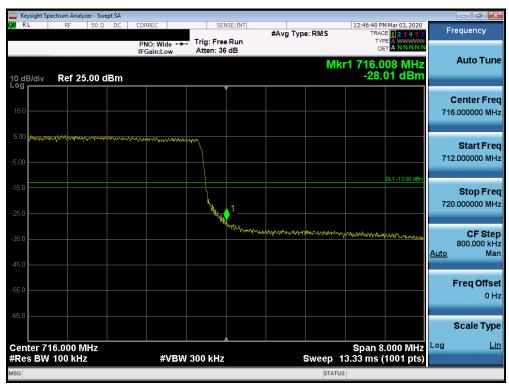


Plot 7-87. Lower Band Edge Plot (Band 12 - 10.0MHz QPSK - Full RB Configuration)

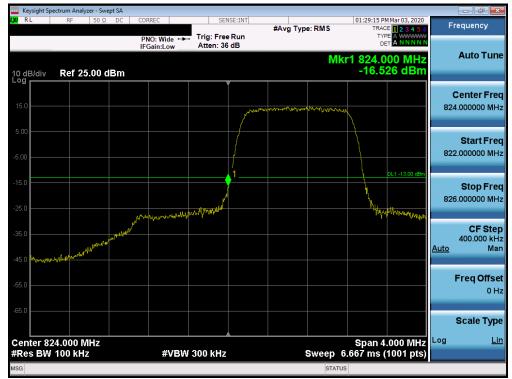


Plot 7-88. Upper Band Edge Plot (Band 12 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 64 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 64 01 146



Band 5



Plot 7-89. Lower Band Edge Plot (Band 5 - 1.4MHz QPSK - Full RB Configuration)

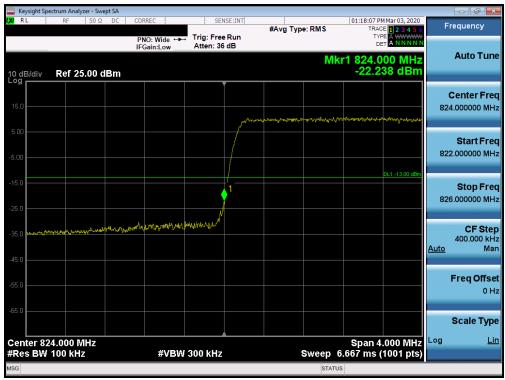


Plot 7-90. Upper Band Edge Plot (Band 5 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 65 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Fage 65 01 146

© 2020 PCTEST V 9.0 02/01/2019





Plot 7-91. Lower Band Edge Plot (Band 5 - 3.0MHz QPSK - Full RB Configuration)



Plot 7-92. Upper Band Edge Plot (Band 5 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 66 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 66 of 146





Plot 7-93. Lower Band Edge Plot (Band 5 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-94. Upper Band Edge Plot (Band 5 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 67 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 67 of 146





Plot 7-95. Lower Band Edge Plot (Band 5 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-96. Upper Band Edge Plot (Band 5 - 10.0MHz QPSK - Full RB Configuration)

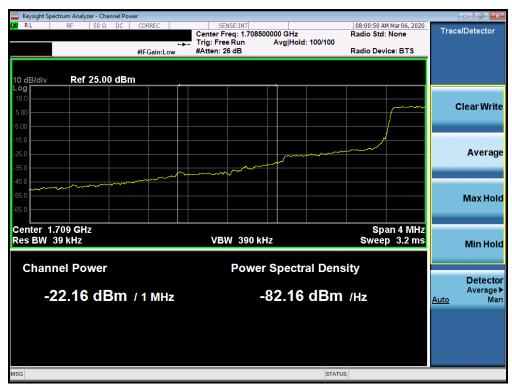
FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 69 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 68 of 146



Band 66/4



Plot 7-97. Lower Band Edge Plot (Band 66/4 - 1.4MHz QPSK - Full RB Configuration)



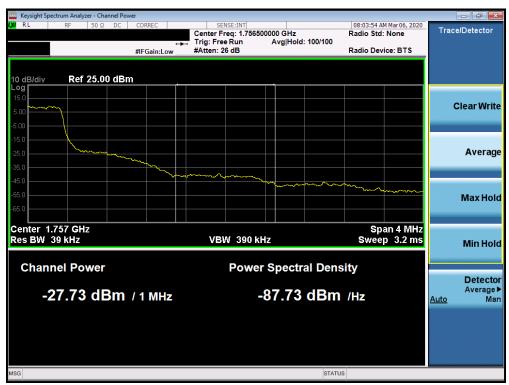
Plot 7-98. Lower Extended Band Edge Plot (Band 66/4 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 60 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 69 of 146
O COCC POTEOT			110000010110010





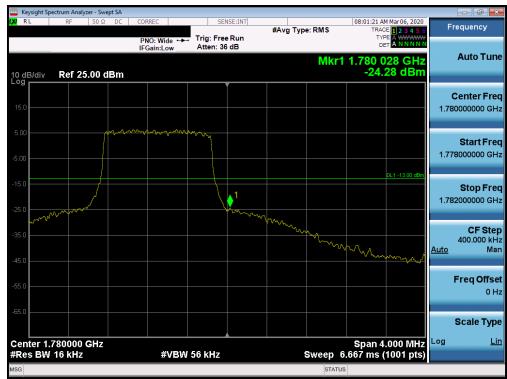
Plot 7-99. Upper Band Edge Plot (Band 4 - 1.4MHz QPSK - Full RB Configuration)



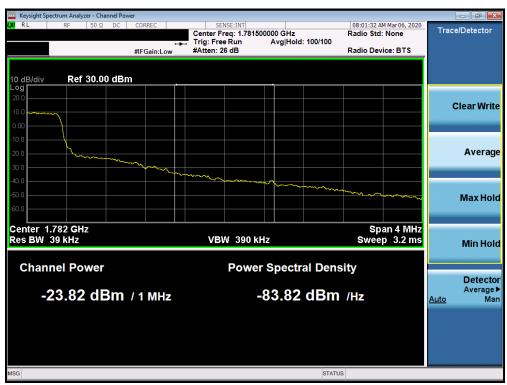
Plot 7-100. Upper Extended Band Edge Plot (Band 4 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 70 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 70 of 146





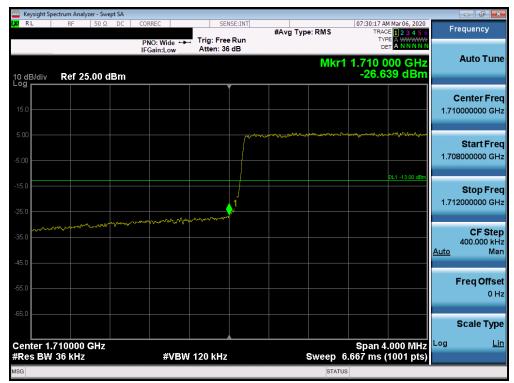
Plot 7-101. Upper Band Edge Plot (Band 66 - 1.4MHz QPSK - Full RB Configuration)



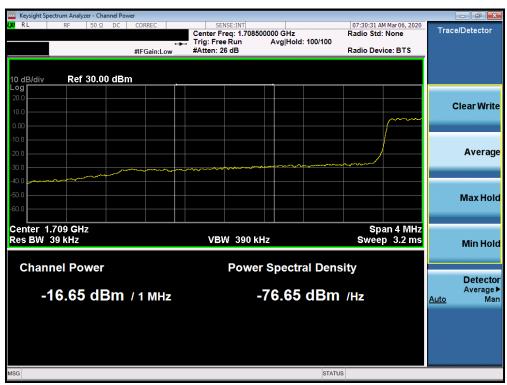
Plot 7-102. Upper Extended Band Edge Plot (Band 66 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 74 of 446
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 71 of 146





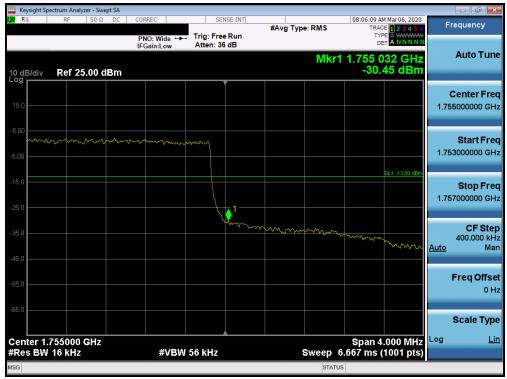
Plot 7-103. Lower Band Edge Plot (Band 66/4 - 3.0MHz QPSK - Full RB Configuration)



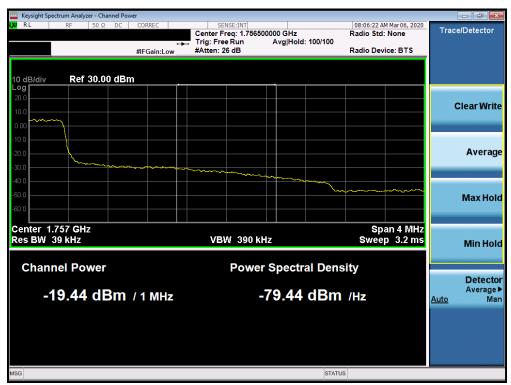
Plot 7-104. Lower Extended Band Edge Plot (Band 66/4 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 72 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 72 of 146





Plot 7-105. Upper Band Edge Plot (Band 4 - 3.0MHz QPSK - Full RB Configuration)



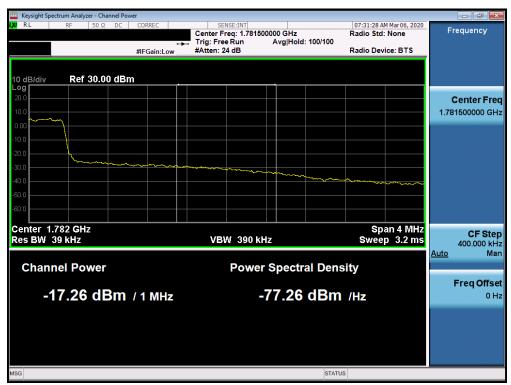
Plot 7-106. Upper Extended Band Edge Plot (Band 4 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 72 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 73 of 146





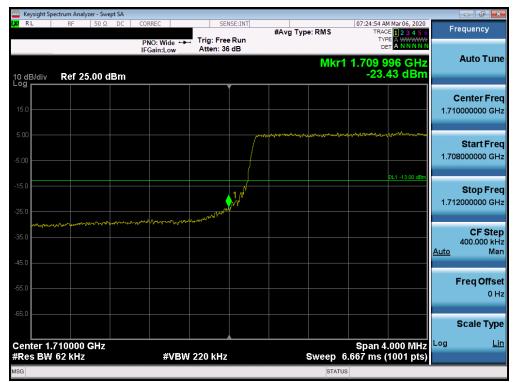
Plot 7-107. Upper Band Edge Plot (Band 66 - 3.0MHz QPSK - Full RB Configuration)



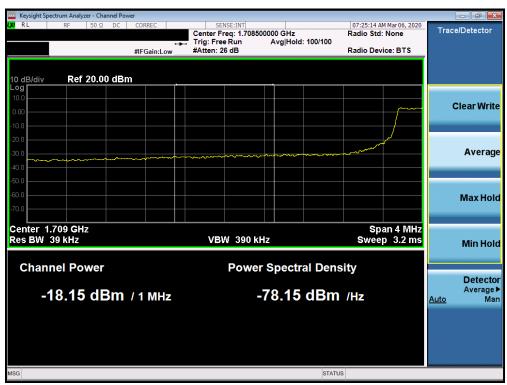
Plot 7-108. Upper Extended Band Edge Plot (Band 66 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 74 of 446
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 74 of 146





Plot 7-109. Lower Band Edge Plot (Band 66/4 - 5.0MHz QPSK - Full RB Configuration)



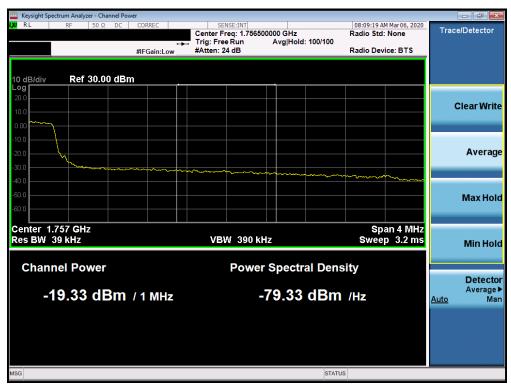
Plot 7-110. Lower Extended Band Edge Plot (Band 66/4 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 75 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 75 of 146





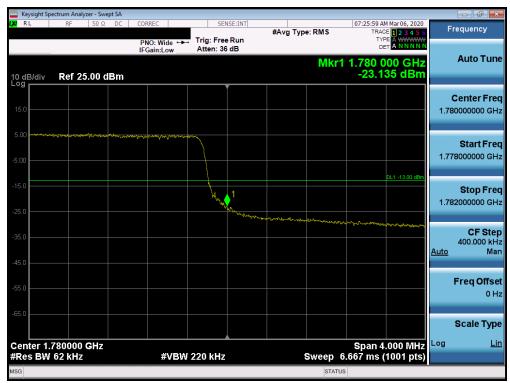
Plot 7-111. Upper Band Edge Plot (Band 4 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-112. Upper Extended Band Edge Plot (Band 4 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 76 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 76 of 146





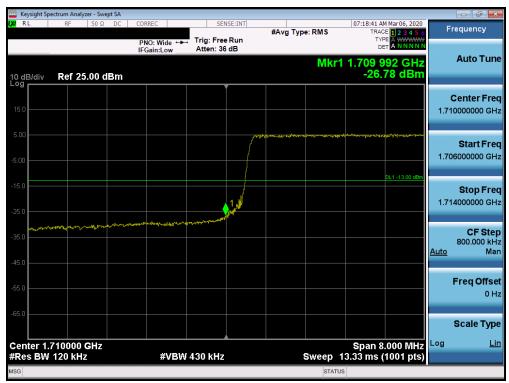
Plot 7-113. Upper Band Edge Plot (Band 66 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-114. Upper Extended Band Edge Plot (Band 66 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 77 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 77 of 146





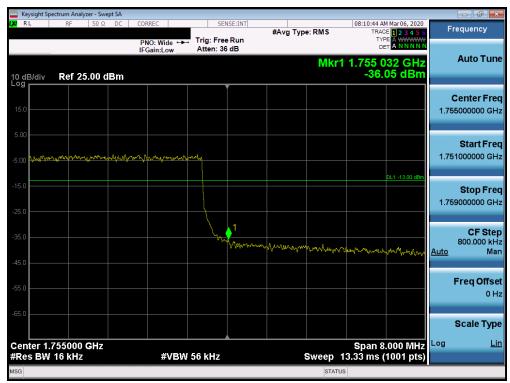
Plot 7-115. Lower Band Edge Plot (Band 66/4 - 10.0MHz QPSK - Full RB Configuration)



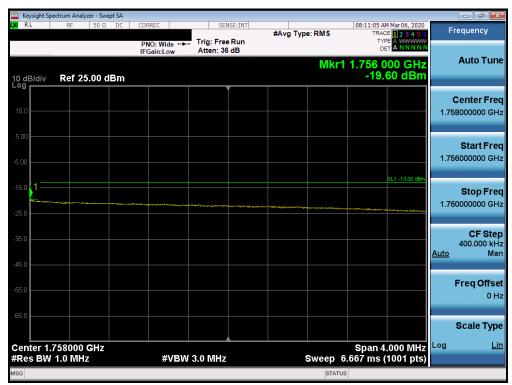
Plot 7-116. Lower Extended Band Edge Plot (Band 66/4 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of selement	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 70 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset		Page 78 of 146
© 2020 PCTEST				V 9.0 02/01/2019





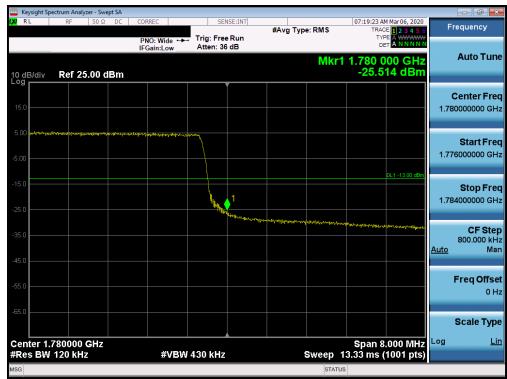
Plot 7-117. Upper Band Edge Plot (Band 4 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-118. Upper Extended Band Edge Plot (Band 4 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 70 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 79 of 146





Plot 7-119. Upper Band Edge Plot (Band 66 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-120. Upper Extended Band Edge Plot (Band 66 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 90 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 80 of 146





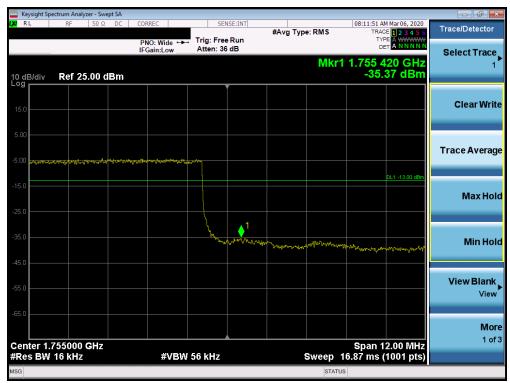
Plot 7-121. Lower Band Edge Plot (Band 66/4 - 15.0MHz QPSK - Full RB Configuration)



Plot 7-122. Lower Extended Band Edge Plot (Band 66/4 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 91 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 81 of 146





Plot 7-123. Upper Band Edge Plot (Band 4 - 15.0MHz QPSK - Full RB Configuration)



Plot 7-124. Upper Extended Band Edge Plot (Band 4 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 92 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 82 of 146





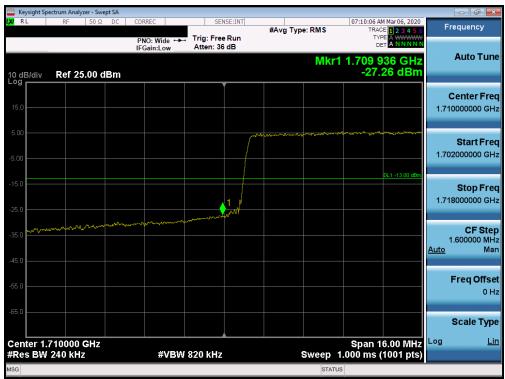
Plot 7-125. Upper Band Edge Plot (Band 66 - 15.0MHz QPSK - Full RB Configuration)



Plot 7-126. Upper Extended Band Edge Plot (Band 66 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 92 of 446
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 83 of 146





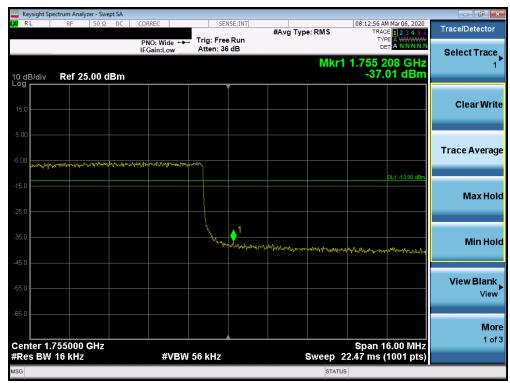
Plot 7-127. Lower Band Edge Plot (Band 66/4 - 20.0MHz QPSK - Full RB Configuration)



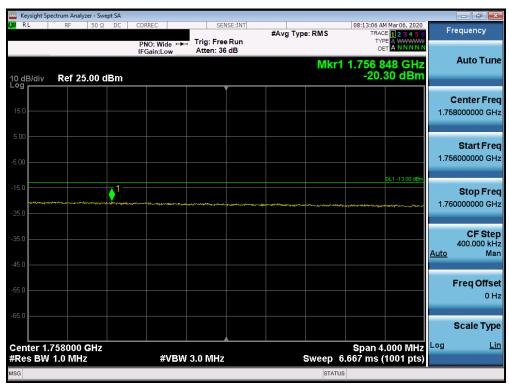
Plot 7-128. Lower Extended Band Edge Plot (Band 66/4 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of selement	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 94 of 446
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset		Page 84 of 146
© 2020 PCTEST				V 9.0 02/01/2019





Plot 7-129. Upper Band Edge Plot (Band 4 - 20.0MHz QPSK - Full RB Configuration)



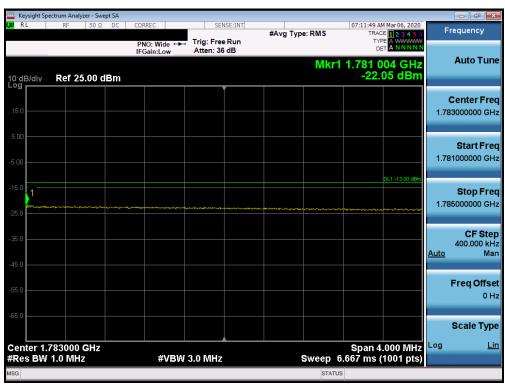
Plot 7-130. Upper Extended Band Edge Plot (Band 4 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Domo 95 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 85 of 146





Plot 7-131. Upper Band Edge Plot (Band 66 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-132. Upper Extended Band Edge Plot (Band 66 - 20.0MHz QPSK - Full RB Configuration)

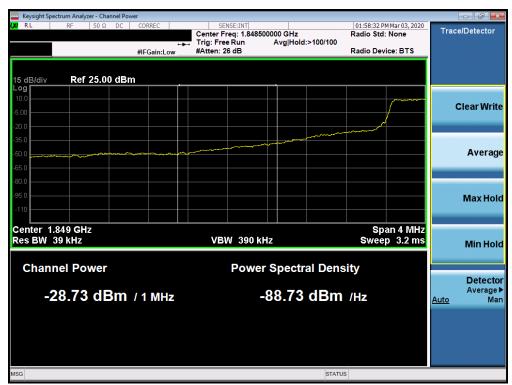
FCC ID: ZNFK400AM	Pecual to be part of @ element	MEASUREMENT REPORT (CERTIFICATION) LG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 96 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 86 01 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	, ,	Page 86 of 146



Band 2



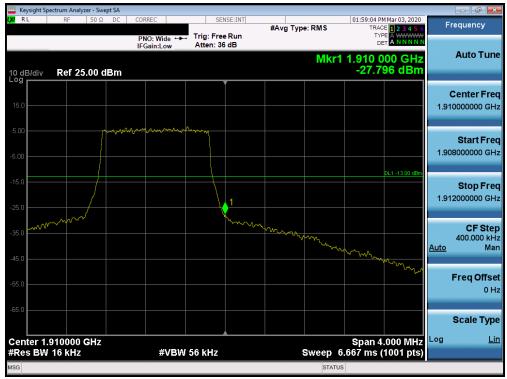
Plot 7-133. Lower Band Edge Plot (Band 2 - 1.4MHz QPSK - Full RB Configuration)



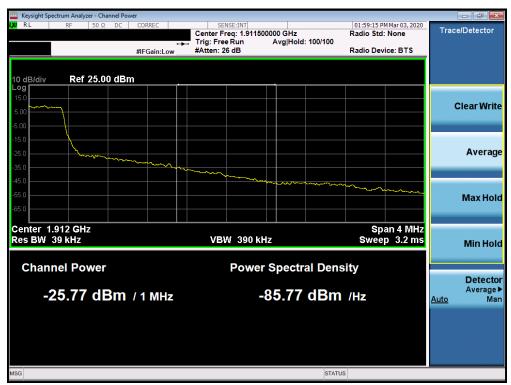
Plot 7-134. Lower Extended Band Edge Plot (Band 2 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 97 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 87 of 146
© 2020 PCTEST			V 9.0 02/01/2019





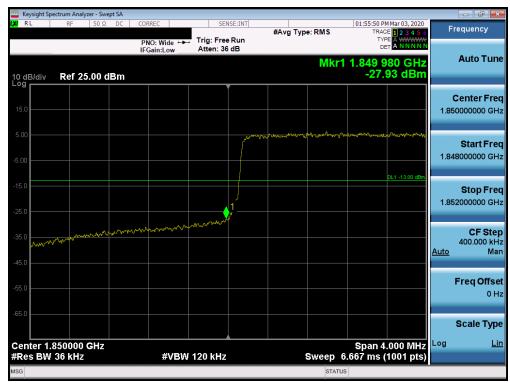
Plot 7-135. Upper Band Edge Plot (Band 2 - 1.4MHz QPSK - Full RB Configuration)



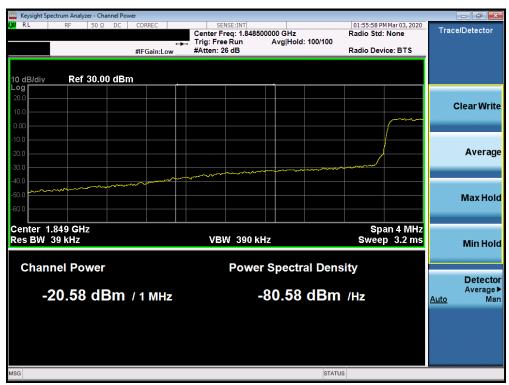
Plot 7-136. Upper Extended Band Edge Plot (Band 2 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Domo 90 of 446
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 88 of 146





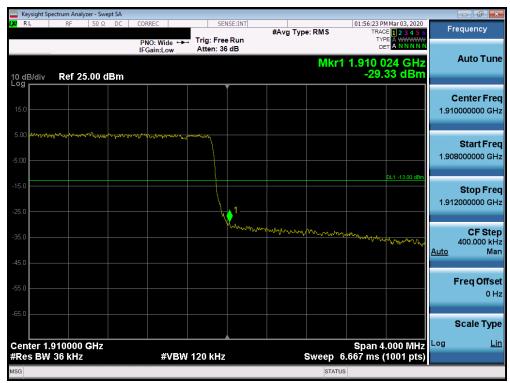
Plot 7-137. Lower Band Edge Plot (Band 2 - 3.0MHz QPSK - Full RB Configuration)



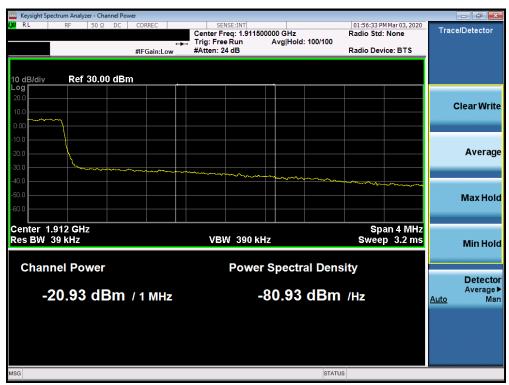
Plot 7-138. Lower Extended Band Edge Plot (Band 2 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 90 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 89 of 146





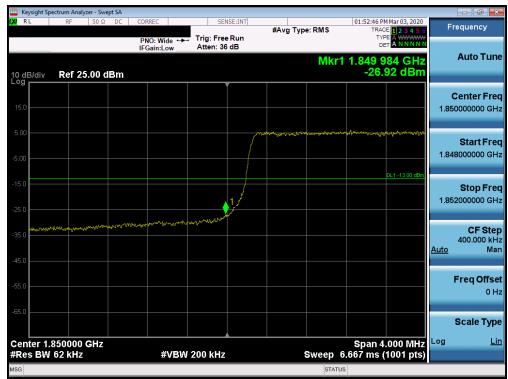
Plot 7-139. Upper Band Edge Plot (Band 2 - 3.0MHz QPSK - Full RB Configuration)



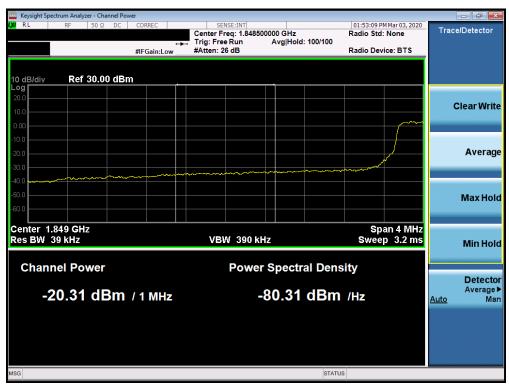
Plot 7-140. Upper Extended Band Edge Plot (Band 2 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 00 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 90 of 146





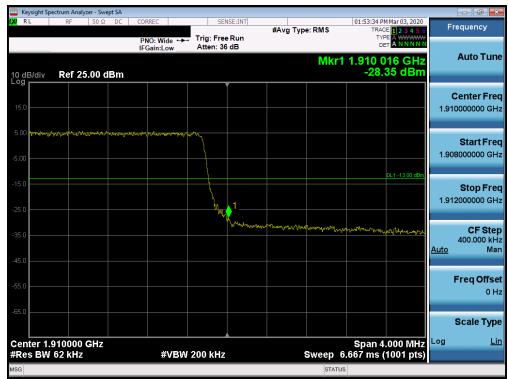
Plot 7-141. Lower Band Edge Plot (Band 2 - 5.0MHz QPSK - Full RB Configuration)



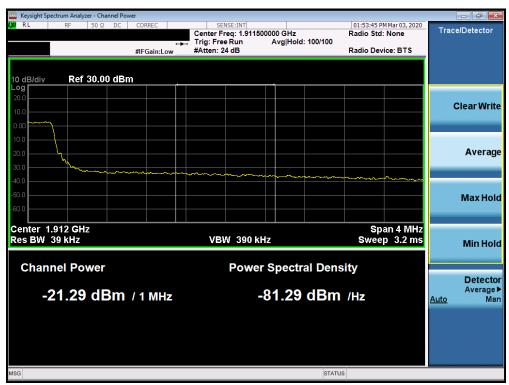
Plot 7-142. Lower Extended Band Edge Plot (Band 2 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 01 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 91 of 146





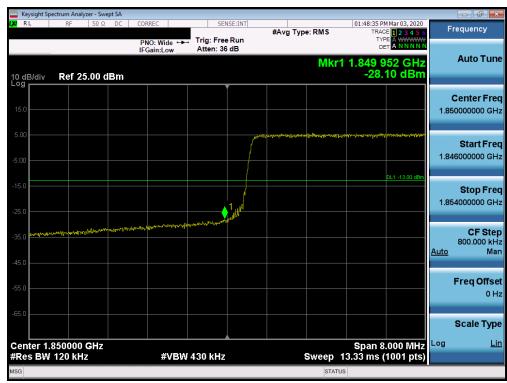
Plot 7-143. Upper Band Edge Plot (Band 2 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-144. Upper Extended Band Edge Plot (Band 2 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 02 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 92 of 146





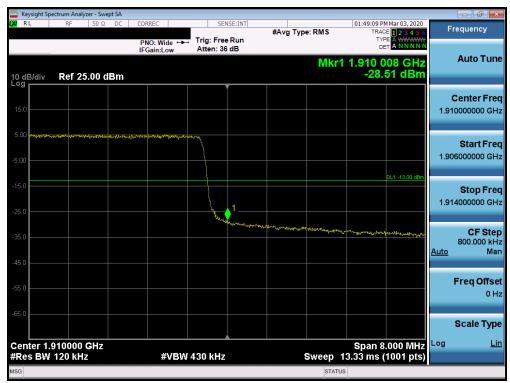
Plot 7-145. Lower Band Edge Plot (Band 2 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-146. Lower Extended Band Edge Plot (Band 2 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Do ac 02 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 93 of 146





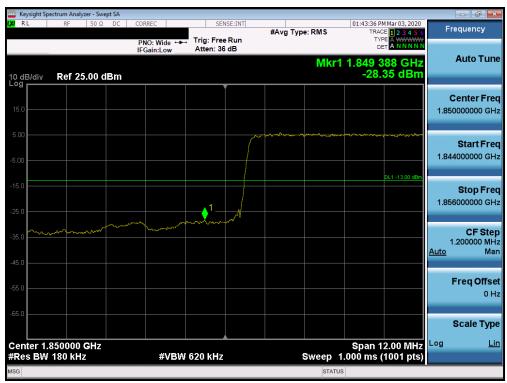
Plot 7-147. Upper Band Edge Plot (Band 2 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-148. Upper Extended Band Edge Plot (Band 2 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Domo 04 of 446
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 94 of 146





Plot 7-149. Lower Band Edge Plot (Band 2 - 15.0MHz QPSK - Full RB Configuration)



Plot 7-150. Lower Extended Band Edge Plot (Band 2 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Domo 05 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 95 of 146





Plot 7-151. Upper Band Edge Plot (Band 2 - 15.0MHz QPSK - Full RB Configuration)



Plot 7-152. Upper Extended Band Edge Plot (Band 2 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 06 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 96 of 146





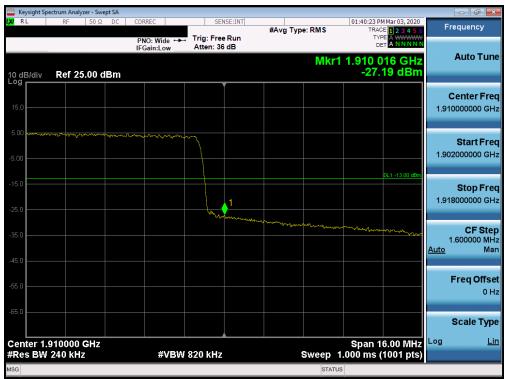
Plot 7-153. Lower Band Edge Plot (Band 2 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-154. Lower Extended Band Edge Plot (Band 2 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 07 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 97 of 146





Plot 7-155. Upper Band Edge Plot (Band 2 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-156. Upper Extended Band Edge Plot (Band 2 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Domo 00 of 446
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 98 of 146



Band 30



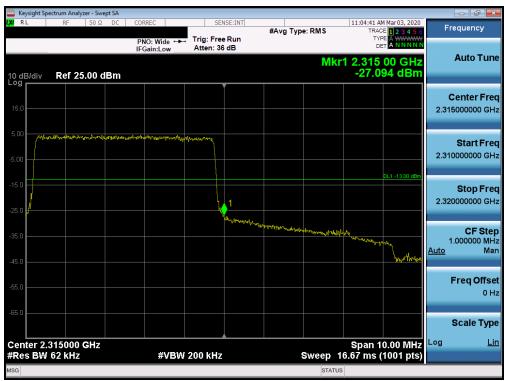
Plot 7-157. Lower Band Edge Plot (Band 30 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-158. Lower Extended Band Edge Plot (Band 30 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 00 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 99 of 146





Plot 7-159. Upper Band Edge Plot (Band 30 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-160. Upper Extended Band Edge Plot (Band 30 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 100 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 100 of 146

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





Plot 7-161. Lower Band Edge Plot (Band 30 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-162. Lower Extended Band Edge Plot (Band 30 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 101 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	





Plot 7-163. Upper Band Edge Plot (Band 30 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-164. Upper Extended Band Edge Plot (Band 30 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 102 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 102 of 146



7.5 Peak-Average Ratio

Test Overview

A peak to average ratio measurement is performed at the conducted port of the EUT. The spectrum analyzers Complementary Cumulative Distribution Function (CCDF) measurement profile is used to determine the largest deviation between the average and the peak power of the EUT in a given bandwidth. The CCDF curve shows how much time the peak waveform spends at or above a given average power level. The percent of time the signal spends at or above the level defines the probability for that particular power level.

Test Procedure Used

KDB 971168 D01 v03r01 - Section 5.7.1

Test Settings

- 1. The signal analyzer's CCDF measurement profile is enabled
- 2. Frequency = carrier center frequency
- 3. Measurement BW ≥ OBW or specified reference bandwidth
- 4. The signal analyzer was set to collect one million samples to generate the CCDF curve
- 5. The measurement interval was set depending on the type of signal analyzed. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms.

Test Setup

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



Figure 7-4. Test Instrument & Measurement Setup

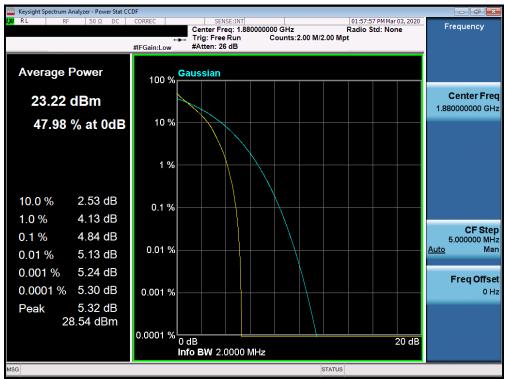
Test Notes

None.

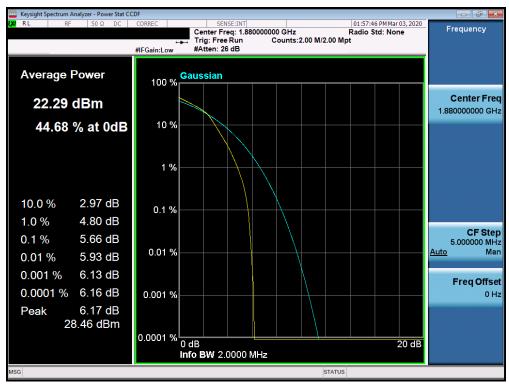
FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 102 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 103 of 146



Band 2



Plot 7-165. PAR Plot (Band 2 - 1.4MHz QPSK - Full RB Configuration)

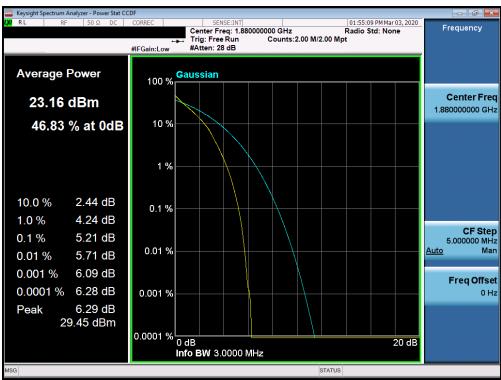


Plot 7-166. PAR Plot (Band 2 - 1.4MHz 16-QAM - Full RB Configuration)

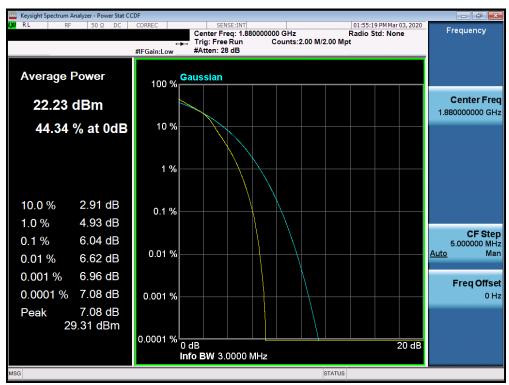
FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 104 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 104 01 146

© 2020 PCTEST V 9.0 02/01/2019





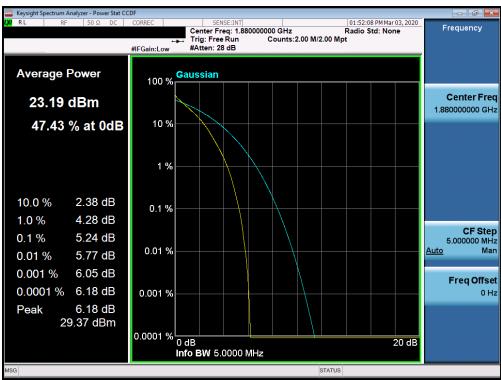
Plot 7-167. PAR Plot (Band 2 - 3.0MHz QPSK - Full RB Configuration)



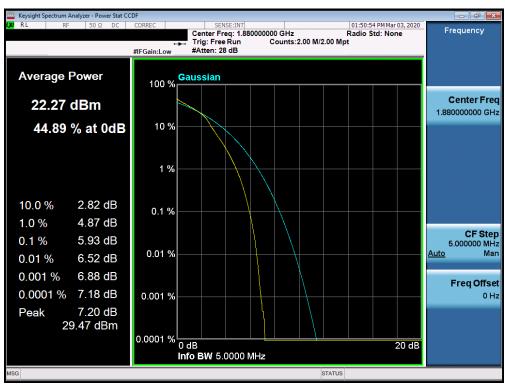
Plot 7-168. PAR Plot (Band 2 - 3.0MHz 16-QAM - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 105 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 105 of 146





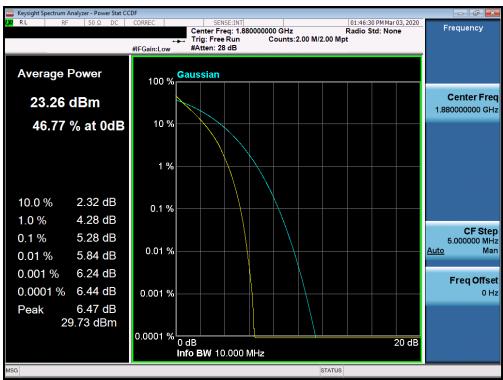
Plot 7-169. PAR Plot (Band 2 - 5.0MHz QPSK - Full RB Configuration)



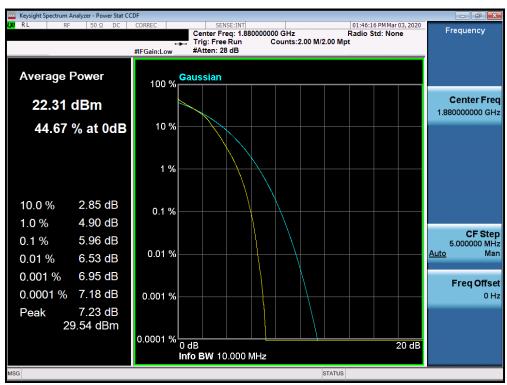
Plot 7-170. PAR Plot (Band 2 - 5.0MHz 16-QAM - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 106 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 106 of 146





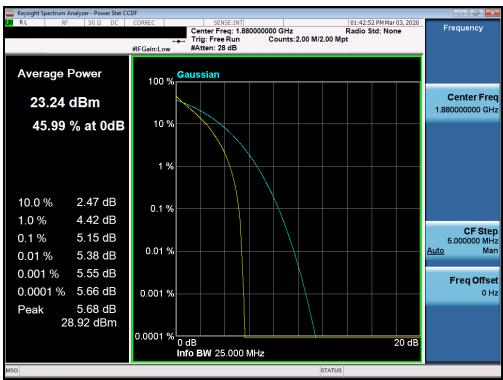
Plot 7-171. PAR Plot (Band 2 - 10.0MHz QPSK - Full RB Configuration)



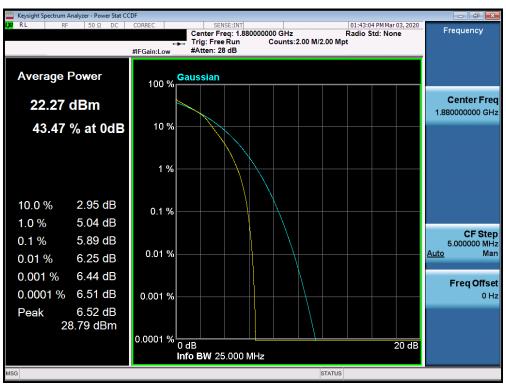
Plot 7-172. PAR Plot (Band 2 - 10.0MHz 16-QAM - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 107 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	rage 107 of 146





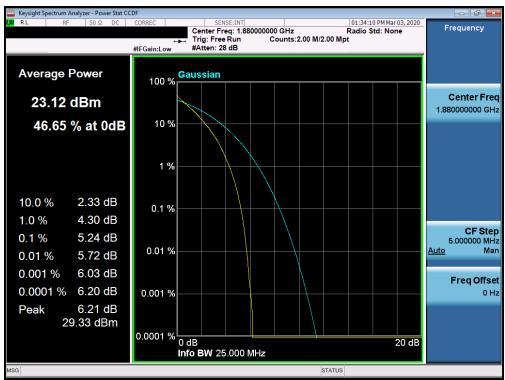
Plot 7-173. PAR Plot (Band 2 - 15.0MHz QPSK - Full RB Configuration)



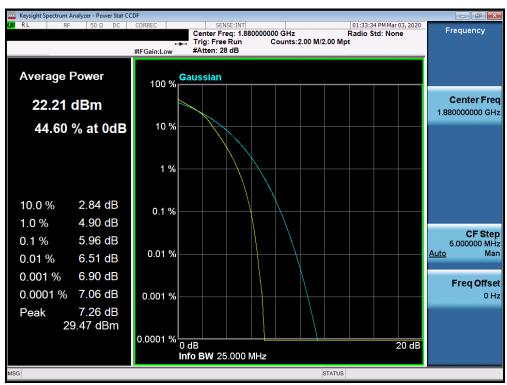
Plot 7-174. PAR Plot (Band 2 - 15.0MHz 16-QAM - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 109 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 108 of 146





Plot 7-175. PAR Plot (Band 2 - 20.0MHz QPSK - Full RB Configuration)

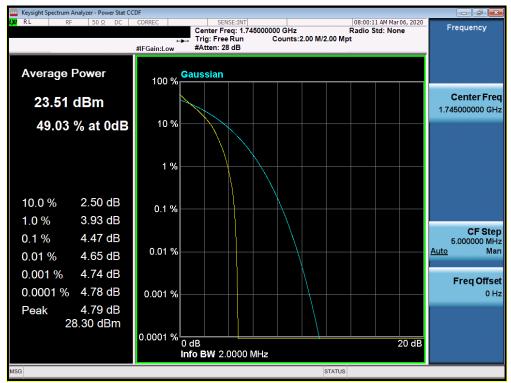


Plot 7-176. PAR Plot (Band 2 - 20.0MHz 16-QAM - Full RB Configuration)

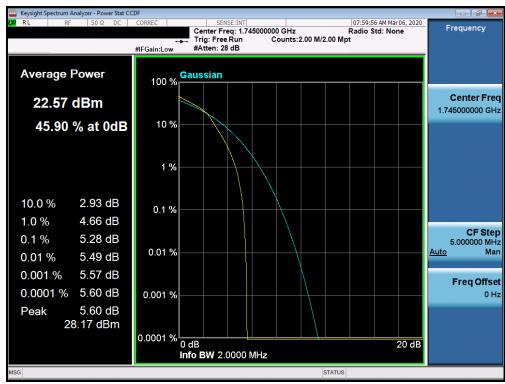
FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 100 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 109 of 146



Band 66/4



Plot 7-177. PAR Plot (Band 66/4 - 1.4MHz QPSK - Full RB Configuration)

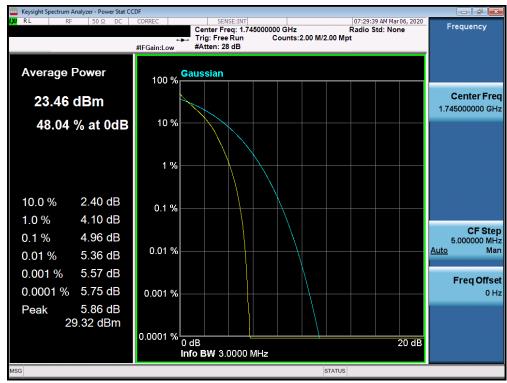


Plot 7-178. PAR Plot (Band 66/4 – 1.4MHz 16-QAM - Full RB Configuration)

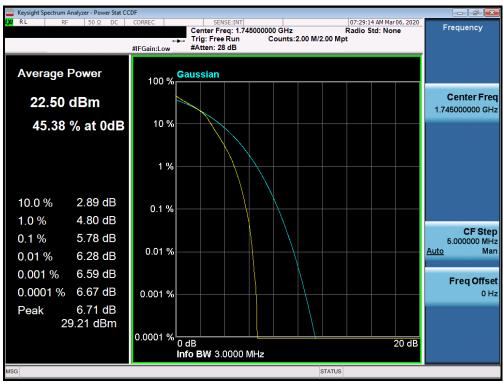
FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 110 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 110 of 146

© 2020 PCTEST V 9.0 02/01/2019





Plot 7-179. PAR Plot (Band 66/4 – 3MHz QPSK - Full RB Configuration)



Plot 7-180. PAR Plot (Band 66/4 - 3MHz 16-QAM - Full RB Configuration)

FCC ID: ZNFK400AM	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 111 of 146
1M2003020032-08-R1.ZNF	3/2 - 4/1/2020	Portable Handset	Page 111 of 146