

3 RESULTS

3.1 RAINWATER PENETRATION

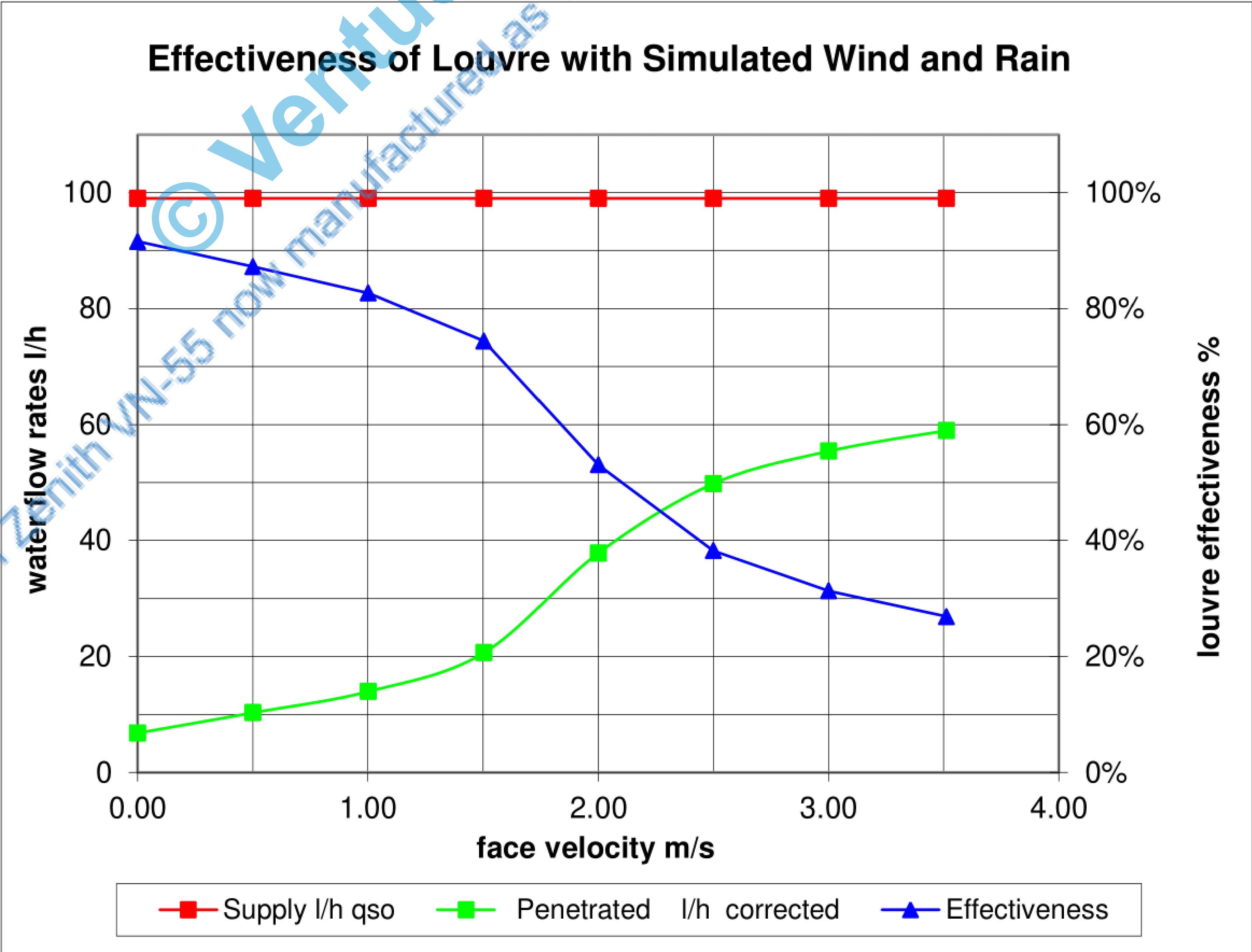
MANUFACTURER INSOL Ltd.
MODEL Zenith VN-55

Date 09/08/2016
Contract 59678

Simulated rainfall 75 mm/hr
Wind speed 13.0 m/s

louvre height 1037 mm
louvre width 1037 mm
louvre area 1.075 m²

VENTILATION RATE		WATER FLOW RATES		Effectiveness	Class
Volume m ³ /s	Velocity m/s	Supply l/h	Penetrated l/h		
0.00	0.00	99.0	6.8	91.6%	C
0.54	0.50	99.0	10.3	87.2%	C
1.08	1.00	99.0	14.0	82.7%	C
1.62	1.50	99.0	20.6	74.4%	D
2.15	2.00	99.0	37.9	53.1%	D
2.69	2.50	99.0	49.8	38.3%	D
3.23	3.00	99.0	55.4	31.3%	D
3.78	3.51	99.0	59.0	26.9%	D



3.2 COEFFICIENT OF ENTRY

MANUFACTURERINSOL Ltd.

MODELZenith VN-55

Date 09/08/2016

Contract 59678

air temperature18.3 °C

barometer1018 mbar

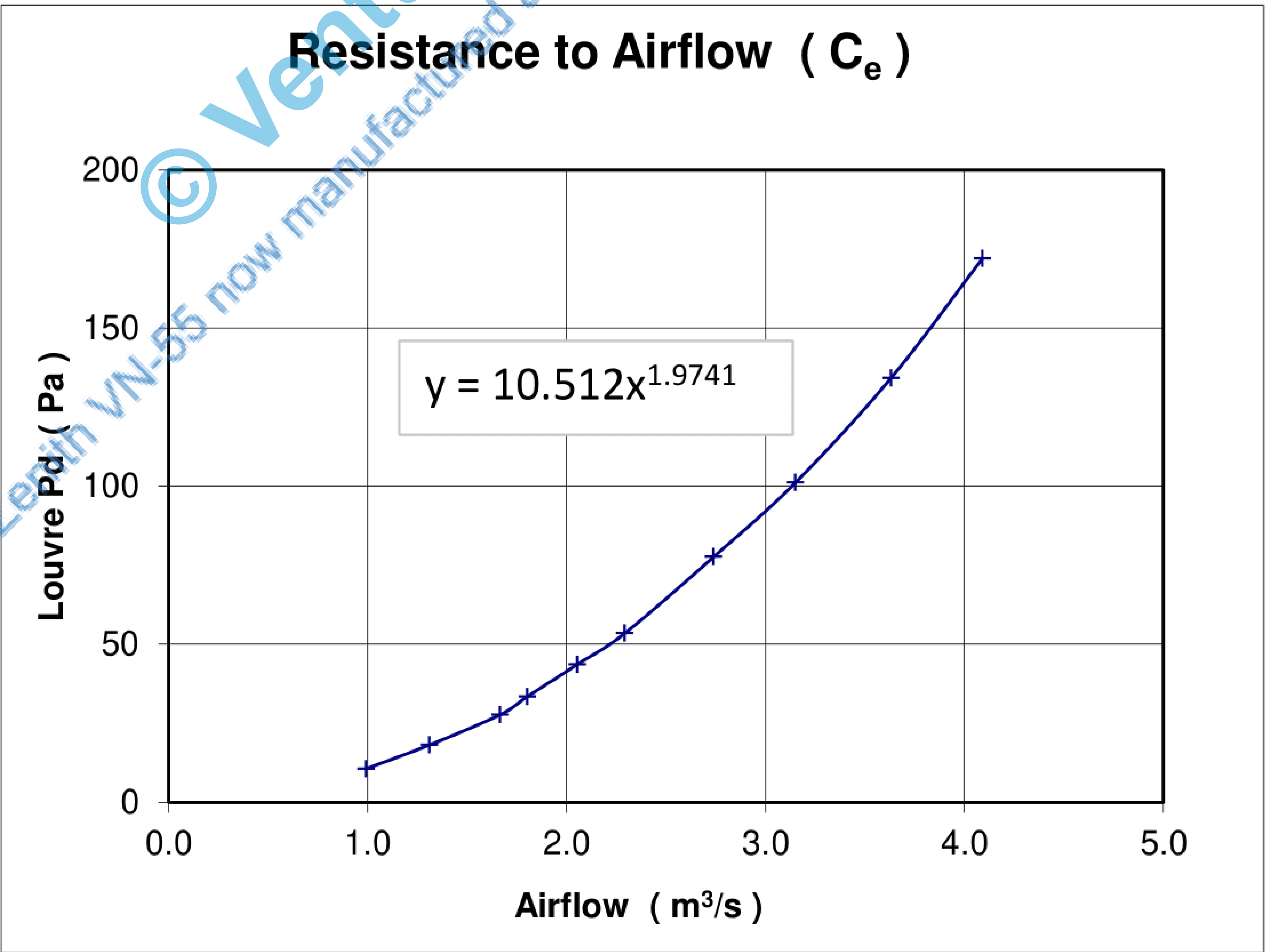
air density1.212 kg/m³

louvre height1037 mm

louvre width1037 mm

louvre area1.075 m²

louvre pd Pascals	louvre face velocity	air flow rate		coefficient C _e
	m/s	test m³/s	theoretical m³/s	
10.6	0.92	0.993	4.497	0.221
18.1	1.22	1.311	5.877	0.223
27.7	1.55	1.667	7.270	0.229
33.4	1.68	1.803	7.983	0.226
43.6	1.91	2.053	9.121	0.225
53.5	2.13	2.293	10.103	0.227
77.6	2.55	2.739	12.168	0.225
101.1	2.93	3.150	13.889	0.227
134.2	3.38	3.631	16.002	0.227
172.0	3.80	4.091	18.116	0.226
mean C _e				0.226
Class				3



3.3 COEFFICIENT OF DISCHARGE

MANUFACTURERINSOL Ltd.

MODELZenith VN-55

Date 19/08/2016

Contract 59678

air temperature20.6 °C

barometer997.6 mbar

air density1.178 kg/m³

louvre height1037 mm

louvre width1037 mm

louvre area1.075 m²

louvre pd Pascals	louvre face velocity	air flow rate		coefficient C _d
	m/s	test m³/s	theoretical m³/s	
10.3	0.95	1.019	4.496	0.227
12.7	1.06	1.144	4.993	0.229
16.3	1.20	1.293	5.656	0.229
21.0	1.37	1.474	6.420	0.230
27.3	1.55	1.666	7.320	0.228
37.7	1.84	1.975	8.602	0.230
58.2	2.32	2.492	10.688	0.233
90.1	2.90	3.118	13.298	0.234
129.3	3.47	3.729	15.931	0.234
153.7	3.82	4.107	17.369	0.236
mean C _d				0.231
Class				3

