Retail Barcelona POC

FINISHED

Survey Report

Period: 2026-05-07 → 2026-05-15 (9 days)
Timezone: Europe/Madrid
Report generated: 2026-11-26 12:56 UTC

Device & Survey Info

Device name	Survey Kit 01
IMEI	990000000000201
Device type	IX10
Physical location	Retail branch, Passeig de Gràcia
Coordinates	41.39170, 2.16490
Timezone	Europe/Madrid
RF monitoring	Enabled · every 1 s
Speed test	Enabled · every 60 min
Ping apps	Enabled · Checkout / POS, Microsoft 365, Salesforce, Google Cloud, Cloudflare, AWS, Microsoft Teams, Zoom

AI Site Assessment

DEGRADED

Meridian Net LTE sustains about 22 Mbps DL and 5.6 Mbps UL in business hours at marginal RSRP (-111 dBm); fit for POS and capped retail, not for office workloads.

KEY FINDINGS

- Business-hour (12:00–18:00) DL median is about 22 Mbps across the survey, with a worst day of 17.9 Mbps on 2026-05-09, versus about 38 Mbps in the 00:00–06:00 window.
- Upload is the binding constraint: 12:00–18:00 UL median is about 5.6 Mbps, falling to 4.0 Mbps on 2026-05-10, below the 5 Mbps retail-small floor and far below the 10 Mbps small-office floor.
- RF is cell-edge: LTE RSRP median sits at -111 dBm (daily range -108 to -116), RSRQ -12 to -16 dB and SINR 9–14 dB; the RSRP median is at the glossary's unusable boundary, yet throughput is delivered, so this is capacity-limited rather than an outage. RF was weakest on 2026-05-14 (RSRP -114 dBm across most windows, evening SINR 7–8 dB) with no service loss.
- Latency and reachability are healthy: ICMP to 1.1.1.1 median 43 ms at 100% success, speedtest latency 37–53 ms with 3–11 ms jitter, and POS TCP at about 105 ms at 100% success. The 1.6–1.9 s HTTP probes (AWS, Salesforce) and about 3.4 s Zoom are consistent with SWA probe-side overhead rather than network latency.

ANOMALIES

- speed.upload_median — Business-hour UL dips to 4.0 Mbps (2026-05-10 12:00–18:00) and 4.3 Mbps (2026-05-11 18:00–24:00), below the 5 Mbps retail-small floor.
- rsrp_median — Median of -111 dBm falls below the glossary's unusable threshold (-110 dBm) while speed delivery remains functional, indicating a probe or cell-edge behaviour that should be verified with an RF check.
- rf_slots (2026-05-12) — The 00:00–06:00 and 06:00–12:00 LTE rows on 2026-05-12 are repeated about 14 times with identical values, inflating sample counts; medians are unaffected but the data pipeline should be checked for duplication.

- rscp_median / ecio_median — 3G fields are constant at -87 dBm and -12 dB across every LTE row, which is a placeholder or stale value on an LTE-only configuration and should not be used.
- survey coverage — No samples exist for 2026-05-15 12:00–24:00; the survey ended at 14:06 on that date, leaving the final day partial and the 12:00–18:00 window unmeasured.
- network (unknown rows) — Rows with network='unknown' appear in the 18:00–24:00 window on 2026-05-07, 2026-05-11 and 2026-05-12 with very small sample counts; these are minor but indicate unclassified samples.

RECOMMENDATIONS

- Profile fit: POS and payment-terminal deployments are supported with margin (worst DL 17.9 Mbps, worst UL 4.0 Mbps versus a 1 Mbps floor, 100% probe success). Retail small (up to 5 VDIs and 5 TPVs) is conditionally supported: DL meets the 15 Mbps floor in every window, but UL drops below 5 Mbps in some 12:00–18:00 windows, so limit it to DL-heavy VDI use. Small office (25/10 Mbps floor) and VoIP-heavy profiles are not supported on this baseline.
- Run an RF check (external antenna or cell-edge assessment) before committing, given the -111 dBm median RSRP; in parallel, compare an alternative operator, since the survey ran single-carrier with carrierswap disabled.
- Re-run or extend the survey to at least 10 full days, fix the duplicated rows and placeholder 3G fields in the aggregation pipeline, and confirm the 2026-05-15 gap before final sign-off.

Generated by AI · model: claude-haiku-5-5 · 2026-11-26 12:55 UTC

Executive Summary

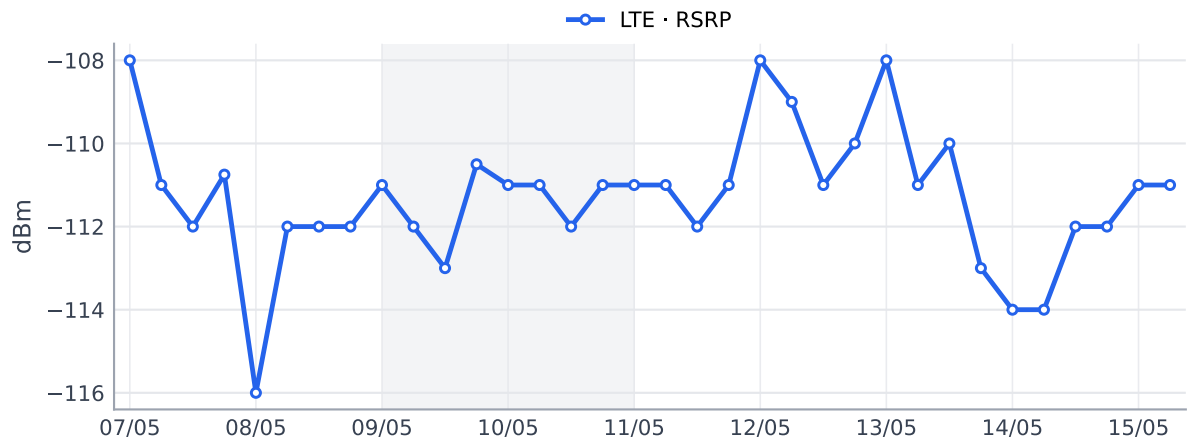
AVG DOWNLOAD	AVG UPLOAD	AVG LATENCY	AVG JITTER
24.23 Mbps	**7.31** Mbps	**44.52** ms	**5.86** ms

Over 9 days · 203 download samples · 203 upload samples

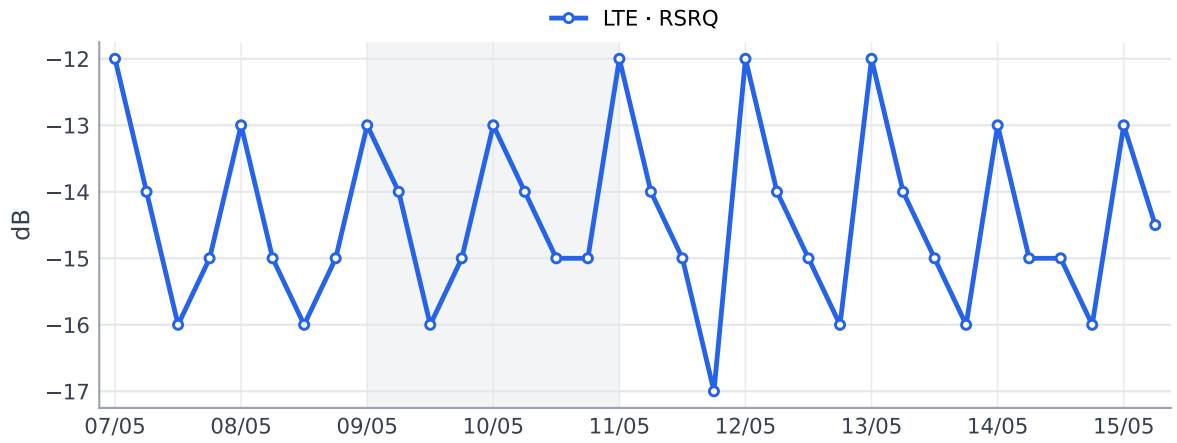
RF Coverage Summary

NETWORK	METRIC	MEDIAN	SAMPLES
LTE (4G)	RSRP	-111.00 dBm	105516
LTE (4G)	RSRQ	-14.00 dB	105516
LTE (4G)	SINR	12.00 dB	105516

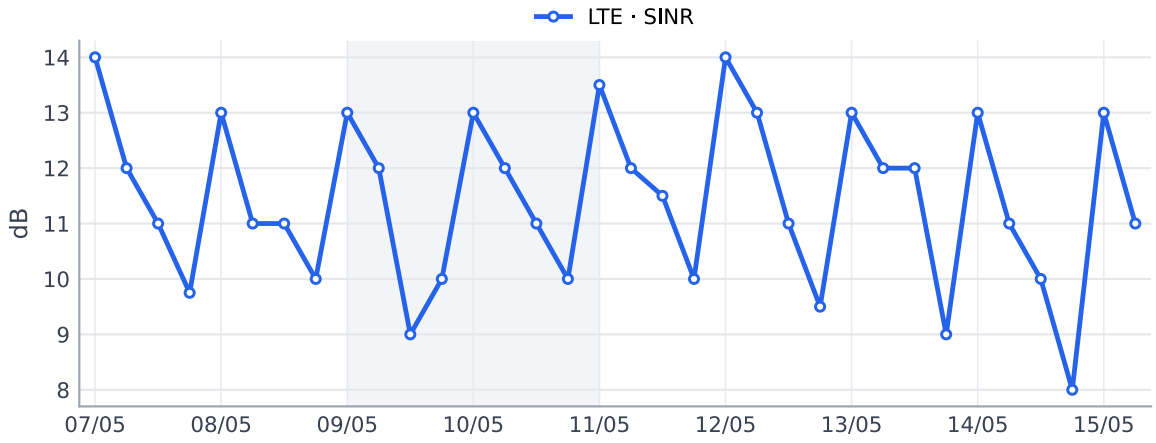
RSRP



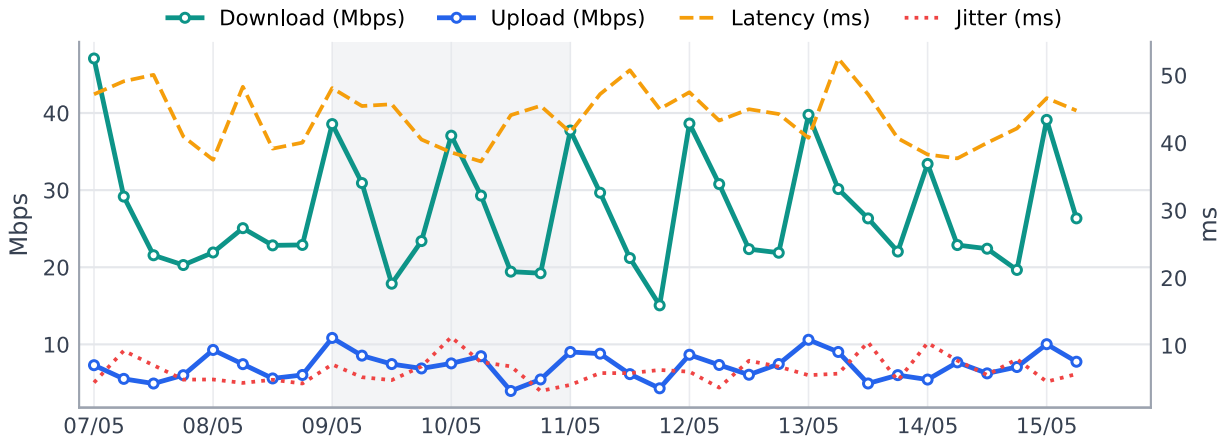
RSRQ



SINR



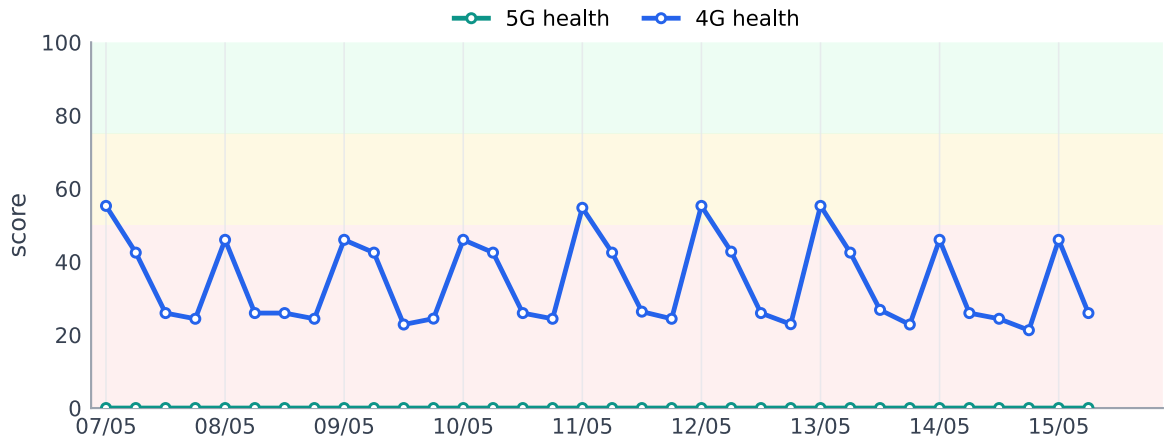
Speed Test Detail



DATE	TIME RANGE	DOWNLOAD (MBPS)	UPLOAD (MBPS)	LATENCY (MS)	JITTER (MS)	SAMPLES
2026-05-07	00:00–05:59	47.07	7.30	47.19	4.50	12
2026-05-07	06:00–11:59	29.16	5.53	49.11	9.22	12
2026-05-07	12:00–17:59	21.56	4.92	50.07	7.06	12
2026-05-07	18:00–23:59	20.29	6.00	40.93	4.94	10
2026-05-08	00:00–05:59	21.92	9.28	37.49	4.96	12
2026-05-08	06:00–11:59	25.07	7.43	48.30	4.45	12
2026-05-08	12:00–17:59	22.84	5.58	39.14	4.92	12
2026-05-08	18:00–23:59	22.89	6.03	40.03	4.36	12
2026-05-09	00:00–05:59	38.57	10.83	48.10	7.18	12
2026-05-09	06:00–11:59	30.92	8.54	45.45	5.30	12
2026-05-09	12:00–17:59	17.87	7.45	45.71	4.87	12
2026-05-09	18:00–23:59	23.40	6.88	40.49	6.89	12

DATE	TIME RANGE	DOWNLOAD (MBPS)	UPLOAD (MBPS)	LATENCY (MS)	JITTER (MS)	SAMPLES
2026-05-10	00:00–05:59	37.06	7.53	38.58	11.23	12
2026-05-10	06:00–11:59	29.29	8.47	37.24	7.52	12
2026-05-10	12:00–17:59	19.43	3.96	44.10	6.90	12
2026-05-10	18:00–23:59	19.23	5.45	45.48	3.26	12
2026-05-11	00:00–05:59	37.73	9.02	41.55	4.16	12
2026-05-11	06:00–11:59	29.66	8.79	47.21	5.91	12
2026-05-11	12:00–17:59	21.19	6.14	50.75	5.90	12
2026-05-11	18:00–23:59	15.06	4.30	45.00	6.37	12
2026-05-12	00:00–05:59	38.64	8.65	47.49	6.12	12
2026-05-12	06:00–11:59	30.78	7.33	43.30	3.75	12
2026-05-12	12:00–17:59	22.35	6.06	44.98	7.74	12
2026-05-12	18:00–23:59	21.88	7.45	44.26	6.86	12
2026-05-13	00:00–05:59	39.76	10.60	40.74	5.59	12
2026-05-13	06:00–11:59	30.14	9.02	52.49	5.82	12
2026-05-13	12:00–17:59	26.34	4.93	47.18	10.47	12
2026-05-13	18:00–23:59	22.04	6.01	40.67	4.80	12
2026-05-14	00:00–05:59	33.40	5.44	38.27	10.38	12
2026-05-14	06:00–11:59	22.88	7.67	37.70	7.76	12
2026-05-14	12:00–17:59	22.41	6.24	40.00	5.63	12
2026-05-14	18:00–23:59	19.65	7.06	42.13	7.97	12
2026-05-15	00:00–05:59	39.11	10.02	46.62	4.64	12
2026-05-15	06:00–11:59	26.34	7.75	44.78	5.76	12
2026-05-15	12:00–17:59	—	—	—	—	0
2026-05-15	18:00–23:59	—	—	—	—	0

QoS Health Score



Enterprise Applications

APP	PROTOCOL	SUCCESS RATE	LATENCY MEDIAN (MS)	SAMPLES
Checkout / POS	TCP	100.00 %	**105.65**	407
Microsoft 365	TCP	100.00 %	**119.40**	407
Salesforce	HTTP	100.00 %	**1858.74**	407
Google Cloud	TCP	100.00 %	**117.40**	407
Cloudflare	ICMP	100.00 %	**43.04**	407
AWS	HTTP	100.00 %	**1661.91**	407
Microsoft Teams	TCP	100.00 %	**139.44**	407
Zoom	HTTP	100.00 %	**3405.09**	407