

141.3.1.1 Channel-to-wavelength mapping

Nx25G-EPON PMD provides multiple instances of the PMD service interface that connect to multiple PMA channels (see 142.x.x.x). Within the PMD sublayer, each instance of the PMD service interface maps to a specific pair of wavelengths. This mapping is different for the two coexistence classes, and shall be as illustrated in Table 141-xx for the OLT and in Table 141-xx for the ONU.

Table 141-xx – OLT Channel-to-wavelength mapping

| PMA channel | PMD service primitives | Wavelength (Coexistence class G) | Wavelength (Coexistence class X) |
|-------------|--|----------------------------------|----------------------------------|
| 0 | PMD_UNITDATA[0].request PMD_SIGNAL[0].request | DW0 | DW0 |
| | PMD_UNITDATA[0].indication PMD_SIGNAL[0].indication | UW0 | UW1 |
| 1 | PMD_UNITDATA[1].request PMD_SIGNAL[1].request | DW1 | DW1 |
| | PMD_UNITDATA[1].indication PMD_SIGNAL[1].indication | UW1 | UW2 |

Table 141-xx – ONU Channel-to-wavelength mapping

| PMA channel | PMD service primitives | Wavelength (Coexistence class G) | Wavelength (Coexistence class X) |
|-------------|--|----------------------------------|----------------------------------|
| 0 | PMD_UNITDATA[0].request PMD_SIGNAL[0].request | UW0 | UW1 |
| | PMD_UNITDATA[0].indication PMD_SIGNAL[0].indication | DW0 | DW0 |
| 1 | PMD_UNITDATA[1].request PMD_SIGNAL[1].request | UW1 | UW2 |
| | PMD_UNITDATA[1].indication PMD_SIGNAL[1].indication | DW1 | DW1 |

141.4 Wavelength channel allocation

Downstream channel wavelength assignments are defined in Table 141–11. Upstream channel wavelength assignments are defined in Table 141–12.

Table 141-11—Downstream ~~channel~~ wavelength assignments

| Wavelength Name | Center wavelength (nm) | Wavelength range (nm) |
|-----------------|------------------------|-----------------------|
| DW0 | 1358 | ±2 |
| DW1 | 1342 | ±2 |

Table 141-12—Upstream ~~channel~~ wavelength assignments

| Wavelength Name | Center wavelength (nm) | Wavelength range (nm) |
|-----------------|------------------------|-----------------------|
| UW0 | 1270 | ±10 |
| UW1 | 1300 | ±10 |
| UW2 | 1320 | ±2 |