OUTPUT POWER - 4 PORT MODE

XMit 2020.03.25.0

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Analyzer - Spectrum Analyzer	Agilent	N9010A	AFL	27-Feb-20	27-Feb-21
Block - DC	Fairview Microwave	SD3379	AMM	21-Sep-20	21-Sep-21
Generator - Signal	Agilent	N5173B	TIW	17-Jul-20	17-Jul-23

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The fundamental emission output power (maximum average conducted output power) was measured using the channels and modes as called out on the following data sheets. The transmit power was set to its default maximum.

The method in section 5.2.4.4 of ANSI C63.26 was used to make the measurement. This method uses trace averaging across ON and OFF times of the EUT transmissions in the spectrum analyzer channel power function using an RMS detector. Following the measurement a duty cycle correction was applied by adding [10 log (1 / D)], where D is the duty cycle, to the measured power to compute the average power during the actual transmission times.

RF conducted emissions testing was performed on one port. The FRIG antenna ports are essentially electrically identical (RF power variation between antenna ports is small) and port 1 was selected to perform the testing under this effort as allowed by ANSI C63.26-2015 paragraphs 5.2.5.3, 5.7.2i and 6.4. The total average transmit power for four port MIMO operation was determined per ANSI C63.26-2015 paragraph 6.4.3.1.

OUTPUT POWER - 4 PORT MODE

element

TbtTx 2020.10.20.0 BETA XMit 2020.03.25.0

EUT:	FRIG (C2PC FCC/ISED Approval for 5G)	**Work Order:**	NOKI0025
Serial Number:	RY142309120	**Date:**	3-Dec-20
Customer:	Nokia of America Corporation	**Temperature:**	23.4 °C
Attendees:	Mitchell Hill, John Rattanavong	**Humidity:**	28.5% RH
Project:	None	**Barometric Pres.:**	1028 mbar
Tested by:	Brandon Hobbs	**Power:** 54 VDC	**Job Site:** TX05

TEST SPECIFICATIONS	Test Method
FCC 27:2020	ANSI C63.26:2015
RSS-139:2015	RSS-139:2015

COMMENTS

All measurement path losses were accounted for in the reference level offest including any attenuators, filters and DC blocks. AWS Band 1 carriers are enabled at maximum power (30 watts/carrier). The output power was measured for a single carrier over the carrier channel bandwidth on port 1. The total output power for multiport (2x2 MIMO & 4x4 MIMO) operation was determined based upon ANSI 63.26 clauses 6.4.3.1 and 6.4.3.2.4 (10 log Nout). The total output power for two port operation is single port power + 3dB [i.e. 10log(2)]. The total output power for four port operation is single port power + 6dB [i.e. 10log(4)].

DEVIATIONS FROM TEST STANDARD

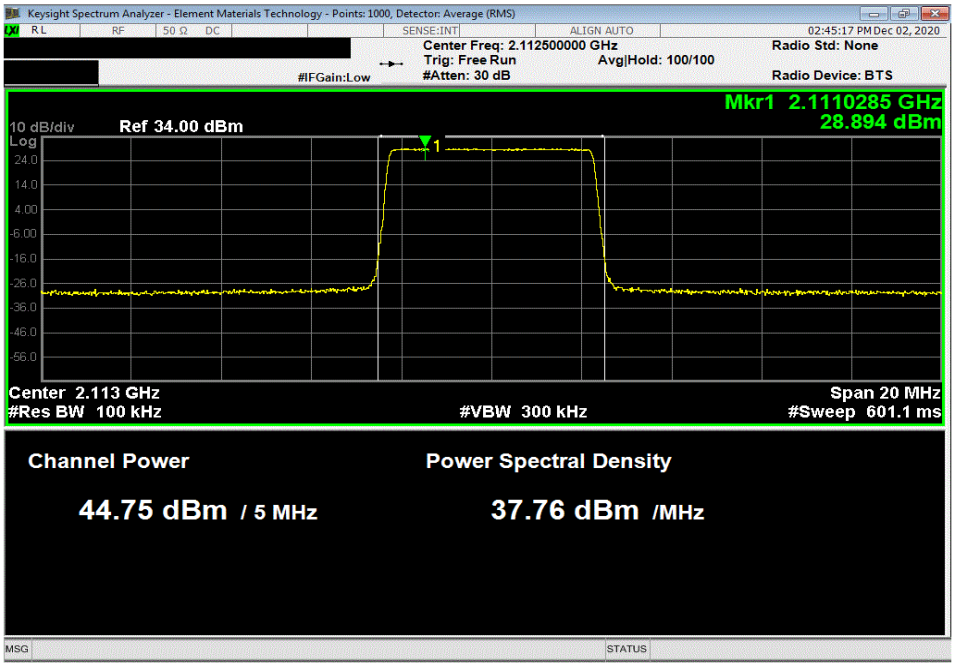
None

Configuration #	2	Signature

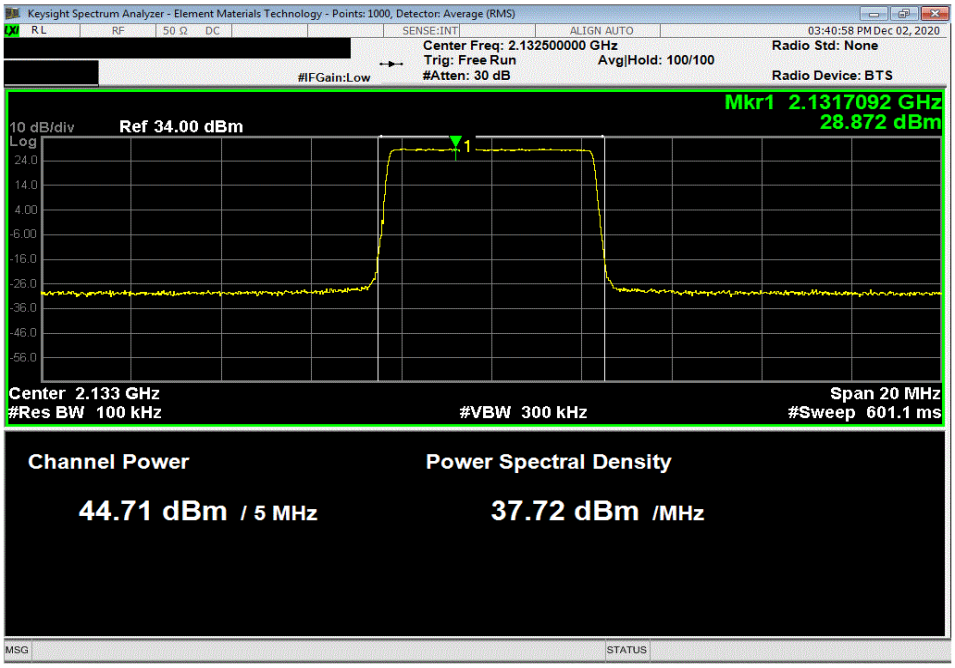
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW
30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz					
5 MHz Bandwidth					
QPSK Modulation					
Low Channel 2112.5 MHz	44.749	0	44.75	47.75	50.75
Mid Channel 2132.5 MHz	44.714	0	44.71	47.71	50.71
High Channel 2152.5 MHz	44.696	0	44.70	47.70	50.70
16-QAM Modulation					
Low Channel 2112.5 MHz	44.597	0	44.60	47.60	50.60
Mid Channel 2132.5 MHz	44.560	0	44.56	47.56	50.56
High Channel 2152.5 MHz	44.666	0	44.67	47.67	50.67
64-QAM Modulation					
Low Channel 2112.5 MHz	44.710	0	44.71	47.71	50.71
Mid Channel 2132.5 MHz	44.760	0	44.76	47.76	50.76
High Channel 2152.5 MHz	44.746	0	44.75	47.75	50.75
256-QAM Modulation					
Low Channel 2112.5 MHz	44.644	0	44.64	47.64	50.64
Mid Channel 2132.5 MHz	44.701	0	44.70	47.70	50.70
High Channel 2152.5 MHz	44.593	0	44.59	47.59	50.59
10 MHz Bandwidth					
QPSK Modulation					
Low Channel 2115 MHz	44.636	0	44.64	47.64	50.64
Mid Channel 2132.5 MHz	44.834	0	44.83	47.83	50.83
High Channel 2150 MHz	44.772	0	44.77	47.77	50.77
16-QAM Modulation					
Low Channel 2115 MHz	44.693	0	44.69	47.69	50.69
Mid Channel 2132.5 MHz	44.853	0	44.85	47.85	50.85
High Channel 2150 MHz	44.705	0	44.71	47.71	50.71
64-QAM Modulation					
Low Channel 2115 MHz	44.787	0	44.79	47.79	50.79
Mid Channel 2132.5 MHz	45.035	0	45.04	48.04	51.04
High Channel 2150 MHz	44.834	0	44.83	47.83	50.83
256-QAM Modulation					
Low Channel 2115 MHz	44.672	0	44.67	47.67	50.67
Mid Channel 2132.5 MHz	44.880	0	44.88	47.88	50.88
High Channel 2150 MHz	44.613	0	44.61	47.61	50.61
15 MHz Bandwidth					
QPSK Modulation					
Low Channel 2117.5 MHz	44.768	0	44.77	47.77	50.77
Mid Channel 2132.5 MHz	44.971	0	44.97	47.97	50.97
High Channel 2147.5 MHz	44.841	0	44.84	47.84	50.84
16-QAM Modulation					
Low Channel 2117.5 MHz	44.690	0	44.69	47.69	50.69
Mid Channel 2132.5 MHz	44.872	0	44.87	47.87	50.87
High Channel 2147.5 MHz	44.752	0	44.75	47.75	50.75
64-QAM Modulation					
Low Channel 2117.5 MHz	44.838	0	44.84	47.84	50.84
Mid Channel 2132.5 MHz	44.892	0	44.89	47.89	50.89
High Channel 2147.5 MHz	44.858	0	44.86	47.86	50.86
256-QAM Modulation					
Low Channel 2117.5 MHz	44.776	0	44.78	47.78	50.78
Mid Channel 2132.5 MHz	44.898	0	44.90	47.90	50.90
High Channel 2147.5 MHz	44.864	0	44.86	47.86	50.86
20 MHz Bandwidth					
QPSK Modulation					
Low Channel 2120 MHz	44.795	0	44.80	47.80	50.80
Mid Channel 2132.5 MHz	44.999	0	45.00	48.00	51.00
High Channel 2145 MHz	44.879	0	44.88	47.88	50.88
16-QAM Modulation					
Low Channel 2120 MHz	44.755	0	44.76	47.76	50.76
Mid Channel 2132.5 MHz	44.969	0	44.97	47.97	50.97
High Channel 2145 MHz	44.883	0	44.88	47.88	50.88
64-QAM Modulation					
Low Channel 2120 MHz	44.851	0	44.85	47.85	50.85
Mid Channel 2132.5 MHz	44.987	0	44.99	47.99	50.99
High Channel 2145 MHz	44.961	0	44.96	47.96	50.96
256-QAM Modulation					
Low Channel 2120 MHz	44.818	0	44.82	47.82	50.82
Mid Channel 2132.5 MHz	44.996	0	45.00	48.00	51.00
High Channel 2145 MHz	44.979	0	44.98	47.98	50.98

OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 5 MHz Bandwidth , QPSK Modulation, Low Channel 2112.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.749	0	44.7	47.7	50.7	

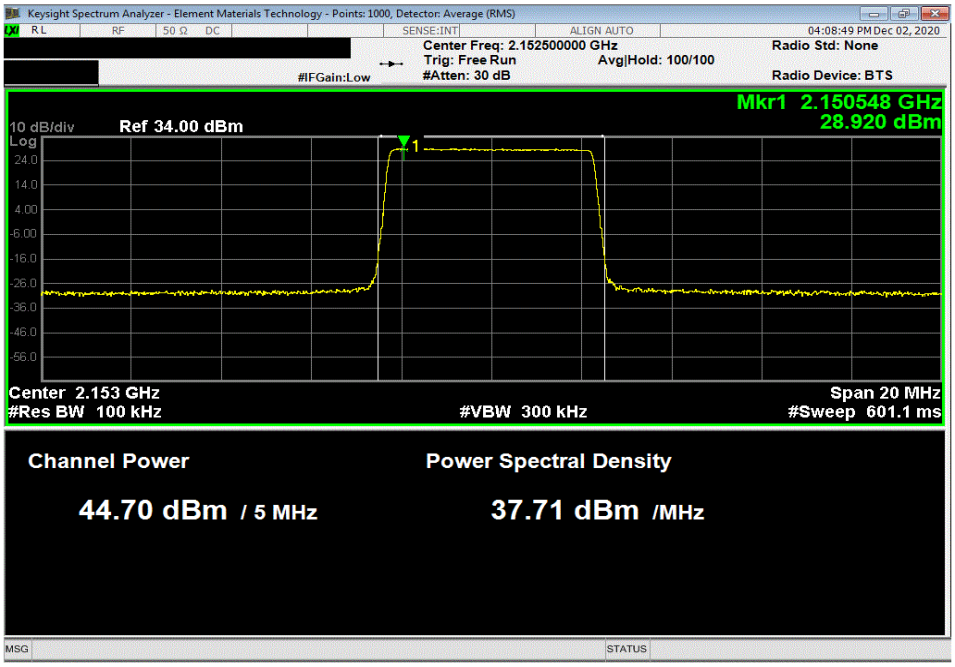


30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 5 MHz Bandwidth , QPSK Modulation, Mid Channel 2132.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.714	0	44.7	47.7	50.7	

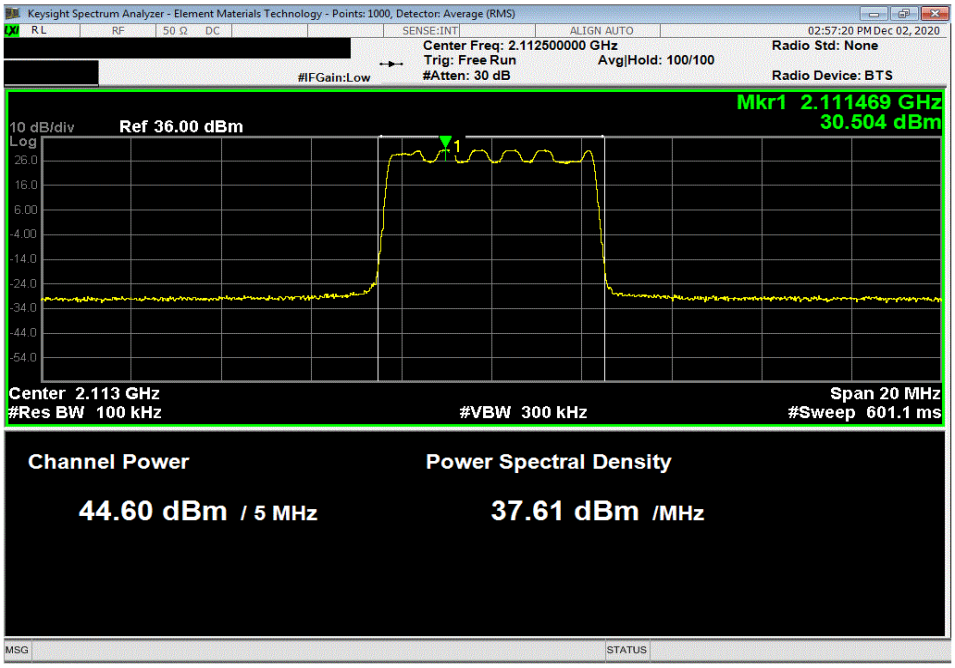


OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 5 MHz Bandwidth , QPSK Modulation, High Channel 2152.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.696	0	44.7	47.7	50.7	

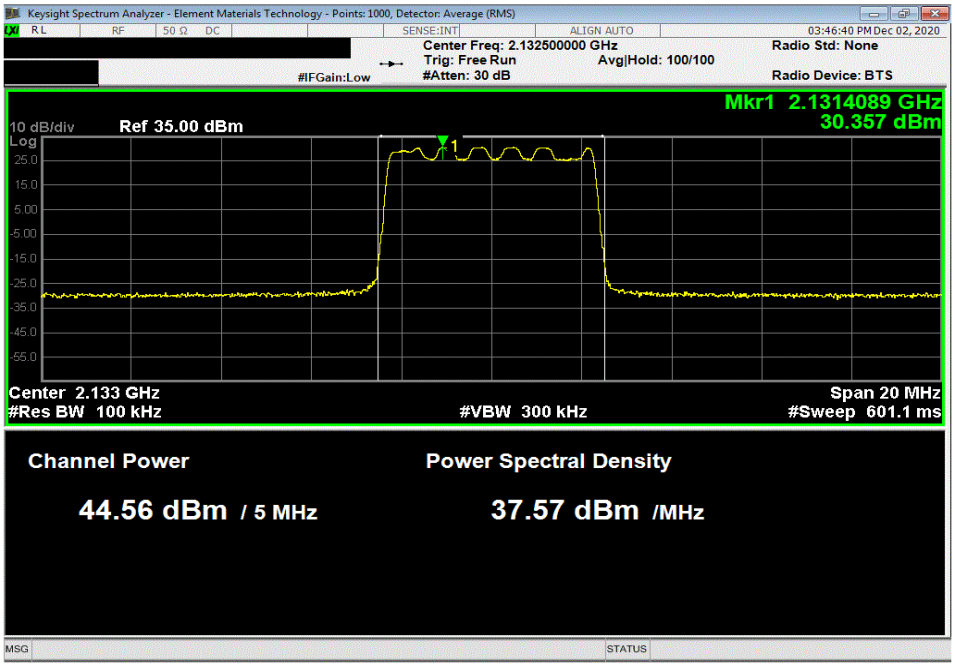


30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 5 MHz Bandwidth , 16-QAM Modulation, Low Channel 2112.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.597	0	44.6	47.6	50.6	

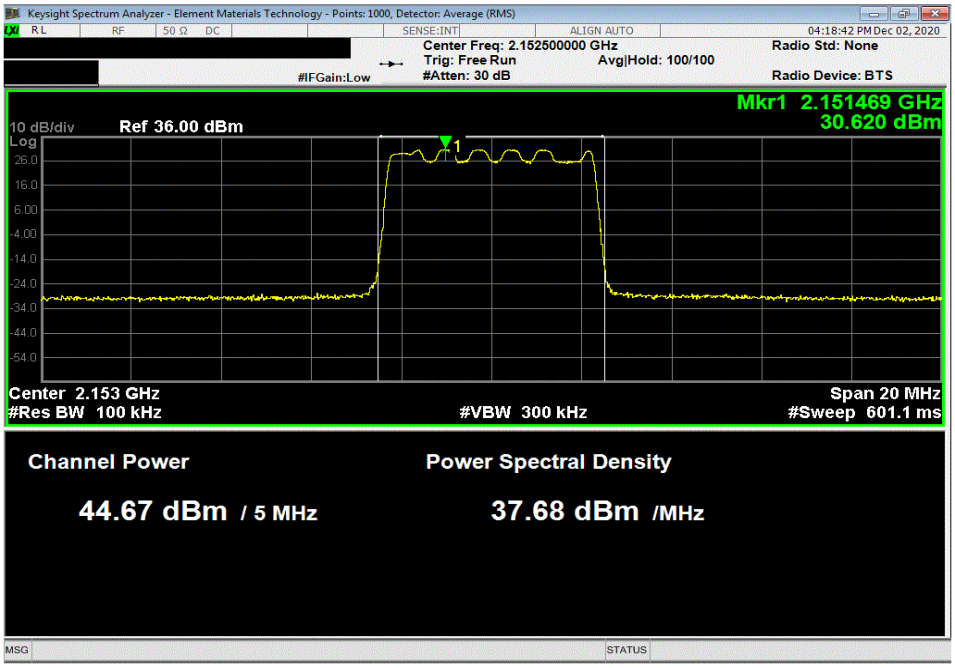


OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 5 MHz Bandwidth , 16-QAM Modulation, Mid Channel 2132.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.56	0	44.6	47.6	50.6	

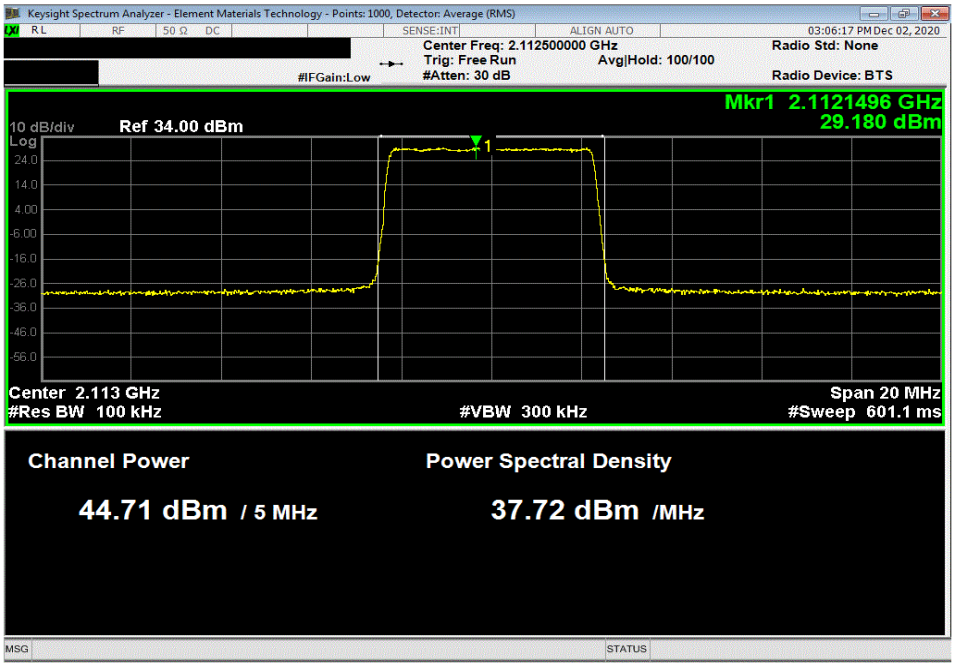


30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 5 MHz Bandwidth , 16-QAM Modulation, High Channel 2152.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.666	0	44.7	47.7	50.7	

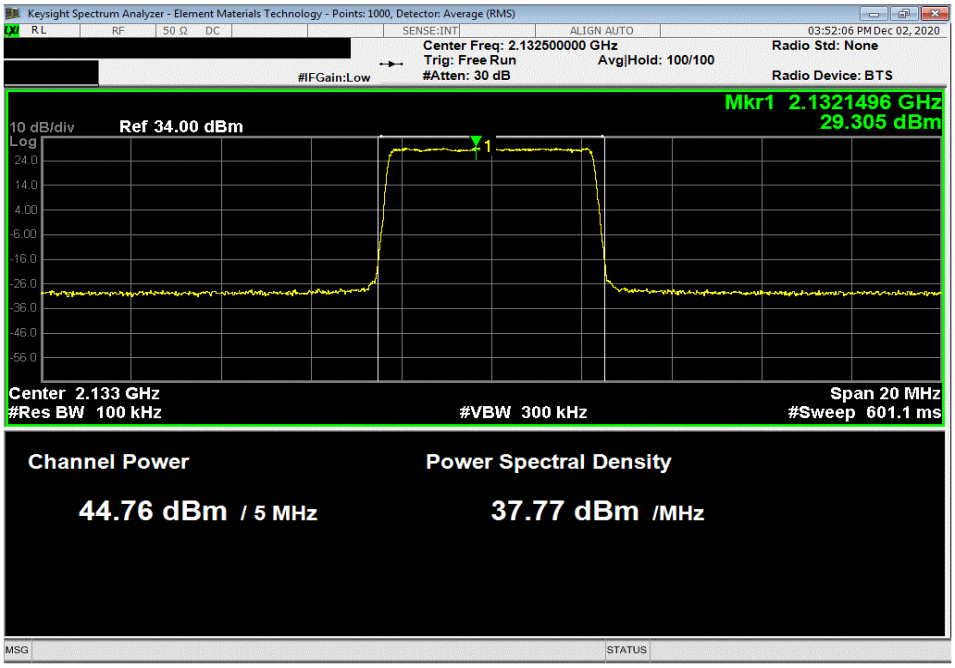


OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 5 MHz Bandwidth , 64-QAM Modulation, Low Channel 2112.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.71	0	44.7	47.7	50.7	

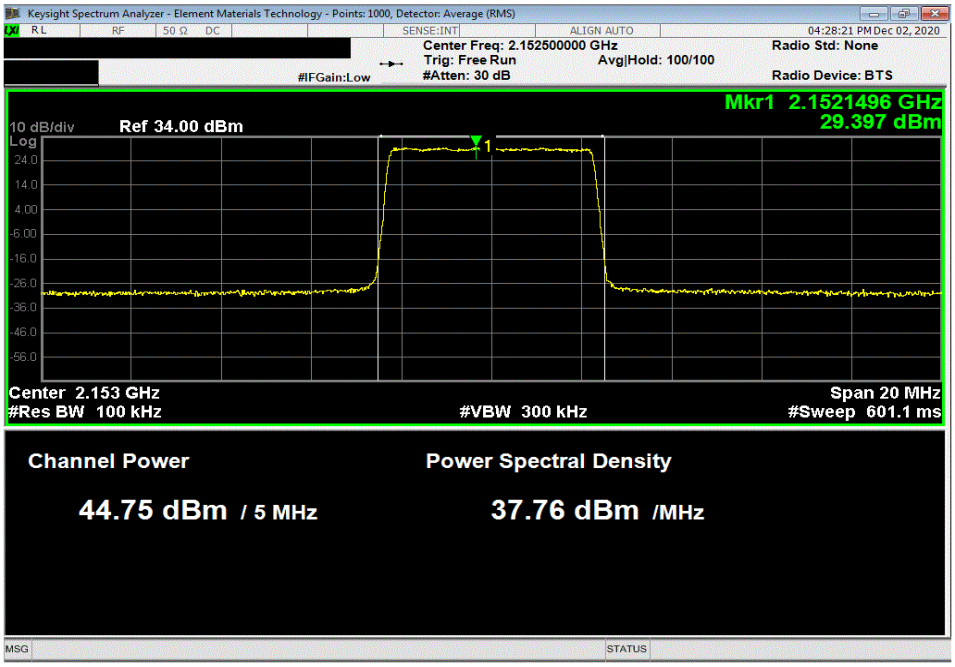


30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 5 MHz Bandwidth , 64-QAM Modulation, Mid Channel 2132.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.76	0	44.8	47.8	50.8	

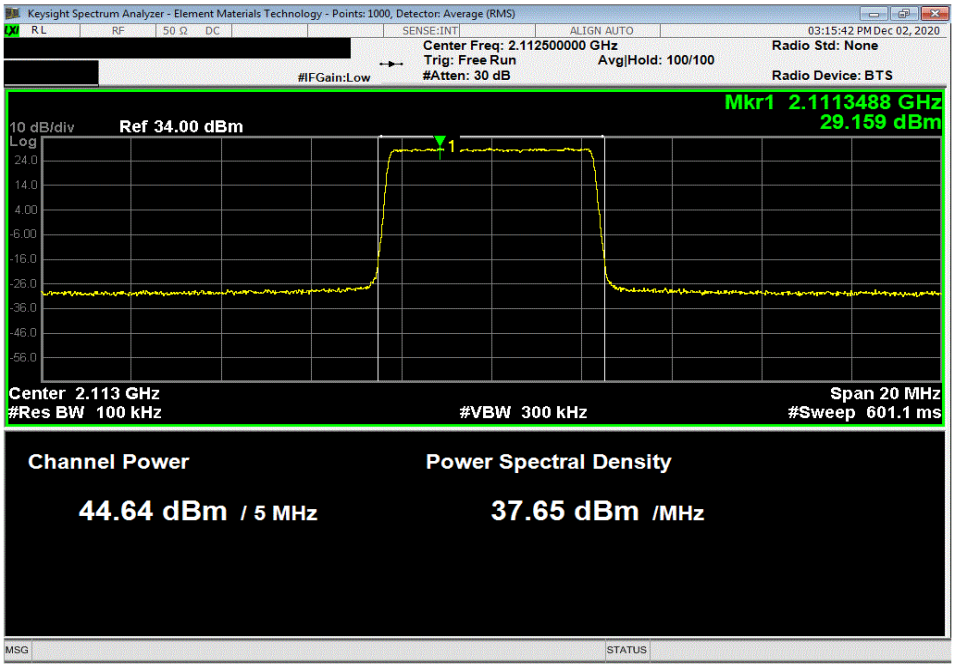


OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 5 MHz Bandwidth , 64-QAM Modulation, High Channel 2152.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.746	0	44.7	47.7	50.7	

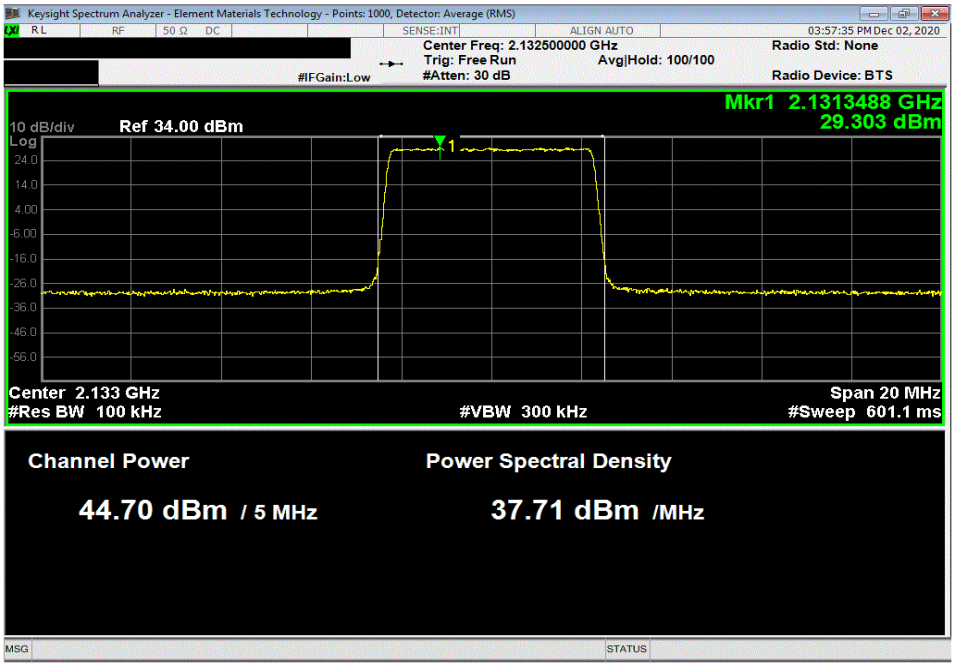


30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 5 MHz Bandwidth , 256-QAM Modulation, Low Channel 2112.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.644	0	44.6	47.6	50.6	

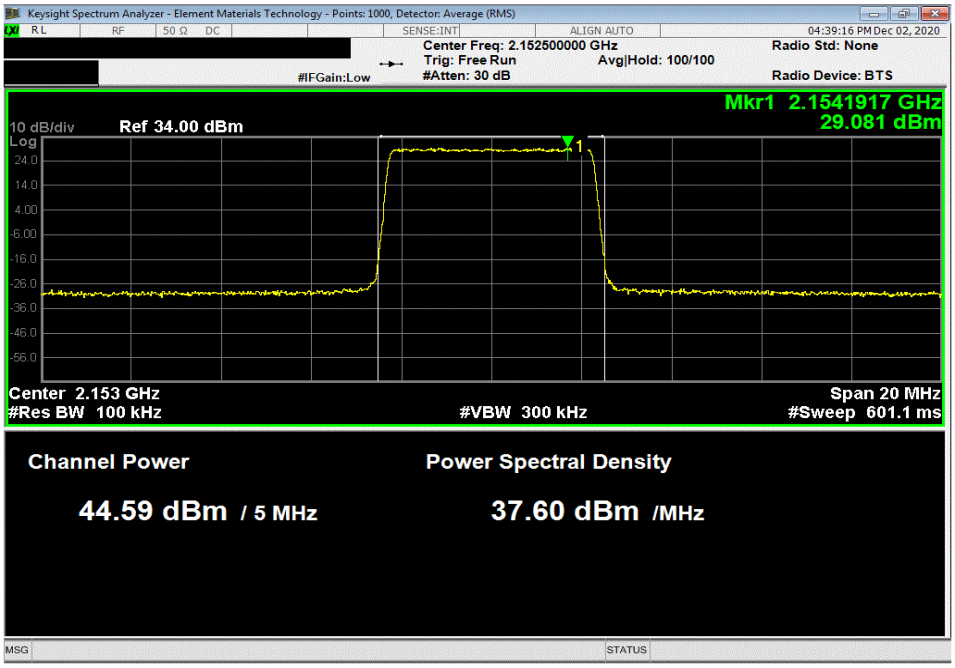


OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 5 MHz Bandwidth , 256-QAM Modulation, Mid Channel 2132.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.701	0	44.7	47.7	50.7	

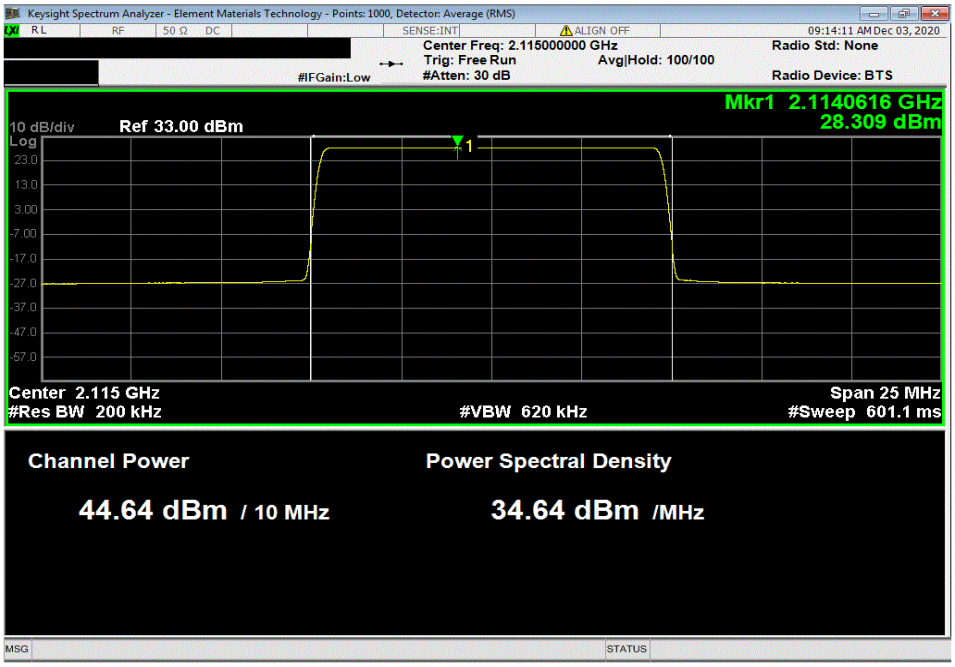


30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 5 MHz Bandwidth , 256-QAM Modulation, High Channel 2152.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.593	0	44.6	47.6	50.6	

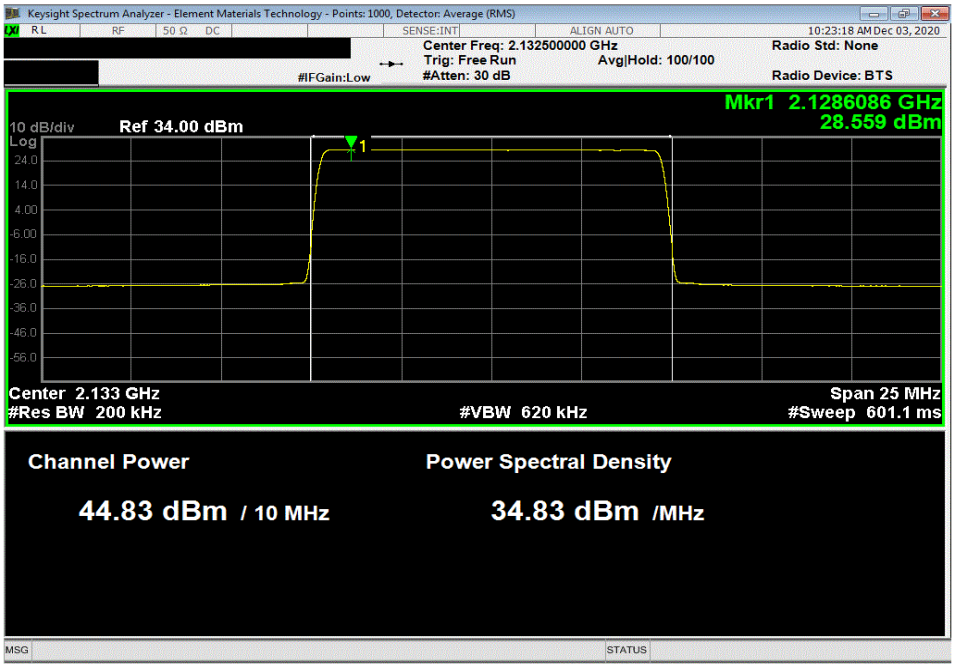


OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 10 MHz Bandwidth , QPSK Modulation, Low Channel 2115 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.636	0	44.6	47.6	50.6	

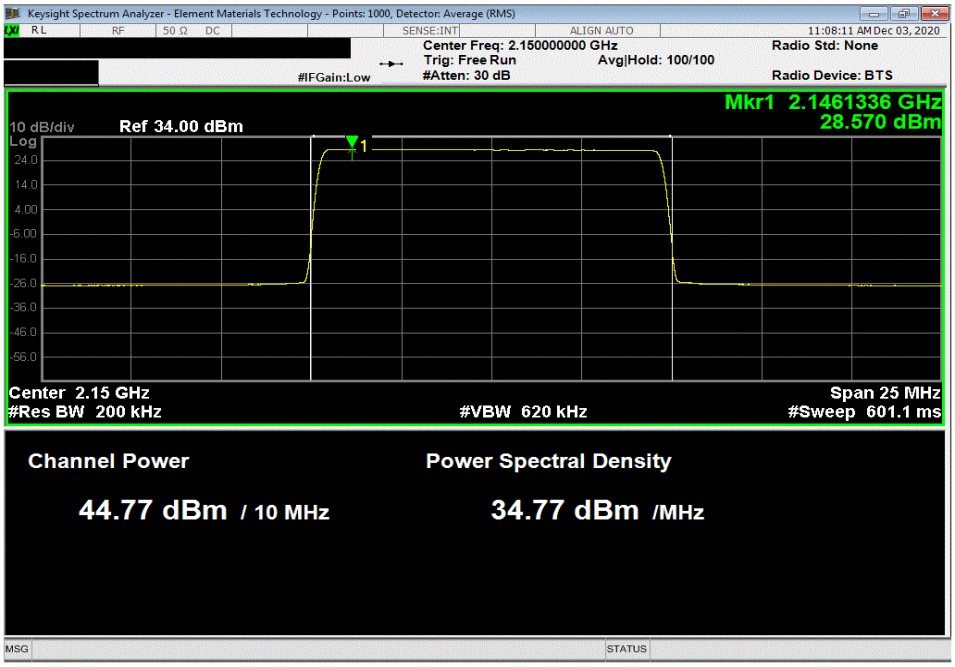


30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 10 MHz Bandwidth , QPSK Modulation, Mid Channel 2132.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.834	0	44.8	47.8	50.8	

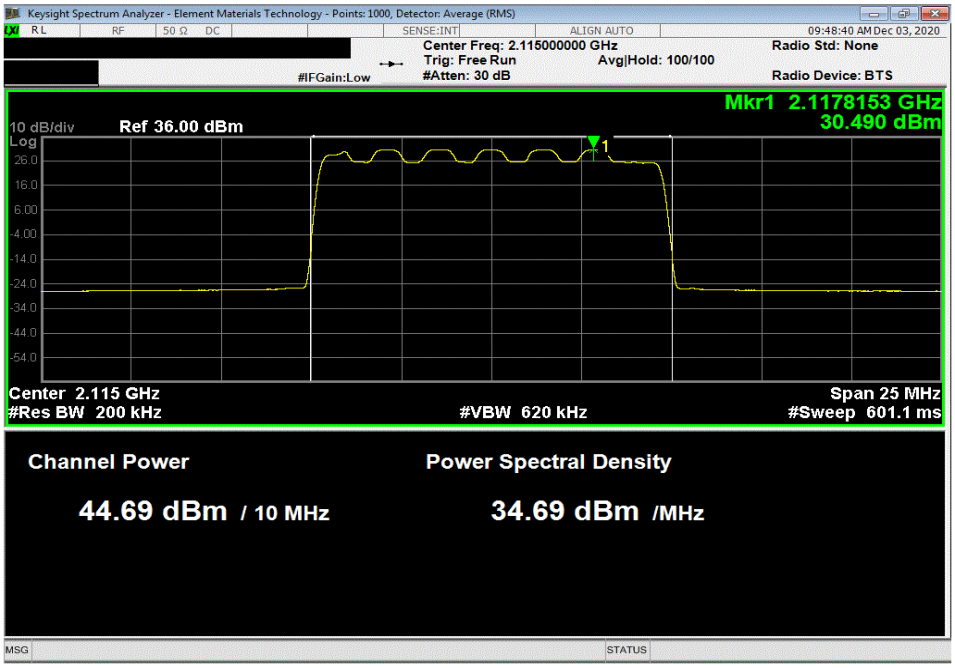


OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 10 MHz Bandwidth , QPSK Modulation, High Channel 2150 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.772	0	44.8	47.8	50.8	

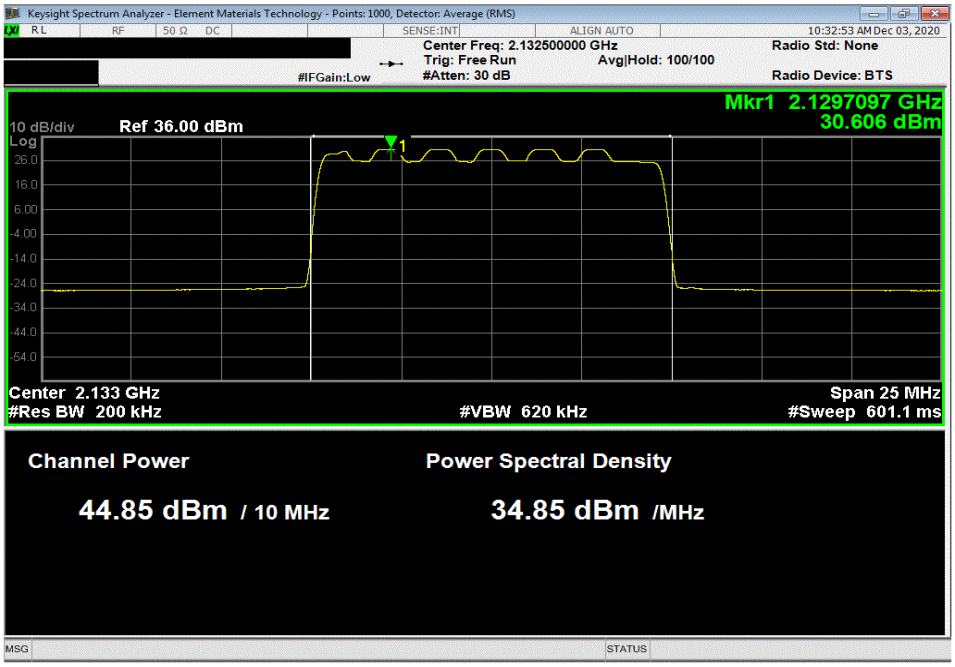


30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 10 MHz Bandwidth , 16-QAM Modulation, Low Channel 2115 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.693	0	44.7	47.7	50.7	

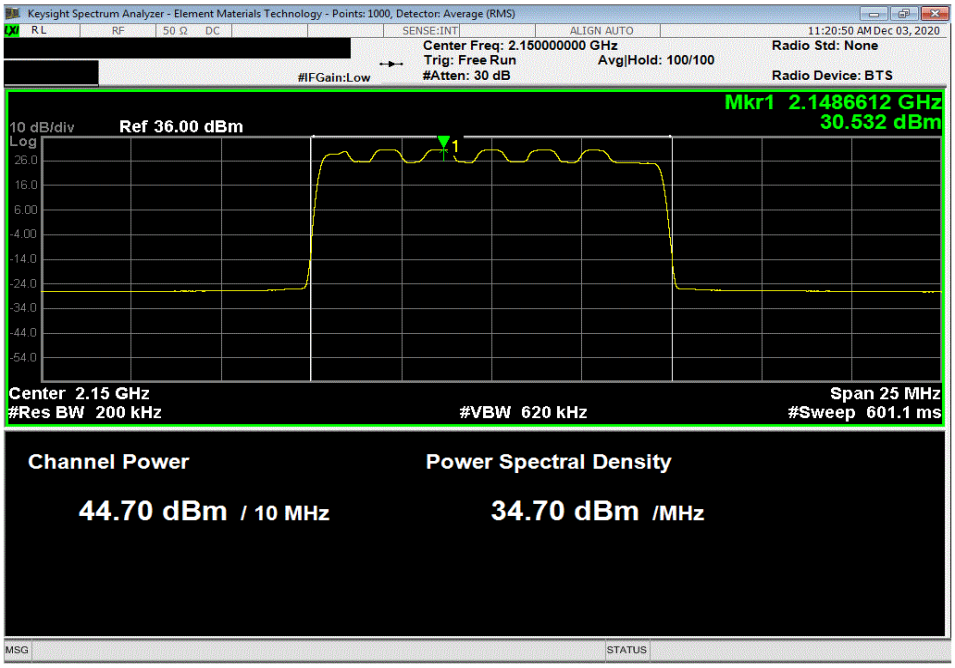


OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 10 MHz Bandwidth , 16-QAM Modulation, Mid Channel 2132.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.853	0	44.9	47.9	50.9	

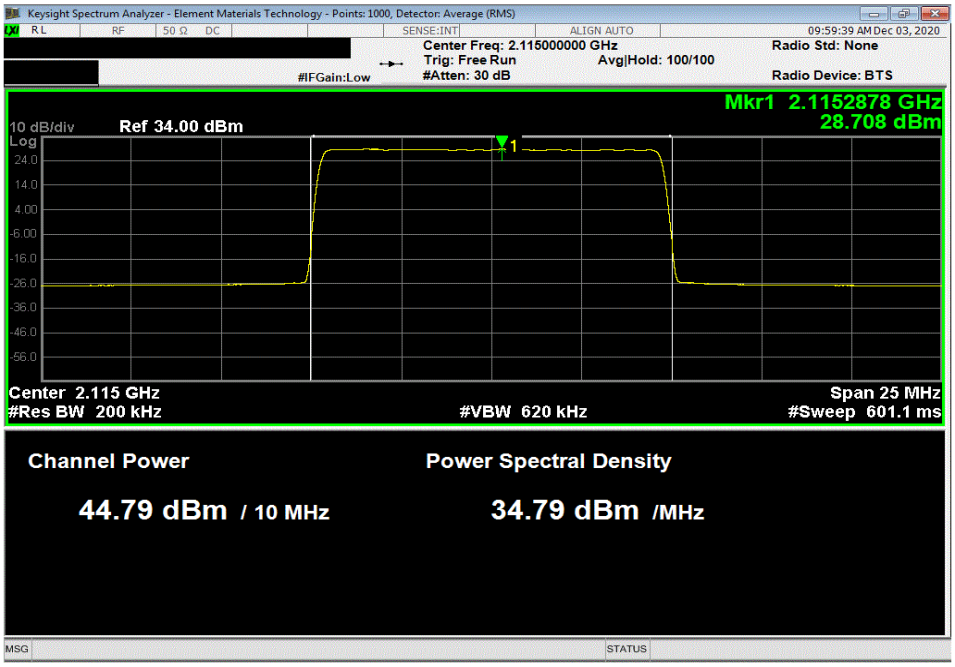


30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 10 MHz Bandwidth , 16-QAM Modulation, High Channel 2150 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.705	0	44.7	47.7	50.7	

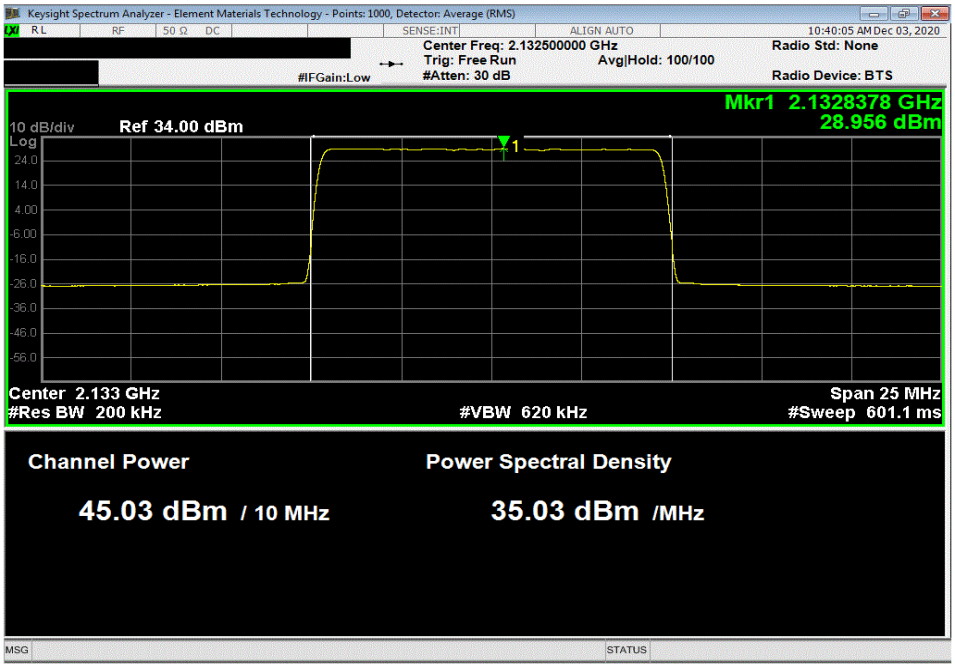


OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 10 MHz Bandwidth , 64-QAM Modulation, Low Channel 2115 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.787	0	44.8	47.8	50.8	

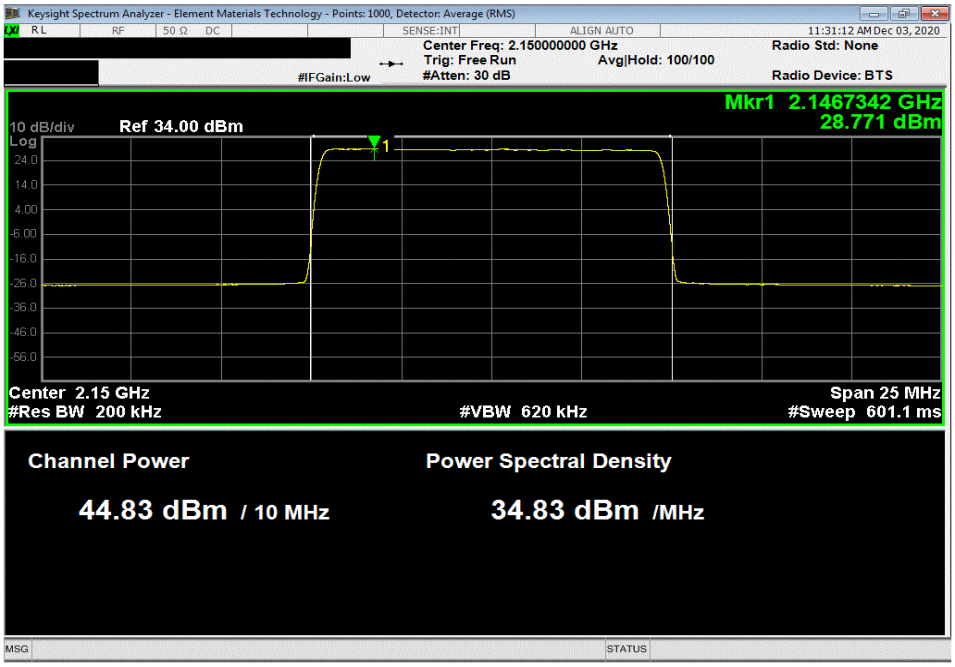


30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 10 MHz Bandwidth , 64-QAM Modulation, Mid Channel 2132.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	45.035	0	45.0	48.0	51.0	

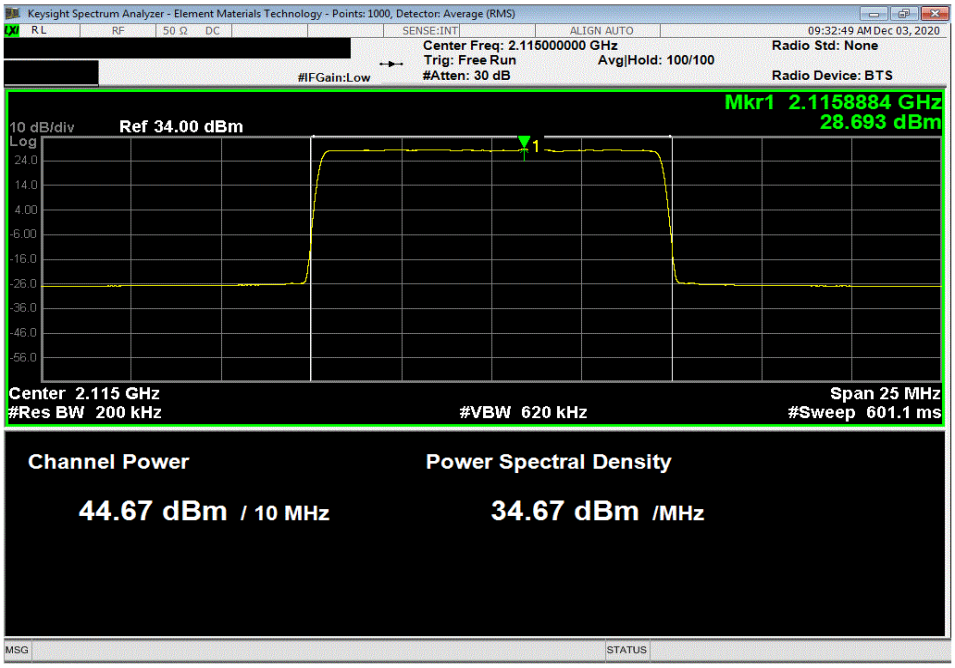


OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 10 MHz Bandwidth , 64-QAM Modulation, High Channel 2150 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.834	0	44.8	47.8	50.8	

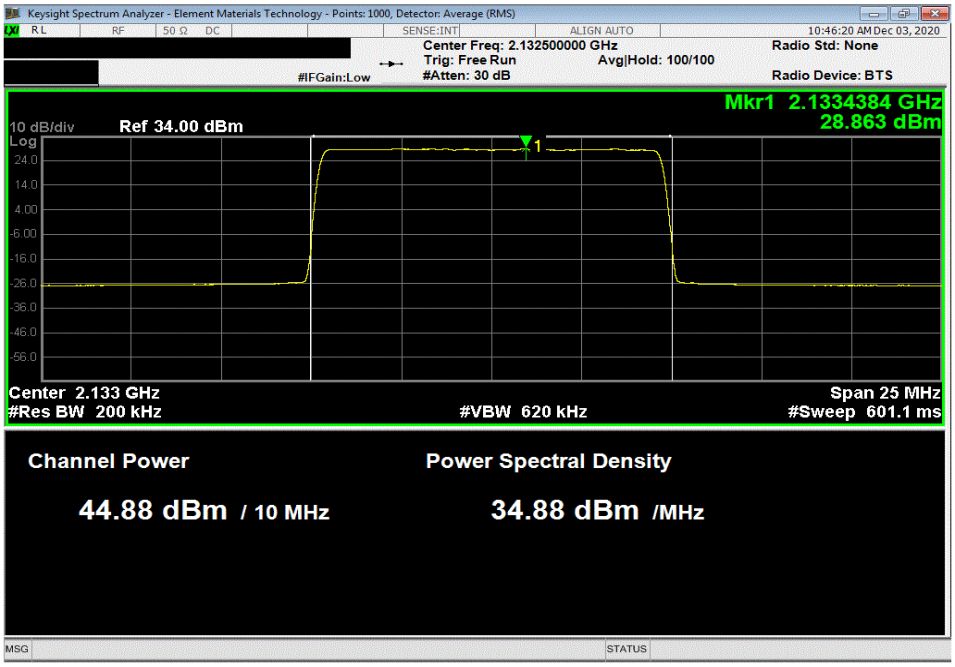


30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 10 MHz Bandwidth , 256-QAM Modulation, Low Channel 2115 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.672	0	44.7	47.7	50.7	

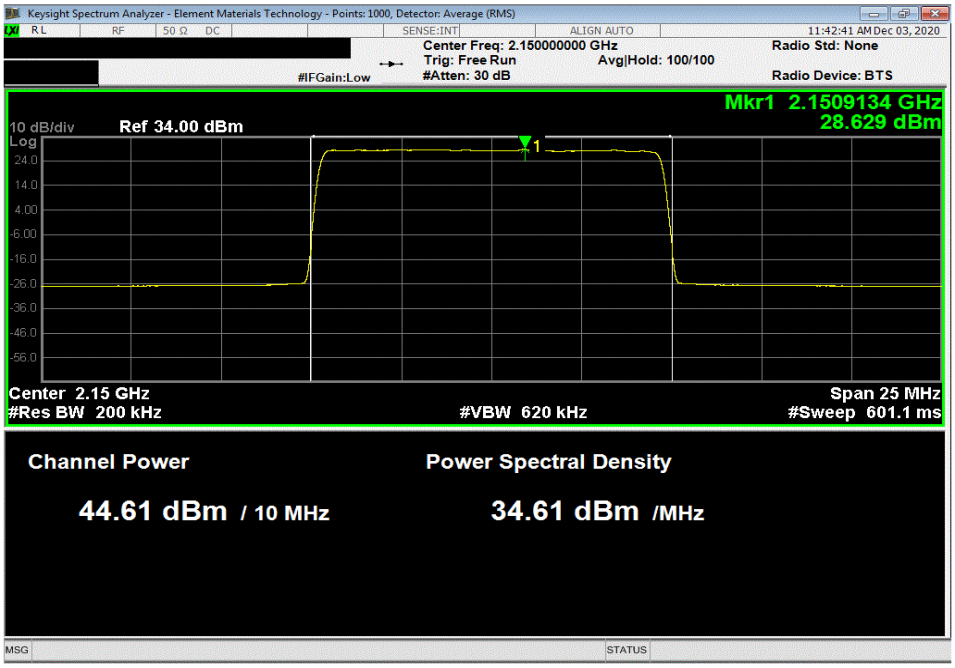


OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 10 MHz Bandwidth , 256-QAM Modulation, Mid Channel 2132.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.88	0	44.9	47.9	50.9	

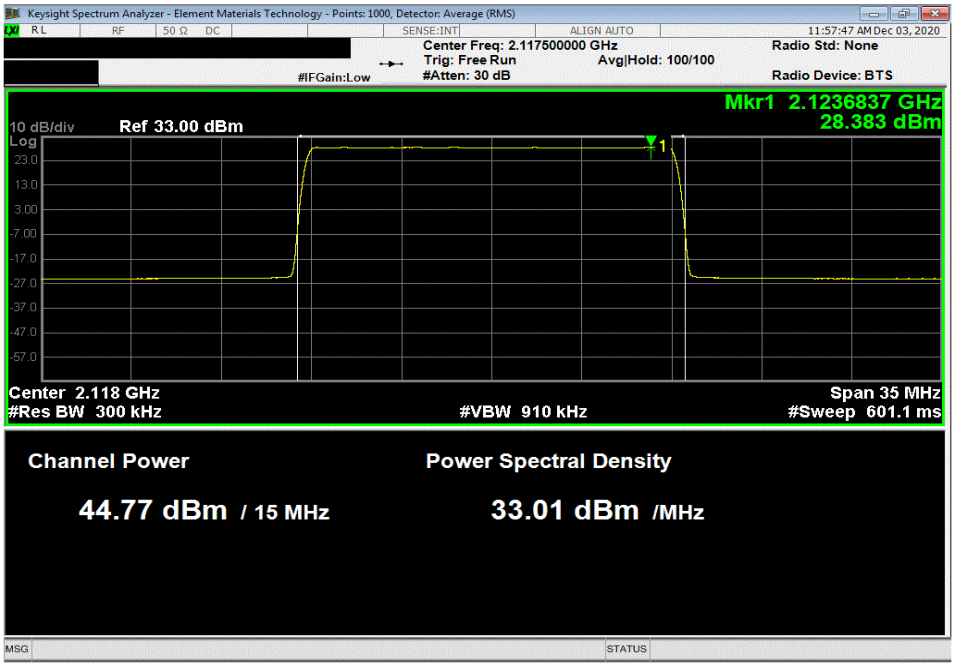


30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 10 MHz Bandwidth , 256-QAM Modulation, High Channel 2150 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.613	0	44.6	47.6	50.6	

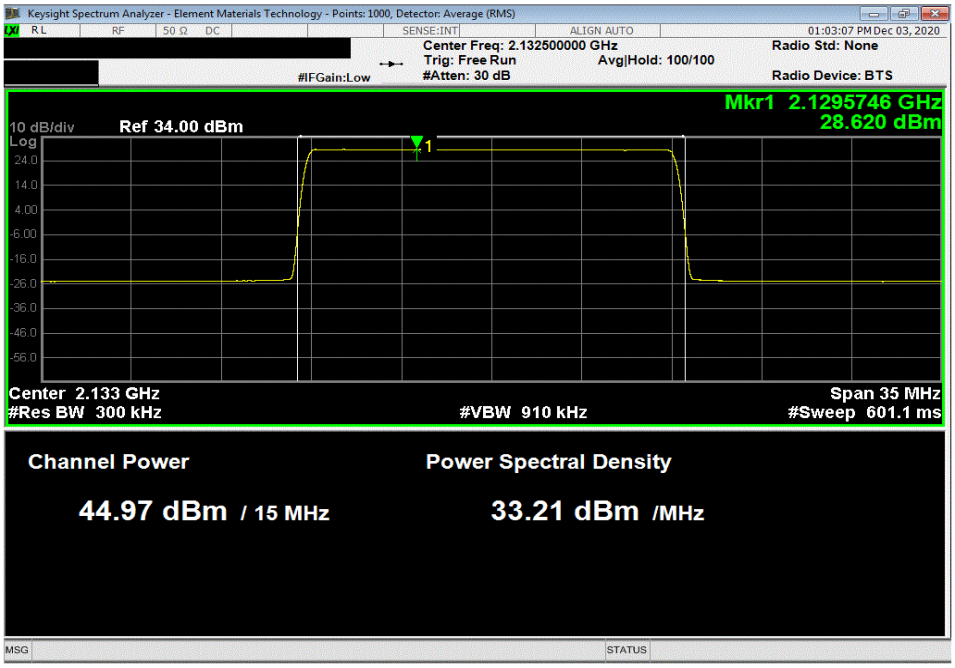


OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 15 MHz Bandwidth , QPSK Modulation, Low Channel 2117.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.768	0	44.8	47.8	50.8	

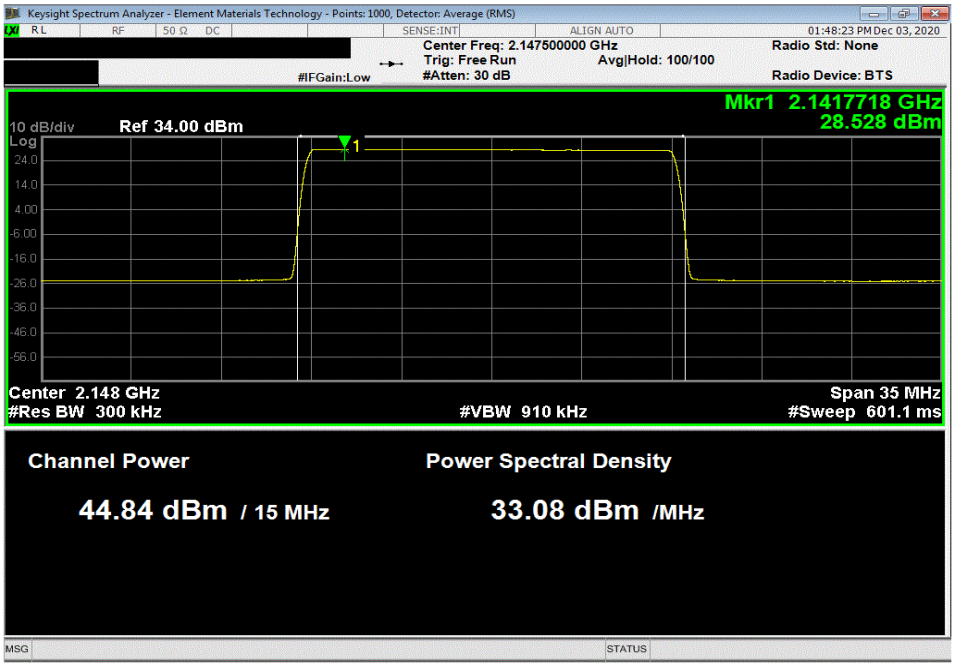


30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 15 MHz Bandwidth , QPSK Modulation, Mid Channel 2132.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.971	0	45.0	48.0	51.0	

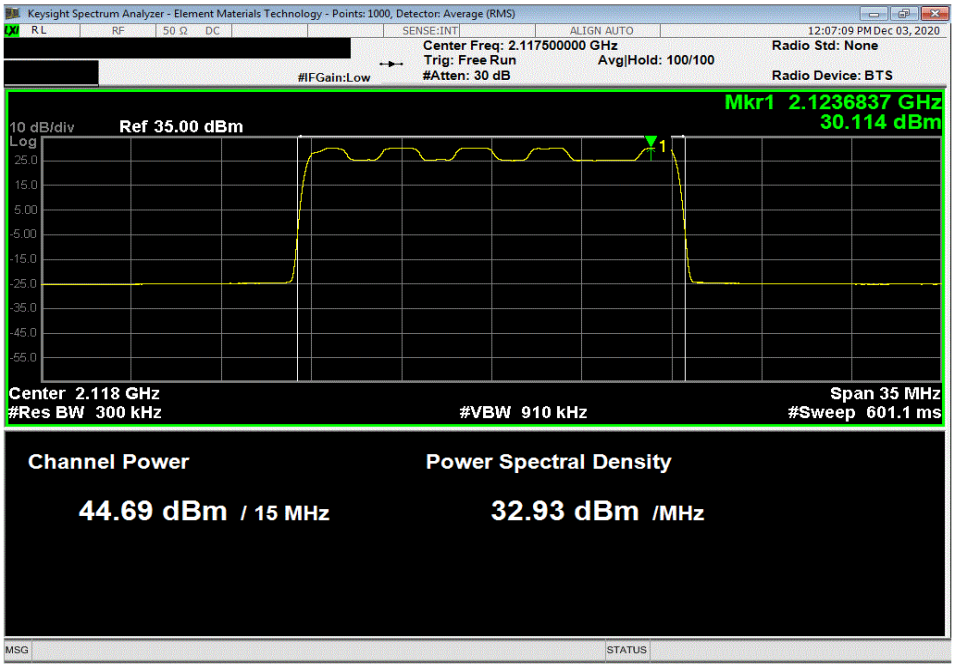


OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 15 MHz Bandwidth , QPSK Modulation, High Channel 2147.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.841	0	44.8	47.8	50.8	

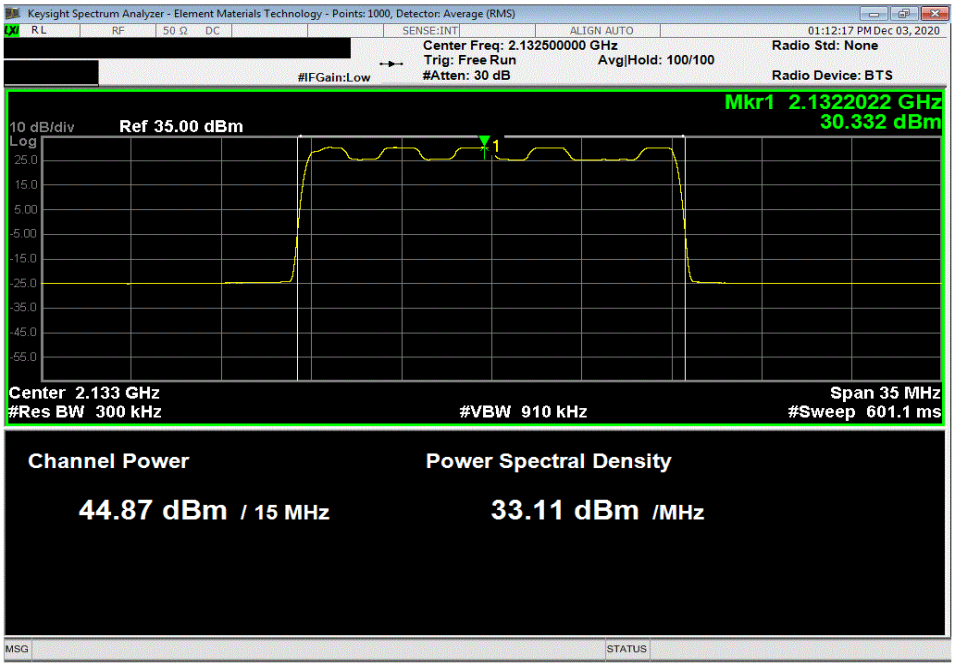


30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 15 MHz Bandwidth , 16-QAM Modulation, Low Channel 2117.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.69	0	44.7	47.7	50.7	

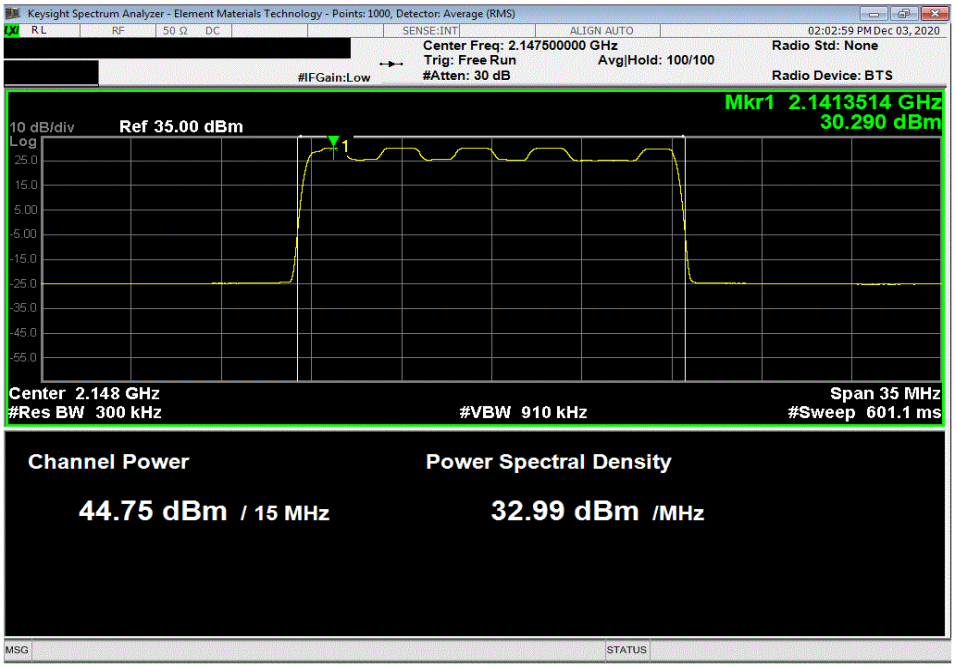


OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 15 MHz Bandwidth , 16-QAM Modulation, Mid Channel 2132.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.872	0	44.9	47.9	50.9	

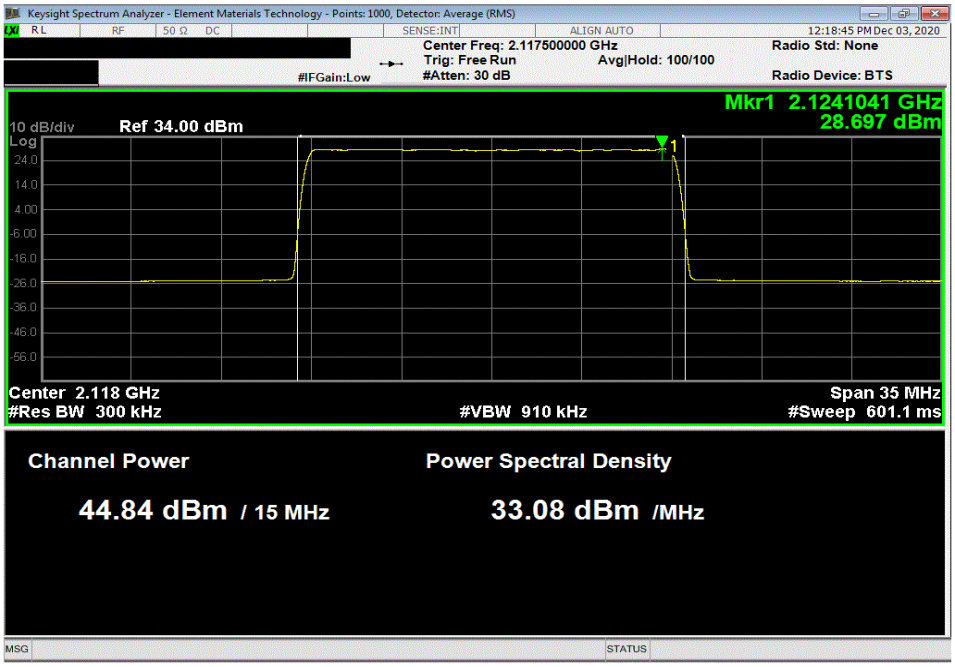


30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 15 MHz Bandwidth , 16-QAM Modulation, High Channel 2147.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.752	0	44.8	47.8	50.8	

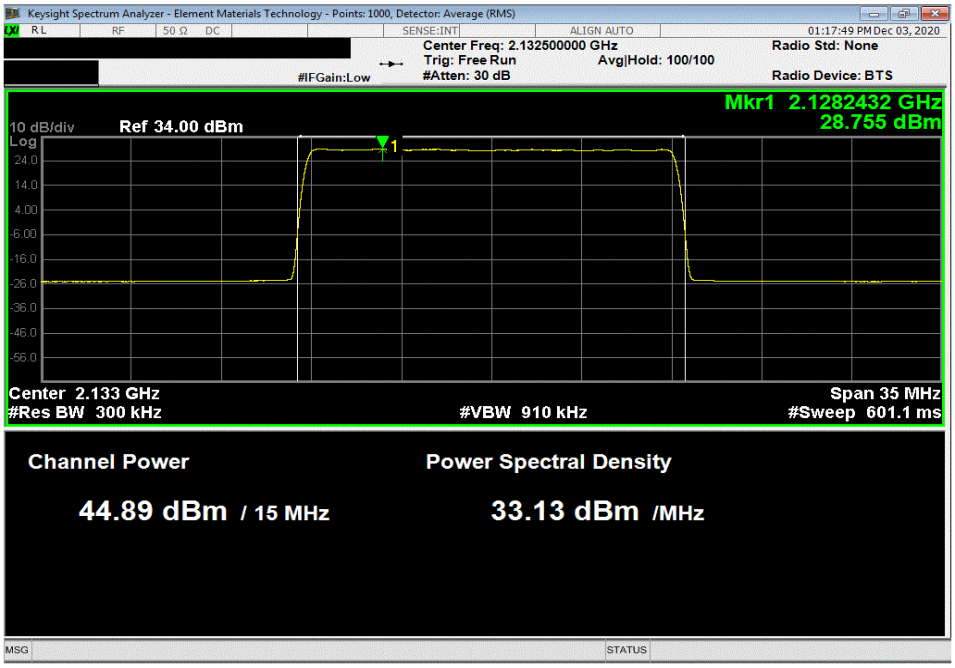


OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 15 MHz Bandwidth , 64-QAM Modulation, Low Channel 2117.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.838	0	44.8	47.8	50.8	

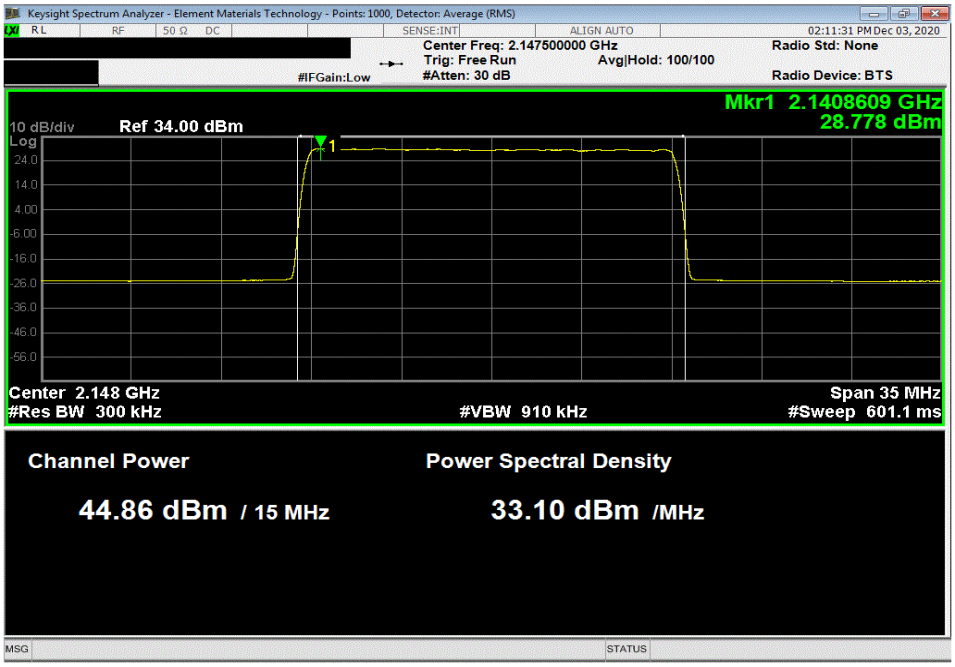


30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 15 MHz Bandwidth , 64-QAM Modulation, Mid Channel 2132.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.892	0	44.9	47.9	50.9	

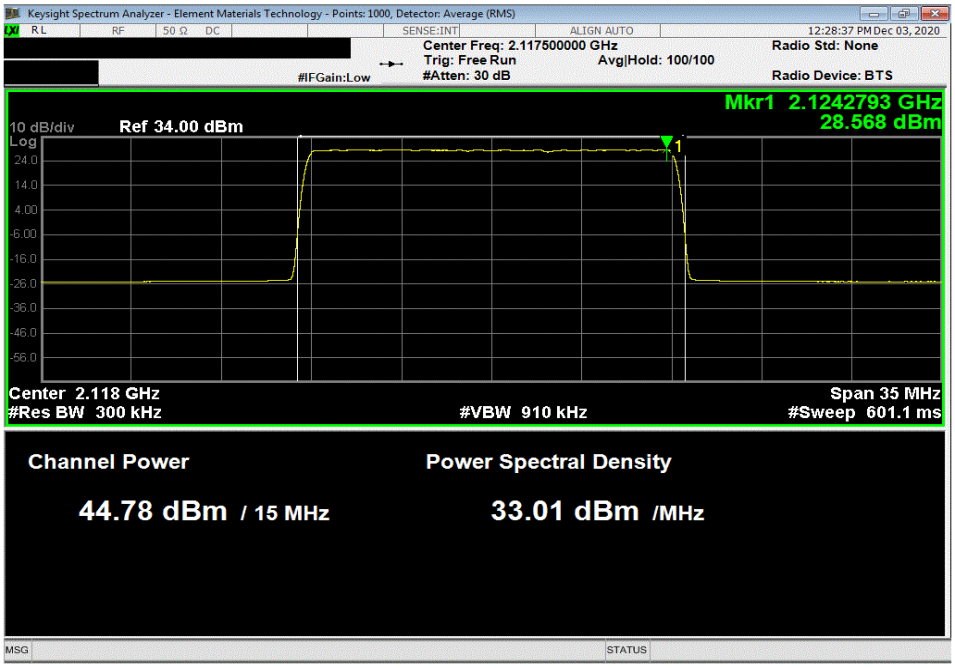


OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 15 MHz Bandwidth , 64-QAM Modulation, High Channel 2147.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.858	0	44.9	47.9	50.9	

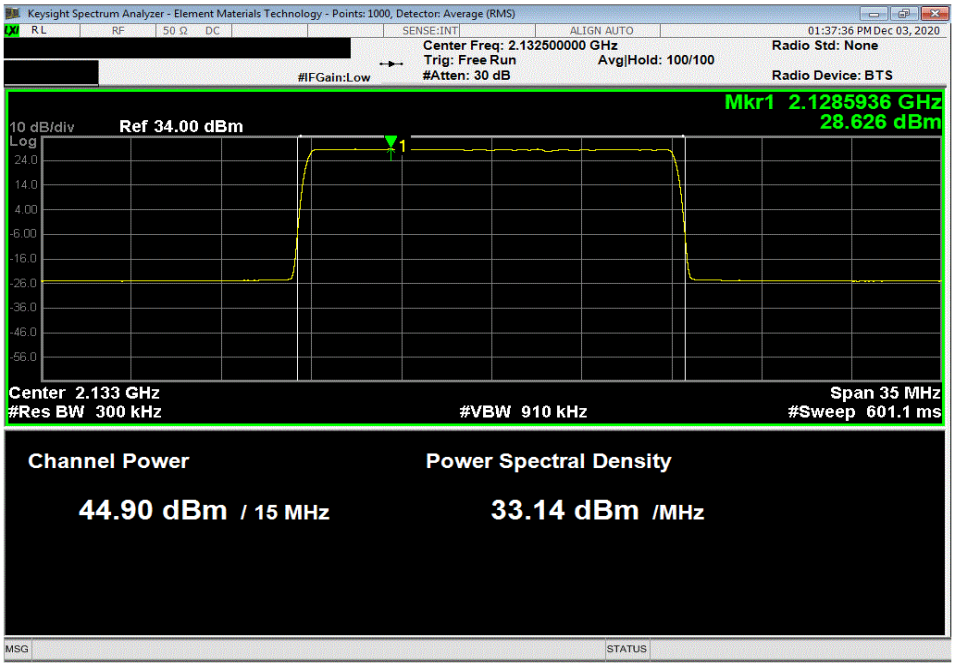


30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 15 MHz Bandwidth , 256-QAM Modulation, Low Channel 2117.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.776	0	44.8	47.8	50.8	

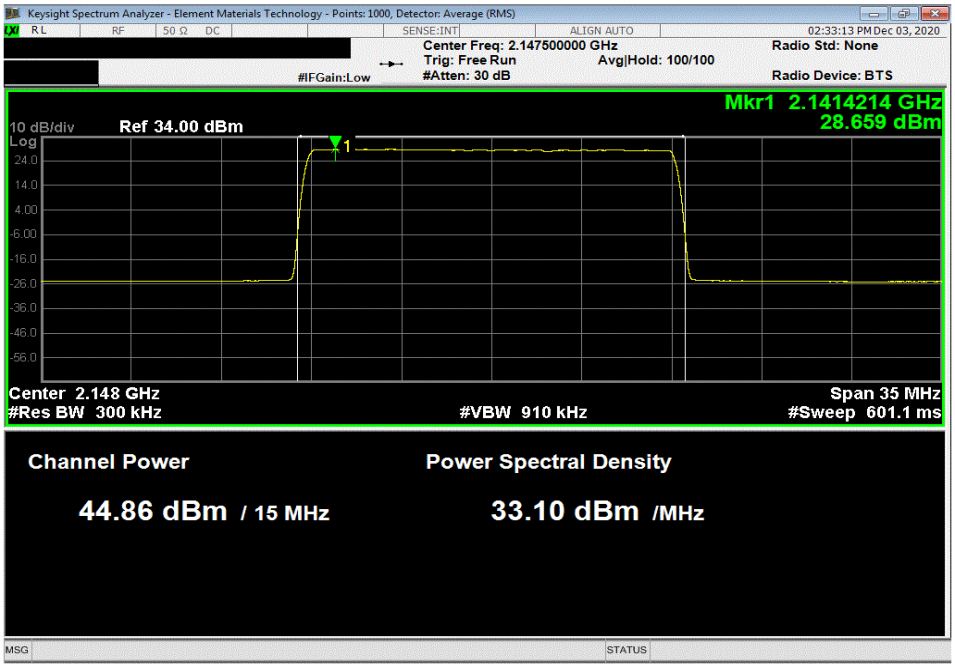


OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 15 MHz Bandwidth , 256-QAM Modulation, Mid Channel 2132.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.898	0	44.9	47.9	50.9	

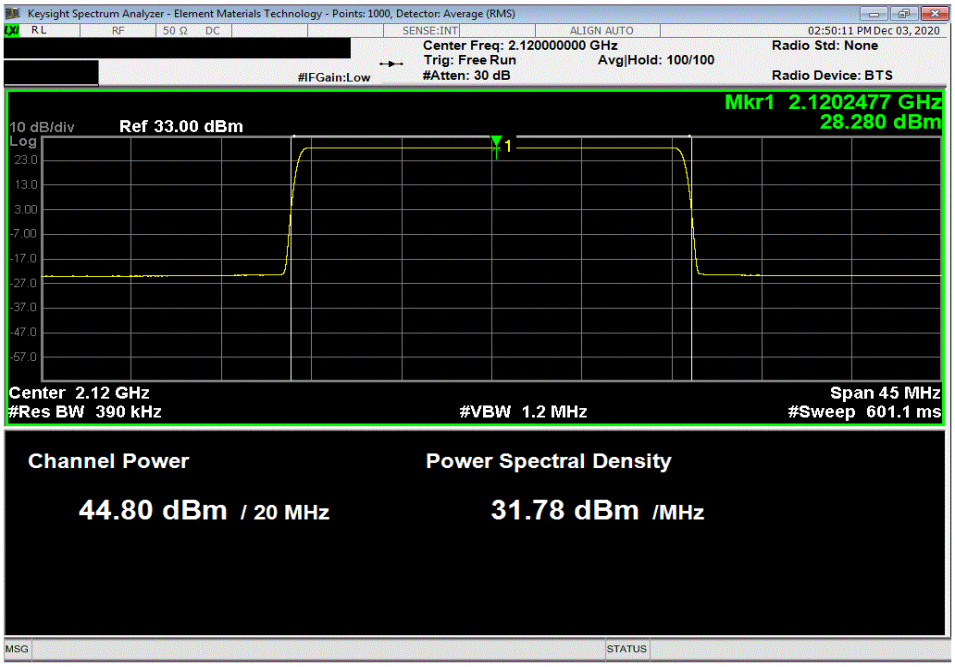


30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 15 MHz Bandwidth , 256-QAM Modulation, High Channel 2147.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.864	0	44.9	47.9	50.9	

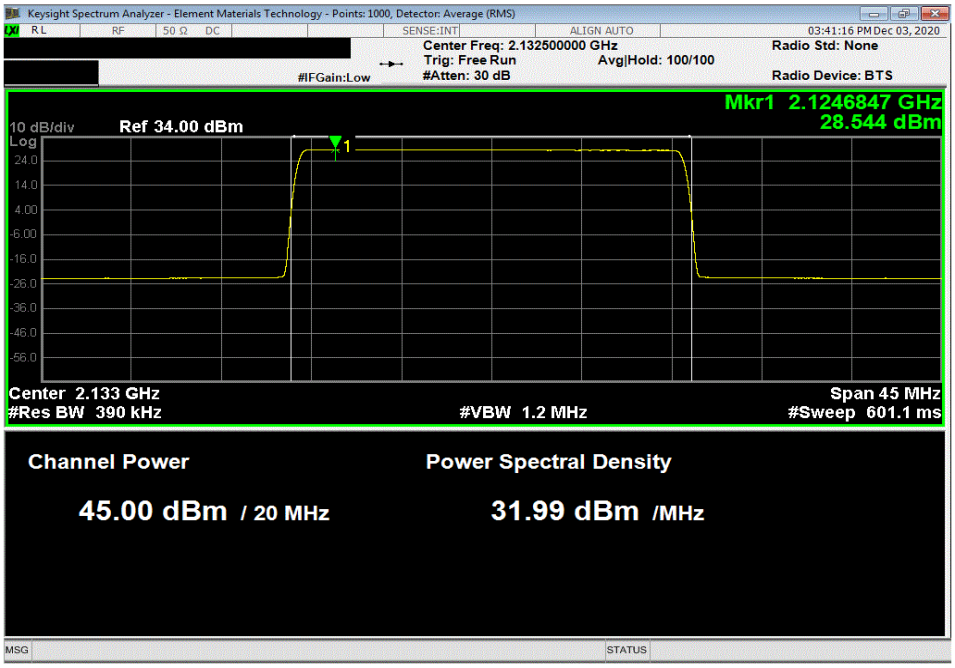


OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 20 MHz Bandwidth, QPSK Modulation, Low Channel 2120 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.795	0	44.8	47.8	50.8	

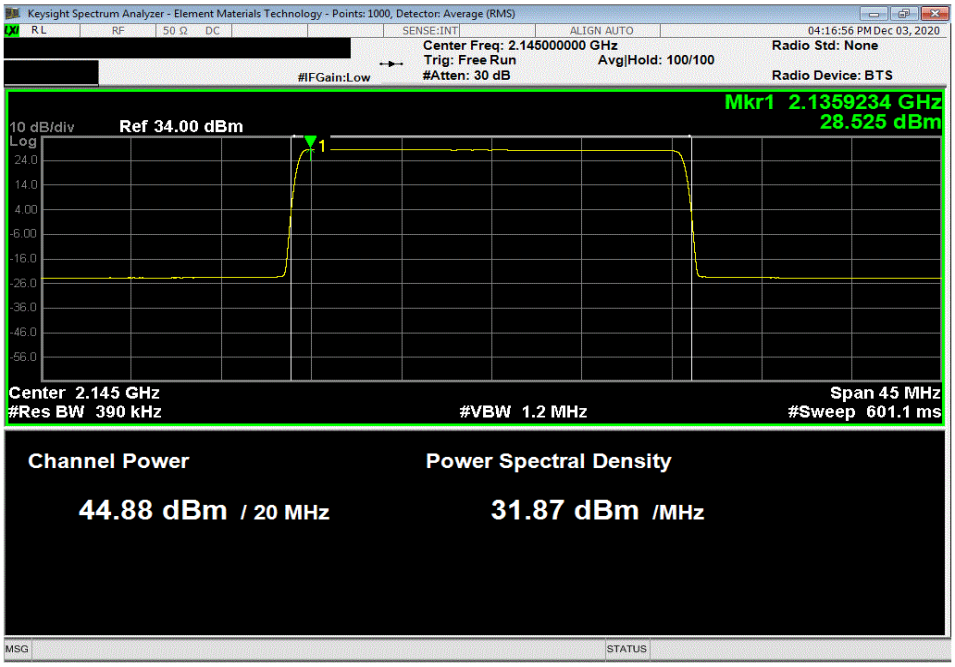


30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 20 MHz Bandwidth, QPSK Modulation, Mid Channel 2132.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.999	0	45.0	48.0	51.0	

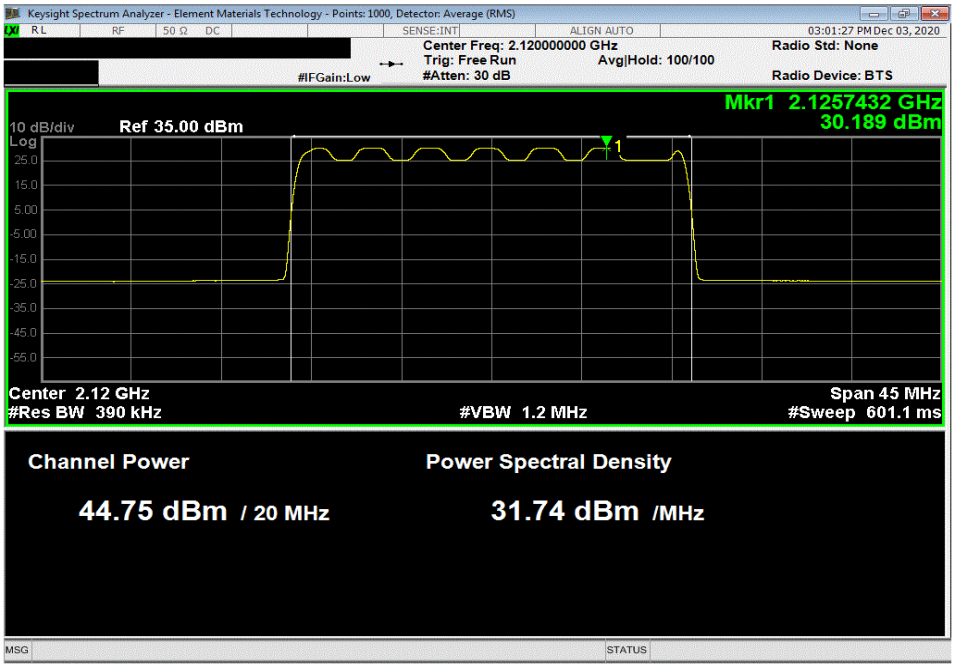


OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 20 MHz Bandwidth, QPSK Modulation, High Channel 2145 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.879	0	44.9	47.9	50.9	

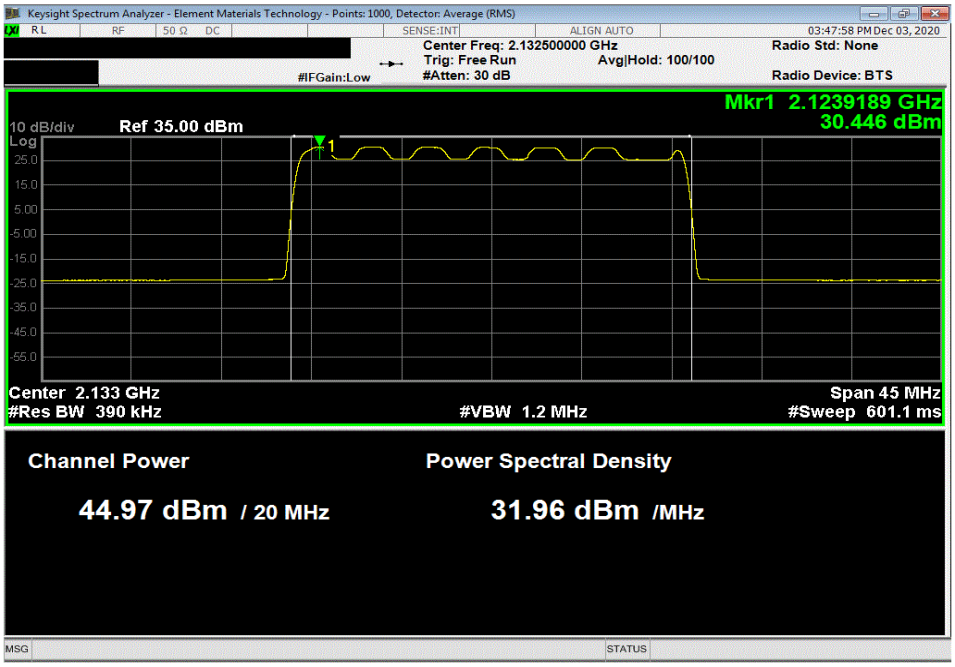


30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 20 MHz Bandwidth, 16-QAM Modulation, Low Channel 2120 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.755	0	44.8	47.8	50.8	

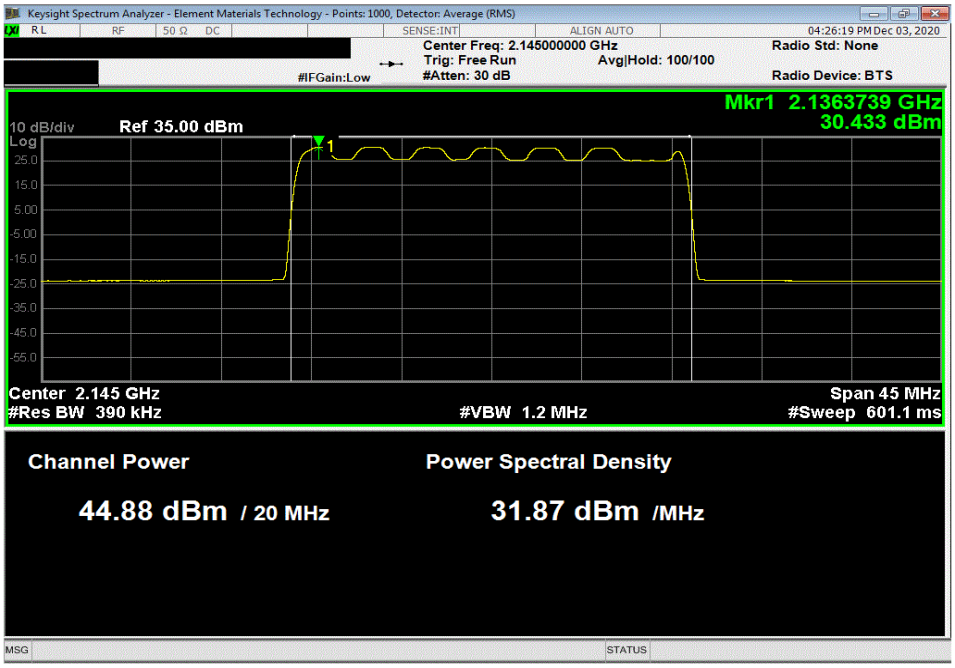


OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 20 MHz Bandwidth, 16-QAM Modulation, Mid Channel 2132.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.969	0	45.0	48.0	51.0	

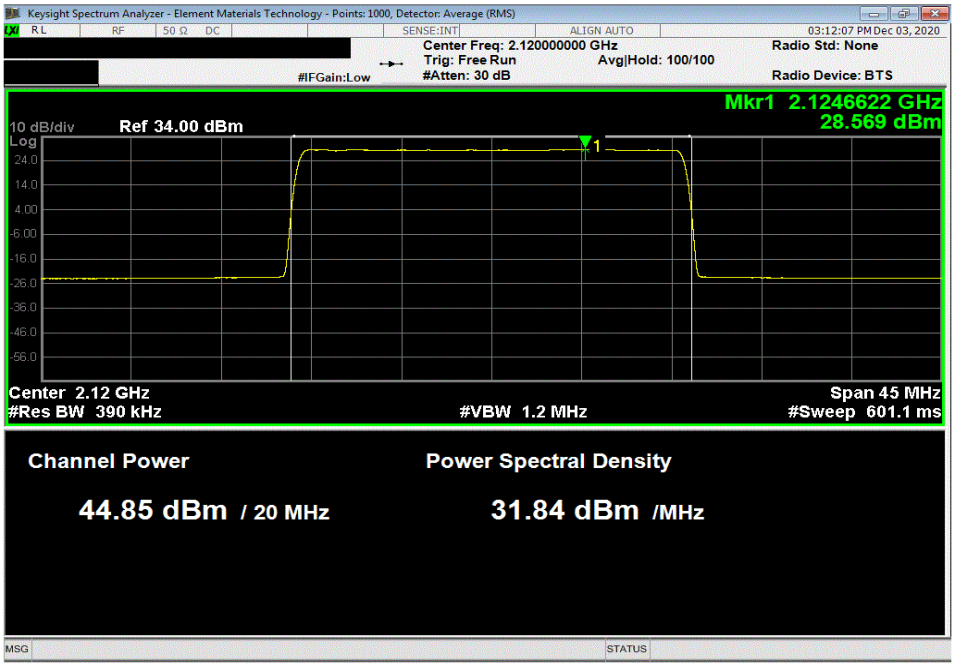


30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 20 MHz Bandwidth, 16-QAM Modulation, High Channel 2145 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.883	0	44.9	47.9	50.9	

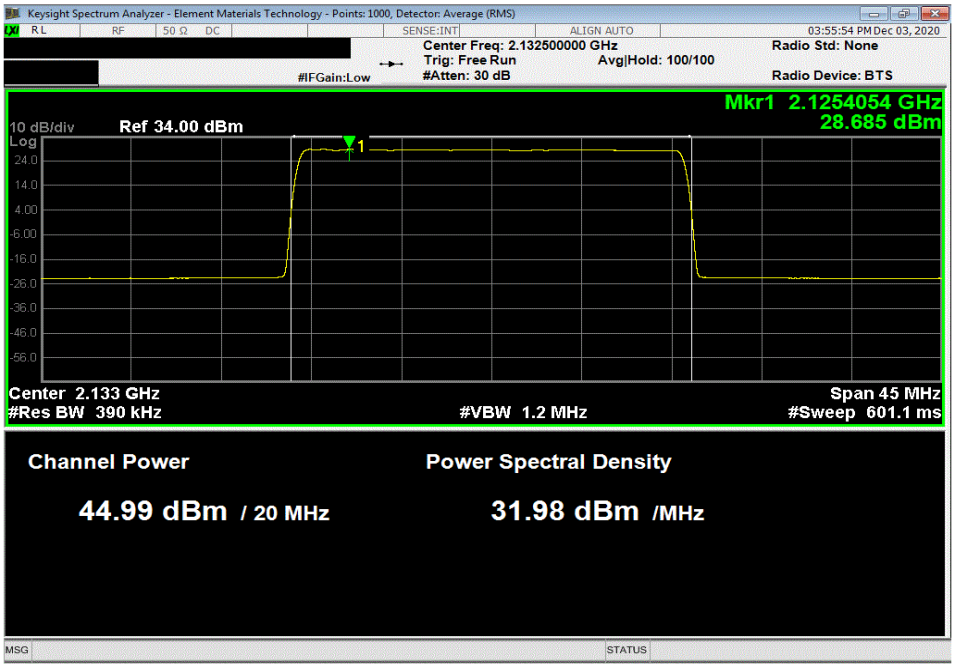


OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 20 MHz Bandwidth, 64-QAM Modulation, Low Channel 2120 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.851	0	44.9	47.9	50.9	

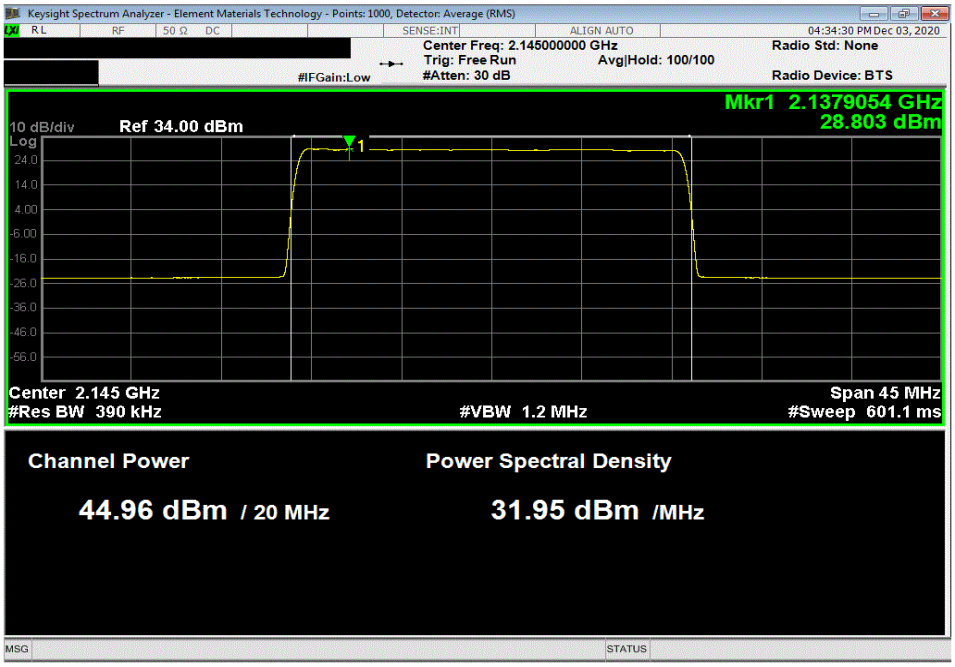


30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 20 MHz Bandwidth, 64-QAM Modulation, Mid Channel 2132.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.987	0	45.0	48.0	51.0	

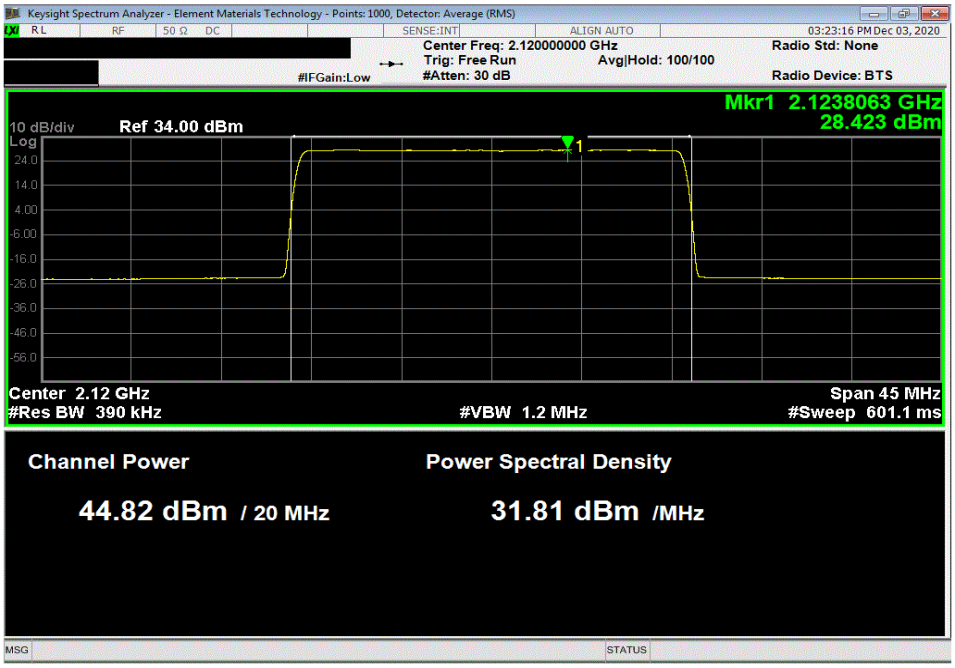


OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 20 MHz Bandwidth, 64-QAM Modulation, High Channel 2145 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.961	0	45.0	48.0	51.0	

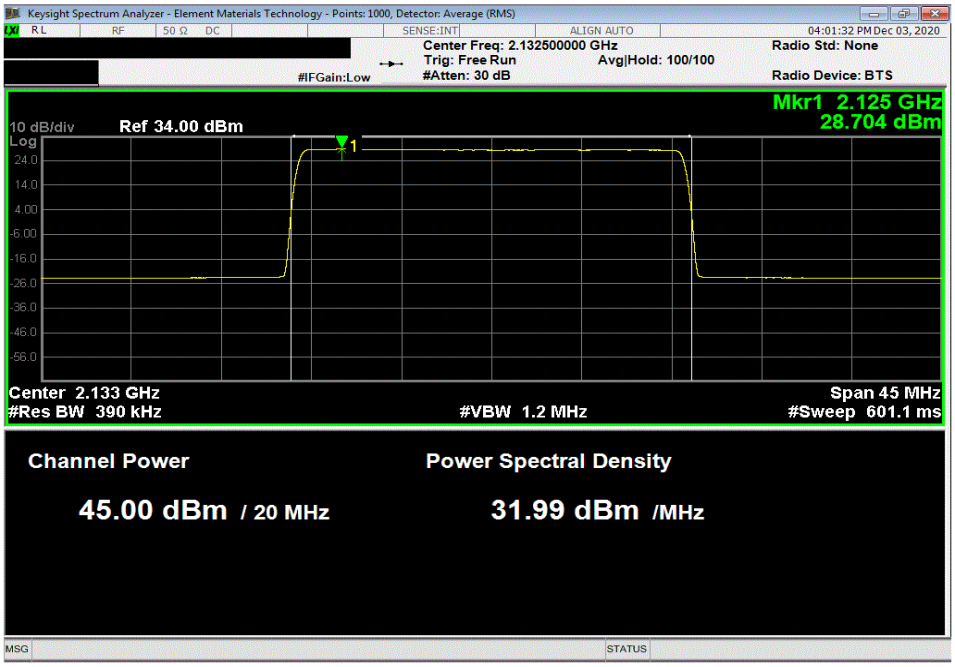


30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 20 MHz Bandwidth, 256-QAM Modulation, Low Channel 2120 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.818	0	44.8	47.8	50.8	



OUTPUT POWER - 4 PORT MODE

30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 20 MHz Bandwidth, 256-QAM Modulation, Mid Channel 2132.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.996	0	45.0	48.0	51.0	



30 Watt Port 1, Band 1, 2110 MHz - 2155 MHz, 20 MHz Bandwidth, 256-QAM Modulation, High Channel 2145 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	44.979	0	45.0	48.0	51.0