

Appendix E

## Test Information

EUT Name: AD1 G55 #45  
 Serial Number: TU162070085  
 Test Description: FCC pt.74 & RSS-210 Radiated Emissions Matching  
 Operating Conditions: 635.875MHz H @ 2mW  
 Operator Name: Alex Stelmaszczyk, Tom Braxton & Mudassar Khan  
 Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
 Test Date: May 5 – 10, 2017

| Frequency<br>MHz | Max Peak<br>(dBμV/m) | Matched<br>Power from<br>Sig Gen | Limit<br>(dBm) | Margin<br>(dBm) | Polarity | Cable Loss<br>(dB) | Cable 2 Loss<br>(dB) | Antenna<br>Gain<br>(dB) | ERP / EIRP<br>Total<br>(dBm) | Status |
|------------------|----------------------|----------------------------------|----------------|-----------------|----------|--------------------|----------------------|-------------------------|------------------------------|--------|
| 1272.100         | 33.91                | -77.3                            | -13.0          | 63.5            | H        | 2.10               | 2.64                 | 3.90                    | -78.14                       | PASS   |
| 1907.800         | 38.20                | -74.9                            | -13.0          | 62.4            | V        | 2.30               | 2.64                 | 5.40                    | -74.44                       | PASS   |
| 2544.400         | 38.47                | -70.2                            | -13.0          | 58.0            | H        | 2.60               | 2.64                 | 6.00                    | -69.44                       | PASS   |
| 3168.700         | 38.63                | -75.4                            | -13.0          | 62.9            | V        | 3.05               | 3.44                 | 7.00                    | -74.89                       | PASS   |
| 3815.800         | 39.76                | -61.1                            | -13.0          | 48.8            | H        | 3.65               | 4.03                 | 8.40                    | -60.38                       | PASS   |
| 6992.500         | 41.37                | -73.3                            | -13.0          | 61.1            | V        | 4.80               | 5.32                 | 10.90                   | -72.52                       | PASS   |
| 9595.900         | 40.75                | -77.3                            | -13.0          | 67.5            | V        | 5.85               | 4.13                 | 13.20                   | -74.08                       | PASS   |
|                  |                      |                                  |                |                 |          |                    |                      |                         |                              |        |

## Test Information

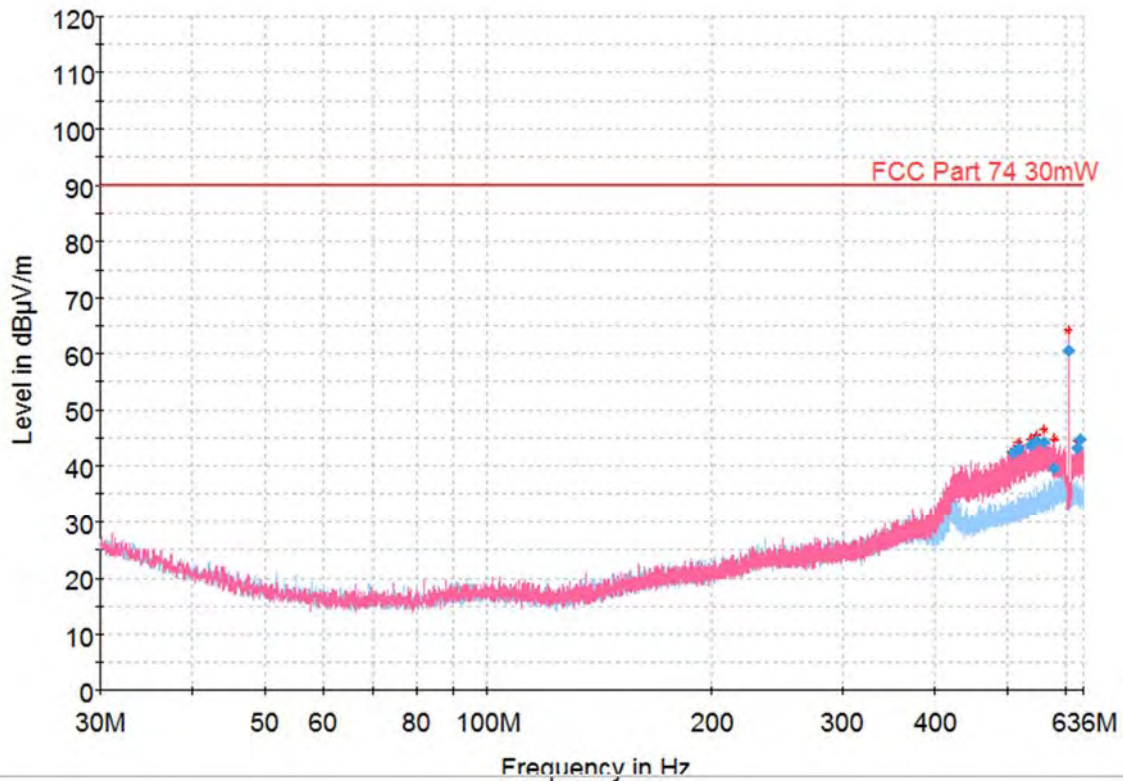
EUT Name: AD1 K53 #142  
 Serial Number: TU162050041  
 Test Description: Radiated RF Emissions 30MHz to 636MHz  
 Operating Conditions: 606.125MHz L @ 35mW  
 Operator Name: Alex Stelmaszczyk  
 Comment: FCC pt. 74  
 Description: FCC Table, 3m, AAs, No Audio Input, w L23-26-01 Tuned Notch  
 Test Date & Time: October 26, 2016 10:24:57 AM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 Transmitter 30MHz to 1000MHz 34790

Hardware Setup: Electric Field Strength 34790 2016 06 03  
 Level Unit: dBμV/m

| Subrange       | Step Size | Detectors | IF BW   | Meas. Time | Preamp |
|----------------|-----------|-----------|---------|------------|--------|
| 30 MHz - 1 GHz | 30 kHz    | PK+       | 120 kHz | 0.02 s     | 20 dB  |

Full Spectrum



## Test Information

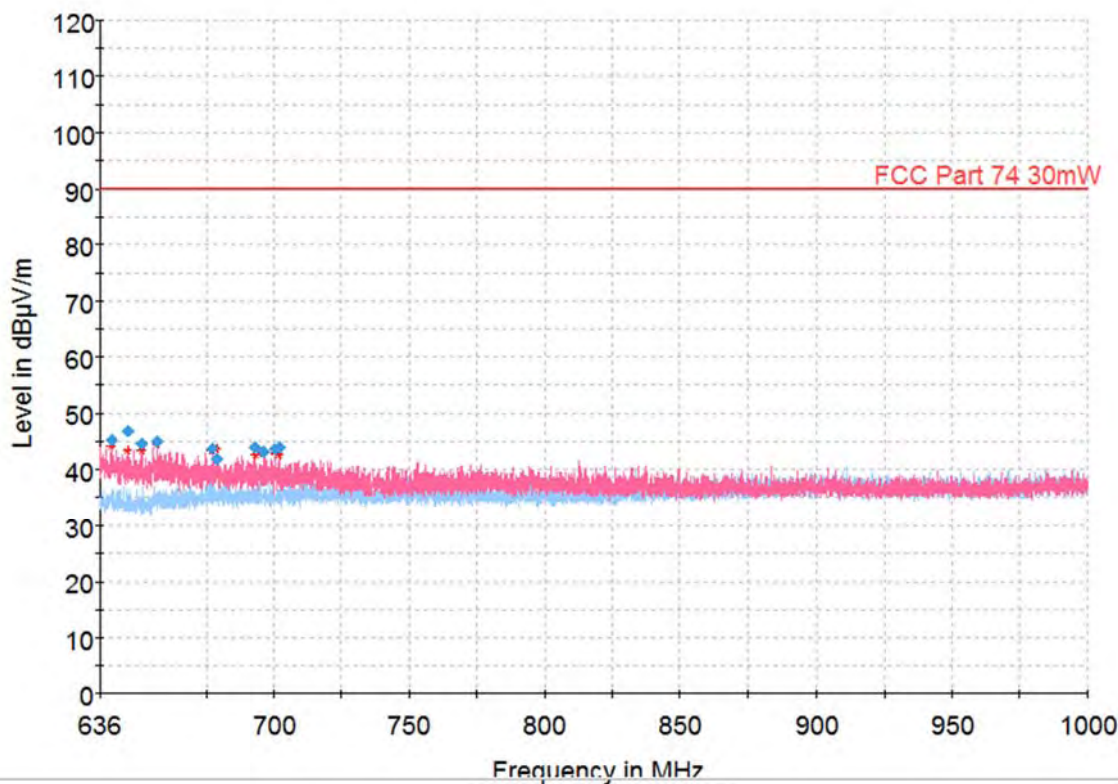
EUT Name: AD1 K53 #142  
Serial Number: TU162050041  
Test Description: Radiated RF Emissions 636 - 1000MHz  
Operating Conditions: 606.125MHz L @ 35mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, 3m, AAs, No Audio Input, w/o L23-26-01 Tuned Notch  
Test Date & Time: October 26, 2016 11:22:46 AM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 Transmitter 30MHz to 1000MHz 34790

Hardware Setup: Electric Field Strength 34790 2016 06 03  
Level Unit: dBμV/m

| Subrange       | Step Size | Detectors | IF BW   | Meas. Time | Preamp |
|----------------|-----------|-----------|---------|------------|--------|
| 30 MHz - 1 GHz | 30 kHz    | PK+       | 120 kHz | 0.02 s     | 20 dB  |

### Full Spectrum



## Test Information

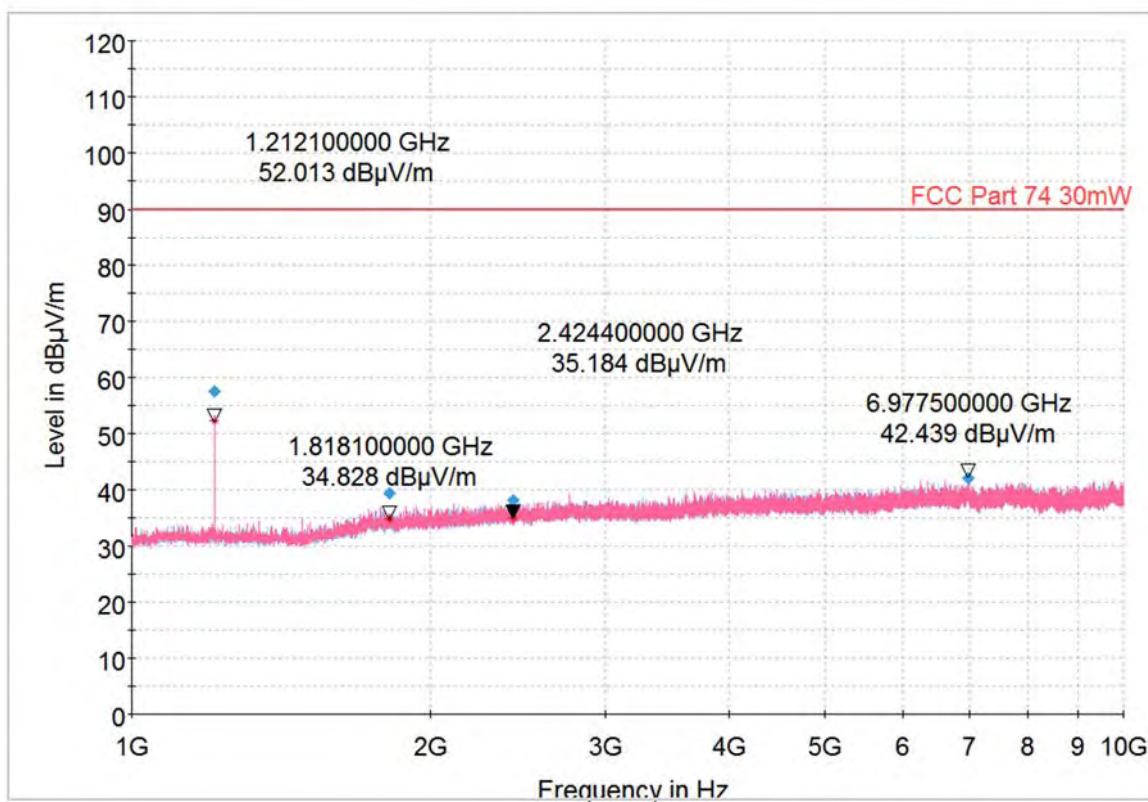
EUT Name: AD1 K53 #142  
Serial Number: TU162050041  
Test Description: Radiated RF Emissions 1GHz to 10GHz  
Operating Conditions: 606.125MHz L @ 35mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF  
Test Date & Time: November 29, 2016 10:28:54 AM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 1GHz to 10GHz 3117-PA 206583 FCC

Hardware Setup: Electric Field Strength 10GHz 3117-PA 206583 2016 03 24  
Level Unit: dBμV/m

| Subrange       | Step Size | Detectors | IF BW | Meas. Time | Preamplifier |
|----------------|-----------|-----------|-------|------------|--------------|
| 1 GHz - 10 GHz | 250 kHz   | PK+       | 1 MHz | 1 s        | 20 dB        |

Full Spectrum



## Appendix E

### Test Information

EUT Name: AD1 K53 #142  
Serial Number: TU162050041  
Test Description: FCC pt.74 & RSS-210 Spurious Radiated Emissions  
Operating Conditions: 606.125MHz L @ 35mW  
Operator Name: Alex Stelmaszczyk  
Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
Test Date: October, 26, 2016 & November 29, 2016

| Frequency<br>MHz | Max Peak<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Measure<br>Time<br>(ms) | Bandwidth<br>(kHz) | Height<br>(cm) | Polarity | Azimuth<br>(deg) | Correction<br>(dB) |
|------------------|----------------------|-------------------|----------------|-------------------------|--------------------|----------------|----------|------------------|--------------------|
| 510.174          | 42.39                | 84.38             | 47.610         | 20                      | 120.00             | 100.000        | V        | 71.00            | 21.00              |
| 518.921          | 42.92                | 84.38             | 47.080         | 20                      | 120.00             | 111.000        | V        | 41.00            | 21.30              |
| 520.597          | 43.18                | 84.38             | 46.820         | 20                      | 120.00             | 100.000        | V        | -6.00            | 21.30              |
| 539.424          | 43.83                | 84.38             | 46.170         | 20                      | 120.00             | 100.000        | V        | 260.00           | 21.80              |
| 550.998          | 44.45                | 84.38             | 45.550         | 20                      | 120.00             | 100.000        | V        | 290.00           | 22.10              |
| 562.815          | 44.31                | 84.38             | 45.690         | 20                      | 120.00             | 100.000        | V        | 30.00            | 22.00              |
| 580.208          | 39.74                | 84.38             | 50.260         | 20                      | 120.00             | 111.000        | V        | 284.00           | 22.20              |
| 623.496          | 43.24                | 84.38             | 46.760         | 20                      | 120.00             | 160.000        | V        | 169.00           | 23.80              |
| 629.273          | 44.84                | 84.38             | 45.160         | 20                      | 120.00             | 163.000        | V        | -5.00            | 23.70              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |
| 640.404          | 45.25                | 84.38             | 44.750         | 20                      | 120.00             | 147.000        | V        | 128.00           | 23.20              |
| 646.265          | 46.86                | 84.38             | 43.140         | 20                      | 120.00             | 167.000        | V        | 295.00           | 23.00              |
| 651.409          | 44.62                | 84.38             | 45.380         | 20                      | 120.00             | 158.000        | V        | 177.00           | 22.90              |
| 657.112          | 44.98                | 84.38             | 45.020         | 20                      | 120.00             | 162.000        | V        | 156.00           | 23.10              |
| 677.168          | 43.82                | 84.38             | 46.180         | 20                      | 120.00             | 133.000        | V        | 149.00           | 23.80              |
| 678.891          | 41.95                | 84.38             | 48.050         | 20                      | 120.00             | 147.000        | V        | 8.00             | 23.80              |
| 693.087          | 44.03                | 84.38             | 45.970         | 20                      | 120.00             | 130.000        | V        | 152.00           | 23.90              |
| 696.436          | 43.27                | 84.38             | 46.730         | 20                      | 120.00             | 152.000        | V        | 24.00            | 23.90              |
| 700.452          | 43.61                | 84.38             | 46.390         | 20                      | 120.00             | 146.000        | V        | 161.00           | 23.90              |
| 702.078          | 43.99                | 84.38             | 46.010         | 20                      | 120.00             | 128.000        | V        | 115.00           | 23.90              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |
| 1212.400         | 57.53                | 84.38             | 32.470         | 1000                    | 1000.00            | 147.000        | V        | 290.00           | -19.30             |
| 1818.100         | 39.37                | 84.38             | 50.630         | 1000                    | 1000.00            | 373.000        | V        | -10.00           | -15.50             |
| 2424.400         | 38.11                | 84.38             | 51.890         | 1000                    | 1000.00            | 166.000        | H        | 182.00           | -13.00             |
| 6977.500         | 42.17                | 84.38             | 47.830         | 1000                    | 1000.00            | 272.000        | H        | 331.00           | -3.50              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |

## Appendix E

### Test Information

EUT Name: AD1 K53 #142  
Serial Number: TU162050041  
Test Description: FCC pt.74 & RSS-210 Radiated Emissions Matching  
Operating Conditions: 606.125MHz L @ 35mW  
Operator Name: Alex Stelmaszczyk, Tom Braxton & Mudassar Khan  
Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
Test Date: May 5 – 10, 2017

| Frequency MHz | Max Peak (dBμV/m) | Matched Power from Sig Gen | Limit (dBm) | Margin (dBm) | Polarity | Cable Loss (dB) | Cable 2 Loss (dB) | Antenna Gain (dB) | ERP / EIRP Total (dBm) | Status |
|---------------|-------------------|----------------------------|-------------|--------------|----------|-----------------|-------------------|-------------------|------------------------|--------|
| 550.998       | 44.45             | -54.7                      | -13.0       | 38.9         | V        | 1.40            | 1.39              |                   | -57.49                 | PASS   |
| 629.273       | 44.84             | -48.7                      | -13.0       | 32.7         | V        | 1.50            | 1.50              |                   | -51.70                 | PASS   |
| 640.404       | 45.25             | -46.2                      | -13.0       | 30.2         | V        | 1.50            | 1.50              |                   | -49.20                 | PASS   |
| 646.265       | 46.86             | -47.6                      | -13.0       | 31.6         | V        | 1.50            | 1.50              |                   | -50.60                 | PASS   |
| 651.409       | 44.62             | -50.3                      | -13.0       | 34.3         | V        | 1.50            | 1.50              |                   | -53.30                 | PASS   |
| 657.112       | 44.98             | -50.6                      | -13.0       | 34.6         | V        | 1.50            | 1.50              |                   | -53.60                 | PASS   |
|               |                   |                            |             |              |          |                 |                   |                   |                        |        |
| 1212.400      | 57.53             | -38.5                      | -13.0       | 23.2         | V        | 2.10            | 2.08              | 1.90              | -40.78                 | PASS   |
| 1818.100      | 39.37             | -66.8                      | -13.0       | 54.4         | V        | 2.25            | 2.58              | 5.40              | -66.23                 | PASS   |
| 2424.400      | 38.11             | -75.2                      | -13.0       | 67.5         | H        | 2.70            | 2.96              | 5.00              | -75.86                 | PASS   |
|               |                   |                            |             |              |          |                 |                   |                   |                        |        |
|               |                   |                            |             |              |          |                 |                   |                   |                        |        |

## Test Information

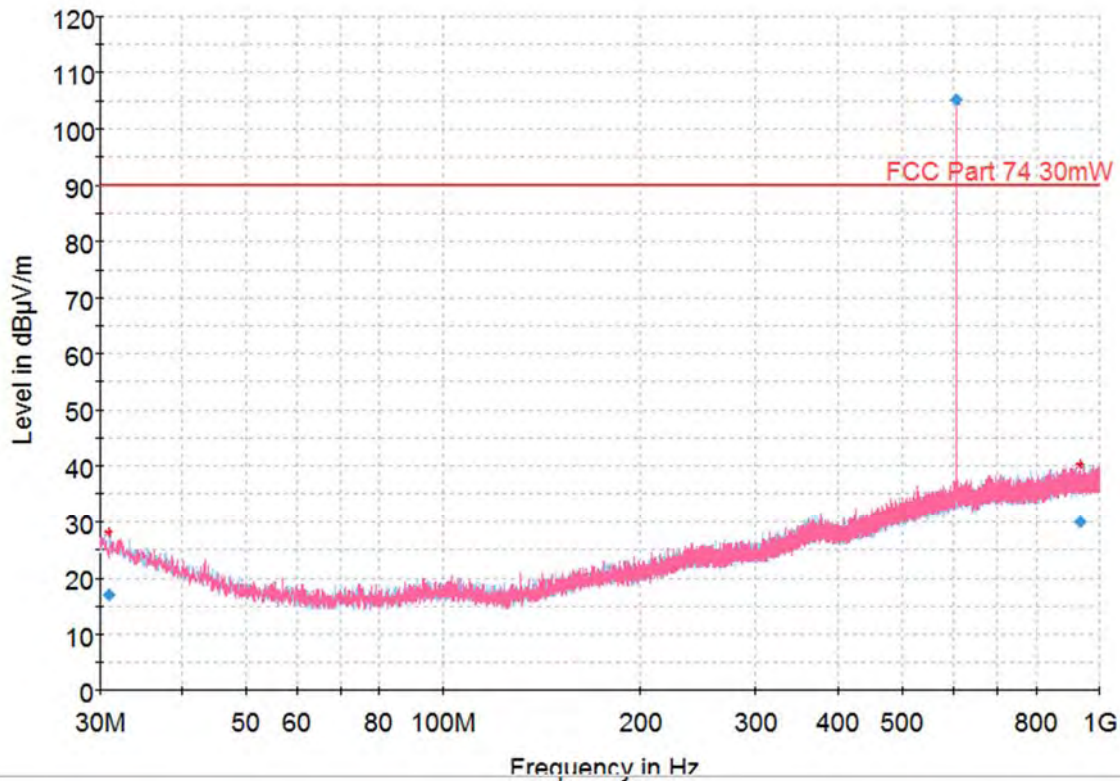
EUT Name: AD1 K53 #142  
Serial Number: TU162050041  
Test Description: Radiated RF Emissions 30MHz to 1GHz  
Operating Conditions: 606.125MHz L @ 2mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, 3m, AAs, No Audio Input  
Test Date & Time: October 27, 2016 11:33:12 AM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 Transmitter 30MHz to 1000MHz 34790

Hardware Setup: Electric Field Strength 34790 2016 06 03  
Level Unit: dB $\mu$ V/m

| Subrange       | Step Size | Detectors | IF BW   | Meas. Time | Preamp |
|----------------|-----------|-----------|---------|------------|--------|
| 30 MHz - 1 GHz | 30 kHz    | PK+       | 120 kHz | 0.02 s     | 20 dB  |

Full Spectrum



## Test Information

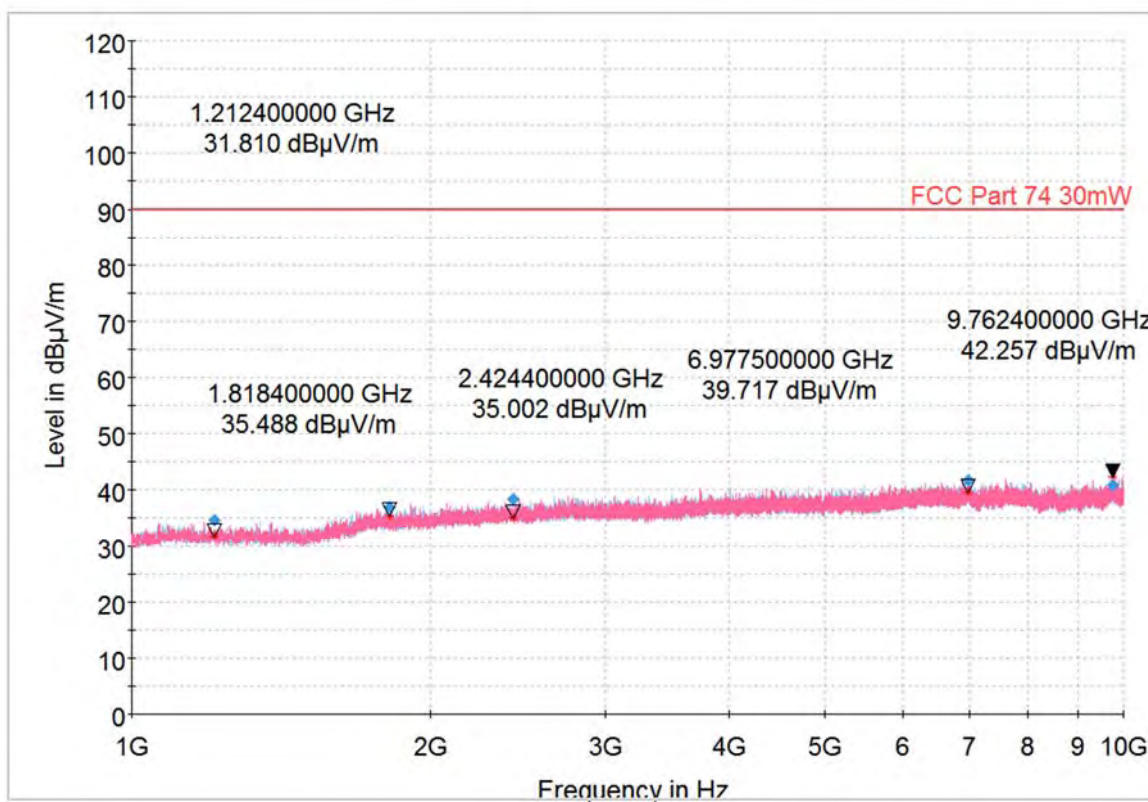
EUT Name: AD1 K53 #142  
Serial Number: TU162050041  
Test Description: Radiated RF Emissions 1GHz to 10GHz  
Operating Conditions: 606.125MHz L @ 2mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF  
Test Date & Time: November 29, 2016 3:12:09 PM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 1GHz to 10GHz 3117-PA 206583 FCC

Hardware Setup: Electric Field Strength 10GHz 3117-PA 206583 2016 03 24  
Level Unit: dBμV/m

| Subrange       | Step Size | Detectors | IF BW | Meas. Time | Preamp |
|----------------|-----------|-----------|-------|------------|--------|
| 1 GHz - 10 GHz | 250 kHz   | PK+       | 1 MHz | 1 s        | 20 dB  |

Full Spectrum



Appendix E

## Test Information

EUT Name: AD1 K53 #142  
 Serial Number: TU162050041  
 Test Description: FCC pt.74 & RSS-210 Spurious Radiated Emissions  
 Operating Conditions: 606.125MHz L @ 2mW  
 Operator Name: Alex Stelmaszczyk  
 Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
 Test Date: October, 27, 2016 & November 29, 2016

| Frequency<br>MHz | Max Peak<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Measure<br>Time<br>(ms) | Bandwidth<br>(kHz) | Height<br>(cm) | Polarity | Azimuth<br>(deg) | Correction<br>(dB) |
|------------------|----------------------|-------------------|----------------|-------------------------|--------------------|----------------|----------|------------------|--------------------|
| 31.035           | 16.93                | 84.38             | 73.070         | 20                      | 120.00             | 366.000        | H        | 6.00             | 16.40              |
| 937.888          | 29.85                | 84.38             | 60.150         | 20                      | 120.00             | 400.000        | V        | 217.00           | 26.10              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |
| 1212.400         | 34.57                | 84.38             | 55.430         | 1000                    | 1000.00            | 388.000        | H        | 144.00           | -19.30             |
| 1818.400         | 36.88                | 84.38             | 53.120         | 1000                    | 1000.00            | 215.000        | H        | 316.00           | -15.50             |
| 2424.400         | 38.38                | 84.38             | 51.620         | 1000                    | 1000.00            | 295.000        | V        | 345.00           | -13.00             |
| 6977.500         | 41.81                | 84.38             | 48.190         | 1000                    | 1000.00            | 176.000        | H        | -4.00            | -3.50              |
| 9762.400         | 40.92                | 84.38             | 49.080         | 1000                    | 1000.00            | 351.000        | V        | 332.00           | -1.10              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |

Appendix E

## Test Information

EUT Name: AD1 K53 #142  
 Serial Number: TU162050041  
 Test Description: FCC pt.74 & RSS-210 Radiated Emissions Matching  
 Operating Conditions: 606.125MHz L @ 2mW  
 Operator Name: Alex Stelmaszczyk, Tom Braxton & Mudassar Khan  
 Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
 Test Date: May 5 – 10, 2017

| Frequency MHz | Max Peak (dBμV/m) | Matched Power from Sig Gen | Limit (dBm) | Margin (dBm) | Polarity | Cable Loss (dB) | Cable 2 Loss (dB) | Antenna Gain (dB) | ERP / EIRP Total (dBm) | Status |
|---------------|-------------------|----------------------------|-------------|--------------|----------|-----------------|-------------------|-------------------|------------------------|--------|
| 937.888       | 29.85             | -65.9                      | -13.0       | 49.5         | V        | 1.60            | 1.84              |                   | -69.34                 | PASS   |
|               |                   |                            |             |              |          |                 |                   |                   |                        |        |
| 1212.400      | 34.57             | -55.1                      | -13.0       | 39.8         | H        | 2.10            | 2.08              | 1.90              | -57.38                 | PASS   |
| 1818.400      | 36.88             | -70.5                      | -13.0       | 58.1         | H        | 2.25            | 2.58              | 5.40              | -69.93                 | PASS   |
| 2424.400      | 38.38             | -74.1                      | -13.0       | 66.8         | V        | 2.70            | 2.96              | 5.40              | -74.36                 | PASS   |
| 6977.500      | 41.81             | -73.4                      | -13.0       | 60.9         | H        | 5.12            | 5.32              | 10.90             | -72.94                 | PASS   |
| 9762.400      | 40.92             | -75.6                      | -13.0       | 65.5         | V        | 6.00            | 4.08              | 13.00             | -72.68                 | PASS   |
|               |                   |                            |             |              |          |                 |                   |                   |                        |        |

## Test Information

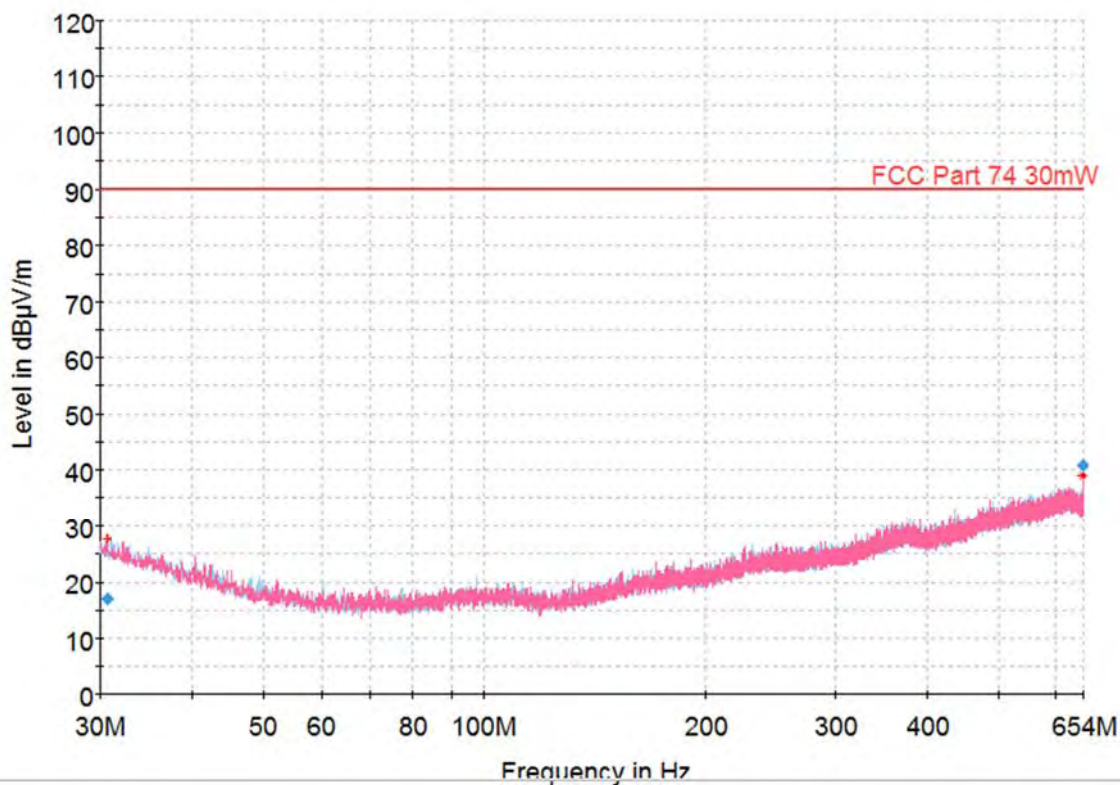
EUT Name: AD1 K53 #142  
Serial Number: TU162050041  
Test Description: Radiated RF Emissions 30MHz to 654MHz  
Operating Conditions: 652.000MHz M @ 35mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, 3m, AAs, No Audio Input, w L23-26-01 Tuned Notch  
Test Date & Time: October 26, 2016 2:02:30 PM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 Transmitter 30MHz to 1000MHz 34790

Hardware Setup: Electric Field Strength 34790 2016 06 03  
Level Unit: dB $\mu$ V/m

| Subrange       | Step Size | Detectors | IF BW   | Meas. Time | Preamp |
|----------------|-----------|-----------|---------|------------|--------|
| 30 MHz - 1 GHz | 30 kHz    | PK+       | 120 kHz | 0.02 s     | 20 dB  |

Full Spectrum



## Test Information

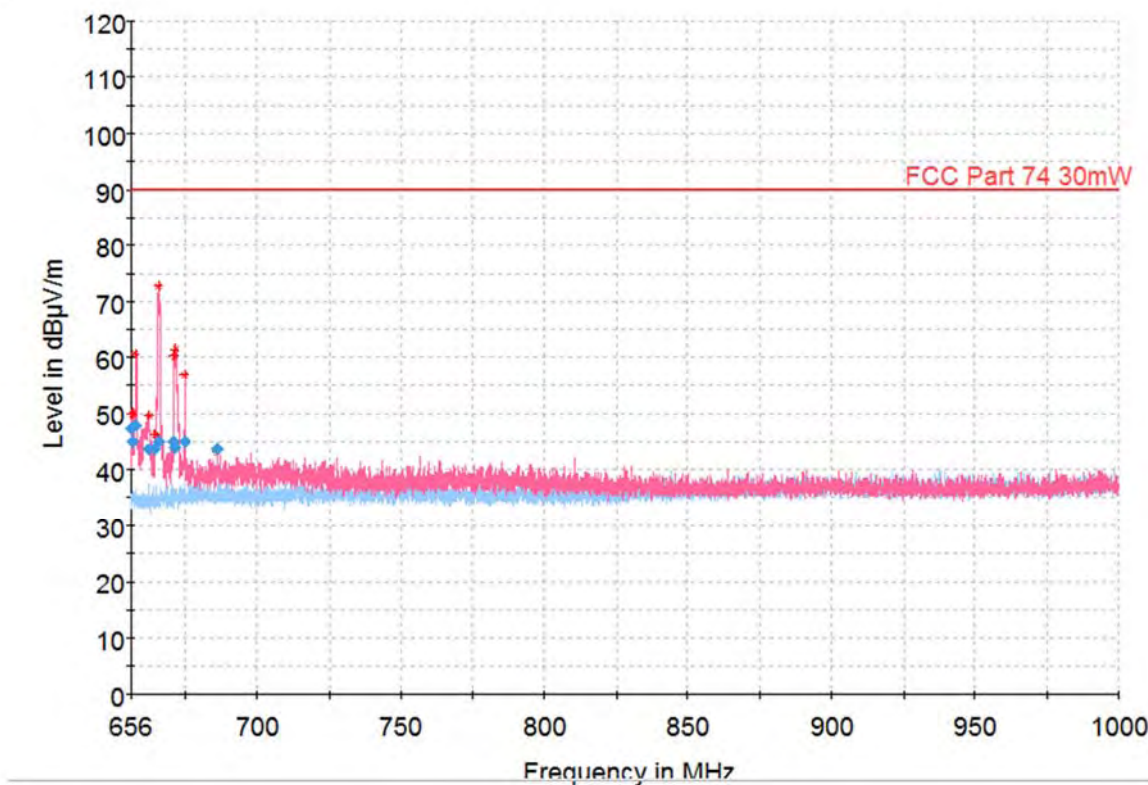
EUT Name: AD1 K53 #142  
 Serial Number: TU162050041  
 Test Description: Radiated RF Emissions 656 - 1000MHz  
 Operating Conditions: 652.000MHz M @ 35mW  
 Operator Name: Alex Stelmaszczyk  
 Comment: FCC pt. 74  
 Description: FCC Table, 3m, AAs, No Audio Input, w/o L23-26-01 Tuned Notch  
 Test Date & Time: October 26, 2016 2:50:20 PM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 Transmitter 30MHz to 1000MHz 34790

Hardware Setup: Electric Field Strength 34790 2016 06 03  
 Level Unit: dBμV/m

| Subrange       | Step Size | Detectors | IF BW   | Meas. Time | Preamp |
|----------------|-----------|-----------|---------|------------|--------|
| 30 MHz - 1 GHz | 30 kHz    | PK+       | 120 kHz | 0.02 s     | 20 dB  |

### Full Spectrum



## Test Information

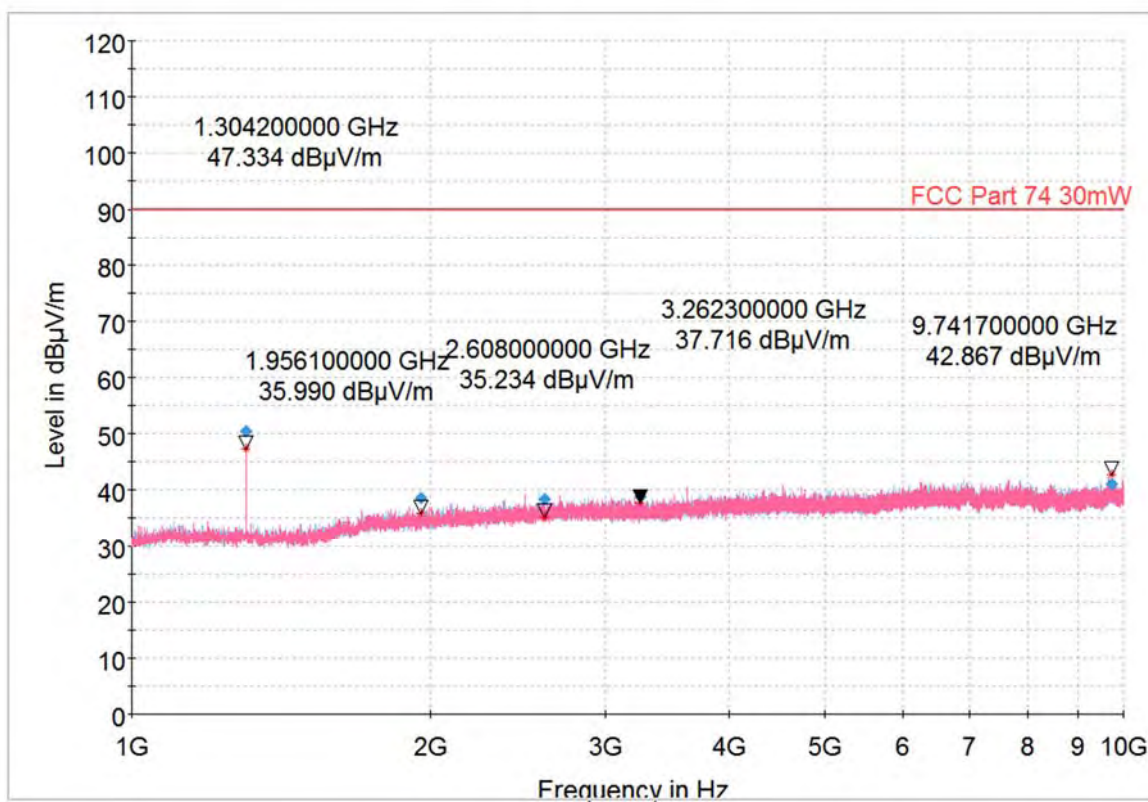
EUT Name: AD1 K53 #142  
Serial Number: TU162050041  
Test Description: Radiated RF Emissions 1GHz to 10GHz  
Operating Conditions: 652.000MHz M @ 35mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF  
Test Date & Time: November 29, 2016 11:22:17 AM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 1GHz to 10GHz 3117-PA 206583 FCC

Hardware Setup: Electric Field Strength 10GHz 3117-PA 206583 2016 03 24  
Level Unit: dBμV/m

| Subrange       | Step Size | Detectors | IF BW | Meas. Time | Preamp |
|----------------|-----------|-----------|-------|------------|--------|
| 1 GHz - 10 GHz | 250 kHz   | PK+       | 1 MHz | 1 s        | 20 dB  |

Full Spectrum



Appendix E

## Test Information

EUT Name: AD1 K53 #142  
 Serial Number: TU162050041  
 Test Description: FCC pt.74 & RSS-210 Spurious Radiated Emissions  
 Operating Conditions: 652.000MHz M @ 35mW  
 Operator Name: Alex Stelmaszczyk  
 Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
 Test Date: October, 26, 2016 & November 29, 2016

| Frequency<br>MHz | Max Peak<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Measure<br>Time<br>(ms) | Bandwidth<br>(kHz) | Height<br>(cm) | Polarity | Azimuth<br>(deg) | Correction<br>(dB) |
|------------------|----------------------|-------------------|----------------|-------------------------|--------------------|----------------|----------|------------------|--------------------|
| 30.770           | 16.98                | 84.38             | 73.020         | 20                      | 120.00             | 147.000        | V        | 219.00           | 16.60              |
| 656.459          | 47.32                | 84.38             | 42.680         | 20                      | 120.00             | 155.000        | V        | 25.00            | 23.10              |
| 656.871          | 45.10                | 84.38             | 44.900         | 20                      | 120.00             | 162.000        | V        | 38.00            | 23.10              |
| 657.812          | 47.88                | 84.38             | 42.120         | 20                      | 120.00             | 148.000        | V        | 2.00             | 23.10              |
| 662.605          | 43.51                | 84.38             | 46.490         | 20                      | 120.00             | 170.000        | V        | 137.00           | 23.30              |
| 664.520          | 43.52                | 84.38             | 46.480         | 20                      | 120.00             | 149.000        | V        | 353.00           | 23.40              |
| 665.598          | 44.99                | 84.38             | 45.010         | 20                      | 120.00             | 137.000        | V        | 169.00           | 23.40              |
| 671.010          | 45.03                | 84.38             | 44.970         | 20                      | 120.00             | 147.000        | V        | 26.00            | 23.60              |
| 671.537          | 44.01                | 84.38             | 45.990         | 20                      | 120.00             | 142.000        | V        | 15.00            | 23.70              |
| 674.886          | 45.13                | 84.38             | 44.870         | 20                      | 120.00             | 143.000        | V        | 45.00            | 23.80              |
| 685.962          | 43.74                | 84.38             | 46.260         | 20                      | 120.00             | 150.000        | V        | 35.00            | 23.80              |
| 1304.200         | 50.52                | 84.38             | 39.480         | 1000                    | 1000.00            | 147.000        | V        | 204.00           | -19.20             |
| 1956.100         | 38.54                | 84.38             | 51.460         | 1000                    | 1000.00            | 207.000        | V        | 50.00            | -14.90             |
| 2608.000         | 38.37                | 84.38             | 51.630         | 1000                    | 1000.00            | 230.000        | H        | -10.00           | -12.30             |
| 3262.300         | 38.74                | 84.38             | 51.260         | 1000                    | 1000.00            | 284.000        | H        | 23.00            | -11.10             |
| 9741.700         | 41.08                | 84.38             | 48.920         | 1000                    | 1000.00            | 309.000        | V        | -2.00            | -1.10              |

## Test Information

EUT Name: AD1 K53 #142  
Serial Number: TU162050041  
Test Description: FCC pt.74 & RSS-210 Radiated Emissions Matching  
Operating Conditions: 652.000MHz M @ 35mW  
Operator Name: Alex Stelmaszczyk, Tom Braxton & Mudassar Khan  
Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
Test Date: May 5 – 10, 2017

| Frequency<br>MHz | Max Peak<br>(dBμV/m) | Matched<br>Power from<br>Sig Gen | Limit<br>(dBm) | Margin<br>(dBm) | Polarity | Cable Loss<br>(dB) | Cable 2 Loss<br>(dB) | Antenna<br>Gain<br>(dB) | ERP / EIRP<br>Total<br>(dBm) | Status |
|------------------|----------------------|----------------------------------|----------------|-----------------|----------|--------------------|----------------------|-------------------------|------------------------------|--------|
| 656.459          | 47.32                | -47.4                            | -13.0          | 31.4            | V        | 1.50               | 1.50                 |                         | -50.40                       | PASS   |
| 656.871          | 45.10                | -50.6                            | -13.0          | 34.6            | V        | 1.50               | 1.50                 |                         | -53.60                       | PASS   |
| 657.812          | 47.88                | -46.4                            | -13.0          | 30.4            | V        | 1.50               | 1.50                 |                         | -49.40                       | PASS   |
| 671.010          | 45.03                | -50.9                            | -13.0          | 34.9            | V        | 1.50               | 1.52                 |                         | -53.92                       | PASS   |
| 674.886          | 45.13                | -49.2                            | -13.0          | 33.2            | V        | 1.50               | 1.53                 |                         | -52.23                       | PASS   |
|                  |                      |                                  |                |                 |          |                    |                      |                         |                              |        |
| 1304.200         | 50.52                | -46.9                            | -13.0          | 33.5            | V        | 2.15               | 2.17                 | 3.90                    | -47.32                       | PASS   |
| 1956.100         | 38.54                | -70.5                            | -13.0          | 58.0            | V        | 2.25               | 2.68                 | 5.40                    | -70.03                       | PASS   |
| 2608.000         | 38.37                | -73.2                            | -13.0          | 60.6            | H        | 2.55               | 3.01                 | 6.00                    | -72.76                       | PASS   |
| 3262.300         | 38.74                | -73.9                            | -13.0          | 62.0            | H        | 3.10               | 3.42                 | 7.60                    | -72.82                       | PASS   |
|                  |                      |                                  |                |                 |          |                    |                      |                         |                              |        |
|                  |                      |                                  |                |                 |          |                    |                      |                         |                              |        |

## Test Information

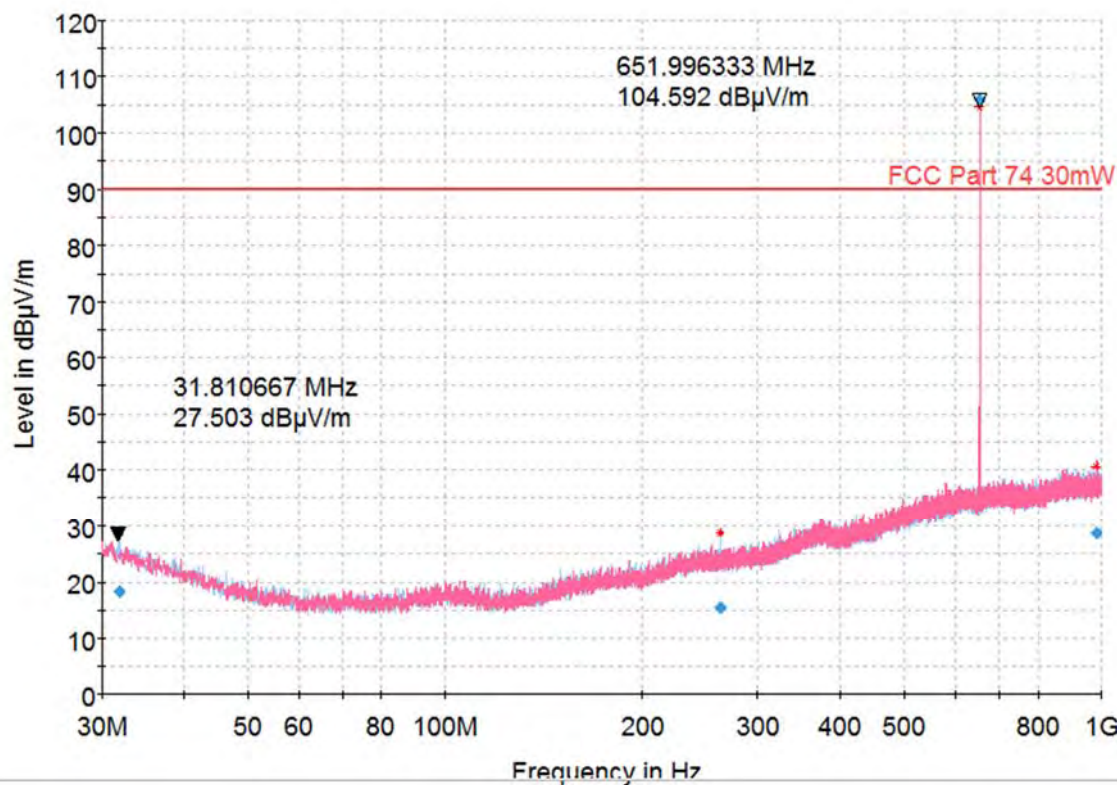
EUT Name: AD1 K53 #142  
Serial Number: TU162050041  
Test Description: Radiated RF Emissions 30MHz to 1GHz  
Operating Conditions: 652.000MHz M @ 2mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, 3m, AAs, No Audio Input  
Test Date & Time: October 27, 2016 10:38:39 AM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 Transmitter 30MHz to 1000MHz 34790

Hardware Setup: Electric Field Strength 34790 2016 06 03  
Level Unit: dB $\mu$ V/m

| Subrange       | Step Size | Detectors | IF BW   | Meas. Time | Preamp |
|----------------|-----------|-----------|---------|------------|--------|
| 30 MHz - 1 GHz | 30 kHz    | PK+       | 120 kHz | 0.02 s     | 20 dB  |

Full Spectrum



## Test Information

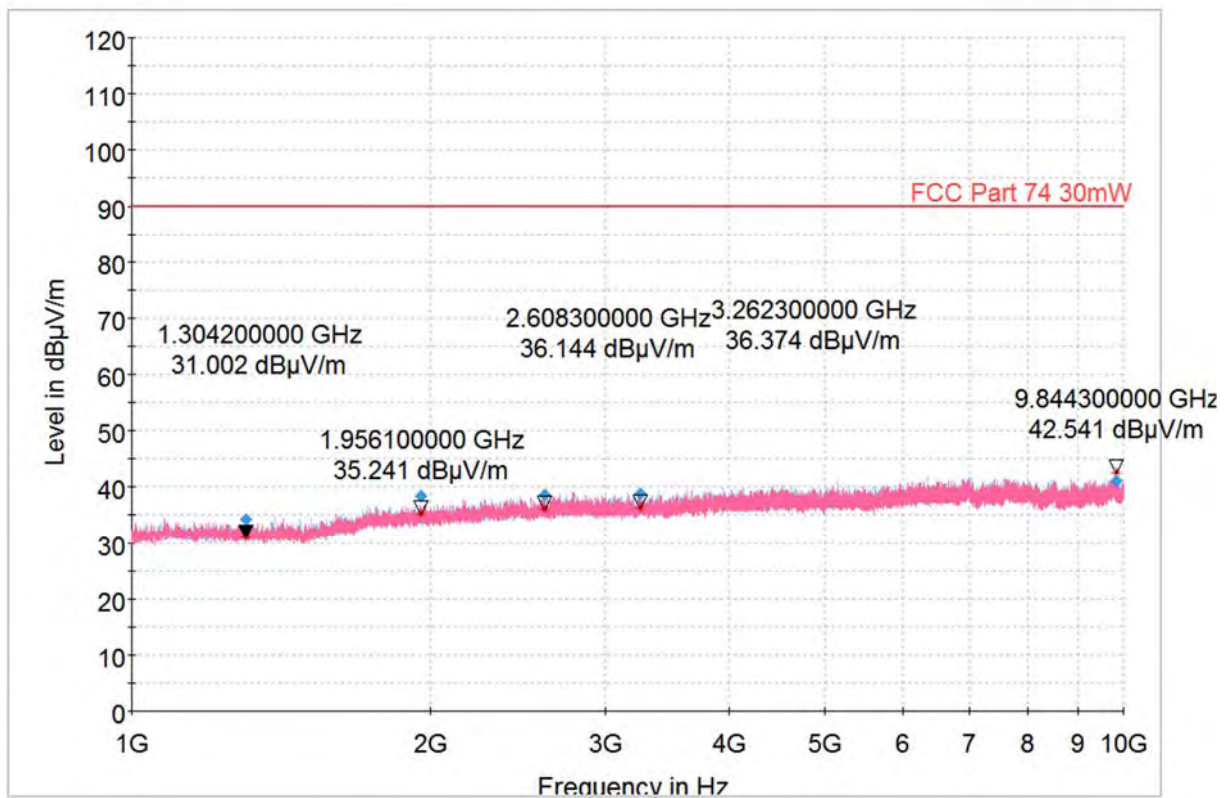
EUT Name: AD1 K53 #142  
Serial Number: TU162050041  
Test Description: Radiated RF Emissions 1GHz to 10GHz  
Operating Conditions: 652.000MHz M @ 2mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF  
Test Date & Time: November 29, 2016 2:23:44 PM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 1GHz to 10GHz 3117-PA 206583 FCC

Hardware Setup: Electric Field Strength 10GHz 3117-PA 206583 2016 03 24  
Level Unit: dBμV/m

| Subrange       | Step Size | Detectors | IF BW | Meas. Time | Preamp |
|----------------|-----------|-----------|-------|------------|--------|
| 1 GHz - 10 GHz | 250 kHz   | PK+       | 1 MHz | 1 s        | 20 dB  |

Full Spectrum





## Test Information

EUT Name: AD1 K53 #142  
Serial Number: TU162050041  
Test Description: FCC pt.74 & RSS-210 Spurious Radiated Emissions  
Operating Conditions: 652.000MHz M @ 2mW  
Operator Name: Alex Stelmaszczyk  
Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
Test Date: October, 27, 2016 & November 29, 2016

| Frequency<br>MHz | Max Peak<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Measure<br>Time<br>(ms) | Bandwidth<br>(kHz) | Height<br>(cm) | Polarity | Azimuth<br>(deg) | Correction<br>(dB) |
|------------------|----------------------|-------------------|----------------|-------------------------|--------------------|----------------|----------|------------------|--------------------|
| 31.875           | 18.22                | 84.38             | 71.780         | 20                      | 120.00             | 273.000        | H        | 309.00           | 16.00              |
| 263.285          | 15.39                | 84.38             | 74.610         | 20                      | 120.00             | 368.000        | H        | 197.00           | 14.00              |
| 982.152          | 28.71                | 84.38             | 61.290         | 20                      | 120.00             | 193.000        | V        | -10.00           | 26.20              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |
| 1304.200         | 34.29                | 84.38             | 55.710         | 1000                    | 1000.00            | 350.000        | H        | 142.00           | -19.20             |
| 1956.100         | 38.42                | 84.38             | 51.580         | 1000                    | 1000.00            | 191.000        | H        | 115.00           | -14.90             |
| 2608.300         | 38.70                | 84.38             | 51.300         | 1000                    | 1000.00            | 393.000        | H        | 32.00            | -12.30             |
| 3262.300         | 38.88                | 84.38             | 51.120         | 1000                    | 1000.00            | 326.000        | H        | 131.00           | -11.10             |
| 9844.300         | 41.17                | 84.38             | 48.830         | 1000                    | 1000.00            | 185.000        | V        | 130.00           | -0.90              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |

Appendix E

## Test Information

EUT Name: AD1 K53 #142  
 Serial Number: TU162050041  
 Test Description: FCC pt.74 & RSS-210 Radiated Emissions Matching  
 Operating Conditions: 652.000MHz M @ 2mW  
 Operator Name: Alex Stelmaszczyk, Tom Braxton & Mudassar Khan  
 Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
 Test Date: May 5 – 10, 2017

| Frequency MHz | Max Peak (dBμV/m) | Matched Power from Sig Gen | Limit (dBm) | Margin (dBm) | Polarity | Cable Loss (dB) | Cable 2 Loss (dB) | Antenna Gain (dB) | ERP / EIRP Total (dBm) | Status |
|---------------|-------------------|----------------------------|-------------|--------------|----------|-----------------|-------------------|-------------------|------------------------|--------|
| 982.152       | <b>28.71</b>      | -85.0                      | -13.0       | 68.6         | V        | 1.51            | 1.89              |                   | -88.40                 | PASS   |
| 1304.200      | <b>34.29</b>      | -79.1                      | -13.0       | 65.7         | H        | 2.15            | 2.17              | 3.90              | -79.52                 | PASS   |
| 1956.100      | <b>38.42</b>      | -69.7                      | -13.0       | 57.2         | H        | 2.25            | 2.68              | 5.40              | -69.23                 | PASS   |
| 2608.300      | <b>38.70</b>      | -75.0                      | -13.0       | 62.4         | H        | 2.55            | 3.01              | 6.00              | -74.56                 | PASS   |
| 3262.300      | <b>38.88</b>      | -75.5                      | -13.0       | 63.6         | H        | 3.10            | 3.42              | 7.60              | -74.42                 | PASS   |
| 9844.300      | <b>41.17</b>      | -70.6                      | -13.0       | 60.5         | V        | 6.00            | 4.09              | 13.00             | -67.69                 | PASS   |

## Test Information

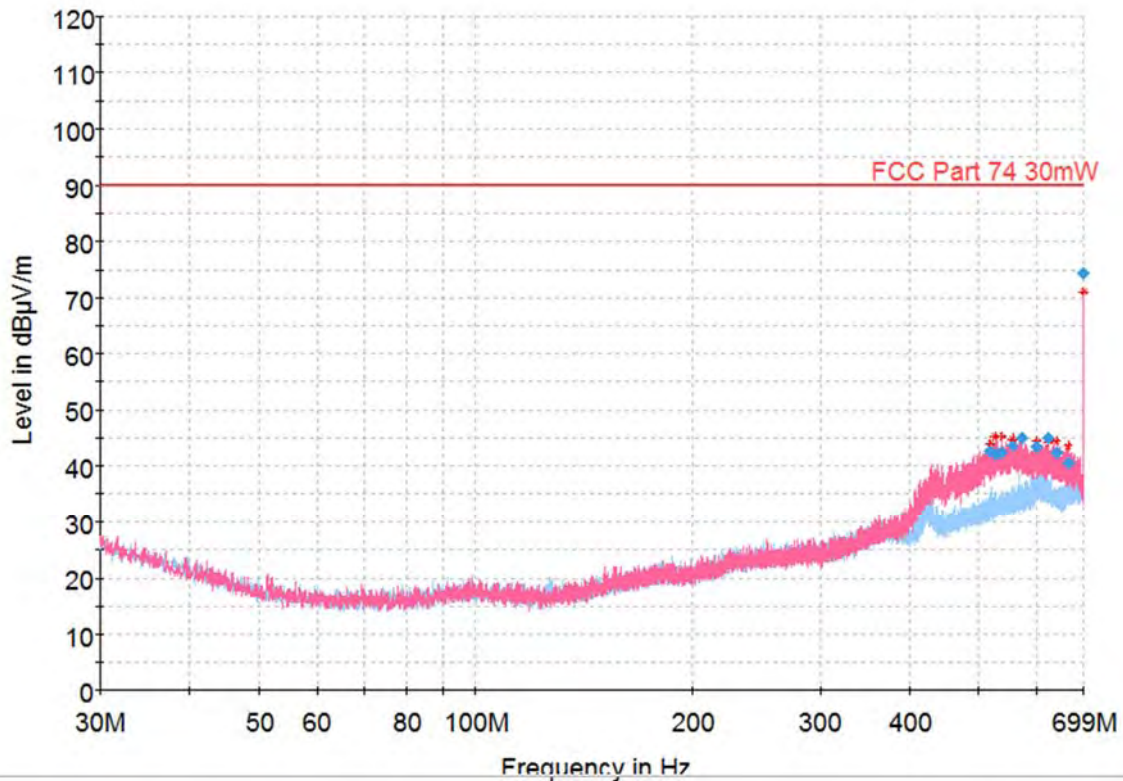
EUT Name: AD1 K53 #142  
Serial Number: TU162050041  
Test Description: Radiated RF Emissions 30MHz to 699MHz  
Operating Conditions: 697.875MHz H @ 35mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, 3m, AAs, No Audio Input, w L23-26-01 Tuned Notch  
Test Date & Time: October 26, 2016 4:16:03 PM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 Transmitter 30MHz to 1000MHz 34790

Hardware Setup: Electric Field Strength 34790 2016 06 03  
Level Unit: dB $\mu$ V/m

| Subrange       | Step Size | Detectors | IF BW   | Meas. Time | Preamp |
|----------------|-----------|-----------|---------|------------|--------|
| 30 MHz - 1 GHz | 30 kHz    | PK+       | 120 kHz | 0.02 s     | 20 dB  |

Full Spectrum



## Test Information

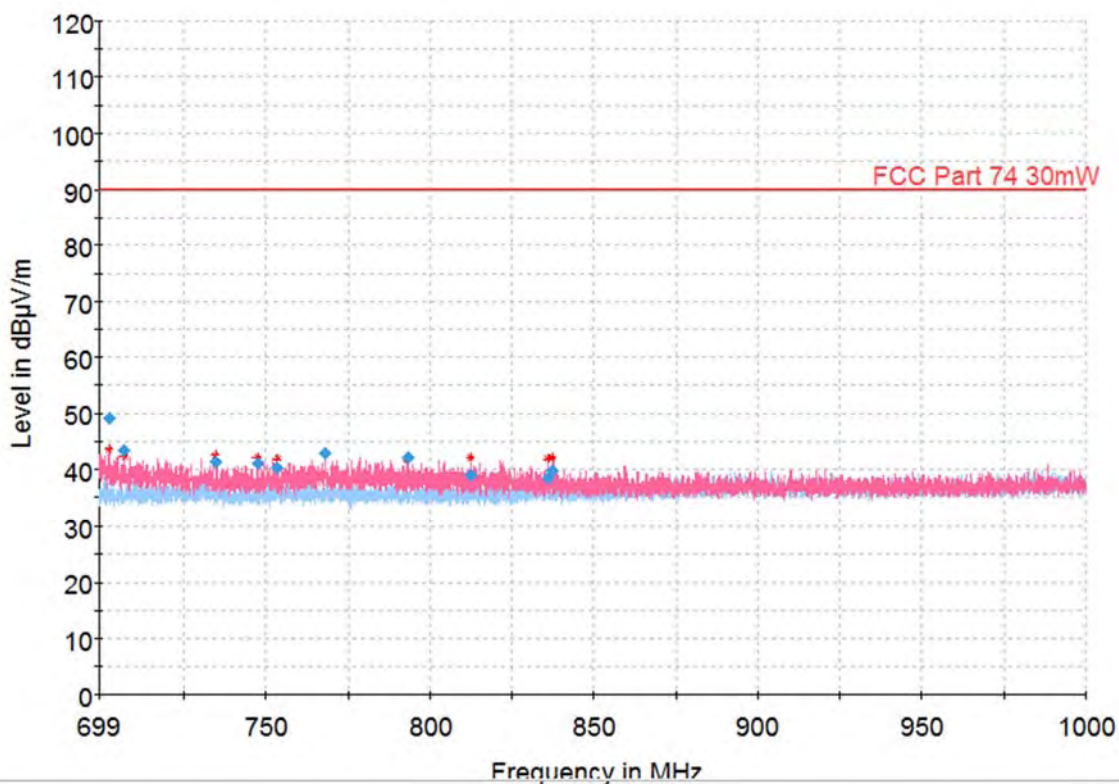
EUT Name: AD1 K53 #142  
Serial Number: TU162050041  
Test Description: Radiated RF Emissions 699 - 1000MHz  
Operating Conditions: 697.875MHz H @ 35mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, 3m, AAs, No Audio Input, w/o L23-26-01 Tuned Notch  
Test Date & Time: October 27, 2016 9:08:59 AM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 Transmitter 30MHz to 1000MHz 34790

Hardware Setup: Electric Field Strength 34790 2016 06 03  
Level Unit: dBμV/m

| Subrange       | Step Size | Detectors | IF BW   | Meas. Time | Preamp |
|----------------|-----------|-----------|---------|------------|--------|
| 30 MHz - 1 GHz | 30 kHz    | PK+       | 120 kHz | 0.02 s     | 20 dB  |

Full Spectrum



## Test Information

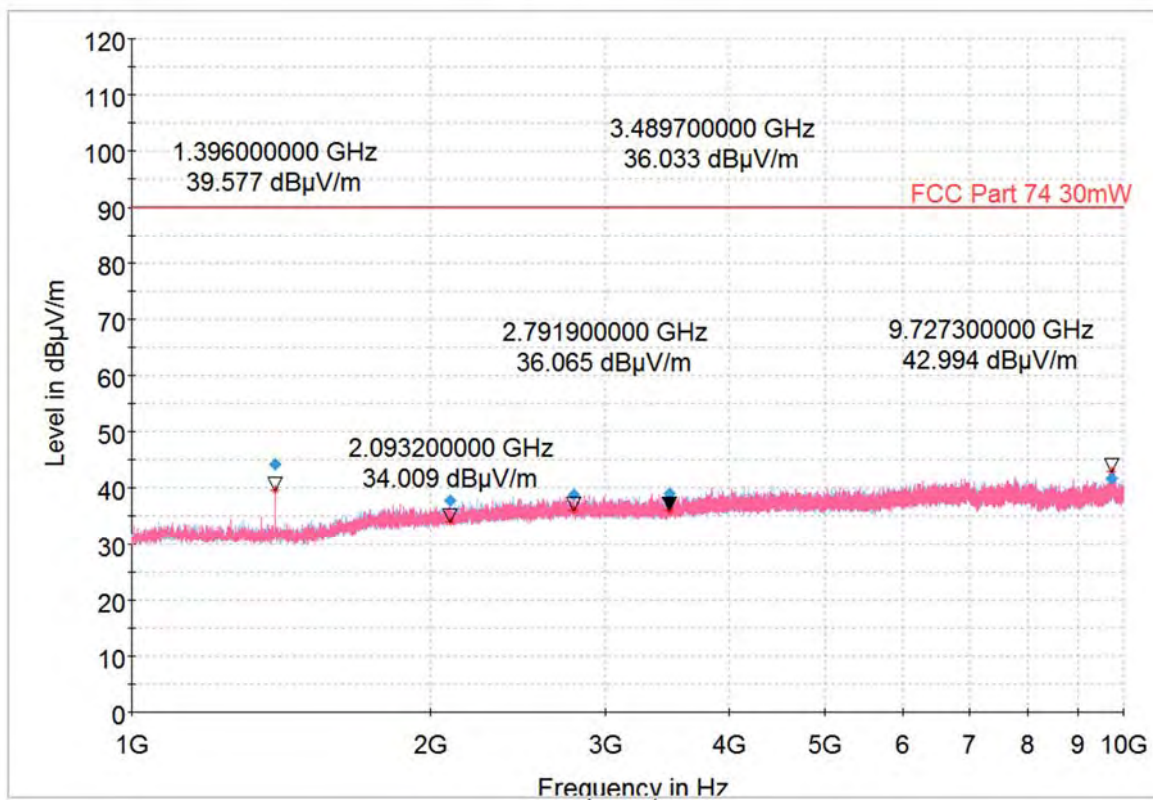
EUT Name: AD1 K53 #142  
Serial Number: TU162050041  
Test Description: Radiated RF Emissions 1GHz to 10GHz  
Operating Conditions: 697.875MHz H @ 35mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF  
Test Date & Time: November 29, 2016 12:04:40 PM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 1GHz to 10GHz 3117-PA 206583 FCC

Hardware Setup: Electric Field Strength 10GHz 3117-PA 206583 2016 03 24  
Level Unit: dBμV/m

| Subrange       | Step Size | Detectors | IF BW | Meas. Time | Preamp |
|----------------|-----------|-----------|-------|------------|--------|
| 1 GHz - 10 GHz | 250 kHz   | PK+       | 1 MHz | 1 s        | 20 dB  |

Full Spectrum



## Appendix E

### Test Information

EUT Name: AD1 K53 #142  
Serial Number: TU162050041  
Test Description: FCC pt.74 & RSS-210 Spurious Radiated Emissions  
Operating Conditions: 697.875MHz H @ 35mW  
Operator Name: Alex Stelmaszczyk  
Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
Test Date: October, 26, 27, 2016 & November 29, 2016

| Frequency<br>MHz | Max Peak<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Measure<br>Time<br>(ms) | Bandwidth<br>(kHz) | Height<br>(cm) | Polarity | Azimuth<br>(deg) | Correction<br>(dB) |
|------------------|----------------------|-------------------|----------------|-------------------------|--------------------|----------------|----------|------------------|--------------------|
| 518.972          | 42.60                | 84.38             | 47.400         | 20                      | 120.00             | 111.000        | V        | 50.00            | 21.30              |
| 526.487          | 42.12                | 84.38             | 47.880         | 20                      | 120.00             | 111.000        | V        | 290.00           | 21.50              |
| 537.749          | 42.44                | 84.38             | 47.560         | 20                      | 120.00             | 111.000        | V        | 317.00           | 21.80              |
| 557.083          | 43.64                | 84.38             | 46.360         | 20                      | 120.00             | 100.000        | V        | 200.00           | 22.10              |
| 573.050          | 45.15                | 84.38             | 44.850         | 20                      | 120.00             | 100.000        | V        | 43.00            | 22.00              |
| 603.065          | 43.32                | 84.38             | 46.680         | 20                      | 120.00             | 188.000        | V        | 345.00           | 23.10              |
| 625.856          | 45.05                | 84.38             | 44.950         | 20                      | 120.00             | 149.000        | V        | 0.00             | 23.80              |
| 642.425          | 42.26                | 84.38             | 47.740         | 20                      | 120.00             | 145.000        | V        | 23.00            | 23.10              |
| 666.375          | 40.56                | 84.38             | 49.440         | 20                      | 120.00             | 157.000        | V        | 322.00           | 23.50              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |
| 702.050          | 49.16                | 84.38             | 40.840         | 20                      | 120.00             | 136.000        | V        | 150.00           | 23.90              |
| 706.926          | 43.47                | 84.38             | 46.530         | 20                      | 120.00             | 127.000        | V        | 4.00             | 24.00              |
| 734.608          | 41.22                | 84.38             | 48.780         | 20                      | 120.00             | 126.000        | V        | 95.00            | 24.30              |
| 747.240          | 41.06                | 84.38             | 48.940         | 20                      | 120.00             | 122.000        | V        | 117.00           | 24.50              |
| 753.310          | 40.27                | 84.38             | 49.730         | 20                      | 120.00             | 122.000        | V        | 116.00           | 24.50              |
| 767.969          | 42.89                | 84.38             | 47.110         | 20                      | 120.00             | 126.000        | V        | 241.00           | 24.70              |
| 793.313          | 42.09                | 84.38             | 47.910         | 20                      | 120.00             | 118.000        | V        | 50.00            | 24.60              |
| 812.427          | 39.09                | 84.38             | 50.910         | 20                      | 120.00             | 100.000        | V        | 10.00            | 24.70              |
| 836.106          | 38.41                | 84.38             | 51.590         | 20                      | 120.00             | 119.000        | V        | 50.00            | 25.10              |
| 837.570          | 39.77                | 84.38             | 50.230         | 20                      | 120.00             | 111.000        | V        | 46.00            | 25.20              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |
| 1396.000         | 44.24                | 84.38             | 45.760         | 1000                    | 1000.00            | 185.000        | V        | 173.00           | -19.10             |
| 2093.200         | 37.69                | 84.38             | 52.310         | 1000                    | 1000.00            | 292.000        | H        | 10.00            | -14.30             |
| 2791.900         | 38.74                | 84.38             | 51.260         | 1000                    | 1000.00            | 324.000        | H        | 272.00           | -11.70             |
| 3489.700         | 39.01                | 84.38             | 50.990         | 1000                    | 1000.00            | 400.000        | H        | 305.00           | -10.50             |
| 9727.300         | 41.80                | 84.38             | 48.200         | 1000                    | 1000.00            | 238.000        | H        | 7.00             | -1.10              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |



## Appendix E

## Test Information

EUT Name: AD1 K53 #142  
Serial Number: TU162050041  
Test Description: FCC pt.74 & RSS-210 Radiated Emissions Matching  
Operating Conditions: 697.875MHz H @ 35mW  
Operator Name: Alex Stelmaszczyk, Tom Braxton & Mudassar Khan  
Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
Test Date: May 5 – 10, 2017

| Frequency<br>MHz | Max Peak<br>(dBμV/m) | Matched<br>Power from<br>Sig Gen | Limit<br>(dBm) | Margin<br>(dBm) | Polarity | Cable Loss<br>(dB) | Cable 2 Loss<br>(dB) | Antenna<br>Gain<br>(dB) | ERP / EIRP<br>Total<br>(dBm) | Status |
|------------------|----------------------|----------------------------------|----------------|-----------------|----------|--------------------|----------------------|-------------------------|------------------------------|--------|
| 557.083          | 43.64                | -55.5                            | -13.0          | 39.7            | V        | 1.42               | 1.40                 |                         | -58.32                       | PASS   |
| 573.050          | 45.15                | -55.3                            | -13.0          | 39.4            | V        | 1.43               | 1.44                 |                         | -58.17                       | PASS   |
| 603.065          | 43.32                | -53.0                            | -13.0          | 37.0            | V        | 1.50               | 1.50                 |                         | -56.00                       | PASS   |
| 625.856          | 45.05                | -45.7                            | -13.0          | 29.7            | V        | 1.50               | 1.50                 |                         | -48.70                       | PASS   |
| 702.050          | 49.16                | -43.0                            | -13.0          | 26.7            | V        | 1.70               | 1.57                 |                         | -46.27                       | PASS   |
| 706.926          | 43.47                | -48.2                            | -13.0          | 31.9            | V        | 1.70               | 1.57                 |                         | -51.47                       | PASS   |
|                  |                      |                                  |                |                 |          |                    |                      |                         |                              |        |
| 1396.000         | 44.24                | -45.3                            | -13.0          | 31.9            | V        | 2.10               | 2.22                 | 3.90                    | -45.72                       | PASS   |
| 2093.200         | 37.69                | -73.8                            | -13.0          | 60.7            | H        | 2.35               | 2.78                 | 5.00                    | -73.93                       | PASS   |
| 2791.900         | 38.74                | -78.5                            | -13.0          | 66.3            | H        | 2.75               | 3.14                 | 6.70                    | -77.69                       | PASS   |
| 3489.700         | 39.01                | -75.0                            | -13.0          | 62.6            | H        | 3.35               | 3.65                 | 7.60                    | -74.40                       | PASS   |
|                  |                      |                                  |                |                 |          |                    |                      |                         |                              |        |
|                  |                      |                                  |                |                 |          |                    |                      |                         |                              |        |

## Test Information

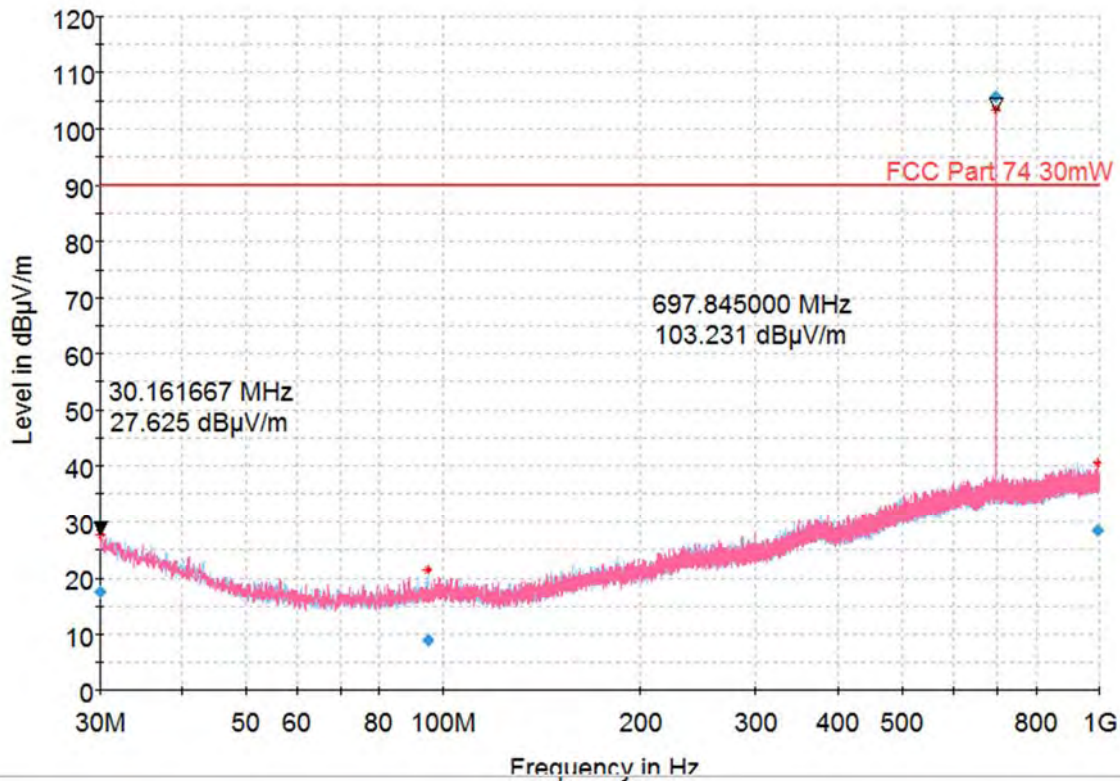
EUT Name: AD1 K53 #142  
Serial Number: TU162050041  
Test Description: Radiated RF Emissions 30MHz to 1GHz  
Operating Conditions: 697.875MHz H @ 2mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, 3m, AAs, No Audio Input  
Test Date & Time: October 27, 2016 9:56:10 AM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 Transmitter 30MHz to 1000MHz 34790

Hardware Setup: Electric Field Strength 34790 2016 06 03  
Level Unit: dB $\mu$ V/m

| Subrange       | Step Size | Detectors | IF BW   | Meas. Time | Preamp |
|----------------|-----------|-----------|---------|------------|--------|
| 30 MHz - 1 GHz | 30 kHz    | PK+       | 120 kHz | 0.02 s     | 20 dB  |

Full Spectrum



## Test Information

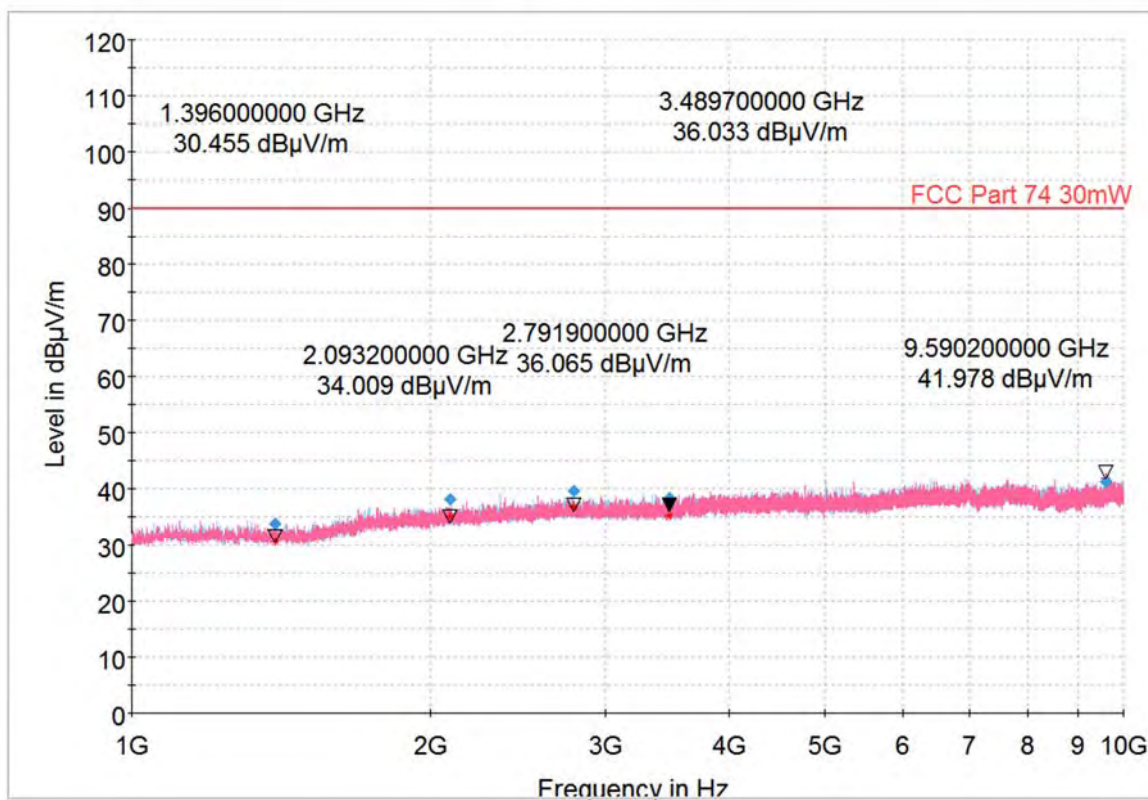
EUT Name: AD1 K53 #142  
Serial Number: TU162050041  
Test Description: Radiated RF Emissions 1GHz to 10GHz  
Operating Conditions: 697.875MHz H @ 2mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF  
Test Date & Time: November 29, 2016 1:42:54 PM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 1GHz to 10GHz 3117-PA 206583 FCC

Hardware Setup: Electric Field Strength 10GHz 3117-PA 206583 2016 03 24  
Level Unit: dB $\mu$ V/m

| Subrange       | Step Size | Detectors | IF BW | Meas. Time | Preamp |
|----------------|-----------|-----------|-------|------------|--------|
| 1 GHz - 10 GHz | 250 kHz   | PK+       | 1 MHz | 1 s        | 20 dB  |

Full Spectrum





## Test Information

EUT Name: AD1 K53 #142  
Serial Number: TU162050041  
Test Description: FCC pt.74 & RSS-210 Spurious Radiated Emissions  
Operating Conditions: 697.875MHz H @ 2mW  
Operator Name: Alex Stelmaszczyk  
Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
Test Date: October 27, 2016 & November 29, 2016

| Frequency<br>MHz | Max Peak<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Measure<br>Time<br>(ms) | Bandwidth<br>(kHz) | Height<br>(cm) | Polarity | Azimuth<br>(deg) | Correction<br>(dB) |
|------------------|----------------------|-------------------|----------------|-------------------------|--------------------|----------------|----------|------------------|--------------------|
| 30.162           | <b>17.38</b>         | 84.38             | 72.620         | 20                      | 120.00             | 359.000        | H        | 193.00           | 16.90              |
| 94.861           | <b>8.93</b>          | 84.38             | 81.070         | 20                      | 120.00             | 144.000        | H        | 212.00           | 8.30               |
| 994.148          | <b>28.54</b>         | 84.38             | 61.460         | 20                      | 120.00             | 278.000        | V        | 199.00           | 26.50              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |
| 1396.000         | <b>33.86</b>         | 84.38             | 56.140         | 1000                    | 1000.00            | 271.000        | H        | 271.00           | -19.10             |
| 2093.200         | <b>38.30</b>         | 84.38             | 51.700         | 1000                    | 1000.00            | 231.000        | V        | 133.00           | -14.30             |
| 2791.900         | <b>39.74</b>         | 84.38             | 50.260         | 1000                    | 1000.00            | 138.000        | V        | 45.00            | -11.70             |
| 3489.700         | <b>38.42</b>         | 84.38             | 51.580         | 1000                    | 1000.00            | 132.000        | V        | 183.00           | -10.50             |
| 9590.200         | <b>41.31</b>         | 84.38             | 48.690         | 1000                    | 1000.00            | 329.000        | V        | 256.00           | -1.50              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |

## Appendix E

### Test Information

EUT Name: AD1 K53 #142  
Serial Number: TU162050041  
Test Description: FCC pt.74 & RSS-210 Radiated Emissions Matching  
Operating Conditions: 697.875MHz H @ 2mW  
Operator Name: Alex Stelmaszczyk, Tom Braxton & Mudassar Khan  
Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
Test Date: May 5 – 10, 2017

| Frequency MHz | Max Peak (dBμV/m) | Matched Power from Sig Gen | Limit (dBm) | Margin (dBm) | Polarity | Cable Loss (dB) | Cable 2 Loss (dB) | Antenna Gain (dB) | ERP / EIRP Total (dBm) | Status |
|---------------|-------------------|----------------------------|-------------|--------------|----------|-----------------|-------------------|-------------------|------------------------|--------|
| 994.148       | <b>28.54</b>      | -88.0                      | -13.0       | 71.6         | V        | 1.51            | 1.89              |                   | -91.40                 | PASS   |
|               |                   |                            |             |              |          |                 |                   |                   |                        |        |
| 1396.000      | <b>33.86</b>      | -81.3                      | -13.0       | 67.9         | H        | 2.10            | 2.22              | 3.90              | -81.72                 | PASS   |
| 2093.200      | <b>38.30</b>      | -70.5                      | -13.0       | 57.4         | V        | 2.35            | 2.78              | 5.00              | -70.63                 | PASS   |
| 2791.900      | <b>39.74</b>      | -70.0                      | -13.0       | 57.8         | V        | 2.75            | 3.14              | 6.70              | -69.19                 | PASS   |
| 3489.700      | <b>38.42</b>      | -78.4                      | -13.0       | 66.0         | V        | 3.35            | 3.65              | 7.60              | -77.80                 | PASS   |
|               |                   |                            |             |              |          |                 |                   |                   |                        |        |
|               |                   |                            |             |              |          |                 |                   |                   |                        |        |

## Test Information

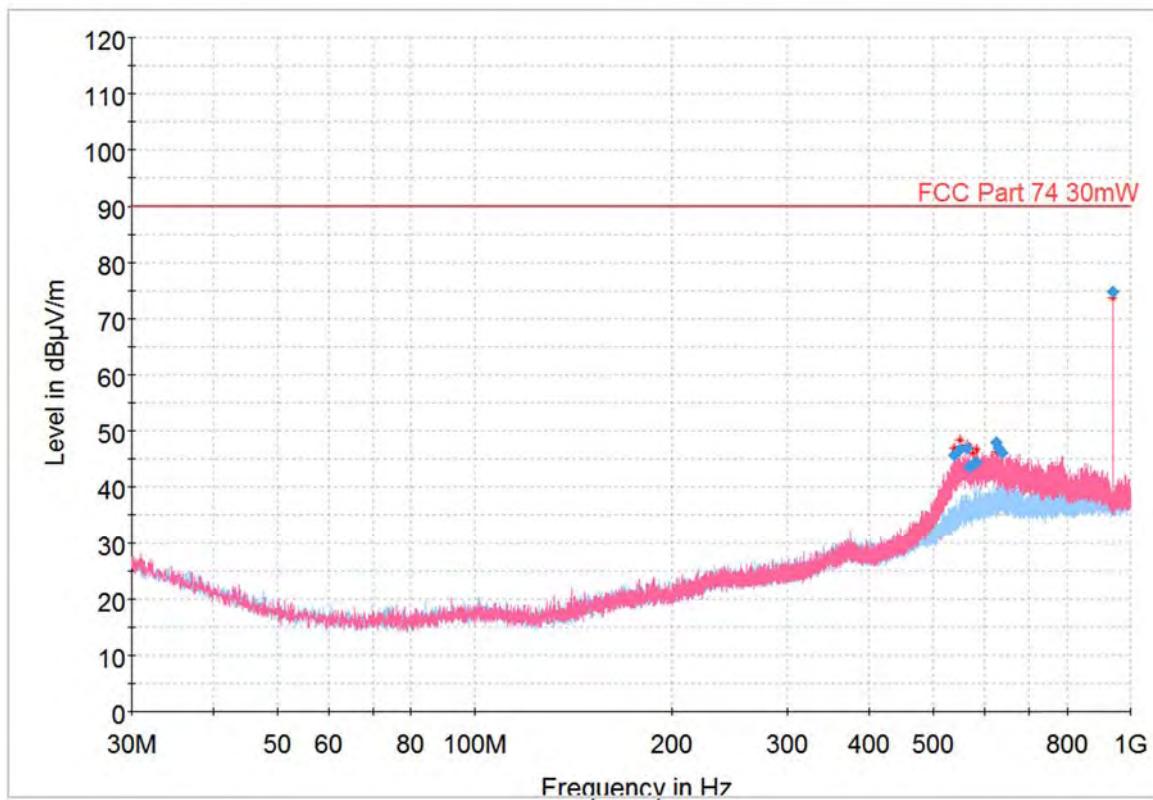
EUT Name: AD1 X55 #243  
Serial Number: TU162050175  
Test Description: Radiated RF Emissions 30MHz to 1GHz  
Operating Conditions: 941.625MHz L @ 35mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, 3m, AAs, No Audio Input, w L23-26-01 Tuned Notch  
Test Date & Time: January 31, 2017 9:11:20 AM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 Transmitter 30MHz to 1000MHz 34790

Hardware Setup: Electric Field Strength 34790 2016 06 03  
Level Unit: dB $\mu$ V/m

| Subrange       | Step Size | Detectors | IF BW   | Meas. Time | Preamp |
|----------------|-----------|-----------|---------|------------|--------|
| 30 MHz - 1 GHz | 30 kHz    | PK+       | 120 kHz | 0.02 s     | 20 dB  |

Full Spectrum



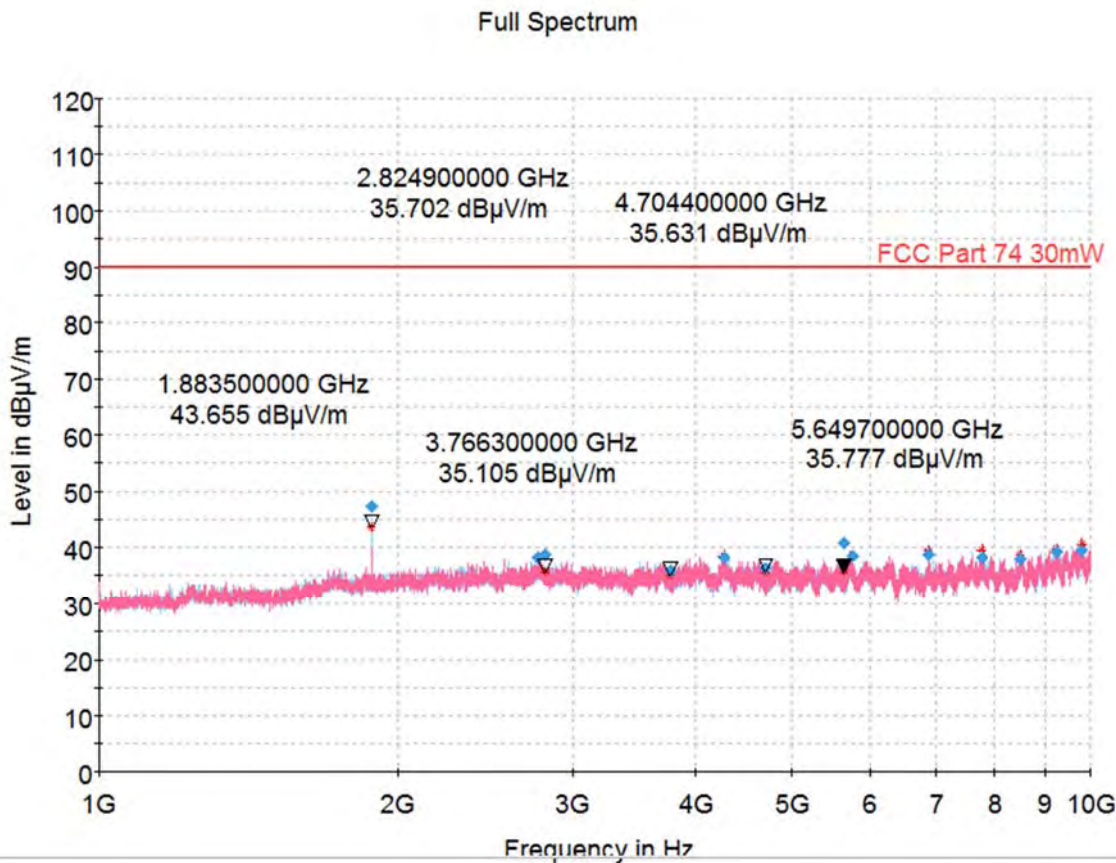
## Test Information

EUT Name: AD1 X55 #243  
Serial Number: TU162050175  
Test Description: Radiated RF Emissions 1GHz to 10GHz  
Operating Conditions: 941.625MHz L @ 35mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-38 1340MHz HPF  
Test Date & Time: February 3, 2017 10:39:57 AM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 1GHz to 10GHz 3117-PA 206583 FCC

Hardware Setup: Electric Field Strength 10GHz 3117-PA 206583 2016 03 24  
Level Unit: dB $\mu$ V/m

| Subrange       | Step Size | Detectors | IF BW | Meas. Time | Preamplifier |
|----------------|-----------|-----------|-------|------------|--------------|
| 1 GHz - 10 GHz | 250 kHz   | PK+       | 1 MHz | 1 s        | 20 dB        |





## Appendix E

## Test Information

EUT Name: AD1 X55 #243  
Serial Number: TU162050175  
Test Description: FCC pt.74 Spurious Radiated Emissions  
Operating Conditions: 941.625MHz L @ 35mW  
Operator Name: Alex Stelmaszczyk  
Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
Test Date: January 31, 2017 & February 3, 2017

| Frequency<br>MHz | Max Peak<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Measure<br>Time<br>(ms) | Bandwidth<br>(kHz) | Height<br>(cm) | Polarity | Azimuth<br>(deg) | Correction<br>(dB) |
|------------------|----------------------|-------------------|----------------|-------------------------|--------------------|----------------|----------|------------------|--------------------|
| 538.991          | 45.58                | 84.38             | 44.420         | 20                      | 120.00             | 111.000        | V        | 315.00           | 21.80              |
| 550.825          | 46.73                | 84.38             | 43.270         | 20                      | 120.00             | 100.000        | V        | 314.00           | 22.10              |
| 562.692          | 46.97                | 84.38             | 43.030         | 20                      | 120.00             | 100.000        | V        | 28.00            | 22.00              |
| 568.124          | 43.66                | 84.38             | 46.340         | 20                      | 120.00             | 111.000        | V        | 55.00            | 22.00              |
| 576.272          | 44.04                | 84.38             | 45.960         | 20                      | 120.00             | 111.000        | V        | 328.00           | 22.10              |
| 581.962          | 44.42                | 84.38             | 45.580         | 20                      | 120.00             | 111.000        | V        | 47.00            | 22.30              |
| 625.418          | 47.98                | 84.38             | 42.020         | 20                      | 120.00             | 168.000        | V        | 121.00           | 23.80              |
| 630.592          | 47.02                | 84.38             | 42.980         | 20                      | 120.00             | 156.000        | V        | 153.00           | 23.60              |
| 636.800          | 46.14                | 84.38             | 43.860         | 20                      | 120.00             | 149.000        | V        | 157.00           | 23.30              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |
| 1883.500         | 47.32                | 84.38             | 42.680         | 1000                    | 1000.00            | 110.000        | H        | 25.00            | -15.20             |
| 2773.600         | 38.17                | 84.38             | 51.830         | 1000                    | 1000.00            | 271.000        | H        | 27.00            | -11.70             |
| 2824.900         | 38.76                | 84.38             | 51.240         | 1000                    | 1000.00            | 343.000        | H        | 331.00           | -11.70             |
| 3766.300         | 35.85                | 84.38             | 54.150         | 1000                    | 1000.00            | 134.000        | V        | 184.00           | -9.20              |
| 4268.200         | 38.22                | 84.38             | 51.780         | 1000                    | 1000.00            | 146.000        | V        | 113.00           | -8.20              |
| 4704.400         | 36.40                | 84.38             | 53.600         | 1000                    | 1000.00            | 120.000        | V        | 170.00           | -7.90              |
| 5649.700         | 40.96                | 84.38             | 49.040         | 1000                    | 1000.00            | 250.000        | H        | 356.00           | -6.60              |
| 5750.500         | 38.63                | 84.38             | 51.370         | 1000                    | 1000.00            | 279.000        | H        | 191.00           | -6.10              |
| 6867.400         | 38.86                | 84.38             | 51.140         | 1000                    | 1000.00            | 250.000        | V        | 41.00            | -4.00              |
| 7774.000         | 38.24                | 84.38             | 51.760         | 1000                    | 1000.00            | 383.000        | V        | 263.00           | -3.10              |
| 8510.800         | 37.99                | 84.38             | 52.010         | 1000                    | 1000.00            | 388.000        | V        | 159.00           | -2.30              |
| 9248.200         | 39.27                | 84.38             | 50.730         | 1000                    | 1000.00            | 310.000        | H        | 149.00           | -1.60              |
| 9811.900         | 39.54                | 84.38             | 50.460         | 1000                    | 1000.00            | 112.000        | V        | 232.00           | -1.00              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |

## Appendix E

### Test Information

EUT Name: AD1 X55 #243  
Serial Number: TU162050175  
Test Description: FCC pt.74 & RSS-210 Radiated Emissions Matching  
Operating Conditions: 941.625MHz L @ 35mW  
Operator Name: Alex Stelmaszczyk, Tom Braxton & Mudassar Khan  
Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
Test Date: May 5 – 10, 2017

| Frequency MHz | Max Peak (dBμV/m) | Matched Power from Sig Gen | Limit (dBm) | Margin (dBm) | Polarity | Cable Loss (dB) | Cable 2 Loss (dB) | Antenna Gain (dB) | ERP / EIRP Total (dBm) | Status |
|---------------|-------------------|----------------------------|-------------|--------------|----------|-----------------|-------------------|-------------------|------------------------|--------|
| 550.825       | 46.73             | -52.8                      | -13.0       | 37.0         | V        | 1.40            | 1.39              |                   | -55.59                 | PASS   |
| 562.692       | 46.97             | -51.8                      | -13.0       | 36.0         | V        | 1.42            | 1.40              |                   | -54.62                 | PASS   |
| 625.418       | 47.98             | -46.4                      | -13.0       | 30.4         | V        | 1.50            | 1.50              |                   | -49.40                 | PASS   |
| 630.592       | 47.02             | -45.2                      | -13.0       | 29.2         | V        | 1.50            | 1.50              |                   | -48.20                 | PASS   |
| 636.800       | 46.14             | -45.7                      | -13.0       | 29.7         | V        | 1.50            | 1.50              |                   | -48.70                 | PASS   |
|               |                   |                            |             |              |          |                 |                   |                   |                        |        |
| 1883.500      | 47.32             | -50.1                      | -13.0       | 37.6         | H        | 2.25            | 2.63              | 5.40              | -49.58                 | PASS   |
| 2824.900      | 38.76             | -73.1                      | -13.0       | 61.0         | H        | 2.70            | 3.15              | 6.70              | -72.25                 | PASS   |
| 3766.300      | 35.85             | -75.0                      | -13.0       | 62.8         | V        | 3.75            | 3.84              | 8.40              | -74.19                 | PASS   |
| 4704.400      | 36.40             | -71.6                      | -13.0       | 59.7         | V        | 3.90            | 4.26              | 9.30              | -70.46                 | PASS   |
| 5649.700      | 40.96             | -71.7                      | -13.0       | 59.9         | H        | 4.50            | 4.78              | 10.50             | -70.48                 | PASS   |
|               |                   |                            |             |              |          |                 |                   |                   |                        |        |
|               |                   |                            |             |              |          |                 |                   |                   |                        |        |

## Test Information

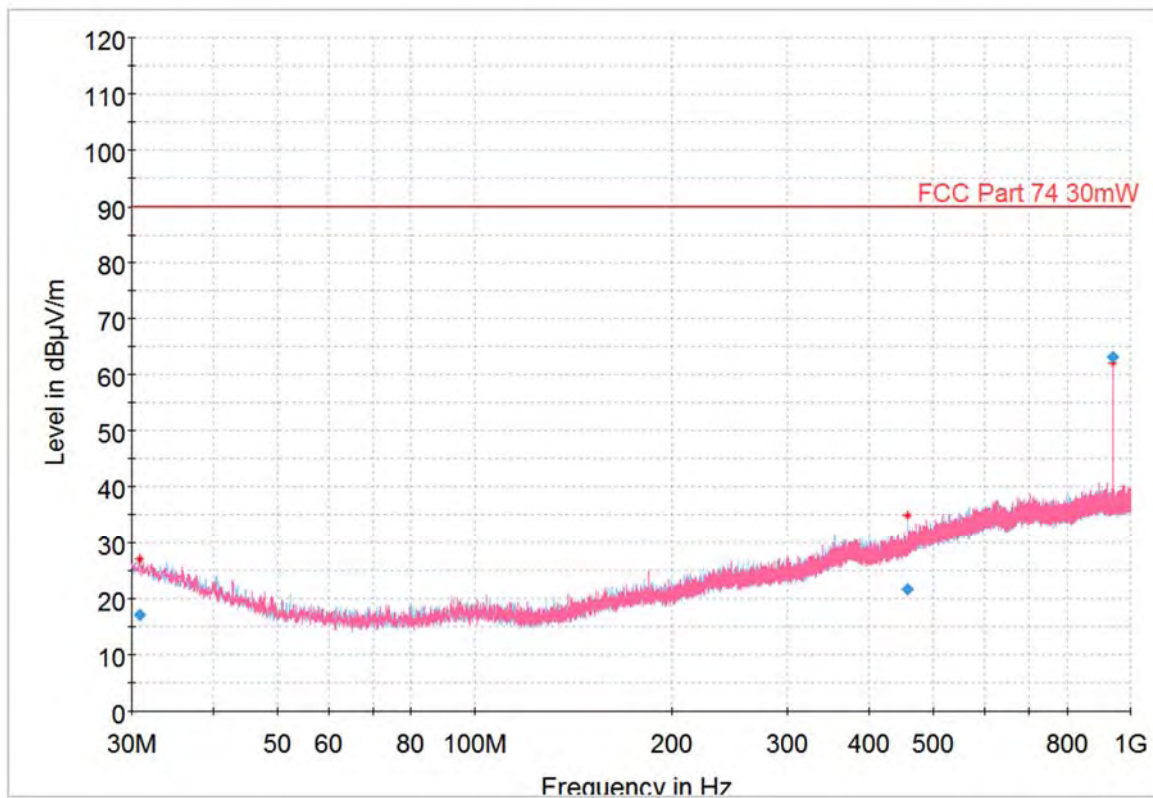
EUT Name: AD1 X55 #243  
Serial Number: TU162050175  
Test Description: Radiated RF Emissions 30MHz to 1GHz  
Operating Conditions: 941.625MHz L @ 2mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, 3m, AAs, No Audio Input, w/L23-26-01 Tuned Notch  
Test Date & Time: January 31, 2017 9:59:05 AM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 Transmitter 30MHz to 1000MHz 34790

Hardware Setup: Electric Field Strength 34790 2016 06 03  
Level Unit: dBμV/m

| Subrange       | Step Size | Detectors | IF BW   | Meas. Time | Preamp |
|----------------|-----------|-----------|---------|------------|--------|
| 30 MHz - 1 GHz | 30 kHz    | PK+       | 120 kHz | 0.02 s     | 20 dB  |

Full Spectrum



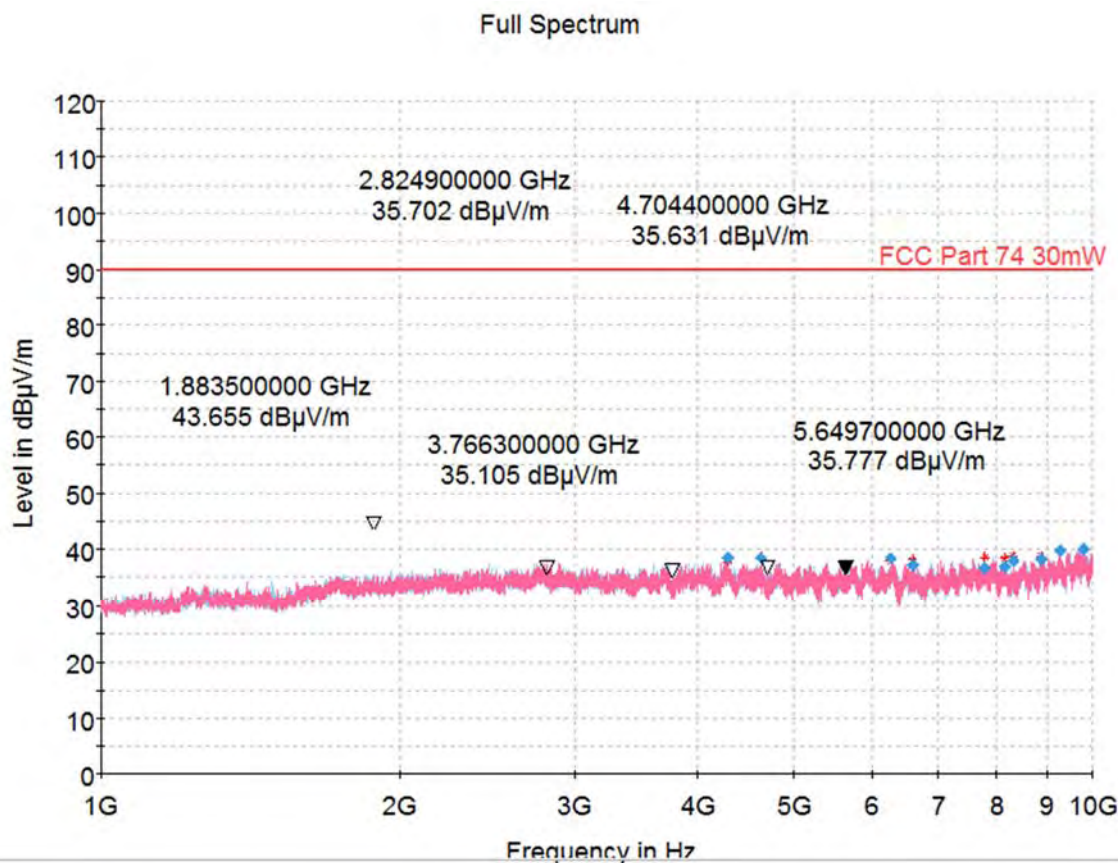
## Test Information

EUT Name: AD1 X55 #243  
Serial Number: TU162050175  
Test Description: Radiated RF Emissions 1GHz to 10GHz  
Operating Conditions: 941.625MHz L @ 2mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-38 1340MHz HPF  
Test Date & Time: February 3, 2017 11:47:17 AM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 1GHz to 10GHz 3117-PA 206583 FCC

Hardware Setup: Electric Field Strength 10GHz 3117-PA 206583 2016 03 24  
Level Unit: dBμV/m

| Subrange       | Step Size | Detectors | IF BW | Meas. Time | Preamplifier |
|----------------|-----------|-----------|-------|------------|--------------|
| 1 GHz - 10 GHz | 250 kHz   | PK+       | 1 MHz | 1 s        | 20 dB        |



## Test Information

EUT Name: AD1 X55 #243  
Serial Number: TU162050175  
Test Description: FCC pt.74 Spurious Radiated Emissions  
Operating Conditions: 941.625MHz L @ 2mW  
Operator Name: Alex Stelmaszczyk  
Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
Test Date: January 31, 2017 & February 3, 2017

| Frequency<br>MHz | Max Peak<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Measure<br>Time<br>(ms) | Bandwidth<br>(kHz) | Height<br>(cm) | Polarity | Azimuth<br>(deg) | Correction<br>(dB) |
|------------------|----------------------|-------------------|----------------|-------------------------|--------------------|----------------|----------|------------------|--------------------|
| 30.905           | 16.93                | 84.38             | 73.070         | 20                      | 120.00             | 267.000        | H        | 9.00             | 16.50              |
| 457.738          | 21.55                | 84.38             | 68.450         | 20                      | 120.00             | 378.000        | H        | 145.00           | 19.40              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |
| 4292.800         | 38.55                | 84.38             | 51.450         | 1000                    | 1000.00            | 386.000        | V        | 29.00            | -8.10              |
| 4633.300         | 38.38                | 84.38             | 51.620         | 1000                    | 1000.00            | 114.000        | H        | 110.00           | -7.70              |
| 6257.500         | 38.50                | 84.38             | 51.500         | 1000                    | 1000.00            | 292.000        | V        | 318.00           | -4.90              |
| 6589.300         | 37.08                | 84.38             | 52.920         | 1000                    | 1000.00            | 135.000        | V        | 66.00            | -4.30              |
| 7797.700         | 36.81                | 84.38             | 53.190         | 1000                    | 1000.00            | 255.000        | H        | 173.00           | -3.00              |
| 8162.800         | 37.01                | 84.38             | 52.990         | 1000                    | 1000.00            | 362.000        | H        | 276.00           | -2.60              |
| 8327.200         | 37.96                | 84.38             | 52.040         | 1000                    | 1000.00            | 367.000        | V        | 127.00           | -2.40              |
| 8872.300         | 38.30                | 84.38             | 51.700         | 1000                    | 1000.00            | 105.000        | V        | 2.00             | -2.10              |
| 9295.600         | 39.94                | 84.38             | 50.060         | 1000                    | 1000.00            | 107.000        | H        | 10.00            | -1.60              |
| 9820.900         | 40.15                | 84.38             | 49.850         | 1000                    | 1000.00            | 259.000        | H        | 212.00           | -1.00              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |

Appendix E

## Test Information

EUT Name: AD1 X55 #243  
 Serial Number: TU162050175  
 Test Description: FCC pt.74 & RSS-210 Radiated Emissions Matching  
 Operating Conditions: 941.625MHz L @ 2mW  
 Operator Name: Alex Stelmaszczyk, Tom Braxton & Mudassar Khan  
 Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
 Test Date: May 5 – 10, 2017

| Frequency MHz | Max Peak (dBμV/m) | Matched Power from Sig Gen | Limit (dBm) | Margin (dBm) | Polarity | Cable Loss (dB) | Cable 2 Loss (dB) | Antenna Gain (dB) | ERP / EIRP Total (dBm) | Status |
|---------------|-------------------|----------------------------|-------------|--------------|----------|-----------------|-------------------|-------------------|------------------------|--------|
| 4292.800      | 38.55             | -80.3                      | -13.0       | 68.8         | V        | 3.70            | 4.11              | 9.30              | -78.81                 | PASS   |
| 4633.300      | 38.38             | -74.4                      | -13.0       | 62.5         | H        | 3.85            | 4.39              | 9.30              | -73.34                 | PASS   |
| 6257.500      | 38.50             | -79.6                      | -13.0       | 67.2         | V        | 4.60            | 5.27              | 10.50             | -78.97                 | PASS   |
| 6589.300      | 37.08             | -69.8                      | -13.0       | 57.2         | V        | 4.75            | 5.45              | 10.60             | -69.40                 | PASS   |
| 8872.300      | 38.30             | -69.5                      | -13.0       | 59.7         | V        | 5.84            | 4.00              | 13.00             | -66.34                 | PASS   |
| 9295.600      | 39.94             | -75.0                      | -13.0       | 65.4         | H        | 5.75            | 3.99              | 13.10             | -71.64                 | PASS   |
| 9820.900      | 40.15             | -70.2                      | -13.0       | 60.1         | H        | 6.01            | 4.09              | 13.00             | -67.30                 | PASS   |
|               |                   |                            |             |              |          |                 |                   |                   |                        |        |

## Test Information

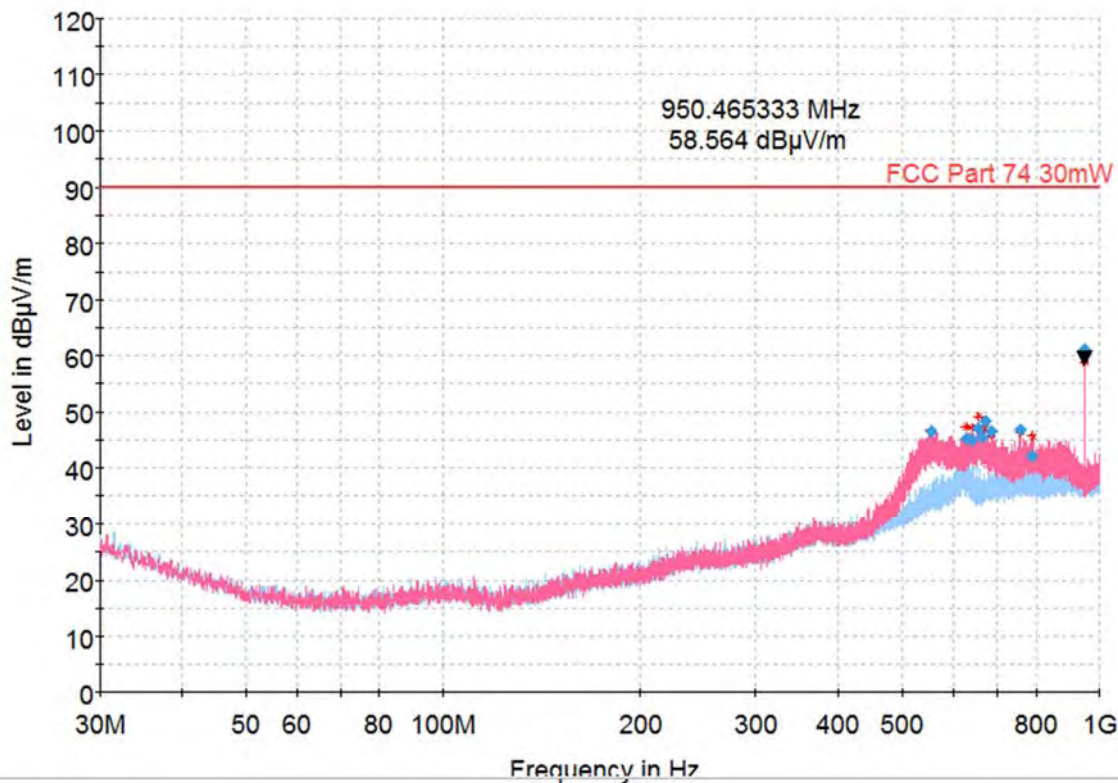
EUT Name: AD1 X55 #243  
 Serial Number: TU162050175  
 Test Description: Radiated RF Emissions 30MHz to 1GHz  
 Operating Conditions: 950.500MHz M @ 35mW  
 Operator Name: Alex Stelmaszczyk  
 Comment: FCC pt. 74  
 Description: FCC Table, 3m, AAs, No Audio Input, w L23-26-01 Tuned Notch  
 Test Date & Time: October 28, 2016 11:02:48 AM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 Transmitter 30MHz to 1000MHz 34790

Hardware Setup: Electric Field Strength 34790 2016 06 03  
 Level Unit: dB $\mu$ V/m

| Subrange       | Step Size | Detectors | IF BW   | Meas. Time | Preamplifier |
|----------------|-----------|-----------|---------|------------|--------------|
| 30 MHz - 1 GHz | 30 kHz    | PK+       | 120 kHz | 0.02 s     | 20 dB        |

Full Spectrum



## Test Information

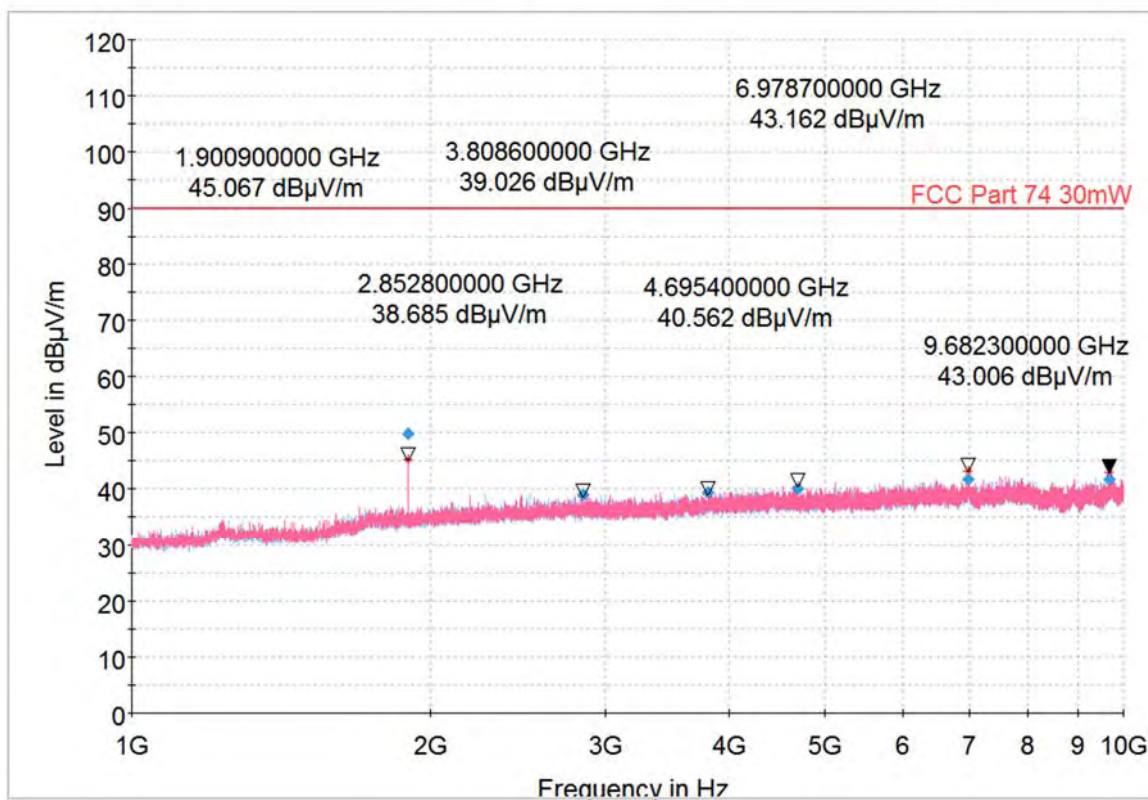
EUT Name: AD1 X55 #243  
Serial Number: TU162050175  
Test Description: Radiated RF Emissions 1GHz to 10GHz  
Operating Conditions: 950.500MHz M @ 35mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-38 1340MHz HPF  
Test Date & Time: December 01, 2016 9:01:44 AM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 1GHz to 10GHz 3117-PA 206583 FCC

Hardware Setup: Electric Field Strength 10GHz 3117-PA 206583 2016 03 24  
Level Unit: dB $\mu$ V/m

| Subrange       | Step Size | Detectors | IF BW | Meas. Time | Preamp |
|----------------|-----------|-----------|-------|------------|--------|
| 1 GHz - 10 GHz | 250 kHz   | PK+       | 1 MHz | 1 s        | 20 dB  |

Full Spectrum



## Appendix E

### Test Information

EUT Name: AD1 X55 #243  
 Serial Number: TU162050175  
 Test Description: FCC pt.74 Spurious Radiated Emissions  
 Operating Conditions: 950.500MHz M @ 35mW  
 Operator Name: Alex Stelmaszczyk  
 Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
 Test Date: October, 28, 2016 & December 01, 2016

| Frequency<br>MHz | Max Peak<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Measure<br>Time<br>(ms) | Bandwidth<br>(kHz) | Height<br>(cm) | Polarity | Azimuth<br>(deg) | Correction<br>(dB) |
|------------------|----------------------|-------------------|----------------|-------------------------|--------------------|----------------|----------|------------------|--------------------|
| 553.735          | 46.49                | 84.38             | 43.510         | 20                      | 120.00             | 100.000        | V        | 283.00           | 22.10              |
| 626.453          | 45.36                | 84.38             | 44.640         | 20                      | 120.00             | 154.000        | V        | 0.00             | 23.80              |
| 640.356          | 45.11                | 84.38             | 44.890         | 20                      | 120.00             | 139.000        | V        | 11.00            | 23.20              |
| 655.909          | 47.21                | 84.38             | 42.790         | 20                      | 120.00             | 150.000        | V        | 324.00           | 23.00              |
| 664.380          | 45.49                | 84.38             | 44.510         | 20                      | 120.00             | 146.000        | V        | 310.00           | 23.40              |
| 671.914          | 48.47                | 84.38             | 41.530         | 20                      | 120.00             | 141.000        | V        | 144.00           | 23.70              |
| 687.401          | 46.48                | 84.38             | 43.520         | 20                      | 120.00             | 138.000        | V        | 129.00           | 23.80              |
| 760.863          | 47.01                | 84.38             | 42.990         | 20                      | 120.00             | 126.000        | V        | 252.00           | 24.60              |
| 792.064          | 42.14                | 84.38             | 47.860         | 20                      | 120.00             | 118.000        | V        | 117.00           | 24.60              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |
| 1901.200         | 49.84                | 84.38             | 40.160         | 1000                    | 1000.00            | 360.000        | V        | 36.00            | -15.10             |
| 2852.800         | 38.98                | 84.38             | 51.020         | 1000                    | 1000.00            | 329.000        | H        | 187.00           | -11.70             |
| 3808.600         | 39.50                | 84.38             | 50.500         | 1000                    | 1000.00            | 360.000        | V        | 269.00           | -9.10              |
| 4695.400         | 40.03                | 84.38             | 49.970         | 1000                    | 1000.00            | 145.000        | V        | 159.00           | -7.90              |
| 6978.700         | 41.67                | 84.38             | 48.330         | 1000                    | 1000.00            | 200.000        | V        | 74.00            | -3.50              |
| 9682.300         | 41.78                | 84.38             | 48.220         | 1000                    | 1000.00            | 369.000        | H        | 179.00           | -1.10              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |



## Appendix E

## Test Information

EUT Name: AD1 X55 #243  
Serial Number: TU162050175  
Test Description: FCC pt.74 & RSS-210 Radiated Emissions Matching  
Operating Conditions: 950.500MHz M @ 35mW  
Operator Name: Alex Stelmaszczyk, Tom Braxton & Mudassar Khan  
Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
Test Date: May 5 – 10, 2017

| Frequency<br>MHz | Max Peak<br>(dBμV/m) | Matched<br>Power from<br>Sig Gen | Limit<br>(dBm) | Margin<br>(dBm) | Polarity | Cable Loss<br>(dB) | Cable 2 Loss<br>(dB) | Antenna<br>Gain<br>(dB) | ERP / EIRP<br>Total<br>(dBm) | Status |
|------------------|----------------------|----------------------------------|----------------|-----------------|----------|--------------------|----------------------|-------------------------|------------------------------|--------|
| 553.735          | 46.49                | -52.2                            | -13.0          | 36.4            | V        | 1.40               | 1.39                 |                         | -54.99                       | PASS   |
| 655.909          | 47.21                | -46.2                            | -13.0          | 30.2            | V        | 1.50               | 1.50                 |                         | -49.20                       | PASS   |
| 664.380          | 45.49                | -48.0                            | -13.0          | 32.0            | V        | 1.50               | 1.50                 |                         | -51.00                       | PASS   |
| 671.914          | 48.47                | -44.5                            | -13.0          | 28.5            | V        | 1.50               | 1.52                 |                         | -47.52                       | PASS   |
| 687.401          | 46.48                | -46.7                            | -13.0          | 30.6            | V        | 1.55               | 1.57                 |                         | -49.82                       | PASS   |
| 760.863          | 47.01                | -46.5                            | -13.0          | 30.4            | V        | 1.65               | 1.50                 |                         | -49.65                       | PASS   |
|                  |                      |                                  |                |                 |          |                    |                      |                         |                              |        |
| 1901.200         | 49.84                | -47.2                            | -13.0          | 34.7            | V        | 2.30               | 2.64                 | 5.40                    | -46.74                       | PASS   |
| 2852.800         | 38.98                | -75.3                            | -13.0          | 63.2            | H        | 2.70               | 3.15                 | 6.70                    | -74.45                       | PASS   |
| 3808.600         | 39.50                | -70.9                            | -13.0          | 58.6            | V        | 3.65               | 4.03                 | 8.40                    | -70.18                       | PASS   |
|                  |                      |                                  |                |                 |          |                    |                      |                         |                              |        |

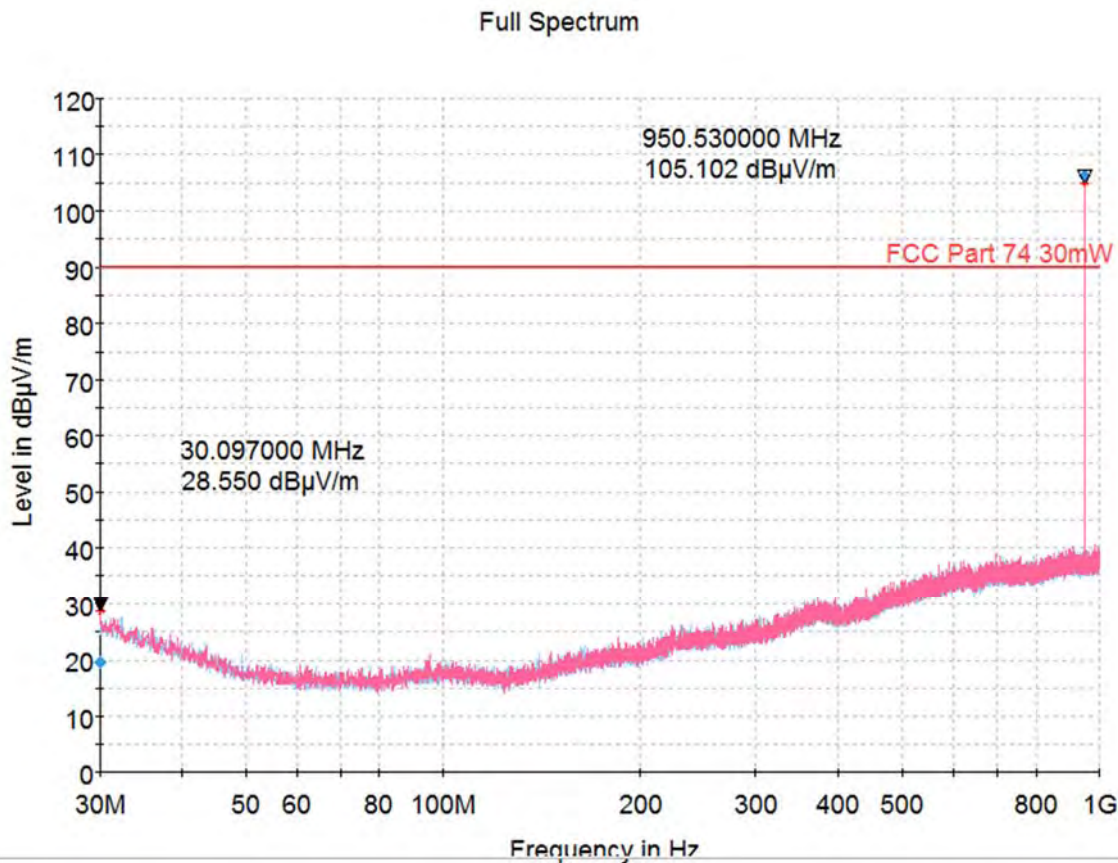
## Test Information

EUT Name: AD1 X55 #243  
Serial Number: TU162050175  
Test Description: Radiated RF Emissions 30MHz to 1GHz  
Operating Conditions: 950.500MHz M @ 2mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, 3m, AAs, No Audio Input  
Test Date & Time: October 31, 2016 9:16:02 AM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 Transmitter 30MHz to 1000MHz 34790

Hardware Setup: Electric Field Strength 34790 2016 06 03  
Level Unit: dB $\mu$ V/m

| Subrange       | Step Size | Detectors | IF BW   | Meas. Time | Preamp |
|----------------|-----------|-----------|---------|------------|--------|
| 30 MHz - 1 GHz | 30 kHz    | PK+       | 120 kHz | 0.02 s     | 20 dB  |



## Test Information

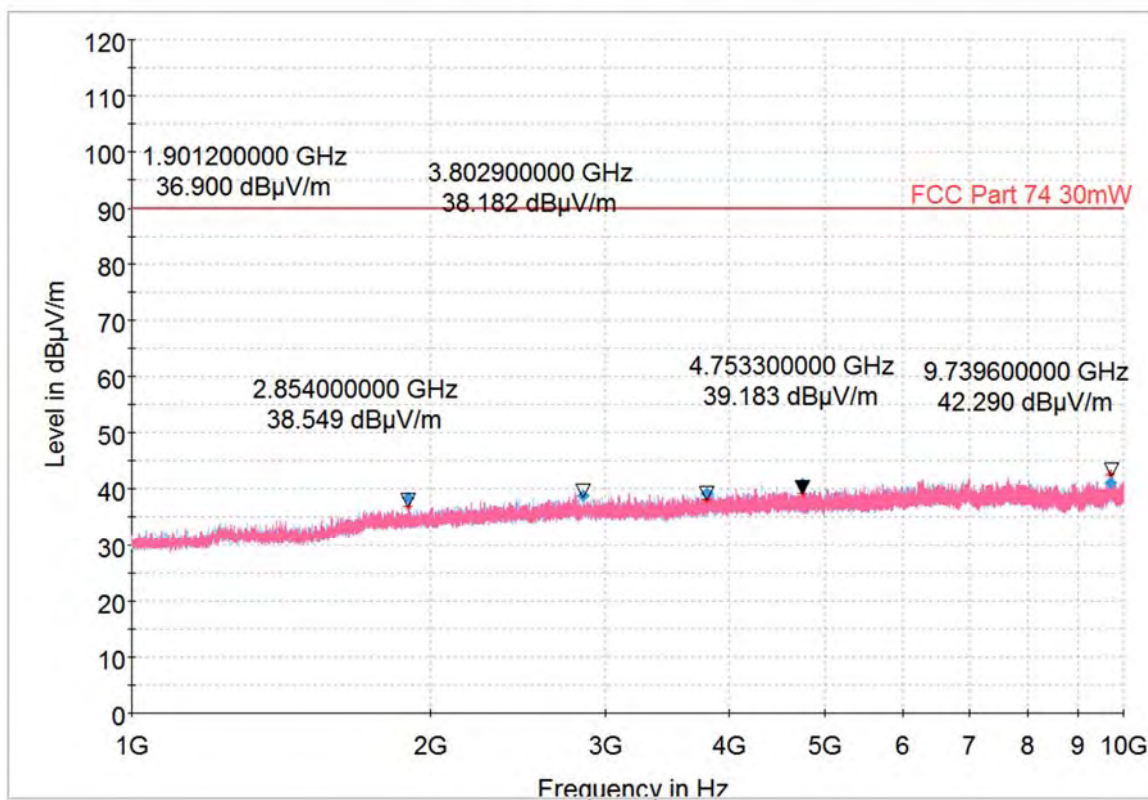
EUT Name: AD1 X55 #243  
Serial Number: TU162050175  
Test Description: Radiated RF Emissions 1GHz to 10GHz  
Operating Conditions: 950.500MHz M @ 2mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-38 1340MHz HPF  
Test Date & Time: November 30, 2016 2:03:38 PM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 1GHz to 10GHz 3117-PA 206583 FCC

Hardware Setup: Electric Field Strength 10GHz 3117-PA 206583 2016 03 24  
Level Unit: dB $\mu$ V/m

| Subrange       | Step Size | Detectors | IF BW | Meas. Time | Preamp |
|----------------|-----------|-----------|-------|------------|--------|
| 1 GHz - 10 GHz | 250 kHz   | PK+       | 1 MHz | 1 s        | 20 dB  |

Full Spectrum



Appendix E

## Test Information

EUT Name: AD1 X55 #243  
 Serial Number: TU162050175  
 Test Description: FCC pt.74 Spurious Radiated Emissions  
 Operating Conditions: 950.500MHz M @ 2mW  
 Operator Name: Alex Stelmaszczyk  
 Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
 Test Date: October 31, 2016 & November 30, 2016

| Frequency<br>MHz | Max Peak<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Measure<br>Time<br>(ms) | Bandwidth<br>(kHz) | Height<br>(cm) | Polarity | Azimuth<br>(deg) | Correction<br>(dB) |
|------------------|----------------------|-------------------|----------------|-------------------------|--------------------|----------------|----------|------------------|--------------------|
| 30.129           | 19.58                | 84.38             | 70.420         | 20                      | 120.00             | 150.000        | V        | 78.00            | 16.90              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |
| 1901.200         | 38.33                | 84.38             | 51.670         | 1000                    | 1000.00            | 122.000        | V        | -10.00           | -15.10             |
| 2854.000         | 38.89                | 84.38             | 51.110         | 1000                    | 1000.00            | 389.000        | H        | 329.00           | -11.70             |
| 3802.900         | 39.32                | 84.38             | 50.680         | 1000                    | 1000.00            | 234.000        | H        | -9.00            | -9.10              |
| 4753.300         | 40.80                | 84.38             | 49.200         | 1000                    | 1000.00            | 374.000        | V        | 40.00            | -7.80              |
| 9713.800         | 41.10                | 84.38             | 48.900         | 1000                    | 1000.00            | 142.000        | H        | 125.00           | -1.10              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |

Appendix E

## Test Information

EUT Name: AD1 X55 #243  
 Serial Number: TU162050175  
 Test Description: FCC pt.74 & RSS-210 Radiated Emissions Matching  
 Operating Conditions: 950.500MHz M @ 2mW  
 Operator Name: Alex Stelmaszczyk, Tom Braxton & Mudassar Khan  
 Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
 Test Date: May 5 – 10, 2017

| Frequency<br>MHz | Max Peak<br>(dBμV/m) | Matched<br>Power from<br>Sig Gen | Limit<br>(dBm) | Margin<br>(dBm) | Polarity | Cable Loss<br>(dB) | Cable 2 Loss<br>(dB) | Antenna<br>Gain<br>(dB) | ERP / EIRP<br>Total<br>(dBm) | Status |
|------------------|----------------------|----------------------------------|----------------|-----------------|----------|--------------------|----------------------|-------------------------|------------------------------|--------|
| 1901.200         | <b>38.33</b>         | -67.8                            | -13.0          | 55.3            | V        | 2.30               | 2.64                 | 5.40                    | -67.34                       | PASS   |
| 2854.000         | <b>38.89</b>         | -72.3                            | -13.0          | 60.2            | H        | 2.70               | 3.15                 | 6.70                    | -71.45                       | PASS   |
| 3802.900         | <b>39.32</b>         | -72.7                            | -13.0          | 60.4            | H        | 3.65               | 4.03                 | 8.40                    | -71.98                       | PASS   |
| 4753.300         | <b>40.80</b>         | -66.7                            | -13.0          | 55.1            | V        | 3.90               | 4.26                 | 9.60                    | -65.26                       | PASS   |
| 9713.800         | <b>41.10</b>         | -73.5                            | -13.0          | 63.6            | H        | 6.00               | 4.08                 | 13.20                   | -70.38                       | PASS   |
|                  |                      |                                  |                |                 |          |                    |                      |                         |                              |        |

## Test Information

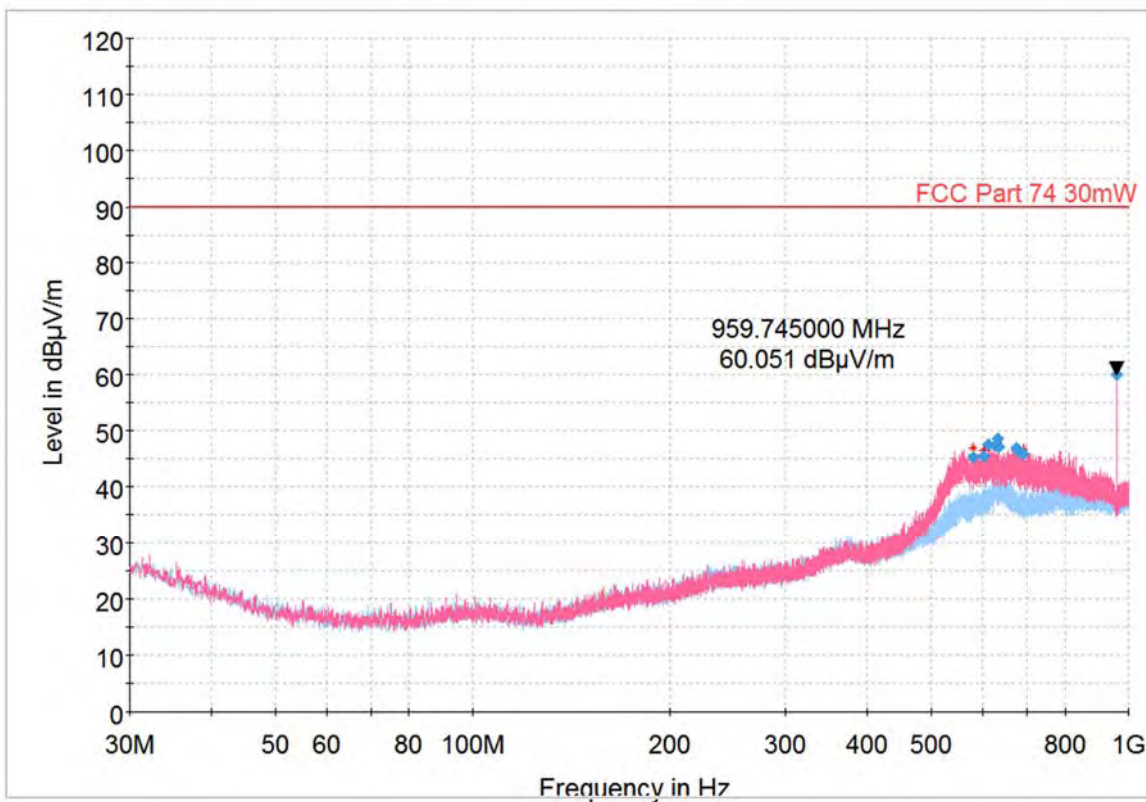
EUT Name: AD1 X55 #243  
Serial Number: TU162050175  
Test Description: Radiated RF Emissions 30MHz to 1GHz  
Operating Conditions: 959.725MHz H @ 35mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, 3m, AAs, No Audio Input, w L23-26-01 Tuned Notch  
Test Date & Time: January 25, 2017 10:28:36 AM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 Transmitter 30MHz to 1000MHz 34790

Hardware Setup: Electric Field Strength 34790 2016 06 03  
Level Unit: dB $\mu$ V/m

| Subrange       | Step Size | Detectors | IF BW   | Meas. Time | Preamp |
|----------------|-----------|-----------|---------|------------|--------|
| 30 MHz - 1 GHz | 30 kHz    | PK+       | 120 kHz | 0.02 s     | 20 dB  |

Full Spectrum



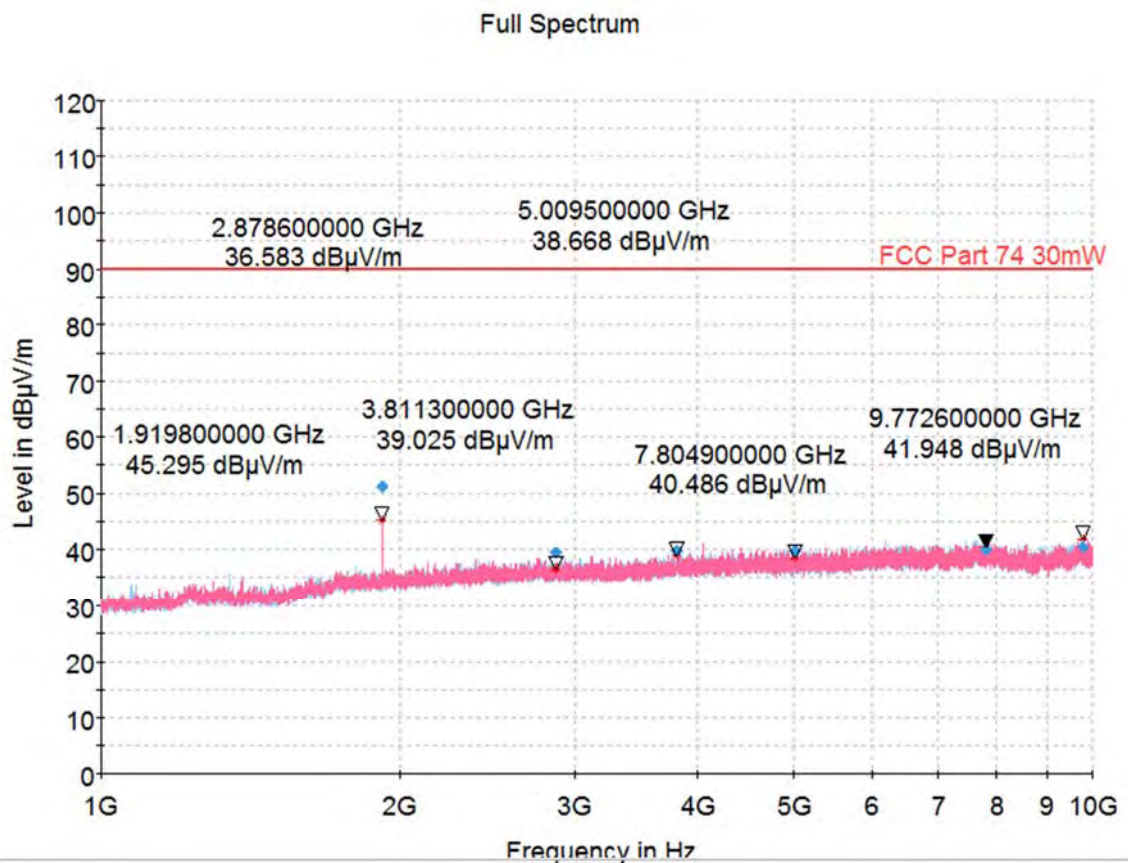
## Test Information

EUT Name: AD1 X55 #243  
Serial Number: TU162050175  
Test Description: Radiated RF Emissions 1GHz to 10GHz  
Operating Conditions: 959.725MHz H @ 35mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-38 1340MHz HPF  
Test Date & Time: December 01, 2016 9:45:14 AM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 1GHz to 10GHz 3117-PA 206583 FCC

Hardware Setup: Electric Field Strength 10GHz 3117-PA 206583 2016 03 24  
Level Unit: dB $\mu$ V/m

| Subrange       | Step Size | Detectors | IF BW | Meas. Time | Preamp |
|----------------|-----------|-----------|-------|------------|--------|
| 1 GHz - 10 GHz | 250 kHz   | PK+       | 1 MHz | 1 s        | 20 dB  |



## Appendix E

### Test Information

EUT Name: AD1 X55 #243  
 Serial Number: TU162050175  
 Test Description: FCC pt.74 Spurious Radiated Emissions  
 Operating Conditions: 959.7255MHz H @ 35mW  
 Operator Name: Alex Stelmaszczyk  
 Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
 Test Date: January 25, 2017 & December 01, 2016

| Frequency<br>MHz | Max Peak<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Measure<br>Time<br>(ms) | Bandwidth<br>(kHz) | Height<br>(cm) | Polarity | Azimuth<br>(deg) | Correction<br>(dB) |
|------------------|----------------------|-------------------|----------------|-------------------------|--------------------|----------------|----------|------------------|--------------------|
| 580.249          | 45.23                | 84.38             | 44.770         | 20                      | 120.00             | 109.000        | V        | 359.00           | 22.20              |
| 602.235          | 45.49                | 84.38             | 44.510         | 20                      | 120.00             | 100.000        | V        | 2.00             | 23.00              |
| 612.873          | 47.54                | 84.38             | 42.460         | 20                      | 120.00             | 204.000        | V        | 166.00           | 23.40              |
| 626.744          | 47.41                | 84.38             | 42.590         | 20                      | 120.00             | 208.000        | V        | 123.00           | 23.80              |
| 631.465          | 48.65                | 84.38             | 41.350         | 20                      | 120.00             | 197.000        | V        | 146.00           | 23.60              |
| 635.603          | 47.08                | 84.38             | 42.920         | 20                      | 120.00             | 190.000        | V        | 119.00           | 23.40              |
| 675.082          | 46.91                | 84.38             | 43.090         | 20                      | 120.00             | 207.000        | V        | -5.00            | 23.80              |
| 681.711          | 46.28                | 84.38             | 43.720         | 20                      | 120.00             | 157.000        | V        | 142.00           | 23.80              |
| 691.734          | 45.94                | 84.38             | 44.060         | 20                      | 120.00             | 202.000        | V        | 10.00            | 23.80              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |
| 1919.800         | 51.38                | 84.38             | 38.620         | 1000                    | 1000.00            | 340.000        | V        | 309.00           | -15.00             |
| 2878.600         | 39.50                | 84.38             | 50.500         | 1000                    | 1000.00            | 240.000        | H        | 345.00           | -11.60             |
| 3811.300         | 39.83                | 84.38             | 50.170         | 1000                    | 1000.00            | 147.000        | V        | 176.00           | -9.10              |
| 5009.500         | 39.92                | 84.38             | 50.080         | 1000                    | 1000.00            | 127.000        | V        | 170.00           | -7.80              |
| 7804.900         | 40.12                | 84.38             | 49.880         | 1000                    | 1000.00            | 160.000        | H        | 96.00            | -3.00              |
| 9772.600         | 40.47                | 84.38             | 49.530         | 1000                    | 1000.00            | 170.000        | V        | 54.00            | -1.10              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |

Appendix E

## Test Information

EUT Name: AD1 X55 #243  
 Serial Number: TU162050175  
 Test Description: FCC pt.74 & RSS-210 Radiated Emissions Matching  
 Operating Conditions: 959.725MHz H @ 35mW  
 Operator Name: Alex Stelmaszczyk, Tom Braxton & Mudassar Khan  
 Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
 Test Date: May 5 – 10, 2017

| Frequency MHz | Max Peak (dBμV/m) | Matched Power from Sig Gen | Limit (dBm) | Margin (dBm) | Polarity | Cable Loss (dB) | Cable 2 Loss (dB) | Antenna Gain (dB) | ERP / EIRP Total (dBm) | Status |
|---------------|-------------------|----------------------------|-------------|--------------|----------|-----------------|-------------------|-------------------|------------------------|--------|
| 612.873       | 47.54             | -49.2                      | -13.0       | 33.2         | V        | 1.50            | 1.49              |                   | -52.19                 | PASS   |
| 626.744       | 47.41             | -49.7                      | -13.0       | 33.7         | V        | 1.50            | 1.50              |                   | -52.70                 | PASS   |
| 631.465       | 48.65             | -48.2                      | -13.0       | 32.2         | V        | 1.50            | 1.50              |                   | -51.20                 | PASS   |
| 635.603       | 47.08             | -49.5                      | -13.0       | 33.5         | V        | 1.50            | 1.50              |                   | -52.50                 | PASS   |
| 675.082       | 46.91             | -45.7                      | -13.0       | 29.7         | V        | 1.50            | 1.53              |                   | -48.73                 | PASS   |
|               |                   |                            |             |              |          |                 |                   |                   |                        |        |
| 1919.800      | 51.38             | -45.9                      | -13.0       | 33.4         | V        | 2.30            | 2.64              | 5.40              | -45.44                 | PASS   |
| 2878.600      | 39.50             | -70.0                      | -13.0       | 57.9         | H        | 2.70            | 3.15              | 6.70              | -69.15                 | PASS   |
| 3811.300      | 39.83             | -71.4                      | -13.0       | 59.1         | V        | 3.65            | 4.03              | 8.40              | -70.68                 | PASS   |

## Test Information

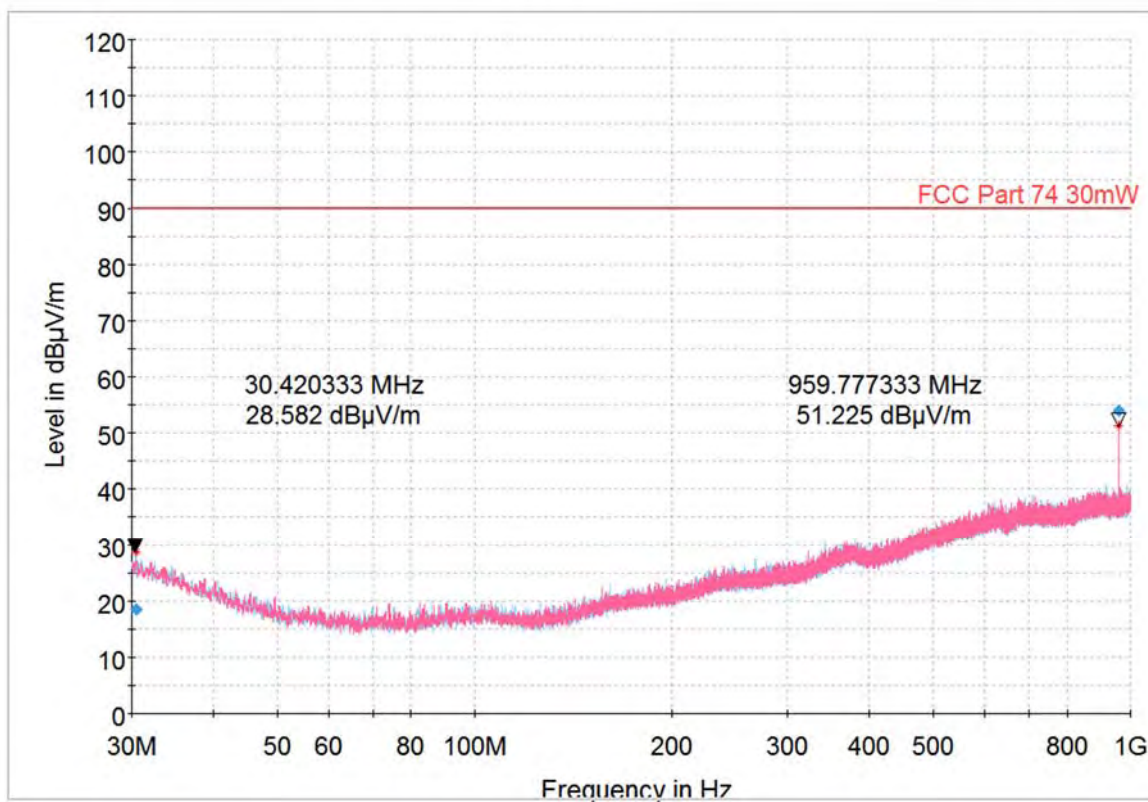
EUT Name: AD1 X55 #243  
Serial Number: TU162050175  
Test Description: Radiated RF Emissions 30MHz to 1GHz  
Operating Conditions: 959.725MHz H @ 2mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, 3m, AAs, No Audio Input, w/L23-26-01 Tuned Notch  
Test Date & Time: January 25, 2017 9:37:03 AM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 Transmitter 30MHz to 1000MHz 34790

Hardware Setup: Electric Field Strength 34790 2016 06 03  
Level Unit: dB $\mu$ V/m

| Subrange       | Step Size | Detectors | IF BW   | Meas. Time | Preamp |
|----------------|-----------|-----------|---------|------------|--------|
| 30 MHz - 1 GHz | 30 kHz    | PK+       | 120 kHz | 0.02 s     | 20 dB  |

Full Spectrum



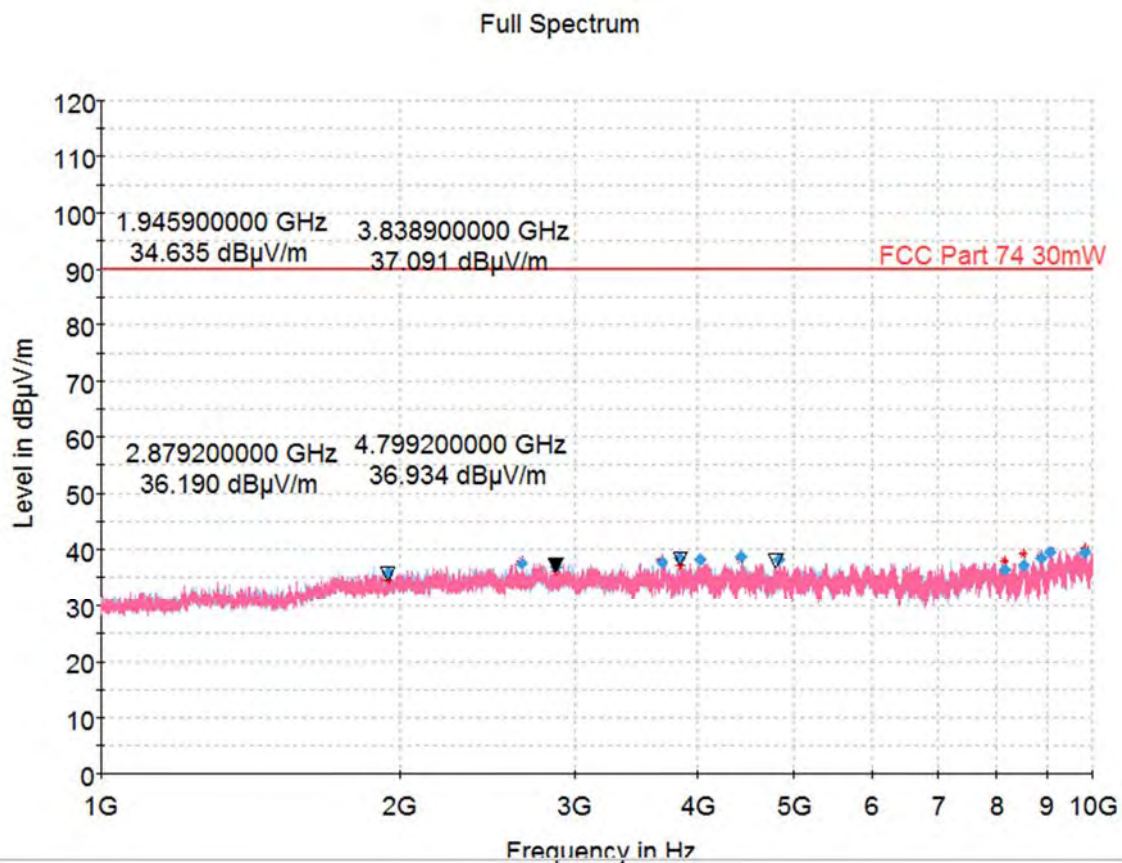
## Test Information

EUT Name: AD1 X55 #243  
Serial Number: TU162050175  
Test Description: Radiated RF Emissions 1GHz to 10GHz  
Operating Conditions: 959.725MHz L @ 2mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-38 1340MHz HPF  
Test Date & Time: January 23, 2017 6:00:02 PM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 1GHz to 10GHz 3117-PA 206583 FCC

Hardware Setup: Electric Field Strength 10GHz 3117-PA 206583 2016 03 24  
Level Unit: dB $\mu$ V/m

| Subrange       | Step Size | Detectors | IF BW | Meas. Time | Preamp |
|----------------|-----------|-----------|-------|------------|--------|
| 1 GHz - 10 GHz | 250 kHz   | PK+       | 1 MHz | 1 s        | 20 dB  |





## Test Information

EUT Name: AD1 X55 #243  
Serial Number: TU162050175  
Test Description: FCC pt.74 Spurious Radiated Emissions  
Operating Conditions: 959.725MHz H @ 2mW  
Operator Name: Alex Stelmaszczyk  
Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
Test Date: January 25, 2017 & January 23, 2017

| Frequency<br>MHz | Max Peak<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Measure<br>Time<br>(ms) | Bandwidth<br>(kHz) | Height<br>(cm) | Polarity | Azimuth<br>(deg) | Correction<br>(dB) |
|------------------|----------------------|-------------------|----------------|-------------------------|--------------------|----------------|----------|------------------|--------------------|
| 30.453           | <b>18.46</b>         | 84.38             | 71.540         | 20                      | 120.00             | 216.000        | H        | 18.00            | 16.70              |
| 1945.900         | <b>35.87</b>         | 84.38             | 54.130         | 1000                    | 1000.00            | 158.000        | H        | 120.00           | -15.00             |
| 2657.200         | <b>37.54</b>         | 84.38             | 52.460         | 1000                    | 1000.00            | 359.000        | H        | 305.00           | -12.10             |
| 2879.200         | <b>37.00</b>         | 84.38             | 53.000         | 1000                    | 1000.00            | 392.000        | H        | 340.00           | -11.60             |
| 3681.400         | <b>37.89</b>         | 84.38             | 52.110         | 1000                    | 1000.00            | 293.000        | V        | 130.00           | -9.60              |
| 3838.900         | <b>38.52</b>         | 84.38             | 51.480         | 1000                    | 1000.00            | 143.000        | H        | 57.00            | -9.00              |
| 4019.800         | <b>38.12</b>         | 84.38             | 51.880         | 1000                    | 1000.00            | 236.000        | H        | 117.00           | -8.60              |
| 4426.300         | <b>38.75</b>         | 84.38             | 51.250         | 1000                    | 1000.00            | 344.000        | H        | 2.00             | -7.90              |
| 4827.700         | <b>38.16</b>         | 84.38             | 51.840         | 1000                    | 1000.00            | 322.000        | V        | 321.00           | -7.60              |
| 8158.300         | <b>36.63</b>         | 84.38             | 53.370         | 1000                    | 1000.00            | 111.000        | H        | 277.00           | -2.60              |
| 8514.400         | <b>37.19</b>         | 84.38             | 52.810         | 1000                    | 1000.00            | 150.000        | H        | 9.00             | -2.30              |
| 8874.100         | <b>38.68</b>         | 84.38             | 51.320         | 1000                    | 1000.00            | 385.000        | V        | 325.00           | -2.10              |
| 9082.900         | <b>39.71</b>         | 84.38             | 50.290         | 1000                    | 1000.00            | 191.000        | V        | 116.00           | -1.80              |
| 9840.100         | <b>39.44</b>         | 84.38             | 50.560         | 1000                    | 1000.00            | 362.000        | V        | 105.00           | -0.90              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |

Appendix E

## Test Information

EUT Name: AD1 X55 #243  
 Serial Number: TU162050175  
 Test Description: FCC pt.74 & RSS-210 Radiated Emissions Matching  
 Operating Conditions: 959.725MHz H @ 2mW  
 Operator Name: Alex Stelmaszczyk, Tom Braxton & Mudassar Khan  
 Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
 Test Date: May 5 – 10, 2017

| Frequency<br>MHz | Max Peak<br>(dBμV/m) | Matched<br>Power from<br>Sig Gen | Limit<br>(dBm) | Margin<br>(dBm) | Polarity | Cable Loss<br>(dB) | Cable 2 Loss<br>(dB) | Antenna<br>Gain<br>(dB) | ERP / EIRP<br>Total<br>(dBm) | Status |
|------------------|----------------------|----------------------------------|----------------|-----------------|----------|--------------------|----------------------|-------------------------|------------------------------|--------|
| 2879.200         | <b>37.00</b>         | -83.1                            | -13.0          | 71.0            | H        | 2.70               | 3.15                 | 6.70                    | -82.25                       | PASS   |
| 3838.900         | <b>38.52</b>         | -68.0                            | -13.0          | 55.7            | H        | 3.65               | 4.03                 | 8.40                    | -67.28                       | PASS   |
| 4426.300         | <b>38.75</b>         | -84.8                            | -13.0          | 73.1            | H        | 3.75               | 4.26                 | 9.30                    | -83.51                       | PASS   |
| 4827.700         | <b>38.16</b>         | -79.0                            | -13.0          | 67.3            | V        | 3.90               | 4.40                 | 9.60                    | -77.70                       | PASS   |
| 8874.100         | <b>38.68</b>         | -69.5                            | -13.0          | 60.0            | V        | 5.55               | 3.98                 | 13.00                   | -66.03                       | PASS   |
| 9082.900         | <b>39.71</b>         | -63.3                            | -13.0          | 53.7            | V        | 5.57               | 4.11                 | 13.10                   | -59.88                       | PASS   |
| 9840.100         | <b>39.44</b>         | -63.7                            | -13.0          | 53.6            | V        | 6.01               | 4.09                 | 13.00                   | -60.80                       | PASS   |
|                  |                      |                                  |                |                 |          |                    |                      |                         |                              |        |

## Test Information

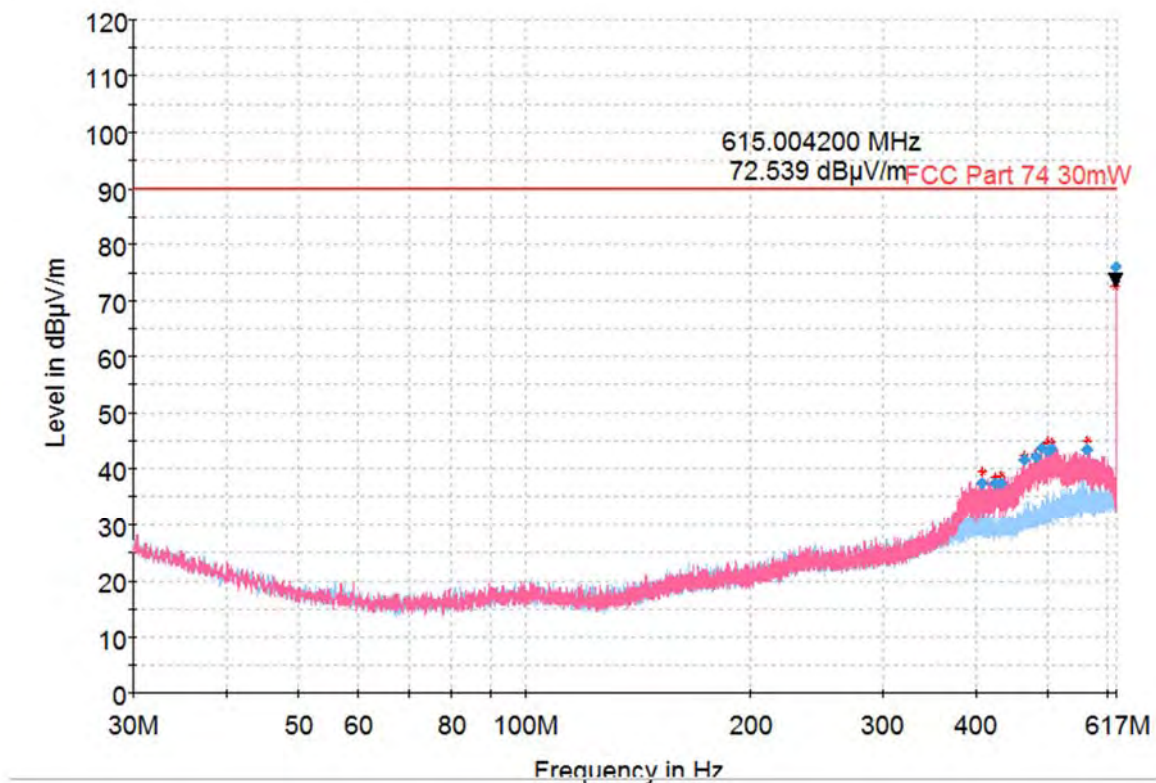
|                       |                                                             |
|-----------------------|-------------------------------------------------------------|
| EUT Name:             | AD1 G57 #17                                                 |
| Serial Number:        | TU163350379                                                 |
| Test Description:     | Radiated RF Emissions 30MHz to 617MHz                       |
| Operating Conditions: | 615.000MHz M @ 20mW                                         |
| Operator Name:        | Alex Stelmaszczyk                                           |
| Comment:              | FCC pt. 74                                                  |
| Description:          | FCC Table, 3m, AAs, No Audio Input, w/L23-26-01 Tuned Notch |
| Test Date & Time      | March 8, 2017 1:55:26 PM                                    |

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 Transmitter 30MHz to 1000MHz 34790

|                 |                                          |
|-----------------|------------------------------------------|
| Hardware Setup: | Electric Field Strength 34790 2016 06 03 |
| Level Unit:     | dBμV/m                                   |

|                 |                  |                  |              |                   |               |
|-----------------|------------------|------------------|--------------|-------------------|---------------|
| <b>Subrange</b> | <b>Step Size</b> | <b>Detectors</b> | <b>IF BW</b> | <b>Meas. Time</b> | <b>Preamp</b> |
| 30 MHz - 1 GHz  | 30 kHz           | PK+              | 120 kHz      | 0.02 s            | 20 dB         |

Full Spectrum



## Test Information

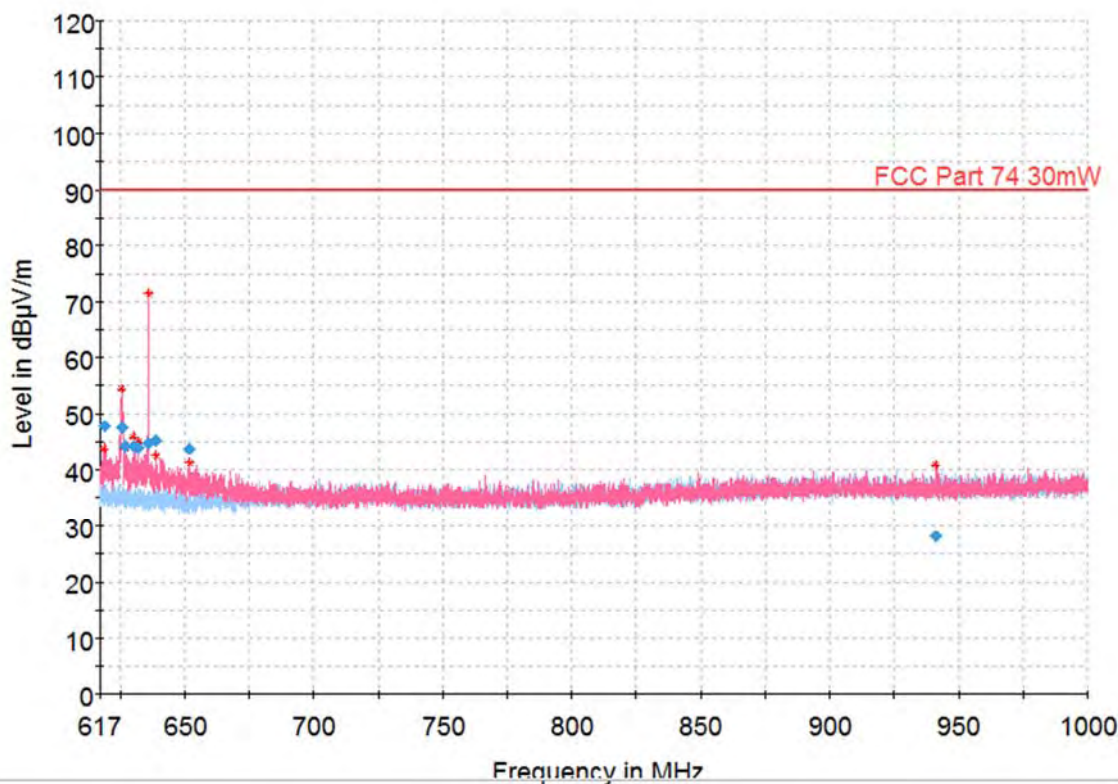
EUT Name: AD1 G57 #17  
Serial Number: TU163350379  
Test Description: Radiated RF Emissions 617Hz to 1000MHz  
Operating Conditions: 615.000MHz M @ 20mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, 3m, AAs, No Audio Input, w/oL23-26-01 Tuned Notch  
Test Date & Time: March 8, 2017 4:31:34 PM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 Transmitter 30MHz to 1000MHz 34790

Hardware Setup: Electric Field Strength 34790 2016 06 03  
Level Unit: dBμV/m

| Subrange       | Step Size | Detectors | IF BW   | Meas. Time | Preamp |
|----------------|-----------|-----------|---------|------------|--------|
| 30 MHz - 1 GHz | 30 kHz    | PK+       | 120 kHz | 0.02 s     | 20 dB  |

Full Spectrum



## Test Information

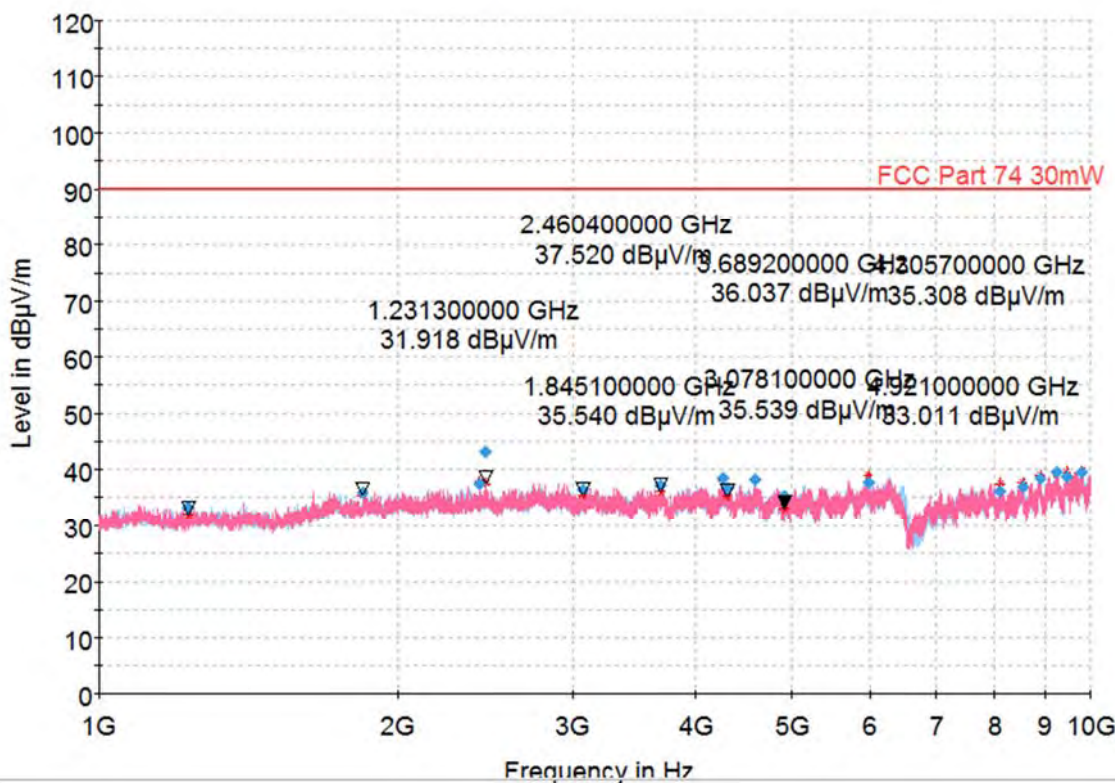
EUT Name: AD1 G57 #17  
Serial Number: TU163350379  
Test Description: Radiated RF Emissions 1GHz to 10GHz  
Operating Conditions: 615.000MHz M @ 20mW  
Operator Name: Russell Smith  
Comment: FCC pt. 74  
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF  
Test Date & Time: March 7, 2017 7:34:55 PM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 1GHz to 10GHz 3117-PA 206583 FCC

Hardware Setup: Electric Field Strength 10GHz 3117-PA 206583 2016 03 24  
Level Unit: dB $\mu$ V/m

| Subrange       | Step Size | Detectors | IF BW | Meas. Time | Preamp |
|----------------|-----------|-----------|-------|------------|--------|
| 1 GHz - 10 GHz | 250 kHz   | PK+       | 1 MHz | 1 s        | 20 dB  |

Full Spectrum





## Appendix E

## Test Information

EUT Name: AD1 G57 #17  
Serial Number: TU163350379  
Test Description: FCC pt.74 Spurious Radiated Emissions  
Operating Conditions: 615.000MHz M @ 20mW  
Operator Name: Alex Stelmaszczyk & Russell Smith  
Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
Test Date: March 7 & 8, 2017

| Frequency<br>MHz | Max Peak<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Measure<br>Time<br>(ms) | Bandwidth<br>(kHz) | Height<br>(cm) | Polarity | Azimuth<br>(deg) | Correction<br>(dB) |
|------------------|----------------------|-------------------|----------------|-------------------------|--------------------|----------------|----------|------------------|--------------------|
| 408.028          | 37.40                | 84.38             | 52.600         | 20                      | 120.00             | 100.000        | V        | -2.00            | 17.90              |
| 424.816          | 37.42                | 84.38             | 52.580         | 20                      | 120.00             | 132.000        | V        | 45.00            | 18.20              |
| 432.917          | 37.68                | 84.38             | 52.320         | 20                      | 120.00             | 126.000        | V        | 0.00             | 18.50              |
| 465.261          | 41.72                | 84.38             | 48.280         | 20                      | 120.00             | 111.000        | V        | 104.00           | 19.80              |
| 481.618          | 42.19                | 84.38             | 47.810         | 20                      | 120.00             | 111.000        | V        | 350.00           | 20.50              |
| 490.032          | 43.88                | 84.38             | 46.120         | 20                      | 120.00             | 100.000        | V        | 46.00            | 20.60              |
| 500.089          | 43.12                | 84.38             | 46.880         | 20                      | 120.00             | 111.000        | V        | 333.00           | 20.70              |
| 505.118          | 43.62                | 84.38             | 46.380         | 20                      | 120.00             | 111.000        | V        | 46.00            | 20.90              |
| 563.466          | 43.33                | 84.38             | 46.670         | 20                      | 120.00             | 111.000        | V        | 84.00            | 22.00              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |
| 618.596          | 47.65                | 84.38             | 42.350         | 20                      | 120.00             | 169.000        | V        | 158.00           | 23.60              |
| 625.477          | 47.60                | 84.38             | 42.400         | 20                      | 120.00             | 172.000        | V        | 144.00           | 23.80              |
| 626.792          | 44.14                | 84.38             | 45.860         | 20                      | 120.00             | 173.000        | V        | 221.00           | 23.80              |
| 630.099          | 44.31                | 84.38             | 45.690         | 20                      | 120.00             | 163.000        | V        | 186.00           | 23.60              |
| 631.924          | 44.07                | 84.38             | 45.930         | 20                      | 120.00             | 131.000        | V        | 164.00           | 23.50              |
| 636.137          | 44.87                | 84.38             | 45.130         | 20                      | 120.00             | 151.000        | V        | 164.00           | 23.40              |
| 638.691          | 45.21                | 84.38             | 44.790         | 20                      | 120.00             | 147.000        | V        | 202.00           | 23.30              |
| 651.713          | 43.73                | 84.38             | 46.270         | 20                      | 120.00             | 160.000        | V        | 158.00           | 22.90              |
| 941.350          | 27.95                | 84.38             | 62.050         | 20                      | 120.00             | 300.000        | V        | 128.00           | 26.10              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |
| 1845.100         | 35.93                | 84.38             | 54.070         | 1000                    | 1000.00            | 163.000        | V        | 181.00           | -15.40             |
| 2424.700         | 37.52                | 84.38             | 52.480         | 1000                    | 1000.00            | 292.000        | H        | 169.00           | -13.00             |
| 2460.400         | 43.17                | 84.38             | 46.830         | 1000                    | 1000.00            | 181.000        | V        | 3.00             | -12.90             |
| 3078.100         | 36.48                | 84.38             | 53.520         | 1000                    | 1000.00            | 350.000        | V        | 203.00           | -11.30             |
| 3689.200         | 37.15                | 84.38             | 52.850         | 1000                    | 1000.00            | 387.000        | H        | 192.00           | -9.60              |
| 4255.300         | 38.67                | 84.38             | 51.330         | 1000                    | 1000.00            | 118.000        | H        | 158.00           | -8.20              |
| 4305.700         | 36.83                | 84.38             | 53.170         | 1000                    | 1000.00            | 284.000        | H        | 306.00           | -8.10              |
| 4598.200         | 38.17                | 84.38             | 51.830         | 1000                    | 1000.00            | 207.000        | V        | 69.00            | -7.70              |
| 4921.000         | 35.20                | 84.38             | 54.800         | 1000                    | 1000.00            | 107.000        | V        | 76.00            | -7.60              |
| 5980.900         | 37.87                | 84.38             | 52.130         | 1000                    | 1000.00            | 382.000        | V        | 204.00           | -5.50              |
| 8121.100         | 36.11                | 84.38             | 53.890         | 1000                    | 1000.00            | 199.000        | H        | 12.00            | -2.60              |
| 8535.100         | 36.88                | 84.38             | 53.120         | 1000                    | 1000.00            | 400.000        | H        | 211.00           | -2.30              |
| 8895.100         | 38.39                | 84.38             | 51.610         | 1000                    | 1000.00            | 206.000        | V        | 313.00           | -2.10              |
| 9239.200         | 39.64                | 84.38             | 50.360         | 1000                    | 1000.00            | 135.000        | V        | 193.00           | -1.50              |
| 9472.000         | 38.81                | 84.38             | 51.190         | 1000                    | 1000.00            | 212.000        | H        | 87.00            | -1.30              |
| 9823.600         | 39.46                | 84.38             | 50.540         | 1000                    | 1000.00            | 365.000        | V        | 154.00           | -0.90              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |



## Test Information

EUT Name: AD1 G57 #17  
Serial Number: TU163350379  
Test Description: FCC pt.74 & RSS-210 Radiated Emissions Matching  
Operating Conditions: 615.000MHz M @ 20mW  
Operator Name: Alex Stelmaszczyk, Tom Braxton & Mudassar Khan  
Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
Test Date: May 5 – 10, 2017

| Frequency<br>MHz | Max Peak<br>(dBμV/m) | Matched<br>Power from<br>Sig Gen | Limit<br>(dBm) | Margin<br>(dBm) | Polarity | Cable Loss<br>(dB) | Cable 2 Loss<br>(dB) | Antenna<br>Gain<br>(dB) | ERP / EIRP<br>Total<br>(dBm) | Status |
|------------------|----------------------|----------------------------------|----------------|-----------------|----------|--------------------|----------------------|-------------------------|------------------------------|--------|
| 1845.100         | 35.93                | -75.0                            | -13.0          | 67.7            | V        | 2.70               | 2.96                 | 5.40                    | -75.26                       | PASS   |
| 2460.400         | 43.17                | -59.9                            | -13.0          | 52.6            | V        | 2.70               | 2.96                 | 5.40                    | -60.16                       | PASS   |
| 3078.100         | 36.48                | -73.4                            | -13.0          | 61.2            | V        | 3.00               | 3.24                 | 7.00                    | -72.64                       | PASS   |
| 4305.700         | 36.83                | -75.0                            | -13.0          | 63.5            | H        | 3.70               | 4.11                 | 9.30                    | -73.51                       | PASS   |
| 4921.000         | 35.20                | -71.1                            | -13.0          | 59.4            | V        | 3.90               | 4.40                 | 9.60                    | -69.80                       | PASS   |
|                  |                      |                                  |                |                 |          |                    |                      |                         |                              |        |

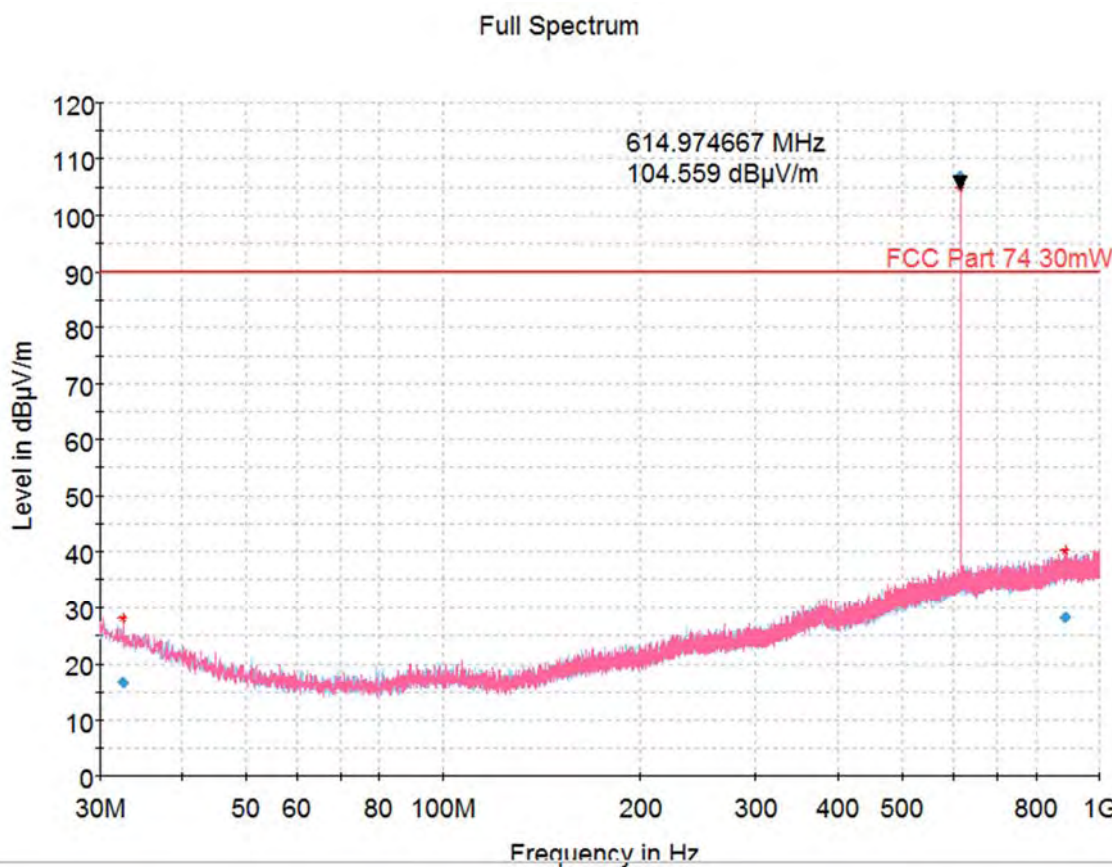
## Test Information

EUT Name: AD1 G57 #17  
Serial Number: TU163350379  
Test Description: Radiated RF Emissions 30MHz to 1GHz  
Operating Conditions: 615.000MHz M @ 2mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, 3m, AAs, No Audio Input, w/oL23-26-01Tuned Notch  
Test Date & Time: March 8, 2017 5:09:17 PM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 Transmitter 30MHz to 1000MHz 34790

Hardware Setup: Electric Field Strength 34790 2016 06 03  
Level Unit: dBμV/m

| Subrange       | Step Size | Detectors | IF BW   | Meas. Time | Preamp |
|----------------|-----------|-----------|---------|------------|--------|
| 30 MHz - 1 GHz | 30 kHz    | PK+       | 120 kHz | 0.02 s     | 20 dB  |



## Test Information

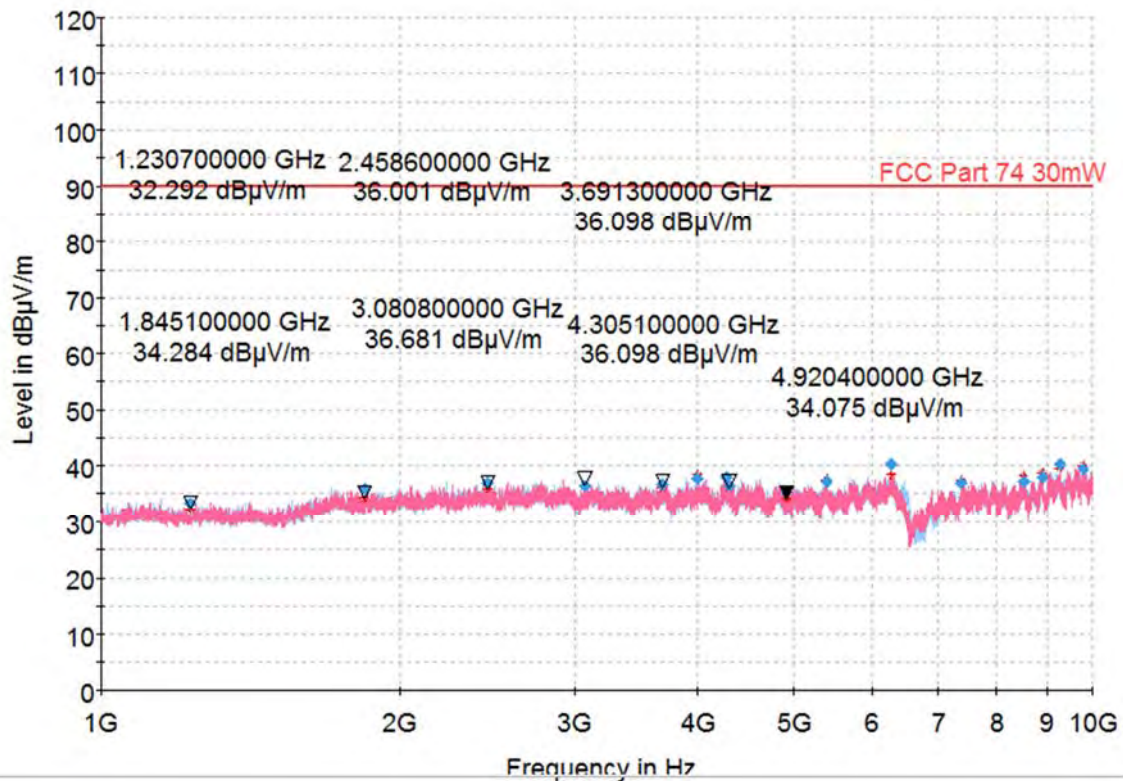
EUT Name: AD1 G57 #17  
Serial Number: TU163350379  
Test Description: Radiated RF Emissions 1GHz to 10GHz  
Operating Conditions: 615.000MHz M @ 2mW  
Operator Name: Russell Smith  
Comment: FCC pt. 74  
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF  
Test Date & Time: March 7, 2017 6:33:10 PM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 1GHz to 10GHz 3117-PA 206583 FCC

Hardware Setup: Electric Field Strength 10GHz 3117-PA 206583 2016 03 24  
Level Unit: dBμV/m

| Subrange       | Step Size | Detectors | IF BW | Meas. Time | Preamplifier |
|----------------|-----------|-----------|-------|------------|--------------|
| 1 GHz - 10 GHz | 250 kHz   | PK+       | 1 MHz | 1 s        | 20 dB        |

Full Spectrum



## Test Information

EUT Name: AD1 G57 #17  
Serial Number: TU163350379  
Test Description: FCC pt.74 Spurious Radiated Emissions  
Operating Conditions: 615.000MHz M @ 2mW  
Operator Name: Alex Stelmaszczyk & Russell Smith  
Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
Test Date: March 7 & 8, 2017

| Frequency<br>MHz | Max Peak<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Measure<br>Time<br>(ms) | Bandwidth<br>(kHz) | Height<br>(cm) | Polarity | Azimuth<br>(deg) | Correction<br>(dB) |
|------------------|----------------------|-------------------|----------------|-------------------------|--------------------|----------------|----------|------------------|--------------------|
| 32.619           | <b>16.59</b>         | 84.38             | 73.410         | 20                      | 120.00             | 333.000        | V        | -4.00            | 15.60              |
| 889.000          | <b>28.19</b>         | 84.38             | 61.810         | 20                      | 120.00             | 277.000        | H        | 217.00           | 26.00              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |
| 1230.700         | <b>33.17</b>         | 84.38             | 56.830         | 1000                    | 1000.00            | 113.000        | H        | 241.00           | -19.30             |
| 1845.100         | <b>35.96</b>         | 84.38             | 54.040         | 1000                    | 1000.00            | 215.000        | V        | 255.00           | -15.40             |
| 2458.600         | <b>36.95</b>         | 84.38             | 53.050         | 1000                    | 1000.00            | 400.000        | H        | 126.00           | -12.90             |
| 3080.800         | <b>36.57</b>         | 84.38             | 53.430         | 1000                    | 1000.00            | 166.000        | H        | 127.00           | -11.30             |
| 3691.300         | <b>36.76</b>         | 84.38             | 53.240         | 1000                    | 1000.00            | 164.000        | H        | 90.00            | -9.60              |
| 4008.100         | <b>37.84</b>         | 84.38             | 52.160         | 1000                    | 1000.00            | 194.000        | H        | 88.00            | -8.60              |
| 4279.300         | <b>38.00</b>         | 84.38             | 52.000         | 1000                    | 1000.00            | 315.000        | V        | 100.00           | -8.20              |
| 4305.100         | <b>36.58</b>         | 84.38             | 53.420         | 1000                    | 1000.00            | 150.000        | H        | 146.00           | -8.10              |
| 4920.400         | <b>35.29</b>         | 84.38             | 54.710         | 1000                    | 1000.00            | 309.000        | V        | 10.00            | -7.60              |
| 5397.400         | <b>37.22</b>         | 84.38             | 52.780         | 1000                    | 1000.00            | 226.000        | H        | 180.00           | -7.20              |
| 6281.200         | <b>40.36</b>         | 84.38             | 49.640         | 1000                    | 1000.00            | 217.000        | H        | 317.00           | -4.80              |
| 7373.500         | <b>36.95</b>         | 84.38             | 53.050         | 1000                    | 1000.00            | 400.000        | H        | 19.00            | -3.30              |
| 8520.100         | <b>37.06</b>         | 84.38             | 52.940         | 1000                    | 1000.00            | 375.000        | V        | 181.00           | -2.30              |
| 8893.900         | <b>37.95</b>         | 84.38             | 52.050         | 1000                    | 1000.00            | 239.000        | V        | 347.00           | -2.10              |
| 9266.800         | <b>40.37</b>         | 84.38             | 49.630         | 1000                    | 1000.00            | 261.000        | H        | 261.00           | -1.60              |
| 9796.000         | <b>39.35</b>         | 84.38             | 50.650         | 1000                    | 1000.00            | 204.000        | V        | 31.00            | -1.00              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |

## Appendix E

### Test Information

EUT Name: AD1 G57 #17  
 Serial Number: TU163350379  
 Test Description: FCC pt.74 & RSS-210 Radiated Emissions Matching  
 Operating Conditions: 615.000MHz M @ 2mW  
 Operator Name: Alex Stelmaszczyk, Tom Braxton & Mudassar Khan  
 Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
 Test Date: May 5 – 10, 2017

| Frequency MHz | Max Peak (dBμV/m) | Matched Power from Sig Gen | Limit (dBm) | Margin (dBm) | Polarity | Cable Loss (dB) | Cable 2 Loss (dB) | Antenna Gain (dB) | ERP / EIRP Total (dBm) | Status |
|---------------|-------------------|----------------------------|-------------|--------------|----------|-----------------|-------------------|-------------------|------------------------|--------|
| 1230.700      | 33.17             | -80.1                      | -13.0       | 64.9         | H        | 2.00            | 2.10              | 1.90              | -82.30                 | PASS   |
| 1845.100      | 35.96             | -81.8                      | -13.0       | 74.5         | V        | 2.70            | 2.96              | 5.40              | -82.06                 | PASS   |
| 2458.600      | 36.95             | -79.7                      | -13.0       | 72.4         | H        | 2.70            | 2.96              | 5.40              | -79.96                 | PASS   |
| 3080.800      | 36.57             | -80.4                      | -13.0       | 68.2         | H        | 3.00            | 3.24              | 7.00              | -79.64                 | PASS   |
| 3691.300      | 36.76             | -82.1                      | -13.0       | 71.4         | H        | 2.70            | 3.15              | 8.10              | -79.85                 | PASS   |
| 4008.100      | 37.84             | -83.6                      | -13.0       | 71.9         | H        | 3.70            | 3.89              | 8.90              | -82.29                 | PASS   |
| 4279.300      | 38.00             | -76.2                      | -13.0       | 64.7         | V        | 3.70            | 4.11              | 9.30              | -74.71                 | PASS   |
| 4305.100      | 36.58             | -83.9                      | -13.0       | 72.4         | H        | 3.70            | 4.11              | 9.30              | -82.41                 | PASS   |
| 4920.400      | 35.29             | -75.0                      | -13.0       | 63.3         | V        | 3.90            | 4.40              | 9.60              | -73.70                 | PASS   |
| 5397.400      | 37.22             | -84.7                      | -13.0       | 72.8         | H        | 4.25            | 4.77              | 10.10             | -83.62                 | PASS   |
| 6281.200      | 40.36             | -83.9                      | -13.0       | 71.5         | H        | 4.60            | 5.27              | 10.50             | -83.27                 | PASS   |
| 8893.900      | 37.95             | -70.6                      | -13.0       | 61.1         | V        | 5.55            | 3.98              | 13.00             | -67.13                 | PASS   |
| 9266.800      | 40.37             | -86.4                      | -13.0       | 76.6         | H        | 5.90            | 4.00              | 13.10             | -83.20                 | PASS   |
| 9796.000      | 39.35             | -56.6                      | -13.0       | 46.5         | V        | 6.00            | 4.08              | 13.00             | -53.68                 | PASS   |
|               |                   |                            |             |              |          |                 |                   |                   |                        |        |
|               |                   |                            |             |              |          |                 |                   |                   |                        |        |

## Test Information

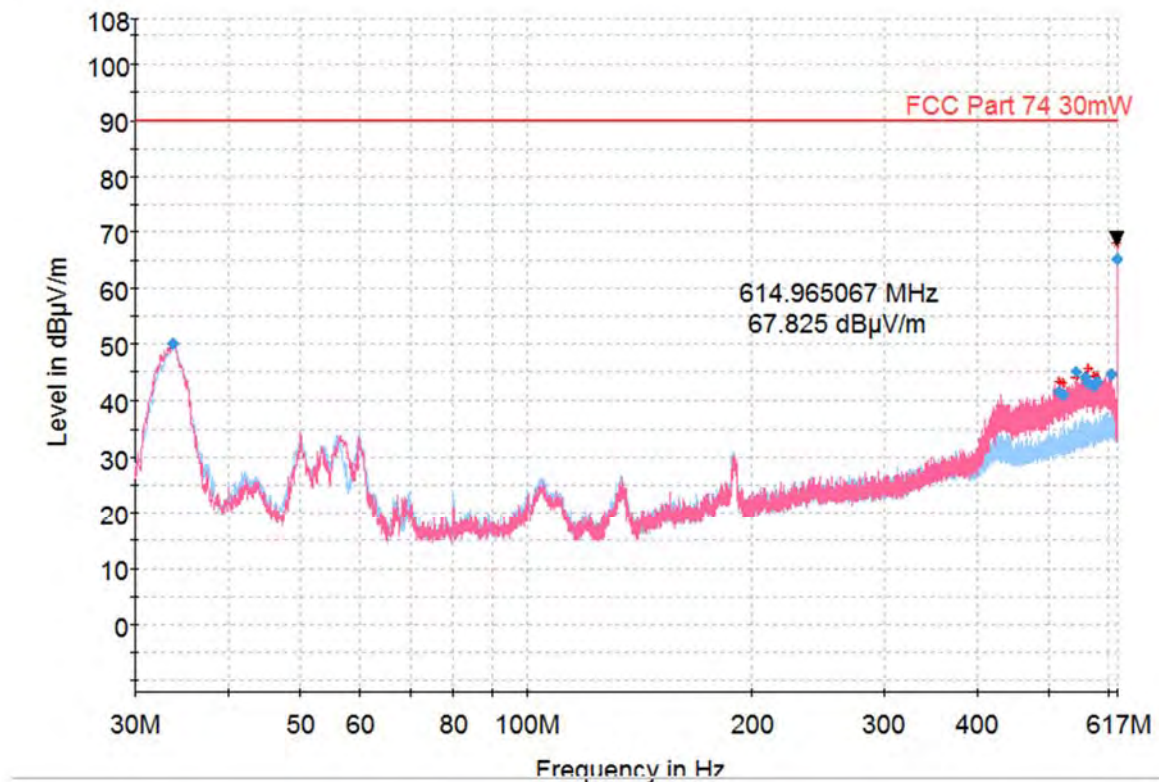
EUT Name: AD1 K54 #103  
Serial Number: TU163380075  
Test Description: Radiated RF Emissions 30MHz to 617MHz  
Operating Conditions: 615.000MHz M @ 20mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, 3m, AAs, No Audio Input, w/L23-26-01 Tuned Notch  
Test Date & Time: February 22, 2017 2:31:50 PM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 Transmitter 30MHz to 1000MHz 34790

Hardware Setup: Electric Field Strength 34790 2016 06 03  
Level Unit: dB $\mu$ V/m

| Subrange       | Step Size | Detectors | IF BW   | Meas. Time | Preamp |
|----------------|-----------|-----------|---------|------------|--------|
| 30 MHz - 1 GHz | 30 kHz    | PK+       | 120 kHz | 0.02 s     | 20 dB  |

Full Spectrum



## Test Information

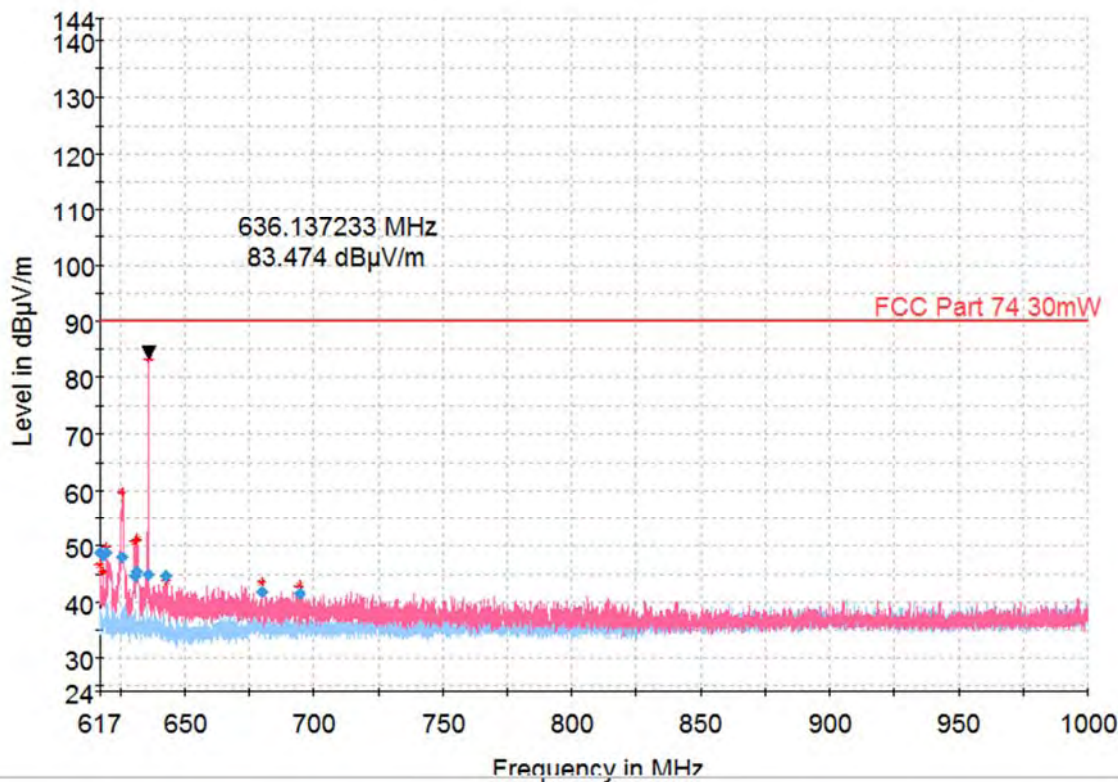
EUT Name: AD1 K54 #103  
Serial Number: TU163380075  
Test Description: Radiated RF Emissions 617Hz to 1000MHz  
Operating Conditions: 615.000MHz M @ 20mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, 3m, AAs, No Audio Input, w/L23-26-01 Tuned Notch  
Test Date & Time: February 22, 2017 3:29:00 PM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 Transmitter 30MHz to 1000MHz 34790

Hardware Setup: Electric Field Strength 34790 2016 06 03  
Level Unit: dBμV/m

| Subrange       | Step Size | Detectors | IF BW   | Meas. Time | Preamplifier |
|----------------|-----------|-----------|---------|------------|--------------|
| 30 MHz - 1 GHz | 30 kHz    | PK+       | 120 kHz | 0.02 s     | 20 dB        |

### Full Spectrum



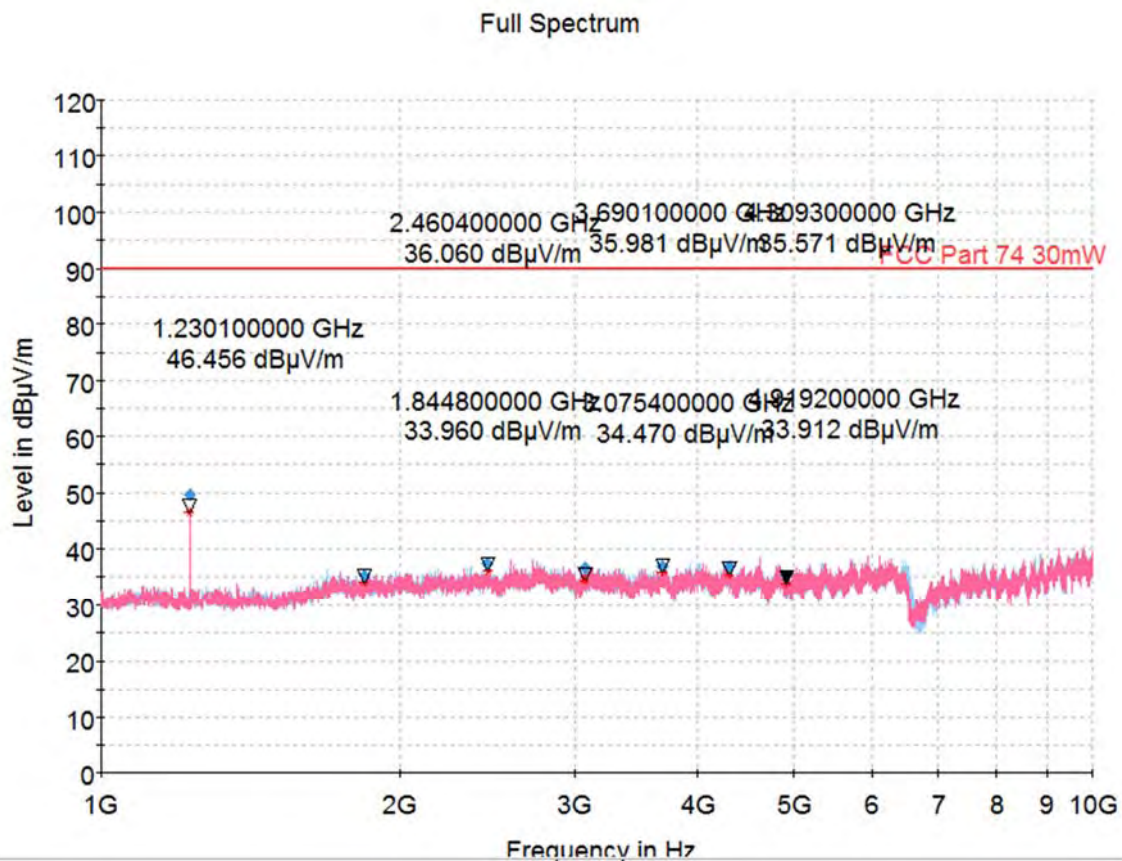
## Test Information

EUT Name: AD1 K54 #65  
Serial Number: TU163380075  
Test Description: Radiated RF Emissions 1GHz to 10GHz  
Operating Conditions: 615.000MHz M @ 20mW  
Operator Name: Russell Smith  
Comment: FCC pt. 74  
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF  
Test Date & Time: March 6, 2017 5:59:43 PM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 1GHz to 10GHz 3117-PA 206583 FCC

Hardware Setup: Electric Field Strength 10GHz 3117-PA 206583 2016 03 24  
Level Unit: dBμV/m

| Subrange       | Step Size | Detectors | IF BW | Meas. Time | Preamp |
|----------------|-----------|-----------|-------|------------|--------|
| 1 GHz - 10 GHz | 250 kHz   | PK+       | 1 MHz | 1 s        | 20 dB  |



## Test Information

EUT Name: AD1 K54 #65  
 Serial Number: TU163380075  
 Test Description: FCC pt.74 Spurious Radiated Emissions  
 Operating Conditions: 615.000MHz M @ 20mW  
 Operator Name: Alex Stelmaszczyk & Russell Smith  
 Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
 Test Date: February 22, 2017 & March 6, 2017

| Frequency<br>MHz | Max Peak<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Measure<br>Time<br>(ms) | Bandwidth<br>(kHz) | Height<br>(cm) | Polarity | Azimuth<br>(deg) | Correction<br>(dB) |
|------------------|----------------------|-------------------|----------------|-------------------------|--------------------|----------------|----------|------------------|--------------------|
| 33.796           | 50.01                | 84.38             | 39.990         | 20                      | 120.00             | 200.000        | H        | 229.00           | 15.00              |
| 514.803          | 41.51                | 84.38             | 48.490         | 20                      | 120.00             | 112.000        | V        | 51.00            | 21.20              |
| 520.869          | 40.98                | 84.38             | 49.020         | 20                      | 120.00             | 113.000        | V        | 45.00            | 21.30              |
| 542.999          | 45.15                | 84.38             | 44.850         | 20                      | 120.00             | 112.000        | V        | 300.00           | 21.90              |
| 557.928          | 44.16                | 84.38             | 45.840         | 20                      | 120.00             | 100.000        | V        | 73.00            | 22.10              |
| 563.426          | 43.08                | 84.38             | 46.920         | 20                      | 120.00             | 111.000        | V        | 47.00            | 22.00              |
| 573.269          | 42.69                | 84.38             | 47.310         | 20                      | 120.00             | 111.000        | V        | 55.00            | 22.00              |
| 578.943          | 43.46                | 84.38             | 46.540         | 20                      | 120.00             | 100.000        | V        | 300.00           | 22.20              |
| 605.025          | 44.59                | 84.38             | 45.410         | 20                      | 120.00             | 170.000        | V        | 114.00           | 23.10              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |
| 617.013          | 48.73                | 84.38             | 41.270         | 20                      | 120.00             | 179.000        | V        | 197.00           | 23.60              |
| 618.187          | 48.28                | 84.38             | 41.720         | 20                      | 120.00             | 166.000        | V        | 117.00           | 23.60              |
| 619.579          | 48.66                | 84.38             | 41.340         | 20                      | 120.00             | 168.000        | V        | 183.00           | 23.60              |
| 625.809          | 47.92                | 84.38             | 42.080         | 20                      | 120.00             | 173.000        | V        | 129.00           | 23.80              |
| 630.392          | 44.59                | 84.38             | 45.410         | 20                      | 120.00             | 138.000        | V        | 172.00           | 23.60              |
| 631.643          | 45.35                | 84.38             | 44.650         | 20                      | 120.00             | 167.000        | V        | 145.00           | 23.60              |
| 636.137          | 44.77                | 84.38             | 45.230         | 20                      | 120.00             | 159.000        | V        | 163.00           | 23.40              |
| 643.018          | 44.45                | 84.38             | 45.550         | 20                      | 120.00             | 166.000        | V        | -7.00            | 23.10              |
| 679.991          | 41.78                | 84.38             | 48.220         | 20                      | 120.00             | 151.000        | V        | 160.00           | 23.80              |
| 694.430          | 41.48                | 84.38             | 48.520         | 20                      | 120.00             | 152.000        | V        | 13.00            | 23.90              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |
| 1230.100         | 49.68                | 84.38             | 40.320         | 1000                    | 1000.00            | 143.000        | V        | 199.00           | -19.30             |
| 1844.800         | 35.26                | 84.38             | 54.740         | 1000                    | 1000.00            | 195.000        | V        | 313.00           | -15.40             |
| 2460.400         | 37.41                | 84.38             | 52.590         | 1000                    | 1000.00            | 294.000        | H        | 172.00           | -12.90             |
| 3075.400         | 36.70                | 84.38             | 53.300         | 1000                    | 1000.00            | 175.000        | V        | 173.00           | -11.30             |
| 3690.100         | 36.91                | 84.38             | 53.090         | 1000                    | 1000.00            | 322.000        | H        | 87.00            | -9.60              |
| 4309.300         | 36.91                | 84.38             | 53.090         | 1000                    | 1000.00            | 377.000        | V        | 13.00            | -8.10              |
| 4919.200         | 35.31                | 84.38             | 54.690         | 1000                    | 1000.00            | 216.000        | H        | 112.00           | -7.60              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |

Appendix E

## Test Information

EUT Name: AD1 K54 #65  
 Serial Number: TU163380075  
 Test Description: FCC pt.74 & RSS-210 Radiated Emissions Matching  
 Operating Conditions: 615.000MHz M @ 20mW  
 Operator Name: Alex Stelmaszczyk, Tom Braxton & Mudassar Khan  
 Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
 Test Date: May 5 – 10, 2017

| Frequency<br>MHz | Max Peak<br>(dBμV/m) | Matched<br>Power from<br>Sig Gen | Limit<br>(dBm) | Margin<br>(dBm) | Polarity | Cable Loss<br>(dB) | Cable 2 Loss<br>(dB) | Antenna<br>Gain<br>(dB) | ERP / EIRP<br>Total<br>(dBm) | Status |
|------------------|----------------------|----------------------------------|----------------|-----------------|----------|--------------------|----------------------|-------------------------|------------------------------|--------|
| 1230.100         | 49.68                | -47.9                            | -13.0          | 32.7            | V        | 2.00               | 2.10                 | 1.90                    | -50.10                       | PASS   |
| 1844.800         | 35.26                | -80.5                            | -13.0          | 73.2            | V        | 2.70               | 2.96                 | 5.40                    | -80.76                       | PASS   |
| 2460.400         | 37.41                | -79.7                            | -13.0          | 72.4            | H        | 2.70               | 2.96                 | 5.40                    | -79.96                       | PASS   |
| 3075.400         | 36.70                | -79.5                            | -13.0          | 67.3            | V        | 3.00               | 3.24                 | 7.00                    | -78.74                       | PASS   |
| 3690.100         | 36.91                | -80.3                            | -13.0          | 69.6            | H        | 2.70               | 3.15                 | 8.10                    | -78.05                       | PASS   |
| 4309.300         | 36.91                | -80.3                            | -13.0          | 68.8            | V        | 3.70               | 4.11                 | 9.30                    | -78.81                       | PASS   |
| 4919.200         | 35.31                | -82.5                            | -13.0          | 70.8            | H        | 3.90               | 4.40                 | 9.60                    | -81.20                       | PASS   |
|                  |                      |                                  |                |                 |          |                    |                      |                         |                              |        |

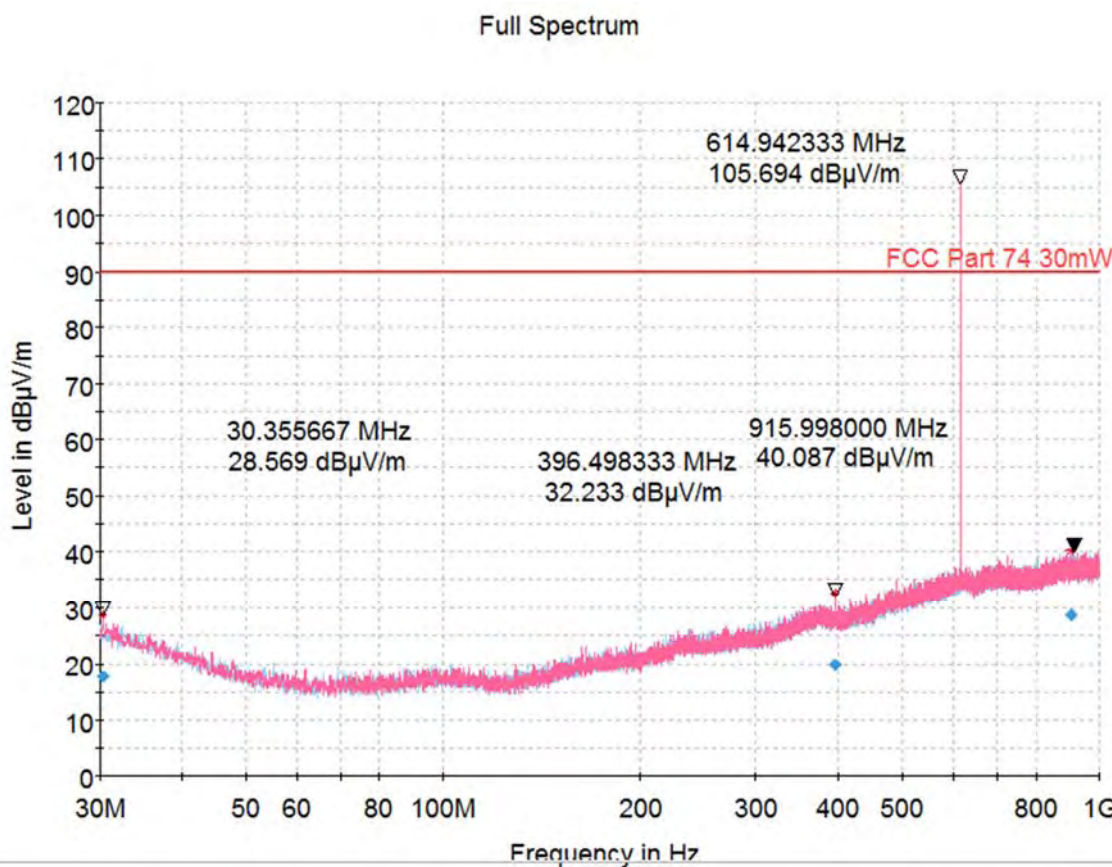
## Test Information

EUT Name: AD1 K54 #103  
Serial Number: TU163380075  
Test Description: Radiated RF Emissions 30MHz to 1GHz  
Operating Conditions: 615.000MHz M @ 2mW  
Operator Name: Alex Stelmaszczyk  
Comment: FCC pt. 74  
Description: FCC Table, 3m, AAs, No Audio Input, w/oL23-26-01 Tuned Notch  
Test Date & Time: March 2, 2017 10:02:08 AM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 Transmitter 30MHz to 1000MHz 34790

Hardware Setup: Electric Field Strength 34790 2016 06 03  
Level Unit: dBμV/m

| Subrange       | Step Size | Detectors | IF BW   | Meas. Time | Preamp |
|----------------|-----------|-----------|---------|------------|--------|
| 30 MHz - 1 GHz | 30 kHz    | PK+       | 120 kHz | 0.02 s     | 20 dB  |



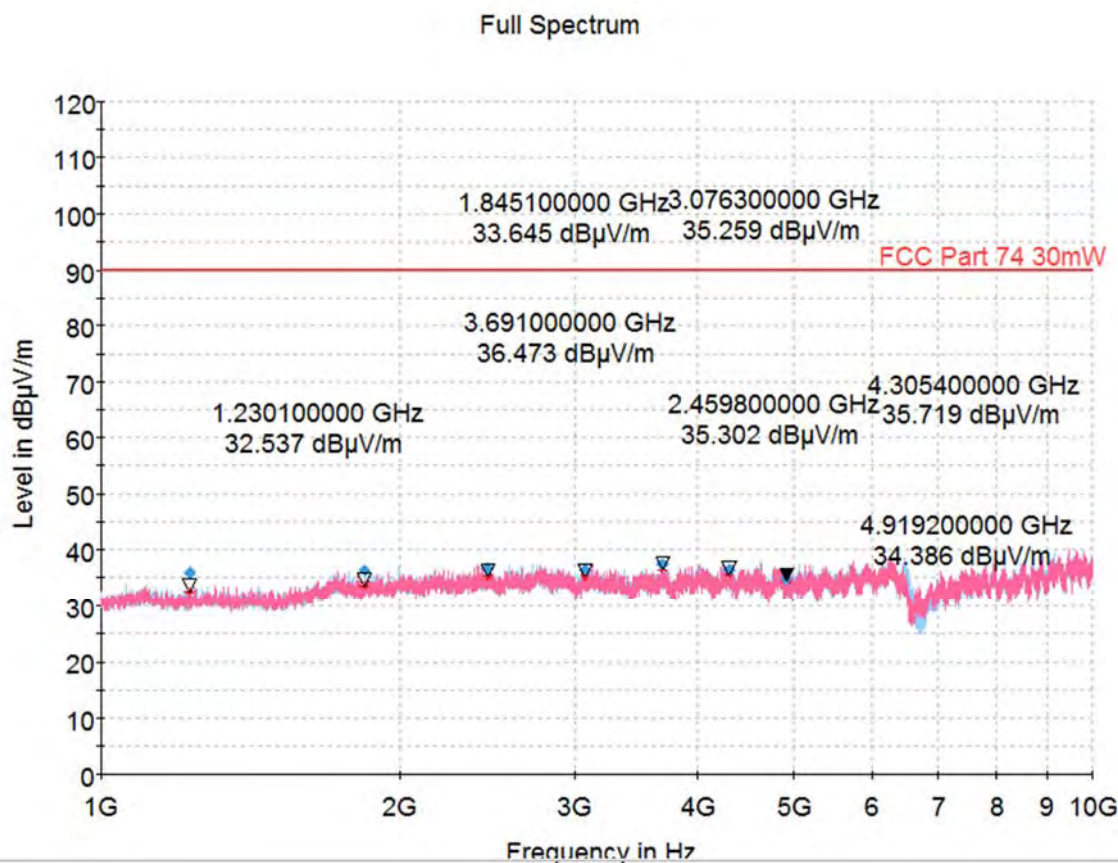
## Test Information

EUT Name: AD1 K54 #103  
Serial Number: TU163380075  
Test Description: Radiated RF Emissions 1GHz to 10GHz  
Operating Conditions: 615.000MHz M @ 2mW  
Operator Name: Russell Smith  
Comment: FCC pt. 74  
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF  
Test Date & Time: March 6, 2017 4:48:05 PM

## EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC 74 1GHz to 10GHz 3117-PA 206583 FCC

Hardware Setup: Electric Field Strength 10GHz 3117-PA 206583 2016 03 24  
Level Unit: dBμV/m

| Subrange       | Step Size | Detectors | IF BW | Meas. Time | Preamp |
|----------------|-----------|-----------|-------|------------|--------|
| 1 GHz - 10 GHz | 250 kHz   | PK+       | 1 MHz | 1 s        | 20 dB  |



Appendix E

## Test Information

EUT Name: AD1 K54 #103  
 Serial Number: TU163380075  
 Test Description: FCC pt.74 Spurious Radiated Emissions  
 Operating Conditions: 615.000MHz M @ 2mW  
 Operator Name: Alex Stelmaszczyk & Russell Smith  
 Comment: Horizontal and Vertical Antennae 30MHz – 10GHz  
 Test Date: March 2 & 6, 2017

| Frequency<br>MHz | Max Peak<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Measure<br>Time<br>(ms) | Bandwidth<br>(kHz) | Height<br>(cm) | Polarity | Azimuth<br>(deg) | Correction<br>(dB) |
|------------------|----------------------|-------------------|----------------|-------------------------|--------------------|----------------|----------|------------------|--------------------|
| 30.388           | 17.69                | 84.38             | 72.310         | 20                      | 120.00             | 400.000        | V        | 8.00             | 16.80              |
| 396.531          | 19.77                | 84.38             | 70.230         | 20                      | 120.00             | 400.000        | V        | 342.00           | 17.80              |
| 906.654          | 28.73                | 84.38             | 61.270         | 20                      | 120.00             | 393.000        | H        | 76.00            | 26.20              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |
| 1230.100         | 35.96                | 84.38             | 54.040         | 1000                    | 1000.00            | 204.000        | V        | 225.00           | -19.30             |
| 1845.100         | 36.29                | 84.38             | 53.710         | 1000                    | 1000.00            | 252.000        | H        | 255.00           | -15.40             |
| 2459.800         | 36.85                | 84.38             | 53.150         | 1000                    | 1000.00            | 338.000        | H        | 115.00           | -12.90             |
| 3076.300         | 36.55                | 84.38             | 53.450         | 1000                    | 1000.00            | 345.000        | V        | 194.00           | -11.30             |
| 3691.000         | 37.28                | 84.38             | 52.720         | 1000                    | 1000.00            | 322.000        | V        | 223.00           | -9.60              |
| 4305.400         | 36.64                | 84.38             | 53.360         | 1000                    | 1000.00            | 150.000        | V        | 337.00           | -8.10              |
| 4919.200         | 34.85                | 84.38             | 55.150         | 1000                    | 1000.00            | 191.000        | H        | 82.00            | -7.60              |
|                  |                      |                   |                |                         |                    |                |          |                  |                    |