

# T-Mobile

# SUMMARY REPORT

**Report Type:** TMO Field Performance

**Model:** DUT

**Software Version:**

**Hardware Version:**

**FCC ID:**

## SCOPE OF WORK

TMobile Field Data Performance, TMobile Field Call Performance, TMobile Field Voice Quality, TMobile Field Coverage Performance, TMobile Field AGPS

## REPORT NUMBER

1013LEX-002

## ISSUE DATE

09-October-2025

## DOCUMENT CONTROL NUMBER

ATMC\_QM\_Procedure\_008\_DC

© 2025 ATMCL



# TMO Field Test Report

## Test Devices

DUT	S. No./IMEI	REF	S. No./IMEI
Samsung XCover Pro 7	AP3A.240905.015.A2.G766USQS2AYG1 / 354877970010297	Samsung GS25 FE	BP2A.250605.031.A3.S731USQU1AYH5 / 358625370021547
Samsung XCover Pro 7	AP3A.240905.015.A2.G766USQS2AYG1 / 354877970011428	Samsung GS25 FE	BP2A.250605.031.A3.S731USQU1AYH5 / 358625370020499
Samsung XCover Pro 7	AP3A.240905.015.A2.G766USQS2AYG1 / 354877970012160	Samsung GS25 FE	BP2A.250605.031.A3.S731USQU1AYH5 / 358625370022602
Samsung XCover Pro 7	AP3A.240905.015.A2.G766USQS2AYG1 / 354877970012335	Samsung GS25 FE	BP2A.250605.031.A3.S731USQU1AYH5 / 358625370021935
Samsung XCover Pro 7	AP3A.240905.015.A2.G766USQS2AYG1 / 354877970011139	Samsung GS25 FE	BP2A.250605.031.A3.S731USQU1AYH5 / 358625370022487
Samsung XCover Pro 7	AP3A.240905.015.A2.G766USQS2AYG1 / 354877970011535	Samsung GS25 FE	BP2A.250605.031.A3.S731USQU1AYH5 / 358625370020408
Samsung XCover Pro 7	AP3A.240905.015.A2.G766USQS2AYG1 / 354877970010388	Samsung GS25 FE	BP2A.250605.031.A3.S731USQU1AYH5 / 358625370022867
Samsung XCover Pro 7	AP3A.240905.015.A2.G766USQS2AYG1 / 354877970012210	Samsung GS25 FE	BP2A.250605.031.A3.S731USQU1AYH5 / 358625370021489
Samsung XCover Pro 7	AP3A.240905.015.A2.G766USQS2AYG1 / 354877970011048	Samsung GS25 FE	BP2A.250605.031.A3.S731USQU1AYH5 / 358625370021489
Samsung XCover Pro 7	AP3A.240905.015.A2.G766USQS2AYG1 / 354877970012475	Samsung GS25 FE	BP2A.250605.031.A3.S731USQU1AYH5 / 358625370021596

## Performance Summary Report

Category	% Completed	% Passed	Issues	Time to complete
Call Performance	100	90		10/07/2025
Data Performance	100	86		10/07/2025
Voice Quality	100	100		10/07/2025
Coverage Performance	100	84		10/07/2025

**Submission Approval**

Signature of Manager Test Team

Date

---

Signature of T-Mobile Device Certification

Date

---

# Table of Contents

<b>1. Call Performance</b>	5
1.1 5G Auto VoNR Disabled CP MO Drive	6
1.2 5G Auto VoNR Disabled CP MT Drive	7
1.3 5G Auto VoNR Enabled CP MO Drive	8
1.4 5G Auto VoNR Enabled CP MT Drive	9
<b>2. Data Performance</b>	10
2.1 5G AUTO DP	
2.1.1 5G Auto Data Test Drive	17
2.1.2 5G Auto Data Test MHS Drive	18
2.1.3 5G Auto Data Test MHS Stationary Location 1 DL	19
2.1.4 5G Auto Data Test MHS Stationary Location 1 UL	23
2.1.5 5G Auto Data Test MHS Stationary Location 2 DL	28
2.1.6 5G Auto Data Test MHS Stationary Location 2 UL	32
2.1.7 5G Auto Data Test Stationary Location 1 DL	37
2.1.8 5G Auto Data Test Stationary Location 1 UL	41
2.1.9 5G Auto Data Test Stationary Location 2 DL	46
2.1.10 5G Auto Data Test Stationary Location 2 UL	50
2.1.11 G Auto Data Test Stationary Location 3 DL	55
2.1.12 5G Auto Data Test Stationary Location 3 UL	59
2.1.13 5G Auto Data Web-Kepler	64
2.1.14 5G VoNR MRAB Stationary	65
2.1.15 5G Auto Data Play-store app DL Stationary	66
2.2 5G NSA DP	
2.2.1 5G NSA Data Test Drive	68
2.2.2 5G NSA Data Test Stationary Moderate RF DL	69
2.2.3 5G NSA Data Test Stationary Moderate RF UL	73
2.2.4 5G NSA Data Test Stationary Poor RF DL	78
2.2.5 5G NSA Data Test Stationary Poor RF UL	82
<b>3. Voice Quality</b>	87
3.1 5G Auto VoNR Enabled AMR NB VQ	88
3.2 5G Auto VoNR Enabled AMR WB VQ	89
3.3 5G Auto VoNR Disabled EVS WB VQ	89
3.4 5G Auto VoNR Enabled EVS WB VQ	89
3.5 5G Auto VoNR Disabled Audio Delay	90
3.6 5G Auto VoNR Enabled Audio Delay	90
<b>4. Coverage Performance</b>	91
4.1 5G VoNR Coverage Test	91
4.2 5G n41 HPUE Coverage Test	98

## Revision History

Version	Description	Author	Revised On
1.0	First Version	Claude Li	10/09/2025

# 1. Call Performance Report

## Call Performance MO/MT Pass/Fail Criteria

5G Auto mode Call Initiation	If p-value for Fisher Exact > 0.99 for MO/MT failures DUT vs REF
	If p-value for Fisher Exact is between 0.05 and 0.99 for MO/MT failures DUT vs REF
	If RED condition is satisfied but % MO/MT Failures (DUT) < 1%
	If p-value for Fisher Exact < 0.05 for MO/MT failures DUT vs REF
5G Auto mode Call Retention (MO Only)	If p-value for Fisher Exact > 0.99 for MO failures DUT vs REF
	If p-value for Fisher Exact is between 0.05 and 0.99 for MO failures DUT vs REF
	If RED condition is satisfied but % MO Failures (DUT) < 1%
	If p-value for Fisher Exact < 0.05 for MO failures DUT vs REF
5G Auto mode Call Setup Time	If (Average MO/MT Call Setup Time All DUT) < (Average MO/MT Call Setup Time All REF)
	If (Average MO/MT Call Setup Time All DUT) is between 1.0 & 1.1 * (Average MO/MT Call Setup Time All REF)
	If (Average MO/MT Call Setup Time All DUT) is between 1.1 & 1.25 * (Average MO/MT Call Setup Time All REF)
	If (Average MO/MT Call Setup Time All DUT) > (Average MO/MT Call Setup Time All REF) * 1.25

## Call Performance Summary -Seattle Market

TEST CASES	KPI FOR CALL PERFORMANCE MOBILITY						NETWORK TECH.	COMMENTS/LINKS		
	CALL SETUP TIME		CALL INITIATION SUCCESS		CALL RETENTION SUCCESS					
	DUT AVG.	REF AVG.	DUT AVG.	REF AVG.	DUT AVG.	REF AVG.				
1.1 5G Auto VoNR Disabled CP MO Drive	1.23	1.38	100.00%	84.85%	99.91%	100.00%	5G Auto VoNR			
1.2 5G Auto VoNR Disabled CP MT Drive	1.64	1.65	100.00%	100.00%	99.32%	100.00%	5G Auto VoNR			
1.3 5G Auto VoNR Enabled CP MO Drive	1.23	1.35	99.56%	92.42%	99.65%	100.00%	5G Auto VoNR			
1.4 5G Auto VoNR Enabled CP MT Drive	1.16	0.91	100.00%	100.00%	100.00%	100.00%	5G Auto VoNR			

## Call Performance - 1.1 5G Auto VoNR Disabled CP MO Drive

Device	Connection Attempts	Mean Setup Time (s)	Successful Initiations	Successful Initiations (%)	Failed Initiations	Failed Initiations (%)
DUT	1159	1.23	1159	100.00%	0	0.00%
REF	1294	1.38	1098	84.85%	196	15.15%

### P-Value Table

Metrics	P-Value
Call Initiation	1.000
Call Retention	0.514

### Call Categories

■ VoLTE ■ 5G SA ■ EPSFB ■ Unknown



Device	VoLTE	5G SA	EPSFB	Unknown	Total
DUT	74 (6.4%)	10 (0.9%)	1068 (92.2%)	6 (0.5%)	1158
REF	90 (7.0%)	199 (15.4%)	942 (72.8%)	63 (4.9%)	1294

## Call Performance - 1.2 5G Auto VoNR Disabled CP MT Drive

Device	Connection Attempts	Mean Setup Time (s)	Successful Initiations	Successful Initiations (%)	Failed Initiations	Failed Initiations (%)
DUT	1028	1.64	1028	100.00%	0	0.00%
REF	1028	1.65	1028	100.00%	0	0.00%

### P-Value Table

Metrics	P-Value
Call Initiation	1.000

### Call Categories

■ VoLTE ■ 5G SA ■ EPSFB ■ Unknown

DUT 5.9% ■ 90.9%

REF 6.4% ■ 90%

Device	VoLTE	5G SA	EPSFB	Unknown	Total
DUT	61 (5.9%)	32 (3.1%)	934 (90.9%)	1 (0.1%)	1028
REF	66 (6.4%)	36 (3.5%)	925 (90.0%)	1 (0.1%)	1028

## Call Performance - 1.3 5G Auto VoNR Enabled CP MO Drive

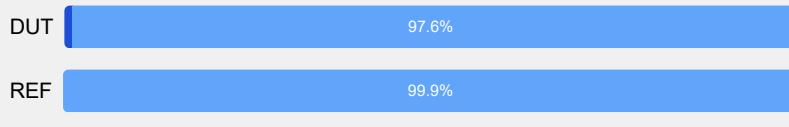
Device	Connection Attempts	Mean Setup Time (s)	Successful Initiations	Successful Initiations (%)	Failed Initiations	Failed Initiations (%)
DUT	1134	1.23	1129	99.56%	5	0.44%
REF	1200	1.35	1109	92.42%	91	7.58%

### P-Value Table

Metrics	P-Value
Call Initiation	1.000
Call Retention	0.065

### Call Categories

■ VoLTE ■ 5G SA ■ EPSFB ■ Unknown



Device	VoLTE	5G SA	EPSFB	Unknown	Total
DUT	13 (1.1%)	1107 (97.6%)	0 (0.0%)	14 (1.2%)	1134
REF	0 (0.0%)	1199 (99.9%)	1 (0.1%)	0 (0.0%)	1200

## Call Performance - 1.4 5G Auto VoNR Enabled CP MT Drive

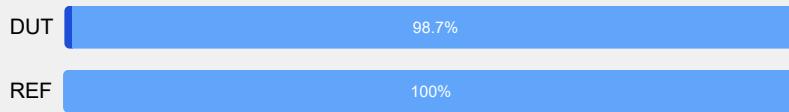
Device	Connection Attempts	Mean Setup Time (s)	Successful Initiations	Successful Initiations (%)	Failed Initiations	Failed Initiations (%)
DUT	1056	1.16	1056	100.00%	0	0.00%
REF	1056	0.91	1056	100.00%	0	0.00%

### P-Value Table

Metrics	P-Value
Call Initiation	1.000

### Call Categories

■ VoLTE ■ 5G SA ■ EPSFB ■ Unknown



Device	VoLTE	5G SA	EPSFB	Unknown	Total
DUT	13 (1.2%)	1042 (98.7%)	1 (0.1%)	0 (0.0%)	1056
REF	0 (0.0%)	1056 (100.0%)	0 (0.0%)	0 (0.0%)	1056

## 2. Data Performance Report

### Stationary Data Performance Pass/Fail Criteria

HTTP Data Throughput Average for Single Stream (Bandwidth Score for Multi Stream), PlayStore app DL throughput	If (Overall Avg Tput DUT) > 1.1*(Overall Avg Tput REF) Excellent
	Between 0.9 and 1.1 * (Overall Avg Tput REF) PASS
	Between 0.8 and 0.9 * (Overall Avg Tput REF) Marginal fail
	If (Overall Avg Tput DUT) < 0.8 * (Overall Avg Tput REF) Fail
UDP Data Throughput Average	If (% UDP TPUT AVG DUT) > 1.1*(% UDP TPUT AVG REF)
	Between 0.9 and 1.1 * (% UDP TPUT AVG REF)
	Between 0.8 and 0.9 * (% UDP TPUT AVG REF)
	If (% UDP TPUT AVG DUT) < 0.8 * (% UDP TPUT AVG REF)
UDP Jitter	If (Jitter AVG DUT) < 0.9*(Jitter AVG REF)
	Between 0.9 and 1.1 * (Jitter AVG REF) or if (Jitter AVG DUT) < 10
	Between 1.1 and 1.20 * (Jitter AVG REF)
	If (Jitter AVG DUT) > 1.20 * (Jitter AVG REF)
Latency (PING RTT)	If (RTT AVG DUT) < 0.9*(RTT AVG REF)
	Between 0.9 and 1.1 * (RTT AVG REF)
	Between 1.1 and 1.20 * (RTT AVG REF)
	If (RTT AVG DUT) > 1.20 * (RTT AVG REF)
One way Latency (UDP DL, UL)	If (OWL AVG DUT) < 0.9*(OWL AVG REF)
	Between 0.9 and 1.1 * (OWL AVG REF)
	Between 1.1 and 1.20 * (OWL AVG REF)
	If (OWL AVG DUT) > 1.20 * (OWL AVG REF)

## Mobility Data Performance Pass/Fail Criteria

UDP Data Throughput Average	If (% UDP TPUT AVG DUT) > 1.1*(% UDP TPUT AVG REF)	
	Between 0.9 and 1.1 * (% UDP TPUT AVG REF)	
	Between 0.8 and 0.9 * (% UDP TPUT AVG REF)	
	If (% UDP TPUT AVG DUT) < 0.8 * (% UDP TPUT AVG REF)	
UDP Jitter	If (Jitter AVG DUT) < 0.9*(Jitter AVG REF)	
	Between 0.9 and 1.1 * (Jitter AVG REF) or if (Jitter AVG DUT) < 10	
	Between 1.1 and 1.20 * (Jitter AVG REF)	
	If (Jitter AVG DUT) > 1.20 * (Jitter AVG REF)	
UDP %Packet Loss	If (%Packet Loss AVG DUT) < (% Packet Loss AVG REF)	
	If (%Packet Loss AVG DUT) <= 5% or (%Packet Loss AVG DUT) – (% Packet Loss AVG REF) <= 10%	
	10% < (%Packet Loss AVG DUT) – (% Packet Loss AVG REF) <= 20%	
	(%Packet Loss AVG DUT) – (% Packet Loss AVG REF) > 20%	
Latency (PING RTT)	If (RTT AVG DUT) < 0.9*(RTT AVG REF)	
	Between 0.9 and 1.1 * (RTT AVG REF)	
	Between 1.1 and 1.20 * (RTT AVG REF)	
	If (RTT AVG DUT) > 1.20 * (RTT AVG REF)	

## Web Browser test Pass/Fail Criteria

Average page load time	If (Webpage Load Time AVG DUT) < 0.9*(Webpage Load Time AVG REF)	
	Between 0.9 and 1.1 * (Webpage Load Time AVG REF) or if (Webpage Load Time AVG DUT) < 2	
	Between 1.1 and 1.20 * (Webpage Load Time AVG REF)	
	If (Webpage Load Time AVG DUT) > 1.20 * (Webpage Load Time AVG REF)	

## Data Throughput before/during/after a call Pass/Fail Criteria

Data Throughput Average (Before/During/After) VoNR Call.	If (Overall Avg Tput DUT) > 1.1*(Overall Avg Tput REF)	
	Between 0.9 and 1.1 * (Overall Avg Tput REF)	
	Between 0.8 and 0.9 * (Overall Avg Tput REF)	
	If (Overall Avg Tput DUT) < 0.8 * (Overall Avg Tput REF)	

## Data Performance Summary- Seattle Market

File Transfer (HTTP) Single Stream DL Cases	DUT Avg. (Mbps)	REF Avg. (Mbps)
5G Auto Data Test Stationary Location 1	100.33	111.51
5G Auto Data Test Stationary Location 2	15.12	23.94
5G Auto Data Test Stationary Location 3	98.08	82.46
5G Auto Data Test MHS Stationary Location 1	73.39	122.94
5G Auto Data Test MHS Stationary Location 2	47.22	50.39
5G NSA Data Test Stationary Moderate RF	56.62	39.23
5G NSA Data Test Stationary Poor RF	94.30	67.69

HTTP Multi Stream DL for 30 Seconds Cases		DUT Avg. (Mbps)		REF Avg. (Mbps)	
5G Auto Data Test Stationary Location 1		328.89		356.00	
5G Auto Data Test Stationary Location 2		64.62		49.71	
5G Auto Data Test Stationary Location 3		277.85		311.79	
5G Auto Data Test MHS Stationary Location 1		264.96		283.19	
5G Auto Data Test MHS Stationary Location 2		94.13		41.18	
5G NSA Data Test Stationary Moderate RF		159.02		291.27	
5G NSA Data Test Stationary Poor RF		240.60		259.07	

UDP Download Task at 200 Mbps for 10 seconds Cases	DUT Avg. (Mbps)	REF Avg. (Mbps)	DUT Jitter (ms)	REF Jitter (ms)	DUT Error Ratio (%)	DUT Error Ratio (%)
5G Auto Data Test Stationary Location 1	185.80	185.01	0.07	0.07	8.33	8.21
5G Auto Data Test Stationary Location 2	72.64	49.65	1.72	1.99	60.48	72.39
5G Auto Data Test Stationary Location 3	188.42	173.89	0.06	0.10	7.47	13.52
5G Auto Data Test MHS Stationary Location 1	195.84	193.80	0.09	0.08	3.38	3.53
5G Auto Data Test MHS Stationary Location 2	94.70	148.30	0.45	0.39	33.27	16.15
5G NSA Data Test Stationary Moderate RF	184.06	121.31	0.17	0.76	19.01	36.12
5G NSA Data Test Stationary Poor RF	155.89	188.27	0.16	0.06	17.43	8.67

UDP Download Task at 400 Mbps for 10 seconds Cases	DUT Avg. (Mbps)	REF Avg. (Mbps)	DUT Jitter (ms)	REF Jitter (ms)	DUT Error Ratio (%)	DUT Error Ratio (%)
5G Auto Data Test Stationary Location 1	216.91	228.50	0.06	0.08	45.43	41.06
5G Auto Data Test Stationary Location 2	70.83	75.84	1.73	12.90	77.38	75.88
5G Auto Data Test Stationary Location 3	234.96	192.23	0.06	0.15	28.25	44.97
5G Auto Data Test MHS Stationary Location 1	368.67	363.17	0.05	0.05	8.18	6.05
5G Auto Data Test MHS Stationary Location 2	110.40	38.47	0.60	45.88	60.86	75.43
5G NSA Data Test Stationary Moderate RF	210.73	208.33	0.18	0.41	44.01	50.54
5G NSA Data Test Stationary Poor RF	287.72	304.40	0.11	0.08	20.81	27.53

Single Stream HTTP Upload of a 15 MB file Cases	DUT Avg. (Mbps)	REF Avg. (Mbps)
5G Auto Data Test Stationary Location 1	89.75	85.15
5G Auto Data Test Stationary Location 2	4.14	10.35
5G Auto Data Test Stationary Location 3	31.85	28.92
5G Auto Data Test MHS Stationary Location 1	25.54	23.59
5G Auto Data Test MHS Stationary Location 2	2.59	10.24
5G NSA Data Test Stationary Moderate RF	4.71	11.60
5G NSA Data Test Stationary Poor RF	43.69	27.71

Multi Stream HTTP Upload for 30 seconds Cases	DUT Avg. (Mbps)	REF Avg. (Mbps)
5G Auto Data Test Stationary Location 1	70.98	76.52
5G Auto Data Test Stationary Location 2	5.16	13.31
5G Auto Data Test Stationary Location 3	18.55	21.23
5G Auto Data Test MHS Stationary Location 1	69.51	74.56
5G Auto Data Test MHS Stationary Location 2	2.01	4.84
5G NSA Data Test Stationary Moderate RF	5.05	2.77
5G NSA Data Test Stationary Poor RF	20.38	8.91

UDP Upload Task at 10 Mbps for 10 seconds Cases	DUT Avg. (Mbps)	REF Avg. (Mbps)	DUT Jitter (ms)	REF Jitter (ms)	DUT Error Ratio (%)	DUT Error Ratio (%)
5G Auto Data Test Stationary Location 1	9.54	9.95	1.67	1.86	0.00	0.00
5G Auto Data Test Stationary Location 2	7.32	4.26	5.92	28.08	19.88	58.59
5G Auto Data Test Stationary Location 3	10.02	8.76	1.58	1.67	0.01	11.53
5G Auto Data Test MHS Stationary Location 1	9.88	9.86	1.96	1.78	0.00	0.00
5G Auto Data Test MHS Stationary Location 2	3.70	1.70	0.94	8.43	28.31	75.04
5G NSA Data Test Stationary Moderate RF	5.96	3.29	4.57	4.55	17.67	58.52
5G NSA Data Test Stationary Poor RF	9.21	6.05	2.03	1.46	0.00	14.81

UDP Upload Task at 20 Mbps for 10 seconds	DUT Avg. (Mbps)	REF Avg. (Mbps)	DUT Jitter (ms)	REF Jitter (ms)	DUT Error Ratio (%)	DUT Error Ratio (%)
5G Auto Data Test Stationary Location 1	19.04	19.30	0.93	0.93	0.00	0.00
5G Auto Data Test Stationary Location 2	3.75	2.41	17.48	26.83	56.81	86.15
5G Auto Data Test Stationary Location 3	18.12	17.84	0.68	0.81	0.00	12.43
5G Auto Data Test MHS Stationary Location 1	19.77	19.67	0.86	0.91	0.00	0.00
5G Auto Data Test MHS Stationary Location 2	8.54	7.74	0.99	0.96	33.01	40.39
5G NSA Data Test Stationary Moderate RF	3.37	2.65	6.82	2.33	41.74	83.92
5G NSA Data Test Stationary Poor RF	13.46	14.16	1.12	1.00	3.01	14.63

25x64 bytes PING (ICMP) Cases		DUT Avg. (ms)			REF Avg. (ms)		
5G Auto Data Test Stationary Location 1		54.76			42.74		
5G Auto Data Test Stationary Location 2		87.10			56.48		
5G Auto Data Test Stationary Location 3		55.12			41.10		
5G Auto Data Test MHS Stationary Location 1		115.56			148.09		
5G Auto Data Test MHS Stationary Location 2		82.61			164.05		
5G NSA Data Test Stationary Moderate RF		53.81			81.33		
5G NSA Data Test Stationary Poor RF		52.52			54.39		

UDP Upload Task at 20 Mbps for 10 seconds	DUT Avg. (Mbps)	REF Avg. (Mbps)	DUT Jitter (ms)	REF Jitter (ms)	DUT Error Ratio (%)	DUT Error Ratio (%)	DUT Ping Avg. (ms)	DUT Ping Avg. (ms)
5G Auto Data Test Drive	9.78	9.80	1.99	1.91	3.96	2.35	115.56	148.09
5G NSA Data Test Drive	9.95	9.82	1.69	1.47	1.04	1.18	115.56	148.09

5G Auto Data Web-Kepler	DUT Avg. (s)	REF Avg. (s)
Web Page Load Time	0.8	0.83

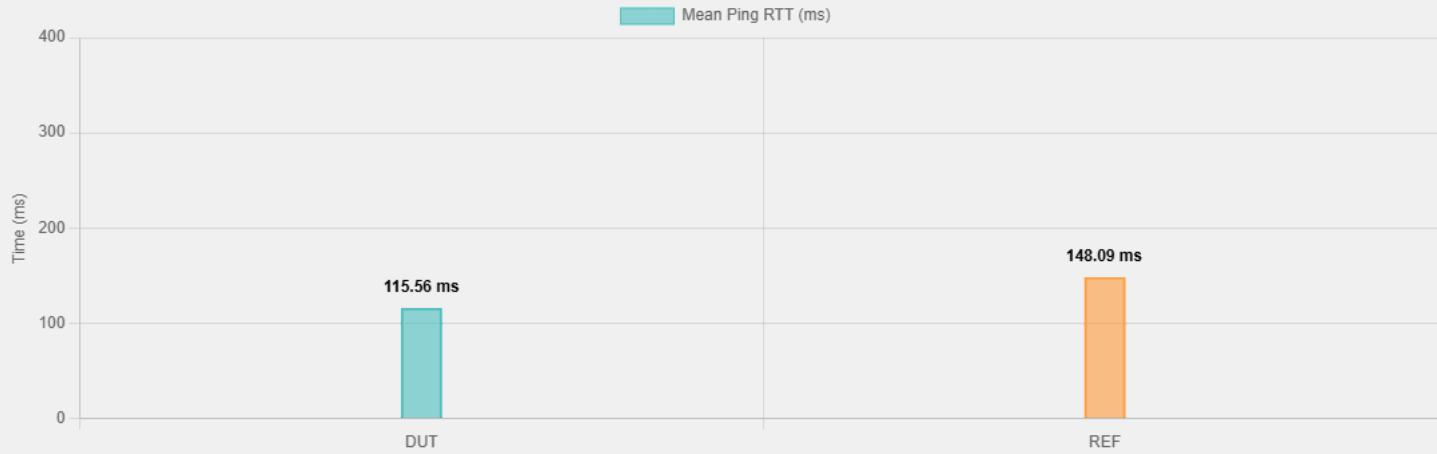
5G VoNR MRAB Stationary	DUT Avg. (Mbps)	REF Avg. (Mbps)
Pre Call Throughput	4.88	26.24
In Call Throughput	3.21	5.22
Post Call Throughput	3.70	20.77

MHS Drive Test Metrics	DUT Value	REF Value
Throughput DL Mean	8.55 Mbps	8.96 Mbps
Throughput UL Mean	7.56 Mbps	7.83 Mbps
Jitter DL Mean	32.18 ms	23.85 ms
Jitter UL Mean	2.06 ms	3.43 ms
Error Ratio DL Mean	11.70 %	9.07 %
Error Ratio UL Mean	15.35 %	14.53 %
Ping RTT Mean	117.09 ms	98.23 ms

<b>5G Auto Data Play-store app DL Stationary</b>	<b>DUT Avg. (Mbps)</b>	<b>REF Avg. (Mbps)</b>
5G Auto Data Test Stationary - Good -30M	<b>77.14</b>	<b>104.79</b>
5G Auto Data Test Stationary - Moderate -30M	<b>30.51</b>	<b>23.04</b>
5G Auto Data Test Stationary - Poor -30M	<b>63.49</b>	<b>102.94</b>
5G Auto Data Test Stationary - Good -60M	<b>218.90</b>	<b>302.13</b>
5G Auto Data Test Stationary - Moderate -60M	<b>54.41</b>	<b>107.53</b>
5G Auto Data Test Stationary - Poor -60M	<b>189.93</b>	<b>261.01</b>
5G Auto Data Test Stationary - Good -100M	<b>160.24</b>	<b>385.17</b>
5G Auto Data Test Stationary - Moderate -100M	<b>57.23</b>	<b>134.85</b>
5G Auto Data Test Stationary - Poor -100M	<b>176.45</b>	<b>295.14</b>

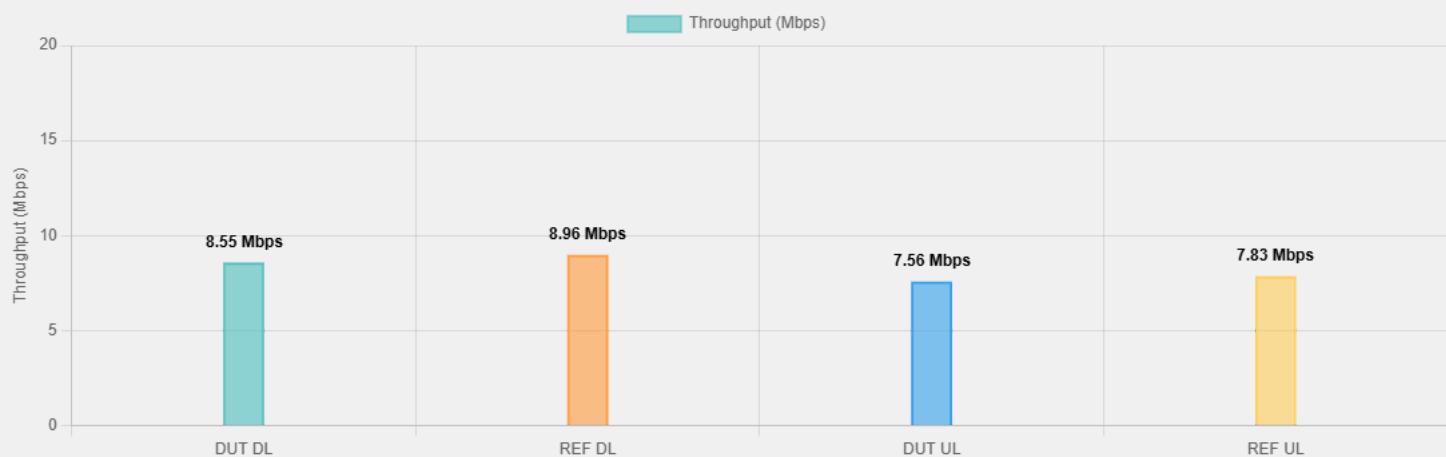
## Data Performance - 5G AUTO DP - 2.1.1 5G Auto Data Test Drive

Metric	Statistic	DUT Value	REF Value
Throughput	Mean	9.78 Mbps	9.80 Mbps
	Difference % Compare to REF	0.19%	
	Standard Deviation	0.93 Mbps	0.72 Mbps
	Minimum	5.83 Mbps	6.84 Mbps
	Maximum	10.00 Mbps	10.00 Mbps
Jitter	Mean	1.99 ms	1.91 ms
Error Ratio	Mean	3.96 %	2.35 %
Ping RTT	Mean	115.56 ms	148.09 ms
	Standard Deviation	70.45 ms	106.63 ms
	Minimum	38.00 ms	43.00 ms
	Maximum	1052.00 ms	788.00 ms



# Data Performance - 5G AUTO DP - 2.1.2 5G Auto Data Test MHS Drive

Metric	DUT Value	REF Value
Throughput DL Mean	8.55 Mbps	8.96 Mbps
Throughput UL Mean	7.56 Mbps	7.83 Mbps
Jitter DL Mean	32.18 ms	23.85 ms
Jitter UL Mean	2.06 ms	3.43 ms
Error Ratio DL Mean	11.70 %	9.07 %
Error Ratio UL Mean	15.35 %	14.53 %
Ping RTT Mean	117.09 ms	98.23 ms



# Data Performance - 5G AUTO DP - 2.1.3 5G Auto Data Test MHS Stationary Location 1 DL - Multi Stream HTTP Download for 30 seconds

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	264.96 Mbps	283.19 Mbps	
	Difference % Compare to REF	6.44%		
	Standard Deviation	47.51 Mbps	62.48 Mbps	
	Minimum	180.14 Mbps	194.13 Mbps	
	Maximum	336.29 Mbps	390.97 Mbps	



# Data Performance - 5G AUTO DP - 2.1.3 5G Auto Data Test MHS Stationary Location 1 DL - Single Stream HTTP Download for 60 seconds

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	73.39 Mbps	122.94 Mbps	
	Difference % Compare to REF	40.30%		
	Standard Deviation	19.97 Mbps	35.35 Mbps	
	Minimum	44.46 Mbps	59.28 Mbps	
	Maximum	104.31 Mbps	172.23 Mbps	



# Data Performance - 5G AUTO DP - 2.1.3 5G Auto Data Test MHS Stationary Location 1 DL - UDP Download Task at 200 Mbps for 10 seconds

Metric	Statistic	DUT Value	REF Value
Throughput	Mean	195.84 Mbps	193.80 Mbps
	Difference % Compare to REF		-1.05%
	Standard Deviation	8.96 Mbps	5.23 Mbps
	Minimum	179.43 Mbps	181.19 Mbps
	Maximum	229.32 Mbps	201.39 Mbps
Jitter	Mean	0.09 ms	0.08 ms
Error Ratio	Mean	3.38 %	3.53 %

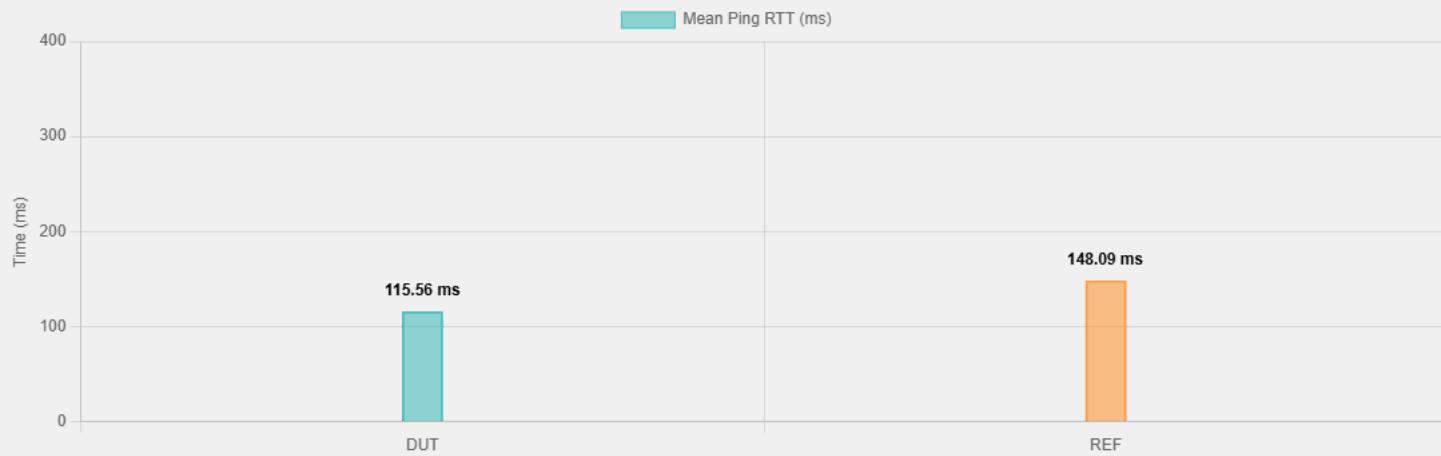


# Data Performance - 5G AUTO DP - 2.1.3 5G Auto Data Test MHS Stationary Location 1 DL - UDP Download Task at 400 Mbps for 10 seconds

Metric	Statistic	DUT Value	REF Value
Throughput	Mean	368.67 Mbps	363.17 Mbps
	Difference % Compare to REF		-1.52%
	Standard Deviation	17.18 Mbps	74.01 Mbps
	Minimum	304.02 Mbps	59.83 Mbps
	Maximum	381.25 Mbps	407.34 Mbps
Jitter	Mean	0.05 ms	0.05 ms
Error Ratio	Mean	8.18 %	6.05 %

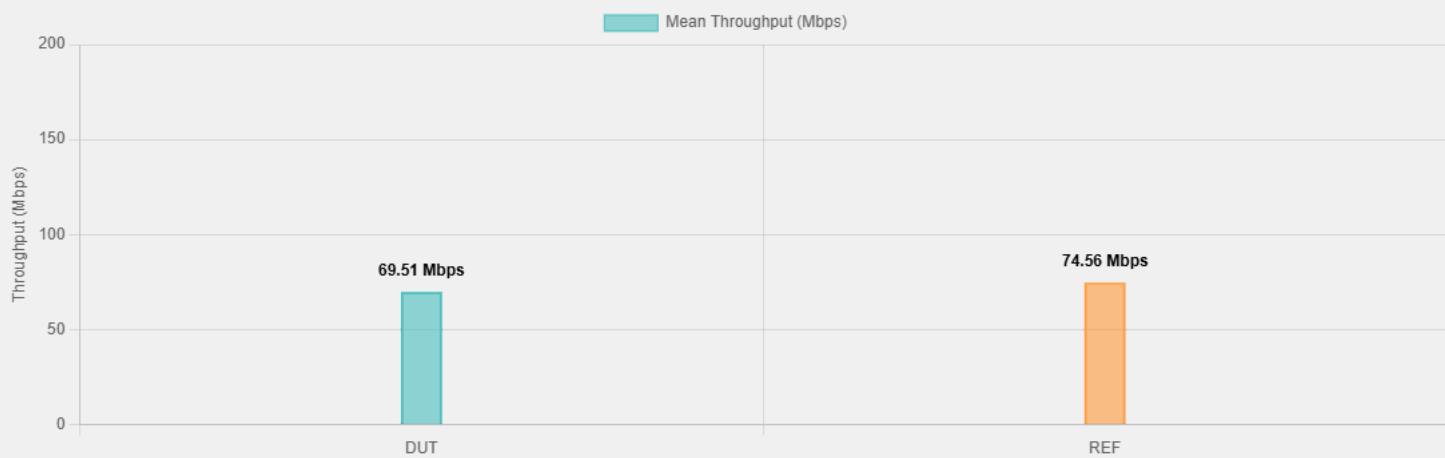


Metric	Statistic	DUT Value	REF Value
Ping RTT	Mean	115.56 ms	148.09 ms
	Standard Deviation	70.45 ms	106.63 ms
	Minimum	38.00 ms	43.00 ms
	Maximum	1052.00 ms	788.00 ms



# Data Performance - 5G AUTO DP - 2.1.4 5G Auto Data Test MHS Stationary Location 1 UL - Multi Stream HTTP Upload for 30 seconds

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	69.51 Mbps	74.56 Mbps	
	Difference % Compare to REF	6.76%		
	Standard Deviation	5.88 Mbps	10.51 Mbps	
	Minimum	56.97 Mbps	57.74 Mbps	
	Maximum	79.25 Mbps	110.50 Mbps	



# Data Performance - 5G AUTO DP - 2.1.4 5G Auto Data Test MHS Stationary Location 1 UL - Single Stream HTTP Upload of a 15 MB file

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	25.54 Mbps	23.59 Mbps	
	Difference % Compare to REF	-8.30%		
	Standard Deviation	11.46 Mbps	9.09 Mbps	
	Minimum	7.34 Mbps	15.71 Mbps	
	Maximum	49.23 Mbps	31.46 Mbps	



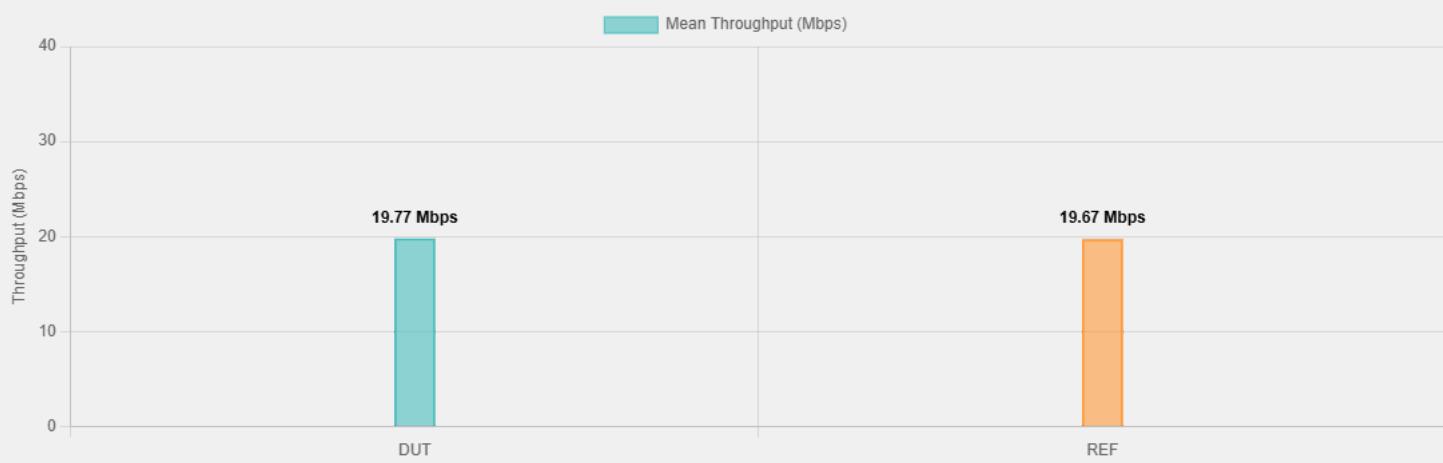
# Data Performance - 5G AUTO DP - 2.1.4 5G Auto Data Test MHS Stationary Location 1 UL - UDP Upload Task at 10 Mbps for 10 seconds

Metric	Statistic	DUT Value	REF Value
Throughput	Mean	9.88 Mbps	9.86 Mbps
	Difference % Compare to REF		-0.27%
	Standard Deviation	0.05 Mbps	0.08 Mbps
	Minimum	9.75 Mbps	9.61 Mbps
	Maximum	9.93 Mbps	9.92 Mbps
Jitter	Mean	1.96 ms	1.78 ms
Error Ratio	Mean	0.00 %	0.00 %



**Data Performance - 5G AUTO DP - 2.1.4 5G Auto Data Test MHS Stationary Location 1 UL - UDP Upload Task at 20 Mbps for 10 seconds**

Metric	Statistic	DUT Value	REF Value
Throughput	Mean	19.77 Mbps	19.67 Mbps
	Difference % Compare to REF		-0.48%
	Standard Deviation	0.10 Mbps	0.18 Mbps
	Minimum	19.48 Mbps	19.25 Mbps
	Maximum	19.86 Mbps	19.84 Mbps
Jitter	Mean	0.86 ms	0.91 ms
Error Ratio	Mean	0.00 %	0.00 %



# Data Performance - 5G AUTO DP - 2.1.5 5G Auto Data Test MHS Stationary Location 2 DL - Multi Stream HTTP Download for 30 seconds

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	94.13 Mbps	41.18 Mbps	
	Difference % Compare to REF	-128.58%		
	Standard Deviation	47.93 Mbps	52.09 Mbps	
	Minimum	1.75 Mbps	1.31 Mbps	
	Maximum	154.54 Mbps	153.25 Mbps	



# Data Performance - 5G AUTO DP - 2.1.5 5G Auto Data Test MHS Stationary Location 2 DL - Single Stream HTTP Download for 60 seconds

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	47.22 Mbps	50.39 Mbps	
	Difference % Compare to REF	6.29%		
	Standard Deviation	23.88 Mbps	44.39 Mbps	
	Minimum	1.69 Mbps	4.64 Mbps	
	Maximum	82.17 Mbps	125.75 Mbps	



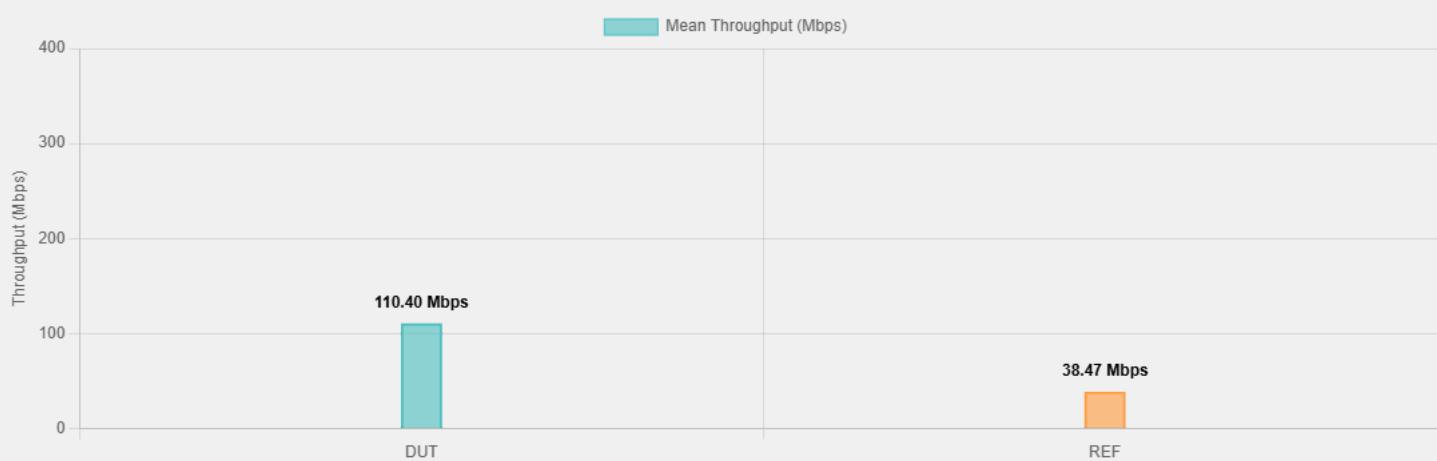
# Data Performance - 5G AUTO DP - 2.1.5 5G Auto Data Test MHS Stationary Location 2 DL - UDP Download Task at 200 Mbps for 10 seconds

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	94.70 Mbps	148.30 Mbps	
	Difference % Compare to REF	36.14%		
	Standard Deviation	43.23 Mbps	53.39 Mbps	
	Minimum	4.43 Mbps	6.54 Mbps	
	Maximum	169.21 Mbps	193.32 Mbps	
Jitter	Mean	0.45 ms	0.39 ms	
Error Ratio	Mean	33.27 %	16.15 %	

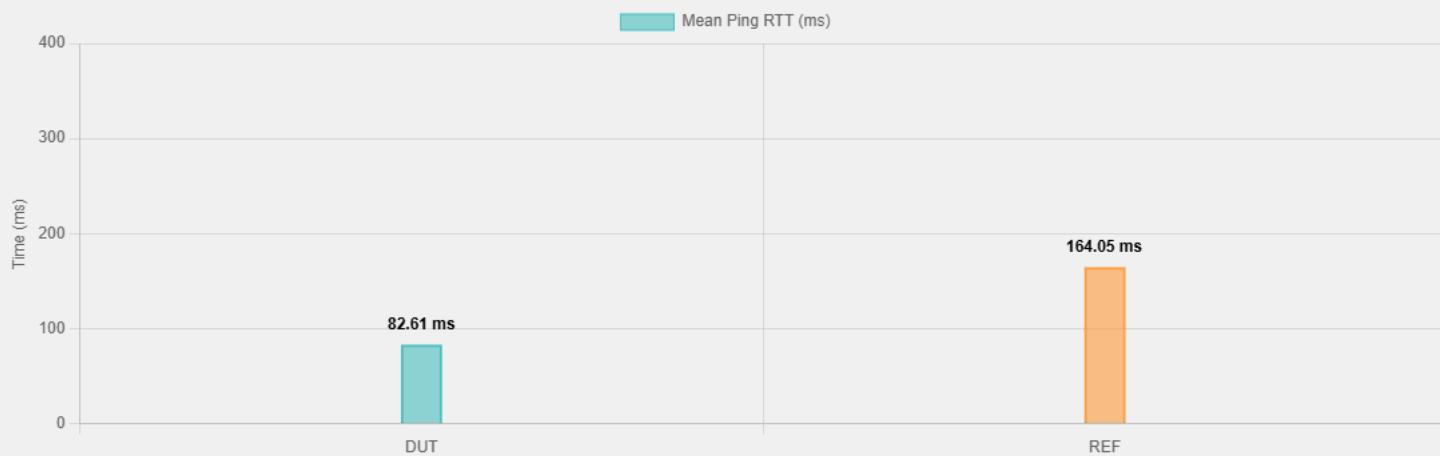


# Data Performance - 5G AUTO DP - 2.1.5 5G Auto Data Test MHS Stationary Location 2 DL - UDP Download Task at 400 Mbps for 10 seconds

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	110.40 Mbps	38.47 Mbps	
	Difference % Compare to REF	-187.02%		
	Standard Deviation	43.41 Mbps	66.09 Mbps	
	Minimum	2.17 Mbps	0.20 Mbps	
	Maximum	166.11 Mbps	198.85 Mbps	
Jitter	Mean	0.60 ms	45.88 ms	
Error Ratio	Mean	60.86 %	75.43 %	



Metric	Statistic	DUT Value	REF Value
Ping RTT	Mean	82.61 ms	164.05 ms
	Standard Deviation	51.13 ms	159.24 ms
	Minimum	24.00 ms	43.00 ms
	Maximum	467.00 ms	997.00 ms



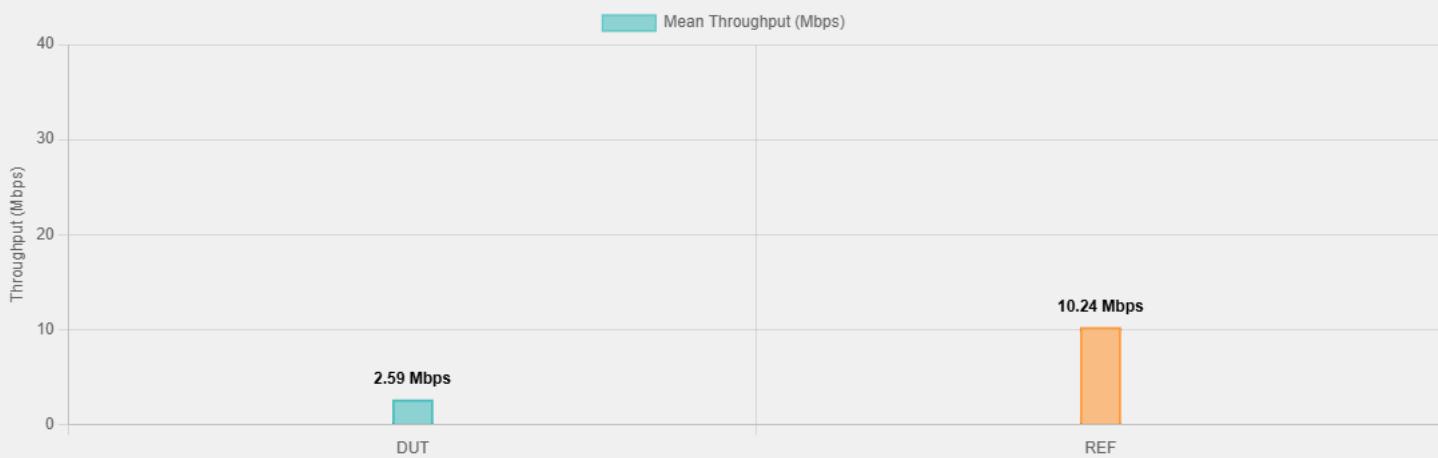
# Data Performance - 5G AUTO DP - 2.1.6 5G Auto Data Test MHS Stationary Location 2 UL - Multi Stream HTTP Upload for 30 seconds

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	2.01 Mbps	4.84 Mbps	
	Difference % Compare to REF	58.51%		
	Standard Deviation	0.80 Mbps	1.74 Mbps	
	Minimum	1.08 Mbps	0.00 Mbps	
	Maximum	3.42 Mbps	5.82 Mbps	



# Data Performance - 5G AUTO DP - 2.1.6 5G Auto Data Test MHS Stationary Location 2 UL - Single Stream HTTP Upload of a 15 MB file

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	2.59 Mbps	10.24 Mbps	
	Difference % Compare to REF	74.68%		
	Standard Deviation	1.70 Mbps	2.28 Mbps	
	Minimum	0.67 Mbps	5.94 Mbps	
	Maximum	6.58 Mbps	14.16 Mbps	



**Data Performance - 5G AUTO DP - 2.1.6 5G Auto Data Test MHS Stationary Location 2 UL - UDP Upload Task at 10 Mbps for 10 seconds**

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	3.70 Mbps	1.70 Mbps	
	Difference % Compare to REF	-117.82%		
	Standard Deviation	2.91 Mbps	0.84 Mbps	
	Minimum	0.00 Mbps	0.57 Mbps	
	Maximum	7.04 Mbps	3.38 Mbps	
Jitter	Mean	0.94 ms	8.43 ms	
Error Ratio	Mean	28.31 %	75.04 %	



**Data Performance - 5G AUTO DP - 2.1.6 5G Auto Data Test MHS Stationary Location 2 UL - UDP Upload Task at 20 Mbps for 10 seconds**

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	8.54 Mbps	7.74 Mbps	
	Difference % Compare to REF	-10.39%		
	Standard Deviation	5.98 Mbps	3.11 Mbps	
	Minimum	0.00 Mbps	4.61 Mbps	
	Maximum	19.71 Mbps	19.63 Mbps	
Jitter	Mean	0.99 ms	0.96 ms	
Error Ratio	Mean	33.01 %	40.39 %	



# Data Performance - 5G AUTO DP - 2.1.7 5G Auto Data Test Stationary Location 1 DL - Multi Stream HTTP Download for 30 seconds\_Good

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	328.89 Mbps	356.00 Mbps	
	Difference % Compare to REF	7.61%		
	Standard Deviation	50.42 Mbps	43.61 Mbps	
	Minimum	234.49 Mbps	245.15 Mbps	
	Maximum	421.72 Mbps	404.73 Mbps	



# Data Performance - 5G AUTO DP - 2.1.7 5G Auto Data Test Stationary Location 1 DL - Single Stream HTTP Download for 60 seconds\_Good

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	100.33 Mbps	111.51 Mbps	
	Difference % Compare to REF	10.03%		
	Standard Deviation	40.82 Mbps	44.90 Mbps	
	Minimum	39.63 Mbps	3.61 Mbps	
	Maximum	194.11 Mbps	178.37 Mbps	



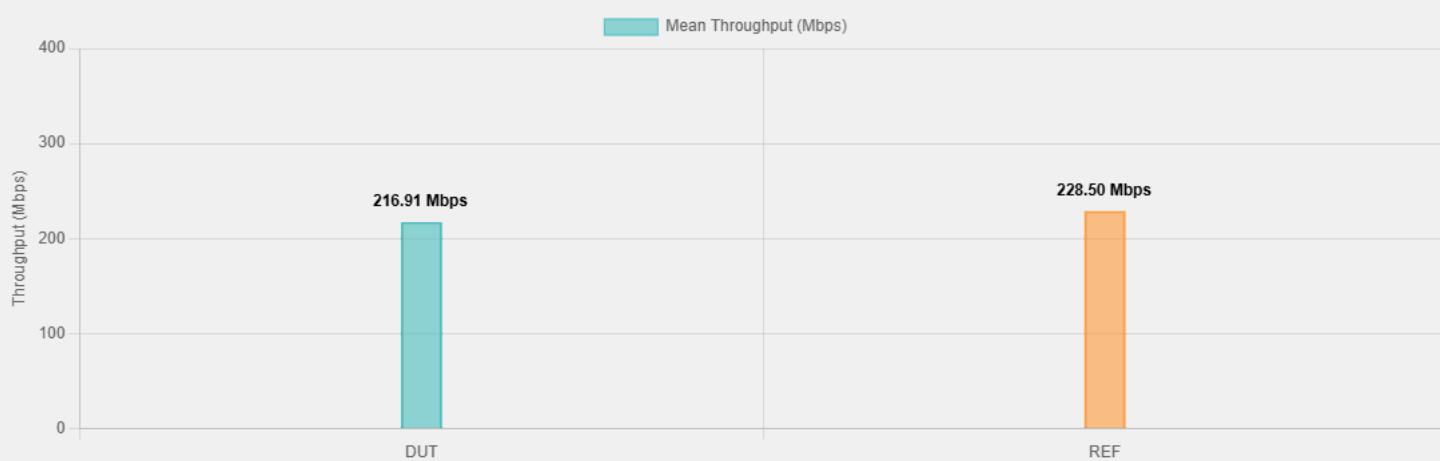
# Data Performance - 5G AUTO DP - 2.1.7 5G Auto Data Test Stationary Location 1 DL - UDP Download Task at 200 Mbps for 10 seconds

Metric	Statistic	DUT Value	REF Value
Throughput	Mean	185.80 Mbps	185.01 Mbps
	Difference % Compare to REF		-0.43%
	Standard Deviation	1.91 Mbps	4.23 Mbps
	Minimum	181.88 Mbps	176.02 Mbps
	Maximum	189.73 Mbps	191.46 Mbps
Jitter	Mean	0.07 ms	0.07 ms
Error Ratio	Mean	8.33 %	8.21 %



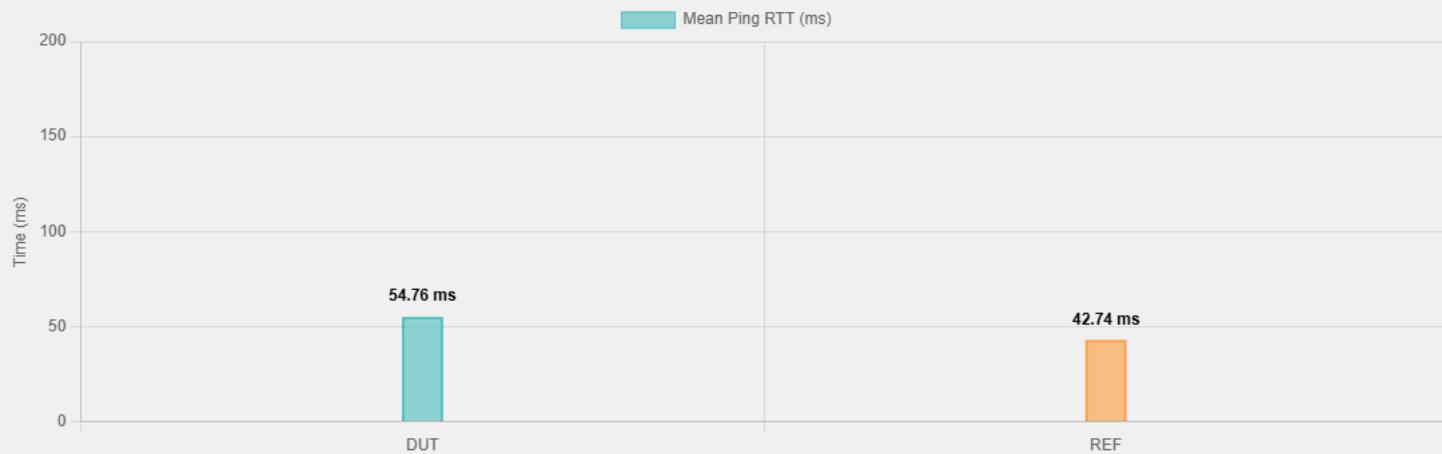
# Data Performance - 5G AUTO DP - 2.1.7 5G Auto Data Test Stationary Location 1 DL - UDP Download Task at 400 Mbps for 10 seconds

Metric	Statistic	DUT Value	REF Value
Throughput	Mean	216.91 Mbps	228.50 Mbps
	Difference % Compare to REF		5.07%
	Standard Deviation	8.17 Mbps	12.76 Mbps
	Minimum	203.82 Mbps	196.17 Mbps
	Maximum	234.43 Mbps	247.84 Mbps
Jitter	Mean	0.06 ms	0.08 ms
Error Ratio	Mean	45.43 %	41.06 %



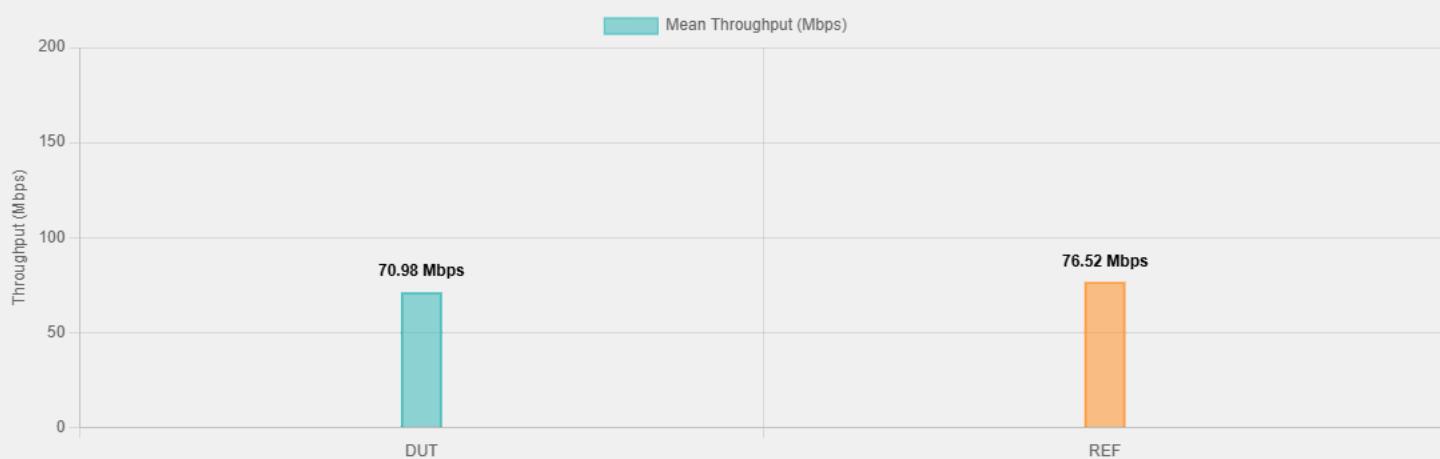
# Data Performance - 5G AUTO DP - 2.1.8 5G Auto Data Test Stationary Location 1 UL - 25x64 bytes PING (ICMP)

Metric	Statistic	DUT Value	REF Value
Ping RTT	Mean	54.76 ms	42.74 ms
	Standard Deviation	20.12 ms	29.29 ms
	Minimum	33.00 ms	29.00 ms
	Maximum	247.00 ms	433.00 ms



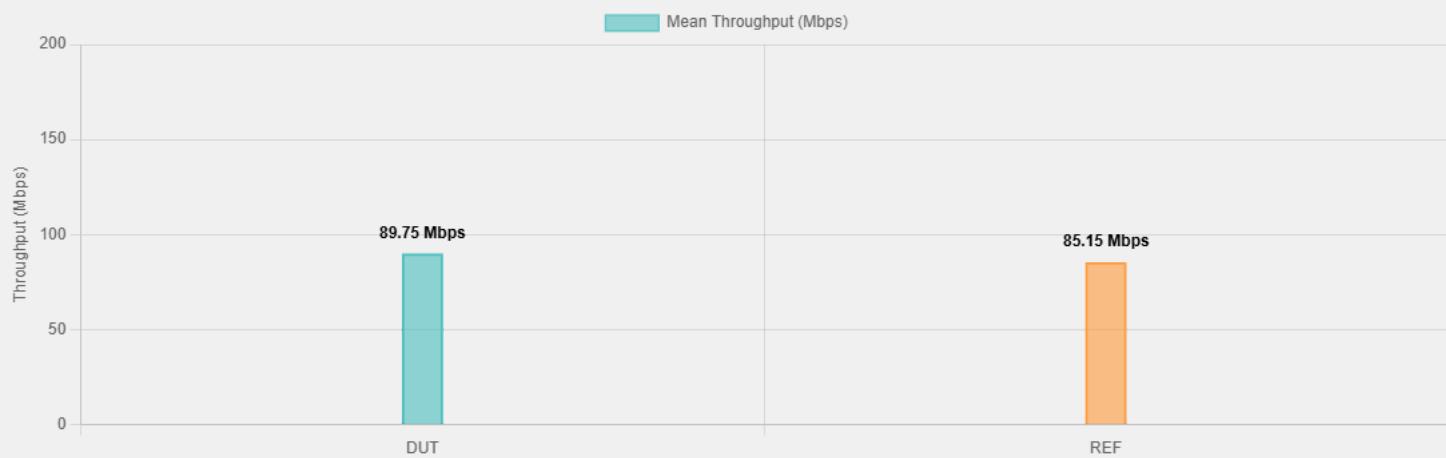
# Data Performance - 5G AUTO DP - 2.1.8 5G Auto Data Test Stationary Location 1 UL - Multi Stream HTTP Upload for 30 seconds

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	70.98 Mbps	76.52 Mbps	
	Difference % Compare to REF	7.25%		
	Standard Deviation	20.37 Mbps	20.71 Mbps	
	Minimum	54.34 Mbps	57.06 Mbps	
	Maximum	109.63 Mbps	117.33 Mbps	



# Data Performance - 5G AUTO DP - 2.1.8 5G Auto Data Test Stationary Location 1 UL - Single Stream HTTP Upload of a 15 MB file

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	89.75 Mbps	85.15 Mbps	
	Difference % Compare to REF	-5.40%		
	Standard Deviation	43.49 Mbps	35.51 Mbps	
	Minimum	15.52 Mbps	44.46 Mbps	
	Maximum	148.37 Mbps	220.42 Mbps	



# Data Performance - 5G AUTO DP - 2.1.8 5G Auto Data Test Stationary Location 1 UL - UDP Upload Task at 10 Mbps for 10 seconds

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	9.54 Mbps	9.95 Mbps	
	Difference % Compare to REF	4.13%		
	Standard Deviation	0.28 Mbps	0.35 Mbps	
	Minimum	9.15 Mbps	9.42 Mbps	
	Maximum	10.09 Mbps	10.60 Mbps	
Jitter	Mean	1.67 ms	1.86 ms	
Error Ratio	Mean	0.00 %	0.00 %	



# Data Performance - 5G AUTO DP - 2.1.8 5G Auto Data Test Stationary Location 1 UL - UDP Upload Task at 20 Mbps for 10 seconds

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	19.04 Mbps	19.30 Mbps	
	Difference % Compare to REF	1.37%		
	Standard Deviation	0.70 Mbps	0.73 Mbps	
	Minimum	16.92 Mbps	17.71 Mbps	
	Maximum	19.95 Mbps	20.28 Mbps	
Jitter	Mean	0.93 ms	0.93 ms	
Error Ratio	Mean	0.00 %	0.00 %	



# Data Performance - 5G AUTO DP - 2.1.9 5G Auto Data Test Stationary Location 2 DL - 5G auto\_Multi Stream HTTP Download for 30 seconds\_moderate

Metric	Statistic	DUT Value	REF Value
Throughput	Mean	64.62 Mbps	49.71 Mbps
	Difference % Compare to REF	-29.99%	
	Standard Deviation	60.54 Mbps	26.60 Mbps
	Minimum	8.55 Mbps	19.83 Mbps
	Maximum	190.30 Mbps	115.23 Mbps



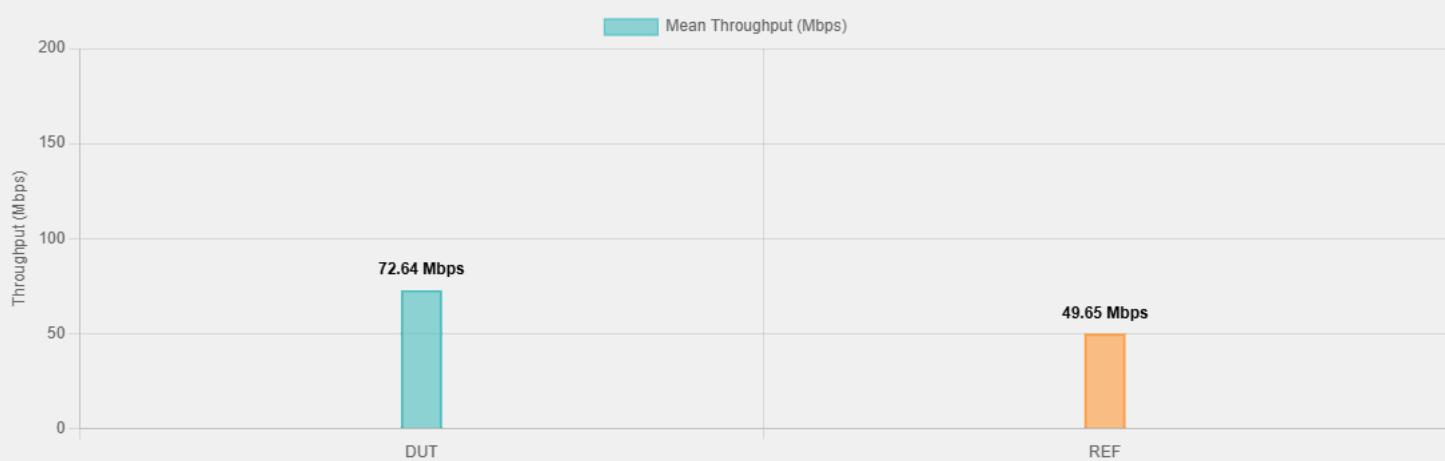
Download for 60 seconds\_moderate

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	15.12 Mbps	23.94 Mbps	
	Difference % Compare to REF	36.84%		
	Standard Deviation	9.07 Mbps	20.94 Mbps	
	Minimum	3.48 Mbps	5.15 Mbps	
	Maximum	38.10 Mbps	73.25 Mbps	



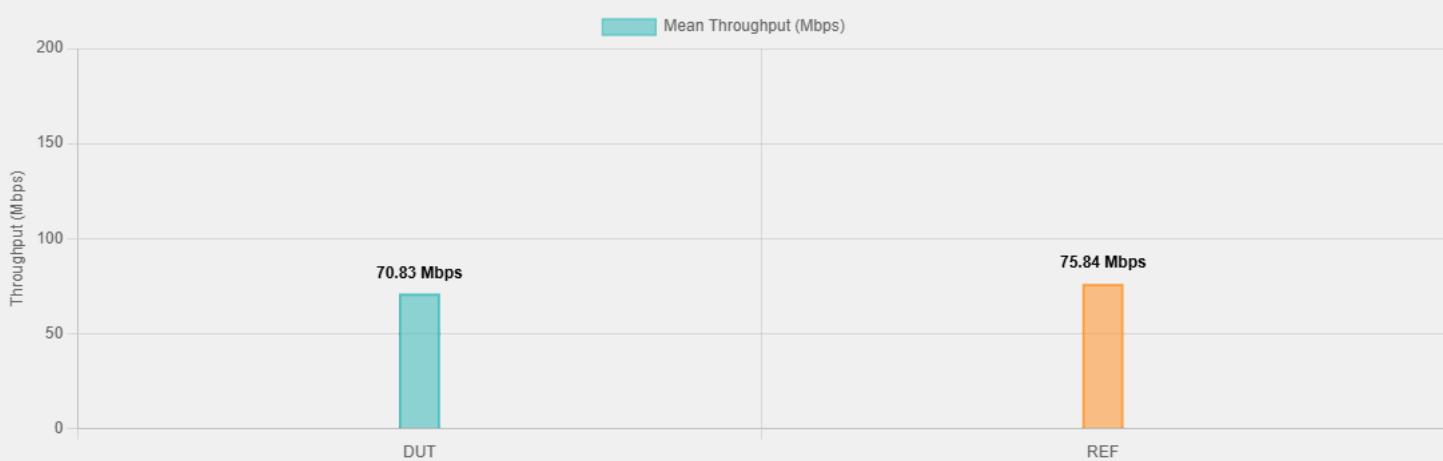
**Data Performance - 5G AUTO DP - 2.1.9 5G Auto Data Test Stationary Location 2 DL - 5G auto\_UDP Download Task at 200 Mbps for 10 seconds\_moderate**

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	72.64 Mbps	49.65 Mbps	
	Difference % Compare to REF	-46.31%		
	Standard Deviation	65.02 Mbps	52.70 Mbps	
	Minimum	5.02 Mbps	6.75 Mbps	
	Maximum	192.46 Mbps	161.23 Mbps	
Jitter	Mean	1.72 ms	1.99 ms	
Error Ratio	Mean	60.48 %	72.39 %	

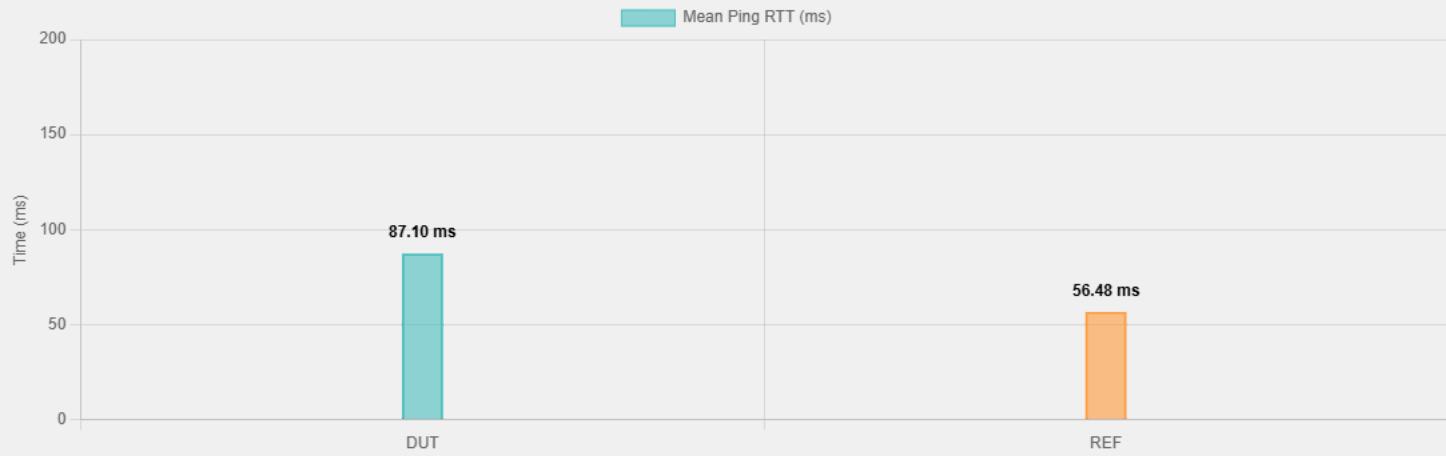


**Data Performance - 5G AUTO DP - 2.1.9 5G Auto Data Test Stationary Location 2 DL - 5G auto\_UDP Download Task at 400 Mbps for 10 seconds\_moderate**

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	70.83 Mbps	75.84 Mbps	
	Difference % Compare to REF	6.61%		
	Standard Deviation	62.44 Mbps	56.62 Mbps	
	Minimum	6.45 Mbps	11.35 Mbps	
	Maximum	225.93 Mbps	183.91 Mbps	
Jitter	Mean	1.73 ms	12.90 ms	
Error Ratio	Mean	77.38 %	75.88 %	

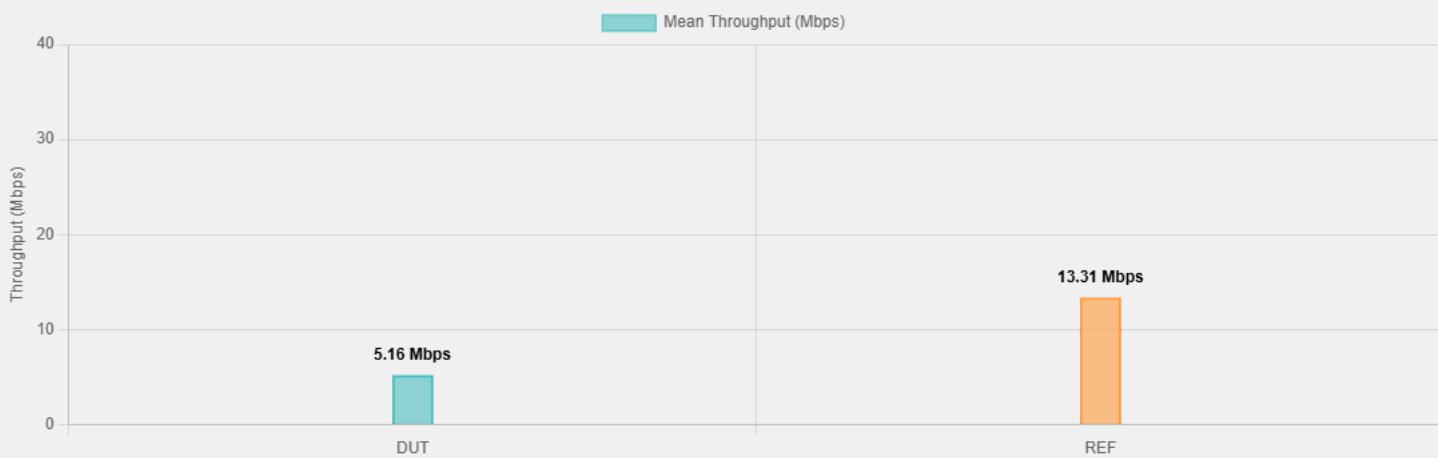


Metric	Statistic	DUT Value	REF Value
Ping RTT	Mean	87.10 ms	56.48 ms
	Standard Deviation	45.43 ms	50.59 ms
	Minimum	35.00 ms	30.00 ms
	Maximum	308.00 ms	642.00 ms



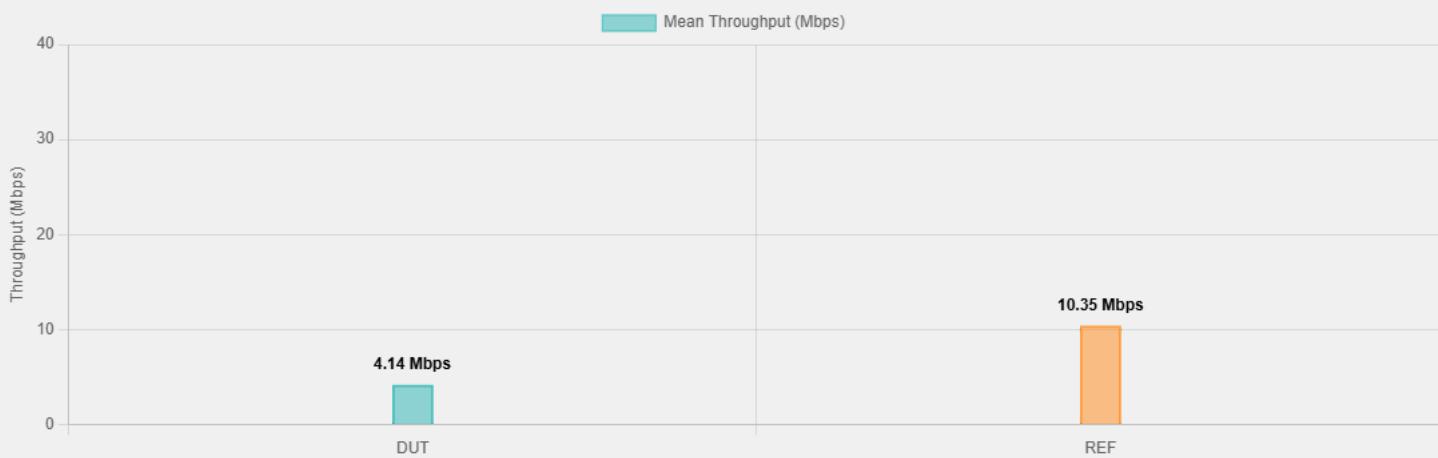
# Data Performance - 5G AUTO DP - 2.1.10 5G Auto Data Test Stationary Location 2 UL - 5G auto\_Multi Stream HTTP Upload for 30 seconds\_moderate

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	5.16 Mbps	13.31 Mbps	
	Difference % Compare to REF	61.20%		
	Standard Deviation	2.74 Mbps	6.11 Mbps	
	Minimum	2.17 Mbps	2.71 Mbps	
	Maximum	10.99 Mbps	25.06 Mbps	



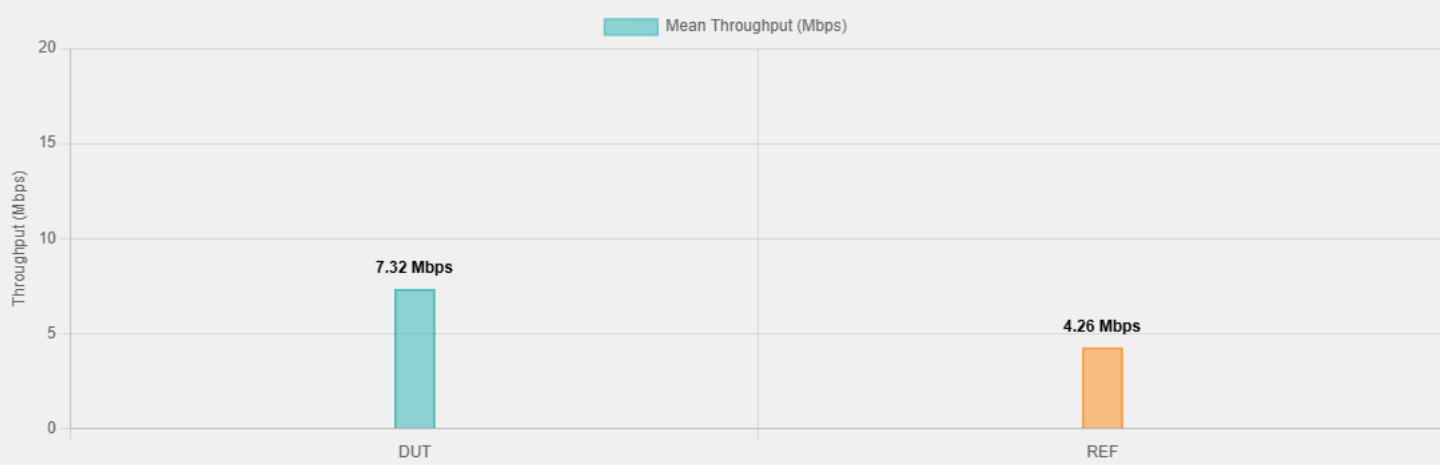
# Data Performance - 5G AUTO DP - 2.1.10 5G Auto Data Test Stationary Location 2 UL - 5G auto\_Single Stream HTTP Upload of a 15 MB file

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	4.14 Mbps	10.35 Mbps	
	Difference % Compare to REF	60.04%		
	Standard Deviation	2.55 Mbps	14.58 Mbps	
	Minimum	2.12 Mbps	1.06 Mbps	
	Maximum	13.63 Mbps	53.04 Mbps	



**Data Performance - 5G AUTO DP - 2.1.10 5G Auto Data Test Stationary Location 2 UL - 5G auto\_UDP Upload Task at 10 Mbps for 10 seconds\_moderate**

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	7.32 Mbps	4.26 Mbps	
	Difference % Compare to REF	-71.94%		
	Standard Deviation	3.86 Mbps	4.01 Mbps	
	Minimum	0.69 Mbps	0.06 Mbps	
	Maximum	10.88 Mbps	10.43 Mbps	
Jitter	Mean	5.92 ms	28.08 ms	
Error Ratio	Mean	19.88 %	58.59 %	



**Data Performance - 5G AUTO DP - 2.1.10 5G Auto Data Test Stationary Location 2 UL - 5G auto\_UDP Upload Task at 20 Mbps for 10 seconds\_moderate**

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	3.75 Mbps	2.41 Mbps	
	Difference % Compare to REF	-55.45%		
	Standard Deviation	4.75 Mbps	4.87 Mbps	
	Minimum	0.61 Mbps	0.02 Mbps	
	Maximum	15.91 Mbps	18.02 Mbps	
Jitter	Mean	17.48 ms	26.83 ms	
Error Ratio	Mean	56.81 %	86.15 %	



# Data Performance - 5G AUTO DP - 2.1.11 5G Auto Data Test Stationary Location 3 DL - Multi Stream HTTP Download for 30 seconds

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	277.85 Mbps	311.79 Mbps	
	Difference % Compare to REF	10.88%		
	Standard Deviation	68.52 Mbps	49.14 Mbps	
	Minimum	136.55 Mbps	210.94 Mbps	
	Maximum	383.88 Mbps	390.13 Mbps	



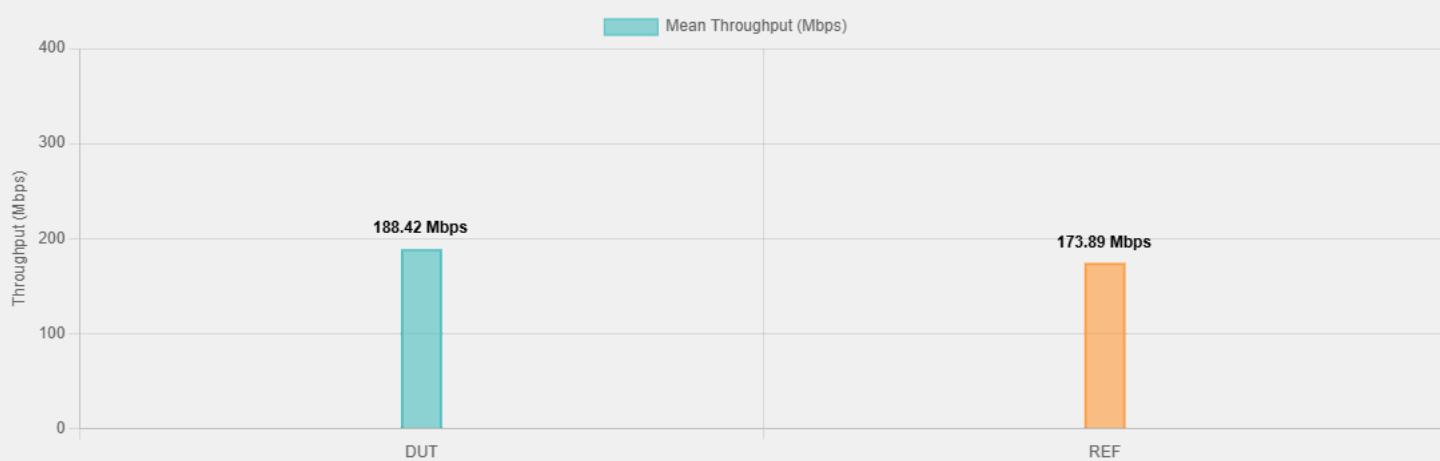
# Data Performance - 5G AUTO DP - 2.1.11 5G Auto Data Test Stationary Location 3 DL - Single Stream HTTP Download for 60 seconds

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	98.08 Mbps	82.46 Mbps	
	Difference % Compare to REF	-18.94%		
	Standard Deviation	34.82 Mbps	36.65 Mbps	
	Minimum	61.53 Mbps	16.29 Mbps	
	Maximum	186.94 Mbps	171.15 Mbps	



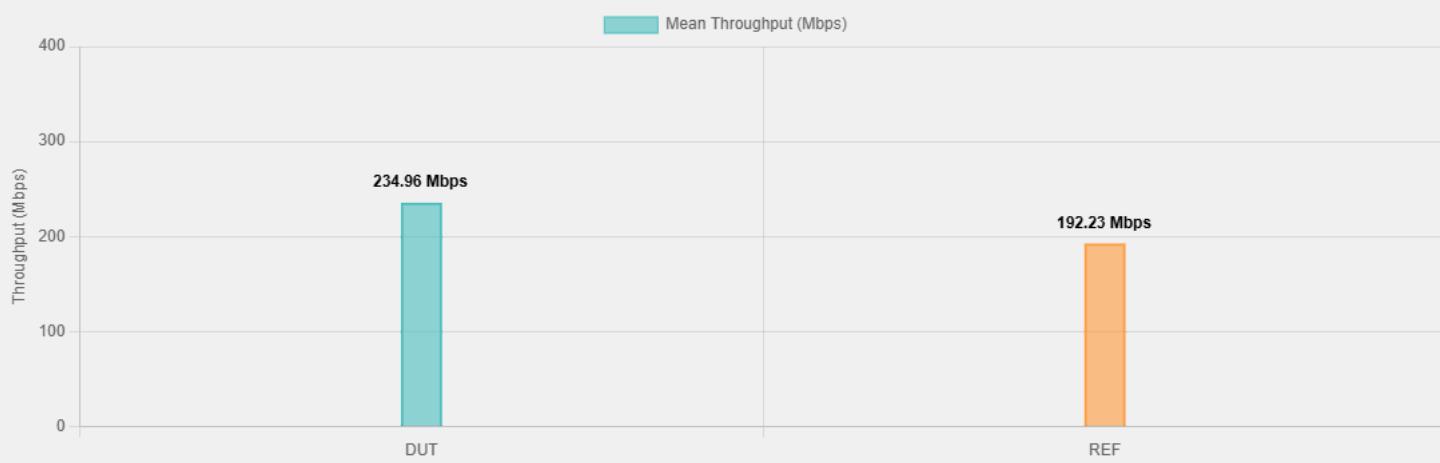
**Data Performance - 5G AUTO DP - 2.1.11 5G Auto Data Test Stationary Location 3 DL - UDP Download Task at 200 Mbps for 10 seconds**

Metric	Statistic	DUT Value	REF Value
Throughput	Mean	188.42 Mbps	173.89 Mbps
	Difference % Compare to REF		-8.36%
	Standard Deviation	5.69 Mbps	16.72 Mbps
	Minimum	182.30 Mbps	132.48 Mbps
	Maximum	209.28 Mbps	192.93 Mbps
Jitter	Mean	0.06 ms	0.10 ms
Error Ratio	Mean	7.47 %	13.52 %

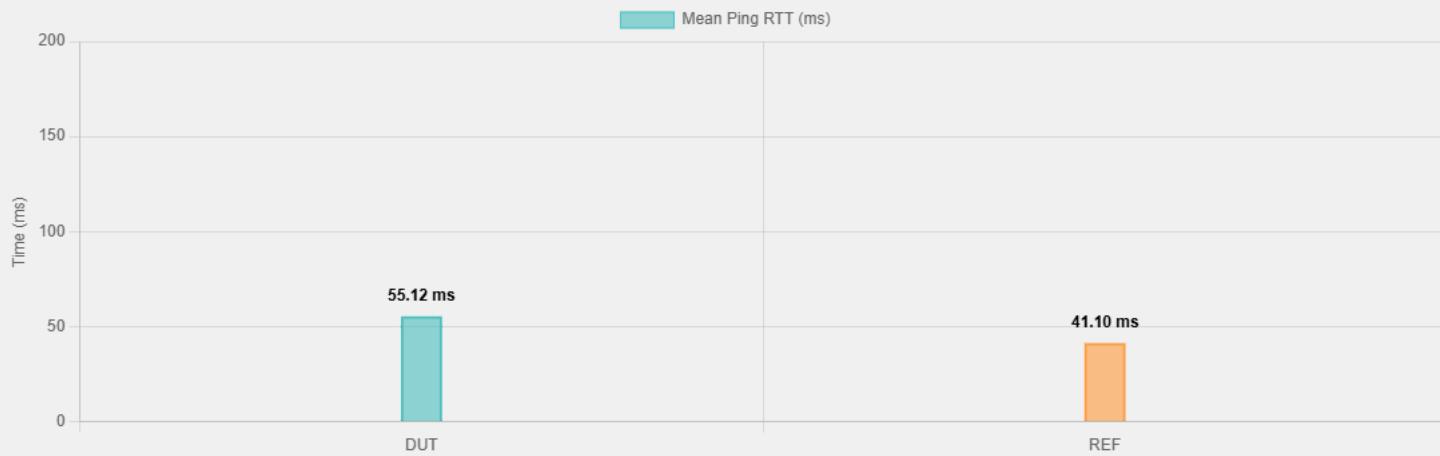


**Data Performance - 5G AUTO DP - 2.1.11 5G Auto Data Test Stationary Location 3 DL - UDP Download Task at 400 Mbps for 10 seconds**

Metric	Statistic	DUT Value	REF Value
Throughput	Mean	234.96 Mbps	192.23 Mbps
	Difference % Compare to REF	-22.23%	
	Standard Deviation	22.24 Mbps	22.50 Mbps
	Minimum	184.03 Mbps	157.75 Mbps
	Maximum	288.76 Mbps	223.38 Mbps
Jitter	Mean	0.06 ms	0.15 ms
Error Ratio	Mean	28.25 %	44.97 %



Metric	Statistic	DUT Value	REF Value
Ping RTT	Mean	55.12 ms	41.10 ms
	Standard Deviation	25.52 ms	25.56 ms
	Minimum	35.00 ms	30.00 ms
	Maximum	357.00 ms	319.00 ms



# Data Performance - 5G AUTO DP - 2.1.12 5G Auto Data Test Stationary Location 3 UL - Multi Stream HTTP Upload for 30 seconds

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	18.55 Mbps	21.23 Mbps	
	Difference % Compare to REF	12.62%		
	Standard Deviation	1.49 Mbps	4.22 Mbps	
	Minimum	16.41 Mbps	5.97 Mbps	
	Maximum	21.73 Mbps	26.03 Mbps	



# Data Performance - 5G AUTO DP - 2.1.12 5G Auto Data Test Stationary Location 3 UL - Single Stream HTTP Upload of a 15 MB file

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	31.85 Mbps	28.92 Mbps	
	Difference % Compare to REF	-10.13%		
	Standard Deviation	8.17 Mbps	9.94 Mbps	
	Minimum	22.23 Mbps	8.95 Mbps	
	Maximum	44.56 Mbps	45.61 Mbps	



# Data Performance - 5G AUTO DP - 2.1.12 5G Auto Data Test Stationary Location 3 UL - UDP Upload Task at 10 Mbps for 10 seconds

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	10.02 Mbps	8.76 Mbps	
	Difference % Compare to REF	-14.41%		
	Standard Deviation	0.85 Mbps	1.24 Mbps	
	Minimum	7.93 Mbps	5.90 Mbps	
	Maximum	10.85 Mbps	10.50 Mbps	
Jitter	Mean	1.58 ms	1.67 ms	
Error Ratio	Mean	0.01 %	11.53 %	

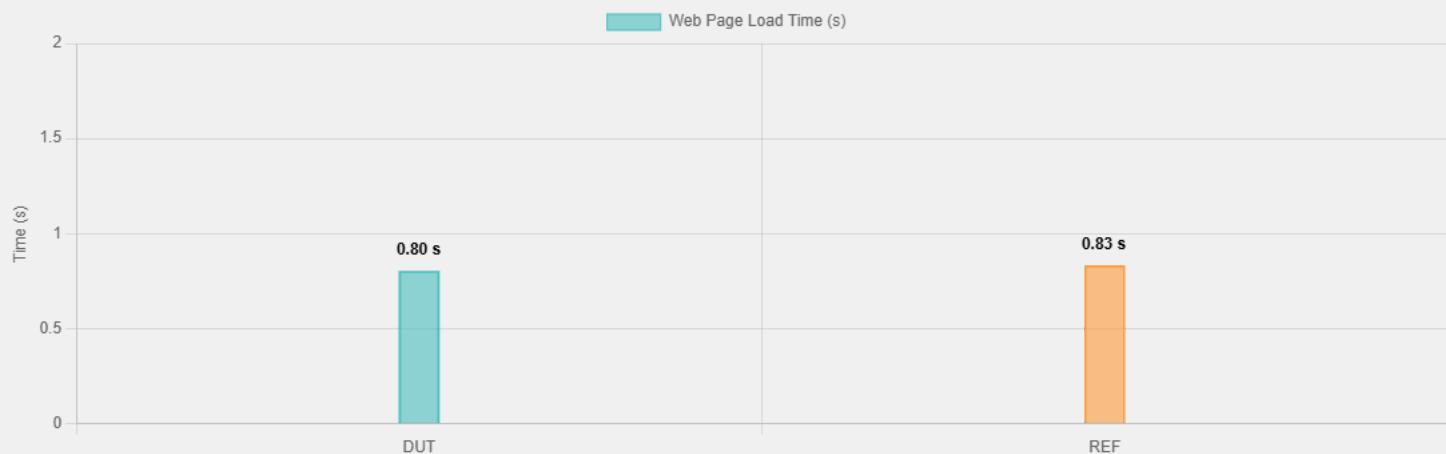


# Data Performance - 5G AUTO DP - 2.1.12 5G Auto Data Test Stationary Location 3 UL - UDP Upload Task at 20 Mbps for 10 seconds

Metric	Statistic	DUT Value	REF Value
Throughput	Mean	18.12 Mbps	17.84 Mbps
	Difference % Compare to REF		-1.56%
	Standard Deviation	2.03 Mbps	2.84 Mbps
	Minimum	12.46 Mbps	11.91 Mbps
	Maximum	20.47 Mbps	20.78 Mbps
Jitter	Mean	0.68 ms	0.81 ms
Error Ratio	Mean	0.00 %	12.43 %



Metric	Statistic	DUT Value	REF Value
Web Page Load Time	Mean	0.80 s	0.83 s
	Standard Deviation	0.22 s	0.34 s
	Minimum	0.45 s	0.44 s
	Maximum	1.11 s	2.00 s



## Data Performance - 5G AUTO DP - 2.1.14 5G VoNR MRAB Stationary

Category	Statistic	DUT Value (Mbps)	REF Value (Mbps)
Pre Call	Mean	4.88 Mbps	26.24 Mbps
	Maximum	24.76 Mbps	143.53 Mbps
	Minimum	1.41 Mbps	1.16 Mbps
	Standard Deviation	5.54 Mbps	43.84 Mbps
In Call	Mean	3.21 Mbps	5.22 Mbps
	Maximum	6.74 Mbps	21.52 Mbps
	Minimum	1.60 Mbps	1.10 Mbps
	Standard Deviation	1.28 Mbps	4.92 Mbps
Post Call	Mean	3.70 Mbps	20.77 Mbps
	Maximum	7.04 Mbps	104.67 Mbps
	Minimum	1.58 Mbps	1.20 Mbps
	Standard Deviation	1.69 Mbps	32.55 Mbps

## 5G Auto Data - 2.1.15 5G Auto Data Play-store app DL Stationary

File Size: 30M

Location	DUT Average Throughput (Mbps)	REF Average Throughput (Mbps)
Good	77.14	104.79
Moderate	30.51	23.04
Poor	63.49	102.94

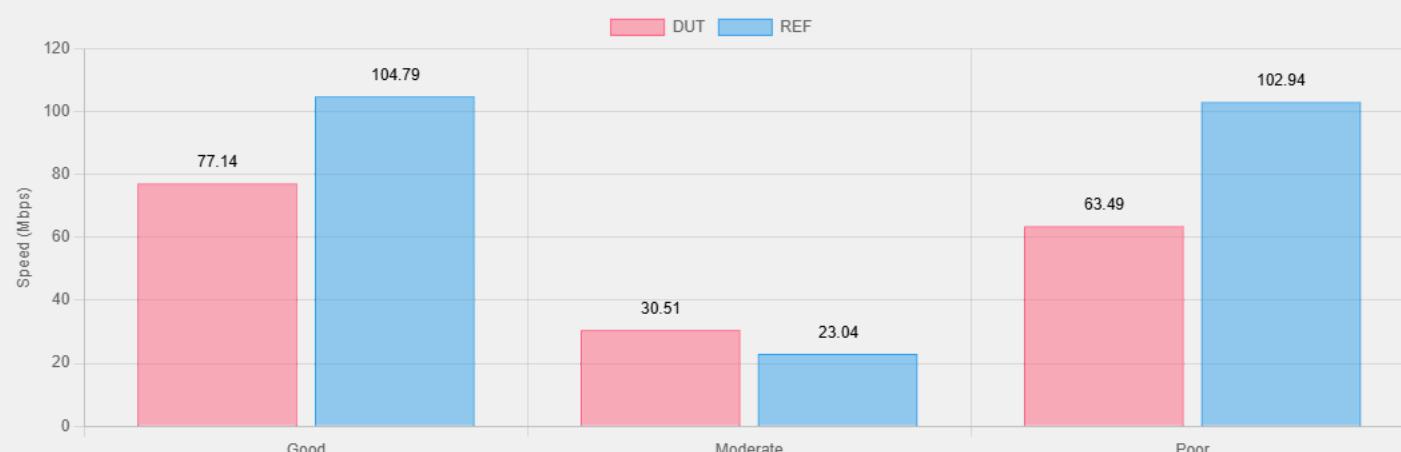
File Size: 60M

Location	DUT Average Throughput (Mbps)	REF Average Throughput (Mbps)
Good	218.90	302.13
Moderate	54.41	107.53
Poor	189.93	261.01

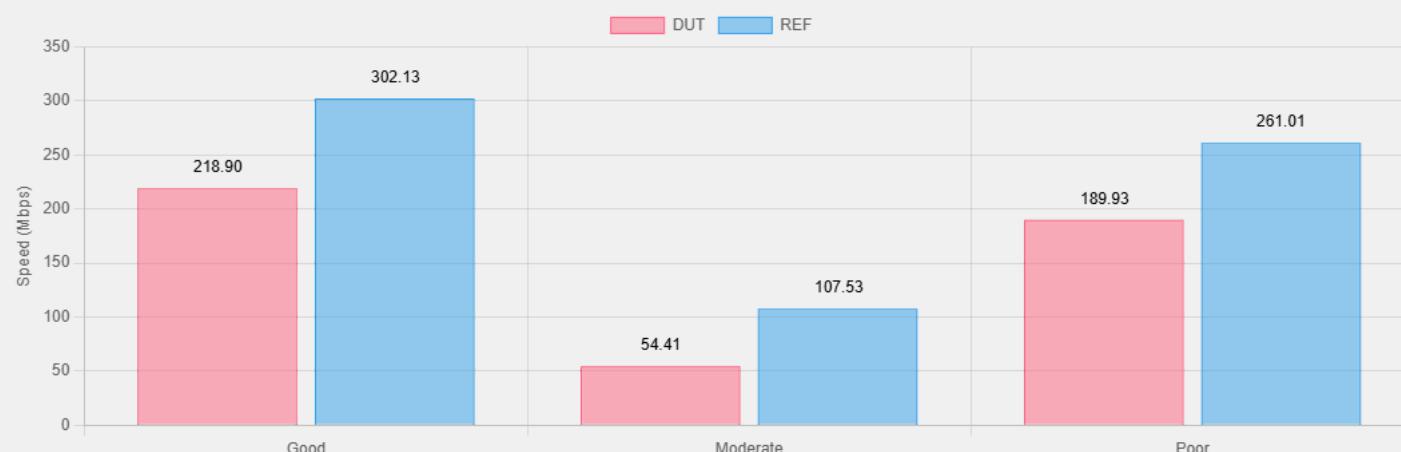
File Size: 100M

Location	DUT Average Throughput (Mbps)	REF Average Throughput (Mbps)
Good	160.24	385.17
Moderate	57.23	134.85
Poor	176.45	295.14

Average Throughput for 30M File Size

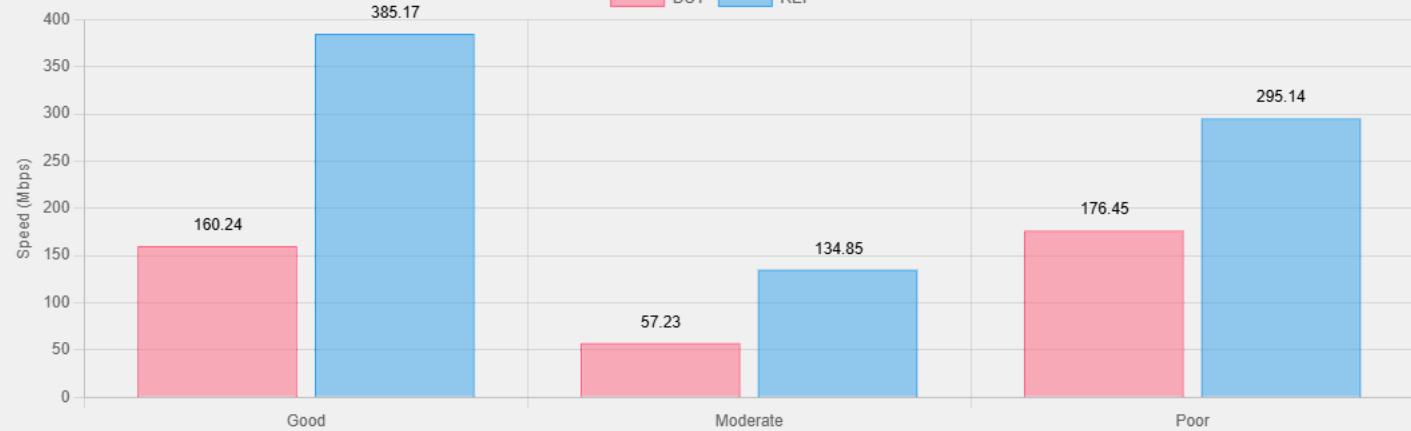


Average Throughput for 60M File Size



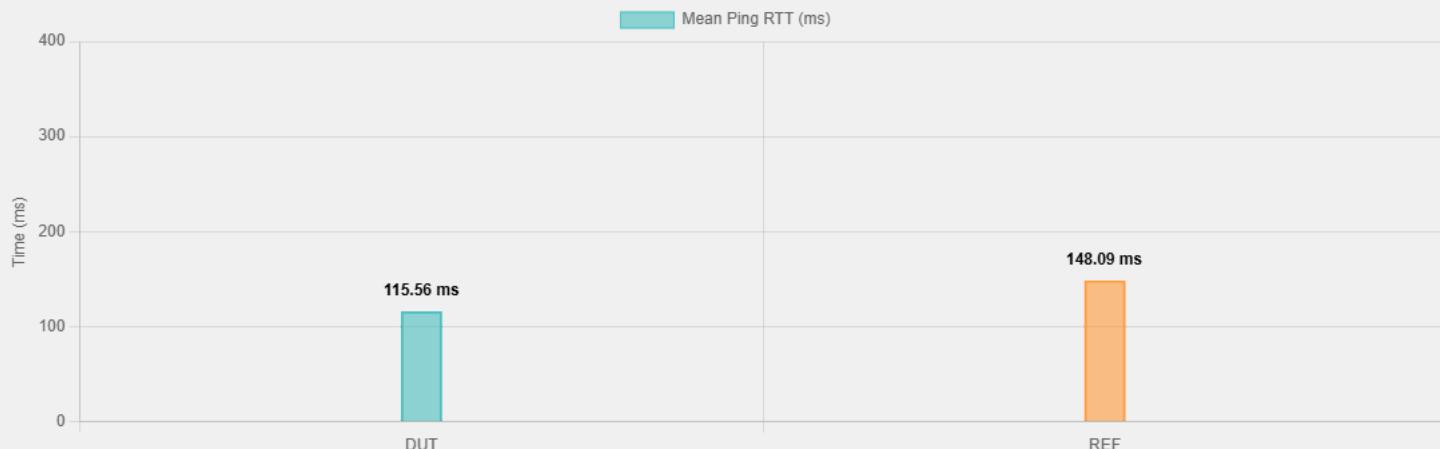
Average Throughput for 100M File Size

DUT REF



# Data Performance - 5G NSA DP - 2.2.1 5G NSA Data Test Drive

Metric	Statistic	DUT Value	REF Value
Throughput	Mean	9.95 Mbps	9.82 Mbps
	Difference % Compare to REF	-1.32%	
	Standard Deviation	0.22 Mbps	0.73 Mbps
	Minimum	9.04 Mbps	6.75 Mbps
	Maximum	10.00 Mbps	10.00 Mbps
Jitter	Mean	1.69 ms	1.47 ms
Error Ratio	Mean	1.04 %	1.18 %
Ping RTT	Mean	115.56 ms	148.09 ms
	Standard Deviation	70.45 ms	106.63 ms
	Minimum	38.00 ms	43.00 ms
	Maximum	1052.00 ms	788.00 ms



# Data Performance - 5G NSA DP - 2.2.2 5G NSA Data Test Stationary Moderate RF DL - Multi Stream HTTP Download for 30 seconds

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	159.02 Mbps	291.27 Mbps	
	Difference % Compare to REF	45.40%		
	Standard Deviation	60.69 Mbps	42.54 Mbps	
	Minimum	61.68 Mbps	200.75 Mbps	
	Maximum	283.99 Mbps	372.58 Mbps	



# Data Performance - 5G NSA DP - 2.2.2 5G NSA Data Test Stationary Moderate RF DL - Single Stream HTTP Download for 60 seconds

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	56.62 Mbps	39.23 Mbps	
	Difference % Compare to REF	-44.32%		
	Standard Deviation	10.83 Mbps	10.59 Mbps	
	Minimum	35.16 Mbps	20.95 Mbps	
	Maximum	77.20 Mbps	56.44 Mbps	



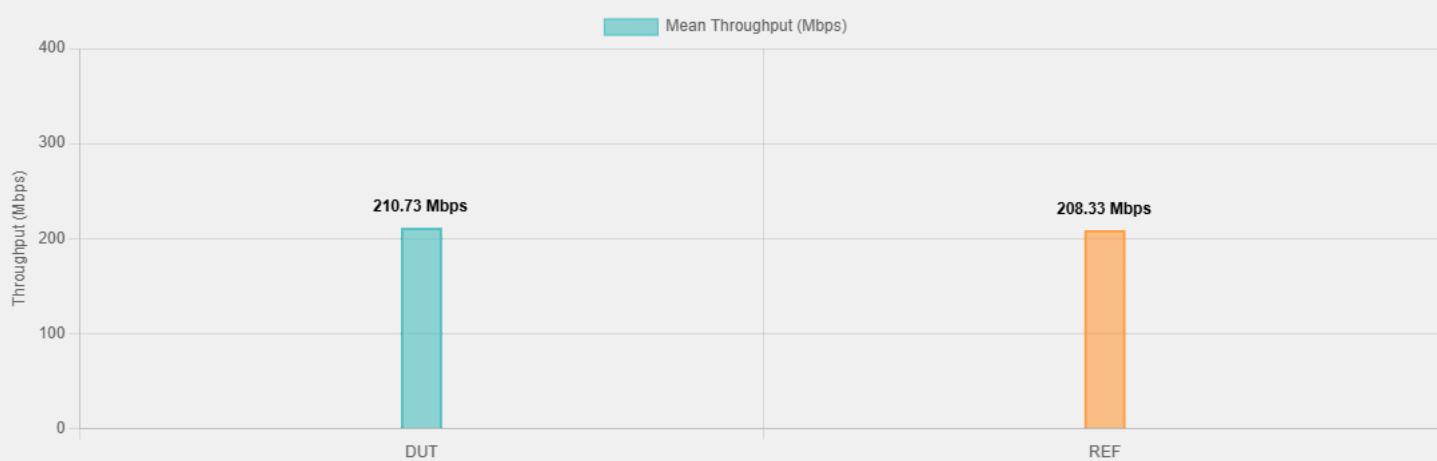
**Data Performance - 5G NSA DP - 2.2.2 5G NSA Data Test Stationary Moderate RF DL - UDP Download Task at 200 Mbps for 10 seconds**

Metric	Statistic	DUT Value	REF Value
Throughput	Mean	184.06 Mbps	121.31 Mbps
	Difference % Compare to REF		-51.73%
	Standard Deviation	71.34 Mbps	83.49 Mbps
	Minimum	54.21 Mbps	36.85 Mbps
	Maximum	238.38 Mbps	223.76 Mbps
Jitter	Mean	0.17 ms	0.76 ms
Error Ratio	Mean	19.01 %	36.12 %

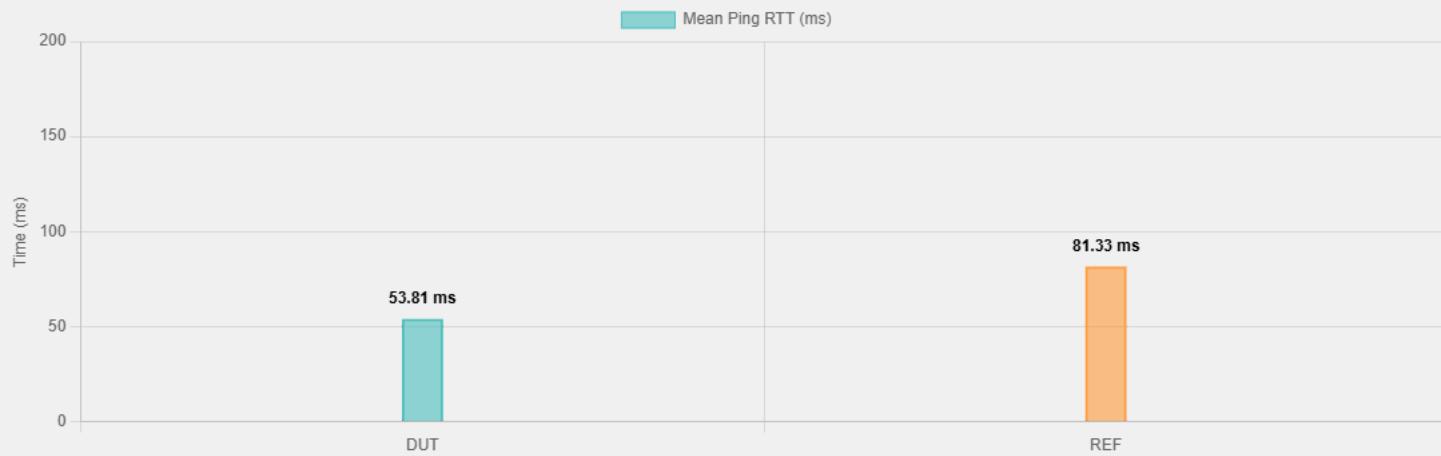


**Data Performance - 5G NSA DP - 2.2.2 5G NSA Data Test Stationary Moderate RF DL - UDP Download Task at 400 Mbps for 10 seconds**

Metric	Statistic	DUT Value	REF Value
Throughput	Mean	210.73 Mbps	208.33 Mbps
	Difference % Compare to REF		-1.16%
	Standard Deviation	87.38 Mbps	129.86 Mbps
	Minimum	62.17 Mbps	31.77 Mbps
	Maximum	295.46 Mbps	340.89 Mbps
Jitter	Mean	0.18 ms	0.41 ms
Error Ratio	Mean	44.01 %	50.54 %



Metric	Statistic	DUT Value	REF Value
Ping RTT	Mean	53.81 ms	81.33 ms
	Standard Deviation	28.72 ms	51.19 ms
	Minimum	33.00 ms	33.00 ms
	Maximum	304.00 ms	400.00 ms



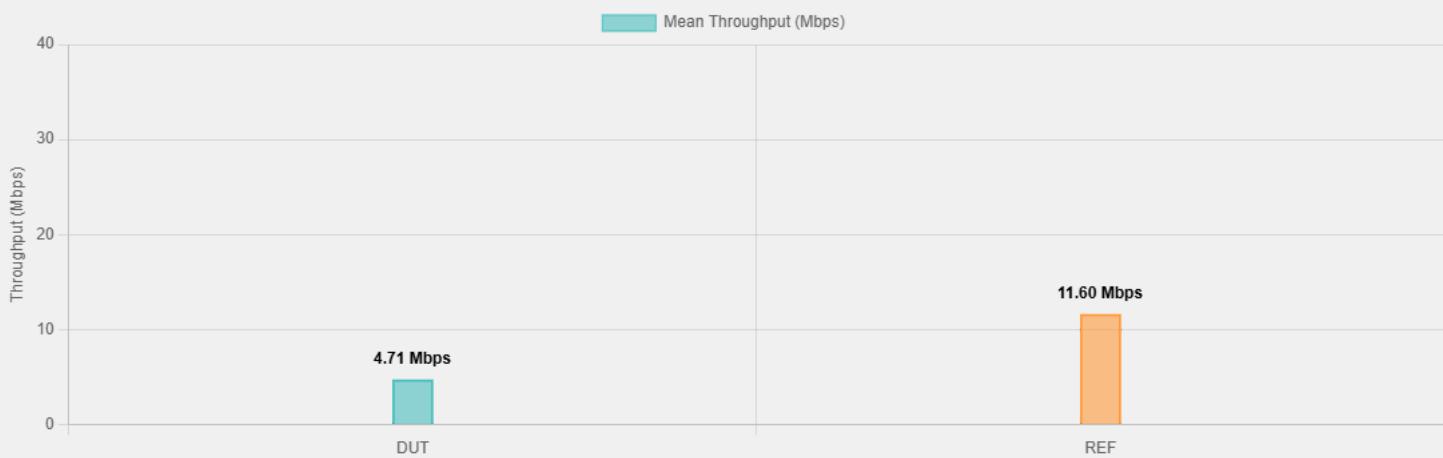
# Data Performance - 5G NSA DP - 2.2.3 5G NSA Data Test Stationary Moderate RF UL - 5G NSA\_Multi Stream HTTP Upload for 30 seconds\_moderate

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	5.05 Mbps	2.77 Mbps	
	Difference % Compare to REF	-82.05%		
	Standard Deviation	1.57 Mbps	0.75 Mbps	
	Minimum	2.04 Mbps	1.22 Mbps	
	Maximum	7.82 Mbps	4.36 Mbps	



# Data Performance - 5G NSA DP - 2.2.3 5G NSA Data Test Stationary Moderate RF UL - 5G NSA\_Single Stream HTTP Upload of a 15 MB file

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	4.71 Mbps	11.60 Mbps	
	Difference % Compare to REF	59.38%		
	Standard Deviation	2.18 Mbps	11.06 Mbps	
	Minimum	1.93 Mbps	1.95 Mbps	
	Maximum	10.28 Mbps	34.60 Mbps	



# Data Performance - 5G NSA DP - 2.2.3 5G NSA Data Test Stationary Moderate RF UL - 5G NSA\_UDP Upload Task at 10 Mbps for 10 seconds

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	5.96 Mbps	3.29 Mbps	
	Difference % Compare to REF	-80.92%		
	Standard Deviation	2.97 Mbps	1.71 Mbps	
	Minimum	1.99 Mbps	1.39 Mbps	
	Maximum	11.22 Mbps	6.84 Mbps	
Jitter	Mean	4.57 ms	4.55 ms	
Error Ratio	Mean	17.67 %	58.52 %	



# Data Performance - 5G NSA DP - 2.2.3 5G NSA Data Test Stationary Moderate RF UL - 5G NSA\_UDP Upload Task at 20 Mbps for 10 seconds

Metric	Statistic	DUT Value	REF Value
Throughput	Mean	3.37 Mbps	2.65 Mbps
	Difference % Compare to REF	-27.50%	
	Standard Deviation	0.49 Mbps	1.14 Mbps
	Minimum	2.50 Mbps	1.14 Mbps
	Maximum	4.41 Mbps	4.81 Mbps
Jitter	Mean	6.82 ms	2.33 ms
Error Ratio	Mean	41.74 %	83.92 %



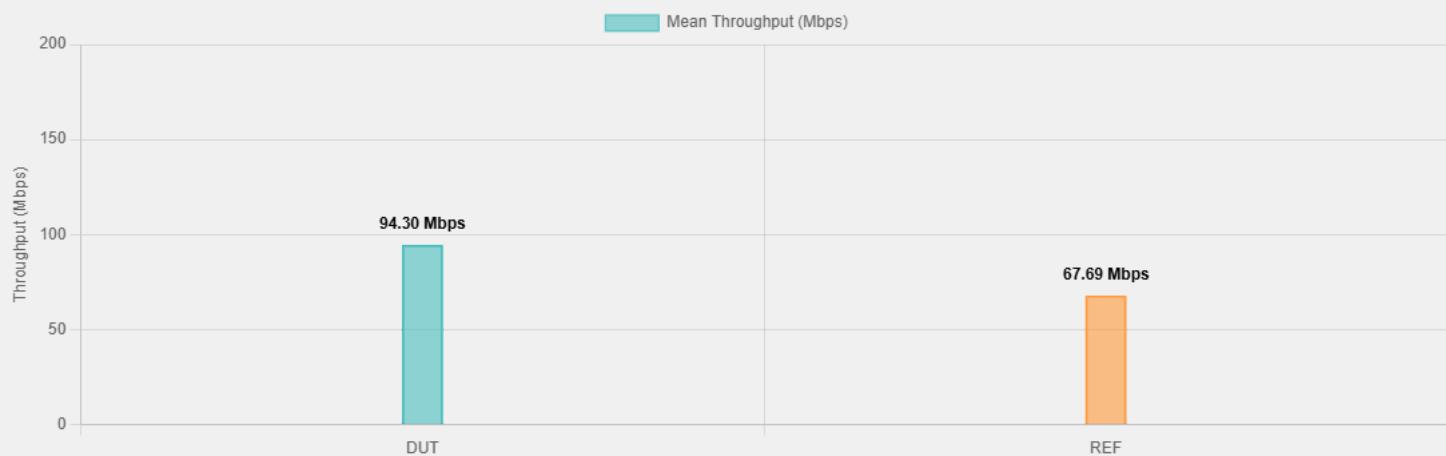
# Data Performance - 5G NSA DP - 2.2.4 5G NSA Data Test Stationary Poor RF DL - Multi Stream HTTP Download for 30 seconds

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	240.60 Mbps	259.07 Mbps	
	Difference % Compare to REF	7.13%		
	Standard Deviation	56.33 Mbps	68.33 Mbps	
	Minimum	72.30 Mbps	158.09 Mbps	
	Maximum	312.22 Mbps	385.36 Mbps	



# Data Performance - 5G NSA DP - 2.2.4 5G NSA Data Test Stationary Poor RF DL - Single Stream HTTP Download for 60 seconds

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	94.30 Mbps	67.69 Mbps	
	Difference % Compare to REF	-39.33%		
	Standard Deviation	35.31 Mbps	25.29 Mbps	
	Minimum	47.43 Mbps	20.27 Mbps	
	Maximum	183.58 Mbps	114.60 Mbps	



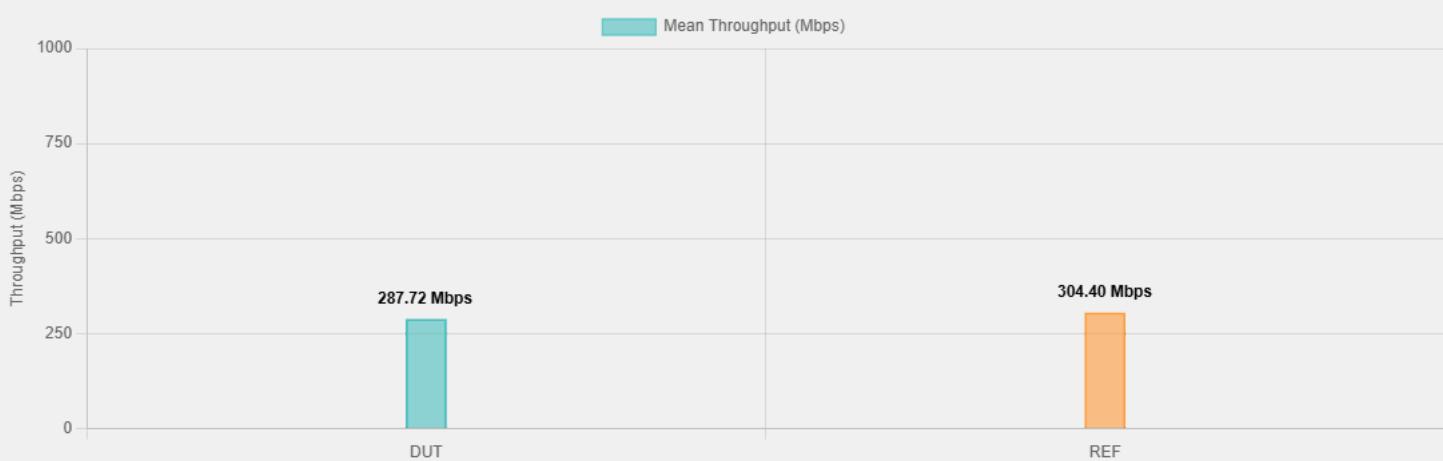
**Data Performance - 5G NSA DP - 2.2.4 5G NSA Data Test Stationary Poor RF DL - UDP Download Task at 200 Mbps for 10 seconds**

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	155.89 Mbps	188.27 Mbps	
	Difference % Compare to REF	17.20%		
	Standard Deviation	59.88 Mbps	6.72 Mbps	
	Minimum	51.49 Mbps	178.77 Mbps	
	Maximum	196.30 Mbps	208.98 Mbps	
Jitter	Mean	0.16 ms	0.06 ms	
Error Ratio	Mean	17.43 %	8.67 %	

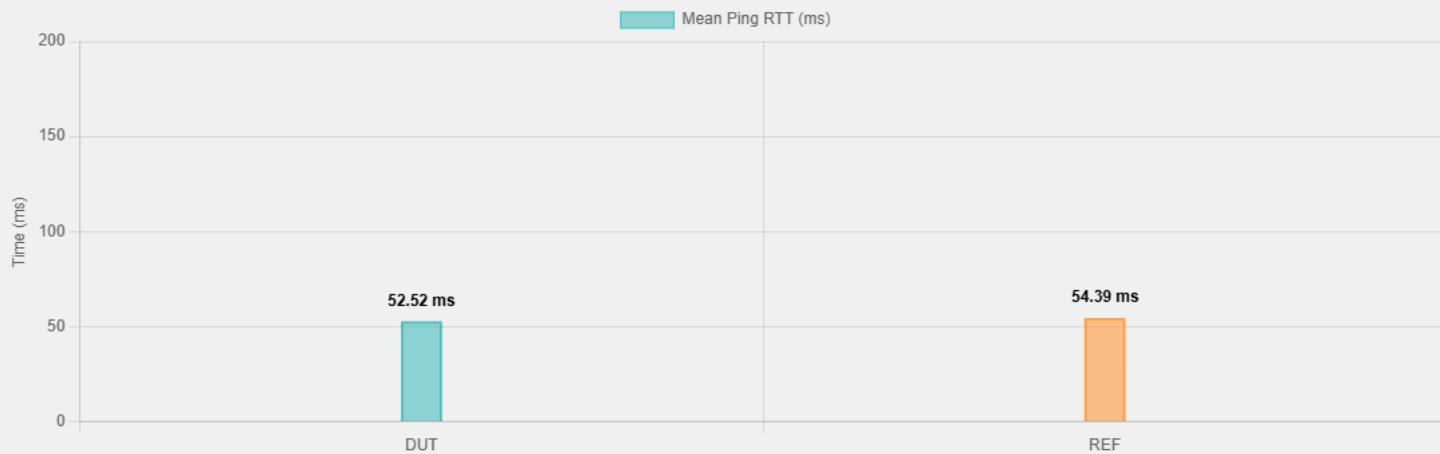


**Data Performance - 5G NSA DP - 2.2.4 5G NSA Data Test Stationary Poor RF DL - UDP Download Task at 400 Mbps for 10 seconds**

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	287.72 Mbps	304.40 Mbps	
	Difference % Compare to REF	5.48%		
	Standard Deviation	70.68 Mbps	45.16 Mbps	
	Minimum	78.72 Mbps	218.35 Mbps	
	Maximum	381.06 Mbps	419.16 Mbps	
Jitter	Mean	0.11 ms	0.08 ms	
Error Ratio	Mean	20.81 %	27.53 %	



Metric	Statistic	DUT Value	REF Value
Ping RTT	Mean	52.52 ms	54.39 ms
	Standard Deviation	18.03 ms	23.42 ms
	Minimum	35.00 ms	30.00 ms
	Maximum	332.00 ms	372.00 ms



Metric	Statistic	DUT Value	REF Value
Throughput	Mean	20.38 Mbps	8.91 Mbps
	Difference % Compare to REF	-128.81%	
	Standard Deviation	8.46 Mbps	4.25 Mbps
	Minimum	6.04 Mbps	4.56 Mbps
	Maximum	30.01 Mbps	20.07 Mbps



Metric	Statistic	DUT Value	REF Value
Throughput	Mean	43.69 Mbps	27.71 Mbps
	Difference % Compare to REF	-57.66%	
	Standard Deviation	7.84 Mbps	7.45 Mbps
	Minimum	29.71 Mbps	19.40 Mbps
	Maximum	68.16 Mbps	46.14 Mbps



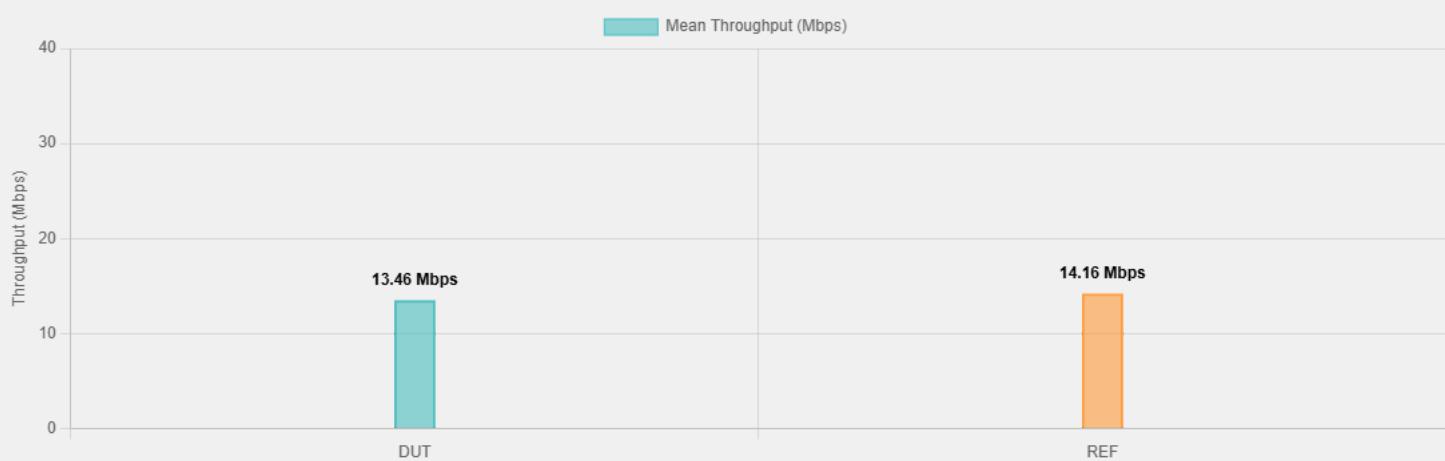
**Data Performance - 5G NSA DP - 2.2.5 5G NSA Data Test Stationary Poor RF UL - UDP Upload Task at 10 Mbps for 10 seconds**

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	9.21 Mbps	6.05 Mbps	
	Difference % Compare to REF	-52.28%		
	Standard Deviation	1.54 Mbps	5.24 Mbps	
	Minimum	5.67 Mbps	0.00 Mbps	
	Maximum	10.49 Mbps	11.42 Mbps	
Jitter	Mean	2.03 ms	1.46 ms	
Error Ratio	Mean	0.00 %	14.81 %	



**Data Performance - 5G NSA DP - 2.2.5 5G NSA Data Test Stationary Poor RF UL - UDP Upload Task at 20 Mbps for 10 seconds**

Metric	Statistic	DUT Value	REF Value	
Throughput	Mean	13.46 Mbps	14.16 Mbps	
	Difference % Compare to REF	4.91%		
	Standard Deviation	1.95 Mbps	2.75 Mbps	
	Minimum	9.86 Mbps	8.82 Mbps	
	Maximum	16.51 Mbps	19.21 Mbps	
Jitter	Mean	1.12 ms	1.00 ms	
Error Ratio	Mean	3.01 %	14.63 %	



### 3. Voice Quality Report

#### AMR Narrowband and Wideband Voice Quality Pass/Fail Criteria

MOS Average

If (Average MOS Worst DUT) > (Average MOS REF) in all markets  
 If (Average MOS Worst DUT) > (Average MOS REF – 0.1) in all markets  
 If Green or Red not satisfied  
 If (Average MOS Worst DUT) < (Average MOS REF – 0.25) in any one market

% MOS < 2.0

If (% MOS Points < 2 for Worst DUT) < (% MOS Points < 2 for REF)  
 If (% MOS Points < 2 for Worst DUT) < ((% MOS Points < 2 for REF) + 2%)  
 If Green or Red not satisfied  
 If ((% MOS Points < 2 for Worst DUT) > (% MOS Points < 2 for REF) + 4%)

% MOS < 3.0

If (% MOS Points < 3 for Worst DUT) < (% MOS Points < 3 for REF)  
 If (% MOS Points < 3 for Worst DUT) < ((% MOS Points < 3 for REF) + 5%)  
 If Green or Red not satisfied  
 If ((% MOS Points < 3 for Worst DUT) > (% MOS Points < 3 for REF) + 8%)

#### EVS to EVS Call Scenario Pass/Fail Criteria

MOS Average

If (Average MOS EVS WB DUT) > 3.9 or If (Average MOS EVS SWB DUT) > 4.0  
 If (3.8 <= Average MOS EVS WB DUT <= 3.9) or If(3.9 <= Average MOS EVS SWB DUT <= 4.0)  
 If (Average MOS EVS WB DUT < 3.8) or If (Average MOS EVS SWB DUT < 3.9)

% MOS < 3.4

If (% MOS Points < 3.4 for EVS to EVS DUT) < (% MOS Points < 3.4 for EVS to EVS REF)  
 If (% MOS Points < 3.4 for EVS to EVS DUT) < ((% MOS Points < 3.4 for EVS to EVS REF) + 5%)  
 If Green or Red not satisfied  
 If ((% MOS Points < 3.4 for EVS to EVS DUT) > (% MOS Points < 3.4 for EVS to EVS REF) + 8%)

% MOS < 3.0

If (% MOS Points < 3 for EVS to EVS DUT) < (% MOS Points < 3 for EVS to EVS REF)  
 If (% MOS Points < 3 for EVS to EVS DUT) < ((% MOS Points < 3 for EVS to EVS REF) + 2%)  
 If Green or Red not satisfied  
 If ((% MOS Points < 3 for EVS to EVS DUT) > (% MOS Points < 3 for EVS to EVS REF) + 4%)

#### Audio Delay Pass/Fail Criteria

Audio Delay

If (Average delay of 2 DUTs) < 90% (Average delay of 2 REFs)  
 If (Average delay of 2 DUTs) between 90% and 110% of (Average delay of 2 REFs)  
 If (Average delay of 2 DUTs) between 110% and 120% of (Average delay of 2 REFs)  
 If (Average delay of 2 DUTs) > 120% (Average delay of 2 REFs)

# Voice Quality Summary - Seattle Market

TEST CASES	MOS AVERAGE		% MOS < 3.0		% MOS < 2.0		COMMENTS/LINKS
	DUT AVG.	REF AVG.	DUT AVG.	REF AVG.	DUT AVG.	REF AVG.	
5G Auto VoNR Enabled AMR NB VQ	4.32	4.29	0.6%	1.0%	0.0%	0.4%	
5G Auto VoNR Enabled AMR WB VQ	3.52	3.36	4.4%	14.7%	0.2%	2.4%	

TEST CASES	MOS AVERAGE		% MOS < 3.4		% MOS < 3.0		COMMENTS/LINKS
	DUT AVG.	REF AVG.	DUT AVG.	REF AVG.	DUT AVG.	REF AVG.	
5G Auto VoNR Disabled EVS WB VQ	4.0	4.1	2.0%	1.5%	0.5%	0.2%	
5G Auto VoNR Enabled EVS WB VQ	4.2	4.3	1.0%	0.8%	0.3%	0.1%	

TEST CASES	KPI FOR VOICE QUALITY PERFORMANCE MOBILITY			COMMENTS/LINKS	
	AUDIO DELAY (MS)				
	DUT AVG.	REF AVG.			
5G Auto VoNR Disabled Audio Delay	329.85		325.76		
5G Auto VoNR Enabled Audio Delay	305.39		333.43		

## Voice Quality - 3.1 5G Auto VoNR Enabled AMR NB VQ

	DOWNLINK			UPLINK			
	REF	DUT 1	DUT 2	REF	DUT 1	DUT 2	
MOS Average	4.29	4.33	4.32	4.28	4.31	4.33	
MOS Stdev	0.26	0.16	0.19	0.36	0.35	0.22	
Maximum MOS	4.47	4.49	4.48	4.50	4.50	4.50	
Count	512	512	510	510	510	509	
% MOS < 3.0	1.0%	0.4%	0.6%	1.6%	2.0%	0.6%	
% MOS < 2.0	0.4%	0.0%	0.0%	0.4%	0.4%	0.0%	

## Voice Quality - 3.2 5G Auto VoNR Enabled AMR WB VQ

	MOBILE				BASE		
	REF	DUT 1	DUT 2	REF	DUT 1	DUT 2	
MOS Average	3.36	3.56	3.52	3.42	3.49	3.57	
MOS Stdev	0.44	0.20	0.25	0.49	0.34	0.23	
Maximum MOS	3.77	3.82	3.83	3.80	3.84	3.81	
Count	502	502	503	505	505	505	
% MOS < 3.0	14.7%	2.8%	4.4%	12.3%	8.7%	4.8%	
% MOS < 2.0	2.4%	0.2%	0.0%	3.0%	0.4%	0.0%	

## Voice Quality - 3.3 5G Auto VoNR Disabled EVS WB VQ

	MOBILE				BASE			
	DUT 1	DUT 2	REF 1	REF 2	DUT 1	DUT 2	REF 1	REF 2
MOS Average	3.61	3.27	3.69	3.33	3.68	3.24	3.79	3.56
MOS Stdev	0.55	0.50	0.60	0.53	0.44	0.30	0.39	0.33
Maximum MOS	4.01	3.68	4.08	3.93	4.02	3.52	4.04	3.92
Count	511	514	515	515	502	505	506	506
% MOS < 3.0	10.6%	14.2%	10.3%	15.9%	9.4%	7.9%	5.3%	6.5%
% MOS < 3.4	15.1%	38.5%	13.0%	41.4%	10.8%	80.6%	7.3%	11.3%

## Voice Quality - 3.4 5G Auto VoNR Enabled EVS WB VQ

	MOBILE				BASE			
	DUT 1	DUT 2	REF 1	REF 2	DUT 1	DUT 2	REF 1	REF 2
MOS Average	3.65	3.45	3.73	3.49	3.70	3.22	3.71	3.37
MOS Stdev	0.62	0.62	0.71	0.51	0.51	0.64	0.66	0.66
Maximum MOS	4.08	3.90	4.19	3.86	4.06	3.89	4.14	3.87
Count	505	502	507	505	507	504	505	508
% MOS < 3.0	11.1%	14.5%	13.4%	8.7%	8.9%	27.6%	13.5%	17.9%
% MOS < 3.4	15.0%	18.1%	17.9%	18.2%	12.4%	47.0%	17.2%	28.0%

## Voice Quality - 3.5 5G Auto VoNR Disabled Audio Delay

	KPI FOR AUDIO DELAY			
	DUT 1	DUT 2	REF 1	REF 2
Average (ms)	333.23	326.47	323.20	328.31
Average of 2 Devices (ms)	329.85		325.75	
Stdev (ms)	13.03	13.57	16.70	51.00
Maximum (ms)	365.41	367.91	415.75	1157.07
Minimum (ms)	278.42	298.17	274.78	285.33
Count	286	285	286	285

## Voice Quality - 3.6 5G Auto VoNR Enabled Audio Delay

	KPI FOR AUDIO DELAY			
	DUT 1	DUT 2	REF 1	REF 2
Average (ms)	310.82	299.96	331.56	335.30
Average of 2 Devices (ms)	305.39		333.43	
Stdev (ms)	10.88	14.76	15.65	34.55
Maximum (ms)	397.87	386.30	388.02	823.20
Minimum (ms)	282.54	266.91	279.68	296.00
Count	282	281	282	280

## 4. Coverage Performance Report

### 5G VoNR Coverage Performance Pass/Fail Criteria

Furthest distance from cell center where, DL Throughput >=1 Mbps, UL Throughput >=1 Mbps, Call Dropped, MOS recorded before call dropped.	If AVG (DUT distance) >= 0.95 * AVG (REF distance) Else
MCS at Initial 30%, Middle 40% and Last 30% portions of the run before losing coverage (Only applicable if distance KPI fails)	If AVG (DUT MCS) >= AVG (REF MCS) - 2 Else
BLER at Initial 30%, Middle 40%, and Last 30% portions of the run before losing coverage (Only applicable if distance KPI fails)	If AVG (DUT BLER) <= AVG (REF BLER) + 2 Else
Tx Power (Only applicable if distance KPI fails)	If AVG (DUT Tx Power) >= AVG (REF Tx Power) - 0.5 Else

### Coverage Performance Summary - Seattle Market

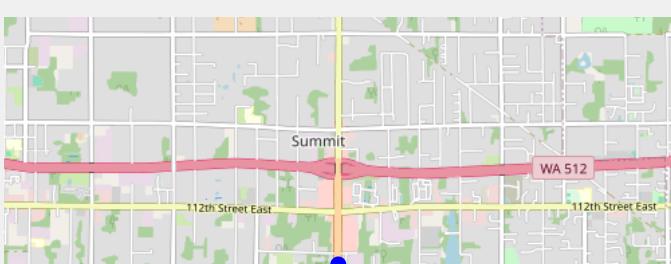
TEST CASES	KPI FOR COVERAGE PERFORMANCE MOBILITY								NETWORK TECH.	COMMENTS/LI NKS		
	LAST MOS BEFORE CALL DROP (KM)		VOICE CALL DROP DISTANCE (KM)		DL TP < 1 DISTANCE (KM)		UL TP < 1 DISTANCE (KM)					
	DUT AVG.	REF AVG.	DUT AVG.	REF AVG.	DUT AVG.	REF AVG.	DUT AVG.	REF AVG.				
5G VoNR Coverage Test n25	2.26	2.39	2.35	2.43	2.00	2.21	1.97	1.80	N25			
5G VoNR Coverage Test n41	2.65	2.44	2.68	2.44	2.43	2.33	2.38	2.11	N41			
5G VoNR Coverage Test n71	2.37	2.34	2.42	2.44	1.91	1.81	1.82	1.70	N71			

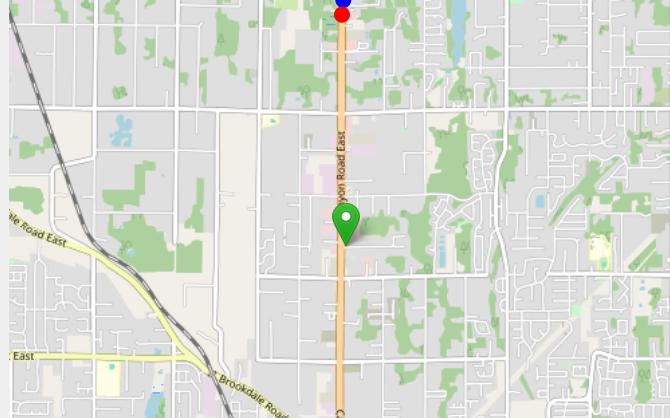
#### 4.1 5G VoNR Coverage Test - N25, N41, N71

Network: N25

##### Last MOS Before Call Drop (km)

Device Name	Run1	Run2	Run3	Run4	Run5	Average
DUT	2.00	2.30	2.37	2.44	2.19	2.26
REF	2.43	2.41	2.42	2.46	2.25	2.39

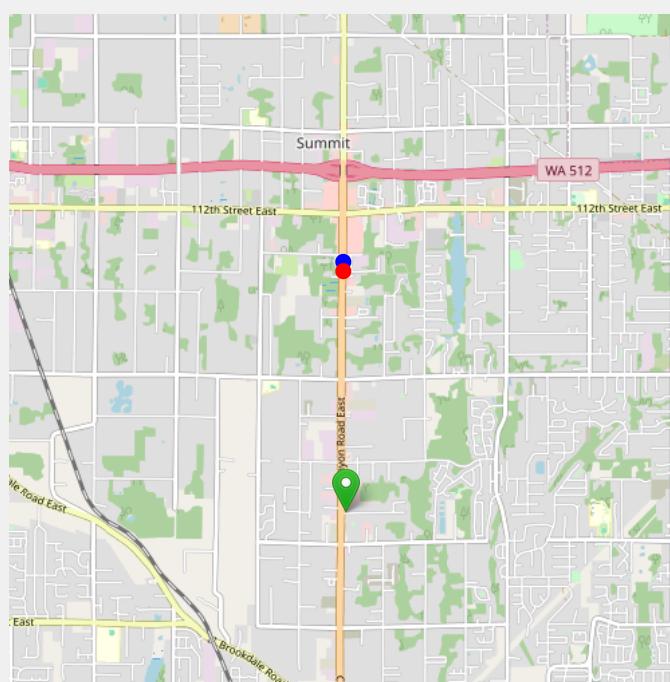




● DUT ● REF ● Base Station

#### Voice Call Drop Distance (km)

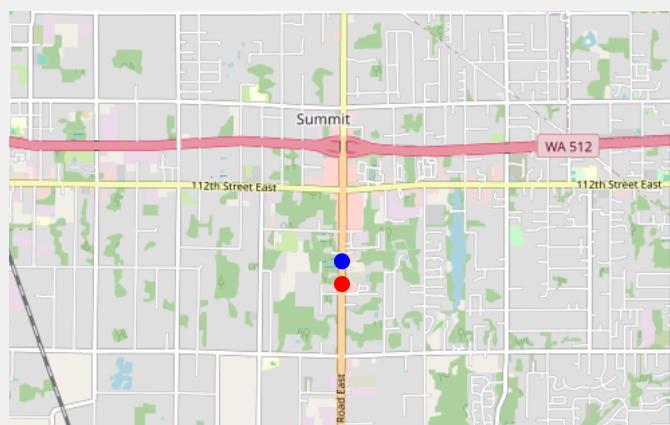
Device Name	Run1	Run2	Run3	Run4	Run5	Average
DUT	2.15	2.40	2.42	2.46	2.32	2.35
REF	2.43	2.41	2.42	2.46	2.43	2.43

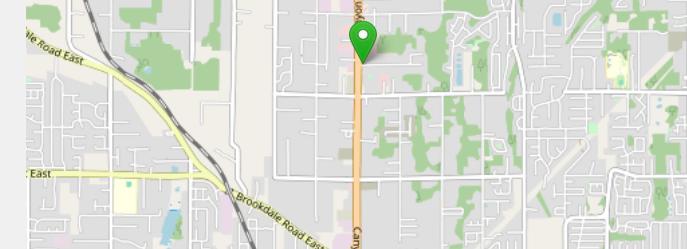


● DUT ● REF ● Base Station

#### DL TP > 1 Distance (km)

Device Name	Run1	Run2	Run3	Run4	Run5	Average
DUT	1.77	1.98	2.16	2.07	2.02	2.00
REF	2.24	2.23	2.23	2.25	2.12	2.21

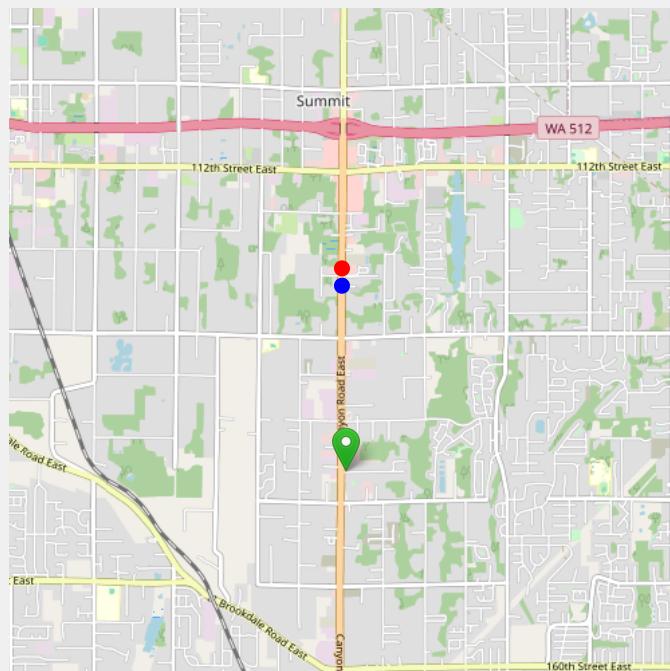




● DUT ● REF ● Base Station

#### UL TP > 1 Distance (km)

Device Name	Run1	Run2	Run3	Run4	Run5	Average
DUT	1.77	1.94	2.13	2.02	2.00	1.97
REF	1.72	1.91	1.76	1.86	1.74	1.80

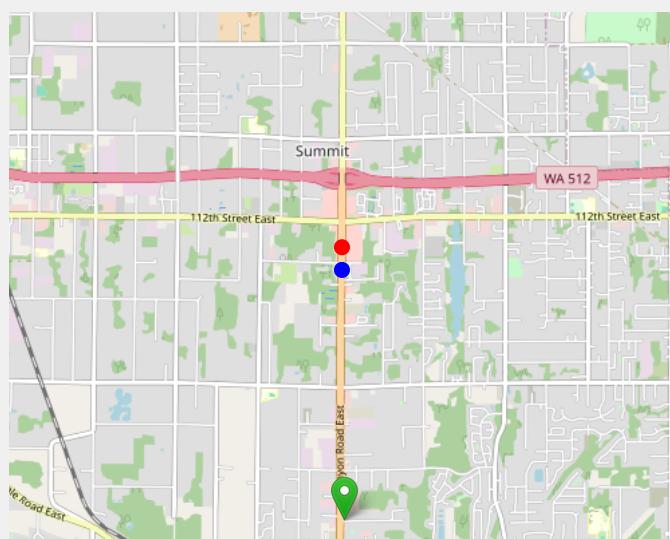


● DUT ● REF ● Base Station

#### Network: N41

#### Last MOS Before Call Drop (km)

Device Name	Run1	Run2	Run3	Run4	Run5	Average
DUT	2.80	2.76	2.42	2.80	2.48	2.65
REF	2.43	2.41	2.42	2.46	2.48	2.44

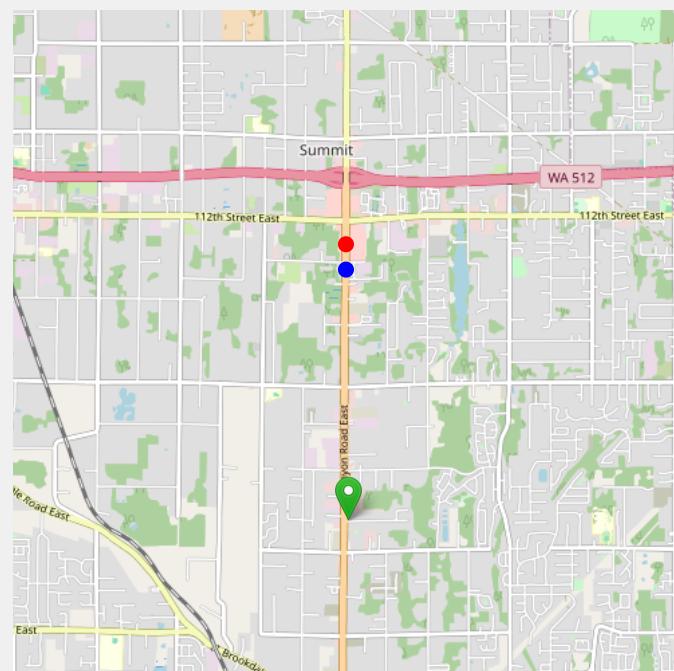




● DUT ● REF ● Base Station

### Voice Call Drop Distance (km)

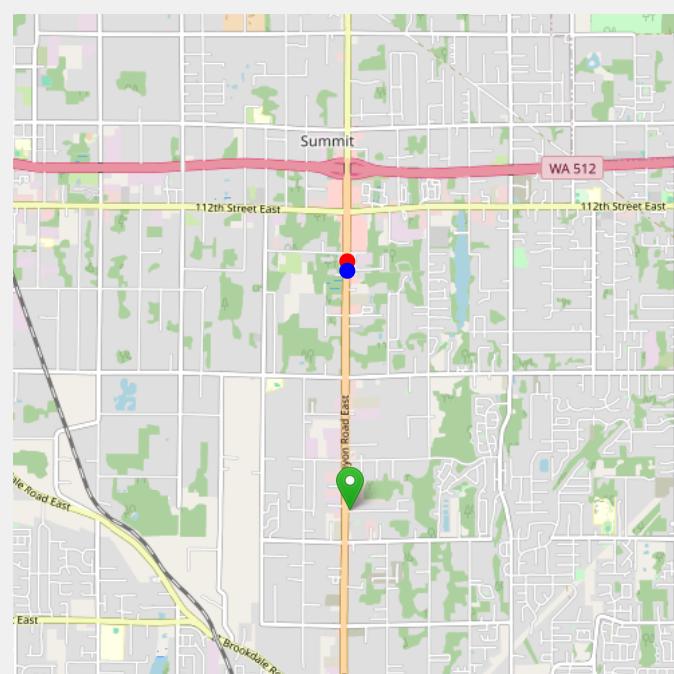
Device Name	Run1	Run2	Run3	Run4	Run5	Average
DUT	2.86	2.82	2.42	2.84	2.48	2.68
REF	2.43	2.41	2.42	2.46	2.48	2.44



● DUT ● REF ● Base Station

### DL TP > 1 Distance (km)

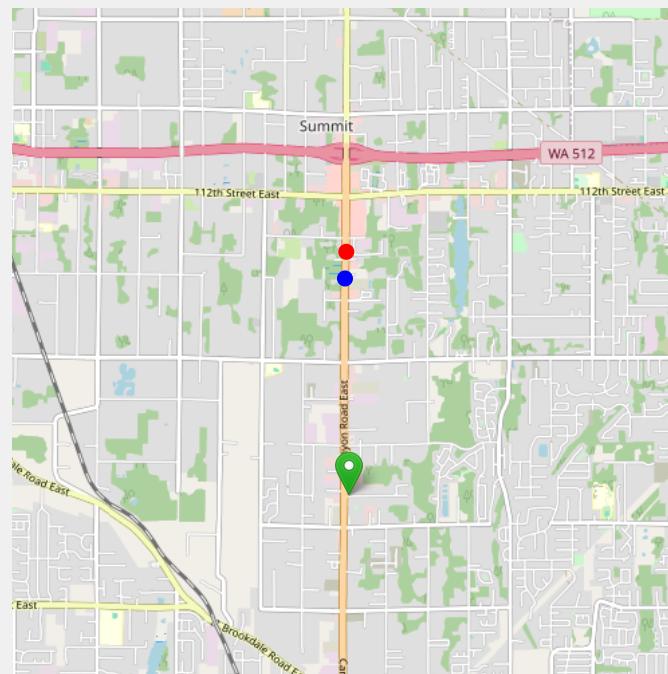
Device Name	Run1	Run2	Run3	Run4	Run5	Average
DUT	2.43	2.48	2.48	2.48	2.27	2.43
REF	2.26	2.38	2.38	2.39	2.25	2.33



● DUT ● REF Base Station

### UL TP > 1 Distance (km)

Device Name	Run1	Run2	Run3	Run4	Run5	Average
DUT	2.34	2.41	2.48	2.47	2.18	2.38
REF	1.73	2.29	2.25	2.07	2.20	2.11

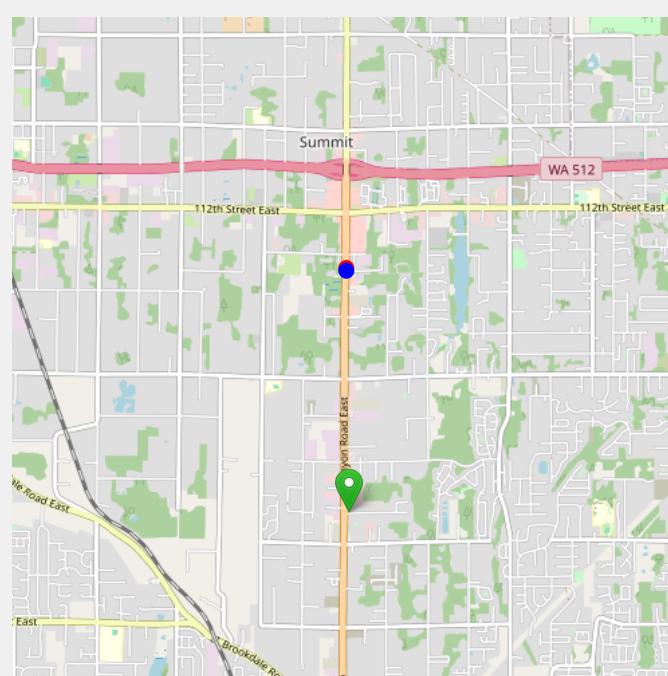


● DUT ● REF Base Station

Network: N71

### Last MOS Before Call Drop (km)

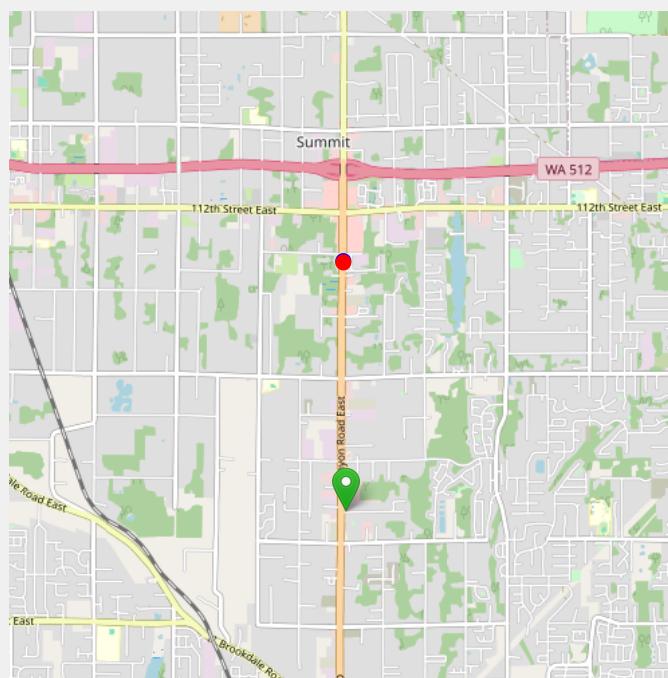
Device Name	Run1	Run2	Run3	Run4	Run5	Average
DUT	2.35	2.30	2.37	2.44	2.37	2.37
REF	2.35	2.30	2.37	2.44	2.25	2.34



● DUT ● REF Base Station

## Voice Call Drop Distance (km)

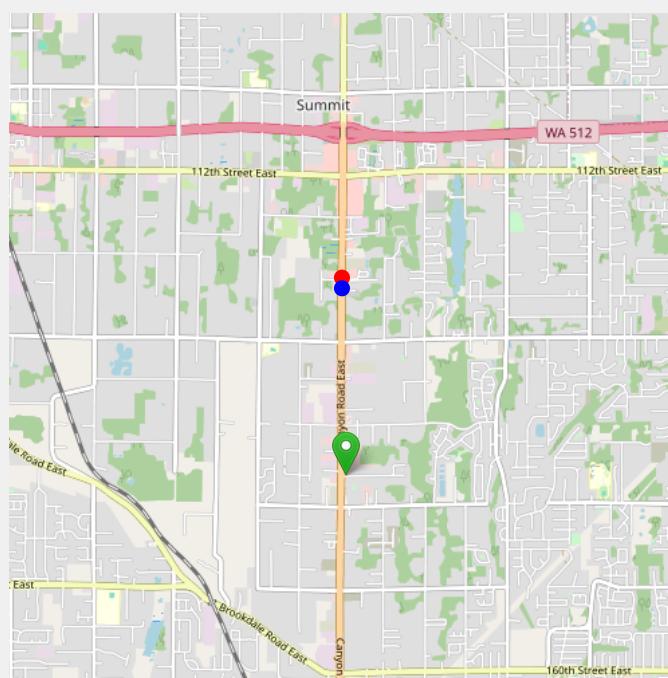
Device Name	Run1	Run2	Run3	Run4	Run5	Average
DUT	2.43	2.40	2.42	2.46	2.40	2.42
REF	2.43	2.41	2.42	2.46	2.48	2.44



● DUT ● REF ● Base Station

## DL TP > 1 Distance (km)

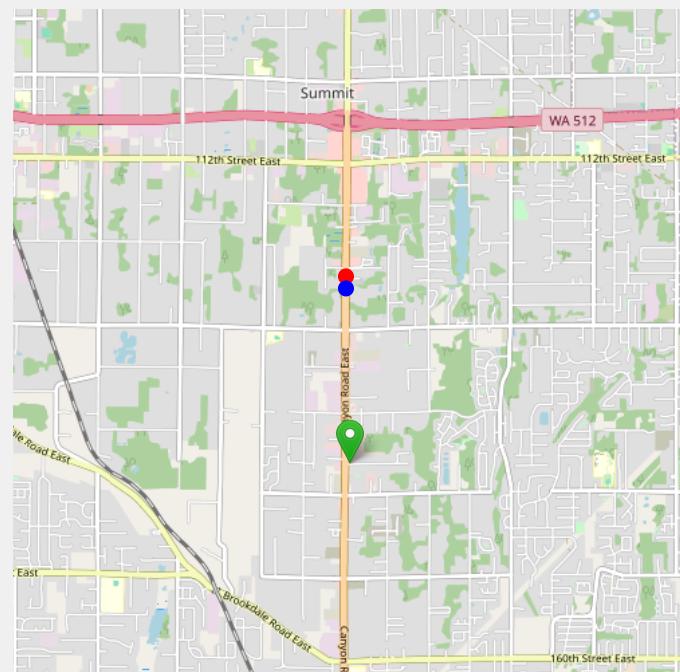
Device Name	Run1	Run2	Run3	Run4	Run5	Average
DUT	2.10	1.96	1.81	1.83	1.86	1.91
REF	1.84	1.98	1.83	1.69	1.72	1.81



● DUT ● REF ● Base Station

## UL TP > 1 Distance (km)

Device Name	Run1	Run2	Run3	Run4	Run5	Average
DUT	2.00	1.83	1.78	1.76	1.72	1.82
REF	1.72	1.84	1.64	1.65	1.64	1.70



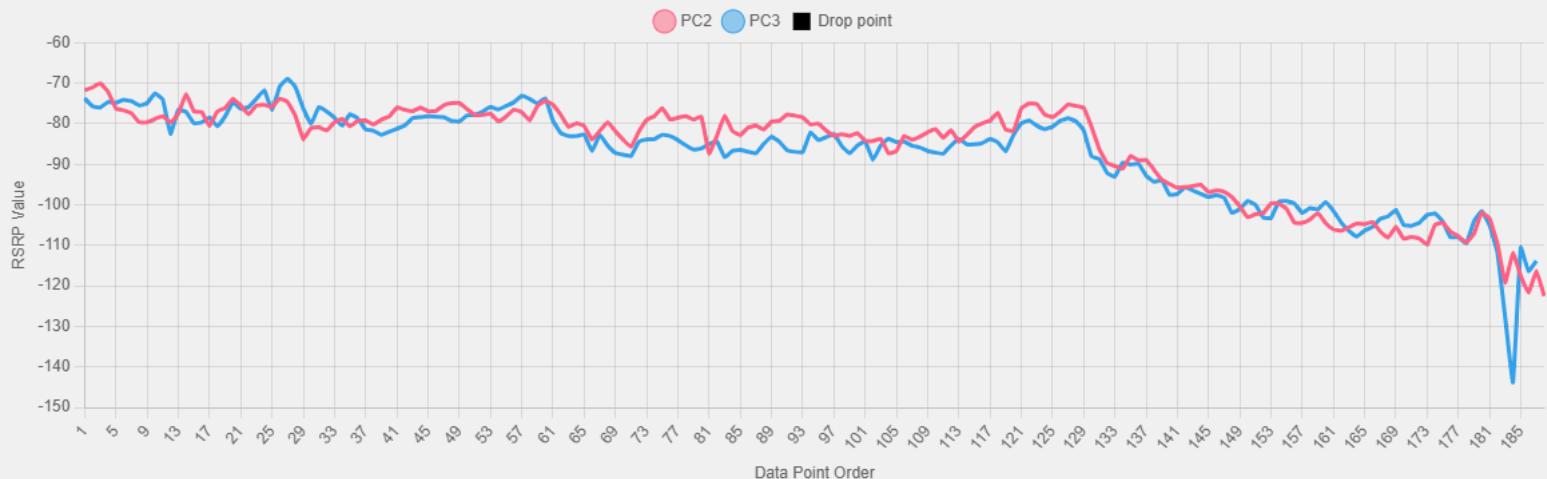
● DUT   ● REF   ● Base Station

## 4.2 5G n41 HPUE Coverage Test

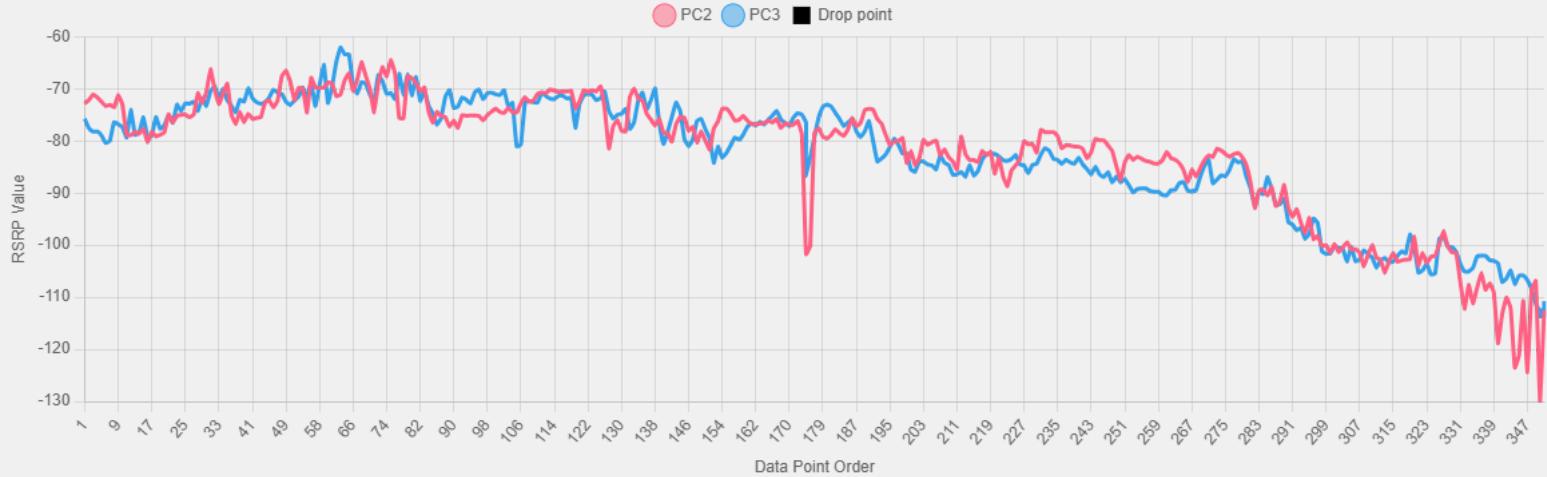
Distance to Base Station (km)

Device	Run1	Run2	Run3	Run4	Run5	Average
Power Class 2	2.34	2.10	2.32	2.33	2.31	2.28
Power Class 3	2.39	2.27	1.98	2.38	2.33	2.27

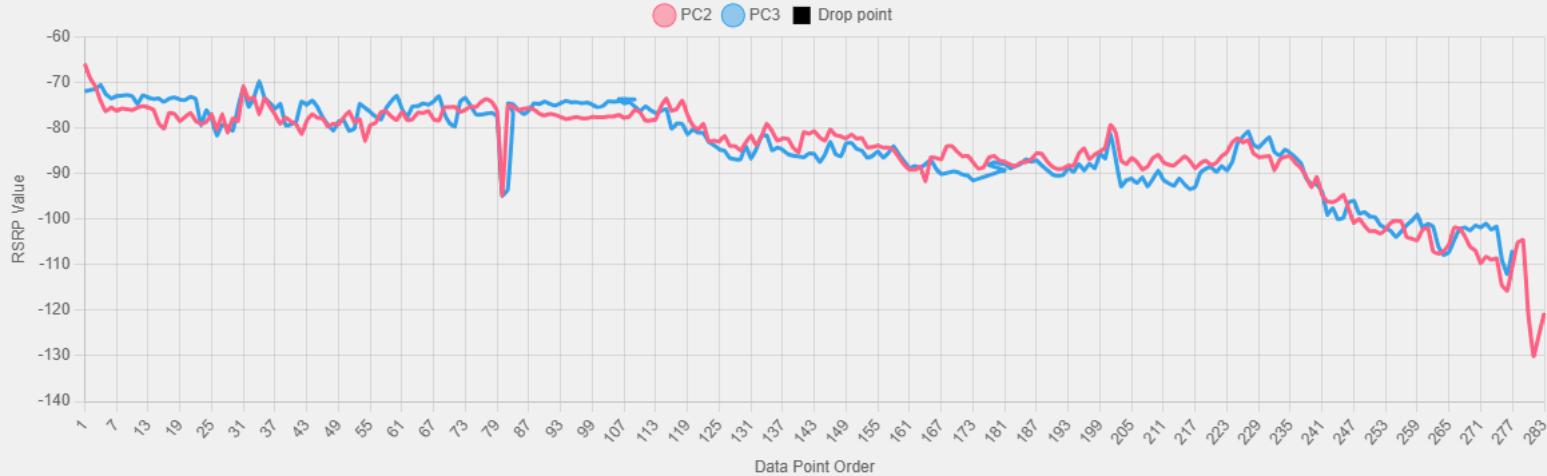
Run 1 RSRP Analysis (PC2 vs PC3)



Run 2 RSRP Analysis (PC2 vs PC3)

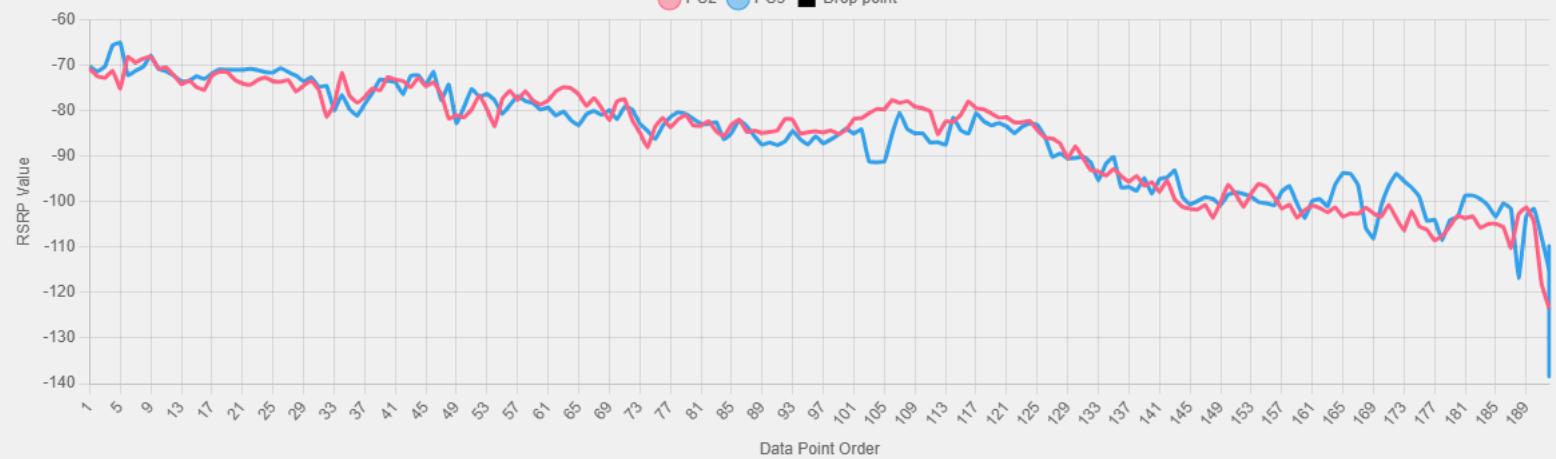


Run 3 RSRP Analysis (PC2 vs PC3)



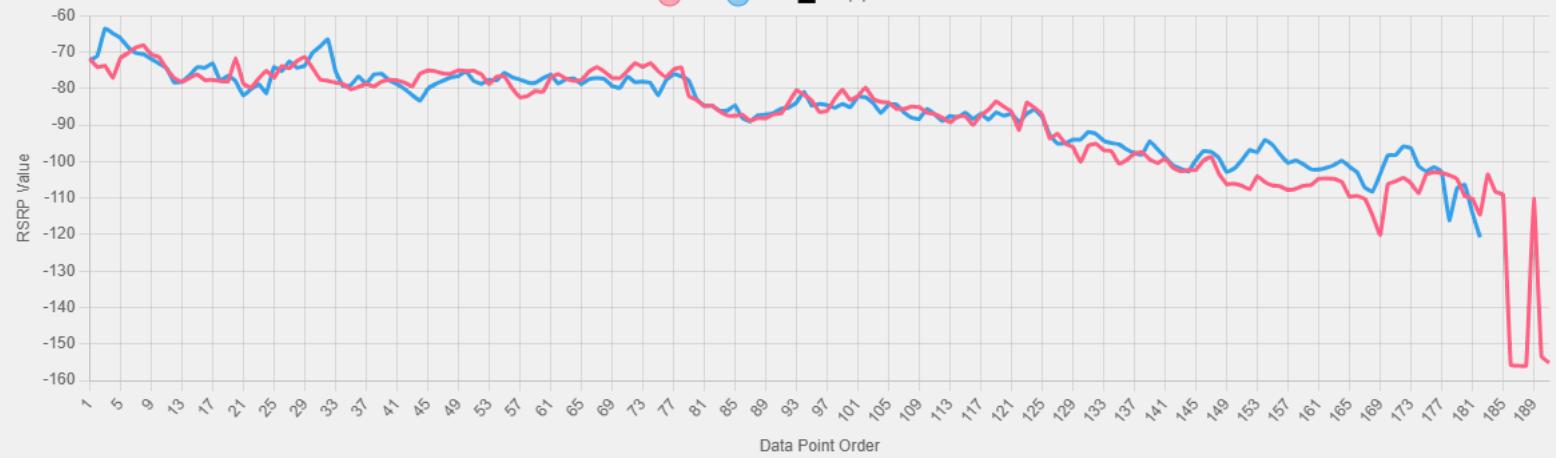
Run 4 RSRP Analysis (PC2 vs PC3)

PC2 PC3 Drop point



Run 5 RSRP Analysis (PC2 vs PC3)

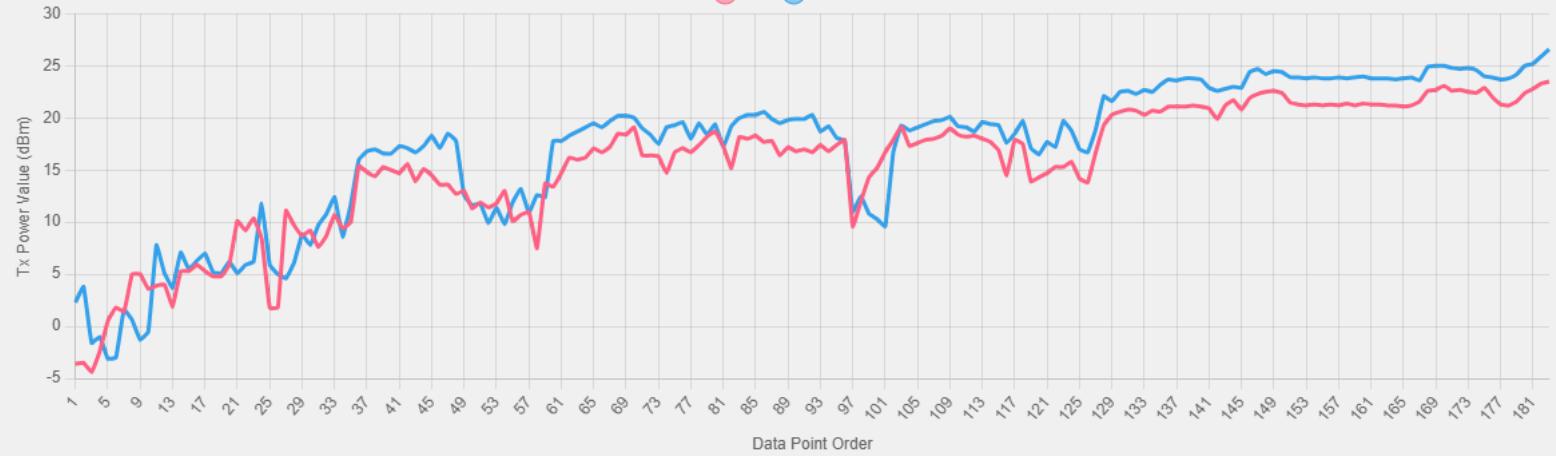
PC2 PC3 Drop point



## Tx Power Analysis

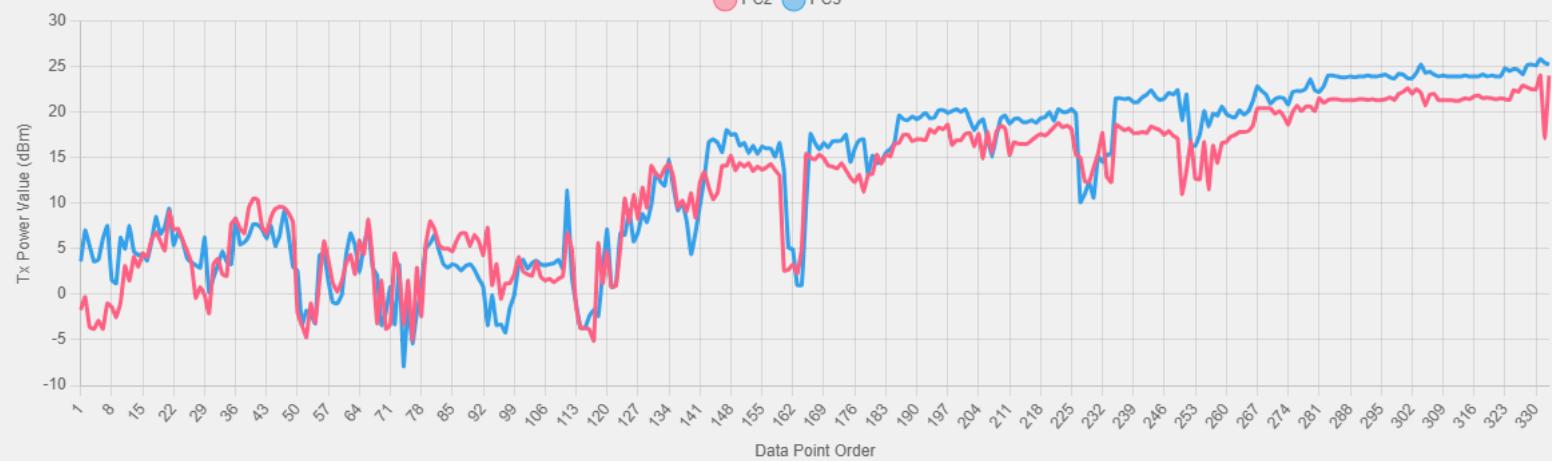
Run 1 Tx Power Analysis (PC2 vs PC3)

PC2 PC3



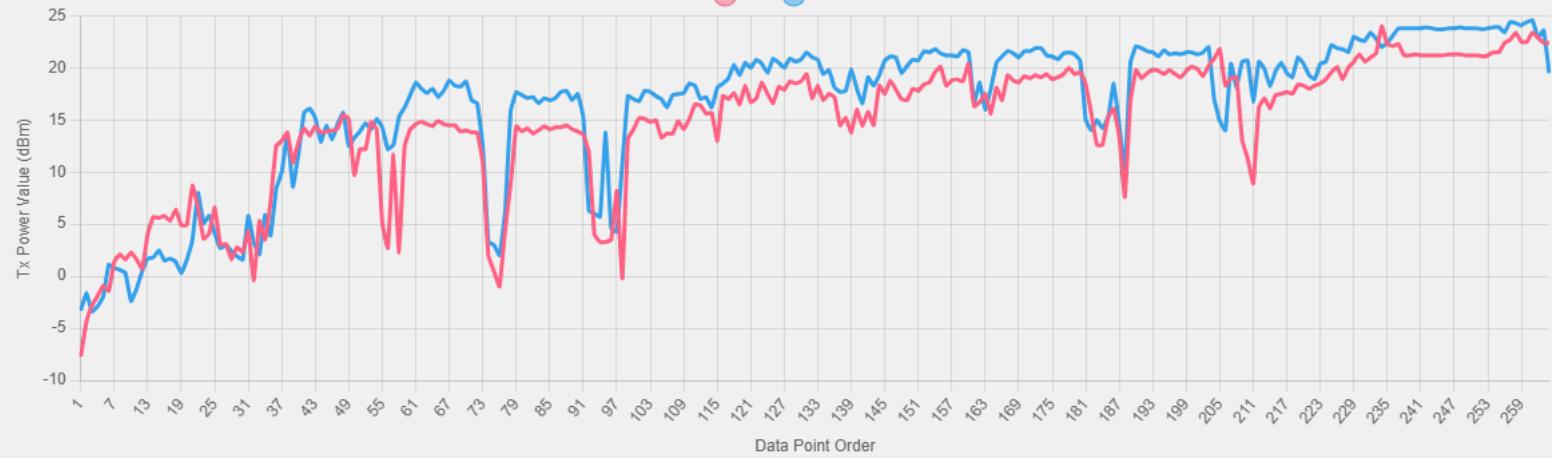
Run 2 Tx Power Analysis (PC2 vs PC3)

PC2 PC3



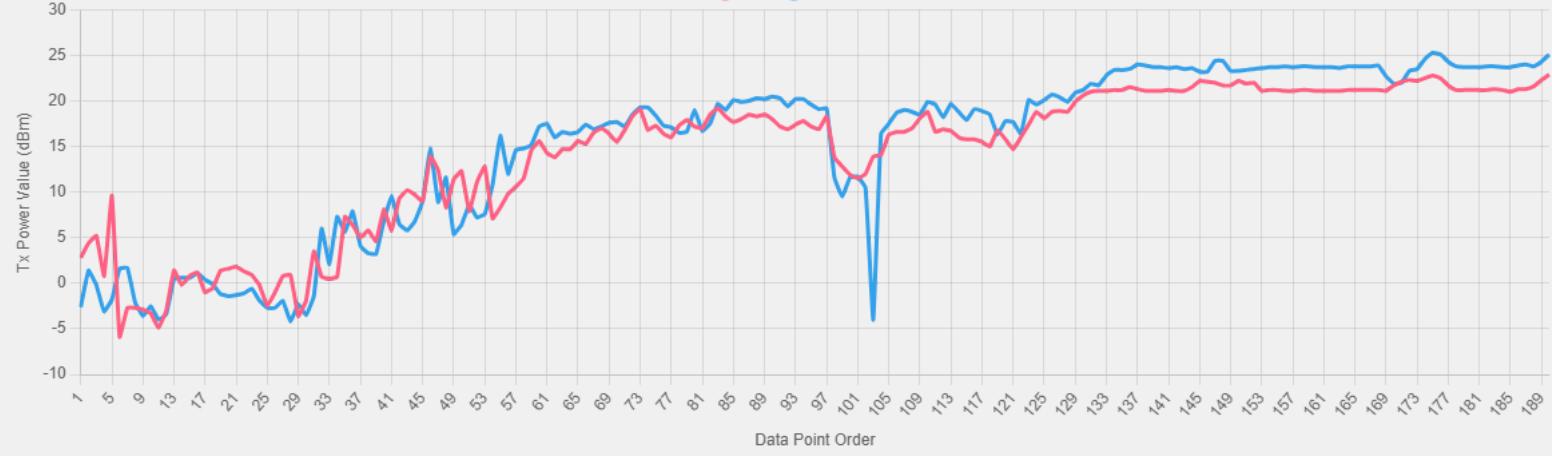
Run 3 Tx Power Analysis (PC2 vs PC3)

PC2 PC3



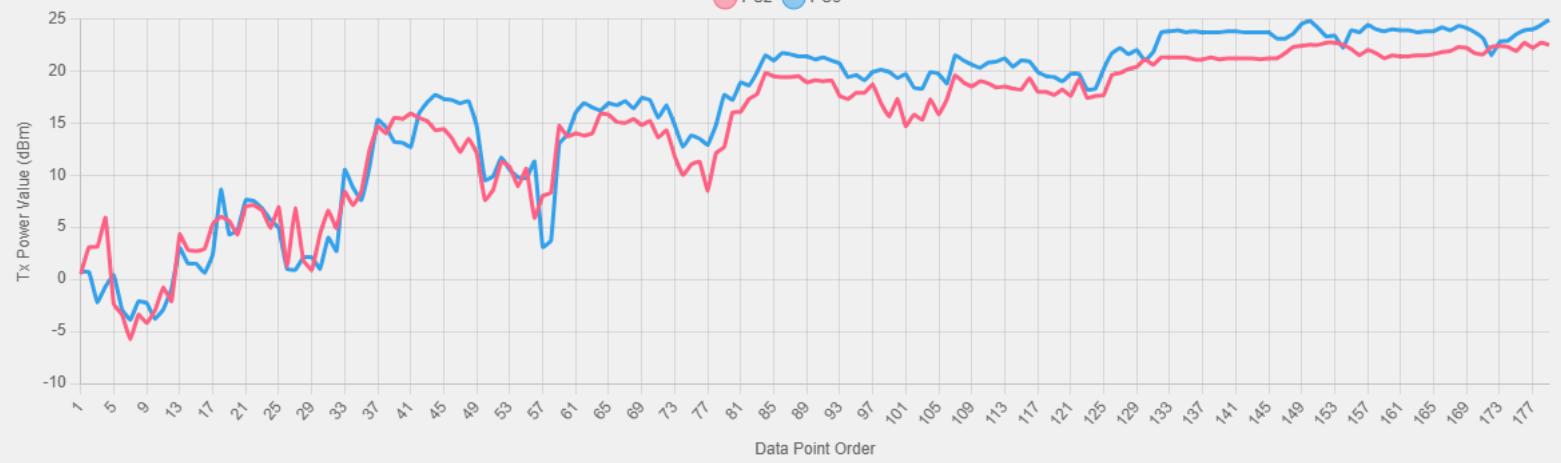
Run 4 Tx Power Analysis (PC2 vs PC3)

PC2 PC3



## Run 5 Tx Power Analysis (PC2 vs PC3)

PC2 PC3



End of Test Report