

Class of Instrument	Equities - Shares & Depositary Receipts (T12)							
Notification if <1 average trade per business day in the previous year	No							
Top five investment firms ranked in t erms of trading volumes (descending o rder)	Proportion of volume trad ed as a percentage of tot al in that class	d as a percentage of tot						
CREDIT SUISSE SECURITIES (EUROPE) LIM ITED DL6FFRRLF74S01HE2M14	51.79 %	51.01 %	11.48 %	8.89 %	0.00 %			
GOLDMAN SACHS INTERNATIONAL W22LROWEIHZNBB6K528	2 10.88 %	7.03 %	0.73 %	0.00 %	0.00 %			
MERRILL LYNCH, PIERCE, FENNER & SMITH INCORPORATED 8NAV47T0Y26Q87Y0QP81	9.15 %	6.67 %	0.00 %	0.00 %	0.00 %			
VIRTU ITG EUROPE LIMITED 213800EEC95P RUCEUP63	8.10 %	7.16 %	0.24 %	0.00 %	0.00 %			
INSTINET EUROPE LIMITED 213800MXAKR2L A1VBM44	6.44 %	6.02 %	0.28 %	0.28 %	0.00 %			
Interaction	Placement/transmission							
Report provided by LiquidMetrix								



Class of Instrument	Equities - Shares & Depositary Receipts (T34)							
Notification if <1 average trade per business day in the previous year	No							
Top five investment firms ranked in t erms of trading volumes (descending o rder)	Proportion of volume trad ed as a percentage of tot al in that class	as a percentage of tot uted as percentage of tot ive orders sive orders cted orders						
CREDIT SUISSE SECURITIES (EUROPE) LIM ITED DL6FFRRLF74S01HE2M14	31.95 %	27.39 %	11.13 %	9.67 %	0.00 %			
VIRTU ITG EUROPE LIMITED 213800EEC95P RUCEUP63	16.50 %	13.10 %	0.00 %	0.00 %	0.00 %			
GOLDMAN SACHS INTERNATIONAL W22LROWI	2 10.23 %	9.81 %	0.85 %	0.26 %	0.00 %			
EXANE DERIVATIVES 2FL5XIC1B8Q6HNGN6A3 5	8.70 %	6.97 %	2.41 %	2.41 %	0.00 %			
MERRILL LYNCH, PIERCE, FENNER & SMITH INCORPORATED 8NAV47T0Y26Q87Y0QP81	8.52 %	8.08 %	0.00 %	0.00 %	0.00 %			
Interaction	Placement/transmission							
Report provided by LiquidMetrix								



Class of Instrument	Equities - Shares & Depositary Receipts (T56)							
Notification if <1 average trade per business day in the previous year	No							
Top five investment firms ranked in t erms of trading volumes (descending o rder)	Proportion of volume trad ed as a percentage of tot al in that class	as a percentage of tot uted as percentage of tot ive orders sive orders cted orders						
CITADEL SECURITIES LLC 12UUJYTN7D3SW8 KCSG25	21.22 %	21.64 %	0.00 %	0.00 %	0.00 %			
VIRTU ITG EUROPE LIMITED 213800EEC95P RUCEUP63	17.80 %	12.08 %	0.00 %	0.00 %	0.00 %			
CREDIT SUISSE SECURITIES (EUROPE) LIM ITED DL6FFRRLF74S01HE2M14	17.46 %	23.39 %	7.30 %	9.33 %	0.00 %			
INSTINET EUROPE LIMITED 213800MXAKR2L A1VBM44	10.86 %	14.28 %	8.84 %	8.17 %	0.00 %			
GOLDMAN SACHS INTERNATIONAL W22LROWNIHZNBB6K528	22 10.03 %	7.59 %	0.19 %	0.32 %	0.00 %			
Interaction	Placement/transmission							
Report provided by LiquidMetrix								



Class of Instrument	Exchange traded products (Exchange traded funds, exchange traded notes and exchange traded commodities)							
Notification if <1 average trade per business day in the previous year		No						
Top five investment firms ranked in t erms of trading volumes (descending o rder)	Proportion of volume trad ed as a percentage of tot al in that class	as a percentage of tot uted as percentage of tot ive orders sive orders cted orders						
Flow Traders B.V. 549300CLJI9XDH12XV5	30.20 %	15.55 %	0.00 %	0.00 %	0.00 %			
JANE STREET FINANCIAL LIMITED 549300Z HEHX8M31RP142	23.11 %	14.38 %	0.00 %	0.00 %	0.00 %			
Optiver V.O.F. 7245009KRYSAYB2QCC29	8.31 %	6.85 %	0.00 %	0.00 %	0.00 %			
MORGAN STANLEY SECURITIES LIMITED VLR 6T6E60GH5GUS0XX16	7.18 %	7.46 %	0.00 %	0.00 %	0.00 %			
SUSQUEHANNA IRELAND LIMITED JE75XDS7H R68LR10V064	6.26 %	3.76 %	0.00 %	0.00 %	0.00 %			
Interaction	Placement/transmission							
Report provided by LiquidMetrix								



Class of Instrument	Debt instruments, Bonds						
Notification if <1 average trade per business day in the previous year		Yes					
Top five investment firms ranked in t erms of trading volumes (descending o rder)	Proportion of volume trad ed as a percentage of tot al in that class  Percentage of pass ive orders  Percentage of aggres sive orders  Percentage of aggres sive orders						
RAIFCHF5_9714	99.86 %	99.86 % 33.33 % 0.00 % 0.00 % 0.00 %					
CREDIT SUISSE SECURITIES (EUROPE) LIM ITED DL6FFRRLF74S01HE2M14	0.14 %	0.14 % 66.67 % 100.00 % 0.00 % 0.00 %					
Interaction	Placement/transmission						
Report provided by LiquidMetrix							



Class of Instrument	Structured finance instruments							
Notification if <1 average trade per business day in the previous year		Yes						
Top five investment firms ranked in t erms of trading volumes (descending o rder)	Proportion of volume trad ed as a percentage of tot al in that class	as a percentage of tot uted as percentage of tot ive orders sive orders cted orders						
Flow Traders B.V. 549300CLJI9XDH12XV5	35.40 %	20.94 %	0.00 %	0.00 %	0.00 %			
LEOCHF1_9720	21.13 %	4.27 %	0.00 %	0.00 %	0.00 %			
JANE STREET FINANCIAL LIMITED 549300Z HEHX8M31RP142	16.99 %	6.41 %	0.00 %	0.00 %	0.00 %			
Optiver V.O.F. 7245009KRYSAYB2QCC29	9.82 %	15.38 %	0.00 %	0.00 %	0.00 %			
MORGAN STANLEY SECURITIES LIMITED VLR 6T6E60GH5GUS0XX16	9.44 %	4.70 %	0.00 %	0.00 %	0.00 %			
Interaction	Placement/transmission							
Report provided by LiquidMetrix								



Class of Instrument	Other instruments							
Notification if <1 average trade per business day in the previous year		Yes						
Top five investment firms ranked in t erms of trading volumes (descending o rder)	Proportion of volume trad ed as a percentage of tot al in that class	as a percentage of tot uted as percentage of tot ive orders sive orders cted orders						
CITADEL SECURITIES LLC 12UUJYTN7D3SW8 KCSG25	63.26 %	46.27 %	0.00 %	0.00 %	0.00 %			
CREDIT SUISSE SECURITIES (EUROPE) LIM ITED DL6FFRRLF74S01HE2M14	13.56 %	9.45 %	0.00 %	31.58 %	0.00 %			
BNP PARIBAS R0MUWSFPU8MPRO8K5P83	10.82 %	21.89 %	0.00 %	0.00 %	0.00 %			
INSTINET EUROPE LIMITED 213800MXAKR2L A1VBM44	4.79 %	9.95 %	20.00 %	30.00 %	0.00 %			
JANE STREET FINANCIAL LIMITED 549300Z HEHX8M31RP142	2.86 %	1.49 %	0.00 %	0.00 %	0.00 %			
Interaction	Placement/transmission							
Report provided by LiquidMetrix								



Class of Instrument	Securitized Derivatives, Warrants and Certificate Derivatives							
Notification if <1 average trade per business day in the previous year	Yes							
Top five investment firms ranked in t erms of trading volumes (descending o rder)	Proportion of volume trad ed as a percentage of tot al in that class	as a percentage of tot uted as percentage of tot ive orders sive orders cted order						
CREDIT SUISSE SECURITIES (EUROPE) LIM ITED DL6FFRRLF74S01HE2M14	76.62 %	25.00 %	0.00 %	0.00 %	0.00 %			
CITADEL SECURITIES LLC 12UUJYTN7D3SW8 KCSG25	15.83 %	16.67 %	0.00 %	0.00 %	0.00 %			
VIRTU ITG EUROPE LIMITED 213800EEC95P RUCEUP63	6.93 %	25.00 %	0.00 %	0.00 %	0.00 %			
INSTINET EUROPE LIMITED 213800MXAKR2L A1VBM44	0.50 %	16.67 %	100.00 %	0.00 %	0.00 %			
GOLDMAN SACHS INTERNATIONAL W22LROWIIHZNBB6K528	0.07 %	8.33 %	0.00 %	0.00 %	0.00 %			
Interaction	Placement/transmission							
Report provided by LiquidMetrix								



Class of Instrument	Securitized Derivatives, Other securitized derivatives						
Notification if <1 average trade per business day in the previous year	Yes						
Top five investment firms ranked in t erms of trading volumes (descending o rder)	Proportion of volume trad ed as a percentage of tot al in that class	ed as a percentage of tot uted as percentage of tot ive orders sive orders cted orders					
REN4	100.00 %	100.00 %	0.00 %	0.00 %	0.00 %		
Interaction	Placement/transmission						
Report provided by LiquidMetrix							