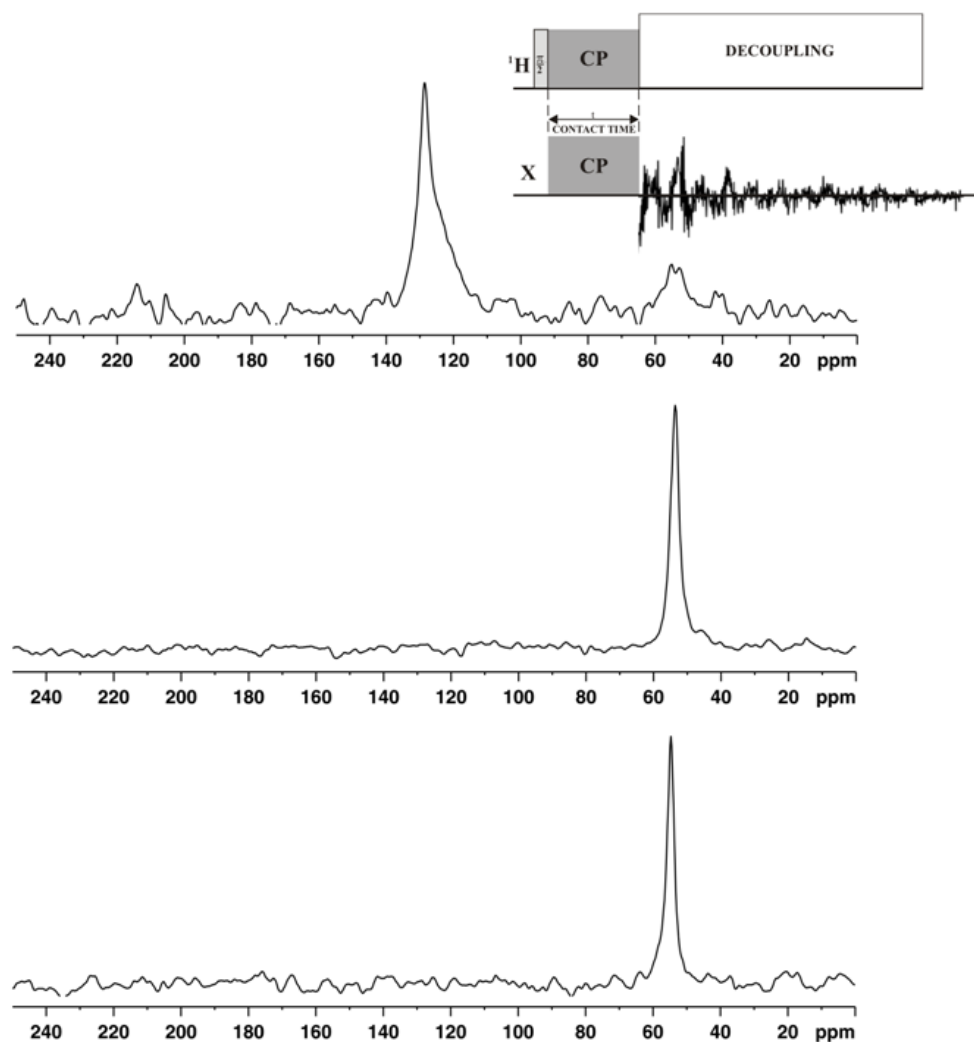


Supporting Materials to Manuscript

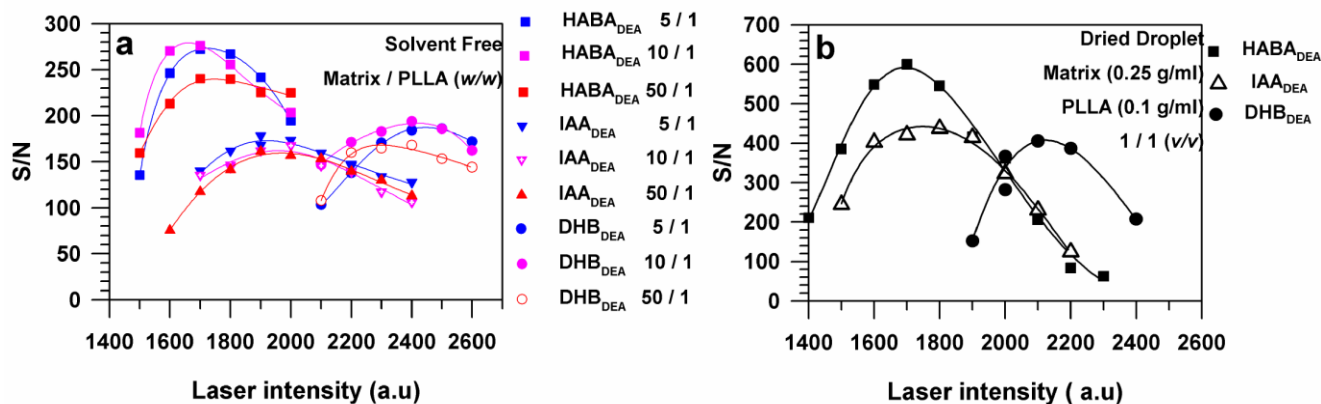
Application of ionic liquid matrices in spectral  
analysis of polylactide – solid state NMR  
spectroscopy *versus* matrix-assisted laser  
desorption/ionization time of flight (MALDI-  
TOF) mass spectrometry.

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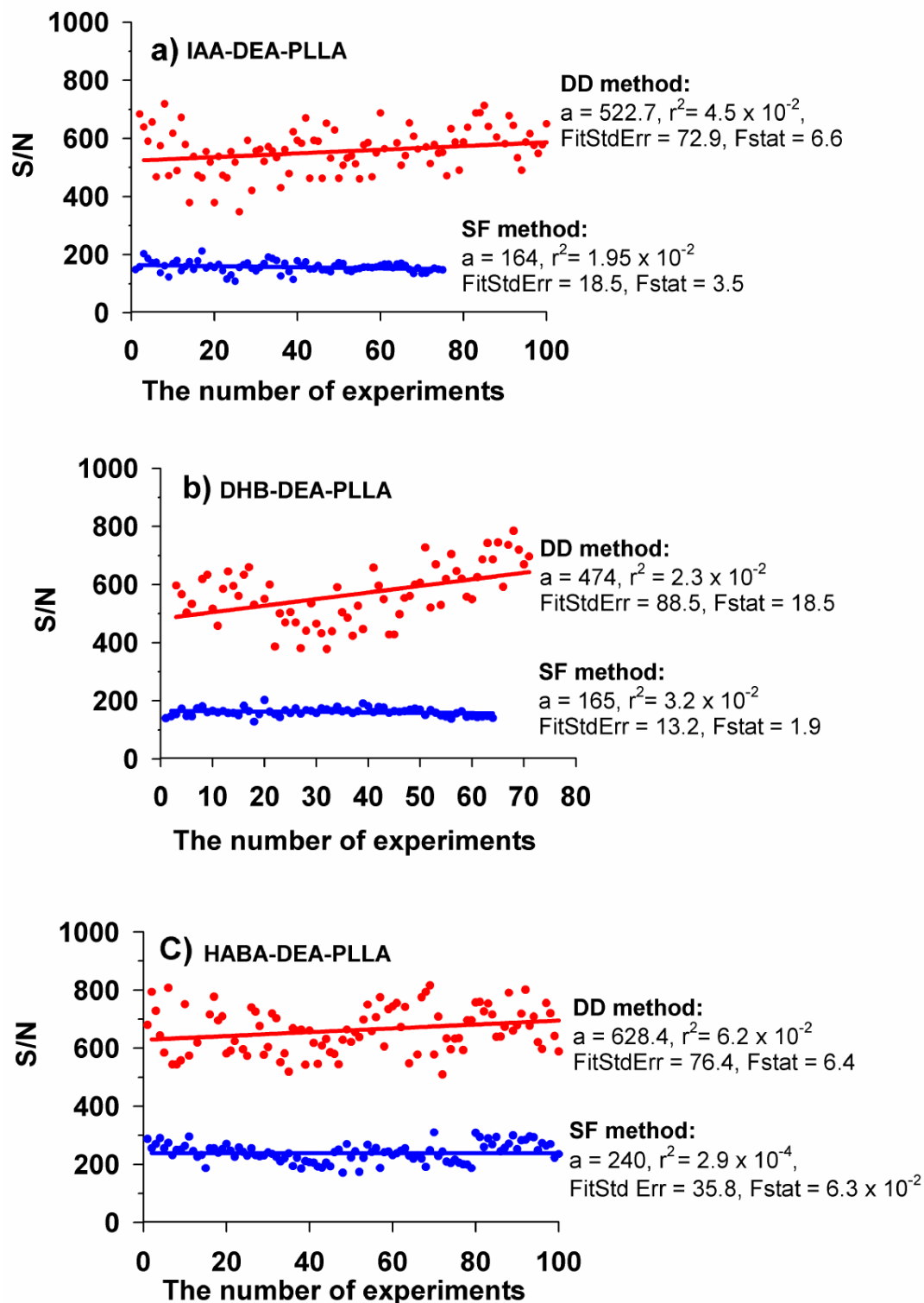


**Fig. S-1.**  $^{15}\text{N}$  CP/MAS spectra of IAA-DEA (top), HABA-DEA (middle) DHB-DEA (bottom) recorded at room temperature with a spinning rate 8 kHz. The broaden signal of DEA for IAA-DEA ILM suggest molecular disorder for this component. The lack of  $-\text{N}=\text{N}-$  signals for HABA means that under standard CP conditions cross-polarization for these nitrogen atoms is not efficient. The CP pulse sequence with defined contact time is shown as top inset.



**Fig. S-2.** The dependence  $S/N$  of PLLA on the laser intensity (in arbitrary units) used ILMs: HABA-DEA, IAA-DEA, DHB-DEA according with **a)** SF method for the different ratio matrix to PLLA: 5, 10, 50 ( $w/w$ ), and **b)** DD method for the ratio matrix ( $c = 0.25$  g/ml) to PLLA (0.1 g/ml) 1:1 ( $v/v$ ).

The measurements described homogeneity used ILMs: HABA-DEA, IAA-DEA, DHB-DEA are illustrated at the **Fig.S-2.2**.



**Fig. S-3.** The values of  $S/N$  of PLLA obtained with ILMs used DD and SF methods for IAA-DEA, DHB-DEA, HABA-DEA illustrated respectively on the graphs: **(a)**, **(b)**, **(c)**. The average number of experiments is about hundred and the points are described by linear equation.

The data points collected at the **Fig. S-2**. came from the tables below:

**Table S-1. The data described of S/N of PLLA used HABA-DEA matrix by DD method.**

<b>Dried Droplet HABA-DEA-PLLA C-polimer(0.1g/ml) C-matrix(0.25g/ml)</b>	Selected peak	Laser	S/N	RMS noise	Resolution FW/HM, 50%	Average S/N
HABA-DEA-DD 0007	1393.1 1465.1 1537.2	<b>1700</b>	714.7 714.7 608.9	6.7	423 443 413	679.4;
HABA-DEA-DD 0008	1393.2 1465.2 1537.3	<b>1700</b>	811.9 813.7 755.1	6.0	406 408 416	793.5;
HABA-DEA-DD 0009	1392.9 1464.9 1536.8	<b>1700</b>	683.4 804.8 695.6	3.5	408 451 462	727.9;
HABA-DEA-DD 0010	1393.0 1464.9 1536.9	<b>18000</b>	643.6 722.4 562.7	8.6	383 419 386	642.9;
HABA-DEA-DD 0011	1393.1 1465.1 1537.1	<b>18000</b>	554.4 615.8 580.8	13.6	383 388 410	583.6;
HABA-DEA-DD 0012	1392.8 1464.9 1536.9	<b>18000</b>	782.3 862.6 777.4	6.9	387 402 386	807.4;
HABA-DEA-DD 0013	1392.4 1465.4 1536.3	<b>18000</b>	560.2 567.7 502.2	6.8	350 357 364	543.4;
HABA-DEA-DD 0014	1392.4 1464.4 1536.3	<b>18000</b>	560.2 567.7 502.2	6.8	350 357 364	543.4;
HABA-DEA-DD 0015	1391.9 1463.7	<b>18000</b>	580.8 575.9	4.7	339 337	557.3;

	1535.7		515.3		350	
HABA-DEA-DD 0016	1392.1 1464.1 1536.1	<b>18000</b>	704.1 798.8 750.2	5.0	380 386 386	751.0;
HABA-DEA-DD 0017	1392.1 1464.1 1536.0	<b>18000</b>	570.7 608.7 541.2	6.2	297 329 331	573.5;
HABA-DEA-DD 0018	1392.5 1464.4 1536.6	<b>18000</b>	504.5 469.2 361.1	4.3	408 416 366	444.9;
HABA-DEA-DD 0019	1393.3 1465.3 1537.3	<b>18000</b>	678.2 659.1 518.1	5.5	361 382 363	618.4;
HABA-DEA-DD 0020	1393.0 1465.0 1537.1	<b>18000</b>	457.4 431.2 398.0	3.8	378 371 392	428.7;
HABA-DEA-DD 0021	1393.3 1465.2 1537.2	<b>1800</b>	431.5 417.0 374.7	3.2	382 403 401	407.7;
HABA-DEA-DD 0022	1392.4 1464.4 1536.3	<b>18000</b>	634.7 764.2 747.5	5.9	368 365 365	715.4;
HABA-DEA-DD 0023	1392.3 1464.2 1536.2	<b>18000</b>	706.0 810.4 813.7	4.7	367 357 365	776.7;
HABA-DEA-DD 0024	1393.0 1464.9 1537.0	<b>18000</b>	666.1 739.7 677.3	5.1	384 399 376	694.4;
HABA-DEA-DD 0025	1392.6 1464.7 1536.6	<b>18000</b>	700.0 726.0 700.3	3.9	416 390 419	708.7;
HABA-DEA-DD 0026	1392.8 1464.9 1536.9	<b>18000</b>	560.4 605.1 577.4	3.5	446 447 447	580.9;
HABA-DEA-DD 0027	1393.3 1465.3 1537.3	<b>18000</b>	551.0 620.3 599.5	5.0	389 395 391	590.3;
HABA-DEA-DD 0028	1393.5 1465.5 1537.6	<b>18000</b>	598.0 651.5 622.1	9.2	371 372 376	623.8;
HABA-DEA-DD 0029	1393.5 1465.5 1537.5	<b>18000</b>	453.4 485.5 471.6	12.5	387 384 388	470.2;
HABA-DEA-DD 0030	1393.2 1465.3	<b>18000</b>	551.2 625.2	12.1	429 414	595.8;

	1537.3		611.1		423	
HABA-DEA-DD 0031	1393.2 1465.2 1537.4	<b>18000</b>	508.3 610.8 599.1	12.8	408 402 412	572.7;
HABA-DEA-DD 0032	1393.1 1465.1 1537.1	<b>18000</b>	699.3 762.1 758.0	7.3	410 413 408	739.8;
HABA-DEA-DD 0033	1393.4 1465.3 1537.4	<b>18000</b>	734.8 766.6 674.6	7.3	406 401 398	725.2;
HABA-DEA-DD 0034	1393.4 1465.3 1537.4	<b>18000</b>	734.8 766.6 674.6	7.3 pwt-	406 401 398	725.2
HABA-DEA-DD 0035	1393.6 1465.6 1537.6	<b>18000</b>	646.4 708.3 672.6	6.7	402 405 398	675.8;
HABA-DEA-DD 0036	1393.2 1465.2 1537.1	<b>18000</b>	531.7 623.3 576.4	4.3	386 400 400	577.1;
HABA-DEA-DD 0037	1393.1 1465.1 1537.1	<b>18000</b>	602.8 625.0 581.1	5.8	389 380 382	602.9;
HABA-DEA-DD 0038	1393.2 1465.1 1537.2	<b>18000</b>	665.9 762.2 727.7	8.8	446 445 441	718.6;
HABA-DEA-DD 0039	1393.7 1465.7 1537.6	<b>18000</b>	689.5 739.9 679.1	8.2	386 401 408	702.8;
HABA-DEA-DD 0040	1393.7 1465.6 1537.7	<b>18000</b>	494.9 587.7 568.8	8.5	379 396 396	550.5;
HABA-DEA-DD 0041	1393.4 1465.4 1537.4	<b>18000</b>	565.1 621.8 556.7	5.5	398 402 397	581.2;
HABA-DEA-DD 0042	1393.5 1465.5 1537.6	<b>18000</b>	524.7 556.5 474.1	6.2	381 394 388	518.4;
HABA-DEA-DD 0043	1393.0 1465.1 1537.1	<b>18000</b>	635.6 707.1 661.7	5.6	432 432 419	668.1;
HABA-DEA-DD 0044	1393.3 1465.2 1537.3	<b>18000</b>	623.2 695.4 660.8	6.0	375 397 385	659.8;
HABA-DEA-DD	1393.0	<b>18000</b>	612.4	5.3	370	663.2;

0045	1465.0 1537.0		686.1 691.5		375 380	
HABA-DEA-DD 0046	1393.2 1465.3 1537.4	<b>18000</b>	552.5 563.0 510.3	5.2	383 374 363	541.9;
HABA-DEA-DD 0047	1393.2 1465.3 1537.2	<b>18000</b>	656.8 686.3 637.9	6.5	390 395 373	660.2;
HABA-DEA-DD 0048	1393.7 1465.8 1537.8	<b>18000</b>	579.9 646.1 625.5	7.6	381 390 378	617.2;
HABA-DEA-DD 0051	1393.6 1465.7 1537.7	<b>18000</b>	543.1 554.5 537.0	6.0	403 399 394	544.8;
HABBA-DEA- DD 0049	1393.7 1465.7 1537.6	<b>18000</b>	528.4 656.9 638.3	8.5	374 419 410	607.8;
HABA-DEA-DD 0050	1393.1 1465.1 1537.1	<b>18000</b>	583.6 675.9 631.6	4.3	398 426 419	630.4;
HABA-DEA-DD 0052	1392.9 1464.9 1536.8	<b>18000</b>	534.8 615.6 604.0	5.4	378 378 374	584.8;
HABA-DEA-DD 0053	1393.7 1465.7 1537.7	<b>18000</b>	592.8 600.4 544.1	6.7	368 369 379	579.1;
HABA-DEA-DD 0054	1393.6 1465.5 1537.5	<b>18000</b>	534.2 569.2 528.4	6.2	347 368 361	543.9;
HABA-DEA-DD 0055	1393.5 1465.4 1537.5	<b>18000</b>	599.3 659.2 623.9	5.6	388 411 408	627.5;
HABA-DEA-DD 0056	1393.7 1465.7 1537.8	<b>18000</b>	647.6 675.2 667.7	7.3	385 375 397	663.5;
HABA-DEA-DD 0057	1393.0 1465.0 1537.1	<b>18000</b>	567.7 662.6 631.5	3.7	406 425 412	620.6;
HABA-DEA-DD 0058	1393.7 1465.7 1537.7	<b>18000</b>	616.5 680.2 665.5	6.7	384 380 397	654.1;
HABA-DEA-DD 0059	1393.7 1465.8	<b>18000</b>	598.4 667.4	9.0	370 374	637.2;



	1537.8		646.2		380	
HABA-DEA-DD 0060	1393.5 1465.5 1537.5	<b>18000</b>	617.5 724.6 749.5	8.4	379 393 408	697.2;
HABA-DEA-DD 0061	1393.6 1465.6 1537.7	<b>18000</b>	701.0 794.1 752.7	6.4	409 417 414	749.3;
HABA-DEA-DD 0062	1393.7 1465.7 1537.7	<b>18000</b>	616.6 687.6 669.0	7.6	375 387 384	657.7;
HABA-DEA-DD 0063	1393.4 1465.4 1537.5	<b>18000</b>	659.8 732.5 725.6	11.5	388 407 404	705.9;
HABA-DEA-DD 0064	1393.8 1465.7 1537.8	<b>18000</b>	699.5 817.7 807.2	8.7	371 388 389	774.8;
HABA-DEA-DD 0065	1393.3 1465.5 1537.4	<b>18000</b>	572.5 612.2 630.6	12.6	436 402 419	605.1;
HABA-DEA-DD 0066	1393.6 1465.7 1537.8	<b>18000</b>	668.6 763.3 768.0	8.3	383 401 403	733.2;
HABA-DEA-DD 0067	1393.5 1465.4 1537.5	<b>18000</b>	754.6 789.4 685.7	5.9	398 415 389	743.2;
HABA-DEA-DD 0068	1393.6 1465.7 1537.7	<b>1800</b>	700.7 780.5 782.5	8.1	380 380 391	754.6;
HABA-DEA-DD 0069	1393.7 1465.6 1537.8	<b>1800</b>	626.9 728.8 660.1	5.4	401 418 406	671.9;
HABA-DEA-DD 0070	1393.3 1465.3 1537.4	<b>1800</b>	730.1 780.6 714.9	4.6	420 425 423	741.2;
HABA-DEA-DD 0071	1393.8 1465.7 1537.8	<b>1800</b>	484.0 568.9 588.9	10.5	369 395 393	547.3;
HABA-DEA-DD 0072	1393.5 1465.5 1537.5	<b>1800</b>	858.3 925.7 965.2	7.3	416 416 432	916.4;
HABA-DEA-DD 0073	1393.7 1465.7 1537.7	<b>1800</b>	547.3 621.7 562.8	12.9	390 410 392	577.3;
HABA-DEA-DD	1393.7	<b>1800</b>	740.1	7.2	397	774.7

0074	1465.7 1537.8		811.7 772.4		395 386	
HABA-DEA-DD 0075	1393.0 1465.0 1537.1	<b>1800</b>	765.4 853.2 761.8	6.5	405 418 402	793.5;
HABA-DEA-DD 0076	1392.8 1464.7 1536.8	<b>1800</b>	773.3 861.1 812.3	5.9	384 405 400	815.6;
HABA-DEA-DD 0077	1393.6 1465.6 1537.6	<b>1800</b>	546.4 596.7 588.8	8.4	375 380 386	577.3;
HABA-DEA-DD 0078	1393.1 1465.1 1537.1	<b>1800</b>	631.2 736.5 757.1	5.5	436 437 435	708.3;
HABA-DEA-DD 0079	1393.7 1465.7 1537.7	<b>1800</b>	464.9 542.1 519.9	9.3	351 375 372	508.9;
HABA-DEA-DD 0080	1393.1 1465.0 1537.0	<b>1800</b>	562.9 669.2 665.7	6.3	371 392 385	632.6;
HABA-DEA-DD 0081	1392.6 1464.6 1536.7	<b>1800</b>	534.8 625.4 627.2	9.1	380 403 387	595.8;
HABA-DEA-DD 0082	1393.4 1465.3 1537.4	<b>1800</b>	580.5 681.6 632.8	9.4	389 426 404	631.6;
HABA-DEA-DD 0083	1393.6 1465.7 1537.7	<b>1800</b>	600.0 666.3 635.3	8.0	376 397 391	633.8;
HABA-DEA-DD 0084	1393.6 1465.6 1537.6	<b>1800</b>	555.4 610.0 613.2	7.1	387 394 401	592.8;
HABA-DEA-DD 0085	1393.4 1465.4 1537.4	<b>1800</b>	678.2 737.4 671.1	7.7	382 388 383	695.6;
HABA-DEA-DD 0086	1393.4 1465.4 1537.4	<b>1800</b>	678.2 737.4 671.1	7.7	382 388 383	695.6;
HABA-DEA-DD 0087	1393.2 1465.2 1537.3	<b>1800</b>	726.2 800.4 743.8	5.4	440 454 427	756.8;
HABA-DEA-DD 0088	1393.4 1465.5 1537.5	<b>1800</b>	722.4 799.4 753.9	6.1	409 410 416	758.6;

HABA-DEA-DD 0089	1393.4 1465.3 1537.4	<b>1800</b>	628.7 772.0 777.9	7.9	400 436 437	726.2;
HABA-DEA-DD 0090	1393.4 1465.4 1537.5	<b>1800</b>	674.8 804.4 781.6	5.8	407 425 426	753.6;
HABA-DEA-DD 0091	1393.6 1465.6 1537.6	<b>1800</b>	655.8 738.2 751.1	8.1	424 424 428	715.0;
HABA-DEA-DD 0092	1393.5 1465.5 1537.6	<b>1800</b>	594.4 682.2 638.3	9.5	411 412 417	638.3;
HABA-DEA-DD 0093	1393.4 1465.5 1537.4	<b>1800</b>	588.7 659.5 672.1	8.3	419 418 445	640;
HABA-DEA-DD 0094	1393.6 1465.5 1537.6	<b>1800</b>	613.6 715.5 689.6	7.7	398 405 416	672.9;
HABA-DEA-DD 0095	1392.9 1464.8 1536.8	<b>1800</b>	775.6 829.5 766.6	5.6	415 411 406	790.6;
HABA-DEA-DD 0096	1393.3 1465.2 1537.2	<b>1800</b>	616.5 704.1 657.5	5.6	361 381 376	659.4;
HABA-DEA-DD 0097	1393.3 1465.3 1537.3	<b>1800</b>	660.2 715.2 660.6	6.2	394 388 383	678.7;
HABA-DEA-DD 0098	1393.2 1465.3 1537.3	<b>1800</b>	729.1 739.8 684.9	8.7	393 380 382	717.9;
HABA-DEA-DD 0099	1393.2 1465.2 1537.3	<b>1800</b>	750.2 856.4 795.6	7.9	393 405 407	800.7 ;
HABA-DEA-DD 00100	1393.7 1465.7 1537.7	<b>1800</b>	641.5 714.3 673.1	7.2	404 400 406	676.3;
HABA-DEA-DD 00101	1393.5 1465.5 1537.5	<b>1800</b>	700.7 730.9 692.8	8.4	383 380 383	708.1;
HABA-DEA-DD 00102	1393.6 1465.5 1537.6	<b>1800</b>	572.4 653.6 634.3	8.8	367 393 384	620.1;
HABA-DEA-DD 00103	1393.5 1465.5	<b>1800</b>	597.3 612.5	9.8	381 372	596.3;

	1537.5		579.1		391	
HABA-DEA-DD 00104	1392.8 1464.7 1536.7	<b>1800</b>	762.2 785.3 715.9	7.2	403 412 413	754.5;
HABA-DEA-DD 00105	1392.8 1464.7 1536.7	<b>1800</b>	661.8 751.9 743.0	5.3	350 343 344	718.9;
HABA-DEA-DD 00106	1393.4 1465.4 1537.4	<b>1800</b>	634.3 666.7 622.5	9.9	382 382 379	641.2;
HABA-DEA-DD 00107	1393.3 1465.2 1537.3	<b>1800</b>	547.3 615.4 600.3	6.8	387 394 413	587.7;
HABA-DEA-DD 00108	1393.3 1465.3 1537.4	<b>1800</b>	693.0 728.4 704.6	8.7	376 379 394	708.7;
HABA-DEA-DD 00109	1393.5 1465.5 1537.5	<b>1800</b>	684.3 741.2 696.9	9.0	386 363 387	674.1;
HABA-DEA- DDL 00110 lin	1393.1 1465.1 1537.1	<b>1800</b>	719.1 803.1 826.5	8.3	401 394 413	782.9;
HABA-DEA-DD 00111	1393.2 1465.1 1537.1	<b>1800</b>	796.8 881.9 788.0	6.3	406 435 431	822.2

**Table S-2. The data described of S/N of PLLA used HABA-DEA matrix by SF method.**

<b>Solvent Free 1mg polymer/ 50 mg matrix HABA-DEA-SF</b>	<b>Selected peak</b>	<b>Laser</b>	<b>S/N</b>	<b>RMS noise</b>	<b>Resolution FW/HM,50%</b>	<b>Average S/N</b>
HABA-DEA- SF 5-10003	1465.2 1537.2 1609.0 1753.1 1897.2 1825.2	1600	176.8 196.0 256.7 283.1 259.8 290.7	4.2	391 348 366 429 406 455	272.5()
HABA-DEA- SF 5-10004	1465.3 1537.3 1609.2	1600	133.6 168.8 201.1	3.9	360 385 378	204.0

	1753.2 1897.5 1825.4		195.9 214.5 204.6		385 452 416	
HABA-DEA-SF 5-10005	1464.6 1536.7 1608.5 1752.7 1824.5 1896.7	1600	154.4 153.3 207.5 253.7 226.6 204.9	2.9	396 349 379 435 430 381	223.2
HABA-DEA-SF 5-10006	1465.3 1537.5 1608.5 1753.5 1825.8 1897.7	1600	103.5 109.8 136.7 141.1 162.7 156.1	3.8	331 323 320 329 385 403	149.2
HABA-DEA-SF 5-10007	1465.3 1537.2 1609.1 1753.1 1825.2 1897.2	1600	146.0 186.4 180.9 217.5 230.3 218.2	3.3	346 401 329 383 429 414	211.7
HABA-DEA-SF 5-10008	1465.5 1537.5 1609.1 1753.6 1825.5 1897.3	1600	123.5 126.9 161.2 172.7 167.4 179.1	3.7	292 294 324 336 338 409	170.1
HABA-DEA-SF 5-10009	1465.7 1537.8 1609.8 1754.0 1826.0 1898.1	1700	208.7 253.1 293.2 277.0 271.2 307.9	7.4	341 349 363 369 358 391	287.3
HABA-DEA-SF 5-10010	1465.6 1537.6 1609.4 1753.8 1825.8 1898.1	1700	187.8 219.4 248.5 259.3 247.2 265.3	7.2	303 327 328 351 338 355	255.1
HABA-DEA-SF 5-10011	1465.4 1537.5 1609.4 1753.6 1825.7 1897.7	1700	209.8 226.3 271.4 283.5 268.0 257.1	7.3	361 345 345 374 375 388	270
HABA-DEA-SF 5-10012	1465.2 1537.2 1609.2 1753.3 1825.3	1700	220.8 245.4 285.8 279.6 298.3	9.3	344 331 342 355 362	290

	1897.3		296.3		382	
HABA-DEA-SF 5-10013	1465.1 1537.2 1609.1 1753.2 1825.3 1897.3	1700	206.8 216.6 258.5 264.4 249.2 248.8	7.6	337 320 340 373 361 368	255.24
HABA-DEA-SF 5-10014	1465.5 1537.5 1609.4 1753.6 1825.7 1897.6	1700	216.6 238.9 265.3 261.3 294.4 271.8	7.7	338 345 342 352 394 374	273.2
HABA-DEA-SF 5-10015	1465.5 1537.6 1609.6 1753.6 1825.7 1897.6	1700	181.6 196.5 231.8 222.0 228.2 243.7	6.9	315 325 328 344 352 368	231.4
HABA-DEA-SF 5-10016	1465.1 1537.2 1609.1 1753.3 1825.2 1897.3	1700	187.0 201.1 237.0 249.8 251.8 257.1	9.7	332 333 330 369 367 380	248.9
HABA-DEA-SF 5-10017	1465.4 1537.4 1609.3 1753.4 1825.5 1897.6	1700	184.5 210.8 236.5 263.3 251.9 249.2	8.6	321 319 313 363 355 354	250
HABA-DEA-SF 5-10018	1465.5 1537.6 1609.5 1753.8 1825.7 1897.8	1700	189.7 225.0 261.0 267.8 260.3 262.9	8.3	334 347 343 363 369 402	263
HABA-DEA-SF 5-10019	1465.6 1537.8 1609.7 1753.9 1825.9 1898.0	1700	220.7 254.1 297.3 312.5 282.6 288.7	10.4	302 319 309 357 337 333	295.3
HABA-DEA-SF 5-10020	1465.6 1537.8 1609.7 1753.9 1825.9 1898.0	1700	188.0 207.7 260.5 242.1 236.7 243.3	8.2	317 300 322 340 337 349	245.7

HABA-DEA-SF 5-10021	1465.5 1537.5 1609.4 1753.6 1825.7 1897.7	1700	176.6 195.6 221.3 231.6 236.7 213.1	8.5	319 333 336 350 373 364	225.7
HABA-DEA-SF 5-10022	1466.5 1538.6 1610.7 1755.1 1826.9 1899.2	1700	138.1 203.3 225.5 234.3 249.7 219	7.2	297 293 300 323 335 298	232
HABA-DEA-SF 5-10023	1466.1 1538.3 1610.2 1754.5 1826.6 1898.6	1700	153.9 171.9 187.3 191.7 192.9 204.6	6.1	290 306 292 311 324 335	186.6
HABA-DEA-SF 5-10024	1465.2 1537.2 1609.2 1753.4 1825.3 1897.3	1700	195.0 224.0 235 261.6 250.1 271.1	8.7	319 337 324 361 354 386	254.5
HABA-DEA-SF 5-10025	1465.1 1537.3 1609.2 1753.5 1825.4 1897.5	1800	208.7 228.4 257.7 253.4 245.6 260.7	7.3	325 356 332 365 366 386	254.4
HABA-DEA-SF 5-10026	1465.2 1537.1 1609.0 1753.2 1825.2 1897.1	1800	179.0 208.1 222.8 246.5 239.2 251.3	11.4	313 315 307 339 325 363	239.9
HABA-DEA-SF 5-10027	1465.8 1537.9 1610.0 1754.1 1826.1 1898.2	1800	201.9 221.0 243.1 249.2 253.8 261.4	7.3	297 283 293 289 307 329	251.9
HABA-DEA-SF 5-10027	1465.6 1537.7 1609.8 1753.9 1825.9 1898.0	1800	213.4 234.5 266.2 268.0 268.4 277.9	5.3	286 275 284 297 297 319	270.1
HABA-DEA-SF 5-10028	1466.3 1538.3	1800	196.0 231.0	12.1	291 296	246.0

	1610.4 1754.5 1826.7 1898.8		223.2 251.5 262.8 246.7		287 316 326 322	
HABA-DEA-SF 5-10029	1465.8 1537.9 1609.9 1754.1 1826.2 1898.1	1800	173.9 192.1 223.7 229.3 225.3 224.2	13.9	275 288 299 306 310 315	225.6
HABA-DEA-SF 5-10030	1465.8 1537.0 1608.9 1754.1 1825.1 1897.0	1800	201.2 223.9 247.8 265.6 261.8 253.7	10.6	311 318 313 342 349 353	257.2
HABA-DEA-SF 5-10031	1465.2 1537.3 1609.2 1753.3 1825.4 1897.4	1800	217.3 244.1 263.9 268.4 275.6 259.4	7.8	298 309 297 313 320 322	241.8
HABA-DEA-SF 5-10032	1465.2 1537.2 1609.2 1753.3 1825.4 1897.4	1800	174.9 201.3 220.4 227.6 231.2 236.3	10.7	291 302 299 317 325 333	228.9
HABA-DEA-SF 5-10033	1465.6 1537.6 1609.7 1753.9 1825.8 1897.9	1800	206.5 224.3 256.3 256.7 256.6 247.4	12.0	316 323 330 342 353 351	254.3
HABA-DEA-SF 5-10034	1465.9 1537.9 1609.9 1754.1 1826.2 1898.2	1800	180.2 210.3 224.7 233.0 231.9 233.6	12.8	298 320 323 346 332 355	230.8
HABA-DEA-SF 5-10035	1465.7 1538.0 1610.0 1754.2 1826.2 1898.2	1800	175.3 190.9 219.5 230.3 230.1 228.0	10.4	321 321 312 344 336 329	226.9
HABA-DEA-SF 5-10036	1466.2 1538.3 1610.3 1754.5	1800	166.3 203.9 218.4 237.7	9.6	268 280 290 307	229.8



	1826.5 1898.6		230.7 232.6		305 311	
HABA-DEA-SF 5-10037	1465.2 1537.3 1609.3 1753.4 1825.5 1897.4	1900	197.6 213.2 233.3 240.9 247.7 238.5	14	324 301 319 345 339 348	240.1
HABA-DEA-SF 5-10038	1465.2 1537.4 1609.3 1753.4 1825.4 1897.4	1900	182.4 209.3 229.4 248.0 234.6 230.8	18.1	312 318 319 348 343 337	235.7
HABA-DEA-SF 5-10039	1466.0 1538.0 1610.1 1754.2 1826.4 1898.4	1900	195.9 210.0 213.3 236.1 229.6 222.7	15.4	318 307 321 332 332 324	225.4
HABA-DEA-SF 5-10040	1466.7 1538.8 1610.9 1755.2 1827.3 1899.4	1900	173.3 185.5 205.4 205.3 214.5 215.3	16.4	300 304 299 313 312 320	210.1
HABA-DEA-SF 5-10041	1465.5 1537.6 1609.5 1753.7 1825.8 1897.8	1900	183.0 201.3 214.9 224.1 223.2 219.3	16.6	307 305 316 339 336 335	220.4
HABA-DEA-SF 5-10042	1465.8 1537.9 1609.9 1754.1 1826.2 1898.2	1900	200.8 228.7 240.3 243.3 231.9 234.8	17.5	324 336 338 352 328 345	237.5
HABA-DEA-SF 5-10043	1467.0 1539.1 1611.2 1755.4 1827.6 1899.6	1900	156.6 184.1 190.1 190.1 196.9 198.7	16.7	297 307 293 303 306 318	193.9
HABA-DEA-SF 5-10044	1466.6 1538.7 1610.7 1754.9 1826.9 1899.1	1900	171.0 198.4 221.9 225.8 220.6 222.9	14.0	287 288 306 314 323 325	222.8

HABA-DEA-SF 5-10045	1466.6 1538.9 1610.8 1755.2 1827.3 1899.4	2000	152.9 170.5 171.5 185.9 203.5 181.1	17.1	276 297 274 294 311 298	185.5
HABA-DEA-SF 5-10046	1466.6 1538.1 1610.2 1754.4 1826.4 1898.5	2000	172.6 198.6 203.2 212.9 214.1 211.7	17.5	311 316 310 323 328 338	210.5
HABA-DEA-SF 5-10047	1465.4 1537.5 1609.5 1753.8 1825.7 1897.9	2000	171.4 188.0 201.2 209.1 217.5 198.8	21.1	313 298 315 316 340 321	206.7
HABA-DEA-SF 5-10048	1466.0 1538.2 1610.4 1754.6 1826.6 1898.7	2000	172.5 194.6 200.7 208.4 209.7 203.3	19.7	307 302 311 315 325 321	205.5
HABA-DEA-SF 5-10049	1467.2 1539.3 1611.5 1755.7 1827.9 1900.0	2000	151.5 176.0 183.3 196.2 195.9 192.3	18.0	277 292 281 298 300 302	191.9
HABA-DEA-SF 5-10050	1467.6 1539.8 1612.0 1756.4 1828.4 1900.6	2000	152.5 171.7 181.0 191.2 189.6 189.2	20.6	285 291 285 295 288 302	187.8
HABA-DEA-SF 5-10051	1465.8 1537.9 1609.8 1754.0 1826.2 1898.1	2000	173.5 189.4 211.5 204.2 206.6 199.6	19.7	305 297 316 311 323 335	205.5
HABA-DEA-SF 5-10052	1466.5 1538.7 1610.6 1755.0 1827.0 1899.2	2000	160.0 186.4 188.3 200.1 193.2 190.6	18.5	264 289 281 296 298 299	193.1
HABA-DEA-SF 5-10053	1464.5 1536.4	1500	127.0 135.5	2.4	358 335	171.2

	1608.2 1752.2 1824.5 1896.3		184.2 170.5 172.5 157.7		344 390 381 414	
HABA-DEA-SF 5-10054	1465.3 1537.3 1609.2 1753.4 1825.4 1897.4	1600	176.3 185.0 252.0 242.4 235.5 235.9	4.9	322 332 345 363 350 375	241.5
HABA-DEA-SF 5-10055	1465.0 1537.1 1609.0 1753.3 1825.2 1897.1	1600	187.7 209.9 243.1 247.5 235.0 273.8	4.4	332 358 348 374 363 418	249.9
HABA-DEA-SF 5-10056	1465.1 1537.3 1609.1 1753.4 1825.3 1897.5	1600	112.7 142.5 158.5 174.1 180.3 171.5	4.2	315 347 313 355 372 365	171.1
HABA-DEA-SF 5-10057	1464.9 1536.9 1608.9 1753.1 1825.1 1897.1	1700	200.1 235.2 256.5 272.5 282.5 266.0	8.6	340 358 347 365 384 383	269.4
HABA-DEA-SF 5-10059	1465.8 1537.9 1610.0 1754.2 1826.2 1898.3	1700	176.4 205.4 220.9 225.5 211.5 234.9	7.5	338 346 329 365 349 365	223.2
HABA-DEA-SF 5-10060	1465.6 1537.6 1609.8 1753.9 1825.9 1898.1	1700	130.2 154.7 159.9 183.4 174.6 179.4	7.8	296 339 298 344 340 353	174.2
HABA-DEA-SF 5-10061	1465.3 1537.3 1609.1 1753.4 1825.5 1897.4	1700	193.4 212.9 236.7 247.4 250.9 242.8	7.8	329 343 327 360 354 369	244.5
HABA-DEA-SF 5-10062	1465.3 1537.3 1609.3 1753.5	1700	177.1 198.0 213.1 218.7	9.5	337 342 339 341	222.2

	1825.4 1897.5		230.8 226.3		359 362	
HABA-DEA-SF 5-10063	1465.3 1537.3 1609.2 1753.4 1825.4 1897.4	1700	206.6 231.5 272.6 269.8 264.7 262.6	8.7	331 336 358 368 378 382	267.4
HABA-DEA-SF 5-10064	1465.7 1537.8 1609.8 1753.9 1826.0 1898.0	1800	185.1 212.1 230.2 246.2 253.4 239.7	12.4	315 329 331 350 354 354	242.4
HABA-DEA-SF 5-10065	1465.6 1537.8 1609.7 1753.9 1825.9 1897.9	1800	189.4 218.4 259.9 255.9 255.9 251.0	12.0	336 351 352 368 359 362	255.7
HABA-DEA-SF 5-10066	1465.8 1537.8 1609.7 1754.1 1826.1 1898.0	1800	139.9 161.1 175.3 179.5 198.3 196.1	11.3	302 305 310 307 339 335	187.3
HABA-DEA-SF 5-10067	1465.5 1537.5 1609.4 1753.6 1825.6 1897.7	1800	194.8 220.2 260.9 248.1 254.3 237.1	12.5	329 338 349 351 371 357	250.1
HABA-DEA-SF 5-10068	1465.3 1537.3 1609.3 1753.4 1825.4 1897.5	1800	189.0 206.1 228.0 252.3 241.8 242.0	11.4	312 328 325 354 356 361	241.0
HABA-DEA-SF 5-10069	1465.6 1537.7 1609.6 1753.9 1825.9 1897.5	1800	189.0 215.6 228.3 247.4 251.7 247.1	13.3	327 345 335 354 354 374	243.6
HABA-DEA-SF 5-10070	1465.5 1537.7 1609.7 1753.9 1825.8 1897.9	1800	174.0 193.7 221.8 240.1 240.0 222.4	10.8	327 330 316 363 362 342	231.1

HABA-DEA-SF 5-10071	1465.4 1537.6 1609.5 1753.7 1825.7 1897.7	1800	165.4 204.8 223.8 243.2 252.9 231.0	12.4	311 330 324 350 372 345	237.7
HABA-DEA-SF 5-10072	1465.7 1537.8 1609.9 1754.0 1826.1 1898.1	1800	199.0 215.1 234.8 250.1 252.2 245.9	13.5	331 341 330 357 363 355	245.8
HABA-DEA-SF 5-10073	1466.6 1538.7 1610.8 1755.1 1827.1 1899.3	1700	218.8 223.3 249.2 256.3 250.7 263.5	4.1	363 332 349 354 391 368	254.9
HABA-DEA-SF 5-10074	1466.2 1538.3 1610.3 1754.5 1826.5 1898.6	1700	173.2 198.0 207.2 249.5 233.2 226.2	6.8	351 350 331 385 354 388	229.0
HABA-DEA-SF 5-10075	1466.3 1538.3 1610.5 1754.7 1826.8 1899.0	1700	193.4 218.4 214.9 227.3 216.0 218.6	4.5	280 306 279 315 297 322	219.0
HABA-DEA-SF 5-10076	1467.0 1539.0 1611.2 1755.4 1827.4 1899.6	1800	168.2 205.7 215.4 234.5 230.7 241.7	8.4	309 351 327 340 341 347	230.6
HABA-DEA-SF 5-10077	1467.1 1539.3 1611.4 1755.7 1827.8 1899.9	1800	160.4 212.7 207.3 225.1 233.2 222.1	11.1	311 371 332 348 367 358	220.0
HABA-DEA-SF 5-10078	1467.2 1539.5 1611.6 1755.8 1827.9 1900.9	1800	134.9 161.9 174.6 199.1 192.9 195.2	9.1	324 336 324 352 352 360	190.5
HABA-DEA-SF 5-10079	1467.3 1539.5	1800	174.0 210.4	9.1	322 330	247.8

	1611.6 1755.9 1828.1 1900.2		234.1 257.9 247.7 251.6		334 348 347 340	
HABA-DEA-SF 5-10080	1466.9 1539.1 1611.1 1755.5 1827.5 1899.7	1800	264.9 295.4 313.5 318.7 304.1 301.3	9.5	319 347 338 334 332 330	309.4
HABA-DEA-SF 5-10081	1465.9 1537.9 1610.0 1754.2 1826.2 1898.2	1900	180.0 198.3 225.9 226.2 231.8 228.3	15.7	313 312 328 338 346 347	228.1
HABA-DEA – SF 5-10082	1466.0 1538.1 1610.1 1754.3 1826.3 1898.3	1900	193.1 223.2 245.2 245.3 244.2 238.7	17.9	308 327 330 350 344 353	243.4
HABA-DEA-SF 5-10083	1466.0 1538.2 1610.1 1754.3 1826.4 1898.3	1900	165.2 188.5 201.0 214.4 215.0 206.1	18.2	304 312 307 329 336 339	209.1
HABA-DEA-SF 5-10084	1466.3 1538.4 1610.5 1754.7 1826.7 1898.9	2000	181.7 197.7 205.2 204.2 212.3 193.0	21.7	308 303 308 330 330 313	203.7
HABA-DEA-SF 5-10085	1466.1 1538.2 1610.2 1754.5 1826.6 1898.6	2000	177.5 201.0 209.7 224.8 217.2 211.5	18.8	299 302 315 328 327 327	215.8
HABA-DEA-SF 5-10086	1466.4 1538.6 1610.5 1754.8 1826.9 1899.0	2000	172.2 201.4 205.9 209.4 200.8 202.3	22.6	294 298 303 322 316 315	204.6

HABA-DEA-SF 5-10087	1466.2 1538.2 1610.3 1754.5 1826.6 1898.6	2000	165.0 185.5 198.1 199.7 204.4 195.4	18.5	294 314 314 315 329 314	199.4
HABA-DEA-SF 5-10088	1466.7 1538.9 1610.9 1755.2 1827.3 1899.3	2000	171.0 187.2 197.5 196.7 196.5 202.4	19.7	284 286 278 304 303 313	198.3
HABA-DEA-SF 5-10089	1467.3 1539.5 1611.7 1756.0 1828.1 1900.1	2000	149.4 167.6 181.3 192.0 189.6 182.1	20.8	261 283 285 303 310 302	186.3
HABA-DEA-SF 50024	1466.7 1538.8 1610.8 1755.1 1827.1 1899.2	1700	254.6 290.8 297.3 332.1 298.0 322.8	9.2	379.0 398.0 371.0 402.0 396.0 420.0	Lin. 308.2
HABA-DEA-SF 50025	1466.3 1538.4 1610.4 1754.6 1826.7 1898.7	1700	261.3 269.0 284.3 301.3 293.9 295.5	9.3	380.0 356.0 360.0 371.0 375.0 386.0	293.8
HABA-DEA-SF 50026	1466.0 1538.1 1610.1 1754.4 1826.3 1898.4	1700	194.5 235.0 252.6 253.4 272.6 258.8	8.2	336 355 346 381 380 379	259.4
HABA-DEA-SF 50027	1466.0 1538.0 1610.0 1754.2 1826.3 1898.3	1700	228.2 236.2 276.9 298.2 292.7 288.1	7.3	389 378 389 418 425 410	288.9
HABA-DEA-SF 50028	1466.4 1538.5 1610.5 1754.8 1826.8 1898.9	1700	192.9 246.6 273.6 273.6 258.9 266.4	8.2	329 364 368 365 355 378	268.1
HABA-DEA-SF 50029	1466.4 1538.2	1700	220.2 226.5	6.4	373 352	293.2

	1610.2 1754.8 1826.5 1898.4		285.4 286.9 308.2 292.1		391 396 405 406	
HABA-DEA-SF 50030	1467.0 1539.1 1611.1 1755.4 1827.5 1899.4	1700	184.6 195.2 206.8 254.8 239.9 238.0	2.9	304 320 295 362 362 354	244.2
HABA-DEA-SF 50031	1466.7 1538.8 1610.9 1755.1 1827.2 1899.3	1800	194.2 213.8 238.5 266.5 266.2 254.7	10.8	338 330 322 362 362 346	256.5
HABA-DEA-SF 50032	1466.1 1538.3 1610.3 1754.5 1826.5 1898.5	1800	210.7 230.7 263.0 273.0 276.5 271.0	13.4	357 339 365 381 367 381	270.9
HABA-DEA-SF 50033	1466.3 1538.5 1610.4 1754.6 1826.7 1898.7	1800	235.1 266.1 286.7 306.9 306.0 296.8	11.0	351 353 354 376 374 385	299.1
HABA-DEA-SF 50034	1466.6 1538.7 1610.8 1755.0 1827.0 1899.1	1800	167.9 210.6 240.0 251.3 265.4 251.7	13.5	304 327 334 347 385 363	252.1
HABA-DEA-SF 50035	1465.9 1537.9 1609.9 1754.1 1826.1 1898.2	1800	216.9 258.4 281.4 274.7 291.6 283.6	10.4	316 349 354 355 362 352	282.8
HABA-DEA-SF 50036	1466.3 1538.4 1610.5 1754.7 1826.7 1898.8	1800	229.2 245.8 279.3 286.9 289.4 278.5	9.8	365 340 345 364 349 359	283.5
HABA-DEA-SF 50037	1465.7 1537.7 1609.7 1753.9	1800	218.6 269.6 287.4 301.0	9.6	323 357 350 368	296



	1825.9 1898.0		292.9 302.4		370 369	
HABA-DEA-SF 50038	1466.7 1538.7 1610.7 1755.1 1827.1 1899.1	1800	223.5 252.7 278.9 298.3 291.3 302.3	11.3	341 342 361 361 361 396	292.7
HABA-DEA-SF 50039	1466.9 1539.1 1611.1 1755.3 1827.4 1899.5	1900	190.4 216.5 240.4 256.0 247.1 247.7	13.7	292 289 298 330 319 339	247.8
HABA-DEA-SF 50040	1466.7 1538.7 1610.8 1755.0 1827.1 1899.1	1900	216.2 246.1 265.6 284.7 270.6 271.6	14.5	323 331 360 360 346 345	273.1
HABA-DEA-SF 50041	1466.9 1539.1 1611.2 1755.4 1827.5 1899.7	1900	212.0 242.0 263.6 269.6 263.3 258.5	15.1	296 315 312 316 316 315	263.8
HABA-DEA-SF 50042	1467.0 1539.2 1611.2 1755.5 1827.5 1899.7	1900	222.6 240.7 270.8 272.2 266.1 269.3	16.6	320 310 322 333 330 328	269.6
HABA-DEA-SF 50043	1466.6 1538.7 1610.8 1755.1 1827.1 1899.1	1900	168.9 191.3 210.3 229.4 227.5 220.6	16.6	279 301 310 330 318 324	221.9
HABA-DEA-SF 50044	1466.0 1538.0 1610.1 1754.2 1826.3 1898.3	1900	188.7 205.3 228.8 238.4 233.5 238.9	13.7	316 310 324 342 334 352	234.9
HABA-DEA-SF 50045	1466.1 1538.1 1610.1 1754.4 1826.5 1898.5	1900	227.8 259.9 275.6 293.6 298.5 281.7	16.7	327 324 327 348 365 345	287.4

HABA-DEA-SF 50046	1466.7 1538.7 1610.8 1755.0 1827.0 1899.7	1900	176.5 193.9 213.0 226.0 221.4 216.2	16.7	284 298 318 319 335 348	Szeroki 219.2
HABA-DEA-SF 50047	1465.8 1537.8 1609.8 1755.0 1825.9 1898.0	1900	142.1 169.2 175.1 191.8 192.3 189.3	13.3	314 322 329 353 343 362	187.1
HABA-DEA-SF 50048	1467.0 1539.1 1611.2 1755.5 1827.5 1899.6	1900	186.2 218.3 223.9 230.1 234.4 237.8	17.4	319 317 318 324 332 328	231.6
HABA-DEA-SF 50049	1466.3 1538.3 1610.4 1754.5 1826.6 1898.6	1900	160.1 183.2 197.6 217.5 217.0 216.8	15.9	321 325 342 348 357 361	212.1
HABA-DEA-SF 50050	1466.8 1539.0 1611.0 1755.3 1827.4 1899.6	1900	177.0 205.3 214.4 226.6 221.6 230.1	17.7	312 306 311 326 316 333	223.2
HABA-DEA-SF 50051	1467.1 1539.4 1611.5 1755.7 1827.8 1899.9	1900	146.3 157.8 164.3 179.5 184.9 190.3	13.2	316 299 287 294 308 320	304
HABA-DEA-SF 50052	1467.9 1540.1 1612.3 1756.7 1828.8 1900.9	2000	165.4 186.9 203.5 206.2 208.6 195.4	20.3	278 284 294 295 297 293	203.3
HABA-DEA-SF 50053	1467.0 1539.1 1611.2 1755.5 1827.5 1899.7	2000	173.5 186.5 200.0 216.7 220.2 206.5	18.6	292 287 293 308 311 298	210.8
HABA-DEA-SF 50054	1466.9 1539.0	2000	174.7 191.6	18.2	305 317	222.8

	1611.0 1755.3 1827.4 1899.4		213.2 220.9 223.4 233.5		322 328 343 360	
HABA-DEA-SF 50055	1467.2 1539.2 1611.4 1755.6 1827.8 1899.4	2000	160.1 182.6 185.3 197.1 186.6 189.5	20.3	281 295 292 315 303 305	188.1
HABA-DEA-SF 50056	1466.1 1538.2 1610.1 1754.5 1826.5 1898.5	1700	206.8 236.7 265.3 299.5 266.2 268.7	3.7	328 326 335 384 365 370	274.9
HABA-DEA-SF 50057	1466.0 1538.2 1610.1 1754.4 1826.3 1898.5	1700	216.4 238.1 250.4 269.6 257.4 252.9	4.4	344 349 334 350 375 359	257.61
HABA-DEA-SF 50058	1466.6 1538.5 1610.6 1754.8 1826.8 1898.9	1700	131.3 175.0 183.3 191.3 190.5 194.5	7.1	317 348 343 363 371 385	189.9
HABA-DEA-SF 50059	1466.4 1538.4 1610.5 1754.9 1827.0 1899.1	1700	148.4 183.4 199.5 224.5 206.7 218.5	6.7	317 327 312 342 344 343	212.3
HABA-DEA-SF 50060	1467.0 1539.3 1611.2 1755.6 1827.7 1899.7	1700	151.6 172.0 197.9 229.3 203.9 180.1	6.4	337 303 341 374 359 334	210.4
HABA-DEA-SF 50061	1466.9 1539.1 1611.1 1755.5 1827.5 1899.6	1800	256.1 278.9 310.8 304.6 347.3 311.7	8.8	345 328 345 359 379 367	318.6
HABA-DEA-SF 50062	1467.5 1539.6 1611.7 1756.1	1800	213.7 233.1 262.9 269.8	9.1	278 275 292 288	269.8

	1828.2 1900.3		286.0 260.3		308 297	
HABA-DEA-SF 50063	1466.7 1538.8 1610.8 1755.1 1827.3 1899.3	1800	181.4 198.4 218.8 248.9 237.3 246.1	9.7	300 295 292 311 308 307	237.8
HABA-DEA-SF 50064	1467.3 1539.4 1611.4 1755.8 1827.9 1899.9	1800	143.8 168.9 185.4 190.8 200.8 203.5	10.2	272 288 302 307 305 311	195.1
HABA-DEA-SF 50065	1468.5 1540.7 1612.8 1757.3 1829.3 1901.6	1900	172.4 188.5 204.0 228.7 240.4 234.3	15.5	303 316 317 329 341 337	226.9
HABA-DEA-SF 50066	1468.1 1540.3 1612.5 1756.8 1829.0 1901.1	1900	262.6 288.5 317.0 327.6 325.1 331.9	13.0	330 332 335 337 345 347	325.4
HABA-DEA-SF 50067	1467.7 1540.0 1612.1 1756.4 1828.6 1901.1	1900	198.8 220.5 242.1 268.8 273.6 258.9	13.8	290 286 291 303 318 303	260.9
HABA-DEA-SF 50068	1467.2 1540.0 1611.5 1755.8 1827.8 1899.9	1900	146.1 158.7 168.3 187.4 177.2 185.0	10.2	293 295 286 293 305 318	179.5
HABA-DEA-SF 50069	1469.6 1542.0 1614.1 1758.5 1830.9 1903.1	2000	131.0 147.8 141.5 169.1 166.8 159.9	20.3	246 245 250 273 268 278	165.31
HABA-DEA-SF 50070	1469.3 1541.5 1613.8 1758.2 1830.6 1902.8	2000	143.6 164.7 168.9 181.3 189.2 177.2	21.6	264 283 277 280 293 288	179.2

HABA-DEA-SF 50071	1467.9 1540.0 1612.2 1756.6 1828.8 1900.9	2000	175.1 206.6 212.0 239.9 236.2 233.2	17.7	271 289 277 297 293 294	225.6
HABA-DEA-SF 50072	1465.6 1537.7 1609.7 1753.8 1826.0 1900.9	1700	181.2 211.4 234.4 264.0 231.9 228.4	3.6	353 348 360 393 366 334	239.7
HABA-DEA-SF 50073	1466.6 1538.7 1610.8 1755.1 1827.1 1899.3	1700	218.9 223.3 249.3 256.3 250.8 263.6	4.1	355 325 343 348 385 363	255
HABA-DEA-SF 50074	1466.2 1538.3 1610.3 1754.5 1826.5 1898.6	1700	173.3 198.0 207.2 249.6 233.3 226.2	6.8	338 339 321 374 345 378	229.1
HABA-DEA-SF 50075	1466.3 1538.3 1610.5 1754.7 1826.8 1899.0	1700	192.6 217.5 214.0 226.4 215.1 217.7	4.5	274 300 274 309 292 317	218.1
HABA-DEA-SF 50076	1467.0 1539.0 1611.2 1755.4 1827.4 1899.6	1800	168.0 205.4 215.2 234.2 230.4 241.4	8.4	295 338 315 328 329 337	230.3
HABA-DEA-SF 50077	1467.1 1539.3 1611.4 1755.7 1827.8 1899.9	1800	159.8 212.0 206.5 224.3 232.4 221.1	11.2	293 354 316 333 352 343	219.3
HABA-DEA-SF 50078	1467.2 1539.5 1611.6 1755.8 1827.9 1900.0	1900	135.0 162.0 174.7 199.3 193.1 195.3	9.1	306 321 310 338 338 346	190.6
HABA-DEA-SF 50079	1467.3 1539.5	1800	174.0 210.4	9.1	309 317	240.4

	1611.6 1755.9 1828.1 1900.2		234.2 258.0 247.7 251.6		322 337 336 330	
HABA-DEA-SF 50080	1466.9 1539.1 1611.6 1755.5 1827.5 1899.7	1800	265.1 295.6 313.7 318.9 304.3 301.5	9.5	307 335 327 326 324 321	306.8
HABA-DEA-SF 50081	1466.1 1538.2 1610.2 1754.3 1826.3 1898.6	1800	144.4 162.6 188.4 193.4 200.8 188.6	10.0	290 309 324 333 336 333	192.8
HABA-DEA-SF 50082	1467.9 1540.1 1612.2 1756.6 1828.8 1900.9	1900	180.5 222.4 234.8 238.5 253.6 250.8	15.1	318 326 344 327 353 349	240.0
HABA-DEA-SF 50083	1468.5 1540.8 1612.9 1757.4 1829.5 1901.7	1900	143.8 161.5 185.7 191.1 191.1 209.2	14.4	287 298 310 312 311 315	194.3
HABAdea 50084	1467.2 1539.4 1611.5 1755.8 1827.9 1900.0	1900	230.7 262.1 288.9 302.3 286.8 289.4	15.0	312 309 322 327 314 327	285.9
HABA-DEA-SF 50085	1466.8 1539.0 1611.1 1755.3 1827.4 1900.0	1900	160.1 182.9 206.1 212.2 217.2 218.3	17.7	325 329 329 343 338 345	213.5
HABA-DEA-SF 50086	1468.9 1541.2 1613.3 1757.7 1830.1 1902.2	2000	162.8 183.0 188.9 211.5 210.7 199.6	17.5	267 274 283 289 286 290	207.3
HABA-DEA-SF 50087	1469.1 1541.1 1613.5 1758.0	2000	128.9 143.9 151.3 171.7	16.6	262 275 264 282	169.8

	1830.1 1902.3		180.3 175.7		290 296	
HABA-DEA-SF 50088	1467.8 1539.9 1612.1 1756.4 1828.6 1900.8	2000	201.3 227.4 243.9 249.7 246.0 234.6	22.3	275 278 293 300 299 292	233.8
HABA-DEA-SF 50089	1467.3 1539.5 1611.7 1756.0 1828.1 1900.1	2000	149.4 167.6 181.3 192.0 189.6 182.1	20.8	261 283 285 303 310 302	186.3
HABA-DEA-SF 100001	1465.2 1537.0 1609.1 1753.1 1825.1 1897.0	1500	176.6 242.2 247.7 225.8 244.7 264.3	2.4	378 437 438 407 391 468	244.9
HABA-DEA-SF 100002	1465.2 1537.0 1609.1 1753.1 1825.1 1896.8	1500	94.0 103.7 122.1 93.9 129.6 117.6	0.8	306 319 316 281 330 338	118.3
HABA-DEA-SF 100005	1465.1 1537.1 1609.2 1753.3 1825.3 1897.2	1700	233.2 253.5 279.6 296.8 318.9 298.8	6.4	393 379 363 375 391 386	289.5
HABA-DEA-SF 100006	1465.5 1537.5 1609.6 1753.8 1825.7 1897.8	1600	230.1 221.5 252.1 322.5 297.0 325.6	4.0	372 338 346 419 408 404	274.8
HABA-DEa-SF 100007	1465.0 1536.9 1609.1 1753.2 1825.2 1897.2	1600	183.5 249.5 253.2 255.5 249.4 272.3	3.7	349 400 338 359 377 409	255.9
HABA-DEA-SF 100008	1465.2 1537.4 1609.2 1753.5 1825.6 1897.6	1600	156.0 186.0 242.8 223.6 240.9 247.0	3.9	290 321 351 336 360 381	238.6

HABA-DEA-SF 100009	1466.1 1538.1 1610.0 1754.4 1826.4 1898.4	1600	173.2 183.7 201.6 227.5 211.3 186.1	3.5	324 298 323 354 357 337	213.5
HABA-DEA-SF 100010	1465.8 1537.8 1609.8 1754.0 1826.0 1898.0	1700	246.2 290.1 333.1 336.7 323.0 334.7	7.9	337 341 350 360 360 369	310.5
HABA-DEA-SF 100011	1465.3 1537.3 1609.4 1753.5 1825.5 1897.6	1700	199.1 237.9 250.5 266.3 279.1 268.3	6.2	344 363 367 388 391 373	260.4
HABA-DEA-SF 100012	1465.7 1537.9 1609.9 1754.1 1826.2 1898.2	1700	209.3 231.3 241.1 261.5 244.2 239.6	6.4	291 288 287 305 287 303	243.5
HABA-DEa-SF 100013	1465.6 1537.6 1609.8 1753.9 1825.8 1897.9	1700	236.1 266.7 292.0 295.3 318.3 300.8	6.6	349 370 361 352 380 366	294.6
HABA-DEa-SF 100014	1466.3 1538.4 1610.5 1754.6 1826.8 1898.8	1700	254.6 293.5 331.6 331.2 320.4 344.5	8.7	356 346 353 352 345 366	324.2
HABA-DEA-SF 100015	1466.4 1538.5 1610.6 1754.7 1826.9 1899.1	1700	213.8 267.8 274.3 287.0 282.1 296.1	9.7	276 304 294 313 317 315	281.5
HABA-DEA-SF 100016	1465.3 1537.3 1609.3 1753.5 1825.5 1897.6	1700	223.0 256.5 283.3 303.7 294.1 291.3	7.6	315 334 334 362 358 358	293.1
HABA-DEA-SF 100017	1465.2 1537.3	1700	242.5 271.6	7.8	323 347	289.6



	1609.2 1753.3 1825.4 1897.3		303.5 293.4 320.5 305.9		317 347 354 364	
HABA-DEA-SF 100018	1466.0 1538.0 1610.0 1754.2 1826.3 1898.4	1700	209.5 224.6 241.6 281.1 284.8 262.0	6.3	329 332 334 364 361 364	258.8
HABA-DEA-SF 100019	1467.5 1537.8 1609.8 1753.9 1826.1 1898.1	1700	148.7 177.5 207.2 227.9 208.0 225.8	4.3	326 308 347 355 354 376	217.2
HABA-DEa-SF 100020	1465.8 1537.8 1610.0 1754.0 1826.1 1898.3	1700	158.6 185.1 208.8 253.5 228.2 241.4	4.5	347 362 355 371 363 358	232.9
HABA-DEA-SF 100021	1465.6 1537.6 1609.7 1753.7 1825.9 1897.9	1700	177.7 196.2 223.0 239.2 250.1 268.4	5.5	311 328 338 344 348 373	235.4
HABA-DEA-SF 100022	1465.3 1537.3 1609.3 1753.5 1825.5 1897.6	1700	186.2 189.9 228.3 224.9 224.0 235.3	6.0	335 314 338 340 359 349	228.1
HABA-DEA-SF 100023	1465.4 1537.6 1609.6 1753.6 1825.7 1897.8	1700	196.2 226.1 236.4 269.7 265.5 261.1	7.1	336 333 333 374 367 364	251.8
HABA-DEA-SF 100024	1465.7 1537.8 1609.8 1754.0 1826.0 1898.0	1700	195.1 218.3 255.3 264.9 249.4 254.2	8.3	318 316 318 349 331 348	248.4
HABA-DEA-SF 100028	1465.4 1537.5 1609.4 1753.6	1700	208.4 248.7 254.3 265.9	7.4	318 337 327 338	260.3

	1825.6 1897.6		261.3 271.5		349 360	
HABA-DEA-SF 100025	1465.3 1537.4 1609.3 1753.4 1825.4 1897.4	1700	196.1 243.0 246.2 277.6 238.8 267.1	7.5	328 345 356 372 383 369	254.5
HABA-DEA-SF 100026	1465.2 1537.3 1609.3 1753.5 1825.3 1897.5	1700	201.6 233.2 255.5 251.8 300.2 281.9	6.3	337 342 338 343 385 389	264.5
HABA-DEA-SF 100027	1465.7 1537.8 1609.8 1754.0 1825.9 1898.0	1700	195.7 241.8 252.5 269.5 267.8 265.2	9.1	323 348 316 338 345 358	259.4
HABA-DEA-SF 100029	1465.2 1537.0 1609.2 1754.0 1825.2 1897.3	1700	191.4 224.8 232.6 253.3 284.9 252.7	6.8	331 352 338 355 386 356	249.7
HABA-DEA-SF 100030	1465.5 1537.6 1609.6 1753.7 1825.7 1897.7	1800	186.7 214.2 232.8 280.3 251.0 258.7	10.8	288 280 283 313 311 318	255.7
HABA-DEA-SF 100031	1466.5 1538.5 1610.6 1755.1 1826.8 1899.2	1800	171.0 198.4 209.1 228.6 239.1 243.6	7.1	281 285 287 291 311 315	230.1
HABA-DEA-SF 100032	1465.7 1537.9 1609.9 1754.0 1826.1 1898.1	1800	204.5 240.2 239.4 270.9 280.0 256.4	6.9	354 349 330 362 371 361	257.4
HABA-DEA-SF 100033	1466.3 1538.2 1610.2 1754.5 1826.5 1898.6	1800	206.9 244.2 260.8 300.6 278.4 260.8	7.6	307 321 320 363 353 335	268.9

HABA-DEA-SF 100034	1467.3 1539.3 1611.5 1755.6 1827.9 1900.0	1800	137.5 153.3 175.8 193.7 191.0 177.2	5.4	261 272 302 308 287 283	184.4
HABA-DEA-SF 100035	1467.0 1539.1 1611.3 1755.6 1827.8 1899.8	1800	173.1 201.6 211.3 232.9 220.9 221.3	8.4	242 253 249 259 252 253	221.6
HABA-DEa-SF 100036	1465.5 1537.5 1609.5 1753.6 1825.6 1897.7	1800	204.0 228.1 257.6 256.9 265.2 268.2	11.8	289 309 311 316 330 342	255.2
HABA-DEA-SF 100037	1466.5 1538.7 1610.7 1755.1 1827.1 1899.2	1800	213.5 230.9 262.5 276.5 271.4 272.8	11.7	213.5 270 284 303 308 298	270.8
HABA-DEA-SF 100038	1465.4 1537.5 1609.5 1753.6 1825.5 1897.5	1800	206.7 233.4 258.6 270.6 263.2 261.3	11.1	324 329 360 366 352 363	263.4
HABA-DEA-SF 100039	1465.7 1537.7 1609.8 1754.0 1825.9 1898.0	1800	218.2 275.1 279.1 312.0 307.3 297.3	12.4	315 353 336 349 356 359	240.2
HABA-DEA-SF 100040	1465.6 1537.6 1609.6 1753.8 1825.7 1897.8	1800	197.6 227.9 245.6 265.8 264.1 268.1	11.6	319 327 313 337 339 359	260.9
HABA-DEa-SF 100041	1465.3 1537.3 1609.2 1753.5 1825.4 1897.4	1800	215.7 267.0 277.1 283.0 288.0 286.1	10.8	324 353 347 350 360 362	280.2
HABA-DEA-SF 100042	1465.8 1537.9	1800	202.4 233.5	11.5	296 321	274.9

	1609.9 1754.1 1826.1 1898.1		260.8 275.0 282.1 282.0		319 341 349 356	
HABA-DEA – SF 100043	1465.5 1537.6 1609.7 1753.8 1825.8 1897.9	1800	214.5 235.2 264.7 278.8 266.5 270.5	13.2	303 302 312 318 335 329	270.1
HABA-DEA-SF 100044	1465.3 1537.3 1609.3 1753.5 1825.4 1897.5	1800	237.5 281.6 317.8 313.0 319.0 319.2	7.4	285 305 305 305 310 325	317.3
HABA-DEA-SF 100045	1465.4 1537.2 1609.4 1753.5 1825.5 1897.4	1800	192.7 233.4 241.7 270.5 267.0 261.9	7.4	270 293 288 303 308 299	260.3
HABA-DEA-SF 100046	1467.0 1539.0 1611.2 1755.4 1827.5 1899.6	1800	190.5 229.0 239.5 262.2 252.5 238.9	12.5	285 302 285 303 304 302	248.3
HABA-DEA-SF 100047	1466.3 1538.4 1610.3 1754.7 1826.6 1898.8	1800	179.2 201.1 224.8 234.7 248.1 245.5	16.6	273 276 289 298 315 313	238.3
HABA-DEA-SF 100048	1465.9 1538.1 1610.2 1754.4 1826.3 1898.4	1900	199.6 225.5 241.8 265.0 254.7 259.4	17.0	289 303 306 333 325 333	255.2
HABA-DEA-SF 100049	1465.6 1537.7 1609.8 1753.9 1826.0 1897.9	1900	207.6 238.7 261.1 265.9 270.4 274.1	15.0	306 310 322 325 343 341	267.9
HABA-DEA-SF 100050	1465.5 1537.7 1609.6 1753.8	1900	207.0 239.8 241.0 264.3	15.5	306 319 318 325	254.8

	1825.8 1897.8		269.3 259.4		334 325	
HABA-DEA-SF 100051	1465.4 1537.4 1609.5 1753.6 1825.7 1897.7	1900	194.9 217.3 246.1 259.3 254.6 258.0	14.7	295 289 303 317 312 327	254.5
HABA-DEA-SF 100052	1466.4 1538.5 1610.4 1754.8 1826.9 1899.0	1900	153.0 173.8 182.5 196.0 210.5 208.7	11.6	239 258 243 259 263 270	199.4
HABA-DEA-SF 100053	1466.3 1538.3 1610.4 1754.6 1826.6 1898.6	1900	176.2 198.8 224.9 236.2 235.1 226.8	12.5	280 295 308 318 322 328	224.4
HABA-DEA-SF 100054	1467.9 1539.9 1612.0 1756.4 1828.6 1900.8	1900	152.1 185.1 191.6 210.4 212.9 210.3	10.8	291 309 304 302 330 327	206.3
HABA-DEA-SF 100055	1465.7 1537.9 1609.9 1754.0 1826.1 1898.2	1900	171.6 195.2 205.6 225.1 213.8 205.1	13.8	278 288 289 300 296 283	212.4
HABA-DEA-SF 100056	1467.2 1539.4 1611.5 1755.7 1828.0 1900.0	1900	172.3 191.3 219.2 235.5 233.5 232.1	18.5	291 294 294 315 314 324	230.1
HABA-DEA-SF100057	1466.4 1538.5 1610.6 1754.9 1826.8 1898.9	1900	174.2 215.7 225.4 235.4 233.3 235.9	17.9	264 288 290 294 305 304	229.1
HABA-DEA-SF 100058	1465.9 1538.0 1610.0 1754.1 1826.2 1898.2	1900	178.2 197.7 225.8 238.6 230.5 233.1	13.8	261 274 280 287 295 305	232

HABA-DEA-SF 100059	1466.6 1538.8 1610.8 1755.1 1827.2 1899.3	1900	165.2 184.2 192.6 206.7 211.6 204.9	16.3	289 288 297 310 312 314	203.9
HABA-DEA-SF 100060	1465.7 1537.7 1609.8 1754.0 1826.1 1898.0	1900	211.7 238.8 264.4 279.8 283.1 274.2	10.7	316 320 331 346 347 349	275.4
HABA-DEA-SF 100061	1465.3 1537.3 1609.4 1753.5 1825.5 1897.5	1900	187.8 224.5 230.2 255.1 241.8 239.9	16.3	302 318 315 340 331 346	238.3
HABA-DEA-SF 100062	1466.8 1538.9 1611.1 1755.4 1827.4 1899.6	2000	154.8 172.9 188.4 194.5 191.7 202.1	18.4	283 283 292 297 302 313	194.2
HABA-DEA-SF 100063	1467.7 1539.9 1612.1 1756.4 1828.7 1900.8	2000	196.8 219.9 233.8 251.2 263.0 243.2	15.0	282 295 286 303 320 304	247.8
HABA-DEA-SF 100064	1468.2 1540.3 1612.6 1757.0 1829.1 1901.3	2000	167.1 194.1 206.0 218.6 208.7 204.3	17.5	280 291 288 303 296 307	206.3
HABA-DEA-SF 100065	1466.8 1538.8 1610.9 1755.2 1827.2 1899.3	2000	168.4 188.7 199.3 210.0 220.4 203.9	18.0	310 301 297 326 335 315	204.5
HABA-DEA-SF 100066	1467.6 1539.7 1612.0 1756.2 1828.5 1900.7	2000	147.4 159.0 171.9 178.0 184.9 174.0	16.3	226 241 221 236 235 230	177.2
HABA-DEA-SF 100067	1467.8 1540.0	2000	154.0 167.7	20.4	265 276	185.8

	1612.1 1756.6 1828.7 1900.9		177.5 185.5 191.6 188.8		270 277 282 288	
HABA-DEA-SF 100068	1466.1 1538.3 1610.3 1754.6 1826.6 1898.7	2000	168.8 186.0 197.5 203.5 215.8 201.1	18.1	299 300 299 304 321 322	204.5
HABA-DEA-SF 100069	1466.4 1538.5 1610.6 1754.9 1826.9 1899.0	2000	163.9 178.1 189.9 187.8 193.2 186.7	17.3	270 277 269 273 284 290	189.4
HABA-DEA-SF 100070	1466.1 1538.2 1610.2 1754.5 1826.4 1898.6	2000	179.4 199.1 216.6 214.9 221.6 215.8	21.3	300 311 320 305 338 328	213.6
HABA-DEA-SF 100071	1466.4 1538.4 1610.6 1754.9 1827.0 1899.1	2000	172.0 190.5 200.5 214.7 217.5 210.4	18.7	309 298 315 317 314 325	210.8
HABA-DEA-SF 100072	1467.2 1539.4 1611.6 1755.8 1828.0 1900.1	2000	153.0 181.8 191.1 201.4 219.3 205.6	17.6	260 273 269 272 292 284	204.4

**Table S-3. The data described of S/N of PLLA used DHB-DEA matrix by DD method**

<b>Dried Droplet DHB-DEA-PLLA C-polymer(0.1g/ml) C-matrix(0.25g/ml)</b>	Selected peak	Laser	S/N	RMS noise	Resolution FW/HM, 50%	Average S/N
DHB-DEA-DD 0001	1465.5 1537.5 1609.5	2300	400.7 419.7 409.5	6.8	335 322 338	409.9
DHB-DEA-DD 0002	1465.9 1538.0 1609.9	2300	327.1 325.5 326.8	6.4	322 318 337	326.5
DHB-DEA-DD 0003	1465.4 1537.3 1609.3	2300	628.1 615.4 543.3	8.2	346 339 340	595.6
DHB-DEA-DD 0004	1465.7 1537.7 1609.8	2300	567.6 580.0 549.4	9.0	349 351 356	565.7
DHB-DEA-DD 0005	1465.7 1537.8 1609.8	2300	528.0 508.3 471.4	7.8	341 338 329	502.6
DHB-DEA-DD 0006	1465.8 1537.9 1609.8	2300	551.8 539.6 505.6	9.3	342 338 345	532.2
DHB-DEA-DD 0007	1466.0 1538.1 1610.0	2300	374.0 379.0 352.4	9.2	330 329 345	368.5
DHB-DEA-DD 0008	1465.5 1537.5 1609.4	2300	630.2 618.8 604.4	9.6	351 354 358	617.8
DHB-DEA-DD 0009	1465.9 1538.0 1610.0	2300	650.0 660.2 588.4	9.7	348 357 366	632.8
DHB-DEA-DD 0010	1465.9 1537.9 1609.9	2300	524.2 527.3 496.7	9.2	345 347 356	516.1
DHB-DEA-DD 0011	1465.8 1537.8 1609.8	2300	468.8 455.9 446.6	9.4	338 335 345	457.0
DHB-DEA-DD 0012	1465.4 1537.4 1609.4	2300	587.6 605.5 559.7	9.5	345 350 355	584.3
DHB-DEA-DD 0013	1466.2 1538.2 1610.2	2300	688.2 658.9 586.2	9.2	349 354 350	644.4



DHB-DEA-DD 0014	1465.8 1537.8 1609.8	2300	640.0 602.7 541.3	8.8	343 341 341	594.7
DHB-DEA-DD 0015	1465.7 1537.7 1609.7	2300	579.8 551.6 549.0	7.6	352 336 330	560.1
DHB-DEA-DD 0016	1465.9 1538.0 1610.0	2300	650.0 660.2 588.4	9.7	348 357 366	632.8
DHB-DEA-DD 0017	1466.0 1538.0 1610.0	2300	697.5 673.0 605.7	8.3	351 358 361	658.7
DHB-DEA-DD 0018	1466.1 1538.1 1610.1	2300	557.8 531.8 498.9	8.7	331 330 336	529.5
DHB-DEA-DD 0019	1465.9 1537.9 1609.9	2300	751.4 725.4 671.8	8.0	347 356 363	716.1
DHB-DEA-DD 0020	1466.4 1538.3 1610.4	2300	569.6 567.0 513.1	10.0	328 336 338	549.9
DHB-DEA-DD 0021	1466.0 1538.0 1610.0	2300	584.7 624.5 588.5	8.7	336 344 348	599.1
DHB-DEA-DD 0022	1466.2 1538.2 1610.2	2300	367.8 400.1 390.3	9.6	328 343 341	386.1
DHB-DEA-DD 0023	1465.7 1537.8 1609.7	2300	488.4 515.8 496.6	7.4	338 344 348	500.1
DHB-DEA-DD 0024	1466.0 1538.0 1609.9	2300	457.3 488.9 459.7	10.4	339 352 355	468.5
DHB-DEA-DD 0025	1466.1 1538.2 1610.2	2300	497.6 510.7 505.2	9.7	341 350 360	504.5
DHB-DEA-DD 0026	1466.2 1538.1 1610.2	2300	452.8 484.7 468.6	9.9	346 356 359	468.6
DHB-DEA-DD 0027	1466.3 1538.3 1610.3	2300	369.1 393.5 378.4	9.7	330 338 338	380.2
DHB-DEA-DD 0028	1466.0 1538.1 1610.0	2300	456.0 447.0 417.0	10.2	334 331 335	440.0

DHB-DEA-DD 0029	1465.9 1537.9 1610.0	2300	540.5 546.0 515.9	10.6	355 350 347	534.1
DHB-DEA-DD 0030	1466.1 1538.0 1610.1	2300	460.3 455.5 476.4	8.6	338 323 345	464.1
DHB-DEA-DD 0031	1466.2 1538.1 1610.2	2300	434.5 460.0 398.4	8.5	349 366 335	430.9
DHB-DEA-DD 0032	1466.1 1538.1 1610.1	2300	380.1 399.4 350.5	7.5	311 332 309	376.7
DHB-DEA-DD0033	1466.3 1538.3 1610.3	2300	437.8 429.8 447.1	8.7	346 345 366	438.2
DHB-DEA-DD 0034	1466.4 1538.4 1610.5	2300	588.4 630.7 551.3	8.7	354 367 352	590.1
DHB-DEA-DD 0035	1466.5 1538.5 1610.6	2300	513.1 513.9 485.0	9.6	347 357 364	504.0
DHB-DEA-DD 0036	1466.1 1538.2 1610.2	2300	492.5 488.2 474.1	8.6	329 331 335	484.9
DHB-DEA-DD 0037	1466.3 1538.3 1610.3	2300	420.0 431.9 415.0	7.6	333 337 339	422.3
DHB-DEA-DD 0038	1466.2 1538.2 1610.3	2300	535.5 544.6 497.8	9.2	339 347 335	525.9
DHB-DEA-DD 0039	1465.9 1537.9 1609.9	2300	434.7 464.7 436.5	7.8	324 327 322	445.2
DHB-DEA-DD 0040	1466.4 1538.4 1610.4	2300	723.5 747.3 713.9	8.9	359 368 382	728.2
DHB-DEA-DD 0041	1466.3 1538.3 1610.3	2300	653.3 667.7 651.2	8.7	351 356 369	657.4
DHB-DEA-DD 0042	1466.2 1538.2 1610.3	2300	611.5 608.0 567.0	9.1	354 351 351	595.4
DHB-DEA-DD 043	1466.4 1538.5 1610.5	2300	577.6 566.3 503.2	9.7	362 354 361	549.0

DHB-DEA-DD 044	1466.2 1538.2 1610.2	2300	409.9 452.3 418.9	8.3	313 318 320	427.0
DHB-DEA-DD 045	1466.4 1538.4 1610.4	2300	497.2 514.8 478.5	9.0	335 345 345	496.8
DHB-DEA-DD 0046	1466.4 1538.4 1610.4	2300	564.0 563.4 531.2	8.8	343 339 347	552.8
DHB-DEA-DD 0047	1466.1 1538.0 1610.0	2300	548.6 570.8 561.4	7.1	312 315 331	560.3
DHB-DEA-DD 0048	1466.3 1538.3 1610.3	2300	603.2 615.0 578.5	7.7	347 355 364	598.9
DHB-DEA-DD 0049	1466.4 1538.5 1610.5	2300	643.1 620.9 553.3	8.6	351 355 343	605.7
DHB-DEA-DD 0050	1466.3 1538.2 1610.4	2300	732.6 745.9 700.9	7.8	333 336 340	726.4
DHB-DEA-DD 0051	1466.5 1538.6 1610.6	2300	620.4 597.2 557.6	8.8	365 363 360	519.7
DHB-DEA-DD 0052	1466.1 1538.1 1610.1	2300	680.3 669.4 630.8	7.2	290 299 305	669.1
DHB-DEA-DD 0053	1466.5 1538.5 1610.6	2300	519.4 540.0 527.5	7.8	347 341 348	528.9
DHB-DEA-DD 0054	1466.2 1538.2 1610.2	2300	647.1 623.7 583.9	9.0	351 350 358	618.2
DHB-DEA-DD 0055	1466.2 1538.3 1610.3	2300	683.2 748.6 679.4	7.7	360 373 362	703.6
DHB-DEA-DD 0056	1465.6 1537.5 1609.5	2300	648.2 652.3 637.7	6.9	352 333 353	646.1
DHB-DEA-DD 0057	1465.8 1537.8 1609.8	2300	646.7 622.8 588.0	8.3	343 341 343	619.2
DHB-DEA-DD 0058	1466.3 1538.3 1610.3	2300	562.2 576.7 531.4	8.7	334 336 341	556.7

DHB-DEA-DD 0059	1466.7 1538.7 1610.8	2300	526.1 558.8 563.7	8.8	351 346 351	549.1
DHB-DEA-DD 0060	1466.6 1538.6 1610.7	2300	629.4 650.2 595.5	7.9	353 363 370	625.0
DHB-DEA-DD 0061	1465.9 1538.0 1609.9	2300	696.0 703.1 659.2	7.2	361 359 352	686.1
DHB-DEA-DD 0062	1466.2 1538.1 1610.2	2300	712.3 791.6 722.6	8.1	353 361 350	742.2
DHB-DEA-DD 0063	1466.4 1538.4 1610.4	2300	691.0 704.6 661.3	8.3	354 362 367	685.6
DHB-DEA-DD-0064	1466.0153 8.1 1610.1	2300	772.1 756.8 703.1	8.8	351 353 353	744.0
DHB-DEA-DD 0065	1465.9 1537.9 1609.8	2300	573.4 608.3 591.7	7.3	323 319 330	591.1
DHB-DEA-DD 0066	1465.8 1537.8 1609.8	2300	716.3 764.3 726.3	8.0	340 349 353	735.5
DHB-DEA-DD 0067	1466.3 1538.3 1610.4	2300	799.5 803.0 751.1	8.9	350 347 361	784.4
DHB-DEA-DD 0068	1466.3 1538.3 1610.4	2300	715.1 747.4 695.0	8.9	339 338 351	719.2
DHB-DEA-DD 0069	1466.1 1538.1 1610.2	2300	681.2 703.9 622.1	8.5	340 352 345	669.1
DHB-DEA-DD 0070	1466.4 1538.4 1610.4	2300	707.6 720.5 659.5	8.9	346 360 361	695.8

**Table S-4. The data described of S/N of PLLA used DHB-DEA matrix by SF method.**

Solvent Free 1mg polymer/ 50 mg matrix DHB-DEA-PLLA	Selected peak	Laser	S/N	RMS noise	Resolution FW/HM, 50%	Average S/N
DHB-DEA- SF 0013	1467.39 1539.49 1611.48 1683.55 1755.82 1827.83	2300	108.1 131.5 139.2 148.6 155.3 151.4	11.8	211 229 230 237 253 262	139.0
DHB-DEA- SF 0014	1466.61 1538.73 1610.76 1683.07 1754.81 1826.85	2200	119.4 145.4 142.6 153.7 154.9 160.0	9.2	281 297 291 315 307 327	146
DHB-DEA- SF 0015	1466.80 1538.84 1610.74 1683.01 1754.99 1826.99	2300	124.9 142.2 158.7 154.8 174.9 165.6	9.9	256 255 263 263 281 298	153.5
DHB-DEA- SF 0016	1466.53 1538.45 1610.63 1682.65 1754.78 1826.65	2300	154.4 166.8 177.8 169.8 181.8 185.5	9.1	264 284 277 284 276 294	172.68
DHB-DEA- SF 017	1466.92 1538.78 1611.03 1683.06 1755.18 1827.18	2300	128.2 144.0 140.4 159.7 157.3 151.3	13.2	228 237 230 241 244 243	146.8
DHB-DEA- SF 0018	1466.41 1538.39 1610.51 1682.57 1754.53 1826.55	2300	123.0 132.2 143.3 156.9 158.9 157.9	12.9	305 307 301 326 330 337	145.4
DHB-DEA- SF 0019	1466.09 1538.10	2300	145.6 166.8	10.9	329 326	173.6

	1610.13 1682.26 1754.12 1826.23		169.2 185.3 185.9 188.5		331 345 352 350	
DHB-DEA – SF 0020	1466.61 1538.57 1610.73 1682.71 1754.65 1826.74	2300	164.5 177.6 181.3 181.7 193.8 179.1	14.1	308 304 308 318 335 324	179.7
DHB-DEA- SF 0021	1466.45 1538.44 1610.62 1682.56 1754.67 1826.72	2300	132.6 155.1 164.6 167.5 168.1 174.0	12.3	314 330 324 327 317 337	160.3
DHB-DEA- SF 0022	1466.09 1538.20 1610.17 1682.32 1754.20 1826.28	2300	139.8 145.1 159.1 178.4 179.8 188.2	10.9	307 304 336 344 334 364	165.1
DHB-DEA- SF 0023	1466.21 1538.27 1610.20 1682.24 1754.26 1826.35	2300	122.2 144.8 160.4 177.3 171.3 180.1	10.8	303 300 320 320 339 340	159.4
DHB-DEA- SF 0024	1466.66 1538.69 1610.65 1682.69 1754.83 1826.82	2300	128.6 154.6 165.8 180.0 185.2 170.6	11.9	287 291 306 314 327 314	164.1
DHB-DEA- SF 0025	1466.94 1538.82 1610.90 1683.07 1755.19 1827.22	2300	137.5 152.6 156.4 160.9 169.6 165.7	10.5	268 281 289 289 299 300	157.1
DHB-DEA- SF 0026	1466.46 1538.43 1610.53 1682.54 1754.59 1826.63	2300	130.2 154.7 170.3 159.6 166.7 164.7	13.2	267 275 282 273 283 281	157.7

DHB-DEA-SF 0027	1466.62 1538.42 1610.62 1682.77 1754.67 1826.71	2300	132.9 142.9 149.4 155.5 161.3 153.9	13.1	264 272 273 277 290 283	149.3
DHB-DEA-SF 0028	1466.45 1538.59 1610.59 1682.71 1754.66 1826.65	2300	157.3 162.1 194.0 193.4 184.6 200.3	13.8	318 302 336 338 327 352	181.9
DHB-DEA-SF 0029	1466.63 1538.73 1610.62 1682.78 1754.72 1826.82	2300	138.3 148.9 163.7 174.3 178.5 177.0	11.7	292 298 322 320 334 330	163.5
DHB-DEA-SF 0030	1466.44 1538.60 1610.69 1682.68 1754.75	2300	128.1 147.7 165.9 157.2 165.6	15.7	292 300 323 316 318	127.3
DHB-DEA-SF 0031	1466.37 1538.34 1610.45 1682.53 1754.58 1826.66	2300	134.5 143.5 159.8 168.1 159.0 151.2	17.6	309 294 317 324 329 315	152.7
DHB-DEA-SF 0032	1466.51 1538.59 1610.68 1682.76 1754.78 1826.83	2300	179.9 204.2 212.9 210.6 207.0 197.7	21.2	305 310 299 305 317 318	202.0
DHB-DEA-SF 0033	1466.56 1538.67 1610.94 1683.33 1755.14 1827.17	2300	137.1 147.4 168.5 167.1 178.9 173.1	17.8	281 299 306 308 307 323	162.0
DHB-DEA-SF 0034	1466.92 1539.01 1611.0 1683.11 1755.36	2300	134.1 150.6 156.8 158.6 153.2	17.8	274 274 297 295 276	153.2

	1827.16		165.8		302	
DHB-DEA-SF 0035	1466.52 1538.53 1610.65 1682.72 1754.76 1826.79	2300	131.3 135.5 154.4 151.5 139.2 148.7	17.5	288 305 326 321 316 321	143.4
DHB-DEA-SF 0036	1466.47 1538.51 1610.62 1682.69 1754.58 1826.76	2300	140.4 163.9 163.4 174.4 180.6 174.8	15.9	296 305 305 312 325 327	166.3
DHB-DEA-SF 0037	1466.62 1538.66 1610.77 1682.70 1754.88 1826.94	2300	137.0 153.9 158.6 158.2 163.4 168.4	19.8	283 283 300 292 297 313	156.6
DHB-DEA-SF 0038	1466.42 1538.53 1610.57 1682.68 1754.76 1826.78	2300	149.6 168.2 178.6 184.8 181.6 177.1	18.1	299 301 324 329 319 328	173.3
DHB-DEA-SF 0039	1466.55 1538.59 1610.60 1682.78 1754.71 1826.74	2300	133.5 153.0 160.7 161.6 158.4 164.4	15.7	278 288 293 293 303 317	155.3
DHB-DEA-SF 0040	1466.78 1538.83 1610.96 1682.97 1755.16 1827.10	2300	154.1 160.0 165.2 174.2 175.9 174.1	17.1	240 243 242 264 254 259	167.3
DHB-DEA-SF 0041	1466.09 1538.14 1610.20 1682.34 1754.28 1826.25	2300	138.9 158.2 167.2 170.1 173.2 179.9	18.5	295 312 296 298 305 322	164.6
DHB-DEA-SF 0042	1466.53 1538.64	2300	125.9 148.3	19.9	278 284	157.2



	1610.62 1682.77 1754.70 1826.69		157.4 170.2 175.2 166.3		299 319 318 320	
DHB-DEA-SF 0043	1466.31 1538.29 1610.40 1682.49 1754.38 1826.52	2300	133.9 158.2 171.5 188.2 192.9 195.4	17.2	292 283 299 313 332 324	173.4
DHB-DEA-SF 0044	1466.33 1538.48 1610.47 1682.48 1754.53 1826.63	2300	141.5 164.9 165.3 181.2 186.2 176.0	17.9	281 290 299 315 316 314	169.2
DHB-DEA-SF 0045	1466.27 1538.37 1610.41 1682.43 1754.45 1826.50	2300	136.7 160.8 167.1 169.4 178.9 172.5	18.0	281 283 302 314 313 299	164.2
DHB-DEA-SF 0046	1466.25 1538.25 1610.40 1682.43 1754.47 1826.47	2300	155.0 170.0 173.0 194.1 191.0 191.5	17.2	305 303 302 320 331 324	179.1
DHB-DEA-SF 0047	1466.09 1538.18 1610.12 1682.17 1754.35 1826.23	2300	134.8 154.2 160.3 166.1 176.2 184.9	15.7	285 295 304 301 303 327	162.8
DHB-DEA-SF 0048	1466.31 1538.42 1610.42 1682.48 1754.38 1826.48	2300	142.2 151.6 165.3 179.7 182.7 179.9	15.2	295 296 292 311 320 308	166.9
DHB-DEA-SF 0049	1466.37 1538.38	2300	131.6 150.4	17.4	288 309	157.2

	1610.50 1682.62 1754.52 1826.66		160.6 165.8 163.5 172.0		301 304 314 312	
DHB-DEA-SF 0050	1466.31 1538.41 1610.33 1682.47 1754.35 1826.56	2300	145.1 158.2 160.6 170.3 175.3 173.2	16.5	286 300 306 308 316 323	163.8
DHB-DEA-SF 0051	1466.73 1538.85 1610.96 1682.96 1755.06 1827.13 1899.12	2300	137.8 159.1 162.9 162.8 175.9 169.0 174.5	16.9	269 285 295 288 304 306 309	190.2
DHB-DEA-SF 0052	1466.82 1538.93 1610.92 1683.05 1755.11 1827.27 1899.19	2300	132.7 157.6 151.4 151.6 157.7 167.8 160.5	15.8	271 302 278 289 281 310 312	179.9
DHB-DEA-SF 0053	1467.84 1539.88 1612.0 1683.92 1756.17 1828.29	2300	140.4 156.6 169.3 166.7 169.2 155.3	16.9	229 243 256 243 249 252	159.6
DHB-DEA-SF 0054	1466.62 1538.61 1610.78 1682.89 1754.88 1826.91	2400	149.8 176.7 180.8 182.7 196.2 186.0	19.2	249 275 268 276 280 272	178.7
DHB-DEA-SF 0055	1466.68 1538.68 1610.68 1682.76 1754.78 1826.79	2400	151.3 170.9 174.2 182.5 193.7 186.3	21.5	265 264 275 280 291 285	176.5

DHB-DEA-SF 0056	1466.66 1538.77 1610.71 1682.83 1754.84 1826.90	2400	135.6 145.3 165.3 173.9 165.1 164.2	20.1	287 281 295 296 296 305	158.2
DHB-DEA-SF 0057	1466.73 1538.84 1610.90 1683.04 1755.05 1827.05	2400	140.3 154.7 165.7 172.9 180.2 170.4	21.7	277 281 288 282 296 299	164.0
DHB-DEA-SF 0058	1466.62 1538.62 1610.67 1682.82 1754.66 1826.79	2400	141.7 164.1 162.2 160.2 160.6 180.5	22.1	267 293 281 288 304 309	161.6
DHB-DEA-SF 0059	1466.31 1538.39 1610.42 1682.46 1754.62 1826.61	2400	145.4 156.0 172.1 168.6 173.1 166.8	22.2	284 277 297 304 296 314	163.7
DHB-DEA-SF 0060	1466.76 1538.80 1610.91 1683.05 1755.09 1827.17	2400	153.5 159.6 170.3 174.6 179.9 171.8	20.8	279 275 289 287 304 291	168.3
DHB-DEA-SF 0061	1466.31 1538.34 1610.38 1682.42 1754.52 1826.55	2400	151.1 166.9 172.0 186.2 187.9 171.7	18.4	283 292 303 320 317 314	172.6
DHB-DEA-SF 0062	1466.63 1538.66 1610.73 1682.85 1754.83 1826.84	2400	142.0 159.3 173.3 175.7 177.2 183.3	21.8	267 278 295 286 301 298	168.5

**Table S-5. The data described of S/N of PLLA used IAA-DEA matrix by SF method.**

Solvent free C-1mg polymer C-50 mg matrix	Selected peak	Laser	S/N	RMS noise	Resolution FW/HM, 50%	Average S/N
IAA-DEA-SF-0047	1467.11 1539.32 1611.26 1827.60	<b>1900</b>	129.8 141.4 143.7 176.4	9.4	272 289 297 322	147.825
IAA-DEA-SF-0048	1467.11 1539.32 1611.26 1827.60	<b>1900</b>	129.8 141.4 143.7 176.4	9.4	272 289 297 322	147.825
IAA-DEA-SF-0049	1466.04 1537.98 1610.14 1826.32	<b>1900</b>	175.3 193.2 206.5 235.7	11.6	290 327 316 351	157.675
IAA-DEA-SF-0050	1466.04 1537.98 1610.14 1826.32	<b>1900</b>	175.3 193.2 206.5 235.7	11.6	290 327 316 351	202.675
IAA-DEA-SF-005	1466.33 1538.50 1610.49 1826.75	<b>1900</b>	160.4 172.7 193.9 216.0	12.4	309 329 326 342	185.75
IAA-DEA-SF-0052	1466.29 1538.47 1610.54 1826.67	<b>1900</b>	142.3 169.6 177.4 197.9	9.2	267 311 303 334	171.8
IAA-DEA-SF-0053w	1466.88 1539.14 1611.15 1827.67	<b>1900</b>	142.4 168.7 192.8 190.5	9.3	288 300 316 317	173.6
IAA-DEA-SF0054	1467.2 1539.43 1611.59 1827.88	<b>1900</b>	162.0 168.6 192.7 204.4	9.6	297 322 320 332	136.925
IAA-DEA-SF0055	1466.32 1538.22 1610.31 1826.56	<b>1800</b>	129.2 150.0 172.0 192.6	6.8	272 293 330 339	160.95
IAA-DEA-SF-0056	1465.05 1536.93 1609.13 1825.24	<b>1800</b>	98.8 112.3 133.9 144.3	7.0	260 297 315 325	122.325

IAA –DEA-SF 0057	1465.48 1537.37 1609.50 1825.67	<b>1800</b>	141.5 172.8 174.2 197.1	8.0	293 324 330 356	168.9
IAA-DEA-SF 0058	1465.68 1537.67 1609.71 1825.87	<b>1900</b>	157.4 175.5 194.6 190.6	8.8	291 319 310 326	179.525
IAA-DEA-SF 0059	1467.05 1539.10 1611.19 1827.65	<b>1900</b>	168.4 185.2 191.8 209.9	8.8	293 314 321 322	143.825
IAA-DEA-SF 0060	1466.51 1538.55 1610.68 1826.89	<b>1900</b>	136.0 150.8 161.5 185.5	7.5	291 313 327 335	158.45
IAA-DEA-SF- 0061	1466.01 1538.09 1610.16 1826.38	<b>1900</b>	161.6 168.0 189.4 182.1	9.5	307 319 329 340	175.275
IAA-DEA-SF 0062	1468.75 1540.97 1613.27 1829.77	<b>1900</b>	128.3 138.2 154.3 172.6	7.6	298 285 299 299	148.35
IAA –DEA-Sf 0063	1466.28 1538.43 1610.60 1826.71	<b>1900</b>	160.1 156.6 176.9 220.9	9.6	317 313 307 372	178.625
IAA –DEA-SF 0064I	1467.12 1539.26 1611.46 1827.67	<b>1900</b>	179.1 200.2 226.4 242	6.2	288 312 330 337	211.925
IAA-DEA-SF 0065	1467.12 1539.07 1611.17 1827.48	<b>1900</b>	130.1 150.5 154.6 178.2	10.3	284 312 328 333	153.35
IAA-DEA-SF- 0066	1467.08 1539.24 1611.31 1827.60	<b>1900</b>	137.3 158.2 160.2 190.2	11.0	303 324 320 363	161.475
IAA-DEA-SF- 0067	1467.46 1539.56 1611.68 1828.12	<b>1900</b>	136.0 152.1 161.8 171.6	33.6	310 317 349 348	155.375
IAA-DEA-SF 0068	1467.82 1540.03 1612.20 1828.58	<b>1900</b>	143.0 155.4 177.1 187.9	10.6	324 330 342 346	165.85
IAA-DEA-SF -	1466.59	<b>1900</b>	123.7	10.0	274	

0069	1538.82 1610.66 1827.09		142.8 149.0 159.4		309 320 313	143.725
IAA-DEA-SF-0070	1467.15 1539.32 1611.34 1827.72	<b>1900</b>	131.2 146.2 157.7 168.5	11.8	297 317 340 339	115.4
IAA-DEA-SF-0071	1467.97 1539.99 1612.26 1828.59	<b>1900</b>	120.8 112.7 141.5 145.1	8.2	243 249 280 285	130.075
IAA-DEA-SF-0072	1468.61 1540.93 1612.71 1829.45	<b>1900</b>	101.6 105.1 109.0 116.1	8.2	210 240 239 226	107.95
IAA-DEA-SF-0073	1467.04 1539.19 1611.36 1827.60	<b>1900</b>	138.2 151.8 155.7 175.7	11.5	277 295 288 306	155.35
IAA-DEA-SF-0074	1467.34 1539.64 1611.65 1828.07	<b>1900</b>	152.8 158.2 167.5 181.4	9.2	265 283 292 291	164.975
IAA-DEA-SF-0075	1467.77 1539.80 1611.96 1828.39	<b>1900</b>	149.0 163.7 179.4 192.1	10.5	178 295 283 310	171.05
IAA-DEA-SF-0076	1468.47 1540.80 1612.87 1829.52	<b>1900</b>	141.4 141.5 149.7 177.9	9.0	250 275 266 285	152.625
IAA-DEA-SF-00771	1468.84 1540.98 1613.16 1829.88	<b>1900</b>	120.0 130.1 145.5 177.3	9.5	284 296 313 334	143.225
IAA-DEA-SF-0078	1466.99 1539.06 1611.12 1827.37	<b>2000</b>	139.2 149.5 162.5 168.5	11.9	256 263 286 298	154.925
IAA-DEA-SF-0079	1465.73 1537.91 1610.00 1826.0	<b>1900</b>	151.0 159.2 175.3 190.8	9.3	308 310 323 340	169.075
IAA-DEA-SF-0080	1466.02 1538.10 1610.31 1826.53	<b>1900</b>	177.2 175.1 193.2 220.2	9.9	310 309 331 345	191.425
IAA-DEA-SF -	1467.57	<b>1900</b>	163.1	9.8	323	

0081	1539.74 1611.78 1828.19		176.2 192.8 211.9		317 340 350	186
IAA-DEA-SF-0082	1469.18 1541.35 1613.65 1830.25	<b>1900</b>	168.3 179.7 178.4 191.1	7.6	291 287 282 275	179.375
IAA-DEA-SF-0083	1466.52 1538.62 1610.46 1826.88	<b>1900</b>	150.9 157.8 173.5 201.5	8.1	304 308 332 349	125.925
IAA-DEA-SF-0084	1467.47 1539.65 1611.68 1828.17	<b>1900</b>	152.0 168.7 171.8 188.5	10.3	283 307 304 321	170.25
IAA-DEA-SF-0085	1467.91 1540.20 1612.29 1828.99	<b>1900</b>	116.5 139.8 144.8 165.5	7.5	252 264 260 277	141.65
IAA-DEA-SF-0086	1468.50 1540.70 1612.94 1829.74	<b>1900</b>	105.8 103.8 115.2 130.7	8.6	191 207 202 207	113.875
IAA-DEA-SF-00871	1467.36 1539.54 1611.61 1827.98	<b>2000</b>	160.7 161.6 188.7 199.9	14.6	294 303 311 324	177.725
IAA-DEA-SF-0088	1466.64 1538.83 1610.84 1827.17	<b>2000</b>	138.8 163.1 166.2 176.9	13.3	250 300 302 308	161.25
IAA-DEA-SF-0089	1467.72 1539.90 1612.0 1828.44	<b>2000</b>	147.8 166.6 185.5 197.5	13.3	302 321 338 345	174.35
IAA-DEA-SF-0090	1467.68 1539.78 1612.05 1828.40	<b>2000</b>	132.2 145.8 149.9 171.5	14.4	259 300 287 307	149.85
IAA-DEA-SF-0091	1467.86 1540.0 1612.09 1828.56	<b>2000</b>	129.4 148.6 150.6 174.3	16.0	268 298 286 314	150.725
IAA-DEA-SF-0092	1468.80 1541.06 1613.13 1829.71	<b>2000</b>	147.1 147.2 170.2 184.4	14.1	290 304 319 321	162.225
IAA-DEA-SF-	1467.16	<b>2000</b>	128.1	12.2	263	

0093	1539.37 1611.47 1827.88		148.6 153.0 156.6		297 305 294	146.575
IAA-DEA-SF-0094	1468.16 1540.49 1612.69 1829.19	<b>2000</b>	133.0 138.1 153.6 163.9	11.5	245 246 265 269	147.15
IAA-DEA-SF-0095	1467.75 1539.99 1611.95 1828.25	<b>2000</b>	122.8 138.5 145.7 152.9	12.4	212 231 235 237	139.975
IAA-DEA-SF-0096	1466.98 1539.11 1611.26 1827.55	<b>2000</b>	131.4 149.8 172.0 187.6	12.6	281 304 337 334	160.2
IAA-DEA-SF-0097	1468.21 1540.45 1612.54 1829.16	<b>2000</b>	155.7 163.7 183.4 184.8	13.9	275 291 311 290	171.9
IAA-DEA-SF-0098	1468.98 1541.29 1613.40 1830.10	<b>2000</b>	153.2 160.2 173.5 187.4	13.0	263 289 293 312	168.575
IAA-DEA-SF-0099	1469.88 1542.31 1614.55 1831.12	<b>2000</b>	120.3 138.3 152.3 167.7	11.0	214 246 251 259	144.65
IAA-DEA-SF-0100	1468.58 1541.0 1613.07 1829.59	<b>2000</b>	129.1 133.4 133.8 167.7	12.4	252 242 259 274	141
IAA-DEA-SF--0101	1466.70 1538.86 1611.04 1827.20	<b>2000</b>	137.7 147.2 154.2 161.1	14.7	247 275 268 272	150.05
IAA-DEA-SF-0102	1466.50 1538.70 1610.75 1826.96	<b>2000</b>	134.0 145.6 155.2 172.8	14.6	247 260 277 289	151.9
IAA-DEA-SF-0103	1466.95 1539.19 1611.32 1827.59	<b>2000</b>	144.9 152.6 153.1 174.7	15.5	265 293 281 295	156.325
IAA -DEA-SF-0104	1467.32 1539.64 1611.78 1828.13	<b>2000</b>	141.9 150.2 149.1 183.5	16.1	262 293 275 322	156.175
IAA-DEA-SF-	1467.54	<b>2000</b>	151.7	13.8	253	154.5



01051	1539.77 1611.91 1828.24		135.6 160.9 169.8		251 256 282	
IAA-DEA-SF-0106	1467.88 1540.10 1612.35 1828.93	<b>2000</b>	138.3 153.5 164.0 172.3	15.1	235 253 271 267	157.025
IAA-DEA-SF-0107	1468.68 1540.95 1613.17 1829.72	<b>2000</b>	148.6 153.8 167.1 177.9	14.7	275 294 300 317	161,85
IAA-DEA-SF-0108	1467.09 1539.13 1611.39 1827.62	<b>2000</b>	153.1 156.4 174.5 184.0	15.3	265 285 291 302	167.0
IAA-DEA-SF-01091	1467.52 1539.67 1611.88 1828.27	<b>2000</b>	150.4 159.2 177.9 180.3	14.5	281 283 294 298	166.95
IAA-DEA-SF-0110lin	1467.25 1539.40 1611.48 1827.91	<b>2000</b>	145.5 143.5 158.5 168.0	15.3	255 271 291 299	153.875
IAA-DEA-SF-0111	1467.10 1539.36 1611.50 1827.86	<b>2000</b>	149.9 161.2 171.3 183.7	14.7	255 276 298 297	166.525
IAA-DEA-SF-0112	1467.26 1539.48 1611.69 1828.03	<b>2000</b>	152.0 170.7 168.1 187.0	14.9	238 294 270 296	169.45
IAA-DEA-SF-0113	1468.61 1540.82 1612.88 1829.43	<b>2000</b>	141.2 160.3 169.0 180.5	14.8	271 286 302 303	162.75
IAA-DEA-SF-0114	1468.59 1540.80 1613.02 1829.79	<b>2000</b>	131.3 151.2 146.8 165.7	16.8	250 274 281 280	148.75
IAA-DEA-SF-0115	1468.50 1540.61 1612.94 1829.39	<b>2000</b>	116.5 131.4 136.9 154.4	15.4	199 229 229 230	134.8
IAA-DEA-SF-0116	1469.15 1541.49 1613.70 1830.30	<b>2000</b>	149.7 148.9 162.0 168.6	16.3	258 277 277 295	157.3
IAA-DEA-SF-	1468.62	<b>2000</b>	119.3	13.1	219	134.2

0117	1540.83 1613.02 1829.54		127.5 142.4 147.6		237 244 247	
IAA-DEA-SF-0118	1468.96 1541.22 1613.30 1829.99	<b>2000</b>	120.3 127.8 144.9 150.8	12.7	209 217 234 236	135.9
IAA-DEA-SF 0119	1467.24 1539.58 1611.60 1828.10	<b>2000</b>	129.7 147.7 154.4 150.0	14.0	225 260 267 255	145.45
IAA –DEA-SF 0120	1467.91 1540.32 1612.48 1829.01	<b>2000</b>	133.2 147.4 153.2 175.2	13.7	259 261 260 289	152.25
IAA –DEA-SF 0121	1468.90 1541.24 1613.38 1830.03	<b>2000</b>	136.1 139.2 153.2 166.6	15.2	231 254 258 269	148.78
IAA-DEA-SF 0122	1470.18 1542.55 1614.91 1831.69	<b>2000</b>	137.0 136.2 153.4 159.7	14.7	250 258 259 267	146.575

**Table S-6. The data described of S/N of PLLA used IAA-DEA matrix by DD method.**

<b>Dried Droplet IAA-DEA-PLLA C-polymer(0.1g/ml) C-matrix(0.25g/ml)</b>	Selected peak	Laser	S/N	RMS noise	Resolution FW/HM, 50%	Average S/N
IAA-DEA-DD 0001	1394.4 1466.4 1538.5	1900	457.4 506.3; 476.3	12.0	321 315 309	480;
IAA-DEA-DD 0002	1393.7 1465.7 1537.8	1900	634.6 715.0; 699.1	12.1	339 339 341	682.9;
IAA-DEA-DD 0003	1393.6 1465.6 1537.6	1900	590.3 679.5; 643.8	11.4	309 310 311	637.8;
IAA-DEA-DD 0004	1393.7 1465.7 1537.8	1900	572.4 619.3; 578.3	13.6	321 316 317	590;
IAA-DEA-DD	1393.4	1900	612.0	12.3	308	655.7;

0005	1465.4 1537.4		698.6; 656.4		318 314	
IAA-DEA-DD 0006	1394.1 1466.1 1538.1	1900	430.2 502.0; 466.9	8.7	320 335 335	466.4;
IAA-DEA-DD 0007	1393.7 1465.8 1537.8	1900	553.4 612.4; 556.7	11.1	336 340 343	574.2,
IAA-DEA-DD 0008	1393.5 1465.5 1537.5	1800	703.7 750.7; 700.2	11.7	341 344 352	718.1;
IAA-DEA-DD 0009	1394.2 1466.2 1538.2	1900	453.2 507.1; 452.5	10.4	341 354 344	470.9;
IAA-DEA-DD 0010	1393.2 1465.1 1537.1	1900	532.2 659.2; 660.2	8.2	339 343 357	617.1;
IAA-DDEA-DD 0011	1392.9 1464.8 1536.8	1900	385.4 531.5; 548.5	8.0	316 327 331	488.5;
IAA-DEA-DD 0012	1393.1 1465.1 1537.1	1900	616.6 712.6; 685.3	9.8	335 340 345	671.5;
IAA-DEA-DD 0013	1393.3 1465.3 1537.3	1900	528.2 613.5; 593.0	9.7	306 308 312	578.1;
IAA-DEA-DD 0014	1394.2 1466.2 1538.3	1900	360.1 406.2; 368.9	8.8	272 280 291	378.4;
IAA-DEA- DD0015	1394.1 1466.1 1538.1	1900	530.0 564.5; 518.1	10.4	338 350 350	537.5;
IAA-DEA-DD 0016	1394.0 1466.0 1537.9	1900	464.7 492.8; 460.6	8.7	313 327 322	472.6;
IAA-DEA DD 0017	1394.5 1466.6 1538.7	1900	468.9 485.7; 438.9	9.5	344 336 331	464.5;
IAA-DEA-DD 0018	1394.0 1466.0 1538.1	1900	564.3 570.3; 527.6	10.7	340 332 342	554.1;
IAA-DEA-DD 0019	1393.6 1465.6 1537.6	1900	479.3 538.3; 534.9	9.5	338 338 355	517.5;
IAA-DEA-DD	1394.2	1900	325.4	10.2	266	346.4;

0020	1466.2 1538.2		365.3; 348.4		282 277	
IAA-DEA-DD 0021	1393.4 1465.4 1537.4	1900	641.2 709.0; 699.4	9.0	331 338 347	683.2;
IAA-DEA-DD 0022	1393.6 1465.6 1537.6	1900	520.6 633.6; 624.2	7.6	320 332 347	592.8;
IAA-DEA-DD 0023	1394.5 1466.5 1538.6	1900	408.1 444.7; 407.9	9.3	343 342 347	420.1;
IAA-DEA-DD 0024	1394.3 1466.3 1538.4	1900	539.7 592.6; 536.7	9.6	337 343 341	556.2;
IAA-DEA-DD 0025	1394.1 1466.1 1538.2	1900	561.6 588.9; 537.2	9.5	339 345 344	562.6;
IAA-DEA-DD 0026	1393.7 1465.7 1537.8	1900	489.1 565.7; 506.1	8.3	308 324 327	520.3;
IAA-DEA-DD 0027	1393.9 1466.0 1537.9	1900	543.5 583.4; 584.5	9.0	328 331 345	570.5;
IAA-DED-DD 0028	1394.2 1466.2 1538.3	1900	563.6 584.1; 523.0	10.2	334 328 342	556.9;
IAA-DEA-DD 0029	1394.2 1466.2 1538.3	1900	526.0 569.0; 505.9	9.9	345 346 338	533.5;
IAA-DEA-DD 0030	1394.2 1466.2 1538.2	1900	417.2 444.5; 427.6	9.1	297 293 295	429.8;
IAA-DEA-DD 0031	1394.3 1466.3 1538.4	1900	560.1 586.7; 538.1	9.8	342 345 343	561.5;
IAA-DEA-DD 0032	1394.0 1466.0 1538.0	1900	441.0 510.2; 483.0	8.3	340 346 332	478.1;
IAA-DEA-DD 0033	1394.0 1466.0 1538.0	1900	441.0 510.2- 483.0	8.3	340 346 332	478.1

IAA-DEA-DD 0034	1394.3 1466.3 1538.4	1900	585.7 660.9; 619.8	10.0	347 356 366	622.1;
IAA-DEA-DD 0035	1393.7 1465.7 1537.7	1900	548.5 629.5; 599.8	9.2	331 339 327	592.5;
IAA-DEA-DD 0036	1393.5 1465.5 1537.5	1900	541.0 609.6; 597.2	9.9	327 330 338	582.5;
IAA-DEA-DD 0037	1393.8 1465.8 1537.8	1900	644.4 720.1; 645.0	10.1	354 355 347	669.7;
IAA-DEA-DD 0038	1394.8 1466.9 1538.9	1900	466.0 487.0; 433.4	10.2	336 353 345	462.1;
IAA-DEA-DD 0039	1394.2 1466.2 1538.2	1900	574.2 619.7; 582.6	8.9	340 344 348	592.2;
IAA-DEA-DD 0040	1393.1 1465.7 1537.7	1900	556.2 606.7; 606.5	9.0	339 336 343	589.7;
IAA-DEA-DD 0041	1394.8 1466.9 1539.0	1900	465.2 488.5; 432.2	10.0	341 343 343	461.9;
IAA-DEA-DD 0042	1393.9 1465.9 1537.9	1900	643.9 683.5; 627.4	10.3	336 339 352	651.5;
IAA-DEA-DD 0043	1394.0 1466.0 1538.1	1900	507.9 550.0; 535.9	9.6	325 315 323	531.3;
IAA-DEA-DD 0044	1394.1 1466.1 1538.1	1900	610.6 657.6; 616.2	8.6	336 344 343	628.1;
IAA-DEA-DD 0045	1394.8 1466.9 1538.9	1900	466.0 487.0; 433.4	10.2	336 353 345	462.1;
IAA-DEA-DD 0046	1394.1 1466.1 1538.1	1900	492.6 514.9; 512.1	9.7	329 333 338	506.4;
IAA-DEA-DD 0047	1394.2 1466.1 1538.2	1900	504.8 563.3; 527.3	6.9	322 335 330	531.7;
IAA-DEA-DD 0048	1394.3 1466.4	1900	536.9 562.5;	10.8	345 342	539.2;

	1538.4		518.1		353	
IAA-DEA-DD 0049	1394.5 1466.5 1538.6	1900	529.7 527.1; 479.3	10.5	335 334 341	512.0;
IAA-DEA-DD 0050	1394.8 1466.8 1538.9	1900	471.5 476.9; 432.8	9.4	335 340 343	460.3;
IAA-DEA-DD 0051	1394.2 1466.2 1538.2	1900	564.5 618.4; 547.8	8.1	343 358 355	576.9
IAA-DEA-DD 0052	1394.4 1466.4 1538.4	1900	572.0 631.6; 551.8	9.3	337 352 347	585.1;
IAA-DEA-DD 0053	1394.7 1466.8 1538.9	1900	488.5 487.9; 423.6	10.2	344 337 347	466.7;
IAA-DEA-DD 0054	1394.4 1466.5 1538.5	1900	549.9 581.1; 517.5	9.5	339 345 335	549.5;
IAA-DEA-DD 0055	1394.0 1466.0 1538.0	1900	648.9 732.9; 678.2	9.5	351 349 354	686.7;
IAA-DEA-DD 0056	1394.0 1466.1 1538.1	1900	538.9 595.3; 558.3	10.5	341 344 347	564.2;
IAA-DEA-DD 0057	1394.6 1466.6 1538.6	1900	558.0 618.7; 554.5	9.1	341 355 345	577.1;
IAA-DEA-DD 0058	1394.4 1466.3 1538.5	1900	298.6 305.7; 285.6	8.9	286 305 300	296.5;
IAA-DEA-DD 0059	1393.8 1465.8 1537.8	1900	505.6 633.5; 613.4	7.2	327 342 341	584.2;
IAA-DEA-DD 0060	1394.4 1466.4 1538.4	1900	499.2 541.1; 478.9	8.6	321 333 323	506.3;
IAA-DEA-DD 0061	1394.7 1466.8 1538.8	1900	550.6 556.7; 513.1	9.9	341 344 344	540.1;
IAA-DEA-DD 0062	1394.2 1466.2 1538.2	1900	639.8 700.4; 617.1	10.4	338 345 344	652.3;
IAA-DEA-DD	1394.6	1900	623.8	9.1	339	607.2;

0063	1466.6 1538.6		634.9; 563.2		339 328	
IAA-DEA-DD 0064	1394.1 1466.2 1538.2	1900	527.4 588.2; 572.9	7.4	339 331 340	562.7;
IAA-DEA-DD 0065	1394.5 1466.5 1538.6	1900	331.9 379.5; 361.6	8.4	277 296 297	357.7;
IAA-DEA-DD 0066	1394.8 1466.9 1539.0	1900	589.2 603.0; 516.0	9.9	343 355 343	569.3;
IAA-DEA-DD 0067	1394.8 1466.9 1538.9	1900	514.7 546.0; 478.4	9.5	342 346 344	513.0;
IAA-DEA-DD 0068	1394.6 1466.7 1538.7	1900	604.4 590.2; 540.6	9.3	346 338 349	578.3;
IAA-DEA-DD 0069	1394.6 1466.7 1538.7	1900	538.2 585.2; 523.6	10.0	328 348 344	549.0;
IAA-DEA-DD 0070	1394.1 1466.1 1538.1	1900	506.7 599.8; 547.4	7.3	336 350 351	551.2;
IAA-DEA-DD 0071	1395.0 1467.1 1539.4	1900	487.5 490.4; 433.4	9.4	349 348 349	470.3;
IAA-DEA-DD 0072	1394.0 1466.0 1538.0	1900	563.6 687.4; 648.6	7.7	341 353 347	633.1;
IAA-DEA-DD 0073	1394.2 1466.2 1538.2	1900	578.9 611.5; 569.5	9.1	331 328 336	586.5;
IAA-DEA-DD 0074	1394.9 1466.9 1539.0	1900	500.0 503.8; 465.1	9.1	343 343 356	489.5;
IAA-DEA-DD 0075	1394.6 1466.7 1538.7	11900	607.2 614.0; 538.7	10.2	352 352 351	586.5;
IAA-DEA-DD 0076	1394.3 1466.4 1538.5	1900	574.0 712.4; 625.8	9.0	354 360 349	637.3;
IAA-DEA-DD 0077	1394.4 1466.5 1538.5	1900	744.3 896.4; 842.6	9.6	352 357 361	827.8;
IAA-DEA –DD	1394.7	1900	680.6	9.0	343	686.5;

0078	1466.7 1538.8		743.3; 635.9		360 339	
IAA-DEA-DD 0079	1394.1 1466.1 1538.2	1900	609.4 744.1; 710.0	8.4	350 361 355	687.7;
IAA-DEA-DD 0080	1394.7 1466.8 1539.0	1900	703.3 764.2; 669.3	8.8	347 362 351	712.3;
IAA-DEA-DD 0081	1394.8 1466.9 1539.0	1900	628.9 685.7; 607.2	9.7	357 352 353	640.5;
IAA-DEA-DD 0082	1394.5 1466.5 1538.6	1900	779.1 890.0; 832.3	9.3	358 369 373	833.7;
IAA-DEA-DD 0083	1394.1 1466.1 1538.2	1900	552.1 652.0; 609.3	8.4	326 337 333	604.5;
IAA-DEA-DD 0084	1394.2 1466.2 1538.2	1900	724.4 831.3; 749.3	10.8	349 356 350	768.2;
IAA-DEA-DD 0085	1394.7 1466.8 1538.9	1900	600.7 601.3; 542.7	10.0	347 355 352	581.6;
IAA-DEA-DD 0086	1394.3 1466.3 1538.3	1900	655.7 723.3; 654.2	10.4	345 349 348	677.6;
IAA-DEA-DD 0087	1394.1 1466.2 1538.2	1900	646.3 679.6; 607.5	10.1	361 350 355	644.5;
IAA-DEA-DD 0088	1394.6 1466.5 1538.6	1900	516.7 573.9; 506.4	10.6	326 327 324	532.2;
IAA-DEA-DD 0089	1394.5 1466.5 1538.5	1900	472.2 509.4; 486.8	9.4	311 315 323	489.5;
IAA-DEA-DD 0090	1394.4 1466.4 1538.4	1900	581.1 621.9; 556.3	9.6	330 342 337	586.3;
IAA-DEA-DD 0091	1394.5 1466.5 1538.5	1900	639.5 642.8; 565.2	10.0	343 342 338	615.7;
IAA-DEA-DD 0092	1394.9 1467.0 1539.1	1900	595.5 609.2; 523.0	9.4	341 343 340	575.9;
IAA-DEA-DD	1394.6	1900	540.9	9.8	332	547.8;



0093	1466.7 1538.8		573.5; 528.9		329 336	
IAA-DEA-DD 0094	1393.6 1465.5 1537.5	1900	535.9 618.1; 576.0	8.2	339 346 344	576.7;
IAA-DEA-DD 0095	1393.7 1465.7 1537.8	1900	642.2 703.2; 604.8	8.3	339 347 338	650.1;
IAA-DEA-DD 0096	1394.0 1466.0 1538.1	1900	481.6 544.2; 495.0	9.0	322 336 333	506.8;
IAA-DEA-DD 0097	1393.3 1465.3 1537.2	1900	565.6 641.0; 644.4	10.0	326 328 341	617.0;
IAA-DEA-DD 0098	1393.8 1465.8 1537.8	1900	507.4 540.9; 515.0	10.5	314 311 331	521.1;
IAA-DEA-DD 0099	1393.8 1465.8 1537.8	1900	504.5 566.6; 524.6	9.9	322 329 335	531.9;
IAA-DEA-DD 00100	1394.0 1466.1 1538.1	1900	555.8 557.1; 516.7	9.7	345 333 347	543.1