

TO: Fine Arts Commission, Cupertino, CA
FROM: Christina Stevens
DATE: April 20, 2022
SUBJECT: Mirage Art Installation Light Temperature
HGA Commission Number 3649-188-00

Writer's Direct Dial 408-213-8242

The Mirage art installation is a self-illuminated series of cast glass cylinders that embody the natural characteristics of native desert sand (Silica) compositions found throughout the world. These distinctive sand characteristics are expressed through the color and texture of the cast glass cylinders. The artwork is designed to be experienced in the daytime under ambient daylight conditions and at nighttime under integral artificial illumination similar in hue to ambient daylight. To achieve this, low intensity lamps are used and placed beneath the cylinders. The cast glass provides a filter for the lighting that creates an appealing soft glow without night sky spillage beyond the art piece itself. There is no light overspill at the sides or top of the cylinders. This is demonstrated by the attached photometric plans showing zero-foot candles outside the glass.

Each cylinder of the artwork expresses its composing sands as a distinct color and texture; therefore, each cylinder will illuminate slightly differently. The Mirage design team analyzed the light fixture (low voltage LED, 145 lm per fixture per cylinder, 4000K color temperature) proposed for the integral illumination and its effect on the cast glass cylinders. The color temperature of the illuminated artwork will minimally vary across the entire installation because of the individual color of the cast glass. This variation of the light color temperature expressed through the artwork is a chief characteristic of the artwork; the 4000K source, being closer to that of natural sunlight, provides the best expression therein as it is a neutral light color. A 3000K source is less neutral on the warm spectrum, casting an overall yellow effect on the art. For the optimum artificial illumination source temperature for the nighttime experience of the art installation, the project proposes to utilize the 4,000K source as an alternative lighting standard as allowed per Section 19.102.040.B.1.c of the Cupertino Municipal Code which reads, "Alternative lighting standards may be used to illuminate public art or serve as public art subject to the review and approval by the Fine Arts Commission."

Because the light fixtures in the artwork provide self-illumination (not area lighting), utilize low intensity lamps located beneath the cylinders, filter light through the cast glass to create a soft glow, and support the nature of the expression of the artwork itself, the proposed installation is consistent with the intent of *Section 19.102.040* of the *Cupertino, CA Municipal Code*.

Sincerely,

A handwritten signature in cursive script that reads "Christina Stevens".

Christina Stevens

Senior Project Manager | Associate Vice President

Attachments
Photometric Study

t:\3600\3649\188-00\5. bidding-permits\fac submission\working\20220318-cs-hga memorandum on lighting_edit
04192022.docx

Attachment C – Photometric Study for Mirage Showing No Light Spillage (0 Foot-candles)

