Note:

Per ANSI C63.10-2013 and KDB 662911 v02r01 Section E)1), the conducted powers at Antenna WF5T and Antenna WF5B were first measured separately during CDD/SDM transmission as shown in the section above. The measured values were then summed in linear power units then converted back to dBm.

Per ANSI C63.10-2013 Subclause 14.4.3, the correlated directional gain is calculated using the following formula, where G_N is the gain of the nth antenna and N_{ANT}, the total number of antennas used.

$$\text{Directional gain} = 10 \log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}] \text{ dBi}$$

Per ANSI C63.10-2013 Subclause 14.4.3, the uncorrelated directional gain is calculated using the following formula, where G_N is the gain of the nth antenna and N_{ANT}, the total number of antennas used.

$$\text{Directional gain} = 10 \log[(10^{G1/10} + 10^{G2/10} + \ldots + 10^{GN/10}) / N_{ANT}] \text{ dBi}$$

Sample CDD/SDM Calculation:

At 5180MHz in 802.11ax (20MHz BW) mode, the average conducted output power was measured to be 8.51 dBm for Antenna WF5T and 8.45dBm for Antenna WF5B.

Antenna WF5T + Antenna WF5B = CDD

(8.61dBm + 8.76dBm) = (7.26mW + 7.52mW) = 14.78mW = 11.70dBm

Sample e.i.r.p. Calculation:

At 5180MHz in 802.11ax (20MHz BW, CDD) mode, the average CDD conducted power was calculated to be 11.70dBm with directional gain of 5.17 dBi.

e.i.r.p. (dBm) = Conducted Power (dBm) + Ant gain (dBi)

11.70 dBm + 5.17 dBi = 16.87 dBm

7.5 Maximum Power Spectral Density – 802.11ax OFDMA

§15.407(a.1.iv) §15.407(a.2) §15.407(a.3); RSS-247 [6.2]

Test Overview and Limit

The spectrum analyzer was connected to the antenna terminal while the EUT was operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10-2013 and KDB 789033 D02 v02r01, and at the appropriate frequencies. Method SA-1, as defined in ANSI C63.10-2013 and KDB 789033 D02 v02r01, was used to measure the power spectral density.

In the 5.15 – 5.25GHz, 5.25 – 5.35GHz, 5.47 – 5.725GHz bands, the maximum permissible power spectral density is 11dBm/MHz.

In the 5.725 – 5.850GHz band, the maximum permissible power spectral density is 30dBm/500kHz.

Test Procedure Used

ANSI C63.10-2013 – Subclause 12.3.2.2
KDB 789033 D02 v02r01 – Section F
ANSI C63.10-2013 – Subclause 14.3.2.2 Measure-and-Sum Technique
KDB 662911 v02r01 – Section E)2) Measure-and-Sum Technique

Test Settings

1. Analyzer was set to the center frequency of the UNII channel under investigation
2. Span was set to encompass the entire emission bandwidth of the signal
3. RBW = 1MHz
4. VBW = 3MHz
5. Number of sweep points ≥ 2 x (span/RBW)
6. Sweep time = auto
7. Detector = power averaging (RMS)
8. Trigger was set to free run for all modes
9. Trace was averaged over 100 sweeps
10. The peak search function of the spectrum analyzer was used to find the peak of the spectrum.

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

Figure 7-4. Test Instrument & Measurement Setup

Test Notes

1. All of the partially-loaded RU configurations have been investigated for Power Spectral Density measurement and among all partially-loaded RU configurations, the RU26 configuration was found to be the worst case. Therefore, only the RU26 (Partially-loaded RU) and RU242 (Fully-loaded RU) data are included in this section.
2. Low, mid, and high channels were tested and tabular data has been reported. Only mid channel psd plots have been reported.

Antenna WF5T Power Spectral Density Measurements

	Frequency [MHz]	Channel No.	802.11 Mode	RU Size	RU Index	Data Rate [Mbps]	Measured Power Density [dBm/MHz]	Max Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	ax (20MHz)	26	0	12.5/14.7 (MCS11)	9.05	11.0	-1.95
				26	4	12.5/14.7 (MCS11)	8.39	11.0	-2.61
				26	8	12.5/14.7 (MCS11)	8.37	11.0	-2.63
	5200	40	ax (20MHz)	26	0	12.5/14.7 (MCS11)	8.96	11.0	-2.04
				26	4	12.5/14.7 (MCS11)	8.11	11.0	-2.89
				26	8	12.5/14.7 (MCS11)	9.11	11.0	-1.89
	5240	48	ax (20MHz)	26	0	12.5/14.7 (MCS11)	9.48	11.0	-1.52
				26	4	12.5/14.7 (MCS11)	9.15	11.0	-1.85
				26	8	12.5/14.7 (MCS11)	9.51	11.0	-1.49
	5190	38	ax (40MHz)	26	0	12.5/14.7 (MCS11)	9.01	11.0	-1.99
				26	8	12.5/14.7 (MCS11)	9.87	11.0	-1.13
				26	17	12.5/14.7 (MCS11)	9.34	11.0	-1.66
	5230	46	ax (40MHz)	26	0	12.5/14.7 (MCS11)	9.40	11.0	-1.60
				26	8	12.5/14.7 (MCS11)	9.87	11.0	-1.13
				26	17	12.5/14.7 (MCS11)	9.56	11.0	-1.44
	5210	42	ax (80MHz)	26	0	12.5/14.7 (MCS11)	9.65	11.0	-1.35
				26	18	12.5/14.7 (MCS11)	8.67	11.0	-2.33
				26	36	12.5/14.7 (MCS11)	9.47	11.0	-1.53

Table 7-102. Bands 1 Power Spectral Density Measurements Antenna WF5T (RU26)

	Frequency [MHz]	Channel No.	802.11 Mode	RU Size	RU Index	Data Rate [Mbps]	Measured Power Density [dBm/MHz]	Max Power Density [dBm/MHz]	Margin [dB]
Band 1/2A	5250	50 (L)	ax (160MHz)	52	37	25/29.4 (MCS11)	4.30	11.0	-6.70
				52	52	25/29.4 (MCS11)	3.54	11.0	-7.47
		50 (U)		52	52	25/29.4 (MCS11)	3.75	11.0	-7.25
Band 2A	5260	52	ax (20MHz)	52	37	25/29.4 (MCS11)	10.12	11.0	-0.88
				52	38	25/29.4 (MCS11)	10.22	11.0	-0.78
				52	40	25/29.4 (MCS11)	10.11	11.0	-0.90
	5300	60	ax (20MHz)	52	37	25/29.4 (MCS11)	8.52	11.0	-2.48
				52	38	25/29.4 (MCS11)	8.95	11.0	-2.05
				52	40	25/29.4 (MCS11)	8.45	11.0	-2.55
	5320	64	ax (20MHz)	52	37	25/29.4 (MCS11)	9.79	11.0	-1.21
				52	38	25/29.4 (MCS11)	10.33	11.0	-0.67
				52	40	25/29.4 (MCS11)	10.03	11.0	-0.97
	5270	54	ax (40MHz)	52	37	25/29.4 (MCS11)	9.99	11.0	-1.01
				52	40	25/29.4 (MCS11)	10.26	11.0	-0.74
				52	44	25/29.4 (MCS11)	9.47	11.0	-1.53
	5310	62	ax (40MHz)	52	37	25/29.4 (MCS11)	9.41	11.0	-1.60
				52	40	25/29.4 (MCS11)	10.35	11.0	-0.65
				52	44	25/29.4 (MCS11)	9.97	11.0	-1.04
	5290	58	ax (80MHz)	52	37	25/29.4 (MCS11)	7.57	11.0	-3.43
				52	44	25/29.4 (MCS11)	7.93	11.0	-3.07
				52	52	25/29.4 (MCS11)	7.31	11.0	-3.69
Band 2C	5500	100	ax (20MHz)	52	37	25/29.4 (MCS11)	9.93	11.0	-1.07
				52	38	25/29.4 (MCS11)	9.82	11.0	-1.18
				52	40	25/29.4 (MCS11)	9.90	11.0	-1.10
	5580	116	ax (20MHz)	52	37	25/29.4 (MCS11)	9.44	11.0	-1.56
				52	38	25/29.4 (MCS11)	9.86	11.0	-1.14
				52	40	25/29.4 (MCS11)	9.18	11.0	-1.82
	5700	140	ax (20MHz)	52	37	25/29.4 (MCS11)	6.99	11.0	-4.01
				52	38	25/29.4 (MCS11)	7.29	11.0	-3.71
				52	40	25/29.4 (MCS11)	7.13	11.0	-3.87
	5720	144	ax (20MHz)	52	37	25/29.4 (MCS11)	9.95	11.0	-1.05
				52	38	25/29.4 (MCS11)	10.32	11.0	-0.68
				52	40	25/29.4 (MCS11)	10.21	11.0	-0.79
	5510	102	ax (40MHz)	52	37	25/29.4 (MCS11)	7.16	11.0	-3.84
				52	40	25/29.4 (MCS11)	8.09	11.0	-2.91
				52	44	25/29.4 (MCS11)	7.54	11.0	-3.46
	5550	110	ax (40MHz)	52	37	25/29.4 (MCS11)	10.17	11.0	-0.83
				52	40	25/29.4 (MCS11)	9.24	11.0	-1.76
				52	44	25/29.4 (MCS11)	9.01	11.0	-2.00
	5710	142	ax (40MHz)	52	37	25/29.4 (MCS11)	9.51	11.0	-1.49
				52	40	25/29.4 (MCS11)	10.41	11.0	-0.59
				52	44	25/29.4 (MCS11)	9.89	11.0	-1.11
	5530	106	ax (80MHz)	52	37	25/29.4 (MCS11)	9.89	11.0	-1.11
				52	44	25/29.4 (MCS11)	9.71	11.0	-1.29
				52	52	25/29.4 (MCS11)	9.66	11.0	-1.34
	5610*	122	ax (80MHz)	52	37	25/29.4 (MCS11)	10.27	11.0	-0.73
				52	44	25/29.4 (MCS11)	10.45	11.0	-0.55
				52	52	25/29.4 (MCS11)	10.17	11.0	-0.83
	5690	138	ax (80MHz)	52	37	25/29.4 (MCS11)	10.20	11.0	-0.80
				52	44	25/29.4 (MCS11)	9.81	11.0	-1.19
				52	52	25/29.4 (MCS11)	9.78	11.0	-1.22
	5570*	114 (L)	ax (160MHz)	52	37	25/29.4 (MCS11)	0.51	11.0	-10.49
				52	52	25/29.4 (MCS11)	0.63	11.0	-10.37
		114 (U)		52	52	25/29.4 (MCS11)	1.09	11.0	-9.91

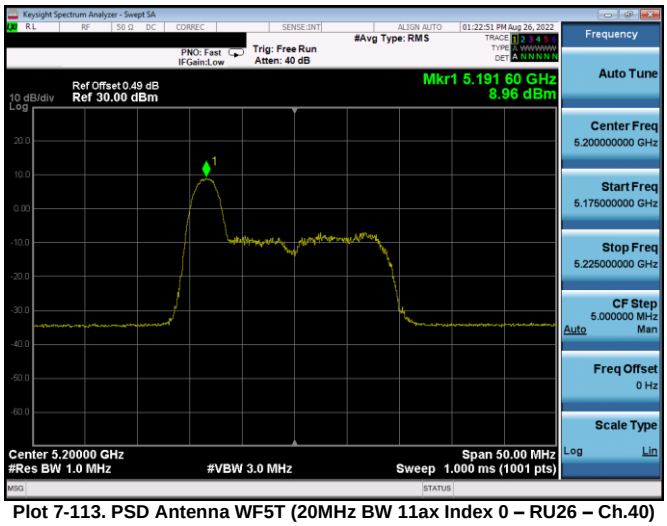
Table 7-103. Bands 1, 2A, 2C Power Spectral Density Measurements Antenna WF5T (RU52)

*TDWR channel is not supported for ISED (denoted by a * next to the frequency)

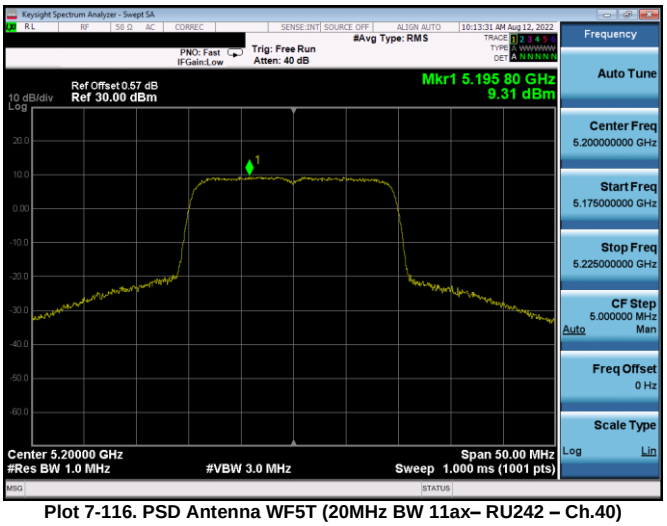
	Frequency [MHz]	Channel No.	802.11 Mode	RU Size	RU Index	Data Rate [Mbps]	Measured Power Density [dBm/MHz]	Max Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	ax (20MHz)	242	61	121.9/143.4 (MCS11)	6.02	11.0	-4.98
	5200	40	ax (20MHz)	242	61	121.9/143.4 (MCS11)	9.31	11.0	-1.69
	5240	48	ax (20MHz)	242	61	121.9/143.4 (MCS11)	9.51	11.0	-1.49
	5190	38	ax (40MHz)	484	65	243.8/286.8 (MCS11)	-1.29	11.0	-12.29
	5230	46	ax (40MHz)	484	65	243.8/286.8 (MCS11)	7.09	11.0	-3.91
	5210	42	ax (80MHz)	996	67	510.4/600.5 (MCS11)	-3.48	11.0	-14.48
Band 1/2A	5250	50	ax (160MHz)	996x2	68	510.4/600.5 (MCS11)	-11.80	11.0	-22.80
Band 2A	5260	52	ax (20MHz)	242	61	121.9/143.4 (MCS11)	9.58	11.0	-1.42
	5300	60	ax (20MHz)	242	61	121.9/143.4 (MCS11)	8.98	11.0	-2.02
	5320	64	ax (20MHz)	242	61	121.9/143.4 (MCS11)	7.14	11.0	-3.86
	5270	54	ax (40MHz)	484	65	243.8/286.8 (MCS11)	6.36	11.0	-4.64
	5310	62	ax (40MHz)	484	65	243.8/286.8 (MCS11)	0.94	11.0	-10.06
	5290	58	ax (80MHz)	996	67	510.4/600.5 (MCS11)	-3.59	11.0	-14.59
Band 2C	5500	100	ax (20MHz)	242	61	121.9/143.4 (MCS11)	5.83	11.0	-5.17
	5580	116	ax (20MHz)	242	61	121.9/143.4 (MCS11)	9.38	11.0	-1.62
	5720	144	ax (20MHz)	242	61	121.9/143.4 (MCS11)	9.76	11.0	-1.24
	5510	102	ax (40MHz)	484	65	243.8/286.8 (MCS11)	-0.91	11.0	-11.91
	5550	110	ax (40MHz)	484	65	243.8/286.8 (MCS11)	4.54	11.0	-6.46
	5710	142	ax (40MHz)	484	65	243.8/286.8 (MCS11)	5.66	11.0	-5.34
	5530	106	ax (80MHz)	996	67	510.4/600.5 (MCS11)	-3.75	11.0	-14.75
	5610*	122	ax (80MHz)	996	67	510.4/600.5 (MCS11)	-2.14	11.0	-13.14
	5690	138	ax (80MHz)	996	67	510.4/600.5 (MCS11)	0.10	11.0	-10.90
	5560*	114	ax (160MHz)	996x2	68	510.4/600.5 (MCS11)	-12.81	11.0	-23.81

Table 7-104. Bands 1, 2A, 2C Power Spectral Density Measurements Antenna WF5T (Fully-loaded RU)

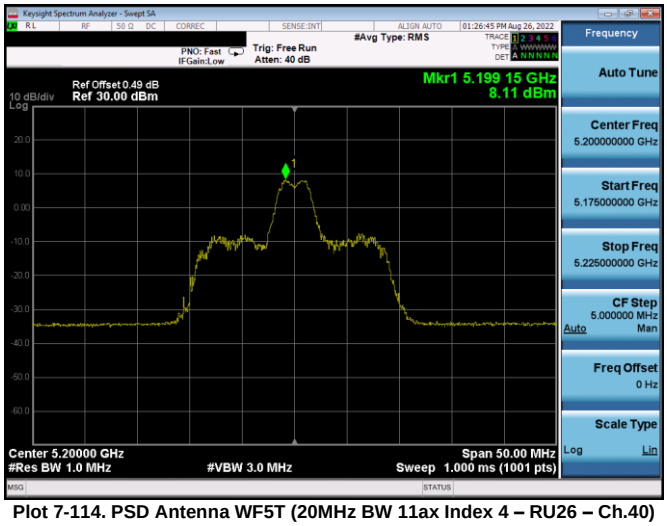
*TDWR channel is not supported for ISED (denoted by a * next to the frequency)



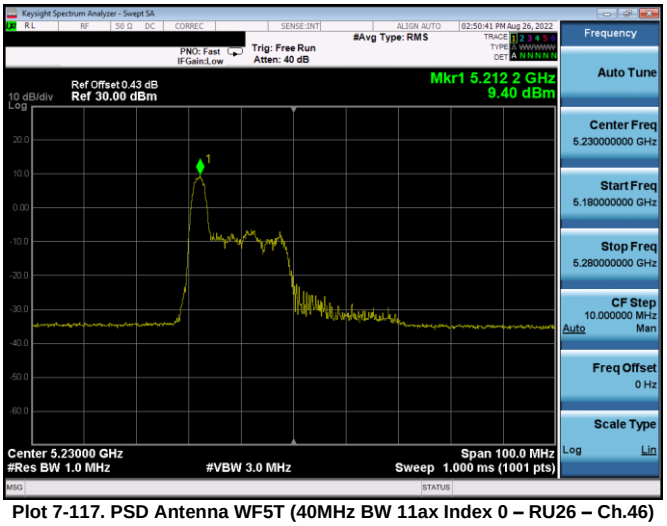
Plot 7-113. PSD Antenna WF5T (20MHz BW 11ax Index 0 – RU26 – Ch.40)



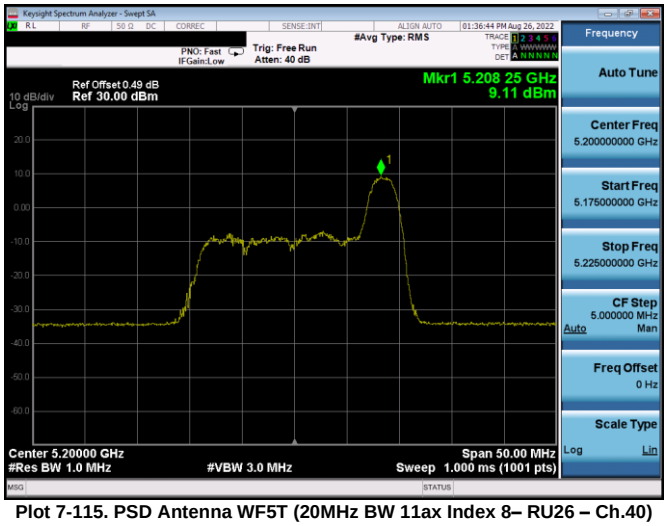
Plot 7-116. PSD Antenna WF5T (20MHz BW 11ax– RU242 – Ch.40)



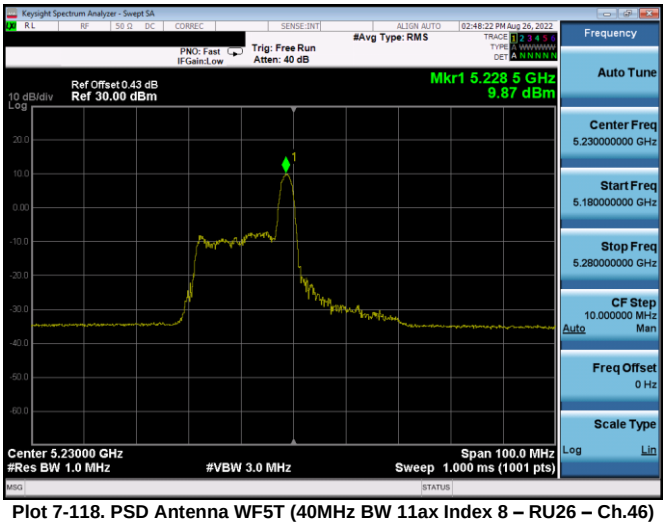
Plot 7-114. PSD Antenna WF5T (20MHz BW 11ax Index 4 – RU26 – Ch.40)



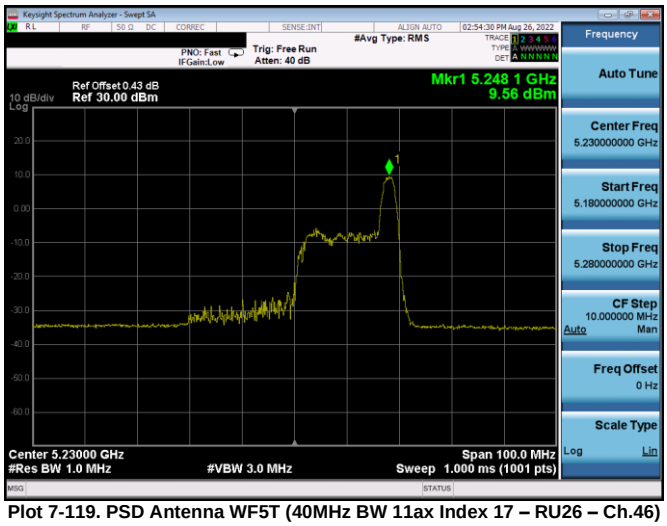
Plot 7-117. PSD Antenna WF5T (40MHz BW 11ax Index 0 – RU26 – Ch.46)



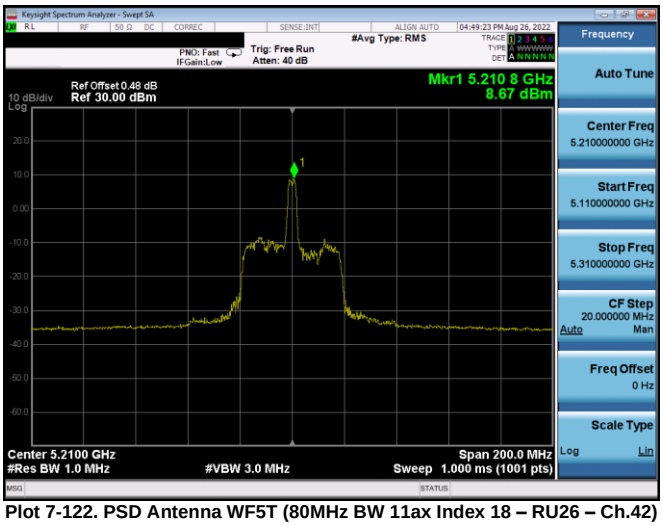
Plot 7-115. PSD Antenna WF5T (20MHz BW 11ax Index 8– RU26 – Ch.40)



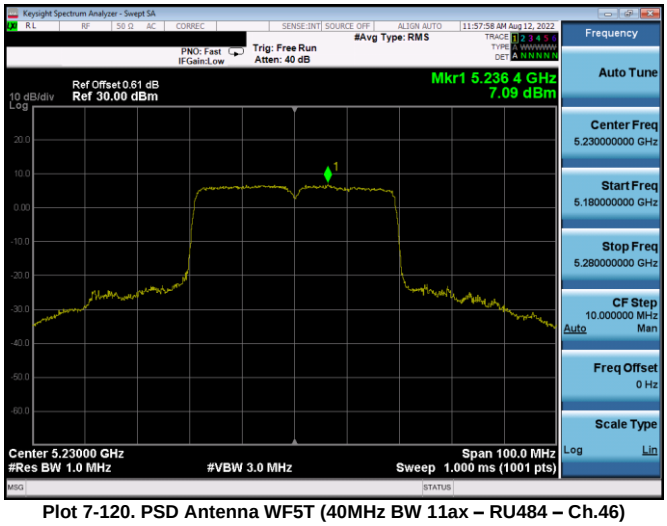
Plot 7-118. PSD Antenna WF5T (40MHz BW 11ax Index 8 – RU26 – Ch.46)



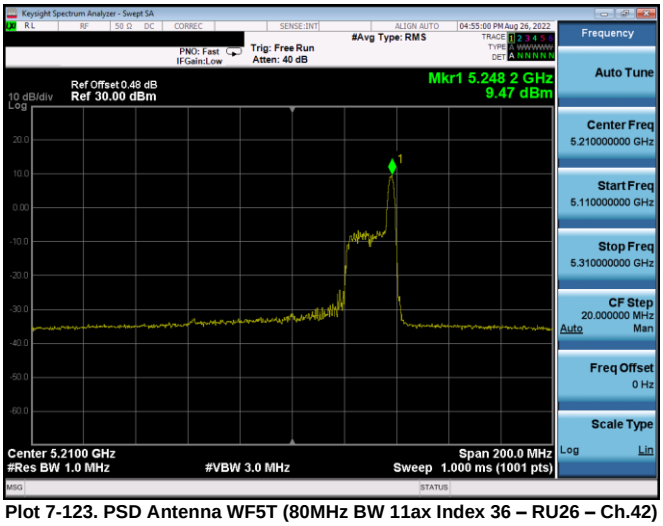
Plot 7-119. PSD Antenna WF5T (40MHz BW 11ax Index 17 – RU26 – Ch.46)



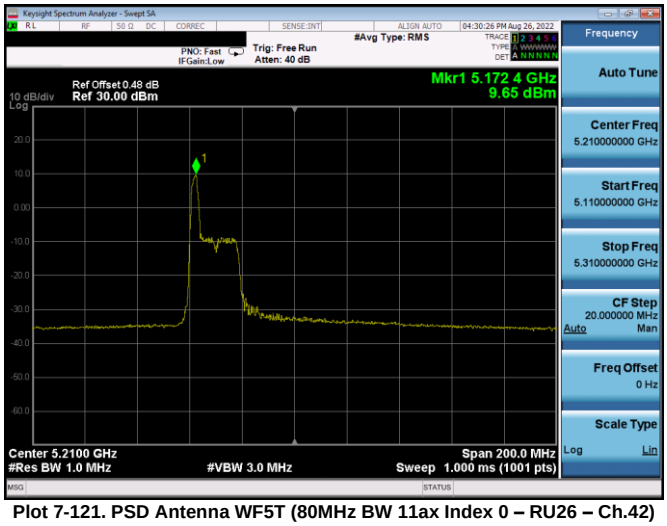
Plot 7-122. PSD Antenna WF5T (80MHz BW 11ax Index 18 – RU26 – Ch.42)



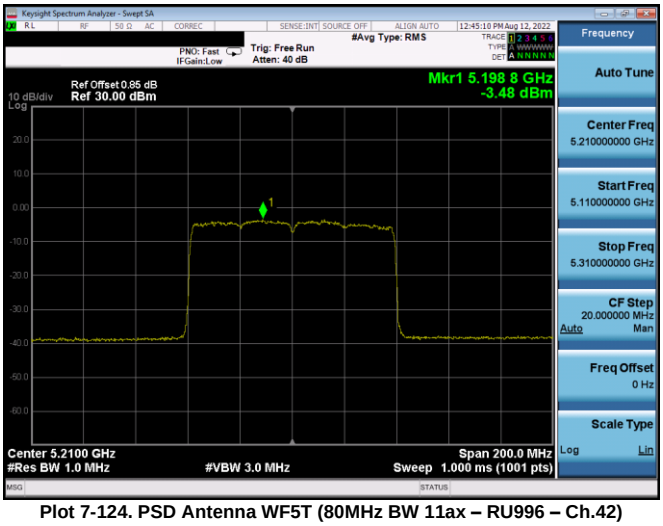
Plot 7-120. PSD Antenna WF5T (40MHz BW 11ax – RU484 – Ch.46)



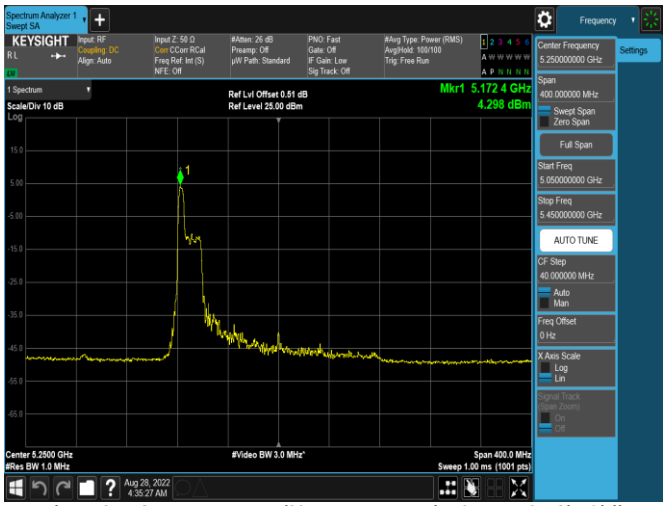
Plot 7-123. PSD Antenna WF5T (80MHz BW 11ax Index 36 – RU26 – Ch.42)



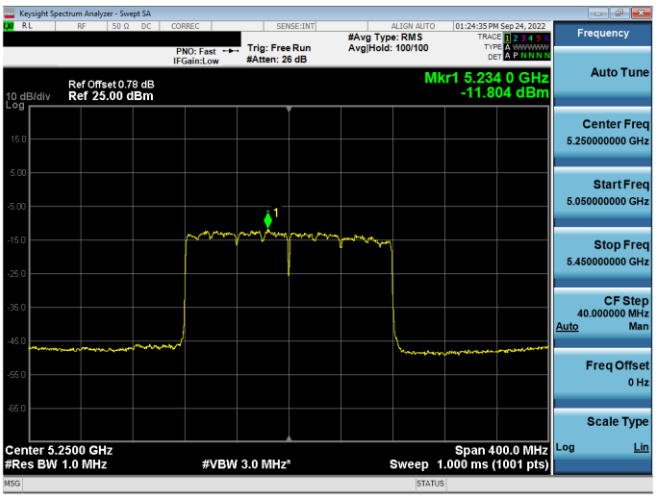
Plot 7-121. PSD Antenna WF5T (80MHz BW 11ax Index 0 – RU26 – Ch.42)



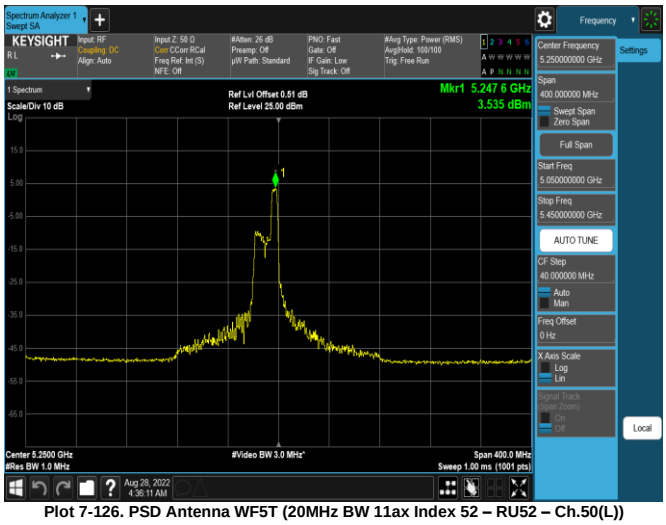
Plot 7-124. PSD Antenna WF5T (80MHz BW 11ax – RU996 – Ch.42)



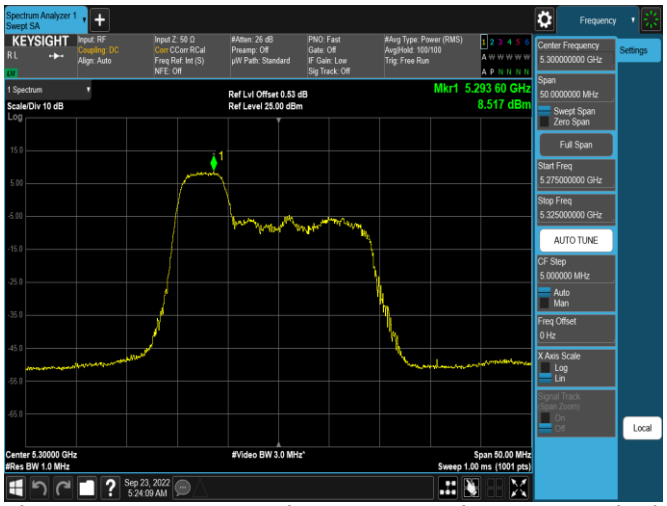
Plot 7-125. PSD Antenna WF5T (20MHz BW 11ax Index 37 – RU52 – Ch.50(L))



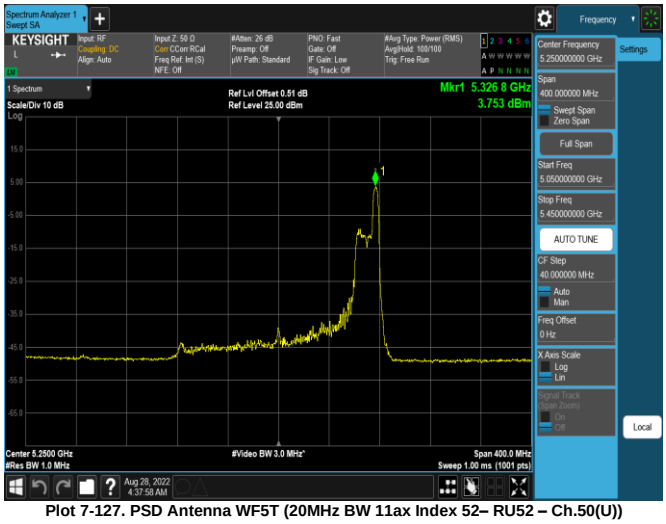
Plot 7-128. PSD Antenna WF5T (20MHz BW 11ax Index 68– RU996x2 – Ch.50)



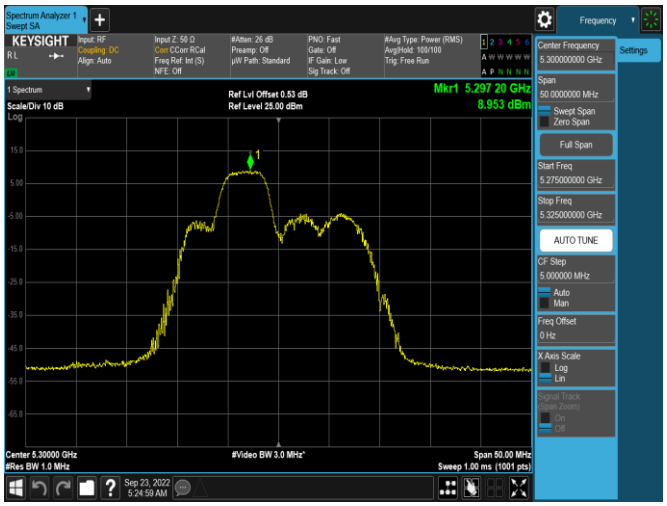
Plot 7-126. PSD Antenna WF5T (20MHz BW 11ax Index 52 – RU52 – Ch.50(L))



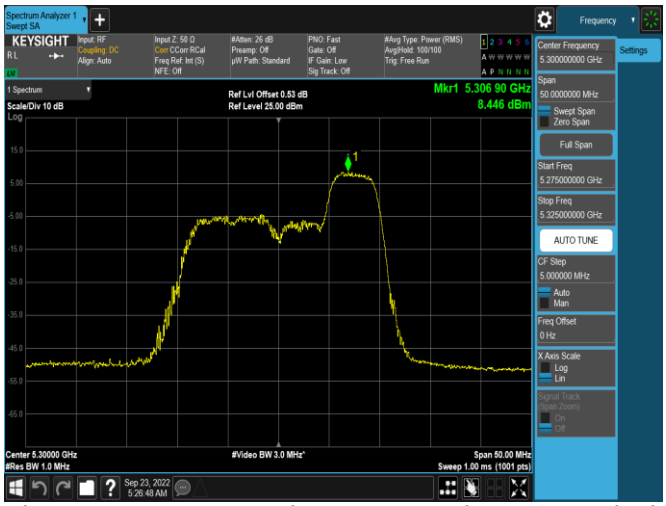
Plot 7-129. PSD Antenna WF5T (20MHz BW 11ax Index 37 – RU52 – Ch.60)



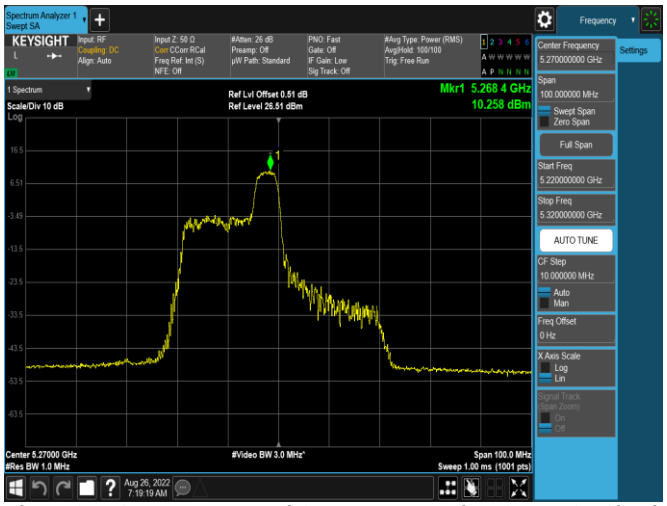
Plot 7-127. PSD Antenna WF5T (20MHz BW 11ax Index 52– RU52 – Ch.50(U))



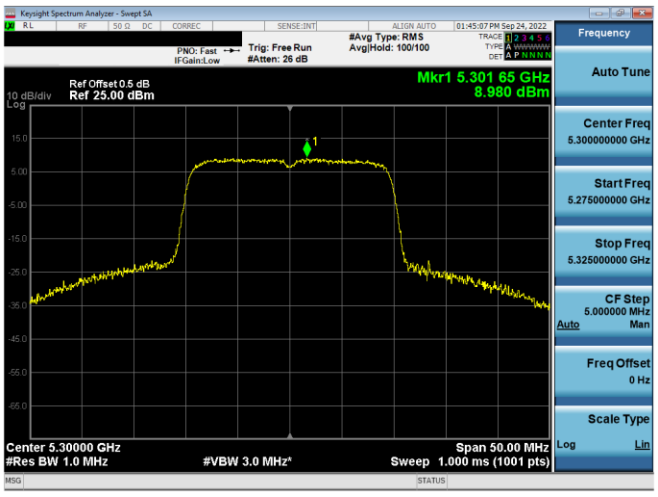
Plot 7-130. PSD Antenna WF5T (20MHz BW 11ax Index 38 – RU52 – Ch.60)



Plot 7-131. PSD Antenna WF5T (20MHz BW 11ax Index 40– RU52 – Ch.60)



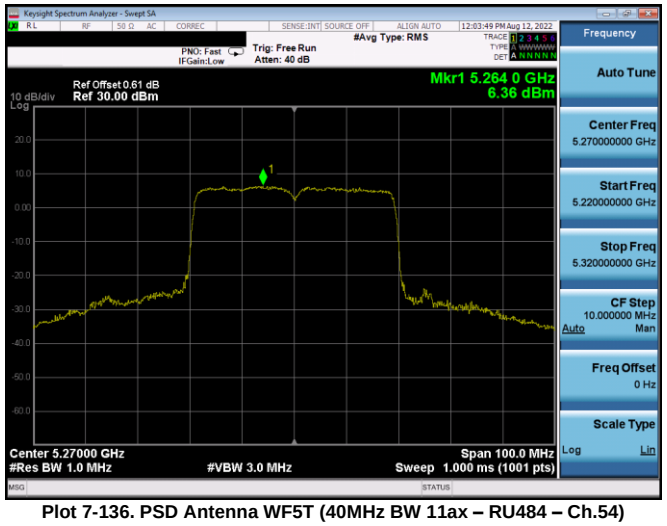
Plot 7-134. PSD Antenna WF5T (40MHz BW 11ax Index 40 – RU52 – Ch.54)



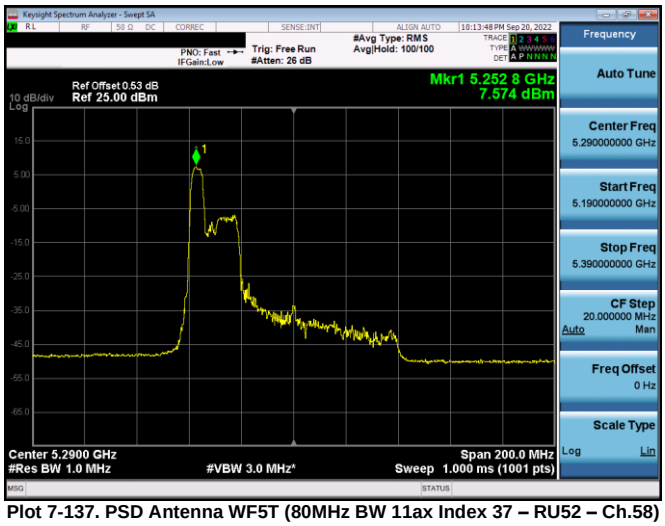
Plot 7-132. PSD Antenna WF5T (20MHz BW 11ax– RU242 – Ch.60)

Plot 7-135. PSD Antenna WF5T (40MHz BW 11ax Index 44 – RU52 – Ch.54)

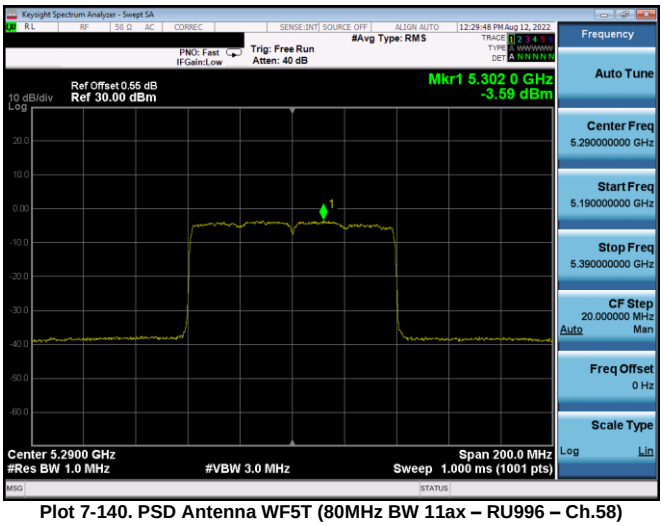
Plot 7-133. PSD Antenna WF5T (40MHz BW 11ax Index 37 – RU52 – Ch.54)



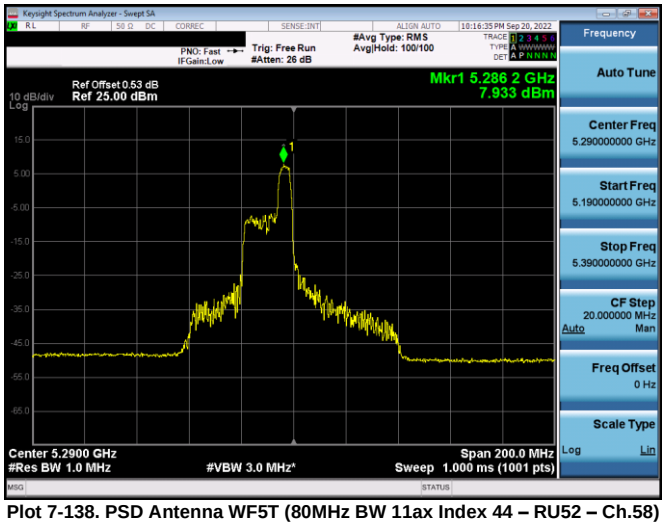
Plot 7-136. PSD Antenna WF5T (40MHz BW 11ax – RU484 – Ch.54)



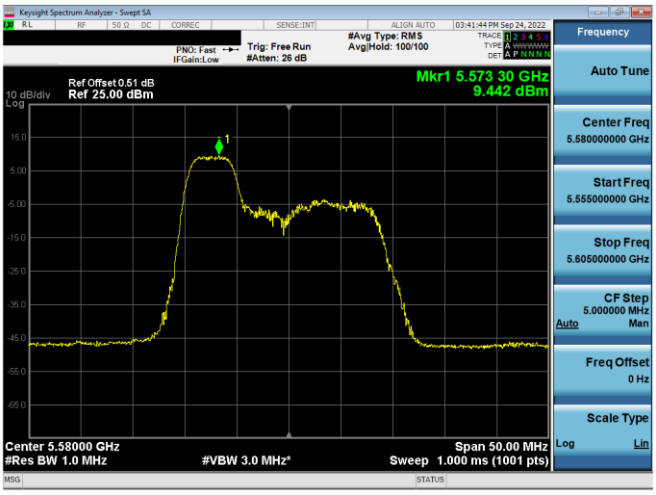
Plot 7-137. PSD Antenna WF5T (80MHz BW 11ax Index 37 – RU52 – Ch.58)



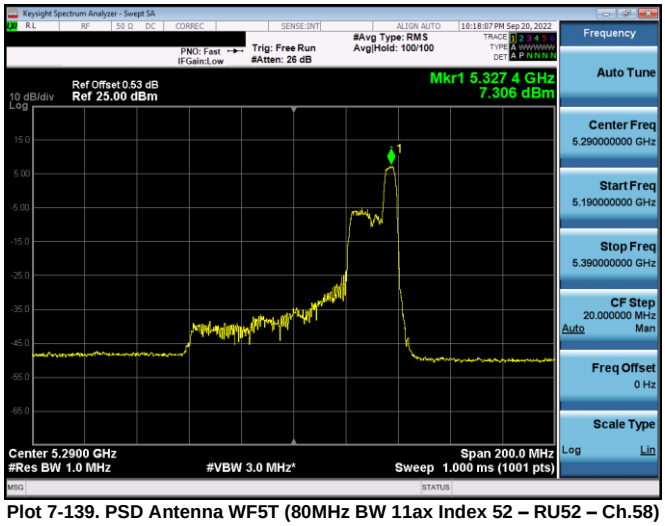
Plot 7-140. PSD Antenna WF5T (80MHz BW 11ax – RU996 – Ch.58)



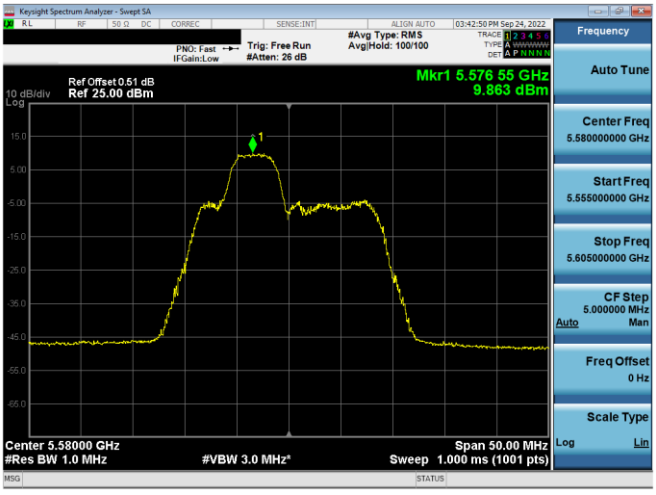
Plot 7-138. PSD Antenna WF5T (80MHz BW 11ax Index 44 – RU52 – Ch.58)



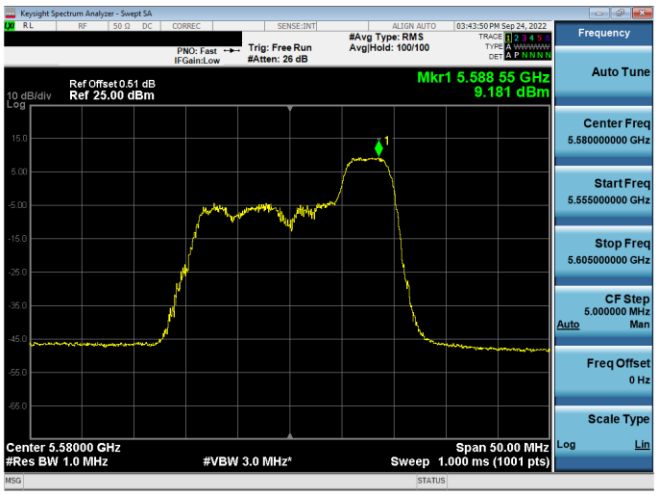
Plot 7-141. PSD Antenna WF5T (20MHz BW 11ax Index 37 – RU52 – Ch.116)



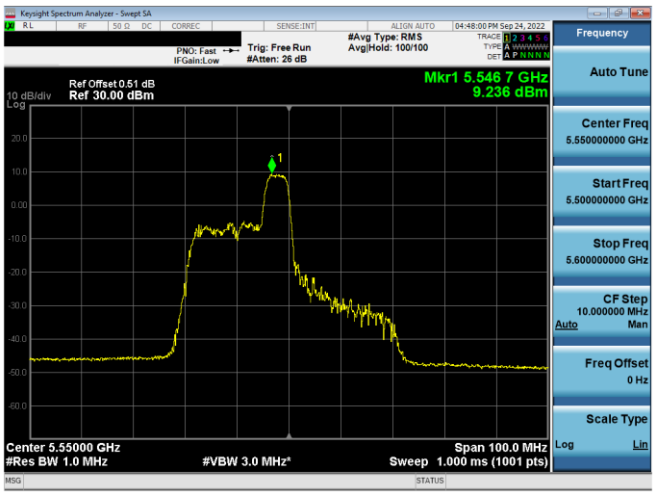
Plot 7-139. PSD Antenna WF5T (80MHz BW 11ax Index 52 – RU52 – Ch.58)



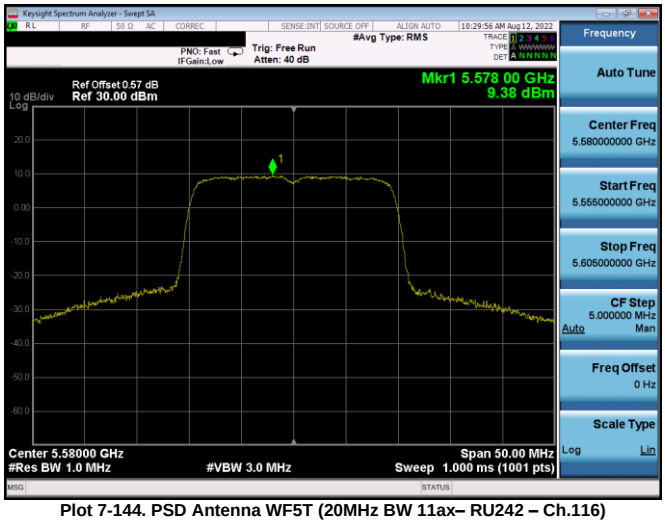
Plot 7-142. PSD Antenna WF5T (20MHz BW 11ax Index 38 – RU52 – Ch.116)



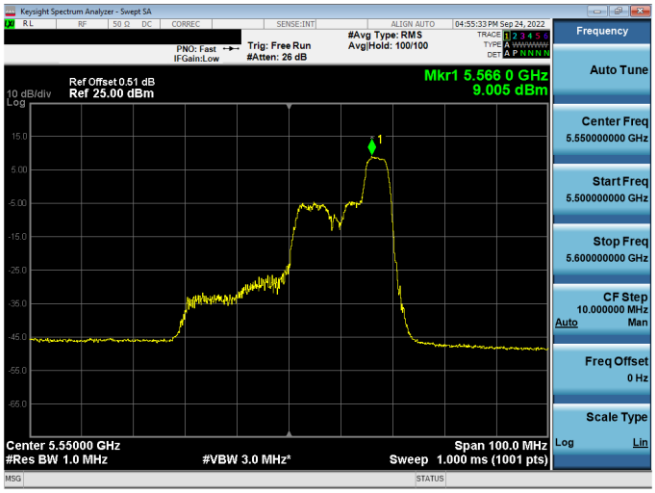
Plot 7-143. PSD Antenna WF5T (20MHz BW 11ax Index 40– RU52 – Ch.116)



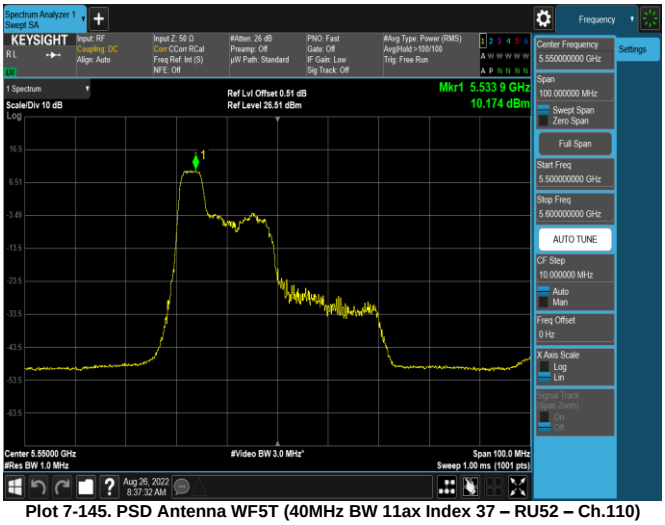
Plot 7-146. PSD Antenna WF5T (40MHz BW 11ax Index 40 – RU52 – Ch.110)



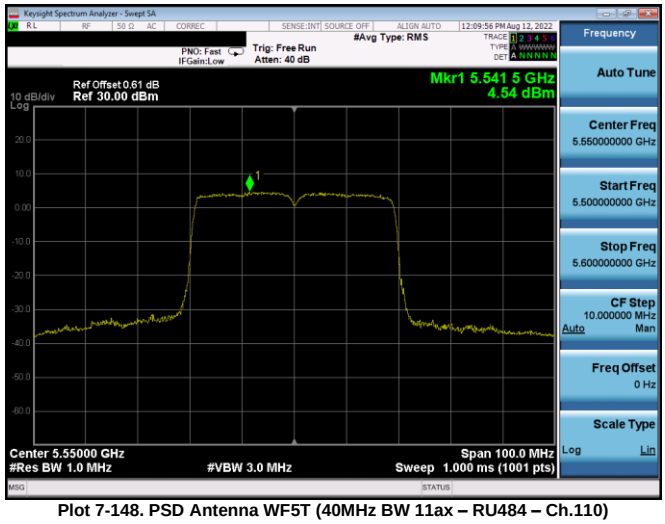
Plot 7-144. PSD Antenna WF5T (20MHz BW 11ax– RU242 – Ch.116)



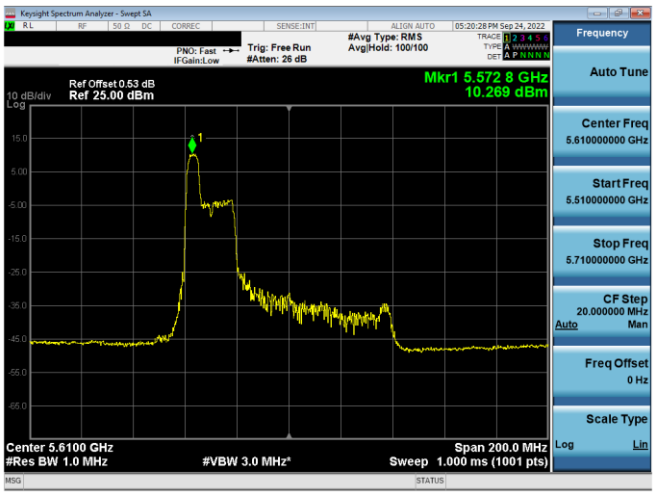
Plot 7-147. PSD Antenna WF5T (40MHz BW 11ax Index 44 – RU52 – Ch.110)



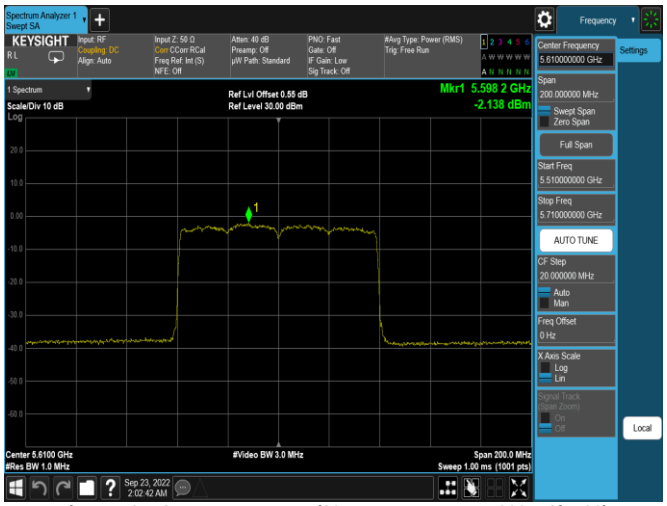
Plot 7-145. PSD Antenna WF5T (40MHz BW 11ax Index 37 – RU52 – Ch.110)



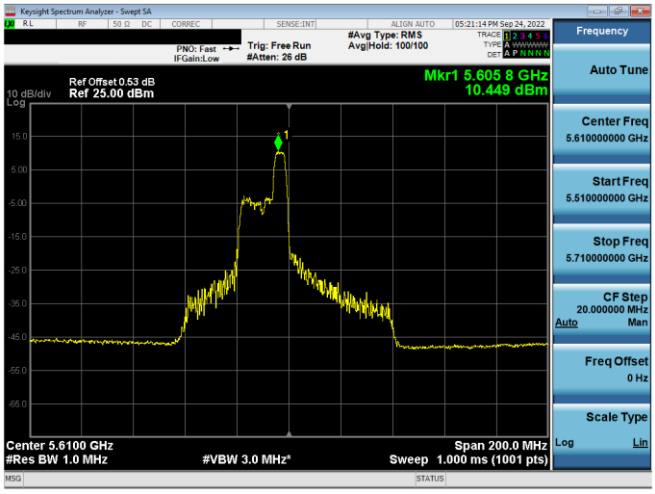
Plot 7-148. PSD Antenna WF5T (40MHz BW 11ax – RU484 – Ch.110)



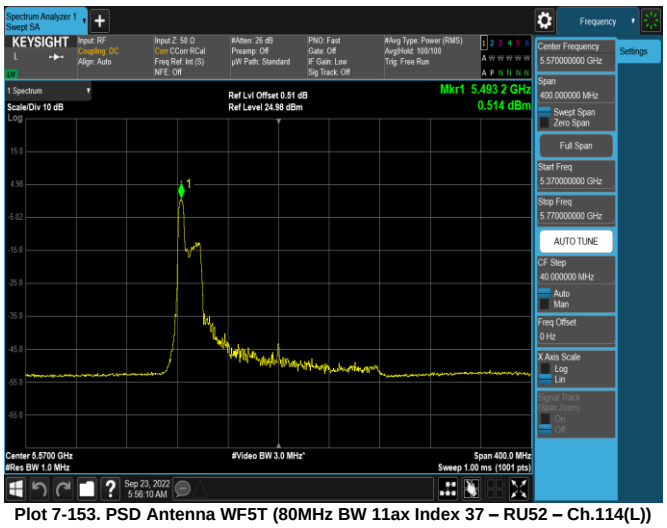
Plot 7-149. PSD Antenna WF5T (80MHz BW 11ax Index 37 – RU52 – Ch.122)



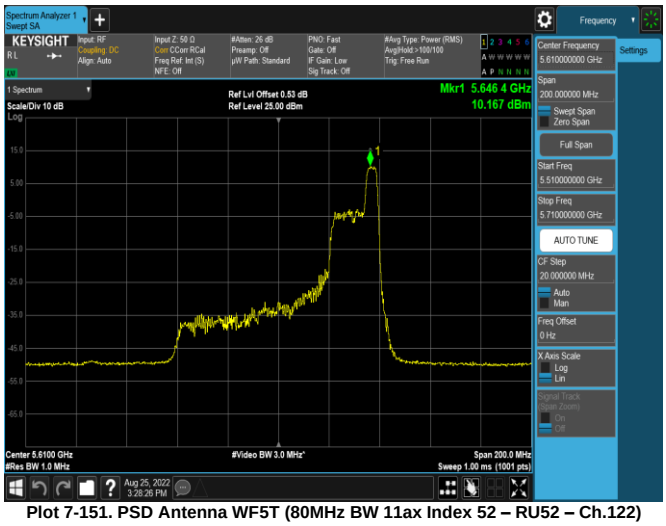
Plot 7-152. PSD Antenna WF5T (80MHz BW 11ax – RU996 – Ch.122)



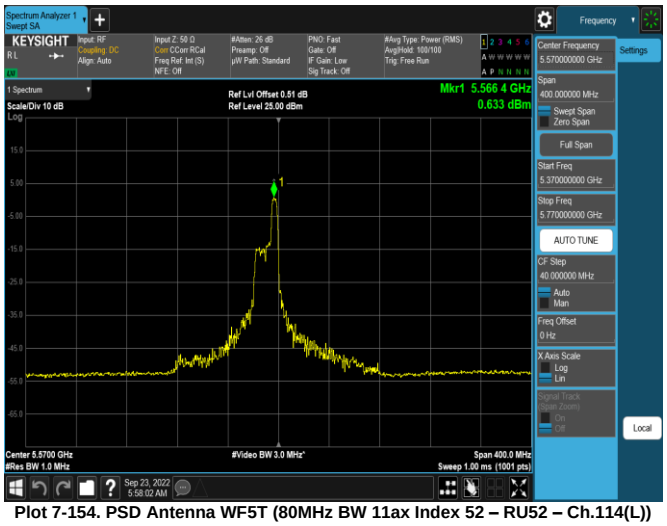
Plot 7-150. PSD Antenna WF5T (80MHz BW 11ax Index 44 – RU52 – Ch.122)



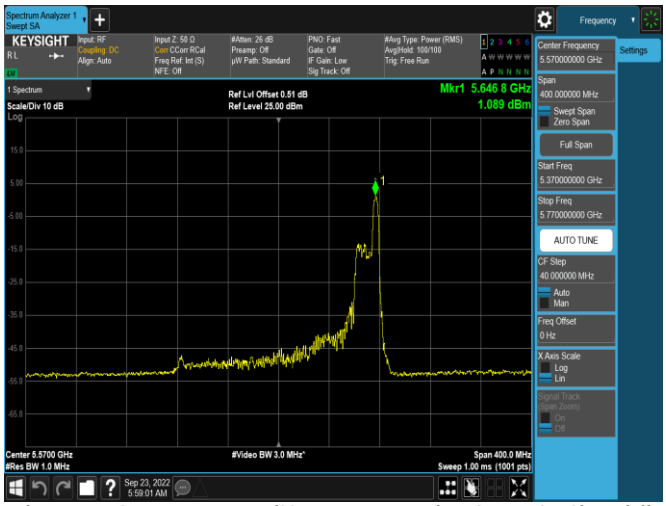
Plot 7-153. PSD Antenna WF5T (80MHz BW 11ax Index 37 – RU52 – Ch.114(L))



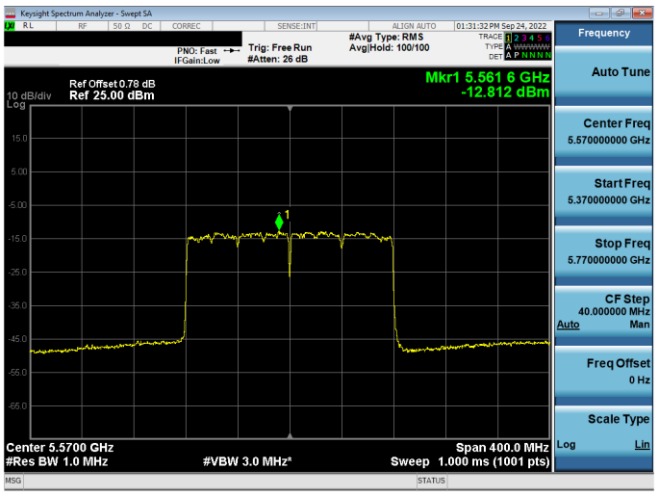
Plot 7-151. PSD Antenna WF5T (80MHz BW 11ax Index 52 – RU52 – Ch.122)



Plot 7-154. PSD Antenna WF5T (80MHz BW 11ax Index 52 – RU52 – Ch.114(L))



Plot 7-155. PSD Antenna WF5T (80MHz BW 11ax Index 52 – RU52 – Ch.114(U))



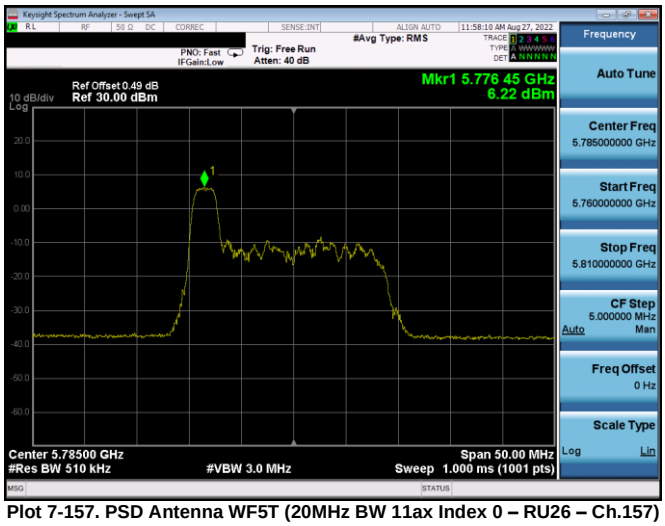
Plot 7-156. PSD Antenna WF5T (80MHz BW 11ax Index 68 – RU996x2 – Ch.114)

	Frequency [MHz]	Channel No.	802.11 Mode	RU Size	RU Index	Data Rate [Mbps]	Measured Power Density [dBm/500kHz]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
Band 3	5745	149	ax (20MHz)	26	0	12.5/14.7 (MCS11)	6.85	30.00	-23.15
				26	4	12.5/14.7 (MCS11)	7.29	30.00	-22.71
				26	8	12.5/14.7 (MCS11)	6.99	30.00	-23.01
	5785	157	ax (20MHz)	26	0	12.5/14.7 (MCS11)	6.22	30.00	-23.78
				26	4	12.5/14.7 (MCS11)	6.08	30.00	-23.92
				26	8	12.5/14.7 (MCS11)	6.81	30.00	-23.19
	5825	165	ax (20MHz)	26	0	12.5/14.7 (MCS11)	6.35	30.00	-23.65
				26	4	12.5/14.7 (MCS11)	6.79	30.00	-23.21
				26	8	12.5/14.7 (MCS11)	6.90	30.00	-23.10
	5755	151	ax (40MHz)	26	0	12.5/14.7 (MCS11)	6.65	30.00	-23.35
				26	8	12.5/14.7 (MCS11)	7.30	30.00	-22.70
				26	17	12.5/14.7 (MCS11)	6.68	30.00	-23.32
	5795	159	ax (40MHz)	26	0	12.5/14.7 (MCS11)	5.95	30.00	-24.05
				26	8	12.5/14.7 (MCS11)	7.15	30.00	-22.85
				26	17	12.5/14.7 (MCS11)	6.29	30.00	-23.71
	5775	155	ax (80MHz)	26	0	12.5/14.7 (MCS11)	9.21	30.00	-20.79
				26	18	12.5/14.7 (MCS11)	8.18	30.00	-21.82
				26	36	12.5/14.7 (MCS11)	8.91	30.00	-21.09

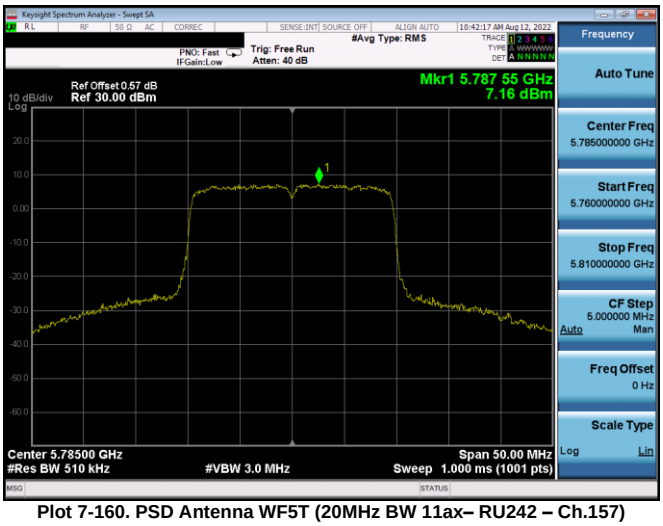
Table 7-105. Band 3 Power Spectral Density Measurements Antenna WF5T (RU26)

	Frequency [MHz]	Channel No.	802.11 Mode	RU Size	RU Index	Data Rate [Mbps]	Measured Power Density [dBm/500kHz]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
Band 3	5745	149	ax (20MHz)	242	61	121.9/143.4 (MCS11)	7.70	30.00	-22.30
	5785	157	ax (20MHz)	242	61	121.9/143.4 (MCS11)	7.16	30.00	-22.84
	5825	165	ax (20MHz)	242	61	121.9/143.4 (MCS11)	7.33	30.00	-22.67
	5755	151	ax (40MHz)	484	65	243.8/286.8 (MCS11)	4.36	30.00	-25.64
	5795	159	ax (40MHz)	484	65	243.8/286.8 (MCS11)	4.49	30.00	-25.51
	5775	155	ax (80MHz)	996	67	510.4/600.5 (MCS11)	-1.11	30.00	-31.11

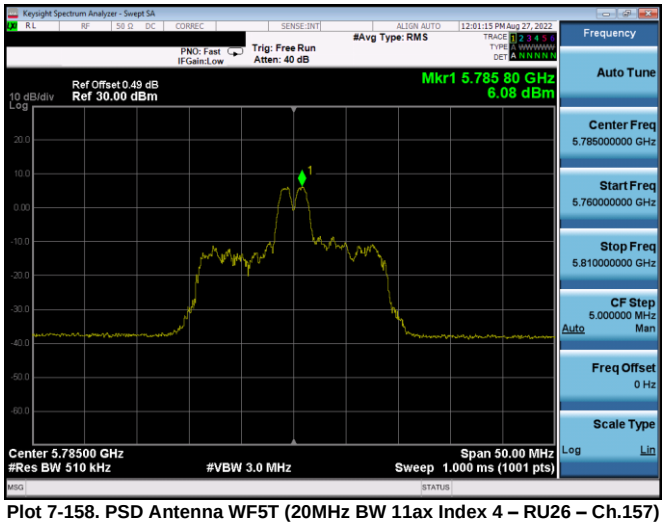
Table 7-106. Band 3 Power Spectral Density Measurements Antenna WF5T (Fully-loaded RU)



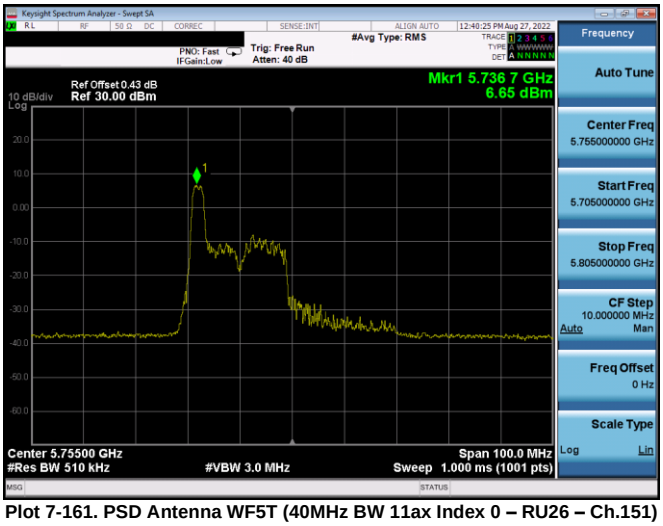
Plot 7-157. PSD Antenna WF5T (20MHz BW 11ax Index 0 – RU26 – Ch.157)



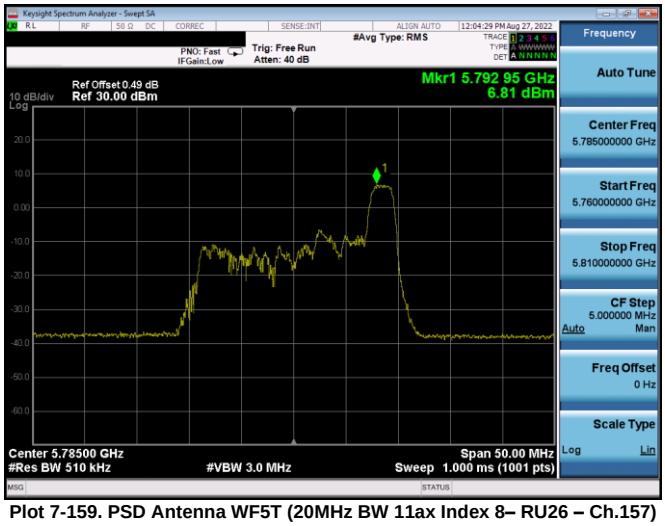
Plot 7-160. PSD Antenna WF5T (20MHz BW 11ax– RU242 – Ch.157)



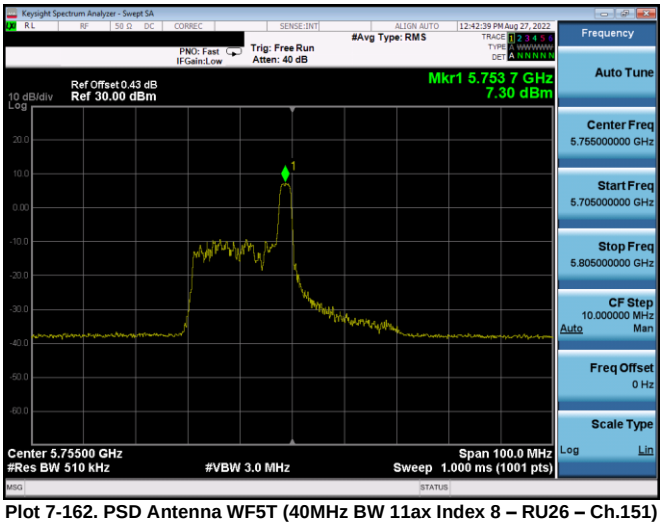
Plot 7-158. PSD Antenna WF5T (20MHz BW 11ax Index 4 – RU26 – Ch.157)



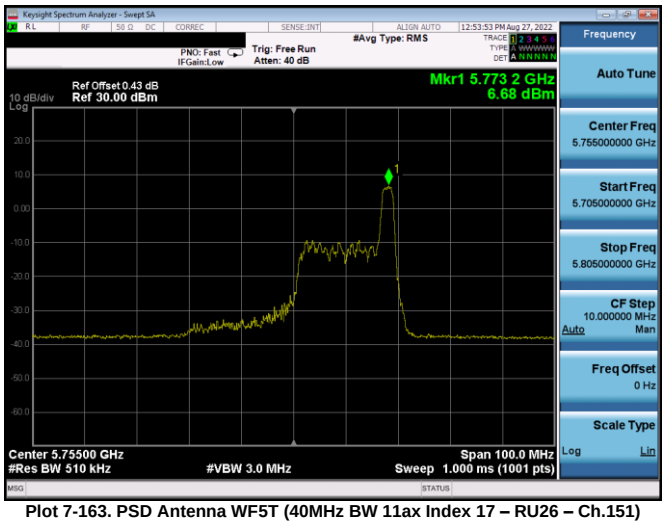
Plot 7-161. PSD Antenna WF5T (40MHz BW 11ax Index 0 – RU26 – Ch.151)



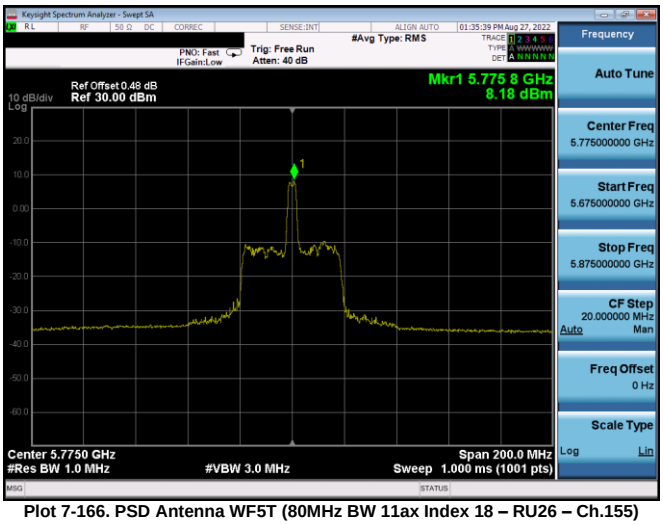
Plot 7-159. PSD Antenna WF5T (20MHz BW 11ax Index 8– RU26 – Ch.157)



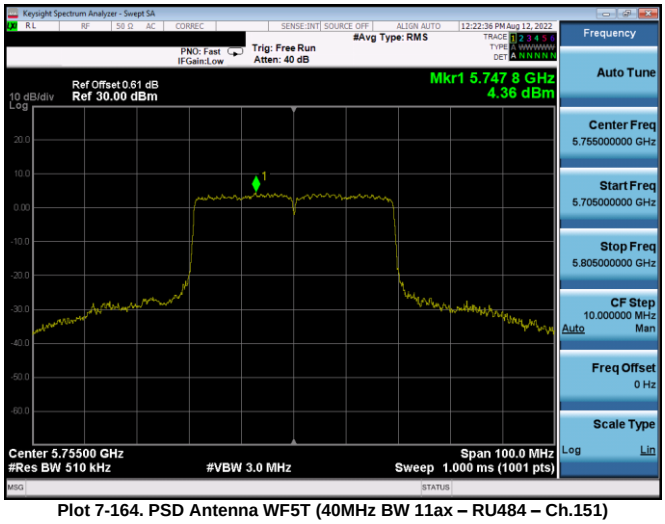
Plot 7-162. PSD Antenna WF5T (40MHz BW 11ax Index 8 – RU26 – Ch.151)



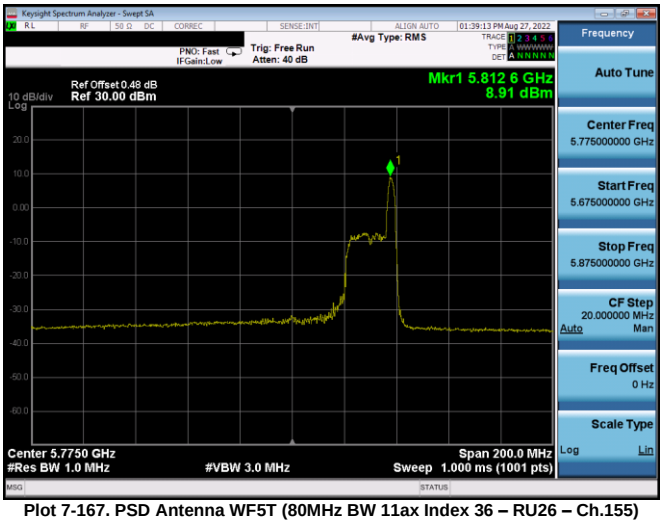
Plot 7-163. PSD Antenna WF5T (40MHz BW 11ax Index 17 – RU26 – Ch.151)



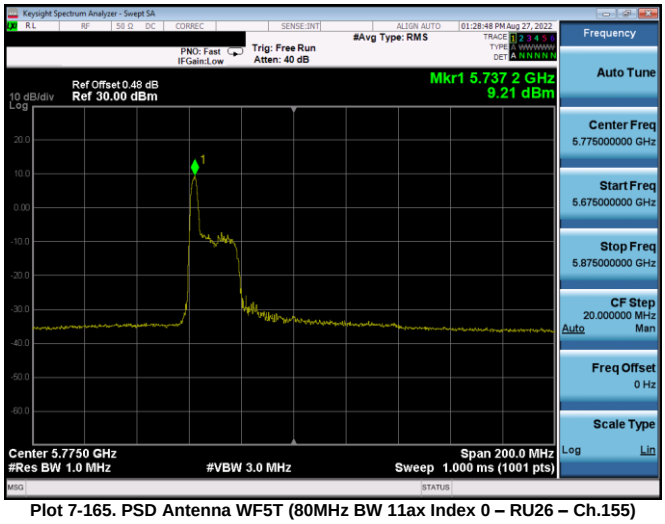
Plot 7-166. PSD Antenna WF5T (80MHz BW 11ax Index 18 – RU26 – Ch.155)



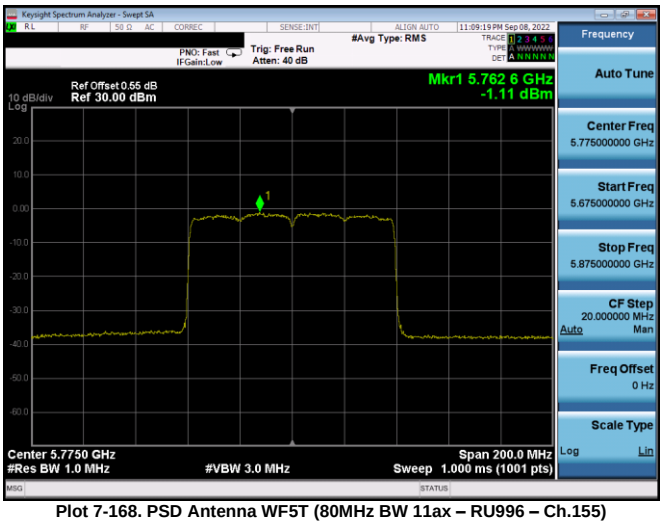
Plot 7-164. PSD Antenna WF5T (40MHz BW 11ax – RU484 – Ch.151)



Plot 7-167. PSD Antenna WF5T (80MHz BW 11ax Index 36 – RU26 – Ch.155)



Plot 7-165. PSD Antenna WF5T (80MHz BW 11ax Index 0 – RU26 – Ch.155)



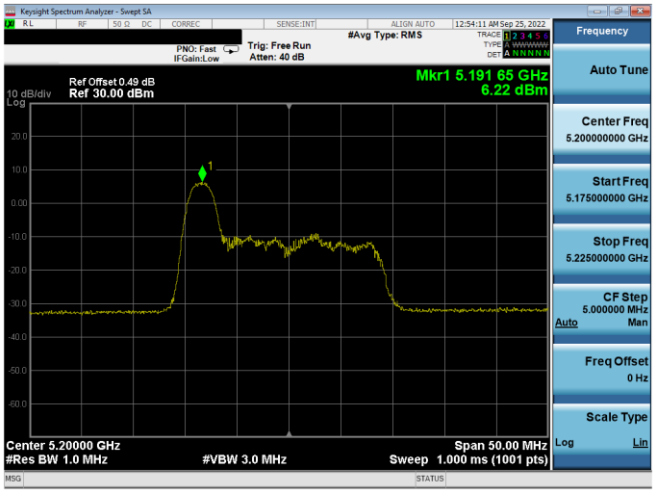
Plot 7-168. PSD Antenna WF5T (80MHz BW 11ax – RU996 – Ch.155)

	Frequency [MHz]	Channel No.	802.11 Mode	RU Size	RU Index	Data Rate [Mbps]	Measured Power Density [dBm/MHz]	Antenna Gain [dBi]	e.i.r.p. Power Density [dBm/MHz]	ISED Max e.i.r.p. Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	ax (20MHz)	26	0	12.5/14.7 (MCS11)	5.20	1.70	6.90	10.0	-3.10
				26	4	12.5/14.7 (MCS11)	4.94	1.70	6.64	10.0	-3.36
				26	8	12.5/14.7 (MCS11)	4.99	1.70	6.69	10.0	-3.31
	5200	40	ax (20MHz)	26	0	12.5/14.7 (MCS11)	6.22	1.70	7.92	10.0	-2.08
				26	4	12.5/14.7 (MCS11)	6.15	1.70	7.85	10.0	-2.15
				26	8	12.5/14.7 (MCS11)	6.67	1.70	8.37	10.0	-1.63
	5240	48	ax (20MHz)	26	0	12.5/14.7 (MCS11)	5.16	1.70	6.86	10.0	-3.14
				26	4	12.5/14.7 (MCS11)	4.51	1.70	6.21	10.0	-3.79
				26	8	12.5/14.7 (MCS11)	4.99	1.70	6.69	10.0	-3.31
	5190	38	ax (40MHz)	26	0	12.5/14.7 (MCS11)	4.60	1.70	6.30	10.0	-3.70
				26	8	12.5/14.7 (MCS11)	5.42	1.70	7.12	10.0	-2.88
				26	17	12.5/14.7 (MCS11)	4.31	1.70	6.01	10.0	-3.99
	5230	46	ax (40MHz)	26	0	12.5/14.7 (MCS11)	6.51	1.70	8.21	10.0	-1.79
				26	8	12.5/14.7 (MCS11)	7.09	1.70	8.79	10.0	-1.21
				26	17	12.5/14.7 (MCS11)	6.06	1.70	7.76	10.0	-2.24
	5210	42	ax (80MHz)	26	0	12.5/14.7 (MCS11)	6.42	1.70	8.12	10.0	-1.88
				26	18	12.5/14.7 (MCS11)	5.55	1.70	7.25	10.0	-2.75
				26	36	12.5/14.7 (MCS11)	5.59	1.70	7.29	10.0	-2.71
	5250	50 (L)	ax (160MHz)	52	37	25/29.4 (MCS11)	4.30	1.70	6.00	10.0	-4.00
				52	52	25/29.4 (MCS11)	3.54	1.70	5.24	10.0	-4.77

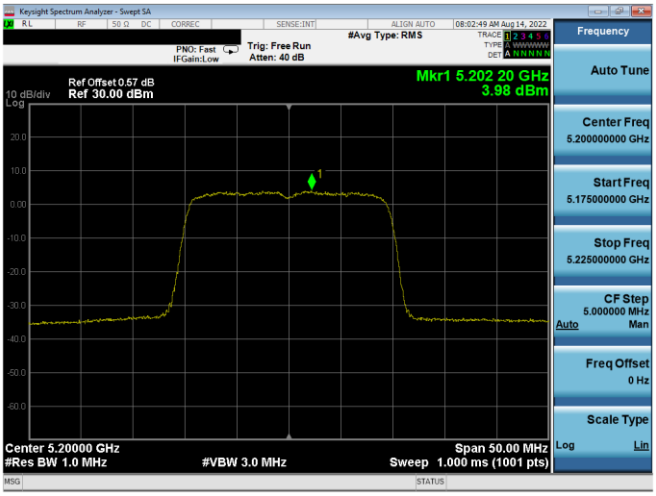
Table 7-107. ISED Band 1 e.i.r.p. Power Spectral Density Measurements Antenna WF5T (RU26/52)

	Frequency [MHz]	Channel No.	802.11 Mode	RU Size	RU Index	Data Rate [Mbps]	Measured Power Density [dBm/MHz]	Antenna Gain [dBi]	e.i.r.p. Power Density [dBm/MHz]	ISED Max e.i.r.p. Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	ax (20MHz)	242	61	121.9/143.4 (MCS11)	3.61	1.70	5.31	10.0	-4.69
	5200	40	ax (20MHz)	242	61	121.9/143.4 (MCS11)	3.98	1.70	5.68	10.0	-4.32
	5240	48	ax (20MHz)	242	61	121.9/143.4 (MCS11)	3.91	1.70	5.61	10.0	-4.39
	5190	38	ax (40MHz)	484	65	243.8/286.8 (MCS11)	-2.98	1.70	-1.28	10.0	-11.28
	5230	46	ax (40MHz)	484	65	243.8/286.8 (MCS11)	3.37	1.70	5.07	10.0	-4.93
	5210	42	ax (80MHz)	996	67	510.4/600.5 (MCS11)	-6.19	1.70	-4.49	10.0	-14.49
	5250	50(L)	ax (160MHz)	996x2	68	510.4/600.5 (MCS11)	-11.80	1.70	-10.10	10.0	-20.10

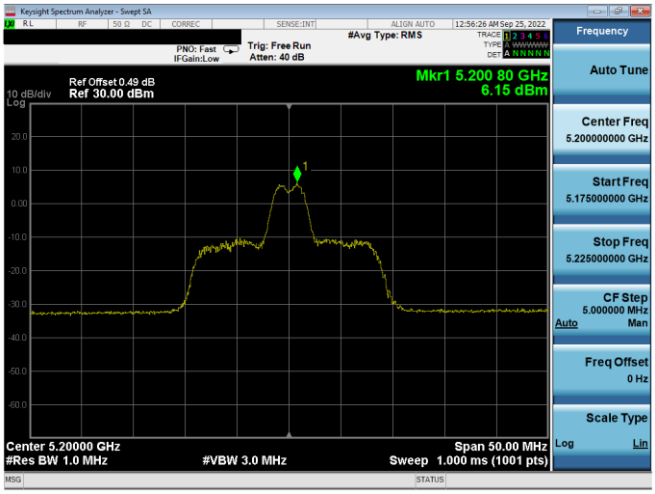
Table 7-108. ISED Band 1 e.i.r.p. Power Spectral Density Measurements Antenna WF5T (Fully-loaded RU)



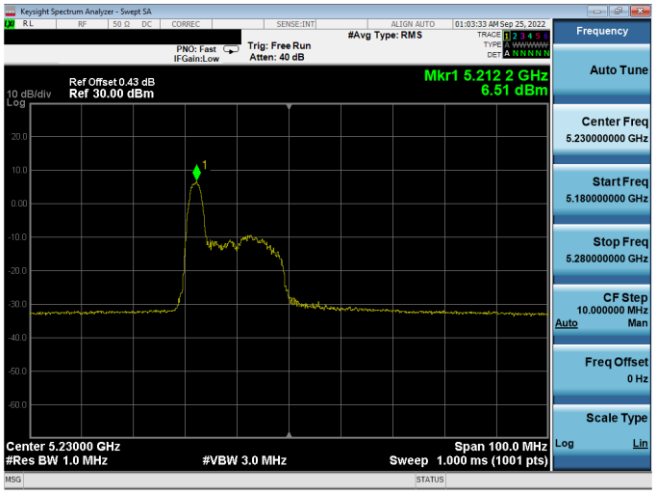
Plot 7-169. ISED PSD Antenna WF5T (20MHz BW 11ax Index 0 – RU26 – Ch.40)



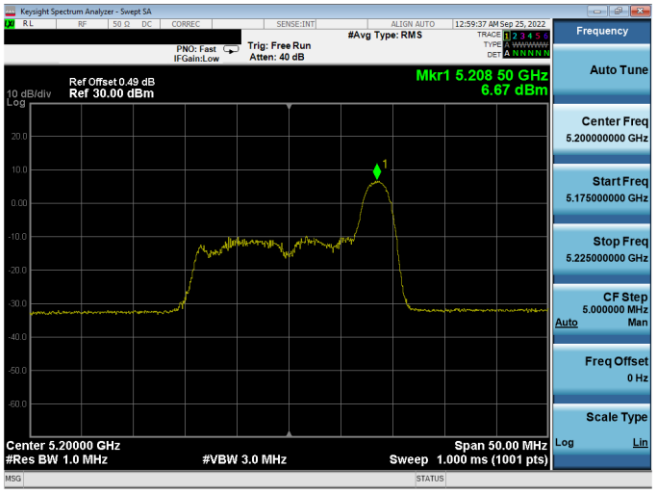
Plot 7-172. ISED PSD Antenna WF5T (20MHz BW 11ax– RU242 – Ch.40)



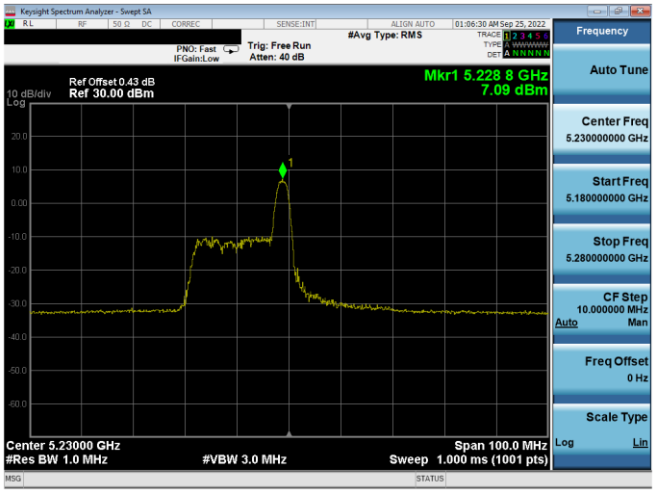
Plot 7-170. ISED PSD Antenna WF5T (20MHz BW 11ax Index 4 – RU26 – Ch.40)



Plot 7-173. ISED PSD Antenna WF5T (40MHz BW 11ax Index 0 – RU26 – Ch.46)



Plot 7-171. ISED PSD Antenna WF5T (20MHz BW 11ax Index 8– RU26 – Ch.40)



Plot 7-174. ISED PSD Antenna WF5T (40MHz BW 11ax Index 8 – RU26 – Ch.46)