

Table. Quality evaluation of the results of Ramella method on the *HSim-data*.

IMG	MSE	PSNR	MSE3	PSNR3	SSIM	MSSIM	VSNR	VIFP	UQI	NQM	WSNR
IMD153	31.667	33.125	44.587	31.639	0.989	0.971	19.854	0.620	0.748	14.665	34.226
IMD154	54.885	30.736	77.002	29.266	0.987	0.941	16.370	0.557	0.692	11.352	26.521
ISIC_0000000	21.039	34.901	30.435	33.297	0.966	0.957	25.049	0.646	0.727	17.146	30.875
ISIC_0000008	14.367	36.557	20.695	34.972	0.982	0.978	24.952	0.708	0.738	16.742	34.039
ISIC_0000013	13.772	36.741	19.402	35.252	0.973	0.972	25.365	0.695	0.729	20.039	34.086
ISIC_0000016	8.420	38.878	11.756	37.428	0.991	0.987	28.168	0.762	0.665	21.211	37.462
ISIC_0000026	118.408	27.397	161.131	26.059	0.974	0.984	8.733	0.710	0.653	15.092	31.697
ISIC_0000028	147.103	26.455	200.757	25.104	0.951	0.950	15.583	0.590	0.666	16.821	29.126
ISIC_0000038	146.880	26.461	202.665	25.063	0.972	0.968	17.706	0.614	0.637	17.834	29.960
ISIC_0000040	114.313	27.550	158.448	26.132	0.982	0.985	8.688	0.697	0.611	15.389	31.447
ISIC_0000047	131.939	26.927	179.822	25.582	0.972	0.976	14.490	0.654	0.606	19.299	31.119
ISIC_0000049	142.150	26.603	194.796	25.235	0.967	0.953	14.763	0.593	0.687	17.988	29.598
ISIC_0000051	128.427	27.044	175.383	25.691	0.977	0.976	13.289	0.689	0.711	19.507	31.508
ISIC_0000087	8.696	38.738	15.319	36.278	0.993	0.962	25.388	0.590	0.361	16.084	36.935
ISIC_0000089	6.605	39.932	13.928	36.692	0.991	0.961	23.683	0.602	0.367	23.304	38.125
ISIC_0000096	5.160	41.005	12.589	37.131	0.996	0.961	20.198	0.716	0.614	16.606	39.021
ISIC_0000105	9.704	38.261	14.683	36.463	0.989	0.952	17.845	0.577	0.409	20.582	36.165
ISIC_0000109	10.710	37.833	19.760	35.173	0.993	0.950	21.820	0.606	0.535	17.472	36.016
ISIC_0000120	18.933	35.359	32.011	33.078	0.930	0.947	23.227	0.543	0.356	15.035	32.678
ISIC_0000124	10.500	37.919	20.640	34.984	0.991	0.954	23.270	0.643	0.613	20.368	35.195
ISIC_0000141	6.637	39.911	11.745	37.432	0.982	0.967	23.455	0.587	0.315	21.083	37.661
ISIC_0000142	19.438	35.244	30.830	33.241	0.973	0.944	24.523	0.525	0.456	18.792	33.178
ISIC_0000143	6.616	39.925	10.682	37.844	0.987	0.961	23.184	0.607	0.405	20.383	39.082
ISIC_0000165	25.168	34.122	37.779	32.358	0.993	0.970	20.358	0.802	0.827	16.559	31.445
ISIC_0000172	13.357	36.874	21.765	34.753	0.992	0.970	26.460	0.705	0.797	19.572	34.315
ISIC_0000175	76.957	29.268	105.446	27.901	0.981	0.963	23.624	0.672	0.753	8.712	27.263
ISIC_0000184	12.844	37.044	19.339	35.267	0.995	0.966	24.759	0.728	0.801	19.208	34.899
ISIC_0000189	31.163	33.194	45.820	31.520	0.991	0.941	21.936	0.519	0.635	14.991	31.600
ISIC_0000205	18.471	35.466	33.444	32.888	0.986	0.937	25.015	0.502	0.654	20.604	33.614

ISIC_0000211	12.024	37.330	19.137	35.312	0.994	0.972	22.598	0.689	0.764	18.965	36.029
ISIC_0000213	458.830	21.514	639.416	20.073	0.972	0.919	15.672	0.650	0.795	1.958	18.320
ISIC_0000226	14.770	36.437	22.712	34.568	0.993	0.964	25.880	0.582	0.717	18.207	35.218
ISIC_0000230	22.668	34.577	32.661	32.991	0.991	0.956	24.758	0.623	0.764	16.411	34.416
ISIC_0000233	31.243	33.183	49.928	31.147	0.993	0.946	21.374	0.633	0.784	15.407	28.720
ISIC_0000236	4.750	41.364	7.341	39.473	0.994	0.981	30.986	0.836	0.794	20.198	38.357
ISIC_0000246	3.025	43.323	5.349	40.848	0.991	0.980	22.318	0.826	0.724	15.146	39.834
ISIC_0000257	1.094	47.739	1.910	45.320	0.998	0.994	31.166	0.845	0.652	23.113	46.466
ISIC_0000261	10.686	37.843	15.091	36.344	0.988	0.980	16.254	0.823	0.764	11.945	32.732
ISIC_0000344	61.931	30.212	87.244	28.723	0.988	0.945	18.119	0.485	0.652	9.042	28.170
ISIC_0000384	1.594	46.105	2.681	43.847	0.980	0.987	25.752	0.731	0.325	25.523	43.600
ISIC_0000385	5.938	40.395	9.826	38.207	0.988	0.972	21.207	0.737	0.406	20.776	36.950
ISIC_0000410	2.346	44.427	4.869	41.257	0.971	0.976	22.008	0.620	0.354	20.210	41.823
ISIC_0000412	5.647	40.612	9.570	38.322	0.987	0.970	20.030	0.716	0.501	19.298	37.428
ISIC_0000416	3.171	43.119	5.941	40.392	0.985	0.972	23.473	0.775	0.467	24.830	39.477
ISIC_0000421	5.957	40.380	10.425	37.950	0.990	0.959	20.902	0.675	0.395	20.638	36.482
ISIC_0000423	5.372	40.829	9.871	38.187	0.996	0.968	26.363	0.731	0.471	21.356	36.665
ISIC_0000426	16.694	35.905	26.291	33.933	0.979	0.952	24.220	0.593	0.398	20.964	32.708
ISIC_0000453	2.436	44.265	4.570	41.531	0.997	0.978	23.593	0.817	0.462	22.288	39.832
ISIC_0000454	3.742	42.399	6.004	40.346	0.993	0.975	21.266	0.718	0.375	17.766	37.654
ISIC_0000455	2.829	43.615	4.656	41.451	0.994	0.983	24.344	0.697	0.420	20.149	39.364
ISIC_0000457	16.192	36.038	24.203	34.292	0.995	0.975	16.314	0.708	0.709	9.829	31.050
ISIC_0000461	4.135	41.967	6.659	39.897	0.989	0.980	22.648	0.692	0.698	15.274	37.668
ISIC_0000466	20.845	34.941	28.322	33.610	0.994	0.972	18.747	0.715	0.738	11.062	30.382
ISIC_0000474	13.068	36.969	18.214	35.527	0.992	0.974	18.712	0.705	0.701	10.423	31.389
ISIC_0000478	19.275	35.281	27.097	33.802	0.993	0.975	14.399	0.721	0.736	6.883	30.176
ISIC_0000482	13.041	36.978	18.479	35.464	0.977	0.977	19.791	0.672	0.706	15.382	32.405
ISIC_0000503	3.716	42.430	5.489	40.736	0.992	0.987	27.291	0.673	0.646	21.392	39.927
ISIC_0000515	2.262	44.586	3.294	42.954	0.994	0.986	27.577	0.761	0.780	20.572	41.408
ISIC_0000530	11.869	37.387	18.361	35.492	0.996	0.977	16.417	0.691	0.672	11.181	33.260
ISIC_0000537	4.585	41.518	6.534	39.979	0.998	0.975	22.912	0.719	0.801	14.499	38.406
ISIC_0000539	366.138	22.494	503.076	21.114	0.977	0.901	12.718	0.620	0.775	1.704	18.906

ISIC_0000541	20.407	35.033	31.892	33.094	0.995	0.970	16.366	0.740	0.774	9.660	29.492
ISIC_0000556	26.943	33.826	39.068	32.213	0.994	0.966	18.746	0.706	0.808	9.371	29.765
ISIC_0001185	9.826	38.207	18.665	35.420	0.994	0.958	17.049	0.384	0.215	19.460	33.712
ISIC_0001367	41.694	31.930	123.675	27.208	0.978	0.957	10.297	0.609	0.282	4.857	27.126
ISIC_0001372	51.365	31.024	143.938	26.549	0.968	0.872	9.386	0.320	0.271	8.669	27.661
ISIC_0006982	15.341	36.272	23.827	34.360	0.990	0.947	10.670	0.479	0.342	8.234	32.009
ISIC_0007038	11.871	37.386	19.063	35.329	0.988	0.951	10.392	0.381	0.153	17.659	32.599
ISIC_0007087	13.405	36.858	23.873	34.352	0.995	0.950	13.762	0.469	0.337	18.637	33.592
ISIC_0007693	3.157	43.138	4.986	41.153	0.983	0.981	15.156	0.527	0.298	18.922	40.392
ISIC_0009875	33.367	32.898	45.366	31.564	0.990	0.974	18.751	0.746	0.798	9.565	28.923
ISIC_0009877	96.163	28.301	132.982	26.893	0.985	0.956	22.955	0.747	0.792	3.844	26.250
ISIC_0009881	4.038	42.069	5.745	40.538	0.994	0.987	24.322	0.761	0.756	20.431	39.570
ISIC_0009882	45.473	31.553	63.765	30.085	0.984	0.963	12.710	0.661	0.738	10.009	26.897
ISIC_0009883	10.926	37.746	14.623	36.480	0.987	0.987	24.456	0.685	0.595	14.853	34.678
ISIC_0009885	5.750	40.534	8.074	39.060	0.991	0.986	22.211	0.794	0.768	18.447	37.528
ISIC_0009891	12.533	37.150	16.724	35.897	0.995	0.978	16.190	0.779	0.765	11.196	31.873
ISIC_0009895	6.216	40.195	9.434	38.384	0.990	0.979	25.872	0.779	0.822	19.417	38.907
ISIC_0009897	8.861	38.656	13.279	36.899	0.997	0.964	25.896	0.783	0.789	18.056	34.756
ISIC_0009926	1.453	46.507	2.200	44.707	0.995	0.990	27.381	0.839	0.761	23.583	46.790
ISIC_0009928	17.474	35.707	25.079	34.138	0.996	0.969	23.829	0.806	0.818	15.199	33.091
ISIC_0009940	18.814	35.386	27.051	33.809	0.995	0.971	18.293	0.801	0.809	11.669	30.624
ISIC_0009962	7.737	39.245	11.585	37.492	0.993	0.973	27.151	0.789	0.815	20.022	37.163
ISIC_0009965	56.715	30.594	74.969	29.382	0.991	0.970	10.126	0.760	0.785	4.444	25.504
ISIC_0009970	6.722	39.856	9.766	38.234	0.996	0.976	26.268	0.818	0.813	13.154	38.296
ISIC_0009973	15.676	36.178	22.469	34.615	0.989	0.969	22.066	0.761	0.788	15.787	33.847
ISIC_0009986	15.327	36.276	22.500	34.609	0.972	0.970	19.833	0.706	0.763	17.420	34.626
ISIC_0009987	4.640	41.466	7.117	39.608	0.986	0.982	28.490	0.733	0.773	23.841	42.510
ISIC_0009993	3.807	42.325	5.871	40.444	0.996	0.983	26.823	0.831	0.801	18.435	40.775
ISIC_0010000	8.863	38.655	12.633	37.116	0.988	0.983	20.608	0.689	0.688	15.375	35.039
ISIC_0010019	4.359	41.737	6.575	39.952	0.991	0.982	29.197	0.693	0.667	19.366	40.813
ISIC_0010022	4.542	41.558	6.483	40.013	0.993	0.985	29.120	0.749	0.688	20.066	39.571
ISIC_0010028	1.916	45.307	2.776	43.697	0.991	0.988	27.216	0.815	0.760	21.684	44.533

ISIC_0010033	15.592	36.202	20.459	35.022	0.992	0.982	20.876	0.807	0.784	14.087	33.039
ISIC_0010034	2.116	44.876	3.323	42.916	0.994	0.988	29.520	0.845	0.818	19.104	41.350
ISIC_0010035	11.301	37.599	16.007	36.088	0.967	0.970	18.309	0.538	0.579	12.568	36.383
ISIC_0010046	4.004	42.106	5.921	40.407	0.998	0.980	20.838	0.770	0.759	16.741	39.808
ISIC_0010057	3.006	43.350	4.265	41.832	0.988	0.989	27.554	0.724	0.642	14.822	42.495
ISIC_0010063	20.115	35.096	29.023	33.503	0.997	0.960	22.025	0.799	0.842	14.059	31.749
ISIC_0010069	2.836	43.604	3.949	42.166	0.981	0.990	28.451	0.670	0.558	25.842	48.126
ISIC_0010070	14.917	36.394	22.128	34.681	0.992	0.974	25.488	0.790	0.770	16.927	34.526
ISIC_0010074	2.508	44.137	3.902	42.218	0.993	0.986	25.649	0.829	0.799	19.395	43.478
ISIC_0010079	1.988	45.146	2.975	43.396	0.995	0.989	29.500	0.819	0.772	17.664	45.262
ISIC_0010080	11.780	37.419	16.341	35.998	0.993	0.976	21.722	0.812	0.836	15.798	33.218
ISIC_0010083	4.743	41.370	7.050	39.649	0.989	0.981	27.044	0.773	0.785	21.248	39.142
ISIC_0010088	2.959	43.419	4.416	41.680	0.993	0.987	25.695	0.787	0.757	20.287	43.818
ISIC_0010093	7.049	39.649	9.904	38.173	0.987	0.980	22.376	0.647	0.605	13.688	37.833
ISIC_0010094	27.982	33.662	37.473	32.394	0.968	0.972	20.935	0.598	0.578	13.170	30.654
ISIC_0010100	29.674	33.407	40.287	32.079	0.995	0.980	25.858	0.844	0.829	4.501	31.402
ISIC_0010168	30.125	33.342	41.846	31.914	0.980	0.969	18.599	0.692	0.716	11.734	30.023
ISIC_0010169	118.264	27.402	158.114	26.141	0.975	0.882	12.164	0.594	0.692	3.959	23.195
ISIC_0010182	1.097	47.727	1.875	45.401	0.992	0.992	29.604	0.909	0.690	22.147	46.114
ISIC_0010183	1.734	45.739	2.555	44.058	0.993	0.990	24.147	0.833	0.751	19.915	43.158
ISIC_0010185	6.812	39.798	9.289	38.451	0.963	0.984	19.172	0.580	0.476	13.914	37.044
ISIC_0010187	8.262	38.960	11.777	37.420	0.995	0.979	23.648	0.765	0.799	15.787	35.574
ISIC_0010191	12.872	37.034	17.769	35.634	0.996	0.978	21.661	0.764	0.728	12.237	33.090
ISIC_0010215	1.585	46.131	2.205	44.697	0.992	0.992	28.568	0.793	0.740	25.035	47.107
ISIC_0010223	84.029	28.887	117.810	27.419	0.985	0.940	17.720	0.598	0.687	9.306	26.158
ISIC_0010226	2.754	43.731	4.069	42.035	0.992	0.989	27.022	0.680	0.526	23.257	49.042
ISIC_0010234	1.956	45.218	2.682	43.846	0.992	0.992	27.073	0.794	0.713	28.815	46.423
ISIC_0010249	25.966	33.987	35.538	32.624	0.995	0.970	17.264	0.766	0.751	10.258	30.661
ISIC_0010252	3.750	42.390	5.746	40.537	0.998	0.981	26.983	0.809	0.806	15.914	41.790
ISIC_0010256	2.194	44.719	3.080	43.245	0.986	0.993	23.101	0.750	0.622	23.282	42.411
ISIC_0010261	3.045	43.295	4.612	41.492	0.996	0.987	24.584	0.813	0.795	20.609	41.161
ISIC_0010262	45.885	31.514	60.937	30.282	0.979	0.964	15.878	0.697	0.675	9.547	28.138

ISIC_0010326	3.640	42.520	5.195	40.975	0.994	0.987	20.807	0.791	0.758	13.150	39.174
ISIC_0010331	6.342	40.108	10.542	37.902	0.995	0.969	23.013	0.788	0.809	15.654	39.379
ISIC_0010332	15.099	36.341	20.783	34.954	0.991	0.978	21.875	0.707	0.700	12.846	32.286
ISIC_0010333	16.978	35.832	23.116	34.492	0.979	0.976	21.206	0.643	0.608	13.718	32.786
ISIC_0010334	8.485	38.845	11.764	37.425	0.994	0.971	28.287	0.693	0.718	17.711	37.222
ISIC_0010342	3.778	42.359	6.081	40.291	0.996	0.983	29.588	0.824	0.804	18.557	41.279
ISIC_0010373	1.983	45.157	2.983	43.384	0.996	0.989	28.505	0.831	0.749	24.240	44.654
ISIC_0010442	33.963	32.821	47.224	31.389	0.987	0.973	18.097	0.758	0.749	8.820	28.829
ISIC_0010443	6.221	40.192	8.693	38.739	0.988	0.982	24.529	0.710	0.693	20.657	38.927
ISIC_0010447	20.963	34.916	29.920	33.371	0.979	0.964	19.581	0.665	0.692	13.377	30.047
ISIC_0010448	23.259	34.465	31.436	33.157	0.995	0.968	9.381	0.828	0.823	4.246	28.273
ISIC_0010454	3.253	43.007	4.999	41.142	0.997	0.985	27.726	0.840	0.850	17.299	42.185
ISIC_0010462	24.414	34.254	33.371	32.897	0.977	0.971	14.977	0.685	0.723	14.624	29.220
ISIC_0010468	4.789	41.328	7.031	39.661	0.992	0.982	24.212	0.726	0.703	17.977	39.505
ISIC_0010557	9.362	38.417	13.558	36.809	0.992	0.977	14.671	0.839	0.805	10.727	33.521
ISIC_0010582	5.549	40.689	8.208	38.988	0.989	0.977	25.415	0.751	0.786	19.972	39.230
ISIC_0010584	2.362	44.397	3.562	42.613	0.997	0.987	25.250	0.855	0.855	18.605	41.457
ISIC_0010589	5.711	40.564	8.383	38.897	0.982	0.981	26.812	0.638	0.580	22.629	41.037
ISIC_0010598	24.878	34.173	33.661	32.859	0.986	0.972	17.388	0.800	0.803	9.541	31.151
ISIC_0010599	21.396	34.827	29.660	33.409	0.992	0.973	14.044	0.764	0.756	7.925	29.997
ISIC_0010854	14.626	36.480	20.274	35.061	0.997	0.986	10.524	0.852	0.788	6.935	30.502
ISIC_0011083	6.535	39.978	9.807	38.215	0.994	0.988	18.313	0.792	0.747	16.792	36.671
ISIC_0011105	4.562	41.540	6.702	39.869	0.995	0.985	28.926	0.811	0.804	16.832	40.534
ISIC_0011119	2.683	43.845	3.750	42.391	0.986	0.990	29.539	0.696	0.559	25.343	46.243
ISIC_0011123	7.316	39.488	10.084	38.095	0.992	0.984	24.285	0.691	0.645	14.139	36.798
ISIC_0011137	4.403	41.694	6.320	40.124	0.993	0.982	28.199	0.680	0.638	18.649	40.493
ISIC_0011143	1.661	45.926	2.405	44.319	0.998	0.994	23.985	0.836	0.760	16.094	44.887
ISIC_0011157	48.682	31.257	64.636	30.026	0.987	0.979	25.387	0.755	0.700	7.342	29.091
ISIC_0011163	2.180	44.747	3.400	42.816	0.997	0.991	27.822	0.810	0.730	25.006	44.154
ISIC_0011168	5.741	40.541	8.097	39.047	0.992	0.981	19.675	0.837	0.796	15.583	36.685
ISIC_0011171	2.375	44.373	3.447	42.757	0.996	0.990	26.942	0.882	0.840	23.932	42.843
ISIC_0011172	27.175	33.789	36.658	32.489	0.988	0.976	17.300	0.807	0.823	9.694	29.236

ISIC_0011176	3.526	42.658	5.310	40.880	0.998	0.986	28.054	0.829	0.834	21.110	40.641
ISIC_0011177	5.746	40.537	8.619	38.776	0.993	0.973	23.872	0.762	0.770	13.962	40.746
ISIC_0011205	12.588	37.131	17.420	35.720	0.996	0.985	24.842	0.817	0.805	18.450	35.301
ISIC_0011211	3.472	42.725	5.439	40.775	0.995	0.986	30.066	0.812	0.808	18.725	39.702
ISIC_0011212	72.854	29.506	99.238	28.164	0.981	0.927	12.369	0.669	0.751	4.567	24.764
ISIC_0011230	35.962	32.572	48.431	31.280	0.988	0.968	18.672	0.770	0.753	9.163	29.941
ISIC_0011323	1.922	45.294	2.683	43.844	0.985	0.993	30.951	0.775	0.666	27.842	47.033
ISIC_0011332	5.006	41.136	7.635	39.303	0.996	0.980	28.567	0.782	0.812	21.018	39.917
ISIC_0011353	4.713	41.398	7.213	39.549	0.985	0.979	22.376	0.800	0.799	20.097	38.618
ISIC_0011367	22.589	34.592	29.961	33.365	0.990	0.982	17.162	0.780	0.693	3.028	31.722
ISIC_0011378	4.969	41.168	7.154	39.585	0.990	0.985	27.806	0.678	0.644	24.189	40.435
ISIC_0011382	7.743	39.242	11.098	37.678	0.984	0.980	26.221	0.664	0.641	18.365	35.883
ISIC_0011400	13.271	36.902	19.213	35.295	0.994	0.972	22.419	0.752	0.763	15.070	33.974