HESSI Shutter Specifications

	Density of Aluminim	6061-T6 =	2.71	g/cm3													
	shutter ID		**A1-1**	**A1-2**	**A1-3**	**A2**	**A3**	**A4**	**A5-1**	**A5-2**	**A6**	**A7-1**	**A7-2**	**A8**	**A9-1**	**A9-2**	
Inner Area																	
	diameter	mm	1.716	1.716	1.716	1.716	1.716	1.716	1.940	1.940	1.716	2.050	2.050	1.940	3.360	3.360	
	thickness	mm	0.050	0.050	0.050	0.050	0.050	0.050	0.060	0.060	0.050	0.060	0.060	0.060	0.100	0.100	
	volume	mm^3	0.116	0.116	0.116	0.116	0.116	0.116	0.177	0.177	0.116	0.198	0.198	0.177	0.887	0.887	
Middle Area																	
	diameter	mm	24.300	24.300	24.300	24.300	24.300	24.300	24.300	24.300	24.300	24.300	24.300	24.300	24.300	24.300	
	thickness	mm	0.61	0.61	0.61	0.61	0.61	0.61	0.53	0.53	0.62	0.53	0.53	0.53	0.57	0.57	
	volume	mm^3	281.489	281.489	281.489	281.489	281.489	281.489	244.231	244.231	286.103	244.049	244.049	244.231	259.295	259.295	
Outer Area																	
	diameter	mm	61.50	61.50	61.50	61.50	61.50	61.50	61.50	61.50	61.50	61.50	61.50	61.50	61.50	61.50	
	thickness	mm	1.53	1.53	1.53	1.52	1.53	1.54	1.44	1.44	1.53	1.44	1.44	1.44	1.47	1.48	
	volume	mm^3	3835.41	3835.41	3835.41	3810.34	3835.41	3860.48	3609.80	3609.80	3835.41	3609.80	3609.80	3609.80	3685.00	3710.07	
Ears (estimate)		mm^3	174.42	174.42	174.42	173.28	174.42	175.56	164.16	164.16	174.42	164.16	164.16	164.16	167.58	168.72	
Total volume		mm^3	4291.43	4291.43	4291.43	4265.22	4291.43	4317.64	4018.36	4018.36	4296.05	4018.20	4018.20	4018.36	4112.76	4138.97	
Calculated Weight		g	11.63	11.63	11.63	11.56	11.63	11.70	10.89	10.89	11.64	10.89	10.89	10.89	11.15	11.22	
Measured Weight		g	11.6102	11.5913	11.5813	11.5760	11.5911	11.6331	10.8526	10.8045	11.6218	10.8682	10.8674	10.8712	11.0861	11.1789	
																Average	Std. Dev.
Difference (M-C)		g	-0.020	-0.038	-0.048	0.017	-0.039	-0.068	-0.037	-0.085	-0.020	-0.021	-0.022	-0.019	-0.059	-0.038	-0.037	0.027
Difference		%	-0.2	-0.3	-0.4	0.1	-0.3	-0.6	-0.3	-0.8	-0.2	-0.2	-0.2	-0.2	-0.5	-0.3		