

Designation : CAT6a 500mhz
 Testorder : T CAT6A RIGIDE C100 Dual
 Length : 100m Temp : 24,5°C

Test Date/Time : 18/09/2020 10:19:37

Sample-ID-No. : 00000EN7SJ

Opérateur : DB
 N° Lot : D27-35/20
 Quantité Reçu : 20000

Référence Produit : F6608SHC
 Référence Commande : POF-1WS2007-0236

Test Result: PASS

Worst Case Summary

{ v = Value l = Limit m = Margin f = Frequency (MHz) p = Pair / Combo < = Lower Limit > = Upper Limit }

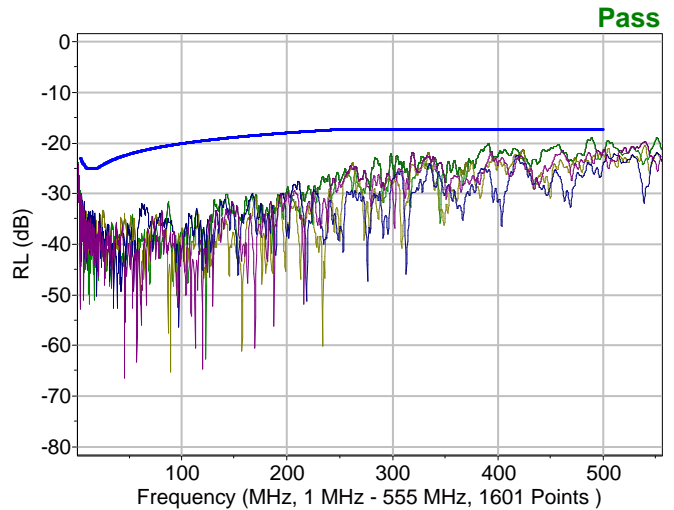
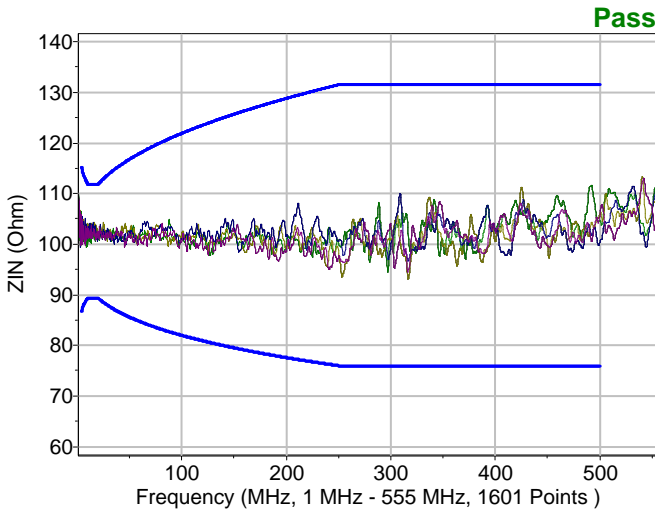
Parameter	Frequency	Points	Minimum { v [f] p }	Maximum { v [f] p }	Min. Margin { m (v l) [f] p }	Result
ZIN (Ohm)	1-555	1601	93,0 [316,8] 2	113,3 [540,8] 2	7,6 (104,3 > 111,9) [15,2] 3	ü
RL (dB)	1-555	1601	18,9 [488,9] 1	43,9 [57,44] 1	1,6 (18,9 < 17,3) [488,9] 1	ü
IL (dB/100m) at 20°C	1-555	1601	1,75 [1] 4	40,12 [555] 3	0,58 (3,27 > 3,85) [4,116] 3	ü
Skew (ns/100m)	1-555	1601	0,28 [548,4] 1-3	7,52 [1] 3-4	37,59 (7,41 > 45,00) [4,116] 3-4	ü
NEXT (dB)	1-555	1601	59,7 [554,7] 1-4	102,6 [2,731] 2-4	26,6 (61,4 < 34,9) [497,2] 1-4	ü
PS NEXT (dB)	1-555	1601	59,7 [554,7] 1	99,8 [3,077] 4	29,5 (61,4 < 31,9) [497,2] 1	ü
FEXT (dB)	1-555	1601	94,0 [2,039] 3-4	113,3 [436,9] 1-4		
ELFEXT (dB)	1-555	1601	58,3 [545,3] 3-4	98,7 [2,731] 2-4	39,4 (93,8 < 54,4) [4,809] 3-4	ü
PS ELFEXT (dB)	1-555	1601	56,6 [545,3] 4	95,6 [9,656] 3	40,0 (90,2 < 50,2) [5,501] 1	ü
ZIN (Ohm)	1-555	1601	92,4 [271,1] 1	110,9 [440,4] 1	6,7 (105,2 > 111,9) [15,2] 1	ü
RL (dB)	1-555	1601	22,5 [528,3] 4	42,0 [57,09] 3	5,8 (23,1 < 17,3) [467,4] 4	ü
IL (dB/100m) at 20°C	1-555	1601	1,75 [1] 3	39,94 [555] 3	0,59 (3,26 > 3,85) [4,116] 3	ü
Skew (ns/100m)	1-555	1601	0,11 [1,692] 1-3	7,28 [1] 1-4	37,80 (7,20 > 45,00) [4,116] 1-4	ü
NEXT (dB)	1-555	1601	81,6 [154,7] 1-3	110,3 [9,656] 3-4	30,0 (95,1 < 65,1) [4,809] 1-4	ü
PS NEXT (dB)	1-555	1601	81,2 [532,8] 2	107,8 [9,656] 4	30,9 (93,0 < 62,1) [4,809] 4	ü
FEXT (dB)	1-555	1601	94,8 [2,731] 3-4	121,3 [210,5] 1-2		
ELFEXT (dB)	1-555	1601	65,0 [430] 3-4	101,0 [10,35] 3-4	39,8 (93,6 < 53,8) [5,155] 2-4	ü
PS ELFEXT (dB)	1-555	1601	64,5 [481,2] 4	98,9 [10,35] 4	39,2 (89,9 < 50,8) [5,155] 2	ü

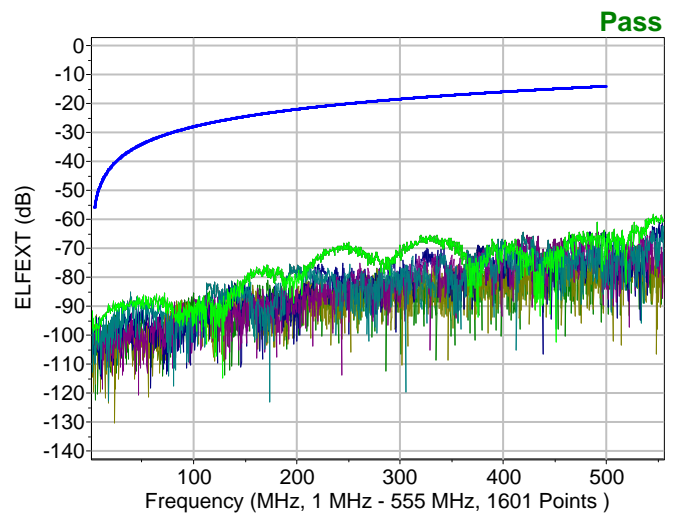
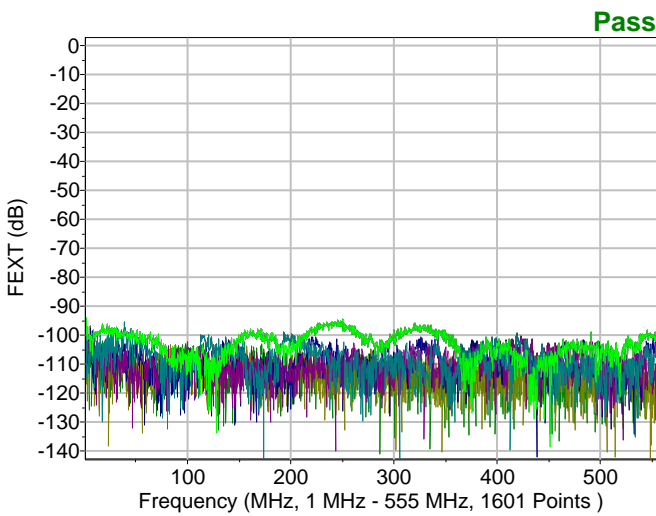
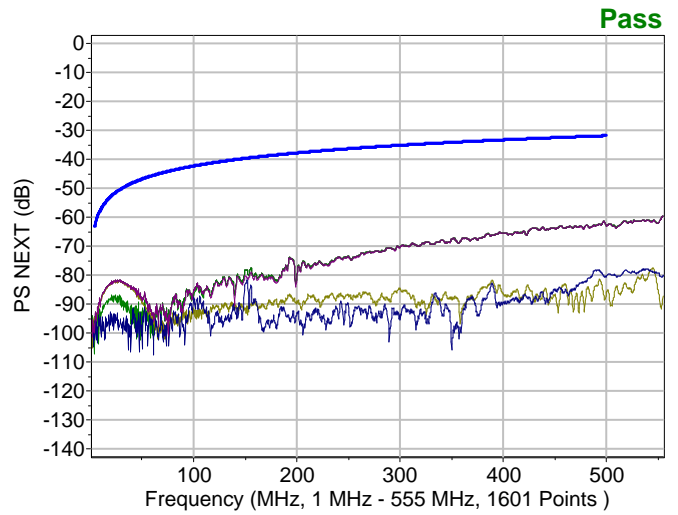
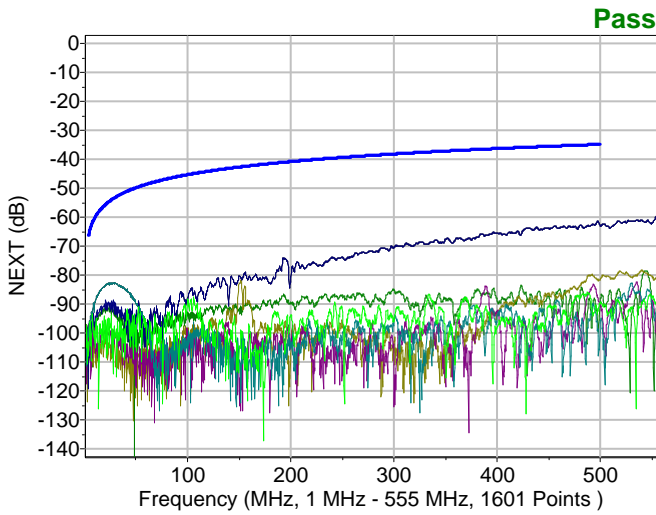
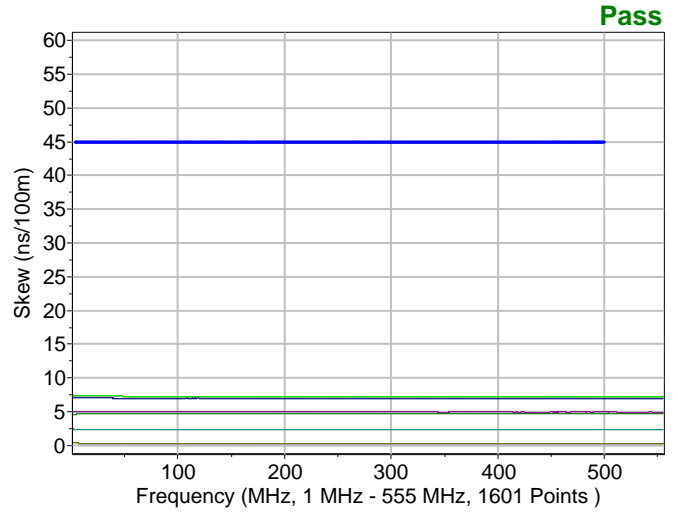
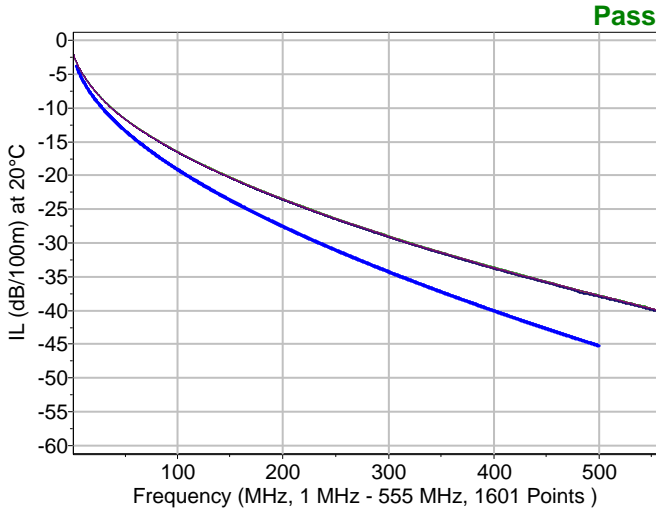
Legend

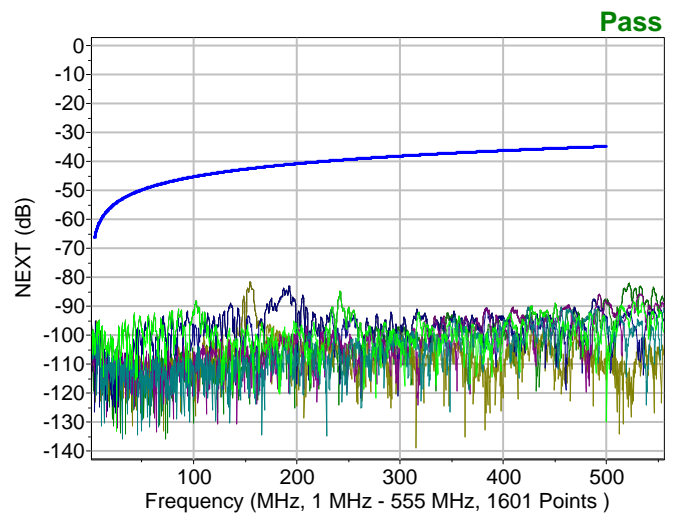
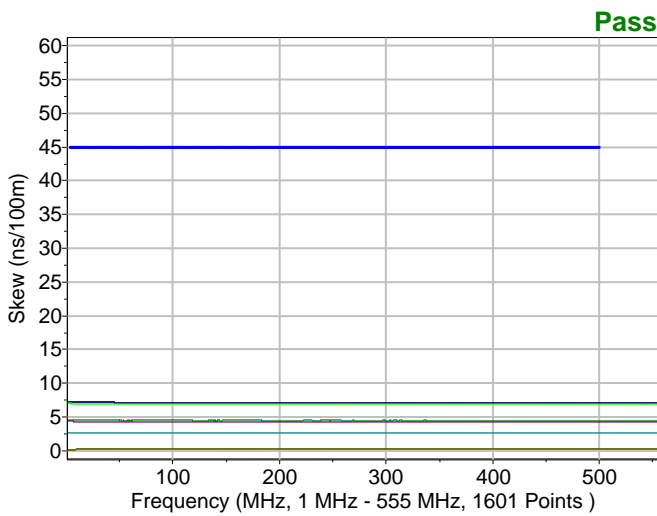
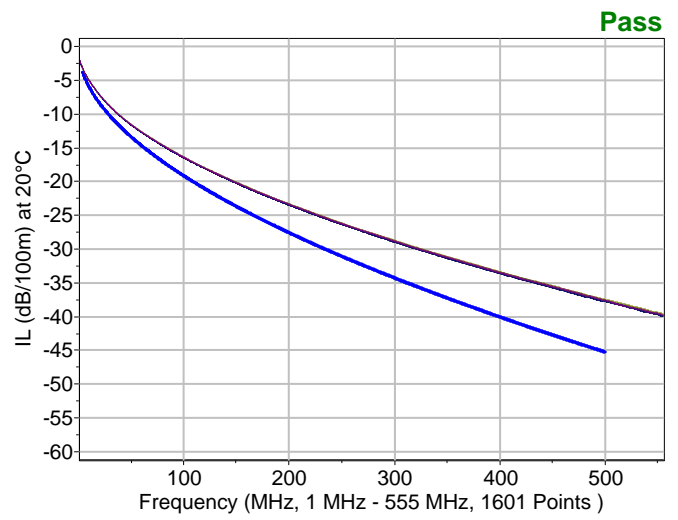
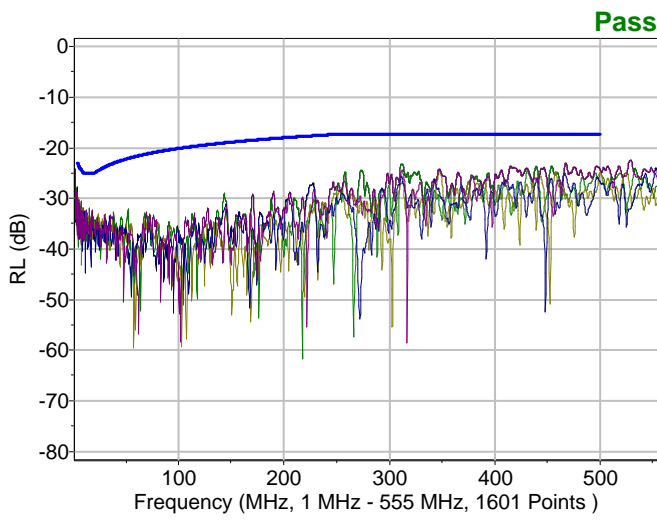
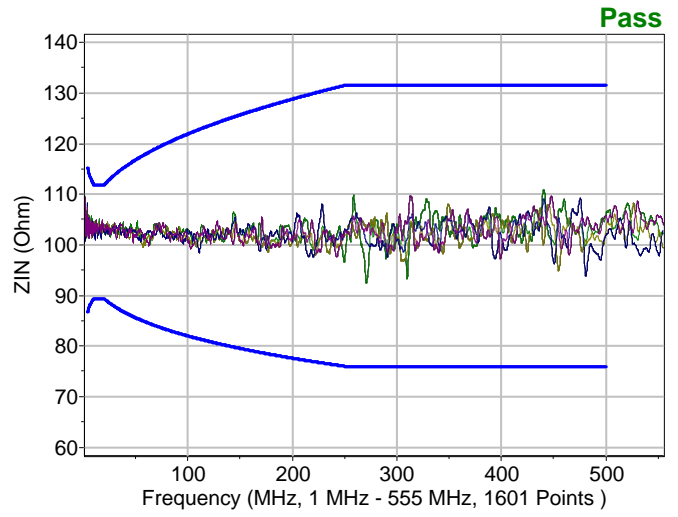
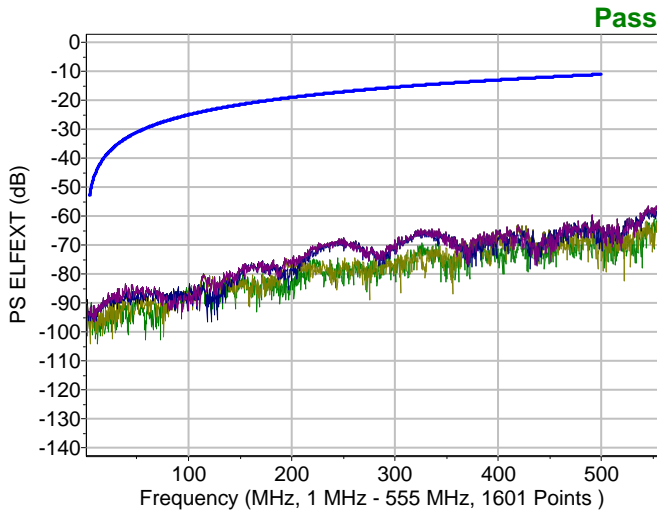
ZIN = Input Impedance
 Skew = Skew
 FEXT = Far End Crosstalk

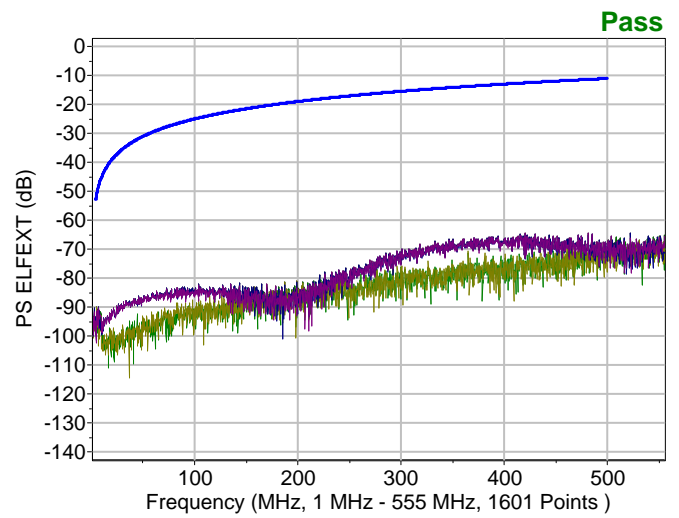
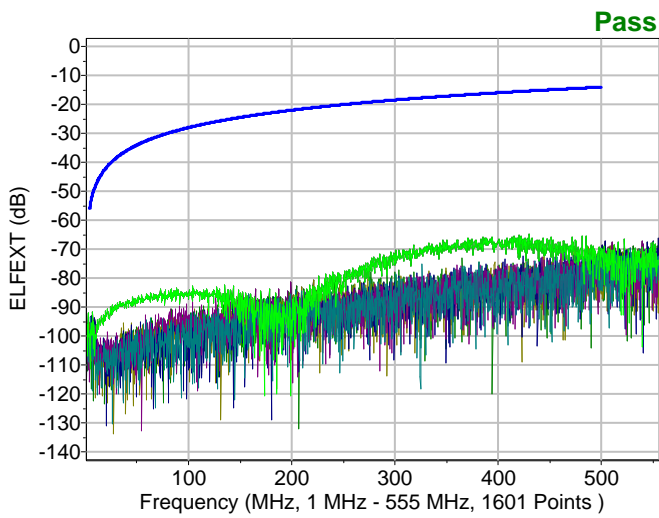
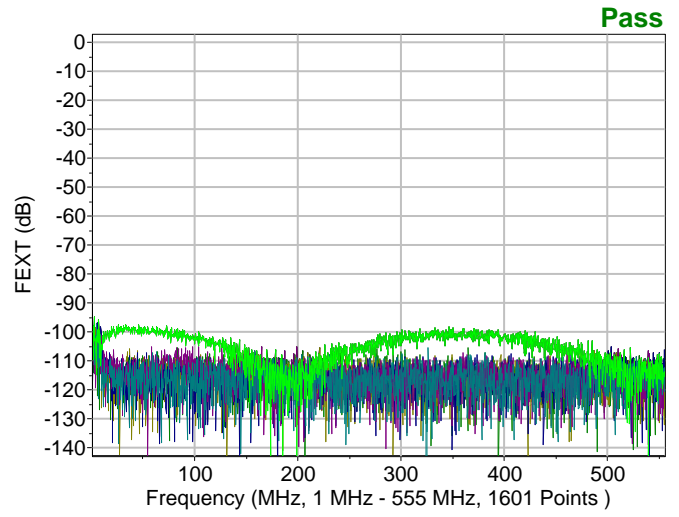
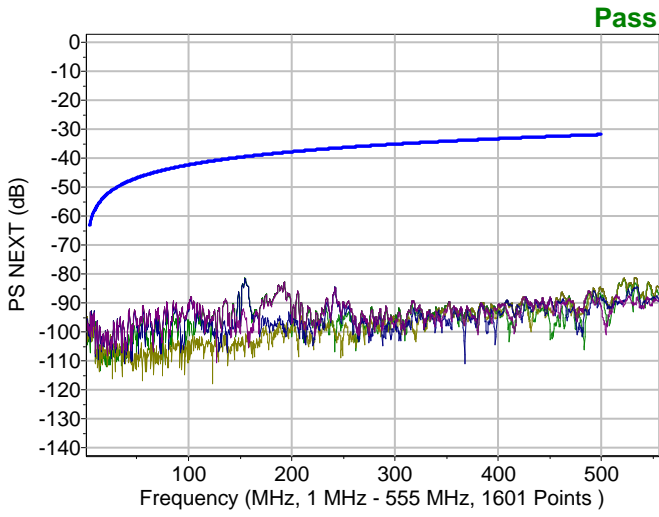
RL = Return Loss
 NEXT = Near End Crosstalk
 ELFEXT = Equal Level FEXT

IL = Insertion loss
 PS NEXT = Power Sum NEXT
 PS ELFEXT = Power Sum ELFEXT





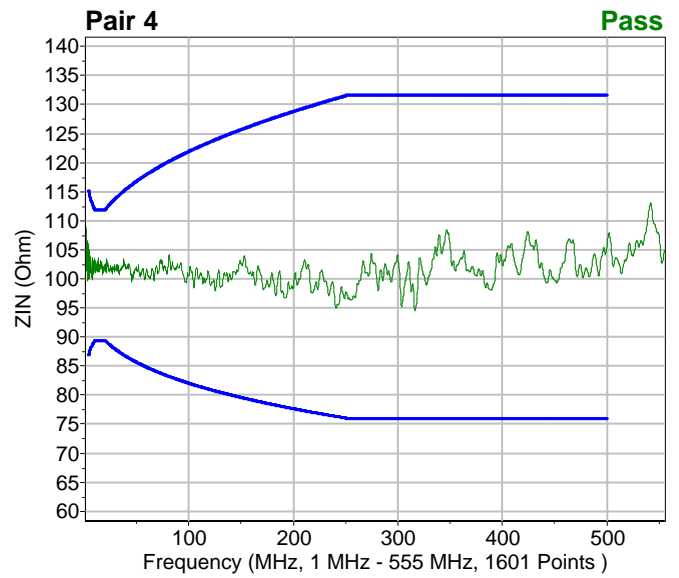
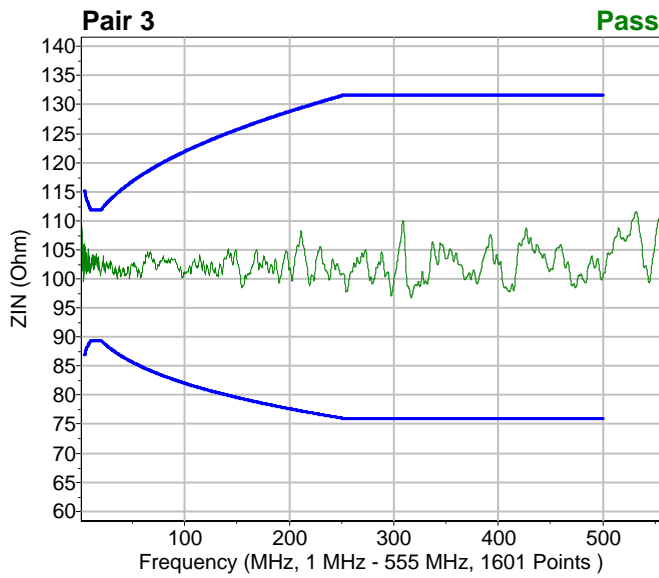
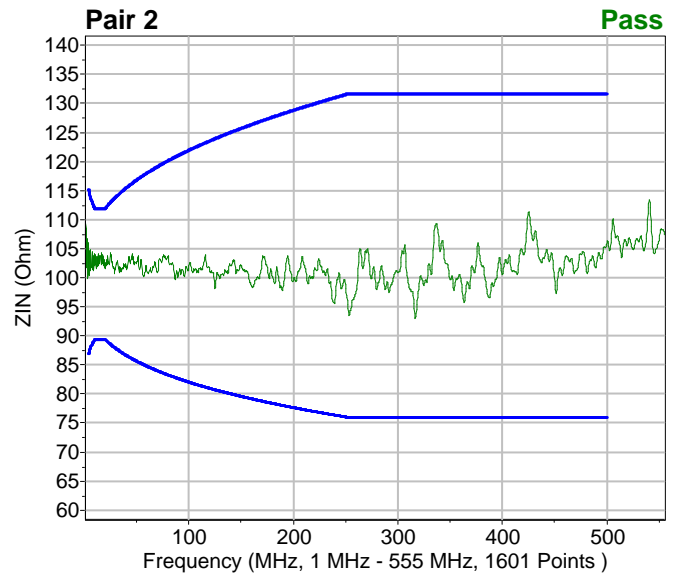
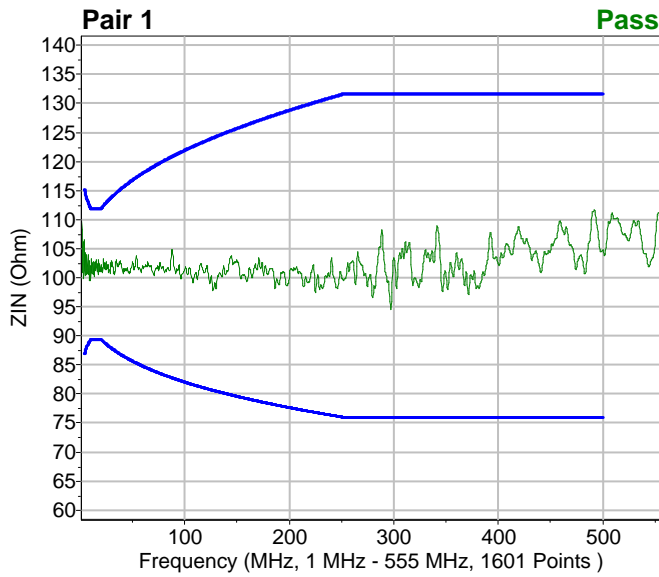




Summary and Graphic: Input Impedance (ZIN)

{ v = Value (Ohm) l = Limit (Ohm) m = Margin (Ohm) f = Frequency (MHz) }

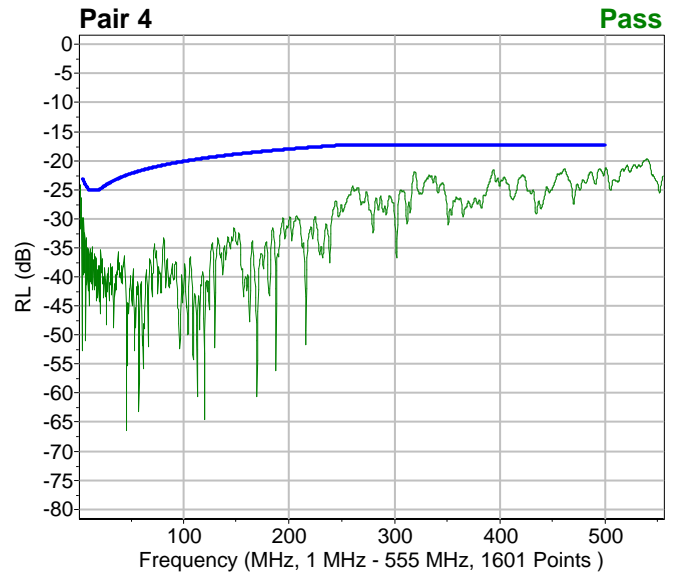
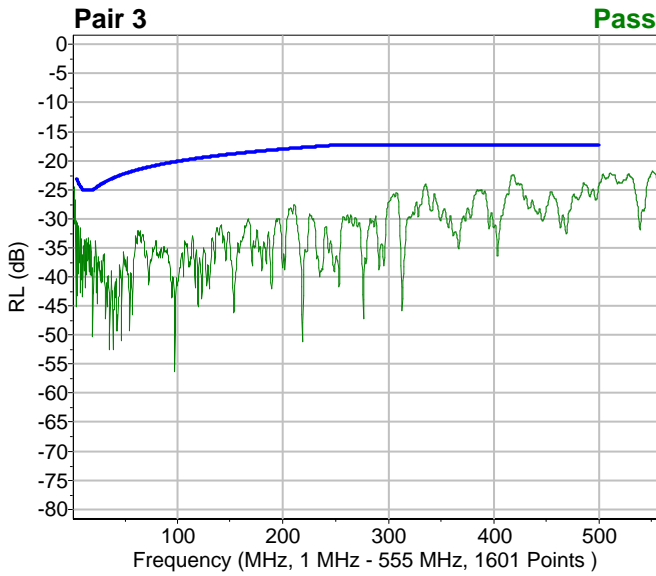
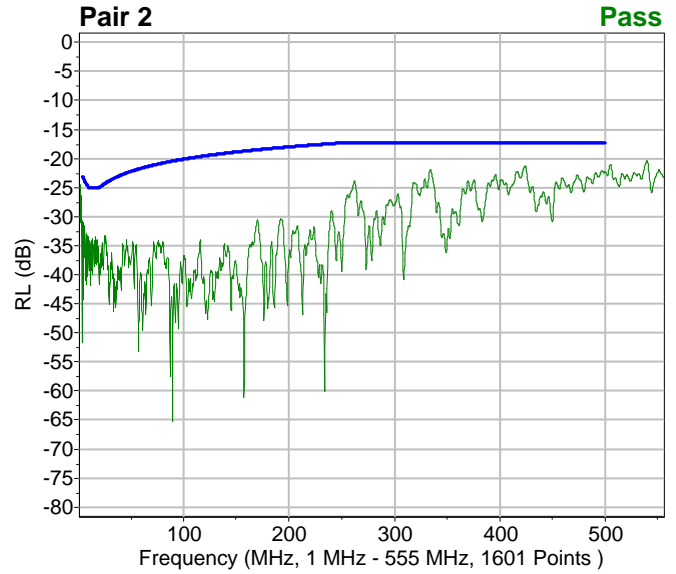
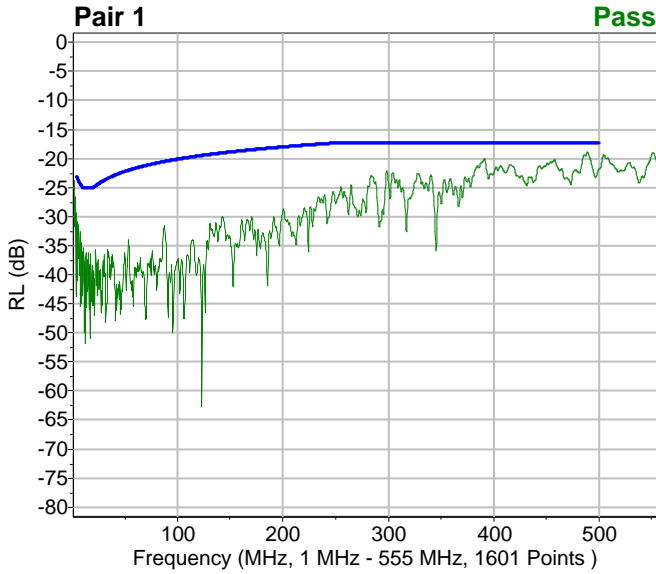
Pair	Start f	Stop f	Points	Minimum { v [ff] }	Maximum { v [ff] }	Min. Margin { m (v l) [ff] }	Result
1	1	555	1601	94,6 [297]	111,6 [492]	8,6 (103,3 > 111,9) [10,69]	ü
2	1	555	1601	93,0 [316,8]	113,3 [540,8]	7,7 (104,2 > 111,9) [16,58]	ü
3	1	555	1601	96,7 [316,8]	111,5 [531,8]	7,6 (104,3 > 111,9) [15,2]	ü
4	1	555	1601	94,6 [316,4]	113,0 [541,8]	8,2 (103,7 > 111,9) [13,12]	ü



Summary and Graphic: Return Loss (RL)

{ v = Value (dB) l = Limit (dB) m = Margin (dB) f = Frequency (MHz) }

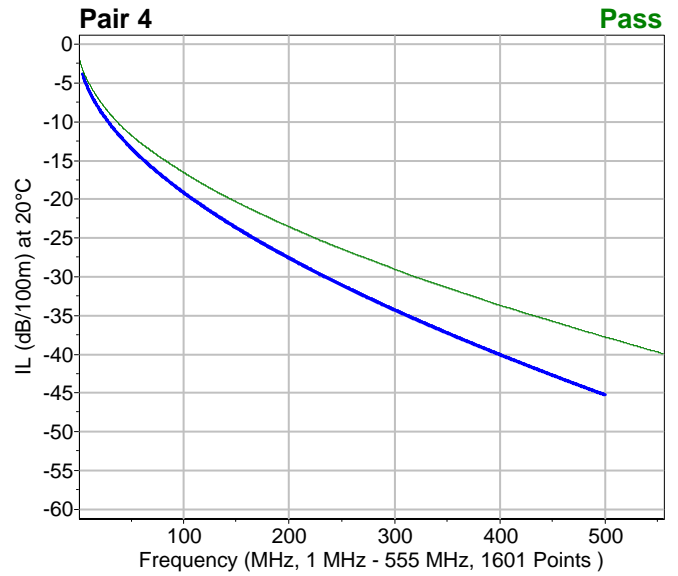
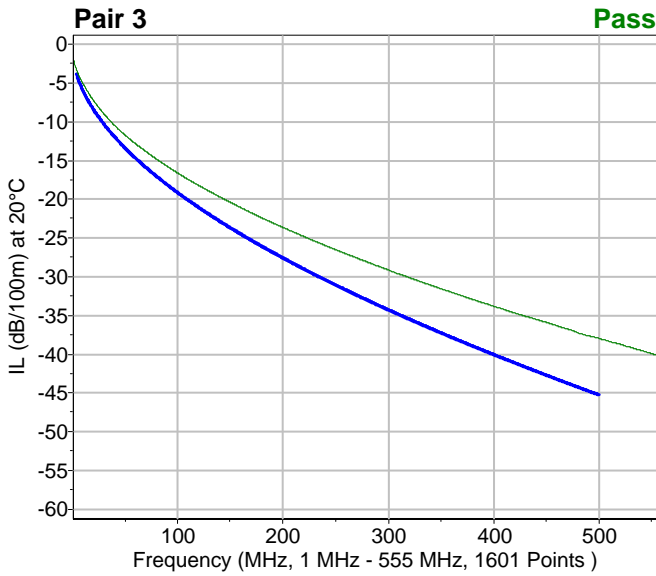
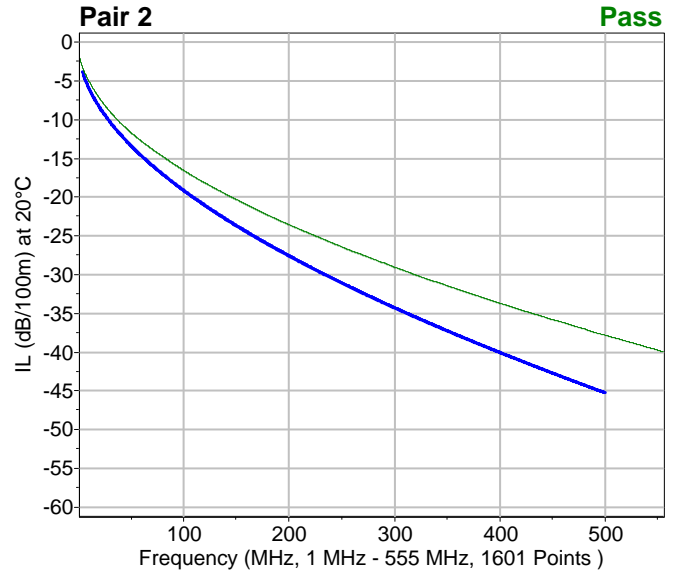
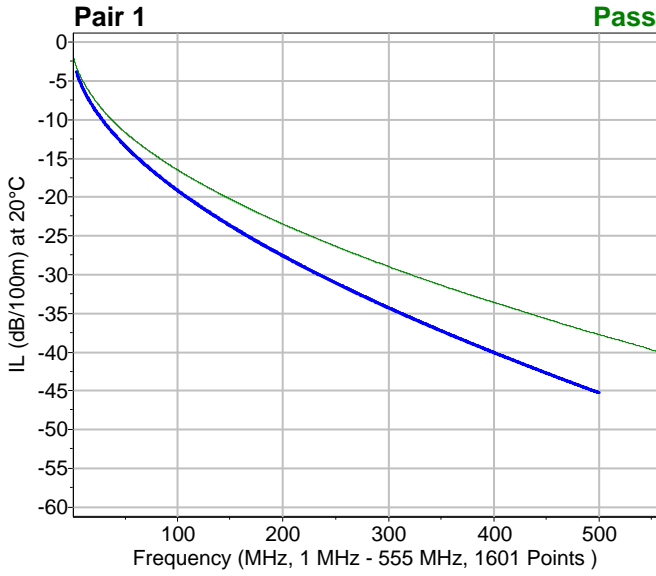
Pair	Start f	Stop f	Points	Minimum { v [ff] }	Maximum { v [ff] }	Min. Margin { m (v l) [ff] }	Result
1	1	555	1601	18,9 [488,9]	62,7 [122,9]	1,6 (18,9 < 17,3) [488,9]	ù
2	1	555	1601	20,4 [539,4]	65,3 [89,29]	4,0 (21,3 < 17,3) [423,8]	ù
3	1	555	1601	21,9 [550,5]	56,3 [97,26]	5,1 (22,4 < 17,3) [418,2]	ù
4	1	555	1601	19,7 [539,4]	66,4 [45,67]	4,1 (21,4 < 17,3) [460,8]	ù



Summary and Graphic: Insertion loss (IL)

{ v = Value (dB/100m) at 20°C l = Limit (dB/100m) at 20°C m = Margin (dB/100m) at 20°C f = Frequency (MHz) }

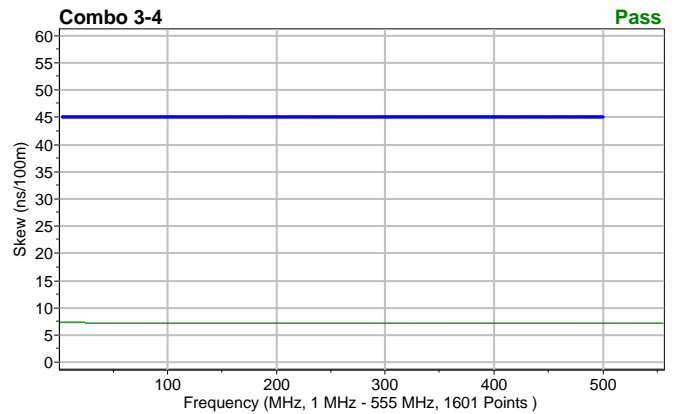
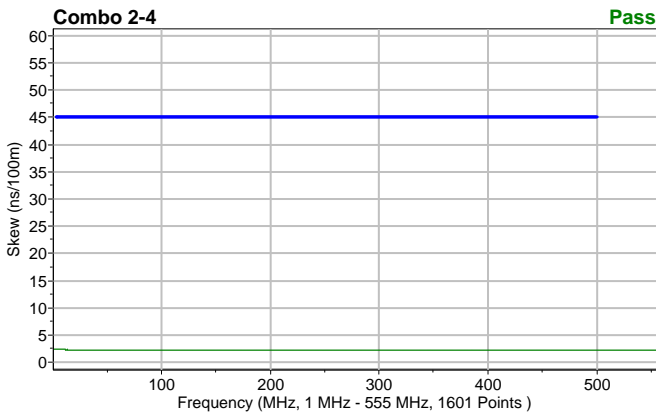
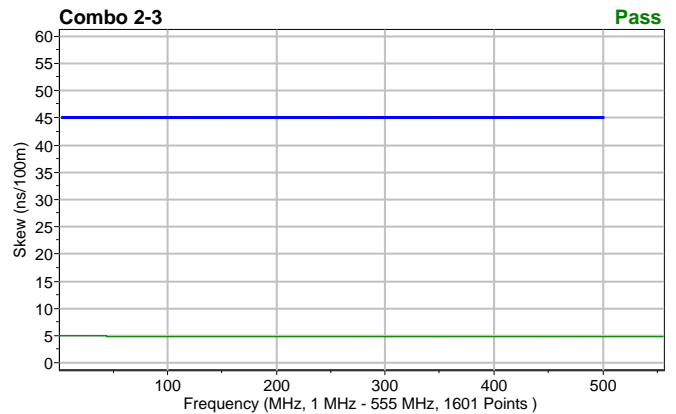
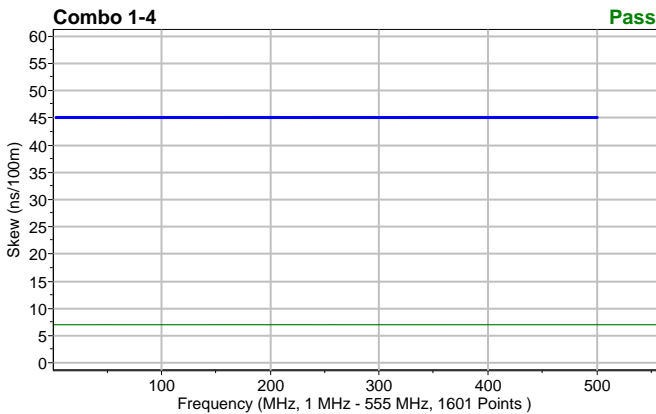
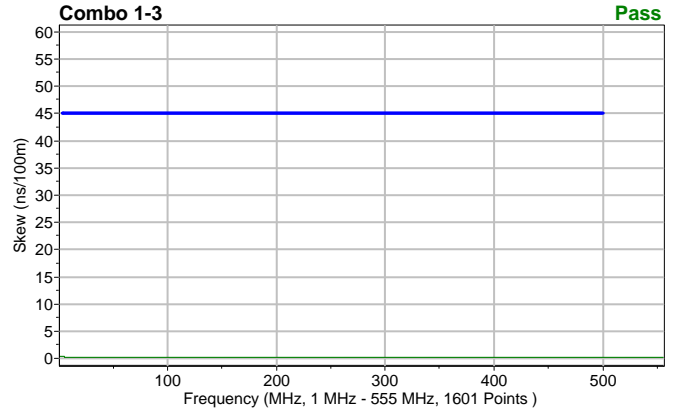
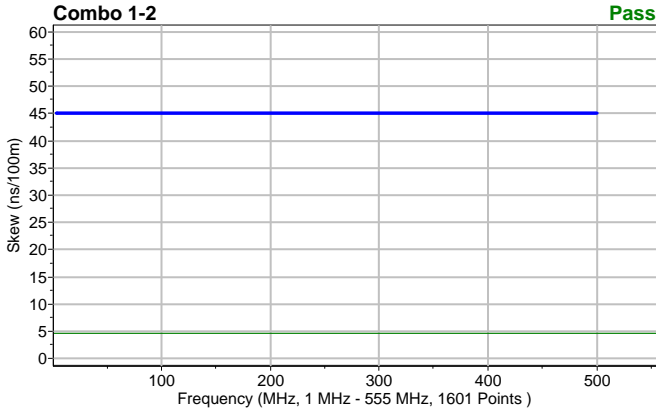
Pair	Start f	Stop f	Points	Minimum { $v[f]$ }	Maximum { $v[f]$ }	Min. Margin { $m(v,l)[f]$ }	Result
1	1	555	1601	1,75 [1]	39,92 [555]	0,60 (3,25 > 3,85) [4,116]	ü
2	1	555	1601	1,75 [1]	39,95 [555]	0,59 (3,26 > 3,85) [4,116]	ü
3	1	555	1601	1,75 [1]	40,12 [555]	0,58 (3,27 > 3,85) [4,116]	ü
4	1	555	1601	1,75 [1]	39,94 [555]	0,59 (3,27 > 3,85) [4,116]	ü



Summary and Graphic: Skew (Skew)

{ v = Value (ns/100m) l = Limit (ns/100m) m = Margin (ns/100m) f = Frequency (MHz) }

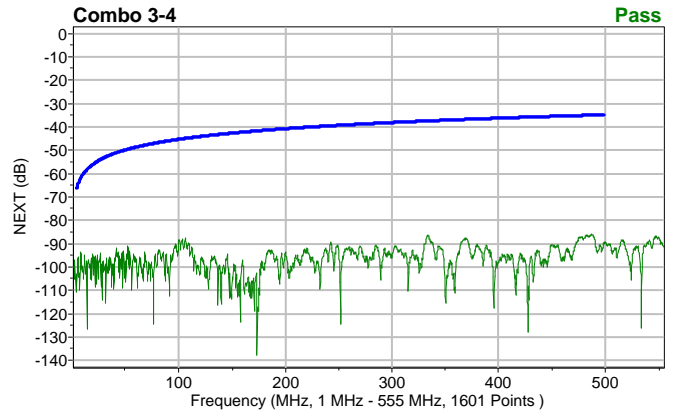
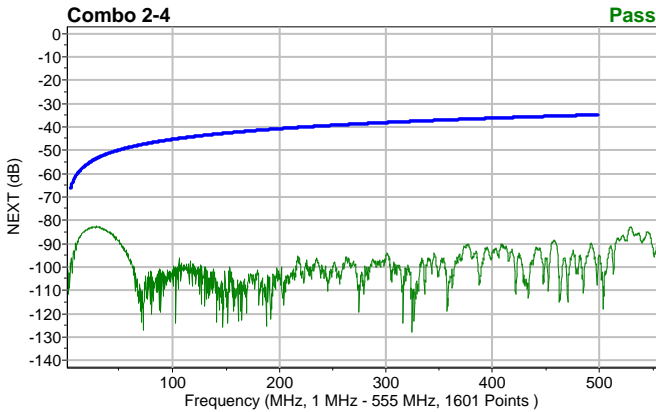
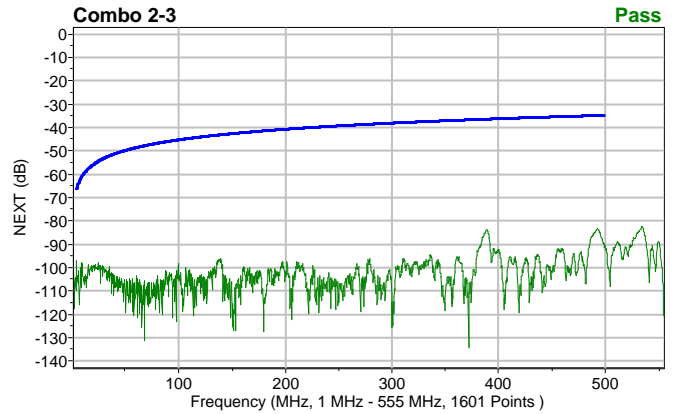
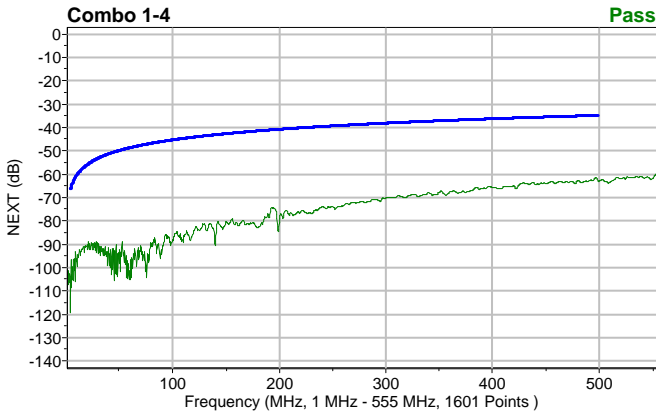
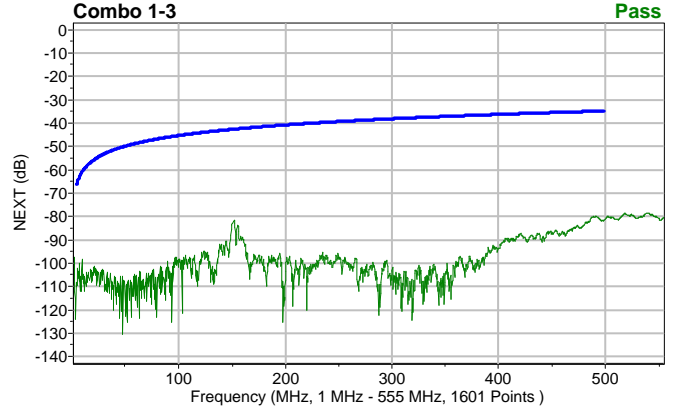
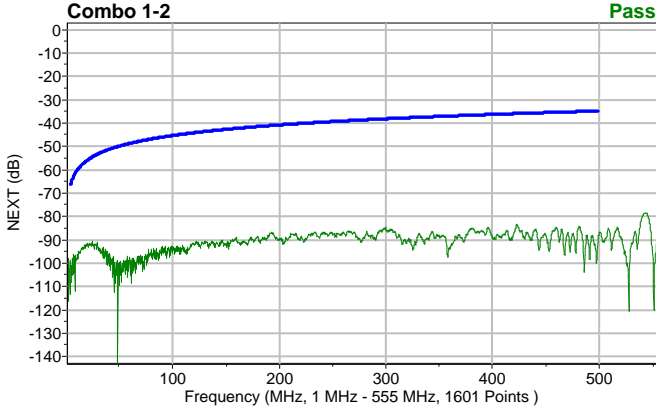
Combo	Start f	Stop f	Points	Minimum { v [ff] }	Maximum { v [ff] }	Min. Margin { m (v l) [ff] }	Result
1-2	1	555	1601	4,53 [1]	4,66 [262,8]	40,34 (4,66 > 45,00) [262,8]	ü
1-3	1	555	1601	0,28 [548,4]	0,53 [1]	44,62 (0,38 > 45,00) [4,116]	ü
1-4	1	555	1601	6,99 [1]	7,04 [8,617]	37,96 (7,04 > 45,00) [8,617]	ü
2-3	1	555	1601	4,93 [537,3]	5,06 [1]	39,99 (5,01 > 45,00) [4,116]	ü
2-4	1	555	1601	2,34 [493,4]	2,45 [1]	42,60 (2,40 > 45,00) [4,116]	ü
3-4	1	555	1601	7,28 [536,6]	7,52 [1]	37,59 (7,41 > 45,00) [4,116]	ü



Summary and Graphic: Near End Crosstalk (NEXT)

{ v = Value (dB) l = Limit (dB) m = Margin (dB) f = Frequency (MHz) }

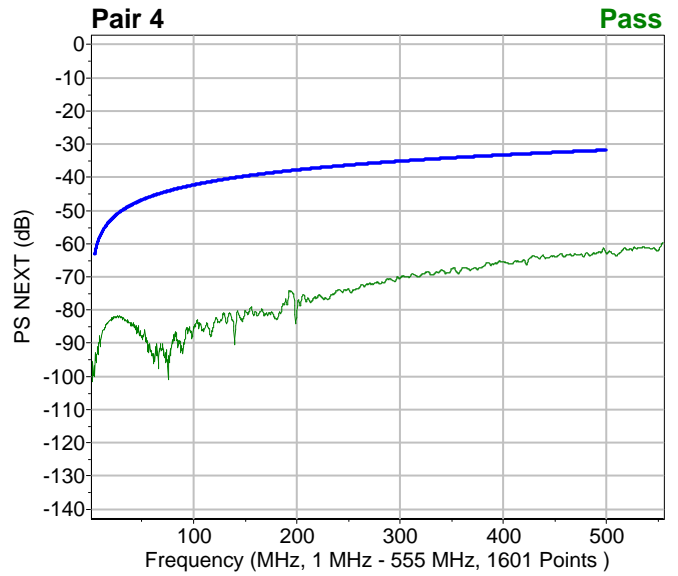
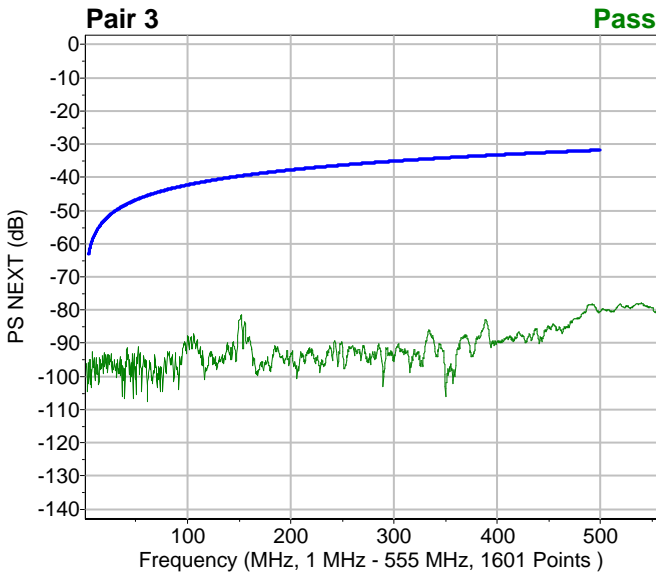
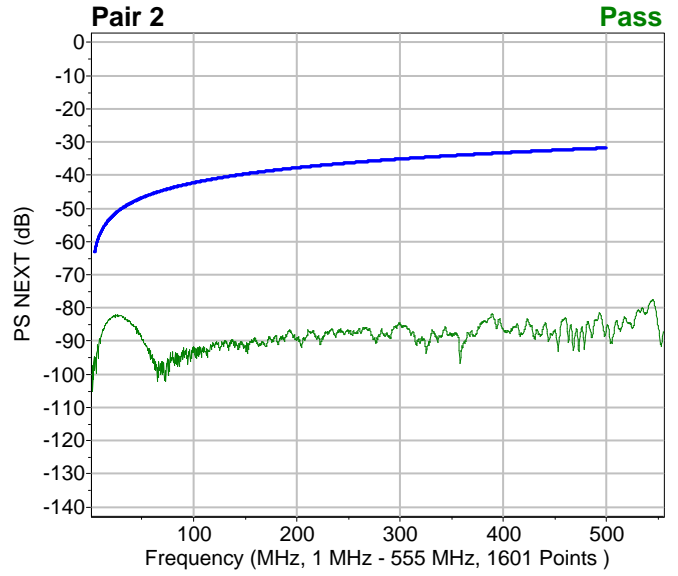
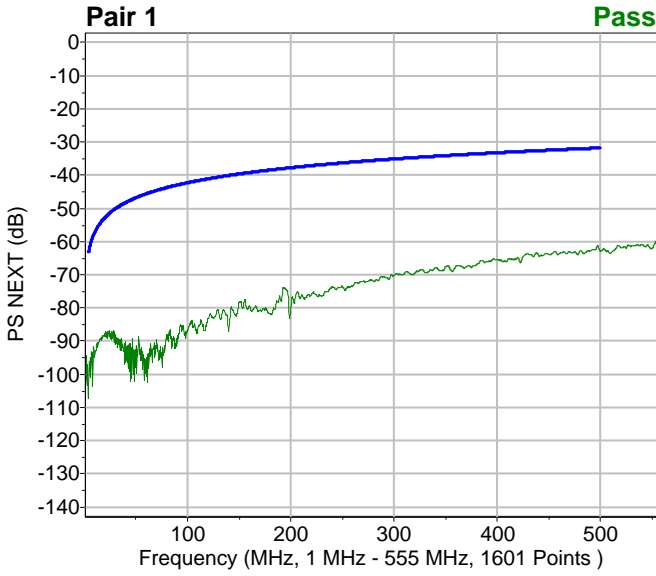
Combo	Start f	Stop f	Points	Minimum { v [ff] }	Maximum { v [ff] }	Min. Margin { m (v l) [ff] }	Result
1-2	1	555	1601	78,5 [544,6]	144,7 [48,44]	33,4 (96,1 < 62,7) [6,886]	ù
1-3	1	555	1601	78,4 [540,5]	130,4 [47,4]	36,8 (99,9 < 63,1) [6,54]	ù
1-4	1	555	1601	59,7 [554,7]	119,4 [3,77]	26,6 (61,4 < 34,9) [497,2]	ù
2-3	1	555	1601	82,4 [534,6]	134,4 [372,2]	36,7 (98,0 < 61,3) [8,617]	ù
2-4	1	555	1601	82,6 [28,35]	127,8 [324,7]	27,7 (84,4 < 56,7) [17,27]	ù
3-4	1	555	1601	85,9 [487,5]	137,4 [173,4]	31,5 (95,7 < 64,2) [5,501]	ù



Summary and Graphic: Power Sum NEXT (PS NEXT)

{ v = Value (dB) l = Limit (dB) m = Margin (dB) f = Frequency (MHz) }

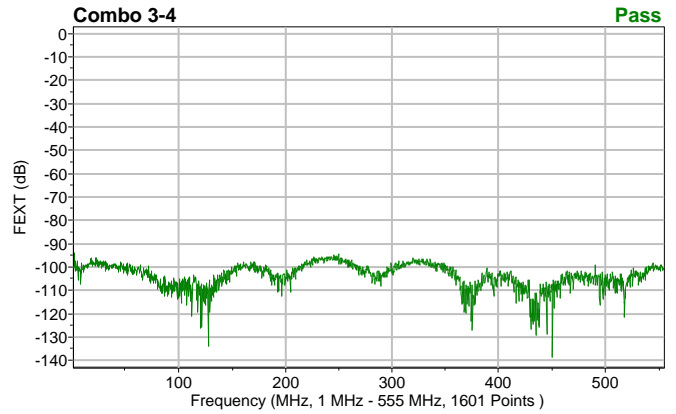
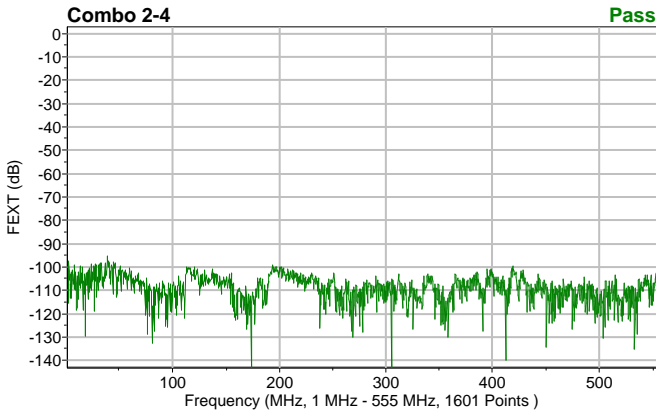
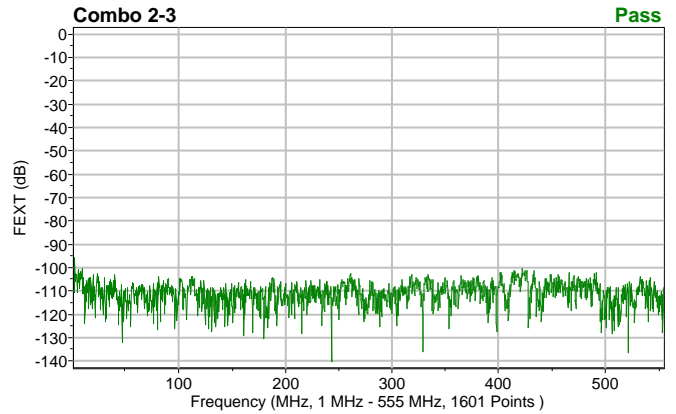
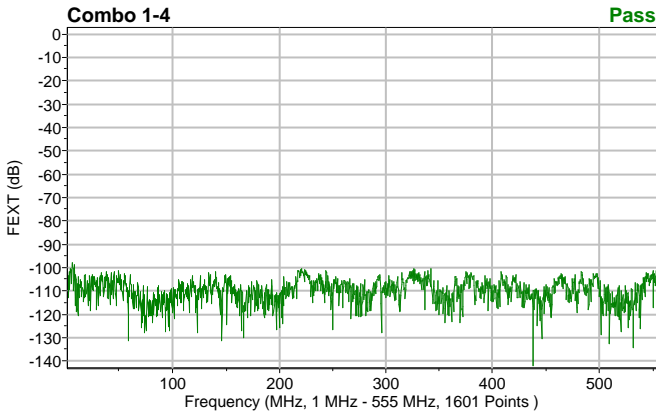
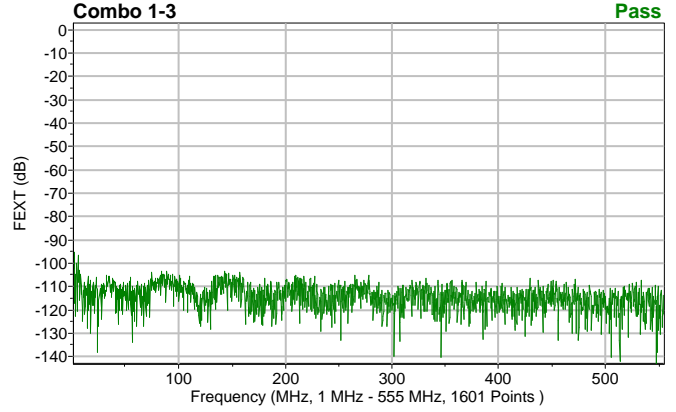
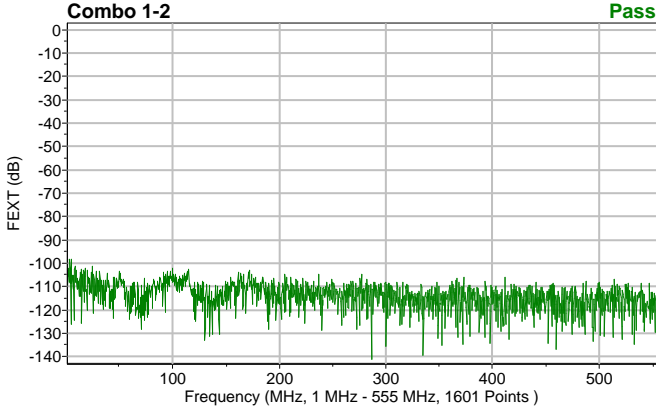
Pair	Start f	Stop f	Points	Minimum { v [ff] }	Maximum { v [ff] }	Min. Margin { m (v l) [ff] }	Result
1	1	555	1601	59,7 [554,7]	107,4 [3,77]	29,5 (61,4 < 31,9) [497,2]	ù
2	1	555	1601	77,6 [544,6]	105,2 [2,385]	29,9 (83,7 < 53,7) [17,27]	ù
3	1	555	1601	78,0 [539,8]	107,7 [61,25]	33,3 (95,0 < 61,6) [5,155]	ù
4	1	555	1601	59,7 [554,7]	101,5 [2,039]	29,6 (61,4 < 31,9) [497,2]	ù



Summary and Graphic: Far End Crosstalk (FEXT)

{ v = Value (dB) l = Limit (dB) m = Margin (dB) f = Frequency (MHz) }

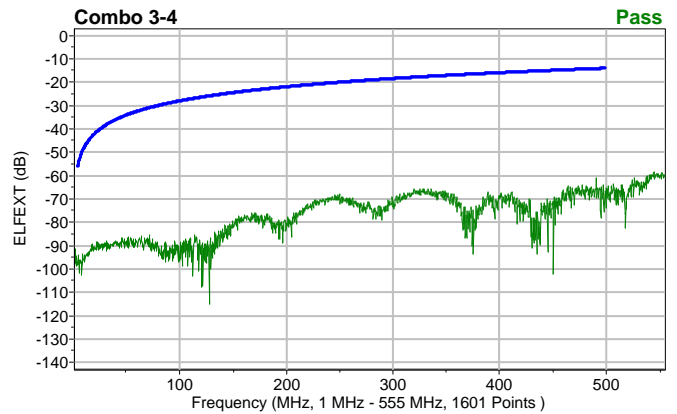
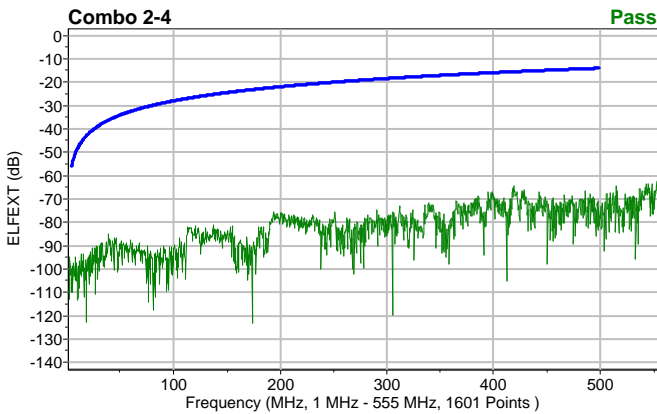
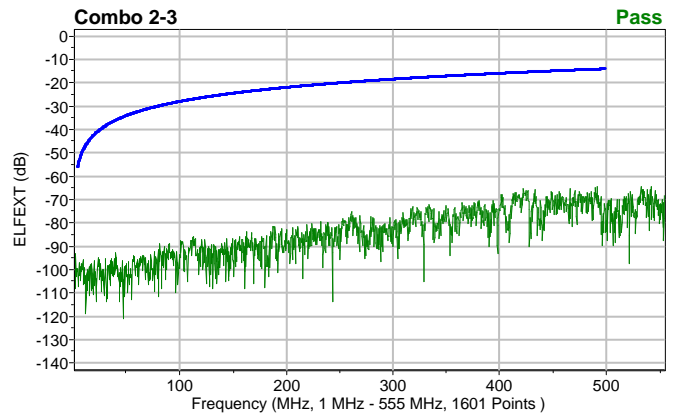
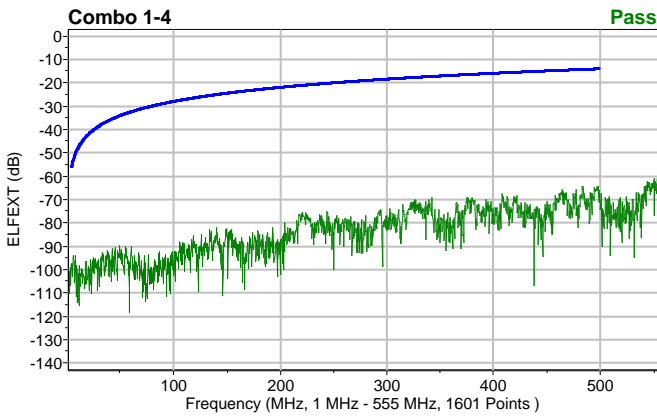
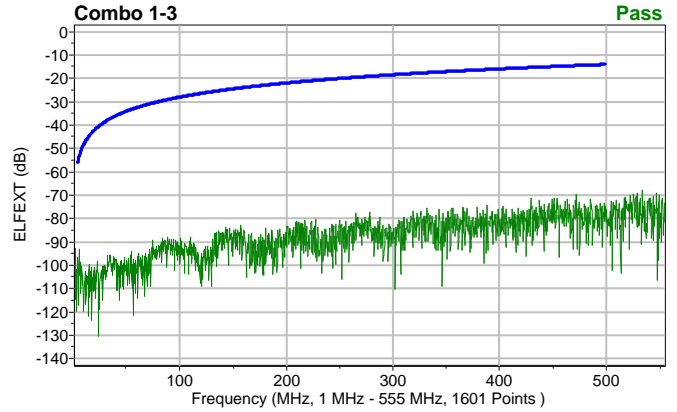
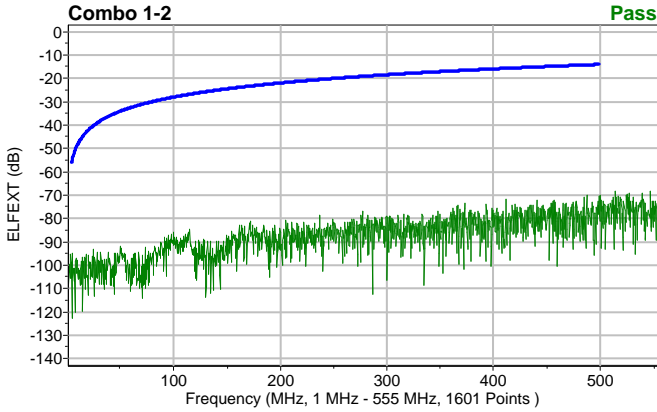
Combo	Start f	Stop f	Points	Minimum { v [f] }	Maximum { v [f] }	Result
1-2	1	555	1601	98,2 [3,077]	141,0 [286,7]	ü
1-3	1	555	1601	95,2 [2,039]	146,5 [548,4]	ü
1-4	1	555	1601	97,6 [5,501]	142,1 [438,3]	ü
2-3	1	555	1601	95,8 [2,385]	140,2 [243,4]	ü
2-4	1	555	1601	95,4 [38,74]	149,2 [305,4]	ü
3-4	1	555	1601	94,0 [2,039]	138,6 [450,8]	ü



Summary and Graphic: Equal Level FEXT (ELFEXT)

{ v = Value (dB) l = Limit (dB) m = Margin (dB) f = Frequency (MHz) }

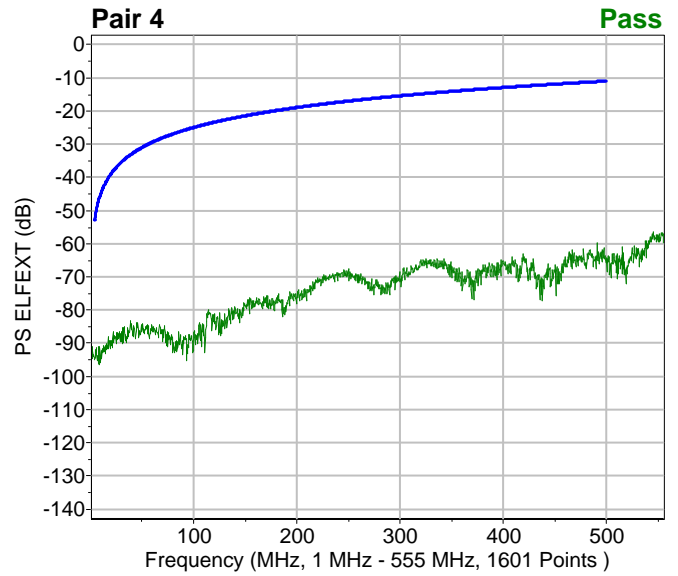
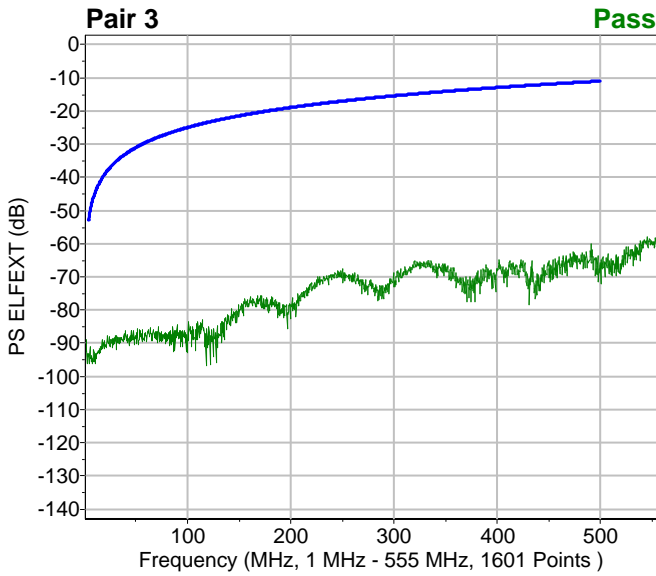
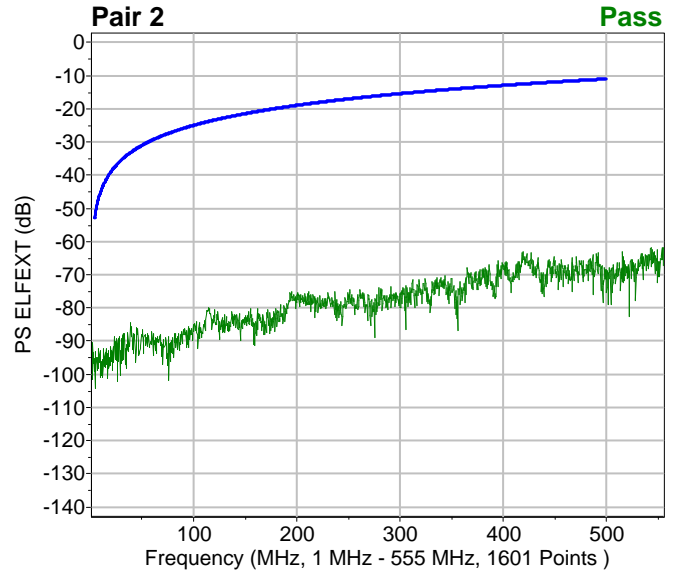
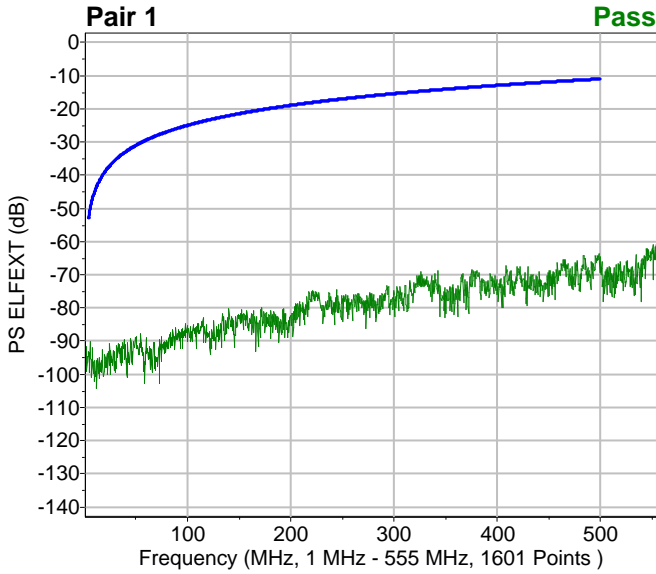
Combo	Start f	Stop f	Points	Minimum { v [ff] }	Maximum { v [ff] }	Min. Margin { m (v l) [ff] }	Result
1-2	1	555	1601	68,2 [514,8]	122,5 [4,462]	40,3 (94,7 < 54,4) [4,809]	ü
1-3	1	555	1601	67,7 [534,2]	130,4 [23,51]	39,8 (93,0 < 53,2) [5,501]	ü
1-4	1	555	1601	61,0 [550,8]	118,4 [58,48]	40,7 (93,9 < 53,2) [5,501]	ü
2-3	1	555	1601	64,3 [542,5]	120,8 [46,7]	43,8 (99,5 < 55,7) [4,116]	ü
2-4	1	555	1601	62,3 [554,7]	123,1 [173,8]	44,2 (98,6 < 54,4) [4,809]	ü
3-4	1	555	1601	58,3 [545,3]	114,8 [127,7]	39,4 (93,8 < 54,4) [4,809]	ü



Summary and Graphic: Power Sum ELFEXT (PS ELFEXT)

{ v = Value (dB) l = Limit (dB) m = Margin (dB) f = Frequency (MHz) }

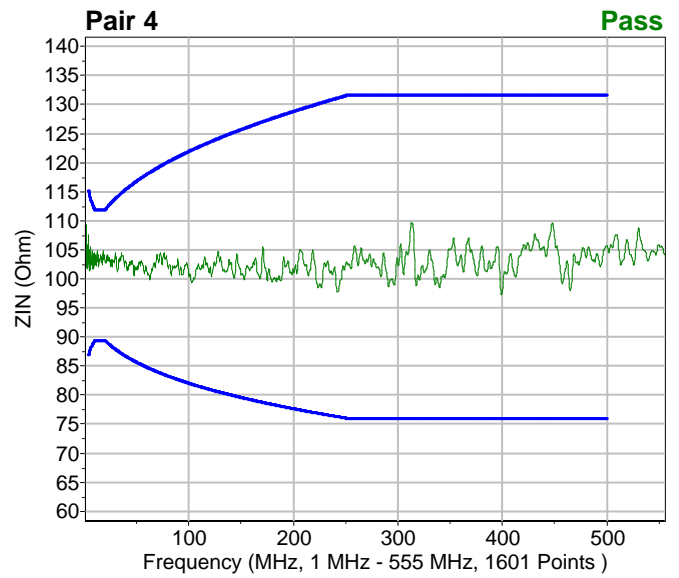
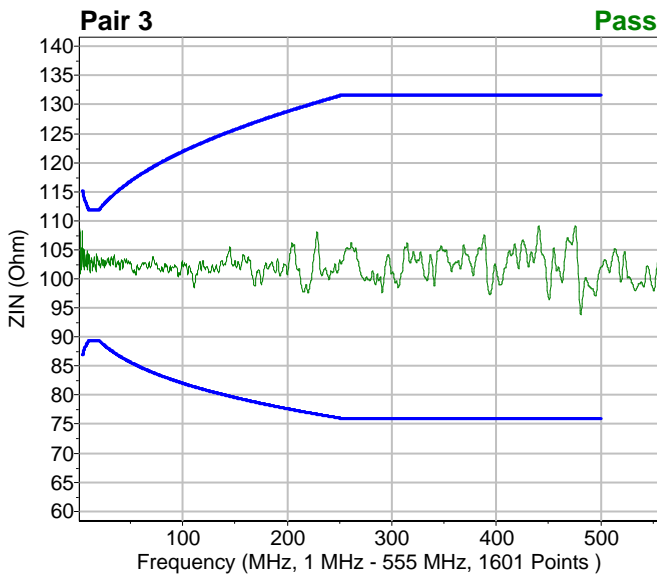
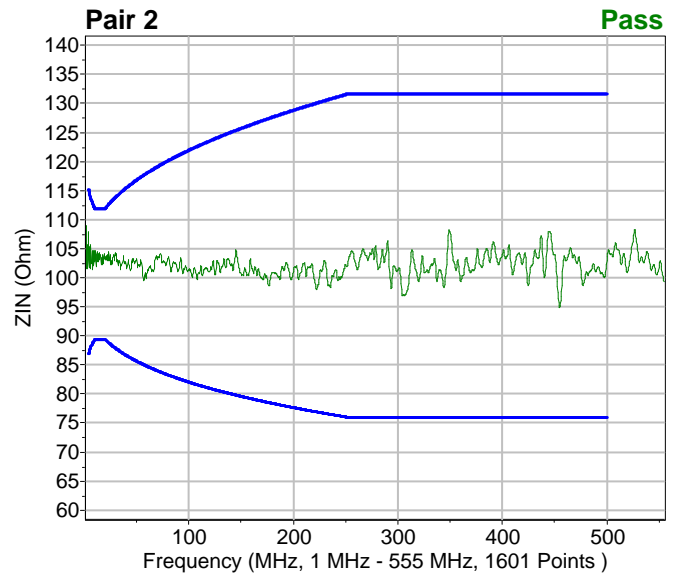
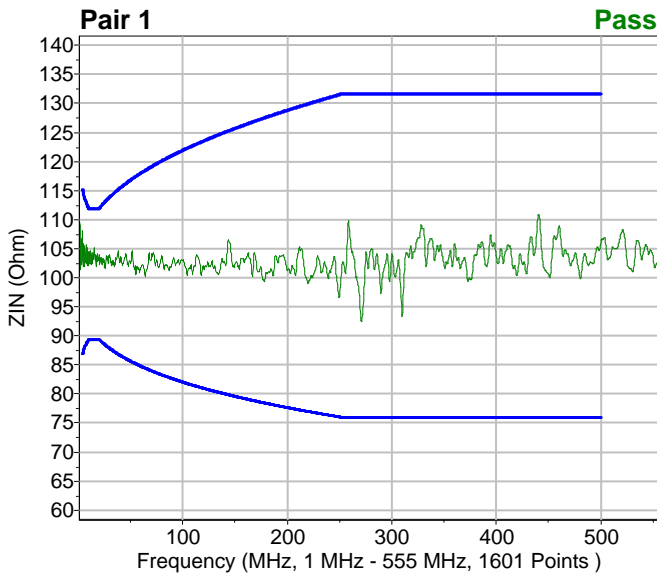
Pair	Start f	Stop f	Points	Minimum { v [ff] }	Maximum { v [ff] }	Min. Margin { m (v l) [ff] }	Result
1	1	555	1601	60,9 [550,8]	104,3 [12,08]	40,0 (90,2 < 50,2) [5,501]	ù
2	1	555	1601	61,8 [542,9]	104,2 [4,462]	41,7 (93,0 < 51,4) [4,809]	ù
3	1	555	1601	58,1 [545,3]	96,6 [118]	40,4 (93,2 < 52,7) [4,116]	ù
4	1	555	1601	56,6 [545,3]	96,5 [8,617]	40,5 (91,8 < 51,4) [4,809]	ù



Summary and Graphic: Input Impedance (ZIN)

{ v = Value (Ohm) l = Limit (Ohm) m = Margin (Ohm) f = Frequency (MHz) }

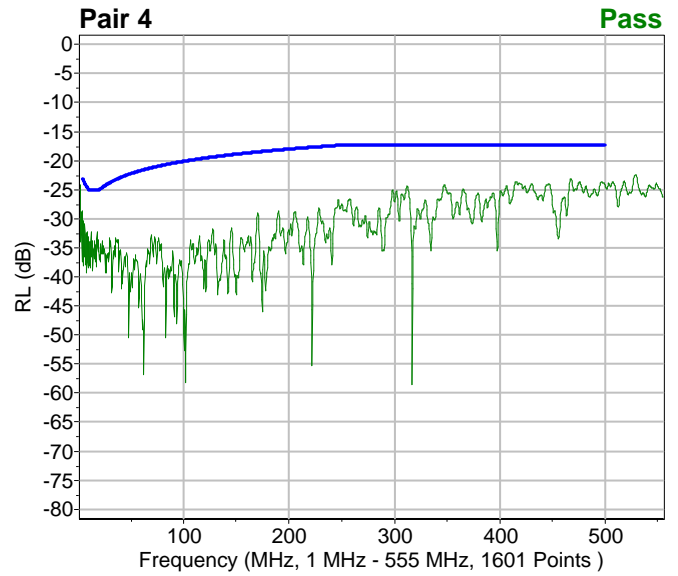
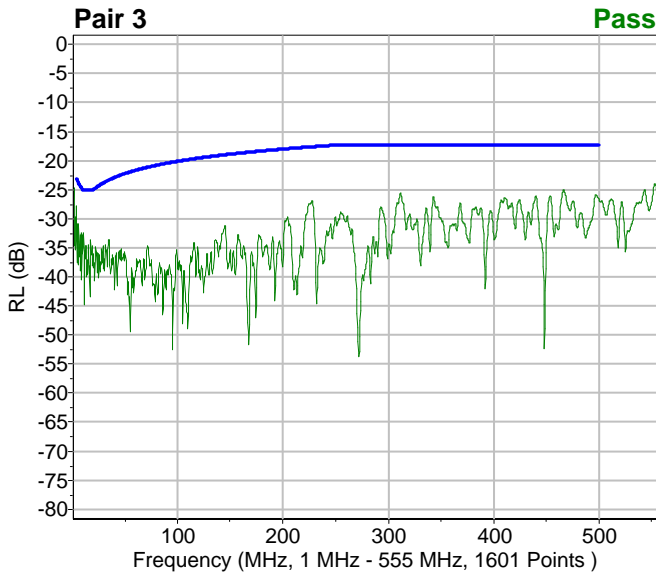
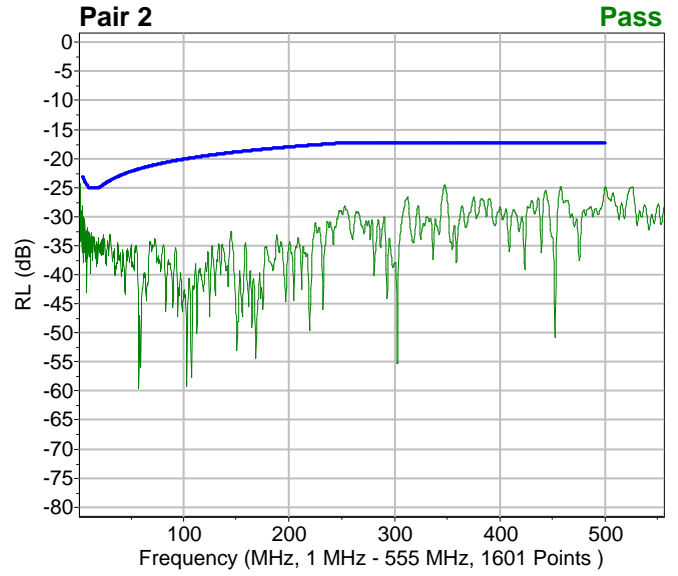
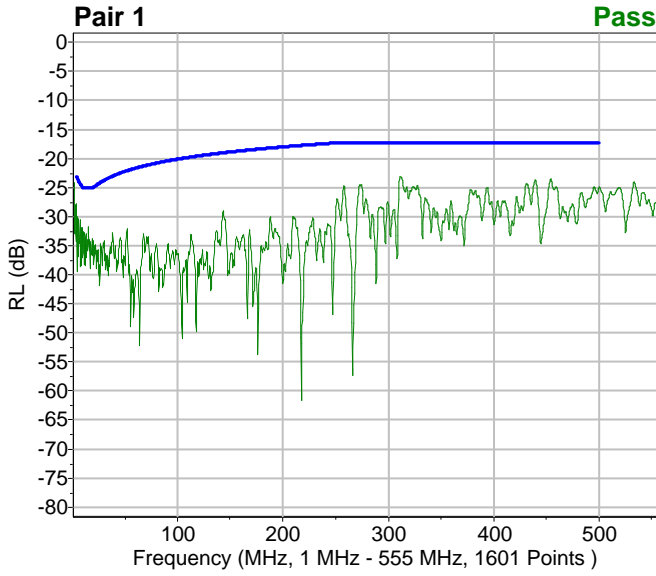
Pair	Start f	Stop f	Points	Minimum { v [ff] }	Maximum { v [ff] }	Min. Margin { m (v l) [ff] }	Result
1	1	555	1601	92,4 [271,1]	110,9 [440,4]	6,7 (105,2 > 111,9) [15,2]	ü
2	1	555	1601	94,9 [454,6]	108,9 [1,692]	7,3 (104,6 > 111,9) [10,69]	ü
3	1	555	1601	93,8 [480,9]	109,2 [475,4]	7,7 (104,2 > 111,9) [17,62]	ü
4	1	555	1601	97,3 [399,2]	109,6 [448]	7,0 (104,9 > 111,9) [12,08]	ü



Summary and Graphic: Return Loss (RL)

{ v = Value (dB) l = Limit (dB) m = Margin (dB) f = Frequency (MHz) }

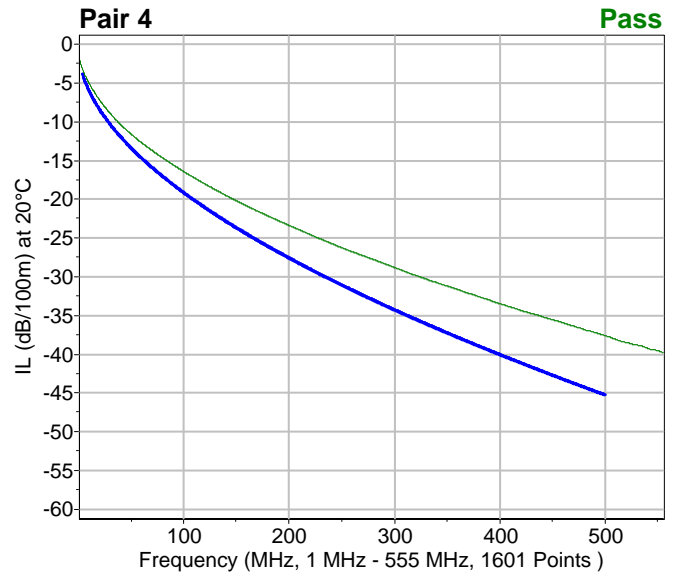
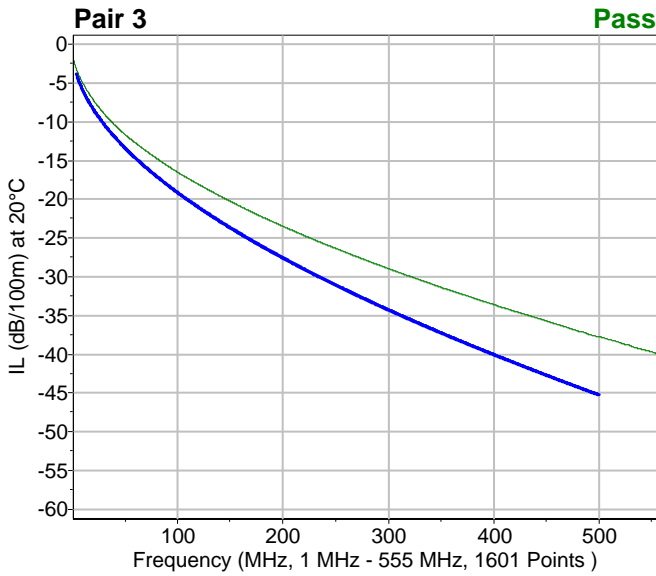
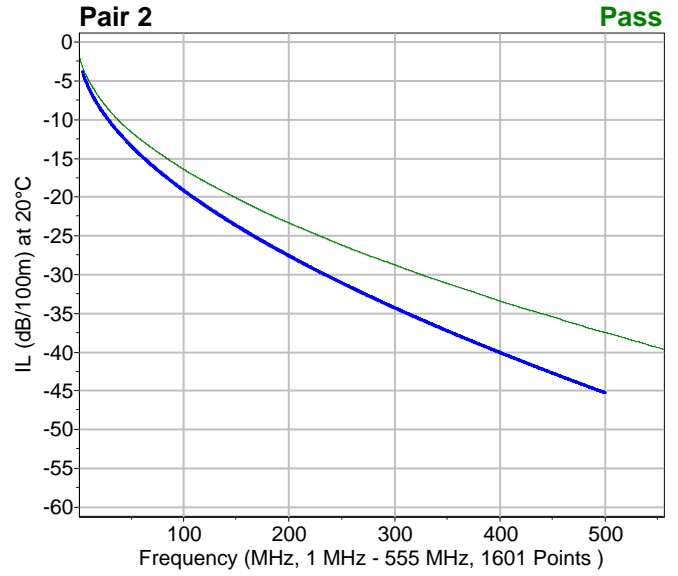
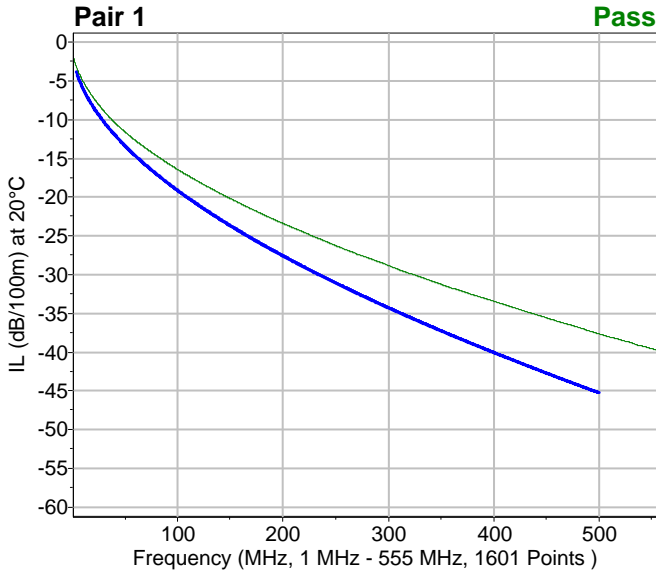
Pair	Start f	Stop f	Points	Minimum { v [f] }	Maximum { v [f] }	Min. Margin { m (v l) [f] }	Result
1	1	555	1601	23,2 [311,2]	61,7 [217,4]	5,9 (23,2 < 17,3) [311,2]	ù
2	1	555	1601	24,4 [1,692]	59,6 [57,44]	6,4 (29,4 < 23,1) [4,116]	ù
3	1	555	1601	24,0 [552,6]	53,8 [271,8]	6,8 (29,9 < 23,1) [4,116]	ù
4	1	555	1601	22,5 [528,3]	58,6 [316,8]	5,8 (23,1 < 17,3) [467,4]	ù



Summary and Graphic: Insertion loss (IL)

{ v = Value (dB/100m) at 20°C l = Limit (dB/100m) at 20°C m = Margin (dB/100m) at 20°C f = Frequency (MHz) }

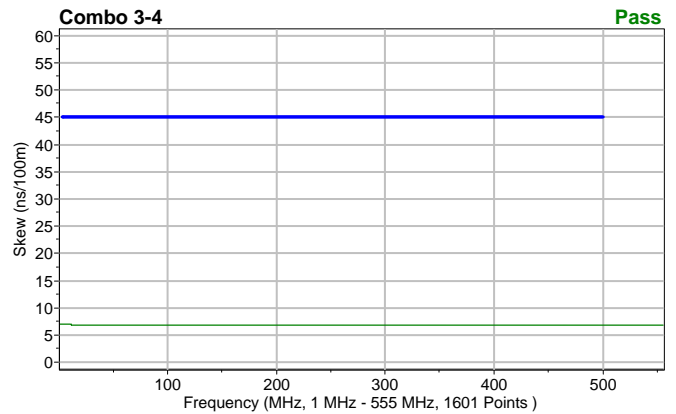
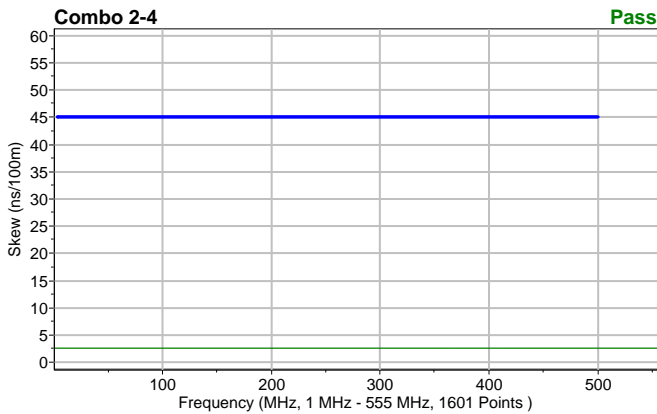
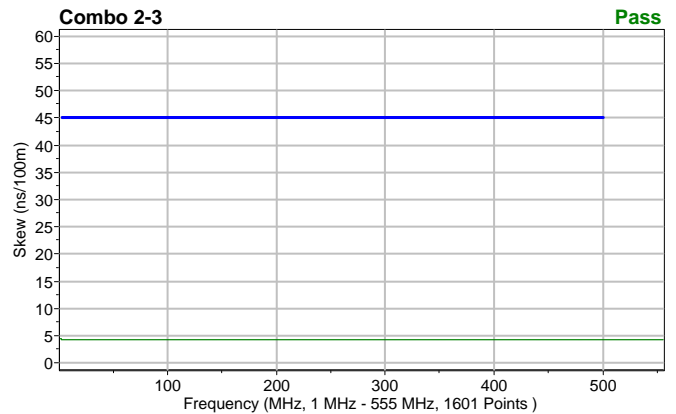
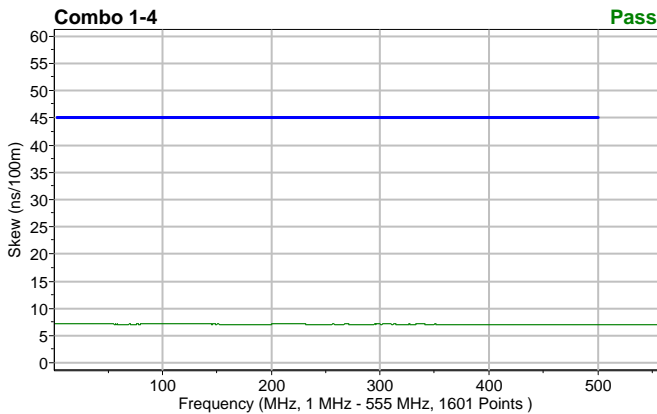
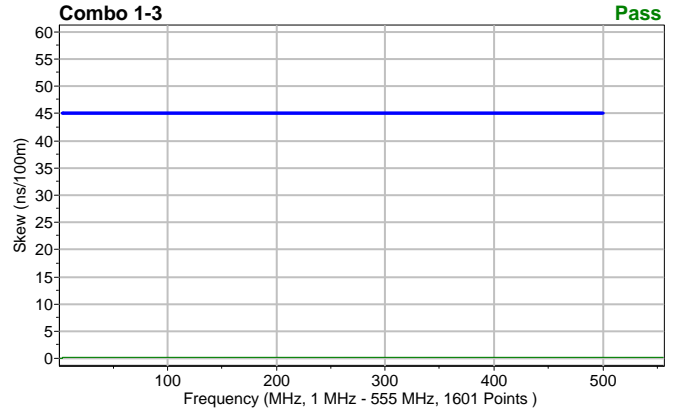
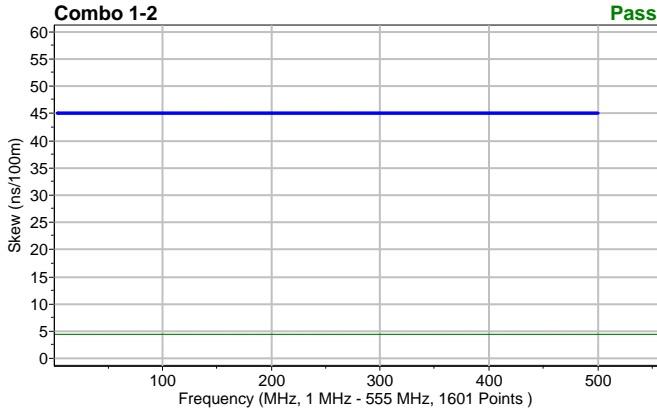
Pair	Start f	Stop f	Points	Minimum { $v[f]$ }	Maximum { $v[f]$ }	Min. Margin { $m(v,l)[f]$ }	Result
1	1	555	1601	1,75 [1]	39,77 [555]	0,61 (3,24 > 3,85) [4,116]	ü
2	1	555	1601	1,74 [1]	39,64 [555]	0,62 (3,24 > 3,85) [4,116]	ü
3	1	555	1601	1,75 [1]	39,94 [555]	0,59 (3,26 > 3,85) [4,116]	ü
4	1	555	1601	1,75 [1]	39,82 [555]	0,61 (3,25 > 3,85) [4,116]	ü



Summary and Graphic: Skew (Skew)

{ v = Value (ns/100m) l = Limit (ns/100m) m = Margin (ns/100m) f = Frequency (MHz) }

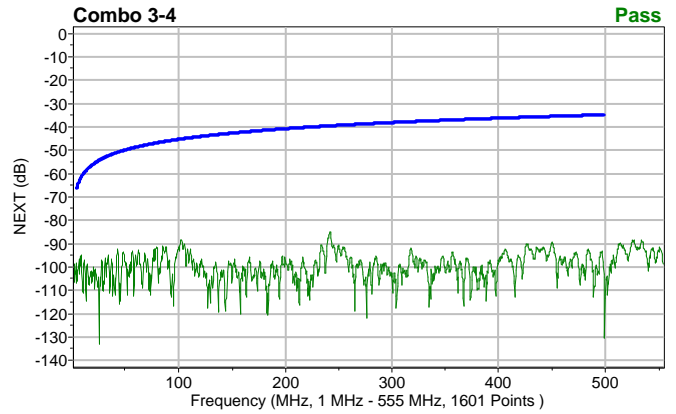
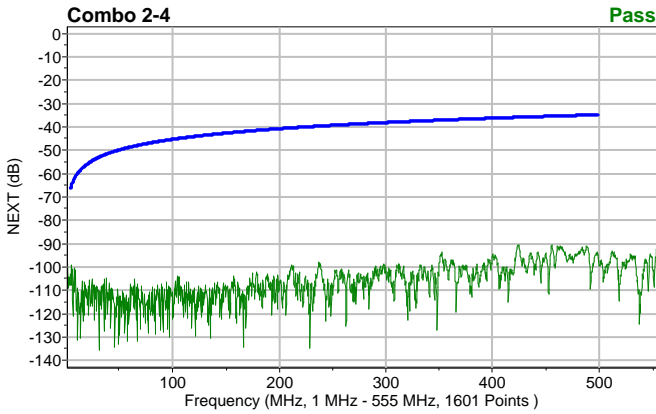
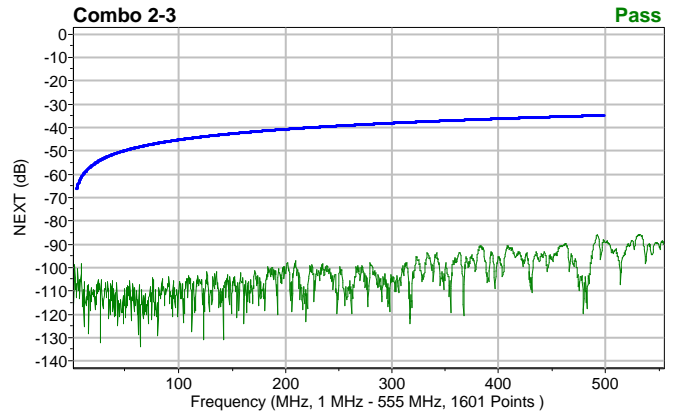
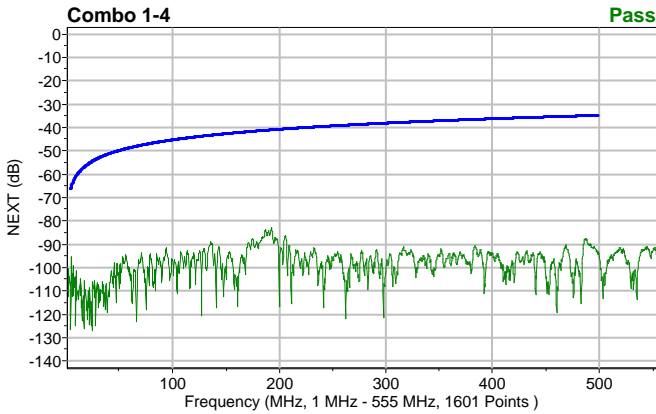
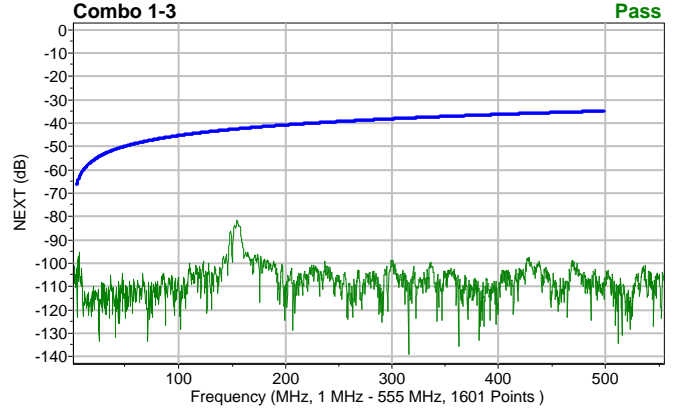
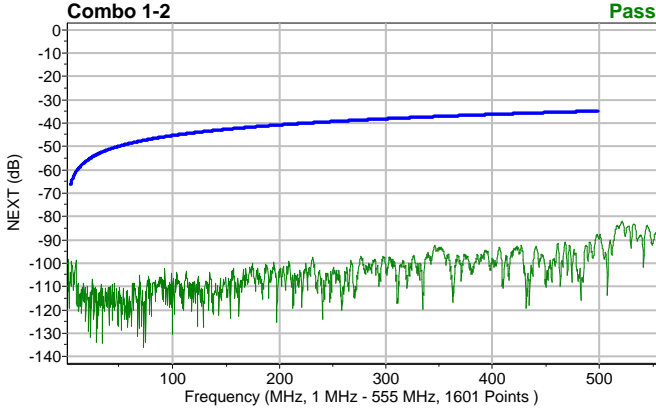
Combo	Start f	Stop f	Points	Minimum { v [ff] }	Maximum { v [ff] }	Min. Margin { m (v l) [ff] }	Result
1-2	1	555	1601	4,48 [513,1]	4,63 [1]	40,44 (4,56 > 45,00) [4,116]	ü
1-3	1	555	1601	0,11 [1,692]	0,24 [498,6]	44,76 (0,24 > 45,00) [498,6]	ü
1-4	1	555	1601	7,14 [512,4]	7,28 [1]	37,80 (7,20 > 45,00) [4,116]	ü
2-3	1	555	1601	4,25 [540,5]	4,52 [1]	40,63 (4,37 > 45,00) [4,116]	ü
2-4	1	555	1601	2,64 [1,346]	2,66 [207,4]	42,34 (2,66 > 45,00) [207,4]	ü
3-4	1	555	1601	6,91 [510]	7,16 [1]	37,98 (7,02 > 45,00) [4,116]	ü



Summary and Graphic: Near End Crosstalk (NEXT)

{ v = Value (dB) l = Limit (dB) m = Margin (dB) f = Frequency (MHz) }

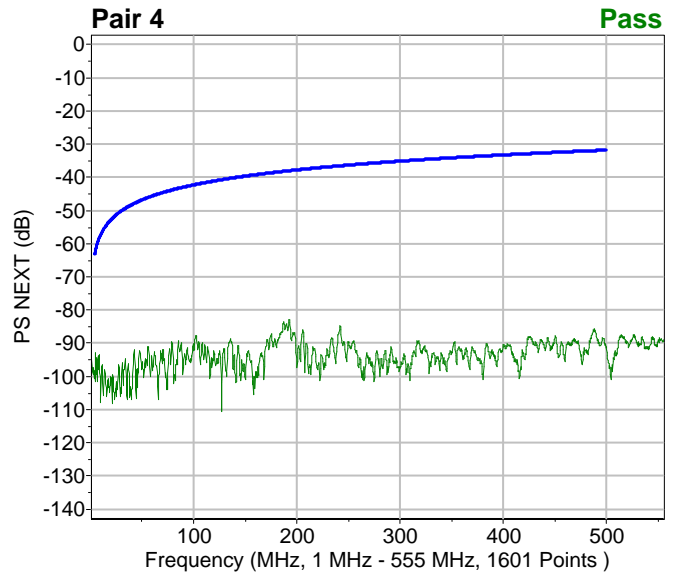
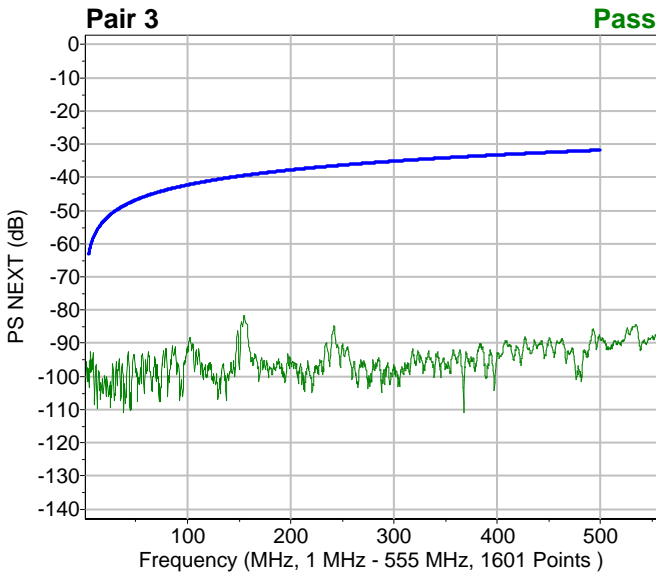
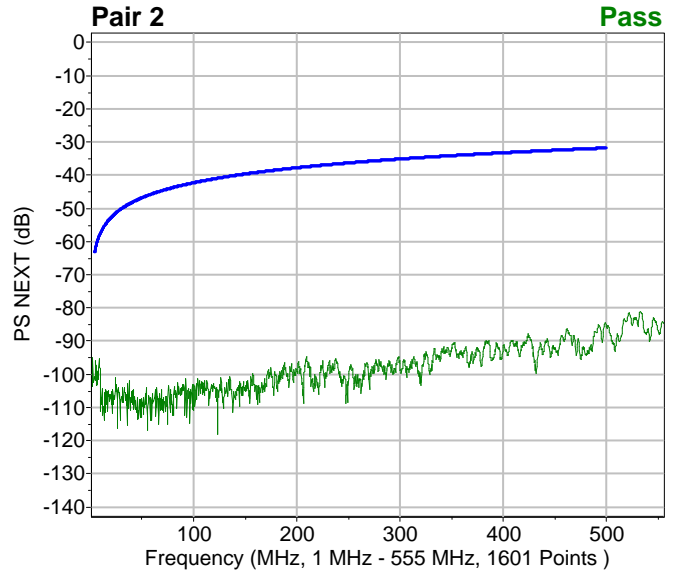
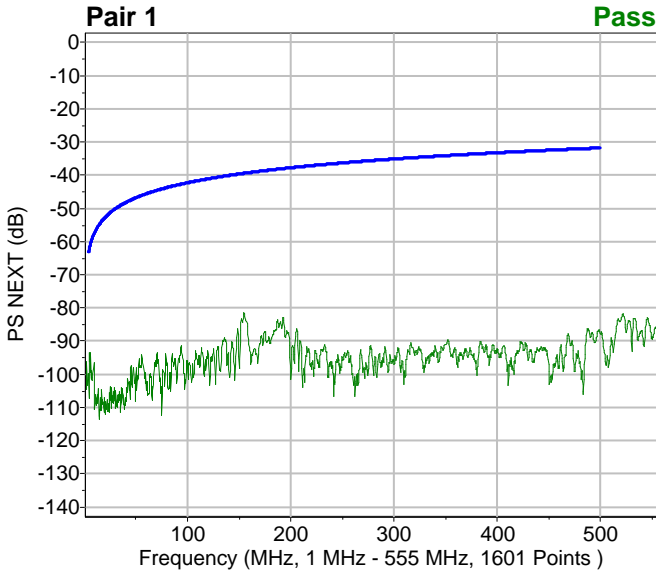
Combo	Start f	Stop f	Points	Minimum { v [ff] }	Maximum { v [ff] }	Min. Margin { m (v l) [ff] }	Result
1-2	1	555	1601	82,1 [521,8]	135,9 [72,67]	33,9 (99,0 < 65,1) [4,809]	ü
1-3	1	555	1601	81,6 [154,7]	139,0 [315,7]	31,8 (95,3 < 63,4) [6,194]	ü
1-4	1	555	1601	83,0 [192,8]	127,0 [24,2]	30,0 (95,1 < 65,1) [4,809]	ü
2-3	1	555	1601	85,8 [531,5]	133,6 [63,67]	35,9 (100,6 < 64,6) [5,155]	ü
2-4	1	555	1601	90,3 [424,1]	135,7 [30,78]	34,1 (99,2 < 65,1) [4,809]	ü
3-4	1	555	1601	84,8 [242]	133,0 [25,24]	33,0 (96,4 < 63,4) [6,194]	ü



Summary and Graphic: Power Sum NEXT (PS NEXT)

{ v = Value (dB) l = Limit (dB) m = Margin (dB) f = Frequency (MHz) }

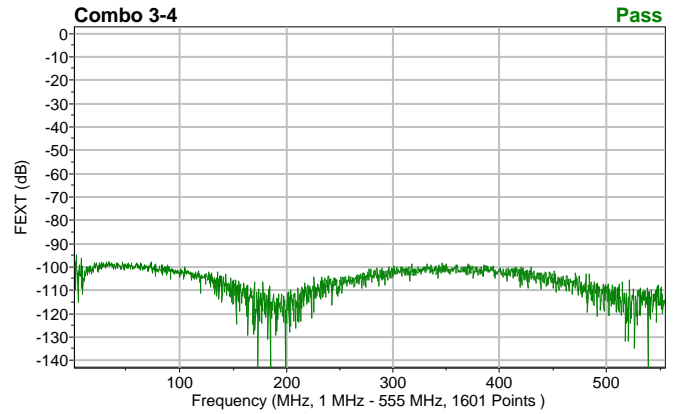
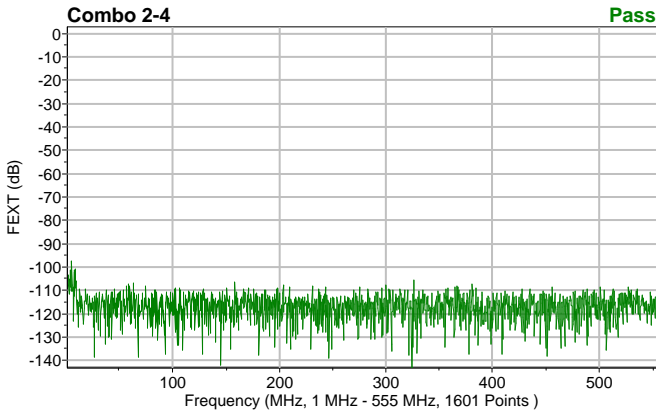
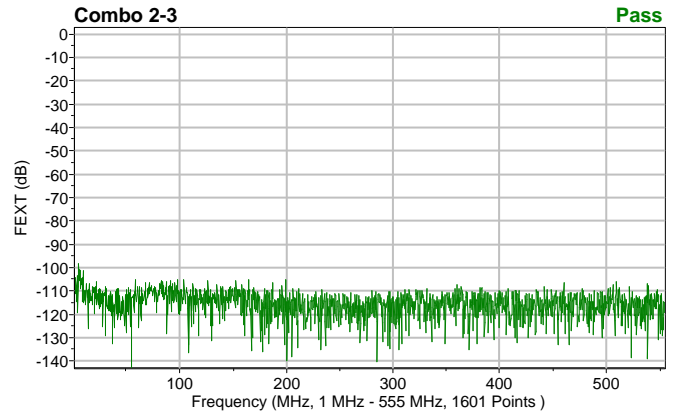
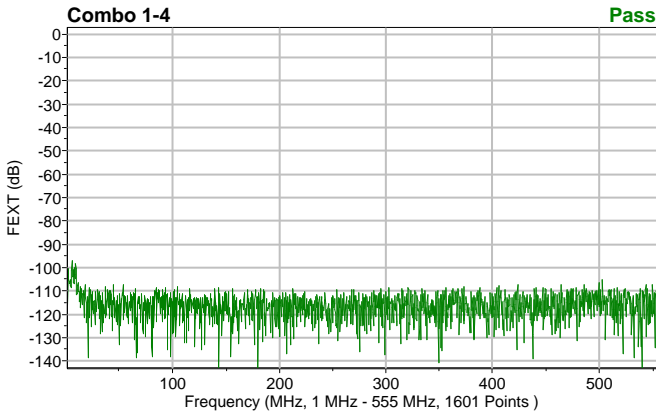
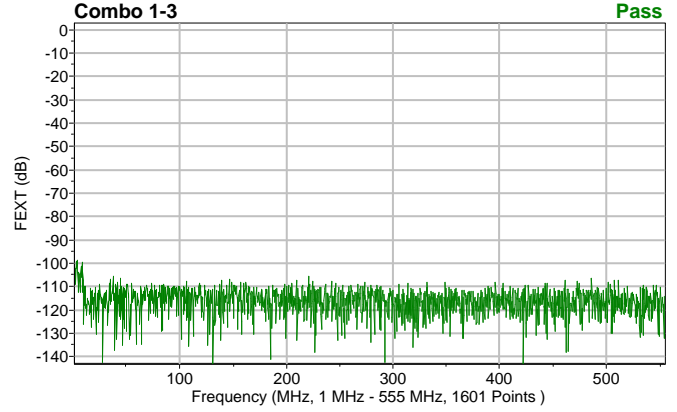
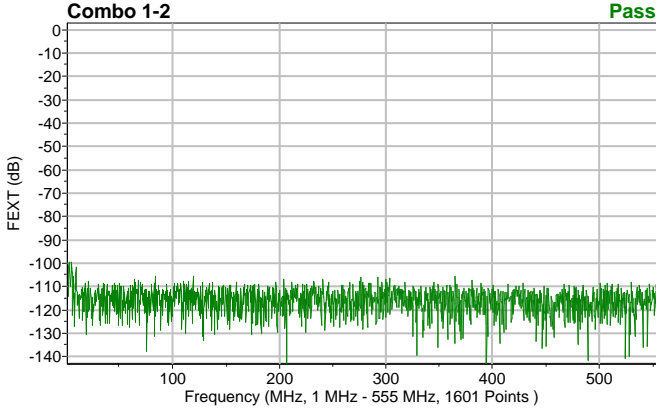
Pair	Start f	Stop f	Points	Minimum { v [ff] }	Maximum { v [ff] }	Min. Margin { m (v l) [ff] }	Result
1	1	555	1601	81,5 [154,7]	113,6 [14,16]	31,5 (93,5 < 62,1) [4,809]	ù
2	1	555	1601	81,2 [532,8]	118,0 [123,2]	33,7 (95,7 < 62,1) [4,809]	ù
3	1	555	1601	81,6 [154,7]	111,0 [38,05]	32,2 (92,6 < 60,4) [6,194]	ù
4	1	555	1601	82,9 [192,8]	110,7 [127]	30,9 (93,0 < 62,1) [4,809]	ù



Summary and Graphic: Far End Crosstalk (FEXT)

{ v = Value (dB) l = Limit (dB) m = Margin (dB) f = Frequency (MHz) }

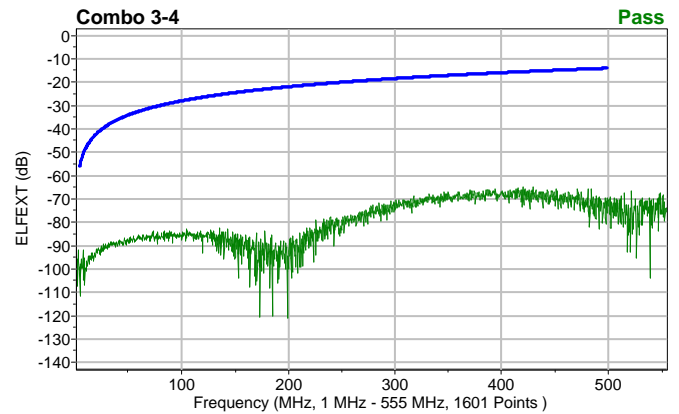
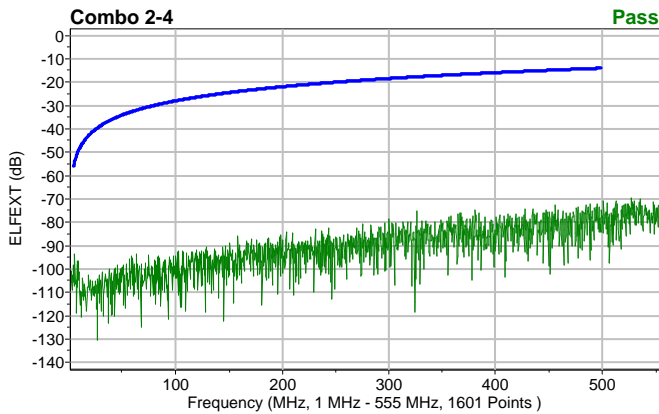
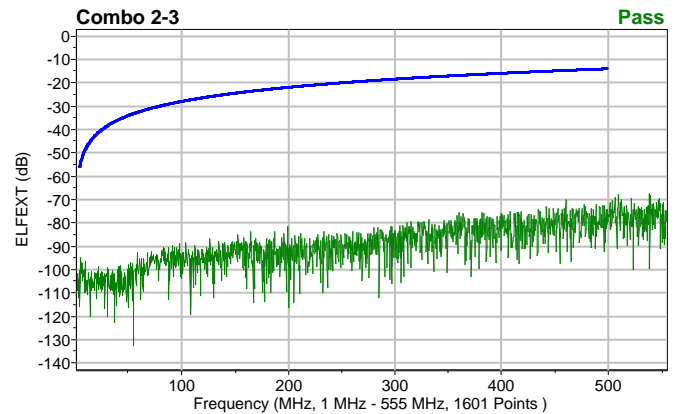
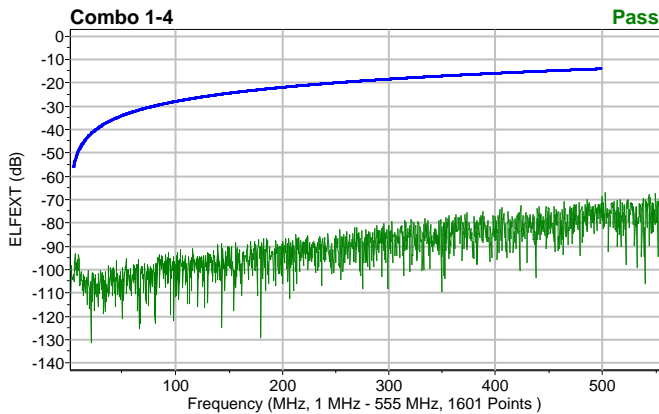
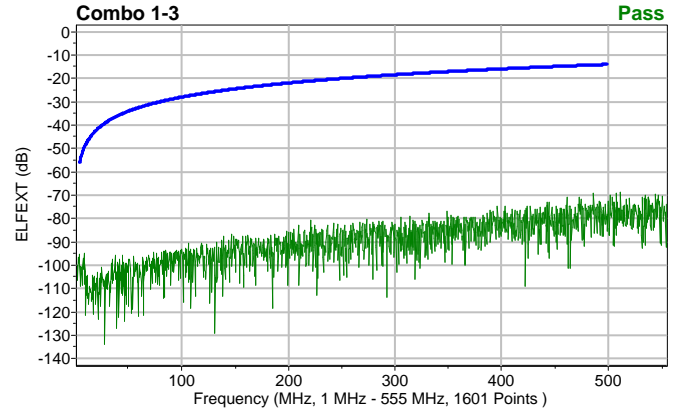
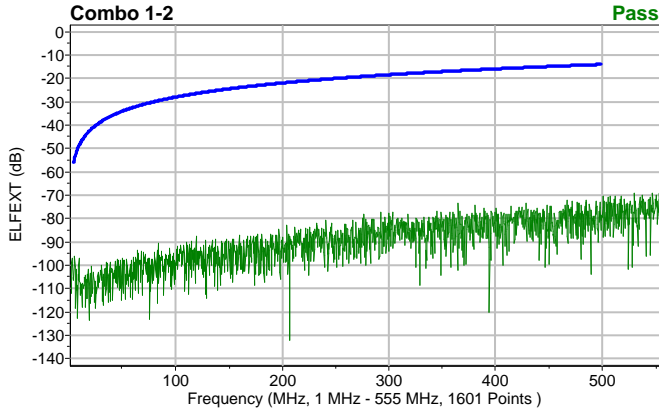
Combo	Start f	Stop f	Points	Minimum { v [f] }	Maximum { v [f] }	Result
1-2	1	555	1601	99,5 [2,731]	156,0 [207]	ü
1-3	1	555	1601	98,6 [3,77]	148,0 [131,2]	ü
1-4	1	555	1601	96,9 [5,501]	151,3 [180]	ü
2-3	1	555	1601	98,5 [5,155]	144,9 [54,67]	ü
2-4	1	555	1601	97,2 [5,155]	148,5 [324,7]	ü
3-4	1	555	1601	94,8 [2,731]	144,5 [199,1]	ü



Summary and Graphic: Equal Level FEXT (ELFEXT)

{ v = Value (dB) l = Limit (dB) m = Margin (dB) f = Frequency (MHz) }

Combo	Start f	Stop f	Points	Minimum { v [ff] }	Maximum { v [ff] }	Min. Margin { m (v l) [ff] }	Result
1-2	1	555	1601	69,0 [530,8]	132,0 [207]	42,3 (96,0 < 53,8) [5,155]	ü
1-3	1	555	1601	68,7 [512,1]	133,9 [27,66]	44,4 (100,1 < 55,7) [4,116]	ü
1-4	1	555	1601	66,1 [555]	131,1 [20,39]	40,0 (93,2 < 53,2) [5,501]	ü
2-3	1	555	1601	67,3 [539,1]	132,7 [54,67]	41,1 (94,8 < 53,8) [5,155]	ü
2-4	1	555	1601	69,7 [528]	130,2 [26,28]	39,8 (93,6 < 53,8) [5,155]	ü
3-4	1	555	1601	65,0 [430]	120,9 [199,1]	40,9 (91,7 < 50,8) [7,232]	ü



Summary and Graphic: Power Sum ELFEXT (PS ELFEXT)

{ v = Value (dB) l = Limit (dB) m = Margin (dB) f = Frequency (MHz) }

Pair	Start f	Stop f	Points	Minimum { v [ff] }	Maximum { v [ff] }	Min. Margin { m (v l) [ff] }	Result
1	1	555	1601	65,2 [555]	111,0 [16,58]	41,6 (91,8 < 50,2) [5,501]	ù
2	1	555	1601	66,6 [547,7]	114,3 [36,66]	39,2 (89,9 < 50,8) [5,155]	ù
3	1	555	1601	64,6 [522,5]	101,7 [4,462]	42,4 (90,2 < 47,8) [7,232]	ù
4	1	555	1601	64,5 [481,2]	102,4 [4,462]	40,8 (90,9 < 50,2) [5,501]	ù

