

APPENDIX G

20 dB Bandwidth



Radiated Emissions, CFR Title 47, FCC Part 15

Manufacturer:	Transparent Technologies	Project Number:	A80432
Customer Representative:	Mark Shamley	Test Area:	10m
Model:	NRD1	S/N:	101
Standard Referenced:	FCC Part 15 Class B	Date:	April 24, 2008
Temperature:	21°C	Humidity:	19%
Input Voltage:	120VAC / 60Hz	Pressure:	837mb
Configuration of Unit:	Transmit at low-band, mid-band and high-band, respectively		
Test Engineer:	Donald Lighthart		

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Frequency Range	20 dB Bandwidth Measurement
Low-band	1.140 MHz
Mid-Band	1.148 MHz
High-band	1.150 MHz

Conclusion: The maximum 20 dB bandwidth for this product is **1.150 MHz**.



Radiated Emissions, CFR Title 47, FCC Part 15

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Standard Referenced:	FCC Part 15 Class B	Date:	April 24, 2008

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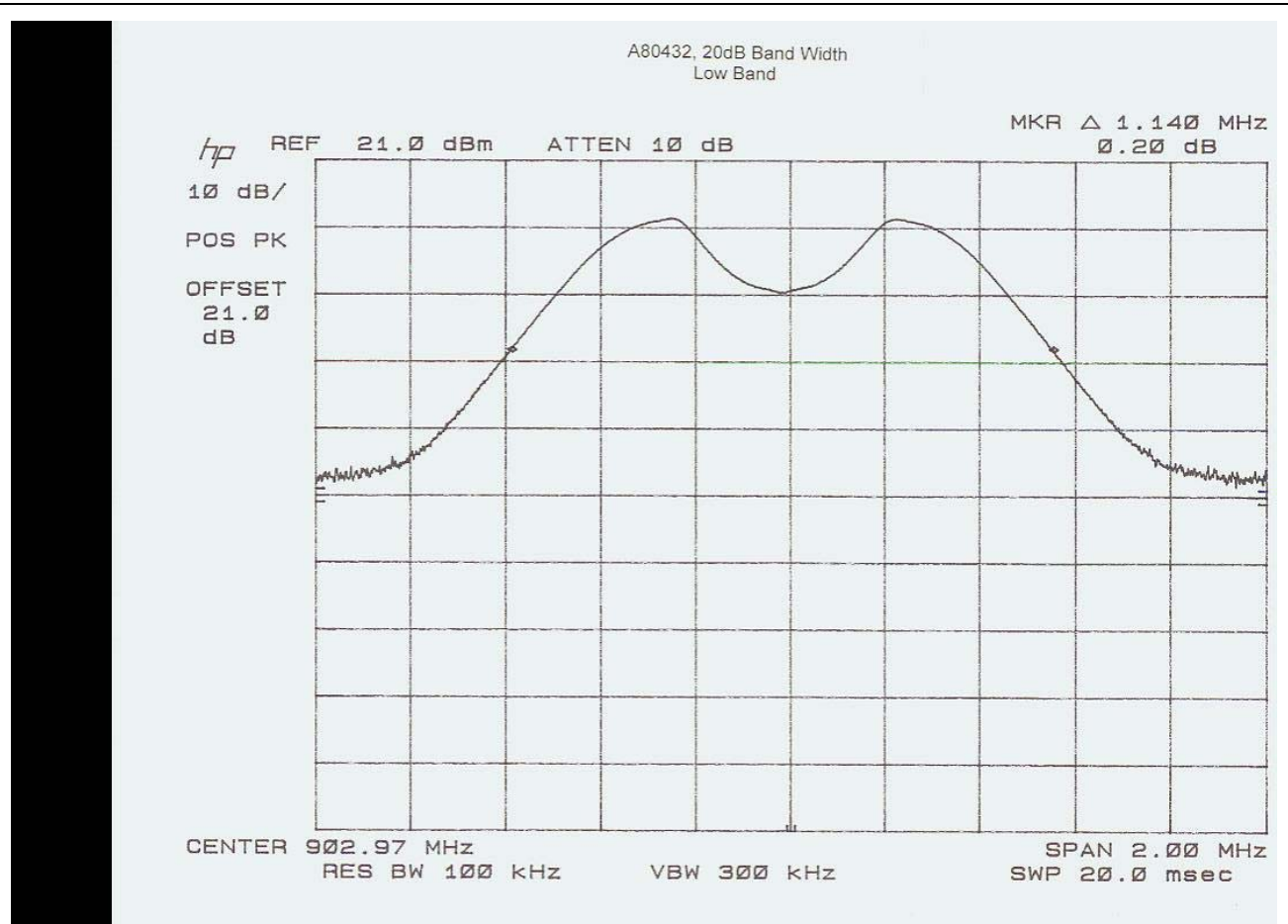


Figure G1. 20 dB Bandwidth Measurement, Low-band.



Radiated Emissions, CFR Title 47, FCC Part 15

Manufacturer: Transparent Technologies
Customer Representative: Mark Shamley
Model: NRD1
Standard Referenced: FCC Part 15 Class B

Project Number: A80432
Test Area: 10m
S/N: 101
Date: April 24, 2008

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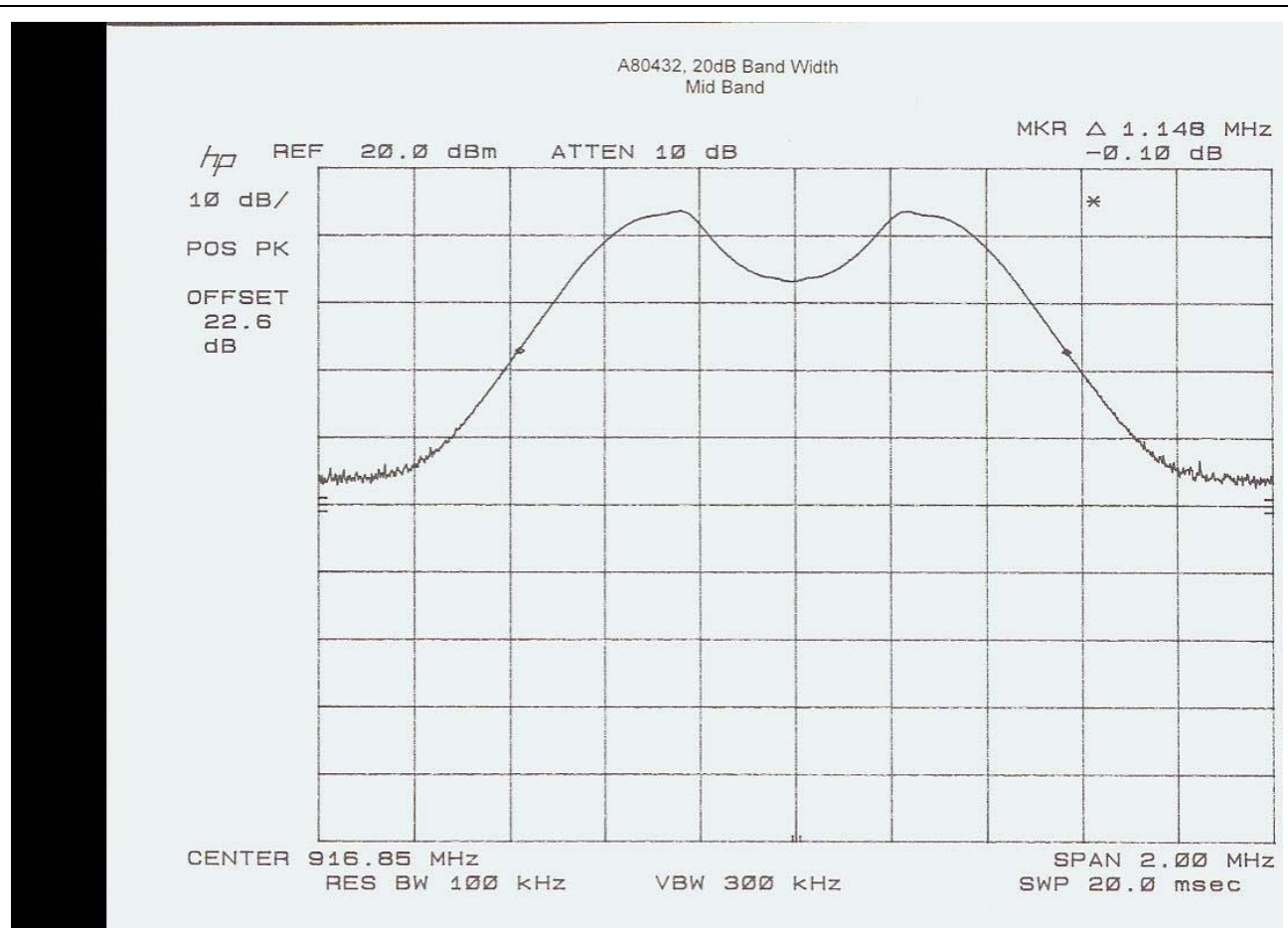


Figure G2. 20 dB Bandwidth Measurement, Mid-band.



Radiated Emissions, CFR Title 47, FCC Part 15

Manufacturer: Transparent Technologies
Customer Representative: Mark Shamley
Model: NRD1
Standard Referenced: FCC Part 15 Class B

Project Number: A80432
Test Area: 10m
S/N: 101
Date: April 24, 2008

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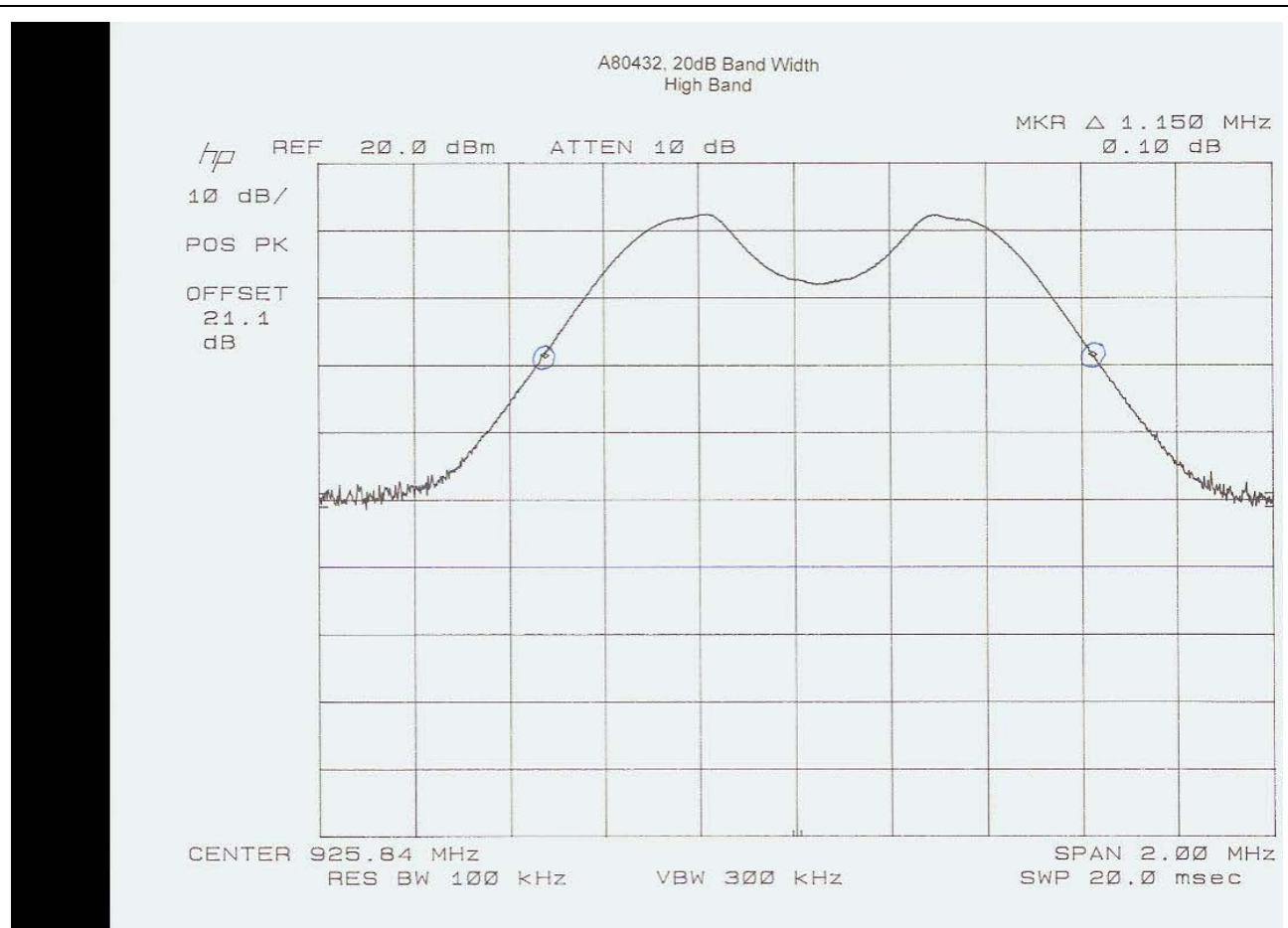


Figure G3. 20 dB Bandwidth Measurement, High-band.



Radiated Emissions, CFR Title 47, FCC Part 15

Manufacturer:	Transparent Technologies	Project Number:	A80432
Customer Representative:	Mark Shamley	Test Area:	10m
Model:	NRD1	S/N:	101
Standard Referenced:	FCC Part 15 Class B	Date:	April 24, 2008

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Test Equipment List

ID Number	Manufacturer	Model #	Serial #	Description	Cal Date	Cal Due
1263	Hewlett Packard	8566B	3014A06873	Spectrum Analyzer, 100 Hz to 22 GHz	08/21/2007	08/21/2008
1264	Hewlett Packard	85662A	2848A18247	Spectrum Analyzer Display	08/21/2007	08/21/2008
1265	Hewlett Packard	85650A	2521A00641	Quasi-Peak Adapter	08/21/2007	08/21/2008
NA	Transparent Technologies	NA	NA	Coaxial Cable, N-type male connector, each end	NA	NA
NA	Pasternack	PE7004-10	NA	10 dB Attenuator, DC-18 GHz, 1 Watt	NA	NA
NA	Pasternack	PE7014-10	NA	10 dB Attenuator, DC-18 GHz, 2 Watt	NA	NA

APPENDIX H

Spurious Emissions at Antenna Terminals



Radiated Emissions, CFR Title 47, FCC Part 15

Manufacturer:	Transparent Technologies	Project Number:	A80432
Customer Representative:	Mark Shamley	Test Area:	10m
Model:	NRD1	S/N:	101
Standard Referenced:	FCC Part 15 Class B	Date:	April 24, 2008
Temperature:	21°C	Humidity:	19%
Input Voltage:	120VAC / 60Hz	Pressure:	837mb
Configuration of Unit:	Transmit at low-band, mid-band and high-band, respectively		
Test Engineer:	Donald Lighthart		

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Frequency Range	Comments	Result
Low-band	All signals were at least 40 dB below carrier. No signals to report.	Pass
Mid-band	All signals were at least 40 dB below carrier. No signals to report.	Pass
High-band	All signals were at least 40 dB below carrier. No signals to report.	Pass

Conclusion: Product **complies** with spurious emissions requirement of FCC Part 2.1051.



Radiated Emissions, CFR Title 47, FCC Part 15

Manufacturer:	Transparent Technologies	Project Number:	A80432
Customer Representative:	Mark Shamley	Test Area:	10m
Model:	NRD1	S/N:	101
Standard Referenced:	FCC Part 15 Class B	Date:	April 24, 2008

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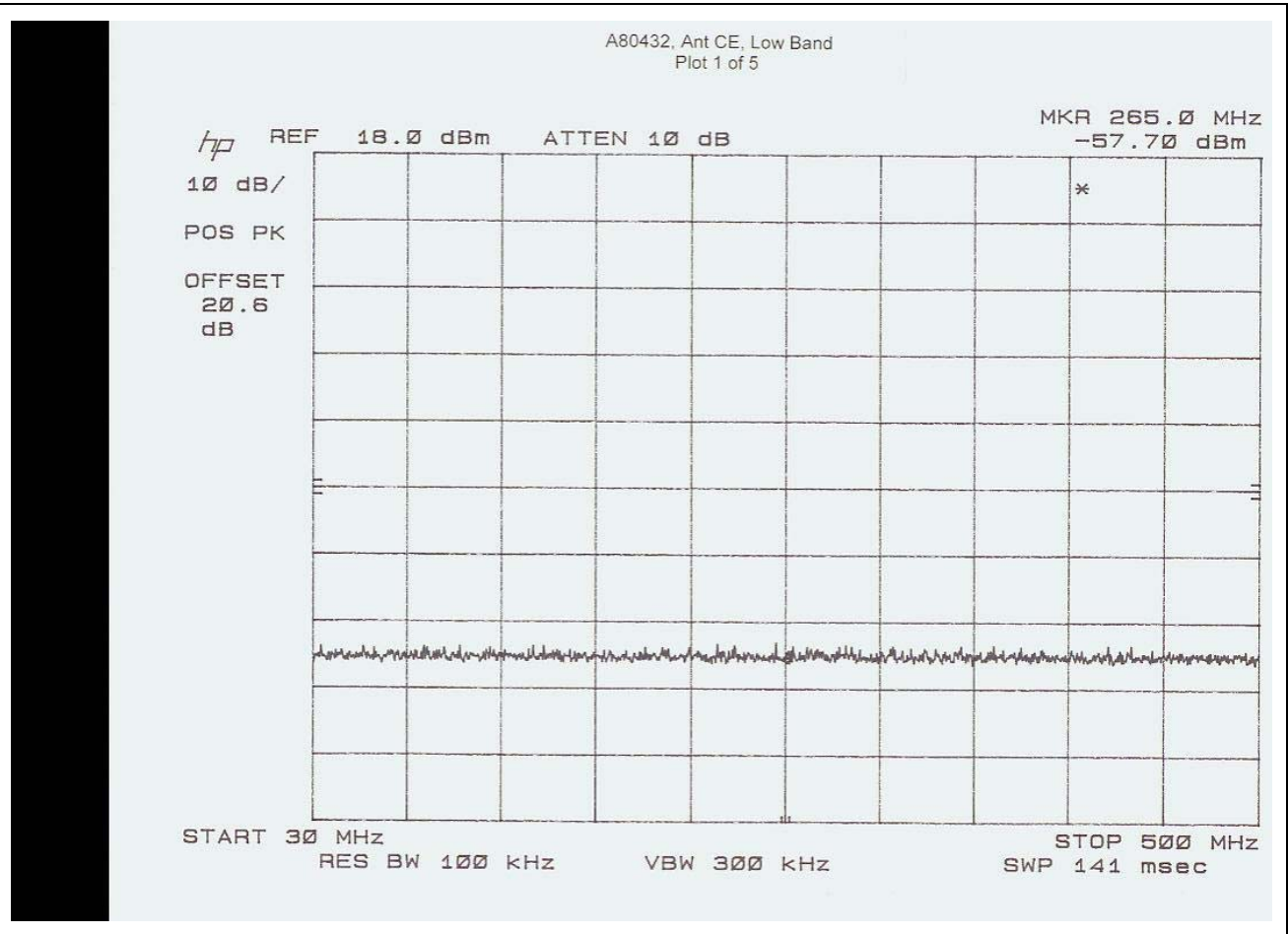


Figure H1. Spurious Emissions @ Antenna Terminals, 30 – 500 MHz (Low-band).



Radiated Emissions, CFR Title 47, FCC Part 15

Manufacturer:	Transparent Technologies	Project Number:	A80432
Customer Representative:	Mark Shamley	Test Area:	10m
Model:	NRD1	S/N:	101
Standard Referenced:	FCC Part 15 Class B	Date:	April 24, 2008

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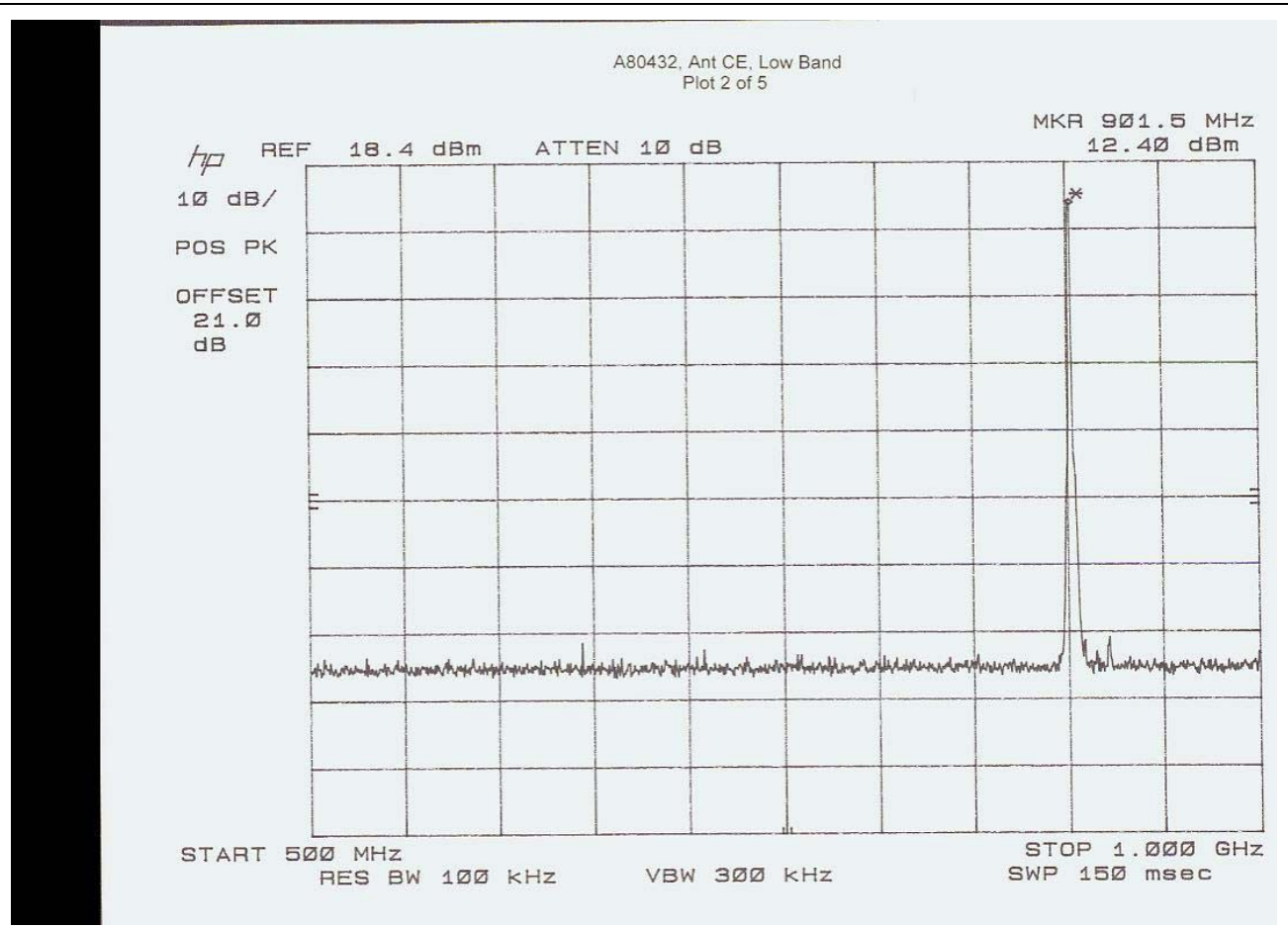


Figure H2. Spurious Emissions @ Antenna Terminals, 500 MHz – 1 GHz (Low-band).



Radiated Emissions, CFR Title 47, FCC Part 15

Manufacturer:	Transparent Technologies	Project Number:	A80432
Customer Representative:	Mark Shamley	Test Area:	10m
Model:	NRD1	S/N:	101
Standard Referenced:	FCC Part 15 Class B	Date:	April 24, 2008

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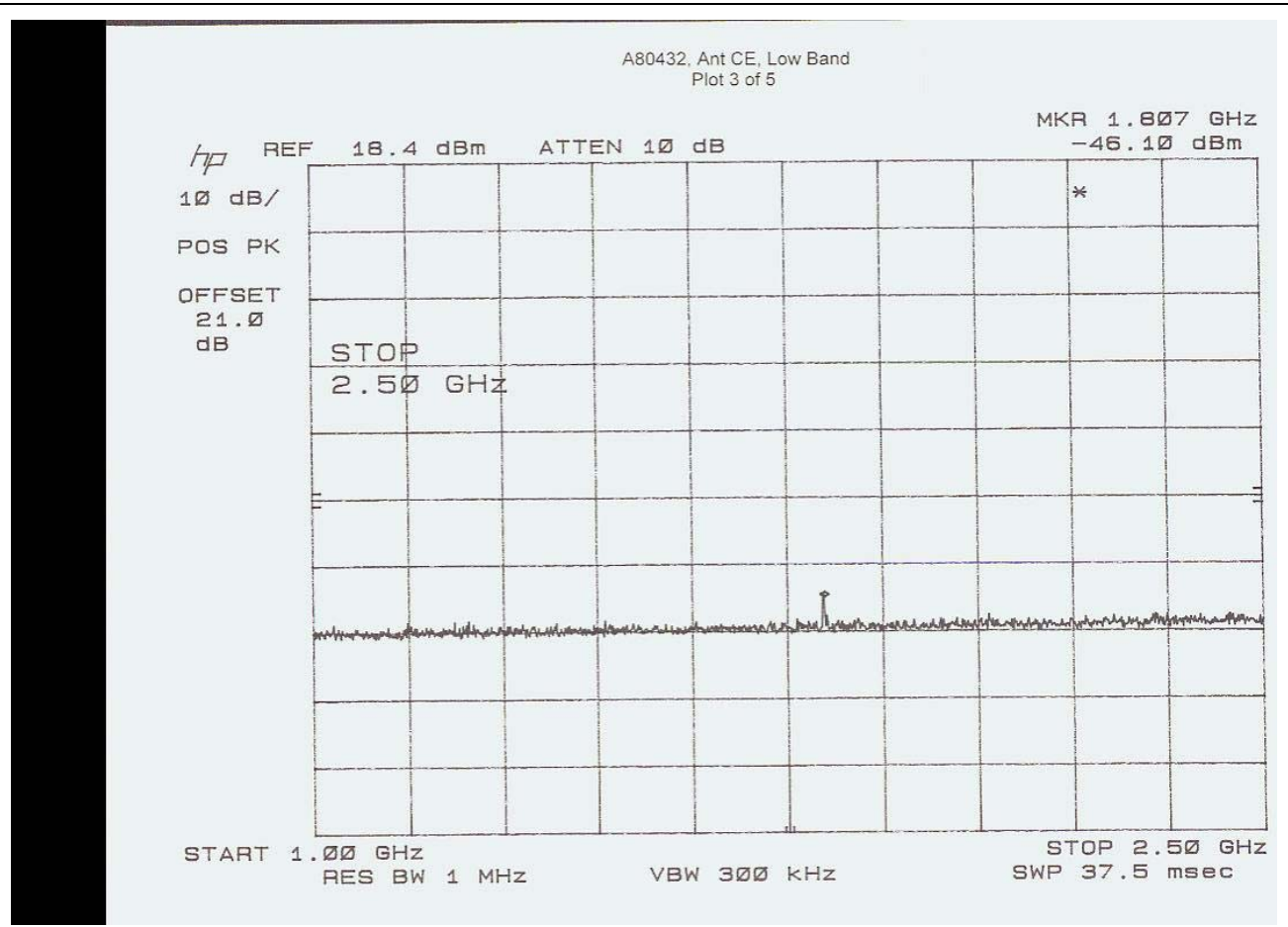


Figure H3. Spurious Emissions @ Antenna Terminals, 1 - 2.5 GHz (Low-band).



Radiated Emissions, CFR Title 47, FCC Part 15

Manufacturer:	Transparent Technologies	Project Number:	A80432
Customer Representative:	Mark Shamley	Test Area:	10m
Model:	NRD1	S/N:	101
Standard Referenced:	FCC Part 15 Class B	Date:	April 24, 2008

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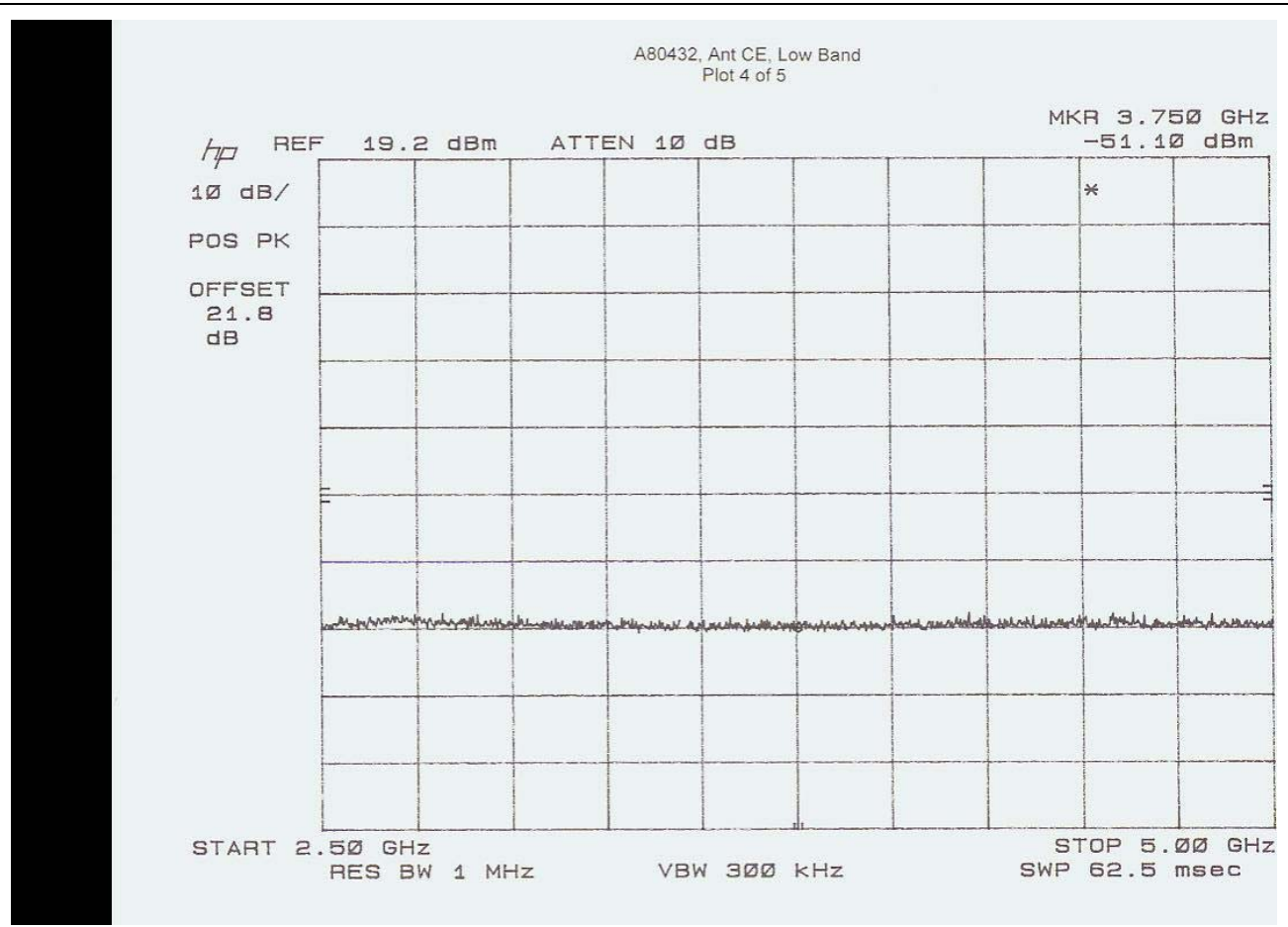


Figure H4. Spurious Emissions @ Antenna Terminals, 2.5 - 5 GHz (Low-band).



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Manufacturer:	Transparent Technologies	Project Number:	A80432
Customer Representative:	Mark Shamley	Test Area:	10m
Model:	NRD1	S/N:	101
Standard Referenced:	FCC Part 15 Class B	Date:	April 24, 2008

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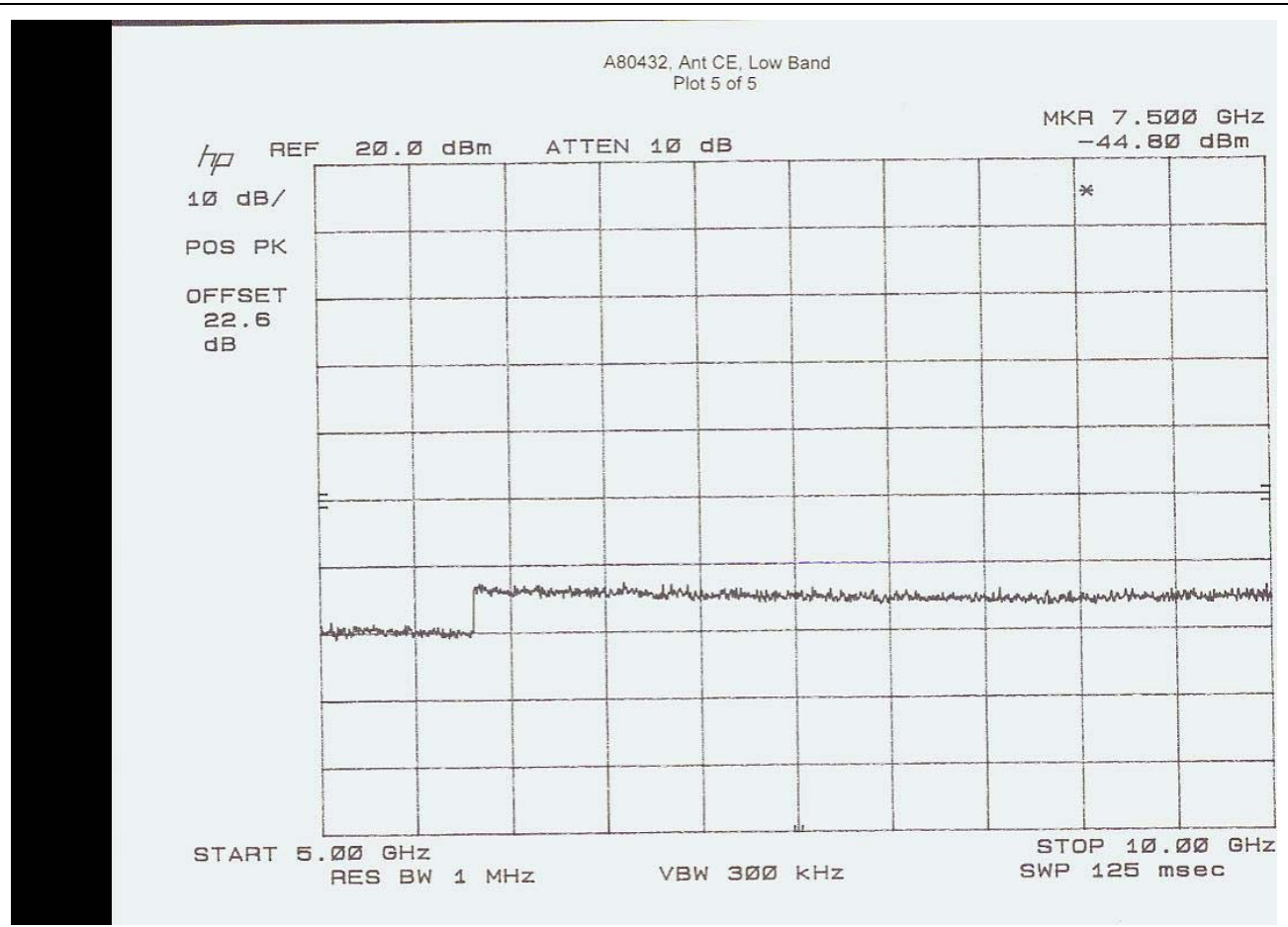


Figure H5. Spurious Emissions @ Antenna Terminals, 5 - 10 GHz (Low-band).



Radiated Emissions, CFR Title 47, FCC Part 15

Manufacturer:	Transparent Technologies	Project Number:	A80432
Customer Representative:	Mark Shamley	Test Area:	10m
Model:	NRD1	S/N:	101
Standard Referenced:	FCC Part 15 Class B	Date:	April 24, 2008

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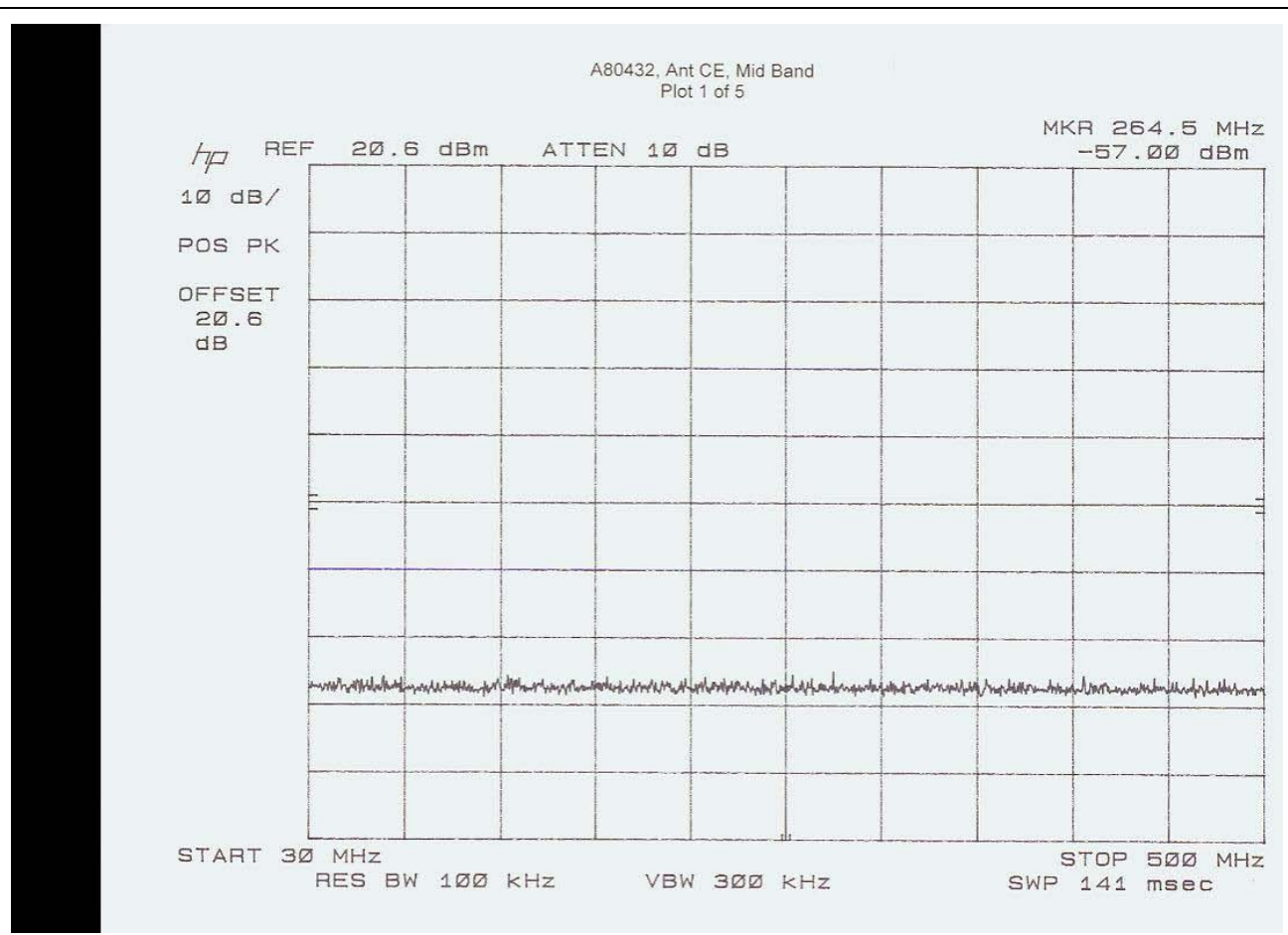


Figure H6. Spurious Emissions @ Antenna Terminals, 30 – 500 MHz (Mid-band).



Radiated Emissions, CFR Title 47, FCC Part 15

Manufacturer:	Transparent Technologies	Project Number:	A80432
Customer Representative:	Mark Shamley	Test Area:	10m
Model:	NRD1	S/N:	101
Standard Referenced:	FCC Part 15 Class B	Date:	April 24, 2008

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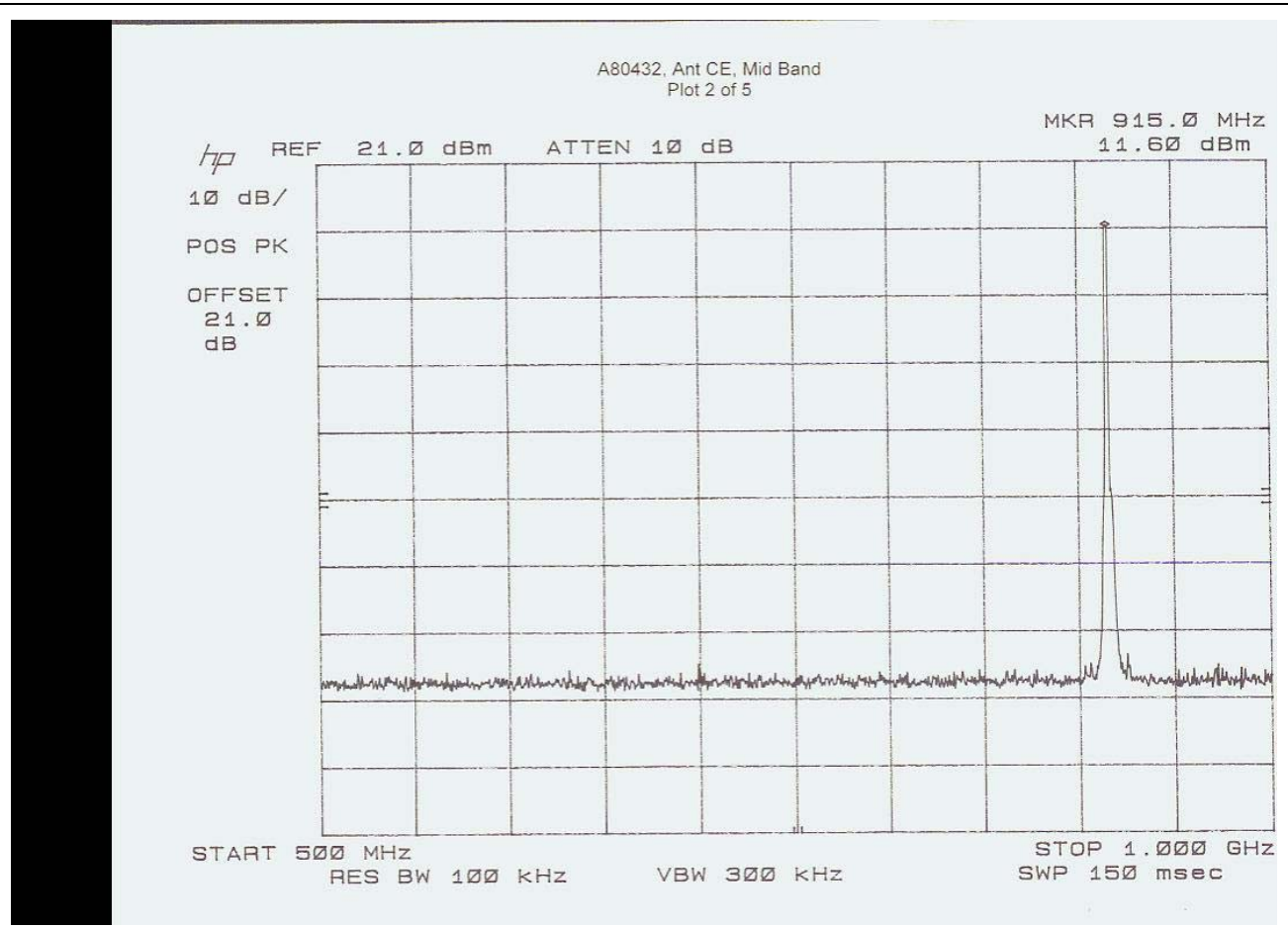


Figure H7. Spurious Emissions @ Antenna Terminals, 500 MHz – 1 GHz (Mid-band).



Radiated Emissions, CFR Title 47, FCC Part 15

Manufacturer:	Transparent Technologies	Project Number:	A80432
Customer Representative:	Mark Shamley	Test Area:	10m
Model:	NRD1	S/N:	101
Standard Referenced:	FCC Part 15 Class B	Date:	April 24, 2008

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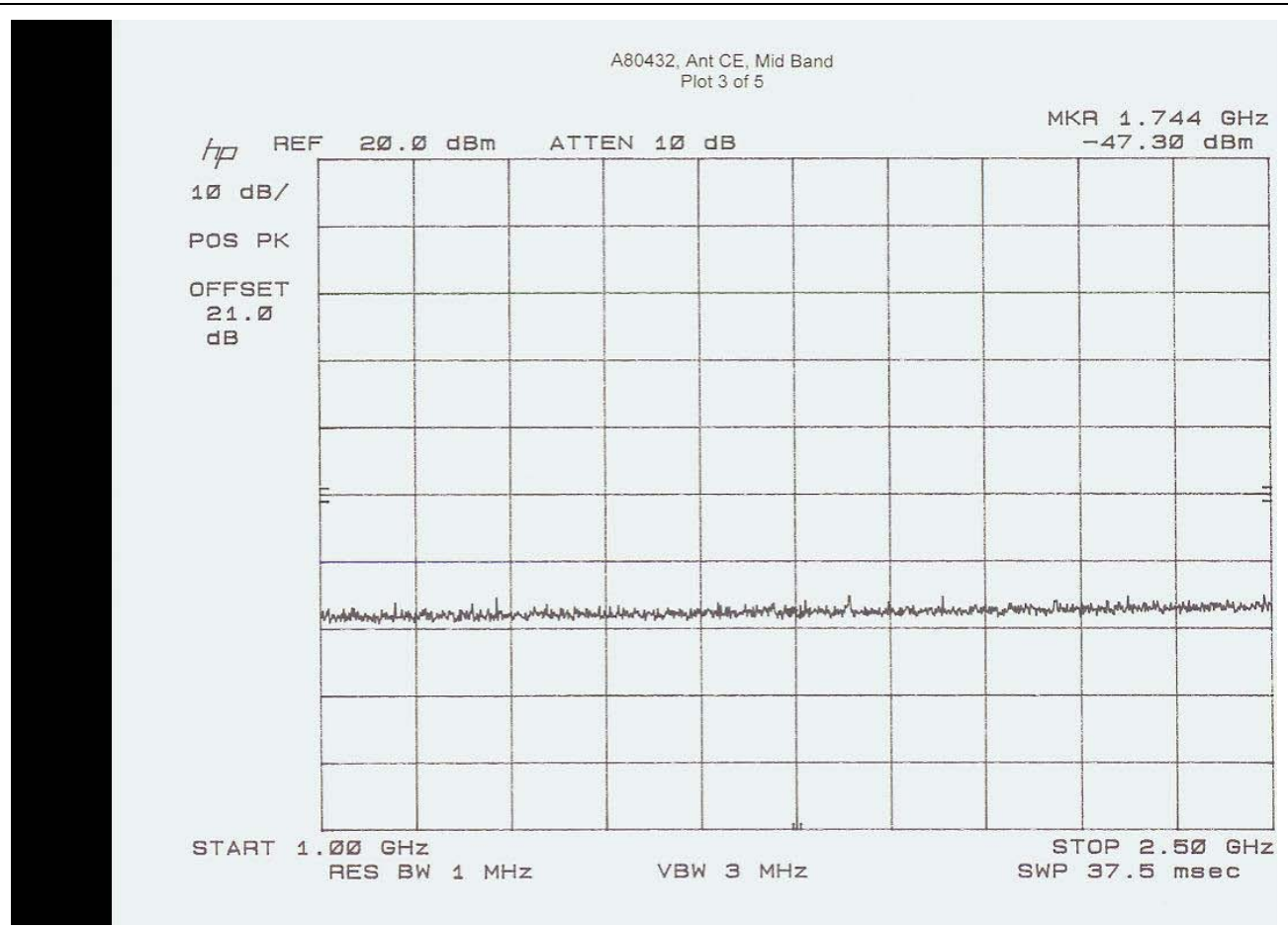


Figure H8. Spurious Emissions @ Antenna Terminals, 1 - 2.5 GHz (Mid-band).



Radiated Emissions, CFR Title 47, FCC Part 15

Manufacturer:	Transparent Technologies	Project Number:	A80432
Customer Representative:	Mark Shamley	Test Area:	10m
Model:	NRD1	S/N:	101
Standard Referenced:	FCC Part 15 Class B	Date:	April 24, 2008

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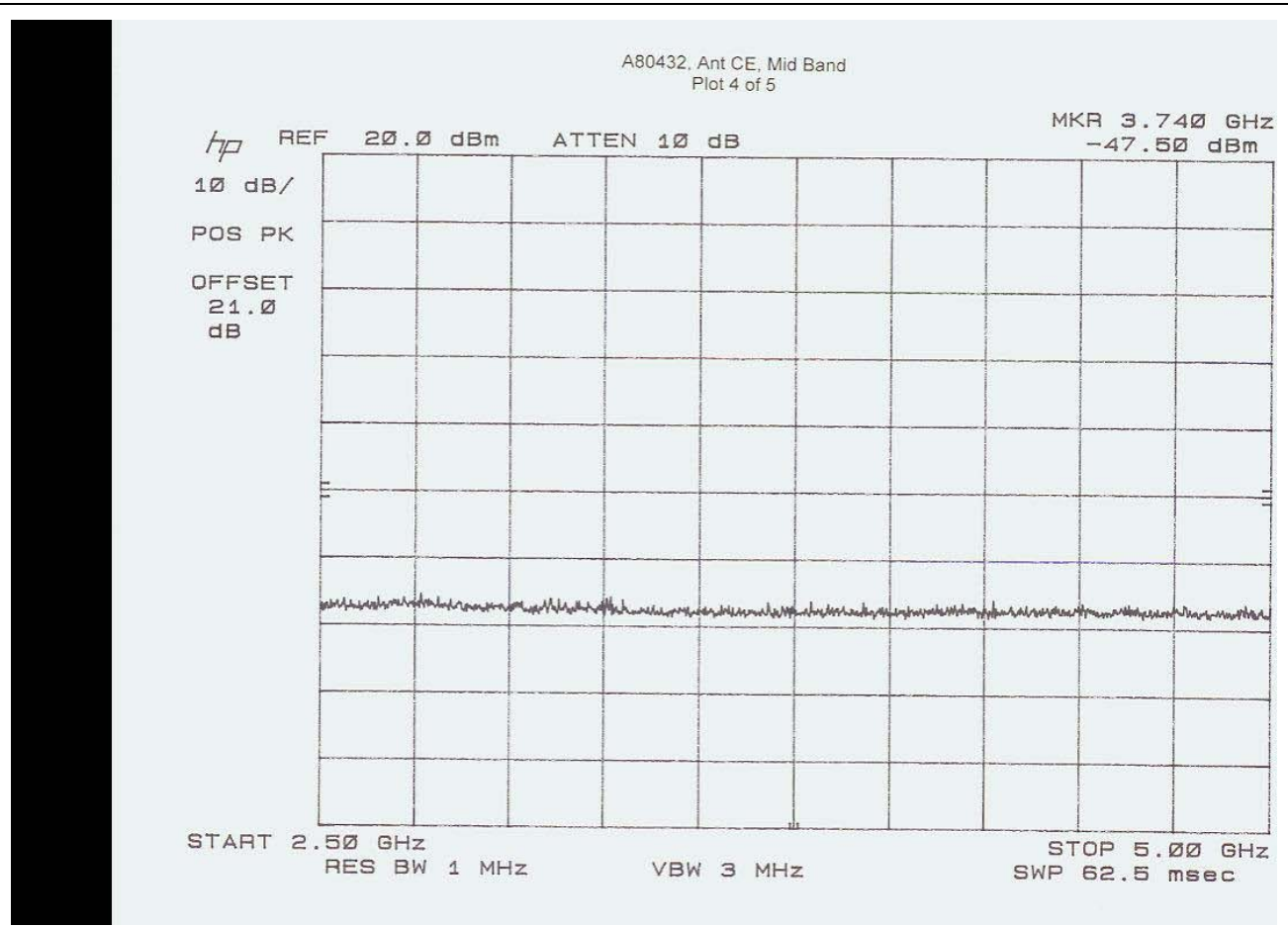


Figure H9. Spurious Emissions @ Antenna Terminals, 2.5 - 5 GHz (Mid-band).



Radiated Emissions, CFR Title 47, FCC Part 15

Manufacturer:	Transparent Technologies	Project Number:	A80432
Customer Representative:	Mark Shamley	Test Area:	10m
Model:	NRD1	S/N:	101
Standard Referenced:	FCC Part 15 Class B	Date:	April 24, 2008

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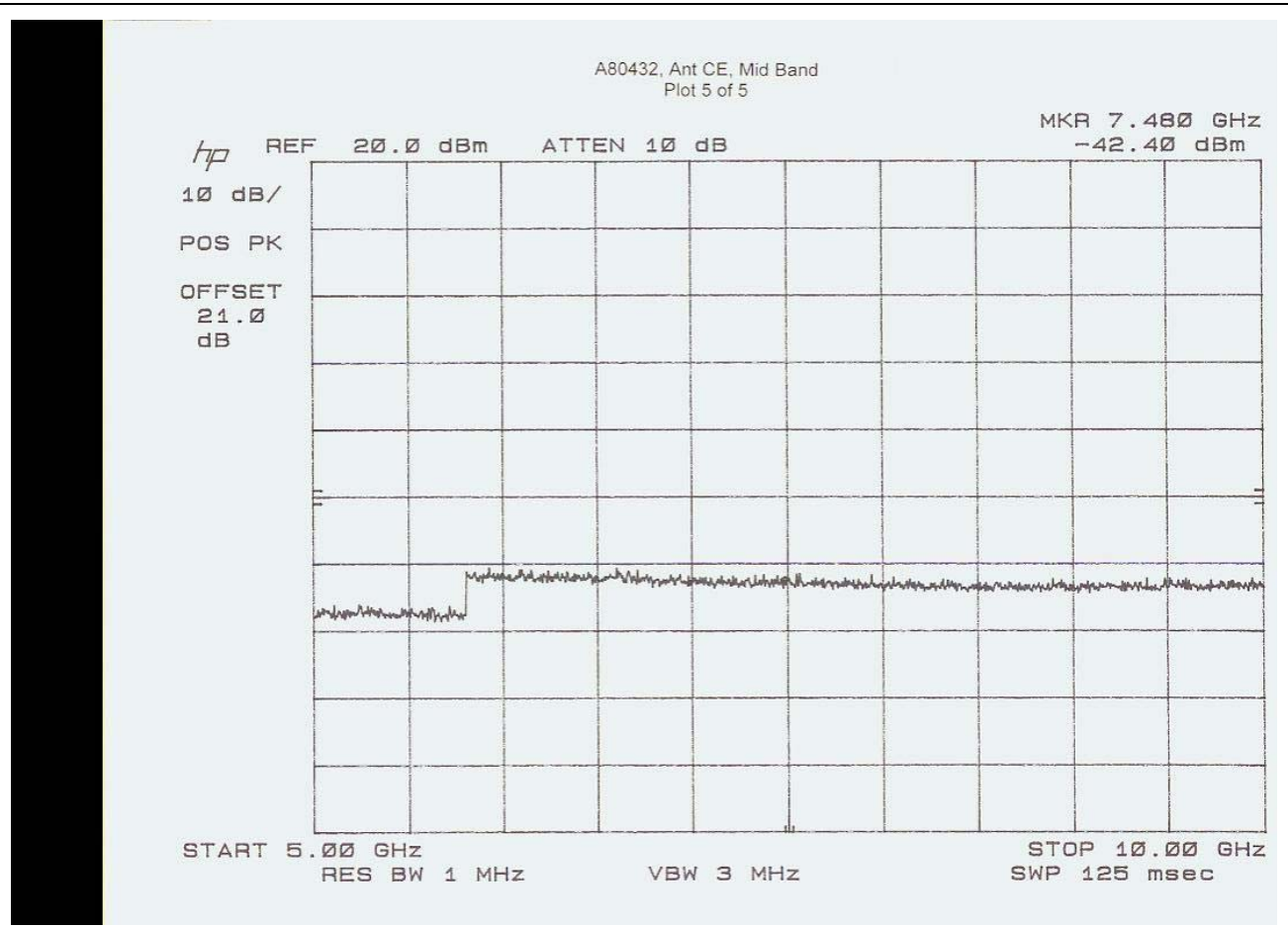


Figure H10. Spurious Emissions @ Antenna Terminals, 5 - 10 GHz (Mid-band).



Radiated Emissions, CFR Title 47, FCC Part 15

Manufacturer:	Transparent Technologies	Project Number:	A80432
Customer Representative:	Mark Shamley	Test Area:	10m
Model:	NRD1	S/N:	101
Standard Referenced:	FCC Part 15 Class B	Date:	April 24, 2008

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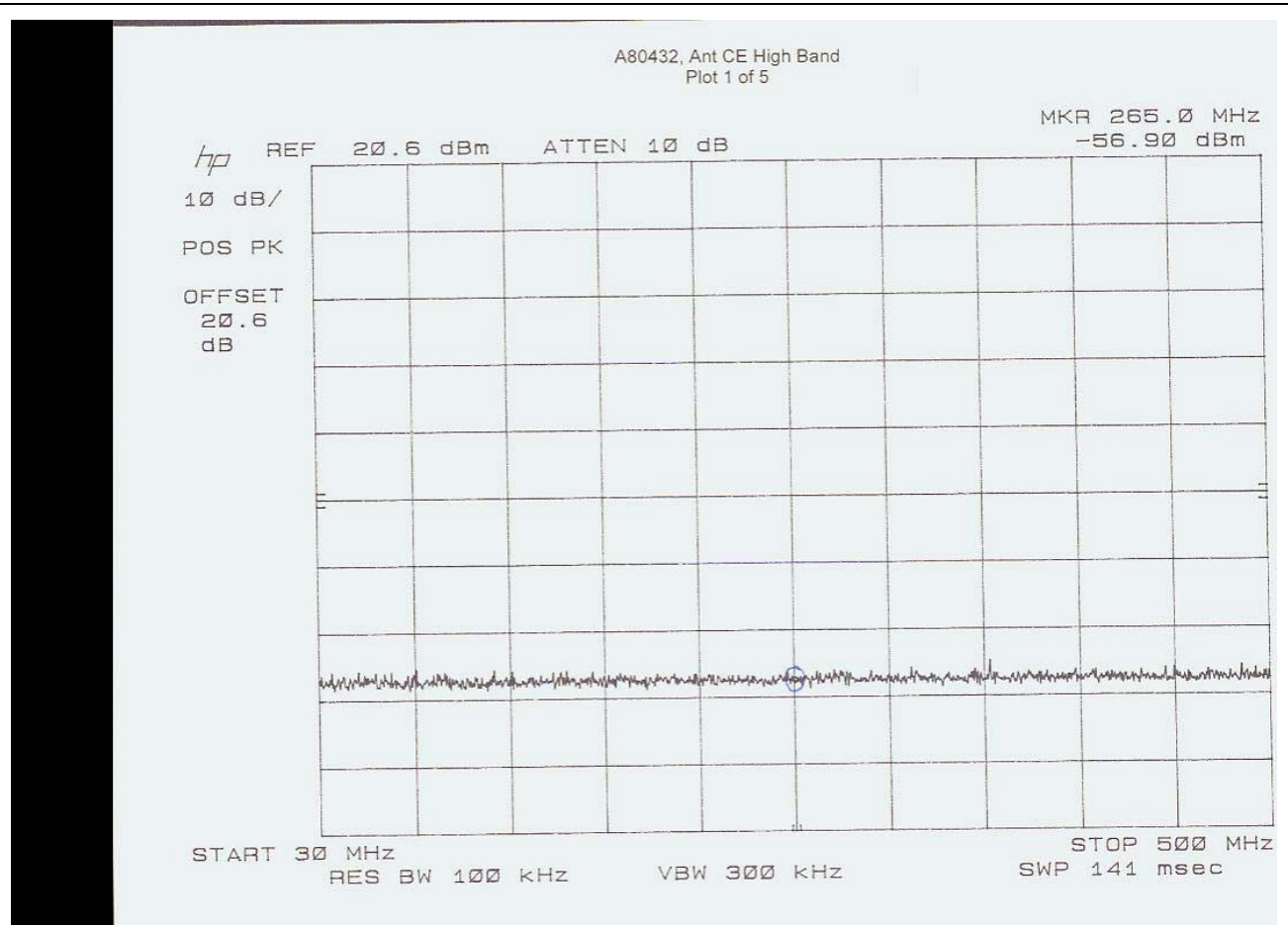


Figure H11. Spurious Emissions @ Antenna Terminals, 30 – 500 MHz (High-band).



Radiated Emissions, CFR Title 47, FCC Part 15

Manufacturer:	Transparent Technologies	Project Number:	A80432
Customer Representative:	Mark Shamley	Test Area:	10m
Model:	NRD1	S/N:	101
Standard Referenced:	FCC Part 15 Class B	Date:	April 24, 2008

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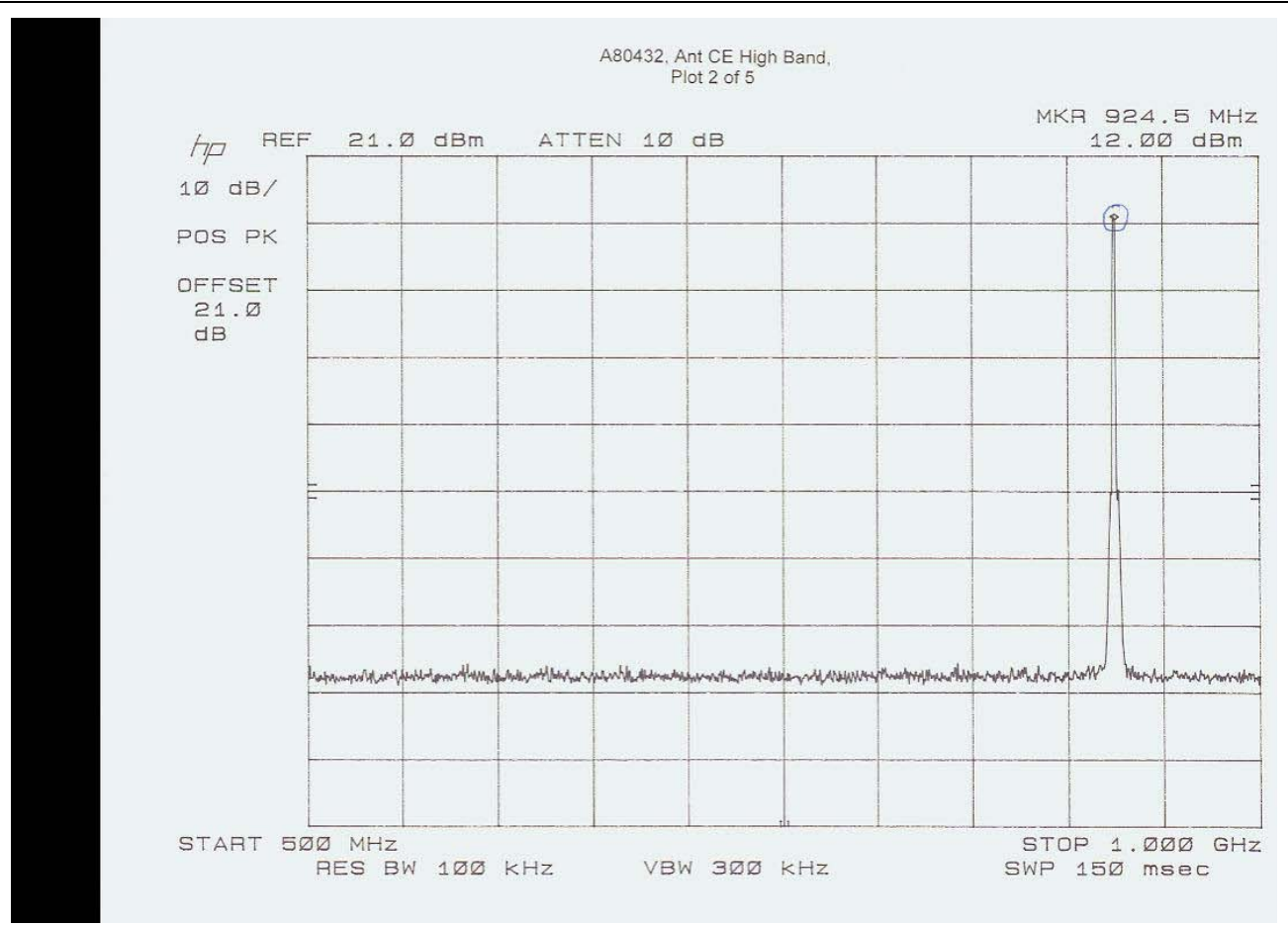


Figure H12. Spurious Emissions @ Antenna Terminals, 500 MHz – 1 GHz (High -band).



Radiated Emissions, CFR Title 47, FCC Part 15

Manufacturer:	Transparent Technologies	Project Number:	A80432
Customer Representative:	Mark Shamley	Test Area:	10m
Model:	NRD1	S/N:	101
Standard Referenced:	FCC Part 15 Class B	Date:	April 24, 2008

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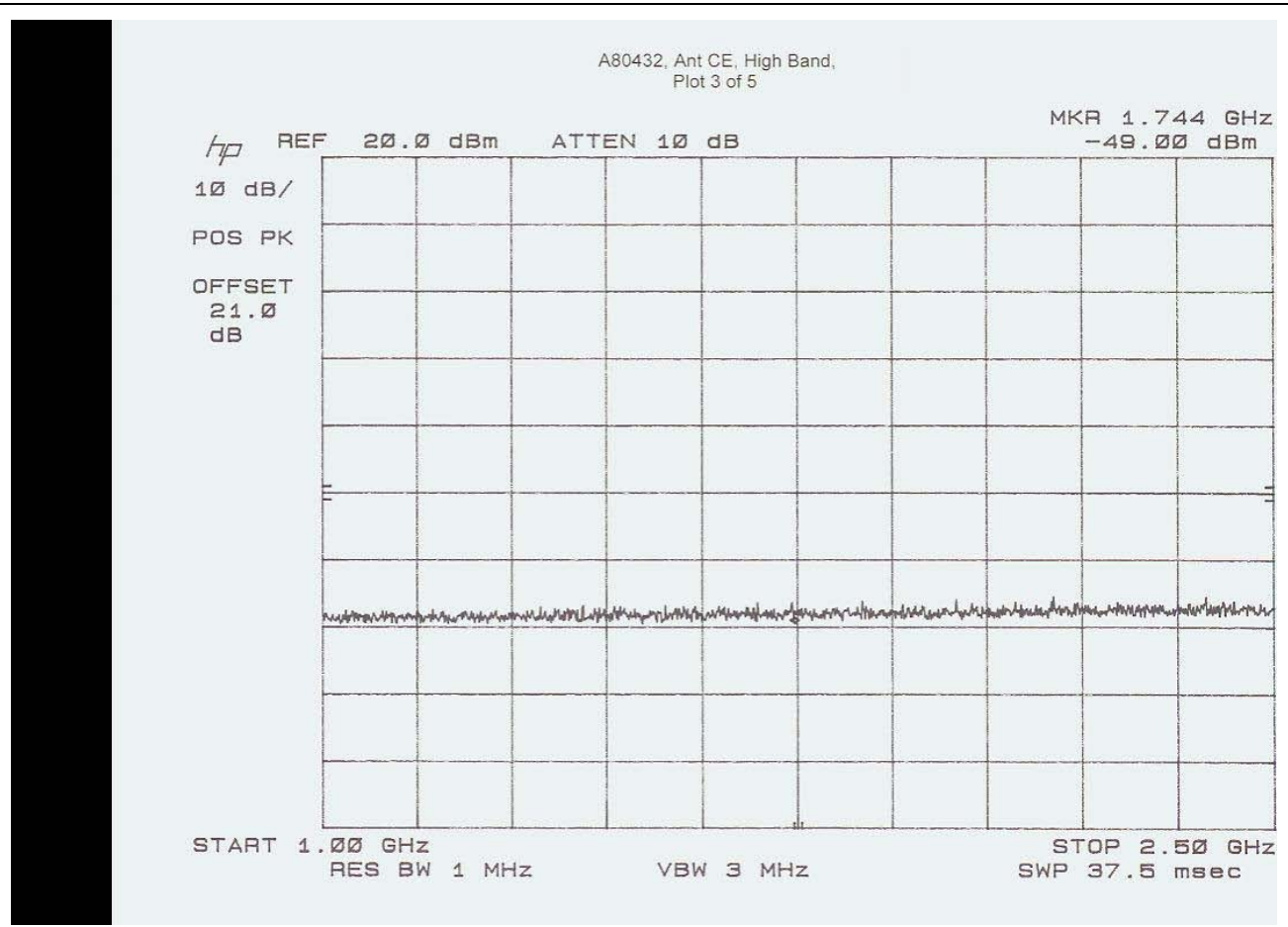


Figure H13. Spurious Emissions @ Antenna Terminals, 1 - 2.5 GHz (High -band).



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Manufacturer:	Transparent Technologies	Project Number:	A80432
Customer Representative:	Mark Shamley	Test Area:	10m
Model:	NRD1	S/N:	101
Standard Referenced:	FCC Part 15 Class B	Date:	April 24, 2008

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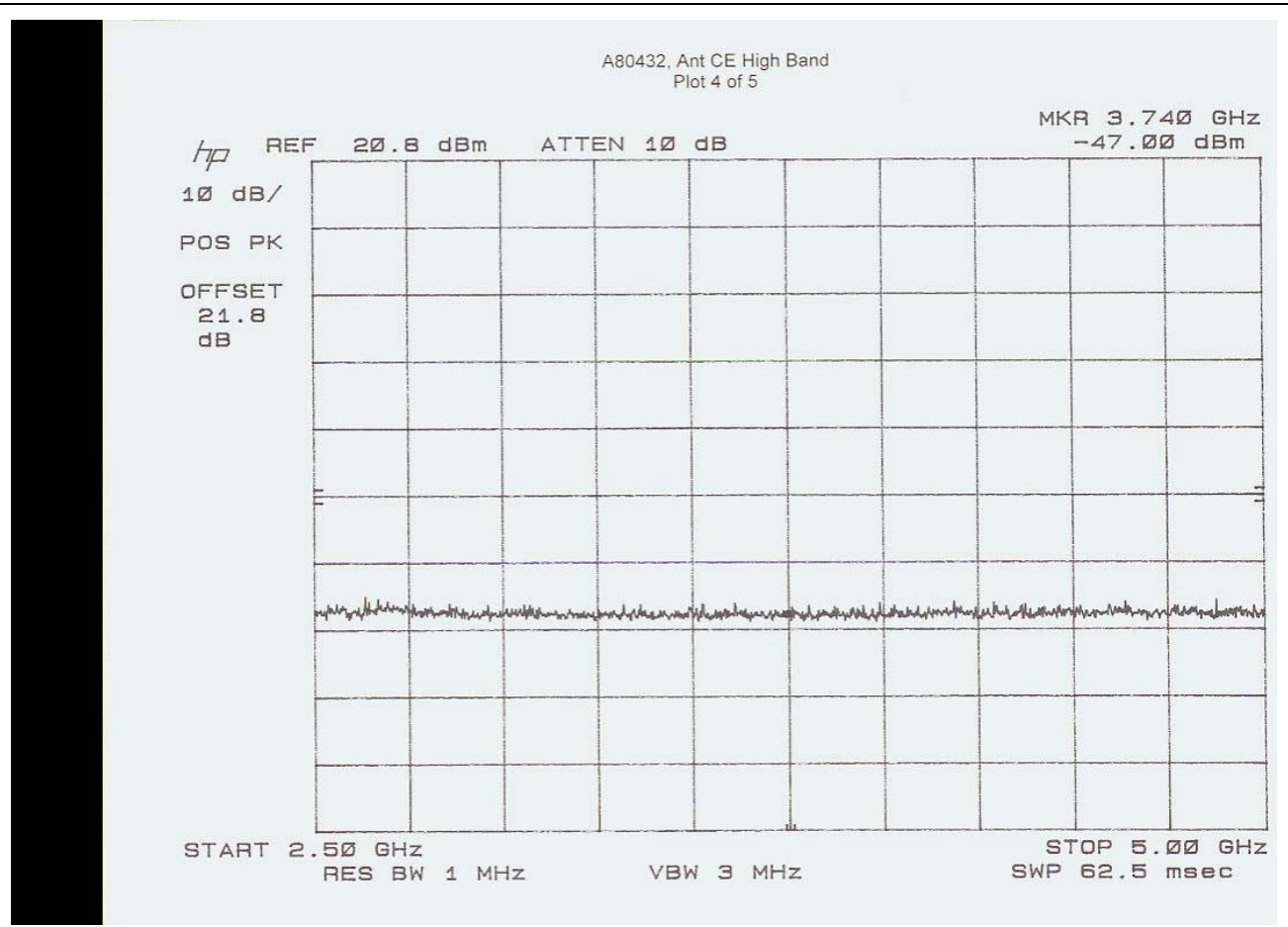


Figure H14. Spurious Emissions @ Antenna Terminals, 2.5 - 5 GHz (High -band).



Radiated Emissions, CFR Title 47, FCC Part 15

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Customer Representative:	Mark Shamley	Test Area:	10m
Model:	NRD1	S/N:	101
Standard Referenced:	FCC Part 15 Class B	Date:	April 24, 2008

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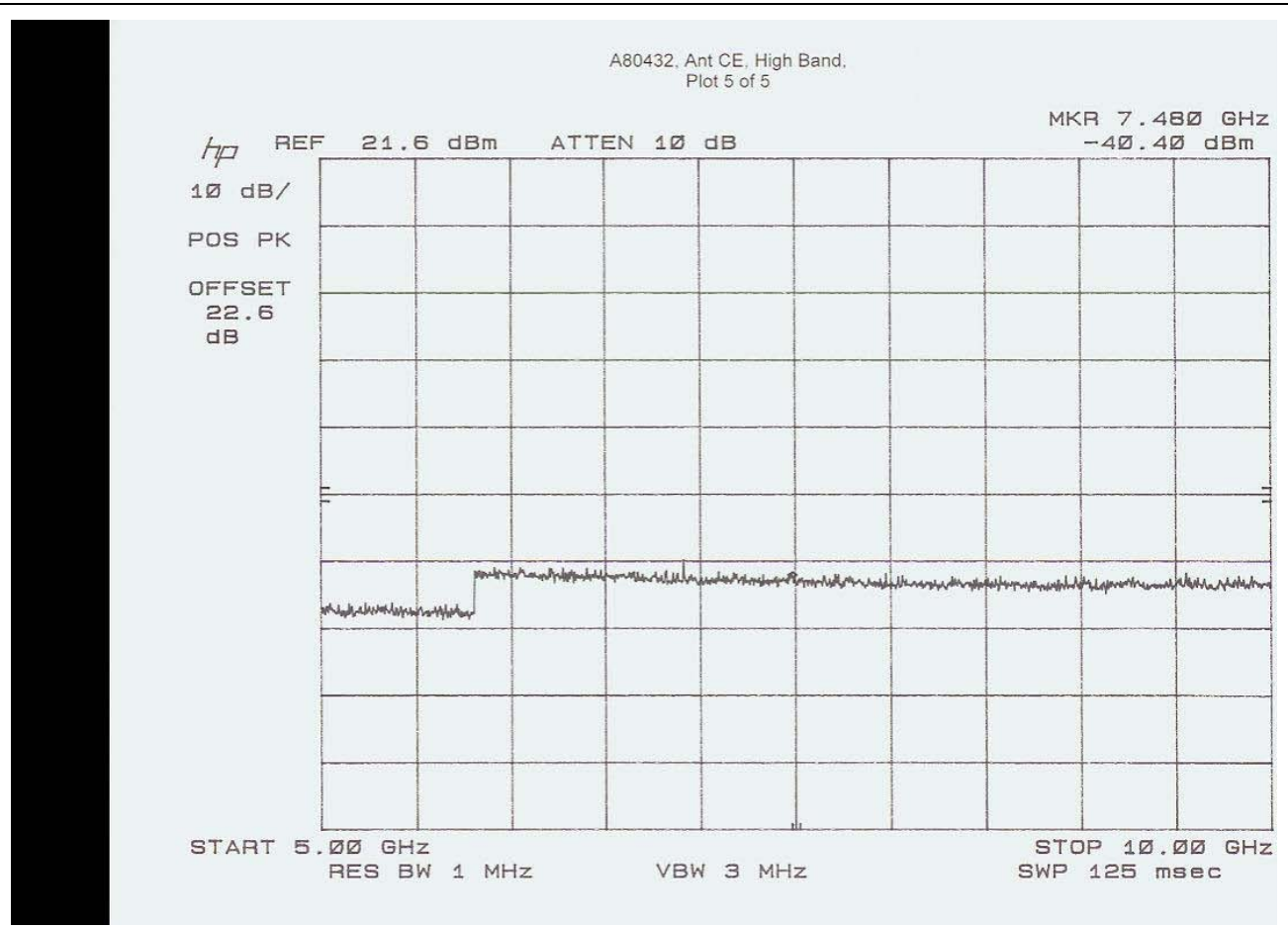


Figure H15. Spurious Emissions @ Antenna Terminals, 5 - 10 GHz (High -band).



Radiated Emissions, CFR Title 47, FCC Part 15

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Customer Representative:	Mark Shamley	Test Area:	10m
Model:	NRD1	S/N:	101
Standard Referenced:	FCC Part 15 Class B	Date:	April 24, 2008

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1264	Hewlett Packard	85662A	2848A18247	Spectrum Analyzer Display	08/21/2007	08/21/2008
1265	Hewlett Packard	85650A	2521A00641	Quasi-Peak Adapter	08/21/2007	08/21/2008
NA	Transparent Technologies	NA	NA	Coaxial Cable, N-type male connector, each end	NA	NA
NA	Pasternack	PE7004-10	NA	10 dB Attenuator, DC-18 GHz, 1 Watt	NA	NA
NA	Pasternack	PE7014-10	NA	10 dB Attenuator, DC-18 GHz, 2 Watt	NA	NA