

Figure A30 Definition of Asymmetry

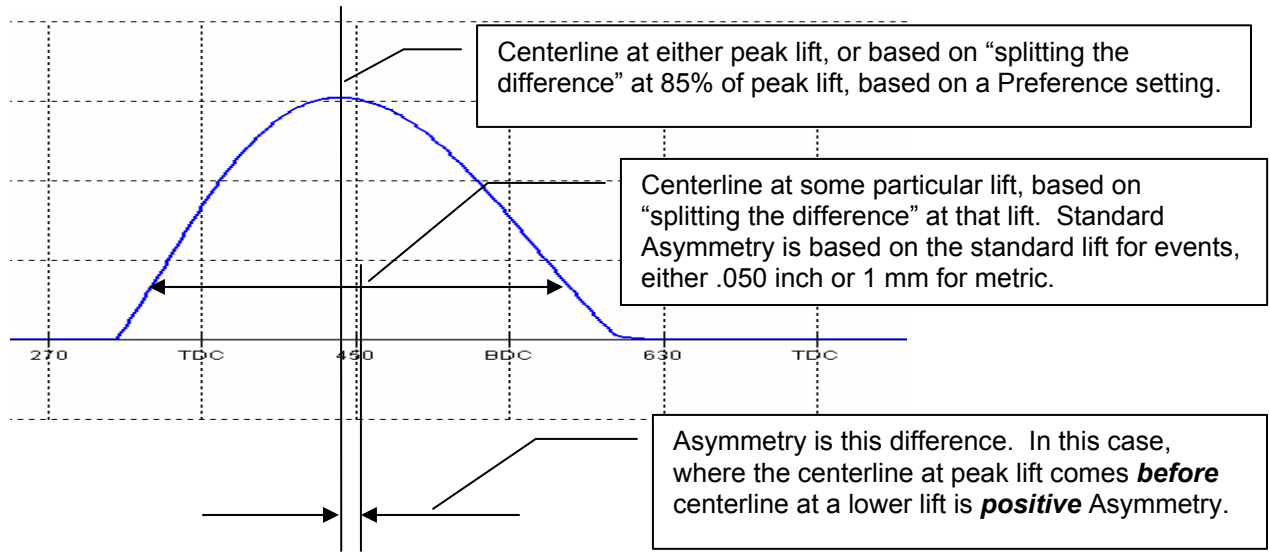


Figure A31 Lobe Analysis Report of **Cam Lobe** Data

		Cam Analyzer v3.8		Koehler Injection		This Report Printed:					
Test: SB Chevy on Stand Folder: EXAMPLES		www.koehlerinjection.com		Performance Trends (c) 2008		2:13 pm 06-30-08					
Report of: Cyl 1, Valve Data Test Time: 11:33 am 06/08/2005 Events Rated at .05" Tappet Lift						Page: 1					
CLine	Dur	Open	Close	Lb Area	Lb Lift	Viv Lift	RAR	Lash	LbSep/Adv	Overlap	ASym
Int: 102.0	259.0	27.4	51.6	32.21	.365	.547	1.5	.026	105.5	52.5	0.08
Exh: 109.0	268.0	62.9	25.1	34.51	.382	.573	1.5	.028	3.5 Advance		0.04
				I 1	E 1						
Max Tappet Lift, in				.3649	.3819						
Centerline (int=ATDC, exh=BTDC)				102.00	108.98						
Base Circle Runout, in				.0018	.0005						
Max Opening Vel, in/deg				6.991	6.957						
Max Closing Vel, in/deg				7.012	6.930						
Min Radius of Curvature, in											
Min Rad. Curv. occurs at											
Contact Pt Movement (open), in											
Contact Pt Movement (close), in											
Opening at .006, in				57.94	99.57						
Closing at .006, in				90.02	66.45						
Opening Vel at .006, in/deg				1.51	1.10						
Closing Vel, .006, in/deg				-.97	-.88						
Opening at .01, in				52.86	92.85						
Closing at .01, in				83.34	58.73						
Opening Vel at .01, in/deg				1.75	1.35						
Closing Vel, .01, in/deg				-1.27	-1.12						
Opening at .02, in				43.33	80.48						
Closing at .02, in				69.85	43.56						
Opening Vel at .02, in/deg				2.85	2.24						
Closing Vel, .02, in/deg				-2.19	-2.09						
Opening at .050, in				27.41	62.93						
Closing at .050, in				51.57	25.05						
Asymetry at .050, in				0.08	0.04						
Opening at .200, in				-17.87	16.99						
Closing at .200, in				5.98	-21.02						
Asymetry at .200, in				-.07	-.02						
Max Opening Accel, in/deg^2				.308	.321						
Max Accel over Nose, in/deg^2				-.203	-.211						
Max Closing Accel, in/deg^2				.334	.339						
Area Above .050 in, in-deg				24.98	26.91						
Duration at .004 in, in-deg				335.42	354.27						
Duration at .006 in, deg				327.96	346.02						
Duration at .01 in, deg				316.20	331.58						
Duration at .02 in, deg				293.18	304.04						
Duration at .050 in, deg				258.97	267.98						
Duration at .100 in, deg				225.45	233.95						
Duration at .200 in, deg				168.12	175.96						
Duration at .300 in, deg				103.44	114.37						
4-50 Index, deg				76.45	86.29						
10-50 Index, deg				57.23	63.60						
20-50 Index, deg				34.21	36.06						

Basic "summary" of these lobes

These outputs are not calculated unless you have measured the cam with the linear encoder **directly** and then used the Virtual Follower feature to calculate the lobe.

Data for estimating performance of opening and closing ramps, at some standard lifts. Remember these are **cam** lifts and not **valve** lifts so are not equal to these valve lash settings.

Events at more standard lifts, and Asymmetry. Velocities not given because these lifts are not close to typical valve lash settings.

More standard measurements for these lobes.

The Indexes are calculated from the subtracting the duration at .050" from the duration at .004, .010 and .020 inches. The larger these number, the more "gentle" the ramp at that lift.