



# Application Bulletin – Model 7.0 Solarmeter

Date: Feb 29, 2016

Model	Description	Yes	No
<p><b>7.0</b></p>	<p>MED/hr            Range 0-199.9 MED/hr</p> <p>Erythema-effective (Eeff/Ery) meter for measuring Minimal Erythema Dose per hour “sun burning rays” from both sun and UV lamps. Sensor/filter response closely follows the erythema action spectrum (EAS) which enables accurate readings from virtually any UV light source.</p> <p>Model 7.0 is set for 156 J/m<sup>2</sup> per MED based on FDA definition for tanning lamps. Upon request (at no price increase) the meter can be set at 210 J/m<sup>2</sup> per MED CIE definition, or 250 J/m<sup>2</sup> per MED EU and AU definition.</p> <p>Application Notes:</p> <ol style="list-style-type: none"> <li>1. Measure MED/hr from sun.</li> <li>2. Measure MED/hr from tanning lamps.</li> <li>3. Measure MED/hr from UV LEDs.</li> </ol> <p>Procedure:</p> <p>Press and hold push button switch while aiming top sensor at light source, or for sun straight up standing in the clear away from walls and trees outdoors.</p> <p>The reading represents instantaneous MED/hr intensity at the distance meter sensor is being held from the source. Moving the meter closer to UV source will increase reading. For solar readings, high altitude will increase the readings.</p> <p>Many factors influence outdoor MED/hr readings, e.g., latitude, time of day, season/date, haze in atmosphere, and the ozone the layer. Generally, a deep blue sky will have highest readings at any given date and time. Light pale blue sky readings are lower due primarily to humidity water vapor UV absorption.</p> <p>For UV lamps hold meter at location of exposure to determine intensity at the subject position of concern. When readings fall 25-30% below new readings the lamps need replacement.</p> <p>For USA tanning beds, divide MED/hr reading into 240 for max session time (Te) in minutes. The 240 represents 4 FDA MEDs max dose x 60 minutes.</p> <p>For EU and AU where 1 CIE MED of 250 J/m<sup>2</sup> is allowed, Divide MED/hr reading into 60 for max session time. The 60 represents 1 CIE MED x 60 min.</p>	<p>X</p> <p>X</p> <p>X</p>	