

*FCC PART 15, SUBPART B, C, and E; RSS-GEN and RSS-247
TEST REPORT*

for

DOCK CONTROLLER

MODEL: ACC810

Prepared for

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DATE: JULY 23, 2020

REPORT BODY	APPENDICES					TOTAL
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GENERAL REPORT SUMMARY

This electromagnetic emission test report is generated by Compatible Electronics Inc., which is an independent testing and consulting firm. The test report is based on testing performed by Compatible Electronics personnel according to the measurement procedures described in the test specifications given below and in the "Test Procedures" section of this report.

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced without the written permission of Compatible Electronics, unless done so in full.

This report must not be used to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the federal government.

Device Tested: Dock Controller
Model: ACC810
S/N: N/A

Product Description: The EUT controls the power output to other Targus docking stations.

Modifications: The EUT was not modified during the testing.

Customer: Targus
1211 N. Miller St
Anaheim, California 92806

Test Dates: September 24; October 10, 11, 15, and 26; November 12, 2019

Test Specifications covered by accreditation:

Emissions requirements
CFR Title 47, Part 15, Subpart B; and
Subpart C, sections 15.205, 15.207, and 15.209; and Subpart E, section 15.407

Test Procedure: ANSI C63.4 and ANSI C63.10





SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Conducted RF Emissions, 150 kHz – 30 MHz	The EUT complies with the Class B limits of CFR Title 47, Part 15 Subpart B; and the limits of CFR Title 47, Part 15, Subpart E, section 15.207; and RSS-GEN See section 6.3 for Measurement Uncertainty
2	Spurious Radiated RF Emissions, 30 MHz – 1000 MHz	The EUT complies with the Class B limits of CFR Title 47, Part 15 Subpart B; and the limits of CFR Title 47, Part 15, Subpart E, section 15.209; RSS-GEN and RSS-247 See section 6.3 for Measurement Uncertainty
3	Spurious Radiated RF Emissions, 9 kHz – 30 MHz and 1000 MHz – 40000 MHz	The EUT complies with the Class B limits of CFR Title 47, Part 15, Subpart B; and CFR Title 47, Part 15, Subpart E, section 15.407 (b)(1); RSS-GEN and RSS-247 See section 6.3 for Measurement Uncertainty
4	Fundamental and Emissions produced by the intentional radiator in non-restricted bands, 9 kHz – 40 GHz	Complies with the relevant requirements of CFR Title 47, Part 15, Subpart E, section 15.407 (b)(1); RSS-GEN and RSS-247
5	Emissions produced by the intentional radiator in restricted bands, 9 kHz – 40 GHz	Complies with the relevant requirements of CFR Title 47, Part 15, Subpart C, section 15.205 and 15.209; Subpart E section 15.407 (b)(1); and RSS-GEN and RSS-247
6	EBW Bandwidth	This test was performed to determine setting for other tests, but does not have any compliance limits.
7	Maximum Conducted Output Power	Complies with the relevant requirements of CFR Title 47, Part 15, Subpart E, section 15.407 (a)(1)(ii); RSS-GEN and RSS-247
8	Maximum Power Spectral Density from the Intentional Radiator to the Antenna	Complies with the relevant requirements of CFR Title 47, Part 15, Subpart E, section 15.407 (a)(1)(ii); RSS-GEN and RSS-247
9	Variation of the Input Power	Complies with the relevant requirements of CFR Title 47, Part 15, Subpart A, section 15.31 (e); RSS-GEN and RSS-247
10	99% Bandwidth	This test was performed to determine setting for other tests, but does not have any compliance limits.

1. PURPOSE

This document is a qualification test report based on the emissions tests performed on the Dock Controller, Model: ACC810. The emissions measurements were performed according to the measurement procedure described in ANSI C63.10 and ANSI C63.4. The tests were performed in order to determine whether the electromagnetic emissions from the equipment under test, referred to as EUT hereafter, are within the Class B specification limits defined by CFR Title 47, Part 15, Subpart B; Subpart C, Sections 15.205, 15.207, and 15.209; Subpart E, Section 15.407; and RSS-GEN and RSS-247.

Note: This document covers the 802.11a portion of the testing for the EUT. For the 802.11g and 802.11n portion, please see Compatible Electronics, Inc. report number B91127D1.

2. ADMINISTRATIVE DATA

2.1 Location of Testing

The emissions tests described herein were performed at the test facility of Compatible Electronics, 114 Olinda Drive, Brea, California 92823.

2.2 Traceability Statement

The calibration certificates of all test equipment used during the test are on file at the location of the test. The calibration is traceable to the National Institute of Standards and Technology (NIST).

2.3 Cognizant Personnel

Targus

Super Tan

Senior Quality Engineering Manager

Compatible Electronics Inc.

Kyle Fujimoto

Test Engineer

James Ross

Test Engineer

Harvey Samaco

Test Technician

2.4 Date Test Sample was Received

The test sample was received on prior to the initial test date.

2.5 Disposition of the Test Sample

The test sample has not been returned to Targus as of the date of this test report.

2.6 Abbreviations and Acronyms

The following abbreviations and acronyms may be used in this document.

RF	Radio Frequency
EMI	Electromagnetic Interference
EUT	Equipment Under Test
P/N	Part Number
S/N	Serial Number
HP	Hewlett Packard
CFR	Code of Federal Regulations
CML	Corrected Meter Limit
LISN	Line Impedance Stabilization Network
N/A	Not Applicable
BLE	Bluetooth Low Energy

3. APPLICABLE DOCUMENTS

The following documents are referenced or used in the preparation of this emissions Test Report.

SPEC	TITLE
CFR Title 47, Part 15 Subpart C	FCC Rules - Radio frequency devices (including digital devices) – Intentional Radiators
CFR Title 47, Part 15 Subpart E	FCC Rules – Radio frequency deices (including digital devices) – Unlicensed National Information Infrastructure Devices
ANSI C63.4 2014	Methods of measurement of radio-noise emissions from low-voltage electrical and electronic equipment in the range of 9 kHz to 40 GHz
ANSI C63.10 2013	American National Standard for Testing Unlicensed Wireless Devices
CFR Title 47, Part 15 Subpart B	FCC Rules - Radio frequency devices (including digital devices) – Unintentional Radiators
KDB 789033 D02 v02r01	Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E
RSS-GEN, Issue 5 + Amendment 1 2019	General Requirements for Compliance of Radio Apparatus
RSS-247 Issue 2 2017	Digital Transmissions Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices

4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description of Test Configuration – Emissions

The Dock Controller, Model: ACC810 (EUT) was connected to a power supply adapter and Thunderbolt 3 Dock.

When being programmed, the EUT was also connected to a laptop and programming board. The laptop was also connected to an AC Adapter. The programming allowed the EUT to operate at the low, middle, and high channels for 802.11a as well as BLE. The laptop was removed prior to the testing.

The EUT was continuously transmitting both the WiFi and BLE simultaneously.

The amplitude of the fundamental for both the BLE and WiFi did not change when both radios were simultaneously transmitting. Also, there were no additional emissions detected.

Note: The BLE is from a pre-certified RF module, so no radio tests were performed on it. The spurious emissions were verified that the emissions were not higher when both the BLE and WiFi were simultaneously transmitting.

The BLE is a pre-certified modular approval under the FCC ID: 2AG4NWISE1012B

It was determined that the emissions were at their highest level when the EUT was operating in the above configuration. The final emissions data was taken in this mode of operation and any cables were maximized. All initial investigations were performed with the EMI Receiver in manual mode scanning the frequency range continuously. Photographs of the test setup are in Appendix D of this report.

4.1.1 **Cable Construction and Termination**

Cable 1

This is a 0.10 meter unshielded cable connecting the EUT to the Thunderbolt 3 Dock. This cable is hard wired at the EUT end and has a 6 millimeter DC power out cable connected to the Thunderbolt 3 Dock.

Cable 2

This is a 1.75 meter unshielded cable connecting from a 110 AC power source to the EUT AC adapter. This cable has a 3-prong AC power connector and an IEC 320 C5 connector at the EUT AC adapter end.

Cable 3

This is a 1 meter unshielded cable connecting the EUT AC adapter to the EUT. This cable is hard wired at the EUT AC adapter end and a DC power out connector on the EUT end. The cable has a molded ferrite at the EUT end.

Cable 4*

This is a 1 meter unshielded cable connecting the AC power source to the laptop AC adapter. This cable has a 2 prong AC power connector and an IEC 320 C7 connector at the laptop AC adapter end. The cable was removed prior to the testing as it was only used with the laptop to program the EUT.

Cable 5*

This is a 1.65 meter unshielded cable connecting the laptop AC adapter to the laptop. This cable is hard wired to the laptop AC adapter and has a USB type 'C' connector at the laptop end. The cable was removed prior to the testing as it was only used with the laptop to program the EUT.

Cable 6*

This is a 1 meter unshielded cable connecting the USB-to-Ethernet adapter to the programming board. This cable has a RJ-45 connector at each end. The cable was removed prior to the testing as it was only used with the laptop to program the EUT.

Cable 7*

This is a 1 meter unshielded cable connecting the Laptop to the EUT. This cable has a USB type 'A' connector at the laptop end and 4 jumper cables at the EUT end. The cable was removed prior to the testing as it was only used with the laptop to program the EUT.

Cable 8*

This is a 1 meter unshielded cable connecting the Laptop to the EUT. This cable has a USB type 'A' connector at the laptop end and 4 jumper cables at the EUT end. The cable was removed prior to the testing as it was only used with the laptop to program the EUT.

*Used to program the EUT only and then was removed during normal operation.

5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT

5.1 EUT and Accessory List

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID
DOCK CONTROLLER (EUT)	TARGUS	ACC810	N/A	OXM000104
AC ADAPTER (EUT)	TARGUS	APA150205	N/A	N/A
BLE MODULE	WISILICA	WISE1012A	N/A	2AG4NWISE1012B
LAPTOP***	LENOVO	T430	101-2037	N/A
THINKPAD LAPTOP 6 TH GENERATION***	LENOVO	THINKPAD X1 CARBON	P/N: SL10Q79187	N/A
AC ADAPTER (LAPTOP)***	LENOVO	ADLX65YCC2A	N/A	N/A
THUNDERBOLT 3 DOCK	TARGUS	DOCK 220	1806001173	N/A
PROGRAMMING BOARD***	N/A	N/A	N/A	N/A
USB TO ETHERNET ADAPTER***	INSIGNIA	NS-PU98505	N/A	N/A
UENERGYTESTAPP*	CSR	2.4.3	N/A	N/A
ATHEROS ART 2**	ATHEROS	2.67	N/A	N/A

*Used to program the EUT to transmit BLE

**Used to program the EUT to transmit at 5180, 5220, and 5240 MHz on a continuous basis

***Used to program the EUT only and then was removed from the test site during normal operation



5.2 Emissions Test Equipment

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CAL. CYCLE
POWER MEAUREMENTS, RADIATED AND CONDUCTED EMISSIONS TEST EQUIPMENT					
TDK TestLab	TDK RF Solutions, Inc.	9.22	700145	N/A	N/A
ETSI Burst System	ETS Lindgren	EMPower	1.0.2.11	N/A	N/A
Computer	Hewlett Packard	p6716f	MXX1030PX0	N/A	N/A
LCD Monitor	Hewlett Packard	52031a	3CQ046N3MG	N/A	N/A
EMI Receiver, 20 Hz – 26.5 GHz	Keysight Technologies	N9038A	MY5120150	August 23, 2019	1 Year
CombiLog Antenna	Com-Power	AC-220	61093	June 5, 2019	2 Year
System Controller	Sunol Sciences Corporation	SC110V	112213-1	N/A	N/A
Turntable	Sunol Sciences Corporation	2011VS	N/A	N/A	N/A
Antenna-Mast	Sunol Sciences Corporation	TWR95-4	112213-3	N/A	N/A
Power Sensor	ETS Lindgren	EMPower	00151018	March 19, 2019	2 Year
Turntable	Com-Power	TT-100	N/A	N/A	N/A
Antenna-Mast	Com-Power	AM-100	N/A	N/A	N/A
Horn Antenna	Com-Power	AH-118	071175	February 22, 2018	2 Year
Preamplifier	Com-Power	PA-118	181653	January 25, 2019	1 Year
Preamplifier	Com-Power	PA-840	711013	May 10, 2018	2 Year
Horn Antenna	Com-Power	AH-826	71957	N/A	N/A
Horn Antenna	Com-Power	AH-840	91003	N/A	N/A
Loop Antenna	Com-Power	AL-130R	121090	February 5, 2019	2 Year
LISN (EUT)	Com-Power	LI-215A	191951	August 7, 2019	1 Year
LISN (ACC)	Com-Power	LI-215A	191952	August 7, 2019	1 Year
Attenuator 10 dB	SureCall	SC-ATT-10	17100025	November 27, 2018	1 Year
EMI Receiver, 20 Hz – 40 GHz	Rohde & Schwarz	ESIB40	100219	September 25, 2019	1 Year

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6. TEST SITE DESCRIPTION

6.1 Test Facility Description

Please refer to section 2.1 and 7.1 of this report for emissions test location.

6.2 EUT Mounting, Bonding and Grounding

For frequencies 1 GHz and below: The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 0.8 meters above the ground plane.

For frequencies above 1 GHz: The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 1.5 meters above the ground plane.

The EUT was not grounded.

6.3 Measurement Uncertainty

Compatible Electronics' U_{lab} value is less than U_{cispr} , thus based on this – compliance is deemed to occur if no measured disturbance exceeds the disturbance limit

$$u_c(y) = \sqrt{\sum_i c_i^2 u^2(x_i)}$$

MEASUREMENT TYPE	UNCERTAINTY VALUES
Radiated Emissions 30 MHz to 1000 MHz	3.26 dB (Vertical) 3.19 dB (Horizontal)
Radiated Emissions 1 GHz to 40 GHz	3.67 dB (Both Vertical and Horizontal)
AC Line Conducted Emissions 0.15 MHz to 30 MHz	2.72 dB (Line and Neutral Leads)

7. CHARACTERISTICS OF THE TRANSMITTER

7.1 Channel Description and Frequencies

The EUT operates on four channels for 802.11a mode.

Channel 36 – 5180 MHz
Channel 40 – 5200 MHz
Channel 44 – 5220 MHz
Channel 48 – 5240 MHz

7.2 Antenna Gain

The gain of the BLE antenna is 2.0 dBi.

The gain of the WiFi antenna is 2.1 dBi.

8. TEST PROCEDURES

The following sections describe the test methods and the specifications for the tests. Test results are also included in this section.

8.1 RF Emissions

8.1.1 Conducted Emissions Test

The EMI Receiver was used as a measuring meter. An attenuator was used for the protection of the EMI Receiver input stage, and the offset was adjusted accordingly to read the actual data measured. The LISN output was measured using the EMI Receiver. The output of the second LISN was terminated by a 50-ohm termination. The effective measurement bandwidth used for this test was 9 kHz.

Please see section 6.2 of this report for mounting, bonding, and grounding of the EUT. The EUT was powered through the LISN, which was bonded to the ground plane. The LISN power was filtered and the filter was bonded to the ground plane. The EUT was set up with the minimum distances from any conductive surfaces as specified in ANSI C63.4. The excess power cord was wrapped in a figure eight pattern to form a bundle not exceeding 0.4 meters in length.

The conducted emissions from the EUT were maximized for operating mode as well as cable placement. The final data was collected under program control by computer software. The final qualification data is located in Appendix E.

The six highest reading are listed in Table 2.0.

Test Results:

The EUT complies with the **Class B** limits of CFR Title 47, Part 15, Subpart B; and the limits of CFR Title 47, Part 15, Subpart C, Section 15.207; and RSS-GEN for conducted emissions. Please see Appendix E for the data sheets.

8.1.2

Radiated Emissions (Spurious and Harmonics) Test

The EMI Receiver was used as the measuring meter. Below 1 GHz, a built-in, internal preamplifier was used to increase the sensitivity of the instrument. At frequencies above 1 GHz, external preamplifiers were used. The EMI Receiver was initially used with the Analyzer mode feature activated. In this mode, the EMI receiver can then record the actual frequency to be measured. This final reading is then taken accurately in the EMI Receiver mode, which takes into account the cable loss, amplifier gain and antenna factors, so that a true reading is compared to the true limit. A quasi-peak reading was taken only for those readings, which are marked accordingly on the data sheets.

The frequencies above 1 GHz were averaged by using the RMS detector function on the EMI Receiver.

The measurement bandwidths and transducers used for the radiated emissions test were:

FREQUENCY RANGE	EFFECTIVE MEASUREMENT BANDWIDTH	TRANSDUCER
9 kHz to 150 kHz	200 Hz	Loop Antenna
150 kHz to 30 MHz	9 kHz	Loop Antenna
30 MHz to 1 GHz	120 kHz	Combilog Antenna
1 GHz to 40 GHz	1 MHz	Horn Antenna

The EMI test chamber of Compatible Electronics, Inc. was used for radiated emissions testing. This test site is in full compliance with ANSI C63.4. Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The turntable supporting the EUT is remote controlled using a motor. The turntable permits EUT rotation of 360 degrees in order to maximize emissions. Also, the antenna mast allows height variation of the antenna from 1 meter to 4 meters. Data was collected in the worst case (highest emission) configuration of the EUT. At each reading, the EUT was rotated 360 degrees and the antenna height was varied from 1 to 4 meters (for E field radiated field strength). The gunsight method was used when measuring with the horn antenna in order to ensure accurate results.

The six highest reading are listed in Table 1.0.

Test Results:

The EUT complies with the **Class B** limits of CFR Title 47, Part 15, Subpart B; the limits of CFR Title 47, Part 15, Subpart C, Section 15.209; the limits of CFR Title 47, Part 15, Subpart E, Section 15.407 (b)(1); and RSS-GEN and RSS-247 for radiated emissions. Please see Appendix E for the data sheets.



8.1.3 RF Emissions Test Results

Table 1.0 RADIATED EMISSION RESULTS
Dock Controller, Model: ACC810

Frequency MHz	Corrected Reading* dBuV/m	Specification Limit dBuV	Delta (Cor. Reading – Spec. Limit) dB
210.00 (H) (5180 MHz)	34.06 (QP)	43.50	-9.44
150.00 (H) (5180 MHz)	31.66 (QP)	43.50	-11.84
273.80 (H) (5180 MHz)	32.45 (QP)	46.00	-13.55
285.10 (H) (5180 MHz)	32.35 (QP)	46.00	-13.65
5350 (H) (Z-Axis)	40.12 (Avg)	53.97	-13.85
5150 (H) (Z-Axis)	40.09 (Avg)	53.97	-13.88

Table 2.0 CONDUCTED EMISSION RESULTS
Dock Controller, Model: ACC810

Frequency MHz	Corrected Reading* dBuV	Specification Limit dBuV	Delta (Cor. Reading – Spec. Limit) dB
0.282 (WL) (5180 MHz)	39.11 (Avg)	50.47	-11.37
0.274 (BL) (5180 MHz)	38.33 (Avg)	50.57	-12.24
0.286 (WL) (5180 MHz)	38.18 (Avg)	50.52	-12.34
0.278 (BL) (5180 MHz)	38.19 (Avg)	50.55	-12.35
0.286 (BL) (5180 MHz)	37.84 (Avg)	50.64	-12.80
0.282 (BL) (5180 MHz)	37.19 (Avg)	50.61	-13.42

QP Quasi-Peak Reading
H Horizontal Polarization

Avg Average Reading
V Vertical Polarization

8.2 EBW Bandwidth

The EBW bandwidth was measured using the EMI Receiver. The bandwidth was measured using a direct connection from the EUT. The following steps were performed for measuring the EBW Bandwidth.

1. Set RBW = approximately 1% of the emission bandwidth
2. Set the VBW > RBW
3. Detector = Peak
4. Trace Mode = Max Hold
5. Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

Test Results:

This test was performed to determine setting for other tests, but does not have any compliance limits.

8.3 Maximum Conducted Output Power

The Maximum Conducted Output Power was measured using the Power Meter. The duty cycle of the fundamental was 100%. The average output power was measured using the average power measurement procedure described in section E3 of KDB 789033 v02r01. The Maximum Conducted Output Power was then taken.

Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart E section 15.407 (a)(1)(ii); and RSS-247.

8.4

Emissions in Non-Restricted Bands

The emissions in the non-restricted frequency bands measurements were performed using the procedure described in section 8.1.2 of this test report. The final qualification data sheets are located in Appendix E.

The spec limit in dBuV/m was determined by the following formula:
$$E \text{ [dBuV/m]} = \text{EIRP [dBm]} + 95.2$$

Where:

$E \text{ [dBuV/m]}$ is the spec limit in dBuV/m

EIRP [dBm] is the EIRP spec limit per FCC Title 47, Part 15, Subpart E, section 15.407 (b)(1).

Test Results:

The EUT complies with the relevant requirements of CFR Title 47, Part 15, Subpart E section 15.407 (b)(1); and RSS-247.

8.5

RF Band Edges

The RF band edges were taken at 5150 MHz when the EUT was on the low channel and 5350 MHz when the EUT was on the high channel using the EMI Receiver. The fundamental was transmitting at a 100% duty cycle. A preamplifier was used to boost the signal level, with the plots being taken at a 3 meter test distance. The radiated emissions test procedure as describe in section 8.1.2 of this test report was used to maximize the emission.

Test Results:

The EUT complies with the relevant requirements of CFR Title 47, Part 15, Subpart E section 15.407 (b)(1) and RSS-247. The RF power at the restricted bands closest to the band edges at 5150 MHz and 5350 MHz also meet the limits of section 15.209; and RSS-GEN. Please see the data sheets located in Appendix E.

8.6 Spectral Density Test

The spectrum density output was measured using the EMI Receiver. The spectral density output was measured using a direct connection from the RF out on the EUT into the input of the EMI Receiver. The following steps were performed for measuring the spectral density.

1. Set span to encompass the entire emission bandwidth (EBW)
2. Set RBW = 1 MHz
3. Set VBW \geq 3 MHz
4. Ensure that the number of measurement points in the sweep \geq 2 x span/RBW
5. Sweep time = auto couple
6. Detector = power averaging (rms)
7. Allow trace to fully stabilize
8. Use the peak marker function to determine the maximum amplitude level

Test Results:

The EUT complies with the relevant requirements of CFR Title 47, Part 15, Subpart E section 15.407 (a)(1)(ii); and RSS-247.

8.7 Variation of the Input Power

The variation of the input power test was performed using the EMI Receiver. The EUT input power was varied between 85% and 115% of the nominal rated supply voltage. The carrier frequency was monitored for any change in amplitude.

Test Results:

The carrier frequency and amplitude did not change.

8.8**99% Bandwidth**

The 99% Bandwidth was measured using an EMI Receiver and was taken after maximizing the worst case fundamental emission for both channels per section 7.1.

The following steps were performed for measuring the 99% bandwidth per RSS-GEN, Issue 5, clause 6.7.

1. Set RBW to 1% to 5% of the actual occupied bandwidth.
2. Set VBW to greater than 3 times the RBW.
3. Set the EMI Receiver to the Occupied Bandwidth Function set at 99%
4. Set the peak detector to max hold.
5. Set the sweep time to auto
6. Allow the trace to stabilize.

Please note that this was only used to determine the emission bandwidth and that there are no limits or pass/fail criteria for this test. Please see the data sheets located in Appendix E.

9. CONCLUSIONS

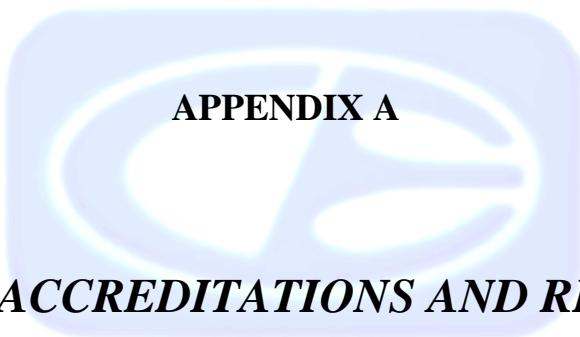
The Dock Controller, Model: ACC810, as tested, meets all of the specification limits defined in CFR Title 47, Part 15, Subpart B, and Subpart C, sections 15.205, 15.207, and 15.209; subpart E section 15.407; and RSS-GEN and RSS-247.



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APPENDIX A

LABORATORY ACCREDITATIONS AND RECOGNITIONS

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Lake Forest Division
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(949) 587-0400

LABORATORY ACCREDITATIONS AND RECOGNITIONS



NVLAP LAB CODE 200528-0

Quote from ISO-ILAC-IAF Communiqué on 17025:

"A laboratory's fulfilment of the requirements of ISO/IEC 17025:2005 means the laboratory meets both the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically valid test results and calibrations. The management system requirements in ISO/IEC 17025:2005 (Section 4) are written in language relevant to laboratory operations and meet the principles of ISO 9001:2008 Quality Management Systems — Requirements."

For US, Canada, Australia/New Zealand, Japan, Taiwan, Korea, and the European Union, Compatible Electronics is currently accredited by NVLAP to ISO/IEC 17025.

For the most up-to-date version of our scopes and certificates please visit <http://celectronics.com/quality/scope/>



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APPENDIX B***MODIFICATIONS TO THE EUT***

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MODIFICATIONS TO THE EUT

The modifications listed below were made to the EUT to pass FCC Subpart B and FCC 15.407; RSS-GEN and RSS-247 specifications.

All the rework described below was implemented during the test in a method that could be reproduced in all the units by the manufacturer.

The EUT was not modified during the testing.



**APPENDIX C*****ADDITIONAL MODELS COVERED
UNDER THIS REPORT***

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ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

Dock Controller
Model: ACC810
S/N: N/A

There are no additional models covered under this report.

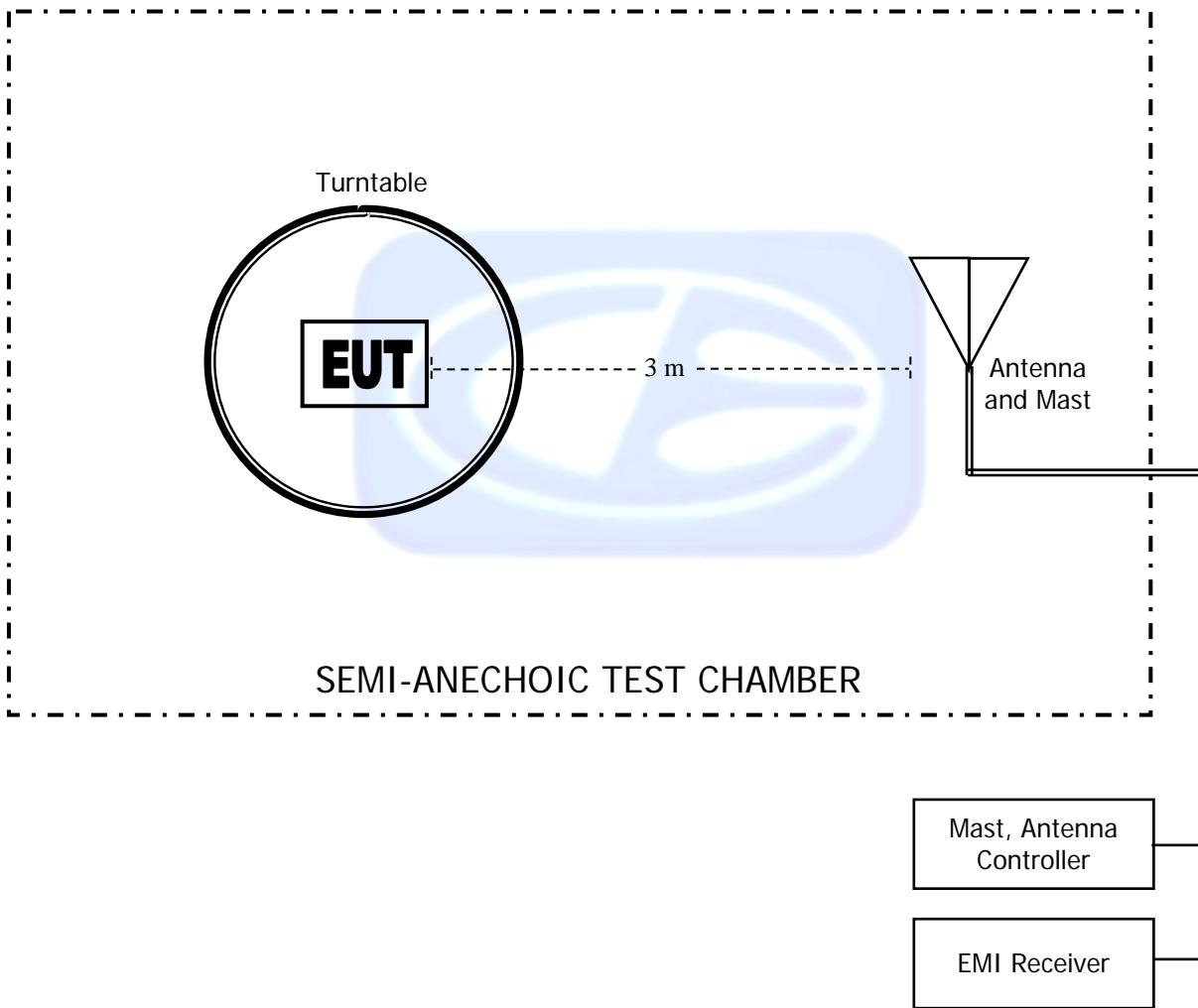


APPENDIX D***DIAGRAMS AND CHARTS***

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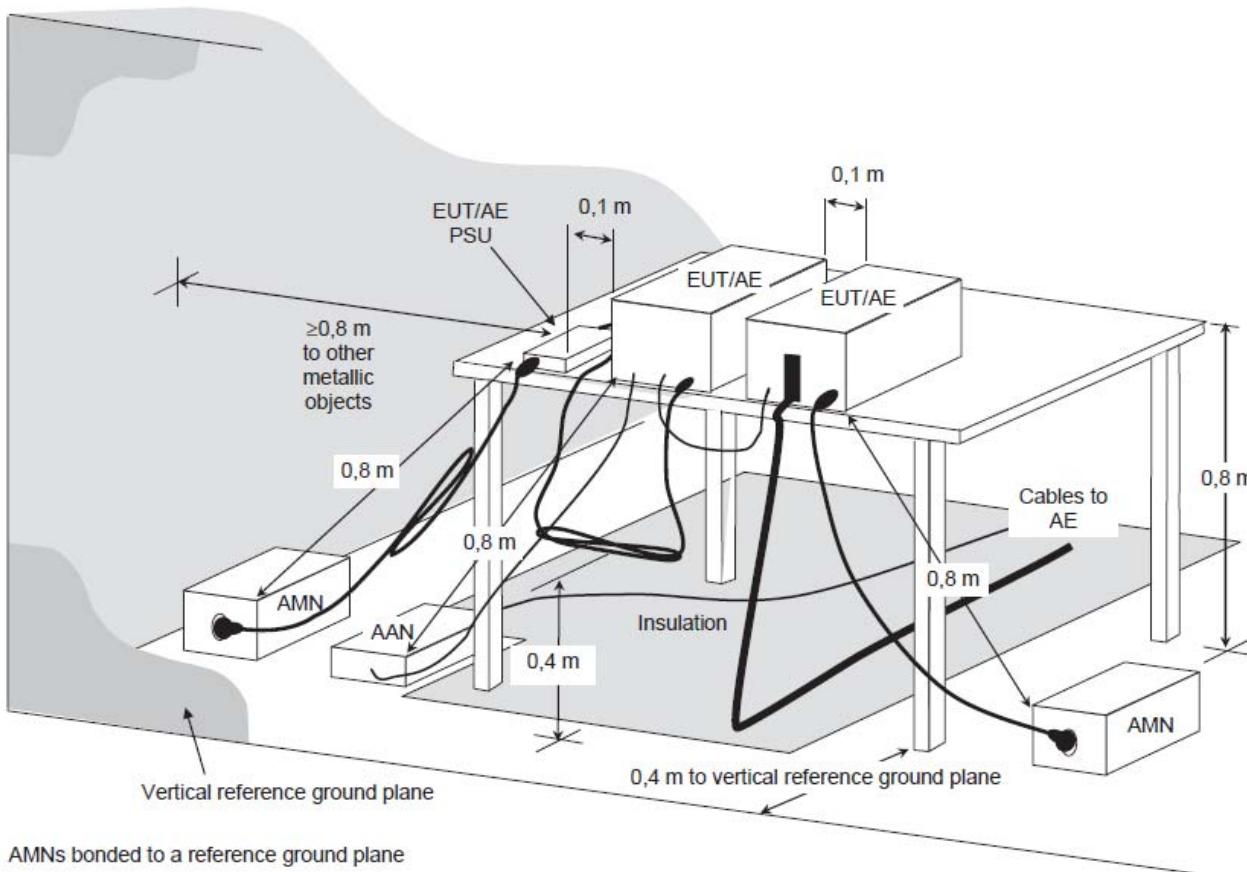
FIGURE 1: LAYOUT OF THE SEMI-ANECHOIC TEST CHAMBER

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FIGURE 2: CONDUCTED EMISSIONS TEST SETUP



COM-POWER AC-220

COMBILOG ANTENNA

S/N: 61093

CALIBRATION DATE: JUNE 5, 2019

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	22.10	200	15.30
35	20.90	250	16.80
40	20.10	300	19.00
45	19.40	350	19.60
50	18.40	400	21.70
60	15.10	450	21.60
70	12.00	500	22.20
80	11.60	550	22.70
90	13.50	600	24.20
100	14.70	650	24.40
120	15.90	700	24.50
125	15.90	750	25.40
140	14.80	800	26.30
150	15.50	850	26.70
160	19.80	900	27.50
175	15.20	950	27.80
180	14.90	1000	27.90

COM POWER AH-118**HORN ANTENNA****S/N: 071175****CALIBRATION DATE: FEBRUARY 22, 2018**

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	23.71	10.0	40.08
1.5	25.46	10.5	40.75
2.0	29.26	11.0	41.78
2.5	27.95	11.5	41.02
3.0	29.03	12.0	40.32
3.5	29.70	12.5	40.96
4.0	30.71	13.0	40.29
4.5	31.62	13.5	39.48
5.0	33.23	14.0	39.89
5.5	35.07	14.5	42.75
6.0	34.43	15.0	40.98
6.5	34.98	15.5	38.54
7.0	36.75	16.0	39.40
7.5	37.10	16.5	39.40
8.0	37.66	17.0	41.74
8.5	39.29	17.5	42.58
9.0	37.75	18.0	44.68
9.5	38.23		

COM-POWER PA-118

PREAMPLIFIER

S/N: 181653

CALIBRATION DATE: JANUARY 25, 2019

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	40.10	6.0	40.60
1.1	40.10	6.5	39.50
1.2	40.00	7.0	39.40
1.3	39.70	7.5	39.30
1.4	39.60	8.0	39.20
1.5	39.90	8.5	40.50
1.6	40.00	9.0	39.60
1.7	39.70	9.5	39.50
1.8	39.50	10.0	38.80
1.9	39.60	11.0	38.70
2.0	39.90	12.0	42.20
2.5	40.10	13.0	40.00
3.0	40.80	14.0	40.30
3.5	40.60	15.0	40.20
4.0	40.50	16.0	41.00
4.5	41.60	17.0	39.70
5.0	39.20	18.0	40.90
5.5	40.00		

COM-POWER AH-826**HORN ANTENNA****S/N: 71957**

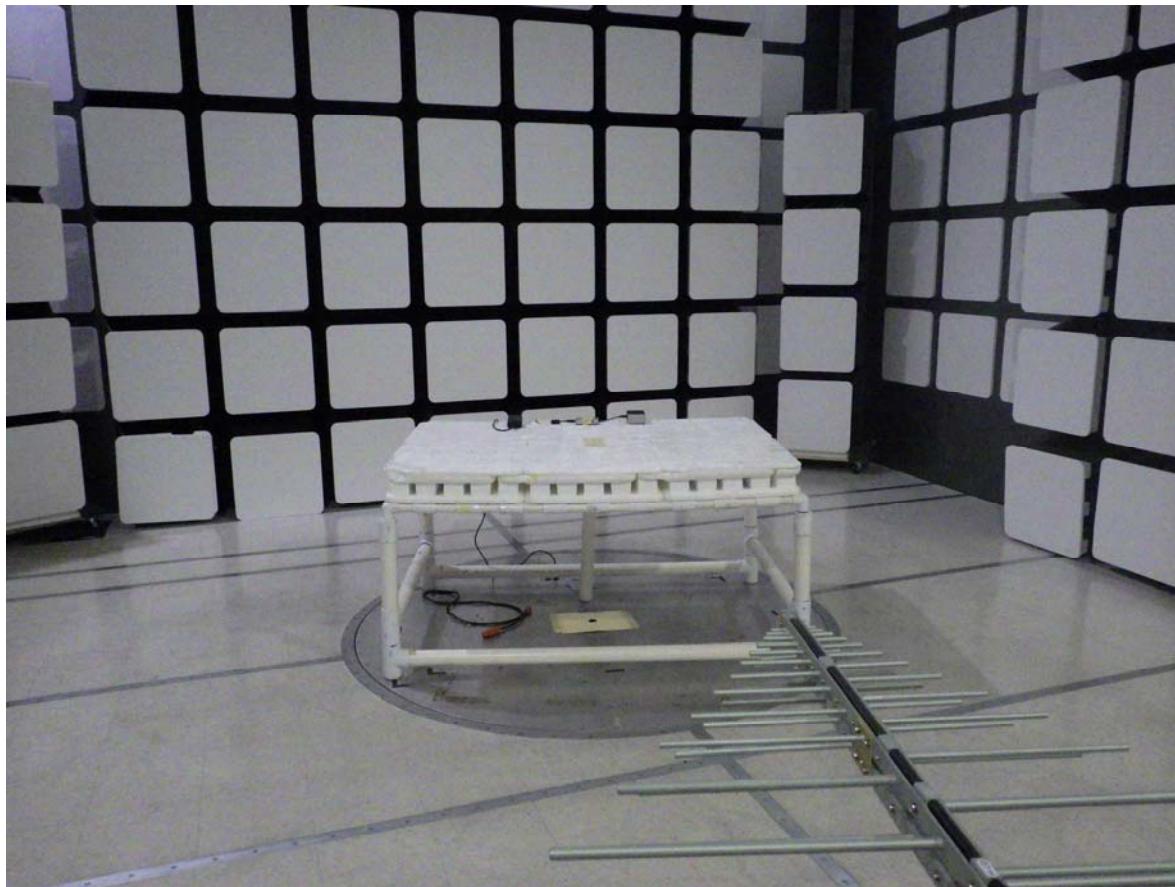
FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
18.0	33.5	22.5	35.5
18.5	33.5	23.0	35.9
19.0	34.0	23.5	35.7
19.5	34.0	24.0	35.6
20.0	34.3	24.5	36.0
20.5	34.9	25.0	36.2
21.0	34.7	25.5	36.1
21.5	35.0	26.0	36.2
22.0	35.0	26.5	35.7

COM-POWER PA-840**MICROWAVE PREAMPLIFIER****S/N: 711013****CALIBRATION DATE: MAY 10, 2018**

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
18.0	26.90	31.0	24.56
19.0	24.65	31.5	25.84
20.0	25.74	32.0	26.93
21.0	24.78	32.5	27.76
22.0	24.83	33.0	25.76
23.0	24.81	33.5	26.76
24.0	25.52	34.0	26.51
25.0	24.90	34.5	27.49
26.0	25.92	35.0	27.64
26.5	26.53	35.5	27.45
27.0	26.41	36.0	25.08
27.5	24.78	36.5	25.61
28.0	25.13	37.0	24.69
28.5	29.29	37.5	24.10
29.0	28.44	38.0	24.83
29.5	27.51	38.5	24.41
30.0	27.12	39.0	24.44
30.5	26.42	39.5	22.96
		40.0	22.29

COM-POWER AH840**HORN ANTENNA****S/N: 91003**

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
26.5	41.0	31.0	40.9
27.0	40.3	31.5	41.8
27.5	41.6	32.0	40.0
28.0	41.9	32.5	40.8
28.5	41.8	33.0	40.6
29.0	41.2	33.5	40.6
29.5	40.8	34.0	40.6
30.0	41.0	34.5	40.8
30.5	41.5	40.0	41.0

**FRONT VIEW**

**TARGUS
DOCK CONTROLLER
MODEL: ACC810**

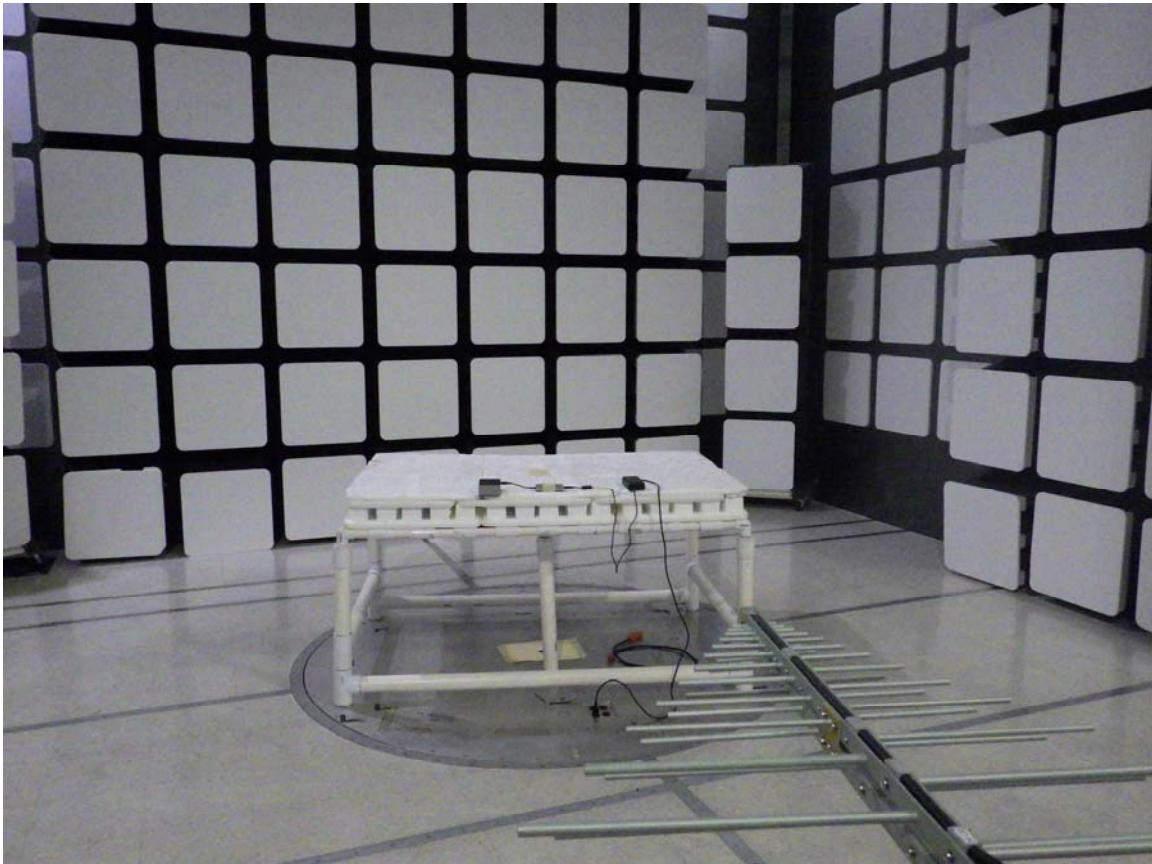
FCC SUBPART B, C, and E; RSS-GEN and RSS-247 – RADIATED EMISSIONS – 30 MHz to 1000 MHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

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**REAR VIEW**

TARGUS
DOCK CONTROLLER
MODEL: ACC810

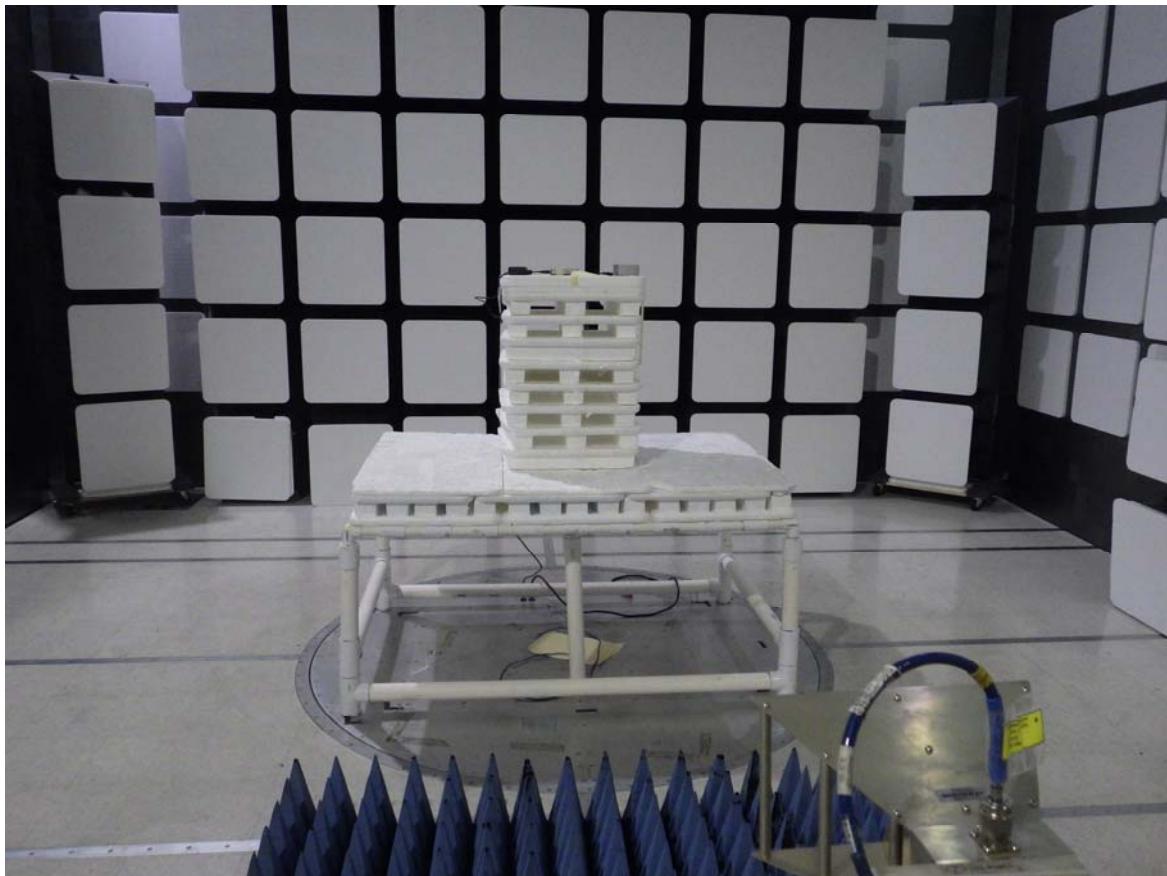
FCC SUBPART B, C, and E; RSS-GEN and RSS-247 – RADIATED EMISSIONS – 30 MHz to 1000 MHz

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**FRONT VIEW**

TARGUS
DOCK CONTROLLER
MODEL: ACC810

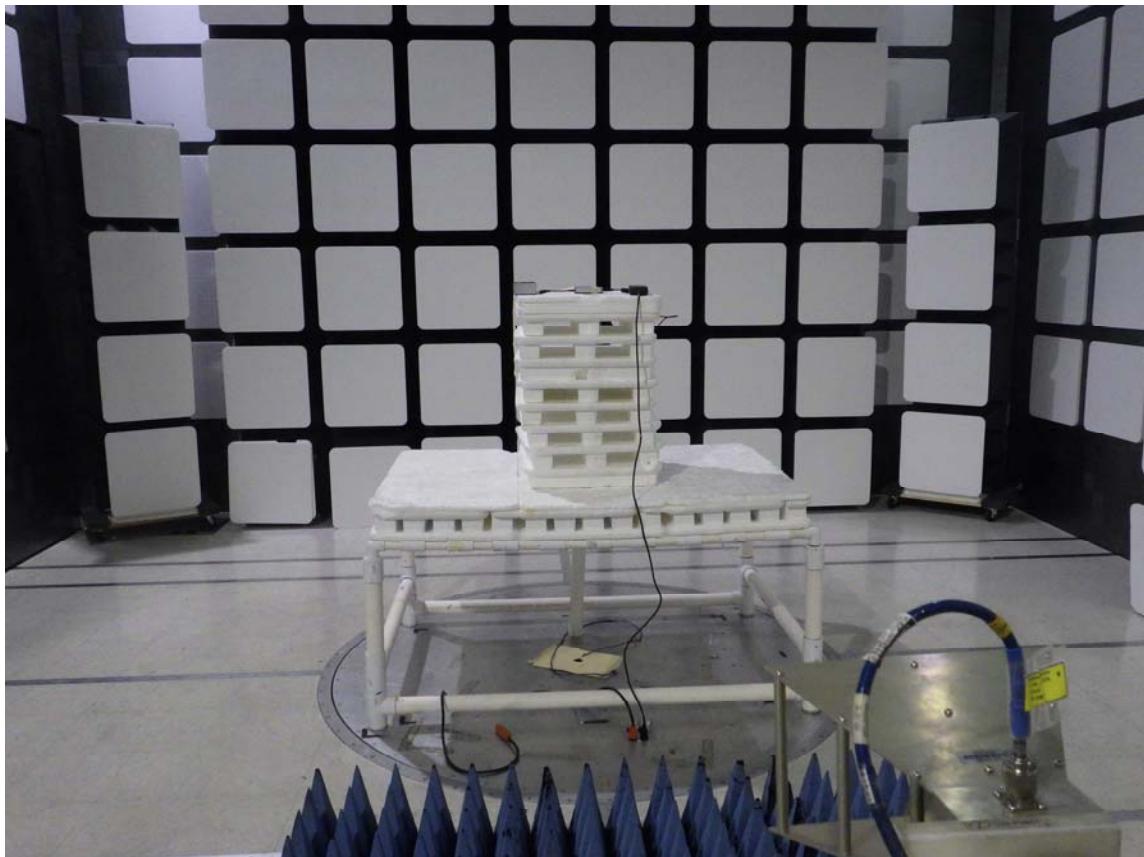
FCC SUBPART B, C, and E; RSS-GEN and RSS-247 – RADIATED EMISSIONS – ABOVE 1 GHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

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**REAR VIEW**

**TARGUS
DOCK CONTROLLER
MODEL: ACC810**

FCC SUBPART B, C, and E; RSS-GEN and RSS-247 – RADIATED EMISSIONS – ABOVE 1 GHz

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FOR MAXIMUM EMISSIONS**

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**FRONT VIEW**

**TARGUS
DOCK CONTROLLER
MODEL: ACC810**

FCC SUBPART B, C, and E; RSS-GEN and RSS-247 – CONDUCTED EMISSIONS

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

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**REAR VIEW**

TARGUS
DOCK CONTROLLER
MODEL: ACC810

FCC SUBPART B, C, and E; RSS-GEN and RSS-247 – CONDUCTED EMISSIONS

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

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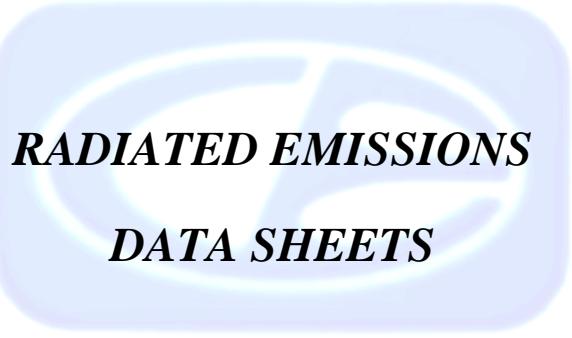
Lake Forest Division
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APPENDIX E***DATA SHEETS***

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RADIATED EMISSIONS
DATA SHEETS

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FCC 15.407

Targus
Dock Controller
Model: ACC810

Date: 11/12/2019
Lab: D
Tested By: Harvey Samaco

Harmonics - Low Channel

Transmit Mode - X-Axis

802.11 a Mode

FCC 15.407

Targus
Dock Controller
Model: ACC810

Date: 11/12/2019
Lab: D
Tested By: Harvey Samaco

Harmonics - Low Channel

Transmit Mode - Y-Axis 802.11 a Mode

FCC 15.407

Targus
Dock Controller
Model: ACC810

Date: 11/12/2019
Lab: D
Tested By: Harvey Samaco

Harmonics - Low Channel

Transmit Mode - Z-Axis 802.11 a Mode

FCC 15.407

Targus
Dock Controller
Model: ACC810

Date: 11/12/2019
Lab: D
Tested By: Harvey Samaco

Harmonics - Low Channel

Transmit Mode - X-Axis 802.11 a Mode

FCC 15.407

Targus
Dock Controller
Model: ACC810

Date: 11/12/2019
Lab: D
Tested By: Harvey Samaco

Harmonics - Low Channel

Transmit Mode - Y-Axis

FCC 15.407

Targus
Dock Controller
Model: ACC810

Date: 11/12/2019
Lab: D
Tested By: Harvey Samaco

Harmonics - Low Channel

Transmit Mode - Z-Axis 802.11 a Mode

FCC 15.407

Targus
Dock Controller
Model: ACC810

Date: 11/12/2019
Lab: D
Tested By: Harvey Samaco

Harmonics - Middle Channel

Transmit Mode - X-Axis

802.11 a Mode

FCC 15.407

Targus
Dock Controller
Model: ACC810

Date: 11/12/2019
Lab: D
Tested By: Harvey Samaco

Harmonics - Middle Channel

Transmit Mode - Y-Axis

802.11 a Mode

FCC 15.407

Targus
Dock Controller
Model: ACC810

Date: 11/12/2019
Lab: D
Tested By: Harvey Samaco

Harmonics - Middle Channel

Transmit Mode - Z-Axis 802.11 a Mode

FCC 15.407

Targus
Dock Controller
Model: ACC810

Date: 11/12/2019
Lab: D
Tested By: Harvey Samaco

Harmonics - Middle Channel

Transmit Mode - X-Axis

802.11 a Mode

FCC 15.407

Targus
Dock Controller
Model: ACC810

Date: 11/12/2019
Lab: D
Tested By: Harvey Samaco

Harmonics - Middle Channel

Transmit Mode - Y-Axis

FCC 15.407

Targus
Dock Controller
Model: ACC810

Date: 11/12/2019
Lab: D
Tested By: Harvey Samaco

Harmonics - Middle Channel

Transmit Mode - Z-Axis

802.11 a Mode

FCC 15.407

Targus
Dock Controller
Model: ACC810

Date: 11/12/2019
Lab: D
Tested By: Harvey Samaco

Harmonics - High Channel

Transmit Mode - X-Axis 802.11 a Mode

FCC 15.407

Targus
Dock Controller
Model: ACC810

Date: 11/12/2019
Lab: D
Tested By: Harvey Samaco

Harmonics - High Channel

Transmit Mode - Y-Axis

FCC 15.407

Targus
Dock Controller
Model: ACC810

Date: 11/12/2019
Lab: D
Tested By: Harvey Samaco

Harmonics - High Channel Transmit Mode - Z-Axis 802.11 a Mode

FCC 15.407

Targus
Dock Controller
Model: ACC810

Date: 11/12/2019
Lab: D
Tested By: Harvey Samaco

Harmonics - High Channel

Transmit Mode - X-Axis 802.11 a Mode

FCC 15.407

Targus
Dock Controller
Model: ACC810

Date: 11/12/2019
Lab: D
Tested By: Harvey Samaco

Harmonics - High Channel

Transmit Mode - Y-Axis

FCC 15.407

Targus
Dock Controller
Model: ACC810

Date: 11/12/2019
Lab: D
Tested By: Harvey Samaco

Harmonics - High Channel

Transmit Mode - Z-Axis 802.11 a Mode

FCC 15.407

Targus
Dock Controller
Model: ACC810

Date: 11/12/2019

Lab: D

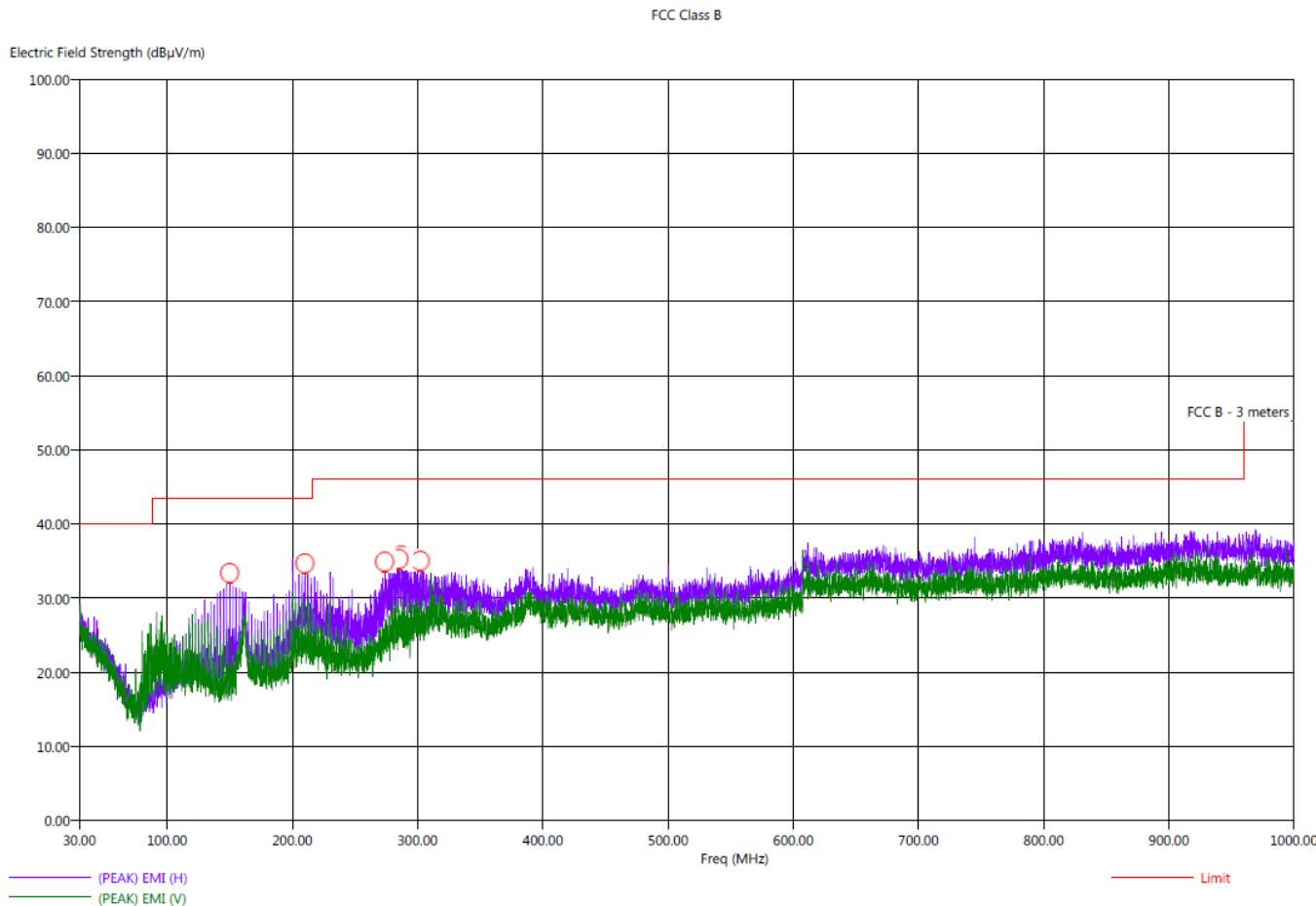
Tested By: Harvey Samaco

Non Harmonic Emissions from the Tx and Digital Portion - 9 kHz to 30 MHz

Non Harmonic Emissions from the Tx and Digital Portion - 1 GHz to 40 GHz

Title: Pre-Scan - FCC Class B
 File: 2 - Agilent - Pre-Scan - X-Axis - 802.11a - FCC Class B - 30 MHz to 1000 MHz.set
 Operator: Harvey Samaco
 EUT Type: Dock Controller
 EUT Condition: The EUT is continuously transmitting at 5180 MHz in 802.11a and BLE
 Company: Targus
 Model: ACC810
 S/N: N/A

10/10/2019 2:29:06 PM
 Sequence: Preliminary Scan



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Title: Radiated Final - FCC Class B
 File: 3 - Agilent - Final Scan - 802.11a - FCC Class B - 30 MHz to 1000 MHz.set
 Operator: Harvey Samaco
 EUT Type: Docking Station
 EUT Condition: The EUT is continuously transmitting at 5180 MHz in 802.11a and BLE
 Company: Targus
 Model: ACC810
 S/N: N/A

10/10/2019 2:53:13 PM
 Sequence: Final Measurements

FCC Class B

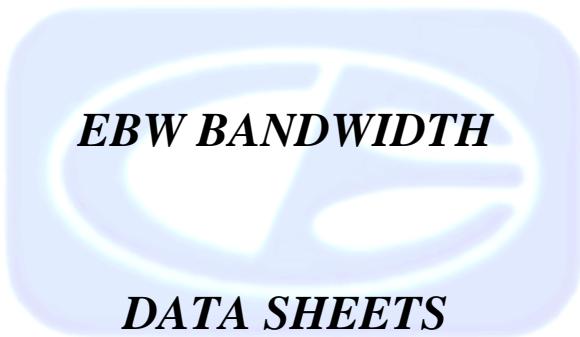
Freq (MHz)	Pol	(PEAK) EMI (dB μ V/m)	(QP) EMI (dB μ V/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dB μ V/m)	Transducer (dB)	Cable (dB)	Ttbl Aql (deg)	Twr Ht (cm)
150.00	H	34.64	31.66	-8.86	-11.84	43.50	15.50	1.30	10.50	206.37
210.00	H	36.51	34.06	-6.99	-9.44	43.50	15.20	1.54	360.00	127.14
273.80	H	35.81	32.45	-10.19	-13.55	46.00	18.50	1.70	23.25	111.20
285.10	H	36.03	32.35	-9.97	-13.65	46.00	18.91	1.70	60.50	126.97
287.10	H	36.67	32.06	-9.33	-13.94	46.00	18.67	1.70	58.25	111.32
302.10	H	35.77	31.91	-10.23	-14.09	46.00	19.19	1.71	359.25	111.32



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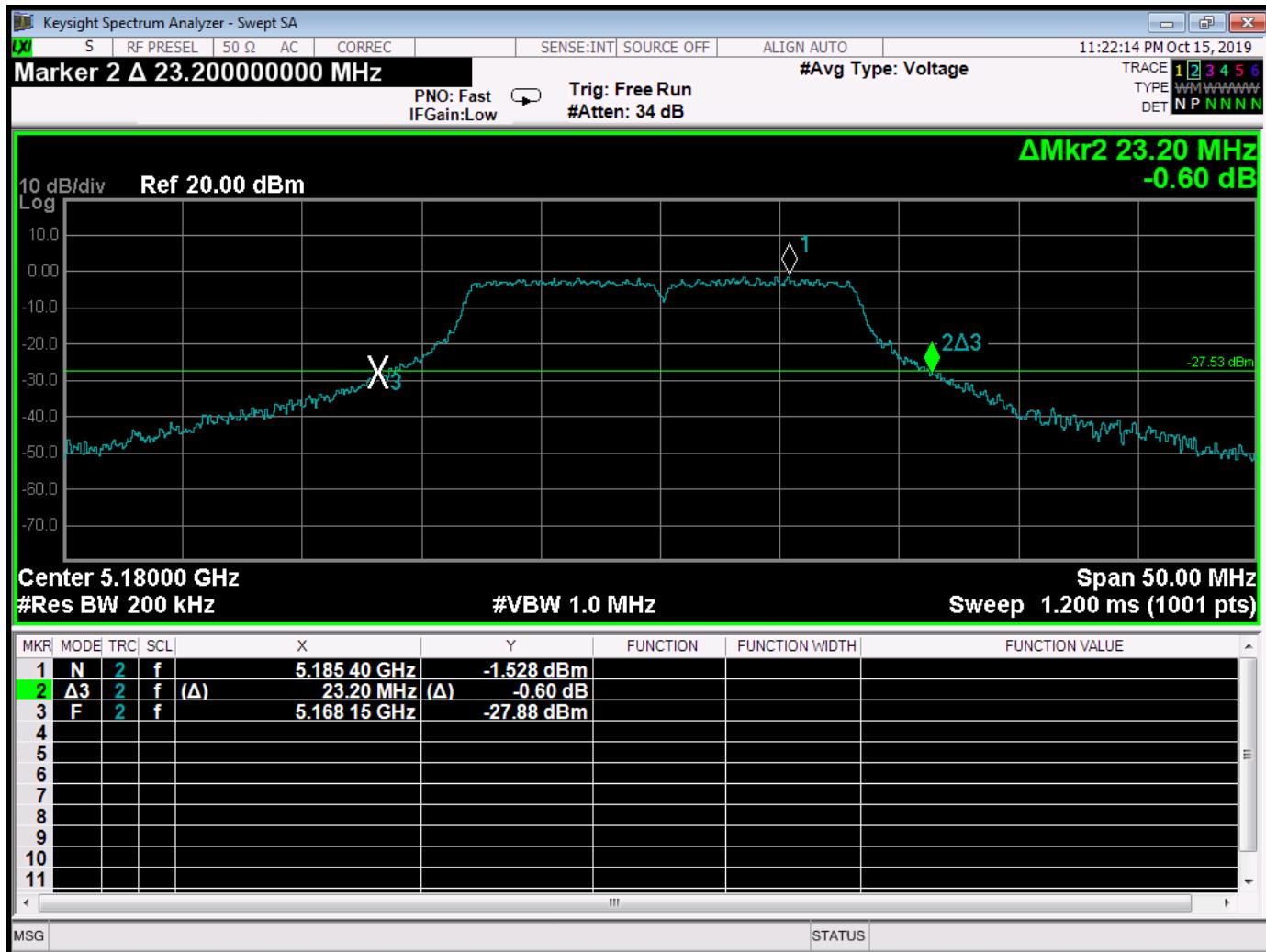
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 **EBW BANDWIDTH****DATA SHEETS**

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EBW Bandwidth – 5180 MHz

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(949) 587-0400



EBW Bandwidth – 5220 MHz

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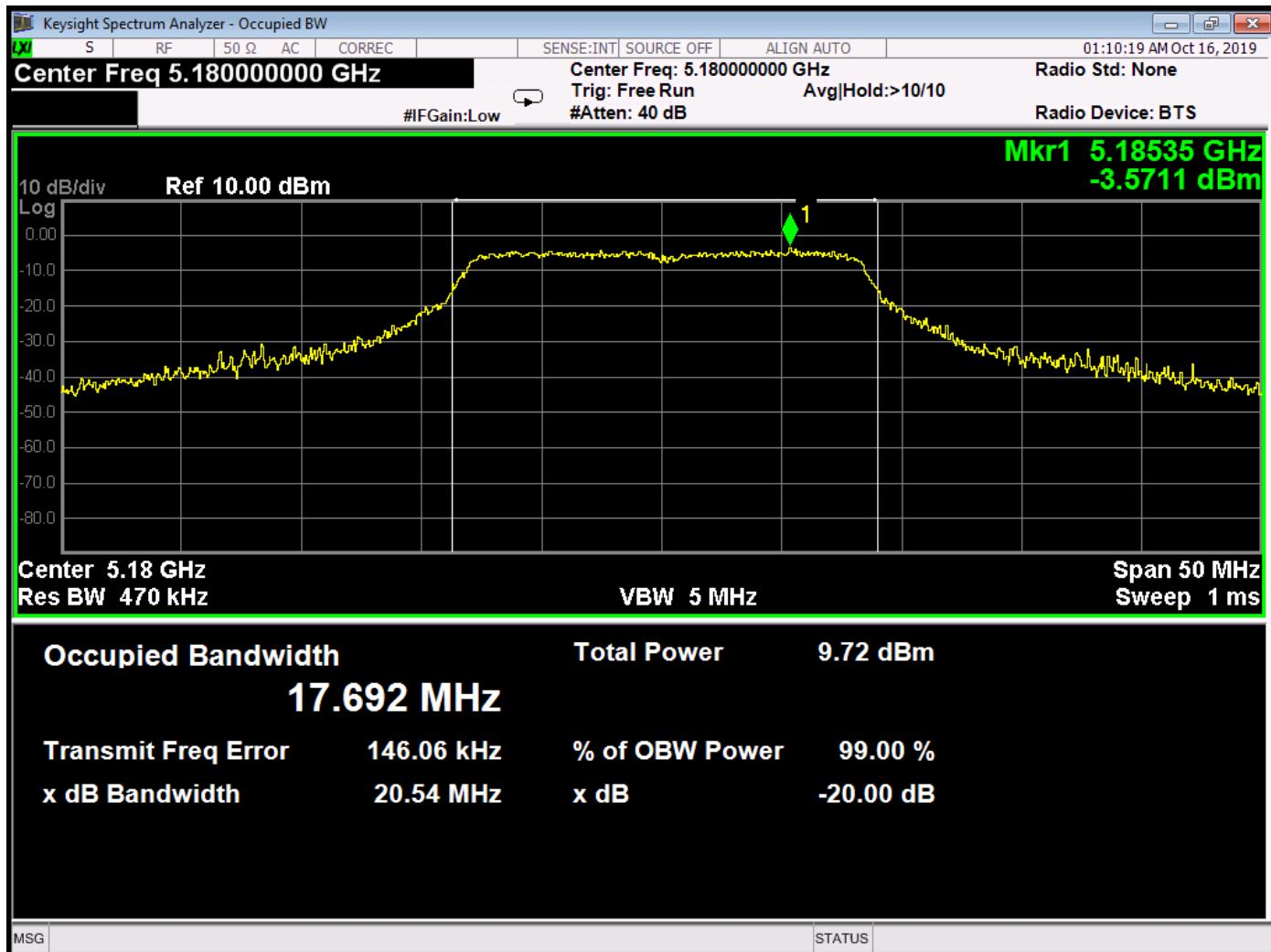
EBW Bandwidth – 5240 MHz

99% BANDWIDTH**DATA SHEETS**

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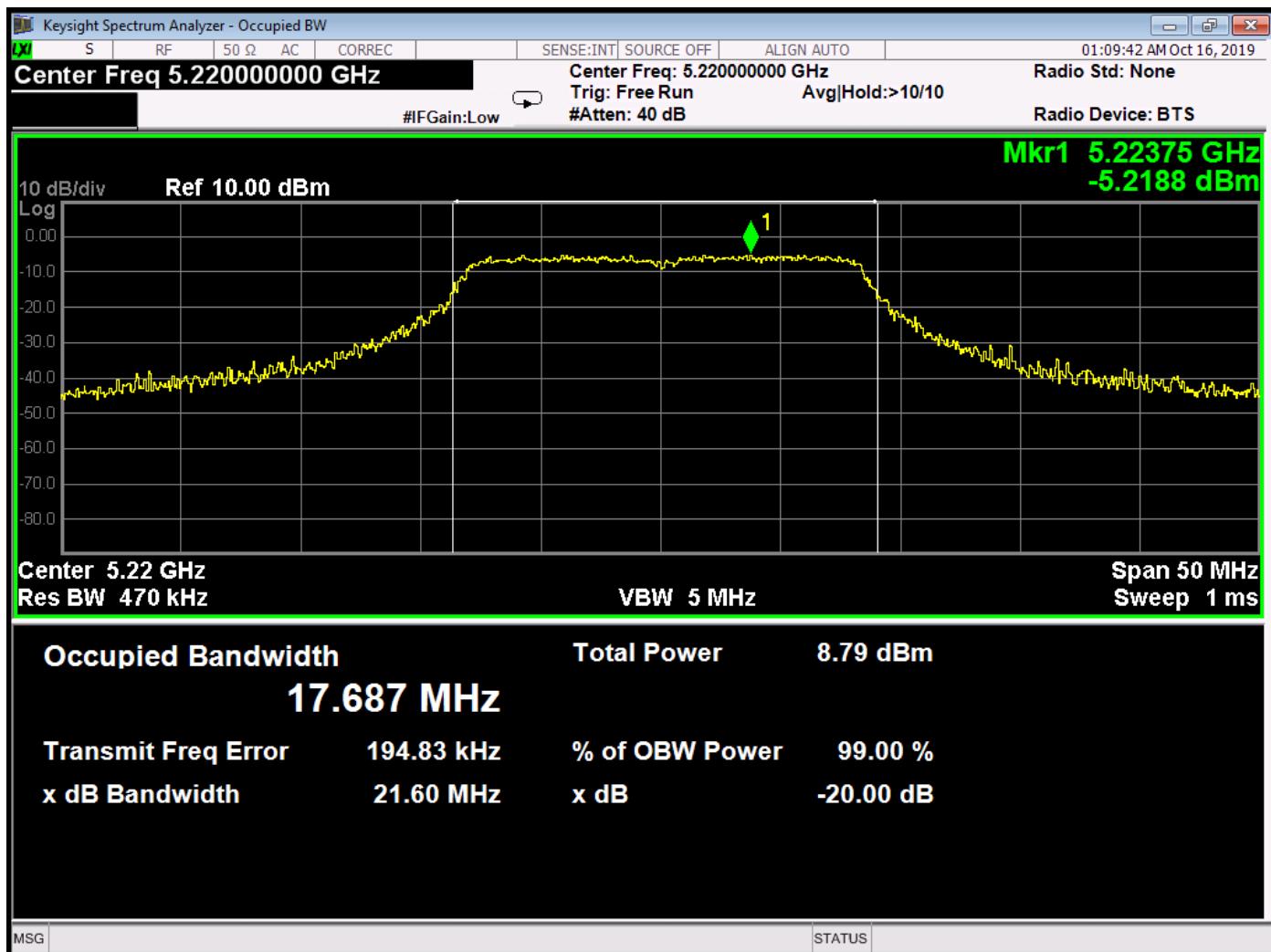


99% Bandwidth – 5180 MHz

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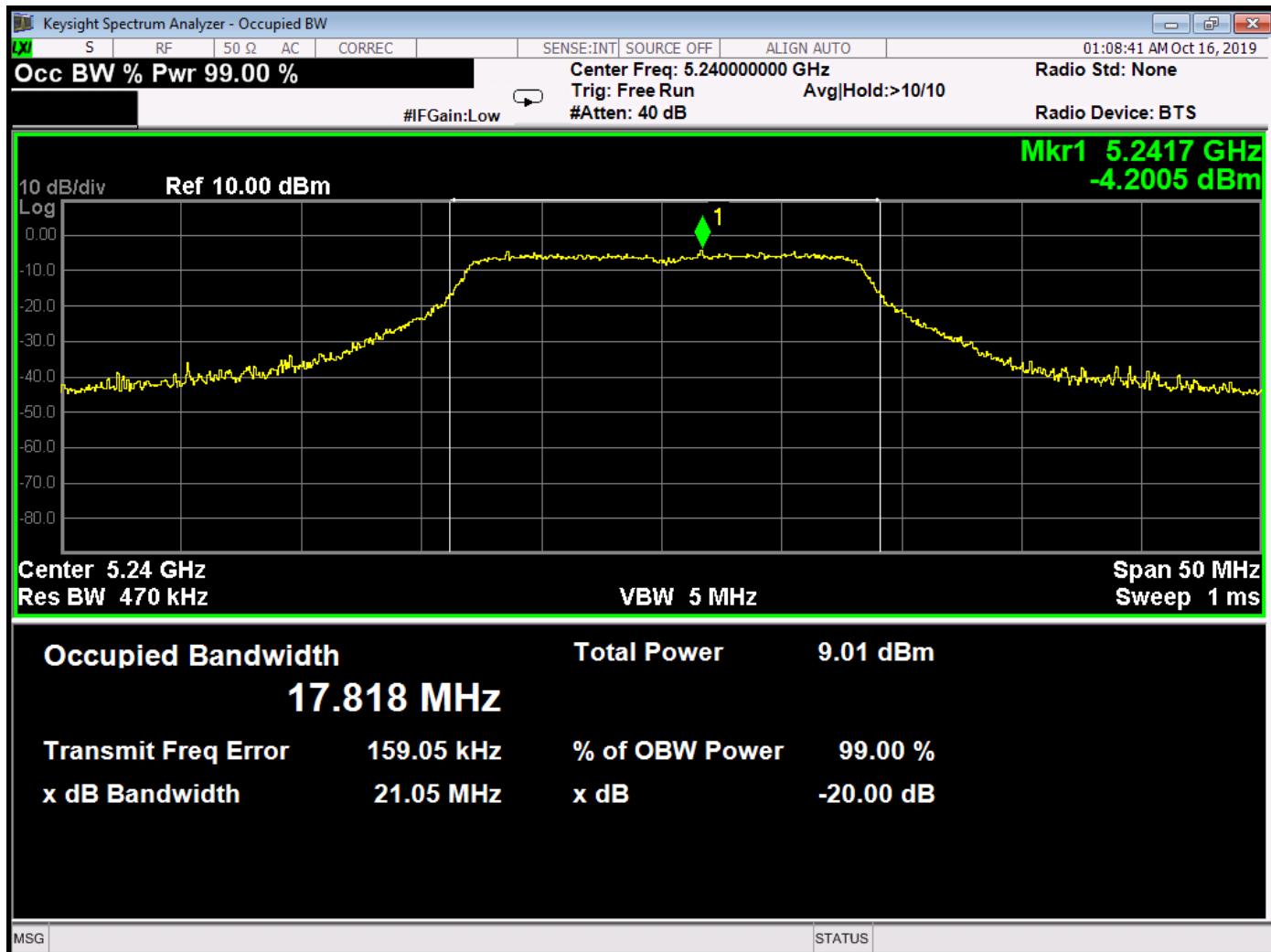


99% Bandwidth – 5220 MHz

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99% Bandwidth – 5240 MHz

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 Brea, CA 92823
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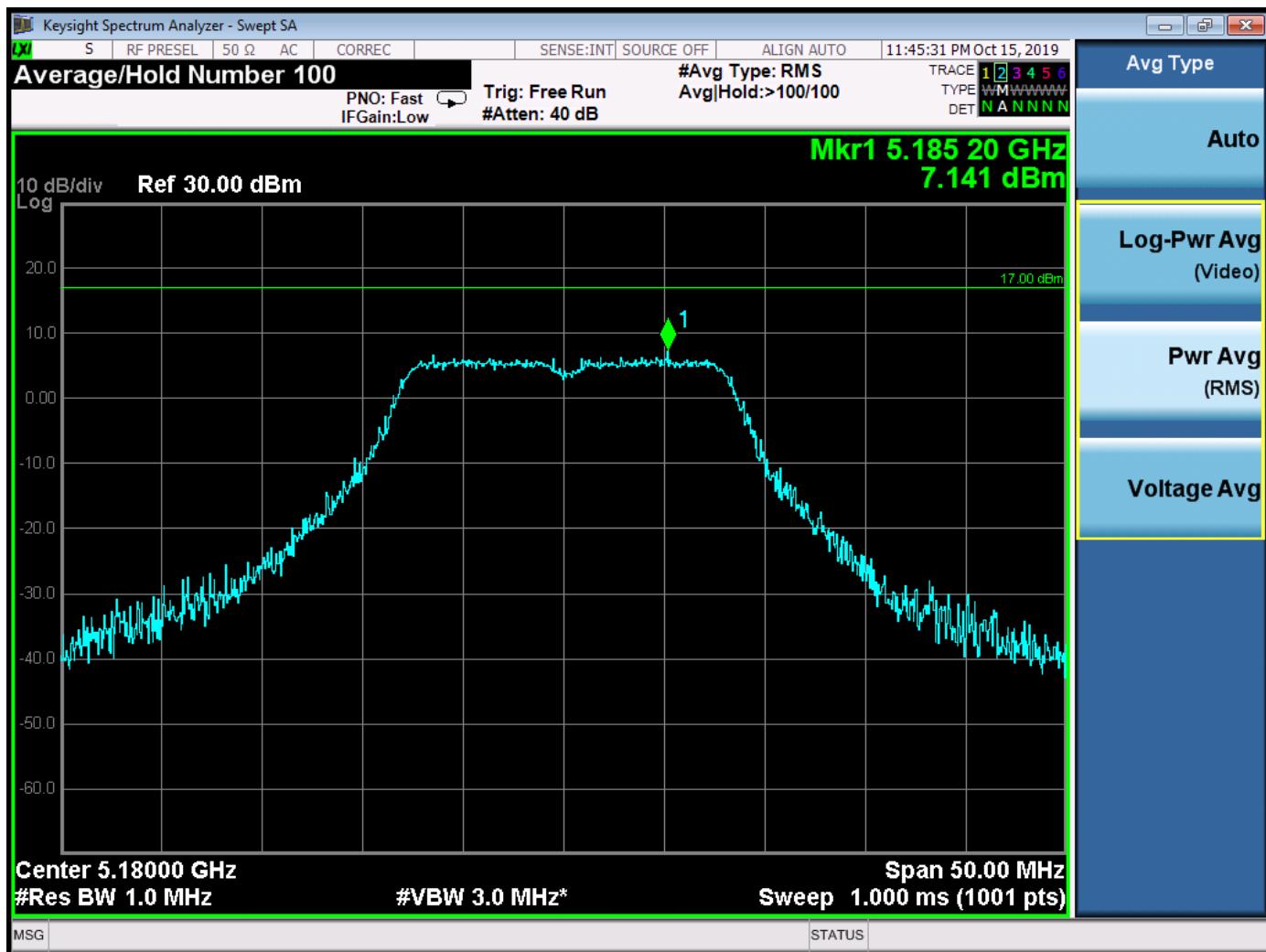
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 Lake Forest, CA 92630
 (949) 587-0400

SPECTRAL DENSITY OUTPUT***DATA SHEETS***

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

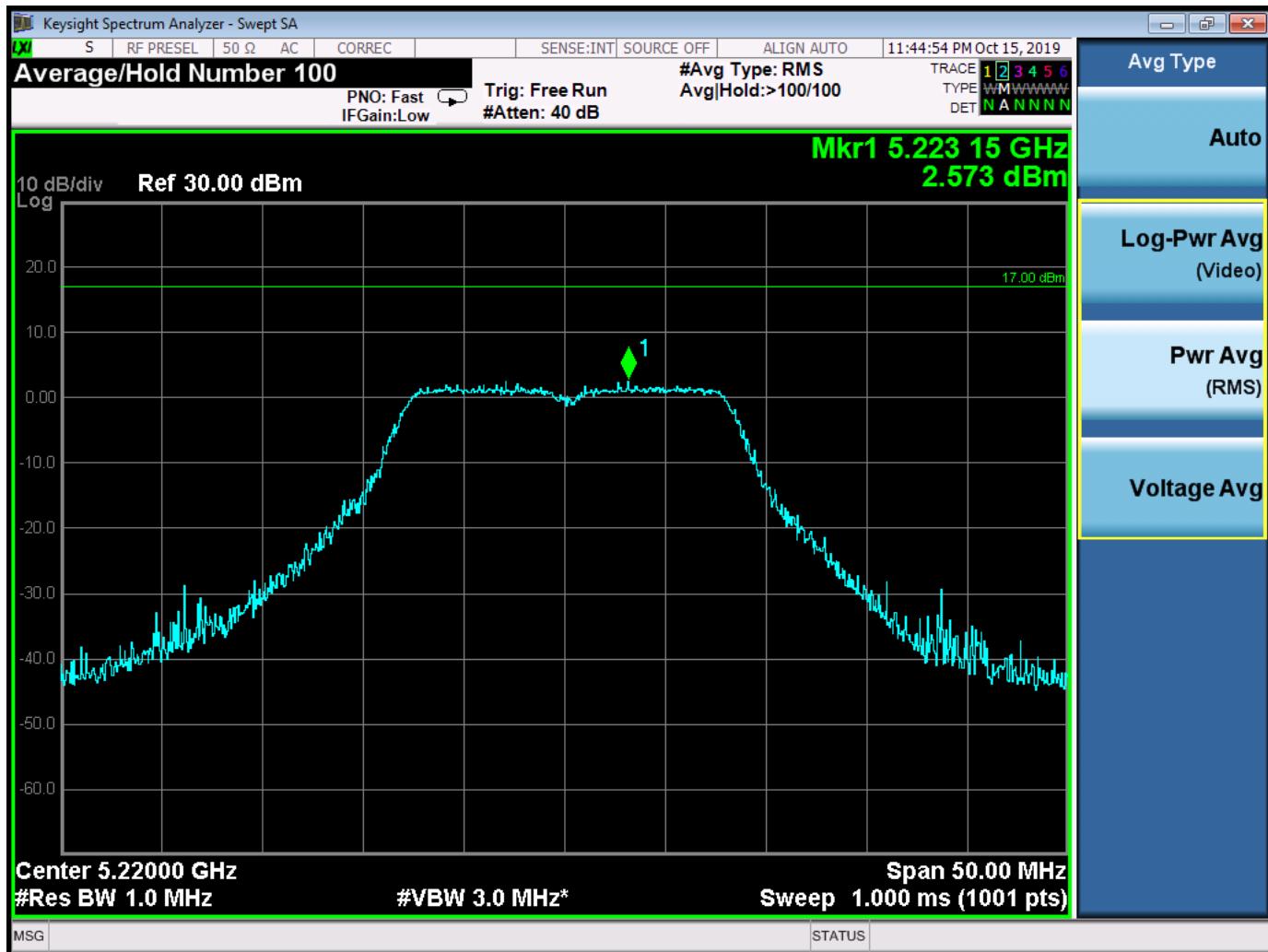


Spectral Density – 5180 MHz

Brea Division
114 Olinda Drive
Brea, CA 92823
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Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

Lake Forest Division
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Lake Forest, CA 92630
(949) 587-0400

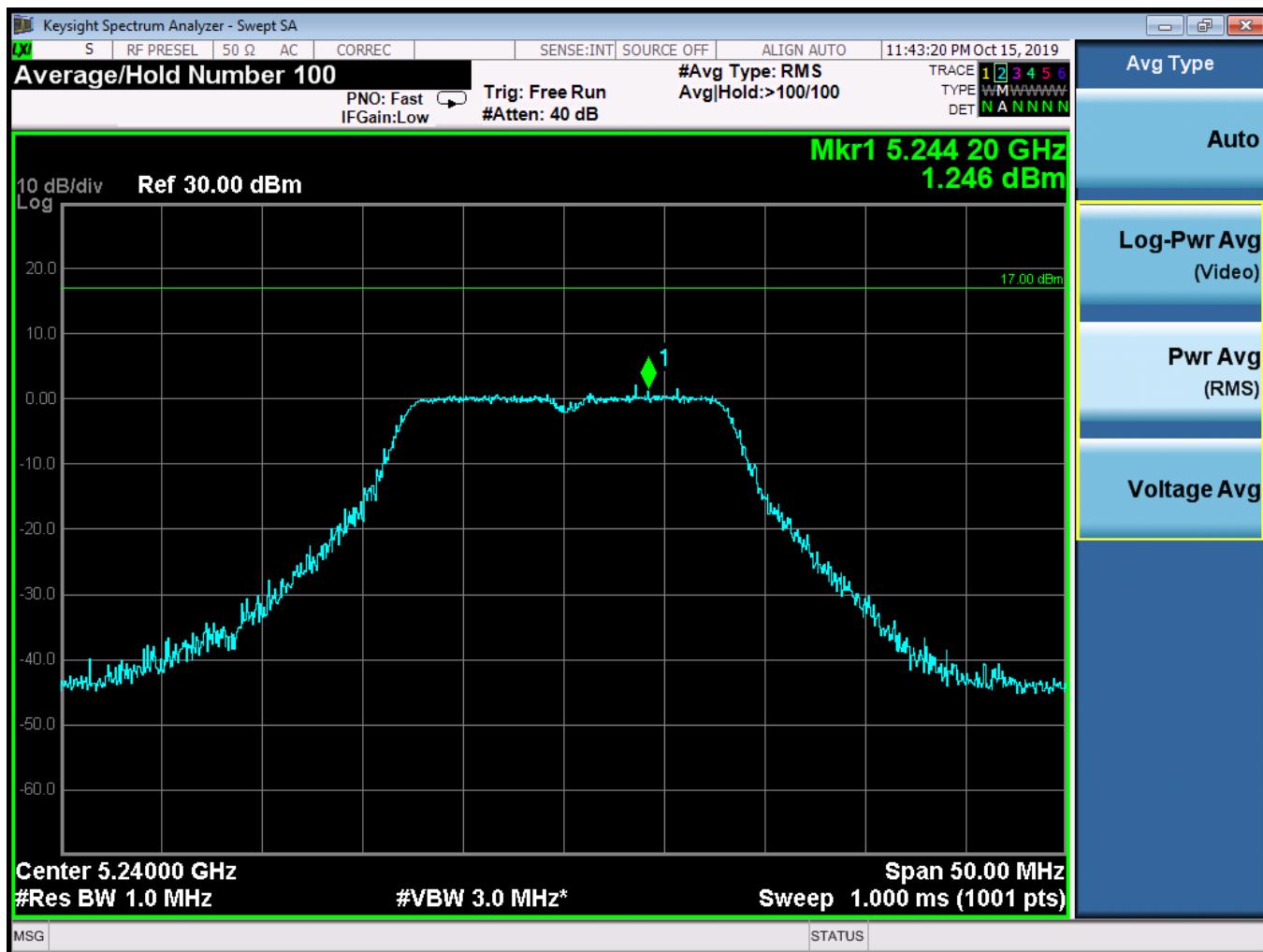


Spectral Density – 5220 MHz

Brea Division
 114 Olinda Drive
 Brea, CA 92823
 (714) 579-0500

Newbury Park Division
 1050 Lawrence Drive
 Newbury Park, CA 91320
 (805) 480-4044

Lake Forest Division
 20621 Pascal Way
 Lake Forest, CA 92630
 (949) 587-0400

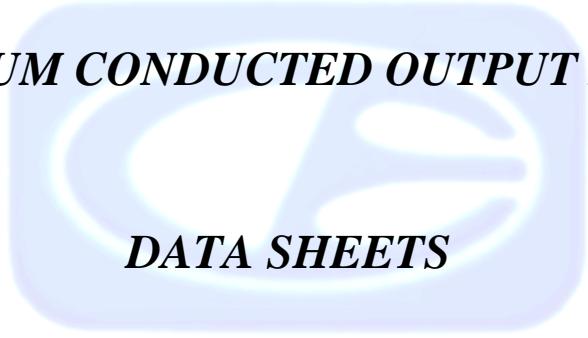


Spectral Density – 5240 MHz

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

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(805) 480-4044

Lake Forest Division
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(949) 587-0400

MAXIMUM CONDUCTED OUTPUT POWER ***DATA SHEETS***

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

TARGUS**DOCK CONTROLLER****MODEL: COPERNICUS****MAXIMUM CONDUCTED POWER OUTPUT****FCC SUBPART E LIMITS**

FREQUENCY (MHz)	LEVEL (dBm)	Limit*(dBm)	Margin (dB)
5180	11.80	30.00	-18.20
5220	10.34	30.00	-19.66
5240	8.95	30.00	-21.05

RSS-247 LIMITS

FREQUENCY (MHz)	LEVEL (dBm)	Limit*(dBm)	Margin (dB)
5180	11.80	23.97	-12.17
5220	10.34	23.97	-13.63
5240	8.95	23.97	-15.02

BAND EDGES***DATA SHEETS***

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(714) 579-0500

Newbury Park Division
1050 Lawrence Drive
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Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

FCC 15.407

Targus
Dock Controller
Model: ACC810

Date: 10/26/2019
Lab: D
Tested By: Harvey Samaco

Band Edges - 802.11 a Mode
Lower Band Edge

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
5180.00	100.78	H	--	--	Peak	175.00	110.00	Fundamental
5180.00	92.36	H	--	--	Avg	175.00	110.00	Z-Axis Worst Case
5150.00	51.76	H	73.97	-22.21	Peak	175.00	110.00	Band Edge
5150.00	40.09	H	53.97	-13.88	Avg	175.00	110.00	Z-Axis Worst Case
5180.00	98.29	V	--	--	Peak	288.00	235.00	Fundamental
5180.00	90.92	V	--	--	Avg	288.00	235.00	Z-Axis Worst Case
5150.00	49.08	V	73.97	-24.89	Peak	288.00	235.00	Band Edge
5150.00	40.07	V	53.97	-13.90	Avg	288.00	235.00	Z-Axis Worst Case

FCC 15.407

Targus
Dock Controller
Model: ACC810

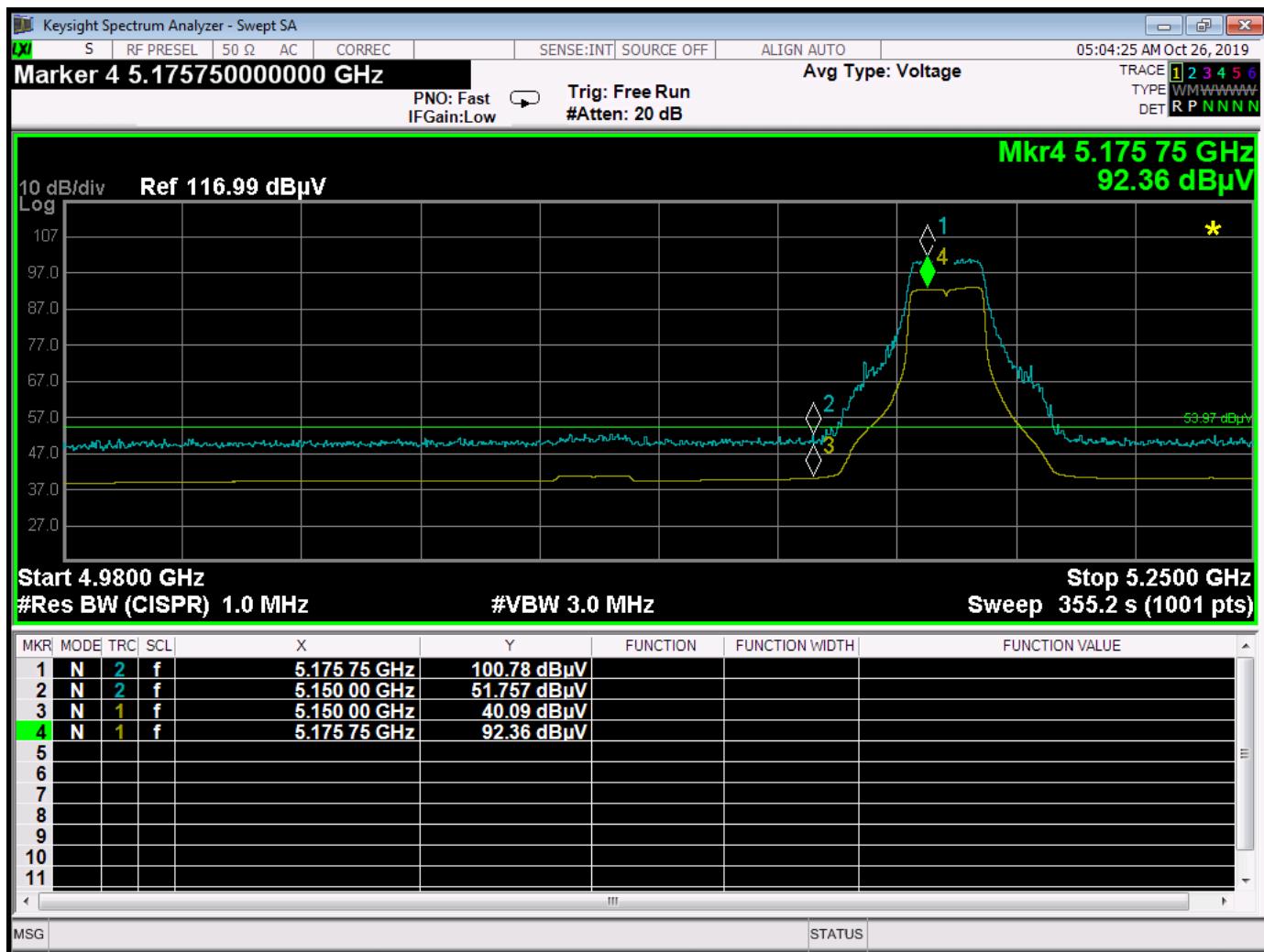
Date: 10/26/2019

Lab: D

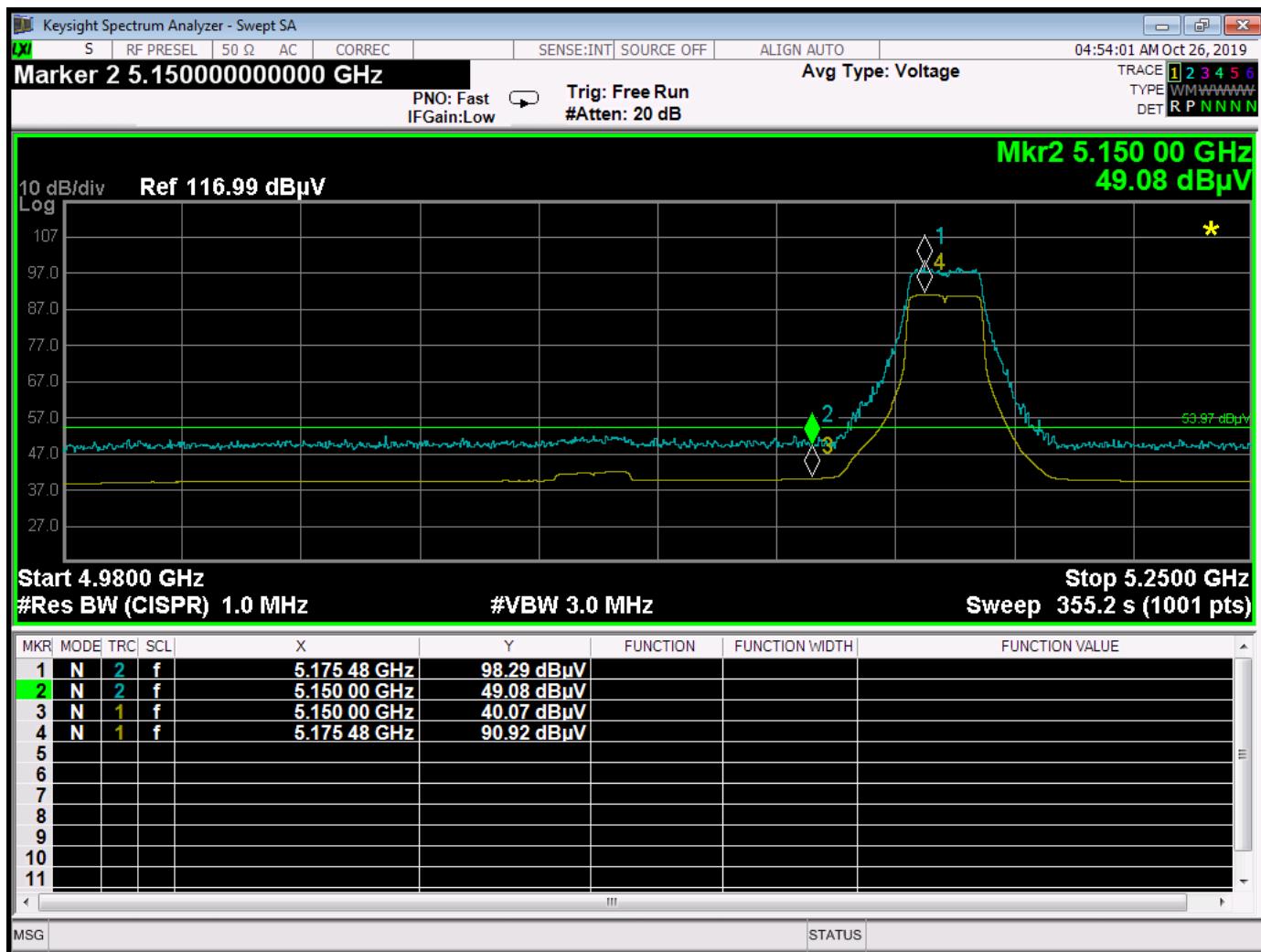
Tested By: Harvey Samaco

Band Edges - 802.11 a Mode
Upper Band Edge

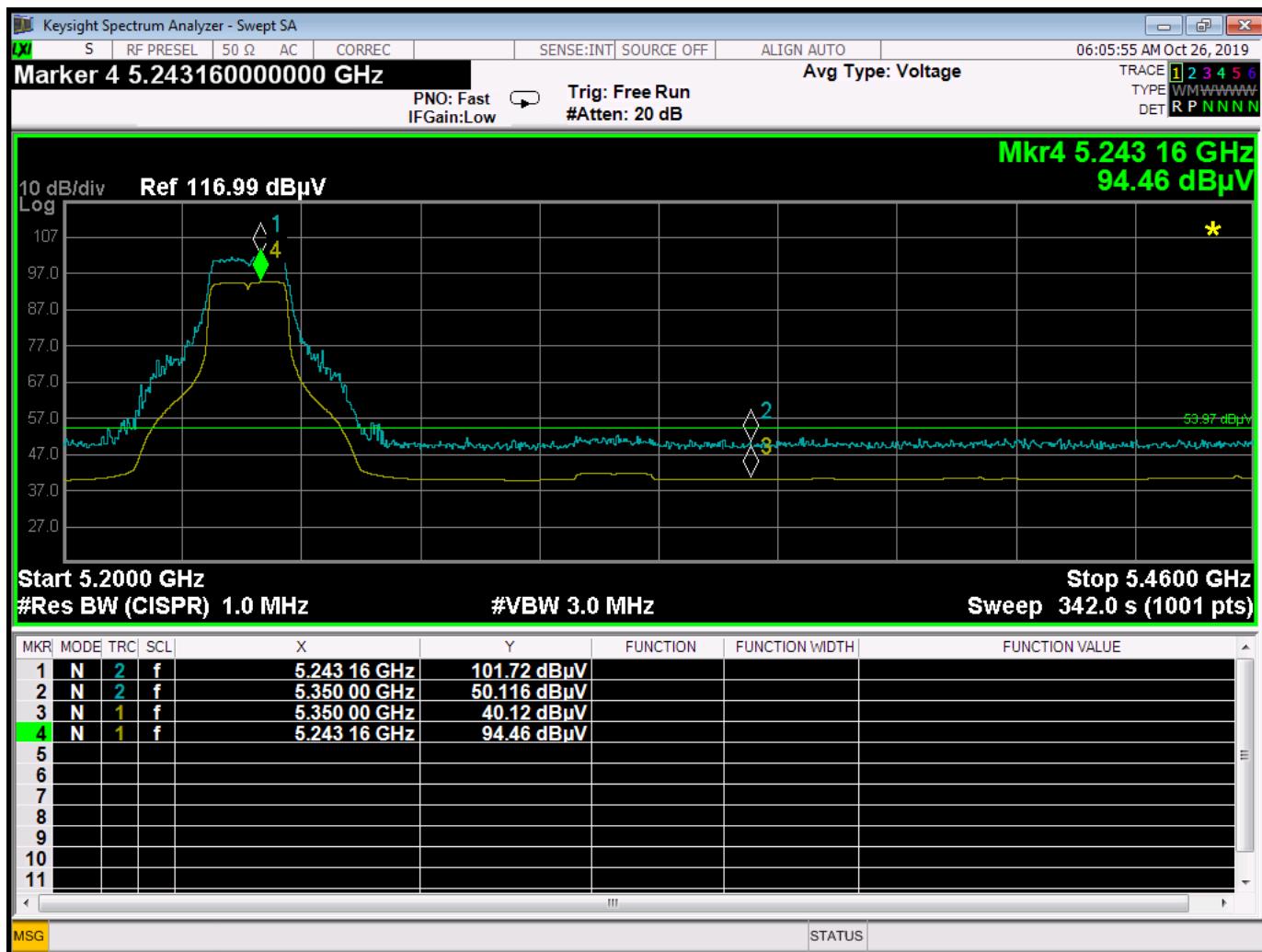
Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
5240.00	101.72	H	--	--	Peak	342.50	236.50	Fundamental
5240.00	94.46	H	--	--	Avg	342.50	236.50	Z-Axis Worst Case
5350.00	50.12	H	73.97	-23.85	Peak	342.50	236.50	Band Edge
5350.00	40.12	H	53.97	-13.85	Avg	342.50	236.50	Z-Axis Worst Case
5240.00	101.32	V	--	--	Peak	298.00	127.00	Fundamental
5240.00	94.09	V	--	--	Avg	298.00	127.00	Z-Axis Worst Case
5350.00	50.14	V	73.97	-23.83	Peak	298.00	127.00	Band Edge
5350.00	40.03	V	53.97	-13.94	Avg	298.00	127.00	Z-Axis Worst Case



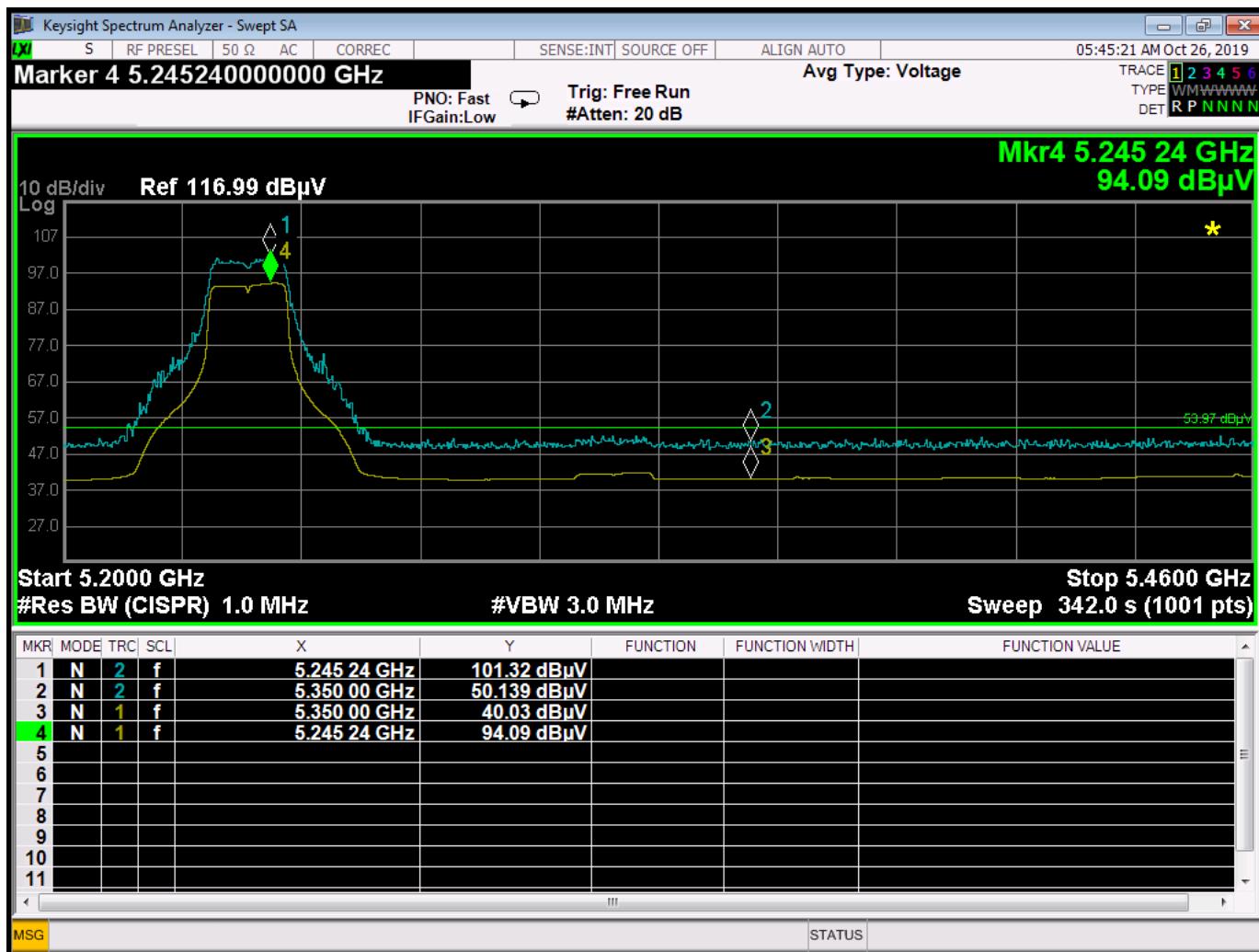
Band Edge – Low Channel – Horizontal Polarization



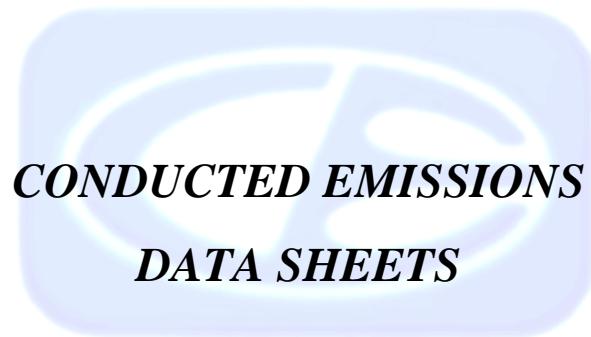
Band Edge – Low Channel – Vertical Polarization



Band Edge – High Channel – Horizontal Polarization



Band Edge – High Channel – Vertical Polarization



CONDUCTED EMISSIONS
DATA SHEETS

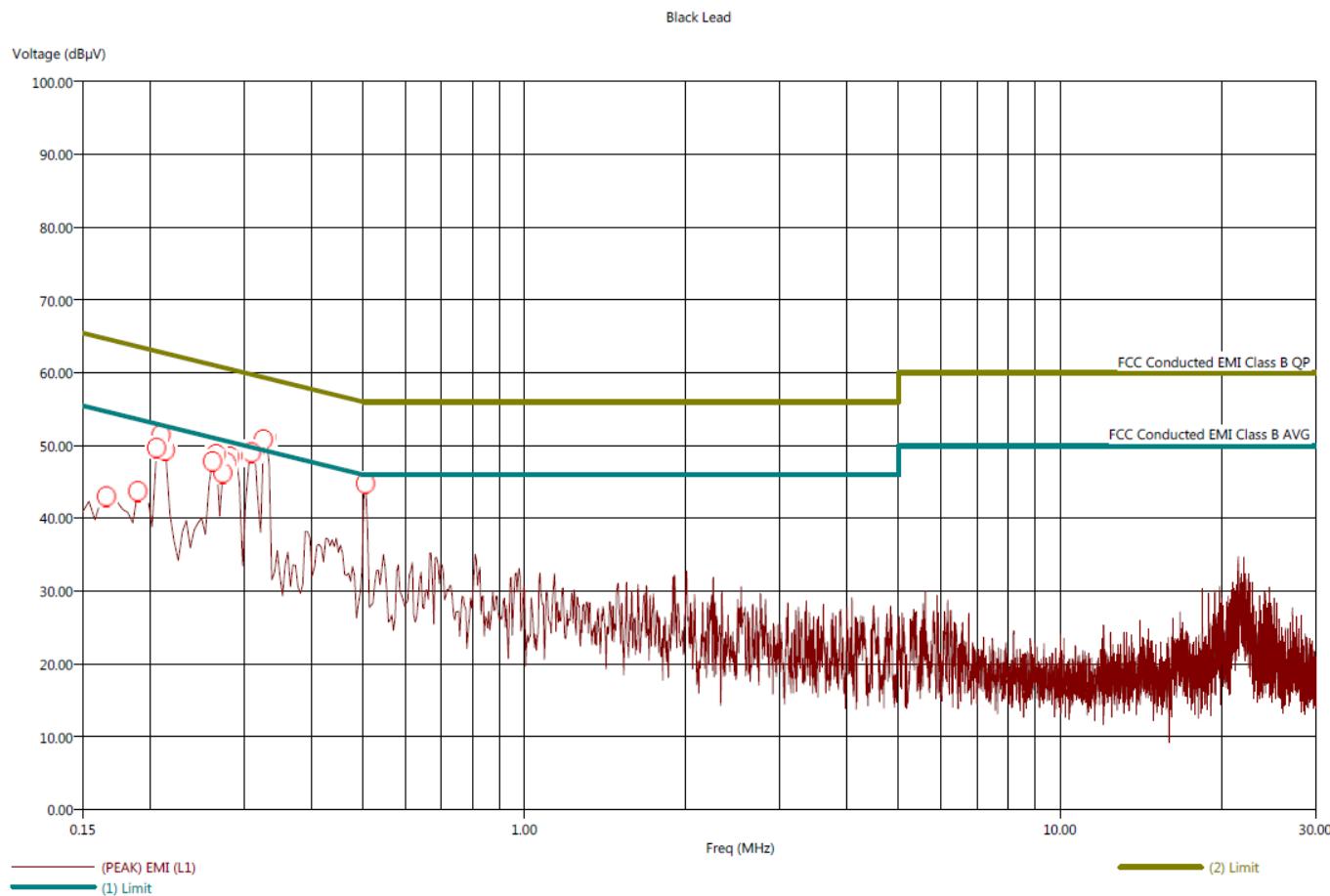
Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Title: FCC Class B - Black Lead
File: Keysight - Pre-Scan - 802.11a - Black Lead - FCC Class B.set
Operator: Harvey Samaco
EUT Type: Dock Controller
EUT Condition: The EUT was set to continuously transmit at 5180 GHz in 802.11a and BLE
Company: Targus
Model: ACC810
S/N: N/A

10/11/2019 8:50:23 AM
Sequence: Preliminary Scan



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(949) 587-0400

Title: FCC Class B - Black Lead
 File: Keysight - Final Scan - 802.11a - Black Lead - FCC Class B.set
 Operator: Harvey Samaco
 EUT Type: Dock Controller
 EUT Condition: The EUT was set to continuously transmit at 5180 GHz in 802.11a and BLE
 Company: Targus
 Model: ACC810
 S/N: N/A

10/11/2019 8:51:59 AM
 Sequence: Final Measurements

Black Lead

Freq (MHz)	(PEAK) EMI (dB μ V)	(AVG) EMI (dB μ V)	(PEAK) Margin (dB)	(AVG) Margin (dB)	(AVG) Limit (dB μ V)	Cable (dB)	Transducer (dB)	Filter (dB)
0.166	48.68	34.57	-5.90	-20.01	54.58	0.00	0.45	9.80
0.190	49.29	34.31	-4.69	-19.67	53.98	0.00	0.41	9.80
0.206	52.25	33.70	-0.55	-19.10	52.80	0.00	0.35	9.79
0.210	50.32	33.84	-2.71	-19.19	53.03	0.00	0.36	9.80
0.214	51.49	35.35	-0.85	-16.99	52.34	0.00	0.32	9.79
0.262	53.05	32.46	1.74	-18.85	51.31	0.00	0.26	9.77
0.266	53.62	35.75	2.47	-15.40	51.16	0.00	0.25	9.77
0.274	54.48	38.33	3.91	-12.24	50.57	0.00	0.22	9.76
0.278	53.99	38.19	3.45	-12.35	50.55	0.00	0.22	9.76
0.282	53.66	37.19	3.05	-13.42	50.61	0.00	0.22	9.76
0.286	51.51	37.84	0.87	-12.80	50.64	0.00	0.22	9.76
0.310	52.41	35.96	2.43	-14.02	49.98	0.00	0.19	9.76
0.314	53.09	35.95	3.21	-13.93	49.88	0.00	0.18	9.75
0.326	51.36	26.96	2.22	-22.18	49.14	0.00	0.14	9.74
0.330	51.66	32.59	2.71	-16.36	48.95	0.00	0.13	9.74
0.506	47.95	27.30	1.95	-18.70	46.00	0.00	0.12	9.70



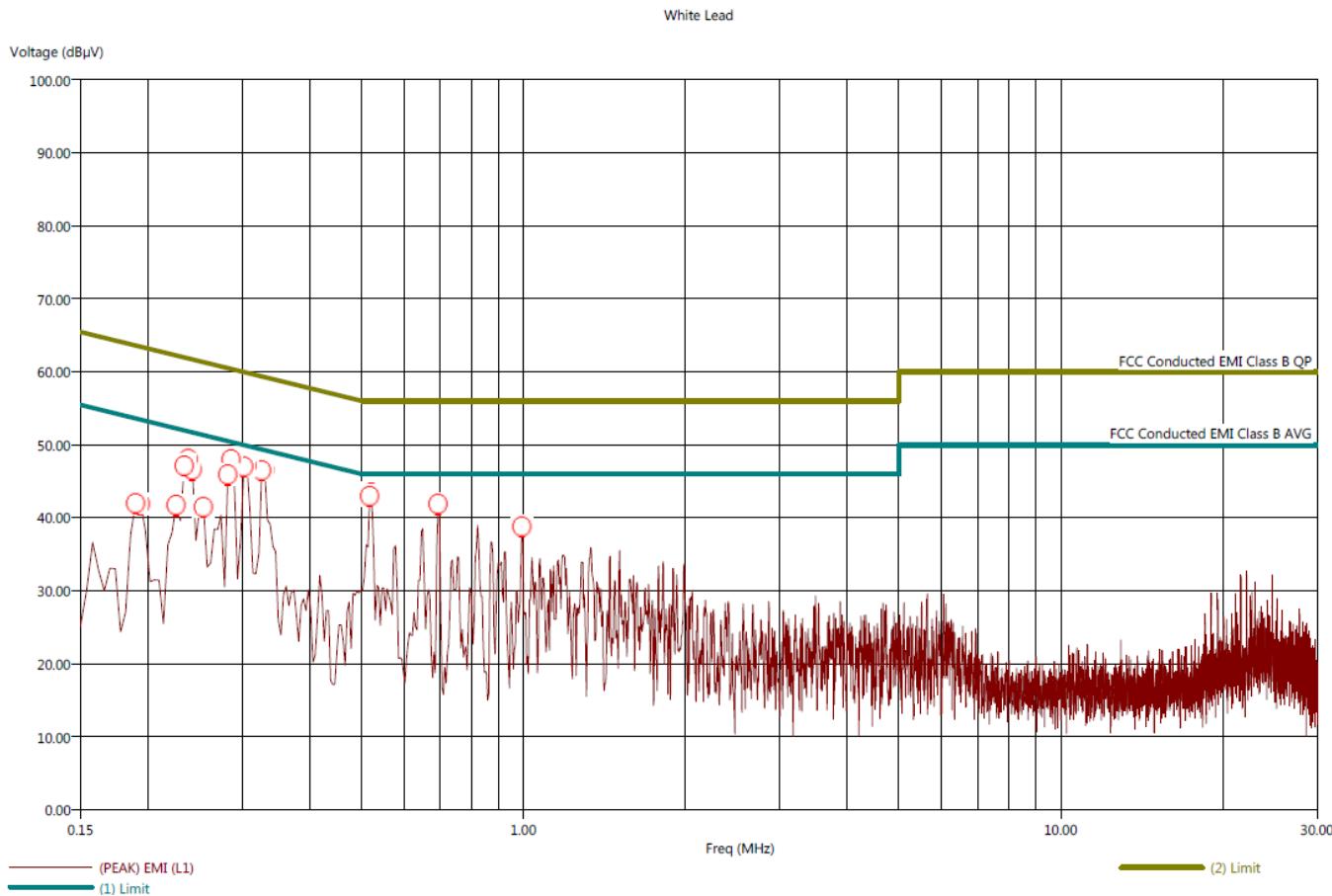
Brea Division
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Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Title: FCC Class B - White Lead
 File: Keysight - Pre-Scan - 802.11a - White Lead - FCC Class B.set
 Operator: Harvey Samaco
 EUT Type: Dock Controller
 EUT Condition: The EUT was set to continuously transmit at 5.180 GHz in 802.11a and BLE
 Company: Targus
 Model: ACC810
 S/N: N/A

10/11/2019 9:01:41 AM
 Sequence: Preliminary Scan



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Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Title: FCC Class B - White Lead
 File: Keysight - Final Scan - 802.11a - White Lead - FCC Class B.set
 Operator: Harvey Samaco
 EUT Type: Dock Controller
 EUT Condition: The EUT was set to continuously transmit at 5180 GHz in 802.11a and BLE
 Company: Targus
 Model: ACC810
 S/N: N/A

10/11/2019 9:03:06 AM
 Sequence: Final Measurements

White Lead									
Freq (MHz)	(PEAK) EMI (dB μ V)	(AVG) EMI (dB μ V)	(PEAK) Margin (dB)	(AVG) Margin (dB)	(AVG) Margin (dB)	(AVG) Limit (dB μ V)	Cable (dB)	Transducer (dB)	Filter (dB)
0.190	46.01	31.26	-7.29	-22.04	53.30	0.00	0.37	9.80	
0.194	48.29	32.85	-5.11	-20.55	53.40	0.00	0.38	9.80	
0.226	50.28	32.06	-1.73	-19.95	52.01	0.00	0.30	9.78	
0.234	47.70	30.32	-4.57	-21.95	52.27	0.00	0.32	9.79	
0.238	50.51	36.87	-1.05	-14.69	51.56	0.00	0.28	9.78	
0.242	50.43	32.56	1.55	-19.42	51.98	0.00	0.30	9.78	
0.254	50.66	35.77	-0.54	-15.43	51.20	0.00	0.26	9.77	
0.282	50.04	39.11	-0.44	-11.37	50.47	0.00	0.21	9.76	
0.286	51.28	38.18	0.76	-12.34	50.52	0.00	0.22	9.76	
0.302	51.36	35.70	1.49	-14.17	49.88	0.00	0.18	9.75	
0.306	50.56	35.71	0.71	-14.14	49.85	0.00	0.18	9.75	
0.326	47.94	34.41	-1.84	-15.37	49.78	0.00	0.18	9.75	
0.330	47.30	27.42	-2.26	-22.14	49.56	0.00	0.16	9.75	
0.518	46.81	26.02	0.81	-19.98	46.00	0.00	0.12	9.71	
0.522	45.32	23.82	-0.68	-22.18	46.00	0.00	0.12	9.71	
0.694	45.43	21.07	-0.57	-24.93	46.00	0.00	0.12	9.79	
0.994	40.37	21.75	-5.63	-24.25	46.00	0.00	0.13	9.90	



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