



Republic of the Philippines  
 NATIONAL POLICE COMMISSION  
 NATIONAL HEADQUARTERS, PHILIPPINE NATIONAL POLICE  
 OFFICE OF THE CHIEF, PNP  
 Camp BGen Rafael T Crame, Quezon City

24 FEB 2021

MEMORANDUM CIRCULAR  
 NO.: 2021-024

**PRESCRIBING THE MINIMUM TECHNICAL SPECIFICATIONS  
 FOR LIGHT EMITTING DIODE (LED) VIDEO WALL DISPLAY**

**1. REFERENCES:**

- a. NAPOLCOM Memorandum Circular (MC) No. 2019-002 entitled, "Defining the Duty and Authority of the NAPOLCOM to Prescribe Minimum Standards for Uniforms, Arms, and Equipment to be Procured by the Philippine National Police" dated January 29, 2019;
- b. NAPOLCOM Resolution No. 2020-0765 entitled, "Prescribing the Minimum Standards for Light Emitting Diode (LED) Video Wall Display" dated September 11, 2020; and
- c. PNP UESB Resolution No. 2021-001 entitled, "Approving the Proposed Minimum Technical Specifications for Light Emitting Diode (LED) Video Wall Display" dated January 22, 2021.

**2. RATIONALE:**

This MC sets forth the technical specifications for Light Emitting Diode (LED) Video Wall Display which will be used by the PNP as a complementary tool for effective visual presentation and information dissemination.

**3. SITUATION:**

LED Walls are deemed necessary for all regional and provincial offices to be used in the various activities of the PNP particularly in the conduct of formal ceremonies and other police community related seminars and conventions. It is also very useful in the information disseminations to the public.

**4. PURPOSE:**

To provide and establish the technical specifications for LED Video Wall Display that will serve as reference in the procurement of said equipment.

**5. DEFINITION OF TERMS:**

- a. Brightness – refers to the light intensity of a monitor's screen. It is a measurement of the light that a display emits, measured in units which is equal to one candela per square meter.

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- b. Color Temperature – it represents the comparative relation of how a perfectly white sheet of paper would be observed under different types of light. Its unit is expressed in Kelvin degrees.
- c. Contrast Ratio – refers to the ratio of the brightest white to the darkest black on a television or computer monitor.
- d. Pixel Density – refers to a measurement of the resolution of electronic image devices, indicating how many pixels are grouped within a space.
- e. Pixel Pitch – refers to the physical distance between pixels on screen.
- f. Refresh Rate – refers to the number of times per second all the pixels on a display screen are re-energized.
- g. Viewing Angle – refers to the maximum angular distance from looking in front of a screen to looking from the side without a change of brightness or colors.

**6. GUIDELINES:**

a. Specifications

1) Description

LED Video Wall Display is an electronic screen display technology that uses a panel or a matrix of panel utilizing light emitting diodes as the light source.

2) Technical Specifications

a) LED Video Wall Display (Indoor)

- (1) Pixel Pitch : Not more than 2.5 mm.
- (2) Pixel Density : 160,000 dots/m<sup>2</sup>
- (3) Brightness : 800 cd/m<sup>2</sup>
- (4) Contrast Ratio : 5000:1
- (5) Cabinet Resolution : At least 192 x 192 pixels
- (6) Colour/Signal Processing : 16 bit
- (7) Color Temperature : 2800°K
- (8) Viewing Angle
  - Horizontal : ±85°
  - Vertical : ±85°

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- (9) Power Requirement : 110-240 VAC
- (10) IP Level : IP 20
- (11) Temperature : 0° to 40°
- (12) Humidity : 10%-80%
- (13) Refresh Frequency : 1920 Hz
- (14) Life Span : 100,000 hours
- (15) Warranty : At least two years

b) LED Video Wall Display (Outdoor)

- (1) Pixel Pitch : Not more than 10.0 mm.
- (2) Pixel Density : 10,000 dots/m<sup>2</sup>
- (3) Brightness : 5000 cd/m<sup>2</sup>
- (4) Contrast Ratio : 4000:1
- (5) Cabinet Resolution : 32 x 32 pixels
- (6) Colour/Signal Processing : 16 bit
- (7) Color Temperature : 3000°K
- (8) Viewing Angle  
Horizontal : ±80°  
Vertical : +50°/-60°
- (9) Power Requirement : 110-240 VAC
- (10) IP Level : IP 65
- (11) Temperature : 0° to 40°
- (12) Humidity : 10%-80%
- (13) Refresh Frequency : 1920 Hz
- (14) Life Span : 100,000 hours
- (15) Warranty : At least two years

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**7. REPEALING CLAUSE:**

All other technical specifications contrary to or inconsistent with the provisions of this MC are hereby rescinded, modified or amended.

**8. EFFECTIVITY:**

This MC shall take effect after 15 days from filing a copy thereof at the UP Law Center in consonance with Section 3, Chapter 2, Book VII of Executive Order 292 otherwise known as the "Revised Administrative Code of 1987," as amended.



  
**DEBOLD M SINAS**  
Police General  
Chief, PNP

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