



Installation Data Pack for Fleet Air Arm Museum

Address	RNAS Yeovilton Ilchester Somerset. BA22 8HT
Pipe Type	Europe
Date	16/11/11
Installer	Wessex Fire & Security
Calculated By	Ian Wilson
Units	Metric
Altitude	0.0m
Designed with Hole Sizes	3.0mm

Detector : Hall 1

Flow Calculations found there were problems with this detector. Check below for errors (marked as !?) or warnings (marked as !).

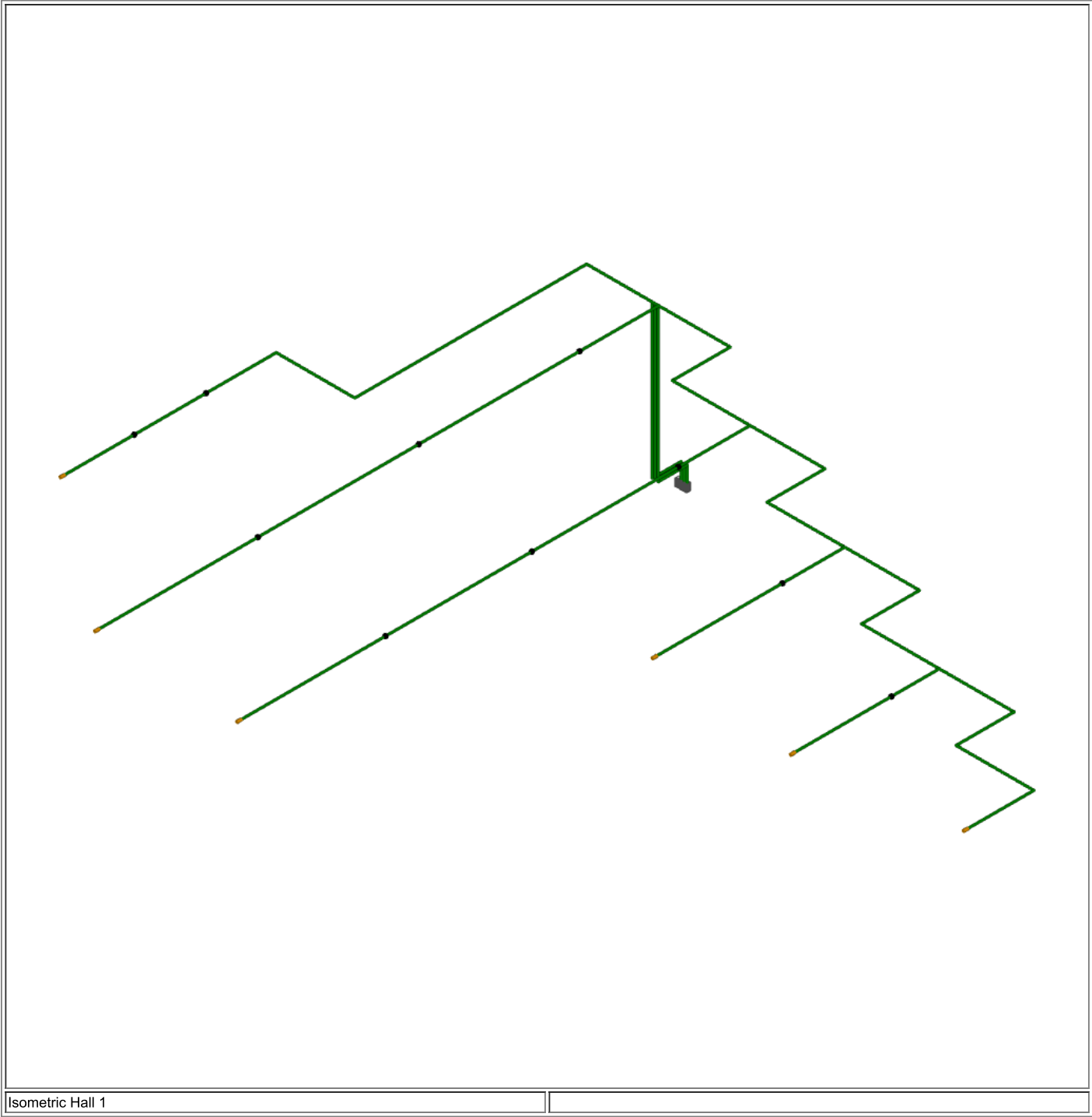
Type	VESDA VLP
Endcap Usage	Create a Balanced Design
Application	default
Aspirator Speed	3660
Fire	0.200%/m
Air Temperature	20.0°C
Absolute Pressure	1013hPa
System Flowrate	71.2l/min
Total Pipe Length	230.3m
Number Of Sample Points	16
Maximum Transport Time	112
Minimum Hole Flow Rate	2.0l/min
Exhaust Length	0.0m
Exhaust Diameter	21.0mm
Exhaust Pressure Drop	0Pa
Inverted Detector	No

Sampling Point Sensitivity

Threshold	Level	Classification	Hole Aggregation
Fire	0.200%/m	Class C	1

Group Details

	Hole Sensitivity	Pressure	Transport Time	Hole Diameter	[Default Group]
Group Type					
Max Target Aggregate Sensitivity					0.300
Min Target Aggregate Sensitivity					0.100
Contribution ratio(%)					100
Applied Max Aggregate Sensitivity					0.300
Applied Min Aggregate Sensitivity					0.100
Target Suction Pressure					25
Target Balance					70
Exclude from Autobalance					0
1:Section0-1	2.888	159	42	3.0	X
1:Section0-2	2.917	156	48	3.0	X
1:Section0-3	2.493	154	60	3.0	X
2:Section0-1	2.769	173	15	3.0	X
2:Section0-2	2.857	163	25	3.0	X
2:Section0-3	2.921	156	39	3.0	X
2:Section0-4	2.513	152	65	3.0	X
3:Section1-1	3.593	103	19	3.0	X
3:Section1-2	3.725	96	31	3.0	X
3:Section1-3	3.824	91	47	3.0	X
3:Section1-4	3.298	88	78	3.0	X
3:Section2-1	3.927	86	33	3.0	X
3:Section2-2	3.382	84	61	3.0	X
3:Section3-1	4.168	76	50	3.0	X
3:Section3-2	3.581	75	73	3.0	X
3:Section0-1	3.615	73	112	3.0	X
Number of holes					16
Flow Share(%)					100
Aggregate Sensitivity					0.200
Balance(%)					!? 60
Suction pressure (least)					73



Isometric Hall 1

Pipe:Pipe 1

Total Pipe Length52.0m

Ambient Pressure0Pa

Sector Pressure203Pa

Number of Sample Points3

Pipe Flowrate15.5l/min

Section0

Pipe Diameter 21.0mm

#		Distance m	Relative m	Direction	Hole Diameter mm	Capillary Length	Transport Time sec	Pressure Pa	Flow l/min	Flow %	Hole Sensitivity %/m	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
-	Bend 90	1.00	1.00	B										
-	Bend 90	2.90	1.90	U										
-	Bend 90	12.90	10.00	L										
-	Bend 90	17.60	4.70	B										
-	Bend 90	32.80	15.20	L										
-	Bend 90	37.95	5.15	B										
1:Section0-1	Hole	42.56	4.61		3.0		42	159	4.9	6.9	2.888	21.0		
1:Section0-2	Hole	47.27	4.71		3.0		48	156	4.9	6.9	2.917	21.0		
1:Section0-3	Endcap	51.98	4.71		3.0		60	154	5.7	8.0	2.493	21.0		

Pipe:Pipe 2

Total Pipe Length50.0m

Ambient Pressure0Pa

Sector Pressure202Pa

Number of Sample Points4

Pipe Flowrate20.7l/min

Section0

Pipe Diameter 21.0mm

#		Distance m	Relative m	Direction	Hole Diameter mm	Capillary Length	Transport Time sec	Pressure Pa	Flow l/min	Flow %	Hole Sensitivity %/m	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
-	Bend 90	1.00	1.00	B										
-	Bend 90	2.90	1.90	U										
-	Bend 90	12.90	10.00	R										
-	Bend 90	13.12	0.22	B										
2:Section0-1	Hole	18.30	5.18		3.0		15	173	5.1	7.2	2.769	21.0		
2:Section0-2	Hole	28.85	10.55		3.0		25	163	5.0	7.0	2.857	21.0		
2:Section0-3	Hole	39.40	10.55		3.0		39	156	4.9	6.8	2.921	21.0		
2:Section0-4	Endcap	49.95	10.55		3.0		65	152	5.7	8.0	2.513	21.0		

Pipe:Pipe 3

Total Pipe Length128.4m
Ambient Pressure0Pa
Sector Pressure199Pa
Number of Sample Points9
Pipe Flowrate35.0l/min

Section0

Pipe Diameter21.0mm

#		Distance m	Relative m	Direction	Hole Diameter	Capillary Length	Transport Time	Pressure	Flow	Flow %	Hole Sensitivity	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
-	Bend 90	1.00	1.00	B										
-	Bend 90	2.90	1.90	U										
-	Bend 90	12.90	10.00	R										
-	Bend 90	18.02	5.12	B										
-	Bend 90	21.82	3.80	R										
-	Branch	26.92	5.10	B										
-	Bend 90	31.83	4.91	B										
-	Bend 90	35.63	3.80	R										
-	Branch	40.73	5.10	B										
-	Bend 90	45.63	4.90	B										
-	Bend 90	49.43	3.80	R										
-	Branch	54.53	5.10	B										
-	Bend 90	59.43	4.90	B										
-	Bend 90	63.23	3.80	R										
-	Bend 90	68.33	5.10	B										
3:Section0-1	Endcap	72.81	4.48		3.0		112	73	3.9	5.5	3.615	21.0		

Section1

Pipe Diameter21.0mm

#		Distance m	Relative m	Direction	Hole Diameter mm	Capillary Length	Transport Time sec	Pressure Pa	Flow l/min	Flow %	Hole Sensitivity %/m	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
3:Section1-1	Hole	31.63	4.71		3.0		19	103	4.0	5.6	3.593	21.0		
3:Section1-2	Hole	41.23	9.60		3.0		31	96	3.8	5.4	3.725	21.0		
3:Section1-3	Hole	50.83	9.60		3.0		47	91	3.7	5.2	3.824	21.0		
3:Section1-4	Endcap	60.43	9.60		3.0		78	88	4.3	6.1	3.298	21.0		

□

Section2

Pipe Diameter21.0mm

#		Distance m	Relative m	Direction	Hole Diameter mm	Capillary Length	Transport Time sec	Pressure Pa	Flow l/min	Flow %	Hole Sensitivity %/m	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
3:Section2-1	Hole	44.83	4.10		3.0		33	86	3.6	5.1	3.927	21.0		
3:Section2-2	Endcap	53.21	8.38		3.0		61	84	4.2	5.9	3.382	21.0		

□

Section3

Pipe Diameter 21.0mm

#		Distance m	Relative m	Direction	Hole Diameter mm	Capillary Length	Transport Time sec	Pressure Pa	Flow l/min	Flow %	Hole Sensitivity %/m	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
3:Section3-1	Hole	57.67	3.14		3.0		50	76	3.4	4.8	4.168	21.0		
3:Section3-2	Endcap	64.15	6.48		3.0		73	75	4.0	5.6	3.581	21.0		

Detector : Hall 2

Flow Calculations found there were problems with this detector. Check below for errors (marked as !?) or warnings (marked as !).

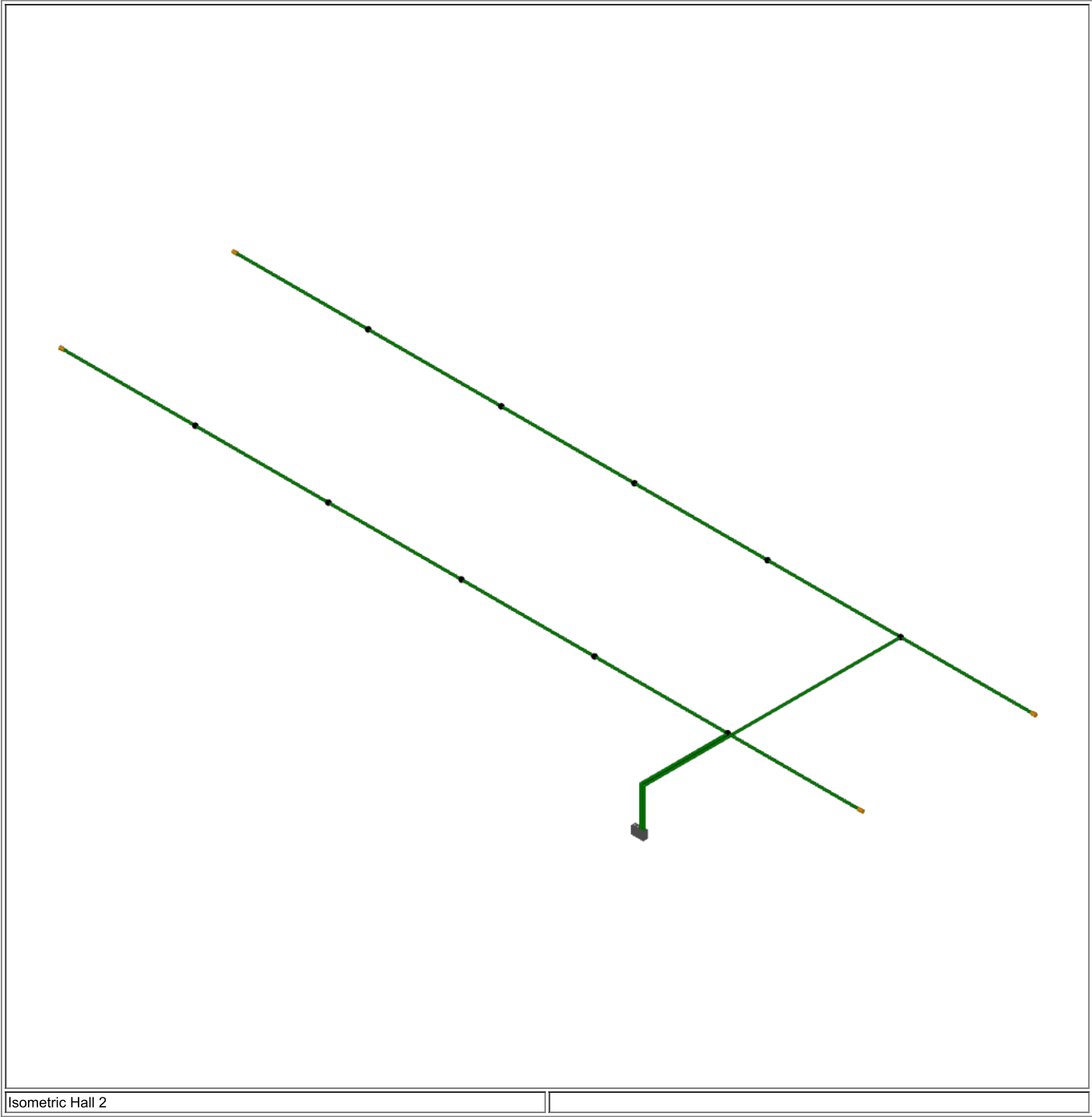
Type	VESDA VLP
Endcap Usage	Create a Balanced Design
Application	default
Aspirator Speed	3300
Fire	0.200%/m
Air Temperature	20.0°C
Absolute Pressure	1013hPa
System Flowrate	60.7l/min
Total Pipe Length	130.4m
Number Of Sample Points	14
Maximum Transport Time	79
Minimum Hole Flow Rate	2.0l/min
Exhaust Length	0.0m
Exhaust Diameter	21.0mm
Exhaust Pressure Drop	0Pa
Inverted Detector	No

Sampling Point Sensitivity

Threshold	Level	Classification	Hole Aggregation
Fire	0.200%/m	Class C	1

Group Details

	Hole Sensitivity	Pressure	Transport Time	Hole Diameter	[Default Group]
Group Type					
Max Target Aggregate Sensitivity					0.300
Min Target Aggregate Sensitivity					0.100
Contribution ratio(%)					100
Applied Max Aggregate Sensitivity					0.300
Applied Min Aggregate Sensitivity					0.100
Target Suction Pressure					25
Target Balance					70
Exclude from Autobalance					0
1:Section1-1	2.424	119	36	3.0	X
1:Section2-1	2.834	120	12	3.0	X
1:Section2-2	2.990	108	18	3.0	X
1:Section2-3	3.118	99	25	3.0	X
1:Section2-4	3.223	93	36	3.0	X
1:Section2-5	3.301	88	51	3.0	X
1:Section2-6	2.843	86	79	3.0	X
2:Section1-1	2.219	141	28	3.0	X
2:Section2-1	2.597	143	6	3.0	X
2:Section2-2	2.734	129	12	3.0	X
2:Section2-3	2.847	119	19	3.0	X
2:Section2-4	2.934	112	28	3.0	X
2:Section2-5	2.999	107	42	3.0	X
2:Section2-6	2.580	105	68	3.0	X
Number of holes					14
Flow Share(%)					100
Aggregate Sensitivity					0.200
Balance(%)					!? 67
Suction pressure (least)					86



Isometric Hall 2

Pipe:Pipe 2

Total Pipe Length 70.7m
Ambient Pressure 0Pa
Sector Pressure 167Pa
Number of Sample Points 7
Pipe Flowrate 29.0l/min

Section0

Pipe Diameter 21.0mm

#		Distance m	Relative m	Direction	Hole Diameter	Capillary Length	Transport Time	Pressure	Flow	Flow %	Hole Sensitivity	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
-	Bend 90	2.50	2.50	F										
-	Tee	19.09	16.59	R										

Section1

Pipe Diameter 21.0mm

#		Distance m	Relative m	Direction	Hole Diameter mm	Capillary Length	Transport Time sec	Pressure Pa	Flow l/min	Flow %	Hole Sensitivity %/m	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
1:Section1-1	Endcap	27.69	8.60		3.0		36	119	5.0	8.3	2.424	21.0		

Section2

Pipe Diameter 21.0mm

#		Distance m	Relative m	Direction	Hole Diameter mm	Capillary Length	Transport Time sec	Pressure Pa	Flow l/min	Flow %	Hole Sensitivity %/m	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
1:Section2-1	Hole	19.10	0.01		3.0		12	120	4.3	7.1	2.834	21.0		
1:Section2-2	Hole	27.70	8.60		3.0		18	108	4.1	6.7	2.990	21.0		
1:Section2-3	Hole	36.30	8.60		3.0		25	99	3.9	6.4	3.118	21.0		
1:Section2-4	Hole	44.90	8.60		3.0		36	93	3.8	6.2	3.223	21.0		
1:Section2-5	Hole	53.50	8.60		3.0		51	88	3.7	6.1	3.301	21.0		
1:Section2-6	Endcap	62.10	8.60		3.0		79	86	4.3	7.0	2.843	21.0		

Pipe:Pipe 1

Total Pipe Length 59.7m
Ambient Pressure 0Pa
Sector Pressure 167Pa
Number of Sample Points 7
Pipe Flowrate 31.7l/min

Section0

Pipe Diameter 21.0mm

#		Distance m	Relative m	Direction	Hole Diameter	Capillary Length	Transport Time	Pressure	Flow	Flow %	Hole Sensitivity	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
-	Bend 90	2.50	2.50	F										
-	Tee	8.12	5.62	R										

Section1

Pipe Diameter 21.0mm

#		Distance m	Relative m	Direction	Hole Diameter mm	Capillary Length	Transport Time sec	Pressure Pa	Flow l/min	Flow %	Hole Sensitivity %/m	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
2:Section1-1	Endcap	16.72	8.60		3.0		28	141	5.5	9.0	2.219	21.0		

Section2

Pipe Diameter 21.0mm

#		Distance m	Relative m	Direction	Hole Diameter mm	Capillary Length	Transport Time sec	Pressure Pa	Flow l/min	Flow %	Hole Sensitivity %/m	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
2:Section2-1	Hole	8.13	0.01		3.0		6	143	4.7	7.7	2.597	21.0		
2:Section2-2	Hole	16.73	8.60		3.0		12	129	4.4	7.3	2.734	21.0		
2:Section2-3	Hole	25.33	8.60		3.0		19	119	4.3	7.0	2.847	21.0		
2:Section2-4	Hole	33.93	8.60		3.0		28	112	4.1	6.8	2.934	21.0		
2:Section2-5	Hole	42.53	8.60		3.0		42	107	4.0	6.7	2.999	21.0		
2:Section2-6	Endcap	51.13	8.60		3.0		68	105	4.7	7.8	2.580	21.0		

Detector : Hall 3

Flow Calculations found there were problems with this detector. Check below for errors (marked as !?) or warnings (marked as !).

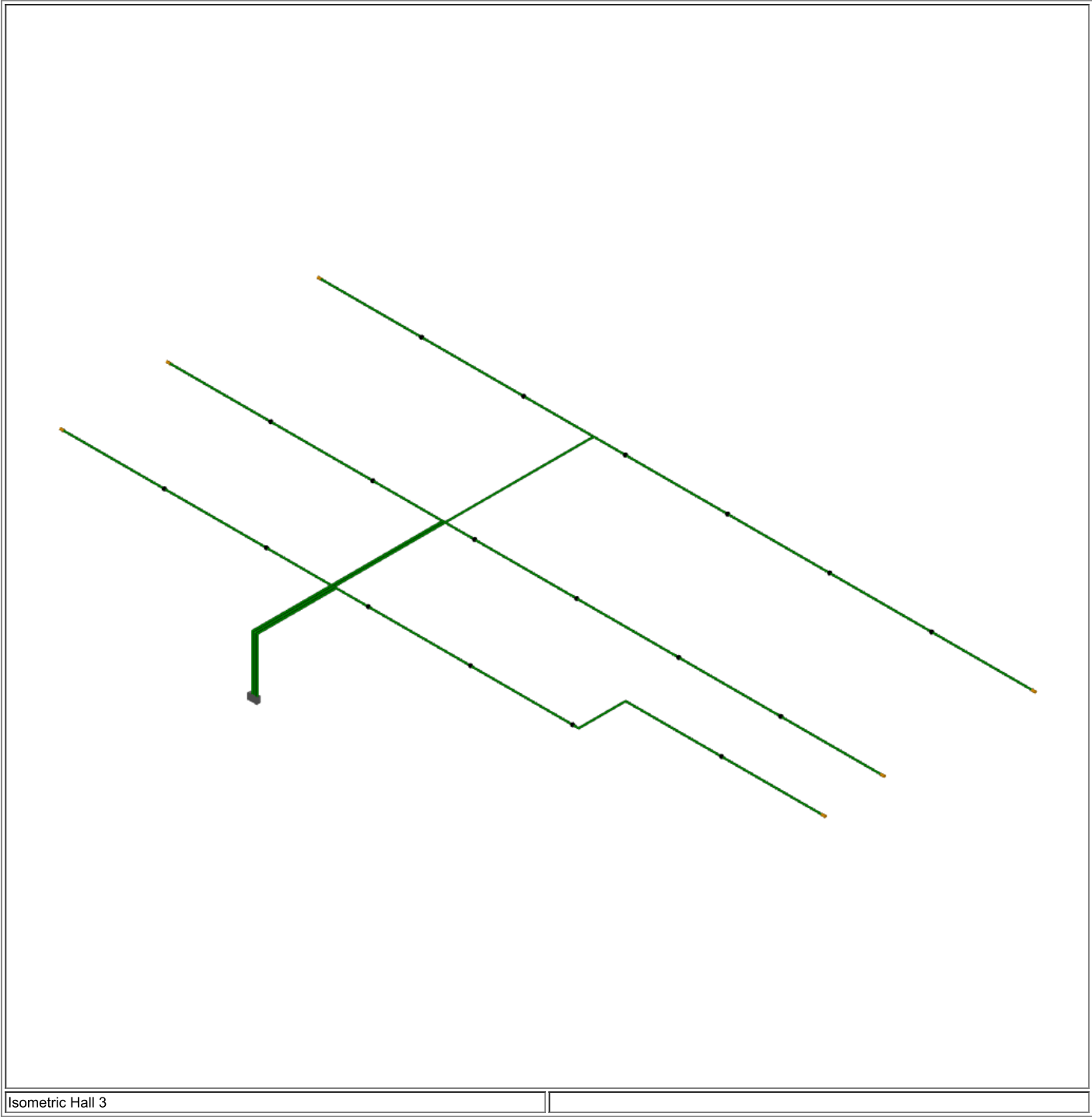
Type	VESDA VLP
Endcap Usage	Create a Balanced Design
Application	default
Aspirator Speed	3450
Fire	0.200%/m
Air Temperature	20.0°C
Absolute Pressure	1013hPa
System Flowrate	84.4l/min
Total Pipe Length	245.9m
Number Of Sample Points	24
Maximum Transport Time	102
Minimum Hole Flow Rate	2.0l/min
Exhaust Length	0.0m
Exhaust Diameter	21.0mm
Exhaust Pressure Drop	0Pa
Inverted Detector	No

Sampling Point Sensitivity

Threshold	Level	Classification	Hole Aggregation
Fire	0.200%/m	Class C	1

Group Details

	Hole Sensitivity	Pressure	Transport Time	Hole Diameter	[Default Group]
Group Type					
Max Target Aggregate Sensitivity					0.300
Min Target Aggregate Sensitivity					0.100
Contribution ratio(%)					100
Applied Max Aggregate Sensitivity					0.300
Applied Min Aggregate Sensitivity					0.100
Target Suction Pressure					25
Target Balance					70
Exclude from Autobalance					0
1:Section1-1	4.322	100	14	3.0	X
1:Section1-2	4.421	95	29	3.0	X
1:Section1-3	3.805	93	56	3.0	X
1:Section2-1	4.314	100	9	3.0	X
1:Section2-2	4.498	92	17	3.0	X
1:Section2-3	4.651	86	28	3.0	X
1:Section2-4	4.821	80	53	3.0	X
1:Section2-5	4.155	78	82	3.0	X
2:Section1-1	5.305	66	29	3.0	X
2:Section1-2	5.454	63	46	3.0	X
2:Section1-3	4.708	61	80	3.0	X
2:Section2-1	5.276	67	23	3.0	X
2:Section2-2	5.550	61	33	3.0	X
2:Section2-3	5.784	56	46	3.0	X
2:Section2-4	5.961	52	65	3.0	X
2:Section2-5	5.153	51	102	3.0	X
3:Section1-1	4.743	83	20	3.0	X
3:Section1-2	4.862	79	36	3.0	X
3:Section1-3	4.190	77	65	3.0	X
3:Section2-1	4.726	83	15	3.0	X
3:Section2-2	4.947	76	23	3.0	X
3:Section2-3	5.133	71	35	3.0	X
3:Section2-4	5.273	67	52	3.0	X
3:Section2-5	4.549	65	85	3.0	X
Number of holes					24
Flow Share(%)					100
Aggregate Sensitivity					0.200
Balance(%)					! 64
Suction pressure (least)					51



Isometric Hall 3

Pipe:Pipe 1

Total Pipe Length 74.3m
Ambient Pressure 0Pa
Sector Pressure 134Pa
Number of Sample Points 8
Pipe Flowrate 31.0l/min

Section0

Pipe Diameter 21.0mm

#		Distance m	Relative m	Direction	Hole Diameter	Capillary Length	Transport Time	Pressure	Flow	Flow %	Hole Sensitivity	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
-	Bend 90	4.50	4.50	F										
-	Tee	11.05	6.55	L										

Section1

Pipe Diameter 21.0mm

#		Distance m	Relative m	Direction	Hole Diameter mm	Capillary Length	Transport Time sec	Pressure Pa	Flow l/min	Flow %	Hole Sensitivity %/m	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
1:Section1-1	Hole	16.85	5.80		3.0		14	100	3.9	4.6	4.322	21.0		
1:Section1-2	Hole	25.33	8.48		3.0		29	95	3.8	4.5	4.421	21.0		
1:Section1-3	Endcap	33.81	8.48		3.0		56	93	4.4	5.3	3.805	21.0		

Section2

Pipe Diameter 21.0mm

#		Distance m	Relative m	Direction	Hole Diameter mm	Capillary Length	Transport Time sec	Pressure Pa	Flow l/min	Flow %	Hole Sensitivity %/m	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
1:Section2-1	Hole	13.73	2.68		3.0		9	100	3.9	4.6	4.314	21.0		
1:Section2-2	Hole	22.21	8.48		3.0		17	92	3.8	4.4	4.498	21.0		
1:Section2-3	Hole	30.69	8.48		3.0		28	86	3.6	4.3	4.651	21.0		
-	Bend 90	31.19	0.50	F										
-	Bend 90	35.09	3.90	R										
1:Section2-4	Hole	43.07	7.98		3.0		53	80	3.5	4.1	4.821	21.0		
1:Section2-5	Endcap	51.55	8.48		3.0		82	78	4.1	4.8	4.155	21.0		

Pipe:Pipe 3

Total Pipe Length 92.0m
Ambient Pressure 0Pa
Sector Pressure 135Pa
Number of Sample Points 8
Pipe Flowrate 25.1l/min

Section0

Pipe Diameter 21.0mm

#		Distance m	Relative m	Direction	Hole Diameter	Capillary Length	Transport Time	Pressure	Flow	Flow %	Hole Sensitivity	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
-	Bend 90	4.50	4.50	F										
-	Tee	32.63	28.13	L										

Section1

Pipe Diameter 21.0mm

#		Distance m	Relative m	Direction	Hole Diameter mm	Capillary Length	Transport Time sec	Pressure Pa	Flow l/min	Flow %	Hole Sensitivity %/m	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
2:Section1-1	Hole	38.43	5.80		3.0		29	66	3.2	3.8	5.305	21.0		
2:Section1-2	Hole	46.91	8.48		3.0		46	63	3.1	3.7	5.454	21.0		
2:Section1-3	Endcap	55.39	8.48		3.0		80	61	3.6	4.2	4.708	21.0		

Section2

Pipe Diameter 21.0mm

#		Distance m	Relative m	Direction	Hole Diameter mm	Capillary Length	Transport Time sec	Pressure Pa	Flow l/min	Flow %	Hole Sensitivity %/m	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
2:Section2-1	Hole	35.28	2.65		3.0		23	67	3.2	3.8	5.276	21.0		
2:Section2-2	Hole	43.76	8.48		3.0		33	61	3.0	3.6	5.550	21.0		
2:Section2-3	Hole	52.24	8.48		3.0		46	56	2.9	3.5	5.784	21.0		
2:Section2-4	Hole	60.72	8.48		3.0		65	52	2.8	3.4	5.961	21.0		
2:Section2-5	Endcap	69.20	8.48		3.0		102	51	3.3	3.9	5.153	21.0		

Pipe:Pipe 2

Total Pipe Length 79.6m
Ambient Pressure 0Pa
Sector Pressure 135Pa
Number of Sample Points 8
Pipe Flowrate 28.2l/min

Section0

Pipe Diameter 21.0mm

#		Distance m	Relative m	Direction	Hole Diameter	Capillary Length	Transport Time	Pressure	Flow	Flow %	Hole Sensitivity	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
-	Bend 90	4.50	4.50	F										
-	Tee	20.29	15.79	L										

Section1

Pipe Diameter 21.0mm

#		Distance m	Relative m	Direction	Hole Diameter mm	Capillary Length	Transport Time sec	Pressure Pa	Flow l/min	Flow %	Hole Sensitivity %/m	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
3:Section1-1	Hole	26.09	5.80		3.0		20	83	3.6	4.2	4.743	21.0		
3:Section1-2	Hole	34.57	8.48		3.0		36	79	3.5	4.1	4.862	21.0		
3:Section1-3	Endcap	43.05	8.48		3.0		65	77	4.0	4.8	4.190	21.0		

Section2

Pipe Diameter 21.0mm

#		Distance m	Relative m	Direction	Hole Diameter mm	Capillary Length	Transport Time sec	Pressure Pa	Flow l/min	Flow %	Hole Sensitivity %/m	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
3:Section2-1	Hole	22.94	2.65		3.0		15	83	3.6	4.2	4.726	21.0		
3:Section2-2	Hole	31.42	8.48		3.0		23	76	3.4	4.0	4.947	21.0		
3:Section2-3	Hole	39.90	8.48		3.0		35	71	3.3	3.9	5.133	21.0		
3:Section2-4	Hole	48.38	8.48		3.0		52	67	3.2	3.8	5.273	21.0		
3:Section2-5	Endcap	56.86	8.48		3.0		85	65	3.7	4.4	4.549	21.0		

Detector : Hall 4

Flow Calculations found there were problems with this detector. Check below for errors (marked as !?) or warnings (marked as !).

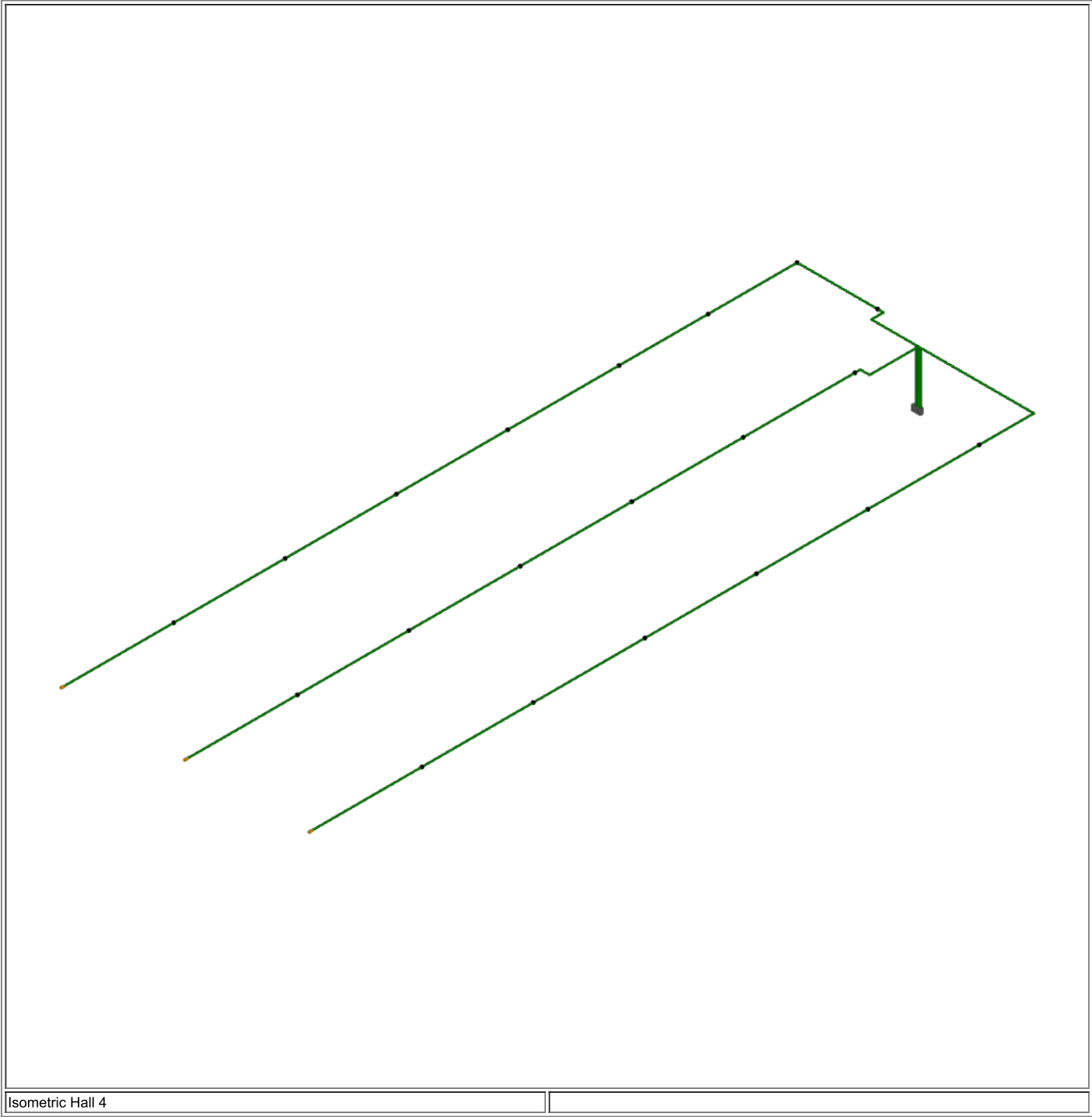
Type	VESDA VLP
Endcap Usage	Create a Balanced Design
Application	default
Aspirator Speed	4050
Fire	0.200%/m
Air Temperature	20.0°C
Absolute Pressure	1013hPa
System Flowrate	97.9l/min
Total Pipe Length	226.8m
Number Of Sample Points	23
Maximum Transport Time	101
Minimum Hole Flow Rate	2.0l/min
Exhaust Length	0.0m
Exhaust Diameter	21.0mm
Exhaust Pressure Drop	0Pa
Inverted Detector	No

Sampling Point Sensitivity

Threshold	Level	Classification	Hole Aggregation
Fire	0.200%/m	Class C	1

Group Details

	Hole Sensitivity	Pressure	Transport Time	Hole Diameter	[Default Group]
Group Type					
Max Target Aggregate Sensitivity					0.300
Min Target Aggregate Sensitivity					0.100
Contribution ratio(%)					100
Applied Max Aggregate Sensitivity					0.300
Applied Min Aggregate Sensitivity					0.100
Target Suction Pressure					25
Target Balance					70
Exclude from Autobalance					0
1:Section0-1	3.967	159	7	3.0	X
1:Section0-2	4.231	140	11	3.0	X
1:Section0-3	4.511	123	15	3.0	X
1:Section0-4	4.776	110	20	3.0	X
1:Section0-5	5.076	97	27	3.0	X
1:Section0-6	5.325	88	36	3.0	X
1:Section0-7	5.538	82	48	3.0	X
1:Section0-8	5.697	77	67	3.0	X
1:Section0-9	4.920	75	101	3.0	X
2:Section0-1	3.835	170	7	3.0	X
2:Section0-2	4.092	150	12	3.0	X
2:Section0-3	4.330	134	18	3.0	X
2:Section0-4	4.528	122	26	3.0	X
2:Section0-5	4.682	114	36	3.0	X
2:Section0-6	4.796	109	52	3.0	X
2:Section0-7	4.132	106	80	3.0	X
3:Section0-1	4.081	151	12	3.0	X
3:Section0-2	4.365	132	17	3.0	X
3:Section0-3	4.627	117	24	3.0	X
3:Section0-4	4.846	107	32	3.0	X
3:Section0-5	5.022	99	43	3.0	X
3:Section0-6	5.153	94	60	3.0	X
3:Section0-7	4.444	92	90	3.0	X
Number of holes					23
Flow Share(%)					100
Aggregate Sensitivity					0.200
Balance(%)					! 67
Suction pressure (least)					75



Isometric Hall 4

Pipe:Pipe 1

Total Pipe Length81.2m

Ambient Pressure0Pa

Sector Pressure198Pa

Number of Sample Points9

Pipe Flowrate36.5l/min

Section0

Pipe Diameter 21.0mm

#		Distance m	Relative m	Direction	Hole Diameter mm	Capillary Length	Transport Time sec	Pressure Pa	Flow l/min	Flow %	Hole Sensitivity %/m	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
-	Bend 90	4.50	4.50	L										
-	Bend 90	8.79	4.29	F										
-	Bend 90	9.84	1.05	L										
1:Section0-1	Hole	10.34	0.50		3.0		7	159	4.9	5.0	3.967	21.0		
-	Bend 90	17.34	7.00	B										
1:Section0-2	Hole	17.35	0.01		3.0		11	140	4.6	4.7	4.231	21.0		
1:Section0-3	Hole	25.08	7.73		3.0		15	123	4.3	4.4	4.511	21.0		
1:Section0-4	Hole	32.81	7.73		3.0		20	110	4.1	4.2	4.776	21.0		
1:Section0-5	Hole	42.48	9.67		3.0		27	97	3.9	3.9	5.076	21.0		
1:Section0-6	Hole	52.15	9.67		3.0		36	88	3.7	3.8	5.325	21.0		
1:Section0-7	Hole	61.82	9.67		3.0		48	82	3.5	3.6	5.538	21.0		
1:Section0-8	Hole	71.49	9.67		3.0		67	77	3.4	3.5	5.697	21.0		
1:Section0-9	Endcap	81.16	9.67		3.0		101	75	4.0	4.1	4.920	21.0		

Pipe:Pipe 2

Total Pipe Length68.1m

Ambient Pressure0Pa

Sector Pressure199Pa

Number of Sample Points7

Pipe Flowrate31.7l/min

Section0

Pipe Diameter 21.0mm

#		Distance m	Relative m	Direction	Hole Diameter mm	Capillary Length	Transport Time sec	Pressure Pa	Flow l/min	Flow %	Hole Sensitivity %/m	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
-	Bend 90	4.50	4.50	B										
-	Bend 90	8.75	4.25	L										
-	Bend 90	9.55	0.80	B										
2:Section0-1	Hole	10.05	0.50		3.0		7	170	5.1	5.2	3.835	21.0		
2:Section0-2	Hole	19.73	9.68		3.0		12	150	4.8	4.9	4.092	21.0		
2:Section0-3	Hole	29.41	9.68		3.0		18	134	4.5	4.6	4.330	21.0		
2:Section0-4	Hole	39.09	9.68		3.0		26	122	4.3	4.4	4.528	21.0		
2:Section0-5	Hole	48.77	9.68		3.0		36	114	4.2	4.3	4.682	21.0		
2:Section0-6	Hole	58.45	9.68		3.0		52	109	4.1	4.2	4.796	21.0		
2:Section0-7	Endcap	68.13	9.68		3.0		80	106	4.7	4.8	4.132	21.0		

Pipe:Pipe 3

Total Pipe Length77.5m

Ambient Pressure0Pa

Sector Pressure199Pa

Number of Sample Points7

Pipe Flowrate29.7l/min

Section0

Pipe Diameter 21.0mm

#		Distance m	Relative m	Direction	Hole Diameter mm	Capillary Length	Transport Time sec	Pressure Pa	Flow l/min	Flow %	Hole Sensitivity %/m	Pipe Diameter mm	Capillary Diameter	Intersection Pressure
-	Bend 90	4.50	4.50	R										
-	Bend 90	14.72	10.22	B										
3:Section0-1	Hole	19.47	4.75		3.0		12	151	4.8	4.9	4.081	21.0		
3:Section0-2	Hole	29.15	9.68		3.0		17	132	4.5	4.6	4.365	21.0		
3:Section0-3	Hole	38.83	9.68		3.0		24	117	4.2	4.3	4.627	21.0		
3:Section0-4	Hole	48.51	9.68		3.0		32	107	4.0	4.1	4.846	21.0		
3:Section0-5	Hole	58.19	9.68		3.0		43	99	3.9	4.0	5.022	21.0		
3:Section0-6	Hole	67.87	9.68		3.0		60	94	3.8	3.9	5.153	21.0		
3:Section0-7	Endcap	77.55	9.68		3.0		90	92	4.4	4.5	4.444	21.0		

