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Instinet BlockCross (BLKX):
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Two Sigma Securities, LLC (SOHO):
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

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N A O	N O O	O O N	N O O N	O O O
100.00	8.82	9.80	81.37	0.00

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100.00	82.99	4.61	11.31	1.10

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Citadel Securities LLC (CDRG)	30.72	37.75	23.81	9.82	7.14	0	0.0000	0	0.0000	0	0.0000	0	0.0000
VIRTU Americas, LLC (NITE)	22.22	24.50	50.00	6.70	64.29	0	0.0000	0	0.0000	0	0.0000	0	0.0000

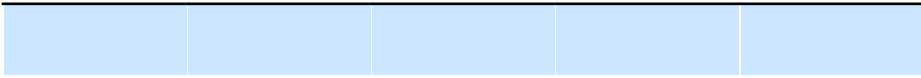
G1 Execution Services, LLC (ETMM) 16.52 20.93

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

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NASDAQ Execution Services, LLC (NSDQ)	6.26	0.00	0.00	28.64	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
New York Stock Exchange (NYSE)	4.97	0.00	0.00	22.73	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
NYSE Arca (ARCA)	4.17	0.00	0.00	19.09	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Cboe EDGX US Equities Exchange (EDGX)	3.48	0.00	0.00	15.91	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000

Instinet
BlockCross

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Citadel Securities LLC (CDRG)	28.35	38.29	24.49	4.89	33.33	0	0.0000	0	0.0000	0	0.0000	0	0.0000
VIRTU Americas, LLC (NITE)	20.08	26.21	44.90	2.22	44.44	0	0.0000	0	0.0000	0	0.0000	0	0.0000
G1 Execution Services, LLC (ETMM)	16.73	22.86	10.20	3.11	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
NASDAQ Execution Services, LLC (NSDO)	16.16	0.00	8.16	56.00	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Jane Street Capital, LLC (JNST)	8.02	10.59	12.24	1.56	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
New York Stock Exchange (NYSE)	5.43	0.00	0.00	19.11	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Cboe EDGX US Equities Exchange (EDGX)	2.84	0.00	0.00	10.00	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Members Exchange (MEMX)	0.76	0.00	0.00	2.67	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Two Sigma Securities, LLC (SOHO)	0.69	0.93	0.00	0.22	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
UBS Securities, LLC (UBSS)	0.57	0.74	0.00	0.22	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000

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Citadel Securities LLC (CDRG):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

VIRTU Americas, LLC (NITE):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

G1 Execution Services, LLC (ETMM):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

NASDAQ Execution Services, LLC (NSDO):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Jane Street Capital, LLC (JNST):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

New York Stock Exchange (NYSE):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Cboe EDGX US Equities Exchange (EDGX):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Members Exchange (MEMX):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Two Sigma Securities, LLC (SOHO):

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UBS Securities, LLC (UBSS):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

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100.00	87.88	1.98	9.24	0.90

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Citadel Securities LLC (CDRG)	26.12	34.18	32.26	3.52	18.18	0	0.0000	0	0.0000	0	0.0000	0	0.0000
VIRTU Americas, LLC (NITE)	20.15	27.14	35.48	0.39	9.09	0	0.0000	0	0.0000	0	0.0000	0	0.0000
G1 Execution Services, LLC (ETMM)	18.74	25.70	16.13	0.98	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Jane Street Capital, LLC (JNST)	8.30	10.66	16.13	1.96	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
NASDAQ Execution Services, LLC (NSDQ)	6.99	0.00	0.00	28.18	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
New York Stock Exchange (NYSE)	6.89	0.00	0.00	27.79	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
NYSE Arca (ARCA)	3.83	0.00	0.00	15.46	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Cboe EDGX US Equities Exchange (EDGX)	3.45	0.00	0.00	13.89	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Instinet BlockCross (BLKX)	1.94	0.00	0.00	0.00	72.73	0	0.0000	0	0.0000	0	0.0000	0	0.0000

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Members Exchange (MEMX)	1.41	0.00	0.00	5.68	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000

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Citadel Securities LLC (CDRG):

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VIRTU Americas, LLC (NITE):

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G1 Execution Services, LLC (ETMM):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Jane Street Capital, LLC (JNST):

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NASDAQ Execution Services, LLC (NSDQ):

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New York Stock Exchange (NYSE):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

NYSE Arca (ARCA):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Cboe EDGX US Equities Exchange (EDGX):

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Instinet BlockCross (BLKX):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Members Exchange (MEMX):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

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Citadel Securities LLC (CDRG)	44.00	66.67	100.00	38.10	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0.0000
Wolverine Execution Services LLC (WEXX)	24.00	0.00	0.00	28.57	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0.0000
Dash Financial Technologies LLC (DASH)	20.00	33.33	0.00	19.05	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0.0000
Susquehanna Capital Group (SUSQ)	12.00	0.00	0.00	14.29	0.00	0	0.0000	0	0.0000					