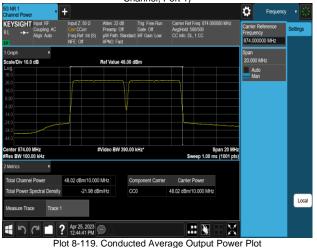
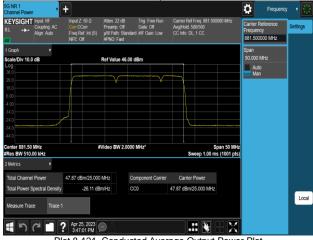


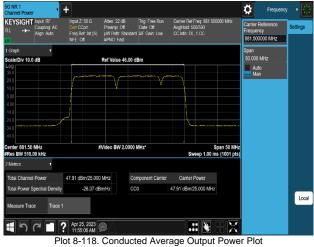
Plot 8-117. Conducted Average Output Power Plot (MSR 3C\_DSS B(n)5\_2C\_10M+10M+LTE B5\_1C\_5M\_2T\_QPSK - Mid Channel. Port 1)



(MSR 2C\_NR n5\_1C\_5M+LTE B5\_1C\_5M\_2T\_QPSK - Low Channel, Port 1)



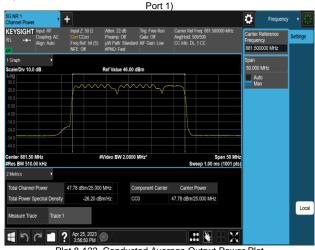
Plot 8-121. Conducted Average Output Power Plot (MSR 3C\_NR n5\_2C\_10M+10M+LTE B5\_1C\_5M\_2T\_QPSK - Middle Channel, Port 1)



(MSR 3C\_DSS B(n)5\_2C\_10M+10M+12B B5\_1C\_5M\_2T\_16QAM - Mid Channel. Port 1)



(MSR 2C\_NR n5\_1C\_5M+LTE B5\_1C\_5M\_2T\_16QAM - Low Channel,



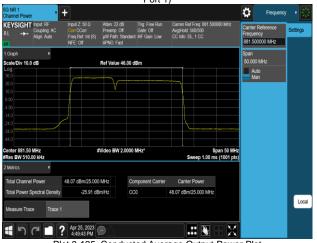
Plot 8-122. Conducted Average Output Power Plot (MSR 3C\_NR n5\_2C\_10M+10M+LTE B5\_1C\_5M\_2T\_16QAM - Middle Channel, Port 1)

FCC ID: A3LRF4461D-13A	element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 107 of 394
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)		Fage 107 01 394
© 2022 Element		•		ES-QP-16-09 Rev.05





Plot 8-123. Conducted Average Output Power Plot (MSR 2C\_DSS B(n)5\_1C\_10M+NR n5\_1C\_5M\_2T\_QPSK - Low Channel, Port 1)



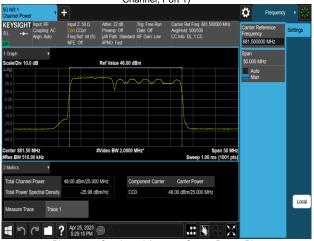
Plot 8-125. Conducted Average Output Power Plot (MSR 2C\_DSS B(n)5\_1C\_10M+NR n5\_1C\_15M\_2T\_QPSK - Middle Channel, Port 1)



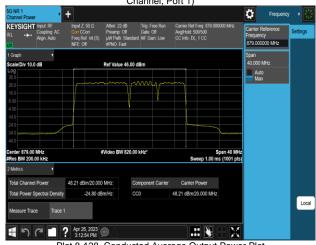
Plot 8-127. Conducted Average Output Power Plot (MSR 3C\_DSS B(n)5\_1C\_10M+NR n5\_1C\_5M+LTE B5\_1C\_5M\_2T\_QPSK - Low Channel, Port 1)



Plot 8-124. Conducted Average Output Power Plot (MSR 2C\_DSS B(n)5\_1C\_10M+NR n5\_1C\_5M\_2T\_16QAM - Low Channel. Port 1)



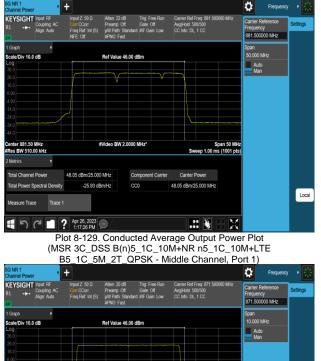
Plot 8-126. Conducted Average Output Power Plot (MSR 2C\_DSS B(n)5\_1C\_10M+NR n5\_1C\_15M\_2T\_16QAM- Middle Channel, Port 1)



Plot 8-128. Conducted Average Output Power Plot (MSR 3C\_DSS B(n)5\_1C\_10M+NR n5\_1C\_5M+LTE B5\_1C\_5M\_2T\_16QAM - Low Channel, Port 1)

FCC ID: A3LRF4461D-13A	element	MEASUREMENT REPORT (CERTIFICATION)	MSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 108 of 394
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)		Fage 100 01 394
© 2022 Element				ES-QP-16-09 Rev.05







+

¢

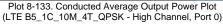
Frequence

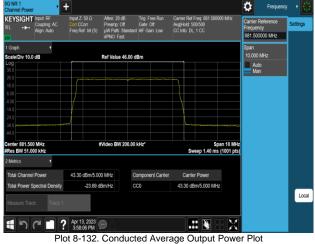
Plot 8-130. Conducted Average Output Power Plot (MSR 3C\_DSS B(n)5\_1C\_10M+NR n5\_1C\_10M+LTE B5 1C 5M 2T 16QAM - Middle Channel, Port 1)



Plot 8-131. Conducted Average Output Power Plot (LTE B5 1C 5M 4T QPSK - Low Channel, Port 0)







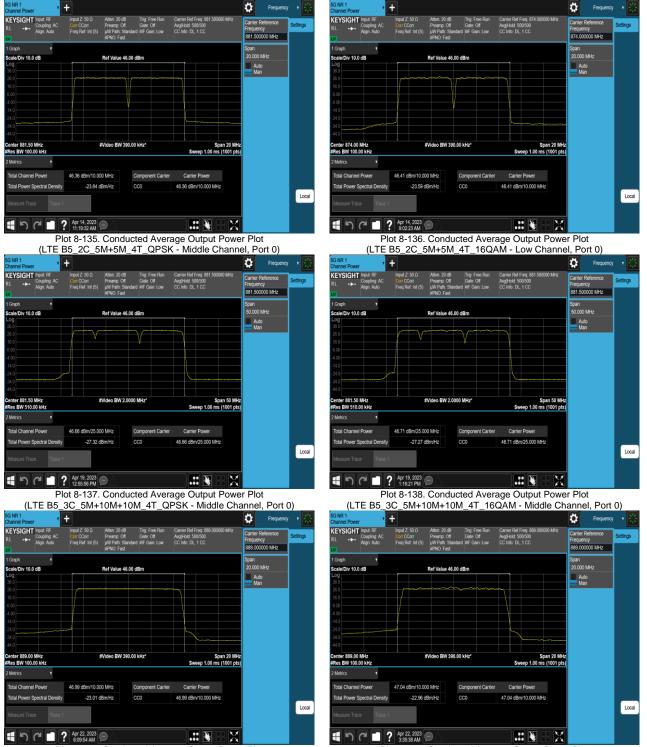
Plot 8-132. Conducted Average Output Power Plot (LTE B5 1C 5M 4T 256QAM - Middle Channel, Port 0)



Plot 8-134. Conducted Average Output Power Plot (LTE B5\_1C\_10M\_4T\_256QAM - Middle Channel, Port 0)

FCC ID: A3LRF4461D-13A	element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 109 of 394
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)		Fage 109 01 394
© 2022 Element		•		ES-QP-16-09 Rev.05

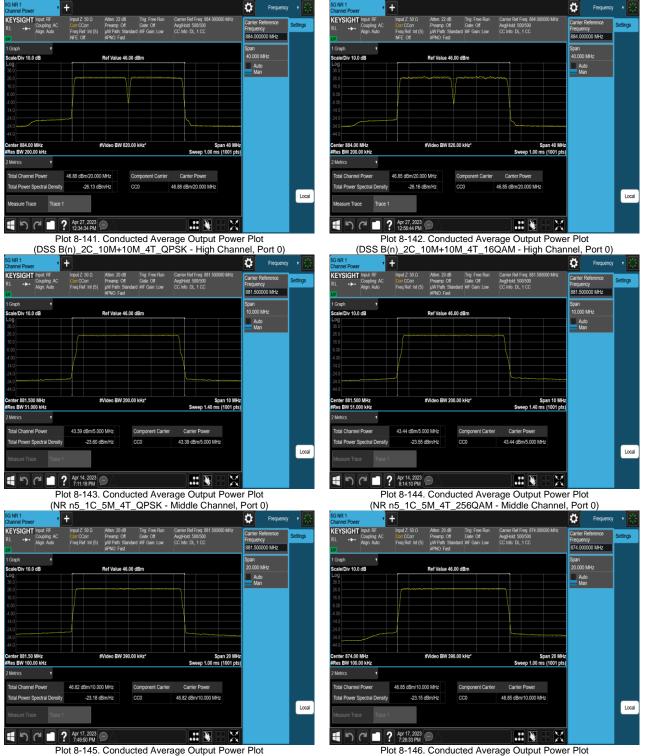




Plot 8-139. Conducted Average Output Power Plot (DSS\_B(n)\_10M(4:6 Ratio)\_1C\_4T\_QPSK - Low Channel, Port 0) Plot 8-140. Conducted Average Output Power Plot (DSS\_B(n)\_10M(9:1 Ratio)\_1C\_4T\_QPSK - High Channel, Port 0)

FCC ID: A3LRF4461D-13A	element 🤤	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 110 of 394
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)		Fage 110 01 394
© 2022 Element		•		ES-QP-16-09 Rev.05



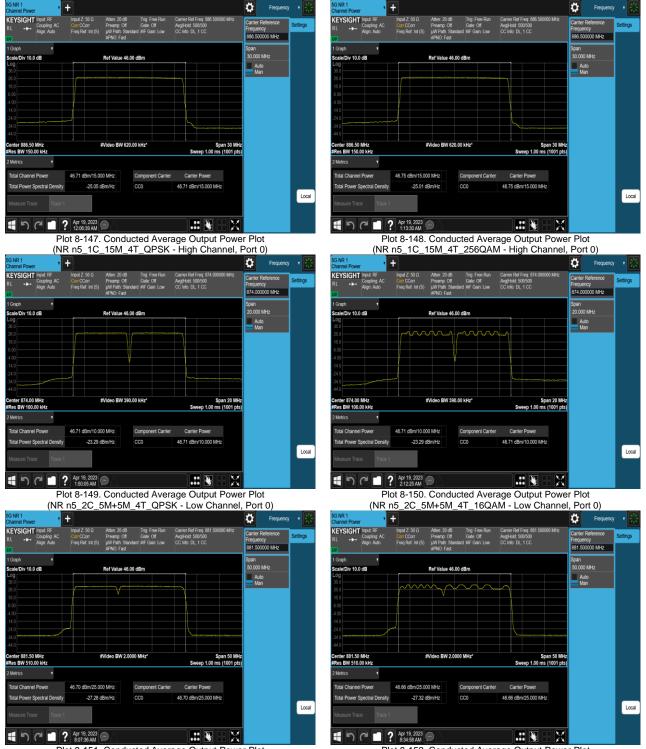


Plot 8-146. Conducted Average Output Power Plot (NR n5\_1C\_10M\_4T\_256QAM - Low Channel, Port 0)

FCC ID: A3LRF4461D-13A	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 111 of 394
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Fage 111 01 394
© 2022 Element		·	ES-QP-16-09 Rev.05

(NR n5\_1C\_10M\_4T\_QPSK - Middle Channel, Port 0)





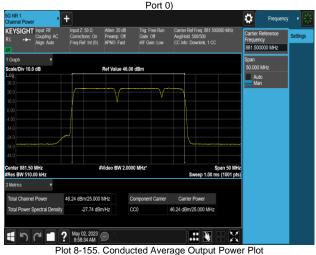
Plot 8-151. Conducted Average Output Power Plot (NR n5\_2C\_10M+15M\_4T\_QPSK - Middle Channel, Port 0) Plot 8-152. Conducted Average Output Power Plot (NR n5\_2C\_10M+15M\_4T\_16QAM - Middle Channel, Port 0)

FCC ID: A3LRF4461D-13A	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 112 of 394
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Fage 112 01 394
© 2022 Element		·	ES-QP-16-09 Rev.05





Plot 8-153. Conducted Average Output Power Plot (MSR 2C\_DSS B(n)5\_2C\_10M+LTE B5\_5M\_4T\_QPSK - Middle Channel,



(MSR 3C\_DSS B(n)5\_2C\_10M+10M+12B B5\_1C\_5M\_4T\_QPSK - Middle Channel, Port 0)



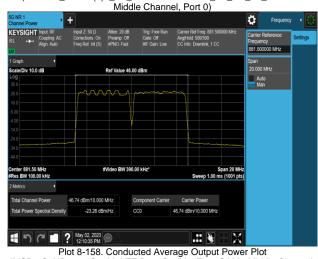
Plot 8-157. Conducted Average Output Power Plot (MSR 2C\_NR n5\_1C\_5M+LTE B5\_1C\_5M\_4T\_QPSK - Middle Channel, Port 0)



Plot 8-154. Conducted Average Output Power Plot (MSR 2C\_DSS B(n)5\_2C\_10M+LTE B5\_5M\_4T\_16QAM - Low Channel,



Plot 8-156. Conducted Average Output Power Plot (MSR 3C\_DSS B(n)5\_2C\_100H10M+LTE B5\_1C\_5M\_4T\_16QAM -



(MSR 2C\_NR n5\_1C\_5M+LTE B5\_1C\_5M\_4T\_16QAM - Middle Channel, Port 0)

FCC ID: A3LRF4461D-13A	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 113 of 394
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Fage 115 01 594
© 2022 Element		·	ES-QP-16-09 Rev.05



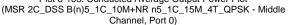


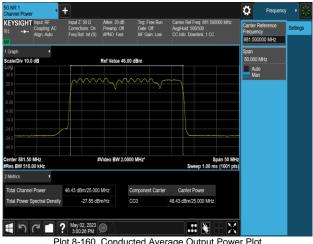
Plot 8-159. Conducted Average Output Power Plot (MSR 3C\_NR n5\_2C\_10M+10M+LTE B5\_1C\_5M\_4T\_QPSK - Middle Channel. Port 0)



(MSR 2C\_DSS B(n)5\_1C\_10M+NR n5\_1C\_5M\_4T\_QPSK - Low Channel, Port 0)



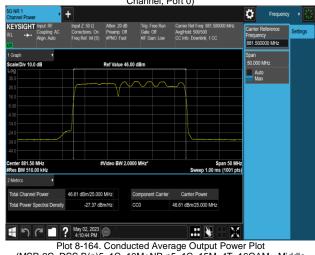




Plot 8-160. Conducted Average Output Power Plot (MSR 3C\_NR n5\_2C\_10M+10M+LTE B5\_1C\_5M\_4T\_16QAM - Middle Channel. Port 0)



Plot 8-162. Conducted Average Output Power Plot (MSR 2C\_DSS B(n)5\_1C\_10M+NR n5\_1C\_5M\_4T\_16QAM - Low Channel, Port 0)



(MSR 2C\_DSS B(n)5\_1C\_10M+NR n5\_1C\_15M\_4T\_16QAM - Middle Channel, Port 0)

FCC ID: A3LRF4461D-13A	element 🤤	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 114 of 394
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Fage 114 01 394
© 2022 Element		·	ES-QP-16-09 Rev.05



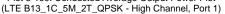


Plot 8-165. Conducted Average Output Power Plot (MSR 3C\_DSS B(n)5\_1C\_10M+MSR 2C\_NR n5\_1C\_5M+LTE B5 1C 5M 4T QPSK - Low Channel, Port 0)



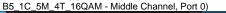
Plot 8-167. Conducted Average Output Power Plot (MSR 3C\_DSS B(n)5\_1C\_10M+NR n5\_1C\_10M+LTE B5\_1C\_5M\_4T\_QPSK - Middle Channel, Port 0)





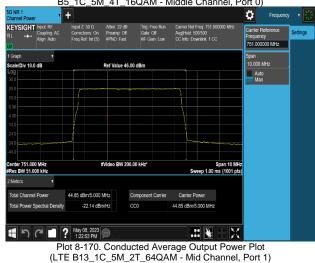


Plot 8-166. Conducted Average Output Power Plot (MSR 3C\_DSS B(n)5\_1C\_10M+NR n5\_1C\_5M+LTE





Plot 8-168. Conducted Average Output Power Plot (MSR 3C\_DSS B(n)5\_1C\_10M+NR n5\_1C\_10M+LTE B5\_1C\_5M\_4T\_16QAM - Middle Channel, Port 0)



MEASUREMENT REPORT Approved by: element FCC ID: A3LRF4461D-13A SAMSUNG (CERTIFICATION) Technical Manager Test Report S/N: Test Dates: EUT Type: Page 115 of 394 8K23040701-00-R2.A3L 04/12/2023 - 05/26/2023 RRU(RF4461d) ES-QP-16-09 Rev.05 © 2022 Element

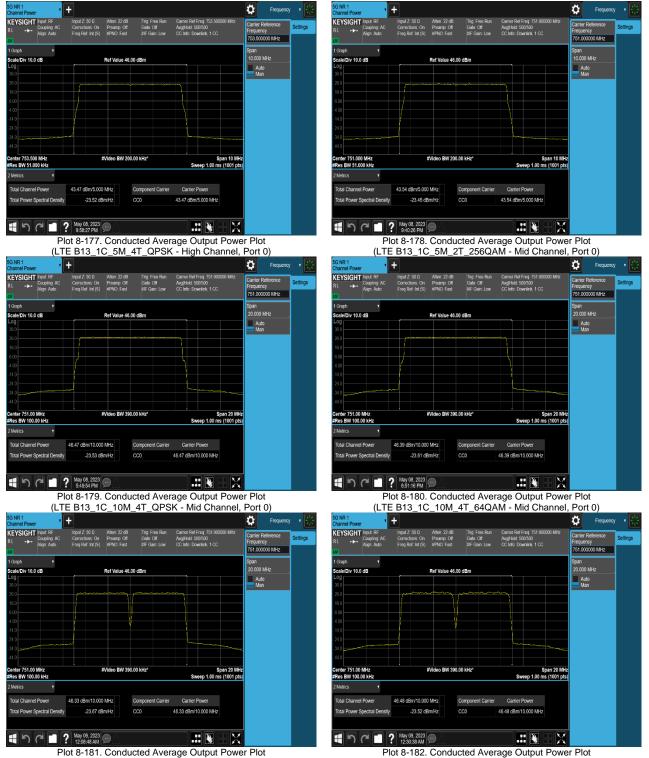




Plot 8-175. Conducted Average Output Power Plot (LTE\_B13\_5M(LTE)\_+NB-IoT(1IB)\_1C\_2T\_QPSK - Mid Channel, Port 1) Plot 8-176. Conducted Average Output Power Plot (LTE\_B13\_10M(LTE)+NB-IoT(2IB)\_1C\_2T\_QPSK - Mid Channel, Port 0)

FCC ID: A3LRF4461D-13A	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 116 of 394
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Fage 110 01 394
© 2022 Element			ES OB 16 00 Boy 05





Plot 8-182. Conducted Average Output Power Plot (LTE B13\_2C\_5M+5M\_4T\_16QAM - Mid Channel, Port 0)

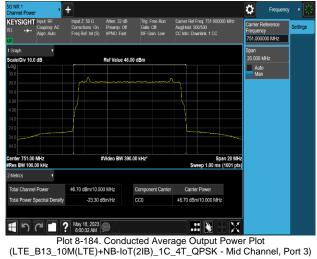
FCC ID: A3LRF4461D-13A	element)	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 117 of 394
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Fage 117 01 394
© 2022 Element			ES OB 16 00 Boy 05

(LTE B13\_2C\_5M+5M\_4T\_QPSK - Mid Channel, Port 0)





Plot 8-183. Conducted Average Output Power Plot (LTE\_B13\_5M(LTE)+NB-IoT(1IB)\_1C\_4T\_QPSK - Mid Channel, Port 3)



FCC ID: A3LRF4461D-13A	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 118 of 394
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Fage 110 01 394
© 2022 Element			ES-QP-16-09 Rev.05



# 8.4 Peak To Average Ratio

## **Test Overview**

The 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 ANSI C63.26-2015 – Section 5.2.3.4

## Test Setting

The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The spectrum analyzer settings were as follows:

- 1. The signal analyzer's CCDF function 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

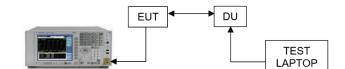


Figure 8-3. Test Instrument & Measurement Setup

## <u>Limit</u>

The peak-to-average power ratio (PAPR) limit shall not exceed 13 dB for more than 0.1% of the time.

FCC ID: A3LRF4461D-13A	element	MEASUREMENT REPORT (CERTIFICATION)	F Approved by Technical Ma	
Test Report S/N:	Test Dates:	EUT Type:	Dage 110 of	204
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Page 119 of	394
© 2022 Element			ES-QP-16-0	9 Rev.05



Channel Port	Dort	PAPR (dB)				Limit
	Poli	QPSK	16QAM	64QAM	256QAM	(dB)
Low	0	8.42	8.38	8.53	8.35	≤ 13
Low	1	8.41	8.41	8.52	8.31	≤ 13
Middle	0	8.39	8.39	8.49	8.34	≤ 13
wildule	1	8.41	8.43	8.51	8.36	≤ 13
High	0	8.40	8.41	8.46	8.40	≤ 13
High 1	1	8.35	8.37	8.48	8.38	≤ 13

Table 8-110. Peak To Average Power Ratio Summary Data (LTE B5\_1C\_5M\_2T)

Channel Port	Dort		Limit			
	Poli	QPSK	16QAM	64QAM	256QAM	(dB)
Low	0	7.64	7.61	7.62	7.64	≤ 13
LOW	Low 1	7.64	7.61	7.61	7.65	≤ 13
Middle	0	7.59	7.59	7.59	7.60	≤ 13
wilddie	1	7.58	7.59	7.58	7.60	≤ 13
High	0	7.78	7.83	7.79	7.81	≤ 13
High 1	1	7.78	7.82	7.77	7.80	≤ 13

Table 8-111. Peak To Average Power Ratio Summary Data (LTE B5\_1C\_10M\_2T)

Channel	Port	PAPF	Limit	
Channel	POIL	QPSK	16QAM	(dB)
Low	0	7.99	8.00	≤ 13
Low	1	8.02	7.98	≤ 13
Middle	0	8.02	7.99	≤ 13
Middle	1	7.99	8.01	≤ 13
High	0	7.83	7.83	≤ 13
High	1	7.82	7.86	≤ 13

Table 8-112. Peak To Average Power Ratio Summary Data (LTE B5\_2C\_5M+5M\_2T)

Channel Port		PAPF	Limit	
		QPSK	16QAM	(dB)
Middle	0	8.11	8.05	≤ 13
widdle	1	8.07	8.08	≤ 13

Table 8-113. Peak To Average Power Ratio Summary Data (LTE B5\_3C\_5M+10M+10M\_2T)

FCC ID: A3LRF4461D-13A	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Baga 120 of 204
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Page 120 of 394
© 2022 Element		•	ES-QP-16-09 Rev.05



DCC Datia	Channel	Dert		Limit			
DSS Ratio	Channel	Port	QPSK	16QAM	64QAM	256QAM	(dB)
	Low	0	8.00	8.01	8.43	8.02	≤ 13
	Low	1	7.98	7.99	8.41	7.99	≤ 13
LTE 9 : NR 1	Middle	0	8.00	8.02	8.28	8.02	≤ 13
LIE9.NKI	Midule	1	8.00	8.02	8.38	8.02	≤ 13
	High	0	8.13	8.05	8.31	8.04	≤ 13
	High	1	8.10	8.04	8.35	8.06	≤ 13
	Low	0	8.01	8.02	8.01	8.03	≤ 13
	LOW	1	7.98	8.03	8.00	8.02	≤ 13
LTE 8 : NR 2	Middle	0	8.01	8.04	8.04	8.04	≤ 13
LIE 0. NR Z	wildule	1	8.03	8.06	8.03	8.05	≤ 13
	High	0	8.14	8.10	8.11	8.11	≤ 13
	підп	1	8.13	8.08	8.09	8.11	≤ 13
	Low	0	8.00	8.06	8.03	8.07	≤ 13
	LOW	1	8.02	8.04	8.03	8.06	≤ 13
LTE 7 : NR 3	Middle	0	8.04	8.07	8.06	8.07	≤ 13
LIE7. NR 3	wildule	1	8.04	8.05	8.06	8.06	≤ 13
	High	0	8.17	8.15	8.11	8.15	≤ 13
	riigii	1	8.15	8.17	8.13	8.14	≤ 13
	Low	0	8.03	8.07	8.05	8.13	≤ 13
	LOW	1	8.04	8.06	8.04	8.10	≤ 13
LTE 6 : NR 4	Middle	0	8.07	8.09	8.06	8.09	≤ 13
		1	8.06	8.08	8.07	8.09	≤ 13
	High	0	8.03	8.07	8.05	8.13	≤ 13
		1	8.04	8.06	8.04	8.10	≤ 13
	Low	0	8.06	8.08	8.09	8.11	≤ 13
		1	8.08	8.07	8.09	8.09	≤ 13
LTE 5 : NR 5	Middle	0	8.08	8.10	8.07	8.10	≤ 13
	wildale	1	8.07	8.09	8.07	8.09	≤ 13
	High	0	8.21	8.24	8.22	8.22	≤ 13
	riigii	1	8.19	8.23	8.19	8.21	≤ 13
	Low	0	8.10	8.09	8.13	8.16	≤ 13
	LOW	1	8.10	8.11	8.11	8.15	≤ 13
LTE 4 : NR 6	Middle	0	8.09	8.08	8.08	8.10	≤ 13
	Wildale	1	8.09	8.08	8.09	8.10	≤ 13
	High	0	8.29	8.27	8.23	8.29	≤ 13
	riigii	1	8.26	8.23	8.23	8.24	≤ 13
	Low	0	8.09	8.14	8.09	8.17	≤ 13
	LOW	1	8.11	8.13	8.14	8.18	≤ 13
LTE 3 : NR 7	Middle	0	8.10	8.10	8.09	8.12	≤ 13
	ivildulo	1	8.11	8.13	8.10	8.10	≤ 13
	High	0	8.29	8.32	8.29	8.30	≤ 13
	· "9"	1	8.27	8.28	8.25	8.29	≤ 13
	Low	0	8.13	8.14	8.11	8.19	≤ 13
	2011	1	8.13	8.15	8.11	8.18	≤ 13
LTE 2 : NR 8	Middle	0	8.15	8.14	8.10	8.12	≤ 13
	maalo	1	8.12	8.13	8.10	8.11	≤ 13
	High	0	8.32	8.33	8.32	8.31	≤ 13
	i ngi	1	8.32	8.30	8.30 / Data (DSS B(I	8.30	≤ 13

Table 8-114. Peak To Average Power Ratio Summary Data (DSS B(n)5\_1C\_10M\_2T)

FCC ID: A3LRF4461D-13A	element	MEASUREMENT REPORT (CERTIFICATION)	NG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 121 of 204
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)		Page 121 of 394
© 2022 Element	•	•		ES-QP-16-09 Rev.05



DSS Ratio Chanr	Channel Port		PAPF	Limit	
	Channel	Poll	QPSK	16QAM	(dB)
	Low	0	8.01	8.04	≤ 13
LOV	Low 1		8.00	8.01	≤ 13
LTE 9 : NR 1	Middle	0	8.00	8.04	≤ 13
LIE 9. NK I	Midule	1	8.03	7.99	≤ 13
	High	0	8.14	8.16	≤ 13
		1	8.16	8.14	≤ 13

Table 8-115. Peak To Average Power Ratio Summary Data (DSS B(n)5\_2C\_10M+10M\_2T)

Channel Port	Dort		Limit			
	QPSK	16QAM	64QAM	256QAM	(dB)	
Low	0	8.41	8.34	8.37	8.40	≤ 13
Low	1	8.34	8.34	8.36	8.36	≤ 13
Middle	0	8.33	8.31	8.36	8.43	≤ 13
Middle	1	8.40	8.33	8.39	8.39	≤ 13
Lliab	0	8.31	8.36	8.37	8.40	≤ 13
High 1	1	8.32	8.34	8.38	8.39	≤ 13

Table 8-116. Peak To Average Power Ratio Summary Data (NR n5\_1C\_5M\_2T)

Channel	Dort		Limit			
Channel	Port	QPSK	16QAM	64QAM	256QAM	(dB)
Low	0	7.62	7.64	7.63	7.61	≤ 13
Low	1	7.60	7.64	7.62	7.62	≤ 13
Middle	0	7.60	7.61	7.60	7.58	≤ 13
Middle	1	7.60	7.61	7.59	7.56	≤ 13
0	0	7.83	7.81	7.81	7.77	≤ 13
High	1	7.80	7.79	7.77	7.76	≤ 13

Table 8-117. Peak To Average Power Ratio Summary Data (NR n5\_1C\_10M\_2T)

FCC ID: A3LRF4461D-13A	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 122 of 394
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Fage 122 01 394
© 2022 Element			ES-QP-16-09 Rev.05



Channel Port	Dort		Limit			
	FOIL	QPSK	16QAM	64QAM	256QAM	(dB)
Low	0	7.67	7.70	7.70	7.66	≤ 13
LOW	1	7.67	7.71	7.69	7.68	≤ 13
Middle	0	7.59	7.60	7.59	7.60	≤ 13
wildule	1	7.60	7.61	7.58	7.59	≤ 13
High 0 1	0	7.86	7.93	7.86	7.89	≤ 13
	1	7.86	7.92	7.87	7.89	≤ 13

Table 8-118. Peak To Average Power Ratio Summary Data (NR n5\_1C\_15M\_2T)

Channel	Dent	PAPR (dB)		Limit
	Port	QPSK	16QAM	(dB)
Low	0	7.96	7.96	≤ 13
Low	1	8.02	7.95	≤ 13
Middle	0	8.01	8.00	≤ 13
Middle	1	8.01	8.00	≤ 13
High	0	8.04	8.03	≤ 13
	1	8.04	8.03	≤ 13

Table 8-119. Peak To Average Power Ratio Summary Data (NR n5\_2C\_5M+5M\_2T)

Channel	Dort	PAPR (dB)		Limit
	Port –	QPSK	16QAM	(dB)
Middlo	0	8.04	8.07	≤ 13
Middle	1	8.03	8.03	≤ 13

Table 8-120. Peak To Average Power Ratio Summary Data (NR n5\_2C\_10M+15M\_2T)

DSS Ratio Cha	Channel	Channel Port	PAPR (dB)		Limit
	Channel		QPSK	16QAM	(dB)
Low	Low	0	8.03	7.99	≤ 13
	LOW	1	8.01	8.02	≤ 13
	Middle	0	8.06	8.02	≤ 13
LTE 9 : NR 1		1	8.07	8.03	≤ 13
	High	0	8.20	8.15	≤ 13
		1	8.20	8.14	≤ 13

 Table 8-121. Peak To Average Power Ratio Summary Data (MSR 2C\_DSS B(n)5\_1C\_10M+LTE B5\_1C\_5M\_2T)

FCC ID: A3LRF4461D-13A	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 122 of 204
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Page 123 of 394
© 2022 Element		•	ES-QP-16-09 Rev.05



DSS Ratio Chan	Channel	Channel Dort	PAPR (dB)		Limit
	Channel	Port	QPSK	16QAM	(dB)
LTE 9 : NR 1 Middle	1 Middlo	0	8.17	8.21	≤ 13
	Midule	1	8.17	8.16	≤ 13

Table 8-122. Peak To Average Power Ratio Summary Data (MSR 3C\_DSS B(n)5\_2C\_10M+10M+LTE B5\_1C\_5M\_2T)

Channel	Port	PAPF	Limit	
	FOIL	QPSK	16QAM	(dB)
Low	0	7.98	7.99	≤ 13
LOW	1	7.97	7.95	≤ 13
Middle	0	7.99	8.01	≤ 13
Middle	1	7.99	7.99	≤ 13
High -	0	8.04	8.02	≤ 13
	1	8.00	8.01	≤ 13

Table 8-123. Peak To Average Power Ratio Summary Data (MSR 2C\_NR n5\_1C\_5M+LTE B5\_1C\_5M\_2T)

Channel Port	Dort	PAPF	Limit	
	Poli	QPSK	16QAM	(dB)
NA: -I -II -	0	8.14	8.10	≤ 13
Middle	1	8.14	8.12	≤ 13

Table 8-124. Peak To Average Power Ratio Summary Data (MSR 3C\_NR n5\_2C\_10M+10M+LTEB5\_1C\_5M\_2T)

DSS Ratio	Channel	annel Port	PAPR (dB)		Limit
			QPSK	16QAM	(dB)
	Low	0	7.99	8.01	≤ 13
	Low	1	8.01	8.03	≤ 13
	Middle	0	8.01	8.03	≤ 13
LTE 9 : NR 1		1	8.04	8.04	≤ 13
	High	0	8.15	8.10	≤ 13
		1	8.14	8.17	≤ 13

Table 8-125. Peak To Average Power Ratio Summary Data (MSR 2C\_DSS B(n)5\_1C\_10M+NR n5\_1C\_5M\_2T)

FCC ID: A3LRF4461D-13A	element 🤤	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 124 of 394
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Fage 124 01 394
© 2022 Element		·	ES-QP-16-09 Rev.05



DSS Ratio Ch	Channel Dart	PAPR (dB)		Limit	
	Channel	Port	QPSK	16QAM	(dB)
LTE 9 : NR 1 Mic	I Middle 0	0	8.04	8.09	≤ 13
		8.06	8.04	≤ 13	

Table 8-126. Peak To Average Power Ratio Summary Data (MSR 2C\_DSS B(n)5\_1C\_10M+NR n5\_1C\_15M\_2T)

DSS Ratio	Channel	Channel Port	PAPR (dB)		Limit
	Channel		QPSK	16QAM	(dB)
	Low	0	7.97	7.98	≤ 13
	LOW	1	7.98	7.99	≤ 13
	Middle	0	8.00	7.99	≤ 13
		1	8.04	8.01	≤ 13
	High	0	8.18	8.14	≤ 13
		1	8.11	8.13	≤ 13

Table 8-127. Peak To Average Power Ratio Summary Data (MSR 3C\_DSS B(n)5\_1C\_10M+NR n5\_1C\_5M+LTE B5\_1C\_5M\_2T)

DSS Ratio C	Channel Port	PAPR (dB)		Limit	
		Port	QPSK	16QAM	(dB)
LTE 9 : NR 1 N	Middle 0 1	0	8.16	8.17	≤ 13
		8.14	8.15	≤ 13	

 Table 8-128. Peak To Average Power Ratio Summary Data (MSR 3C\_DSS B(n)5\_1C\_10M+NR n5\_1C\_10M+LTE B5\_1C\_5M\_2T)

FCC ID: A3LRF4461D-13A	element	MEASUREMENT REPORT (CERTIFICATION)	SUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 125 of 394
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	023 - 05/26/2023 RRU(RF4461d)		Fage 125 01 394
© 2022 Element				ES-QP-16-09 Rev.05



Channel	Port	PAPR (dB)				Limit
	Poli	QPSK	16QAM	64QAM	256QAM	(dB)
Low	0	8.27	8.41	8.34	8.31	≤ 13
Low –	1	8.25	8.41	8.33	8.31	≤ 13
Middle	0	8.28	8.43	8.34	8.30	≤ 13
Middle	1	8.29	8.44	8.34	8.29	≤ 13
High -	0	8.27	8.42	8.35	8.29	≤ 13
	1	8.28	8.43	8.33	8.28	≤ 13

Table 8-129. Peak To Average Power Ratio Summary Data (LTE B13\_1C\_5M\_2T)

Channel Port	PAPR (dB)				Limit	
	Pon	QPSK	16QAM	64QAM	256QAM	(dB)
Middle	0	7.61	7.60	7.62	7.59	≤ 13
	1	7.60	7.59	7.62	7.59	≤ 13

Table 8-130. Peak To Average Power Ratio Summary Data (LTE B13\_1C\_10M\_2T)

Channel	Port	PAPF	Limit	
		QPSK	16QAM	(dB)
Middle	0	7.64	7.65	≤ 13
	1	7.63	7.64	≤ 13

Table 8-131. Peak To Average Power Ratio Summary Data (LTE B13\_2C\_5M+5M\_2T)

Channel Port	Port	PAPR (dB)	Limit
		QPSK	(dB)
Low	0	8.48	≤ 13
Low	1	8.47	≤ 13
Middle	0	8.39	≤ 13
IVIIdale	1	8.40	≤ 13
High	0	8.45	≤ 13
High	1	8.44	≤ 13

Table 8-132. Peak To Average Power Ratio Summary Data (LTE B13\_1C\_5M+NB-IoT(1IB)\_2T)

		PAPR (dB)						
Channel Port	Port	QPSK						
		LTE B13_1C_10M+ NB-IoT(2GB)	LTE B13_1C_10M+ NB-IoT(GB+IB)	LTE B13_1C_10M+ NB-IoT(IB+GB)	LTE B13_1C_10M+ NB-IoT(2IB)	(dB)		
Middle	0	7.78	7.86	7.87	7.76	≤ 13		
Middle –	1	7.78	7.87	7.87	7.76	≤ 13		

Table 8-133. Peak To Average Power Ratio Summary Data (LTE B13\_1C\_10M+NB-loT\_2T)

FCC ID: A3LRF4461D-13A	element 🤤	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Baga 126 of 204
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Page 126 of 394
© 2022 Element		·	ES-QP-16-09 Rev.05



Channel	Port	PAPR (dB)				Limit
Channel	POIL	QPSK	16QAM	64QAM	256QAM	(dB)
	0	8.45	8.42	8.32	8.35	≤ 13
Low	1	8.42	8.41	8.25	8.35	≤ 13
Low	2	8.44	8.37	8.34	8.37	≤ 13
	3	8.40	8.37	8.31	8.36	≤ 13
	0	8.47	8.40	8.32	8.38	≤ 13
Middle	1	8.46	8.43	8.28	8.35	≤ 13
Widdle	2	8.47	8.35	8.34	8.35	≤ 13
	3	8.37	8.35	8.32	8.34	≤ 13
	0	8.38	8.35	8.26	8.34	≤ 13
Lliab	1	8.41	8.35	8.27	8.32	≤ 13
High	2	8.42	8.34	8.31	8.30	≤ 13
	3	8.39	8.31	8.33	8.30	≤ 13

Table 8-134. Peak To Average Power Ratio Summary Data (LTE B5\_1C\_5M\_4T)

Channel	Dort	PAPR (dB)				Limit
Channel	Port	QPSK	16QAM	64QAM	256QAM	(dB)
	0	8.35	8.37	8.39	8.42	≤ 13
Low	1	8.36	8.36	8.36	8.40	≤ 13
Low	2	7.63	7.63	7.64	7.65	≤ 13
	3	7.63	7.65	7.64	7.66	≤ 13
	0	8.38	8.36	8.35	8.44	≤ 13
Middle	1	8.37	8.34	8.33	8.40	≤ 13
Middle	2	7.62	7.62	7.61	7.62	≤ 13
	3	7.61	7.62	7.62	7.62	≤ 13
	0	8.38	8.34	8.36	8.41	≤ 13
High	1	8.36	8.37	8.36	8.39	≤ 13
riigh	2	7.82	7.74	7.80	7.82	≤ 13
	3	7.81	7.77	7.79	7.81	≤ 13

 Table 8-135. Peak To Average Power Ratio Summary Data (LTE B5\_1C\_10M\_4T)

FCC ID: A3LRF4461D-13A	element)	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 127 of 394
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Page 127 01 394



Channel	Port	PAPF	Limit	
Channel	POIL	QPSK	16QAM	(dB)
	0	8.47	8.44	≤ 13
Low	1	8.47	8.44	≤ 13
LOW	2	8.04	8.02	≤ 13
	3	8.03	8.02	≤ 13
	0	8.44	8.43	≤ 13
Middle	1	8.43	8.45	≤ 13
widdle	2	8.07	8.06	≤ 13
	3	8.07	8.06	≤ 13
	0	8.46	8.52	≤ 13
High	1	8.39	8.51	≤ 13
High	2	8.07	8.12	≤ 13
	3	8.07	8.12	≤ 13

Table 8-136. Peak To Average Power Ratio Summary Data (LTE B5\_2C\_5M+5M\_4T)

Channel	Port	PAPF	Limit	
		QPSK	16QAM	(dB)
Middle	0	8.39	8.38	≤ 13
	1	8.36	8.40	≤ 13
	2	7.88	7.91	≤ 13
	3	7.88	7.91	≤ 13

Table 8-137. Peak To Average Power Ratio Summary Data (LTE B5\_3C\_5M+10M+10M\_4T)

FCC ID: A3LRF4461D-13A	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 128 of 394
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Fage 120 01 394



		Dest	PAPR (dB)				Limit
DSS Ratio	Channel	Port	QPSK	16QAM	64QAM	256QAM	(dB)
		0	8.51	8.52	8.85	8.54	≤ 13
		1	8.45	8.56	8.82	8.48	≤ 13
	Low	2	8.01	8.02	8.51	8.04	≤ 13
		3	8.00	8.04	8.49	8.05	≤ 13
		0	8.48	8.54	8.80	8.54	≤ 13
	Middle	1	8.49	8.49	8.78	8.53	≤ 13
LTE 9 : NR 1	Middle	2	8.03	8.09	8.38	8.06	≤ 13
		3	8.04	8.07	8.44	8.07	≤ 13
		0	8.50	8.48	8.81	8.54	≤ 13
	Llink	1	8.50	8.47	8.87	8.51	≤ 13
	High	2	8.05	8.06	8.46	8.08	≤ 13
		3	8.08	8.07	8.47	8.07	≤ 13
		0	8.54	8.66	8.62	8.58	≤ 13
	Low	1	8.57	8.68	8.58	8.56	≤ 13
		2	8.05	8.08	8.06	8.05	≤ 13
		3	8.06	8.06	8.06	8.06	≤ 13
	Middle	0	8.56	8.57	8.62	8.62	≤ 13
		1	8.54	8.58	8.62	8.55	≤ 13
LTE 8 : NR 2		2	8.06	8.07	8.07	8.07	≤ 13
		3	8.05	8.07	8.07	8.07	≤ 13
	High	0	8.59	8.56	8.61	8.50	≤ 13
		1	8.62	8.56	8.56	8.52	≤ 13
		2	8.13	8.07	8.13	8.09	≤ 13
		3	8.14	8.06	8.13	8.08	≤ 13
		0	8.82	8.80	8.90	8.95	≤ 13
	Law	1	8.83	8.82	8.88	9.00	≤ 13
	Low	2	8.11	8.11	8.13	8.14	≤ 13
		3	8.11	8.11	8.13	8.13	≤ 13
		0	8.82	8.84	8.95	9.01	≤ 13
	Middle	1	8.82	8.79	8.91	8.95	≤ 13
LTE 4 : NR 6	Middle	2	8.11	8.10	8.13	8.10	≤ 13
		3	8.12	8.09	8.13	8.10	≤ 13
		0	8.84	8.79	8.88	8.90	≤ 13
	ا المرام	1	8.84	8.76	8.77	8.86	≤ 13
	High	2	8.27	8.20	8.27	8.27	≤ 13
		3	8.25	8.21	8.28	8.27	≤ 13

 Table 8-138. Peak To Average Power Ratio Summary Data (DSS B(n)5\_1C\_10M\_4T)

FCC ID: A3LRF4461D-13A	element)	MEASUREMENT REPORT (CERTIFICATION)	SUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 129 of 394
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)		Fage 129 01 394
© 2022 Element	•			ES-QP-16-09 Rev.05



DSS Ratio C	Channel	Port	PAPF	PAPR (dB)		
DSS Ratio	Channel	Poll	QPSK	16QAM	(dB)	
		0	8.15	8.57	≤ 13	
	Low	1	8.51	8.52	≤ 13	
	Low	2	8.04	8.06	≤ 13	
		3	8.05	8.04	≤ 13	
		0	8.51	8.52	≤ 13	
LTE 9 : NR 1	Middle	1	8.52	8.48	≤ 13	
LIE 9. NK I	wildule	2	8.04	8.05	≤ 13	
		3	8.04	8.05	≤ 13	
		0	8.47	8.57	≤ 13	
	High	1	8.51	8.50	≤ 13	
	High	2	8.16	8.17	≤ 13	
		3	8.16	8.19	≤ 13	

Table 8-139. Peak To Average Power Ratio Summary Data (DSS B(n)5\_2C\_10M+10M\_4T)

Channel	Dort		Limit			
Channel	Port	QPSK	16QAM	64QAM	256QAM	(dB)
	0	8.37	8.28	8.39	8.34	≤ 13
Low	1	8.39	8.30	8.36	8.36	≤ 13
LOW	2	8.39	8.28	8.32	8.31	≤ 13
	3	8.40	8.27	8.36	8.33	≤ 13
	0	8.35	8.37	8.32	8.35	≤ 13
Middlo	1	8.37	8.29	8.32	8.39	≤ 13
Middle	2	8.39	8.30	8.39	8.36	≤ 13
	3	8.39	8.34	8.36	8.39	≤ 13
	0	8.36	8.35	8.35	8.31	≤ 13
High	1	8.39	8.32	8.32	8.36	≤ 13
High	2	8.41	8.31	8.36	8.32	≤ 13
	3	8.41	8.32	8.34	8.32	≤ 13

Table 8-140. Peak To Average Power Ratio Summary Data (NR n5\_1C\_5M\_4T)

FCC ID: A3LRF4461D-13A	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 120 of 204
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Page 130 of 394



Channel	Dort		Limit			
Channel	Port	QPSK	16QAM	64QAM	256QAM	(dB)
	0	8.36	8.33	8.43	8.42	≤ 13
Low	1	8.38	8.31	8.40	8.43	≤ 13
LOW	2	7.64	7.62	7.65	7.65	≤ 13
	3	7.63	7.62	7.64	7.65	≤ 13
0	0	8.37	8.31	8.39	8.44	≤ 13
Middle	1	8.38	8.30	8.38	8.45	≤ 13
Middle	2	7.60	7.60	7.61	7.61	≤ 13
	3	7.60	7.61	7.60	7.61	≤ 13
	0	8.40	8.32	8.36	8.43	≤ 13
Lliab	1	8.39	8.30	8.37	8.42	≤ 13
High	2	7.80	7.75	7.80	7.80	≤ 13
	3	7.81	7.75	7.81	7.83	≤ 13

Table 8-141. Peak To Average Power Ratio Summary Data (NR n5\_1C\_10M\_4T)

Channel	Dort		Limit			
Channel	Port	QPSK	16QAM	64QAM	256QAM	(dB)
	0	8.36	8.34	8.41	8.32	≤ 13
Low	1	8.36	8.31	8.38	8.30	≤ 13
Low	2	7.69	7.68	7.67	7.69	≤ 13
	3	7.68	7.68	7.67	7.67	≤ 13
	0	8.37	8.33	8.42	8.33	≤ 13
Middle	1	8.37	8.30	8.43	8.33	≤ 13
Middle	2	7.62	7.61	7.62	7.64	≤ 13
	3	7.62	7.62	7.63	7.64	≤ 13
	0	8.36	8.27	8.36	8.35	≤ 13
High	1	8.34	8.27	8.38	8.33	≤ 13
riigh	2	7.90	7.89	7.90	7.89	≤ 13
	3	7.90	7.90	7.91	7.90	≤ 13

 Table 8-142. Peak To Average Power Ratio Summary Data (NR n5\_1C\_15M\_4T)

FCC ID: A3LRF4461D-13A	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 121 of 204
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Page 131 of 394



Channel	Dort	PAPF	Limit	
Channel	Port	QPSK	16QAM	(dB)
	0	8.43	8.42	≤ 13
Low	1	8.39	8.41	≤ 13
LOW	2	8.00	8.02	≤ 13
	3	8.00	8.01	≤ 13
	0	8.45	8.40	≤ 13
Middle	1	8.41	8.46	≤ 13
Middle	2	8.05	8.03	≤ 13
	3	8.01	8.03	≤ 13
	0	8.41	8.42	≤ 13
Lliab	1	8.44	8.39	≤ 13
High	2	8.08	8.07	≤ 13
	3	8.02	8.06	≤ 13

Table 8-143. Peak To Average Power Ratio Summary Data (NR n5\_2C\_5M+5M\_4T)

Channel Port	PAPF	Limit		
	Poit	QPSK	16QAM	(dB)
0	0	8.40	8.36	≤ 13
Middlo	1	8.43	8.38	≤ 13
Middle –	2	8.08	8.09	≤ 13
	3	7.90	7.89	≤ 13

Table 8-144. Peak To Average Power Ratio Summary Data (NR n5\_2C\_10M+15M\_4T)

FCC ID: A3LRF4461D-13A	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 132 of 394
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Fage 132 01 394



DSS Ratio Channel	Channel	el Port	PAPR (dB)		Limit
DSS Ralio		Pon	QPSK	16QAM	(dB)
		0	8.45	8.38	≤ 13
	Low	1	8.44	8.43	≤ 13
	Low	2	7.96	8.01	≤ 13
		3	7.99	7.98	≤ 13
		0	8.47	8.39	≤ 13
LTE 9 : NR 1	Middle	1	8.47	8.41	≤ 13
	Midule	2	8.03	8.03	≤ 13
	3	3	8.06	8.03	≤ 13
		0	8.48	8.37	≤ 13
	Lliab	1	8.39	8.36	≤ 13
	High	2	8.14	8.15	≤ 13
		3	8.23	8.15	≤ 13

 Table 8-145. Peak To Average Power Ratio Summary Data (MSR 2C\_DSS B(n)5\_1C\_10M+LTE B5\_1C\_5M\_4T)

DSS Ratio	Channel	PAPR PAPR	R (dB)	Limit												
DSS Ralio			Port	QPSK	16QAM	(dB)										
		0	8.45	8.48	≤ 13											
LTE 9 : NR 1 Middle	Middlo	1	8.46	8.46	≤ 13											
	Midule	2	8.18	8.22	≤ 13											
		3	8.20	8.20	≤ 13											

Table 8-146. Peak To Average Power Ratio Summary Data (MSR 3C\_DSS B(n)5\_2C\_10M+10M+LTE B5\_1C\_5M\_4T)

FCC ID: A3LRF4461D-13A	element)	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 133 of 394
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Fage 155 01 594



Channel	Port	PAPR (dB)		Limit
Channe	Poli	QPSK	16QAM	(dB)
	0	8.36	8.40	≤ 13
Low	1	8.38	8.39	≤ 13
LOW	2	7.98	8.03	≤ 13
	3	8.01	8.03	≤ 13
	0	8.33	8.38	≤ 13
Middle	1	8.40	8.35	≤ 13
Middle	2	8.01	8.03	≤ 13
3	3	8.00	8.03	≤ 13
	0	8.39	8.37	≤ 13
High	1	8.38	8.39	≤ 13
High –	2	8.07	8.06	≤ 13
	3	8.06	8.04	≤ 13

Table 8-147. Peak To Average Power Ratio Summary Data (MSR 2C\_NR n5\_1C\_5M+LTE B5\_1C\_5M\_4T)

Channel	Dort	PAPF	Limit (dB)	
Channel Port		QPSK		16QAM
	0	8.42	8.37	≤ 13
Middle	1	8.43	8.39	≤ 13
	2	8.17	8.14	≤ 13
	3	8.18	8.18	≤ 13

Table 8-148. Peak To Average Power Ratio Summary Data (MSR 3C\_NR n5\_2C\_10M+10M+LTE B5\_1C\_5M\_4T)

FCC ID: A3LRF4461D-13A	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 134 of 394
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Fage 134 01 394
@ 0000 FL			EQ. OD 40.00 D



Channel	Dort	PAPR (dB)		Limit
	Port	QPSK	16QAM	(dB)
	0	8.59	8.67	≤ 13
Low	1	8.62	8.66	≤ 13
LOW	2	8.24	8.26	≤ 13
	3	8.24	8.29	≤ 13
	0	8.61	8.63	≤ 13
Middle	1	8.68	8.66	≤ 13
Middle	2	8.27	8.31	≤ 13
	3	8.27	8.28	≤ 13
	0	8.63	8.69	≤ 13
High	1	8.62	8.58	≤ 13
High	2	8.42	8.38	≤ 13
	3	8.40	8.36	≤ 13

 Table 8-149. Peak To Average Power Ratio Summary Data (MSR 2C\_DSS B(n)5\_1C\_10M+NR n5\_1C\_5M\_4T)

Channel	Port	PAPR (dB)		Limit
		QPSK	16QAM	(dB)
	0	8.52	8.51	≤ 13
Mid	1	8.54	8.50	≤ 13
	2	8.22	8.27	≤ 13
	3	8.20	8.20	≤ 13

Table 8-150. Peak To Average Power Ratio Summary Data (MSR 2C\_DSS B(n)5\_1C\_10M+NR n5\_1C\_15M\_4T)

FCC ID: A3LRF4461D-13A	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 135 of 394
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Fage 155 01 594
© 0000 El.			E0 0D 10 00 D 05



Channel	Dort	PAPR (dB)		Limit
Channel	Port	QPSK	16QAM	(dB)
	0	8.45	8.54	≤ 13
Low	1	8.48	8.58	≤ 13
LOW	2	8.10	8.11	≤ 13
	3	8.16	8.10	≤ 13
	0	8.56	8.59	≤ 13
Middle	1	8.59	8.46	≤ 13
Middle	2	8.18	8.21	≤ 13
	3	8.21	8.25	≤ 13
	0	8.60	8.54	≤ 13
High	1	8.54	8.67	≤ 13
High	2	8.26	8.40	≤ 13
	3	8.30	8.24	≤ 13

Table 8-151. Peak To Average Power Ratio Summary Data (MSR 3C\_DSS B(n)5\_1C\_10M+NR n5\_1C\_5M+LTE B5\_1C\_5M\_4T)

Channel	Port	PAPR (dB)		Limit
		QPSK	16QAM	(dB)
	0	8.50	8.57	≤ 13
Middle	1	8.49	8.55	≤ 13
	2	8.24	8.23	≤ 13
	3	8.30	8.30	≤ 13

Table 8-152. Peak To Average Power Ratio Summary Data (MSR 3C\_DSS B(n)5\_1C\_10M+NR n5\_1C\_10M+LTE B5\_1C\_5M\_4T)

FCC ID: A3LRF4461D-13A	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 126 of 204
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Page 136 of 394
© 2022 Element		·	ES-QP-16-09 Rev.05



Channel	Port	PAPR (dB)			Limit	
	Poli	QPSK	16QAM	64QAM	256QAM	(dB)
	0	8.42	8.34	8.31	8.36	≤ 13
Low	1	8.42	8.35	8.34	8.34	≤ 13
LOW	2	8.42	8.34	8.32	8.36	≤ 13
	3	8.42	8.34	8.31	8.34	≤ 13
	0	8.44	8.33	8.32	8.34	≤ 13
Middle	1	8.43	8.33	8.32	8.36	≤ 13
widdie	2	8.43	8.33	8.33	8.34	≤ 13
	3	8.42	8.34	8.30	8.34	≤ 13
High	0	8.42	8.34	8.30	8.35	≤ 13
	1	8.41	8.36	8.33	8.35	≤ 13
	2	8.41	8.32	8.34	8.35	≤ 13
	3	8.41	8.33	8.31	8.36	≤ 13

Table 8-153. Peak To Average Power Ratio Summary Data (LTE B13\_1C\_5M\_4T)

Channel	Port	PAPR (dB)				Limit
	POIL	QPSK	16QAM	64QAM	256QAM	(dB)
Middle	0	8.37	8.35	8.31	8.41	≤ 13
	1	8.35	8.36	8.35	8.41	≤ 13
	2	7.62	7.63	7.62	7.63	≤ 13
	3	7.61	7.61	7.62	7.62	≤ 13

Table 8-154. Peak To Average Power Ratio Summary Data (LTE B13\_1C\_10M\_4T)

Channel	Port	PAPF	Limit	
		QPSK	16QAM	(dB)
Middle	0	8.40	8.42	≤ 13
	1	8.41	8.39	≤ 13
	2	7.67	7.67	≤ 13
	3	7.66	7.65	≤ 13

Table 8-155. Peak To Average Power Ratio Summary Data (LTE B13\_2C\_5M+5M\_4T)

FCC ID: A3LRF4461D-13A	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dago 127 of 204
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Page 137 of 394
© 2022 Element		·	ES-QP-16-09 Rev.05



Channel	Port	PAPR (dB)	Limit
	FOIL	QPSK	(dB)
	0	8.49	≤ 13
Low	1	8.52	≤ 13
LOW	2	8.52	≤ 13
	3	8.50	≤ 13
	0	8.40	≤ 13
Middle	1	8.38	≤ 13
WIGGle	2	8.40	≤ 13
	3	8.39	≤ 13
	0	8.45	≤ 13
High	1	8.46	≤ 13
	2	8.49	≤ 13
	3	8.48	≤ 13

Table 8-156. Peak To Average Power Ratio Summary Data (LTE B13\_1C\_5M+NB-loT(1IB)\_4T)

		PAPR (dB)					
Channel	Port	QPSK					
		LTE B13_1C_10M+ NB-IoT(2GB)	LTE B13_1C_10M+ NB-IoT(GB+IB)	LTE B13_1C_10M+ NB-IoT(IB+GB)	LTE B13_1C_10M+ NB-IoT(2IB)	(dB)	
Middle	0	8.66	8.47	8.50	8.42	≤ 13	
	1	8.69	8.46	8.51	8.44	≤ 13	
	2	7.76	7.88	7.88	8.46	≤ 13	
	3	7.76	7.87	7.88	8.46	≤ 13	

Table 7 103. Peak To Average Power Ratio Summary Data (LTE B13\_1C\_10M+NB-loT\_4T)

FCC ID: A3LRF4461D-13A		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 138 of 394
8K23040701-00-R2.A3L	04/12/2023 - 05/26/2023	RRU(RF4461d)	Fage 130 01 394
© 0000 El			E0.00 40.00 D. 05