Application for Certification
For an RF amplifier

Clear RF, LLC
15520 E Fairview Avenue
Seattle, WA 99216

RF amplifier

FCC ID: XS7WRE2700
IC ID: 8918A-WRE2700

REPORT # UT16033A-004

This report was prepared in accordance with the requirements of the FCC Rules and Regulations Part 2, Subpart J, 2.1031 through 2.1057, and Parts 22, and 24 and in accordance with Industry Canada Radio Standards Specification RSS-131 Issue 2 July 2003 for Zone Enhancers and any other applicable sections of the rules as indicated herein.

Prepared By:

DNB Engineering, Inc.
1100 E. Chalk Creek Road
Coalville, Ut 84017

Industry Canada Lab Code: IC 4738A-1

13 October 2010 (Original Release)
17 November 2010 (Revised Release)

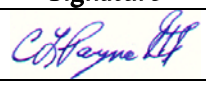
TEST LAB PERSONNEL

Test Performed by:	Date	Signature
Les Payne	13 Oct 2010	

APPROVALS

Quality Approval	Date	Signature
Carrie Yates Quality Check	17 Nov 2010	

REVISION APPROVAL

Quality Approval	Date	Signature
CL Payne III Quality Check	17 Nov 2010	

Original report UT16033A-001 Dated 13 Oct 2010
Revised report UT16033A-002 Dated 12 Nov 2010
Revised report UT16033A-003 Dated 15 Nov 2010
Revised report UT16033A-004 Dated 17 Nov 2010

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1.0 ADMINISTRATIVE DATA

1.1 Certifications and Qualifications

I certify that DNB Engineering, Inc conducted the tests performed in order to obtain the technical data presented in this application. Also, based on the results of the enclosed data, I have concluded that the equipment tested meets or exceeds the requirements of the Rules and Regulations governing this application.

1.2 Measurement Repeatability Information

The test data presented in this report has been acquired using the guidelines set forth in FCC Part 2.1031 through 2.1057, and Parts 22, and 24. Also included in this report is compliancy data for Industry Canada RS-131 for Zone Enhancers. The test results presented in this document are valid only for the equipment identified herein under the test conditions described. Repeatability of these test results will only be achieved with identical measurement conditions. These conditions include: The same test distance, EUT Height, Measurement Site Characteristics, and the same EUT System Components. The system must have the same Interconnecting Cables arranged in identical placement to that in the test set-up, with the system and/or EUT functioning in the identical mode of operation (i.e. software and so on) as on the date of the test. Any deviation from the test conditions and the environment on the date of the test may result in measurement repeatability difficulties.

All changes made to the EUT during the course of testing as identified in this test report must be incorporated into the EUT or identical models to ensure compliance with the FCC regulations.

C. L. Payne III (Para. 1.1)
Facility Manager
DNB Engineering, Inc.
Tel. (435) 336-4433
Fax (435) 336-4436
E-mail Les@dnbenginc.com

1.3 Test Methodology

The tests were performed in accordance with FCC Part 2 Subpart J, 2.1031 through 2.1057, 15, and 22, 24, Industry Canada RSS-131 Issue 2 July 2003 on a sample of the production model.

1.4 Test Equipment

FIGURE 1: TEST EQUIPMENT

Description	Manufacturer	M/N	S/N	Cal Due Date	Test Used On
Signal Generator	**Rhode & Schwarz**	**SMU 200A**	**100094**	**11/28/10**	RF Power Out put, Inter-Mod, Cond Spur, Rad Spur, Characteristics
Spectrum Analyzer	**Agilent**	**E4407B**	**MY45103462**	**08/18/11**	RF Power Out put, Inter-Mod, Cond Spur, Rad Spur, Characteristics, RE
S/A Display	**H/P**	**85662A**	**2318A05282**	**6/17/12**	**RE**
Spectrum Analyzer	**H/P**	**85680B**	**2330A02791**	**6/17/12**	**RE**
Q-P Adapter	**H/P**	**85650A**	**2811A01240**	**6/17/12**	**RE**
Bicon Antenna	**Schwarzbeck**	**BBA-9106**	**7**	**4/30/11**	**RE**
Logarithmic Antenna	**Schwarzbeck**	**UHALP9107**	**L10**	**10/12/12**	**RE**
DRG Antenna	**AH Systems**	**SAS-200/571**	**222**	**7/15/11**	**RE**
DRG Antenna	**AH Systems**	**SAS-571**	**417**	**7/15/11**	**RE,Rad spur**
50 ohm Load	**Decibel**	**DB4303G**	**2309**	**1/11/11**	RF Power Out put, Inter-Mod, Cond Spur, Rad Spur, Characteristics, RE
Directional Coupler	**Narda**	**3003.20**	**05002**	**9/8/11**	RF Power Out put, Inter-Mod, Cond Spur, Characteristics
Directional Coupler	**Narda**	**3022**	**30087**	**9/8/11**	RF Power Out put, Inter-Mod, Cond Spur, Characteristics

1. 5 DEVIATIONS

Deviations/Modifications to the EUT
None.

Deviations/Modifications from test standard.
None

1.6 TEST DESCRIPTION

1.6.1 RF Power Output

For RF amplifier.

1.6.2 Emissions Limitation and Occupied Bandwidth

Occupied Bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are equal to 0.5 percent of the total mean power radiated by a given emission. (also known as the 99% bandwidth)

1.6.3 Conducted Spurious Emissions at Antenna Terminals

Conducted Spurious Emissions are emissions at the antenna terminals on a frequency or frequencies which are outside an occupied band sufficient to ensure transmission of information of required quality for the class of communication desired. The reduction in the level of these spurious emissions will not affect the quality of the information being transmitted.

1.6.4 Radiated Field Strength of Spurious Emissions

Emissions from the equipment when connected into a non-radiating load on a frequency or frequencies which are outside an occupied band sufficient to ensure transmission of information of required quality for the class of communication desired. The reduction in the level of these spurious emissions will not affect the quality of the information being transmitted.

1.6.5 Conducted Emissions

Emissions which are conducted onto the AC power mains.

1.6.6 Radiated Emissions

Emissions which emanate from the EUT.

2.1033 (C) (1) Application for Certification

Name of Applicant:		Clear RF, LLC 15520 E Fairview Avenue Seattle, WA 99216
FRN:		0019166644
Applicant is:	X	Manufacturer Vendor Licensee Prospective Licensee Other
Name of Manufacturer		Clear RF, LLC
Description:		RF amplifier
Part Number:		WRE2700
Anticipated Production Quantity:		Multiple Units
Applicable FCC Parts:		22, and 24
Applicable IC Standard:		RSS-131
FCC ID No:		XS7WRE2700
IC ID No:		8918A-WRE2700

FCC Emissions Designator:		
	22H	F1D and F8W
	22H	GXW
	22.901(d)	DXW
	24E	F1D and F8W
	24E	GXW
	24E	DXW
	24E	F9W

Frequency Range:			
	Uplink	824.075-848.925	MHz
	Uplink	1850.075-1909.925	MHz
	Downlink	869.075-893.925	MHz
	Downlink	1930.075-1989.925	MHz

Rated Conducted Output:			
	1.222W	30.87dBm)	824.075-848.925 MHz
	0.564W	(27.51dBm)	1850.075-1909.925 MHz
	0.0045W	(6.53dBm)	869.075-893.925 MHz
	0.0018W	(2.48dBm)	1930.075-1989.925MHz

2.1033 (C) (2) FCC Identifier

FCC ID: XS7WRE2700

2.1033 (C) (3) Installation Instruction and Manual Customer will provide.

2.1033 (C) (4) Type of Emission

824.075 – 848.925 MHz	22H	F1D and F8W 40K0F1D
824.350 – 848.650 MHz	22H	GXW 300KGXW
824.075 – 848.925 MHz	22.901(d)	DXW 30K0DXW
1850.075 – 1909.925 MHz	24E	F1D and F8W 40K0F1D
1850.350 – 1909.650 MHz	24E	GXW 300KGXW
1850.075 – 1909.925 MHz	24E	DXW 30K0DXW
1851.000 – 1909.000 MHz	24E	F9W 1M25F9W

2.1033 (C) (5) Frequency Range

Uplink	824.075 – 848.925 MHz	Downlink	869.075 – 893.925 MHz
Uplink	1850.075 – 1909.925 MHz	Downlink	1930.075 – 1989.925 MHz

2.1033 (C) (6) Operating Power (Conducted)

Uplink	824.075 – 848.925 MHz	1.222W	(30.87dBm)
Downlink	869.075 – 893.925 MHz	0.0045W	(6.53dBm)
Uplink	1850.075 – 1909.925 MHz	0.564W	(27.51dBm)
Downlink	1930.075 – 1989.925 MHz	0.0018W	(2.48dBm)

2.1033 (C) (7) Maximum Power Allowed in Applicable Part(s) of the Rules

RULES PART	MAXIMUM POWER (WATTS)
Part 22	7
Part 24	2

2.1033 (C) (8) Input Power Characteristics 1.00 mW Max Uplink
1.00 pW Max Downlink

2.1033 (C) (9) Tune Up Procedure Customer will provide.

2.1033 (C) (10) Schematic Diagram and Circuit Description

Customer will provide.

2.1033 (C) (11) Equipment Identification Plate

Customer will provide.

2.1033 (C) (12) Equipment Photographs - Internal

Customer will provide.

2.1033 (C) (12) Equipment Photographs - External

Customer will provide.

2.1033 (C) (13) Digital Modulation Techniques

CDMA / TDMA /GSM

2.1033 (c) (14) Test Data

See 2.1046-2.1053 and Radiated Emissions

FIGURE 2: TEST RESULT SUMMARY

NAME OF TEST	FCC Part 15 Clause	Industry Canada (RSS-131)	TIA-603-B Clause	RESULTS
RF Power Output	2.1046	RSS-131 Cl 4.3	2.2.1	Complies
Emissions Limitations: TDMA	2.1049	RSS-131 Cl 4.2		Complies
Emissions Limitations: GSM	2.1049	RSS-131 Cl 4.2		Complies
Occupied Bandwidth: TDMA/GSM	2.1049	RSS-131 Cl 4.2		Complies
Conducted Spurious Emissions at Antenna Terminals	2.1051	RSS-131 Cl4.4	2.2.13	Complies
Radiated Field Strength of Spurious Emissions	2.1053	RSS-131 Cl 4.4	2.2.12	Complies
Radiated Emissions	15 Class B	CIPSR 22 Class B		Complies
Intermodulation		RSS-131 Cl 4.3 RSS-131 Cl 4.4	2.2.16	Complies

2.1033 (c) (14) Photograph of Test Set Up

2.1033 (c) (14)

FIGURE 3: TEST SET UP BLOCK DIAGRAM FOR RF POWER OUTPUT, EMISSIONS LIMITATIONS GSM/TDMA, OCCUPIED BANDWIDTH GSM/TDMA, CONDUCTED SPURIOUS EMISSIONS AT ANTENNA TERMINALS.

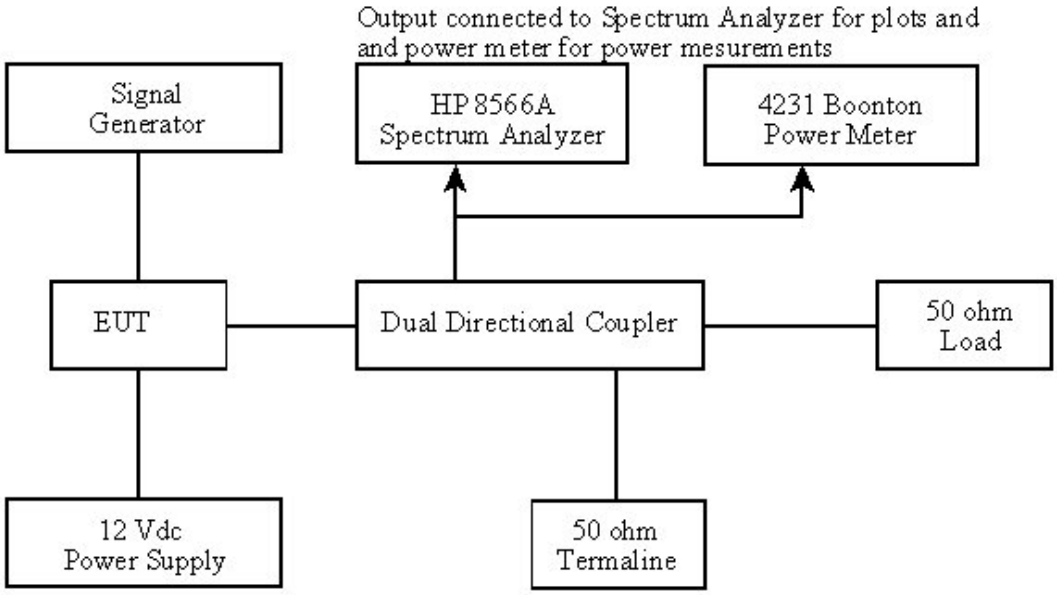
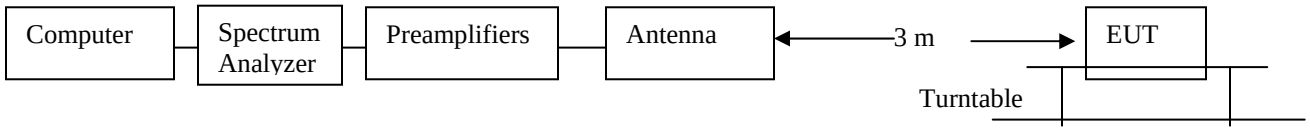


FIGURE 4: TEST SET UP BLOCK DIAGRAM FOR RADIATED EMISSIONS



2.1046 Measurement of RF Power Output (IC RSS-131 Cl 4.3)

Definition: For RF amplifier

Test Method: See FIGURE 1.

Output Power is measured across a precision 50 ohm load with a Spectrum Analyzer. For all measurements the maximum signal was determined by input the signal until the unit would no longer amplify the signal. This signal has been plotted in the section as modulation characteristics as input (EUT removed form circuit) and output (EUT inserted in circuit). For the power measurement, typical signal is used. (GSM / TDMA / CDMA)

** ERP/EIRP calculations in the table below are for informational purposes only. ERP/EIRP calculations are not for compliance other than to estimate the ERP/EIRP of the highest gain antenna expected.

Test Results: Frequency Range 824-894 MHz - UPLINK									
Antenna Conducted				ERP Calculations **			Characteristics (dBm)		
Signal Type	Freq MHz	Power dBm	Conducted Power W	Antenna Gain (dBi)	Cable Loss (dB)	ERP W	Input	Output	Gain
GSM	824.350	28.87	0.771	3.0	2.0	0.971	-9.2	25.7	34.9
GSM	836.500	30.59	1.146	3.0	2.0	1.442	-9.1	31.3	40.4
GSM	848.650	30.87	1.222	3.0	2.0	1.538	-9.1	30.5	39.6
TDMA	824.075	-0.32	0.0009	3.0	2.0	0.0012	-28.3	-2.7	25.6
TDMA	836.500	0.87	0.0012	3.0	2.0	0.0015	-27.9	-1.5	26.4
TDMA	848.925	0.68	0.0012	3.0	2.0	0.0015	-27.9	-1.9	26.0
CDMA	825.000	15.92	0.039	3.0	2.0	0.049	-24.1	2.1	26.2
CDMA	836.500	16.85	0.048	3.0	2.0	0.061	-24.1	3.7	27.8
CDMA	848.000	16.61	0.046	3.0	2.0	0.058	-24.7	2.9	27.6

Test Results: Frequency Range 824-894 MHz - DOWNLINK									
Antenna Conducted				ERP Calculations **			Characteristics (dBm)		
Signal Type	Freq MHz	Power dBm	Conducted Power W	Antenna Gain (dBi)	Cable Loss (dB)	ERP W	Input	Output	Gain
GSM	869.350	4.81	0.003027	3.0	2.0	0.003811	-40.9	2.5	43.4
GSM	881.500	5.33	0.003412	3.0	2.0	0.004295	-40.9	2.5	43.4
GSM	893.650	1.74	0.001493	3.0	2.0	0.001879	-40.9	-1.1	39.8
TDMA	869.075	-2.55	0.000556	3.0	2.0	0.000700	-46.9	-4.7	42.2
TDMA	881.500	-1.52	0.000705	3.0	2.0	0.000887	-46.9	-4.7	42.2
TDMA	893.925	-5.04	0.000313	3.0	2.0	0.000394	-47.3	-7.9	39.4
CDMA	870.000	6.28	0.004246	3.0	2.0	0.005346	-42.1	1.7	43.8
CDMA	881.500	6.53	0.004498	3.0	2.0	0.005662	-42.1	1.3	43.4
CDMA	893.000	3.94	0.002477	3.0	2.0	0.003119	-42.1	-1.5	40.6

2.1046 Measurement of RF Power Output (IC RSS-131 Cl 4.3)

Definition: For RF amplifier

Test Method: See FIGURE 1.

Output Power is measured across a precision 50 ohm load with a Spectrum Analyzer. For all measurements the maximum signal was determined by input the signal until the unit would no longer amplify the signal. This signal has been plotted in the section as modulation characteristics as input (EUT removed form circuit) and output (EUT inserted in circuit). For the power measurement, typical signal is used. (GSM / TDMA / CDMA)

** ERP/EIRP calculations in the table below are for informational purposes only. ERP/EIRP calculations are not for compliance other than to estimate the ERP/EIRP of the highest gain antenna expected.

Test Results: Frequency Range 1850-1990 MHz - UPLINK									
Antenna Conducted				EIRP Calculations **			Characteristics (dBm)		
Signal Type	Freq MHz	Power dBm	Conducted Power W	Antenna Gain (dBi)	Cable Loss (dB)	EIRP W	Input	Output	Gain
GSM	1850.350	26.81	0.480	3.0	4.0	0.381	-1.9	24.9	26.8
GSM	1880.000	27.51	0.564	3.0	4.0	0.448	-1.9	26.1	28.0
GSM	1909.650	23.63	0.231	3.0	4.0	0.183	-2.3	21.7	24.0
TDMA	1850.075	16.18	0.041	3.0	4.0	0.033	-12.3	13.3	25.6
TDMA	1880.000	18.87	0.077	3.0	4.0	0.061	-12.8	15.7	28.5
TDMA	1909.925	13.64	0.023	3.0	4.0	0.017	-13.6	10.5	24.1
CDMA	1851.000	15.22	0.033	3.0	4.0	0.026	-15.7	7.7	23.4
CDMA	1880.000	18.13	0.065	3.0	4.0	0.052	-16.9	10.5	27.4
CDMA	1909.000	12.96	0.020	3.0	4.0	0.016	-17.7	4.9	22.6

Test Results: Frequency Range 1850-1990 MHz - DOWNLINK									
Antenna Conducted				EIRP Calculations **			Characteristics (dBm)		
Signal Type	Freq MHz	Power dBm	Conducted Power W	Antenna Gain (dBi)	Cable Loss (dB)	EIRP W	Input	Output	Gain
GSM	1930.350	0.88	0.001224	3.0	4.0	0.000973	-41.7	-5.5	36.2
GSM	1960.000	1.91	0.000155	3.0	4.0	0.001233	-42.1	-4.3	37.8
GSM	1989.650	-3.16	0.000483	3.0	4.0	0.000384	-42.1	-10.9	31.2
TDMA	1930.075	0.26	0.001061	3.0	4.0	0.000843	-43.9	-6.7	37.2
TDMA	1960.000	1.54	0.001426	3.0	4.0	0.001132	-43.7	-5.5	38.2
TDMA	1989.925	-2.60	0.000550	3.0	4.0	0.000437	-42.9	-10.3	32.6
CDMA	1931.000	1.85	0.001531	3.0	4.0	0.001216	-43.7	-6.7	37.0
CDMA	1960.000	2.48	0.001770	3.0	4.0	0.001406	-43.3	-6.3	37.0
CDMA	1989.000	-2.27	0.000593	3.0	4.0	0.000471	-43.5	-12.7	30.8

2.1046 Measurement of Mean Output Power (IC RSS-131 Cl 4.3)

Definition: For RF amplifier

Test Method: See FIGURE 1.

IC RSS-131 Clause **4.3 Mean Output Power**
4.3.1 Multi-channel Enhancer

The following subscript "o" denotes a parameter at the enhancer output point.

Connect two signal generators to the input of the Device Under Test (DUT), via a proper impedance matching network (and preferably via a variable attenuator) so that the two input signals are equal sinusoids (and can be raised equally).

Connect a dummy load of suitable load rating to the enhancer output point. Connect also a spectrum analyzer to this output point via a coupling network and attenuator, so that only a portion of the output signal is coupled to the spectrum analyzer. The coupling attenuation shall be stated in the test report.

Set the two generator frequencies f_1 and f_2 such that they and their third-order intermodulation product frequencies, $f_3 = 2f_1 - f_2$ and $f_4 = 2f_2 - f_1$, are all within the passband of the DUT. Raise the input level to the DUT while observing the output tone levels, P_{o1} and P_{o2}, and the intermodulation product levels, P_{o3} and P_{o4}.

For enhancers rated 500 watts or less: Raise the input level to the DUT until the greater level of the intermodulation products at the enhancer output terminals, P_{o3} or P_{o4}, equals -43 dBW.

Record all signal levels and their frequencies. Calculate the mean output power (P_{mean}) under this testing condition using $P_{mean} = P_{o1} + 3$ dB. Data is on next page.

IC RSS-131 Clause **6.2 Output Power**

The manufacturer's output power rating P_{rated} MUST NOT be greater than P_{mean} for all types of enhancers

IC RSS-131 Clause **4.3 Mean Output Power**
4.3.1 Multi-channel Enhancer

Data

Mod	Link	Band	Chl	f1	f2	f3	f4	Po1	Pmean	Prated	Result
GSM	Up	Lower	Low	824.750	825.250	824.250	825.750	27.94	30.94	30.87	PASS
GSM	Up	Lower	High	847.750	848.250	847.250	848.750	28.70	31.70	30.87	PASS
TDMA	Up	Lower	Low	824.250	824.375	824.125	824.500	-1.16	1.84	0.87	PASS
TDMA	Up	Lower	High	848.375	848.750	848.000	849.125	2.50	5.50	0.87	PASS
CDMA	Up	Lower	Low	827.000	829.000	825.000	831.000	22.90	25.90	16.85	PASS
CDMA	Up	Lower	High	844.000	846.000	842.000	848.000	26.40	29.40	16.85	PASS
GSM	Down	Lower	Low	869.750	870.250	869.250	870.750	7.50	10.50	5.33	PASS
GSM	Down	Lower	High	892.750	893.250	892.250	893.750	5.70	8.70	5.33	PASS
TDMA	Down	Lower	Low	869.250	869.375	869.125	869.500	0.36	3.36	-1.52	PASS
TDMA	Down	Lower	High	893.625	893.750	893.500	893.875	0.65	3.65	-1.52	PASS
CDMA	Down	Lower	Low	873.000	875.000	871.000	877.000	6.20	9.20	6.53	PASS
CDMA	Down	Lower	High	889.000	891.000	887.000	893.000	5.90	8.90	6.53	PASS
GSM	Up	Upper	Low	1850.750	1851.250	1850.250	1851.750	25.80	28.80	27.51	PASS
GSM	Up	Upper	High	1908.750	1909.250	1908.250	1909.750	25.20	28.20	27.51	PASS
TDMA	Up	Upper	Low	1850.250	1850.375	1850.125	1850.500	16.92	18.92	18.87	PASS
TDMA	Up	Upper	High	1909.625	1909.750	1909.500	1909.875	16.02	19.02	18.87	PASS
CDMA	Up	Upper	Low	1853.000	1855.000	1851.000	1857.000	22.20	25.20	18.13	PASS
CDMA	Up	Upper	High	1905.000	1907.000	1903.000	1909.000	19.40	22.40	18.13	PASS
GSM	Down	Upper	Low	1930.750	1931.250	1930.250	1931.750	6.60	9.60	1.91	PASS
GSM	Down	Upper	High	1988.750	1989.250	1988.250	1989.750	3.90	6.90	1.91	PASS
TDMA	Down	Upper	Low	1930.250	1930.375	1930.125	1930.500	3.00	6.00	1.54	PASS
TDMA	Down	Upper	High	1989.625	1989.750	1989.500	1989.875	8.40	11.40	1.54	PASS
CDMA	Down	Upper	Low	1933.000	1935.000	1931.000	1937.000	5.80	8.80	2.48	PASS
CDMA	Down	Upper	High	1985.000	1987.000	1983.000	1989.000	6.00	9.00	2.48	PASS

FIGURE 5: OUTPUT POWER PLOTS, UPLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink GSM 824.350 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Low	824.350	28.87	0.771	7.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**1M**	**Video BW**	**3M**	**Mode**	**Peak**

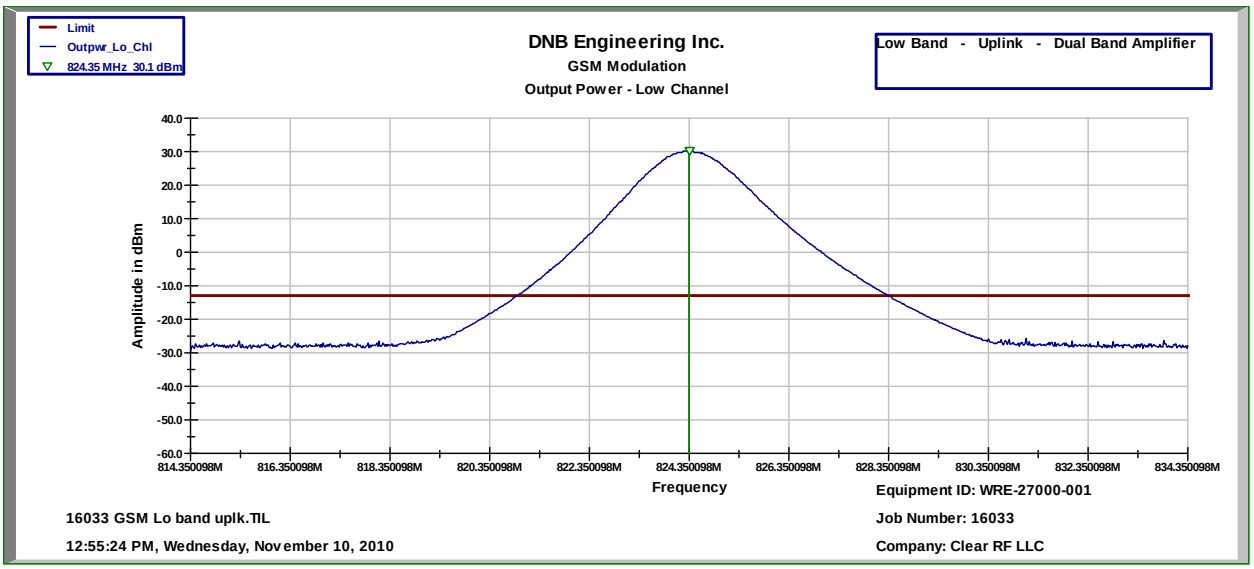


FIGURE 5: OUTPUT POWER PLOTS, UPLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink GSM 836.500 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Mid	836.500	30.59	1.146	7.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**1M**	**Video BW**	**3M**	**Mode**	**Peak**

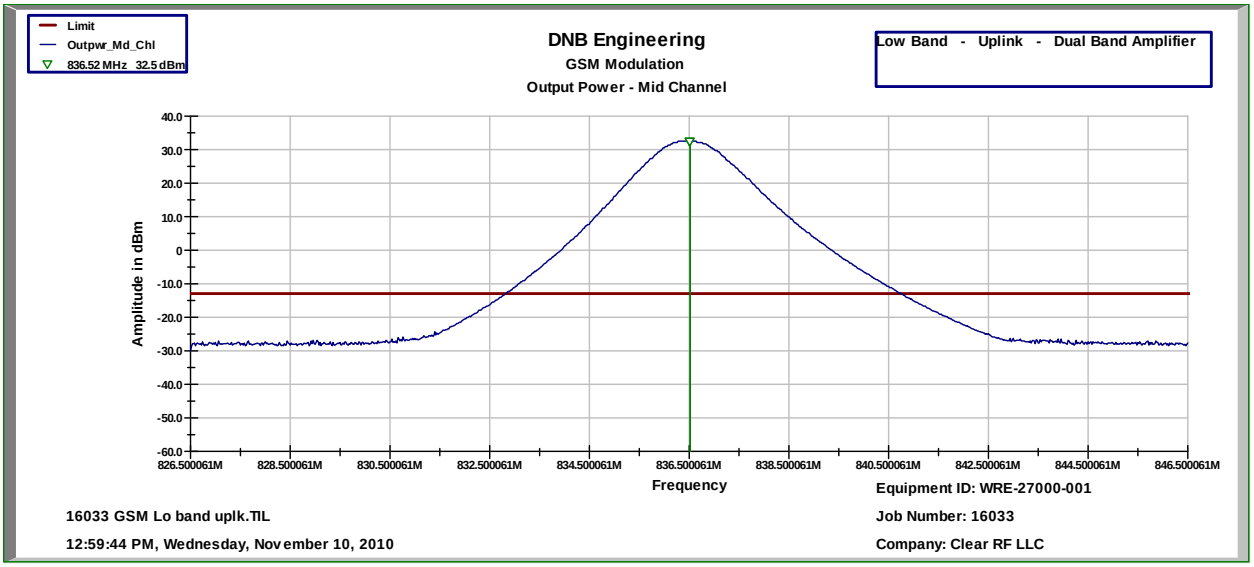


FIGURE 5: OUTPUT POWER PLOTS, UPLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink GSM 848.650 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
High	848.650	30.87	1.222	7.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**1M**	**Video BW**	**3M**	**Mode**	**Peak**

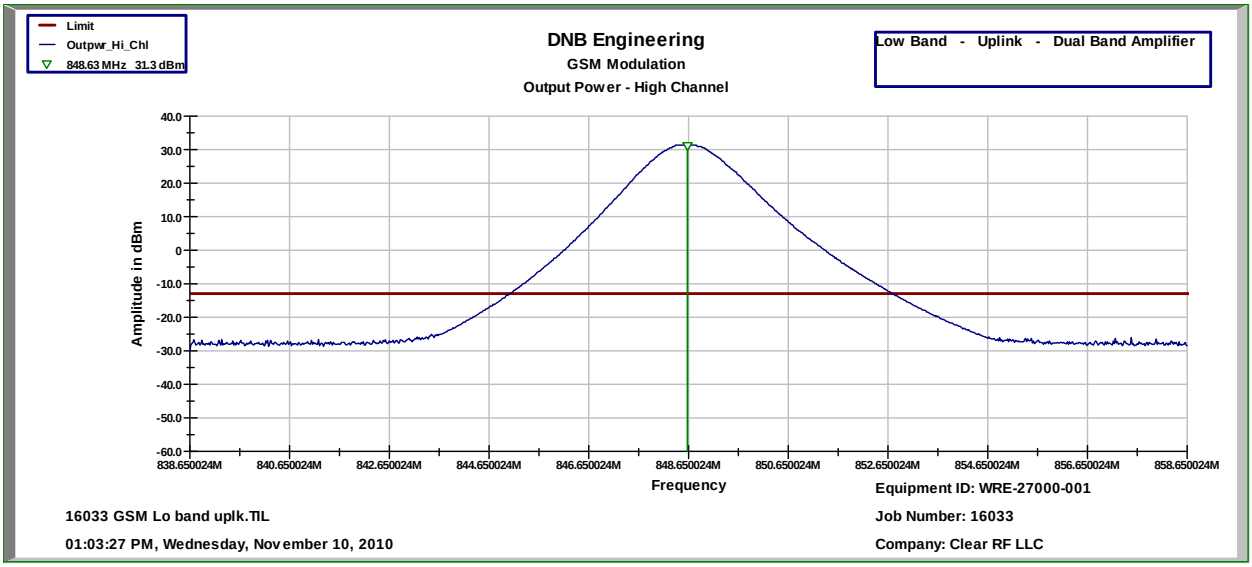


FIGURE 5: OUTPUT POWER PLOTS, UPLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink GSM 1850.350 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Low	1850.350	26.81	0.480	2.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**1M**	**Video BW**	**3M**	**Mode**	**Peak**

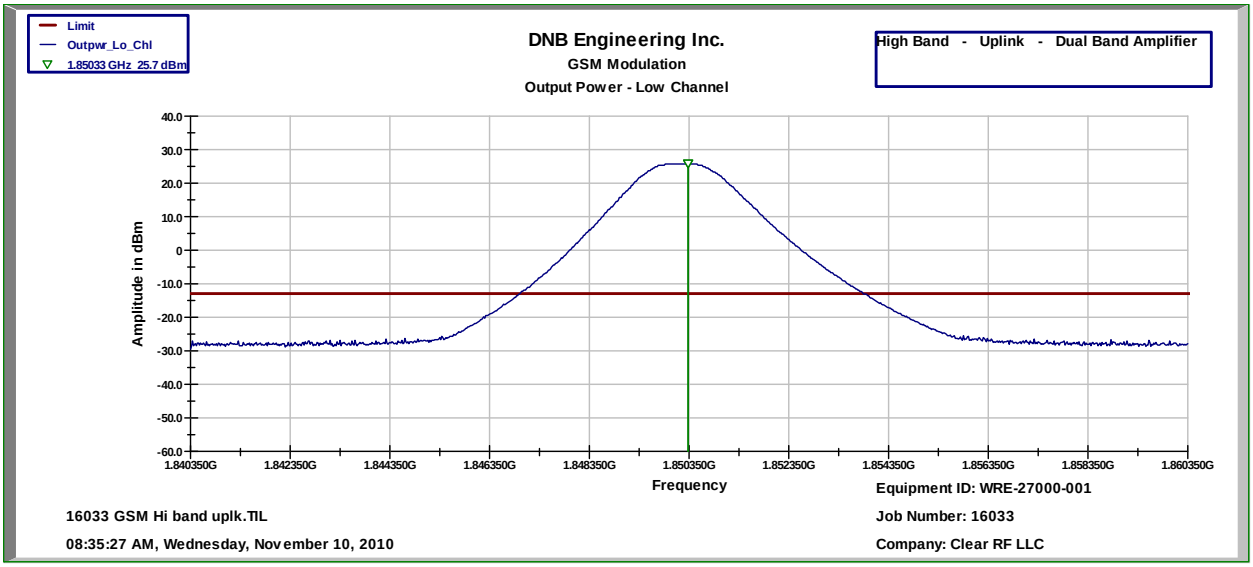


FIGURE 5: OUTPUT POWER PLOTS, UPLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink GSM 1880.000 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Mid	1880.000	27.51	0.564	2.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**1M**	**Video BW**	**3M**	**Mode**	**Peak**

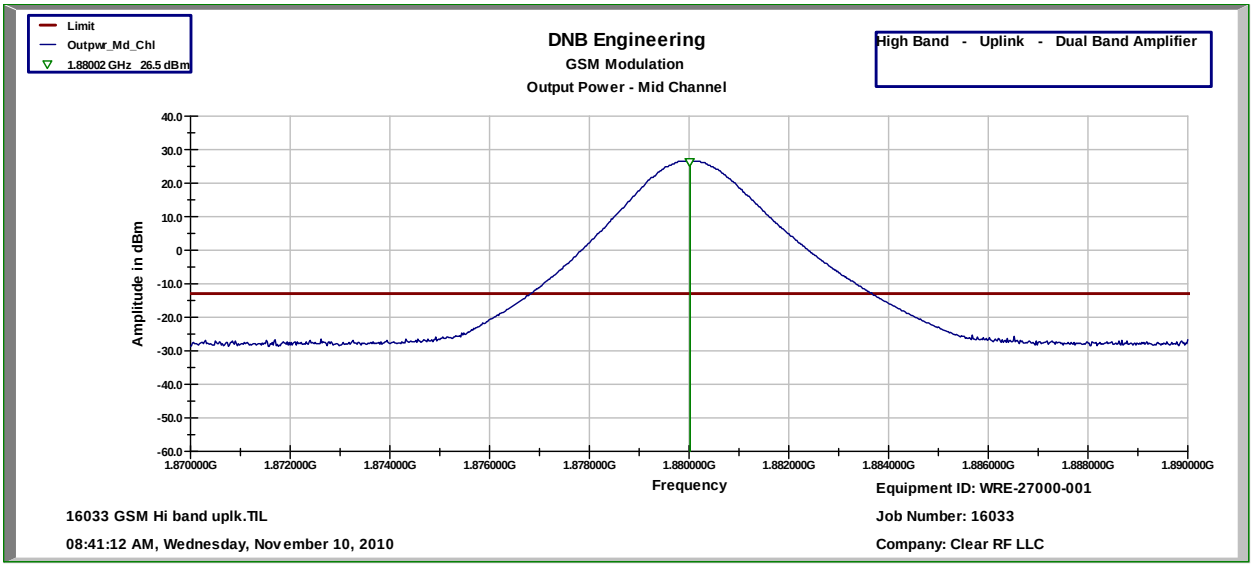


FIGURE 5: OUTPUT POWER PLOTS, UPLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink GSM 1909.650 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
High	1909.650	23.63	0.231	2.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**1M**	**Video BW**	**3M**	**Mode**	**Peak**

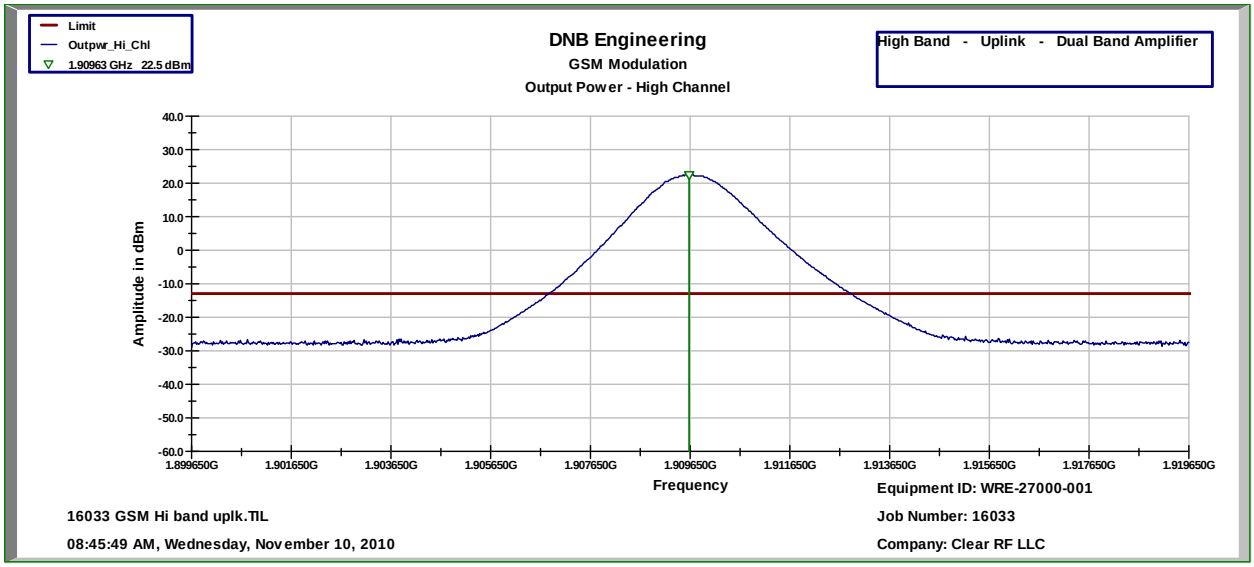


FIGURE 5: OUTPUT POWER PLOTS, UPLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 17 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink TDMA 824.075 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Low	824.075	-0.32	0.0009	7.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**100K**	**Video BW**	**300K**	**Mode**	**Peak**

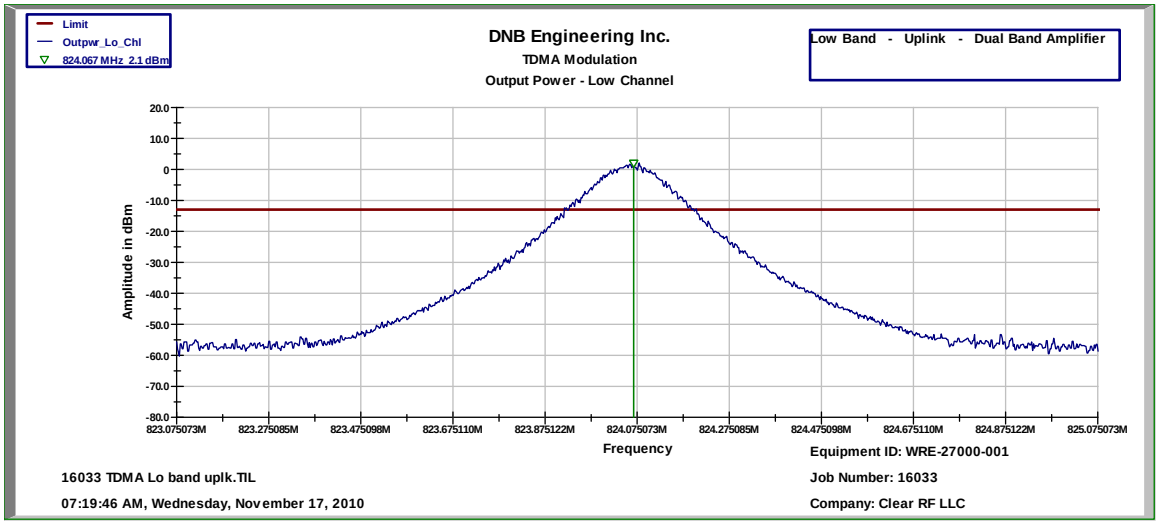


FIGURE 5: OUTPUT POWER PLOTS, UPLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 17 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink TDMA 836.500 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Mid	836.500	0.87	0.0012	7.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**100K**	**Video BW**	**300K**	**Mode**	**Peak**

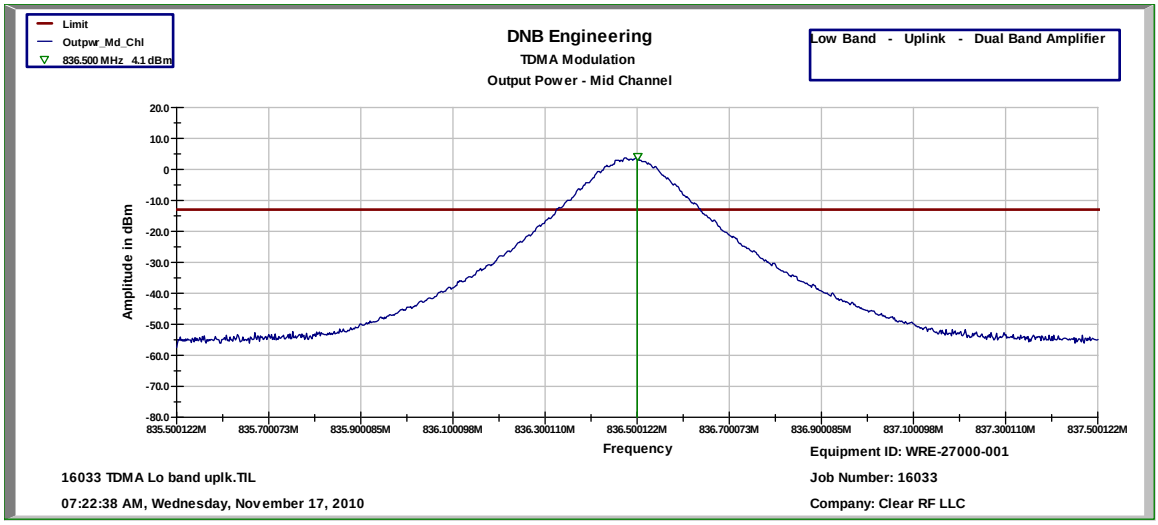


FIGURE 5: OUTPUT POWER PLOTS, UPLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 17 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink TDMA 848.925 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
High	848.925	0.68	0.0012	7.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**100K**	**Video BW**	**300K**	**Mode**	**Peak**

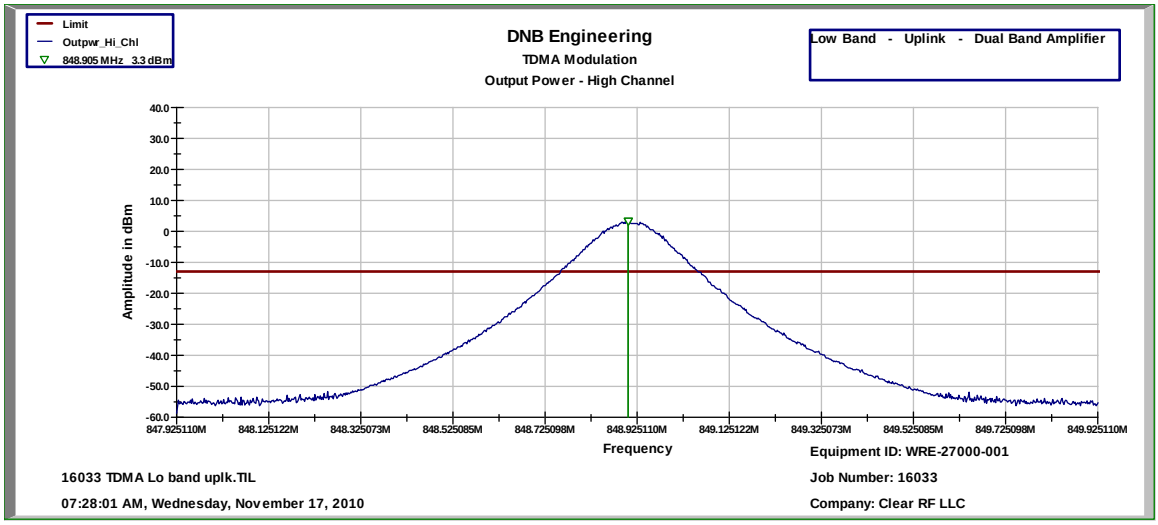


FIGURE 5: OUTPUT POWER PLOTS, UPLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 17 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink TDMA 1850.075 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Low	1850.075	16.18	0.041	2.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**100K**	**Video BW**	**300K**	**Mode**	**Peak**

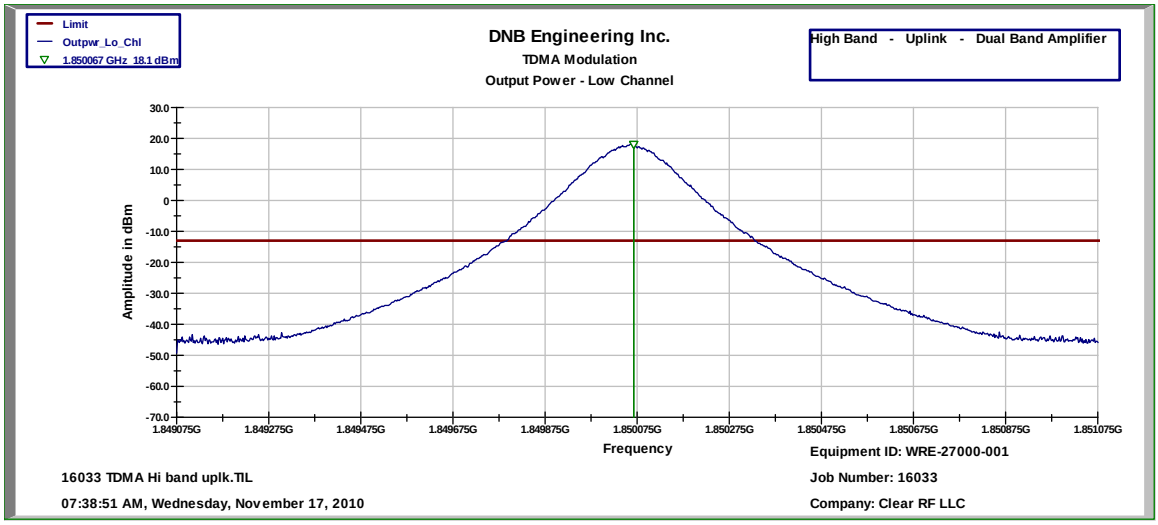


FIGURE 5: OUTPUT POWER PLOTS, UPLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 17 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink TDMA 1880.000 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Mid	1880.000	18.87	0.077	2.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**100K**	**Video BW**	**300K**	**Mode**	**Peak**

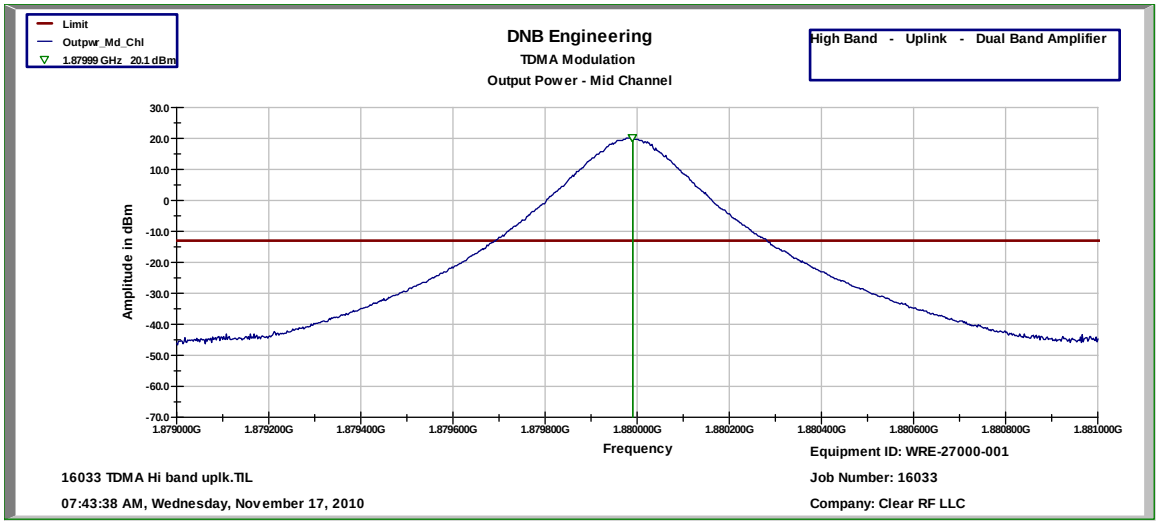


FIGURE 5: OUTPUT POWER PLOTS, UPLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 17 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink TDMA 1909.925 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
High	1909.925	13.64	0.023	2.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**100K**	**Video BW**	**300K**	**Mode**	**Peak**

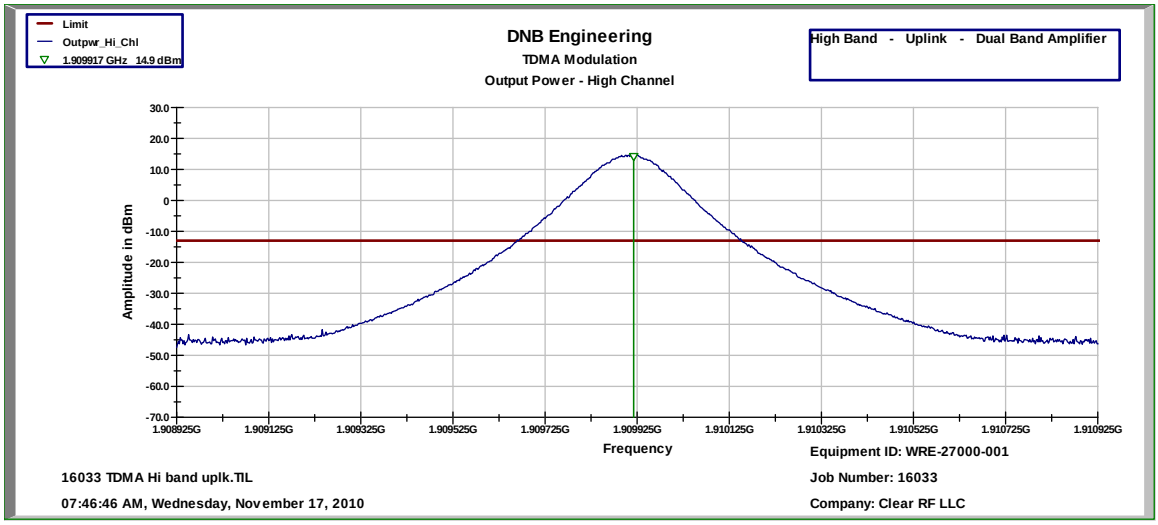


FIGURE 5: OUTPUT POWER PLOTS, UPLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink CDMA 825.000 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Low	825.000	15.92	0.039	7.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**3M**	**Video BW**	**3M**	**Mode**	**Peak**

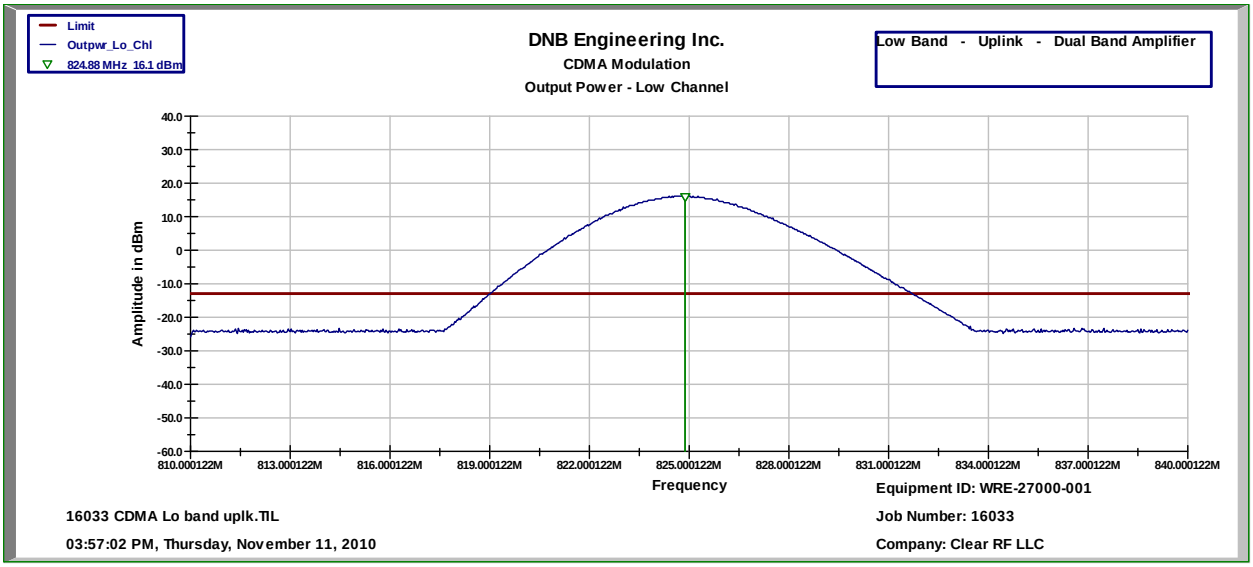


FIGURE 5: OUTPUT POWER PLOTS, UPLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink CDMA 836.500 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Mid	836.5.000	16.85	0.048	7.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**3M**	**Video BW**	**3M**	**Mode**	**Peak**

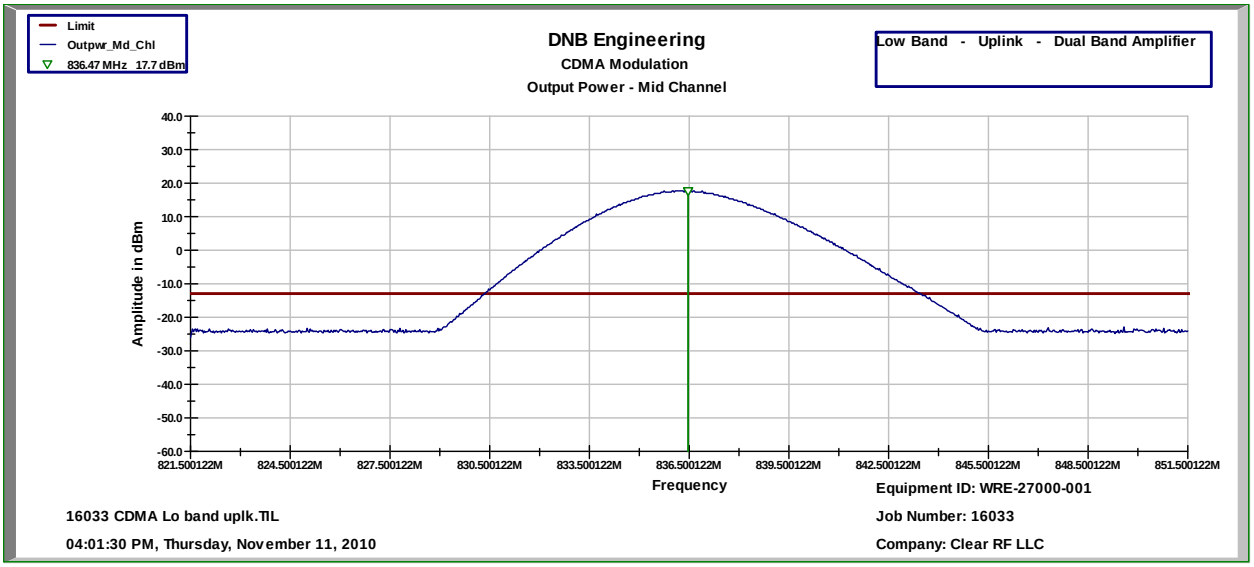


FIGURE 5: OUTPUT POWER PLOTS, UPLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink CDMA 848.000 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
High	848.000	16.61	0.046	7.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**3M**	**Video BW**	**3M**	**Mode**	**Peak**

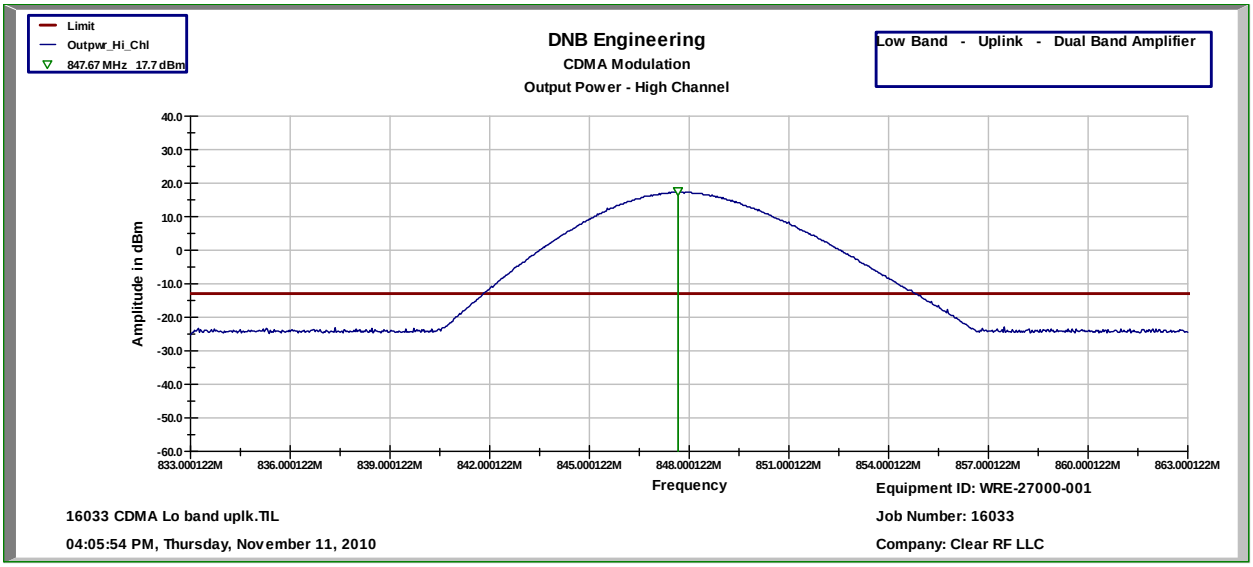


FIGURE 5: OUTPUT POWER PLOTS, UPLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink CDMA 1851.000 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Low	1851.000	15.22	0.033	2.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**3M**	**Video BW**	**3M**	**Mode**	**Peak**

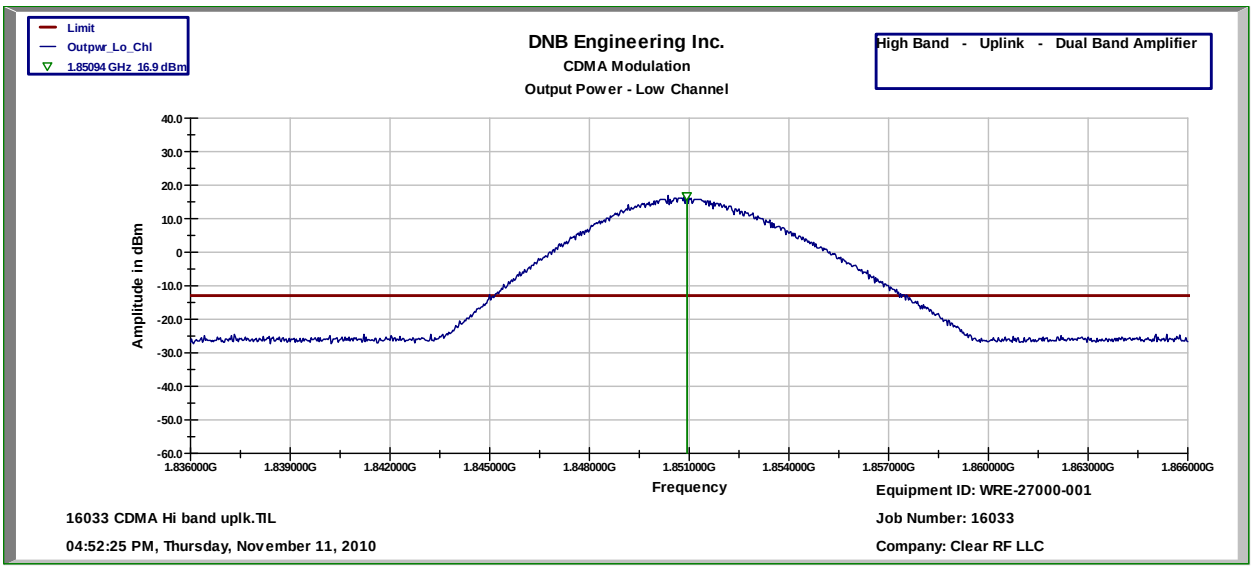


FIGURE 5: OUTPUT POWER PLOTS, UPLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink CDMA 1880.000 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Mid	1880.000	18.13	0.065	2.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**3M**	**Video BW**	**3M**	**Mode**	**Peak**

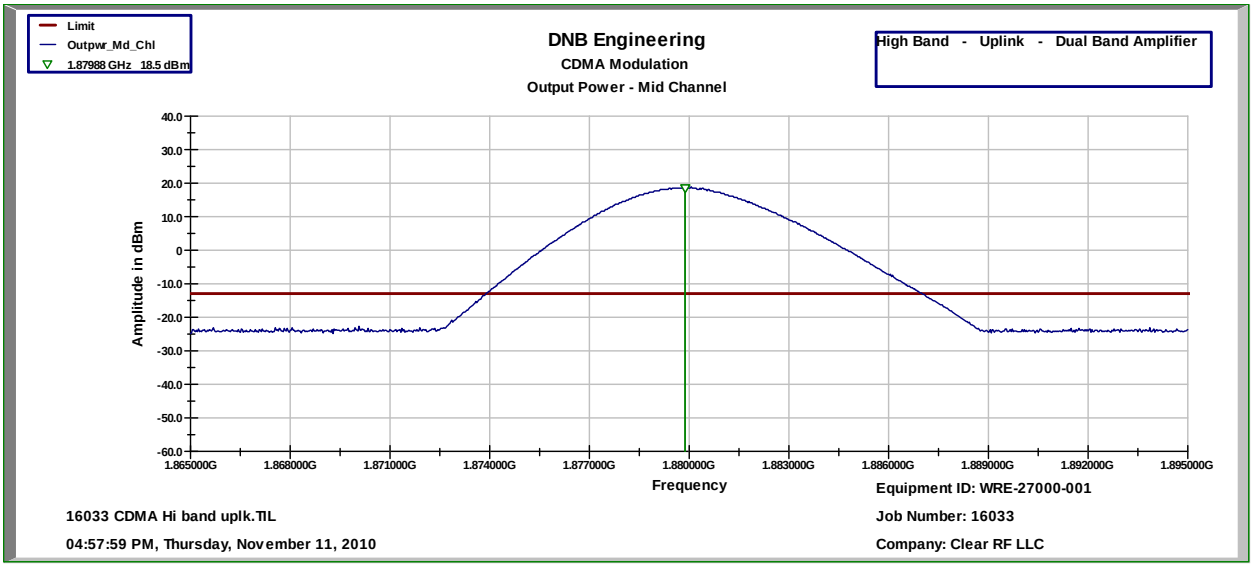


FIGURE 5: OUTPUT POWER PLOTS, UPLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink CDMA 1909.000MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
High	1909.000	12.96	0.020	2.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**3M**	**Video BW**	**3M**	**Mode**	**Peak**

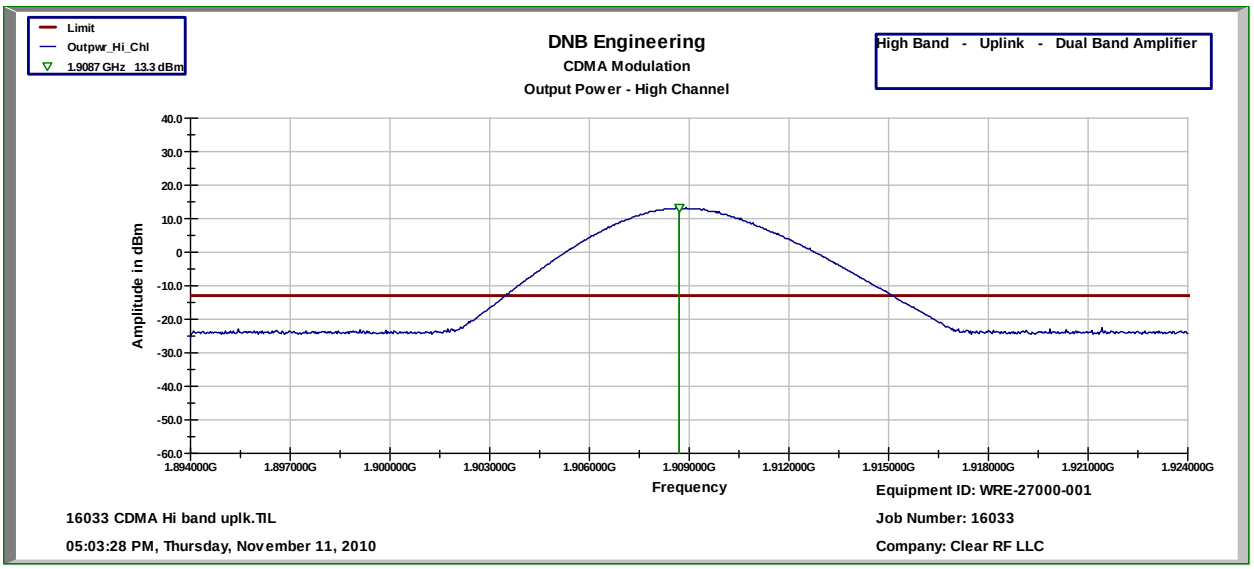


FIGURE 5: OUTPUT POWER PLOTS, DOWNLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Downlink GSM 869.350 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Low	869.350	4.81	0.003027	7.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**1M**	**Video BW**	**3M**	**Mode**	**Peak**

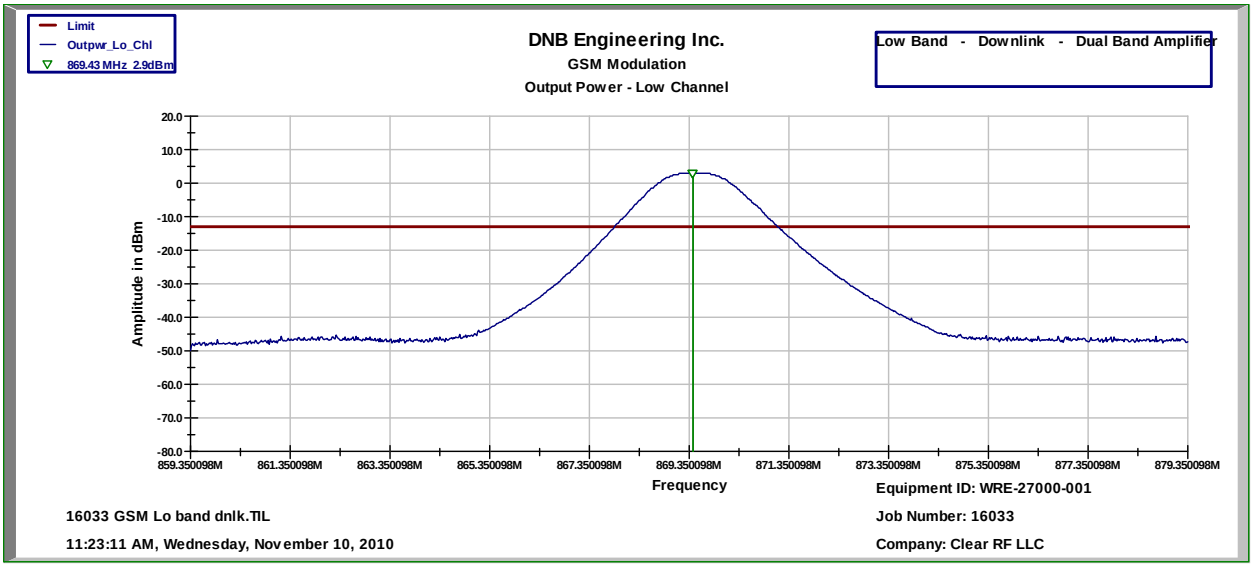


FIGURE 5: OUTPUT POWER PLOTS, DOWNLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Downlink GSM 881.500 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Mid	881.500	5.33	0.003412	7.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**1M**	**Video BW**	**3M**	**Mode**	**Peak**

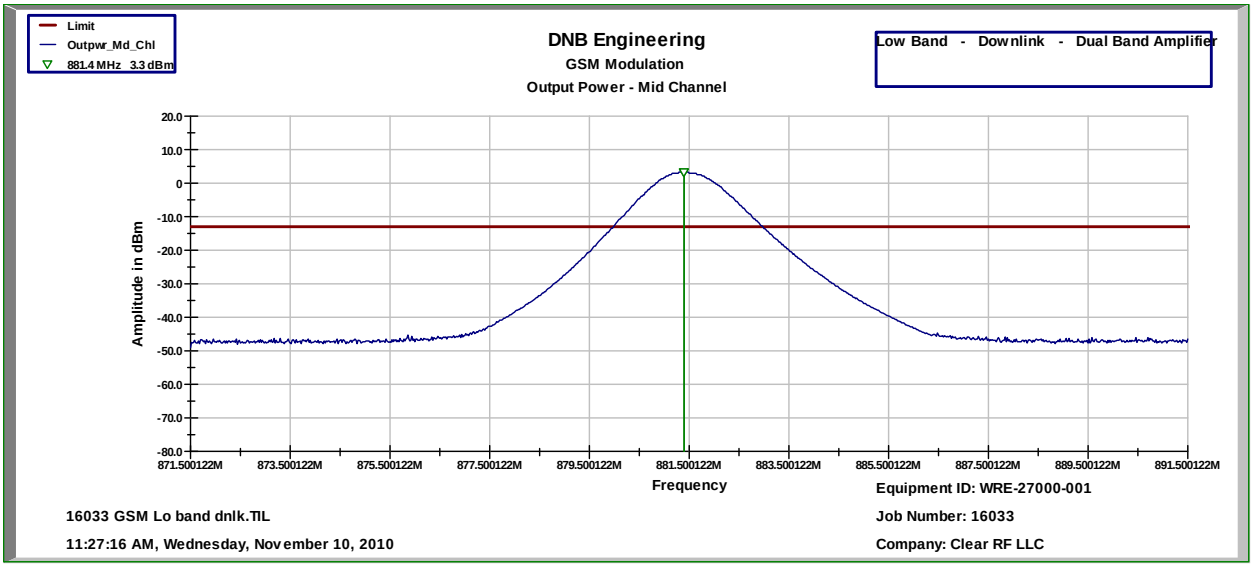


FIGURE 5: OUTPUT POWER PLOTS, DOWNLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Downlink GSM 893.650 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
High	893.650	1.74	0.001493	7.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**1M**	**Video BW**	**3M**	**Mode**	**Peak**

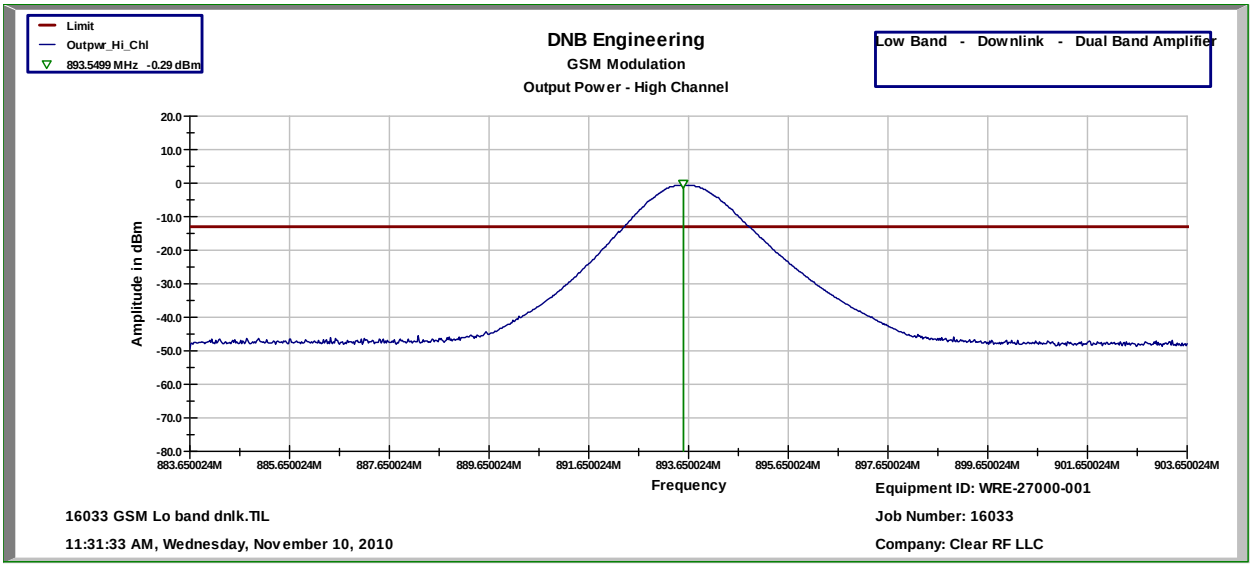


FIGURE 5: OUTPUT POWER PLOTS, DOWNLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Downlink GSM 1930.350 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Low	1930.350	0.88	0.001224	2.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**1M**	**Video BW**	**3M**	**Mode**	**Peak**

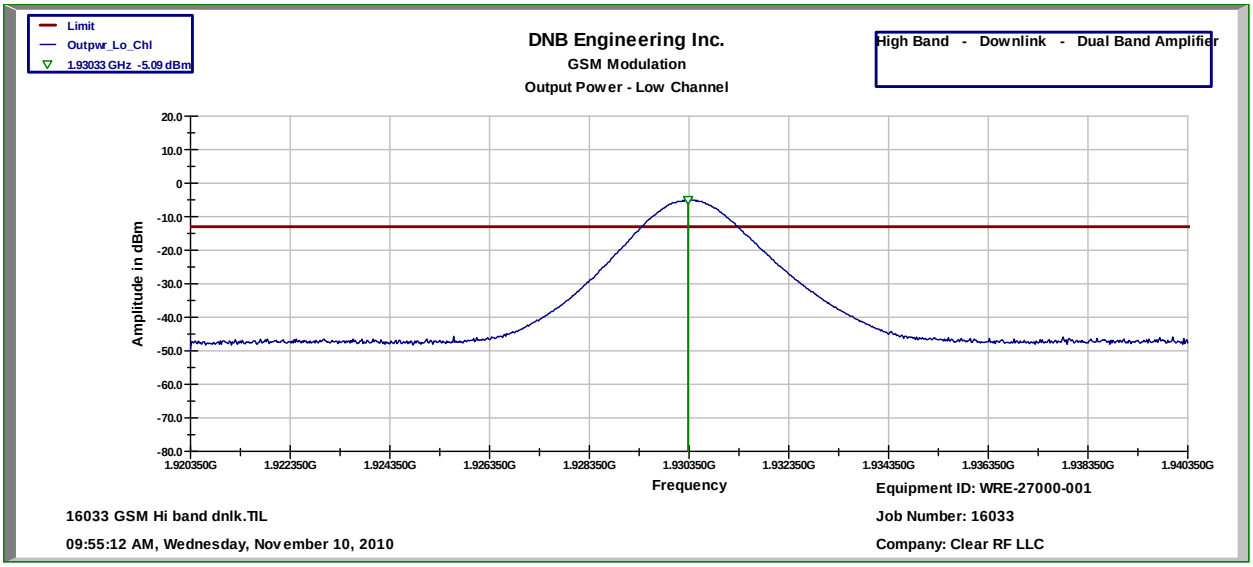


FIGURE 5: OUTPUT POWER PLOTS, DOWNLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Downlink GSM 1960.000 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Mid	1960.000	1.91	0.000155	2.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**1M**	**Video BW**	**3M**	**Mode**	**Peak**

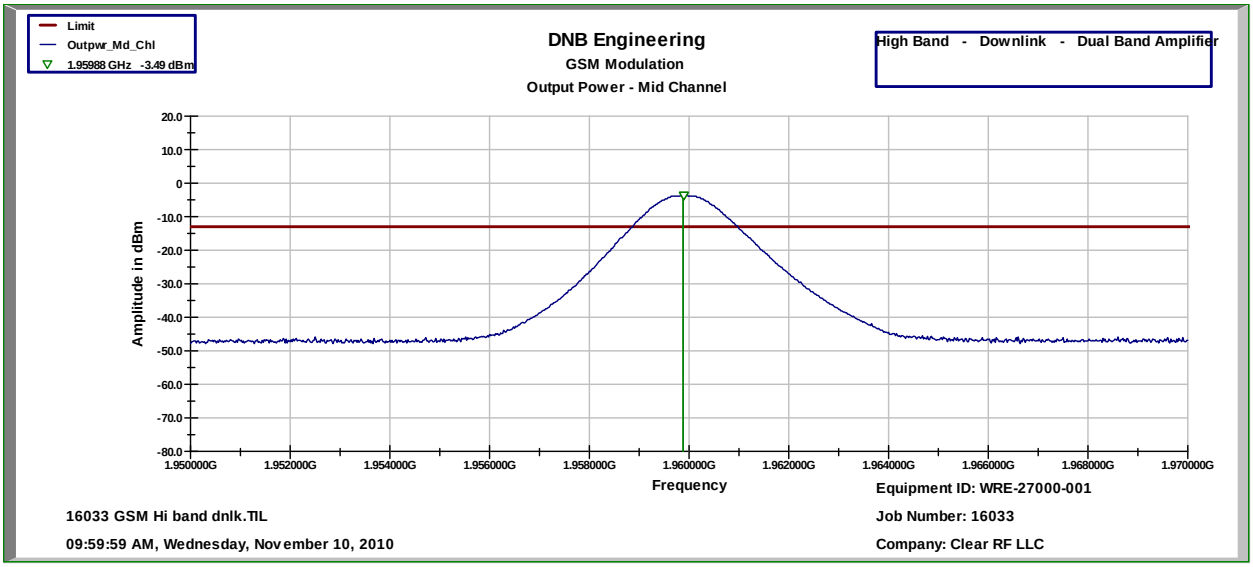


FIGURE 5: OUTPUT POWER PLOTS, DOWNLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Downlink GSM 1989.650 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
High	1989.650	-3.16	0.000483	2.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**1M**	**Video BW**	**3M**	**Mode**	**Peak**

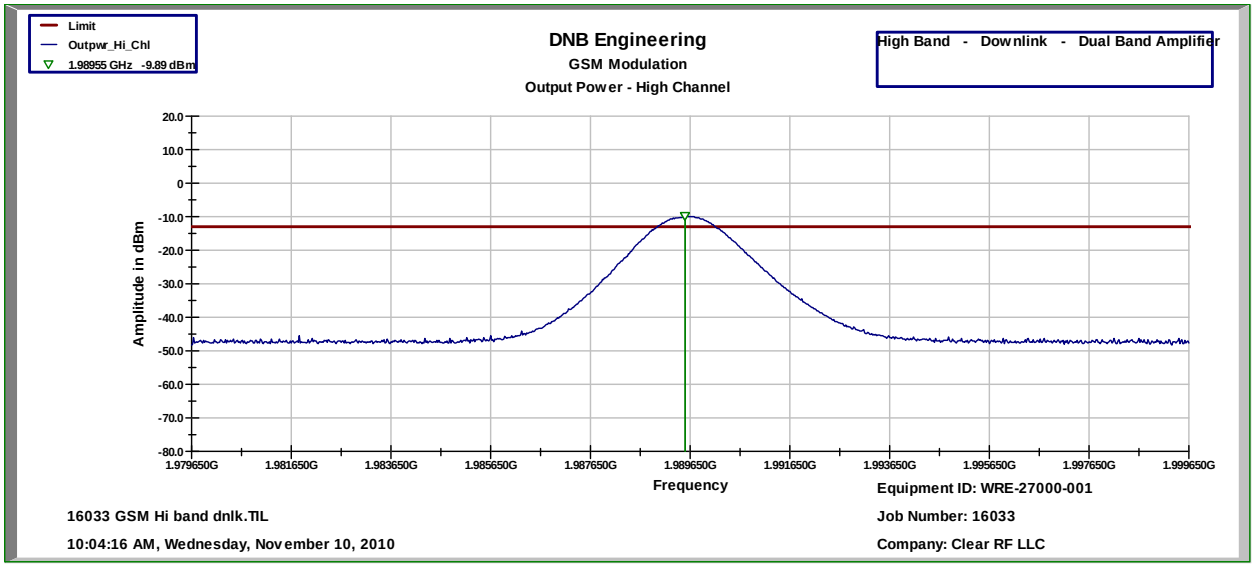


FIGURE 5: OUTPUT POWER PLOTS, DOWNLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 17 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Downlink TDMA 869.075 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Low	869.075	-2.55	0.000556	7.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**100K**	**Video BW**	**300K**	**Mode**	**Peak**

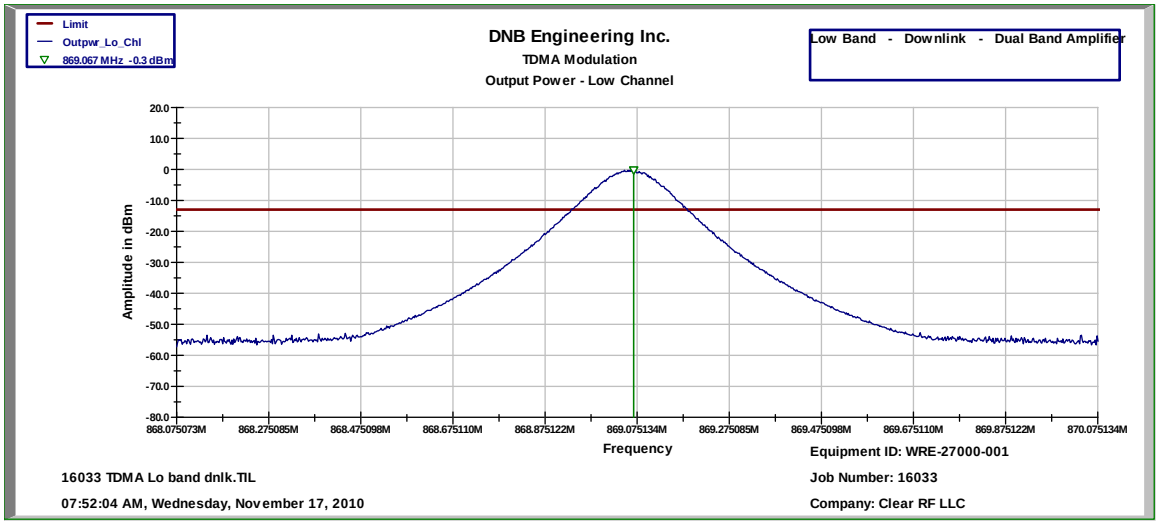


FIGURE 5: OUTPUT POWER PLOTS, DOWNLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 17 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Downlink TDMA 881.500 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Mid	881.500	-1.52	0.000705	7.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**100K**	**Video BW**	**300K**	**Mode**	**Peak**

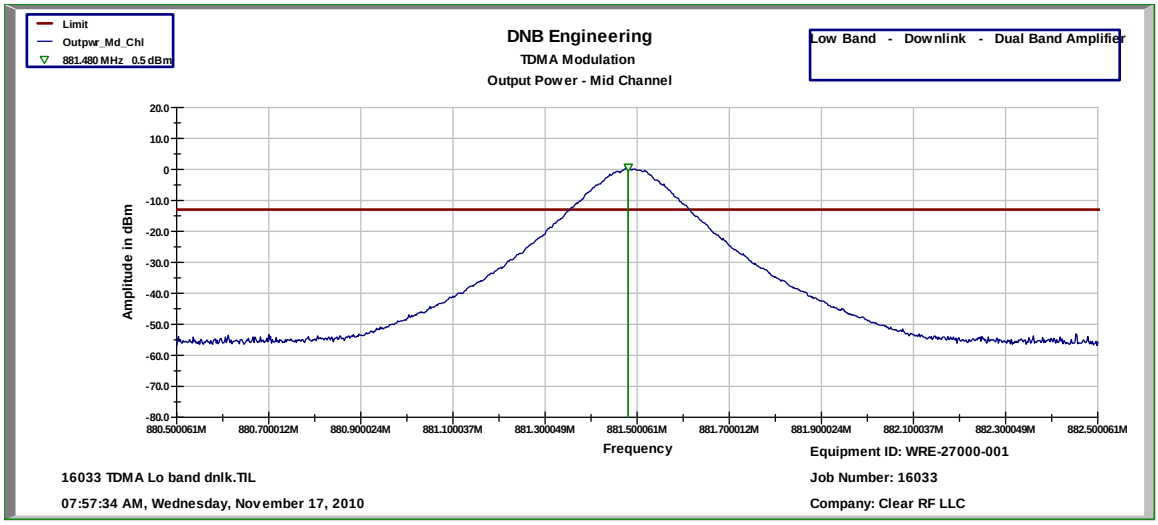


FIGURE 5: OUTPUT POWER PLOTS, DOWNLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 17 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Downlink TDMA 893.925 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
High	893.925	-5.04	0.000313	7.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**100K**	**Video BW**	**300K**	**Mode**	**Peak**

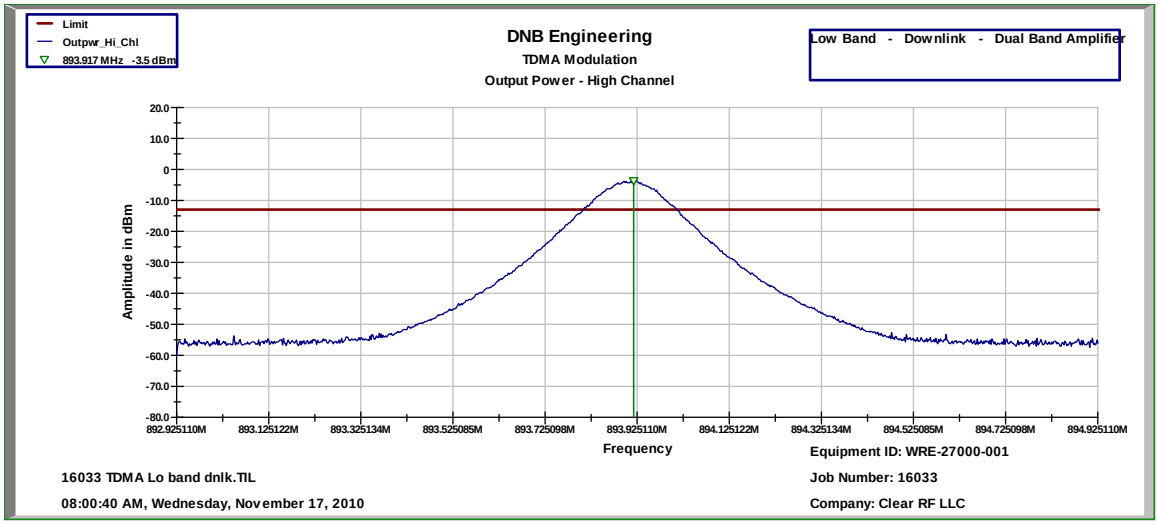


FIGURE 5: OUTPUT POWER PLOTS, DOWNLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Downlink TDMA 1930.075 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Low	1930.075	0.26	0.001061	2.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**100K**	**Video BW**	**300K**	**Mode**	**Peak**

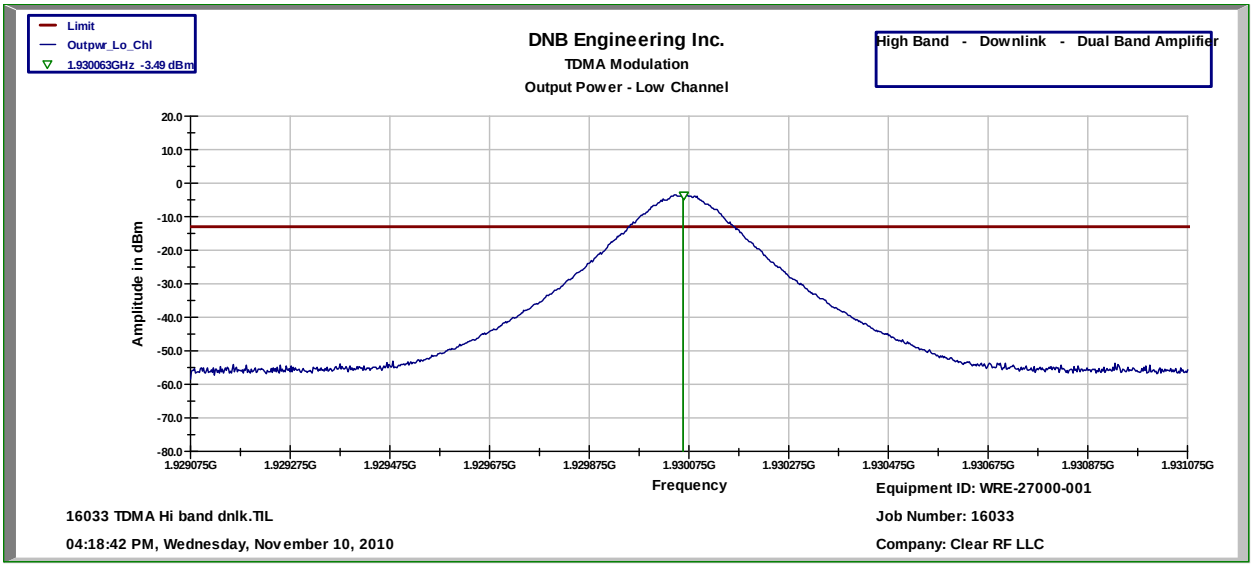


FIGURE 5: OUTPUT POWER PLOTS, DOWNLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Downlink TDMA 1960.000 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Mid	1960.000	1.54	0.001426	2.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**100K**	**Video BW**	**300K**	**Mode**	**Peak**

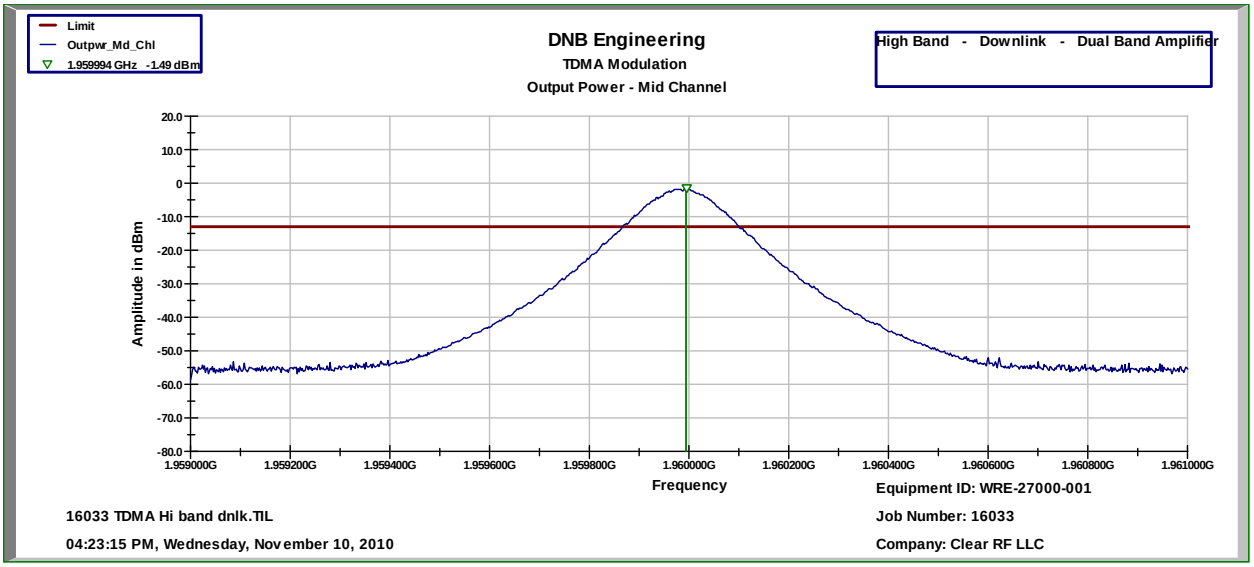


FIGURE 5: OUTPUT POWER PLOTS, DOWNLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Downlink TDMA 1989.925 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
High	1989.925	-2.60	0.000550	2.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**100K**	**Video BW**	**300K**	**Mode**	**Peak**

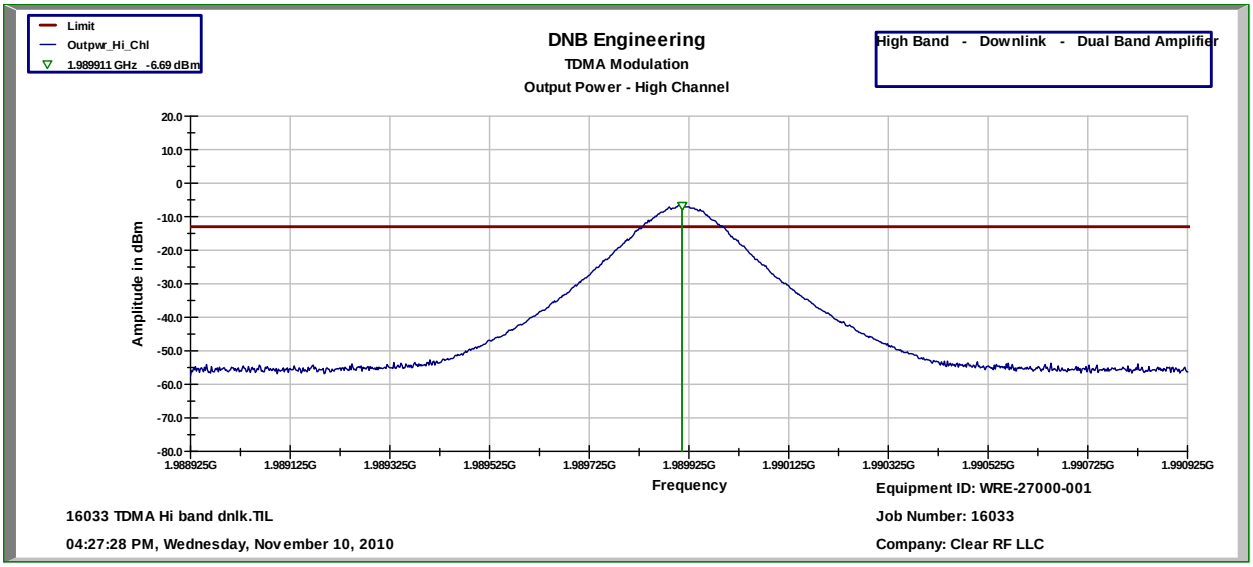


FIGURE 5: OUTPUT POWER PLOTS, DOWNLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Downlink CDMA 870.000 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Low	870.000	6.28	0.004246	7.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**3M**	**Video BW**	**3M**	**Mode**	**Peak**

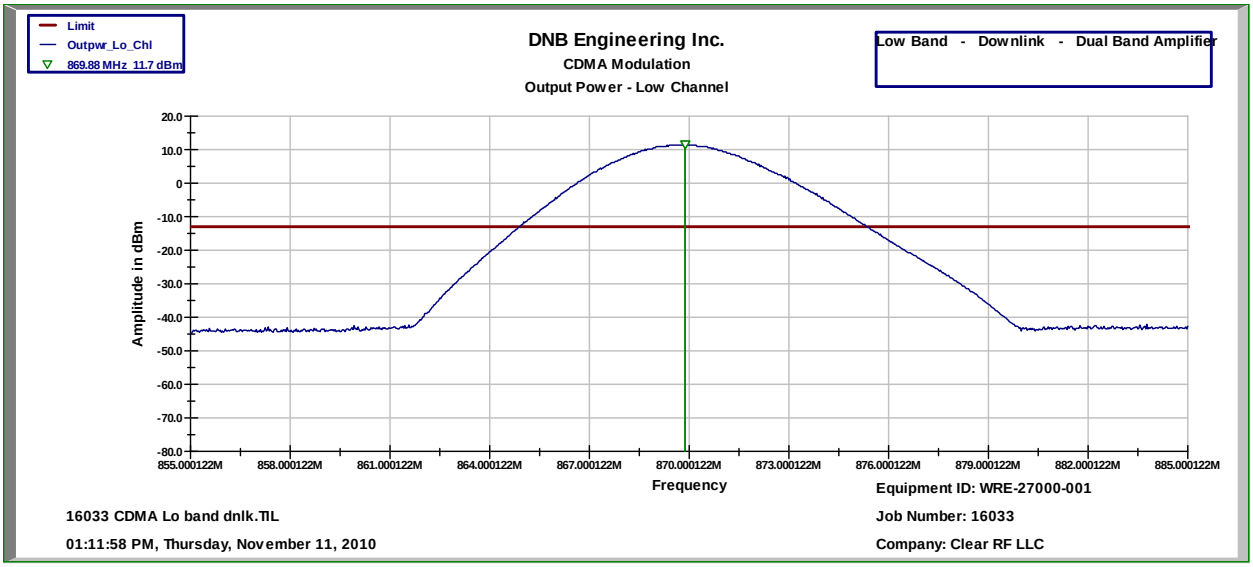


FIGURE 5: OUTPUT POWER PLOTS, DOWNLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Downlink CDMA 881.500 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Mid	881.500	6.53	0.004498	7.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**3M**	**Video BW**	**3M**	**Mode**	**Peak**

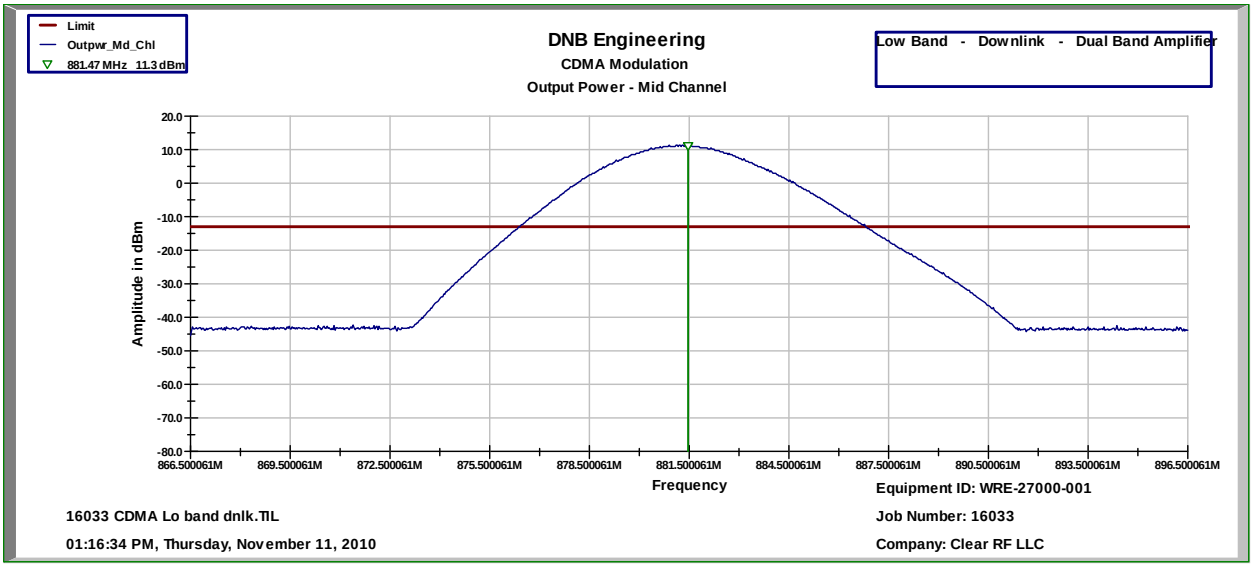


FIGURE 5: OUTPUT POWER PLOTS, DOWNLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Downlink CDMA 893.000 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
High	893.000	3.94	0.002477	7.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**3M**	**Video BW**	**3M**	**Mode**	**Peak**

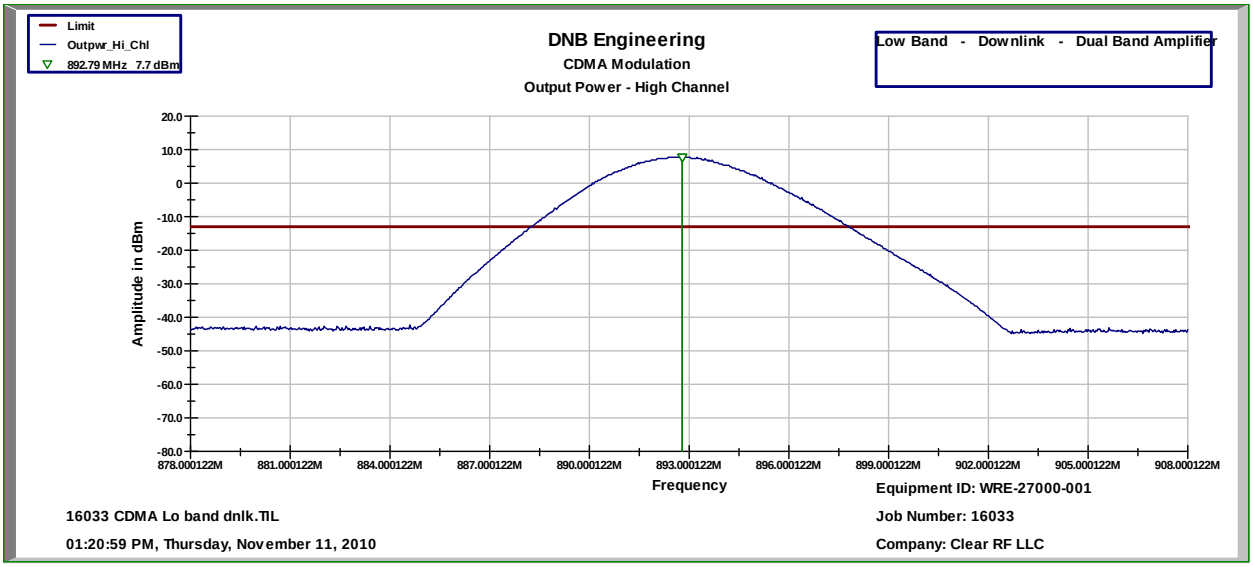


FIGURE 5: OUTPUT POWER PLOTS, DOWNLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Downlink CDMA 1931.000 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Low	1931.000	1.85	0.001531	2.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**3M**	**Video BW**	**3M**	**Mode**	**Peak**

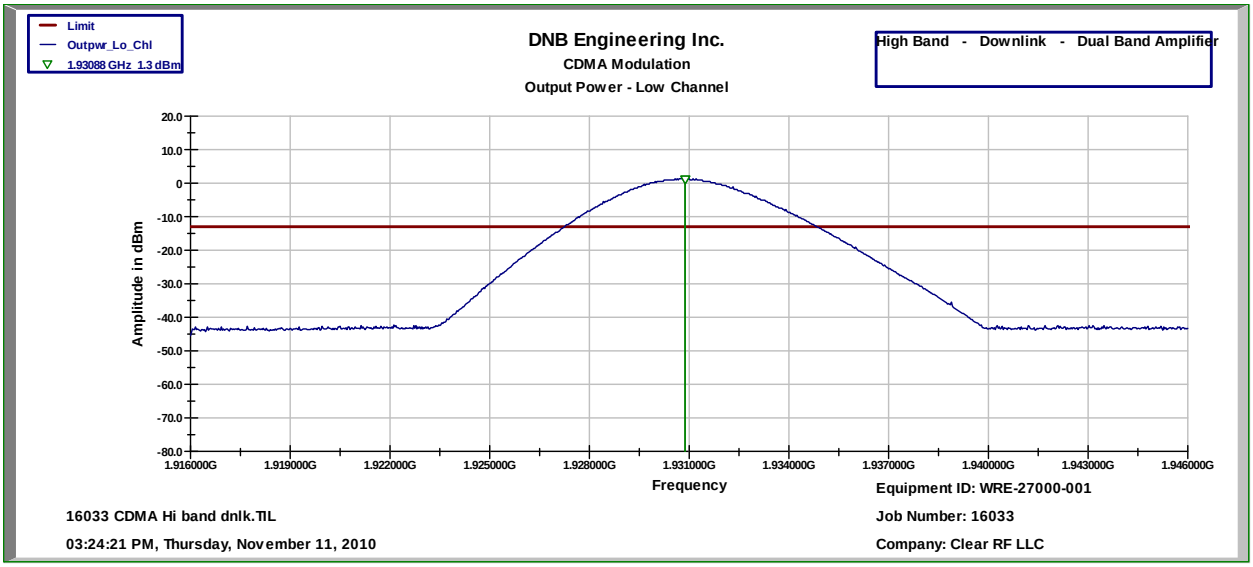


FIGURE 5: OUTPUT POWER PLOTS, DOWNLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Downlink CDMA 1960.000 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
Mid	1960.000	2.48	0.001770	2.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**3M**	**Video BW**	**3M**	**Mode**	**Peak**

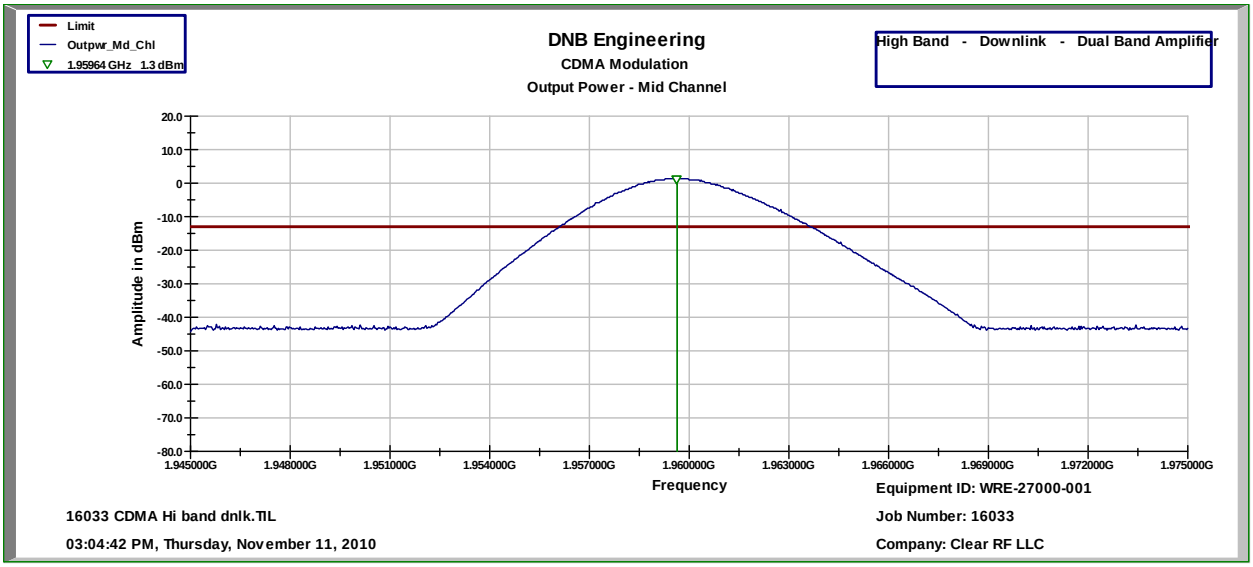
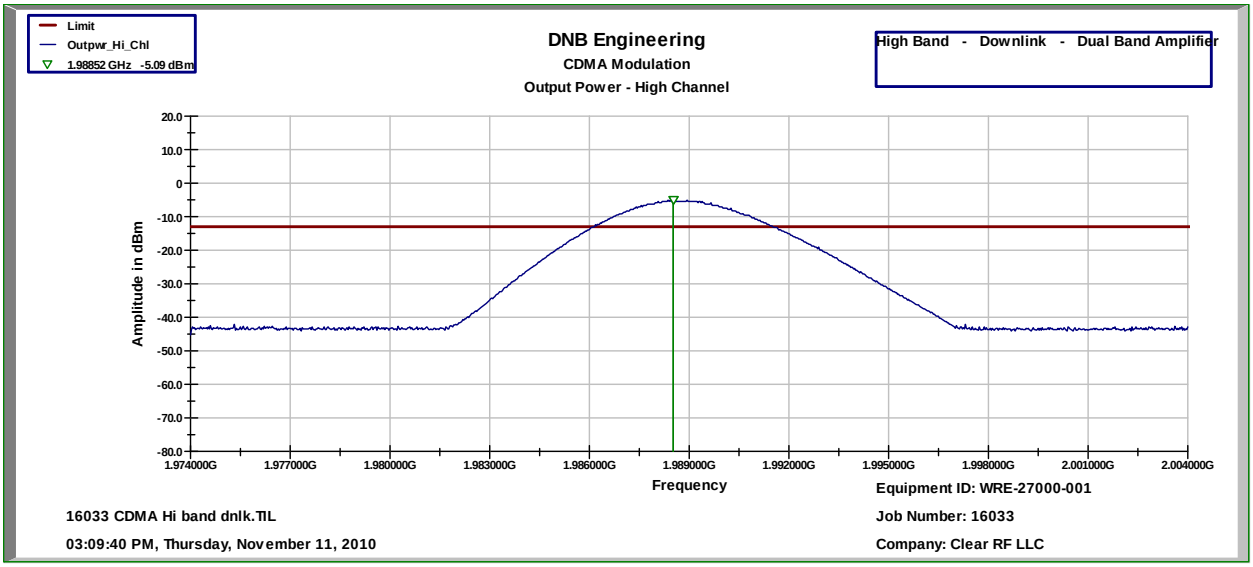


FIGURE 5: OUTPUT POWER PLOTS, DOWNLINK.

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Output Power**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Downlink CDMA 1989.000 MHz		

Power Meter Measurements					
Channel	**Freq (MHz)**	**dBm**	**Watts**	**Limit**	**Result**
High	1989.000	-2.27	0.000593	2.00	Pass

Spectrum Analyzer Settings					
Resolution BW	**3M**	**Video BW**	**3M**	**Mode**	**Peak**



2.1049 Measurement of Occupied Bandwidth (IC RSS-131 Clause 4.2)

Definition:
Occupied Bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are equal to 0.5 percent of the total mean power radiated by a given emission.

Test Method: Connect the Equipment per FIGURE 1.

For all measurements the maximum signal was determined by input the signal until the unit would no longer amplify the signal. This signal has been plotted in the section as modulation characteristics as input (EUT removed form circuit) and output (EUT inserted in circuit).

Measurements were made while the driving source generated the following:

TDMA Signal
GSM Signal
CDMA Signal

Test Results: See Plots

The center frequency of the signal did not shift with modulation. The Spectrum Bandwidth was well within the limits specified in the FCC Regulations.

Modulation characteristic plots are shown in this section.

FIGURE 6: OCCUPIED BANDWIDTH

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Occupied Bandwidth**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink GSM 824.350 MHz		

Spectrum Analyzer Settings					
Resolution BW	**10K**	**Video BW**	**30K**	**Mode**	**Peak**

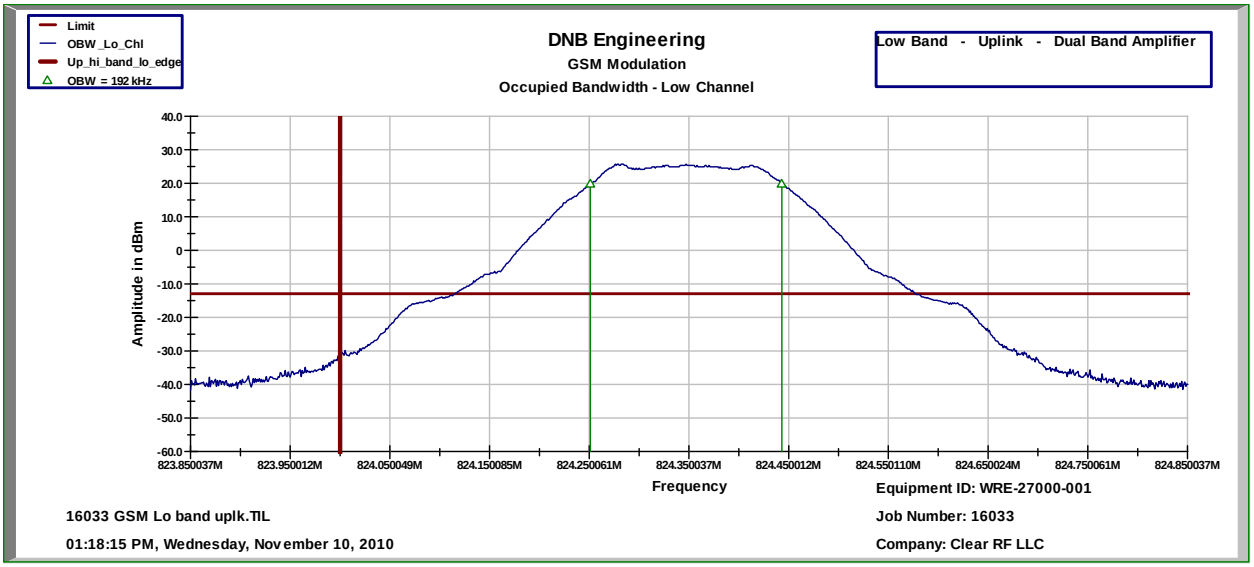


FIGURE 6: OCCUPIED BANDWIDTH

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Modulation Characteristics**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink GSM 824.350 MHz		

Spectrum Analyzer Settings					
Resolution BW	**10K**	**Video BW**	**30K**	**Mode**	**Peak**

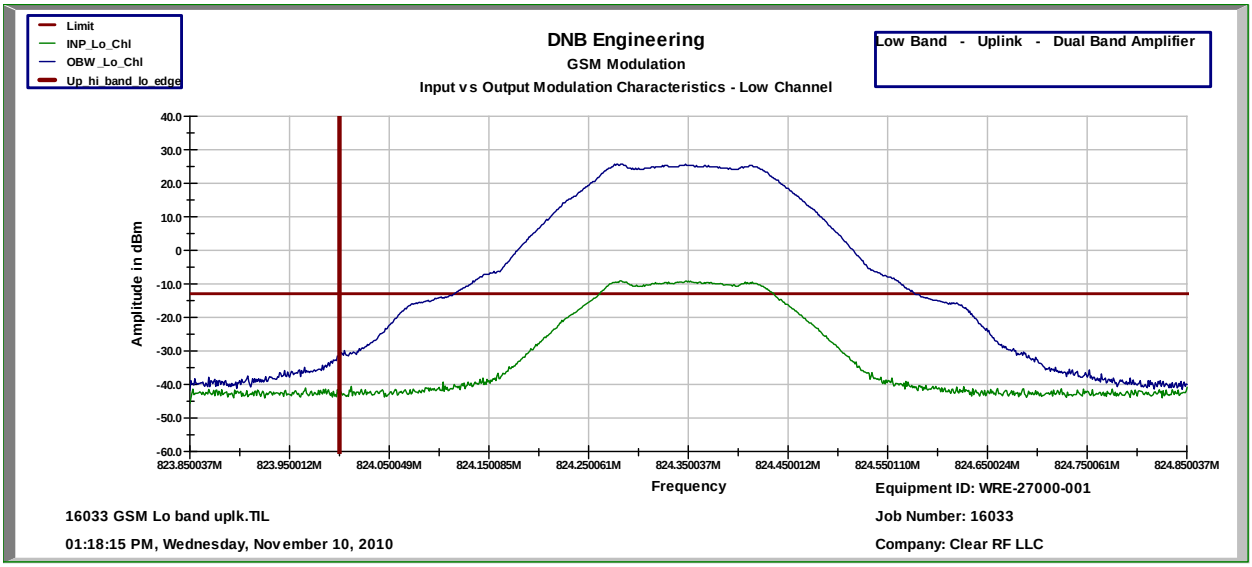


FIGURE 6: OCCUPIED BANDWIDTH

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Occupied Bandwidth**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink GSM 836.500 MHz		

Spectrum Analyzer Settings					
Resolution BW	**10K**	**Video BW**	**30K**	**Mode**	**Peak**

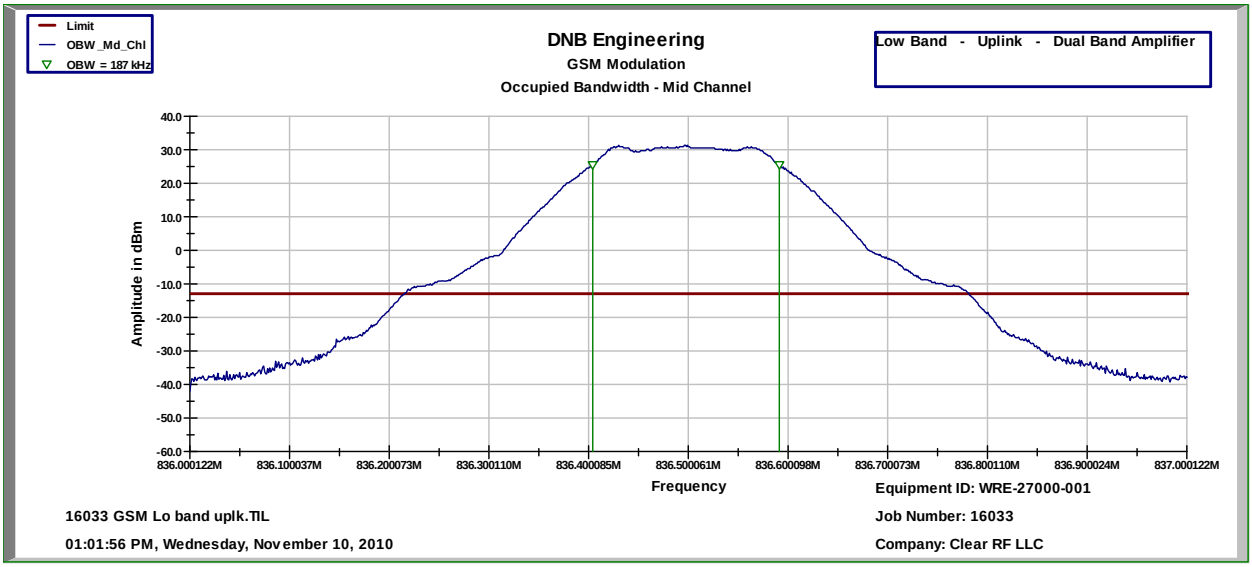


FIGURE 6: OCCUPIED BANDWIDTH

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Modulation Characteristics**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink GSM 836.500 MHz		

Spectrum Analyzer Settings					
Resolution BW	**10K**	**Video BW**	**30K**	**Mode**	**Peak**

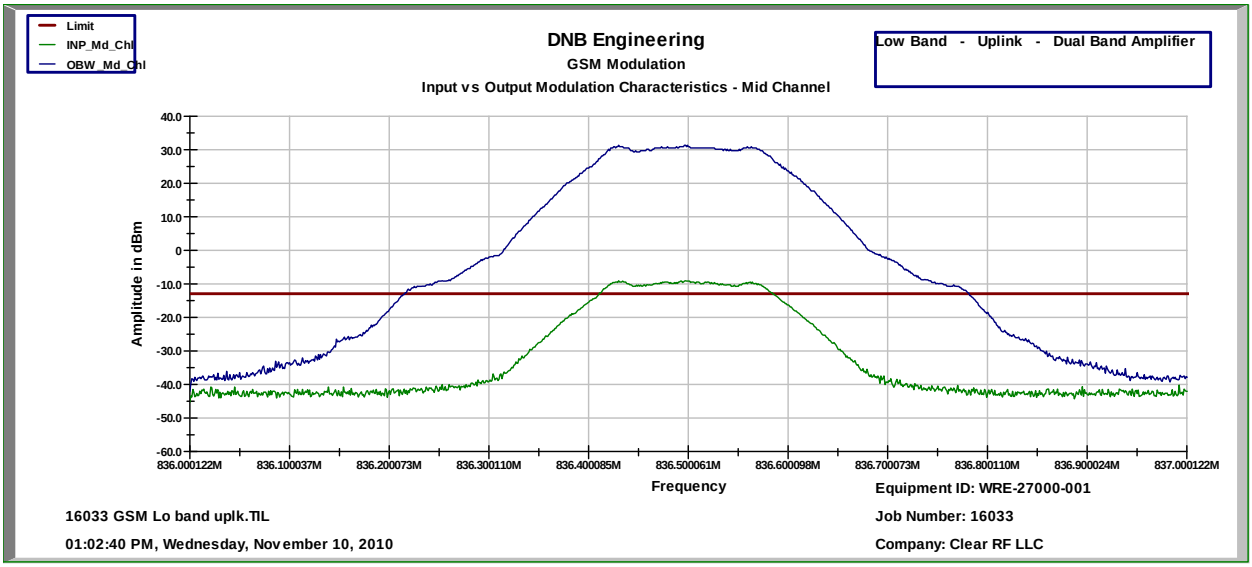


FIGURE 6: OCCUPIED BANDWIDTH

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Occupied Bandwidth**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink GSM 848.650 MHz		

Spectrum Analyzer Settings					
Resolution BW	**10K**	**Video BW**	**30K**	**Mode**	**Peak**

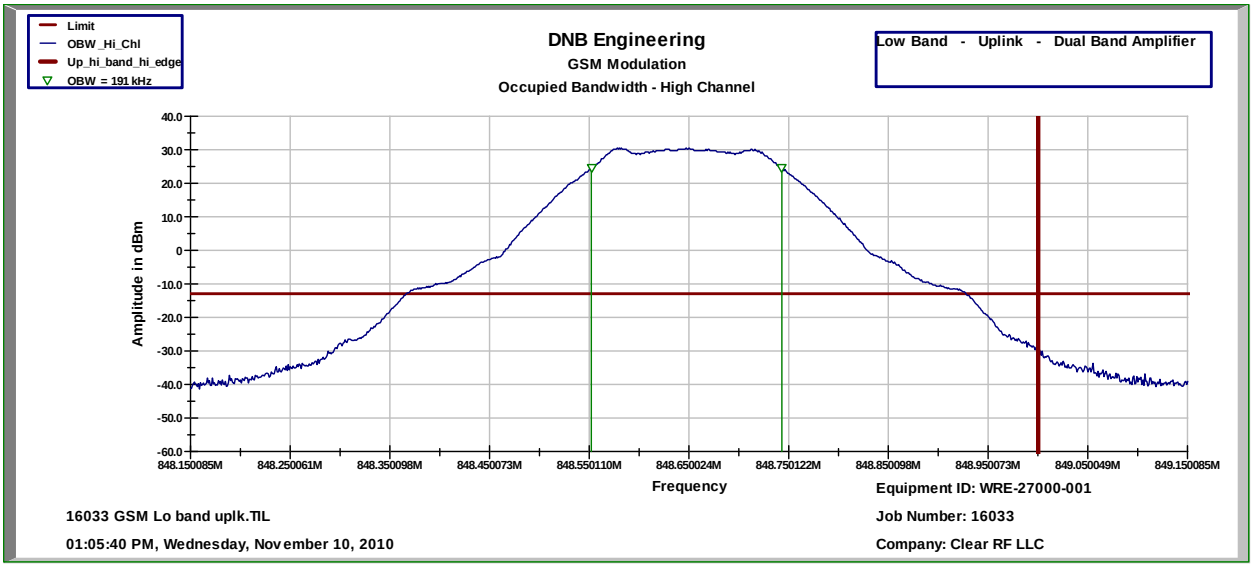


FIGURE 6: OCCUPIED BANDWIDTH

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Modulation Characteristics**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink GSM 848.650 MHz		

Spectrum Analyzer Settings					
Resolution BW	**10K**	**Video BW**	**30K**	**Mode**	**Peak**

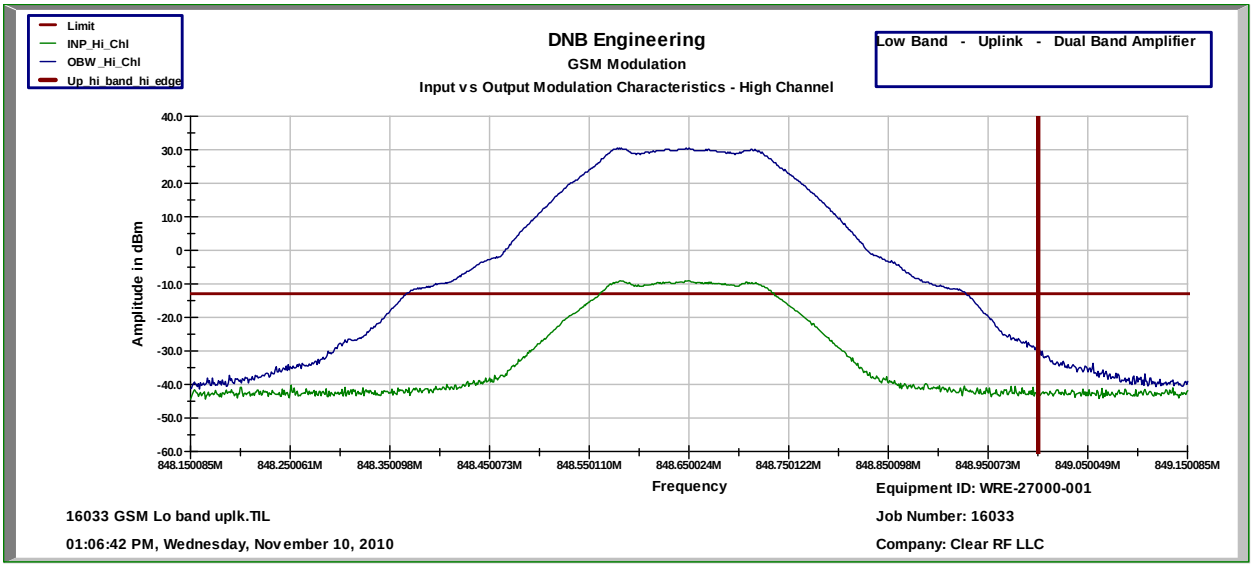


FIGURE 6: OCCUPIED BANDWIDTH

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Occupied Bandwidth**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink GSM 1850.350 MHz		

Spectrum Analyzer Settings					
Resolution BW	**10K**	**Video BW**	**30K**	**Mode**	**Peak**

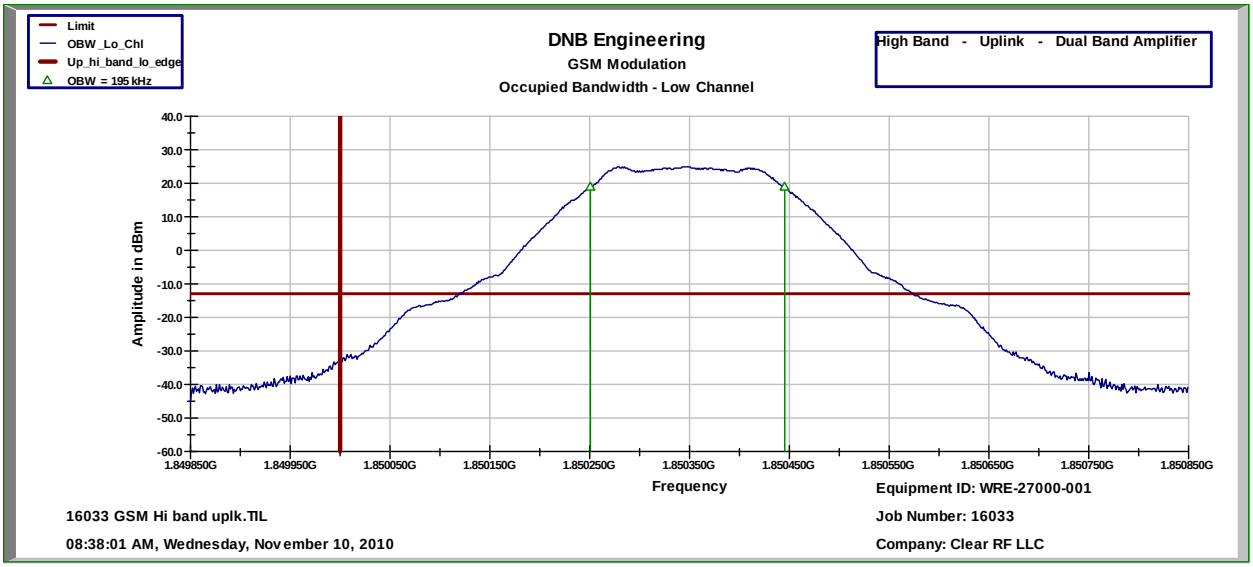


FIGURE 6: OCCUPIED BANDWIDTH

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Modulation Characteristics**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink GSM 1850.350 MHz		

Spectrum Analyzer Settings					
Resolution BW	**10K**	**Video BW**	**30K**	**Mode**	**Peak**

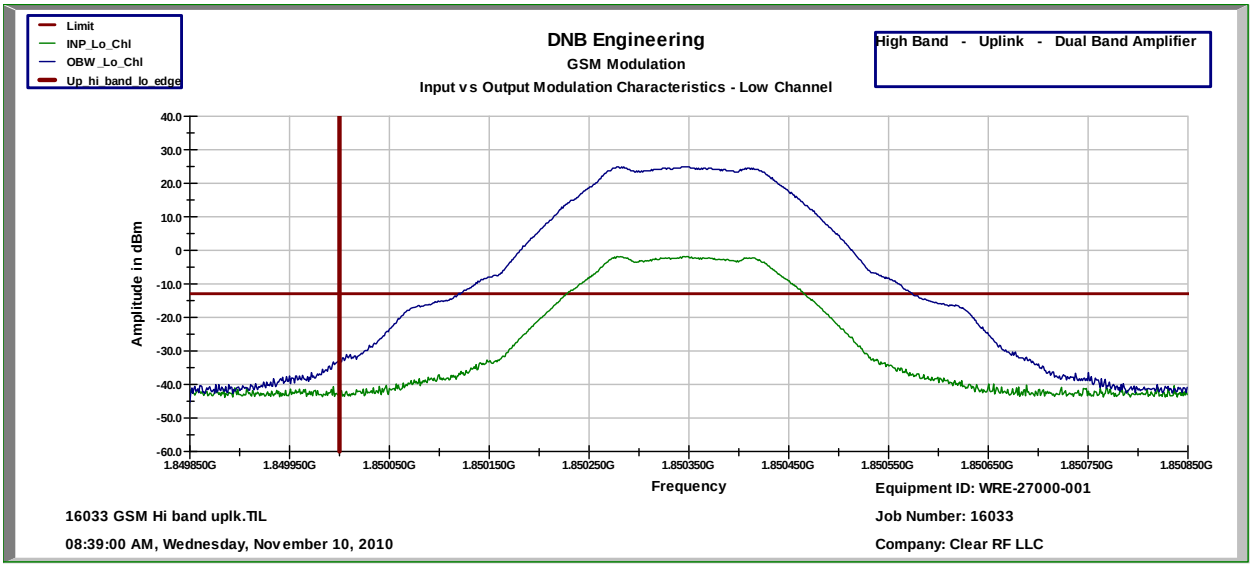


FIGURE 6: OCCUPIED BANDWIDTH

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Occupied Bandwidth**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink GSM 1880.000 MHz		

Spectrum Analyzer Settings					
Resolution BW	**10K**	**Video BW**	**30K**	**Mode**	**Peak**

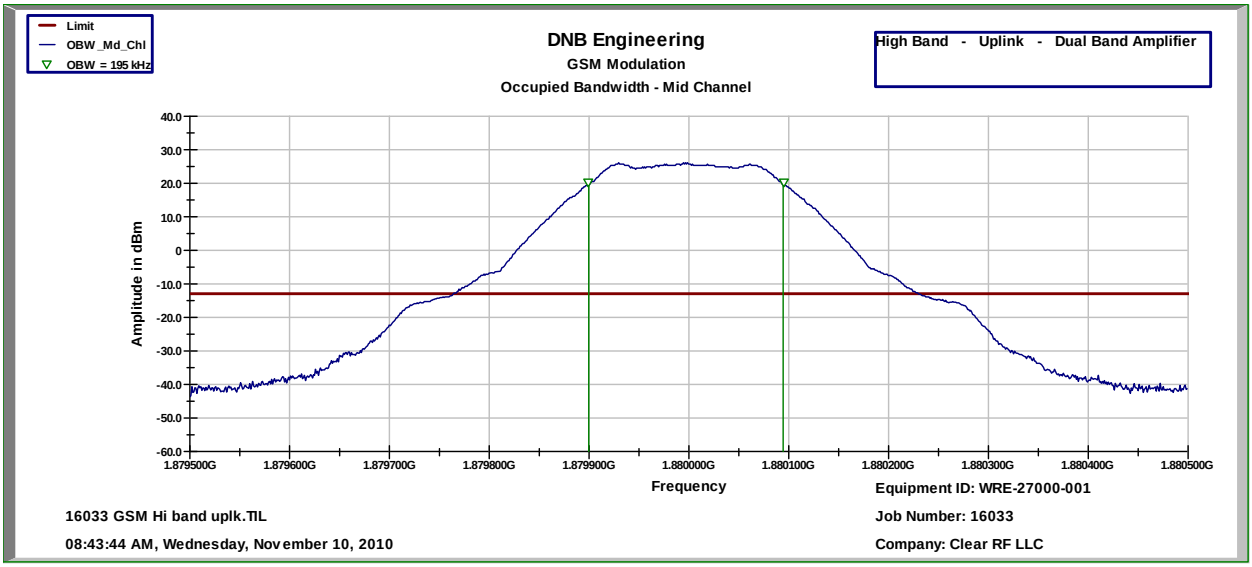


FIGURE 6: OCCUPIED BANDWIDTH

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Modulation Characteristics**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink GSM 1880.000 MHz		

Spectrum Analyzer Settings					
Resolution BW	**10K**	**Video BW**	**30K**	**Mode**	**Peak**

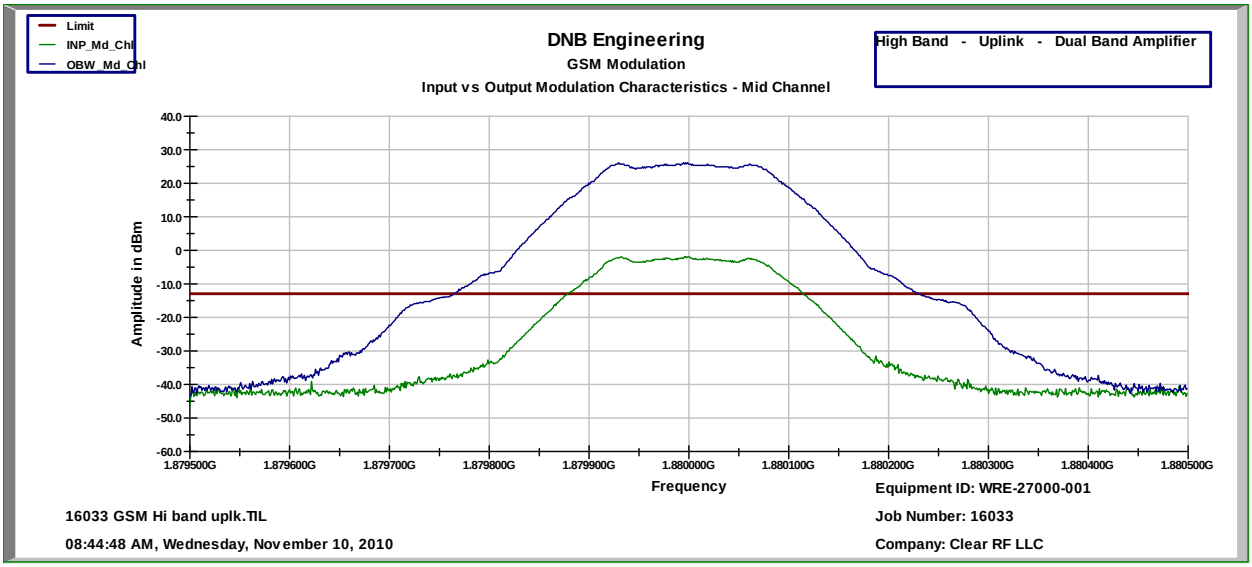


FIGURE 6: OCCUPIED BANDWIDTH

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Occupied Bandwidth**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink GSM 1909.650 MHz		

Spectrum Analyzer Settings					
Resolution BW	**10K**	**Video BW**	**30K**	**Mode**	**Peak**

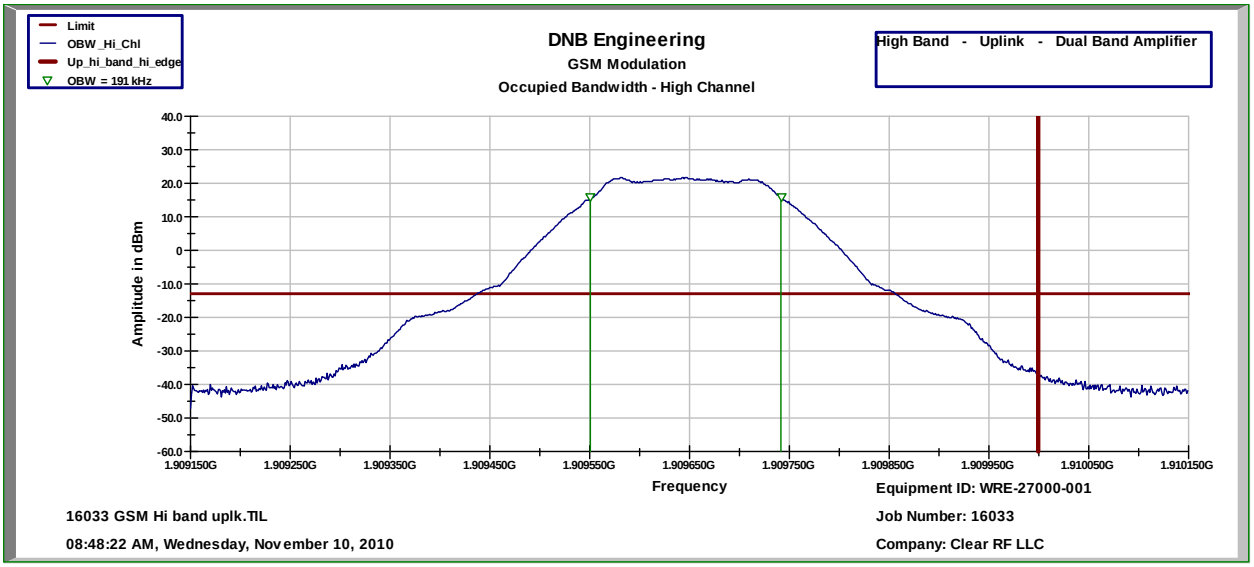


FIGURE 6: OCCUPIED BANDWIDTH

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Modulation Characteristics**	
DNB Job Number:	16033	Date: 10 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink GSM 1909.650 MHz		

Spectrum Analyzer Settings					
Resolution BW	**10K**	**Video BW**	**30K**	**Mode**	**Peak**

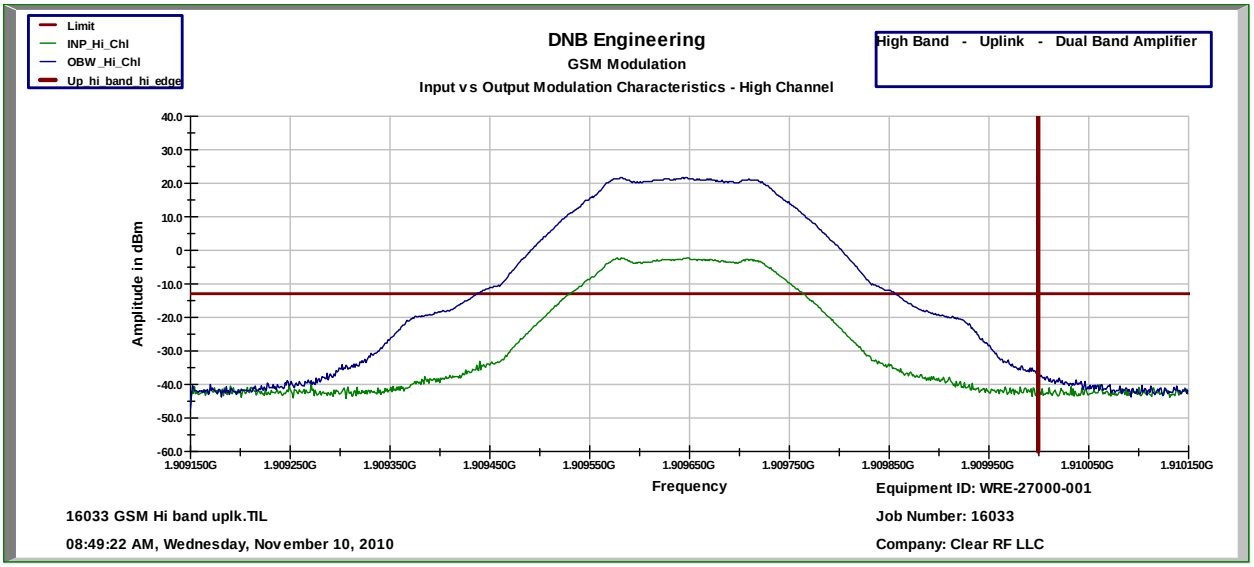


FIGURE 6: OCCUPIED BANDWIDTH

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Occupied Bandwidth**	
DNB Job Number:	16033	Date: 17 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink TDMA 824.075 MHz		

Spectrum Analyzer Settings					
Resolution BW	**3K**	**Video BW**	**30K**	**Mode**	**Peak**

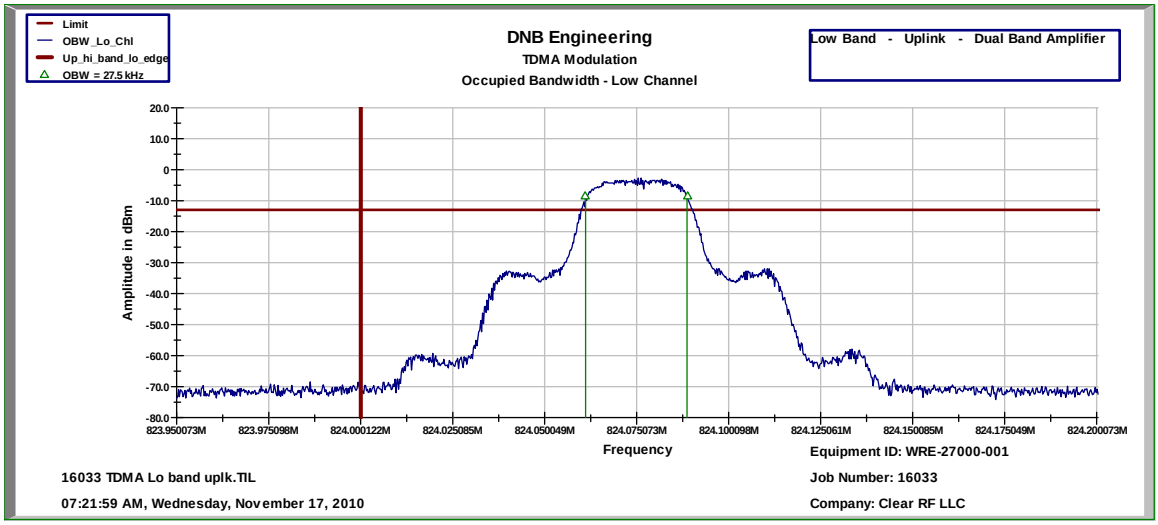


FIGURE 6: OCCUPIED BANDWIDTH

	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Modulation Characteristics**	
DNB Job Number:	16033	Date: 17 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
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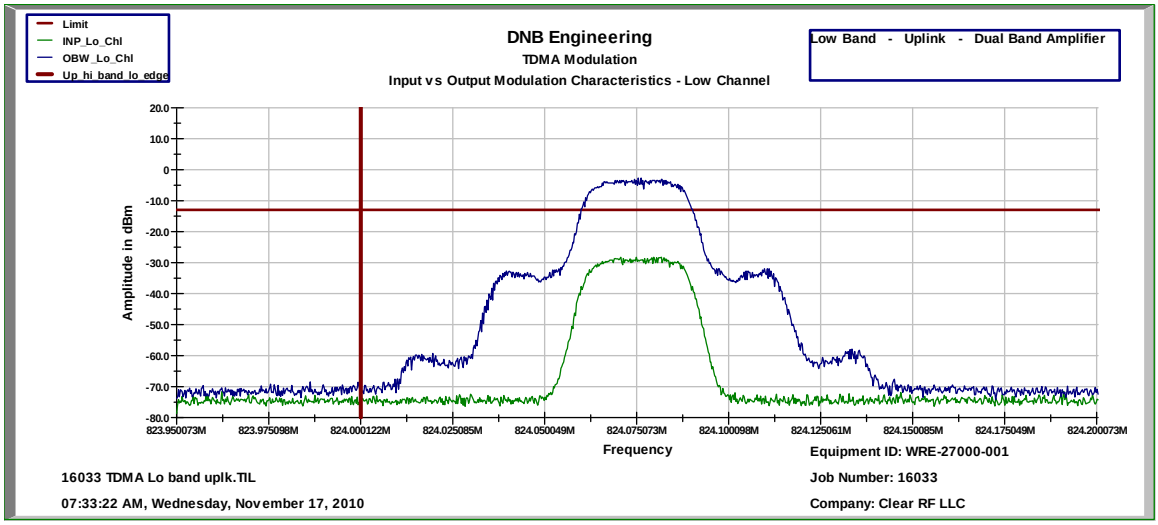
Resolution BW	**3K**	**Video BW**	**30K**	**Mode**	**Peak**



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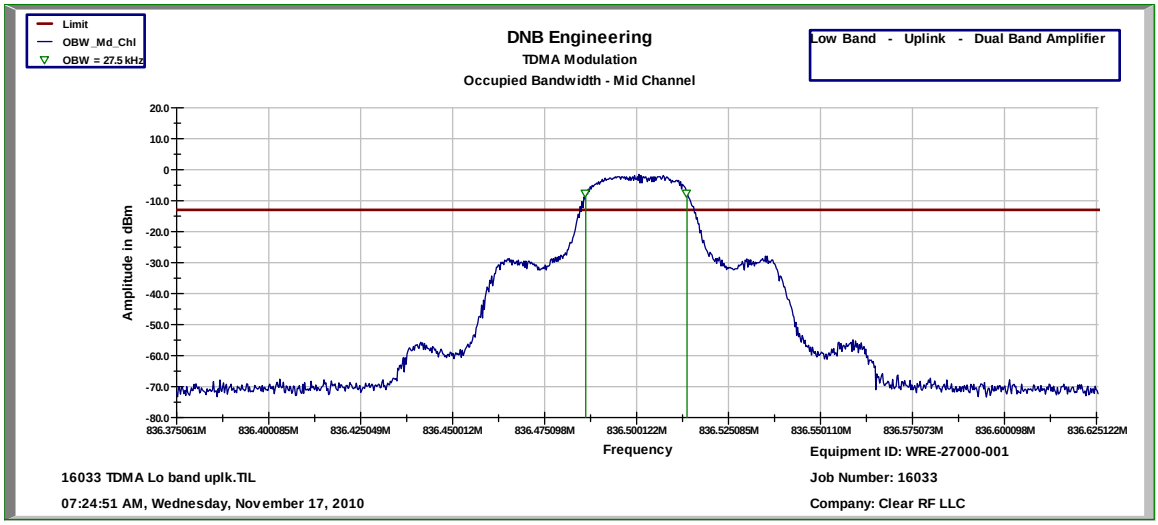
	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Occupied Bandwidth**	
DNB Job Number:	16033	Date: 17 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink TDMA 836.500 MHz		

Spectrum Analyzer Settings					
Resolution BW	**3K**	**Video BW**	**30K**	**Mode**	**Peak**



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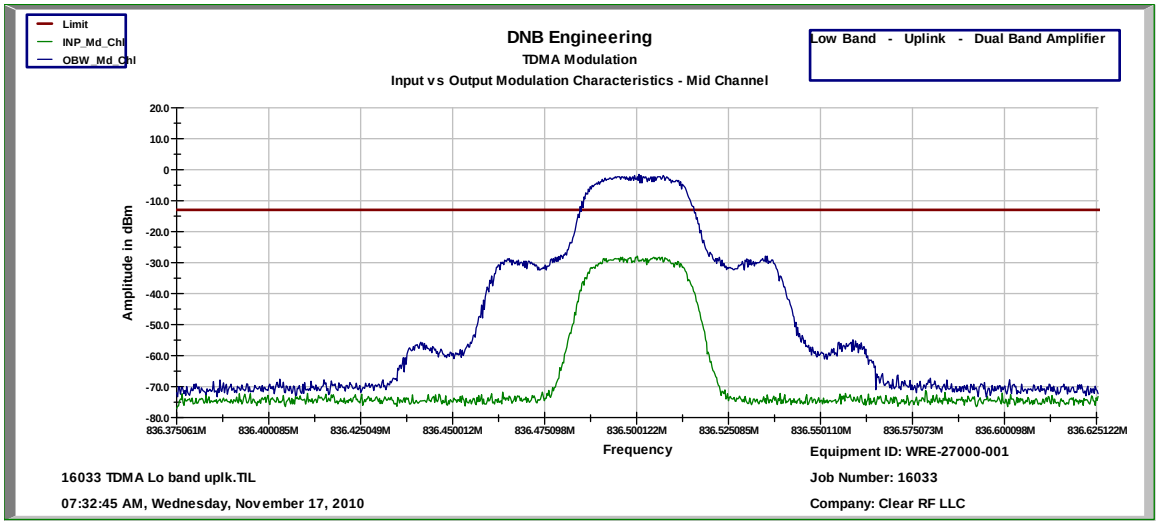
	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Modulation Characteristics**	
DNB Job Number:	16033	Date: 17 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink TDMA 836.500 MHz		

Spectrum Analyzer Settings					
Resolution BW	**3K**	**Video BW**	**30K**	**Mode**	**Peak**



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	1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436	**Occupied Bandwidth**	
DNB Job Number:	16033	Date: 17 Nov 2010	**Conformance Standards** [X] IC RSS-131 [X] FCC Part 22 [X] FCC Part 24
Customer:	Clear RF, LLC		
Model Number:	WRE2700		
Description:	RF amplifier		
	Uplink TDMA 848.925 MHz		

Spectrum Analyzer Settings					
Resolution BW	**3K**	**Video BW**	**30K**	**Mode**	**Peak**