



• Applications

IEC 61089 Aluminum Alloy Conductor Steel Reinforced (AACSR) is a versatile conductor suitable for various applications. Comprising one or more layers of 6201-T81 aluminum alloy wire stranded around a high-strength coated steel core, AACSR conductors offer customizable current-carrying capacity and mechanical strength. The proportion of aluminum alloy to steel can be adjusted to meet specific requirements, ensuring optimal performance in diverse applications. Additionally, AACSR conductors can be further protected against corrosion through the application of grease to the core or by infusing the entire cable with grease, enhancing durability and longevity.

• Advantages

Customizable Properties: The composition of aluminum alloy and steel in AACSR conductors can be tailored to achieve the desired balance of current-carrying capacity and mechanical strength, making them adaptable to various applications and environmental conditions.

High Strength: With a high-strength coated steel core, AACSR conductors offer exceptional mechanical strength, enabling them to withstand high tensions and harsh operating conditions.

Corrosion Protection: Additional corrosion protection, such as grease application to the core or infusion of the complete cable with grease, enhances the longevity and reliability of AACSR conductors, particularly in corrosive environments.

Versatility: AACSR conductors are suitable for a wide range of applications, from overhead transmission lines to distribution networks, offering flexibility and reliability across different power transmission scenarios.

• Construction

AACSR conductors are constructed using a concentric stranding technique. They consist of one or more layers of 6201-T81 aluminum alloy wires stranded around a high-strength coated steel core. The steel core can be a single wire or stranded, depending on the conductor size and requirements.

• Specifications

-IEC 61089 Standard Aluminum Alloy Conductor Steel Reinforced

• Eastful Cable Lab



We have CNAS Accredited Facility to assure conformity assessment services with a focus on quality, expertise, and customer satisfaction.

CNAS has international mutual recognition among IAF, ILAC, APLAC and PAC.

• Accreditation

We meet the requirements of ISO9001, ISO14001, ISO45001 and ISO50001 and our cables have certificate of CCC, RoHS, CASC, UL, cUL, TÜV Rheinland and CCS.



• National Green Factory



Our facility has been awarded of National Green Factory by Ministry of Industry and Information Technology of China.

We are committed to the development of high-end, intelligent and green manufacturing industry.

*The overall energy consumption level of green factories is better than the energy efficiency benchmark level.

Technical Parameters

IEC 61089 AACSR - Type A2/S1A														
Nominal Cross Section Area	Steel Ratio	Calculated Cross Sectional Area			Stranding Wires				Diameter of Complete Conductor	Weight	Rated Strength	D.C. Resistance at 20°C	Current Capacity	
		Alloy	Steel	Total	Alum.	Steel	Alum.	Steel					at 75°C	at 85°C
mm²	%	mm²	mm²	mm²	No.	No.	mm	mm	mm	kg/km	kN	Ω/km	A	A
16	17	18.4	3.07	21.5	6	1	1.98	1.98	5.94	74.4	9.02	1.7934	78	93
25	17	28.8	4.8	33.6	6	1	2.47	2.47	7.41	116.2	13.96	1.1478	102	122
40	17	46	7.67	53.7	6	1	3.13	3.13	9.39	185.9	22.02	0.7174	135	163
63	17	72.5	12.1	84.6	6	1	3.92	3.92	11.76	292.8	34.68	0.4555	177	215
100	6	115	6.39	121	18	1	2.85	2.85	14.25	366.4	41.24	0.288	246	301
125	6	144	7.99	152	18	1	3.19	3.19	15.95	458	51.23	0.2304	281	345
125	16	144	23.4	167	26	7	2.65	2.96	19.48	579.9	69.86	0.231	290	359
160	6	184	10.2	194	18	1	3.61	3.61	18.05	586.2	65.58	0.18	324	400
160	16	184	30	214	26	7	3	2.34	19.02	742.3	88.52	0.1805	326	404
200	6	230	12.8	243	18	1	4.04	4.04	20.2	732.8	81.97	0.144	369	458
200	16	230	37.5	268	26	7	3.36	2.61	21.27	927.9	110.64	0.1444	371	462
250	10	288	28.3	316	22	7	4.08	2.27	23.13	1013.5	117.09	0.1154	420	526
250	16	288	46.9	335	26	7	3.75	2.92	23.76	1159.8	138.31	0.1155	421	529
315	7	363	25.1	388	45	7	3.2	2.14	25.62	1196.5	136.28	0.0917	471	594
315	16	363	59	422	26	7	4.21	3.28	26.68	1461.4	171.9	0.0917	480	607
400	7	460	31.8	492	45	7	3.61	2.41	28.89	1519.4	201.46	0.0722	538	685
400	13	460	59.7	520	54	7	3.29	3.29	29.61	1738.3	193.61	0.0723	540	688
450	7	518	35.8	554	45	7	3.83	2.55	30.63	1709.3	226.64	0.0642	574	734
450	13	518	67.1	585	54	7	3.49	3.49	31.41	1955.6	215.12	0.0643	576	738
500	7	575	39.8	615	45	7	4.04	2.69	32.31	1899.3	251.82	0.0578	608	781
500	13	575	74.6	650	54	7	3.68	3.68	33.12	2172.9	240.93	0.0578	611	785
560	7	646	44.6	691	45	7	4.27	2.85	34.17	2127.2	283.21	0.0516	647	834
560	13	646	81.6	728	54	19	3.9	2.34	35.1	2420.9	249.62	0.0516	649	840
630	4	725	31.3	756	72	7	3.58	2.39	35.81	2248	318.61	0.0459	696	902
630	13	725	91.8	817	54	19	4.13	2.48	37.18	2723.5	281.32	0.0459	691	899
710	4	817	35.3	852	72	7	3.8	2.53	37.99	2533.4	359.06	0.0407	741	966
710	13	817	104	921	54	19	4.39	2.63	39.49	3069.4	316.98	0.0407	737	964
800	4	921	39.8	961	72	7	4.04	2.69	40.39	2854.6	359.03	0.0361	789	1034
800	8	921	76.7	998	84	7	3.74	3.74	41.14	3145.1	359.03	0.0362	791	1039
900	4	1036	44.8	1081	72	7	4.28	2.85	42.79	3211.4	356.6	0.0321	837	1104
900	8	1036	86.3	1122	84	7	3.96	3.96	43.56	3538.3	400.53	0.0322	839	1109
1000	8	1151	93.7	1245	84	19	4.18	2.51	45.99	3916.8	446.37	0.0298	873	1161
1120	8	1289	105	1394	84	19	4.42	2.65	48.61	4368.6	499.93	0.0258	934	1252

Technical Parameters

IEC 61089 AACSR - Type A2/S1B														
Nominal Cross Section Area	Steel Ratio	Calculated Cross Sectional Area			Stranding Wires				Diameter of Complete Conductor	Weight	Rated Strength	D.C. Resistance at 20°C	Current Capacity	
		Alloy	Steel	Total	Alum.	Steel	Alum.	Steel					at 75°C	at 85°C
mm²	%	mm²	mm²	mm²	No.	No.	mm	mm	mm	kg/km	kN	Ω/km	A	A
16	17	18.4	3.07	21.5	6	1	1.98	1.98	5.94	74.4	8.81	1.7934	78	93
25	17	28.8	4.8	33.6	6	1	2.47	2.47	7.41	116.2	13.62	1.1478	102	122
40	17	46	7.67	53.7	6	1	3.13	3.13	9.39	185.9	21.25	0.7174	135	163
63	17	72.5	12.1	84.6	6	1	3.92	3.92	11.76	292.8	33.48	0.4555	177	215
100	6	115	6.39	121	18	1	2.85	2.85	14.25	366.4	40.79	0.288	246	301
125	6	144	7.99	152	18	1	3.19	3.19	15.95	458	50.43	0.2304	281	345
125	16	144	23.4	167	26	7	2.65	2.96	19.48	579.9	68.22	0.231	290	359
160	6	184	10.2	194	18	1	3.61	3.61	18.05	586.2	64.56	0.18	324	400
160	16	184	30	214	26	7	3	2.34	19.02	742.3	86.42	0.1805	326	404
200	6	230	12.8	243	18	1	4.04	4.04	20.2	732.8	80.69	0.144	369	458
200	16	230	37.5	268	26	7	3.36	2.61	21.27	927.9	108.02	0.1444	371	462
250	10	288	28.3	316	22	7	4.08	2.27	23.13	1013.5	115.12	0.1154	420	526
250	16	288	46.9	335	26	7	3.75	2.92	23.76	1159.8	135.03	0.1155	421	529
315	7	363	25.1	388	45	7	3.2	2.14	25.62	1196.5	134.52	0.0917	471	594
315	16	363	59	422	26	7	4.21	3.28	26.68	1461.4	166	0.0917	480	607
400	7	460	31.8	492	45	7	3.61	2.41	28.89	1519.4	169.87	0.0722	538	685
400	13	460	59.7	520	54	7	3.29	3.29	29.61	1738.3	195.49	0.0723	540	688
450	7	518	35.8	554	45	7	3.83	2.55	30.63	1709.3	191.1	0.0642	574	734
450	13	518	67.1	585	54	7	3.49	3.49	31.41	1955.6	219.93	0.0643	576	738
500	7	575	39.8	615	45	7	4.04	2.69	32.31	1899.3	212.33	0.0578	608	781
500	13	575	74.6	650	54	7	3.68	3.68	33.12	2172.9	244.36	0.0578	611	785
560	7	646	44.6	691	45	7	4.27	2.85	34.17	2127.2	237.82	0.0516	647	834
560	13	646	81.6	728	54	19	3.9	2.34	35.1	2420.9	277.49	0.0516	649	840
630	4	725	31.3	756	72	7	3.58	2.39	35.81	2248	247.43	0.0459	696	902
630	13	725	91.8	817	54	19	4.13	2.48	37.18	2723.5	312.18	0.0459	691	899
710	4	817	35.3	852	72	7	3.8	2.53	37.99	2533.4	278.85	0.0407	741	966
710	13	817	104	921	54	19	4.39	2.63	39.49	3069.4	351.82	0.0407	737	964
800	4	921	39.8	961	72	7	4.04	2.69	40.39	2854.6	314.19	0.0361	789	1034
800	8	921	76.7	998	84	7	3.74	3.74	41.14	3145.1	348.35	0.0362	791	1039
900	4	1036	44.8	1081	72	7	4.28	2.85	42.79	3211.4	353.47	0.0321	837	1104
900	8	1036	86.3	1122	84	7	3.96	3.96	43.56	3538.3	391.9	0.0322	839	1109
1000	8	1151	93.7	1245	84	19	4.18	2.51	45.99	3916.8	439.81	0.0298	873	1161
1120	8	1289	105	1394	84	19	4.42	2.65	48.61	4368.6	492.59	0.0258	934	1252

Technical Parameters

IEC 61089 AACSR - Type A2/S3A														
Nominal Cross Section Area	Steel Ratio	Calculated Cross Sectional Area			Stranding Wires				Diameter of Complete Conductor	Weight	Rated Strength	D.C. Resistance at 20°C	Current Capacity	
		Alloy	Steel	Total	Alum.	Steel	Alum.	Steel					at 75°C	at 85°C
mm²	%	mm²	mm²	mm²	No.	No.	mm	mm	mm	kg/km	kN	Ω/km	A	A
16	17	18.4	3.07	21.5	6	1	1.98	1.98	5.94	74.4	9.88	1.7934	78	93
25	17	28.8	4.8	33.6	6	1	2.47	2.47	7.41	116.2	15.25	1.1478	102	122
40	17	46	7.67	53.7	6	1	3.13	3.13	9.39	185.9	24.71	0.7174	135	163
63	17	72.5	12.1	84.6	6	1	3.92	3.92	11.76	292.8	37.58	0.4555	177	215
100	6	115	6.39	121	18	1	2.85	2.85	14.25	366.4	42.97	0.288	246	301
125	6	144	7.99	152	18	1	3.19	3.19	15.95	458	53.47	0.2304	281	345
125	16	144	23.4	167	26	7	2.65	2.96	19.48	579.9	76.42	0.231	290	359
160	6	184	10.2	194	18	1	3.61	3.61	18.05	586.2	68.03	0.18	324	400
160	16	184	30	214	26	7	3	2.34	19.02	742.3	96.61	0.1805	326	404
200	6	230	12.8	243	18	1	4.04	4.04	20.2	732.8	85.04	0.144	369	458
200	16	230	37.5	268	26	7	3.36	2.61	21.27	927.9	120.77	0.1444	371	462
250	10	288	28.3	316	22	7	4.08	2.27	23.13	1013.5	124.72	0.1154	420	526
250	16	288	46.9	335	26	7	3.75	2.92	23.76	1159.8	150.96	0.1155	421	529
315	7	363	25.1	388	45	7	3.2	2.14	25.62	1196.5	143.3	0.0917	471	594
315	16	363	59	422	26	7	4.21	3.28	26.68	1461.4	188.44	0.0917	480	607
400	7	460	31.8	492	45	7	3.61	2.41	28.89	1519.4	180.69	0.0722	538	685
400	13	460	59.7	520	54	7	3.29	3.29	29.61	1738.3	218.17	0.0723	540	688
450	7	518	35.8	554	45	7	3.83	2.55	30.63	1709.3	203.28	0.0642	574	734
450	13	518	67.1	585	54	7	3.49	3.49	31.41	1955.6	245.44	0.0643	576	738
500	7	575	39.8	615	45	7	4.04	2.69	32.31	1899.3	225.86	0.0578	608	781
500	13	575	74.6	650	54	7	3.68	3.68	33.12	2172.9	269.73	0.0578	611	785
560	7	646	44.6	691	45	7	4.27	2.85	34.17	2127.2	252.97	0.0516	647	834
560	13	646	81.6	728	54	19	3.9	2.34	35.1	2420.9	305.25	0.0516	649	840
630	4	725	31.3	756	72	7	3.58	2.39	35.81	2248	258.08	0.0459	696	902
630	13	725	91.8	817	54	19	4.13	2.48	37.18	2723.5	343.4	0.0459	691	899
710	4	817	35.3	852	72	7	3.8	2.53	37.99	2533.4	290.85	0.0407	741	966
710	13	817	104	921	54	19	4.39	2.63	39.49	3069.4	387.01	0.0407	737	964
800	4	921	39.8	961	72	7	4.04	2.69	40.39	2854.6	327.72	0.0361	789	1034
800	8	921	76.7	998	84	7	3.74	3.74	41.14	3145.1	374.44	0.0362	791	1039
900	4	1036	44.8	1081	72	7	4.28	2.85	42.79	3211.4	368.69	0.0321	837	1104
900	8	1036	86.3	1122	84	7	3.96	3.96	43.56	3538.3	421.25	0.0322	839	1109
1000	8	1151	93.7	1245	84	19	4.18	2.51	45.99	3916.8	471.67	0.0298	873	1161
1120	8	1289	105	1394	84	19	4.42	2.65	48.61	4368.6	528.27	0.0258	934	1252

Technical Parameters

IEC 61089 AACSR - Type A3/S1A														
Nominal Cross Section Area	Steel Ratio	Calculated Cross Sectional Area			Stranding Wires				Diameter of Complete Conductor	Weight	Rated Strength	D.C. Resistance at 20°C	Current Capacity	
		Alloy	Steel	Total	Alum.	Steel	Alum.	Steel					at 75°C	at 85°C
mm²	%	mm²	mm²	mm²	No.	No.	mm	mm	mm	kg/km	kN	Ω/km	A	A
16	17	18.6	3.1	21.7	6	1	1.99	1.99	5.97	75.1	9.67	1.7934	78	93
25	17	29	4.8	33.8	6	1	2.48	2.48	7.44	117.3	14.96	1.1478	102	122
40	17	46.5	7.8	54.3	6	1	3.14	3.14	9.42	187.7	23.63	0.7174	135	163
63	17	73.2	12.2	85.4	6	1	3.94	3.94	11.82	295.6	36.48	0.4555	177	215
100	6	116	6.5	122.5	18	1	2.87	2.87	14.35	369.9	45.12	0.288	246	301
125	6	145	8.1	153.1	18	1	3.21	3.21	16.05	462.3	56.08	0.2304	281	345
125	16	145	23.7	168.7	26	7	2.67	2.07	16.89	585.4	74.88	0.231	290	359
160	6	186	10.3	196.3	18	1	3.63	3.63	18.15	591.8	69.92	0.18	324	400
160	16	186	13.3	199.3	26	7	3.02	2.35	19.13	749.4	94.94	0.1805	326	404
200	6	232	12.9	244.9	18	1	4.05	4.05	20.25	739.8	87.4	0.144	369	458
200	16	232	37.8	269.8	26	7	3.37	2.62	21.34	936.7	118.67	0.1444	371	462
250	10	290	28.5	318.5	22	7	4.1	2.28	23.24	1023.2	124.02	0.1154	420	526
250	16	290	47.3	337.3	26	7	3.77	2.93	23.87	1170.9	145.43	0.1155	421	529
315	7	366	25.3	391.3	45	7	3.22	2.15	25.77	1207.9	148.56	0.0917	471	594
315	16	366	59.6	425.6	26	7	4.23	3.29	26.79	1475.3	180.86	0.0917	480	607
400	7	465	32.1	497.1	45	7	3.63	2.42	29.04	1533.9	183.03	0.0722	538	685
400	13	465	60.2	525.2	54	7	3.31	3.31	29.79	1754.9	217.32	0.0723	540	688
450	7	523	36.1	559.1	45	7	3.85	2.56	30.78	1725.6	205.91	0.0642	574	734
450	13	523	67.8	590.8	54	7	3.51	3.51	31.59	1974.2	239.26	0.0643	576	738
500	7	581	40.2	621.2	45	7	4.05	2.7	32.4	1917.3	228.79	0.0578	608	781
500	13	581	75.3	656.3	54	7	3.7	3.7	33.3	2193.6	265.84	0.0578	611	785
560	7	651	45	696	45	7	4.29	2.86	34.32	2147.4	256.24	0.0516	647	834
560	13	651	82.4	733.4	54	19	3.92	2.35	35.27	2444	298.92	0.0516	649	840
630	4	732	31.6	763.6	72	7	3.6	2.4	36	2269.4	266.64	0.0459	696	902
630	13	732	92.7	824.7	54	19	4.15	2.49	37.35	2749.5	336.28	0.0459	691	899
710	13	825	35.6	860.6	72	7	3.82	2.55	38.21	2557.6	300.5	0.0407	741	966
710	13	825	104	929	54	19	4.41	2.65	39.71	3098.6	378.98	0.0407	737	964
800	13	930	40.2	970.2	72	7	4.05	2.7	40.5	2881.8	338.59	0.0361	789	1034
800	13	930	77.5	1007.5	84	7	3.75	3.75	41.25	3175.1	378.01	0.0362	791	1039
900	13	1046	45.2	1091.2	72	7	4.3	2.87	43.01	3242	380.91	0.0321	837	1104
900	13	1046	87.1	1133.1	84	7	3.98	3.98	43.78	3572	425.26	0.0322	839	1109
1000	13	1162	94.6	1256.6	84	19	4.2	2.52	46.2	3954.1	473.86	0.0298	873	1161
1120	13	1301	106	1407	84	19	4.44	2.66	48.82	4428.6	530.72	0.0258	934	1252

● Technical Parameters

IEC 61089 AACSR - Type A3/S1B														
Nominal Cross Section Area	Steel Ratio	Calculated Cross Sectional Area			Stranding Wires				Diameter of Complete Conductor	Weight	Rated Strength	D.C. Resistance at 20°C	Current Capacity	
		Alloy	Steel	Total	Alum.	Steel	Alum.	Steel					at 75°C	at 85°C
mm²	%	mm²	mm²	mm²	No.	No.	mm	mm	mm	kg/km	kN	Ω/km	A	A
16	17	18.6	3.1	21.7	6	1	1.99	1.99	5.97	75.1	9.45	1.7934	78	93
25	17	29	4.8	33.8	6	1	2.48	2.48	7.44	117.3	14.62	1.1478	102	122
40	17	46.5	7.8	54.3	6	1	3.14	3.14	9.42	187.7	22.85	0.7174	135	163
63	17	73.2	12.2	85.4	6	1	3.94	3.94	11.82	295.6	35.26	0.4555	177	215
100	6	116	6.5	122.5	18	1	2.87	2.87	14.35	369.9	44.67	0.288	246	301
125	6	145	8.1	153.1	18	1	3.21	3.21	16.05	462.3	55.27	0.2304	281	345
125	16	145	23.7	168.7	26	7	2.67	2.07	16.89	585.4	73.22	0.231	290	359
160	6	186	10.3	196.3	18	1	3.63	3.63	18.15	591.8	68.89	0.18	324	400
160	16	186	13.3	199.3	26	7	3.02	2.35	19.13	749.4	92.82	0.1805	326	404
200	6	232	12.9	244.9	18	1	4.05	4.05	20.25	739.8	86.11	0.144	369	458
200	16	232	37.8	269.8	26	7	3.37	2.62	21.34	936.7	116.02	0.1444	371	462
250	10	290	28.5	318.5	22	7	4.1	2.28	23.24	1023.2	122.02	0.1154	420	526
250	16	290	47.3	337.3	26	7	3.77	2.93	23.87	1170.9	142.12	0.1155	421	529
315	7	366	25.3	391.3	45	7	3.22	2.15	25.77	1207.9	146.78	0.0917	471	594
315	16	366	59.6	425.6	26	7	4.23	3.29	26.79	1475.3	174.9	0.0917	480	607
400	7	465	32.1	497.1	45	7	3.63	2.42	29.04	1533.9	180.78	0.0722	538	685
400	13	465	60.2	525.2	54	7	3.31	3.31	29.79	1754.9	211.29	0.0723	540	688
450	7	523	36.1	559.1	45	7	3.85	2.56	30.78	1725.6	203.38	0.0642	574	734
450	13	523	67.8	590.8	54	7	3.51	3.51	31.59	1974.2	232.48	0.0643	576	738
500	7	581	40.2	621.2	45	7	4.05	2.7	32.4	1917.3	225.96	0.0578	608	781
500	13	581	75.3	656.3	54	7	3.7	3.7	33.3	2193.6	258.31	0.0578	611	785
560	7	651	45	696	45	7	4.29	2.86	34.32	2147.4	253.09	0.0516	647	834
560	13	651	82.4	733.4	54	19	3.92	2.35	35.27	2444	293.15	0.0516	649	840
630	4	732	31.6	763.6	72	7	3.6	2.4	36	2269.4	264.42	0.0459	696	902
630	13	732	92.7	824.7	54	19	4.15	2.49	37.35	2749.5	329.79	0.0459	691	899
710	13	825	35.6	860.6	72	7	3.82	2.55	38.21	2557.6	298	0.0407	741	966
710	13	825	104	929	54	19	4.41	2.65	39.71	3098.6	371.67	0.0407	737	964
800	13	930	40.2	970.2	72	7	4.05	2.7	40.5	2881.8	335.78	0.0361	789	1034
800	13	930	77.5	1007.5	84	7	3.75	3.75	41.25	3175.1	370.26	0.0362	791	1039
900	13	1046	45.2	1091.2	72	7	4.3	2.87	43.01	3242	377.75	0.0321	837	1104
900	13	1046	87.1	1133.1	84	7	3.98	3.98	43.78	3572	416.54	0.0322	839	1109
1000	13	1162	94.6	1256.6	84	19	4.2	2.52	46.2	3954.1	467.24	0.0298	873	1161
1120	13	1301	106	1407	84	19	4.44	2.66	48.82	4428.6	523.3	0.0258	934	1252

Technical Parameters

IEC 61089 AACSR - Type A3/S3A														
Nominal Cross Section Area	Steel Ratio	Calculated Cross Sectional Area			Stranding Wires				Diameter of Complete Conductor	Weight	Rated Strength	D.C. Resistance at 20°C	Current Capacity	
		Alloy	Steel	Total	Alum.	Steel	Alum.	Steel					at 75°C	at 85°C
mm²	%	mm²	mm²	mm²	No.	No.	mm	mm	mm	kg/km	kN	Ω/km	A	A
16	17	18.6	3.1	21.7	6	1	1.99	1.99	5.97	75.1	10.53	1.7934	78	93
25	17	29	4.8	33.8	6	1	2.48	2.48	7.44	117.3	16.27	1.1478	102	122
40	17	46.5	7.8	54.3	6	1	3.14	3.14	9.42	187.7	25.79	0.7174	135	163
63	17	73.2	12.2	85.4	6	1	3.94	3.94	11.82	295.6	39.41	0.4555	177	215
100	6	116	6.5	122.5	18	1	2.87	2.87	14.35	369.9	46.86	0.288	246	301
125	6	145	8.1	153.1	18	1	3.21	3.21	16.05	462.3	58.34	0.2304	281	345
125	16	145	23.7	168.7	26	7	2.67	2.07	16.89	585.4	81.5	0.231	290	359
160	6	186	10.3	196.3	18	1	3.63	3.63	18.15	591.8	72.4	0.18	324	400
160	16	186	13.3	199.3	26	7	3.02	2.35	19.13	749.4	103.11	0.1805	326	404
200	6	232	12.9	244.9	18	1	4.05	4.05	20.25	739.8	90.5	0.144	369	458
200	16	232	37.8	269.8	26	7	3.37	2.62	21.34	936.7	128.89	0.1444	371	462
250	10	290	28.5	318.5	22	7	4.1	2.28	23.24	1023.2	131.72	0.1154	420	526
250	16	290	47.3	337.3	26	7	3.77	2.93	23.87	1170.9	158.21	0.1155	421	529
315	7	366	25.3	391.3	45	7	3.22	2.15	25.77	1207.9	155.64	0.0917	471	594
315	16	366	59.6	425.6	26	7	4.23	3.29	26.79	1475.3	197.55	0.0917	480	607
400	7	465	32.1	497.1	45	7	3.63	2.42	29.04	1533.9	191.71	0.0722	538	685
400	13	465	60.2	525.2	54	7	3.31	3.31	29.79	1754.9	234.19	0.0723	540	688
450	7	523	36.1	559.1	45	7	3.85	2.56	30.78	1725.6	215.67	0.0642	574	734
450	13	523	67.8	590.8	54	7	3.51	3.51	31.59	1974.2	255.52	0.0643	576	738
500	7	581	40.2	621.2	45	7	4.05	2.7	32.4	1917.3	239.63	0.0578	608	781
500	13	581	75.3	656.3	54	7	3.7	3.7	33.3	2193.6	283.91	0.0578	611	785
560	7	651	45	696	45	7	4.29	2.86	34.32	2147.4	268.39	0.0516	647	834
560	13	651	82.4	733.4	54	19	3.92	2.35	35.27	2444	321.17	0.0516	649	840
630	4	732	31.6	763.6	72	7	3.6	2.4	36	2269.4	275.18	0.0459	696	902
630	13	732	92.7	824.7	54	19	4.15	2.49	37.35	2749.5	361.32	0.0459	691	899
710	13	825	35.6	860.6	72	7	3.82	2.55	38.21	2557.6	310.12	0.0407	741	966
710	13	825	104	929	54	19	4.41	2.65	39.71	3098.6	407.2	0.0407	737	964
800	13	930	40.2	970.2	72	7	4.05	2.7	40.5	2881.8	349.43	0.0361	789	1034
800	13	930	77.5	1007.5	84	7	3.75	3.75	41.25	3175.1	396.6	0.0362	791	1039
900	13	1046	45.2	1091.2	72	7	4.3	2.87	43.01	3242	393.11	0.0321	837	1104
900	13	1046	87.1	1133.1	84	7	3.98	3.98	43.78	3572	446.17	0.0322	839	1109
1000	13	1162	94.6	1256.6	84	19	4.2	2.52	46.2	3954.1	499.4	0.0298	873	1161
1120	13	1301	106	1407	84	19	4.44	2.66	48.82	4428.6	559.33	0.0258	934	1252