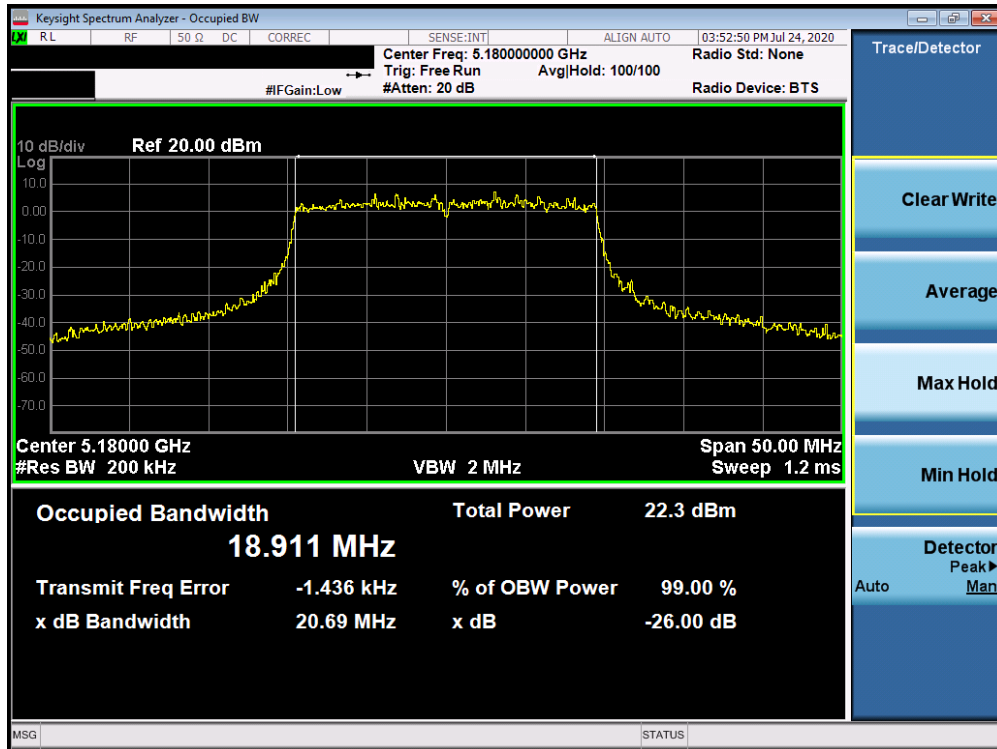
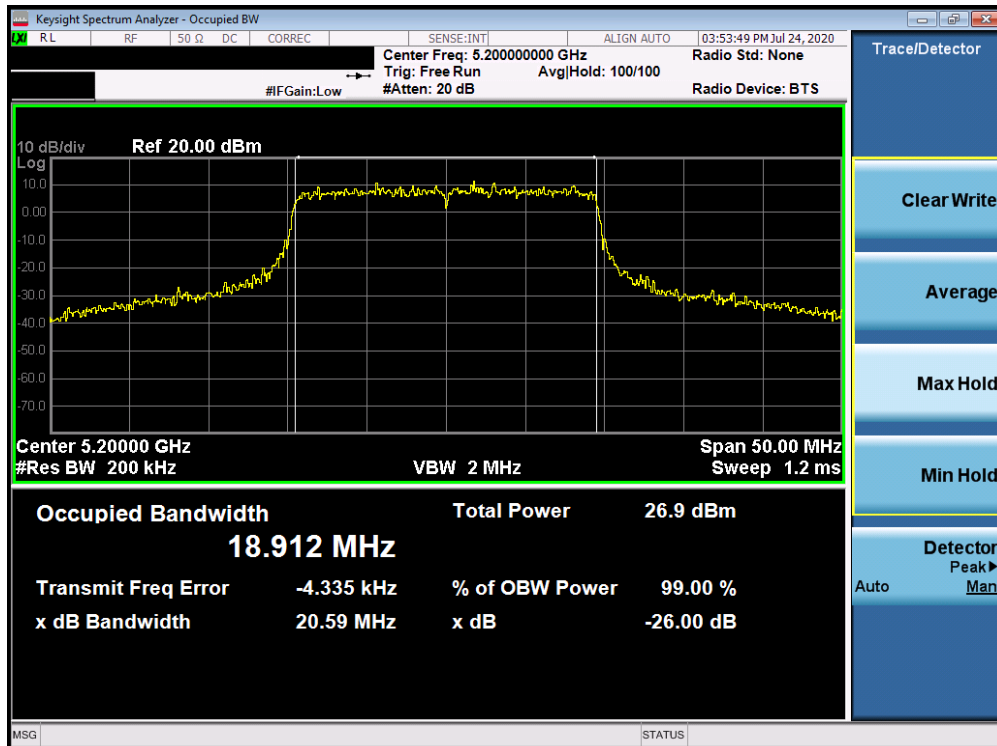


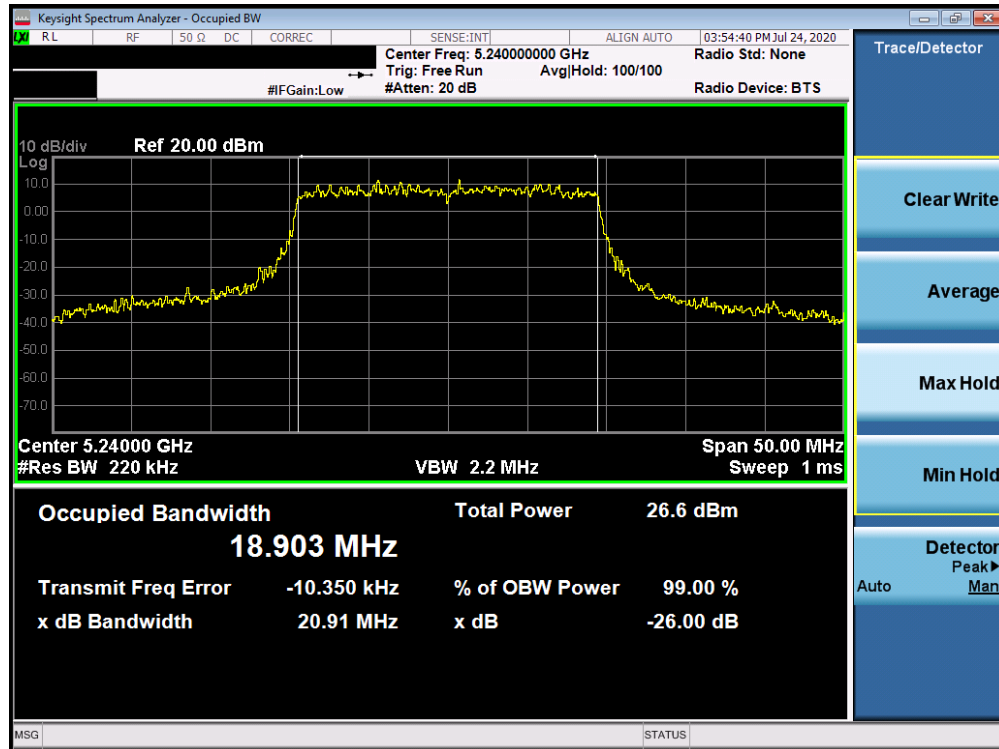


Plot 7-109. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11ax (UNII Band 1) – Ch. 36)

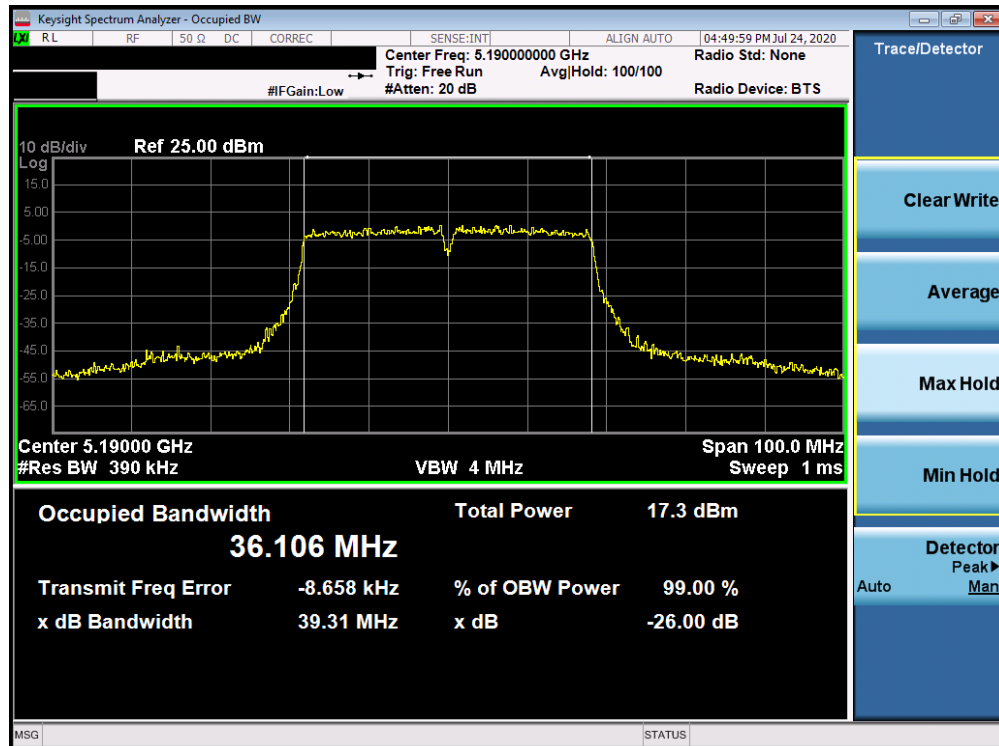


Plot 7-110. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11ax (UNII Band 1) – Ch. 40)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 74 of 344

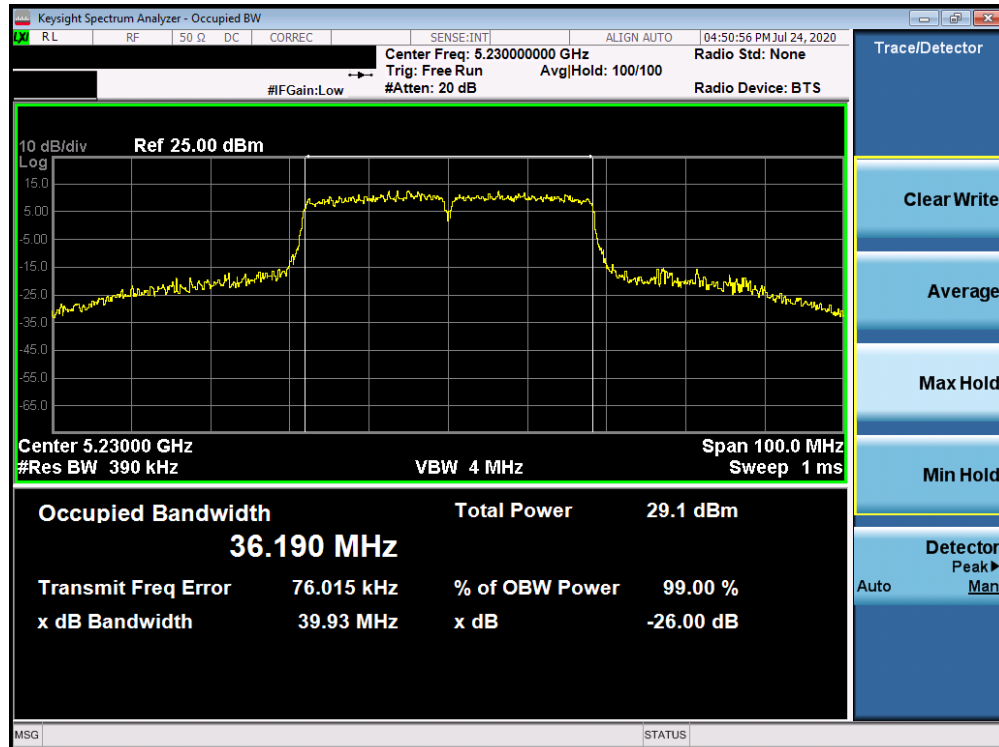


Plot 7-111. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11ax (UNII Band 1) – Ch. 48)

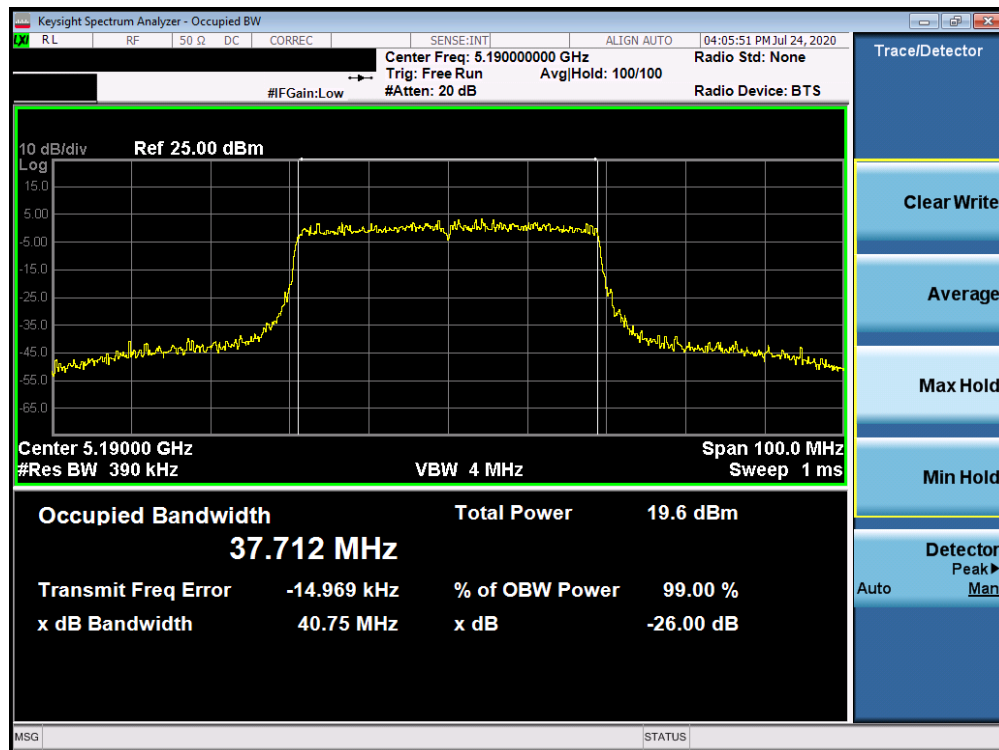


Plot 7-112. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11n (UNII Band 1) – Ch. 38)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 75 of 344

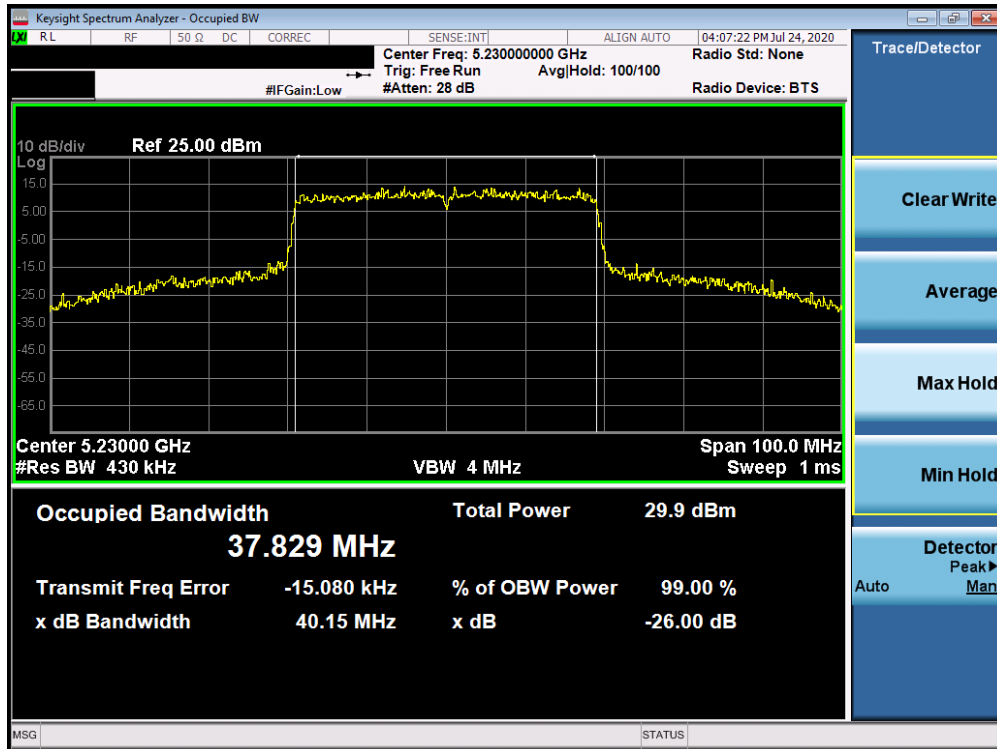


Plot 7-113. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11n (UNII Band 1) – Ch. 46)

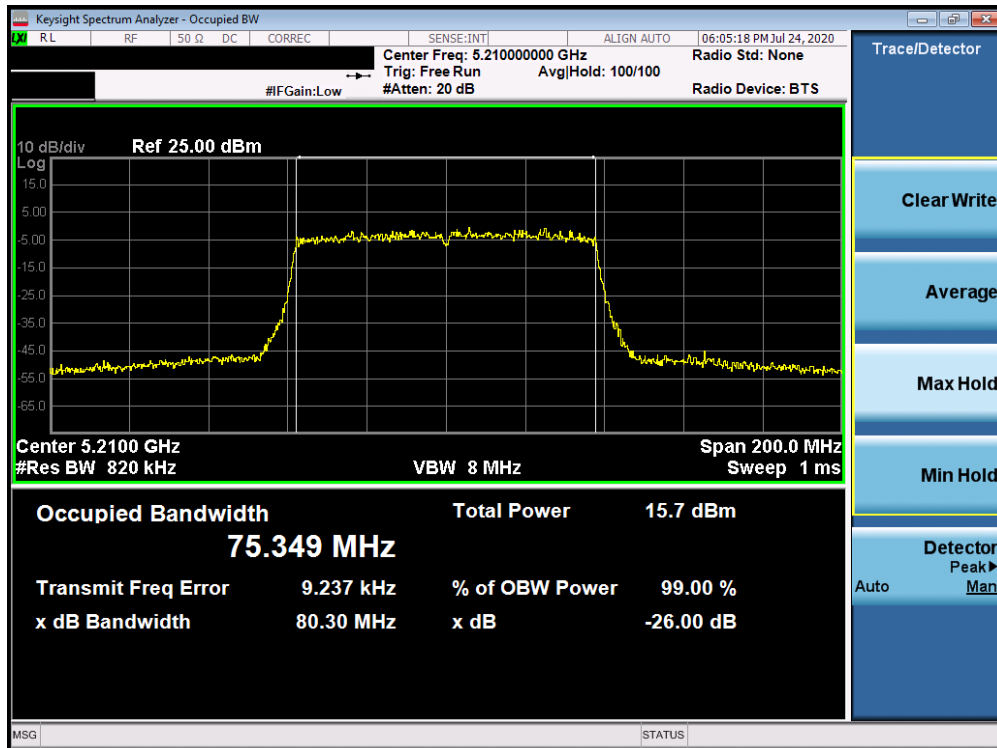


Plot 7-114. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11ax (UNII Band 1) – Ch. 38)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 76 of 344

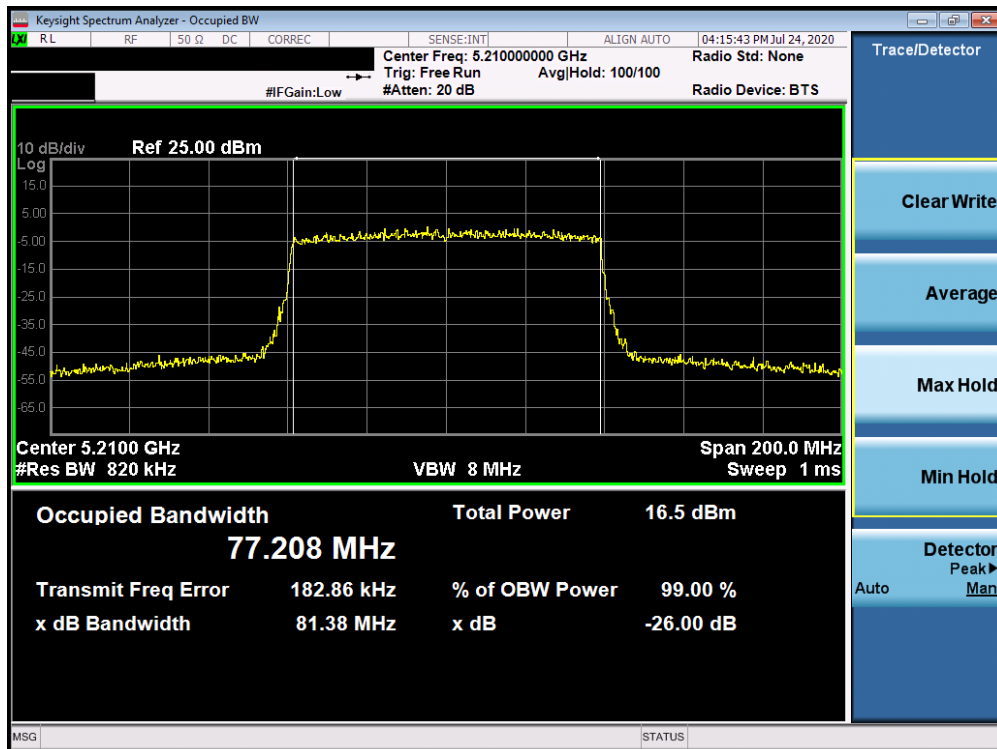


Plot 7-115. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11ax (UNII Band 1) – Ch. 46)

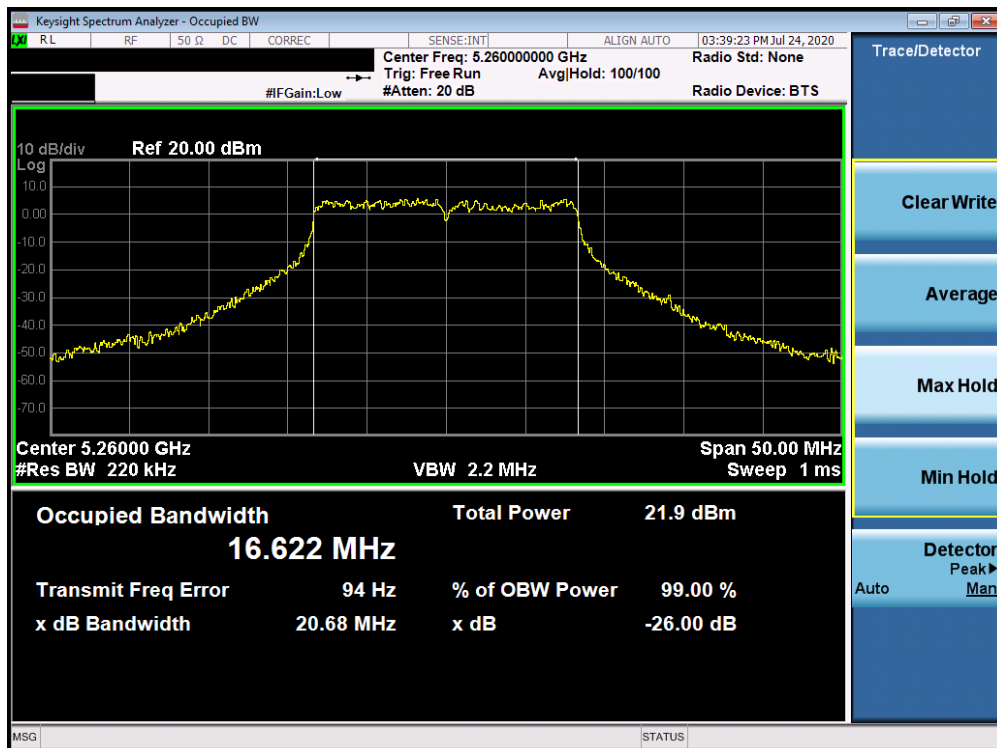


Plot 7-116. 26dB Bandwidth Plot ANT5 (80MHz BW 802.11ac (UNII Band 1) – Ch. 42)

FCC ID: A3LSMH204V		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 77 of 344

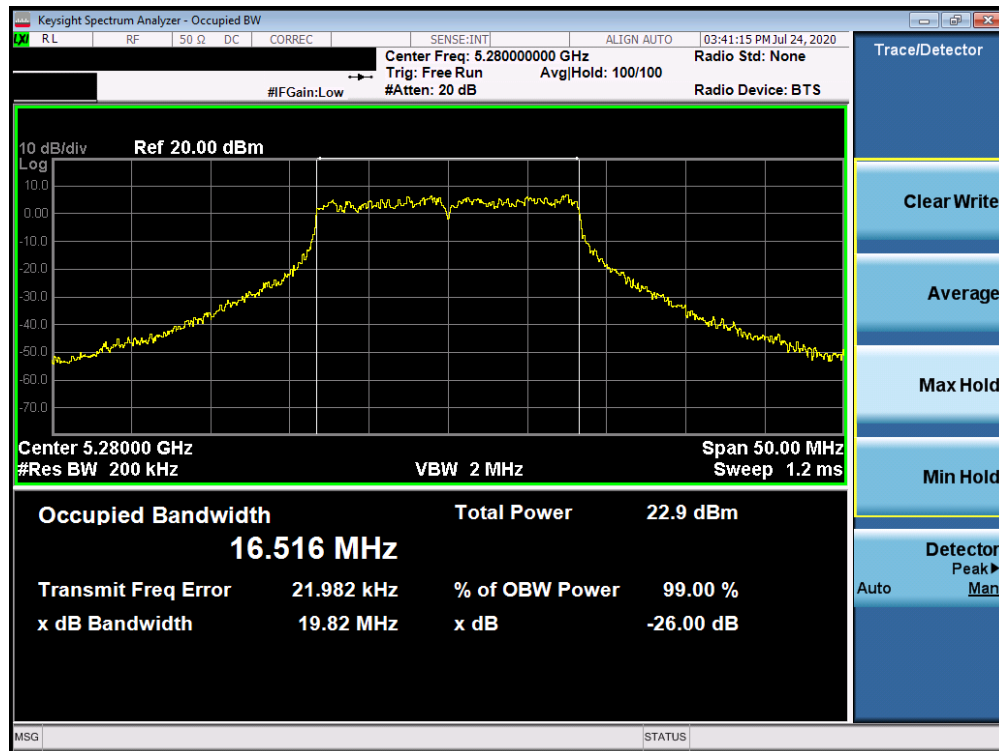


Plot 7-117. 26dB Bandwidth Plot ANT5 (80MHz BW 802.11ax (UNII Band 1) – Ch. 42)

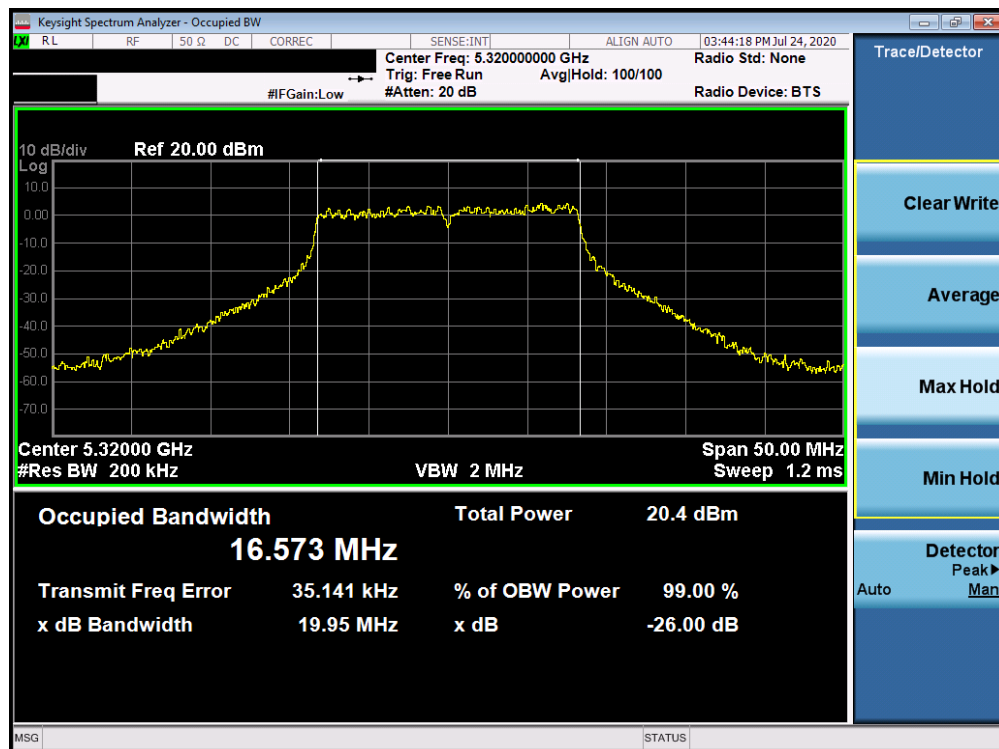


Plot 7-118. 26dB Bandwidth Plot ANT5 (802.11a (UNII Band 2A) – Ch. 52)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 78 of 344

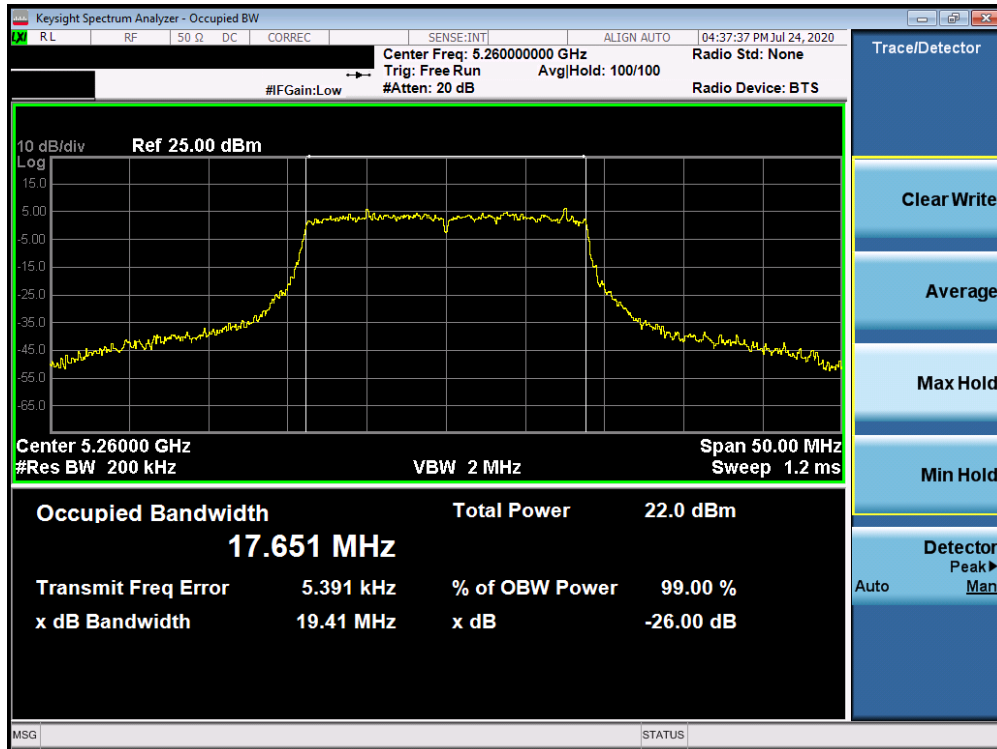


Plot 7-119. 26dB Bandwidth Plot ANT5 (802.11a (UNII Band 2A) – Ch. 56)

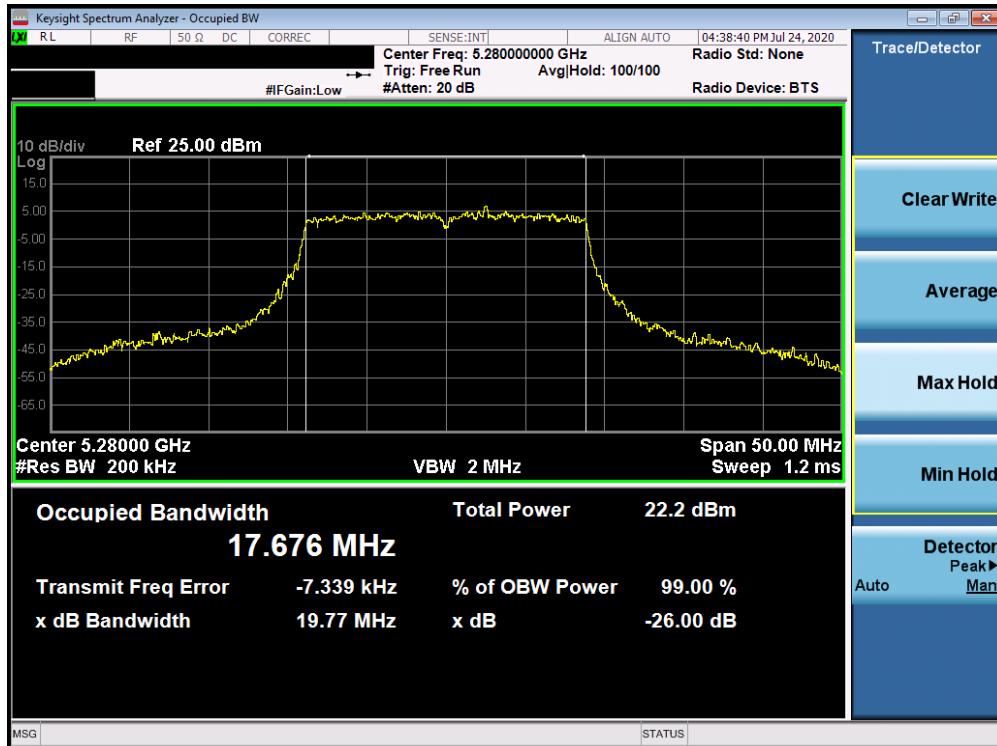


Plot 7-120. 26dB Bandwidth Plot ANT5 (802.11a (UNII Band 2A) – Ch. 64)

FCC ID: A3LSMH204V	PCTEST Provided to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 79 of 344

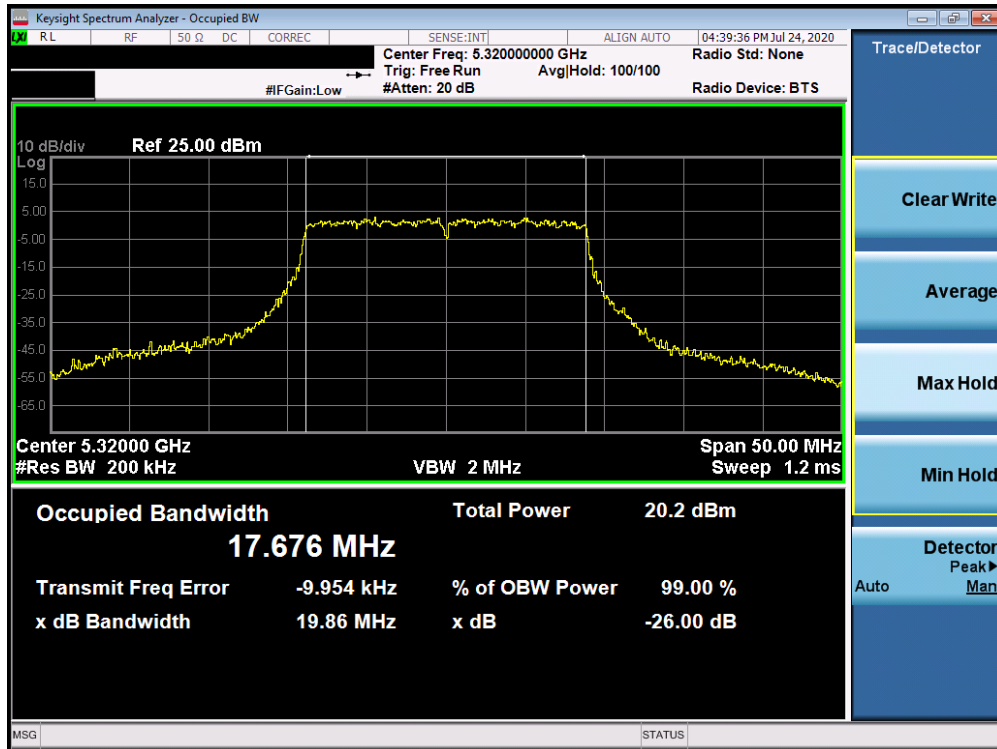


Plot 7-121. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11n (UNII Band 2A) – Ch. 52)

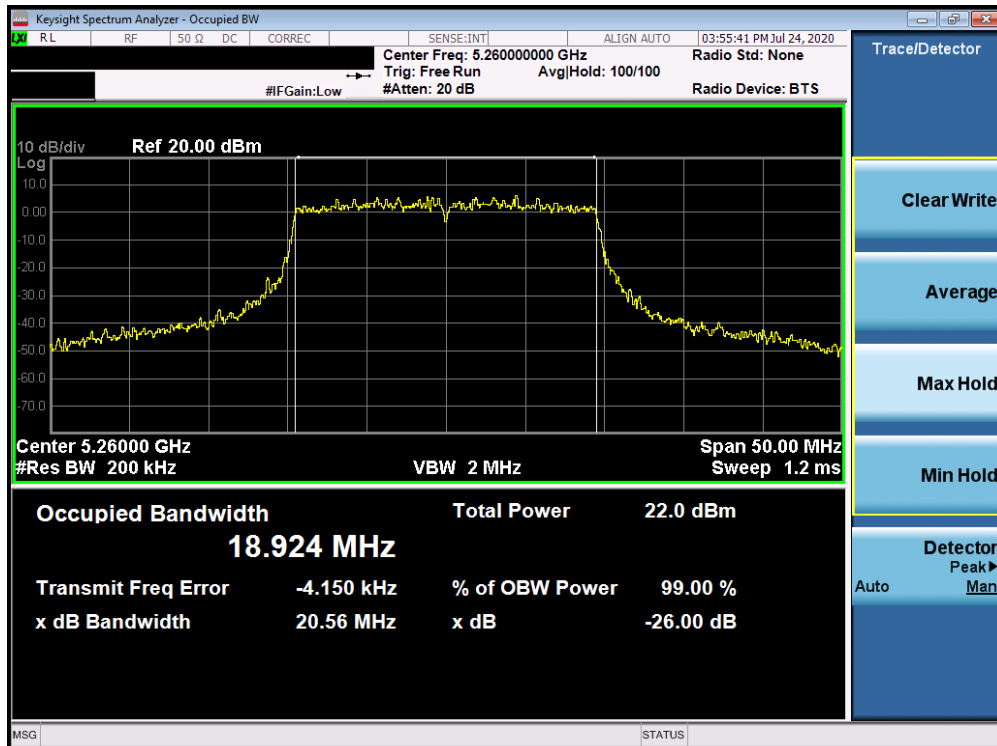


Plot 7-122. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11n (UNII Band 2A) – Ch. 56)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 80 of 344

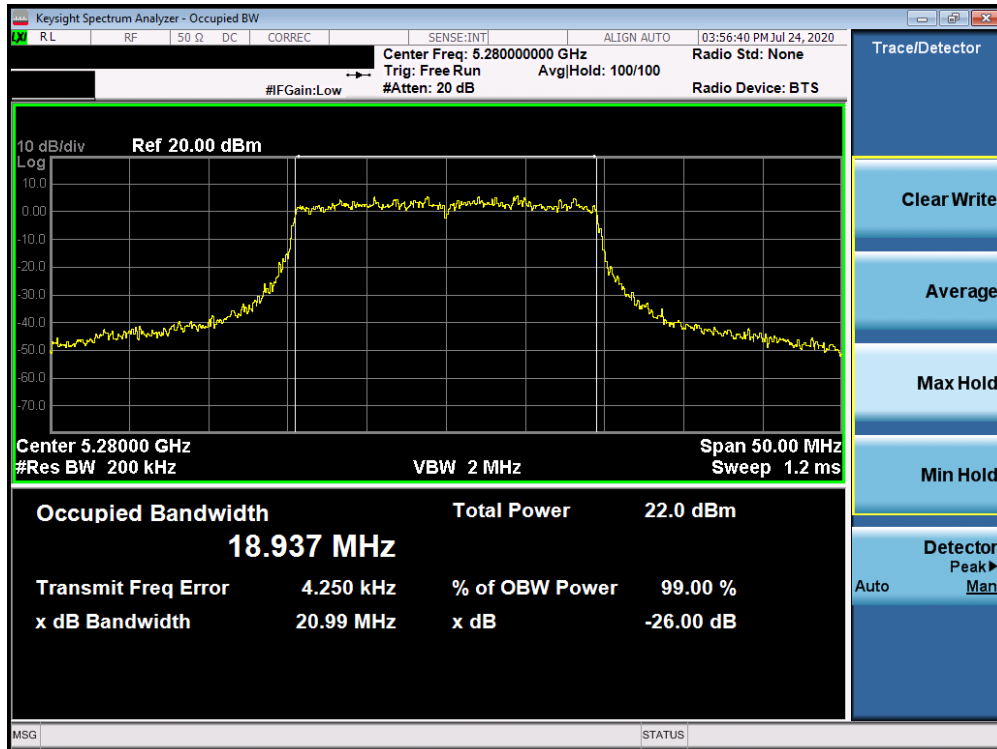


Plot 7-123. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11n (UNII Band 2A) – Ch. 64)

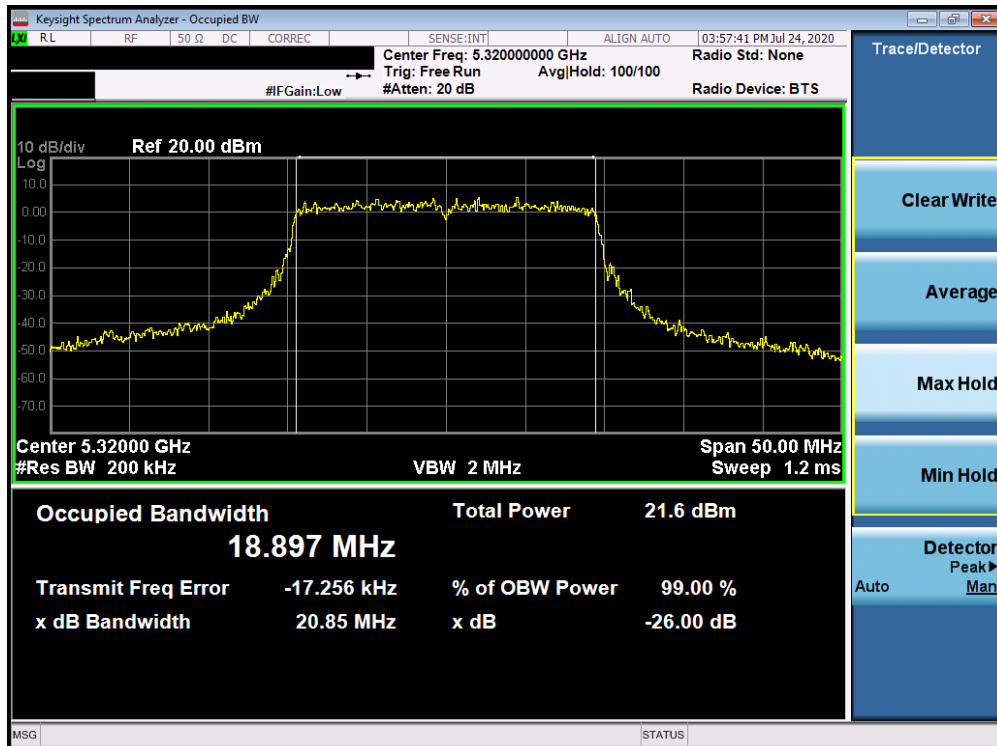


Plot 7-124. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11ax (UNII Band 2A) – Ch. 52)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 81 of 344

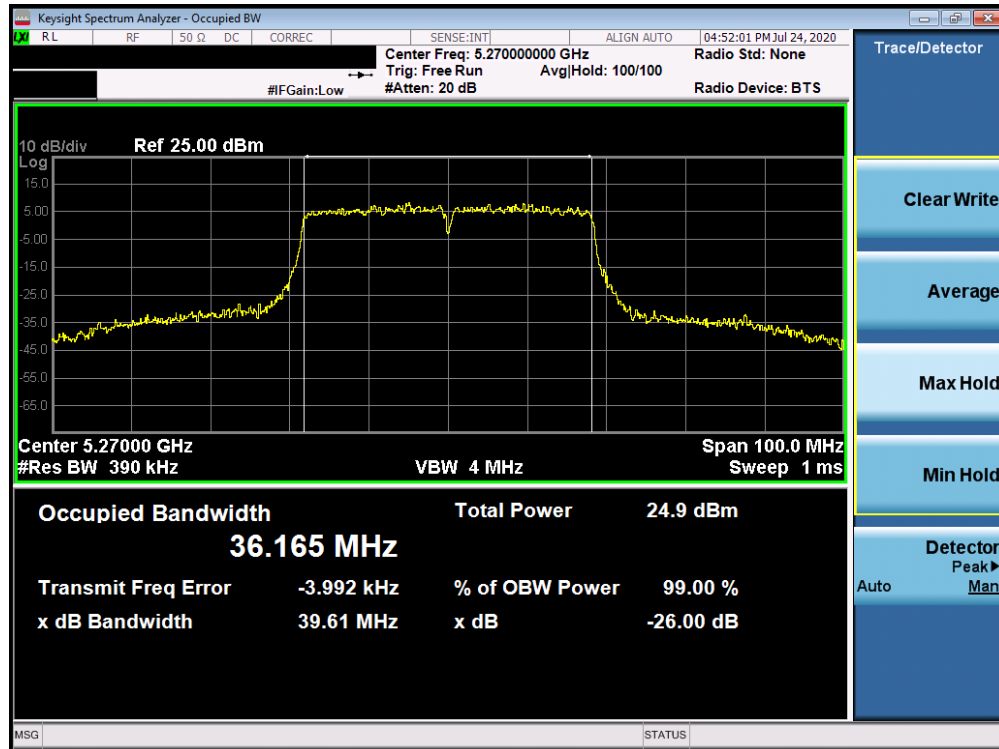


Plot 7-125. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11ax (UNII Band 2A) – Ch. 56)

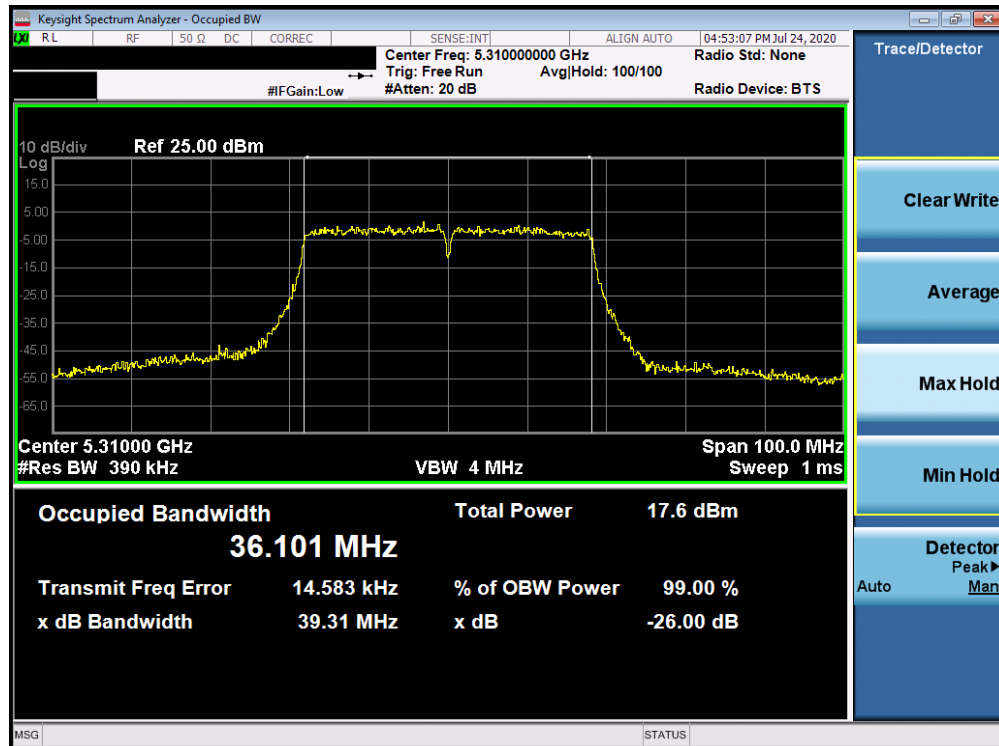


Plot 7-126. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11ax (UNII Band 2A) – Ch. 64)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 82 of 344

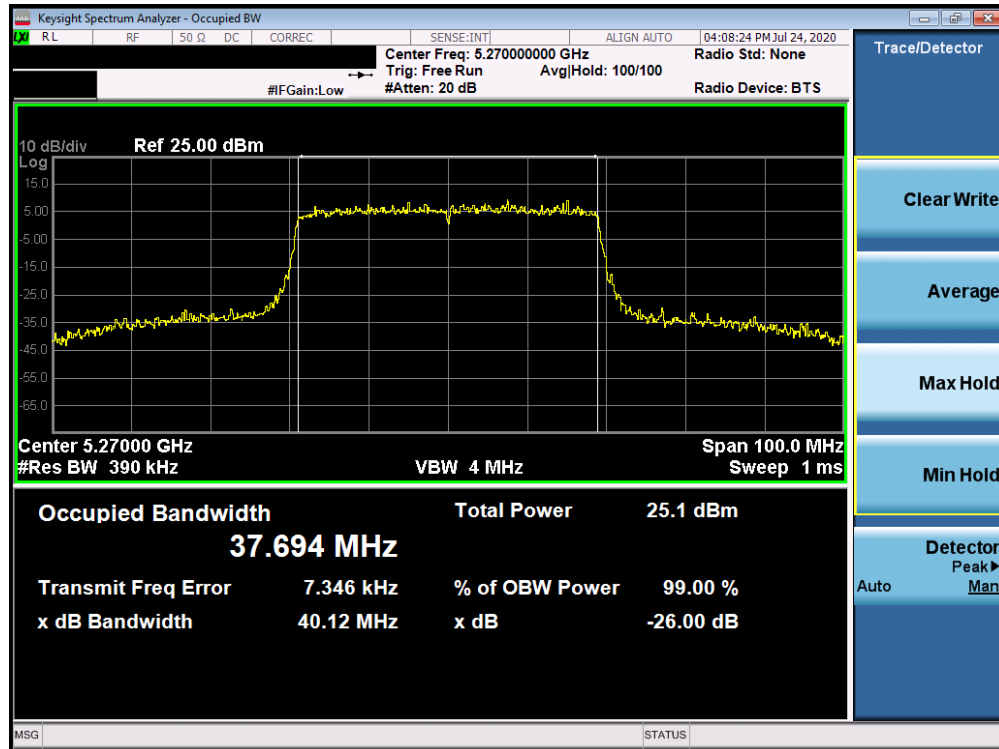


Plot 7-127. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11n (UNII Band 2A) – Ch. 54)

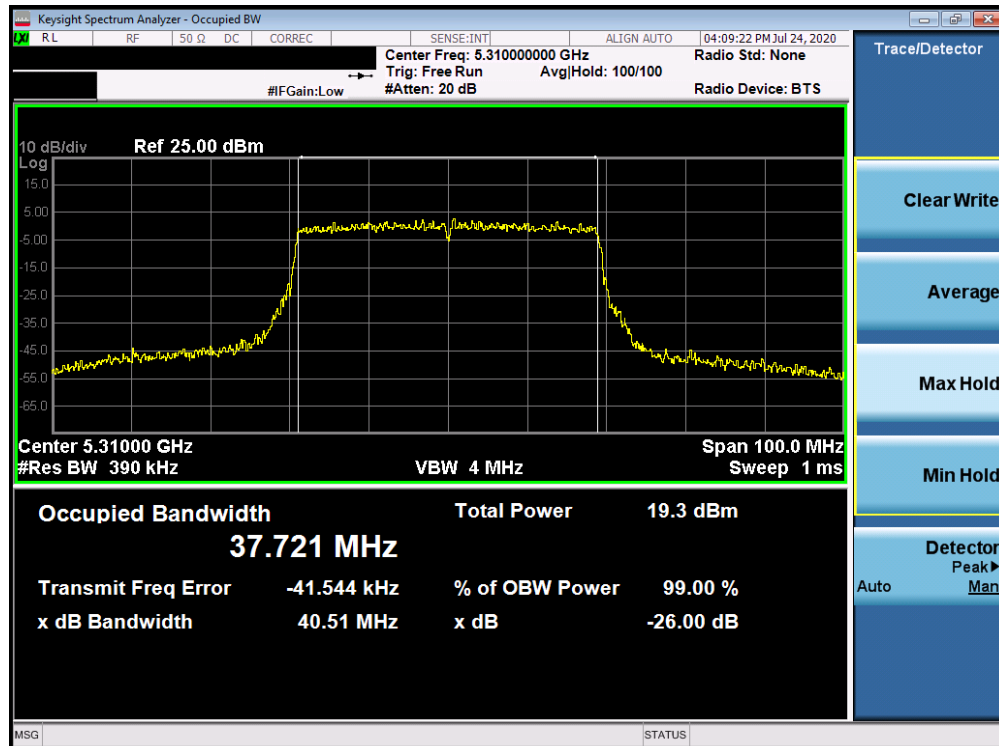


Plot 7-128. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11n (UNII Band 2A) – Ch. 62)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 83 of 344

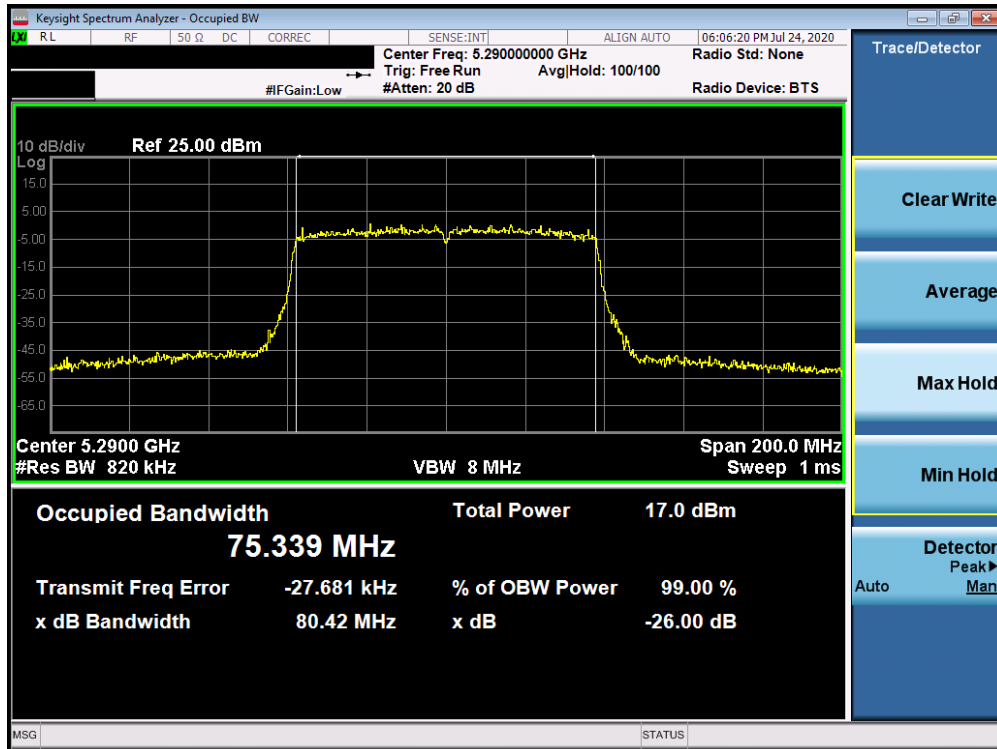


Plot 7-129. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11ax (UNII Band 2A) – Ch. 54)

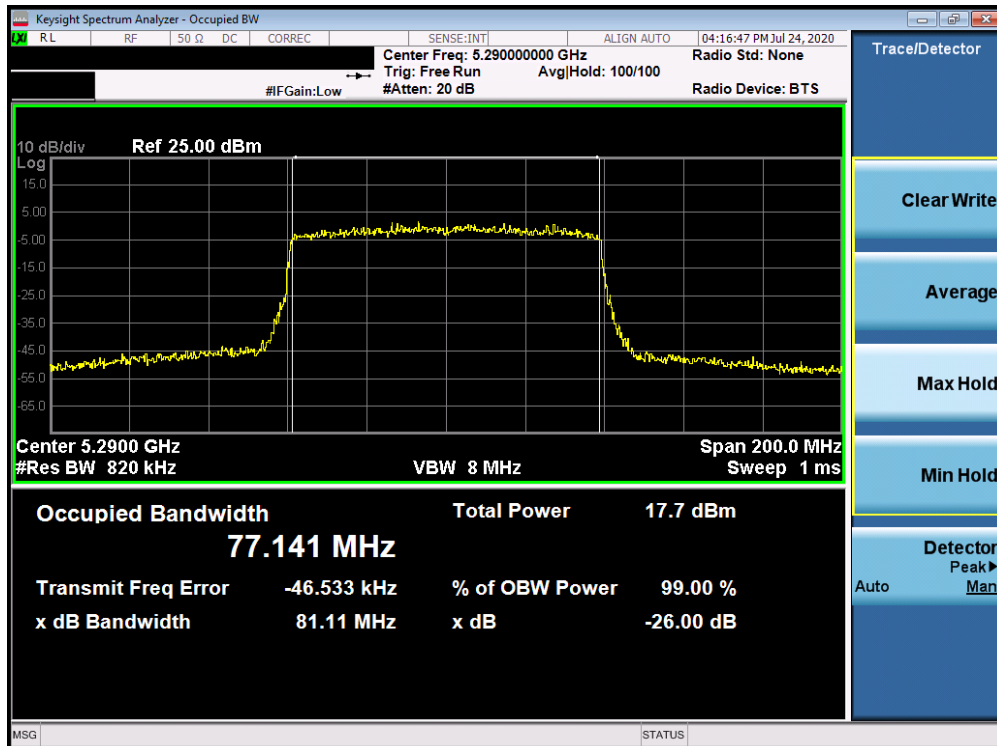


Plot 7-130. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11ax (UNII Band 2A) – Ch. 54)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 84 of 344

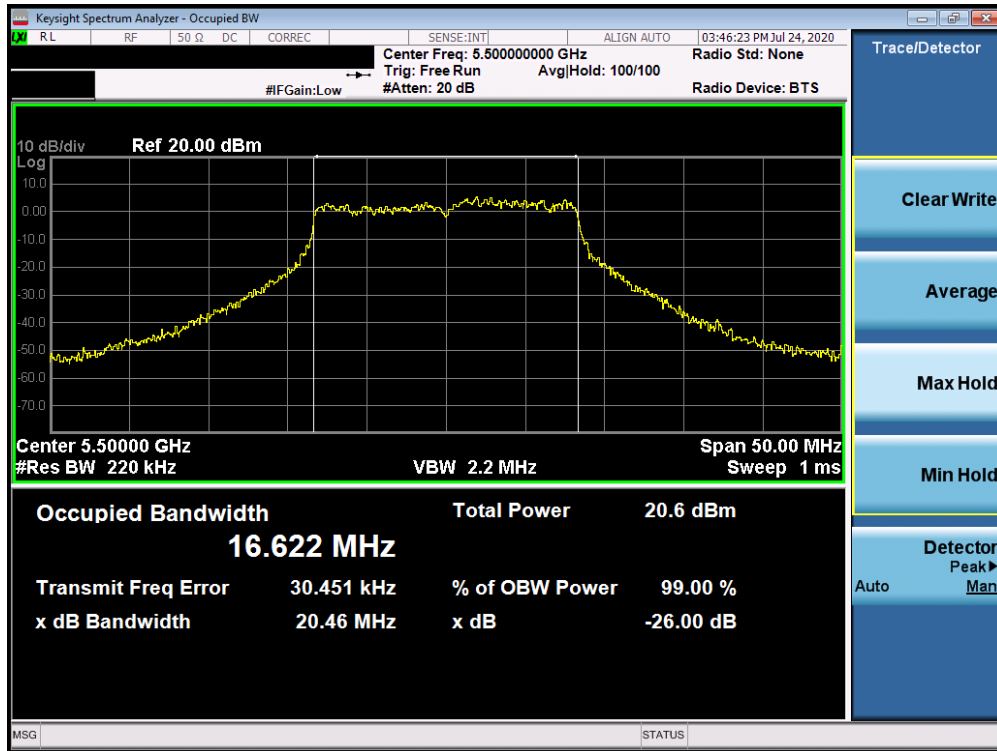


Plot 7-131. 26dB Bandwidth Plot ANT5 (80MHz BW 802.11ac (UNII Band 2A) – Ch. 58)

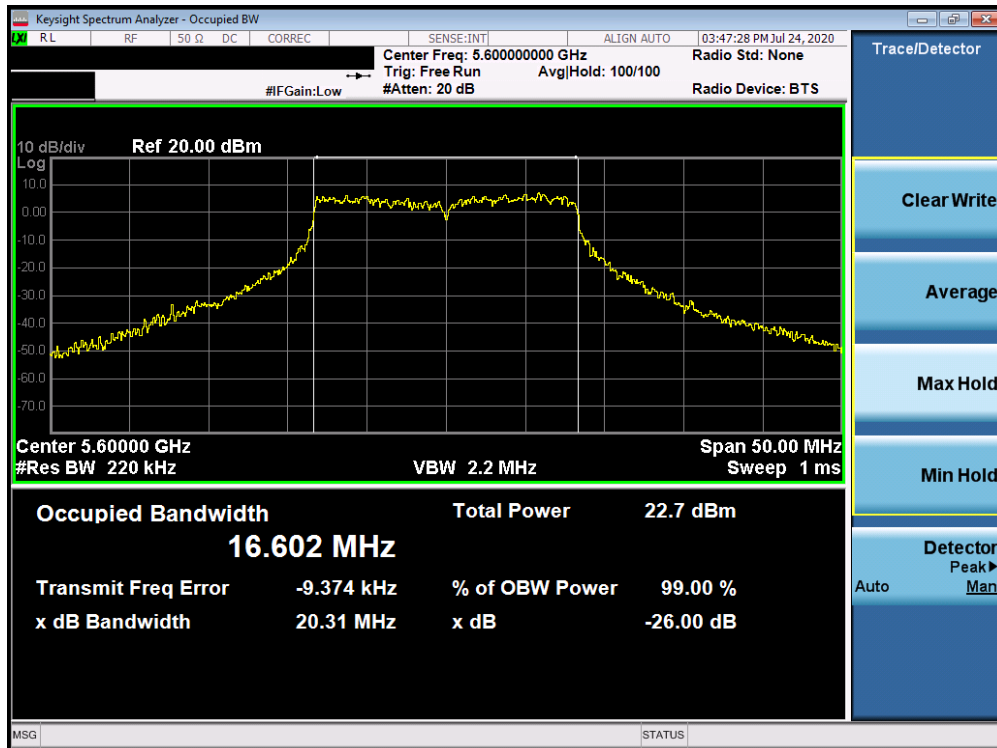


Plot 7-132. 26dB Bandwidth Plot ANT5 (80MHz BW 802.11ax (UNII Band 2A) – Ch. 58)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 85 of 344

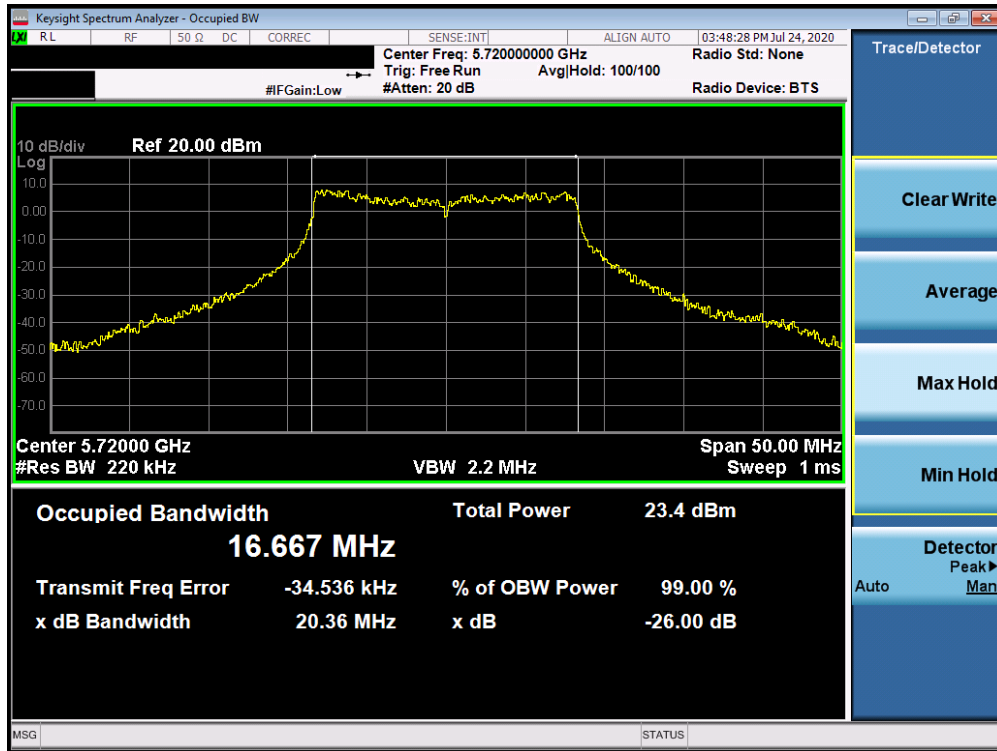


Plot 7-133. 26dB Bandwidth Plot ANT5 (802.11a (UNII Band 2C) – Ch. 100)

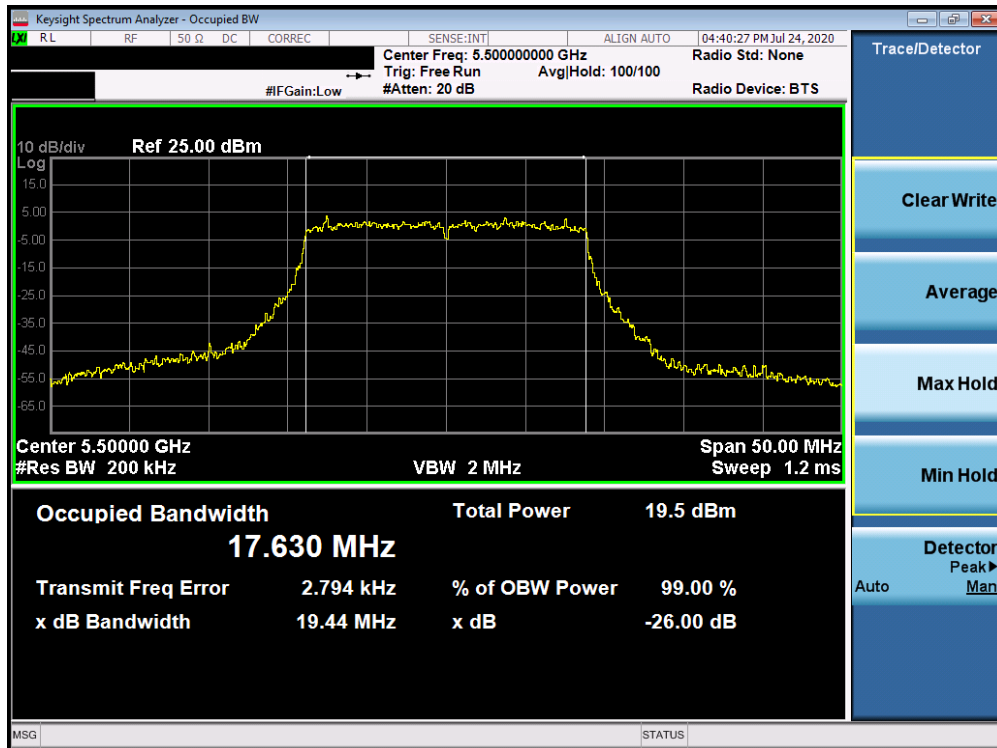


Plot 7-134. 26dB Bandwidth Plot ANT5 (802.11a (UNII Band 2C) – Ch. 120)

FCC ID: A3LSMH204V		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 86 of 344

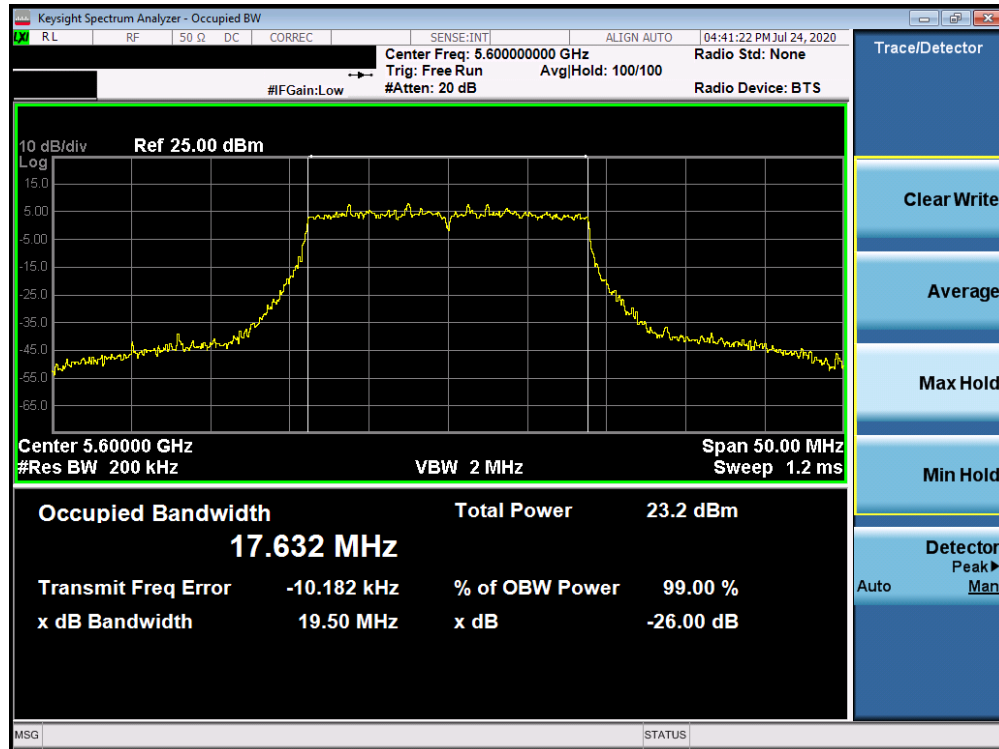


Plot 7-135. 26dB Bandwidth Plot ANT5 (802.11a (UNII Band 2C) – Ch. 144)

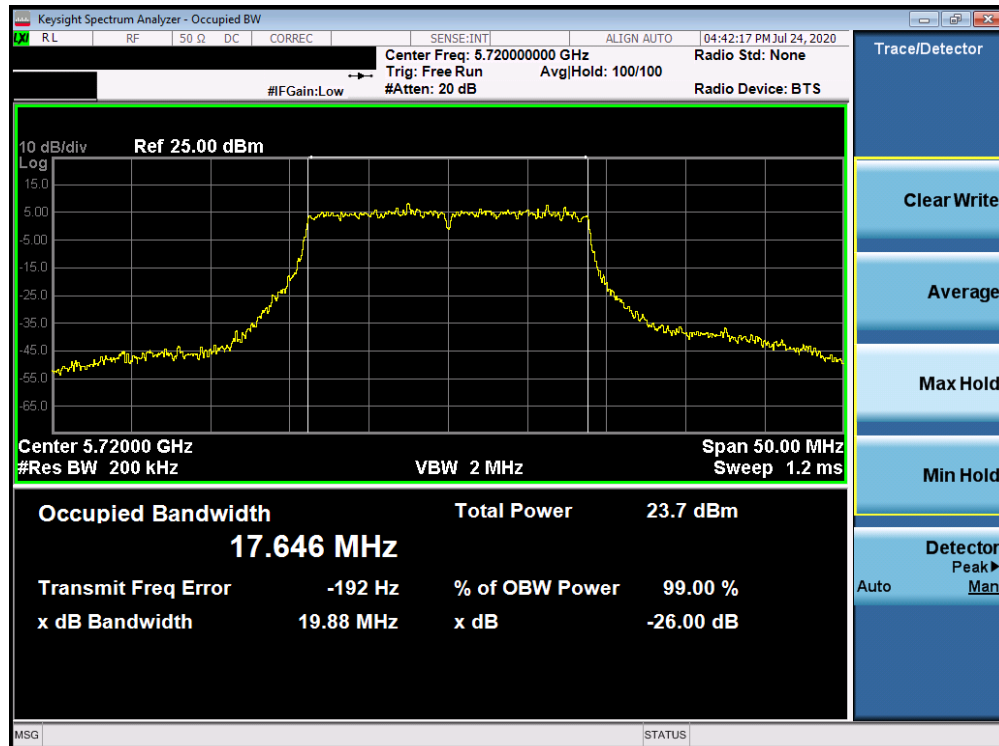


Plot 7-136. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11n (UNII Band 2C) – Ch. 100)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 87 of 344

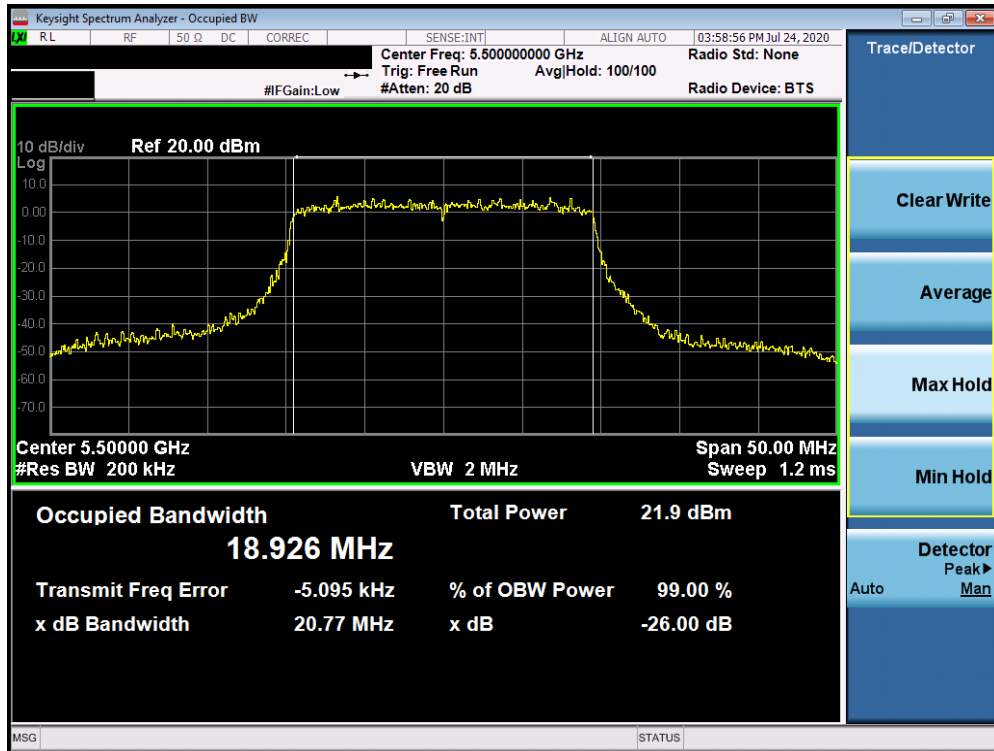


Plot 7-137. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11n (UNII Band 2C) – Ch. 120)

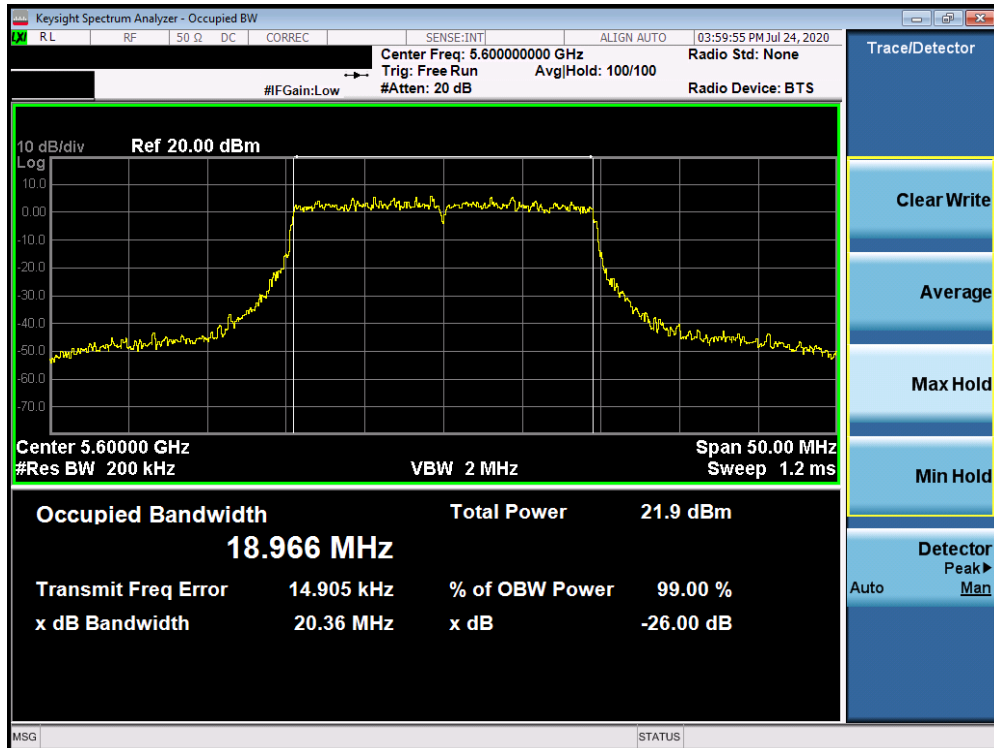


Plot 7-138. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11n (UNII Band 2C) – Ch. 144)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 88 of 344

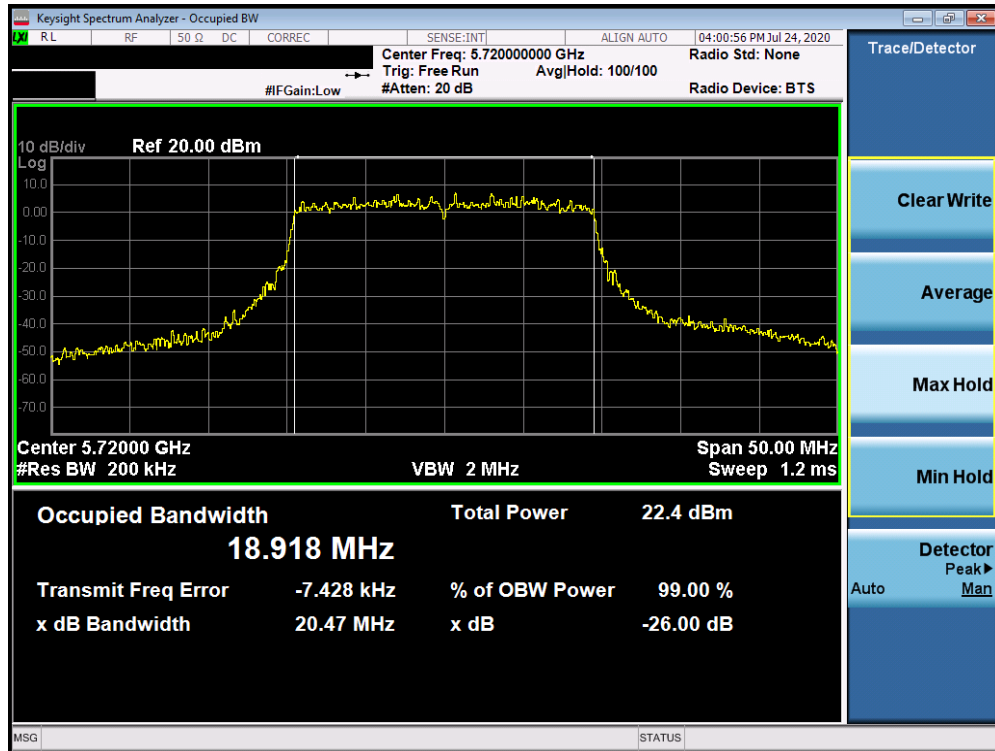


Plot 7-139. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11ax (UNII Band 2C) – Ch. 100)

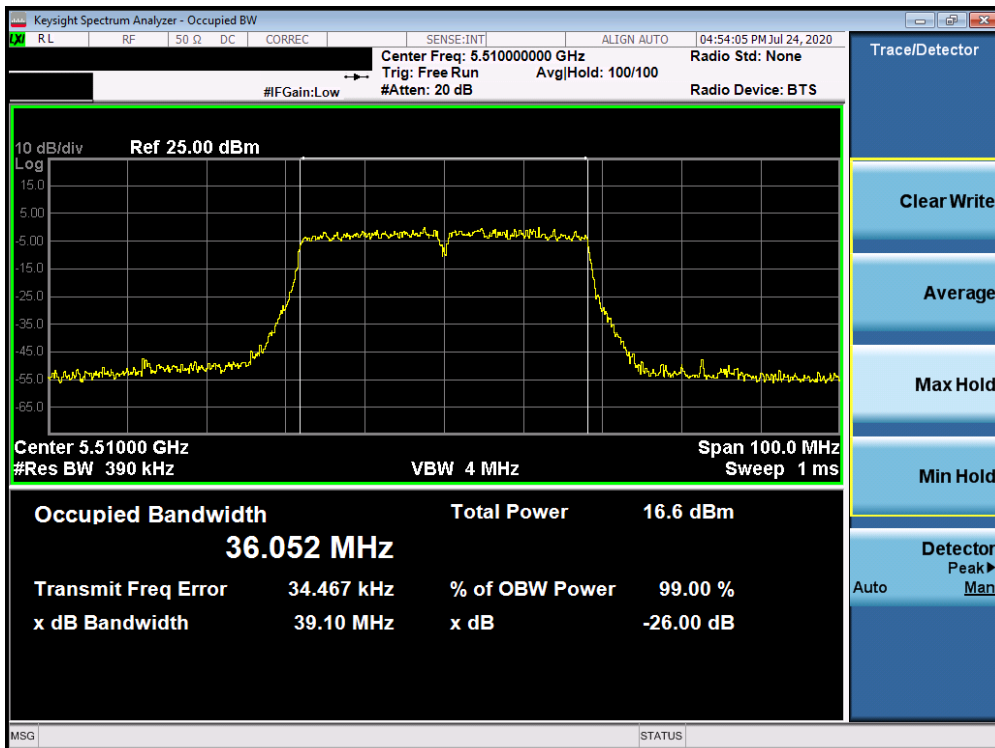


Plot 7-140. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11ax (UNII Band 2C) – Ch. 120)

FCC ID: A3LSMH204V		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 89 of 344

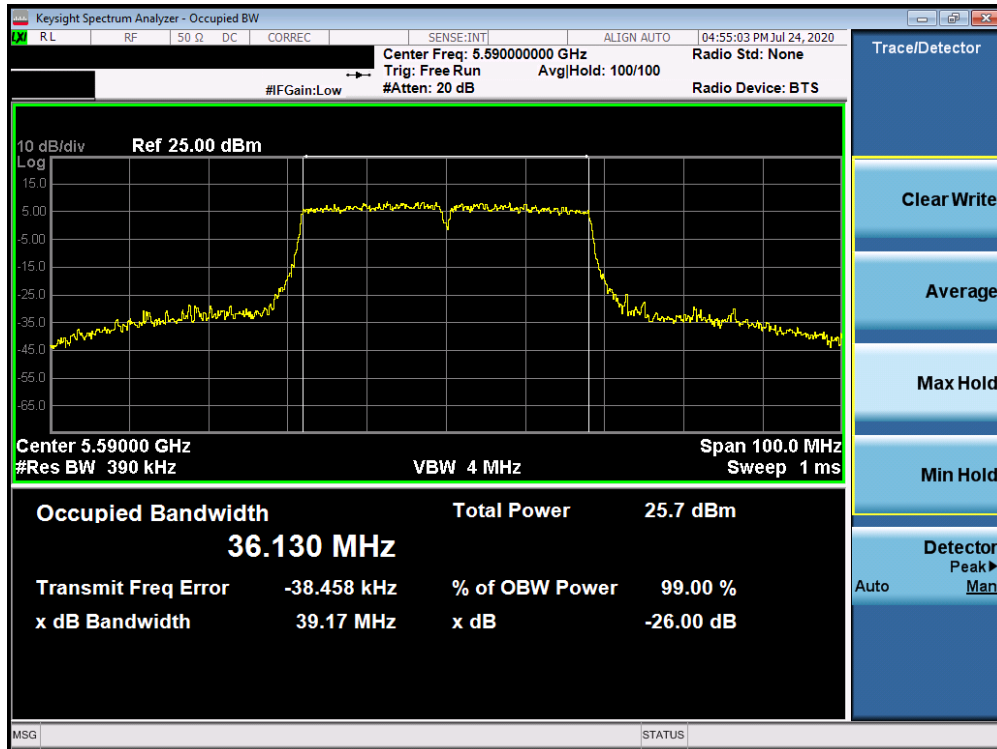


Plot 7-141. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11ax (UNII Band 2C) – Ch. 144)

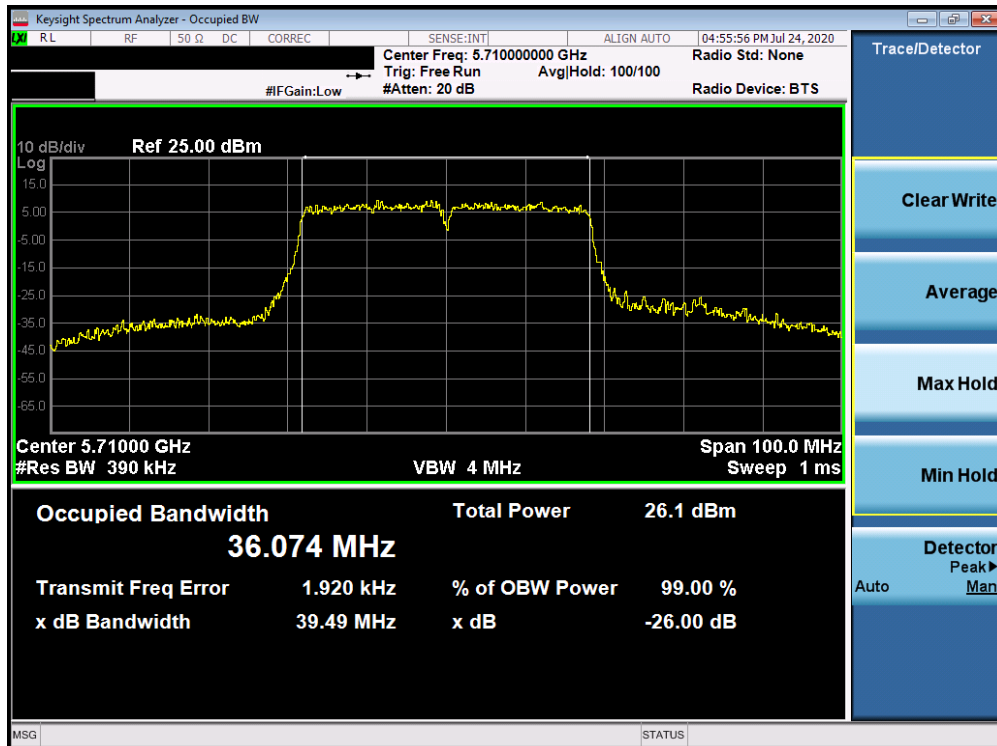


Plot 7-142. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11n (UNII Band 2C) – Ch. 102)

FCC ID: A3LSMH204V		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 90 of 344

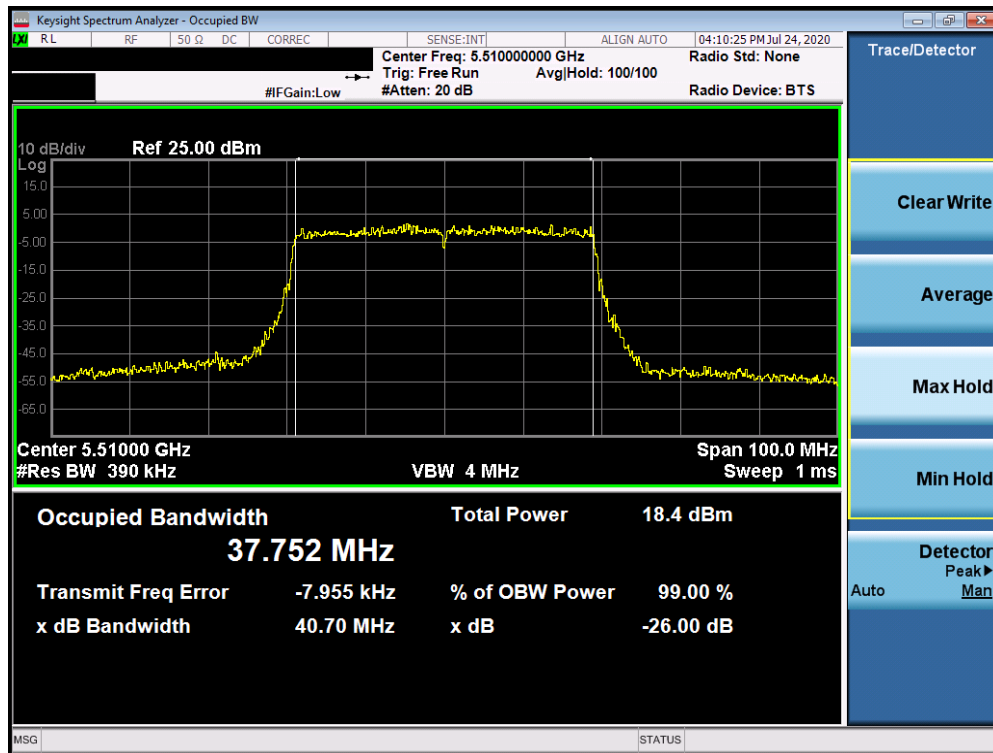


Plot 7-143. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11n (UNII Band 2C) – Ch. 118)

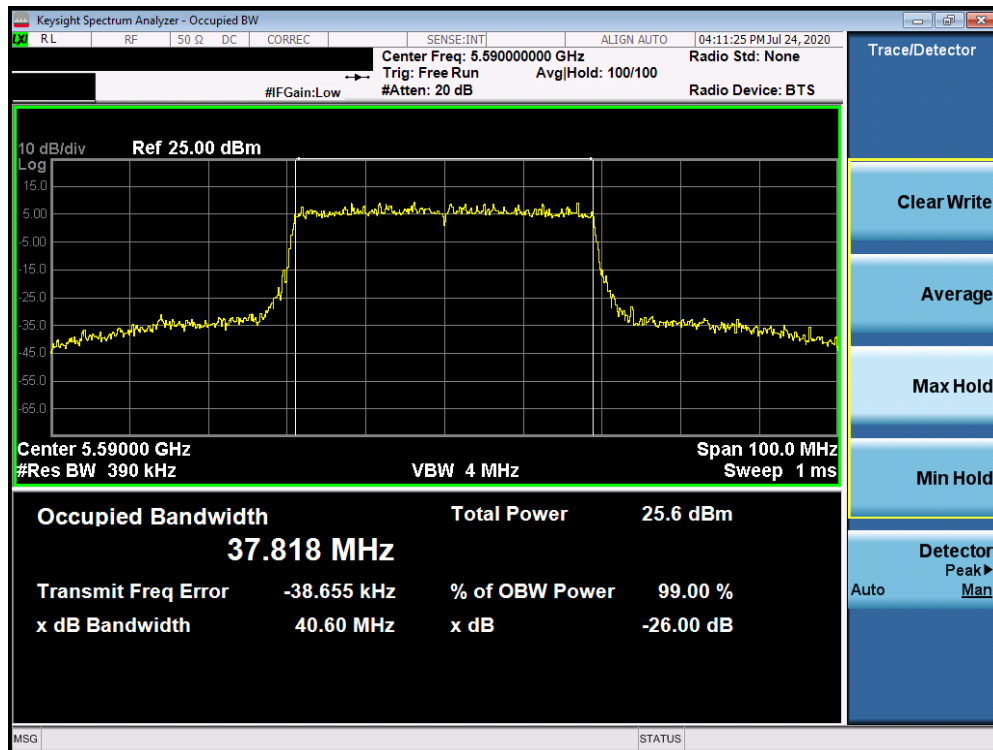


Plot 7-144. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11n (UNII Band 2C) – Ch. 142)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 91 of 344

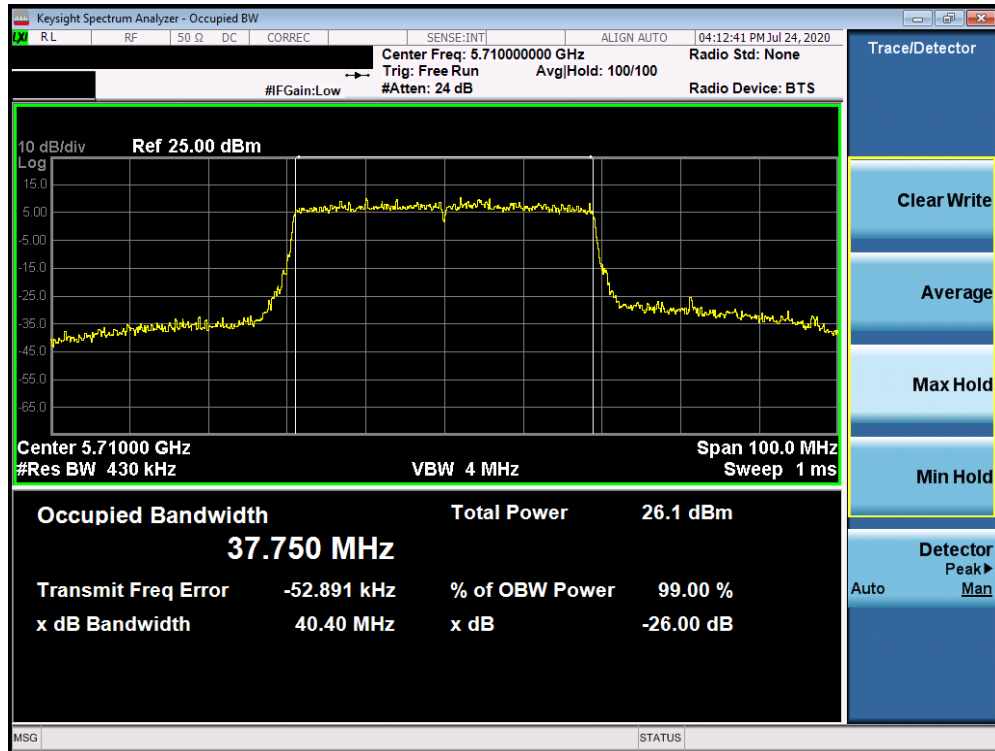


Plot 7-145. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11ax (UNII Band 2C) – Ch. 102)

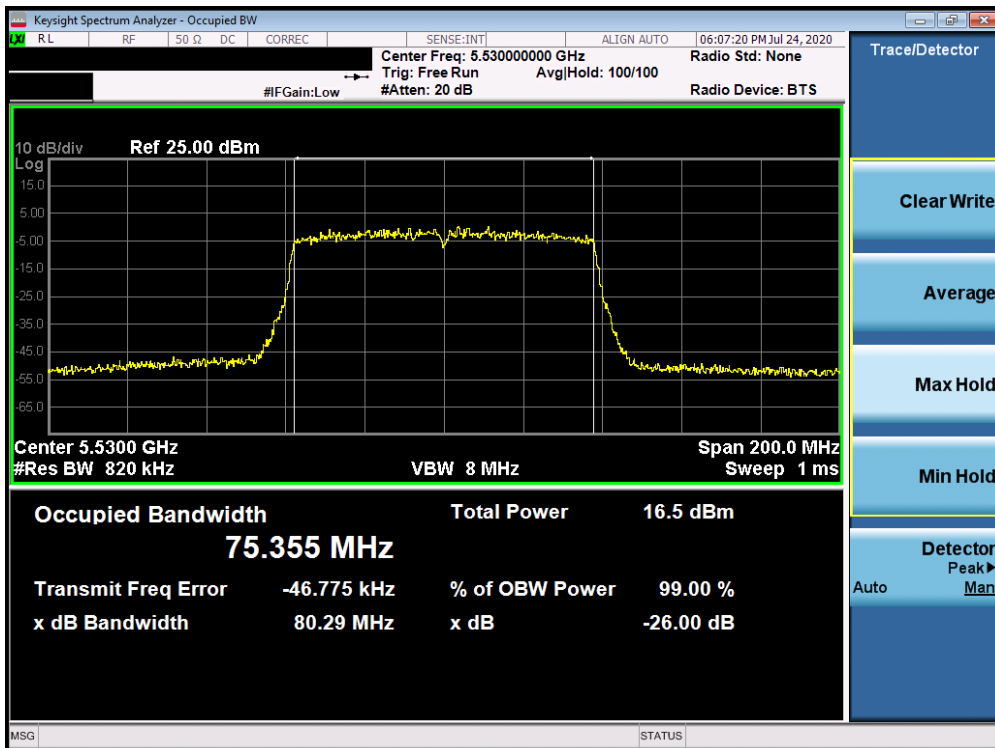


Plot 7-146. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11ax (UNII Band 2C) – Ch. 118)

FCC ID: A3LSMH204V		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 92 of 344

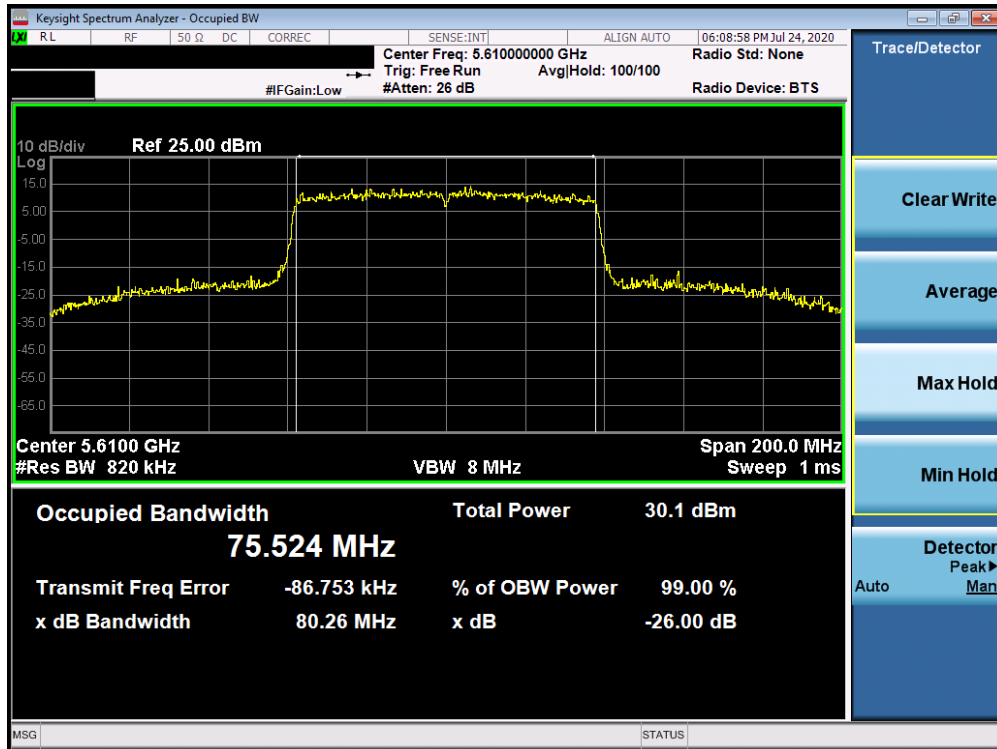


Plot 7-147. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11ax (UNII Band 2C) – Ch. 142)

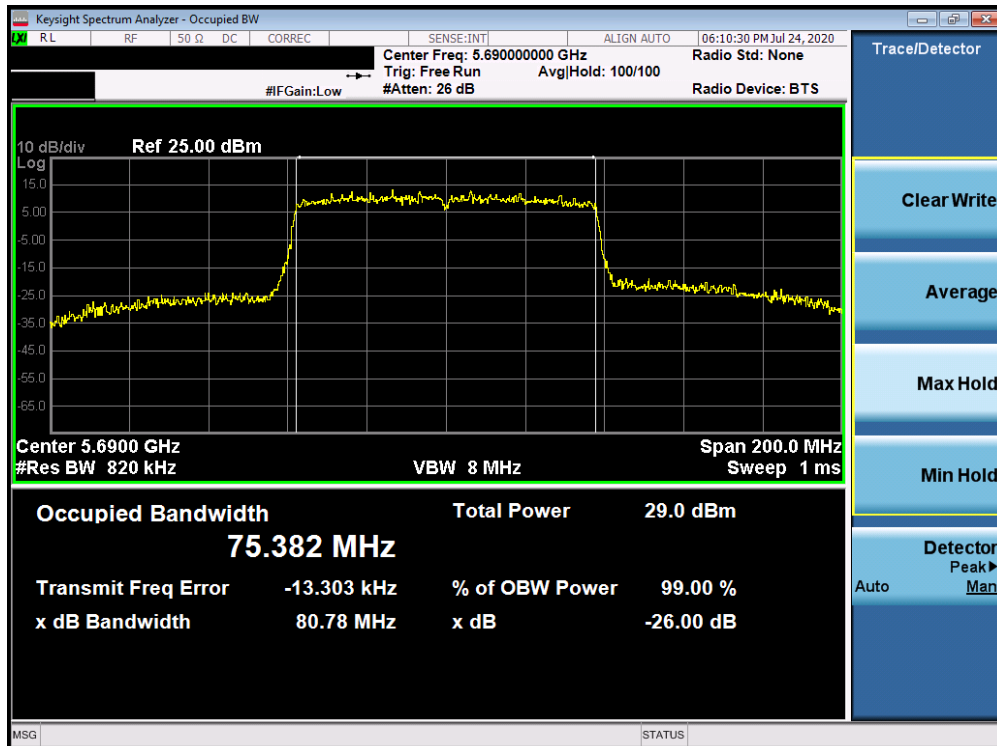


Plot 7-148. 26dB Bandwidth Plot ANT5 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 106)

FCC ID: A3LSMH204V		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 93 of 344

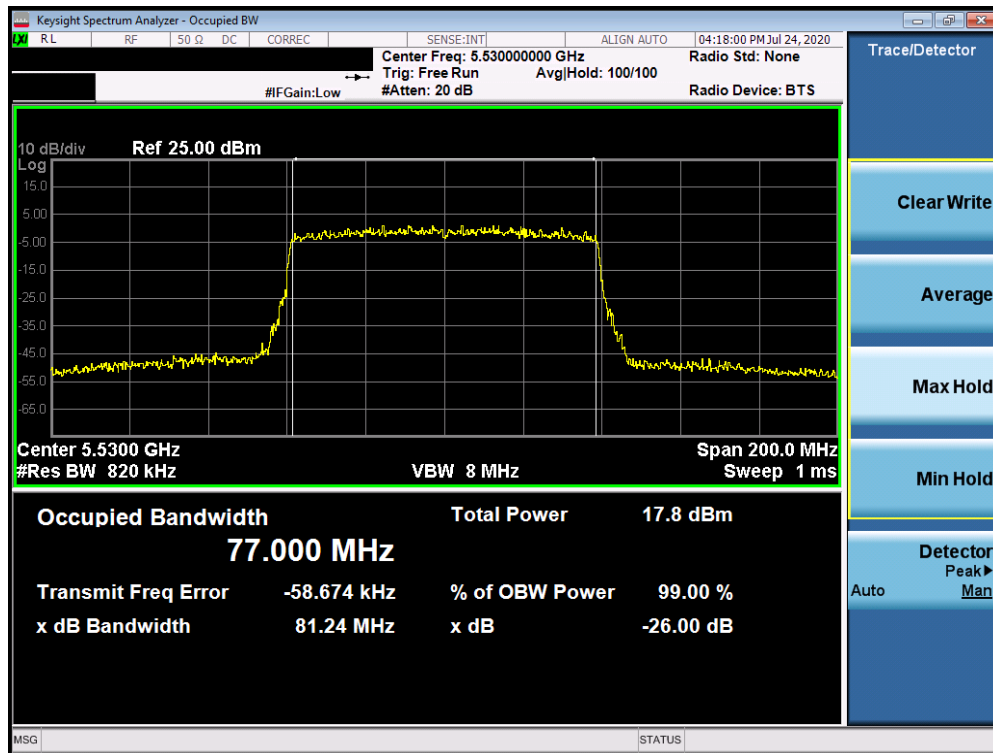


Plot 7-149. 26dB Bandwidth Plot ANT5 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 122)

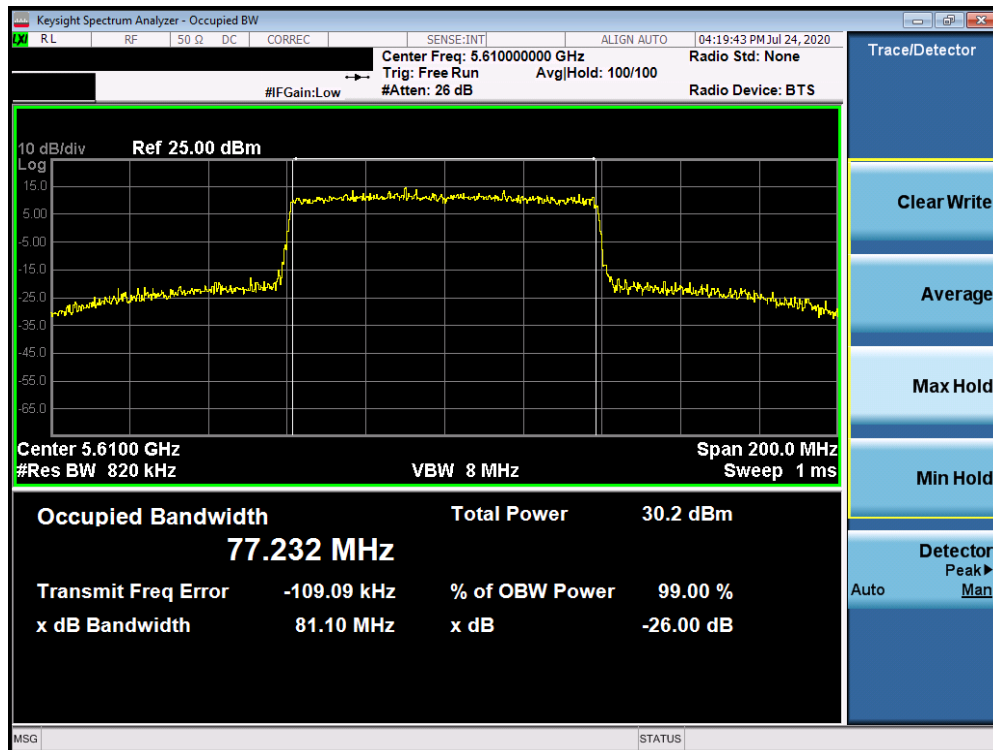


Plot 7-150. 26dB Bandwidth Plot ANT5 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 138)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 94 of 344

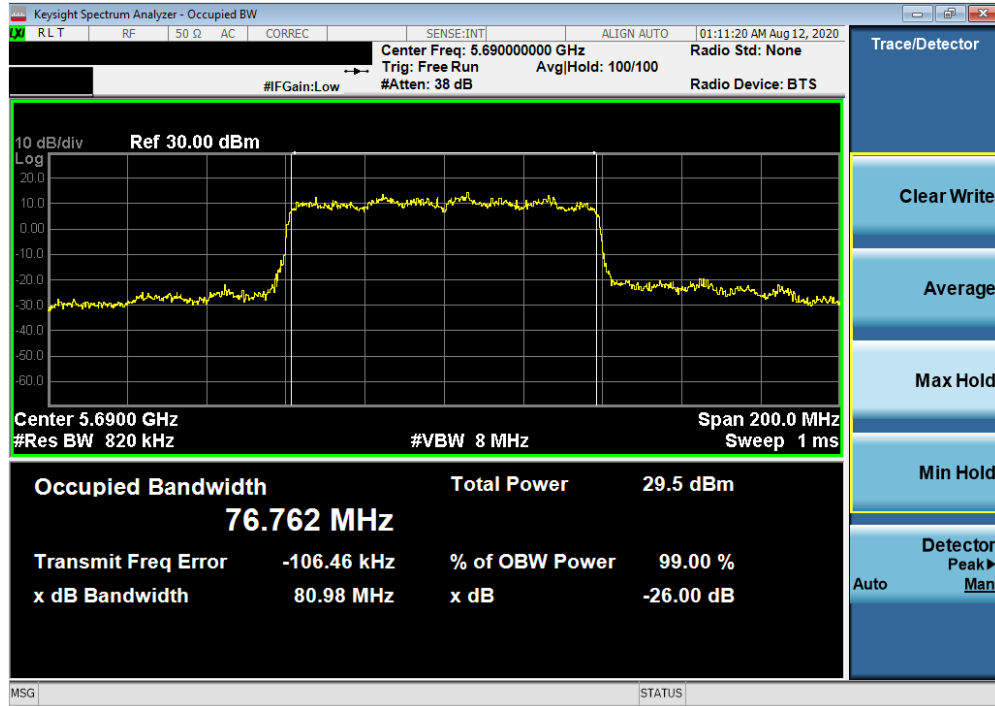


Plot 7-151. 26dB Bandwidth Plot ANT5 (80MHz BW 802.11ax (UNII Band 2C) – Ch. 106)



Plot 7-152. 26dB Bandwidth Plot ANT5 (80MHz BW 802.11ax (UNII Band 2C) – Ch. 122)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 95 of 344



Plot 7-153. 26dB Bandwidth Plot ANT5 (80MHz BW 802.11ax (UNII Band 2C) – Ch. 138)

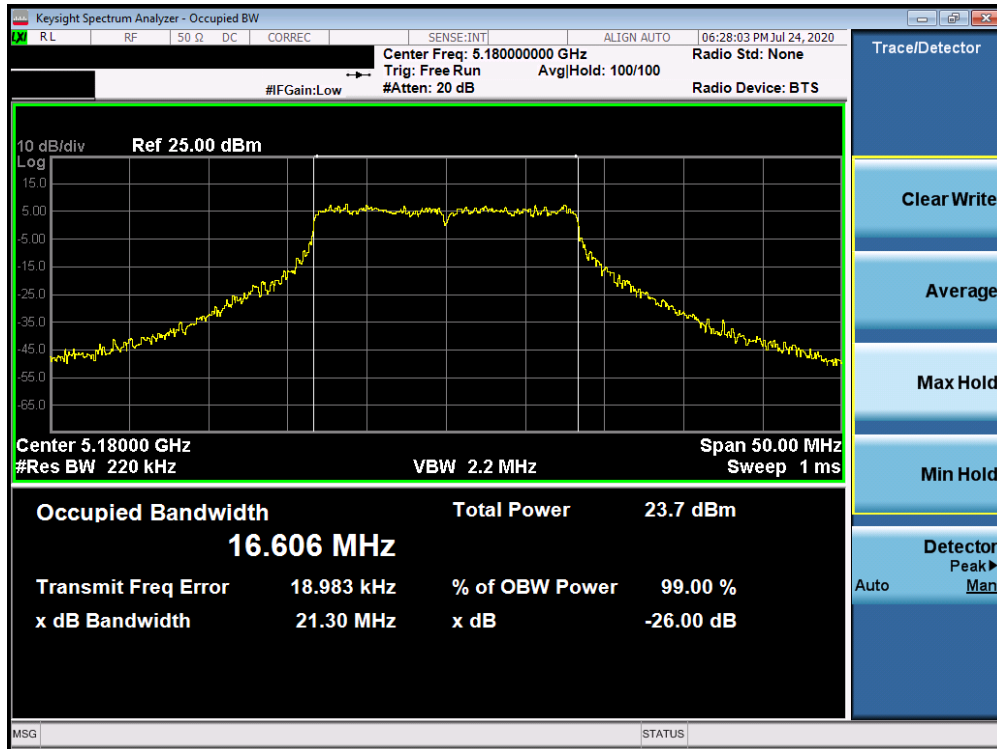
FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 96 of 344

Antenna-6 26dB Bandwidth Measurements

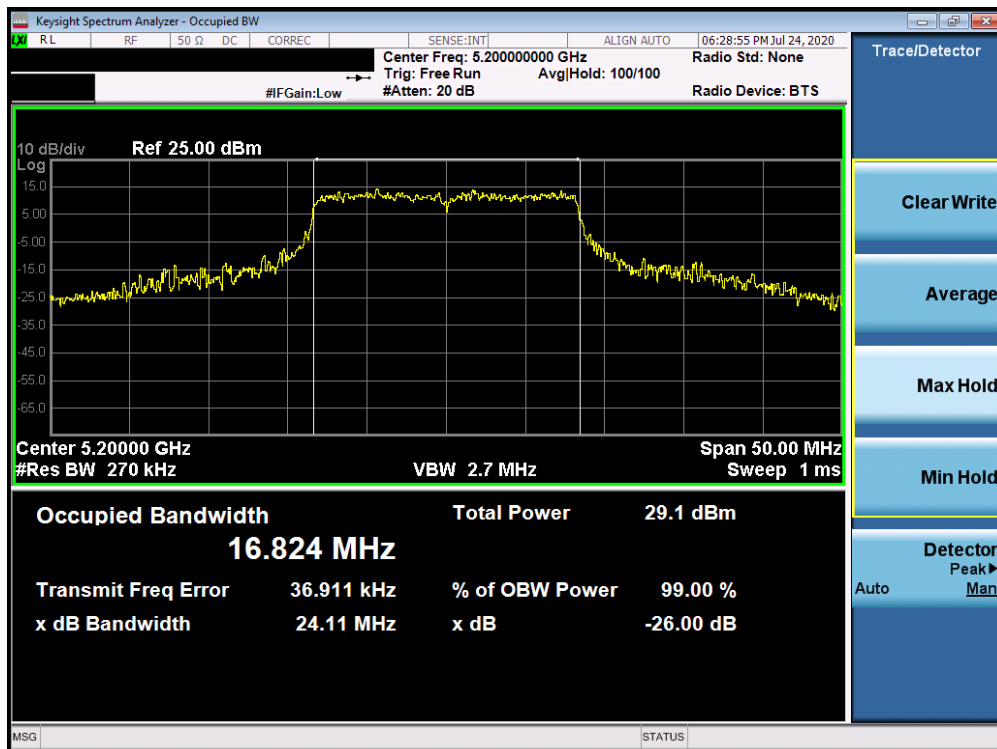
	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured 26dB Bandwidth [MHz]
Band 1	5180	36	a	6	21.30
	5200	40	a	6	24.11
	5240	48	a	6	23.72
	5180	36	n (20MHz)	6.5/7.2 (MCS0)	20.05
	5200	40	n (20MHz)	6.5/7.2 (MCS0)	19.64
	5240	48	n (20MHz)	6.5/7.2 (MCS0)	20.00
	5180	36	ax (20MHz)	8/8.6 (MCS0)	20.94
	5200	40	ax (20MHz)	8/8.6 (MCS0)	20.96
	5240	48	ax (20MHz)	8/8.6 (MCS0)	20.87
	5190	38	n (40MHz)	13.5/15 (MCS0)	39.44
	5230	46	n (40MHz)	13.5/15 (MCS0)	39.23
	5190	38	ax (40MHz)	8/8.6 (MCS0)	40.17
	5230	46	ax (40MHz)	13.5/15 (MCS0)	40.54
	5210	42	ac (80MHz)	8/8.6 (MCS0)	81.05
Band 2A	5210	42	ax (80MHz)	8/8.6 (MCS0)	80.92
	5260	52	a	6	21.38
	5280	56	a	6	21.20
	5320	64	a	6	21.37
	5260	52	n (20MHz)	6.5/7.2 (MCS0)	19.64
	5280	56	n (20MHz)	6.5/7.2 (MCS0)	19.84
	5320	64	n (20MHz)	6.5/7.2 (MCS0)	19.79
	5260	52	ax (20MHz)	8/8.6 (MCS0)	20.52
	5280	56	ax (20MHz)	8/8.6 (MCS0)	20.75
	5320	64	ax (20MHz)	8/8.6 (MCS0)	20.91
	5270	54	n (40MHz)	13.5/15 (MCS0)	39.27
	5310	62	n (40MHz)	13.5/15 (MCS0)	38.98
	5270	54	ax (40MHz)	8/8.6 (MCS0)	40.34
	5310	62	ax (40MHz)	8/8.6 (MCS0)	40.34
Band 2C	5290	58	ac (80MHz)	29.3/32.5 (MCS0)	81.58
	5290	58	ax (80MHz)	8/8.6 (MCS0)	82.24
	5500	100	a	6	21.19
	5600	120	a	6	20.50
	5720	144	a	6	21.68
	5500	100	n (20MHz)	6.5/7.2 (MCS0)	19.83
	5600	120	n (20MHz)	6.5/7.2 (MCS0)	19.81
	5720	144	n (20MHz)	6.5/7.2 (MCS0)	19.83
	5500	100	ax (20MHz)	8/8.6 (MCS0)	20.74
	5600	120	ax (20MHz)	8/8.6 (MCS0)	20.38
	5720	144	ax (20MHz)	8/8.6 (MCS0)	20.92
	5510	102	n (40MHz)	13.5/15 (MCS0)	39.35
	5590	118	n (40MHz)	13.5/15 (MCS0)	39.37
	5710	142	n (40MHz)	13.5/15 (MCS0)	39.42
	5510	102	ax (40MHz)	8/8.6 (MCS0)	40.24
	5590	118	ax (40MHz)	8/8.6 (MCS0)	40.31
	5710	142	ax (40MHz)	8/8.6 (MCS0)	40.36
	5530	106	ac (80MHz)	29.3/32.5 (MCS0)	80.66
	5610	122	ac (80MHz)	29.3/32.5 (MCS0)	81.32
	5690	138	ac (80MHz)	29.3/32.5 (MCS0)	81.20
	5530	106	ax (80MHz)	8/8.6 (MCS0)	81.69
	5610	122	ax (80MHz)	8/8.6 (MCS0)	81.45
	5690	138	ax (80MHz)	8/8.6 (MCS0)	81.03

Table 7-5. Conducted Bandwidth Measurements

FCC ID: A3LSMH204V		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 97 of 344

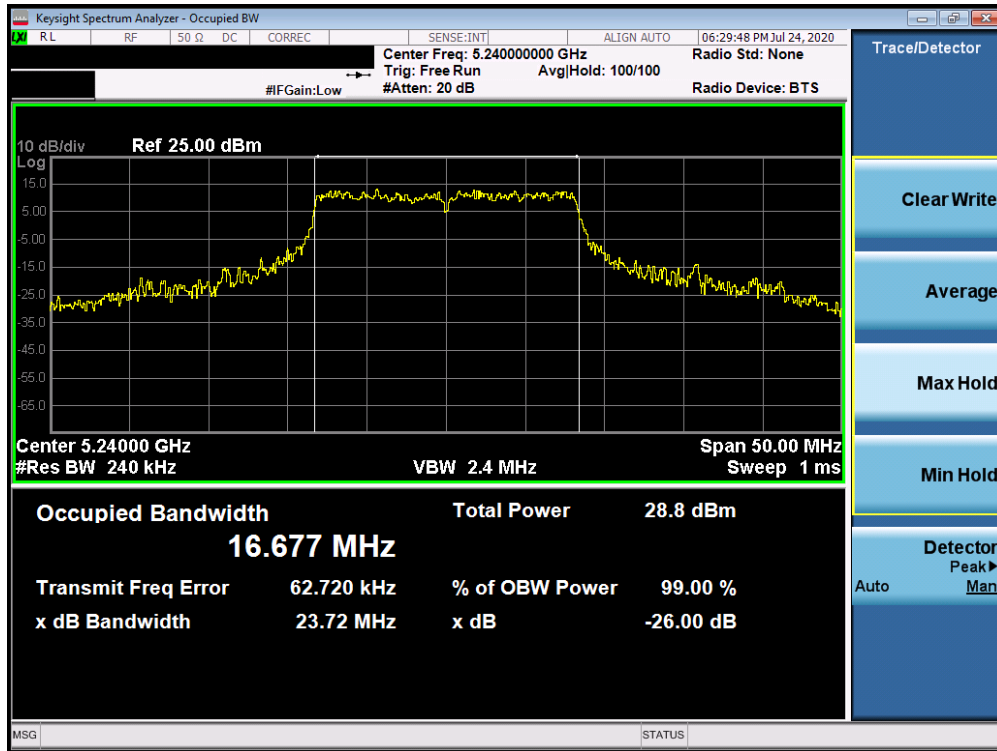


Plot 7-154. 26dB Bandwidth Plot ANT6 (802.11a (UNII Band 1) – Ch. 36)

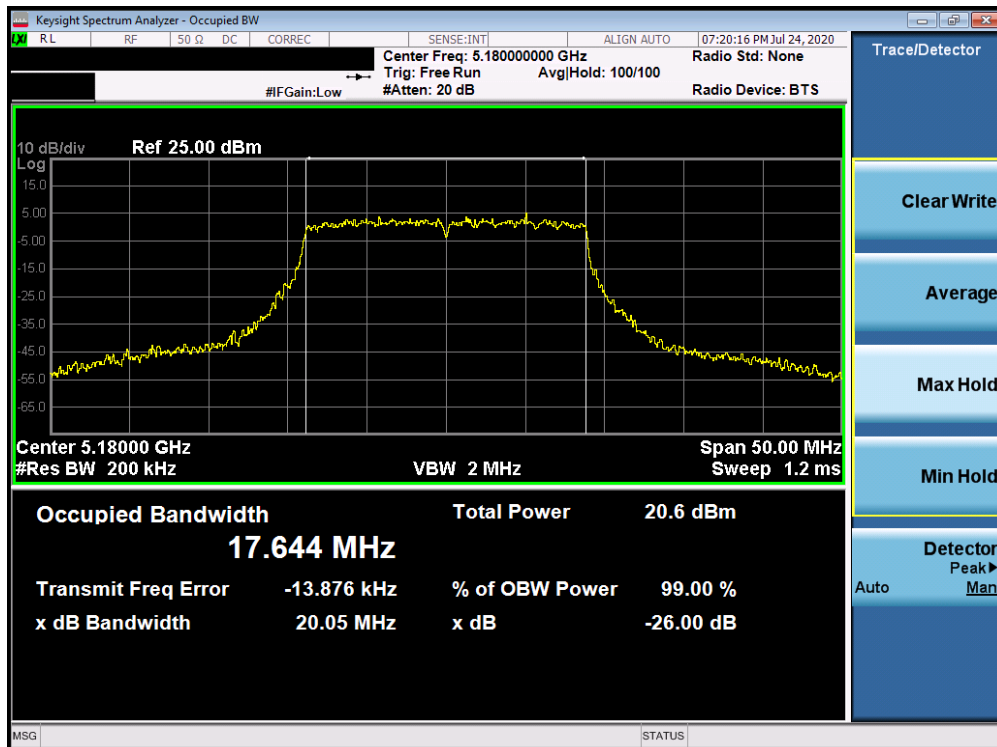


Plot 7-155. 26dB Bandwidth Plot ANT6 (802.11a (UNII Band 1) – Ch. 40)

FCC ID: A3LSMH204V	PCTEST Provided to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 98 of 344

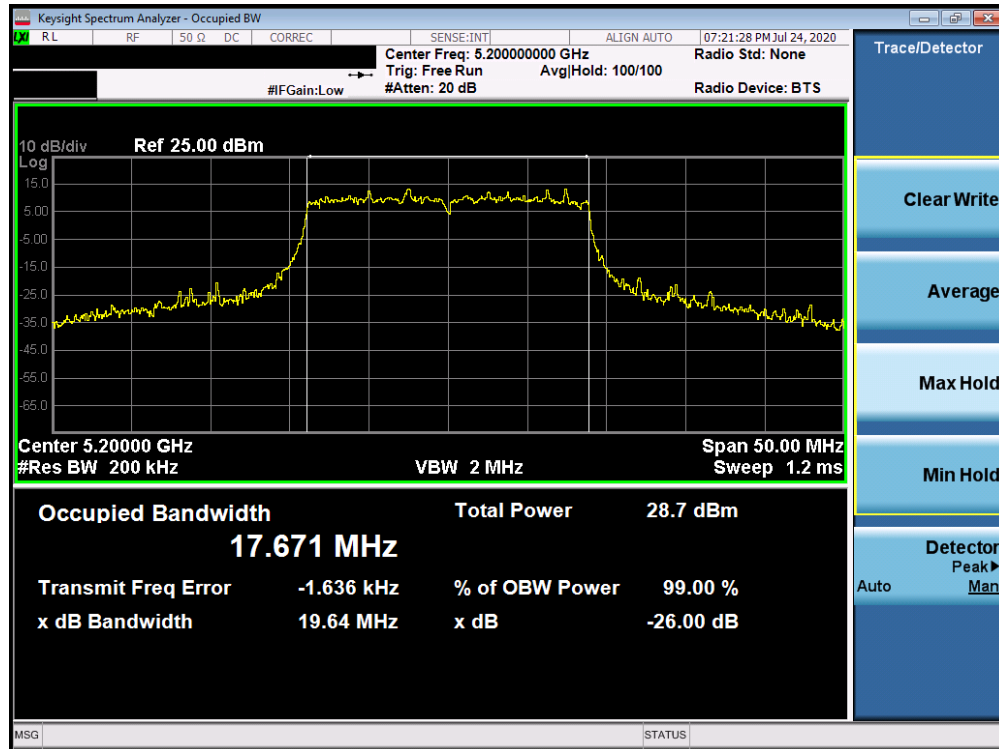


Plot 7-156. 26dB Bandwidth Plot ANT6 (802.11a (UNII Band 1) – Ch. 48)

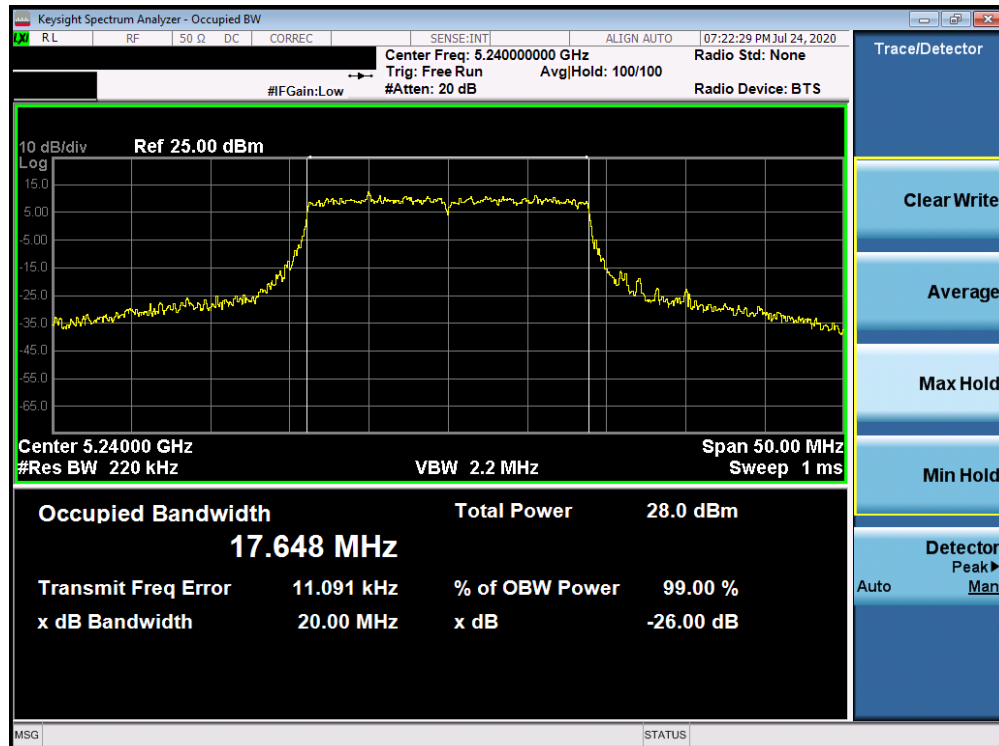


Plot 7-157. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11n (UNII Band 1) – Ch. 36)

FCC ID: A3LSMH204V	PCTEST Provided to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 99 of 344

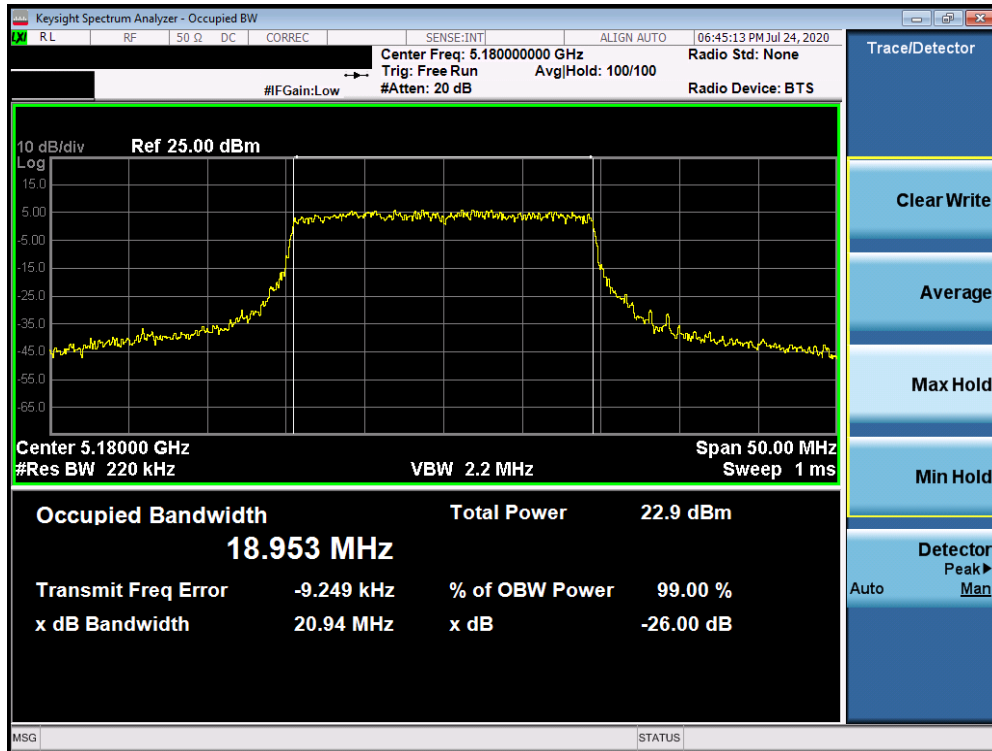


Plot 7-158. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11n (UNII Band 1) – Ch. 40)

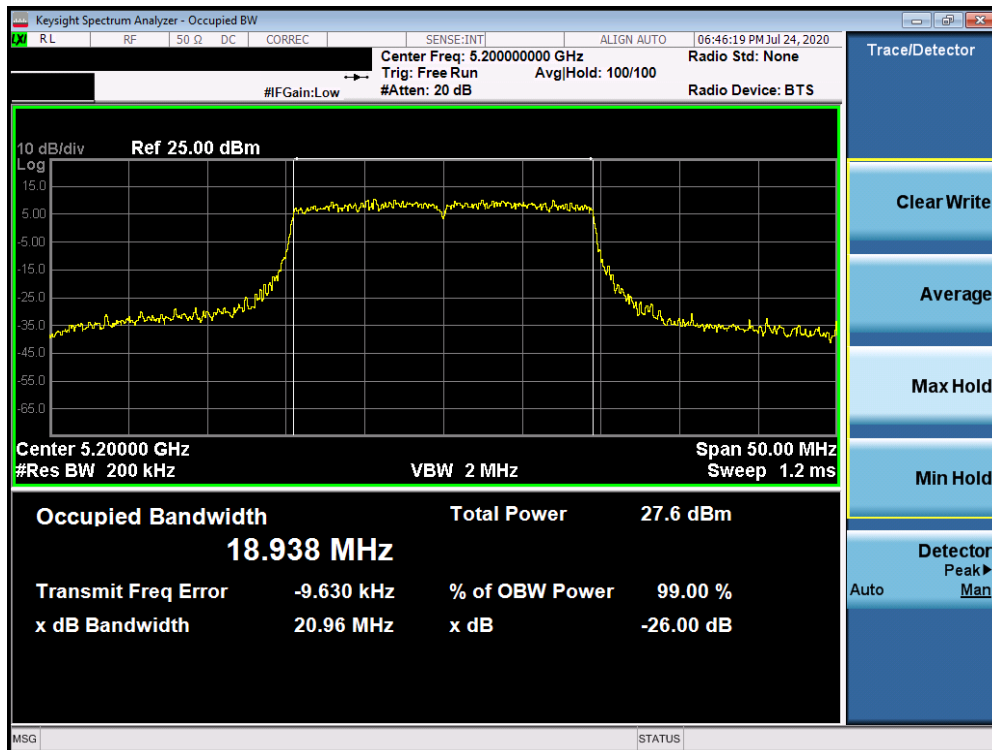


Plot 7-159. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11n (UNII Band 1) – Ch. 48)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 100 of 344

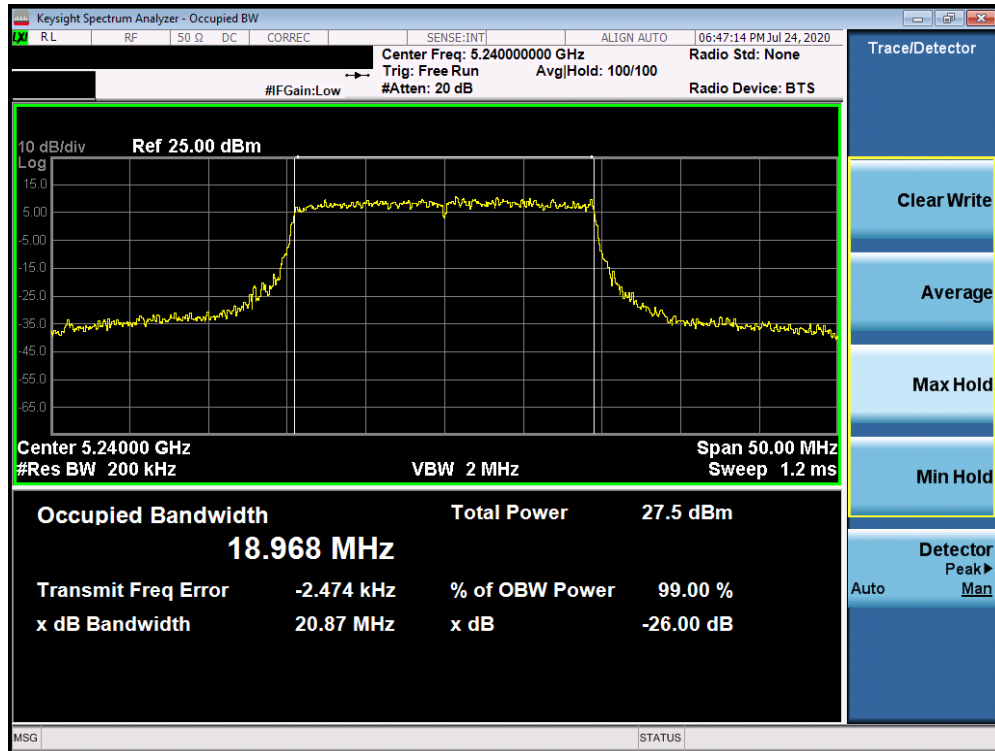


Plot 7-160. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11ax (UNII Band 1) – Ch. 36)

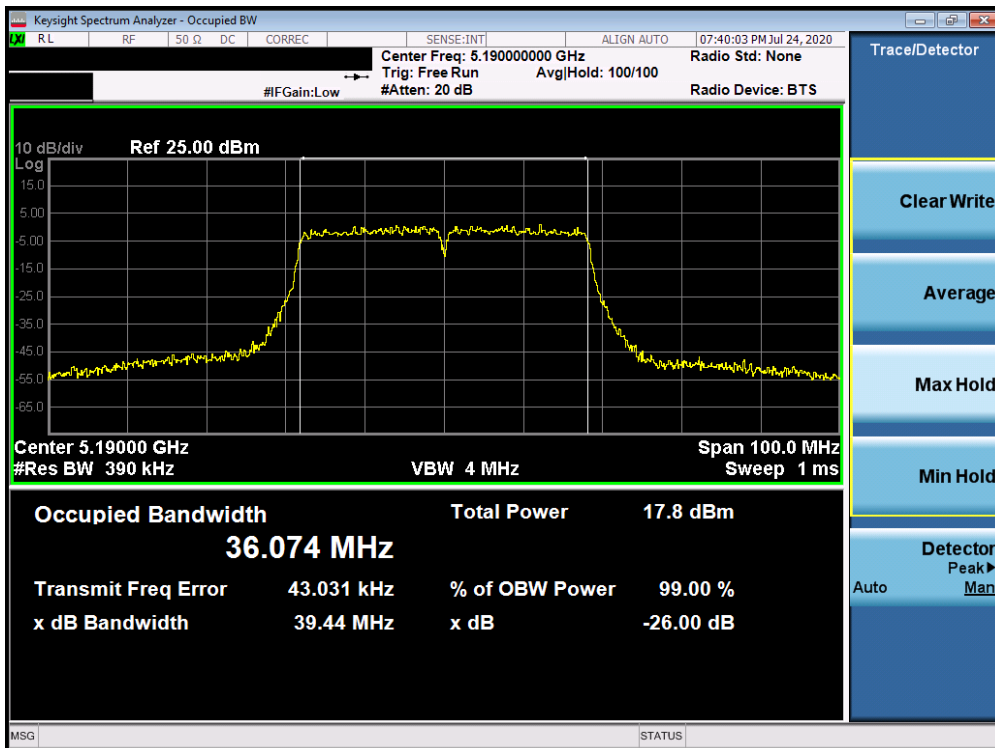


Plot 7-161. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11ax (UNII Band 1) – Ch. 40)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 101 of 344

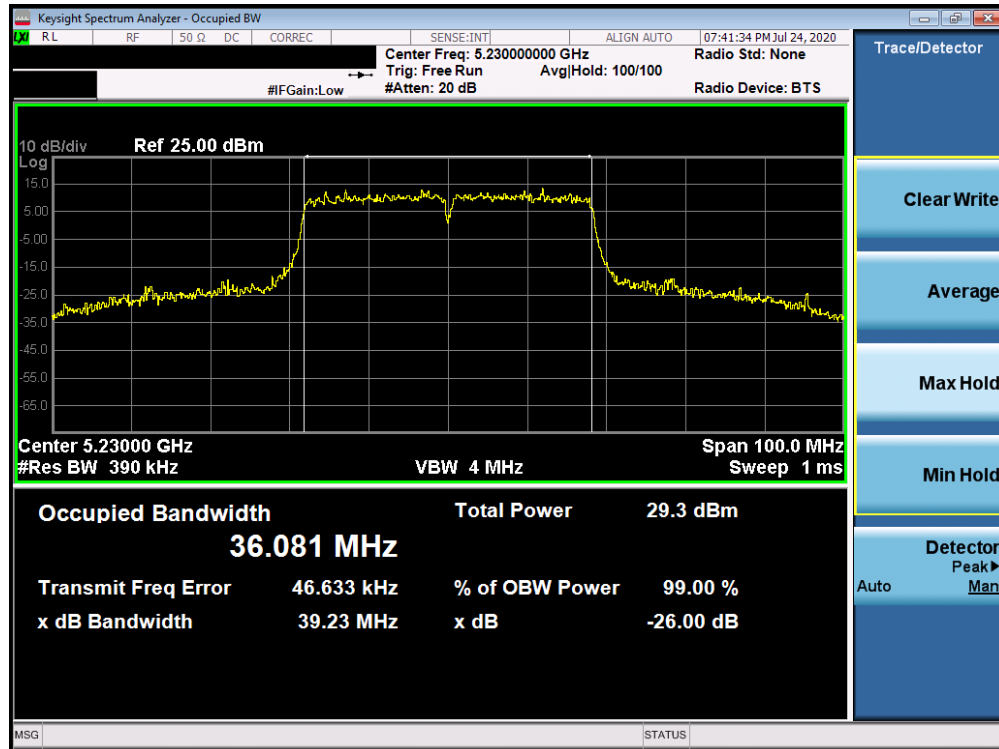


Plot 7-162. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11ax (UNII Band 1) – Ch. 48)

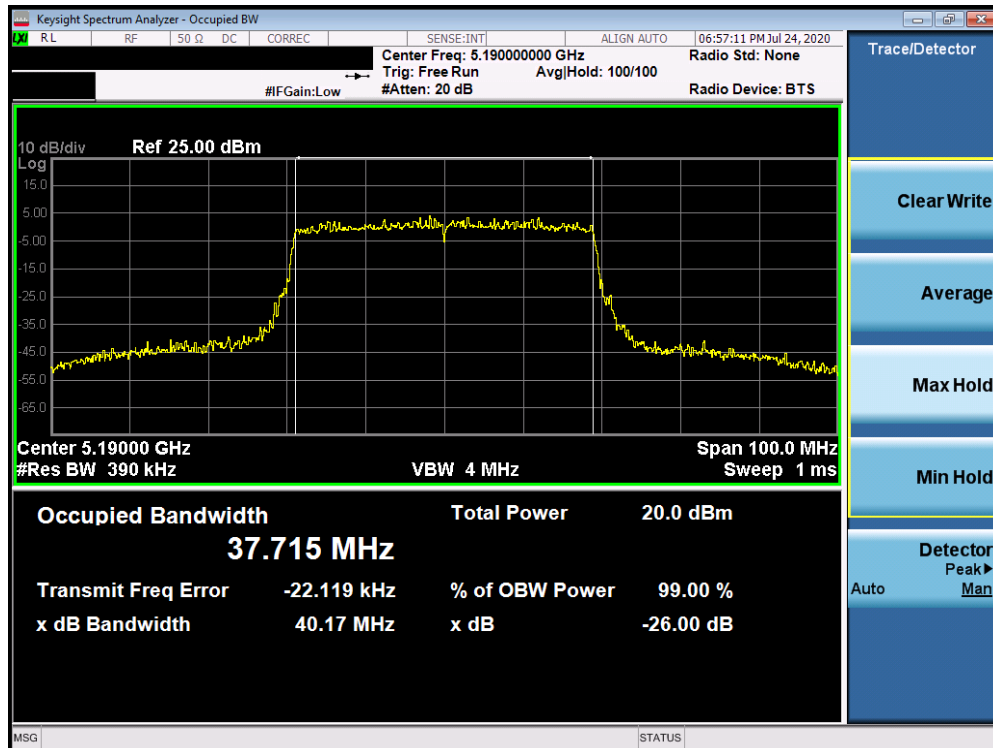


Plot 7-163. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11n (UNII Band 1) – Ch. 38)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 102 of 344

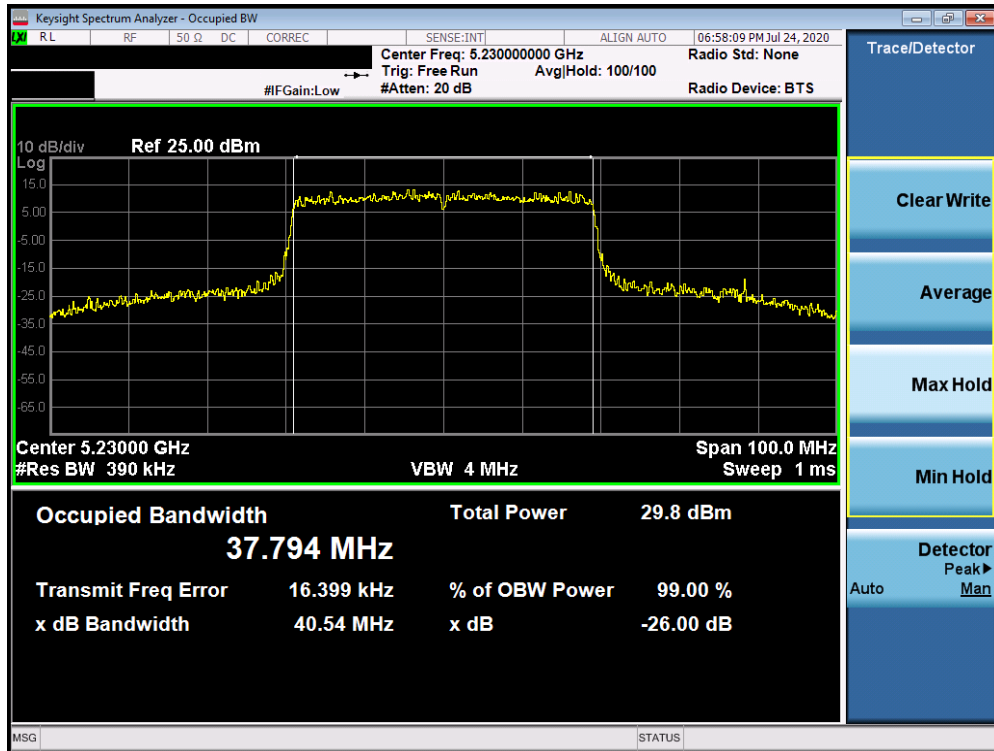


Plot 7-164. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11n (UNII Band 1) – Ch. 46)

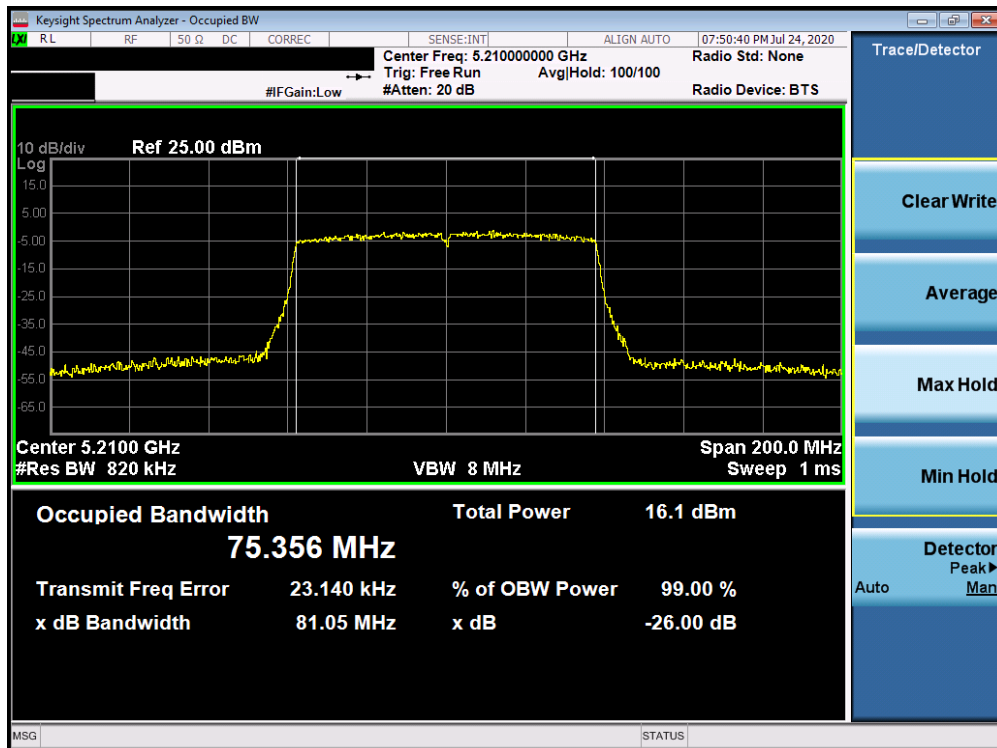


Plot 7-165. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11ax (UNII Band 1) – Ch. 38)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 103 of 344

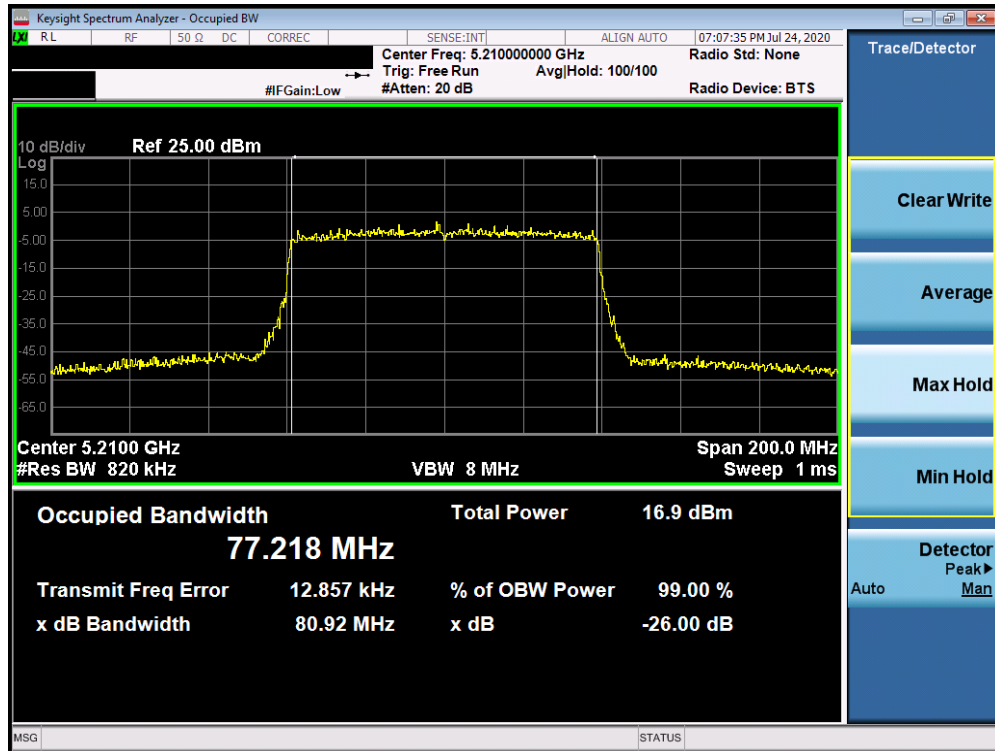


Plot 7-166. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11ax (UNII Band 1) – Ch. 46)

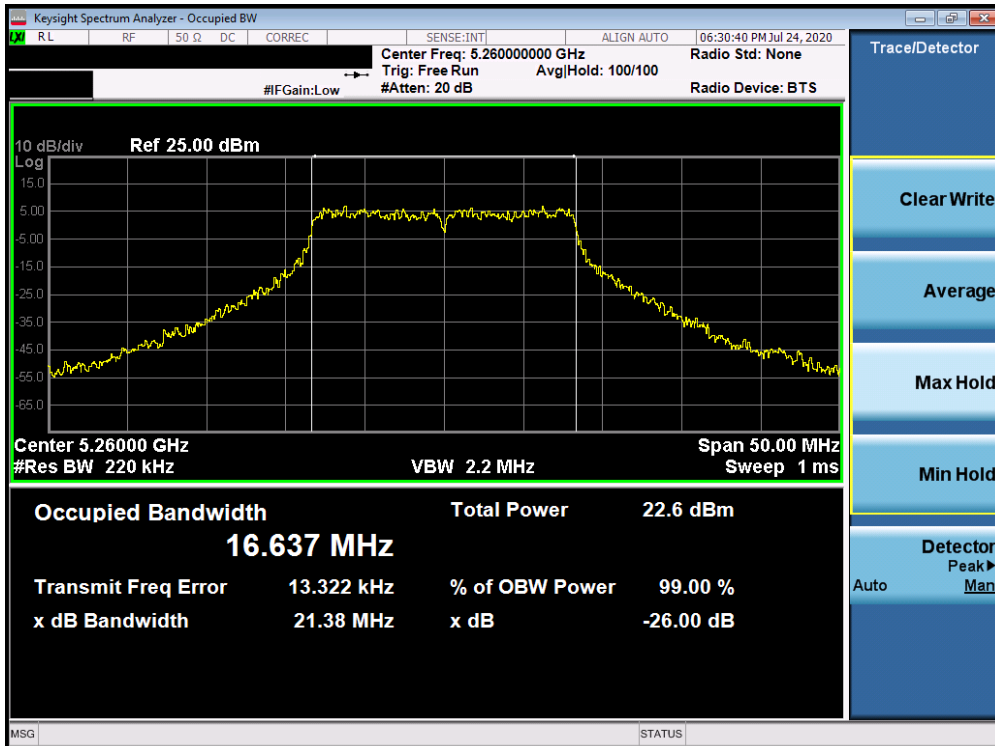


Plot 7-167. 26dB Bandwidth Plot ANT6 (80MHz BW 802.11ac (UNII Band 1) – Ch. 42)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 104 of 344

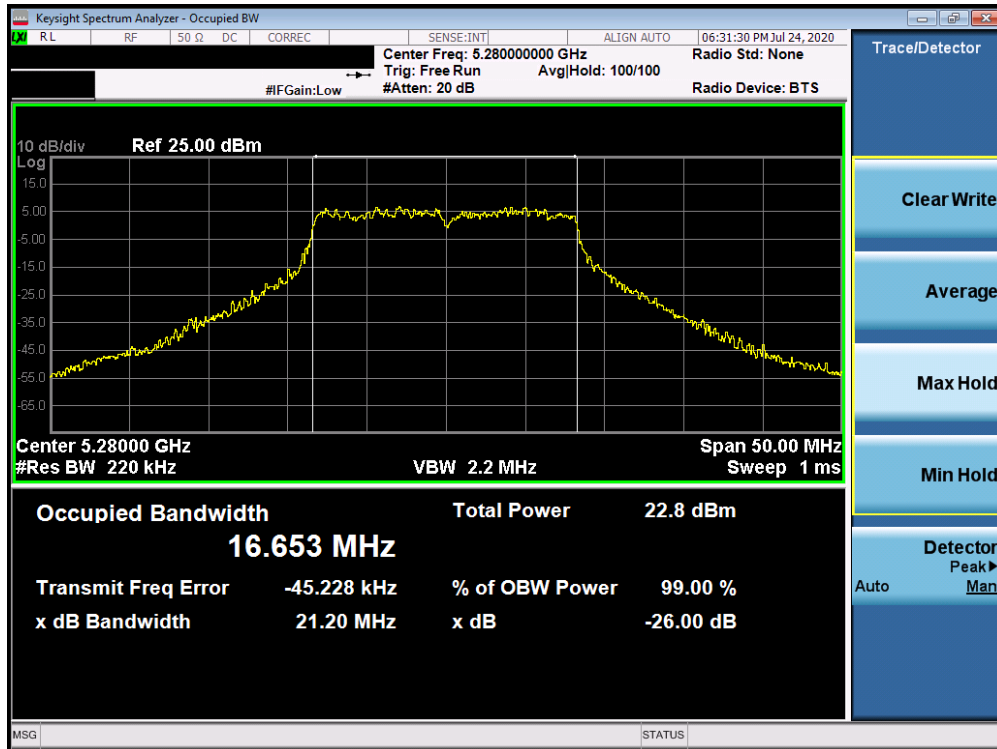


Plot 7-168. 26dB Bandwidth Plot ANT6 (80MHz BW 802.11ax (UNII Band 1) – Ch. 42)

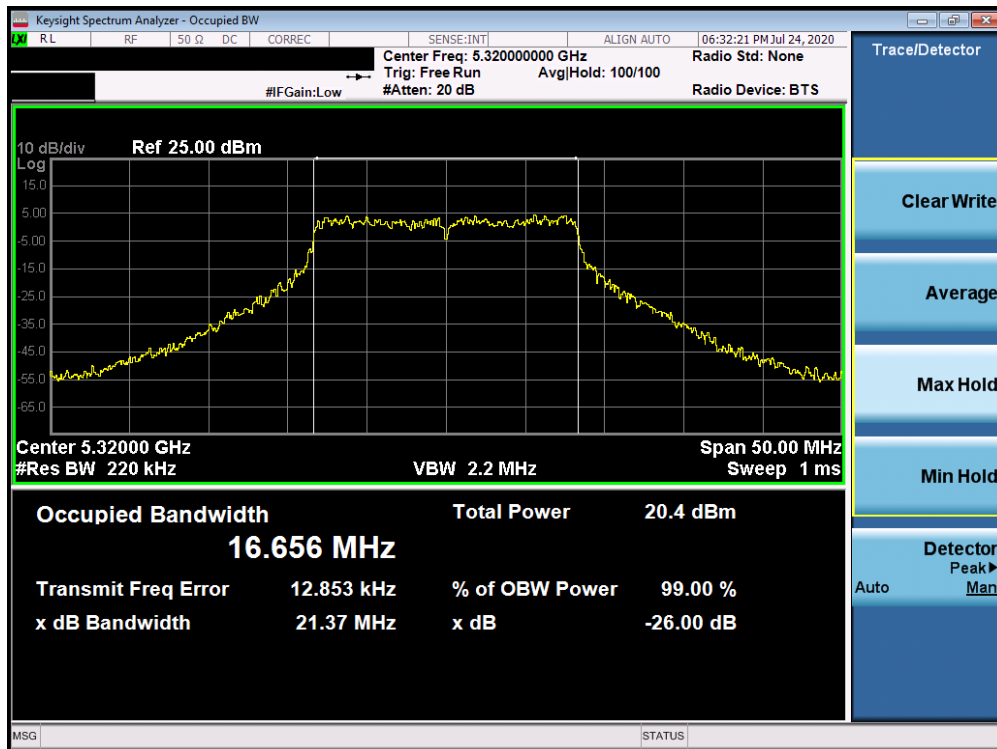


Plot 7-169. 26dB Bandwidth Plot ANT6 (802.11a (UNII Band 2A) – Ch. 52)

FCC ID: A3LSMH204V	PCTEST Provided to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 105 of 344

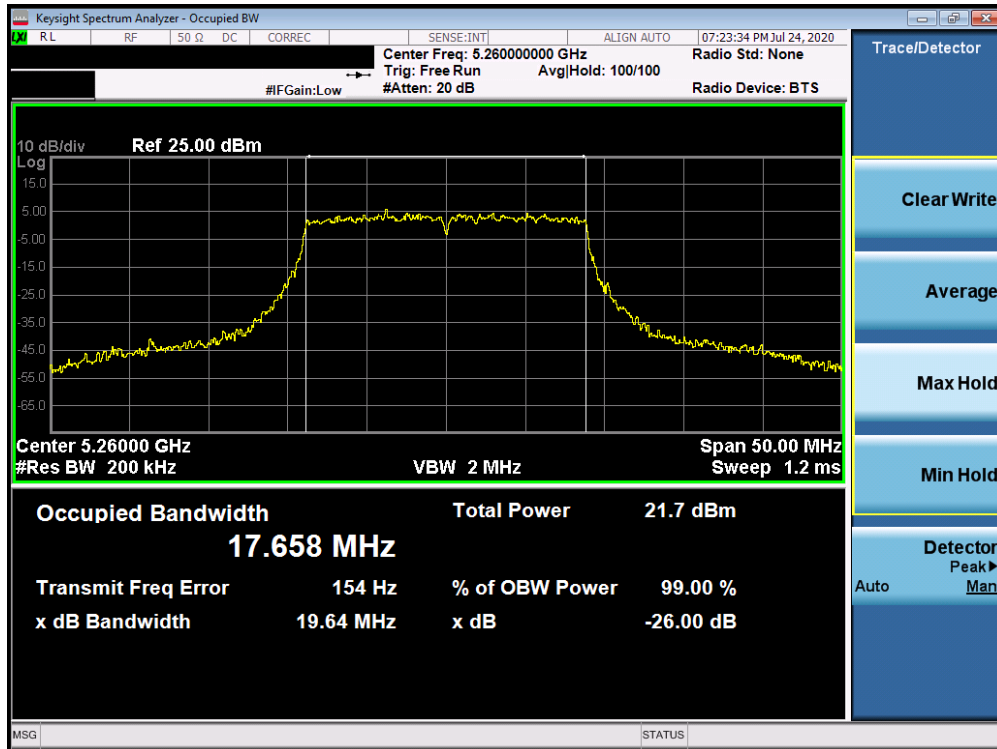


Plot 7-170. 26dB Bandwidth Plot ANT6 (802.11a (UNII Band 2A) – Ch. 56)

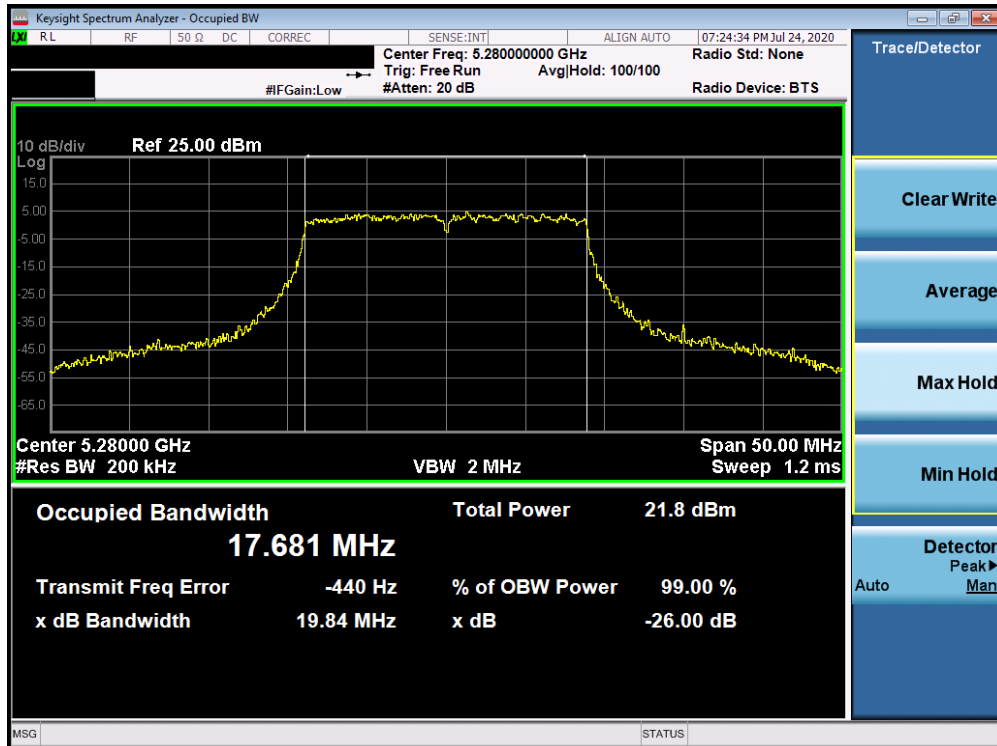


Plot 7-171. 26dB Bandwidth Plot ANT6 (802.11a (UNII Band 2A) – Ch. 64)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 106 of 344

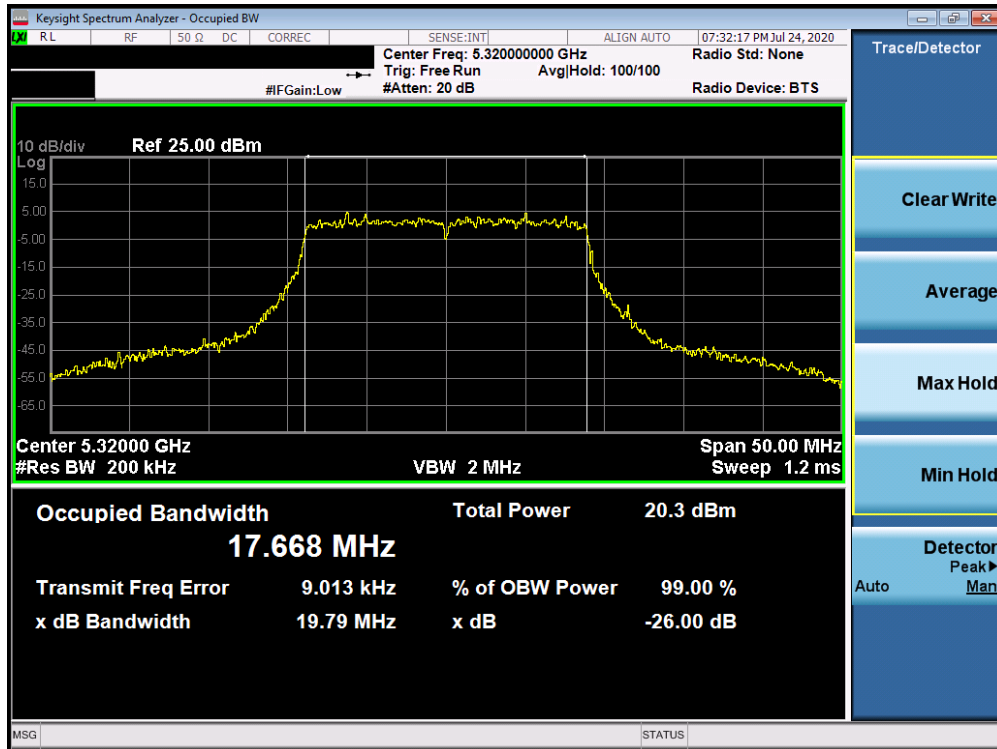


Plot 7-172. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11n (UNII Band 2A) – Ch. 52)

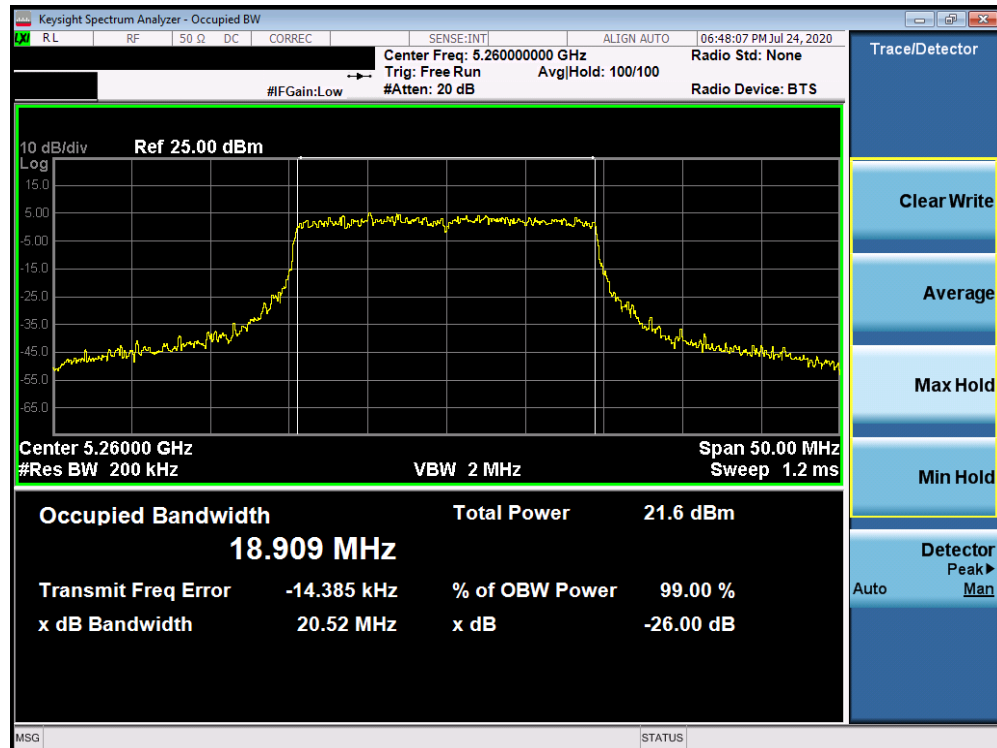


Plot 7-173. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11n (UNII Band 2A) – Ch. 56)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 107 of 344

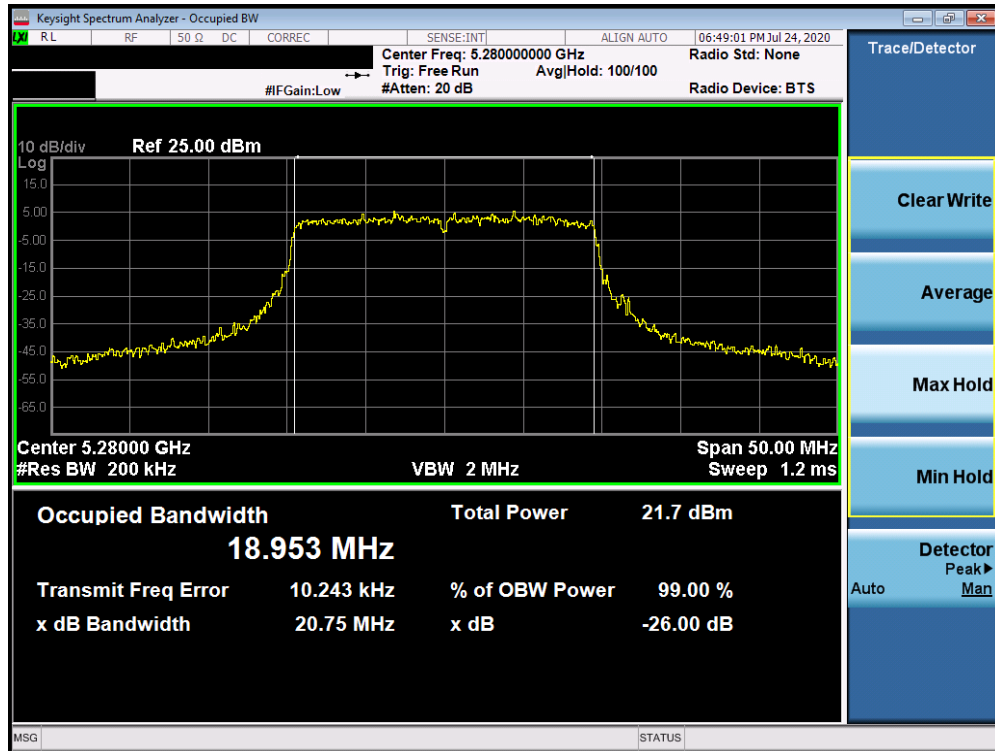


Plot 7-174. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11n (UNII Band 2A) – Ch. 64)

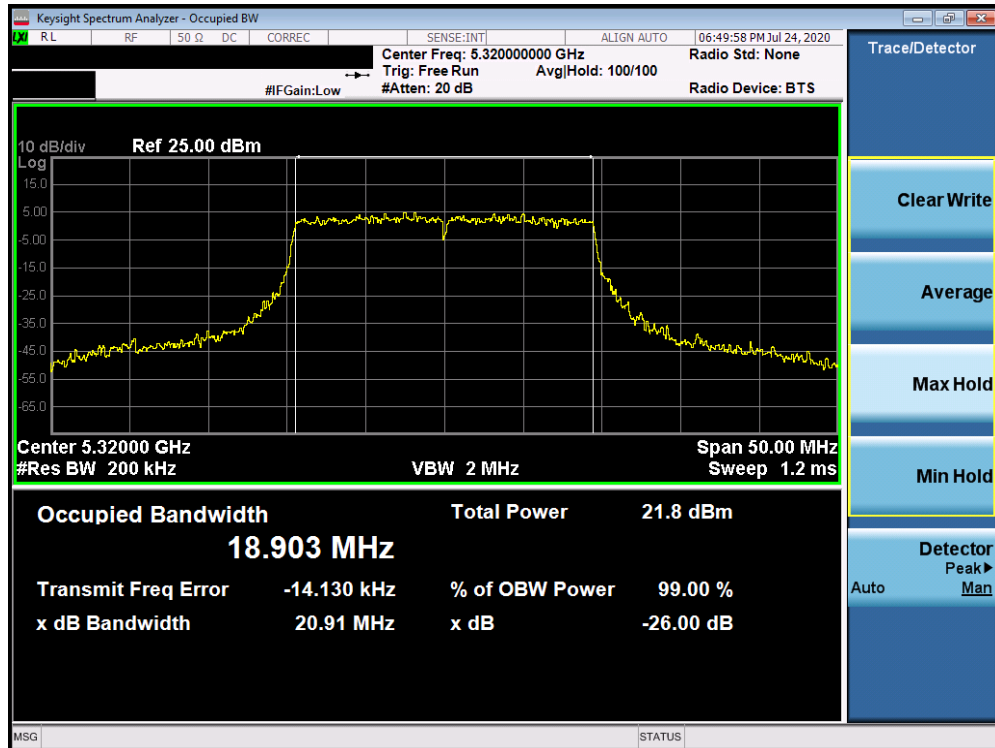


Plot 7-175. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11ax (UNII Band 2A) – Ch. 52)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 108 of 344

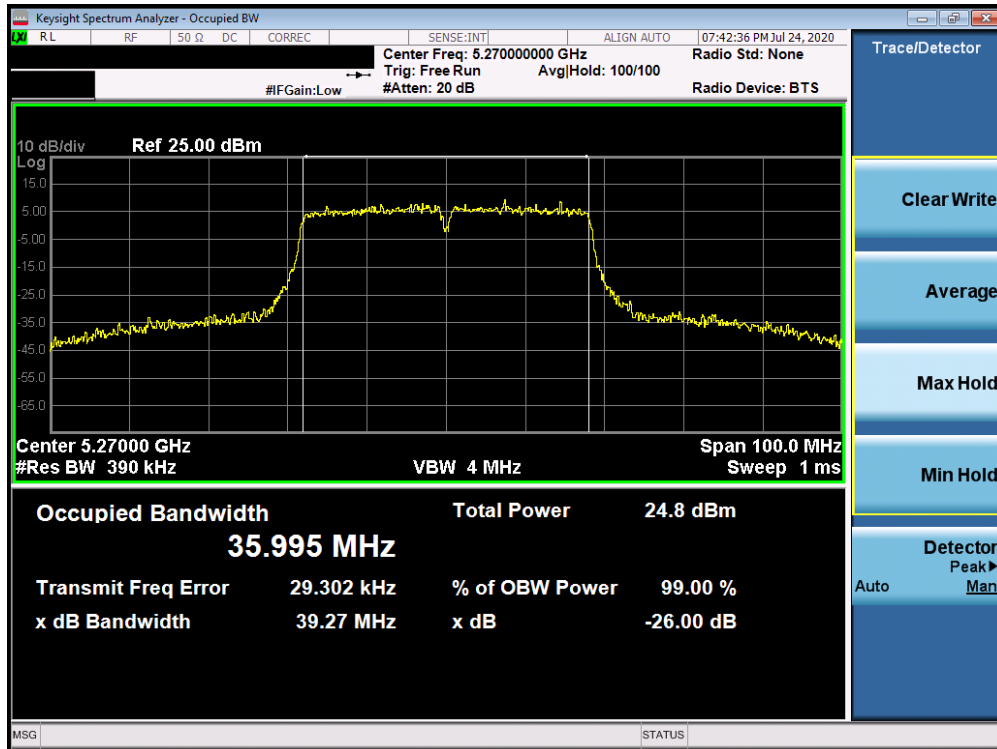


Plot 7-176. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11ax (UNII Band 2A) – Ch. 56)

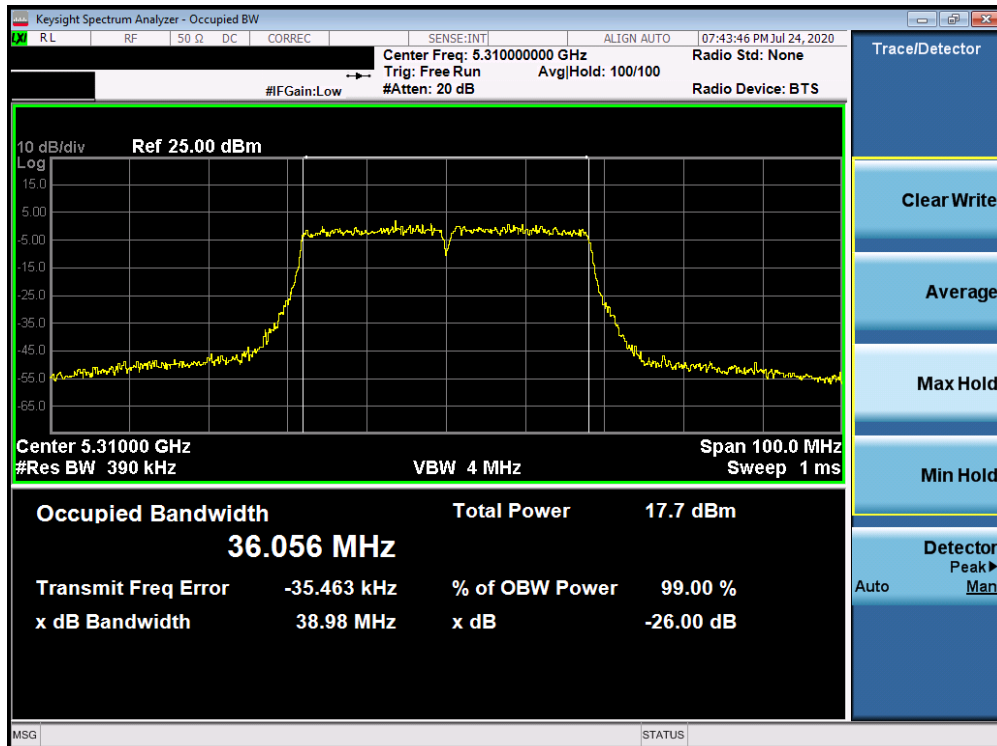


Plot 7-177. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11ax (UNII Band 2A) – Ch. 64)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 109 of 344

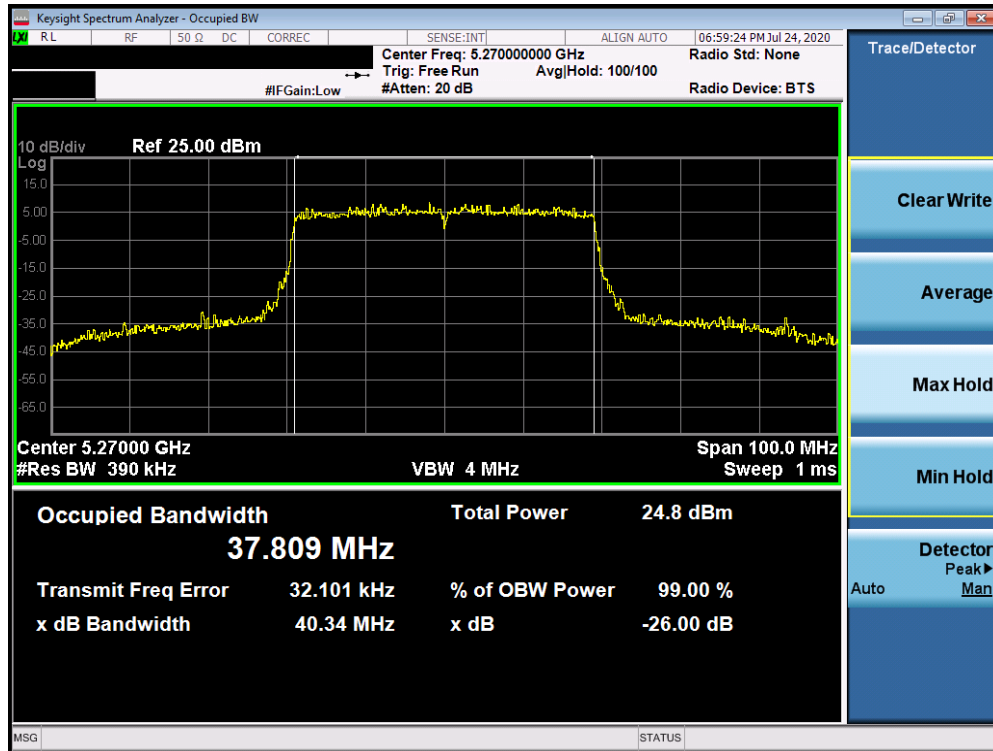


Plot 7-178. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11n (UNII Band 2A) – Ch. 54)

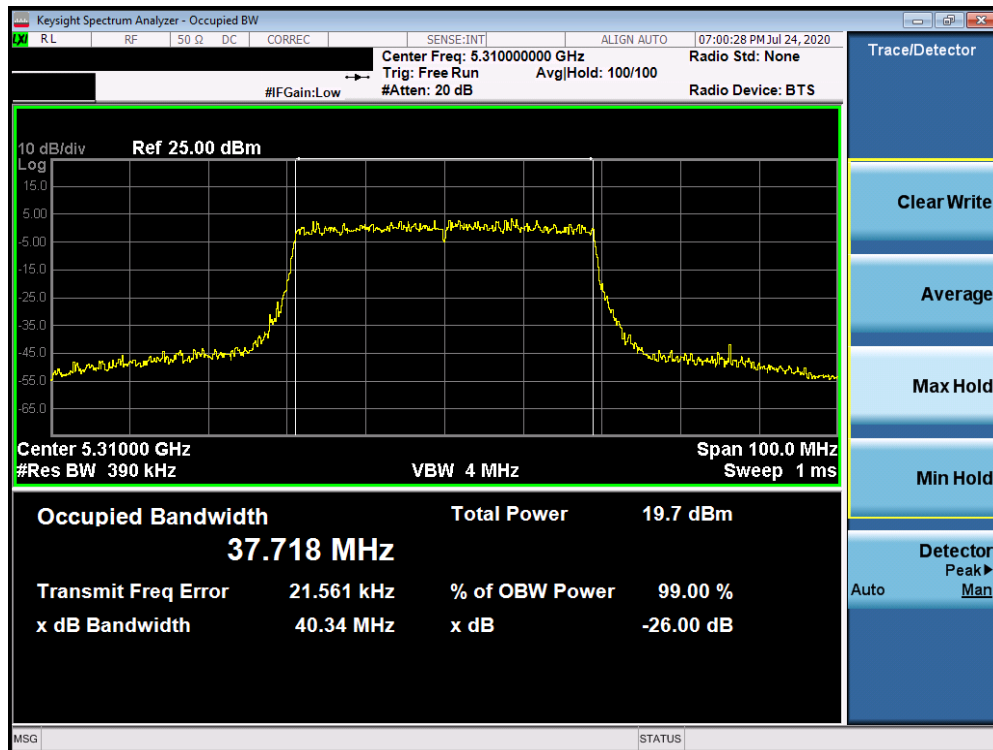


Plot 7-179. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11n (UNII Band 2A) – Ch. 62)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 110 of 344

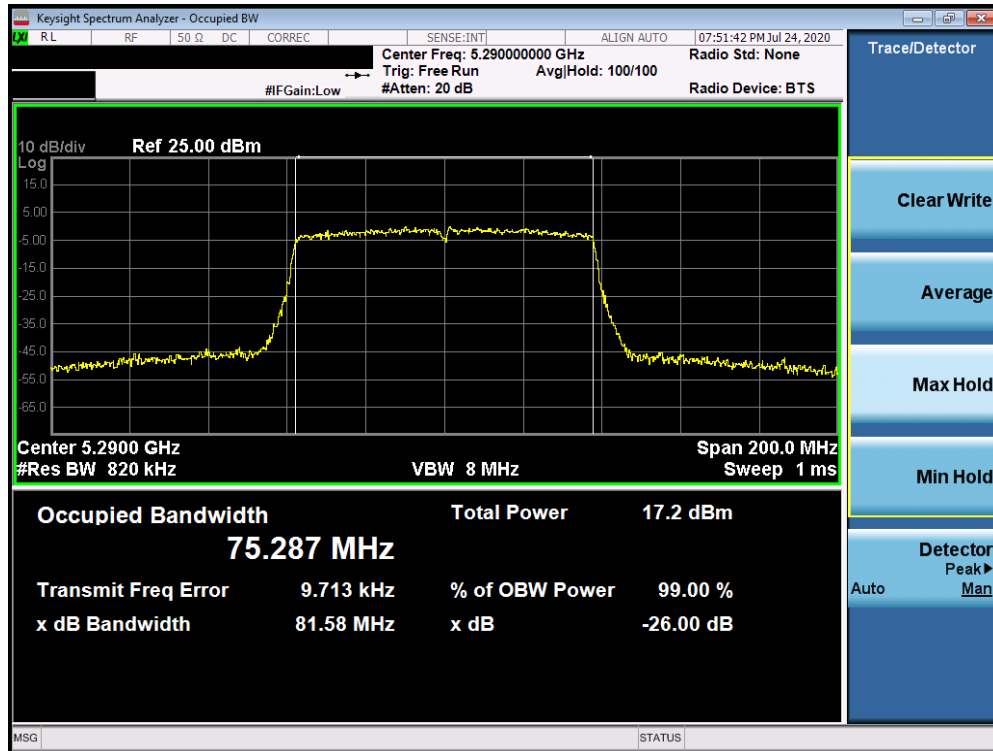


Plot 7-180. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11ax (UNII Band 2a) – Ch. 54)

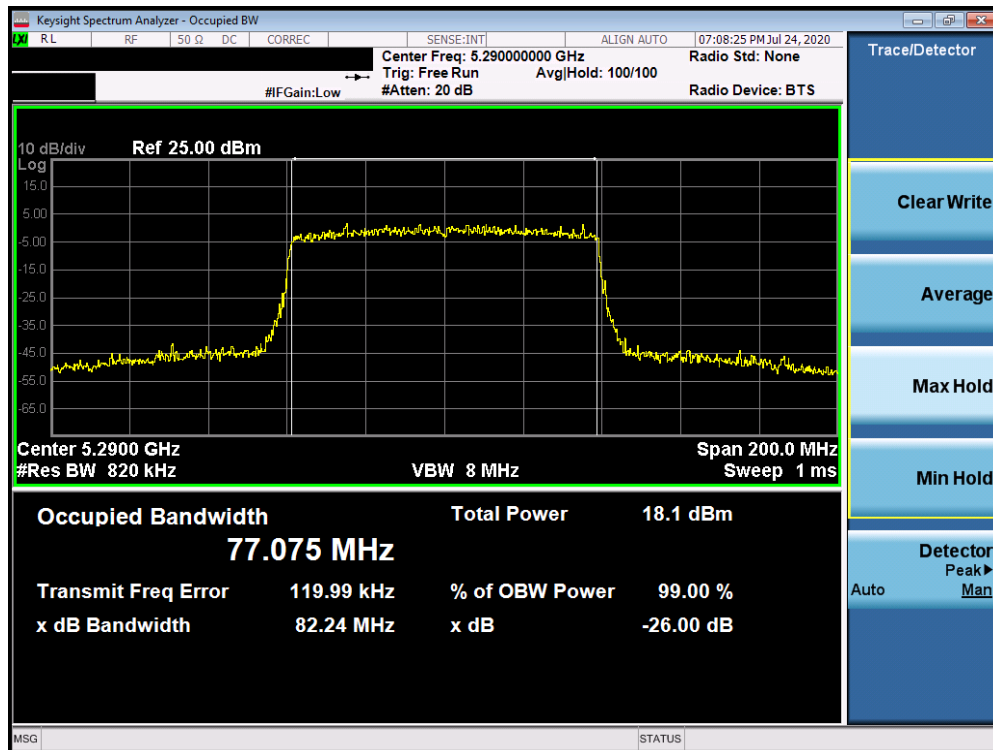


Plot 7-181. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11ax (UNII Band 2a) – Ch. 62)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 111 of 344

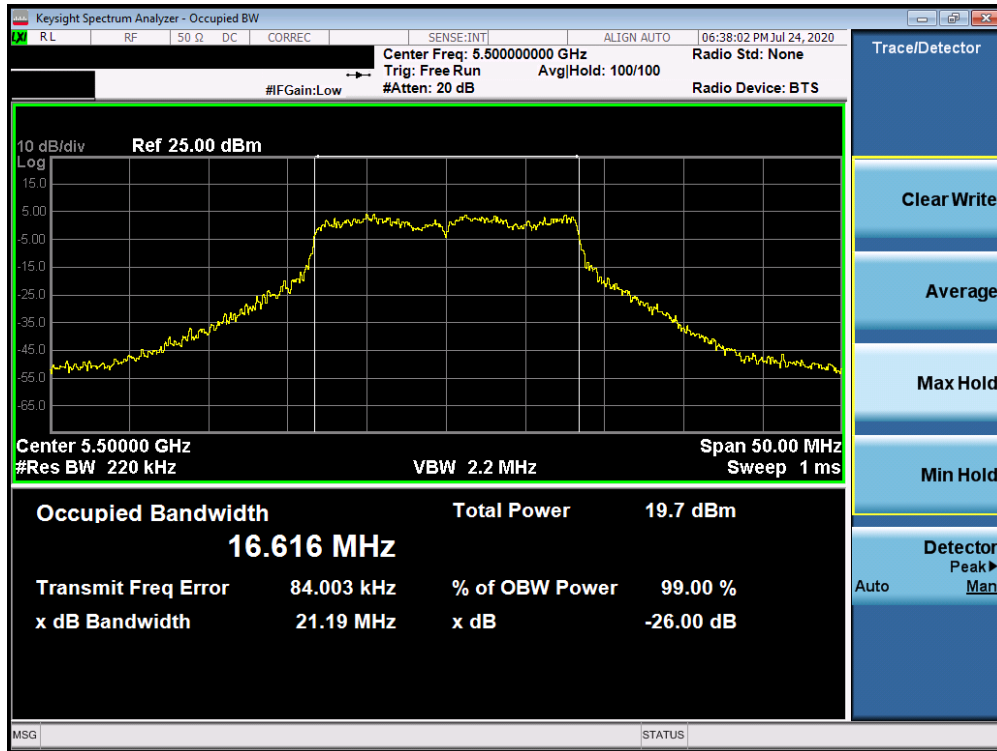


Plot 7-182. 26dB Bandwidth Plot ANT6 (80MHz BW 802.11ac (UNII Band 2A) – Ch. 58)

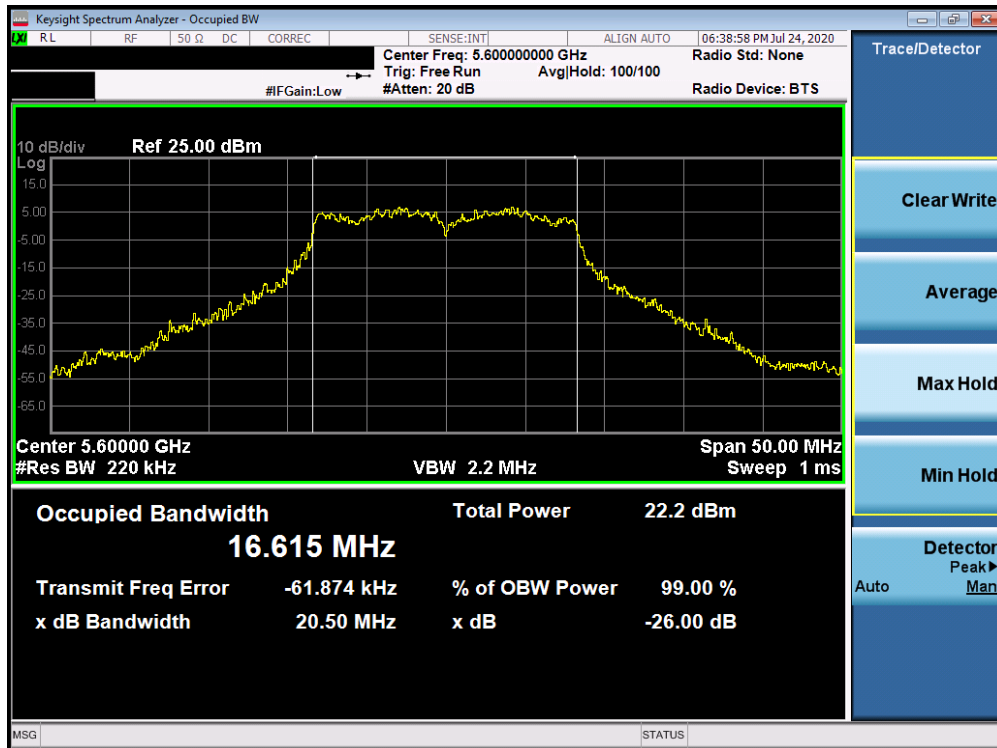


Plot 7-183. 26dB Bandwidth Plot ANT6 (80MHz BW 802.11ax (UNII Band 2A) – Ch. 58)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 112 of 344

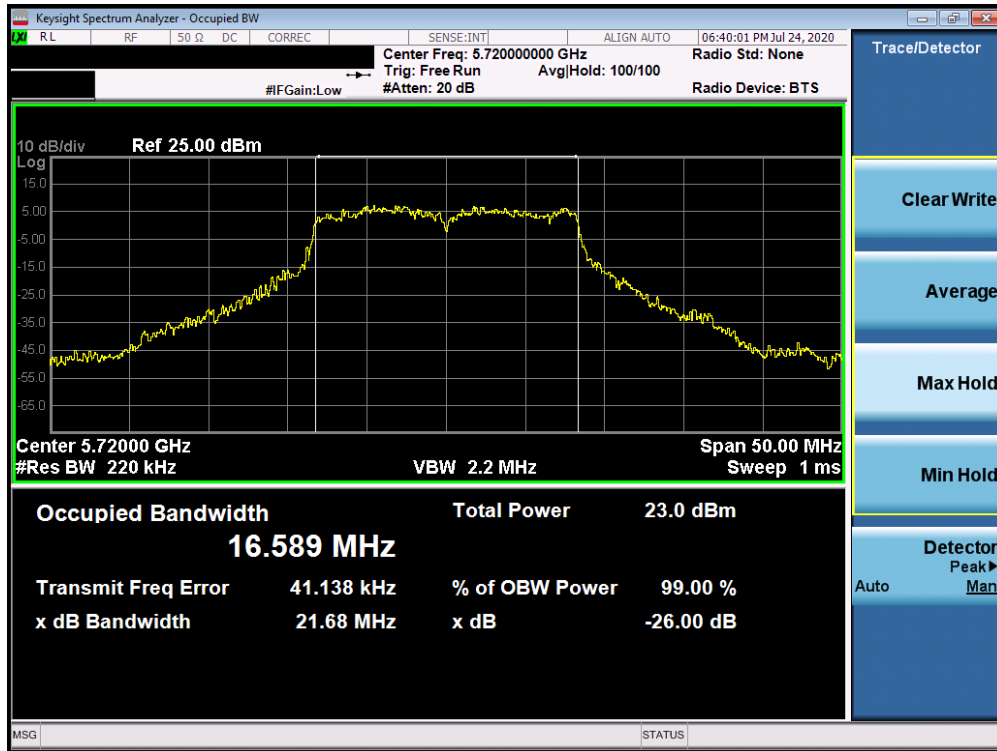


Plot 7-184. 26dB Bandwidth Plot ANT6 (802.11a (UNII Band 2C) – Ch. 100)

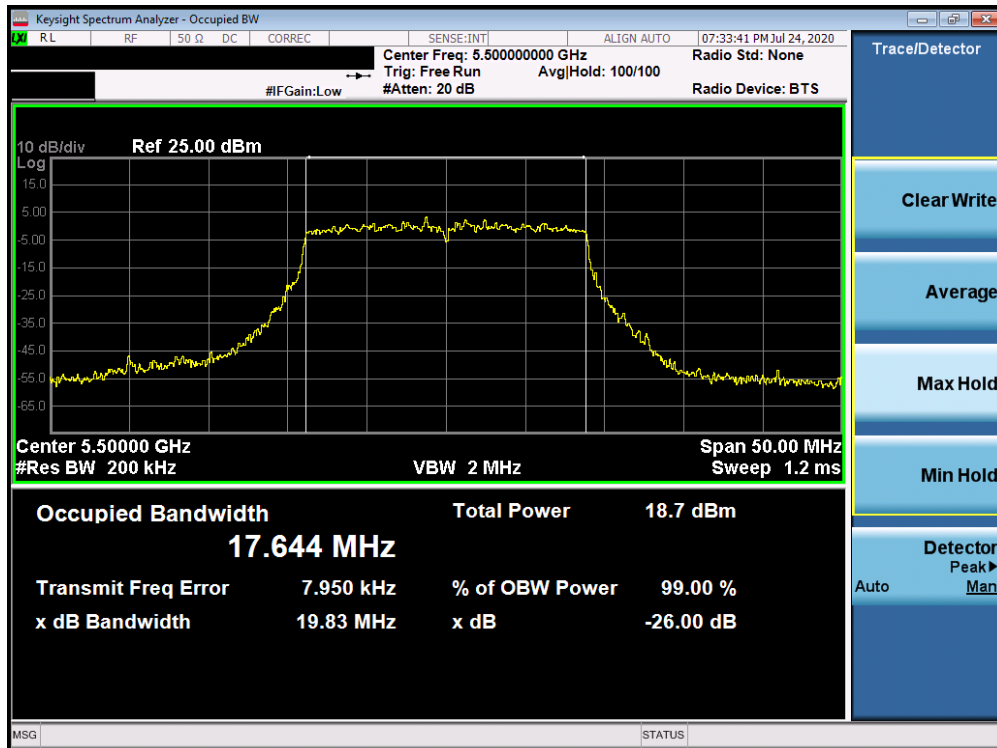


Plot 7-185. 26dB Bandwidth Plot ANT6 (802.11a (UNII Band 2C) – Ch. 120)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 113 of 344

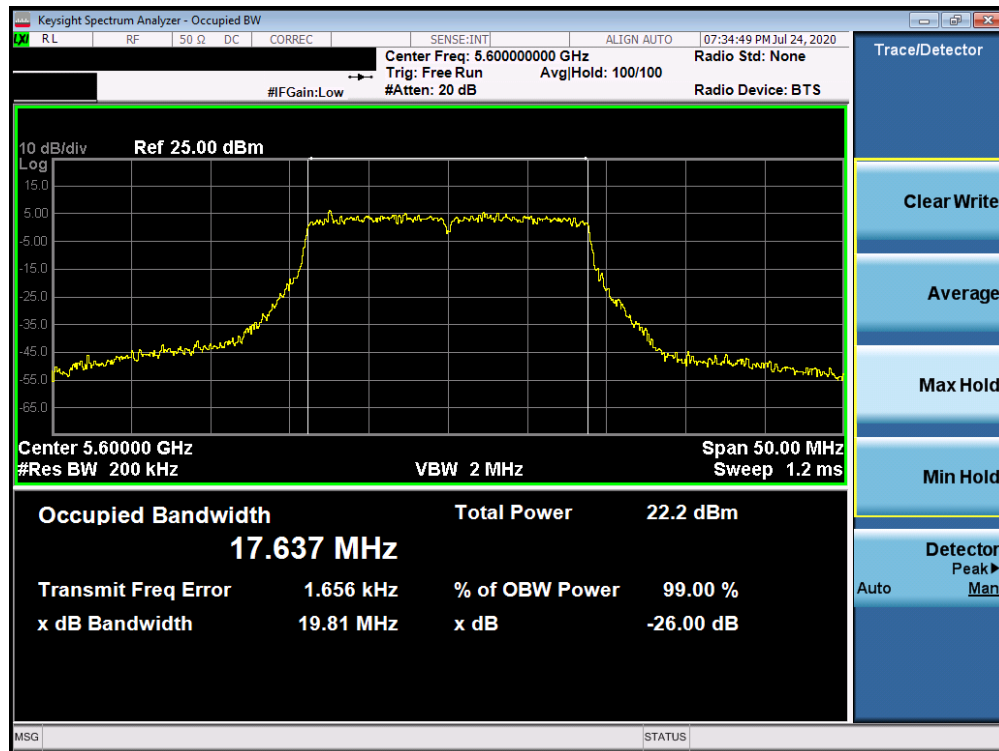


Plot 7-186. 26dB Bandwidth Plot ANT6 (802.11a (UNII Band 2C) – Ch. 144)

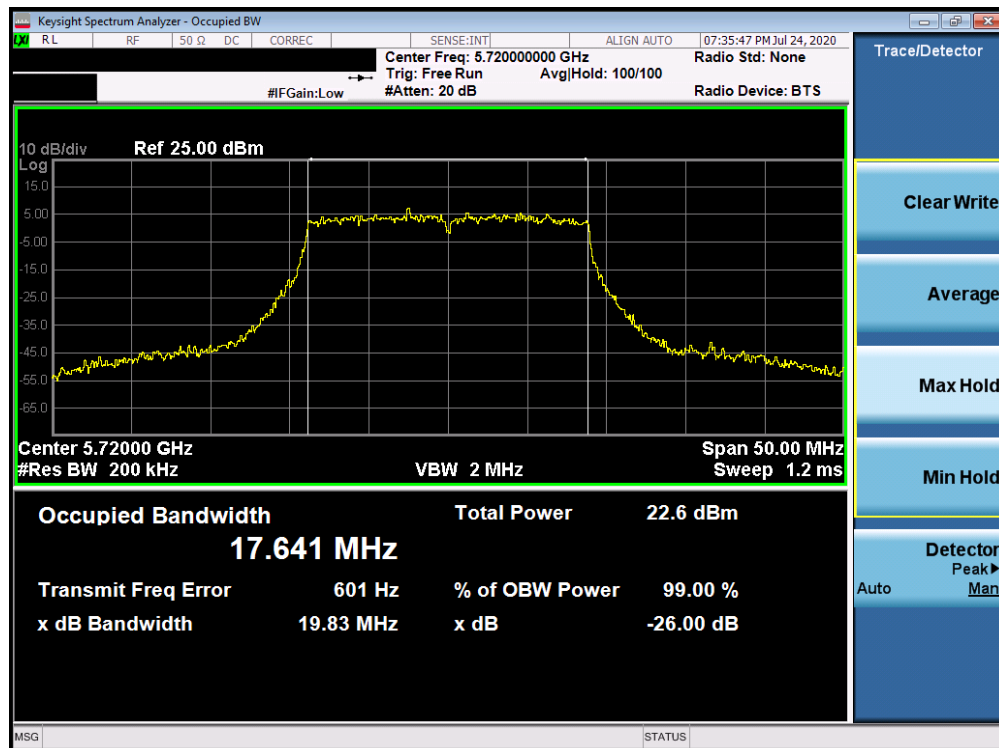


Plot 7-187. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11n (UNII Band 2C) – Ch. 100)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 114 of 344

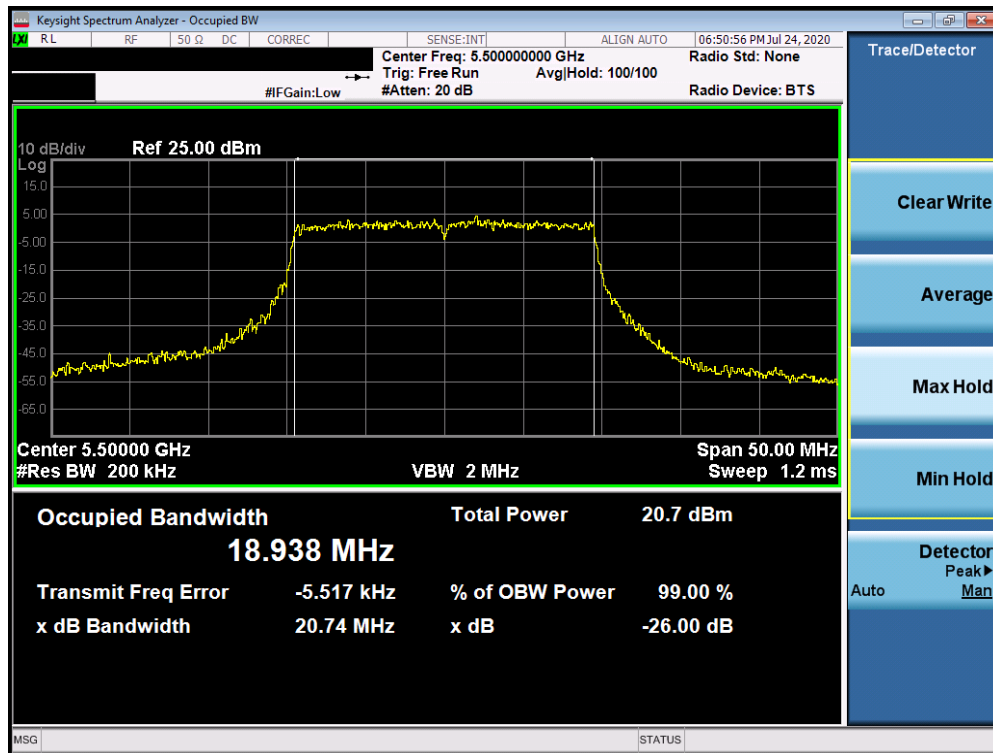


Plot 7-188. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11n (UNII Band 2C) – Ch. 120)

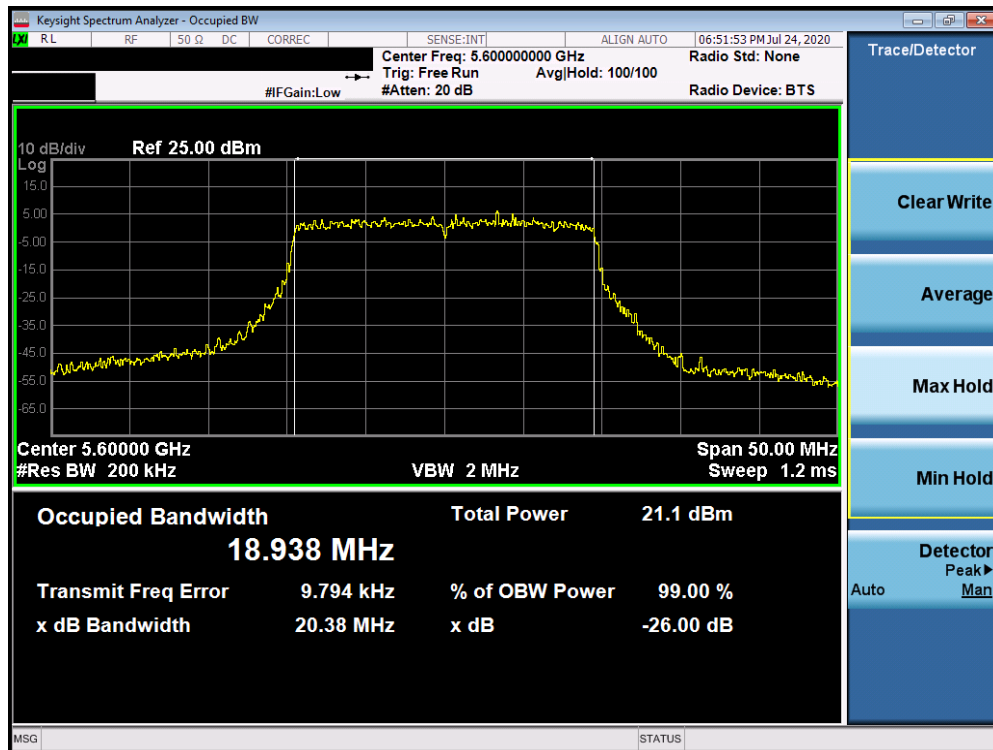


Plot 7-189. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11n (UNII Band 2C) – Ch. 144)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 115 of 344

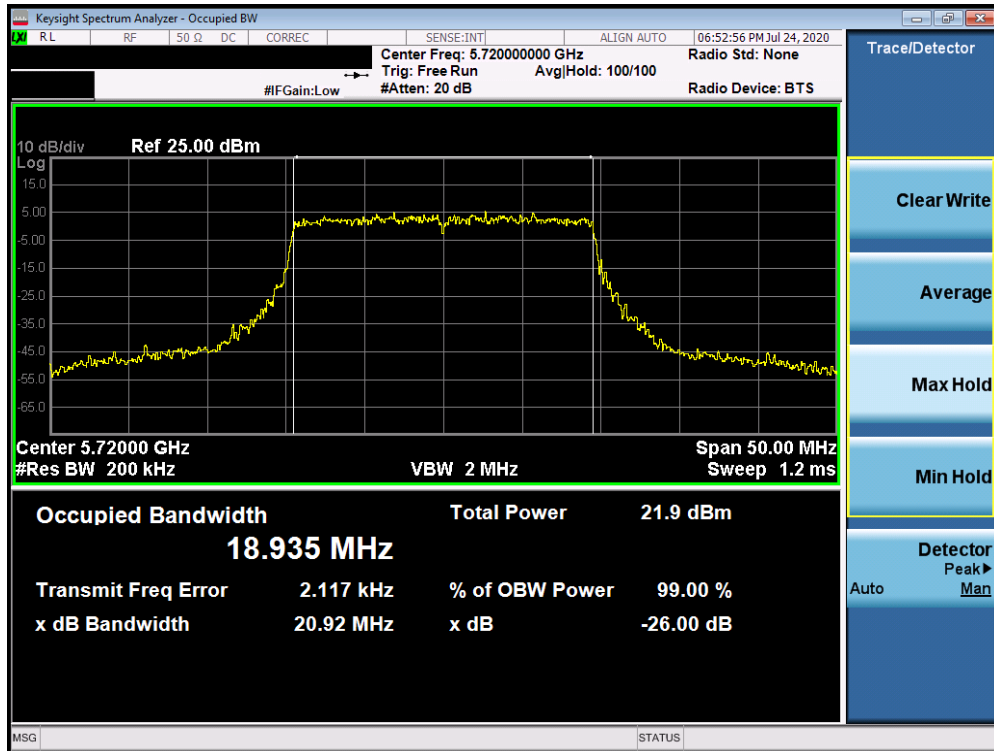


Plot 7-190. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11ax (UNII Band 2C) – Ch. 100)

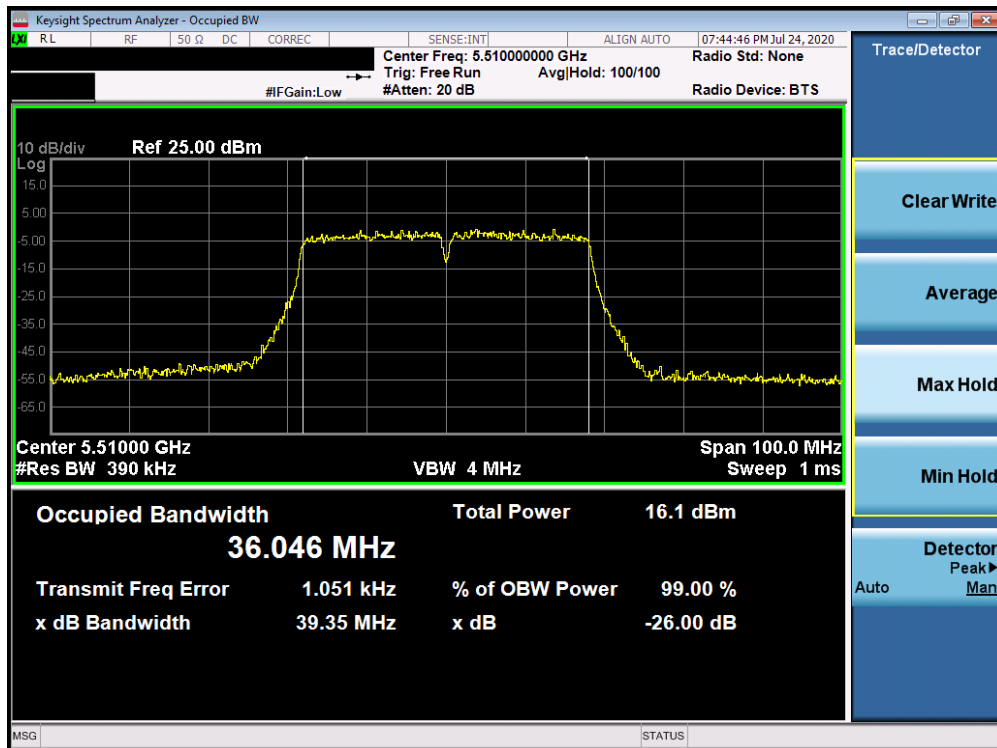


Plot 7-191. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11ax (UNII Band 2C) – Ch. 120)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 116 of 344

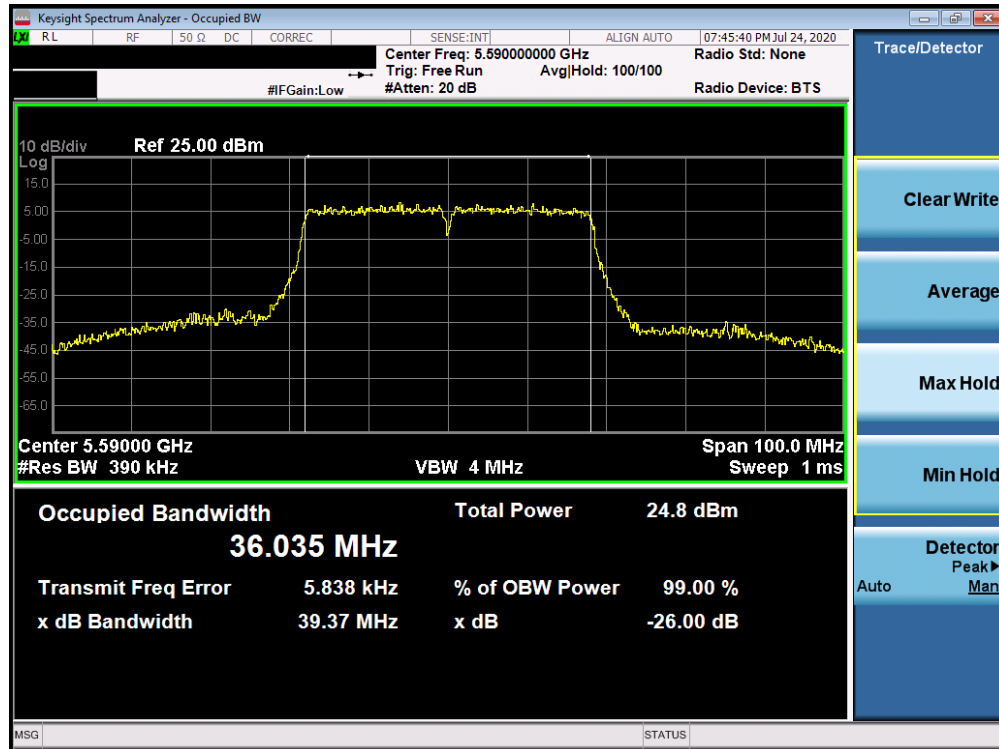


Plot 7-192. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11ax (UNII Band 2C) – Ch. 144)

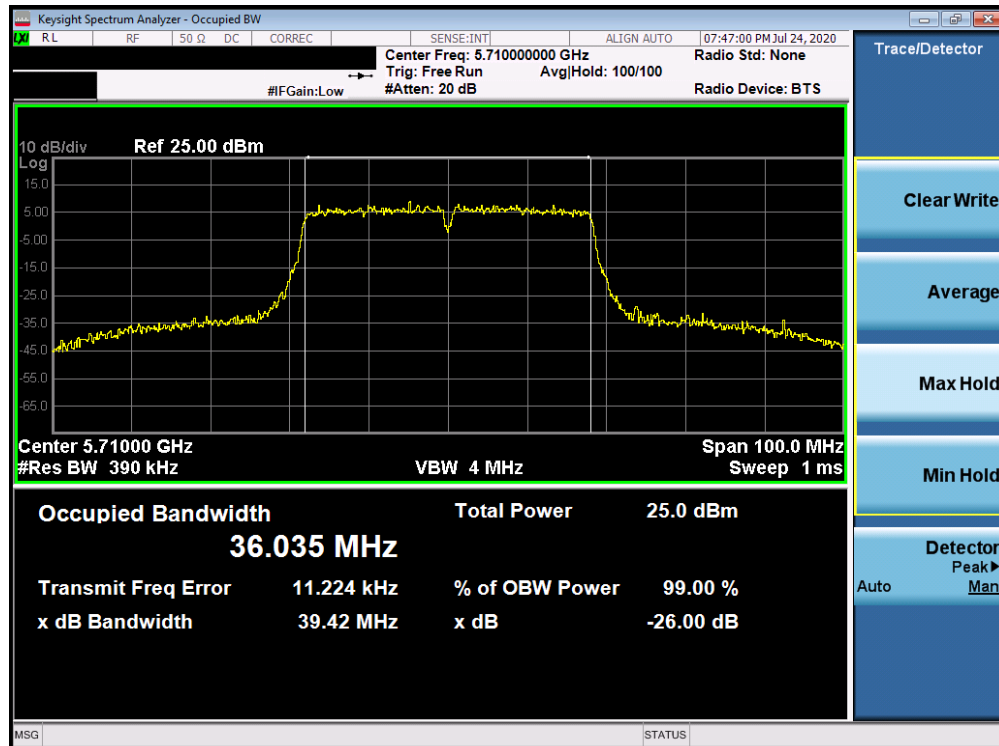


Plot 7-193. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11n (UNII Band 2C) – Ch. 102)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 117 of 344

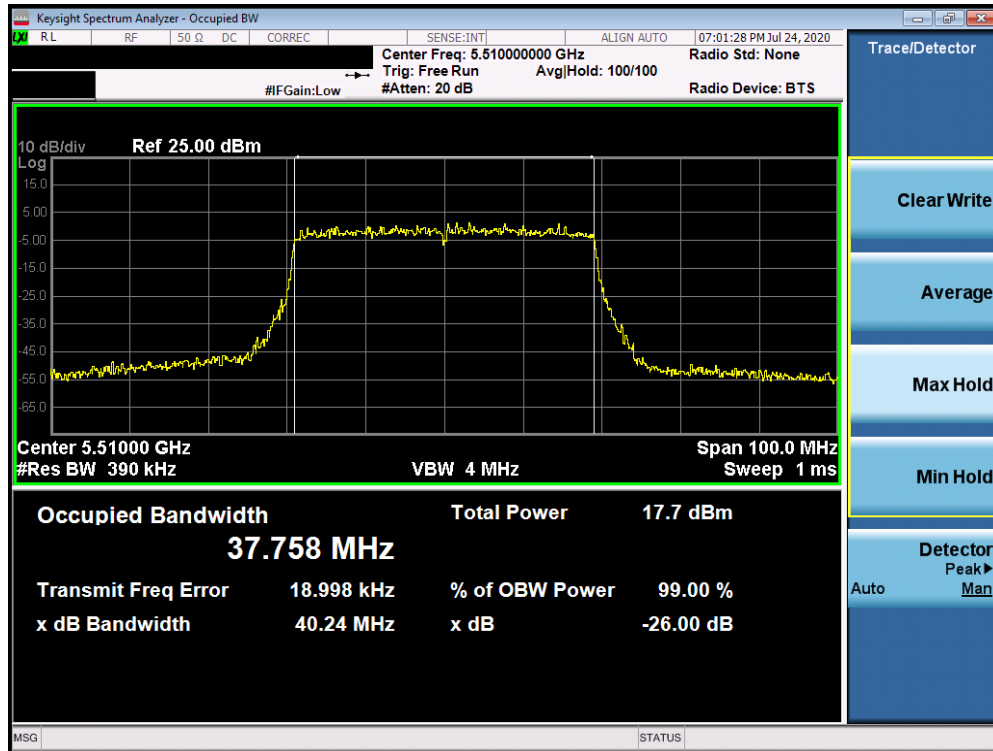


Plot 7-194. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11n (UNII Band 2C) – Ch. 118)

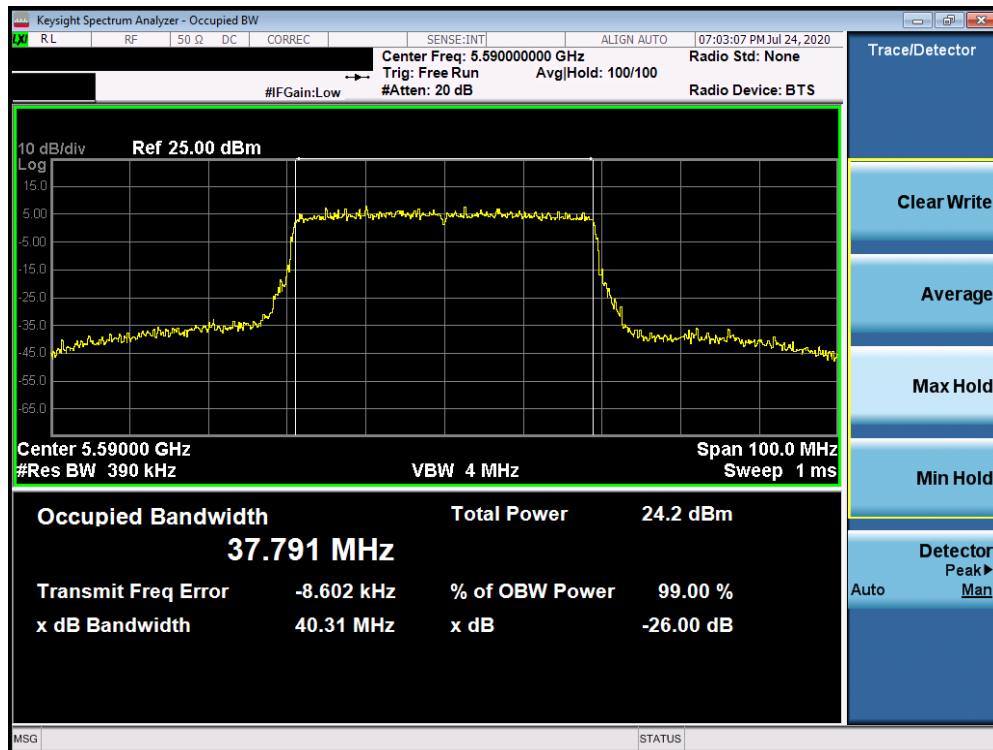


Plot 7-195. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11n (UNII Band 2C) – Ch. 142)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 118 of 344

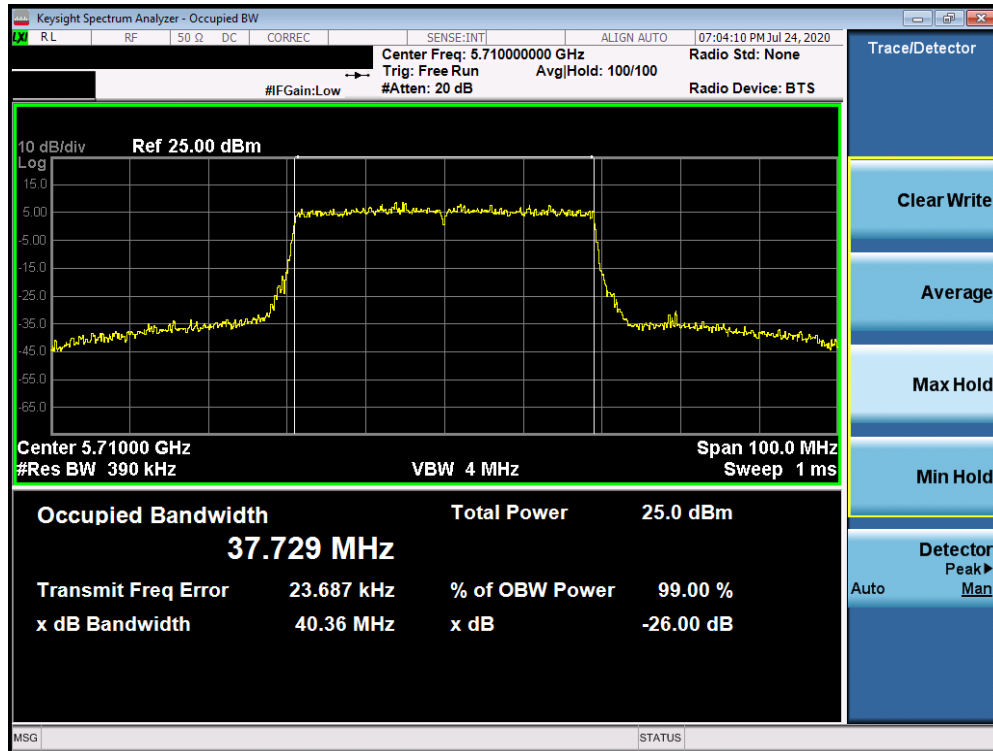


Plot 7-196. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11ax (UNII Band 2C) – Ch. 102)

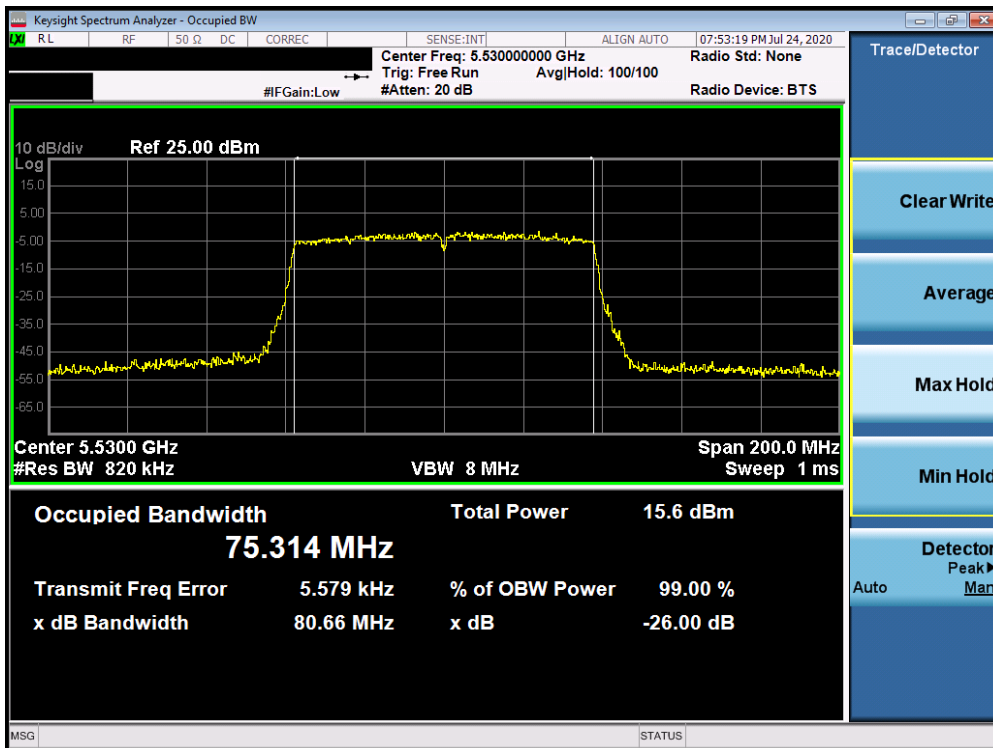


Plot 7-197. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11ax (UNII Band 2C) – Ch. 118)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 119 of 344

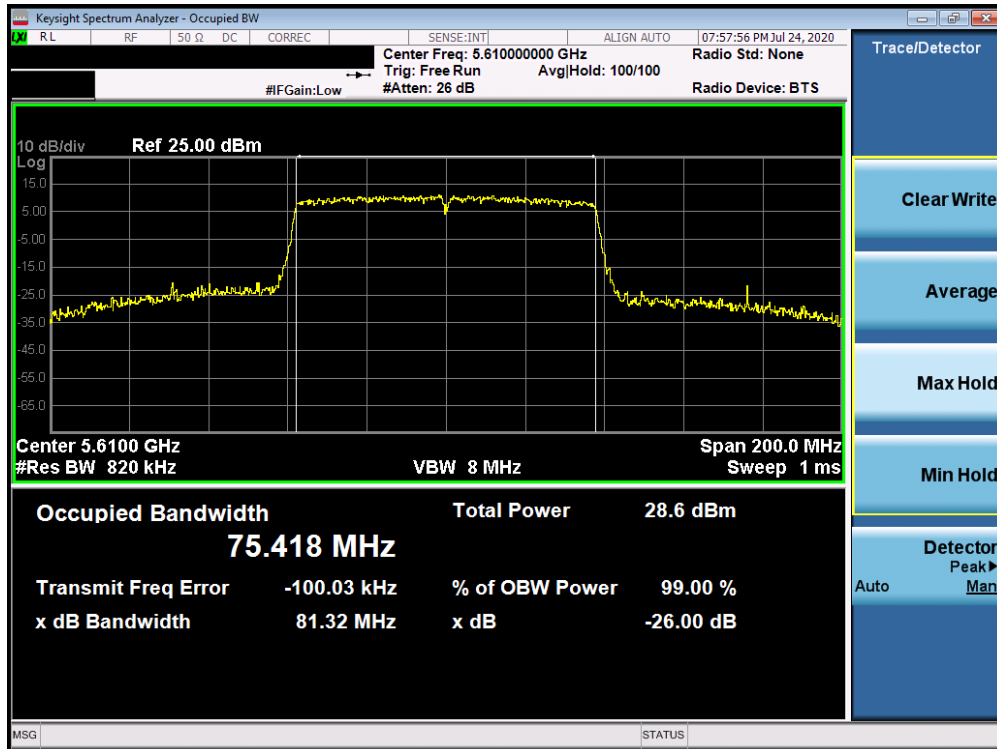


Plot 7-198. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11ax (UNII Band 2C) – Ch. 142)

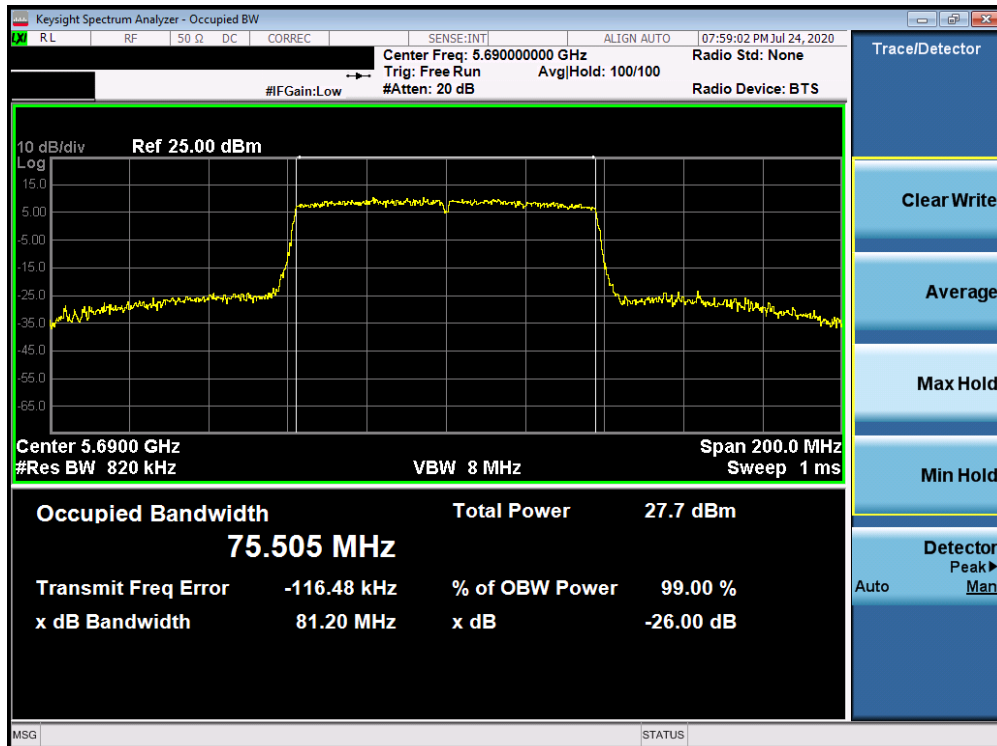


Plot 7-199. 26dB Bandwidth Plot ANT6 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 106)

FCC ID: A3LSMH204V		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 120 of 344

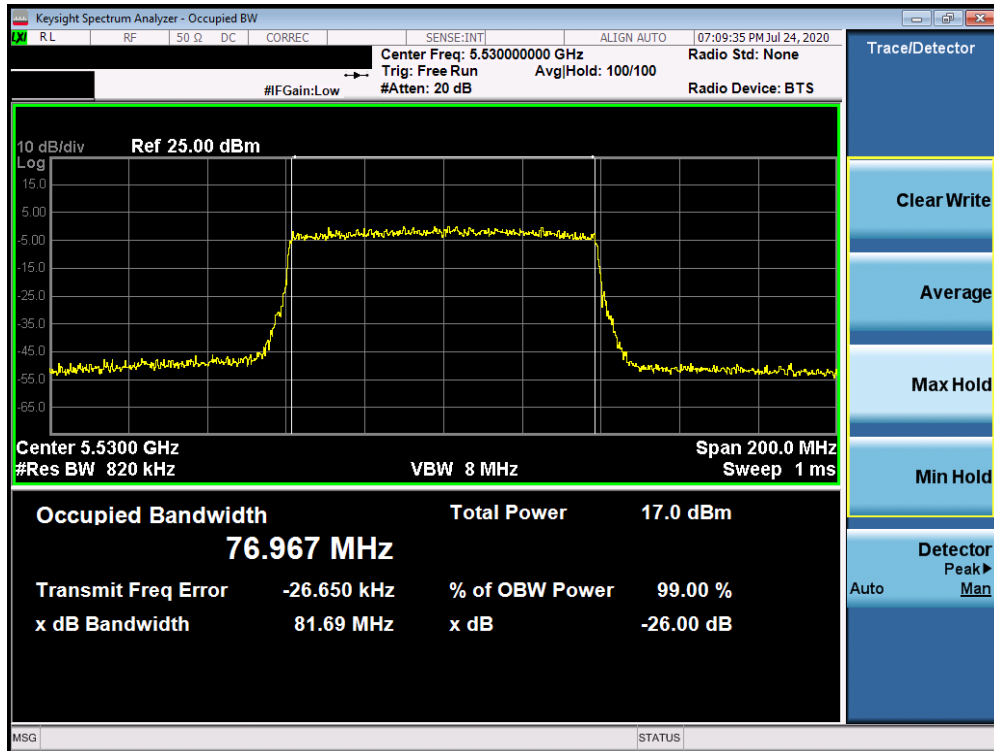


Plot 7-200. 26dB Bandwidth Plot ANT6 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 122)

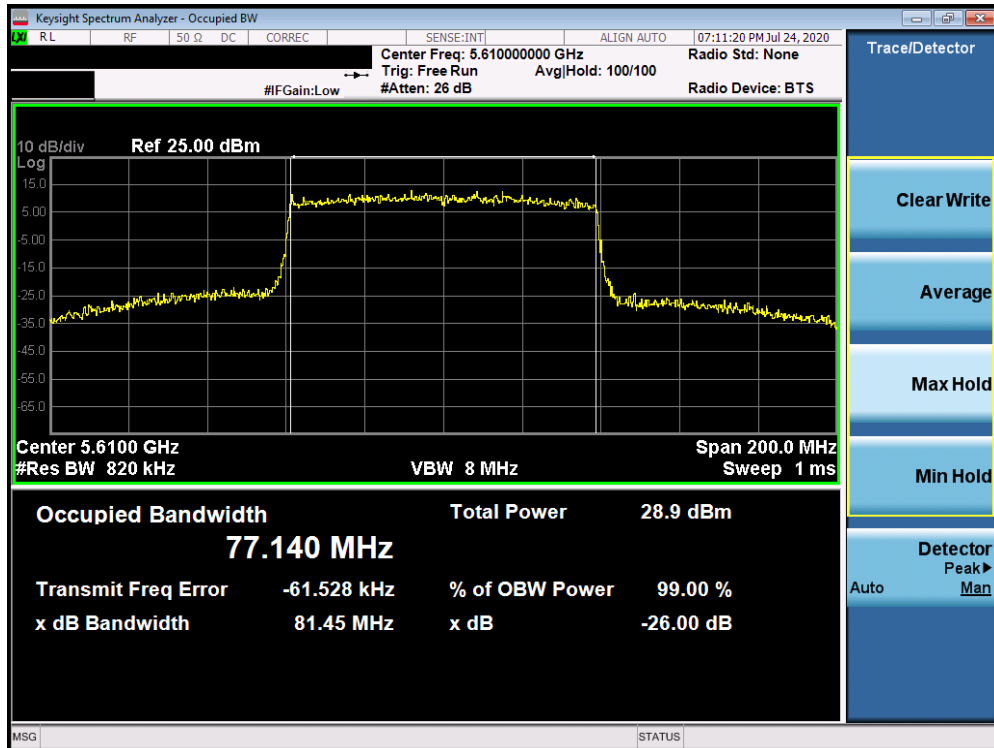


Plot 7-201. 26dB Bandwidth Plot ANT6 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 138)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 121 of 344

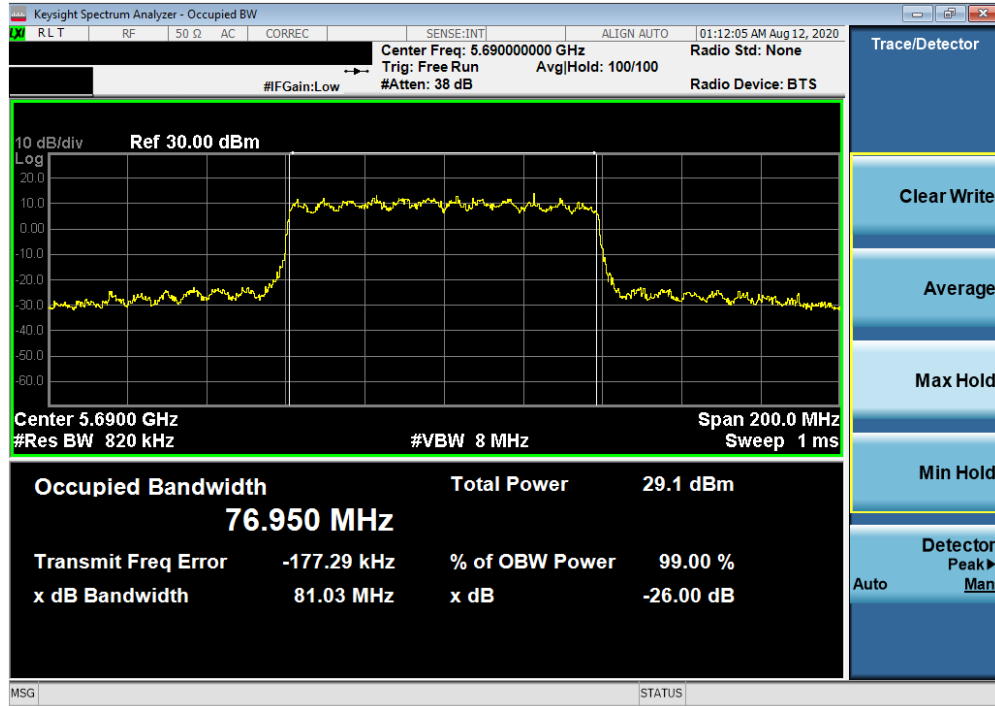


Plot 7-202. 26dB Bandwidth Plot ANT6 (80MHz BW 802.11ax (UNII Band 2C) – Ch. 106)



Plot 7-203. 26dB Bandwidth Plot ANT6 (80MHz BW 802.11ax (UNII Band 2C) – Ch. 122)

FCC ID: A3LSMH204V		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 122 of 344



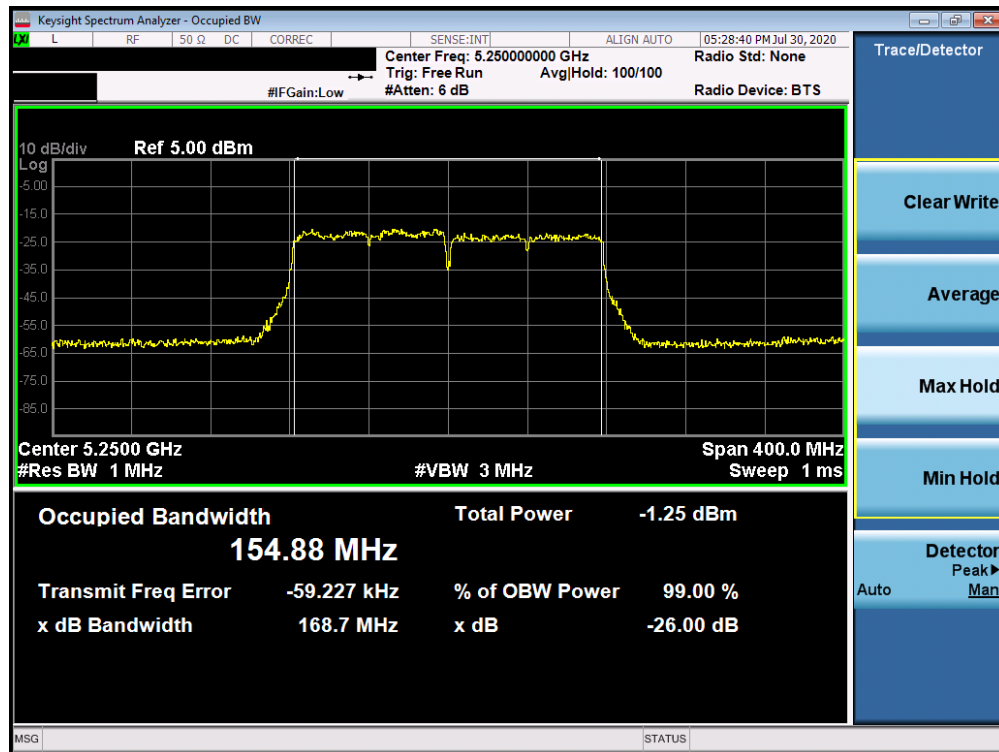
Plot 7-204. 26dB Bandwidth Plot ANT6 (80MHz BW 802.11ax (UNII Band 2C) – Ch. 138)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 123 of 344

MIMO 26dB Bandwidth Measurements 80+80MHz

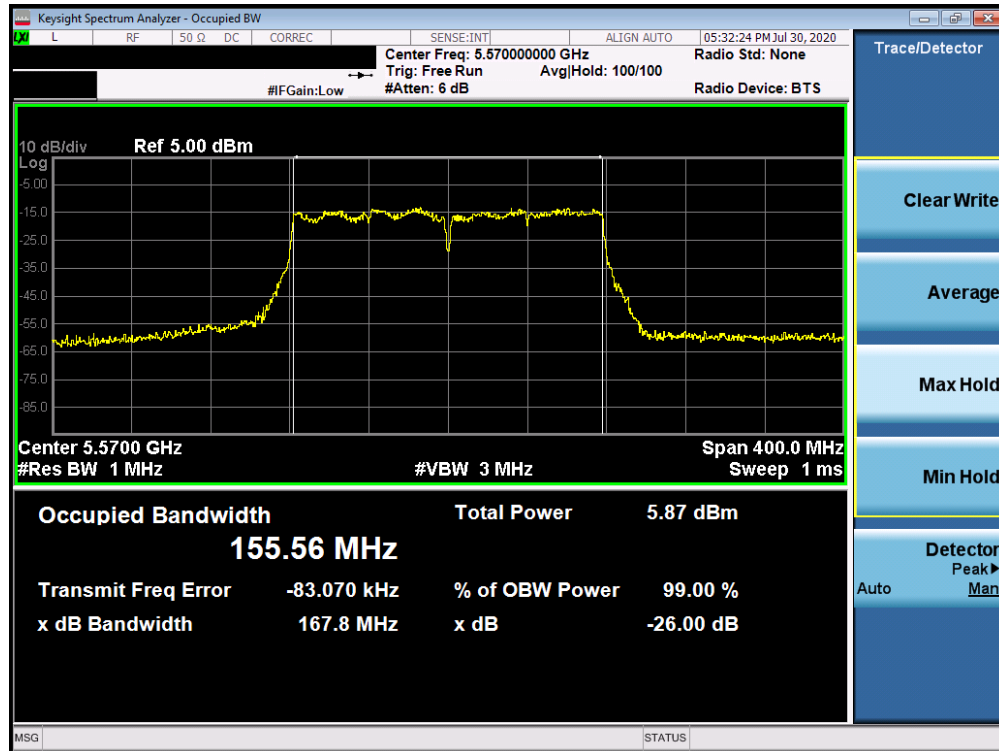
	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured 26dB Bandwidth [MHz]
Band 1	5210	42	ac (80MHz)	29.3/32.5 (MCS0)	168.70
Band 2A	5290	58	ac (80MHz)	29.3/32.5 (MCS0)	
Band 2C	5530	106	ac (80MHz)	29.3/32.5 (MCS0)	167.80
	5610	122	ac (80MHz)	8/8.6 (MCS0)	
Band 1	5210	42	ac (80MHz)	8/8.6 (MCS0)	161.00
Band 2A	5290	58	ac (80MHz)	8/8.6 (MCS0)	
Band 2C	5530	106	ac (80MHz)	8/8.6 (MCS0)	162.40
	5610	122	ac (80MHz)	8/8.6 (MCS0)	

Table 7-6. MIMO Bandwidth Measurements

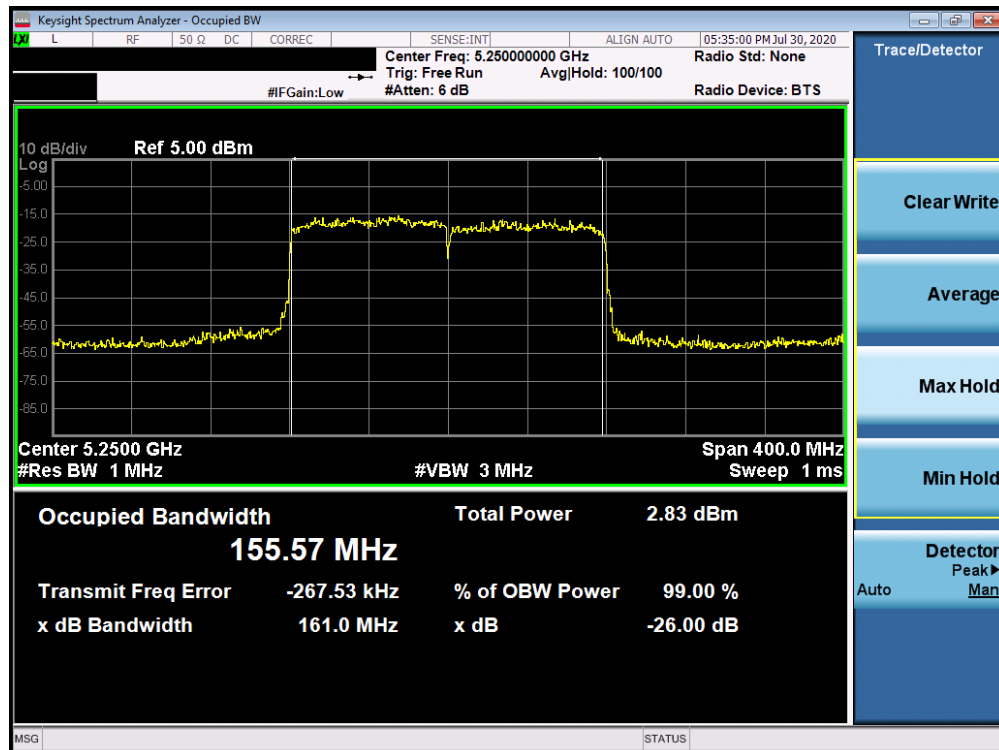


Plot 7-205. 26dB Bandwidth Plot (80MHz BW 802.11ac (UNII Band 1 and 2A) – Ch. 42 and 58)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 124 of 344

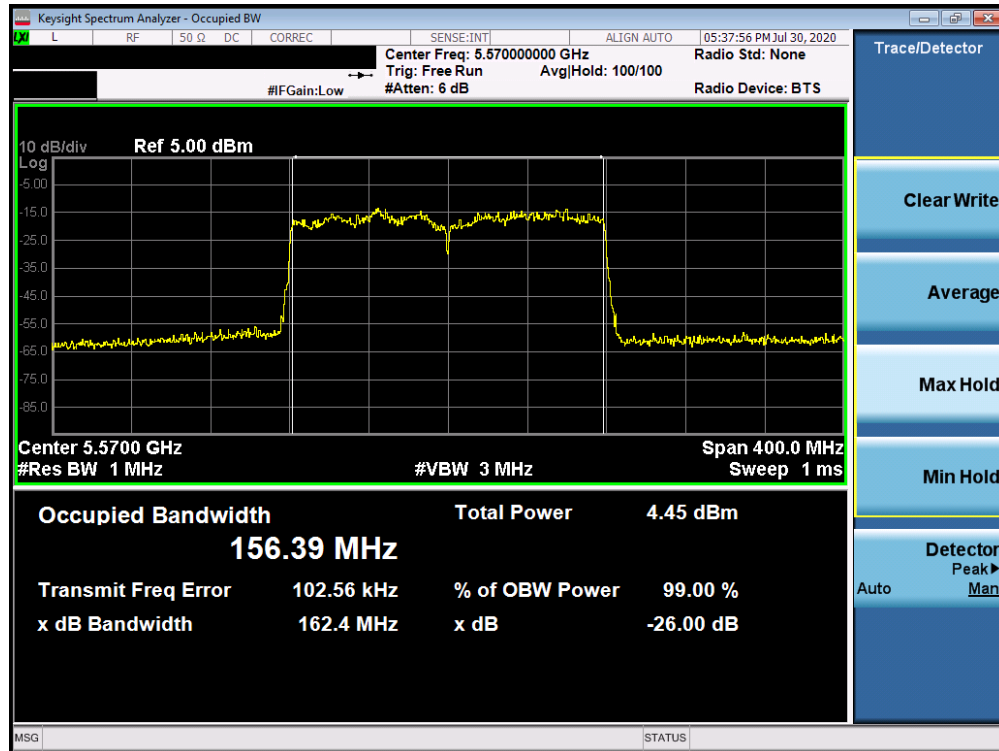


Plot 7-206. 26dB Bandwidth Plot (80+80MHz BW 802.11ac (UNII Band 2C) – Ch. 106 and Ch. 122)



Plot 7-207. 26dB Bandwidth Plot (80+80MHz BW 802.11ax (UNII Band 1 and 2A) – Ch. 42 and 58)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 125 of 344



Plot 7-208. 26dB Bandwidth Plot (80+80MHz BW 802.11ax (UNII Band 2C) – Ch. 106 and Ch. 122)

FCC ID: A3LSMH204V		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 126 of 344

7.3 6dB Bandwidth Measurement – 802.11a/n/ac/ax §15.407 (e); RSS-Gen [6.2]

Test Overview and Limit

The bandwidth at 6dB down from the highest in-band spectral density is measured with a spectrum analyzer connected to the antenna terminal while the EUT is 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. The spectrum analyzer's bandwidth measurement function is configured to measure the 6dB bandwidth.

In the 5.725 – 5.850GHz band, the 6dB bandwidth must be ≥ 500 kHz.

Test Procedure Used

ANSI C63.10-2013 – Section 6.9.2
KDB 789033 D02 v02r01 – Section C

Test Settings

1. The signal analyzers' automatic bandwidth measurement capability was used to perform the 6dB bandwidth measurement. The "X" dB bandwidth parameter was set to $X = 6$. The automatic bandwidth measurement function also has the capability of simultaneously measuring the 99% occupied bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. RBW = 100 kHz
3. VBW $\geq 3 \times$ RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple

Test Setup

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



Figure 7-2. Test Instrument & Measurement Setup

Test Notes

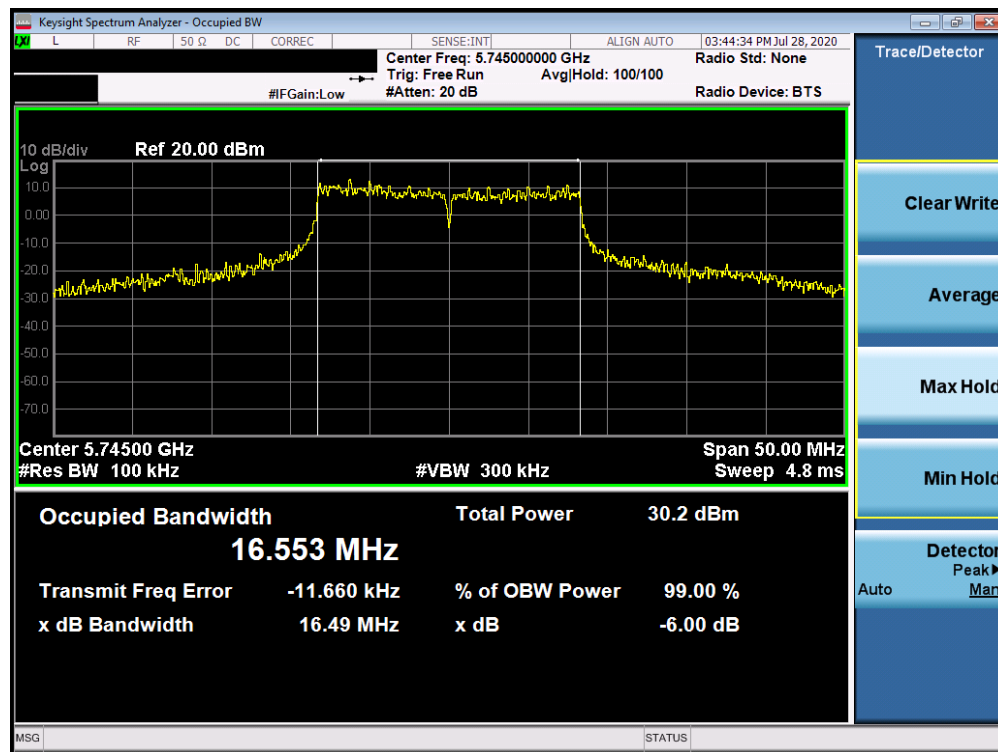
None.

FCC ID: A3LSMH204V		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 127 of 344

Antenna-3 6dB Bandwidth Measurements

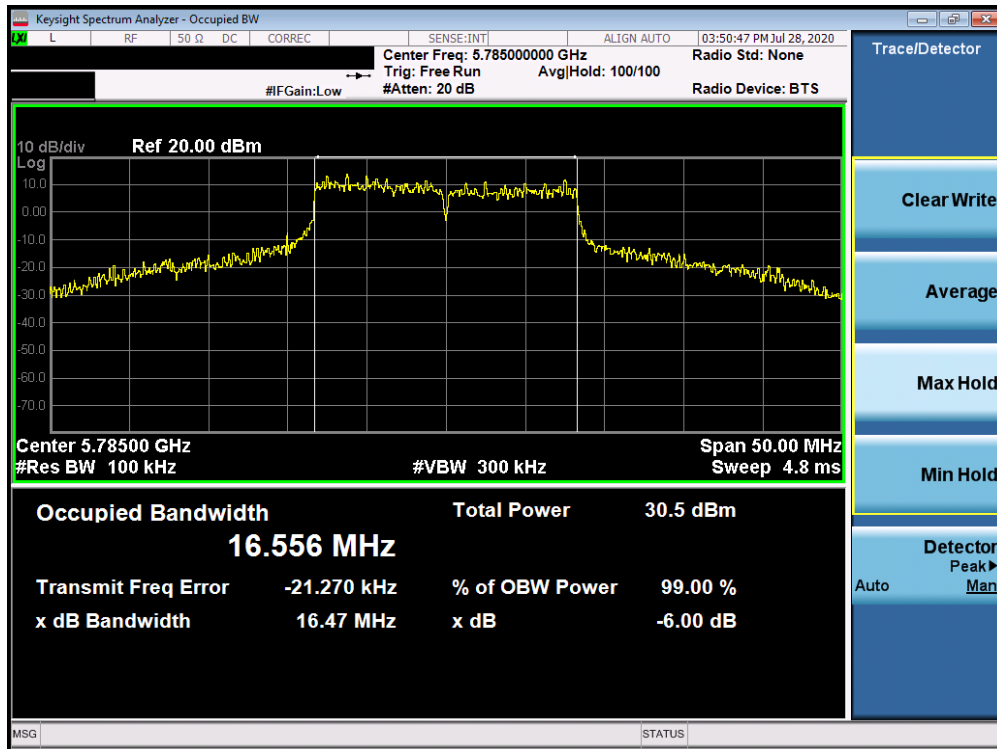
	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured 6dB Bandwidth [MHz]
Band 3	5745	149	a	6	16.49
	5785	157	a	6	16.47
	5825	165	a	6	16.23
	5745	149	n (20MHz)	6.5/7.2 (MCS0)	17.59
	5785	157	n (20MHz)	6.5/7.2 (MCS0)	15.92
	5825	165	n (20MHz)	6.5/7.2 (MCS0)	16.89
	5745	149	ax (20MHz)	6.5/7.2 (MCS0)	17.71
	5785	157	ax (20MHz)	6.5/7.2 (MCS0)	18.11
	5825	165	ax (20MHz)	6.5/7.2 (MCS0)	18.71
	5755	151	n (40MHz)	13.5/15 (MCS0)	34.14
	5795	159	n (40MHz)	13.5/15 (MCS0)	34.50
	5755	151	ax (40MHz)	13.5/15 (MCS0)	36.81
	5795	159	ax (40MHz)	13.5/15 (MCS0)	35.22
	5775	155	ac (80MHz)	29.3/32.5 (MCS0)	74.58
	5775	155	ax (80MHz)	29.3/32.5 (MCS0)	76.09

Table 7-7. Conducted Bandwidth Measurements

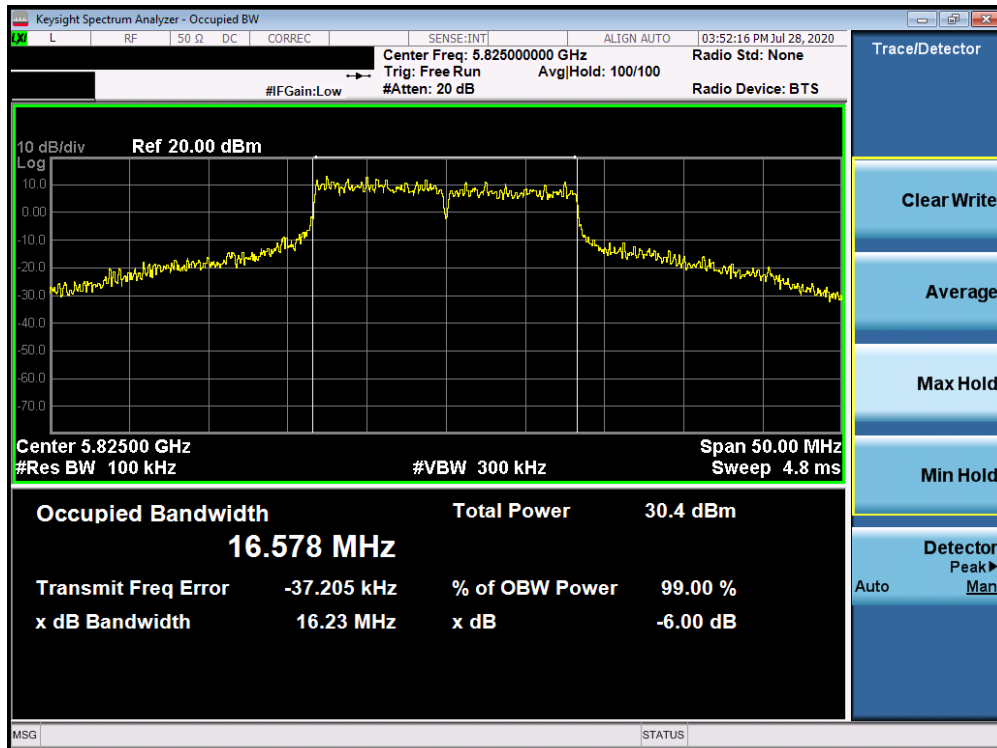


Plot 7-209. 6dB Bandwidth Plot ANT3 (802.11a (UNII Band 3) – Ch. 149)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 128 of 344

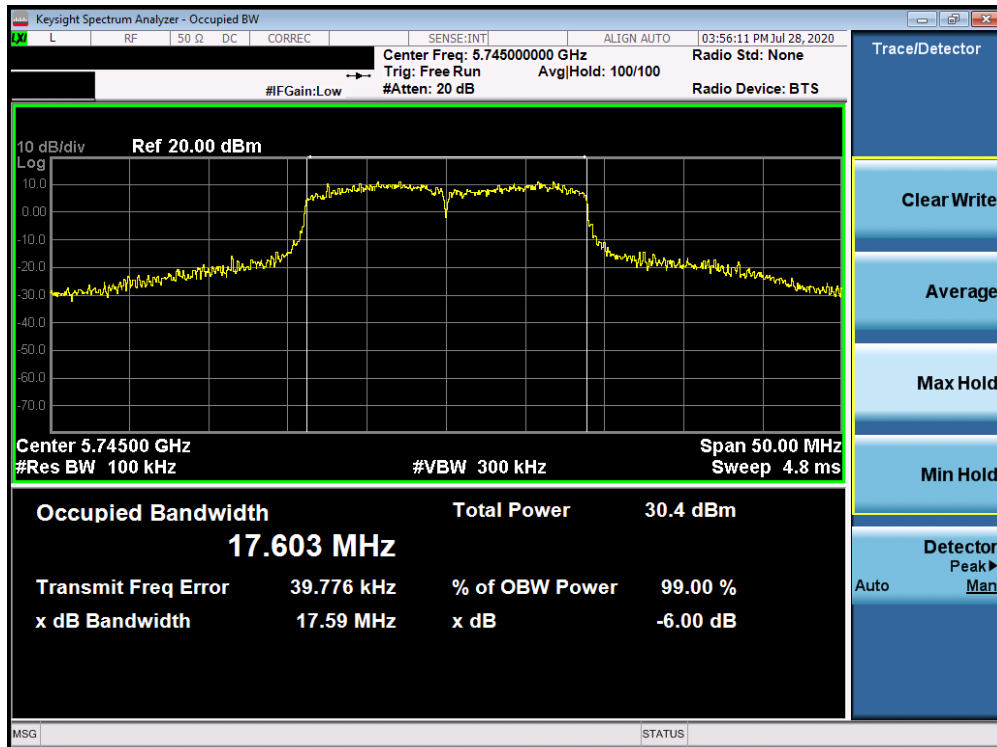


Plot 7-210. 6dB Bandwidth Plot ANT3 (802.11a (UNII Band 3) – Ch. 157)

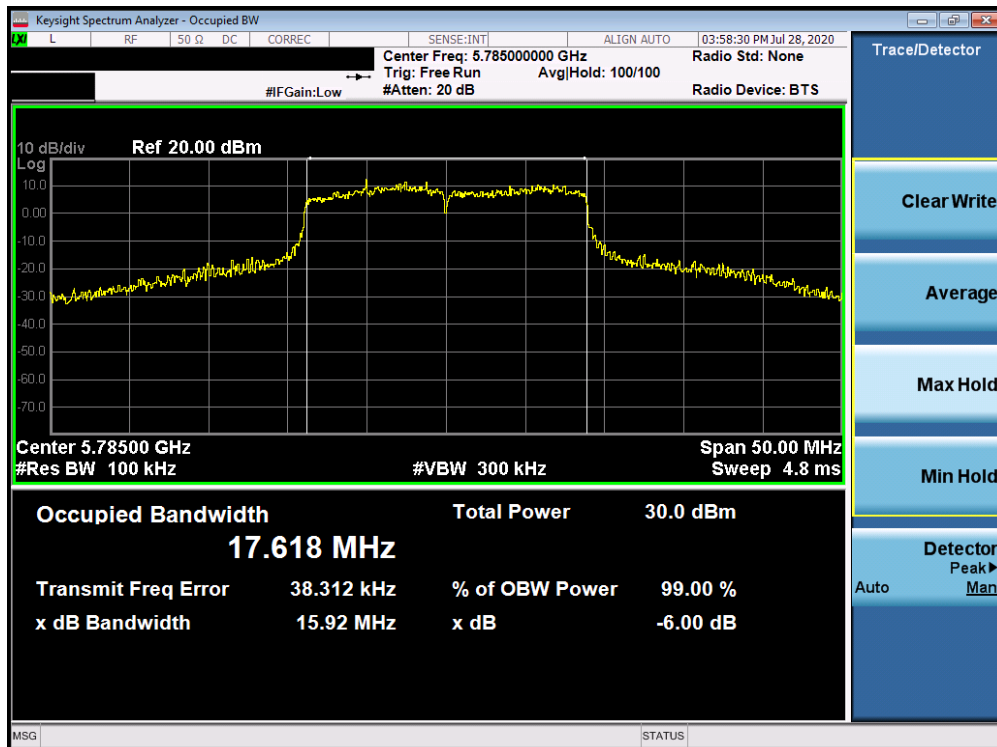


Plot 7-211. 6dB Bandwidth Plot ANT3 (802.11a (UNII Band 3) – Ch. 165)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 129 of 344

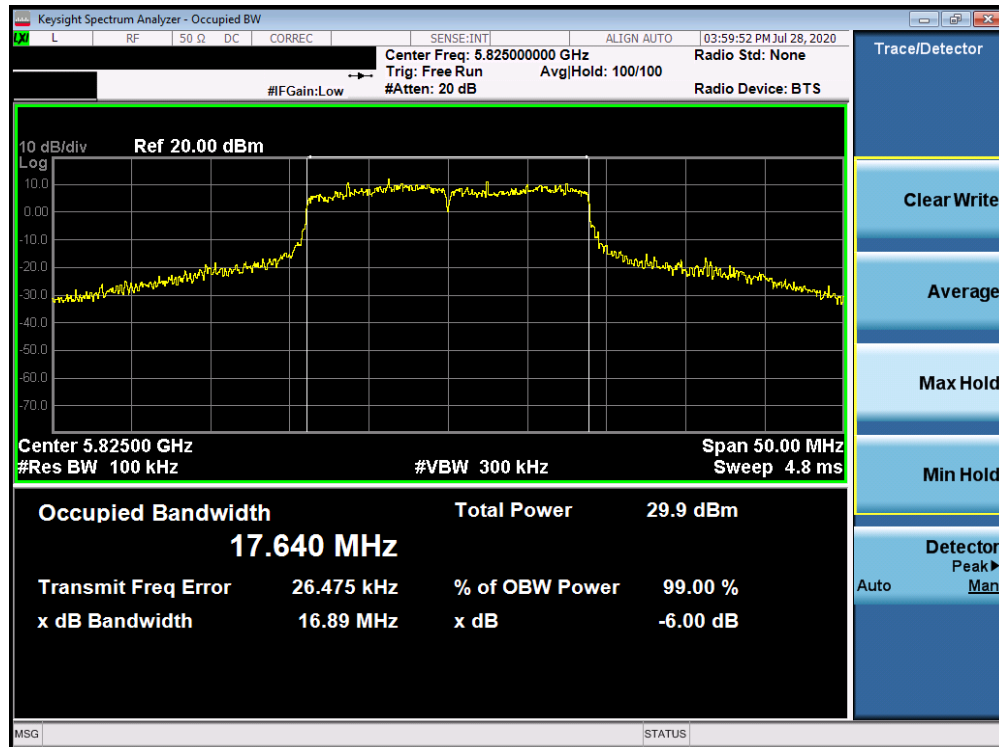


Plot 7-212. 6dB Bandwidth Plot ANT3 (20MHz BW 802.11n (UNII Band 3) – Ch. 149)

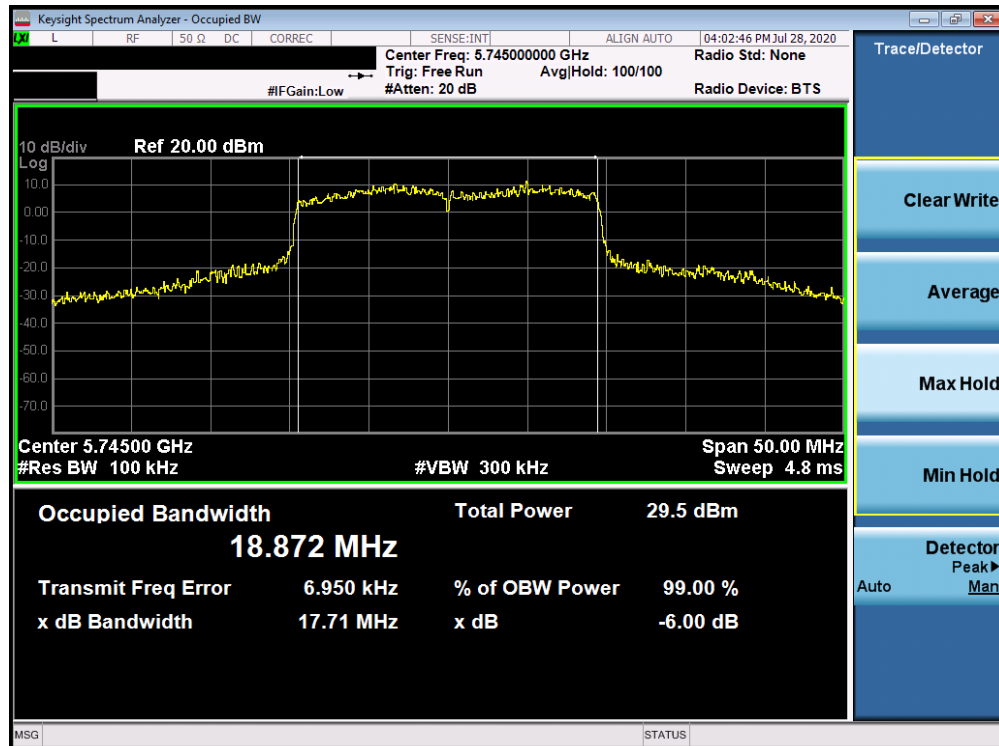


Plot 7-213. 6dB Bandwidth Plot ANT3 (20MHz BW 802.11n (UNII Band 3) – Ch. 157)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 130 of 344

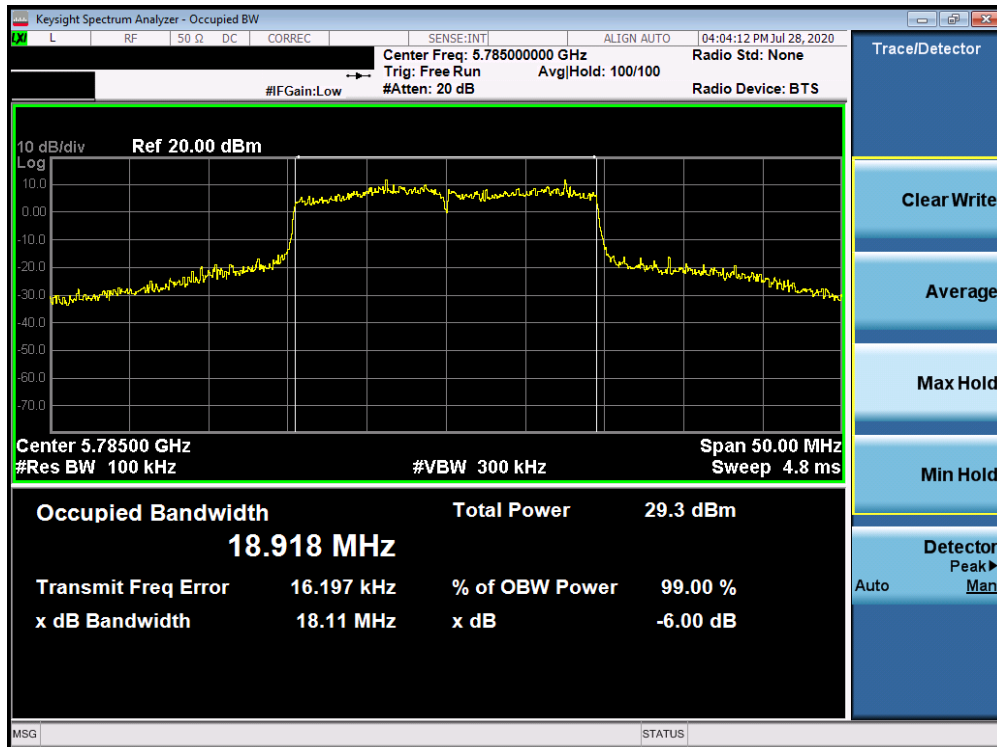


Plot 7-214. 6dB Bandwidth Plot ANT3 (20MHz BW 802.11n (UNII Band 3) – Ch. 165)

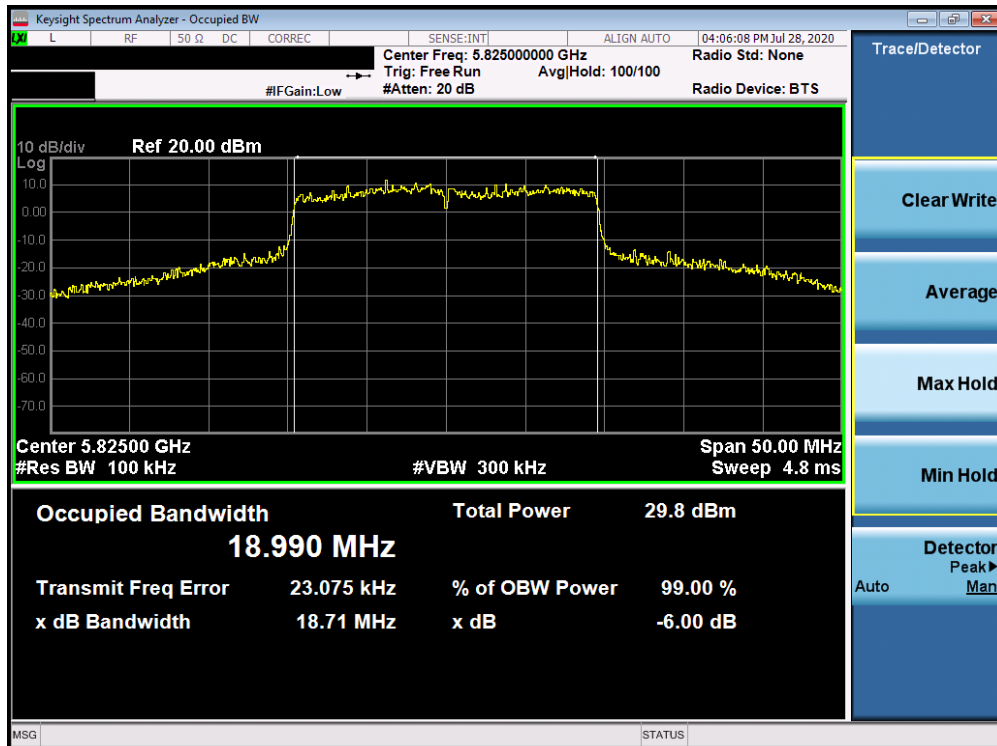


Plot 7-215. 6dB Bandwidth Plot ANT3 (20MHz BW 802.11ax (UNII Band 3) – Ch. 149)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 131 of 344

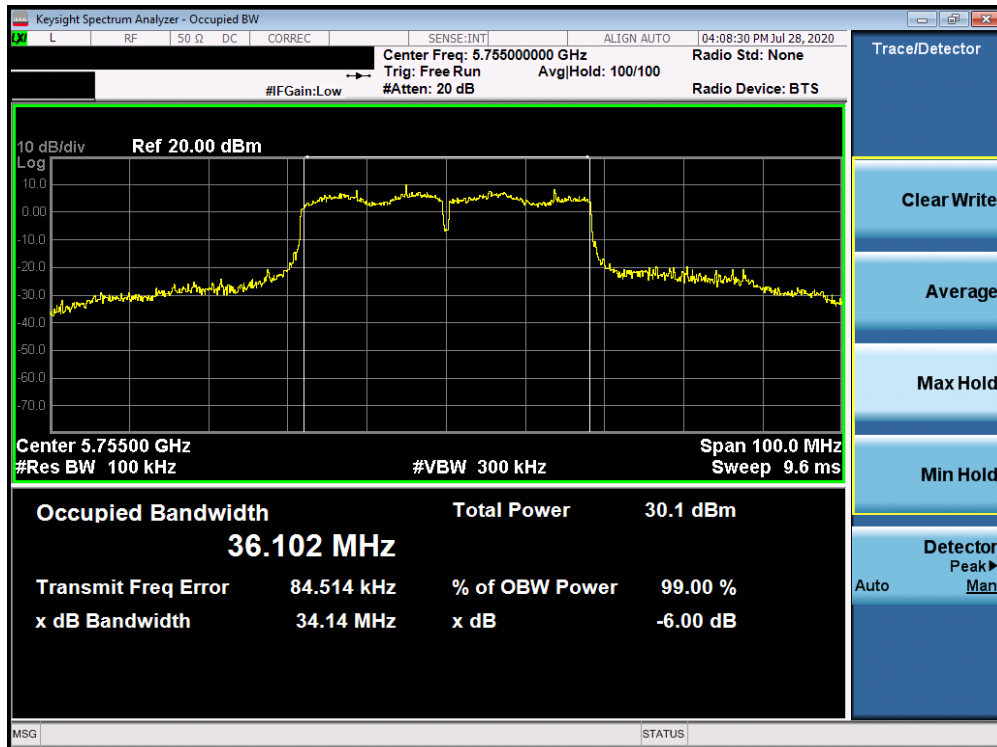


Plot 7-216. 6dB Bandwidth Plot ANT3 (20MHz BW 802.11ax (UNII Band 3) – Ch. 157)

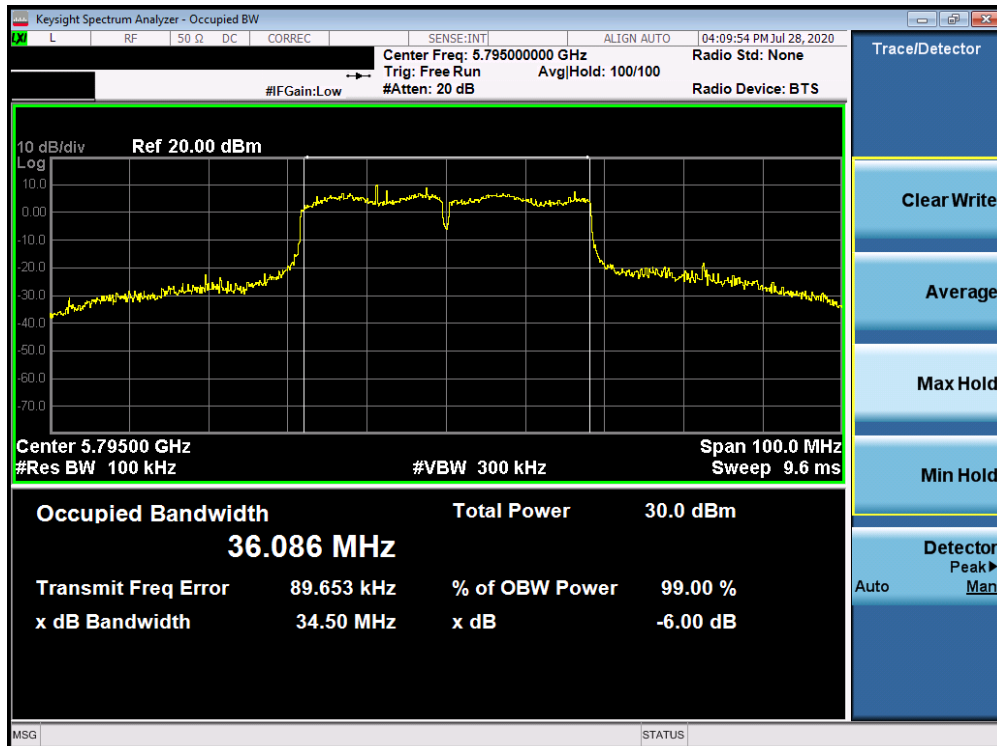


Plot 7-217. 6dB Bandwidth Plot ANT3 (20MHz BW 802.11ax (UNII Band 3) – Ch. 165)

FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 132 of 344



Plot 7-218. 6dB Bandwidth Plot ANT3 (40MHz BW 802.11n (UNII Band 3) – Ch. 151)



Plot 7-219. 6dB Bandwidth Plot ANT3 (40MHz BW 802.11n (UNII Band 3) – Ch. 159)

FCC ID: A3LSMH204V		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 133 of 344