

Ericsson AB

RF TEST REPORT

Report Type:

FCC Part 96 RF report

PRODUCT NAME:

AIR 6488 B48

REPORT NUMBER:

2408B2504SHA-001

ISSUE DATE:

August 30, 2024

DOCUMENT CONTROL NUMBER:

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TEST REPORT

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Report no.: 2408B2504SHA-001

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Manufacturer: Ericsson AB
Isafjordsgatan 10 SE-164 80 Stockholm 16480 Sweden

FCC ID: TA8BKRD901160

SUMMARY:

The equipment is tested according to the following standard(s) or Specification:

FCC CFR 47 Part 96: CITIZENS BROADBAND RADIO SERVICE

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TEST REPORT**Revision History**

Report No.	Version	Description	Issued Date
2408B2504SHA-001	Rev. 01	Initial issue of report	August 30, 2024

TEST REPORT**Measurement result summary**

TEST ITEM	FCC REFERANCE	RESULT
Power, PSD and Peak to Average Power Ratio	96.41(b)(c)(g) 2.1046	Pass
Occupied Bandwidth	96.41(e)(3) 2.1049	Pass
Unwanted Emissions at Band Edge	96.41(e)(1) 2.1051	Pass
Conducted Unwanted Emission	96.41(e)(2) 2.1051	Pass
Frequency Stability	- 2.1055	Pass

TEST REPORT**1 GENERAL INFORMATION****1.1 Description of Equipment Under Test (EUT)**

Description:	Remote Radio Unit
Product name:	AIR 6488 B48
Product number:	KRD 901 160/1, KRD 901 160/11, KRD 901 160/2, KRD 901 160/21
Serial Number(s)	CF89551490
Rating:	-48V DC
Software Version:	PIS: CXP2030020%5_R130B53, UP: CXP2020666/2_R16A130
Hardware Version:	R2A
Sample received date:	July 17, 2024
Date of test:	July 17, 2024 ~ August 23, 2024

Note: The differences between the 4 variants are as below, and others are same. We test on KRD 901 160/2 as typical model.

KRD 901 160/2 (with un-security software and RDNB board for testing purpose).

KRD 901 160/21 (with security software and RDNB board for testing purpose).

KRD 901 160/1 (with un-security software and antenna).

KRD 901 160/11 (with security software and antenna).

TEST REPORT**1.2 Technical Specification**

Frequency Range:	3550MHz - 3700MHz
Number of Antenna ports:	64 TX/RX
Supported RAT:	LTE, NR
Max RF bandwidth (IBW):	NR only with one carrier, max 1 carrier, max OBW = 100 MHz NR only or NR+LTE with 2 carriers, max 2 carriers, max OBW = 80 MHz LTE: 100MHz
Supported Number of Carriers:	LTE: Max 3 carriers NR: Max 2 carriers
Supported modulation:	QPSK, 16QAM, 64QAM, 256QAM
Supported Channel Bandwidth:	LTE: 10, 20MHz NR: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100MHz
Output Power:	For antenna 22.5dBi Maximum 17dBm (50mW) per port for 10MHz channel bandwidth Maximum 20dBm (100mW) per port for 20MHz channel bandwidth Maximum 21.8dBm (150mW) per port for 30MHz channel bandwidth Maximum 23dBm (200mW) per port for 40MHz channel bandwidth Maximum 24dBm (250mW) per port for 50/60/70/80/90/100MHz channel bandwidth For antenna 23.2dBi Maximum 16.3dBm (43mW) per port for 10MHz channel bandwidth Maximum 19.3dBm (85mW) per port for 20MHz channel bandwidth Maximum 21.1dBm (129mW) per port for 30MHz channel bandwidth Maximum 22.3dBm (170mW) per port for 40MHz channel bandwidth Maximum 23.3dBm (214mW) per port for 50/60/70/80/90/100MHz channel bandwidth
Antenna Gain:	22.5dBi & 23.2dBi

Note: Information in the 1.2 sheet declared by the manufacturer and Intertek has no responsibility of its accuracy.

TEST REPORT**1.3 Description of Test Facility**

Name:	Intertek Testing Services Shanghai
Address 1:	Building 86, No. 1198 Qinzhou Road(North), Shanghai 200233, P.R. China
Address 2:	No. 5 Lize East Street, Ericsson Tower, Chaoyang District, Beijing 100102 P.R.C.
Telephone:	+86 21 61278200
Telefax:	+86 21 54262353
The test facility is recognized, certified, or accredited by these organizations:	FCC Accredited Lab Designation Number: CN0175 IC Registration Lab CAB identifier.: CN0014 A2LA Accreditation Lab Certificate Number: 3309.02

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2 TEST SPECIFICATIONS

2.1 Related documents

FCC Part 96 (2023)

FCC Part 2 (2023)

ANSI C63.26:2015

KDB 971168 D01 v03r01

KDB 662911 D01 v02r01

KDB 940660 D01 v02

2.2 Product Information

The Equipment Under Test (EUT) AIR 6488 B48 is an Ericsson Radio Unit working in the public mobile services 3550-3700MHz band which provides communication connections to 3550-3700MHz network. The Radio AIR 6488 B48 operates from a -48V DC power supply.

The EUT includes 64 TX/RX ports. It can be configured to transmit in MU-MIMO mode with up to a maximum of 16 beams, and the MU-MIMO mode was used for measurements as the worst configuration. The complete testing was performed with the EUT transmitting at maximum RF power unless otherwise stated.

A full technical description can be found in the Manufacturer's documentation.

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2.3 Configuration Description

All of the configurations from single user beam to 16 users beam were checked, the 16 users beam power was found to be higher than any other number of user beam configurations, and hence was tested and reported.

Initial pre-testing was carried out to determine the worst-case modulation scheme by measuring the output power from QPSK, 16QAM, 64QAM and 256QAM on the middle channel of one antenna port. From these tests, it was determined that QPSK was the worst-case modulation scheme and was used for all testing as data listed following.

Antenna	NR-1C middle	Port	QPSK	16QAM	64QAM	256QAM
23.2dBi	100M	Port 36	24.08dBm	24.03dBm	24.04dBm	24.03dBm
Antenna	NR-1C middle	Port	QPSK	16QAM	64QAM	256QAM
22.5dBi	100M	Port 36	24.65dBm	24.61dBm	24.63dBm	24.63dBm

Complete testing was carried out on the worst-case antenna port which was determined by the highest output power from the 64 measured ports on worst-case modulation scheme and the worst antenna port was port 36 for NR as data listed following.

Antenna	NR-1C middle	modulation	Max port
23.2dBi	100M	QPSK	Port 36, 24.08dBm
Antenna	NR-1C middle	modulation	Max port
22.5dBi	100M	QPSK	Port 36, 24.65dBm

The settings below were used for all measurements unless otherwise noted:

Configuration	No. of Carriers	Channel Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
NR-1C	1	10	3555.00	3625.02	3695.01
		20	3560.01	3625.02	3690.00
		30	3565.02	3625.02	3685.02
		40	3570.00	3625.02	3680.01
		50	3575.01	3625.02	3675.00
		60	3580.02	3625.02	3670.02
		70	3585.00	3625.02	3665.01
		80	3590.01	3625.02	3660.00
		90	3595.02	3625.02	3655.02
		100	3600.00	3625.02	3650.01
NR-2C	2	10	-	3580.02+3670.02	-
		20	-	3585.00+3664.98	-
		30	-	3590.01+3660.00	-
		40	-	3595.02+3655.02	-

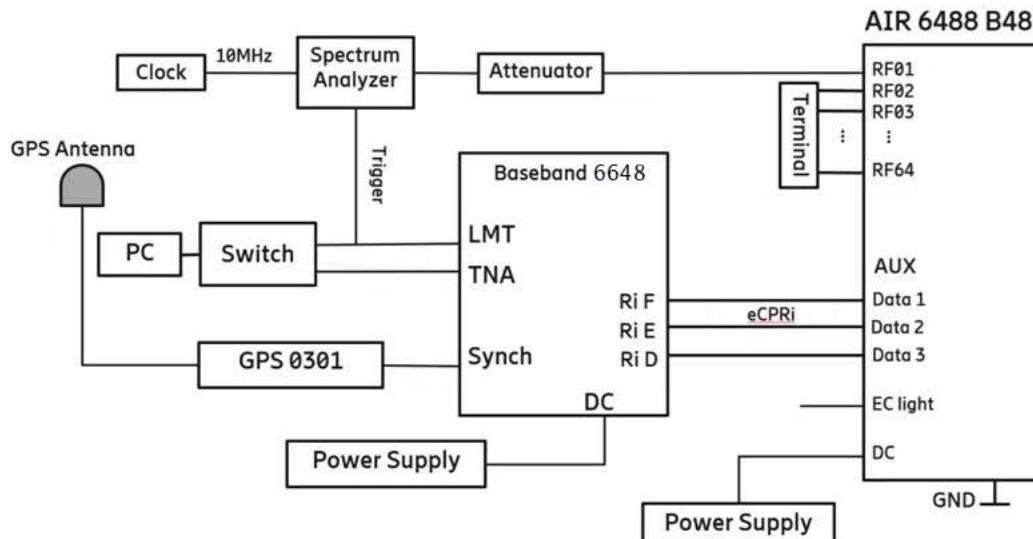
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Configuration	No. of Carriers	Channel Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
NR-1C-UE	1	10	3555.00	-	3695.01
		20	3560.01	-	3690.00
		30	3565.02	-	3685.02
		40	3570.00	-	3680.01
		50	3575.01	-	3675.00
		60	3580.02	-	3670.02
		70	3585.00	-	3665.01
		80	3590.01	-	3660.00
		90	3595.02	-	3655.02
		100	3600.00	-	3650.01
NR-2C-UE	2	10	3555.00+3565.02	-	3685.02+3695.01
		20	3560.01+3580.02	-	3670.02+3690.00
		30	3565.02+3595.02	-	3655.02+3685.02
		40	3570.00+3610.02	-	3640.02+3680.01

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2.4 Test Setup

Conducted Measurement:



No.	Auxiliary Equipment	Product Number / Model Type	Version
1	Test computer	HP Probook 430 G3	-
2	Baseband 6648	KDU1370015/1	R3H
3	Power supply	N8737A	-
4	Power supply	N8737A	-
5	Terminator	AETFZ-10W-SMAM	-
6	Diplxer	B48	-
7	Attenuator	WDTS150-40-6G-B-NFF	-
8	Attenuator box	BAMS-1017018157	-

Proper Diplxer/Attenuator/Attenuator box will be chosen to use in relative test case. And the cable loss of specified Diplxer/Attenuator/Attenuator box with connect cable will be calibrated before test for relative frequency range and the worst reading will be used as offset in the relative test case.

TEST REPORT**2.5 Test environment condition:**

Test items	Temperature	Humidity
Power, PSD and Peak to Average Power Ratio	19°C	52% RH
Occupied Bandwidth		
Unwanted Emissions at Band Edge		
Conducted Unwanted Emission		
Frequency Stability	Please refer to clause 8	

TEST REPORT**2.6 Instrument list**

RF test					
Used	Equipment	Manufacturer	Type	Internal no.	Due date
<input checked="" type="checkbox"/>	PXA Signal Analyzer	Keysight	N9030A	EC1046	2025.4.7
<input type="checkbox"/>	Signal Generator	R&S	SMU200A	EC1050	2025.4.2
<input type="checkbox"/>	Multi-meter	Fluke	117	EC1051	2025.1.15
<input checked="" type="checkbox"/>	Climatic Chamber	赛宝	CEEC-WR16H-50W	EC1052	2025.7.31
<input type="checkbox"/>	Humiture meter	托普	TPJ-20	EC1053	2025.1.24
<input type="checkbox"/>	PXA Signal Analyzer	Keysight	N9030A	EC1124	2024.11.2
<input type="checkbox"/>	Power Sensor	R&S	NRP-Z11	EC1125	2025.5.13
<input type="checkbox"/>	Power Meter	R&S	NRX	EC1126	2025.5.13

TEST REPORT**2.7 Measurement uncertainty**

The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Test item	Measurement uncertainty
Maximum output power	0.73dB
Occupied Bandwidth	0.88%
Unwanted Emissions at Band Edge	3.03dB
Conducted Unwanted Emission	3.03dB
Frequency stability	0.77×10^{-7}

TEST REPORT**3 Power, PSD and Peak to Average Power Ratio**

Test result: Pass

3.1 Limit

Power limits:

Maximum effective isotropic radiated power (EIRP): 47dBm/10MHz

Maximum Power Spectral Density (PSD): 37dBm/MHz

Peak to Average Ratio: ≤ 13 dB

3.2 Measurement Procedure

The EUT was configured to transmit on maximum power and proper modulation. Measurements were performed with a Spectrum Analyzer using the Band Power measurement function. The detector was set to RMS with an RBW of at least 1% of the carrier bandwidth and a VBW of at least 3 times the RBW. The integration bandwidth was configured to be 10MHz as defined in 96.41(b). Where the carrier width was greater than 10MHz, the integration bandwidth was moved to the region with the highest PSD to find the maximum band power.

For PSD measurements in a 1MHz bandwidth, an RMS detector was used with a single sweep. The highest PSD was established over the entire emission bandwidth and the result recorded.

CCDF measurements were carried out in accordance with ANSI C63.26 Clause 5.2.3.4.

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3.3 Test Notes

1. All of the configurations from single user beam to 16 users beam were checked, the 16 users beam power was found to be higher than any other number of user beam configurations, and hence was tested and reported.
2. The MIMO conducted power is measured for signal with respect to the Bandwidth in 1MHz. The value has to be scaled to per 10MHz in order to compare it with the FCC EIRP Limit defined in units dBm/10MHz. Scaling Factor (dB) = $10 \log_{10} (10\text{MHz} / 1\text{MHz}) = 10$
3. 16-beam reduction:
The 16-beam reduction is applicable in the 16-User Beam operating mode of the EUT. It is a logarithmic factor applied to account for maximum 16 spatially separated beams operate simultaneously.
16-beam power reduction factor (dB) = $10 \log_{10} (1/16) = -12.04$ dB
4. Antenna Gains (dBi) are provided by the client.

5. Sample Calculation:

Let us assume the following numbers:

- a. MIMO Conducted Power for Port 0 to 63 as 100mW/MHz.
- b. Antenna Gain = 22.5dBi

Factors	Value	Unit	
MIMO Conducted Power (linear sum) for Port 0-63	100	mW/MHz	
MIMO Conducted Power (dBm) for Port 0-63	$= 10 \log_{10} (100)$	= 20	dBm
Scaling Factor (OBW = 10MHz)	$= 10 \log_{10} (10 / 1)$	= 10	dB
Applying Reductions:			
Antenna Gain	22.5	dBi	
16-Beam Reduction	$= 10 \log_{10} (1 / 16)$	= -12.04	dB
MIMO EIRP =	40.46	dBm/ 10MHz	
MIMO Conducted Power for Port 0-63 + Scaling Factor + Antenna Gain + 16-Beam Reduction			
FCC EIRP Limit	47	dBm/ 10MHz	
Margin = FCC EIRP Limit - MIMO EIRP	6.54	dB	

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3.4 Measurement result

For 23.2dBi antenna config:

NR-1C:

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position B			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
0	QPSK	10	15.34	6.47	16.47	8.52
1	QPSK	10	15.37	6.51	16.51	8.58
2	QPSK	10	15.33	6.45	16.45	8.48
3	QPSK	10	15.29	6.36	16.36	8.51
4	QPSK	10	15.27	6.37	16.37	8.57
5	QPSK	10	15.30	6.38	16.38	8.49
6	QPSK	10	15.34	6.41	16.41	8.51
7	QPSK	10	15.34	6.45	16.45	8.42
8	QPSK	10	15.39	6.61	16.61	8.59
9	QPSK	10	15.35	6.45	16.45	8.46
10	QPSK	10	15.81	6.94	16.94	8.58
11	QPSK	10	15.76	6.89	16.89	8.53
12	QPSK	10	15.37	6.60	16.60	8.39
13	QPSK	10	15.48	6.59	16.59	8.57
14	QPSK	10	15.38	6.58	16.58	8.42
15	QPSK	10	15.67	6.75	16.75	8.40
16	QPSK	10	15.90	7.00	17.00	8.46
17	QPSK	10	15.86	7.00	17.00	8.40
18	QPSK	10	15.80	6.89	16.89	8.46
19	QPSK	10	15.79	6.91	16.91	8.43
20	QPSK	10	15.75	6.91	16.91	8.51
21	QPSK	10	15.83	6.89	16.89	8.49
22	QPSK	10	15.50	6.60	16.60	8.46
23	QPSK	10	15.89	6.96	16.96	8.50
24	QPSK	10	15.87	7.00	17.00	8.52
25	QPSK	10	16.02	7.13	17.13	8.58
26	QPSK	10	16.02	7.10	17.10	8.41
27	QPSK	10	16.01	7.16	17.16	8.55
28	QPSK	10	16.00	7.15	17.15	8.34
29	QPSK	10	15.71	6.83	16.83	8.52
30	QPSK	10	15.54	6.76	16.76	8.56
31	QPSK	10	15.50	6.60	16.60	8.38
32	QPSK	10	15.99	7.07	17.07	8.54
33	QPSK	10	16.00	7.10	17.10	8.41
34	QPSK	10	15.84	6.98	16.98	8.50
35	QPSK	10	16.01	7.11	17.11	8.42

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36	QPSK	10	16.07	7.16	17.16	8.58
37	QPSK	10	16.03	7.13	17.13	8.41
38	QPSK	10	15.88	6.95	16.95	8.44
39	QPSK	10	15.91	7.04	17.04	8.43
40	QPSK	10	15.94	7.05	17.05	8.58
41	QPSK	10	15.91	6.98	16.98	8.47
42	QPSK	10	15.80	6.98	16.98	8.48
43	QPSK	10	15.92	6.98	16.98	8.45
44	QPSK	10	15.84	6.95	16.95	8.49
45	QPSK	10	15.65	6.76	16.76	8.54
46	QPSK	10	15.85	6.99	16.99	8.41
47	QPSK	10	15.69	6.81	16.81	8.56
48	QPSK	10	14.79	5.92	15.92	8.54
49	QPSK	10	14.79	5.94	15.94	8.57
50	QPSK	10	15.65	6.76	16.76	8.40
51	QPSK	10	16.16	7.41	17.41	8.54
52	QPSK	10	15.80	6.91	16.91	8.58
53	QPSK	10	14.67	5.78	15.78	8.54
54	QPSK	10	14.42	5.51	15.51	8.62
55	QPSK	10	14.59	5.70	15.70	8.59
56	QPSK	10	14.87	5.96	15.96	8.45
57	QPSK	10	14.87	6.00	16.00	8.44
58	QPSK	10	15.10	6.15	16.15	8.52
59	QPSK	10	15.13	6.28	16.28	8.58
60	QPSK	10	14.90	6.00	16.00	8.58
61	QPSK	10	14.70	5.78	15.78	8.62
62	QPSK	10	14.74	5.82	15.82	8.52
63	QPSK	10	15.13	6.22	16.22	8.45
Total 0-63			33.62	24.74	34.74	-
16-Beam Reduction					-12.04	
Antenna gain					23.2	
EIRP/PSD			44.78	35.90	45.90	-
Limit			-	37	47	13

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position M			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
0	QPSK	10	15.93	6.87	16.87	8.58
1	QPSK	10	16.00	7.01	17.01	8.57
2	QPSK	10	15.83	6.83	16.83	8.52
3	QPSK	10	15.97	6.91	16.91	8.57
4	QPSK	10	15.99	6.97	16.97	8.48
5	QPSK	10	15.87	6.85	16.85	8.42
6	QPSK	10	15.98	7.00	17.00	8.45
7	QPSK	10	15.63	6.67	16.67	8.48
8	QPSK	10	15.67	6.71	16.71	8.61

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9	QPSK	10	15.98	6.93	16.93	8.59
10	QPSK	10	16.36	7.39	17.39	8.42
11	QPSK	10	16.11	7.08	17.08	8.44
12	QPSK	10	15.90	6.89	16.89	8.41
13	QPSK	10	15.88	6.88	16.88	8.39
14	QPSK	10	15.98	7.00	17.00	8.43
15	QPSK	10	15.99	6.97	16.97	8.58
16	QPSK	10	16.16	7.28	17.28	8.59
17	QPSK	10	16.28	7.32	17.32	8.55
18	QPSK	10	16.07	7.07	17.07	8.42
19	QPSK	10	15.87	6.93	16.93	8.40
20	QPSK	10	16.31	7.31	17.31	8.41
21	QPSK	10	16.35	7.28	17.28	8.42
22	QPSK	10	16.02	7.00	17.00	8.44
23	QPSK	10	16.30	7.36	17.36	8.43
24	QPSK	10	16.40	7.40	17.40	8.41
25	QPSK	10	16.31	7.34	17.34	8.43
26	QPSK	10	16.40	7.36	17.36	8.53
27	QPSK	10	16.49	7.53	17.53	8.41
28	QPSK	10	16.35	7.39	17.39	8.42
29	QPSK	10	16.48	7.41	17.41	8.55
30	QPSK	10	16.01	7.05	17.05	8.55
31	QPSK	10	16.18	7.15	17.15	8.56
32	QPSK	10	16.45	7.37	17.37	8.57
33	QPSK	10	16.38	7.35	17.35	8.44
34	QPSK	10	16.29	7.25	17.25	8.49
35	QPSK	10	16.24	7.23	17.23	8.53
36	QPSK	10	16.64	7.67	17.67	8.52
37	QPSK	10	16.28	7.25	17.25	8.49
38	QPSK	10	16.12	7.22	17.22	8.49
39	QPSK	10	16.17	7.19	17.19	8.53
40	QPSK	10	16.01	6.93	16.93	8.41
41	QPSK	10	16.45	7.39	17.39	8.40
42	QPSK	10	16.40	7.46	17.46	8.57
43	QPSK	10	16.39	7.39	17.39	8.41
44	QPSK	10	16.41	7.41	17.41	8.47
45	QPSK	10	16.15	7.15	17.15	8.50
46	QPSK	10	16.33	7.36	17.36	8.59
47	QPSK	10	16.33	7.32	17.32	8.45
48	QPSK	10	15.08	6.10	16.10	8.50
49	QPSK	10	15.18	6.15	16.15	8.63
50	QPSK	10	16.08	7.12	17.12	8.67
51	QPSK	10	16.53	7.49	17.49	8.52
52	QPSK	10	16.17	7.17	17.17	8.41
53	QPSK	10	15.02	5.99	15.99	8.43
54	QPSK	10	14.85	5.86	15.86	8.39
55	QPSK	10	14.92	5.93	15.93	8.65

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56	QPSK	10	15.19	6.13	16.13	8.62
57	QPSK	10	15.30	6.35	16.35	8.64
58	QPSK	10	15.37	6.32	16.32	8.41
59	QPSK	10	15.34	6.29	16.29	8.60
60	QPSK	10	15.18	6.15	16.15	8.55
61	QPSK	10	15.98	6.05	16.05	8.19
62	QPSK	10	14.86	5.91	15.91	8.53
63	QPSK	10	15.11	6.07	16.07	8.56
Total 0-63			34.06	25.04	35.04	-
16-Beam Reduction				-12.04		
Antenna gain				23.2		
EIRP/PSD			45.22	36.20	46.20	-
Limit			-	37	47	13

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position T			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
0	QPSK	10	15.79	6.88	16.88	8.55
1	QPSK	10	15.82	6.98	16.98	8.50
2	QPSK	10	15.89	7.06	17.06	8.57
3	QPSK	10	15.66	6.82	16.82	8.48
4	QPSK	10	15.81	6.95	16.95	8.59
5	QPSK	10	15.75	6.84	16.84	8.59
6	QPSK	10	15.80	6.98	16.98	8.59
7	QPSK	10	15.59	6.70	16.70	8.49
8	QPSK	10	15.79	6.87	16.87	8.47
9	QPSK	10	15.88	6.96	16.96	8.39
10	QPSK	10	16.09	7.20	17.20	8.59
11	QPSK	10	16.13	7.22	17.22	8.43
12	QPSK	10	15.94	7.07	17.07	8.35
13	QPSK	10	16.03	7.10	17.10	8.56
14	QPSK	10	15.96	7.10	17.10	8.49
15	QPSK	10	16.10	7.27	17.27	8.54
16	QPSK	10	16.06	7.26	17.26	8.64
17	QPSK	10	15.99	7.18	17.18	8.44
18	QPSK	10	16.19	7.31	17.31	8.51
19	QPSK	10	15.89	7.12	17.12	8.35
20	QPSK	10	15.97	7.04	17.04	8.40
21	QPSK	10	16.02	7.14	17.14	8.35
22	QPSK	10	16.01	7.19	17.19	8.60
23	QPSK	10	16.11	7.24	17.24	8.42
24	QPSK	10	16.17	7.33	17.33	8.43
25	QPSK	10	16.30	7.44	17.44	8.61
26	QPSK	10	16.17	7.29	17.29	8.47
27	QPSK	10	16.21	7.37	17.37	8.60
28	QPSK	10	15.99	7.27	17.27	8.40

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29	QPSK	10	16.21	7.36	17.36	8.45
30	QPSK	10	15.98	7.10	17.10	8.61
31	QPSK	10	15.94	7.05	17.05	8.45
32	QPSK	10	16.23	7.39	17.39	8.43
33	QPSK	10	16.16	7.30	17.30	8.63
34	QPSK	10	16.23	7.36	17.36	8.48
35	QPSK	10	16.18	7.43	17.43	8.40
36	QPSK	10	16.33	7.49	17.49	8.42
37	QPSK	10	16.19	7.34	17.34	8.42
38	QPSK	10	16.19	7.35	17.35	8.61
39	QPSK	10	16.17	7.35	17.35	8.63
40	QPSK	10	16.32	7.46	17.46	8.49
41	QPSK	10	16.17	7.32	17.32	8.40
42	QPSK	10	16.24	7.36	17.36	8.43
43	QPSK	10	16.20	7.39	17.39	8.50
44	QPSK	10	16.26	7.39	17.39	8.40
45	QPSK	10	16.17	7.22	17.22	8.32
46	QPSK	10	16.33	7.35	17.35	8.58
47	QPSK	10	16.22	7.45	17.45	8.34
48	QPSK	10	15.27	6.43	16.43	8.48
49	QPSK	10	14.98	6.21	16.21	8.57
50	QPSK	10	15.92	7.12	17.12	8.38
51	QPSK	10	16.55	7.45	17.45	8.43
52	QPSK	10	16.31	7.46	17.46	8.49
53	QPSK	10	15.10	6.23	16.23	8.44
54	QPSK	10	15.04	6.16	16.16	8.41
55	QPSK	10	15.20	6.31	16.31	8.56
56	QPSK	10	15.32	6.50	16.50	8.44
57	QPSK	10	15.26	6.42	16.42	8.45
58	QPSK	10	15.33	6.47	16.47	8.53
59	QPSK	10	15.09	6.24	16.24	8.66
60	QPSK	10	14.93	6.10	16.10	8.57
61	QPSK	10	15.09	6.23	16.23	8.65
62	QPSK	10	15.09	6.26	16.26	8.55
63	QPSK	10	15.43	6.56	16.56	8.53
Total 0-63			33.97	25.11	35.11	-
16-Beam Reduction				-12.04		
Antenna gain				23.2		
EIRP/PSD			45.13	36.27	46.27	-
Limit			-	37	47	13

TEST REPORT

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position B			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
36	QPSK	20	19.04	6.89	16.89	8.35
10LOG64			18.06			
Total 0-63			37.10	24.95	34.95	-
16-Beam Reduction			-12.04			
Antenna gain			23.2			
EIRP/PSD			48.26	36.11	46.11	-
Limit			-	37	47	13

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position M			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
36	QPSK	20	19.47	7.18	17.18	8.44
10LOG64			18.06			
Total 0-63			37.53	25.24	35.24	-
16-Beam Reduction			-12.04			
Antenna gain			23.2			
EIRP/PSD			48.69	36.40	46.40	-
Limit			-	37	47	13

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position T			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
36	QPSK	20	19.23	7.24	17.24	8.42
10LOG64			18.06			
Total 0-63			37.29	25.30	35.30	-
16-Beam Reduction			-12.04			
Antenna gain			23.2			
EIRP/PSD			48.45	36.46	46.46	-
Limit			-	37	47	13

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position B			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
36	QPSK	30	20.64	6.68	16.68	8.42
10LOG64			18.06			
Total 0-63			38.70	24.74	34.74	-
16-Beam Reduction			-12.04			
Antenna gain			23.2			
EIRP/PSD			49.86	35.90	45.90	-
Limit			-	37	47	13

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Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position M			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
36	QPSK	30	21.10	7.18	17.18	8.46
10LOG64			18.06			
Total 0-63			39.16	25.24	35.24	-
16-Beam Reduction			-12.04			
Antenna gain			23.2			
EIRP/PSD			50.32	36.40	46.40	-
Limit			-	37	47	13

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position T			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
36	QPSK	30	20.92	7.20	17.20	8.43
10LOG64			18.06			
Total 0-63			38.98	25.26	35.26	-
16-Beam Reduction			-12.04			
Antenna gain			23.2			
EIRP/PSD			50.14	36.42	46.42	-
Limit			-	37	47	13

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position B			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
36	QPSK	40	22.27	6.90	16.90	8.51
10LOG64			18.06			
Total 0-63			40.33	24.96	34.96	-
16-Beam Reduction			-12.04			
Antenna gain			23.2			
EIRP/PSD			51.49	36.12	46.12	-
Limit			-	37	47	13

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position M			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
36	QPSK	40	22.35	7.07	17.07	8.51
10LOG64			18.06			
Total 0-63			40.41	25.13	35.13	-
16-Beam Reduction			-12.04			
Antenna gain			23.2			
EIRP/PSD			51.57	36.29	46.29	-
Limit			-	37	47	13

TEST REPORT

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position T			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
36	QPSK	40	22.14	7.03	17.03	8.57
10LOG64			18.06			
Total 0-63			40.20	25.09	35.09	-
16-Beam Reduction			-12.04			
Antenna gain			23.2			
EIRP/PSD			51.36	36.25	46.25	-
Limit			-	37	47	13

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position B			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
0	QPSK	50	23.59	7.24	17.24	8.00
1	QPSK	50	23.68	7.44	17.44	7.99
2	QPSK	50	23.67	7.43	17.43	8.00
3	QPSK	50	23.52	7.20	17.20	8.02
4	QPSK	50	23.58	7.23	17.23	8.01
5	QPSK	50	23.58	7.24	17.24	8.01
6	QPSK	50	23.44	7.14	17.14	8.00
7	QPSK	50	23.49	7.20	17.20	8.02
8	QPSK	50	23.36	7.10	17.10	8.02
9	QPSK	50	23.55	7.34	17.34	8.01
10	QPSK	50	23.86	7.53	17.53	8.02
11	QPSK	50	23.83	7.51	17.51	8.01
12	QPSK	50	23.61	7.26	17.26	8.00
13	QPSK	50	23.74	7.41	17.41	8.01
14	QPSK	50	23.85	7.70	17.70	8.01
15	QPSK	50	23.58	7.34	17.34	7.98
16	QPSK	50	23.75	7.46	17.46	7.80
17	QPSK	50	23.82	7.65	17.65	7.79
18	QPSK	50	23.79	7.56	17.56	7.79
19	QPSK	50	23.59	7.37	17.37	7.82
20	QPSK	50	23.81	7.56	17.56	7.76
21	QPSK	50	23.84	7.64	17.64	7.80
22	QPSK	50	23.57	7.30	17.30	7.79
23	QPSK	50	23.81	7.55	17.55	7.79
24	QPSK	50	23.88	7.76	17.76	7.77
25	QPSK	50	23.66	7.50	17.50	7.76
26	QPSK	50	23.96	7.69	17.69	7.74
27	QPSK	50	24.01	7.81	17.81	7.80
28	QPSK	50	23.97	7.65	17.65	7.78
29	QPSK	50	23.95	7.76	17.76	7.84

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30	QPSK	50	23.65	7.46	17.46	7.76
31	QPSK	50	23.51	7.32	17.32	7.78
32	QPSK	50	24.09	7.75	17.75	7.77
33	QPSK	50	24.00	7.76	17.76	7.76
34	QPSK	50	23.88	7.66	17.66	7.80
35	QPSK	50	24.01	7.63	17.63	7.80
36	QPSK	50	24.10	7.78	17.78	7.75
37	QPSK	50	23.99	7.67	17.67	7.77
38	QPSK	50	23.77	7.51	17.51	7.80
39	QPSK	50	23.82	7.54	17.54	7.76
40	QPSK	50	23.71	7.43	17.43	7.82
41	QPSK	50	23.83	7.50	17.50	7.78
42	QPSK	50	23.85	7.62	17.62	7.75
43	QPSK	50	23.92	7.62	17.62	7.72
44	QPSK	50	23.94	7.61	17.61	7.79
45	QPSK	50	23.72	7.43	17.43	7.76
46	QPSK	50	23.90	7.58	17.58	7.76
47	QPSK	50	23.81	7.57	17.57	7.78
48	QPSK	50	22.83	6.54	16.54	7.33
49	QPSK	50	22.95	6.63	16.63	8.27
50	QPSK	50	23.82	7.53	17.53	8.25
51	QPSK	50	23.20	6.87	16.87	8.20
52	QPSK	50	23.99	7.68	17.68	8.22
53	QPSK	50	22.71	6.41	16.41	8.26
54	QPSK	50	22.56	6.28	16.28	8.24
55	QPSK	50	22.71	6.37	16.37	8.25
56	QPSK	50	22.92	6.68	16.68	8.23
57	QPSK	50	22.94	6.73	16.73	8.25
58	QPSK	50	22.97	6.64	16.64	8.22
59	QPSK	50	22.98	6.70	16.70	8.32
60	QPSK	50	22.76	6.43	16.43	8.27
61	QPSK	50	22.66	6.30	16.30	8.24
62	QPSK	50	22.53	6.32	16.32	8.23
63	QPSK	50	22.91	6.65	16.65	8.24
Total 0-63			41.65	25.38	35.38	-
16-Beam Reduction					12.04	
Antenna gain					23.2	
EIRP/PSD			52.81	36.54	46.54	-
Limit			-	37	47	13

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position M			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
0	QPSK	50	23.59	7.43	17.43	8.01
1	QPSK	50	23.57	7.39	17.39	8.00
2	QPSK	50	23.59	7.44	17.44	8.02

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3	QPSK	50	23.65	7.32	17.32	8.05
4	QPSK	50	23.60	7.41	17.41	8.02
5	QPSK	50	23.52	7.19	17.19	8.02
6	QPSK	50	23.64	7.21	17.21	8.05
7	QPSK	50	23.56	7.20	17.20	8.04
8	QPSK	50	23.41	7.30	17.30	8.04
9	QPSK	50	23.70	7.44	17.44	8.06
10	QPSK	50	23.86	7.62	17.62	8.03
11	QPSK	50	23.83	7.60	17.60	8.01
12	QPSK	50	23.69	7.38	17.38	8.05
13	QPSK	50	23.76	7.53	17.53	8.02
14	QPSK	50	23.84	7.60	17.60	8.02
15	QPSK	50	23.75	7.38	17.38	8.06
16	QPSK	50	23.91	7.56	17.56	7.72
17	QPSK	50	23.94	7.67	17.67	7.70
18	QPSK	50	23.84	7.57	17.57	7.75
19	QPSK	50	23.63	7.39	17.39	7.78
20	QPSK	50	23.96	7.63	17.63	7.71
21	QPSK	50	24.02	7.66	17.66	7.71
22	QPSK	50	23.72	7.31	17.31	7.75
23	QPSK	50	23.99	7.61	17.61	7.76
24	QPSK	50	24.12	7.73	17.73	7.77
25	QPSK	50	23.94	7.54	17.54	7.76
26	QPSK	50	23.89	7.60	17.60	7.72
27	QPSK	50	24.14	7.75	17.75	7.72
28	QPSK	50	24.13	7.74	17.74	7.78
29	QPSK	50	24.14	7.75	17.75	7.72
30	QPSK	50	23.77	7.48	17.48	7.68
31	QPSK	50	23.81	7.50	17.50	7.72
32	QPSK	50	23.94	7.61	17.61	7.73
33	QPSK	50	23.94	7.68	17.68	7.69
34	QPSK	50	24.04	7.66	17.66	7.75
35	QPSK	50	24.04	7.65	17.65	7.77
36	QPSK	50	24.14	7.75	17.75	7.72
37	QPSK	50	23.91	7.59	17.59	7.69
38	QPSK	50	23.85	7.58	17.58	7.75
39	QPSK	50	23.88	7.59	17.59	7.76
40	QPSK	50	23.61	7.37	17.37	7.73
41	QPSK	50	23.99	7.65	17.65	7.74
42	QPSK	50	23.94	7.69	17.69	7.70
43	QPSK	50	23.94	7.63	17.63	7.70
44	QPSK	50	24.05	7.82	17.82	7.73
45	QPSK	50	23.79	7.53	17.53	7.70
46	QPSK	50	23.94	7.58	17.58	7.71
47	QPSK	50	23.99	7.72	17.72	7.72
48	QPSK	50	22.84	6.99	16.99	7.34
49	QPSK	50	22.96	6.67	16.67	8.31

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50	QPSK	50	23.91	7.65	17.65	8.31
51	QPSK	50	23.14	6.86	16.86	8.01
52	QPSK	50	23.95	7.69	17.69	8.29
53	QPSK	50	22.66	6.36	16.36	8.31
54	QPSK	50	22.63	6.44	16.44	8.31
55	QPSK	50	22.66	6.41	16.41	8.30
56	QPSK	50	22.95	6.50	16.50	8.29
57	QPSK	50	23.00	6.73	16.73	8.29
58	QPSK	50	22.86	6.53	16.53	8.31
59	QPSK	50	22.97	6.66	16.66	8.33
60	QPSK	50	22.75	6.42	16.42	8.29
61	QPSK	50	22.99	6.49	16.49	8.33
62	QPSK	50	22.58	6.37	16.37	8.31
63	QPSK	50	22.84	6.61	16.61	8.28
Total 0-63			41.71	25.42	35.42	-
16-Beam Reduction					-12.04	
Antenna gain					23.2	
EIRP/PSD			52.87	36.58	46.58	-
Limit			-	37	47	13

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position T			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
0	QPSK	50	23.44	7.35	17.35	8.08
1	QPSK	50	23.40	7.29	17.29	8.06
2	QPSK	50	23.53	7.43	17.43	8.05
3	QPSK	50	23.44	7.30	17.30	8.07
4	QPSK	50	23.44	7.33	17.33	8.02
5	QPSK	50	23.48	7.30	17.30	8.07
6	QPSK	50	23.38	7.28	17.28	8.07
7	QPSK	50	23.30	7.14	17.14	8.06
8	QPSK	50	23.32	7.13	17.13	8.07
9	QPSK	50	23.48	7.40	17.40	8.06
10	QPSK	50	23.69	7.50	17.50	8.04
11	QPSK	50	23.62	7.30	17.30	8.00
12	QPSK	50	23.48	7.41	17.41	8.01
13	QPSK	50	23.66	7.46	17.46	8.01
14	QPSK	50	23.83	7.43	17.43	8.03
15	QPSK	50	23.58	7.41	17.41	8.01
16	QPSK	50	23.71	7.61	17.61	7.82
17	QPSK	50	23.77	7.57	17.57	7.74
18	QPSK	50	23.74	7.61	17.61	8.02
19	QPSK	50	23.55	7.47	17.47	7.85
20	QPSK	50	23.82	7.53	17.53	7.77
21	QPSK	50	23.88	7.72	17.72	7.76
22	QPSK	50	23.62	7.46	17.46	7.84

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23	QPSK	50	23.44	7.63	17.63	7.81
24	QPSK	50	23.81	7.75	17.75	7.78
25	QPSK	50	23.67	7.45	17.45	7.82
26	QPSK	50	23.78	7.66	17.66	7.76
27	QPSK	50	23.79	7.77	17.77	7.78
28	QPSK	50	23.84	7.75	17.75	7.81
29	QPSK	50	23.90	7.70	17.70	7.79
30	QPSK	50	23.69	7.52	17.52	7.74
31	QPSK	50	23.63	7.54	17.54	7.81
32	QPSK	50	23.88	7.77	17.77	7.78
33	QPSK	50	23.87	7.77	17.77	7.76
34	QPSK	50	23.86	7.78	17.78	7.78
35	QPSK	50	23.76	7.69	17.69	7.79
36	QPSK	50	23.93	7.75	17.75	7.80
37	QPSK	50	23.89	7.57	17.57	7.77
38	QPSK	50	23.72	7.68	17.68	7.81
39	QPSK	50	23.73	7.66	17.66	7.84
40	QPSK	50	23.60	7.51	17.51	7.82
41	QPSK	50	23.89	7.79	17.79	7.79
42	QPSK	50	23.86	7.68	17.68	7.77
43	QPSK	50	23.83	7.70	17.70	7.77
44	QPSK	50	23.88	7.78	17.78	7.81
45	QPSK	50	23.67	7.56	17.56	7.77
46	QPSK	50	23.83	7.68	17.68	7.77
47	QPSK	50	23.82	7.76	17.76	7.78
48	QPSK	50	22.76	6.62	16.62	7.31
49	QPSK	50	22.88	6.69	16.69	8.23
50	QPSK	50	23.78	7.72	17.72	8.26
51	QPSK	50	23.10	6.94	16.94	8.31
52	QPSK	50	23.80	7.76	17.76	8.28
53	QPSK	50	22.64	6.46	16.46	8.30
54	QPSK	50	22.56	6.44	16.44	8.38
55	QPSK	50	22.62	6.51	16.51	8.36
56	QPSK	50	22.80	6.67	16.67	8.38
57	QPSK	50	22.89	6.82	16.82	8.31
58	QPSK	50	22.87	6.67	16.67	8.26
59	QPSK	50	22.84	6.71	16.71	8.27
60	QPSK	50	22.65	6.51	16.51	8.29
61	QPSK	50	22.68	6.57	16.57	8.38
62	QPSK	50	22.62	6.51	16.51	8.35
63	QPSK	50	22.78	6.72	16.72	8.38
Total 0-63			41.57	25.44	35.44	-
16-Beam Reduction				-12.04		
Antenna gain				23.2		
EIRP/PSD			52.73	36.60	46.60	-
Limit			-	37	47	13

TEST REPORT

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position B			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
36	QPSK	60	24.11	6.90	16.90	7.75
10LOG64			18.06			
Total 0-63			42.17	24.96	34.96	-
16-Beam Reduction			-12.04			
Antenna gain			23.2			
EIRP/PSD			53.33	36.12	46.12	-
Limit			-	37	47	13

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position M			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
36	QPSK	60	24.12	7.00	17.00	7.67
10LOG64			18.06			
Total 0-63			42.18	25.06	35.06	-
16-Beam Reduction			-12.04			
Antenna gain			23.2			
EIRP/PSD			53.34	36.22	46.22	-
Limit			-	37	47	13

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position T			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
36	QPSK	60	23.88	6.83	16.83	7.78
10LOG64			18.06			
Total 0-63			41.94	24.89	34.89	-
16-Beam Reduction			-12.04			
Antenna gain			23.2			
EIRP/PSD			53.10	36.05	46.05	-
Limit			-	37	47	13

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position B			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
36	QPSK	70	24.13	6.26	16.26	7.77
10LOG64			18.06			
Total 0-63			42.19	24.32	34.32	-
16-Beam Reduction			-12.04			
Antenna gain			23.2			
EIRP/PSD			53.35	35.48	45.48	-
Limit			-	37	47	13

TEST REPORT

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position M			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
36	QPSK	70	24.07	6.32	16.32	7.65
10LOG64			18.06			
Total 0-63			42.13	24.38	34.38	-
16-Beam Reduction			-12.04			
Antenna gain			23.2			
EIRP/PSD			53.29	35.54	45.54	-
Limit			-	37	47	13

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position T			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
36	QPSK	70	23.83	6.17	16.17	7.77
10LOG64			18.06			
Total 0-63			41.89	24.23	34.23	-
16-Beam Reduction			-12.04			
Antenna gain			23.2			
EIRP/PSD			53.05	35.39	45.39	-
Limit			-	37	47	13

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position B			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
36	QPSK	80	24.24	5.70	15.70	7.78
10LOG64			18.06			
Total 0-63			42.30	23.76	33.76	-
16-Beam Reduction			-12.04			
Antenna gain			23.2			
EIRP/PSD			53.46	34.92	44.92	-
Limit			-	37	47	13

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position M			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
36	QPSK	80	24.11	5.82	15.82	7.72
10LOG64			18.06			
Total 0-63			42.17	23.88	33.88	-
16-Beam Reduction			-12.04			
Antenna gain			23.2			
EIRP/PSD			53.33	35.04	45.04	-
Limit			-	37	47	13

TEST REPORT

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position T			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
36	QPSK	80	23.85	5.74	15.74	7.77
10LOG64			18.06			
Total 0-63			41.91	23.80	33.80	-
16-Beam Reduction			-12.04			
Antenna gain			23.2			
EIRP/PSD			53.07	34.96	44.96	-
Limit			-	37	47	13

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position B			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
36	QPSK	90	24.03	5.22	15.22	7.82
10LOG64			18.06			
Total 0-63			42.09	23.28	33.28	-
16-Beam Reduction			-12.04			
Antenna gain			23.2			
EIRP/PSD			53.25	34.44	44.44	-
Limit			-	37	47	13

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position M			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
36	QPSK	90	24.07	5.24	15.24	7.67
10LOG64			18.06			
Total 0-63			42.13	23.30	33.30	-
16-Beam Reduction			-12.04			
Antenna gain			23.2			
EIRP/PSD			53.29	34.46	44.46	-
Limit			-	37	47	13

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position T			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
36	QPSK	90	23.76	5.21	15.21	7.77
10LOG64			18.06			
Total 0-63			41.82	23.27	33.27	-
16-Beam Reduction			-12.04			
Antenna gain			23.2			
EIRP/PSD			52.98	34.43	44.43	-
Limit			-	37	47	13

TEST REPORT

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position B			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
0	QPSK	100	23.78	4.34	14.34	7.99
1	QPSK	100	23.66	4.26	14.26	8.00
2	QPSK	100	23.90	4.50	14.50	7.97
3	QPSK	100	23.64	4.22	14.22	8.04
4	QPSK	100	23.77	4.40	14.40	8.00
5	QPSK	100	23.79	4.32	14.32	8.00
6	QPSK	100	23.63	4.18	14.18	7.97
7	QPSK	100	23.57	4.13	14.13	8.02
8	QPSK	100	23.38	4.04	14.04	8.03
9	QPSK	100	23.66	4.23	14.23	8.01
10	QPSK	100	23.89	4.53	14.53	8.00
11	QPSK	100	23.87	4.51	14.51	8.00
12	QPSK	100	23.79	4.38	14.38	8.02
13	QPSK	100	23.84	4.37	14.37	8.00
14	QPSK	100	23.82	4.38	14.38	7.98
15	QPSK	100	23.75	4.33	14.33	8.04
16	QPSK	100	23.94	4.57	14.57	7.81
17	QPSK	100	23.97	4.62	14.62	7.82
18	QPSK	100	23.78	4.35	14.35	7.81
19	QPSK	100	23.64	4.36	14.36	7.79
20	QPSK	100	23.92	4.46	14.46	7.81
21	QPSK	100	24.04	4.61	14.61	7.77
22	QPSK	100	23.87	4.51	14.51	7.77
23	QPSK	100	24.02	4.65	14.65	7.84
24	QPSK	100	24.06	4.76	14.76	7.80
25	QPSK	100	24.05	4.66	14.66	7.78
26	QPSK	100	24.09	4.71	14.71	7.76
27	QPSK	100	24.10	4.61	14.61	7.81
28	QPSK	100	24.10	4.70	14.70	7.83
29	QPSK	100	24.09	4.70	14.70	7.79
30	QPSK	100	23.82	4.53	14.53	7.79
31	QPSK	100	23.75	4.43	14.43	7.78
32	QPSK	100	24.09	4.71	14.71	7.80
33	QPSK	100	24.11	4.64	14.64	7.77
34	QPSK	100	24.06	4.65	14.65	7.79
35	QPSK	100	24.08	4.63	14.63	7.78
36	QPSK	100	24.11	4.71	14.71	7.75
37	QPSK	100	23.99	4.62	14.62	7.81
38	QPSK	100	23.98	4.53	14.53	7.76
39	QPSK	100	23.89	4.46	14.46	7.81
40	QPSK	100	23.72	4.29	14.29	7.84
41	QPSK	100	24.02	4.67	14.67	7.80

TEST REPORT

42	QPSK	100	24.01	4.65	14.65	7.83
43	QPSK	100	24.00	4.60	14.60	7.76
44	QPSK	100	24.05	4.58	14.58	7.84
45	QPSK	100	23.86	4.41	14.41	7.84
46	QPSK	100	23.97	4.54	14.54	7.77
47	QPSK	100	24.03	4.58	14.58	7.78
48	QPSK	100	22.98	3.54	13.54	7.24
49	QPSK	100	22.99	3.63	13.63	8.24
50	QPSK	100	23.78	4.60	14.60	8.25
51	QPSK	100	23.14	3.82	13.82	8.20
52	QPSK	100	24.07	4.65	14.65	8.23
53	QPSK	100	22.91	3.57	13.57	8.26
54	QPSK	100	22.69	3.28	13.28	8.26
55	QPSK	100	22.77	3.33	13.33	8.27
56	QPSK	100	22.87	3.50	13.50	8.26
57	QPSK	100	23.13	3.80	13.80	8.19
58	QPSK	100	22.96	3.53	13.53	8.19
59	QPSK	100	23.12	3.67	13.67	8.25
60	QPSK	100	22.77	3.37	13.37	8.24
61	QPSK	100	22.76	3.31	13.31	8.23
62	QPSK	100	22.78	3.44	13.44	8.22
63	QPSK	100	22.96	3.62	13.62	8.21
Total 0-63		41.76	22.37	32.37	-	
16-Beam Reduction			-12.04			
Antenna gain			23.2			
EIRP/PSD		52.92	33.53	43.53	-	
Limit		-	37	47	13	

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position M			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
0	QPSK	100	23.55	4.23	14.23	7.97
1	QPSK	100	23.70	4.32	14.32	7.92
2	QPSK	100	23.78	4.34	14.34	8.00
3	QPSK	100	23.63	4.23	14.23	8.02
4	QPSK	100	23.60	4.27	14.27	7.94
5	QPSK	100	23.50	4.11	14.11	7.99
6	QPSK	100	23.54	4.06	14.06	7.98
7	QPSK	100	23.52	4.13	14.13	7.99
8	QPSK	100	23.46	4.05	14.05	8.01
9	QPSK	100	23.52	4.14	14.14	7.92
10	QPSK	100	23.85	4.58	14.58	7.90
11	QPSK	100	23.80	4.48	14.48	7.79
12	QPSK	100	23.62	4.18	14.18	7.99
13	QPSK	100	23.83	4.45	14.45	7.89
14	QPSK	100	23.84	4.52	14.52	7.85

TEST REPORT

15	QPSK	100	23.64	4.22	14.22	7.98
16	QPSK	100	23.89	4.46	14.46	7.67
17	QPSK	100	23.91	4.53	14.53	7.60
18	QPSK	100	23.66	4.31	14.31	7.64
19	QPSK	100	23.57	4.31	14.31	7.68
20	QPSK	100	23.90	4.51	14.51	7.61
21	QPSK	100	23.94	4.54	14.54	7.66
22	QPSK	100	23.72	4.28	14.28	7.66
23	QPSK	100	23.94	4.48	14.48	7.64
24	QPSK	100	23.99	4.61	14.61	7.71
25	QPSK	100	23.99	4.63	14.63	7.70
26	QPSK	100	24.00	4.60	14.60	7.66
27	QPSK	100	24.01	4.69	14.69	7.61
28	QPSK	100	24.08	4.72	14.72	7.70
29	QPSK	100	24.07	4.64	14.64	7.68
30	QPSK	100	23.74	4.41	14.41	7.65
31	QPSK	100	23.77	4.38	14.38	7.69
32	QPSK	100	23.66	4.45	14.45	7.67
33	QPSK	100	23.95	4.63	14.63	7.61
34	QPSK	100	23.95	4.51	14.51	7.68
35	QPSK	100	24.00	4.60	14.60	7.66
36	QPSK	100	24.08	4.78	14.78	7.61
37	QPSK	100	23.87	4.50	14.50	7.67
38	QPSK	100	23.81	4.45	14.45	7.62
39	QPSK	100	23.96	4.52	14.52	7.67
40	QPSK	100	23.59	4.20	14.20	7.67
41	QPSK	100	24.06	4.65	14.65	7.66
42	QPSK	100	23.96	4.57	14.57	7.65
43	QPSK	100	23.93	4.50	14.50	7.61
44	QPSK	100	24.00	4.59	14.59	7.66
45	QPSK	100	23.83	4.35	14.35	7.67
46	QPSK	100	23.99	4.53	14.53	7.65
47	QPSK	100	24.02	4.56	14.56	7.66
48	QPSK	100	22.83	3.40	13.40	7.15
49	QPSK	100	22.97	3.68	13.68	8.30
50	QPSK	100	23.97	4.59	14.59	8.31
51	QPSK	100	23.12	3.82	13.82	8.30
52	QPSK	100	23.84	4.51	14.51	8.31
53	QPSK	100	22.80	3.59	13.59	8.30
54	QPSK	100	22.66	3.26	13.26	8.31
55	QPSK	100	22.62	3.24	13.24	8.29
56	QPSK	100	22.94	3.62	13.62	8.32
57	QPSK	100	22.94	3.58	13.58	8.31
58	QPSK	100	22.85	3.45	13.45	8.32
59	QPSK	100	22.98	3.56	13.56	8.24
60	QPSK	100	22.77	3.43	13.43	8.32
61	QPSK	100	22.74	3.28	13.28	8.21

TEST REPORT

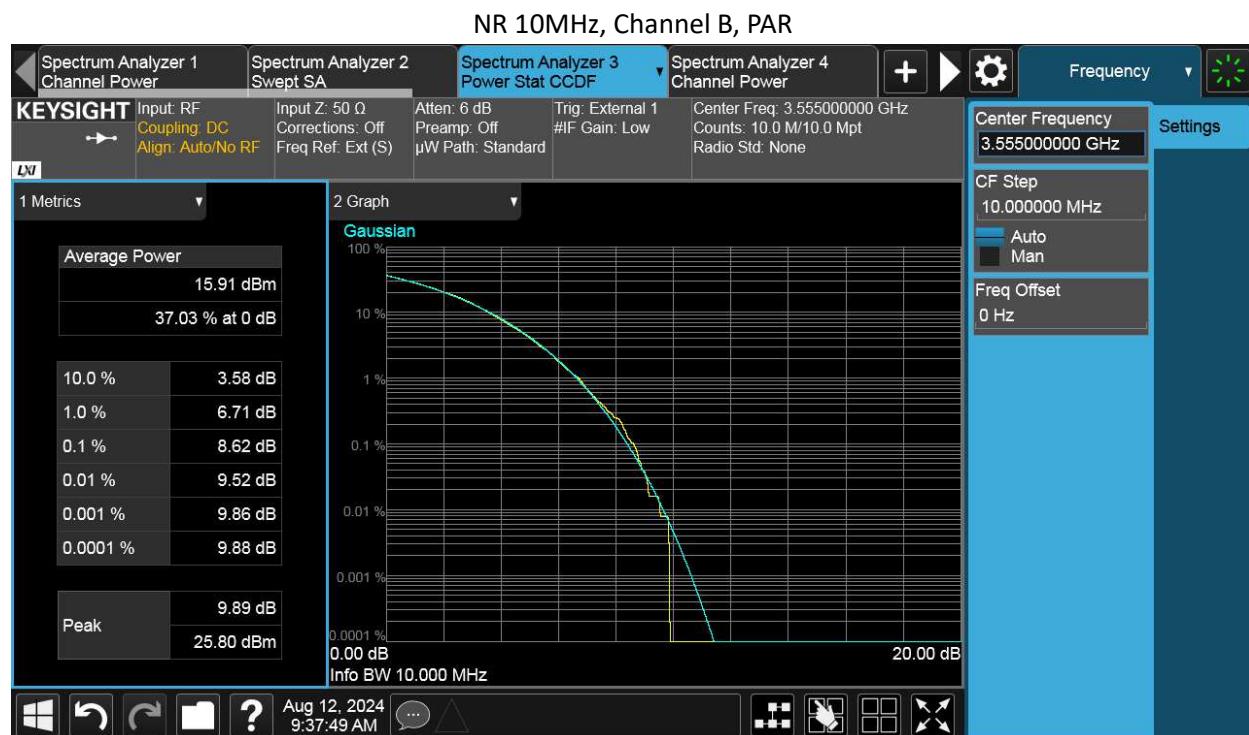
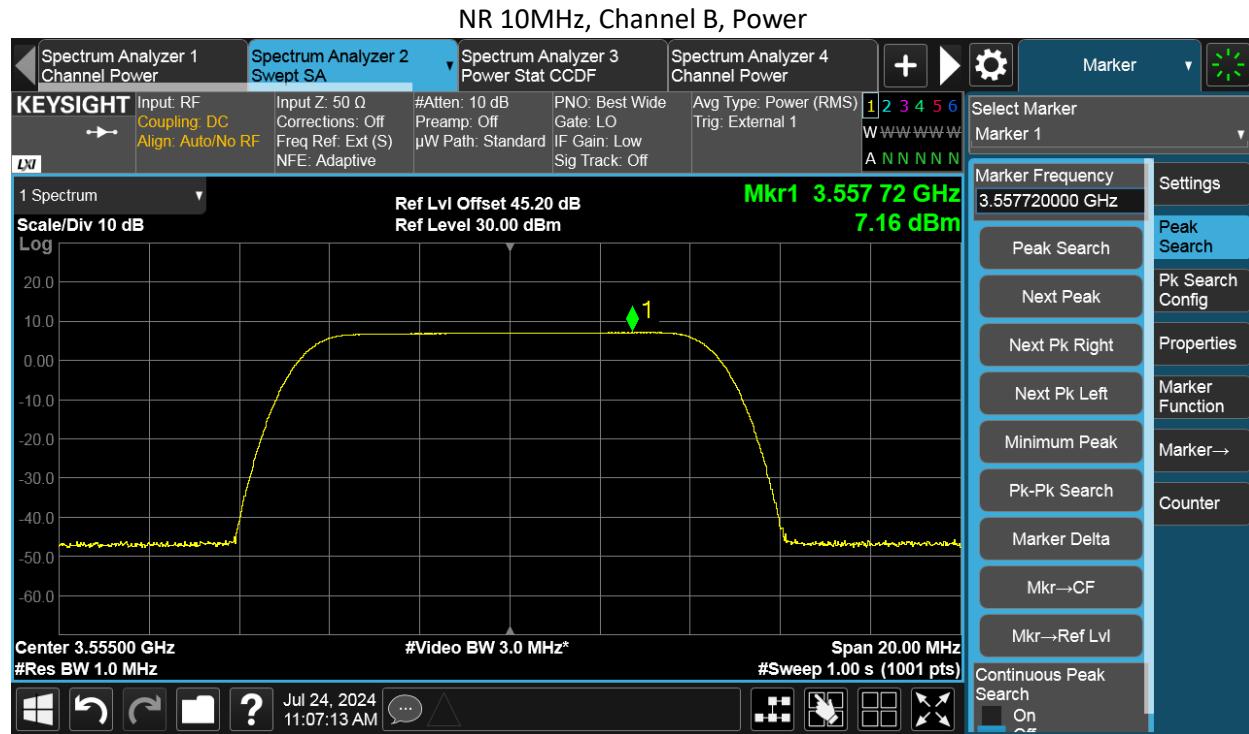
62	QPSK	100	22.65	3.32	13.32	8.28
63	QPSK	100	22.83	3.53	13.53	8.32
Total 0-63			41.69	22.31	32.31	-
16-Beam Reduction			-12.04			
Antenna gain			23.2			
EIRP/PSD			52.85	33.47	43.47	-
Limit			-	37	47	13

Antenna Port	Modulation	Carrier Bandwidth (MHz)	Power / PSD / Peak-to-Average Ratio (PAR)			
			Channel position T			
			Power (dBm)	PSD (dBm/MHz)	Power (dBm/10MHz)	PAR (dB)
0	QPSK	100	23.49	4.39	14.39	8.04
1	QPSK	100	23.52	4.37	14.37	7.95
2	QPSK	100	23.59	4.36	14.36	8.00
3	QPSK	100	23.64	4.35	14.35	8.08
4	QPSK	100	23.46	4.36	14.36	7.94
5	QPSK	100	23.55	4.32	14.32	8.01
6	QPSK	100	23.54	4.35	14.35	7.99
7	QPSK	100	23.42	4.21	14.21	8.00
8	QPSK	100	23.50	4.21	14.21	7.96
9	QPSK	100	23.44	4.22	14.22	8.00
10	QPSK	100	23.79	4.56	14.56	8.03
11	QPSK	100	23.69	4.50	14.50	8.00
12	QPSK	100	23.67	4.42	14.42	8.01
13	QPSK	100	23.75	4.64	14.64	7.95
14	QPSK	100	23.68	4.44	14.44	8.01
15	QPSK	100	23.60	4.35	14.35	7.97
16	QPSK	100	23.73	4.54	14.54	7.77
17	QPSK	100	23.81	4.73	14.73	7.74
18	QPSK	100	23.63	4.47	14.47	7.84
19	QPSK	100	23.59	4.40	14.40	7.78
20	QPSK	100	23.79	4.66	14.66	7.74
21	QPSK	100	23.96	4.79	14.79	7.76
22	QPSK	100	23.70	4.42	14.42	7.76
23	QPSK	100	23.75	4.45	14.45	7.77
24	QPSK	100	24.02	4.88	14.88	7.76
25	QPSK	100	23.93	4.79	14.79	7.87
26	QPSK	100	23.94	4.58	14.58	7.74
27	QPSK	100	23.81	4.68	14.68	7.75
28	QPSK	100	24.01	4.79	14.79	7.83
29	QPSK	100	23.91	4.71	14.71	7.83
30	QPSK	100	23.68	4.51	14.51	7.77
31	QPSK	100	23.73	4.53	14.53	7.80
32	QPSK	100	23.87	4.64	14.64	7.77
33	QPSK	100	23.99	4.86	14.86	7.75
34	QPSK	100	23.93	4.68	14.68	7.80

TEST REPORT

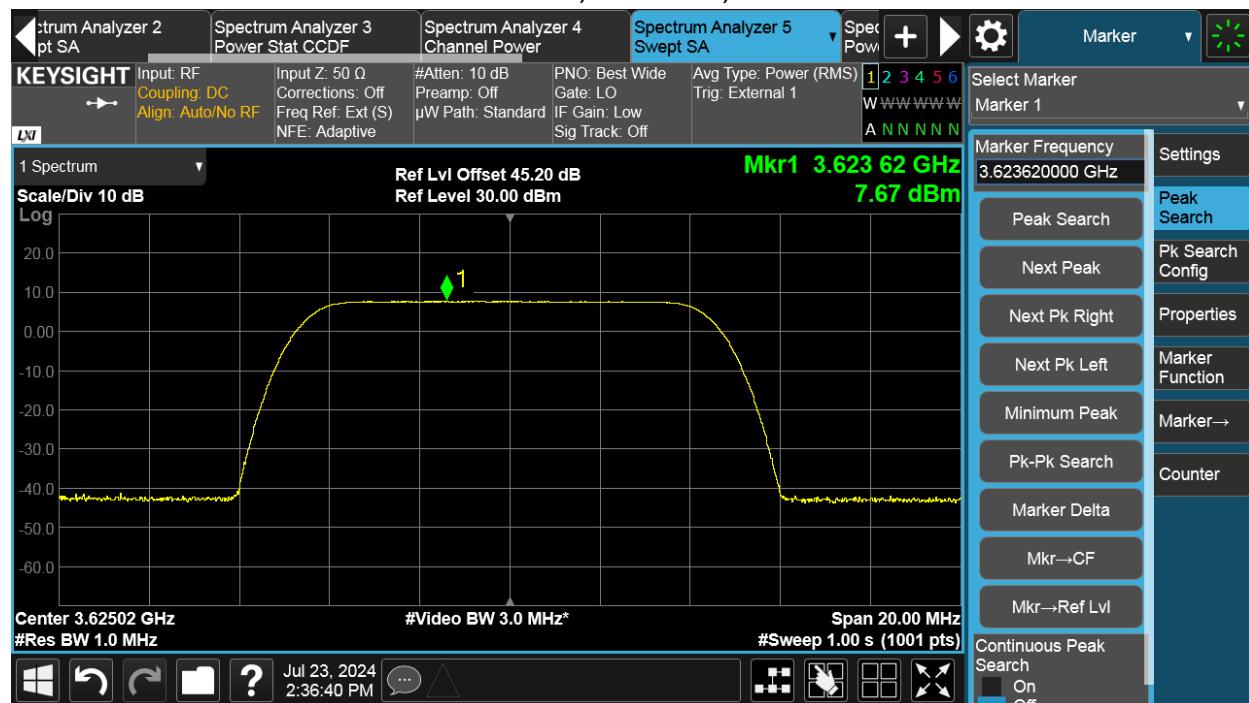
35	QPSK	100	23.89	4.67	14.67	7.80
36	QPSK	100	24.05	4.84	14.84	7.76
37	QPSK	100	23.89	4.70	14.70	7.81
38	QPSK	100	23.68	4.54	14.54	7.77
39	QPSK	100	23.83	4.60	14.60	7.79
40	QPSK	100	23.54	4.32	14.32	7.81
41	QPSK	100	23.91	4.66	14.66	7.80
42	QPSK	100	23.99	4.71	14.71	7.82
43	QPSK	100	23.81	4.50	14.50	7.77
44	QPSK	100	23.91	4.75	14.75	7.78
45	QPSK	100	23.70	4.48	14.48	7.84
46	QPSK	100	23.88	4.45	14.45	7.78
47	QPSK	100	23.85	4.46	14.46	7.81
48	QPSK	100	22.80	3.55	13.55	8.14
49	QPSK	100	22.80	3.60	13.60	8.24
50	QPSK	100	23.91	4.73	14.73	8.27
51	QPSK	100	23.18	3.92	13.92	8.27
52	QPSK	100	23.77	4.72	14.72	8.26
53	QPSK	100	22.80	3.45	13.45	8.19
54	QPSK	100	22.54	3.44	13.44	8.26
55	QPSK	100	22.54	3.32	13.32	8.24
56	QPSK	100	22.83	3.74	13.74	8.28
57	QPSK	100	22.91	3.77	13.77	8.15
58	QPSK	100	22.96	3.66	13.66	8.27
59	QPSK	100	23.03	3.78	13.78	8.27
60	QPSK	100	22.62	3.41	13.41	8.15
61	QPSK	100	22.60	3.49	13.49	8.13
62	QPSK	100	22.80	3.59	13.59	8.25
63	QPSK	100	22.79	3.65	13.65	8.27
Total 0-63		41.63	22.42	32.42	-	
16-Beam Reduction				12.04		
Antenna gain				23.2		
EIRP/PSD		52.79	33.58	43.58	-	
Limit		-	37	47	13	

TEST REPORT



TEST REPORT

NR 10MHz, Channel M, Power

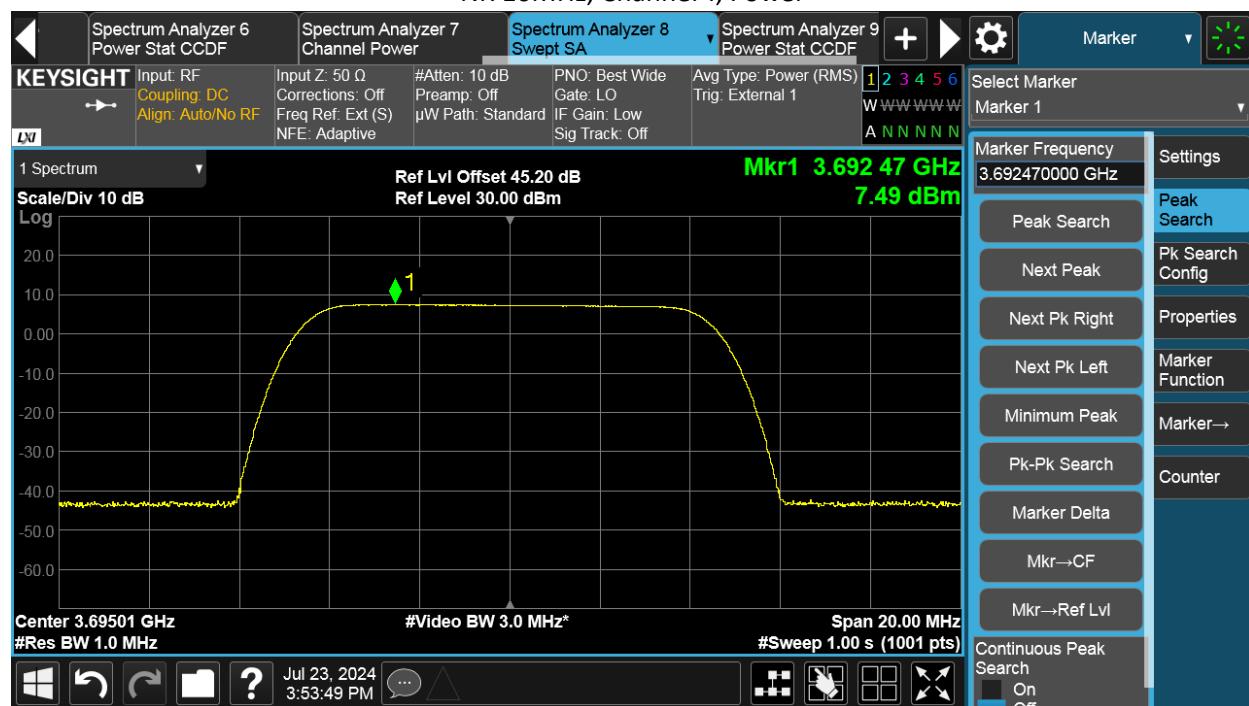


NR 10MHz, Channel M, PAR



TEST REPORT

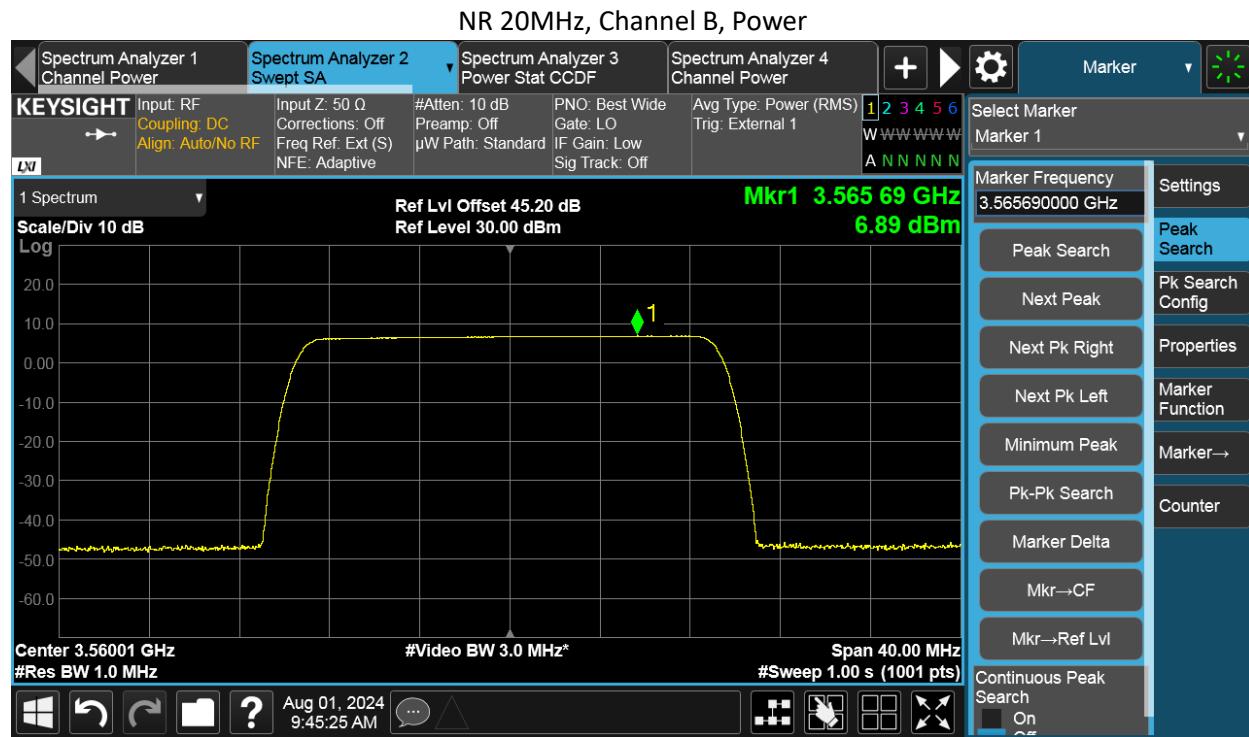
NR 10MHz, Channel T, Power



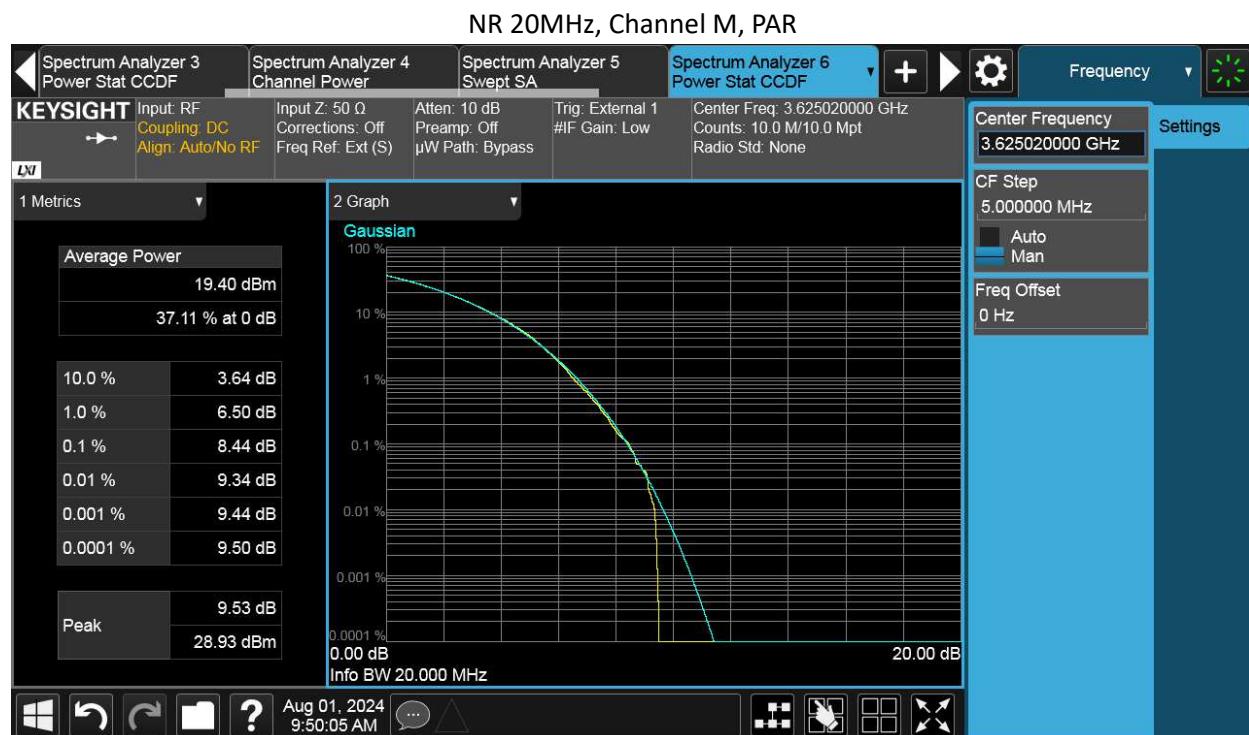
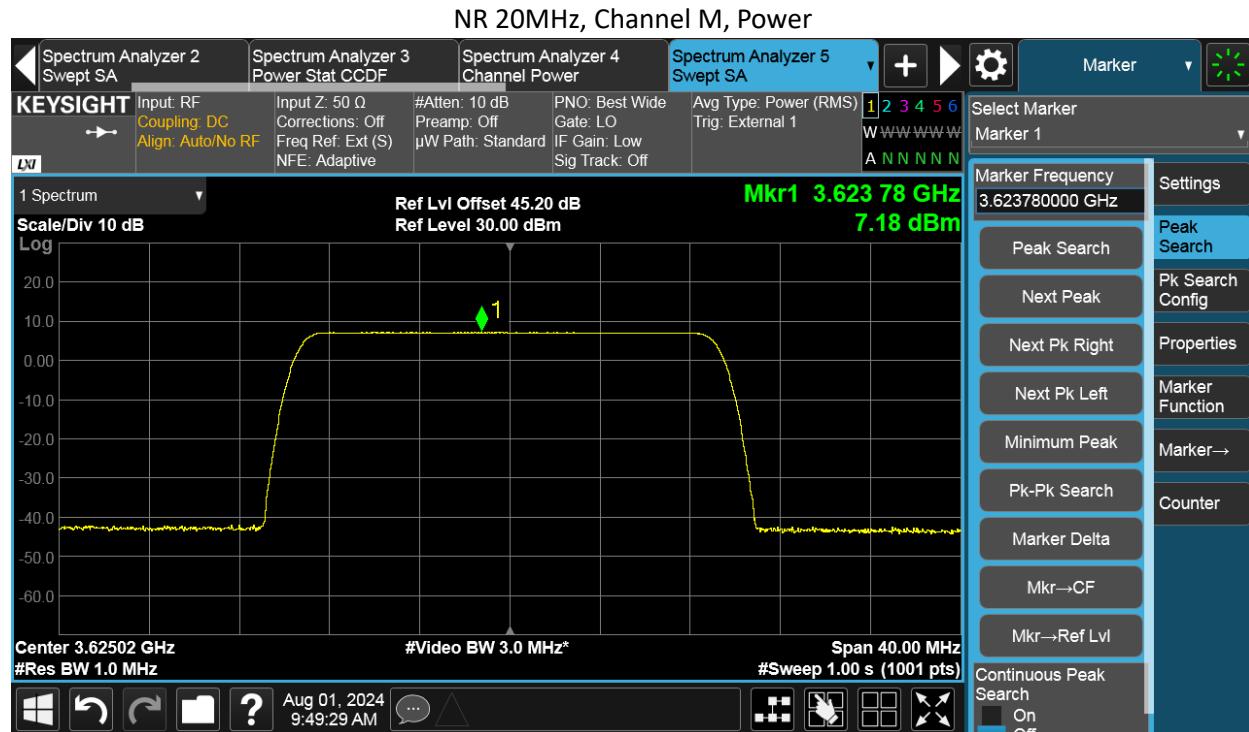
NR 10MHz, Channel T, PAR



TEST REPORT

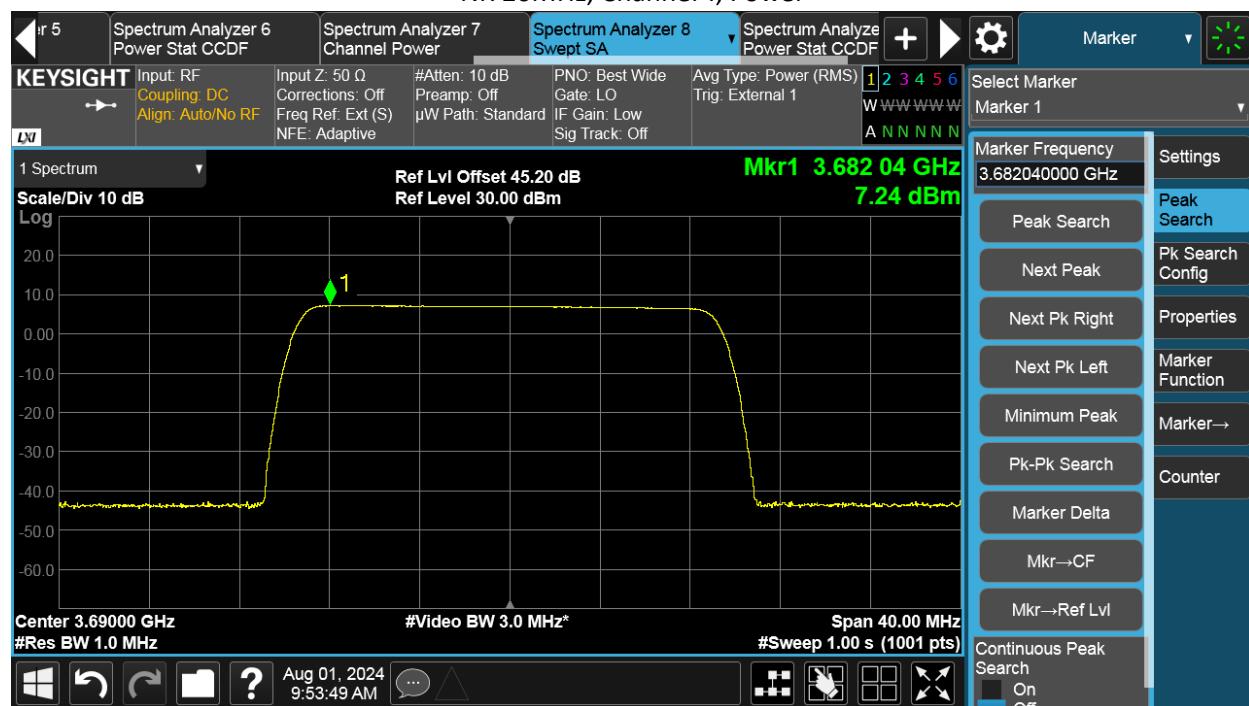


TEST REPORT



TEST REPORT

NR 20MHz, Channel T, Power

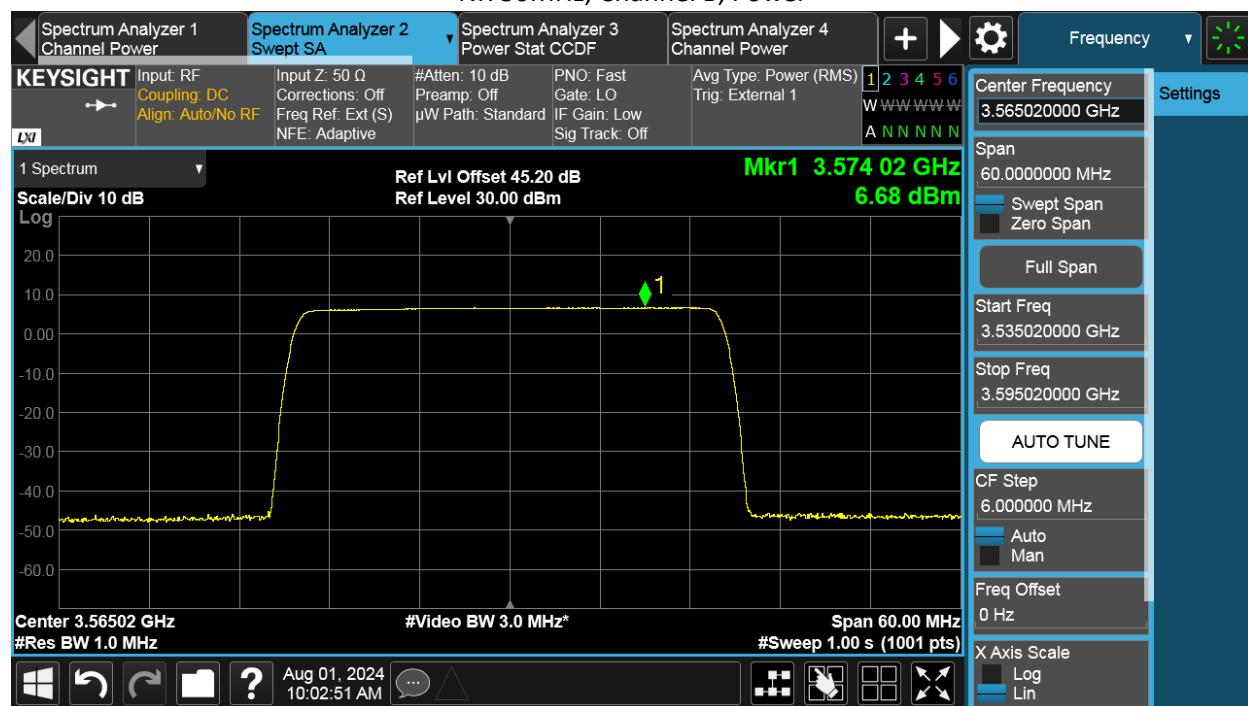


NR 20MHz, Channel T, PAR

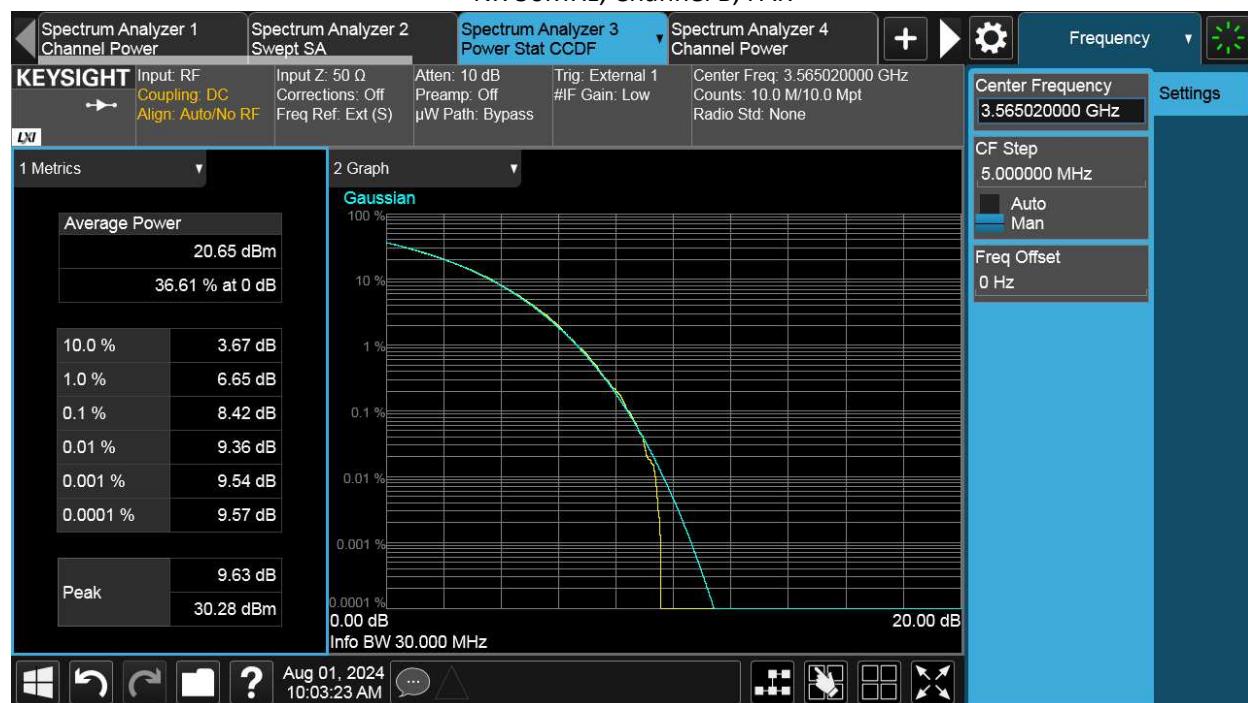


TEST REPORT

NR 30MHz, Channel B, Power

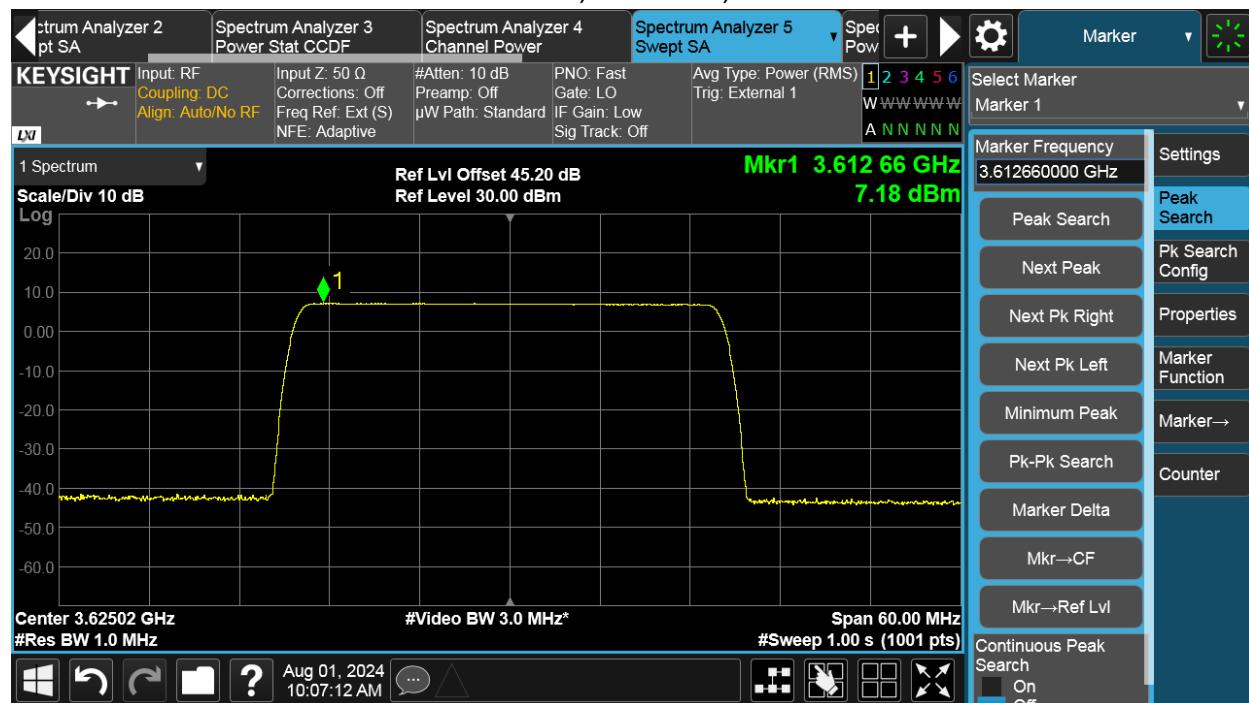


NR 30MHz, Channel B, PAR

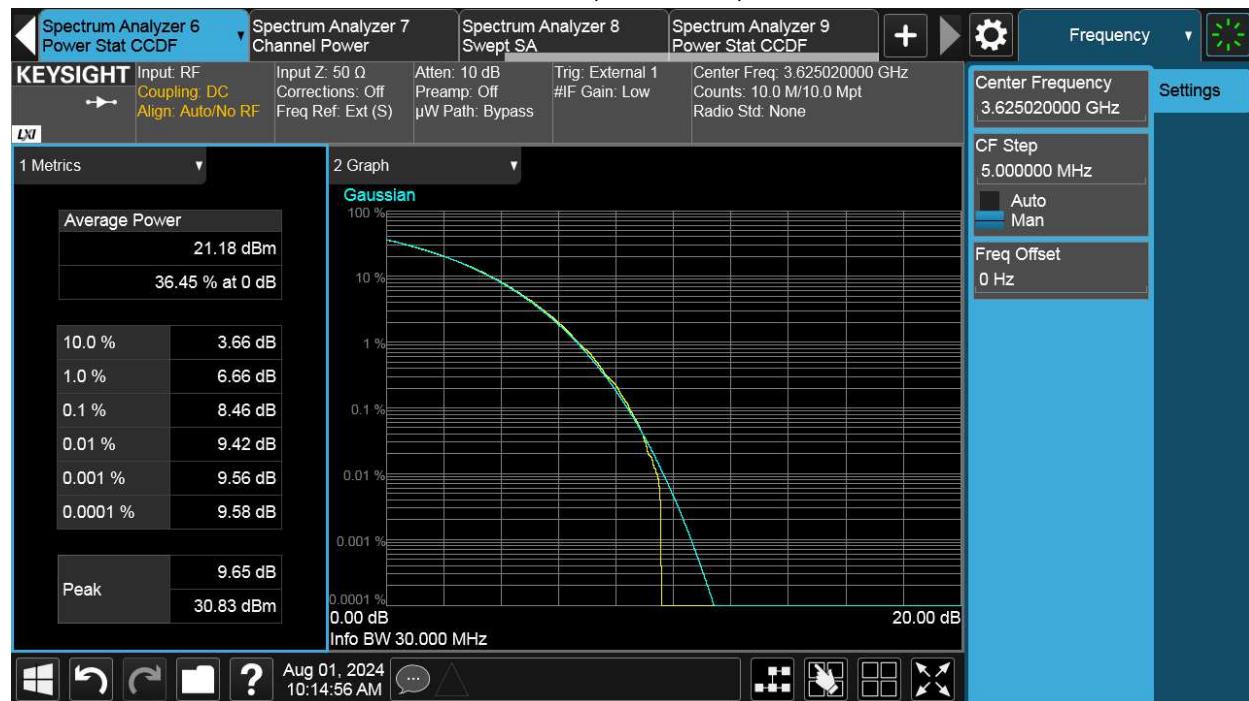


TEST REPORT

NR 30MHz, Channel M, Power

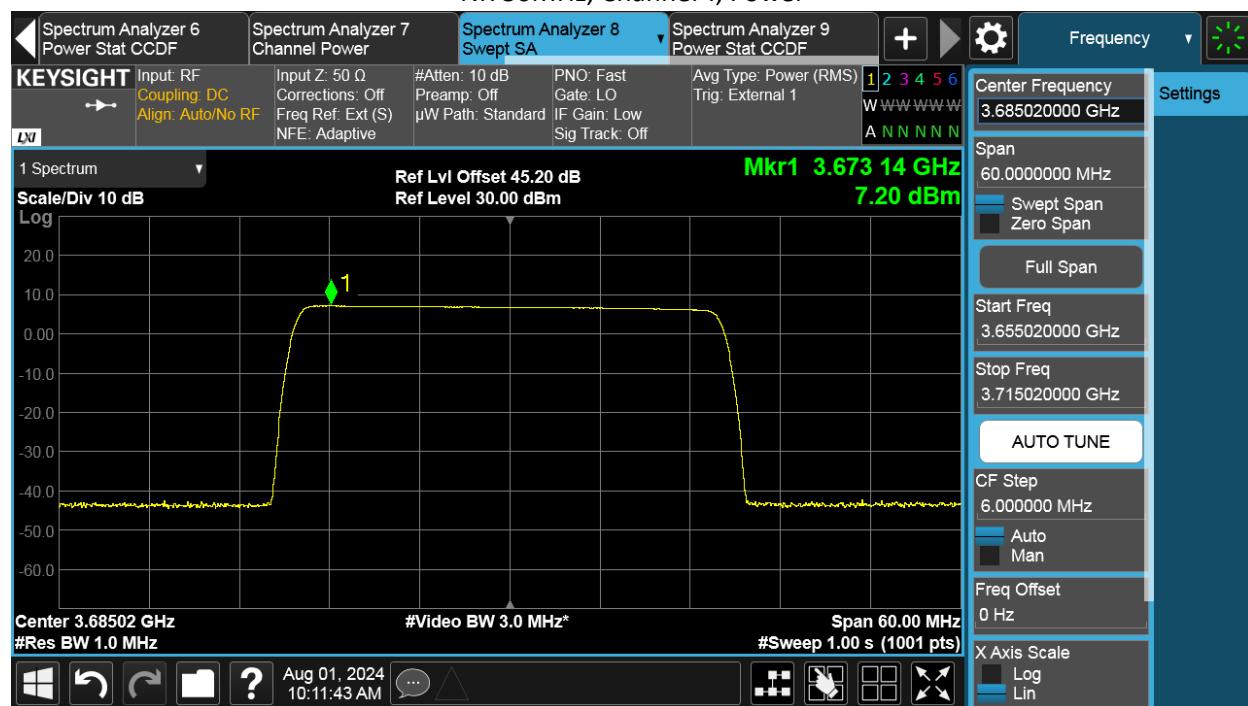


NR 30MHz, Channel M, PAR



TEST REPORT

NR 30MHz, Channel T, Power

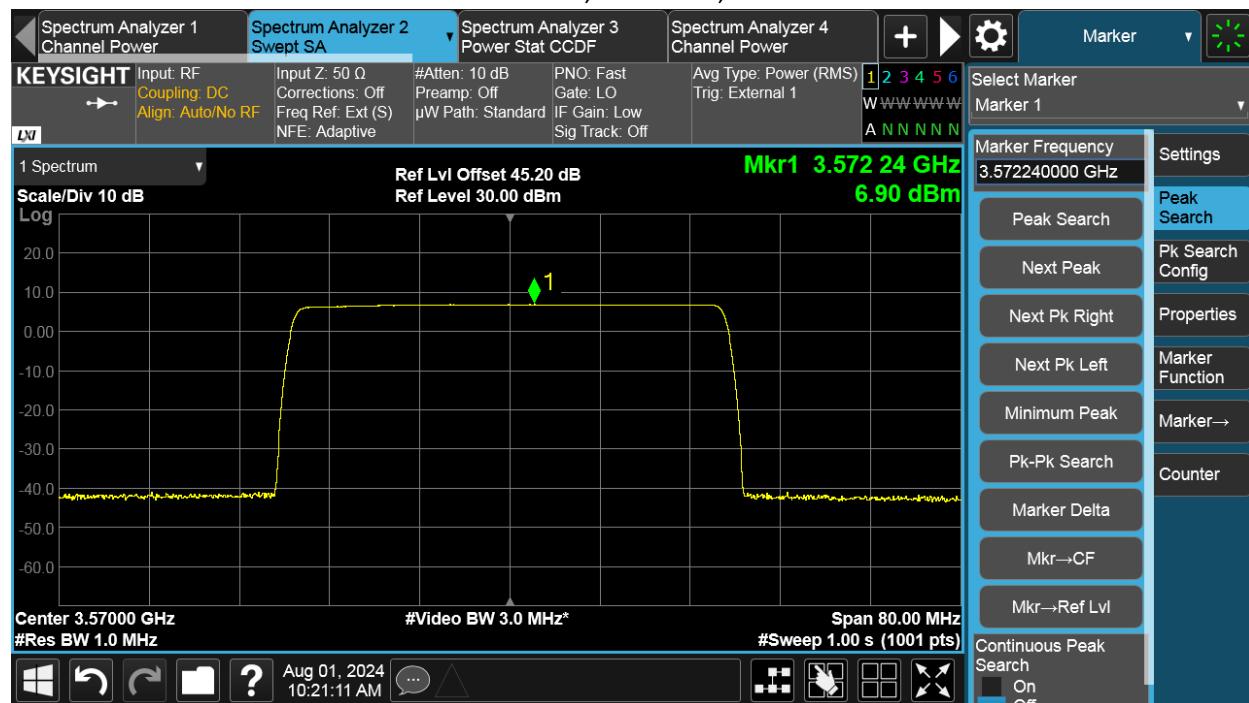


NR 30MHz, Channel T, PAR

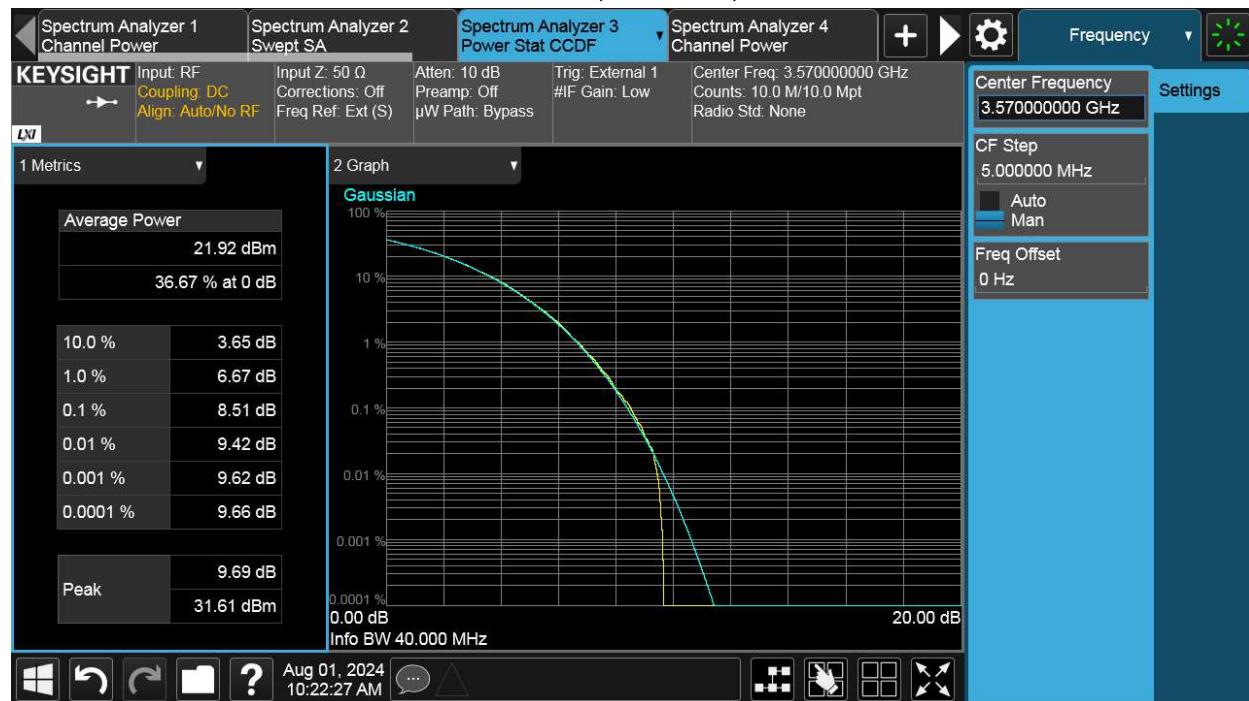


TEST REPORT

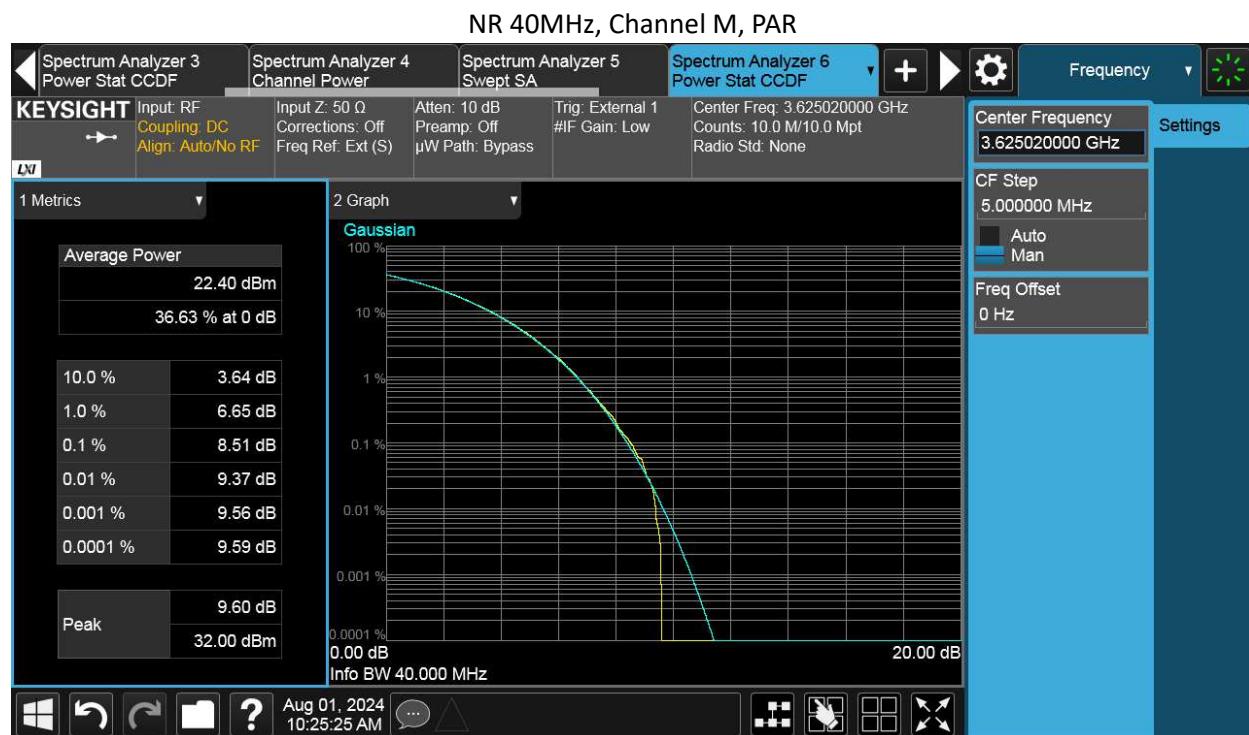
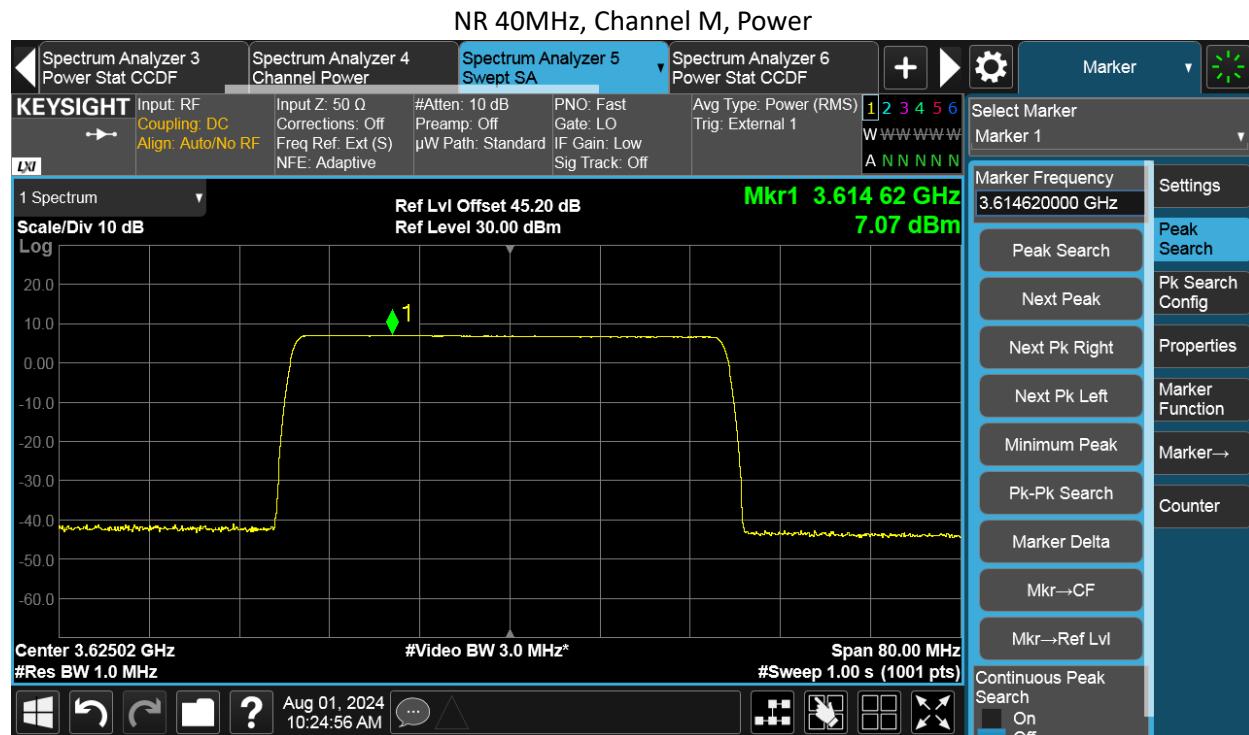
NR 40MHz, Channel B, Power



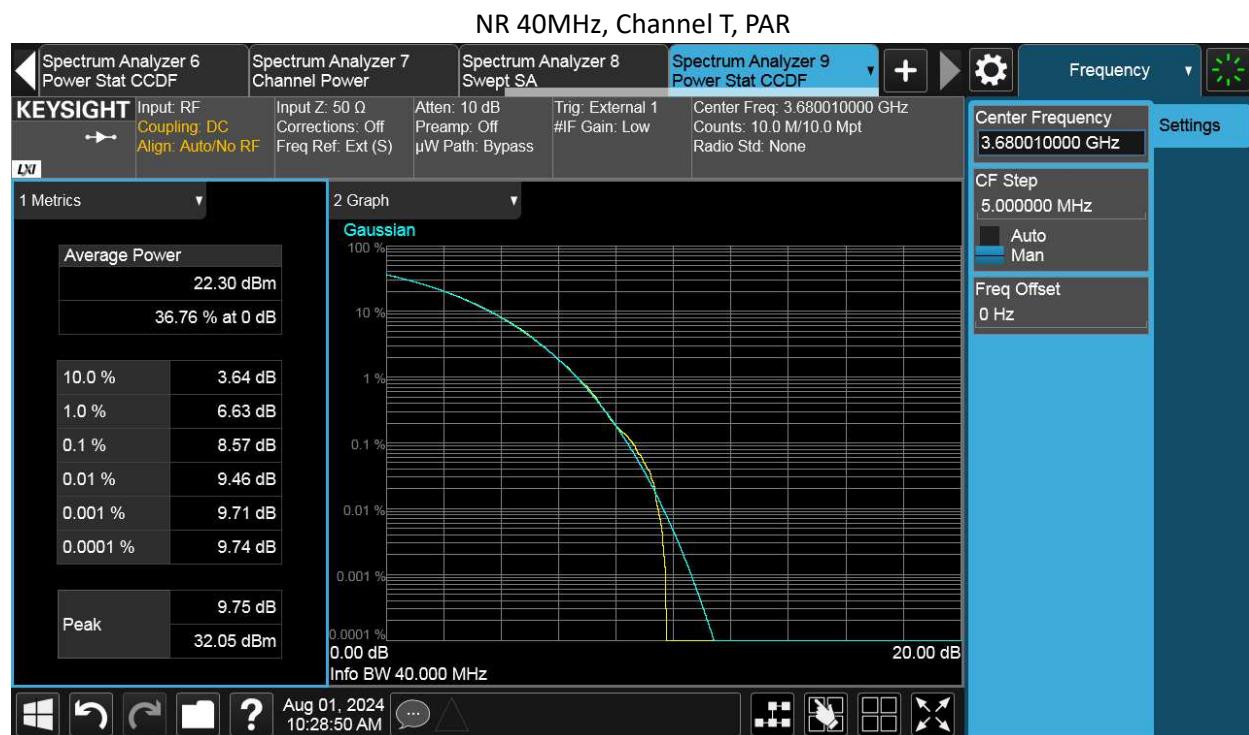
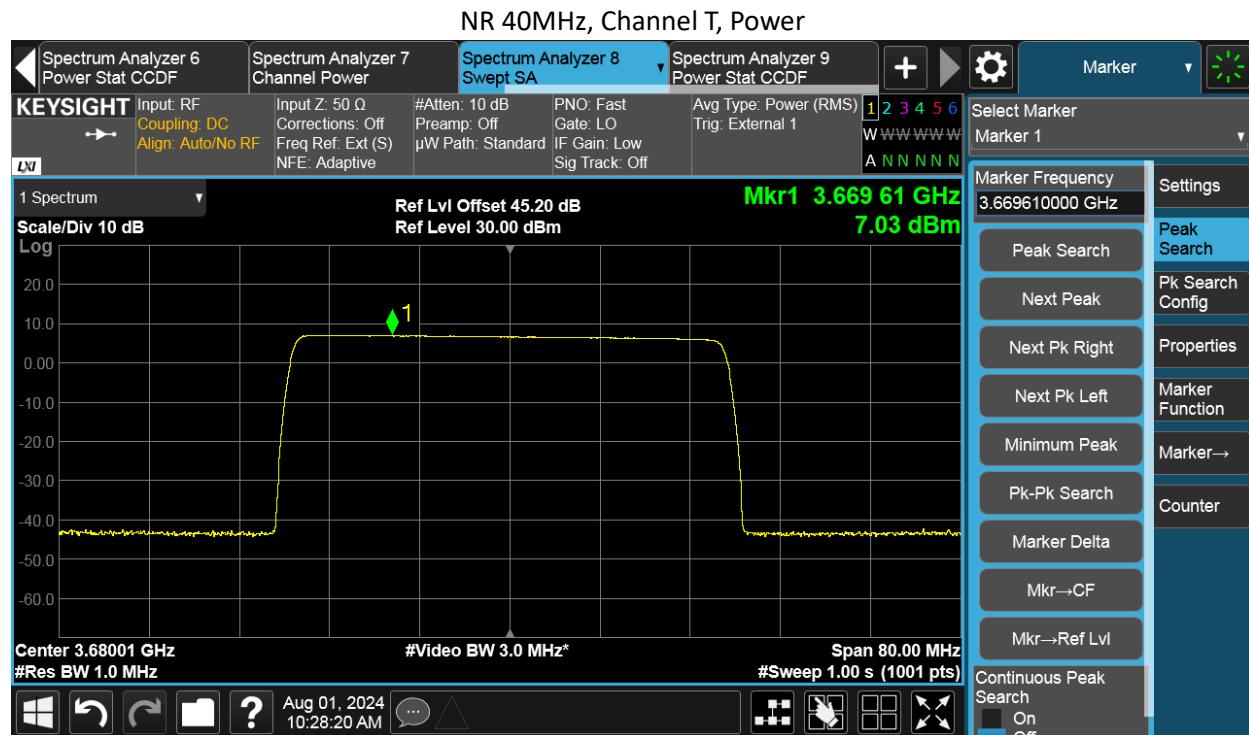
NR 40MHz, Channel B, PAR



TEST REPORT

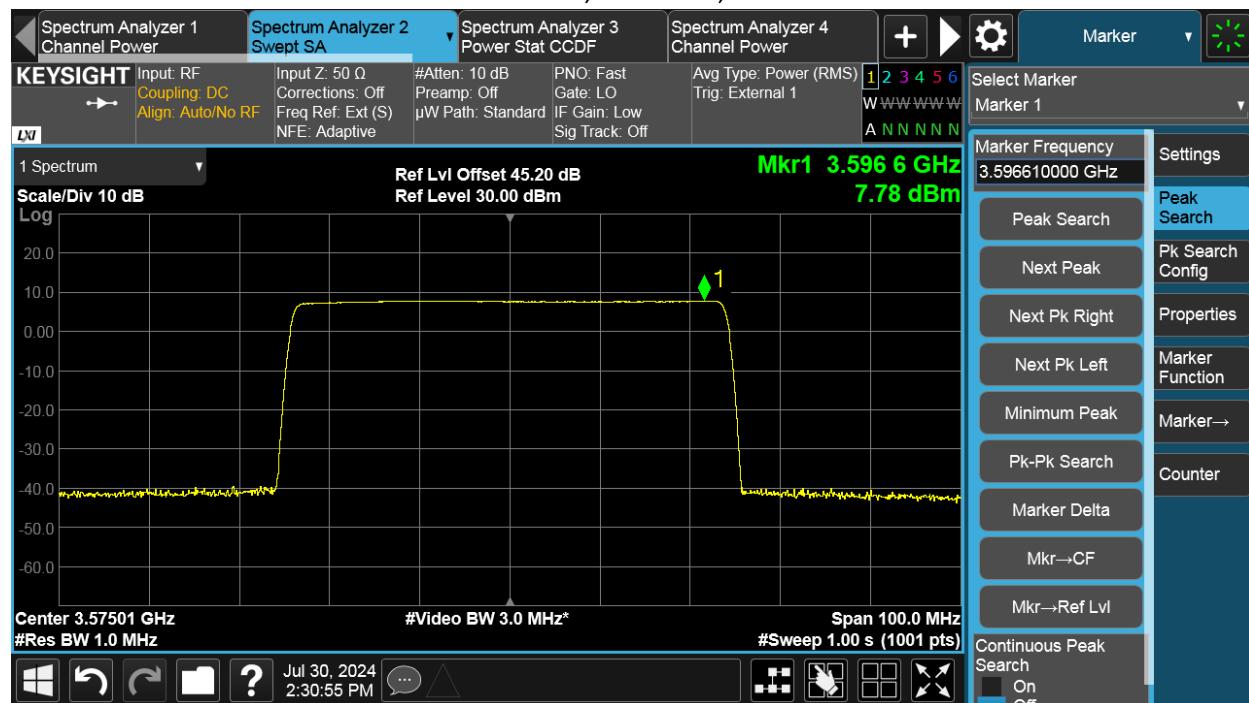


TEST REPORT

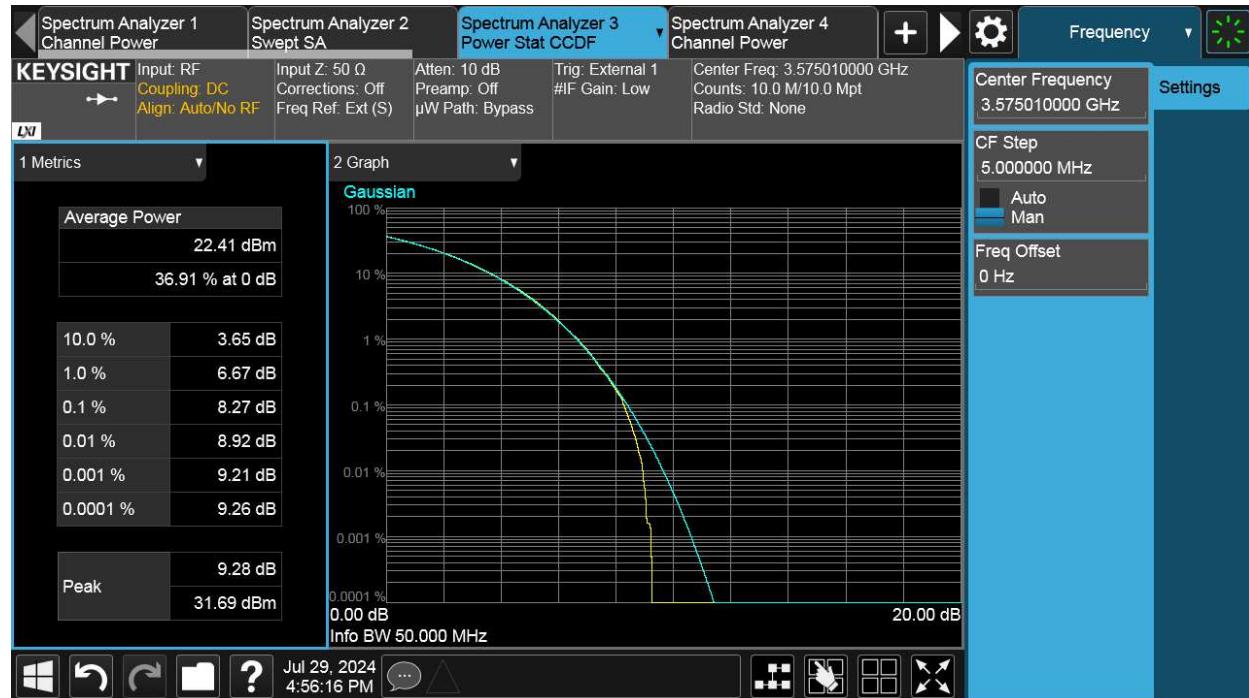


TEST REPORT

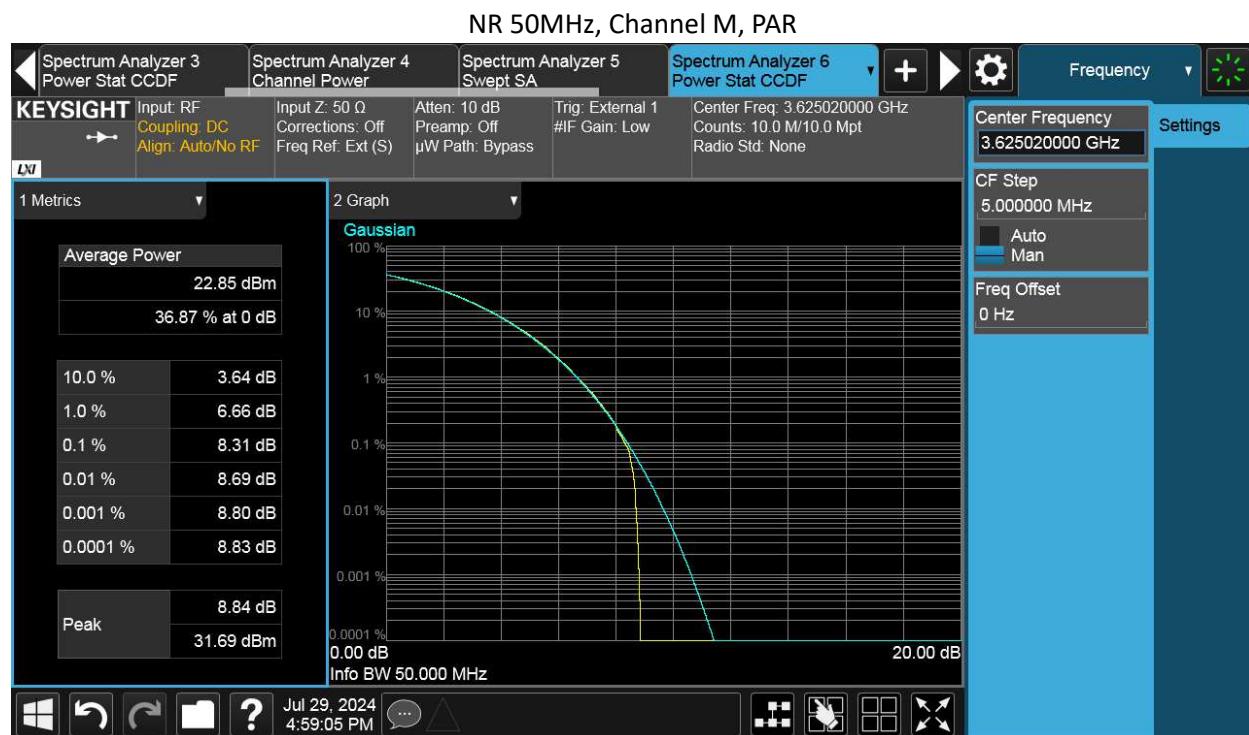
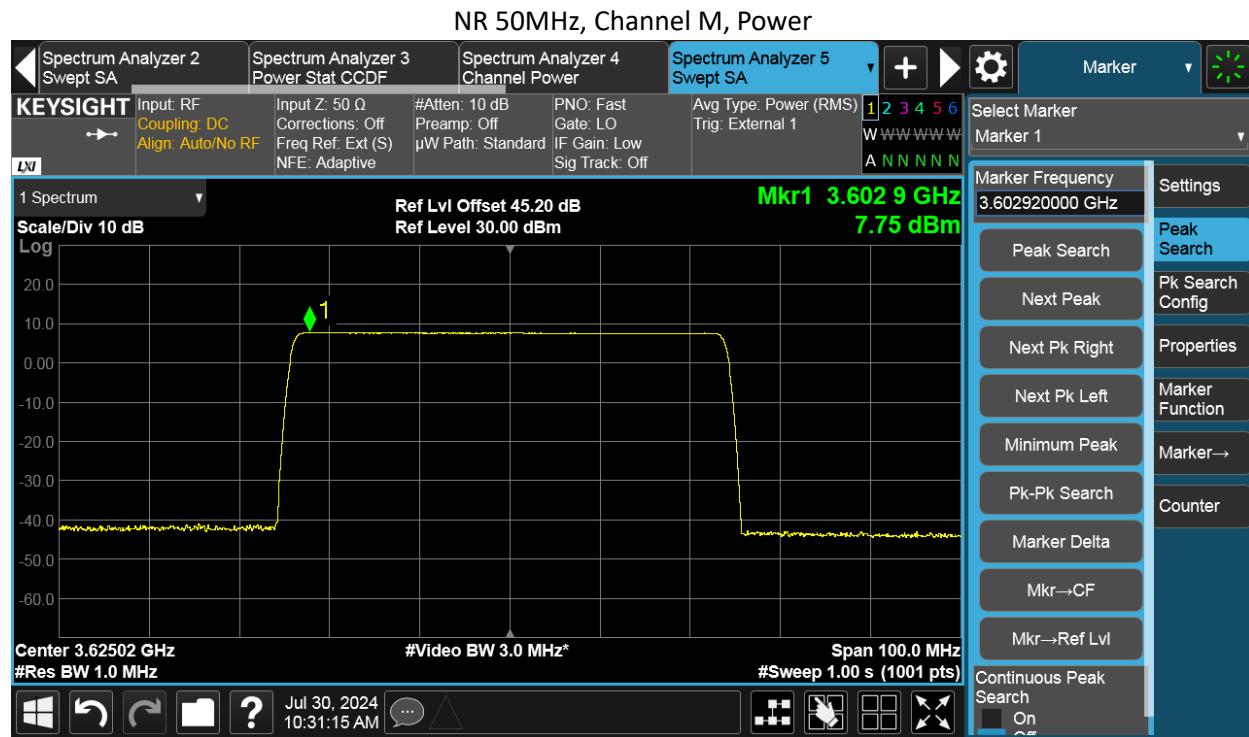
NR 50MHz, Channel B, Power



NR 50MHz, Channel B, PAR

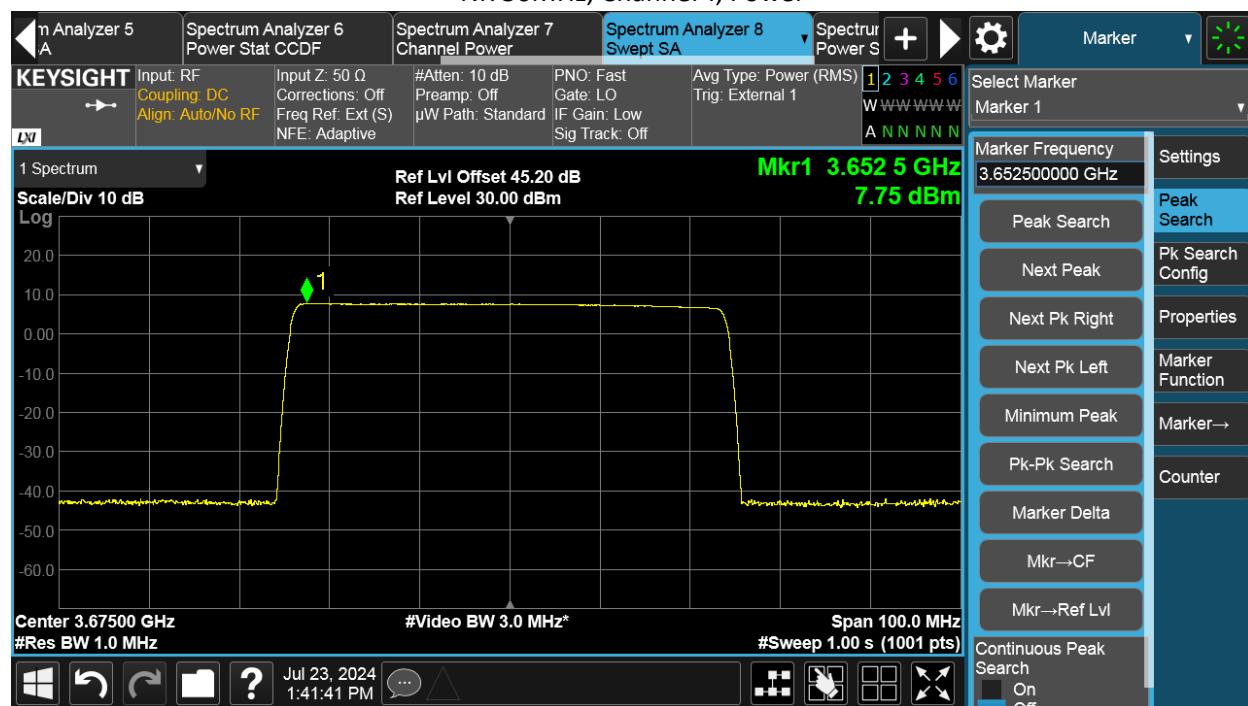


TEST REPORT



TEST REPORT

NR 50MHz, Channel T, Power

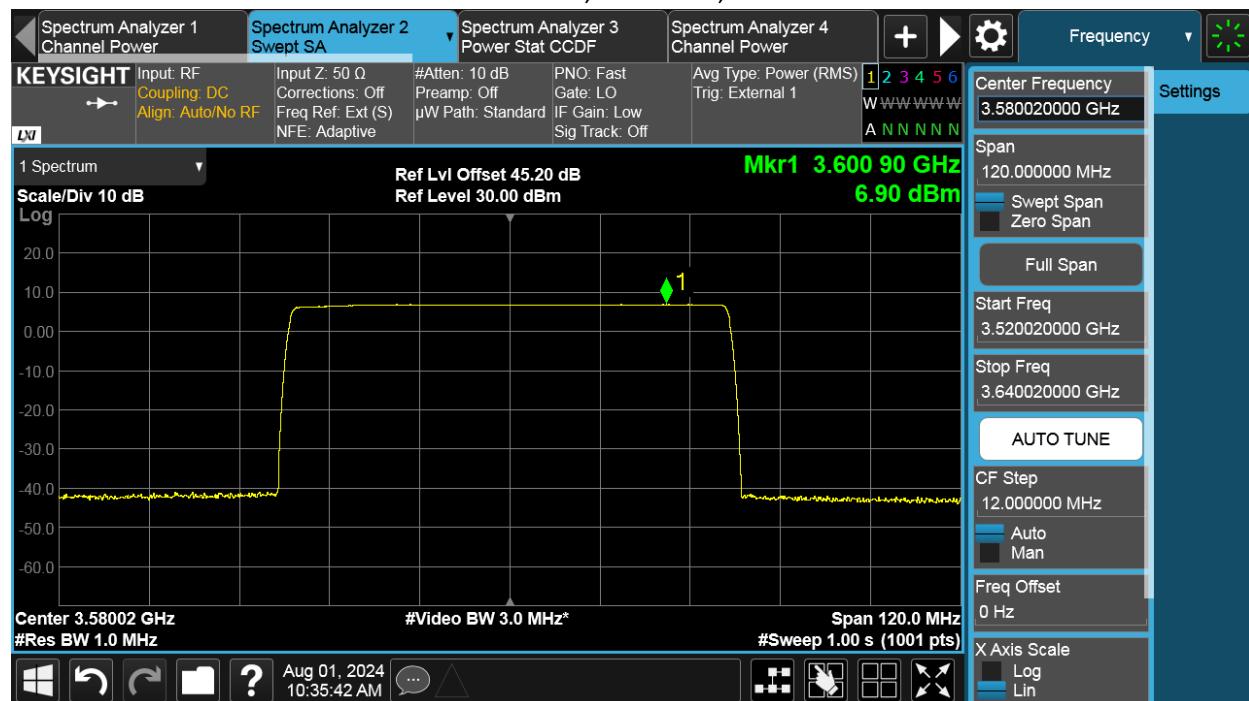


NR 50MHz, Channel T, PAR

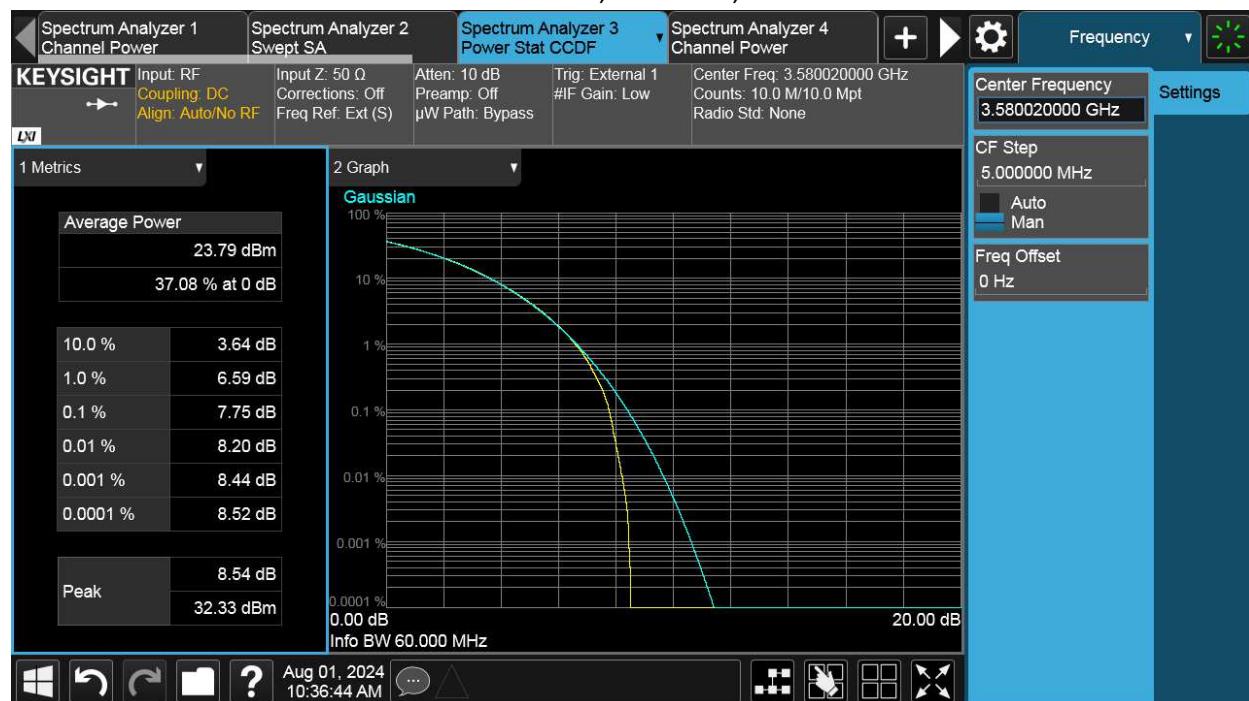


TEST REPORT

NR 60MHz, Channel B, Power

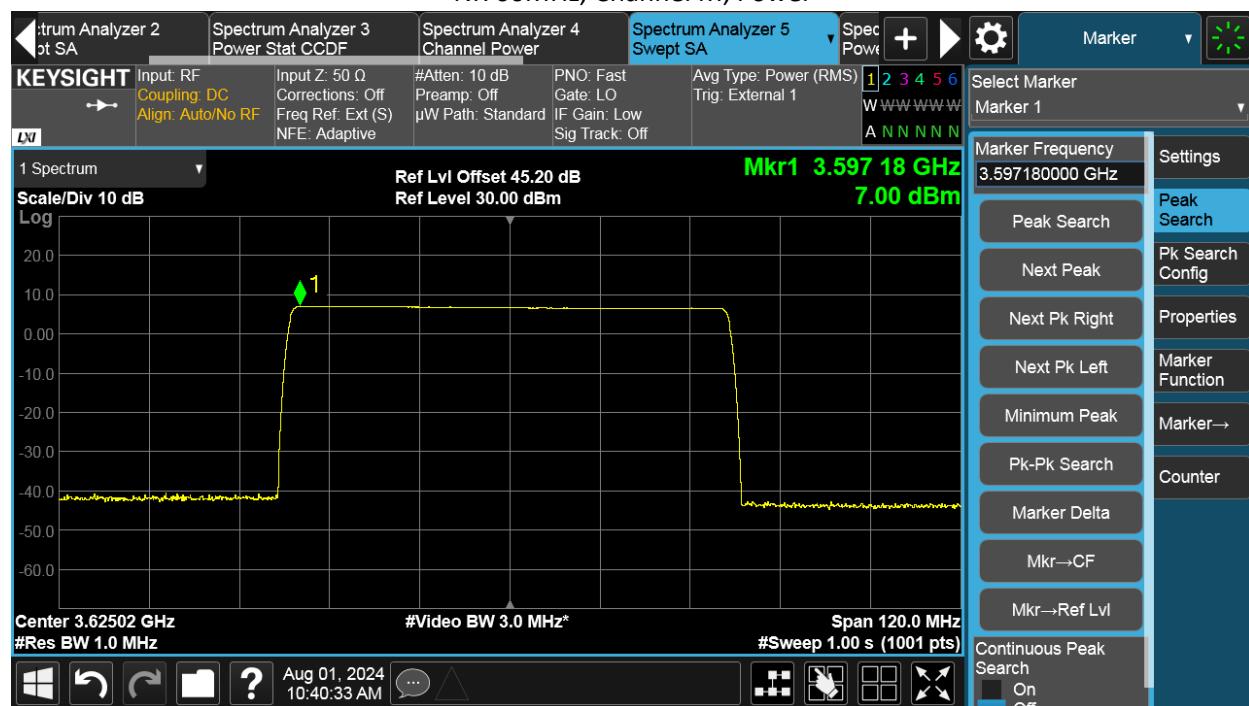


NR 60MHz, Channel B, PAR

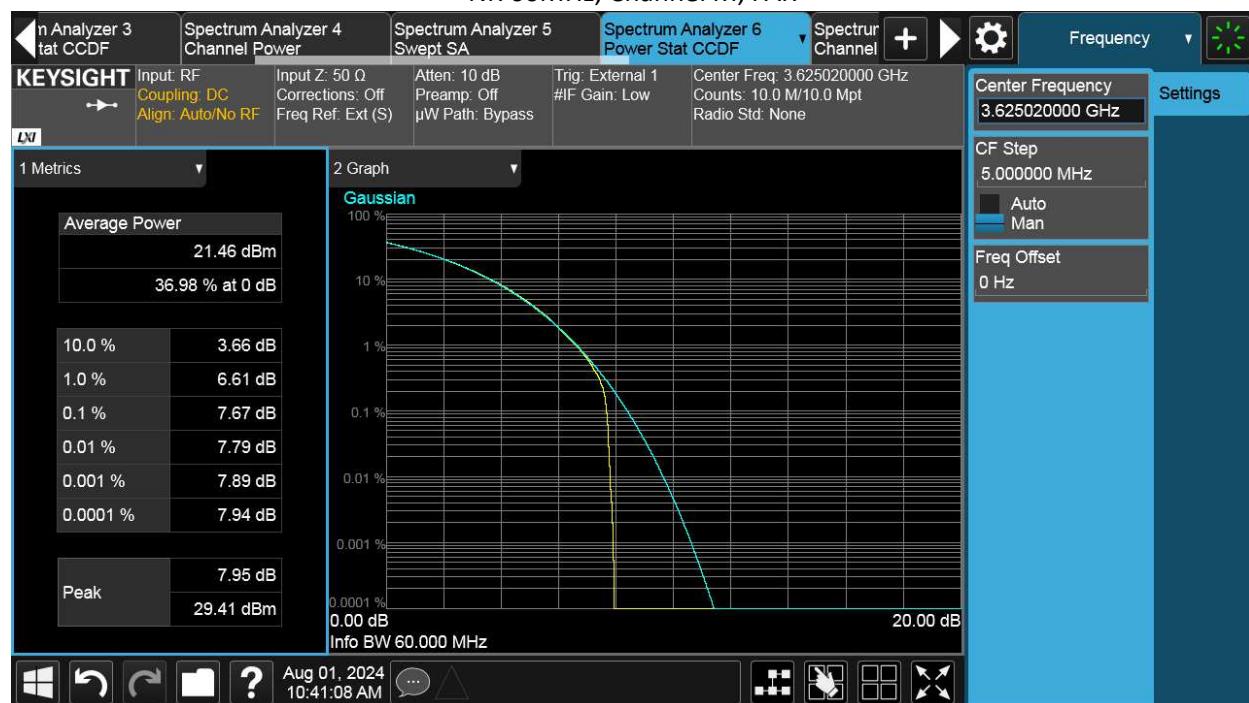


TEST REPORT

NR 60MHz, Channel M, Power

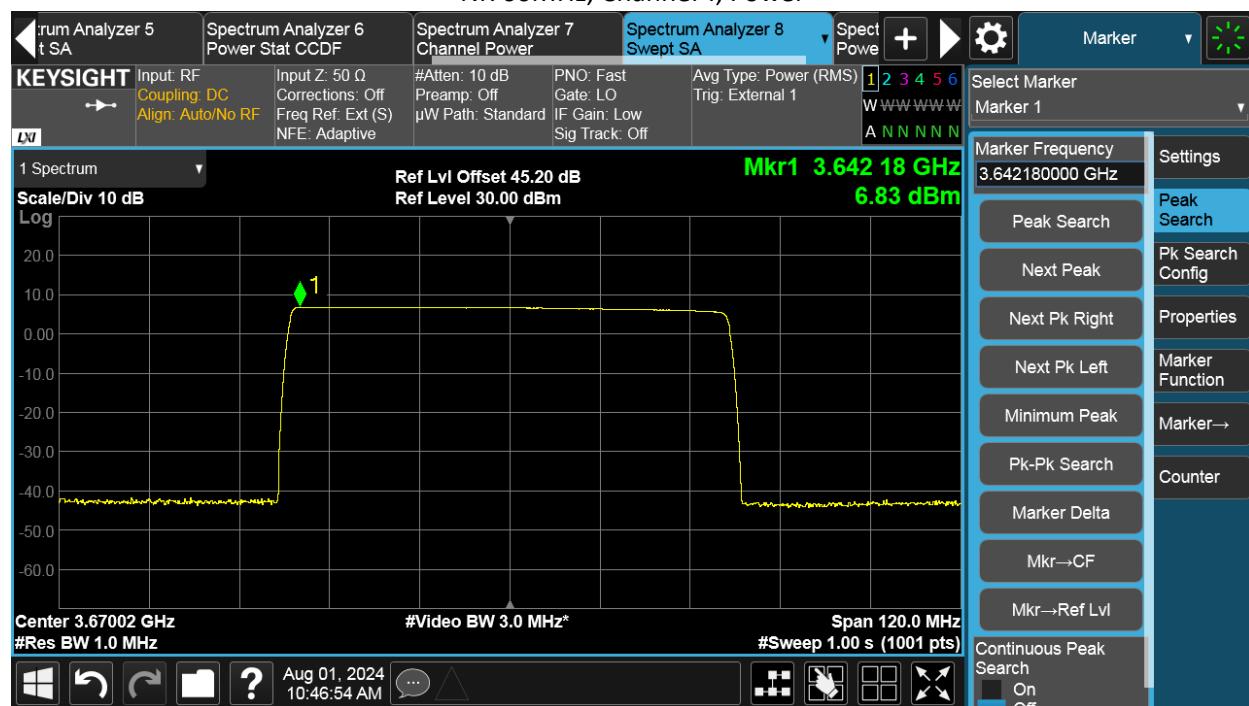


NR 60MHz, Channel M, PAR



TEST REPORT

NR 60MHz, Channel T, Power

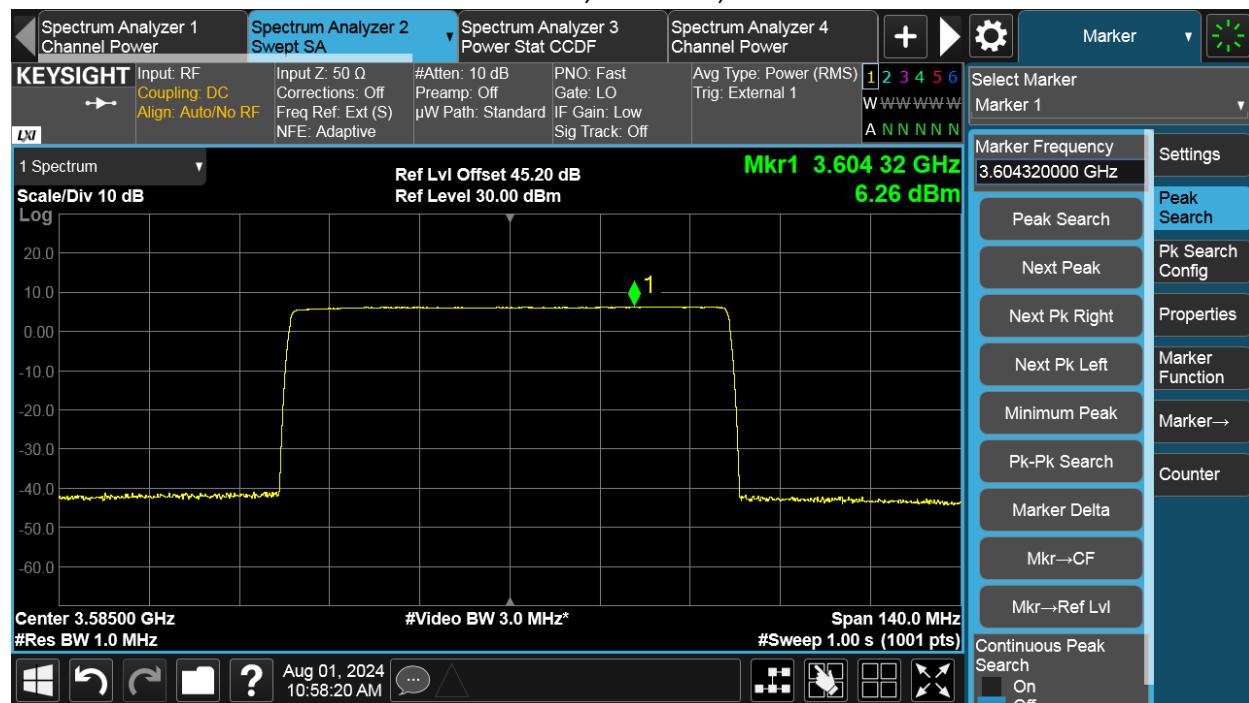


NR 60MHz, Channel T, PAR



TEST REPORT

NR 70MHz, Channel B, Power

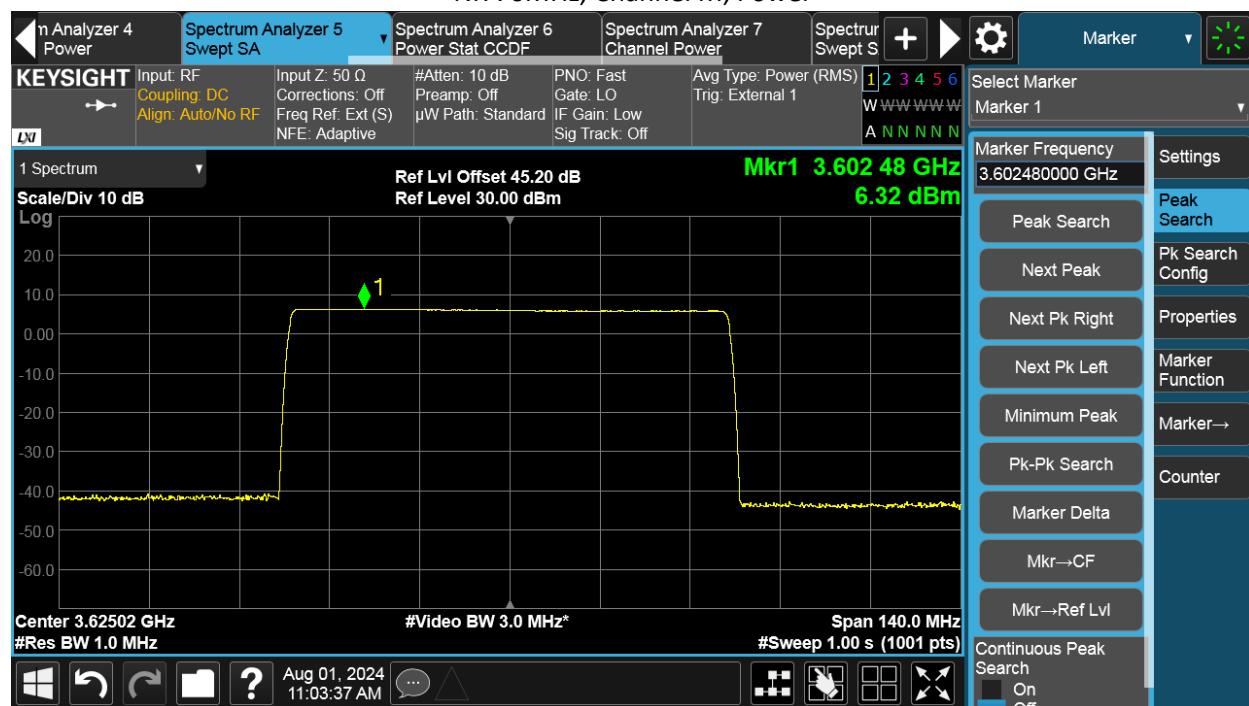


NR 70MHz, Channel B, PAR

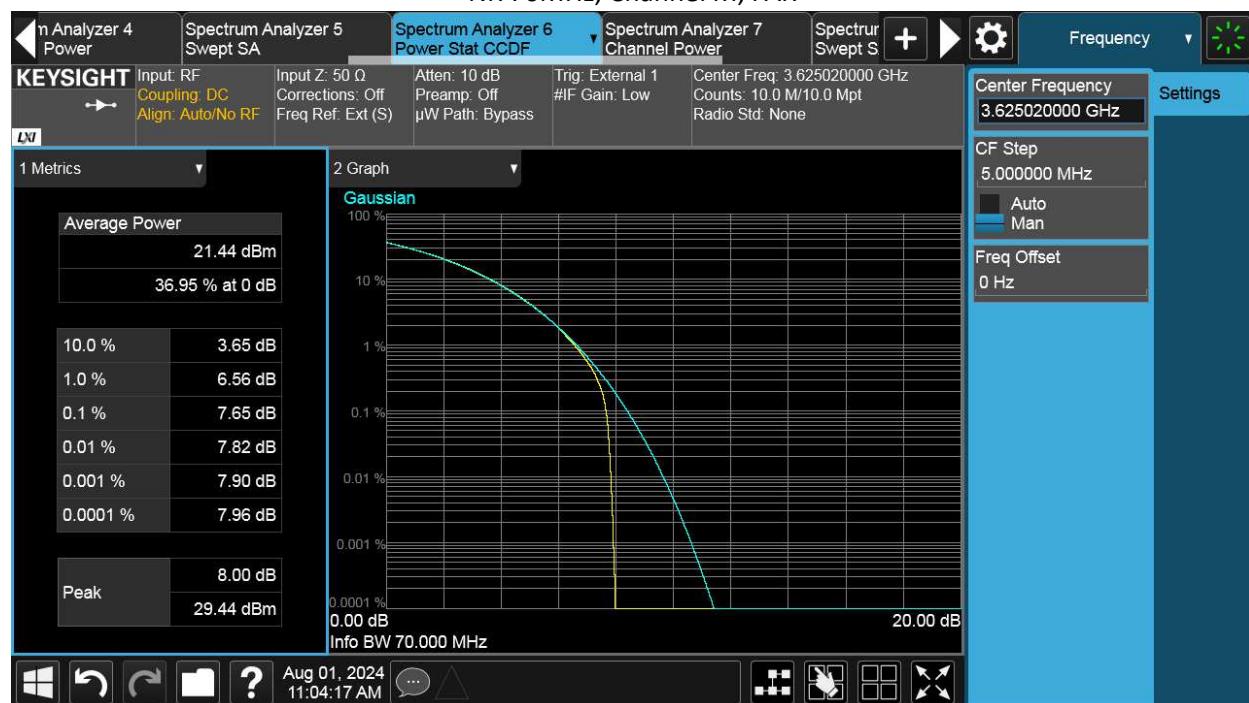


TEST REPORT

NR 70MHz, Channel M, Power

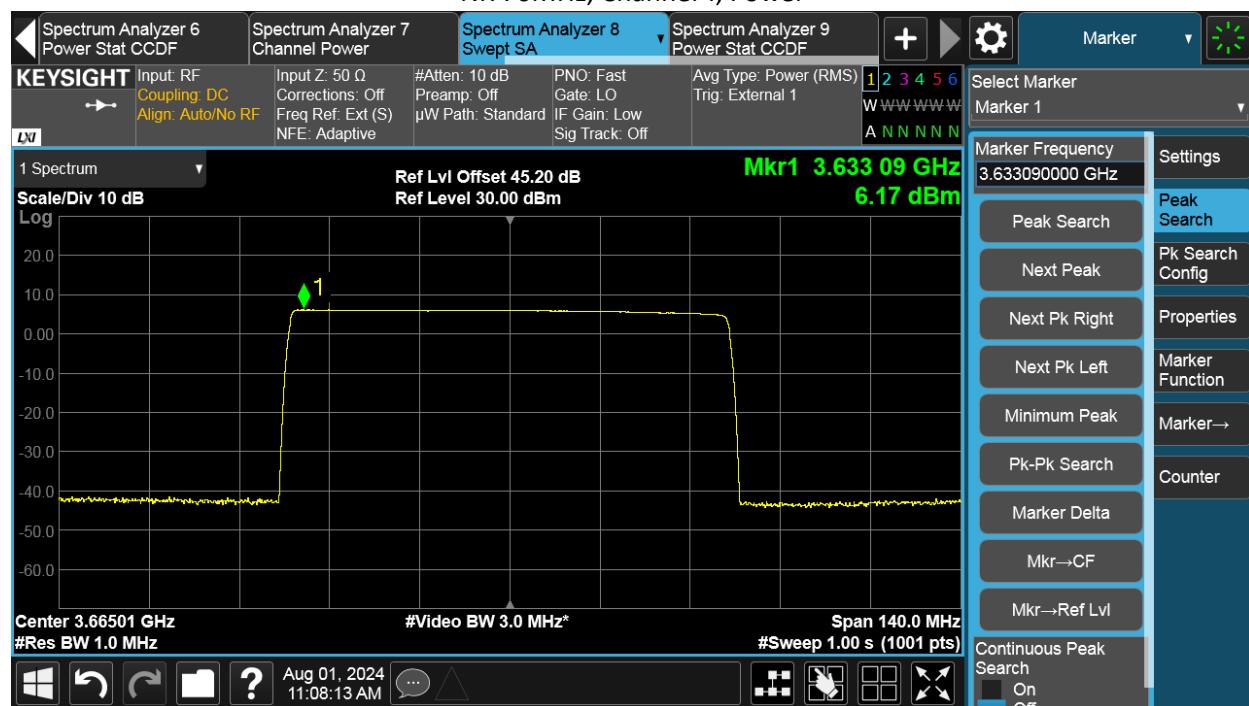


NR 70MHz, Channel M, PAR

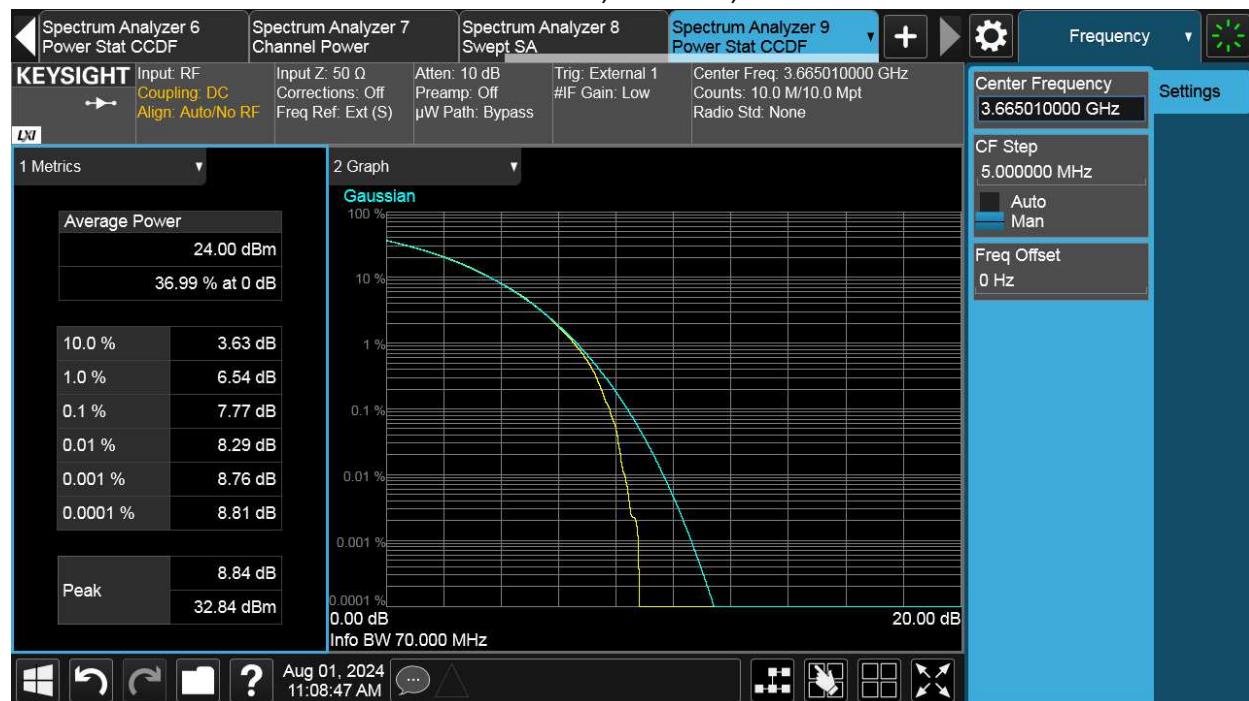


TEST REPORT

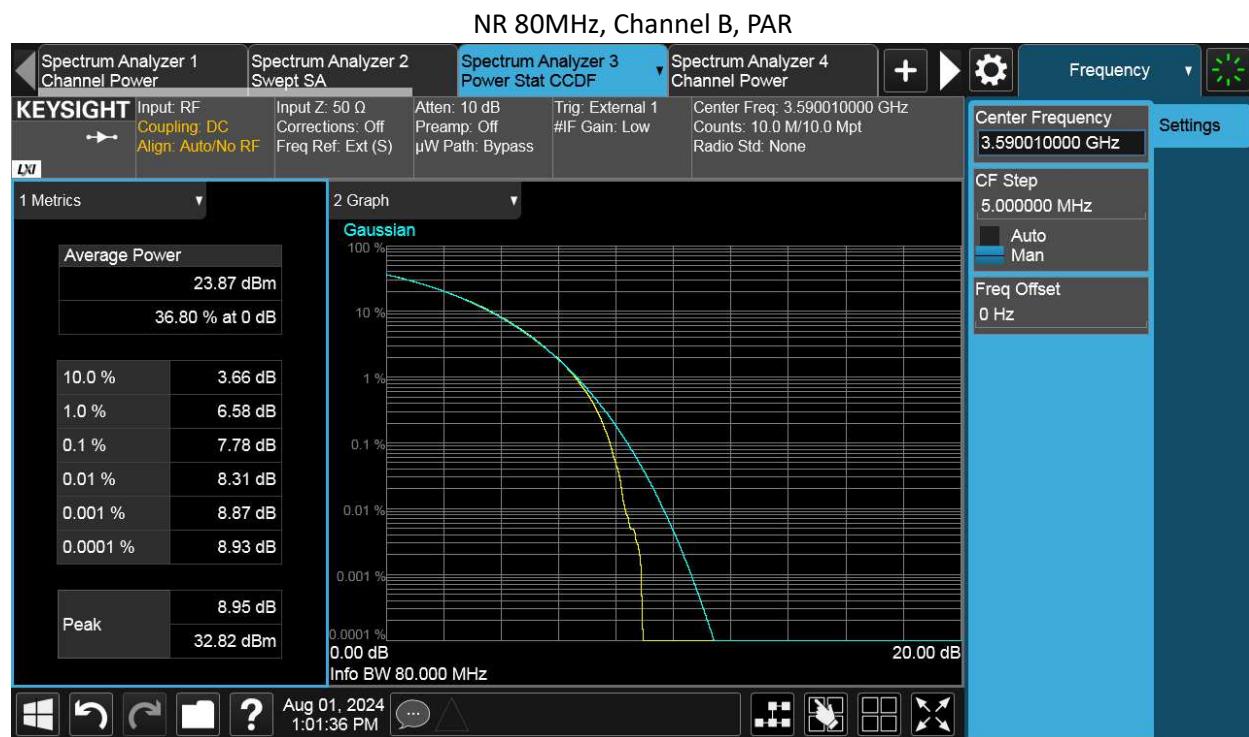
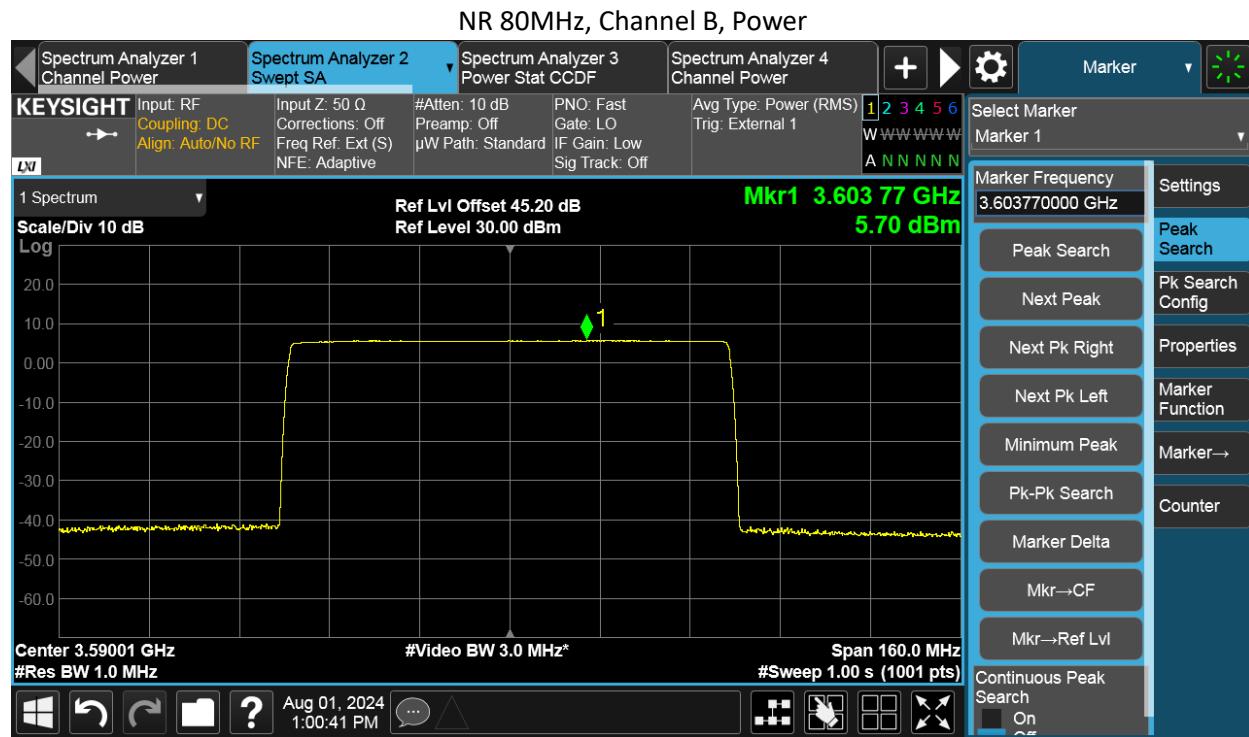
NR 70MHz, Channel T, Power



NR 70MHz, Channel T, PAR

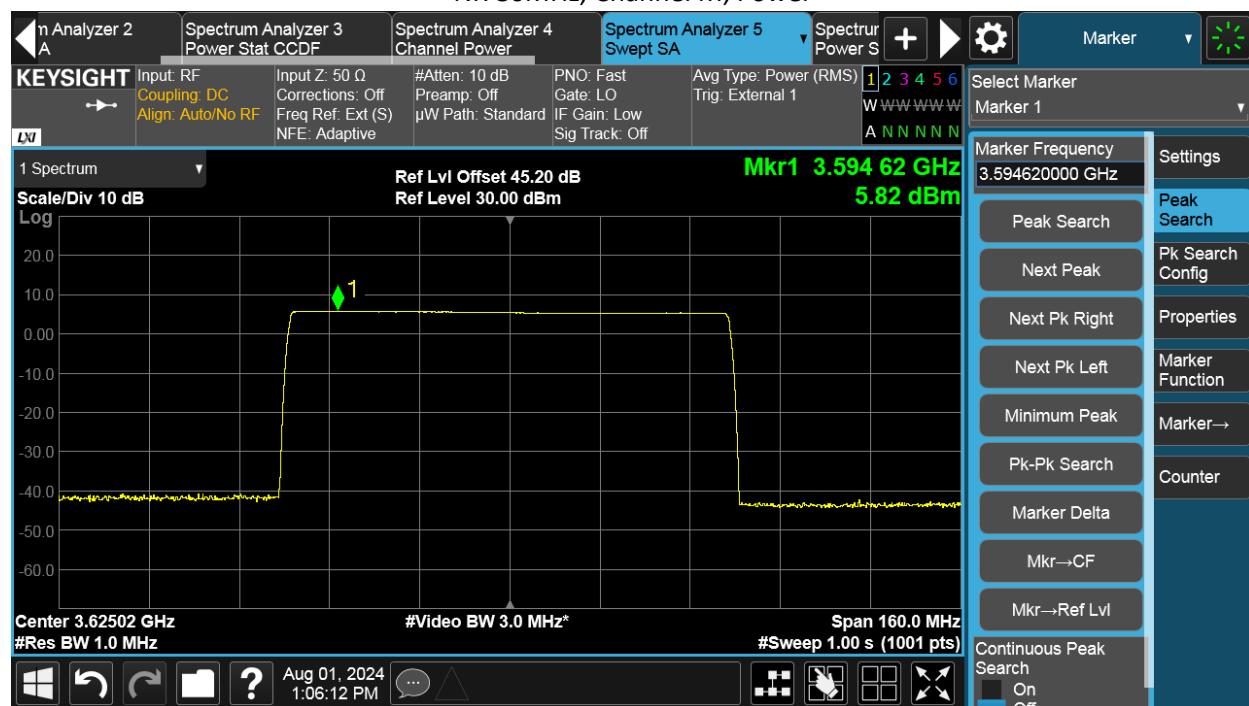


TEST REPORT

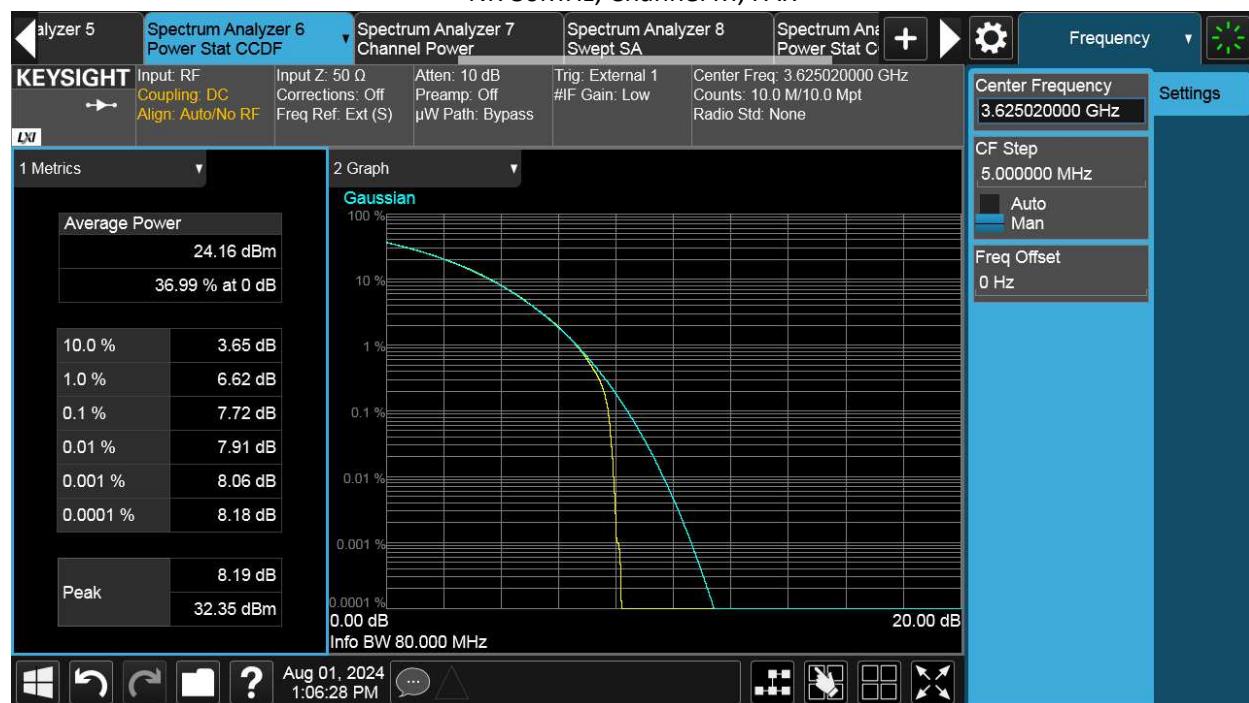


TEST REPORT

NR 80MHz, Channel M, Power

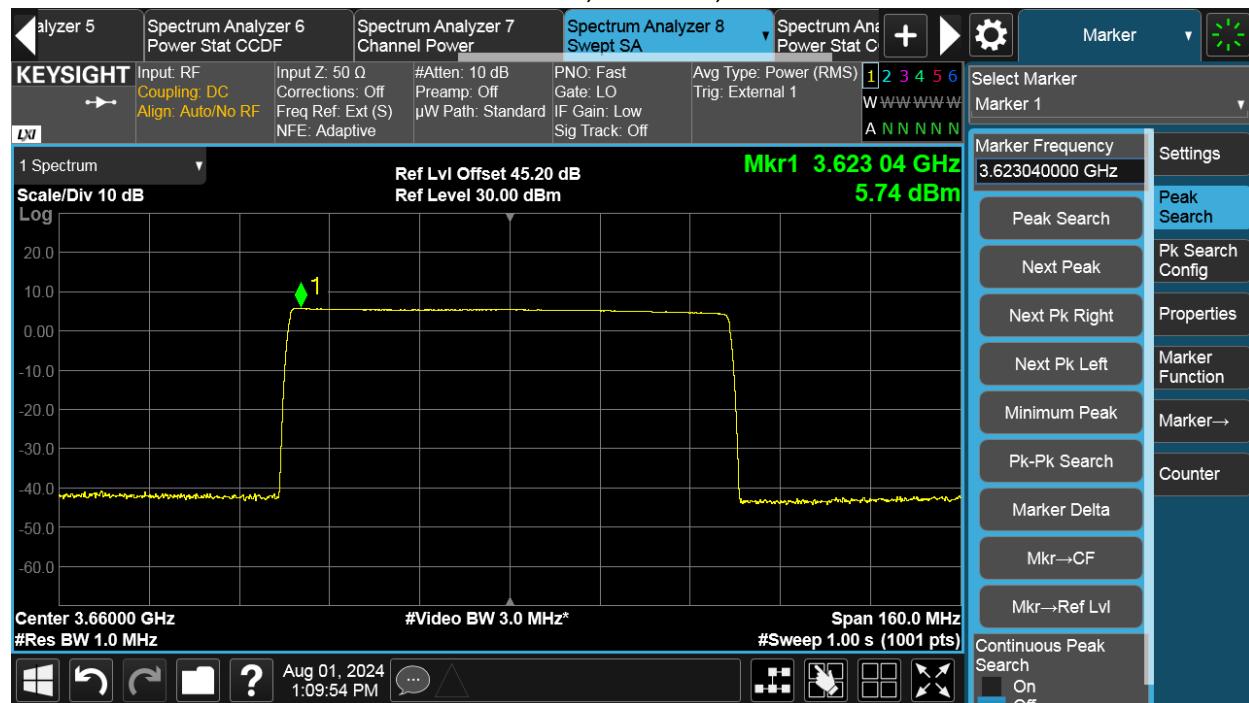


NR 80MHz, Channel M, PAR

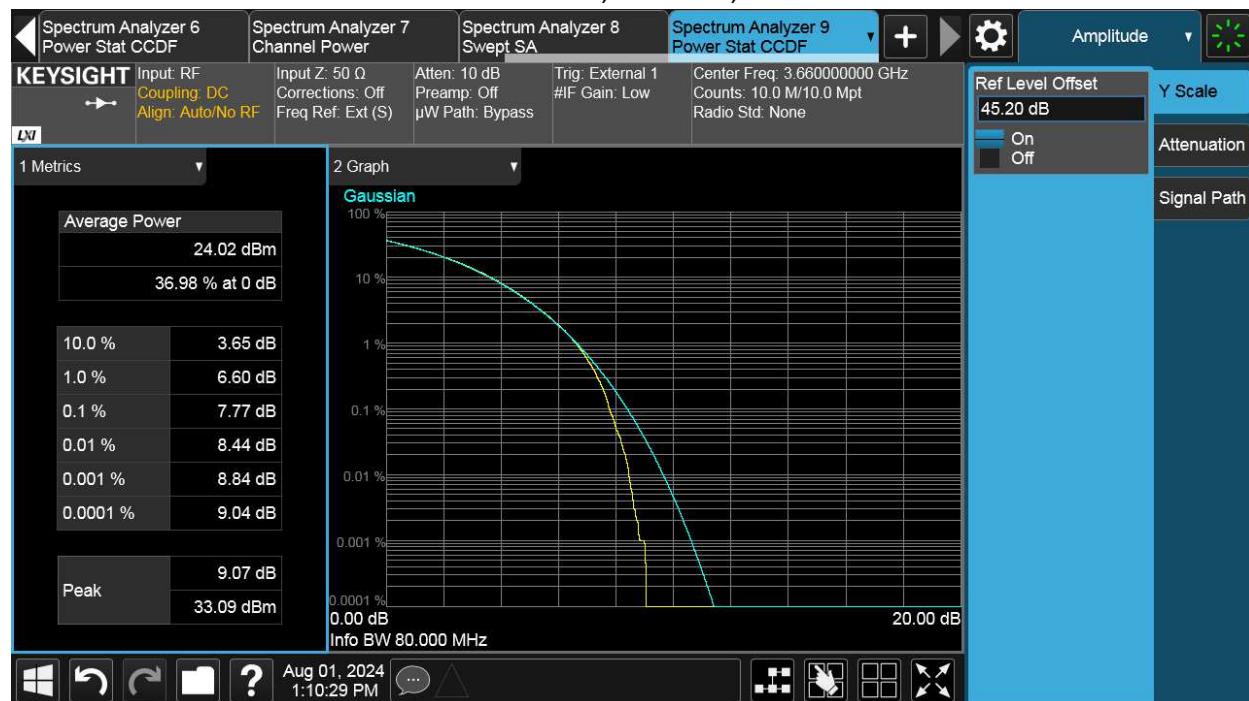


TEST REPORT

NR 80MHz, Channel T, Power

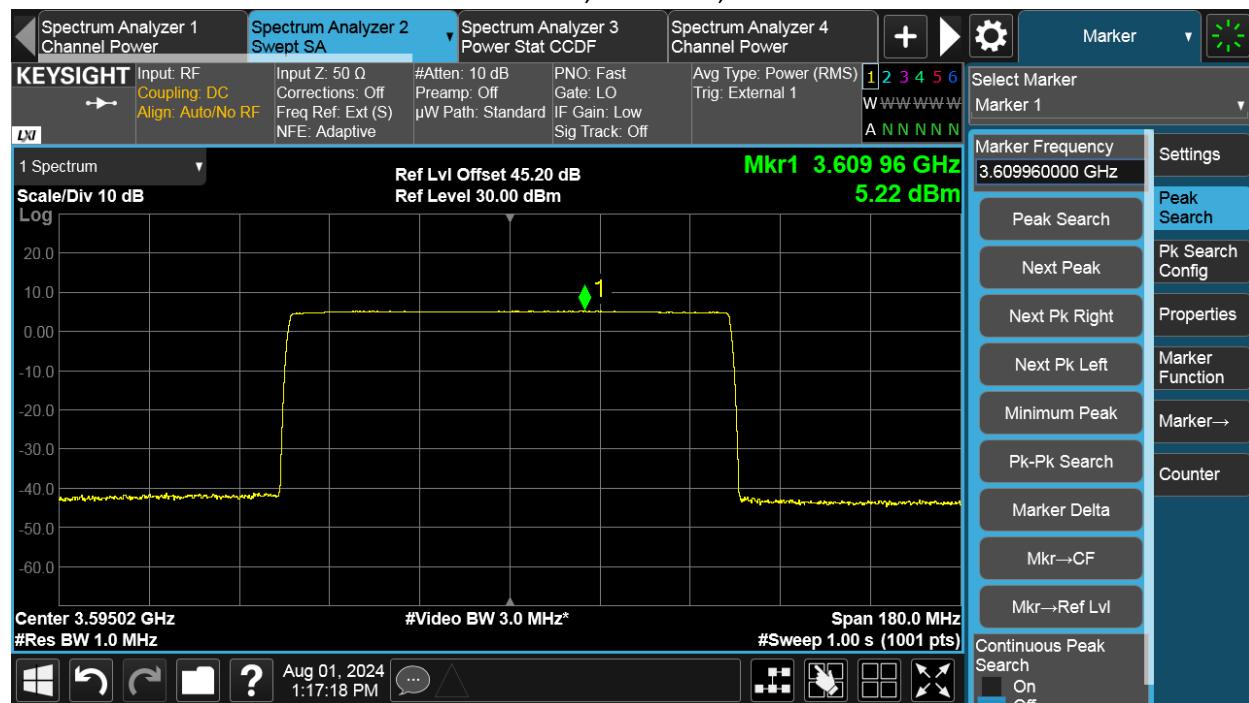


NR 80MHz, Channel T, PAR



TEST REPORT

NR 90MHz, Channel B, Power



NR 90MHz, Channel B, PAR

