CTL DECISION SHEET

Standard(s):	**Sub clause(s):**	**Decision Sheet n°:**
IEC 60825-1, Ed 1.2 (2001) & Ed 2.0 (2007)	**Clause 9.1 Tests** **Clause 9.2 Measurement of laser radiation** **Clause 9.3 Measurement geometry**	**DSH 656**
Subject:	**Key words:**	**Approved by the 45th CTL Plenary meeting 2008**
Equivalent measurement setup for the Condition 1 for certain laser beams	**- Condition 1** **- Telescoping viewing** **- Aperture stop**	

Question:

Is it necessary to always use a 50 mm aperture stop in order to fulfil the requirements for the measuring Condition 1?

Decision:

If the laser beam is well collimated so that the entire radiant power is passing through a 7 mm aperture within 2000 mm distance, it is acceptable to use a 7 mm aperture stop for the purpose of testing according to Condition 1.

Note: National Certification Bodies shall provide objective evidence that the whole laser beam is captured with the reduced aperture size.

Explanatory Notes:

1. IEC 60825-1 Ed. 1.2 and IEC 60825-1 Ed. 2.0 states in Par. 9.1, that "Equivalent tests or procedures are acceptable."

2. CBTLs declare frequently the 50 mm aperture stop for measurement of radiant power of well collimated laser beams having a diameter smaller than 7 mm such as those emitted by laser pointers.

3. The 50 mm aperture stop placed at the measurement distance of 2 m is intended to simulate viewing of a laser beam with telescopes and binoculars.

4. The 50 mm aperture stop is applicable to wavelengths 400 nm to 1400 nm inclusive.