Sigma Conversion Table

Long-Term Yield	Long-Term Sigma	Short-Term Sigma	Defects Per 1,000,000	Defects Per 10,000	Defects Per 100
99.99966%	4.5	6.0	3.4	0.034	0.00034
99.9995%	4.4	5.9	5	0.05	0.0005
99.9992%	4.3	5.8	8	0.08	0.0008
99.9990%	4.2	5.7	10	0.1	0.001
99.9980%	4.1	5.6	20	0.2	0.002
99.9970%	4.0	5.5	30	0.3	0.003
99.9960%	3.9	5.4	40	0.4	0.004
99.9930%	3.8	5.3	70	0.7	0.007
99.9900%	3.7	5.2	100	1.0	0.01
99.9850%	3.6	5.1	150	1.5	0.015
99.9770%	3.5	5.0	230	2.3	0.023
99.9670%	3.4	4.9	330	3.3	0.033
99.9520%	3.3	4.8	480	4.8	0.048
99.9320%	3.2	4.7	680	6.8	0.068
99.9040%	3.1	4.6	960	9.6	0.096
99.8650%	3.0	4.5	1,350	13.5	0.135
99.8140%	2.9	4.4	1,860	18.6	0.186
99.7450%	2.8	4.3	2,550	25.5	0.255
99.6540%	2.7	4.2	3,460	34.6	0.346
99.5340%	2.6	4.1	4,660	46.6	0.466
99.3790%	2.5	4.0	6,210	62.1	0.621
99.1810%	2.4	3.9	8,190	81.9	0.819
98.930%	2.3	3.8	10,700	107	1.07
98.610%	2.2	3.7	13,900	139	1.39
98.220%	2.1	3.6	17,800	178	1.78
97.730%	2.0	3.5	22,700	227	2.27
97.130%	1.9	3.4	28,700	287	2.87
96.410%	1.8	3.3	35,900	359	3.59
95.540%	1.7	3.2	44,600	446	4.46
94.520%	1.6	3.1	54,800	548	5.48
93.320%	1.5	3.0	66,800	668	6.68
91.920%	1.4	2.9	80,800	808	8.08
90.320%	1.3	2.8	96,800	968	9.68
88.50%	1.2	2.7	115,000	1,150	11.5
86.50%	1.1	2.6	135,000	1,350	13.5
84.20%	1.0	2.5	158,000	1,580	15.8
81.60%	.9	2.4	184,000	1,840	18.4
78.80%	.8	2.3	212,000	2,120	21.2
75.80%	.7	2.2	242,000	2,420	24.2
72.60%	.6	2.1	274,000	2,740	27.4
69.20%	.5	2.0	308,000	3,080	30.8
65.60%	.4	1.9	344,000	3,440	34.4
61.80%	.3	1.8	382,000	3,820	38.2
58.00%	.2	1.7	420,000	4,200	42
54.00%	.1	1.6	460,000	4,600	46
50%	.09	1.5	500,000	5,000	50
46%	.08	1.4	540,000	5,400	54
43%	.07	1.3	570,000	5,700	57
39%	.06	1.2	610,000	6,100	61
35%	.05	1.1	650,000	6,500	65
31%	.04	1.0	690,000	6,900	69
28%	.03	0.9	720,00	7,200	72
25%	.02	0.8	750,000	7,500	75

Note: Sigma level is typically reported as short-term Sigma. When the shift between long-term and short-term capability can be determined, 6-Sigma methodology requires the team to calculate and report short-term Sigma based on the actual shift. For reference purposes, this abridged chart uses the generally accepted shift of 1.5 to approximate short-term Sigma value when long-term Sigma is known.