HC Verma Solutions Photometry

http://www.learncbse.in/photometry-hc-verma-concepts-physics-solutions/
https://goo.gl/NAvd63
https://goo.gl/nwsKTf
https://sites.google.com/site/aplustoppernotes/hc-verma-solutions-photometry
http://cbsetuts.blogspot.com/2018/01/hc-verma-solutions-photometry.html
https://goo.gl/zajFFt
https://goo.gl/JkD5YF
https://goo.gl/sQ4EHV

Photometry HC Verma Concepts of Physics Solutions

Photometry HC Verma Concepts of Physics Solutions Chapter 22

1. Radiant Flux = $\frac{\text{Total energy emitted}}{\text{Time}} = \frac{45}{15s} = 3W$
2. To get equally intense lines on the photographic plate, the radiant flux (energy) should be same.
   S0, 10W × 12sec = 12W × t
   $\Rightarrow t = \frac{10W \times 12\,sec}{12W} = 10$ sec.
3. it can be found out from the graph by the student.
4. Relative luminousity = $\frac{\text{Luminous flux of a source of given wavelength}}{\text{Luminous flux of a source of 555 nm of same power}}$
   Let the radiant flux needed be P watt.
   Ao, $0.6 = \frac{\text{Luminous flux of source 'P' watt}}{685\ P}$
   ∴ Luminous flux of the source = (685 P)× 0.6 = 120 × 685
   $\Rightarrow P = \frac{120}{0.6} = 200W$
5. The luminous flux of the given source of 1W is 450 lumen/watt
   ∴ Relative luminosity = $\frac{\text{Luminous flux of the source of given wavelength}}{\text{Luminous flux of 555 nm source of same power}} = \frac{450}{685} = 66\%$
   [∴ Since, luminous flux of 555nm source of 1W = 685 lumen]
6. The radiant flux of 555nm part is 40W and of the 600nm part is 30W
   (a) Total radiant flux = 40W + 30W = 70W
   (b) Luminous flux = $(L.Fllux)_{555nm} + (L.Flux)_{600nm}$
   = 1 × 40× 685 + 0.6 × 30 × 685 = 39730 lumen
   (c) Luminous efficiency = $\frac{\text{Total luminous flux}}{\text{Total radiant flux}} = \frac{39730}{70} = 567.6$ lumen/W

- HC Verma Solutions,
- HC Verma,
- Solution of HC Verma Concept of Physics,
- Concepts of Physics Part 1 - HC Verma Solutions,
- HC Verma Concepts of Physics Solutions part 1 and part 2,
- HC Verma Solutions For Physics,
- hc verma part 1 pdf,

- h.c verma solutions free download full book,
- hc verma part 2 pdf,
- hc verma objective solutions,
- hc verma short answer solutions pdf,
- Physics HC Verma 1 - Solutions,
- Chapter wise solutions to HC Verma's Concepts of Physics,
- HC Verma Solutions Both Parts,
- HC VERMA SOLUTIONS (CHAPTERWISE)

Read more about HC Verma Solutions Photometry