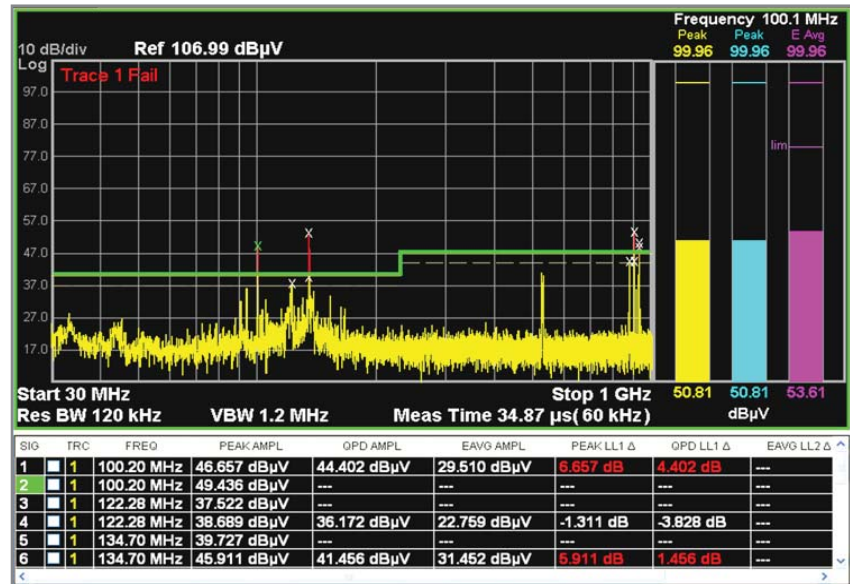# Resolve EMI Performance Issues Early To Avoid Costly Rework

New N/W6141A EMC measurement application for X-Series signal analyzers is the ideal replacement for legacy E7400 Series and 859xEM EMC analyzers.

Are you developing prototype electrical devices and need to evaluate the EMI performance of your new designs to ensure successful compliance testing? The N/W6141A EMC measurement application for X-Series signal analyzers is the only pre-compliance test solution the enables you to reduce test margins while ensuring your device meets all regulatory limits.

Reduce margins with superior measurement accuracy

- Identify low-level signals with excellent sensitivity from X-Series signal analyzers
- Exceptional accuracy ensures more precise measurement of signals

Easily identify out-of-limit device emissions

- See device emissions typically hidden in the noise floor
- Differentiate between ambient and DUT signals using Signal List features
- Use strip chart to identify intermittent signals

Maximize signals and compare against commercial and MIL-STD limits

- Meet test requirements with built-in commercial and MIL-STD compliant bandwidths, detectors and presets; compare measured emissions with pass/fail and delta indicators
- Use frequency scan to identify, measure and store results

Agilent Technologies

Features Comparison

Feature	N/W6141A X-Series EMC measurement application	E7400 Series EMC analyzer	859xEM Series EMC analyzer (obsolete)
Limit lines			
• Points	2000 points	200 points	30 points
• Editing	Dynamic editing, view change as data is entered	Updates after data is entered	Updates after data entered
• Store type	Store limits as .lim or .csv	Store as .lim only	.lim only
• Limit names	Complete name + legacy name	Legacy name (8 characters only)	8 characters only
Correction factors			
• Points	2000 points	200 points	80 points total
• Editing	Dynamic editing, view changes as data is entered	Update after data is entered	Update after data entered
• Store type	.ant, .oth, .amp, .cbl, .csv	.ant, .oth, .amp, .cbl	.ant, .cbl, .amp
Measurements	Frequency scan and strip chart	Frequency scan only	Frequency scan only
CISPR presets	Band A through E	Band A through D	Band A through D
EMC presets	None, CISPR or MIL	EMI, Man, SA	CISPR
Data points	40,001	8192	401
Tracking generator	No, uses external source control	Yes, to 3 GHz	Yes
Scan sequence	Search, Scan, Scan/Search/Measure, Search/Measure, Remeasure	Measure peaks to list	Measure peaks to list
Bar meters	Scan display plus 3 bar meters to continuously monitor signals at a specific frequency	No bar meters	No bar meters
Maximum signals in a list	1000	2000	80
Signals above limit/margin to list	<1 sec to move all signals (amplitude frequency pairs) to list	Must measure each signal before going into list (many seconds depending on the number of signals)	Must measure each signal before going into list
Measure signals to Δ limit	3 amplitudes and 3 limits	3 amplitudes and 2 limits	3 amplitudes and 2 limits
Scan table	10 preset and adjustable scans, select multiple scans	No scan table	No scan table
Marked signals	All marked signals are displayed on the trace	Only one marked signal at a time is displayed	Only one marked signal at a time displayed
Detectors	Peak, Quasi-peak, EMI average, RMS Average, Sample, Neg peak	Peak, Quasi-peak, EMI average, Sample, Neg peak	Peak, Quasi-peak, average, Sample, Neg peak
Bandwidths	CISPR, MIL-STD and 10% bandwidths	1, 3,10 sequence, CISPR BWs	1, 3,10 sequence, CISPR BWs
I/O ports	USB, LAN, GPIB	GPIB	GPIB

Agilent Technologies