



# NCR CX5 All-in-One POS

## Site Preparation Guide

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**7773**



BCC5-0000-5397

Issue K

# Copyright

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# Preface

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This is a contractual document. It contains important warnings and confers important legal rights and obligations. You are advised to read it carefully.

It is the responsibility of the customer to ensure that all installation preparations are complete and in compliance with NCR Voyix specifications and requirements and all applicable national, state, or local codes, regulations, and laws.

## Audience

This book is written for hardware installer/service personnel, system integrators, and field engineers.



### Note

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# Revision Record

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Issue	Date	Remarks
A	Nov 2019	First Issue
B	Jul 2020	Release 1.1
C	Sep 2020	Release 1.2
D	Jan 2021	Release 1.3
E	Mar 2021	Added tilt angle
F	Nov 2021	Release 1.4
G	Jan 2022	Added: <ul style="list-style-type: none"><li>• F471 OSI APA Graphical Display</li><li>• F475 XL10 High Mount, Non-Touch</li><li>• F476 XL10 High Mount, PCAP</li></ul>
H	Jan 2023	Updated F038/F039/F048/F049 dimensions
I	Jun 2023	Added Display with Base dimensions
J	May 2024	Updated links from ncr.com to ncrvoyix.com
K	Jan 2025	Changed to Voyix template Added F435, F436, F437, F438, F439

# NCR CX5 All-in-One POS (7773) Site Preparation

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This section provides the information necessary to prepare a site to NCR Voyix specifications prior to installing an NCR CX5 All-in-One POS (7773). Prepare the site properly before installing the terminal because site preparation deficiencies may be difficult to detect and correct after installation.



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This is a contractual document. It contains important warnings and confers important legal rights and obligations. You are advised to read it carefully.

It is the responsibility of the customer to ensure that all installation preparations are complete and in compliance with NCR Voyix specifications and requirements and all applicable national, state, or local codes, regulations, and laws.

# About this Document

This book provides site preparation information for the NCR CX5 All-in-One POS (7773) only. Site preparation for any peripheral components, AC wiring, and Network wiring are NOT provided in this book, but are in separate documents.

This document contains the information necessary for the preparation of a site that conforms to NCR Voyix specifications. It is very important that the site complies with the requirements specified in the document because, once the equipment has been installed, deficiencies in site preparation or the problems caused by these deficiencies are much more difficult to detect and correct. Furthermore, failure to comply with these requirements or to take proper steps to protect equipment against risks identified in this document may cause serious damage to the equipment and to the customer's business.

In addition to the need to comply with the requirements specified, electrical wiring and mechanical systems must also comply with all relevant codes, laws, and regulations.

It is important that a customer or his agent who is fully conversant with the special requirements of electronic equipment prepare the site. The responsibility of ensuring that the site is prepared in compliance with this document remains with the customer.

For information and guidance purposes only, a list is provided, in general terms, of those matters for which the customer is responsible. This list is not intended to be comprehensive, and in no way modifies, alters, or limits the responsibility of the customer for all aspects of adequate site preparation.

NCR Voyix staff will be available to answer questions relating to the contents of this document except where:

- A customer has been notified that a full or partial consultant service is available and/or that NCR Voyix will be willing to undertake a preliminary or final site survey and
- The customer shall have entered into a formal contract with NCR Voyix for provision of the same.

No comment, suggestion, or advice offered or not offered about preparation of the site, nor any inspection of the site, whether before or after preparation, is to be taken as approval of the location of the site and equipment or its preparation. NCR Voyix will not be liable in respect to any comment, suggestion, or advice given by its staff or in respect to any failure to give advice.

Finally, only the customer can know the full extent of the damage that may be caused to his business by reason of failure of the equipment that is to be installed. For this reason, it is the customer's responsibility to ascertain the extent of any such possible damage to his existing or planned business, and to effect full insurance in respect of it.

# Customer Responsibilities

Before installing the system, the customer must perform or provide the following:

- When required by NCR Voyix, provide the NCR Voyix Customer Services representative with appropriate drawings that indicate:
  - Equipment location
  - Site wiring (power and communications, paths and lengths)
  - Location of other equipment that may generate electrical noise, electromagnetic interference, or heat
- Make building alterations necessary to meet wiring and other site requirements
- Provide and install all communications cables, wall jacks, special connectors, and associated hardware
- Provide and install necessary power distribution boxes, conduits, grounds, lightning protection devices, and associated hardware
- Ensure all applicable codes, regulations, and laws (including, but not limited to, electrical, building, safety, and health) are met
- Provide and install auxiliary power or other equipment as required
- Provide storage or service areas as required
- Meet all system/unit environmental requirements
- Provide and install floor coverings and environment systems that limit or control static electricity build-up and discharge

In general, keep the NCR Voyix equipment area free from dust, smoke, lint, and other particles.

Restrict smoking, eating, and drinking around the equipment. Avoid locating the equipment near other machines that generate ink, carbon, and paper dust particles.



# Third-Party Peripheral Certification

Third-party peripherals must be certified with the POS terminal or a potential ESD issue can occur.

Third party peripherals include any electrically powered devices connected to the POS terminal that is not an NCR Voyix branded product or a certified solution advocated by NCR Voyix. Examples of third party products include printers, external disk drives, cash drawers, pin pad devices, etc.

Peripherals tend to be less sensitive to electrostatic damage when directly grounded through their power cords. If the peripheral is powered by the terminal and has no dedicated ground, then all of the ESD energy is coupled into the port connection. Some devices may require the use of an in-line galvanic isolator/surge protector in order to prevent problems.

The NCR Voyix TPP/SCER process is designed to evaluate third party peripherals and determine whether additional protective devices are needed.

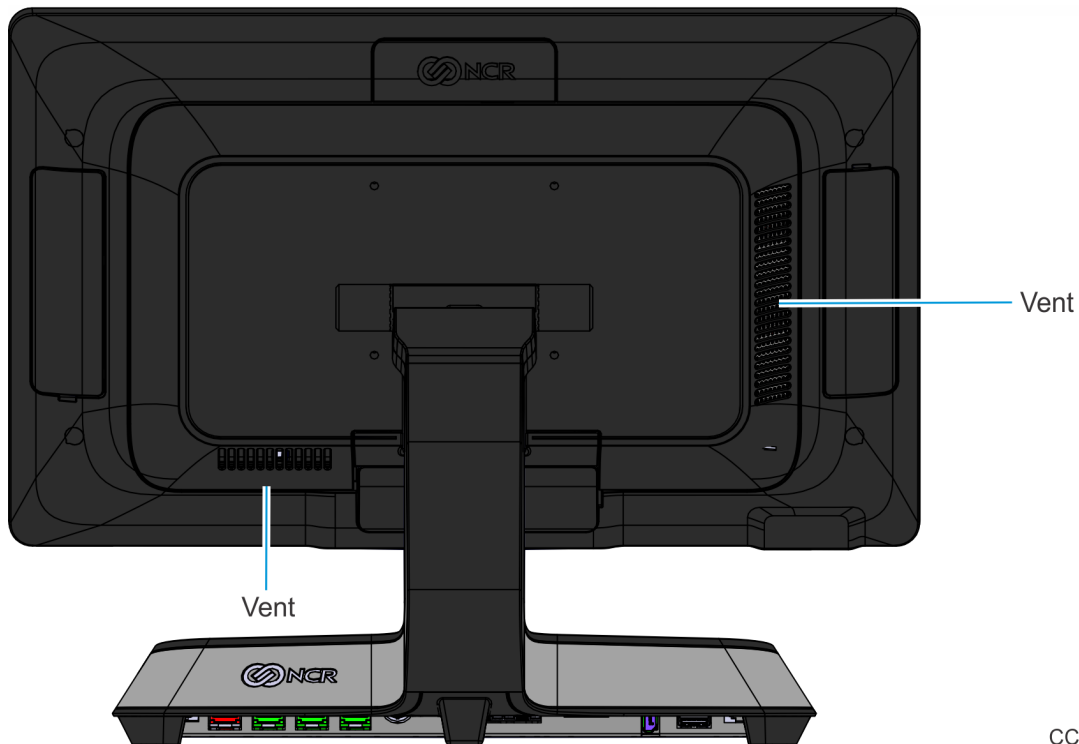
The [NCR Workstation and Peripherals AC Wiring Guide](#) (BSTO-2115-53) contains additional information on this subject.

## LAN Communications

The NCR CX5 All-in-One POS (7773) supports and prefers Ethernet 10/100/1000baseT Local Area Network (LAN) communication protocol. For Ethernet communications wiring specifications, refer to the [NCR Ethernet Communication Wiring Guide](#) (BSTO-2118-82).

# Airflow Requirements

Do not block the air vents on the terminal or peripherals. These vents are necessary for cooling.



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Do not place the terminal in an enclosed area where sufficient ventilation is not available. Leave at least 100 mm (4 inches) of clearance from air vents.

# Environmental Requirements

## Barometric Pressure

The terminal operates within the following barometric pressure conditions:

- Maximum operating altitude: 3,000 m (9,840 ft.)
- Operating range of pressure: 105 to 70 kPa (15.2 to 10.2 lb./in.)

## Temperature and Humidity

The NCR CX5 All-in-One POS (7773) is designed to operate in a CES Working Range 3, which is applicable to a broad spectrum of fully to partially conditioned office and commercial environments. This includes environments where—dependent upon local climatic conditions—heating, cooling, and humidity control capability may not be provided at all or be inadequate to maintain desirable human comfort levels on a day-to-day basis.

Ranges	Temperature	Relative Humidity	Dew Point
Operating Range	10°C to 40°C (50°F to 104°F)	20–80%	26°C (78.8°F)
Storage Range	–10°C to 50°C (–14°F to 122°F)	10–90%	N/A
Transit Range	–40°C to 60°C (–40°F to 140°F)	5–95%	N/A

# Electrical Requirements

## Terminal Power Requirements

The external power supply of the terminal has a maximum output of 150 Watts and provides power to the terminal and its peripherals.

Voltage Range	Frequency	Current
100-240 V	50-60 Hz	2.0 A

### Caution

Locate the power supply away from other electrical equipment, away from heat sources, away from possible liquid spills, and where there is adequate clearance for cooling.

## Peripheral Power Requirements

The number of peripherals that the terminal can support is dependent upon which peripherals are connected. For planning purposes, use the [NCR CX5 All-in-One POS \(7773\) Power Matrix](#) for details on total power distribution.

### Note

This file requires Microsoft Excel to run.

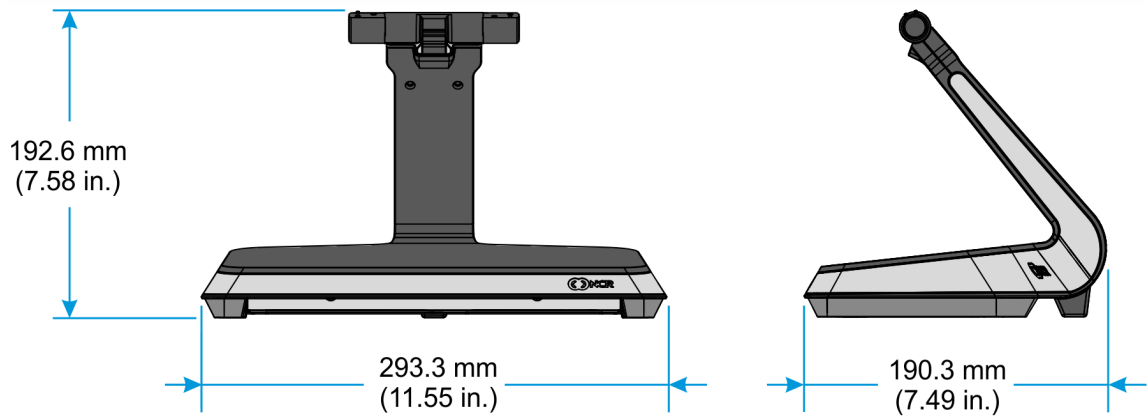
## Store AC Wiring Requirements

The customer must provide suitable AC power for the terminals, associated equipment, and devices. We recommend a dedicated unswitched power line specific for the NCR Voyix equipment installation. Refer to the [NCR Workstation and Peripherals AC Wiring Guide](#) (BSTO-2115-53) for store AC wiring requirements. The AC outlet must be installed near the terminal and easily accessible to the operator.

# Dimensions

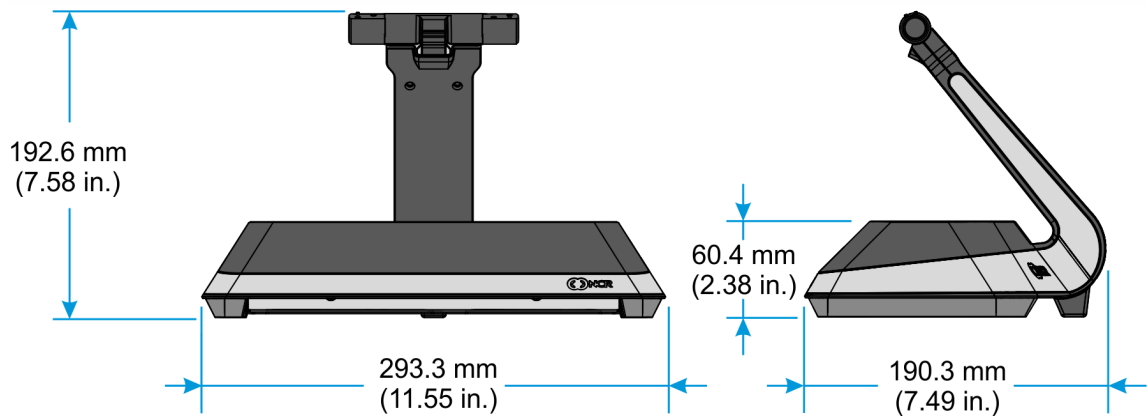
## CX5 Base

### Base with Remote Power Supply (F033/F035/F043/F045)



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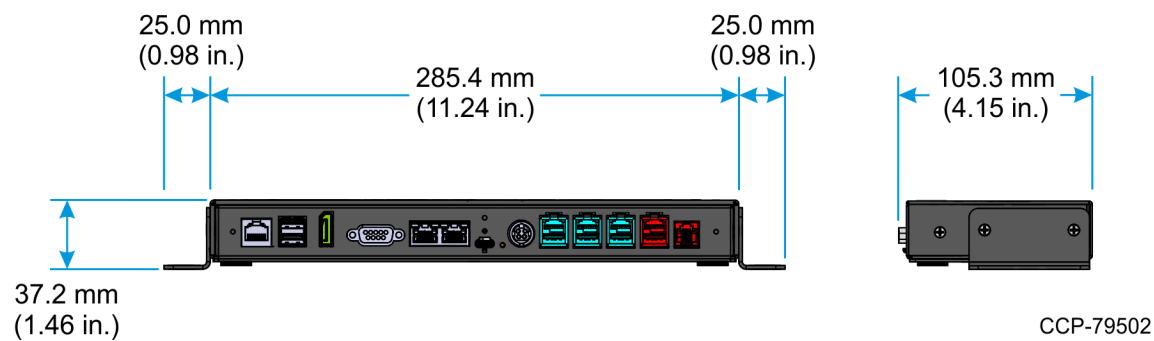
### Base with Integrated Power Supply (F032/F034/F042/F044)



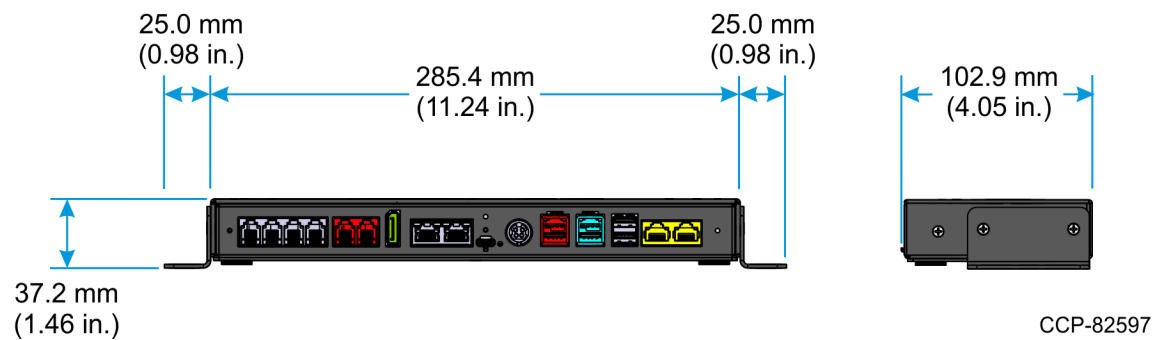
CCP-77060

# CX5 Remote I/O Chassis

## Remote USB Centric I/O (Retail) Chassis (F038/F048)

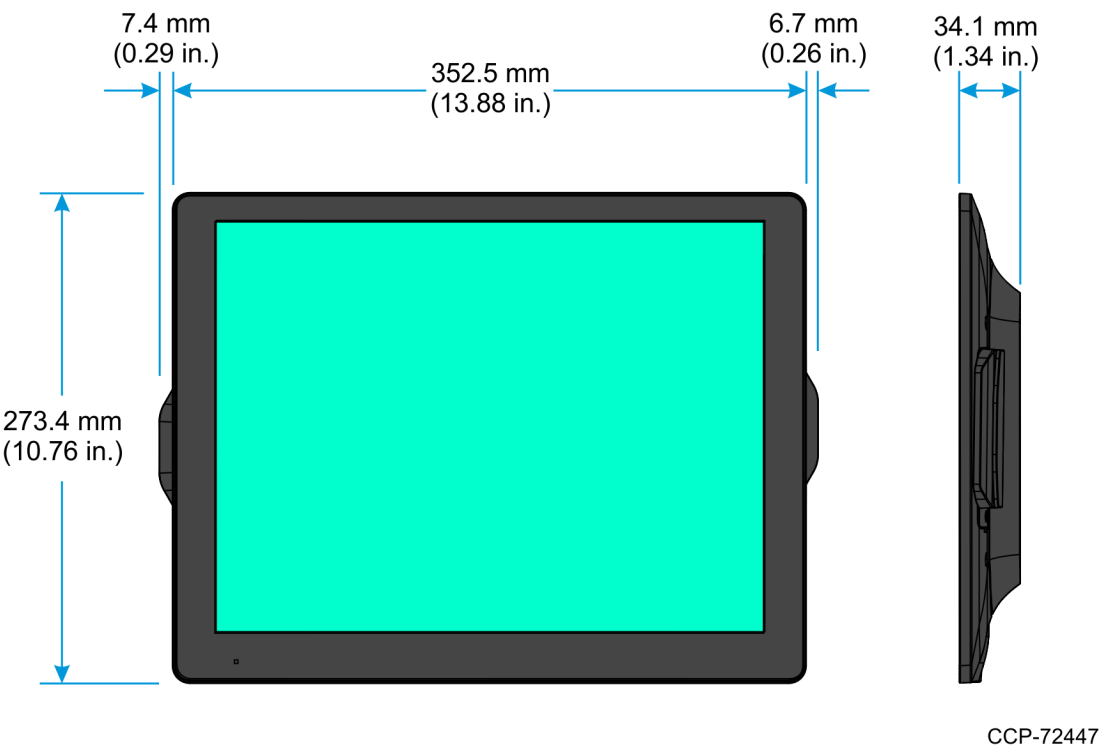


## Remote Serial Centric I/O (Hospitality) Chassis (F039/F049)

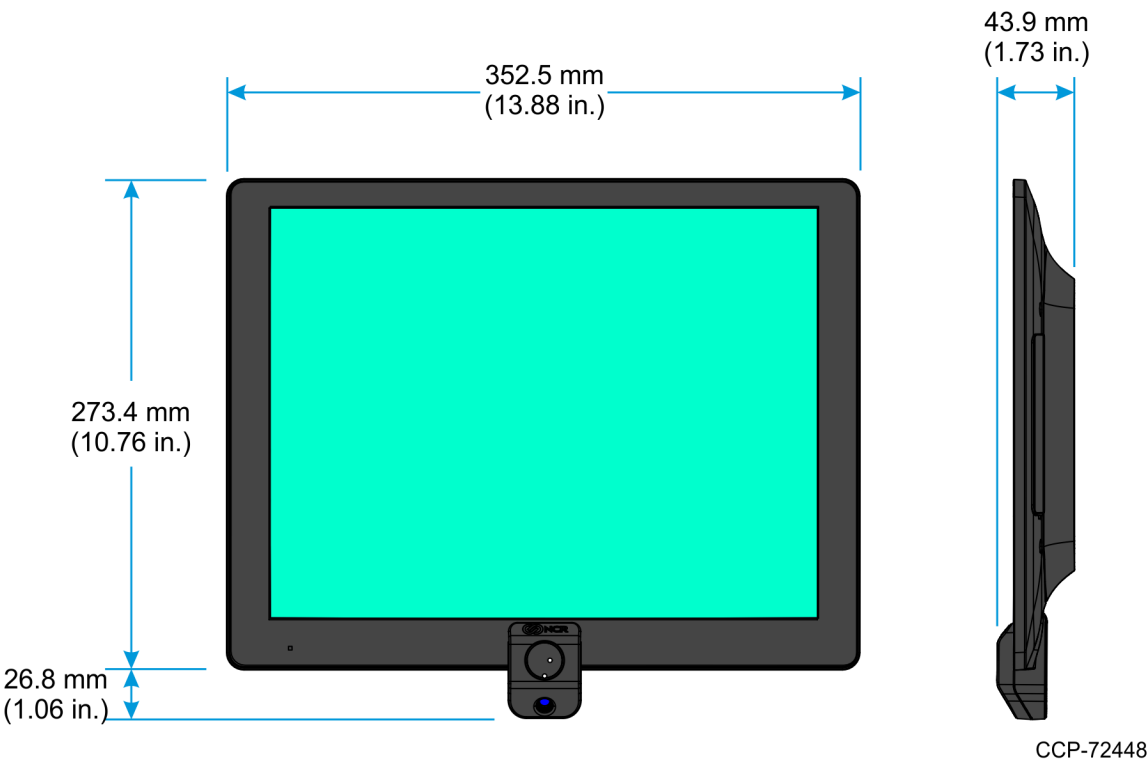


# CX5 15" 4:3 Display (F013)

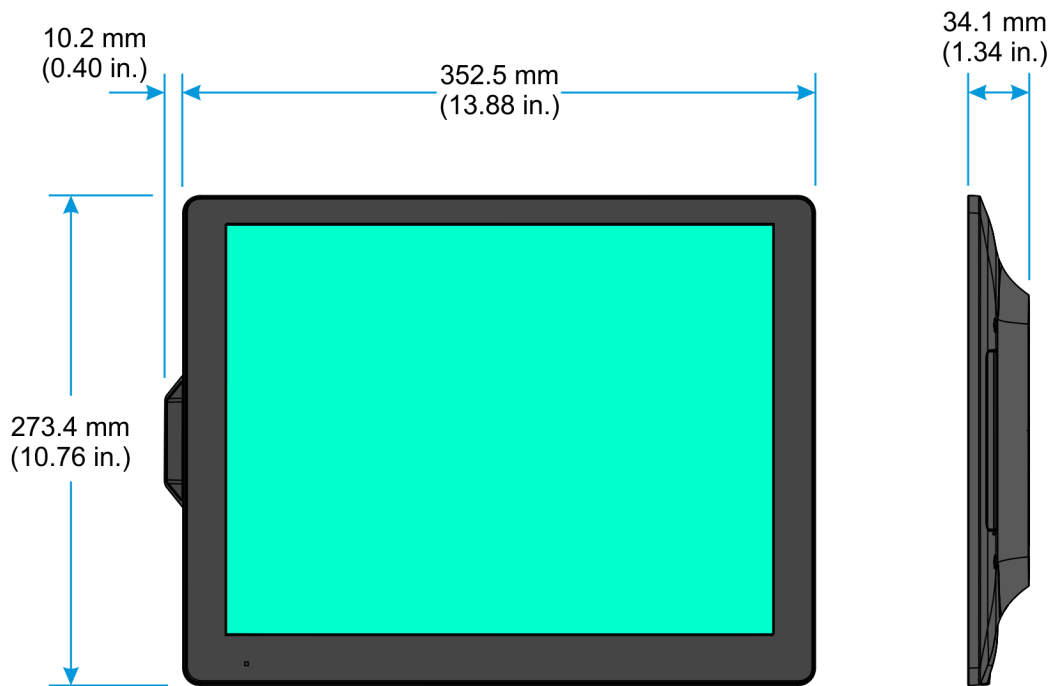
With Biometrics (F151/K151) and MSR (F141/K141)



# With 2-in-1 Sign-In (F161/K161)

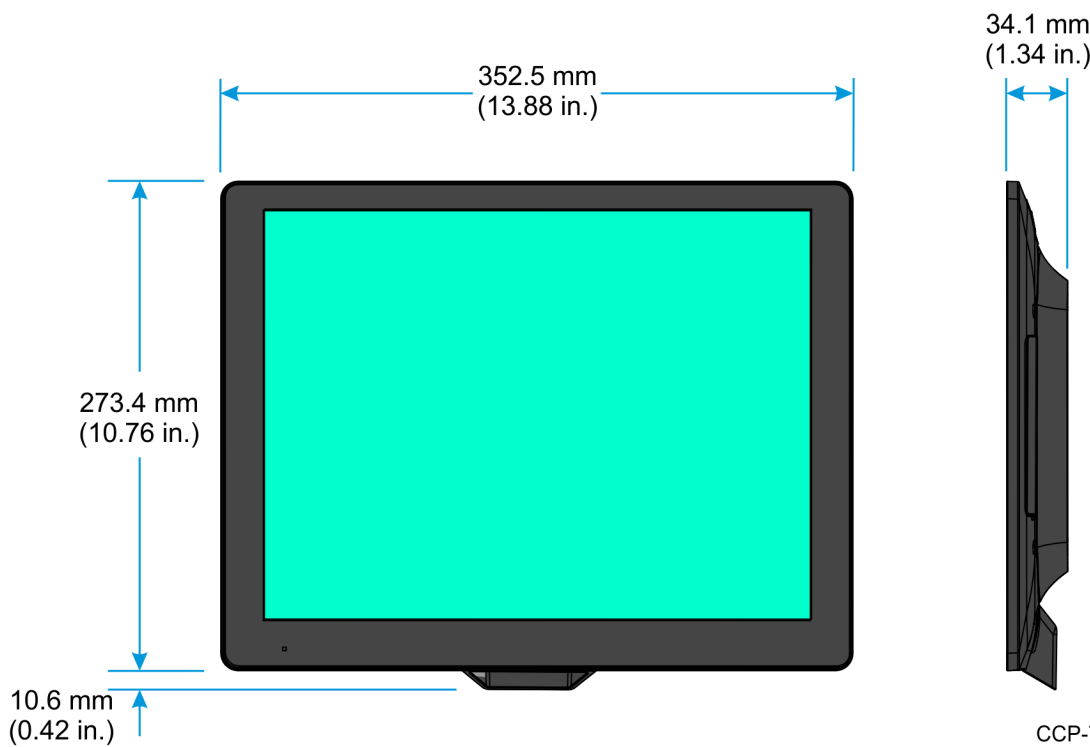


**With Imager (Port B) (F156)**



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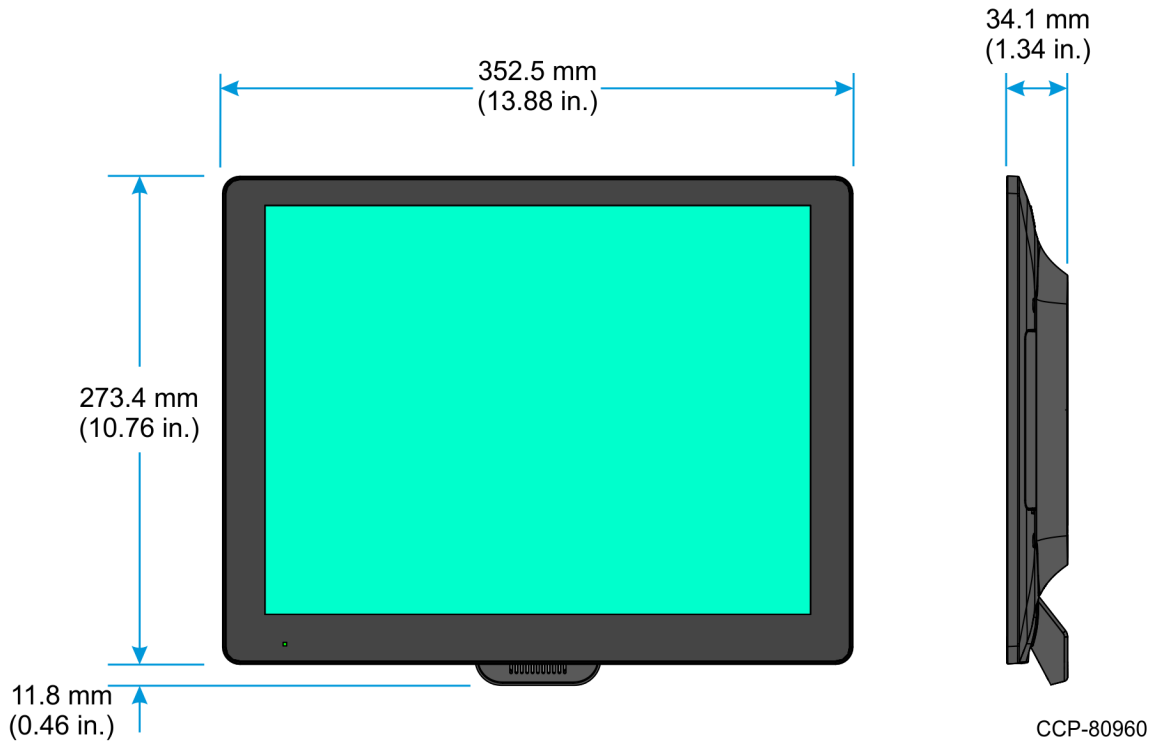
**With Imager (Port C) (F166)**



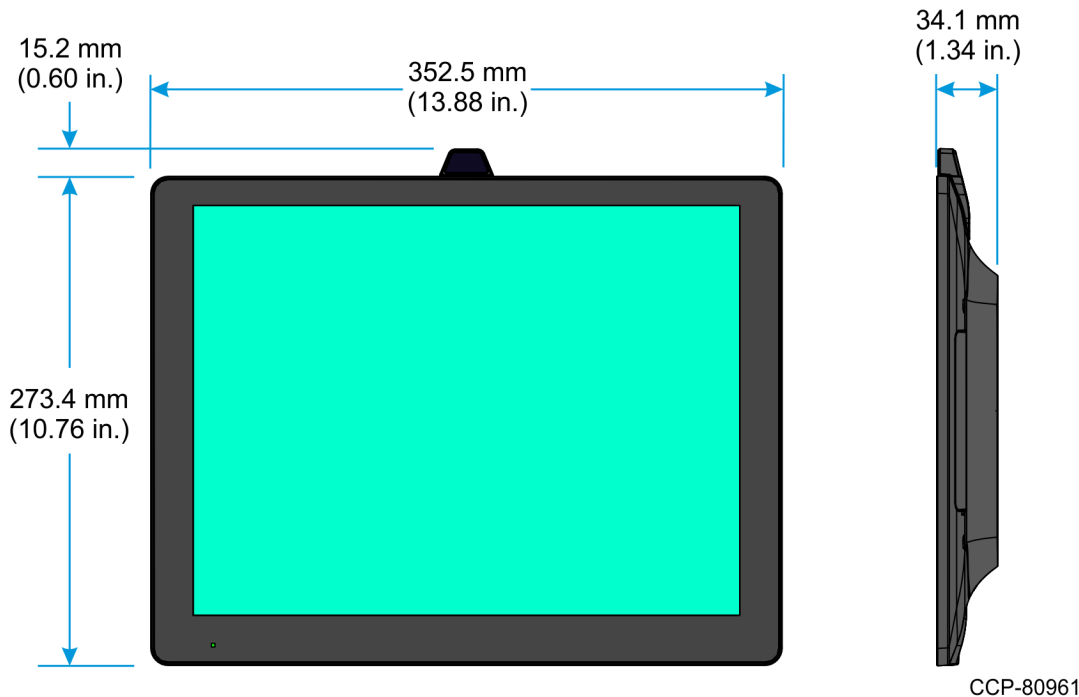
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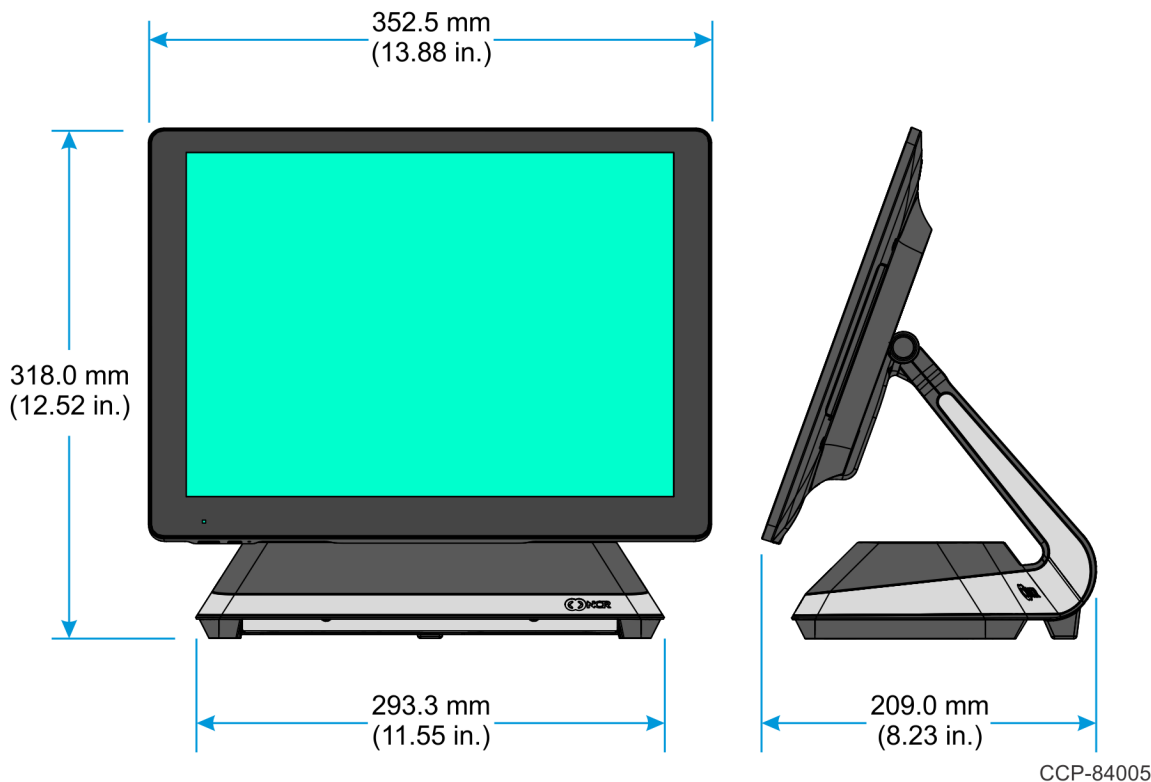
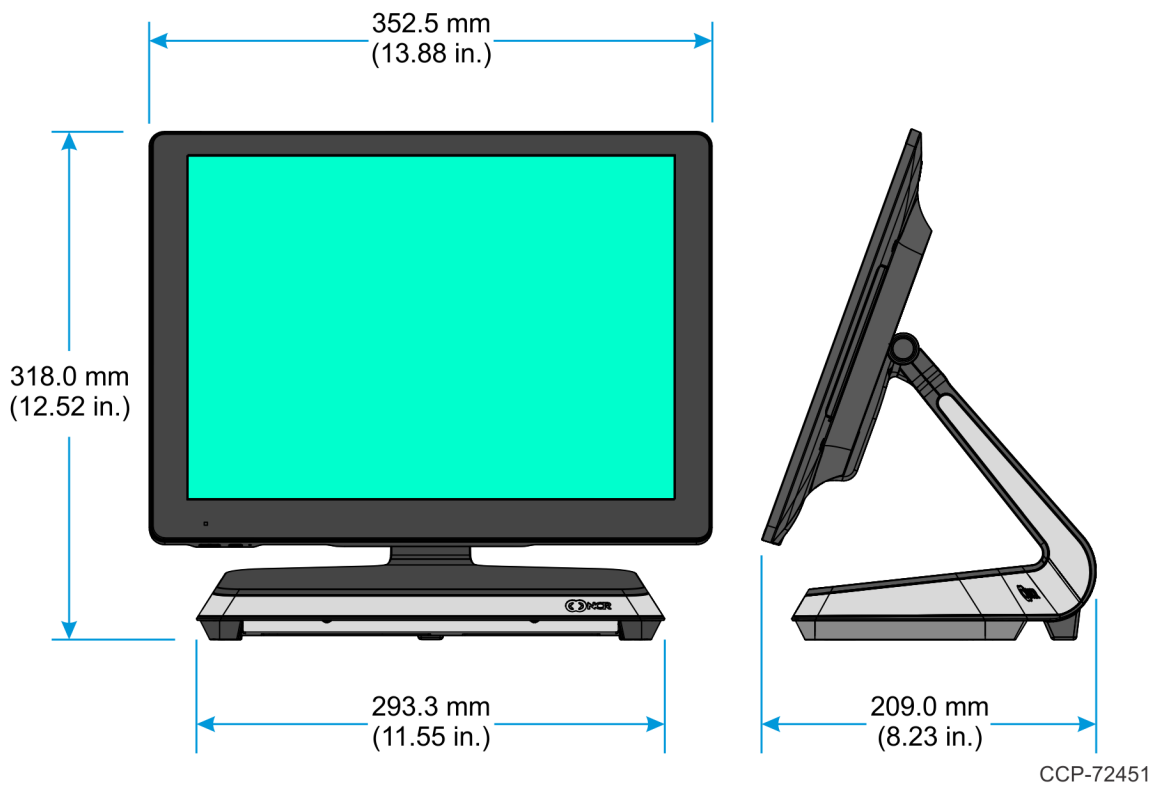
# With External Speaker (F169/K169)



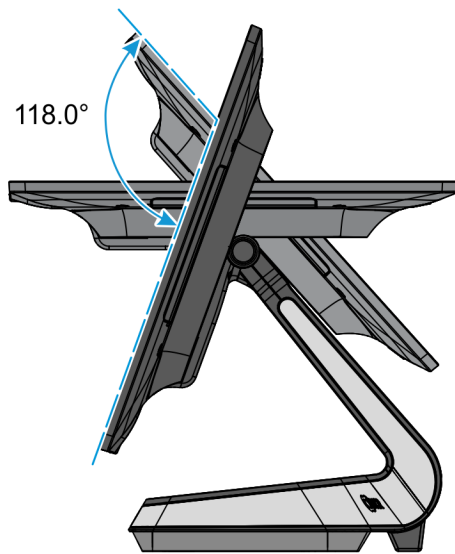
# With Camera (F460/K460)



CX5 15" 4:3 Display with Base

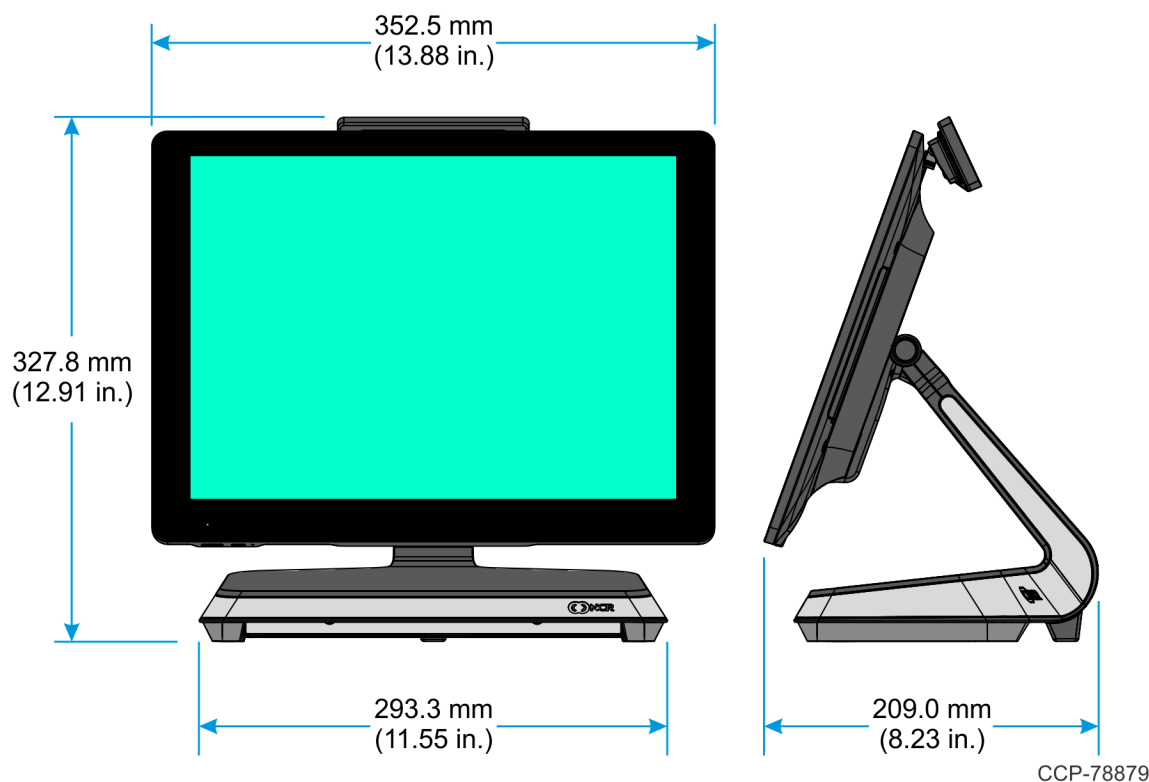
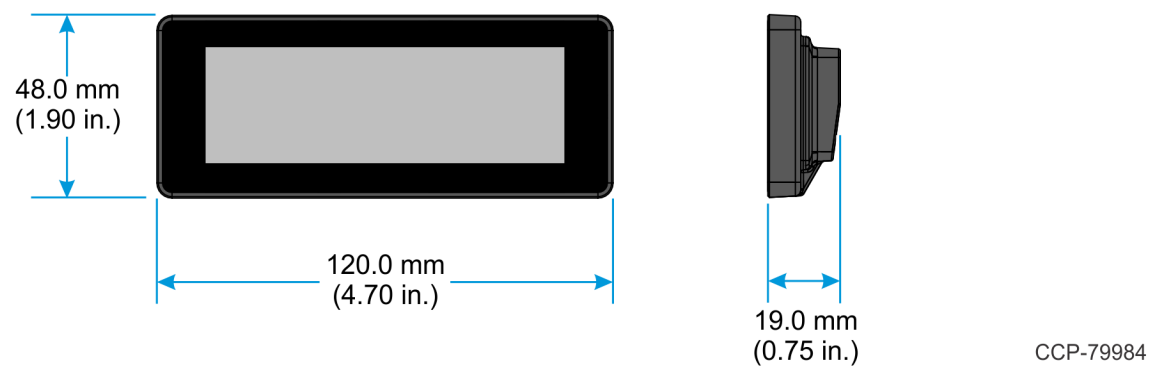


## Tilt Angle



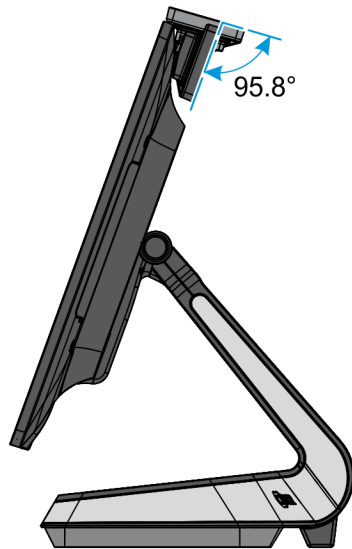
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With APA Graphical Display (F451/F471/K451)



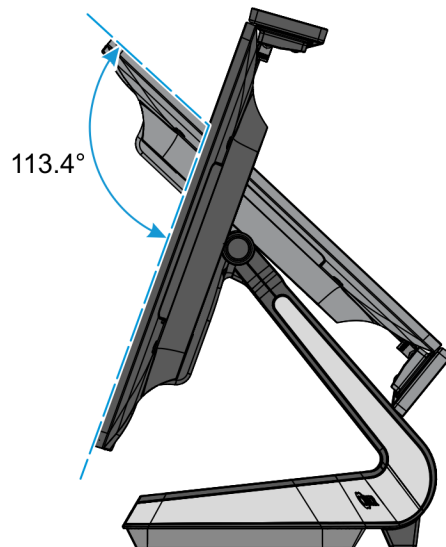
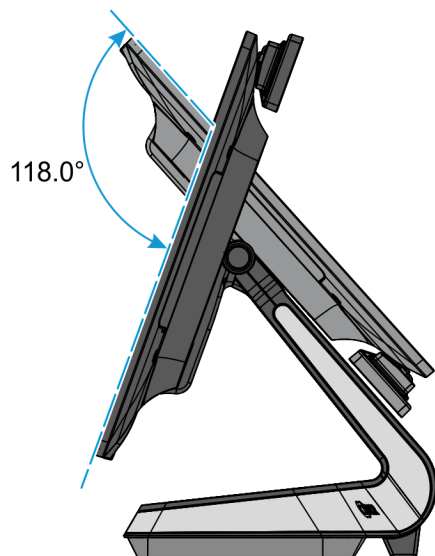
## ***Tilt Angle***

### ***Tilt Angle of APA Graphical Display on CX Head***



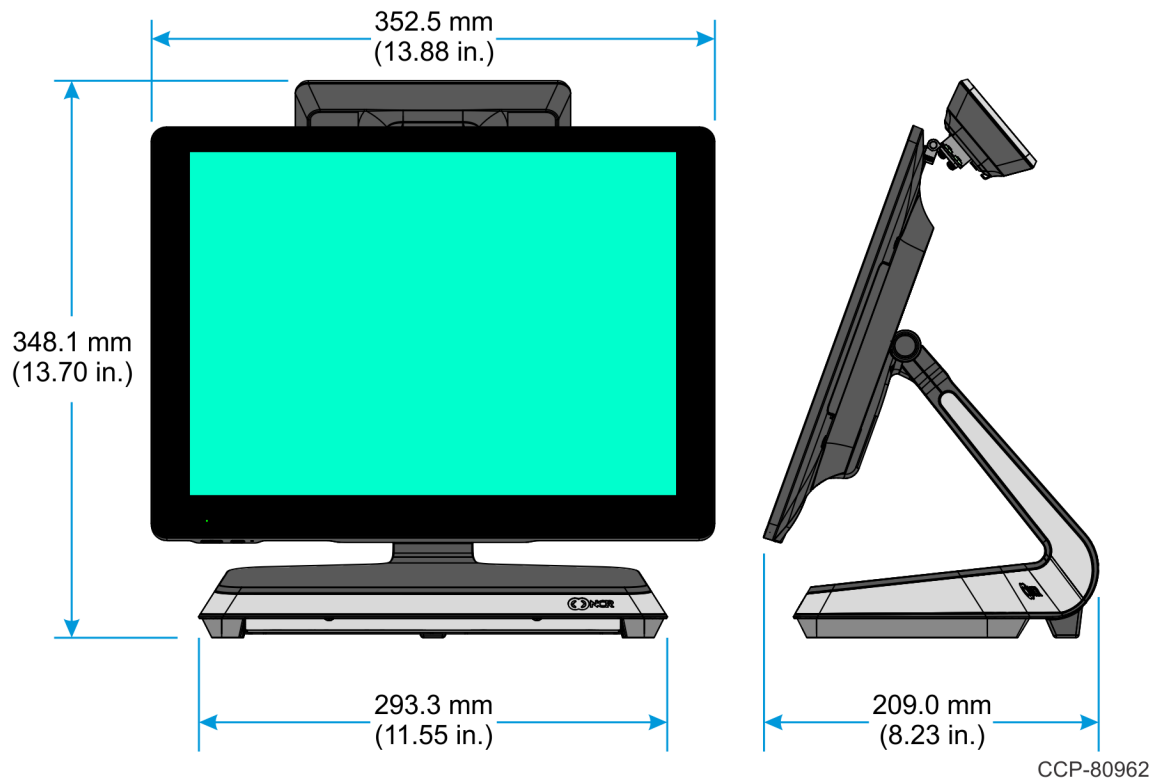
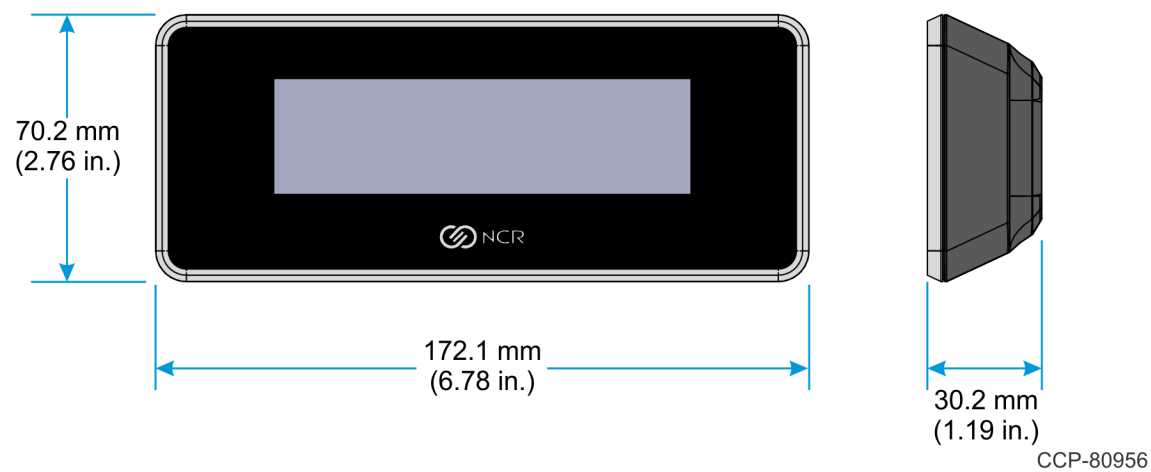
CCP-79975

### ***Tilt Angle of CX Head with APA Graphical Display***



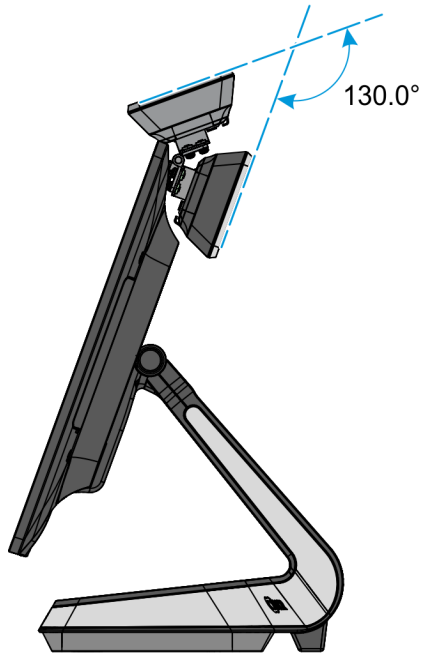
CCP-79981

**With 2x20/Double Byte Customer Display (F461/F462)**



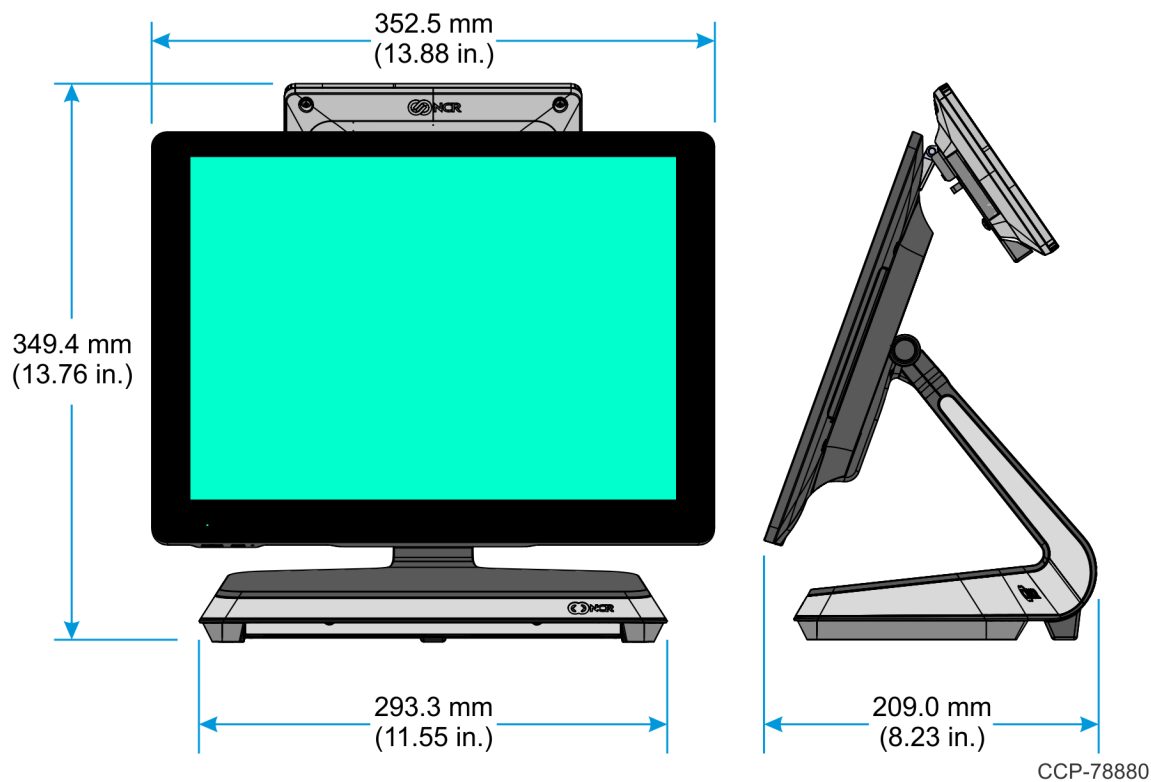
## ***Tilt Angle***

### ***Tilt Angle of 2x20/Double Byte Customer Display on CX Head***

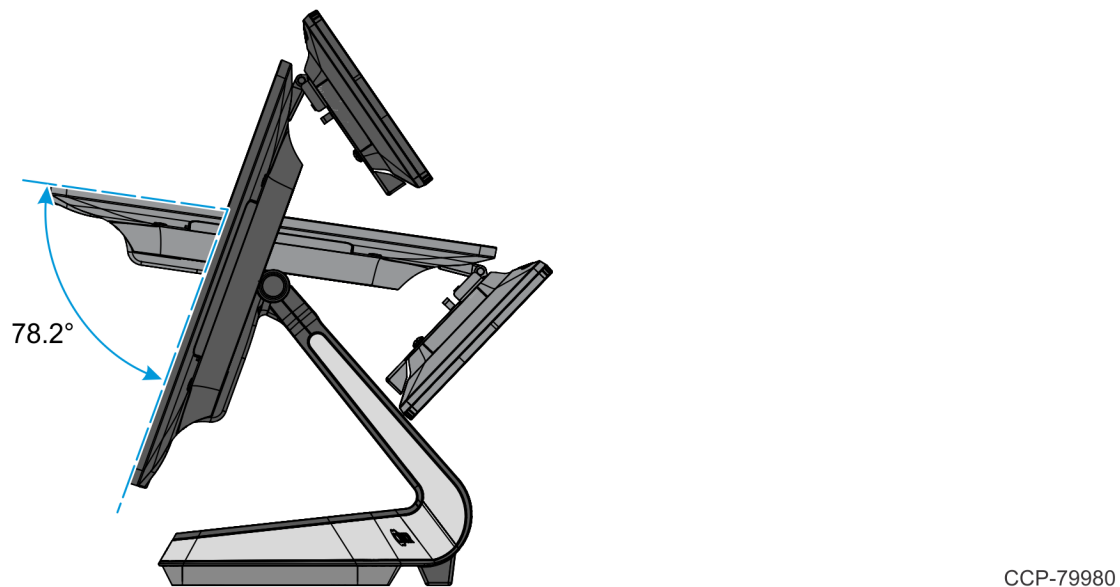


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With 7" (XL7) Customer Display (F452/F453/K452)

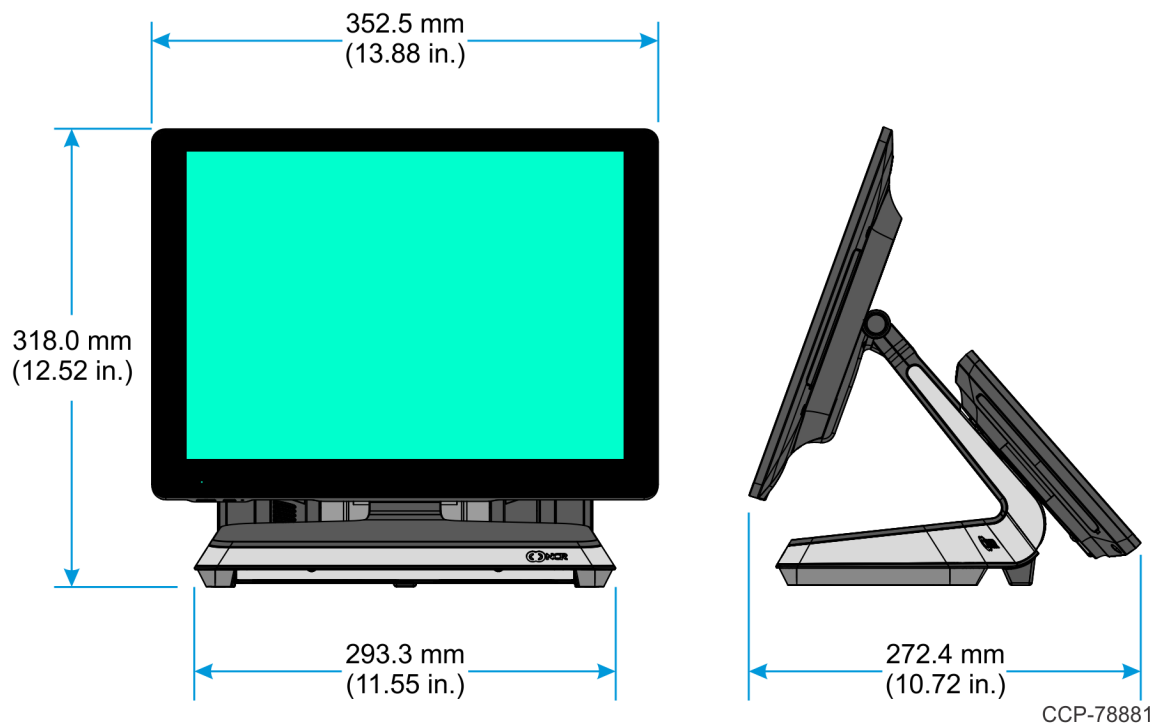


Tilt Angle

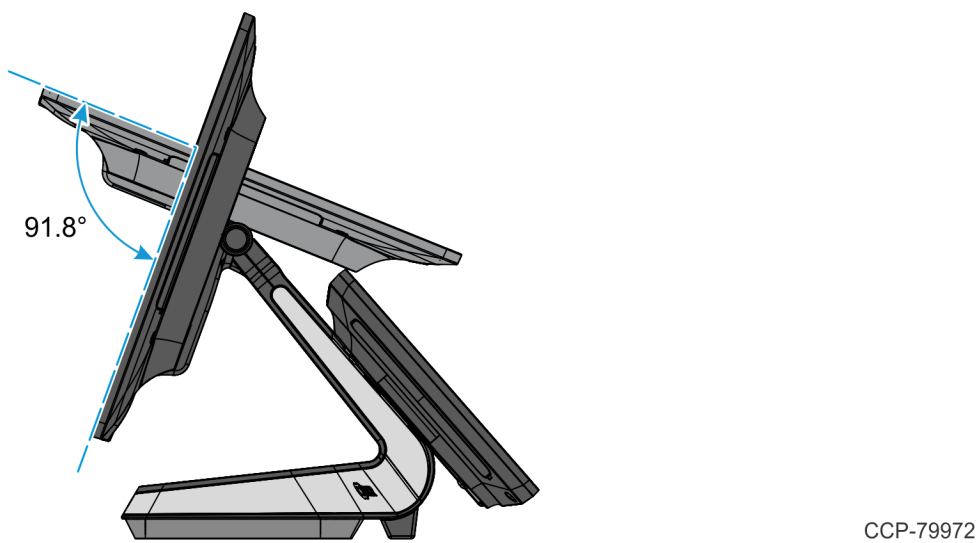




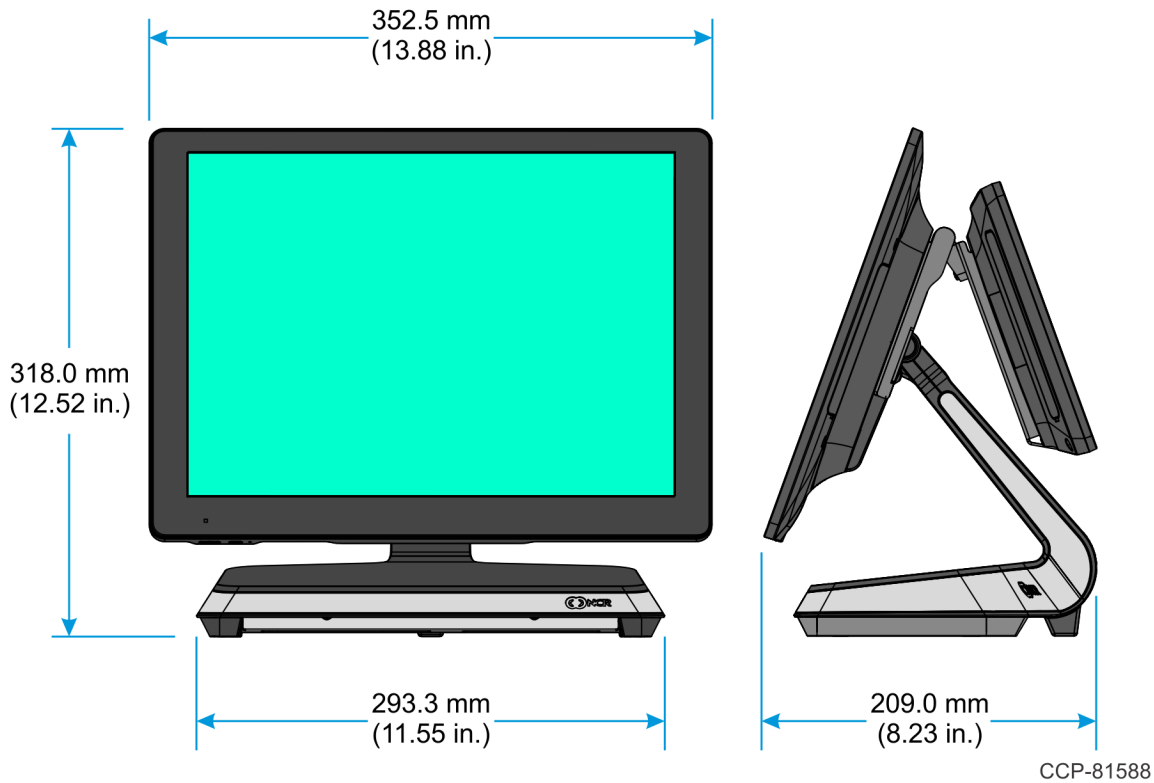
**With 10" (XL10) Base Display (F435/F436/F439/F455/F456/K455)**



***Tilt Angle***

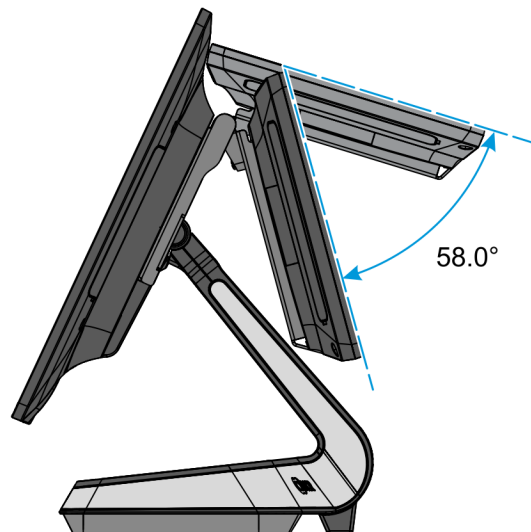


**With High Mount 10" (XL10) Customer Display (F475/F476)**



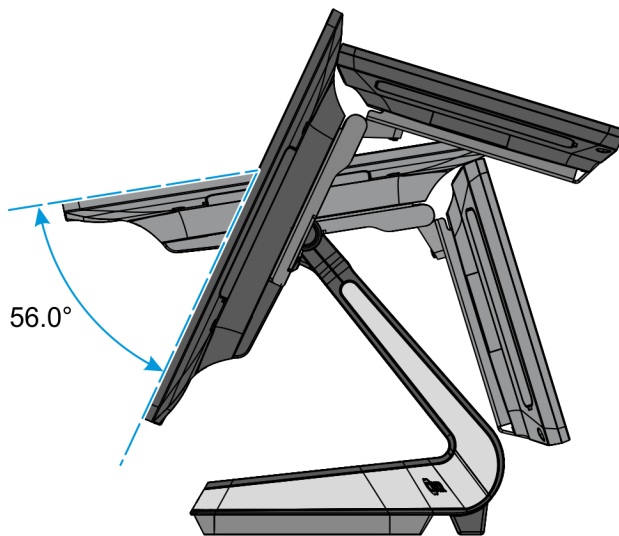
***Tilt Angle***

***Tilt Angle of XL10 Customer Display on CX Head***



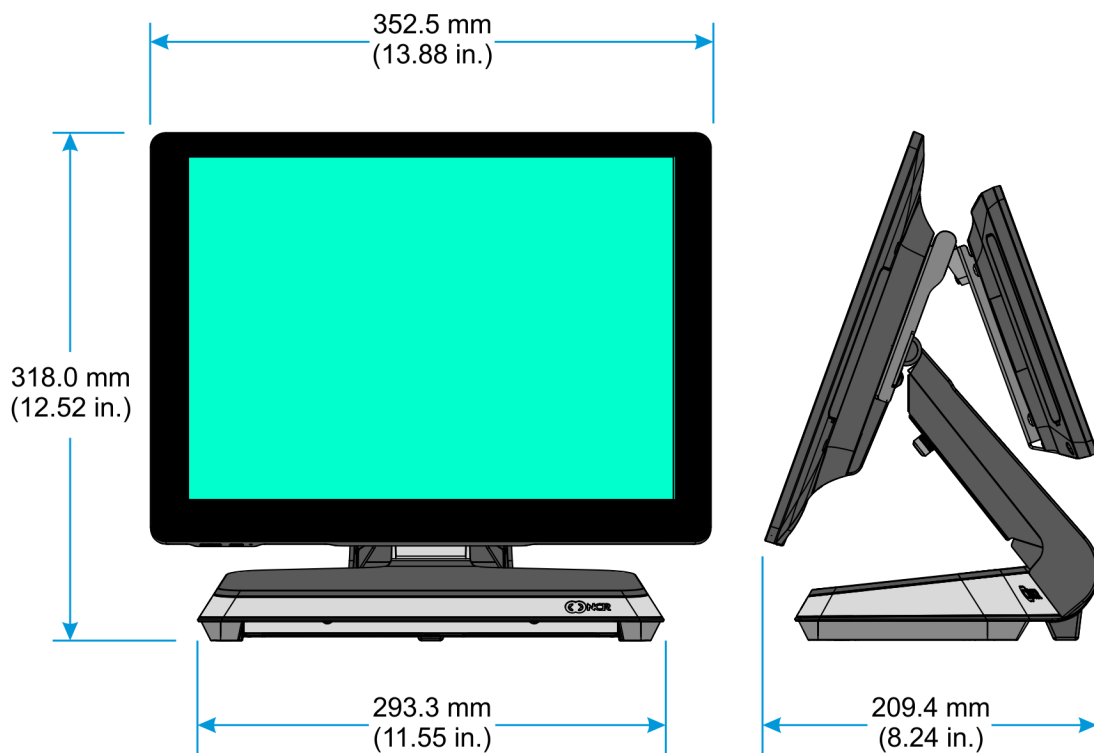
CCP-81589

## ***Tilt Angle of CX Head with XL10 Customer Display***



CCP-81590

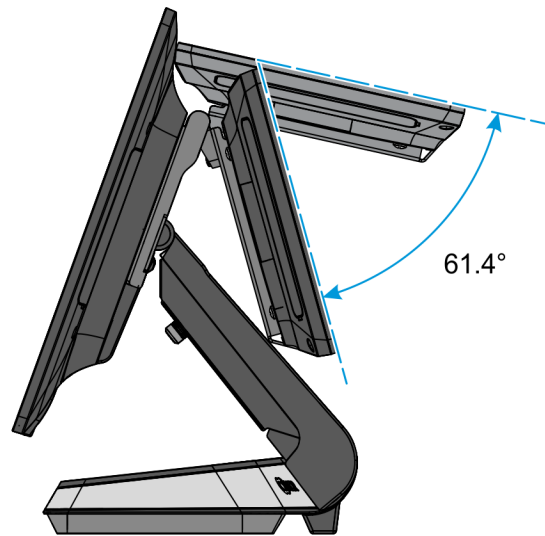
## **With High Mount 10" (XL10) DP Customer Display (F437/F438)**



CCP-84063

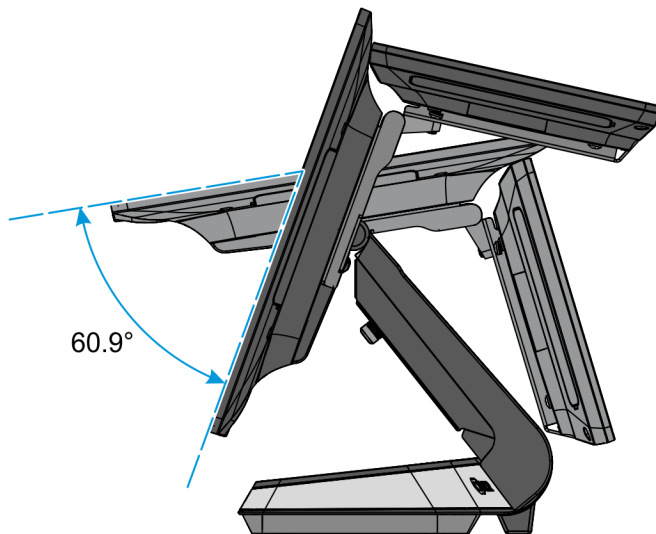
## ***Tilt Angle***

### ***Tilt Angle of XL10 Customer Display on CX Head***



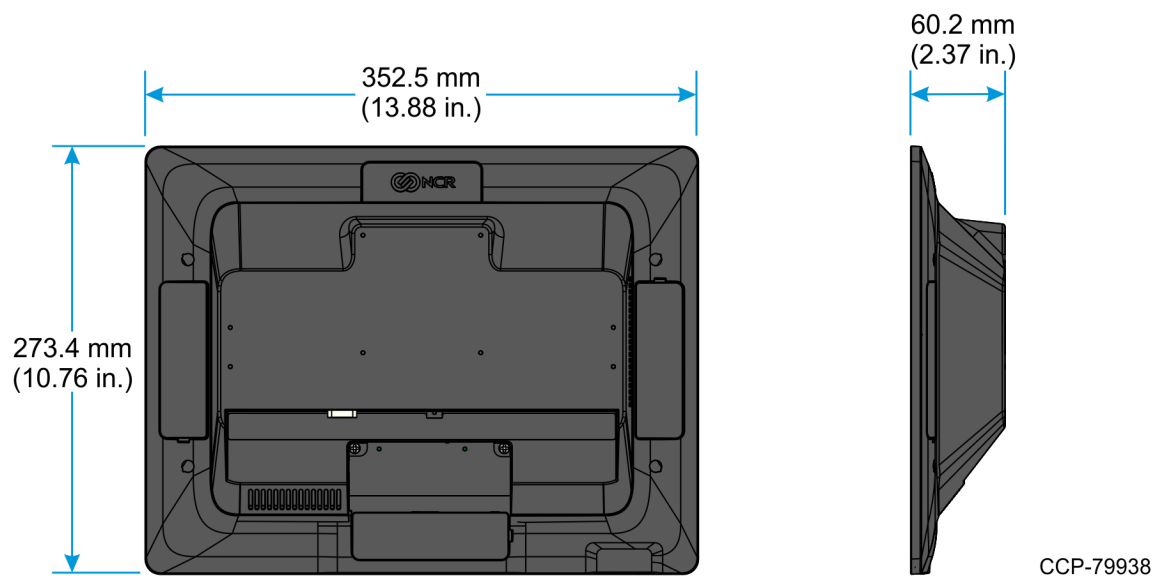
CCP-84064

### ***Tilt Angle of CX Head with XL10 Customer Display***

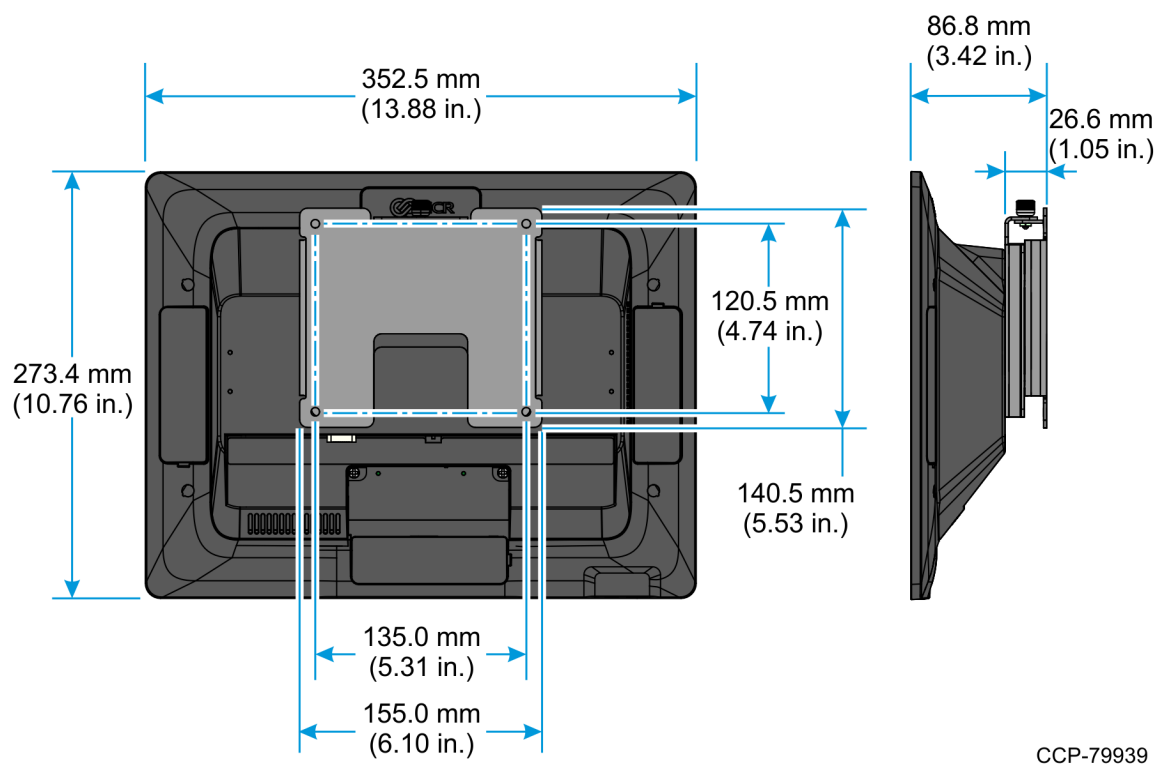


CCP-84065

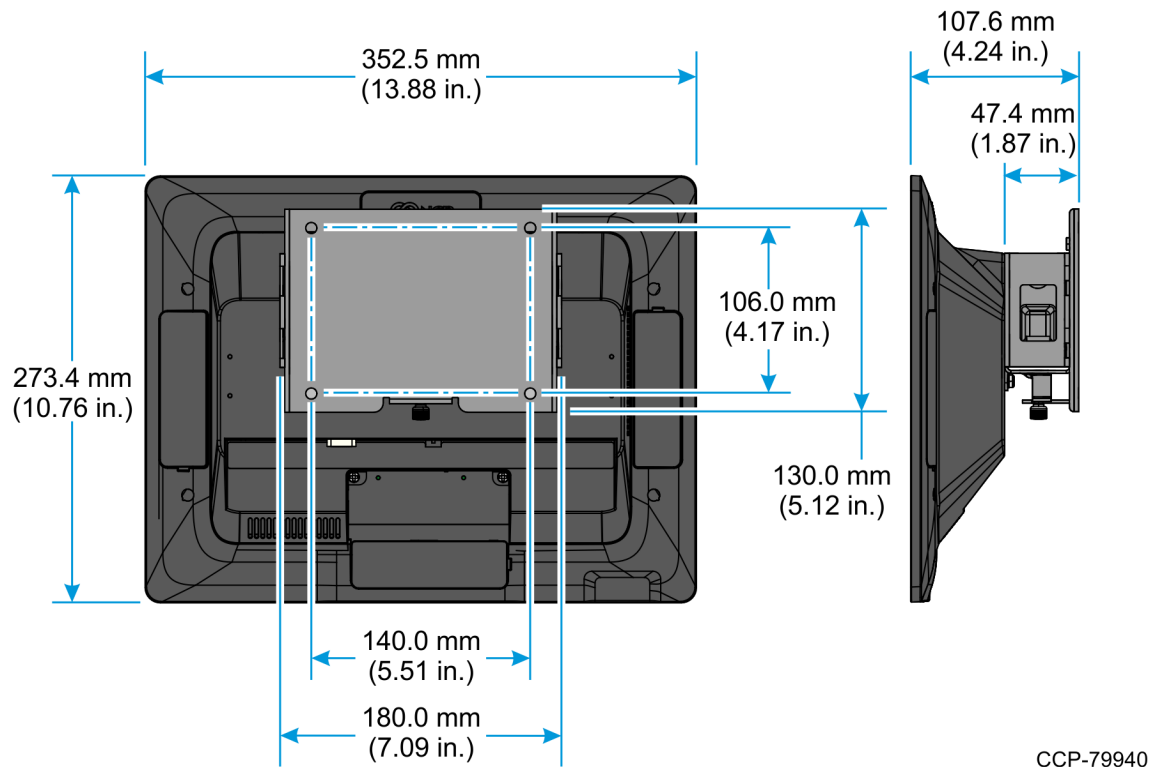
# CX5 15" 4:3 Display with Integrated I/O (F046/F047)



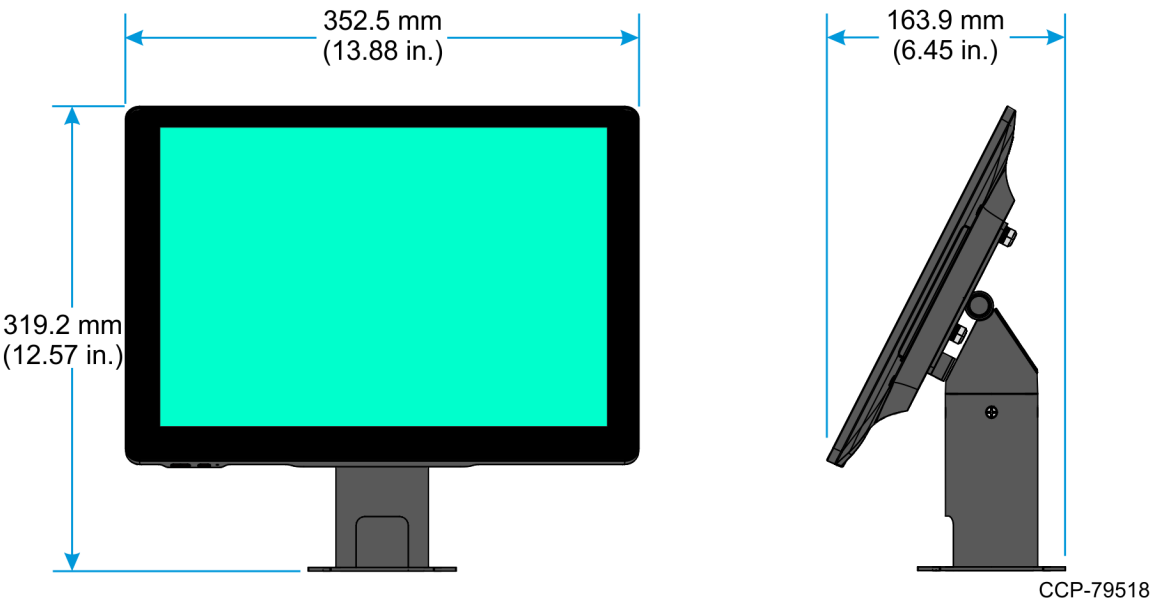
## With Wall Mount (7772-K320)



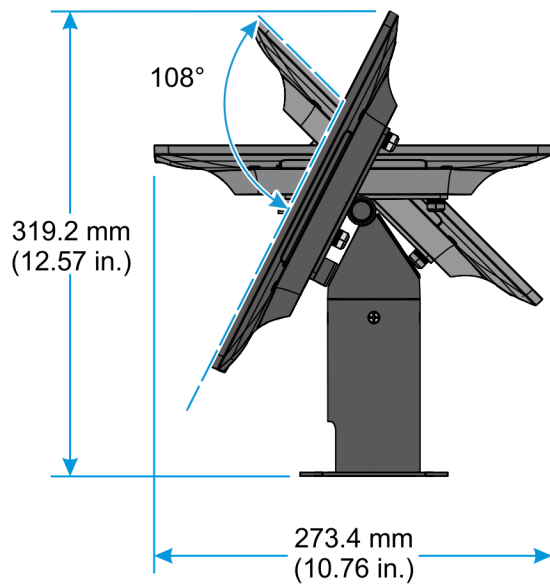
**With Wall Mount, Power Supply (7772-K325)**



**CX5 15" 4:3 Display Mounts for Remote I/O**  
**With Pole Mount (7772-K400)**

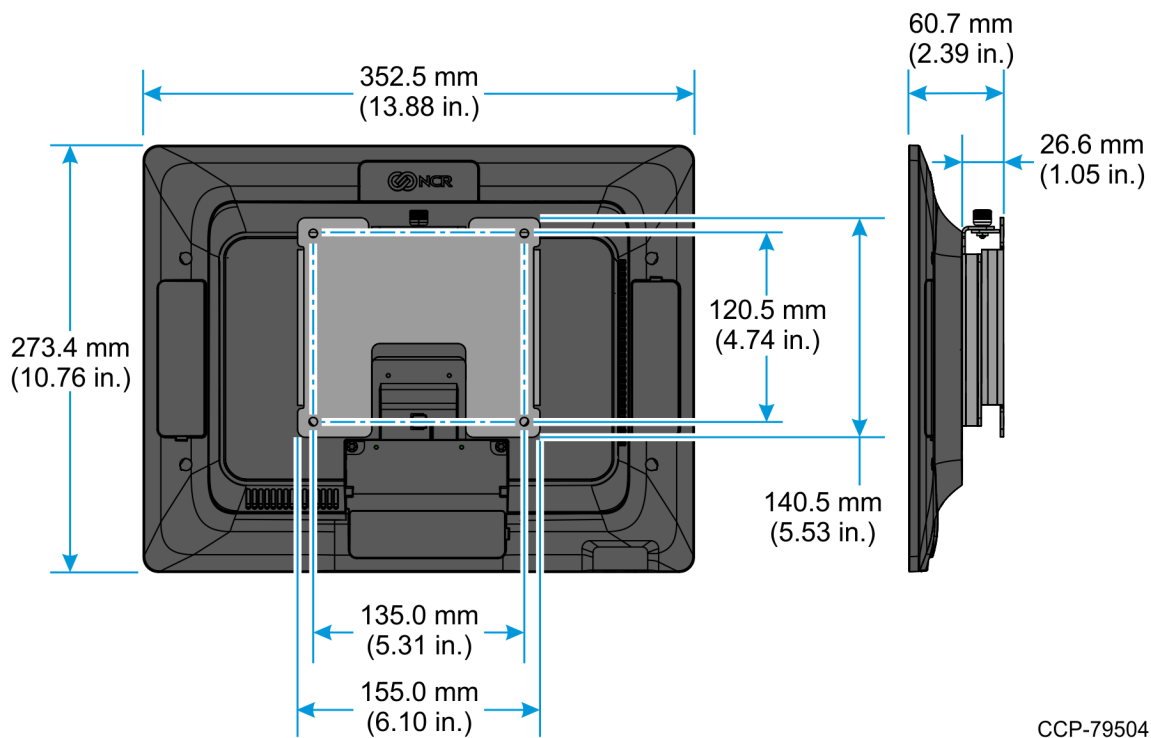


## Tilt Angle



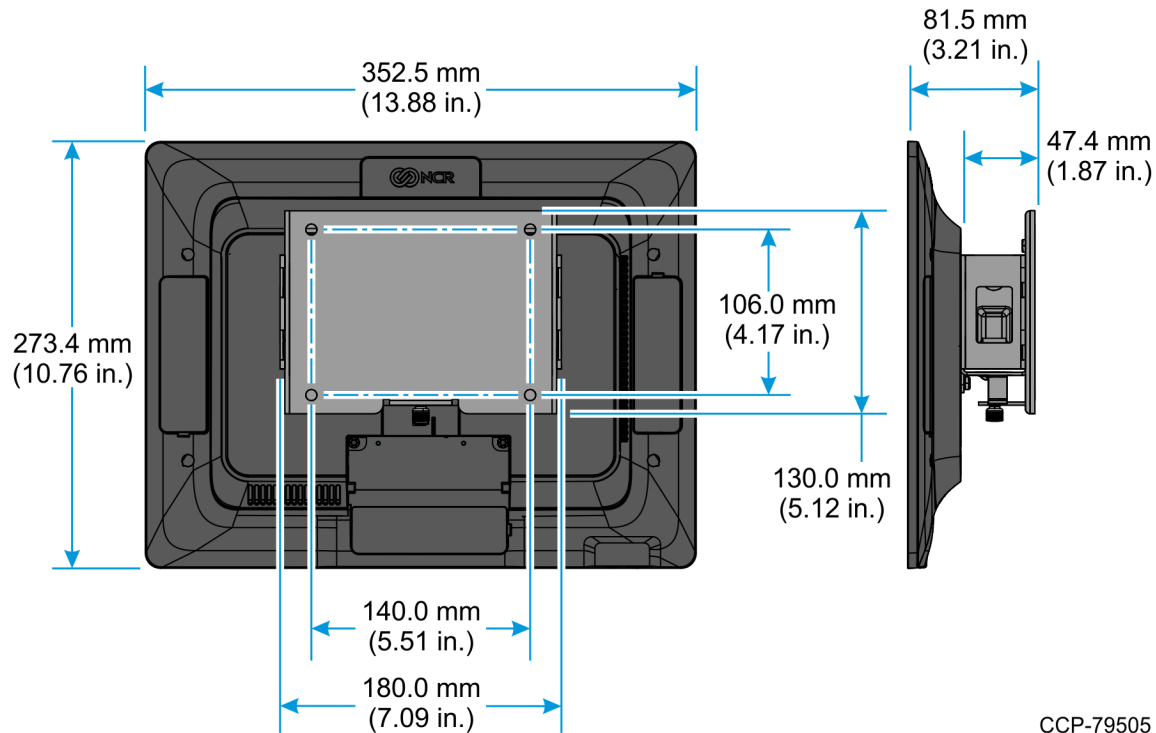
CCP-79519

## With Wall Mount (7772-K320)



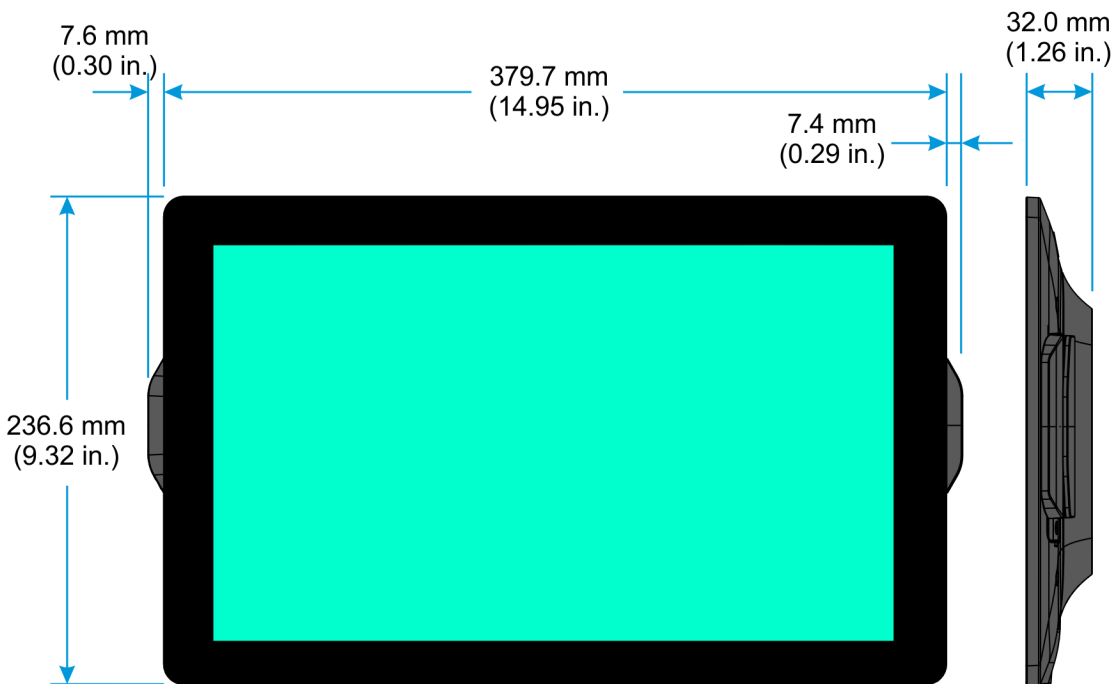
CCP-79504

**With Wall Mount, Power Supply (7772-K325)**



CCP-79505

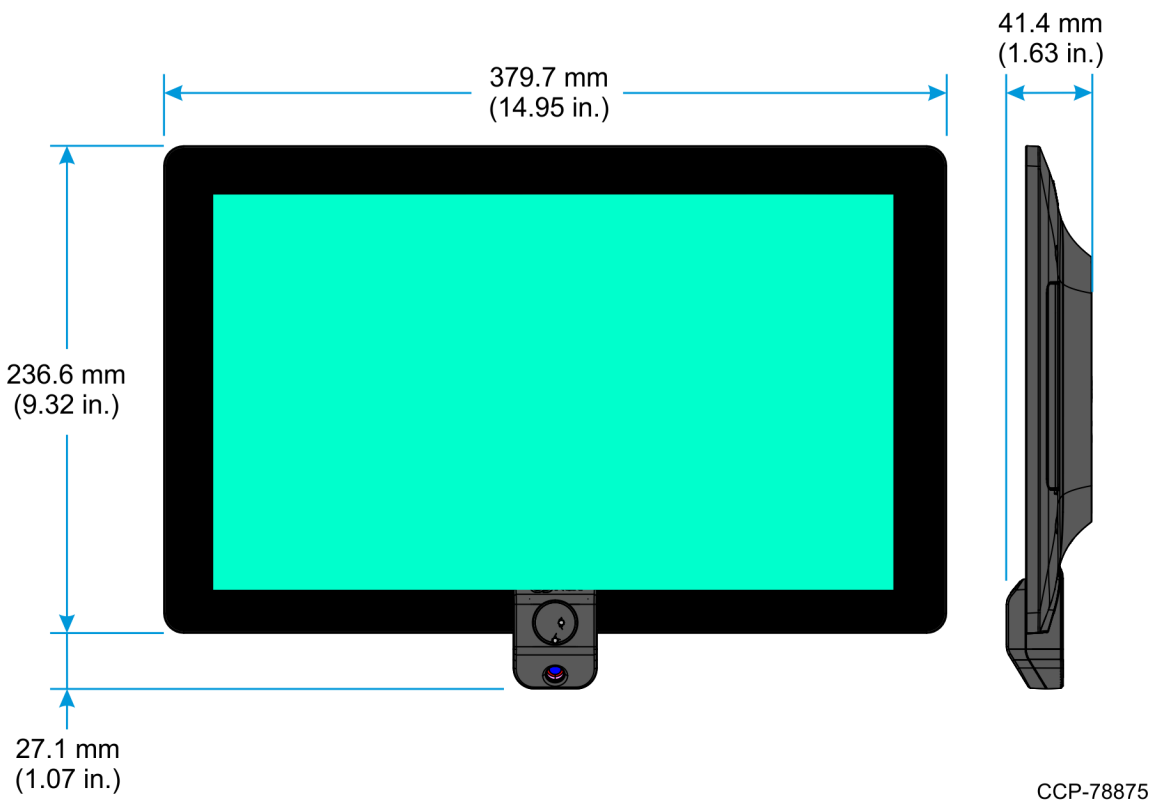
**CX5 15.6" 16:9 Display (F016)**  
**With Biometrics (F151/K151) and MSR (F141/K141)**



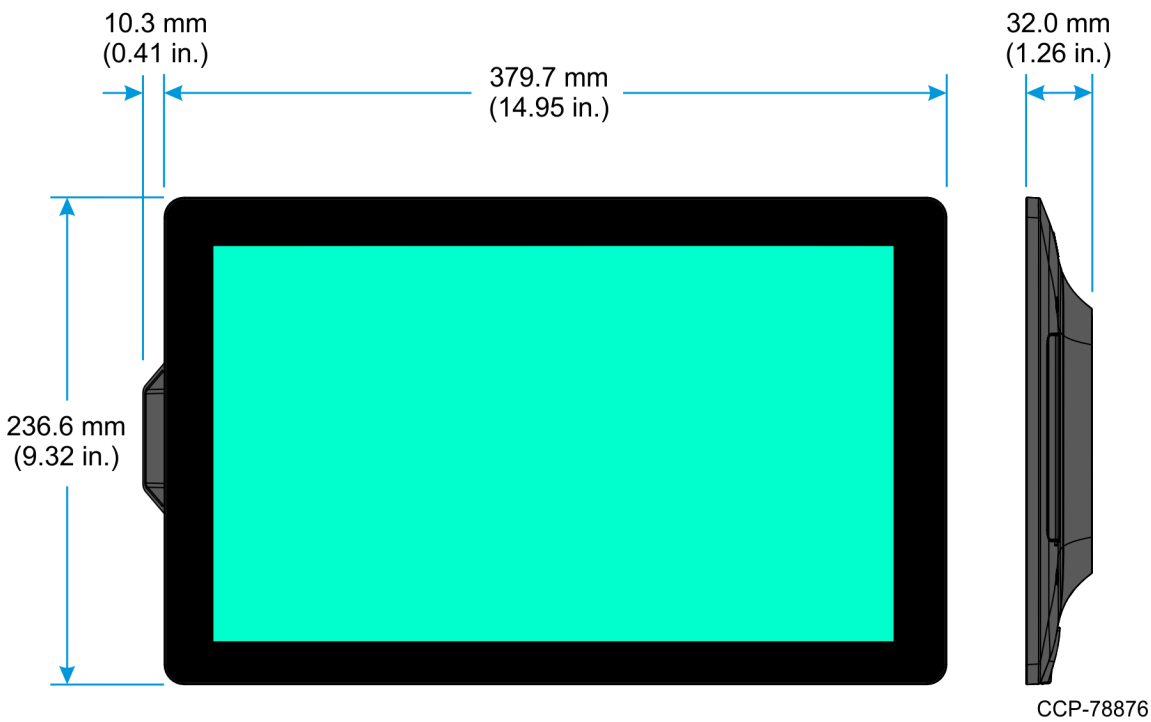
CCP-77825



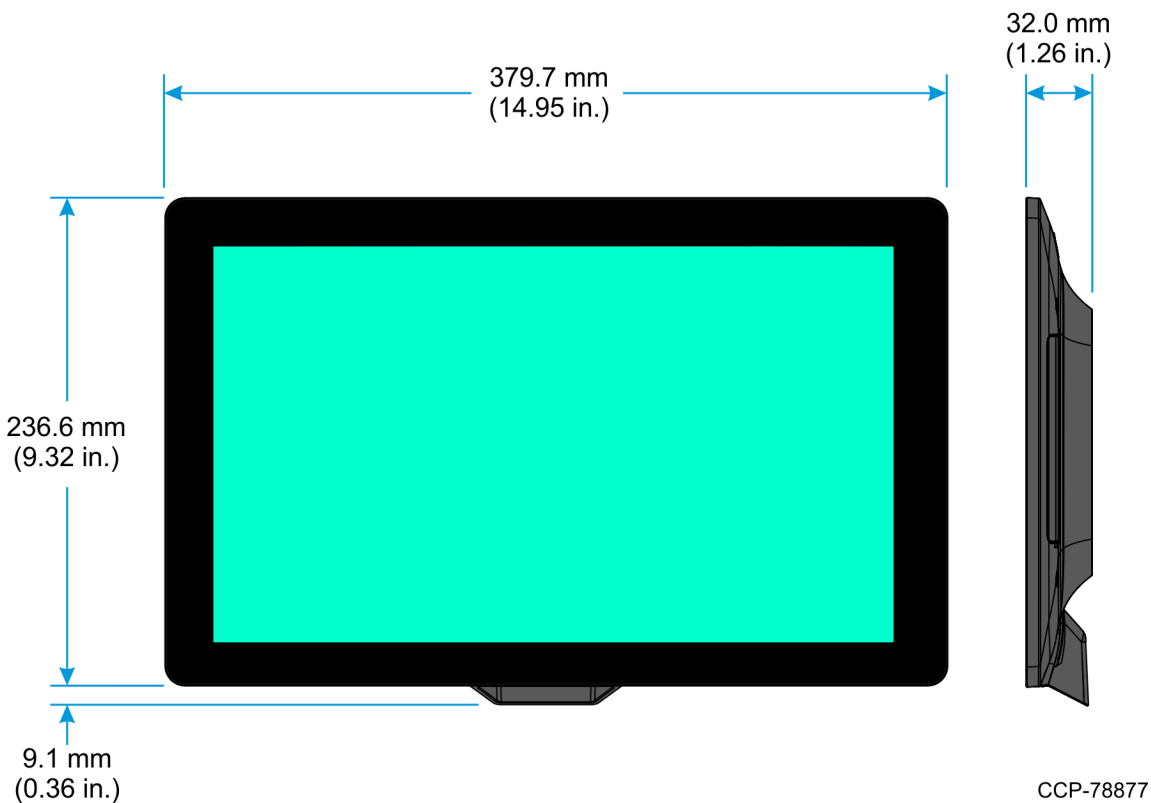
**With 2-in-1 Sign-In (F161/K161)**



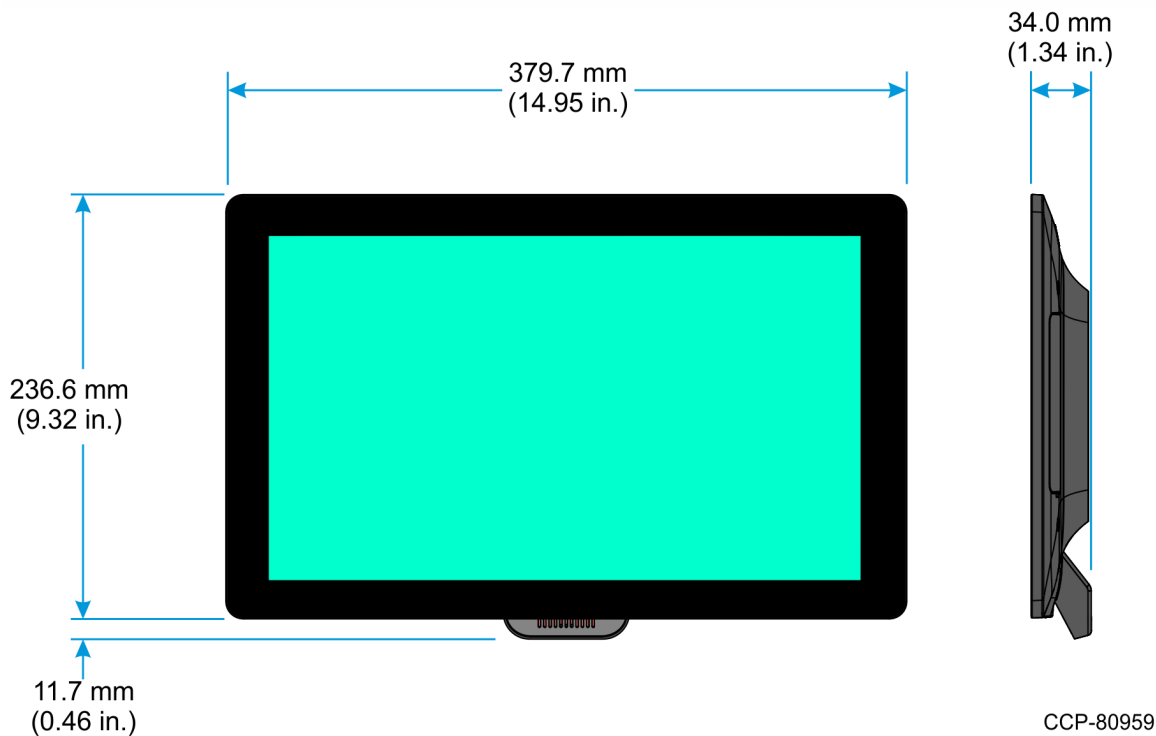
**With Imager (Port B) (F156)**



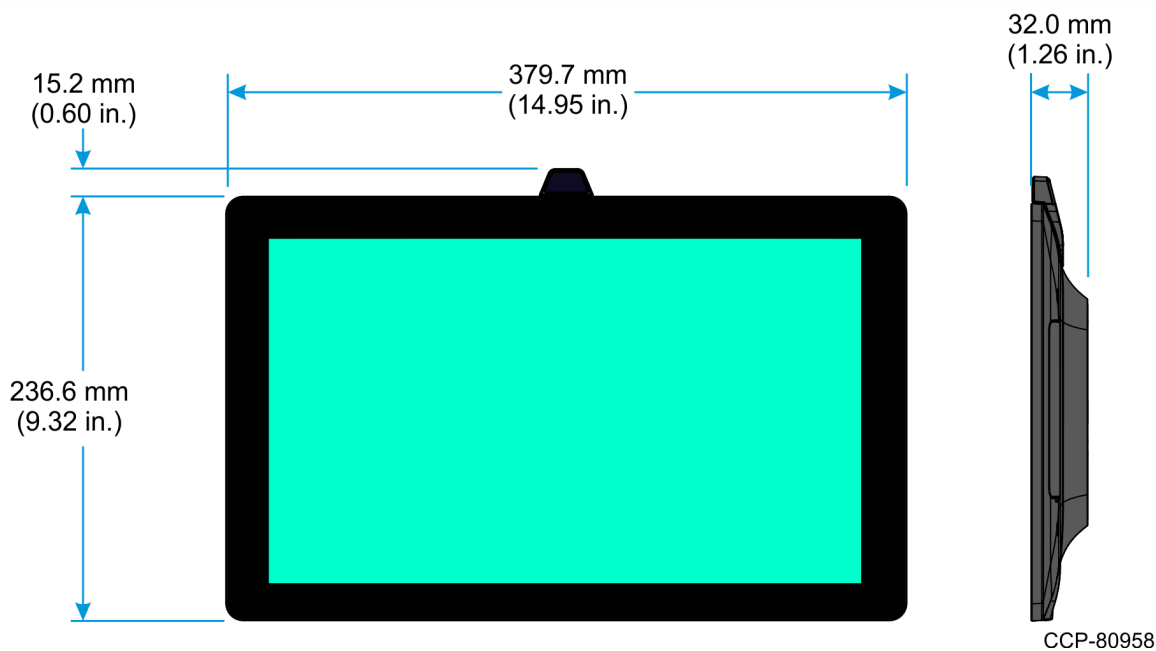
**With Imager (Port C) (F166)**



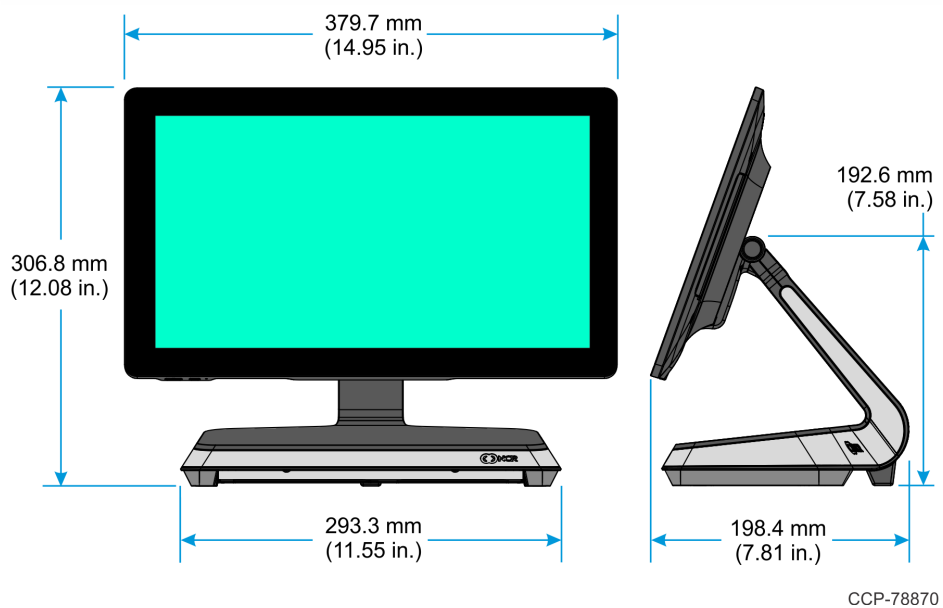
**With External Speaker (F169/K169)**

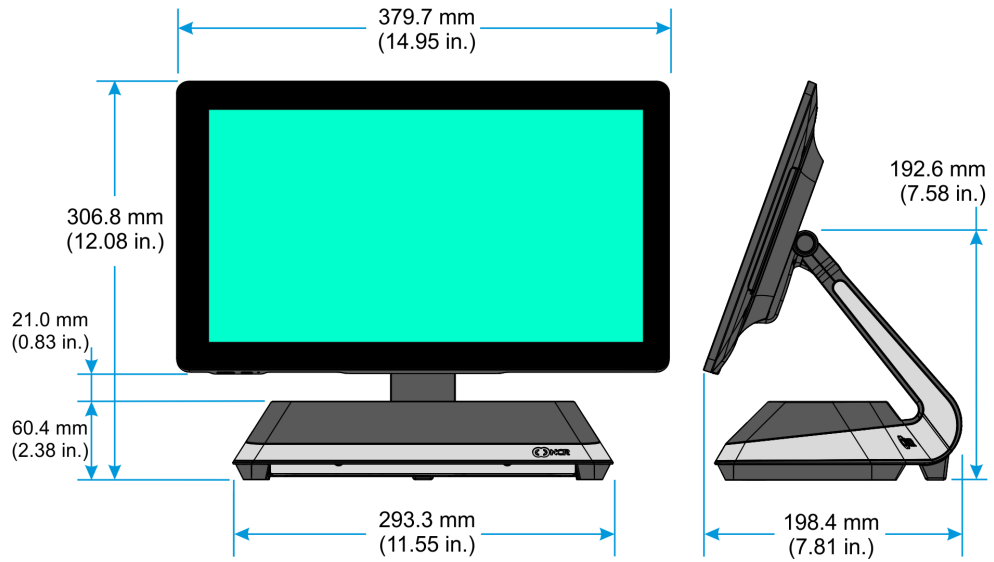


# With Camera (F460/K460)



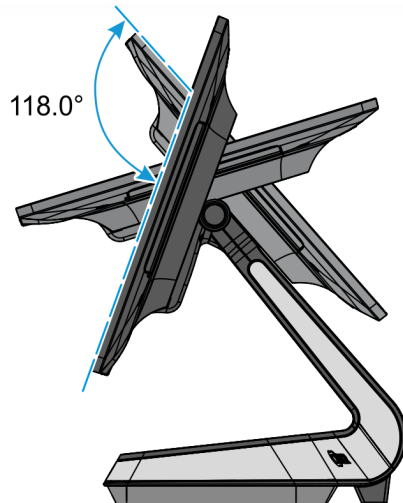
# CX5 15.6" 16:9 Display with Base





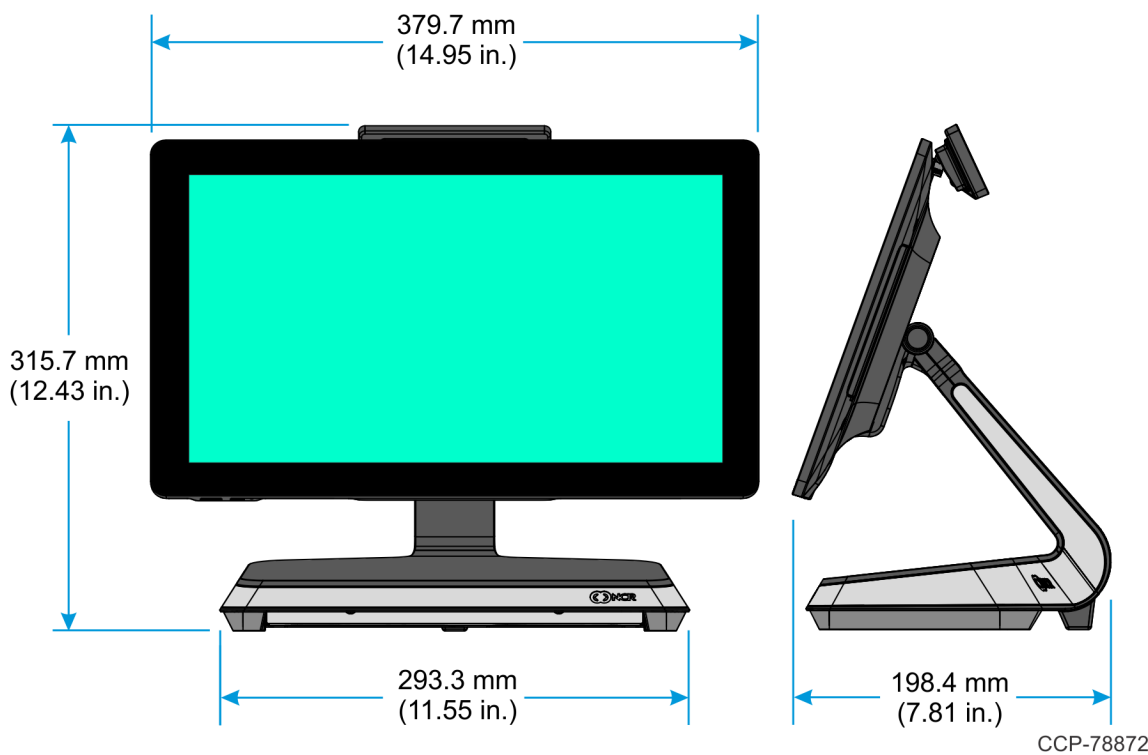
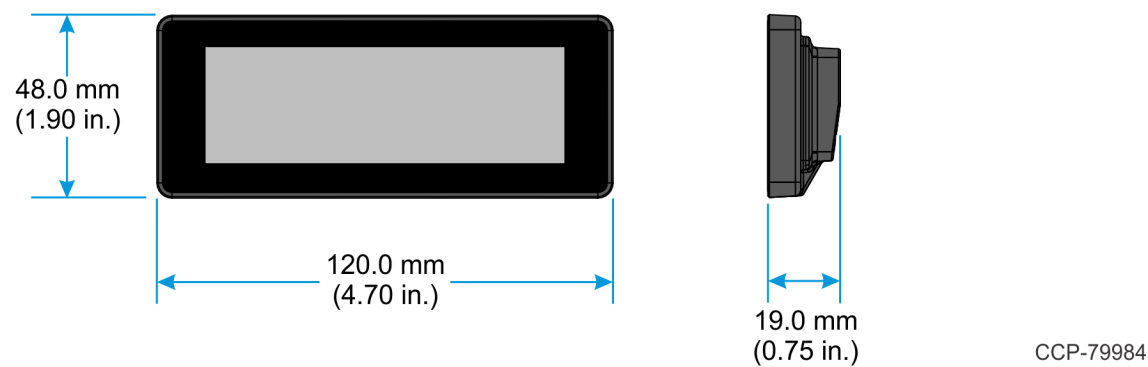
CCP-84004

## Tilt Angle



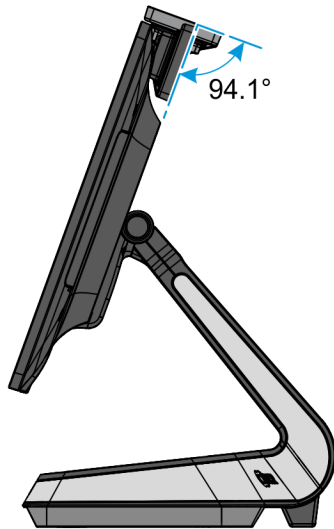
CCP-79974

**With APA Graphical Display (F451/F471/K451)**



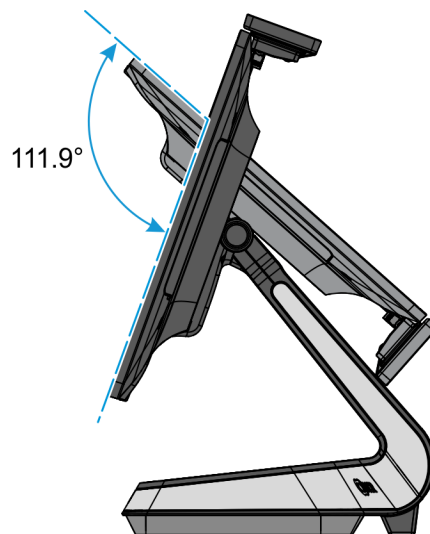
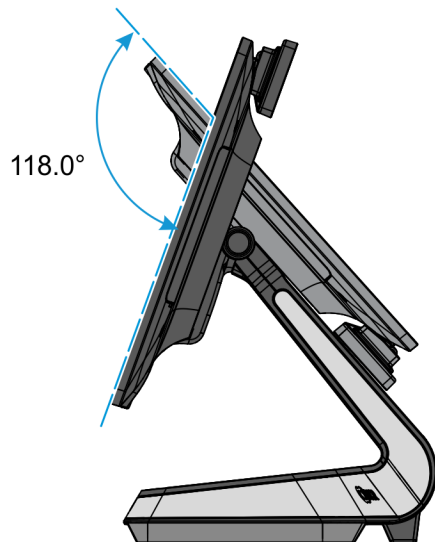
## ***Tilt Angle***

### ***Tilt Angle of APA Graphical Display on CX Head***



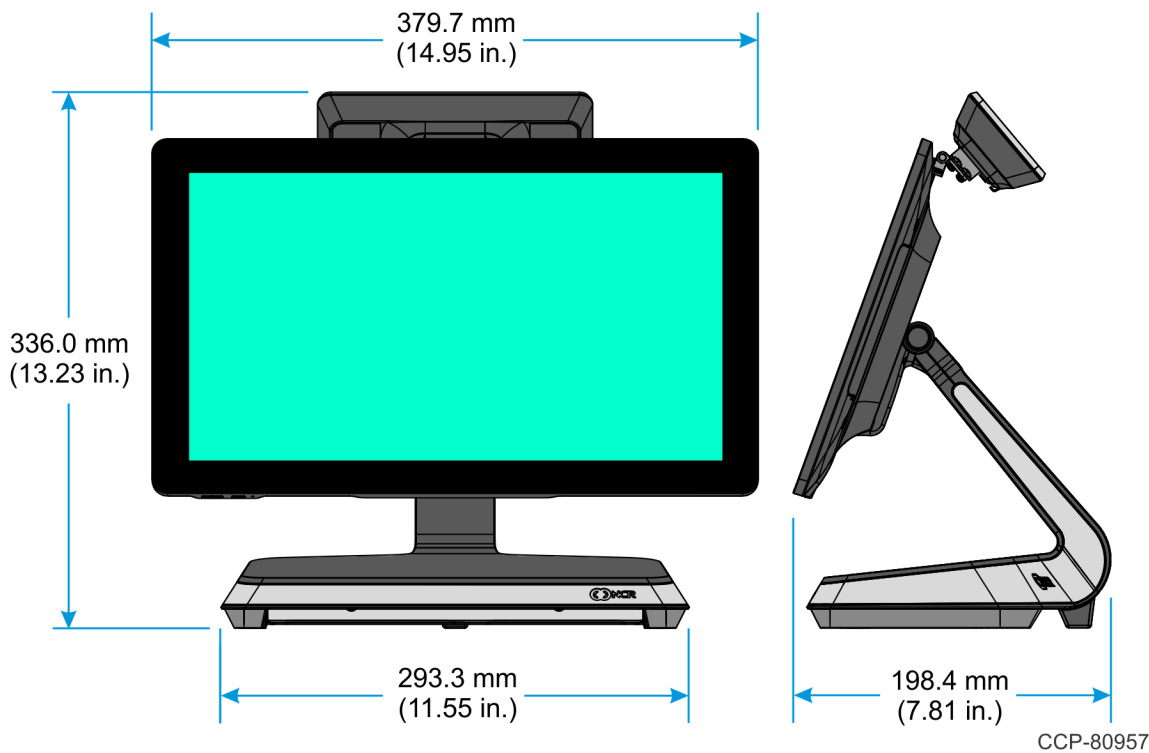
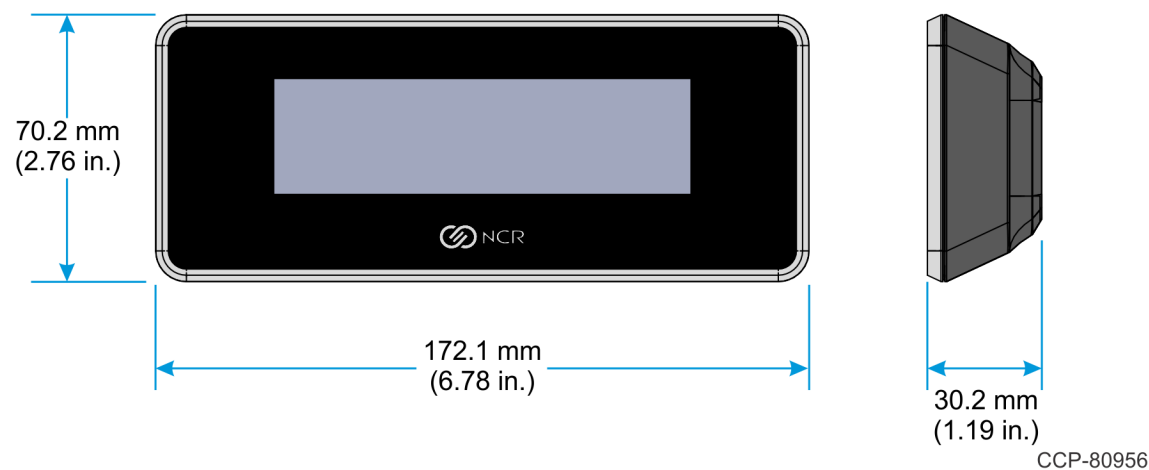
CCP-79976

### ***Tilt Angle of CX Head with APA Graphical Display***



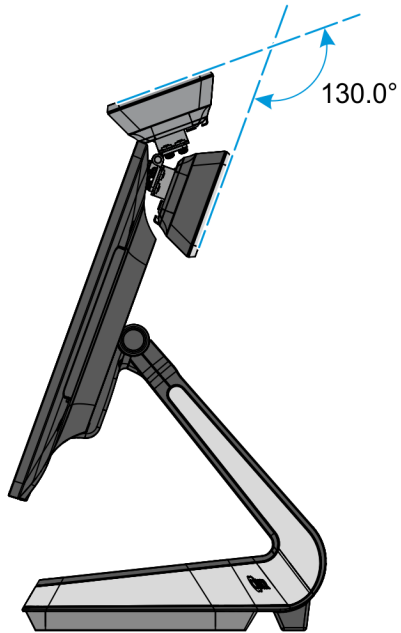
CCP-79977

With 2x20/Double Byte Customer Display (F461/F462)



## ***Tilt Angle***

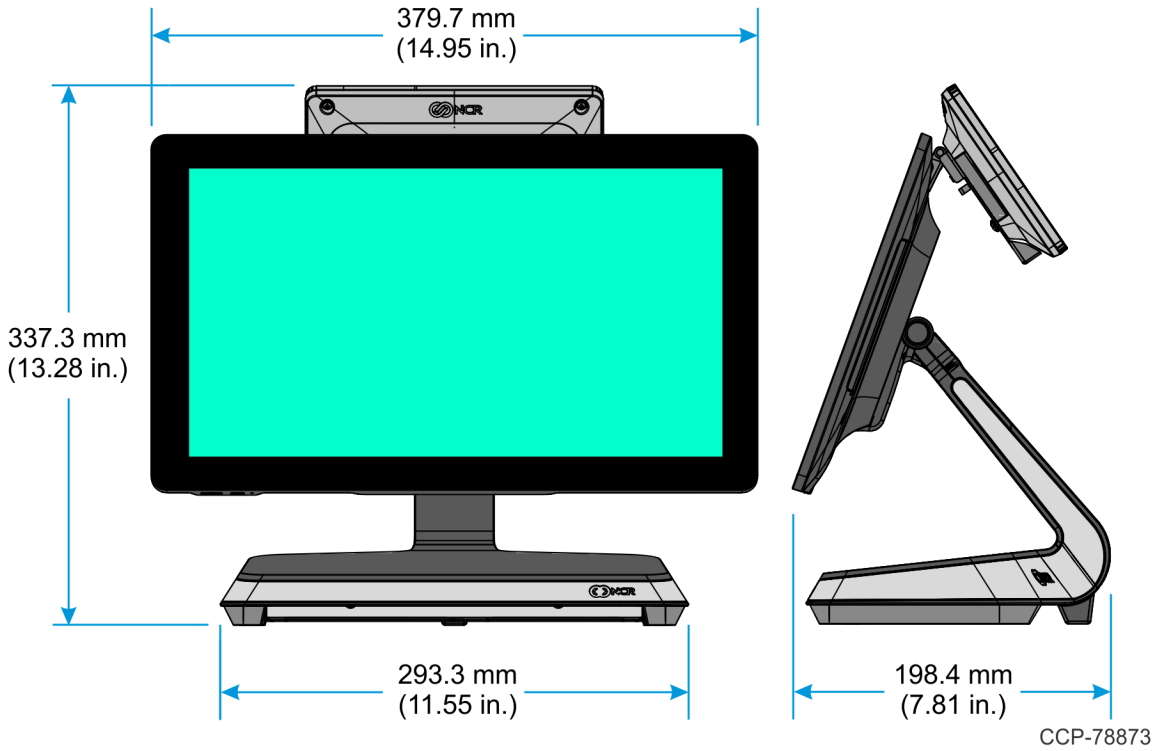
### ***Tilt Angle of 2x20/Double Byte Customer Display on CX Head***



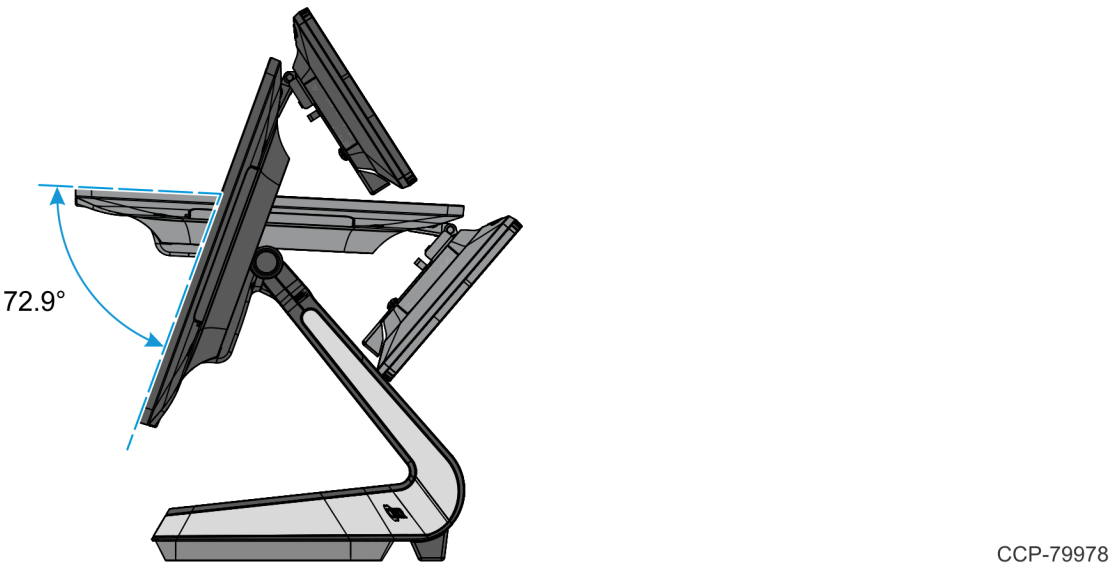
CCP-81502



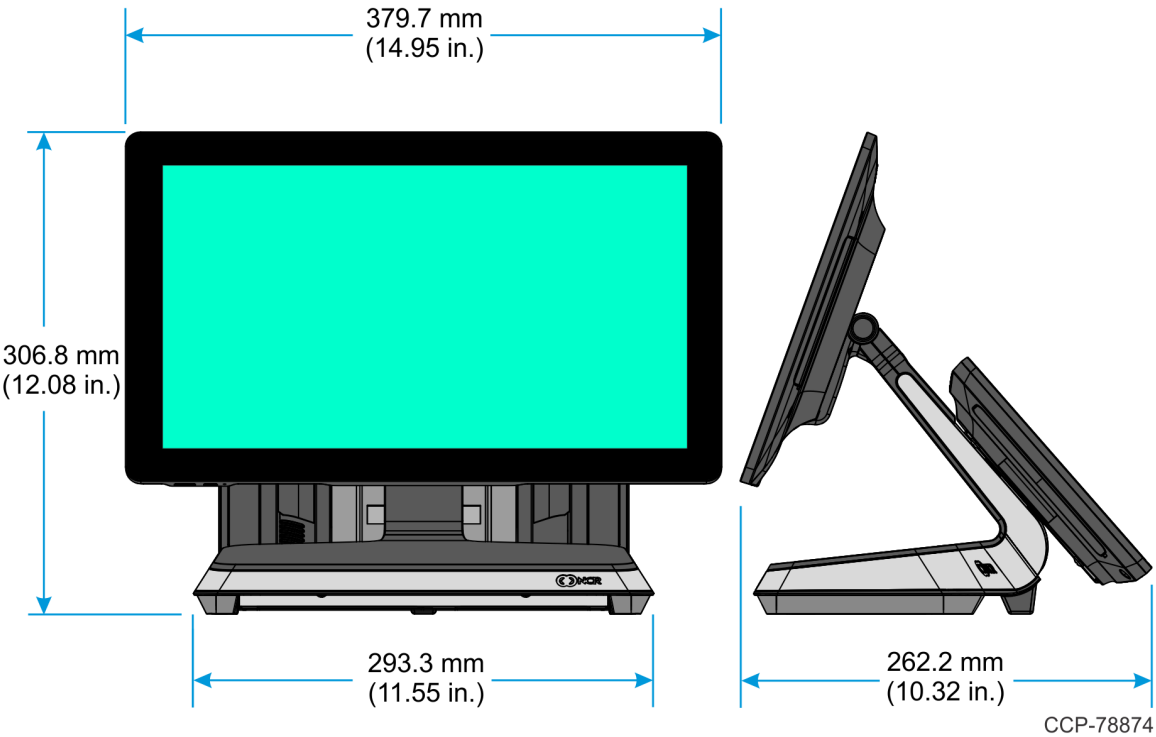
**With 7" (XL7) Customer Display (F452/F453/K452)**



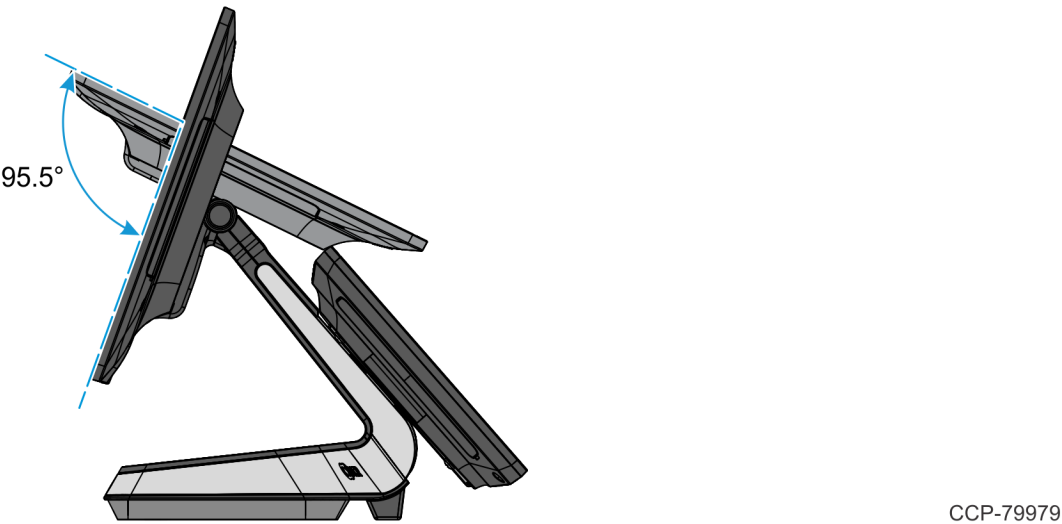
**Tilt Angle**



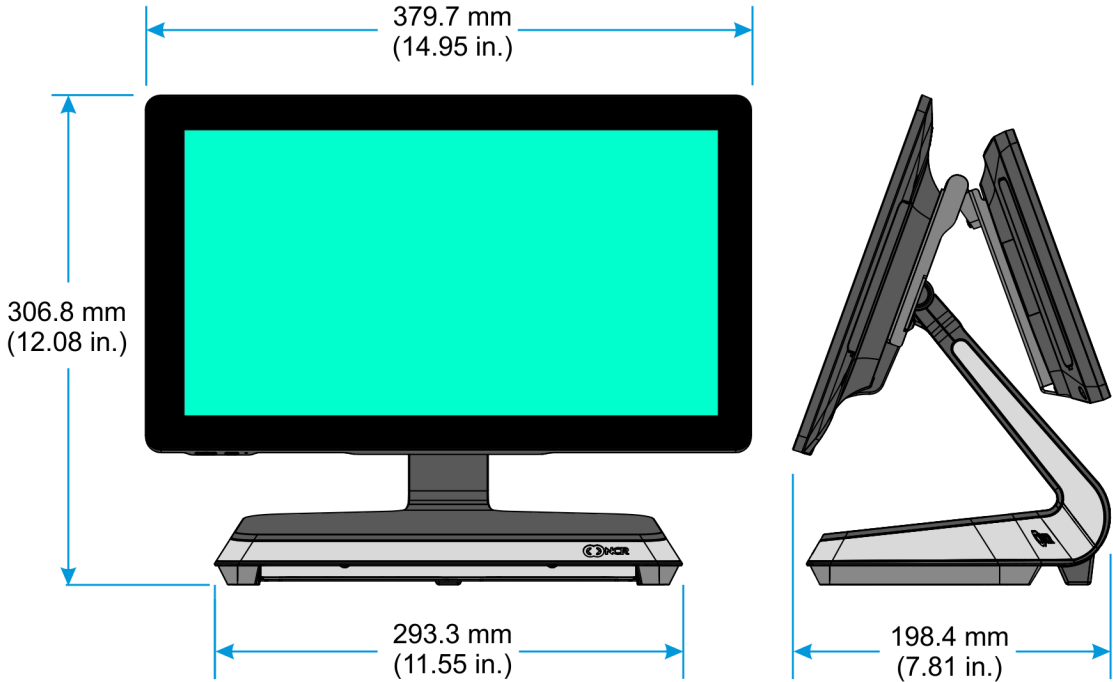
**With 10" (XL10) Base Display (F435/F436/F439/F455/F456/K455)**



***Tilt Angle***



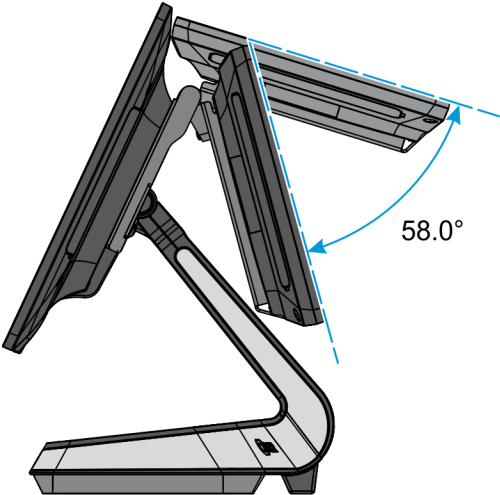
**With High Mount 10" (XL10) Customer Display (F475/F476)**



CCP-81585

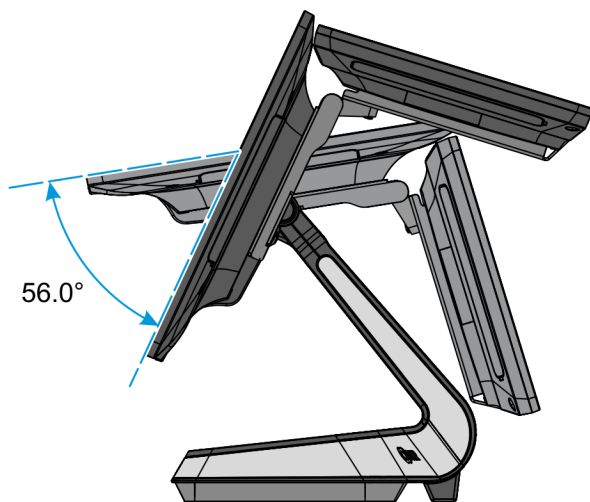
***Tilt Angle***

***Tilt Angle of XL10 Customer Display on CX Head***



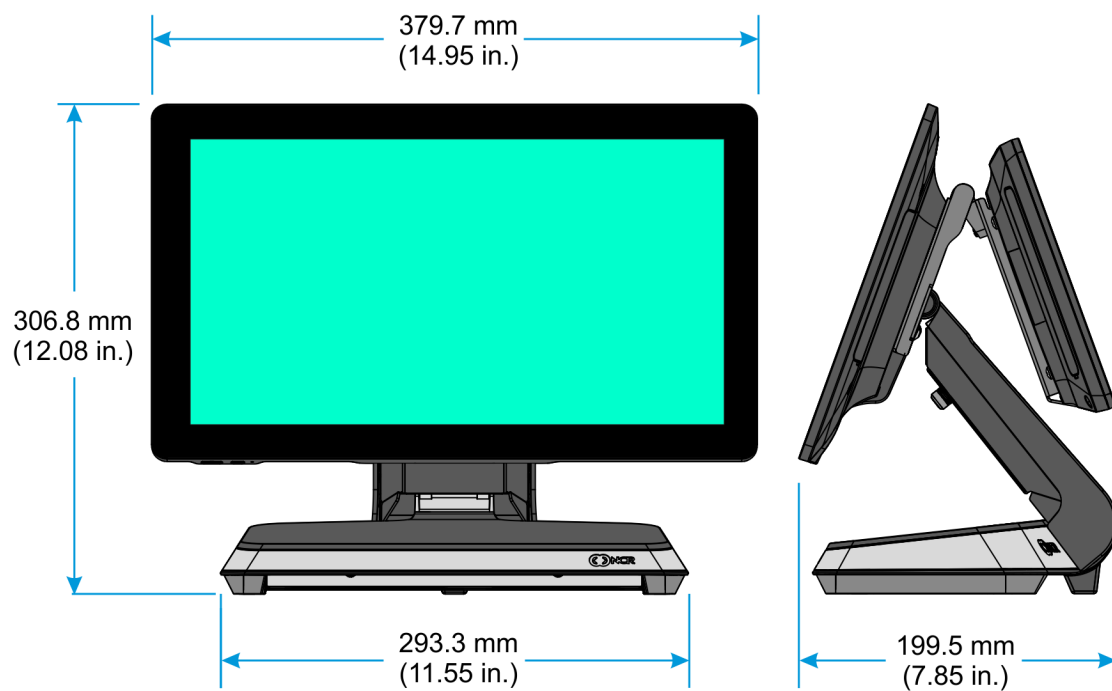
CCP-81586

## ***Tilt Angle of CX Head with XL10 Customer Display***



CCP-81587

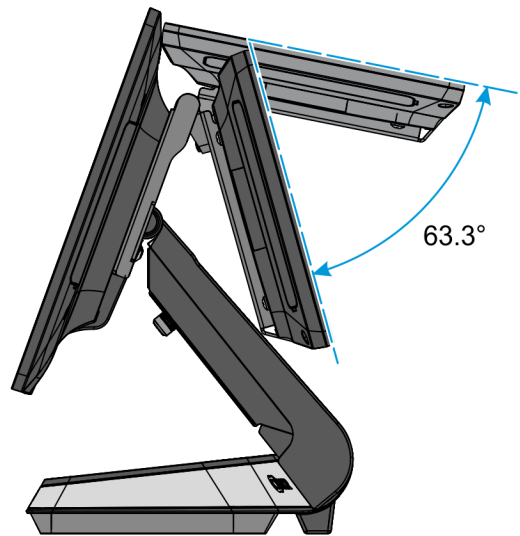
## **With High Mount 10" (XL10) DP Customer Display (F437/F438)**



CCP-84060

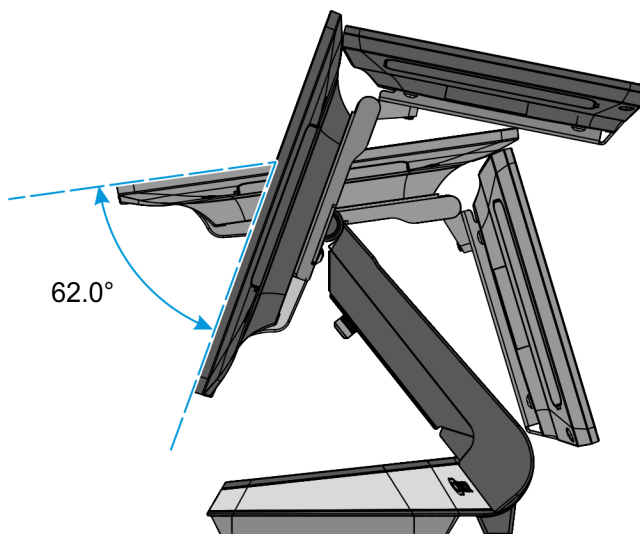
## ***Tilt Angle***

### ***Tilt Angle of XL10 Customer Display on CX Head***



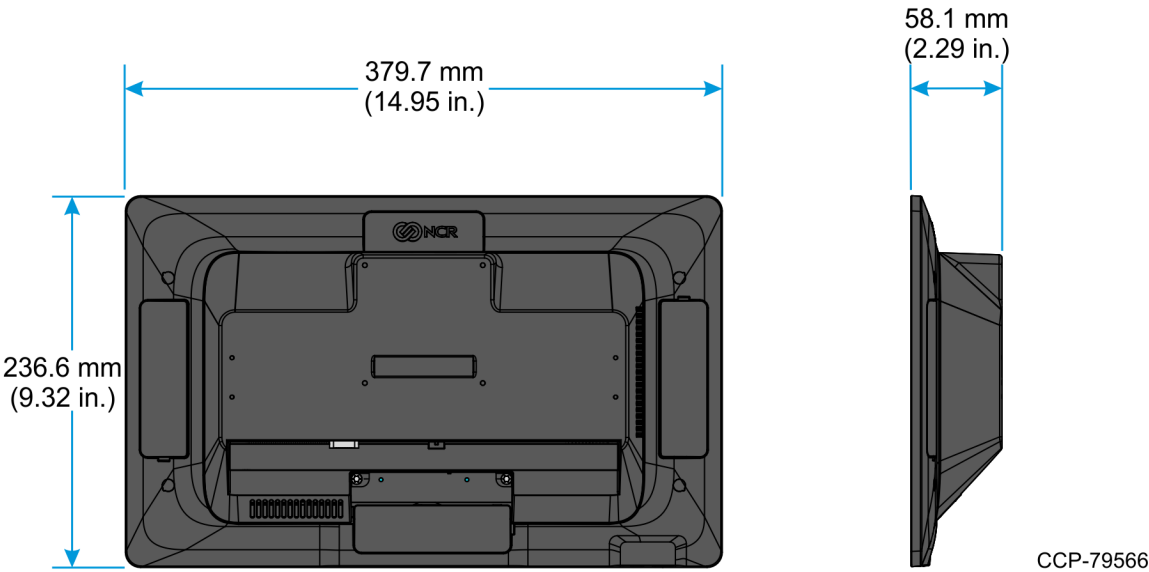
CCP-84061

### ***Tilt Angle of CX Head with XL10 Customer Display***

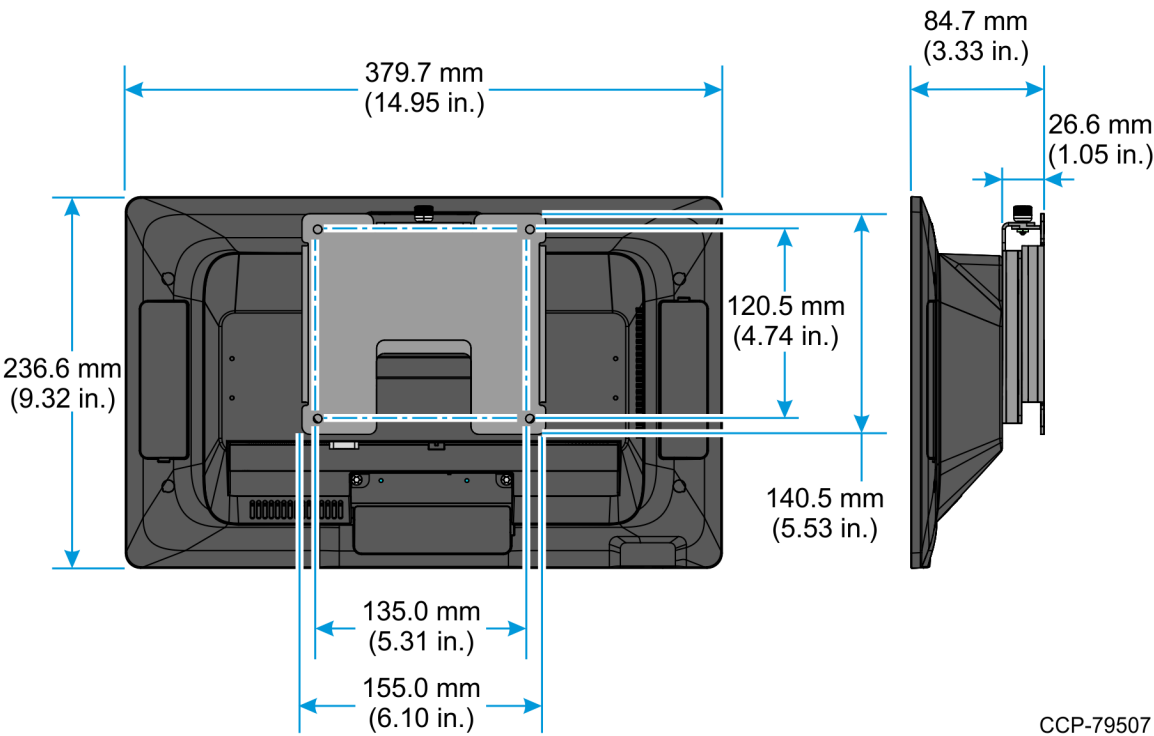


CCP-84062

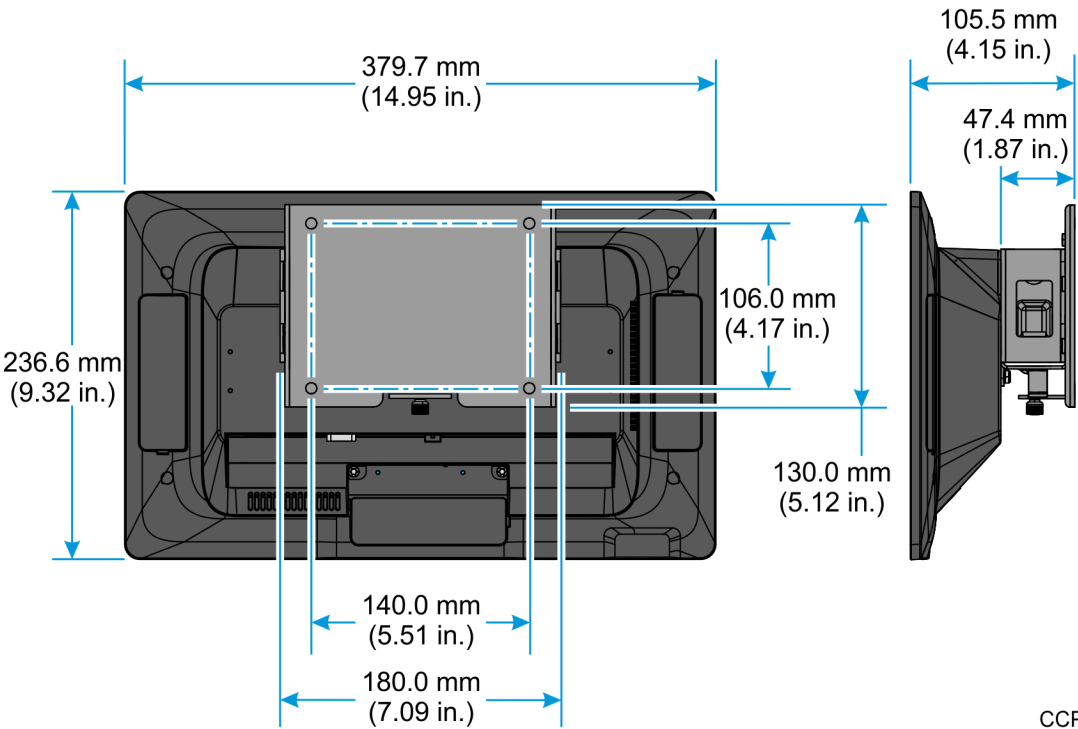
# CX5 15.6" 16:9 Display with Integrated I/O (F036/F037)



## With Wall Mount (7772-K320)

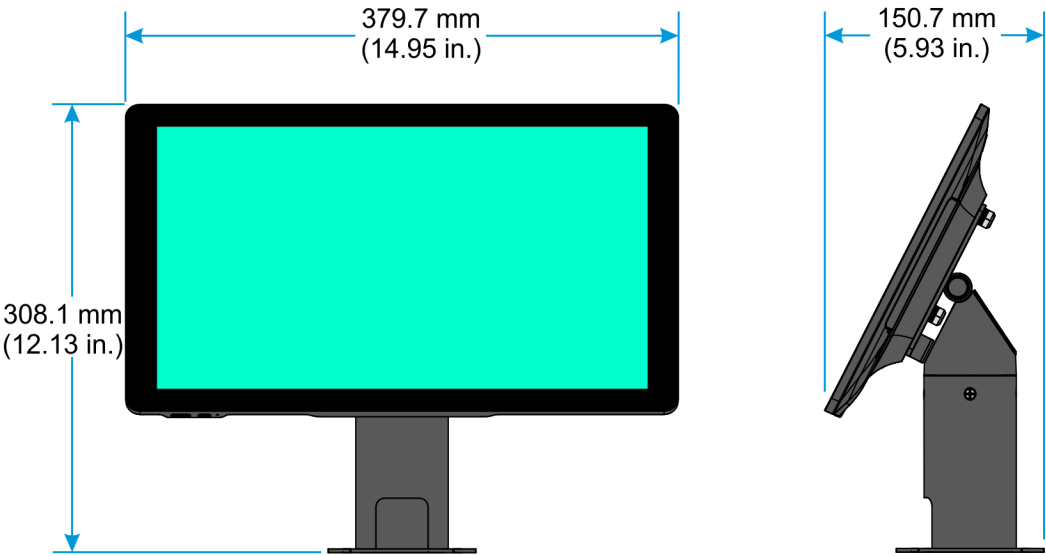


**With Wall Mount, Power Supply (7772-K325)**



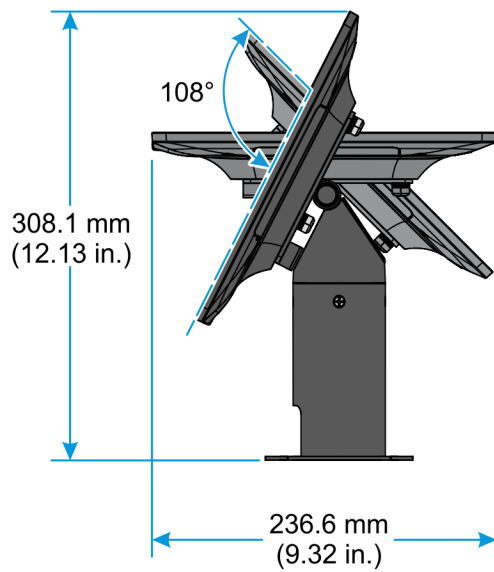
CCP-79506

**CX5 15.6" 16:9 Display Mounts for Remote I/O**  
**With Pole Mount (7772-K400)**



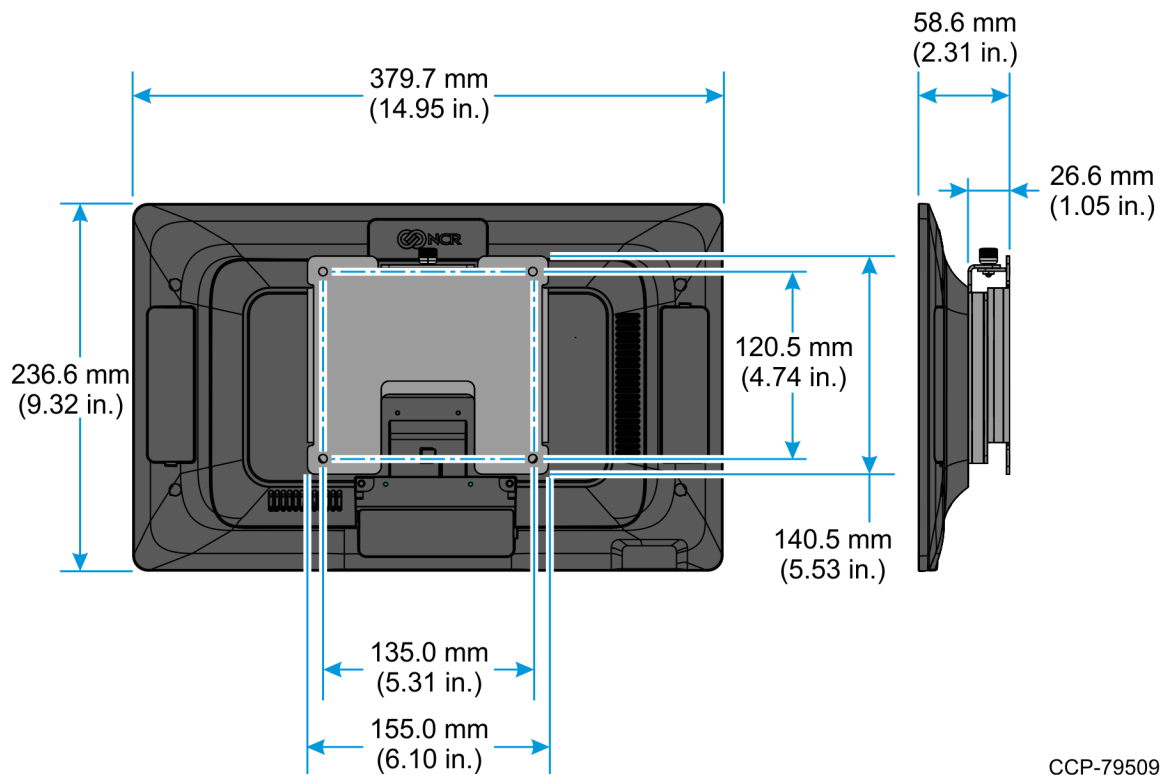
CCP-79512

## Tilt Angle



CCP-79513

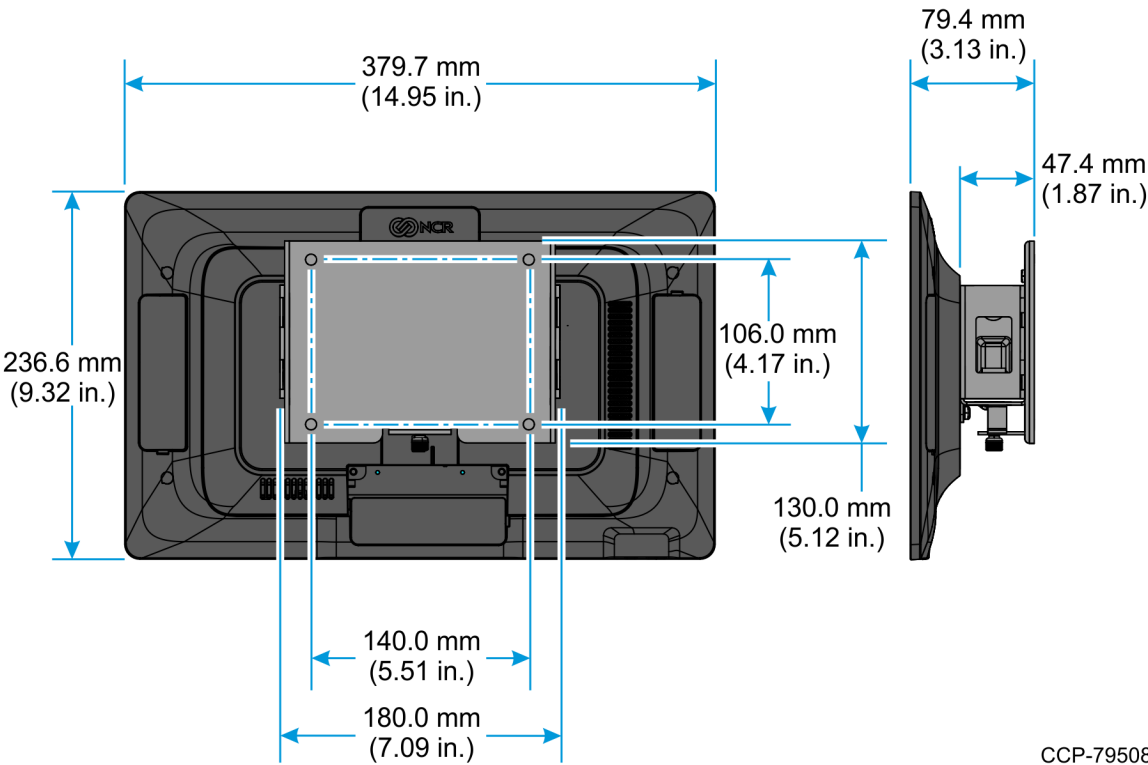
## With Wall Mount (7772-K320)



CCP-79509

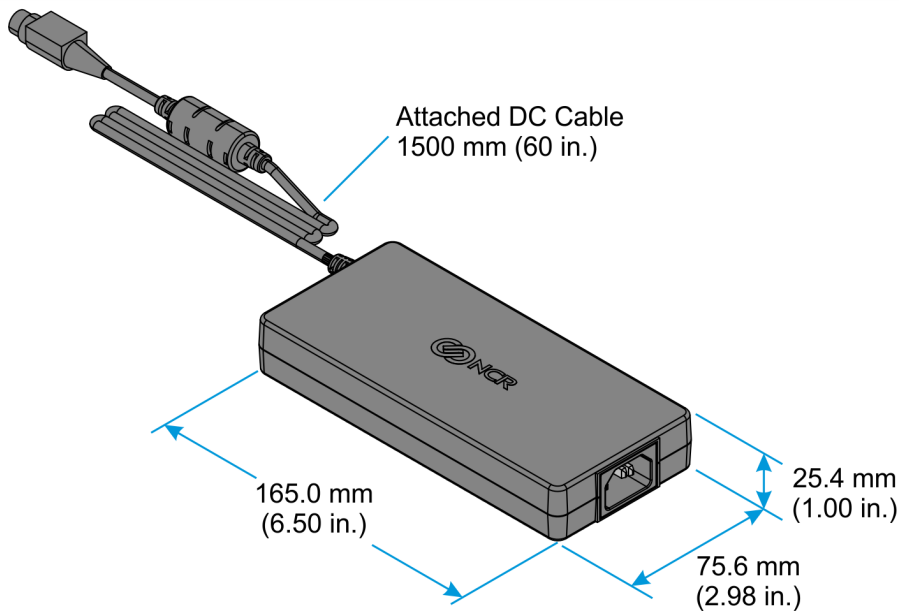


With Wall Mount, Power Supply (7772-K325)



CCP-79508

Power Supply



CCP-77024

# Terminal Weight

Component	Weight
<b>15.6" Projected Capacitive</b>	
15.6" NCR CX5 All-in-One POS (7773) with Base	5.15 kg (11.35 lbs)
15.6" NCR CX5 All-in-One POS (7773) without Base	2.40 kg (5.30 lbs)
15.6" NCR CX5 All-in-One POS (7773) with Integrated I/O	2.86 kg (6.30 lbs)
15.6" NCR CX5 All-in-One POS (7773) with Remote I/O	3.54 kg (7.80 lbs)
<b>15" 4:3 Projected Capacitive</b>	
15" 4:3 NCR CX5 All-in-One POS (7773) with Base	5.44 kg (12.00 lbs)
15" 4:3 NCR CX5 All-in-One POS (7773) without Base	2.86 kg (6.30 lbs)
15" 4:3 NCR CX5 All-in-One POS (7773) with Integrated I/O	3.08 kg (6.80 lbs)
15" 4:3 NCR CX5 All-in-One POS (7773) with Remote I/O	3.67 kg (8.10 lbs)

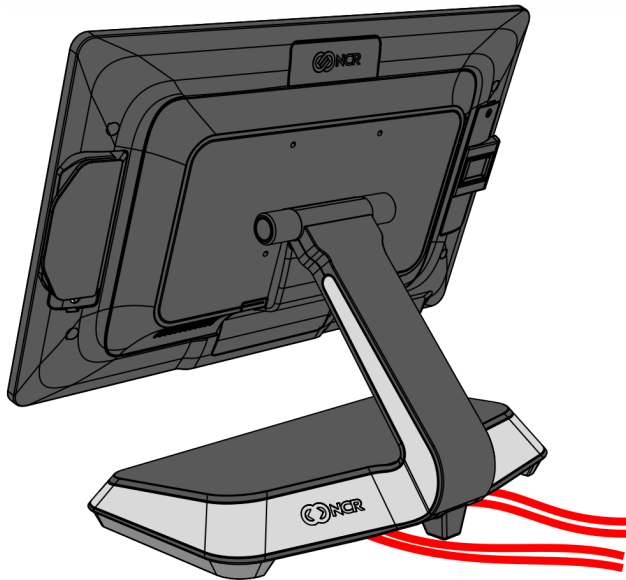
# Shipping Weight and Dimensions

Component	Weight	Dimension (L x W x H)
<b>15.6" Projected Capacitive</b>		
15.6" NCR CX5 All-in-One POS (7773) with Base, Integrated Power Supply, XL7 Customer Display	7.26 kg (16.00 lbs)	489 x 406 x 375 mm (19.25 x 16 x 14.75 in.)
15.6" NCR CX5 All-in-One POS (7773) with Integrated I/O	5.17 kg (11.40 lbs)	203 x 470 x 572 mm (8 x 18.5 x 22.5 in.)
15.6" NCR CX5 All-in-One POS (7773) with Remote I/O	6.03 kg (13.30 lbs)	203 x 470 x 572 mm (8 x 18.5 x 22.5 in.)
<b>15" 4:3 Projected Capacitive</b>		
15" 4:3 NCR CX5 All-in-One POS (7773) with Base, Integrated Power Supply, XL7 Customer Display	7.57 kg (16.70 lbs)	489 x 406 x 375 mm (19.25 x 16 x 14.75 in.)
15" 4:3 NCR CX5 All-in-One POS (7773) with Integrated I/O	5.44 kg (12.00 lbs)	203 x 470 x 572 mm (8 x 18.5 x 22.5 in.)
15" 4:3 NCR CX5 All-in-One POS (7773) with Remote I/O	6.17 kg (13.60 lbs)	203 x 470 x 572 mm (8 x 18.5 x 22.5 in.)

# Cable Routing

## Base

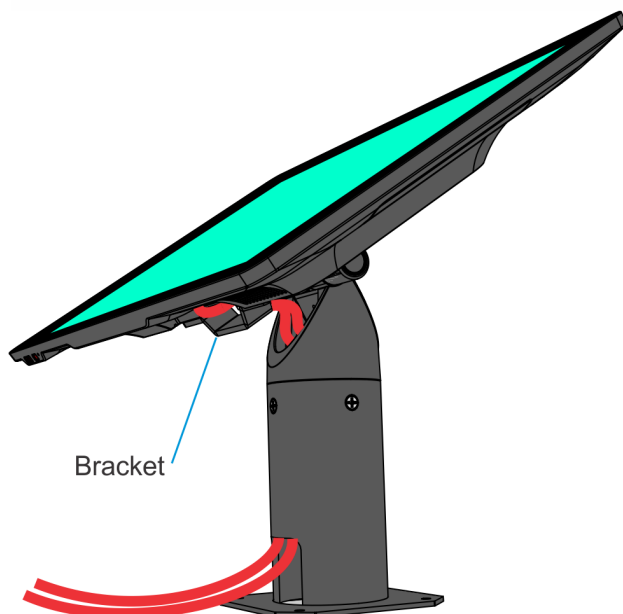
Route cables through the bottom of the Base.



CCP-77022

## Pole Mount

Route cables through the bracket and down through the Pole.



CCP-79090