

1100 E Chalk Creek Road
Coalville, UT 84017
(435) 336-4433
FAX (435) 336-4436

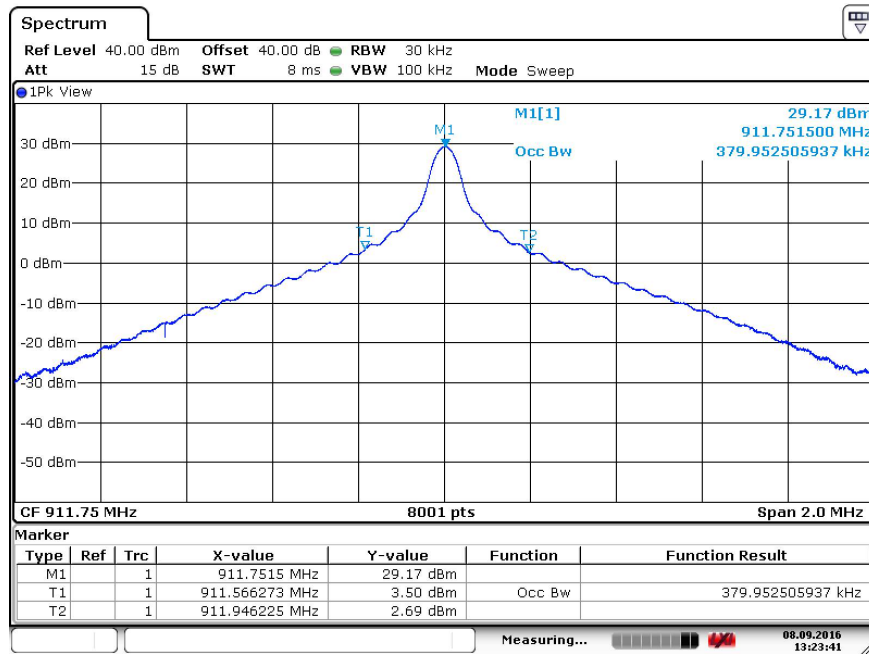
Occupied Bandwidth

DNB Job Number:	76033	Date:	8 Sep 2016	Conformance Standard FCC Part 90 RSS-137
Customer:	Transcore			
Model Number:	MPRX			
Description:	Multiprotocol Reader Extreme			Clause Part 90.209 RSS-137 cl. 6.1

Ambient Temperature	Relative Humidity	Barometric Pressure
19 °C	28 %	101.8 kPa

EUT performed within the requirements of the applicable standard Yes No *Les Payne*

BAND	CHANNEL	FREQ IN MHZ	MODULATION	OBW in kHz	RESULT
High	Low	911.750	IAG	379.952505937	Pass



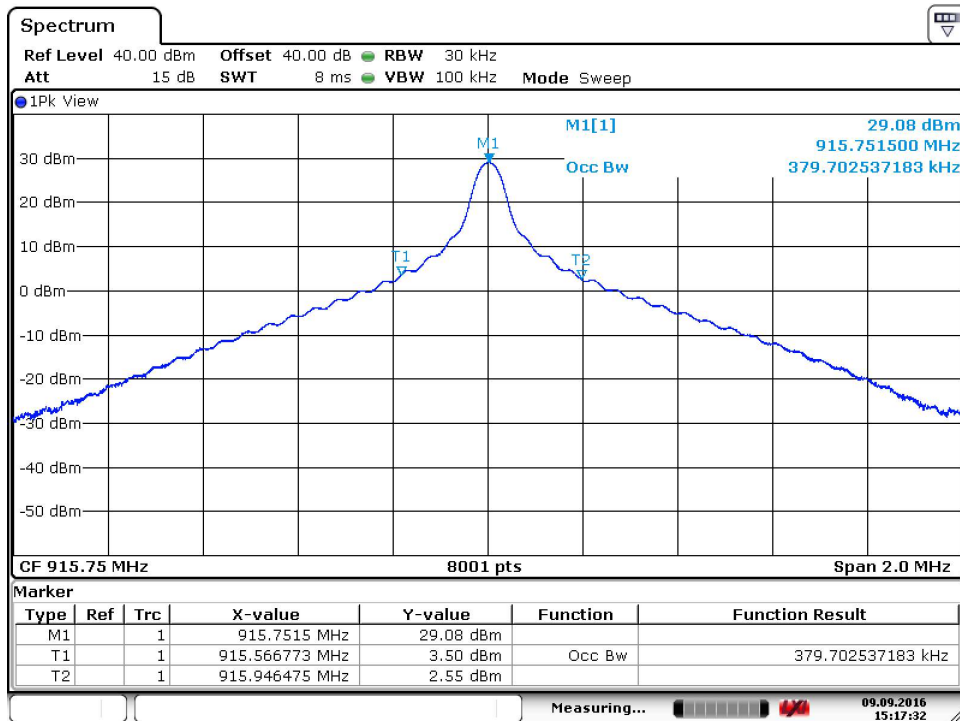
Date: 8.SEP.2016 13:23:42



1100 E Chalk Creek Road
 Coalville, UT 84017
 (435) 336-4433
 FAX (435) 336-4436

Occupied Bandwidth

DNB Job Number:	76033	Date:	9 Sep 2016	Conformance Standard FCC Part 90 RSS-137	
Customer:	Transcore				
Model Number:	MPRX				
Description:	Multiprotocol Reader Extreme			Clause Part 90.209 RSS-137 cl. 6.1	
Ambient Temperature		Relative Humidity		Barometric Pressure	
19 °C		28 %		101.8 kPa	
EUT performed within the requirements of the applicable standard <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>Les Payne</i>					
BAND	CHANNEL	FREQ IN MHZ	MODULATION	OBW in kHz	RESULT
High	Middle	915.750	IAG	379.702537183	Pass



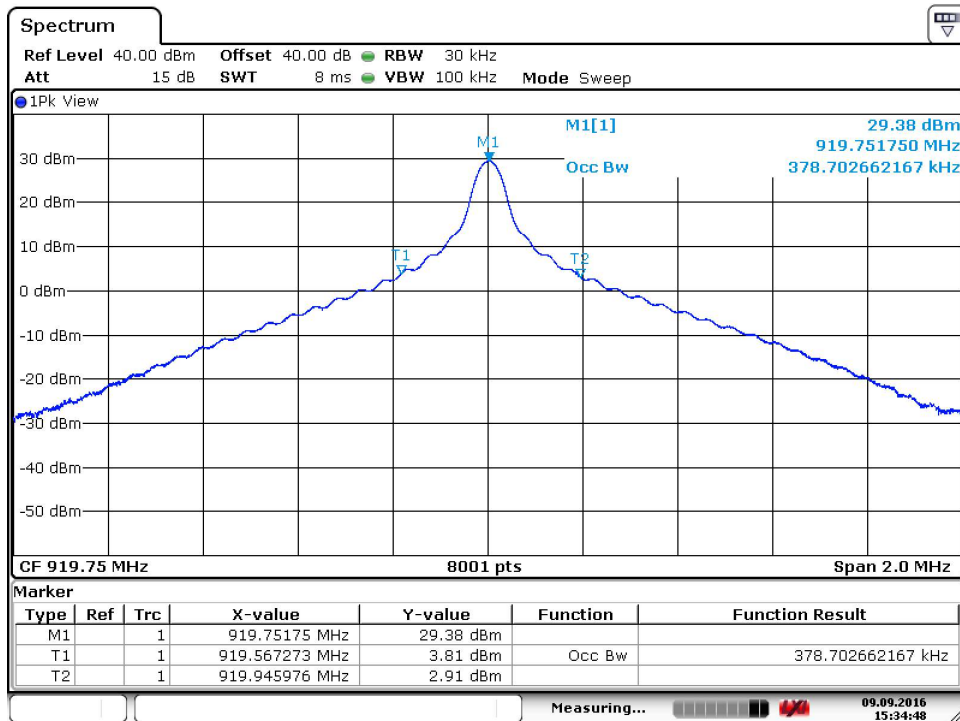
Date: 9.SEP.2016 15:17:33




1100 E Chalk Creek Road
 Coalville, UT 84017
 (435) 336-4433
 FAX (435) 336-4436

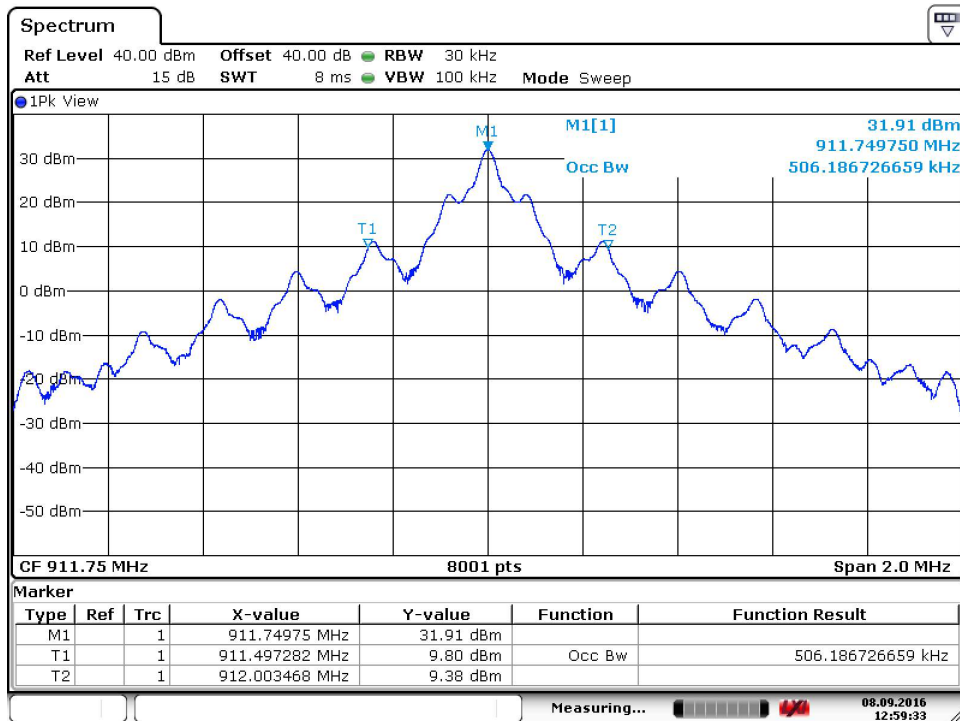
Occupied Bandwidth

DNB Job Number:	76033	Date:	9 Sep 2016	Conformance Standard FCC Part 90 RSS-137	
Customer:	Transcore				
Model Number:	MPRX				
Description:	Multiprotocol Reader Extreme				Clause Part 90.209 RSS-137 cl. 6.1
Ambient Temperature		Relative Humidity		Barometric Pressure	
19 °C		28 %		101.8 kPa	
EUT performed within the requirements of the applicable standard <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>Les Payne</i>					
BAND	CHANNEL	FREQ IN MHZ	MODULATION	OBW in kHz	RESULT
High	High	919.750	IAG	378.702662167	Pass




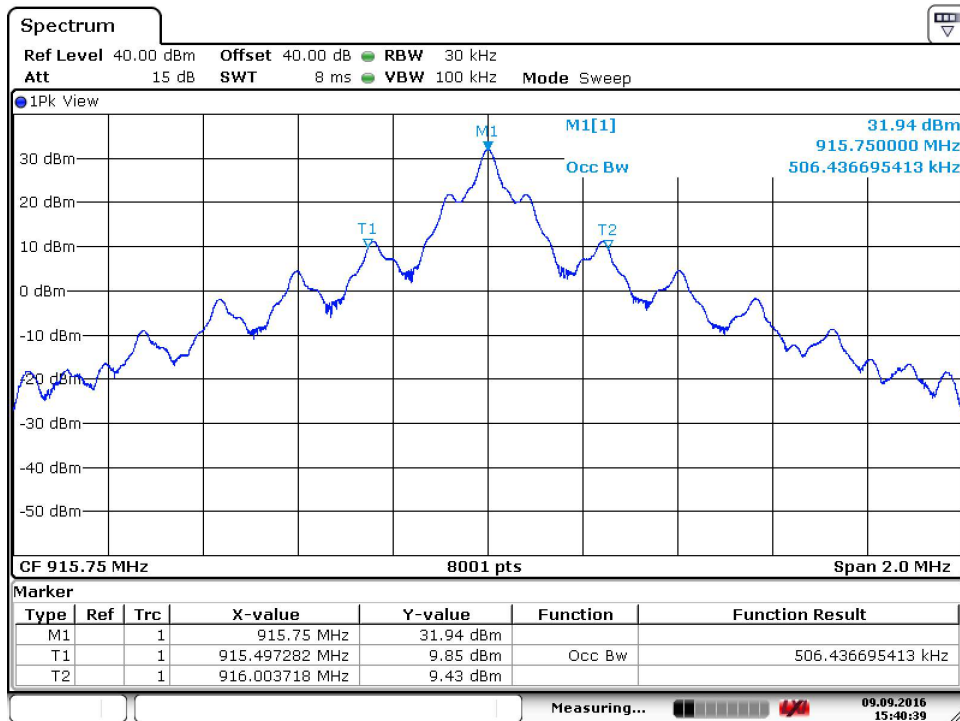
Date: 9.SEP.2016 15:34:49

		1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436		<h2>Occupied Bandwidth</h2>	
DNB Job Number:		76033		Date: 8 Sep 2016	
Customer:		Transcore		Conformance Standard FCC Part 90 RSS-137	
Model Number:		MPRX			
Description:		Multiprotocol Reader Extreme		Clause Part 90.209 RSS-137 cl. 6.1	
Ambient Temperature		Relative Humidity		Barometric Pressure	
19 °C		28 %		101.8 kPa	
EUT performed within the requirements of the applicable standard <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>Les Payne</i>					
BAND	CHANNEL	FREQ IN MHZ	MODULATION	OBW in kHz	RESULT
High	Low	911.750	SeGo	506.186726659	Pass



Date: 8.SEP.2016 12:59:34

		1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436		<h2>Occupied Bandwidth</h2>	
DNB Job Number:		76033		Date: 9 Sep 2016	
Customer:		Transcore			
Model Number:		MPRX			
Description:		Multiprotocol Reader Extreme			
		Conformance Standard FCC Part 90 RSS-137			
		Clause Part 90.209 RSS-137 cl. 6.1			
Ambient Temperature		Relative Humidity		Barometric Pressure	
19 °C		28 %		101.8 kPa	
EUT performed within the requirements of the applicable standard <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>Les Payne</i>					
BAND	CHANNEL	FREQ IN MHZ	MODULATION	OBW in kHz	RESULT
High	Middle	915.750	SeGo	506.436695413	Pass



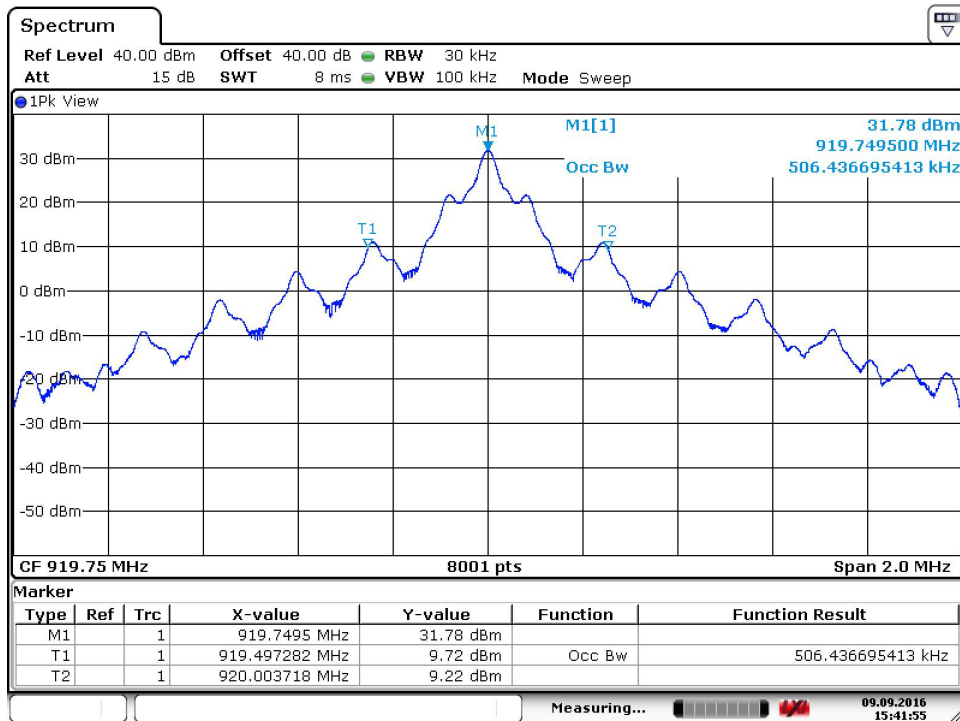
Date: 9.SEP.2016 15:40:40



1100 E Chalk Creek Road
 Coalville, UT 84017
 (435) 336-4433
 FAX (435) 336-4436

Occupied Bandwidth

DNB Job Number:	76033	Date:	9 Sep 2016	Conformance Standard FCC Part 90 RSS-137	
Customer:	Transcore				
Model Number:	MPRX				
Description:	Multiprotocol Reader Extreme			Clause Part 90.209 RSS-137 cl. 6.1	
Ambient Temperature		Relative Humidity		Barometric Pressure	
19 °C		28 %		101.8 kPa	
EUT performed within the requirements of the applicable standard <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>Les Payne</i>					
BAND	CHANNEL	FREQ IN MHZ	MODULATION	OBW in kHz	RESULT
High	High	919.750	SeGo	506.436695413	Pass



Date: 9.SEP.2016 15:41:56

2.1051

Spurious Emissions at Antenna Terminals

90.210 (k) (3) / RSS-137 cl. 6.5

The radio frequency voltage or powers generated within the equipment and appearing on a spurious frequency shall be checked at the equipment output terminals when properly loaded with a suitable artificial antenna. Curves or equivalent data shall show the magnitude of each harmonic and other spurious emission that can be detected when the equipment is operated under the conditions specified in §2.1049 as appropriate. The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be specified.

The peak power of any emission shall be attenuated below the power of the highest emission contained within the licensee's sub-band in accordance with the following schedule:

Test Procedure: ANSI C63.10-2013

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic. Typically, several plots are required to cover this entire span.

RBW = 100 kHz

VBW RBW

Sweep = auto

Detector function = peak

Trace = max hold

Allow the trace to stabilize. Set the marker on the peak of any spurious emission recorded. The level displayed must comply with the limit specified in this Section. Submit these plots.

Limit: Spurious emissions must be attenuated below the peak output power by at least:
 $55 + 10 \log(P)$ dB

where (P) is the highest emission (watts) of the transmitter inside the licensee's sub-band.

Peak Output Power = 1.6 W

Attenuation = $55 + 10 \log(P)$ dB
= $55 + 10 \log(1.6)$ dB
= 57 dBc



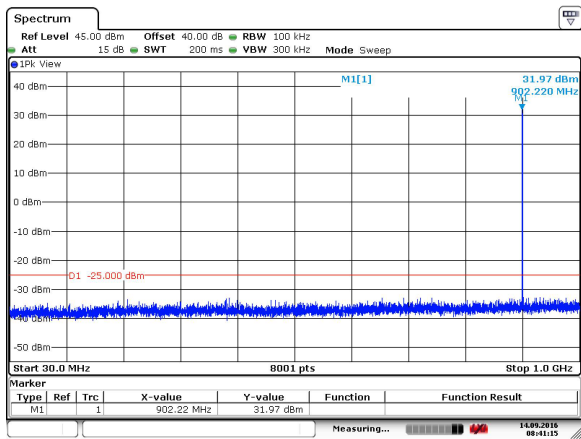
1100 E Chalk Creek Road
 Coalville, UT 84017
 (435) 336-4433
 FAX (435) 336-4436

Spurious Emissions (Conducted)

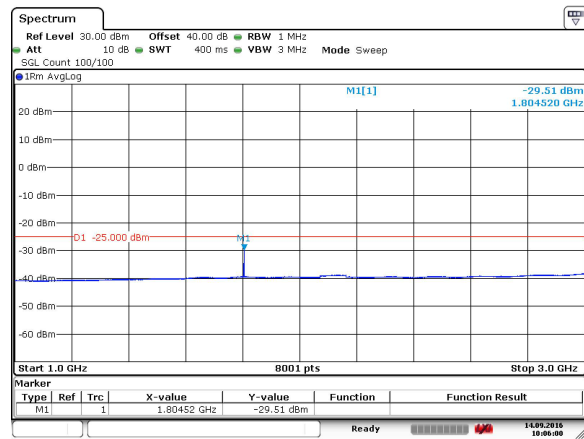
DNB Job Number:	76033	Date:	14 Sep 2016	Conformance Standard FCC Part 90 RSS-137
Customer:	Transcore			
Model Number:	MPRX			
Description:	Multiprotocol Reader Extreme			Clause 90.210 (k) RSS-137 cl 6.5.3

LEGEND TO PLOTS BELOW

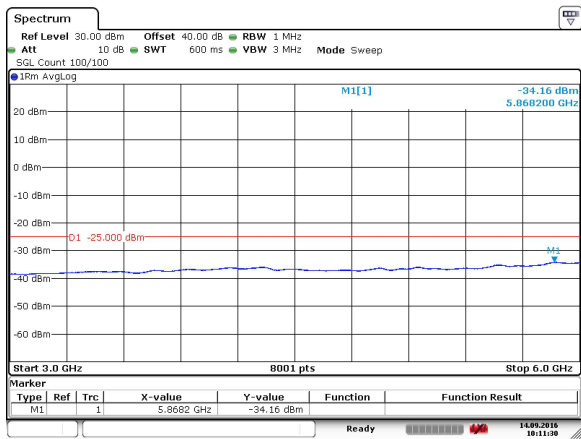
ATA - Low Band - Low Channel - 30 to 1000 MHz	ATA - Low Band - Low Channel - 1 to 3 GHz
ATA - Low Band - Low Channel - 3 to 6 GHz	ATA - Low Band - Low Channel - 6 to 10 GHz



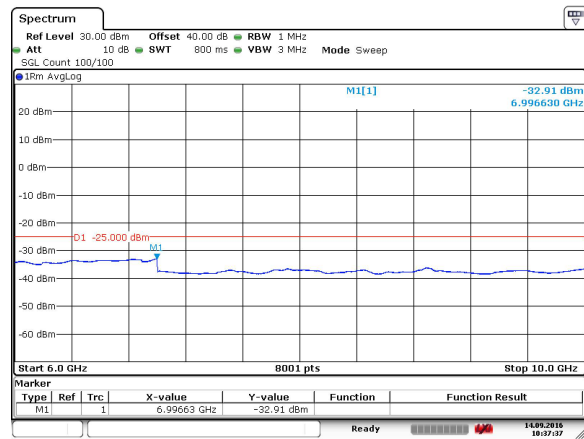
Date: 14.SEP.2016 08:41:15



Date: 14.SEP.2016 10:06:00



Date: 14.SEP.2016 10:11:30



Date: 14.SEP.2016 10:37:37



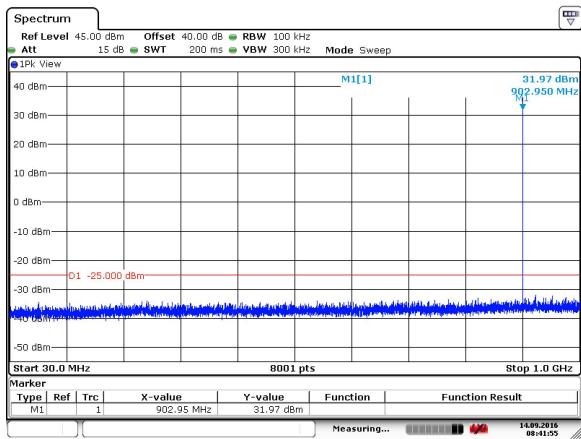
1100 E Chalk Creek Road
 Coalville, UT 84017
 (435) 336-4433
 FAX (435) 336-4436

Spurious Emissions (Conducted)

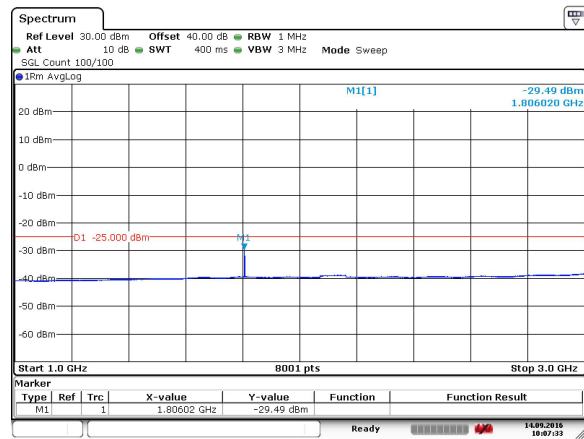
DNB Job Number:	76033	Date:	14 Sep 2016	Conformance Standard FCC Part 90 RSS-137
Customer:	Transcore			
Model Number:	MPRX			
Description:	Multiprotocol Reader Extreme			Clause 90.210 (k) RSS-137 cl 6.5.3

LEGEND TO PLOTS BELOW

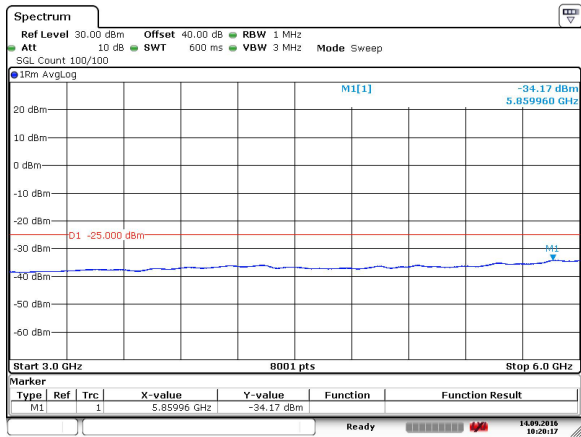
ATA - Low Band - Middle Channel - 30 to 1000 MHz	ATA - Low Band - Middle Channel - 1 to 3 GHz
ATA - Low Band - Middle Channel - 3 to 6 GHz	ATA - Low Band - Middle Channel - 6 to 10 GHz



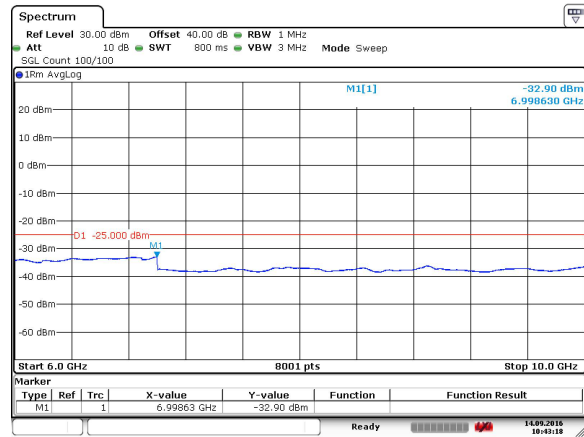
Date: 14.SEP.2016 08:41:55



Date: 14.SEP.2016 10:07:33



Date: 14.SEP.2016 10:20:17



Date: 14.SEP.2016 10:43:18



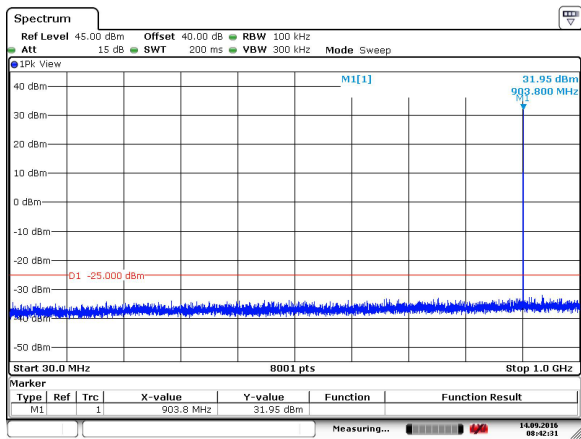
1100 E Chalk Creek Road
 Coalville, UT 84017
 (435) 336-4433
 FAX (435) 336-4436

Spurious Emissions (Conducted)

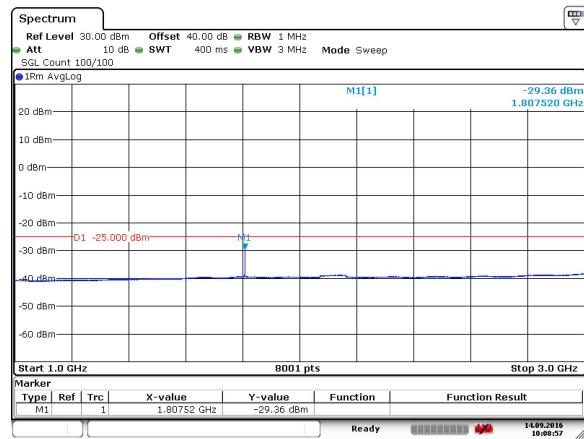
DNB Job Number:	76033	Date:	14 Sep 2016	Conformance Standard FCC Part 90 RSS-137
Customer:	Transcore			
Model Number:	MPRX			
Description:	Multiprotocol Reader Extreme			Clause 90.210 (k) RSS-137 cl 6.5.3

LEGEND TO PLOTS BELOW

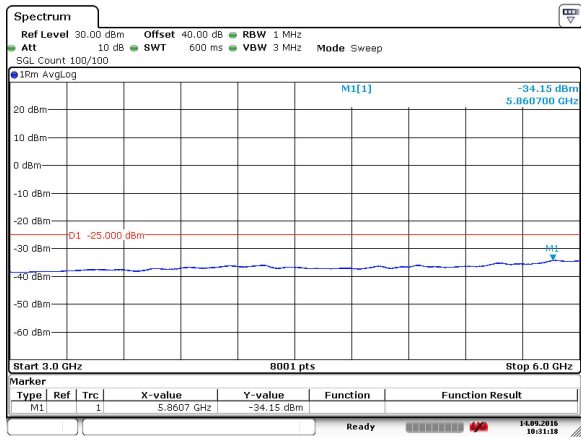
ATA - Low Band - High Channel - 30 to 1000 MHz	ATA - Low Band - High Channel - 1 to 3 GHz
ATA - Low Band - High Channel - 3 to 6 GHz	ATA - Low Band - High Channel - 6 to 10 GHz



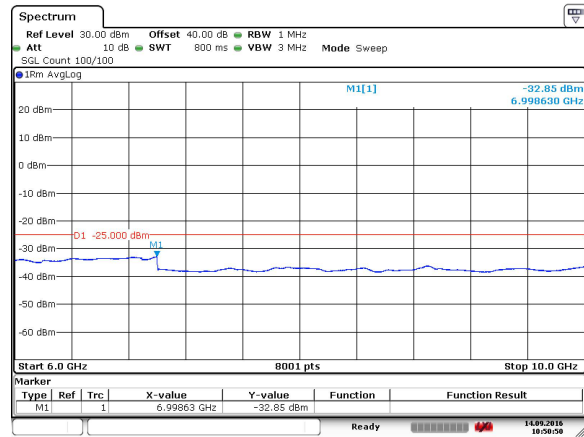
Date: 14.SEP.2016 08:42:31



Date: 14.SEP.2016 10:08:57



Date: 14.SEP.2016 10:31:18



Date: 14.SEP.2016 10:50:50



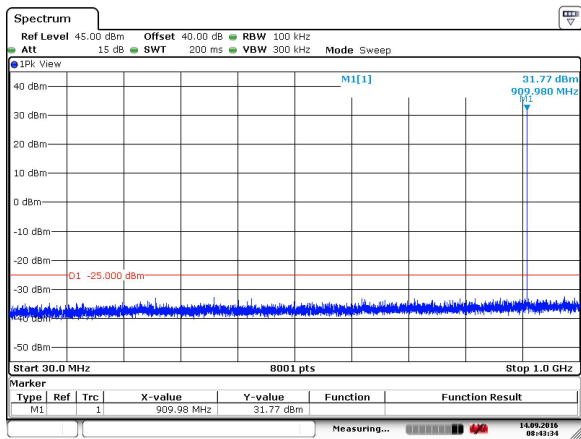
1100 E Chalk Creek Road
 Coalville, UT 84017
 (435) 336-4433
 FAX (435) 336-4436

Spurious Emissions (Conducted)

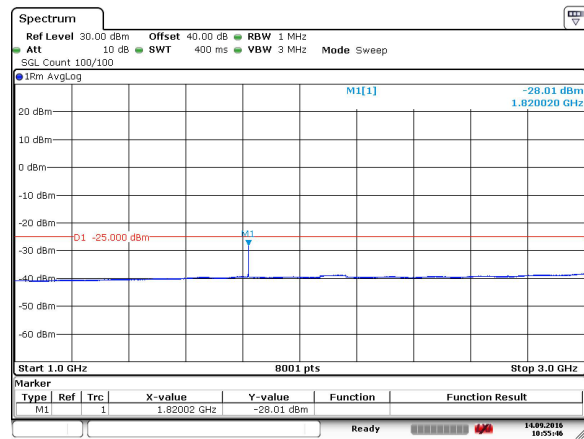
DNB Job Number:	76033	Date:	Conformance Standard FCC Part 90 RSS-137 Clause 90.210 (k) RSS-137 cl 6.5.3
Customer:	Transcore		
Model Number:	MPRX		
Description:	Multiprotocol Reader Extreme		

LEGEND TO PLOTS BELOW

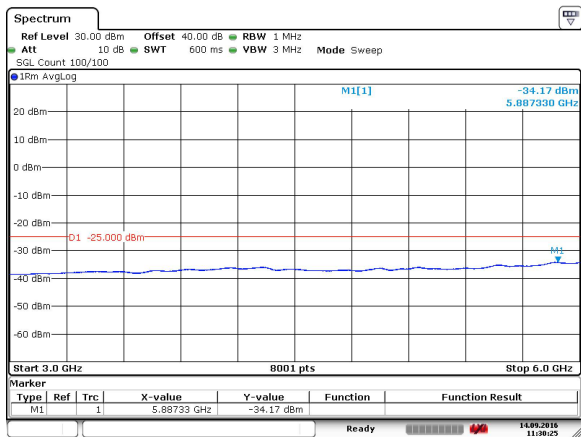
ATA - High Band - Low Channel - 30 to 1000 MHz	ATA - High Band - Low Channel - 1 to 3 GHz
ATA - High Band - Low Channel - 3 to 6 GHz	ATA - High Band - Low Channel - 6 to 10 GHz



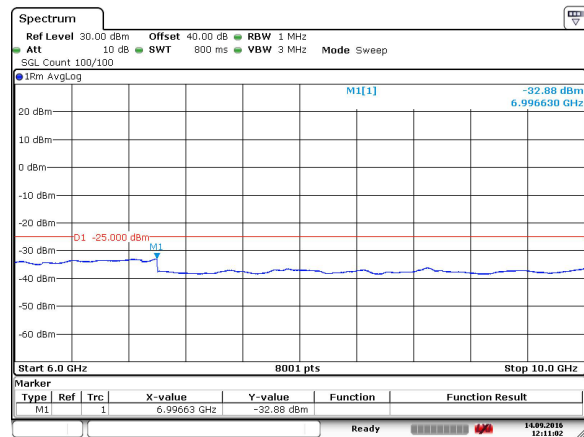
Date: 14.SEP.2016 08:43:34



Date: 14.SEP.2016 10:55:46



Date: 14.SEP.2016 11:30:25



Date: 14.SEP.2016 12:11:02



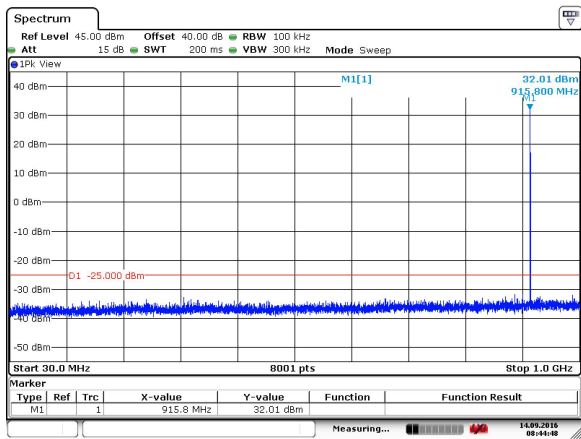
1100 E Chalk Creek Road
 Coalville, UT 84017
 (435) 336-4433
 FAX (435) 336-4436

Spurious Emissions (Conducted)

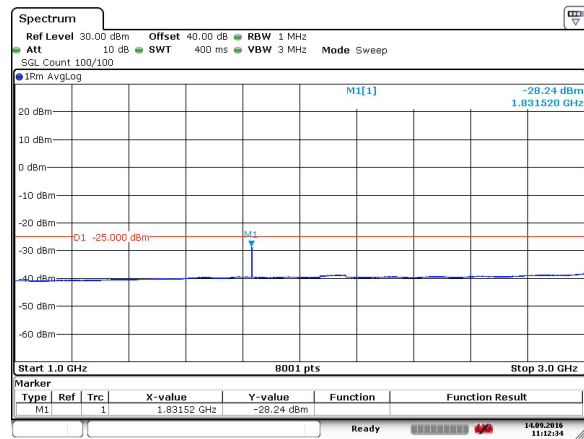
DNB Job Number:	76033	Date:	14 Sep 2016	Conformance Standard FCC Part 90 RSS-137
Customer:	Transcore			
Model Number:	MPRX			
Description:	Multiprotocol Reader Extreme			Clause 90.210 (k) RSS-137 cl 6.5.3

LEGEND TO PLOTS BELOW

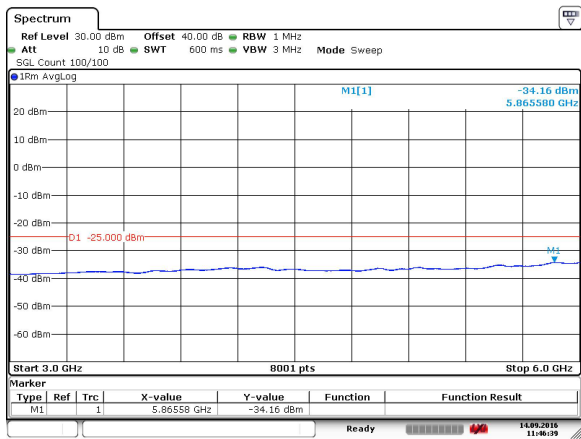
ATA - High Band - Middle Channel - 30 to 1000 MHz	ATA - High Band - Middle Channel - 1 to 3 GHz
ATA - High Band - Middle Channel - 3 to 6 GHz	ATA - High Band - Middle Channel - 6 to 10 GHz



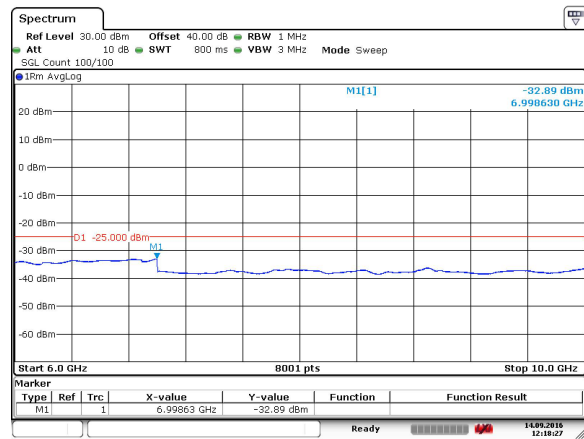
Date: 14.SEP.2016 09:44:48



Date: 14.SEP.2016 11:12:34



Date: 14.SEP.2016 11:46:39



Date: 14.SEP.2016 12:18:27



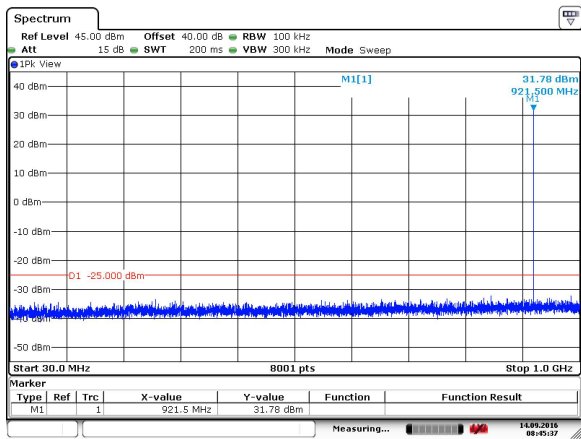
1100 E Chalk Creek Road
 Coalville, UT 84017
 (435) 336-4433
 FAX (435) 336-4436

Spurious Emissions (Conducted)

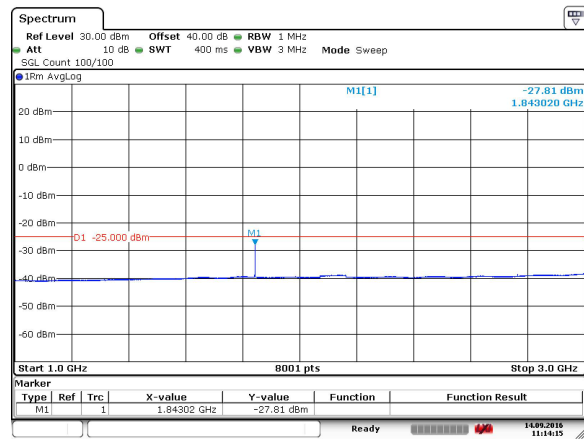
DNB Job Number:	76033	Date:	14 Sep 2016	Conformance Standard FCC Part 90 RSS-137
Customer:	Transcore			
Model Number:	MPRX			
Description:	Multiprotocol Reader Extreme			Clause 90.210 (k) RSS-137 cl 6.5.3

LEGEND TO PLOTS BELOW

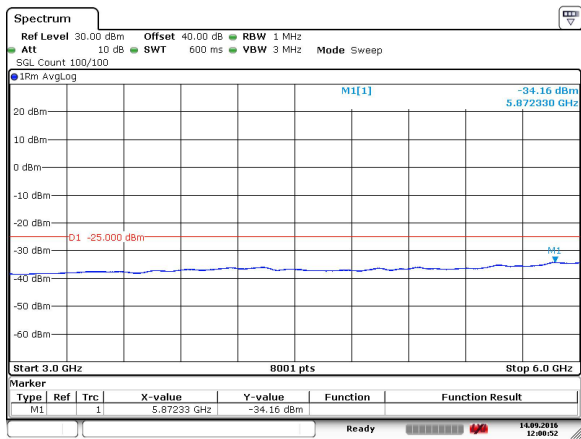
ATA - High Band - High Channel - 30 to 1000 MHz	ATA - High Band - High Channel - 1 to 3 GHz
ATA - High Band - High Channel - 3 to 6 GHz	ATA - High Band - High Channel - 6 to 10 GHz



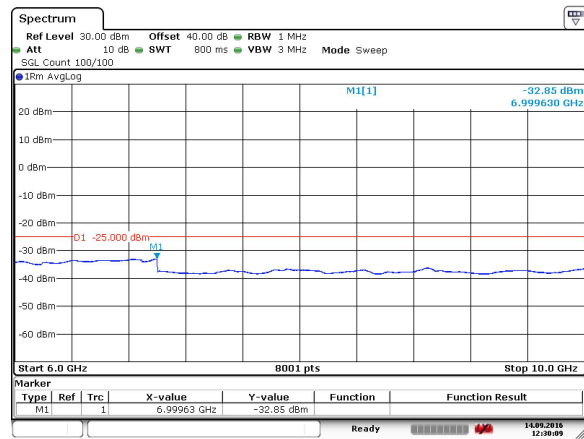
Date: 14.SEP.2016 08:45:36



Date: 14.SEP.2016 11:14:15



Date: 14.SEP.2016 12:00:52



Date: 14.SEP.2016 12:30:09