Annex 4A
(normative)
Protocol implementation conformance statement (PICS) for Package A

4A.1 Introduction

4A.2 ONU-specific PICS

4A.2.10 Management

Item	Description	Subclause	Value/Comment	Status	Support
AU-MG0a	Implements management	Table 4-1	ONU implements management per 13.4.	M	[ ] Yes
AU-MG0b	Management	13.4	Implement ONU management as defined in DPoE-SP-OAM.	M	[ ] Yes
AU-MG1a	eOAMPDU Frame Format	13.4.1.1	Meets the requirements of Table 13-80.	M	[ ] Yes
AU-MG1b	eOAMPDU Frame Format (fields)	13.4.1.1	Meets the requirements as listed in 13.4.1.1.	M	[ ] Yes
AU-MG2	TLV sequence terminator	13.4.1.2	A series of TLVs carried in any of the *eOAM_Get_Request*, *eOAM_Get_Response*, *eOAM_Set_Request*, or *eOAM_Set_Response* eOAMPDUs is terminated with the Variable Descriptor with values carried in the Branch and Leaf fields equal to 0.	M	[ ] Yes
AU-MG3	Variable Descriptor TLV format	13.4.1.2.1	Meets the requirements of Table 13-81.	M	[ ] Yes
AU-MG4a	Variable Container TLV format	13.4.1.2.2	Meets the requirements of Table 13-82.	M	[ ] Yes
AU-MG4b	Variable Container TLV format (integer)	13.4.1.2.2	Represented in the two's-complement form, with the Most Significant Octet (MSO) first.	M	[ ] Yes
AU-MG4c	Variable Container TLV format (integer, length)	13.4.1.2.2	Destination OAM client accepts an integer in a Variable Container of any legal width (1..128 octets).	M	[ ] Yes
AU-MG4d	Variable Container TLV format (enumerated value)	13.4.1.2.2	Source OAM client does not suppress trailing zeros for enumerated values.	M	[ ] Yes
AU-MG4e	Variable Container TLV format (enumerated value)	13.4.1.2.2	Destination OAM client does not add trailing zeros for enumerated values.	M	[ ] Yes
AU-MG4f	Variable Container TLV format (sequence list)	13.4.1.2.2	All elements in the sequence list are of the same length.	M	[ ] Yes
AU-MG4g	Variable Container TLV format (sequence list)	13.4.1.2.2	Number of elements in the sequence list is determined based on size of the given Variable Container.	M	[ ] Yes
AU-MG5a	*Extended Information* TLV format	13.4.1.3.1	Meets the requirements of Table 13-83.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AU-MG5b	*Extended Information* TLV structure (OUI)	13.4.1.3.1	At least one of the *Organization Specific Information* TLVs exchanged between the ONU and the OLT during the eOAM discovery process is of *Extended Information* TLV type, containing the OUI_A.	M	[ ] Yes
AU-MG6a	*Event Notification* TLV format	13.4.1.3.2	Meets the requirements, as listed in 13.4.1.3.2 and shown in Figure 13-8.	M	[ ] Yes
AU-MG6b	Organization Specific Value format	13.4.1.3.2	Meets the requirements per Table 13-84.	M	[ ] Yes
AU-MG7a	Multipart eOAMPDU response sequence (obligation to notify)	13.4.1.4	ONU informs the OLT that the complete response to the original request was not sent in a single eOAMPDU, but rather in a series of eOAMPDUs.	M	[ ] Yes
AU-MG7b	Multipart eOAMPDU response sequence (notification mechanism)	13.4.1.4	ONU adds an instance of the *Sequence* TLV (0xD7/0x00-01) to the response eOAMPDU to denote the response sequence.	M	[ ] Yes
AU-MG7c	Single-part eOAMPDU response sequence (notification mechanism)	13.4.1.4	ONU does not add an instance of the *Sequence* TLV (0xD7/0x00-01) to the response eOAMPDU to denote the response sequence.	O	[ ] Yes [ ] No
AU-MG8	eOAMPDU Type codes	13.4.2.1	Assignment of eOAMPDU type code meets the requirements of Table 13-87.	M	[ ] Yes
AU-MG9	*eOAM_Get_Request* eOAMPDU type	13.4.2.2	Meets the requirements per Table 13-88.	M	[ ] Yes
AU-MG10	*eOAM_Get_Response* eOAMPDU type	13.4.2.3	Meets the requirements per Table 13-89.	M	[ ] Yes
AU-MG11	*eOAM_Set_Request* eOAMPDU type	13.4.2.4	Meets the requirements per Table 13-90.	M	[ ] Yes
AU-MG12	*eOAM_Set_Response* eOAMPDU type	13.4.2.5	Meets the requirements per Table 13-91.	M	[ ] Yes
~~AU-MG13~~	~~*eOAM_MC_Control* eOAMPDU type~~	~~13.4.2.6~~	~~Meets the requirements per Table 13-92.~~	~~M~~	~~[ ] Yes~~
~~AU-MG14~~	~~*eOAM_MC_Register* eOAMPDU type~~	~~13.4.2.7~~	~~Meets the requirements per Table 13-93.~~	~~M~~	~~[ ] Yes~~
~~AU-MG15~~	~~*eOAM_MC_Response* eOAMPDU type~~	~~13.4.2.8~~	~~Meets the requirements per Table 13-94.~~	~~M~~	~~[ ] Yes~~
AU-MG16a	*eOAM_KeyExchange* eOAMPDU structure	13.4.2.11.1	Meets the requirements per Table 13-102.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AU-MG16b	*eOAM_KeyExchange_Assign* eOAMPDU type	13.4.2.11.2	Meets the requirements per Table 13-103.	M	[ ] Yes
AU-MG16c	*eOAM_KeyExchange_ACK* eOAMPDU type	13.4.2.11.3	Meets the requirements per Table 13-104.	M	[ ] Yes
AU-MG17a	*eOAM_Software* eOAMPDU structure	13.4.2.10.1	Meets the requirements per Table 13-96.	M	[ ] Yes
AU-MG17b	*eOAM_Software_WriteRequest* eOAMPDU type	13.4.2.10.2	Meets the requirements per Table 13-98.	M	[ ] Yes
AU-MG17c	*eOAM_Software_FileTransferData* eOAMPDU type	13.4.2.10.3	Meets the requirements per Table 13-99.	M	[ ] Yes
AU-MG17d	*eOAM_Software_FileTransferAck* eOAMPDU type	13.4.2.10.4	Meets the requirements per Table 13-100.	M	[ ] Yes
~~AU-MG18~~	~~*eOAM_MC_ACK* eOAMPDU type~~	~~13.4.2.9~~	~~Meets the requirements per Table 13-95.~~	~~M~~	~~[ ] Yes~~
AU-MG19	*eOAM_Early_WakeUpOLT* eOAMPDU type	13.4.2.11	Meets the requirements per Table 13-105.	M	[ ] Yes
AU-MG20	*eOAM_Early_WakeUpONU* eOAMPDU type	13.4.2.13	Meets the requirements per Table 13-106.	M	[ ] Yes
AU-MG21	*eOAM_Sleep_Allowed* eOAMPDU type	13.4.2.14	Meets the requirements per Table 13-107.	M	[ ] Yes
AU-MG22	eOAMPDU return codes	13.4.3	Codes as listed in Table 13-108	M	[ ] Yes
AU-MG23a	Use of return codes (*eOAM_Set_Request* eOAMPDU)	13.4.3	ONU to provide exactly one TLV with the return code for each attribute/action TLV included in the received *eOAM_Set_Request* eOAMPDU.	M	[ ] Yes
AU-MG23b	Use of return codes (*eOAM_Get_Request* eOAMPDU)	13.4.3	ONU to provide either exactly one TLV with the return code or at least one TLV with the value of the requested attribute for each attribute TLV included in the received *eOAM_Get_Request* eOAMPDU.	M	[ ] Yes
AU-MG23c	Use of *Object Context* TLV	13.4.3	Precede the TLV that contains a return code with the *Object Context* TLV. The *Object Context* TLV has the same code as was used by the TLV that caused the given response.	M	[ ] Yes
AU-MG23d	Spanning response codes across multiple *eOAM_Set_Response* eOAMPDUs	13.4.3	If the series of return codes to the given TLVs in the *eOAM_Set_Request* eOAMPDU does not fit into one *eOAM_Set_Response* eOAMPDU, the remaining part of the series of return codes is preceded by the appropriate *Object Context* TLV.	M	[ ] Yes

4A.2.1 Device and capability discovery

Item	Description	Subclause	Value/Comment	Status	Support
AU-DCD0	Implements device and capability discovery	Table 4-1	ONU implements device and capability discovery per 12.2.3.	M	[ ] Yes
AU-DCD1a	eOAM discovery (implementation)	12.2.3.2.1	Implemented through exchange of *Organization Specific Information* TLVs, as defined in IEEE Std 802.3, 57.5.2.3, and further specified in 13.4.1.3.1, referred to as *Extended Information* TLVs, embedded in the *Information* OAMPDU, as defined in IEEE Std 802.3, 57.4.3.1.	M	[ ] Yes
AU-DCD1b	eOAM discovery (implementation)	12.2.3.2.1	ONU includes the *Extended Information* TLV in all *Information* OAMPDUs exchanged during the eOAM discovery process phase.	M	[ ] Yes
AU-DCD1c	eOAM discovery (start)	12.2.3.2.1	ONU starts the eOAM discovery process not later than 5 seconds after the successful completion of the MPCP discovery and registration process.	M	[ ] Yes
AU-DCD2	Ordering *Organization Specific Information* TLVs (source)	12.2.3.2.2.1	*Local Information* TLV and *Remote Information* TLV are transmitted first, followed by *Organization Specific Information* TLVs.	M	[ ] Yes
AU-DCD3a	Ordering *Organization Specific Information* TLVs (destination)	12.2.3.2.2.2	Support multiple *Information* TLVs in a single *Information* OAMPDU, including *Local Information* TLV, *Remote Information* TLV, and at least one *Organization Specific Information* TLV.	M	[ ] Yes
AU-DCD3b	Processing order	12.2.3.2.2.2	Process all received *Information* TLVs in the order of their reception, discarding any *Information* TLVs which are either malformed or unsupported.	M	[ ] Yes
AU-DCD4	OAM and eOAM Keep-alive Process	12.2.3.3	ONU goes through the MPCP deregistration process, as defined in IEEE Std 802.3, Clause 64 for 1G-EPON and Clause 77 for 10G-EPON.	M	[ ] Yes

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4A.2.2 Software update

Item	Description	Subclause	Value/Comment	Status	Support
AU-SU0	Implements software update	Table 4-1	ONU implements software update per 12.3.3.	M	[ ] Yes
AU-SU1	ONU maintains software image on download failure	12.3.3.1.2	If the software image downloading process is aborted, the ONU retains the software image that existed in the ONU prior to the failed download attempt.	M	[ ] Yes

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~~Item~~	~~Description~~	~~Subclause~~	~~Value/Comment~~	~~Status~~	~~Support~~
~~AU-SU2~~	~~ONU maintains software image on committing failure~~	~~12.3.3.1.4~~	~~If the software image committing process is aborted, the ONU retains the software image that existed in the ONU prior to the failed committing attempt.~~	~~M~~	~~[ ] Yes~~
~~AU-SU3~~	~~ONU software update processes~~	~~12.3.3.2.6~~	~~Implement the software image download process as shown in Figure 12-21.~~	~~M~~	~~[ ] Yes~~

4A.2.13 Management entities

Item	Description	Subclause	Value/Comment	Status	Support
AU-ME0a	Implements management entities	Table 4-1	ONU implements management entities per 14.4.	M	[ ] Yes
AU-ME0b	Management entities	14.4	Implement management entities, as defined in 14.4.	M	[ ] Yes
AU-ME1a	*Object Context*	14.4.1.1	Meets the requirements of Table 14-124.	M	[ ] Yes
AU-ME1b	Source OAM Client (set object context)	14.4.1.1	The source OAM Client sets the proper context, as specified for each attribute and action in 14.4.2 – 14.4.6 using the *Object Context* TLV.	M	[ ] Yes
AU-ME1c	Source OAM Client (maintain object context)	14.4.1.1	The source OAM Client does not insert the *Object Context* TLV in front of Variable Container TLVs or Variable Descriptor TLVs if the proper context is already set, either explicitly via an earlier *Object Context* TLV or implicitly, as a default object context.	O	[ ] Yes [ ] No
AU-ME1d	Destination OAM Client (default object context)	14.4.1.1	Until the first *Object Context* TLV is encountered in the received eOAMPDU, the destination OAM Client uses the LLID on which the eOAMPDU was received as the object context.	M	[ ] Yes
AU-ME1e	Destination OAM Client (maintain object context)	14.4.1.1	The destination OAM Client applies the current object context to all subsequent Variable Container TLVs and Variable Descriptor TLVs until another *Object Context* TLV is encountered.	M	[ ] Yes
AU-ME2a	ObjectType	14.4.1.1.1	Supports values per Table 14-125.	M	[ ] Yes
AU-ME2b	Action for reserved ObjectType value	14.4.1.1.1	When the destination OAM Client encounters an *Object Context* TLV carrying one of the reserved ObjectType values, the destination OAM Client discards this *Object Context* TLV and all the subsequent TLVs present in the same eOAMPDU until it encounters another *Object Context* TLV with one of the supported values.	M	[ ] Yes
AU-ME3a	ObjectInstance value (ONU object)	14.4.1.1.2.1	Instance number for the ONU ObjectType is equal to 0x00, per Table 14-126.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AU-ME3b	ObjectInstance value (PON Port object)	14.4.1.1.2.2	Instance number for the PON Port ObjectType starts with 0x00 up to the value of N−1, where N represents the total number of PON Port interfaces, per Table 14-127.	M	[ ] Yes
AU-ME3c	ObjectInstance value (LLID object)	14.4.1.1.2.3	Instance number for the LLID ObjectType starts with 0x00 up to the value of N−1, where N represents the total number of supported LLIDs, per Table 14-128.	M	[ ] Yes
AU-ME3d	ObjectInstance value (UNI Port object)	14.4.1.1.2.4	Instance number for the UNI Port ObjectType starts with 0x00 up to the value of N−1, where N represents the total number of supported UNIs, per Table 14-129.	M	[ ] Yes
AU-ME3f	ObjectInstance value (Queue object)	14.4.1.1.2.5	Instance number for the Queue ObjectType starts with 0x00 up to the value of N−1, where N represents the total number of supported queues, per Table 14-130.	M	[ ] Yes
AU-ME4	Supported standard attributes	14.4.2	Per Table 14-131	M	[ ] Yes
AU-ME5	Supported extended attributes	14.4.3	Per Table 14-132	M	[ ] Yes
AU-ME6	*Sequence* TLV (0xD7/0x00-01)	14.4.3.1.1	Meets the requirements of Table 14-133.	M	[ ] Yes
AU-ME7	*ONU ID* TLV (0xD7/0x00-02)	14.4.3.1.2	Meets the requirements of Table 14-134.	M	[ ] Yes
AU-ME8	*ONU Firmware Version* TLV (0xD7/0x00-03)	14.4.3.1.3	Meets the requirements of Table 14-135.	M	[ ] Yes
AU-ME9	*ONU Chipset ID* TLV (0xD7/0x00-04)	14.4.3.1.4	Meets the requirements of Table 14-136.	M	[ ] Yes
AU-ME10	*ONU Date of Manufacture* TLV (0xD7/0x00-05)	14.4.3.1.5	Meets the requirements of Table 14-137.	M	[ ] Yes
AU-ME11	*ONU Manufacturer Info* TLV (0xD7/0x00-06)	14.4.3.1.6	Meets the requirements of Table 14-138.	M	[ ] Yes
AU-ME12	*ONU L-ONU Count* TLV (0xD7/0x00-07)	14.4.3.1.7	Meets the requirements of Table 14-139.	M	[ ] Yes
AU-ME13	*ONU PON Port Count* TLV (0xD7/0x00-08)	14.4.3.1.8	Meets the requirements of Table 14-140.	M	[ ] Yes
AU-ME14	*ONU UNI Port Count* TLV (0xD7/0x00-09)	14.4.3.1.9	Meets the requirements of Table 14-141.	M	[ ] Yes
AU-ME15	*ONU Packet Buffer* TLV (0xD7/0x00-0A)	14.4.3.1.10	Meets the requirements of Table 14-142.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AU-ME16	*REPORT Threshold* TLV (0xD7/0x00-0B)	14.4.3.1.11	Meets the requirements of Table 14-143.	M	[ ] Yes
AU-ME17	*L-ONU Forwarding State* TLV (0xD7/0x00-0C)	14.4.3.1.12	Meets the requirements of Table 14-144.	M	[ ] Yes
AU-ME18	*OAM Frame Rate* TLV (0xD7/0x00-0D)	14.4.3.1.13	Meets the requirements of Table 14-145.	M	[ ] Yes
AU-ME19	*Dynamic Learning Table Size* TLV (0xD7/0x01-01)	14.4.3.2.1	Meets the requirements of Table 14-149.	M	[ ] Yes
AU-ME20	*Dynamic Address Age Limit* TLV (0xD7/0x01-02)	14.4.3.2.2	Meets the requirements of Table 14-150.	M	[ ] Yes
AU-ME21	*Dynamic Address MAC Table* TLV (0xD7/0x01-03)	14.4.3.2.3	Meets the requirements of Table 14-151.	M	[ ] Yes
AU-ME22	*Static Address MAC Table* TLV (0xD7/0x01-04)	14.4.3.2.4	Meets the requirements of Table 14-152.	M	[ ] Yes
AU-ME23	*UNI Port Auto-Negotiation* TLV (0xD7/0x01-05)	14.4.3.2.5	Meets the requirements of Table 14-154.	M	[ ] Yes
AU-ME24	*Source Address Admission Control* TLV (0xD7/0x01-06)	14.4.3.2.6	Meets the requirements of Table 14-155.	M	[ ] Yes
AU-ME25	*MAC Learning Min Guarantee* TLV (0xD7/0x01-07)	14.4.3.2.7	Meets the requirements of Table 14-156.	M	[ ] Yes
AU-ME26	*MAC Learning Max Allowed* TLV (0xD7/0x01-08)	14.4.3.2.8	Meets the requirements of Table 14-157.	M	[ ] Yes
AU-ME27	*MAC Learning Aggregate Limit* TLV (0xD7/0x01-09)	14.4.3.2.9	Meets the requirements of Table 14-158.	M	[ ] Yes
AU-ME28	*Length Error Discard* TLV (0xD7/0x01-0A)	14.4.3.2.10	Meets the requirements of Table 14-159.	M	[ ] Yes
AU-ME29	*Flood Unknown* TLV (0xD7/0x01-0B)	14.4.3.2.11	Meets the requirements of Table 14-160.	M	[ ] Yes
AU-ME30	*Local Switching* TLV (0xD7/0x01-0C)	14.4.3.2.12	Meets the requirements of Table 14-161.	M	[ ] Yes
AU-ME31a	*L-ONU and Queue Configuration* TLV (0xD7/0x01-0D)	14.4.3.2.13	Meets the requirements of Table 14-162.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AU-ME31b	Read of *aOnuLlidQueueConfig. sLlidQueCount*	14.4.3.2.13	ONU returns the value of 0x01 on read of this sub-attribute.	M	[ ] Yes
AU-ME31c	Write into *aOnuLlidQueueConfig. sLlidQueCount*	14.4.3.2.13	ONU ignores attempts to write a value other than 0x01 into this sub-attribute.	M	[ ] Yes
AU-ME31d	Change of queue number and queue size for L-ONUs/queues with assigned rules	14.4.3.2.13	The ONU ignores the *L-ONU and Queue Configuration* TLV (0xD7/0x01-0D) requesting the deletion of or changing the size of any queues if there exist Classifier rules that use those queues.	M	[ ] Yes
AU-ME32a	*Firmware Filename* TLV (0xD7/0x01-0E)	14.4.3.2.14	Meets the requirements of Table 14-163.	M	[ ] Yes
AU-ME32b	On reset	14.4.3.2.14	ONU retains the value of *aOnuFwFileName* attribute across reset.	M	[ ] Yes
AU-ME33	*MAC Table Full Behavior* TLV (0xD7/0x01-0F)	14.4.3.2.15	Meets the requirements of Table 14-164.	M	[ ] Yes
AU-ME34a	*RX Frames Green* TLV (0xD7/0x02-01)	14.4.3.3.1	Meets the requirements of Table 14-165.	M	[ ] Yes
AU-ME34b	Reset of counter	14.4.3.3.1	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME35a	*TX Frames Green* TLV (0xD7/0x02-02)	14.4.3.3.2	Meets the requirements of Table 14-166.	M	[ ] Yes
AU-ME35b	Reset of counter	14.4.3.3.2	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME36a	*RX Frames Too Short* TLV (0xD7/0x02-03)	14.4.3.3.3	Meets the requirements of Table 14-167.	M	[ ] Yes
AU-ME36b	Reset of counter	14.4.3.3.3	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME37a	*RX Frames 64 Octets* TLV (0xD7/0x02-04)	14.4.3.3.3	Meets the requirements of Table 14-168.	M	[ ] Yes
AU-ME37b	Reset of counter	14.4.3.3.3	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME38a	*RX Frames 65–127 Octets* TLV (0xD7/0x02-05)	14.4.3.3.3	Meets the requirements of Table 14-169.	M	[ ] Yes
AU-ME38b	Reset of counter	14.4.3.3.3	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AU-ME39a	*RX Frames 128–255 Octets* TLV (0xD7/0x02-06)	14.4.3.3.6	Meets the requirements of Table 14-170.	M	[ ] Yes
AU-ME39b	Reset of counter	14.4.3.3.6	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME40a	*RX Frames 256–511 Octets* TLV (0xD7/0x02-07)	14.4.3.3.7	Meets the requirements of Table 14-171.	M	[ ] Yes
AU-ME40b	Reset of counter	14.4.3.3.7	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME41a	*RX Frames 512–1023 Octets* TLV (0xD7/0x02-08)	14.4.3.3.8	Meets the requirements of Table 14-172.	M	[ ] Yes
AU-ME41b	Reset of counter	14.4.3.3.8	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME42a	*RX Frames 1024–1518 Octets* TLV (0xD7/0x02-09)	14.4.3.3.9	Meets the requirements of Table 14-173.	M	[ ] Yes
AU-ME42b	Reset of counter	14.4.3.3.9	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME43a	*RX Frames 1519 Octets* TLV (0xD7/0x02-0A)	14.4.3.3.10	Meets the requirements of Table 14-174.	M	[ ] Yes
AU-ME43b	Reset of counter	14.4.3.3.10	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME44a	*TX Frames 64 Octets* TLV (0xD7/0x02-0B)	14.4.3.3.11	Meets the requirements of Table 14-175.	M	[ ] Yes
AU-ME44b	Reset of counter	14.4.3.3.11	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME45a	*TX Frames 65–127 Octets* TLV (0xD7/0x02-0C)	14.4.3.3.12	Meets the requirements of Table 14-176.	M	[ ] Yes
AU-ME45b	Reset of counter	14.4.3.3.12	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME46a	*TX Frames 128–255 Octets* TLV (0xD7/0x02-0D)	14.4.3.3.13	Meets the requirements of Table 14-177.	M	[ ] Yes
AU-ME46b	Reset of counter	14.4.3.3.13	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME47a	*TX Frames 256–511 Octets* TLV (0xD7/0x02-0E)	14.4.3.3.14	Meets the requirements of Table 14-178.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AU-ME47b	Reset of counter	14.4.3.3.14	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME48a	*TX Frames 512–1023 Octets* TLV (0xD7/0x02-0F)	14.4.3.3.15	Meets the requirements of Table 14-179.	M	[ ] Yes
AU-ME48b	Reset of counter	14.4.3.3.15	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME49a	*TX Frames 1024–1518 Octets* TLV (0xD7/0x02-10)	14.4.3.3.16	Meets the requirements of Table 14-180.	M	[ ] Yes
AU-ME49b	Reset of counter	14.4.3.3.16	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME50a	*TX Frames 1519 Octets* TLV (0xD7/0x02-11)	14.4.3.3.17	Meets the requirements of Table 14-181.	M	[ ] Yes
AU-ME50b	Reset of counter	14.4.3.3.17	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME51	*Delay Threshold* TLV (0xD7/0x02-12)	14.4.3.3.18	Meets the requirements of Table 14-182.	M	[ ] Yes
AU-ME52a	*Delay* TLV (0xD7/0x02-13)	14.4.3.3.19	Meets the requirements of Table 14-183.	M	[ ] Yes
AU-ME52b	Reset of attribute	14.4.3.3.19	ONU resets this attribute to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME53a	*Frames Dropped* TLV (0xD7/0x02-14)	14.4.3.3.20	Meets the requirements of Table 14-184.	M	[ ] Yes
AU-ME53b	Reset of counter	14.4.3.3.20	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME54a	*Octets Dropped* TLV (0xD7/0x02-15)	14.4.3.3.21	Meets the requirements of Table 14-185.	M	[ ] Yes
AU-ME54b	Reset of counter	14.4.3.3.21	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME55a	*Octets Delayed* TLV (0xD7/0x02-16)	14.4.3.3.22	Meets the requirements of Table 14-186.	M	[ ] Yes
AU-ME55b	Reset of counter	14.4.3.3.22	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME56a	*Upstream Octets Unused* TLV (0xD7/0x02-17)	14.4.3.3.23	Meets the requirements of Table 14-187.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AU-ME56b	Reset of attribute	14.4.3.3.23	ONU resets this attribute to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME62a	*Optical Monitoring Temperature* TLV (0xD7/0x02-1D)	14.4.3.3.24	Meets the requirements of Table 14-188.	M	[ ] Yes
AU-ME62b	Reset of attribute	14.4.3.3.24	ONU resets this attribute to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME63a	*Optical Monitoring VCC* TLV (0xD7/0x02-1E)	14.4.3.3.25	Meets the requirements of Table 14-189.	M	[ ] Yes
AU-ME63b	Reset of attribute	14.4.3.3.25	ONU resets this attribute to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME64a	*Optical Monitoring Tx Bias Current* TLV (0xD7/0x02-1F)	14.4.3.3.26	Meets the requirements of Table 14-190.	M	[ ] Yes
AU-ME64b	Reset of attribute	14.4.3.3.26	ONU resets this attribute to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME65a	*Optical Monitoring Tx Power* TLV (0xD7/0x02-20)	14.4.3.3.27	Meets the requirements of Table 14-191.	M	[ ] Yes
AU-ME65b	Reset of attribute	14.4.3.3.27	ONU resets this attribute to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME66a	*Optical Monitoring Rx Power* TLV (0xD7/0x02-21)	14.4.3.3.28	Meets the requirements of Table 14-192.	M	[ ] Yes
AU-ME66b	Reset of attribute	14.4.3.3.28	ONU resets this attribute to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME67a	*Rx Frames Yellow* TLV (0xD7/0x02-22)	14.4.3.3.29	Meets the requirements of Table 14-193.	M	[ ] Yes
AU-ME67b	Reset of counter	14.4.3.3.29	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME68a	*Tx Frames Yellow* TLV (0xD7/0x02-23)	14.4.3.3.30	Meets the requirements of Table 14-194.	M	[ ] Yes
AU-ME68b	Reset of counter	14.4.3.3.30	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME69a	*Tx Octets Green* TLV (0xD7/0x02-24)	14.4.3.3.31	Meets the requirements of Table 14-195.	M	[ ] Yes
AU-ME69b	Reset of counter	14.4.3.3.31	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AU-ME70a	*Rx Octets Yellow* TLV (0xD7/0x02-25)	14.4.3.3.32	Meets the requirements of Table 14-196.	M	[ ] Yes
AU-ME70b	Reset of counter	14.4.3.3.32	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME71a	*Rx Octets Green* TLV (0xD7/0x02-26)	14.4.3.3.33	Meets the requirements of Table 14-197.	M	[ ] Yes
AU-ME71b	Reset of counter	14.4.3.3.33	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME72a	*Tx Octets Yellow* TLV (0xD7/0x02-27)	14.4.3.3.34	Meets the requirements of Table 14-198.	M	[ ] Yes
AU-ME72b	Reset of counter	14.4.3.3.34	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME73a	*Tx Frames Layer 2 Unicast* TLV (0xD7/0x02-28)	14.4.3.3.35	Meets the requirements of Table 14-199.	M	[ ] Yes
AU-ME73b	Reset of counter	14.4.3.3.35	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME74a	*Tx Frames Layer 2 Multicast* TLV (0xD7/0x02-29)	14.4.3.3.36	Meets the requirements of Table 14-200.	M	[ ] Yes
AU-ME74b	Reset of counter	14.4.3.3.36	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME75a	*Tx Frames Layer 2 Broadcast* TLV (0xD7/0x02-2A)	14.4.3.3.37	Meets the requirements of Table 14-201.	M	[ ] Yes
AU-ME75b	Reset of counter	14.4.3.3.37	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME76a	*Rx Frames Layer 2 Unicast* TLV (0xD7/0x02-2B)	14.4.3.3.38	Meets the requirements of Table 14-202.	M	[ ] Yes
AU-ME76b	Reset of counter	14.4.3.3.38	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME77a	*Rx Frames Layer 2 Multicast* TLV (0xD7/0x02-2C)	14.4.3.3.39	Meets the requirements of Table 14-203.	M	[ ] Yes
AU-ME77b	Reset of counter	14.4.3.3.39	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME78a	*Rx Frames Layer 2 Broadcast* TLV (0xD7/0x02-2D)	14.4.3.3.40	Meets the requirements of Table 14-204.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AU-ME78b	Reset of counter	14.4.3.3.40	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME79	*Counter Number* TLV (0xD7/0x02-2E)	14.4.3.3.41	Meets the requirements of Table 14-205.	M	[ ] Yes
AU-ME80a	*L2CP Frames Rx* TLV (0xD7/0x02-2F)	14.4.3.3.42	Meets the requirements of Table 14-206.	M	[ ] Yes
AU-ME80b	Reset of counter	14.4.3.3.42	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME81a	*L2CP Octets Rx* TLV (0xD7/0x02-30)	14.4.3.3.43	Meets the requirements of Table 14-207.	M	[ ] Yes
AU-ME81b	Reset of counter	14.4.3.3.43	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME82a	*L2CP Frames Tx* TLV (0xD7/0x02-31)	14.4.3.3.44	Meets the requirements of Table 14-208.	M	[ ] Yes
AU-ME82b	Reset of counter	14.4.3.3.44	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME83a	*L2CP Octets Tx* TLV (0xD7/0x02-32)	14.4.3.3.45	Meets the requirements of Table 14-209.	M	[ ] Yes
AU-ME83b	Reset of counter	14.4.3.3.45	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME84a	*L2CP Frames Discarded* TLV (0xD7/0x02-33)	14.4.3.3.46	Meets the requirements of Table 14-210.	M	[ ] Yes
AU-ME84b	Reset of counter	14.4.3.3.46	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME85a	*L2CP Octets Discarded* TLV (0xD7/0x02-34)	14.4.3.3.47	Meets the requirements of Table 14-211.	M	[ ] Yes
AU-ME85b	Reset of counter	14.4.3.3.47	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME86a	*L2 Tx Errors* TLV (0xD7/0x02-35)	14.4.3.3.48	Meets the requirements of Table 14-212.	M	[ ] Yes
AU-ME86b	Reset of counter	14.4.3.3.48	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME87a	*L2 Rx Errors* TLV (0xD7/0x02-36)	14.4.3.3.49	Meets the requirements of Table 14-213.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AU-ME87b	Reset of counter	14.4.3.3.49	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME88	*Port Stat Threshold* TLV (0xD7/0x03-01)	14.4.3.4.1	Meets the requirements of Table 14-214.	M	[ ] Yes
AU-ME89	*L-ONU Stat Threshold* TLV (0xD7/0x03-02)	14.4.3.4.2	Meets the requirements of Table 14-215.	M	[ ] Yes
AU-ME90a	*Alarm Status Control* TLV (0xD7/0x03-03)	14.4.3.4.3	Meets the requirements of Table 14-216.	M	[ ] Yes
AU-ME90b	Disable event signaling	14.4.3.4.3	ONU does not signal this alarm using the *Event Notification* TLV when the given alarm is disabled.	M	[ ] Yes
AU-ME91	*Encryption Key Expiry Time* TLV (0xD7/0x04-01)	14.4.3.5.1	Meets the requirements of Table 14-217.	M	[ ] Yes
AU-ME92	*Encryption Mode* TLV (0xD7/0x04-02)	14.4.3.5.2	Meets the requirements of Table 14-218.	M	[ ] Yes
AU-ME93a	*Port Ingress Rule* TLV (0xD7/0x05-01)	14.4.3.6.1.3	Meets the requirements of Table 14-219.	M	[ ] Yes
AU-ME93b	*sClause* sub-attribute structure	14.4.3.6.1.3	Meets the requirements of Table 14-220.	M	[ ] Yes
AU-ME93c	*sResult* sub-attribute for the frame actions `NOP`, `DISCARD`, and `FORWARD`	14.4.3.6.1.3	Meets the requirements of Table 14-221.	M	[ ] Yes
AU-ME93d	*sResult* sub-attribute for the frame action `QUEUE`	14.4.3.6.1.3	Meets the requirements of Table 14-222.	M	[ ] Yes
AU-ME93e	*sResult* sub-attribute for the frame action `SET`	14.4.3.6.1.3	Meets the requirements of Table 14-223.	M	[ ] Yes
AU-ME93f	*sResult* sub-attribute for the frame action `COPY`	14.4.3.6.1.3	Meets the requirements of Table 14-224.	M	[ ] Yes
AU-ME93g	*sResult* sub-attribute for the frame actions `DELETE`, `INSERT`, `REPLACE`, `CLEAR_DELETE`, and `CLEAR_INSERT`	14.4.3.6.1.3	Meets the requirements of Table 14-225.	M	[ ] Yes
AU-ME93h	*sResult* sub-attribute for the frame action `INC_COUNTER`	14.4.3.6.1.3	Meets the requirements of Table 14-226.	M	[ ] Yes
AU-ME98a	*Custom Field* TLV (0xD7/0x05-02)	14.4.3.6.2	Meets the requirements of Table 14-228.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AU-ME98b	Write into *aRuleCustomField.sReferenceCount* sub-attribute	14.4.3.6.2	ONU ignores any request to write a value into this sub-attribute.	M	[ ] Yes
AU-ME99	*Alternative C-VLAN TPID* TLV(0xD7/0x05-03)	14.4.3.6.3	Meets the requirements of Table 14-239.	M	[ ] Yes
AU-ME100	*Alternative S-VLAN TPID* TLV (0xD7/0x05-04)	14.4.3.6.4	Meets the requirements of Table 14-240.	M	[ ] Yes
AU-ME101a	*Broadcast Rate Limit* TLV (0xD7/0x06-01)	14.4.3.7.1	Meets the requirements of Table 14-244.	M	[ ] Yes
AU-ME101b	Disable broadcast frame limitation function	14.4.3.7.1	ONU disables the broadcast frame limitation function for the given UNI port on the write of the value of 0xFF-FF into this attribute.	M	[ ] Yes
AU-ME102	*Queue Committed Information Rate* TLV (0xD7/0x06-04)	14.4.3.7.2	Meets the requirements of Table 14-245.	M	[ ] Yes
AU-ME103a	*FEC Mode* TLV (0xD7/0x06-05)	14.4.3.7.3	Meets the requirements of Table 14-246.	M	[ ] Yes
AU-ME103b	FEC for downstream 10 Gb/s links (read)	14.4.3.7.3	Enabled for downstream 10 Gb/s links	M	[ ] Yes
AU-ME103c	FEC for downstream 10 Gb/s links (write)	14.4.3.7.3	Ignore write of value other than enable for downstream 10 Gb/s links.	M	[ ] Yes
AU-ME103d	FEC for upstream 10 Gb/s links (read)	14.4.3.7.3	Enabled for upstream 10 Gb/s links	M	[ ] Yes
AU-ME103e	FEC for upstream 10 Gb/s links (write)	14.4.3.7.3	Ignore write of value other than enable for upstream 10 Gb/s links.	M	[ ] Yes
AU-ME104	*Queue Excess Information Rate* TLV (0xD7/0x06-06)	14.4.3.7.4	Meets the requirements of Table 14-247.	M	[ ] Yes
AU-ME105	*Queue Color Marking* TLV (0xD7/0x06-07)	14.4.3.7.5	Meets the requirements of Table 14-248.	M	[ ] Yes
AU-ME106	*Queue Rate Limiter Capabilities* TLV (0xD7/0x06-08)	14.4.3.7.6	Meets the requirements of Table 14-249.	M	[ ] Yes
AU-ME107	*Coupling Flag* TLV (0xD7/0x06-09)	14.4.3.7.7	Meets the requirements of Table 14-250.	M	[ ] Yes
AU-ME108	*ONU Power Saving Capabilities* TLV (0xD7/0xFF-FF)	14.4.3.8.1	Meets the requirements of Table 14-251.	M	[ ] Yes
AU-ME109	Supported basic actions	14.4.4	Per Table 14-261	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AU-ME110	Supported extended actions	14.4.5	Per Table 14-262	M	[ ] Yes
AU-ME111	*ONU Reboot* TLV (0xD9/0x00-01)	14.4.5.1.1	Meets the requirements of Table 14-263.	M	[ ] Yes
AU-ME112	*Clear Dynamic MAC Table* TLV (0xD9/0x01-01)	14.4.5.2.1	Meets the requirements of Table 14-264.	M	[ ] Yes
AU-ME113	*Add Dynamic MAC Address* TLV (0xD9/0x01-02)	14.4.5.2.2	Meets the requirements of Table 14-265.	M	[ ] Yes
AU-ME114	*Delete Dynamic MAC Address* TLV (0xD9/0x01-03)	14.4.5.2.3	Meets the requirements of Table 14-266.	M	[ ] Yes
AU-ME115	*Clear Static MAC Table* TLV (0xD9/0x01-04)	14.4.5.2.4	Meets the requirements of Table 14-267.	M	[ ] Yes
AU-ME116	*Add Static MAC Address* TLV (0xD9/0x01-05)	14.4.5.2.5	Meets the requirements of Table 14-268.	M	[ ] Yes
AU-ME117	*Delete Static MAC Address* TLV (0xD9/0x01-06)	14.4.5.2.6	Meets the requirements of Table 14-269.	M	[ ] Yes
AU-ME118	*Clear Counters* TLV (0xD9/0x02-01)	14.4.5.3.1	Meets the requirements of Table 14-270.	M	[ ] Yes
AU-ME119	*Retrieve Current Alarm Summary* TLV (0xD9/0x03-01)	14.4.5.4.1	Meets the requirements of Table 14-271.	M	[ ] Yes
AU-ME120	*Clear Port Ingress Rules* TLV (0xD9/0x05-01)	14.4.5.5.1	Meets the requirements of Table 14-272.	M	[ ] Yes
AU-ME121	*Add Port Ingress Rule* TLV (0xD9/0x05-02)	14.4.5.5.2	Meets the requirements of Table 14-273.	M	[ ] Yes
AU-ME122	*Delete Port Ingress Rule* TLV (0xD9/0x05-03)	14.4.5.5.3	Meets the requirements of Table 14-274.	M	[ ] Yes
AU-ME123	*Enable User Traffic* TLV (0xD9/0x06-01)	14.4.5.6.1	Meets the requirements of Table 14-275.	M	[ ] Yes
AU-ME124	*Disable User Traffic* TLV (0xD9/0x06-02)	14.4.5.6.2	Meets the requirements of Table 14-276.	M	[ ] Yes
AU-ME125	*Loopback Enable* TLV (0xD9/0x06-03)	14.4.5.6.3	Meets the requirements of Table 14-277.	M	[ ] Yes
AU-ME126	*Loopback Disable* TLV (0xD9/0x06-04)	14.4.5.6.4	Meets the requirements of Table 14-278.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AU-ME127	*Laser Tx Power Off* TLV (0xD9/0x06-05)	14.4.5.6.5	Meets the requirements of Table 14-279.	M	[ ] Yes
AU-ME128	*ONU CVC Identificator* TLV (0xD7/0x00-0E)	14.4.3.1.14	Meets the requirements of Table 14-146.	M	[ ] Yes
AU-ME129	*ONU CVC Validity* TLV (0xD7/0x00-0F)	14.4.3.1.15	Meets the requirements of Table 14-147.	M	[ ] Yes
AU-ME130	*ONU UNI Port Type* TLV (0xD7/0x00-10)	14.4.3.1.16	Meets the requirements of Table 14-148.	M	[ ] Yes
AU-ME131	*Multicast Group Identifier* TLV (0xD7/0x05-05)	14.4.3.6.5	Meets the requirements of Table 14-241.	M	[ ] Yes
AU-ME132	*Alternative I-TPID* TLV (0xD7/0x05-06)	14.4.3.6.6	Meets the requirements of Table 14-242.	M	[ ] Yes
AU-ME133	*Alternative B-TPID* TLV (0xD7/0x05-07)	14.4.3.6.7	Meets the requirements of Table 14-243.	M	[ ] Yes
AU-ME134	*Clock Transport Capability* TLV (0xD7/0x07-01)	14.4.3.9.1	Meets the requirements of Table 14-252.	M	[ ] Yes
AU-ME135	*Clock Transport Admin Status* TLV (0xD7/0x07-02)	14.4.3.9.2	Meets the requirements of Table 14-253.	M	[ ] Yes
AU-ME136	*Clock Transfer Time* TLV (0xD7/0x07-03)	14.4.3.9.3	Meets the requirements of Table 14-254.	M	[ ] Yes
AU-ME137	*Clock Transfer Propagation Parameters* TLV (0xD7/0x07-04)	14.4.3.9.4	Meets the requirements of Table 14-255.	M	[ ] Yes
AU-ME138	*Clock Transfer RTT* TLV (0xD7/0x07-05)	14.4.3.9.5	Meets the requirements of Table 14-256.	M	[ ] Yes
AU-ME139	*DAC Configuration Fields* TLV (0xD7/0x08-00)	14.4.3.10.1	Meets the requirements of Table 14-257.	M	[ ] Yes
AU-ME140	*DAC Configuration Field Flags* TLV (0xD7/0x08-01)	14.4.3.10.2	Meets the requirements of Table 14-258.	M	[ ] Yes
AU-ME141	*DAC Password Challenge* TLV (0xD7/0x08-02)	14.4.3.10.3	Meets the requirements of Table 14-259.	M	[ ] Yes
AU-ME142	*DAC Admin Status* TLV (0xD7/0x08-03)	14.4.3.10.4	Meets the requirements of Table 14-260.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AU-ME143a	*Programmable Counter N* TLV (0xD8/0x00-00 to 0xD8/0x7F-FF)	14.4.6.1	Meets the requirements of Table 14-281.	M	[ ] Yes
AU-ME143b	Reset of counter	14.4.6.1	ONU resets this counter to the value of 0x00 on write of any value to this attribute.	M	[ ] Yes
AU-ME144	Support for programmable, general-purpose counters	14.4.6	ONU supports programmable, general-purpose counter attributes shown in Table 14-281.	M	[ ] Yes
AU-ME145	*ONU Protection Capability* TLV (0xD7/0x09-00)	14.4.3.9.1	Meets the requirements of Table 14-256.	M	[ ] Yes
AU-ME146	*ONU Protection Configuration* TLV (0xD7/0x09-01)	14.4.3.9.2	Meets the requirements of Table 14-256.	AU-LPTE0+ AU-LPTK0:M	[ ] Yes
AU-ME147	*PON Interface Administrate* TLV (0xD7/0x09-02)	14.4.3.9.3	Meets the requirements of Table 14-256.	AU-LPTE0:M	[ ] Yes
AU-ME148	*ONU Configuration Holdover Period* TLV (0xD7/0x09-03)	14.4.3.9.4	Meets the requirements of Table 14-256.	AU-LPTK0:M	[ ] Yes
AU-ME149	*ONU Multicast LLIDs* TLV (0xD7/0x01-10)	14.4.3.2.15	Meets the requirements of Table 14-170.	M	[ ] Yes
AU-ME150	*UNI MAC Learned* TLV (0xD7/0x01-11)	14.4.3.2.16	Meets the requirements of Table 14-171.	M	[ ] Yes
AU-ME151	*Config Multicast LLID* TLV (0xD9/0x01-07)	14.4.5.2.7	Meets the requirements of Table 14-282	M	[ ] Yes

4A.2.18 Multicast connectivity

Item	Description	Subclause	Value/Comment	Status	Support
AU-MC0	Implements multicast connectivity	Table 4-1	ONU implements multicast connectivity per 7.4.5.	M	[ ] Yes
AU-MC1a	IGMP/MLD forwarding (upstream)	7.4.5.2.1	ONU forwards all IGMP and MLD control messages received at the UNI to the ONU_MDI using a provisioned unicast ESP.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AU-MC1e	UNI Port Instance	7.4.5.2.1	When one or all mLLIDs are deleted from the ONU, the ONU does not modify or delete any of the rules provisioned into Classifier/Modifier using the aRuleSetConfig (0xD7/0x05-01) attribute.	M	[ ] Yes
AU-MC1f	Multiple frame copies to the same UNI port	7.4.5.3.2	The ONU rejects a rule with multiple *sResult* sub-attributes pointing to the same instance of a UNI port.	M	[ ] Yes
AU-MC1g	Multicast flows to the existing clients	7.4.5.3.2	When a new rule is added at the ONU and the old rule is deleted after that, and if the new rule contains the same *sClause* sub-attributes and some of the *sResult* clauses forwarding traffic to the same queues as the old rule, the Classifier at the ONU does not discard any frames destined to these queues, i.e., the multicast flows to the existing and remaining multicast clients are not interrupted when other clients are added or deleted.	M	[ ] Yes
~~AU-MC1b~~	~~VLAN tagging (upstream)~~	~~7.4.5.2.1~~	~~ONU adds S-Tag and C-Tag (as configured) to the multicast control frame prior to forwarding the multicast control frame to the ONU_MDI.~~	~~M~~	~~[ ] Yes~~
~~AU-MC1c~~	~~Processing *eOAM_MC_Control* eOAMPDU~~	~~7.4.5.2.1~~	~~ONU configures the mLLID and the filtering and forwarding rules according to the *eOAM_MC_Control* eOAMPDU (see 13.4.2.6) received from the OLT.~~	~~M~~	~~[ ] Yes~~
~~AU-MC1d~~	~~Confirmation of mLLID provisioning~~	~~7.4.5.2.1~~	~~ONU confirms provisioning of the mLLID and the filtering and forwarding rules by sending the *eOAM_MC_Ack* eOAMPDU to the OLT (see 13.4.2.9).~~	~~M~~	~~[ ] Yes~~
~~AU-MC2a~~	~~Multicast forwarding~~	~~7.4.5.3.2~~	~~ONU forwards frames based on IP destination addresses, or a combination of IP destination and source addresses.~~	~~M~~	~~[ ] Yes~~
AU-MC2b	Multicast forwarding (rules)	~~7.4.5.3.2~~7.4.5.4.2	OLT forwards multicast traffic based on rules per Table 7-4. ~~Per Table 7-40, with the exception that the output vector elements x_1 – x_n represent the CrossConnect entries that forward frames to specific output (UNI) ports~~	M	[ ] Yes

4A.3 OLT-specific PICS

4A.3.8 Management

Item	Description	Subclause	Value/Comment	Status	Support

Item	Description	Subclause	Value/Comment	Status	Support
AT-MG0a	Implements management	Table 4-1	OLT implements management per 13.4.	M	[ ] Yes
AT-MG0b	Management	13.4	Implement ONU management as defined in DPoE-SP-OAM.	M	[ ] Yes
AT-MG1a	eOAMPDU Frame Format	13.4.1.1	Meets the requirements of Table 13-80.	M	[ ] Yes
AT-MG1b	eOAMPDU Frame Format (fields)	13.4.1.1	Meet the requirements as listed in 13.4.1.1.	M	[ ] Yes
AT-MG2	TLV sequence terminator	13.4.1.2	A series of TLVs carried in any of the *eOAM_Get_Request*, *eOAM_Get_Response*, *eOAM_Set_Request*, or *eOAM_Set_Response* eOAMPDUs is terminated with the Variable Descriptor with values carried in the Branch and Leaf fields equal to 0.	M	[ ] Yes
AT-MG3	Variable Descriptor TLV format	13.4.1.2.1	Meets the requirements of Table 13-81.	M	[ ] Yes
AT-MG4a	Variable Container TLV format	13.4.1.2.2	Meets the requirements of Table 13-82.	M	[ ] Yes
AT-MG4b	Variable Container TLV format (integer)	13.4.1.2.2	Represented in the two's-complement form, with the Most Significant Octet (MSO) first.	M	[ ] Yes
AT-MG4c	Variable Container TLV format (integer, length)	13.4.1.2.2	Destination OAM client accepts an integer in a Variable Container of any legal width (1..128 octets).	M	[ ] Yes
AT-MG4d	Variable Container TLV format (enumerated value)	13.4.1.2.2	Source OAM client does not suppress trailing zeros for enumerated values.	M	[ ] Yes
AT-MG4e	Variable Container TLV format (enumerated value)	13.4.1.2.2	Destination OAM client does not add trailing zeros for enumerated values.	M	[ ] Yes
AT-MG4f	Variable Container TLV format (sequence list)	13.4.1.2.2	All elements in the sequence list are of the same length.	M	[ ] Yes
AT-MG4g	Variable Container TLV format (sequence list)	13.4.1.2.2	Number of elements in the sequence list is determined based on size of the given Variable Container.	M	[ ] Yes
AT-MG5a	*Extended Information* TLV format	13.4.1.3.1	Meets the requirements of Table 13-83.	M	[ ] Yes
AT-MG5b	*Extended Information* TLV structure (OUI)	13.4.1.3.1	At least one of the *Organization Specific Information* TLVs exchanged between the ONU and the OLT during the eOAM discovery process is of *Extended Information* TLV type, containing the OUI_A.	M	[ ] Yes
AT-MG6a	*Event Notification* TLV format	13.4.1.3.2	Meets the requirements, as listed in 13.4.1.3.2 and shown in Figure 13-8.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AT-MG6b	Organization Specific Value format	13.4.1.3.2	Meets the requirements per Table 13-84.	M	[ ] Yes
AT-MG7a	Multipart eOAMPDU response sequence (obligation to notify)	13.4.1.4	ONU informs the OLT that the complete response to the original request was not sent in a single eOAMPDU, but rather in a series of eOAMPDUs.	M	[ ] Yes
AT-MG7b	Multipart eOAMPDU response sequence (notification mechanism)	13.4.1.4	ONU adds an instance of the *Sequence* TLV (0xD7/0x00 -01) to the response eOAMPDU to denote the response sequence.	M	[ ] Yes
AT-MG7c	Single-part eOAMPDU response sequence (notification mechanism)	13.4.1.4	ONU does not add an instance of the *Sequence* TLV (0xD7/0x00 -01) to the response eOAMPDU to denote the response sequence.	O	[ ] Yes [ ] No
AT-MG7d	Detecting missing eOAMPDUs in multipart eOAMPDU response sequence	13.4.1.4	OLT is capable of detecting any missing eOAMPDUs in the series of eOAMPDUs comprising a complete response from an ONU.	M	[ ] Yes
AT-MG8	eOAMPDU Type codes	13.4.2.1	Assignment of eOAMPDU type code meets the requirements of Table 13-87.	M	[ ] Yes
AT-MG9	*eOAM_Get_Request* eOAMPDU type	13.4.2.2	Meets the requirements per Table 13-88.	M	[ ] Yes
AT-MG10	*eOAM_Get_Response* eOAMPDU type	13.4.2.3	Meets the requirements per Table 13-89.	M	[ ] Yes
AT-MG11	*eOAM_Set_Request* eOAMPDU type	13.4.2.4	Meets the requirements per Table 13-90.	M	[ ] Yes
AT-MG12	*eOAM_Set_Response* eOAMPDU type	13.4.2.5	Meets the requirements per Table 13-91.	M	[ ] Yes
~~AT-MG13~~	~~*eOAM_MC_Control* eOAMPDU type~~	~~13.4.2.6~~	~~Meets the requirements per Table 13-92.~~	~~M~~	~~[ ] Yes~~
~~AT-MG14~~	~~*eOAM_MC_Register* eOAMPDU type~~	~~13.4.2.7~~	~~Meets the requirements per Table 13-93.~~	~~M~~	~~[ ] Yes~~
~~AT-MG15~~	~~*eOAM_MC_Response* eOAMPDU type~~	~~13.4.2.8~~	~~Meets the requirements per Table 13-94.~~	~~M~~	~~[ ] Yes~~
AT-MG16a	*eOAM_KeyExchange* eOAMPDU structure	13.4.2.11.1	Meets the requirements per Table 13-102.	M	[ ] Yes
AT-MG16b	*eOAM_KeyExchange_Assign* eOAMPDU type	13.4.2.11.2	Meets the requirements per Table 13-103.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AT-MG16c	*eOAM_KeyExchange_ACK* eOAMPDU type	13.4.2.11.3	Meets the requirements per Table 13-104.	M	[ ] Yes
AT-MG17a	*eOAM_Software* eOAMPDU structure	13.4.2.10.1	Meets the requirements per Table 13-96.	M	[ ] Yes
AT-MG17b	*eOAM_Software_WriteRequest* eOAMPDU type	13.4.2.10.2	Meets the requirements per Table 13-98.	M	[ ] Yes
AT-MG17c	*eOAM_Software_FileTransfer Data* eOAMPDU type	13.4.2.10.3	Meets the requirements per Table 13-99.	M	[ ] Yes
AT-MG17d	*eOAM_Software_FileTransfer Ack* eOAMPDU type	13.4.2.10.4	Meets the requirements per Table 13-100.	M	[ ] Yes
~~AT-MG18~~	~~*eOAM_MC_ACK* eOAMPDU type~~	~~13.4.2.9~~	~~Meets the requirements per Table 13-95.~~	~~M~~	~~[ ] Yes~~
AT-MG19	*eOAM_Early_WakeUpOLT* eOAMPDU type	13.4.2.11	Meets the requirements per Table 13-105.	M	[ ] Yes
AT-MG20	*eOAM_Early_WakeUpONU* eOAMPDU type	13.4.2.13	Meets the requirements per Table 13-106.	M	[ ] Yes
AT-MG21	*eOAM_Sleep_Allowed* eOAMPDU type	13.4.2.14	Meets the requirements per Table 13-107.	M	[ ] Yes
AT-MG22	eOAMPDU return codes	13.4.3	Codes as listed in Table 13-108.	M	[ ] Yes

4A.3.11 Management entities

Item	Description	Subclause	Value/Comment	Status	Support
AT-ME0a	Implements management entities	Table 4-1	OLT implements management entities per 14.4.	M	[ ] Yes
AT-ME0b	Management entities	14.4	Implement management entities, as defined in 14.4.	M	[ ] Yes
AT-ME1a	*Object Context*	14.4.1.1	Meets the requirements of Table 14-124.	M	[ ] Yes
AT-ME1b	Source OAM Client (set object context)	14.4.1.1	The source OAM Client sets the proper context, as specified for each attribute and action in 14.4.2 — 14.4.6 using the *Object Context* TLV.	M	[ ] Yes
AT-ME1c	Source OAM Client (maintain object context)	14.4.1.1	The source OAM Client does not insert the *Object Context* TLV in front of Variable Container TLVs or Variable Descriptor TLVs if the proper context is already set, either explicitly via an earlier *Object Context* TLV or implicitly, as a default object context.	O	[ ] Yes [ ] No

Item	Description	Subclause	Value/Comment	Status	Support
AT-ME1d	Destination OAM Client (default object context)	14.4.1.1	Until the first *Object Context* TLV is encountered in the received eOAMPDU, the destination OAM Client uses the LLID on which the eOAMPDU was received as the object context.	M	[ ] Yes
AT-ME1e	Destination OAM Client (maintain object context)	14.4.1.1	The destination OAM Client applies the current object context to all subsequent Variable Container TLVs and Variable Descriptor TLVs until another *Object Context* TLV is encountered.	M	[ ] Yes
AT-ME2a	ObjectType	14.4.1.1.1	Supports values per Table 14-125.	M	[ ] Yes
AT-ME2b	Action for reserved ObjectType value	14.4.1.1.1	When the destination OAM Client encounters an *Object Context* TLV carrying one of the reserved ObjectType values, the destination OAM Client discards this *Object Context* TLV and all the subsequent TLVs present in the same eOAMPDU until it encounters another *Object Context* TLV with one of the supported values.	M	[ ] Yes
AT-ME3a	ObjectInstance value (ONU object)	14.4.1.1.2.1	Instance number for the ONU ObjectType is equal to 0x00, per Table 14-126.	M	[ ] Yes
AT-ME3b	ObjectInstance value (PON Port object)	14.4.1.1.2.2	Instance number for the PON Port ObjectType starts with 0x00 up to the value of N−1, where N represents the total number of PON Port interfaces, per Table 14-127.	M	[ ] Yes
AT-ME3c	ObjectInstance value (LLID object)	14.4.1.1.2.3	Instance number for the LLID ObjectType starts with 0x00 up to the value of N−1, where N represents the total number of supported LLIDs, per Table 14-128.	M	[ ] Yes
AT-ME3d	ObjectInstance value (UNI Port object)	14.4.1.1.2.4	Instance number for the UNI Port ObjectType starts with 0x00 up to the value of N−1, where N represents the total number of supported UNIs, per Table 14-129.	M	[ ] Yes
AT-ME3f	ObjectInstance value (Queue object)	14.4.1.1.2.5	Instance number for the Queue ObjectType starts with 0x00 up to the value of N−1, where N represents the total number of supported queues, per Table 14-130.	M	[ ] Yes
AT-ME4	Supported standard attributes	14.4.2	Per Table 14-131	M	[ ] Yes
AT-ME5	Supported extended attributes	14.4.3	Per Table 14-132	M	[ ] Yes
AT-ME6	*Sequence* TLV (0xD7/0x00-01)	14.4.3.1.1	Meets the requirements of Table 14-133.	M	[ ] Yes
AT-ME7	*ONU ID* TLV (0xD7/0x00-02)	14.4.3.1.2	Meets the requirements of Table 14-134.	M	[ ] Yes
AT-ME8	*ONU Firmware Version* TLV (0xD7/0x00-03)	14.4.3.1.3	Meets the requirements of Table 14-135.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AT-ME9	*ONU Chipset ID* TLV (0xD7/0x00-04)	14.4.3.1.4	Meets the requirements of Table 14-136.	M	[ ] Yes
AT-ME10	*ONU Date of Manufacture* TLV (0xD7/0x00-05)	14.4.3.1.5	Meets the requirements of Table 14-137.	M	[ ] Yes
AT-ME11	*ONU Manufacturer Info* TLV (0xD7/0x00-06)	14.4.3.1.6	Meets the requirements of Table 14-138.	M	[ ] Yes
AT-ME12	*ONU L-ONU Count* TLV (0xD7/0x00-07)	14.4.3.1.7	Meets the requirements of Table 14-139.	M	[ ] Yes
AT-ME13	*ONU PON Port Count* TLV (0xD7/0x00-08)	14.4.3.1.8	Meets the requirements of Table 14-140.	M	[ ] Yes
AT-ME14	*ONU UNI Port Count* TLV (0xD7/0x00-09)	14.4.3.1.9	Meets the requirements of Table 14-141.	M	[ ] Yes
AT-ME15	*ONU Packet Buffer* TLV (0xD7/0x00-0A)	14.4.3.1.10	Meets the requirements of Table 14-142.	M	[ ] Yes
AT-ME16	*REPORT Threshold* TLV (0xD7/0x00-0B)	14.4.3.1.11	Meets the requirements of Table 14-143.	M	[ ] Yes
AT-ME17	*L-ONU Forwarding State* TLV (0xD7/0x00-0C)	14.4.3.1.12	Meets the requirements of Table 14-144.	M	[ ] Yes
AT-ME18	*OAM Frame Rate* TLV (0xD7/0x00-0D)	14.4.3.1.13	Meets the requirements of Table 14-145.	M	[ ] Yes
AT-ME19	*Dynamic Learning Table Size* TLV (0xD7/0x01-01)	14.4.3.2.1	Meets the requirements of Table 14-149.	M	[ ] Yes
AT-ME20	*Dynamic Address Age Limit* TLV (0xD7/0x01-02)	14.4.3.2.2	Meets the requirements of Table 14-150.	M	[ ] Yes
AT-ME21	*Dynamic Address MAC Table* TLV (0xD7/0x01-03)	14.4.3.2.3	Meets the requirements of Table 14-151.	M	[ ] Yes
AT-ME22	*Static Address MAC Table* TLV (0xD7/0x01-04)	14.4.3.2.4	Meets the requirements of Table 14-152.	M	[ ] Yes
AT-ME23	*UNI Port Auto-Negotiation* TLV (0xD7/0x01-05)	14.4.3.2.5	Meets the requirements of Table 14-154.	M	[ ] Yes
AT-ME24	*Source Address Admission Control* TLV (0xD7/0x01-06)	14.4.3.2.6	Meets the requirements of Table 14-155.	M	[ ] Yes
AT-ME25	*MAC Learning Min Guarantee* TLV (0xD7/0x01-07)	14.4.3.2.7	Meets the requirements of Table 14-156.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AT-ME26	*MAC Learning Max Allowed* TLV (0xD7/0x01-08)	14.4.3.2.8	Meets the requirements of Table 14-157.	M	[ ] Yes
AT-ME27	*MAC Learning Aggregate Limit* TLV (0xD7/0x01-09)	14.4.3.2.9	Meets the requirements of Table 14-158.	M	[ ] Yes
AT-ME28	*Length Error Discard* TLV (0xD7/0x01-0A)	14.4.3.2.10	Meets the requirements of Table 14-159.	M	[ ] Yes
AT-ME29	*Flood Unknown* TLV (0xD7/0x01-0B)	14.4.3.2.11	Meets the requirements of Table 14-160.	M	[ ] Yes
AT-ME30	*Local Switching* TLV (0xD7/0x01-0C)	14.4.3.2.12	Meets the requirements of Table 14-161.	M	[ ] Yes
AT-ME31a	*L-ONU and Queue Configuration* TLV (0xD7/0x01-0D)	14.4.3.2.13	Meets the requirements of Table 14-162.	M	[ ] Yes
AT-ME31b	Reconfigure L-ONU/queue number / size	14.4.3.2.13	Before attempting to reconfigure the number or the sizes of any queues, the OLT deletes all the Classifier rules associated with these queues.	M	[ ] Yes
AT-ME31c	Sum of queue sizes	14.4.3.2.13	Does not exceed the size reported via the *ONU Packet Buffer* TLV.	M	[ ] Yes
AT-ME32	*Firmware Filename* TLV (0xD7/0x01-0E)	14.4.3.2.14	Meets the requirements of Table 14-163.	M	[ ] Yes
AT-ME33	*MAC Table Full Behavior* TLV (0xD7/0x01-0F)	14.4.3.2.15	Meets the requirements of Table 14-164.	M	[ ] Yes
AT-ME34	*RX Frames Green* TLV (0xD7/0x02-01)	14.4.3.3.1	Meets the requirements of Table 14-165.	M	[ ] Yes
AT-ME35	*TX Frames Green* TLV (0xD7/0x02-02)	14.4.3.3.2	Meets the requirements of Table 14-166.	M	[ ] Yes
AT-ME36	*RX Frames Too Short* TLV (0xD7/0x02-03)	14.4.3.3.3	Meets the requirements of Table 14-167.	M	[ ] Yes
AT-ME37	*RX Frames 64 Octets* TLV (0xD7/0x02-04)	14.4.3.3.4	Meets the requirements of Table 14-168.	M	[ ] Yes
AT-ME38	*RX Frames 65–127 Octets* TLV (0xD7/0x02-05)	14.4.3.3.5	Meets the requirements of Table 14-169.	M	[ ] Yes
AT-ME39	*RX Frames 128–255 Octets* TLV (0xD7/0x02-06)	14.4.3.3.6	Meets the requirements of Table 14-170.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AT-ME40	*RX Frames 256–511 Octets* TLV (0xD7/0x02-07)	14.4.3.3.7	Meets the requirements of Table 14-171.	M	[ ] Yes
AT-ME41	*RX Frames 512–1023 Octets* TLV (0xD7/0x02-08)	14.4.3.3.8	Meets the requirements of Table 14-172.	M	[ ] Yes
AT-ME42	*RX Frames 1024–1518 Octets* TLV (0xD7/0x02-09)	14.4.3.3.9	Meets the requirements of Table 14-173.	M	[ ] Yes
AT-ME43	*RX Frames 1519 Octets* TLV (0xD7/0x02-0A)	14.4.3.3.10	Meets the requirements of Table 14-174.	M	[ ] Yes
AT-ME44	*TX Frames 64 Octets* TLV (0xD7/0x02-0B)	14.4.3.3.11	Meets the requirements of Table 14-175.	M	[ ] Yes
AT-ME45	*TX Frames 65–127 Octets* TLV (0xD7/0x02-0C)	14.4.3.3.12	Meets the requirements of Table 14-176.	M	[ ] Yes
AT-ME46	*TX Frames 128–255 Octets* TLV (0xD7/0x02-0D)	14.4.3.3.13	Meets the requirements of Table 14-177.	M	[ ] Yes
AT-ME47	*TX Frames 256–511 Octets* TLV (0xD7/0x02-0E)	14.4.3.3.14	Meets the requirements of Table 14-178.	M	[ ] Yes
AT-ME48	*TX Frames 512–1023 Octets* TLV (0xD7/0x02-0F)	14.4.3.3.15	Meets the requirements of Table 14-179.	M	[ ] Yes
AT-ME49	*TX Frames 1024–1518 Octets* TLV (0xD7/0x02-10)	14.4.3.3.16	Meets the requirements of Table 14-180.	M	[ ] Yes
AT-ME50	*TX Frames 1519 Octets* TLV (0xD7/0x02-11)	14.4.3.3.17	Meets the requirements of Table 14-181.	M	[ ] Yes
AT-ME51	*Delay Threshold* TLV (0xD7/0x02-12)	14.4.3.3.18	Meets the requirements of Table 14-182.	M	[ ] Yes
AT-ME52	*Delay* TLV (0xD7/0x02-13)	14.4.3.3.19	Meets the requirements of Table 14-183.	M	[ ] Yes
AT-ME53	*Frames Dropped* TLV (0xD7/0x02-14)	14.4.3.3.20	Meets the requirements of Table 14-184.	M	[ ] Yes
AT-ME54	*Octets Dropped* TLV (0xD7/0x02-15)	14.4.3.3.21	Meets the requirements of Table 14-185.	M	[ ] Yes
AT-ME55	*Octets Delayed* TLV (0xD7/0x02-16)	14.4.3.3.22	Meets the requirements of Table 14-186.	M	[ ] Yes
AT-ME56	*Upstream Octets Unused* TLV (0xD7/0x02-17)	14.4.3.3.23	Meets the requirements of Table 14-187.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AT-ME62	*Optical Monitoring Temperature* TLV (0xD7/0x02-1D)	14.4.3.3.24	Meets the requirements of Table 14-188.	M	[ ] Yes
AT-ME63	*Optical Monitoring VCC* TLV (0xD7/0x02-1E)	14.4.3.3.25	Meets the requirements of Table 14-189.	M	[ ] Yes
AT-ME64	*Optical Monitoring Tx Bias Current* TLV (0xD7/0x02-1F)	14.4.3.3.26	Meets the requirements of Table 14-190.	M	[ ] Yes
AT-ME65	*Optical Monitoring Tx Power* TLV (0xD7/0x02-20)	14.4.3.3.27	Meets the requirements of Table 14-191.	M	[ ] Yes
AT-ME66	*Optical Monitoring Rx Power* TLV (0xD7/0x02-21)	14.4.3.3.28	Meets the requirements of Table 14-192.	M	[ ] Yes
AT-ME67	*Rx Frames Yellow* TLV (0xD7/0x02-22)	14.4.3.3.29	Meets the requirements of Table 14-193.	M	[ ] Yes
AT-ME68	*Tx Frames Yellow* TLV (0xD7/0x02-23)	14.4.3.3.30	Meets the requirements of Table 14-194.	M	[ ] Yes
AT-ME69	*Tx Octets Green* TLV (0xD7/0x02-24)	14.4.3.3.31	Meets the requirements of Table 14-195.	M	[ ] Yes
AT-ME70	*Rx Octets Yellow* TLV (0xD7/0x02-25)	14.4.3.3.32	Meets the requirements of Table 14-196.	M	[ ] Yes
AT-ME71	*Rx Octets Green* TLV (0xD7/0x02-26)	14.4.3.3.33	Meets the requirements of Table 14-197.	M	[ ] Yes
AT-ME72	*Tx Octets Yellow* TLV (0xD7/0x02-27)	14.4.3.3.34	Meets the requirements of Table 14-198.	M	[ ] Yes
AT-ME73	*Tx Frames Layer 2 Unicast* TLV (0xD7/0x02-28)	14.4.3.3.35	Meets the requirements of Table 14-199.	M	[ ] Yes
AT-ME74	*Tx Frames Layer 2 Multicast* TLV (0xD7/0x02-29)	14.4.3.3.36	Meets the requirements of Table 14-200.	M	[ ] Yes
AT-ME75	*Tx Frames Layer 2 Broadcast* TLV (0xD7/0x02-2A)	14.4.3.3.37	Meets the requirements of Table 14-201.	M	[ ] Yes
AT-ME76	*Rx Frames Layer 2 Unicast* TLV (0xD7/0x02-2B)	14.4.3.3.38	Meets the requirements of Table 14-202.	M	[ ] Yes
AT-ME77	*Rx Frames Layer 2 Multicast* TLV (0xD7/0x02-2C)	14.4.3.3.39	Meets the requirements of Table 14-203.	M	[ ] Yes
AT-ME78	*Rx Frames Layer 2 Broadcast* TLV (0xD7/0x02-2D)	14.4.3.3.40	Meets the requirements of Table 14-204.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AT-ME79	*Counter Number* TLV (0xD7/0x02-2E)	14.4.3.3.41	Meets the requirements of Table 14-205.	M	[ ] Yes
AT-ME80	*L2CP Frames Rx* TLV (0xD7/0x02-2F)	14.4.3.3.42	Meets the requirements of Table 14-206.	M	[ ] Yes
AT-ME81	*L2CP Octets Rx* TLV (0xD7/0x02-30)	14.4.3.3.43	Meets the requirements of Table 14-207.	M	[ ] Yes
AT-ME82	*L2CP Frames Tx* TLV (0xD7/0x02-31)	14.4.3.3.44	Meets the requirements of Table 14-208.	M	[ ] Yes
AT-ME83	*L2CP Octets Tx* TLV (0xD7/0x02-32)	14.4.3.3.45	Meets the requirements of Table 14-209.	M	[ ] Yes
AT-ME84	*L2CP Frames Discarded* TLV (0xD7/0x02-33)	14.4.3.3.46	Meets the requirements of Table 14-210.	M	[ ] Yes
AT-ME85	*L2CP Octets Discarded* TLV (0xD7/0x02-34)	14.4.3.3.47	Meets the requirements of Table 14-211.	M	[ ] Yes
AT-ME86	*L2 Tx Errors* TLV (0xD7/0x02-35)	14.4.3.3.48	Meets the requirements of Table 14-212.	M	[ ] Yes
AT-ME87	*L2 Rx Errors* TLV (0xD7/0x02-36)	14.4.3.3.49	Meets the requirements of Table 14-213.	M	[ ] Yes
AT-ME88	*Port Stat Threshold* TLV (0xD7/0x03-01)	14.4.3.4.1	Meets the requirements of Table 14-214.	M	[ ] Yes
AT-ME89	*L-ONU Stat Threshold* TLV (0xD7/0x03-02)	14.4.3.4.2	Meets the requirements of Table 14-215.	M	[ ] Yes
AT-ME90	*Alarm Status Control* TLV (0xD7/0x03-03)	14.4.3.4.3	Meets the requirements of Table 14-216.	M	[ ] Yes
AT-ME91	*Encryption Key Expiry Time* TLV (0xD7/0x04-01)	14.4.3.5.1	Meets the requirements of Table 14-217.	M	[ ] Yes
AT-ME92	*Encryption Mode* TLV (0xD7/0x04-02)	14.4.3.5.2	Meets the requirements of Table 14-218.	M	[ ] Yes
AT-ME93a	*Port Ingress Rule* TLV (0xD7/0x05-01)	14.4.3.6.1.3	Meets the requirements of Table 14-219.	M	[ ] Yes
AT-ME93b	s*Clause* sub-attribute structure	14.4.3.6.1.3	Meets the requirements of Table 14-220.	M	[ ] Yes
AT-ME93c	s*Result* sub-attribute for the frame actions `NOP`, `DISCARD`, and `FORWARD`	14.4.3.6.1.3	Meets the requirements of Table 14-221.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AT-ME93d	*sResult* sub-attribute for the frame action `QUEUE`	14.4.3.6.1.3	Meets the requirements of Table 14-222.	M	[ ] Yes
AT-ME93e	*sResult* sub-attribute for the frame action `SET`	14.4.3.6.1.3	Meets the requirements of Table 14-223.	M	[ ] Yes
AT-ME93f	*sResult* sub-attribute for the frame action `COPY`	14.4.3.6.1.3	Meets the requirements of Table 14-224.	M	[ ] Yes
AT-ME93g	*sResult* sub-attribute for the frame actions `DELETE`, `INSERT`, `REPLACE`, `CLEAR_DELETE`, and `CLEAR_INSERT`	14.4.3.6.1.3	Meets the requirements of Table 14-225.	M	[ ] Yes
AT-ME93h	*sResult* sub-attribute for the frame action `INC_COUNTER`	14.4.3.6.1.3	Meets the requirements of Table 14-226.	M	[ ] Yes
AT-ME98	*Custom Field* TLV (0xD7/0x05-02)	14.4.3.6.2	Meets the requirements of Table 14-228.	M	[ ] Yes
AT-ME99	*Alternative C-VLAN TPID* TLV (0xD7/0x05-03)	14.4.3.6.3	Meets the requirements of Table 14-239.	M	[ ] Yes
AT-ME100	*Alternative S-VLAN TPID* TLV (0xD7/0x05-04)	14.4.3.6.4	Meets the requirements of Table 14-240.	M	[ ] Yes
AT-ME101	*Broadcast Rate Limit* TLV (0xD7/0x06-01)	14.4.3.7.1	Meets the requirements of Table 14-244.	M	[ ] Yes
AT-ME102	*Queue Committed Information Rate* TLV (0xD7/0x06-02)	14.4.3.7.2	Meets the requirements of Table 14-245.	M	[ ] Yes
AT-ME103	*FEC Mode* TLV (0xD7/0x06-03)	14.4.3.7.3	Meets the requirements of Table 14-246.	M	[ ] Yes
AT-ME104	*Queue Excess Information Rate* TLV (0xD7/0x06-06)	14.4.3.7.4	Meets the requirements of Table 14-247.	M	[ ] Yes
AT-ME105	*Queue Color Marking* TLV (0xD7/0x06-07)	14.4.3.7.5	Meets the requirements of Table 14-248.	M	[ ] Yes
AT-ME106	*Queue Rate Limiter Capabilities* TLV (0xD7/0x08-08)	14.4.3.7.6	Meets the requirements of Table 14-249.	M	[ ] Yes
AT-ME107	*Coupling Flag* TLV (0xD7/0x08-09)	14.4.3.7.7	Meets the requirements of Table 14-250.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AT-ME108	*ONU Power Saving Capabilities* TLV (0xD7/0xFF-FF)	14.4.3.8.1	Meets the requirements of Table 14-251.	M	[ ] Yes
AT-ME109	Supported standard actions	14.4.4	Per Table 14-261	M	[ ] Yes
AT-ME110	Supported extended actions	14.4.5	Per Table 14-262	M	[ ] Yes
AT-ME111	*ONU Reboot* TLV (0xD9/0x00-01)	14.4.5.1.1	Meets the requirements of Table 14-263.	M	[ ] Yes
AT-ME112	*Clear Dynamic MAC Table* TLV (0xD9/0x01-01)	14.4.5.2.1	Meets the requirements of Table 14-264.	M	[ ] Yes
AT-ME113	*Add Dynamic MAC Address* TLV (0xD9/0x01-02)	14.4.5.2.2	Meets the requirements of Table 14-265.	M	[ ] Yes
AT-ME114	*Delete Dynamic MAC Address* TLV (0xD9/0x01-03)	14.4.5.2.3	Meets the requirements of Table 14-266.	M	[ ] Yes
AT-ME115	*Clear Static MAC Table* TLV (0xD9/0x01-04)	14.4.5.2.4	Meets the requirements of Table 14-267.	M	[ ] Yes
AT-ME116	*Add Static MAC Address* TLV (0xD9/0x01-05)	14.4.5.2.5	Meets the requirements of Table 14-268.	M	[ ] Yes
AT-ME117	*Delete Static MAC Address* TLV (0xD9/0x01-06)	14.4.5.2.6	Meets the requirements of Table 14-269.	M	[ ] Yes
AT-ME118	*Clear Counters* TLV (0xD9/0x02-01)	14.4.5.3.1	Meets the requirements of Table 14-270.	M	[ ] Yes
AT-ME119	*Retrieve Current Alarm Summary* TLV (0xD9/0x03-01)	14.4.5.4.1	Meets the requirements of Table 14-271.	M	[ ] Yes
AT-ME120	*Clear Port Ingress Rules* TLV (0xD9/0x05-01)	14.4.5.5.1	Meets the requirements of Table 14-272.	M	[ ] Yes
AT-ME121	*Add Port Ingress Rule* TLV (0xD9/0x05-02)	14.4.5.5.2	Meets the requirements of Table 14-273.	M	[ ] Yes
AT-ME122	*Delete Port Ingress Rule* TLV (0xD9/0x05-03)	14.4.5.5.3	Meets the requirements of Table 14-274.	M	[ ] Yes
AT-ME123	*Enable User Traffic* TLV (0xD9/0x06-01)	14.4.5.6.1	Meets the requirements of Table 14-275.	M	[ ] Yes
AT-ME124	*Disable User Traffic* TLV (0xD9/0x06-02)	14.4.5.6.2	Meets the requirements of Table 14-276.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AT-ME125	*Loopback Enable* TLV (0xD9/0x06-03)	14.4.5.6.3	Meets the requirements of Table 14-277.	M	[ ] Yes
AT-ME126	*Loopback Disable* TLV (0xD9/0x06-04)	14.4.5.6.4	Meets the requirements of Table 14-278.	M	[ ] Yes
AT-ME127	*Laser Tx Power Off* TLV (0xD9/0x06-05)	14.4.5.6.5	Meets the requirements of Table 14-279.	M	[ ] Yes
AT-ME128	*ONU CVC Identifier* TLV (0xD7/0x00-0E)	14.4.3.1.14	Meets the requirements of Table 14-146.	M	[ ] Yes
AT-ME129	*ONU CVC Validity* TLV (0xD7/0x00-0F)	14.4.3.1.15	Meets the requirements of Table 14-147.	M	[ ] Yes
AT-ME130	*ONU UNI Port Type* TLV (0xD7/0x00-10)	14.4.3.1.16	Meets the requirements of Table 14-148.	M	[ ] Yes
AT-ME131	*Multicast Group Identifier* TLV (0xD7/0x05-05)	14.4.3.6.5	Meets the requirements of Table 14-241.	M	[ ] Yes
AT-ME132	*Alternative I-TPID* TLV (0xD7/0x05-06)	14.4.3.6.6	Meets the requirements of Table 14-242.	M	[ ] Yes
AT-ME133	*Alternative B-TPID* TLV (0xD7/0x05-07)	14.4.3.6.7	Meets the requirements of Table 14-243.	M	[ ] Yes
AT-ME134	*Clock Transport Capability* TLV (0xD7/0x07-01)	14.4.3.9.1	Meets the requirements of Table 14-252.	M	[ ] Yes
AT-ME135	*Clock Transport Admin Status* TLV (0xD7/0x07-02)	14.4.3.9.2	Meets the requirements of Table 14-253.	M	[ ] Yes
AT-ME136	*Clock Transfer Time* TLV (0xD7/0x07-03)	14.4.3.9.3	Meets the requirements of Table 14-254.	M	[ ] Yes
AT-ME137	*Clock Transfer Propagation Parameters* TLV (0xD7/0x07-04)	14.4.3.9.4	Meets the requirements of Table 14-255.	M	[ ] Yes
AT-ME138	*Clock Transfer RTT* TLV (0xD7/0x07-05)	14.4.3.9.5	Meets the requirements of Table 14-256.	M	[ ] Yes
AT-ME139	*DAC Configuration Fields* TLV (0xD7/0x08-00)	14.4.3.10.1	Meets the requirements of Table 14-257.	M	[ ] Yes
AT-ME140	*DAC Configuration Field Flags* TLV (0xD7/0x08-01)	14.4.3.10.2	Meets the requirements of Table 14-258.	M	[ ] Yes
AT-ME141	*DAC Password Challenge* TLV (0xD7/0x08-02)	14.4.3.10.3	Meets the requirements of Table 14-259.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AT-ME142	*DAC Admin Status* TLV (0xD7/0x08-03)	14.4.3.10.4	Meets the requirements of Table 14-260.	M	[ ] Yes
AT-ME143	*Programmable Counter N* TLV (0xD8/0x00-00 to 0xD8/0x7F-FF)	14.4.6.1	Meets the requirements of Table 14-281.	M	[ ] Yes
AT-ME144	*ONU Protection Capability* TLV (0xD7/0x09-00)	14.4.3.9.1	Meets the requirements of Table 14-256.	M	[ ] Yes
AT-ME145	*ONU Protection Configuration* TLV (0xD7/0x09-01)	14.4.3.9.2	Meets the requirements of Table 14-256.	AT-LPTE0+ AT-LPTK0:M	[ ] Yes
AT-ME146	*PON Interface Administrate* TLV (0xD7/0x09-02)	14.4.3.9.3	Meets the requirements of Table 14-256.	AT-LPTE0:M	[ ] Yes
AT-ME147	*ONU Configuration Holdover Period* TLV (0xD7/0x09-03)	14.4.3.9.4	Meets the requirements of Table 14-256.	AT-LPTK0:M	[ ] Yes
AT-ME148	*ONU Multicast LLIDs* TLV (0xD7/0x01-10)	14.4.3.2.15	Meets the requirements of Table 14-170.	M	[ ] Yes
AT-ME149	*UNI MAC Learned* TLV (0xD7/0x01-11)	14.4.3.2.16	Meets the requirements of Table 14-171.	M	[ ] Yes
AT-ME150	*Config Multicast LLID* TLV (0xD9/0x01-07)	14.4.5.2.7	Meets the requirements of Table 14-282	M	[ ] Yes

4A.3.16 Multicast connectivity

Item	Description	Subclause	Value/Comment	Status	Support
AT-MC0	Implements multicast connectivity	Table 4-1	OLT implements multicast connectivity per 7.4.5.	M	[ ] Yes
AT-MC1d	UNI Port Instance	7.4.5.2.1	If OLT does not know the instance of the UNI port to which the multicast client is connected, it queries the ONU to determine an instance of a UNI port on which the given client's MAC address has been learned.	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AT-MC1e	Provisioning of mLLID	7.4.5.2.2	If the ONU is not already configured to receive the mLLID carrying the requested IP multicast session, the OLT provisions the mLLID (see 7.4.5.3.1).	M	[ ] Yes
AT-MC1f	Provisioning of classification and forwarding rule for multicast session	7.4.5.2.2	If the ONU is not already configured to receive the requested IP multicast session, the OLT adds a new classification and forwarding rule to forward the requested multicast session to the specific UNI port (see 7.4.5.3.2).	M	[ ] Yes
AT-MC1g	Modification of existing classification and forwarding rule	7.4.5.2.2	If the ONU is already receiving the requested multicast session, but the given UNI port is not configured to receive the multicast session, the OLT modifies the existing classification and forwarding rule to include the additional UNI port into the existing multicast group.	M	[ ] Yes
AT-MC1h	Provisioning of local multicast-bearing ESP	7.4.5.2.2	If the IP multicast session requested by a client does not exist in the OLT, the OLT provisions multicast-bearing ESP that forwards multicast traffic identified by the requested IP multicast address to the same mLLID that has been provisioned to the ONUs to receive this multicast stream.	M	[ ] Yes
~~AT-MC1a~~	~~Authorization control for newly joining multicast clients~~	~~7.4.5.2.2~~	~~When the OLT receives a multicast session join message in an IGMP/MLD membership report from the first multicast client downstream from an ONU, the OLT verifies if clients on the port are authorized to receive the requested IP multicast session.~~	~~M~~	~~[ ] Yes~~
~~AT-MC1b~~	~~Joining multicast clients are authorized to receive the requested content~~	~~7.4.5.2.2~~	~~If clients are authorized to receive the multicast session on the particular ONU port, the OLT configures the addition of the mLLID and associated filtering and forwarding parameters on the ONU using the *eOAM_MC_Control* eOAMPDU.~~	~~M~~	~~[ ] Yes~~
~~AT-MC1c~~	~~Joining multicast clients are not authorized to receive the requested content~~	~~7.4.5.2.2~~	~~If the ONU is not authorized, the OLT does not configure the addition of the mLLID and associated filtering and forwarding parameters on the ONU.~~	~~M~~	~~[ ] Yes~~
AT-MC2a	Last member leave on ONU port	7.4.5.2.2	When the OLT determines that there are no multicast clients for an IP multicast session ~~behind~~ connected to an ONU UNI port, the OLT ~~deletes the mLLID and associated filtering and forwarding parameters using the *eOAM_MC_Control* eOAMPDU for the ONU port~~ modifies the associated classification and forwarding rule at the ONU to stop forwarding the indicated multicast session to the UNI port (see 7.4.5.3.3).	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AT-MC2b	Last member leave on ONU	7.4.5.2.2	When the OLT determines that there are no multicast clients for an IP multicast session ~~on an ONU, the OLT deletes the mLLID and associated filtering and forwarding parameters using the *eOAM_MC_Control* eOAMPDU for this ONU.~~ connected to any of the UNI ports on an ONU, the OLT configures the ONU to delete the associated classification and forwarding rule on that ONU (see 7.4.5.3.3).	M	[ ] Yes
AT-MC2c	Last member leave on mLLID	7.4.5.2.2	When the OLT determines that there are no multicast clients connected to any of the UNI ports on an ONU for any of IP multicast sessions being delivered on a specific mLLID, the OLT configures the ONU to delete the mLLID used to deliver these IP multicast sessions (see 7.4.5.3.1).	M	[ ] Yes
AT-MC3a	Adding the first UNI port to a multicast group	7.4.5.3.2	To add the *first* UNI port to a multicast group, the OLT generates the *aRuleSetConfig* (0xD7/0x05-01) attribute that includes one or more *sClause* sub-attributes and a single *sResult* sub-attribute with the action set to *QUEUE*, directing traffic to a specific queue associated with a specific UNI port instance.	M	[ ] Yes
AT-MC3b	Adidng an additional UNI port to a multicast group	7.4.5.3.2	To add an additional UNI port to a multicast group already existing in the ONU, the OLT generates a new *aRuleSetConfig* attribute, that contains an additional *sResult* sub-attribute with the action set to *QUEUE*, but is otherwise identical to the existing rule for the given multicast group.	M	[ ] Yes
AT-MC3c	Multiple *sResult* sub-attributes pointing to the same instance of a UNI port	7.4.5.3.2	The OLT does not generate a rule with multiple *sResult* sub-attributes pointing to the same instance of a UNI port.	M	[ ] Yes
AT-MC3d	Deleting a UNI port from an existing multicast group	7.4.5.3.2	To delete a UNI port from an existing multicast group in the given ONU, the OLT generates a new *aRuleSetConfig* attribute, that does not contain the *sResult* sub-attribute forwarding traffic to the port being deleted, but is otherwise identical to the existing rule for the given multicast group.	M	[ ] Yes
AT-MC3e	Generates new rule before deleting the old rule	7.4.5.3.2	The OLT generates the new *aRuleSetConfig* attribute before deleting the old rule	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
AT-MC3f	Deleting the old rule beforereceiving a confirmation from the ONU	7.4.5.3.2	The OLT does not configure the ONU to delete the old *aRuleSetConfig* attribute before it receives a confirmation from the ONU that the new *aRuleSetConfig* attribute was configured successfully.	M	[ ] Yes
AT-MC3g	Deleting all UNI ports from a multicast group	7.4.5.3.2	To delete all UNI ports from an existing multicast group in the given ONU, the OLT deletes the associated *aRuleSetConfig* attribute entirely.	M	[ ] Yes
AT-MC4a	Retrieving the instance of the UNI port	7.4.5.3.3	The OLT uses the *aUniMacLearned* (0xD7/0x01-11) attribute to retrieve the instance of the UNI port on which the given MAC address has been learned.	M	[ ] Yes
AT-MC4b	Handling of a non-learned MAC address	7.4.5.3.3	The OLT does not generate the new *aRuleSetConfig* attribute if the sub-attribute *sUniPort* contains the value 0xFF, indicating that the given MAC address has not been learned on any of UNI ports.	M	[ ] Yes
~~AT-MC3~~	~~Multicast traffic modification~~	~~7.4.5.3.1~~	~~OLT forwards multicast traffic to multicast clients unmodified.~~	~~M~~	~~[ ] Yes~~
~~AT-MC4~~	~~Start forwarding multicast content~~	~~7.4.5.2.2~~	~~If the IP multicast session requested by a client does not exist in the OLT, the OLT provisions multicast-bearing ESP that forwards multicast traffic identified by the requested IP multicast address to the same mLLID that has been provisioned to the ONUs to receive this multicast stream.~~	~~M~~	~~[ ] Yes~~
AT-MC5	Multicast forwarding rules	~~7.4.5.3.1~~7.4.5.4.1	OLT forwards multicast traffic based on rules per Table 7-40.	M	[ ] Yes