

Venue - Non-directed Order Flow	Non-Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non-Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/Received for Market Orders(cents per hundred shares)	Net Payment Paid/Received for Marketable Limit Orders(USD)	Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/Received for Other Orders(cents per hundred shares)
Philadelphia Stock Exchange (PHLX)	4.00	0.00	0.00	2.50	50.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CBOE BZX U.S. EQUITIES EXCHAN (BATS)	4.00	0.00	0.00	5.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CBOE EDGX U.S. EQUITIES EXCHA (EDGX)	4.00	0.00	0.00	5.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Citadel Securities LLC (CDRG)	2.00	0.00	0.00	0.00	50.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
UNKNOWN (BOX)	2.00	0.00	12.50	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
UNKNOWN (ISE)	2.00	0.00	0.00	2.50	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Material Aspects: