

3h Cooling Loop			
ring	#	insert facing	distance [mm]
15.3		1 down	72.9
		2 up	12.3
		3 up	78.4
		4 down	12.3
		5 down	78.4
		6 up	12.3
		7 up	78.4
		8 down	12.3
		9 down	78.4
		10 up	12.3
		11 up	78.4
		12 down	12.3
15.2		13 down	91.4
		14 up	16.15
		15 down	157.8
		16 up	16.15
		17 down	157.8
		18 up	16.15
15.1		19 down	171.3
		20 up	20
		21 up	63
		22 down	20
		23 down	63
		24 up	20
		25 up	63
		26 down	20
		27 down	63
		28 up	20
		29 up	63
		30 down	20
13.3		31 up	128.5
		32 down	12.6
		33 down	77.8
		34 up	12.6
		35 up	77.8
		36 down	12.6
		37 down	77.8
		38 up	12.6
		39 up	77.8
		40 down	12.6
13.2		41 up	161.9
		42 down	17.2
		43 up	154.9
		44 down	17.2
13.1		45 up	171
		46 down	21.7
		47 down	59.6
		48 up	21.7
		49 up	59.6
		50 down	21.7
		51 down	59.6
		52 up	21.7
		53 up	59.6
		54 down	21.7
		55 down	135.6
11.3		56 up	13.6
		57 up	75.9
		58 down	13.6
		59 down	75.9
		60 up	13.6
		61 up	75.9
		62 down	13.6
		63 down	91.4
11.2		64 up	19.2
		65 down	149
		66 up	19.2
		67 down	170.2
11.1		68 up	24.8
		69 up	53.4
		70 down	24.8
		71 down	53.4
		72 up	24.8
		73 up	53.4
		74 down	24.8
		75 up	1925.2
11.2		76 up	46.5
11.3		77 up	46.5
13.1		78 up	88
13.2		79 up	46.5
13.3		80 up	46.5
15.1		81 up	83.2
15.2		82 up	46.5
15.3		83 up	46.5
			42.5
sum			6516.25

2h Cooling Loop			
ring	#	insert facing	distance [mm]
15.3		1 down	76
		2 up	12.3
		3 up	78.4
		4 down	12.3
		5 down	78.4
		6 up	12.3
		7 up	78.4
		8 down	12.3
		9 down	78.4
		10 up	12.3
		11 up	78.4
		12 down	12.3
15.2		13 down	91.4
		14 up	16.15
		15 down	157.8
		16 up	16.15
		17 down	157.8
		18 up	16.15
15.1		19 down	171.3
		20 up	20
		21 up	63
		22 down	20
		23 down	63
		24 up	20
		25 up	63
		26 down	20
		27 down	63
		28 up	20
		29 up	63
		30 down	20
13.3		31 down	129.2
		32 up	12.6
		33 up	77.8
		34 down	12.6
		35 down	77.8
		36 up	12.6
		37 up	77.8
		38 down	12.6
		39 down	77.8
		40 up	12.6
13.2		41 up	91.4
		42 down	17.2
		43 up	154.9
		44 down	17.2
13.1		45 up	154.9
		46 down	17.2
		47 down	91.4
		48 up	21.7
		49 up	59.6
		50 down	21.7
		51 down	59.6
		52 up	21.7
		53 up	59.6
		54 down	21.7
		55 down	59.6
11.3		56 up	21.7
		57 down	134.2
		58 up	13.6
		59 up	75.9
		60 down	13.6
		61 down	75.9
		62 up	13.6
		63 up	75.9
11.2		64 down	13.6
		65 down	91.4
		66 up	19.2
		67 down	149
11.1		68 up	19.2
		69 down	170.2
		70 up	24.8
		71 up	53.4
		72 down	24.8
		73 down	53.4
		74 up	24.8
		75 up	53.4
sum			2683.4
			6806.15

1h Cooling Loop			
ring	#	insert facing	distance [mm]
15.3		1 down	64.4
		2 up	12.3
		3 up	78.4
		4 down	12.3
		5 down	78.4
		6 up	12.3
		7 up	78.4
		8 down	12.3
		9 down	78.4
		10 up	12.3
		11 up	78.4
		12 down	12.3
15.2		13 up	163.6
		14 down	16.15
		15 up	157.8
		16 down	16.15
		17 up	157.8
		18 down	16.15
15.1		19 down	91.4
		20 up	20
		21 up	63
		22 down	20
		23 down	63
		24 up	20
		25 up	63
		26 down	20
		27 down	63
		28 up	20
		29 up	63
		30 down	20
13.3		31 down	128.5
		32 up	12.6
		33 up	77.8
		34 down	12.6
		35 down	77.8
		36 up	12.6
		37 up	77.8
		38 down	12.6
		39 down	77.8
		40 up	12.6
13.2		41 down	161.9
		42 up	17.2
		43 down	154.9
		44 up	17.2
13.1		45 down	171
		46 up	21.7
		47 up	59.6
		48 down	21.7
		49 down	59.6
		50 up	21.7
		51 up	59.6
		52 down	21.7
		53 down	59.6
		54 up	21.7
		55 down	135.6
11.3		56 up	13.6
		57 up	75.9
		58 down	13.6
		59 down	75.9
		60 up	13.6
		61 up	75.9
		62 down	13.6
		63 up	158.9
11.2		64 down	19.2
		65 up	149
		66 down	19.2
		67 down	91.4
11.1		68 up	24.8
		69 up	53.4
		70 down	24.8
		71 down	53.4
		72 up	24.8
		73 up	53.4
		74 down	24.8
		75 down	1918.5
11.3		76 down	93.8
13.1		77 up	88
13.2		78 up	46.5
13.3		79 up	46.5
15.1		80 down	83.2
15.3		81 down	93
sum			6482.75