

June 13, 2016

City of Central Point

Re: Lighting Analysis for Daktronics LED DVX Video Scoreboard

To Whom This May Concern:

The accompanying graph pertains to the Daktronics LED DVX video scoreboard proposed for installation at Crater High School located at 655 North Third Street in Central Point. We hope you find the following information beneficial.

The accompanying graph depicts the scoreboard's viewing cone as identified by the pink lines that are 75 degrees on each side from the face of the display. Illumination levels in footcandles that the proposed display will produce based on nighttime running levels at a measurement height of five feet above ground level (which is approximately eye height).¹ These levels are based on a worst-case scenario of an all-white display. Actual levels will be much lower than what is represented on the graph, as typical content runs at 25 to 35 percent of the brightness of an all-white display.

It is important to note that the accompanying graph assumes absolute darkness with regard to surrounding ambient light. In other words, the presence of ambient light producing elements at night including but not limited to stadium lighting, roadway lighting, residential lighting, the moon, etc. will further diminish the impact of the light output from the display in question. If there is a game at night utilizing the scoreboard, the display may be operating at a higher brightness level to counteract the additional lighting and remain clearly visible. However, the presence of stadium lighting will exceed the light output from the video scoreboard such that the display output would not be perceived as an additional light source. This is the same concept as LED displays operating in daytime conditions. The presence of the sun exceeds the light output from LED displays, so daytime brightness is rarely a concern.

The lighting analysis viewing cone also shows most of the illumination is directed to the field with limited amounts of light falling on other areas off the field. The accompanying lighting analysis graph shows there will be no lighting impact from the Daktronics LED scoreboard to the adjacent residential neighborhood north of the stadium. For example, at 325 ft away the graph shows a lighting level of 0.00 footcandles. Thus, the proposed scoreboard lighting will not have any lighting impact to the neighboring residential properties during a variety of environmental lighting conditions.

Finally, it is important to note the illumination levels are only representative of Daktronics LED scoreboards. Other digital display manufacturers may use different LEDs which have different light emissions.

Daktronics is committed to providing digital displays that adhere to the regulatory environment, working closely with our customers for a responsible approach to the market.

Please let me know if you have any questions or concerns.

Sincerely,
Daktronics, Inc.

Angela Bailey

Angela Bailey
Signage Legislation
605-692-0200

† Also note, the illumination levels cited take into account a height above ground level of 15 feet and provide the illumination which will be measured by the testing meter located 5 feet above ground level.



Light Analysis for DVX-1130-20MT-N-HC-144x252

Date: 06/10/2016

Crater High School

Prepared by: Glen Wiebe

Central Point, OR

Values expressed are specific to Daktronics product only

Glen Wiebe



- Display at 3% of Maximum Daytime Brightness
- Calculations take into account a 15' HAGL
- Any rise or fall in elevation or physical blockage is not shown in calculations

*Calculations are based on Red, Green, and Blue LEDs (White Content) powered to their maximum potential for nighttime viewing. Values are shown in footcandles (fc).