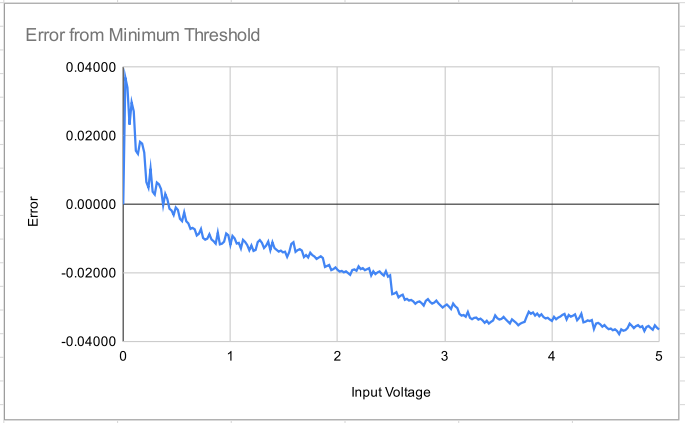
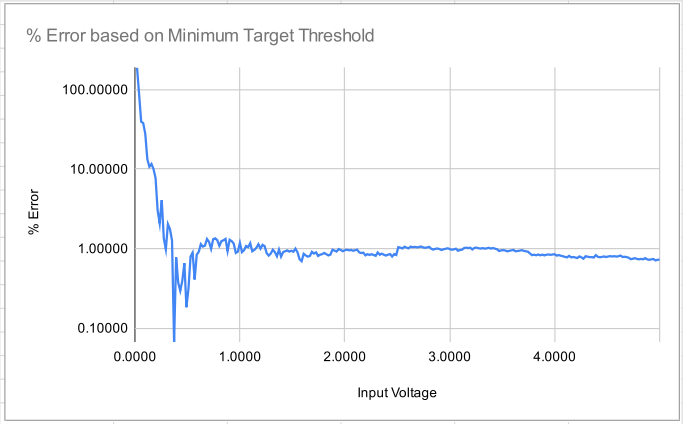
differitial from previous value		Input voltage target	Test data (from 0)	Error	Avg Error	Binary Output		% Error	bands of deviation (19.6 mv)	rebuilt circuit minimal values	old bad data (chip)
		5.0000	4.9635	-0.03650	-0.02084	11111111	255	0.73000	-1.8615		
0.0191		4.9804	4.9444	-0.03599		11111110	254	0.72268	-1.8356		
0.0189		4.9608	4.9255	-0.03528		11111101	253	0.71126	-1.7995		
0.0209		4.9412	4.9046	-0.03658		11111100	252	0.74024	-1.8654		
0.0191		4.9216	4.8855	-0.03607		11111011	251	0.73287	-1.8395		
0.0190		4.9020	4.8665	-0.03546		11111010	250	0.72340	-1.8085		
0.0199		4.8824	4.8466	-0.03575		11111001	249	0.73229	-1.8234		
0.0208		4.8627	4.8258	-0.03695		11111000	248	0.75976	-1.8842		
0.0182		4.8431	4.8076	-0.03554		11110111	247	0.73377	-1.8124		
0.0199		4.8235	4.7877	-0.03583		11110110	246	0.74280	-1.8273		
0.0190		4.8039	4.7687	-0.03522		11110101	245	0.73318	-1.7963		
0.0199		4.7843	4.7488	-0.03551		11110100	244	0.74230	-1.8112		
0.0202		4.7647	4.7286	-0.03611		11110011	243	0.75778	-1.8414		
0.0189		4.7451	4.7097	-0.03540		11110010	242	0.74599	-1.8053		
0.0190		4.7255	4.6907	-0.03479		11110001	241	0.73622	-1.7743		
0.0209		4.7059	4.6698	-0.03608		11110000	240	0.76675	-1.8402		
0.0202		4.6863	4.6496	-0.03667		11101111	239	0.78259	-1.8704		
0.0198		4.6667	4.6298	-0.03687		11101110	238	0.79000	-1.8802		
0.0192		4.6471	4.6106	-0.03646		11101101	237	0.78456	-1.8594		
0.0210		4.6275	4.5896	-0.03785		11101100	236	0.81797	-1.9304		
0.0187		4.6078	4.5709	-0.03694		11101011	235	0.80174	-1.8841		
0.0191		4.5882	4.5518	-0.03644		11101010	234	0.79410	-1.8582		
0.0199		4.5686	4.5319	-0.03673		11101001	233	0.80391	-1.8731		
0.0191		4.5490	4.5128	-0.03622		11101000	232	0.79621	-1.8472		
0.0198		4.5294	4.4930	-0.03641		11100111	231	0.80390	-1.857		
0.0191		4.5098	4.4739	-0.03590		11100110	230	0.79613	-1.8311		
0.0189		4.4902	4.4550	-0.03520		11100101	229	0.78384	-1.795		
0.0201		4.4706	4.4349	-0.03569		11100100	228	0.79829	-1.8201		
0.0189		4.4510	4.4160	-0.03498		11100011	227	0.78590	-1.784		
0.0192		4.4314	4.3968	-0.03457		11100010	226	0.78018	-1.7632		
0.0198		4.4118	4.3770	-0.03476		11100001	225	0.78800	-1.773		
0.0212		4.3922	4.3558	-0.03636		11100000	224	0.82777	-1.8542		
0.0170		4.3725	4.3388	-0.03375		11011111	223	0.77184	-1.7212		
0.0199		4.3529	4.3189	-0.03404		11011110	222	0.78203	-1.7361		
0.0194		4.3333	4.2995	-0.03383		11011101	221	0.78077	-1.7255		
0.0200		4.3137	4.2795	-0.03423		11011100	220	0.79341	-1.7455		
0.0198		4.2941	4.2597	-0.03442		11011011	219	0.80151	-1.7553		
0.0171		4.2745	4.2426	-0.03191		11011010	218	0.74651	-1.6274		
0.0208		4.2549	4.2218	-0.03310		11011001	217	0.77797	-1.6882		
0.0203		4.2353	4.2015	-0.03379		11011000	216	0.79792	-1.7235		
0.0179		4.2157	4.1836	-0.03209		11010111	215	0.76112	-1.6364		
0.0200		4.1961	4.1636	-0.03248		11010110	214	0.77402	-1.6564		
0.0199		4.1765	4.1437	-0.03277		11010101	213	0.78465	-1.6713		
0.0191		4.1569	4.1246	-0.03226		11010100	212	0.77613	-1.6454		
0.0209		4.1373	4.1037	-0.03355		11010011	211	0.81104	-1.7113		
0.0180		4.1176	4.0857	-0.03195		11010010	210	0.77586	-1.6293		
0.0199		4.0980	4.0658	-0.03224		11010001	209	0.78670	-1.6442		
0.0201		4.0784	4.0457	-0.03273		11010000	208	0.80255	-1.6693		
0.0199		4.0588	4.0258	-0.03302		11001111	207	0.81362	-1.6842		
0.0201		4.0392	4.0057	-0.03352		11001110	206	0.82976	-1.7093		
0.0189		4.0196	3.9868	-0.03281		11001101	205	0.81620	-1.6732		
0.0208		4.0000	3.9660	-0.03400		11001100	204	0.85000	-1.734		
0.0192		3.9804	3.9468	-0.03359		11001011	203	0.84394	-1.7132		
0.0191		3.9608	3.9277	-0.03308		11001010	202	0.83530	-1.6873		





0.0198		3.9412	3.9079	-0.03328		11001001	201	0.84433	-1.6971					
0.0192		3.9216	3.8887	-0.03287		11001000	200	0.83815	-1.6763					
0.0188		3.9020	3.8699	-0.03206		11000111	199	0.82166	-1.6351					
0.0202		3.8824	3.8497	-0.03265		11000110	198	0.84106	-1.6653					
0.0188		3.8627	3.8309	-0.03185		11000101	197	0.82442	-1.6241					
0.0202		3.8431	3.8107	-0.03244		11000100	196	0.84403	-1.6543					
0.0187		3.8235	3.7920	-0.03153		11000011	195	0.82462	-1.608					
0.0200		3.8039	3.7720	-0.03192		11000010	194	0.83918	-1.628					
0.0190		3.7843	3.7530	-0.03131		11000001	193	0.82746	-1.597					
0.0210		3.7647	3.7320	-0.03271		11000000	192	0.86875	-1.668					
0.0212		3.7451	3.7108	-0.03430		10111111	191	0.91581	-1.7492					
0.0198		3.7255	3.6910	-0.03449		10111110	190	0.92579	-1.759					
0.0199		3.7059	3.6711	-0.03478		10111101	189	0.93857	-1.7739					
0.0201		3.6863	3.6510	-0.03527		10111100	188	0.95691	-1.799					
0.0189		3.6667	3.6321	-0.03457		10111011	187	0.94273	-1.7629					
0.0191		3.6471	3.6130	-0.03406		10111010	186	0.93387	-1.737					
0.0191		3.6275	3.5939	-0.03355		10111001	185	0.92492	-1.7111					
0.0208		3.6078	3.5731	-0.03474		10111000	184	0.96299	-1.7719					
0.0190		3.5882	3.5541	-0.03414		10110111	183	0.95131	-1.7409					
0.0190		3.5686	3.5351	-0.03353		10110110	182	0.93951	-1.7099					
0.0189		3.5490	3.5162	-0.03282		10110101	181	0.92475	-1.6738					
0.0202		3.5294	3.4960	-0.03341		10110100	180	0.94667	-1.704					
0.0198		3.5098	3.4762	-0.03360		10110011	179	0.95743	-1.7138					
0.0192		3.4902	3.4570	-0.03320		10110010	178	0.95112	-1.693					
0.0188		3.4706	3.4382	-0.03239		10110001	177	0.93322	-1.6518					
0.0211		3.4510	3.4171	-0.03388		10110000	176	0.98176	-1.7279					
0.0200		3.4314	3.3971	-0.03427		10101111	175	0.99880	-1.7479					
0.0201		3.4118	3.3770	-0.03476		10101110	174	1.01897	-1.773					
0.0188		3.3922	3.3582	-0.03396		10101101	173	1.00104	-1.7318					
0.0202		3.3725	3.3380	-0.03455		10101100	172	1.02442	-1.762					
0.0189		3.3529	3.3191	-0.03384		10101011	171	1.00930	-1.7259					
0.0191		3.3333	3.3000	-0.03333		10101010	170	1.00000	-1.7					
0.0199		3.3137	3.2801	-0.03363		10101001	169	1.01473	-1.7149					
0.0190		3.2941	3.2611	-0.03302		10101000	168	1.00232	-1.6839					
0.0197		3.2745	3.2414	-0.03311		10100111	167	1.01114	-1.6886					
0.0200		3.2549	3.2214	-0.03350		10100110	166	1.02928	-1.7086					
0.0192		3.2353	3.2022	-0.03309		10100101	165	1.02291	-1.6878					
0.0179		3.2157	3.1843	-0.03139		10100100	164	0.97604	-1.6007					
0.0210		3.1961	3.1633	-0.03278		10100011	163	1.02558	-1.6717					
0.0191		3.1765	3.1442	-0.03227		10100010	162	1.01593	-1.6458					
0.0198		3.1569	3.1244	-0.03246		10100001	161	1.02832	-1.6556					
0.0191		3.1373	3.1053	-0.03195		10100000	160	1.01856	-1.6297					
0.0179		3.1176	3.0874	-0.03025		10011111	159	0.97019	-1.5426					
0.0191		3.0980	3.0683	-0.02974		10011110	158	0.95994	-1.5167					
0.0188		3.0784	3.0495	-0.02893		10011101	157	0.93981	-1.4755					
0.0212		3.0588	3.0283	-0.03052		10011100	156	0.99788	-1.5567					
0.0189		3.0392	3.0094	-0.02982		10011011	155	0.98103	-1.5206					
0.0190		3.0196	2.9904	-0.02921		10011010	154	0.96727	-1.4896					
0.0200		3.0000	2.9704	-0.02960		10011001	153	0.98667	-1.5096					
0.0201		2.9804	2.9503	-0.03009		10011000	152	1.00967	-1.5347					
0.0190		2.9608	2.9313	-0.02948		10010111	151	0.99583	-1.5037					
0.0190		2.9412	2.9123	-0.02888		10010110	150	0.98180	-1.4727					
0.0188		2.9216	2.8935	-0.02807		10010101	149	0.96074	-1.4315					
0.0202		2.9020	2.8733	-0.02866		10010100	148	0.98764	-1.4617					
0.0199		2.8824	2.8534	-0.02895		10010011	147	1.00449	-1.4766					
0.0191		2.8627	2.8343	-0.02845		10010010	146	0.99363	-1.4507					

0.0188		2.8431	2.8155	-0.02764		10010001	145	0.97207	-1.4095					
0.0201		2.8235	2.7954	-0.02813		10010000	144	0.99625	-1.4346					
0.0210		2.8039	2.7744	-0.02952		10001111	143	1.05287	-1.5056					
0.0189		2.7843	2.7555	-0.02881		10001110	142	1.03486	-1.4695					
0.0191		2.7647	2.7364	-0.02831		10001101	141	1.02383	-1.4436					
0.0198		2.7451	2.7166	-0.02850		10001100	140	1.03814	-1.4534					
0.0201		2.7255	2.6965	-0.02899		10001011	139	1.06367	-1.4785					
0.0189		2.7059	2.6776	-0.02828		10001010	138	1.04522	-1.4424					
0.0192		2.6863	2.6584	-0.02787		10001001	137	1.03766	-1.4216					
0.0198		2.6667	2.6386	-0.02807		10001000	136	1.05250	-1.4314					
0.0191		2.6471	2.6195	-0.02756		10000111	135	1.04111	-1.4055					
0.0199		2.6275	2.5996	-0.02785		10000110	134	1.06000	-1.4204					
0.0181		2.6078	2.5815	-0.02634		10000101	133	1.01015	-1.3435					
0.0199		2.5882	2.5616	-0.02664		10000100	132	1.02909	-1.3584					
0.0201		2.5686	2.5415	-0.02713		10000011	131	1.05611	-1.3835					
0.0181		2.5490	2.5234	-0.02562		10000010	130	1.00508	-1.3066					
0.0200		2.5294	2.5034	-0.02601		10000001	129	1.02837	-1.3266					
0.0198		2.5098	2.4836	-0.02620		10000000	128	1.04406	-1.3364					
0.0141		2.4902	2.4695	-0.02070		01111111	127	0.83110	-1.0555					
0.0200		2.4706	2.4495	-0.02109		01111110	126	0.85357	-1.0755					
0.0180		2.4510	2.4315	-0.01948		01111101	125	0.79480	-0.9935					
0.0209		2.4314	2.4106	-0.02077		01111100	124	0.85435	-1.0594					
0.0191		2.4118	2.3915	-0.02026		01111011	123	0.84024	-1.0335					
0.0189		2.3922	2.3726	-0.01956		01111010	122	0.81754	-0.9974					
0.0199		2.3725	2.3527	-0.01985		01111001	121	0.83661	-1.0123					
0.0201		2.3529	2.3326	-0.02034		01111000	120	0.86450	-1.0374					
0.0188		2.3333	2.3138	-0.01953		01110111	119	0.83714	-0.9962					
0.0208		2.3137	2.2930	-0.02073		01110110	118	0.89576	-1.057	old data 2.935				
0.0175		2.2941	2.2755	-0.01862		01110101	117	0.81154	-0.9495					
0.0199		2.2745	2.2556	-0.01891		01110100	116	0.83138	-0.9644					
0.0199		2.2549	2.2357	-0.01920		01110011	115	0.85157	-0.9793					
0.0190		2.2353	2.2167	-0.01859		01110010	114	0.83184	-0.9483					
0.0199		2.2157	2.1968	-0.01889		01110001	113	0.85239	-0.9632					
0.0188		2.1961	2.1780	-0.01808		01110000	112	0.82321	-0.922					
0.0209		2.1765	2.1571	-0.01937		01101111	111	0.89000	-0.9879					
0.0192		2.1569	2.1379	-0.01896		01101110	110	0.87918	-0.9671					
0.0198		2.1373	2.1181	-0.01915		01101101	109	0.89624	-0.9769					
0.0210		2.1176	2.0971	-0.02055		01101100	108	0.97028	-1.0479					
0.0191		2.0980	2.0780	-0.02004		01101011	107	0.95514	-1.022					
0.0191		2.0784	2.0589	-0.01953		01101010	106	0.93972	-0.9961					
0.0199		2.0588	2.0390	-0.01982		01101001	105	0.96286	-1.011					
0.0192		2.0392	2.0198	-0.01942		01101000	104	0.95212	-0.9902					
0.0198		2.0196	2.0000	-0.01961		01100111	103	0.97087	-1					
0.0191		2.0000	1.9809	-0.01910		01100110	102	0.95500	-0.9741					
0.0189		1.9804	1.9620	-0.01839		01100101	101	0.92871	-0.938					
0.0201		1.9608	1.9419	-0.01888		01100100	100	0.96310	-0.9631					
0.0199		1.9412	1.9220	-0.01918		01100011	99	0.98788	-0.978					
0.0181		1.9216	1.9039	-0.01767		01100010	98	0.91949	-0.9011					
0.0199		1.9020	1.8840	-0.01796		01100001	97	0.94433	-0.916					
0.0199		1.8824	1.8641	-0.01825		01100000	96	0.96969	-0.9309					
0.0170		1.8627	1.8471	-0.01565		01011111	95	0.83989	-0.7979					
0.0191		1.8431	1.8280	-0.01514		01011110	94	0.82128	-0.772					
0.0200		1.8235	1.8080	-0.01553		01011101	93	0.85161	-0.792					
0.0200		1.8039	1.7880	-0.01592		01011100	92	0.88261	-0.812					
0.0189		1.7843	1.7691	-0.01521		01011011	91	0.85264	-0.7759					
0.0192		1.7647	1.7499	-0.01481		01011010	90	0.83900	-0.7551					

0.0189		1.7451	1.7310	-0.01410		01011001	89	0.80787	-0.719					
0.0210		1.7255	1.7100	-0.01549		01011000	88	0.89773	-0.79					
0.0189		1.7059	1.6911	-0.01478		01010111	87	0.86655	-0.7539					
0.0202		1.6863	1.6709	-0.01537		01010110	86	0.91174	-0.7841					
0.0177		1.6667	1.6532	-0.01347		01010101	85	0.80800	-0.6868					
0.0192		1.6471	1.6340	-0.01306		01010100	84	0.79286	-0.666					
0.0199		1.6275	1.6141	-0.01335		01010011	83	0.82036	-0.6809					
0.0201		1.6078	1.5940	-0.01384		01010010	82	0.86098	-0.706					
0.0168		1.5882	1.5772	-0.01104		01010001	81	0.69481	-0.5628					
0.0201		1.5686	1.5571	-0.01153		01010000	80	0.73487	-0.5879					
0.0220		1.5490	1.5351	-0.01392		01001111	79	0.89861	-0.7099					
0.0210		1.5294	1.5141	-0.01531		01001110	78	1.00115	-0.7809					
0.0181		1.5098	1.4960	-0.01380		01001101	77	0.91429	-0.704					
0.0198		1.4902	1.4762	-0.01400		01001100	76	0.93921	-0.7138					
0.0191		1.4706	1.4571	-0.01349		01001011	75	0.91720	-0.6879					
0.0199		1.4510	1.4372	-0.01378		01001010	74	0.94973	-0.7028					
0.0191		1.4314	1.4181	-0.01327		01001001	73	0.92726	-0.6769					
0.0191		1.4118	1.3990	-0.01276		01001000	72	0.90417	-0.651					
0.0179		1.3922	1.3811	-0.01106		01000111	71	0.79423	-0.5639					
0.0219		1.3725	1.3592	-0.01335		01000110	70	0.97257	-0.6808					
0.0171		1.3529	1.3421	-0.01084		01000101	69	0.80130	-0.5529					
0.0208		1.3333	1.3213	-0.01203		01000100	68	0.90250	-0.6137					
0.0203		1.3137	1.3010	-0.01273		01000011	67	0.96866	-0.649					
0.0181		1.2941	1.2829	-0.01122		01000010	66	0.86682	-0.5721					
0.0188		1.2745	1.2641	-0.01041		01000001	65	0.81677	-0.5309					
0.0202		1.2549	1.2439	-0.01100		01000000	64	0.87672	-0.5611					
0.0219		1.2353	1.2220	-0.01329		00111111	63	1.07619	-0.678					
0.0199		1.2157	1.2021	-0.01359		00111110	62	1.11758	-0.6929					
0.0180		1.1961	1.1841	-0.01198		00111101	61	1.00148	-0.6109					
0.0210		1.1765	1.1631	-0.01337		00111100	60	1.13650	-0.6819				1.17	
0.0181		1.1569	1.1450	-0.01186		00111011	59	1.02542	-0.605					
0.0187		1.1373	1.1263	-0.01095		00111010	58	0.96328	-0.5587					
0.0190		1.1176	1.1073	-0.01035		00111001	57	0.92579	-0.5277					
0.0221		1.0980	1.0852	-0.01284		00111000	56	1.16929	-0.6548				1.103	
0.0180		1.0784	1.0672	-0.01123		00110111	55	1.04145	-0.5728					
0.0198		1.0588	1.0474	-0.01142		00110110	54	1.07889	-0.5826					
0.0181		1.0392	1.0293	-0.00992		00110101	53	0.95415	-0.5057					
0.0189		1.0196	1.0104	-0.00921		00110100	52	0.90308	-0.4696					
0.0222		1.0000	0.9882	-0.01180		00110011	51	1.18000	-0.6018					
0.0168		0.9804	0.9714	-0.00899		00110010	50	0.91720	-0.4586					
0.0191		0.9608	0.9523	-0.00848		00110001	49	0.88306	-0.4327					
0.0220		0.9412	0.9303	-0.01088		00110000	48	1.15563	-0.5547				0.944	
0.0202		0.9216	0.9101	-0.01147		00101111	47	1.24447	-0.5849				0.937	
0.0198		0.9020	0.8903	-0.01166		00101110	46	1.29283	-0.5947					
0.0162		0.8824	0.8741	-0.00824		00101101	45	0.93420	-0.42039	old data0.8571				
0.0228		0.8627	0.8513	-0.01145		00101100	44	1.32659	-0.5837					
0.0189		0.8431	0.8324	-0.01074		00101011	43	1.27349	-0.5476					
0.0191		0.8235	0.8133	-0.01023		00101010	42	1.24214	-0.5217					
0.0181		0.8039	0.7952	-0.00872		00101001	41	1.08488	-0.4448					
0.0209		0.7843	0.7743	-0.01001		00101000	40	1.27675	-0.5107					
0.0199		0.7647	0.7544	-0.01031		00100111	39	1.34769	-0.5256				0.858	
0.0191		0.7451	0.7353	-0.00980		00100110	38	1.31500	-0.4997					
0.0170		0.7255	0.7183	-0.00719		00100101	37	0.99108	-0.3667					
0.0210		0.7059	0.6973	-0.00858		00100100	36	1.21583	-0.4377					
0.0201		0.6863	0.6772	-0.00907		00100011	35	1.32229	-0.4628				0.819	
0.0178		0.6667	0.6594	-0.00727		00100010	34	1.09000	-0.3706					

0.0192		0.6471	0.6402	-0.00686		00100001	33	1.06000	-0.3498				0.799		
0.0199		0.6275	0.6203	-0.00715		00100000	32	1.13969	-0.3647				0.779		
0.0180		0.6078	0.6023	-0.00554		00011111	31	0.91194	-0.2827				0.611		
0.0190		0.5882	0.5833	-0.00494		00011110	30	0.83900	-0.2517				0.591		
0.0170		0.5686	0.5663	-0.00233		00011101	29	0.40931	-0.1187						
0.0222		0.5490	0.54414	-0.00488		00011100	28	0.88879	-0.24886	OLD DATA 0.6464			0.551		
0.0189		0.5294	0.5252	-0.00421		00011011	27	0.79556	-0.2148						
0.0170		0.5098	0.5082	-0.00160		00011010	26	0.31462	-0.0818						
0.0189		0.4902	0.4893	-0.00090		00011001	25	0.18280	-0.0457						
0.0218		0.4706	0.4675	-0.00309		00011000	24	0.65625	-0.1575				0.471		
0.0183		0.4510	0.4492	-0.00178		00010111	23	0.39478	-0.0908						
0.0191		0.4314	0.4301	-0.00127		00010110	22	0.29500	-0.0649						
0.0168		0.4118	0.4133	0.00154		00010101	21	0.37286	0.0783						
0.0181		0.3922	0.3952	0.00304		00010100	20	0.77600	0.1552						
0.0229		0.3725	0.3723	-0.00025		00010011	19	0.06684	-0.0127						
0.0149		0.3529	0.3574	0.00446		00010010	18	1.26333	0.2274						
0.0182		0.3333	0.3392	0.00587		00010001	17	1.76000	0.2992						
0.0191		0.3137	0.3201	0.00637		00010000	16	2.03188	0.3251				0.466		
0.0231		0.2941	0.2970	0.00288		00001111	15	0.98000	0.147				0.31		
0.0188		0.2745	0.2782	0.00369		00001110	14	1.34429	0.1882						
0.0129		0.2549	0.2653	0.01040		00001101	13	4.07923	0.5303						
0.0251		0.2353	0.2402	0.00491		00001100	12	2.08500	0.2502						
0.0180		0.2157	0.2222	0.00651		00001011	11	3.02000	0.3322						
0.0110		0.1961	0.2112	0.01512		00001010	10	7.71200	0.7712						
0.0170		0.1765	0.1942	0.01773		00001001	9	10.04667	0.9042						
0.0191		0.1569	0.1751	0.01824		00001000	8	11.62625	0.9301						
0.0231		0.1373	0.1520	0.01475		00000111	7	10.74286	0.752				0.228		
0.0187		0.1176	0.1333	0.01565		00000110	6	13.30500	0.7983						
0.0081		0.0980	0.1252	0.02716		00000101	5	27.70400	1.3852						
0.0170		0.0784	0.1082	0.02977		00000100	4	37.95500	1.5182						
0.0261		0.0588	0.0821	0.02328		00000011	3	39.57000	1.1871				0.19		
0.0088		0.0392	0.0733	0.03408		00000010	2	86.91500	1.7383	0.067					
0.0167		0.0196	0.0566	0.03699		00000001	1	188.66000	1.8866	0.048			0.17		
0.0566		0.0000	0.0000	0.00000		00000000	0	#DIV/0!	0	0			0		