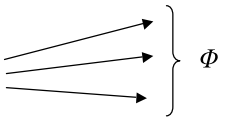
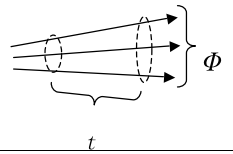
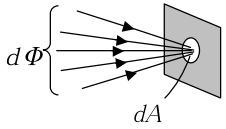
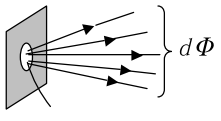
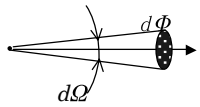
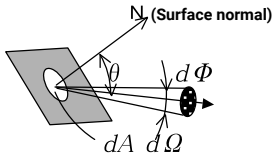
<<2>> Cited reference for Radiant Quantities, Luminous Quantities, and Sensor-metric Quantities
JIS Z 8120:2001 (Optical terminology), JIS Z 8113:1998 (lighting terms)

Conceptual Diagram	Radiant Quantities		Luminous Quantities		Sensor-metric Quantities	
	**Radiant flux** Φ_e	**Radiant energy per unit time** $\Phi_e = \int \phi_e(\lambda)\, d\lambda$ [W]	**Luminous flux** Φ_v	**Measure of radiant flux according to the standard spectral luminous efficiency V(λ) and maximum luminous efficacy K_m** $\Phi_V = K_m \int \phi_e(\lambda) \cdot V(\lambda) d\lambda$ [lm]	**Sensor-metric flux** Φ_S	**Measures the radiant flux according to the sensor spectral response S(λ)** $\Phi_S = k \int \phi_e(\lambda) \cdot S(\lambda) d\lambda$ **(k: Constant)** **[Arbitrary unit]**
	**Radiant energy** Q_e	**Radiation energy emitted, transmitted or received** $Q_e = \int \Phi_e dt$ [J] = [W・sec]	**Quantity of light** Q_v	**Time integral value of luminous flux** $Q_V = \int \Phi_V dt$ [lm・sec]	**Quantity of sensor-metric light** Q_s	**Time integral value of sensor-metric flux** $Q_S = \int \Phi_S dt$ **[Arbitrary unit・sec]**
	**Irradiance** E_e	**Radiant flux incident on a surface per unit area** $E_e = \frac{d\Phi_e}{dA}$ [W /m²]	**Illuminance** E_v	**Luminous flux incident on a surface per unit area** $E_V = \frac{d\Phi_V}{dA}$ [lx] = [lm /m²]	**Sensor-metric illuminance** E_s	**Sensor-metric flux incident on a surface per unit area** $E_S = \frac{d\Phi_S}{dA}$ **[Arbitrary unit / m²]**
	**Radiant exitance** M_e	**Radiant flux emitted by a surface per unit area** $M_e = \frac{d\Phi_e}{dA}$ [W /m²]	**Luminous exitance** M_v	**Luminous flux emitted by a surface per unit area** $M_V = \frac{d\Phi_V}{dA}$ [lm /m²]	**Sensor-metric exitance** M_s	**Sensor-metric flux emitted by a surface per unit area** $M_S = \frac{d\Phi_S}{dA}$ **[Arbitrary unit / m²]**
	**Radiant intensity** I_e	**Radiant flux per unit solid angle** $I_e = \frac{d\Phi_e}{d\Omega}$ [W / sr]	**Luminous intensity** I_v	**Luminous flux per unit solid angle** $I_V = \frac{d\Phi_V}{d\Omega}$ [cd] = [lm / sr]	**Sensor-metric intensity** I_s	**Sensor-metric flux per unit solid angle** $I_S = \frac{d\Phi_S}{d\Omega}$ **[Arbitrary unit / sr]**
	**Radiance** L_e	**Radiant flux emitted, reflected, transmitted or received by a surface, per unit solid angle per apparent unit area** $L_e = \frac{d^2\Phi_e}{d\Omega \cdot dA \cdot \cos\theta} = \frac{dI_e}{dA \cdot \cos\theta}$ [W / sr / m²]	**Luminance** L_v	**Luminous flux per unit solid angle per apparent unit area** $L_v = \frac{d^2\Phi_V}{d\Omega \cdot dA \cdot \cos\theta} = \frac{dI_V}{dA \cdot \cos\theta}$ [cd/m²] = [lm /sr/m²]	**Sensor-metric luminance** L_s	**Sensor-metric flux per unit solid angle per apparent unit area** $L_S = \frac{d^2\Phi_S}{d\Omega \cdot dA \cdot \cos\theta} = \frac{d\,I_S}{dA \cdot \cos\theta}$ **[Arbitrary unit / sr / m²]**