

# Notes about Draft 5.3.16 as a proposed new version of OP1.002

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## **Brand new to this version (as compared to the current published version 2009)**

Should we introduce supplementary scratch-and-dig notations to (1) allow suspension of accumulation and concentration tests (See Section 2.1.4.3.1) and/or (2) to allow scratch length to be defined along the optical surface rather than as projected onto a planar clear aperture (See Section 2.1.4.3.2)?

Should we limit smallest dimensional specification to 1 micron for scratches (see Section 2.1.3.1.1) and 10 microns for digs? (see Section 2.1.3.1.2)?

## **Changes to the current published version 2009**

Should we produce our own version of C7461866 rather than simply making reference to ARDEC's C7641866? This possible change has not been drafted into this version 5.3.16. (See Section 1.5.1).

Should we allow supplementary magnification of 4x to evaluate visibility specifications? (See Section 7.1.6.1).

Should we allow all kinds of scratches and digs outside the clear aperture? Currently, we limit them. (See Section 2.1.2.5 and Section 2.1.3.3). However, we allow all kinds of areal imperfections in that outer region. There is no section that defines acceptable levels of areal imperfections outside the clear aperture; therefore, every kind of areal imperfection is allowed out there, unless limited by the designer in the form of a comment. (See Section 2.3). Note that all specifications are limited to the clear aperture unless explicitly stated otherwise. (See Section 1.2.1).

Should we correct the misunderstanding about the meaning of "true roof surface" and apply the scratch-and-dig specification to any roof surface? Should we explicitly address roof surfaces at all? (See Section 8.6). Note that the diagram in Section 8.6.4 depicts a "true" roof prism, an Amici Roof Prism, as probably intended by MIL-PRF-13830B, and note that it is different than the diagram in version 2009 in which a Porro Prism is depicted. (See Section 3.1.5 of OP1.002-2009).

Should we clarify the nature of a default "clear aperture" as "planar"? (See Section 2.1.4.3.3 and Section 8.4).