|  |  |  |  |
| --- | --- | --- | --- |
|  | **Position L1= 2m** | **Position L2= 4m** | **Position L3= 6m** |
| **L/D** | 80 | 160 | 240 |
| **Calculated flux** | **2.77e7** | **1.58e7** | **1e7** |
| **Simulated flux** | 4.38e9 / ( pi X (5.5)^2)  =  **4.6e7** | 4.38e9 / ( pi X (9.5)^2)  =  **1.54e7** | 4.38e9 / ( pi X (14)^2)  =  **7e6** |
| **Ratio Simu./Calc.** | ~ Double?? | ~ Same?? | ~ Half?? |

**\*5.5. 9.5, and 14 are beam sizes roughly at the 3 positions.**

**Calc. by equation: Ф = (Ф. /16) X (D/L)^2**

**Where:**

**Ф. =** 2.7e13 n/cm^2/sec

**D=** 2.5 cm

**L1,2,3 =** 417+(200,400,600) cm // “**3 positions”**

* **McStas detected rays intensity is fixed for all = 4.38e9 n/sec**
* **I followed same concept for all cases handling, any change “same touch” will affect all results simultaneously. I can’t find a reasonable justifications. Thank you.**