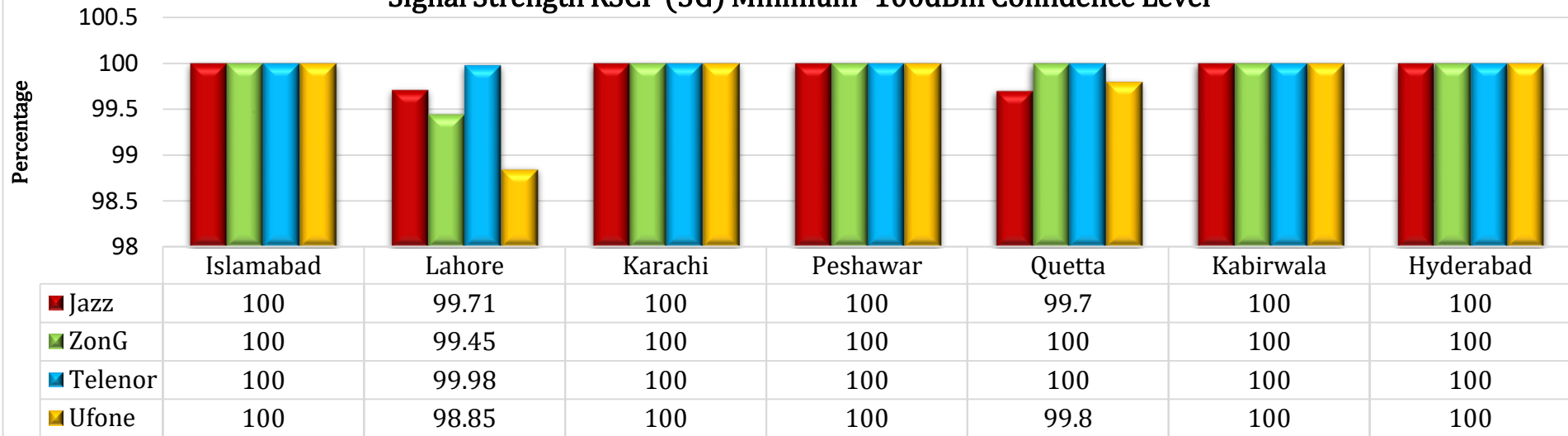
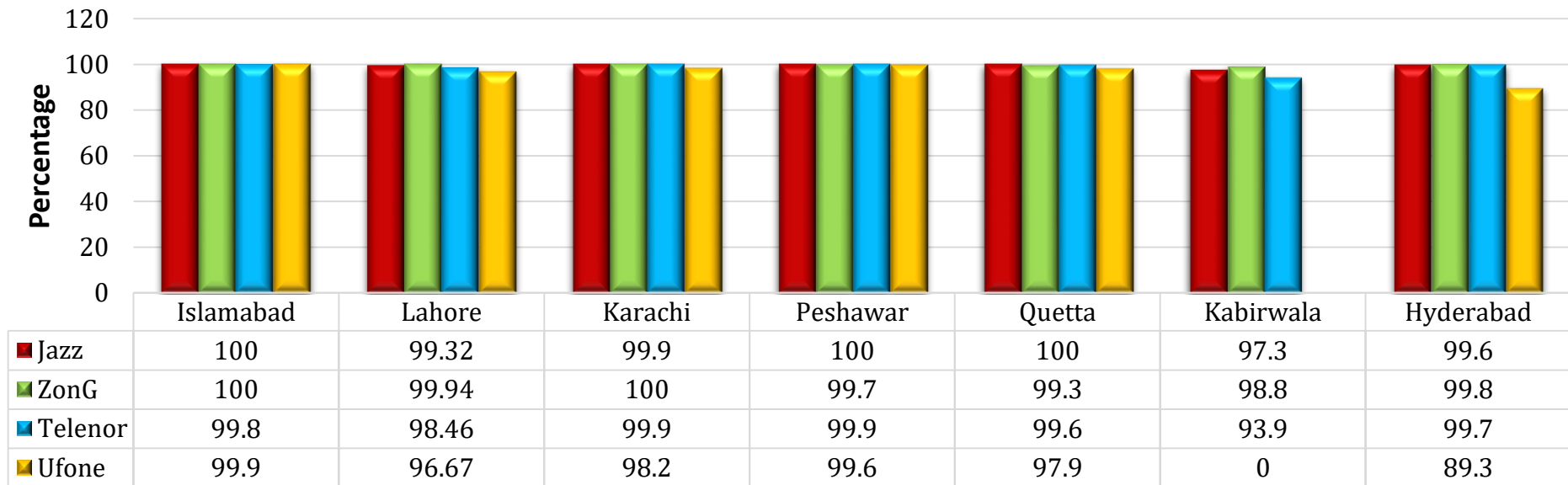


Signal Strength RSCP (3G) Minimum -100dBm Confidence Level



Signal Strength RSRP (4G) Minimum -100dBm Confidence Level



COVERAGE ANALYSIS

Mobile Network Signal Strength is measured in decibels (dBm). Signal Strength can range from approximately -30 dBm to -100 dBm. The closer that number is to 0, the stronger the signal. In general, anything better than -85 decibels is considered a usable signal. In CMOs licenses, Mobile Signal Strength minimum level in outdoor is defined as -100dBm with 90% confidence. The different ranges of signal strength and its effects can be categorized as under:

<i>S. #.</i>	Signal Strength Ranges (dBm)	Signal Strength	
		Category	Description
1.	-65 to 0	Excellent	Strong Signal with Maximum Data Speed
2.	-75 to -65	Good	Strong Signal with Good Data Speed
3.	-85 to -75	Fair	Fair, Useful & Reliable Data Speed is Attainable
4.	-100 to -85	Poor	Marginal Data Speed with Possibility of Drop-Out
5.	-140 to -100	Very Poor / No	Performance will Drop Drastically

SIGNAL STRENGTH SAMPLES

The analysis of signal strength samples recorded during drive test on survey routes revealed following:

<i>Technology</i>	Category	Coverage/ Signal Strength Survey Results
3G	EXCELLENT	<ul style="list-style-type: none">○ Ufone has greater percentage of 3G Excellent Coverage which resulted into higher 3G User Data Throughput.○ The highest percentage of 3G Excellent Coverage was 86.5% of Ufone at Karachi, whereas the lowest percentage was 18.9% of Jazz at Kabirwala.○ The average percentage of 3G Excellent Coverage of Ufone, ZonG, Telenor and Jazz was found as 70.8%, 62.3%, 58.9% and 52.3% respectively.
	GOOD	<ul style="list-style-type: none">○ The average percentage of 3G Good Coverage of Jazz, ZonG, Telenor and Ufone was 31.7%, 28%, 27.5% and 21.2% respectively.
	FAIR	<ul style="list-style-type: none">○ The average percentage of 3G Fair Coverage of Jazz, Telenor, ZonG and Ufone was 12.9%, 11.5%, 8.8% and 7.5% respectively.