

HFACS Tracking #: CT23-29  
MARAD Object #: 1947.014.0001  
Contract #: 693JF723C000008

Artifact: oil on sail weight cotton duck  
Title: Christ on the Water  
Artist: Lt. Hunter Wood

Size: 10'h x 19'11"w (full original size)  
8'6"w x 18'6"w (current reduced size to fit space)

Year/Circa: 1944

Accompanying Materials: Mahogany Frame - original  
to 1947 installation at USMMA

Date: 8/30/2023

Owner: United States Merchant Marine  
Academy

Type of Client: Federal Government  
Address: 300 Steamboat Road  
Kings Point, NY 11024

Contact (COR) – Kim Hathaway, Facilities  
Operations Specialist

Contact: Joshua M. Smith, PhD, Museum Dir.  
pHTelephone # (Kim): 516-726-5745

Telephone # (Josh): 516-726-6047

E-mail # (Kim): hathawayk@USMMA.edu

Email # (Josh): smithj@USMMA.edu

Service: examination  survey  treatment  other

## Condition Report:

- Painted by Lt. Hunter Wood in 1944. First exhibited in San Mateo, California, and then moved to the United States Merchant Marine Academy for exhibition in Wiley Hall in 1947. A custom build stained and fished Mahogany frame was made for this installation to match the historic woodwork in the room (original Music Room in the Chrysler Mansion) in Wiley Hall. Because of size constraints in this room the left and right ends of the painted were folded around the stretcher that was built for this installation. The painting was reduced by approximately 9" on each end. This painted canvas was found to be intact when the painting was removed from the wall for conservation, with the exception of tack holes through the painting to hold it in place on the stretcher.
- Upon close examination in our conservation facility in Carlisle, PA, and following extensive cleaning tests, it was determined that the painting had a heavy obscuring layer of yellow/orange nicotine on its surface, a thick dirt layer both on top of the varnish coating and embedded in it, and a very thick unevenly applied brush coating of a natural resin or spar varnish that was extremely discolored and chemically cross-linked. As well it was further determined, that a previous attempt had been made to clean the painting at least once in the sky (likely prior to its 1947 installation). During this cleaning, the original paint in the sky was chemically abraded. It is quite possible that the painting had not been varnished prior to this cleaning attempt. The result of the harsh uneven cleaning was that the original paint was abraded and that dirt and nicotine on the surface was then chemically embedded/linked into the structure of the original paint. When we initially viewed the painting in situ at USMMA during the bid walk through we were not allowed to make cleaning tests, nor were ladders provided to allow us to more closely examine the painting's surface. At this point in time, we assumed that since this had been in a museum setting at USMMA for over 75 years that we were just dealing with an extremely discolored varnish coating, and not an additional problem causing thick obscuring nicotine layer as well. The nicotine and varnish layers were so thick and discolored that none of the artist's original colors or even paintbrush strokes were discernable. This was even the case when we closely examined the painting at our conservation facility using strong photographic lighting. We quickly realized that cleaning the sky was going to be problematic because of the prior harsh restoration likely by untrained hands. The varnish coating was so tough and chemically cross-

linked that it could not be safely removed from the painting's surface without further damaging the blue of the sky to both the left and right of the white aura around Christ. Note: It took 4 distinct separate cleanings to removed nicotine, dirt and varnish from the water, boat, and Christ (with aura). After removal of surface dirt and nicotine in the sky we realized we couldn't clean these areas anymore. This presented a problem because the sky was still extremely discolored (yellow/orange) and did not represent the true color of the artist's paint, which was a lighter sky blue color. The only way to reachieve this color was to reglaze/repaint the sky over the remaining discolored varnish coating. This new layer of conservation grade paints (Goldens MSA (mineral spirit based acrylic) Paints) was applied over an isolating brush coating of varnish (Acryloid B-72 varnish 8% in xylene). Only the paint of the sky had been damaged by the previous cleaning, unlike the rest of the composition's paint, which was structurally strong withstanding multiple cleaning processes.

- The painting was executed in an oil medium over a white artist preparatory ground layer on a heavy weight white cotton duck canvas (sail weight). The canvas, although 80 years old, was still structurally strong and quite pliable. It was stretched over a custom-built pine stretcher with 4 vertical and 1 horizontal crossbar. No stretcher keys were present.
- During the deistallation process for the painting in Wiley Hall we discovered that the frame was bolted to the wall and was manufactured in two sections, a front section made of mahogany and a back section of pine. The stretched painting was attached using bent steel mending to the front of the pine section of the frame. The front mahogany section of the frame covered up the attachment plates and provided a rabbet covering the front edges of the painting. The painting was tautly stretched on its stretcher while in Wiley Hall.
- The painting was to be moved from Wiley Hall to the lower rear hallway of the Mariner's Memorial Chapel at the Academy as part of the this conservation contract because of recent complaints that found fault with this religious painting being displayed in the room where the Academy's Cadets graduated, meetings were held, and disciplinary hearings were conducted. Because of size constraints in the Chapel hallway, the painting needed to be reduced in size to get into the building. There was no adequate space in the hallway to restretch the painting to keep its original size.
- The mahogany frame used in Wiley Hall was not reused again because of size constraints, and differences in architectural design. We built a new 1 ¼" w x 3"th poplar frame for the painting. It was painted with Sherwin Williams "All Surface Enamel" oil base interior/exterior semi-gloss paint. The color used on both the frame and the wooden platform base was "Dark Knight SW 6327." Remaining paint in three quarts was left on site for future touch up if needed.
- Because of the paintings new installation location in a pass through hallway, and because it would now be displayed within a foot of the floor, which occasionally floods and is wet mopped/cleaned (tile floor) we felt that the painting could be damaged. We proposed construction of a raised wooden painted exhibit platform for under the painting to help alleviate this issue. USMMA approved a change order in our contract to build this platform. The drawing for this platform can be found at the end of this report. To remove the platform from the wall slide it 6" to the left to disengage the sliding French cleats from the wooden mounting brackets on the wall. It is only attached by six, 5" w French cleats mounted onto the back of the platform. It is not attached to the floor.

#### **Painting's Maintenance and Lighting:**

- The surface of the painting should only be dusted or cleaned when needed. Likely on a yearly or 2 year basis. The surface can be lightly dusted with a wide (3 – 5") soft natural bristle brush with out a metal feral. We suggest purchasing Hake brushes for this purpose from Talas Art Supply Co. or University Products. The painted frame and wooden platform can be brushed in a similar fashion or by using a damp/rung out clean cotton cloth with no detergents or soaps.
- Suggestions for display lighting for this mural were requested as part of the contract deliverables. After discussions with USMMA staff (COR and Museum Director) we felt that maybe additional lighting would not be necessary for this painting following installation. The fluorescent lighting in

the hallway, although not the correct usual color temperature, was fairly even and acceptable. If this is to remain we would suggest changing out the cool color lighting tubes for warm tubes (incandescent/tungsten light color). If USMMA would still like to add additional lighting, we would suggest mounting track lighting down the center of the hallway extending the entire length of the mural. We would suggest using 10 – 14 light cans, which would be pointed/focused both up and down, but from an oblique angle so that no direct straight-on aiming of light beams would be utilized, which would create “hot spots.” Lamps should be dimmable, focusable, and LED warm lighting. These will give off little or no heat when used. We would suggest a product like: Dali 6 wire dimming LED track lights Museum Series (see product specifications at end of report).

### **Treatment Report:**

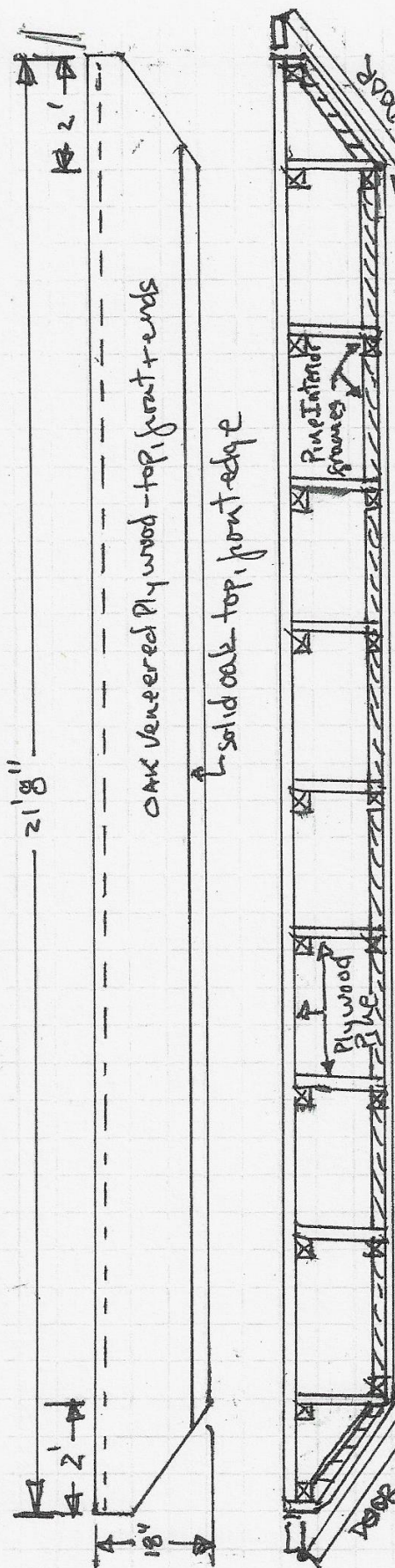
- Travel from Carlisle, PA to USMMA in Kings Point, NY.
- Staging of equipment, scaffolding, supplies and materials in Wiley Hall in preparation of mural deinstallation.
- Install cardboard below mural, plastic sheeting on floor under scaffolding, and Homasote and plywood under wheels of scaffold towers to protect building and furnishings in Wiley Hall. Move large table, and furnishing temporarily out of the way during mural deinstallation.
- Document all work in Wiley Hall, at conservator’s facility, and at the Mariner’s Memorial Chapel using high-resolution digital photography (before, during, and after treatment).
- Disassemble mahogany and front and pine back frame for reuse by USMMA maintenance staff.
- Detach screws and mending plates attaching painting to back half of frame (pine portion) and lower stretched painting to floor.
- Place painting face down on protective sheeting on the floor and remove painting from its current stretcher. Disassemble wooden members of current stretcher for USMMA reuse of wood.
- Roll the painting face out with silicon coated Mylar sheeting interleaving onto a 14” diameter Construction Sonotube that is 1’ longer than the width of the mural with its tacking edges flattened. Wrap the mural in polypropylene sheeting in preparation for transport to the conservator’s facility for conservation treatment.
- Clean up workspace in Wiley Hall.
- Transport the rolled mural to our conservation facility in Carlisle, PA.
- Thoroughly examine mural at our conservation center prior to start of treatment. Documentary photography will include normal lighting, UV, IR, details, staff working shots, and raking light.
- The painting was mounted onto our specially built scroll table that we use for cleaning and treating large murals. Each end of the mural was attached to two large diameter Sonotubes, which stretch across a working surface that can be used to treat pieces in sections using both a horizontal or vertical format.
- Thick layer of dirt, nicotine and discolored varnish were removed with 4 separate cleaning for the water boat, and Christ with oval aura using – first cleaning: Simple Green Detergent in distilled water, second cleaning: acetone, third cleaning: lacquer thinner followed by a naphtha rinse, and then finally additional Simple Green detergent cleaning followed by a naphtha rinse, then reapplication of Lacquer thinner. The sky to the right and left of the oval aura around Christ was first cleaned with Simple Green Detergent in distilled water followed by a naphtha rinse, and a partial second cleaning using isopropyl alcohol. As noted above in the Condition Report section, we could not fully clean the sky because of how cross-linked that varnish was, because of the damage (abrasion) to the paint from a previous cleaning, and because any solvent that dissolved the varnish dissolved the artist’s original paint as well.
- Areas of distorted cupping/quilted canvas, or previous canvas folds underwent a moisture treatment. Distilled water was brush applied to the bare back of the canvas. Tented/distorted areas were then weighted with silicon coated Mylar interleaves, glass plates, and weights until dry. This process vastly reduced the cupped/distorted areas, but did not totally remove them. Lining of the painting, or

lining and mounting on a panel would have eliminated these planar distortions, but lining was not warranted because of the stability and strength of the original heavyweight duck cotton canvas.

- A custom-made ash wood expansion bolt stretcher with two horizontal and five vertical cross members was ordered.
- The new stretcher was picked up from Bethesda, MD, assembled at our facility, and then the painting was restretched onto the new stretcher securing it with stainless steel staples. The exterior doorways into the lower level exhibition hallway of the Mariner's Memorial Chapel dictated the final maximum size of the painting when restretched. The diagonal of the doorways could only accommodate a 102" h painting, which required folding portions of the top and bottom of the composition and securing to the edges and back of the stretcher. A nine-inch reduction of size along the top, and an eleven-inch reduction along the bottom were required. The top was folded starting at the top of Christ's halo, and the bottom just below Hunter Wood's signature. A small rowboat shape, which seemed to be part of his signature presentation, was out of sight. The rowboat is intact along the bottom right tacking edge, and we insured that no staples went through this image when we restretched the painting.
- The painting was partially keyed out after it was restretched. Further keying out of the painting will be done in the Chapel hallway prior to installing the painting on the wall. (Because of the size of the painting and weight of the canvas it is affected by changes in humidity. If the doors to the exterior in the hallway are left open for any period of time the canvas may loosen on its stretcher. Drier parts of the year or in winter with less relative humidity levels the painting should be tighter on its stretcher. There is not much we can do about this unless you have very strict stable museum temperature and relative humidity conditions in this space.)
- An isolating spray varnish coating of Acryloid B-72 was applied to the entire painting.
- All losses were filled with Modostuc filler (an Italian wood filling product), and inpainted using Goldens MSA (mineral spirit based acrylic) Paints. The sky to the left and right of Christ's oval aura was glazed/overpainted in its entirety because, as noted above, the original varnish and embedded dirt could not be safely removed from the painting and its color did not match that of the original artist's composition.
- A final spray varnish coating of Acryloid B-72 was applied.
- A new poplar 1 ¼" w x 3" th painted frame was constructed for the painting.
- A painted wooden 21 ½' long platform was constructed through a change order for installation below the painting. This will serve as a space for didactic history panels for the mural to be created by USMMA in the future, and to protect the painting from floor cleaning and people bumping into it.
- The painting, detached sections of frame stock and protective floor platform sections were loaded into a 26' truck for transport from HFACS in Carlisle, PA to USMMA in preparation of mural installation.
- Unload the painting, frame sections, and platform pieces from the truck into the installation hallway in the Mariner's Memorial Chapel.
- Equipment, ladders, supplies and materials were staged in the installation hallway in preparation for mural installation.
- Mount steel flat hanging plates to the reverse side of the stretcher (6 down each side and 8 across the top). These plates extended out past the edge of the painting and were secured with Tapcon lag bolts directly into the cinder block wall in the installation hallway. The bottom edge of the painting will be supported with steel "L" brackets secured into the wall in a similar fashion. The new frame covers the mounting brackets and bolts that secure the painting to the wall. The new frame was secured to the outer edges of the stretcher with predrilled holes in the frame using drywall screws for top and bottom frame pieces. The left and right sides were secured using hex head lag bolts leaving the heads exposed and painting them to resemble rivets.
- Assemble three sections of wooden painted platform with interconnecting bolts with wing nuts. Attach painted wooden strips on site to cover platform joint seams also with painted exposed hex head bolts to resemble rivets. The platform as noted in the Condition Section above is mounted onto the

wall using sliding French cleats. To remove platform slide it to the left 6" to clear the mounting joints. It is only attached to the wall and not the floor.

- We were going to mount door hook hardware to allow for the flanking chapel doors to be propped open, but it was decided that the COR decided in conference with maintenance staff that they would order industrial hardware for this purpose and install at a later date.
- **Clean up workspace.**
- After installation return to our facility in Carlisle, PA.

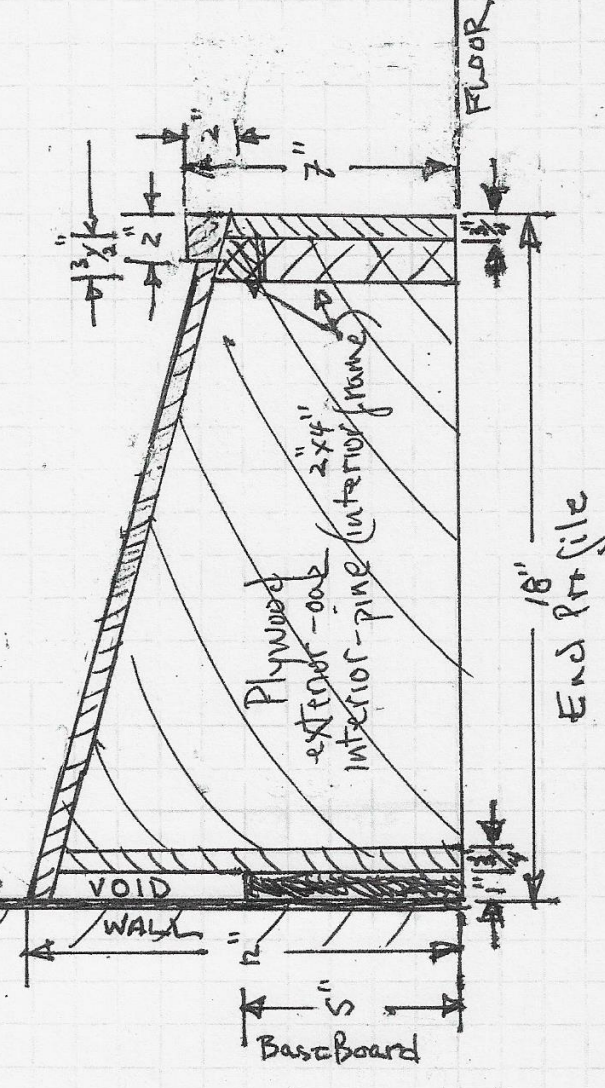


add doors top or back of some kind (both ends)

Exterior - oak veneered 3/4"th plywood, corner block top front as solid oak

Interior - 3/4" plywood

Finish - To be determined (TOD)

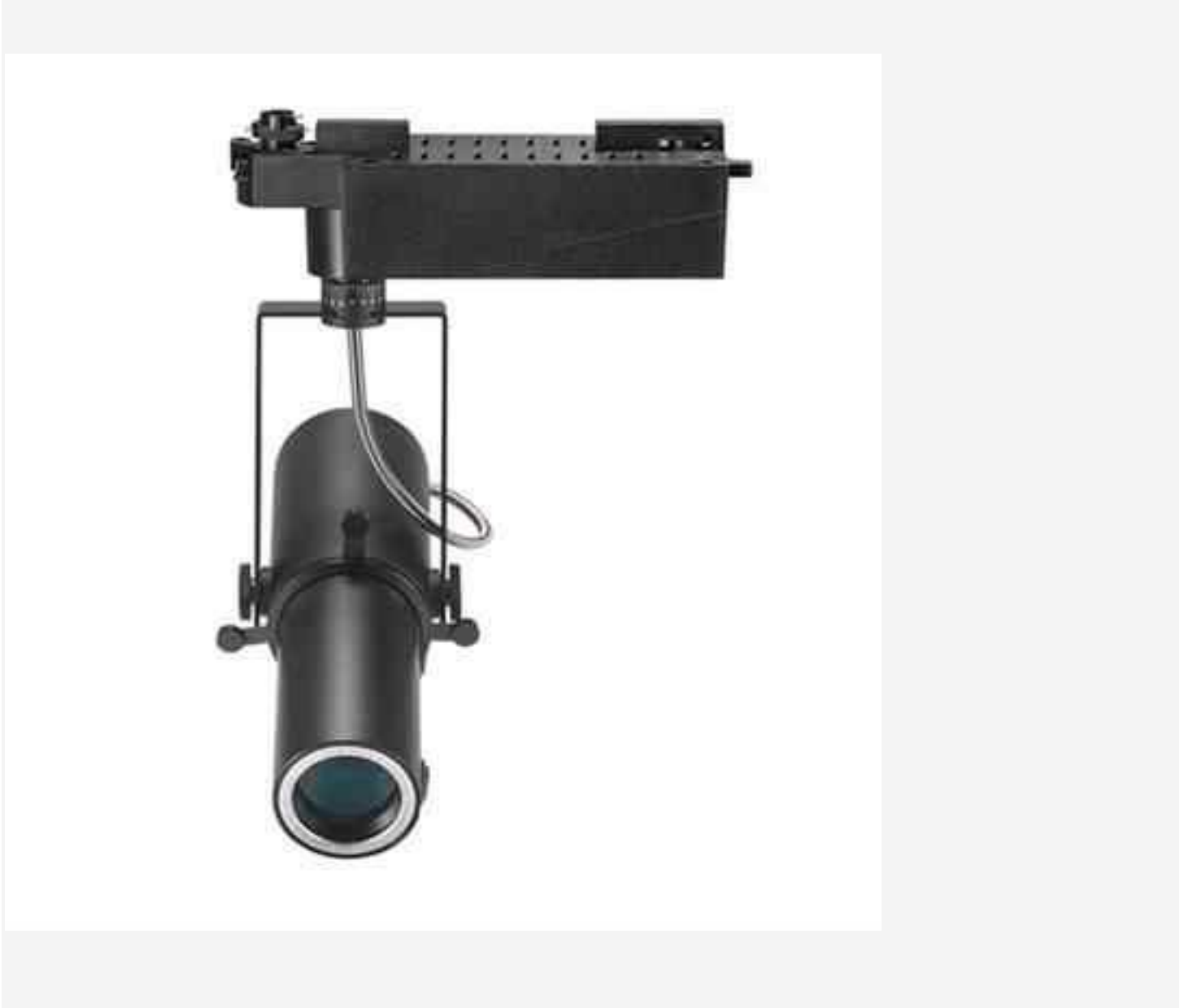


Note: Added as per USIMA request

① Platform will be attached to wall as requested. Will discuss methods to be used with Josh Smith - Museum Director

② Color will be a medium tone blue green to match color palette of painting - to be determined after painting is cleaned

Hartmann Fine Art Conservation Services, Inc.  
 6/24/2023 - cell 717-574-3579  
 Raised platform for under Hunter Wood painting



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Store's sales amount

**\$530,000+**

Store's sales trend



Store's order trend



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## Overview

### Essential details

Item Type:

TRACK LIGHTS

Color Temperature(CCT):

2700/3000/4000/5000K

Lamp Luminous Efficiency(lm/w):

80

Color Rendering Index(Ra):

Ra>97 or Ra>90

Light Source:

LED

Support Dimmer:

Yes

Lighting solutions service:

DIALux evo layout

Application:

Museum, Museum

Design Style:

modern

Lifespan (hours):

50000

Working Time (hours):

50000

LED Light Source:

LED

Input Voltage(V):

100-277VAC

Lamp Luminous Flux(lm):

80lm/w

CRI (Ra>):

90 or 97

Working Lifetime(Hour):

50000

Lamp Body Material:

Aluminum

Base Type:

3 wires/4wires/6wires

Place of Origin:

Guangdong, China

Brand Name:

SZDAYTON or OEM

Model Number:

DT-TDL01G-001-20W/30W



Warranty(Year):

5-Year

Track wires:

3wires/4wires/6wires Dali

Ra:

>97 or >90

Input:

100-277 VAC

Certification:

C-tick, EMC, ETL, LVD, PSE, RoHS, Saa

### **Packaging & delivery**

Selling Units:

Single item

Single package size:

52X30X18 cm

Single gross weight:

4.200 kg

Package Type:

Carton

Lead time:

Quantity(pieces)	1 - 10	11 - 100	>100
Lead time (days)	10	15	To be negotiated

**Dali dimming LED track lights 3 wires 4 wires 6 wires Museum track light 220 volt led track lighting**

**\*220 volt led track lighting**

**\*Museum track light**

**\*Dali dimming LED track lights**