

RFC Compliance Test Report IPV6-MLDV2 Results SourceRouting SourceRouting (New Note Device Education Foundation, Inc (New Net DEF. org))



	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21					
Туре	FRR	FRR	FRR	FRR	FRR	FRR	FRR					
Commit ID	99477bc	62ac43d	86a5e5a	933b834	7a2b85a	61ba3a4	852b11e					
Commit Date	2022-11-03	2023-01-10	2023-03-13	2023-03-16	2023-04-23	2023-06-14	2023-11-22					
ANVL-IPV6-	RFC 3810, MLD Version 2											
MLDV2-1.1 MUST		-	cation Tests. hat DUT acts		Router							
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					
ANVL-IPV6-	RFC 3810, MLD	/2 for IPv6, s1 p2	2, Introduction									
MLDV2-2.1 MAY	multicast a	multicast ddresses; i	router may in this case multicast ac	it performs	both the "mu	ılticast						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					
ANVL-IPV6-	RFC 3810, MLDv2 for IPv6, s2 p3, Protocol Overview											
MLDV2-3.1 MUST	Protocol Overview A multicast router performs the *router part* of the MLDv2 protocol (described in details in section 7) on each of its directly attached links.											
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					
ANVL-IPV6- MLDV2-3.2		/2 for IPv6, s2.2	3, Protocol Overvie p4, Exchanging M		the							
MUST		st routers ddress list	on the subne eners, and m state									
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					



RFC Compliance Test Report IPV6-MLDV2 Resupplied by the Network Device Education Foundation, Inc (www.NetDEF.org)

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ANVL-IPV6- MLDV2-3.3		RFC 3810, MLDv2 for IPv6, s2 p3, Protocol Overview RFC 3810, MLDv2 for IPv6, s7.6.2 p46 Querier Election												
MUST	All multica by multicas	Protocol Overview All multicast routers on the subnet listen to the messages sent by multicast address listenersthey can take over the querier role, should the present Querier fail												
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested							
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass							
ANVL-IPV6- MLDV2-3.4 MUST	RFC 3810, MLD Querier and the I	RFC 3810, MLDv2 for IPv6, s2 p3, Protocol Overview RFC 3810, MLDv2 for IPv6, s2.2 p4, Exchanging Messages between the Querier and the Listening Nodes RFC 3810, MLDv2 for IPv6, s7.1 p36, Conditions for MLD Queries												
	Only the Qu on the subn	periodical erier sends et test is fo	periodical r	33	s l query messa nges sent by	3								
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested							
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass							
ANVL-IPV6- MLDV2-3.5	RFC 3810, MLDv2 for IPv6, s2 p3, Protocol Overview RFC 3810, MLDv2 for IPv6, s7.1 p36, Conditions for MLD Queries													
MUST	Protocol Overview Only the Querier sends periodical or triggered query messages on the subnet [Note: This test is for periodical Query messages not sent by DUT behaving as a Non-Querier]													
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested							
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass							
ANVL-IPV6- MLDV2-3.6			3, Protocol Overvie p36, Conditions for											
MUST	on the subn	erier sends et test is fo	r triggered		l query messa									
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested							
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass							



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ANVL-IPV6- MLDV2-3.7			3, Protocol Overvie p36, Conditions fo									
MUST	Protocol Overview Only the Querier sends periodical or triggered query messages on the subnet [Note: This test is for triggered Query messages not sent by DUT behaving as a Non-Querier]											
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					
ANVL-IPV6- MLDV2-3.8	RFC 3810, MLD\ State on Multicas		p4, Building Multic ners	ast Listening								
MUST	Protocol Overview In INCLUDE mode, reception of packets sent to the specified multicast address is enabled *only* from the source addresses listed in the source list											
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					
ANVL-IPV6- MLDV2-3.9		RFC 3810, MLDv2 for IPv6, s2.1 p4, Building Multicast Listening State on Multicast Address Listeners										
MUST	Protocol Overview In EXCLUDE mode, reception of packets sent to the given multicast address is enabled from all source addresses *except* those listed in the source list											
	Ubuntu 18.04: untested	Ubuntu 18.04: FAIL	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: FAIL	Debian 12: FAIL					
ANVL-IPV6- MLDV2-3.20	RFC 3810, MLD Querier and the I		p5, Exchanging M	essages between	the							
MUST	the Querier to verify w	n a link ex sends a Mu hether, for	llticast Addr a specified	ess and Sour l multicast a	c Change Reported Specific address, therefore the contract the contrac	Query ce are						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					



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ANVL-IPV6- MLDV2-3.21	RFC 3810, MLD Querier and the I		p6, Exchanging M	essages between	the							
MUST	Protocol Overview Both Multicast Address Specific Queries and Multicast Address and Source Specific Queries are only sent in response to State Change Reports, never in response to Current State Reports.											
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					
ANVL-IPV6- MLDV2-3.22	RFC 3810, MLD Querier and the I		p6, Exchanging M	essages between	the							
MUST	Protocol Overview As stated earlier, in order to ensure protocol robustness, all the queries, except the periodical General Queries, are retransmitted several times within a given time interval. The number of retransmissions depends on the Robustness Variable. [Note: This test is for MLDv2 Multicast Address and Source Specific Queries]											
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					
ANVL-IPV6- MLDV2-3.23	RFC 3810, MLDv2 for IPv6, s2.2 p6, Exchanging Messages between the Querier and the Listening Nodes											
MUST	Protocol Overview As stated earlier, in order to ensure protocol robustness, all the queries, except the periodical General Queries, are retransmitted several times within a given time interval. The number of retransmissions depends on the Robustness Variable. [Note: This test is for MLDv2 Multicast Address Specific Queries]											
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					
ANVL-IPV6- MLDV2-3.24	RFC 3810, MLD Querier and the I	,	p6, Exchanging M	essages between	the							
MUST	Address and of retransm	d above, wh Source Spe issions of	cific Query	is sent by t	Specific or a The Querier, In the ori	a number						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					



RFC Compliance Test Report IPV6-MLDV2 Resuper Source Education Foundation, Inc (www.NetDef.org)

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ANVL-IPV6- MLDV2-3.25 MUST	Querier and the L	RFC 3810, MLDv2 for IPv6, s2.2 p6, Exchanging Messages between the Querier and the Listening Nodes RFC 3810, MLDv2 for IPv6, s5.1.7 p17, S Flag (Suppress Router-Side Processing)											
	The schedule that a non-current Queagain, as a	Protocol Overview The scheduled queries still have to be sent, in order to ensure that a non-querier router keeps its state synchronized with the current Querier Nevertheless, the timers should not be lowered again, as a valid answer was already received. Therefore, in subsequent queries the Querier sets the S flag.											
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass						
ANVL-IPV6- MLDV2-3.26		RFC 3810, MLDv2 for IPv6, s2.3 p7, Building Multicast Address Listener State on Multicast Routers											
MUST	Protocol Overview This multicast address listener state consists of a Filter Mode, a Filter Timer, and a Source List, with a timer associated to each source from the list. [Note: This test is to verify that multicast address listener state consists of a Filter Mode, a Filter Timer]												
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass						
ANVL-IPV6- MLDV2-4.1	RFC 3810, MLDv Listener State on		p7, Building Multicers	ast Address									
MUST	Filter Times source from [Note: This	ast address r, and a So the list. test is to a Source I	s listener st ource List, w o verify that	cate consists with a timer c multicast a timer associ	associated t	o each ner state							
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12:	Debian 12: pass						



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ANVL-IPV6- MLDV2-4.2	RFC 3810, MLDv Listener State on		p7, Building Multic ers	ast Address								
MUST	A router is given inter	Protocol Overview (Continued) A router is in INCLUDE mode for a specific multicast address on a given interface if all the listeners on the link interested in that address are in INCLUDE mode.										
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					
ANVL-IPV6- MLDV2-4.3	RFC 3810, MLDv Listener State on		p7, Building Multicers	east Address								
MUST	Protocol Ov All the sou			ist will be	forwarded by	the router						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					
ANVL-IPV6- MLDV2-4.4	RFC 3810, MLDv2 for IPv6, s2.3 p7, Building Multicast Address Listener State on Multicast Routers											
MUST	Protocol Overview (Continued) Any other source that is not in the Include List will be blocked by the router											
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					
ANVL-IPV6- MLDV2-4.5	RFC 3810, MLDv Listener State on		p7, Building Multicers	cast Address								
MUST		n be added e sends a C	to the curre	ent Include I e or a State								
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					



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	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21		
ANVL-IPV6- MLDV2-4.6	RFC 3810, MLDv Listener State on		p7, Building Multicers	cast Address					
MUST	that is upd that confir	from the I ated whenev ms its inte from the I	Include List ver a listene erest in that Include List	is associate er in INCLUDE specific so expires, the	mode sends ource. If th	a report e timer			
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested		
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass		
ANVL-IPV6- MLDV2-4.7	RFC 3810, MLDv2 for IPv6, s2.3 p7, Building Multicast Address Listener State on Multicast Routers								
MUST	Protocol Overview (Continued) When a node in INCLUDE mode expresses its desire to stop listening to a specific source, The Querier then sends a Multicast Address and Source Specific Query, to verify whether there are other listeners for that source on the link, or not. If a report that includes this source is received before the timer expiration, all the multicast routers on the link update the source timer.								
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested		
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass		
ANVL-IPV6- MLDV2-4.8	RFC 3810, MLDv Listener State on		p7, Building Multicers	cast Address					
MUST	to a specif Address and other liste that includ all the mul	in INCLUDE ic source, Source Spe ners for th es this sou ticast rout	I mode expres The Quer ecific Query, nat source or arce is receivers on the 1	sses its desirier then sent to verify went the link, colved before the link update the Include Li	ds a Multica whether there or not. If a he timer exp he source ti	st are report iration,			
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested		
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass		



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ANVL-IPV6- MLDV2-4.9	RFC 3810, MLDv Listener State on		p8, Building Multic rs	ast Address						
MUST	Protocol Ov A router is given inter that addres	in EXCLUDE	node for a re is at lea	specific mul st one liste	ticast addre ener in EXCLU	ess on a IDE mode for				
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested			
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass			
ANVL-IPV6- MLDV2-4.10	RFC 3810, MLDv2 for IPv6, s2.3 p8, Building Multicast Address Listener State on Multicast Routers									
MUST	Protocol Overview (Continued) This timer is reset each time an EXCLUDE mode listener confirms its listening state through a Current State Report. The timer is also updated when a listener, formerly in INCLUDE mode, announces its filter mode change through a State Change Report message (Note: This test is for Current State Report)									
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested			
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass			
ANVL-IPV6- MLDV2-4.11	RFC 3810, MLDv Listener State on		p8, Building Multic	ast Address						
MUST	listening s updated whe filter mode	is reset ea tate throug n a listene change thr	ch time an E h a Current er, formerly	State Report in INCLUDE m Change Repo	listener con The timer node, announc ort message	is also				
	Ubuntu 18.04: untested	Ubuntu 18.04: FAIL	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested			
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: FAIL	Debian 12: FAIL			
ANVL-IPV6- MLDV2-4.12	RFC 3810, MLDv Listener State on	·	p8, Building Multic	ast Address						
MUST	listeners i	er Timer ex n EXCLUDE m	pires, it me node on the l		ere are no mo s case, the ast address					
	Ubuntu 18.04: untested	Ubuntu 18.04: other	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested			
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: other	Debian 12: other			



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ANVL-IPV6- MLDV2-4.13	RFC 3810, MLDv Listener State on		p8, Building Multic rs	ast Address							
MUST	concerned s no node ann the timers from the Re	er receives ources are ounces its of those so quested Lis	a report the added to the interest in ources expire	e Requested I receiving the c. Then, the clude List.	such a reque ist I lose specific sources are From then on	f source, moved					
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				
ANVL-IPV6-	RFC 3810, MLD	/2 for IPv6, s5 p1	13, Message Form	nats							
MLDV2-7.2 MUST	Message Formats: Multicast Listener Query Message MLDv2 is a sub-protocol of ICMPv6, that is, MLDv2 message types are a subset of ICMPv6 messages, and MLDv2 messages are identified in IPv6 packets by a preceding Next Header value of 58.										
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				
ANVL-IPV6- MLDV2-7.3	RFC 3810, MLDv2 for IPv6, s5 p14, Message Formats										
MUST	Message Formats: Multicast Listener Query Message There are two MLD message types of concern to the MLDv2 protocol described in this document: Multicast Listener Query (Type = decimal 130) and Version 2 Multicast Listener Report (Type = decimal 143) [Note: This test is for Multicast Listener Query]										
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				
ANVL-IPV6-	RFC 3810, MLD\	/2 for IPv6, s5.1.	1 p16, Code								
MLDV2-7.8 MUST	Code :			er Query Mess	J						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				



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ANVL-IPV6-	RFC 3810, MLD	/2 for IPv6, s5.1.	2 p16, Checksum										
MLDV2-7.10 MUST	Checksum : The standar	Message Formats: Multicast Listener Query Message Checksum: The standard ICMPv6 checksum; it covers the entire MLDv2 message, plus a "pseudo-header" of IPv6 header fields											
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass						
ANVL-IPV6-	RFC 3810, MLD	/2 for IPv6, s5.1.	4 p16, Reserved										
MLDV2-7.14 MUST	Reserved :		cast Listener the sender	er Query Mess	age								
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass						
ANVL-IPV6-	RFC 3810, MLD	/2 for IPv6, s5.1.	5 p17, Multicast A	ddress									
MLDV2-7.16 MUST	Message Formats: Multicast Listener Query Message For a General Query, the Multicast Address field is set to zero.												
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass						
ANVL-IPV6- MLDV2-7.17	RFC 3810, MLD\	/2 for IPv6, s5.1.	5 p17, Multicast A	ddress									
MUST	Message Formats: Multicast Listener Query Message For a Multicast Address Specific Query, it (Multicast Address field) is set to the multicast address being queried												
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass						
ANVL-IPV6-	RFC 3810, MLD	/2 for IPv6, s5.1.	5 p17, Multicast A	ddress									
MLDV2-7.18 MUST	For a Multi	cast Addres		Specific Qu	age ery, it (Mul being queri								
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass						



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	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21				
ANVL-IPV6- MLDV2-7.19	RFC 3810, MLDv Processing)	/2 for IPv6, s5.1.	7 p17, S Flag (Տսի	opress Router-Side	2						
MUST	Message Formats: Multicast Listener Query Message Nevertheless, it does not suppress the querier election or the normal "host-side" processing of a Query that a router may be required to perform as a consequence of itself being a multicast listener										
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				
ANVL-IPV6- MLDV2-7.20	RFC 3810, MLDv Variable)	/2 for IPv6, s5.1.	8 p17, QRV (Que	rier"s Robustness							
MUST		, the QRV f		er Query Mess as the [Robus	_	le] value					
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				
ANVL-IPV6- MLDV2-7.21	RFC 3810, MLDv2 for IPv6, s5.1.9 p17, QQIC (Querier"s Query Interval Code)										
MUST	Message Formats: Multicast Listener Query Message The Querier"s Query Interval Code field specifies the [Query Interval] used by the Querier										
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				
ANVL-IPV6-	RFC 3810, MLD	/2 for IPv6, s5.1.	10 p18, Number o	f Sources (N)							
MLDV2-7.22 MUST		of Sources	(N) field sp	er Query Mess becifies how	_	addresses					
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				



RFC Compliance Test Report IPV6-MLDV2 Results SourceRouting the Network Device Education Foundation, Inc (www.NetDEF.org)

	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21						
ANVL-IPV6-	RFC 3810, MLD	/2 for IPv6, s5.1.	10 p18, Number o	f Sources (N)									
MLDV2-7.23 MUST	Message Formats: Multicast Listener Query Message Number of Sources (N) : This number is zero in a General Query												
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass						
ANVL-IPV6- MLDV2-7.24	RFC 3810, MLD	RFC 3810, MLDv2 for IPv6, s5.1.10 p18, Number of Sources (N)											
MUST	Number of S	ources (N)	:	er Query Mess Address Spe									
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass						
ANVL-IPV6- MLDV2-7.25	RFC 3810, MLD\	/2 for IPv6, s5.1.	10 p18, Number o	f Sources (N)									
MUST	Message Formats: Multicast Listener Query Message Number of Sources (N): This number is non-zero in a Multicast Address and Source Specific Query												
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass						
ANVL-IPV6-	RFC 3810, MLDv2 for IPv6, s5.1.11 p18, Source Address [i]												
MLDV2-7.26 MUST	Message Formats: Multicast Listener Query Message The Source Address [i] fields are a vector of n unicast addresses, where n is the value in the Number of Sources (N) field												
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass						
ANVL-IPV6-	NEGATIVE: RFC	3810, MLDv2 fo	or IPv6, s5.1.12 p1	8, Additional Data									
MLDV2-7.27 MUST	If the Payl indicates to the fields	oad Length hat there a described h	field in the are additiona aere, MLDv2 i	al octets of mplementation	age of a receiv data present ons MUST incl red MLD Check	, beyond ude those							
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass						



	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21						
ANVL-IPV6- MLDV2-7.28	RFC 3810, MLDv2 for IPv6, s5.1.12 p18, Additional Data												
MUST	Message Formats: Multicast Listener Query Message If the Payload Length field in the IPv6 header of a received Query indicates that there are additional octets of data present, beyond the fields described here, MLDv2 implementations MUST otherwise ignore those additional octets												
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass						
ANVL-IPV6-	RFC 3810, MLD	/2 for IPv6, s5.1.	14 p19, Source A	ddresses for Queri	ies								
MLDV2-7.29 MUST		Message Formats: Multicast Listener Query Message All MLDv2 Queries MUST be sent with a valid IPv6 link-local source address											
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass						
ANVL-IPV6- MLDV2-7.31	RFC 3810, MLDv Queries	/2 for IPv6, s5.1.	15 p19, Destinatio	n Addresses for	Addresses for								
MUST	Message Formats: Multicast Listener Query Message In MLDv2, General Queries are sent to the link-scope all-nodes multicast address (FF02::1)												
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass						
ANVL-IPV6- MLDV2-7.32	RFC 3810, MLDv Queries	/2 for IPv6, s5.1.	15 p19, Destinatio	n Addresses for									
MUST	Multicast A Queries are multicast a	ddress Spec sent with ddress of i	cific and Mul an IP destir nterest	nation addres	sage ess and Sourcess equal to t	he							
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass						



	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21				
ANVL-IPV6- MLDV2-8.1	RFC 3810, MLD Queries	/2 for IPv6, s5.1.	15 p19, Destinatio	n Addresses for							
MUST	Multicast A Specific Qu to the mult	ddress Spec eries are s icast addre	cific and Mul sent with an ess of intere	ticast Addre IP destinati est	sage (Continuess and Source on address e	equal					
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				
ANVL-IPV6-	RFC 3810, MLD	/2 for IPv6, s5.2.	1 p22, Reserved								
MLDV2-9.2 MUST			on 2 Multica e ignored or		Report Messa	ge					
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				
ANVL-IPV6-	RFC 3810, MLDv2 for IPv6, s5.2.2 p22, Checksum										
MLDV2-9.4 MUST	Message Formats: Version 2 Multicast Listener Report Message When a packet is received, the checksum MUST be verified before processing it.										
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				
ANVL-IPV6-	RFC 3810, MLD	/2 for IPv6, s5.2.	11 p23, Additiona	l Data							
MLDV2-9.11 MUST	If the Payl indicates t the last Mu those octet	oad Length hat there a lticast Add s in the co	field in the are additional dress Record, omputation to	e IPv6 header al octets of MLDv2 imple o verify the	Report Messa of a received data present mentations M received MLD cose addition	red Report ., beyond WST include) Checksum					
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				



	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21					
ANVL-IPV6- MLDV2-9.12	NEGATIVE: RFC	3810, MLDv2 fo	or IPv6, s5.2.11 p2	3, Additional Data	ı							
MUST	Message Formats: Version 2 Multicast Listener Report Message If the Payload Length field in the IPv6 header of a received Report indicates that there are additional octets of data present, beyond the last Multicast Address Record, MLDv2 implementations MUST include those octets in the computation to verify the received MLD Checksum											
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					
ANVL-IPV6-	RFC 3810, MLD	/2 for IPv6, s5.2.	13 p26, Source Ad	dresses for Repor	rts		•					
MLDV2-9.23 MUST	Message Formats: Version 2 Multicast Listener Report Message On the other hand, routers MUST silently discard a message that is not sent with a valid link-local address, without taking any action on the contents of the packet											
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					
ANVL-IPV6- MLDV2-9.24	RFC 3810, MLDv2 for IPv6, s5.2.13 p26, Source Addresses for Reports											
MUST	Message Formats: Version 2 Multicast Listener Report Message A Report sent with the unspecified address is also discarded by the router											
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					
ANVL-IPV6- MLDV2-9.26	RFC 3810, MLDv Reports	/2 for IPv6, s5.2.	14 p26, Destinatio	n Addresses for			-					
MUST	A node MUST Destination unicast or	accept and Address fi multicast)	l process any eld contains	version 1 R *any* of th the interfac	Report Messa Report whose De IPv6 addre De on which t	IP sses (
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					



	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21						
ANVL-IPV6- MLDV2-9.27	RFC 3810, MLDv Reports	RFC 3810, MLDv2 for IPv6, s5.2.14 p26, Destination Addresses for Reports											
MUST	A node MUST Destination unicast or	Message Formats: Version 2 Multicast Listener Report Message A node MUST accept and process any version 1 Report whose IP Destination Address field contains *any* of the IPv6 addresses (unicast or multicast) assigned to the interface on which the Report (Tests for IPv6 unicast address) arrives											
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass						
ANVL-IPV6- MLDV2-10.2	RFC 3810, MLDv Address Listener	, ,	27, Protocol Descr	iption for Multicast									
MUST	Protocol Description for Multicast Address Listeners The link-scope all-nodes multicast address, (FF02::1), is handled as a special case. On all nodes that is all hosts and routers, including multicast routers listening to packets destined to the all-nodes multicast address, from all sources, is permanently enabled on all interfaces on which multicast listening is supported [Note: This test is for routers]												
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass						
ANVL-IPV6- MLDV2-10.3	NEGATIVE: RFC 3810, MLDv2 for IPv6, s6 p27, Protocol Description for Multicast Address Listeners												
MUST	Protocol Description for Multicast Address Listeners No MLD messages are ever sent regarding neither the link-scope all- nodes multicast address, nor any multicast address of scope 0 (reserved) or 1 (node-local) (Tests for scope 0 (reserved) multicast address)												
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass						
ANVL-IPV6- MLDV2-10.4	NEGATIVE: RFC for Multicast Add		or IPv6, s6 p27, Pro	otocol Description									
MUST	No MLD mess nodes multi (reserved)	ages are ev cast addres or 1 (node-	ver sent rega ss, nor any m ·local)		er the link-s dress of scop								
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass						



	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21					
ANVL-IPV6- MLDV2-12.1	RFC 3810, MLD Multicast Routers		35, Description of t	he Protocol for								
MUST	For each in the router multicast a example, an reception f	Description of the Protocol for Multicast Routers For each interface over which the router operates the MLD protocol, the router must configure that interface to listen to all link-layer multicast addresses that can be generated by IPv6 multicasts. For example, an Ethernet-attached router must set its Ethernet address reception filter to accept all Ethernet multicast addresses that start with the hexadecimal value 3333										
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					
ANVL-IPV6- MLDV2-12.2	RFC 3810, MLD Multicast Routers		35, Description of t	he Protocol for								
MUST	On each int MUST enable	erface over reception	which this	scope "all M	ers being run, t LDv2-capable							
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					
ANVL-IPV6- MLDV2-12.3	RFC 3810, MLD Multicast Routers		35, Description of t	he Protocol for								
MUST	Description of the Protocol for Multicast Routers On each interface over which this protocol is being run, the router MUST perform the multicast address listener part of MLDv2 for that address on that interface											
	Ubuntu 18.04: untested	Ubuntu 18.04: FAIL	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: FAIL	Debian 12: FAIL					
ANVL-IPV6- MLDV2-12.4	RFC 3810, MLD\ Multicast Routers		35, Description of t	he Protocol for								
MUST	Multicast r attached li from a part	outers only nk listens icular sour	need to kno to packets f ce; a multic	or a particu ast router i	ers east one* no lar multicas s not requir each neighbo	t address ed to						
	Ubuntu 18.04: untested	Ubuntu 18.04: FAIL	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: FAIL	Debian 12: FAIL					



RFC Compliance Test Report IPV6-MLDV2 Results Source Routing Www.OpenSourceRouting.org

	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21				
ANVL-IPV6-	RFC 3810, MLD	/2 for IPv6, s7.1	p36, Conditions fo	r MLD Queries							
MLDV2-12.5 MUST	Description of the Protocol for Multicast Routers These queries are used to build and refresh the Multicast Address Listener state of routers on attached links.										
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				
ANVL-IPV6- MLDV2-12.6	RFC 3810, MLD\	/2 for IPv6, s7.1	p36, Conditions fo	r MLD Queries							
MUST	When Multic from a part for other 1 deleting th Address Lis	ast Address icular sour isteners of e multicast tener state	s Listening in the is no long the multical address (or and pruning	ger desired, ast address of source) fro gits traffic	l at a node of the Querier or of the sou om its Multic	must query arce before ast					
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				
ANVL-IPV6-	RFC 3810, MLD	/2 for IPv6, s7.1	p36, Conditions fo	r MLD Queries							
MLDV2-12.7 MUST	Description of the Protocol for Multicast Routers When Multicast Address Listening is terminated at a node or traffic from a particular source is no longer desired, the Querier must query for other listeners of the multicast address or of the source before deleting the multicast address (or source) from its Multicast Address Listener state and pruning its traffic [Note: This test is for listeners of a particular source]										
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				
ANVL-IPV6-	RFC 3810, MLD	/2 for IPv6, s7.1	p36, Conditions fo	r MLD Queries							
MLDV2-12.8 MUST	Multicast A response to State Recor [Note: This	ddress and State Chan ds test check	Source Speci age Records a s that Multi	nd never in cast Address	ers are only sen response to and Source State Record	Current Specific					
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				



	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21				
ANVL-IPV6- MLDV2-12.9	RFC 3810, MLDv Routers	/2 for IPv6, s7.2	p37, MLD State M	aintained by Multic	cast						
MUST	Description of the Protocol for Multicast Routers If all sources for a multicast address are listened to, an empty source record list is kept with the Router Filter Mode set to EXCLUDE. This means that nodes on this link want all sources for this multicast address to be forwarded										
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				
ANVL-IPV6- MLDV2-12.10	RFC 3810, MLDv Mode	/2 for IPv6, s7.2.	1 p37, Definition o	f Router Filter			,				
MUST	Description of the Protocol for Multicast Routers A router is in INCLUDE mode for a specific multicast address on a given interface if all the listeners on the link interested in that address are in INCLUDE modeThe Include List is the set of sources that one or more listeners on the link have requested to receive										
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				
ANVL-IPV6- MLDV2-12.11	RFC 3810, MLDv2 for IPv6, s7.2.1 p37, Definition of Router Filter Mode										
MUST	Description of the Protocol for Multicast Routers A router is in EXCLUDE mode for a specific multicast address on a given interface if there is at least one listener in EXCLUDE mode interested in that address on the link										
	Ubuntu 18.04: untested	Ubuntu 18.04: FAIL	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: FAIL	Debian 12: FAIL				
ANVL-IPV6- MLDV2-12.12	RFC 3810, MLDv Mode	/2 for IPv6, s7.2.	1 p38, Definition o	f Router Filter							
MUST	As a rule,	once a Mult received, t	icast Addres the Router Fi		ers h a filter m or that multi						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				



	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21					
ANVL-IPV6- MLDV2-12.13	RFC 3810, MLD Mode	/2 for IPv6, s7.2.	1 p38, Definition o	f Router Filter								
MUST	Nevertheles filter mode Router Filt	Description of the Protocol for Multicast Routers Nevertheless, if all nodes with a multicast address record having filter mode set to EXCLUDE cease reporting, it is desirable for the Router Filter Mode for that multicast address to transition back to INCLUDE mode										
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					
ANVL-IPV6-	RFC 3810, MLD	/2 for IPv6, s7.2.	2 p38, Definition of	of Filter Timers	•		-					
MLDV2-12.14 MUST	The Filter a specific Router Filt	Description of the Protocol for Multicast Routers The Filter Timer is only used when the router is in EXCLUDE mode for a specific multicast address, and it represents the time for the Router Filter Mode of the multicast address to expire and switch to INCLUDE mode										
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					
ANVL-IPV6- MLDV2-12.15	RFC 3810, MLDv2 for IPv6, s7.2.3 p39, Definition of Source Timers											
MUST	Description of the Protocol for Multicast Routers The variable MALI stands for the Multicast Address Listening Interval, which is the time in which multicast address listening state will time out.											
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					
ANVL-IPV6-	RFC 3810, MLD	/2 for IPv6, s7.2.	3 p39, Definition o	f Source Timers								
MLDV2-12.17 MUST	The variabl time the ro the first q [Note: This record afte [LastListen	e LLQT is tuter should uery. test verifr receivingerQueryInte a Router].	l wait for a fies that the no report w erval * Robus Robustness	ener Query Treport, after DUT deletes within LLQT =	Time, which is the Querie the correspection time per per per per per per per per per pe	r has sent						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					



	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21				
ANVL-IPV6- MLDV2-12.18	RFC 3810, MLD\	/2 for IPv6, s7.2.	3 p39, Definition o	f Source Timers							
MUST	Description of the Protocol for Multicast Routers During this time, the Querier should send [Last Member Query Count]-1 retransmissions of the query										
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				
ANVL-IPV6-	RFC 3810, MLD	/2 for IPv6, s7.2.	3 p39, Definition o	f Source Timers							
MLDV2-12.19 MUST	If the rout current Inc	er is in IN lude List i	NCLUDE filter .f a listener	•	rce can be a mode sends a						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				
ANVL-IPV6-	RFC 3810, MLDv2 for IPv6, s7.2.3 p40, Definition of Source Timers										
MLDV2-12.20 MUST		r of a sour	cce from the	ılticast Rout Include List	ers expires, th	e source					
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				
ANVL-IPV6-	RFC 3810, MLD	/2 for IPv6, s7.2.	3 p40, Definition o	f Source Timers			•				
MLDV2-12.21 MUST	When a node to a specif their timer millisecond Source Specis not recethe Include	in INCLUDE ic source, for that ss. The Querific Query, ived before List.	I mode express all the mult source to a serier then serier the not extend the timer of	cicast router small intervands then a Mu (i.e if the	re to stop les on the ling of LLQT alticast Addresorresponding source is de	ess and g report					
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				



	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21					
ANVL-IPV6- MLDV2-12.22	RFC 3810, MLD\	/2 for IPv6, s7.2.	3 p40, Definition o	f Source Timers								
MUST	Description of the Protocol for Multicast Routers If a corresponding report is received before the timer expires, all the multicast routers on the link update their source timer. [Note: This test is for DUT which is a querier]											
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					
ANVL-IPV6- MLDV2-12.23	RFC 3810, MLD\	/2 for IPv6, s7.2.	3 p40, Definition o	f Source Timers								
MUST	Description of the Protocol for Multicast Routers When a node in INCLUDE mode expresses its desire to stop listening to a specific source, all the multicast routers on the link lower their timer for that source to a small interval of LLQT milliseconds. The Querier then sends then a Multicast Address and Source Specific Query,If not (i.e if the corresponding report is not received before the timer expire), the source is deleted from the Include List. [Note: This test is for DUT which is a non querier]											
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					
ANVL-IPV6-	RFC 3810, MLDv2 for IPv6, s7.2.3 p40, Definition of Source Timers											
MLDV2-12.24 MUST	Description of the Protocol for Multicast Routers If a corresponding report is received before the timer expires, all the multicast routers on the link update their source timer. [Note: This test is for DUT which is a non querier]											
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					
ANVL-IPV6- MLDV2-12.25	RFC 3810, MLD	/2 for IPv6, s7.4	p42, Action on Re	eception of Reports	3							
MUST	Upon recept	ion of an M		llticast Rout hat contains 1		the router						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass					



	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21				
ANVL-IPV6- MLDV2-12.26	RFC 3810, MLD\	/2 for IPv6, s7.4	p42, Action on Re	eception of Reports	3						
MUST	Description of the Protocol for Multicast Routers Upon reception of an MLD message that contains a Report, the router checks if the Hop Limit is set to 1 If this check fails, the packet is dropped.										
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				
ANVL-IPV6-	RFC 3810, MLD	/2 for IPv6, s7.4	p42, Action on Re	eception of Reports	3		-				
MLDV2-13.1 MUST	Upon recept checks if the	ion of an M he Router A	ILD message t	ulticast Rout hat contains is present i	a Report, t	he router					
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				
ANVL-IPV6- MLDV2-13.2	RFC 3810, MLDv2 for IPv6, s7.4 p42, Action on Reception of Reports										
MUST	Upon recept checks if to Options head	ion of an M he Router A der of the	ILD message t	alticast Rout that contains is present i s dropped.	a Report, t	he router					
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				
ANVL-IPV6- MLDV2-13.3	RFC 3810, MLDv Records	/2 for IPv6, s7.4.	1 p42, Reception	of Current State							
MUST	When receiv Filter Time action, wit	ing Current r and its s h respect t reception c e Report	State Recor source timers to state and of Current St Received Ne	alticast Routerds, a routers. Following timers, that tate Records we Router Sta	updates bot describes to occur to a :	h its he router"s					
	Ubuntu 18.04: untested	Ubuntu 18.04: FAIL	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: FAIL	Debian 12: FAIL				



RFC Compliance Test Report IPV6-MLDV2 Results Source Routing Www.OpenSourceRouting.org

	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21					
ANVL-IPV6- MLDV2-13.4	RFC 3810, MLDv Records	RFC 3810, MLDv2 for IPv6, s7.4.1 p42, Reception of Current State Records										
MUST	When receiv Filter Time action, wit state upon	ing Current r and its s h respect t reception c e Report F IS_EX)	State Recor source timers to state and of Current St Received New	alticast Routerds, a routers. Following timers, that ate Records Router Stat	updates bot describes to occur to a : e Actions	th its the						
	Ubuntu 18.04: untested	Ubuntu 18.04: FAIL	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: FAIL	Debian 12: FAIL					
ANVL-IPV6- MLDV2-13.5	RFC 3810, MLDv Records	/2 for IPv6, s7.4.	1 p42, Reception	of Current State								
MUST	When receiv Filter Time action, wit	ing Current r and its s h respect t reception c e Report	State Recor source timers to state and of Current St Received Ne	alticast Routerds, a router s. Following timers, that ate Records w Router Sta CCLUDE (X+A,	updates bot describes to occur to a : te Actions	ch its che router"s						
	Ubuntu 18.04: untested	Ubuntu 18.04: FAIL	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: FAIL	Debian 12: FAIL					
ANVL-IPV6- MLDV2-13.6	RFC 3810, MLD\ Records	/2 for IPv6, s7.4.	1 p42, Reception	of Current State								
MUST	When receiv Filter Time action, wit	ing Current r and its s h respect t reception c e Repo Y) IS_E)	State Recorsource timers to state and of Current St	alticast Rout rds, a router s. Following timers, that ate Records New Router EXCLUDE (A-	updates bot describes to occur to a :	th its the router"s						
	Ubuntu 18.04: untested	Ubuntu 18.04: FAIL	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested					
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: FAIL	Debian 12: FAIL					



RFC Compliance Test Report IPV6-MLDV2 Resuper Source Routing Www.OpenSourceRouting.org

	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21			
ANVL-IPV6- MLDV2-13.7 MUST	RFC 3810, MLDv2 for IPv6, s7.4.2 p44, Reception of Filter Mode Change and Source List Change Records RFC 3810, MLDv2 for IPv6, s7.4.2 p45, Reception of Filter Mode Change and Source List Change Records									
	Description of the Protocol for Multicast Routers (Continued) In order to maintain protocol robustness, the query (Q) defined below need to be transmitted [Last Listener Query Count] times, once every [Last Listener Query Interval] period: Router State Report Received New Router State Actions INCLUDE (A) BLOCK (B) INCLUDE (A) Send Q(MA,A*B)									
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested							
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass			
ANVL-IPV6- MLDV2-13.8	RFC 3810, MLDv2 for IPv6, s7.4.2 p44, Reception of Filter Mode Change and Source List Change Records RFC 3810, MLDv2 for IPv6, s7.4.2 p45, Reception of Filter Mode Change and Source List Change Records									
	Description of the Protocol for Multicast Routers (Continued) In order to maintain protocol robustness, the query (Q) defined below need to be transmitted [Last Listener Query Count] times, once every [Last Listener Query Interval] period: Router State Report Received New Router State Actions INCLUDE (A) TO_EX (B) EXCLUDE (A*B,B-A) (B-A)=0 Delete (A-B) Send Q(MA,A*B) Filter Timer=MALI									
	Ubuntu 18.04: untested	Ubuntu 18.04: other	Ubuntu 18.04: untested							
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: other	Debian 12: other			
ANVL-IPV6- MLDV2-13.9	ALDV2-13.9 and Source List Change Records RFC 3810, MLDv2 for IPv6, s7.4.2 p45, Reception of Filter Mode Change									
	Description of the Protocol for Multicast Routers (Continued) In order to maintain protocol robustness, the query (Q) defined below need to be transmitted [Last Listener Query Count] times, once every [Last Listener Query Interval] period: Router State Report Received New Router State Actions INCLUDE (A) TO_IN (B) INCLUDE (A+B) (B)=MALI Send Q(MA,A-B)									
	Ubuntu 18.04: untested	Ubuntu 18.04: other	Ubuntu 18.04: untested							
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: other	Debian 12: other			



RFC Compliance Test Report IPV6-MLDV2 Resupports the Network Device Education Foundation, Inc (www.NetDEF.org)

	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21				
ANVL-IPV6- MLDV2-13.10 MUST	RFC 3810, MLDv2 for IPv6, s7.4.2 p44, Reception of Filter Mode Change and Source List Change Records RFC 3810, MLDv2 for IPv6, s7.4.2 p45, Reception of Filter Mode Change and Source List Change Records										
	Description of the Protocol for Multicast Routers (Continued) In order to maintain protocol robustness, the query (Q) defined below need to be transmitted [Last Listener Query Count] times, once every [Last Listener Query Interval] period: Router State Report Received New Router State Actions EXCLUDE (X,Y) BLOCK (A) EXCLUDE (X+(A-Y),Y) (A-X-Y)=Filter Timer Send Q(MA,A-Y)										
	Ubuntu 18.04: untested	Ubuntu 18.04: other	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: other	Debian 12: other				
ANVL-IPV6- MLDV2-13.11 MUST	RFC 3810, MLDv2 for IPv6, s7.4.2 p44, Reception of Filter Mode Change and Source List Change Records RFC 3810, MLDv2 for IPv6, s7.4.2 p45, Reception of Filter Mode Change and Source List Change Records										
	In order to need to be every [Last	maintain ptransmitted Listener Qe Report R Y) TO_EX)) -Y)	orotocol robu l [Last Liste Juery Interva Leceived New	ulticast Rout ustness, the ener Query Co ul] period : Router Stat LUDE (A-Y,Y*	query (Q) de punt] times, e Actions	fined below once					
	Ubuntu 18.04: untested	Ubuntu 18.04: FAIL	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: FAIL	Debian 12: FAIL				
ANVL-IPV6- MLDV2-13.12 MUST	and Source List (RFC 3810, MLD)	RFC 3810, MLDv2 for IPv6, s7.4.2 p44, Reception of Filter Mode Change and Source List Change Records RFC 3810, MLDv2 for IPv6, s7.4.2 p45, Reception of Filter Mode Change and Source List Change Records									
	Description of the Protocol for Multicast Routers (Continued) In order to maintain protocol robustness, the query (Q) defined below need to be transmitted [Last Listener Query Count] times, once every [Last Listener Query Interval] period: Router State Report Received New Router State Actions EXCLUDE (X,Y) TO_IN (A) EXCLUDE (X+A,Y-A) (A)=MALI Send Q(MA,X-A) Send Q(MA)										
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested				
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass				



RFC Compliance Test Report IPV6-MLDV2 Results Source Routing Www.OpenSourceRouting.org

	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21		
ANVL-IPV6- MLDV2-13.13	RFC 3810, MLDv2 for IPv6, s7.6 p46, Action on Reception of Queries								
MUST	Description of the Protocol for Multicast Routers (Continued) Upon reception of an MLD message that contains a Query, the router checks if the source address of the message is a valid link-local address. If this check fails, the packet is dropped.								
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested		
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass		
ANVL-IPV6-	RFC 3810, MLD	/2 for IPv6, s7.6	p46, Action on Re	ception of Queries					
MLDV2-13.14 MUST	Description of the Protocol for Multicast Routers (Continued) Upon reception of an MLD message that contains a Query, the router checks if the Hop Limit is set to 1. If this check fails, the packet is dropped.								
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested		
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass		
ANVL-IPV6- MLDV2-13.15	RFC 3810, MLD	/2 for IPv6, s7.6	p46, Action on Re	ception of Queries					
MUST	Description of the Protocol for Multicast Routers (Continued) Upon reception of an MLD message that contains a Query, the router checks if the Router Alert option is present in the Hop-By-Hop Options header of the IPv6 packet. If this checks fails, the packet is dropped.								
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested		
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass		
ANVL-IPV6-	RFC 3810, MLDv2 for IPv6, s7.6.2 p46, Querier Election								
MLDV2-13.16 MUST	_	er starts o	perating on		ers (Continu default it				
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested		
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass		



	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21			
ANVL-IPV6- MLDV2-13.17	RFC 3810, MLDv2 for IPv6, s8.1 p48, Query Version Distinctions									
MUST	Description of the Protocol for Multicast Routers (Continued) The MLD version of a Multicast Listener Query message is determined as follows: MLDv1 Query: length = 24 octets									
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested							
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass			
ANVL-IPV6-	RFC 3810, MLD	/2 for IPv6, s8.1	p48, Query Versio	n Distinctions			•			
MLDV2-14.1 MUST	Interoperation with MLDv1 The MLD version of a Multicast Listener Query message is determined as follows: MLDv2 Query: length >= 28 octets									
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested							
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass			
ANVL-IPV6-	RFC 3810, MLDv2 for IPv6, s8.3.1 p49, In the Presence of MLDv1 Routers									
MLDV2-14.10 MUST	Interoperation with MLDvl When in MLDvl mode, the Querier MUST send periodic General Queries truncated at the Multicast Address field (i.e., 24 bytes long)									
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested							
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass			
ANVL-IPV6- MLDV2-14.11	RFC 3810, MLDv Address Listener	·	2 p50, In the Pres	ence of MLDv1 Mu	llticast					
MUST	Interoperation with MLDv1 MLDv2 routers may be placed on a network where there are hosts that have not yet been upgraded to MLDv2. In order to be compatible with MLDv1 hosts, MLDv2 routers MUST operate in version 1 compatibility mode									
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested							
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass			



RFC Compliance Test Report IPV6-MLDV2 Results Source Routing Www.OpenSourceRouting.org

	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21		
ANVL-IPV6- MLDV2-14.12	RFC 3810, MLDv2 for IPv6, s8.3.2 p50, In the Presence of MLDv1 Multicast Address Listeners								
MUST	Interoperation with MLDv1 The Multicast Address Compatibility Mode of a multicast address record is set to MLDv1 whenever an MLDv1 Multicast Listener Report is received for that multicast adress.								
	Ubuntu 18.04: untested	Ubuntu 18.04: other	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested		
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: other	Debian 12: other		
ANVL-IPV6- MLDV2-14.13	RFC 3810, MLDv Address Listener		2 p50, In the Prese	ence of MLDv1 Mu	ılticast				
MUST		r Version H ticast Addr	Most Present	timer expire					
	Ubuntu 18.04: untested	Ubuntu 18.04: other	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested		
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: other	Debian 12: other		
ANVL-IPV6- MLDV2-14.14	RFC 3810, MLDv2 for IPv6, s8.3.2 p50, In the Presence of MLDv1 Multicast Address Listeners								
MUST	Interoperation with MLDv1 Note that when a router switches back to MLDv2 Multicast Address Compatibility Mode for a multicast address, it takes some time to regain source-specific state information. Source-specific information will be learned during the next General Query, but sources that should be blocked will not be blocked until [Multicast Address Listening Interval] after that.								
	Ubuntu 18.04: untested	Ubuntu 18.04: FAIL	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested		
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: FAIL	Debian 12: FAIL		
ANVL-IPV6- MLDV2-14.15	RFC 3810, MLDv Multicast Address	,	2 p50, In the Pres	ence of MLDv1					
MUST	internally multicast a	ast Address translates ddress to t	Compatibili the followin their MLDv2 e	ty Mode is M ng MLDv1 mess equivalents: MLDv2 Equiv	ages for tha				
	Ubuntu 18.04: untested	Ubuntu 18.04: other	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested		
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: other	Debian 12: other		



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	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21		
ANVL-IPV6- MLDV2-14.16	RFC 3810, MLDv2 for IPv6, s8.3.2 p50, In the Presence of MLDv1 Multicast Address Listeners								
MUST	Interoperation with MLDv1 When Multicast Address Compatibility Mode is MLDv1, a router internally translates the following MLDv1 messages for that multicast address to their MLDv2 equivalents: Done MLDv1 Message> to TO_IN({}) MLDv2 Equivalent>								
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass		
ANVL-IPV6- MLDV2-14.17	RFC 3810, MLDv2 for IPv6, s8.3.2 p50, In the Presence of MLDv1 Multicast Address Listeners								
MUST	Interoperat MLDv2 BLOCK								
	Ubuntu 18.04: untested	Ubuntu 18.04: FAIL	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: FAIL	Debian 12: FAIL		
ANVL-IPV6- MLDV2-14.18	RFC 3810, MLDv2 for IPv6, s8.3.2 p50, In the Presence of MLDv1 Multicast Address Listeners								
MUST	Interoperat Any TO_EX()			TO_EX({}))					
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested						
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass		