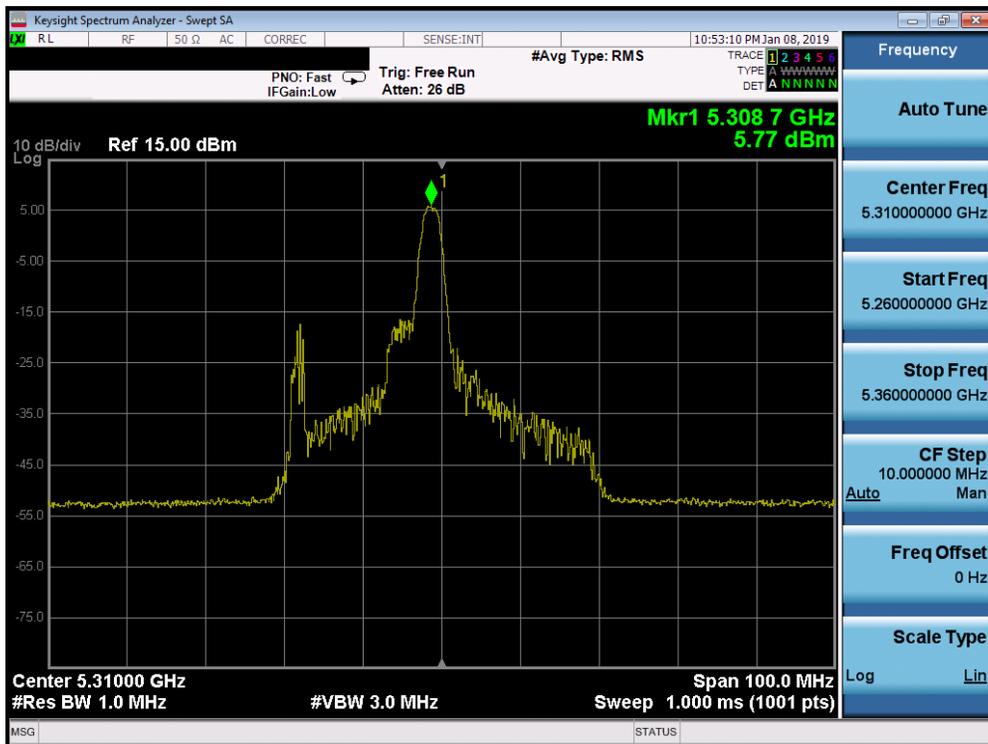
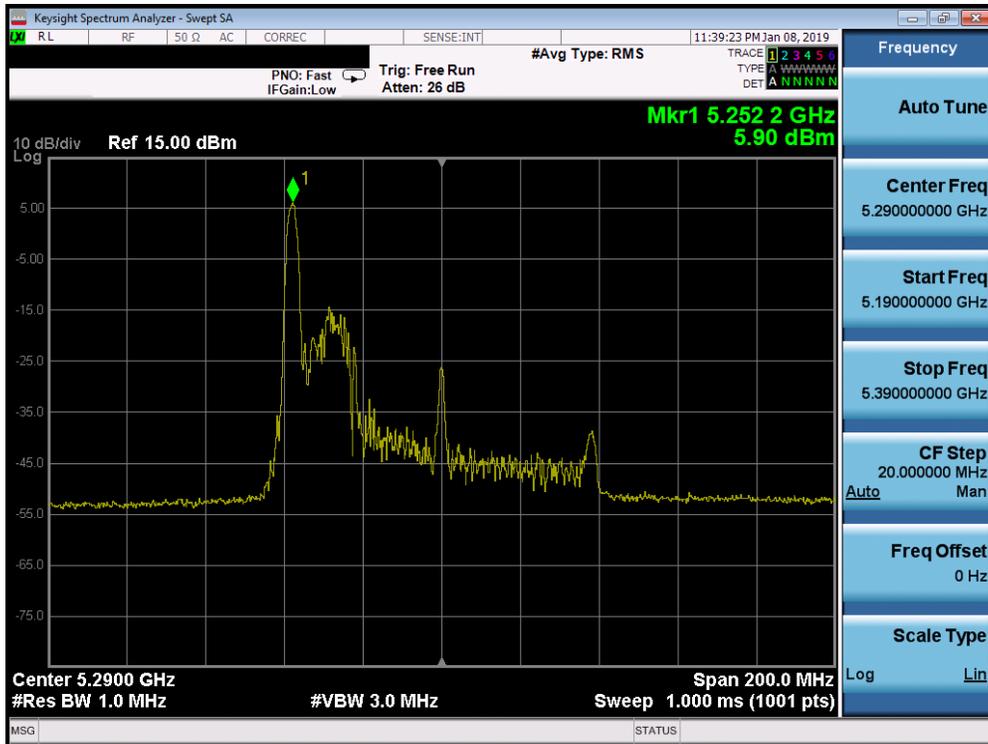


Plot 7-505. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 54)



Plot 7-506. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 62)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 341 of 519

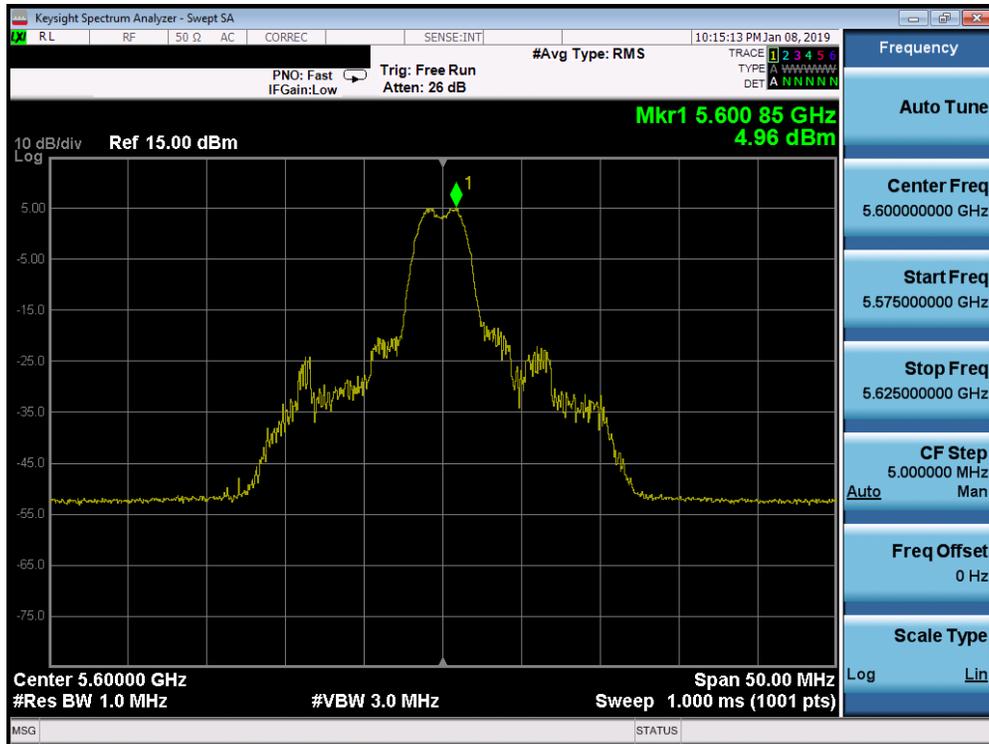


Plot 7-507. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 58)



Plot 7-508. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 100)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 342 of 519

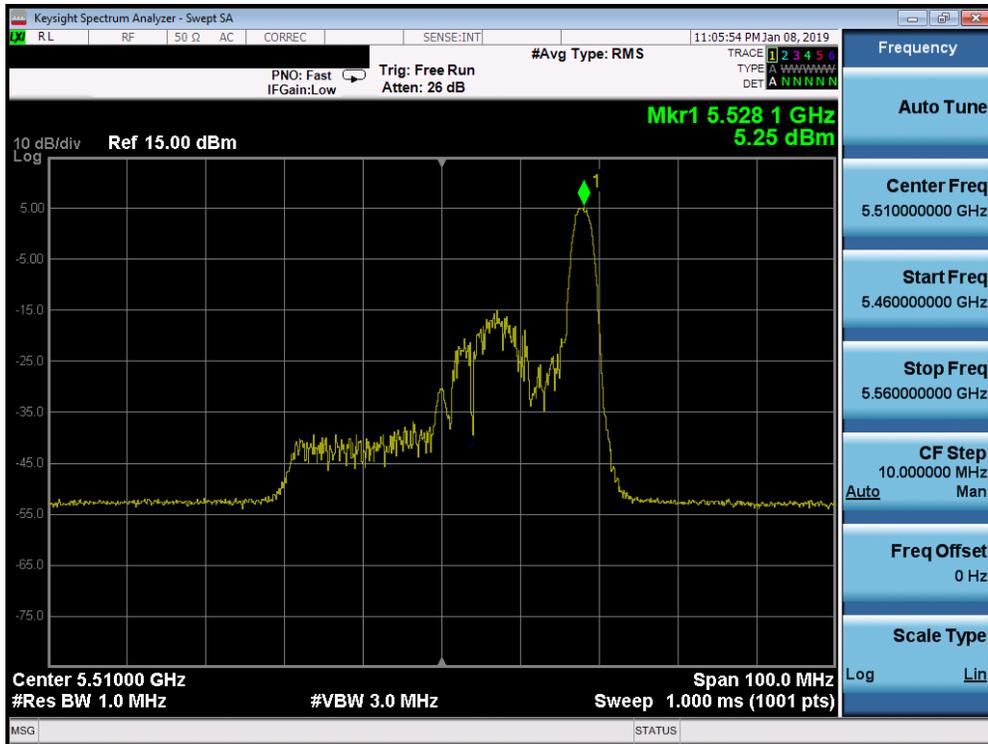


Plot 7-509. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 120)

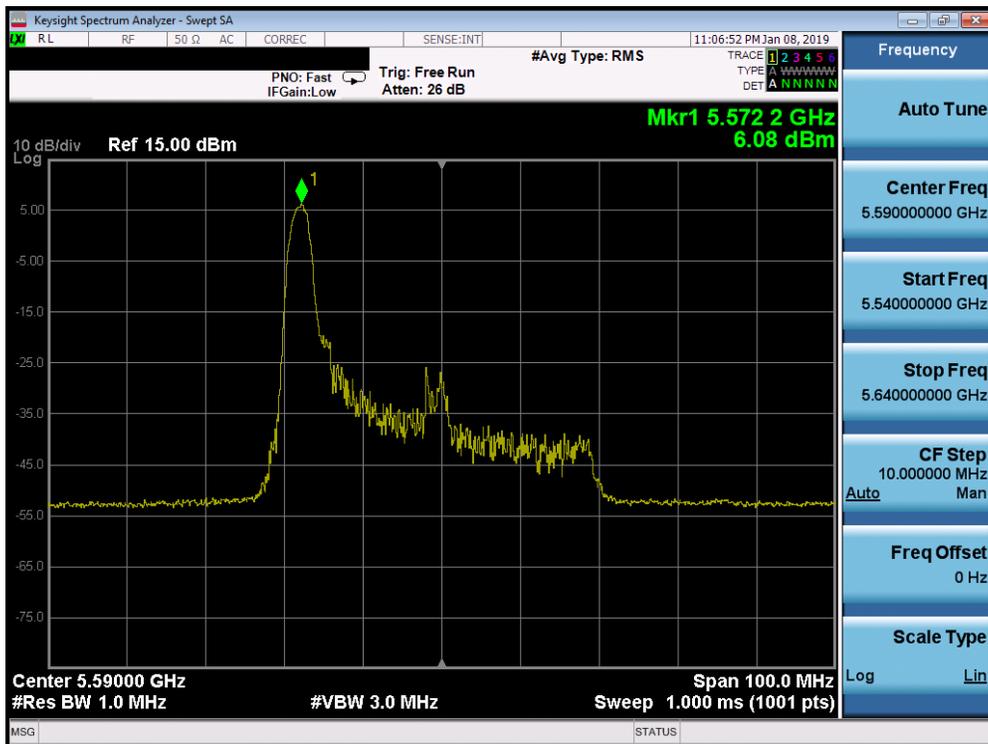


Plot 7-510. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 144)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 343 of 519

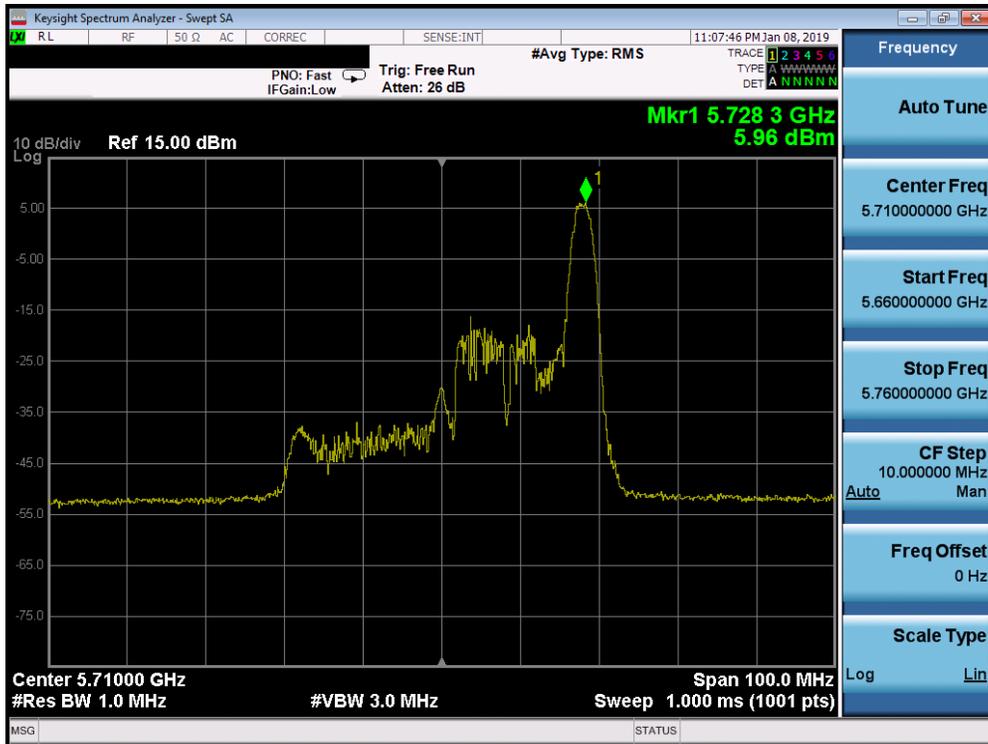


Plot 7-511. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 102)

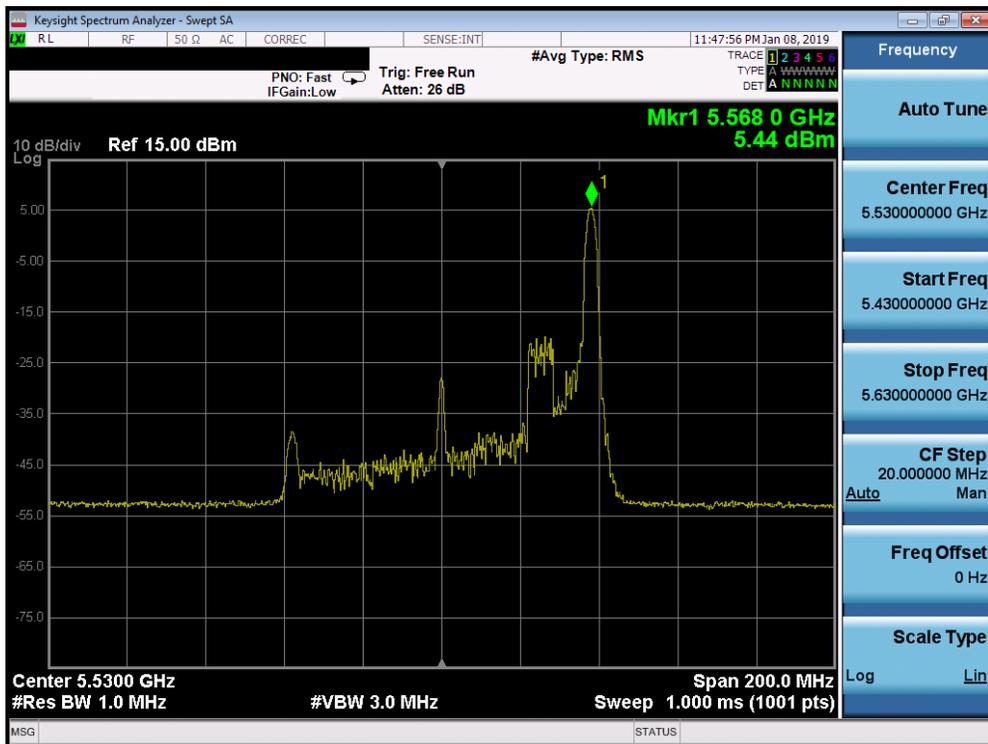


Plot 7-512. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 118)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 344 of 519

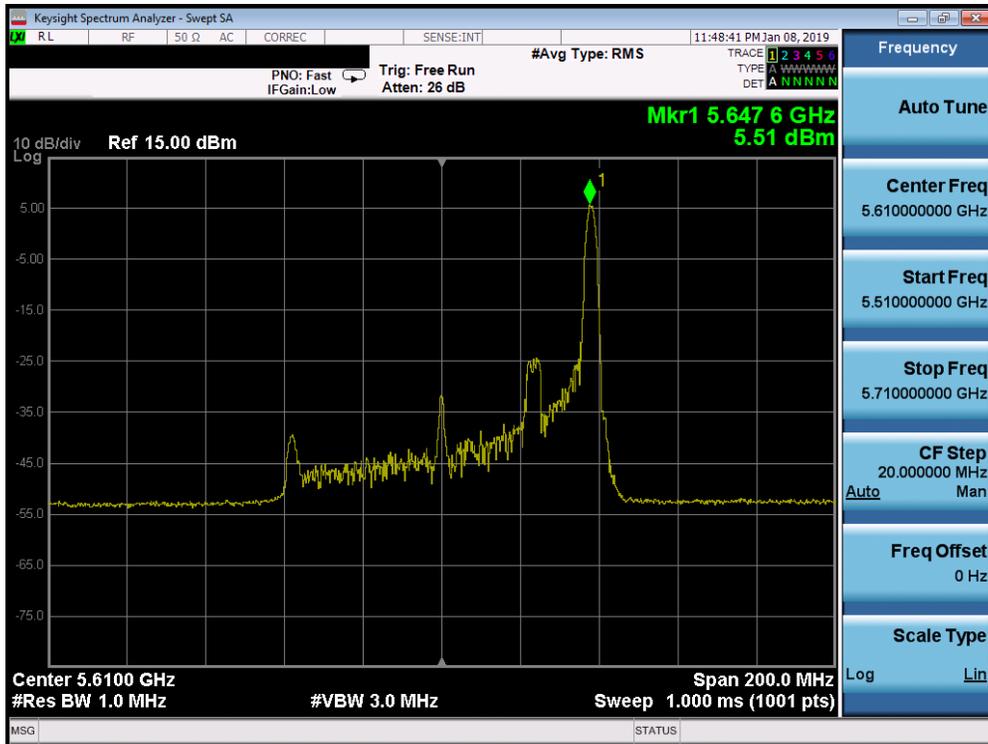


Plot 7-513. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 142)

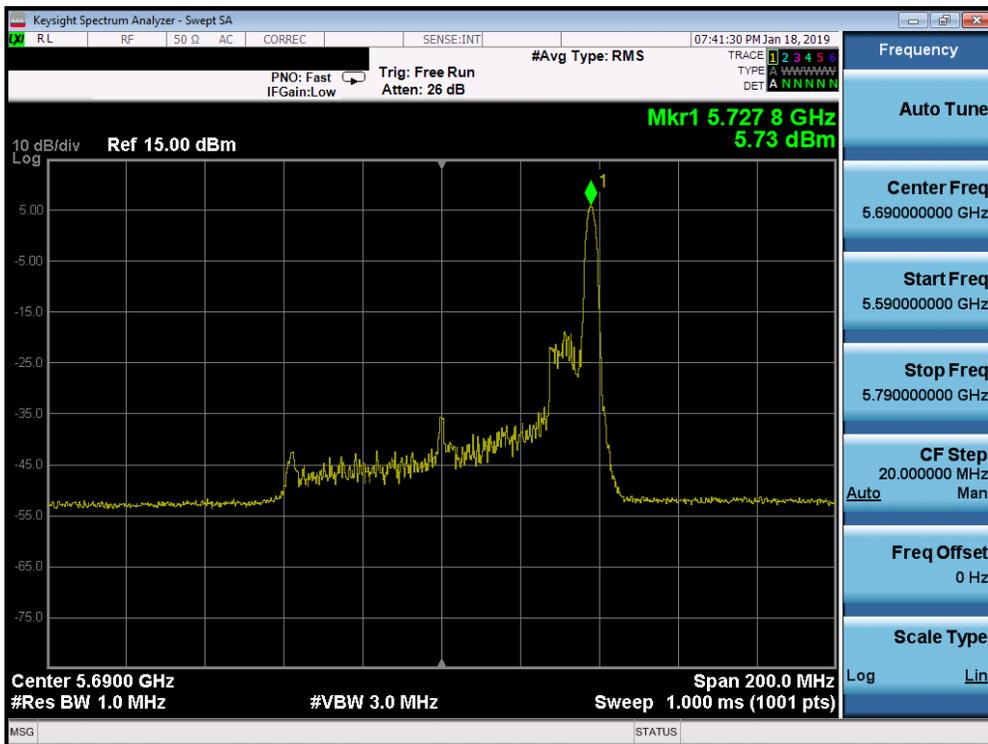


Plot 7-514. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 106)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 345 of 519

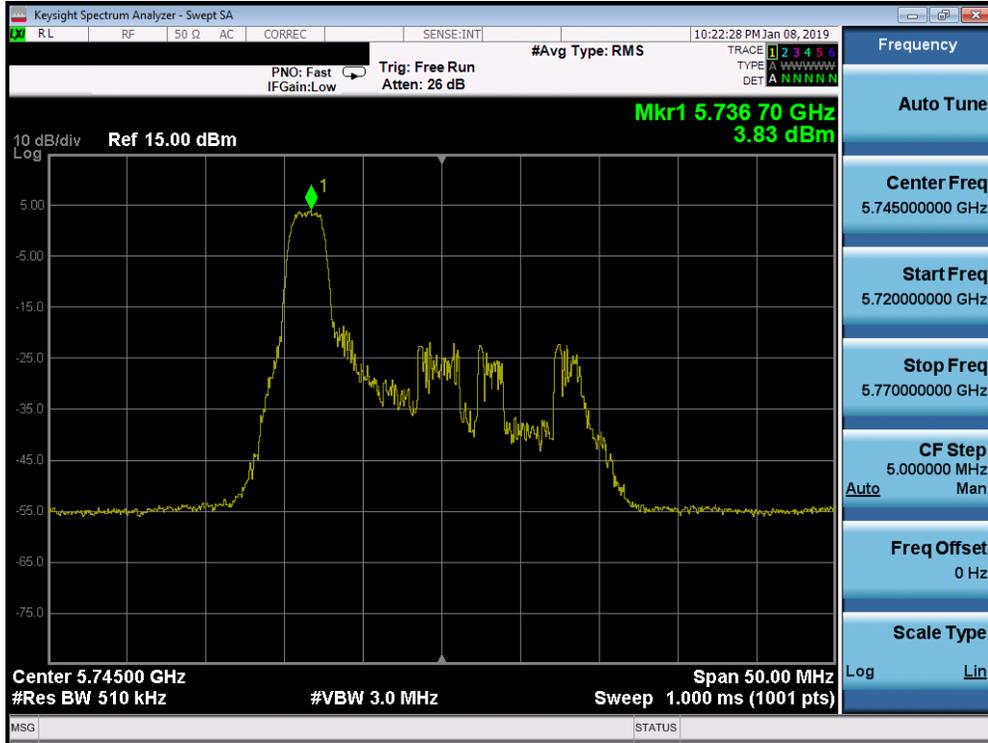


Plot 7-515. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 122)

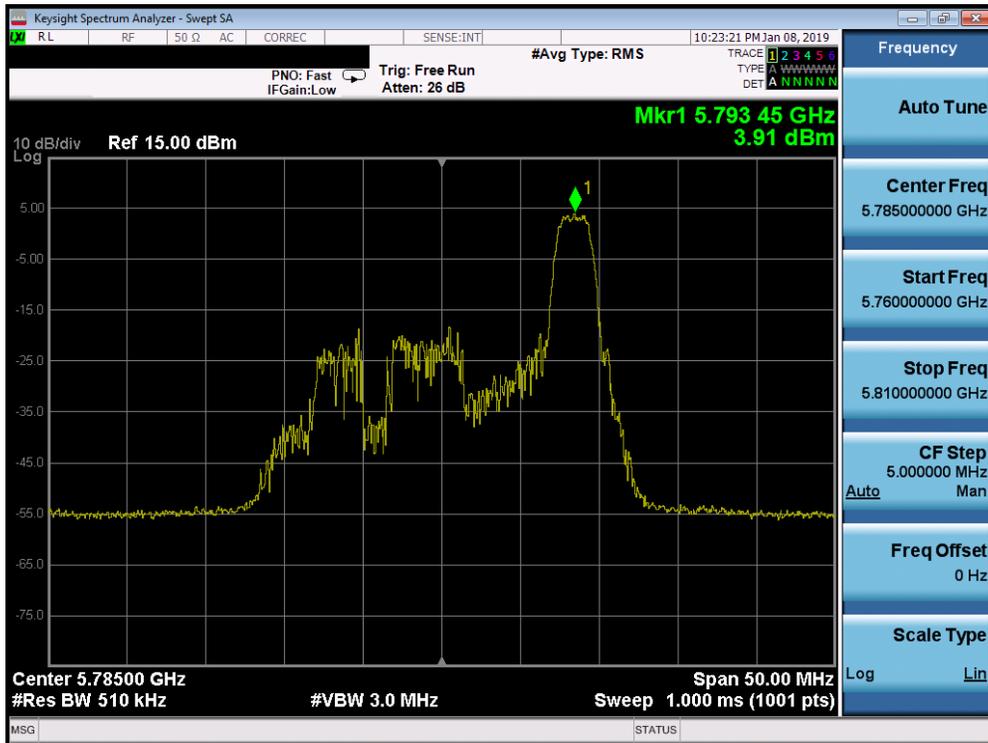


Plot 7-516. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 138)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 346 of 519

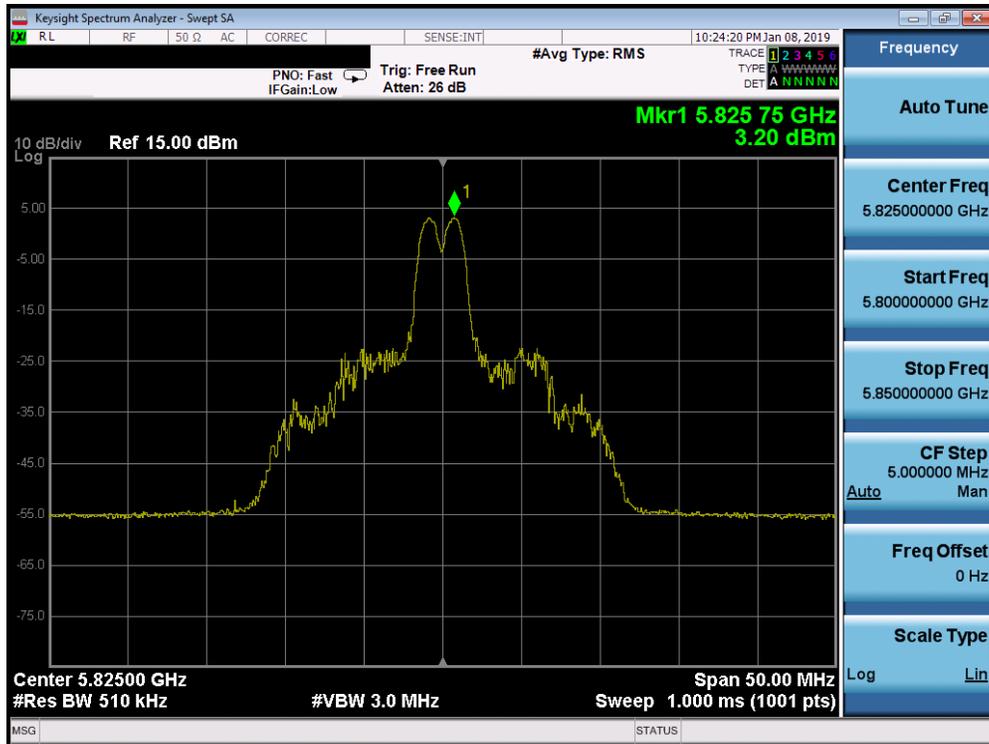


Plot 7-517. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 149)

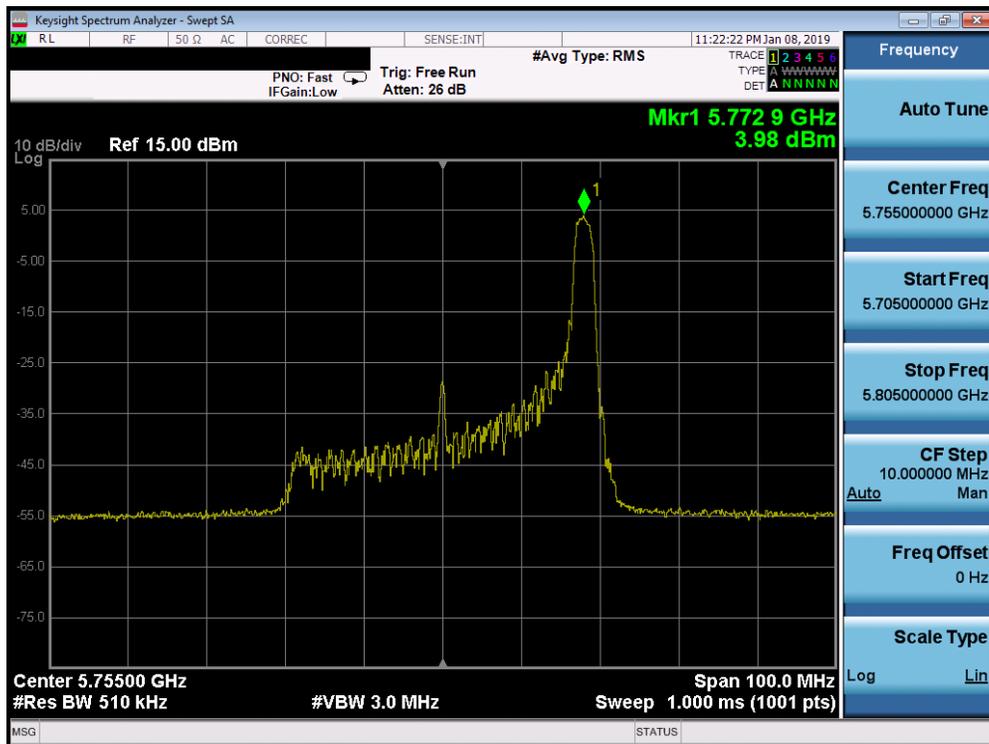


Plot 7-518. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 157)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 347 of 519



Plot 7-519. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 165)

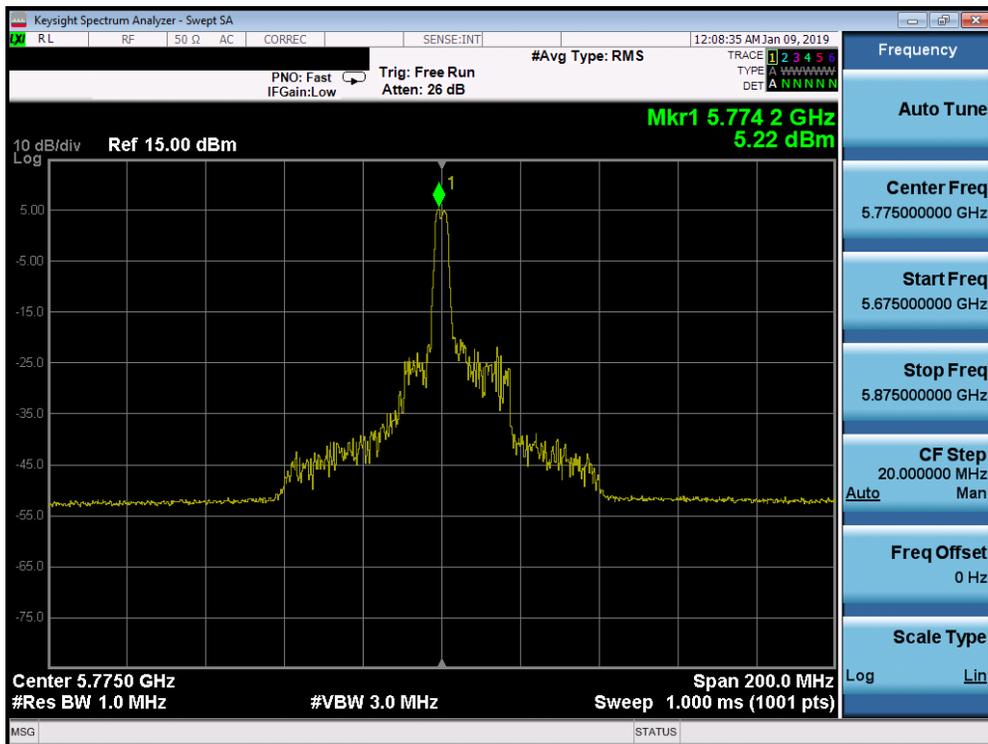


Plot 7-520. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 151)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 348 of 519



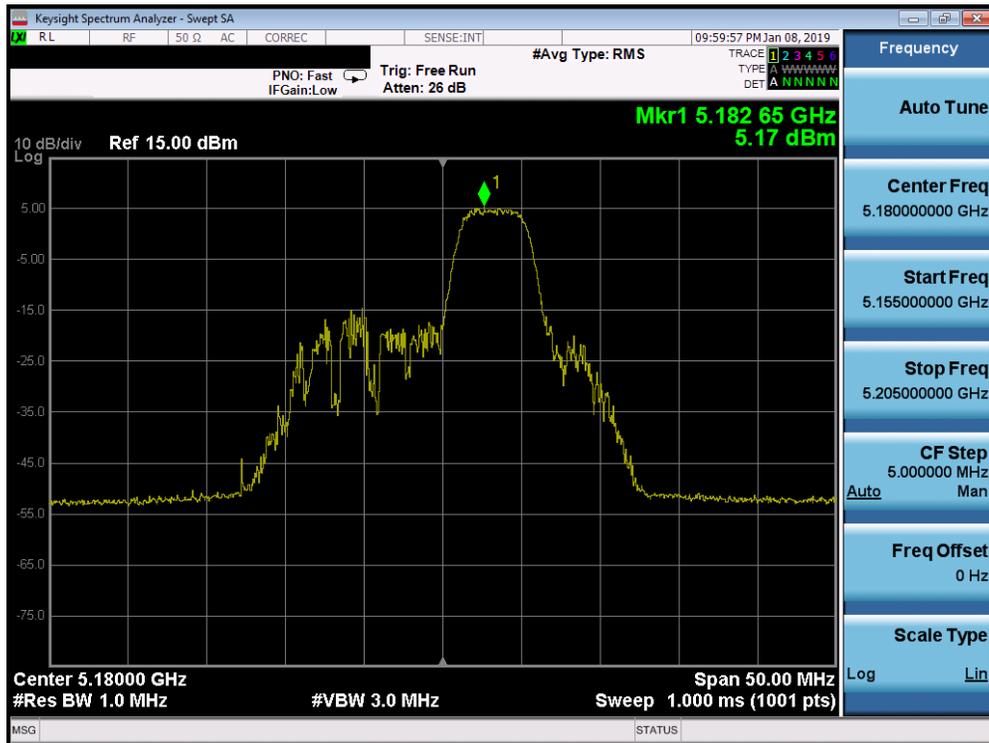
Plot 7-521. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 159)



Plot 7-522. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 155)

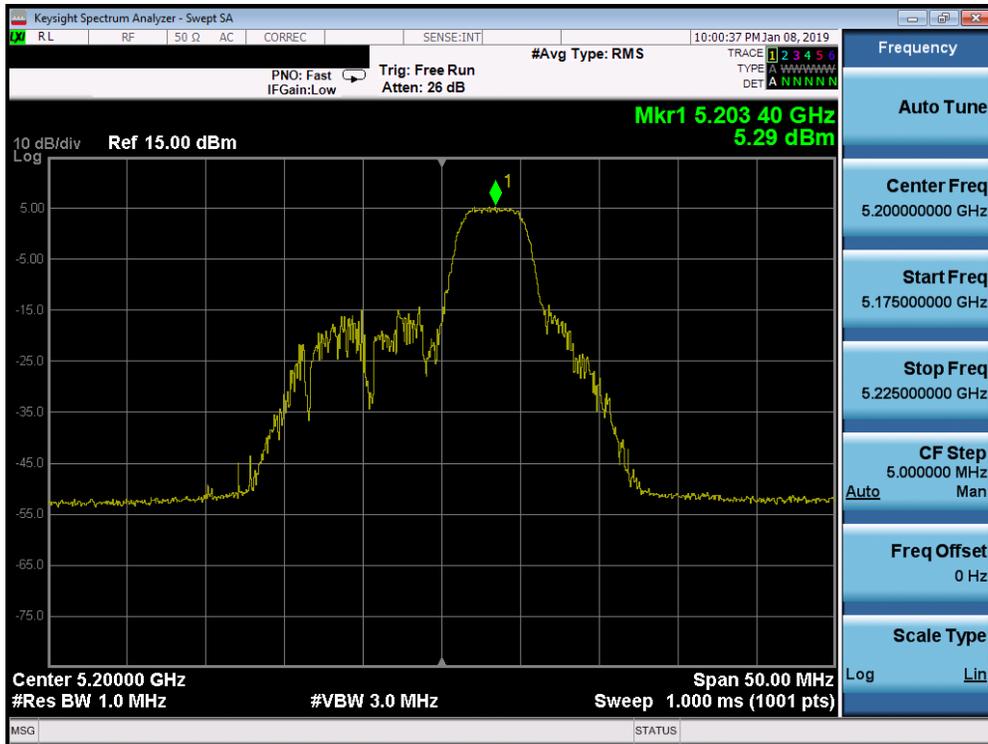
FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 349 of 519

MIMO Antenna-2 Power Spectral Density Measurements (52 Tones)

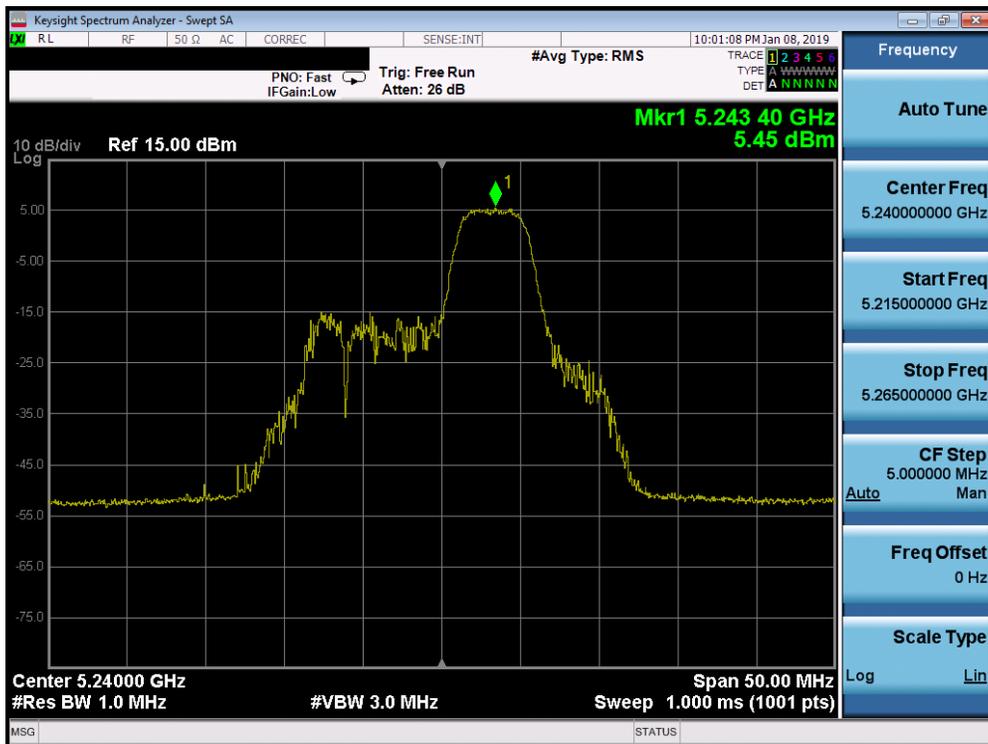


Plot 7-523. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 36)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 350 of 519

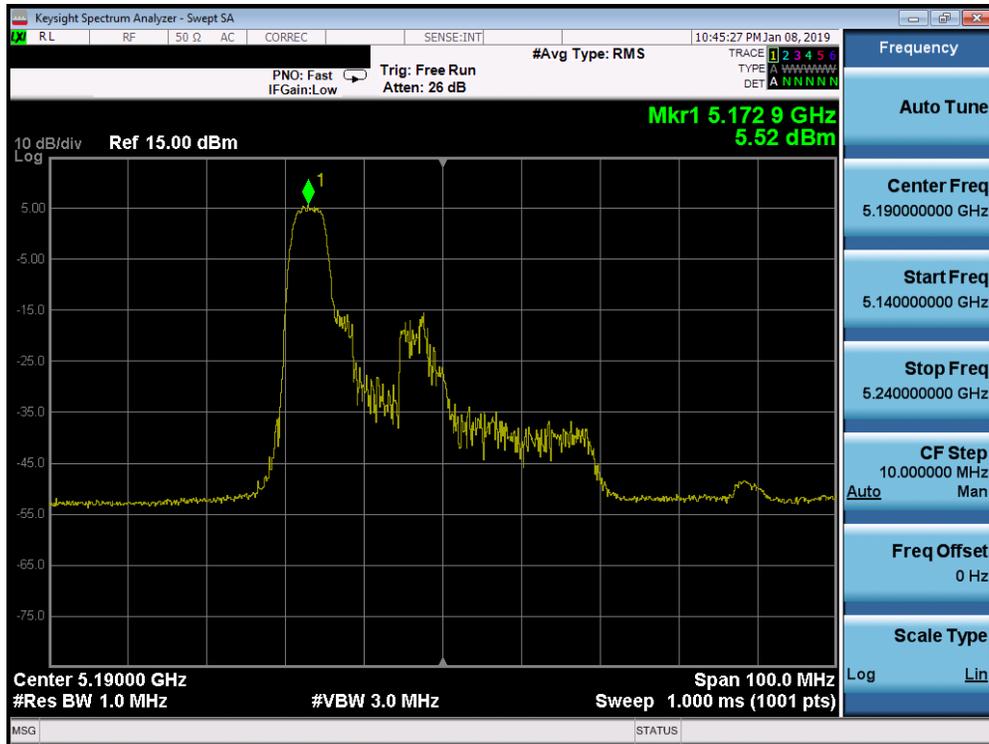


Plot 7-524. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 40)

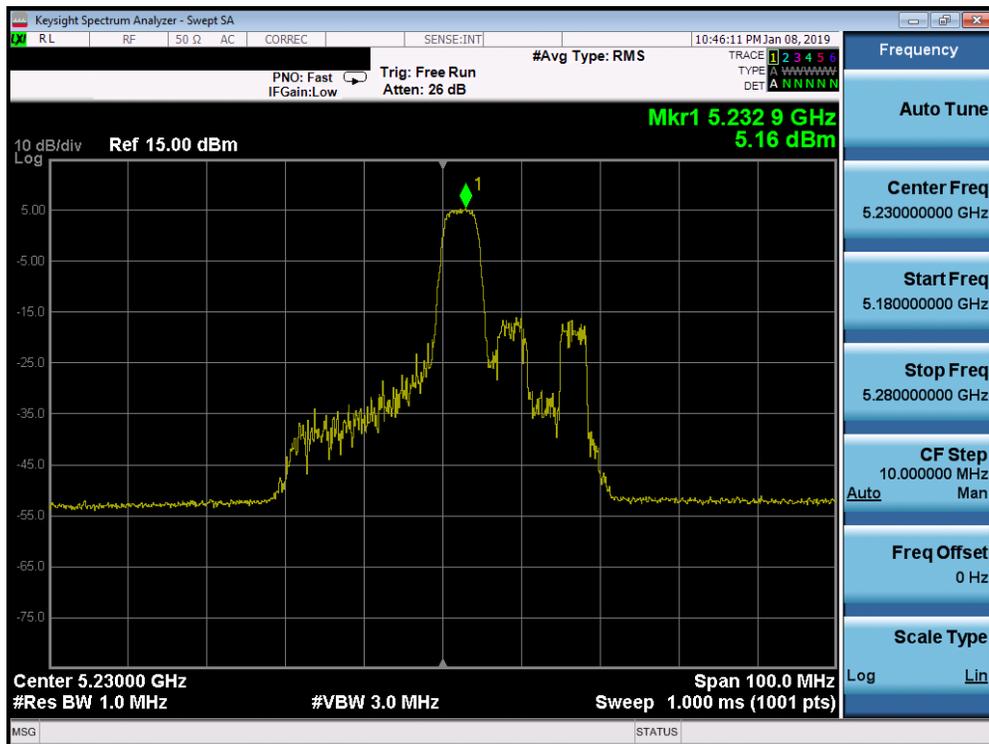


Plot 7-525. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 48)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 351 of 519

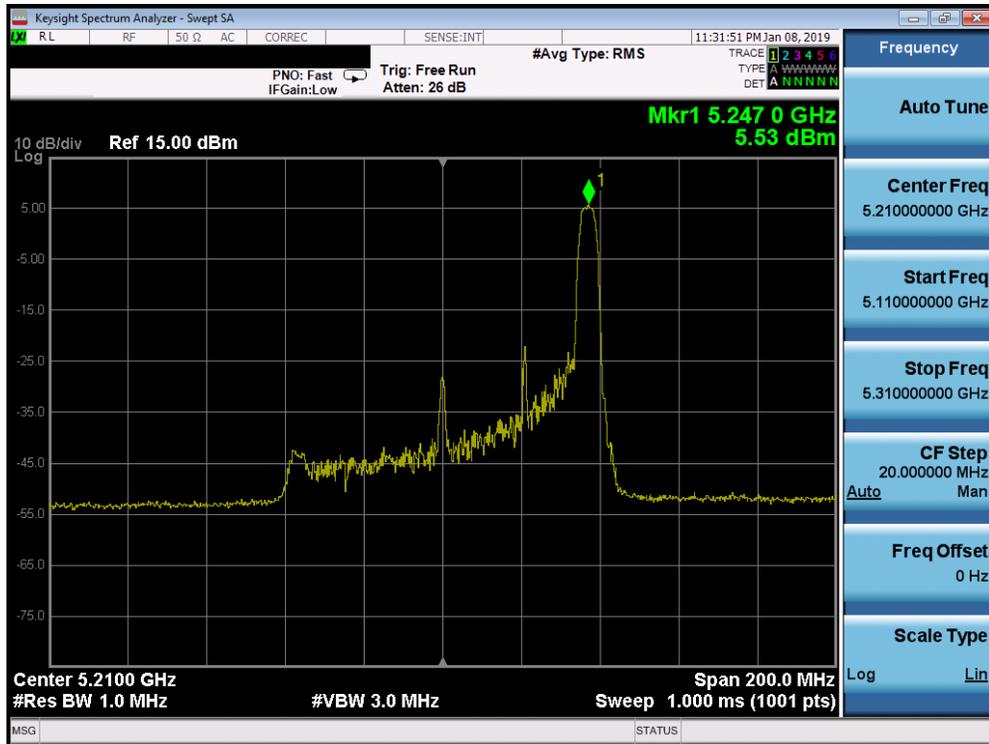


Plot 7-526. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 38)

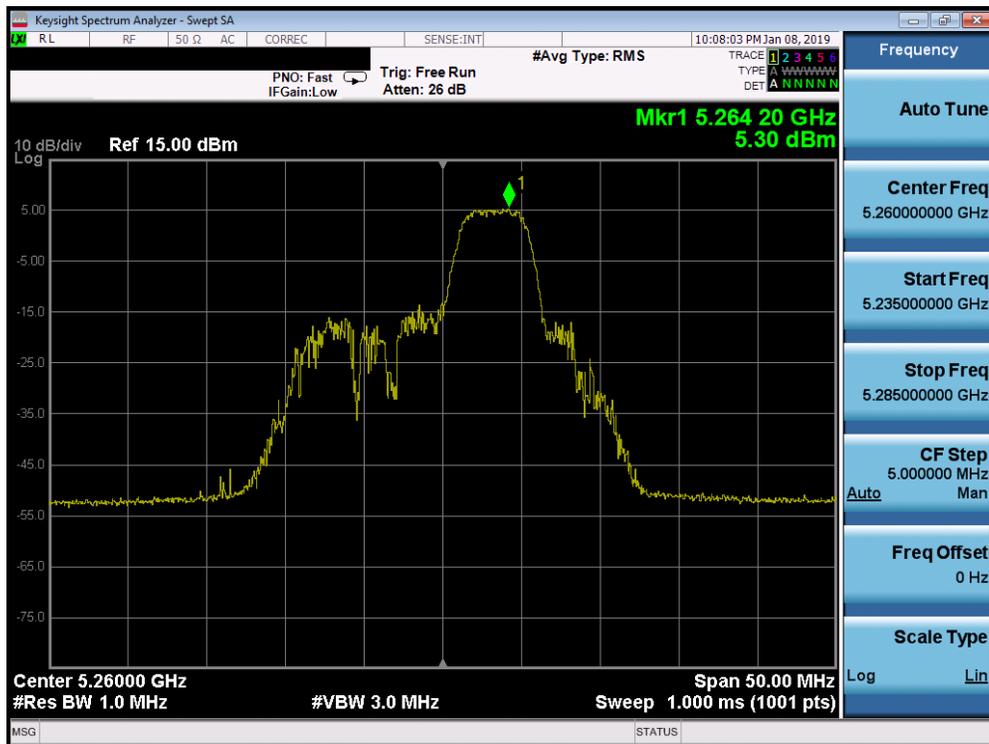


Plot 7-527. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 46)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 352 of 519

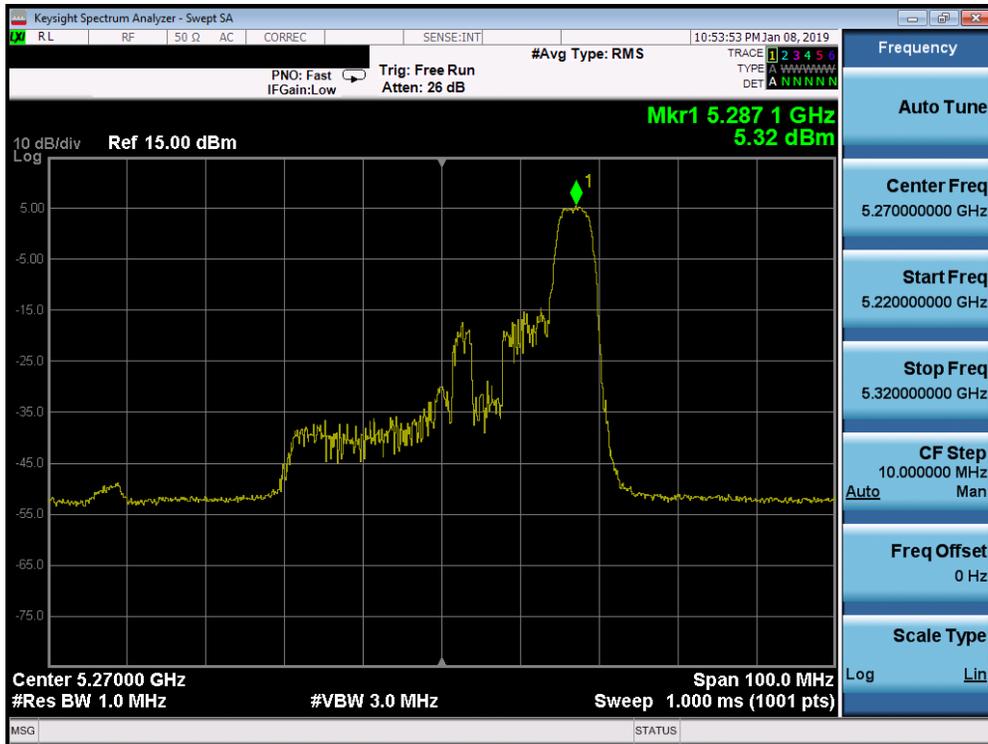


Plot 7-528. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 42)

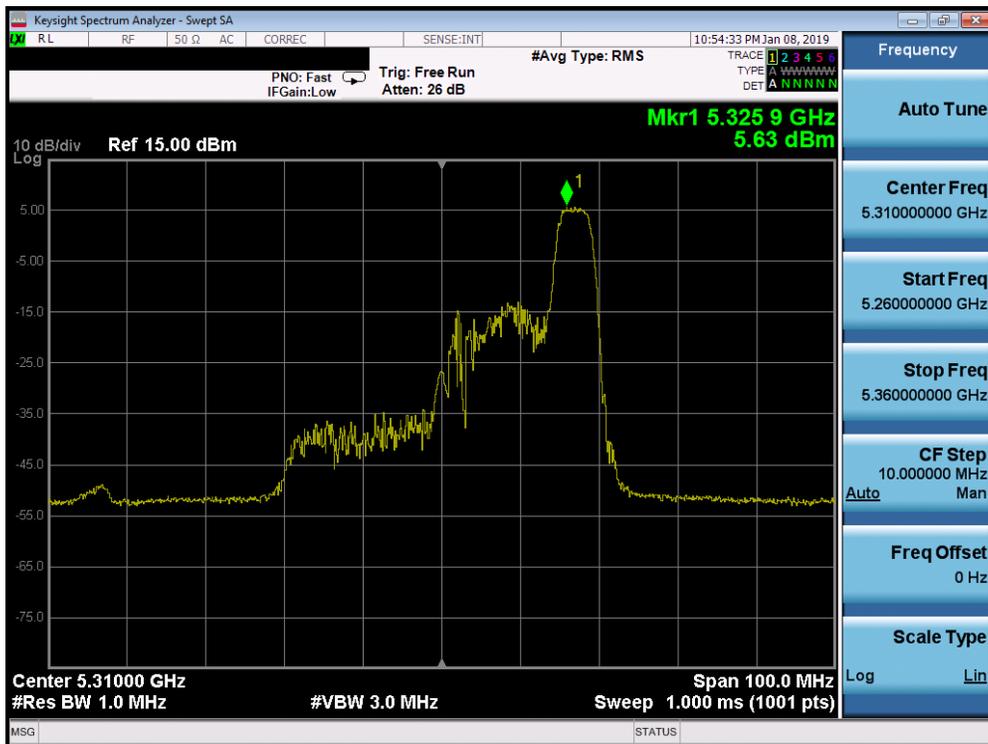


Plot 7-529. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 52)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 353 of 519

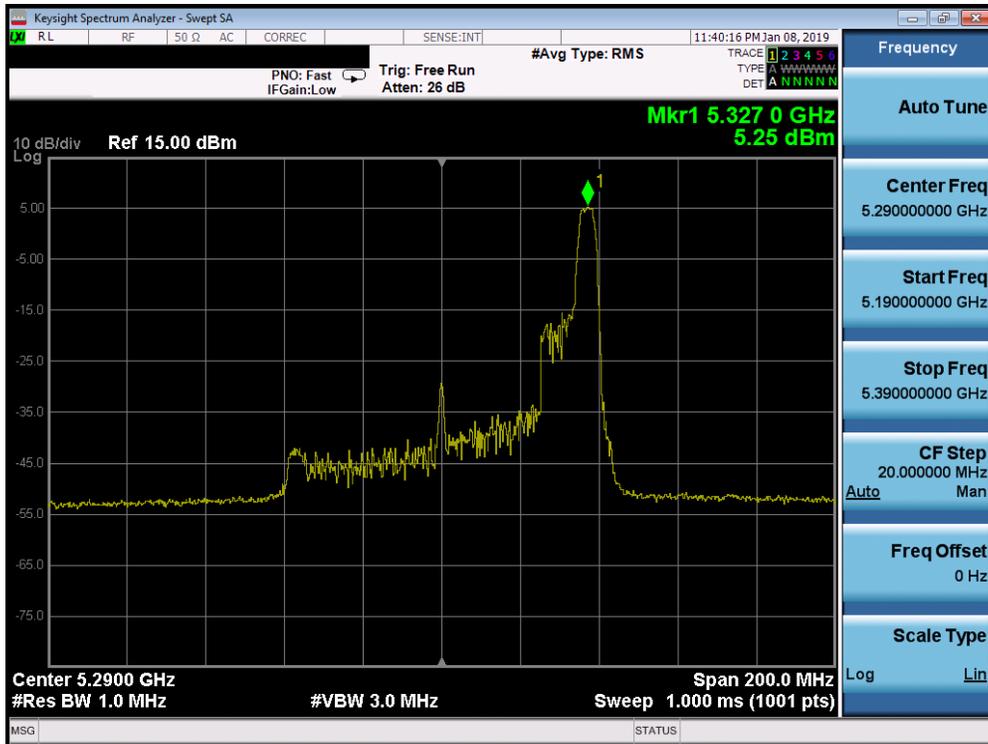


Plot 7-532. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 54)

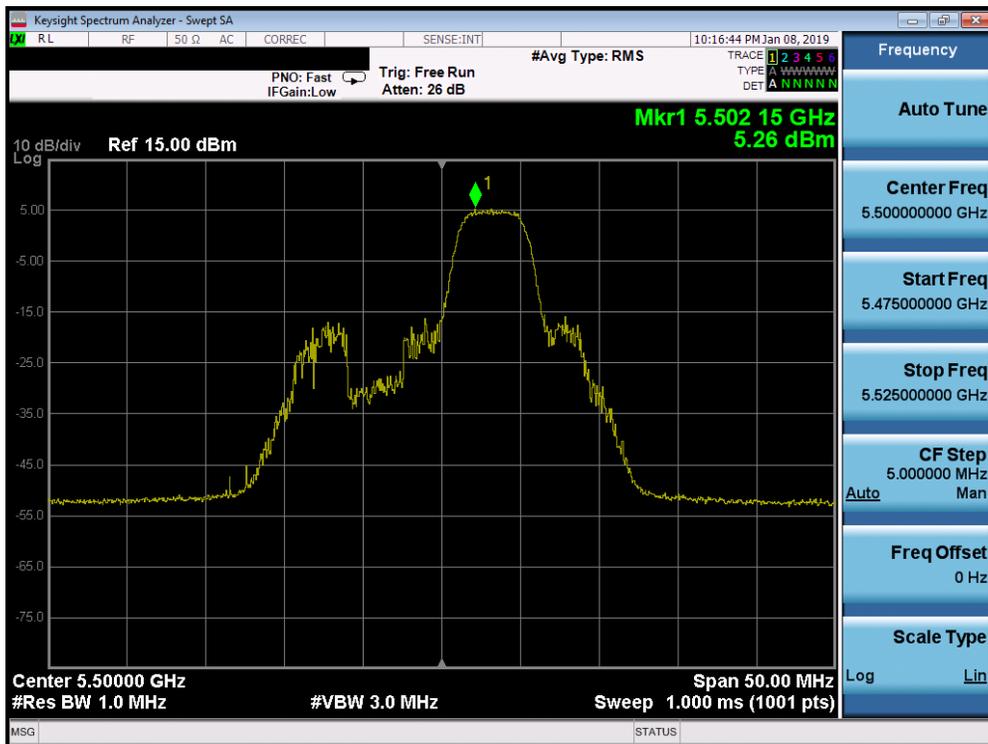


Plot 7-533. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 62)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 355 of 519

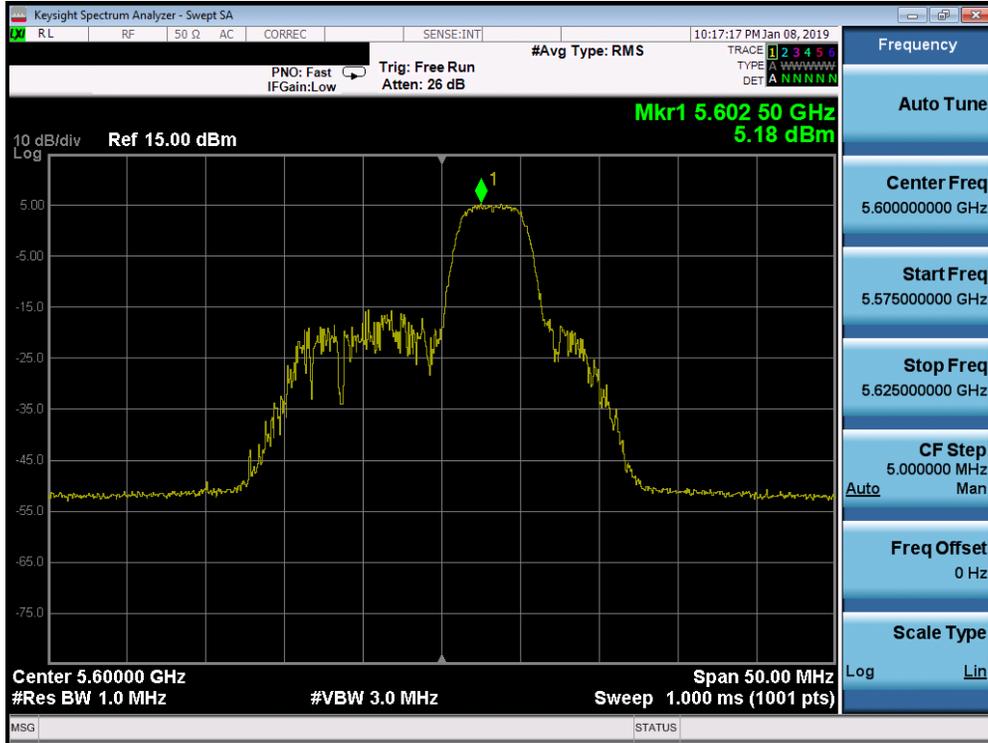


Plot 7-534. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 58)

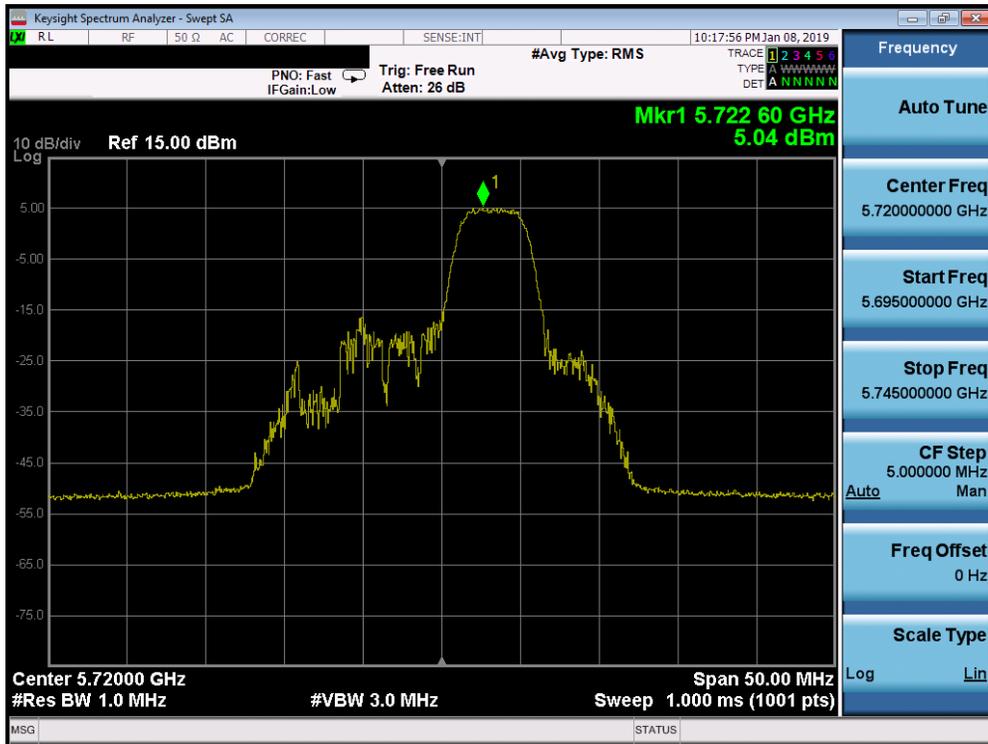


Plot 7-535. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 100)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 356 of 519

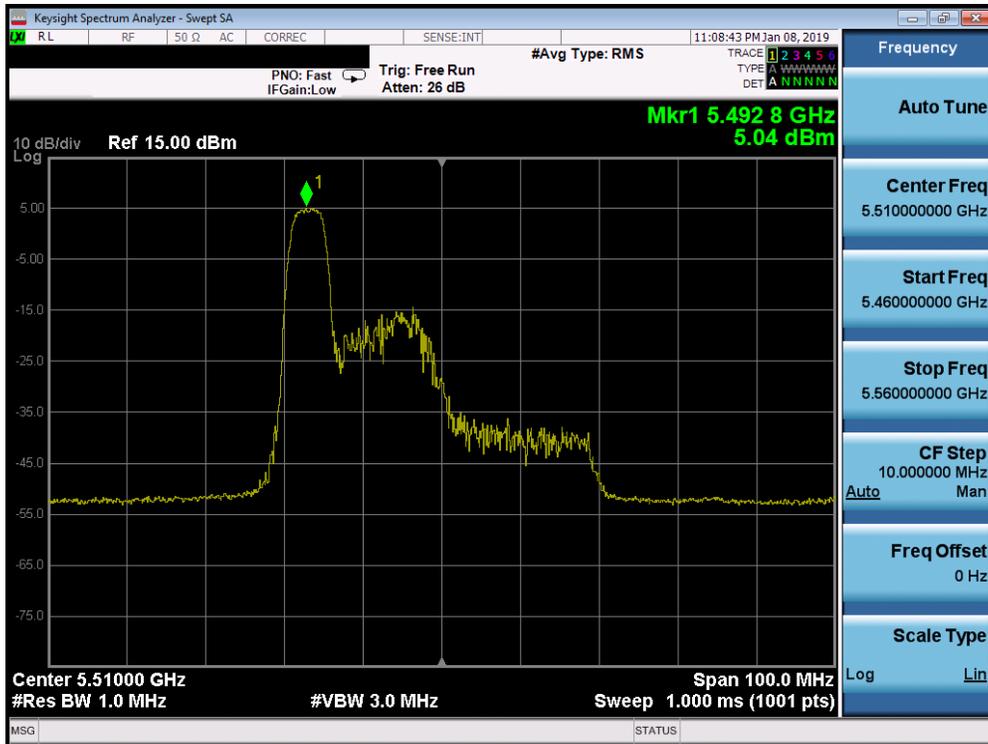


Plot 7-536. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 120)

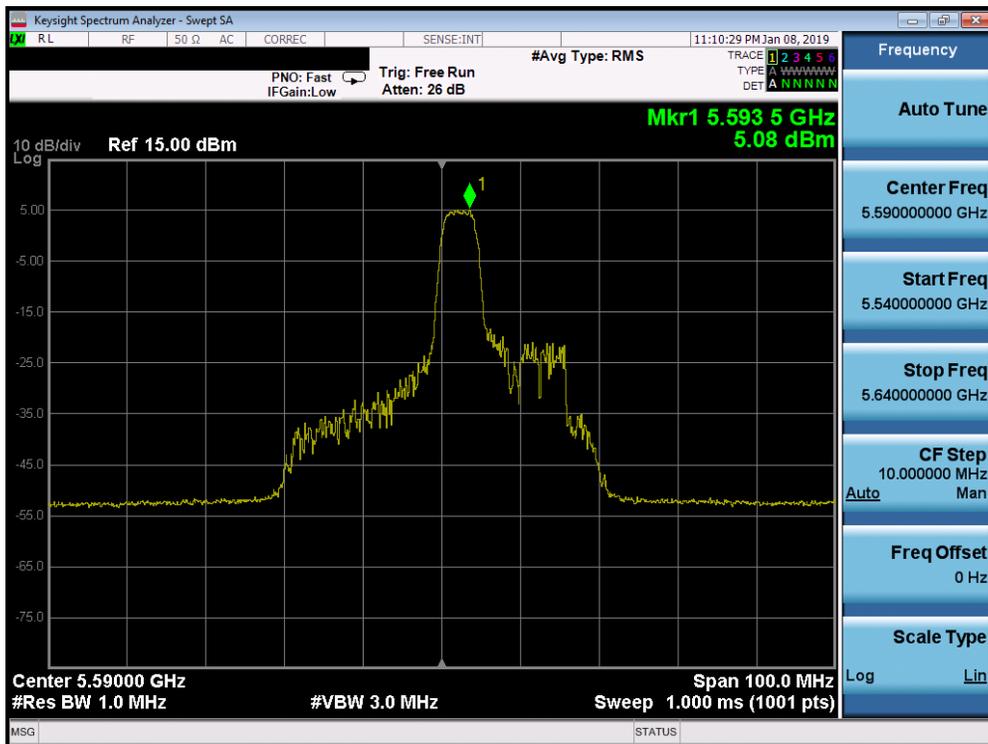


Plot 7-537. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 144)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 357 of 519

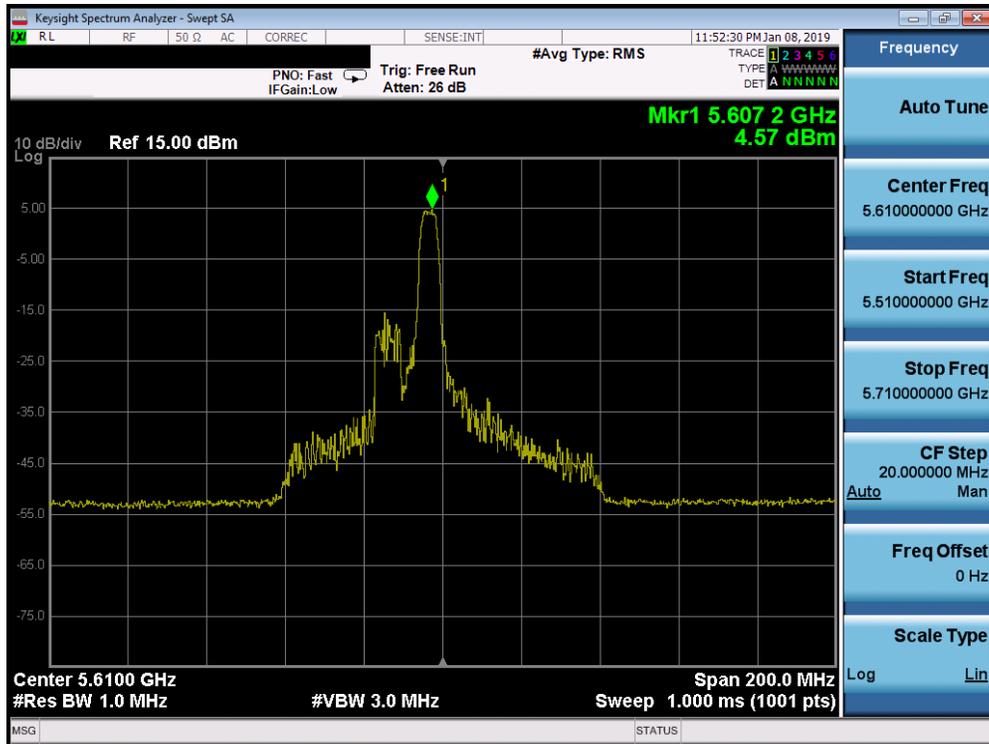


Plot 7-538. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 102)

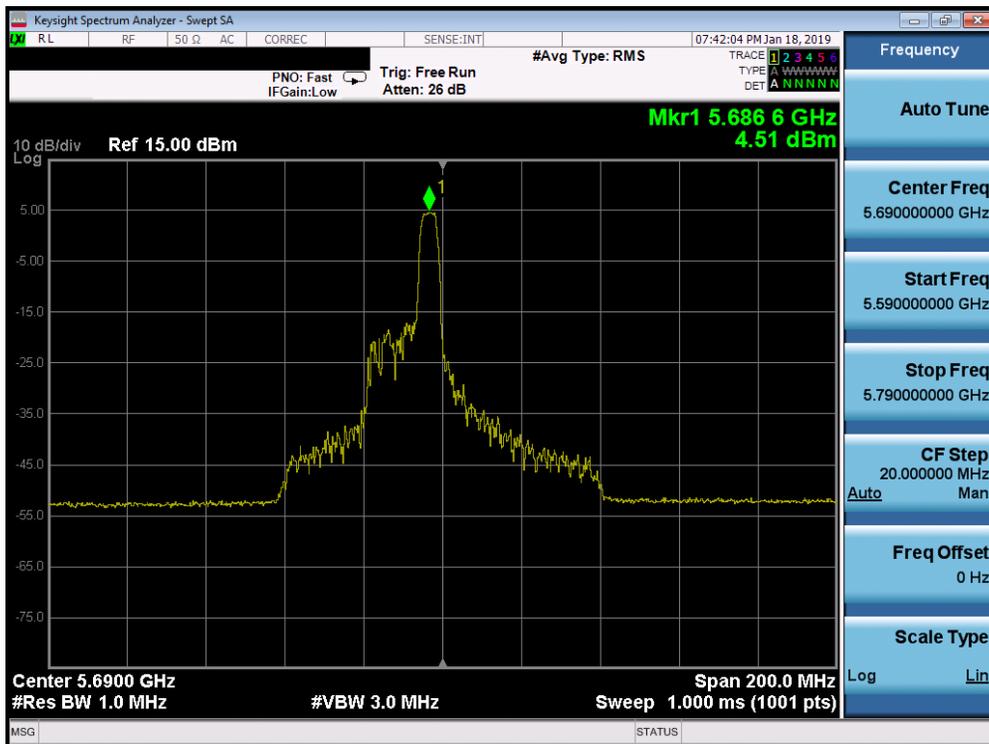


Plot 7-539. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 118)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 358 of 519

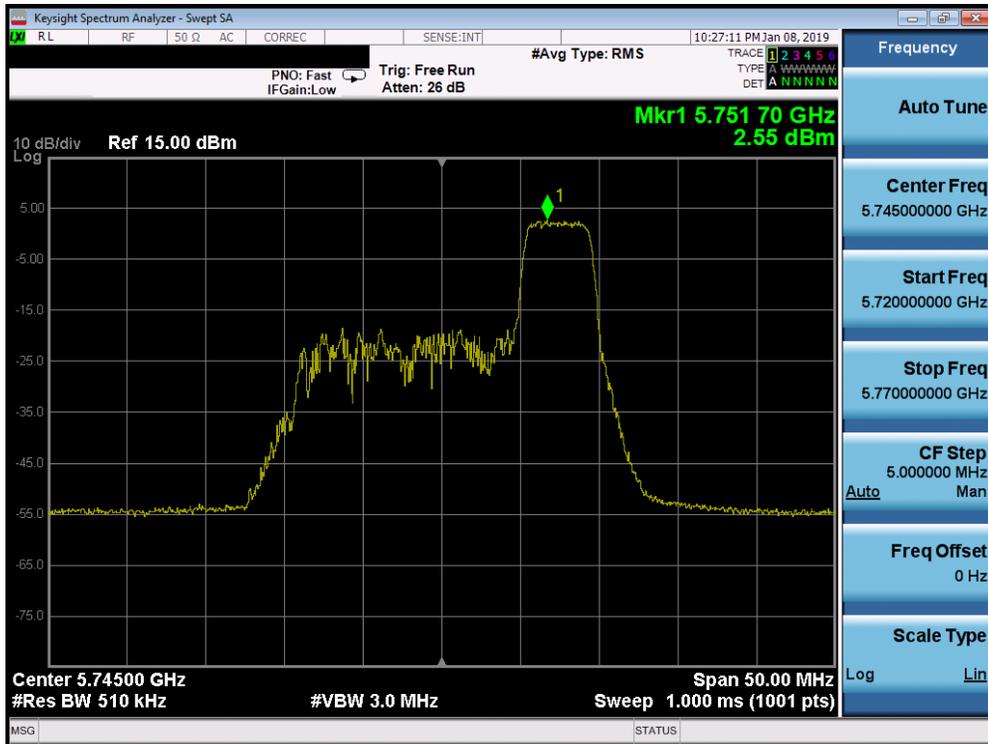


Plot 7-542. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 122)

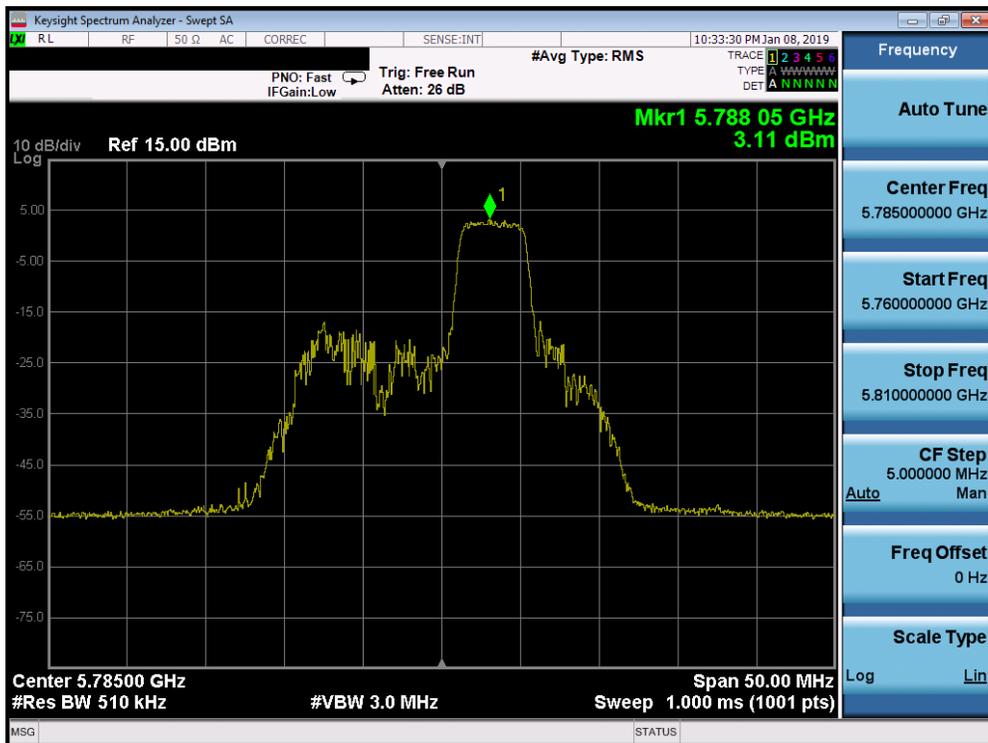


Plot 7-543. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 138)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 360 of 519

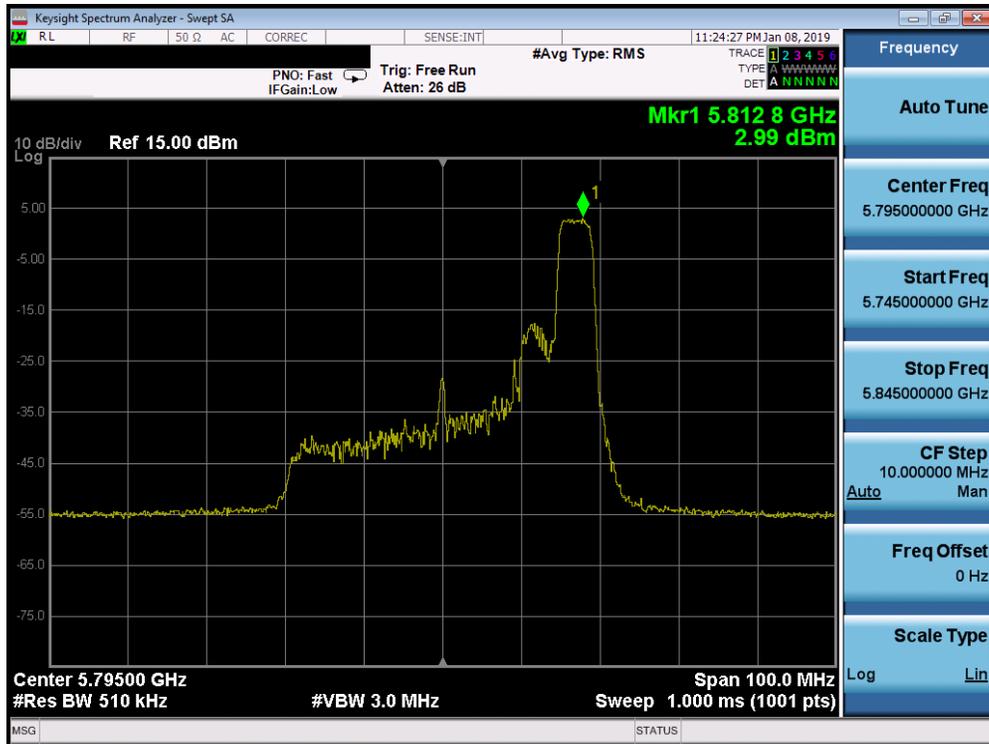


Plot 7-544. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 3) – Ch. 149)

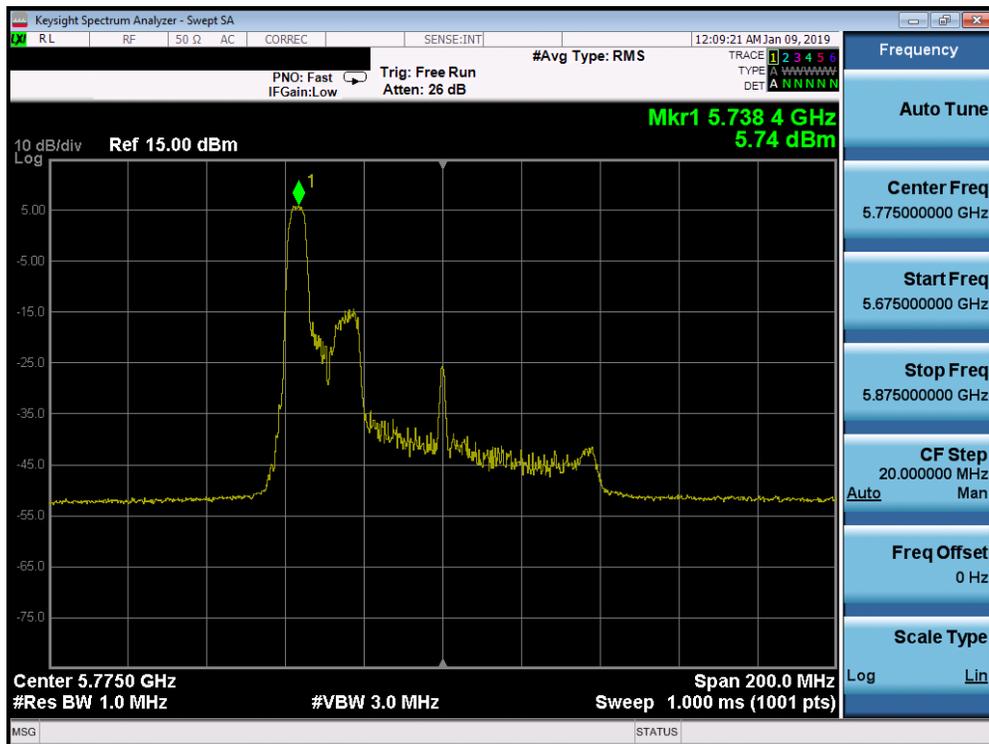


Plot 7-545. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 3) – Ch. 157)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 361 of 519

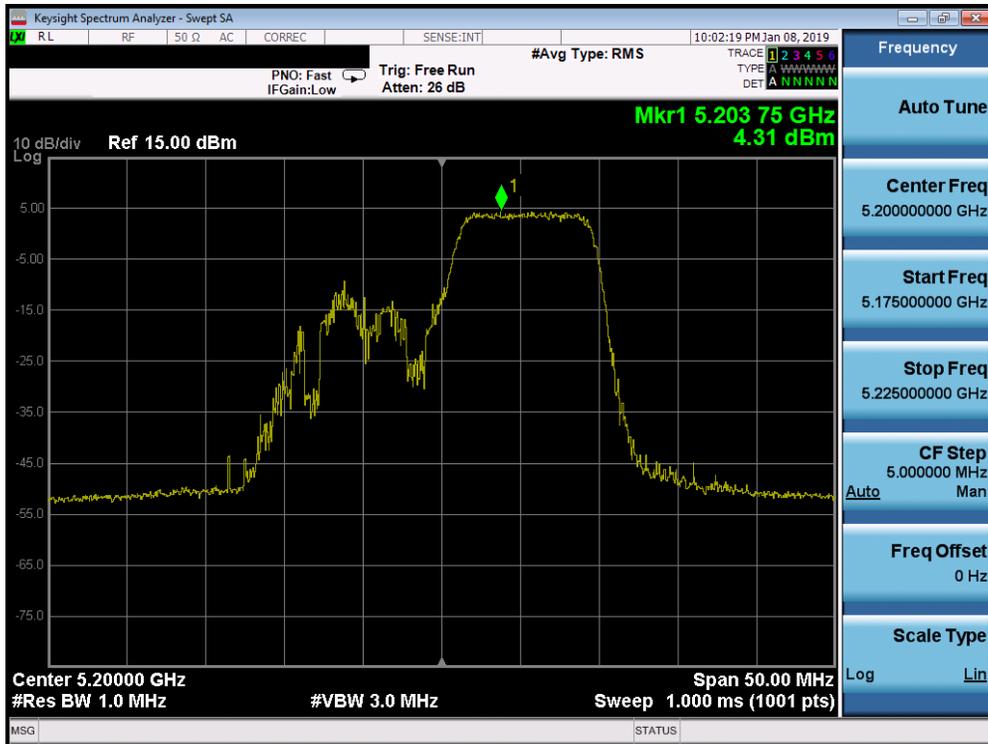


Plot 7-548. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 52 Tones (UNII Band 3) – Ch. 159)

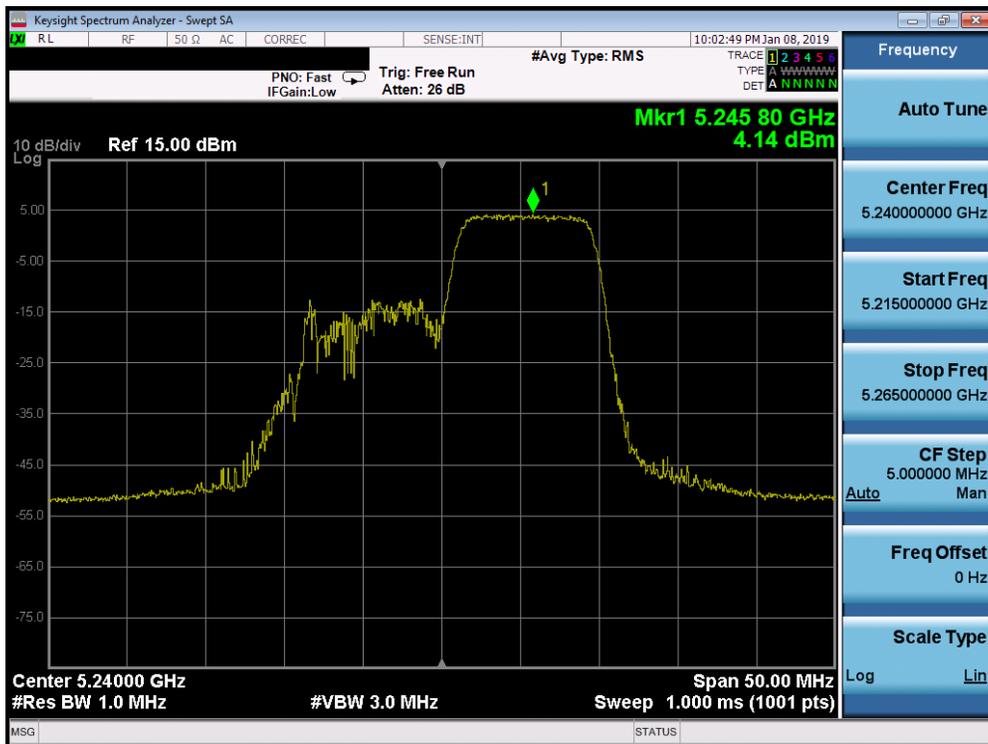


Plot 7-549. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 52 Tones (UNII Band 3) – Ch. 155)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 363 of 519

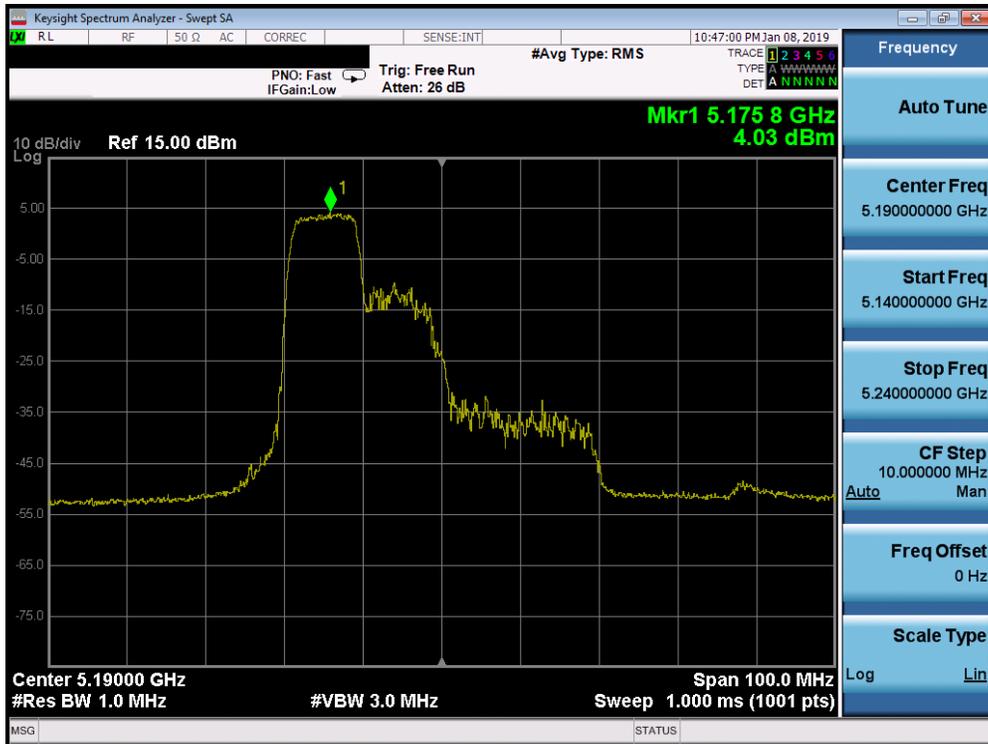


Plot 7-551. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 40)

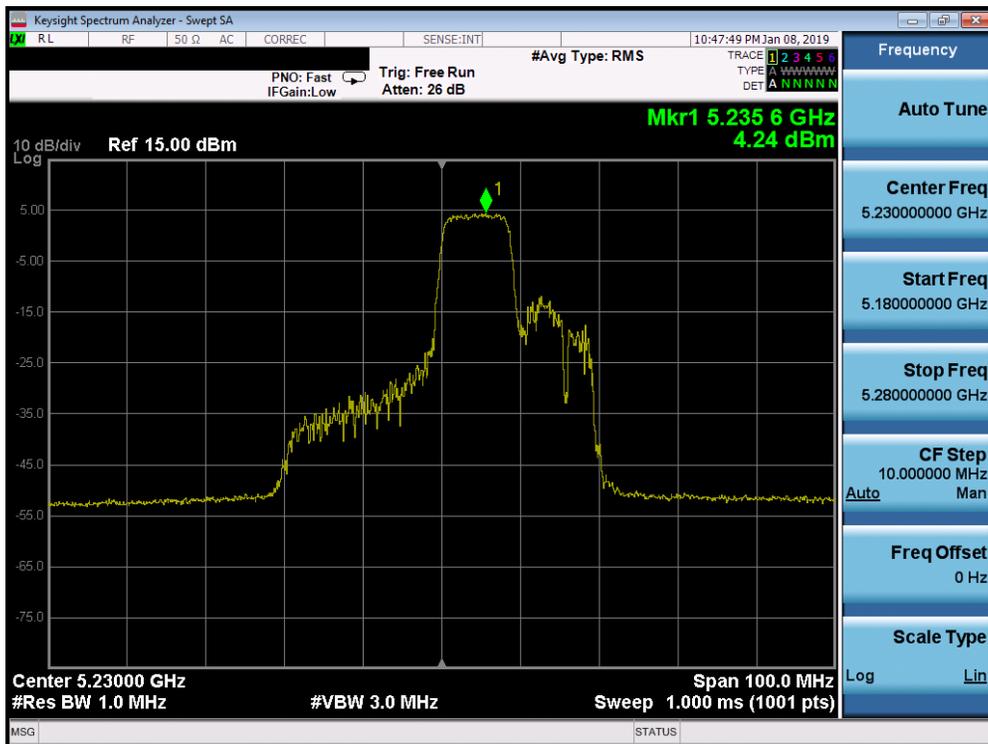


Plot 7-552. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 48)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 365 of 519

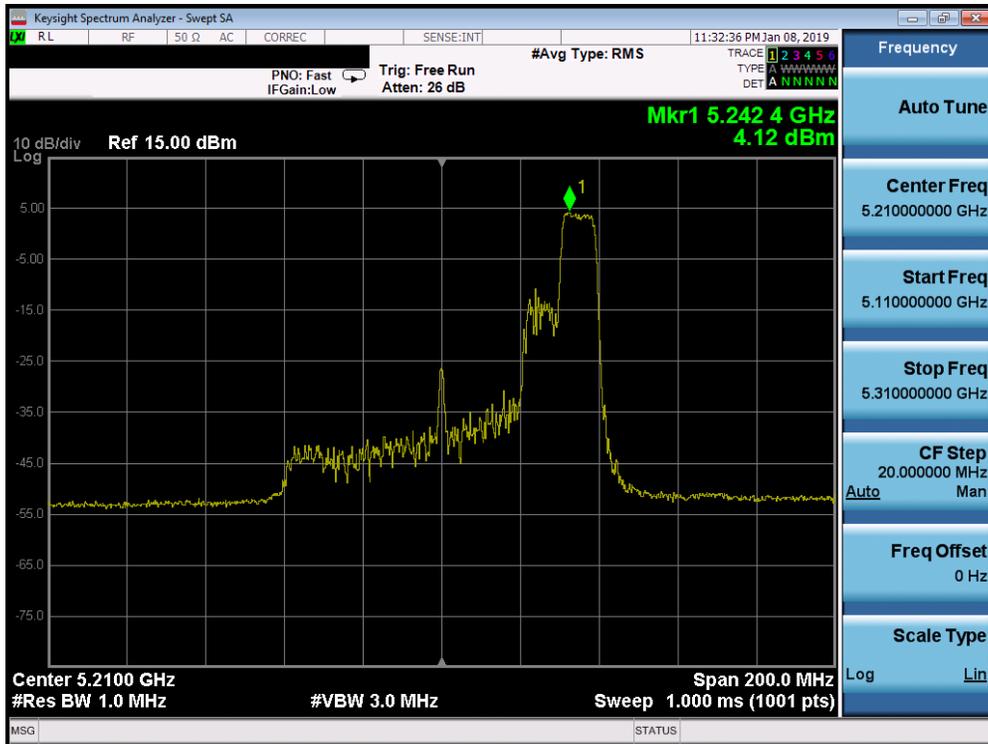


Plot 7-553. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 38)

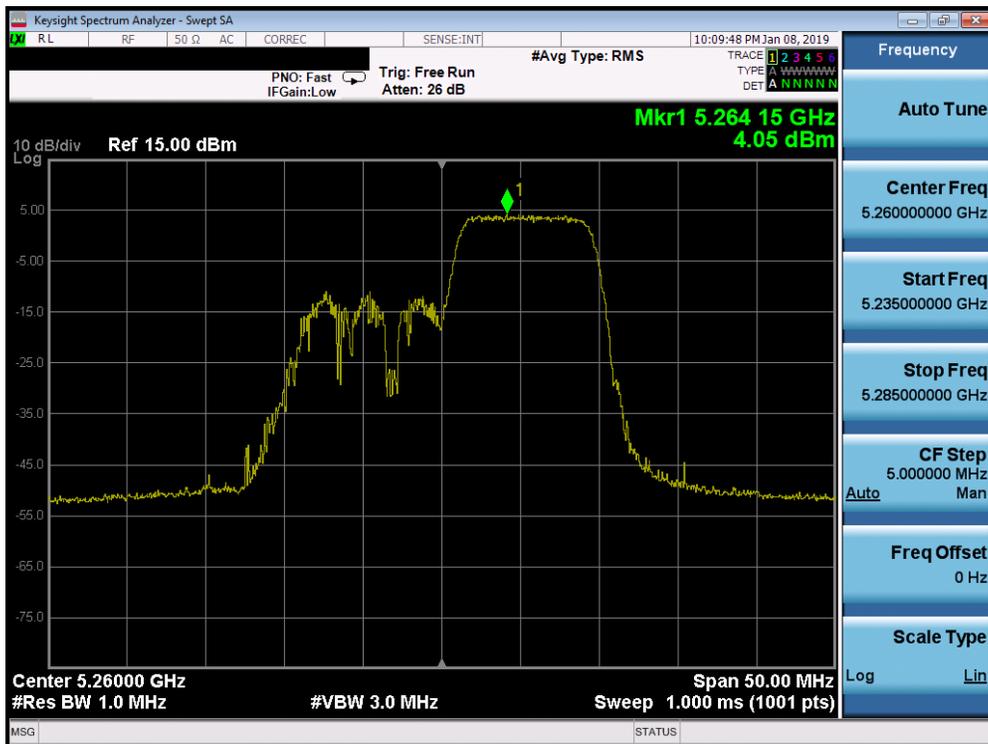


Plot 7-554. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 46)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 366 of 519

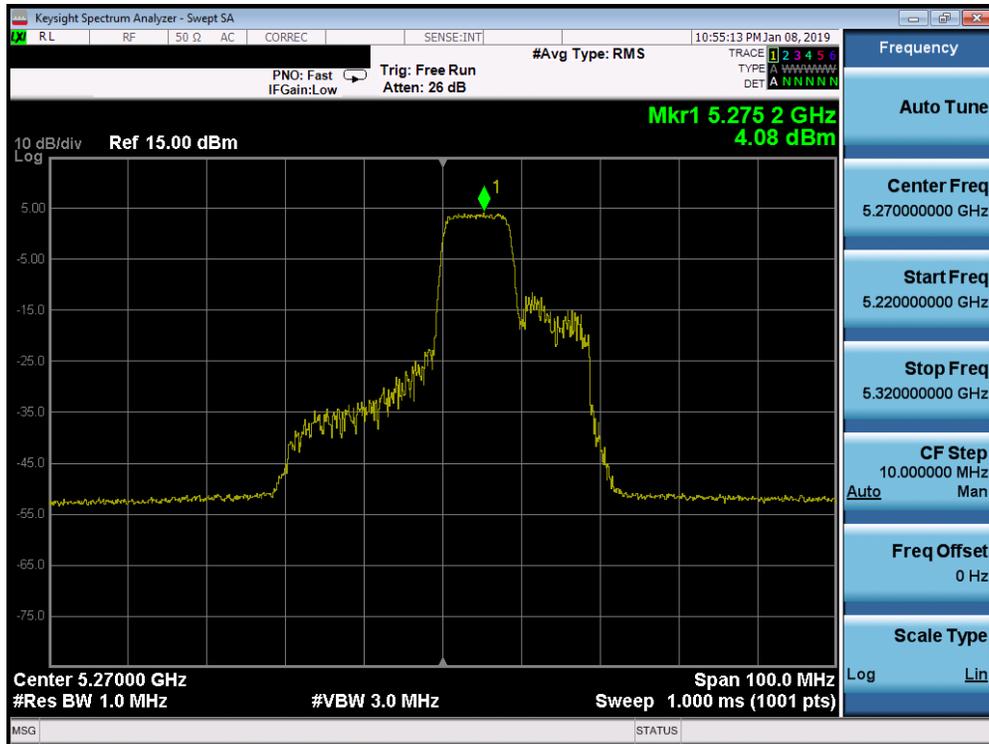


Plot 7-555. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 42)

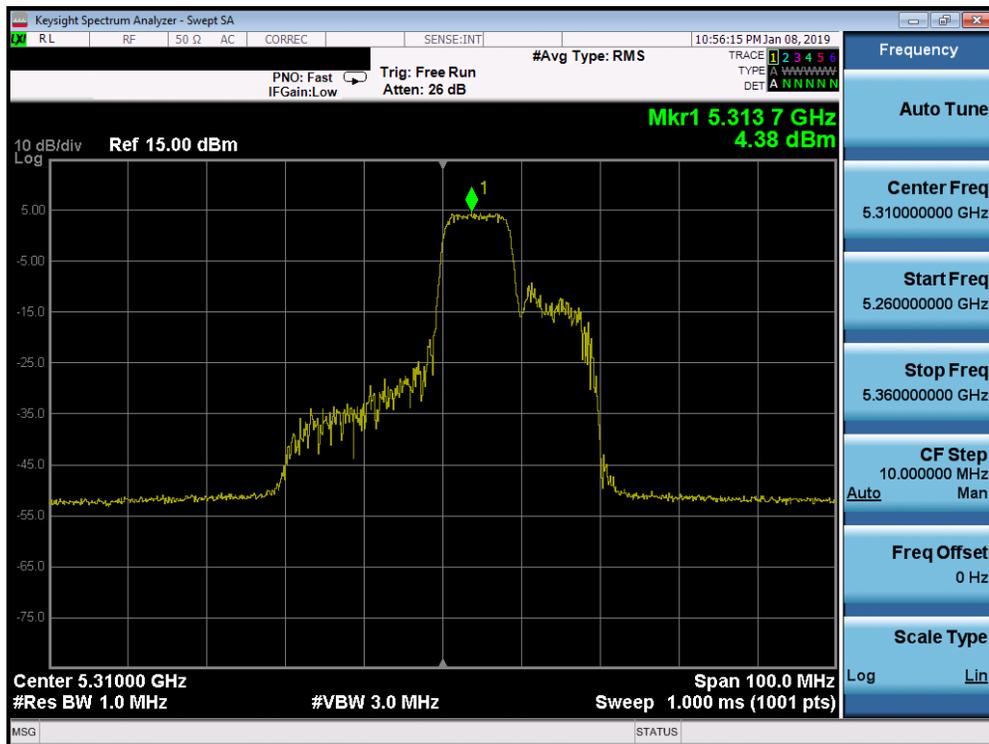


Plot 7-556. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 52)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 367 of 519

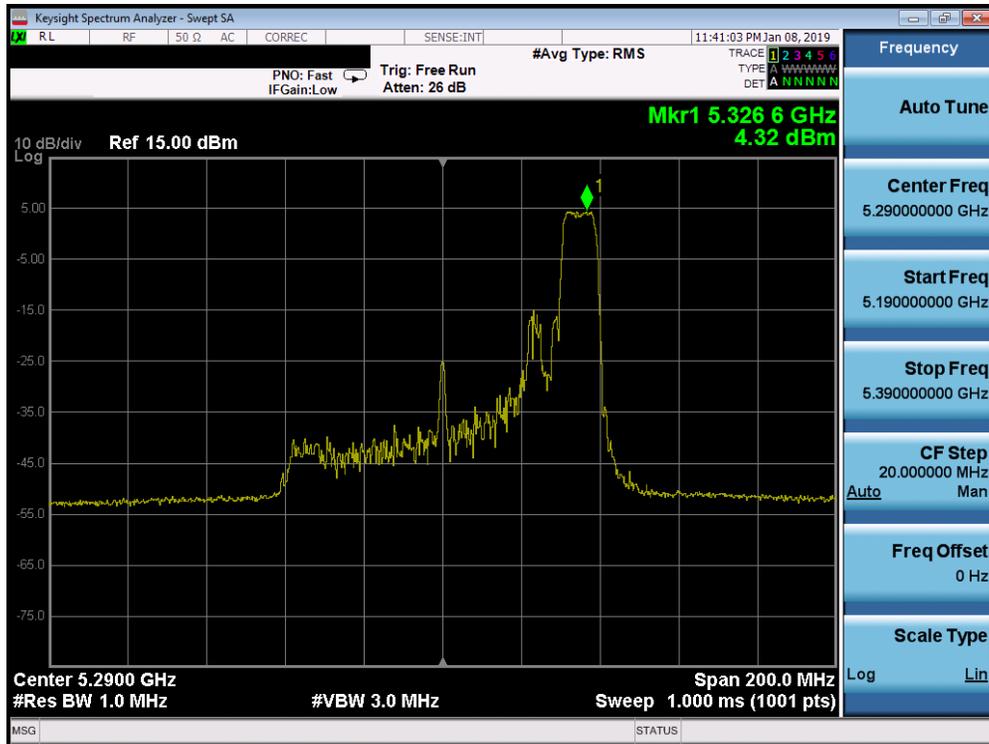


Plot 7-559. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 54)

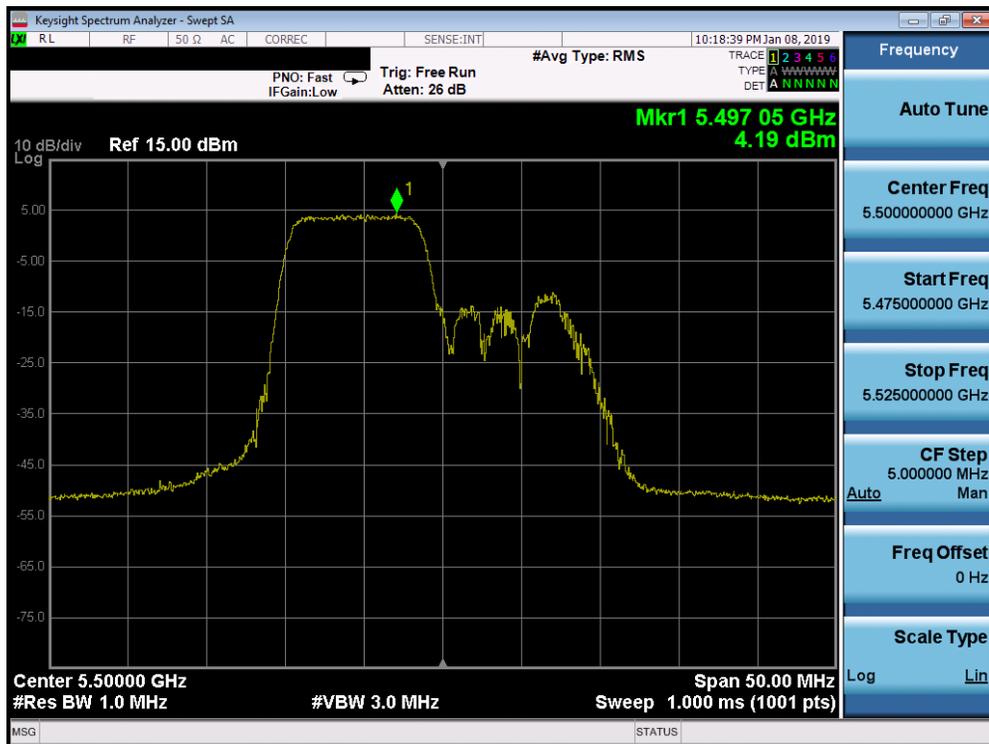


Plot 7-560. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 62)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 369 of 519

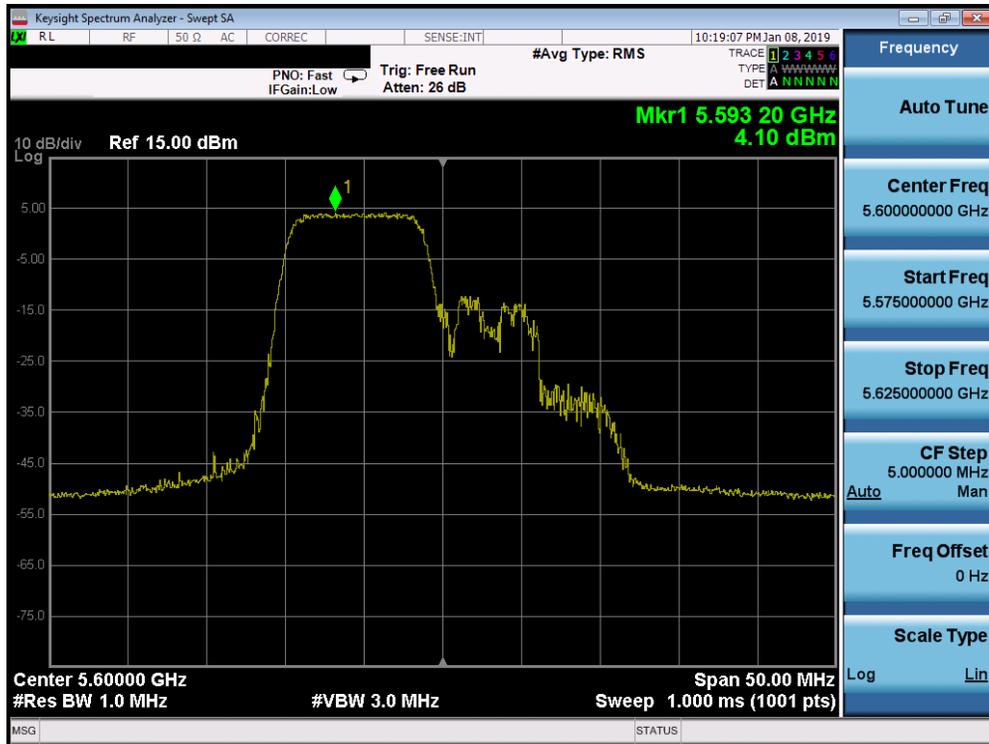


Plot 7-561. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 58)

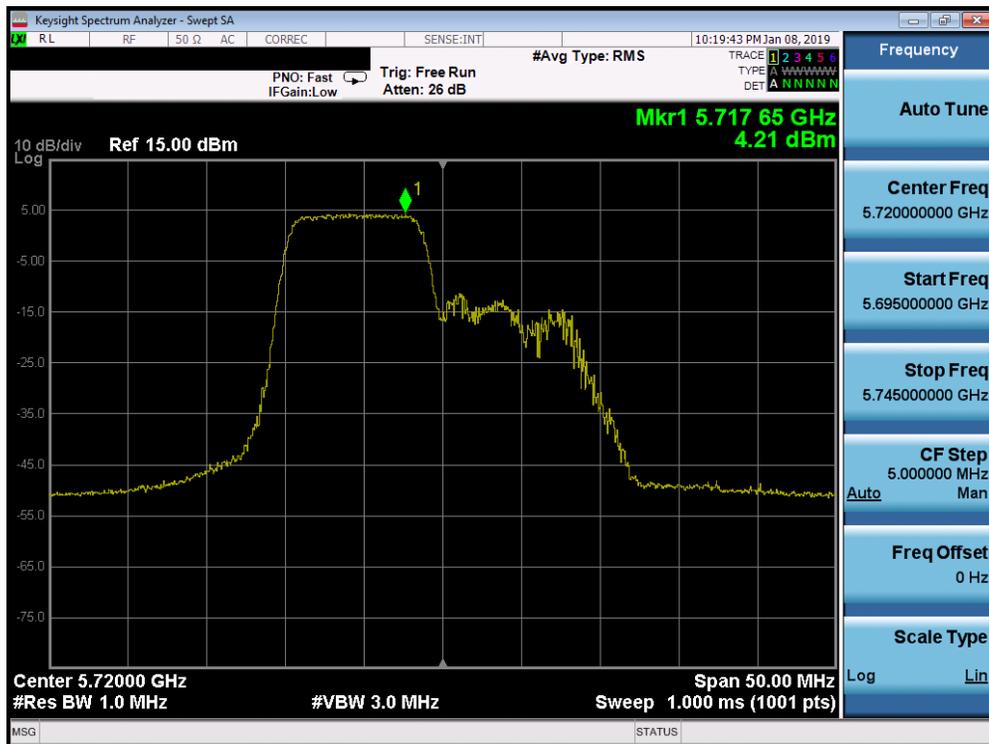


Plot 7-562. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 100)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 370 of 519

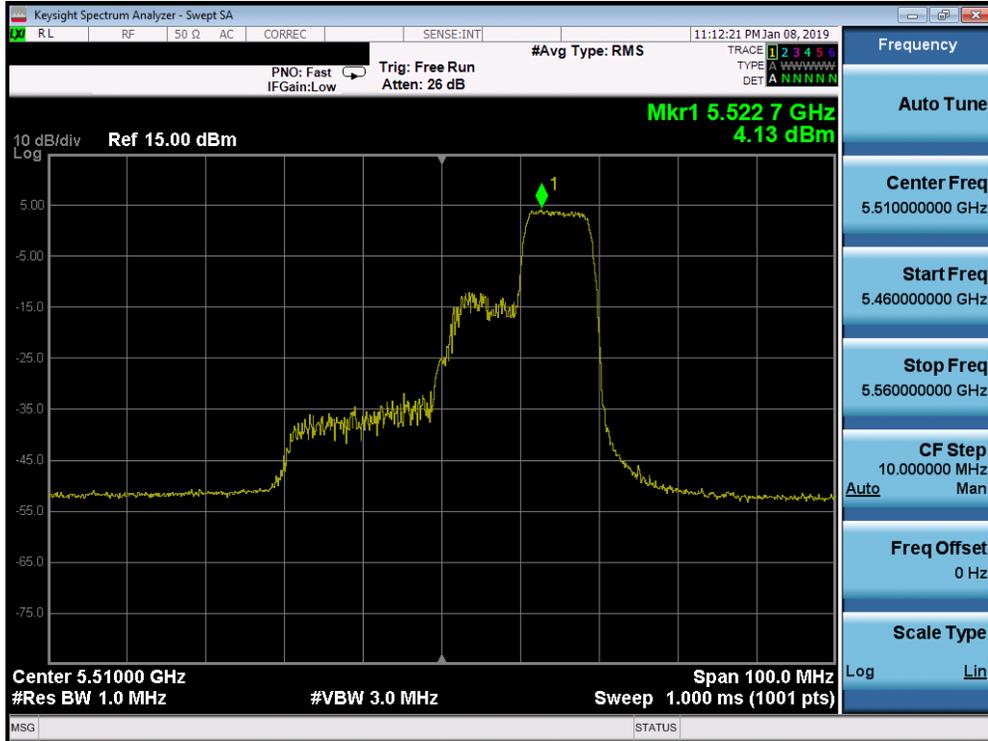


Plot 7-563. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 120)

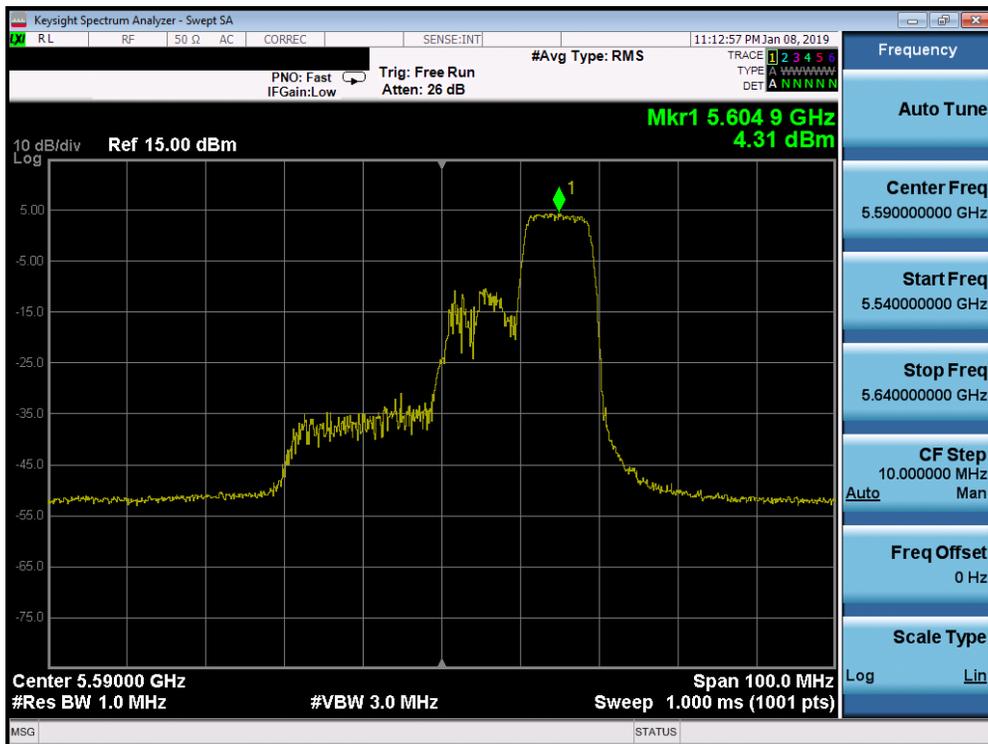


Plot 7-564. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 144)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 371 of 519

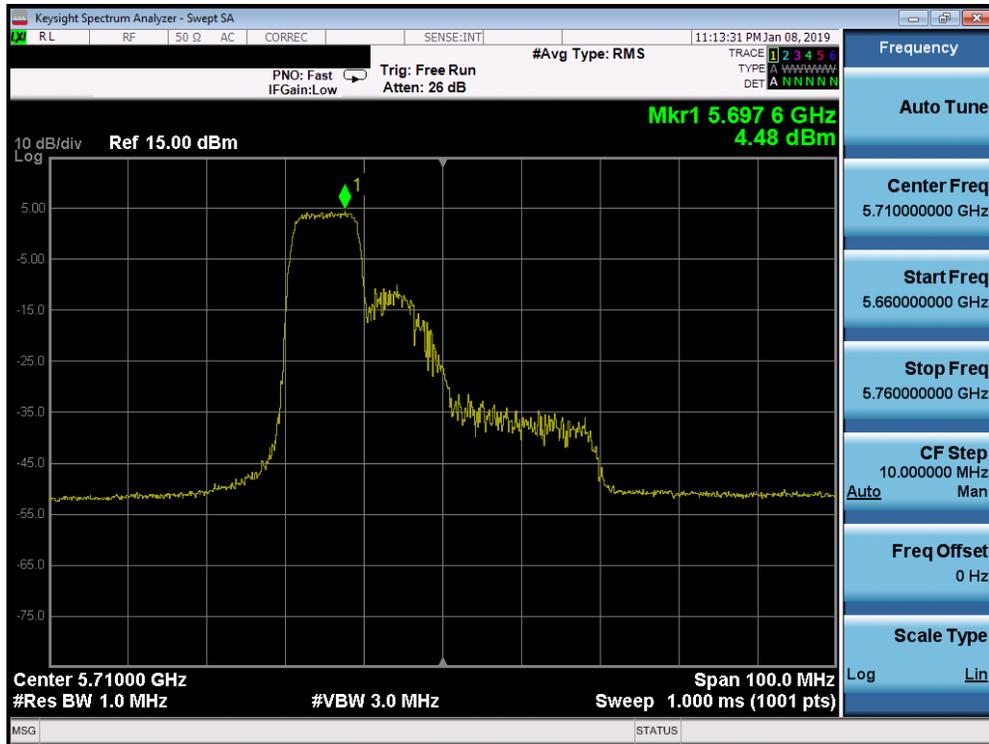


Plot 7-565. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 102)

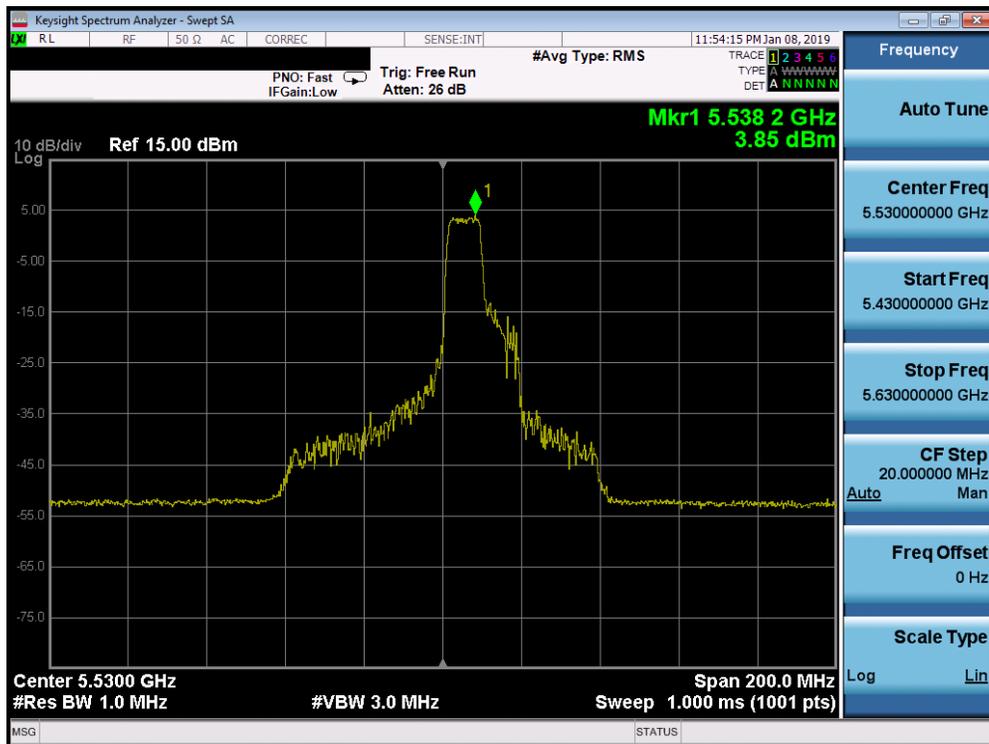


Plot 7-566. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 118)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 372 of 519

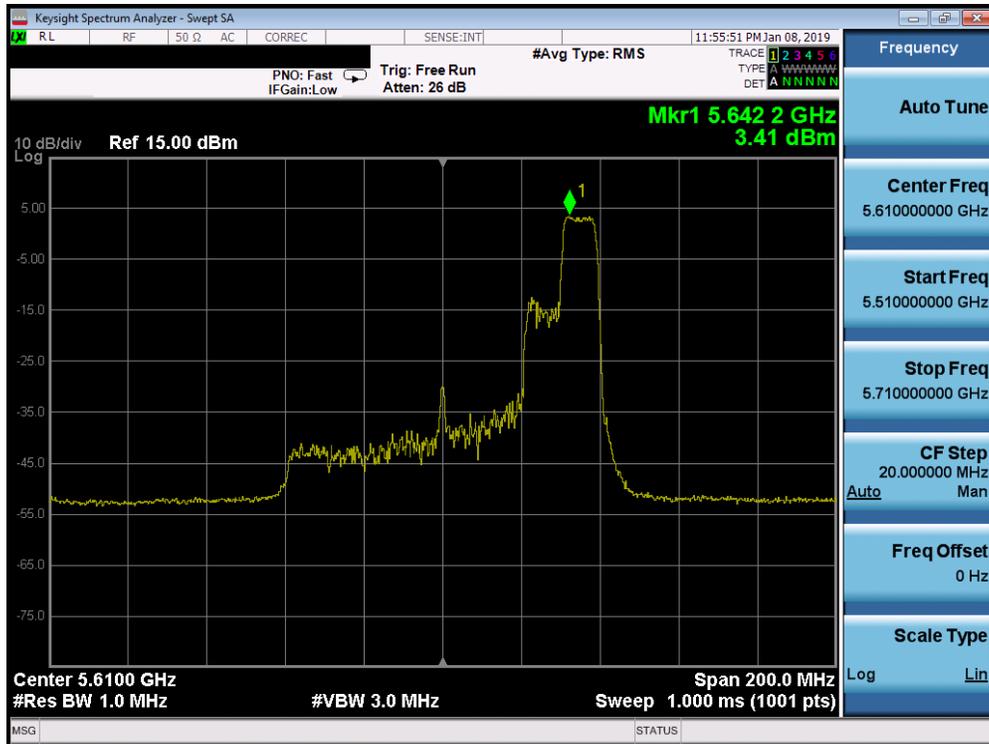


Plot 7-567. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 142)

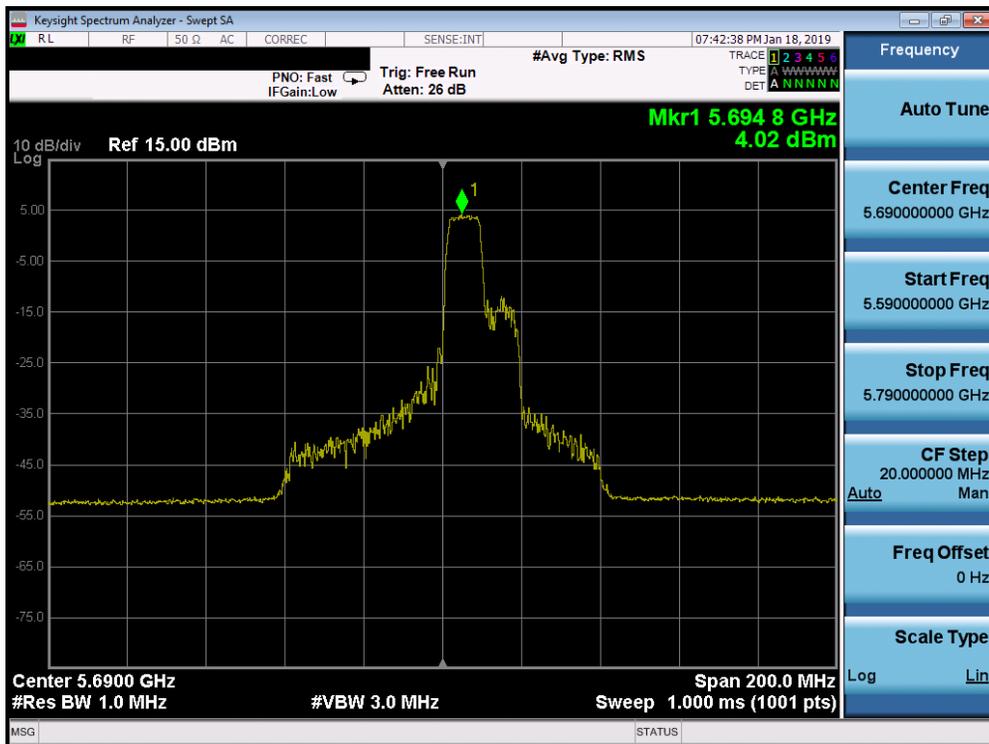


Plot 7-568. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 106)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 373 of 519

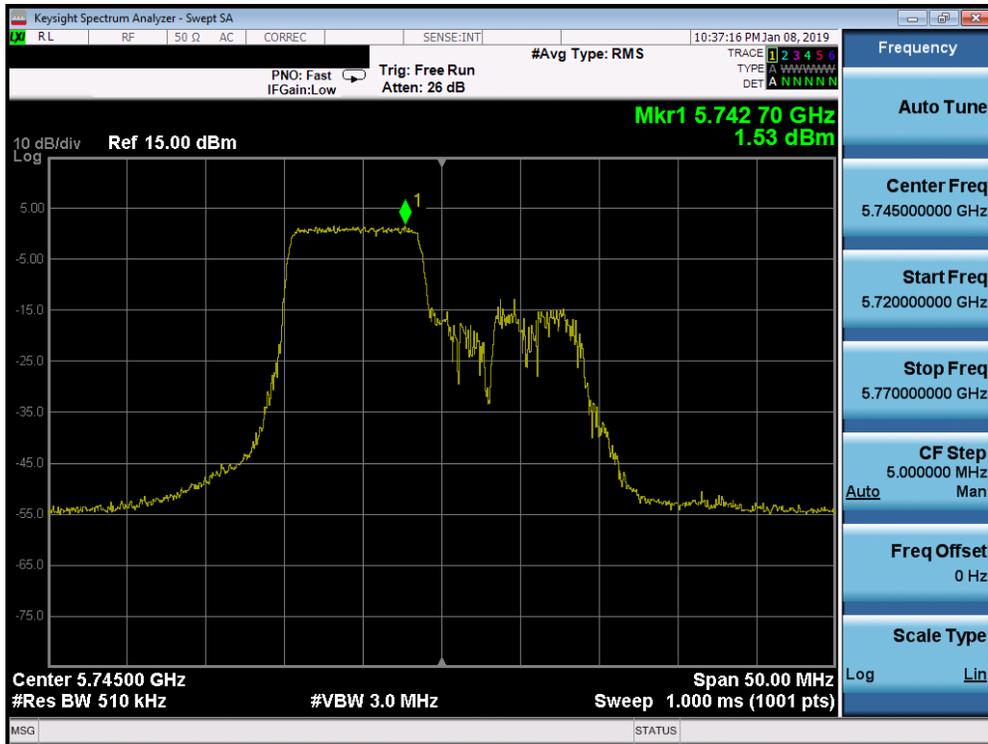


Plot 7-569. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 122)



Plot 7-570. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 138)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 374 of 519



Plot 7-571. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 149)

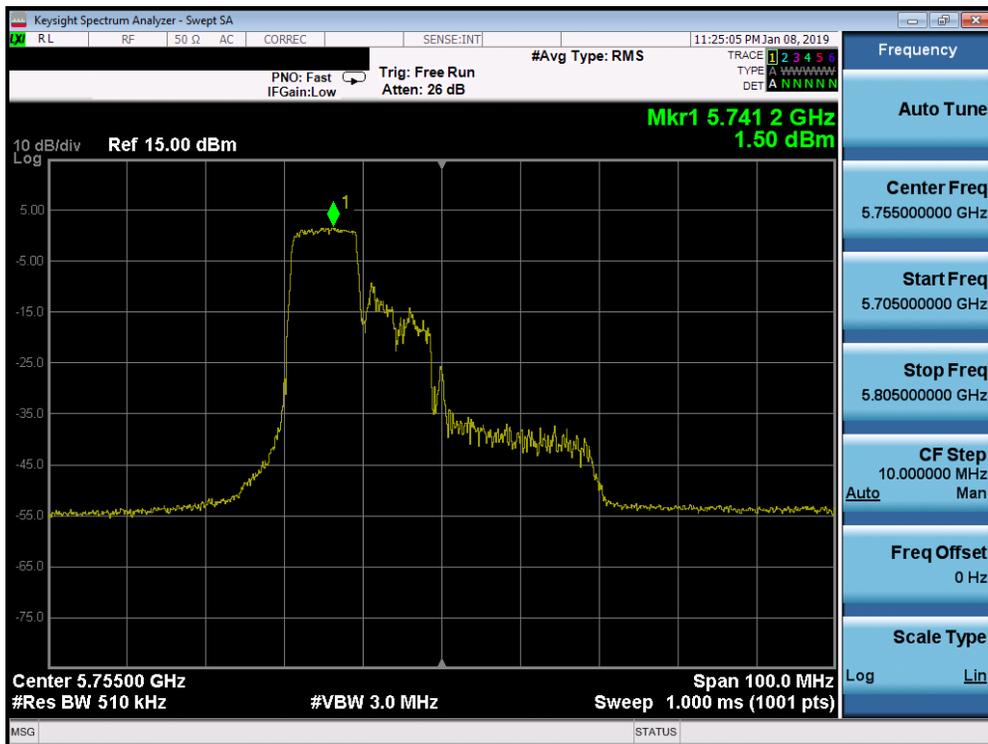


Plot 7-572. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 157)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 375 of 519

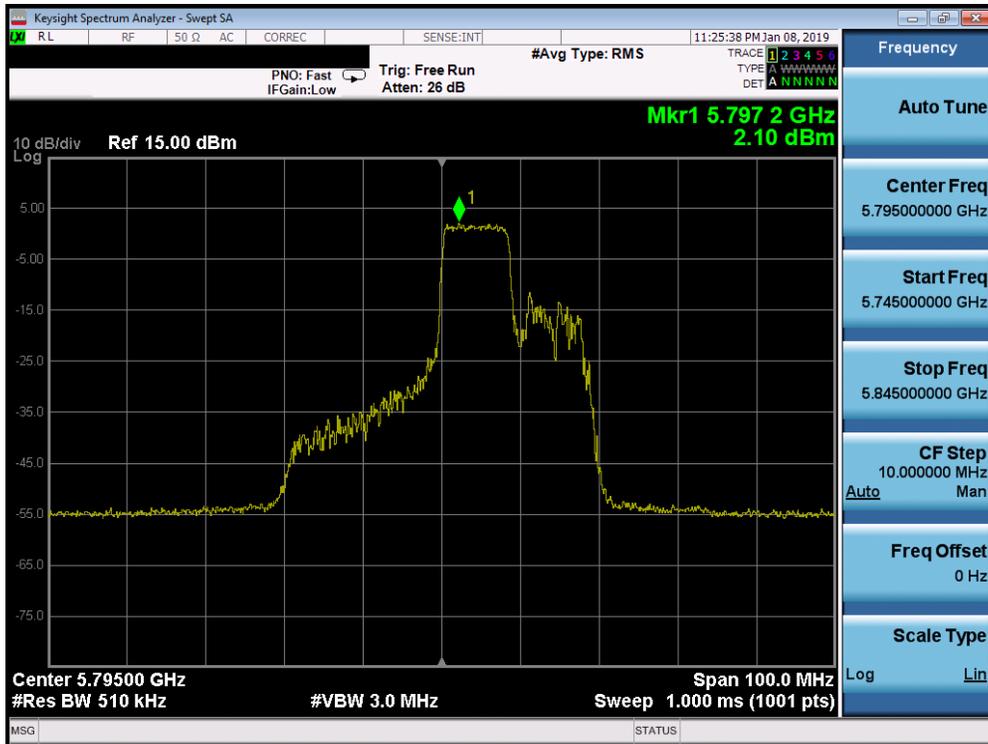


Plot 7-573. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 165)

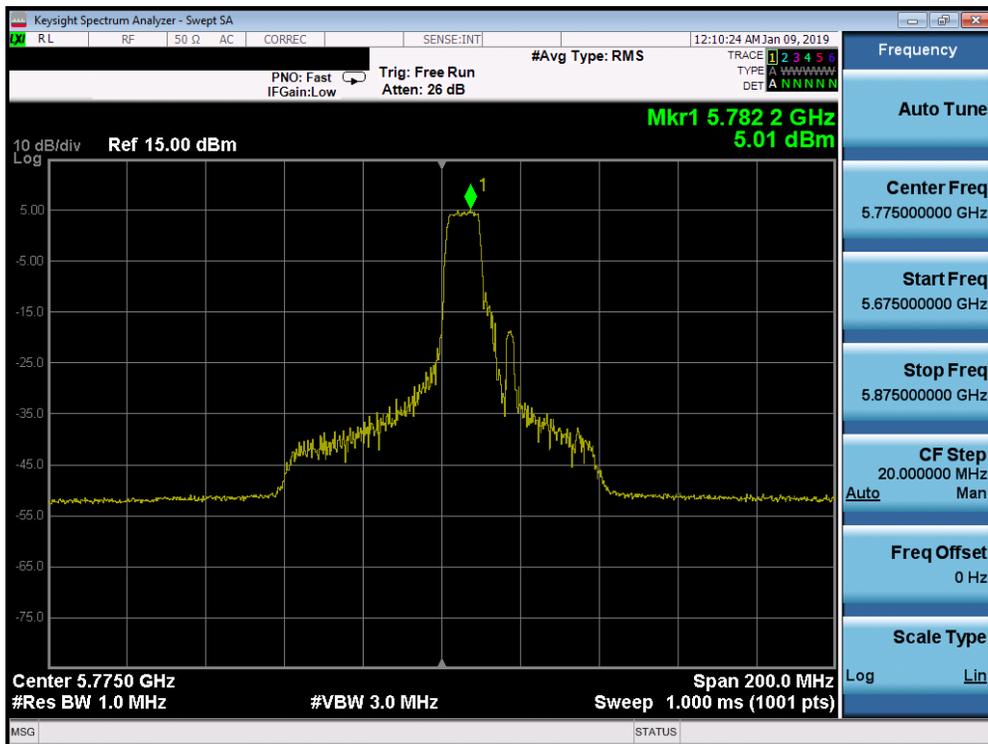


Plot 7-574. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 151)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 376 of 519



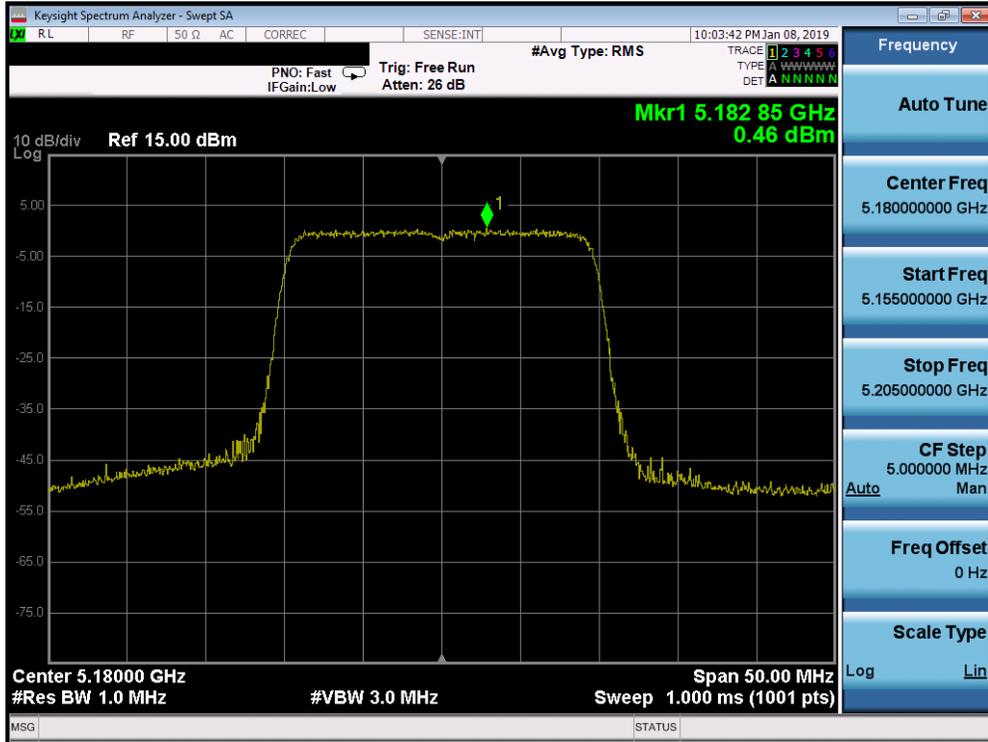
Plot 7-575. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 159)



Plot 7-576. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 155)

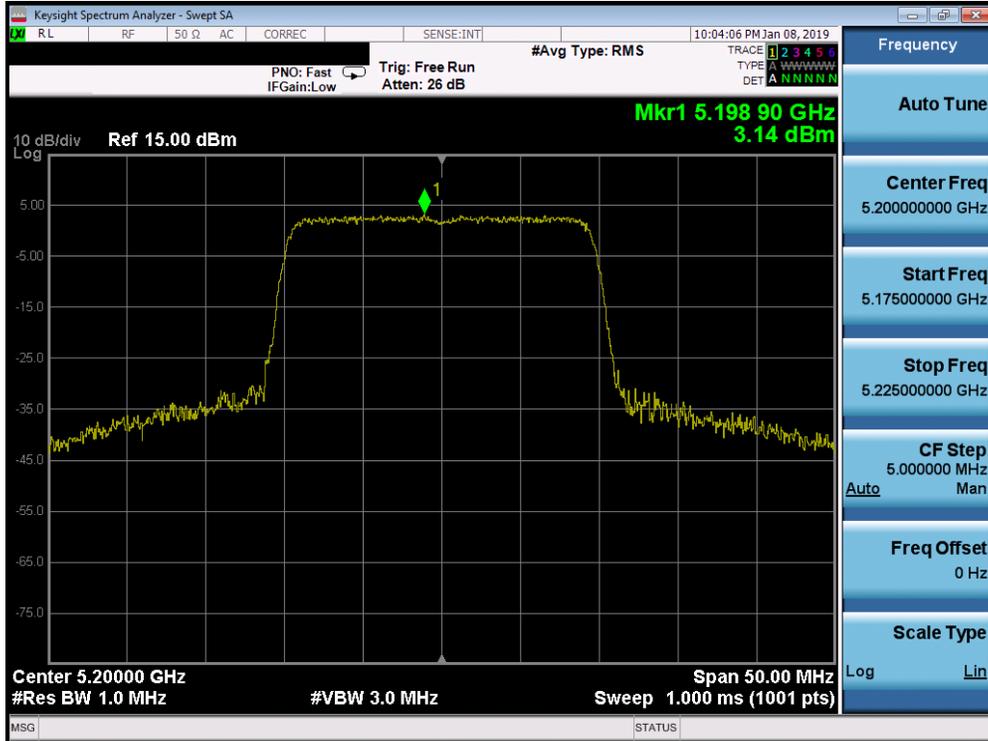
FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 377 of 519

MIMO Antenna-2 Power Spectral Density Measurements (242 Tones)

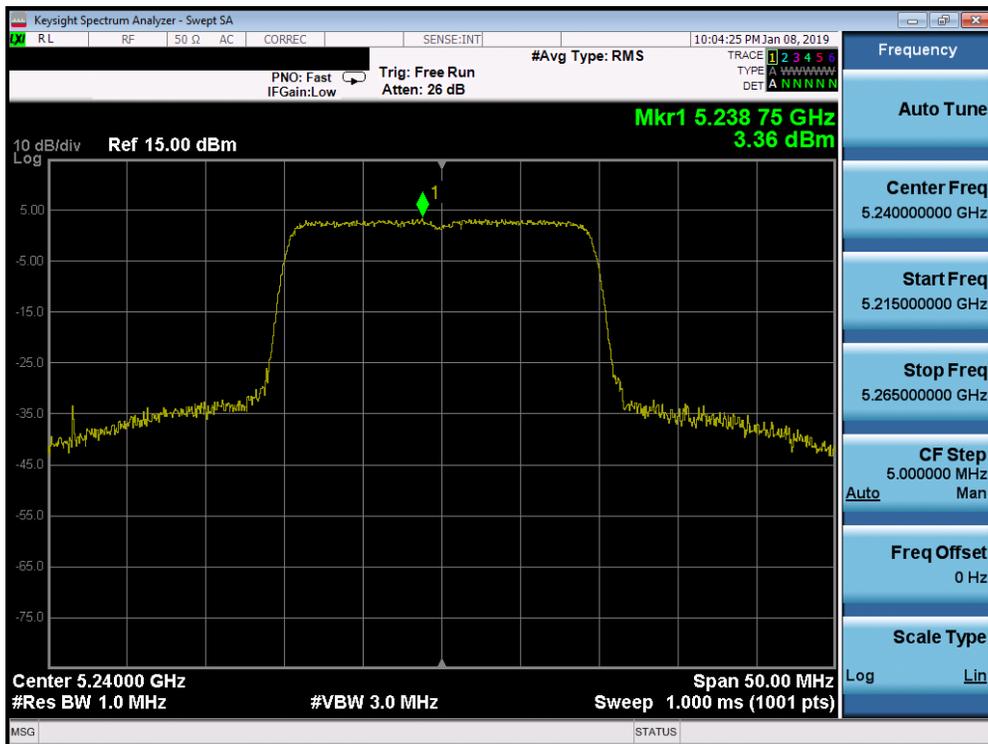


Plot 7-577. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 36)

FCC ID: A3LSMG970U	 MEASUREMENT REPORT (CERTIFICATION) 		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset	Page 378 of 519

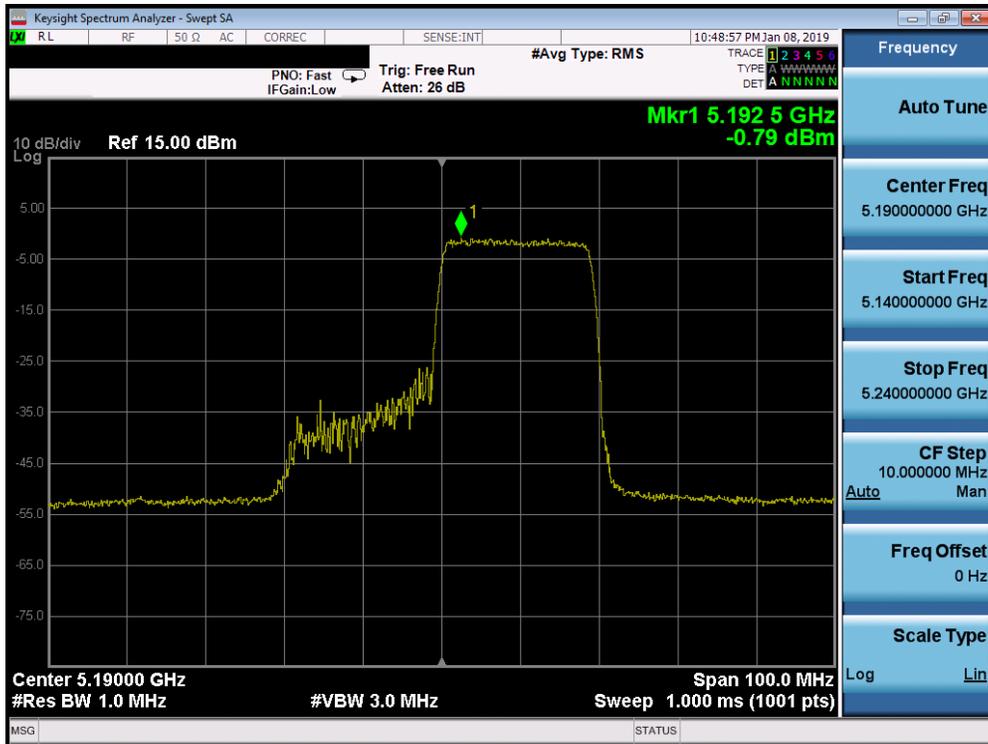


Plot 7-578. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 40)

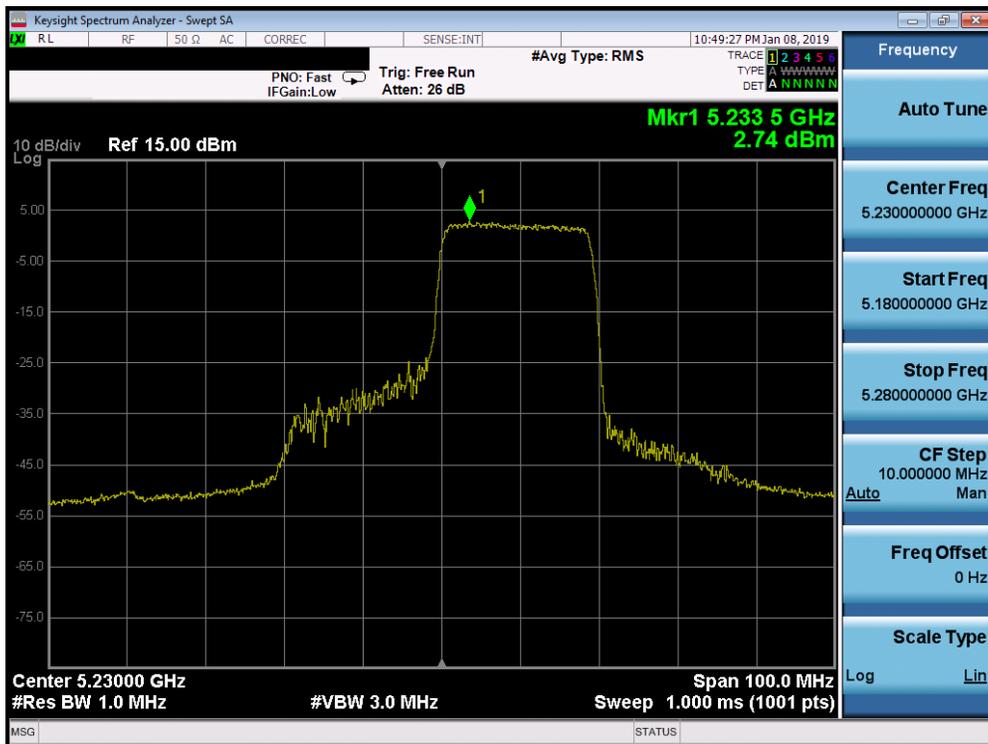


Plot 7-579. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 48)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 379 of 519

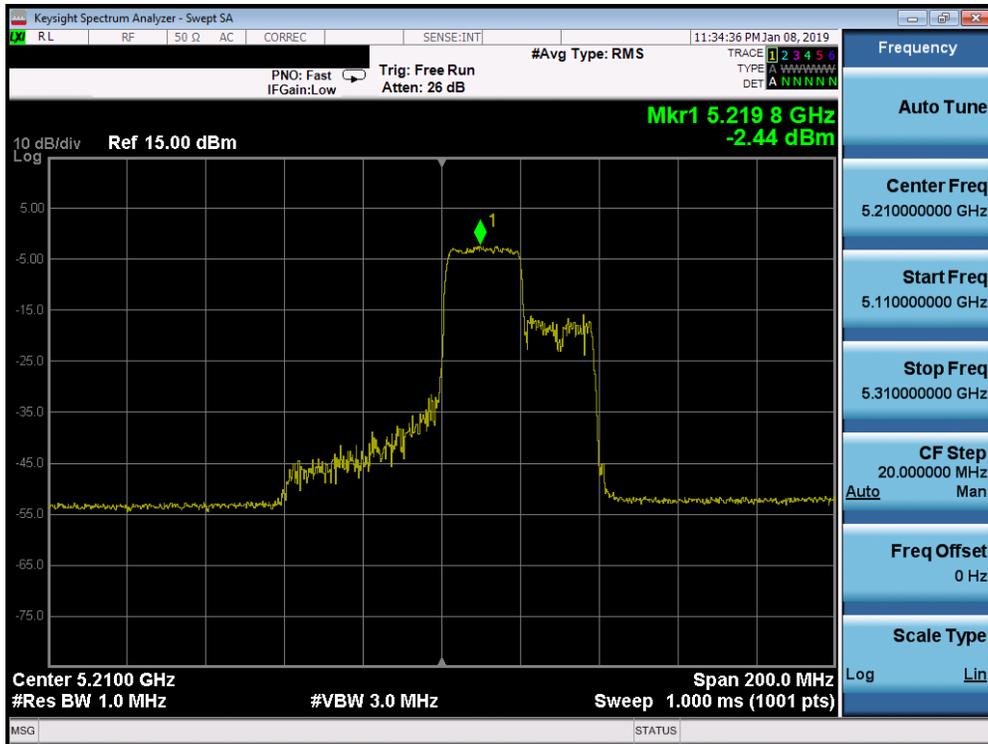


Plot 7-580. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 38)

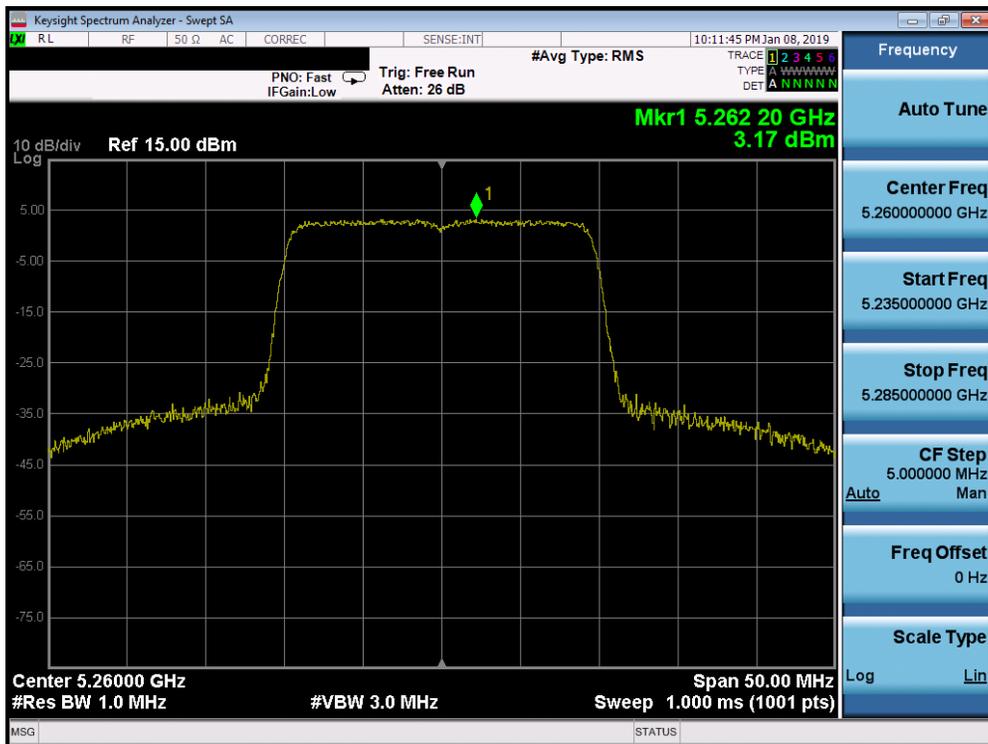


Plot 7-581. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 46)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 380 of 519

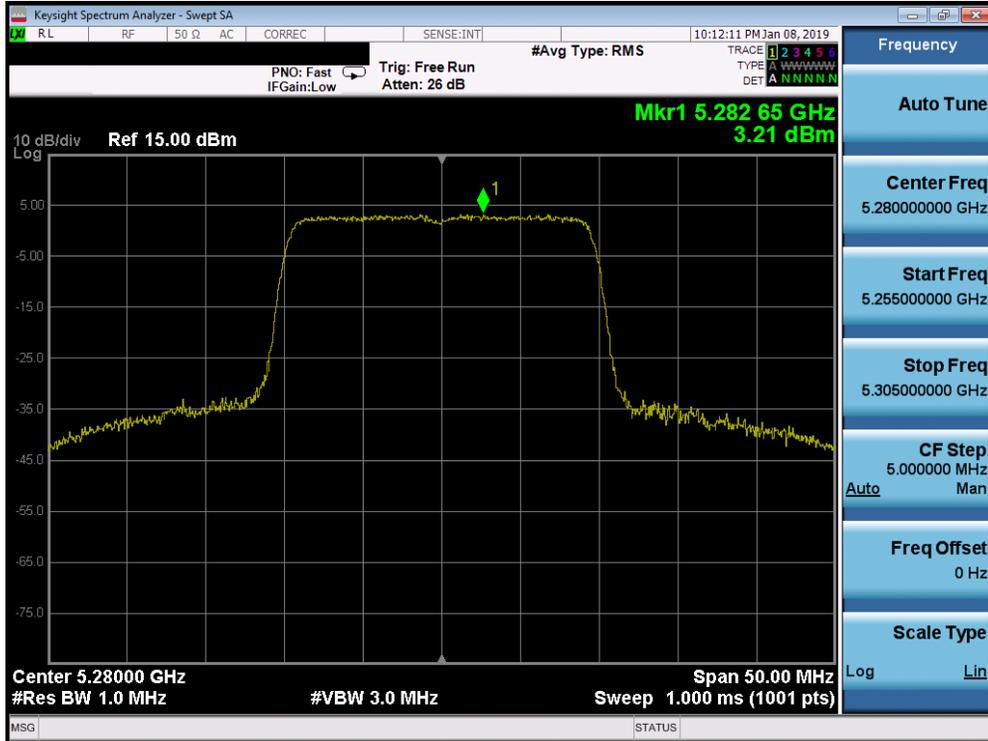


Plot 7-582. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 42)

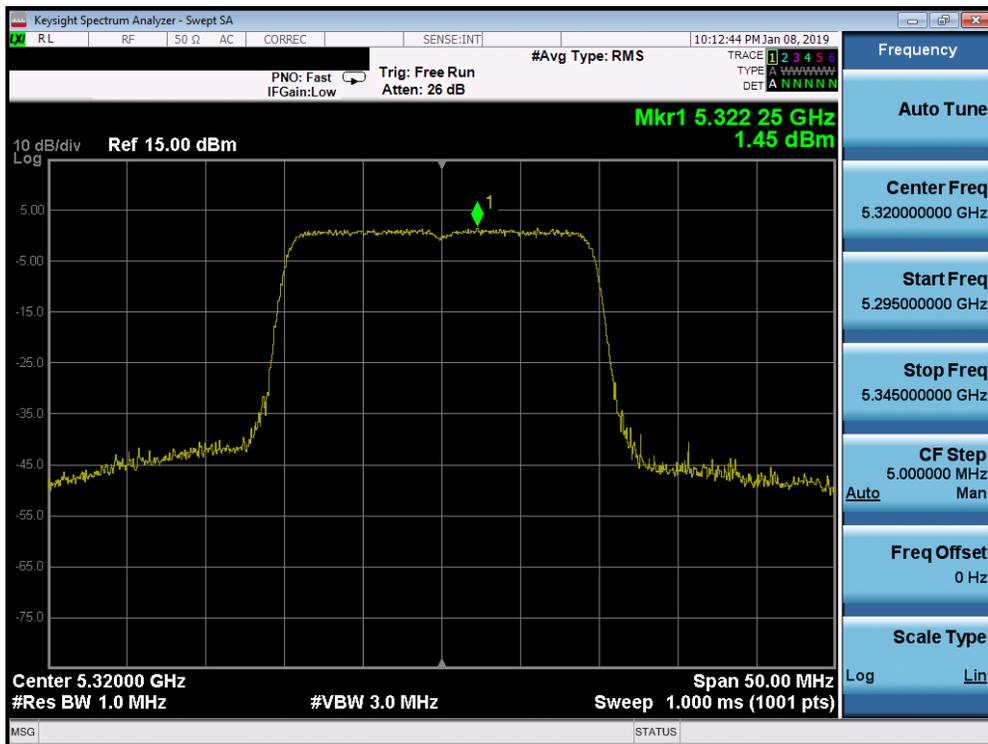


Plot 7-583. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 52)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 381 of 519

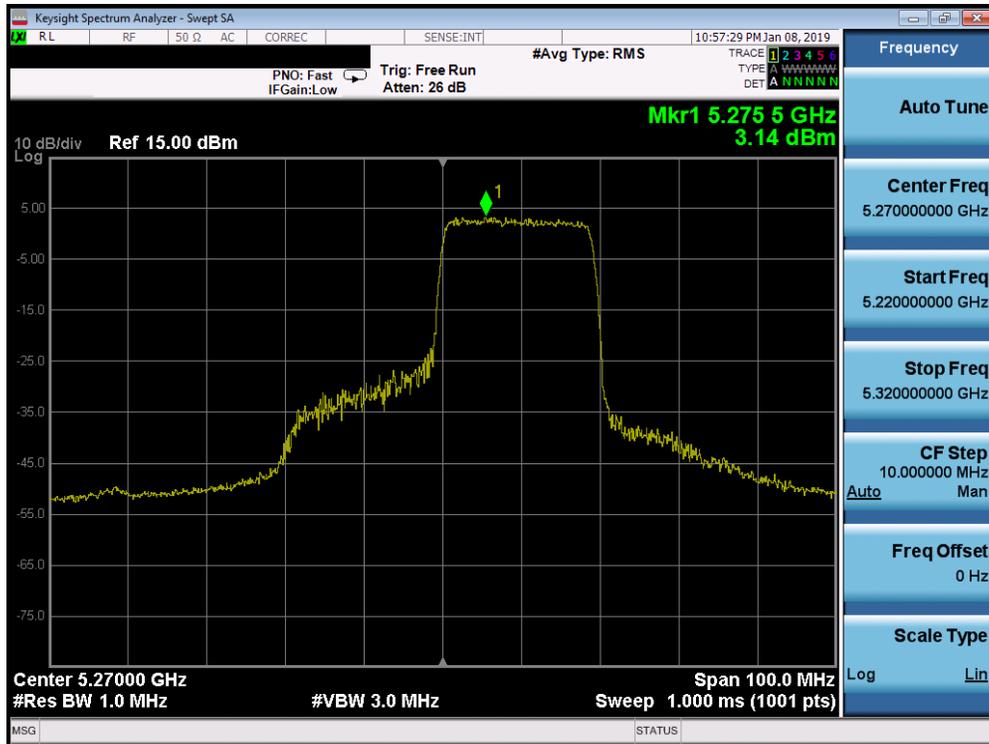


Plot 7-584. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 56)

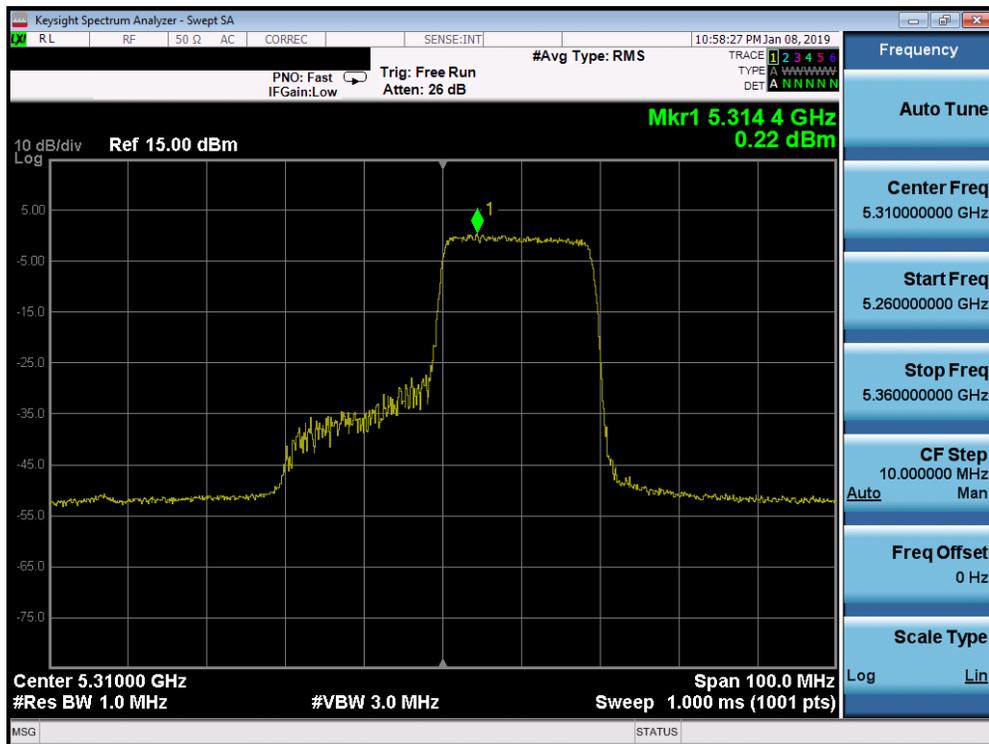


Plot 7-585. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 64)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 382 of 519

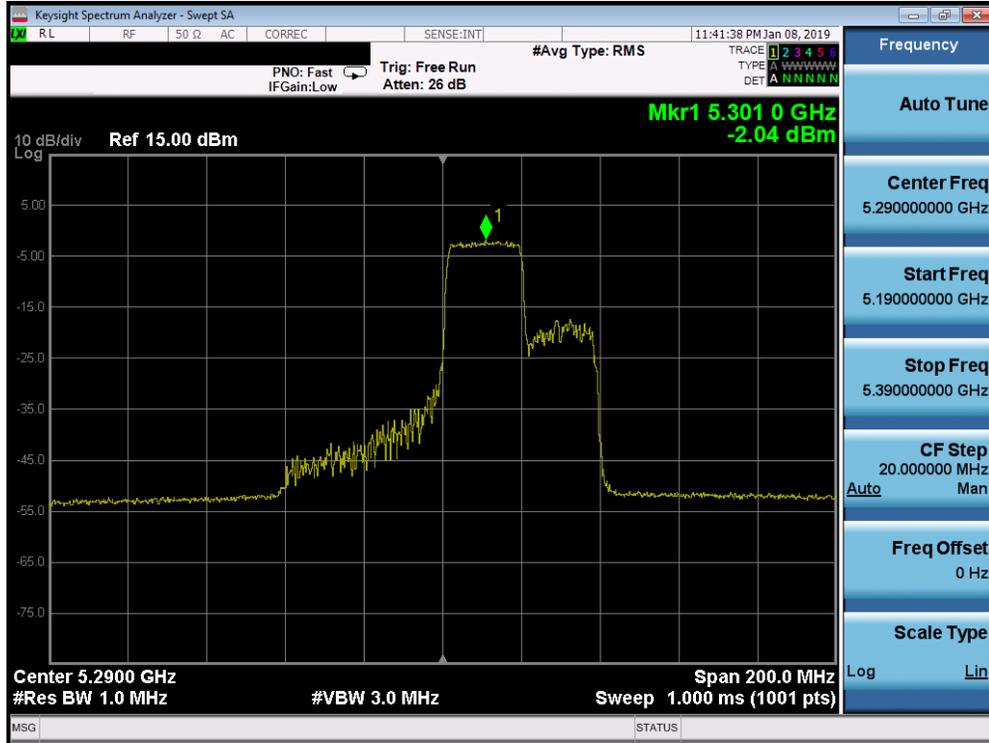


Plot 7-586. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 54)

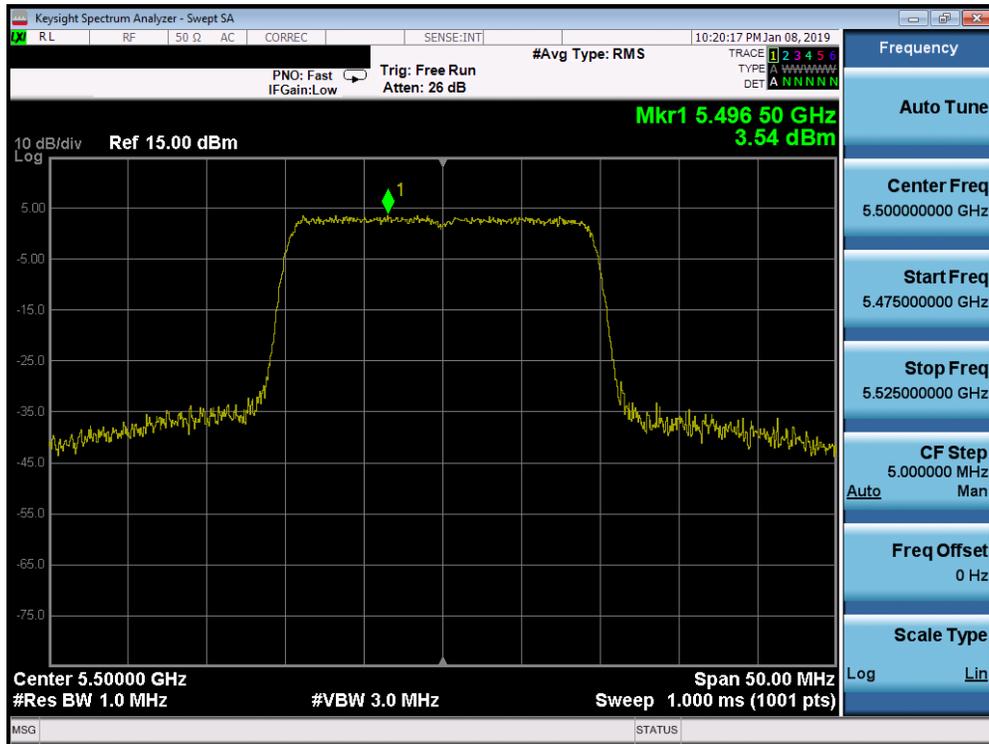


Plot 7-587. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 62)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 383 of 519

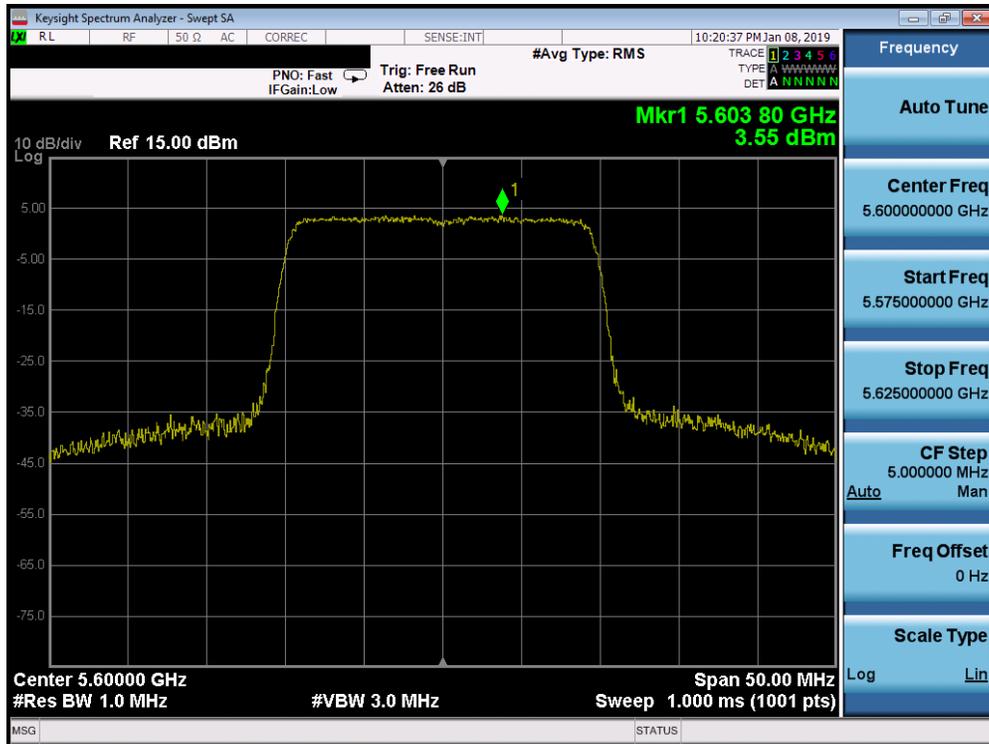


Plot 7-588. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 58)

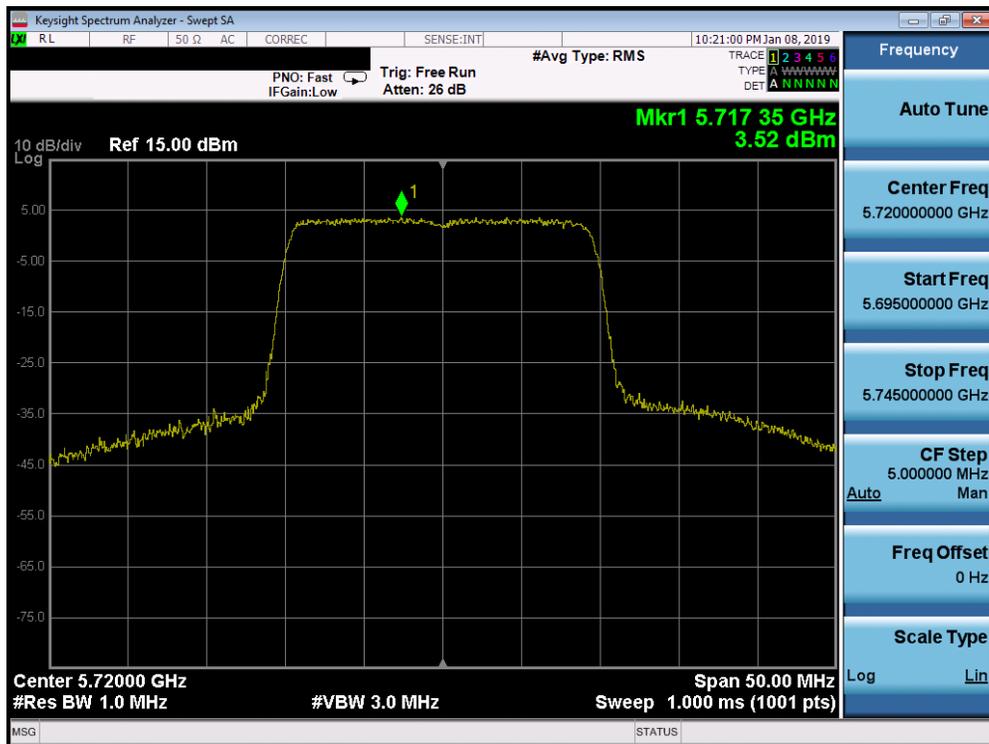


Plot 7-589. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 100)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 384 of 519

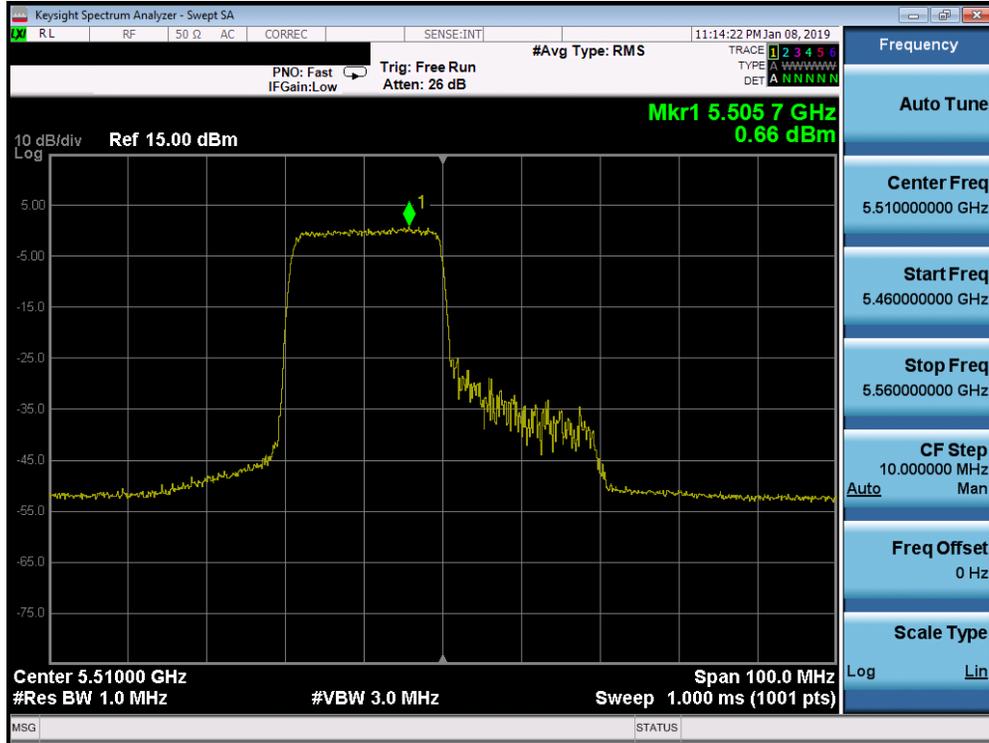


Plot 7-590. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 120)

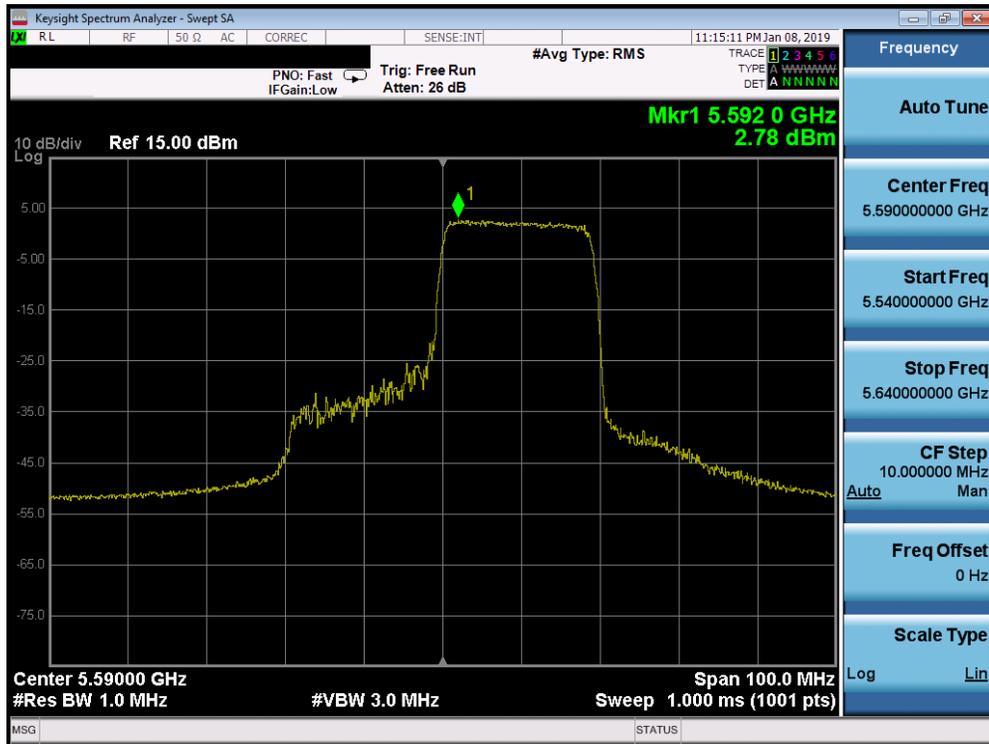


Plot 7-591. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 144)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 385 of 519

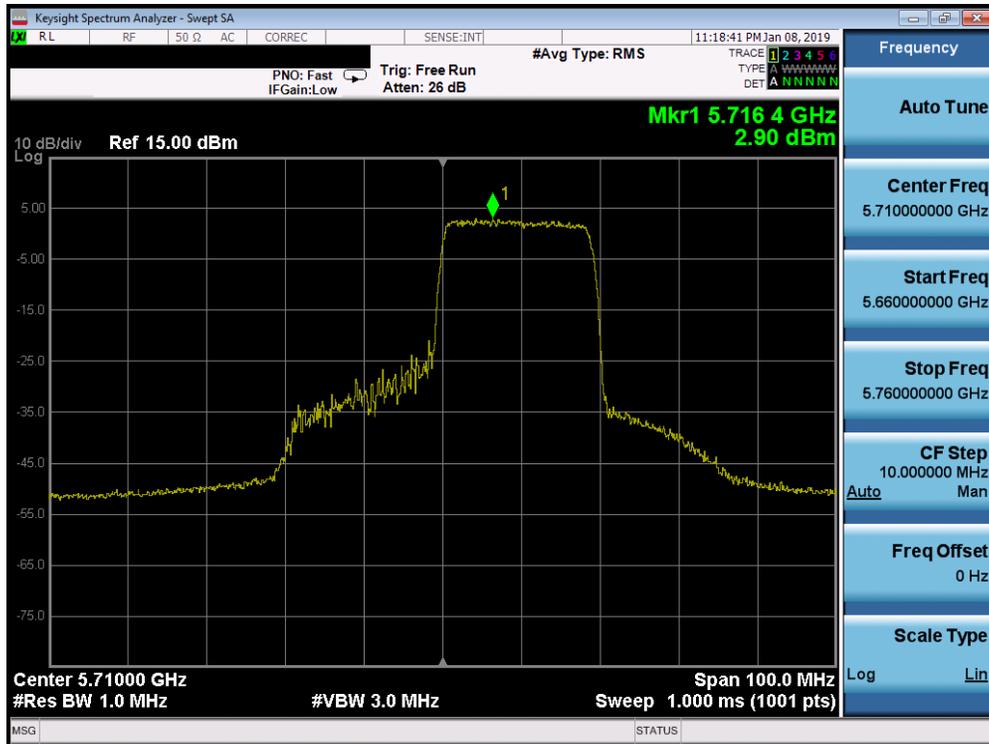


Plot 7-592. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 102)

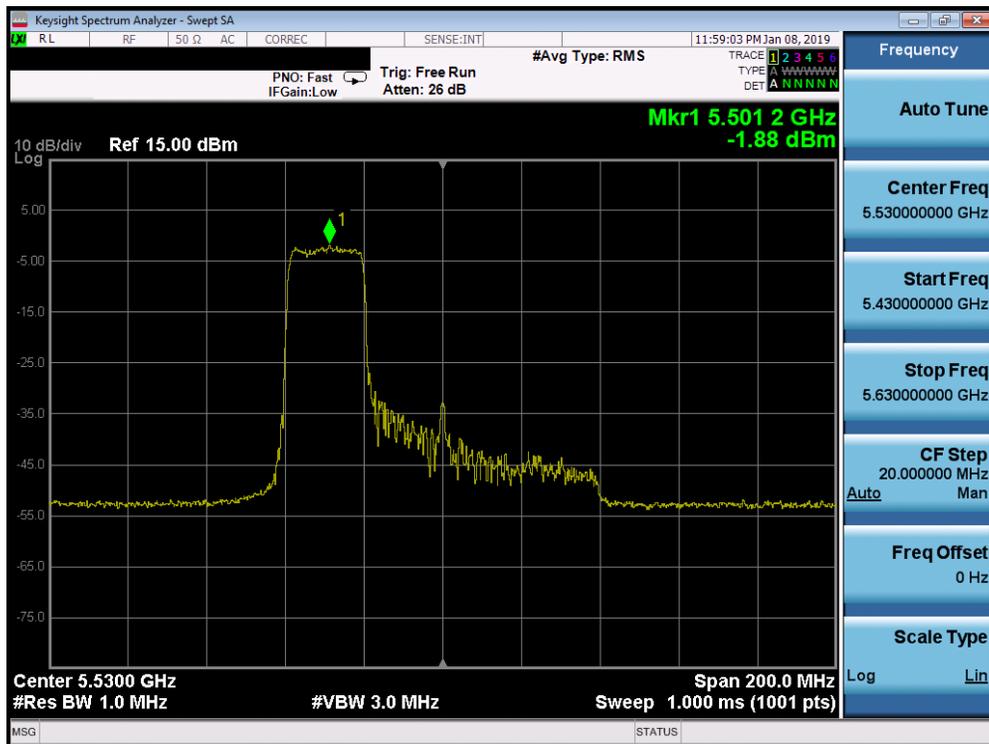


Plot 7-593. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 118)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 386 of 519

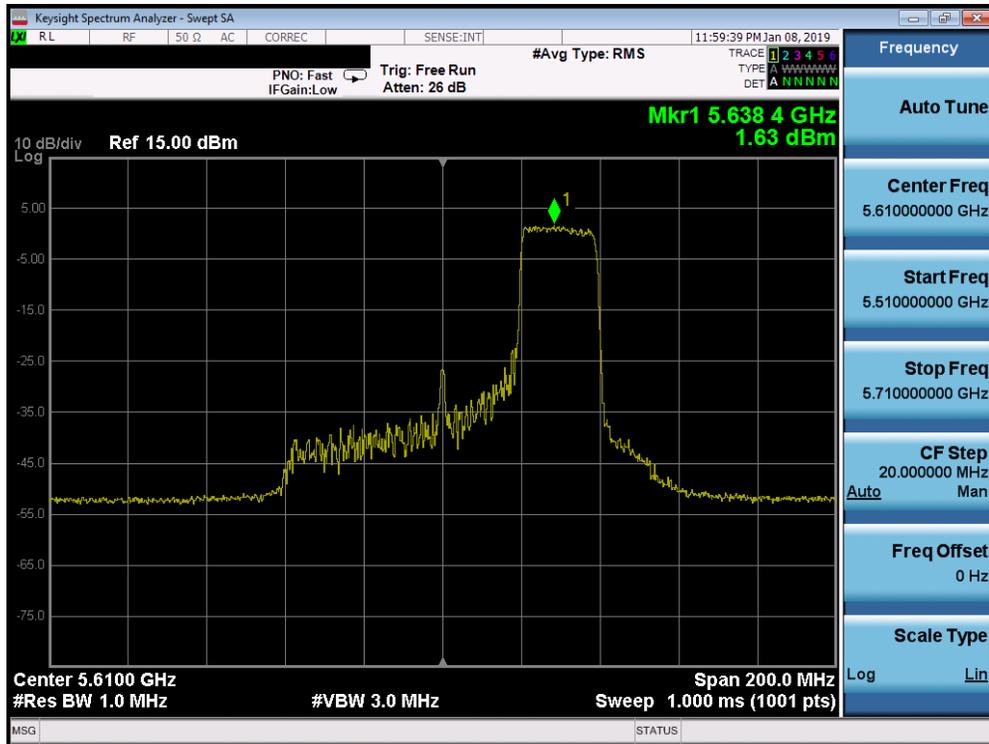


Plot 7-594. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 142)

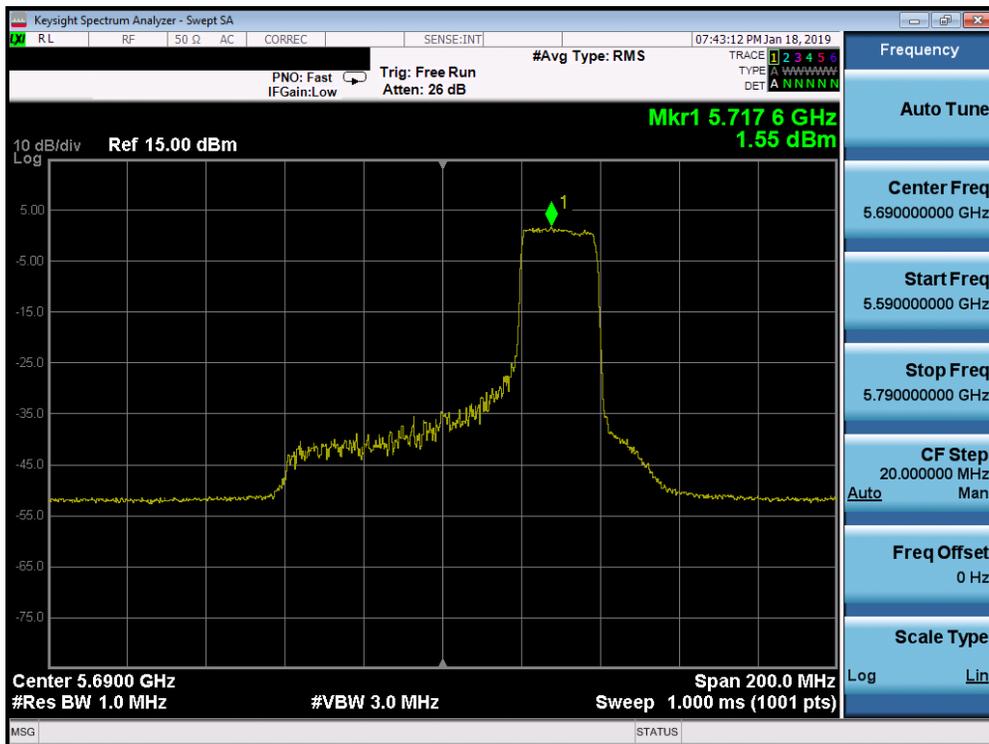


Plot 7-595. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 106)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 387 of 519

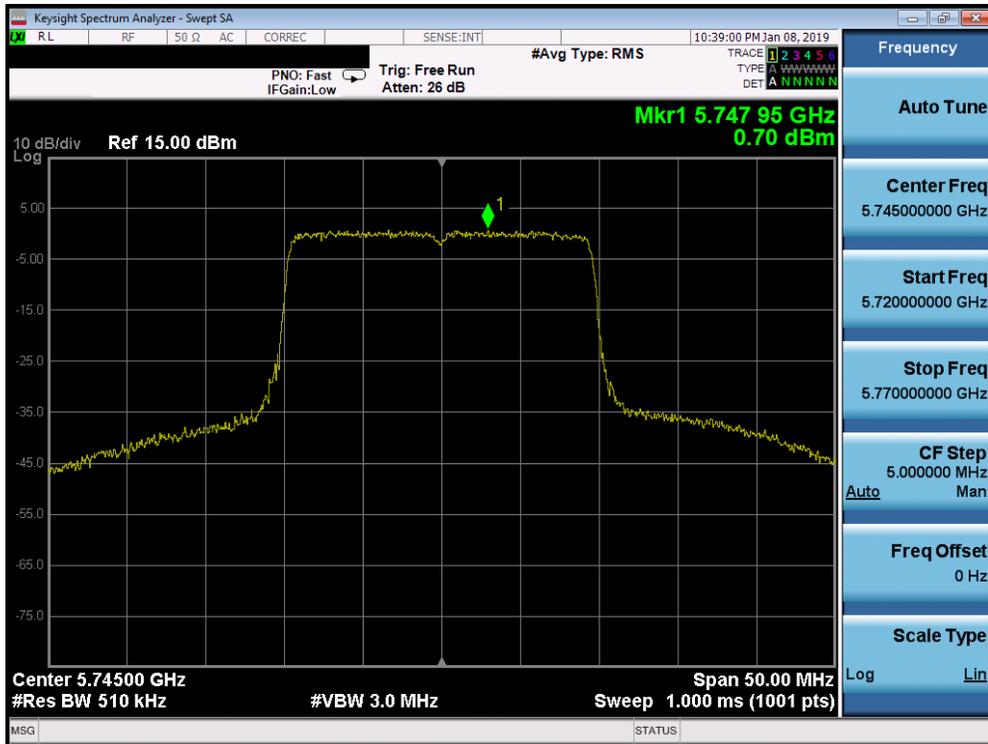


Plot 7-596. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 122)

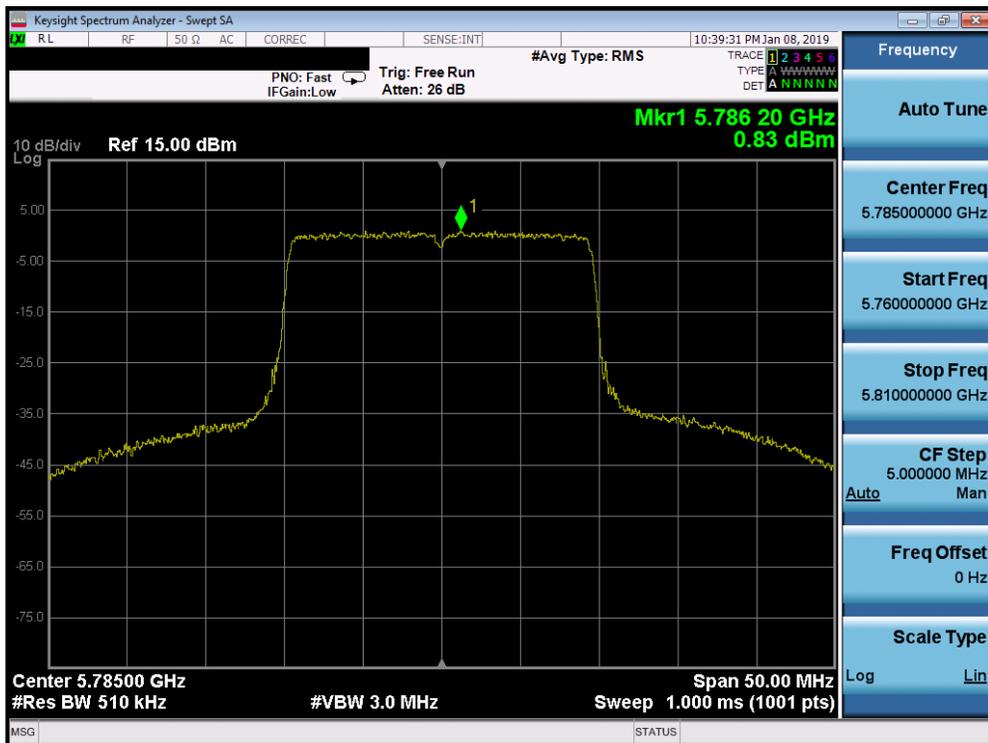


Plot 7-597. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 138)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 388 of 519

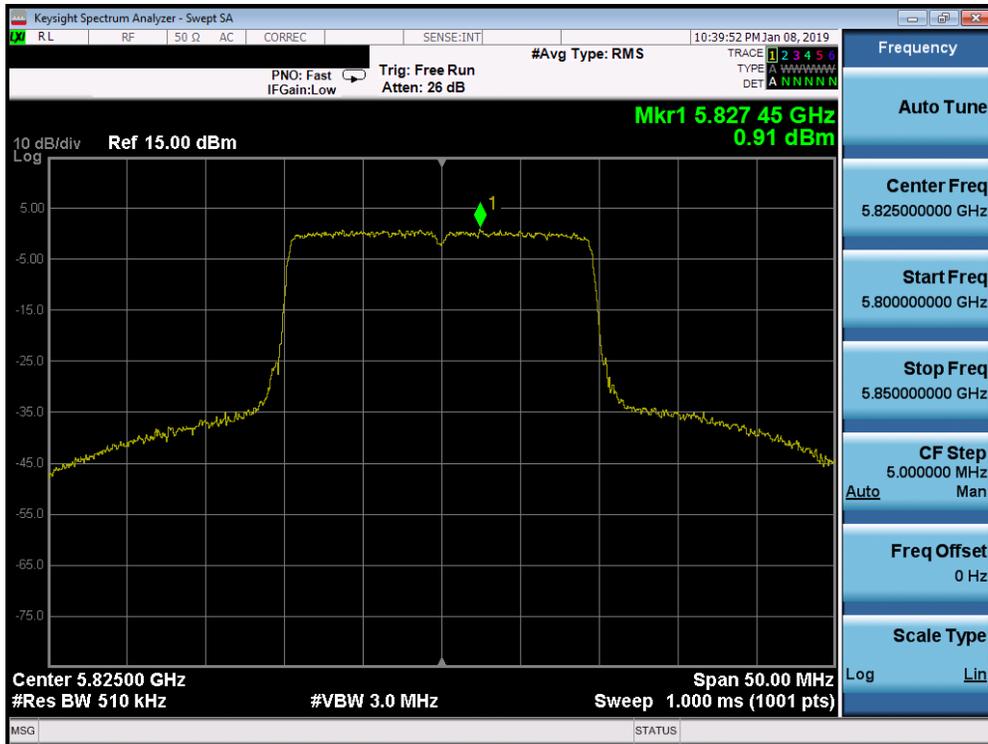


Plot 7-598. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 149)

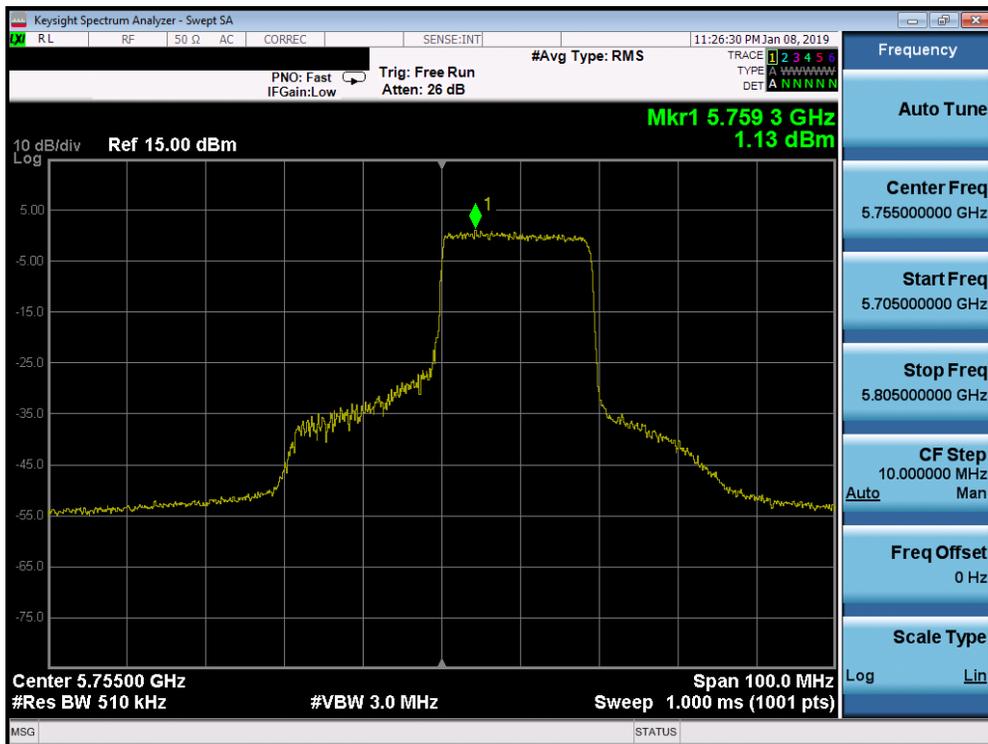


Plot 7-599. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 157)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 389 of 519

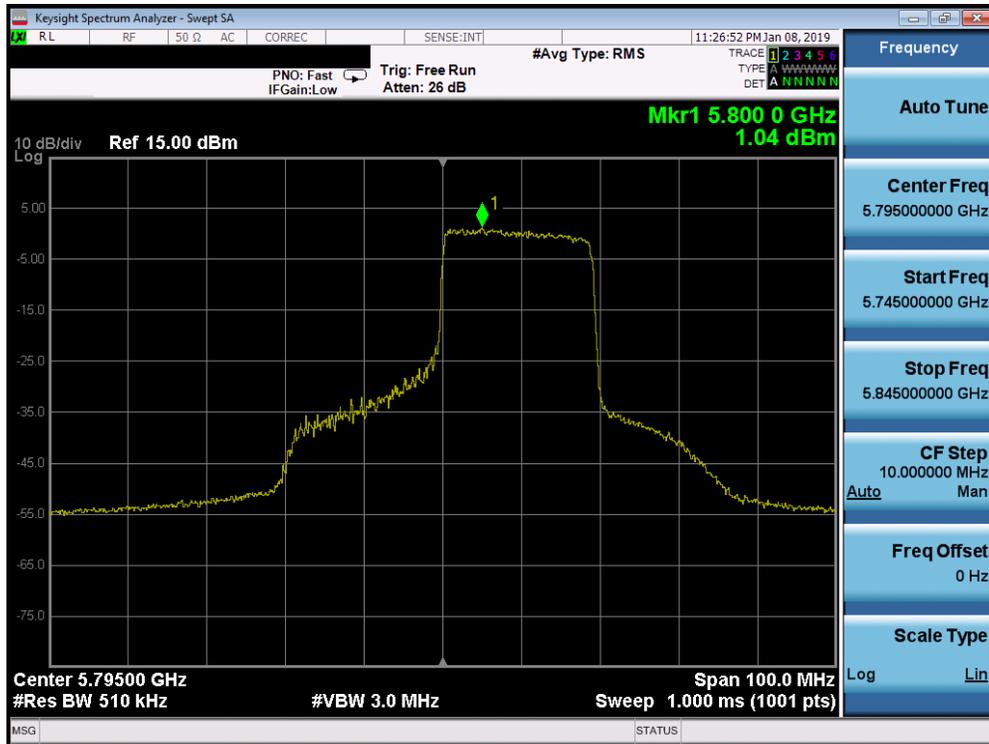


Plot 7-600. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 165)

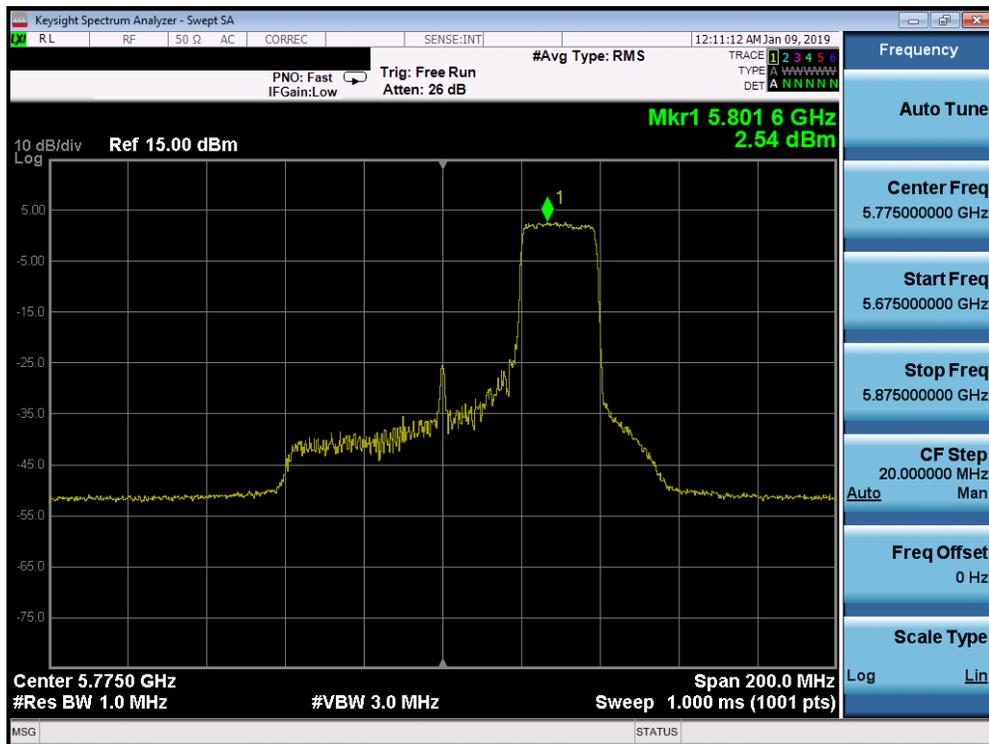


Plot 7-601. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 151)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 390 of 519



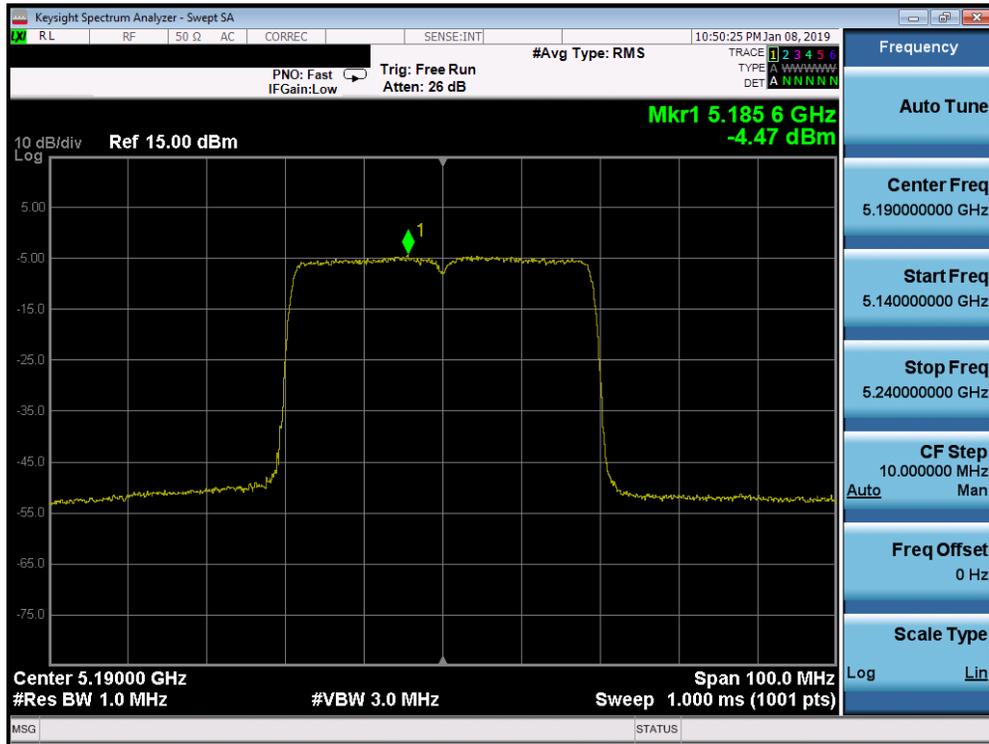
Plot 7-602. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 159)



Plot 7-603. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 155)

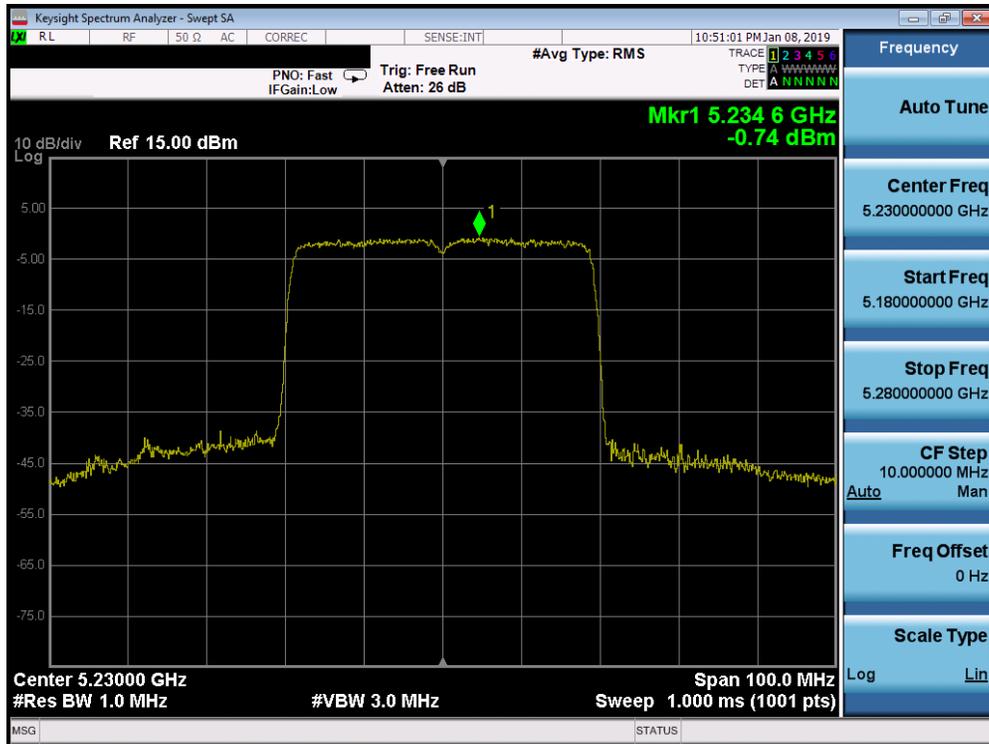
FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 391 of 519

MIMO Antenna-2 Power Spectral Density Measurements (484 Tones)

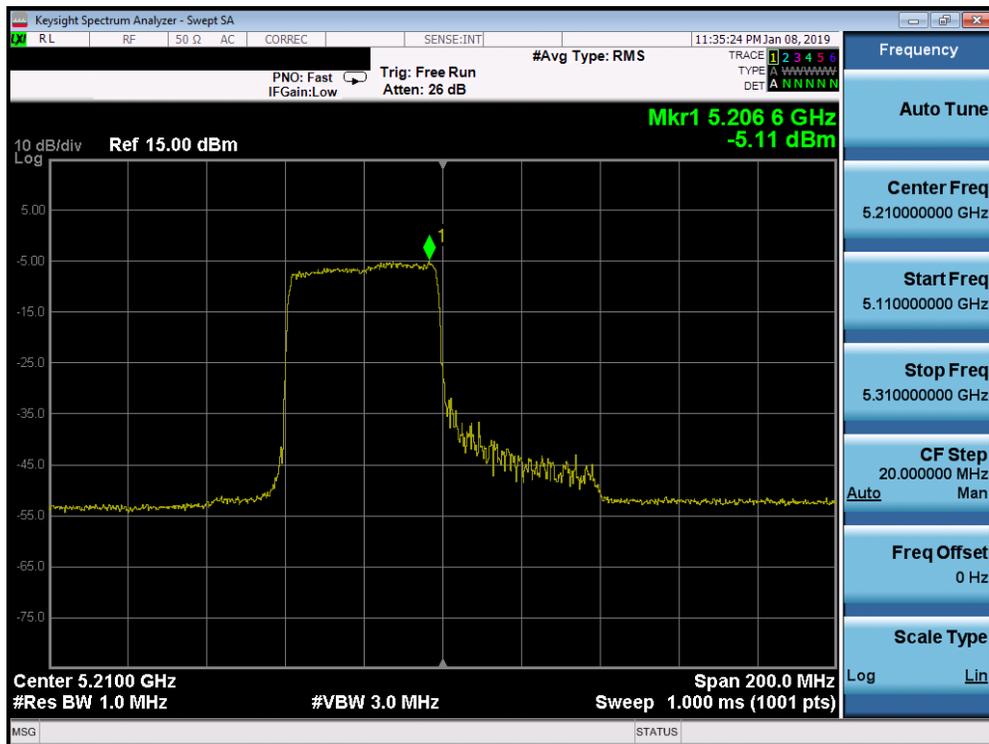


Plot 7-604. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 484 Tones (UNII Band 1) – Ch. 38)

FCC ID: A3LSMG970U	 MEASUREMENT REPORT (CERTIFICATION) 		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset	Page 392 of 519

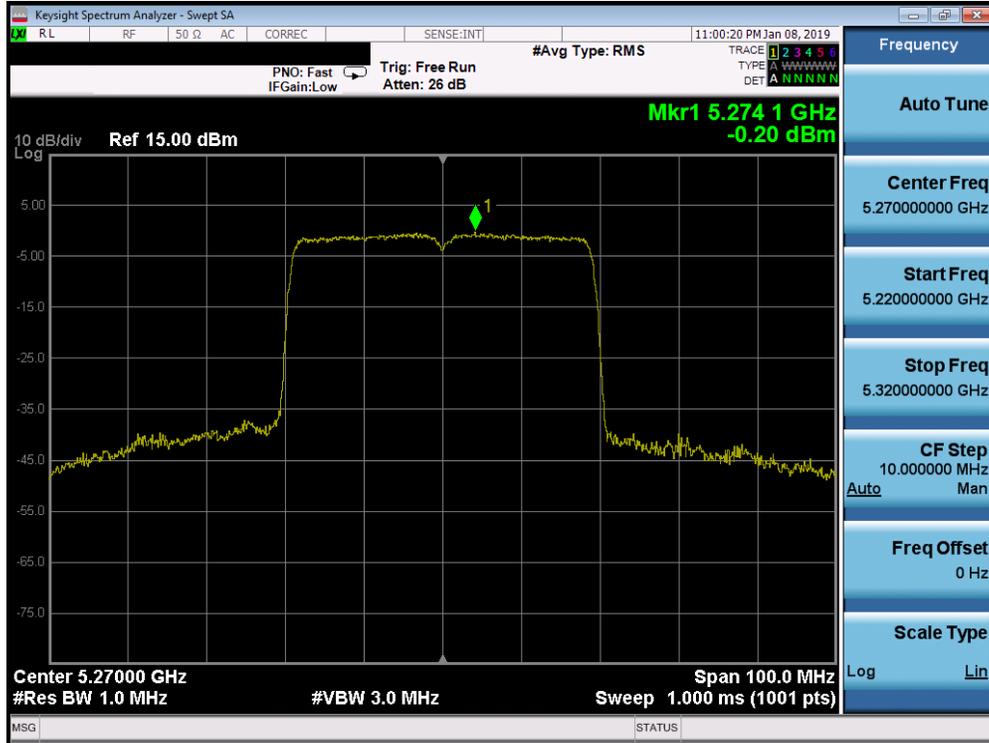


Plot 7-605. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 484 Tones (UNII Band 1) – Ch. 46)

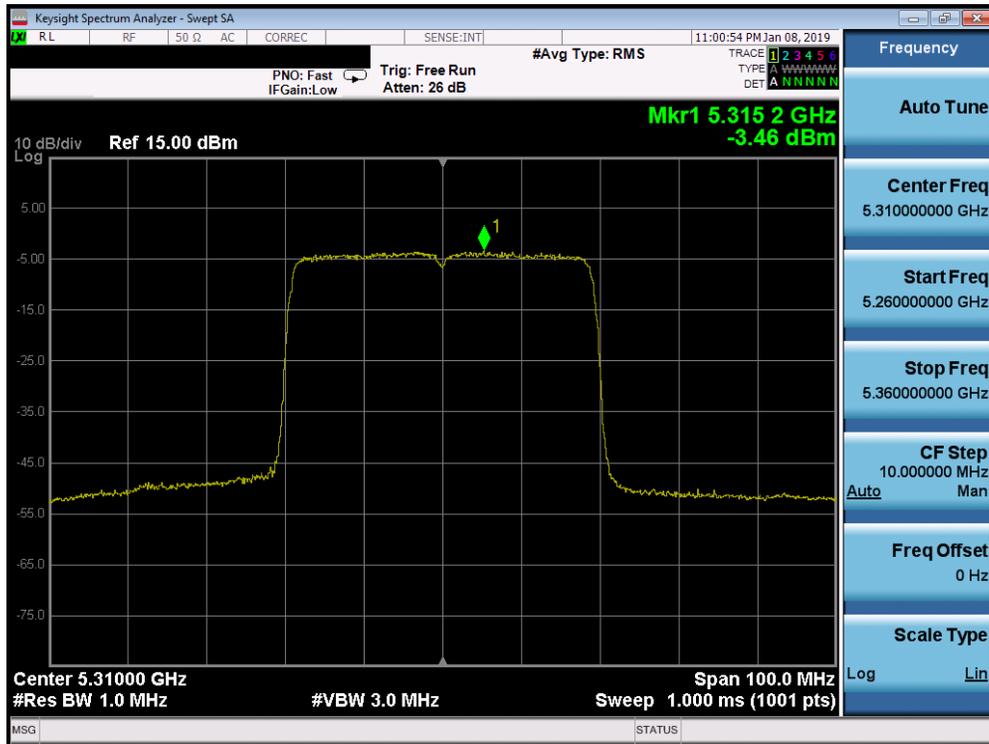


Plot 7-606. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 484 Tones (UNII Band 1) – Ch. 42)

FCC ID: A3LSMG970U	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset	Page 393 of 519	

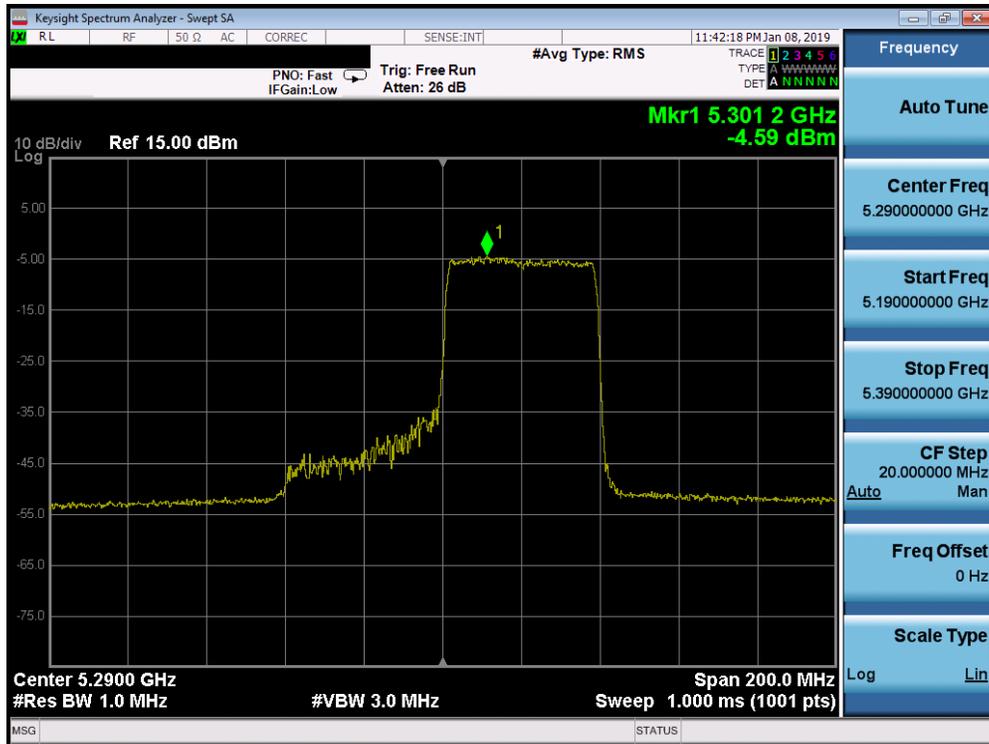


Plot 7-607. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 484 Tones (UNII Band 2A) – Ch. 54)

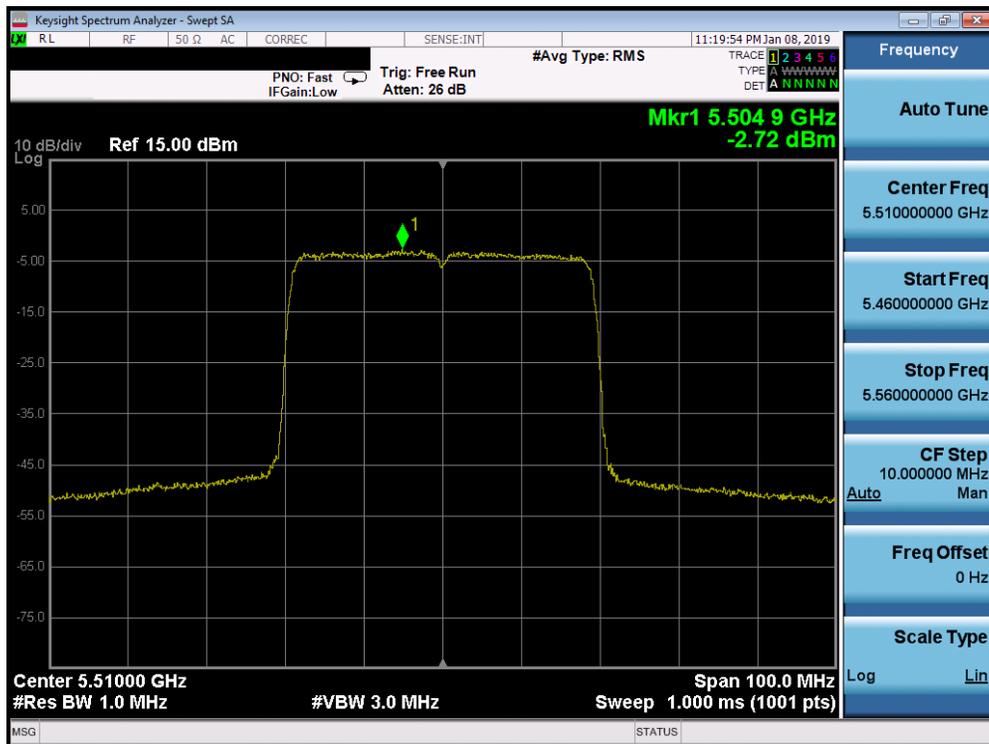


Plot 7-608. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 484 Tones (UNII Band 2A) – Ch. 62)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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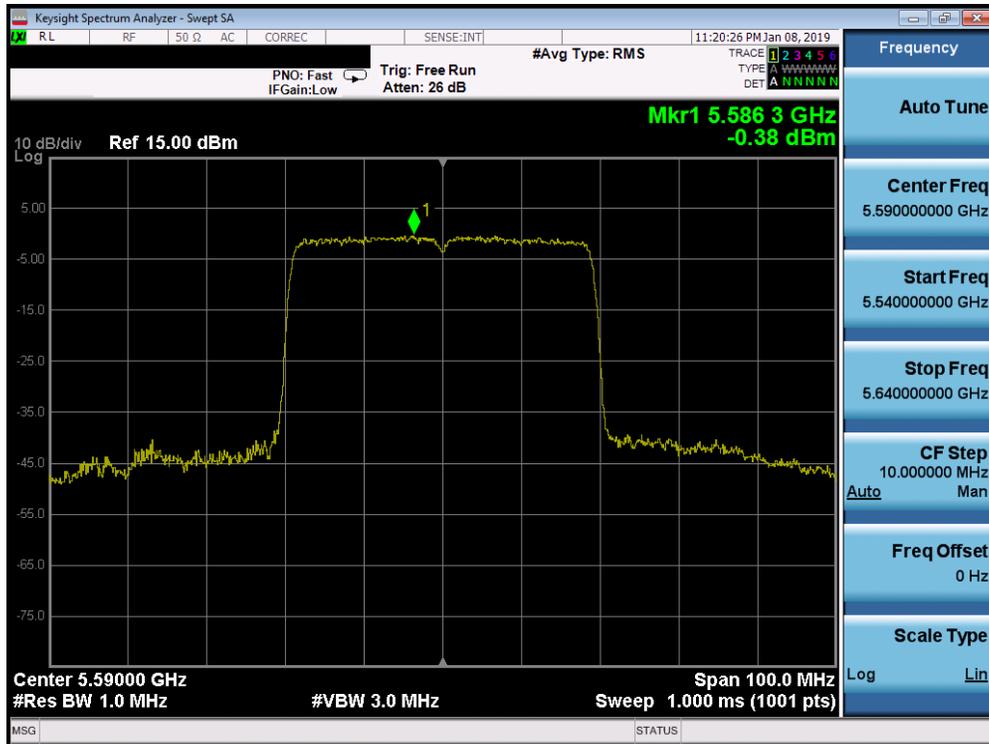


Plot 7-609. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 484 Tones (UNII Band 2A) – Ch. 58)

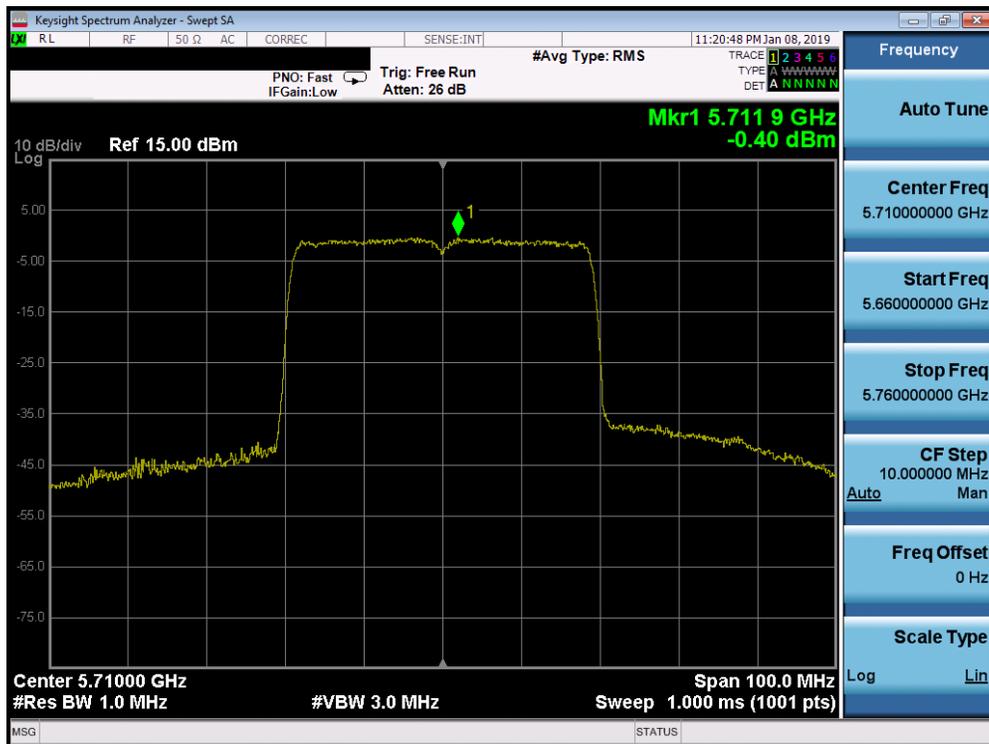


Plot 7-610. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 484 Tones (UNII Band 2C) – Ch. 102)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 395 of 519

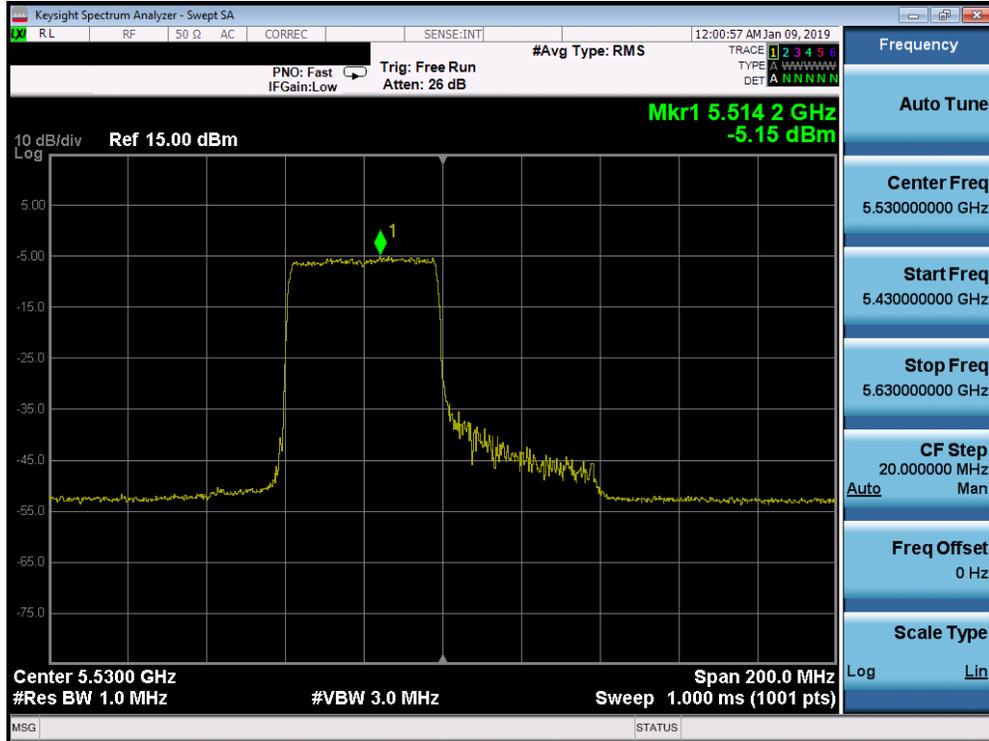


Plot 7-611. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 484 Tones (UNII Band 2C) – Ch. 118)

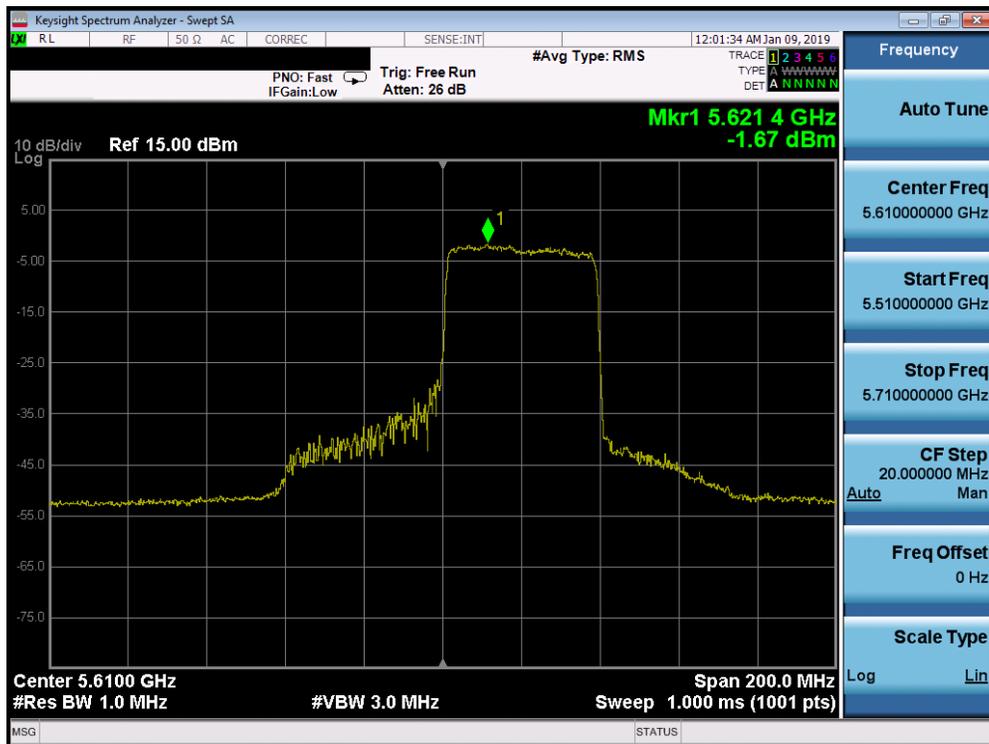


Plot 7-612. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 484 Tones (UNII Band 2C) – Ch. 142)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 396 of 519

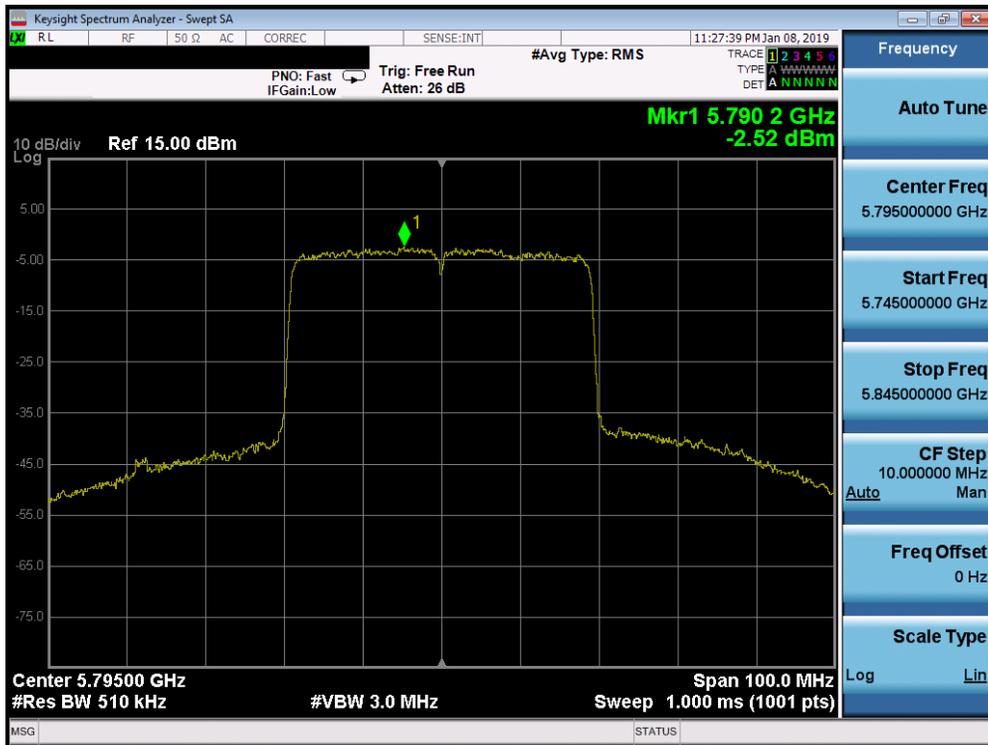


Plot 7-613. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 484 Tones (UNII Band 2C) – Ch. 106)



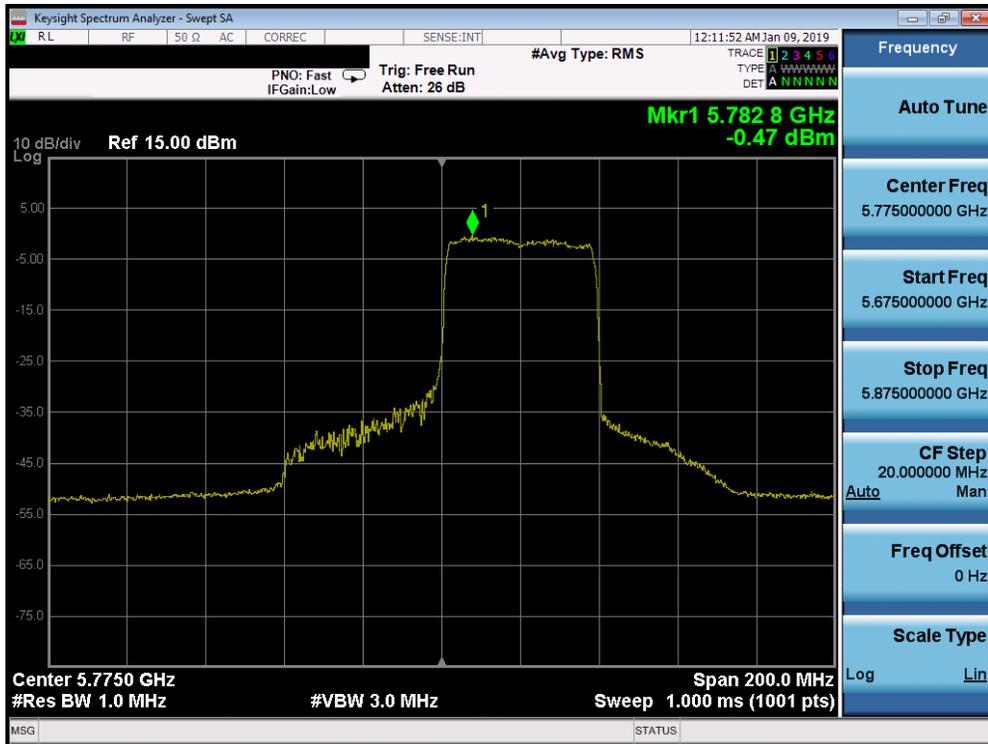
Plot 7-614. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 484 Tones (UNII Band 2C) – Ch. 122)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 397 of 519



Plot 7-617. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 484 Tones (UNII Band 3) – Ch. 159)

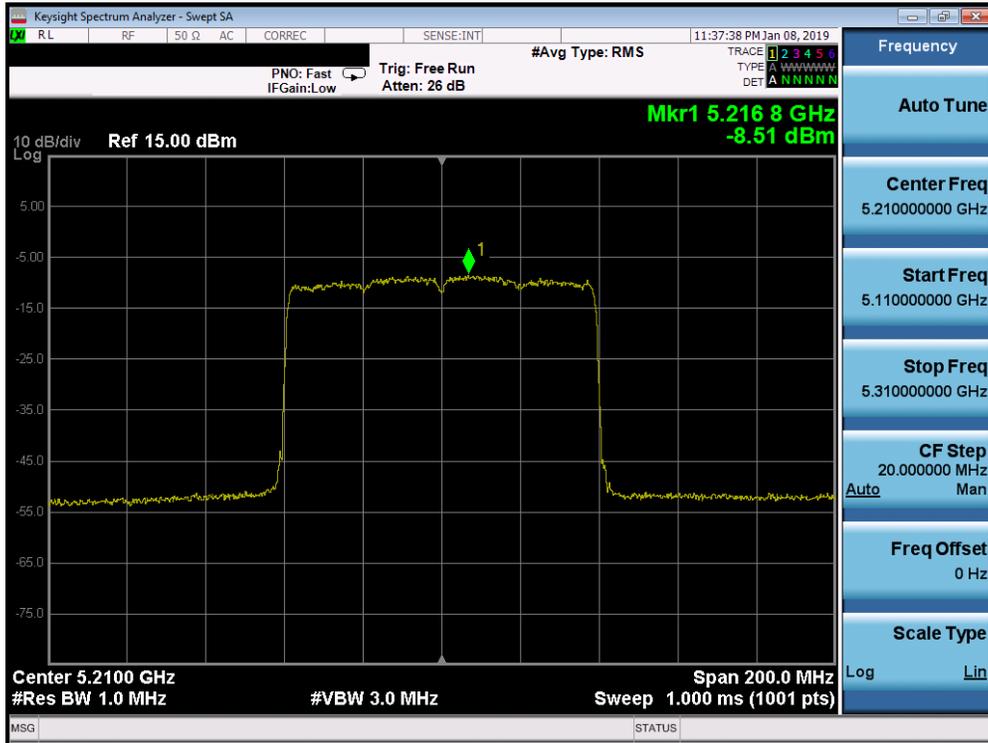
FCC ID: A3LSMG970U	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset	Page 399 of 519	



Plot 7-618. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 484 Tones (UNII Band 3) – Ch. 155)

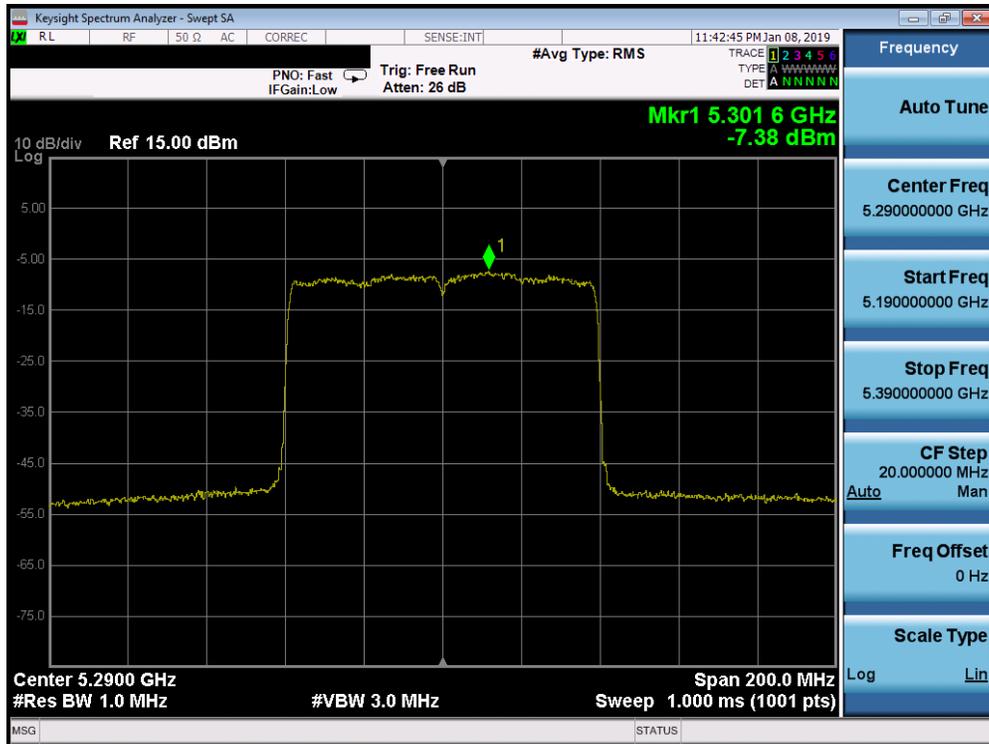
FCC ID: A3LSMG970U	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset	Page 400 of 519	

MIMO Antenna-2 Power Spectral Density Measurements (996 Tones)

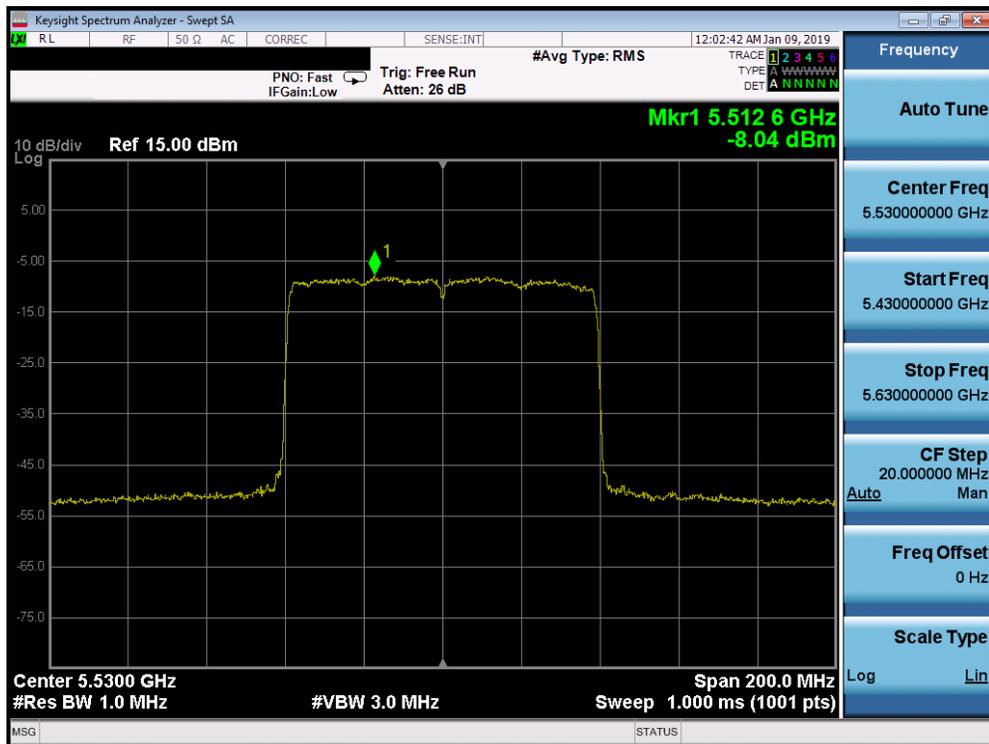


Plot 7-619. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 996 Tones (UNII Band 1) – Ch. 42)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 401 of 519

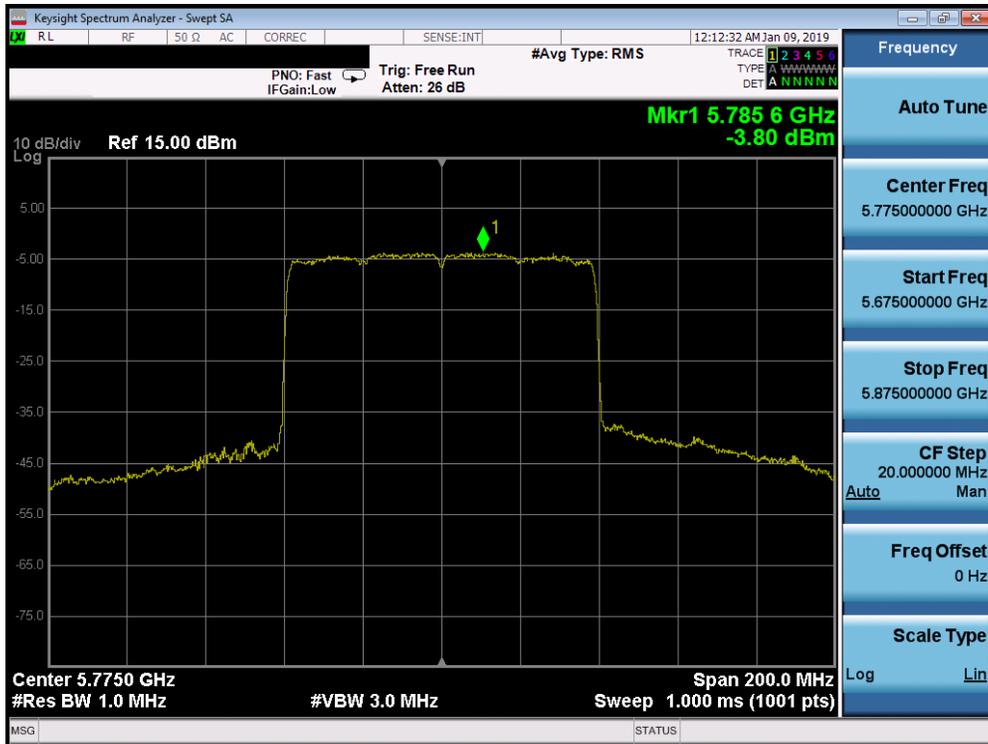


Plot 7-620. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 996 Tones (UNII Band 2A) – Ch. 58)



Plot 7-621. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 996 Tones (UNII Band 2C) – Ch. 106)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 402 of 519



Plot 7-624. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 996 Tones (UNII Band 3) – Ch. 155)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 404 of 519

7.6 Radiated Spurious Emission Measurements – Above 1GHz

§15.407(b) §15.205 §15.209; RSS-Gen [8.9]

Test Overview and Limit

All out of band radiated spurious emissions are measured with a spectrum analyzer connected to a receive antenna 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. All channels, modes (e.g. 26 Tones, 52 Tones, 106 Tones, 242 Tones, 484 Tones and 996 Tones), and modulations/data rates were investigated among all UNII bands. Only the radiated emissions of the configuration that produced the worst case emissions are reported in this section.

For transmitters operating in the 5.15-5.25 GHz and 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR and Table 6 of RSS-Gen (8.10) must not exceed the limits shown in Table 7-30 per Section 15.209 and RSS-Gen (8.9).

Frequency	Field Strength [$\mu\text{V/m}$]	Measured Distance [Meters]
Above 960.0 MHz	500	3

Table 7-117. Radiated Limits

Test Procedures Used

ANSI C63.10-2013 – Sections 12.7.7.2, 12.7.6, 12.7.5
KDB 789033 D02 v02r01 – Section G

Test Settings

Average Measurements above 1GHz (Method AD)

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = power average (RMS)
5. Number of measurement points = 1001 (Number of points must be $\geq 2 \times \text{span/RBW}$)
6. Averaging type = power (RMS)
7. Sweep time = auto couple
8. Trace was averaged over 100 sweeps

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Peak Measurements above 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Peak Measurements below 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = 120kHz
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Test Setup

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

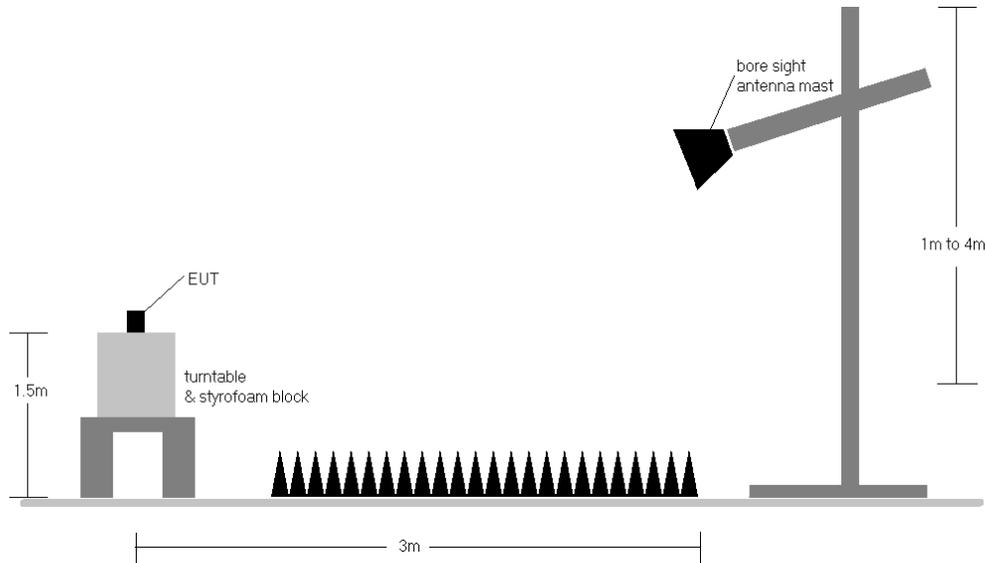


Figure 7-5. Test Instrument & Measurement Setup

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Test Notes

1. All emissions that lie in the restricted bands (denoted by a * next to the frequency) specified in §15.205 and Section 8.10 of RSS-Gen are below the limit shown in Table 7-30.
2. All spurious emissions lying in restricted bands specified in §15.205 and Section 8.10 of RSS-Gen are below the limit shown in Table 7-30. All spurious emissions that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.
3. The antenna is manipulated through typical positions, polarity and length during the tests. The EUT is manipulated through three orthogonal planes.
4. This unit was tested with its standard battery.
5. The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter using CISPR quasi peak detector below 1GHz. Above 1 GHz, average and peak measurements were taken using linearly polarized horn antennas. The worst-case emissions are reported however emissions whose levels were not within 20dB of the respective limits were not reported.
6. Emissions below 18GHz were measured at a 3 meter test distance while emissions above 18GHz were measured at a 1 meter test distance with the application of a distance correction factor.
7. The wide spectrum spurious emissions plots shown on the following pages are used only for the purpose of emission identification. Any emissions found to be within 20dB of the limit are fully investigated and the results are shown in this section.
8. The "-" shown in the following RSE tables are used to denote a noise floor measurement.
9. For radiated measurements, emissions were investigated for the fully-loaded RU configuration and for all of the partially-loaded RU configurations. Among all of the available partially-loaded RU configurations, only the configuration with the worst case emissions is reported

Sample Calculations

Determining Spurious Emissions Levels

- Field Strength Level [dBμV/m] = Analyzer Level [dBm] + 107 + AFCL [dB/m]
- AFCL [dB/m] = Antenna Factor [dB/m] + Cable Loss [dB]
- Margin [dB] = Field Strength Level [dBμV/m] – Limit [dBμV/m]

Radiated Band Edge Measurement Offset

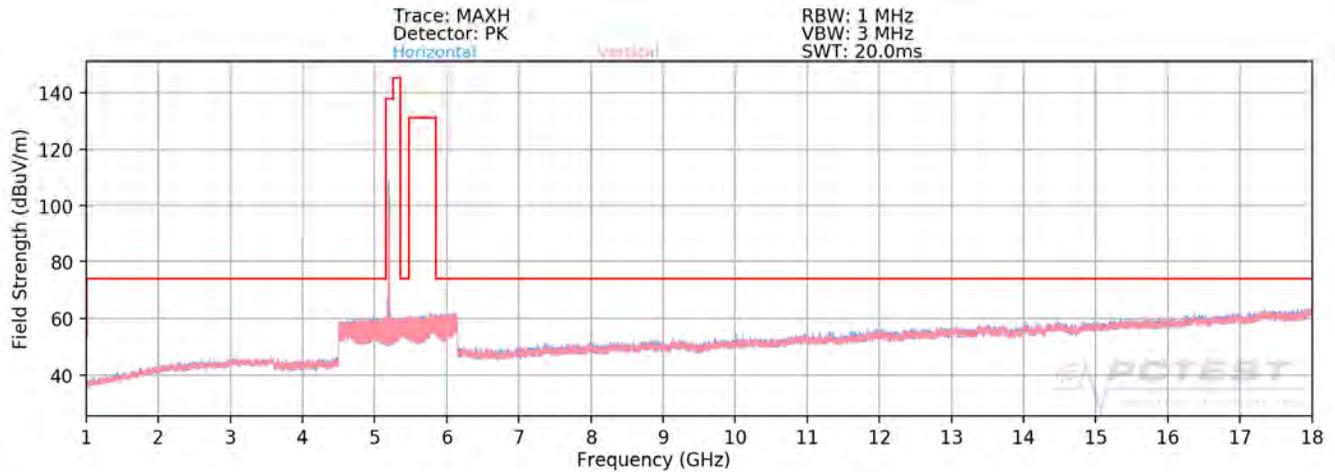
- The amplitude offset shown in the radiated restricted band edge plots in Section 7.8 was calculated using the formula:

$$\text{Offset (dB)} = (\text{Antenna Factor} + \text{Cable Loss} + \text{Attenuator}) - \text{Preamplifier Gain}$$

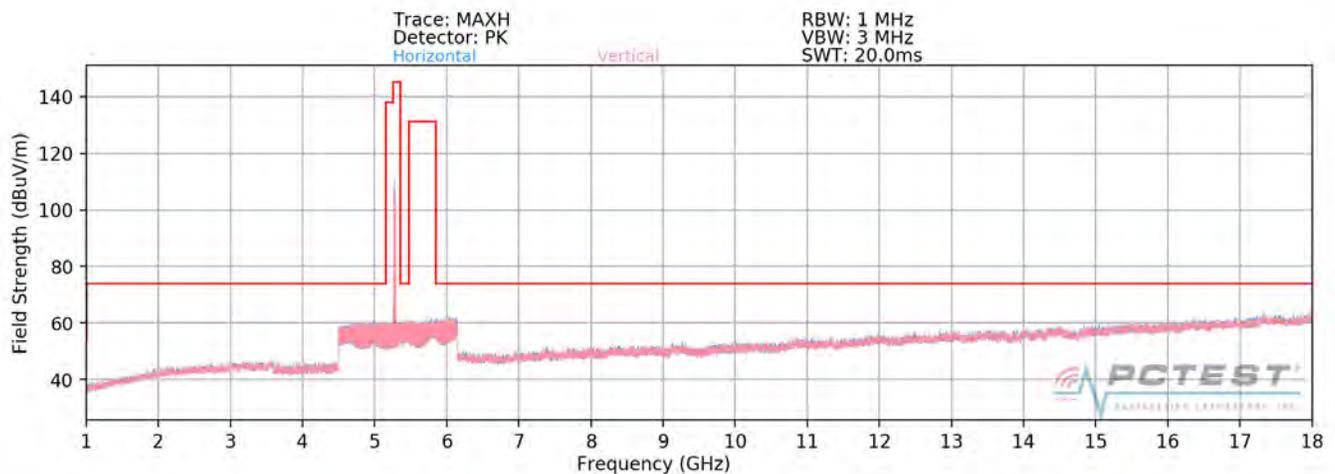
FCC ID: A3LSMG970U	 MEASUREMENT REPORT (CERTIFICATION) 		Approved by: Quality Manager
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7.6.1 SISO Antenna-1 Radiated Spurious Emission Measurements

106 Tones

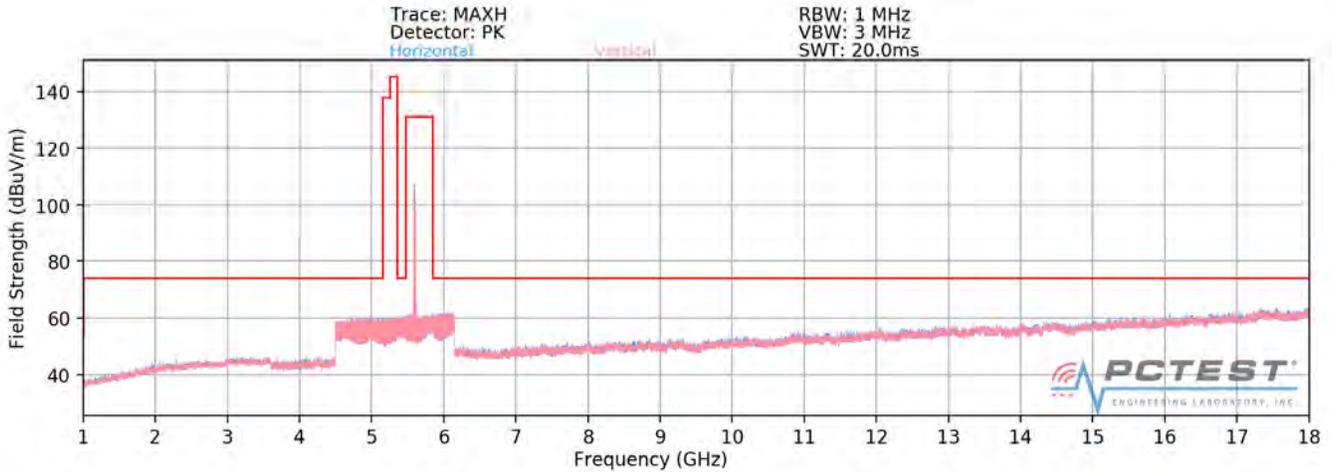


Plot 7-625. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U1 Ch. 40 – 106 Tones)

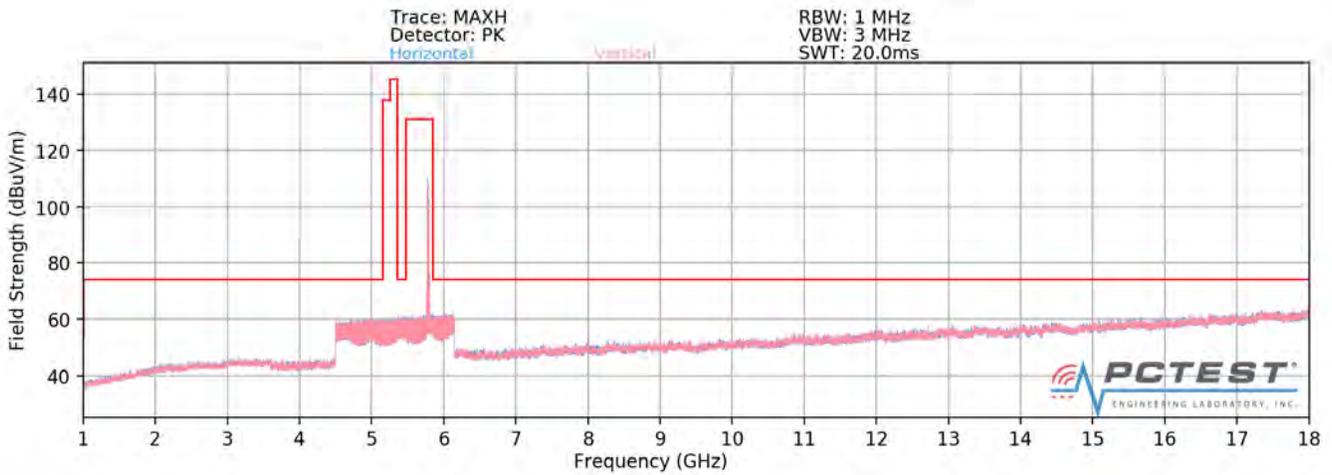


Plot 7-626. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U2A Ch. 56 – 106 Tones)

FCC ID: A3LSMG970U				MEASUREMENT REPORT (CERTIFICATION) Approved by: Quality Manager
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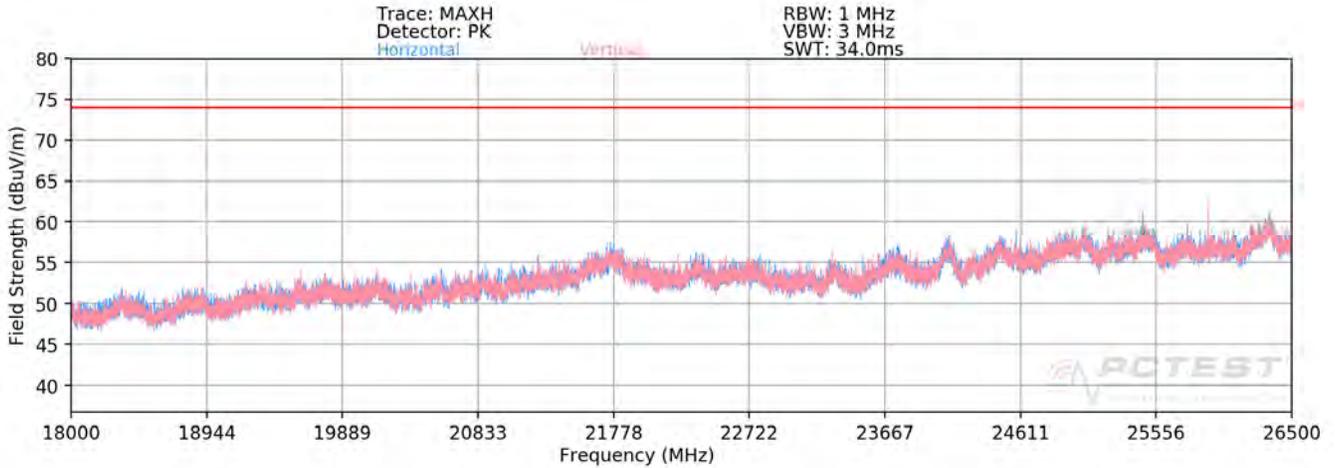
Plot 7-627. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U2C Ch. 120 – 106 Tones)



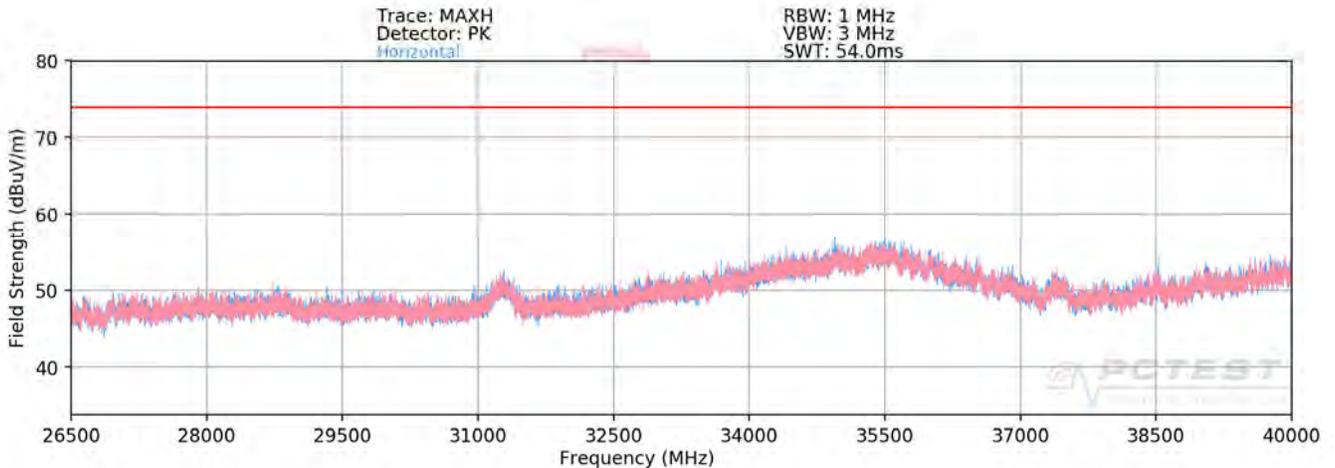
Plot 7-628. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U3 Ch. 157 – 106 Tones)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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SISO Antenna-1 Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-629. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT1 (802.11ax – 106 Tones)



Plot 7-630. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT1 (802.11ax – 106 Tones)

FCC ID: A3LSMG970U	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
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SISO Antenna-1 Radiated Spurious Emission Measurements (106 Tones)

§15.407(b) §15.205 & §15.209; RSS-Gen [8.9]

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 53
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5180MHz
 Channel: 36

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
10360.00	Peak	H	400	293	-63.24	12.74	0.00	56.50	68.20	-11.70
* 15540.00	Average	H	-	-	-79.54	15.28	0.00	42.74	53.98	-11.24
* 15540.00	Peak	H	-	-	-68.93	15.28	0.00	53.35	73.98	-20.63
* 20720.00	Average	H	-	-	-77.92	16.92	-9.54	36.46	53.98	-17.52
* 20720.00	Peak	H	-	-	-66.70	16.92	-9.54	47.68	73.98	-26.30
25900.00	Peak	H	-	-	-65.18	19.39	-9.54	51.67	68.20	-16.53

Table 7-118. Radiated Measurements SISO ANT1 (106 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 53
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5200MHz
 Channel: 40

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
10400.00	Peak	H	372	293	-62.92	12.24	0.00	56.32	68.20	-11.88
* 15600.00	Average	H	-	-	-79.62	15.40	0.00	42.78	53.98	-11.19
* 15600.00	Peak	H	-	-	-68.26	15.40	0.00	54.14	73.98	-19.83
* 20800.00	Average	H	-	-	-77.64	17.39	-9.54	37.20	53.98	-16.77
* 20800.00	Peak	H	-	-	-66.77	17.39	-9.54	48.07	73.98	-25.90
26000.00	Peak	H	-	-	-64.69	19.98	-9.54	52.74	68.20	-15.46

Table 7-119. Radiated Measurements SISO ANT1 (106 Tones)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 53
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5240MHz
 Channel: 48

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10480.00	Peak	H	398	296	-62.63	12.41	0.00	56.78	68.20	-11.42
* 15720.00	Average	H	-	-	-79.89	16.70	0.00	43.81	53.98	-10.17
* 15720.00	Peak	H	-	-	-68.82	16.70	0.00	54.88	73.98	-19.10
* 20960.00	Average	H	-	-	-77.90	17.29	-9.54	36.85	53.98	-17.13
* 20960.00	Peak	H	-	-	-66.95	17.29	-9.54	47.80	73.98	-26.18
26200.00	Peak	H	-	-	-65.02	19.80	-9.54	52.24	68.20	-15.96

Table 7-120. Radiated Measurements SISO ANT1 (106 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 53
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5240MHz
 Channel: 48

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10480.00	Peak	H	-	-	-62.98	12.41	0.00	56.43	68.20	-11.77
* 15720.00	Average	H	-	-	-79.99	16.70	0.00	43.71	53.98	-10.27
* 15720.00	Peak	H	-	-	-69.12	16.70	0.00	54.58	73.98	-19.40
* 20960.00	Average	H	-	-	-77.97	17.29	-9.54	36.78	53.98	-17.20
* 20960.00	Peak	H	-	-	-67.08	17.29	-9.54	47.67	73.98	-26.31
26200.00	Peak	H	-	-	-64.80	19.80	-9.54	52.46	68.20	-15.74

Table 7-121. Radiated Measurements SISO ANT1 (106 Tones)with WCP

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 53
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5260MHz
 Channel: 52

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10520.00	Peak	H	361	293	-63.51	13.16	0.00	56.65	68.20	-11.55
* 15780.00	Average	H	-	-	-79.80	16.21	0.00	43.41	53.98	-10.57
* 15780.00	Peak	H	-	-	-69.37	16.21	0.00	53.84	73.98	-20.14
* 21040.00	Average	H	-	-	-77.84	17.32	-9.54	36.94	53.98	-17.04
* 21040.00	Peak	H	-	-	-66.71	17.32	-9.54	48.07	73.98	-25.91
26300.00	Peak	H	-	-	-65.02	20.12	-9.54	52.56	68.20	-15.64

Table 7-122. Radiated Measurements SISO ANT1 (106 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 53
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5280MHz
 Channel: 56

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10560.00	Peak	H	400	291	-64.32	13.66	0.00	56.34	68.20	-11.86
* 15840.00	Average	H	-	-	-79.51	15.64	0.00	43.13	53.98	-10.85
* 15840.00	Peak	H	-	-	-68.45	15.64	0.00	54.19	73.98	-19.79
* 21120.00	Average	H	-	-	-77.68	17.26	-9.54	37.04	53.98	-16.94
* 21120.00	Peak	H	-	-	-66.49	17.26	-9.54	48.23	73.98	-25.75
26400.00	Peak	H	-	-	-64.89	19.67	-9.54	52.24	68.20	-15.96

Table 7-123. Radiated Measurements SISO ANT1 (106 Tones)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 413 of 519

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 53
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5320MHz
 Channel: 64

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 10640.00	Average	H	400	292	-78.03	14.15	0.00	43.12	53.98	-10.86
* 10640.00	Peak	H	400	292	-66.74	14.15	0.00	54.41	73.98	-19.57
* 15960.00	Average	H	223	344	-79.02	15.01	0.00	42.99	53.98	-10.99
* 15960.00	Peak	H	223	344	-65.81	15.01	0.00	56.20	73.98	-17.78
* 21280.00	Average	H	-	-	-77.91	17.51	-9.54	37.06	53.98	-16.92
* 21280.00	Peak	H	-	-	-66.74	17.51	-9.54	48.23	73.98	-25.75
26600.00	Peak	H	-	-	-49.87	1.44	-9.54	49.03	68.20	-19.17

Table 7-124. Radiated Measurements SISO ANT1 (106 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 53
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5260MHz
 Channel: 52

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10520.00	Peak	H	-	-	-67.76	13.16	0.00	52.40	68.20	-15.80
* 15780.00	Average	H	-	-	-80.22	16.21	0.00	42.99	53.98	-10.99
* 15780.00	Peak	H	-	-	-79.22	16.21	0.00	43.99	73.98	-29.99
* 21040.00	Average	H	-	-	-77.41	17.32	-9.54	37.37	53.98	-16.61
* 21040.00	Peak	H	-	-	-66.38	17.32	-9.54	48.40	73.98	-25.58
26300.00	Peak	H	-	-	-64.91	20.12	-9.54	52.67	68.20	-15.53

Table 7-125. Radiated Measurements SISO ANT1 (106 Tones)with WCP

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset	Page 414 of 519	

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 53
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5500MHz
 Channel: 100

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11000.00	Average	H	326	86	-78.59	13.55	0.00	41.96	53.98	-12.02
* 11000.00	Peak	H	326	86	-67.93	13.55	0.00	52.62	73.98	-21.36
16500.00	Peak	H	234	344	-61.97	16.10	0.00	61.13	68.20	-7.07
22000.00	Peak	H	-	-	-66.54	18.25	-9.54	49.17	68.20	-19.03
27500.00	Peak	H	-	-	-48.26	0.12	-9.54	49.32	68.20	-18.88

Table 7-126. Radiated Measurements SISO ANT1 (106 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 53
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5600MHz
 Channel: 120

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11200.00	Average	H	-	-	-79.40	13.31	0.00	40.91	53.98	-13.07
* 11200.00	Peak	H	-	-	-68.94	13.31	0.00	51.37	73.98	-22.61
16800.00	Peak	H	252	352	-61.65	17.53	0.00	62.88	68.20	-5.32
* 22400.00	Average	H	-	-	-77.93	19.00	-9.54	38.53	53.98	-15.45
* 22400.00	Peak	H	-	-	-66.42	19.00	-9.54	50.04	73.98	-23.94
28000.00	Peak	H	-	-	-48.57	0.74	-9.54	49.62	68.20	-18.58

Table 7-127. Radiated Measurements SISO ANT1 (106 Tones)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 415 of 519

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 53
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5720MHz
 Channel: 144

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11440.00	Average	H	-	-	-79.45	15.10	0.00	42.65	53.98	-11.33
* 11440.00	Peak	H	-	-	-68.62	15.10	0.00	53.48	73.98	-20.50
17160.00	Peak	H	240	82	-66.17	18.83	0.00	59.66	68.20	-8.54
* 22880.00	Average	H	-	-	-77.71	18.40	-9.54	38.15	53.98	-15.83
* 22880.00	Peak	H	-	-	-66.50	18.40	-9.54	49.36	73.98	-24.62
28600.00	Peak	H	-	-	-49.08	0.41	-9.54	48.79	68.20	-19.41

Table 7-128. Radiated Measurements SISO ANT1 (106 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 53
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5600MHz
 Channel: 120

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11200.00	Average	H	-	-	-79.66	13.31	0.00	40.65	53.98	-13.33
* 11200.00	Peak	H	-	-	-68.77	13.31	0.00	51.54	73.98	-22.44
16800.00	Peak	H	-	-	-61.98	17.53	0.00	62.55	68.20	-5.65
* 22400.00	Average	H	-	-	-77.84	19.00	-9.54	38.62	53.98	-15.36
* 22400.00	Peak	H	-	-	-66.64	19.00	-9.54	49.82	73.98	-24.16
28000.00	Peak	H	-	-	-48.41	0.74	-9.54	49.78	68.20	-18.42

Table 7-129. Radiated Measurements SISO ANT1 (106 Tones)with WCP

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset	Page 416 of 519	

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 53
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5745MHz
 Channel: 149

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11490.00	Average	H	-	-	-79.30	15.22	0.00	42.92	53.98	-11.06
* 11490.00	Peak	H	-	-	-68.26	15.22	0.00	53.96	73.98	-20.02
17235.00	Peak	H	240	348	-64.47	19.54	0.00	62.07	68.20	-6.13
* 22980.00	Average	H	-	-	-77.49	17.92	-9.54	37.89	53.98	-16.09
* 22980.00	Peak	H	-	-	-66.94	17.92	-9.54	48.44	73.98	-25.54
28725.00	Peak	H	-	-	-49.18	0.67	-9.54	48.95	68.20	-19.25

Table 7-130. Radiated Measurements SISO ANT1 (106 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 53
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5785MHz
 Channel: 157

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11570.00	Average	H	-	-	-79.18	15.02	0.00	42.84	53.98	-11.14
* 11570.00	Peak	H	-	-	-68.15	15.02	0.00	53.87	73.98	-20.11
17355.00	Peak	H	-	-	-69.70	23.41	0.00	60.71	68.20	-7.49
23140.00	Peak	H	-	-	-66.67	18.32	-9.54	49.11	68.20	-19.09
28925.00	Peak	H	-	-	-49.08	0.75	-9.54	49.13	68.20	-19.07

Table 7-131. Radiated Measurements SISO ANT1 (106 Tones)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 417 of 519

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 53
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5825MHz
 Channel: 165

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11650.00	Average	H	-	-	-79.21	14.92	0.00	42.71	53.98	-11.27
* 11650.00	Peak	H	-	-	-68.03	14.92	0.00	53.89	73.98	-20.09
17475.00	Peak	H	-	-	-69.75	21.86	0.00	59.11	68.20	-9.09
23300.00	Peak	H	-	-	-66.79	18.77	-9.54	49.44	68.20	-18.76
29125.00	Peak	H	-	-	-49.14	-0.12	-9.54	48.20	68.20	-20.00

Table 7-132. Radiated Measurements SISO ANT1 (106 Tones)

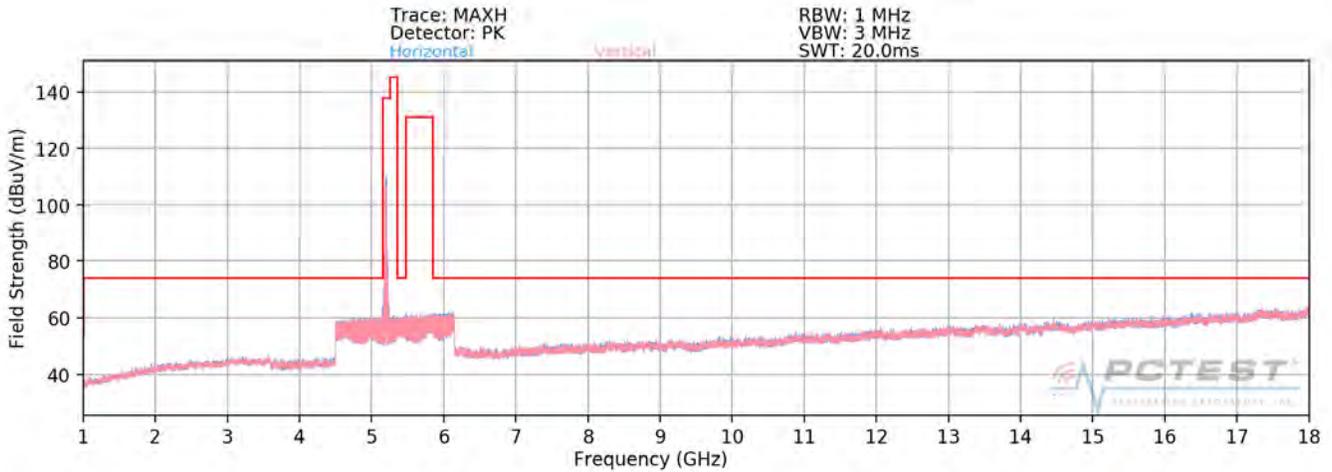
Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 53
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5745MHz
 Channel: 149

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11490.00	Average	H	-	-	-79.35	15.22	0.00	42.87	53.98	-11.11
* 11490.00	Peak	H	-	-	-68.22	15.22	0.00	54.00	73.98	-19.98
17235.00	Peak	H	-	-	-65.21	19.54	0.00	61.33	68.20	-6.87
* 22980.00	Average	H	-	-	-77.68	17.92	-9.54	37.70	53.98	-16.28
* 22980.00	Peak	H	-	-	-66.74	17.92	-9.54	48.64	73.98	-25.34
28725.00	Peak	H	-	-	-48.98	0.67	-9.54	49.15	68.20	-19.05

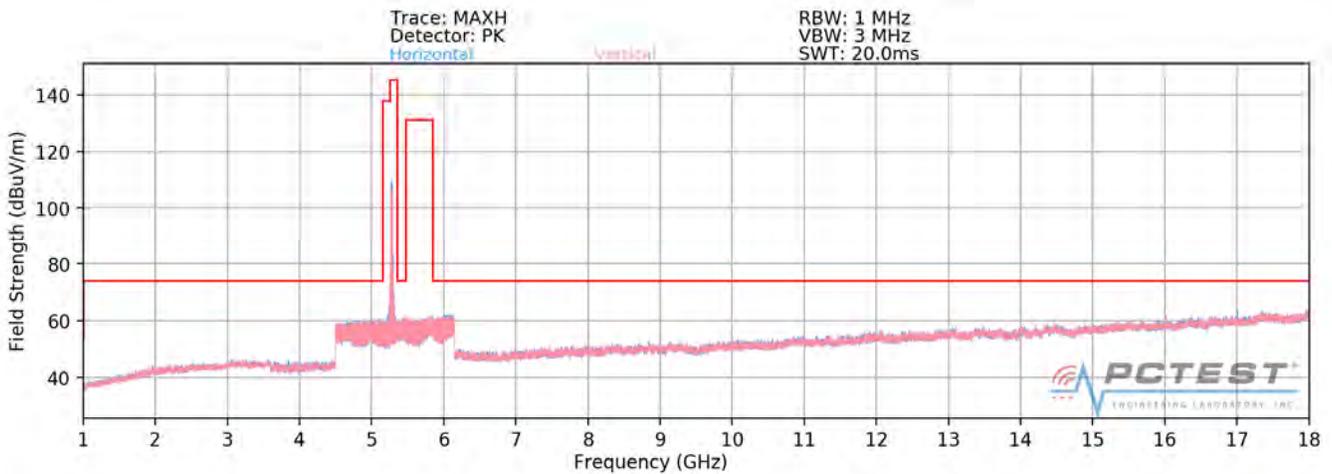
Table 7-133. Radiated Measurements SISO ANT1 (106 Tones)with WCP

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset	Page 418 of 519	

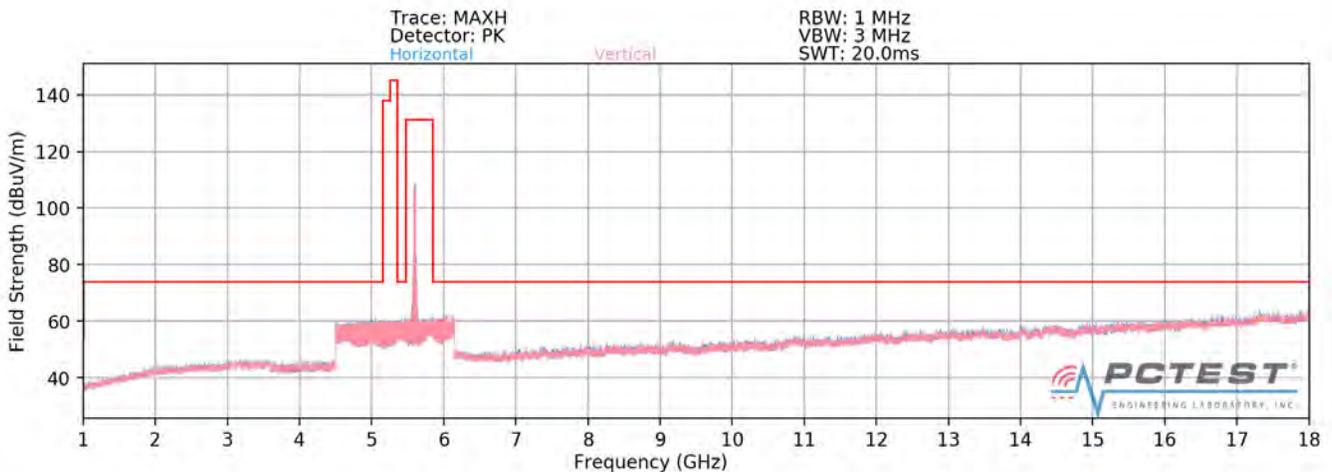
242 Tones



Plot 7-631. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U1 Ch. 40 – 242 Tones)

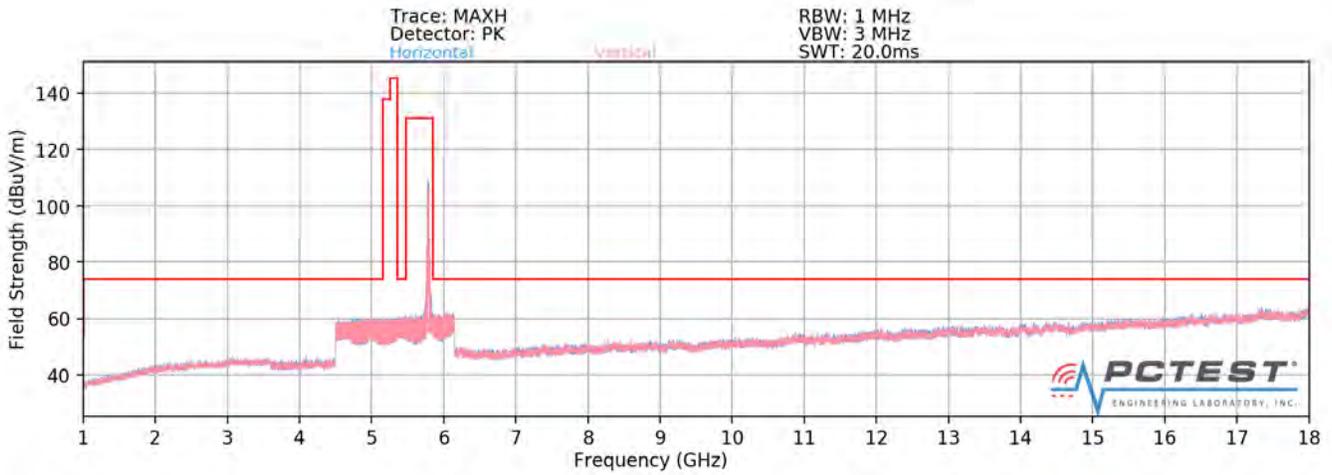


Plot 7-632. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U2A Ch. 56 – 242 Tones)



Plot 7-633. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U2C Ch. 120 – 242 Tones)

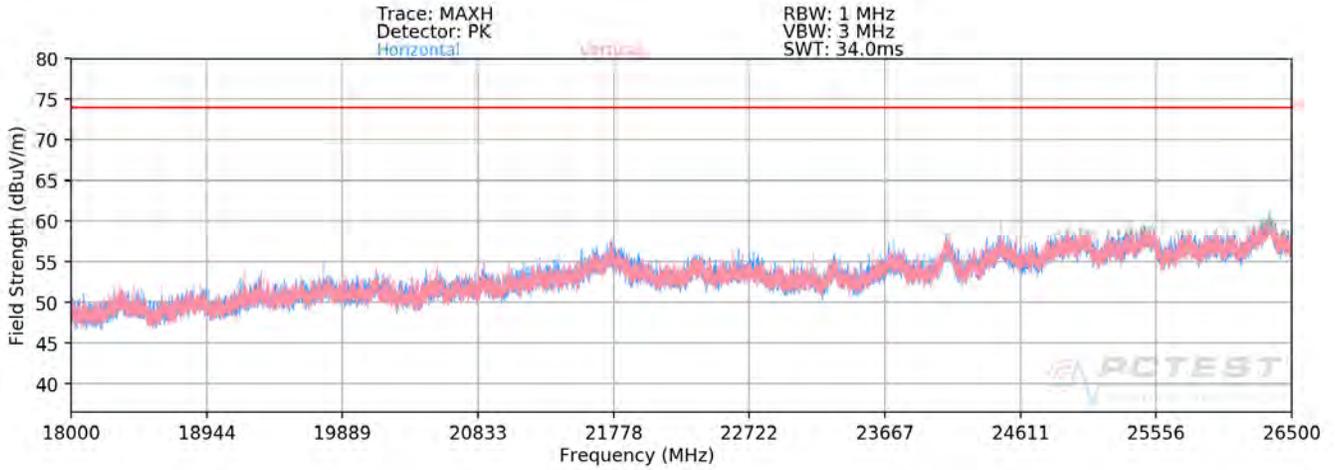
FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 419 of 519



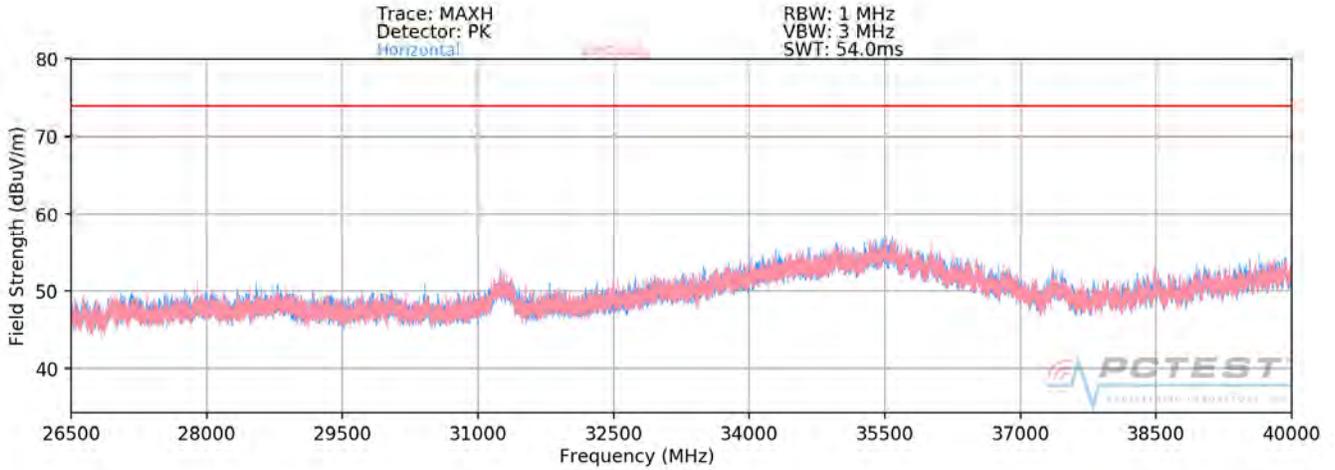
Plot 7-634. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U3 Ch. 157 – 242 Tones)

FCC ID: A3LSMG970U	 MEASUREMENT REPORT (CERTIFICATION) 		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset	Page 420 of 519

SISO Antenna-1 Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-635. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT1 (802.11ax - 242 Tones)



Plot 7-636. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT1 (802.11ax - 242 Tones)

FCC ID: A3LSMG970U	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset	Page 421 of 519	

SISO Antenna-1 Radiated Spurious Emission Measurements (242 Tones)

§15.407(b) §15.205 & §15.209; RSS-Gen [8.9]

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5180MHz
 Channel: 36

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
10360.00	Peak	H	-	-	-68.70	15.88	0.00	54.18	68.20	-14.02
* 15540.00	Average	H	-	-	-81.17	23.03	0.00	48.86	53.98	-5.12
* 15540.00	Peak	H	-	-	-69.52	23.03	0.00	60.51	73.98	-13.47
* 20720.00	Average	H	-	-	-77.89	16.92	-9.54	36.49	53.98	-17.49
* 20720.00	Peak	H	-	-	-66.74	16.92	-9.54	47.64	73.98	-26.34
25900.00	Peak	H	-	-	-65.05	19.39	-9.54	51.80	68.20	-16.40

Table 7-134. Radiated Measurements SISO ANT1 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5200MHz
 Channel: 40

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
10400.00	Peak	H	-	-	-68.86	16.04	0.00	54.18	68.20	-14.02
* 15600.00	Average	H	-	-	-80.95	23.01	0.00	49.06	53.98	-4.92
* 15600.00	Peak	H	-	-	-69.83	23.01	0.00	60.18	73.98	-13.80
* 20800.00	Average	H	-	-	-77.84	17.39	-9.54	37.00	53.98	-16.97
* 20800.00	Peak	H	-	-	-66.73	17.39	-9.54	48.11	73.98	-25.86
26000.00	Peak	H	-	-	-65.90	19.98	-9.54	51.53	68.20	-16.67

Table 7-135. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset	Page 422 of 519	

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5240MHz
 Channel: 48

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10480.00	Peak	H	-	-	-68.99	16.18	0.00	54.19	68.20	-14.01
* 15720.00	Average	H	-	-	-81.20	23.46	0.00	49.26	53.98	-4.72
* 15720.00	Peak	H	-	-	-69.70	23.46	0.00	60.76	73.98	-13.22
* 20960.00	Average	H	-	-	-77.85	17.29	-9.54	36.90	53.98	-17.08
* 20960.00	Peak	H	-	-	-66.14	17.29	-9.54	48.61	73.98	-25.37
26200.00	Peak	H	-	-	-65.77	19.80	-9.54	51.49	68.20	-16.71

Table 7-136. Radiated Measurements SISO ANT1 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5260MHz
 Channel: 52

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10520.00	Peak	H	-	-	-69.27	16.24	0.00	53.97	68.20	-14.23
* 15780.00	Average	H	-	-	-81.16	23.09	0.00	48.93	53.98	-5.05
* 15780.00	Peak	H	-	-	-69.65	23.09	0.00	60.44	73.98	-13.54
* 21040.00	Average	H	-	-	-77.68	17.32	-9.54	37.10	53.98	-16.88
* 21040.00	Peak	H	-	-	-66.09	17.32	-9.54	48.69	73.98	-25.29
26300.00	Peak	H	-	-	-65.39	20.12	-9.54	52.19	68.20	-16.01

Table 7-137. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset	Page 423 of 519	

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5280MHz
 Channel: 56

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10560.00	Peak	H	-	-	-69.11	16.27	0.00	54.16	68.20	-14.04
* 15840.00	Average	H	-	-	-81.32	23.65	0.00	49.33	53.98	-4.65
* 15840.00	Peak	H	-	-	-70.10	23.65	0.00	60.55	73.98	-13.43
* 21120.00	Average	H	-	-	-77.65	17.26	-9.54	37.07	53.98	-16.91
* 21120.00	Peak	H	-	-	-65.86	17.26	-9.54	48.86	73.98	-25.12
26400.00	Peak	H	-	-	-65.29	19.67	-9.54	51.84	68.20	-16.36

Table 7-138. Radiated Measurements SISO ANT1 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5320MHz
 Channel: 64

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 10640.00	Average	H	-	-	-80.83	16.99	0.00	43.16	53.98	-10.82
* 10640.00	Peak	H	-	-	-69.10	16.99	0.00	54.89	73.98	-19.09
* 15960.00	Average	H	-	-	-81.25	23.61	0.00	49.36	53.98	-4.62
* 15960.00	Peak	H	-	-	-69.93	23.61	0.00	60.68	73.98	-13.30
* 21280.00	Average	H	-	-	-77.52	17.51	-9.54	37.45	53.98	-16.53
* 21280.00	Peak	H	-	-	-65.99	17.51	-9.54	48.98	73.98	-25.00
26600.00	Peak	H	-	-	-49.73	1.44	-9.54	49.17	68.20	-19.03

Table 7-139. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset	Page 424 of 519	

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5500MHz
 Channel: 100

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11000.00	Average	H	-	-	-80.28	17.61	0.00	44.33	53.98	-9.65
* 11000.00	Peak	H	-	-	-68.23	17.61	0.00	56.38	73.98	-17.60
16500.00	Peak	H	-	-	-68.87	25.31	0.00	63.44	68.20	-4.76
22000.00	Peak	H	-	-	-66.42	18.25	-9.54	49.29	68.20	-18.91
27500.00	Peak	H	-	-	-48.36	0.12	-9.54	49.22	68.20	-18.98

Table 7-140. Radiated Measurements SISO ANT1 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5600MHz
 Channel: 120

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11200.00	Average	H	-	-	-80.29	16.98	0.00	43.69	53.98	-10.29
* 11200.00	Peak	H	-	-	-67.67	16.98	0.00	56.31	73.98	-17.67
16800.00	Peak	H	-	-	-69.69	24.87	0.00	62.18	68.20	-6.02
* 22400.00	Average	H	-	-	-78.00	19.00	-9.54	38.46	53.98	-15.52
* 22400.00	Peak	H	-	-	-67.15	19.00	-9.54	49.31	73.98	-24.67
28000.00	Peak	H	-	-	-48.58	0.74	-9.54	49.61	68.20	-18.59

Table 7-141. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset	Page 425 of 519	

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5720MHz
 Channel: 144

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11440.00	Average	H	-	-	-81.00	18.07	0.00	44.07	53.98	-9.91
* 11440.00	Peak	H	-	-	-69.60	18.07	0.00	55.47	73.98	-18.51
17160.00	Peak	H	-	-	-68.43	24.98	0.00	63.55	68.20	-4.65
* 22880.00	Average	H	-	-	-78.13	18.40	-9.54	37.73	53.98	-16.25
* 22880.00	Peak	H	-	-	-67.05	18.40	-9.54	48.81	73.98	-25.17
28600.00	Peak	H	-	-	-48.96	0.41	-9.54	48.91	68.20	-19.29

Table 7-142. Radiated Measurements SISO ANT1 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5745MHz
 Channel: 149

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11490.00	Average	H	351	33	-80.15	18.31	0.00	45.16	53.98	-8.82
* 11490.00	Peak	H	351	33	-68.44	18.31	0.00	56.87	73.98	-17.11
17235.00	Peak	H	233	350	-67.76	25.66	0.00	64.90	68.20	-3.30
* 22980.00	Average	H	-	-	-77.87	17.92	-9.54	37.51	53.98	-16.47
* 22980.00	Peak	H	-	-	-67.24	17.92	-9.54	48.14	73.98	-25.84
28725.00	Peak	H	-	-	-49.32	0.67	-9.54	48.81	68.20	-19.39

Table 7-143. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5785MHz
 Channel: 157

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11570.00	Average	H	343	84	-79.94	18.06	0.00	45.12	53.98	-8.86
* 11570.00	Peak	H	343	84	-68.54	18.06	0.00	56.52	73.98	-17.46
17355.00	Peak	H	242	341	-69.22	27.10	0.00	64.88	68.20	-3.32
23140.00	Peak	H	-	-	-67.08	18.32	-9.54	48.70	68.20	-19.50
28925.00	Peak	H	-	-	-48.92	0.75	-9.54	49.29	68.20	-18.91

Table 7-144. Radiated Measurements SISO ANT1 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5825MHz
 Channel: 165

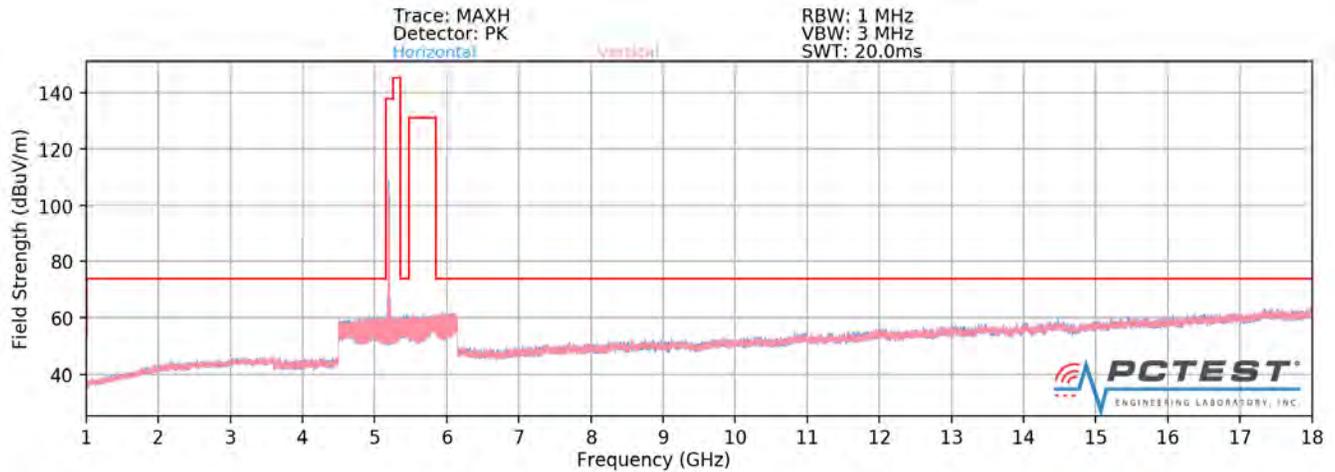
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11650.00	Average	H	255	65	-78.81	18.25	0.00	46.44	53.98	-7.54
* 11650.00	Peak	H	255	65	-66.66	18.25	0.00	58.59	73.98	-15.39
17475.00	Peak	H	256	341	-69.32	26.28	0.00	63.96	68.20	-4.24
23300.00	Peak	H	-	-	-66.93	18.77	-9.54	49.30	68.20	-18.90
29125.00	Peak	H	-	-	-48.56	-0.12	-9.54	48.78	68.20	-19.42

Table 7-145. Radiated Measurements SISO ANT1 (242 Tones)

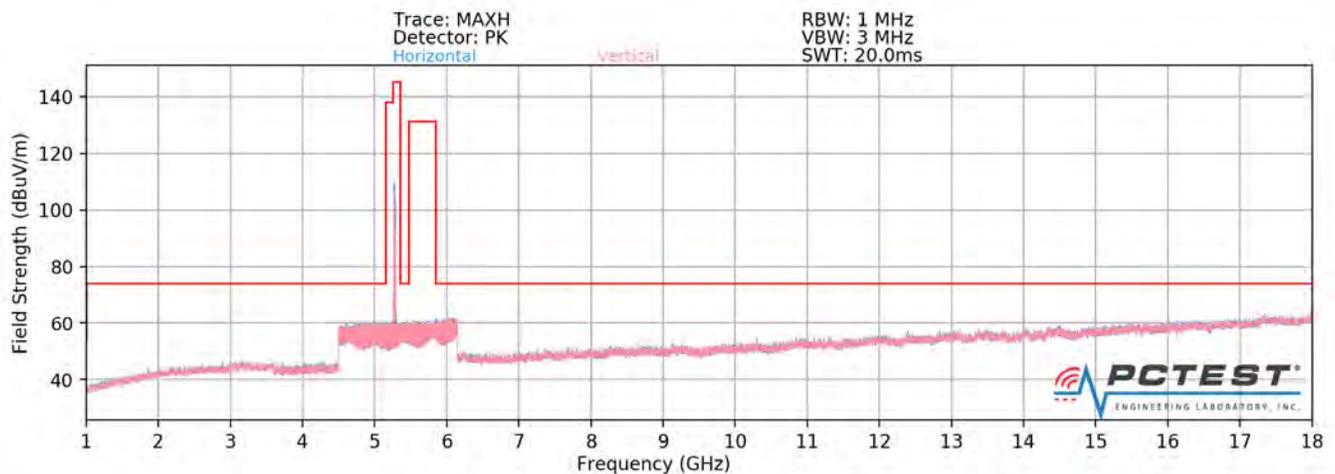
FCC ID: A3LSMG970U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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7.6.2 SISO Antenna-2 Radiated Spurious Emission Measurements

106 Tones



Plot 7-637. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U1 Ch. 40 – 106 Tones)



Plot 7-638. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U2A Ch. 56 – 106 Tones)

FCC ID: A3LSMG970U			MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250193-18.A3L	Test Dates: 11/9/2018 - 1/18/2019	EUT Type: Portable Handset		Page 428 of 519	