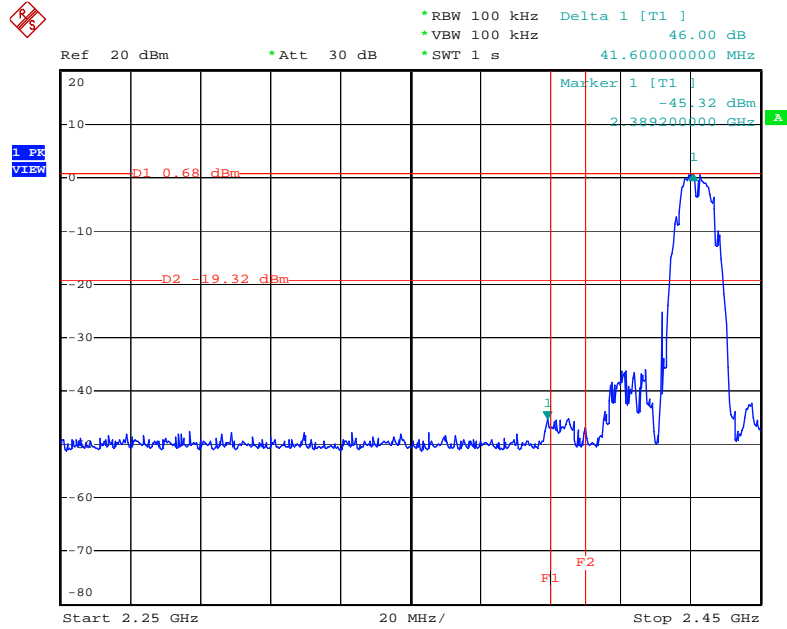
Date: 6.APR.2006 09:55:51



For Emission not in Restricted Band

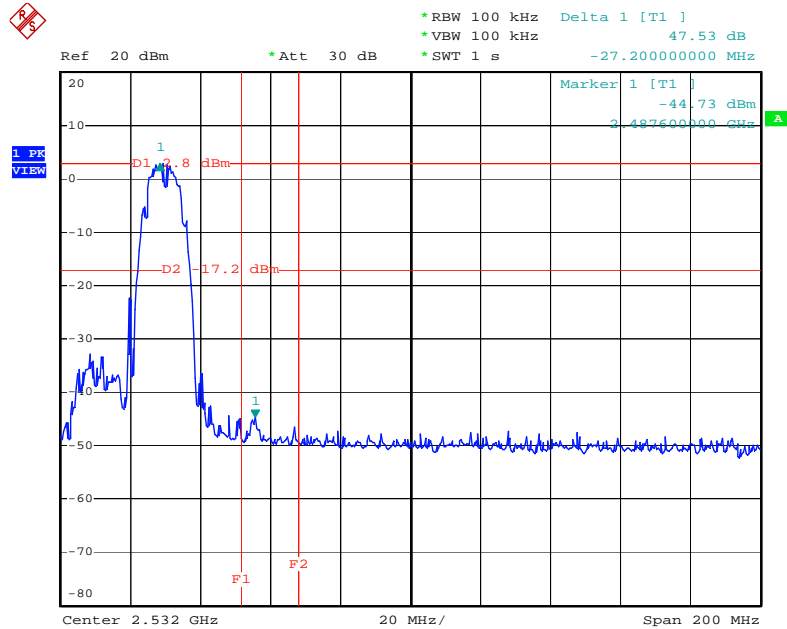
Upper Channel

Low Band Edge Plot on Configuration IEEE 802.11b 40MHz Ant. A / 2422 MHz



Date: 6.APR.2006 09:42:26

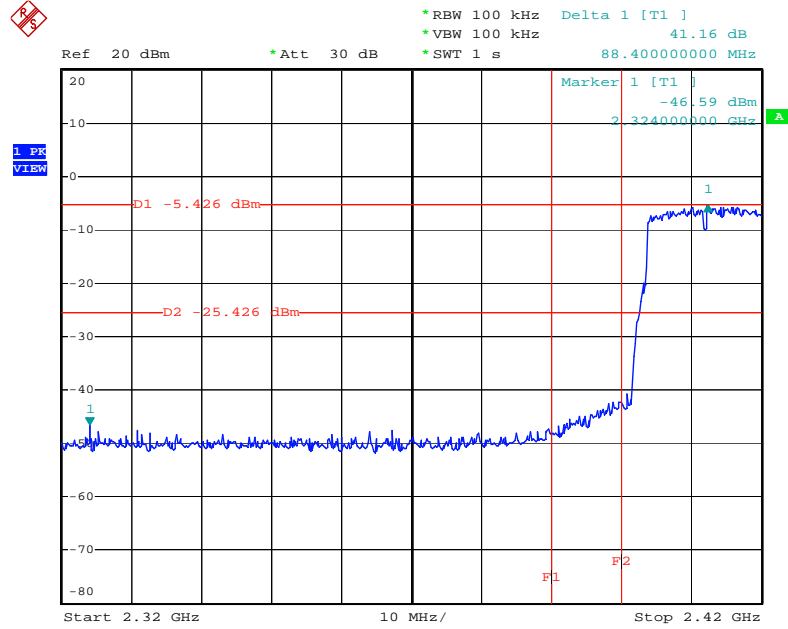
High Band Edge Plot on Configuration IEEE 802.11b 40MHz Ant. A / 2452 MHz



Date: 6.APR.2006 09:46:34

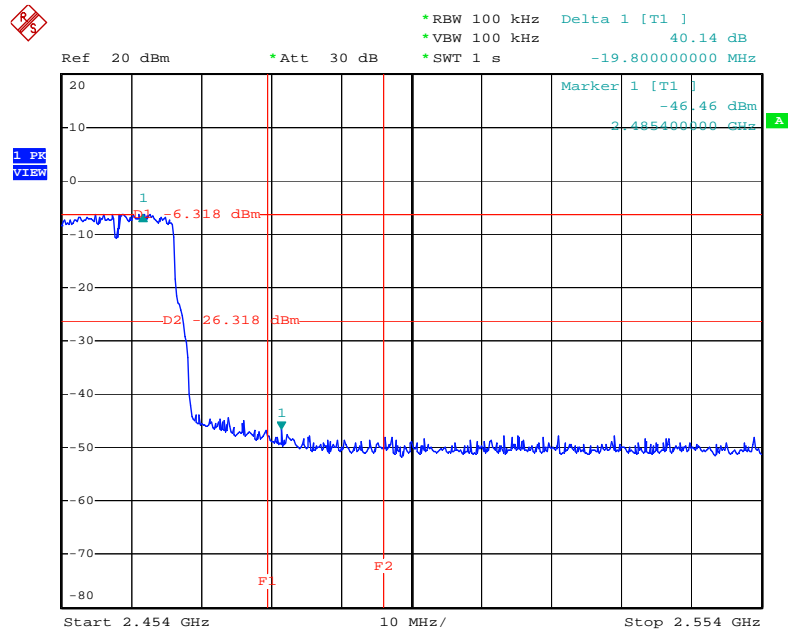
For Emission not in Restricted Band

Low Band Edge Plot on Configuration IEEE 802.11g 20MHz Ant. A / 2412 MHz



Date: 31.MAR.2006 03:51:55

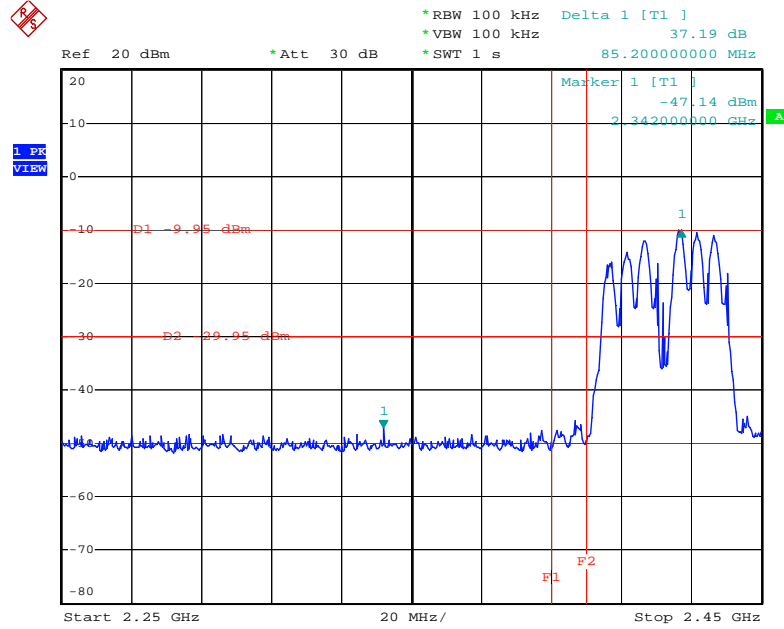
High Band Edge Plot on Configuration IEEE 802.11g 20MHz Ant. A / 2462 MHz



Date: 31.MAR.2006 03:53:48

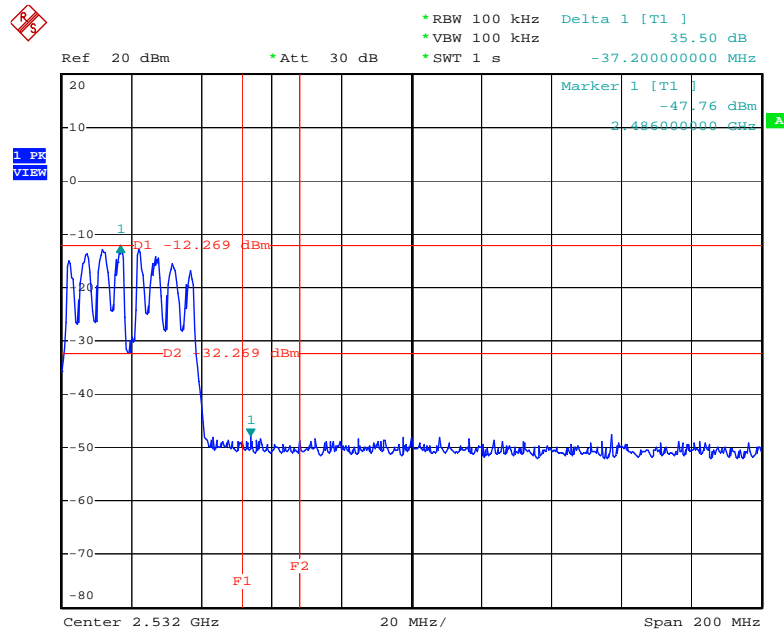
For Emission not in Restricted Band

Low Band Edge Plot on Configuration IEEE 802.11g 40MHz Ant. A + Ant. B / 2422 MHz



Date: 3.APR.2006 20:25:27

High Band Edge Plot on Configuration IEEE 802.11g 40MHz Ant. A + Ant. B / 2452 MHz



Date: 3.APR.2006 20:35:44



## 4.7. Antenna Requirements

### 4.7.1. Limit

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

### 4.7.2. Antenna Connector Construction

Please refer to section 3.3 in this test report, all antenna connectors comply with the requirements.

## 5. LIST OF MEASURING EQUIPMENTS

| Instrument               | Manufacturer   | Model No.     | Serial No.  | Characteristics      | Calibration Date | Remark                |
|--------------------------|----------------|---------------|-------------|----------------------|------------------|-----------------------|
| EMC Receiver             | R&S            | ESCS 30       | 100174      | 9kHz – 2.75GHz       | Feb. 22, 2006    | Conduction (CO04-HY)  |
| LISN                     | MessTec        | NNB-2/16Z     | 99079       | 9kHz – 30MHz         | Dec. 19, 2005    | Conduction (CO04-HY)  |
| LISN (Support Unit)      | EMCO           | 3810/2NM      | 9708-1839   | 9kHz – 30MHz         | Mar. 18, 2006    | Conduction (CO04-HY)  |
| RF Cable-CON             | UTIFLEX        | 3102-26886-4  | CB049       | 9kHz – 30MHz         | Apr. 20, 2005    | Conduction (CO04-HY)  |
| EMI Filter               | LINDGREN       | LRE-2030      | 2651        | < 450 Hz             | N/A              | Conduction (CO04-HY)  |
| 3m Semi Anechoic Chamber | SIDT FRANKONIA | SAC-3M        | 03CH03-HY   | 30 MHz - 1 GHz<br>3m | Jun. 16, 2005    | Radiation (03CH03-HY) |
| Amplifier                | SCHAFFNER      | CPA9231A      | 3565        | 9 kHz - 2 GHz        | Jan. 18, 2006    | Radiation (03CH03-HY) |
| Amplifier                | Agilent        | 8449B         | 3008A02120  | 1 GHz - 26.5 GHz     | May. 31, 2005    | Radiation (03CH03-HY) |
| Amplifier                | MITEQ          | AMF-6F-260400 | 923364      | 26.5 GHz - 40 GHz    | Jan. 24, 2006*   | Radiation (03CH03-HY) |
| Spectrum Analyzer        | R&S            | FSP40         | 100004/040  | 9 kHz - 40 GHz       | Sep. 30, 2005    | Radiation (03CH03-HY) |
| Loop Antenna             | R&S            | HFH2-Z2       | 860004/001  | 9 kHz - 30 MHz       | May. 24, 2004*   | Radiation (03CH03-HY) |
| Biconical Antenna        | SCHWARZBECK    | VHBB 9124     | 301         | 30 MHz - 200 MHz     | Jul. 22, 2005    | Radiation (03CH03-HY) |
| Log Antenna              | SCHWARZBECK    | VUSLP 9111    | 221         | 200 MHz - 1 GHz      | Jul. 22, 2005    | Radiation (03CH03-HY) |
| Horn Antenna             | EMCO           | 3115          | 6741        | 1 GHz - 18 GHz       | Apr. 22, 2005    | Radiation (03CH03-HY) |
| Horn Antenna             | SCHWARZBECK    | BBHA9170      | BBHA9170154 | 15 GHz - 40 GHz      | Jun. 09, 2004*   | Radiation (03CH03-HY) |
| RF Cable-R03m            | Jye Bao        | RG142         | CB021       | 30 MHz - 1 GHz       | Dec.02, 2005     | Radiation (03CH03-HY) |
| RF Cable-HIGH            | SUHNER         | SUCOFLEX 106  | 03CH03-HY   | 1 GHz - 40 GHz       | Dec.02, 2005     | Radiation (03CH03-HY) |
| Turn Table               | HD             | DS 420        | 420/650/00  | 0 - 360 degree       | N/A              | Radiation (03CH03-HY) |
| Antenna Mast             | HD             | MA 240        | 240/560/00  | 1 m - 4 m            | N/A              | Radiation (03CH03-HY) |
| Power sensor             | R&S            | NRV-Z55       | 100049      | DC ~ 40GHz           | Jul. 06, 2005    | Conducted (TH01-HY)   |
| Power Sensor             | R&S            | NRV-Z32       | 100057      | 30MHz ~ 6GHz         | Apr. 28, 2005    | Conducted (TH01-HY)   |
| AC power source          | HPC            | HPA-500W      | HPA-9100024 | AC 0 ~ 300V          | Apr. 21, 2005    | Conducted (TH01-HY)   |
| DC power source          | G.W.           | GPC-6030D     | C671845     | DC 1V ~ 60V          | Dec. 28, 2005    | Conducted (TH01-HY)   |
| RF CABLE-1m              | Jye Bao        | RG142         | CB034-1m    | 20MHz ~ 7GHz         | Dec. 30, 2005    | Conducted (TH01-HY)   |





| Instrument       | Manufacturer | Model No. | Serial No.  | Characteristics | Calibration Date | Remark              |
|------------------|--------------|-----------|-------------|-----------------|------------------|---------------------|
| RF CABLE-2m      | Jye Bao      | RG142     | CB035-2m    | 20MHz ~ 1GHz    | Dec. 30, 2005    | Conducted (TH01-HY) |
| Oscilloscope     | Tektronix    | TDS1012   | CO38515     | 100MHz / 1GS/s  | Apr. 15, 2005*   | Conducted (TH01-HY) |
| Signal Generator | R&S          | SMR40     | 100116      | 10MHz ~ 40GHz   | Dec. 30, 2005    | Conducted (TH01-HY) |
| Data Generator   | Tektronix    | DG2030    | 063-2920-50 | 0.1Hz~400MHz    | Jun. 02, 2005    | Conducted (TH01-HY) |

※ Calibration Interval of instruments listed above is one year.

\* Calibration Interval of instruments listed above is two year.

## 6. SPORTON COMPANY PROFILE

SPORTON Lab. was established in 1986 with one shielded room: the first private EMI test facility, offering local manufacturers an alternative EMI test facility apart from ERSO. In 1988, one 3M and 10M/3M open area test site were setup and also obtained official accreditation from FCC, VCCI and NEMKO. In 1993, a Safety laboratory was founded and obtained accreditation from UL of USA, CSA of Canada and TUV (Rhineland & PS) of Germany. In 1995, one EMC lab, including EMI and EMS test facilities was setup. In 1997, SPORTON Group has provided financial expense to relocate the headquarter to Orient Scientific Park in Taipei Hsien to offer more comprehensive, more qualified and better service to local suppliers and manufactures. In 1999, Safety Group and Component Group were setup. In 2001, SPORTON has established 3M/10M chamber in Hwa Ya Technology Park.

### 6.1. Test Location

|        |  |
|--------|--|
| SHIJR  | ADD : 6Fl., No. 106, Sec. 1, Shintai 5th Rd., Shijr City, Taipei, Taiwan 221, R.O.C.<br>TEL : 02-2696-2468<br>FAX : 02-2696-2255 |
| HWA YA | ADD : No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.<br>TEL : 03-327-3456<br>FAX : 03-318-0055         |
| LINKOU | ADD : No. 30-2, Dingfu Tsuen, Linkou Shiang, Taipei, Taiwan 244, R.O.C<br>TEL : 02-2601-1640<br>FAX : 02-2601-1695               |
| DUNGHU | ADD : No. 3, Lane 238, Kangle St., Neihu Chiu, Taipei, Taiwan 114, R.O.C.<br>TEL : 02-2631-4739<br>FAX : 02-2631-9740            |
| JUNGHE | ADD : 7Fl., No. 758, Jungjeng Rd., Junghe City, Taipei, Taiwan 235, R.O.C.<br>TEL : 02-8227-2020<br>FAX : 02-8227-2626           |
| NEIHU  | ADD : 4Fl., No. 339, Hsin Hu 2 <sup>nd</sup> Rd., Taipei 114, Taiwan, R.O.C.<br>TEL : 02-2794-8886<br>FAX : 02-2794-9777         |
| JHUBEI | ADD : No.8, Lane 728, Bo-ai St., Jhubei City, Hsinchu County 302, Taiwan, R.O.C.<br>TEL : 03-656-9065<br>FAX : 03-656-9085       |

## 7. NVLAP CERTIFICATE OF ACCREDITATION

United States Department of Commerce  
National Institute of Standards and Technology



### Certificate of Accreditation to ISO/IEC 17025:1999

NVLAP LAB CODE: 200079-0

**Sporton International, Inc. Hwa Ya EMC Laboratory**

Tao Yuan Hsien 333  
TAIWAN

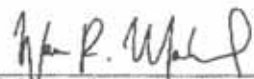
*is recognized by the National Voluntary Laboratory Accreditation Program for conformance with criteria set forth in  
NIST Handbook 150:2001 and all requirements of ISO/IEC 17025:1999.  
Accreditation is granted for specific services, listed on the Scope of Accreditation, for:*

**ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS**

2006-01-01 through 2006-12-31

*Effective dates*



  
For the National Institute of Standards and Technology