

SPECIFICATIONS

Hewlett-Packard guarantees that the performance of your cables will equal or exceed the following specifications, at **frequencies** $\leq 26.5\text{GHz}$:

SWR insertion Loss _(in dB)	≤ 1.38 (15.94 dB return loss) $\leq 0.43\sqrt{f} + 0.3$, HP 851316 $\leq 0.30\sqrt{f} + 0.2$, HP 85131D	where f is in GHz
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Recession of center conductor shoulder behind outer conductor mating plane, of **3.5mm** connector.
NMD-3.5mm precision **3.5mm** male/female

0.005 to 0.056mm (0.0002 to 0.0022 inch)
0.0025 to 0.013 mm (0.0001 to 0.0005 inch)

Protrusion is **never allowable** on any **3.5mm** connector.

SUPPLEMENTAL PERFORMANCE DATA

The following data gives further information about the typical performance of HP **85131C/D** cables.

Magnitude and Phase stability with a 90 degree 4 inch bend radius	≤ 0.06 dB change $\leq 0.16(f) + 0.5$ degrees	where f is in GHz
Magnitude and Phase stability after three bending straightening cycles, with each bend measuring 90 degrees at a 4 inch bend radius	≤ 0.03 dB change $\leq 0.13(f) + 0.3$ degrees	

Electrical length of the HP 85131C cable is approximately **1.15m**, while it is approximately **0.74m** for the **HP 85131D**.

PERFORMANCE TESTS

Using an HP 8510 Network Analyzer perform the following tests upon your cables as soon as you receive them, and periodically repeat the tests to determine if their performance is still satisfactory or if the cables need to be replaced.