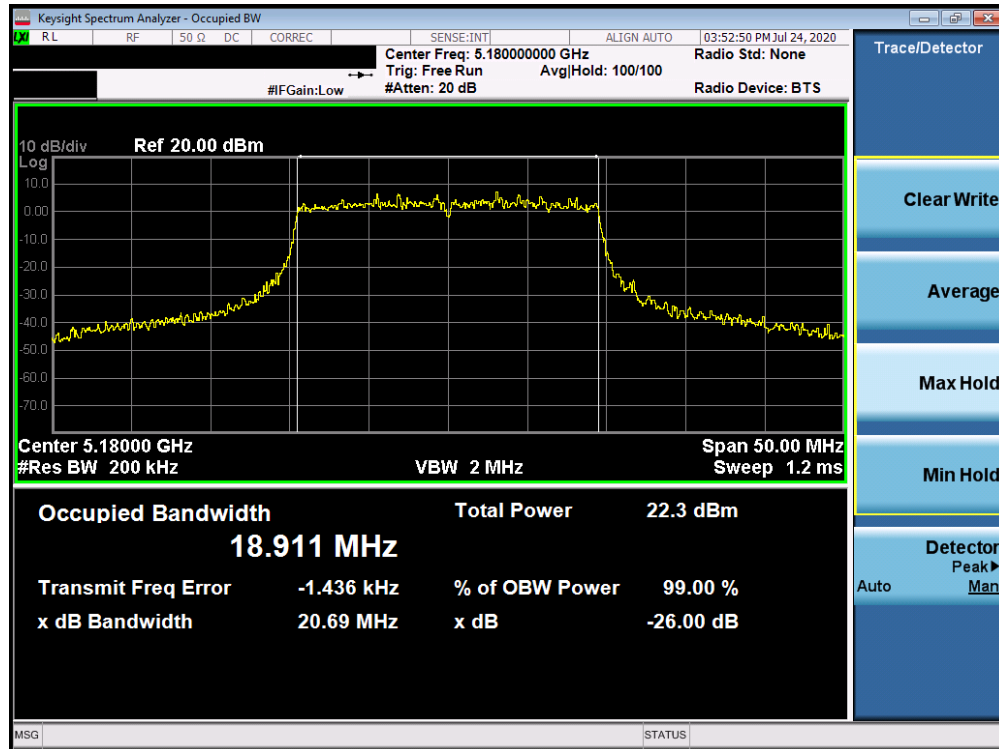
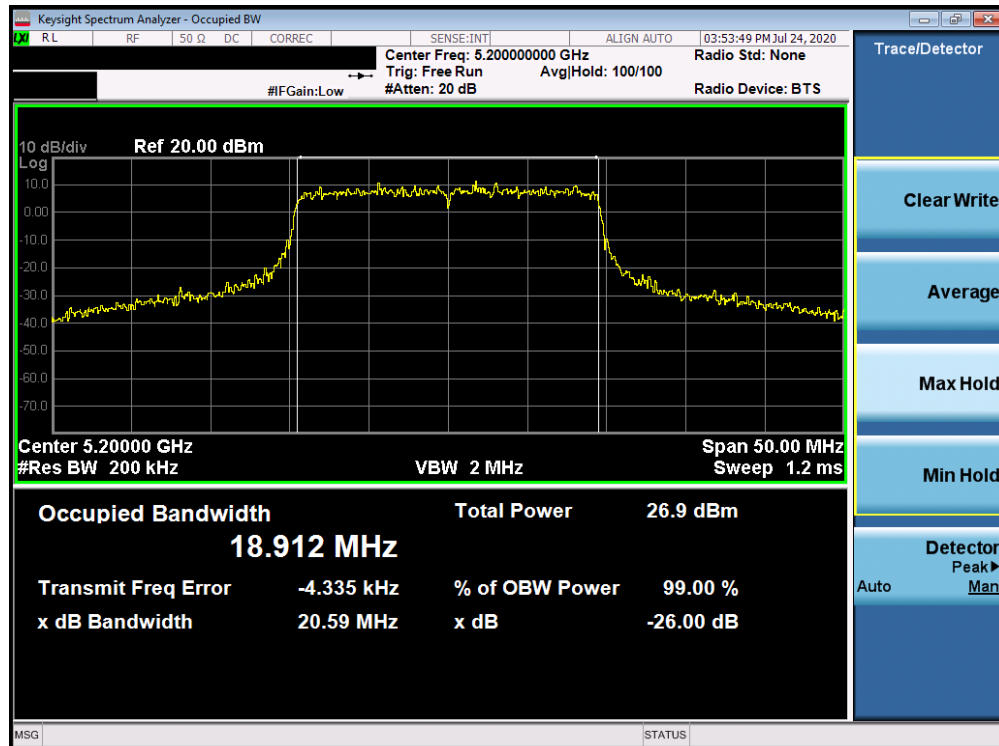


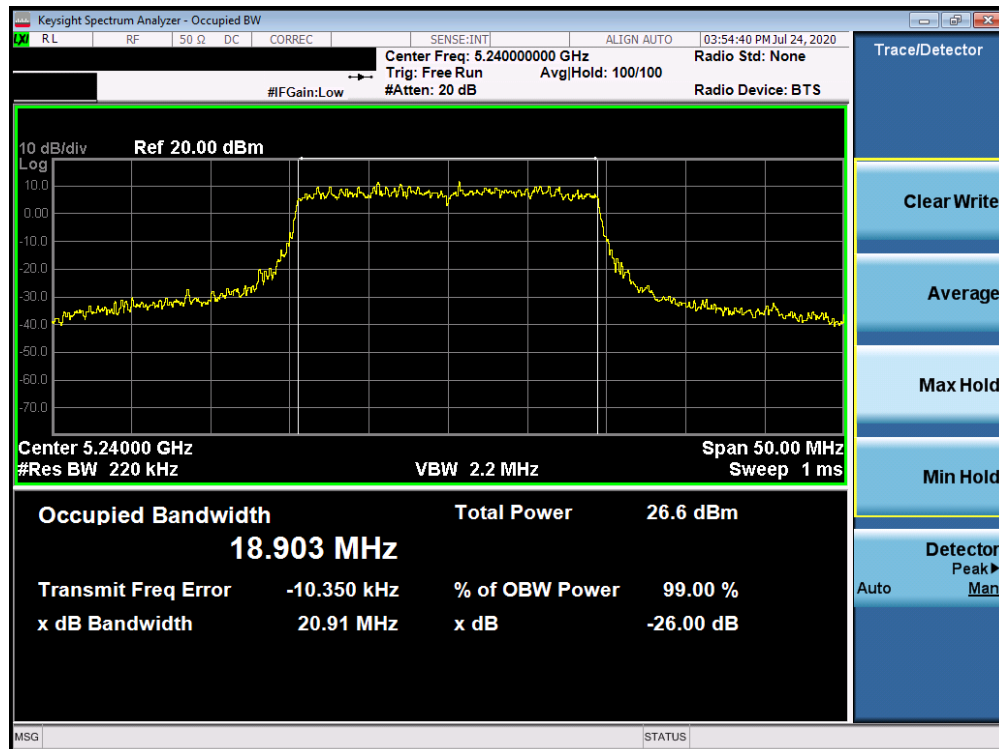


Plot 7-109. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11ax (UNII Band 1) – Ch. 36)

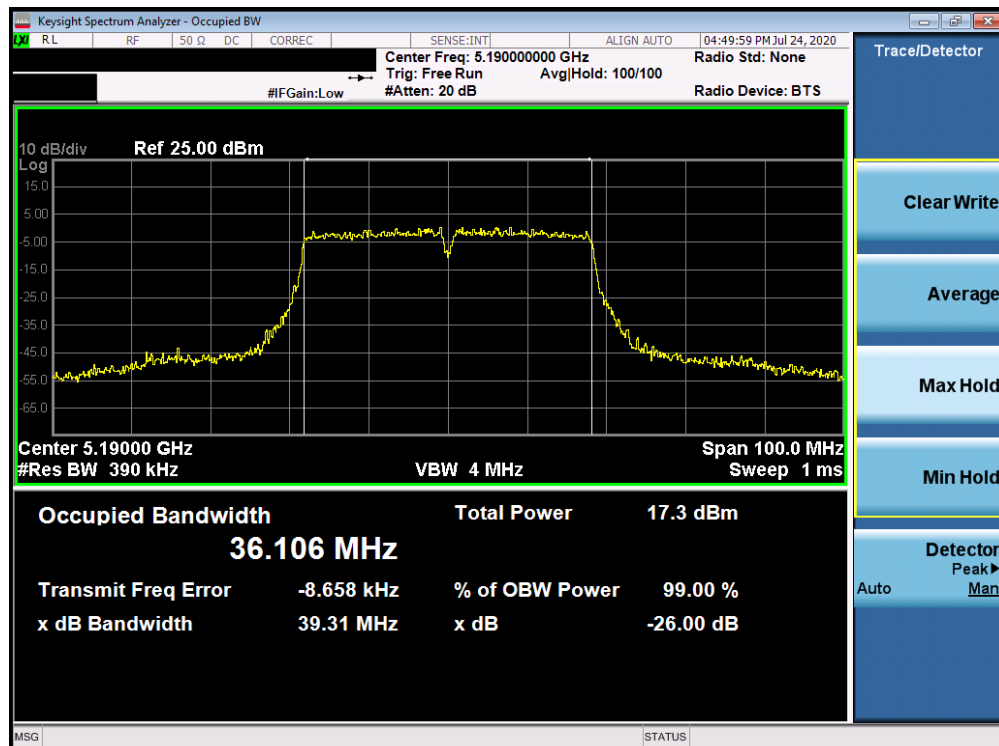


Plot 7-110. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11ax (UNII Band 1) – Ch. 40)

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

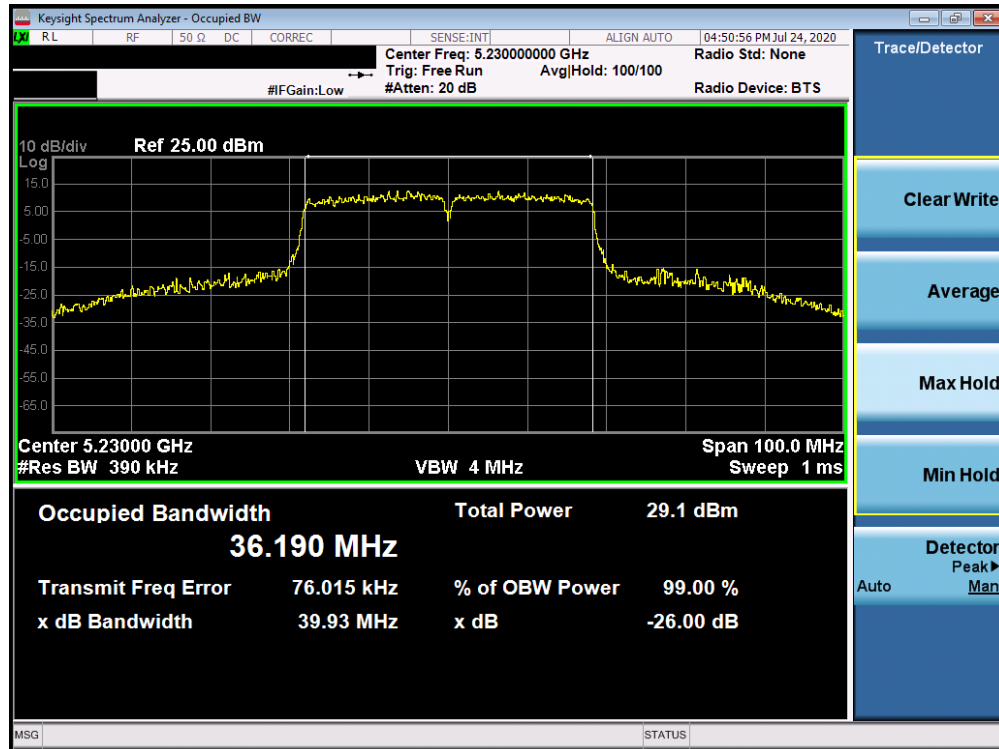


Plot 7-111. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11ax (UNII Band 1) – Ch. 48)

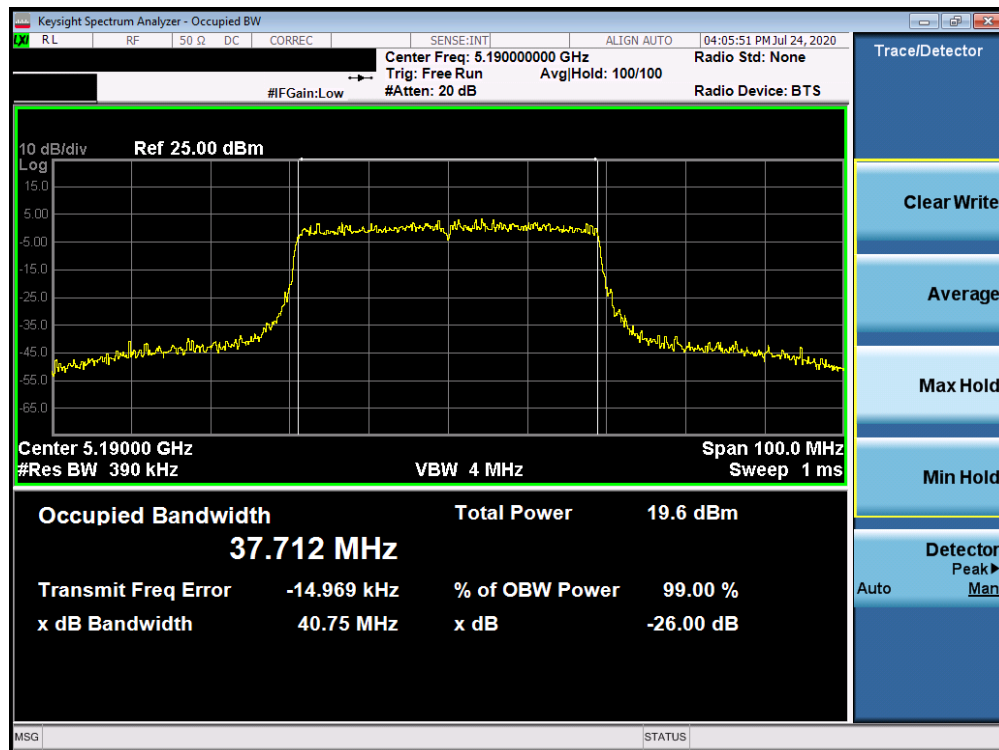


Plot 7-112. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11n (UNII Band 1) – Ch. 38)

FCC ID: A3LSMH204V		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 75 of 344

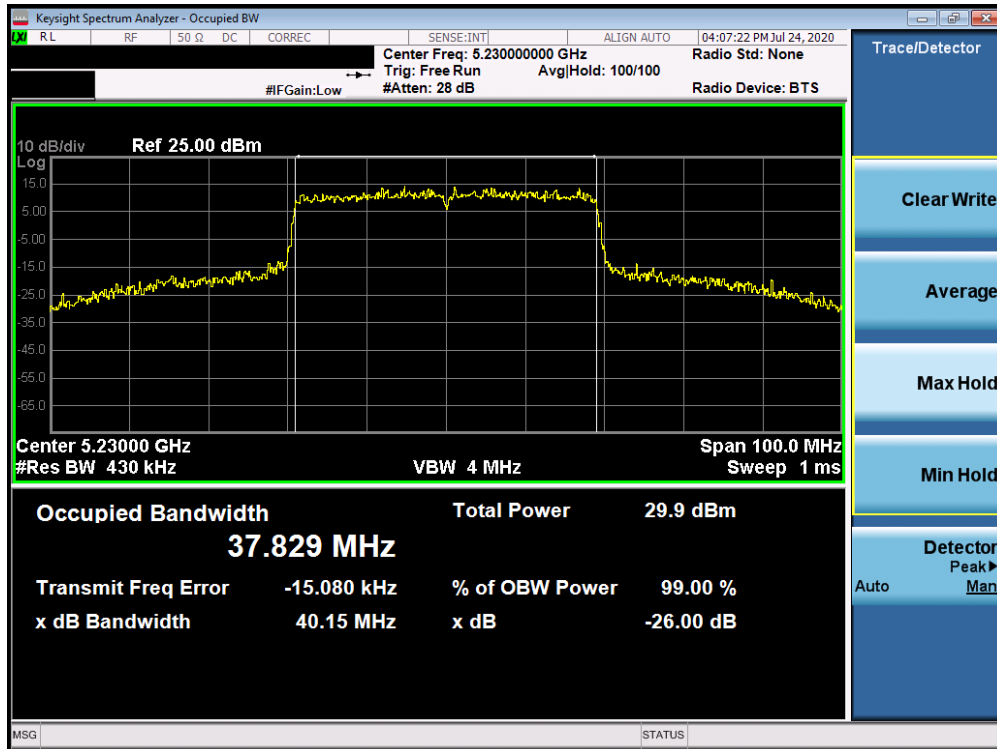


Plot 7-113. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11n (UNII Band 1) – Ch. 46)

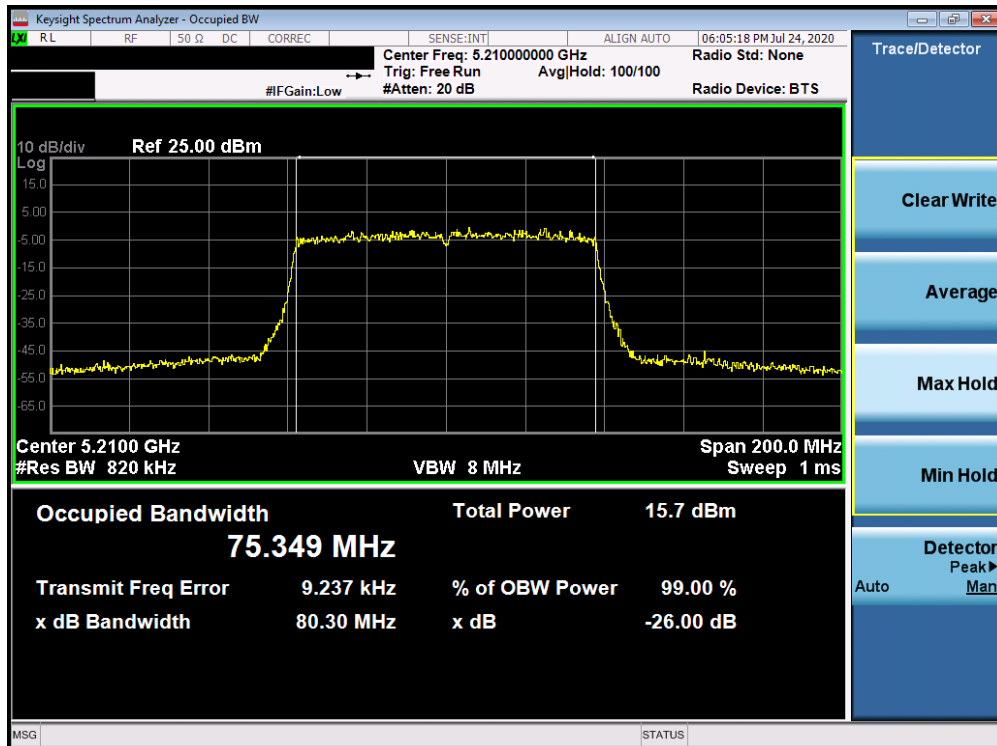


Plot 7-114. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11ax (UNII Band 1) – Ch. 38)

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

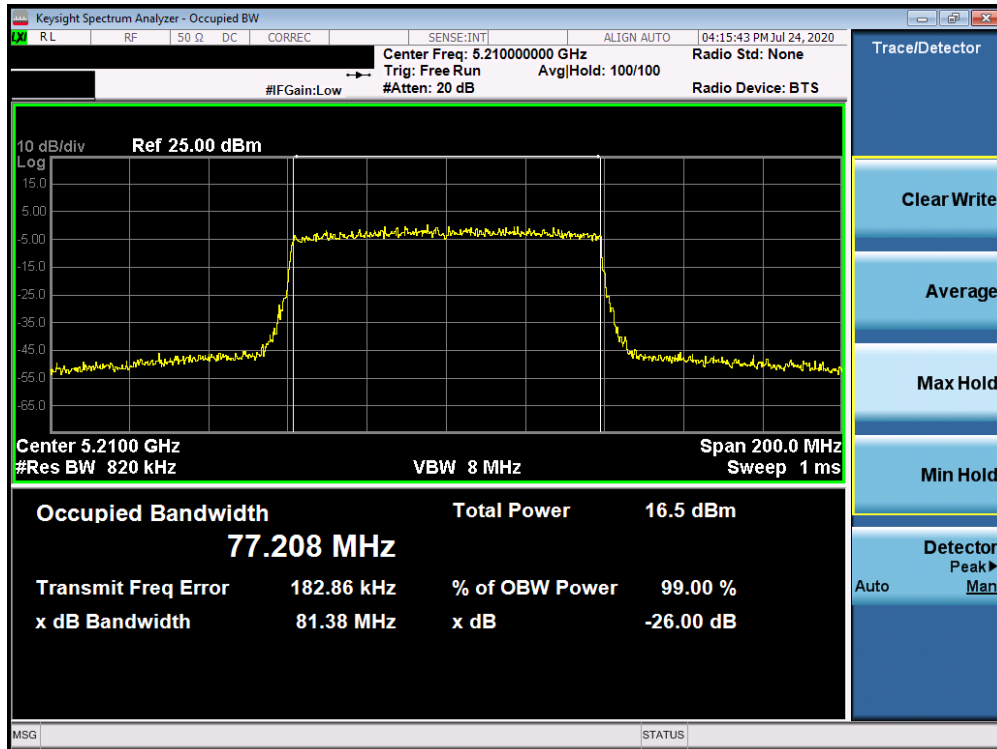


Plot 7-115. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11ax (UNII Band 1) – Ch. 46)

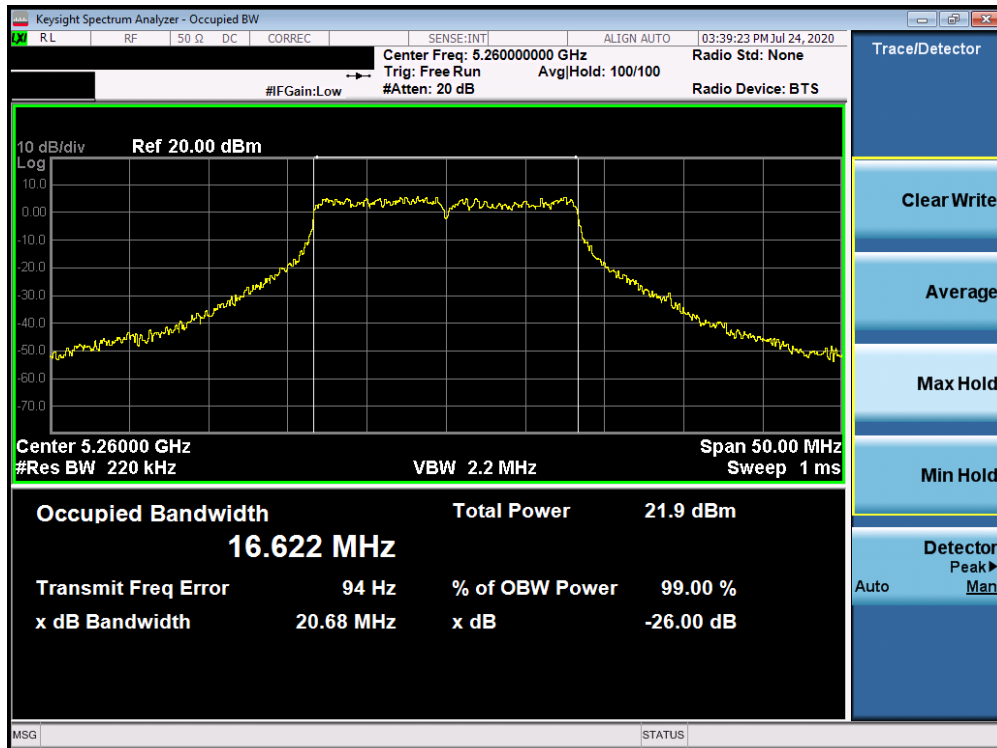


Plot 7-116. 26dB Bandwidth Plot ANT5 (80MHz BW 802.11ac (UNII Band 1) – Ch. 42)

FCC ID: A3LSMH204V	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 77 of 344

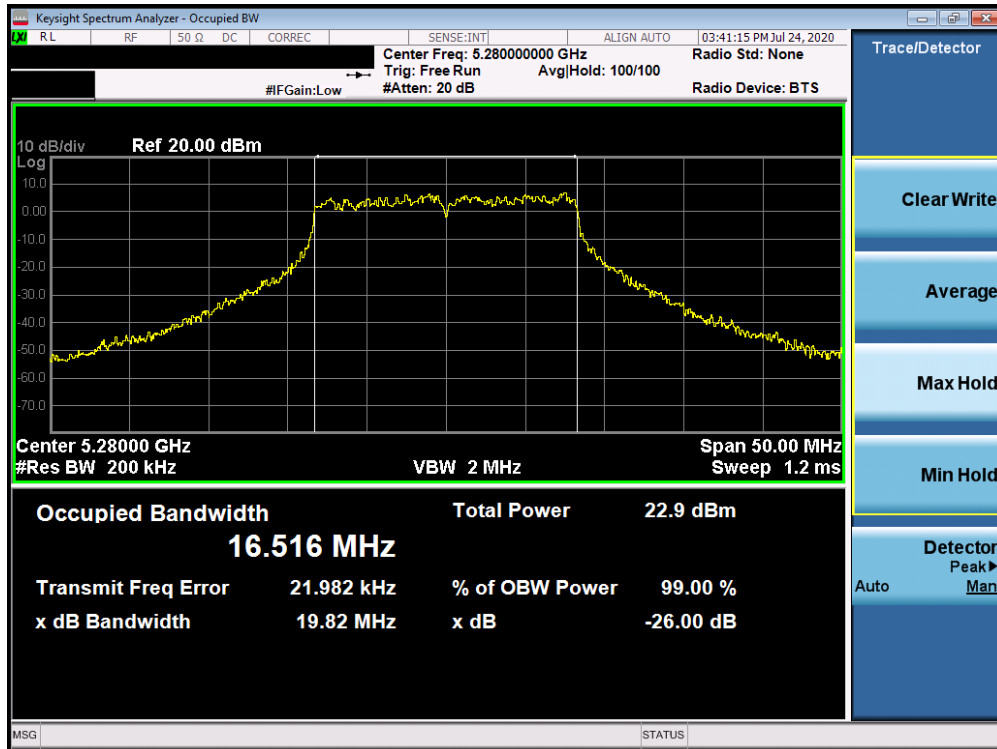


Plot 7-117. 26dB Bandwidth Plot ANT5 (80MHz BW 802.11ax (UNII Band 1) – Ch. 42)

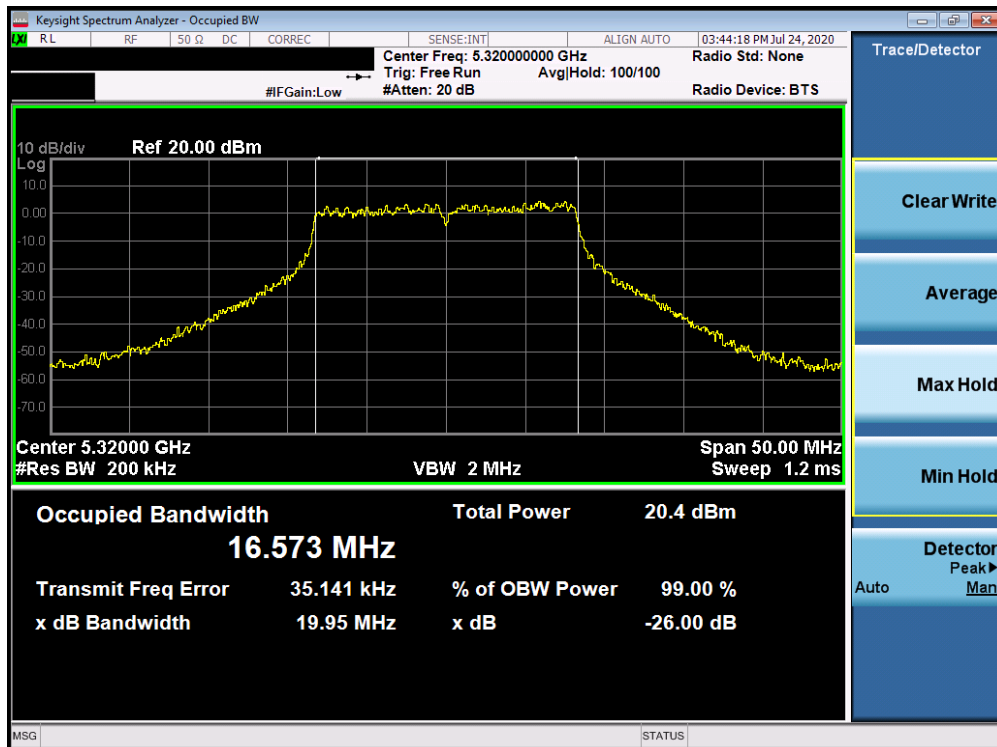


Plot 7-118. 26dB Bandwidth Plot ANT5 (802.11a (UNII Band 2A) – Ch. 52)

FCC ID: A3LSMH204V		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 78 of 344

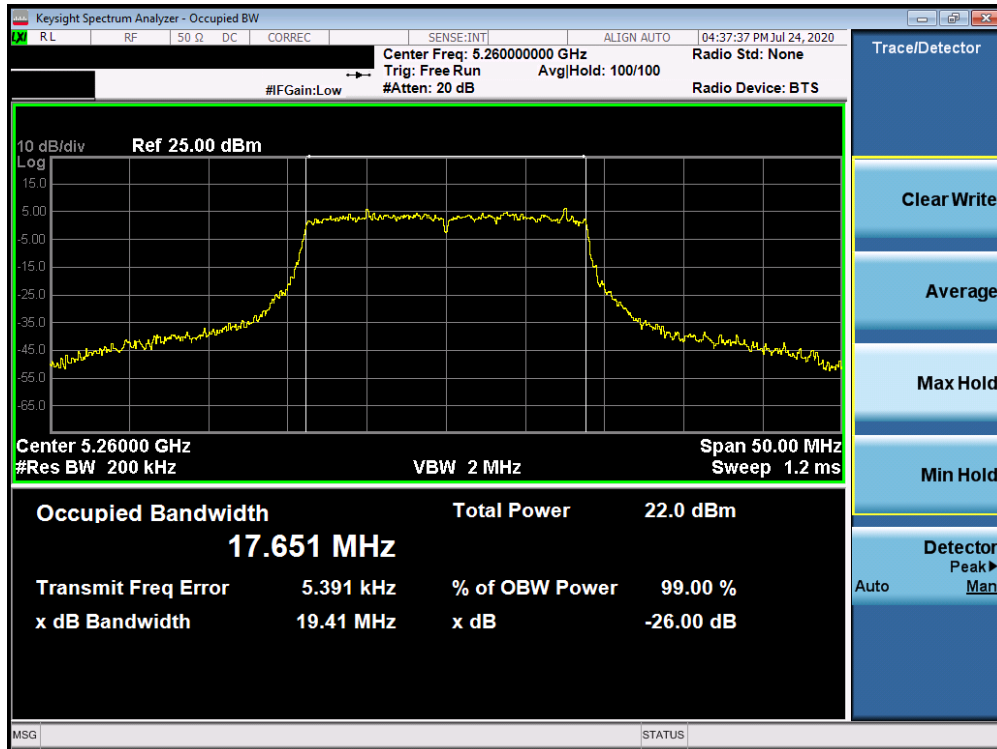


Plot 7-119. 26dB Bandwidth Plot ANT5 (802.11a (UNII Band 2A) – Ch. 56)

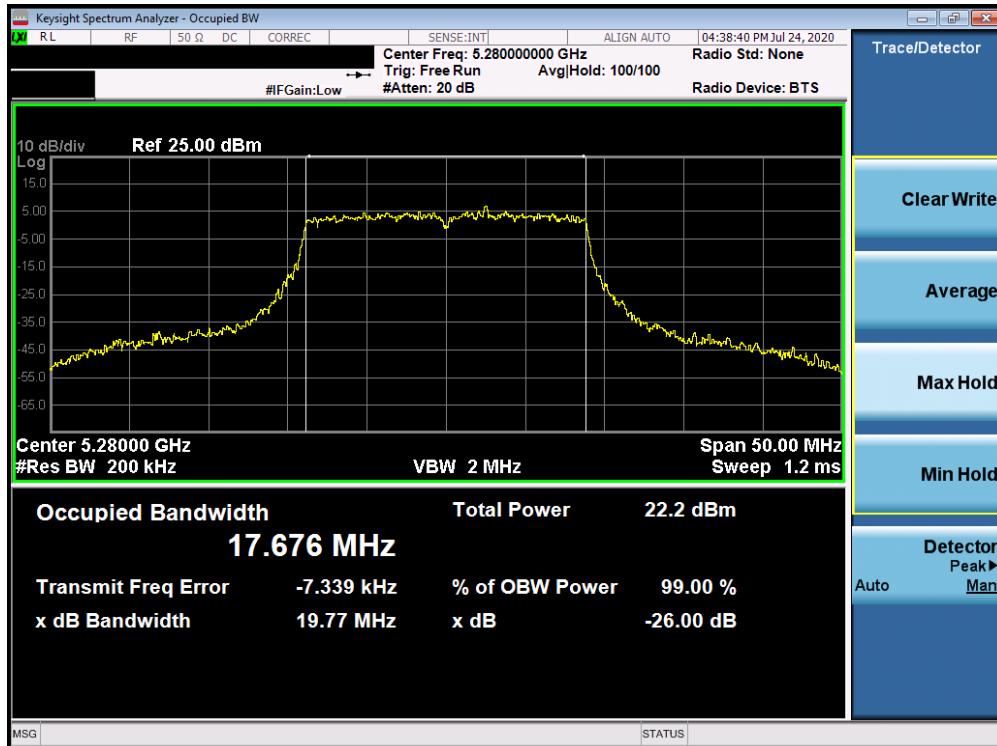


Plot 7-120. 26dB Bandwidth Plot ANT5 (802.11a (UNII Band 2A) – Ch. 64)

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

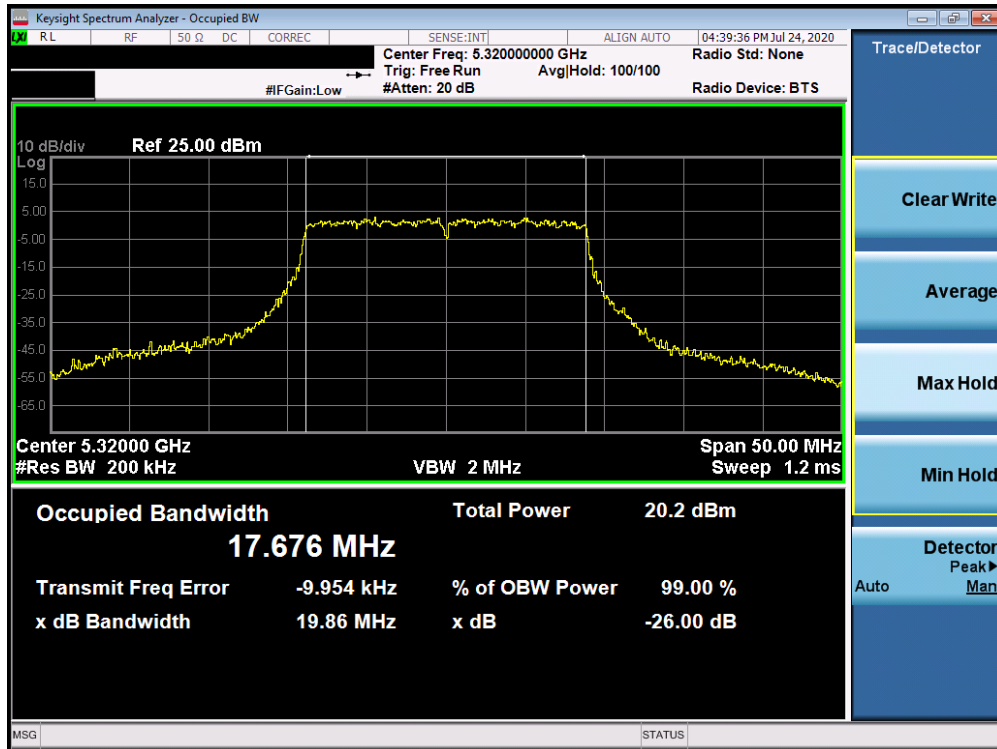


Plot 7-121. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11n (UNII Band 2A) – Ch. 52)

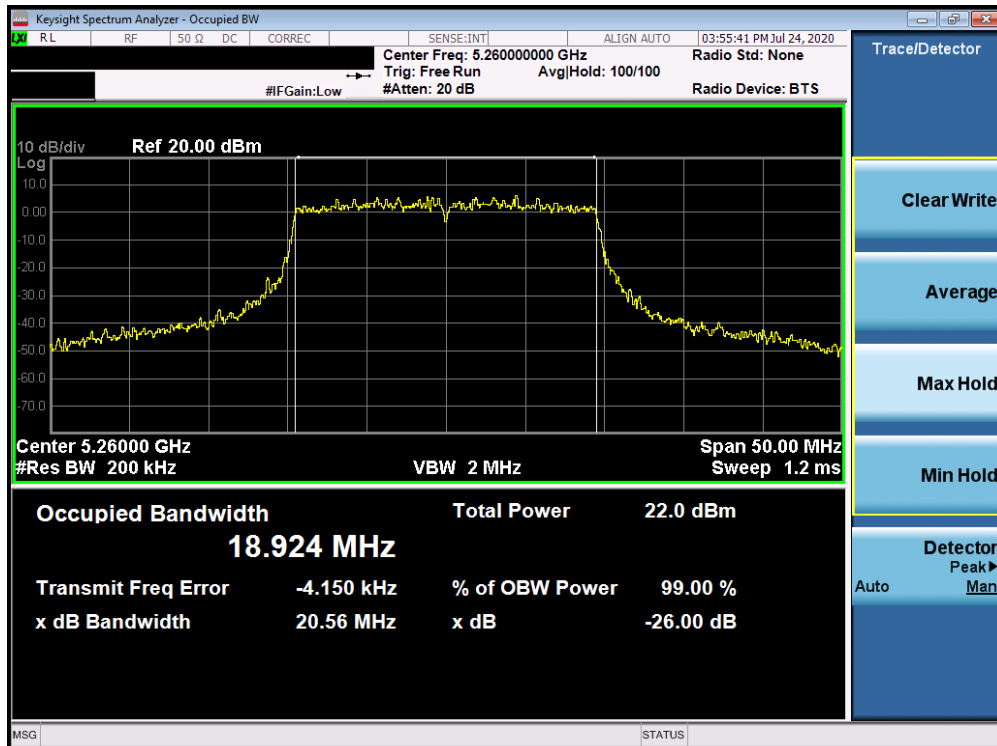


Plot 7-122. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11n (UNII Band 2A) – Ch. 56)

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

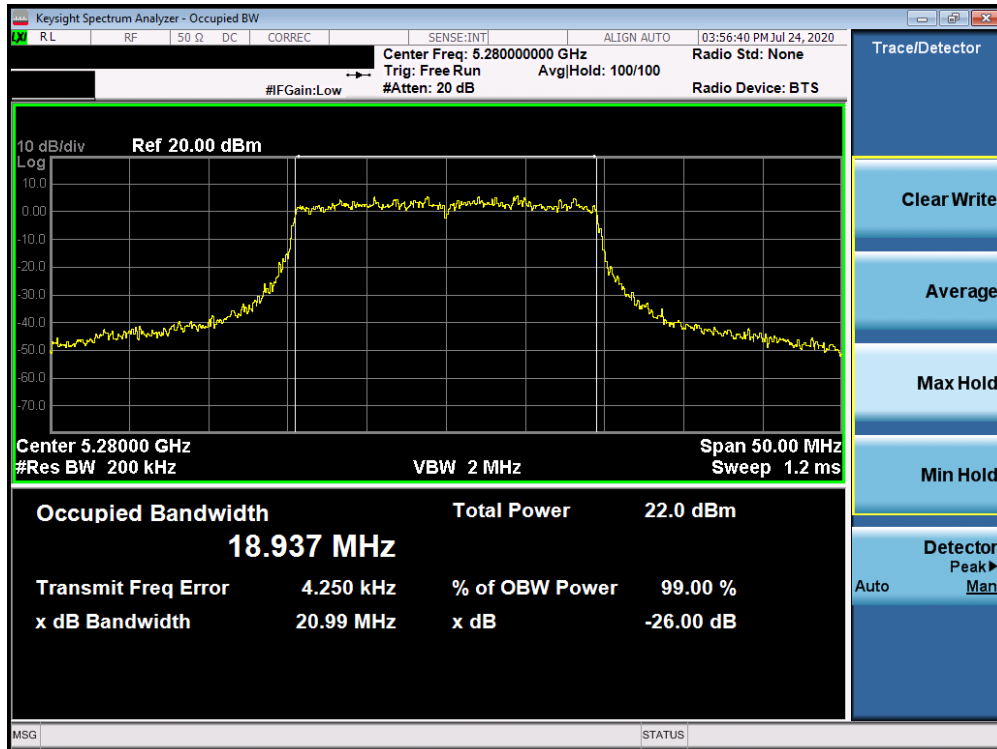


Plot 7-123. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11n (UNII Band 2A) – Ch. 64)

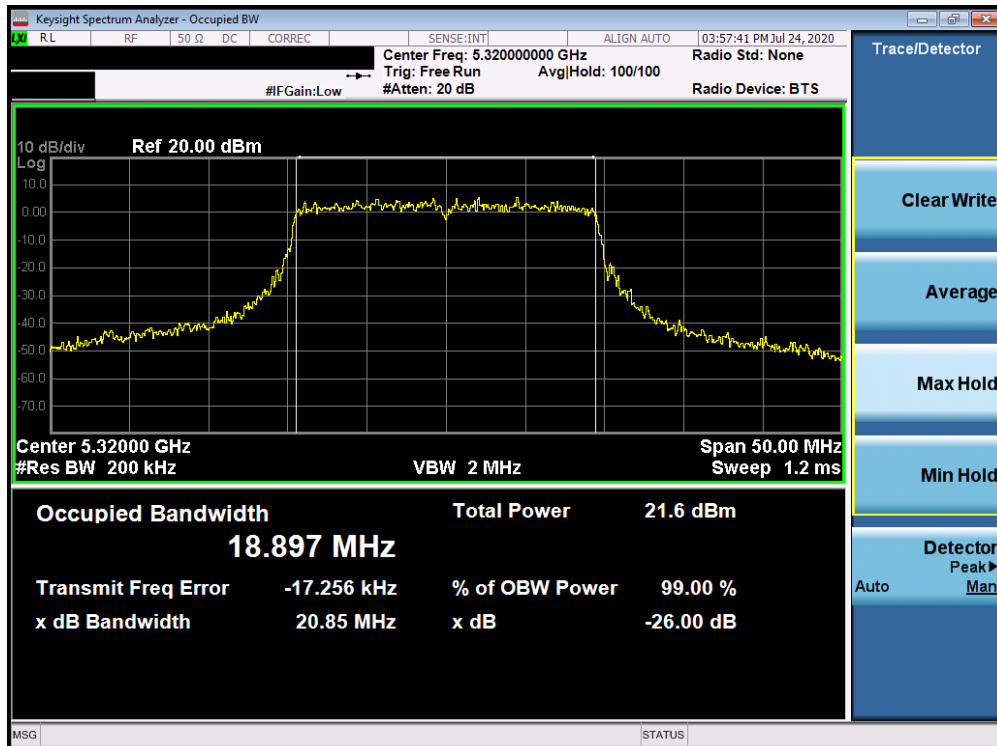


Plot 7-124. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11ax (UNII Band 2A) – Ch. 52)

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

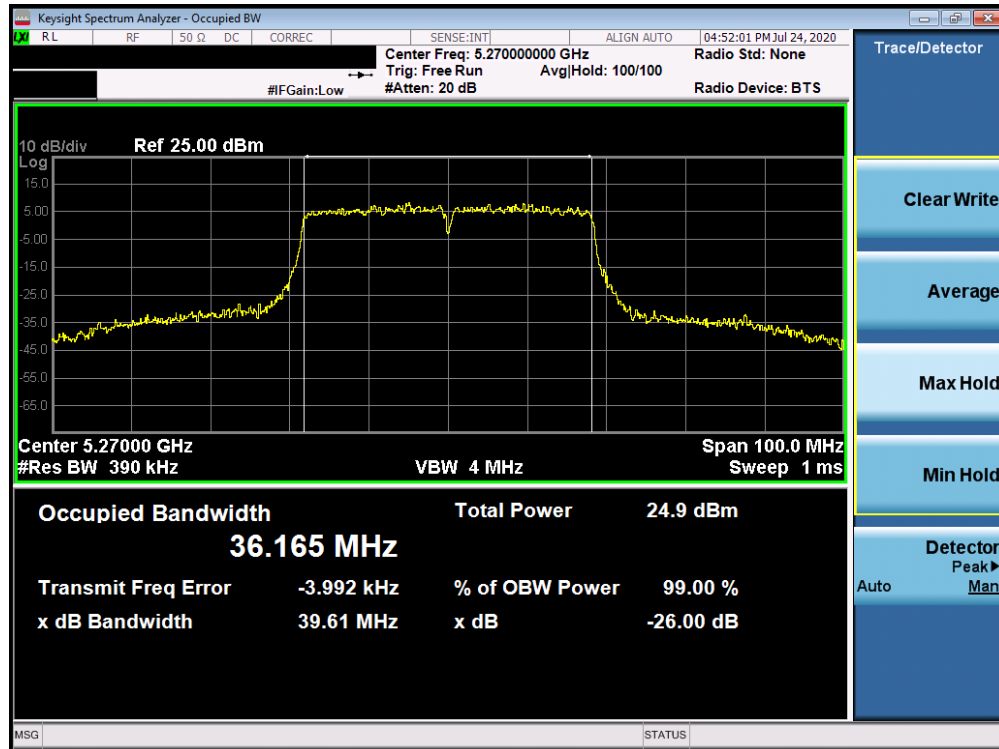


Plot 7-125. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11ax (UNII Band 2A) – Ch. 56)

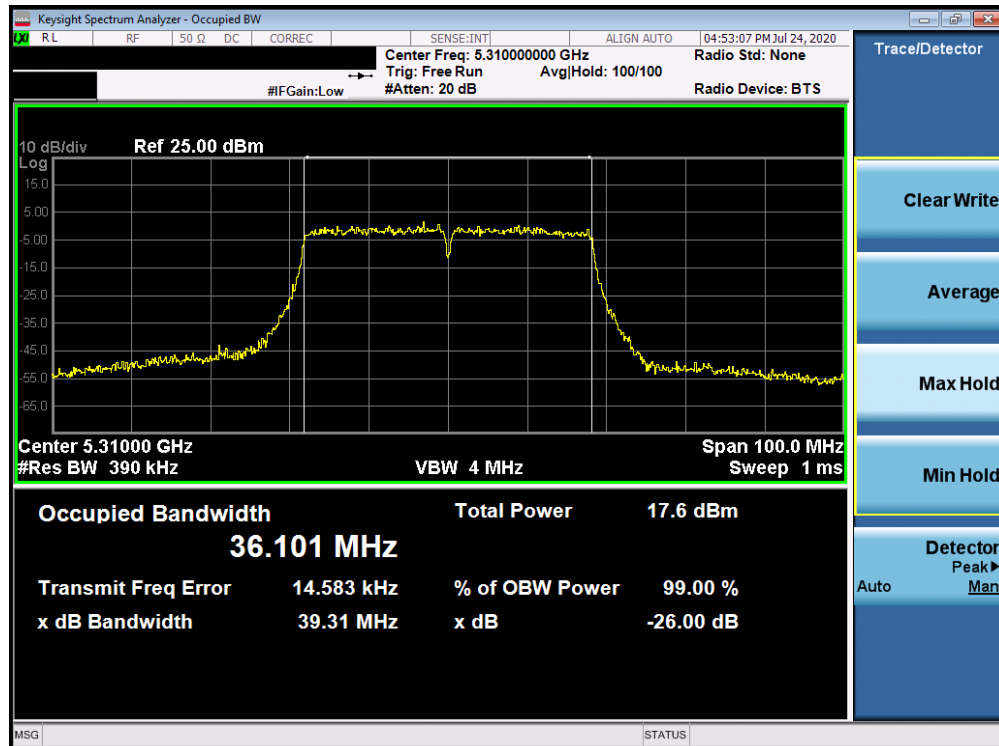


Plot 7-126. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11ax (UNII Band 2A) – Ch. 64)

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

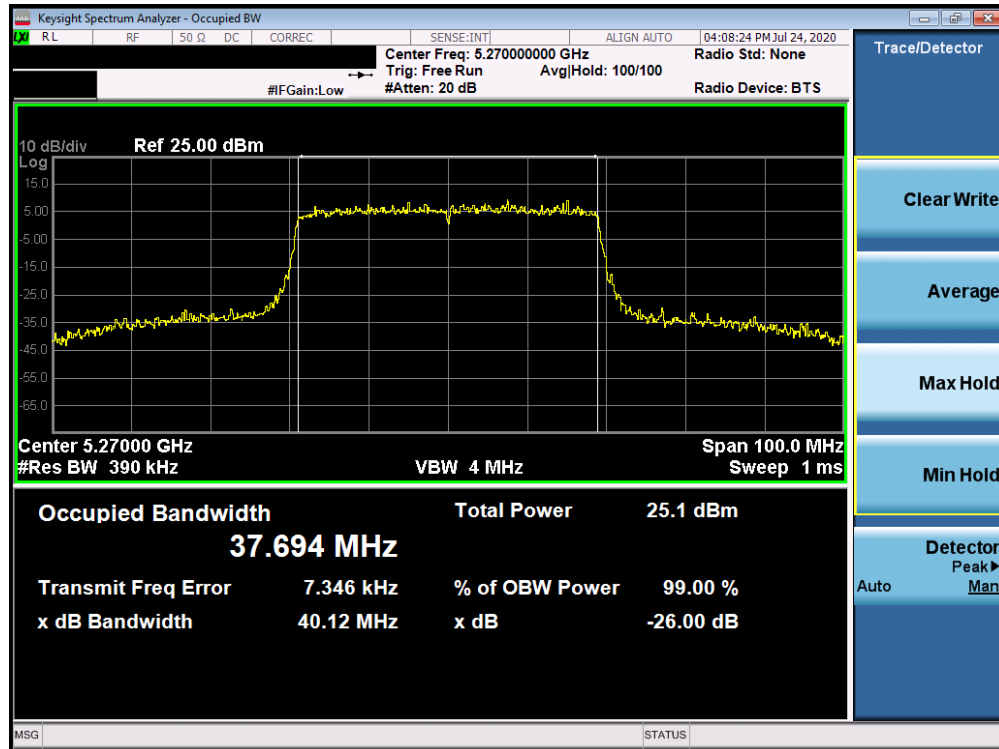


Plot 7-127. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11n (UNII Band 2A) – Ch. 54)

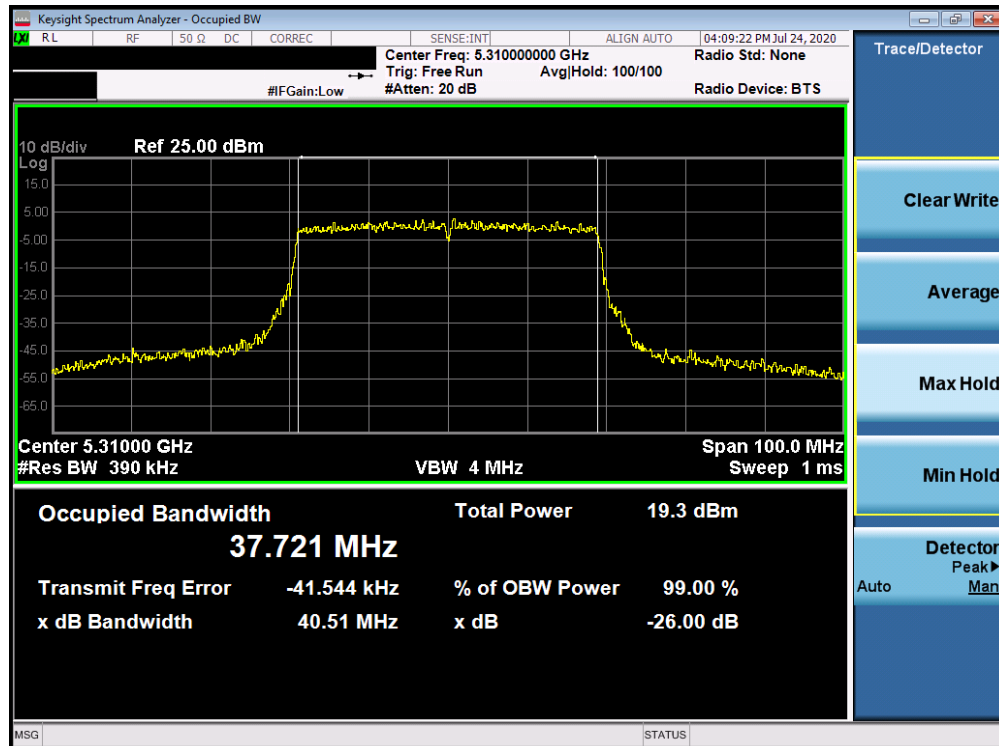


Plot 7-128. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11n (UNII Band 2A) – Ch. 62)

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

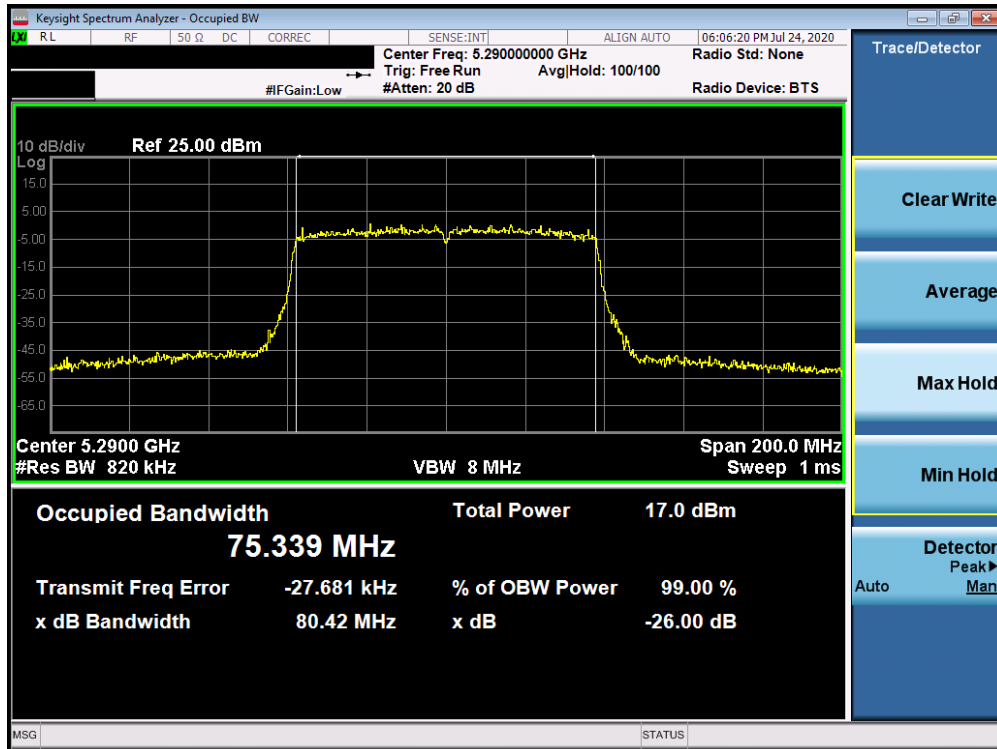


Plot 7-129. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11ax (UNII Band 2A) – Ch. 54)

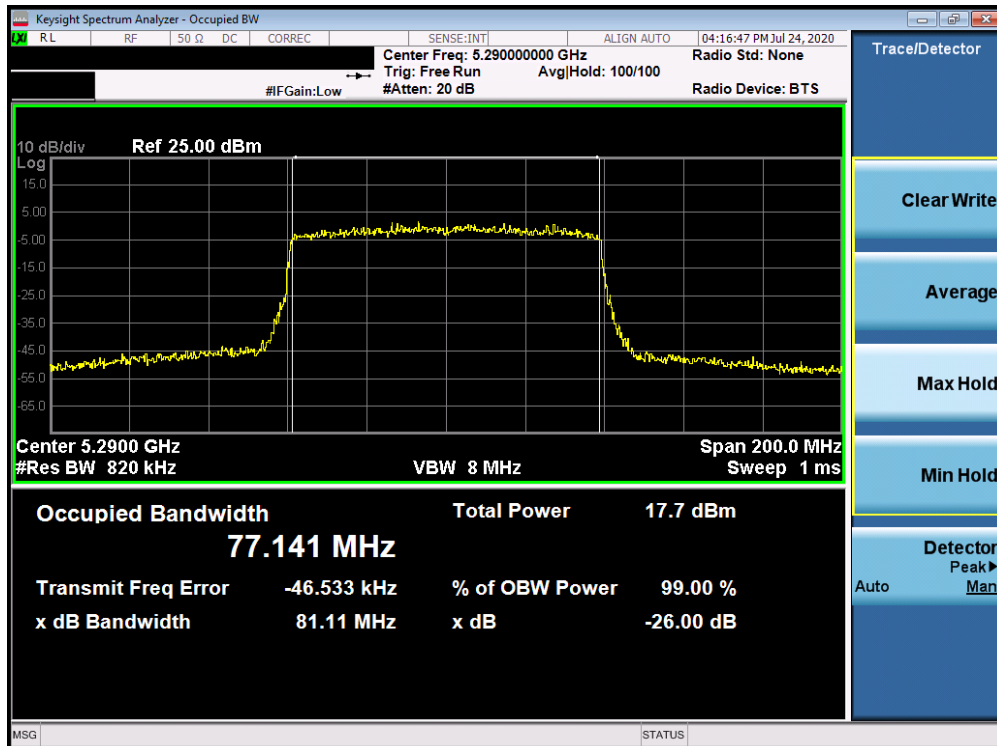


Plot 7-130. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11ax (UNII Band 2A) – Ch. 54)

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

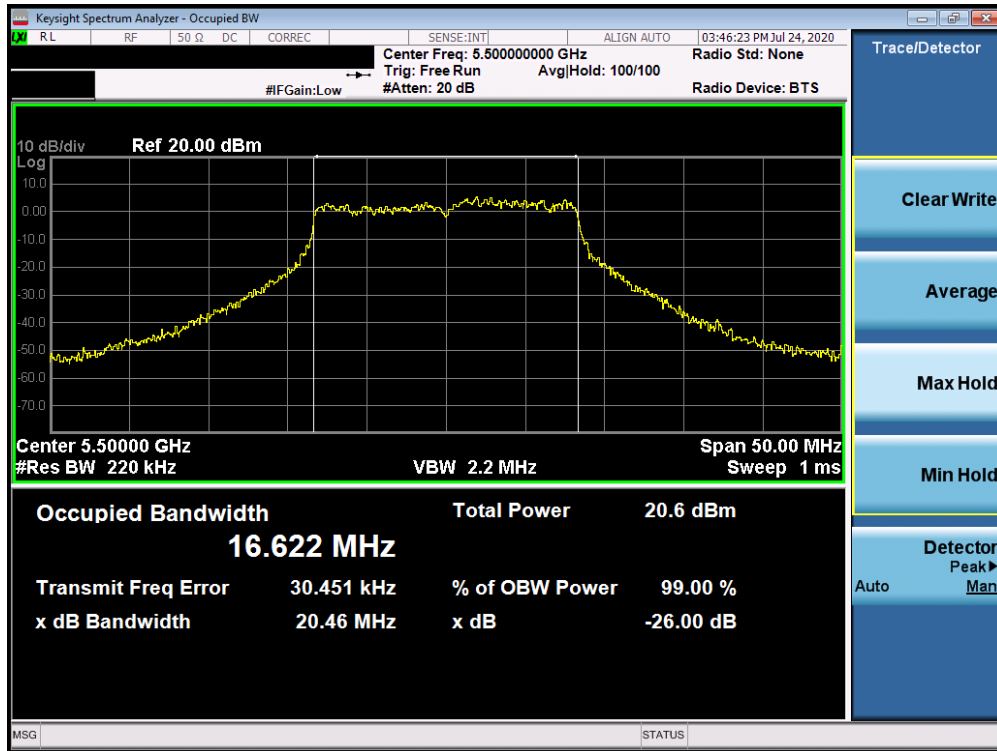


Plot 7-131. 26dB Bandwidth Plot ANT5 (80MHz BW 802.11ac (UNII Band 2A) – Ch. 58)

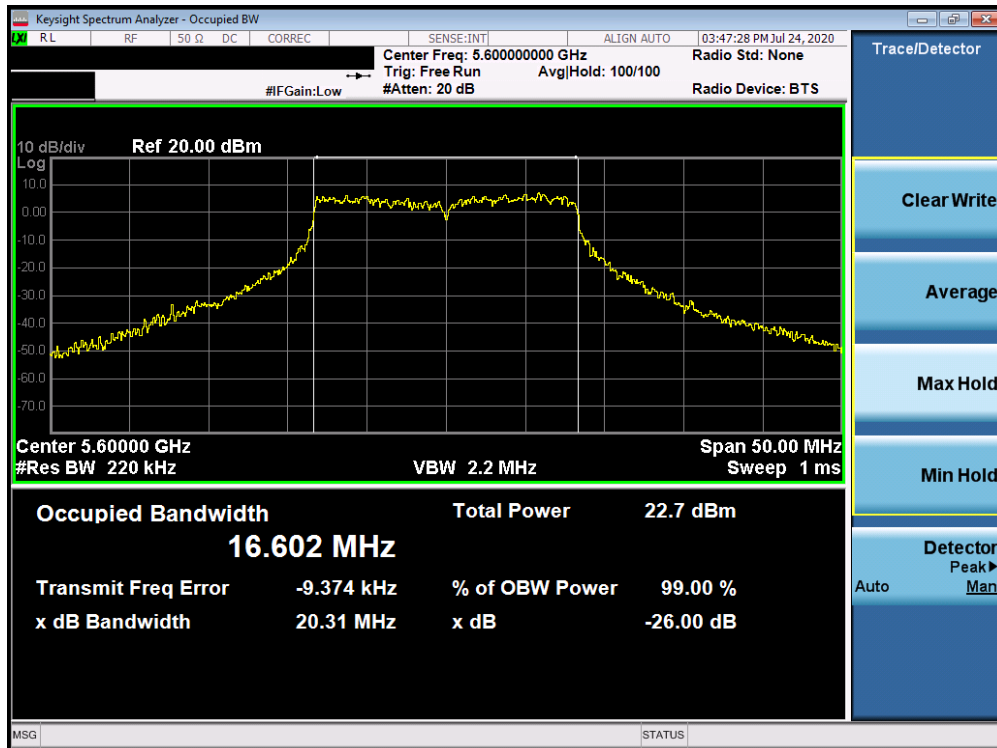


Plot 7-132. 26dB Bandwidth Plot ANT5 (80MHz BW 802.11ax (UNII Band 2A) – Ch. 58)

FCC ID: A3LSMH204V		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 85 of 344

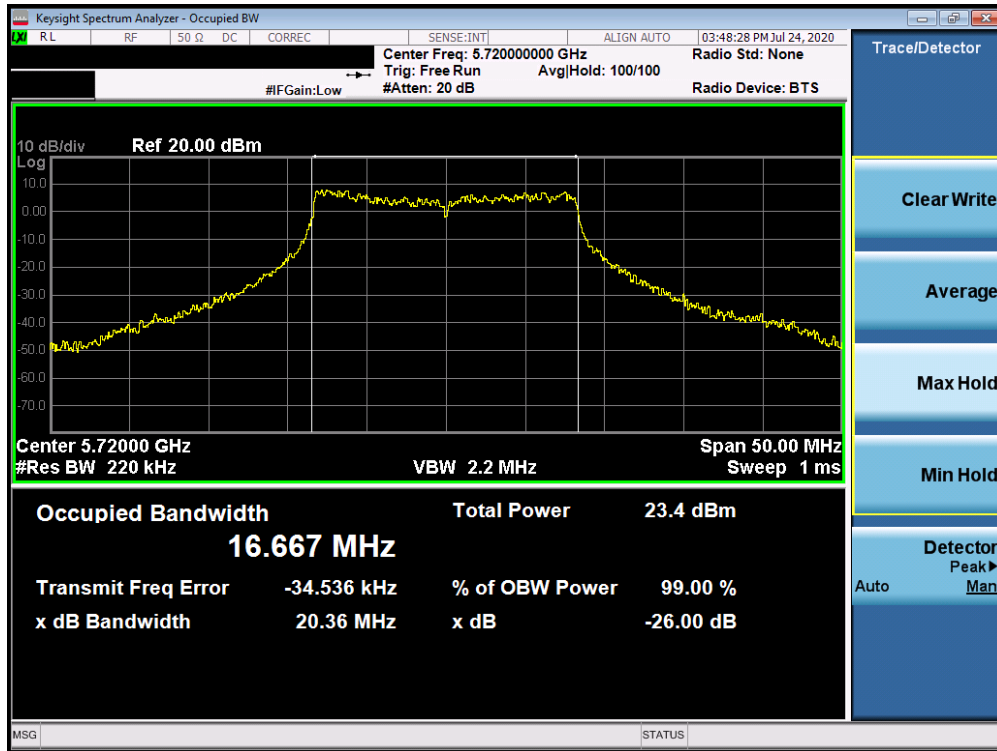


Plot 7-133. 26dB Bandwidth Plot ANT5 (802.11a (UNII Band 2C) – Ch. 100)

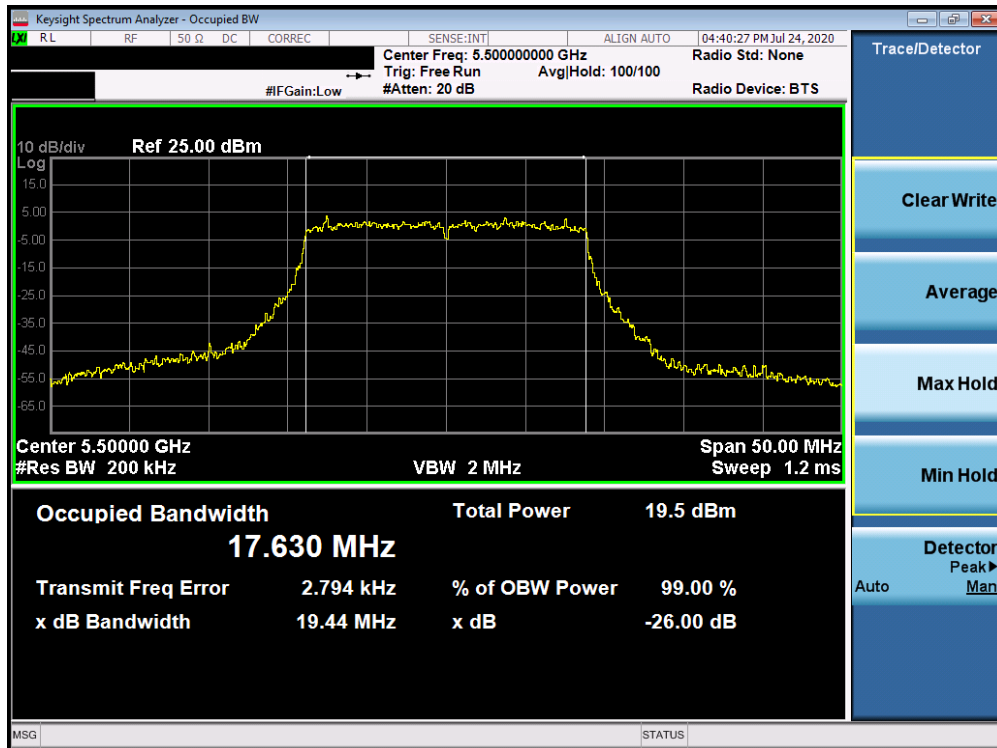


Plot 7-134. 26dB Bandwidth Plot ANT5 (802.11a (UNII Band 2C) – Ch. 120)

FCC ID: A3LSMH204V	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 86 of 344

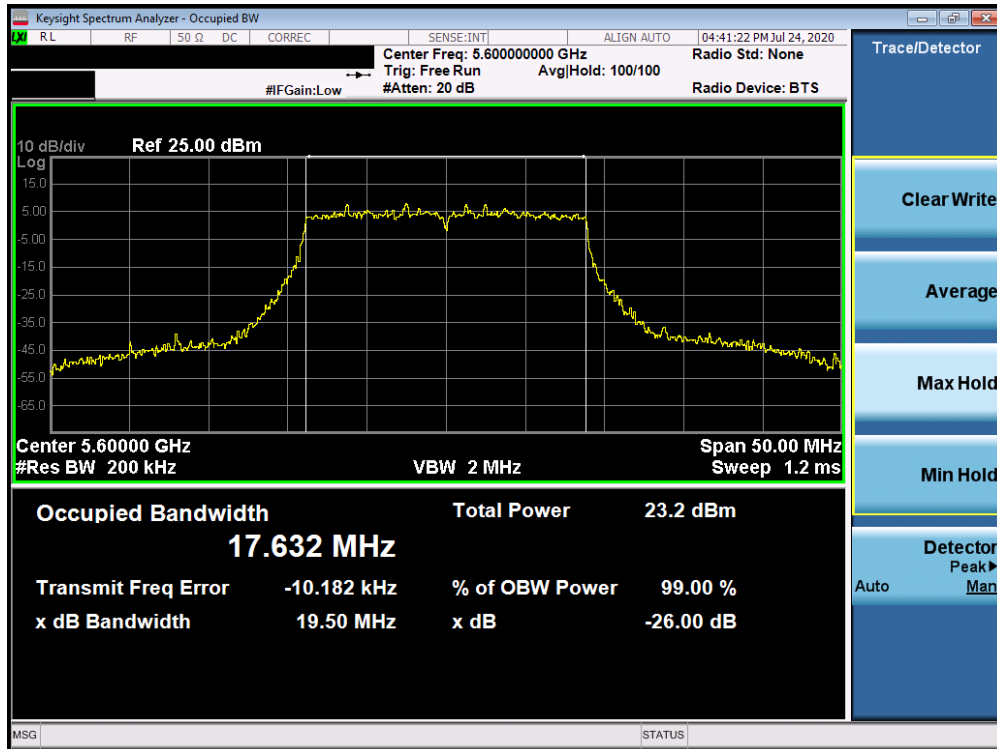


Plot 7-135. 26dB Bandwidth Plot ANT5 (802.11a (UNII Band 2C) – Ch. 144)

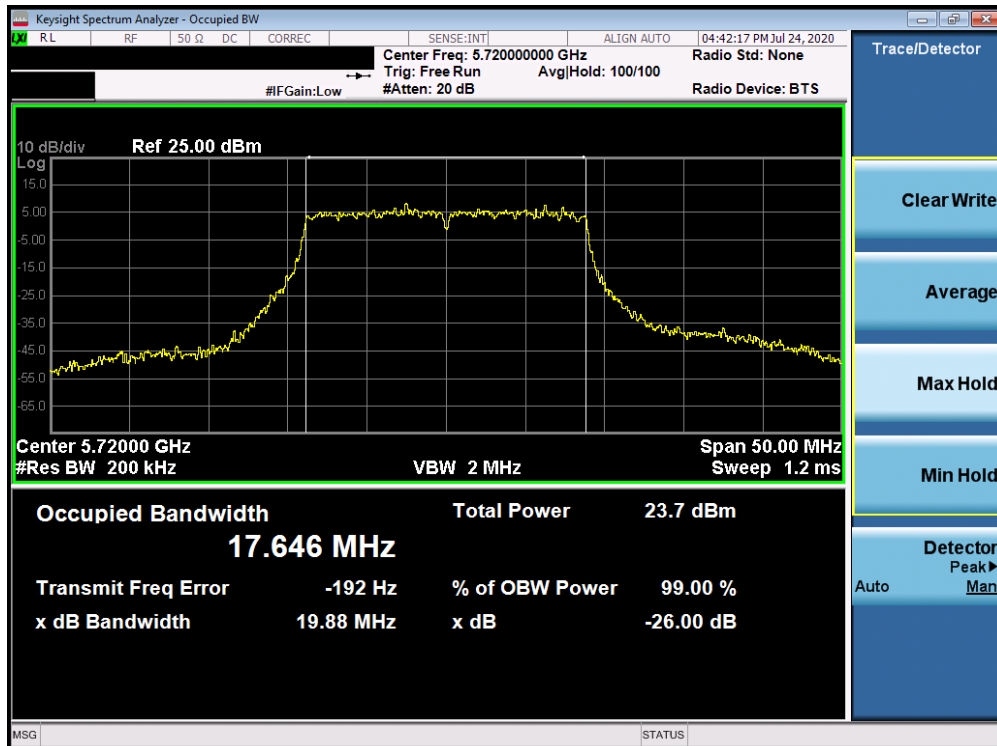


Plot 7-136. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11n (UNII Band 2C) – Ch. 100)

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

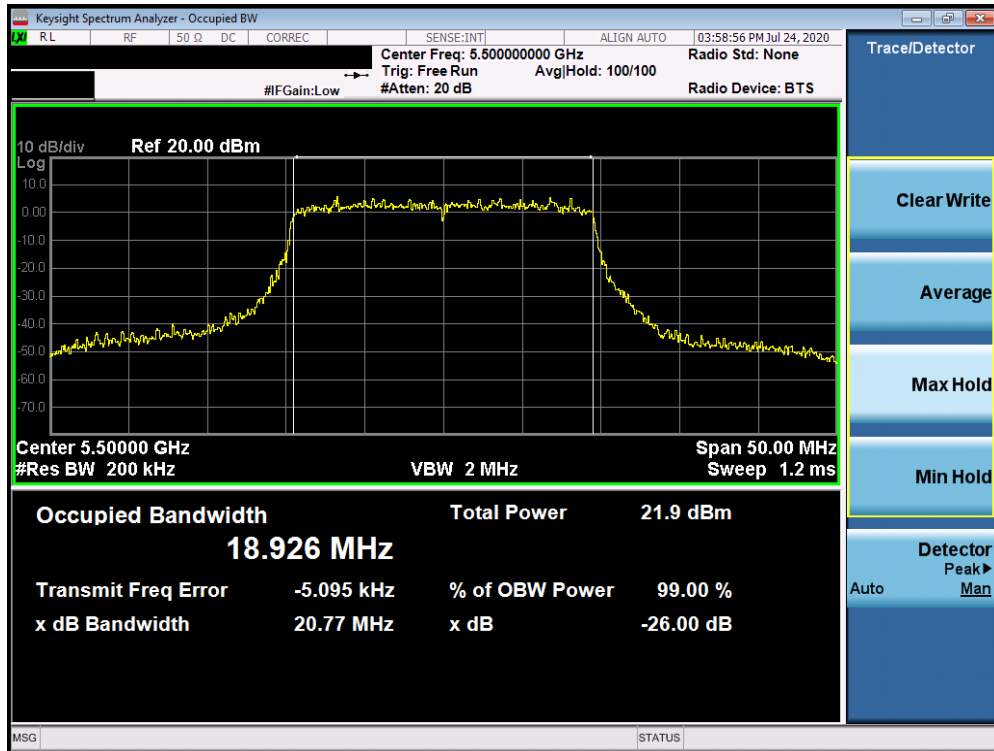


Plot 7-137. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11n (UNII Band 2C) – Ch. 120)

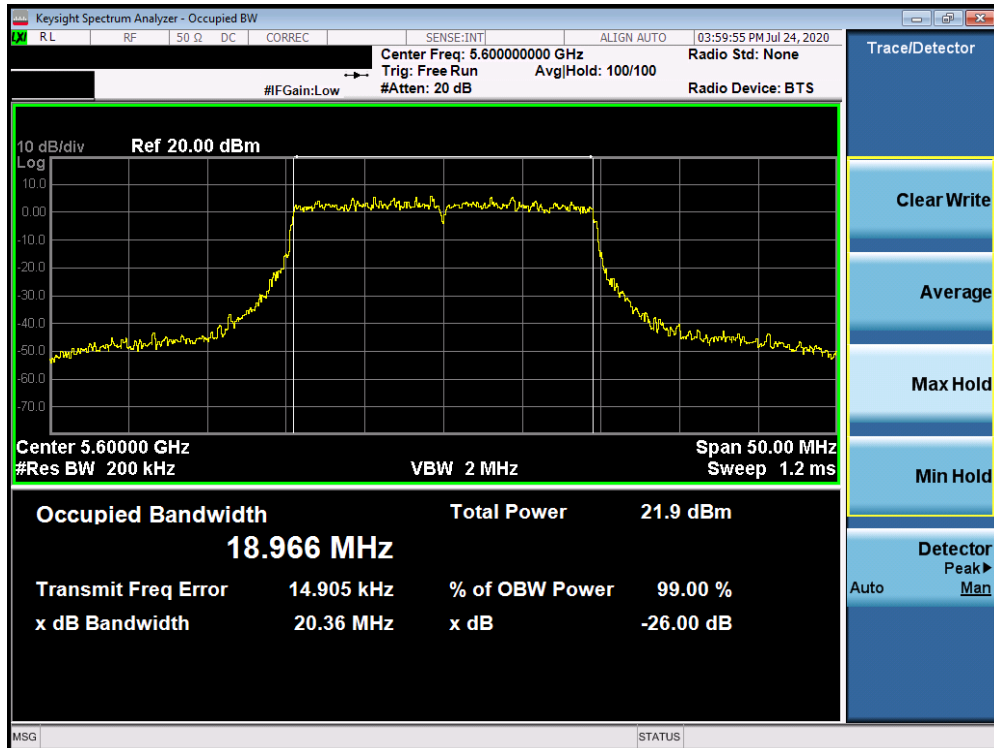


Plot 7-138. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11n (UNII Band 2C) – Ch. 144)

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

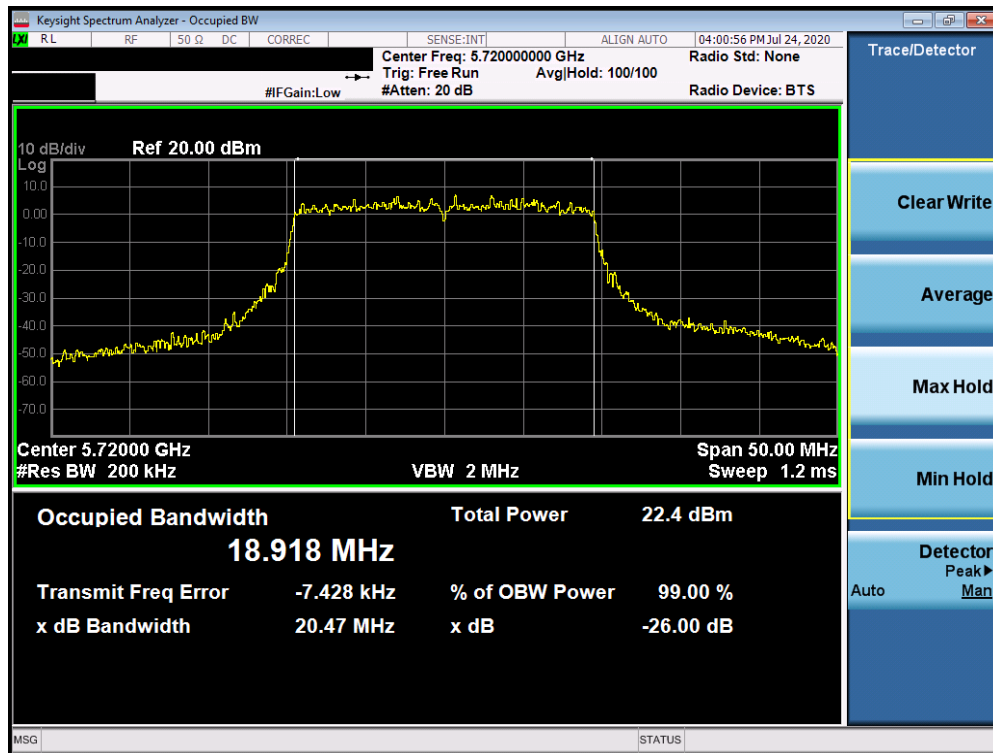


Plot 7-139. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11ax (UNII Band 2C) – Ch. 100)

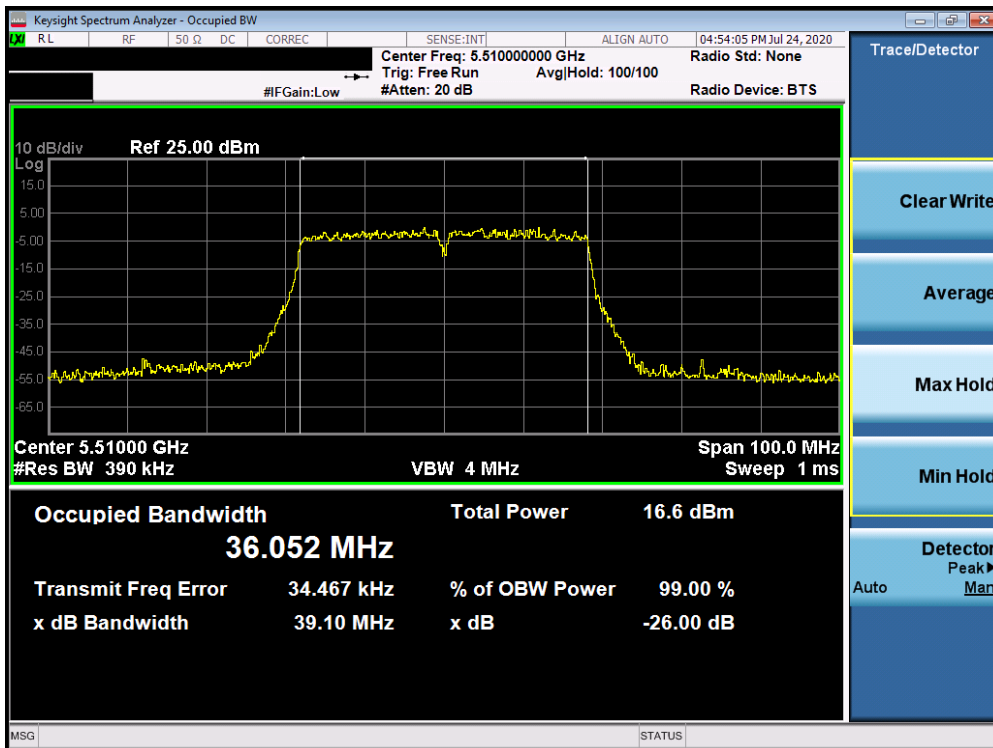


Plot 7-140. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11ax (UNII Band 2C) – Ch. 120)

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

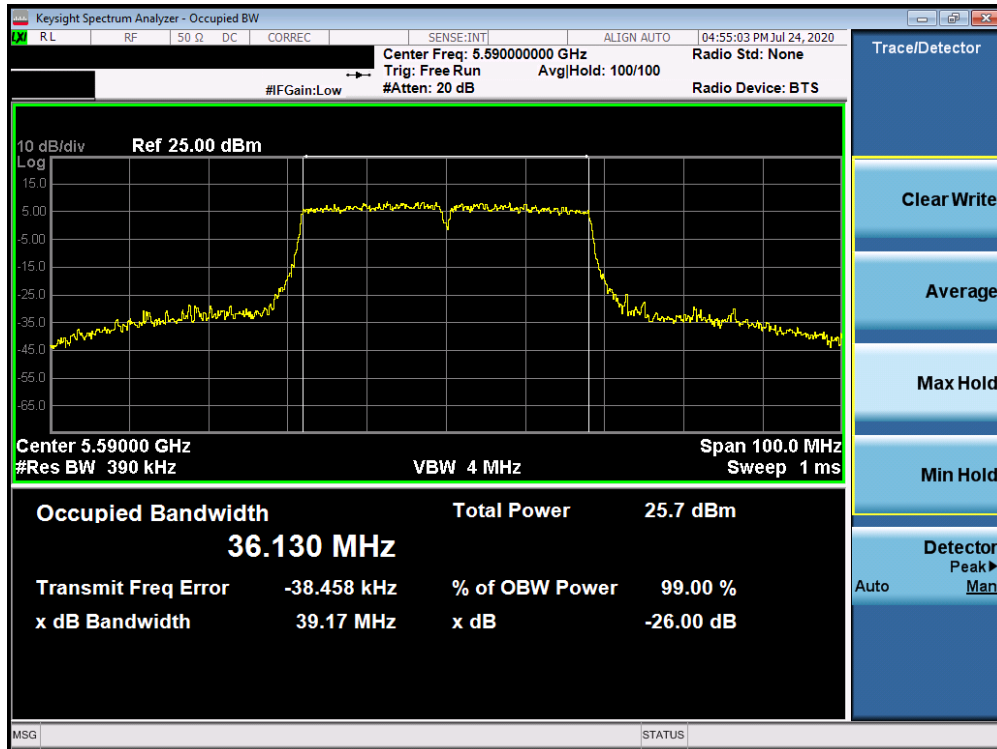


Plot 7-141. 26dB Bandwidth Plot ANT5 (20MHz BW 802.11ax (UNII Band 2C) – Ch. 144)

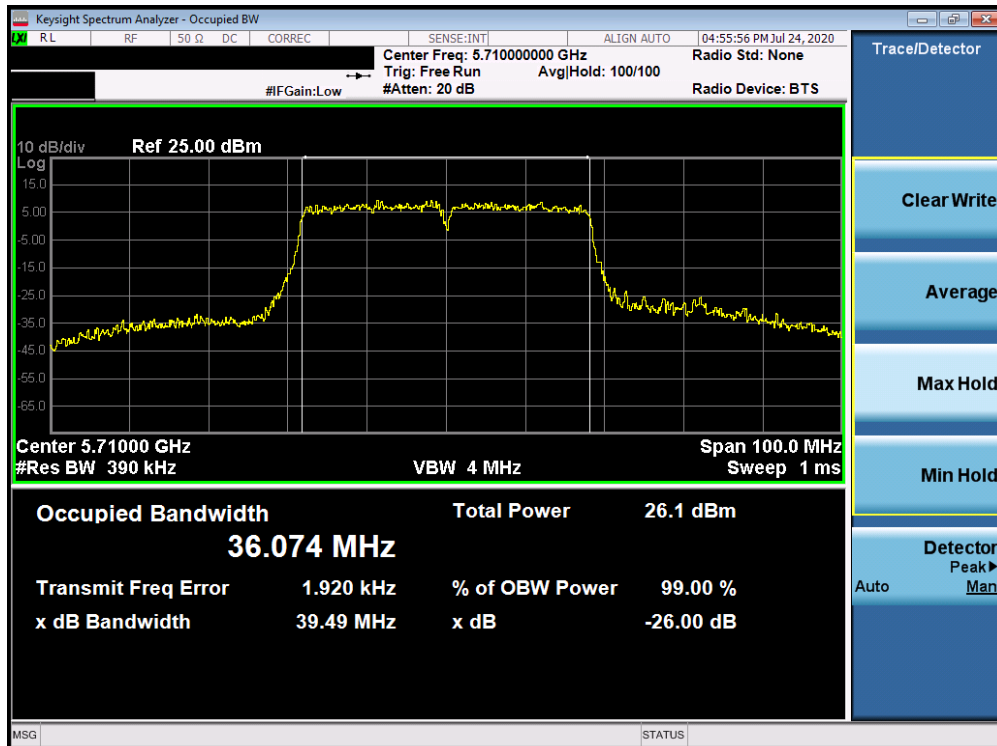


Plot 7-142. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11n (UNII Band 2C) – Ch. 102)

FCC ID: A3LSMH204V	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 90 of 344

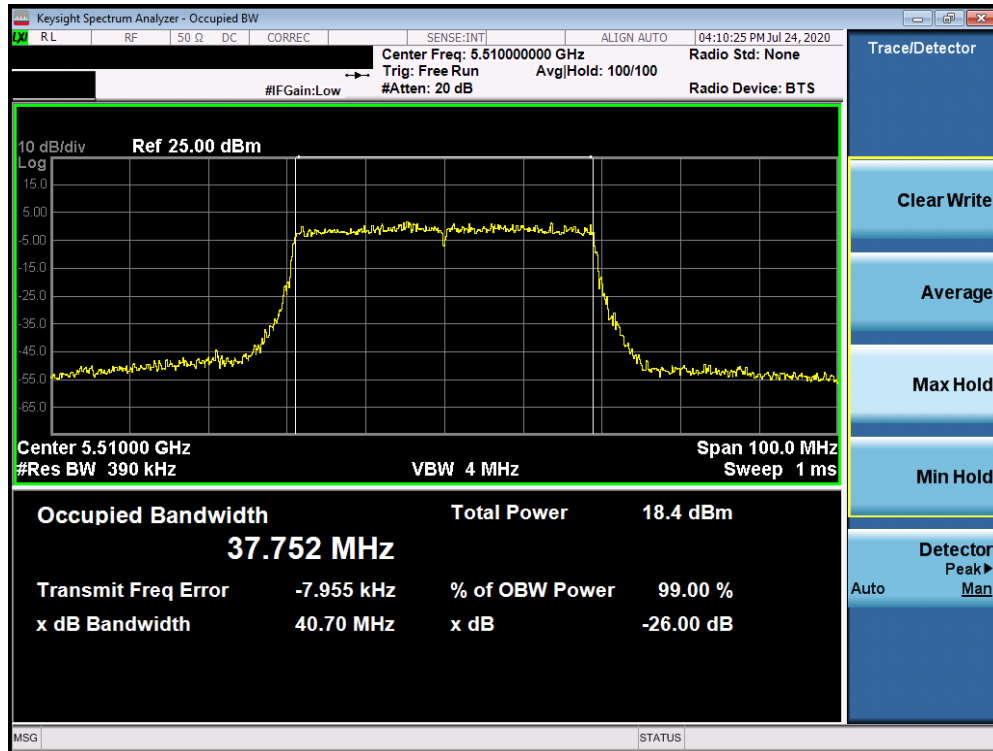


Plot 7-143. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11n (UNII Band 2C) – Ch. 118)

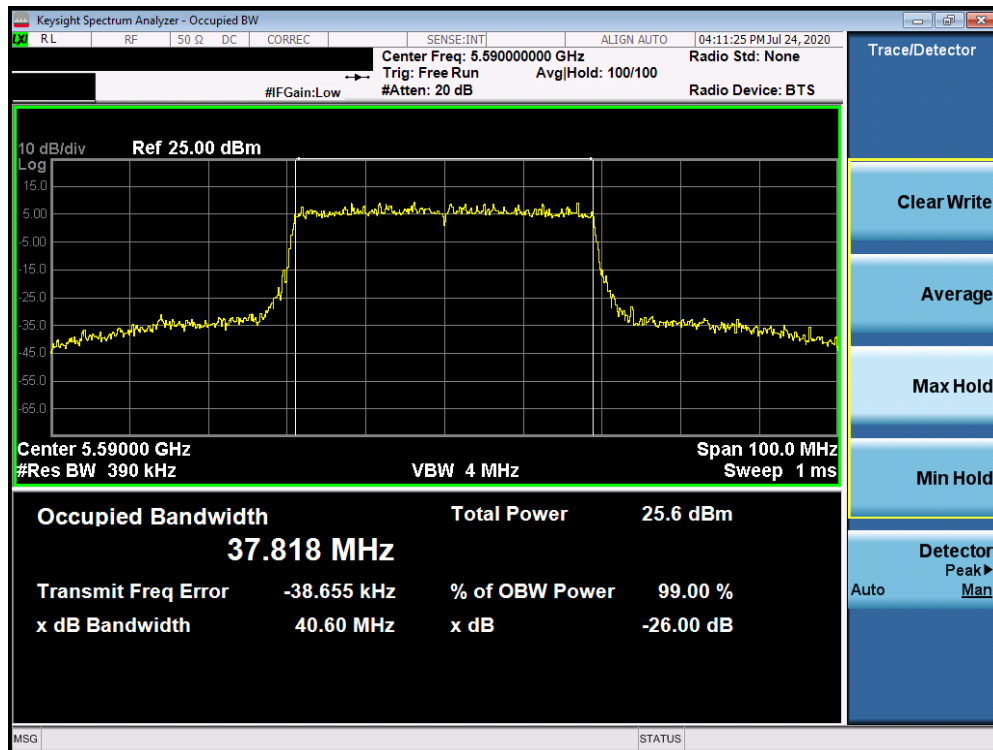


Plot 7-144. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11n (UNII Band 2C) – Ch. 142)

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

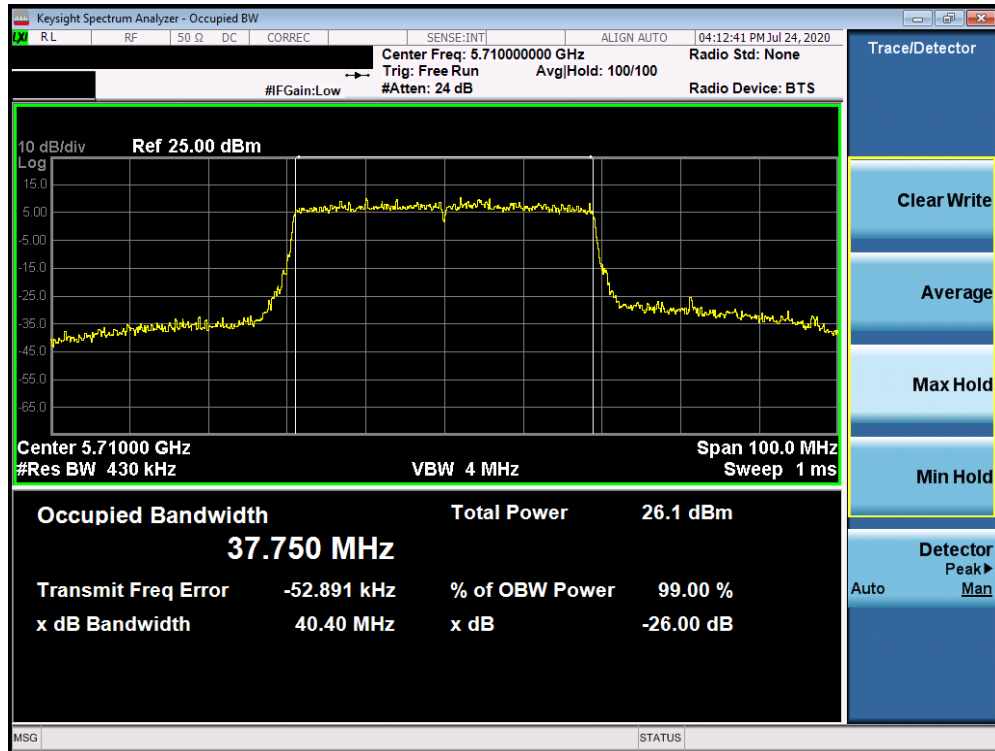


Plot 7-145. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11ax (UNII Band 2C) – Ch. 102)

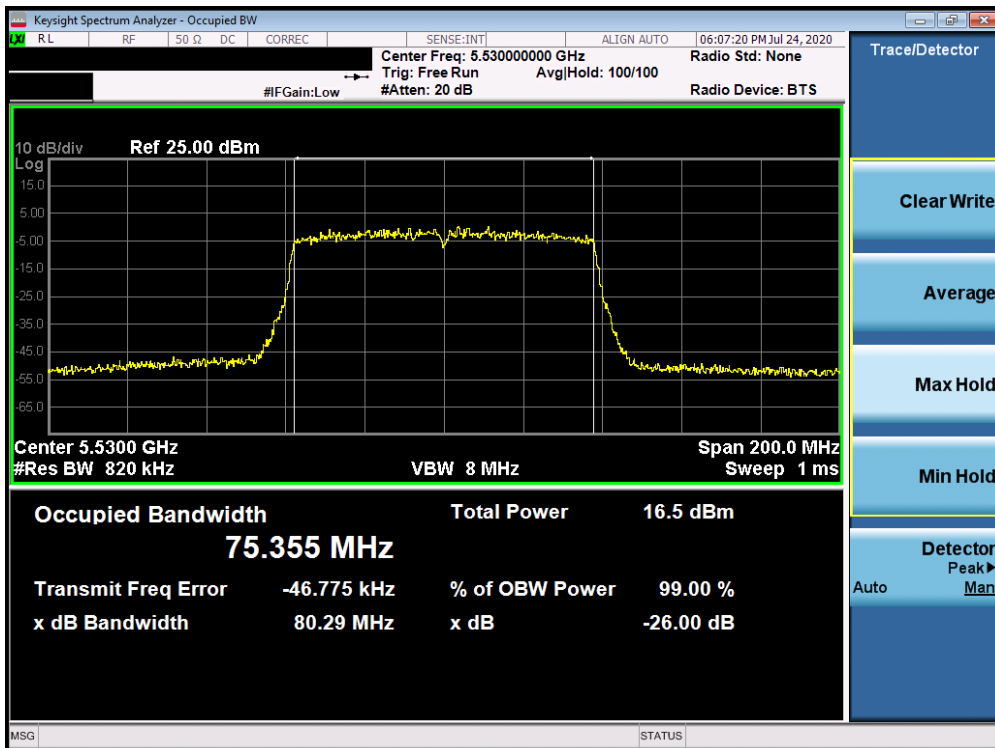


Plot 7-146. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11ax (UNII Band 2C) – Ch. 118)

FCC ID: A3LSMH204V	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 92 of 344

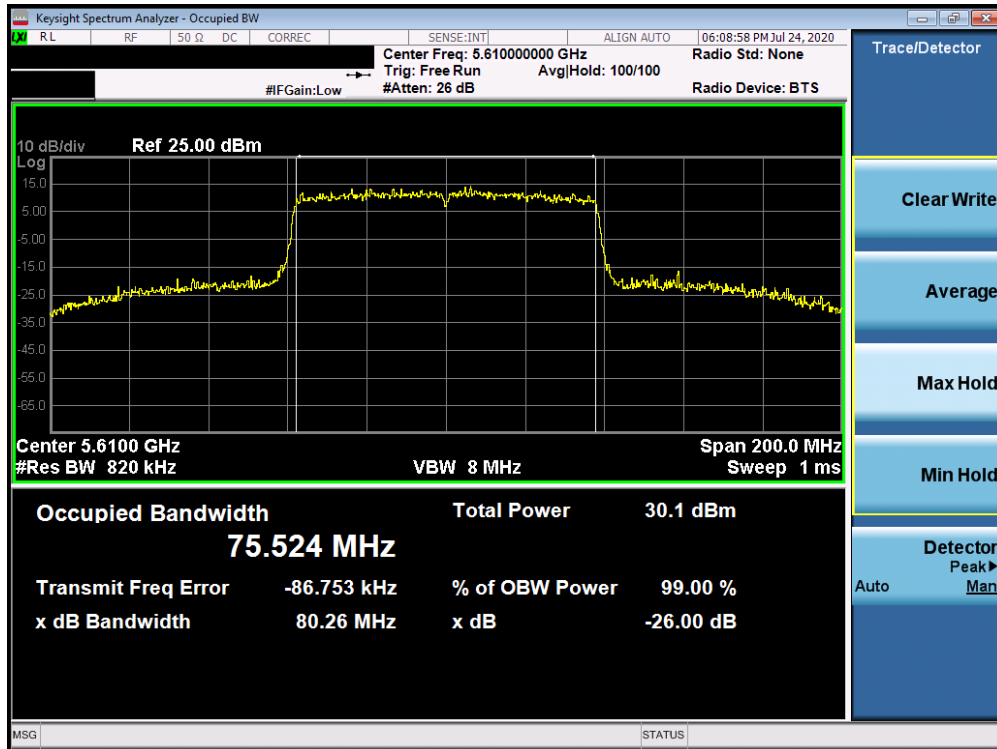


Plot 7-147. 26dB Bandwidth Plot ANT5 (40MHz BW 802.11ax (UNII Band 2C) – Ch. 142)

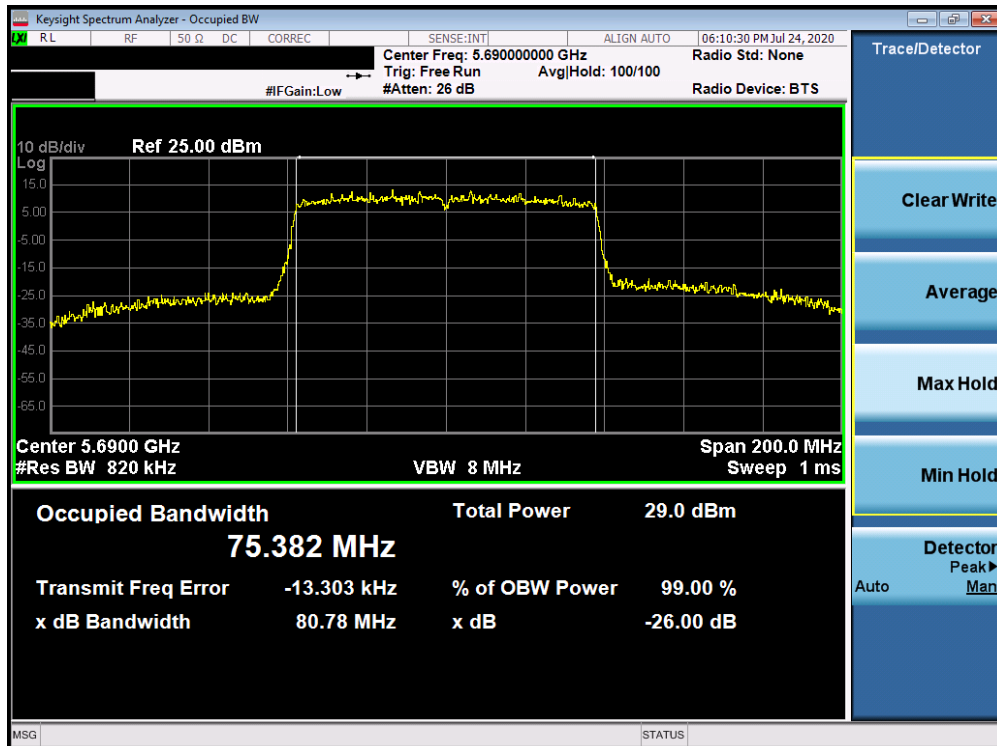


Plot 7-148. 26dB Bandwidth Plot ANT5 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 106)

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

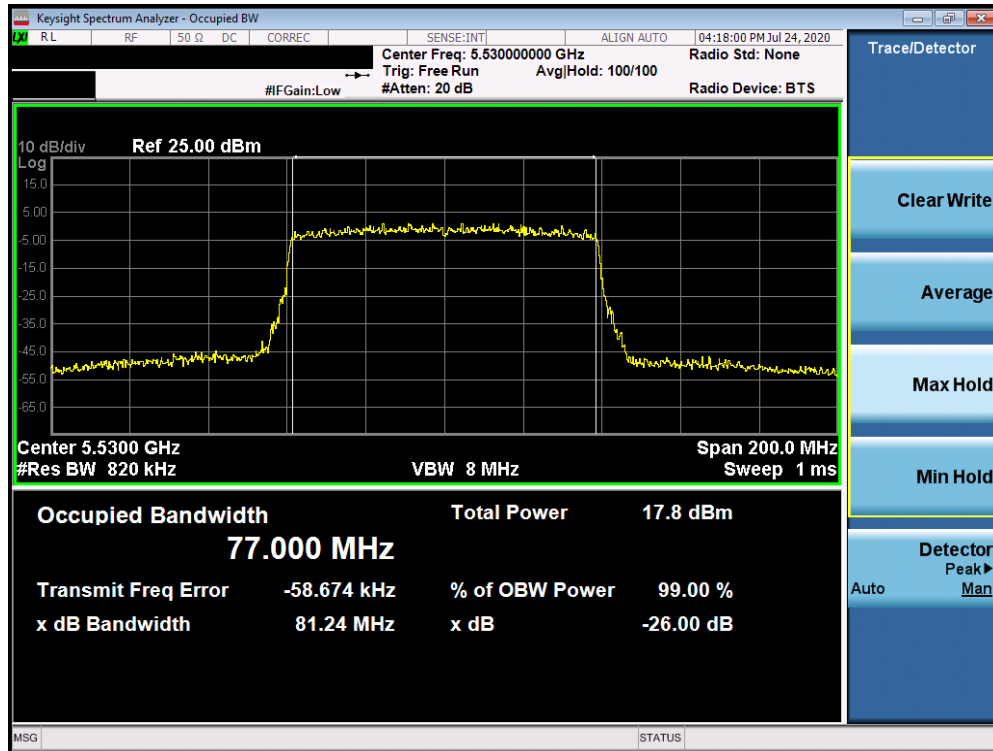


Plot 7-149. 26dB Bandwidth Plot ANT5 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 122)

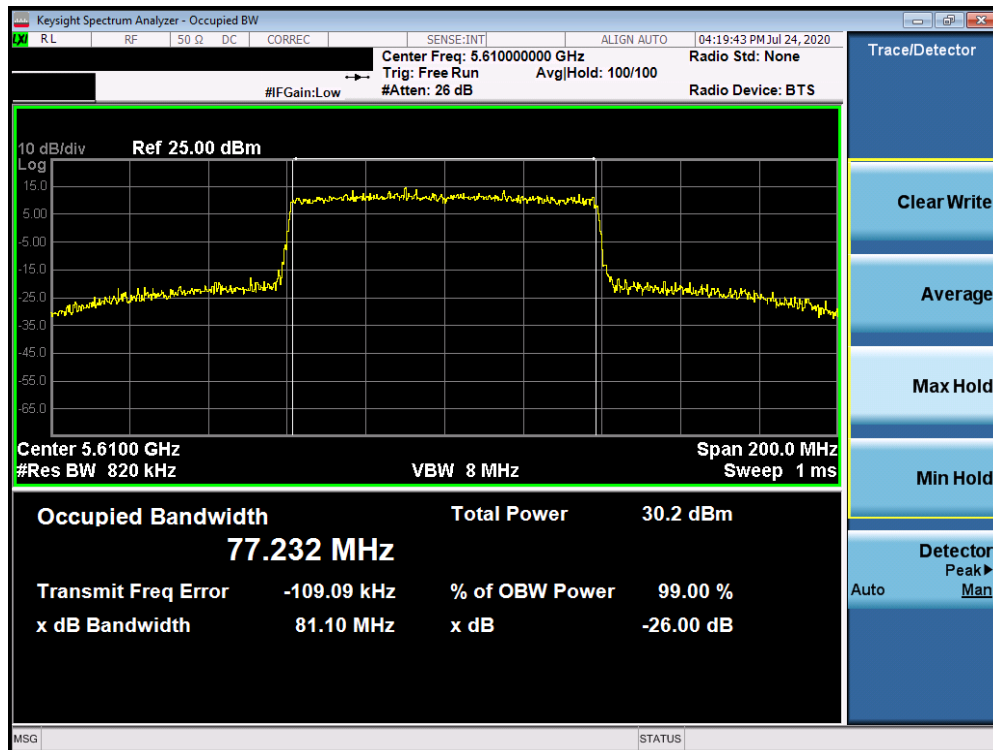


Plot 7-150. 26dB Bandwidth Plot ANT5 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 138)

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

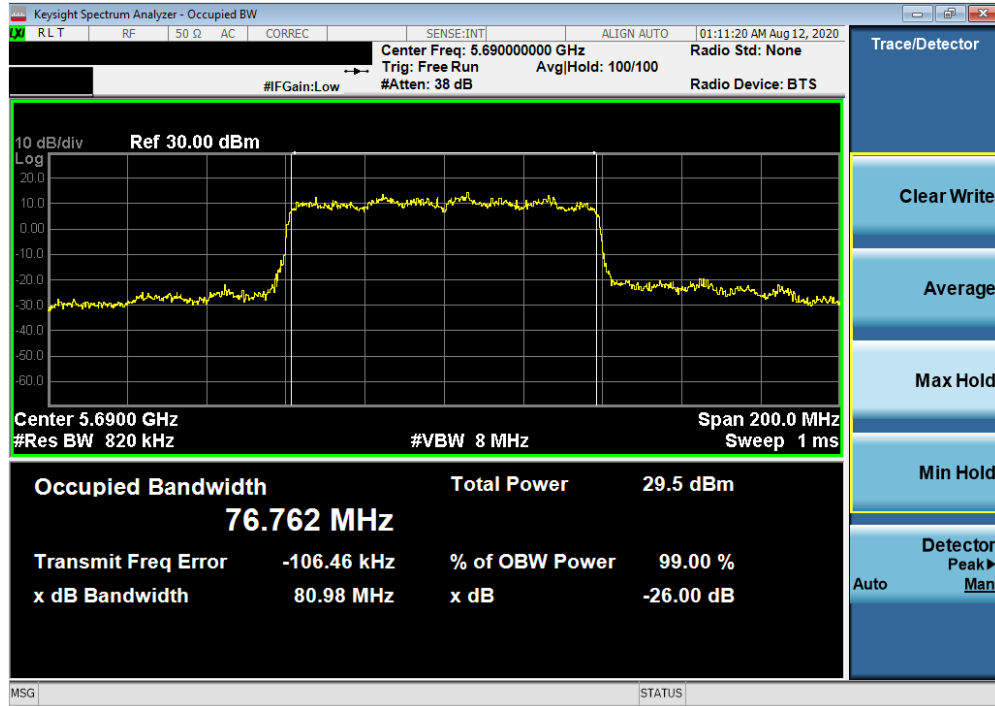


Plot 7-151. 26dB Bandwidth Plot ANT5 (80MHz BW 802.11ax (UNII Band 2C) – Ch. 106)



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

FCC ID: A3LSMH204V		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 95 of 344



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

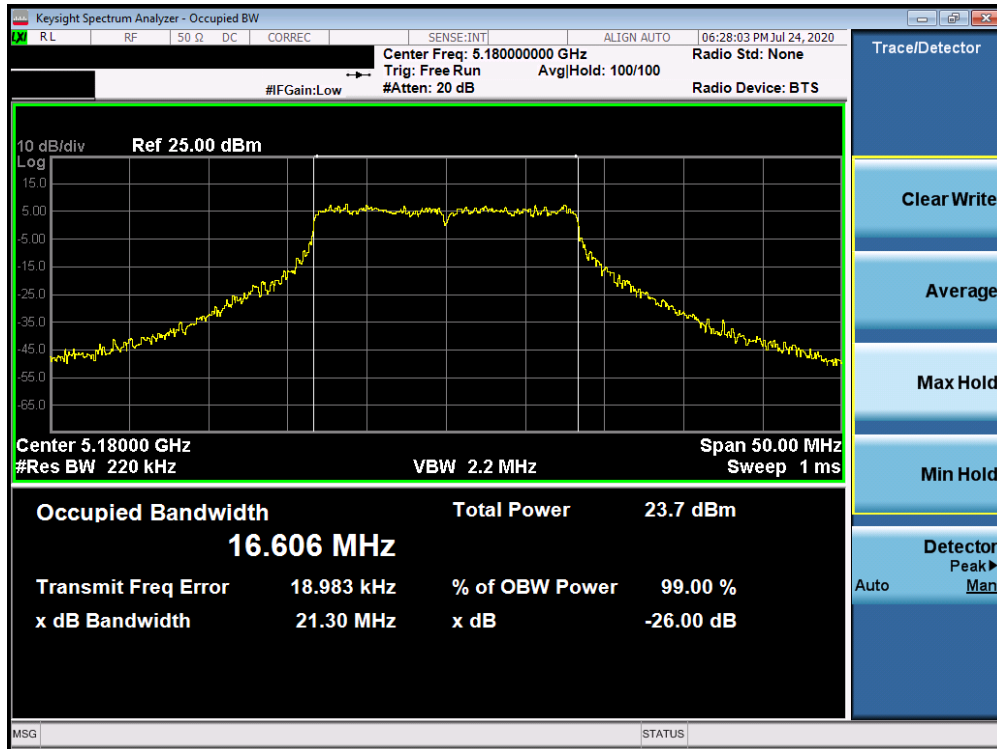
FCC ID: A3LSMH204V	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2004140062-08.A3L	Test Dates: 4/29 - 8/12/2020	EUT Type: Indoor Customer Premises Equipment (CPE)		Page 96 of 344

Antenna-6 26dB Bandwidth Measurements

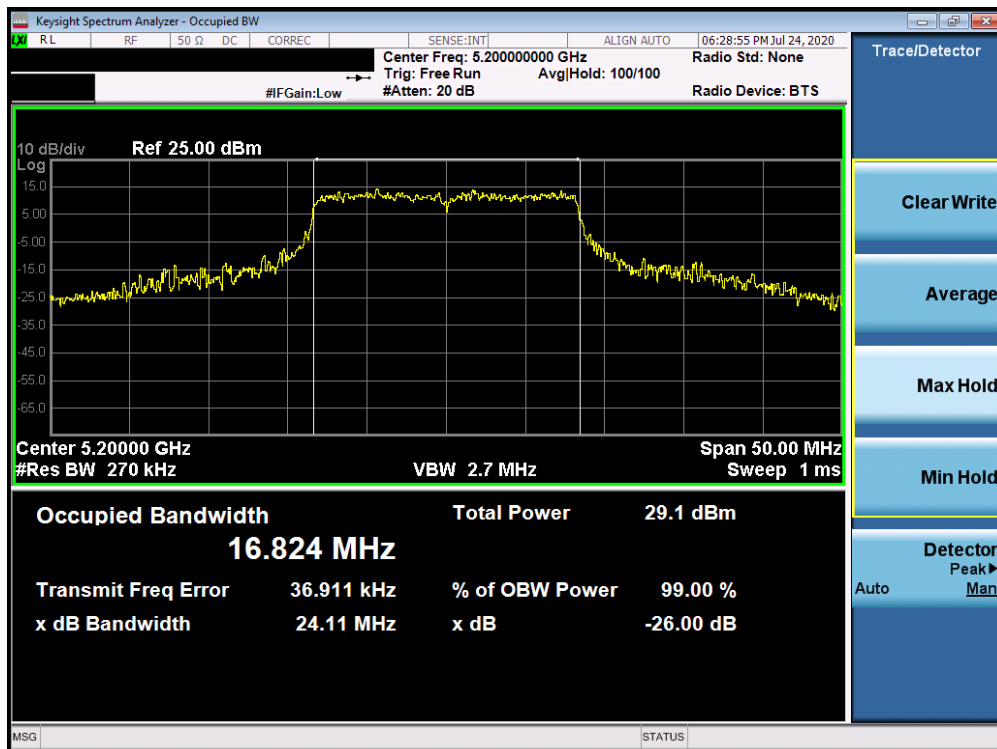
	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured 26dB Bandwidth [MHz]
Band 1	5180	36	a	6	21.30
	5200	40	a	6	24.11
	5240	48	a	6	23.72
	5180	36	n (20MHz)	6.5/7.2 (MCS0)	20.05
	5200	40	n (20MHz)	6.5/7.2 (MCS0)	19.64
	5240	48	n (20MHz)	6.5/7.2 (MCS0)	20.00
	5180	36	ax (20MHz)	8/8.6 (MCS0)	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

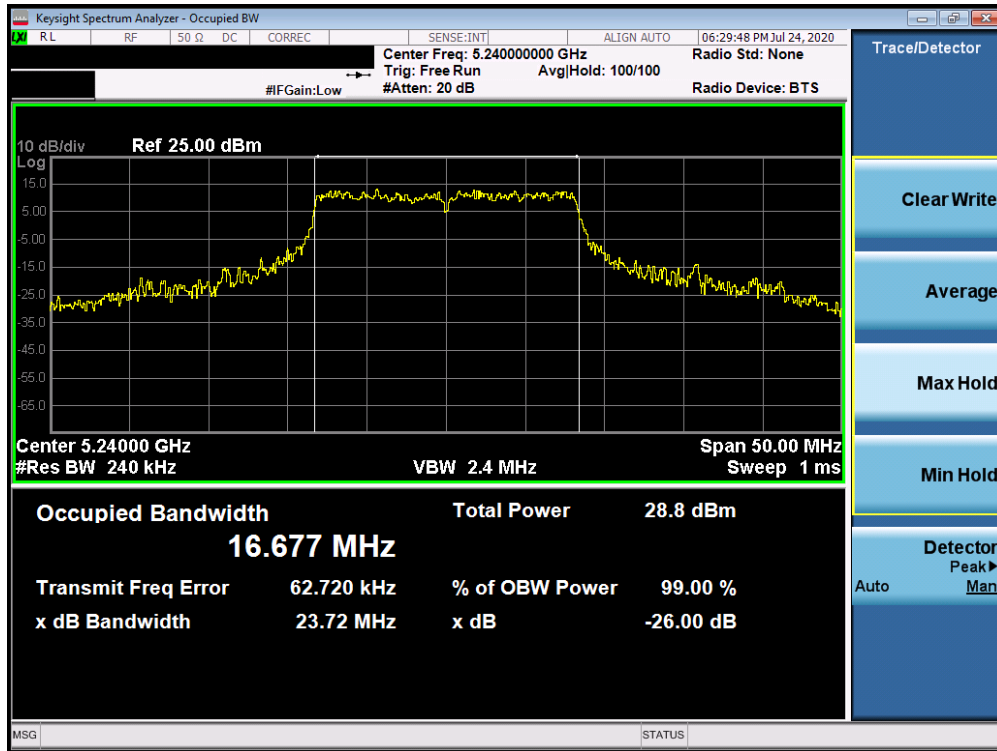


Plot 7-154. 26dB Bandwidth Plot ANT6 (802.11a (UNII Band 1) – Ch. 36)

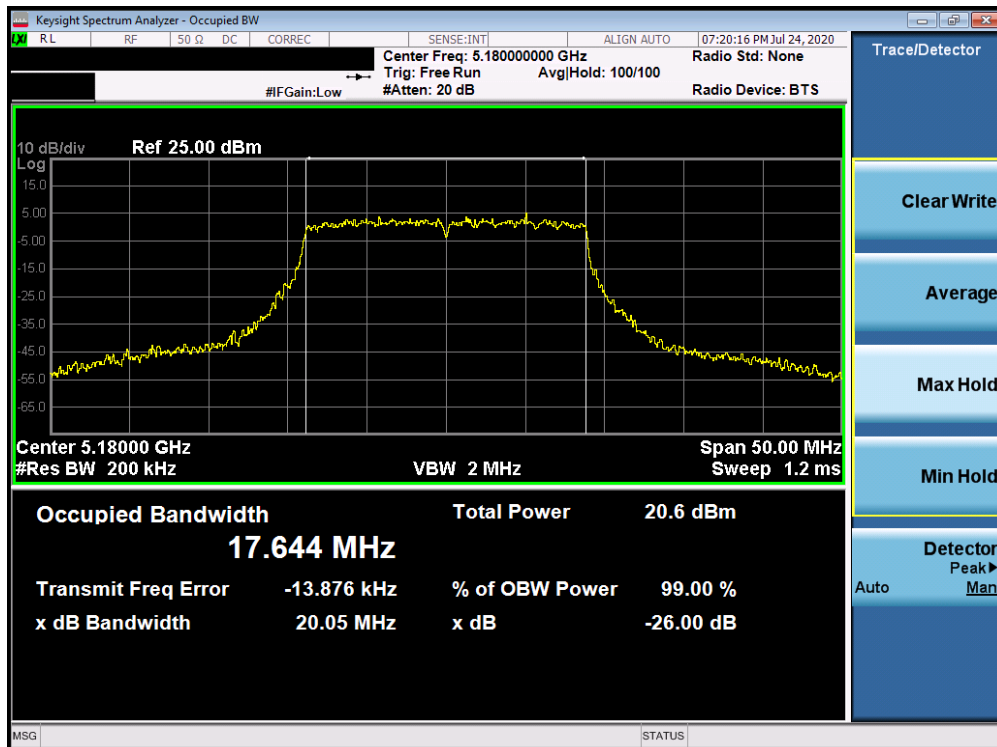


Plot 7-155. 26dB Bandwidth Plot ANT6 (802.11a (UNII Band 1) – Ch. 40)

FCC ID: A3LSMH204V	PCTEST 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 98 of 344

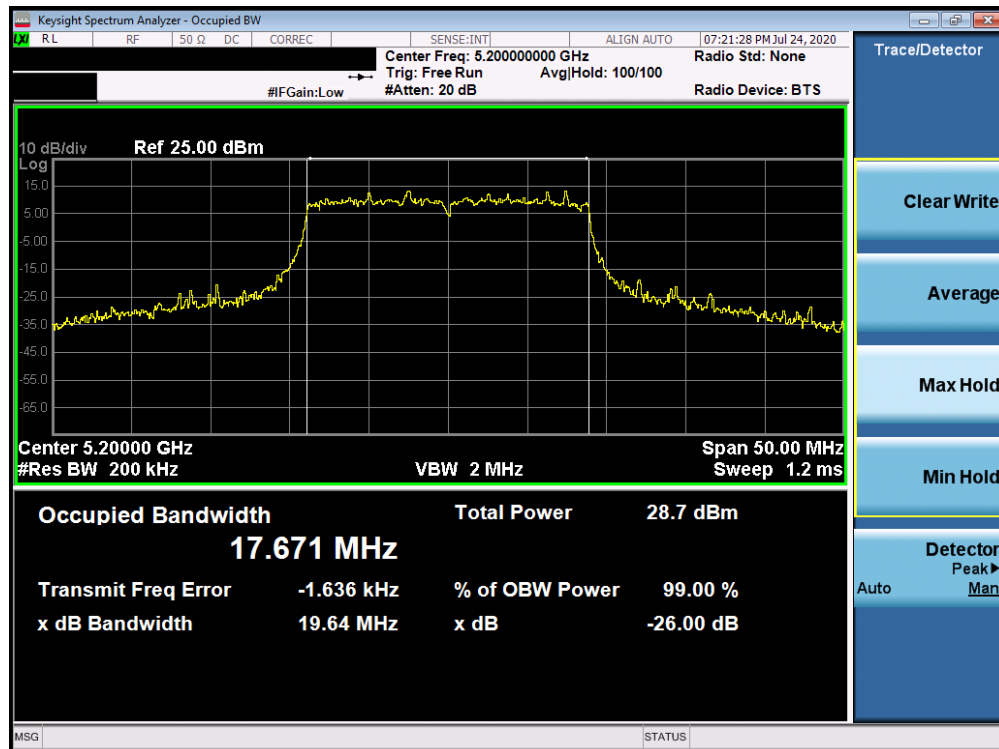


Plot 7-156. 26dB Bandwidth Plot ANT6 (802.11a (UNII Band 1) – Ch. 48)

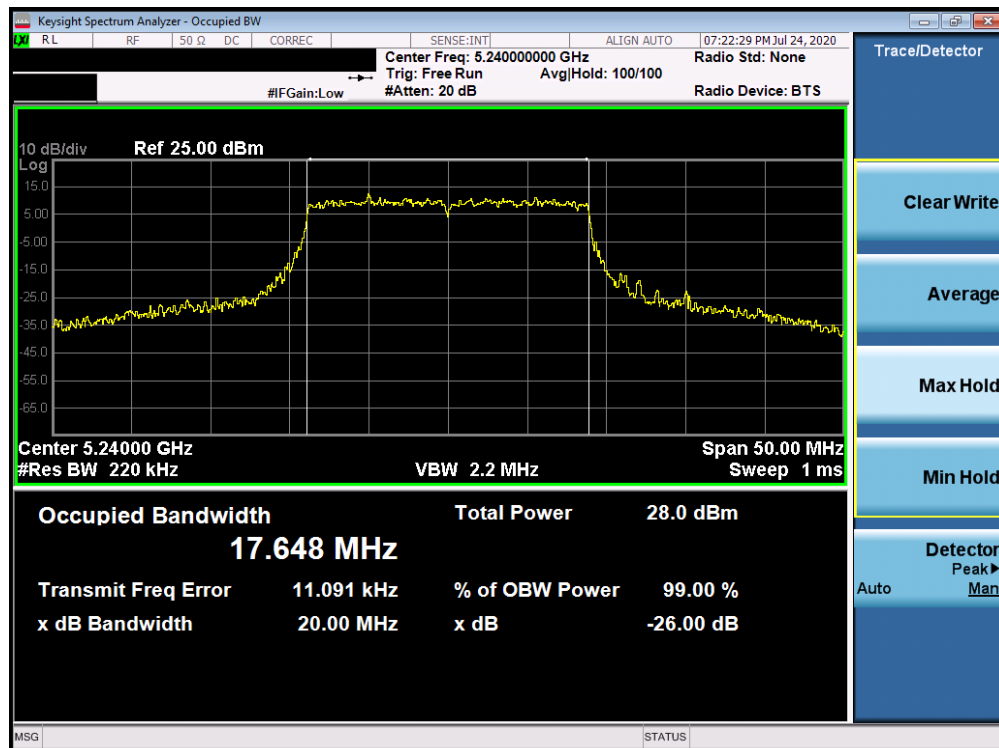


Plot 7-157. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11n (UNII Band 1) – Ch. 36)

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

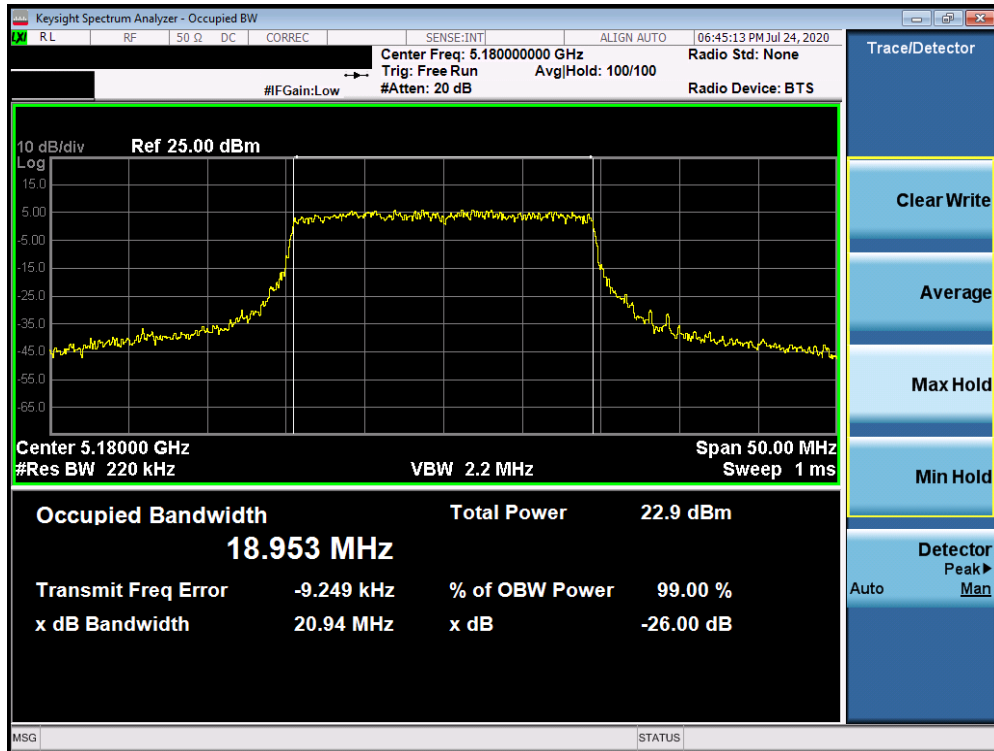


Plot 7-158. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11n (UNII Band 1) – Ch. 40)

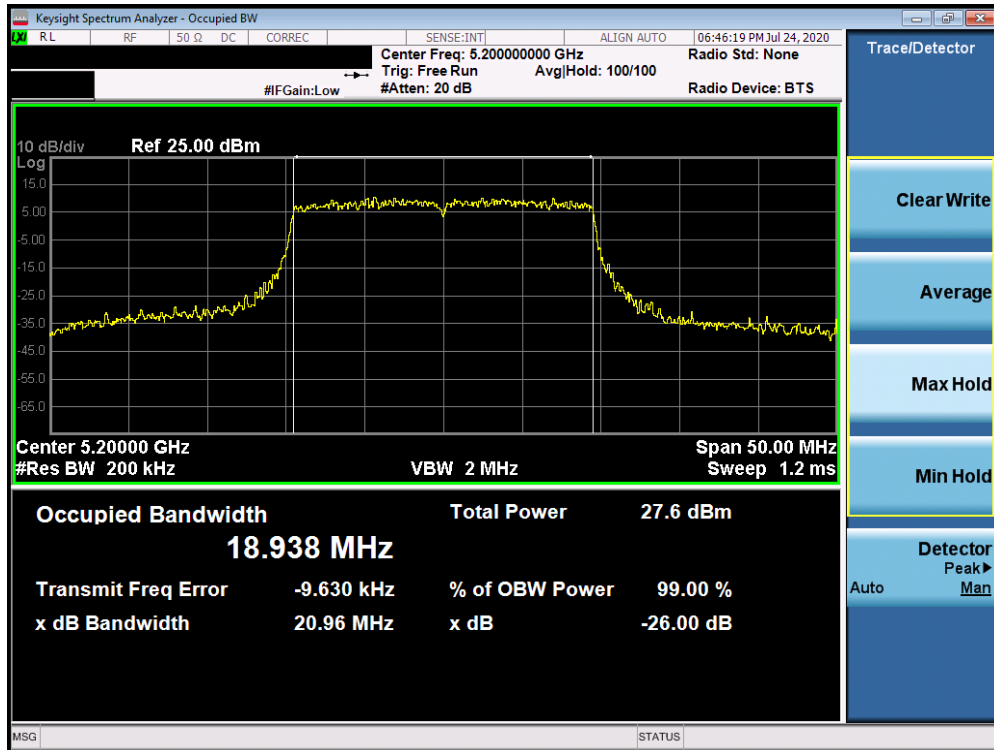


Plot 7-159. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11n (UNII Band 1) – Ch. 48)

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

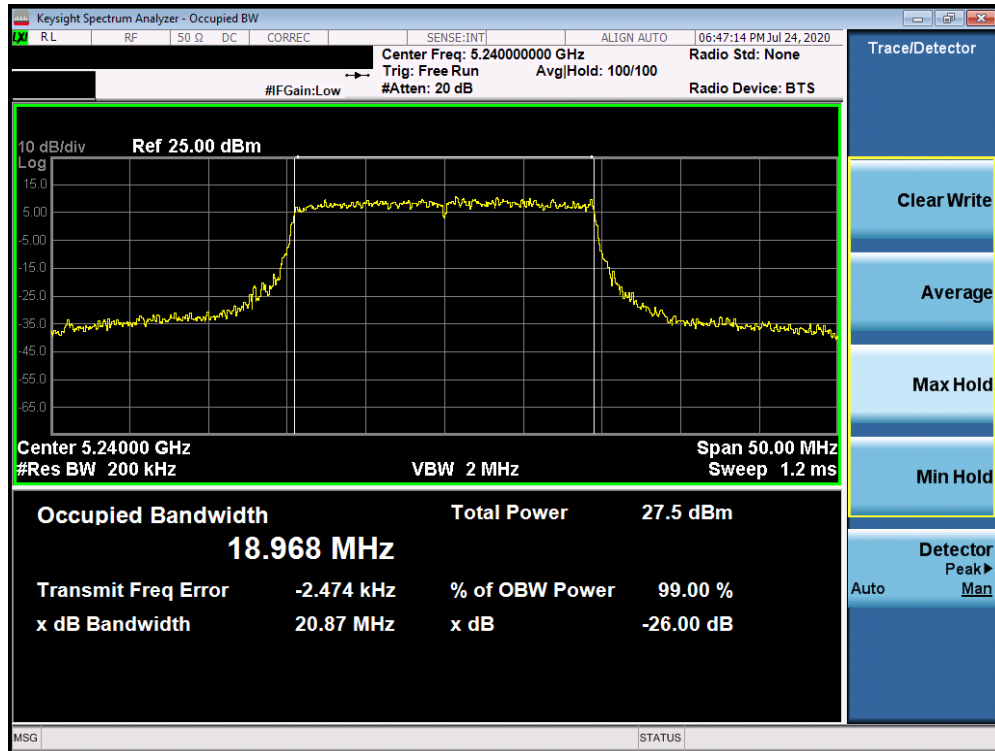


Plot 7-160. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11ax (UNII Band 1) – Ch. 36)

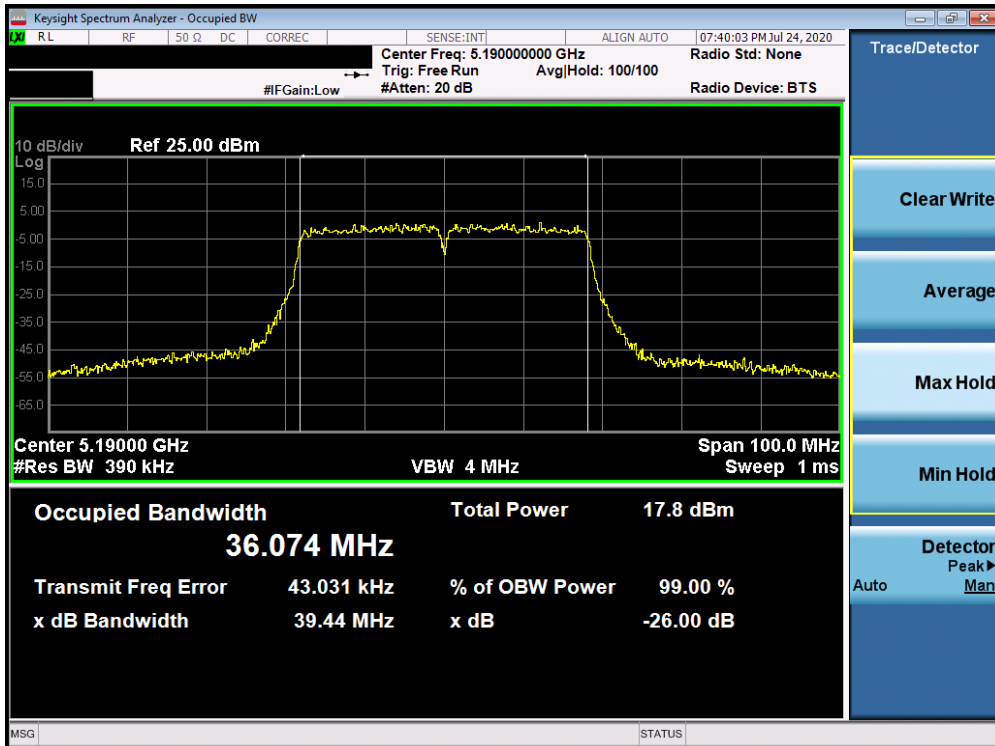


Plot 7-161. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11ax (UNII Band 1) – Ch. 40)

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

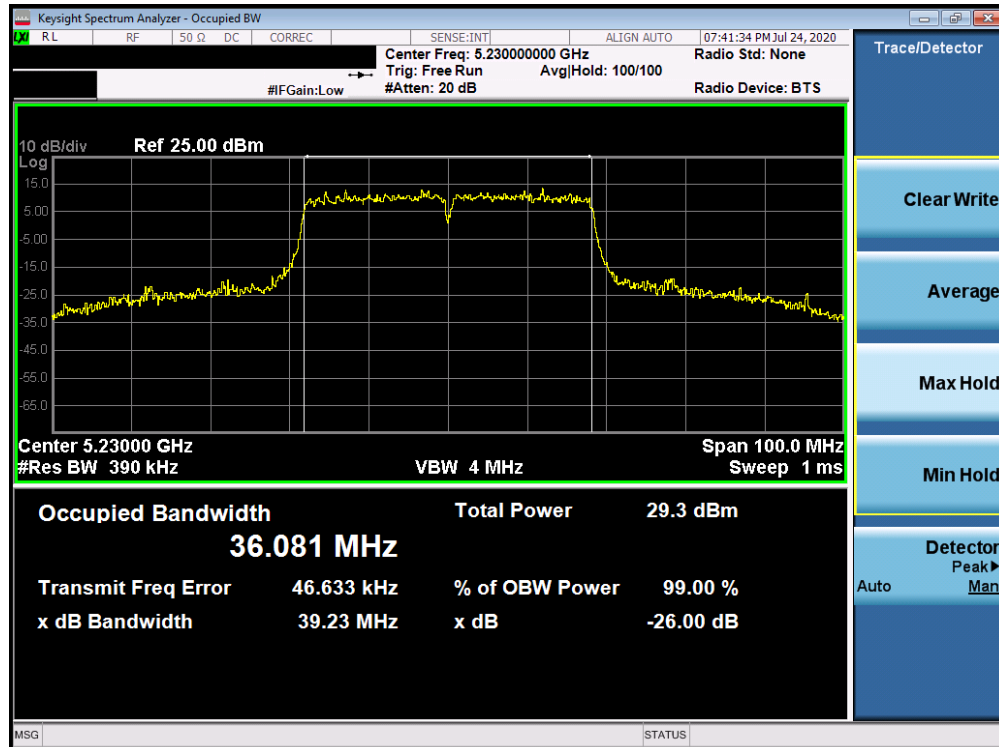


Plot 7-162. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11ax (UNII Band 1) – Ch. 48)

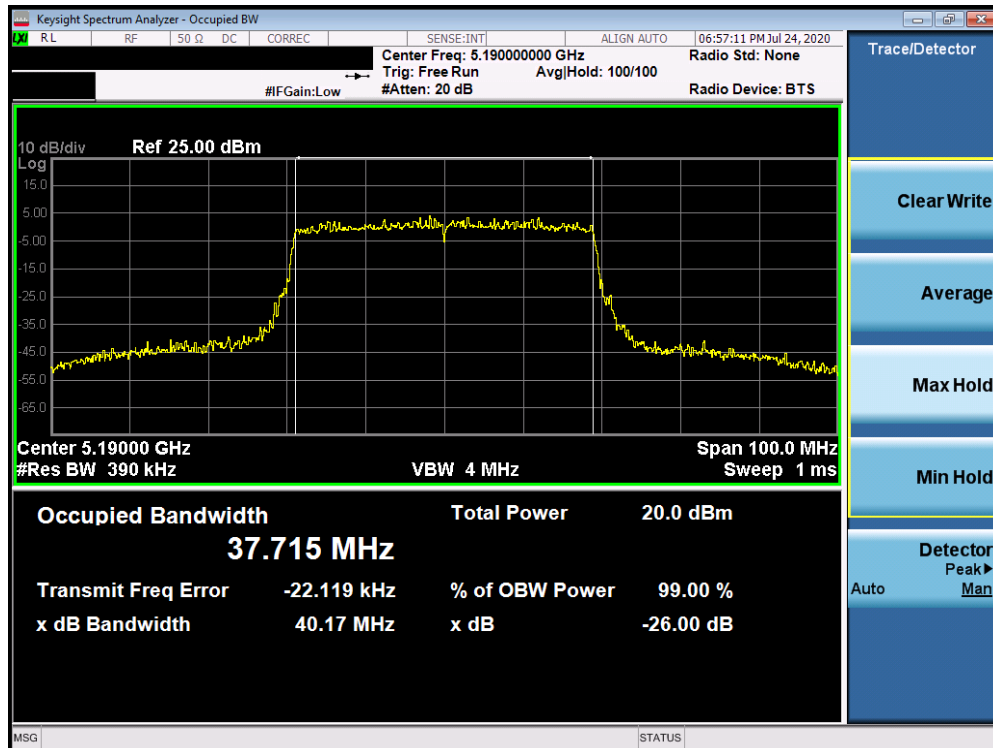


Plot 7-163. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11n (UNII Band 1) – Ch. 38)

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

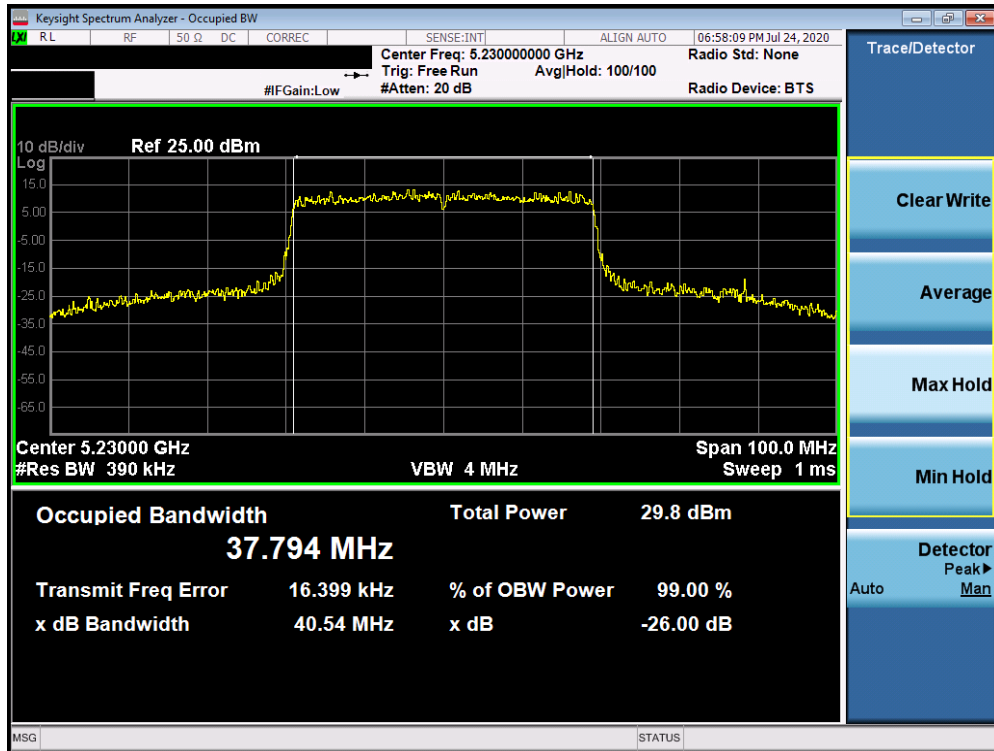


Plot 7-164. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11n (UNII Band 1) – Ch. 46)

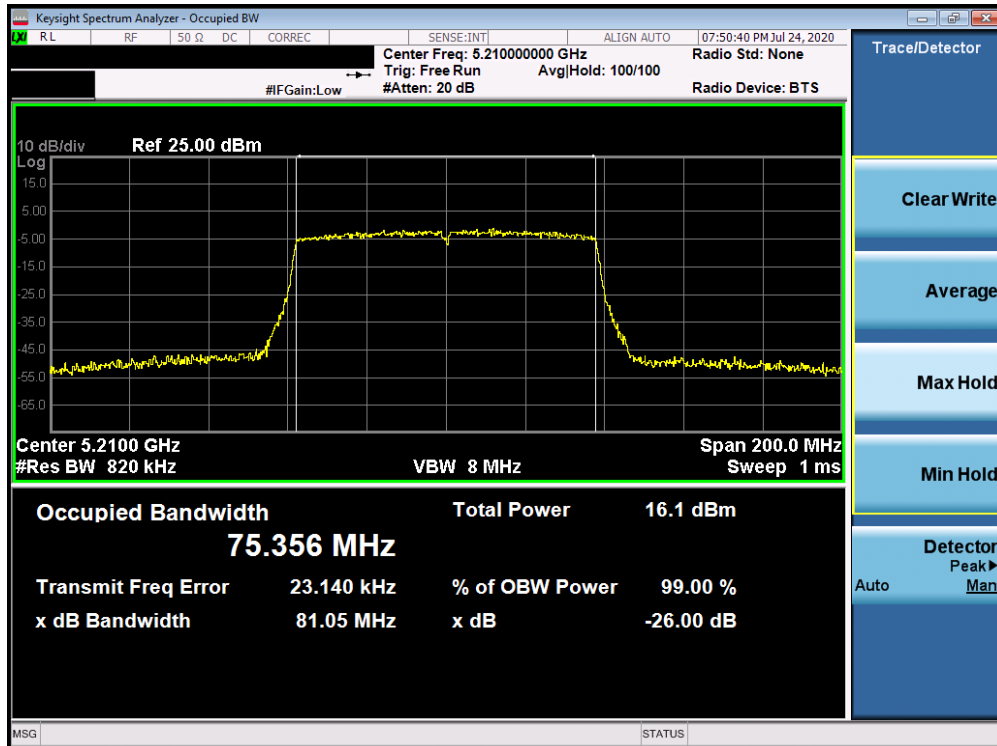


Plot 7-165. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11ax (UNII Band 1) – Ch. 38)

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

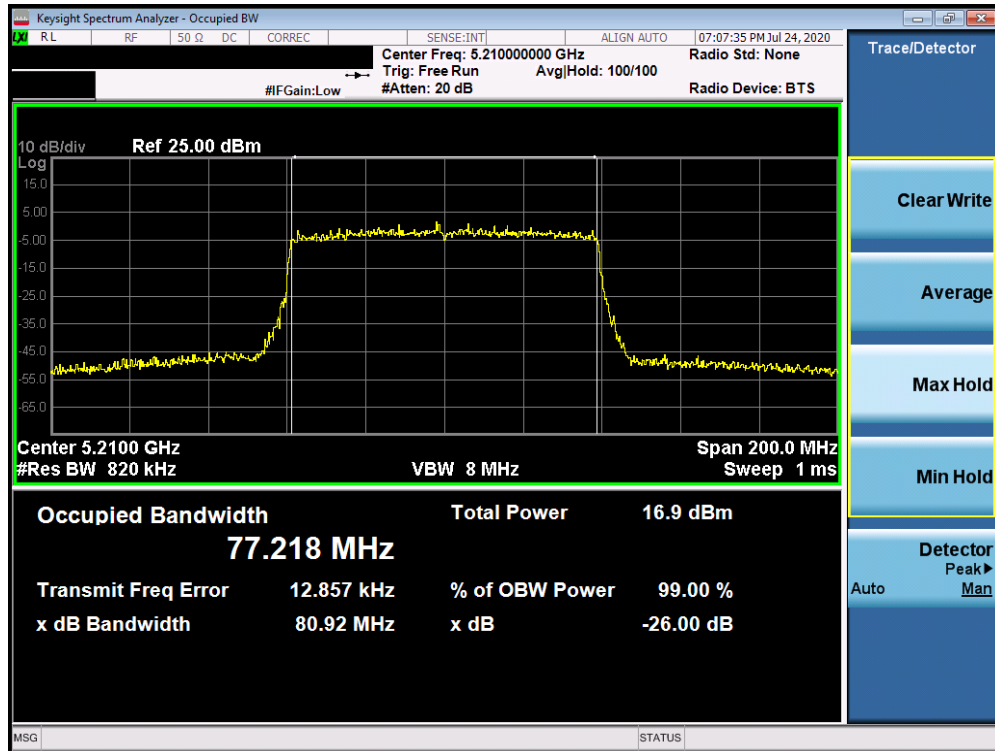


Plot 7-166. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11ax (UNII Band 1) – Ch. 46)

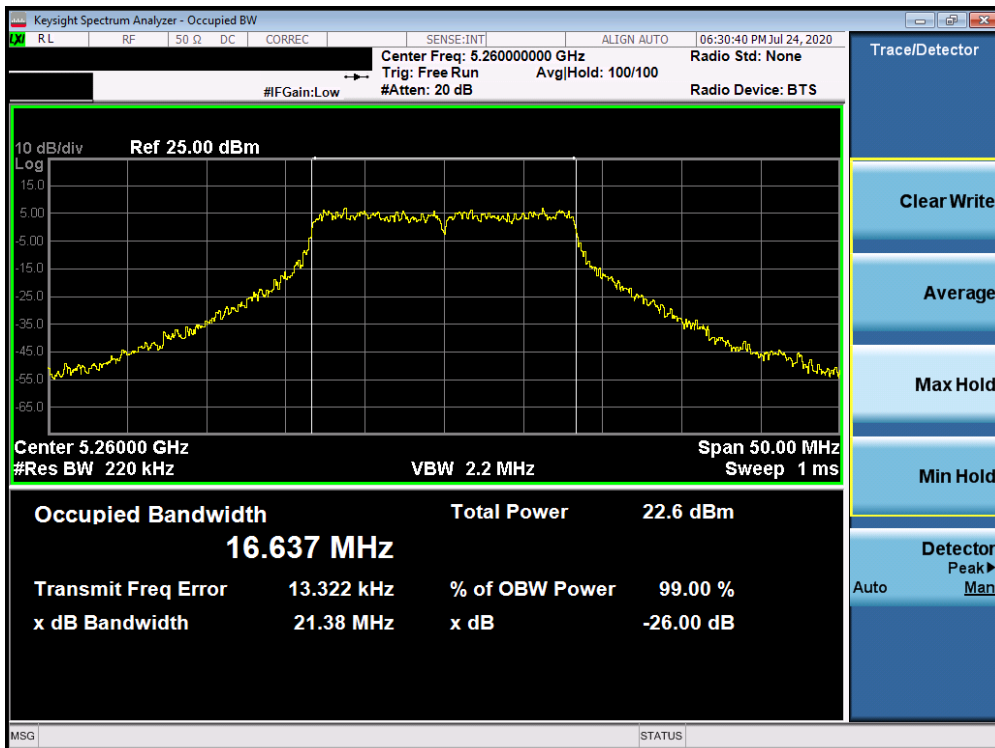


Plot 7-167. 26dB Bandwidth Plot ANT6 (80MHz BW 802.11ac (UNII Band 1) – Ch. 42)

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

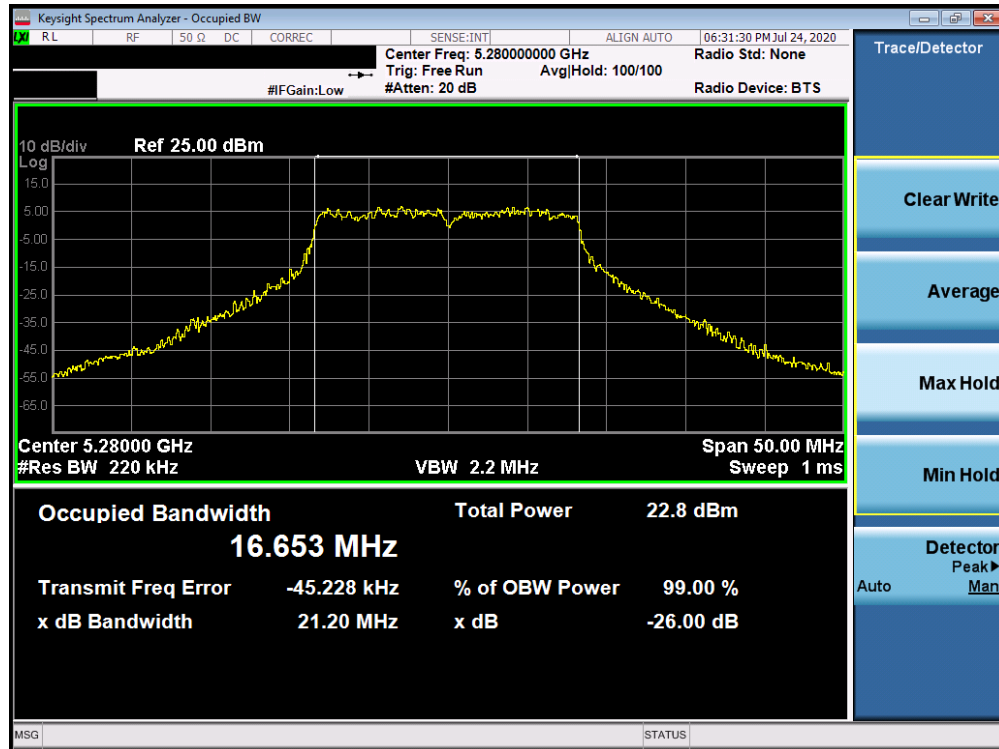


Plot 7-168. 26dB Bandwidth Plot ANT6 (80MHz BW 802.11ax (UNII Band 1) – Ch. 42)

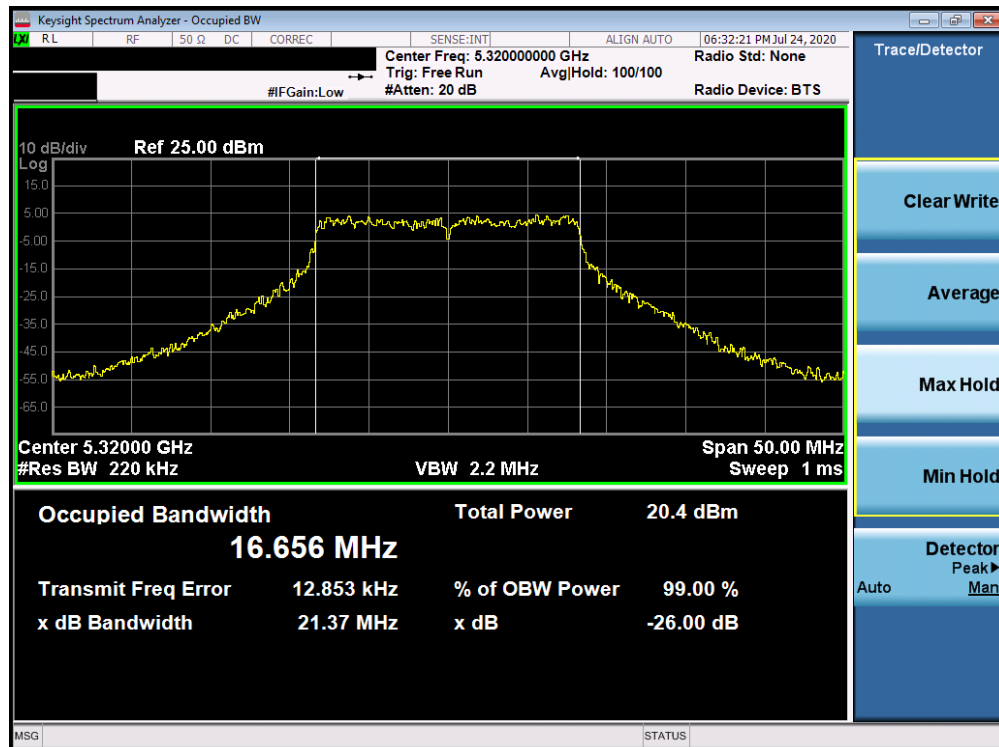


Plot 7-169. 26dB Bandwidth Plot ANT6 (802.11a (UNII Band 2A) – Ch. 52)

FCC ID: A3LSMH204V		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 105 of 344

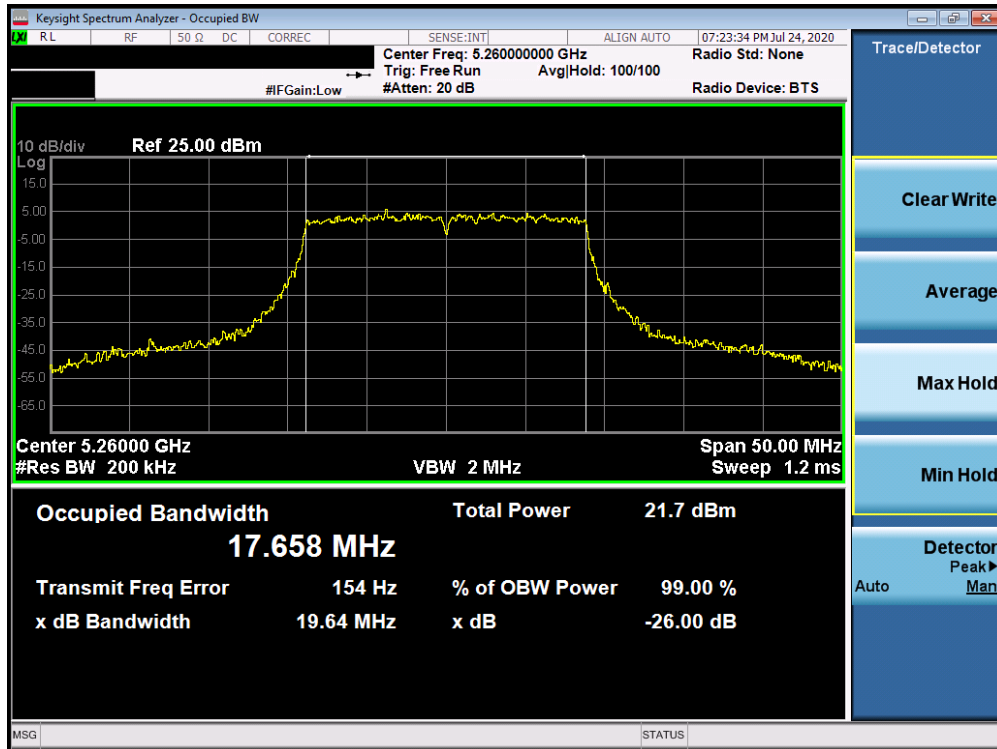


Plot 7-170. 26dB Bandwidth Plot ANT6 (802.11a (UNII Band 2A) – Ch. 56)

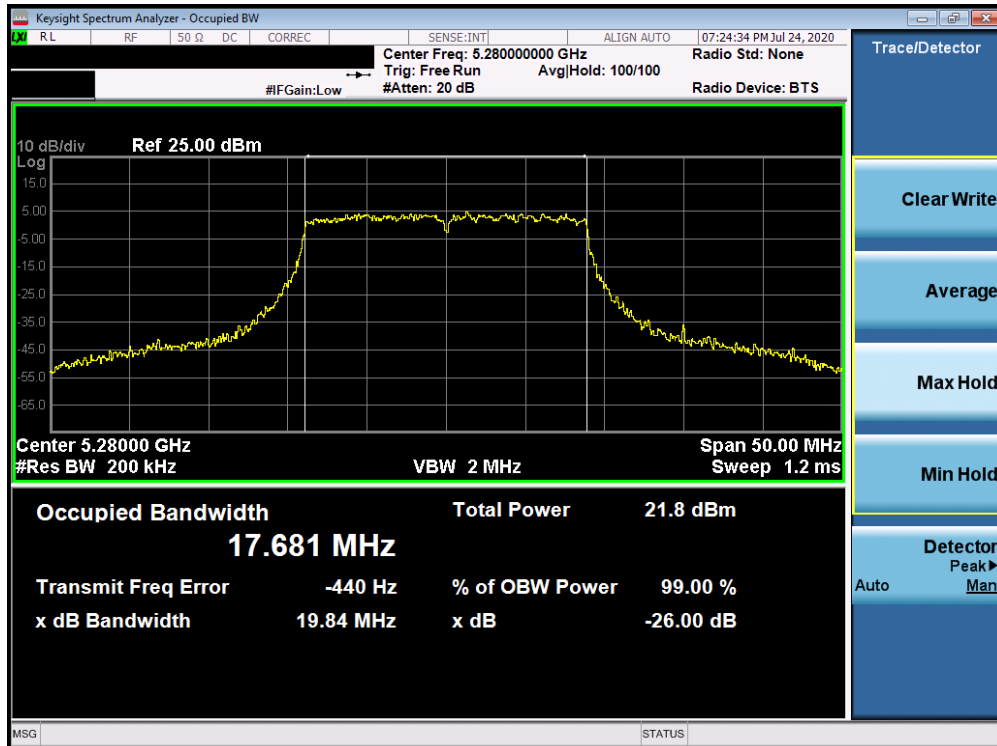


Plot 7-171. 26dB Bandwidth Plot ANT6 (802.11a (UNII Band 2A) – Ch. 64)

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

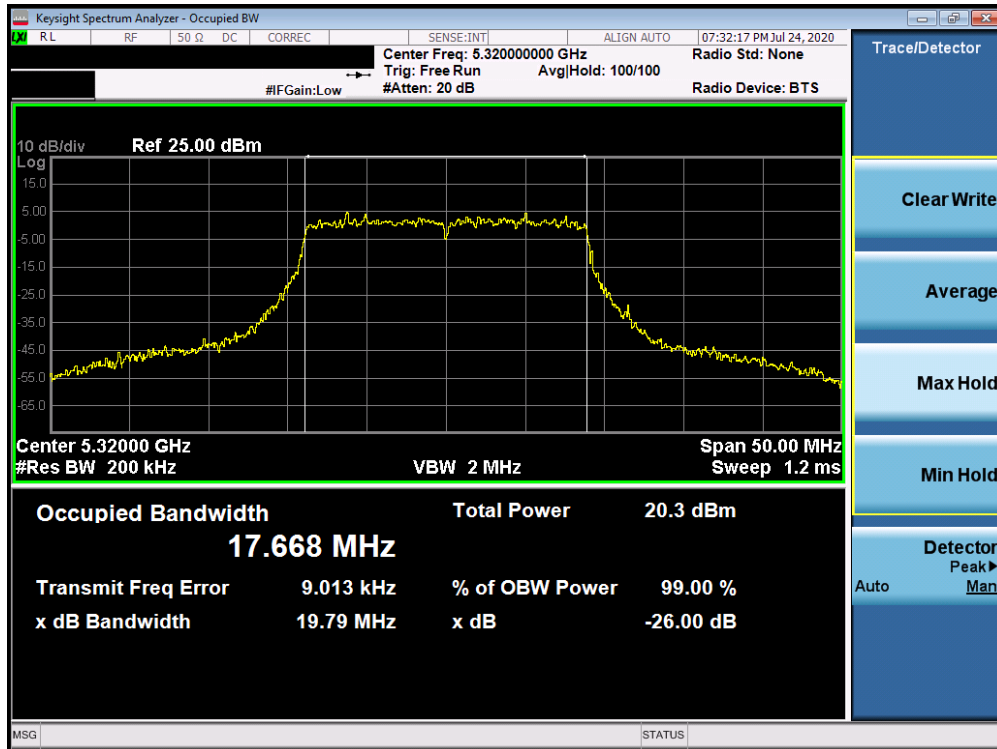


Plot 7-172. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11n (UNII Band 2A) – Ch. 52)

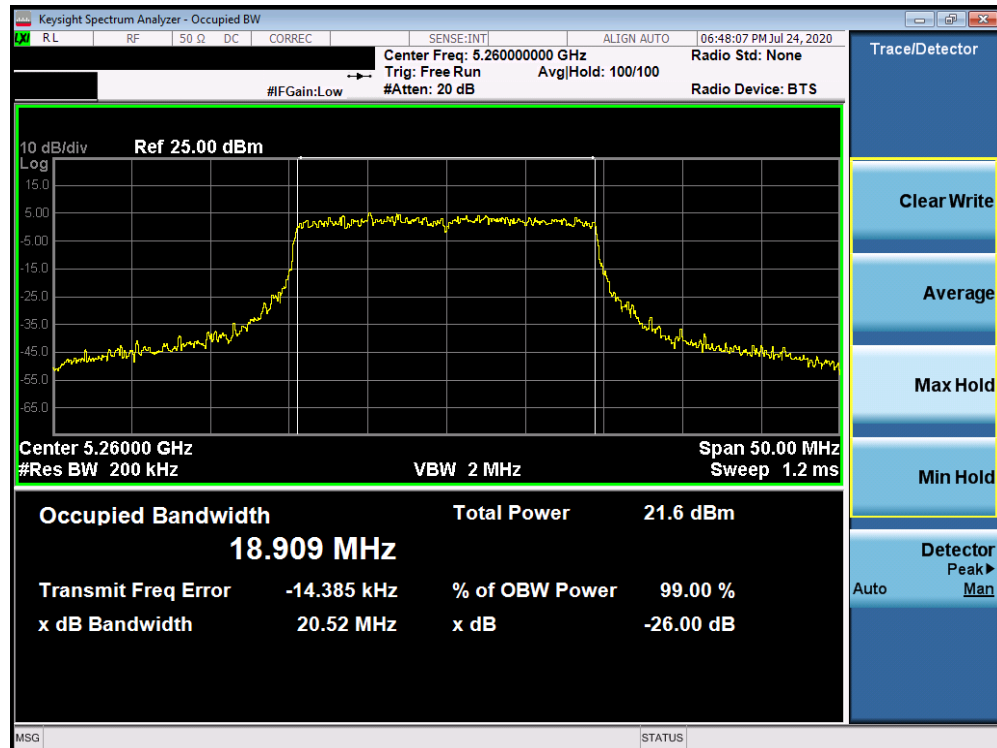


Plot 7-173. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11n (UNII Band 2A) – Ch. 56)

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

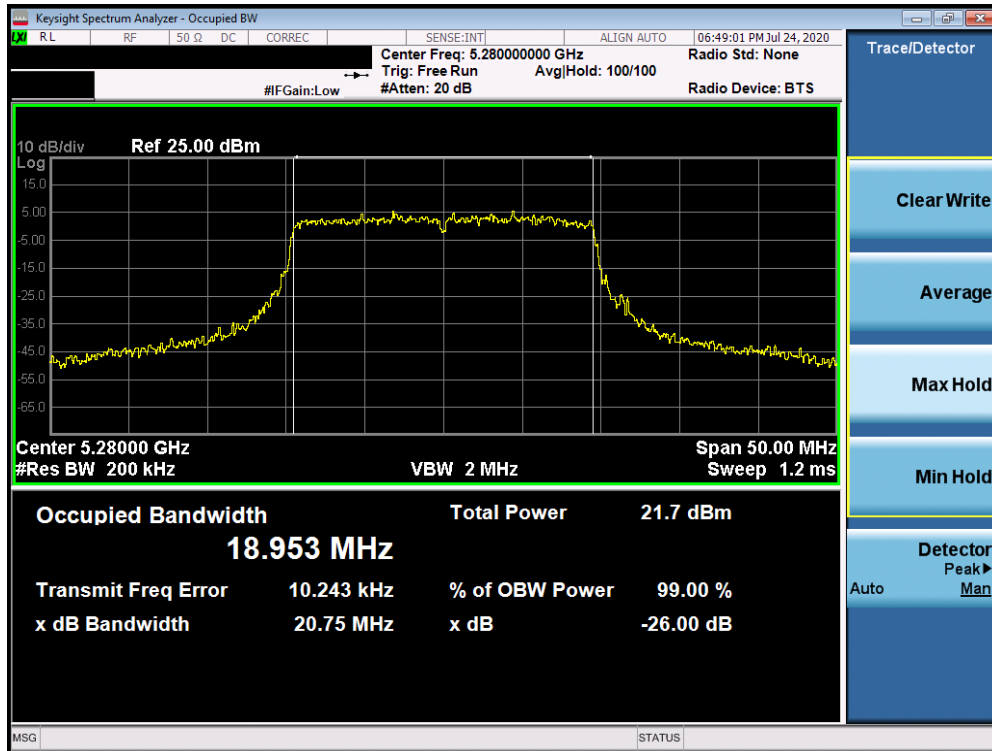


Plot 7-174. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11n (UNII Band 2A) – Ch. 64)

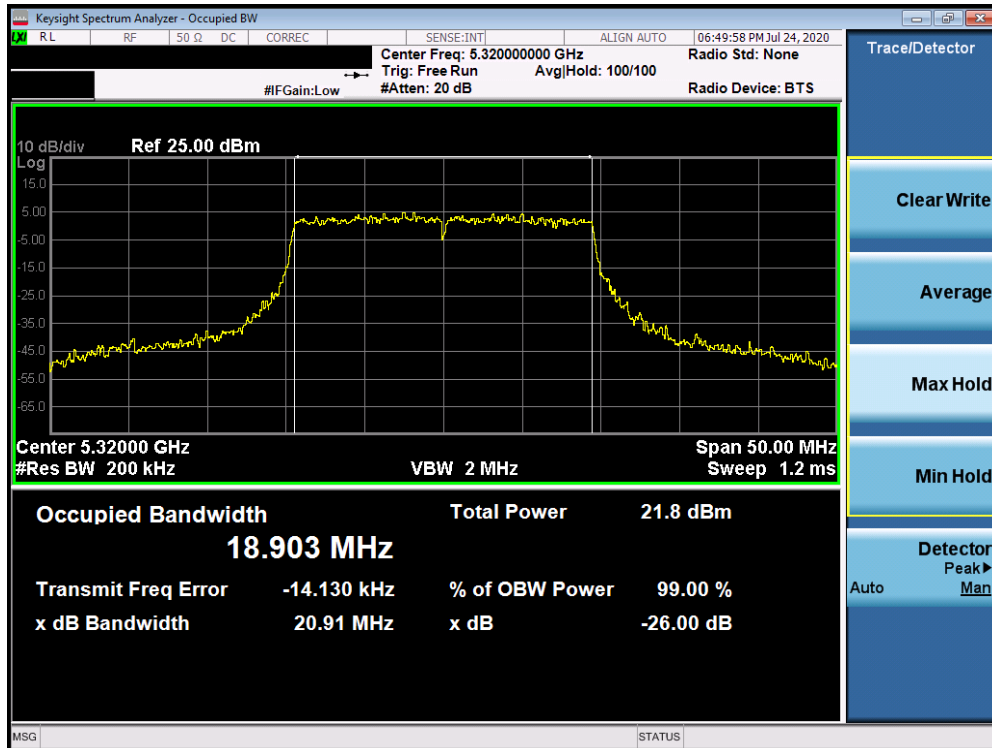


Plot 7-175. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11ax (UNII Band 2A) – Ch. 52)

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

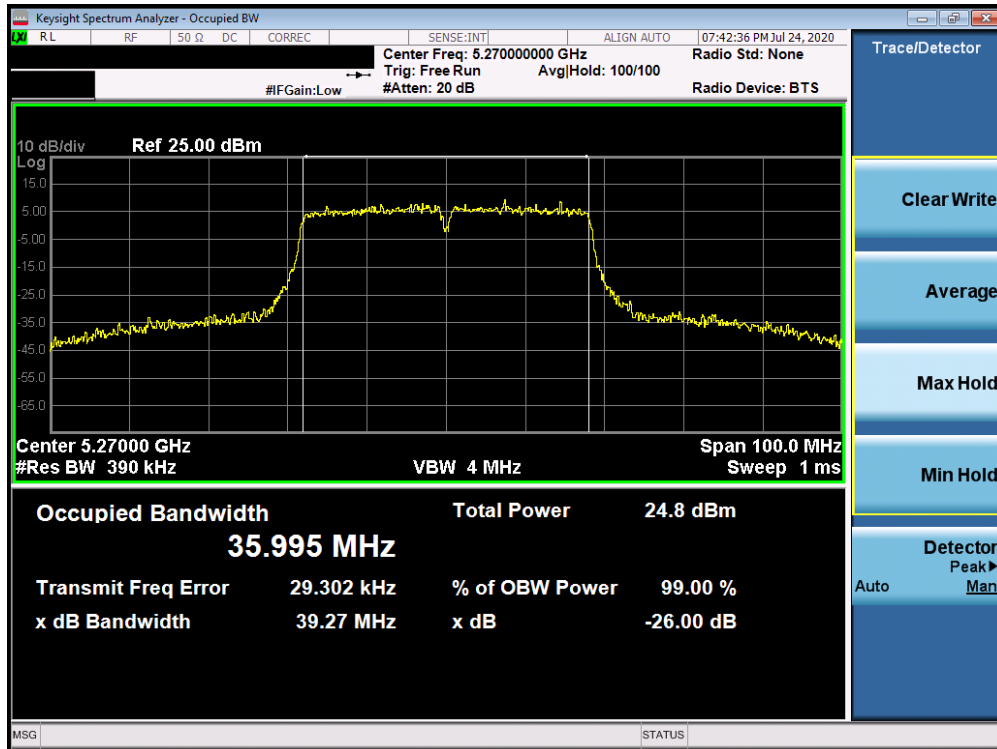


Plot 7-176. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11ax (UNII Band 2A) – Ch. 56)

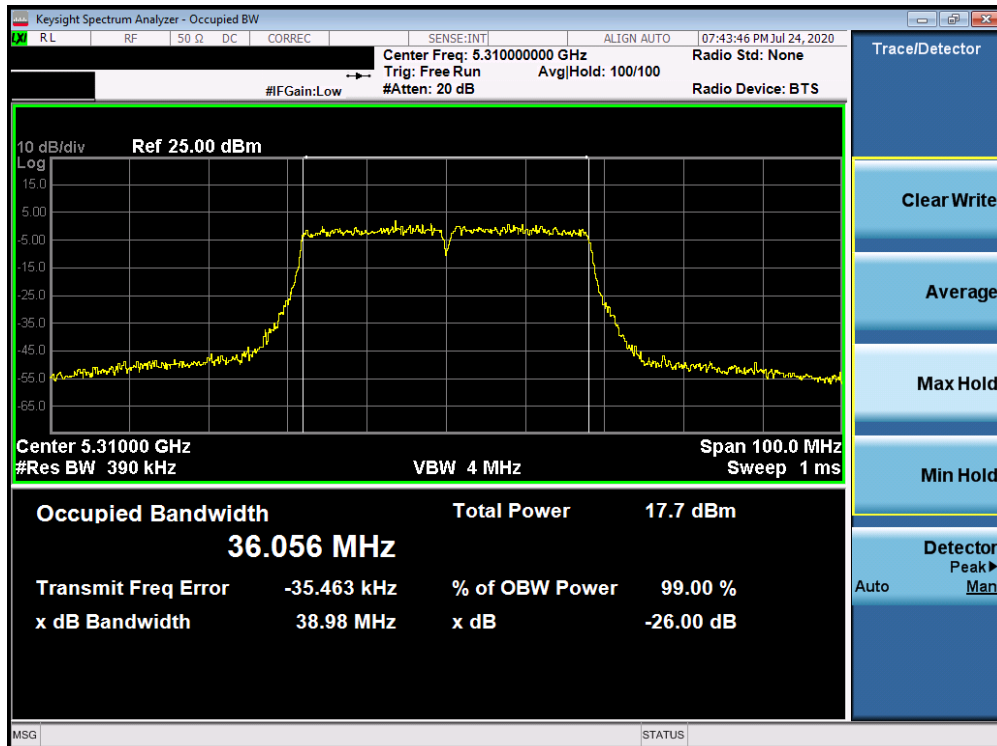


Plot 7-177. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11ax (UNII Band 2A) – Ch. 64)

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

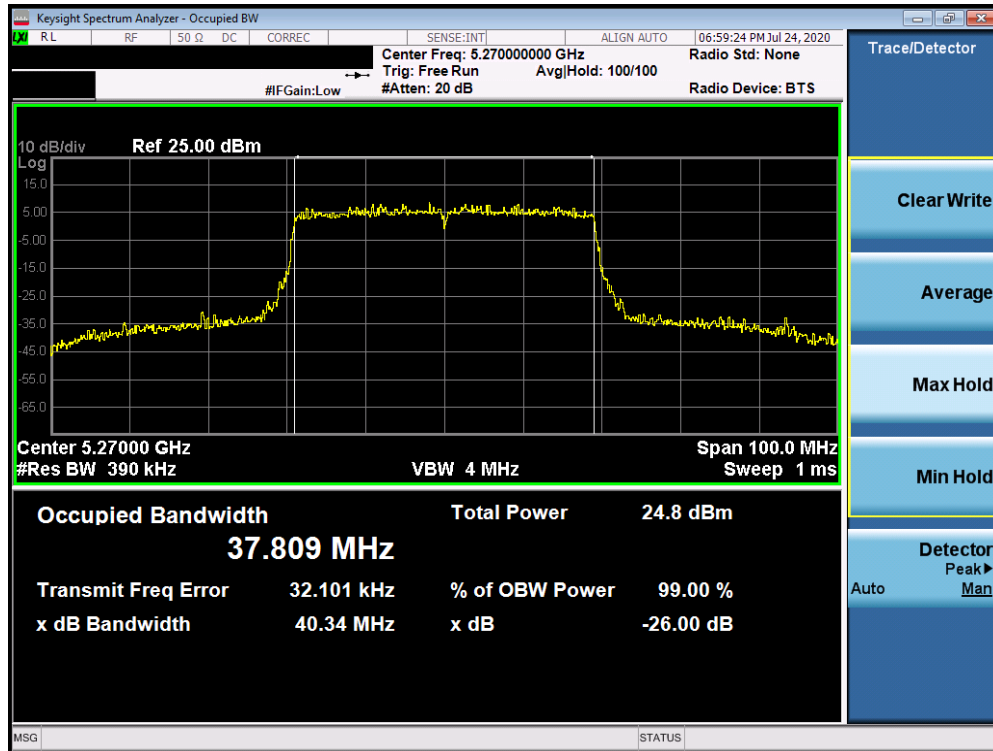


Plot 7-178. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11n (UNII Band 2A) – Ch. 54)

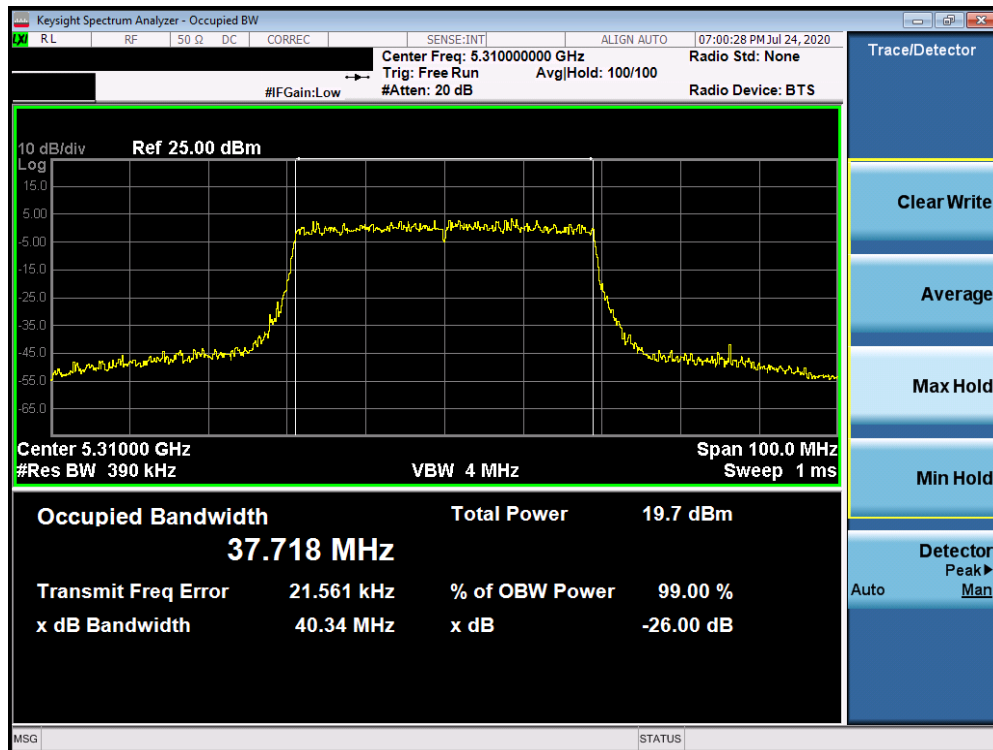


Plot 7-179. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11n (UNII Band 2A) – Ch. 62)

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

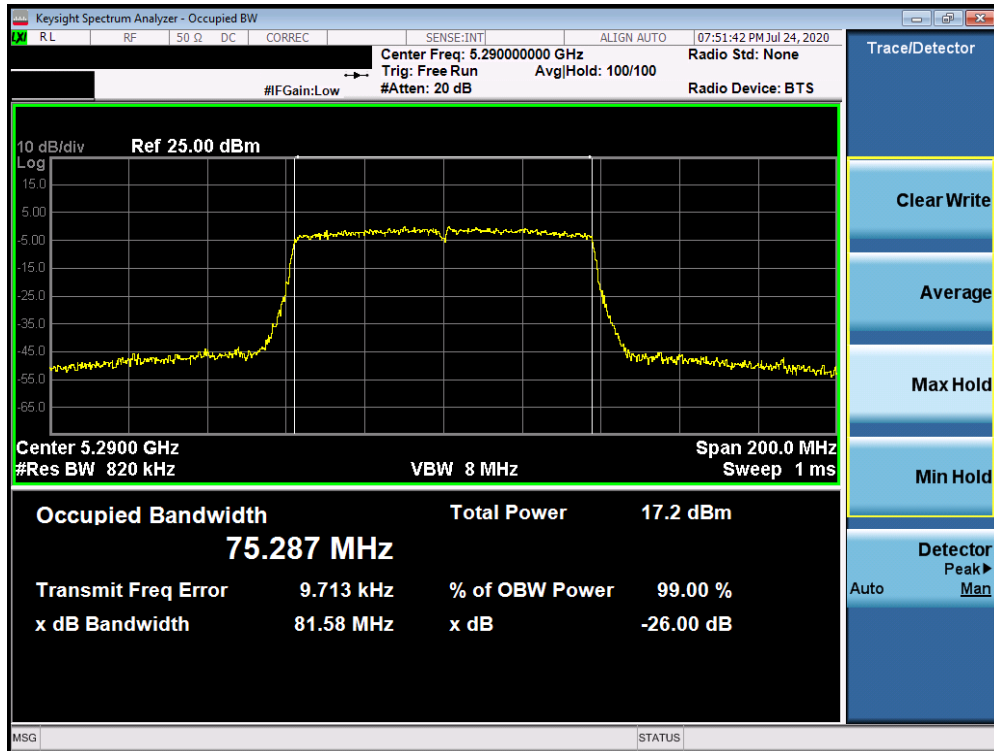


Plot 7-180. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11ax (UNII Band 2a) – Ch. 54)

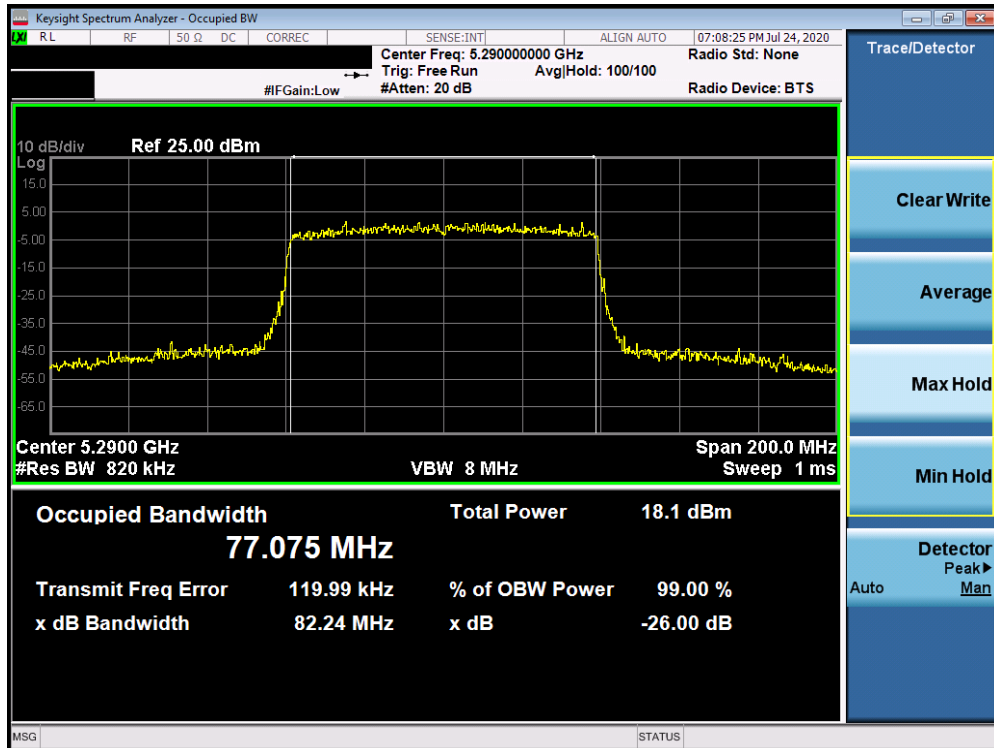


Plot 7-181. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11ax (UNII Band 2a) – Ch. 62)

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

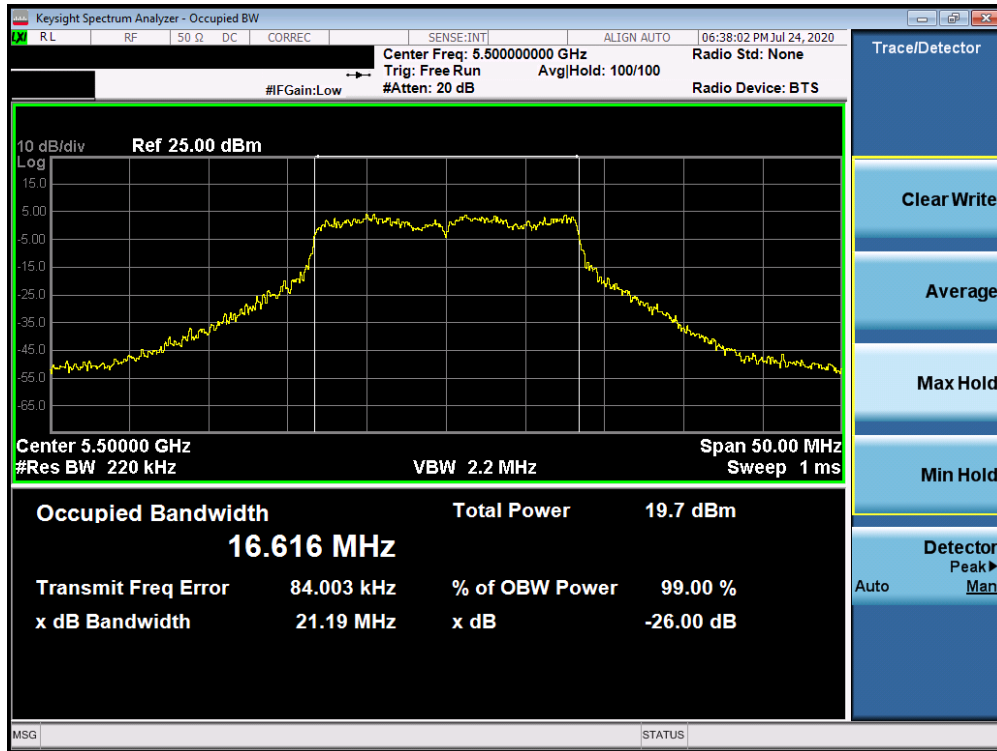


Plot 7-182. 26dB Bandwidth Plot ANT6 (80MHz BW 802.11ac (UNII Band 2A) – Ch. 58)

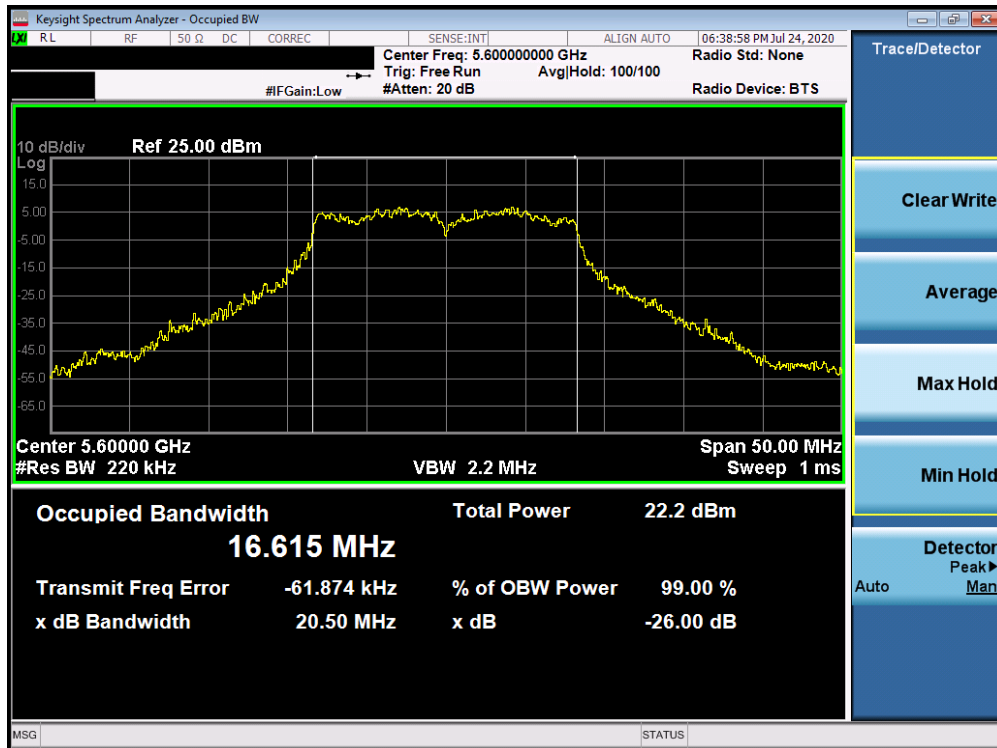


Plot 7-183. 26dB Bandwidth Plot ANT6 (80MHz BW 802.11ax (UNII Band 2A) – Ch. 58)

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

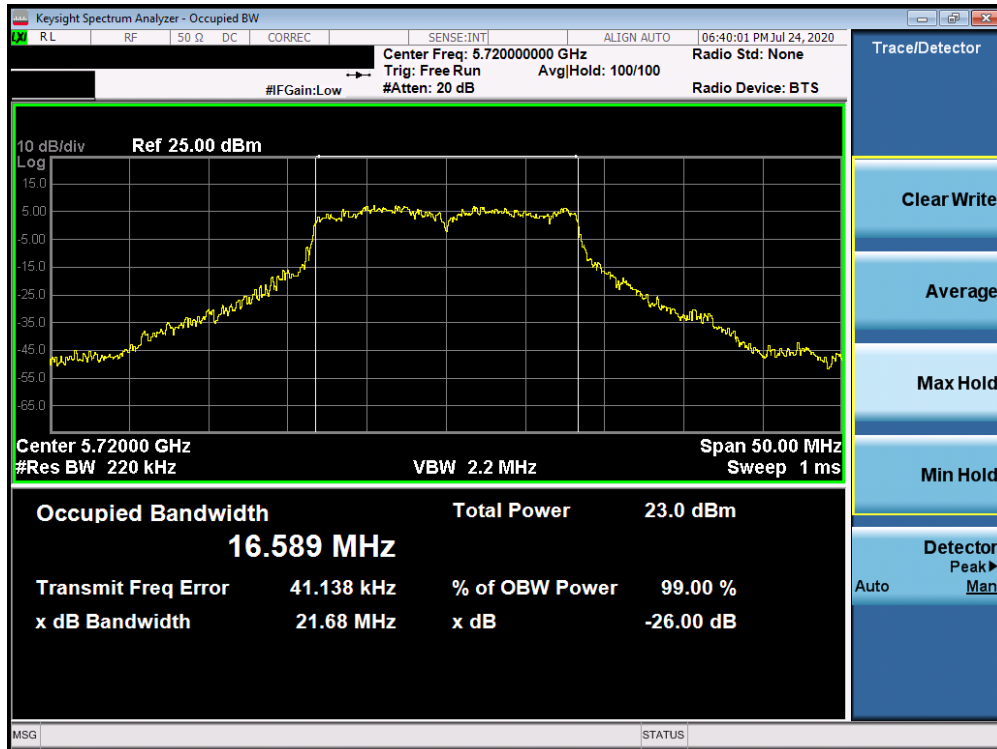


Plot 7-184. 26dB Bandwidth Plot ANT6 (802.11a (UNII Band 2C) – Ch. 100)

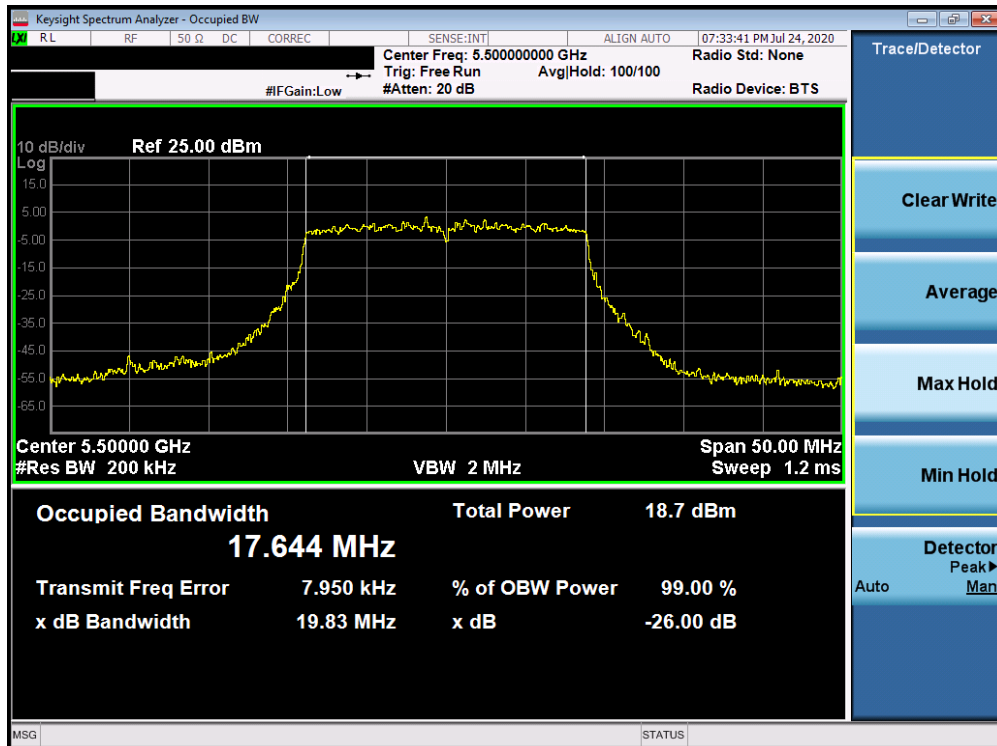


Plot 7-185. 26dB Bandwidth Plot ANT6 (802.11a (UNII Band 2C) – Ch. 120)

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

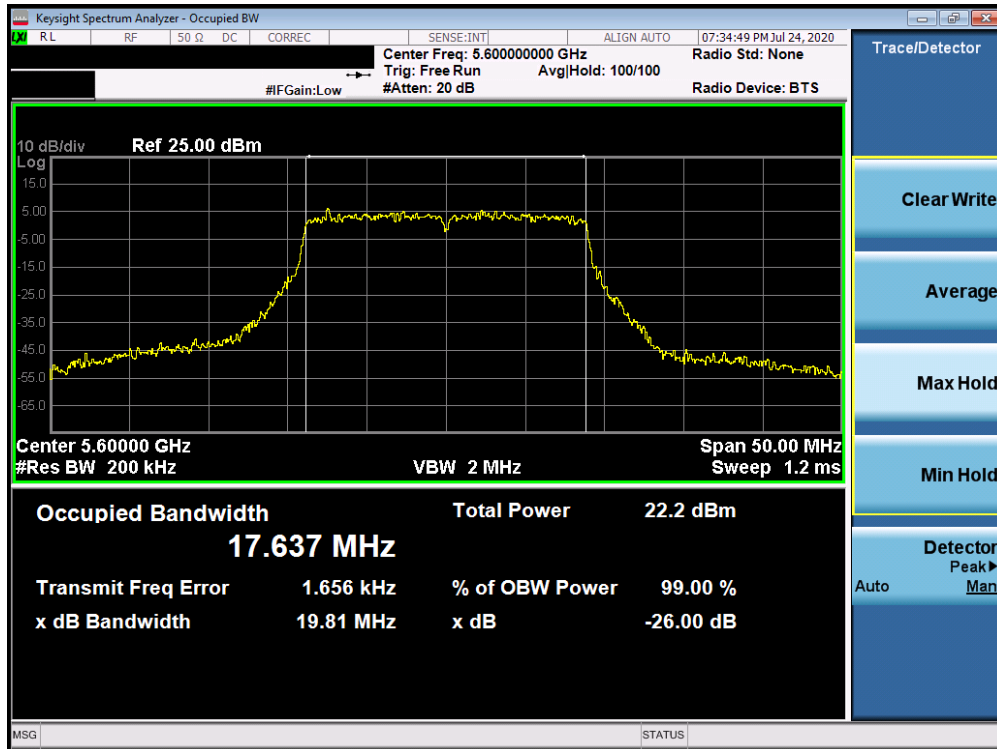


Plot 7-186. 26dB Bandwidth Plot ANT6 (802.11a (UNII Band 2C) – Ch. 144)

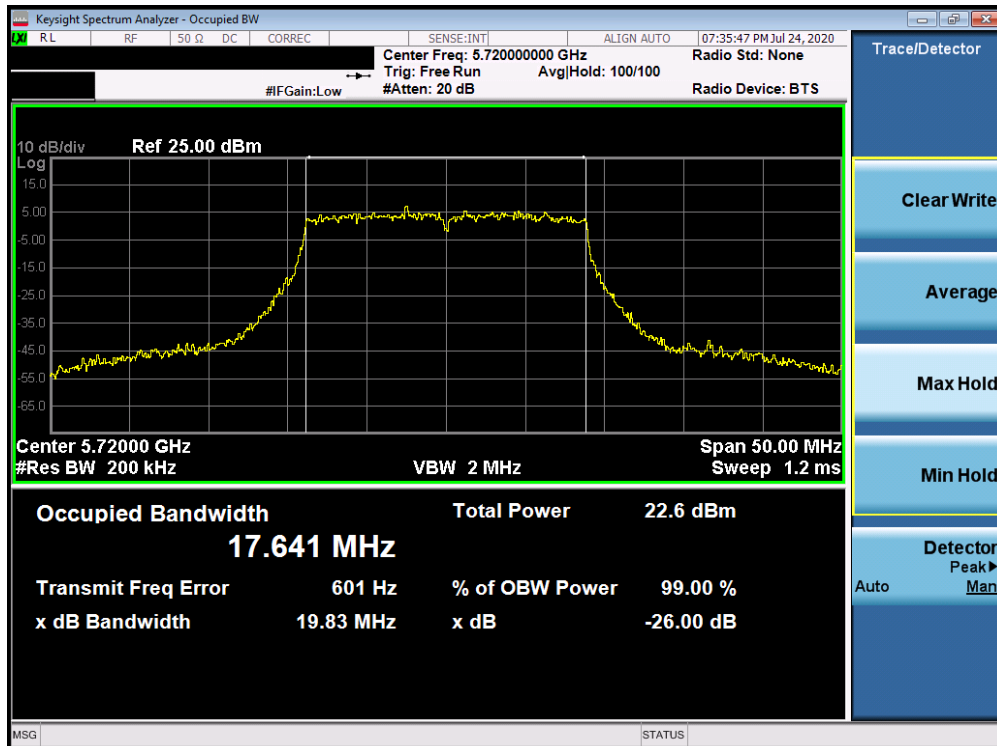


Plot 7-187. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11n (UNII Band 2C) – Ch. 100)

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

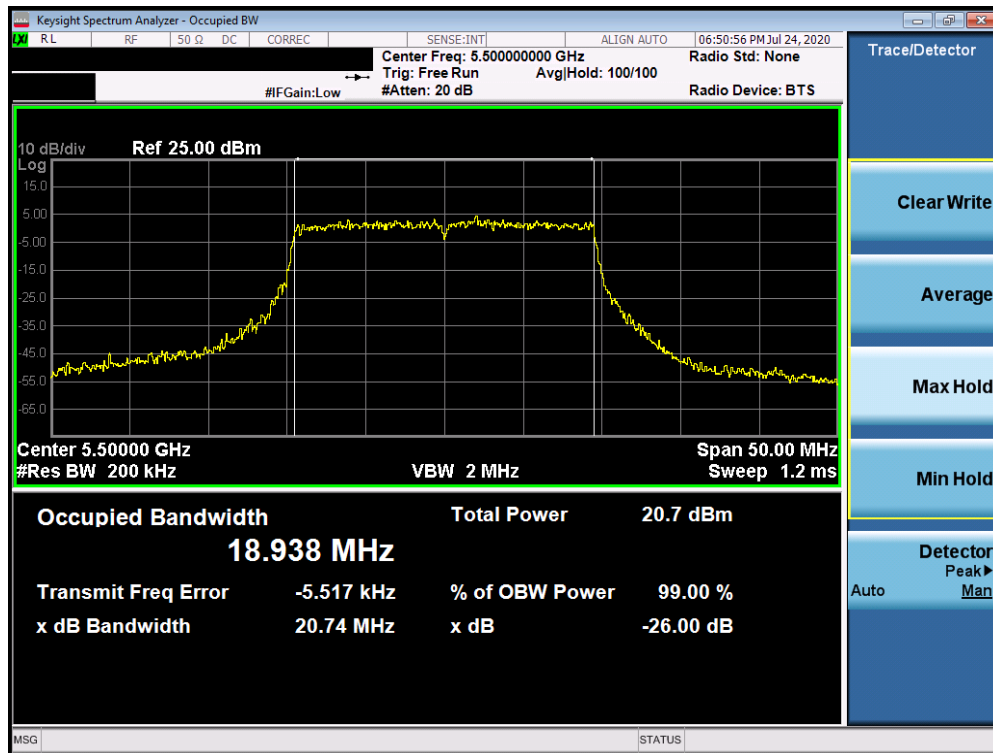


Plot 7-188. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11n (UNII Band 2C) – Ch. 120)

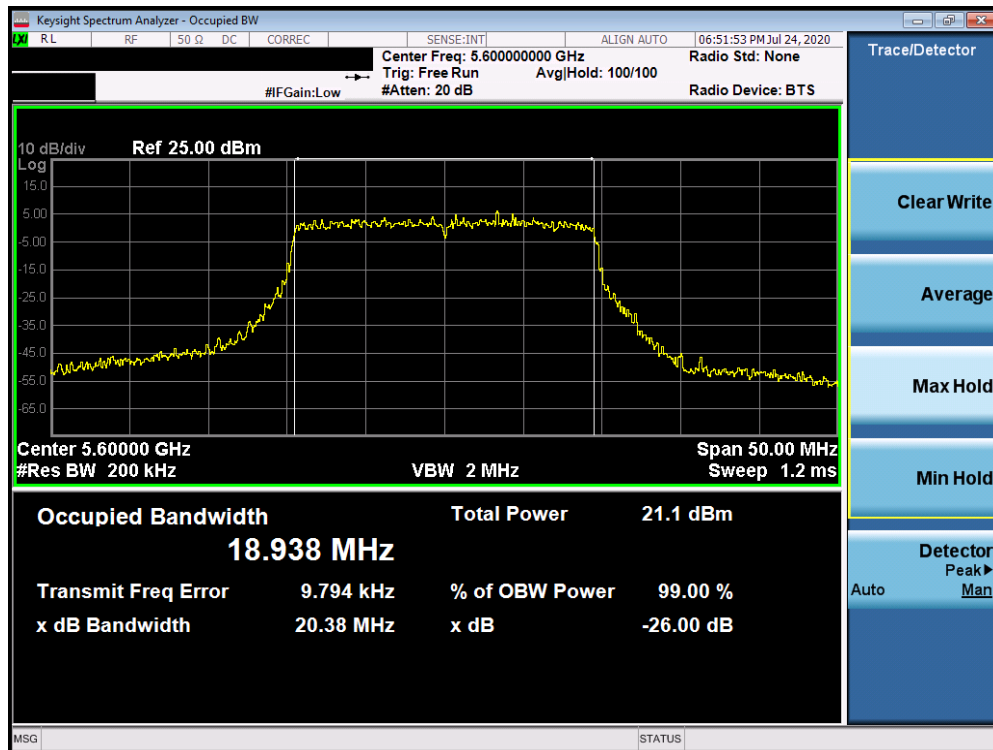


Plot 7-189. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11n (UNII Band 2C) – Ch. 144)

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

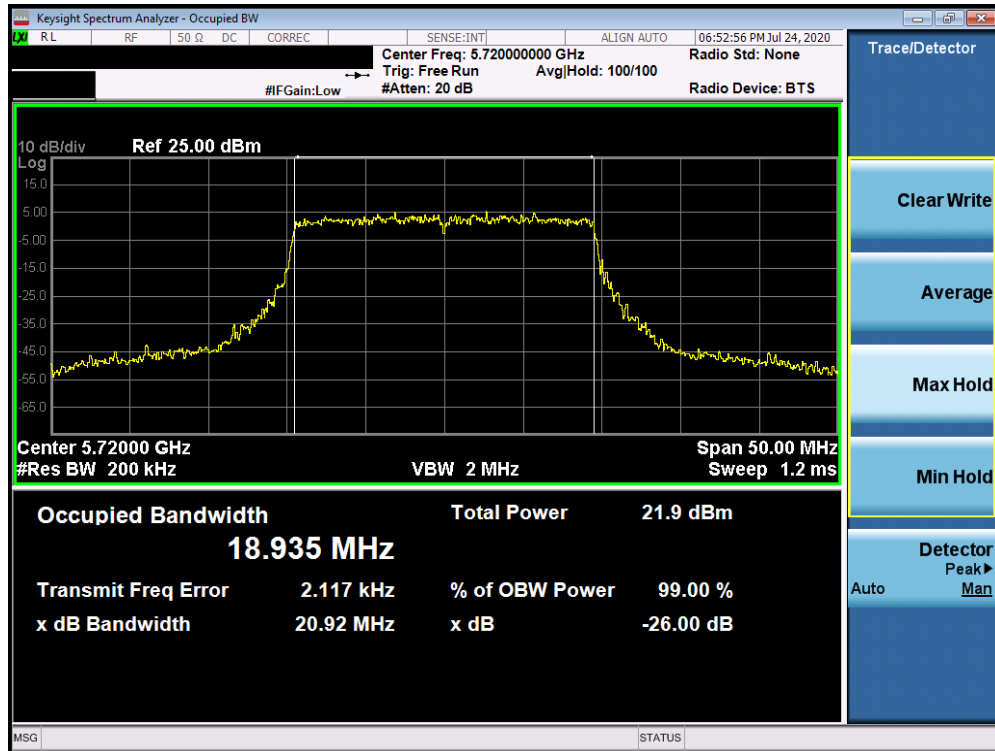


Plot 7-190. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11ax (UNII Band 2C) – Ch. 100)

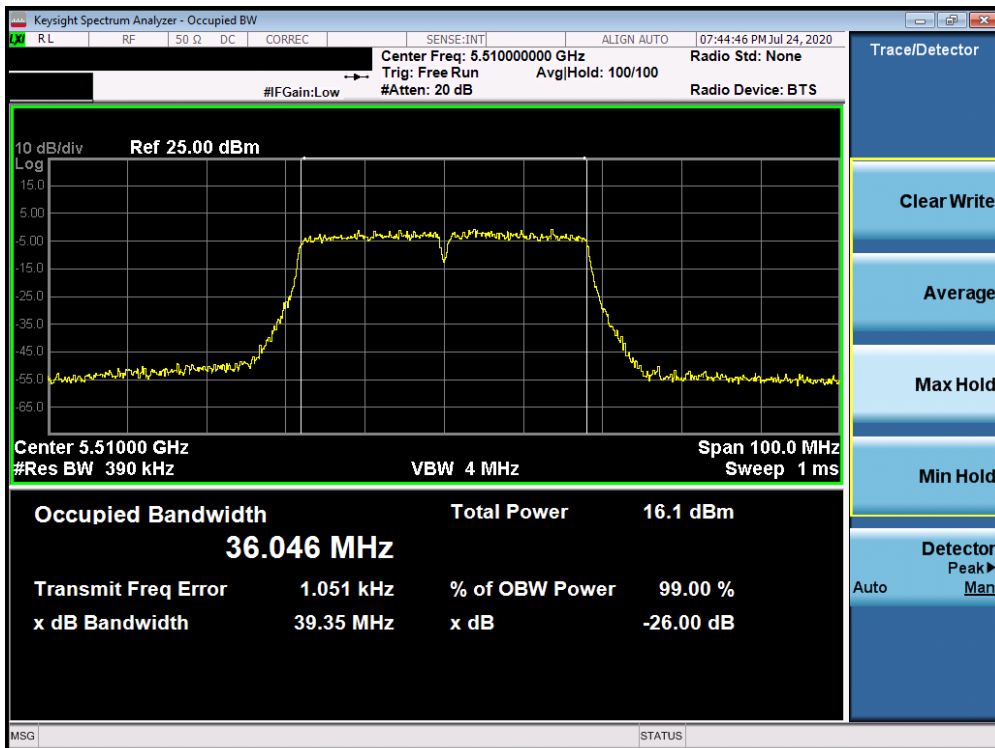


Plot 7-191. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11ax (UNII Band 2C) – Ch. 120)

FCC ID: A3LSMH204V		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 116 of 344

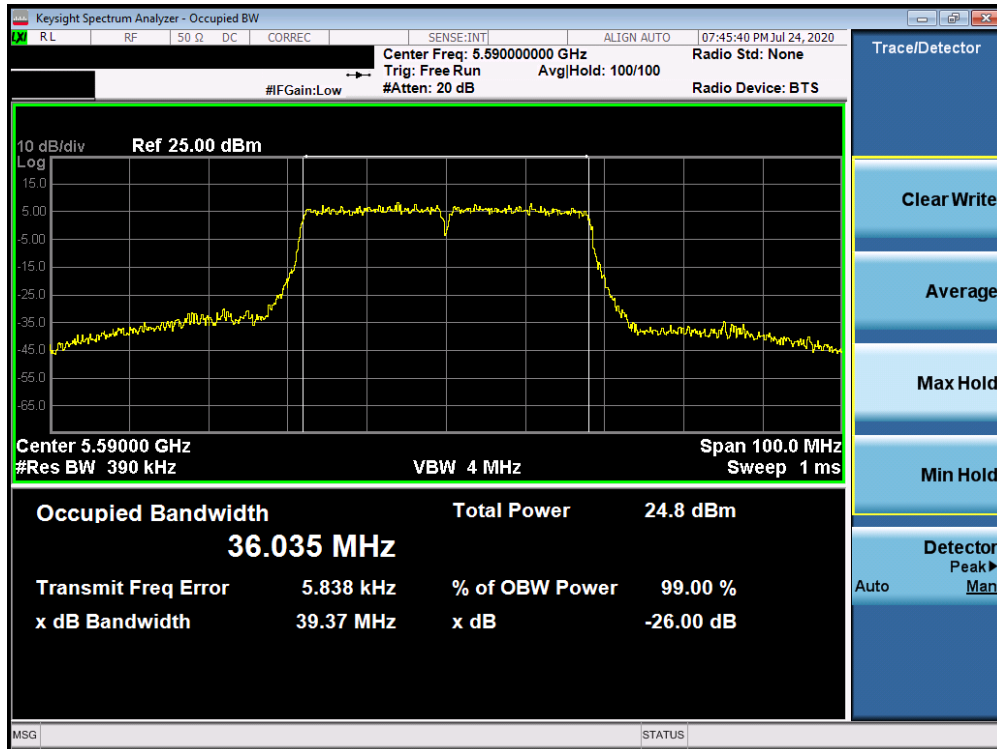


Plot 7-192. 26dB Bandwidth Plot ANT6 (20MHz BW 802.11ax (UNII Band 2C) – Ch. 144)

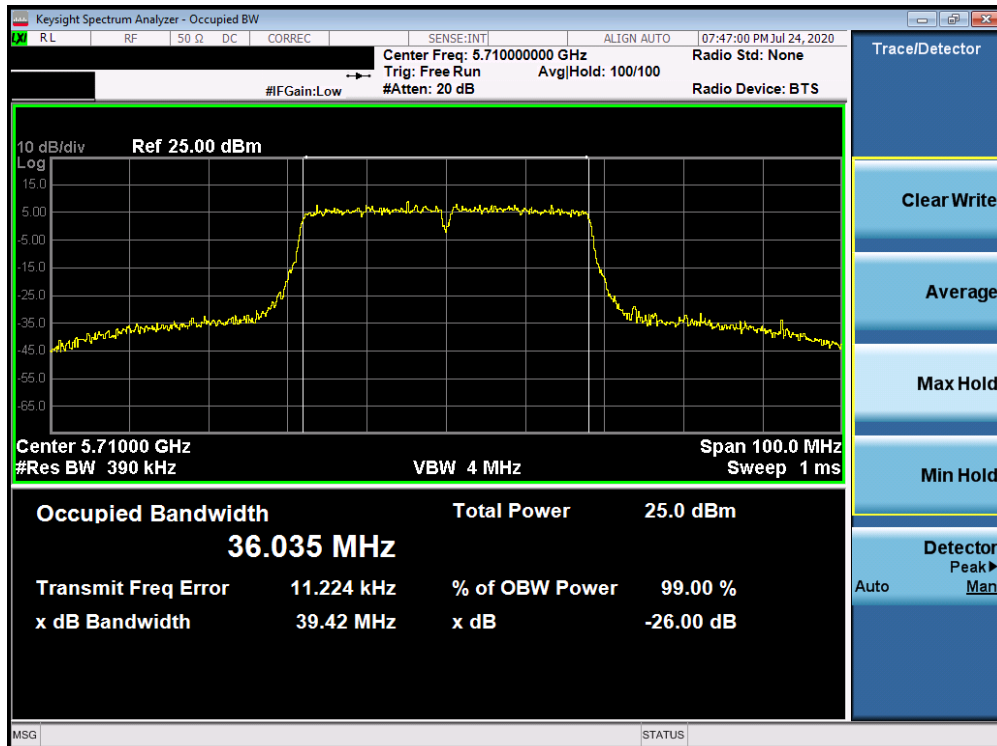


Plot 7-193. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11n (UNII Band 2C) – Ch. 102)

FCC ID: A3LSMH204V		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 117 of 344

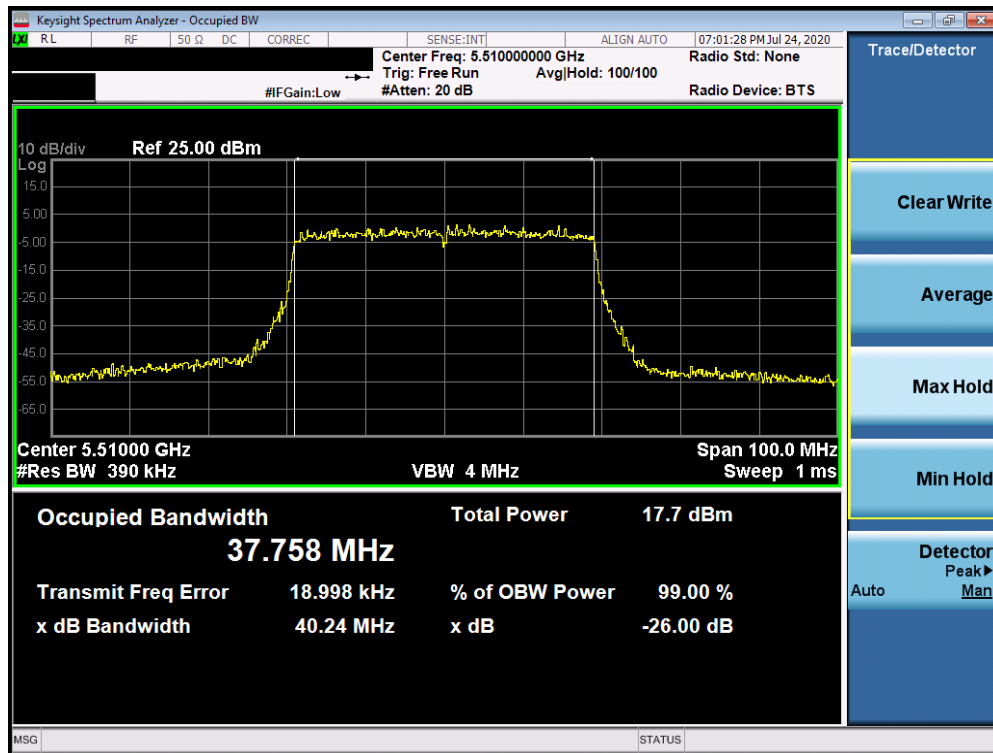


Plot 7-194. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11n (UNII Band 2C) – Ch. 118)

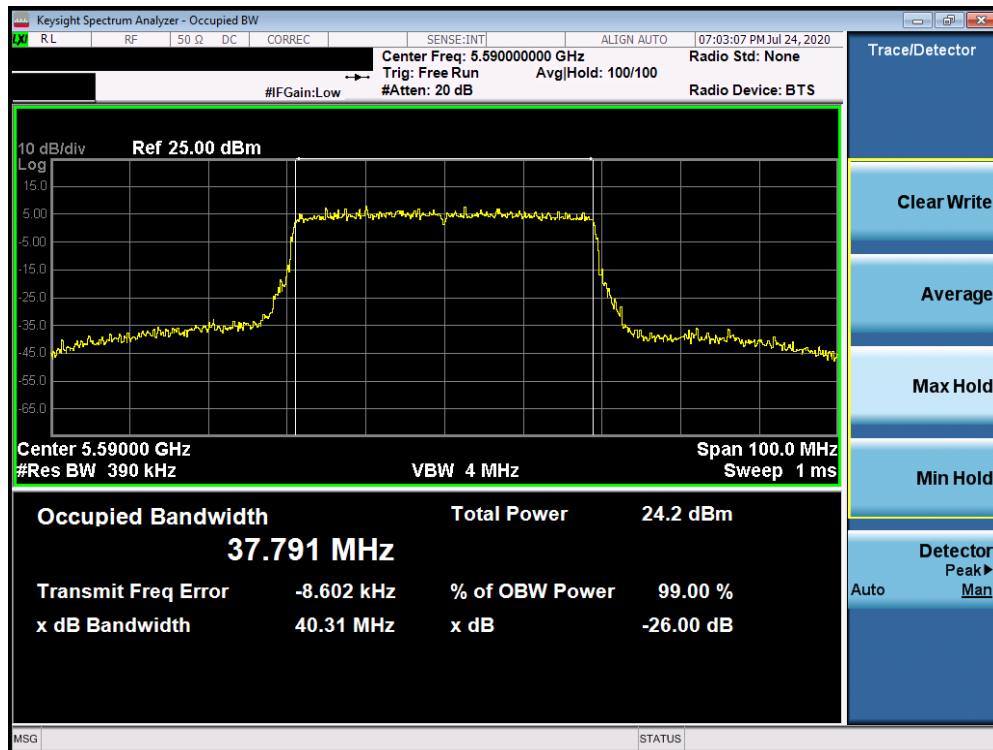


Plot 7-195. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11n (UNII Band 2C) – Ch. 142)

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

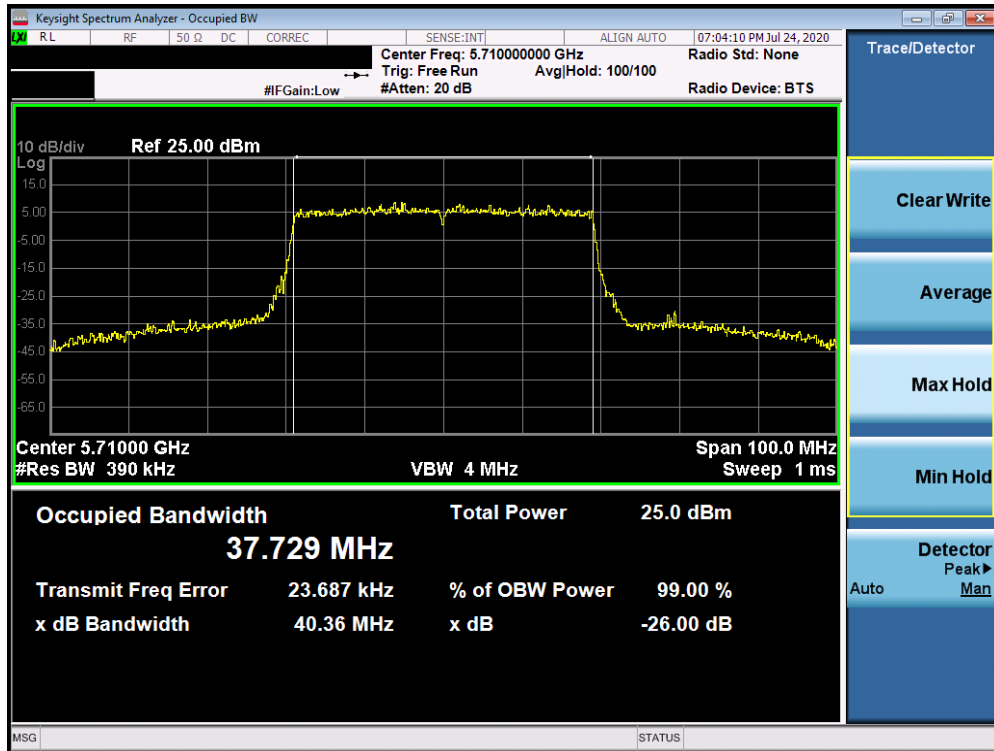


Plot 7-196. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11ax (UNII Band 2C) – Ch. 102)

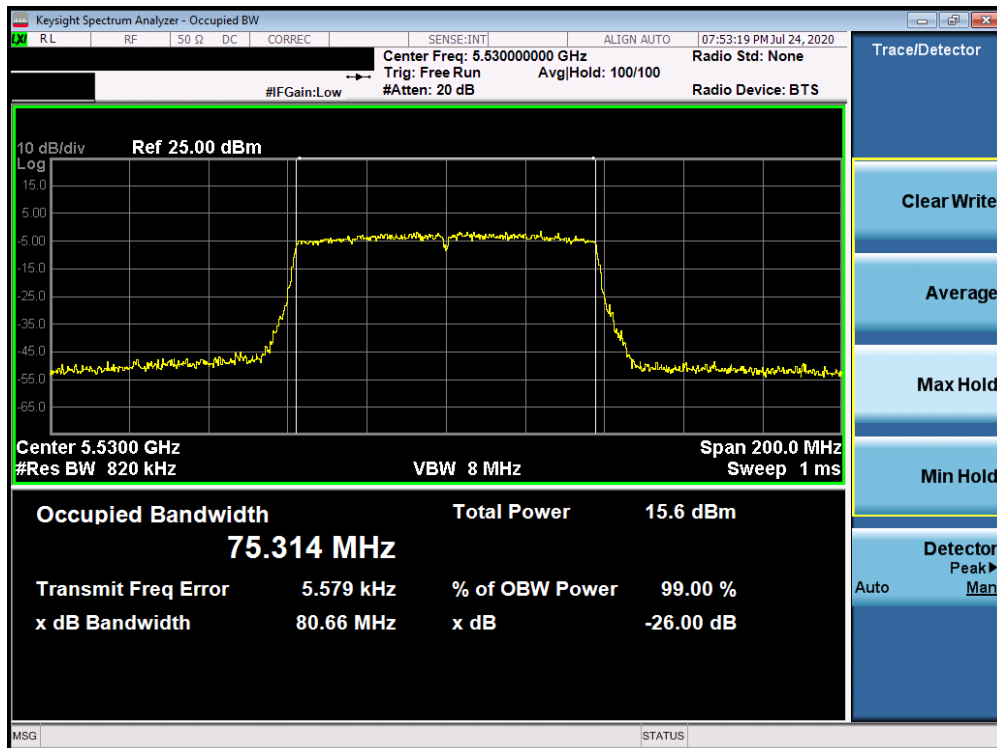


Plot 7-197. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11ax (UNII Band 2C) – Ch. 118)

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

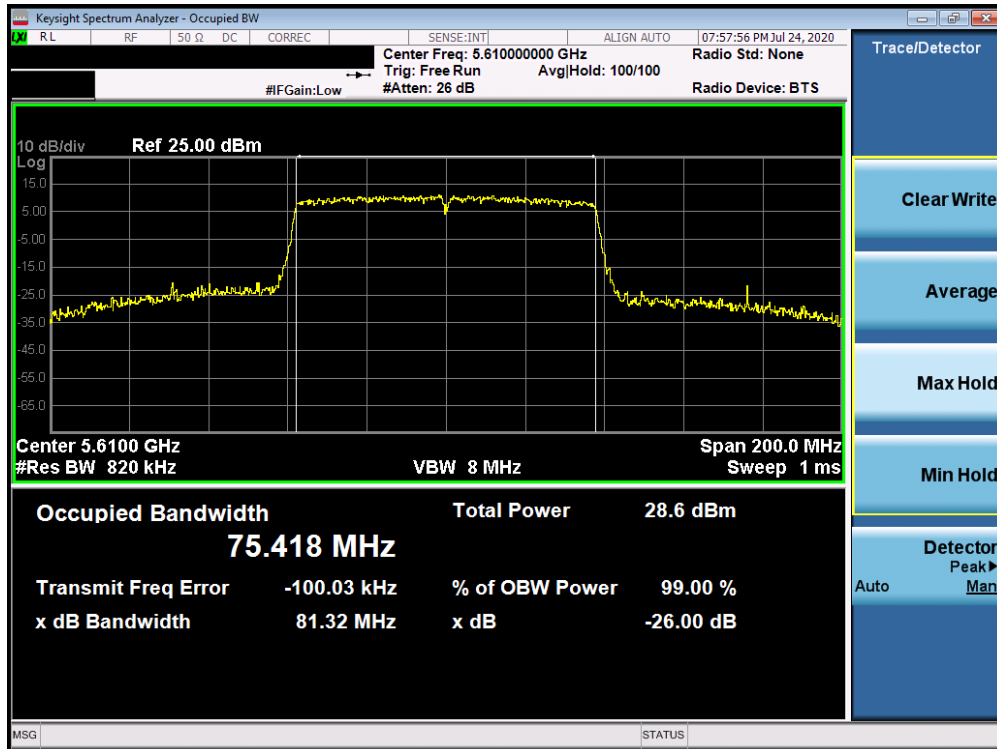


Plot 7-198. 26dB Bandwidth Plot ANT6 (40MHz BW 802.11ax (UNII Band 2C) – Ch. 142)

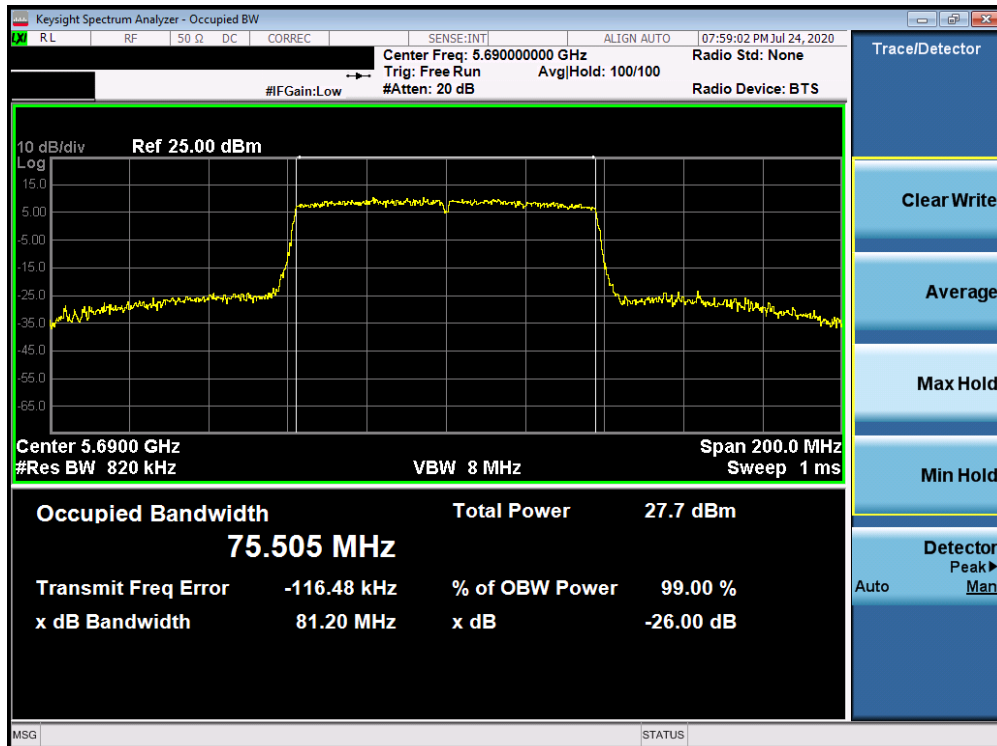


Plot 7-199. 26dB Bandwidth Plot ANT6 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 106)

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

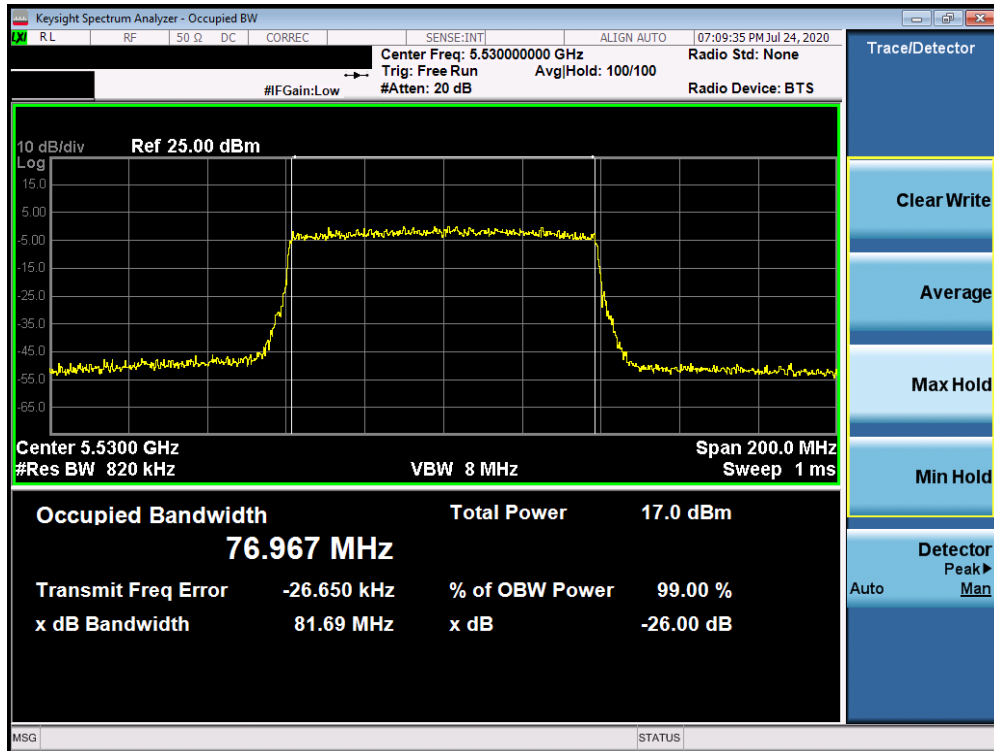


Plot 7-200. 26dB Bandwidth Plot ANT6 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 122)

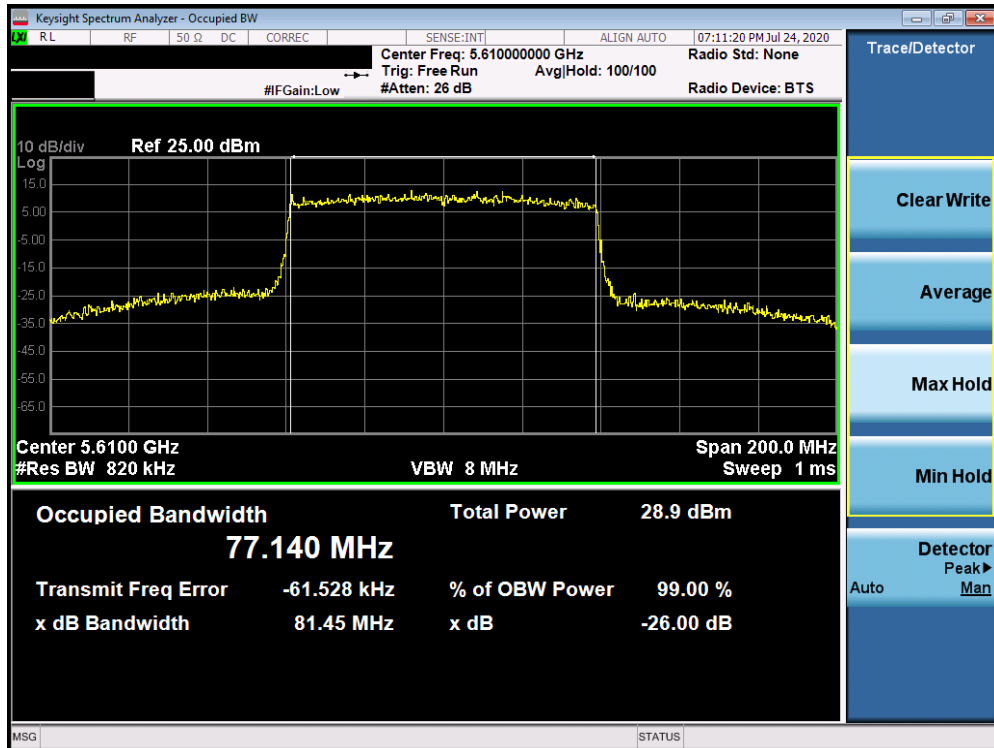


Plot 7-201. 26dB Bandwidth Plot ANT6 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 138)

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

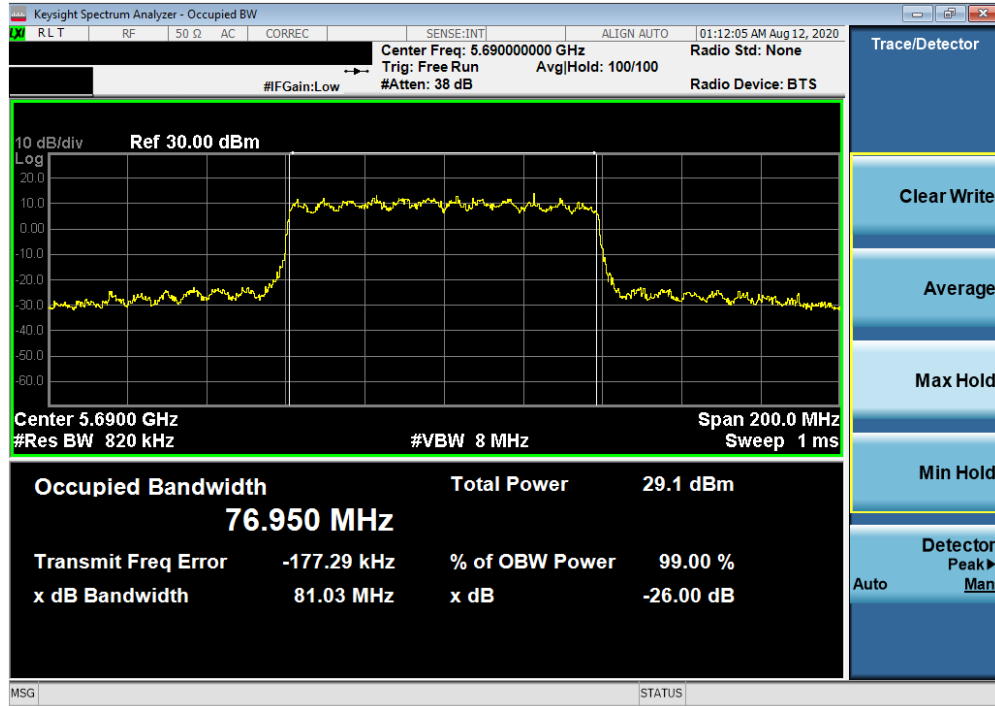


Plot 7-202. 26dB Bandwidth Plot ANT6 (80MHz BW 802.11ax (UNII Band 2C) – Ch. 106)



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

FCC ID: A3LSMH204V	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 122 of 344



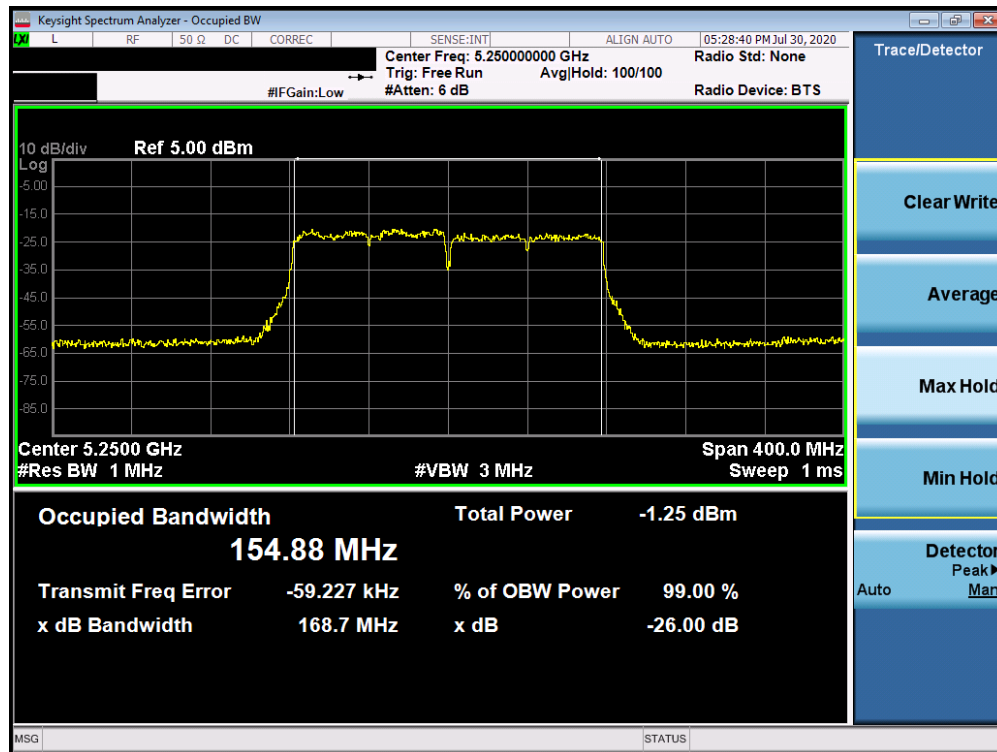
Plot 7-204. 26dB Bandwidth Plot ANT6 (80MHz BW 802.11ax (UNII Band 2C) – Ch. 138)

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

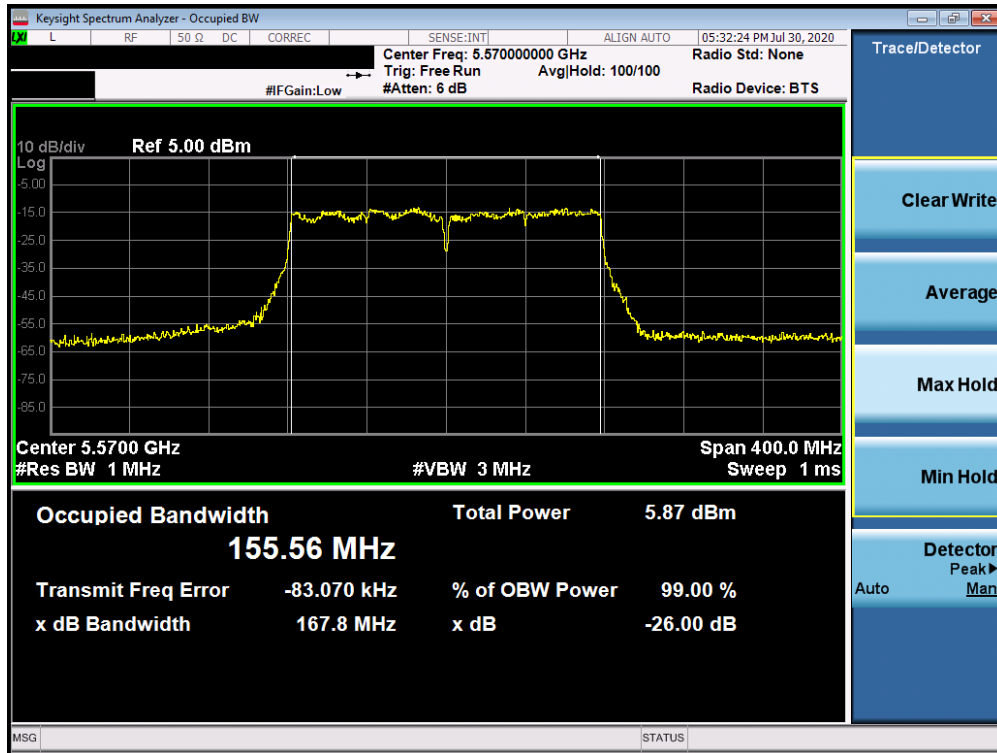
	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured 26dB Bandwidth [MHz]
Band 1	5210	42	ac (80MHz)	29.3/32.5 (MCS0)	168.70
Band 2A	5290	58	ac (80MHz)	29.3/32.5 (MCS0)	
Band 2C	5530	106	ac (80MHz)	29.3/32.5 (MCS0)	167.80
	5610	122	ac (80MHz)	8/8.6 (MCS0)	
Band 1	5210	42	ac (80MHz)	8/8.6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

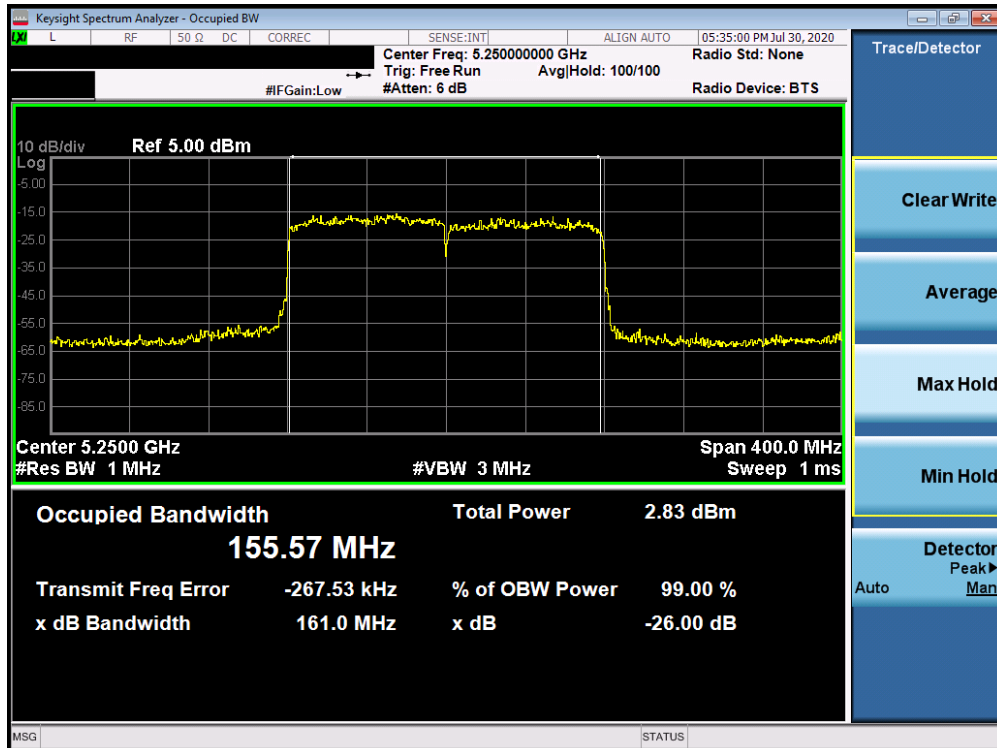


Plot 7-205. 26dB Bandwidth Plot (80MHz BW 802.11ac (UNII Band 1 and 2A) – Ch. 42 and 58)

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

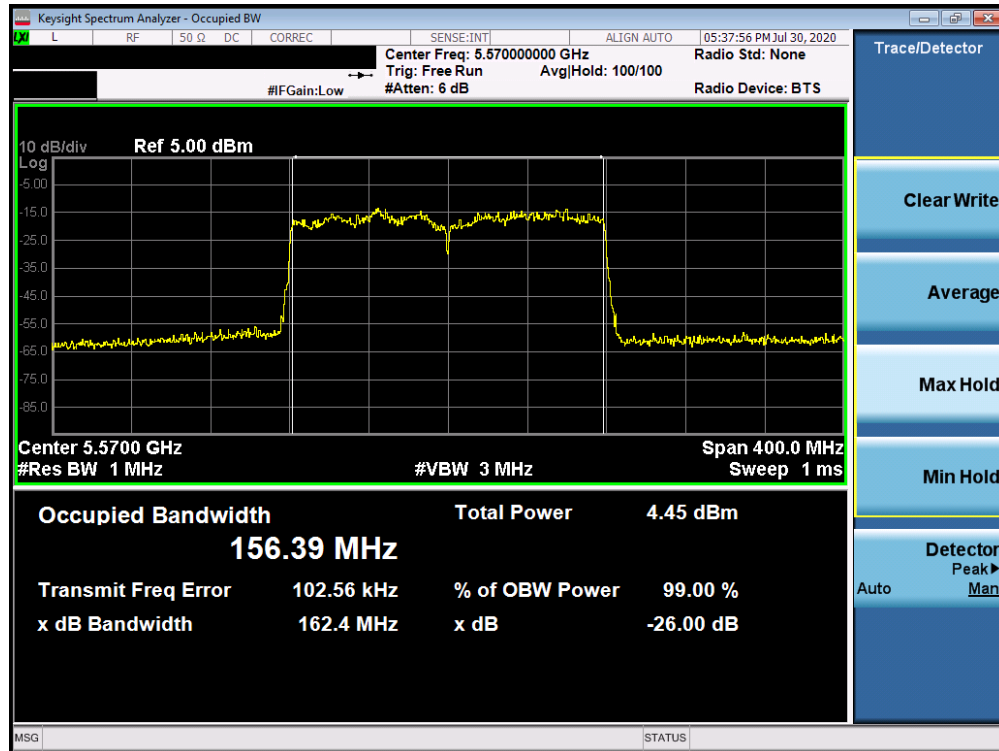


Plot 7-206. 26dB Bandwidth Plot (80+80MHz BW 802.11ac (UNII Band 2C) – Ch. 106 and Ch. 122)



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	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 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

© 2020 PCTEST

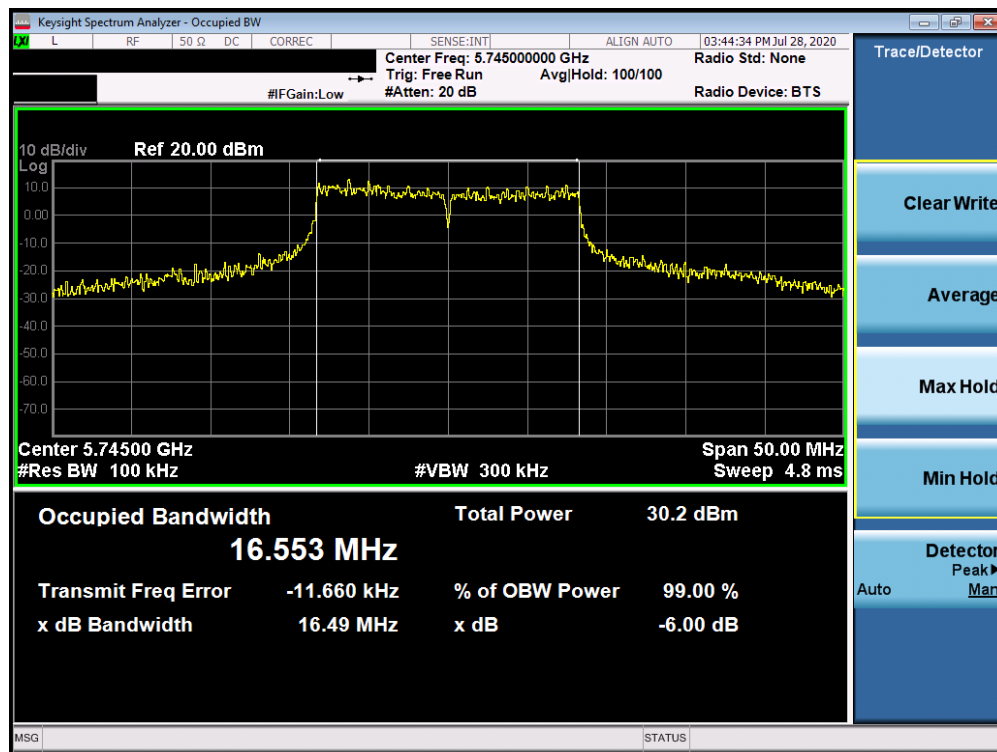
V 9.0 02/01/2019

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

Antenna-3 6dB Bandwidth Measurements

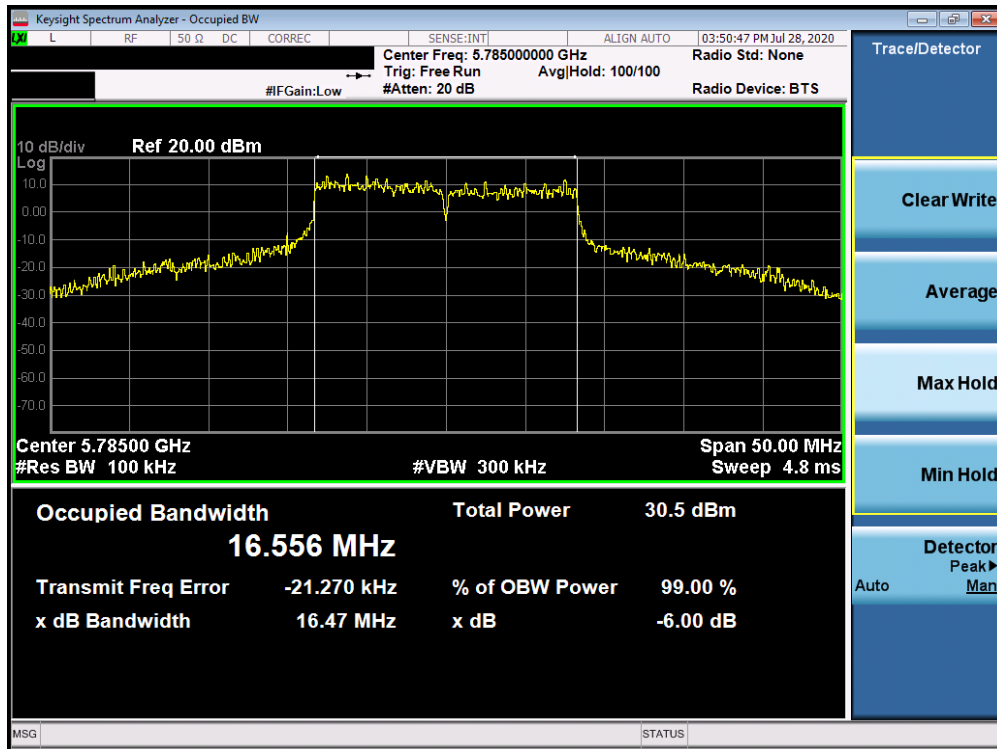
	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured 6dB Bandwidth [MHz]
Band 3	5745	149	a	6	16.49
	5785	157	a	6	16.47
	5825	165	a	6	16.23
	5745	149	n (20MHz)	6.5/7.2 (MCS0)	17.59
	5785	157	n (20MHz)	6.5/7.2 (MCS0)	15.92
	5825	165	n (20MHz)	6.5/7.2 (MCS0)	16.89
	5745	149	ax (20MHz)	6.5/7.2 (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

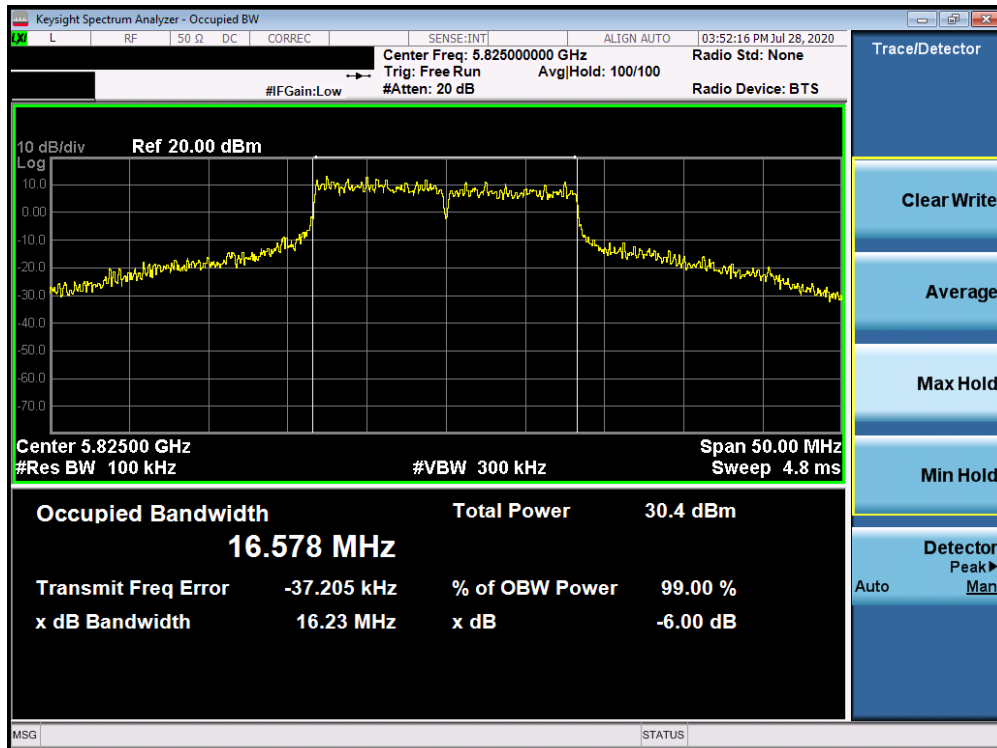


Plot 7-209. 6dB Bandwidth Plot ANT3 (802.11a (UNII Band 3) – Ch. 149)

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

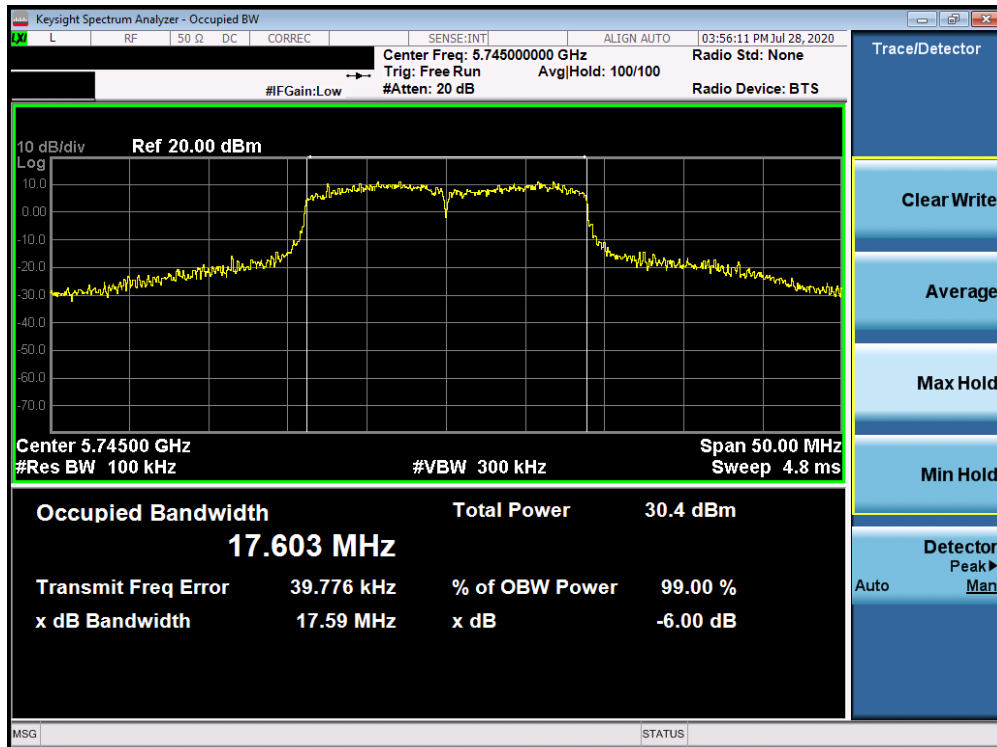


Plot 7-210. 6dB Bandwidth Plot ANT3 (802.11a (UNII Band 3) – Ch. 157)

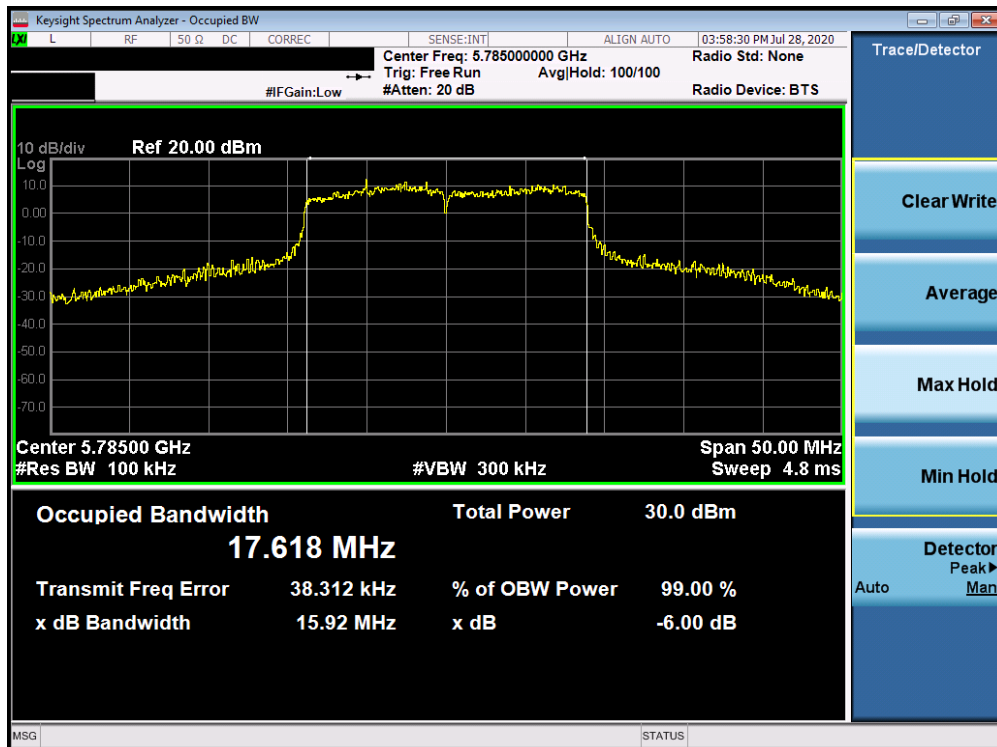


Plot 7-211. 6dB Bandwidth Plot ANT3 (802.11a (UNII Band 3) – Ch. 165)

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

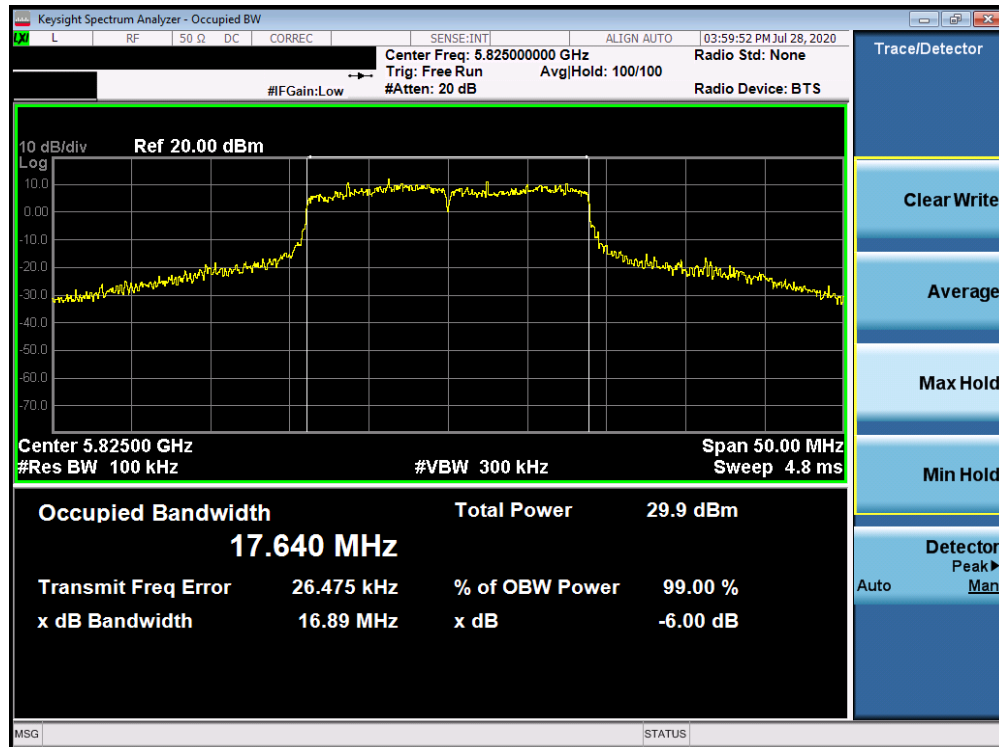


Plot 7-212. 6dB Bandwidth Plot ANT3 (20MHz BW 802.11n (UNII Band 3) – Ch. 149)

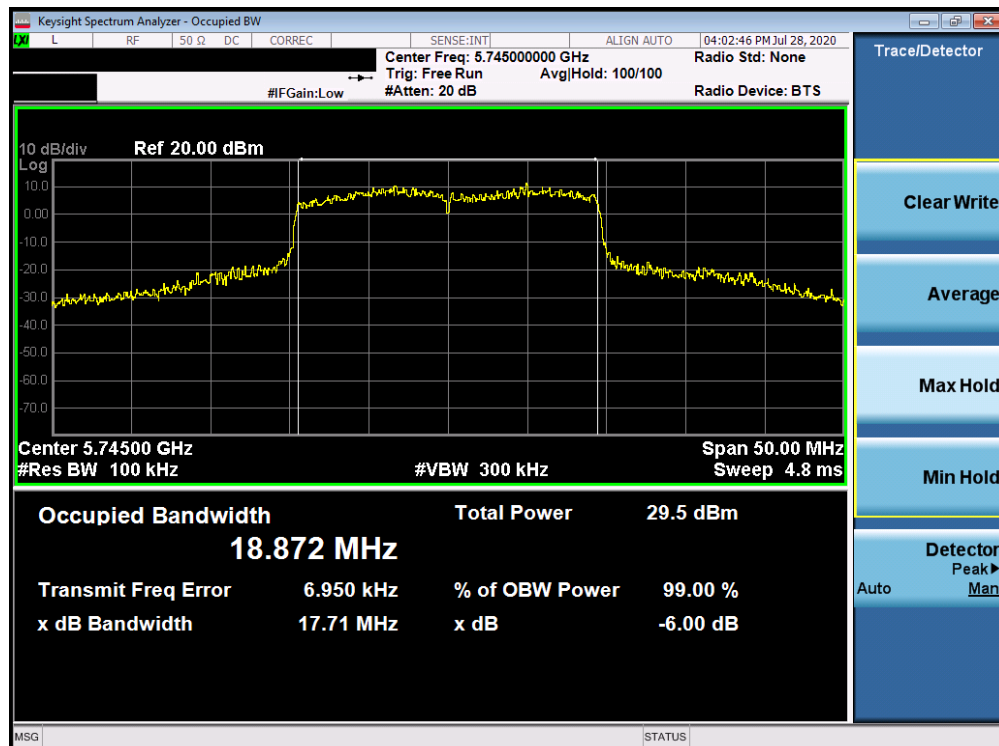


Plot 7-213. 6dB Bandwidth Plot ANT3 (20MHz BW 802.11n (UNII Band 3) – Ch. 157)

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

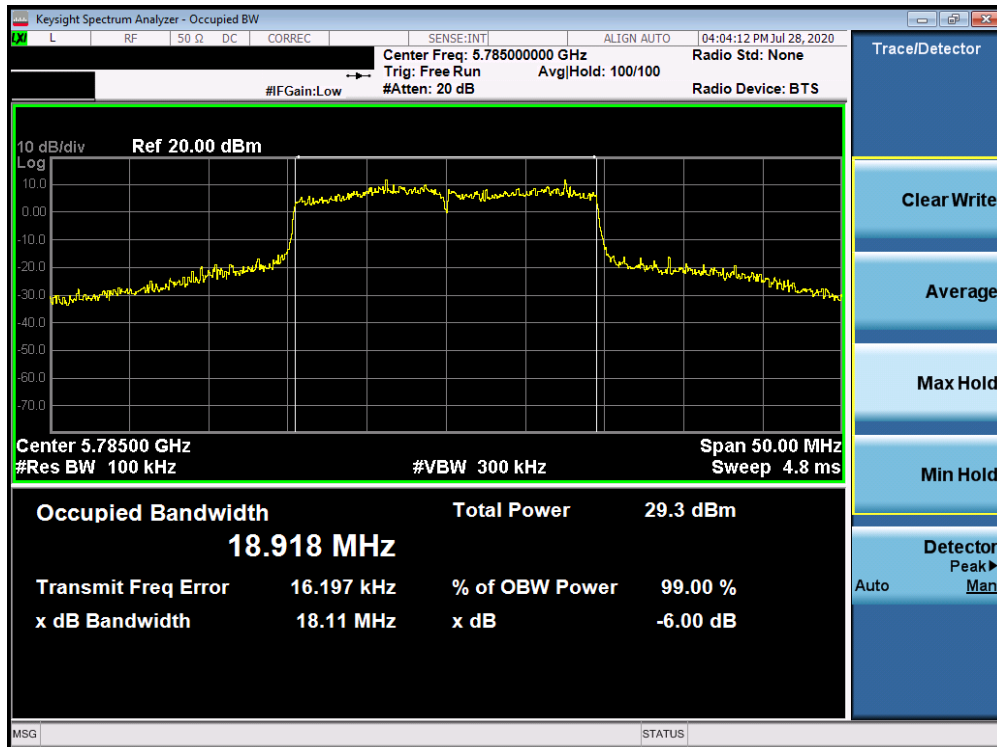


Plot 7-214. 6dB Bandwidth Plot ANT3 (20MHz BW 802.11n (UNII Band 3) – Ch. 165)

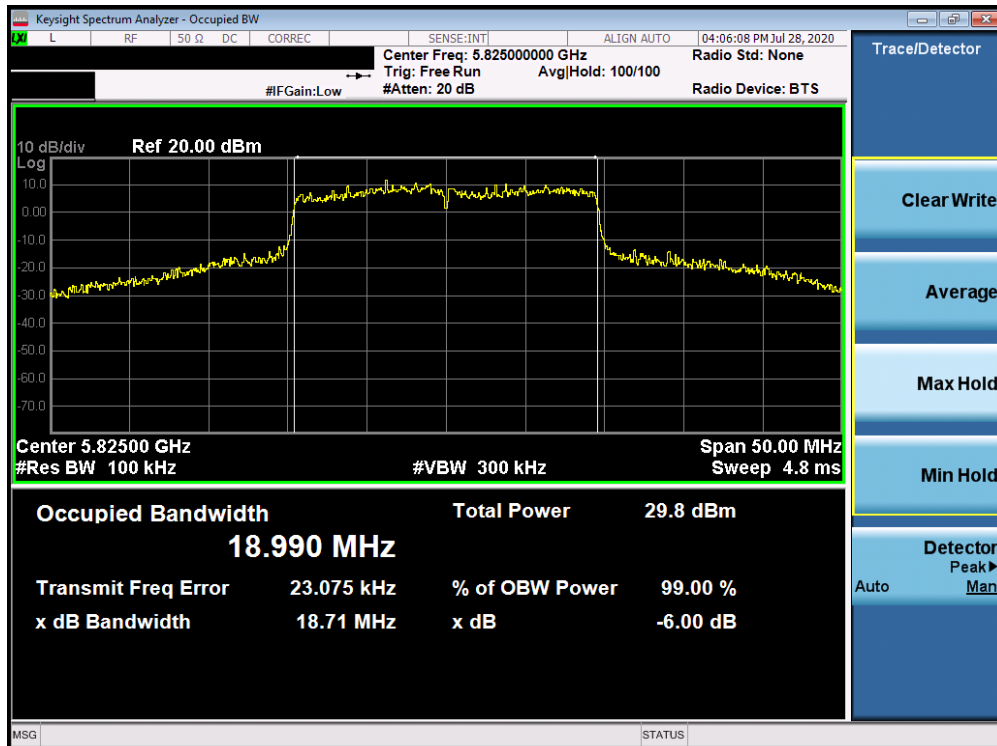


Plot 7-215. 6dB Bandwidth Plot ANT3 (20MHz BW 802.11ax (UNII Band 3) – Ch. 149)

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

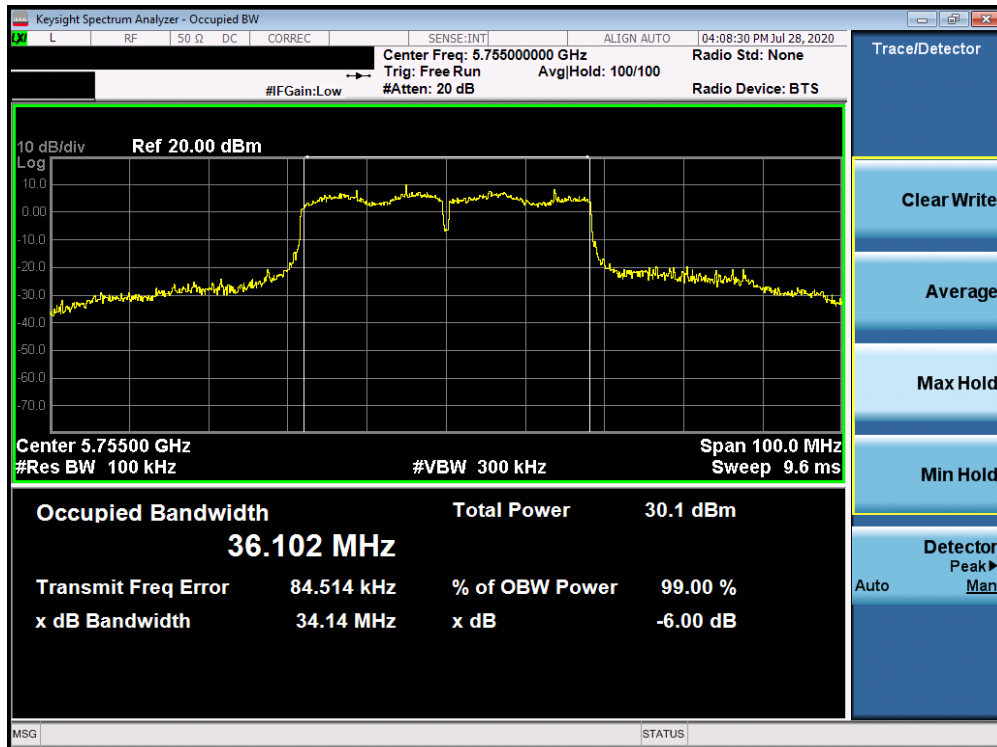


Plot 7-216. 6dB Bandwidth Plot ANT3 (20MHz BW 802.11ax (UNII Band 3) – Ch. 157)

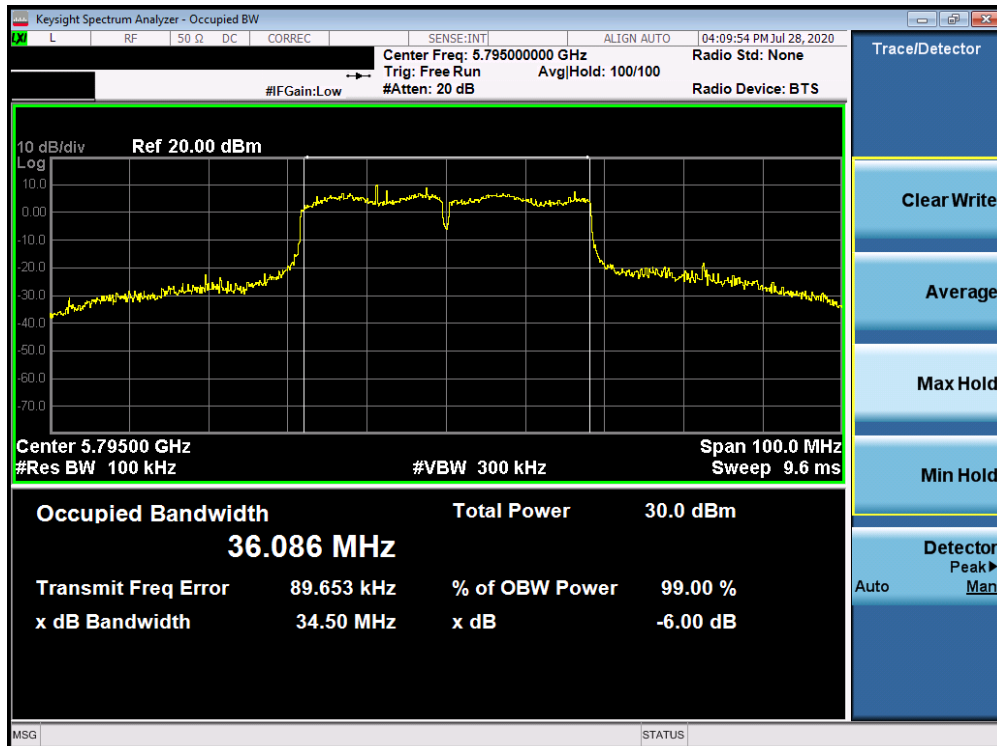


Plot 7-217. 6dB Bandwidth Plot ANT3 (20MHz BW 802.11ax (UNII Band 3) – Ch. 165)

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	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 133 of 344