

# Product/Family, Best Foot Forward (BFF), Test Points and Qualification Ranges

Herb Tanzer  
SNIA Green TWG

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SNIA Emerald™ Training

SNIA Emerald™ Power Efficiency  
Measurement Specification

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# BFF and range submitted

- After one has found the peak MiB/sec/Watt from each of the SFS2014 workloads. Find the best foot forward by increasing and decreasing drive count and run suite again. This may take several iterations.
- Required by the EPA's Energy Star program.  
For the low and high range points use either of the below
  - ◆ Efficiency results with -40% drive count and + 15 % drive count.
  - ◆ Efficiency results with -15% peak efficiency result and +15 % peak efficiency result, by decreasing and increasing drive counts to produce these efficiency results.

# Backup: data test points

- Emerald has defined the Best Foot Forward (BFF) – the optimal power efficiency data point (performance / Watt)
- EPA has defined two additional data test points which determine the ENERGY STAR qualified range
  - ◆ Either... -40% and +15% of the BFF storage device count
  - ◆ Or... Storage device count points where Perf/W value is 15% < the BFF point
  - ◆ Whichever provides the wider range or coverage of device count

Reference previous V2.0.2 Emerald Training [slides](#)

“Product Family, Best Foot Forward, Test Points and Qualification Ranges”  
see starting with slide #30