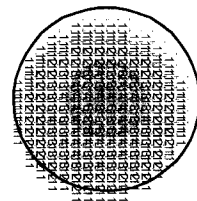


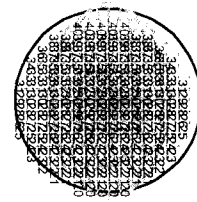


John Day Dam
US Army Corp of Engineers
Illumination Tubes for Salmon Migration

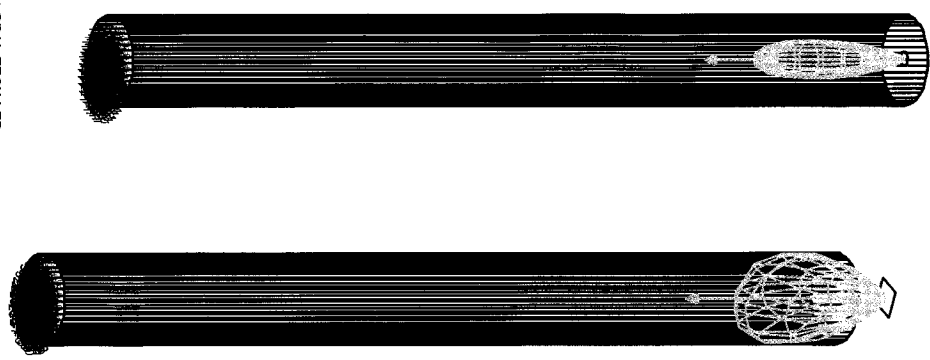
Designer
A. Rehle
Date
Sep 3 2012
Scale
1"=20'
Drawing No.
1



GLOBAL TECH LED

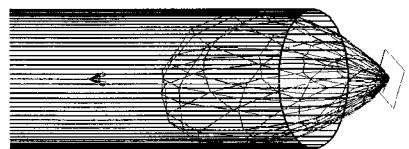
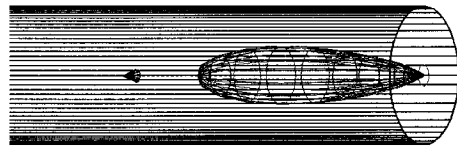


500W QUARTZ



GLOBAL TECH LED
100 W WITH 25 OPTICS

500W QUARTZ



STATISTICS

Description	Symbol	Avg	Max	Min
Global Tech LED	+	113 fc	119 fc	111 fc
500W Quartz	+	29 fc	40 fc	20 fc

NOTES

1. GLOBAL TECH LED - 100W MODULE WITH 25 OPTICS
 2. GENERIC 500W QUARTZ - NO OPTICS
- DELIVERED LUMEN PROJECTIONS DO NOT FACTOR LIGHT LOSS THROUGH WATER. ANTICIPATED LIGHT LOSS IS 50%.

Calculated values include direct and interreflected components.