

BALLABS REPORT NO. : 18646.0 I  
DATE: 04/14/15  
PREPARED FOR: H.E. WILLIAMS, INC - CARTHAGE, MO  
DESCRIPTION: 16-32 LED 22"ARRAYS 4x4' RECESSED LUMINAIRE w/WHITE REFL  
ARRAYS ON WHITE INTERNAL REFLS & 46"DIA WHITE FROST ACRYLIC  
CONVEX LENS 4 EVERLINE #D15CC55UNVT-C @ 1327mA  
CATALOG NO.: RND-4-L111/835-FXA-DIM-UNV  
LED : M10CC835D32N2S

## IN-SITU TEMPERATURE MEASUREMENT

### ELECTRICAL CHARACTERISTICS

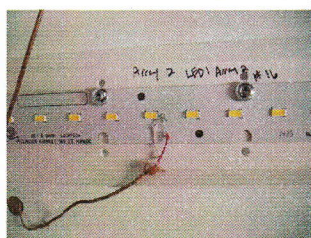
|              | VOLT  | AMPS   | WATTS  | PF    | THDv  | THDi   | Max LED Current: |
|--------------|-------|--------|--------|-------|-------|--------|------------------|
| Line @ 120.0 | 120.0 | 1.2604 | 150.87 | .9975 | .1568 | 5.5670 | 1.3212 A         |

TEMPERATURES: (DEGREES C)

|      |   |      |
|------|---|------|
| TC#1 | ROOM AMBIENT                            | 25.0 |
| TC#2 | LED DRIVER TC LOCATION PER MANUFACTURER | 42.4 |
| TC#3 | LED DRIVER TC LOCATION PER MANUFACTURER | 50.2 |
| TC#4 | LED DRIVER TC LOCATION PER MANUFACTURER | 42.7 |
| TC#5 | LED DRIVER TC LOCATION PER MANUFACTURER | 48.2 |
| TC#6 | LED ARRAY #2 LED #16                    | 39.6 |
| TC#7 | LED ARRAY #8 LED #16                    | 38.7 |
| TC#8 | LED ARRAY #9 LED #16                    | 39.4 |
| TC#9 | LED ARRAY #15 LED #16                   | 39.1 |

Location of led array & driver thermocouples determined per fixture manufacturer's specifications. All thermocouples attached per UL1598. Temperatures are offset to 25 deg C ambient as described in UL1598.

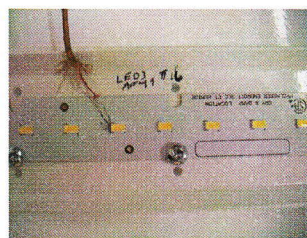
### LED Thermocouple Locations



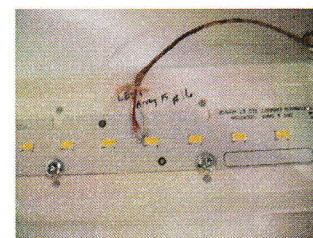
TC#6  
Array2 LED16



TC#7  
Array8 LED16



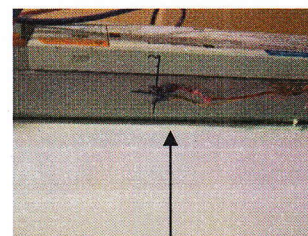
TC#8  
Array9 LED16



TC#9  
Array15 LED16



LED Typical-Thermocouples mounted  
Per manufacturer LM80 Data



Driver Typical Thermocouple

NVLAP<sup>®</sup>

NVLAP LAB Code 20921-0



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Additional Photographs:

LED Thermocouple Locations

Bottom View of Fixture-visual of thermocouple placement

