



Operator Assisted Drive Test Report

HP LSA

June 2025 (Regional Office, Delhi)

The Operator Assisted Drive Test has been carried out by Regional Office, Delhi with the help of Telecom Service Providers in HP LSA covering seven cities and highway route from Parwanoo to Chail from 25th to 27th June 2025 from 10.00 AM to 06.00 PM. The drive test covered drive route of 167.5 KMs (approx.) over a period of three days, covering hotspot at ten (10) locations. Networks Tested: 3 in 2G, 1 in 3G, 4 in 4G and 2 in 5G.

Voice and Dynamic/Static Data Test Route			
S.No	Date	Location/Area	Hotspot Locations
1	25-06-2025	Parwanoo to Chail Highway	Not Applicable
2	26-06-2025	Chail , Kandaghat , Solan	Chail Palace, Bahara University (Waknaghat), Dr. YSP University (Solan), ISBT Solan.
3	27-06-2025	Barog, Dharampur, Kasauli & Parwanoo	Railway Station Dharampur, Government Model Senior Secondary School (Dharampur), Pinegrove School (Dharampur), Sunset Point (Kasauli), ESI Hospital (Parwanoo), Barog Market (Barog).

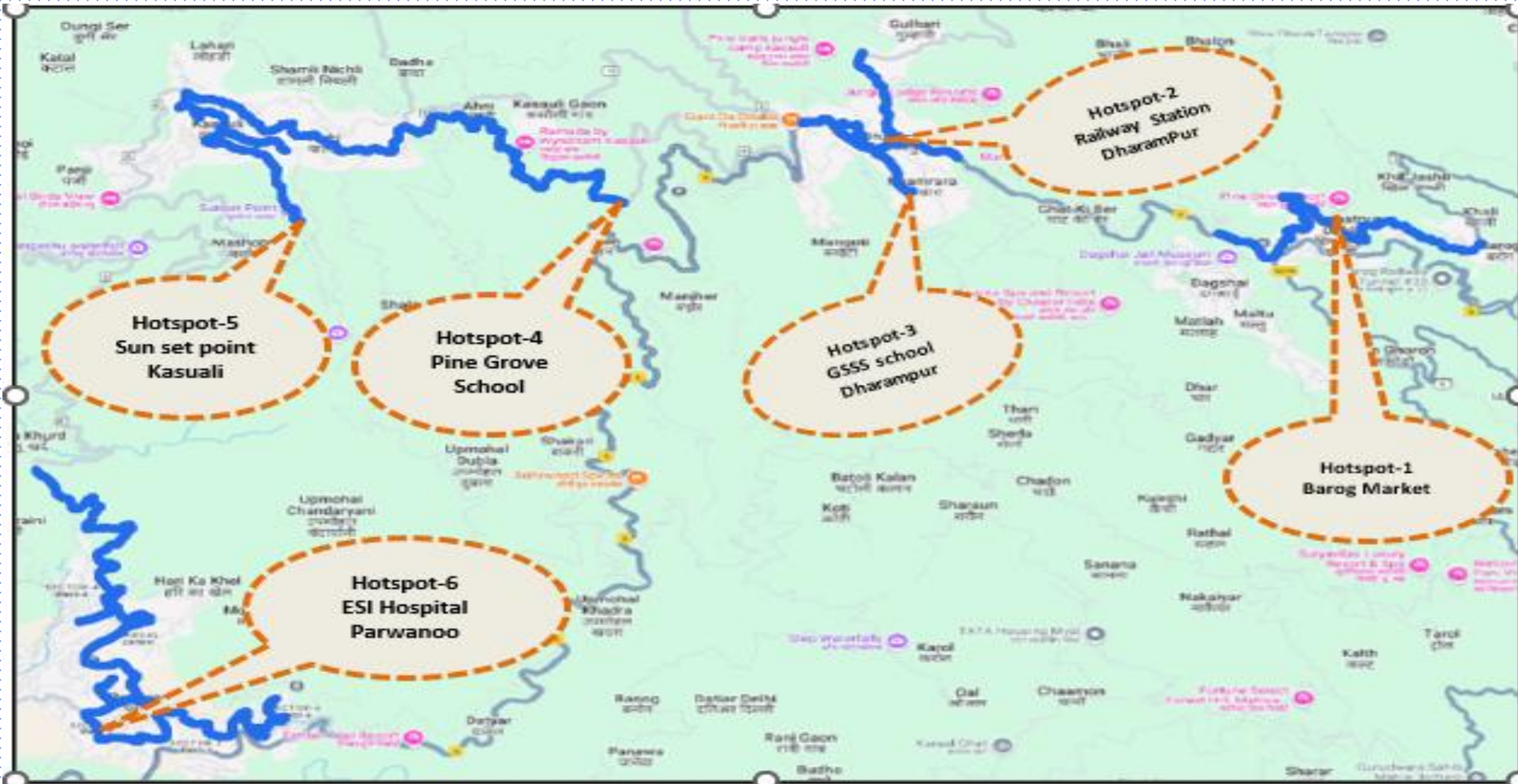
Drive Test Route Map : Day-1



Drive Test Route Map : Day-2



Drive Test Route Map : Day-3



Key observations from Drive Test (Voice)

TSP	Network tested
Airtel	2G,4G & 5G
BSNL	3G & 4G
RJIO	4G & 5G
VIL	2G & 4G

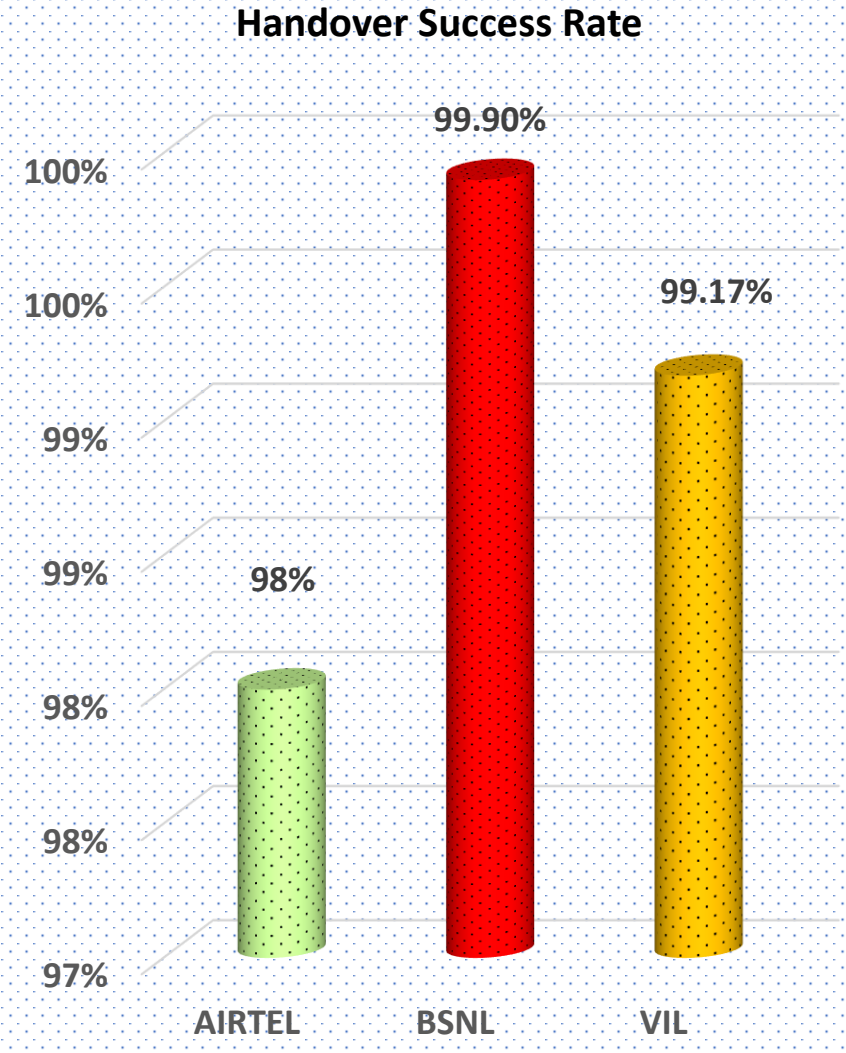
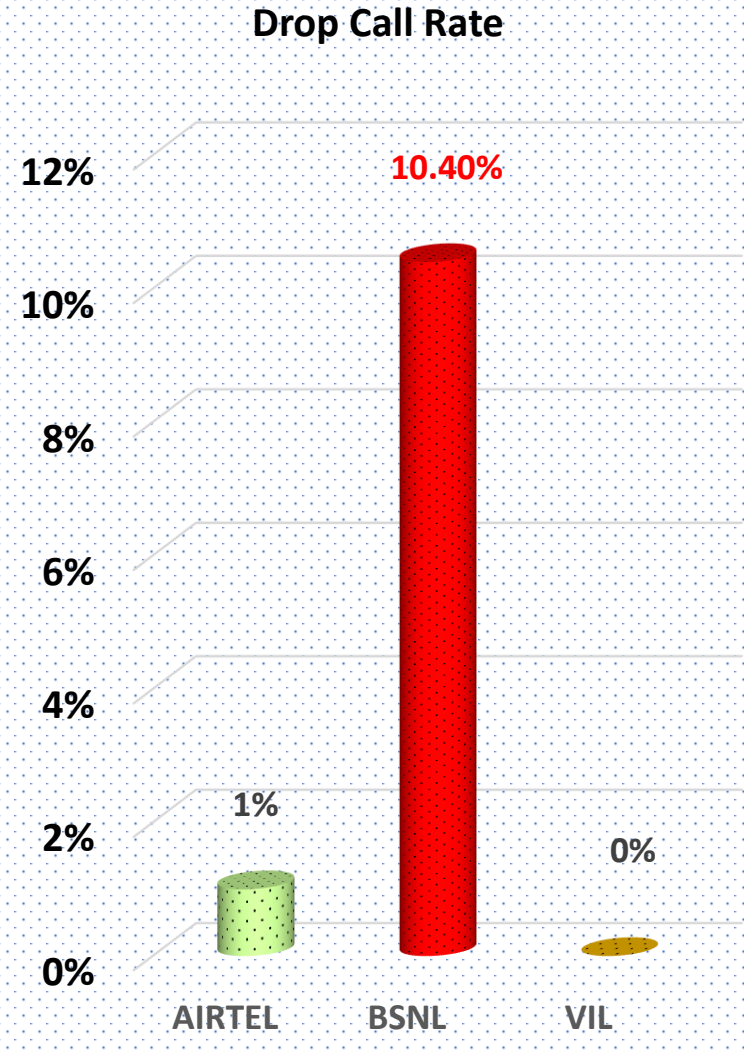
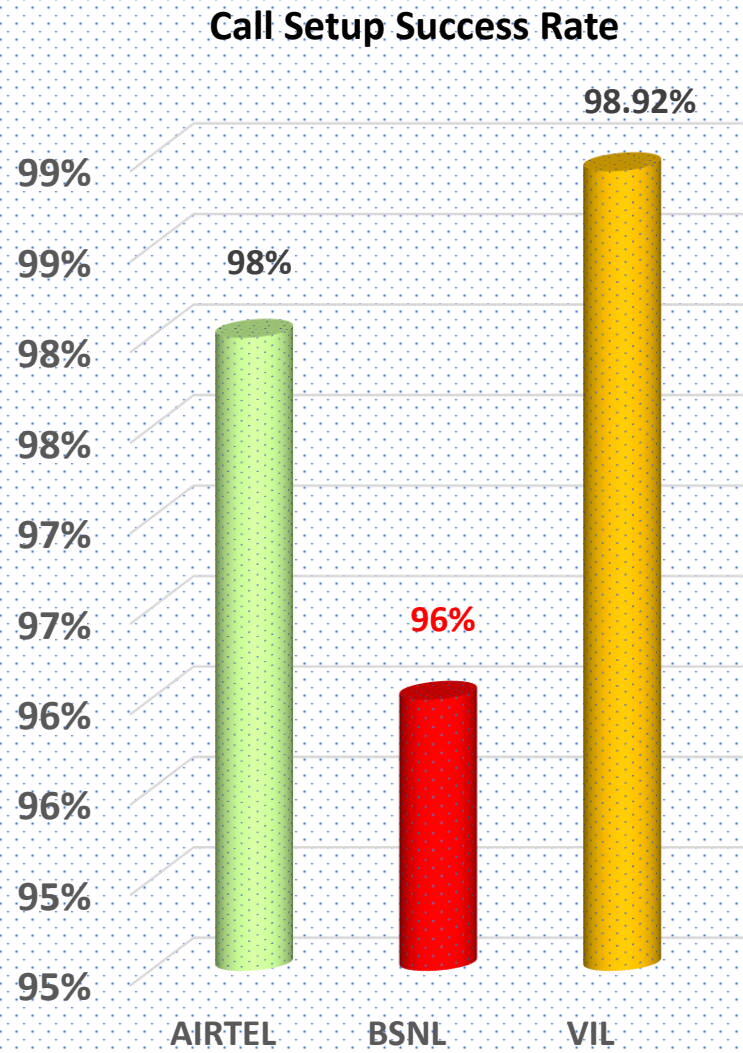
Calls were made for the **180-sec** duration on the highway route and **90-sec** duration on the city route, with a wait time of **15 sec** between calls in all technologies.

KPI	Benchmark	Observations
Drop call rate %	≤2%	All TSPs achieved the benchmark except BSNL
CSSR %	≥98 %	All TSPs achieved the benchmark except BSNL
Handover Success Rate%	≥95%	All TSPs achieved the benchmark.

Summary – Voice City Dynamic in 3G/2G (Locked Mode)

Voice Call	AIRTEL 2G	BSNL 3G/2G	VIL 2G
Call Attempt	225	250	187
Call Established	221	240	185
CSSR% (Accessibility)	98%	96%	98.92%
Drop Call Rate (%)	1%	10.40%	0%
Handover Success Rate (%)	98%	99.90%	99.17%

Summary – Voice City Dynamic in 3G/2G (Locked Mode)

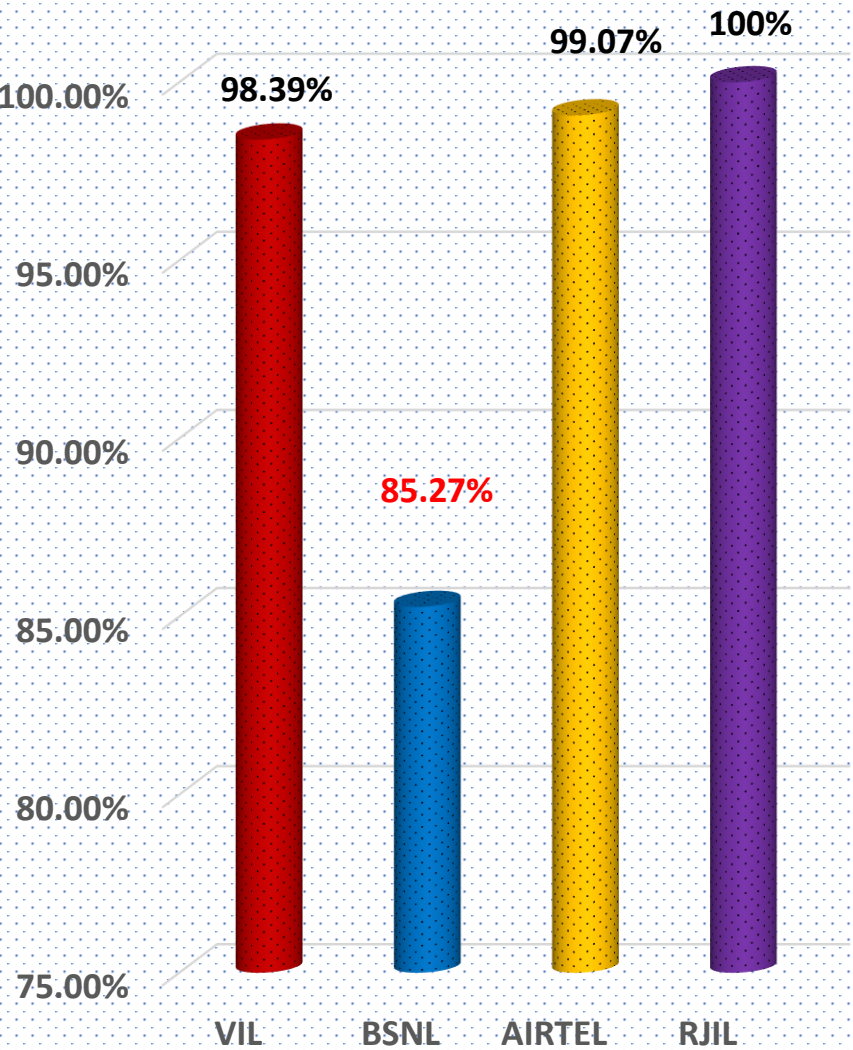


Summary – Voice City Dynamic in 5G/4G/3G/2G (Auto Mode)

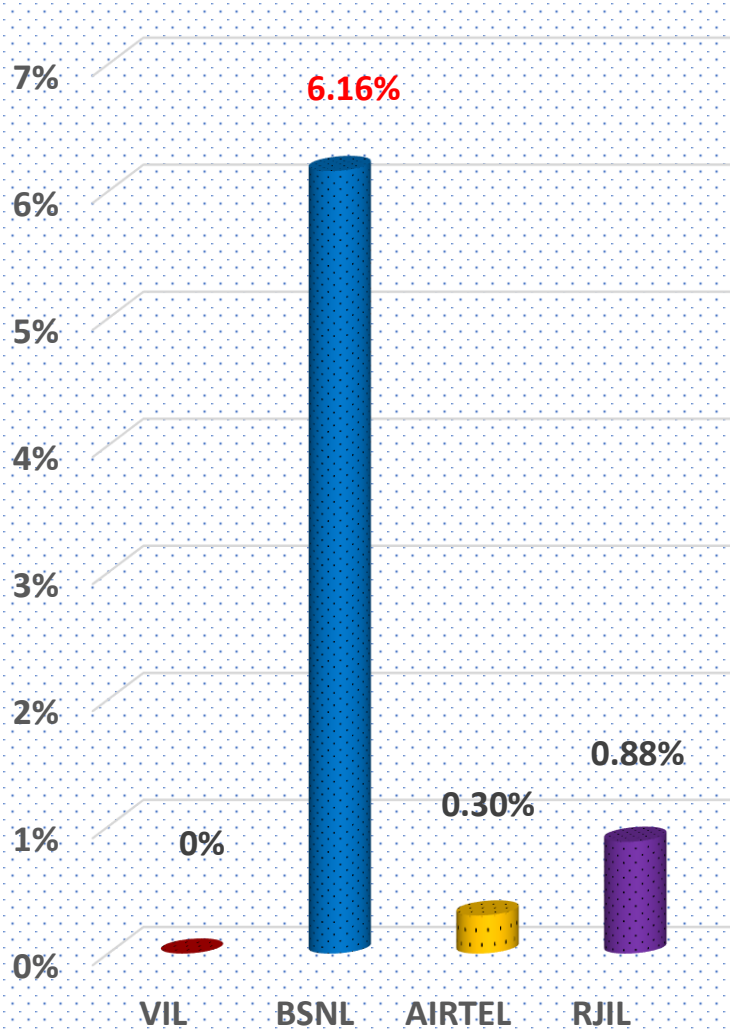
Voice Call	VIL	BSNL	AIRTEL	RJIL
Call Attempt	186	292	223	227
Call Established	183	249	221	227
CSSR% (Accessibility)	98.39%	85.27%	99.07%	100%
Drop Call Rate (%)	0%	6.16%	0.30%	0.88%
Handover Success Rate (%)	99.64%	99.84%	100%	97.76%

Summary – Voice City Dynamic in 5G/4G/3G/2G (Auto Mode)

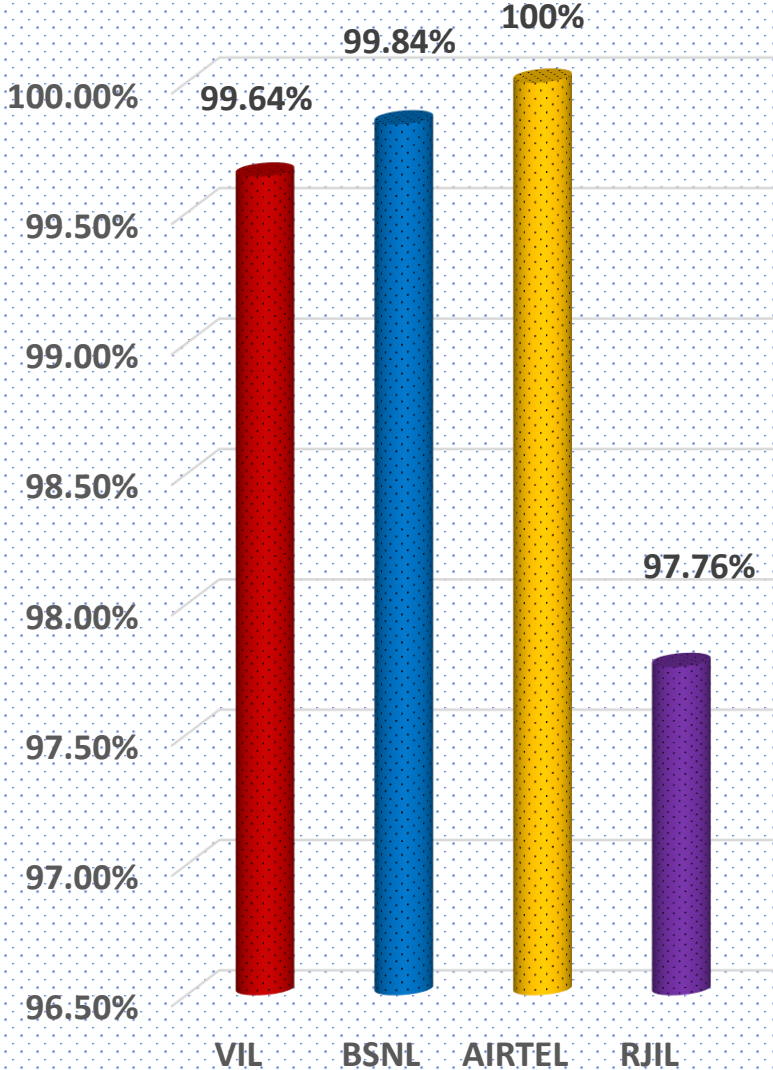
Call Setup Success Rate



Drop Call Rate

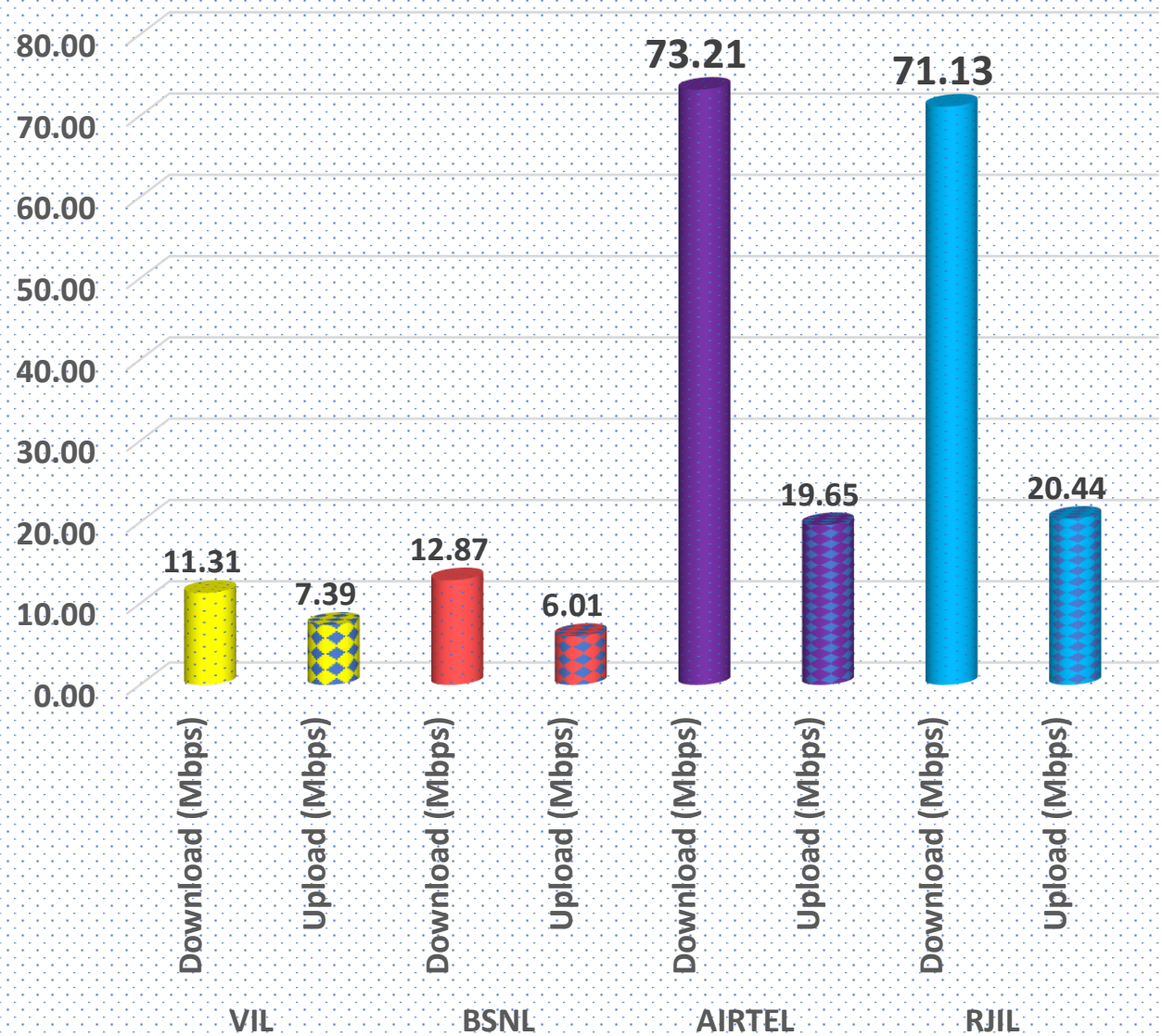


Handover Success Rate

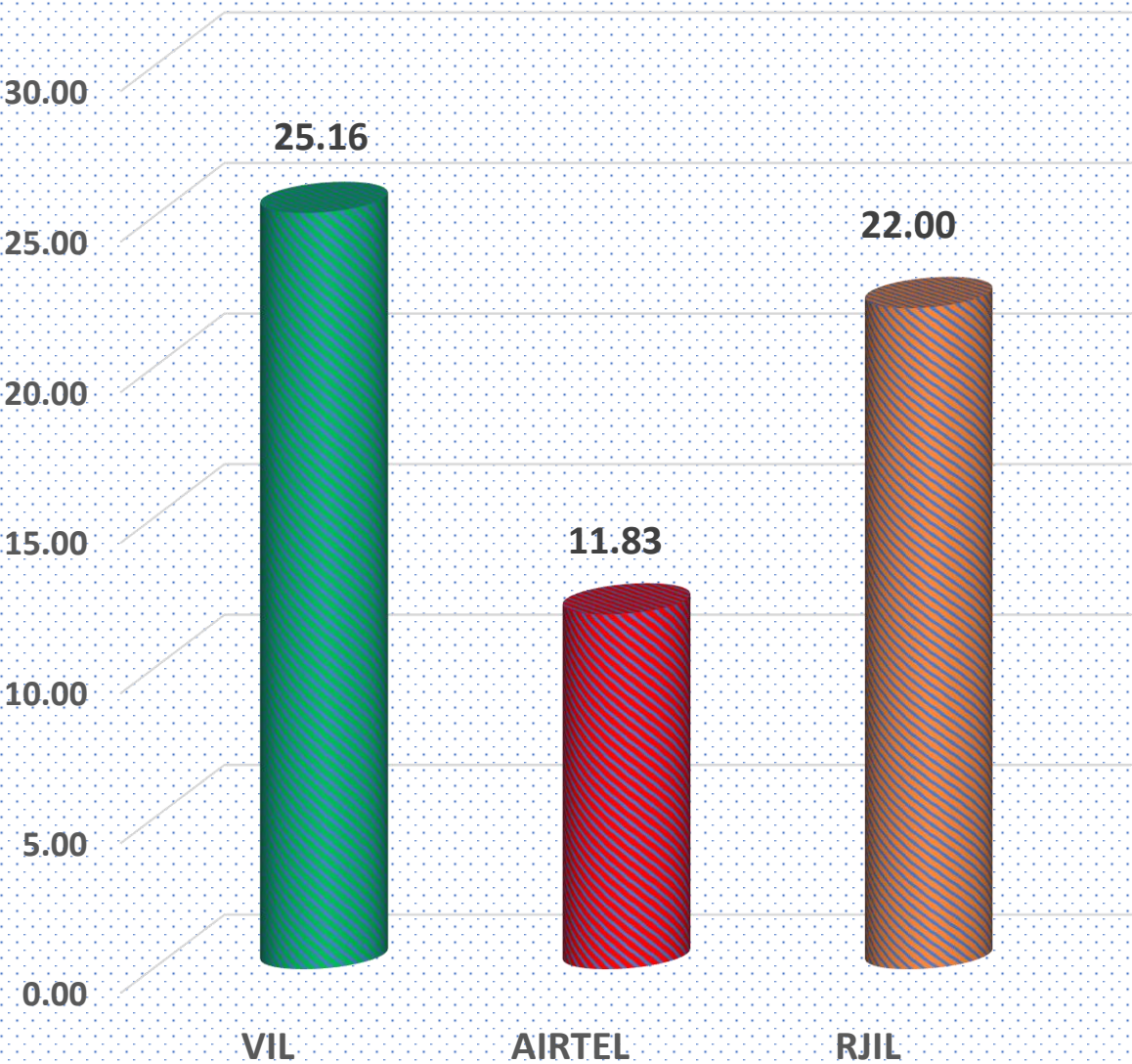


Data Service Performance in 5G/4G/3G/2G (Auto mode) - Dynamic

Average Download/Upload Speed - Dynamic



Average Latency - Dynamic



Summary-Voice Service Performance (5G/ 4G/ 3G/ 2G - Auto mode) – Over all (Static)

Voice Call	VIL	BSNL	AIRTEL	RJIL
Call Attempt	90	100	100	100
Call Established	90	99	100	100
CSSR% (Accessibility)	100	99	100	100
No. of Drop Call	0	0	0	0
Drop Call Rate (%)	0	0	0	0
Call Setup Time Average (Sec.)	2.32	3.13	1.12	0.72

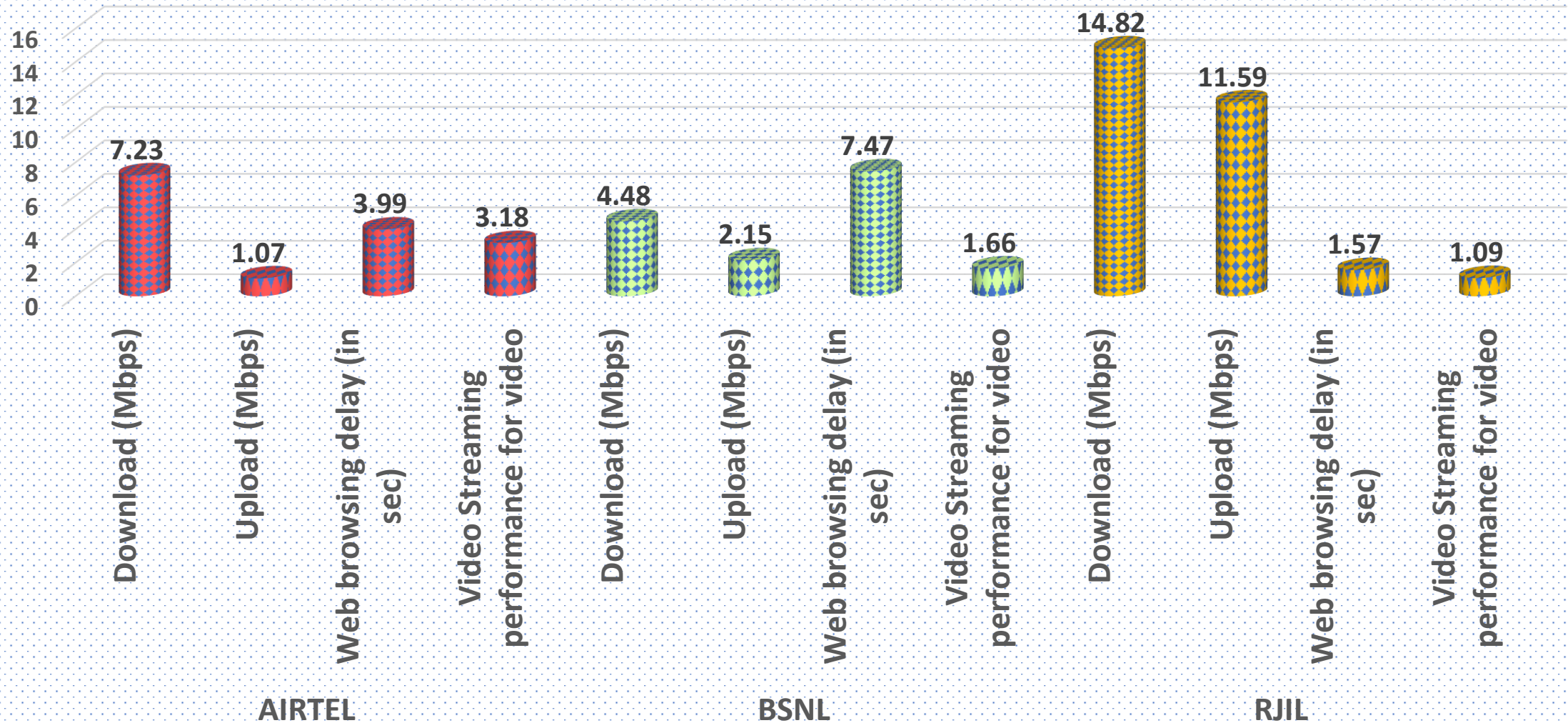
Summary-Data Service Performance (5G/ 4G/ 3G/ 2G - Auto mode) – Over all (Static)

Data Service	VIL	BSNL	AIRTEL	RJIL
Download speed (Mbits/s) (Average)	11.41	15.13	112.38	131.54
Upload speed (Mbits/s) (Average)	7.7	11.95	31.81	36.92

Data Summary at Hotspot Locations: Download and Upload Speed(in Mbps)									
S.No.	Hotspot Locations	AIRTEL		RJIL		VIL		BSNL	
		Download	Upload	Download	Upload	Download	Upload	Download	Upload
1	Chail Palace	7.23	1.07	14.82	11.59	No Service		4.48	2.15
2	Bahara University Kandaghat	224.61	67.43	70.48	14.46	9.25	8.76	9.98	13.04
3	ISBT Solan	100.94	25.32	136.95	92.92	3.75	7.06	7.89	4.90
4	Dr. YSP University Solan	354.58	66.67	91.96	59.49	6.38	4.37	22.51	20.95
5	Barog Market	39.69	14.41	127.66	36.68	2.29	1.39	15.73	5.44
6	Railway Station Dharampur	425.71	48.71	184.19	84.68	12.07	11.9	23.25	5.78
7	Govt. Senior Secondary School Dharampur	67.49	5.78	232.45	46.55	9.29	10.8	25.65	5.78
8	Pine Grove School Dharampur	325.13	21.36	141	19.75	3.01	2.85	15.61	2.93
9	Sun Set Point Kasauli	4.52	4.01	39.84	4.00	1.35	0.69	21.78	10.88
10	ESIC Hospital Parwanoo	165.89	32.52	122.48	39.14	8.08	7.68	9.42	2.25

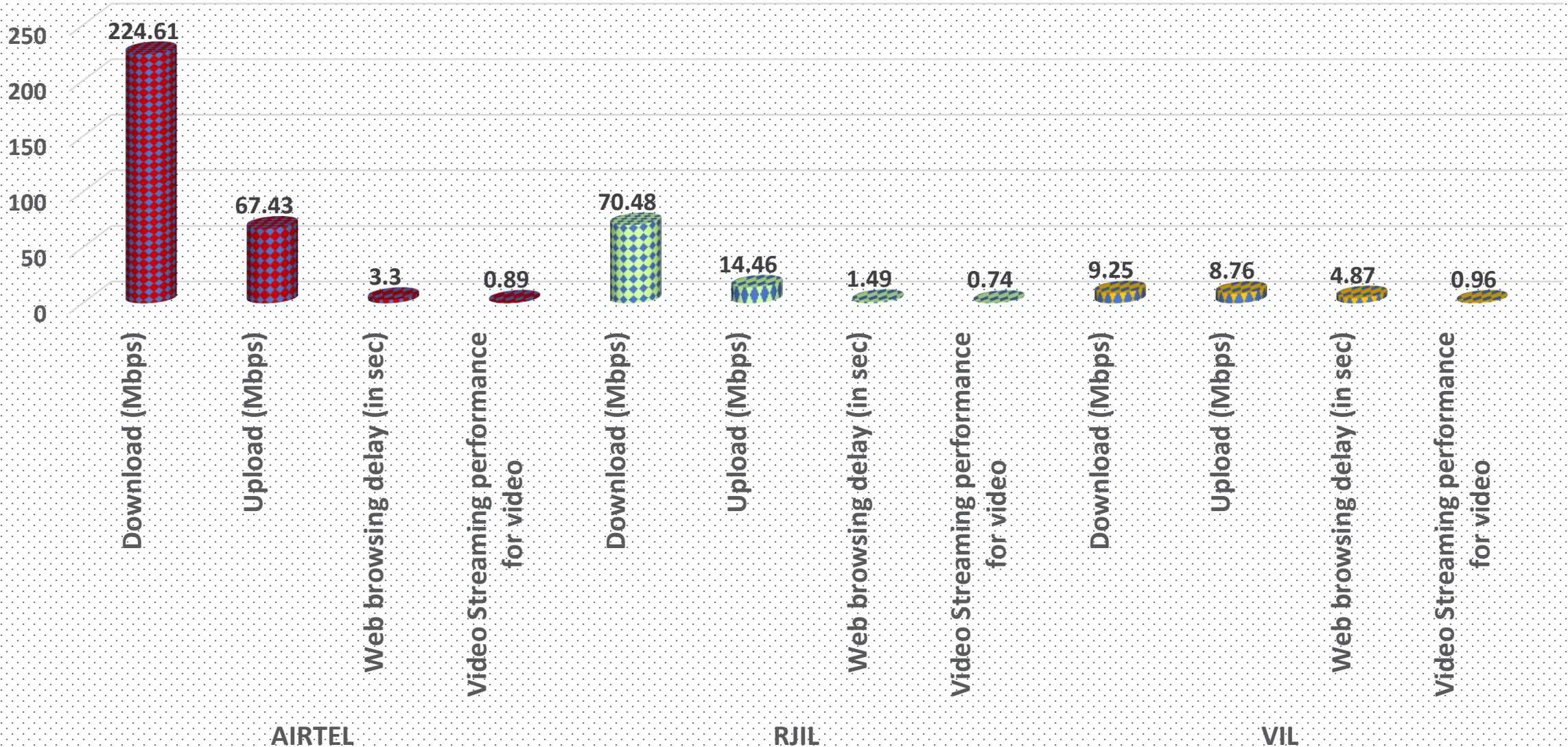
Data Service Performance in 5G/4G/3G/2G (Auto mode) - Static

Hotspot Location : Chail Palace



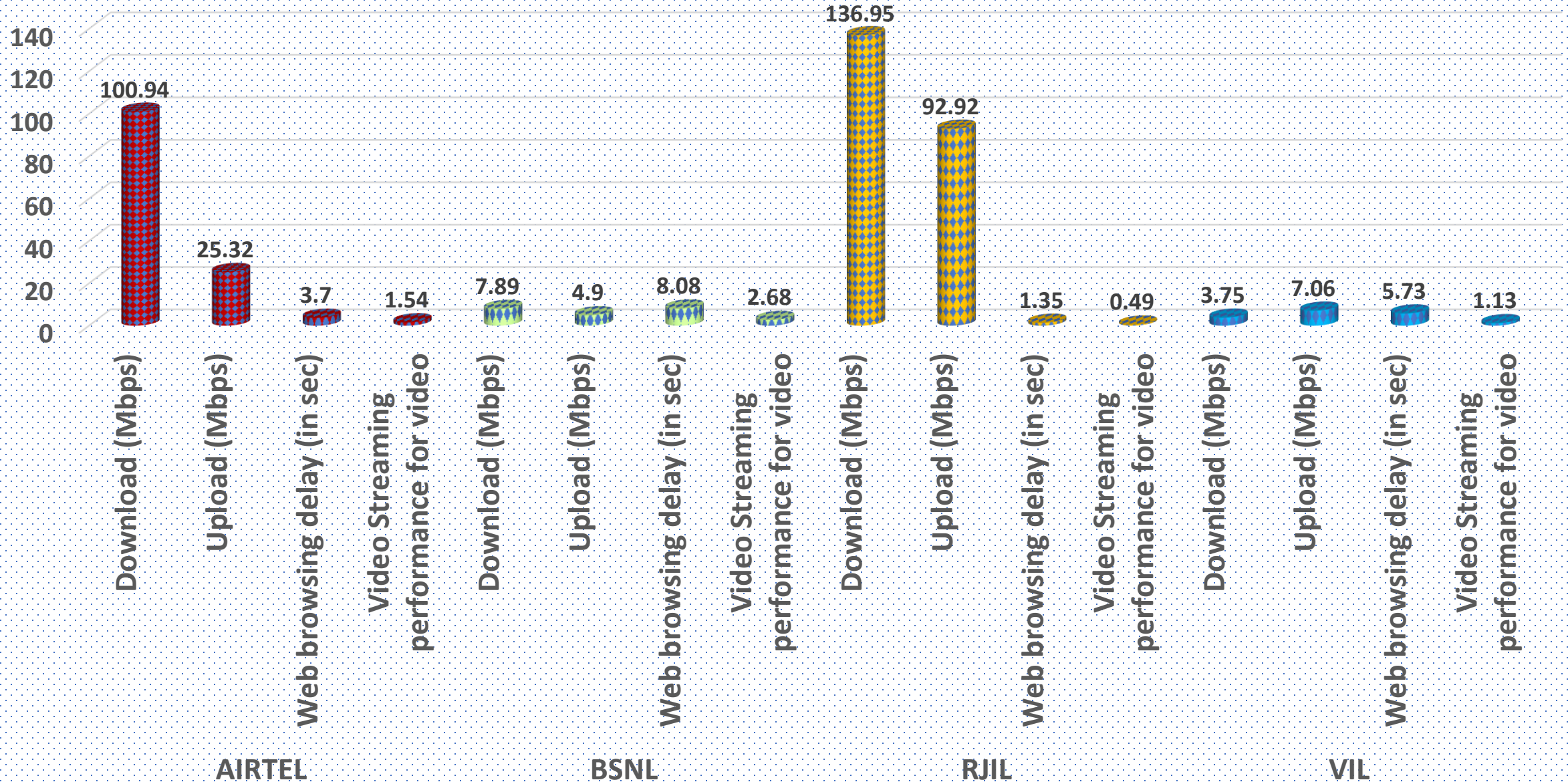
Data Service Performance in 5G/4G/3G/2G (Auto mode) - Static

Hotspot Location : Bahara University Kandaghat



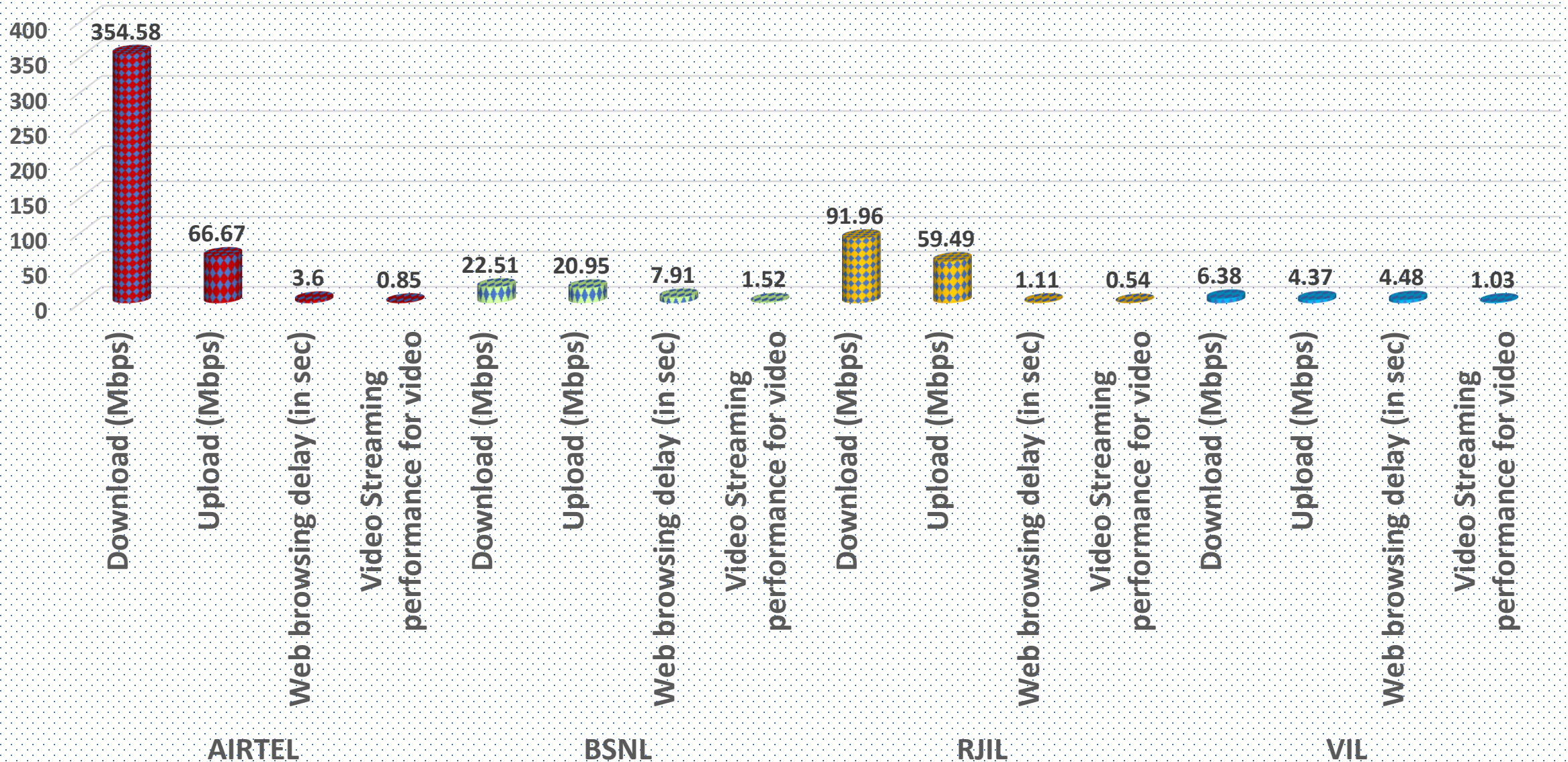
Data Service Performance in 5G/4G/3G/2G (Auto mode) - Static

Hotspot Location : ISBT Solan



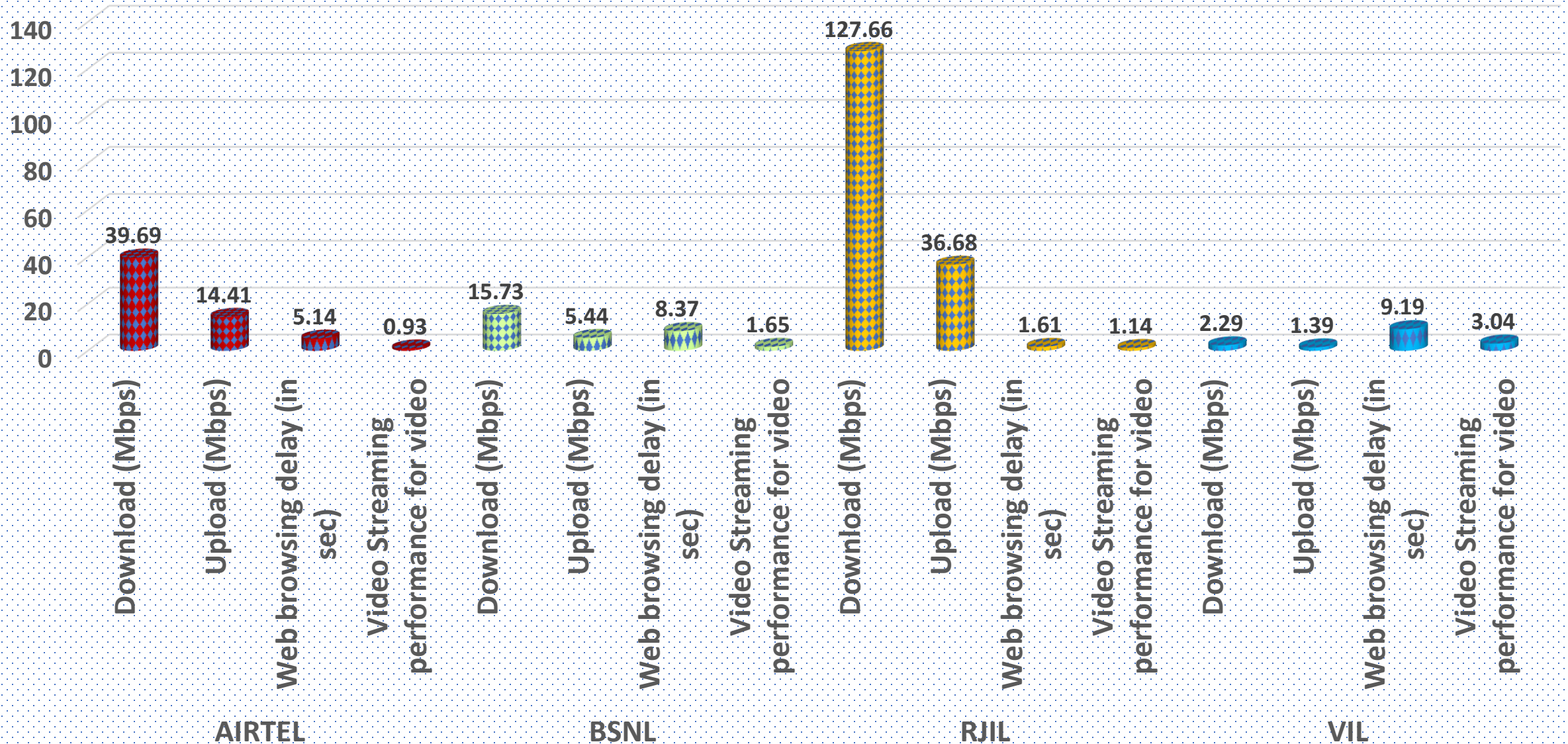
Data Service Performance in 5G/4G/3G/2G (Auto mode) - Static

Hotspot Location : Dr. YSP University Solan



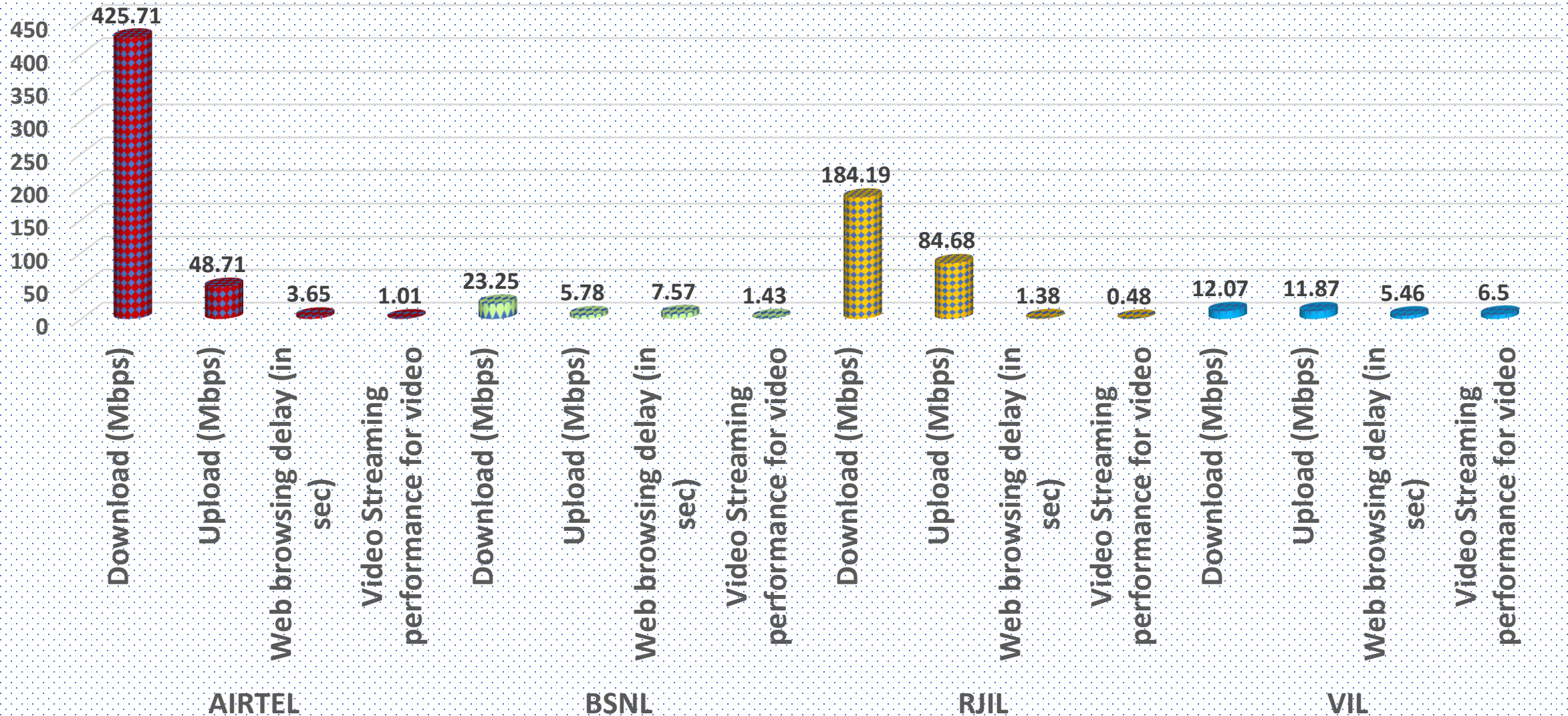
Data Service Performance in 5G/4G/3G/2G (Auto mode) - Static

Hotspot Location : Barog Market



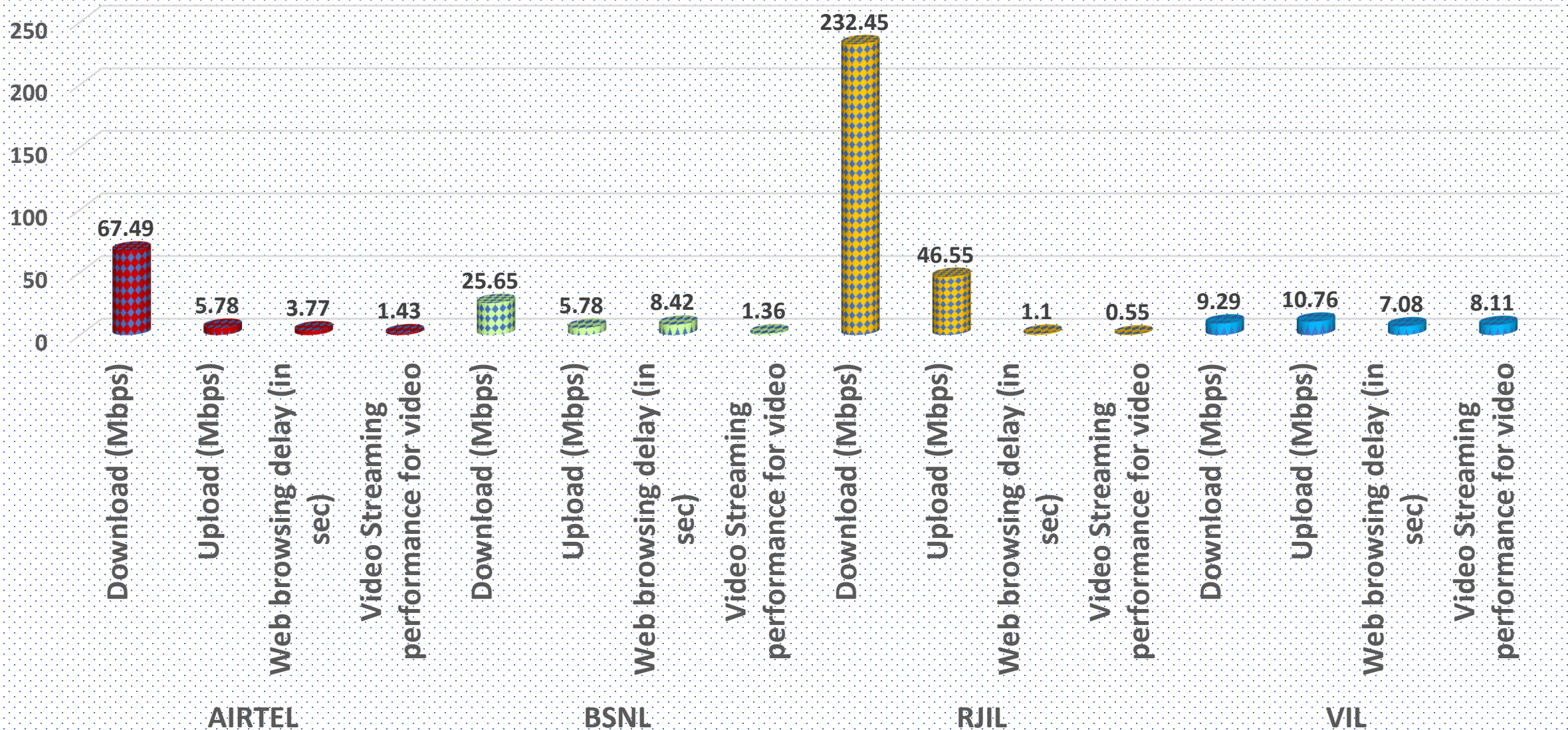
Data Service Performance in 5G/4G/3G/2G (Auto mode) - Static

Hotspot Location : Railway Station Dharampur



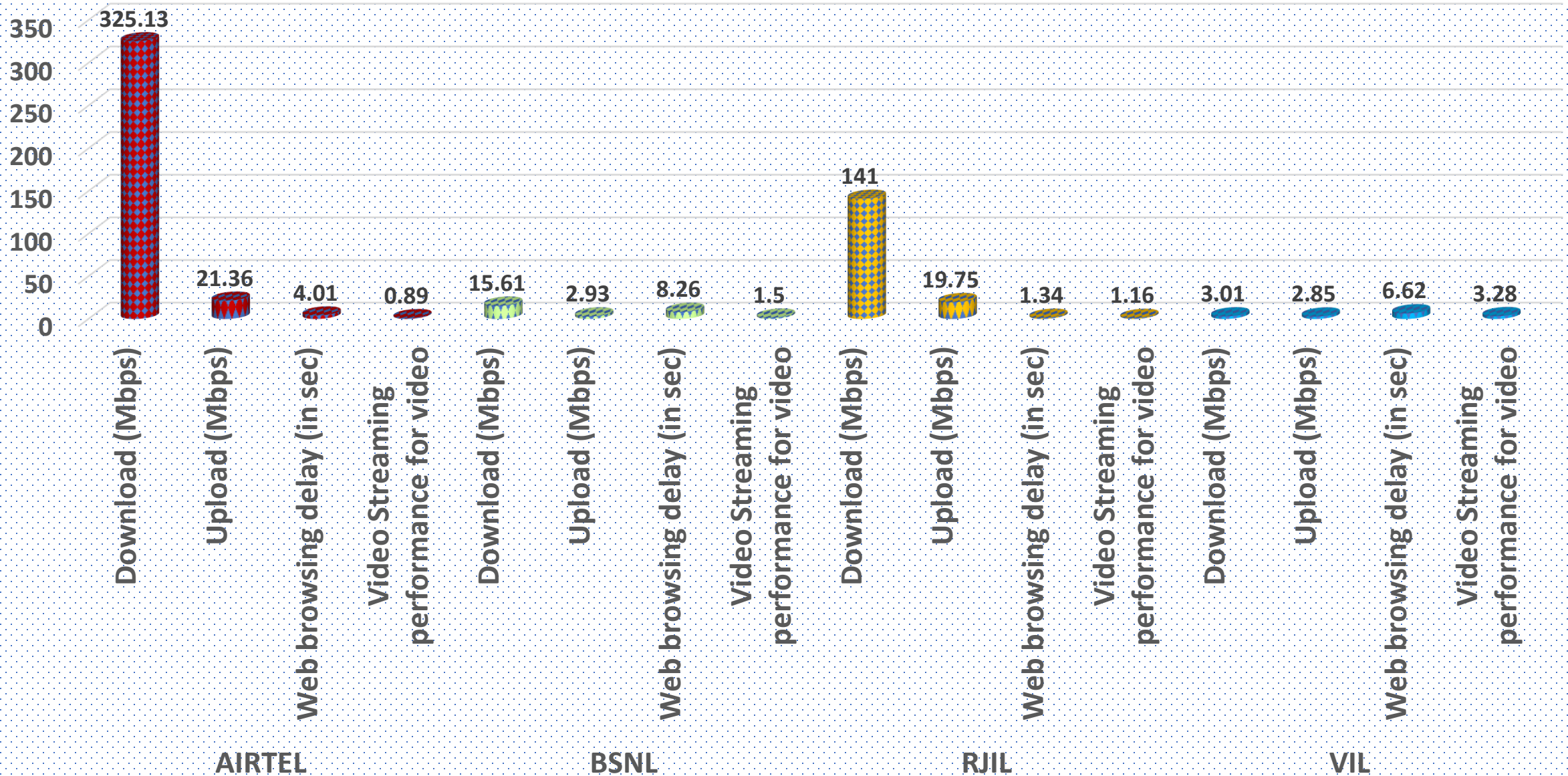
Data Service Performance in 5G/4G/3G/2G (Auto mode) - Static

Hotspot Location : Govt. Senior Secondary School Dharampur



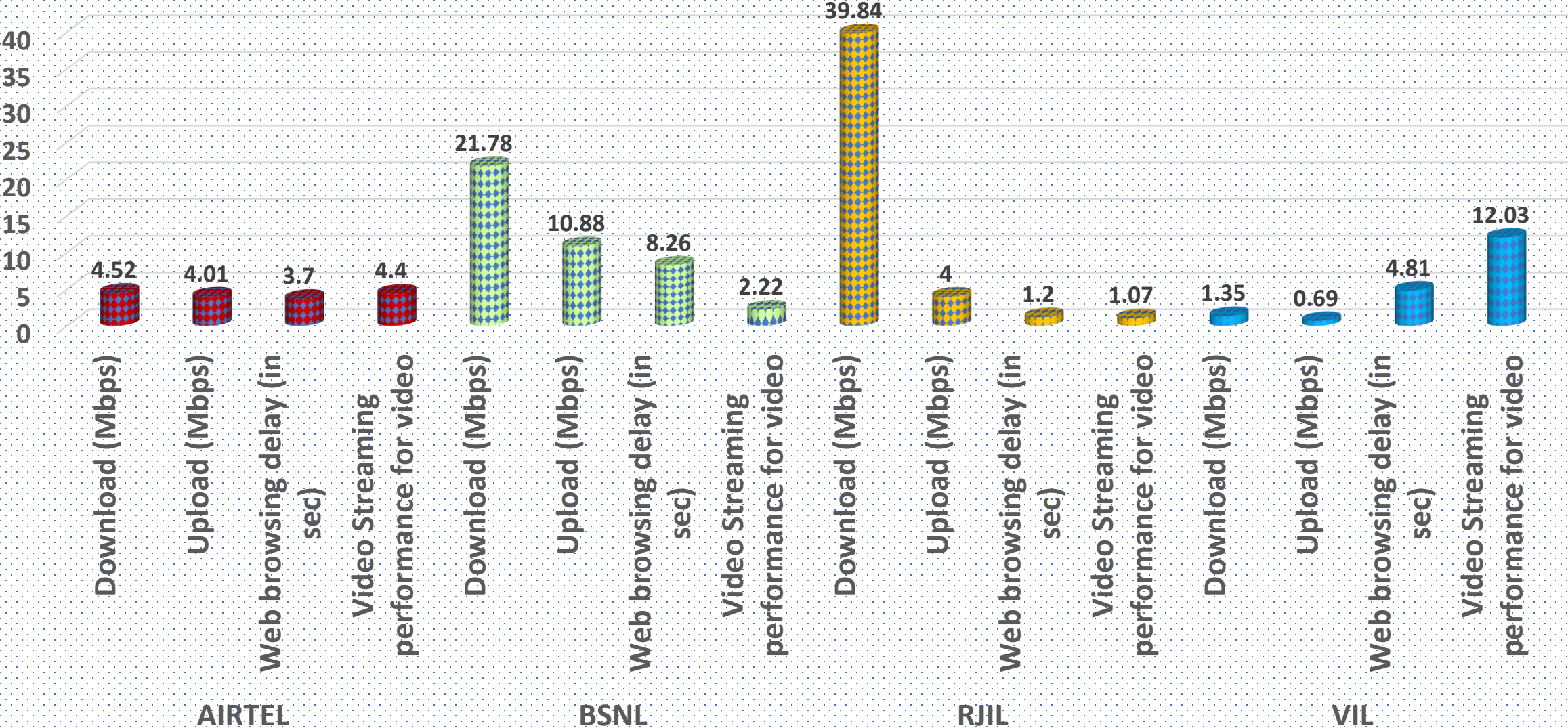
Data Service Performance in 5G/4G/3G/2G (Auto mode) - Static

Hotspot Location : Pine Grove School Dharampur



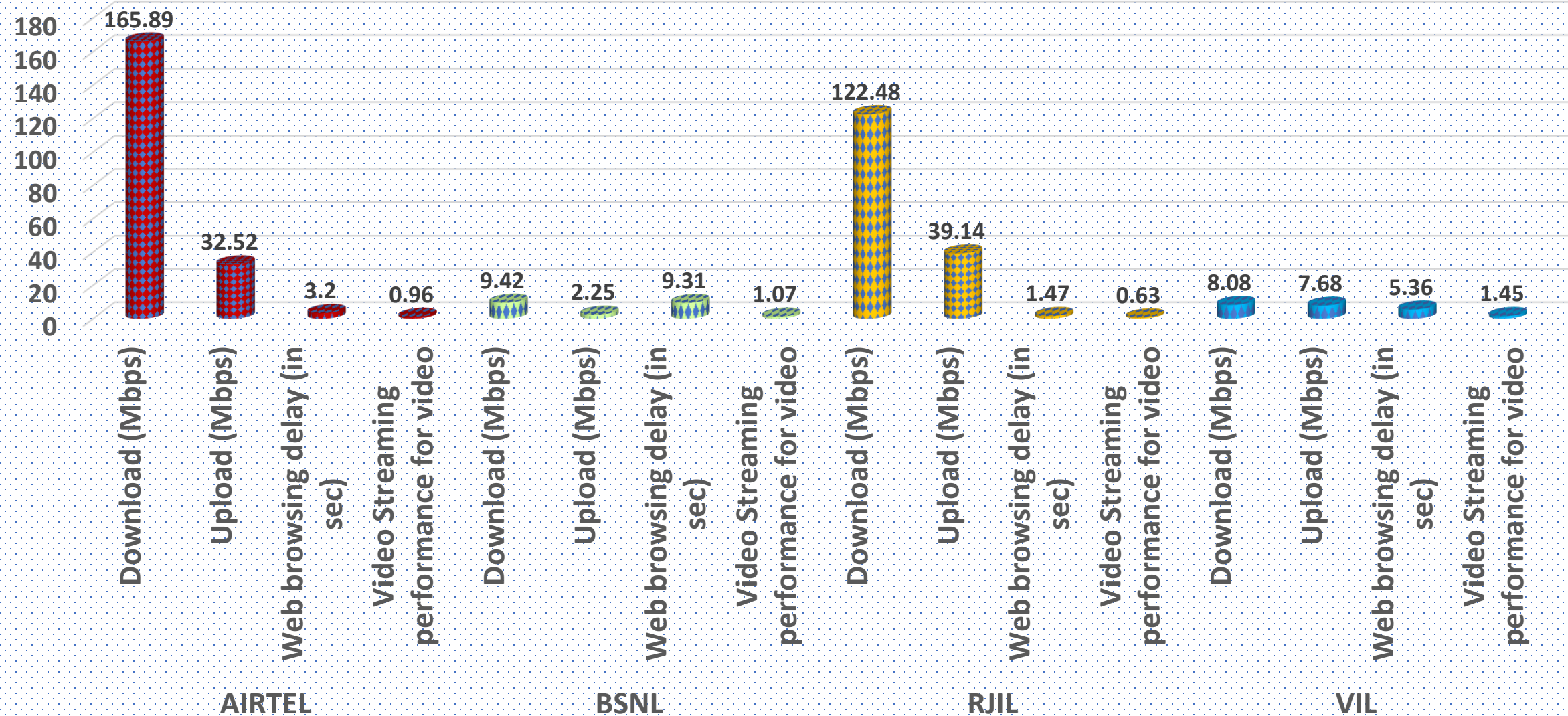
Data Service Performance in 5G/4G/3G/2G (Auto mode) - Static

Hotspot Location : Sun Set Point Kasauli



Data Service Performance in 5G/4G/3G/2G (Auto mode) - Static

Hotspot Location : ESIC Hospital Parwanoo



Coverage – Voice Calls

- Percentage of coverage samples for 2G $\geq$ -85 dBm

TSPs	2G		
	Airtel	VIL	BSNL
Coverage%	90.54%	71.77%	97.58%

- Percentage of coverage samples for 3G $\geq$ - 90 dBm

TSPs	3G
	BSNL
Coverage%	51.22%

- Percentage of coverage samples for 4G $\geq$ -110 dBm

TSPs	4G			
	Airtel	JIO	VIL	BSNL
Coverage %	98.52%	96.05%	87.65%	97.42%

THANK YOU