

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 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	33.91	-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

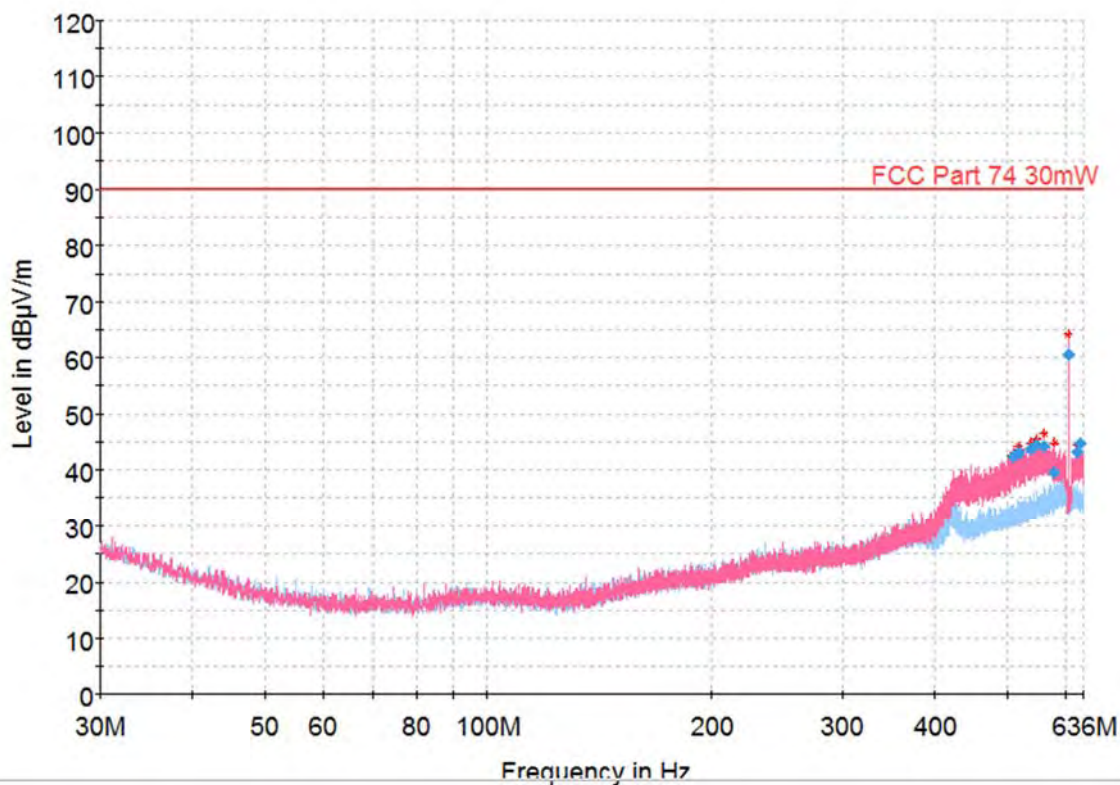
EUT Name: AD1 K53 #142
 Serial Number: TU162050041
 Test Description: Radiated RF Emissions 30MHz to 636MHz
 Operating Conditions: 606.125MHz L @ 35mW
 Operator Name: Alex Stelmaszczyk
 Comment: FCC pt. 74
 Description: FCC Table, 3m, AAs, No Audio Input, w L23-26-01 Tuned Notch
 Test Date & Time: October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

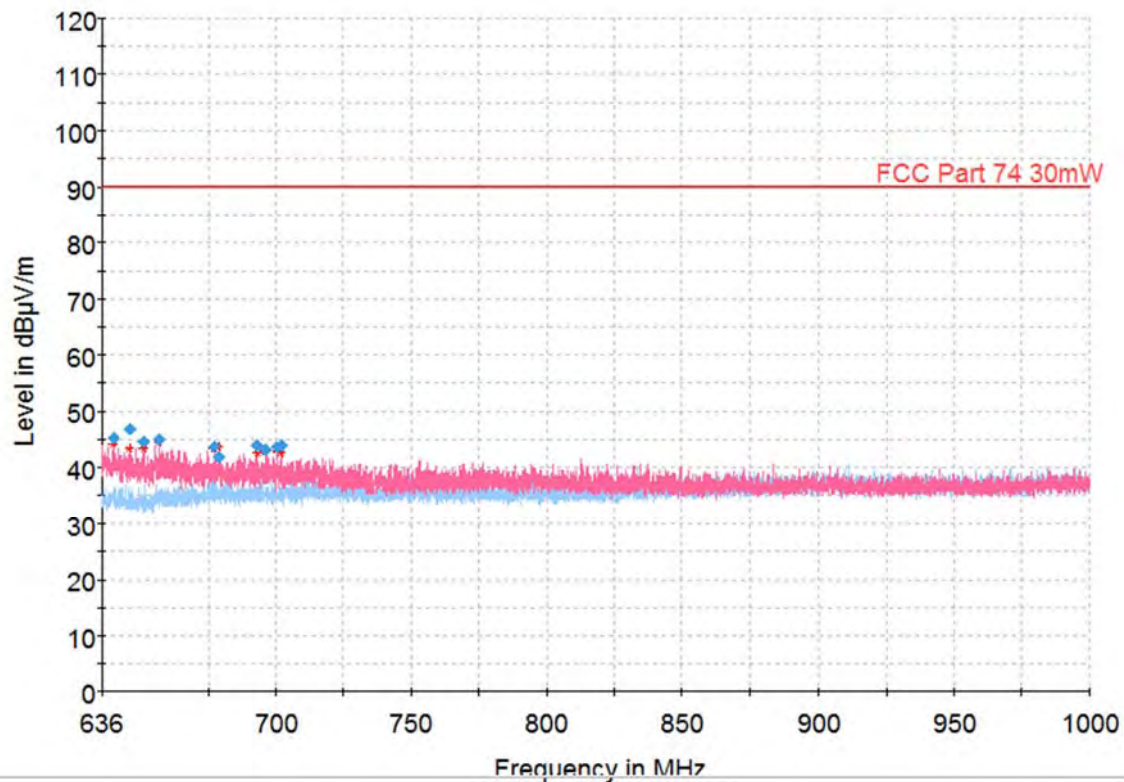
EUT Name: AD1 K53 #142
Serial Number: TU162050041
Test Description: Radiated RF Emissions 636 - 1000MHz
Operating Conditions: 606.125MHz L @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w/o L23-26-01 Tuned Notch
Test Date & Time: October 26,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

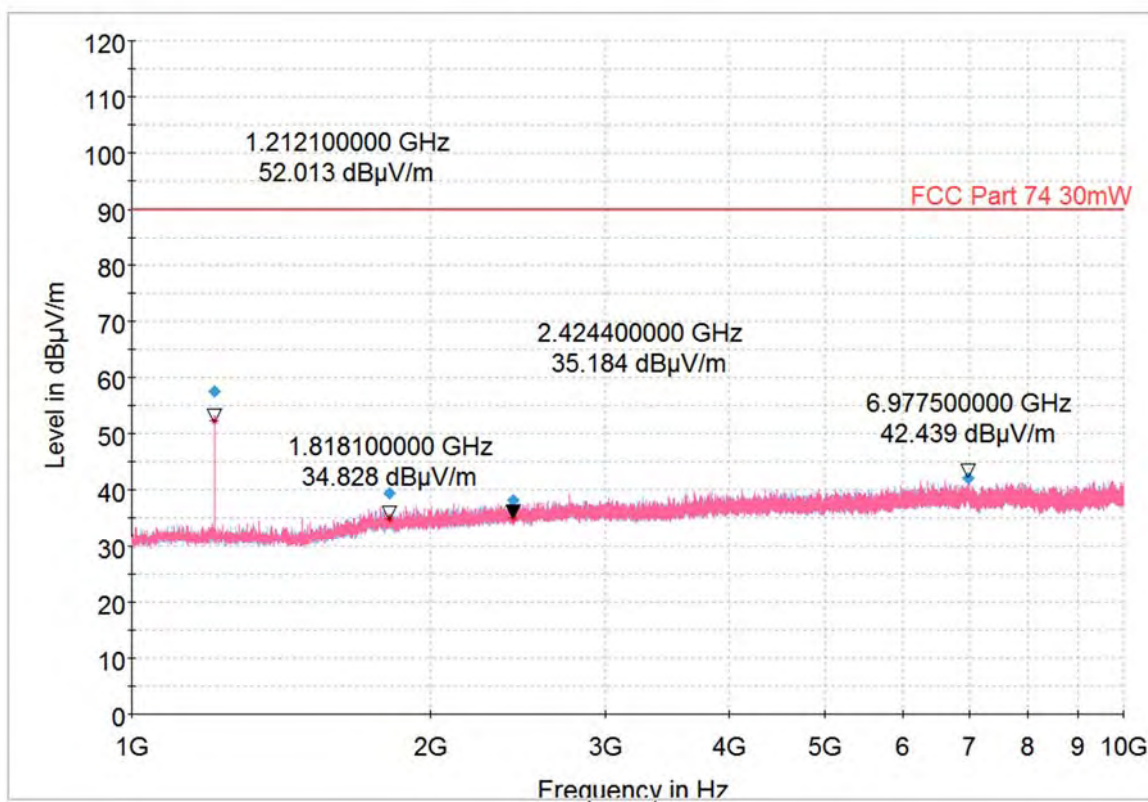
EUT Name: AD1 K53 #142
Serial Number: TU162050041
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 606.125MHz L @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF
Test Date & Time: 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: dB μ V/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 MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (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

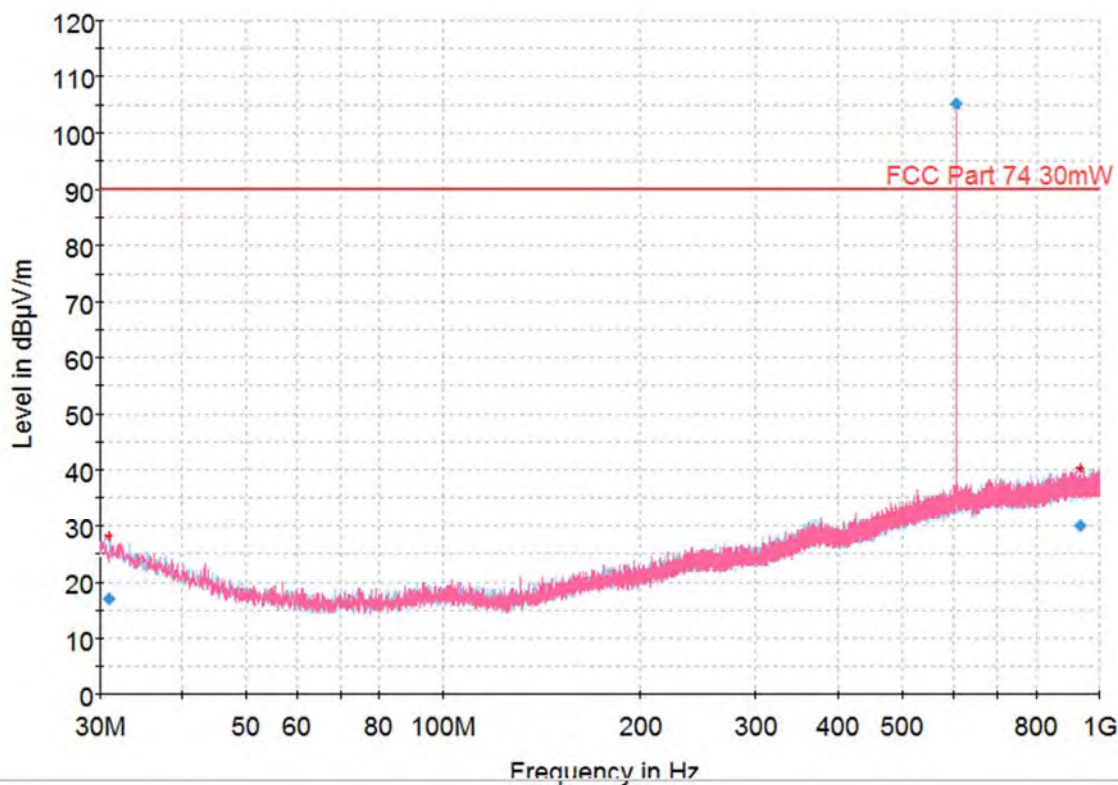
EUT Name: AD1 K53 #142
Serial Number: TU162050041
Test Description: Radiated RF Emissions 30MHz to 1GHz
Operating Conditions: 606.125MHz L @ 2mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input
Test Date & Time: October 27, 2016 11:33:12 AM

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 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

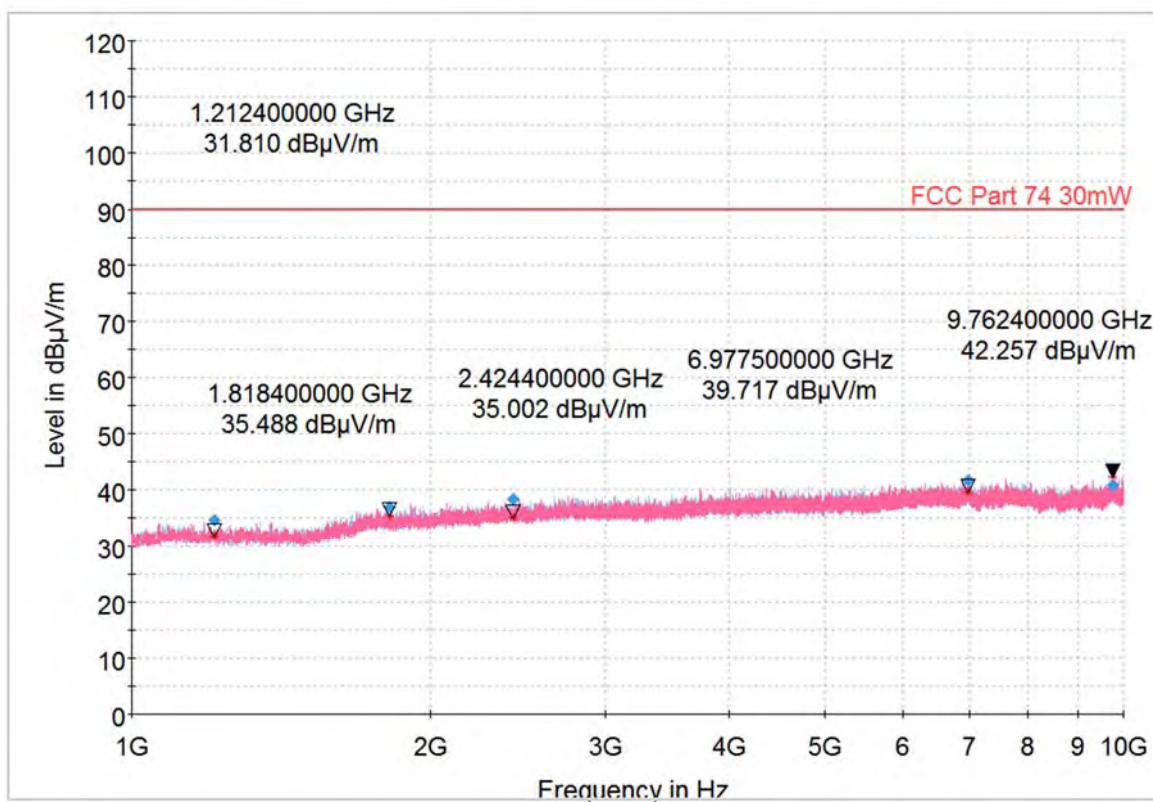
EUT Name: AD1 K53 #142
Serial Number: TU162050041
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 606.125MHz L @ 2mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF
Test Date & Time: November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





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 MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (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

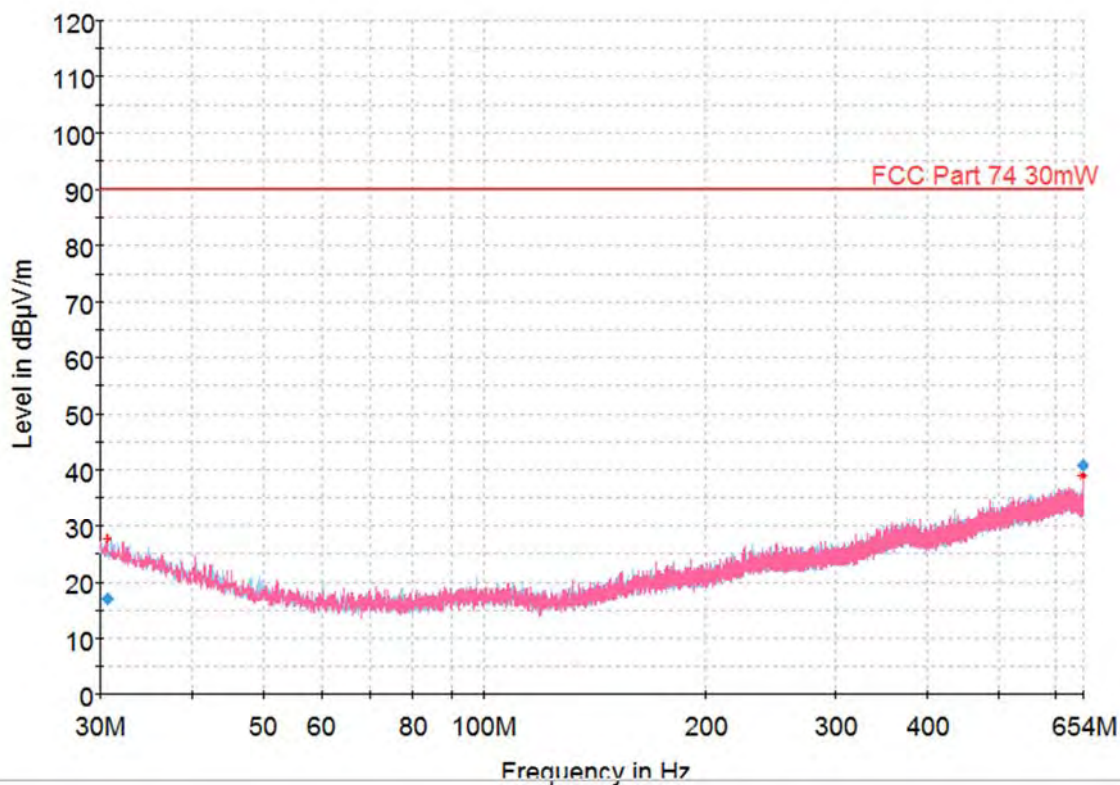
EUT Name: AD1 K53 #142
Serial Number: TU162050041
Test Description: Radiated RF Emissions 30MHz to 654MHz
Operating Conditions: 652.000MHz M @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w L23-26-01 Tuned Notch
Test Date & Time: October 26,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

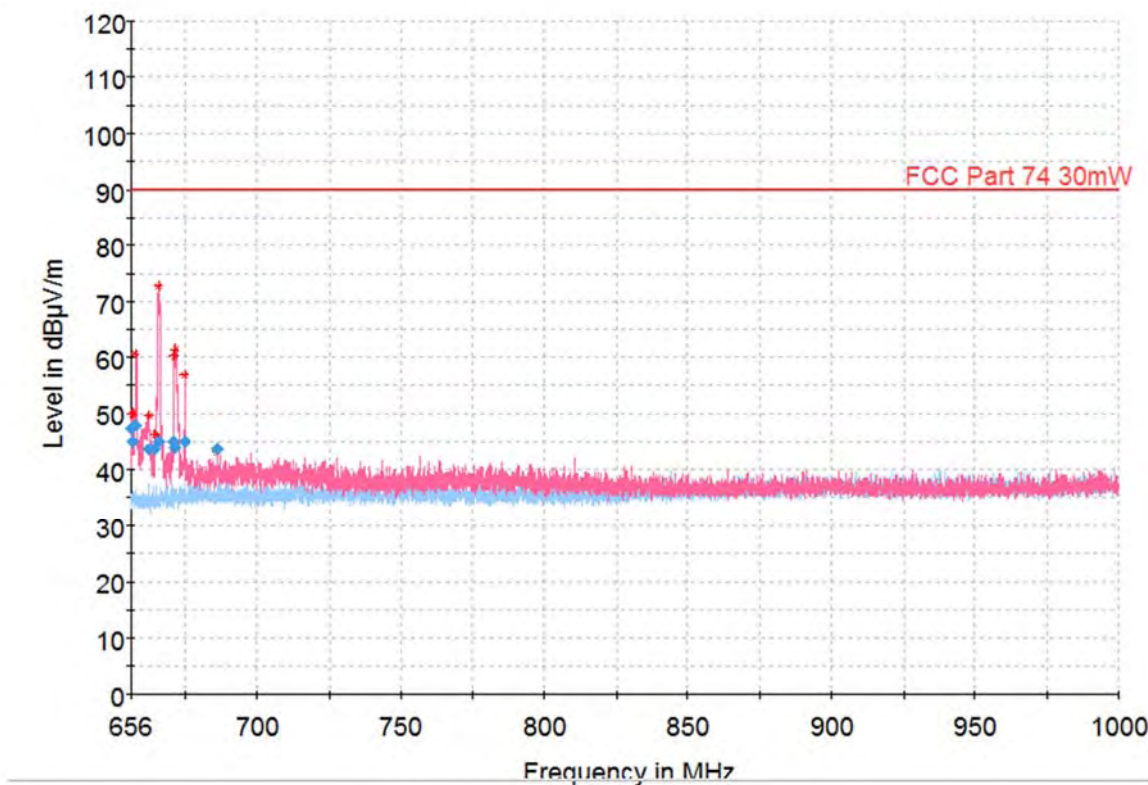
EUT Name: AD1 K53 #142
 Serial Number: TU162050041
 Test Description: Radiated RF Emissions 656 - 1000MHz
 Operating Conditions: 652.000MHz M @ 35mW
 Operator Name: Alex Stelmaszczyk
 Comment: FCC pt. 74
 Description: FCC Table, 3m, AAs, No Audio Input, w/o L23-26-01 Tuned Notch
 Test Date & Time: October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

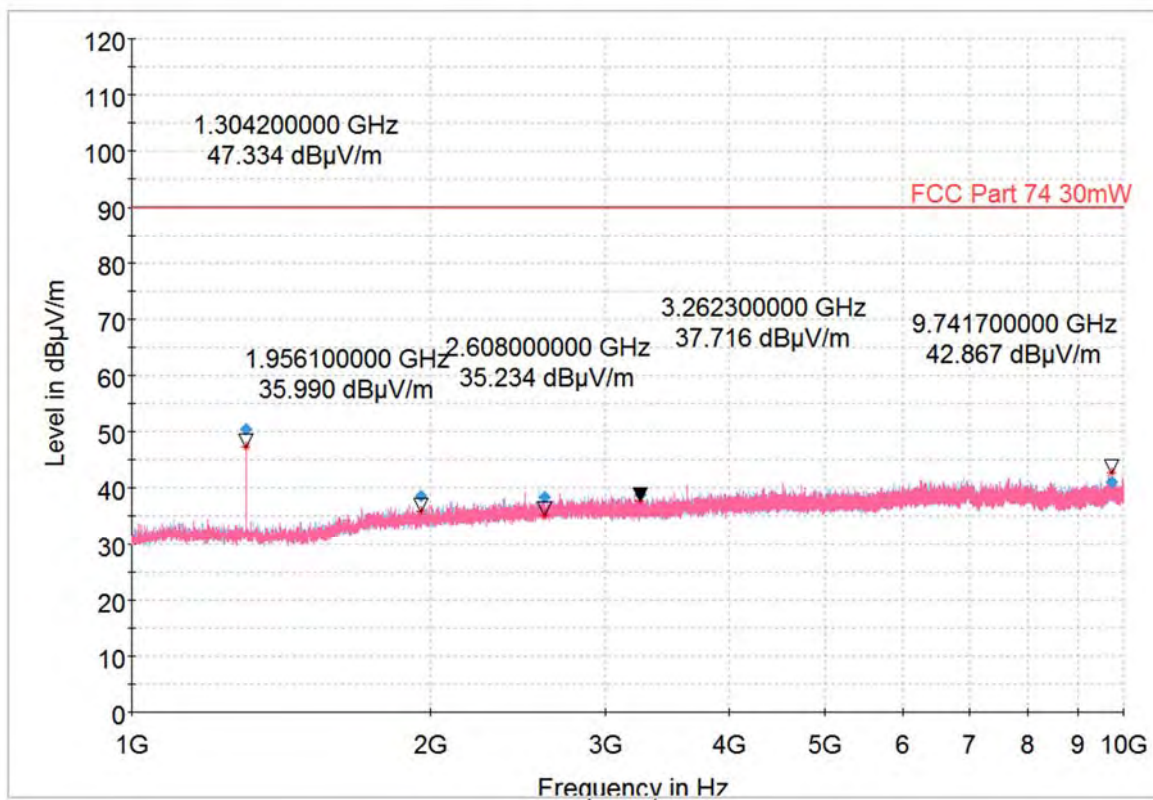
EUT Name: AD1 K53 #142
Serial Number: TU162050041
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 652.000MHz M @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF
Test Date & Time: 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 MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (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

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 @ 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
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

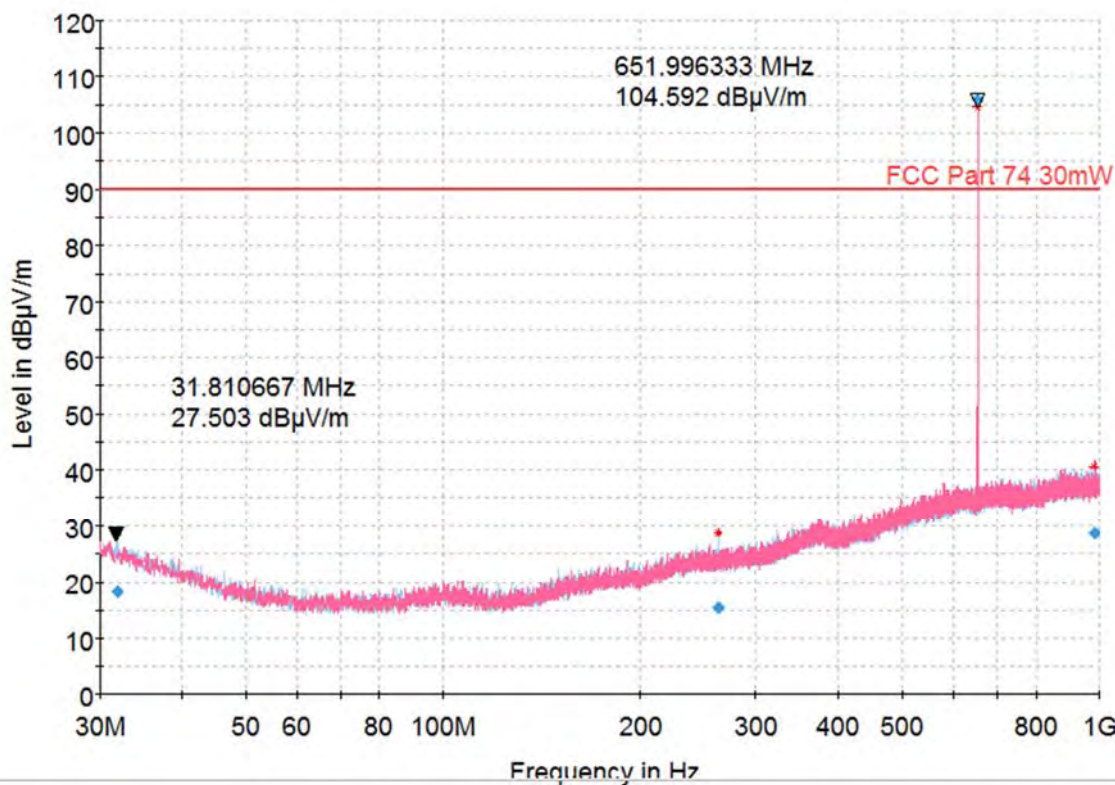
EUT Name: AD1 K53 #142
Serial Number: TU162050041
Test Description: Radiated RF Emissions 30MHz to 1GHz
Operating Conditions: 652.000MHz M @ 2mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input
Test Date & Time: October 27, 2016 10:38:39 AM

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 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

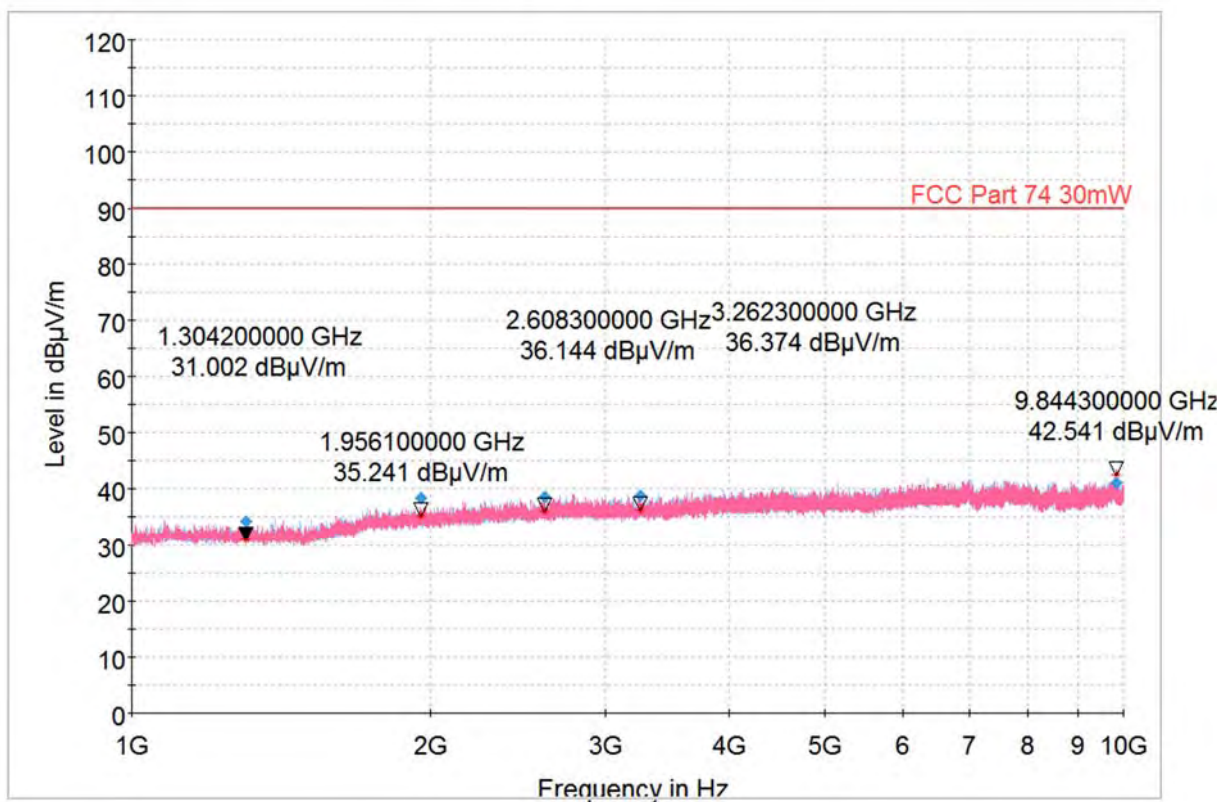
EUT Name: AD1 K53 #142
Serial Number: TU162050041
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 652.000MHz M @ 2mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF
Test Date & Time: November 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 MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (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	28.71	-85.0	-13.0	68.6	V	1.51	1.89		-88.40	PASS
1304.200	34.29	-79.1	-13.0	65.7	H	2.15	2.17	3.90	-79.52	PASS
1956.100	38.42	-69.7	-13.0	57.2	H	2.25	2.68	5.40	-69.23	PASS
2608.300	38.70	-75.0	-13.0	62.4	H	2.55	3.01	6.00	-74.56	PASS
3262.300	38.88	-75.5	-13.0	63.6	H	3.10	3.42	7.60	-74.42	PASS
9844.300	41.17	-70.6	-13.0	60.5	V	6.00	4.09	13.00	-67.69	PASS

Test Information

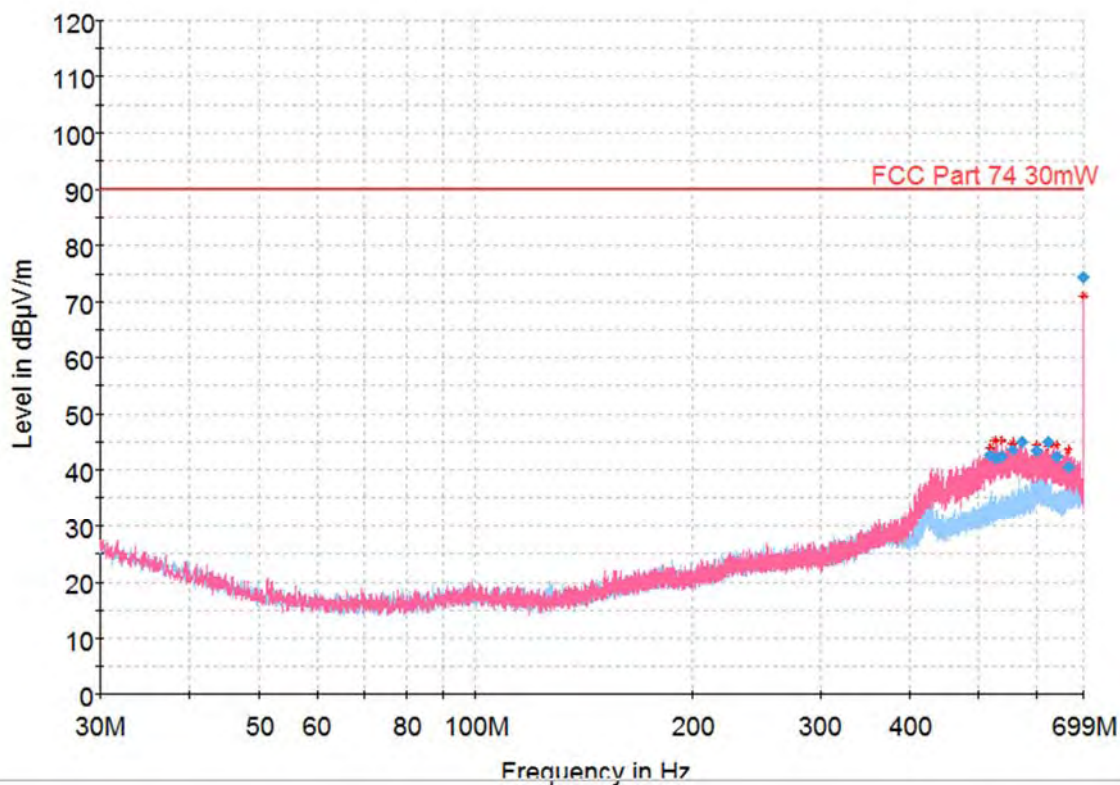
EUT Name: AD1 K53 #142
Serial Number: TU162050041
Test Description: Radiated RF Emissions 30MHz to 699MHz
Operating Conditions: 697.875MHz H @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w L23-26-01 Tuned Notch
Test Date & Time: October 26,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

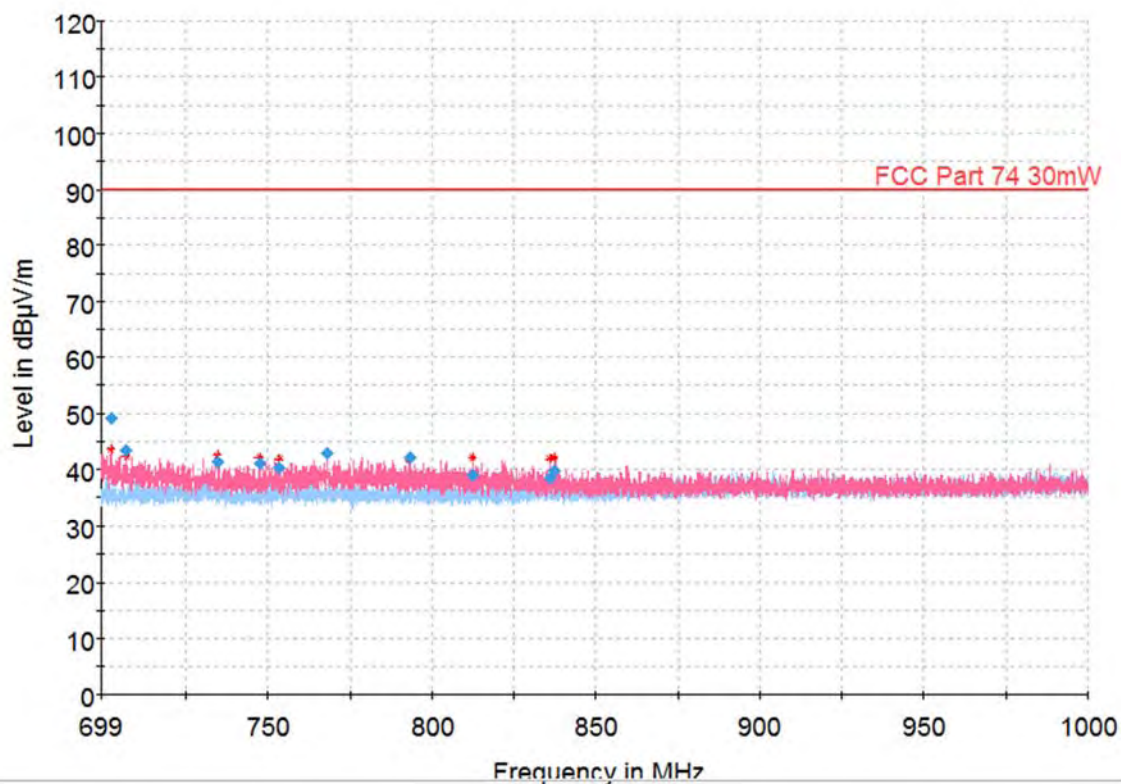
EUT Name: AD1 K53 #142
Serial Number: TU162050041
Test Description: Radiated RF Emissions 699 - 1000MHz
Operating Conditions: 697.875MHz H @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w/o L23-26-01 Tuned Notch
Test Date & Time: October 27,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

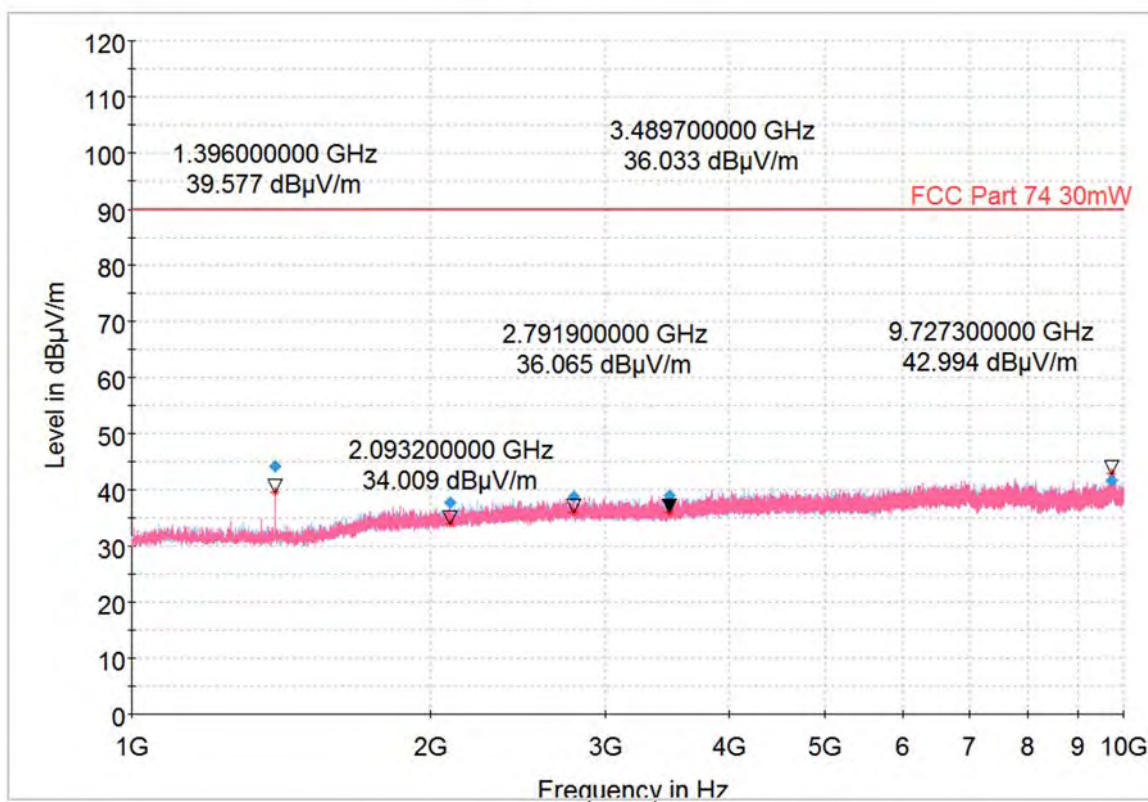
EUT Name: AD1 K53 #142
Serial Number: TU162050041
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 697.875MHz H @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF
Test Date & Time: 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 MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (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 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
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

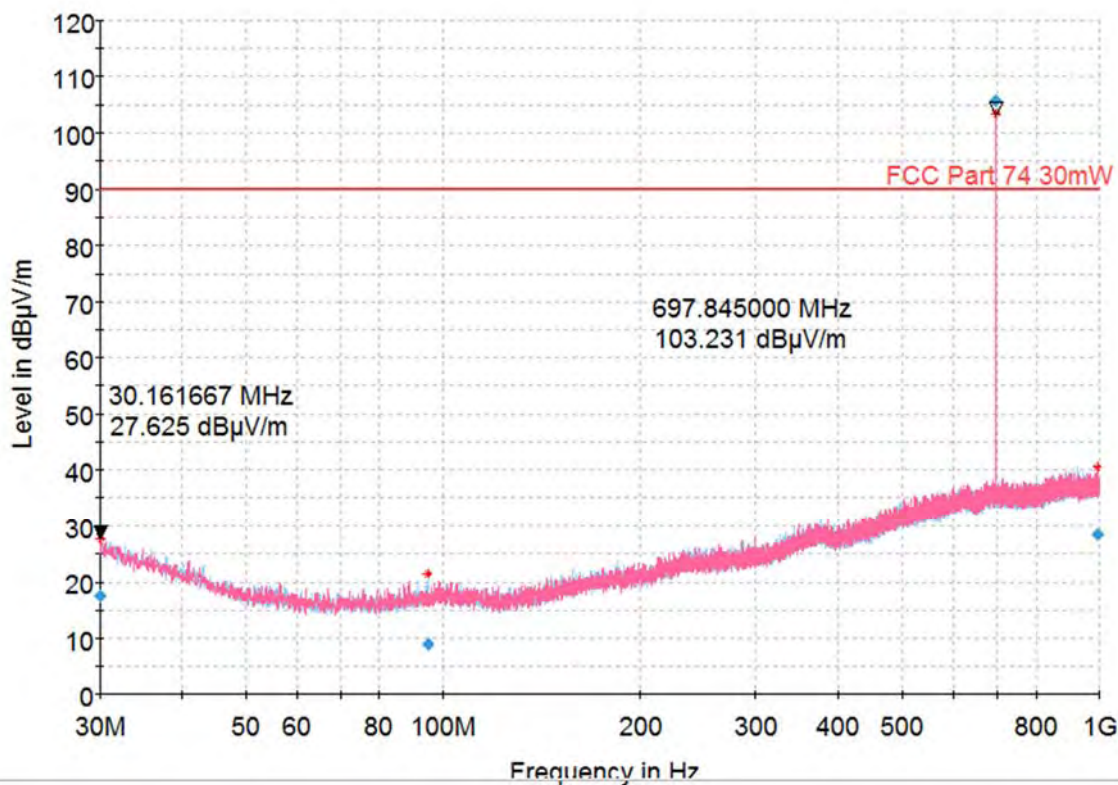
EUT Name: AD1 K53 #142
Serial Number: TU162050041
Test Description: Radiated RF Emissions 30MHz to 1GHz
Operating Conditions: 697.875MHz H @ 2mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input
Test Date & Time: October 27, 2016 9:56:10 AM

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: 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

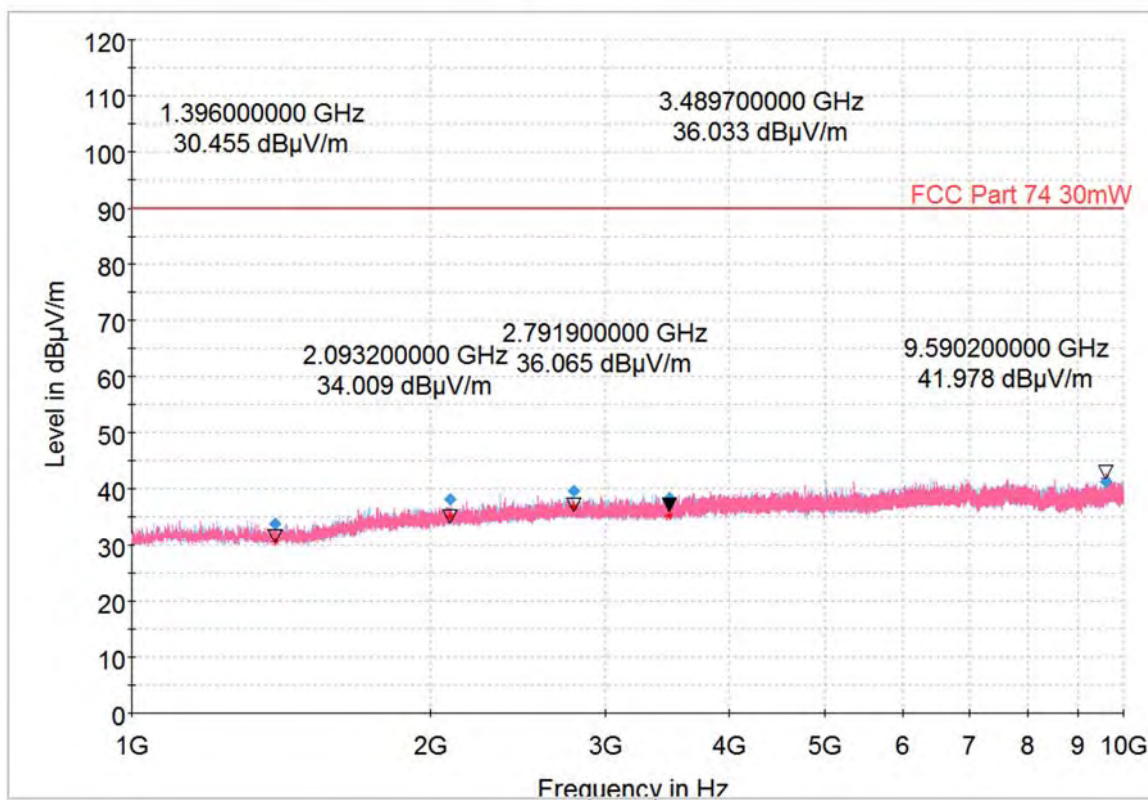
EUT Name: AD1 K53 #142
Serial Number: TU162050041
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 697.875MHz H @ 2mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF
Test Date & Time: November 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 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: 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 MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (dB)
30.162	17.38	84.38	72.620	20	120.00	359.000	H	193.00	16.90
94.861	8.93	84.38	81.070	20	120.00	144.000	H	212.00	8.30
994.148	28.54	84.38	61.460	20	120.00	278.000	V	199.00	26.50
1396.000	33.86	84.38	56.140	1000	1000.00	271.000	H	271.00	-19.10
2093.200	38.30	84.38	51.700	1000	1000.00	231.000	V	133.00	-14.30
2791.900	39.74	84.38	50.260	1000	1000.00	138.000	V	45.00	-11.70
3489.700	38.42	84.38	51.580	1000	1000.00	132.000	V	183.00	-10.50
9590.200	41.31	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	28.54	-88.0	-13.0	71.6	V	1.51	1.89		-91.40	PASS
1396.000	33.86	-81.3	-13.0	67.9	H	2.10	2.22	3.90	-81.72	PASS
2093.200	38.30	-70.5	-13.0	57.4	V	2.35	2.78	5.00	-70.63	PASS
2791.900	39.74	-70.0	-13.0	57.8	V	2.75	3.14	6.70	-69.19	PASS
3489.700	38.42	-78.4	-13.0	66.0	V	3.35	3.65	7.60	-77.80	PASS

Test Information

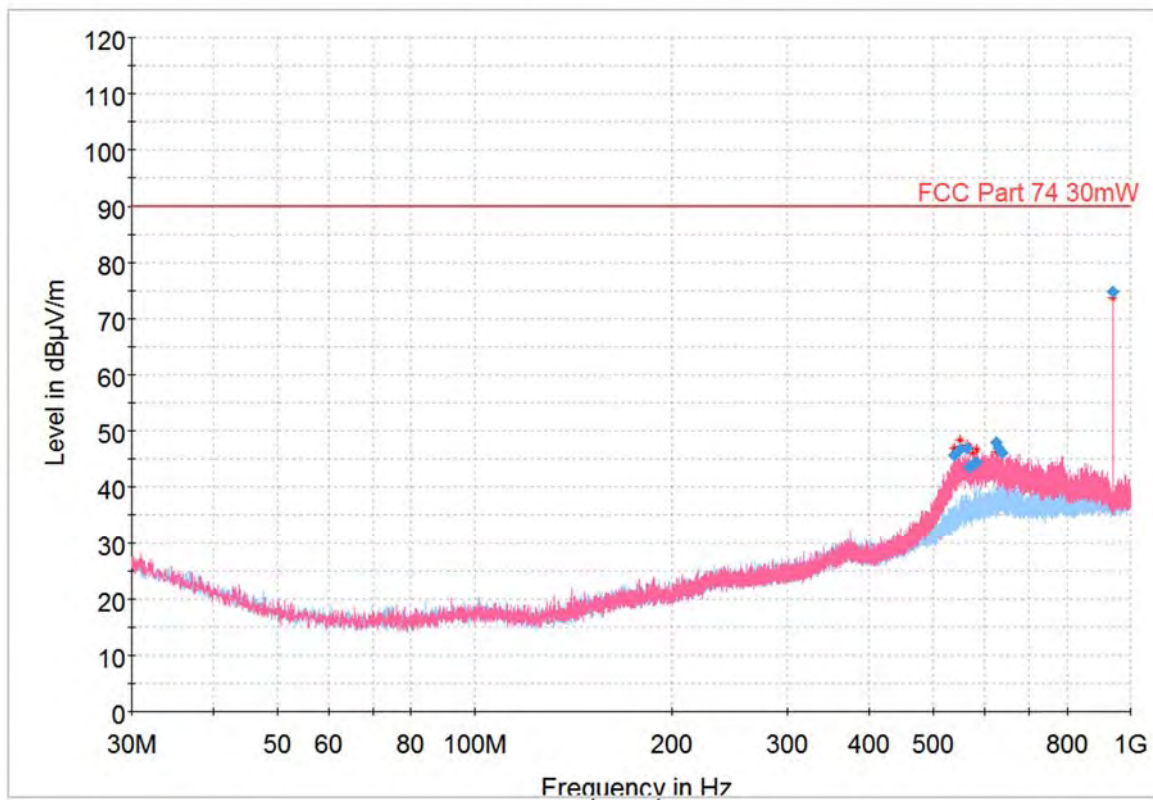
EUT Name: AD1 X55 #243
Serial Number: TU162050175
Test Description: Radiated RF Emissions 30MHz to 1GHz
Operating Conditions: 941.625MHz L @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w L23-26-01 Tuned Notch
Test Date & Time: January 31,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



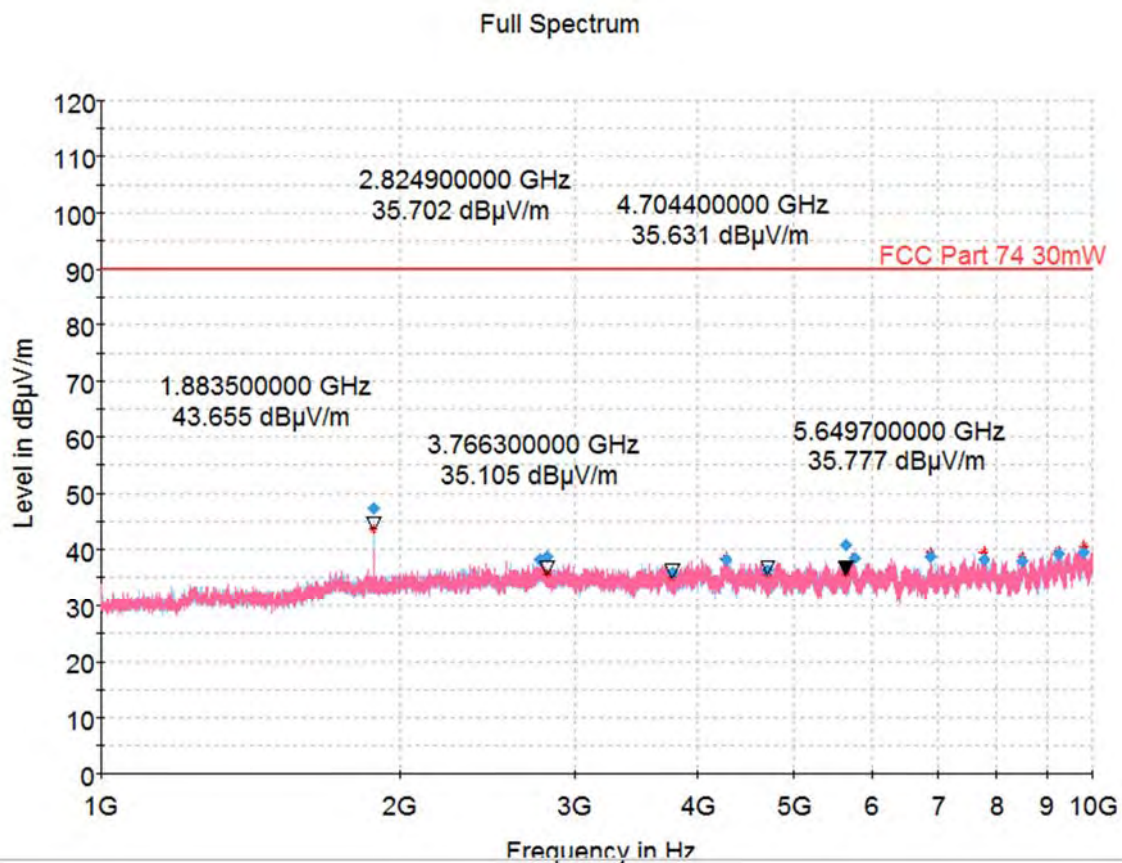
Test Information

EUT Name: AD1 X55 #243
Serial Number: TU162050175
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 941.625MHz L @ 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 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





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 MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (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

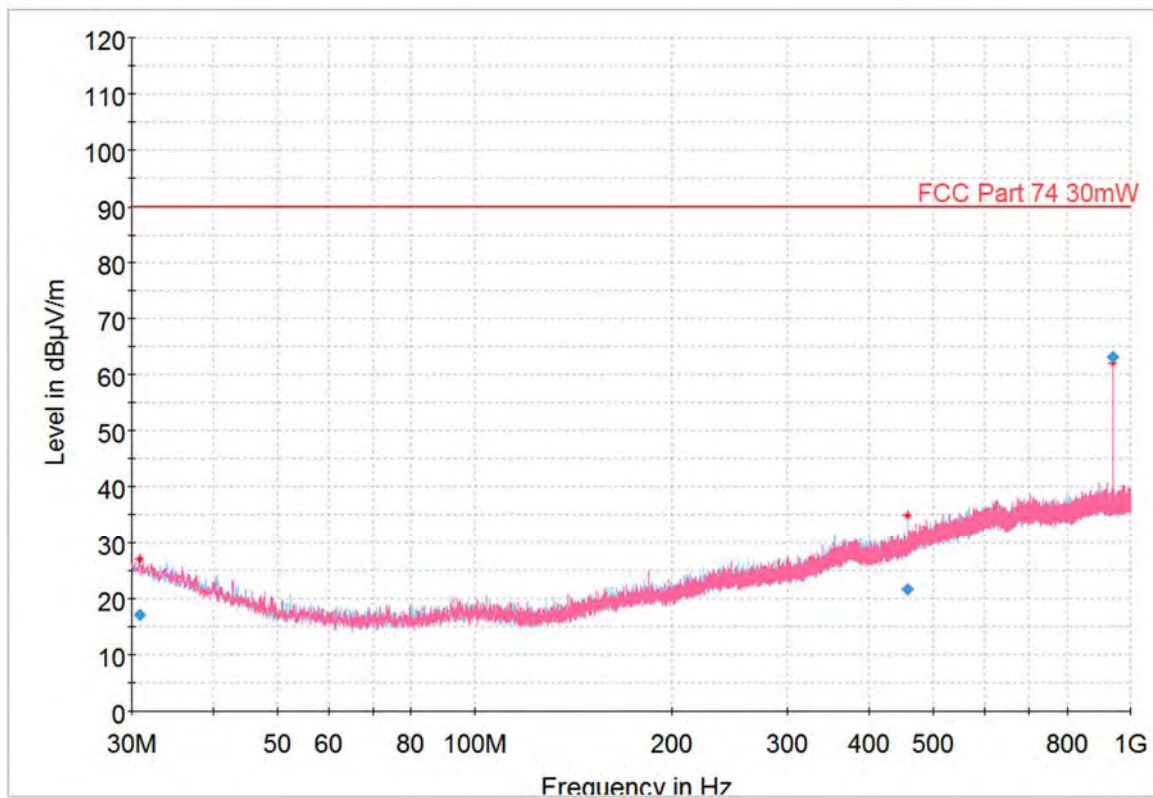
EUT Name: AD1 X55 #243
Serial Number: TU162050175
Test Description: Radiated RF Emissions 30MHz to 1GHz
Operating Conditions: 941.625MHz L @ 2mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w/L23-26-01 Tuned Notch
Test Date & Time: January 31,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



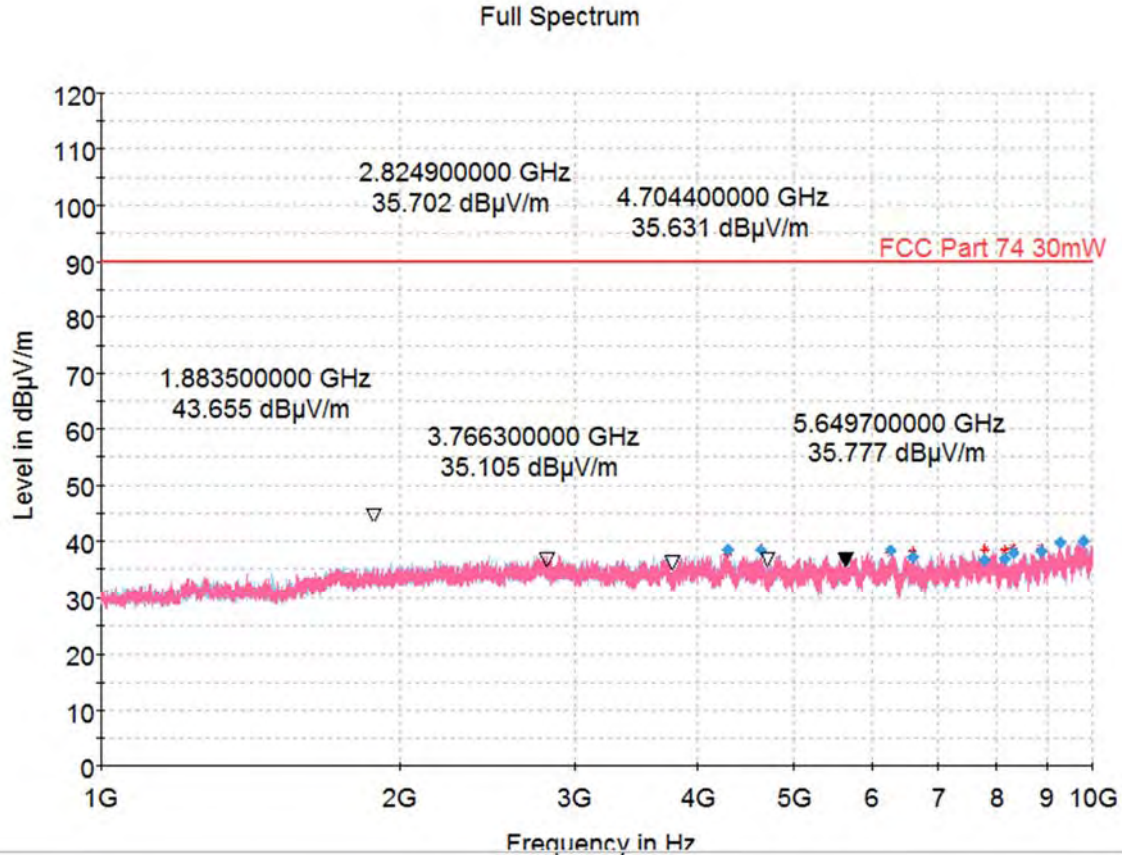
Test Information

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	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: 941.625MHz L @ 2mW
Operator Name: Alex Stelmaszczyk
Comment: Horizontal and Vertical Antennae 30MHz – 10GHz
Test Date: January 31, 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)
30.905	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

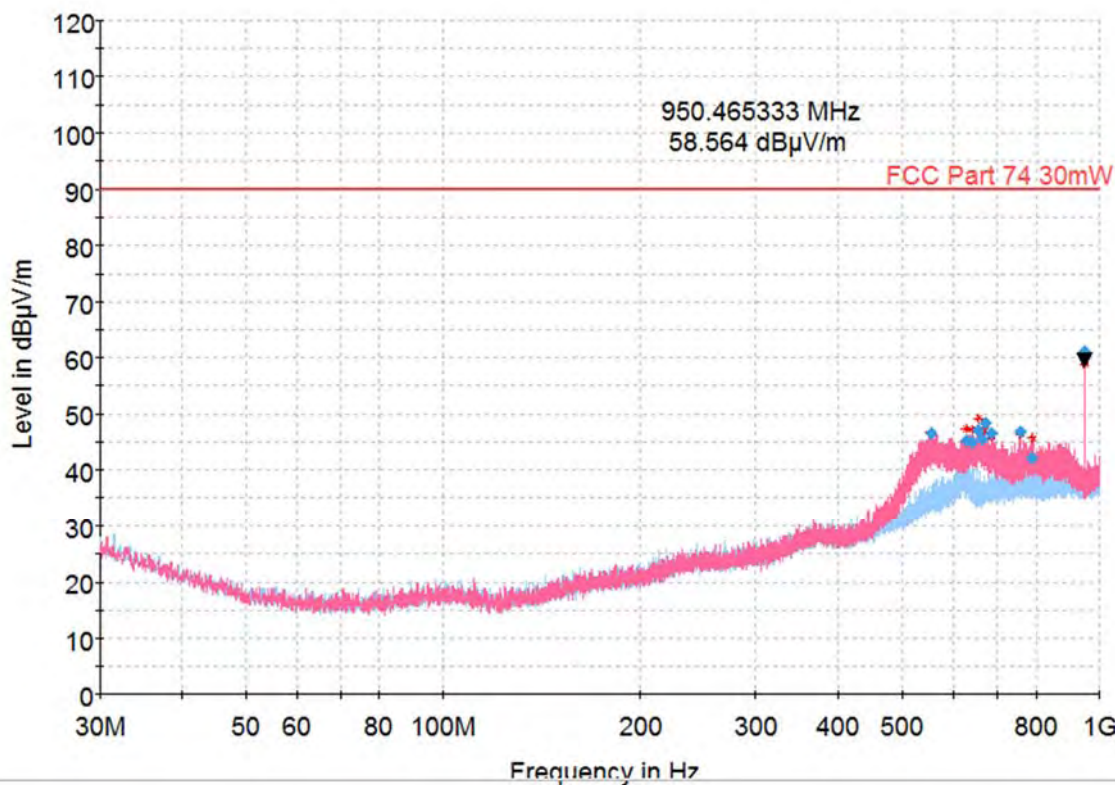
EUT Name: AD1 X55 #243
 Serial Number: TU162050175
 Test Description: Radiated RF Emissions 30MHz to 1GHz
 Operating Conditions: 950.500MHz M @ 35mW
 Operator Name: Alex Stelmaszczyk
 Comment: FCC pt. 74
 Description: FCC Table, 3m, AAs, No Audio Input, w L23-26-01 Tuned Notch
 Test Date & Time: October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

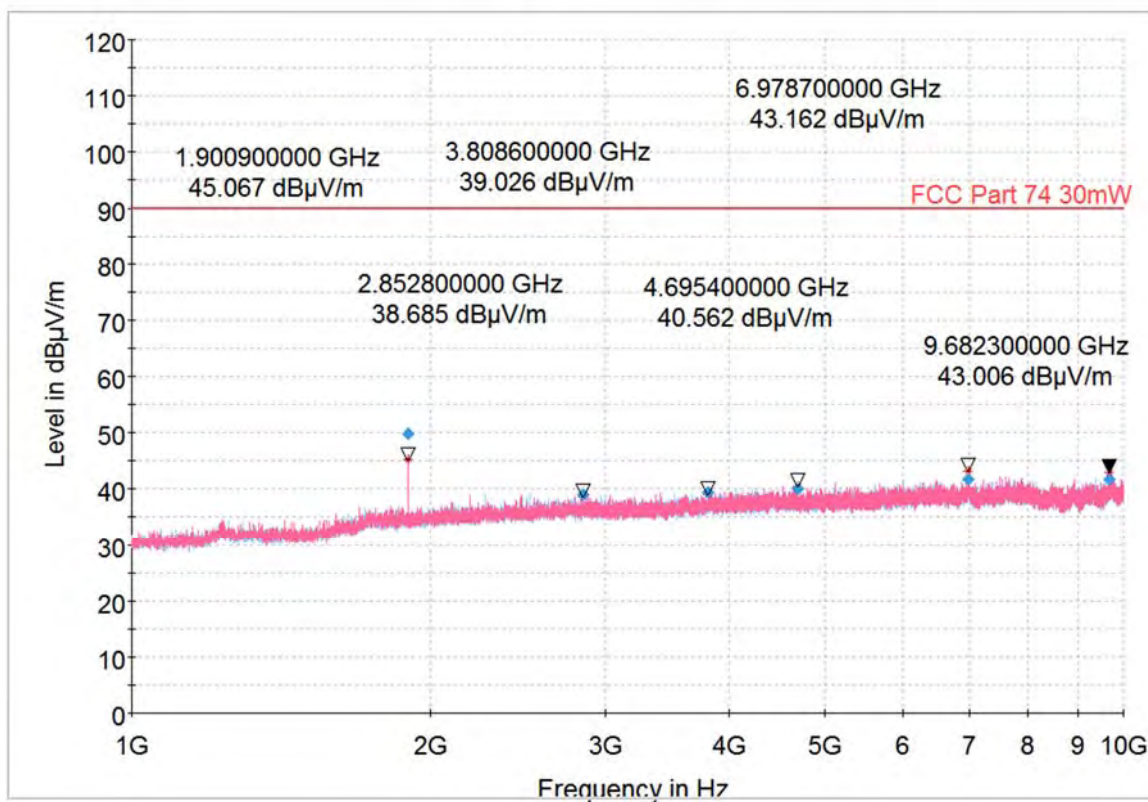
EUT Name: AD1 X55 #243
Serial Number: TU162050175
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 950.500MHz M @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-38 1340MHz HPF
Test Date & Time: 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 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: 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 MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (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 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
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

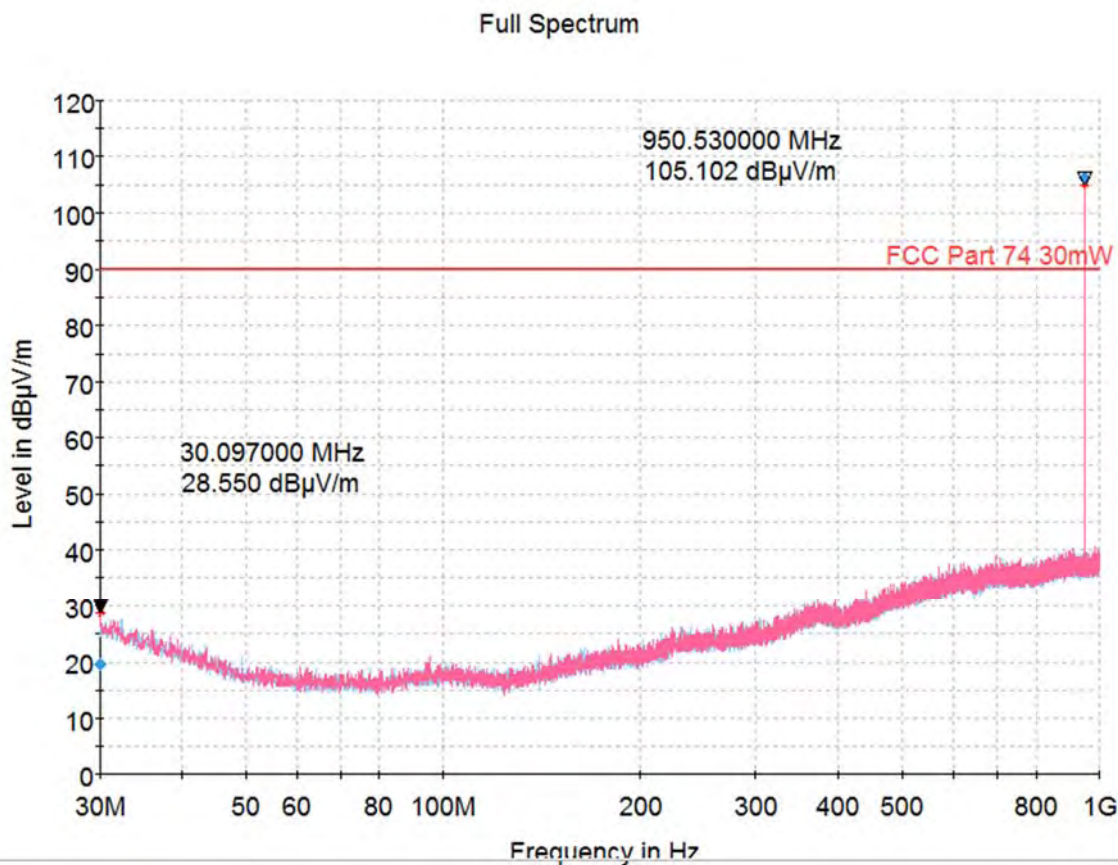
Test Information

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 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



Test Information

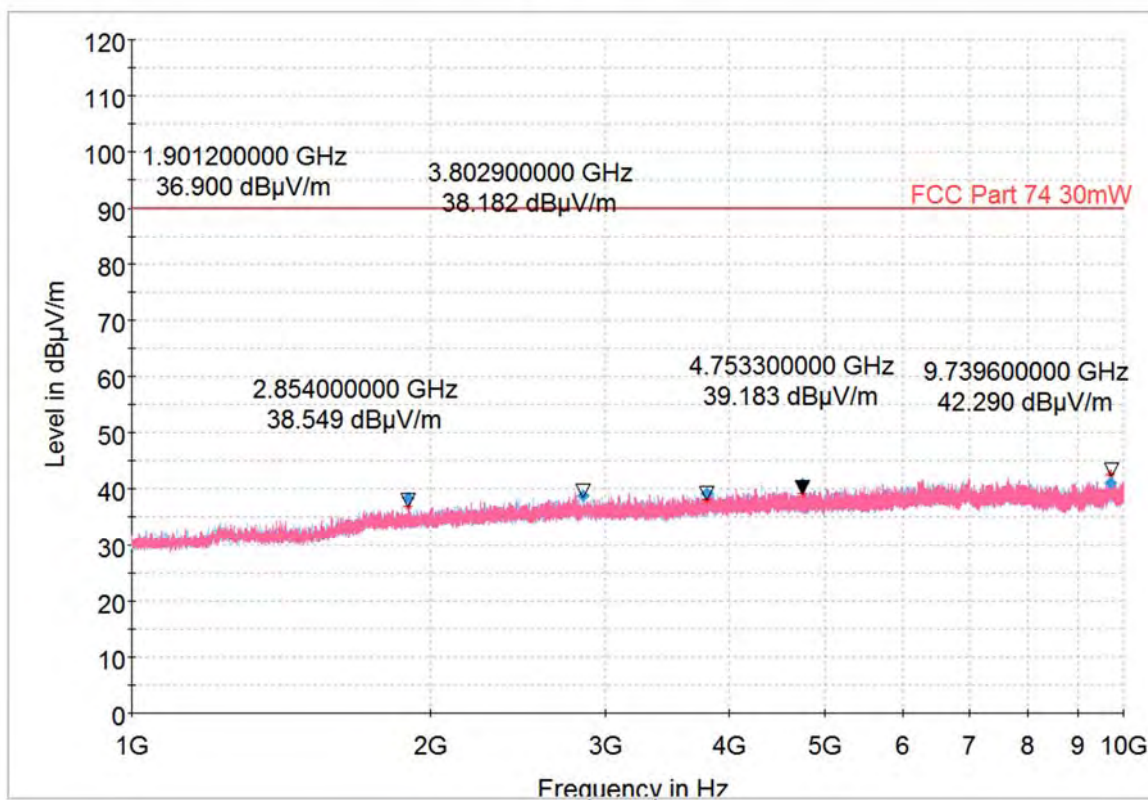
EUT Name: AD1 X55 #243
Serial Number: TU162050175
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 950.500MHz M @ 2mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-38 1340MHz HPF
Test Date & Time: 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 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: 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 MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (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 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	38.33	-67.8	-13.0	55.3	V	2.30	2.64	5.40	-67.34	PASS
2854.000	38.89	-72.3	-13.0	60.2	H	2.70	3.15	6.70	-71.45	PASS
3802.900	39.32	-72.7	-13.0	60.4	H	3.65	4.03	8.40	-71.98	PASS
4753.300	40.80	-66.7	-13.0	55.1	V	3.90	4.26	9.60	-65.26	PASS
9713.800	41.10	-73.5	-13.0	63.6	H	6.00	4.08	13.20	-70.38	PASS

Test Information

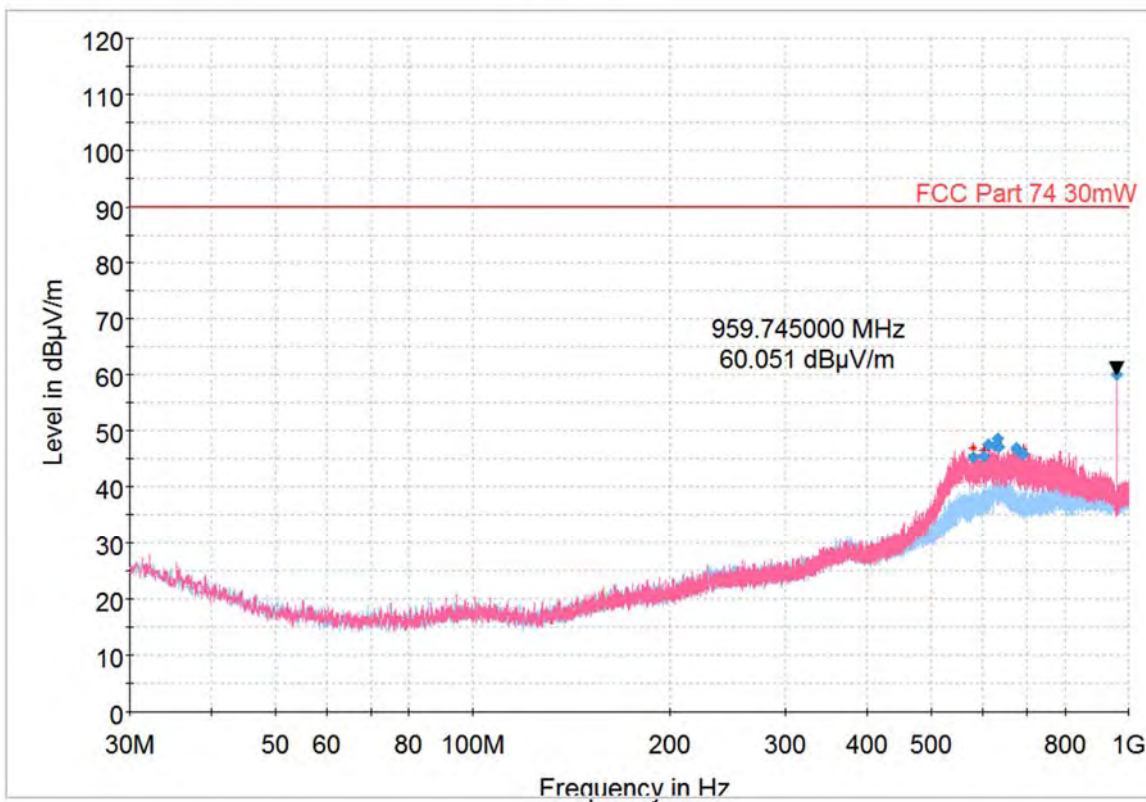
EUT Name: AD1 X55 #243
Serial Number: TU162050175
Test Description: Radiated RF Emissions 30MHz to 1GHz
Operating Conditions: 959.725MHz H @ 35mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w L23-26-01 Tuned Notch
Test Date & Time: January 25,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



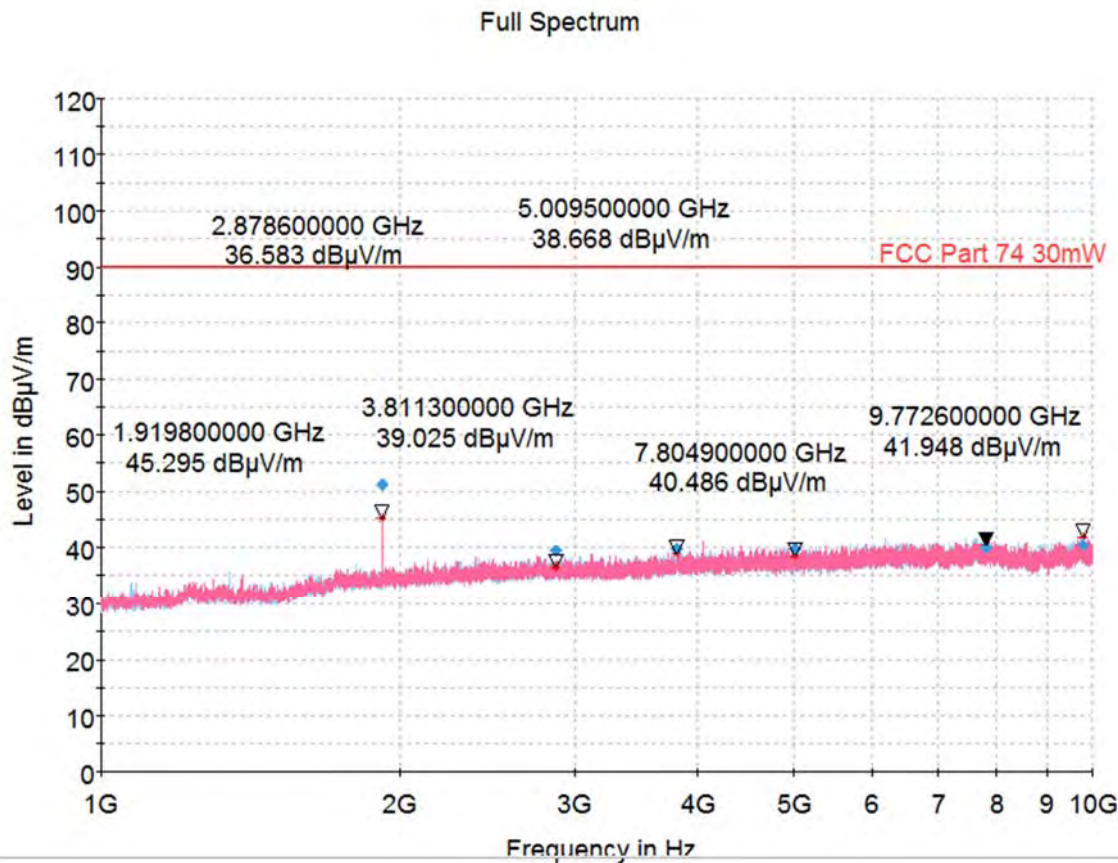
Test Information

EUT Name: 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 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



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 MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (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

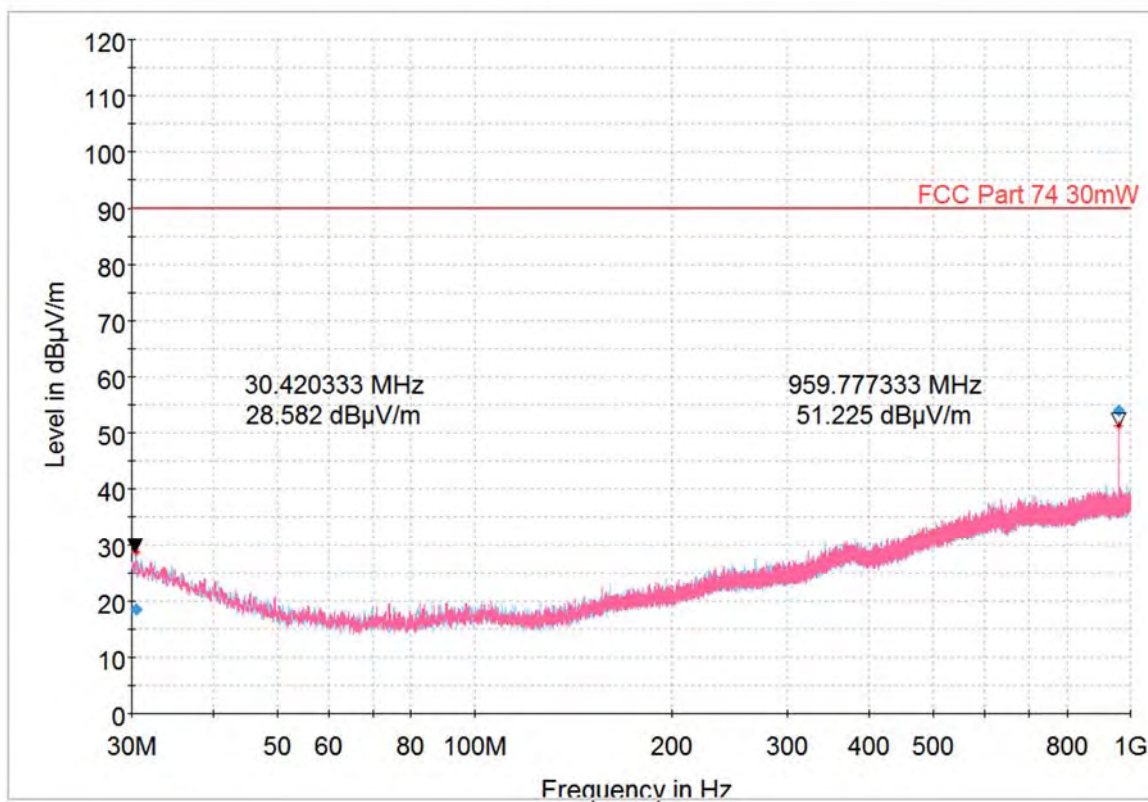
EUT Name: AD1 X55 #243
Serial Number: TU162050175
Test Description: Radiated RF Emissions 30MHz to 1GHz
Operating Conditions: 959.725MHz H @ 2mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w/L23-26-01 Tuned Notch
Test Date & Time: January 25,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



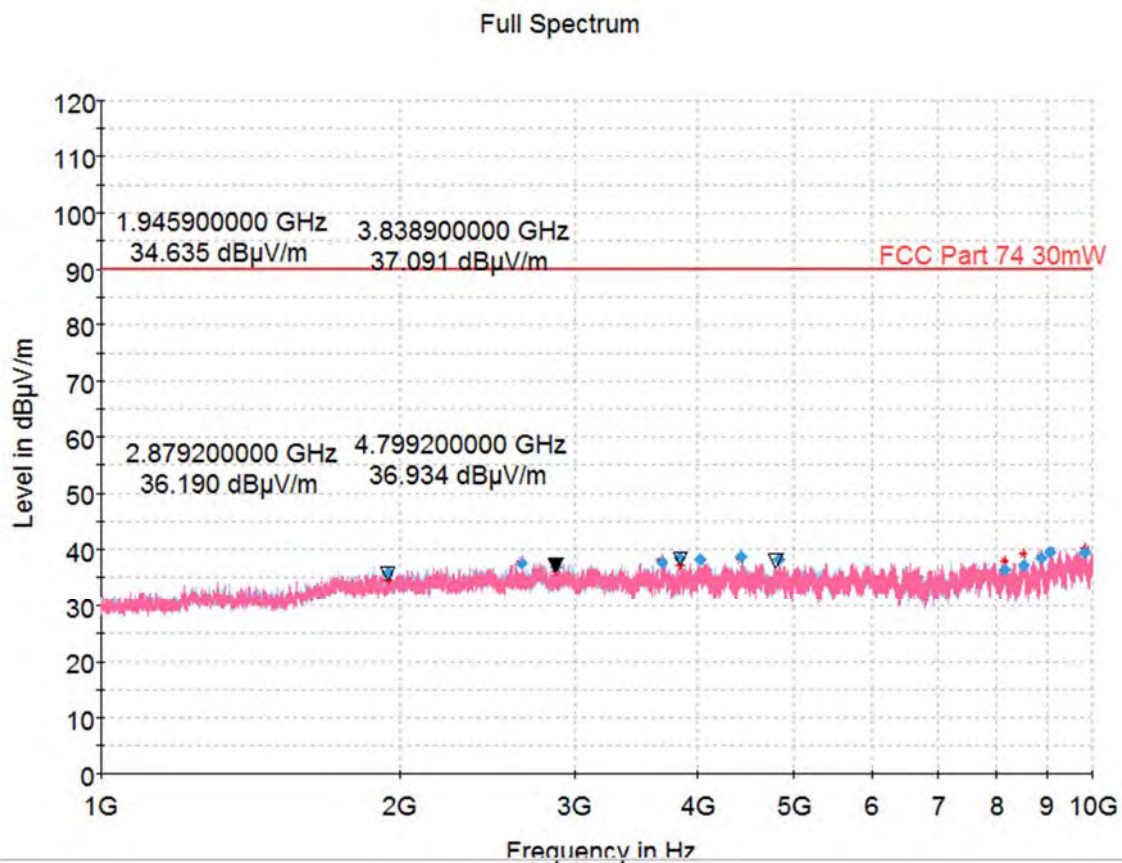
Test Information

EUT Name: 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 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: 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 MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (dB)
30.453	18.46	84.38	71.540	20	120.00	216.000	H	18.00	16.70
1945.900	35.87	84.38	54.130	1000	1000.00	158.000	H	120.00	-15.00
2657.200	37.54	84.38	52.460	1000	1000.00	359.000	H	305.00	-12.10
2879.200	37.00	84.38	53.000	1000	1000.00	392.000	H	340.00	-11.60
3681.400	37.89	84.38	52.110	1000	1000.00	293.000	V	130.00	-9.60
3838.900	38.52	84.38	51.480	1000	1000.00	143.000	H	57.00	-9.00
4019.800	38.12	84.38	51.880	1000	1000.00	236.000	H	117.00	-8.60
4426.300	38.75	84.38	51.250	1000	1000.00	344.000	H	2.00	-7.90
4827.700	38.16	84.38	51.840	1000	1000.00	322.000	V	321.00	-7.60
8158.300	36.63	84.38	53.370	1000	1000.00	111.000	H	277.00	-2.60
8514.400	37.19	84.38	52.810	1000	1000.00	150.000	H	9.00	-2.30
8874.100	38.68	84.38	51.320	1000	1000.00	385.000	V	325.00	-2.10
9082.900	39.71	84.38	50.290	1000	1000.00	191.000	V	116.00	-1.80
9840.100	39.44	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 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
2879.200	37.00	-83.1	-13.0	71.0	H	2.70	3.15	6.70	-82.25	PASS
3838.900	38.52	-68.0	-13.0	55.7	H	3.65	4.03	8.40	-67.28	PASS
4426.300	38.75	-84.8	-13.0	73.1	H	3.75	4.26	9.30	-83.51	PASS
4827.700	38.16	-79.0	-13.0	67.3	V	3.90	4.40	9.60	-77.70	PASS
8874.100	38.68	-69.5	-13.0	60.0	V	5.55	3.98	13.00	-66.03	PASS
9082.900	39.71	-63.3	-13.0	53.7	V	5.57	4.11	13.10	-59.88	PASS
9840.100	39.44	-63.7	-13.0	53.6	V	6.01	4.09	13.00	-60.80	PASS

Test Information

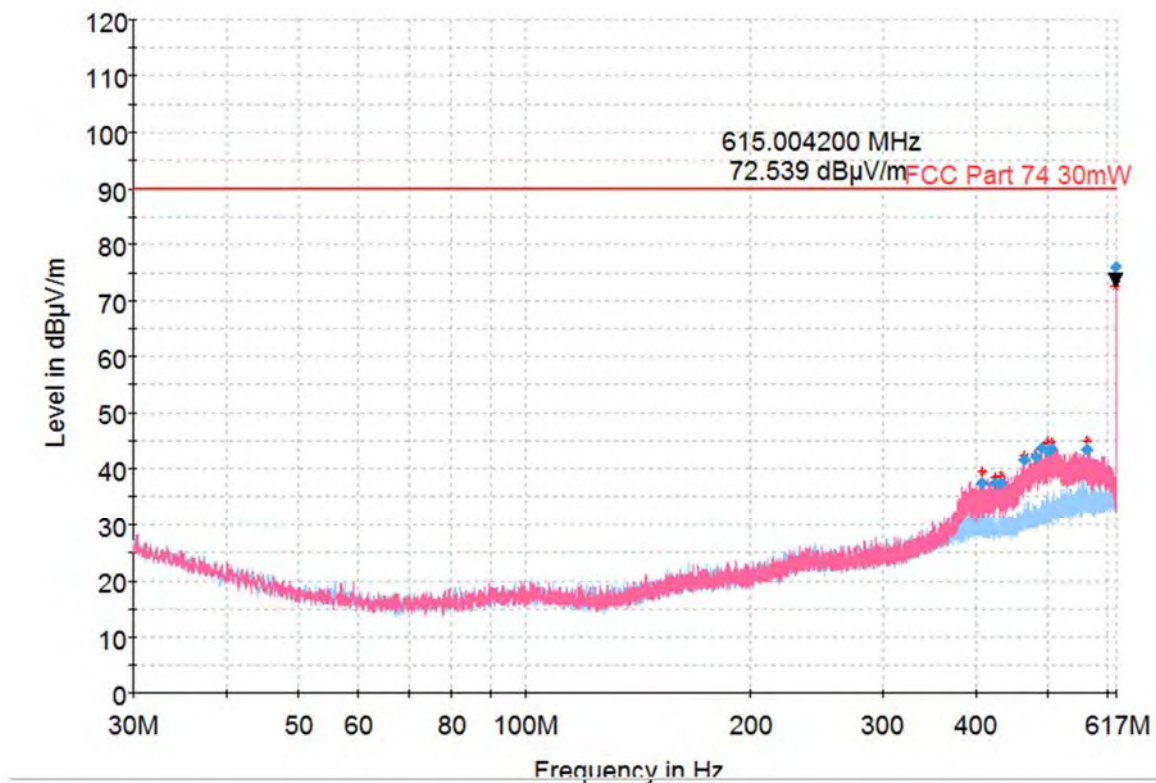
EUT Name:	AD1 G57 #17
Serial Number:	TU163350379
Test Description:	Radiated RF Emissions 30MHz to 617MHz
Operating Conditions:	615.000MHz M @ 20mW
Operator Name:	Alex Stelmaszczyk
Comment:	FCC pt. 74
Description:	FCC Table, 3m, AAs, No Audio Input, w/L23-26-01 Tuned Notch
Test Date & Time	March 8, 2017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

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

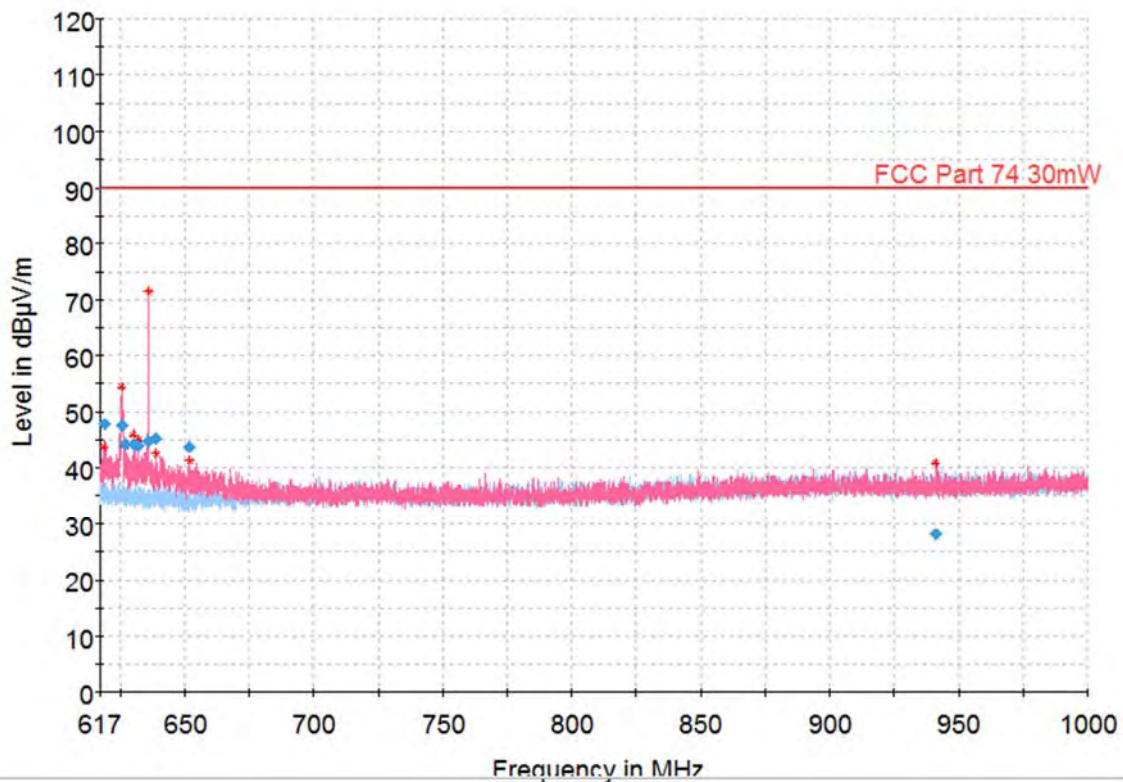
EUT Name: AD1 G57 #17
Serial Number: TU163350379
Test Description: Radiated RF Emissions 617Hz to 1000MHz
Operating Conditions: 615.000MHz M @ 20mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w/oL23-26-01 Tuned Notch
Test Date & Time: March 8,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

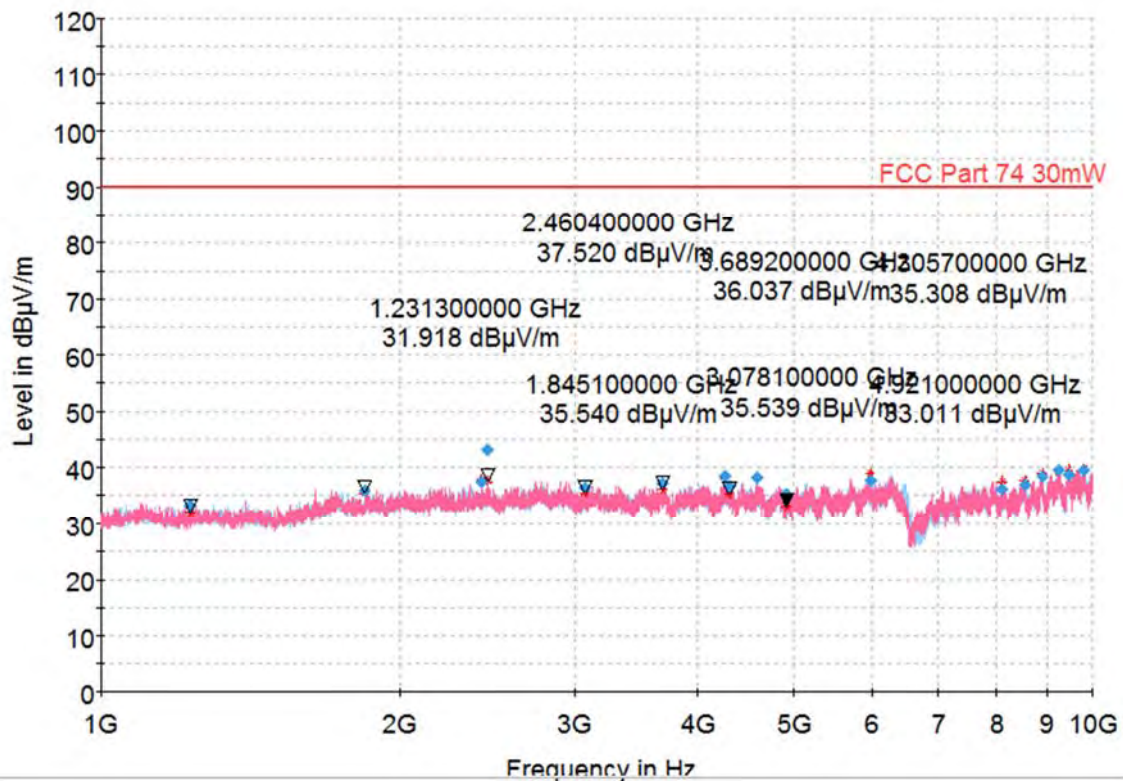
EUT Name: AD1 G57 #17
Serial Number: TU163350379
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 615.000MHz M @ 20mW
Operator Name: Russell Smith
Comment: FCC pt. 74
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF
Test Date & Time: March 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 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: 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 MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (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 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
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

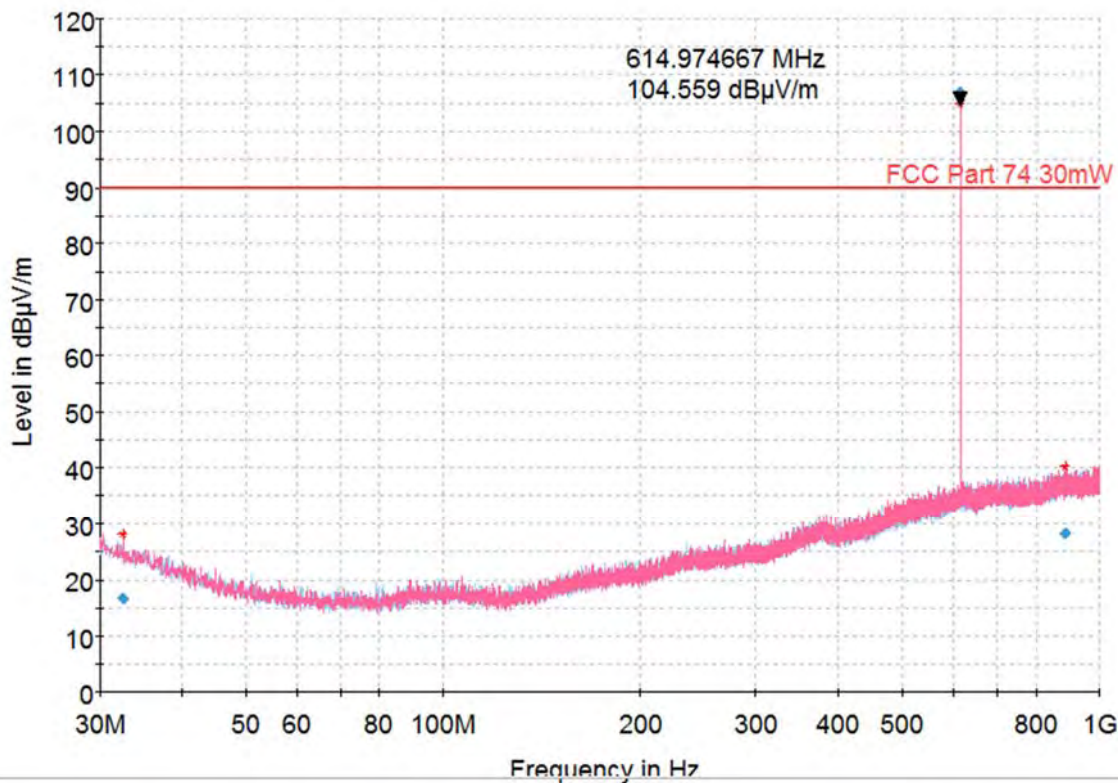
EUT Name: AD1 G57 #17
Serial Number: TU163350379
Test Description: Radiated RF Emissions 30MHz to 1GHz
Operating Conditions: 615.000MHz M @ 2mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w/oL23-26-01Tuned Notch
Test Date & Time: March 8, 2017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

Full Spectrum



Test Information

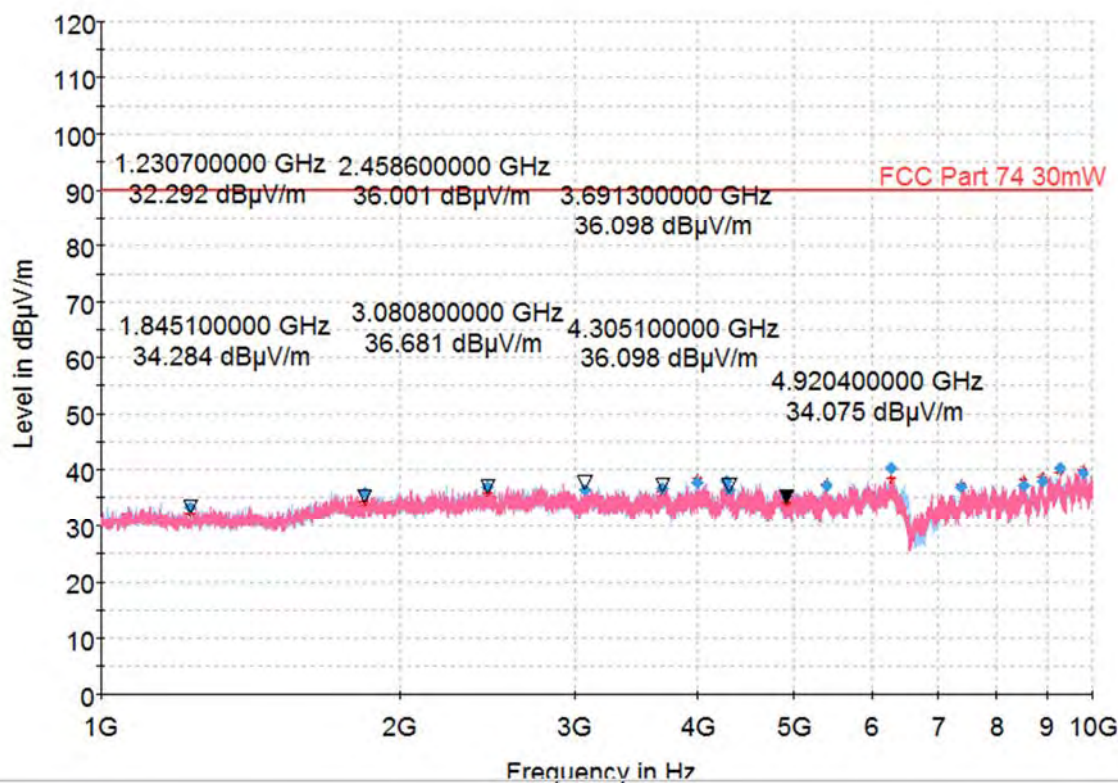
EUT Name: AD1 G57 #17
Serial Number: TU163350379
Test Description: Radiated RF Emissions 1GHz to 10GHz
Operating Conditions: 615.000MHz M @ 2mW
Operator Name: Russell Smith
Comment: FCC pt. 74
Description: FCC Table, Bore Site, 3m, AAs, No Audio Input, w/ L23-11-57 940MHz HPF
Test Date & Time: March 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 MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (dB)
32.619	16.59	84.38	73.410	20	120.00	333.000	V	-4.00	15.60
889.000	28.19	84.38	61.810	20	120.00	277.000	H	217.00	26.00
1230.700	33.17	84.38	56.830	1000	1000.00	113.000	H	241.00	-19.30
1845.100	35.96	84.38	54.040	1000	1000.00	215.000	V	255.00	-15.40
2458.600	36.95	84.38	53.050	1000	1000.00	400.000	H	126.00	-12.90
3080.800	36.57	84.38	53.430	1000	1000.00	166.000	H	127.00	-11.30
3691.300	36.76	84.38	53.240	1000	1000.00	164.000	H	90.00	-9.60
4008.100	37.84	84.38	52.160	1000	1000.00	194.000	H	88.00	-8.60
4279.300	38.00	84.38	52.000	1000	1000.00	315.000	V	100.00	-8.20
4305.100	36.58	84.38	53.420	1000	1000.00	150.000	H	146.00	-8.10
4920.400	35.29	84.38	54.710	1000	1000.00	309.000	V	10.00	-7.60
5397.400	37.22	84.38	52.780	1000	1000.00	226.000	H	180.00	-7.20
6281.200	40.36	84.38	49.640	1000	1000.00	217.000	H	317.00	-4.80
7373.500	36.95	84.38	53.050	1000	1000.00	400.000	H	19.00	-3.30
8520.100	37.06	84.38	52.940	1000	1000.00	375.000	V	181.00	-2.30
8893.900	37.95	84.38	52.050	1000	1000.00	239.000	V	347.00	-2.10
9266.800	40.37	84.38	49.630	1000	1000.00	261.000	H	261.00	-1.60
9796.000	39.35	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

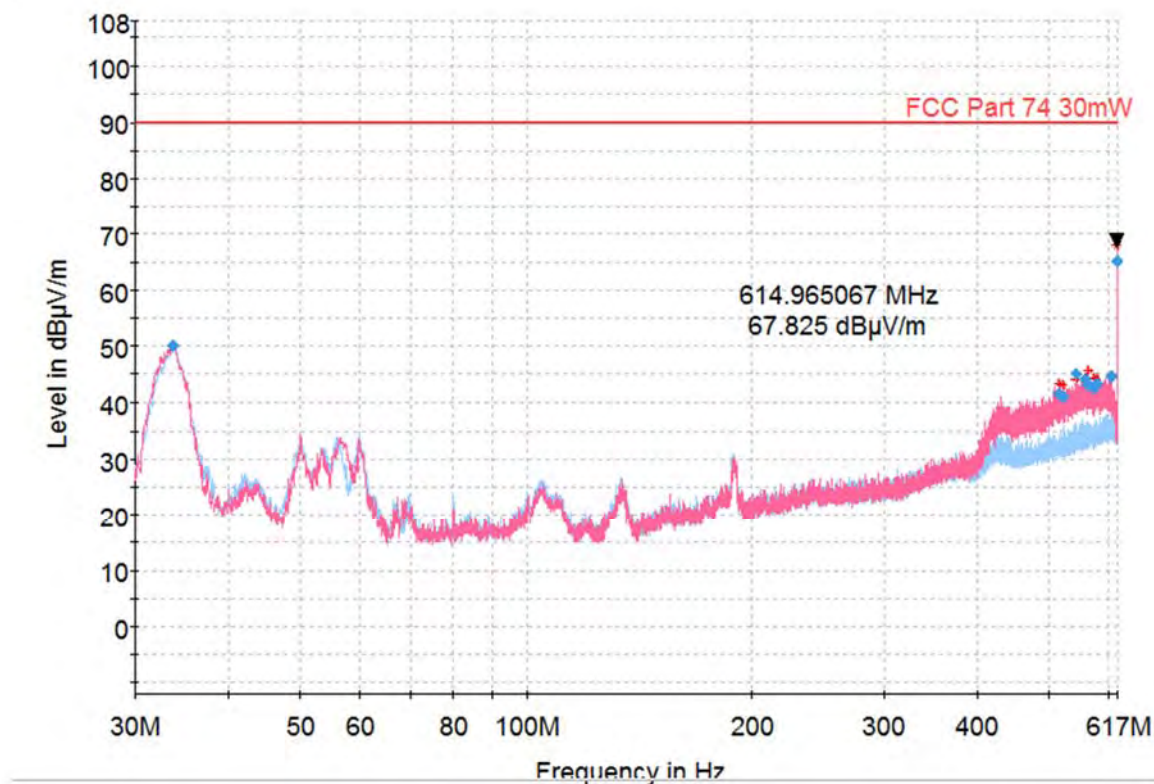
EUT Name: AD1 K54 #103
 Serial Number: TU163380075
 Test Description: Radiated RF Emissions 30MHz to 617MHz
 Operating Conditions: 615.000MHz M @ 20mW
 Operator Name: Alex Stelmaszczyk
 Comment: FCC pt. 74
 Description: FCC Table, 3m, AAs, No Audio Input, w/L23-26-01 Tuned Notch
 Test Date & Time: February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

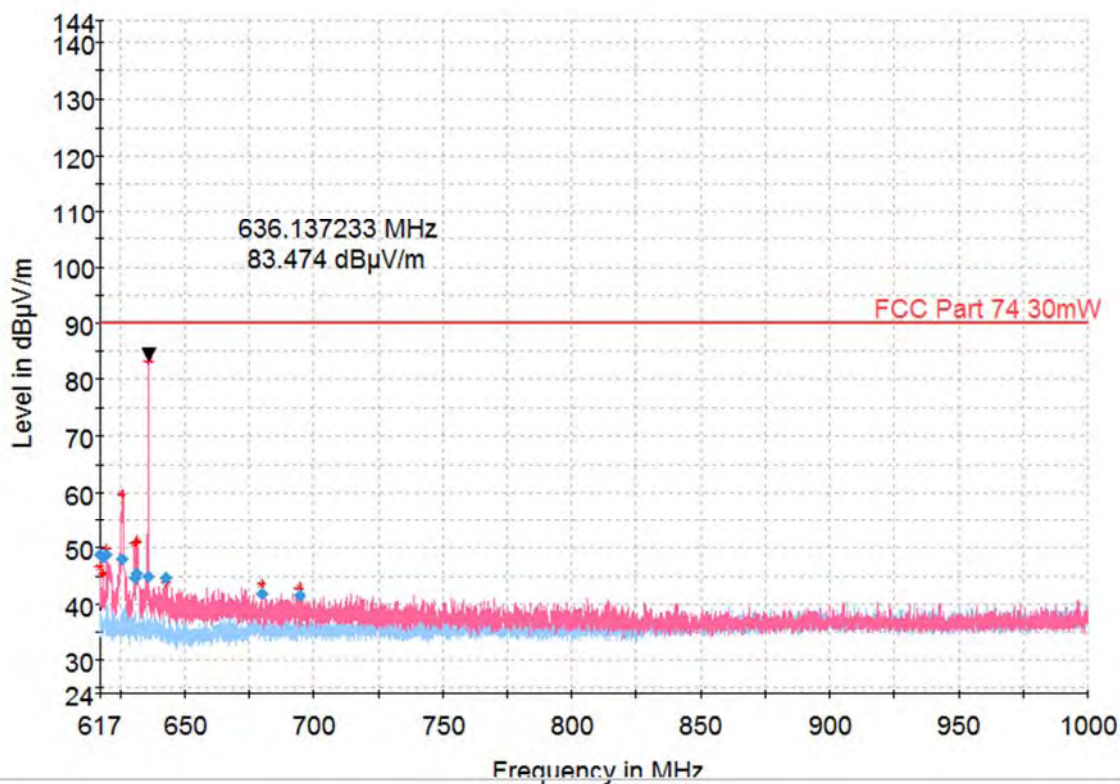
EUT Name: AD1 K54 #103
Serial Number: TU163380075
Test Description: Radiated RF Emissions 617Hz to 1000MHz
Operating Conditions: 615.000MHz M @ 20mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w/L23-26-01 Tuned Notch
Test Date & Time: February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



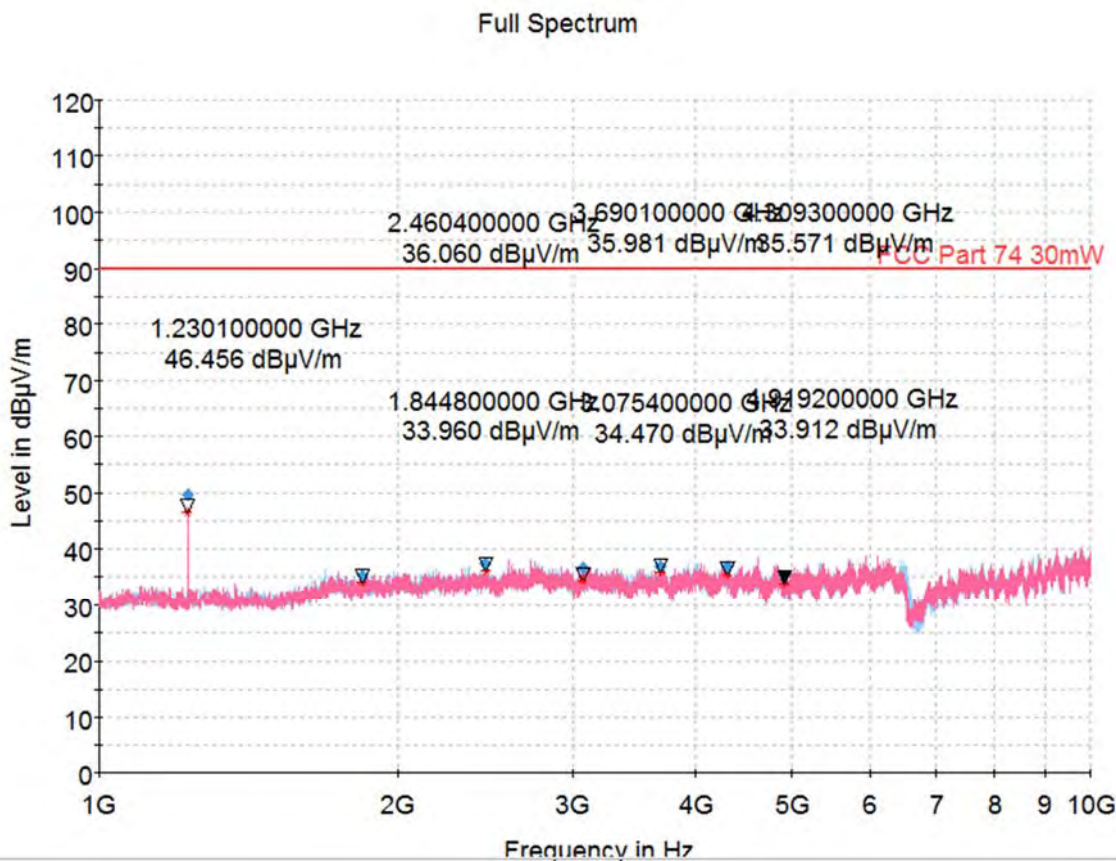
Test Information

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



Appendix E

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 MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (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 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
1230.100	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

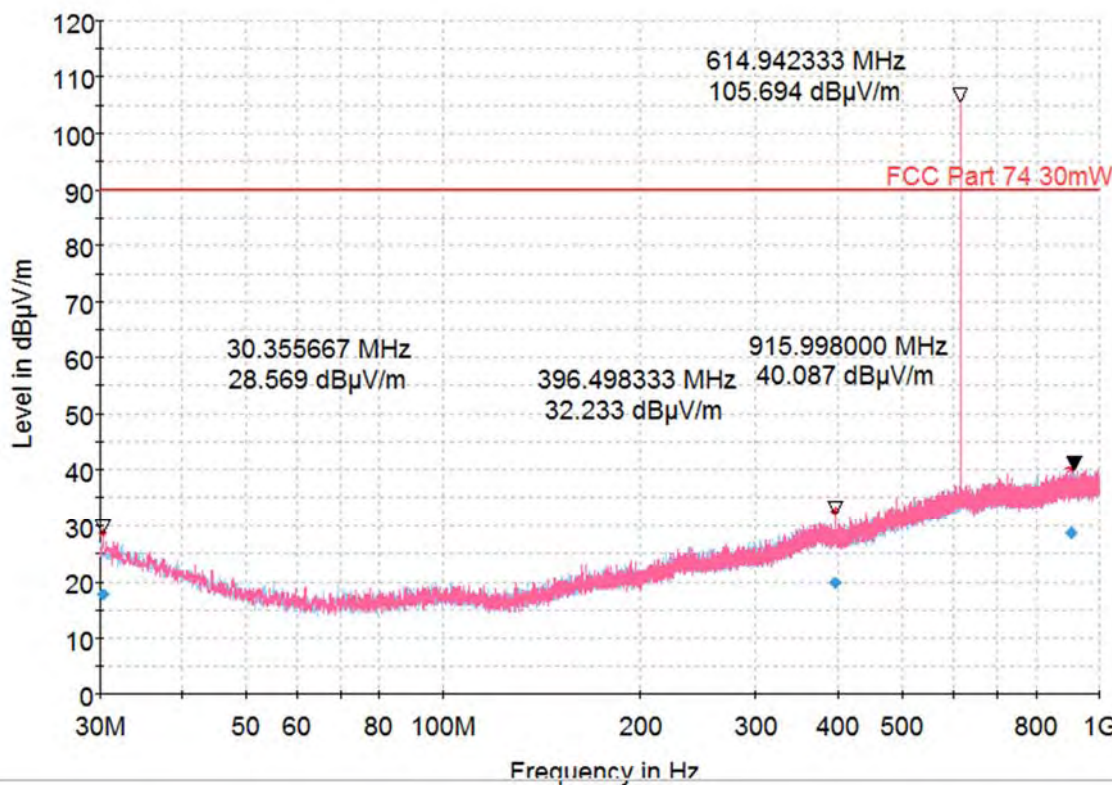
EUT Name: AD1 K54 #103
Serial Number: TU163380075
Test Description: Radiated RF Emissions 30MHz to 1GHz
Operating Conditions: 615.000MHz M @ 2mW
Operator Name: Alex Stelmaszczyk
Comment: FCC pt. 74
Description: FCC Table, 3m, AAs, No Audio Input, w/oL23-26-01 Tuned Notch
Test Date & Time: March 2, 2017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

Full Spectrum



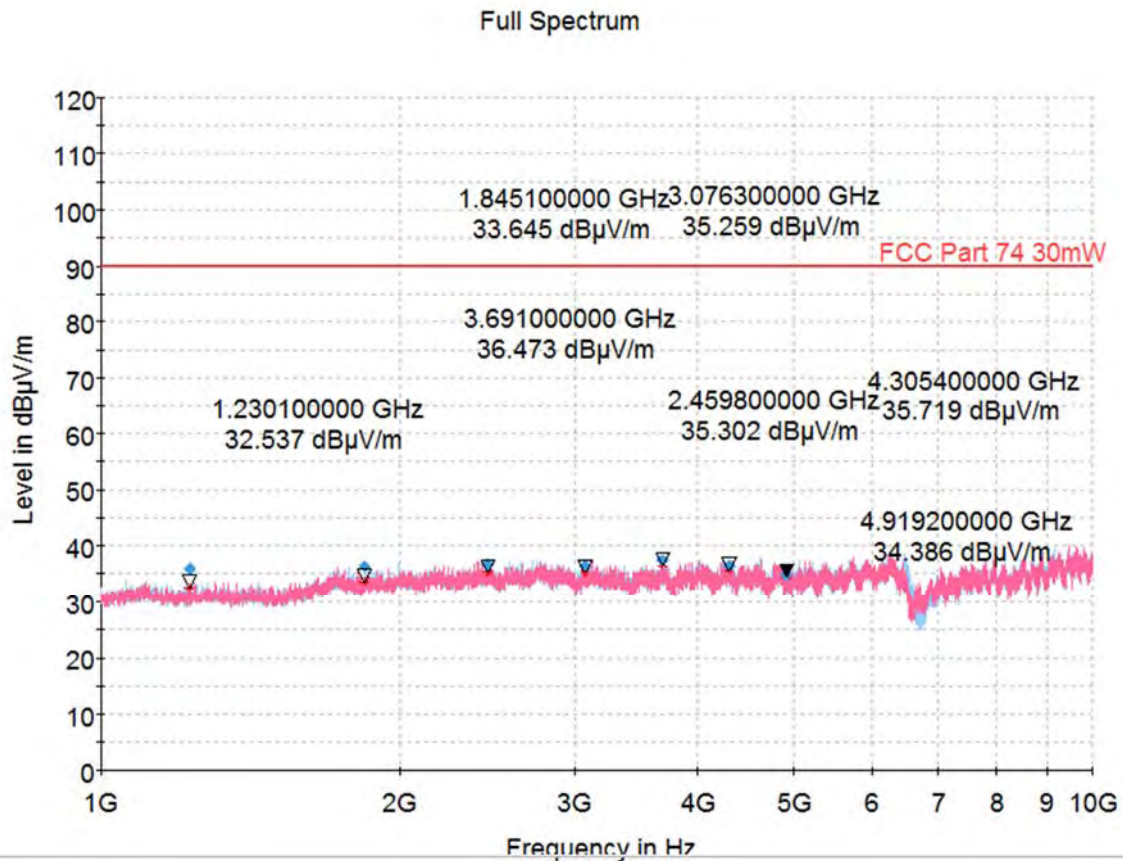
Test Information

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 MHz	Max Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measure Time (ms)	Bandwidth (kHz)	Height (cm)	Polarity	Azimuth (deg)	Correction (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