

Antenna OTA 3D Antenna Pattern

Infomation	
Date	45614
Start Time	45614.59236
Finish Time	45614.59653
Lab Name	Max860
Operator	ATEN
Project Name	CO-15-F1
Manufacturer	PASSIVE V1.0A
Model Name	919
Hardware V	1
Software V	3.6.1 Beta
Test Condition	Free Space
Temperature	N/A
Humidity	N/A
Note	N/A

Test List
800MHz
804MHz
808MHz
812MHz
816MHz
820MHz
824MHz
828MHz
832MHz
836MHz
840MHz
844MHz
848MHz
852MHz
856MHz
860MHz
864MHz
868MHz
872MHz
876MHz
880MHz
884MHz
888MHz
892MHz

896MHz
900MHz
904MHz
908MHz
912MHz
916MHz
920MHz
924MHz
928MHz
932MHz
936MHz
940MHz
944MHz
948MHz
952MHz
956MHz
960MHz
964MHz
968MHz
972MHz
976MHz
980MHz
984MHz
988MHz
992MHz
996MHz
1GHz

Frequency	800MHz	804MHz	808MHz	812MHz	816MHz	820MHz	824MHz	828MHz	832MHz	836MHz	840MHz	844MHz	848MHz	852MHz	856MHz	860MHz	864MHz	868MHz	872MHz	876MHz	880MHz	884MHz	888MHz	892MHz	896MHz
Ant. Port Inp. Pow. (dBi)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rad. Pow. (dBi)	-1.46	-1.56	-1.73	-1.76	-1.84	-2.04	-1.99	-1.86	-1.98	-1.95	-1.9	-2.09	-2.17	-2.16	-2.11	-2.01	-1.98	-1.89	-1.89	-2.11	-2.33	-2.43	-2.47	-2.5	-2.47
Rad. Pow. 0-90 (dBi)	-3.63	-3.71	-3.86	-3.86	-3.92	-4.1	-4.02	-3.86	-3.97	-3.92	-3.85	-4.02	-4.08	-4.06	-4	-3.89	-3.85	-3.76	-3.76	-3.97	-4.19	-4.29	-4.32	-4.34	-4.3
Rad. Pow. 90-180 (dBi)	-5.51	-5.64	-5.85	-5.92	-6.04	-6.28	-6.27	-6.18	-6.34	-6.34	-6.33	-6.54	-6.64	-6.66	-6.64	-6.55	-6.53	-6.46	-6.46	-6.68	-6.92	-7.02	-7.06	-7.1	-7.09
Peak EIRP (dBi)	2.55	2.46	2.27	2.24	2.16	1.88	1.89	2.03	1.82	1.83	1.85	1.7	1.62	1.66	1.72	1.95	2.05	2.19	2.28	2.17	1.99	1.95	1.92	1.94	1.95
Directivity (dBi)	4.01	4.02	4	4	4	3.92	3.88	3.89	3.8	3.78	3.75	3.79	3.79	3.82	3.83	3.96	4.03	4.08	4.17	4.28	4.32	4.38	4.39	4.44	4.42
Efficiency (dB)	-1.46	-1.56	-1.73	-1.76	-1.84	-2.04	-1.99	-1.86	-1.98	-1.95	-1.9	-2.09	-2.17	-2.16	-2.11	-2.01	-1.98	-1.89	-1.89	-2.11	-2.33	-2.43	-2.47	-2.5	-2.47
Efficiency (%)	71.45	69.82	67.14	66.68	65.46	62.52	63.24	65.16	63.39	63.83	64.57	61.8	60.67	60.81	61.52	62.95	63.39	64.71	64.71	61.52	58.48	57.15	56.62	56.23	56.62
Gain (dBi)	2.55	2.46	2.27	2.24	2.16	1.88	1.89	2.03	1.82	1.83	1.85	1.7	1.62	1.66	1.72	1.95	2.05	2.19	2.28	2.17	1.99	1.95	1.92	1.94	1.95
NHPRP +/-30 (dBi)	-4.1	-4.18	-4.32	-4.31	-4.37	-4.55	-4.47	-4.31	-4.42	-4.37	-4.3	-4.46	-4.52	-4.51	-4.45	-4.32	-4.29	-4.19	-4.18	-4.38	-4.6	-4.7	-4.73	-4.76	-4.73
NHPRP +/-45 (dBi)	-2.79	-2.88	-3.04	-3.04	-3.11	-3.29	-3.22	-3.07	-3.18	-3.13	-3.07	-3.23	-3.29	-3.27	-3.21	-3.08	-3.05	-2.95	-2.94	-3.13	-3.35	-3.45	-3.48	-3.5	-3.47
Maximum H+V Value (dBi)	2.55	2.46	2.27	2.24	2.16	1.88	1.89	2.03	1.82	1.83	1.85	1.7	1.62	1.66	1.72	1.95	2.05	2.19	2.28	2.17	1.99	1.95	1.92	1.94	1.95
Maximum H+V @ Theta (deg.)	60	60	60	60	60	60	60	60	60	60	60	60	60	60	75	75	75	75	75	75	75	75	75	75	75
Maximum H+V @ Phi (deg.)	345	0	0	345	345	345	345	345	0	345	345	15	15	15	15	0	15	15	15	15	15	15	15	15	15
Minimum H+V Value (dBi)	-8.02	-8.23	-8.48	-8.61	-8.89	-9.36	-9.64	-9.96	-10.43	-10.73	-11.04	-11.55	-12	-12.3	-12.6	-12.28	-12.17	-12.21	-11.84	-11.95	-11.66	-11.42	-10.99	-10.67	-10.37
Minimum H+V @ Theta (deg.)	45	165	165	165	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
Minimum H+V @ Phi (deg.)	240	210	210	210	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255
Horizontal ()																									
Ant. Port Inp. Pow. (dBi)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H Rad. Pow. (dBi)	-4.72	-4.76	-4.85	-4.82	-4.85	-5	-4.9	-4.73	-4.81	-4.78	-4.73	-4.91	-5.01	-5.11	-5.07	-4.92	-4.87	-4.73	-4.73	-4.95	-5.14	-5.19	-5.28	-5.2	-5.15
H Rad. Pow. 0-90 (dBi)	-6.62	-6.65	-6.72	-6.67	-6.7	-6.84	-6.73	-6.55	-6.63	-6.59	-6.55	-6.72	-6.83	-6.93	-6.89	-6.76	-6.71	-6.58	-6.6	-6.81	-7.01	-7.07	-7.16	-7.08	-7.02
H Rad. Pow. 90-180 (dBi)	-9.23	-9.29	-9.41	-9.41	-9.46	-9.62	-9.54	-9.38	-9.46	-9.44	-9.4	-9.57	-9.67	-9.76	-9.72	-9.55	-9.47	-9.31	-9.3	-9.51	-9.69	-9.73	-9.81	-9.75	-9.7
H Peak EIRP (dBi)	0.94	0.97	0.97	1.06	1.08	0.96	1.1	1.3	1.29	1.32	1.39	1.16	1.04	0.91	0.97	1.03	1.07	1.08	1.02	0.75	0.52	0.44	0.31	0.36	0.42
H Directivity (dBi)	5.66	5.73	5.82	5.88	5.93	5.96	6	6.03	6.1	6.12	6.07	6.05	6.02	6.04	5.95	5.94	5.81	5.75	5.7	5.66	5.63	5.59	5.56	5.57	5.57
H Efficiency (dB)	-4.72	-4.76	-4.85	-4.82	-4.85	-5	-4.9	-4.73	-4.81	-4.78	-4.73	-4.91	-5.01	-5.11	-5.07	-4.92	-4.87	-4.73	-4.73	-4.95	-5.14	-5.19	-5.28	-5.2	-5.15
H Efficiency (%)	33.73	33.42	32.73	32.96	32.73	31.62	32.36	33.65	33.04	33.27	33.65	32.28	31.55	30.83	31.12	32.21	32.58	33.65	33.65	31.99	30.62	30.27	29.65	30.2	30.55
H Gain (dBi)	0.94	0.97	0.97	1.06	1.08	0.96	1.1	1.3	1.29	1.32	1.39	1.16	1.04	0.91	0.97	1.03	1.07	1.08	1.02	0.75	0.52	0.44	0.31	0.36	0.42
H NHPRP +/-30 (dBi)	-7.2	-7.23	-7.29	-7.24	-7.26	-7.39	-7.28	-7.09	-7.17	-7.12	-7.06	-7.22	-7.32	-7.4	-7.36	-7.2	-7.14	-6.99	-6.98	-7.17	-7.35	-7.41	-7.48	-7.39	-7.33
H NHPRP +/-45 (dBi)	-6.02	-6.05	-6.11	-6.06	-6.07	-6.2	-6.09	-5.9	-5.97	-5.92	-5.85	-6.01	-6.1	-6.18	-6.12	-5.97	-5.9	-5.74	-5.73	-5.92	-6.1	-6.15	-6.22	-6.14	-6.07
Maximum H Value (dBi)	0.94	0.97	0.97	1.06	1.08	0.96	1.1	1.3	1.29	1.32	1.39	1.16	1.04	0.91	0.97	1.03	1.07	1.08	1.02	0.75	0.52	0.44	0.31	0.36	0.42
Maximum H @ Theta (deg.)	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	45	45	45	45	45
Maximum H @ Phi (deg.)	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	60
Minimum H Value (dBi)	-22.71	-22.91	-22.96	-22.43	-22.72	-22.79	-22.55	-22.46	-22.47	-21.86	-21.42	-22.34	-23.09	-23.93	-25.14	-26.28	-26.34	-25.49	-24.49	-23.49	-22.64	-22.89	-24.73	-27.05	-30.12
Minimum H @ Theta (deg.)	165	165	165	165	15	0	0	15	15	15	15	30	30	30	30	30	30	30	30	30	45	45	45	45	45
Minimum H @ Phi (deg.)	195	195	195	195	180	180	180	180	180	180	180	195	195	195	195	195	195	195	195	195	195	210	210	210	210
Vertical ()																									
Ant. Port Inp. Pow. (dBi)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
V Rad. Pow. (dBi)	-4.23	-4.39	-4.64	-4.71	-4.85	-5.11	-5.1	-5.01	-5.19	-5.16	-5.11	-5.31	-5.34	-5.23	-5.18	-5.11	-5.09	-5.09	-5.29	-5.56	-5.71	-5.69	-5.83	-5.83	-5.83
V Rad. Pow. 0-90 (dBi)	-6.66	-6.79	-7.03	-7.07	-7.18	-7.4	-7.35	-7.22	-7.35	-7.28	-7.2	-7.37	-7.37	-7.22	-7.14	-7.04	-7.01	-6.97	-6.96	-7.15	-7.4	-7.54	-7.51	-7.65	-7.63
V Rad. Pow. 90-180 (dBi)	-7.91	-8.1	-8.37	-8.49	-8.68	-8.99	-9.04	-9.01	-9.25	-9.27	-9.27	-9.54	-9.64	-9.58	-9.58	-9.56	-9.6	-9.63	-9.65	-9.88	-10.18	-10.35	-10.35	-10.51	-10.53
V Peak EIRP (dBi)	0.7	0.6	0.39	0.29	0.17	-0.11	-0.18	-0.21	-0.29	-0.23	-0.18	-0.37	-0.42	-0.33	-0.32	-0.28	-0.29	-0.27	-0.28	-0.53	-0.81	-0.9	-0.78	-0.85	-0.87
V Directivity (dBi)	4.93	4.99	5.03	5	5.02	5	4.92	4.8	4.9	4.93	4.93	4.94	4.92	4.9	4.86	4.83	4.82	4.82	4.81	4.76	4.75	4.81	4.91	4.98	4.96
V Efficiency (dB)	-4.23	-4.39	-4.64	-4.71	-4.85	-5.11	-5.1	-5.01	-5.19	-5.16	-5.11	-5.31	-5.34	-5.23	-5.18	-5.11	-5.11	-5.09	-5.09	-5.29	-5.56	-5.71	-5.69	-5.83	-5.83
V Efficiency (%)	37.76	36.39	34.36	33.81	32.73	30.83	30.9	31.55	30.27	30.48	30.83	29.44	29.24	29.99	30.34	30.83	30.97	30.97	29.58	27.8	26.85	26.98	26.12	26.12	26.12
V Gain (dBi)	0.7	0.6	0.39	0.29	0.17	-0.11	-0.18	-0.21	-0.29	-0.23	-0.18	-0.37	-0.42	-0.33	-0.32	-0.28	-0.29	-0.27	-0.28	-0.53	-0.81	-0.9	-0.78	-0.85	-0.87
V NHPRP +/-30 (dBi)	-7.02	-7.15	-7.37	-7.41	-7.51	-7.73	-7.69	-7.57	-7.71	-7.66	-7.58	-7.74	-7.76	-7.64	-7.56	-7.46	-7.46	-7.43	-7.42	-7.62	-7.88	-8.04	-8.02	-8.18	-8.18
V NHPRP +/-45 (dBi)	-5.59	-5.74	-5.98	-6.04	-6.17	-6.41	-6.38	-6.28	-6.43	-6.39	-6.32	-6.49	-6.52	-6.39	-6.32	-6.22	-6.19	-6.18	-6.38	-6.64	-6.79	-6.77	-6.93	-6.94	-6.94
Maximum V Value (dBi)	0.7	0.6	0.39	0.29	0.17	-0.11	-0.18	-0.21	-0.29	-0.23	-0.18	-0.37	-0.42	-0.33	-0.32	-0.28	-0.29	-0.27	-0.28	-0.53	-0.81	-0.9	-0.78	-0.85	-0.87
Maximum V @ Theta (deg.)	60	60	60	60	60	60	60	75	75	75	75	75	75	75	75	75	75	75	75	75	75	45	45	45	45
Maximum V @ Phi (deg.)	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	180	165	180	180	180	180	165
Minimum V Value (dBi)	-32.26	-31.28	-30.88	-27.65	-29.03	-30.18	-30.6	-35.38	-37.24	-38.72	-45.24	-37.4	-34.13	-31.28	-29.16	-27.84	-26.18	-24.4	-24.61	-24.27	-23.05	-23.39	-25.76	-29.71	-37.85
Minimum V @ Theta (deg.)	105	105	105	105	0	0	30	30	30	30	30	105	105	105	105	105	105	105	135	135	75	135	135	135	135
Minimum V @ Phi (deg.)	90	90	90	90	75	75	75	75	75	75	75	105	105	105	105	105	105	105	90	90	90	300	300	300	300

900MHz	904MHz	908MHz	912MHz	916MHz	920MHz	924MHz	928MHz	932MHz	936MHz	940MHz	944MHz	948MHz	952MHz	956MHz	960MHz	964MHz	968MHz	972MHz	976MHz	980MHz	984MHz	988MHz	992MHz	996MHz	1GHz
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-2.34	-2.58	-2.63	-2.91	-3.32	-3.4	-3.51	-3.42	-3.35	-3.32	-3.49	-3.91	-4.04	-4.65	-4.87	-4.88	-5.53	-5.88	-6.08	-6.54	-7.06	-7.25	-7.24	-7.73	-7.72	-7.77
-4.18	-4.41	-4.46	-4.74	-5.14	-5.21	-5.31	-5.22	-5.14	-5.12	-5.29	-5.72	-5.86	-6.48	-6.73	-6.76	-7.43	-7.81	-8.05	-8.54	-9.13	-9.37	-9.43	-10.01	-10.07	-10.22
-6.96	-7.2	-7.27	-7.56	-7.98	-8.07	-8.19	-8.11	-8.04	-8.01	-8.18	-8.58	-8.68	-9.28	-9.46	-9.43	-10.04	-10.34	-10.47	-10.86	-11.29	-11.38	-11.27	-11.63	-11.51	-11.43
2	1.76	1.7	1.27	0.79	0.64	0.46	0.48	0.47	0.46	0.32	-0.18	-0.37	-0.94	-1.19	-1.27	-1.81	-2.04	-2.1	-2.51	-2.88	-3.04	-2.96	-3.51	-3.48	-3.61
4.34	4.34	4.33	4.18	4.11	4.04	3.97	3.9	3.82	3.78	3.81	3.73	3.67	3.71	3.68	3.61	3.72	3.84	3.98	4.03	4.18	4.21	4.28	4.22	4.24	4.16
-2.34	-2.58	-2.63	-2.91	-3.32	-3.4	-3.51	-3.42	-3.35	-3.32	-3.49	-3.91	-4.04	-4.65	-4.87	-4.88	-5.53	-5.88	-6.08	-6.54	-7.06	-7.25	-7.24	-7.73	-7.72	-7.77
58.34	55.21	54.58	51.17	46.56	45.71	44.57	45.5	46.24	46.56	44.77	40.64	39.45	34.28	32.58	32.51	27.99	25.82	24.66	22.18	19.68	18.84	18.88	16.87	16.9	16.71
2	1.76	1.7	1.27	0.79	0.64	0.46	0.48	0.47	0.46	0.32	-0.18	-0.37	-0.94	-1.19	-1.27	-1.81	-2.04	-2.1	-2.51	-2.88	-3.04	-2.96	-3.51	-3.48	-3.61
-4.61	-4.86	-4.92	-5.2	-5.63	-5.71	-5.82	-5.74	-5.67	-5.65	-5.82	-6.26	-6.4	-7.03	-7.26	-7.28	-7.94	-8.3	-8.52	-8.98	-9.52	-9.71	-9.71	-10.2	-10.18	-10.24
-3.35	-3.59	-3.64	-3.92	-4.34	-4.41	-4.52	-4.43	-4.36	-4.33	-4.5	-4.93	-5.08	-5.7	-5.93	-5.96	-6.62	-6.98	-7.21	-7.68	-8.22	-8.43	-8.43	-8.92	-8.91	-8.96
2	1.76	1.7	1.27	0.79	0.64	0.46	0.48	0.47	0.46	0.32	-0.18	-0.37	-0.94	-1.19	-1.27	-1.81	-2.04	-2.1	-2.51	-2.88	-3.04	-2.96	-3.51	-3.48	-3.61
75	75	75	75	75	75	75	75	75	75	45	45	45	45	45	45	60	60	60	60	60	60	60	60	60	90
15	15	15	15	15	15	15	15	15	30	30	30	30	30	15	15	15	15	15	15	15	15	15	15	15	0
-9.78	-9.94	-9.66	-9.71	-9.92	-9.8	-9.74	-9.77	-9.69	-9.71	-9.88	-10.17	-10.01	-10.64	-10.5	-10.28	-10.89	-11.23	-11.4	-11.92	-12.36	-12.52	-12.35	-13.04	-13.09	-13.03
60	60	60	75	75	75	120	120	120	120	150	120	150	150	150	120	120	120	120	120	120	120	120	120	120	120
255	255	255	255	255	255	270	270	270	285	75	285	90	90	90	270	270	270	270	270	270	270	270	270	270	270
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-4.99	-5.2	-5.2	-5.46	-5.88	-5.9	-5.96	-5.86	-5.77	-5.7	-5.83	-6.29	-6.38	-6.97	-7.2	-7.23	-7.84	-8.11	-8.3	-8.71	-9.13	-9.26	-9.16	-9.55	-9.42	-9.38
-6.86	-7.07	-7.07	-7.32	-7.72	-7.74	-7.79	-7.69	-7.59	-7.52	-7.65	-8.11	-8.21	-8.8	-9.04	-9.08	-9.69	-9.97	-10.18	-10.6	-11.04	-11.21	-11.15	-11.6	-11.53	-11.55
-9.55	-9.76	-9.78	-10.05	-10.48	-10.52	-10.59	-10.5	-10.41	-10.36	-10.49	-10.95	-11.02	-11.61	-11.82	-11.84	-12.45	-12.69	-12.86	-13.22	-13.61	-13.68	-13.5	-13.79	-13.57	-13.42
0.55	0.32	0.29	0.02	-0.42	-0.46	-0.52	-0.3	-0.3	-0.21	-0.38	-0.87	-1.05	-1.76	-2.03	-2.19	-2.98	-3.31	-3.41	-3.71	-3.92	-4	-3.76	-4.22	-4.03	-3.88
5.54	5.52	5.49	5.48	5.46	5.44	5.44	5.56	5.47	5.49	5.45	5.42	5.33	5.21	5.17	5.04	4.86	4.8	4.89	5	5.21	5.26	5.4	5.33	5.39	5.5
-4.99	-5.2	-5.2	-5.46	-5.88	-5.9	-5.96	-5.86	-5.77	-5.7	-5.83	-6.29	-6.38	-6.97	-7.2	-7.23	-7.84	-8.11	-8.3	-8.71	-9.13	-9.26	-9.16	-9.55	-9.42	-9.38
31.7	30.2	30.2	28.44	25.82	25.7	25.35	25.94	26.49	26.92	26.12	23.5	23.01	20.09	19.05	18.92	16.44	15.45	14.79	13.46	12.22	11.86	12.13	11.09	11.43	11.53
0.55	0.32	0.29	0.02	-0.42	-0.46	-0.52	-0.3	-0.3	-0.21	-0.38	-0.87	-1.05	-1.76	-2.03	-2.19	-2.98	-3.31	-3.41	-3.71	-3.92	-4	-3.76	-4.22	-4.03	-3.88
-7.17	-7.38	-7.38	-7.64	-8.05	-8.08	-8.12	-8.02	-7.92	-7.86	-7.98	-8.44	-8.53	-9.11	-9.31	-9.33	-9.92	-10.17	-10.34	-10.7	-11.1	-11.2	-11.05	-11.41	-11.26	-11.2
-5.91	-6.11	-6.11	-6.37	-6.77	-6.8	-6.85	-6.75	-6.64	-6.58	-6.71	-7.17	-7.26	-7.85	-8.07	-8.11	-8.97	-9.16	-9.55	-9.96	-10.08	-9.96	-10.33	-10.19	-10.13	-10.13
0.55	0.32	0.29	0.02	-0.42	-0.46	-0.52	-0.3	-0.3	-0.21	-0.38	-0.87	-1.05	-1.76	-2.03	-2.19	-2.98	-3.31	-3.41	-3.71	-3.92	-4	-3.76	-4.22	-4.03	-3.88
45	30	45	30	45	45	45	45	45	45	45	45	45	45	45	45	45	45	60	60	60	60	60	75	90	90
60	75	60	75	75	60	75	75	75	75	75	75	75	75	60	60	60	60	15	15	15	15	15	15	0	0
-32.87	-35.93	-31.37	-29.54	-28.95	-27.38	-26.22	-31.07	-37.17	-26.19	-26.02	-25.36	-27.8	-39.12	-34.87	-26.89	-34.93	-35.37	-39.2	-30.32	-34.65	-41.6	-39.58	-32.8	-34.33	-34.95
45	45	45	45	45	45	150	150	150	150	135	135	135	135	135	135	135	135	150	150	120	120	120	165	45	45
210	210	210	210	210	210	45	45	45	45	45	45	60	60	60	60	75	75	105	105	225	225	225	135	180	180
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-5.75	-6.02	-6.13	-6.43	-6.85	-6.99	-7.16	-7.09	-7.04	-7.06	-7.29	-7.64	-7.83	-8.47	-8.69	-8.67	-9.37	-9.84	-10.05	-10.59	-11.28	-11.55	-11.72	-12.39	-12.61	-12.88
-7.55	-7.81	-7.93	-8.22	-8.63	-8.76	-8.93	-8.86	-8.8	-8.83	-9.07	-9.44	-9.65	-10.31	-10.58	-10.6	-11.33	-11.87	-12.15	-12.78	-13.6	-13.98	-14.29	-15.13	-15.51	-16
-10.44	-10.72	-10.84	-11.15	-11.57	-11.73	-11.91	-11.85	-11.81	-11.81	-12.01	-12.34	-12.49	-13.09	-13.23	-13.14	-13.75	-14.12	-14.62	-15.12	-15.23	-15.22	-15.69	-15.72	-15.79	-15.79
-0.75	-0.94	-1.1	-1.35	-1.68	-1.78	-1.99	-1.83	-1.81	-1.86	-2.11	-2.44	-2.6	-3.28	-3.49	-3.42	-4.19	-4.64	-4.91	-5.49	-6.19	-6.51	-6.74	-7.5	-7.79	-8.12
5	5.08	5.03	5.08	5.17	5.21	5.17	5.26	5.23	5.2	5.18	5.2	5.23	5.19	5.2	5.25	5.18	5.2	5.14	5.1	5.09	5.04	4.98	4.89	4.82	4.76
-5.75	-6.02	-6.13	-6.43	-6.85	-6.99	-7.16	-7.09	-7.04	-7.06	-7.29	-7.64	-7.83	-8.47	-8.69	-8.67	-9.37	-9.84	-10.05	-10.59	-11.28	-11.55	-11.72	-12.39	-12.61	-12.88
26.61	25	24.38	22.75	20.65	20	19.23	19.54	19.77	19.68	18.66	17.22	16.48	14.22	13.52	13.58	11.56	10.38	9.89	8.73	7.45	7	6.73	5.77	5.48	5.15
-0.75	-0.94	-1.1	-1.35	-1.68	-1.78	-1.99	-1.83	-1.81	-1.86	-2.11	-2.44	-2.6	-3.28	-3.49	-3.42	-4.19	-4.64	-4.91	-5.49	-6.19	-6.51	-6.74	-7.5	-7.79	-8.12
-8.12	-8.42	-8.55	-8.87	-9.32	-9.48	-9.67	-9.63	-9.6	-9.65	-9.91	-10.3	-10.53	-11.22	-11.5	-11.53	-12.29	-12.86	-13.17	-13.83	-14.69	-15.1	-15.46	-16.34	-16.76	-17.27
-6.87	-7.15	-7.28	-7.58	-8.02	-8.16	-8.33	-8.27	-8.23	-8.26	-8.51	-8.89	-9.11	-9.78	-10.04	-10.06	-10.8	-11.33	-11.62	-12.24	-13.05	-13.42	-13.7	-14.45	-14.84	-15.24
-0.75	-0.94	-1.1	-1.35	-1.68	-1.78	-1.99	-1.83	-1.81	-1.86	-2.11	-2.44	-2.6	-3.28	-3.49	-3.42	-4.19	-4.64	-4.91	-5.49	-6.19	-6.51	-6.74	-7.5	-7.79	-8.12
45	45	45	45	45	45	45	45	45	45	0	45	0	0	15	0	15	0	15	15	15	15	15	30	15	0
165	165	165	165	180	180	180	180	180	165	180	165	165	165	165	165	165	150	150	150	150	150	150	150	150	150
-39.99	-32.6	-28	-28.01	-29.63	-31.15	-35.32	-41.49	-32.13	-27.17	-28.51	-34.48	-39.16	-31.3	-27.32	-24.2	-24.69	-26.98	-29.54	-33.95	-32.6	-30.01	-27.53	-27.42	-31.01	-33.41
135	135	135	105	105	105	90	90	90	105	120	120	120	120	120	120	105	105	105	105	105	105	90	90	90	90
300	300	300	105	105	105	90	90	90	105	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300