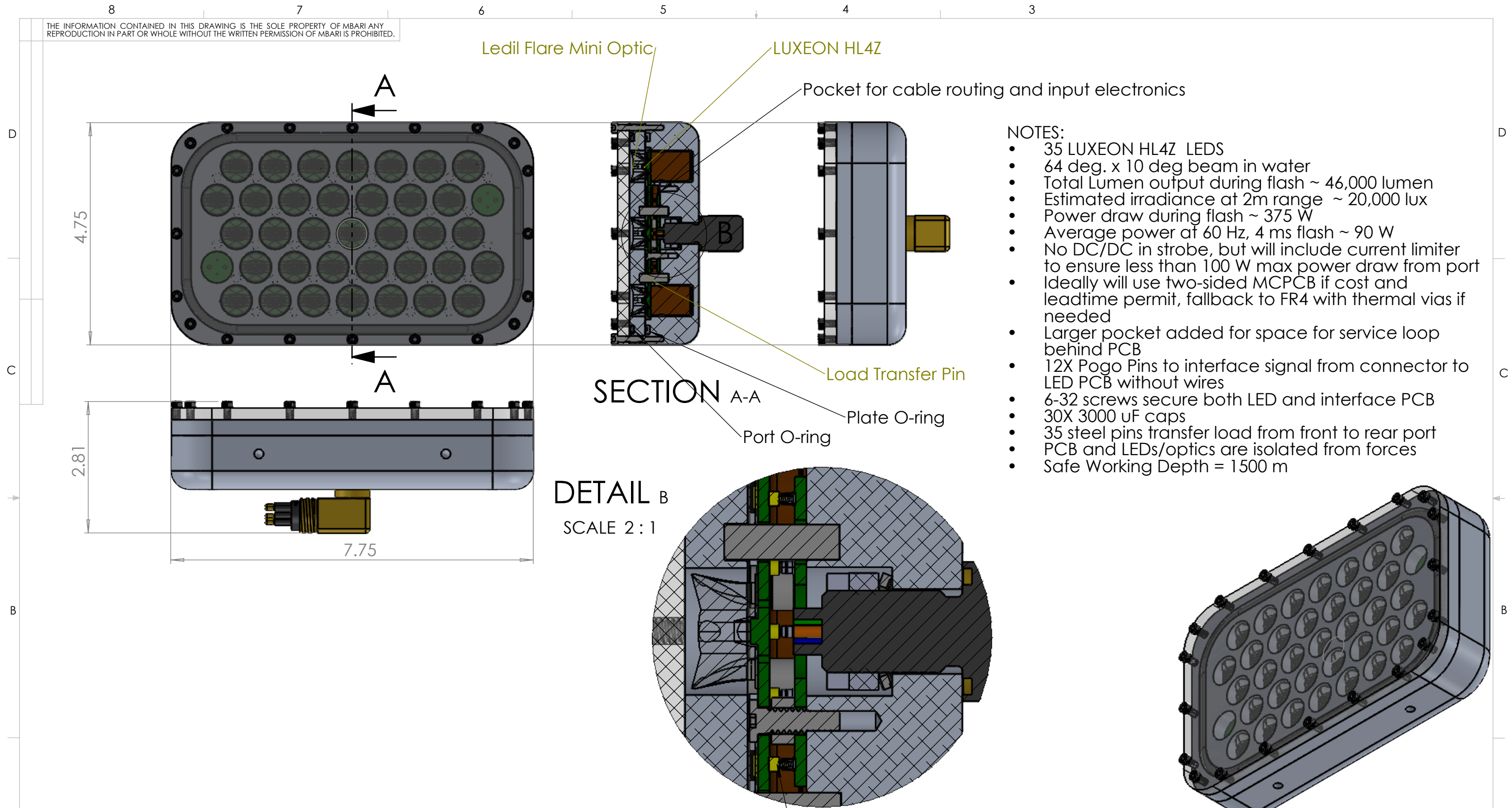


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- NOTES:
- 35 LUXEON HL4Z LEDs
  - 64 deg. x 10 deg beam in water
  - Total Lumen output during flash ~ 46,000 lumen
  - Estimated irradiance at 2m range ~ 20,000 lux
  - Power draw during flash ~ 375 W
  - Average power at 60 Hz, 4 ms flash ~ 90 W
  - No DC/DC in strobe, but will include current limiter to ensure less than 100 W max power draw from port
  - Ideally will use two-sided MCPCB if cost and leadtime permit, fallback to FR4 with thermal vias if needed
  - Larger pocket added for space for service loop behind PCB
  - 12X Pogo Pins to interface signal from connector to LED PCB without wires
  - 6-32 screws secure both LED and interface PCB
  - 30X 3000 uF caps
  - 35 steel pins transfer load from front to rear port
  - PCB and LEDs/optics are isolated from forces
  - Safe Working Depth = 1500 m

**FILE LOCATION:**  
\\atlas\ProjectLibrary\902204\_CoMPAS\ME.Drawings\HSILighting\HSILEDPUck

| BILL OF MATERIALS     |                  |                                                                                                           |                  |                   |             |           |                                          |          |              |
|-----------------------|------------------|-----------------------------------------------------------------------------------------------------------|------------------|-------------------|-------------|-----------|------------------------------------------|----------|--------------|
| Shop / Q.C.           |                  | UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:                                                                |                  |                   | APPROVALS   | DATE      | Monterey Bay Aquarium Research Institute |          |              |
| Inspector             |                  | 1 PLACE DIM ±1/16                                                                                         | 2 PLACE DIM ±.02 | 3 PLACE DIM ±.005 | DRAWN       |           |                                          |          |              |
| Shop Foreman          |                  | 1. DIMENSIONS ARE IN INCHES                                                                               |                  |                   | P. Roberts  |           | MBARI                                    |          |              |
| Engineer              |                  | 2. DIMENSION LIMITS HELD AFTER PLATING.                                                                   |                  |                   | ENGINEER    |           |                                          |          |              |
|                       |                  | 3. REMOVE BURRS AND SHARP EDGES .015 MAX.                                                                 |                  |                   | P. ROBERTS  |           | 7700 Sandholdt RD.                       |          |              |
|                       |                  | 4. MACHINED FILLET RADII .0150-.030.                                                                      |                  |                   | CHECKED     |           |                                          |          |              |
|                       |                  | 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005                                       |                  |                   | P. ROBERTS  |           | Moss Landing, CA 95039                   |          |              |
| NEXT ASSY Description | NEXT ASSY Number | 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE. |                  |                   | PROJECT NO. | 902204.00 |                                          |          |              |
|                       |                  |                                                                                                           |                  |                   | PROJECT     | CoMPAS    | HSILEDPUck                               |          |              |
| Application           |                  | DO NOT SCALE DRAWING                                                                                      |                  |                   | WEIGHT      |           |                                          |          |              |
|                       |                  |                                                                                                           |                  |                   |             |           | SIZE B                                   | DWG. NO. | REV.         |
|                       |                  |                                                                                                           |                  |                   |             |           | SCALE                                    |          | SHEET 1 OF 1 |