

## **Seychelles Static Test**

**District: Bel Ombre**

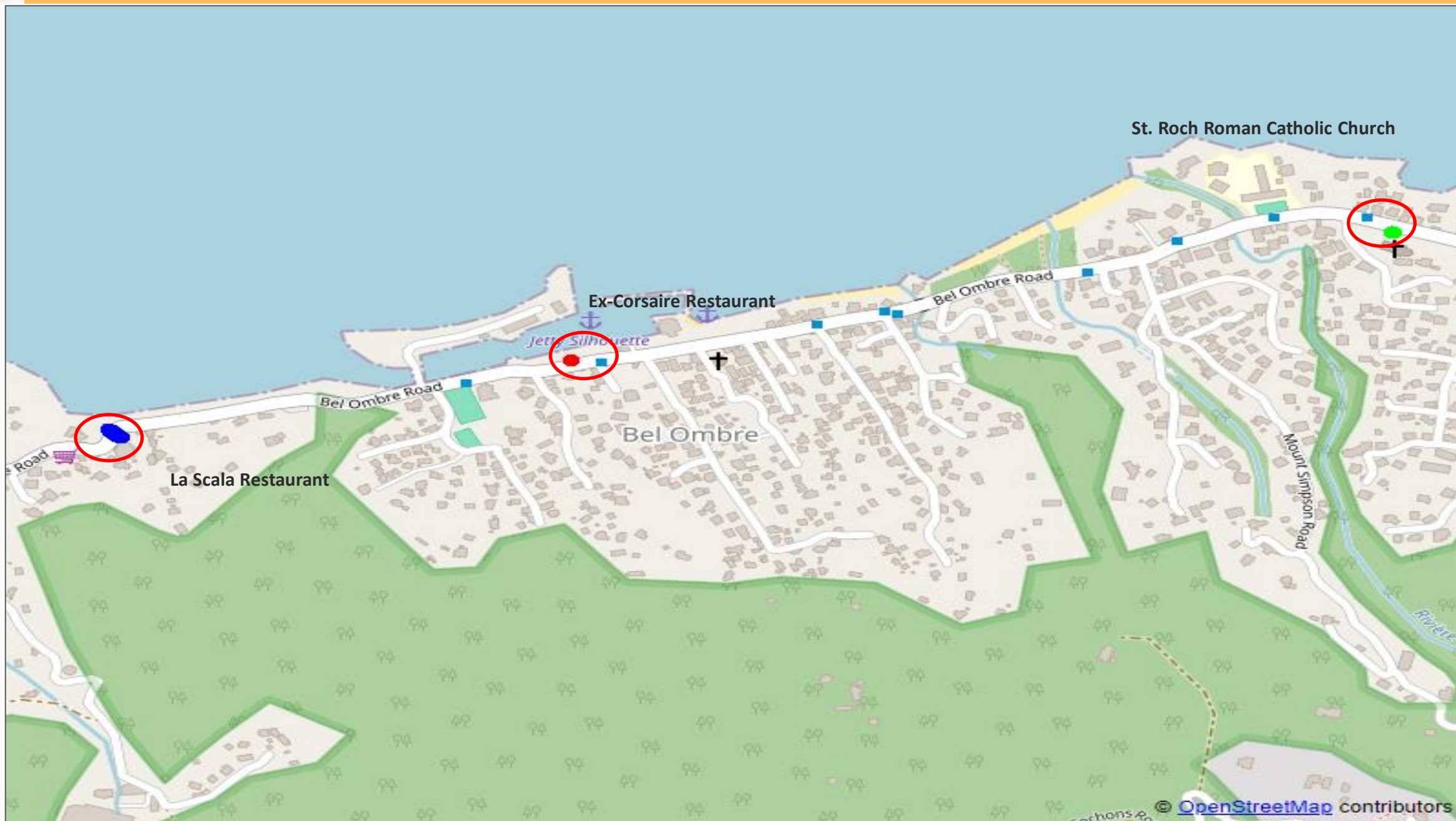
**Date of Testing:- 26<sup>th</sup> Sep to 2<sup>nd</sup> Oct 2024**

**Report Date:- 10<sup>th</sup> Oct 2024**

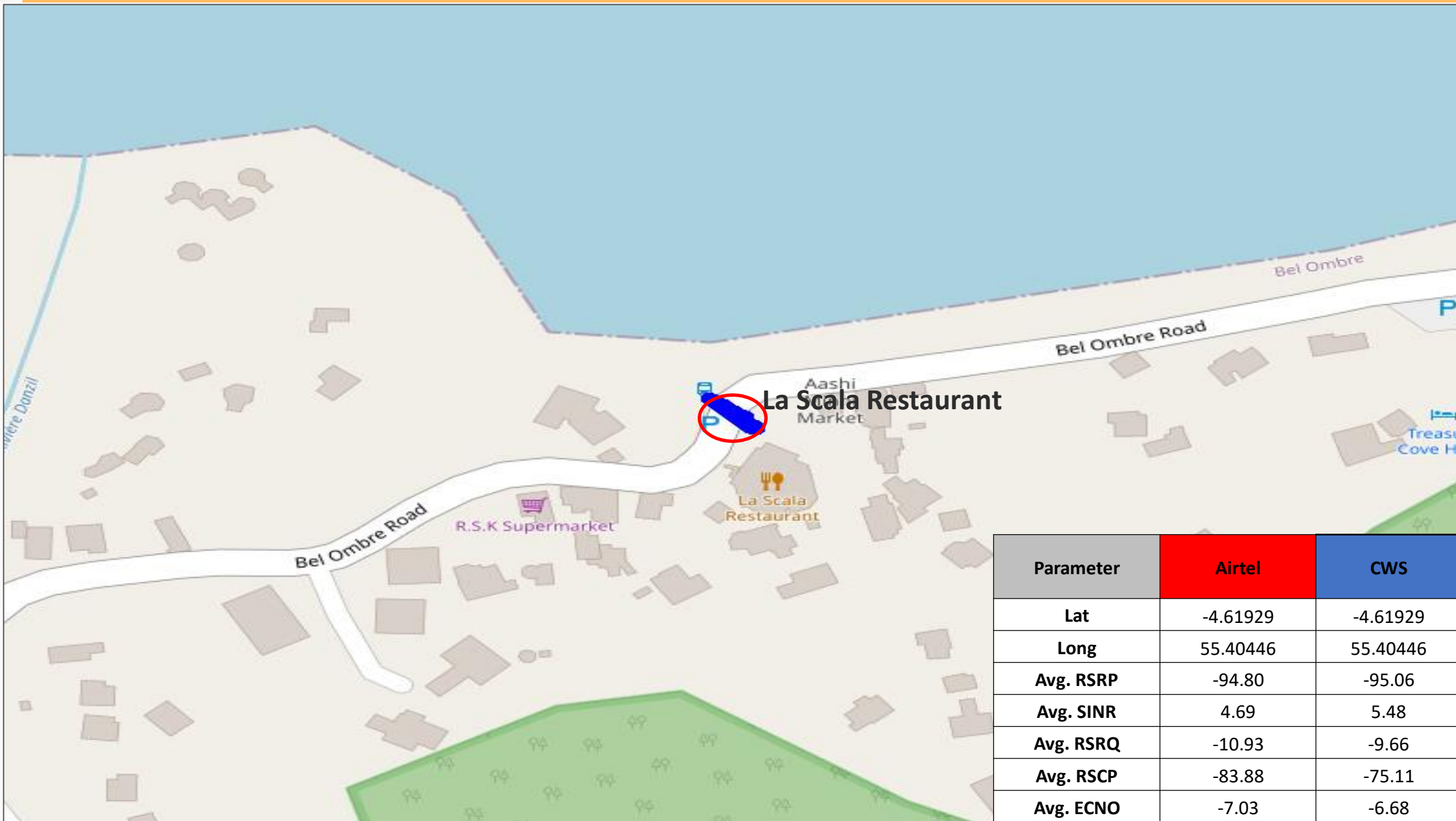
# VOICE TEST METHODOLOGY

DATA	Test Type and Timeout	Technology 3G Preferred	Technology 4G Preferred
POP always on. ICMP PAYLOAD PING 800 BYTES			
1	FILE TRANSFER DOWNLOAD 135s	FTP DL (3MB) wait 10s	FTP DL (5MB) wait 10s
2	FILE TRANSFER UPLOAD 135s	FTP UL (1MB) wait 10s	FTP UL (3MB) wait 10s
3	FILE TRANSFER DOWNLOAD 135s	HTTP Get (3MB) wait 10s	HTTP Get (5MB) wait 10s
4	FILE TRANSFER UPLOAD 135s	HTTP Put (1MB) wait 10s	HTTP Put (3MB) wait 10s
5	ICMP PING 32 BYTES	Ping (32 bytes) *5 wait 10s	Ping (32 bytes) *5 wait 10s
6	YOUTUBE STREAMING 95 seconds	Video: YouTube 60sec wait 10s	Video: YouTube 60sec wait 10s
7	KEPLER WEB BROWSING 45s	HTTPS Browsing: Kepler wait 10s	HTTPS Browsing: Kepler wait 10s
8	LIVE WEB BROWSING 45s	www.shein.com, www.nbs.gov.sc, www.sbc.sc wait 10s	www.shein.com, www.nbs.gov.sc, www.sbc.sc wait 10s
9	KEPLER MOBILE WEB BROWSING 45s	HTTPS Browsing: Kepler Mobile wait 10s	HTTPS Browsing: Kepler Mobile wait 10s
10	ICMP PING 32 BYTES	Ping (32 bytes) 5 www.google.com wait 10s	Ping (32 bytes) 5 www.google.com wait 10s
11	FILE TRANSFER-CAPACITY DOWNLOAD 10s fixed duration	HTTP Get (500MB) Multiple files wait 10s	HTTP Get (500MB) Multiple files wait 10s
12	FILE TRANSFER-CAPACITY UPLOAD 10s fixed duration	HTTP Put (500MB)-Multiple Files wait 10s	HTTP Put (500MB)-Multiple Files wait 10s

# Static Points Location – Cluster Bel Ombre



# Static Point Location 1 - La Scala Restaurant



Parameter	Airtel	CWS
Lat	-4.61929	-4.61929
Long	55.40446	55.40446
Avg. RSRP	-94.80	-95.06
Avg. SINR	4.69	5.48
Avg. RSRQ	-10.93	-9.66
Avg. RSCP	-83.88	-75.11
Avg. ECNO	-7.03	-6.68



## 4G Preferred Data Findings:

- Airtel SFTP DL is (7.31 Mbps), while SFTP UL is (4.17 Mbps), CWS SFTP DL is (2.27 Mbps), while SFTP UL is (0.00 Mbps)
- Airtel HTTP DL is (9.19 Mbps), HTTP Capacity DL is (40.64 Mbps) ,HTTP UL is (7.28 Mbps) , and HTTP Capacity UL is (22.76 Mbps).
- CWS HTTP DL is (3.55 Mbps), HTTP Capacity DL is (21.84 Mbps) ,HTTP UL is (0.00 Mbps) , and HTTP Capacity UL is (6.40 Mbps).
- On live web page testing for browsing, [www.shein.com](http://www.shein.com) took (6.42s), [www.nbs.gov.sc](http://www.nbs.gov.sc) took (16.96s), and [www.sbc.sc](http://www.sbc.sc) took (18.21s) on Airtel.
- On live web page testing for browsing, [www.shein.com](http://www.shein.com) took (9.62s), [www.nbs.gov.sc](http://www.nbs.gov.sc) took (16.75s), and [www.sbc.sc](http://www.sbc.sc) took (14.88s) on CWS.
- On static browsing, Kepler Webpage took (6.88s), and Kepler Mobile took (3.03s) on Airtel.
- On static browsing, Kepler Webpage took (10.70s), and Kepler Mobile took (7.11s) on CWS.
- YouTube average resolution in Airtel is (1038.27) pixels.
- YouTube average resolution in CWS is (1037.92) pixels.
- Airtel scored 44.98% in Carrier Aggregation (CA).
- CWS scored 29.41% in Carrier Aggregation (CA).

### 3G Preferred Data Test Findings:

- Airtel SFTP DL is (2.28 Mbps), while SFTP UL is (1.27 Mbps), CWS SFTP DL is (1.68 Mbps), while SFTP UL is (0.06 Mbps)
- Airtel HTTP DL is (2.25 Mbps), HTTP Capacity DL is (6.65 Mbps) ,HTTP UL is (2.07 Mbps) , and HTTP Capacity UL is (5.23 Mbps).
- CWS HTTP DL is (2.30 Mbps), HTTP Capacity DL is (7.29 Mbps) ,HTTP UL is (0.00 Mbps) , and HTTP Capacity UL is (2.83 Mbps).
- On live web page testing for browsing, [www.shein.com](http://www.shein.com) took (9.95s), [www.nbs.gov.sc](http://www.nbs.gov.sc) took (13.06s), and [www.sbc.sc](http://www.sbc.sc) took (22.18s) on Airtel.
- On live web page testing for browsing, [www.shein.com](http://www.shein.com) took (9.64s), [www.nbs.gov.sc](http://www.nbs.gov.sc) took (8.04s), and [www.sbc.sc](http://www.sbc.sc) took (9.60s) on CWS.
- On static browsing, Kepler Webpage took (6.24s), and Kepler Mobile took (3.35s) on Airtel.
- On static browsing, Kepler Webpage took (9.40s), and Kepler Mobile took (5.55s) on CWS.
- YouTube average resolution in Airtel is (992.55) pixels.
- YouTube average resolution in CWS is (1045.91) pixels.

# DRIVE TEST KPI STATISTICS

DATA Scenario		3G Preferred				4G Preferred			
		Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)	Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
FILE TRANSFER	SFTP DL (Mbps)	2.28	1.68	1	2	7.31	2.27	1	2
	SFTP UL(Mbps)	1.27	0.06	1	2	4.17	0.00	1	2
	HTTP DL(Mbps)	2.25	2.30	2	1	9.19	3.55	1	2
	HTTP UL(Mbps)	2.07	0.00	1	2	7.28	0.00	1	2
	HTTP Capacity DL(Mbps)	6.65	7.29	2	1	40.64	21.84	1	2
	HTTP Capacity UL(Mbps)	5.23	2.83	1	2	22.76	6.40	1	2
BROWSER	Overall Browser DL Time (s)	10.72	8.44	2	1	10.35	11.81	1	2
	Kepler Webpage DL Time (s)	6.24	9.40	1	2	6.88	10.70	1	2
	Mobile Kepler Webpage DL Time (s)	3.35	5.55	1	2	3.03	7.11	1	2
	www.shein.com Webpage DL Time (s)	9.95	9.64	2	1	6.42	9.62	1	2
	www.nbs.gov.sc Webpage DL Time (s)	13.06	8.04	2	1	16.96	16.75	2	1
	www.sbc.sc Webpage DL Time (s)	22.18	9.60	2	1	18.21	14.88	2	1
LATENCY	Avg Latency (ms)	326.50	218.53	2	1	329.55	297.21	2	1
	Median Latency (ms)	276	152	2	1	331	303	2	1
YOUTUBE	YouTube Access Time (s)	4.22	2.29	2	1	5.37	1.55	2	1
	YouTube Average Resolution (pixels)	992.55	1045.91	2	1	1038.27	1037.92	1	2
	YouTube Success Ratio [%]	100.00	100.00	1	1	100.00	100.00	1	1

# 4G PREFERRED THROUGHPUT COMPARISON

Test Type	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
SFTP DL	Success	13	8	100.00	100.00
	Failure	0	0	0.00	0.00
SFTP UL	Success	13	7	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP DL	Success	13	7	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	13	7	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity DL	Success	12	7	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	12	7	100.00	100.00
	Failure	0	0	0.00	0.00

DATA Scenario		Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
FILE TRANSFER	SFTP DL (Mbps)	7.31	2.27	1	2
	SFTP UL(Mbps)	4.17	0.00	1	2
	HTTP DL(Mbps)	9.19	3.55	1	2
	HTTP UL(Mbps)	7.28	0.00	1	2
	HTTP Capacity DL(Mbps)	40.64	21.84	1	2
	HTTP Capacity UL(Mbps)	22.76	6.40	1	2



# 4G PREFERRED BROWSING COMPARISON

Web Page	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
Kepler	Success	12	7	92.31	100.00
	Failure	1	0	7.69	0.00
Mobile Kepler	Success	13	7	100.00	100.00
	Failure	0	0	0.00	0.00
www.shein.com	Success	13	7	100.00	100.00
	Failure	0	0	0.00	0.00
www.nbs.gov.sc	Success	13	7	100.00	100.00
	Failure	0	0	0.00	0.00
www.sbc.sc	Success	13	7	100.00	100.00
	Failure	0	0	0.00	0.00

DATA Scenario		Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
BROWSER	Overall Browser DL Time (s)	10.35	11.81	1	2
	Kepler Webpage DL Time (s)	6.88	10.70	1	2
	Mobile Kepler Webpage DL Time (s)	3.03	7.11	1	2
	www.shein.com Webpage DL Time (s)	6.42	9.62	1	2
	www.nbs.gov.sc Webpage DL Time (s)	16.96	16.75	2	1
	www.sbc.sc Webpage DL Time (s)	18.21	14.88	2	1

	Latency KPIs	Airtel 4G	CWS 4G
Overall Latency	Sample Count [32 bytes]	26	8
	Average Latency [ms]	328.19	196.75
	Median Latency [ms]	332	178
	Ping session status: Successful	26	8
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	4
	Packet Loss<1%	0.00	33.33
www.google.com	Average Latency [ms]	405.46	173.14
	Median Latency [ms]	401	176
	Ping session status: Successful	13	7
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
	102.133.176.104	Average Latency [ms]	250.92
Median Latency [ms]		248	362
Ping session status: Successful		13	1
Ping session status: Failed [Socket error]		0	0
Ping session status: Failed [Protocol error timeout]		0	4
Packet Loss<1%		0.00	80.00

LTE YOUTUBE Success Ratio		
KPIs	Airtel Data 4G	CWS Data 4G
Attempt(Count)	13	7
Success(Count)	13	7
Failure(Count)	0	0
YouTube Access Time (s)	5.37	1.55
YouTube Average Resolution (pixels)	1038.27	1037.92
YouTube Success Ratio [%]	100.00	100.00

Latency 250ms

# 3G PREFERRED THROUGHPUT COMPARISON

Test Type	Status	Airtel 3G	CWS 3G	Airtel 3G (%)	CWS 3G (%)
SFTP DL	Success	11	6	100.00	100.00
	Failure	0	0	0.00	0.00
SFTP UL	Success	11	4	100.00	66.67
	Failure	0	2	0.00	33.33
HTTP DL	Success	11	8	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	11	8	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity DL	Success	10	8	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	10	8	100.00	100.00
	Failure	0	0	0.00	0.00

DATA Scenario		Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)
FILE TRANSFER	SFTP DL (Mbps)	2.28	1.68	1	2
	SFTP UL(Mbps)	1.27	0.06	1	2
	HTTP DL(Mbps)	2.25	2.30	2	1
	HTTP UL(Mbps)	2.07	0.00	1	2
	HTTP Capacity DL(Mbps)	6.65	7.29	2	1
	HTTP Capacity UL(Mbps)	5.23	2.83	1	2

# 3G PREFERRED BROWSING COMPARISON

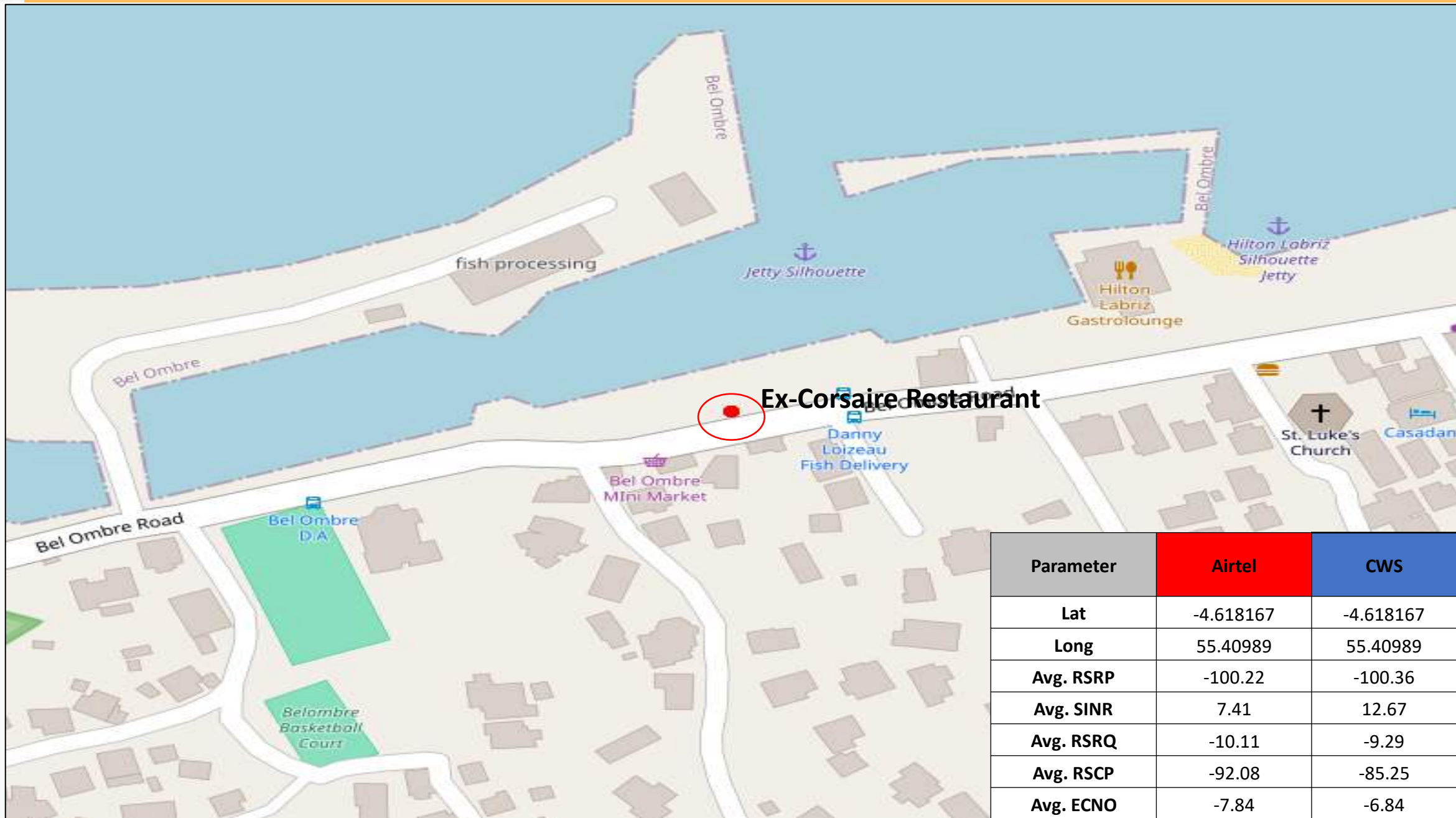
Web Page	Status	Airtel 3G	CWS 3G	Airtel 3G(%)	CWS 3G (%)
Kepler	Success	10	8	100.00	100.00
	Failure	0	0	0.00	0.00
Mobile Kepler	Success	10	8	100.00	100.00
	Failure	0	0	0.00	0.00
www.shein.com	Success	10	8	100.00	100.00
	Failure	0	0	0.00	0.00
www.nbs.gov.sc	Success	10	8	100.00	100.00
	Failure	0	0	0.00	0.00
www.sbc.sc	Success	9	8	90.00	100.00
	Failure	1	0	10.00	0.00

DATA Scenario		Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)
BROWSER	Overall Browser DL Time (s)	10.72	8.44	2	1
	Kepler Webpage DL Time (s)	6.24	9.40	1	2
	Mobile Kepler Webpage DL Time (s)	3.35	5.55	1	2
	www.shein.com Webpage DL Time (s)	9.95	9.64	2	1
	www.nbs.gov.sc Webpage DL Time (s)	13.06	8.04	2	1
	www.sbc.sc Webpage DL Time (s)	22.18	9.60	2	1

	Latency KPIs	Airtel 3G	CWS 3G
Overall Latency	Sample Count [32 bytes]	20	10
	Average Latency [ms]	332.00	176.50
	Median Latency [ms]	393	142
	Ping session status: Successful	20	10
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	1	5
	Packet Loss<1%	4.76	33.33
www.google.com	Average Latency [ms]	402.40	142.63
	Median Latency [ms]	403	142
	Ping session status: Successful	10	8
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
102.133.176.104	Average Latency [ms]	261.60	312.00
	Median Latency [ms]	244	312
	Ping session status: Successful	10	2
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	1	5
	Packet Loss<1%	9.09	71.43

UMTS YOUTUBE Success Ratio		
KPIs	Airtel 3G	CWS 3G
Attempt(Count)	11	8
Success(Count)	11	8
Failure(Count)	0	0
YouTube Access Time (s)	4.22	2.29
YouTube Average Resolution (pixels)	992.55	1045.91
YouTube Success Ratio [%]	100.00	100.00

# Static Point Location 2 - Ex-Corsaire Restaurant





## 4G Preferred Data Findings:

- Airtel SFTP DL is (11.73 Mbps), while SFTP UL is (6.60 Mbps), CWS SFTP DL is (8.35 Mbps), while SFTP UL is (3.30 Mbps)
- Airtel HTTP DL is (14.44 Mbps), HTTP Capacity DL is (18.49 Mbps) ,HTTP UL is (9.29 Mbps) , and HTTP Capacity UL is (18.55 Mbps).
- CWS HTTP DL is (11.46 Mbps), HTTP Capacity DL is (31.37 Mbps) ,HTTP UL is (4.87 Mbps) , and HTTP Capacity UL is (10.82 Mbps).
- On live web page testing for browsing, [www.shein.com](http://www.shein.com) took (6.79s), [www.nbs.gov.sc](http://www.nbs.gov.sc) took (17.00s), and [www.sbc.sc](http://www.sbc.sc) took (17.26s) on Airtel.
- On live web page testing for browsing, [www.shein.com](http://www.shein.com) took (6.17s), [www.nbs.gov.sc](http://www.nbs.gov.sc) took (14.70s), and [www.sbc.sc](http://www.sbc.sc) took (12.40s) on CWS.
- On static browsing, Kepler Webpage took (4.04s), and Kepler Mobile took (1.78s) on Airtel.
- On static browsing, Kepler Webpage took (4.33s), and Kepler Mobile took (2.62s) on CWS.
- YouTube average resolution in Airtel is (1041.32) pixels.
- YouTube average resolution in CWS is (1049.96) pixels.
- Airtel scored 34.53% in Carrier Aggregation (CA).
- CWS scored 25.00% in Carrier Aggregation (CA).

### 3G Preferred Data Test Findings:

- Airtel SFTP DL is (5.04 Mbps), while SFTP UL is (0.99 Mbps), CWS SFTP DL is (3.77 Mbps), while SFTP UL is (1.23 Mbps)
- Airtel HTTP DL is (4.55 Mbps), HTTP Capacity DL is (6.71 Mbps) ,HTTP UL is (1.29 Mbps) , and HTTP Capacity UL is (7.86 Mbps).
- CWS HTTP DL is (3.11 Mbps), HTTP Capacity DL is (7.01 Mbps) ,HTTP UL is (2.36 Mbps) , and HTTP Capacity UL is (5.90 Mbps).
- On live web page testing for browsing, [www.shein.com](http://www.shein.com) took (10.25s), [www.nbs.gov.sc](http://www.nbs.gov.sc) took (11.04s), and [www.sbc.sc](http://www.sbc.sc) took (12.94s) on Airtel.
- On live web page testing for browsing, [www.shein.com](http://www.shein.com) took (10.48s), [www.nbs.gov.sc](http://www.nbs.gov.sc) took (7.69s), and [www.sbc.sc](http://www.sbc.sc) took (11.42s) on CWS.
- On static browsing, Kepler Webpage took (3.58s), and Kepler Mobile took (1.69s) on Airtel.
- On static browsing, Kepler Webpage took (5.02s), and Kepler Mobile took (2.25s) on CWS.
- YouTube average resolution in Airtel is (1026.17) pixels.
- YouTube average resolution in CWS is (1035.58) pixels.

# DRIVE TEST KPI STATISTICS

DATA Scenario		3G Preferred				4G Preferred			
		Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)	Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
FILE TRANSFER	SFTP DL (Mbps)	5.04	3.77	1	2	11.73	8.35	1	2
	SFTP UL(Mbps)	0.99	1.23	2	1	6.60	3.30	1	2
	HTTP DL(Mbps)	4.55	3.11	1	2	14.44	11.46	1	2
	HTTP UL(Mbps)	1.29	2.36	2	1	9.29	4.87	1	2
	HTTP Capacity DL(Mbps)	6.71	7.01	2	1	18.49	31.37	2	1
	HTTP Capacity UL(Mbps)	3.58	5.90	2	1	18.55	10.82	1	2
BROWSER	Overall Browser DL Time (s)	7.86	7.29	2	1	9.46	8.04	2	1
	Kepler Webpage DL Time (s)	3.58	5.02	1	2	4.04	4.33	1	2
	Mobile Kepler Webpage DL Time (s)	1.69	2.25	1	2	1.78	2.62	1	2
	www.shein.com Webpage DL Time (s)	10.25	10.48	1	2	6.79	6.17	2	1
	www.nbs.gov.sc Webpage DL Time (s)	11.04	7.69	2	1	17.00	14.70	2	1
	www.sbc.sc Webpage DL Time (s)	12.94	11.42	2	1	17.26	12.40	2	1
LATENCY	Avg Latency (ms)	292.14	197.30	2	1	268.73	172.11	2	1
	Median Latency (ms)	359.	194	2	1	247	191	2	1
YOUTUBE	YouTube Access Time (s)	3.30	2.01	2	1	5.29	1.41	2	1
	YouTube Average Resolution (pixels)	1026.17	1035.58	2	1	1041.32	1049.96	2	1
	YouTube Success Ratio [%]	100.00	90.91	1	2	100.00	100.00	1	1

# 4G PREFERRED THROUGHPUT COMPARISON

Test Type	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
SFTP DL	Success	13	13	100.00	100.00
	Failure	0	0	0.00	0.00
SFTP UL	Success	13	13	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP DL	Success	13	13	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	13	13	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity DL	Success	12	12	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	12	12	100.00	100.00
	Failure	0	0	0.00	0.00

DATA Scenario		Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
FILE TRANSFER	SFTP DL (Mbps)	11.73	8.35	1	2
	SFTP UL(Mbps)	6.60	3.30	1	2
	HTTP DL(Mbps)	14.44	11.46	1	2
	HTTP UL(Mbps)	9.29	4.87	1	2
	HTTP Capacity DL(Mbps)	18.49	31.37	2	1
	HTTP Capacity UL(Mbps)	18.55	10.82	1	2

# 4G PREFERRED BROWSING COMPARISON

Web Page	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
Kepler	Success	11	12	91.67	100.00
	Failure	1	0	8.33	0.00
Mobile Kepler	Success	12	12	100.00	100.00
	Failure	0	0	0.00	0.00
www.shein.com	Success	12	12	100.00	100.00
	Failure	0	0	0.00	0.00
www.nbs.gov.sc	Success	12	12	100.00	100.00
	Failure	0	0	0.00	0.00
www.sbc.sc	Success	12	12	100.00	100.00
	Failure	0	0	0.00	0.00

DATA Scenario		Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
BROWSER	Overall Browser DL Time (s)	9.46	8.04	2	1
	Kepler Webpage DL Time (s)	4.04	4.33	1	2
	Mobile Kepler Webpage DL Time (s)	1.78	2.62	1	2
	www.shein.com Webpage DL Time (s)	6.79	6.17	2	1
	www.nbs.gov.sc Webpage DL Time (s)	17.00	14.70	2	1
	www.sbc.sc Webpage DL Time (s)	17.26	12.40	2	1

	Latency KPIs	Airtel 3G	CWS 3G
Overall Latency	Sample Count [32 bytes]	25	25
	Average Latency [ms]	267.28	173.20
	Median Latency [ms]	244	191
	Ping session status: Successful	25	25
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
www.google.com	Average Latency [ms]	411.75	144.67
	Median Latency [ms]	411	144
	Ping session status: Successful	12	12
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
102.133.176.104	Average Latency [ms]	133.92	199.54
	Median Latency [ms]	129	198
	Ping session status: Successful	13	13
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00

LTE YOUTUBE Success Ratio		
KPIs	Airtel Data 4G	CWS Data 4G
Attempt(Count)	13	12
Success(Count)	13	12
Failure(Count)	0	0
YouTube Access Time (s)	5.29	1.41
YouTube Average Resolution (pixels)	1041.32	1049.96
YouTube Success Ratio [%]	100.00	100.00

Latency 250ms



# 3G PREFERRED THROUGHPUT COMPARISON

Test Type	Status	Airtel 3G	CWS 3G	Airtel 3G (%)	CWS 3G (%)
SFTP DL	Success	11	10	100.00	100.00
	Failure	0	0	0.00	0.00
SFTP UL	Success	11	10	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP DL	Success	11	10	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	11	10	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity DL	Success	10	9	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	10	9	100.00	90.00
	Failure	0	1	0.00	10.00

DATA Scenario		Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)
FILE TRANSFER	SFTP DL (Mbps)	5.04	3.77	1	2
	SFTP UL(Mbps)	0.99	1.23	2	1
	HTTP DL(Mbps)	4.55	3.11	1	2
	HTTP UL(Mbps)	1.29	2.36	2	1
	HTTP Capacity DL(Mbps)	6.71	7.01	2	1
	HTTP Capacity UL(Mbps)	3.58	5.90	2	1

# 3G PREFERRED BROWSING COMPARISON

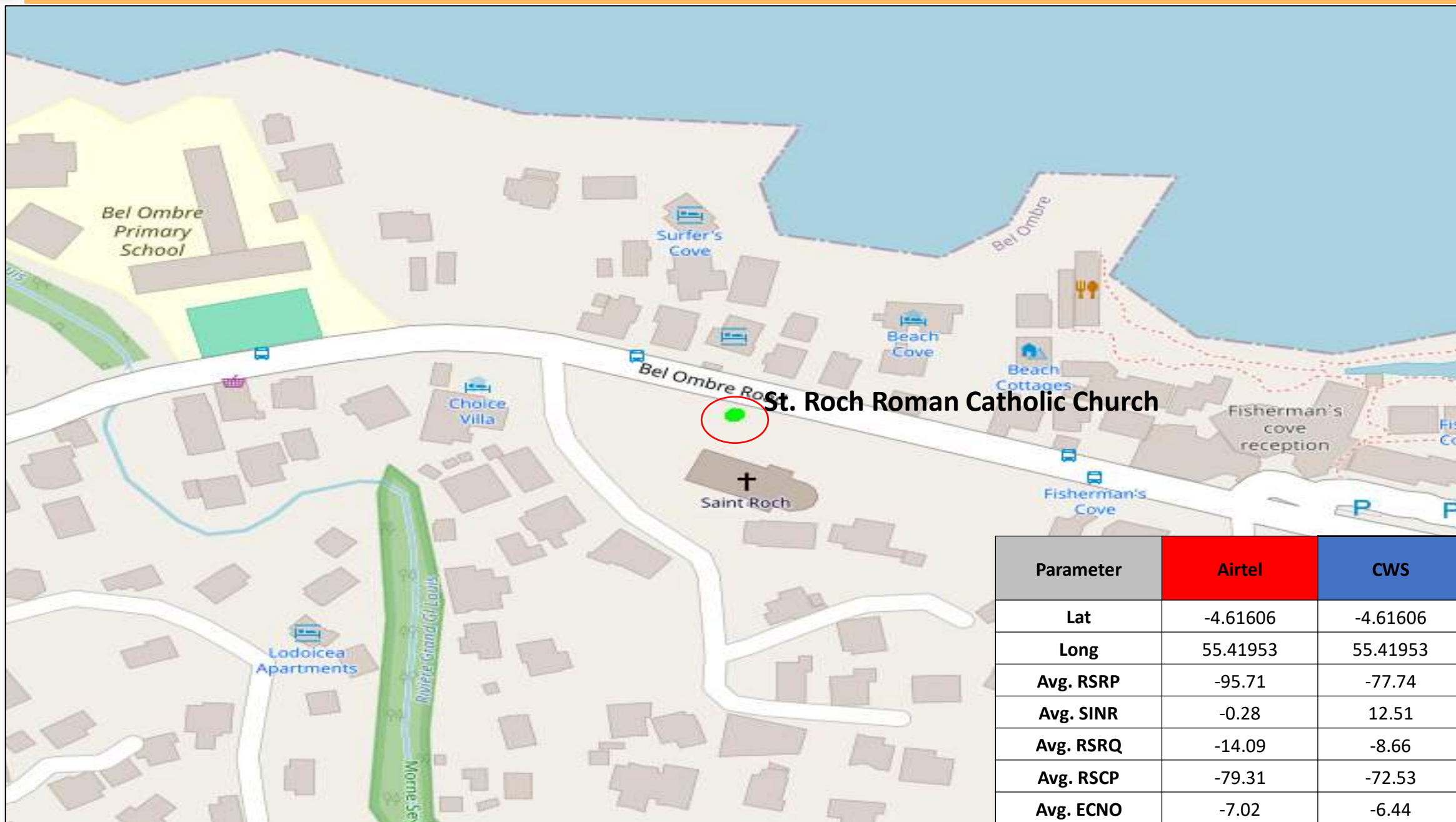
Web Page	Status	Airtel 3G	CWS 3G	Airtel 3G(%)	CWS 3G (%)
Kepler	Success	11	8	100.00	100.00
	Failure	0	0	0.00	0.00
Mobile Kepler	Success	10	8	100.00	88.89
	Failure	0	1	0.00	11.11
www.shein.com	Success	10	7	100.00	100.00
	Failure	0	0	0.00	0.00
www.nbs.gov.sc	Success	11	8	100.00	100.00
	Failure	0	0	0.00	0.00
www.sbc.sc	Success	10	8	100.00	100.00
	Failure	0	0	0.00	0.00

DATA Scenario		Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)
BROWSER	Overall Browser DL Time (s)	7.86	7.29	2	1
	Kepler Webpage DL Time (s)	3.58	5.02	1	2
	Mobile Kepler Webpage DL Time (s)	1.69	2.25	1	2
	www.shein.com Webpage DL Time (s)	10.25	10.48	1	2
	www.nbs.gov.sc Webpage DL Time (s)	11.04	7.69	2	1
	www.sbc.sc Webpage DL Time (s)	12.94	11.42	2	1

	Latency KPIs	Airtel 4G	CWS 4G
Overall Latency	Sample Count [32 bytes]	19	18
	Average Latency [ms]	329.37	185.61
	Median Latency [ms]	418	175
	Ping session status: Successful	19	18
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	2	1
	Packet Loss<1%	9.52	5.26
www.google.com	Average Latency [ms]	428.00	140.00
	Median Latency [ms]	427	138
	Ping session status: Successful	10	9
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
102.133.176.104	Average Latency [ms]	219.78	231.22
	Median Latency [ms]	135	200
	Ping session status: Successful	9	9
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	2	1
	Packet Loss<1%	18.18	10.00

UMTS YOUTUBE Success Ratio		
KPIs	Airtel 3G	CWS 3G
Attempt(Count)	11	11
Success(Count)	11	10
Failure(Count)	0	1
YouTube Access Time (s)	3.30	2.01
YouTube Average Resolution (pixels)	1026.17	1035.58
YouTube Success Ratio [%]	100.00	90.91

# Static Point Location 3 - St. Roch Roman Catholic Church



## 4G Preferred Data Findings:

- Airtel SFTP DL is (12.46 Mbps), while SFTP UL is (8.36 Mbps), CWS SFTP DL is (8.92 Mbps), while SFTP UL is (6.15 Mbps)
- Airtel HTTP DL is (14.41 Mbps), HTTP Capacity DL is (22.20 Mbps) ,HTTP UL is (13.86 Mbps) , and HTTP Capacity UL is (24.17 Mbps).
- CWS HTTP DL is (10.79 Mbps), HTTP Capacity DL is (39.92 Mbps) ,HTTP UL is (11.43 Mbps) , and HTTP Capacity UL is (49.77 Mbps).
- On live web page testing for browsing, [www.shein.com](http://www.shein.com) took (6.37s), [www.nbs.gov.sc](http://www.nbs.gov.sc) took (16.48s), and [www.sbc.sc](http://www.sbc.sc) took (17.53s) on Airtel.
- On live web page testing for browsing, [www.shein.com](http://www.shein.com) took (6.02s), [www.nbs.gov.sc](http://www.nbs.gov.sc) took (14.02s), and [www.sbc.sc](http://www.sbc.sc) took (13.28s) on CWS.
- On static browsing, Kepler Webpage took (4.02s), and Kepler Mobile took (1.64s) on Airtel.
- On static browsing, Kepler Webpage took (4.48s), and Kepler Mobile took (2.70s) on CWS.
- YouTube average resolution in Airtel is (1045.43) pixels.
- YouTube average resolution in CWS is (1046.43) pixels.
- Airtel scored 48.56% in Carrier Aggregation (CA).
- CWS scored 0.00% in Carrier Aggregation (CA).

### 3G Preferred Data Test Findings:

- Airtel SFTP DL is (5.91 Mbps), while SFTP UL is (2.31 Mbps), CWS SFTP DL is (4.06 Mbps), while SFTP UL is (0.98 Mbps)
- Airtel HTTP DL is (6.39 Mbps), HTTP Capacity DL is (9.07 Mbps) ,HTTP UL is (3.57 Mbps) , and HTTP Capacity UL is (6.48 Mbps).
- CWS HTTP DL is (3.20 Mbps), HTTP Capacity DL is (12.70 Mbps) ,HTTP UL is (1.91 Mbps) , and HTTP Capacity UL is (4.25 Mbps).
- On live web page testing for browsing, [www.shein.com](http://www.shein.com) took (8.50s), [www.nbs.gov.sc](http://www.nbs.gov.sc) took (10.32s), and [www.sbc.sc](http://www.sbc.sc) took (11.16s) on Airtel.
- On live web page testing for browsing, [www.shein.com](http://www.shein.com) took (8.66s), [www.nbs.gov.sc](http://www.nbs.gov.sc) took (7.91s), and [www.sbc.sc](http://www.sbc.sc) took (9.67s) on CWS.
- On static browsing, Kepler Webpage took (3.18s), and Kepler Mobile took (1.54s) on Airtel.
- On static browsing, Kepler Webpage took (5.60s), and Kepler Mobile took (2.43s) on CWS.
- YouTube average resolution in Airtel is (1047.06) pixels.
- YouTube average resolution in CWS is (1042.85) pixels.



# DRIVE TEST KPI STATISTICS

DATA Scenario		3G Preferred				4G Preferred			
		Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)	Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
FILE TRANSFER	SFTP DL (Mbps)	5.91	4.06	1	2	12.46	8.92	1	2
	SFTP UL(Mbps)	2.31	0.98	1	2	8.36	6.15	1	2
	HTTP DL(Mbps)	6.39	3.20	1	2	14.41	10.79	1	2
	HTTP UL(Mbps)	3.57	1.91	1	2	13.86	11.43	1	2
	HTTP Capacity DL(Mbps)	9.07	12.70	2	1	22.20	39.92	2	1
	HTTP Capacity UL(Mbps)	6.48	4.25	1	2	24.17	49.77	2	1
BROWSER	Overall Browser DL Time (s)	6.94	6.82	2	1	9.20	8.08	2	1
	Kepler Webpage DL Time (s)	3.18	5.60	1	2	4.02	4.48	1	2
	Mobile Kepler Webpage DL Time (s)	1.54	2.43	1	2	1.64	2.70	1	2
	www.shein.com Webpage DL Time (s)	8.50	8.66	1	2	6.37	6.02	2	1
	www.nbs.gov.sc Webpage DL Time (s)	10.32	7.91	2	1	16.48	14.02	2	1
	www.sbc.sc Webpage DL Time (s)	11.16	9.67	2	1	17.53	13.28	2	1
LATENCY	Avg Latency (ms)	249.53	204.64	2	1	274.48	176.32	2	1
	Median Latency (ms)	137	192	1	2	145	181	1	2
YOUTUBE	YouTube Access Time (s)	3.21	1.83	2	1	5.31	1.46	2	1
	YouTube Average Resolution (pixels)	1047.06	1042.85	1	2	1045.43	1046.43	2	1
	YouTube Success Ratio [%]	100.00	90.91	1	2	100.00	100.00	1	1

# 4G PREFERRED THROUGHPUT COMPARISON

Test Type	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
SFTP DL	Success	13	13	100.00	100.00
	Failure	0	0	0.00	0.00
SFTP UL	Success	13	13	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP DL	Success	13	13	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	13	13	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity DL	Success	12	12	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	12	12	100.00	100.00
	Failure	0	0	0.00	0.00

DATA Scenario		Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
FILE TRANSFER	SFTP DL (Mbps)	12.46	8.92	1	2
	SFTP UL(Mbps)	8.36	6.15	1	2
	HTTP DL(Mbps)	14.41	10.79	1	2
	HTTP UL(Mbps)	13.86	11.43	1	2
	HTTP Capacity DL(Mbps)	22.20	39.92	2	1
	HTTP Capacity UL(Mbps)	24.17	49.77	2	1

# 4G PREFERRED BROWSING COMPARISON

Web Page	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
Kepler	Success	13	13	100.00	100.00
	Failure	0	0	0.00	0.00
Mobile Kepler	Success	13	13	100.00	100.00
	Failure	0	0	0.00	0.00
www.shein.com	Success	13	13	100.00	100.00
	Failure	0	0	0.00	0.00
www.nbs.gov.sc	Success	13	13	100.00	100.00
	Failure	0	0	0.00	0.00
www.sbc.sc	Success	13	13	100.00	100.00
	Failure	0	0	0.00	0.00

DATA Scenario		Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
BROWSER	Overall Browser DL Time (s)	9.20	8.08	2	1
	Kepler Webpage DL Time (s)	4.02	4.48	1	2
	Mobile Kepler Webpage DL Time (s)	1.64	2.70	1	2
	www.shein.com Webpage DL Time (s)	6.37	6.02	2	1
	www.nbs.gov.sc Webpage DL Time (s)	16.48	14.02	2	1
	www.sbc.sc Webpage DL Time (s)	17.53	13.28	2	1

	Latency KPIs	Airtel 4G	CWS 4G
Overall Latency	Sample Count [32 bytes]	26	26
	Average Latency [ms]	273.96	179.12
	Median Latency [ms]	269	182
	Ping session status: Successful	26	26
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
www.google.com	Average Latency [ms]	421.31	150.77
	Median Latency [ms]	422	150
	Ping session status: Successful	13	13
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
	102.133.176.104	Average Latency [ms]	126.62
Median Latency [ms]		127	208
Ping session status: Successful		13	13
Ping session status: Failed [Socket error]		0	0
Ping session status: Failed [Protocol error timeout]		0	0
Packet Loss<1%		0.00	0.00

LTE YOUTUBE Success Ratio		
KPIs	Airtel Data 4G	CWS Data 4G
Attempt(Count)	13	13
Success(Count)	13	13
Failure(Count)	0	0
YouTube Access Time (s)	5.31	1.46
YouTube Average Resolution (pixels)	1045.43	1046.43
YouTube Success Ratio [%]	100.00	100.00

Latency 250ms

# 3G PREFERRED THROUGHPUT COMPARISON

Test Type	Status	Airtel 3G	CWS 3G	Airtel 3G (%)	CWS 3G (%)
SFTP DL	Success	12	10	100.00	100.00
	Failure	0	0	0.00	0.00
SFTP UL	Success	12	9	100.00	81.82
	Failure	0	2	0.00	18.18
HTTP DL	Success	12	11	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	12	10	100.00	90.91
	Failure	0	1	0.00	9.09
HTTP Capacity DL	Success	11	10	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	11	7	100.00	70.00
	Failure	0	3	0.00	30.00

DATA Scenario		Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)
FILE TRANSFER	SFTP DL (Mbps)	5.91	4.06	1	2
	SFTP UL(Mbps)	2.31	0.98	1	2
	HTTP DL(Mbps)	6.39	3.20	1	2
	HTTP UL(Mbps)	3.57	1.91	1	2
	HTTP Capacity DL(Mbps)	9.07	12.70	2	1
	HTTP Capacity UL(Mbps)	6.48	4.25	1	2

# 3G PREFERRED BROWSING COMPARISON

Web Page	Status	Airtel 3G	CWS 3G	Airtel 3G(%)	CWS 3G (%)
Kepler	Success	11	11	100.00	100.00
	Failure	0	0	0.00	0.00
Mobile Kepler	Success	11	10	100.00	100.00
	Failure	0	0	0.00	0.00
www.shein.com	Success	11	10	100.00	100.00
	Failure	0	0	0.00	0.00
www.nbs.gov.sc	Success	11	10	100.00	100.00
	Failure	0	0	0.00	0.00
www.sbc.sc	Success	11	10	100.00	100.00
	Failure	0	0	0.00	0.00

DATA Scenario		Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)
BROWSER	Overall Browser DL Time (s)	6.94	6.82	2	1
	Kepler Webpage DL Time (s)	3.18	5.60	1	2
	Mobile Kepler Webpage DL Time (s)	1.54	2.43	1	2
	www.shein.com Webpage DL Time (s)	8.50	8.66	1	2
	www.nbs.gov.sc Webpage DL Time (s)	10.32	7.91	2	1
	www.sbc.sc Webpage DL Time (s)	11.16	9.67	2	1

	Latency KPIs	Airtel 3G	CWS 3G
Overall Latency	Sample Count [32 bytes]	22	19
	Average Latency [ms]	255.82	209.21
	Median Latency [ms]	183	164
	Ping session status: Successful	22	19
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	1	1
	Packet Loss<1%	4.35	5.00
www.google.com	Average Latency [ms]	390.36	145.40
	Median Latency [ms]	405	141
	Ping session status: Successful	11	10
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
102.133.176.104	Average Latency [ms]	121.27	280.11
	Median Latency [ms]	117	211
	Ping session status: Successful	11	9
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	1	1
	Packet Loss<1%	8.33	10.00

UMTS YOUTUBE Success Ratio		
KPIs	Airtel 3G	CWS 3G
Attempt(Count)	12	11
Success(Count)	12	10
Failure(Count)	0	1
YouTube Access Time (s)	3.21	1.83
YouTube Average Resolution (pixels)	1047.06	1042.85
YouTube Success Ratio [%]	100.00	90.91

**THANKS**