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Report On

FCC and ISED Testing of the Ericsson KRC 161 489/1 (Radio 2203)
WCDMA and LTE B2 & 25 (1900 MHz) Base Station In accordance
with FCC CFR 47 Part 2, FCC CFR 47 Part 24, Industry Canada RSS-
GEN and Industry Canada RSS-133

COMMERCIAL-IN-CONFIDENCE

FCC ID: TA8AKRC161489-1
IC: 287AB-AS1614891

PREPARED BY

APPROVED BY

DATED

Maggie Whiting
Project Manager

Nic Forsyth
Authorised Signatory

24 June 2016

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June 2016

CONTENTS

Section	Page No
1	REPORT INFORMATION 2
1.1	Report Details 3
1.2	Brief Summary of Results 4
1.3	Configuration Description 5
1.4	Declaration of Build Status 8
1.5	Product Information 9
1.6	Test Setup 10
1.7	Test Conditions 11
1.8	Deviation From The Standard 11
1.9	Modification Record 11
1.10	Alternative Test Site 11
1.11	Additional Information 11
2	TEST DETAILS 12
2.1	Maximum Peak Output Power and Peak to Average Ratio - Conducted 13
2.2	Occupied Bandwidth 58
2.3	Band Edge 98
2.4	Transmitter Spurious Emissions 154
3	TEST EQUIPMENT USED 262
3.1	Test Equipment Used 263
3.2	Measurement Uncertainty 265
4	ACCREDITATION, DISCLAIMERS AND COPYRIGHT 266
4.1	Accreditation, Disclaimers and Copyright 267
ANNEX A	Module Lists A.2



Product Service

SECTION 1

REPORT INFORMATION

1.1 REPORT DETAILS

Manufacturer	Ericsson
Address	Torshamnsgatan 23 Kista SE-16480 Stockholm Sweden
Product Name	Radio 2203
Product Number	KRC 161 489/1
IC Model Name	287AB-AS1614891
Serial Number(s)	C82A522332
Software Version	CXP 901 7316/2, R62EU
Hardware Version	R1D
Test Specification/Issue/Date	FCC CFR 47 Part 2: 2015 FCC CFR 47 Part 24: 2015 Industry Canada RSS-GEN: Issue 4: 2014 Industry Canada RSS-133: Issue 6: 2013
Start of Test	18 May 2016
Finish of Test	30 May 2016
Name of Engineer(s)	Raj Kumar Kallem
Related Document(s)	KDB 971168 D01

This report has been up issued to Issue 2 and should be read in place of Issue 1. This report has been up issued to Issue 2 to add a revised Declaration of Build Status.

1.2 BRIEF SUMMARY OF RESULTS

A brief summary of results for each configuration, in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 24, Industry Canada RSS-GEN and Industry Canada RSS-133 is shown below.

Section	Specification Clause				Test Description	Result
	FCC CFR 47 Part 2	FCC CFR 47 Part 24	RSS-GEN	RSS-133		
2.1	2.1046	24.232 (a)	-	6.4	Maximum Peak Output Power and Peak to Average Ratio - Conducted	Pass
2.2	2.1049	24.238 (b)	6.6	-	Occupied Bandwidth	Pass
2.3	2.1051	24.238 (b)	-	6.5	Band Edge	Pass
2.4	2.1051	24.238 (a)	-	6.5	Transmitter Spurious Emissions	Pass

1.3 CONFIGURATION DESCRIPTION

The Radio 2203 B2 B25, KRC 161 489/1 supports 1 to 5 Carrier operation from either a single or dual port configuration. Pre-test results were used to establish the worst case configuration of the EUT in the above mentioned operating modes. The reported results represent testing in the worst case modes of operation. Testing was also carried out on all antenna ports to confirm that each output was electrically identical. .

The Radio 2203 B2 B25, KRC 161 489/1 supports LTE, WCDMA and WCDMA +LTE carriers in the 1930 to 1990 MHz and the 1930 to 1995 MHz frequency bands.

Test Models as defined in 3GPP TS 25.141 and TS 36.141 were used to represent the required modulation for test.

TX test cases: Conducted Output Power, Spurious Emissions at Antenna Terminals (± 1 MHz) and Conducted Spurious Emissions measurements were performed on all RF Ports using a test limit accounting for MIMO operation with 2 ports. All RF ports were tested for RF Carrier Power and results recorded using the Measure and Sum approach to account for MIMO operation. The test limits shown are representative of the worst case. All testing was performed with the EUT transmitting at maximum RF output power unless otherwise stated.

The EUT was powered by a 230 VAC (radio module 36 VDC).

Channel Configurations

WCDMA B2 (1930 MHz – 1990 MHz)

Configuration	RAT	No. of Carriers	Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		
				Bottom (BRFBW)	Middle (MRFBW)	Top (TRFBW)
A	W	1	5	1932.4	1960	1987.6
B	W	2	5	1932.4+1972.6	1940+1980	1947.6+1987.6
C	W	4	5	1932.4+1937.4+1967.6+1972.6	1940+1945+1975+1980	1947.6+1952.6+1982.6+1987.6

LTE B2 (1930 MHz – 1990 MHz)

Configuration	RAT	No. of Carriers	Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		
				Bottom (BRFBW)	Middle (MRFBW)	Top (TRFBW)
D	L	1	1.4	1930.7	1960	1989.3
D	L	1	3	1931.5	1960	1988.5
D	L	1	5	1932.5	1960	1987.5
D	L	1	10	1935	1960	1985
D	L	1	15	1937.5	1960	1982.5
D	L	1	20	1940	1960	1980
E	L	2	1.4	1930.7 + 1954.3	1948.2 + 1971.8	1965.7 + 1989.3
E	L	2	3	1931.5 + 1953.5	1949 + 1971	1966.5 + 1988.5
E	L	2	5	1932.5+1972.5	1940+1980	1947.5+1987.5
E	L	2	10	1935+1970	1942.5+1977.5	1950+1985
E	L	2	15	1937.5+1967.5	1945+1975	1952.5+1982.5
E	L	2	20	1940+1965	1947.5+1972.5	1955+1980
F	L	3	1.4	1930.7+1932.1+1954.3	1948.2+1949.6+1971.8	1965.7+1967.1+1989.3
F	L	3	3	1931.5+1934.5+1953.5	1949+1952+1971	1966.5+1969.5+1988.5
F	L	3	5	1932.5+1937.5+1972.5	1940+1945+1980	1947.5+1952.5+1987.5
F	L	3	10	1935+1945+1970	1942.5+1952.5+1977.5	1950+1960+1985
F	L	3	15	1937.5+1952.5+1967.5	1945+1960+1975	1952.5+1967.5+1982.5
F	L	3	20	1940+1960+1965	1947.5+1967.5+1972.5	1955+1975+1980

WCDMA/LTE (MM) B2 (1930 MHz – 1990 MHz)

Configuration	RAT	No. of Carriers	Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		
				BRFBW	MRFBW	TRFBW
G	W + L	2	5 + 3	1932.4+1973.5	1940+1981	1947.6+1988.5
H	3W+2L	5	5 + 5 + 5+3+3	1932.4+1937.4+1942.4+1970.5+1973.5	1940+1945+1950+1978+1981	1947.6+1952.6+1957.6+1985.5+1988.5

WCDMA B25 (1930 MHz – 1995 MHz)

Configuration	RAT	No. of Carriers	Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		
				Bottom (BRFBW)	Middle (MRFBW)	Top (TRFBW)
I	W	1	5	1932.4	1962.6	1992.6
J	W	2	5	1932.4+1972.6	1942.6+1982.6	1952.6+1992.6
K	W	4	5	1932.4+1937.4+1967.6+1972.6	1942.6+1947.6+1977.6+1982.6	1952.6+1957.6+1987.6+1992.6

LTE B25 (1930 MHz – 1995 MHz)

Configuration	RAT	No. of Carriers	Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		
				Bottom (BRFBW)	Middle (MRFBW)	Top (TRFBW)
L	L	1	1.4	1930.7	1962.5	1994.3
L	L	1	3	1931.5	1962.5	1993.5
L	L	1	5	1932.5	1962.5	1992.5
L	L	1	10	1935	1962.5	1990
L	L	1	15	1937.5	1962.5	1987.5
L	L	1	20	1940	1962.5	1985
M	L	2	1.4	1930.7+1954.3	1950.7+1974.3	1970.7+1994.3
M	L	2	3	1931.5+1953.5	1951.5+1973.5	1971.5+1993.5
M	L	2	5	1932.5+1972.5	1942.5+1982.5	1952.5+1992.5
M	L	2	10	1935+1970	1945+1980	1955+1990
M	L	2	15	1937.5+1967.5	1947.5+1977.5	1957.5+1987.5
M	L	2	20	1940+1965	1950+1975	1960+1985
N	L	3	1.4	1930.7+1932.1+1954.3	1950.7+1952.1+1974.3	1970.7+1972.1+1994.3
N	L	3	3	1931.5+1934.5+1953.5	1951.5+1954.5+1973.5	1971.5+1974.5+1993.5
N	L	3	5	1932.5+1937.5+1972.5	1942.5+1947.5+1982.5	1952.5+1957.5+1992.5
N	L	3	10	1935+1945+1970	1945+1955+1980	1955+1965+1990
N	L	3	15	1937.5+1952.5+1967.5	1947.5+1962.5+1977.5	1957.5+1972.5+1987.5
N	L	3	20	1940+1960+1965	1950+1970+1975	1960+1980+1985

WCDMA/LTE (MM) B25 (1930 MHz – 1995 MHz)

Configuration	RAT	No. of Carriers	Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		
				BRFBW	MRFBW	TRFBW
O	W + L	2	5 + 3	1932.4+1973.5	1942.6+1983.5	1952.6+1993.5
P	3W+2L	5	5 + 5 + 5+3+3	1932.4+1937.4+1942.4+1970.5+1973.5	1942.6+1947.6+1952.6+1980.5+1983.5	1952.6+1957.6+1962.6+1990.5+1993.5

1.4 DECLARATION OF BUILD STATUS

MANUFACTURING DESCRIPTION	Radio Unit																								
MANUFACTURER	Ericsson AB																								
TYPE	Radio 2203 B2 B25																								
PART NUMBER	KRC 161 4891																								
SERIAL NUMBER	C824522332																								
HARDWARE VERSION	R10																								
SOFTWARE VERSION	CXP 901 T316/2, R62EU																								
TRANSMITTER FREQUENCY OPERATING RANGE (MHz)	B2, TX DL: 1930-1990 MHz B25, TX DL: 1930-1995 MHz																								
RECEIVER FREQUENCY OPERATING RANGE (MHz)	B2, RX UL: 1850-1910 MHz B25, RX UL: 1850-1915 MHz																								
COUNTRY OF ORIGIN	Sweden																								
INTERMEDIATE FREQUENCIES	—																								
EMISSION DESIGNATOR(S): (i.e. G1Q GX'A)	See below																								
MODULATION TYPES: (i.e. phase mod, amplitude mod or comb thereof...)	Combination of phase and amplitude modulation																								
HIGHEST INTERNALLY GENERATED FREQUENCY	Carrier frequency 1995 MHz CPRI 9.8 Gbps																								
OUTPUT POWER (W or dBm)	2 ports, total 5 W (37 dBm) per port, SR L max 3 carriers (3x32.2 dBm) per port, SR W max 4 carriers (4x31 dBm) per port, MR (L+W) max 5 carriers (5x30 dBm) per port																								
FCC ID	See below																								
INDUSTRY CANADA ID	See below																								
TECHNICAL DESCRIPTION (a brief description of the intended use and operation)	See below																								
BATTERY/POWER SUPPLY																									
MANUFACTURING DESCRIPTION																									
MANUFACTURER																									
TYPE																									
PART NUMBER																									
VOLTAGE	230 VAC or 48 VDC but supply voltage to radio module is constant																								
COUNTRY OF ORIGIN																									
MODULES (if applicable)																									
MANUFACTURING DESCRIPTION	Radio Unit																								
MANUFACTURER	Ericsson AB																								
TYPE	Radio 2203 B2 B25																								
POWER	36 VDC																								
FCC ID	TABAKRC161489-1																								
COUNTRY OF ORIGIN	Sweden																								
INDUSTRY CANADA ID	287 AB-AS1614891																								
EMISSION DESIGNATOR(S)	<table border="0"> <tr> <td>FCC</td> <td></td> <td>ISSED</td> </tr> <tr> <td>LTE:</td> <td></td> <td>LTE:</td> </tr> <tr> <td>1.4 MHz 1M10WTD</td> <td>5MHz 5M00F9W</td> <td>1.4MHz 1M10WTD</td> </tr> <tr> <td>3MHz 3M00WTD</td> <td></td> <td>3MHz 2M69WTD</td> </tr> <tr> <td>5MHz 5M00WTD</td> <td></td> <td>5MHz 4M48WTD</td> </tr> <tr> <td>10MHz 10M00WTD</td> <td></td> <td>10MHz 8M96WTD</td> </tr> <tr> <td>15MHz 15M00WTD</td> <td></td> <td>15MHz 13M4WTD</td> </tr> <tr> <td>20MHz 20M00WTD</td> <td></td> <td>20MHz 17M9WTD</td> </tr> </table>	FCC		ISSED	LTE:		LTE:	1.4 MHz 1M10WTD	5MHz 5M00F9W	1.4MHz 1M10WTD	3MHz 3M00WTD		3MHz 2M69WTD	5MHz 5M00WTD		5MHz 4M48WTD	10MHz 10M00WTD		10MHz 8M96WTD	15MHz 15M00WTD		15MHz 13M4WTD	20MHz 20M00WTD		20MHz 17M9WTD
FCC		ISSED																							
LTE:		LTE:																							
1.4 MHz 1M10WTD	5MHz 5M00F9W	1.4MHz 1M10WTD																							
3MHz 3M00WTD		3MHz 2M69WTD																							
5MHz 5M00WTD		5MHz 4M48WTD																							
10MHz 10M00WTD		10MHz 8M96WTD																							
15MHz 15M00WTD		15MHz 13M4WTD																							
20MHz 20M00WTD		20MHz 17M9WTD																							
DHS S/FHS S/COMBINED OR OTHER																									
ANCILLARIES (if applicable)																									
MANUFACTURING DESCRIPTION																									
MANUFACTURER																									
TYPE																									
PART NUMBER																									
SERIAL NUMBER																									
COUNTRY OF ORIGIN																									

Signature Lars wallin Date 2016-06-22



No responsibility will be accepted by TÜV SÜD Product Service as to the accuracy of the information declared in this document by the manufacturer.



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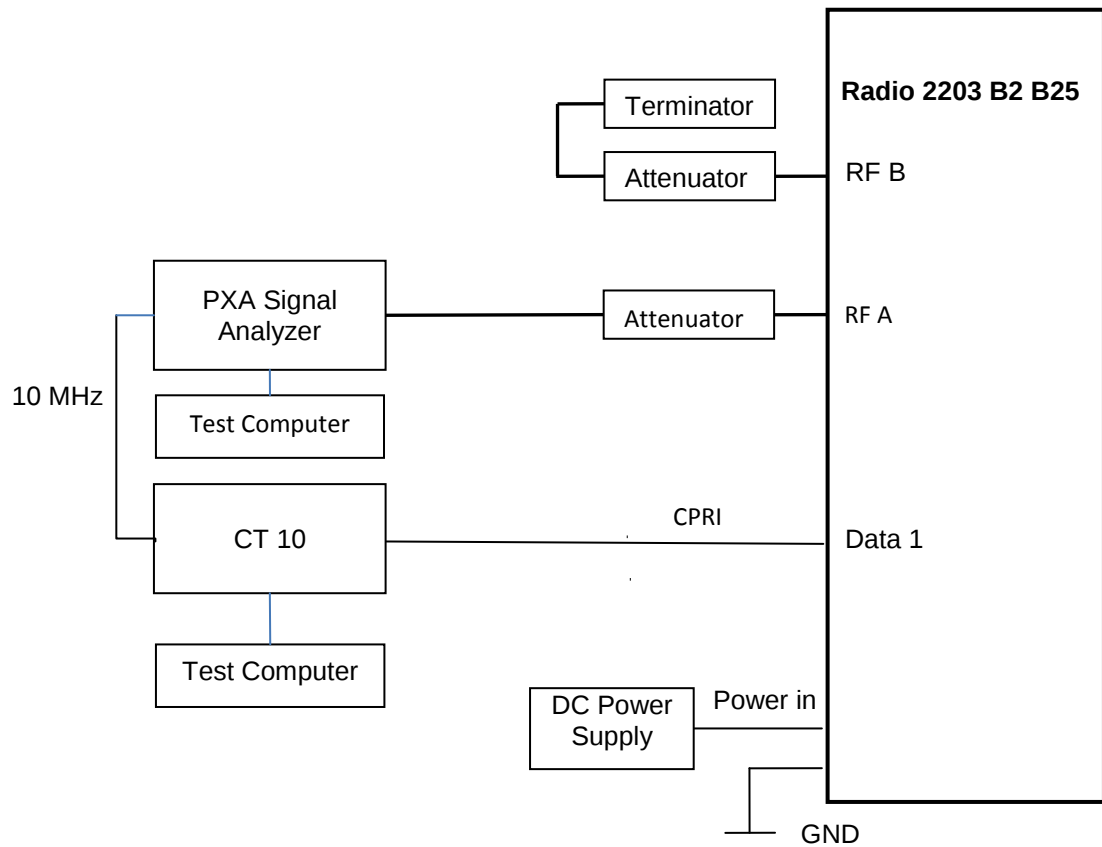
1.5 PRODUCT INFORMATION

1.5.1 Technical Description

The Equipment Under Test (EUT) Radio 2203 - KRC 161 489/1 is an Ericsson AB Radio Unit working in the the Personal Communication Services (PCS) which provides communication connections to (Band) network. The Radio 2203 - KRC 161 489/1 radio module operates from 36 VDC via -48 VDC supply or 230 VAC supply.

A full technical description of the Equipment Under Test (EUT) can be found in the Manufacturer's documentation.

1.6 TEST SETUP



Block diagram of Radio 2203 B2 B25 with cables and auxiliary equipment

1.7 TEST CONDITIONS

For all tests the EUT was set up in accordance with the relevant test standard and to represent typical operating conditions. Tests were applied with the EUT situated in a shielded enclosure, test laboratories or a chamber as appropriate.

The EUT was powered from 230 VAC Supply.

1.8 DEVIATION FROM THE STANDARD

No deviations from the applicable test standards or test plan were made during testing.

1.9 MODIFICATION RECORD

No modifications were made to the EUT during testing.

1.10 ALTERNATIVE TEST SITE

Under our group UKAS Accreditation, TÜV SÜD Product Service conducted the tests at Ericsson in Kista, Sweden.

1.11 ADDITIONAL INFORMATION

Testing was performed at Ericsson in Kista, Sweden in the presence of Mr Björn Utermöhl and Lars Wallin of Ericsson AB.

Measurements were performed in accordance with FCC KDB 971168.



Product Service

SECTION 2

TEST DETAILS

2.1 MAXIMUM PEAK OUTPUT POWER AND PEAK TO AVERAGE RATIO - CONDUCTED

2.1.1 Specification Reference

FCC CFR 47 Part 2, Clause 2.1046
FCC CFR 47 Part 24, Clause 24.232 (a)
Industry Canada RSS-133, Clause 6.4

2.1.2 Date of Test and Modification State

23, 26 and 27 May 2016 - Modification State 0

2.1.3 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.1.4 Environmental Conditions

Ambient Temperature 22.6 - 23.8°C
Relative Humidity 33.7 - 37.3%

2.1.5 Test Method

All measurements were made in accordance with FCC KDB 971168 D01 and summed in accordance with FCC KDB 662911 D01.

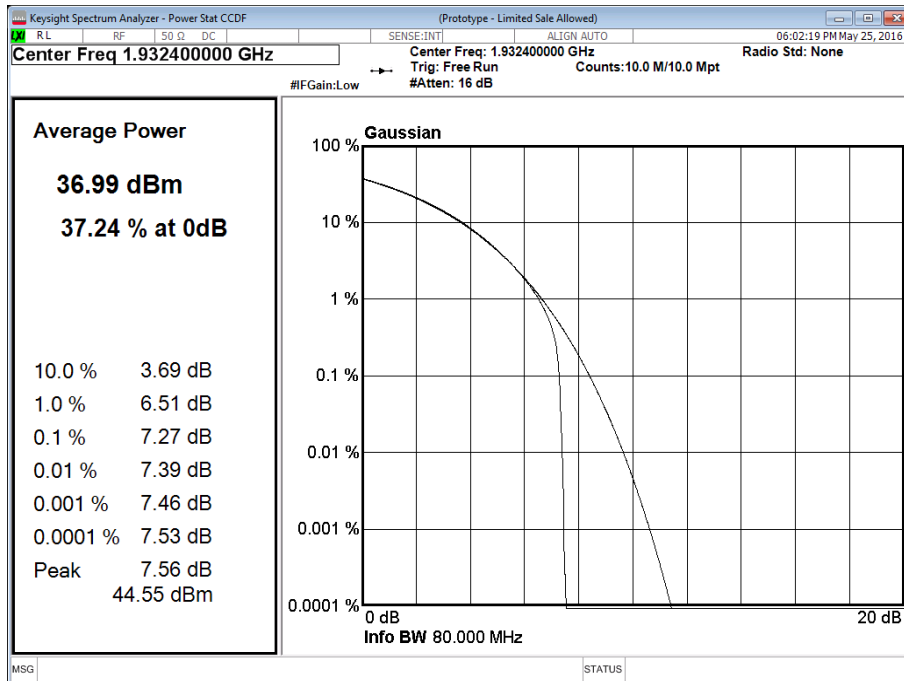
2.1.6 Test Results

Configuration A

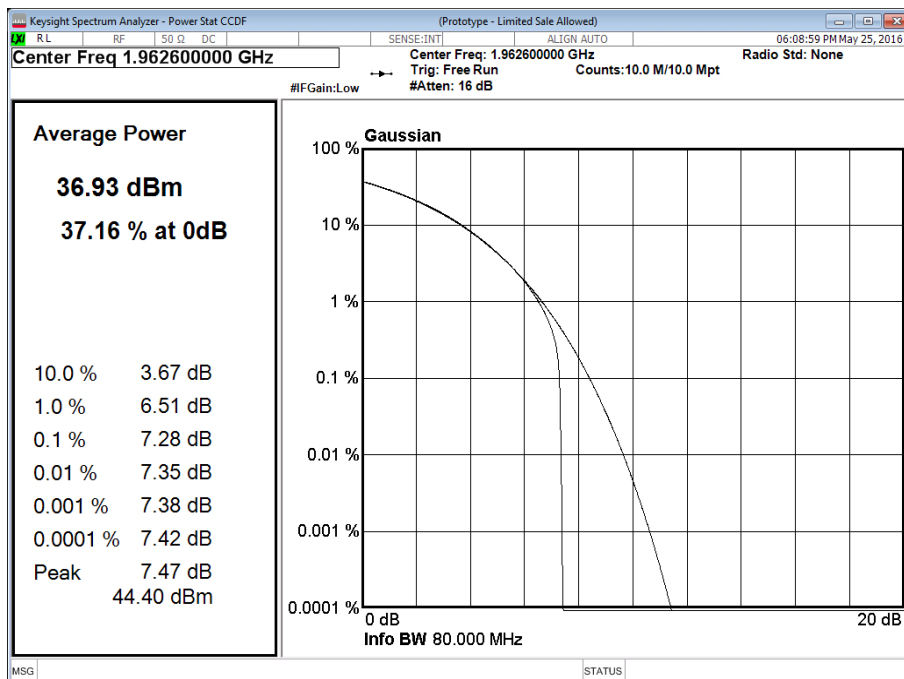
Maximum Output Power 37 dBm

Modulation	A	Antenna	Peak to Average Ratio (PAR) / Output Power								
			Channel Position B			Channel Position M			Channel Position T		
			PAR (dB)	Average Power		PAR (dB)	Average Power		PAR (dB)	Average Power	
				dBm	dBm/MHz		dBm	dBm/MHz		dBm	dBm/MHz
16QAM	5.0	A	7.27	37.04	31.74	7.28	36.94	31.68	7.27	37.08	31.83
	5.0	B	7.27	36.94	31.67	7.28	36.89	31.64	7.27	36.97	31.73
Total			-	40.00	34.72	-	39.93	34.67	-	40.04	34.79

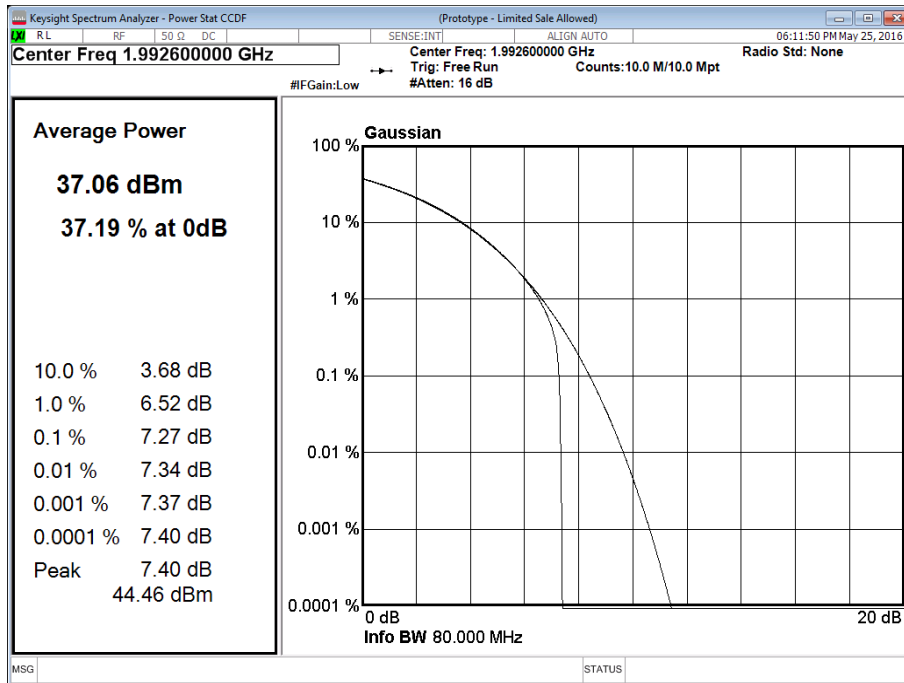
Channel Position B - Bandwidth 5.0 MHz - Antenna A



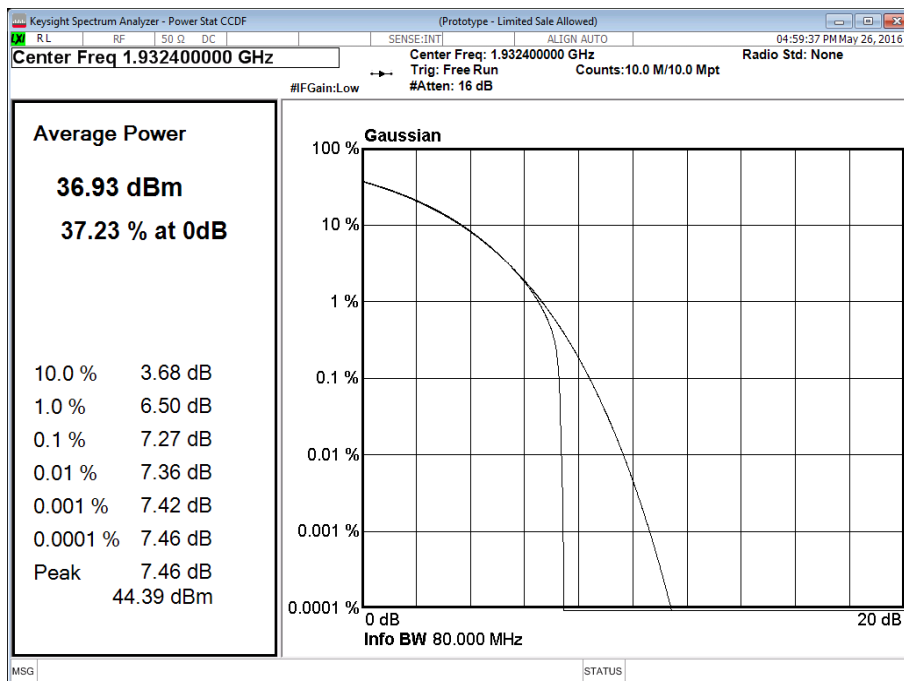
Channel Position M - Bandwidth 5.0 MHz - Antenna A



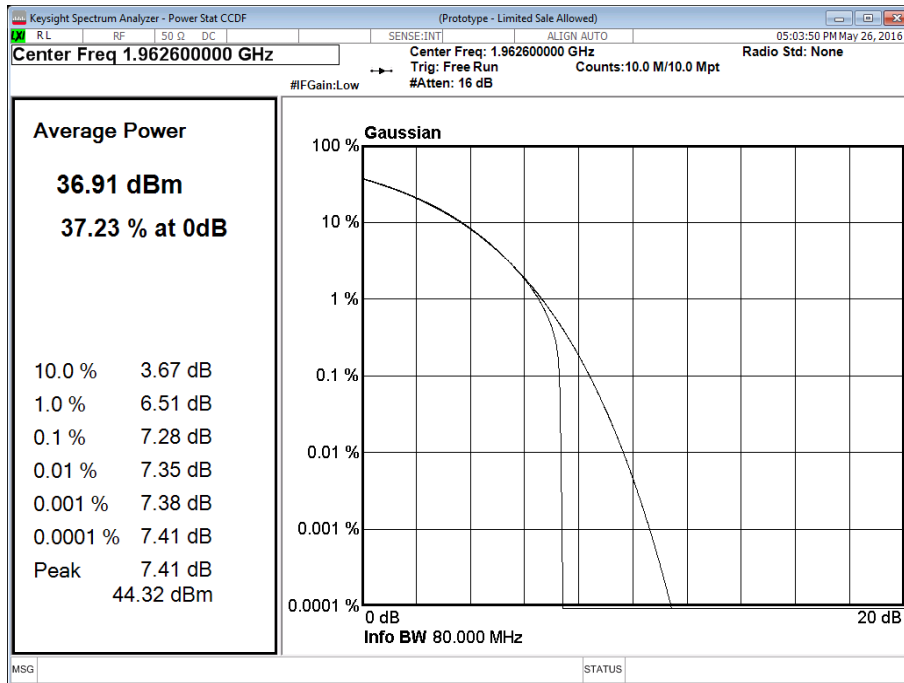
Channel Position T - Bandwidth 5.0 MHz - Antenna A



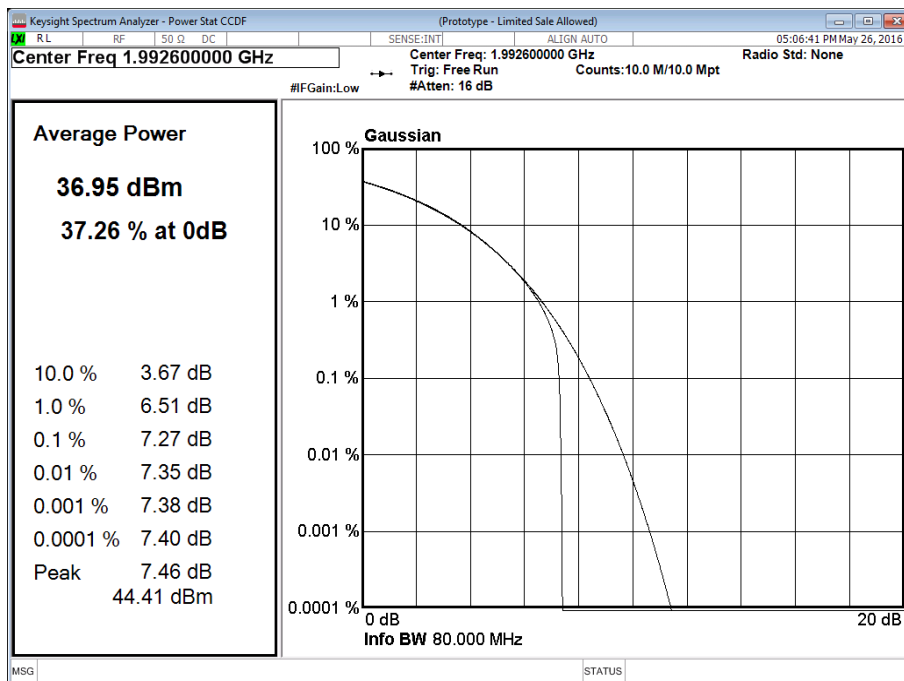
Channel Position B - Bandwidth 5.0 MHz - Antenna B



Channel Position M - Bandwidth 5.0 MHz - Antenna B



Channel Position T - Bandwidth 5.0 MHz - Antenna B



Configuration B

Maximum Output Power 37 dBm

Modulation	Modulation	Antenna	Peak to Average Ratio (PAR) / Output Power								
			Channel Position B			Channel Position M			Channel Position T		
			PAR (dB)	Average Power		PAR (dB)	Average Power		PAR (dB)	Average Power	
				dBm	dBm/MHz		dBm	dBm/MHz		dBm	dBm/MHz
16QAM	16QAM	A	-	36.68	28.78	-	36.80	28.89	-	36.77	28.70
	16QAM	B	-	36.68	28.93	-	36.78	28.63	-	36.74	28.76
Total			-	39.69	31.87	-	39.80	31.77	-	39.77	31.74

Configuration C

Maximum Output Power 37 dBm

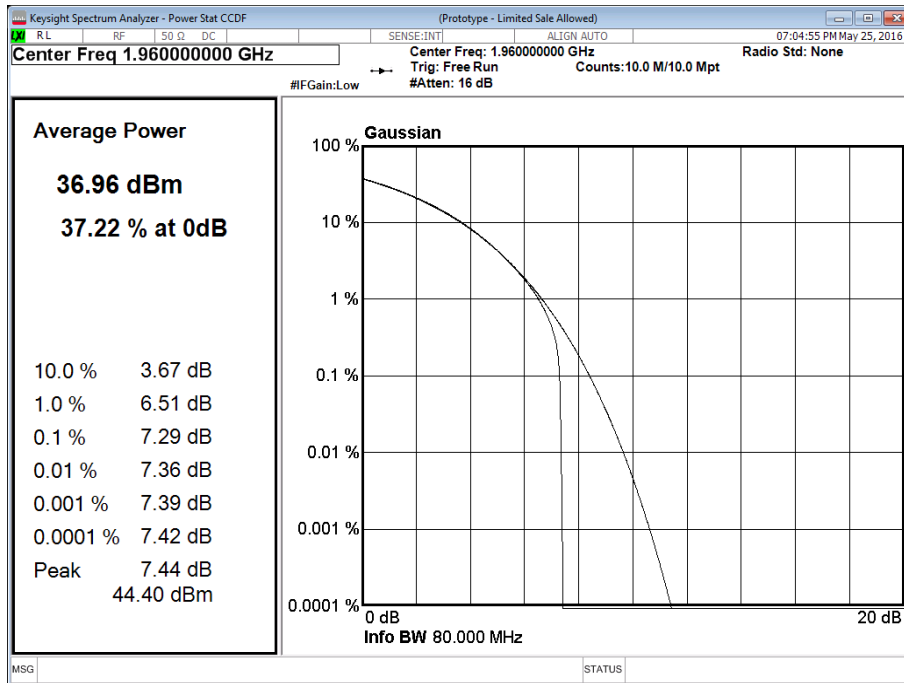
Modulation	Carrier Bandwidth (MHz)	Antenna	Peak to Average Ratio (PAR) / Output Power								
			Channel Position B			Channel Position M			Channel Position T		
			PAR (dB)	Average Power		PAR (dB)	Average Power		PAR (dB)	Average Power	
				dBm	dBm/MHz		dBm	dBm/MHz		dBm	dBm/MHz
16QAM	5.0	A	-	36.79	25.84	-	36.84	25.78	-	36.86	25.83
	5.0	B	-	36.77	25.76	-	36.84	25.72	-	36.77	25.77
Total			-	39.79	28.81	-	39.85	28.76	-	39.83	28.81

Configuration I

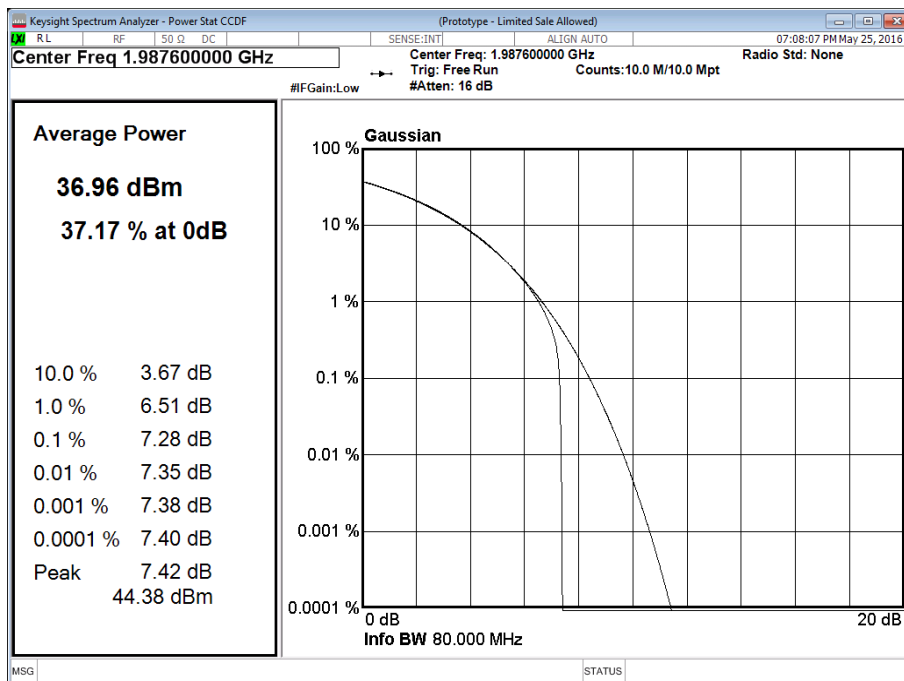
Maximum Output Power 37 dBm

Modulation	Carrier Bandwidth (MHz)	Antenna	Peak to Average Ratio (PAR) / Output Power					
			Channel Position M			Channel Position T		
			PAR (dB)	Average Power		PAR (dB)	Average Power	
				dBm	dBm/MHz		dBm	dBm/MHz
16QAM	5.0	A	7.29	36.98	31.72	7.28	37.01	31.68
	5.0	B	7.27	36.95	31.71	7.29	36.86	31.60
Total			-	39.98	34.73	-	39.95	34.65

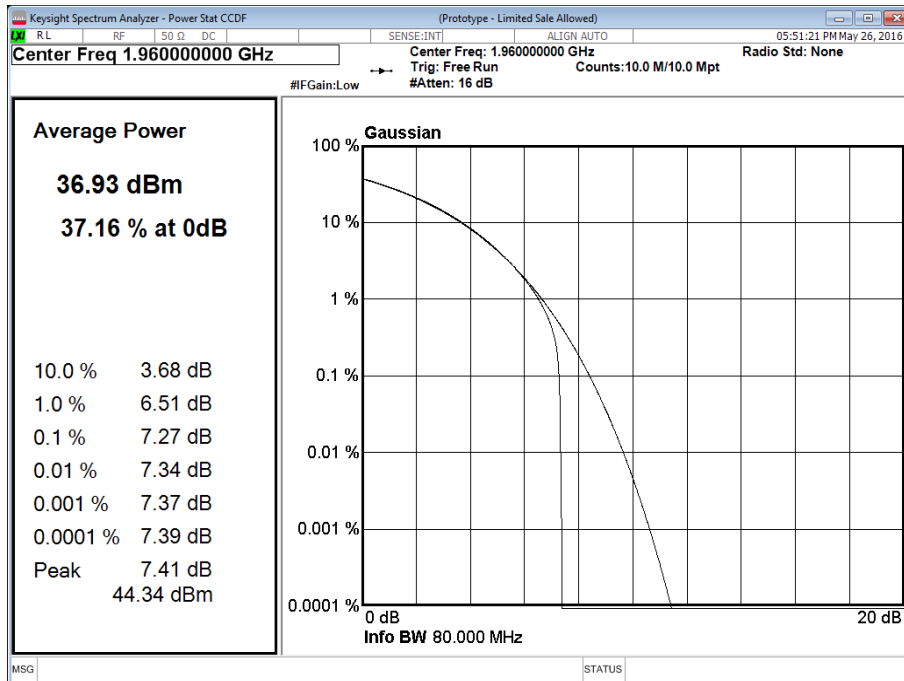
Channel Position M - Bandwidth 5.0 MHz - Antenna A



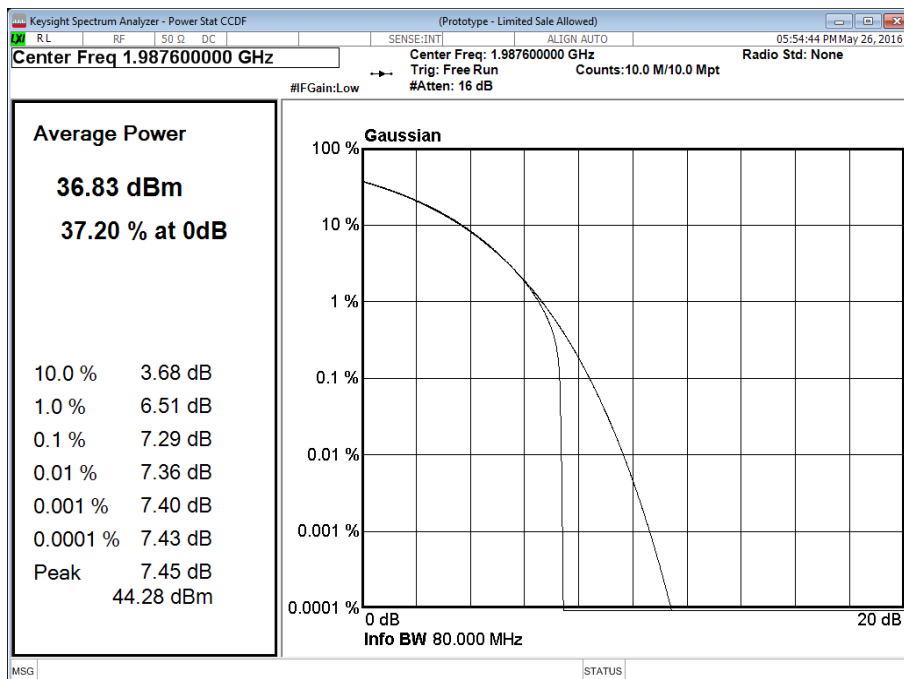
Channel Position T - Bandwidth 5.0 MHz - Antenna A



Channel Position M - Bandwidth 5.0 MHz - Antenna B



Channel Position T - Bandwidth 5.0 MHz - Antenna B



Configuration J

Maximum Output Power 37 dBm

Modulation	Modulation	Antenna	Peak to Average Ratio (PAR) / Output Power					
			Channel Position M			Channel Position T		
			PAR (dB)	Average Power		PAR (dB)	Average Power	
				dBm	dBm/MHz		dBm	dBm/MHz
16QAM	16QAM	A	-	36.82	28.62	-	36.85	28.72
	16QAM	B	-	36.83	28.65	-	36.81	28.70
Total			-	39.84	31.65	-	39.84	31.72

Configuration K

Maximum Output Power 37 dBm

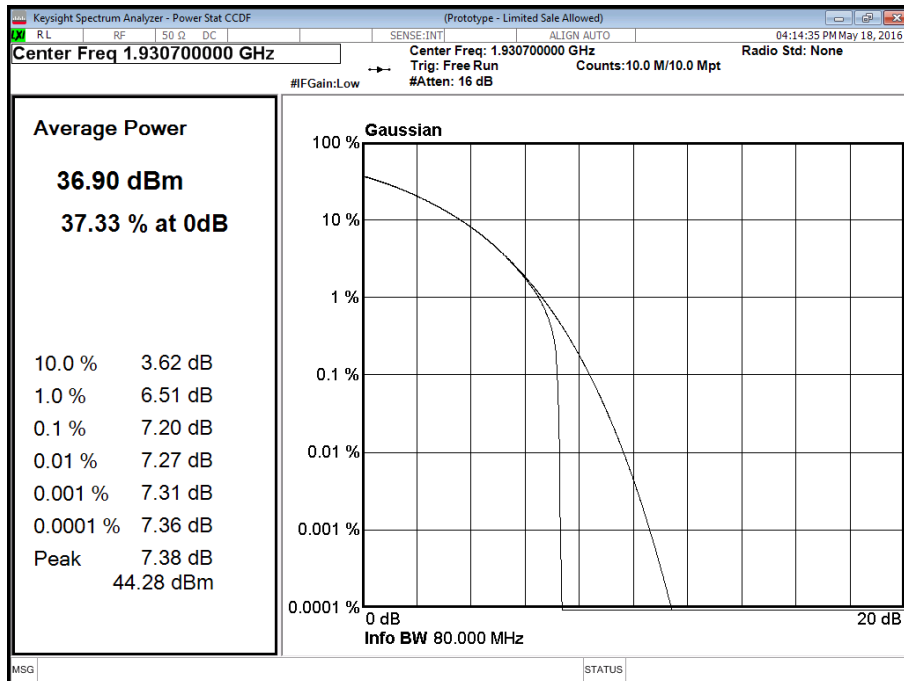
Modulation	Carrier Bandwidth (MHz)	Antenna	Peak to Average Ratio (PAR) / Output Power					
			Channel Position M			Channel Position T		
			PAR (dB)	Average Power		PAR (dB)	Average Power	
				dBm	dBm/MHz		dBm	dBm/MHz
16QAM	5.0	A	-	36.84	25.81	-	36.89	25.67
	5.0	B	-	36.83	25.75	-	36.91	25.80
Total			-	39.85	28.79	-	39.91	28.75

Configuration D

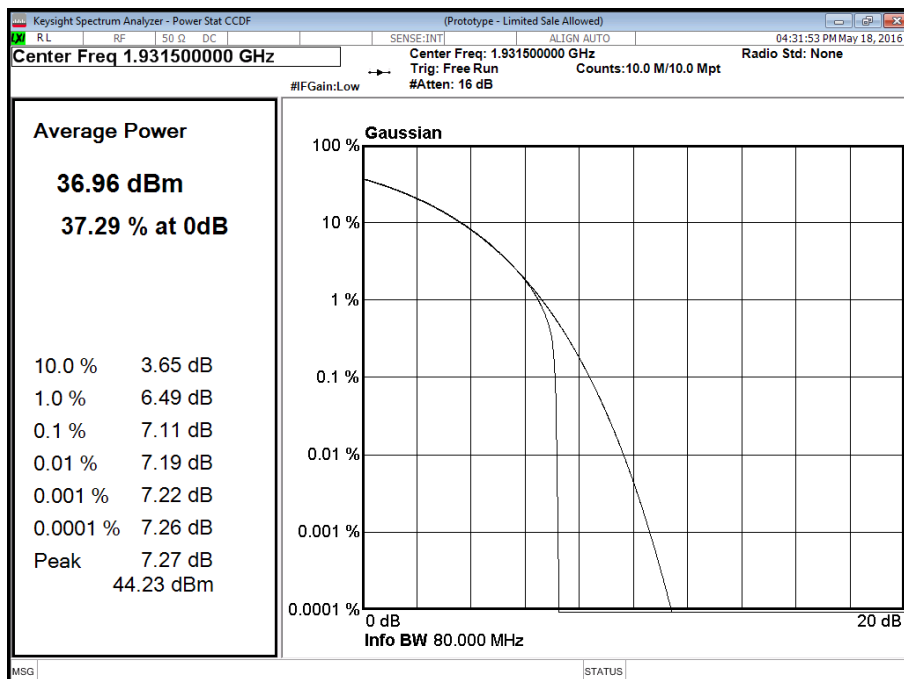
Maximum Output Power 37 dBm

Modulation	Carrier Bandwidth (MHz)	Antenna	Peak to Average Ratio (PAR) / Output Power								
			Channel Position B			Channel Position M			Channel Position T		
			PAR (dB)	Average Power		PAR (dB)	Average Power		PAR (dB)	Average Power	
				dBm	dBm/MHz		dBm	dBm/MHz		dBm	dBm/MHz
QPSK	1.4	A	7.20	36.94	36.23	7.21	36.88	36.42	7.21	37.06	36.57
	1.4	B	7.19	36.94	36.27	7.21	36.95	36.33	7.20	36.97	36.56
Total			-	39.95	39.26	-	39.93	39.39	-	40.03	39.58
QPSK	3.0	A	7.11	37.00	33.21	7.13	36.95	33.13	7.11	37.04	33.19
	3.0	B	7.12	36.95	33.14	7.12	36.94	33.22	7.12	36.97	33.16
Total			-	39.99	36.19	-	39.96	36.19	-	40.02	36.19
QPSK	5.0	A	7.10	36.99	31.07	7.11	36.92	30.89	7.09	37.04	31.06
	5.0	B	7.10	36.99	30.95	7.11	36.95	30.92	7.09	36.97	31.09
Total			-	40.00	34.02	-	39.95	33.92	-	40.02	34.09
QPSK	10.0	A	7.17	37.02	28.40	7.10	36.97	28.37	7.10	37.02	28.35
	10.0	B	7.15	37.01	28.32	7.10	36.98	28.16	7.10	36.98	28.28
Total			-	40.03	31.37	-	39.99	31.28	-	40.01	31.33
QPSK	15.0	A	7.22	36.97	26.60	7.10	36.97	26.52	7.12	36.97	26.52
	15.0	B	7.21	36.90	26.48	7.11	36.95	26.56	7.13	36.88	26.46
Total			-	39.95	29.55	-	39.97	29.55	-	39.94	29.50
QPSK	20.0	A	7.30	36.96	25.40	7.11	36.94	25.29	7.13	37.00	25.29
	20.0	B	7.27	36.90	25.23	7.11	36.95	25.19	7.13	36.87	25.36
Total			-	39.94	28.33	-	39.96	28.25	-	39.95	28.34

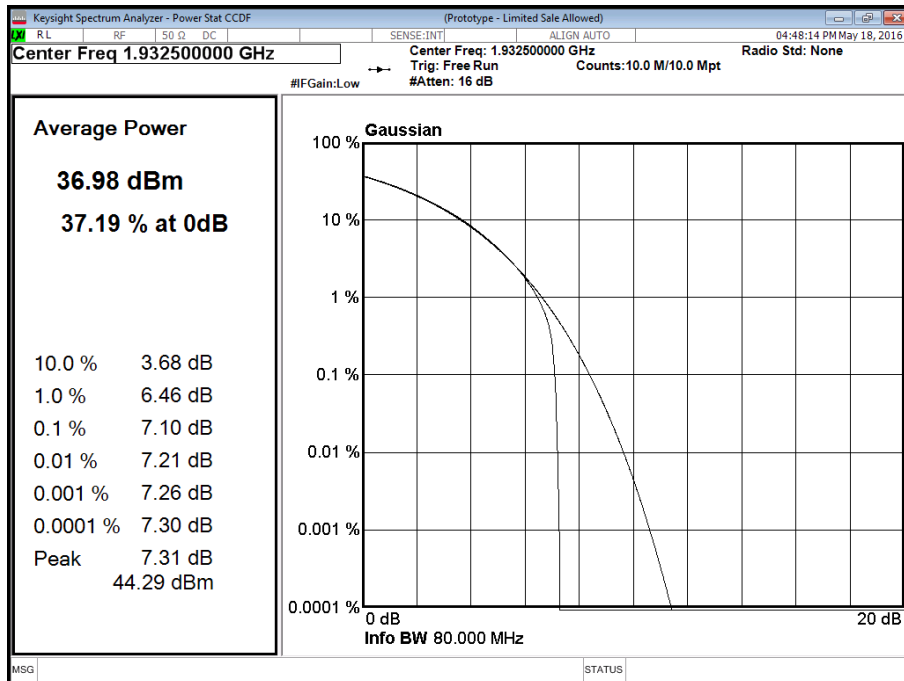
Channel Position B - Bandwidth 1.4 MHz - Antenna A



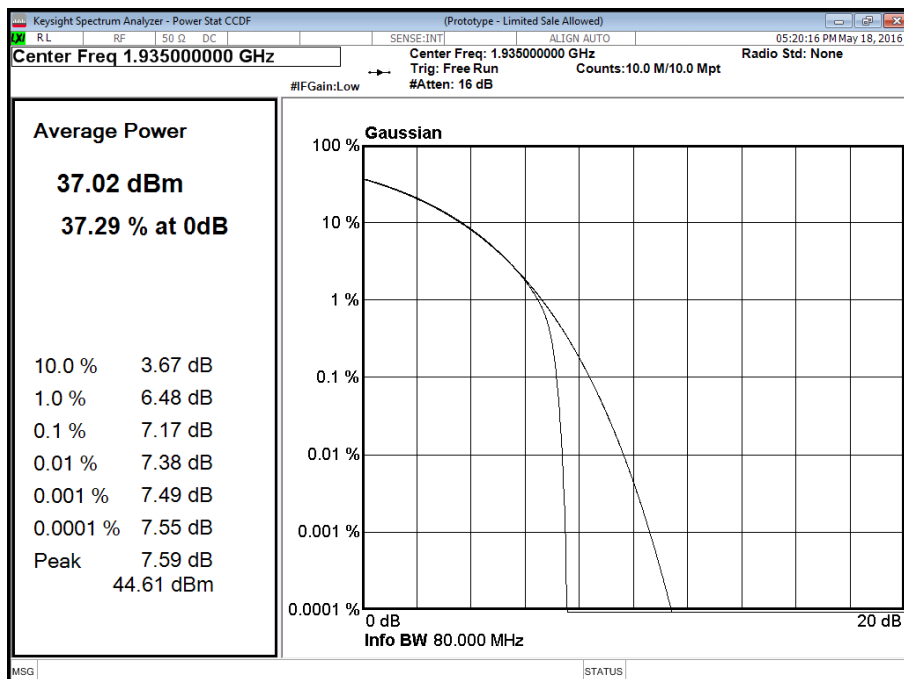
Channel Position B - Bandwidth 3.0 MHz - Antenna A



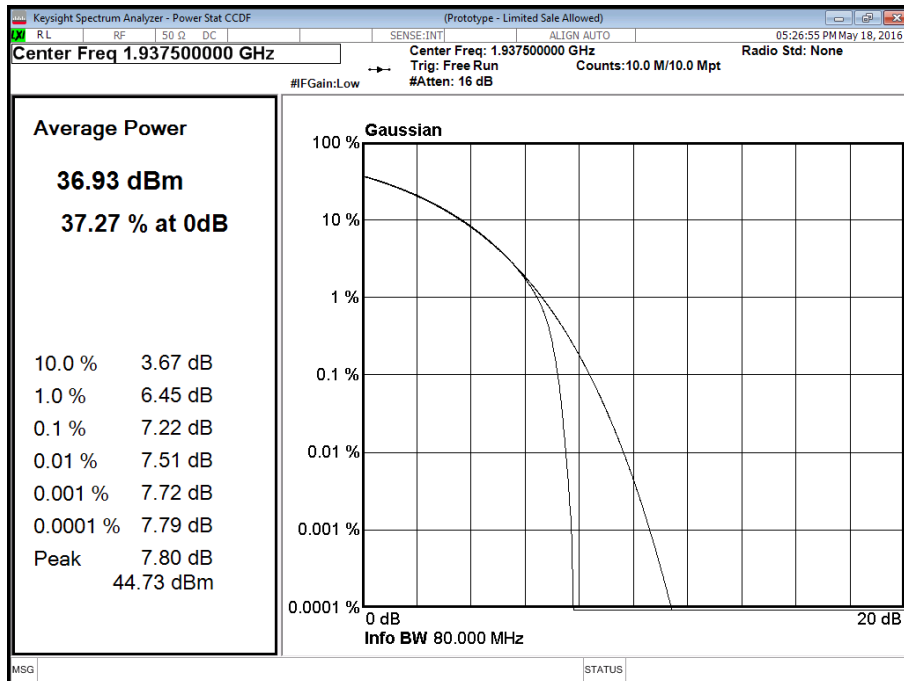
Channel Position B - Bandwidth 5.0 MHz - Antenna A



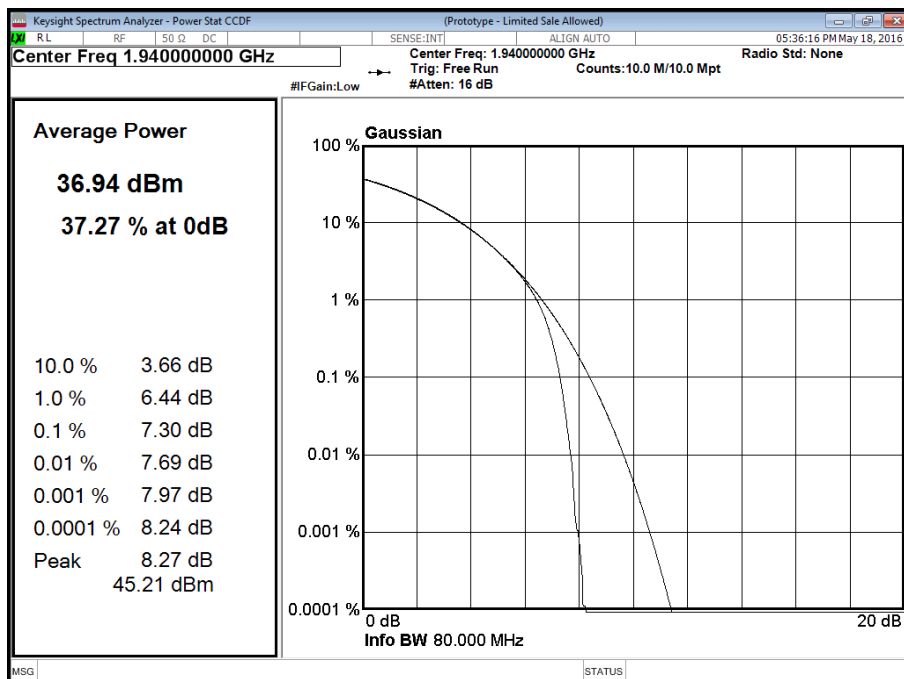
Channel Position B - Bandwidth 10.0 MHz - Antenna A



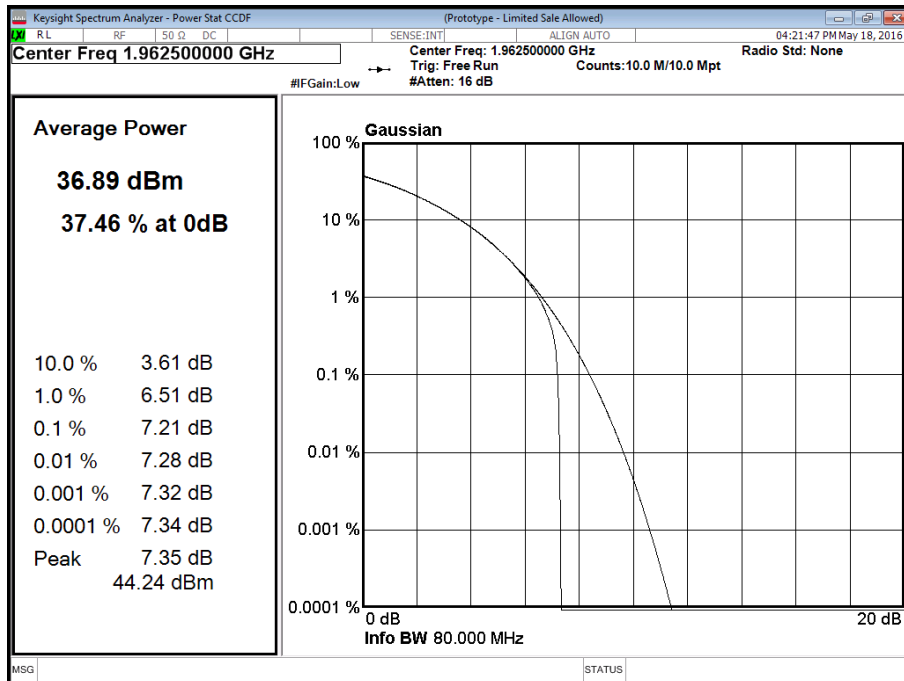
Channel Position B - Bandwidth 15.0 MHz - Antenna A



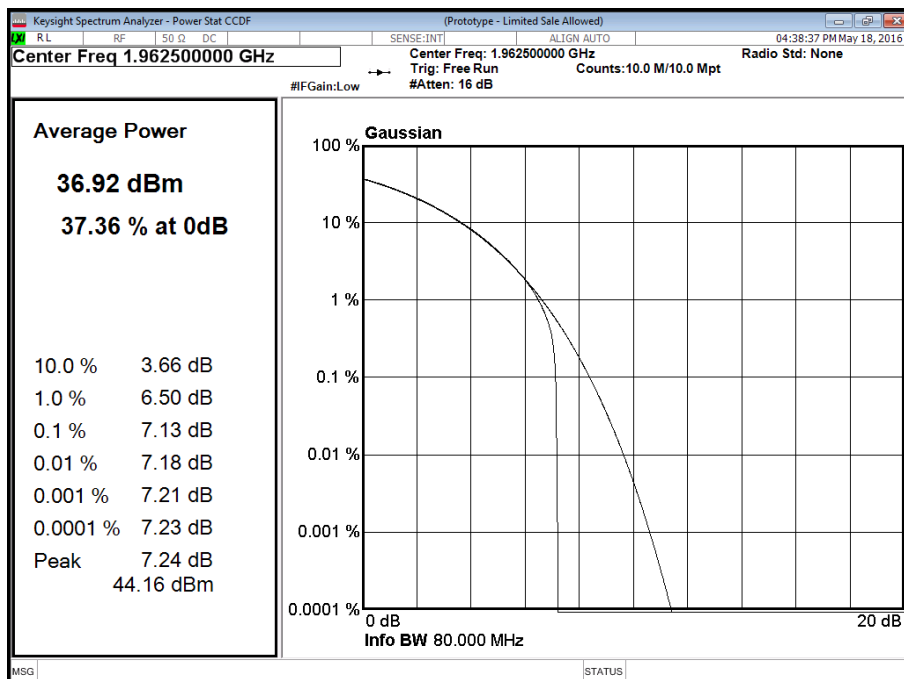
Channel Position B - Bandwidth 20.0 MHz - Antenna A



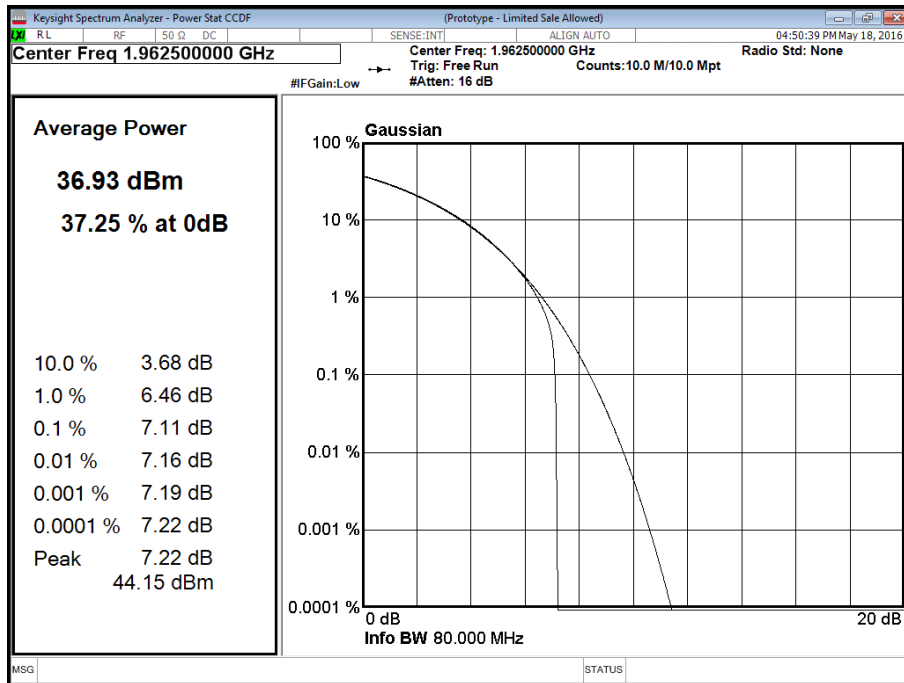
Channel Position M - Bandwidth 1.4 MHz - Antenna A



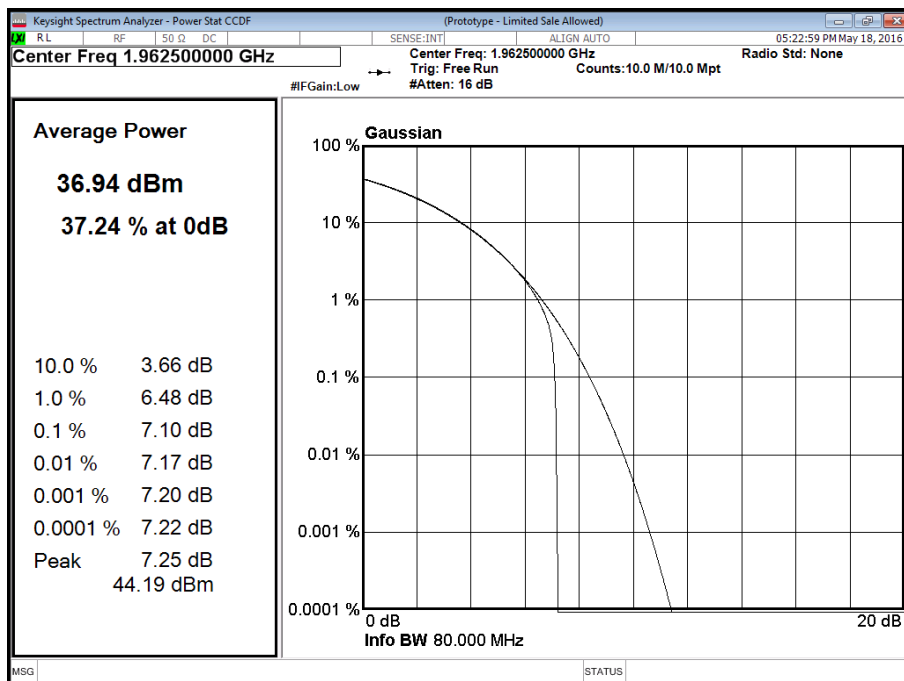
Channel Position M - Bandwidth 3.0 MHz - Antenna A



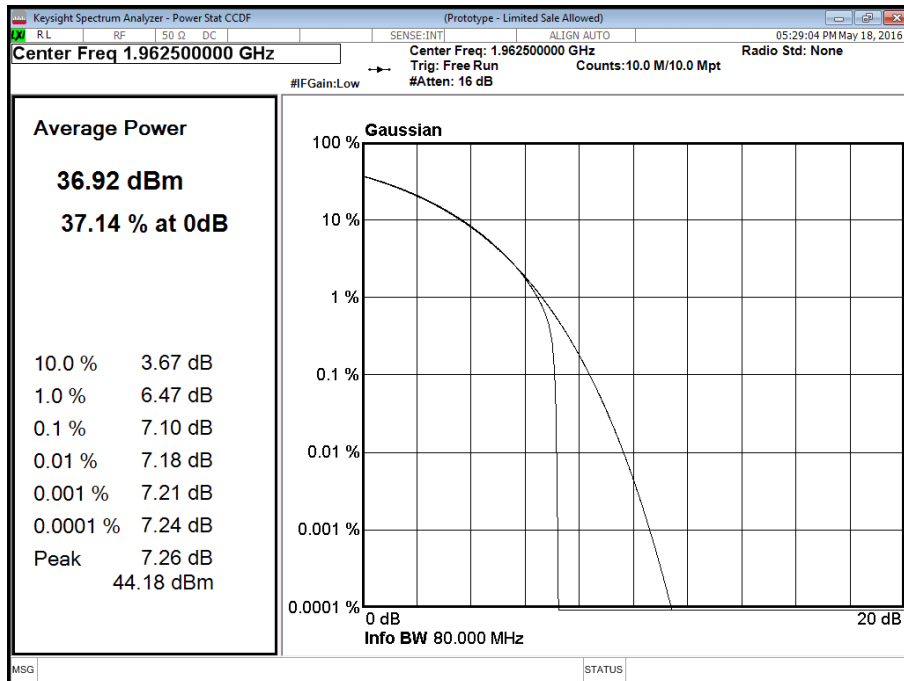
Channel Position M - Bandwidth 5.0 MHz - Antenna A



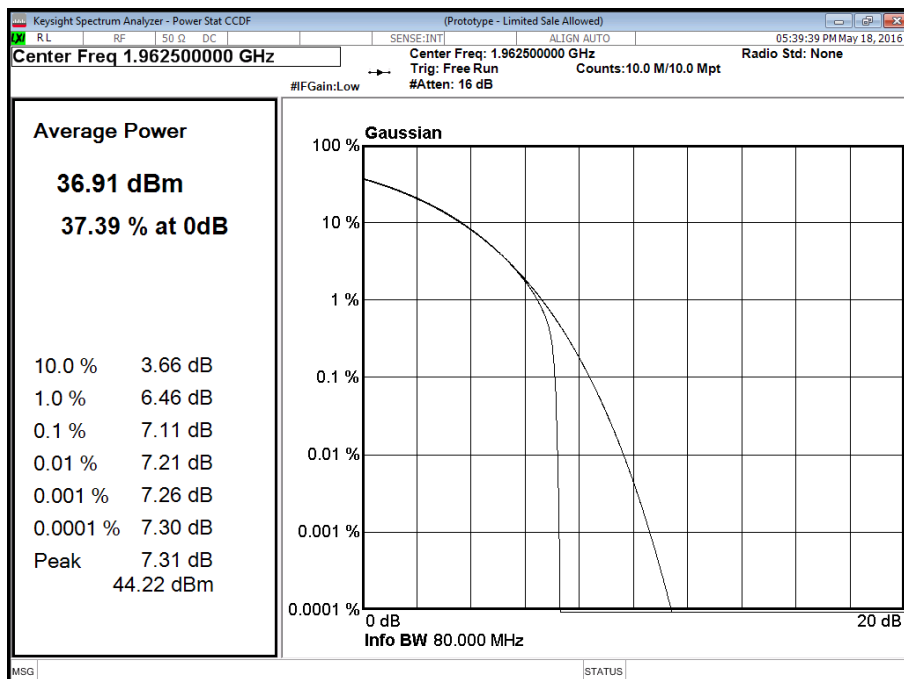
Channel Position M - Bandwidth 10.0 MHz - Antenna A



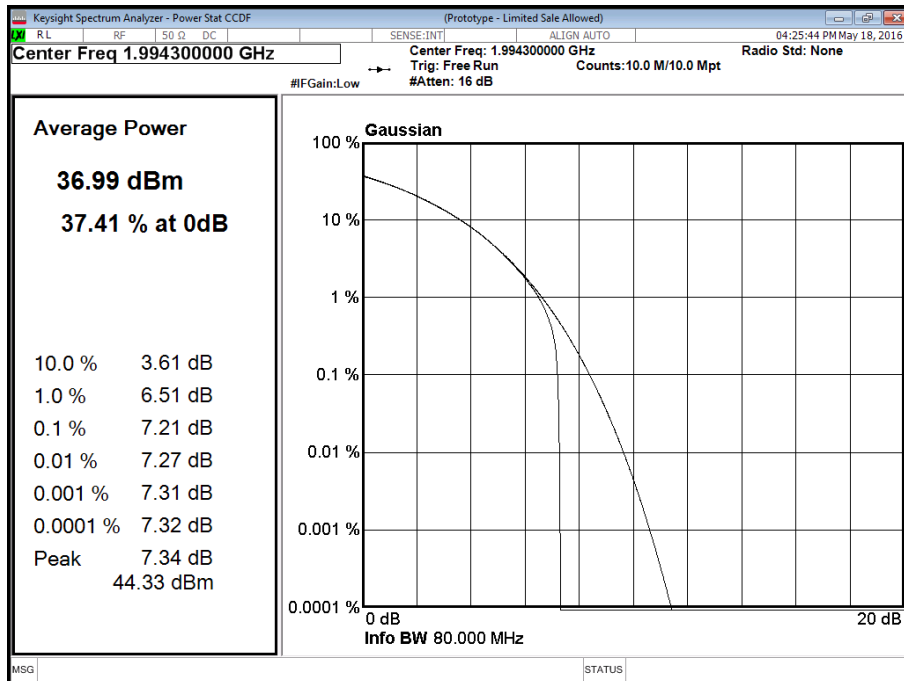
Channel Position M - Bandwidth 15.0 MHz - Antenna A



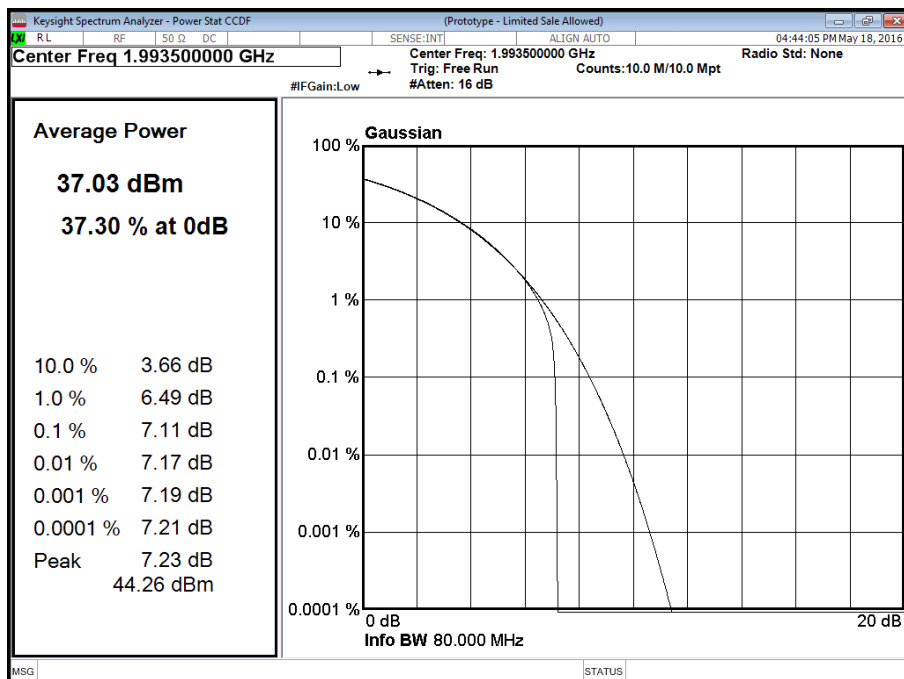
Channel Position M - Bandwidth 20.0 MHz - Antenna A



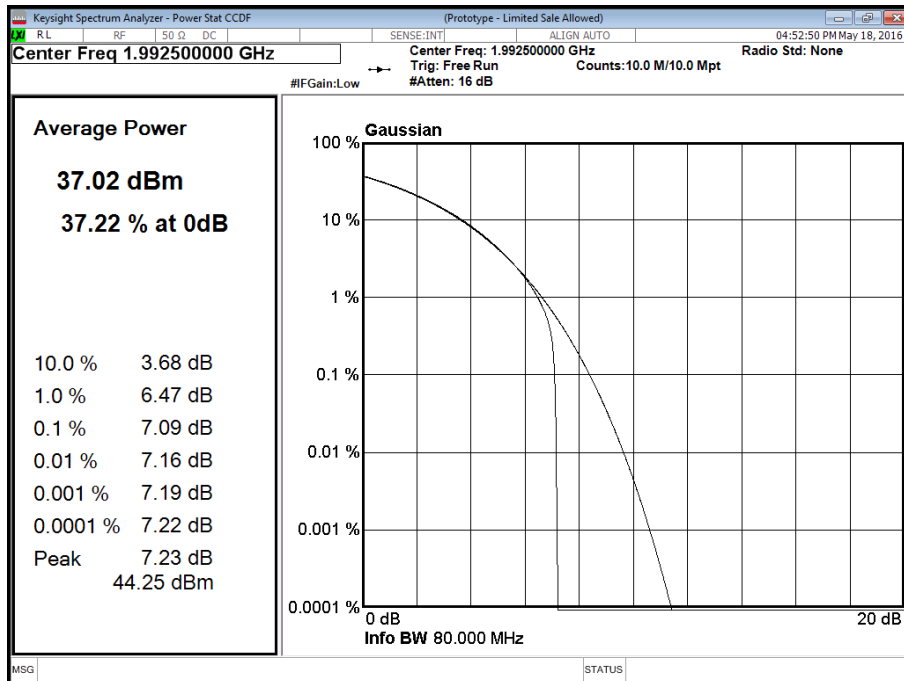
Channel Position T - Bandwidth 1.4 MHz - Antenna A



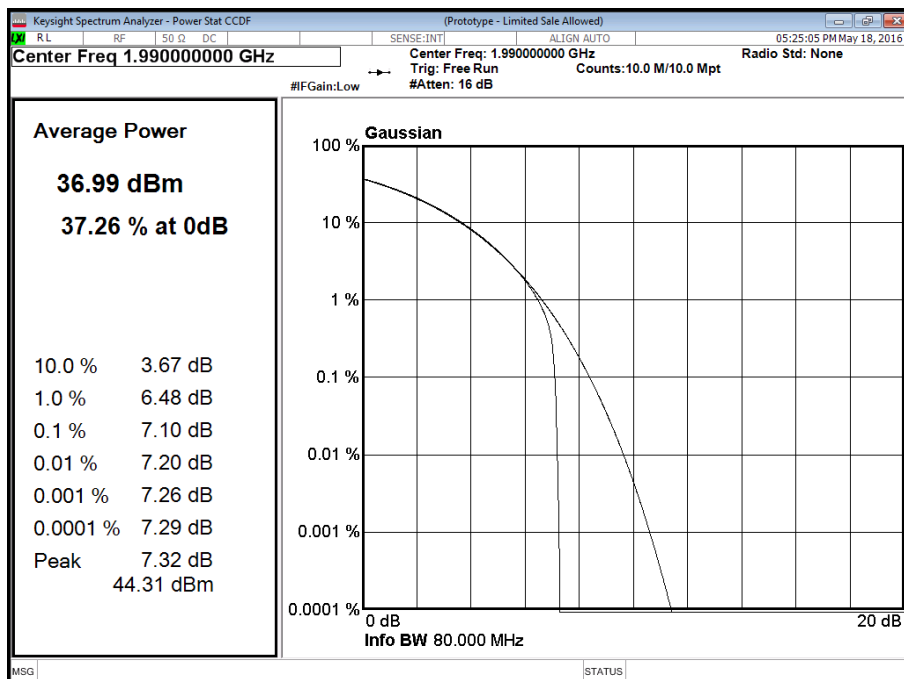
Channel Position T - Bandwidth 3.0 MHz - Antenna A



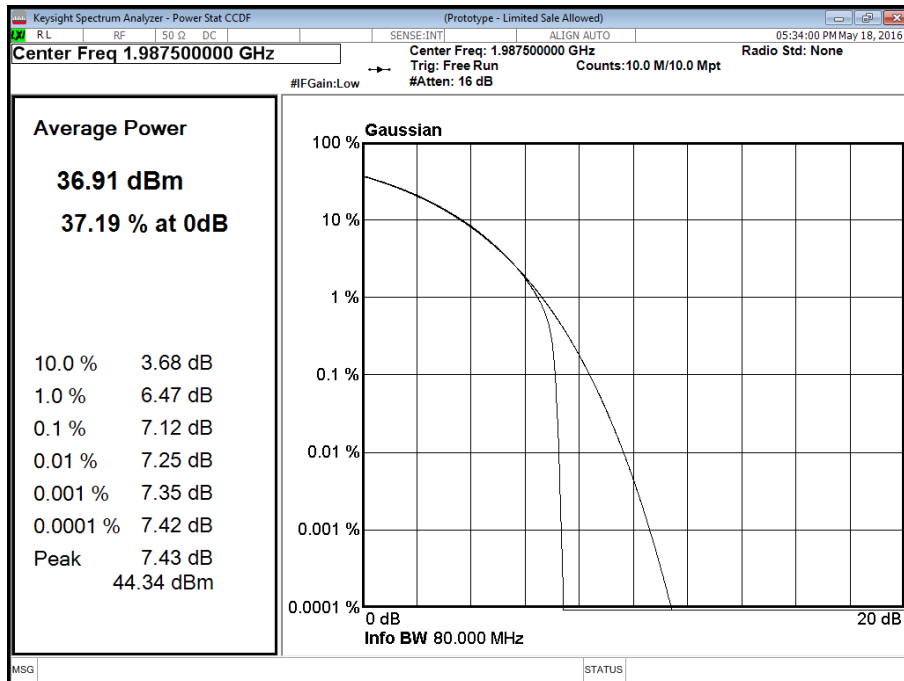
Channel Position T - Bandwidth 5.0 MHz - Antenna A



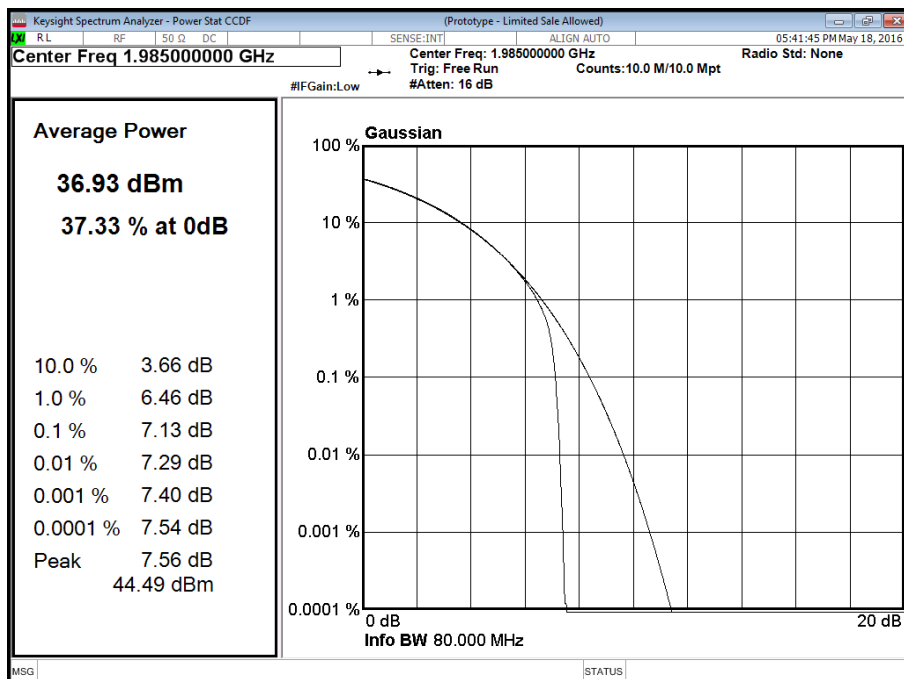
Channel Position T - Bandwidth 10.0 MHz - Antenna A



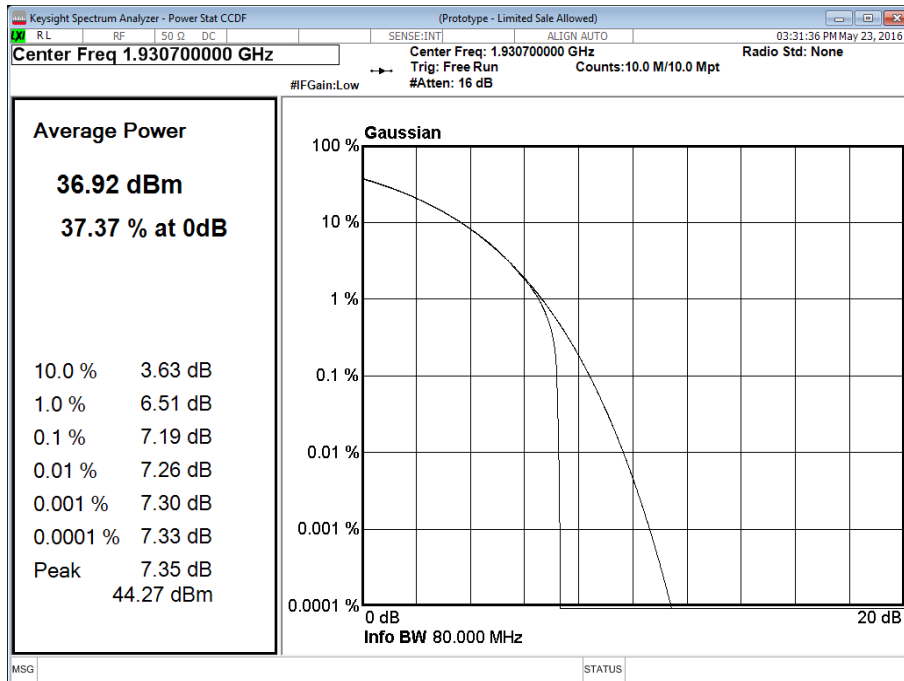
Channel Position T - Bandwidth 15.0 MHz - Antenna A



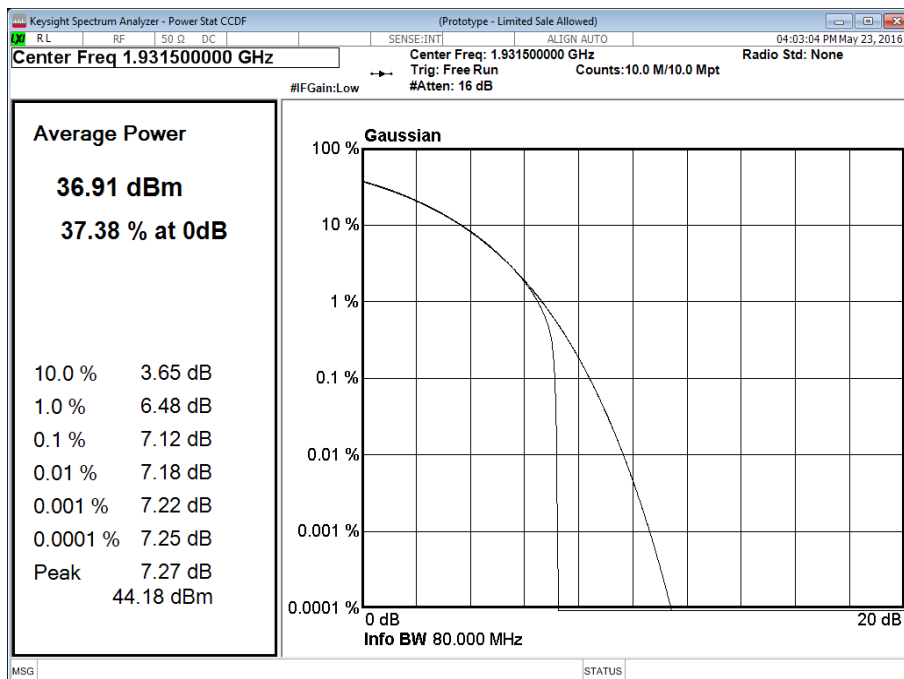
Channel Position T - Bandwidth 20.0 MHz - Antenna A



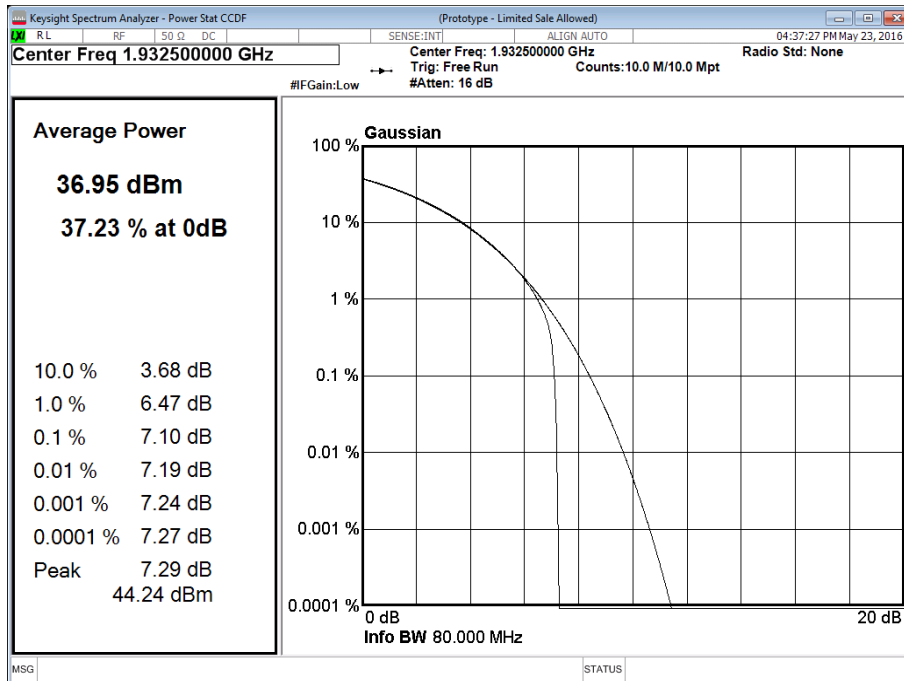
Channel Position B - Bandwidth 1.4 MHz - Antenna B



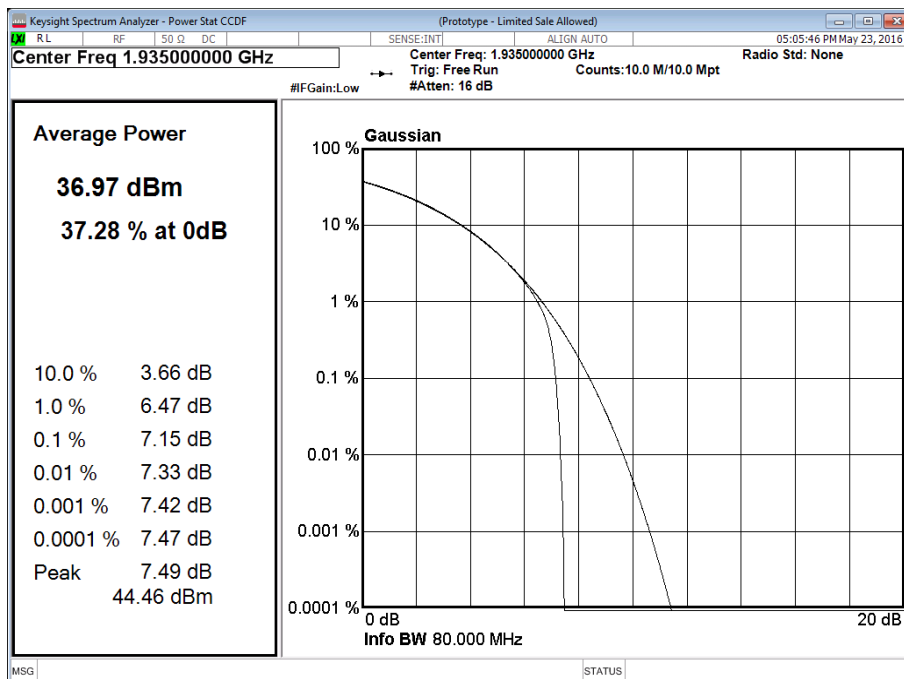
Channel Position B - Bandwidth 3.0 MHz - Antenna B



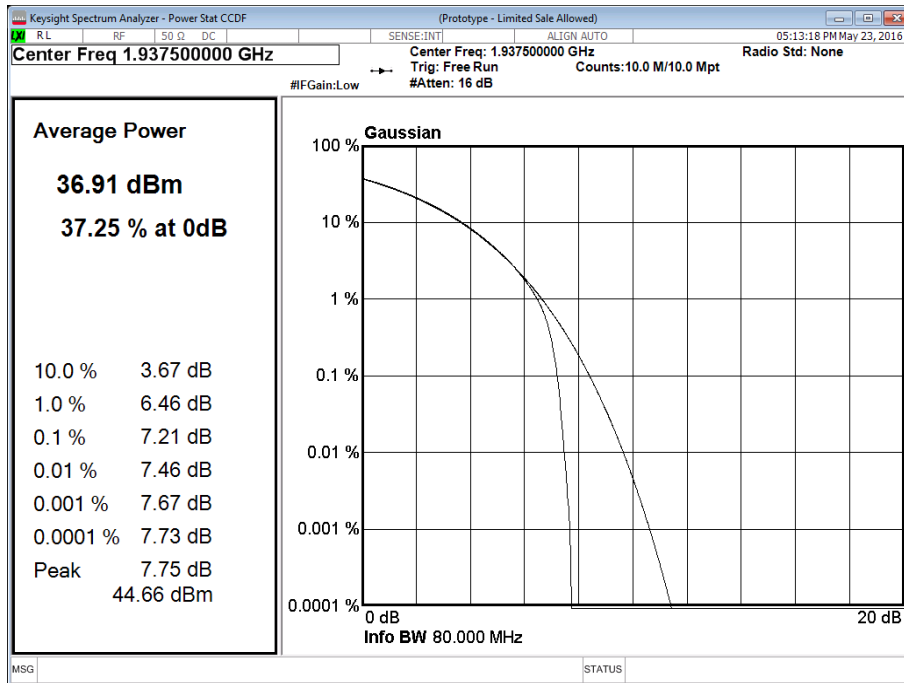
Channel Position B - Bandwidth 5.0 MHz - Antenna B



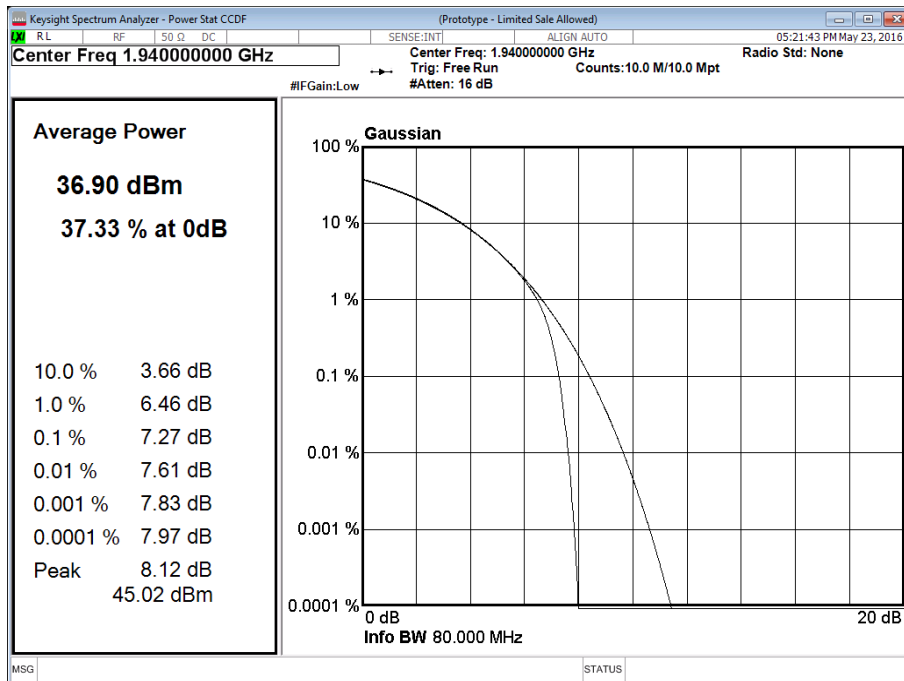
Channel Position B - Bandwidth 10.0 MHz - Antenna B



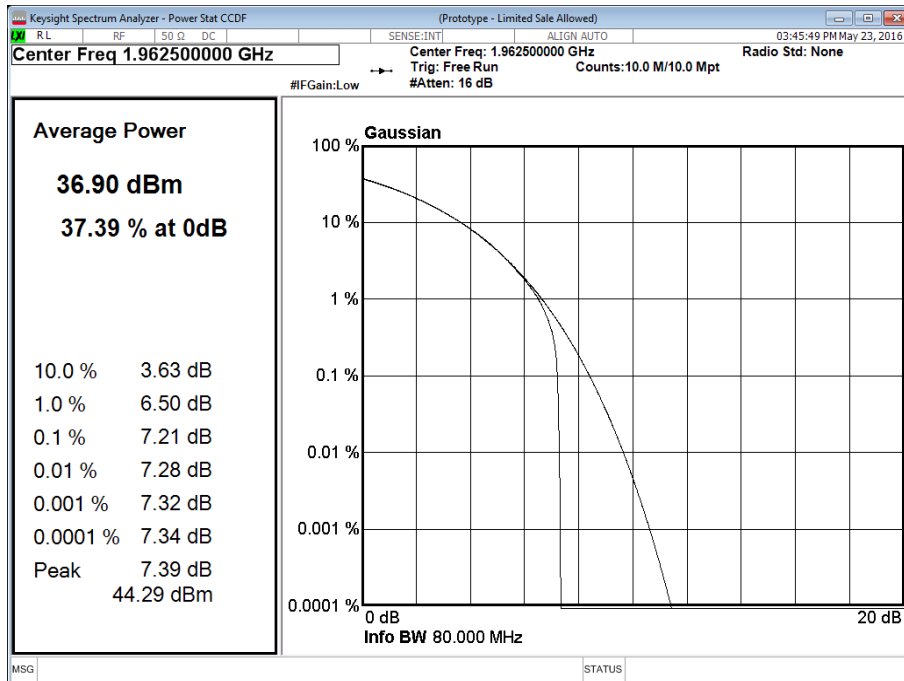
Channel Position B - Bandwidth 15.0 MHz - Antenna B



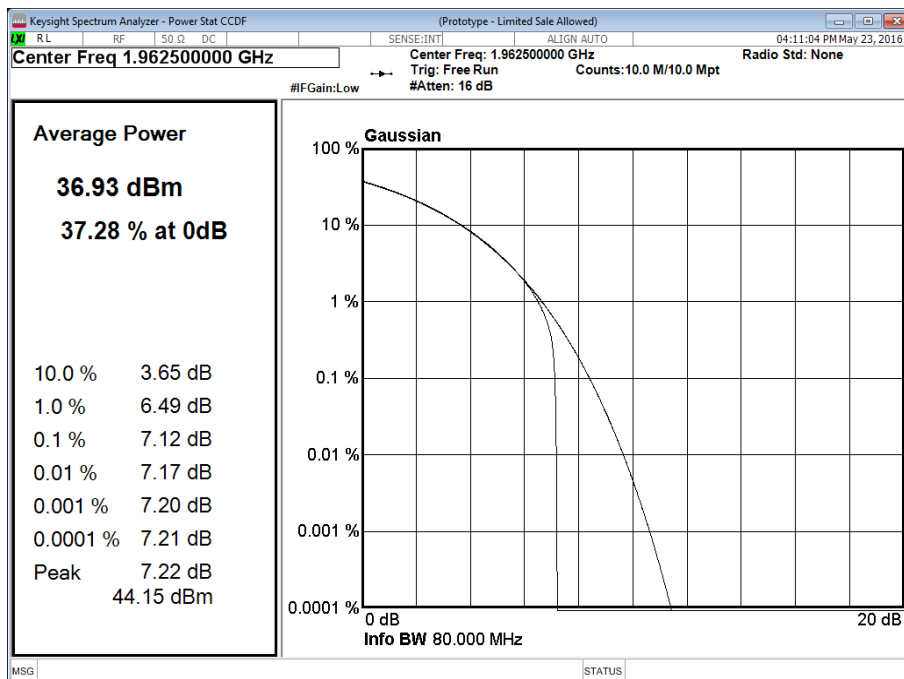
Channel Position B - Bandwidth 20.0 MHz - Antenna B



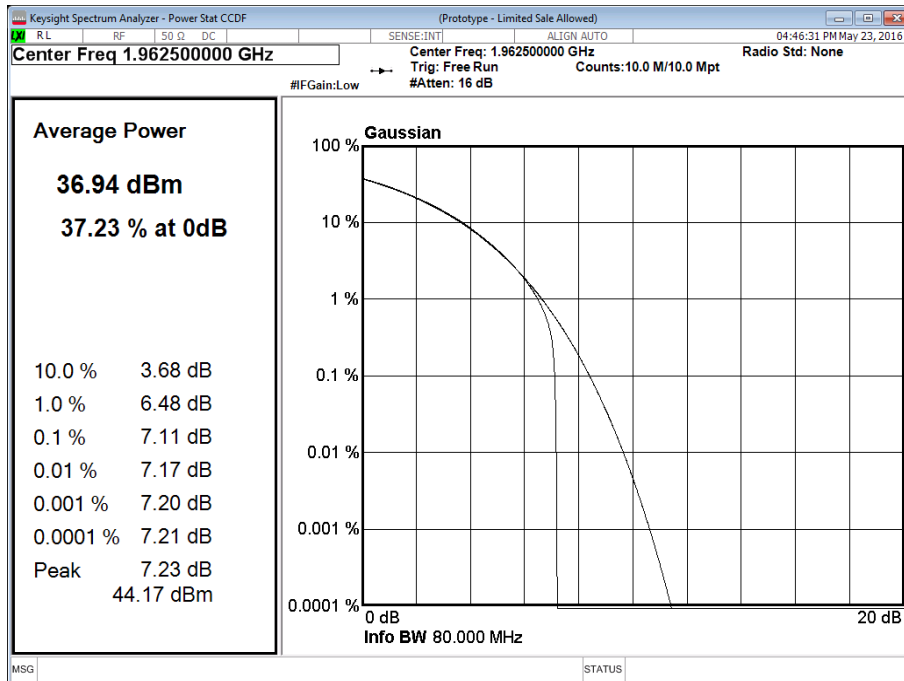
Channel Position M - Bandwidth 1.4 MHz - Antenna B



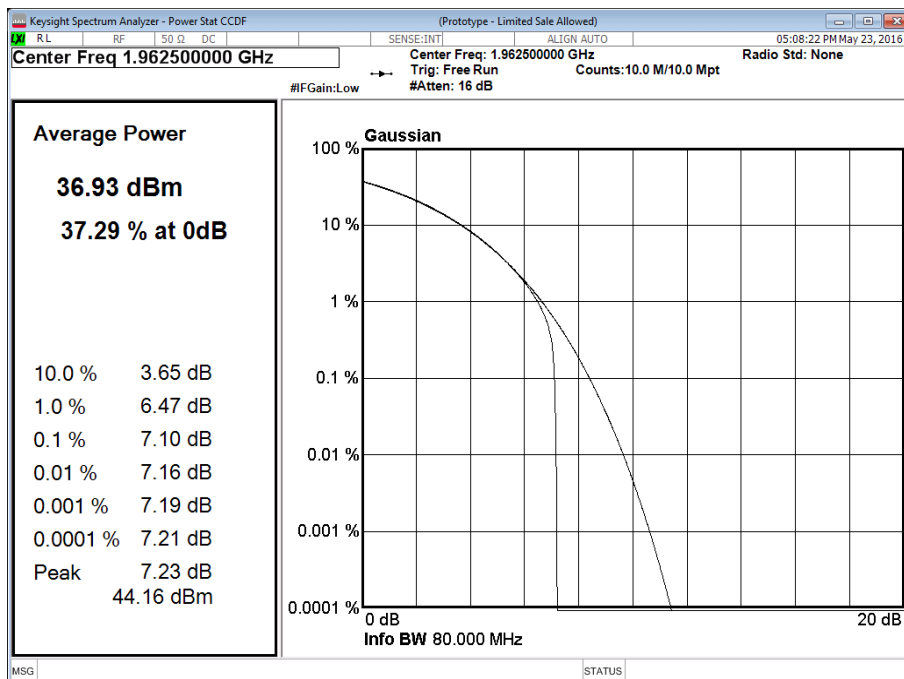
Channel Position M - Bandwidth 3.0 MHz - Antenna B



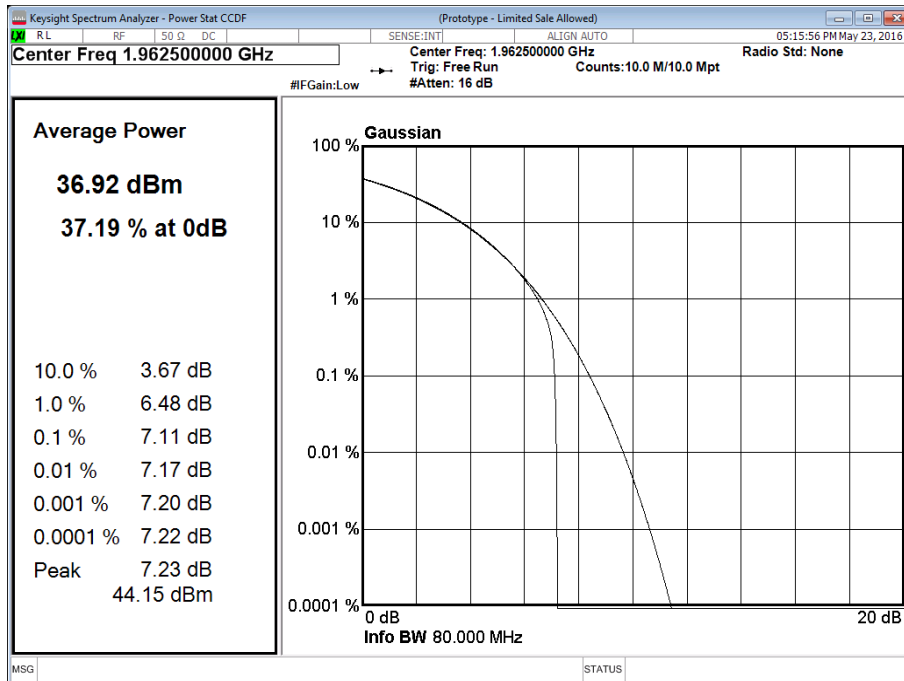
Channel Position M - Bandwidth 5.0 MHz - Antenna B



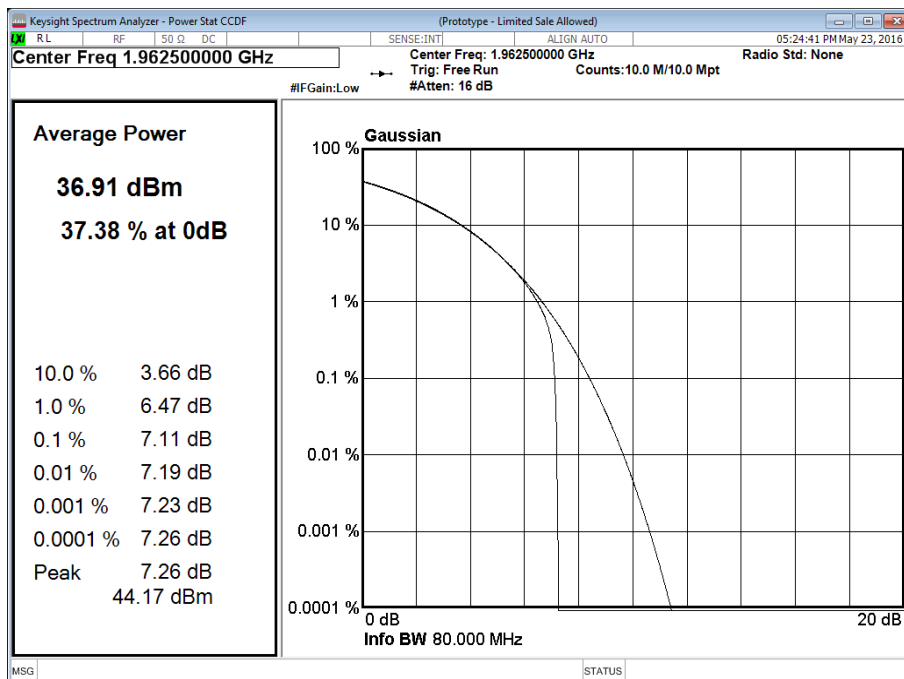
Channel Position M - Bandwidth 10.0 MHz - Antenna B



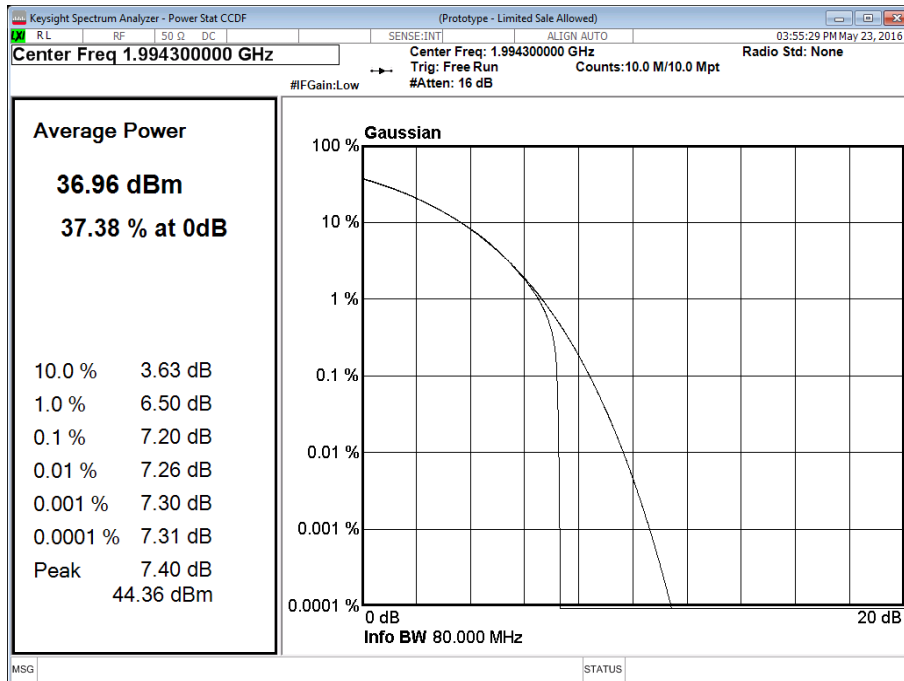
Channel Position M - Bandwidth 15.0 MHz - Antenna B



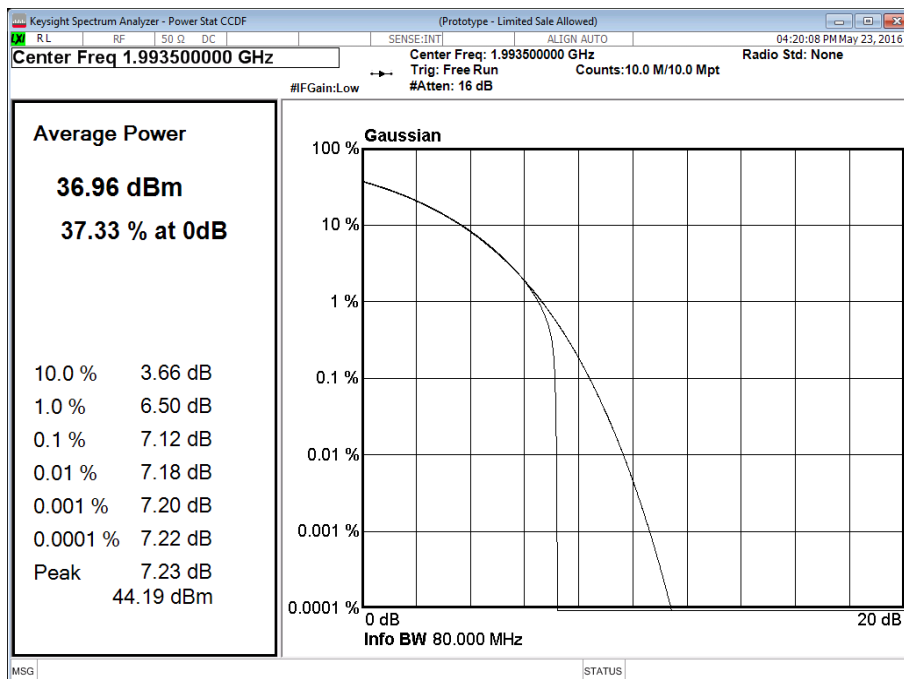
Channel Position M - Bandwidth 20.0 MHz - Antenna B



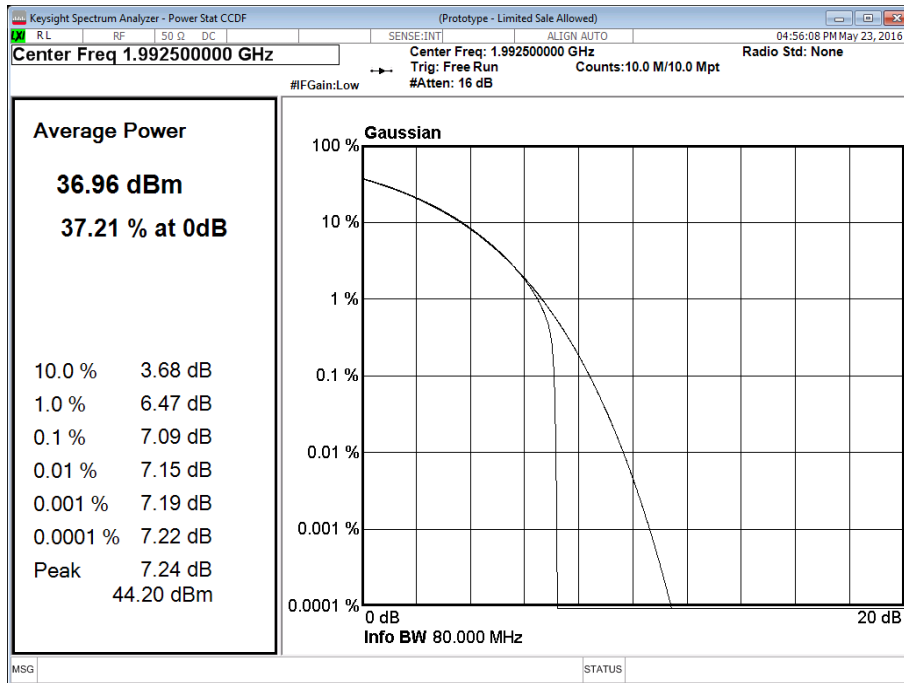
Channel Position T - Bandwidth 1.4 MHz - Antenna B



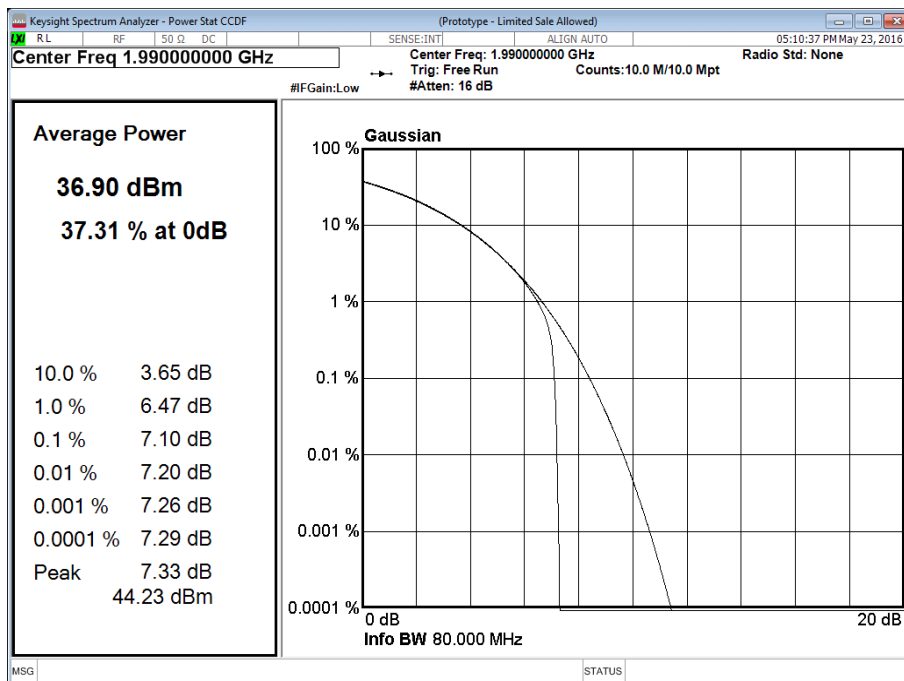
Channel Position T - Bandwidth 3.0 MHz - Antenna B



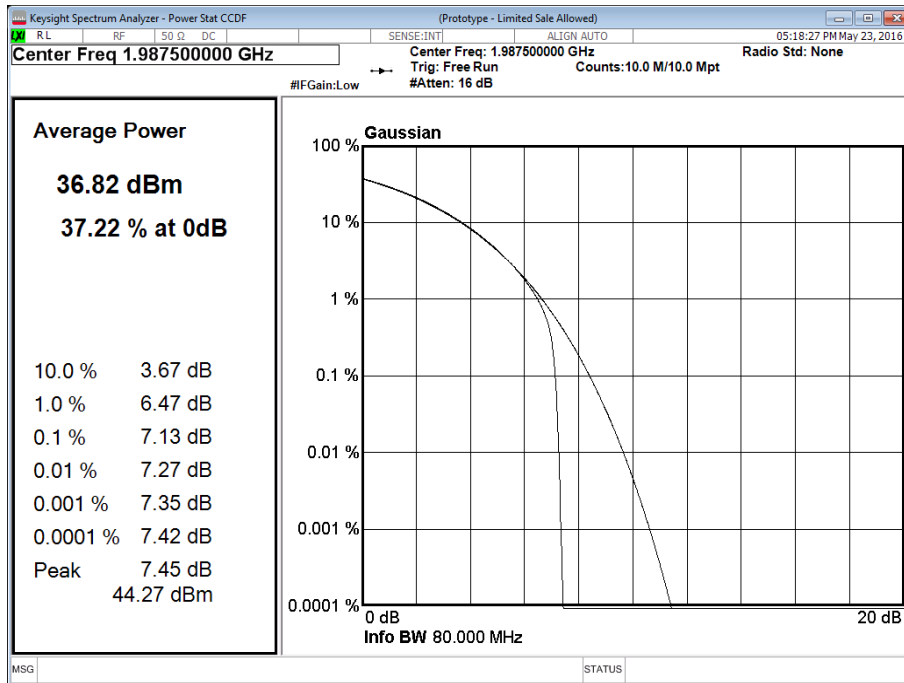
Channel Position T - Bandwidth 5.0 MHz - Antenna B



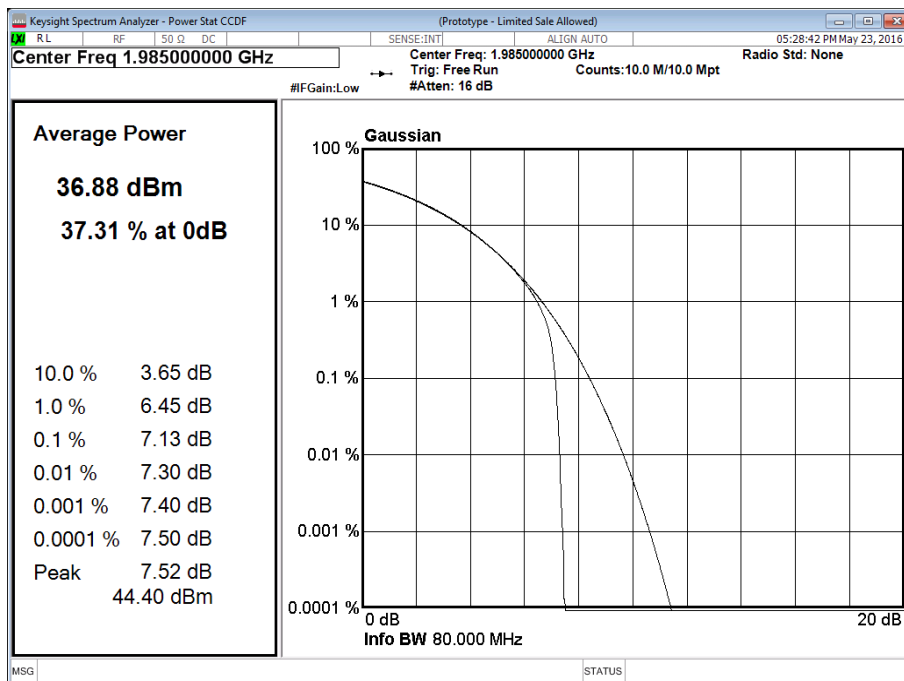
Channel Position T - Bandwidth 10.0 MHz - Antenna B



Channel Position T - Bandwidth 15.0 MHz - Antenna B



Channel Position T - Bandwidth 20.0 MHz - Antenna B



Configuration E

Maximum Output Power 37 dBm

Modulation	Carrier Bandwidth (MHz)	Antenna	Peak to Average Ratio (PAR) / Output Power								
			Channel Position B			Channel Position M			Channel Position T		
			PAR (dB)	Average Power		PAR (dB)	Average Power		PAR (dB)	Average Power	
				dBm	dBm/MHz		dBm	dBm/MHz		dBm	dBm/MHz
QPSK	1.4	A	-	36.80	33.25	-	36.88	32.96	-	36.82	32.80
	1.4	B	-	36.70	33.25	-	36.89	33.17	-	36.84	32.90
Total			-	39.76	36.26	-	39.90	36.08	-	39.84	35.86
QPSK	3.0	A	-	36.84	30.28	-	36.92	30.05	-	36.86	30.22
	3.0	B	-	36.80	30.38	-	36.91	30.38	-	36.83	30.29
Total			-	39.83	33.34	-	39.93	33.23	-	39.86	33.27
QPSK	5.0	A	-	36.67	28.15	-	36.76	28.21	-	36.76	27.94
	5.0	B	-	36.67	28.09	-	36.85	27.92	-	36.73	28.04
Total			-	39.68	31.13	-	39.82	31.08	-	39.76	31.00
QPSK	10.0	A	-	36.78	25.29	-	36.82	25.03	-	36.81	25.20
	10.0	B	-	36.81	25.40	-	36.89	25.17	-	36.82	25.04
Total			-	39.81	28.36	-	39.87	28.11	-	39.83	28.13
QPSK	15.0	A	-	36.84	23.62	-	36.90	23.54	-	36.86	23.55
	15.0	B	-	36.83	23.53	-	36.93	23.44	-	36.85	23.29
Total			-	39.85	26.59	-	39.93	26.50	-	39.87	26.43
QPSK	20.0	A	-	36.86	22.34	-	36.87	22.21	-	36.90	22.18
	20.0	B	-	36.88	22.25	-	36.91	22.19	-	36.87	22.14
Total			-	39.88	25.31	-	39.90	25.21	-	39.90	25.17

Configuration F

Maximum Output Power 37 dBm

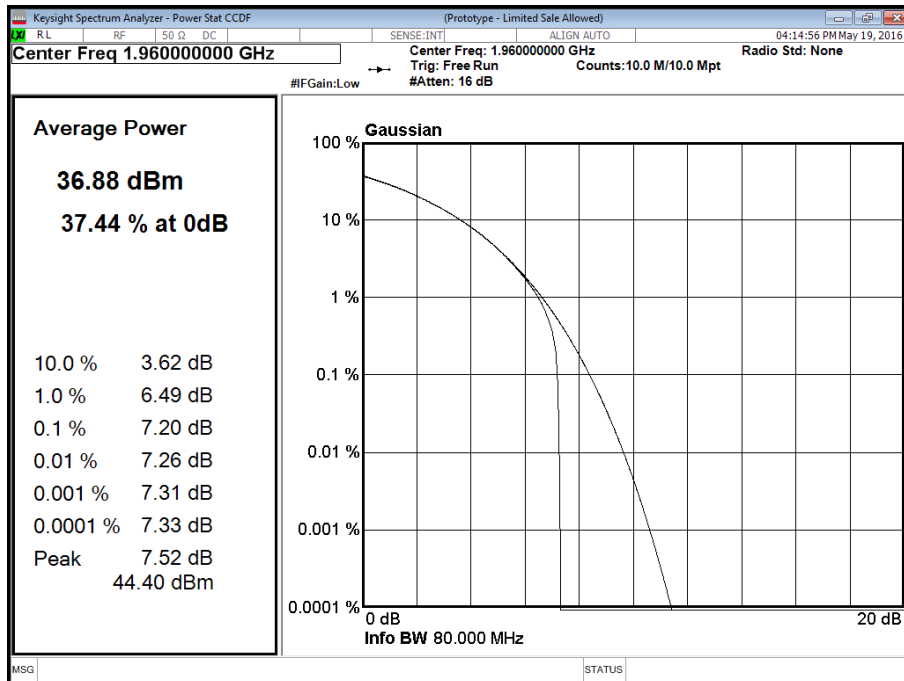
Modulation	Carrier Bandwidth (MHz)	Antenna	Peak to Average Ratio (PAR) / Output Power								
			Channel Position B			Channel Position M			Channel Position T		
			PAR (dB)	Average Power		PAR (dB)	Average Power		PAR (dB)	Average Power	
				dBm	dBm/MHz		dBm	dBm/MHz		dBm	dBm/MHz
QPSK	1.4	A	-	36.61	31.45	-	36.84	31.49	-	36.84	31.46
	1.4	B	-	36.59	31.49	-	36.84	31.43	-	36.82	31.84
Total			-	39.61	34.48	-	39.85	34.47	-	39.84	34.66
QPSK	3.0	A	-	36.74	28.62	-	36.83	28.34	-	36.87	28.50
	3.0	B	-	36.69	28.41	-	36.89	28.44	-	36.86	28.72
Total			-	39.73	31.53	-	39.87	31.40	-	39.88	31.62
QPSK	5.0	A	-	36.60	26.30	-	36.74	26.03	-	36.79	26.30
	5.0	B	-	36.66	26.27	-	36.79	26.39	-	36.76	26.39
Total			-	39.64	29.30	-	39.78	29.22	-	39.79	29.36
QPSK	10.0	A	-	36.74	23.32	-	36.79	23.19	-	36.84	23.33
	10.0	B	-	36.76	23.33	-	36.86	23.38	-	36.78	23.25
Total			-	39.76	26.34	-	39.84	26.30	-	39.82	26.30
QPSK	15.0	A	-	36.87	21.80	-	36.92	24.57	-	36.91	21.70
	15.0	B	-	36.85	21.62	-	36.88	21.62	-	36.81	21.70
Total			-	39.87	24.72	-	39.91	26.35	-	39.87	24.71

Configuration L

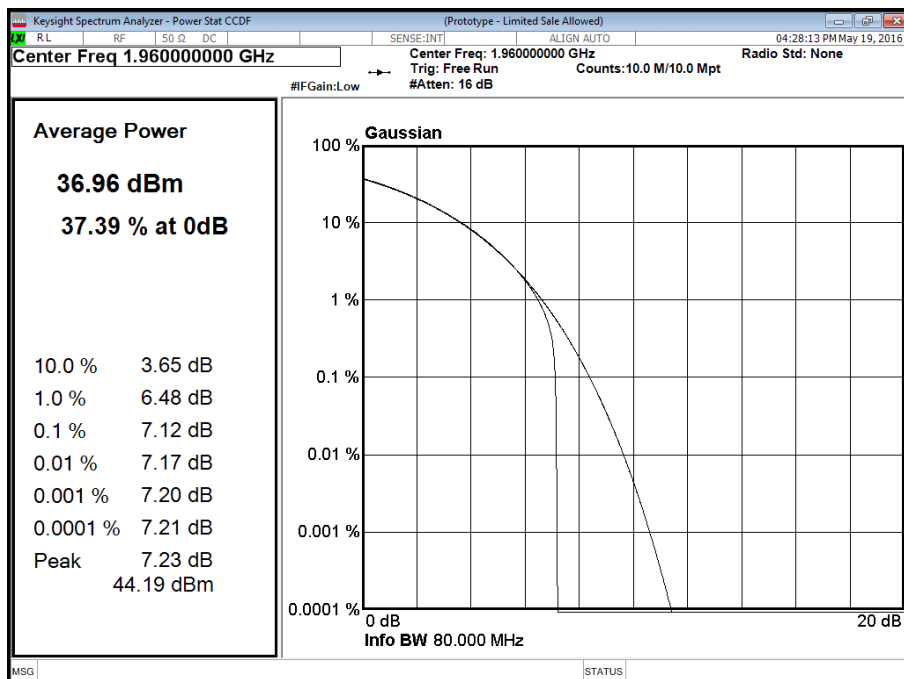
Maximum Output Power 37 dBm

Modulation	Carrier Bandwidth (MHz)	Antenna	Peak to Average Ratio (PAR) / Output Power					
			Channel Position M			Channel Position T		
			PAR (dB)	Average Power		PAR (dB)	Average Power	
				dBm	dBm/MHz		dBm	dBm/MHz
QPSK	1.4	A	7.20	36.92	36.19	7.19	36.94	36.38
	1.4	B	7.22	36.92	36.26	7.20	36.88	36.35
Total			-	39.93	39.24	-	39.92	39.38
QPSK	3.0	A	7.12	36.99	33.15	7.11	36.93	33.15
	3.0	B	7.12	36.95	33.21	7.12	36.86	33.09
Total			-	39.98	36.19	-	39.91	36.13
QPSK	5.0	A	7.09	36.96	30.92	7.10	36.92	31.00
	5.0	B	7.10	36.93	30.94	7.11	36.86	30.91
Total			-	39.96	33.94	-	39.90	33.97
QPSK	10.0	A	7.11	36.98	28.34	7.12	36.96	28.20
	10.0	B	7.11	36.93	28.25	7.11	36.92	28.25
Total			-	39.97	31.31	-	39.95	31.24
QPSK	15.0	A	7.10	37.01	26.60	7.10	36.99	26.74
	15.0	B	7.11	36.96	26.47	7.12	36.95	26.42
Total			-	40.00	29.55	-	39.98	29.59
QPSK	20.0	A	7.11	36.96	25.31	7.11	36.97	25.35
	20.0	B	7.11	36.93	25.32	7.11	36.90	25.15
Total			-	39.96	28.33	-	39.95	28.26

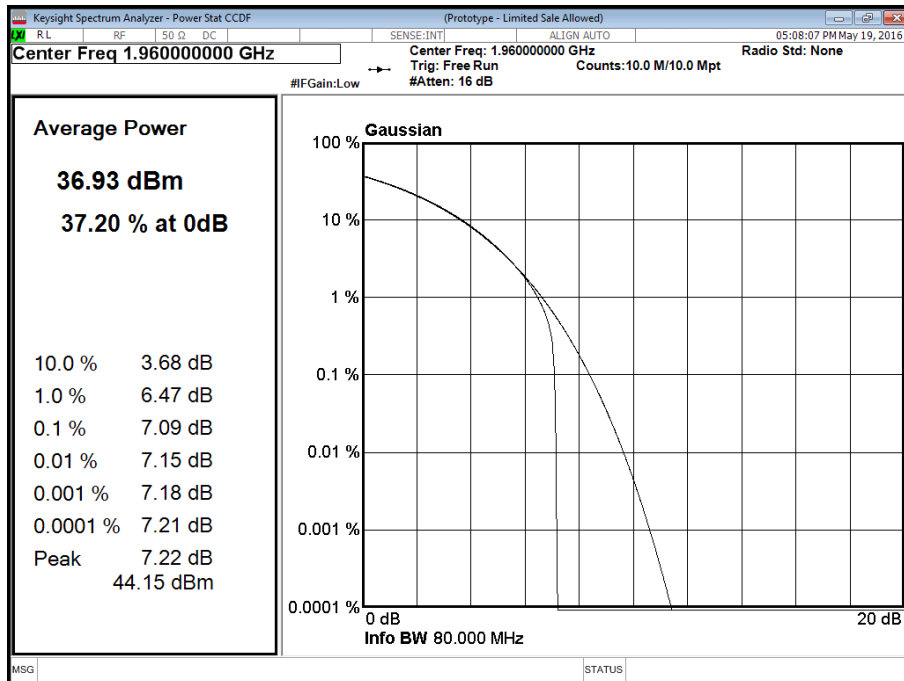
Channel Position M - Bandwidth 1.4 MHz - Antenna A



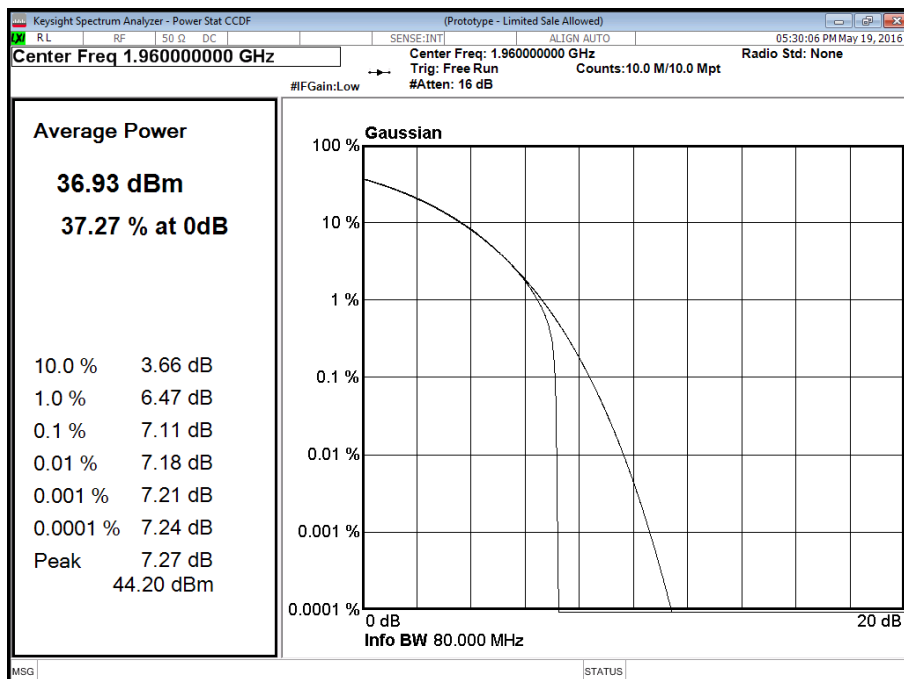
Channel Position M - Bandwidth 3.0 MHz - Antenna A



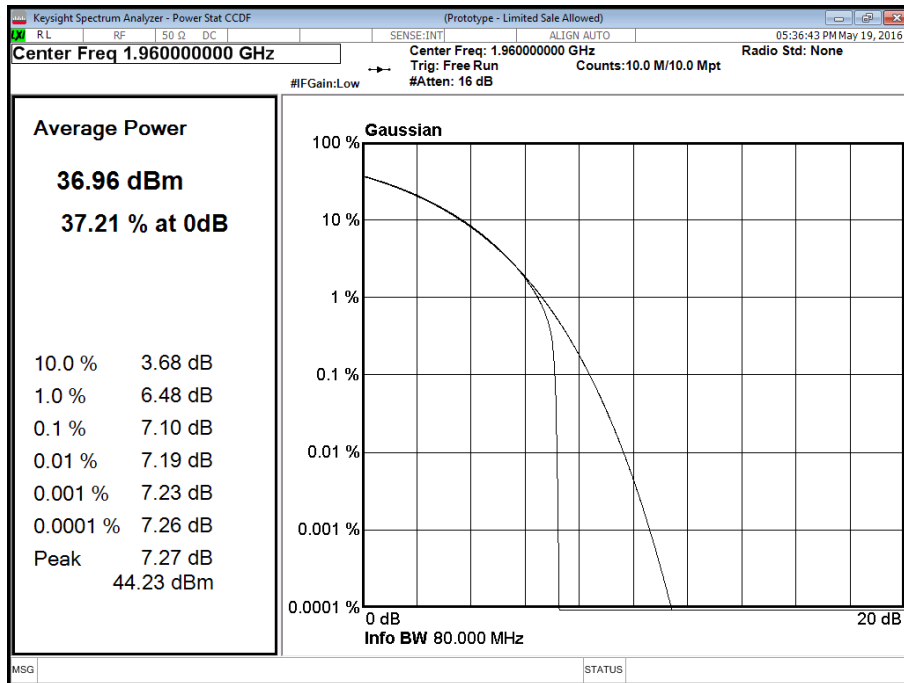
Channel Position M - Bandwidth 5.0 MHz - Antenna A



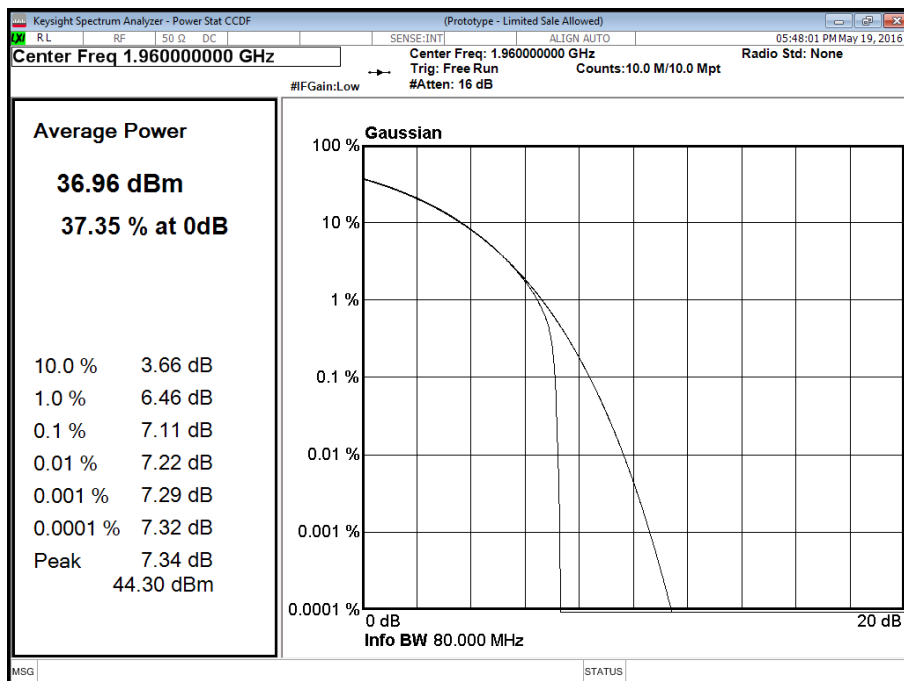
Channel Position M - Bandwidth 10.0 MHz - Antenna A



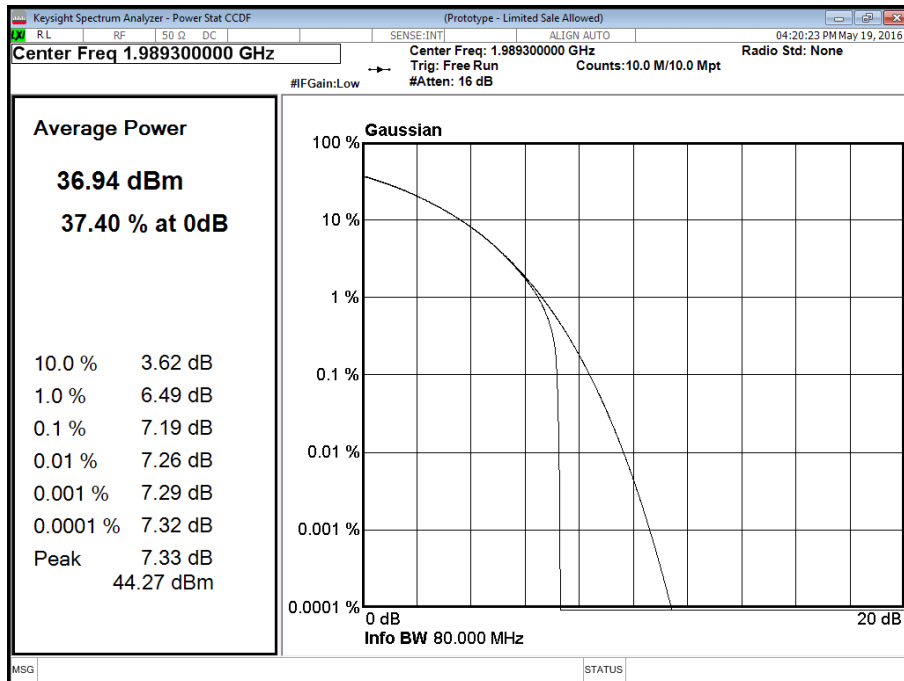
Channel Position M - Bandwidth 15.0 MHz - Antenna A



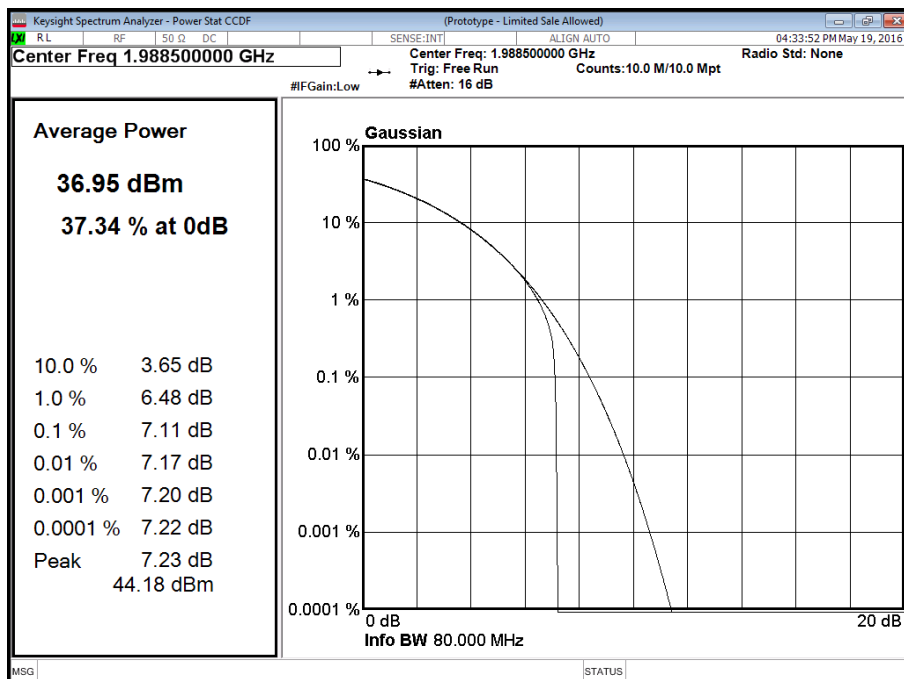
Channel Position M - Bandwidth 20.0 MHz - Antenna A



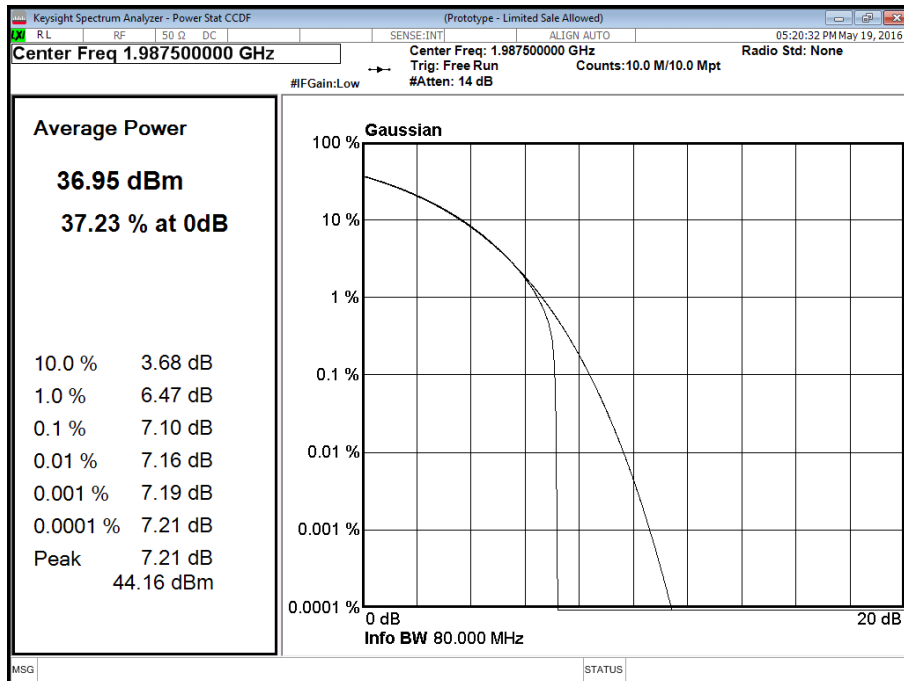
Channel Position T - Bandwidth 1.4 MHz - Antenna A



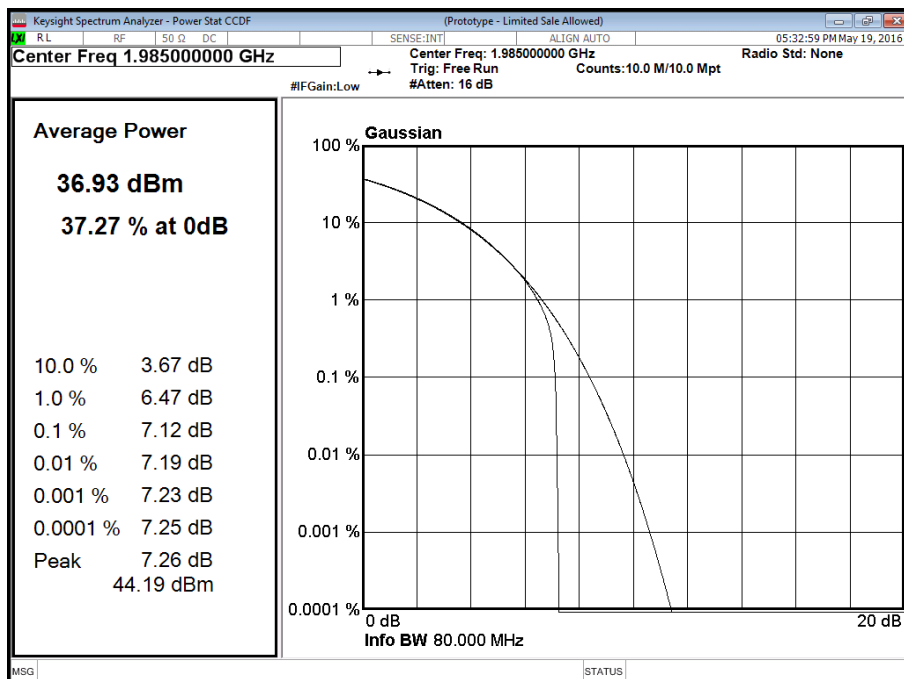
Channel Position T - Bandwidth 3.0 MHz - Antenna A



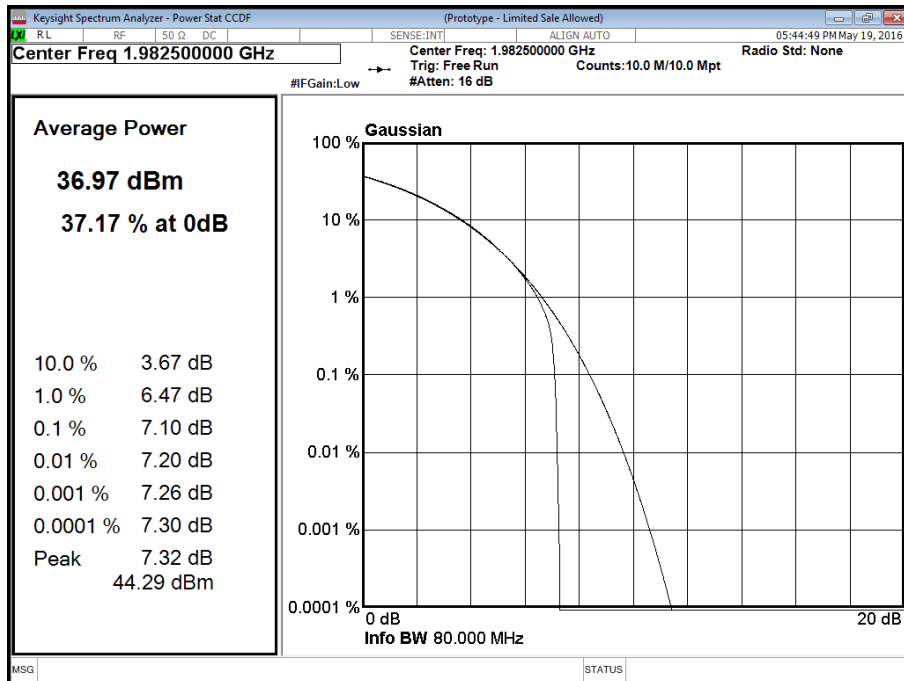
Channel Position T - Bandwidth 5.0 MHz - Antenna A



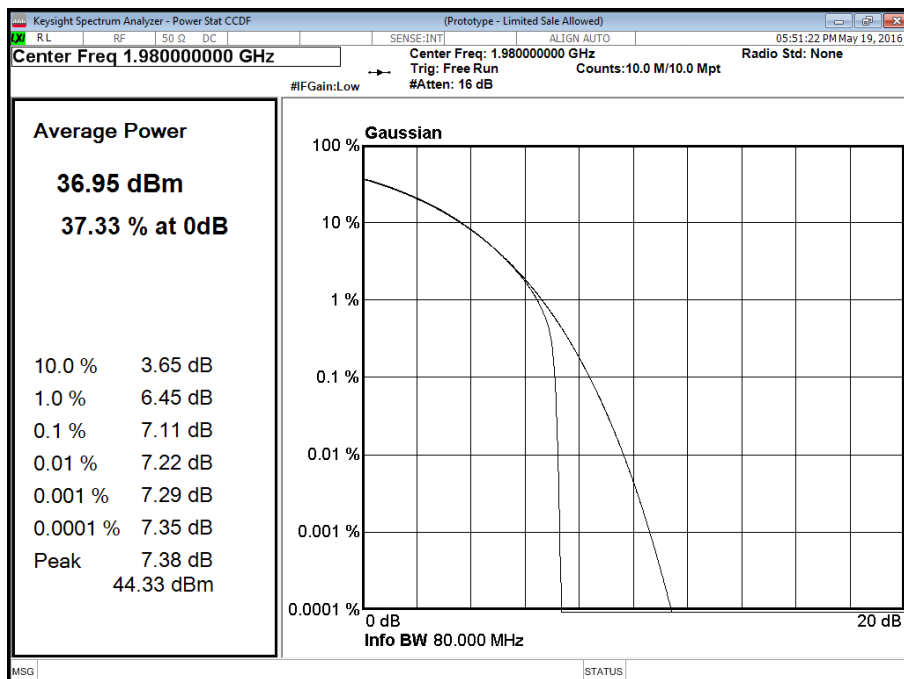
Channel Position T - Bandwidth 10.0 MHz - Antenna A



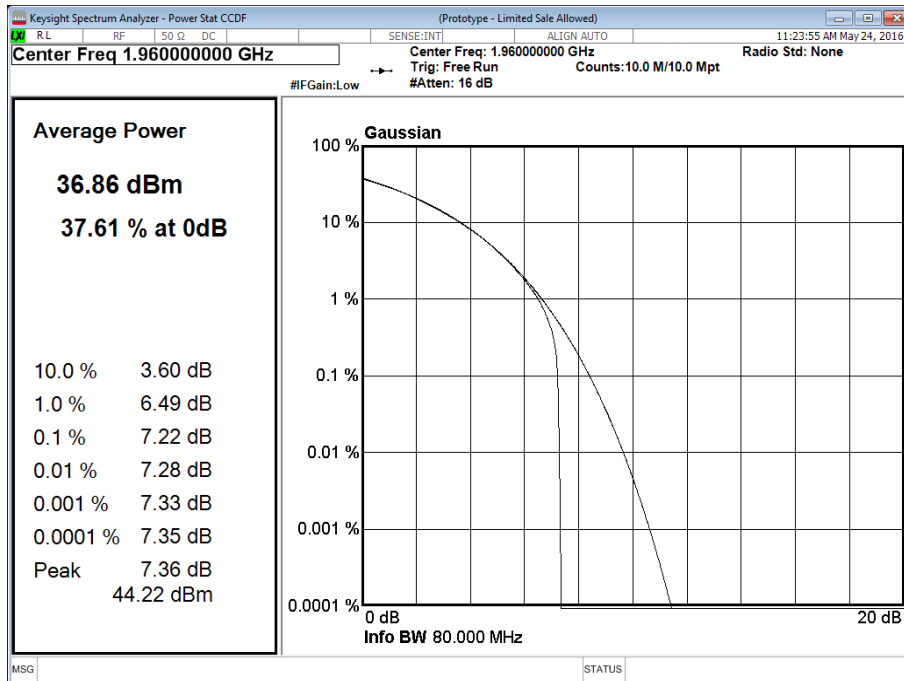
Channel Position T - Bandwidth 15.0 MHz - Antenna A



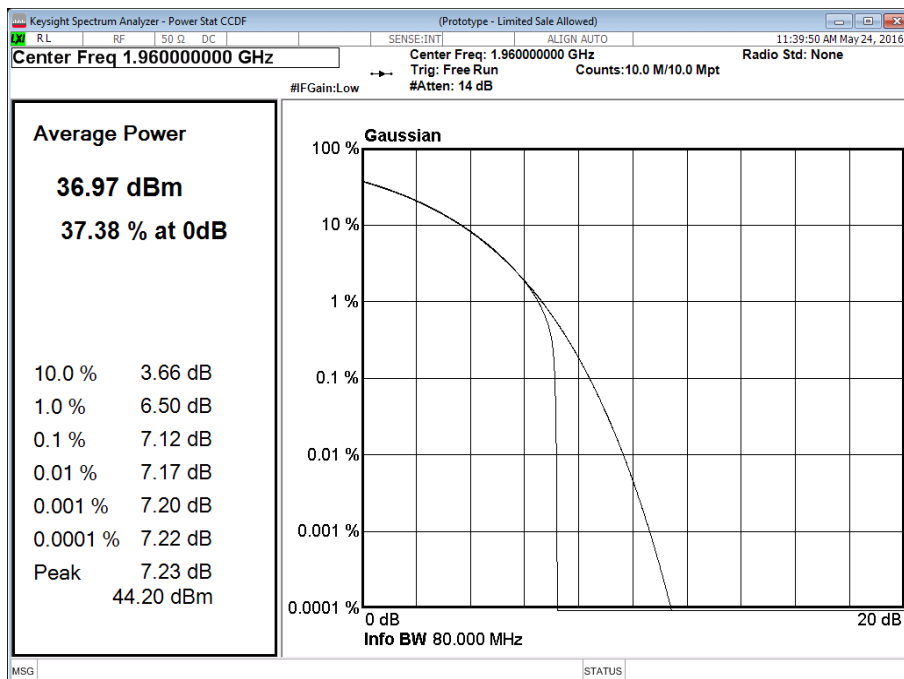
Channel Position T - Bandwidth 20.0 MHz - Antenna A



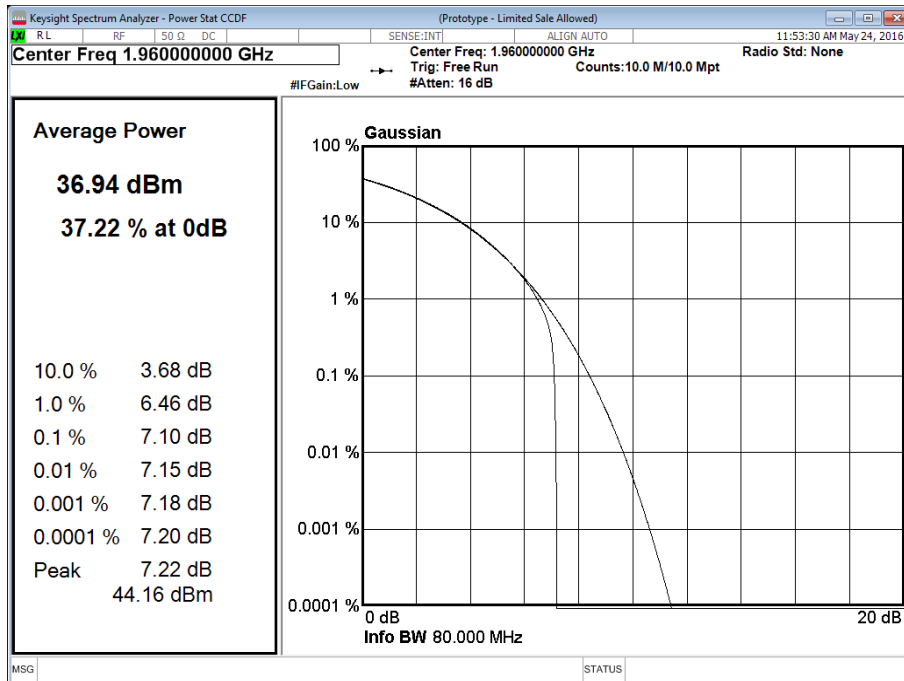
Channel Position M - Bandwidth 1.4 MHz - Antenna B



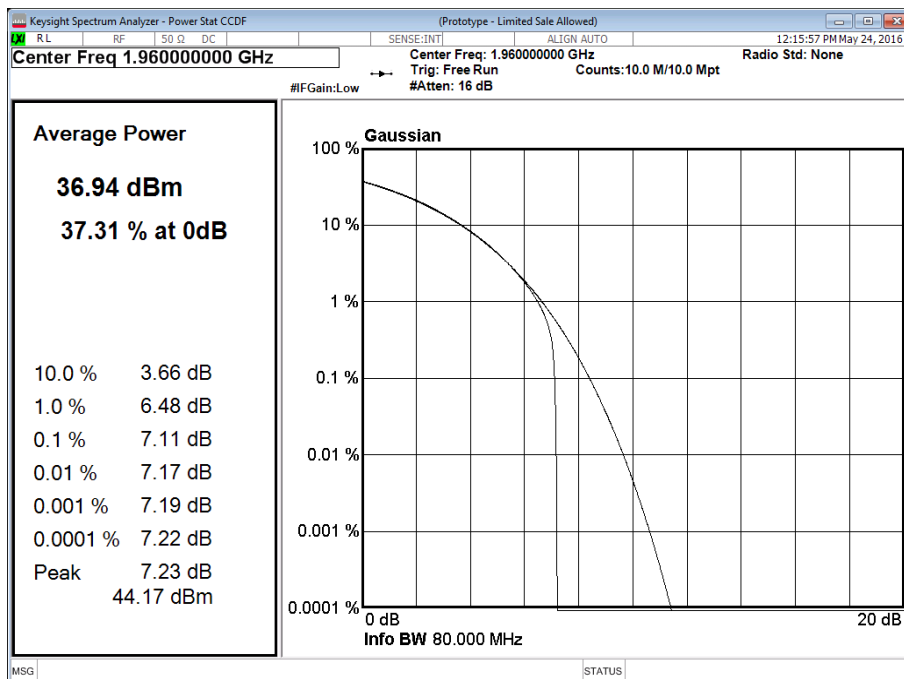
Channel Position M - Bandwidth 3.0 MHz - Antenna B



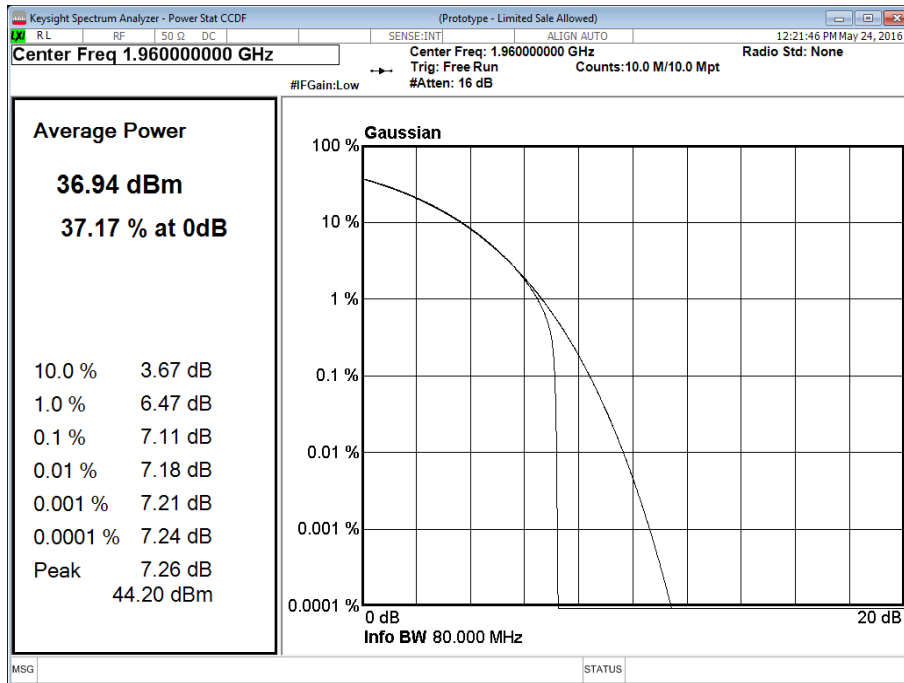
Channel Position M - Bandwidth 5.0 MHz - Antenna B



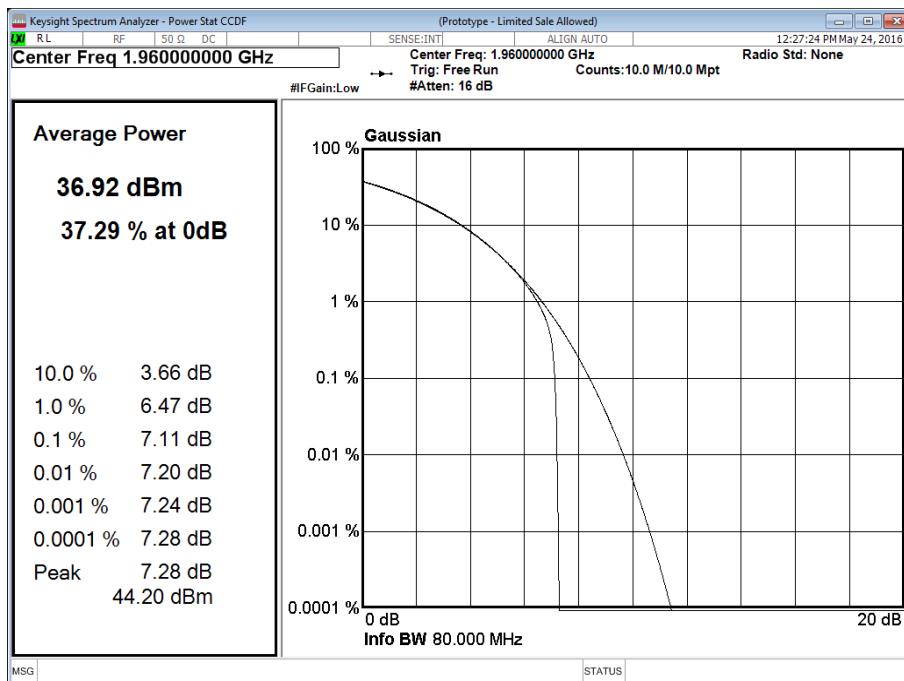
Channel Position M - Bandwidth 10.0 MHz - Antenna B



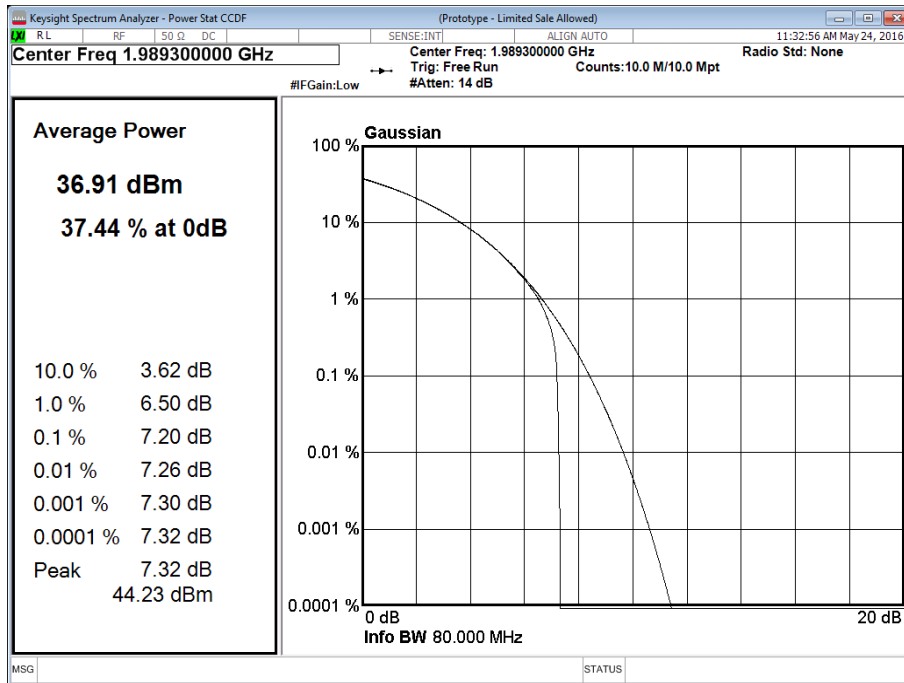
Channel Position M - Bandwidth 15.0 MHz - Antenna B



Channel Position M - Bandwidth 20.0 MHz - Antenna B



Channel Position T - Bandwidth 1.4 MHz - Antenna B



Channel Position T - Bandwidth 3.0 MHz - Antenna B

