

Appendix E

Test Information

EUT Name: AD2 G55 #55
Serial Number: TU162030005
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 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
1272.100	33.41	-50.9	-13.0	56.6	V	2.10	2.64	3.90	-51.74	PASS
1907.800	37.45	-71.4	-13.0	52.6	H	2.30	2.64	5.40	-70.94	PASS
2544.400	37.99	-71.1	-13.0	52.0	V	2.60	2.64	7.00	-69.34	PASS
3168.700	39.33	-67.7	-13.0	50.7	H	3.05	3.44	7.00	-67.19	PASS
3815.800	39.44	-72.0	-13.0	50.6	V	3.65	4.03	8.40	-71.28	PASS
6992.500	42.27	-56.1	-13.0	47.7	H	5.15	5.52	10.90	-55.87	PASS
7760.200	39.78	-73.0	-13.0	50.2	V	5.25	-4.07	12.10	-62.08	PASS

Test Information

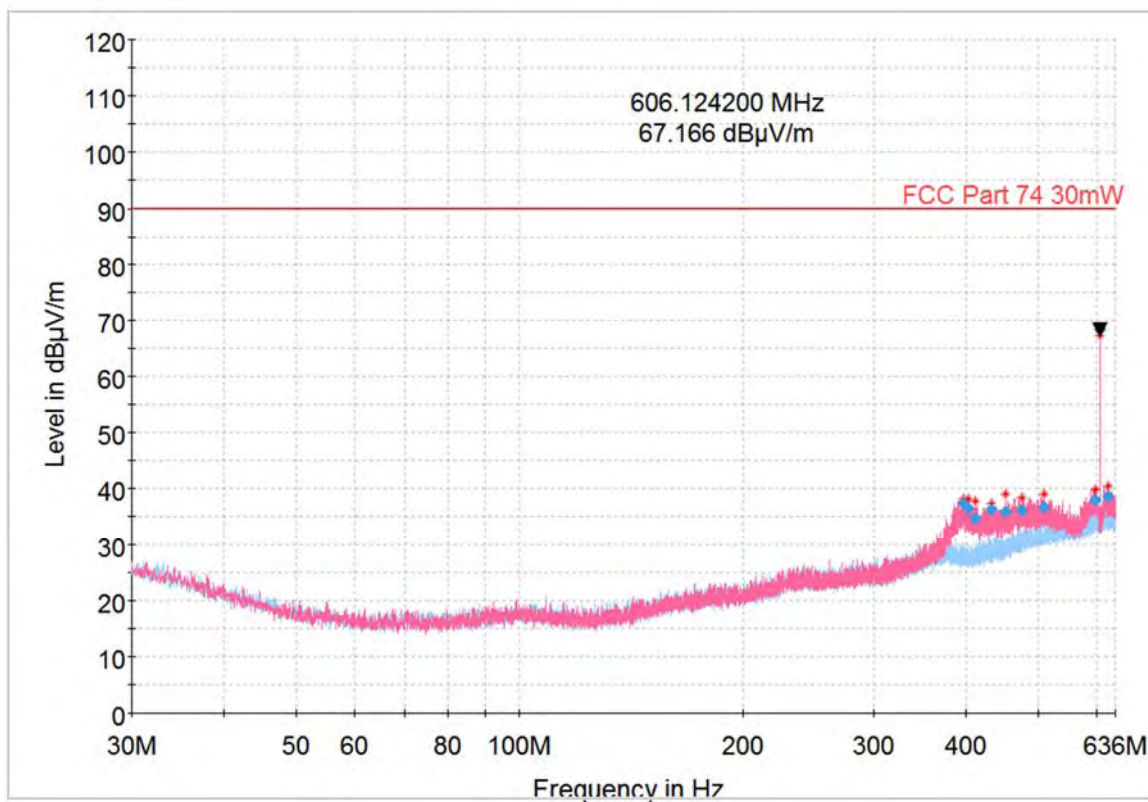
EUT Name: AD2 K53 #134
Serial Number: TU162080102
Test Description: Radiated RF Emissions 30MHz to 636MHz
Operating Conditions: 606.125MHz L @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w L23-26-01 Tuned Notch
Test Date & Time: November 1, 2016 3:57:20 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

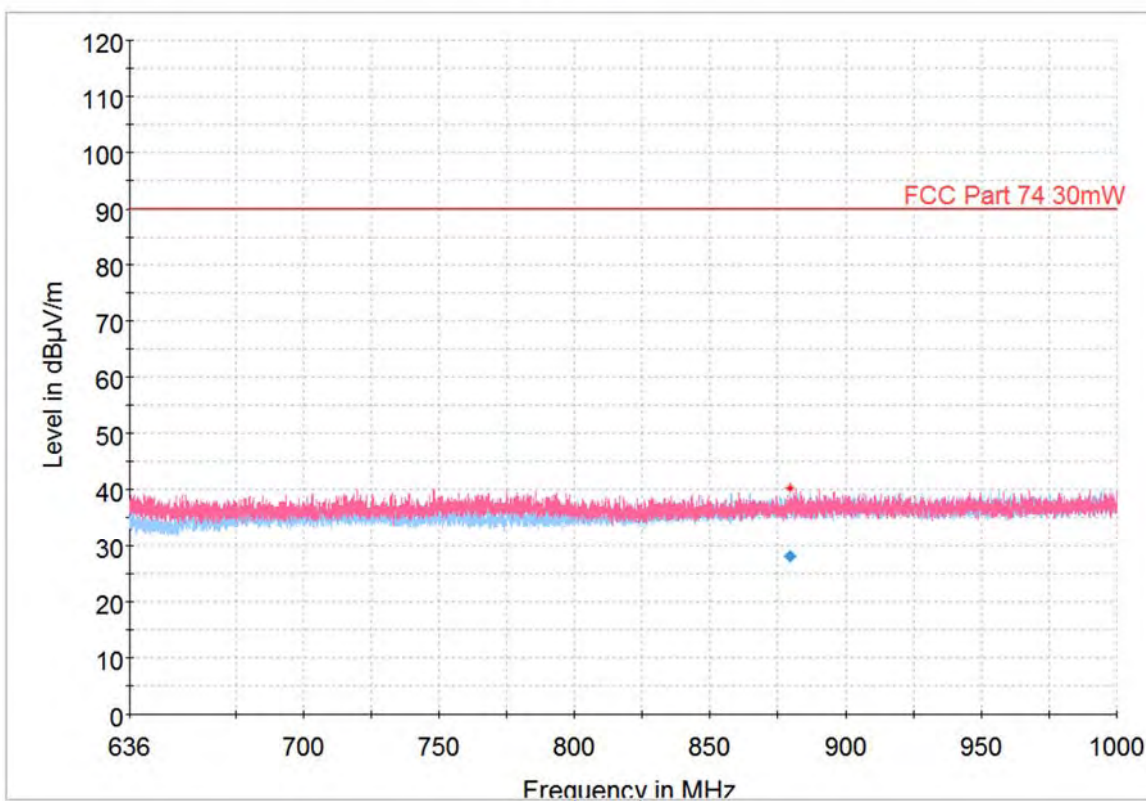
EUT Name: AD2 K53 #134
Serial Number: TU162080102
Test Description: Radiated RF Emissions 636 - 1000MHz
Operating Conditions: 606.125MHz L @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w/o L23-26-01 Tuned Notch
Test Date & Time: November 2, 2016 9:08:58 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

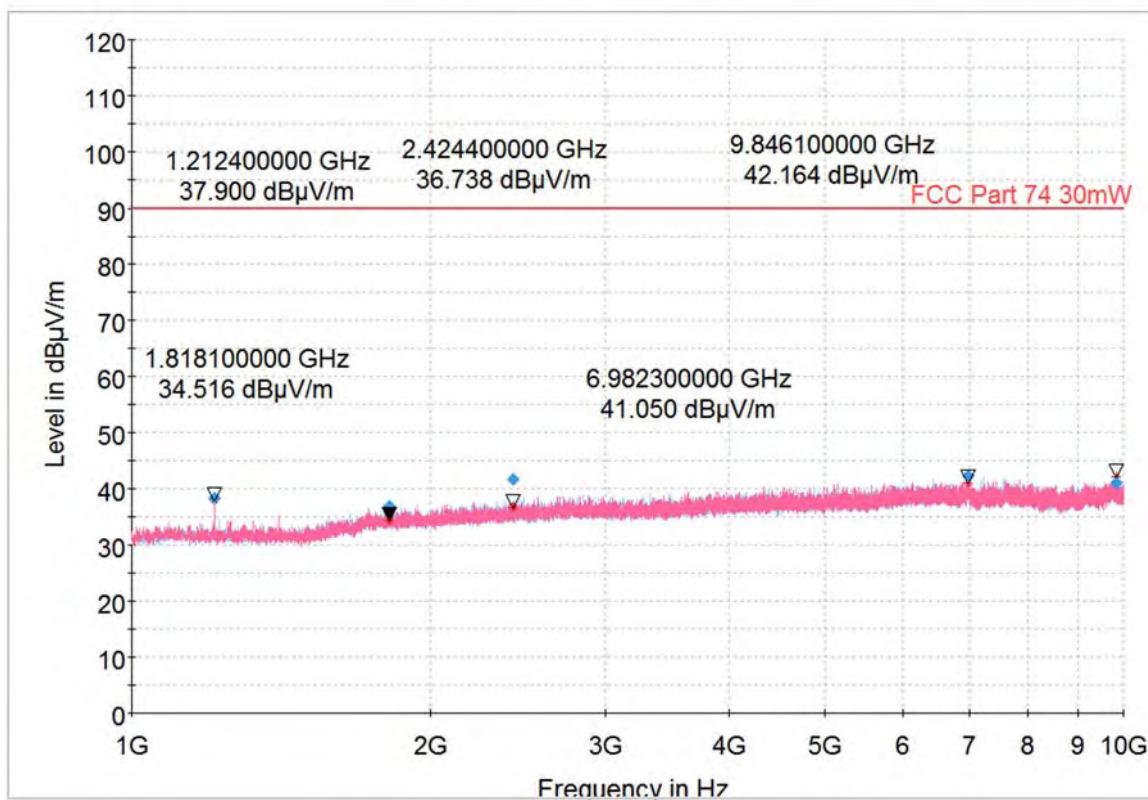
EUT Name: AD2 K53 #134
Serial Number: TU162080102
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 606.125MHz L @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF
Test Date & Time: December 05, 2016 3:15:14 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: AD2 K53 #134
Serial Number: TU162080102
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: November 1 & 2, 2016 & December 05, 2016

Frequency MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (dB)
397.640	37.33	84.38	52.670	20	120.00	122.000	V	46.00	17.80
403.639	36.57	84.38	53.430	20	120.00	123.000	V	46.00	17.80
411.235	34.70	84.38	55.300	20	120.00	100.000	V	356.00	17.90
432.990	36.44	84.38	53.560	20	120.00	100.000	V	56.00	18.50
452.685	35.98	84.38	54.020	20	120.00	111.000	V	8.00	19.10
475.955	36.22	84.38	53.780	20	120.00	111.000	V	347.00	20.40
510.073	36.68	84.38	53.320	20	120.00	100.000	V	22.00	21.00
596.974	37.95	84.38	52.050	20	120.00	188.000	V	119.00	22.80
606.144	68.29	84.38	21.710	20	120.00	164.000	V	115.00	23.20
621.335	38.62	84.38	51.380	20	120.00	167.000	V	249.00	23.70
879.492	27.96	84.38	62.040	20	120.00	138.000	H	227.00	25.80
1212.700	38.31	84.38	51.690	1000	1000.00	350.000	V	247.00	-19.30
1818.100	37.02	84.38	52.980	1000	1000.00	289.000	V	0.00	-15.50
2424.400	41.76	84.38	48.240	1000	1000.00	209.000	V	113.00	-13.00
6982.300	42.32	84.38	47.680	1000	1000.00	218.000	H	210.00	-3.50
9846.100	41.08	84.38	48.920	1000	1000.00	376.000	H	196.00	-0.90

Appendix E

Test Information

EUT Name: AD2 K53 #134
Serial Number: TU162080102
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
621.335	38.62	-48.7	-13.0	51.4	V	1.50	1.50		-51.70	PASS
1212.700	38.31	-42.1	-13.0	51.7	V	2.10	2.08	3.90	-42.38	PASS
1818.100	37.02	-32.0	-13.0	53.0	V	2.25	2.58	5.40	-31.43	PASS
2424.400	41.76	-44.0	-13.0	48.2	V	2.70	2.96	5.40	-44.26	PASS
6982.300	42.32	-65.3	-13.0	47.7	H	5.12	5.32	10.90	-64.84	PASS
9846.100	41.08	-44.3	-13.0	48.9	H	6.00	4.09	12.90	-41.49	PASS

Test Information

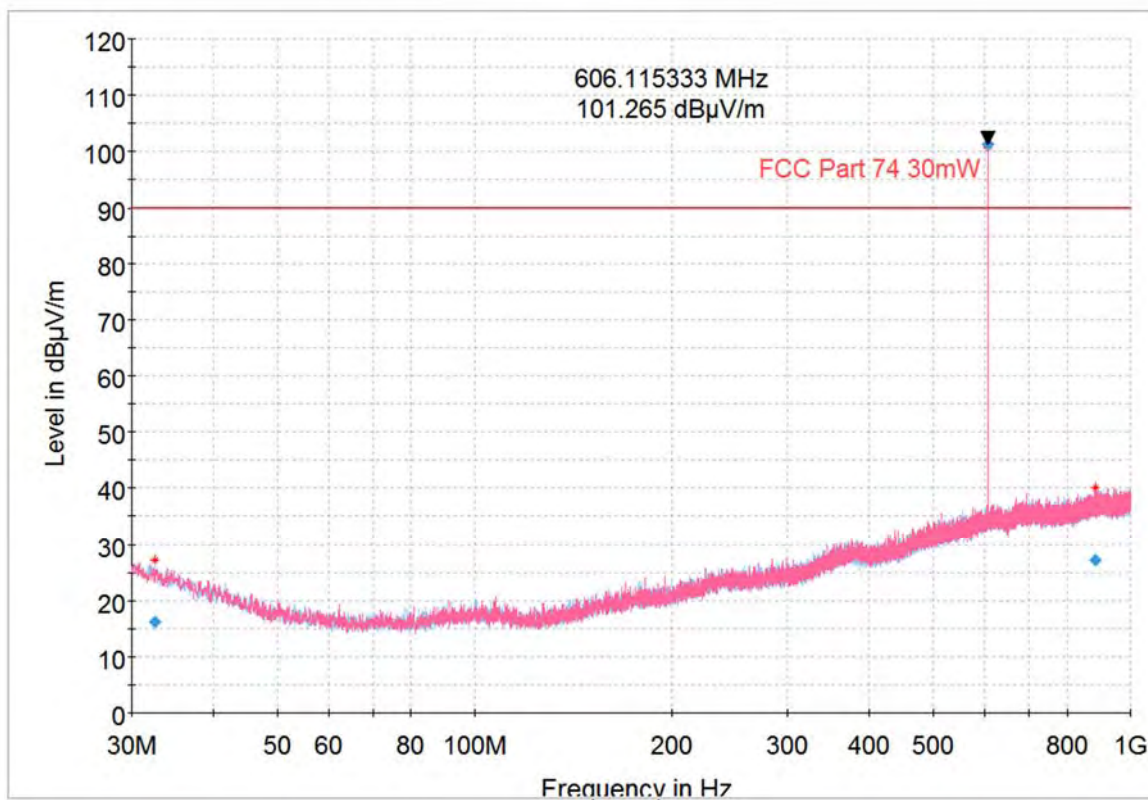
EUT Name: AD2 K53 #134
Serial Number: TU162080102
Test Description: Radiated RF Emissions 30MHz to 1GHz
Operating Conditions: 606.125MHz L @ 2mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input
Test Date & Time: November 2, 2016 4:20:56 PM

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 μ 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

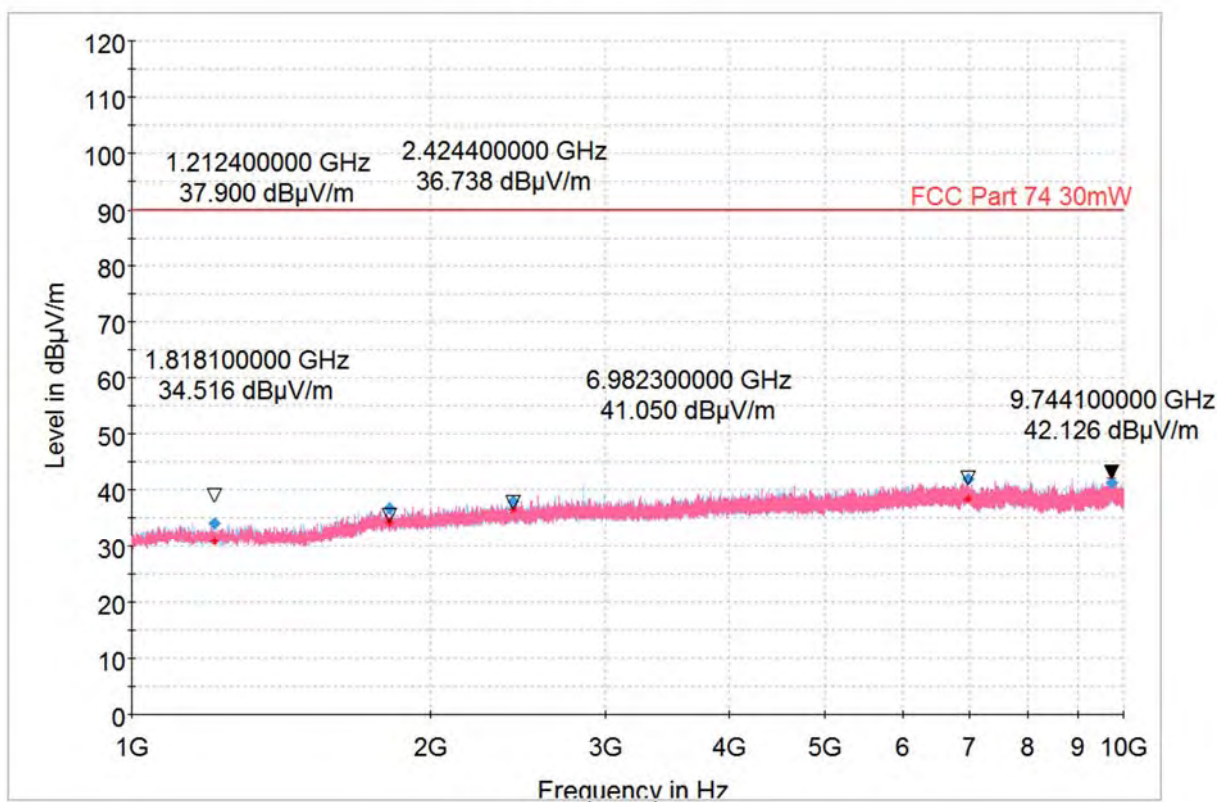
EUT Name: AD2 K53 #134
Serial Number: TU162080102
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 606.125MHz L @ 2mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF
Test Date & Time: December 06, 2016 1:36:38 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 μ 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: AD2 K53 #134
Serial Number: TU162080102
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: November 2, 2016 & December 06, 2016

Frequency MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (dB)
32.554	16.18	84.38	73.820	20	120.00	241.000	H	128.00	15.60
606.115	101.27	84.38	-11.270	20	120.00	169.000	V	286.00	23.20
882.695	27.18	84.38	62.820	20	120.00	400.000	V	311.00	25.90
1212.400	34.12	84.38	55.880	1000	1000.00	282.000	H	184.00	-19.30
1818.100	36.70	84.38	53.300	1000	1000.00	200.000	H	1.00	-15.50
2424.400	37.91	84.38	52.090	1000	1000.00	135.000	H	245.00	-13.00
6982.300	41.92	84.38	48.080	1000	1000.00	380.000	V	329.00	-3.50
9744.100	41.34	84.38	48.660	1000	1000.00	150.000	H	197.00	-1.10

Appendix E

Test Information

EUT Name: AD2 K53 #134
 Serial Number: TU162080102
 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
1212.400	34.12	-40.2	-13.0	55.9	H	2.10	2.08	3.90	-40.48	PASS
1818.100	36.70	-49.9	-13.0	53.3	H	2.25	2.58	5.40	-49.33	PASS
2424.400	37.91	-78.2	-13.0	52.1	H	2.70	2.96	5.40	-78.46	PASS
6982.300	41.92	-68.1	-13.0	48.1	V	5.12	5.32	10.90	-67.64	PASS
9744.100	41.34	-77.9	-13.0	48.7	H	6.00	4.08	13.20	-74.78	PASS

Test Information

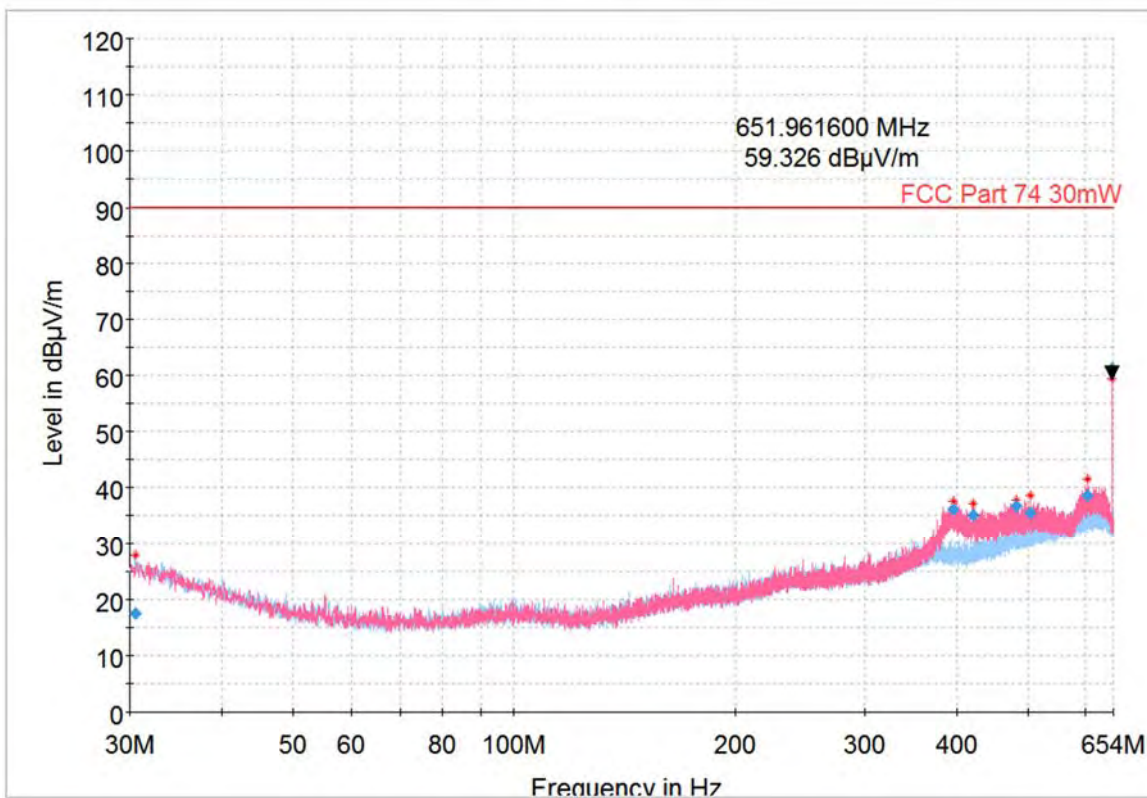
EUT Name: AD2 K53 #134
Serial Number: TU162080102
Test Description: Radiated RF Emissions 30MHz to 654MHz
Operating Conditions: 652.000MHz M @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w L23-26-01 Tuned Notch
Test Date & Time: November 2, 2016 9:43:59 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: dB μ 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

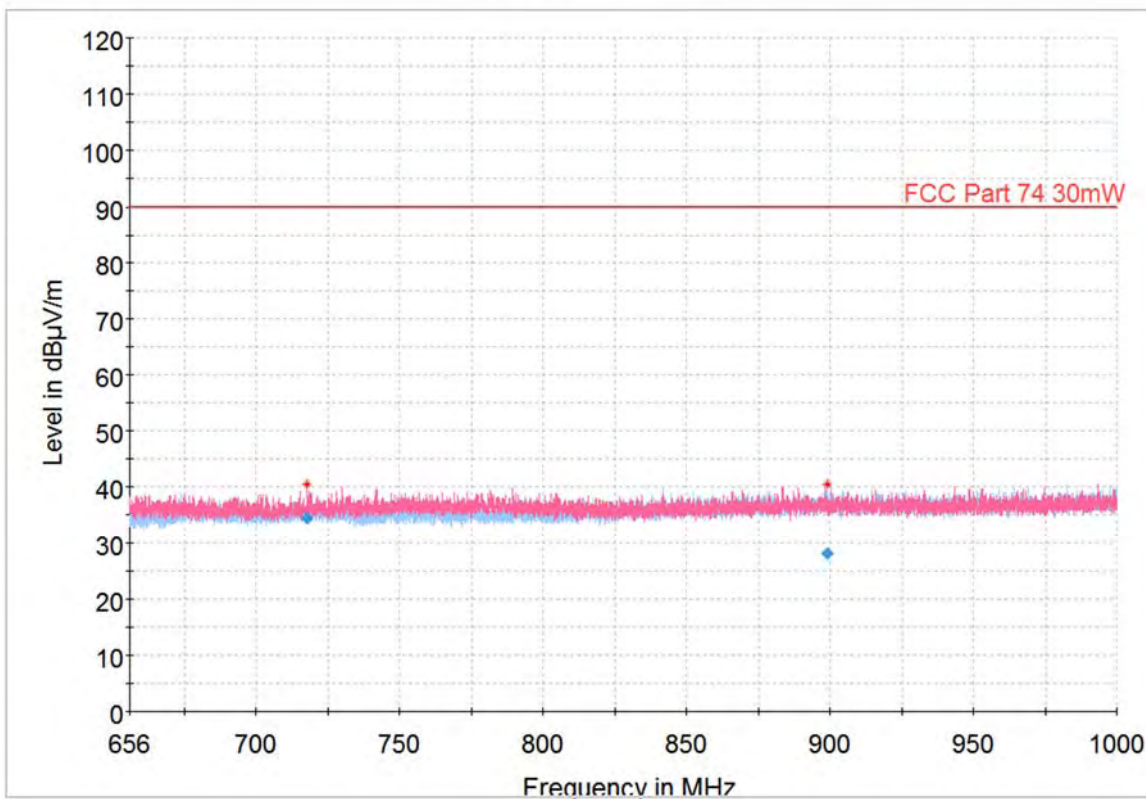
EUT Name: AD2 K53 #134
Serial Number: TU162080102
Test Description: Radiated RF Emissions 656 - 1000MHz
Operating Conditions: 652.000MHz M @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w/o L23-26-01 Tuned Notch
Test Date & Time: November 2, 2016 10:16:05 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

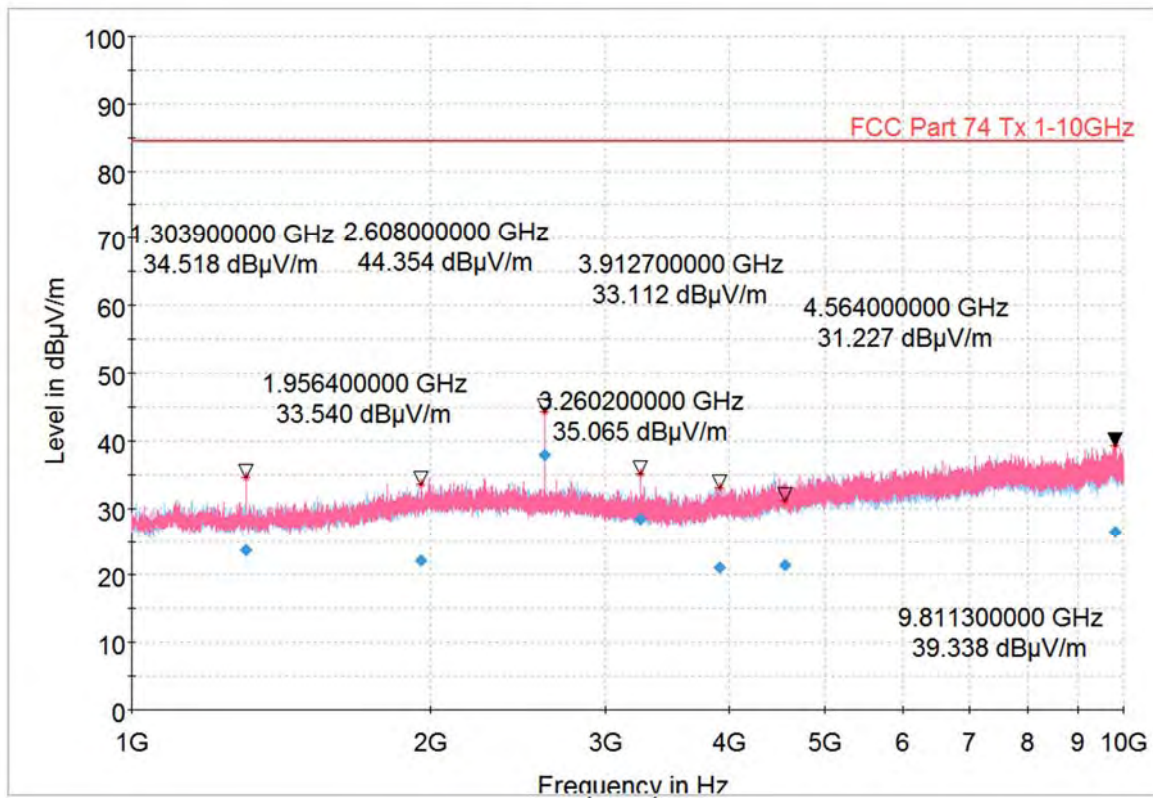
EUT Name: AD2 K53 #134
Serial Number: TU162080102
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 652.000MHz M @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF
Test Date & Time: June 06, 2017 11:29:20 AM

EMI Auto Test Template: Axient Digital COMPLIANCE TEST FCC Pt 74 1GHz to 10GHz 3117-PA 20063

Hardware Setup: Electric Field Strength 10GHz 3117-PA 200363 2016 06 16
Level Unit: dB μ V/m

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

Full Spectrum



Appendix E

Test Information

EUT Name: AD2 K53 #134
 Serial Number: TU162080102
 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: November 2, 2016 & June 06, 2017

Frequency MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (dB)
30.499	17.35	84.38	72.650	20	120.00	376.000	H	139.00	16.70
395.747	36.07	84.38	53.930	20	120.00	139.000	V	17.00	17.80
421.019	35.13	84.38	54.870	20	120.00	119.000	V	268.00	18.10
482.587	36.85	84.38	53.150	20	120.00	111.000	V	165.00	20.50
505.342	35.53	84.38	54.470	20	120.00	111.000	V	3.00	20.90
603.726	38.65	84.38	51.350	20	120.00	176.000	V	7.00	23.10
651.982	61.33	84.38	28.670	20	120.00	144.000	V	63.00	22.90
717.943	34.56	84.38	55.440	20	120.00	179.000	V	51.00	24.10
899.323	27.96	84.38	62.040	20	120.00	354.000	H	130.00	26.30
1304.200	23.69	84.38	60.690	1000	1000.00	302.000	V	87.00	-18.00
1956.400	22.17	84.38	62.210	1000	1000.00	380.000	V	31.00	-13.40
2608.000	37.94	84.38	46.440	1000	1000.00	289.000	V	191.00	-10.90
3260.200	28.45	84.38	55.930	1000	1000.00	193.000	V	180.00	-9.30
3912.700	21.04	84.38	63.340	1000	1000.00	389.000	H	359.00	-6.80
4564.000	21.43	84.38	62.950	1000	1000.00	116.000	H	264.00	-5.30
9811.300	26.39	84.38	57.990	1000	1000.00	112.000	V	315.00	0.50

Appendix E

Test Information

EUT Name: AD2 K53 #134
 Serial Number: TU162080102
 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 & June 6, 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
603.726	38.65	-56.7	-13.0	46.7	V	1.50	1.50		-59.70	PASS
1304.200	23.69	-71.1	-13.0	58.6	V	2.15	2.17	3.90	-71.56	PASS
1956.400	22.17	-73.4	-13.0	60.0	V	2.25	2.68	5.40	-72.97	PASS
2608.000	37.94	-52.7	-13.0	39.2	V	2.55	3.01	6.00	-52.24	PASS
3260.200	28.45	-65.1	-13.0	51.0	V	3.10	3.42	7.60	-63.98	PASS
3912.700	21.04	-98.9	-13.0	89.5	H	3.60	4.04	4.04	-102.50	PASS
4564.000	21.43	-98.9	-13.0	88.7	H	3.70	3.42	4.28	-101.74	PASS

Test Information

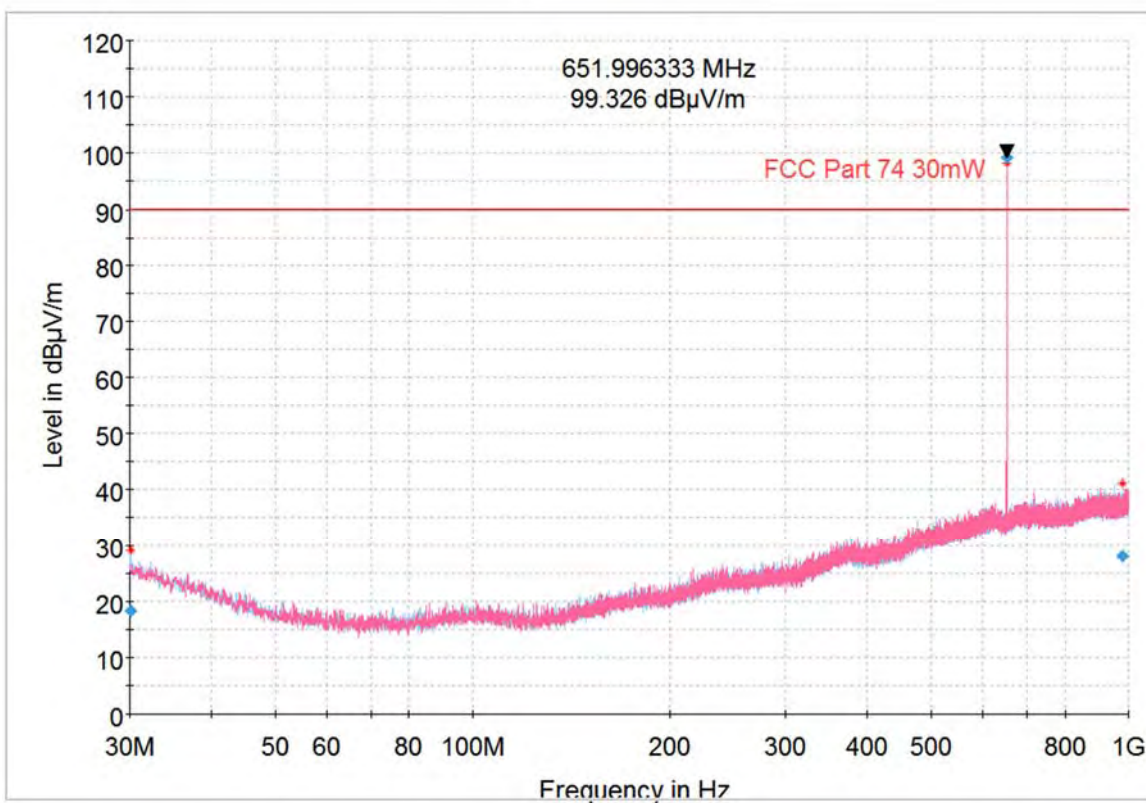
EUT Name: AD2 K53 #134
Serial Number: TU162080102
Test Description: Radiated RF Emissions 30MHz to 1GHz
Operating Conditions: 652.000MHz M @ 2mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input
Test Date & Time: November 2, 2016 3:47:00 PM

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	Preamp
30 MHz - 1 GHz	30 kHz	PK+	120 kHz	0.02 s	20 dB

Full Spectrum



Test Information

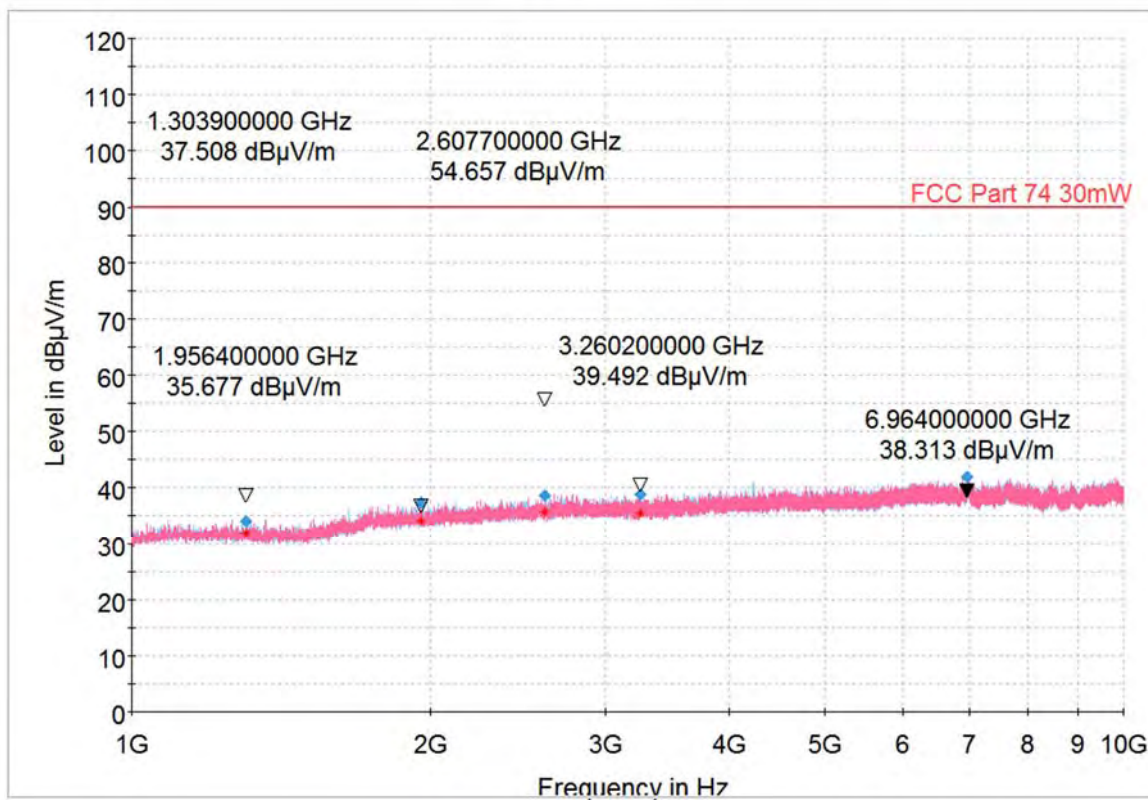
EUT Name: AD2 K53 #134
Serial Number: TU162080102
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 652.000MHz M @ 2mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF
Test Date & Time: December 06, 2016 12:47:27 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: AD2 K53 #134
Serial Number: TU162080102
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: November 2, 2016 & December 06, 2016

Frequency MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (dB)
30.065	18.27	84.38	71.730	20	120.00	143.000	H	220.00	16.90
651.996	99.33	84.38	-9.330	20	120.00	140.000	V	0.00	22.90
977.852	28.09	84.38	61.910	20	120.00	161.000	H	58.00	26.20
1303.900	34.08	84.38	55.920	1000	1000.00	317.000	H	10.00	-19.20
1956.400	37.30	84.38	52.700	1000	1000.00	126.000	V	112.00	-14.90
2607.700	38.68	84.38	51.320	1000	1000.00	172.000	V	113.00	-12.30
3260.200	38.72	84.38	51.280	1000	1000.00	131.000	H	135.00	-11.10
6964.000	41.91	84.38	48.090	1000	1000.00	369.000	H	154.00	-3.60



Test Information

EUT Name: AD2 K53 #134
Serial Number: TU162080102
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
1303.900	34.08	-38.6	-13.0	55.9	H	2.25	2.25	3.90	-39.20	PASS
1956.400	37.30	-51.2	-13.0	52.7	V	2.25	2.25	5.40	-50.30	PASS
2607.700	38.68	-69.0	-13.0	51.3	V	2.25	2.25	6.00	-67.50	PASS
3260.200	38.72	-51.4	-13.0	51.3	H	2.25	2.25	7.60	-48.30	PASS
6964.000	41.91	-60.9	-13.0	48.1	H	5.12	5.32	10.90	-60.44	PASS

Test Information

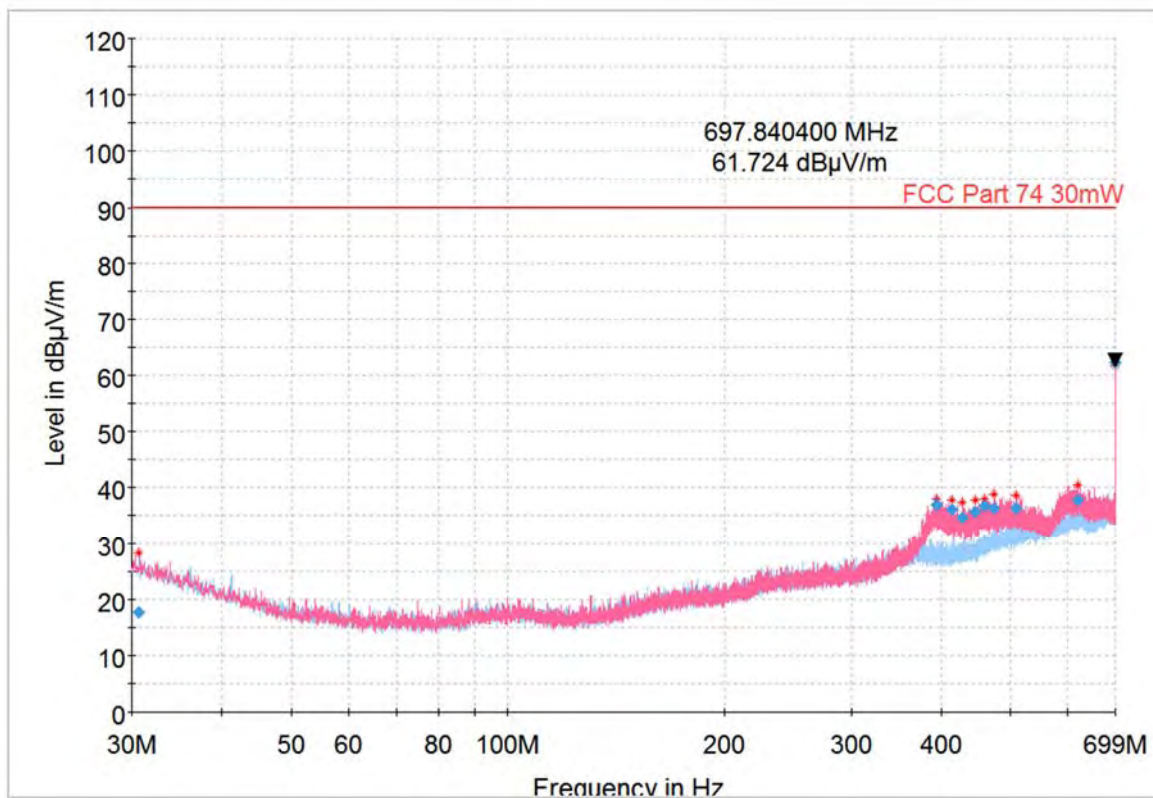
EUT Name: AD2 K53 #134
Serial Number: TU162080102
Test Description: Radiated RF Emissions 30MHz to 699MHz
Operating Conditions: 697.875MHz H @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w L23-26-01 Tuned Notch
Test Date & Time: November 2, 2016 10:44:40 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 μ 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

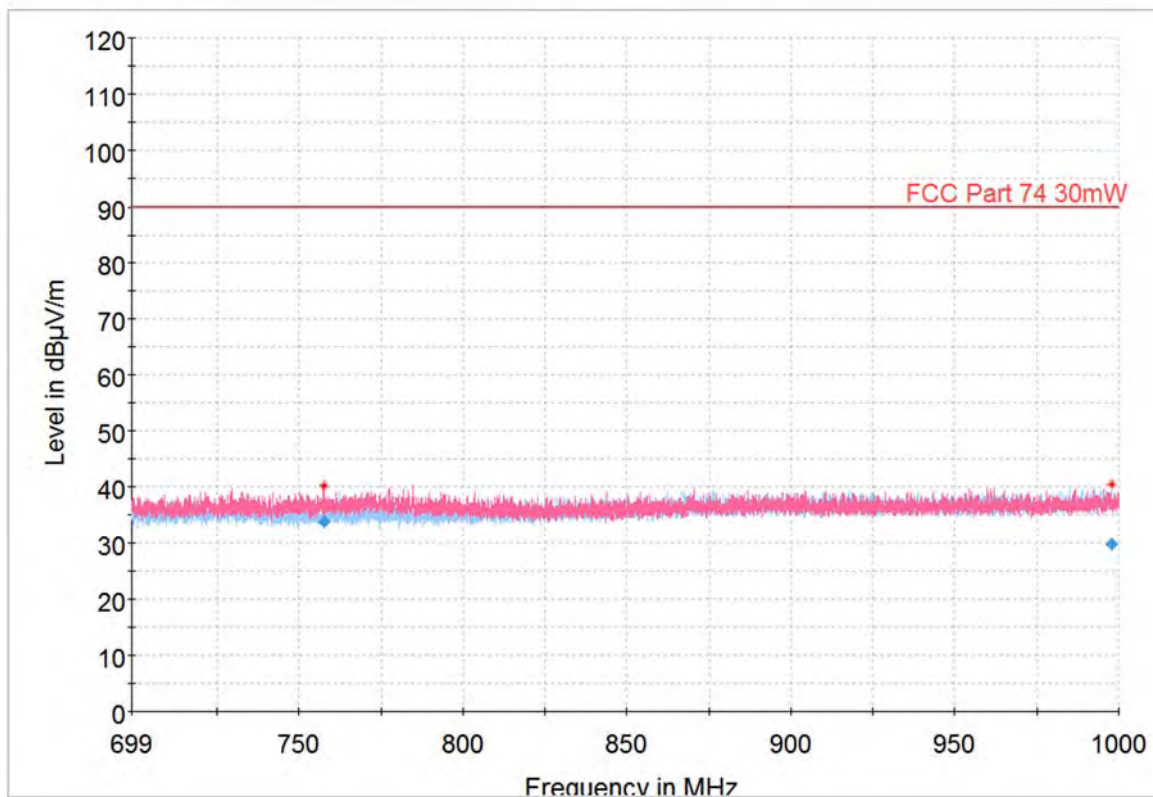
EUT Name: AD2 K53 #134
Serial Number: TU162080102
Test Description: Radiated RF Emissions 699 - 1000MHz
Operating Conditions: 697.125MHz H @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w/o L23-26-01 Tuned Notch
Test Date & Time: November 2, 2016 11:22:12 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: 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

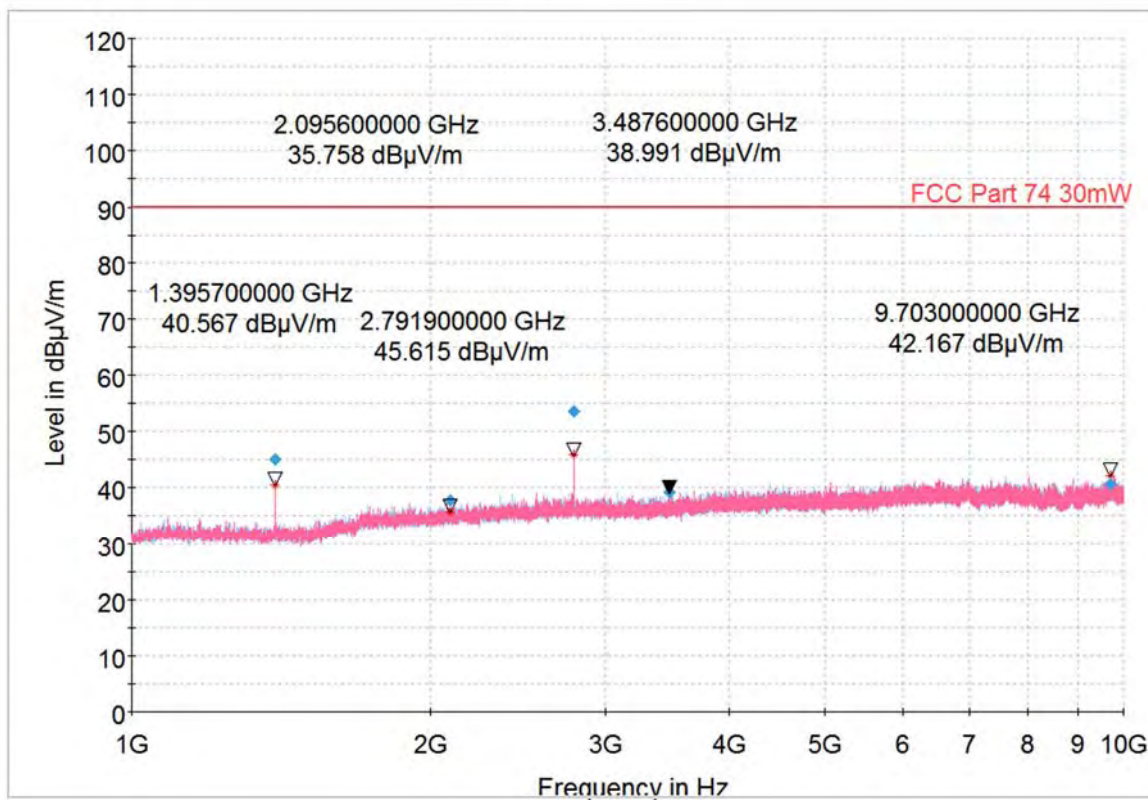
EUT Name: AD2 K53 #134
Serial Number: TU162080102
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 697.875MHz H @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF
Test Date & Time: December 05, 2016 4:57:51 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: AD2 K53 #134
Serial Number: TU162080102
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: November 2, 2016 & December 05, 2016

Frequency MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (dB)
30.736	17.67	84.38	72.330	20	120.00	400.000	H	272.00	16.60
394.583	37.05	84.38	52.950	20	120.00	124.000	V	242.00	17.90
413.694	36.14	84.38	53.860	20	120.00	112.000	V	308.00	18.00
428.635	34.74	84.38	55.260	20	120.00	127.000	V	228.00	18.30
445.873	35.67	84.38	54.330	20	120.00	119.000	V	359.00	18.80
459.587	36.67	84.38	53.330	20	120.00	100.000	V	300.00	19.50
474.863	36.40	84.38	53.600	20	120.00	100.000	V	139.00	20.40
508.335	36.43	84.38	53.570	20	120.00	100.000	V	313.00	21.00
620.861	37.79	84.38	52.210	20	120.00	139.000	V	295.00	23.70
697.840	62.39	84.38	27.610	20	120.00	205.000	V	196.00	23.90
757.795	33.93	84.38	56.070	20	120.00	150.000	V	126.00	24.60
997.853	29.74	84.38	60.260	20	120.00	269.000	H	108.00	26.60
1395.700	40.57	84.38	49.430	1000	1000.00	190.000	V	155.00	-19.10
2095.600	35.76	84.38	54.240	1000	1000.00	331.000	H	67.00	-14.30
2791.600	45.85	84.38	44.150	1000	1000.00	240.000	V	354.00	-11.70
3487.600	38.99	84.38	51.010	1000	1000.00	195.000	H	9.00	-10.50
9703.000	42.17	84.38	47.830	1000	1000.00	127.000	V	262.00	-1.00

Appendix E

Test Information

EUT Name: AD2 K53 #134
Serial Number: TU162080102
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 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
620.861	37.79	-53.2	-13.0	52.2	V	1.50	1.50		-56.20	PASS
1395.700	40.57	-38.3	-13.0	49.4	V	2.10	2.22	3.90	-38.72	PASS
2095.600	35.76	-89.4	-13.0	54.2	H	2.35	2.78	5.00	-89.53	PASS
2791.600	45.85	-36.9	-13.0	44.2	V	2.75	3.14	6.70	-36.09	PASS
3487.600	38.99	-71.8	-13.0	51.0	H	3.35	3.65	7.60	-71.20	PASS
9703.000	42.17	-68.1	-13.0	47.8	V	6.00	4.08	13.20	-64.98	PASS

Test Information

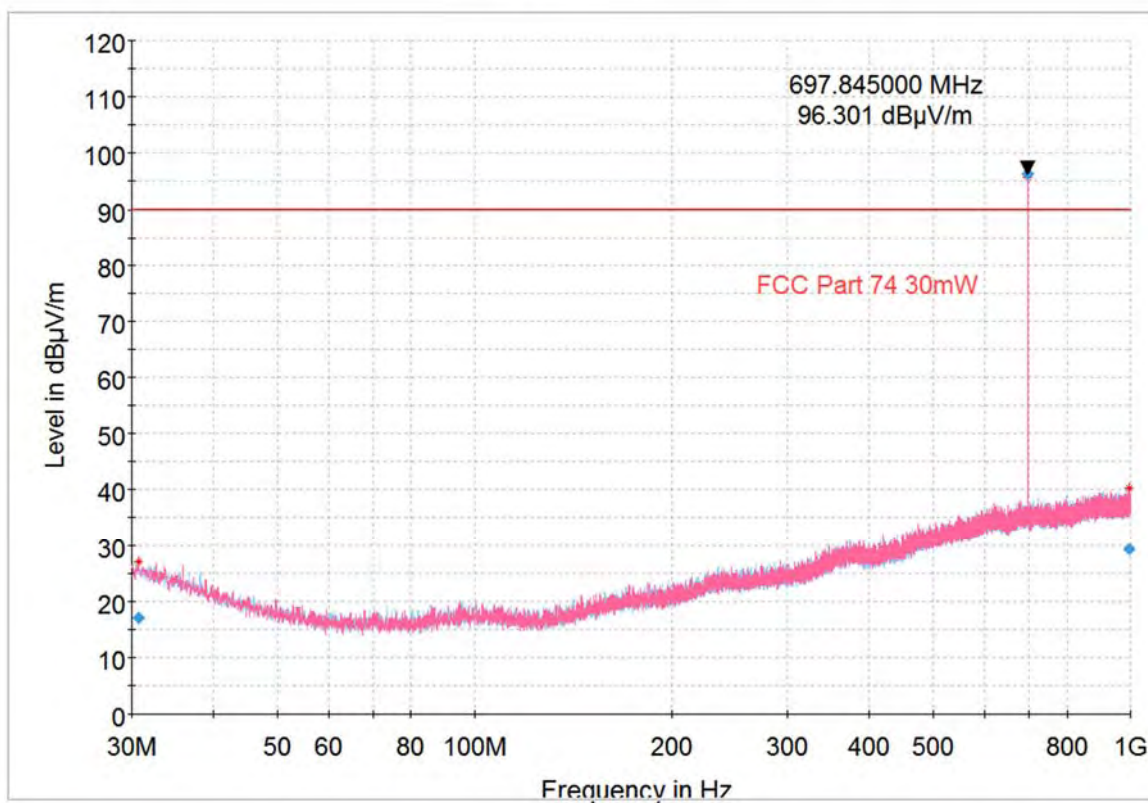
EUT Name: AD2 K53 #134
Serial Number: TU162080102
Test Description: Radiated RF Emissions 30MHz to 1GHz
Operating Conditions: 697.125MHz H @ 2mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input
Test Date & Time: November 2, 2016 12:14:37 PM

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 μ 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

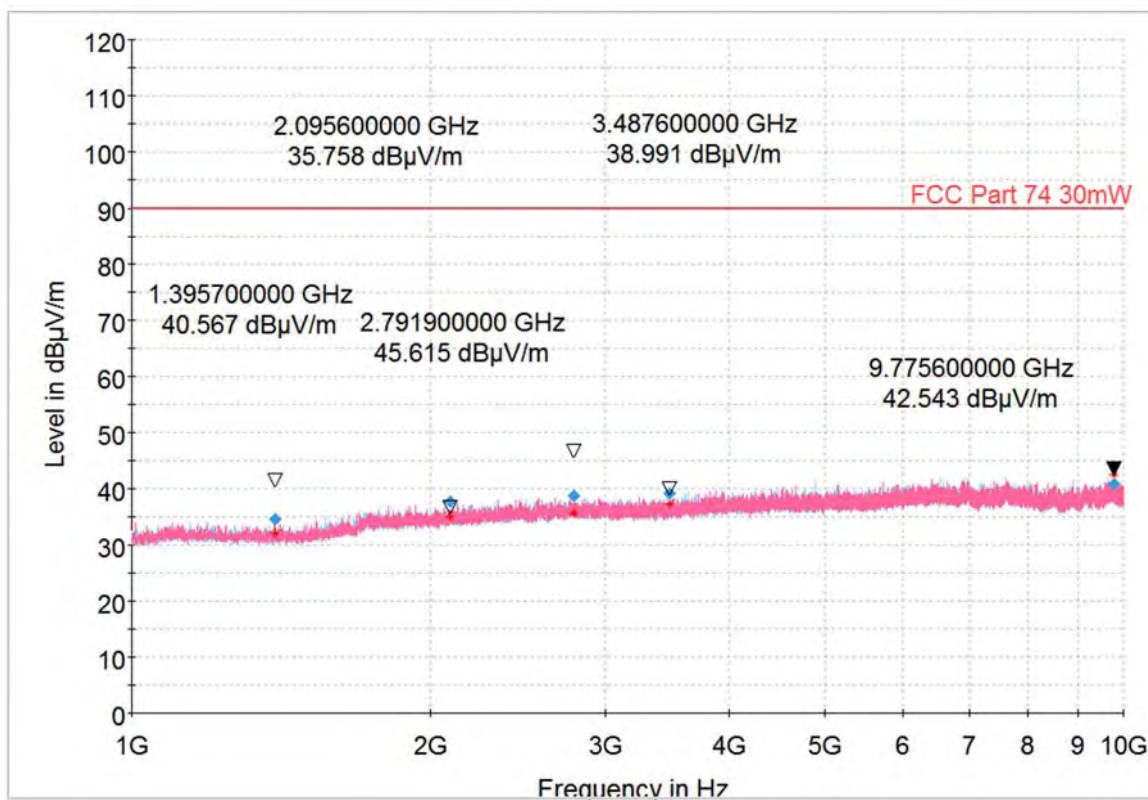
EUT Name: AD2 K53 #134
Serial Number: TU162080102
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 697.875MHz H @ 2mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF
Test Date & Time: December 06, 2016 10:28:33 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 μ 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: AD2 K53 #134
Serial Number: TU162080102
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: November 2, 2016 & December 06, 2016

Frequency MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (dB)
30.711	17.09	84.38	72.910	20	120.00	304.000	V	332.00	16.60
697.845	96.30	84.38	-6.300	20	120.00	201.000	V	221.00	23.90
996.670	29.29	84.38	60.710	20	120.00	395.000	H	138.00	26.50
1395.700	34.70	84.38	55.300	1000	1000.00	283.000	H	133.00	-19.10
2095.600	37.78	84.38	52.220	1000	1000.00	382.000	V	281.00	-14.30
2791.900	38.84	84.38	51.160	1000	1000.00	126.000	H	154.00	-11.70
3487.600	39.19	84.38	50.810	1000	1000.00	145.000	V	345.00	-10.50
9775.600	40.80	84.38	49.200	1000	1000.00	390.000	H	48.00	-1.10

Appendix E

Test Information

EUT Name: AD2 K53 #134
 Serial Number: TU162080102
 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)	ERP / EIRP Total (dBm)	ERP Total (dBm)	Status
1395.700	34.70	-69.9	-13.0	55.3	H	2.10	2.22	3.90	-70.32	PASS
2095.600	37.78	-59.1	-13.0	52.2	V	2.35	2.78	5.00	-59.23	PASS
2791.900	38.84	-75.1	-13.0	51.2	H	2.75	3.14	6.70	-74.29	PASS
3487.600	39.19	-71.1	-13.0	50.8	V	3.35	3.65	7.60	-70.50	PASS
9775.600	40.80	-74.6	-13.0	49.2	H	6.00	4.08	13.00	-71.68	PASS

Test Information

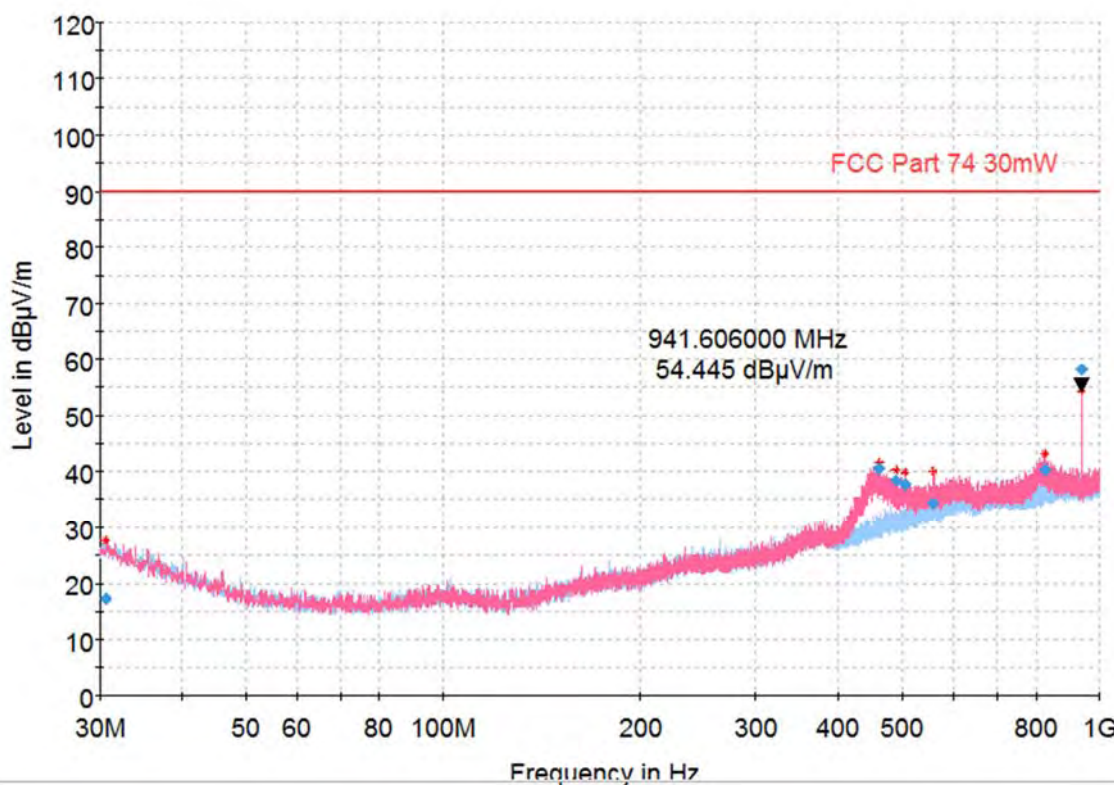
EUT Name: AD2 X55 #242
 Serial Number: TU162090145
 Test Description: Radiated RF Emissions 30MHz to 1GHz
 Operating Conditions: 941.625MHz L @ 35mW
 Operator Name: Alex Stelmaszczyk
 Comment: FCC pt. 74
 Description: FCC Table, 3m, AAs, No Audio Input, w L23-26-01 Tuned Notch
 Test Date & Time: January 25, 2017 3:07:15 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 μ 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



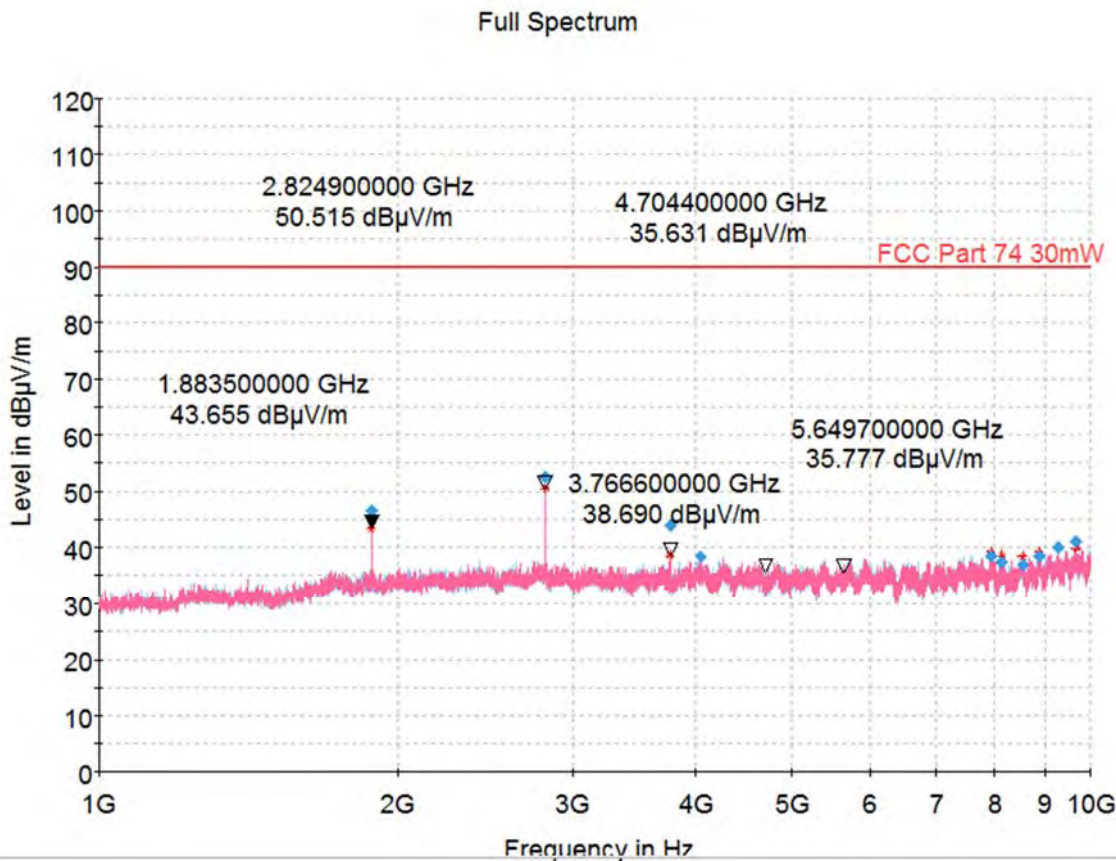
Test Information

EUT Name: AD2 X55 #242
Serial Number: TU162090145
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 3:44:56 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 μ 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: AD2 X55 #242
Serial Number: TU162090145
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 25, 2017 & February 3, 2017

Frequency MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (dB)
30.647	17.28	84.38	72.720	20	120.00	285.000	H	268.00	16.60
462.070	40.47	84.38	49.530	20	120.00	127.000	V	336.00	19.70
491.106	38.39	84.38	51.610	20	120.00	107.000	V	83.00	20.60
506.561	37.73	84.38	52.270	20	120.00	100.000	V	50.00	20.90
560.073	34.35	84.38	55.650	20	120.00	109.000	V	10.00	22.00
829.054	40.32	84.38	49.680	20	120.00	190.000	V	168.00	25.00
941.606	58.14	84.38	31.860	20	120.00	258.000	V	146.00	26.10
1883.200	46.43	84.38	43.570	1000	1000.00	125.000	V	7.00	-15.20
2824.900	52.48	84.38	37.520	1000	1000.00	243.000	V	-3.00	-11.70
3766.600	44.05	84.38	45.950	1000	1000.00	107.000	V	166.00	-9.20
4046.800	38.34	84.38	51.660	1000	1000.00	244.000	V	188.00	-8.50
7945.600	38.40	84.38	51.600	1000	1000.00	384.000	V	228.00	-2.70
8146.600	37.40	84.38	52.600	1000	1000.00	130.000	V	32.00	-2.60
8555.500	36.96	84.38	53.040	1000	1000.00	191.000	V	269.00	-2.40
8865.100	38.35	84.38	51.650	1000	1000.00	382.000	H	258.00	-2.20
9298.600	40.05	84.38	49.950	1000	1000.00	113.000	V	323.00	-1.60
9672.400	41.12	84.38	48.880	1000	1000.00	380.000	V	324.00	-1.20

Appendix E

Test Information

EUT Name: AD2 X55 #242
 Serial Number: TU162090145
 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
462.070	40.47	-58.5	-13.0	49.5	V	1.22	1.27		-60.99	PASS
1883.200	46.43	-51.4	-13.0	43.6	V	2.25	2.63	5.40	-50.88	PASS
2824.900	52.48	-30.9	-13.0	37.5	V	2.70	3.15	6.70	-30.05	PASS
3766.600	44.05	-55.5	-13.0	46.0	V	3.75	3.84	8.40	-54.69	PASS
4046.800	38.34	-98.9	-13.0	51.7	V	3.75	3.89	8.90	-97.64	PASS
9672.400	41.12	-98.9	-13.0	48.9	V	5.90	4.22	13.20	-95.82	PASS

Test Information

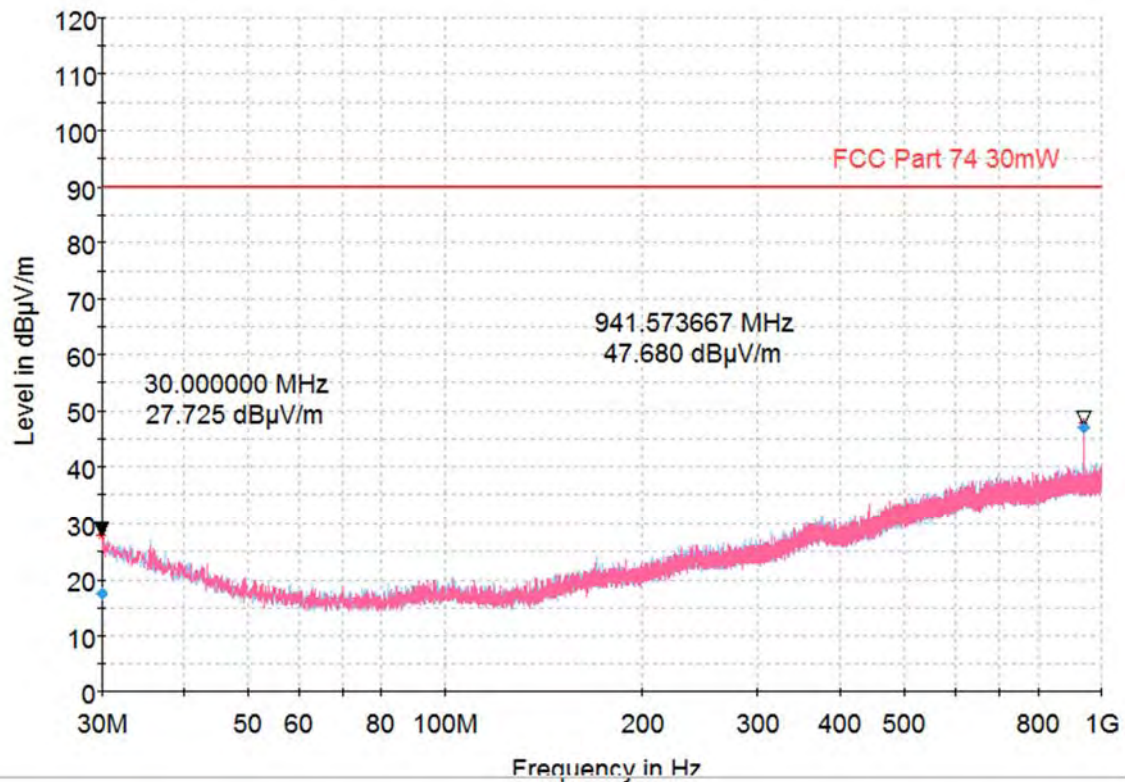
EUT Name: AD2 X55 #242
 Serial Number: TU162090145
 Test Description: Radiated RF Emissions 30MHz to 1GHz
 Operating Conditions: 941.625MHz L @ 2mW
 Operator Name: Alex Stelmaszczyk
 Comment: FCC pt. 74
 Description: FCC Table, 3m, AAs, No Audio Input, w/L23-26-01 Tuned Notch
 Test Date & Time: January 25, 2017 4:00:14 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 μ 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



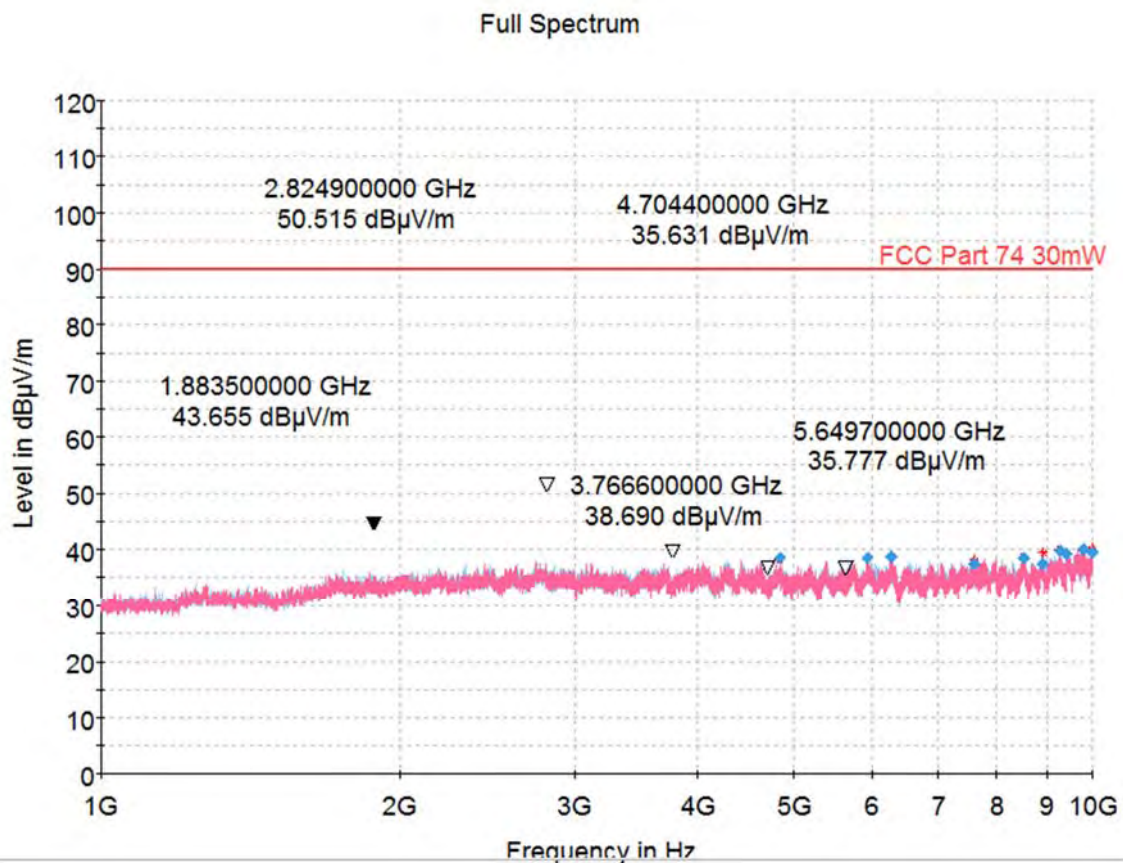
Test Information

EUT Name: AD2 X55 #242
Serial Number: TU162090145
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 4:48:20 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 μ 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: AD2 X55 #242
Serial Number: TU162090145
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 25, 2017 & February 3, 2017

Frequency MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (dB)
30.000	17.35	84.38	72.650	20	120.00	300.000	V	103.00	17.00
941.606	47.06	84.38	42.940	20	120.00	253.000	V	315.00	26.10
4839.100	38.52	84.38	51.480	1000	1000.00	354.000	H	135.00	-7.60
5932.000	38.61	84.38	51.390	1000	1000.00	335.000	V	349.00	-5.50
6279.700	38.76	84.38	51.240	1000	1000.00	185.000	H	263.00	-4.80
7607.200	37.59	84.38	52.410	1000	1000.00	248.000	V	272.00	-2.80
8532.700	38.62	84.38	51.380	1000	1000.00	241.000	V	112.00	-2.30
8915.200	37.57	84.38	52.430	1000	1000.00	132.000	H	328.00	-2.10
9271.600	39.79	84.38	50.210	1000	1000.00	257.000	H	236.00	-1.60
9433.300	39.20	84.38	50.800	1000	1000.00	384.000	H	198.00	-1.30
9814.000	40.14	84.38	49.860	1000	1000.00	341.000	H	295.00	-1.00
9991.000	39.49	84.38	50.510	1000	1000.00	385.000	V	51.00	-0.50



Appendix E

Test Information

EUT Name: AD2 X55 #242
Serial Number: TU162090145
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
6279.700	38.76	-98.9	-13.0	51.2	H	4.60	5.27	10.50	-98.27	PASS
9271.600	39.79	-98.9	-13.0	50.2	H	5.75	3.99	13.10	-95.54	PASS
9433.300	39.20	-98.9	-13.0	50.8	H	5.90	4.03	13.10	-95.73	PASS
9814.000	40.14	-98.9	-13.0	49.9	H	6.01	4.09	13.00	-96.00	PASS
9991.000	39.49	-98.9	-13.0	50.5	V	5.85	4.09	13.00	-95.84	PASS

Test Information

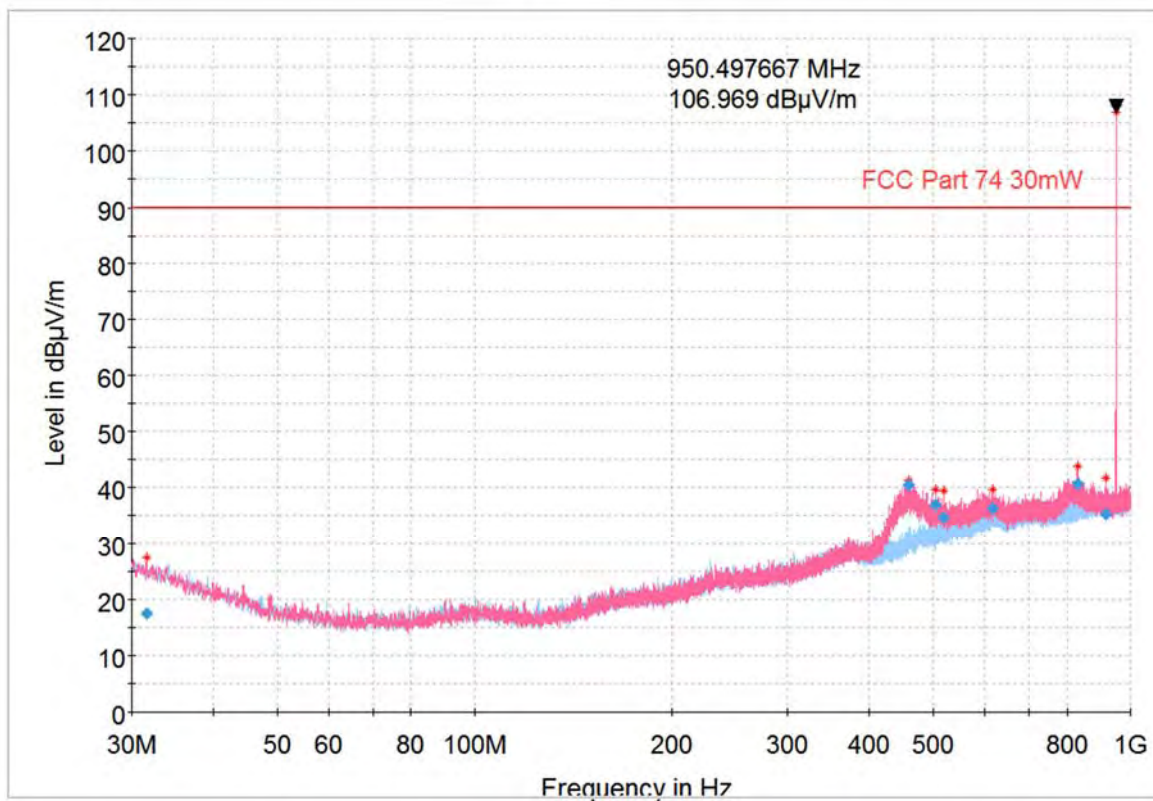
EUT Name: AD2 X55 #242
Serial Number: TU162090145
Test Description: Radiated RF Emissions 30MHz to 1GHz
Operating Conditions: 950.500MHz M @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input
Test Date & Time: November 1, 2016 11:20:54 AM

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 μ 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

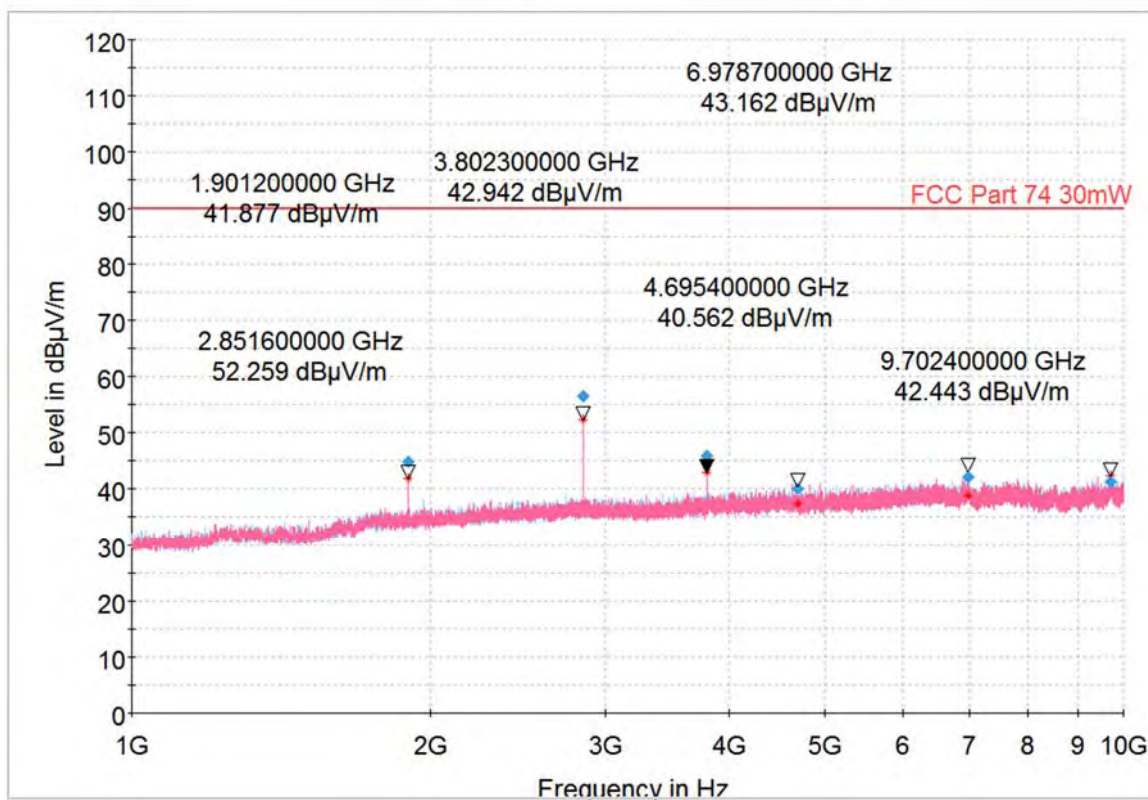
EUT Name: AD2 X55 #242
Serial Number: TU162090145
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 950.500MHz M @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-38 1340MHz HPF
Test Date & Time: December 06, 2016 3:51:01 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 μ 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: AD2 X55 #242
 Serial Number: TU162090145
 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: November 1, 2016 & December 06, 2016

Frequency MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (dB)
31.584	17.46	84.38	72.540	20	120.00	400.000	V	259.00	16.10
458.772	40.56	84.38	49.440	20	120.00	110.000	V	20.00	19.50
505.235	36.99	84.38	53.010	20	120.00	100.000	V	156.00	20.90
518.524	34.61	84.38	55.390	20	120.00	111.000	V	238.00	21.30
615.492	36.26	84.38	53.740	20	120.00	156.000	V	167.00	23.50
830.476	40.72	84.38	49.280	20	120.00	164.000	V	84.00	25.00
918.876	35.22	84.38	54.780	20	120.00	201.000	V	166.00	26.10
950.498	108.18	84.38	-18.180	20	120.00	192.000	V	206.00	26.10
1901.200	44.80	84.38	45.200	1000	1000.00	400.000	V	21.00	-15.10
2851.600	56.47	84.38	33.530	1000	1000.00	342.000	V	27.00	-11.70
3802.300	45.83	84.38	44.170	1000	1000.00	400.000	V	300.00	-9.10
4695.400	40.14	84.38	49.860	1000	1000.00	274.000	H	276.00	-7.90
6978.700	42.19	84.38	47.810	1000	1000.00	333.000	H	68.00	-3.50
9702.400	41.21	84.38	48.790	1000	1000.00	322.000	V	157.00	-1.00

Appendix E

Test Information

EUT Name: AD2 X55 #242
Serial Number: TU162090145
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 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
1901.200	44.80	-47.1	-13.0	45.2	V	2.30	2.64	5.40	-46.64	PASS
2851.600	56.47	-35.2	-13.0	33.5	V	2.70	3.15	6.70	-34.35	PASS
3802.300	45.83	-44.3	-13.0	44.2	V	3.65	4.03	8.40	-43.58	PASS
4695.400	40.14	-43.4	-13.0	49.9	H	3.85	4.39	9.30	-42.34	PASS
6978.700	42.19	-60.9	-13.0	47.8	H	4.80	5.32	10.90	-60.12	PASS
9702.400	41.21	-44.3	-13.0	48.8	V	6.00	4.08	13.20	-41.18	PASS

Test Information

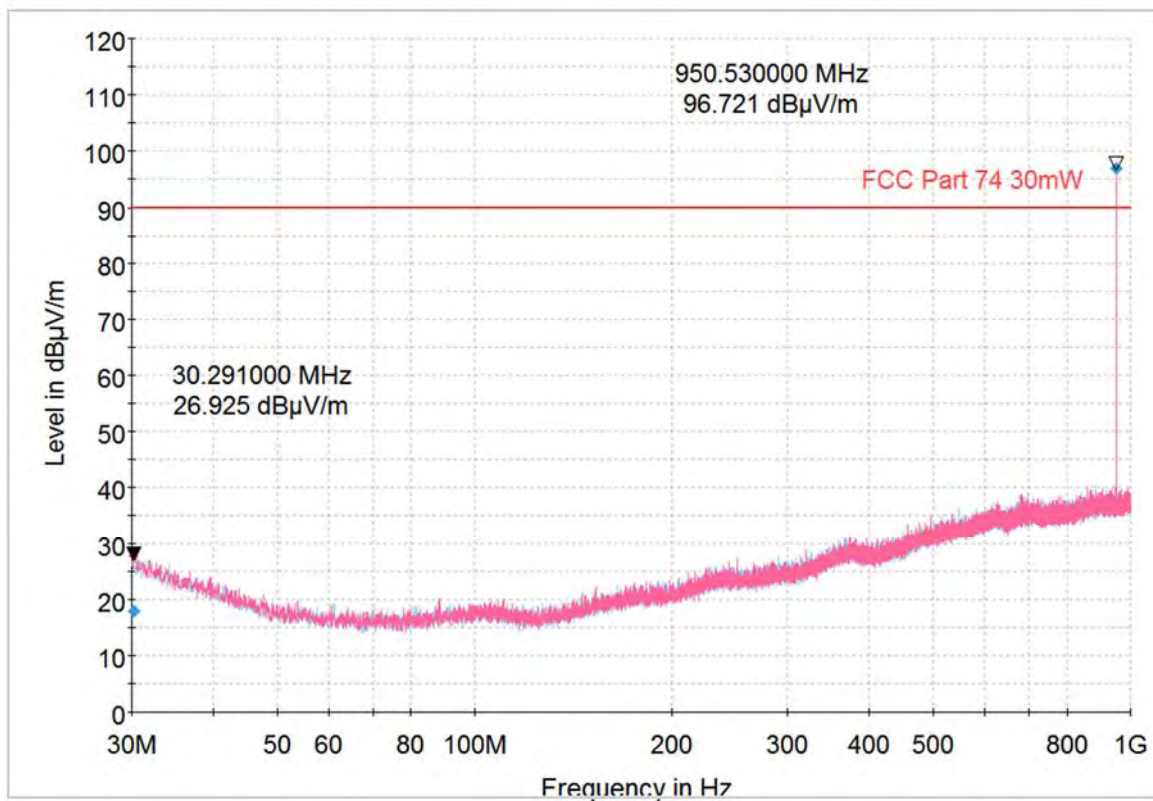
EUT Name: AD2 X55 #242
Serial Number: TU162090145
Test Description: Radiated RF Emissions 30MHz to 1GHz
Operating Conditions: 950.500MHz M @ 2mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input
Test Date & Time: November 1, 2016 10:11:52 AM

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 μ 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

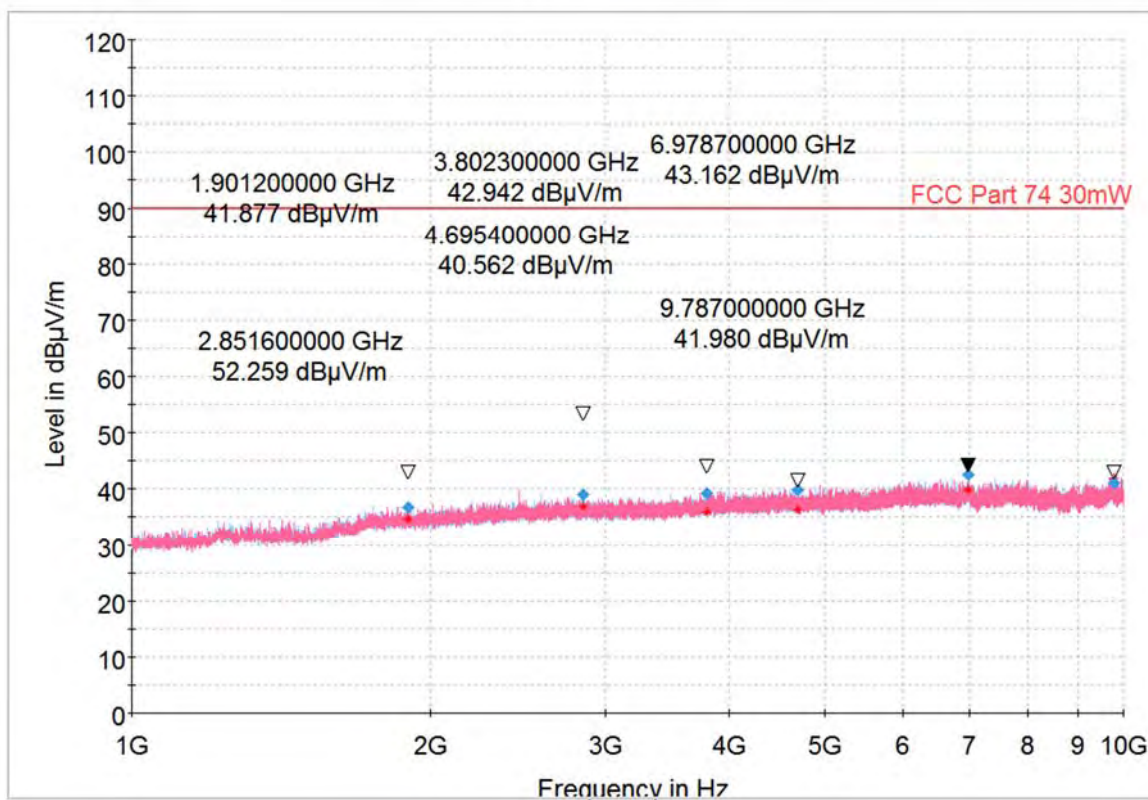
EUT Name: AD2 X55 #242
Serial Number: TU162090145
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 950.500MHz M @ 2mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-38 1340MHz HPF
Test Date & Time: December 06, 2016 10:28:29 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 μ 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: AD2 X55 #242
 Serial Number: TU162090145
 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: November 1, 2016 & December 06, 2016

Frequency MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (dB)
30.259	17.78	84.38	72.220	20	120.00	353.000	V	101.00	16.80
950.562	96.88	84.38	-6.880	20	120.00	195.000	V	243.00	26.10
1901.200	36.65	84.38	53.350	1000	1000.00	368.000	H	318.00	-15.10
2851.600	38.95	84.38	51.050	1000	1000.00	368.000	H	226.00	-11.70
3802.300	39.23	84.38	50.770	1000	1000.00	290.000	H	296.00	-9.10
4695.400	39.94	84.38	50.060	1000	1000.00	305.000	V	253.00	-7.90
6978.700	42.62	84.38	47.380	1000	1000.00	396.000	V	259.00	-3.50
9787.000	41.18	84.38	48.820	1000	1000.00	251.000	H	114.00	-1.00

Appendix E

Test Information

EUT Name: AD2 X55 #242
 Serial Number: TU162090145
 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 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
1901.200	36.65	-75.9	-13.0	53.4	H	2.30	2.64	5.40	-75.44	PASS
2851.600	38.95	-67.4	-13.0	51.1	H	2.70	3.15	6.70	-66.55	PASS
3802.300	39.23	-52.9	-13.0	50.8	H	3.65	4.03	8.40	-52.18	PASS
4695.400	39.94	-51.2	-13.0	50.1	V	3.85	4.39	9.30	-50.14	PASS
6978.700	42.62	-55.8	-13.0	47.4	V	4.80	5.32	10.90	-55.02	PASS
9787.000	41.18	-57.9	-13.0	48.8	H	6.00	4.08	13.00	-54.98	PASS

Test Information

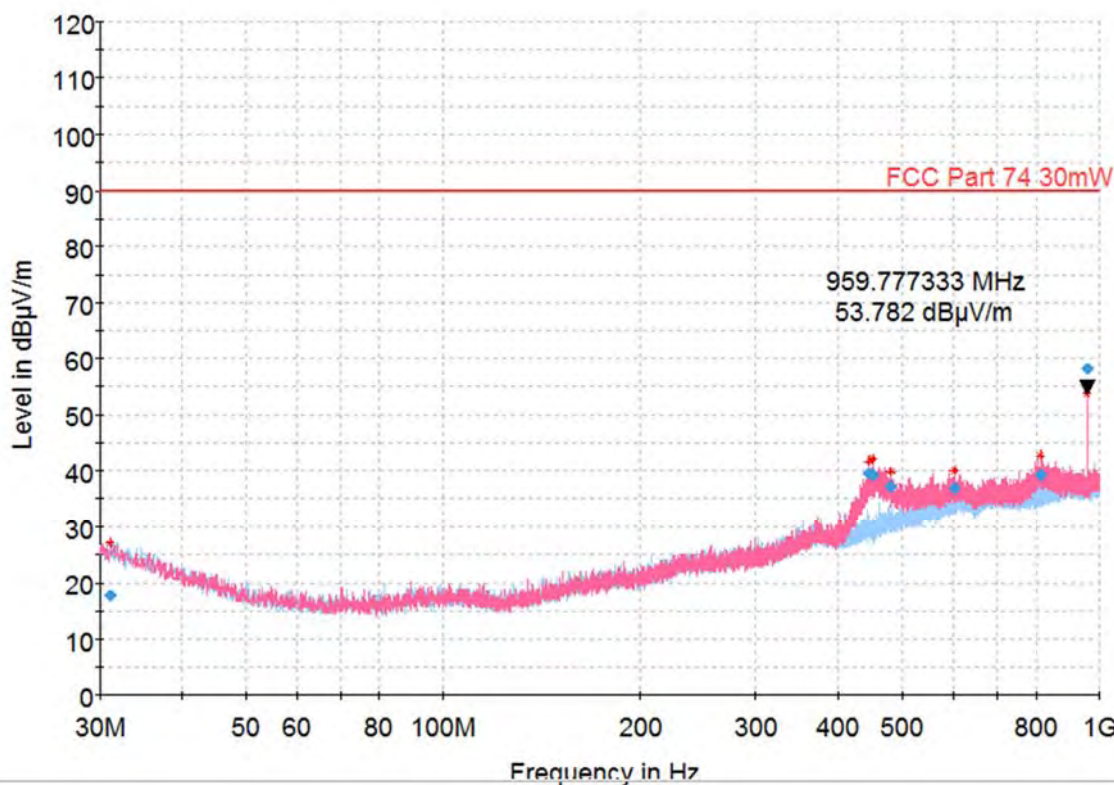
EUT Name: AD2 X55 #242
Serial Number: TU162090145
Test Description: Radiated RF Emissions 30MHz to 1GHz
Operating Conditions: 959.725MHz H @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w L23-26-01 Tuned Notch
Test Date & Time: January 25, 2017 1:22:29 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

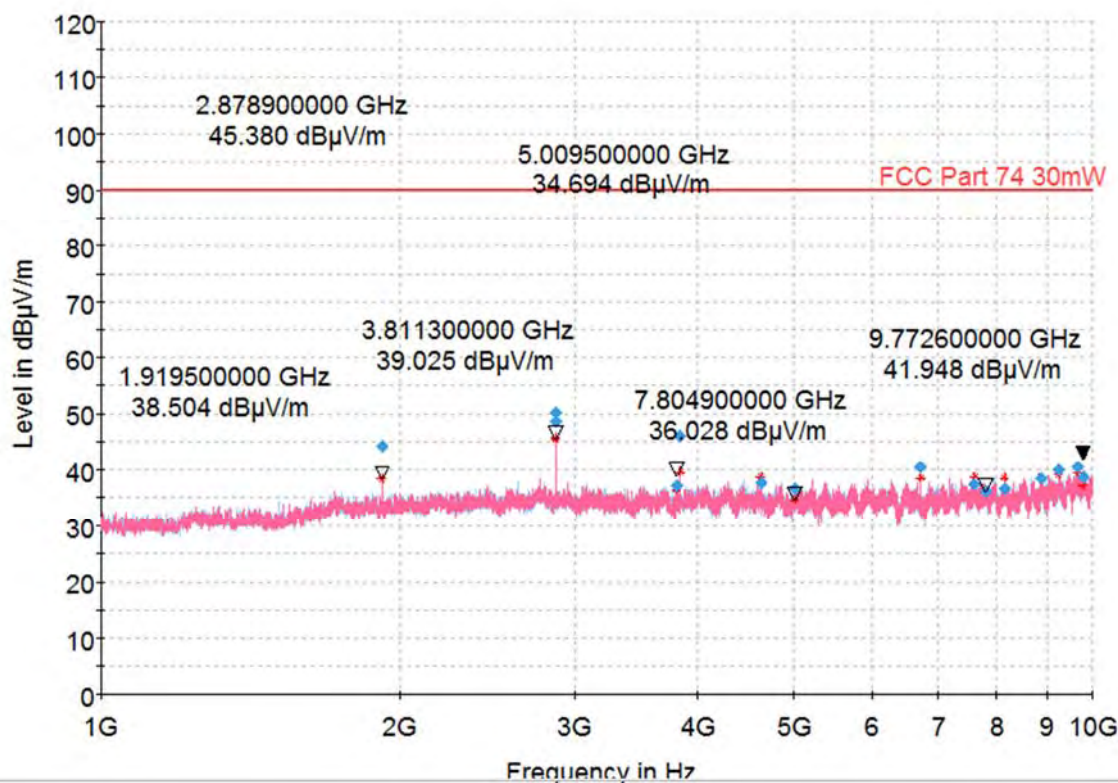
EUT Name: AD2 X55 #242
Serial Number: TU162090145
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 959.725MHz H @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-38 1340MHz HPF
Test Date & Time: February 3, 2017 1:38:06 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: AD2 X55 #242
Serial Number: TU162090145
Test Description: FCC pt.74 Spurious Radiated Emissions
Operating Conditions: 959.725MHz H @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: Horizontal and Vertical Antennae 30MHz – 10GHz
Test Date: January 25, 2017 & February 3, 2017

Frequency MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (dB)
31.099	17.64	84.38	72.360	20	120.00	170.000	H	185.00	16.40
446.712	39.59	84.38	50.410	20	120.00	144.000	V	218.00	18.90
451.918	39.30	84.38	50.700	20	120.00	150.000	V	64.00	19.10
482.699	37.18	84.38	52.820	20	120.00	119.000	V	67.00	20.50
602.041	37.05	84.38	52.950	20	120.00	203.000	V	242.00	23.00
814.536	39.21	84.38	50.790	20	120.00	366.000	V	214.00	24.80
959.777	58.22	84.38	31.780	20	120.00	254.000	V	161.00	26.10
1919.500	44.19	84.38	45.810	1000	1000.00	128.000	V	229.00	-15.00
2878.900	48.61	84.38	41.390	1000	1000.00	342.000	V	-3.00	-11.60
2879.200	50.24	84.38	39.760	1000	1000.00	344.000	V	-3.00	-11.60
3811.300	37.26	84.38	52.740	1000	1000.00	143.000	H	281.00	-9.10
3838.900	46.18	84.38	43.820	1000	1000.00	151.000	V	195.00	-9.00
4637.200	37.71	84.38	52.290	1000	1000.00	368.000	V	119.00	-7.80
5009.500	36.83	84.38	53.170	1000	1000.00	118.000	H	126.00	-7.80
6718.300	40.49	84.38	49.510	1000	1000.00	350.000	V	330.00	-4.30
7611.400	37.67	84.38	52.330	1000	1000.00	212.000	H	24.00	-2.80
7804.900	36.11	84.38	53.890	1000	1000.00	116.000	V	342.00	-3.00
8157.400	36.78	84.38	53.220	1000	1000.00	357.000	H	148.00	-2.60
8870.200	38.62	84.38	51.380	1000	1000.00	321.000	V	335.00	-2.20
9243.100	40.03	84.38	49.970	1000	1000.00	328.000	V	127.00	-1.60
9669.400	40.56	84.38	49.440	1000	1000.00	400.000	H	21.00	-1.20
9772.600	38.92	84.38	51.080	1000	1000.00	391.000	H	318.00	-1.10



Appendix E

Test Information

EUT Name: AD2 X55 #242
Serial Number: TU162090145
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
1919.500	44.19	-42.0	-13.0	45.8	V	2.30	2.64	5.40	-41.54	PASS
2878.900	48.61	-45.6	-13.0	41.4	V	2.70	3.15	6.70	-44.75	PASS
2879.200	50.24	-42.6	-13.0	39.8	V	2.70	3.15	6.70	-41.75	PASS
3811.300	37.26	-98.9	-13.0	52.7	H	3.65	4.03	8.40	-98.18	PASS
3838.900	46.18	-51.6	-13.0	43.8	V	3.65	4.03	8.40	-50.88	PASS
4637.200	37.71	-98.9	-13.0	52.3	V	3.85	4.39	9.30	-97.84	PASS
9669.400	40.56	-98.9	-13.0	49.4	H	6.00	4.08	13.20	-95.78	PASS

Test Information

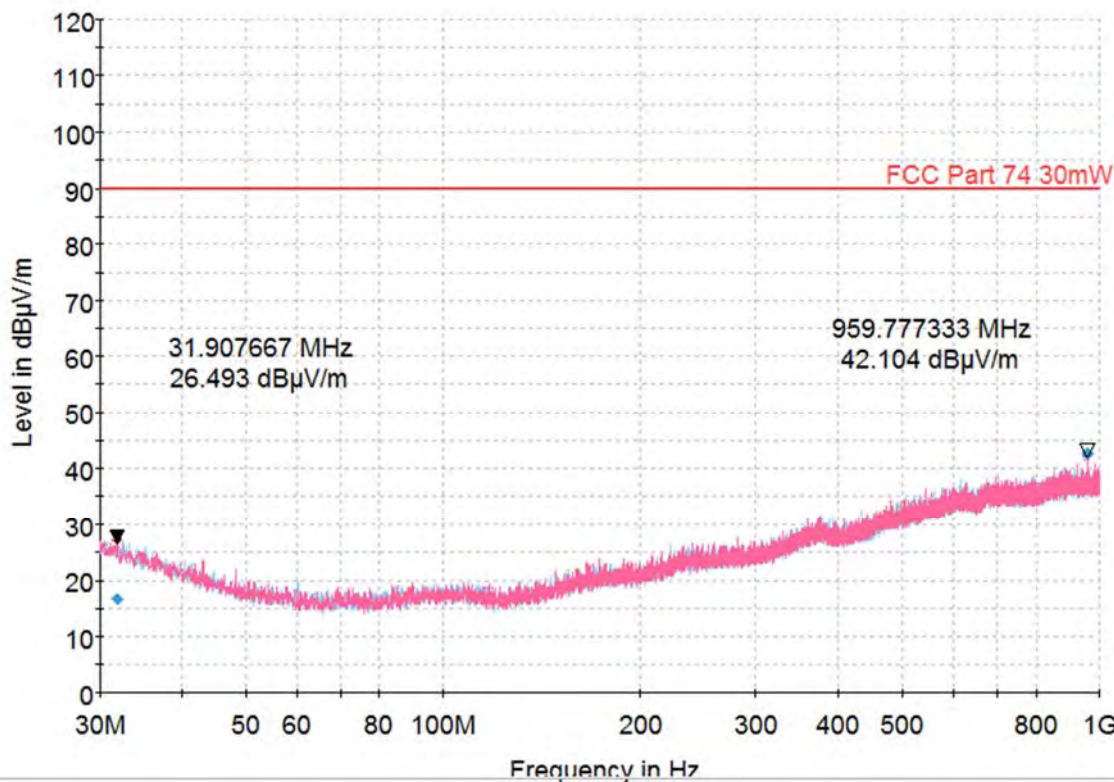
EUT Name: AD2 X55 #242
 Serial Number: TU162090145
 Test Description: Radiated RF Emissions 30MHz to 1GHz
 Operating Conditions: 959.725MHz H @ 2mW
 Operator Name: Alex Stelmaszczyk
 Comment: FCC pt. 74
 Description: FCC Table, 3m, AAs, No Audio Input, w/L23-26-01 Tuned Notch
 Test Date & Time: January 25, 2017 11:40:43 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 μ 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



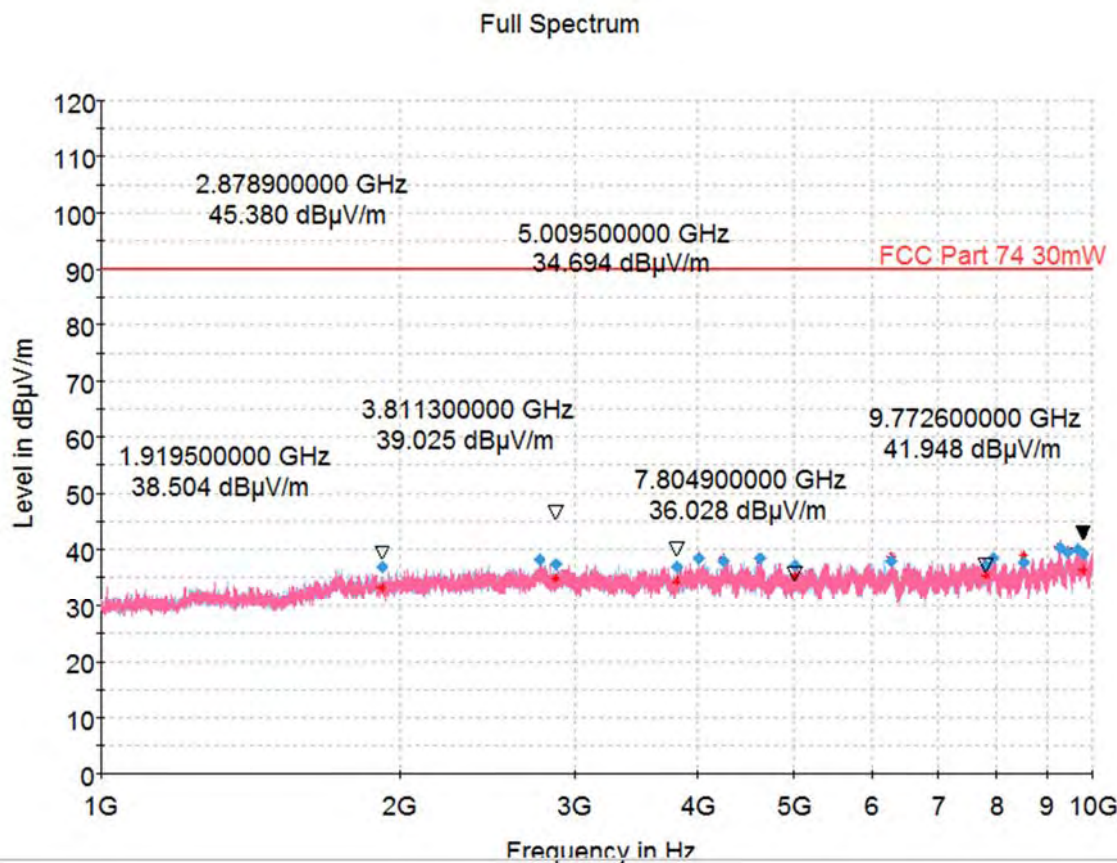
Test Information

EUT Name: AD2 X55 #242
Serial Number: TU162090145
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 959.725MHz H @ 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 2:43:45 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 μ 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: AD2 X55 #242
Serial Number: TU162090145
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 & February 3, 2017

Frequency MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (dB)
31.875	16.59	84.38	73.410	20	120.00	158.000	V	52.00	16.00
959.777	42.77	84.38	47.230	20	120.00	251.000	V	235.00	26.10
1919.500	36.94	84.38	53.060	1000	1000.00	274.000	H	263.00	-15.00
2772.700	38.28	84.38	51.720	1000	1000.00	390.000	V	236.00	-11.70
2878.900	37.41	84.38	52.590	1000	1000.00	134.000	H	18.00	-11.60
3811.300	36.97	84.38	53.030	1000	1000.00	109.000	V	137.00	-9.10
4015.900	38.43	84.38	51.570	1000	1000.00	370.000	H	275.00	-8.60
4251.100	38.06	84.38	51.940	1000	1000.00	389.000	H	117.00	-8.20
4615.600	38.34	84.38	51.660	1000	1000.00	391.000	H	280.00	-7.70
5009.500	37.18	84.38	52.820	1000	1000.00	331.000	V	149.00	-7.80
6269.800	38.07	84.38	51.930	1000	1000.00	278.000	H	10.00	-4.90
7804.900	37.22	84.38	52.780	1000	1000.00	100.000	H	167.00	-3.00
7954.000	38.56	84.38	51.440	1000	1000.00	289.000	V	94.00	-2.70
8517.100	37.73	84.38	52.270	1000	1000.00	289.000	H	335.00	-2.30
9270.700	40.18	84.38	49.820	1000	1000.00	383.000	V	284.00	-1.60
9458.800	39.38	84.38	50.620	1000	1000.00	340.000	V	289.00	-1.30
9642.700	40.14	84.38	49.860	1000	1000.00	311.000	V	80.00	-1.30
9772.600	39.29	84.38	50.710	1000	1000.00	183.000	V	250.00	-1.10

Appendix E

Test Information

EUT Name: AD2 X55 #242
Serial Number: TU162090145
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 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
1919.500	36.94	-34.4	-13.0	53.1	H	2.30	2.64	5.40	-33.94	PASS
2772.700	38.28	-79.5	-13.0	51.7	V	2.75	3.14	6.70	-78.69	PASS
2878.900	37.41	-52.2	-13.0	52.6	H	2.70	3.15	6.70	-51.35	PASS
3811.300	36.97	-98.9	-13.0	53.0	V	3.65	4.03	8.40	-98.18	PASS
4015.900	38.43	-98.9	-13.0	51.6	H	3.75	3.89	8.90	-97.64	PASS
7954.000	38.56	-98.9	-13.0	51.4	V	5.25	3.98	12.10	-96.03	PASS
9270.700	40.18	-98.9	-13.0	49.8	V	5.75	3.99	13.10	-95.54	PASS
9458.800	39.38	-98.9	-13.0	50.6	V	5.90	4.03	13.10	-95.73	PASS
9642.700	40.14	-98.9	-13.0	49.9	V	6.00	4.08	13.20	-95.78	PASS
9772.600	39.29	-98.9	-13.0	50.7	V	6.00	4.08	13.00	-95.98	PASS

Test Information

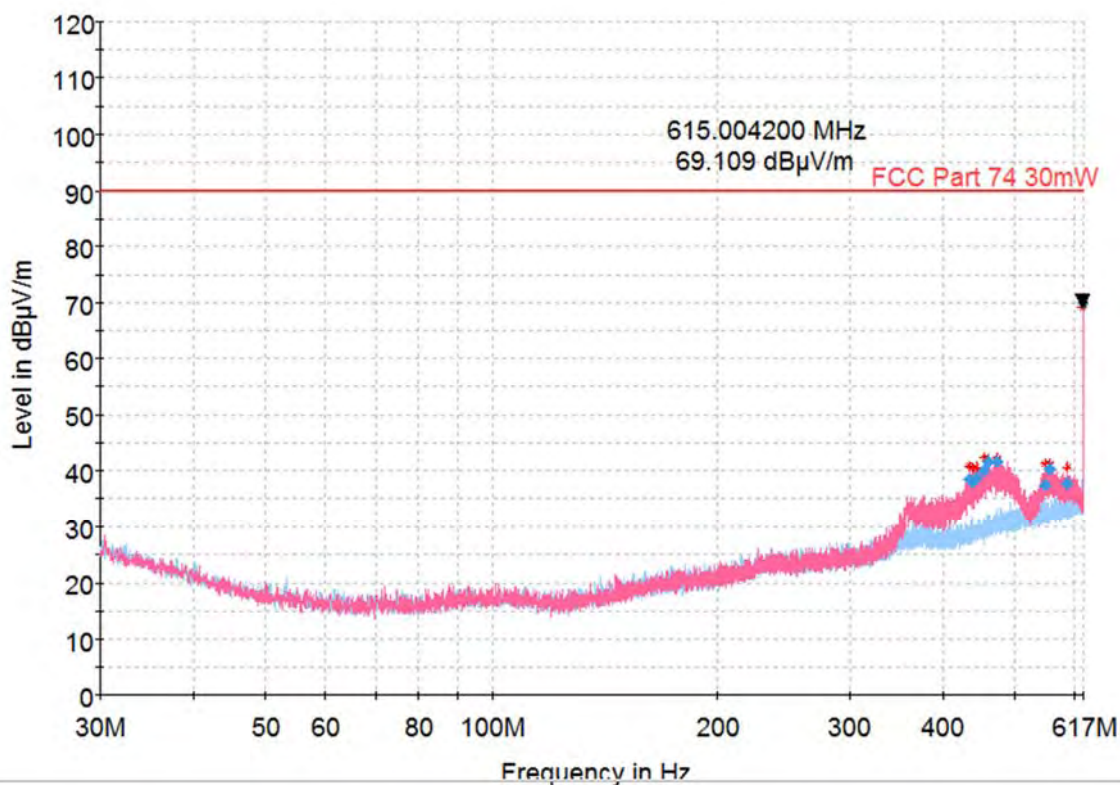
EUT Name: AD2 G57 #43
Serial Number: TU163360199
Test Description: Radiated RF Emissions 30MHz to 617MHz
Operating Conditions: 615.000MHz M @ 20mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w/L23-26-01 Tuned Notch
Test Date & Time: March 8, 2017 2:37:30 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: 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

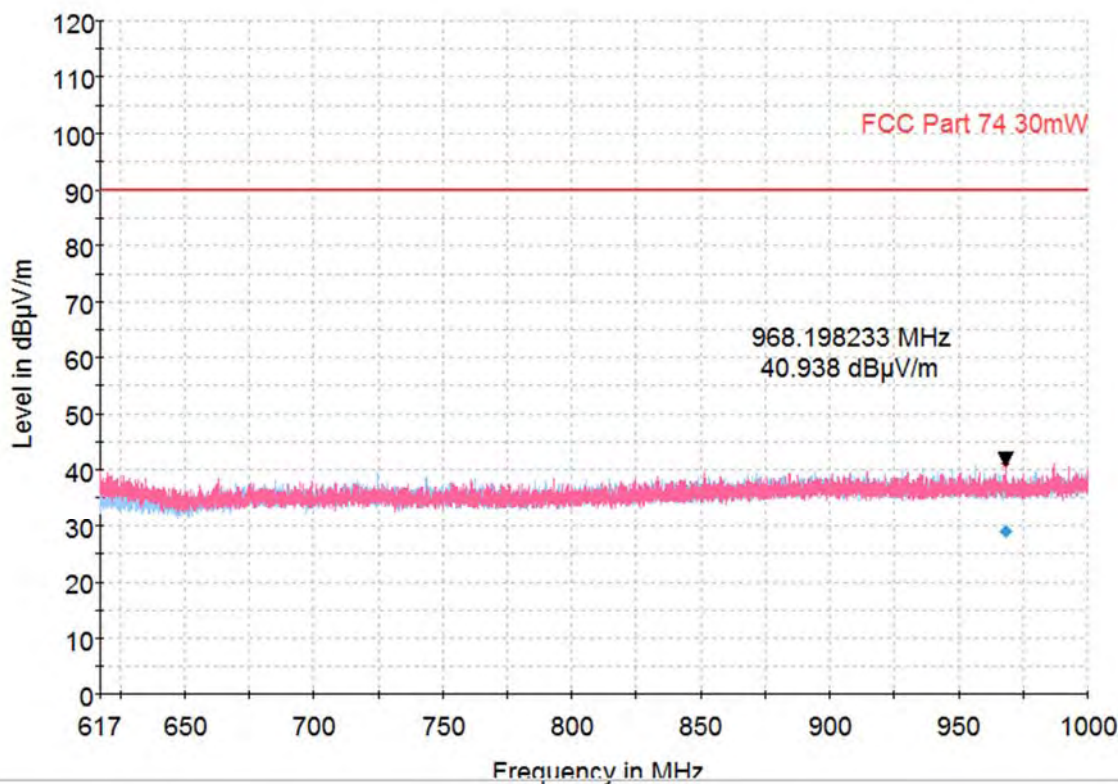
EUT Name: AD2 G57 #43
Serial Number: TU163360199
Test Description: Radiated RF Emissions 617Hz to 1000MHz
Operating Conditions: 615.000MHz M @ 20mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w/oL23-26-01 Tuned Notch
Test Date & Time: March 8, 2017 3:16:30 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: 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

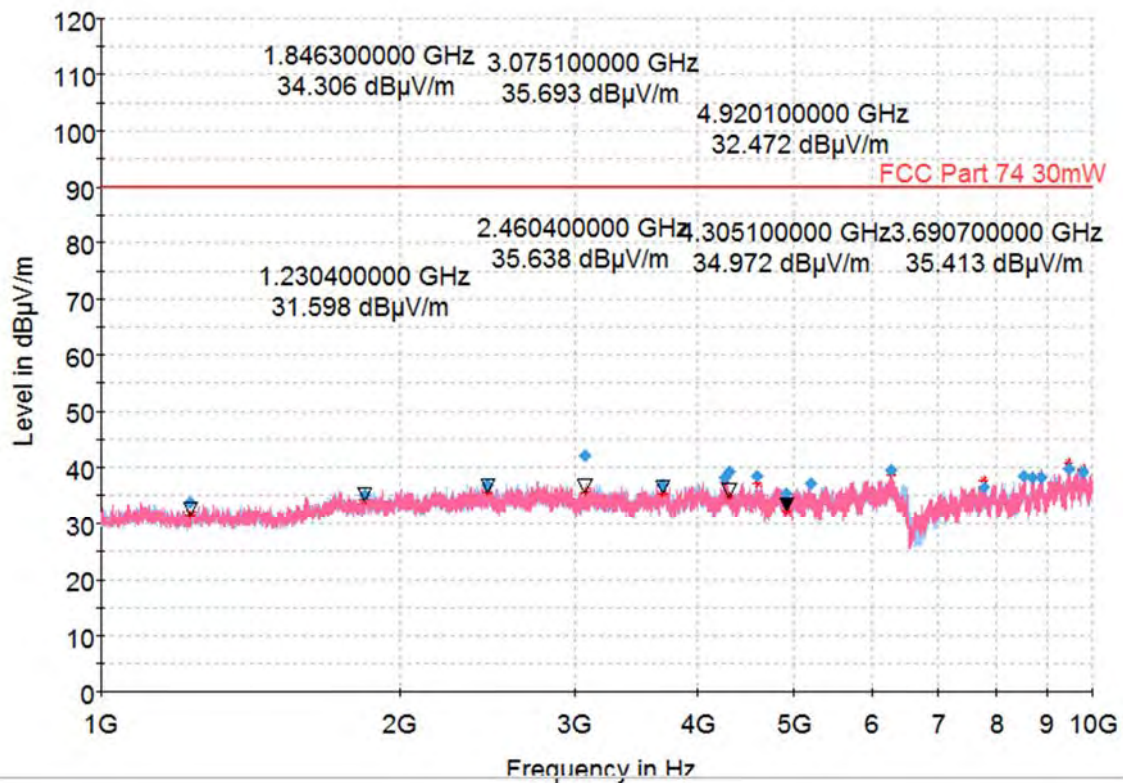
EUT Name: AD2 G57 #43
Serial Number: TU163360199
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 615.000MHz M @ 20mW
Operator Name: Russell Smith
Comment: FCC pt. 74
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF
Test Date & Time: March 7, 2017 5:33:14 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 μ 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: AD2 G57 #43
Serial Number: TU163360199
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 MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (dB)
434.150	38.40	84.38	51.600	20	120.00	118.000	V	169.00	18.50
437.965	38.05	84.38	51.950	20	120.00	111.000	V	249.00	18.60
444.207	38.90	84.38	51.100	20	120.00	119.000	V	323.00	18.80
454.773	40.04	84.38	49.960	20	120.00	119.000	V	45.00	19.20
460.467	41.77	84.38	48.230	20	120.00	100.000	V	332.00	19.60
473.596	41.81	84.38	48.190	20	120.00	111.000	V	255.00	20.30
547.812	37.49	84.38	52.510	20	120.00	219.000	V	109.00	22.00
556.539	40.23	84.38	49.770	20	120.00	100.000	V	115.00	22.10
585.948	37.71	84.38	52.290	20	120.00	162.000	V	167.00	22.40
615.024	69.87	84.38	20.130	20	120.00	158.000	V	90.00	23.50
968.224	28.81	84.38	61.190	20	120.00	178.000	V	33.00	26.10
1230.400	33.94	84.38	56.060	1000	1000.00	315.000	V	146.00	-19.30
1846.300	35.10	84.38	54.900	1000	1000.00	283.000	H	-5.00	-15.30
2460.400	37.02	84.38	52.980	1000	1000.00	400.000	V	324.00	-12.90
3075.100	42.21	84.38	47.790	1000	1000.00	306.000	V	194.00	-11.30
3690.700	37.05	84.38	52.950	1000	1000.00	191.000	H	175.00	-9.60
4255.300	38.13	84.38	51.870	1000	1000.00	145.000	V	111.00	-8.20
4305.100	39.16	84.38	50.840	1000	1000.00	261.000	V	325.00	-8.10
4596.700	38.63	84.38	51.370	1000	1000.00	312.000	V	51.00	-7.70
4920.100	35.47	84.38	54.530	1000	1000.00	362.000	H	72.00	-7.60
5209.000	37.18	84.38	52.820	1000	1000.00	107.000	H	-5.00	-7.30
6271.000	39.62	84.38	50.380	1000	1000.00	150.000	V	89.00	-4.90
7777.300	36.60	84.38	53.400	1000	1000.00	150.000	H	1.00	-3.10
8516.800	38.69	84.38	51.310	1000	1000.00	126.000	H	102.00	-2.30
8705.200	38.13	84.38	51.870	1000	1000.00	362.000	V	250.00	-2.50
8872.000	38.30	84.38	51.700	1000	1000.00	368.000	H	95.00	-2.10
9478.300	39.96	84.38	50.040	1000	1000.00	262.000	H	212.00	-1.30
9794.800	39.21	84.38	50.790	1000	1000.00	158.000	H	45.00	-1.00

Appendix E

Test Information

EUT Name: AD2 G57 #43
 Serial Number: TU163360199
 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 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
454.773	40.04	-58.4	-13.0	50.0	V	1.25	1.24		-60.89	PASS
460.467	41.77	-56.5	-13.0	48.2	V	1.45	1.26		-59.21	PASS
473.596	41.81	-56.5	-13.0	48.2	V	1.45	1.27		-59.22	PASS
556.539	40.23	-59.2	-13.0	49.8	V	1.49	1.40		-62.09	PASS
1230.400	33.94	-41.3	-13.0	56.1	V	2.00	2.10	1.90	-43.50	PASS
1846.300	35.10	-37.6	-13.0	54.9	H	2.70	2.96	5.40	-37.86	PASS
2460.400	37.02	-41.7	-13.0	53.0	V	2.70	2.96	5.40	-41.96	PASS
3075.100	42.21	-49.4	-13.0	47.8	V	3.00	3.24	7.00	-48.64	PASS
3690.700	37.05	-98.9	-13.0	53.0	H	2.70	3.15	8.10	-96.65	PASS
4255.300	38.13	-98.9	-13.0	51.9	V	3.70	4.11	9.30	-97.41	PASS
4305.100	39.16	-98.9	-13.0	50.8	V	3.70	4.11	9.30	-97.41	PASS
4596.700	38.63	-82.4	-13.0	51.4	V	3.85	4.47	9.30	-81.42	PASS

Test Information

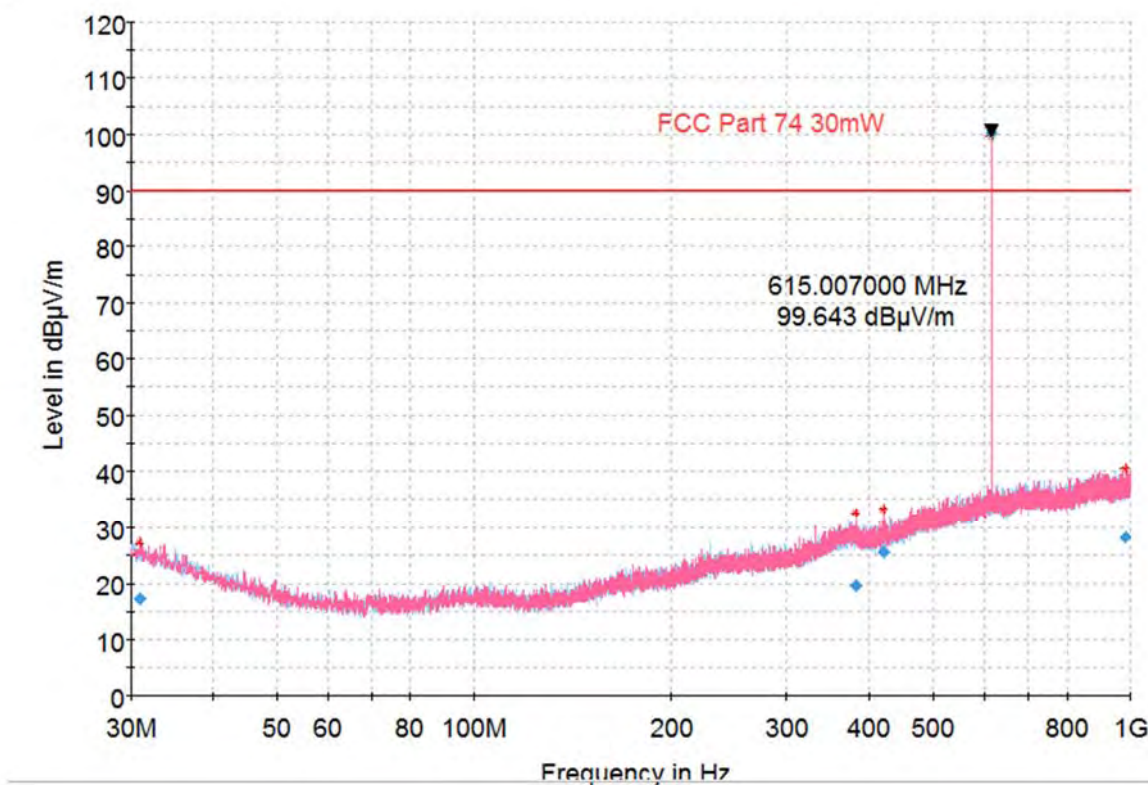
EUT Name: AD2 G57 #43
Serial Number: TU163360199
Test Description: Radiated RF Emissions 30MHz to 1GHz
Operating Conditions: 615.000MHz M @ 2mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w/oL23-26-01Tuned Notch
Test Date & Time: March 8, 2017 3:56:41 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

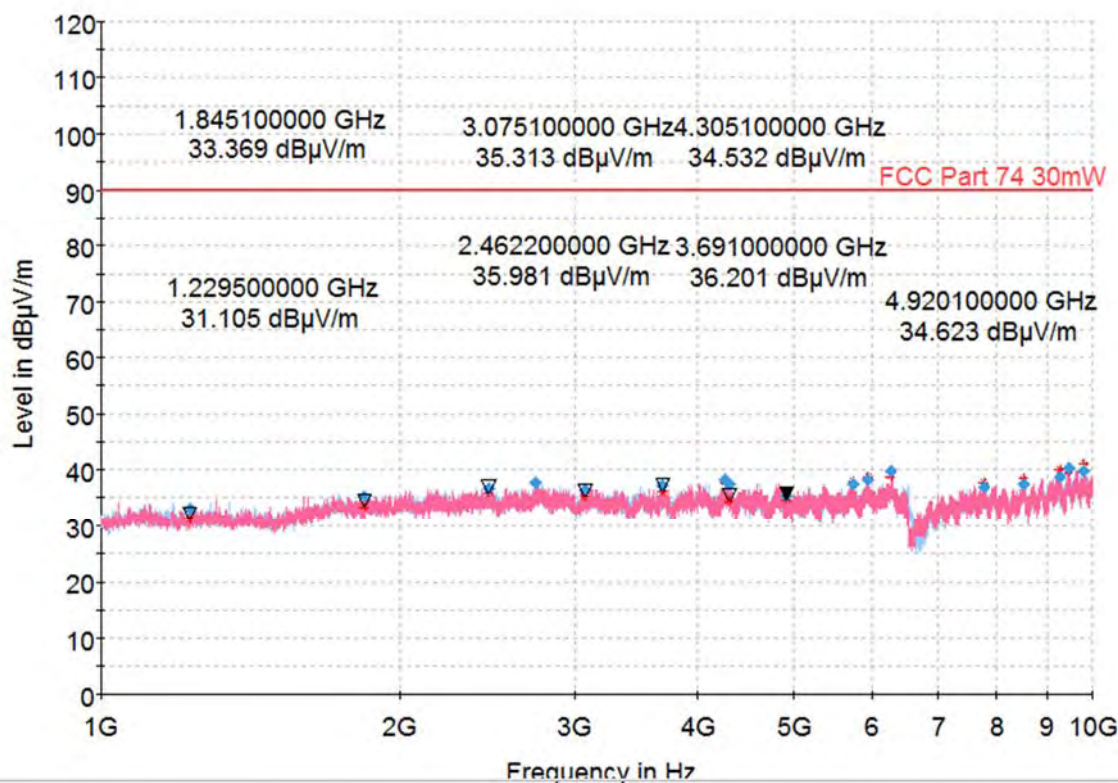
EUT Name: AD2 G57 #43
Serial Number: TU163360199
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 615.000MHz M @ 2mW
Operator Name: Russell Smith
Comment: FCC pt. 74
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF
Test Date & Time: March 7, 2017 4:08:09 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: AD2 G57 #43
Serial Number: TU163360199
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 MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (dB)
31.035	17.22	84.38	72.780	20	120.00	274.000	V	17.00	16.40
381.916	19.60	84.38	70.400	20	120.00	150.000	H	123.00	18.30
421.880	25.47	84.38	64.530	20	120.00	111.000	V	303.00	18.20
615.007	100.23	84.38	-10.230	20	120.00	152.000	V	63.00	23.50
984.933	28.21	84.38	61.790	20	120.00	150.000	H	45.00	26.30
1229.500	32.93	84.38	57.070	1000	1000.00	318.000	H	108.00	-19.30
1845.100	35.35	84.38	54.650	1000	1000.00	388.000	H	93.00	-15.40
2462.200	36.78	84.38	53.220	1000	1000.00	200.000	V	238.00	-12.90
2746.900	37.87	84.38	52.130	1000	1000.00	149.000	V	287.00	-11.80
3075.100	36.47	84.38	53.530	1000	1000.00	112.000	H	306.00	-11.30
3691.000	37.21	84.38	52.790	1000	1000.00	104.000	V	264.00	-9.60
4258.600	38.24	84.38	51.760	1000	1000.00	400.000	H	254.00	-8.20
4305.100	37.39	84.38	52.610	1000	1000.00	150.000	V	203.00	-8.10
4920.100	35.19	84.38	54.810	1000	1000.00	221.000	V	341.00	-7.60
5731.300	37.67	84.38	52.330	1000	1000.00	280.000	H	92.00	-6.20
5952.400	38.27	84.38	51.730	1000	1000.00	400.000	V	285.00	-5.50
6256.900	39.90	84.38	50.100	1000	1000.00	362.000	H	321.00	-4.90
7770.400	37.04	84.38	52.960	1000	1000.00	136.000	V	87.00	-3.10
8515.300	37.51	84.38	52.490	1000	1000.00	323.000	V	324.00	-2.30
9264.100	38.89	84.38	51.110	1000	1000.00	313.000	H	335.00	-1.60
9460.000	40.31	84.38	49.690	1000	1000.00	136.000	V	175.00	-1.30
9814.300	39.81	84.38	50.190	1000	1000.00	258.000	V	92.00	-1.00

Appendix E

Test Information

EUT Name: AD2 G57 #43
Serial Number: TU163360199
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
1229.500	32.93	-98.9	-13.0	57.1	H	2.00	2.10	1.90	-101.10	PASS
1845.100	35.35	-98.9	-13.0	54.7	H	2.70	2.96	5.40	-99.16	PASS
2462.200	36.78	-98.9	-13.0	53.2	V	2.70	2.96	5.40	-99.16	PASS
2746.900	37.87	-84.1	-13.0	52.1	V	3.00	3.13	6.00	-84.23	PASS
3075.100	36.47	-98.9	-13.0	53.5	H	3.00	3.24	7.00	-98.14	PASS
3691.000	37.21	-98.9	-13.0	52.8	V	2.70	3.15	8.10	-96.65	PASS
4258.600	38.24	-98.9	-13.0	51.8	H	3.70	4.11	9.30	-97.41	PASS
4305.100	37.39	-98.9	-13.0	52.6	V	3.70	4.11	9.30	-97.41	PASS
4920.100	35.19	-98.9	-13.0	54.8	V	3.90	4.40	9.60	-97.60	PASS
5952.400	38.27	-98.9	-13.0	51.7	V	4.50	5.35	10.60	-98.15	PASS
6256.900	39.90	-98.9	-13.0	50.1	H	4.60	5.27	10.50	-98.27	PASS
9264.100	38.89	-98.9	-13.0	51.1	H	5.90	4.00	13.10	-95.70	PASS
9460.000	40.31	-98.9	-13.0	49.7	V	5.93	4.02	13.10	-95.75	PASS

Test Information

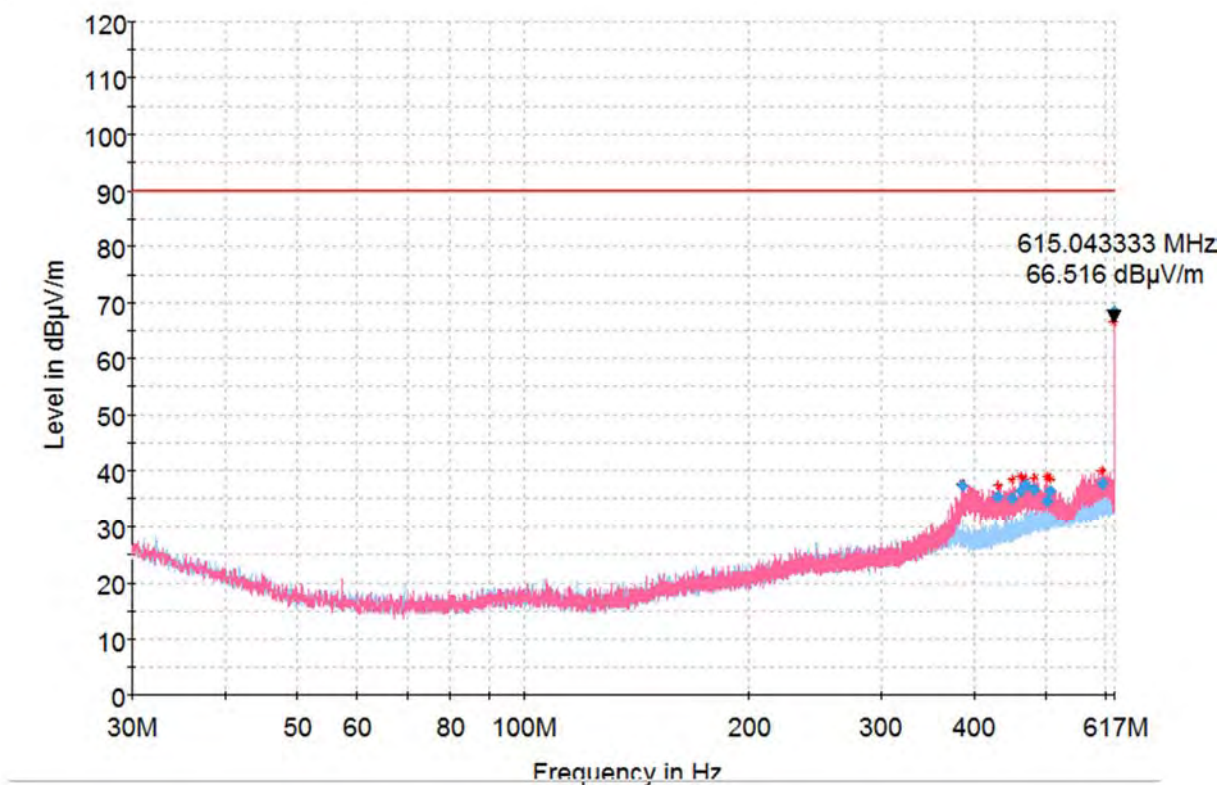
EUT Name: AD2 K54 #65
Serial Number: TU163370263
Test Description: Radiated RF Emissions 30MHz to 617MHz
Operating Conditions: 615.000MHz M @ 20mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w/L23-26-01 Tuned Notch
Test Date & Time: March 2, 2017 1:39:33 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

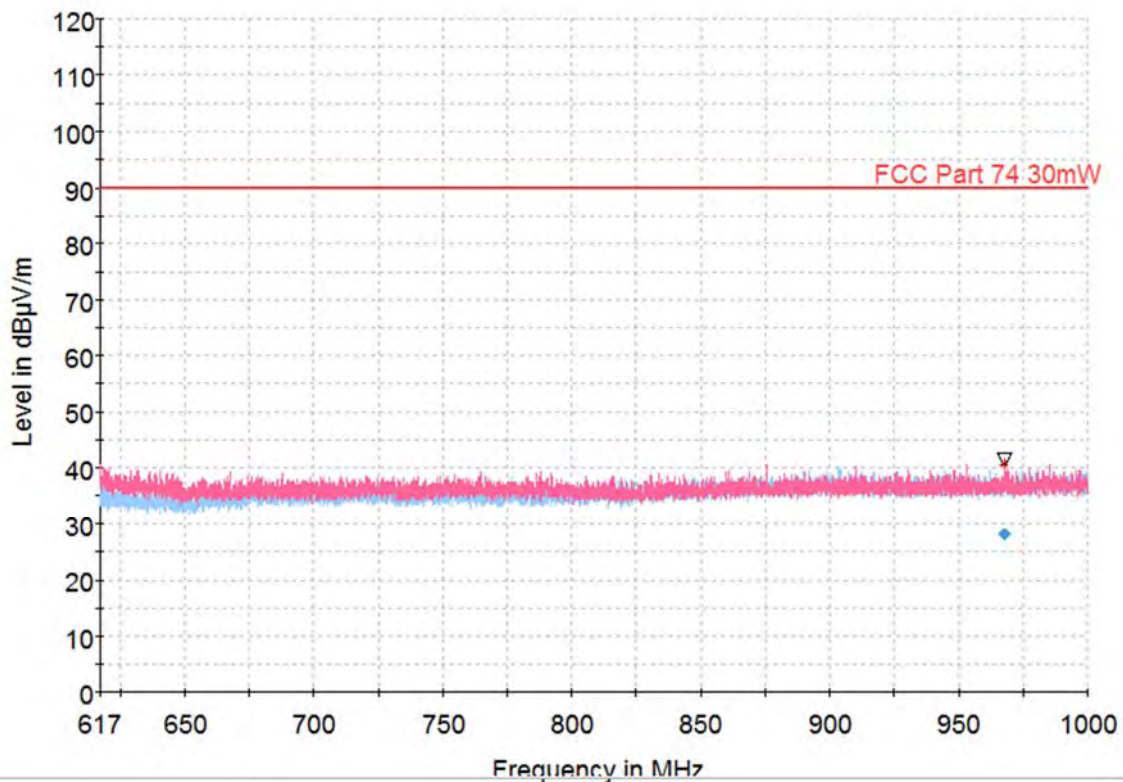
EUT Name: AD2 K54 #65
Serial Number: TU163370263
Test Description: Radiated RF Emissions 617Hz to 1000MHz
Operating Conditions: 615.000MHz M @ 20mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w/L23-26-01 Tuned Notch
Test Date & Time: March 2, 2017 2:24:45 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

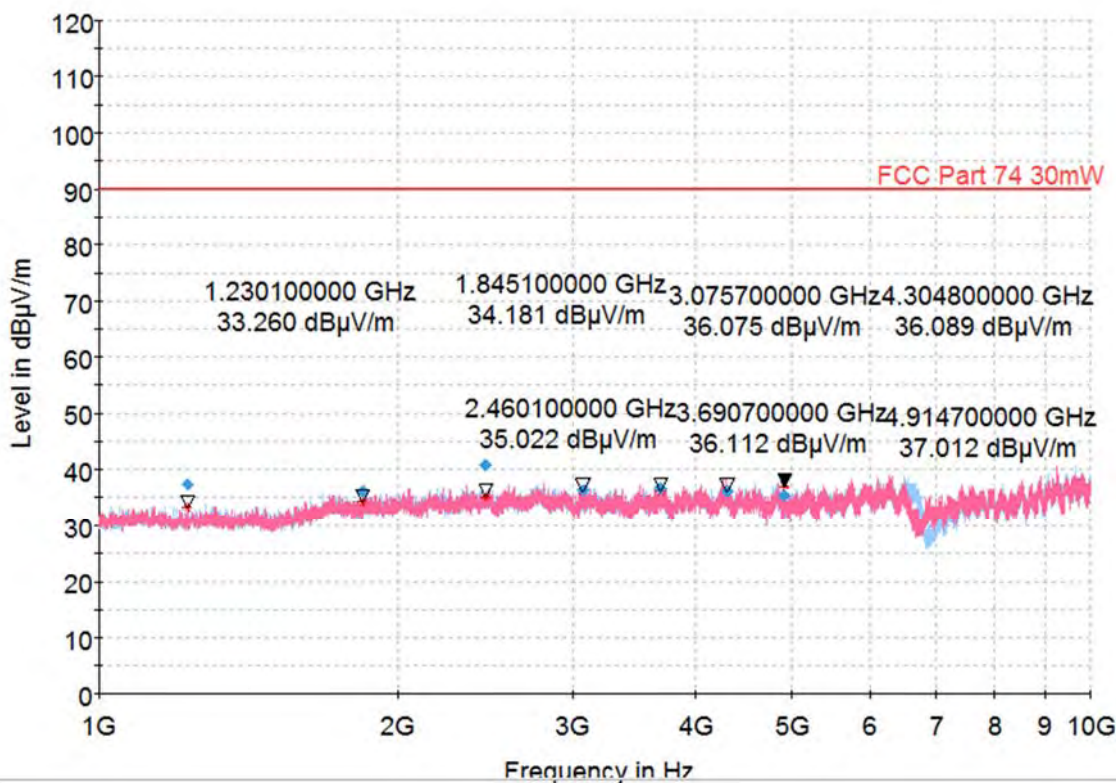
EUT Name: AD2 K54 #65
Serial Number: TU163370263
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 615.000MHz M @ 20mW
Operator Name: Russell Smith
Comment: FCC pt. 74
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF
Test Date & Time: March 2, 2017 6:27:54 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: 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: AD2 K54 #65
Serial Number: TU163370263
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 2, 2017

Frequency MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (dB)
385.194	37.37	84.38	52.630	20	120.00	139.000	V	320.00	18.20
430.921	35.40	84.38	54.600	20	120.00	126.000	V	206.00	18.40
450.644	35.02	84.38	54.980	20	120.00	100.000	V	221.00	19.00
461.465	36.39	84.38	53.610	20	120.00	111.000	V	314.00	19.60
468.567	37.51	84.38	52.490	20	120.00	100.000	V	342.00	20.00
480.914	36.82	84.38	53.180	20	120.00	100.000	V	303.00	20.50
500.226	34.71	84.38	55.290	20	120.00	111.000	V	289.00	20.70
506.585	36.25	84.38	53.750	20	120.00	100.000	V	131.00	20.90
593.070	37.74	84.38	52.260	20	120.00	182.000	V	148.00	22.70
615.043	68.29	84.38	21.710	20	120.00	150.000	V	67.00	23.50
967.866	28.00	84.38	62.000	20	120.00	400.000	V	10.00	26.10
1230.100	37.40	84.38	52.600	1000	1000.00	377.000	V	330.00	-19.30
1845.100	36.15	84.38	53.850	1000	1000.00	212.000	V	310.00	-15.40
2460.100	40.84	84.38	49.160	1000	1000.00	395.000	H	177.00	-12.90
3075.700	36.43	84.38	53.570	1000	1000.00	129.000	H	157.00	-11.30
3690.700	36.79	84.38	53.210	1000	1000.00	239.000	V	307.00	-9.60
4304.800	36.19	84.38	53.810	1000	1000.00	382.000	H	8.00	-8.10
4914.700	35.53	84.38	54.470	1000	1000.00	272.000	V	67.00	-7.60

Appendix E

Test Information

EUT Name: AD2 K54 #65
 Serial Number: TU163370263
 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 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
468.567	37.51	-60.9	-13.0	52.5	V	1.35	1.25		-63.50	PASS
593.070	37.74	-56.6	-13.0	52.3	V	1.47	1.48		-59.55	PASS
1230.100	37.40	-46.2	-13.0	52.6	V	2.00	2.10	1.90	-48.40	PASS
1845.100	36.15	-48.7	-13.0	53.9	V	2.70	2.96	5.40	-48.96	PASS
2460.100	40.84	-58.7	-13.0	49.2	H	2.70	2.96	5.40	-58.96	PASS
3075.700	36.43	-98.9	-13.0	53.6	H	3.00	3.24	7.00	-98.14	PASS
3690.700	36.79	-98.9	-13.0	53.2	V	2.70	3.15	8.10	-96.65	PASS
4304.800	36.19	-98.9	-13.0	53.8	H	3.70	4.11	9.30	-97.41	PASS
4914.700	35.53	-98.9	-13.0	54.5	V	3.90	4.40	9.60	-97.60	PASS

Test Information

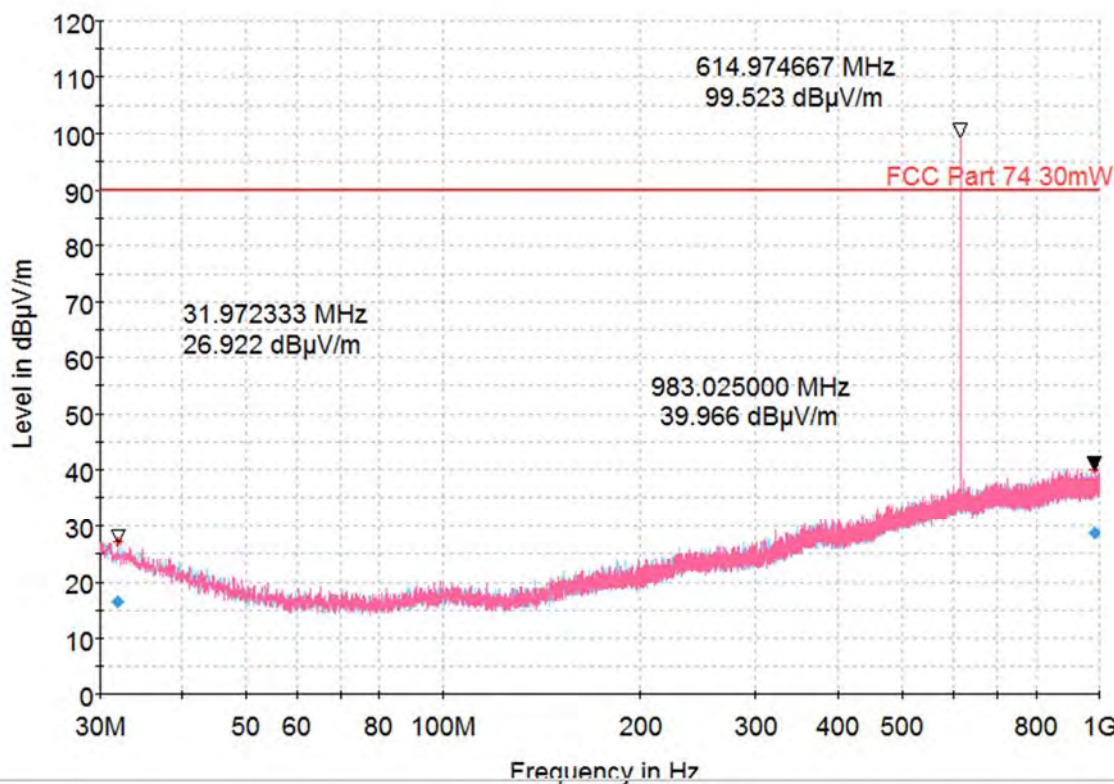
EUT Name: AD2 K54 #65
Serial Number: TU163370263
Test Description: Radiated RF Emissions 30MHz to 1GHz
Operating Conditions: 615.000MHz M @ 2mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w/oL23-26-01 Tuned Notch
Test Date & Time: March 2, 2017 10:59:39 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: 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

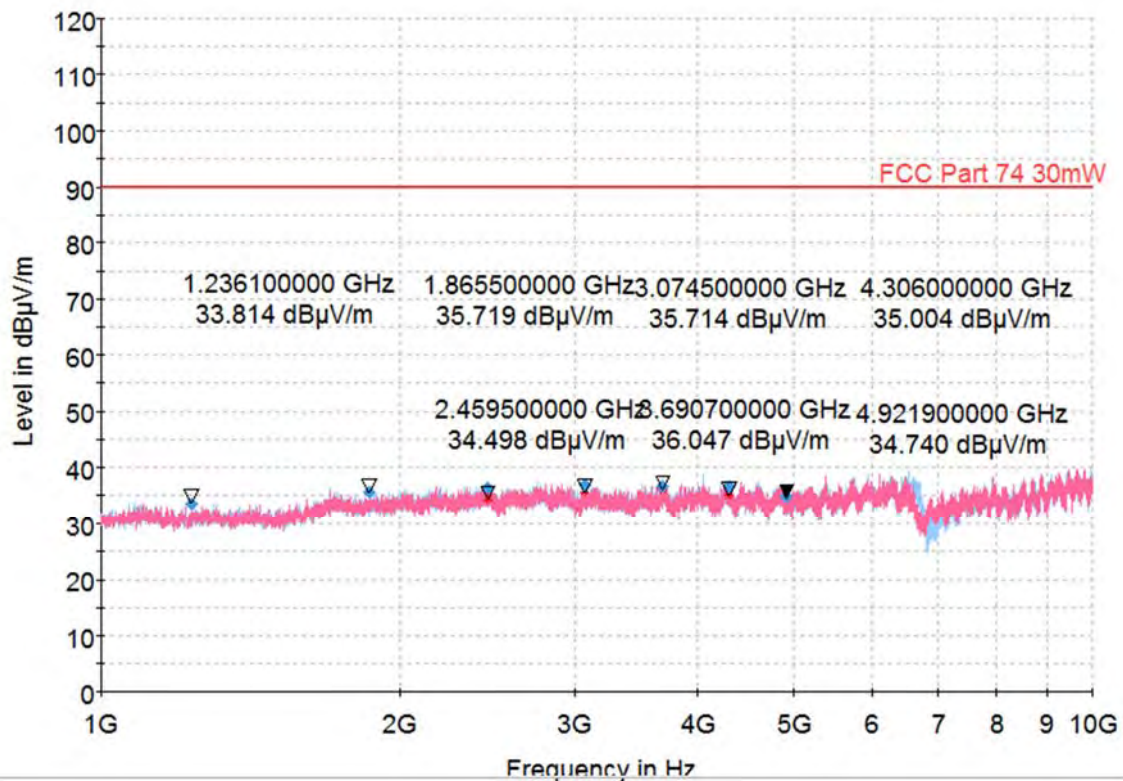
EUT Name: AD2 K54 #65
Serial Number: TU163370263
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 615.000MHz M @ 2mW
Operator Name: Russell Smith
Comment: FCC pt. 74
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF
Test Date & Time: March 2, 2017 5:27:24 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: AD2 K54 #65
Serial Number: TU163370263
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, 2017

Frequency MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (dB)
31.972	16.43	84.38	73.570	20	120.00	199.000	H	0.00	15.90
985.515	28.71	84.38	61.290	20	120.00	316.000	V	15.00	26.30
1236.100	33.64	84.38	56.360	1000	1000.00	287.000	V	204.00	-19.30
1865.500	35.72	84.38	54.280	1000	1000.00	206.000	H	341.00	-15.30
2459.500	36.49	84.38	53.510	1000	1000.00	131.000	V	82.00	-12.90
3074.500	37.03	84.38	52.970	1000	1000.00	382.000	H	107.00	-11.30
3690.700	36.65	84.38	53.350	1000	1000.00	392.000	V	38.00	-9.60
4306.000	36.82	84.38	53.180	1000	1000.00	153.000	V	35.00	-8.10
4921.900	34.82	84.38	55.180	1000	1000.00	143.000	V	337.00	-7.60



Test Information

EUT Name: AD2 K54 #65
Serial Number: TU163370263
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
1236.100	33.64	-48.5	-13.0	56.4	V	1.65	2.10	1.90	-50.35	PASS
1865.500	35.72	-53.6	-13.0	54.3	H	2.25	2.60	5.40	-53.05	PASS
2459.500	36.49	-53.8	-13.0	53.5	V	2.70	2.96	5.40	-54.06	PASS
3074.500	37.03	-98.9	-13.0	53.0	H	3.00	3.24	7.00	-98.14	PASS
3690.700	36.65	-98.9	-13.0	53.4	V	2.70	3.15	8.10	-96.65	PASS
4306.000	36.82	-98.9	-13.0	53.2	V	3.70	4.11	9.30	-97.41	PASS
4921.900	34.82	-98.9	-13.0	55.2	V	3.90	4.40	9.60	-97.60	PASS