

best in test.

For adding something on top in New Zealand and reaching an overall score of 872 dots in mobile network benchmarking survey we proudly award this certificate to

One New Zealand

Score 872 out of 1000 in Total

Score 246 out of 270 in Voice Services

Score 399 out of 480 in Data Services

Score 227 out of 250 in Crowdsourced Quality

Reliability Score 527 out of 600 in Total

Crescenzo Micheli

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Global Network Benchmarking Lead





Measurement Overview

umlaut tested and measured the performance of its voice and data services on smartphones in comparison to other 5G/LTE mobile radio networks in metropolitan and rural areas of New Zealand.

The audit was done as a performance benchmark performed by umlaut between 29.04.2026 – 19.05.2026 in cities and towns as well as on connection roads.

Dedicated measurements were taken via outdoor drive tests using a Samsung Galaxy S24 Ultra.

All data measurements have been performed in 5G preferred mode. Voice measurements have been done in 5G/5G preferred mode on both sides, while call origin has been alternated.

In addition crowdsourced performance data has been collected and evaluated between W50 2025 and W21 2026.

The following pages provide a comparative overview about the performance results observed the different tested service types.

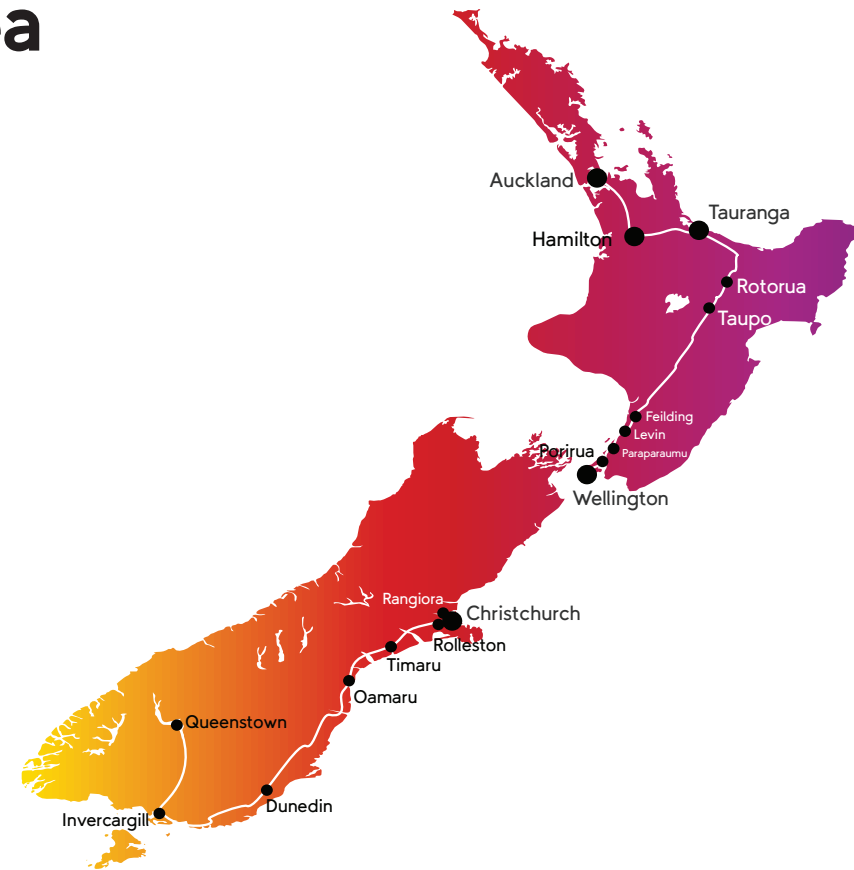


Drive Test	Voice	Conversational App	Data
Device	Samsung Galaxy S24 Ultra	Samsung Galaxy S24 Ultra	Samsung Galaxy S24 Ultra
Test Cases	Mobile-to-Mobile <ul style="list-style-type: none"> • Side1 (VoLTE, 5G pref.) to Side2 (VoLTE, 5G pref.) • 105 sec call window • 70 sec call duration • 15 sec call setup timeout • Multi-RAB traffic injection on both sides 	Mobile-to-Mobile <ul style="list-style-type: none"> • Side1 (VoLTE, 5G pref.) to Side2 (VoLTE, 5G pref.) • 105 sec call window • 70 sec call duration • 15 sec call setup timeout 	Data 5G preferred <ul style="list-style-type: none"> • HTTP DL datastream 7s • HTTP UL datastream 7s • HTTP 10MB DL fixed file transfer • HTTP 5MB UL fixed file transfer • Web Browsing – (4 international pages, 4 local pages, 1 ETSI reference, 1 umlaut reference page) • 2 YouTube videos ~45s (Full HD and Live Full HD) • Interactivity eGaming, Video Chat HD
Mobility & Route Types	100% Drivetest ~60% in Cities, ~18% in Towns and ~22% on Roads		
Samples	9,030 Voice Samples		94,476 Data Samples
Dates	Crowd Data : 24 Weeks Assessment : CW50 2025 – CW21 2026		



Testing area

Driving Route



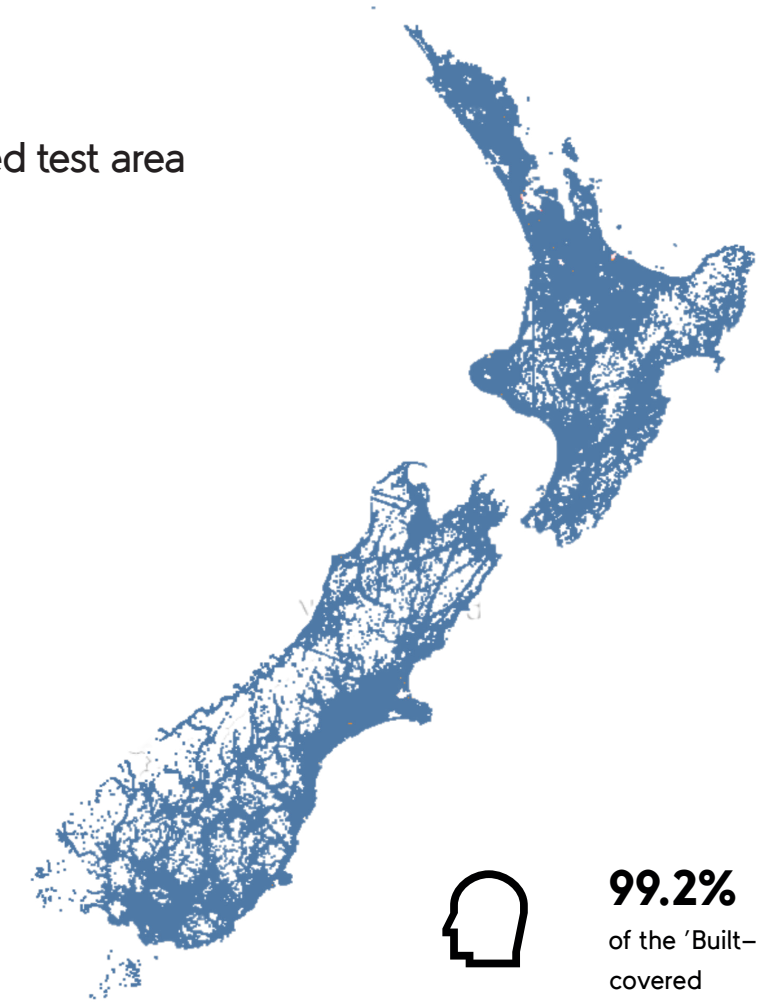
~62%
of population measured



8,230 km
measuring distance



Crowdsourcing based test area



140,179 km²
size of tested area



99.2%
of the 'Built-up area'
covered



99.7%
of the 'Population area'
covered



Claims




Best in test
One New Zealand



Best in voice
One New Zealand



Best in data
One New Zealand



Best in Reliability
One New Zealand



Best in crowd-sourced quality
One New Zealand



Methodology

As the de-facto industry standard, umlaut's benchmarking methodology focuses on customer-perceived network quality and covers a wide range of mobile and fixed broadband services.

For the collection of crowd-data used for this certification report, we have integrated a background diagnosis processes into thousands of diverse Android apps. If one of these applications is installed on the end-user's phone, data collection takes place 24/7, 365 days a year. We focus on the user experience. Our data collection is compliant with the GDPR, since we do not include any personal user data. This unique crowdsourcing technology allows us to collect data about real-world experience wherever and whenever customers use their smartphones to consume data services or place phone calls.

The umlaut benchmarking framework is based on a unified measurement method for true international comparability combined with the umlaut-Score approach. Our top priority is to fairly and transparently assess the global development of networks, push their quality and performance with our benchmarks and ultimately achieve improvements for every customer.



Score and breakdown

One achieved the highest overall score among competitors with 872 dots out of 1000.



Overall score considering Crowdsourcing, Voice and Data.

→ Shown total scores are rounded.

Total Scores

		One	2degrees	Spark
Crowd	max. 250	227	223	216
Broadband Coverage	100	94%	88%	93%
Download speed (Service Category)	19	97%	94%	89%
Upload speed (Service Category)	19	67%	81%	69%
Download Speed (Data Rates)	19	97%	92%	72%
Upload Speed (Data Rates)	19	85%	93%	88%
Latency	50	88%	86%	79%
Voice	10	98%	100%	99%
Stability	15	94%	97%	96%
Voice	max. 270	246	207	223
Cities drive test	162	96%	83%	90%
Towns drive test	54	97%	89%	92%
Roads drive test	54	70%	43%	50%
Data	max. 480	399	386	360
Cities drive test	288	89%	90%	85%
Towns drive test	96	89%	88%	73%
Roads drive test	96	60%	43%	46%
Total	1000	872	816	799

Shown scores are rounded.



Achieved percentage of the maximum score in each of the different data services.

Data	Service group	Max.	One	2degrees	Spark
Cities drive test	Web Browsing	50.4	93%	96%	93%
	File Download	57.6	94%	89%	92%
	File Upload	57.6	82%	93%	81%
	YouTube	49.0	91%	87%	84%
	OTT	73.4	85%	88%	79%
Towns	Web Browsing	16.8	94%	96%	78%
	File Download	19.2	96%	85%	78%
	File Upload	19.2	79%	87%	71%
	YouTube	16.3	92%	85%	63%
	OTT	24.5	88%	88%	73%
Roads	Web Browsing	16.8	68%	49%	54%
	File Download	19.2	66%	42%	47%
	File Upload	19.2	40%	25%	31%
	YouTube	16.3	58%	36%	36%
	OTT	24.5	69%	60%	57%

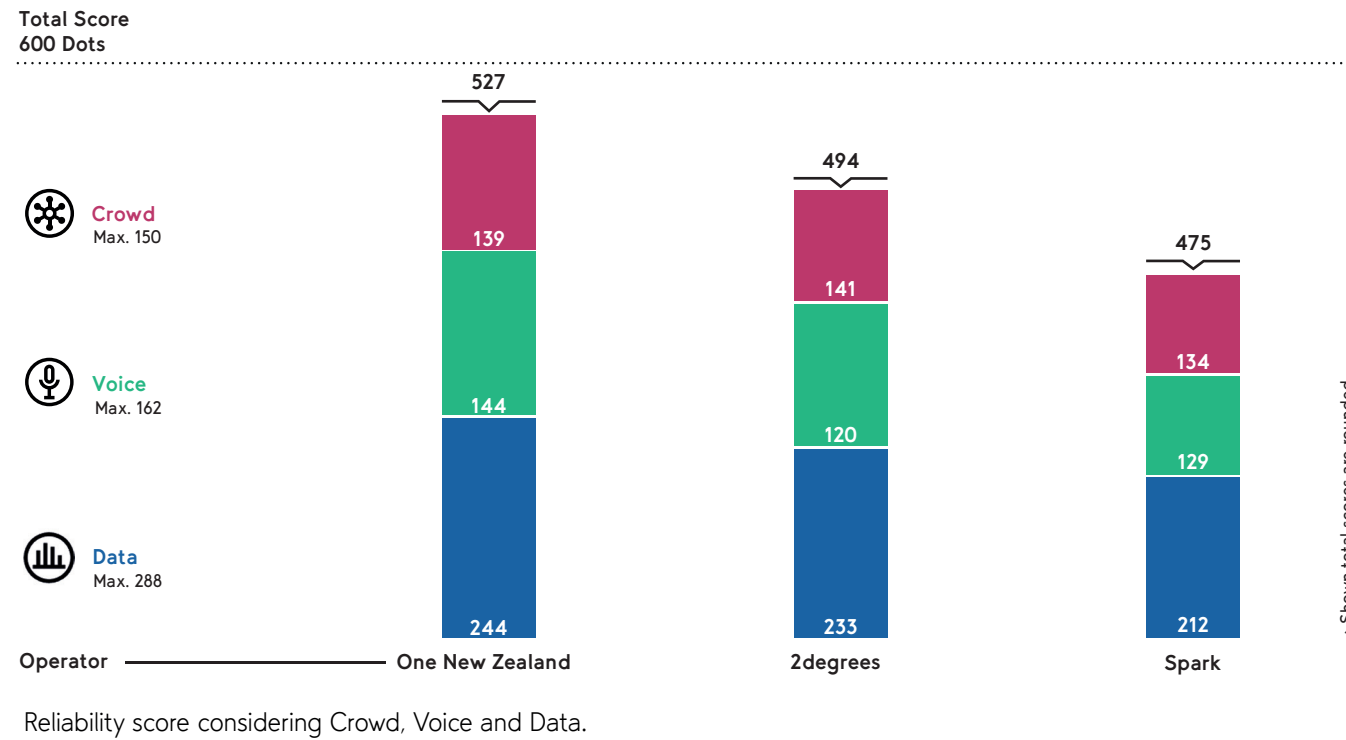


Achieved percentage of the maximum score in each of the different crowdsourcing services.

Crowd	Service group	Max.	One	2degrees	Spark
Crowdsourced Quality	Broadband Coverage	100	94%	88%	93%
	Download speed (Service Category)	19	97%	94%	89%
	Upload speed (Service Category)	19	67%	81%	69%
	Download Speed (Data Rates)	19	97%	92%	72%
	Upload Speed (Data Rates)	19	85%	93%	88%
	Latency	50	88%	86%	79%
	Voice	10	98%	100%	99%
	Stability	15	94%	97%	96%



Reliability



Total Scores

	Service group	Max.	One	2degrees	Spark
Reliability	Crowd	150	93%	94%	89%
	Voice	162	89%	74%	80%
	Data	288	85%	81%	74%

Score achievement in school grades:
 outstanding (95%), very good (85% and <95%), good (75% and 85%), satisfactory (65% and <75%), sufficient (55% and <65%).



Voice KPI overview

Achieved values of all networks under test in each of the relevant Voice Key Performance Indicators (KPIs) for the geographical categories "Cities", "Towns" and "Roads".

Voice	Service group	Unit	One	2degrees	Spark
Cities drive test	Qualifier	[%]	99.7	98.8	99.4
	Call Setup Time (P90)	[s]	1.4	2.5	2.8
	Speech Quality (P10)	[MOS-LQO]	4.4	3.6	4.0
Towns	Qualifier	[%]	99.8	99.6	99.8
	Call Setup Time (P90)	[s]	1.6	2.7	3.1
	Speech Quality (P10)	[MOS-LQO]	4.5	3.7	4.0
Roads	Qualifier	[%]	94.0	88.8	89.7
	Call Setup Time (P90)	[s]	3.0	2.9	3.0
	Speech Quality (P10)	[MOS-LQO]	4.2	3.4	3.8



Data Service KPI overview

Achieved values of all networks under test in each of the relevant Data Key Performance Indicators (KPIs) for the geographical category "Cities".

Services	KPI name	Unit	One	2degrees	Spark
HTTP Web page DL Smart-phone	Qualifier	[%]	99.5	99.8	99.4
	Overall session time	[s]	1.5	1.4	1.4
HTTP 10MB DL Smartphone	Qualifier	[%]	99.5	99.8	99.9
	Average session time	[s]	1.1	2.1	1.7
	90% faster than	[Mbit/s]	51	21	29.9
	10% faster than	[Mbit/s]	202.5	205.6	217.4
HTTP 5MB UL Smartphone	Qualifier	[%]	99.7	100	99.8
	Average session time	[s]	3.8	2.5	4.3
	90% faster than	[Mbit/s]	4.7	9.1	3.9
	10% faster than	[Mbit/s]	61.1	64.6	69.1
HTTP DL FDTT	Qualifier	[%]	99.7	99.3	99.4
	10% faster than	[Mbit/s]	605.3	479.5	632.1
	Faster than 20Mbits/s	[%]	98.6	93.4	93.2
	Faster than 100Mbits/s	[%]	81.2	73.3	79.2
HTTP UL FDTT	Qualifier	[%]	99.1	99.9	99.2
	10% faster than	[Mbit/s]	94.7	96.8	105.6
	Faster than 2Mbits/s	[%]	97.2	99.2	96.7
	Faster than 5Mbits/s	[%]	92.2	96.4	90.4
YouTube	Qualifier	[%]	99.4	99.2	98.7
	Start time	[s]	2.4	2.3	2.5
	Average resolution	[p]	1080.0	1079.1	1079.6
YouTube live smartphone	Qualifier	[%]	99.3	98.6	98.4
	Start time	[s]	2.6	2.6	2.8
	Average resolution	[p]	1079.4	1079.3	1079.3
Interactivity EGaming	Qualifier	[%]	94.5	97.9	87.9
	Interactivity score	[%]	76.2	79.6	72.3
Interactivity videochat	Qualifier	[%]	89.5	89.4	86.6
	Interactivity score	[%]	88.3	88	85.7
Conversational app	Qualifier	[%]	99.1	99.9	99.8
	Speech quality (P10)	[MOS-LQO]	3.8	3.3	3.6



Data Service KPI overview

Achieved values of all networks under test in each of the relevant Data Key Performance Indicators (KPIs) for the geographical category "Town".

Services	KPI name	Unit	One	2degrees	Spark
HTTP Web page DL Smartphone	Qualifier	[%]	99.7	99.9	97.6
	Overall session time	[s]	1.6	1.6	1.7
HTTP 10MB DL Smartphone	Qualifier	[%]	100	100	99.5
	Average session time	[s]	1.3	2.8	2.6
	90% faster than	[Mbit/s]	41	11.8	17.9
	10% faster than	[Mbit/s]	190.6	172	193.1
HTTP 5MB UL Smartphone	Qualifier	[%]	99.8	100	99
	Average session time	[s]	4.2	3.4	5.7
	90% faster than	[Mbit/s]	4.7	5.8	3.1
	10% faster than	[Mbit/s]	50.5	57.2	47.8
HTTP DL FDTT	Qualifier	[%]	99.8	99.5	97.5
	10% faster than	[Mbit/s]	504	443.3	638.1
	Faster than 20Mbits/s	[%]	98.8	86.1	90.3
	Faster than 100Mbits/s	[%]	73.2	67.2	66.6
HTTP UL FDTT	Qualifier	[%]	99	99.7	99
	10% faster than	[Mbit/s]	74.1	87.5	60.7
	Faster than 2Mbits/s	[%]	95.7	97.7	95.6
	Faster than 5Mbits/s	[%]	91.2	91.9	86.2
YouTube	Qualifier	[%]	99.7	98.7	96.5
	Start time	[s]	2.5	2.6	2.9
	Average resolution	[p]	1080.0	1078.2	1080.0
YouTube live smartphone	Qualifier	[%]	99.5	99	95.3
	Start time	[s]	2.8	3.0	3.1
	Average resolution	[p]	1079.2	1076.9	1077.9
Interactivity EGaming	Qualifier	[%]	95.8	97.7	82.3
	Interactivity score	[%]	69.1	73.1	63.5
Interactivity videochat	Qualifier	[%]	93.1	91.1	84.3
	Interactivity score	[%]	87.1	84.4	85.1
Conversational app	Qualifier	[%]	100	100	99.8
	Speech quality (P10)	[MOS-LQO]	4.0	3.5	3.8



Data Service KPI overview

Achieved values of all networks under test in each of the relevant Data Key Performance Indicators (KPIs) for the geographical category "Road".

Services	KPI name	Unit	One	2degrees	Spark
HTTP Web page DL Smartphone	Qualifier	[%]	94.5	90.5	91.4
	Overall session time	[s]	2.0	2.1	2.1
HTTP 10MB DL Smartphone	Qualifier	[%]	97.6	92.9	92.1
	Average session time	[s]	4.8	6.2	4.8
	90% faster than	[Mbit/s]	7.7	5.8	6.4
	10% faster than	[Mbit/s]	136.7	129.7	169.4
HTTP 5MB UL Smartphone	Qualifier	[%]	93.4	88.5	91.7
	Average session time	[s]	8.7	9.0	9.7
	90% faster than	[Mbit/s]	1.8	1.7	1.6
	10% faster than	[Mbit/s]	37.1	39.1	35.7
HTTP DL FDTT	Qualifier	[%]	93.3	88.7	90.3
	10% faster than	[Mbit/s]	263.1	273.6	446
	Faster than 20Mbits/s	[%]	77.7	68.6	74.0
	Faster than 100Mbits/s	[%]	36.6	28.6	37.9
HTTP UL FDTT	Qualifier	[%]	90.4	88.2	88.2
	10% faster than	[Mbit/s]	50.6	54.3	52.4
	Faster than 2Mbits/s	[%]	87.6	87.8	87.5
	Faster than 5Mbits/s	[%]	72.7	72.2	72.9
YouTube	Qualifier	[%]	92.0	84.3	86.5
	Start time	[s]	3.0	3.1	3.1
	Average resolution	[p]	1077.3	1073.6	1076.4
YouTube live smartphone	Qualifier	[%]	92.2	80.5	86.2
	Start time	[s]	3.3	3.5	3.6
	Average resolution	[p]	1069.7	1068.6	1067.7
Interactivity EGaming	Qualifier	[%]	81.5	75.3	64.6
	Interactivity score	[%]	61.9	62.1	61.1
Interactivity videochat	Qualifier	[%]	75.8	65.8	72.1
	Interactivity score	[%]	86.4	85.8	81.6
Conversational app	Qualifier	[%]	96.7	97.6	97.1
	Speech quality (P10)	[MOS-LQO]	3.7	3.2	3.5



Crowd KPI overview

Achieved values of all networks under test in each of the relevant Crowd Key Performance Indicators (KPIs) for the categories "Broadband Coverage", "Download Speed", "Upload Speed", "Latency", "Voice Crowd" and "Stability".

Category	KPI name	Unit	One	2degrees	Spark
Broadband Coverage	Coverage Reach	[%]	93.1	86.1	92.5
	Time on broadband	[%]	99.4	99.4	99.1
Download Speed (Service Category)	Basic internet class	[%]	99.2	97.9	96.1
	HD video class	[%]	96.2	92.2	86.5
	UHD video class	[%]	83.4	71.7	65.4
Upload Speed (Service Category)	Basic internet class	[%]	89.1	93.5	92.0
	HD video class	[%]	73.9	81.2	72.2
Download Speed (Data Rates)	P10 data rate	[Mbit/s]	13.9	7.0	3.4
	P90 data rate	[Mbit/s]	448.0	368.7	375.6
	AVG data rate	[Mbit/s]	175.6	127.6	117.5
Upload Speed (Data Rates)	P10 data rate	[Mbit/s]	2.0	3.2	2.3
	P90 data rate	[Mbit/s]	66.7	62.5	55.8
	AVG data rate	[Mbit/s]	26.6	27.2	22.6
Latency	OTT voice class	[%]	97.8	97.5	96.7
	Gaming class	[%]	80.6	78.8	72.0
	Egoshooter class	[%]	9.6	12.0	7.0
Voice	HD voice	[%]	98.6	99.7	99.2
Stability	Transaction Success	[%]	94.3	96.8	96.2



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