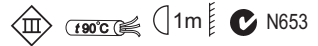




LUMASCAPE

MODELS LS491A  
2X 12V 20watt max.  
IP65 rated



# IMPORTANT INSTRUCTIONS

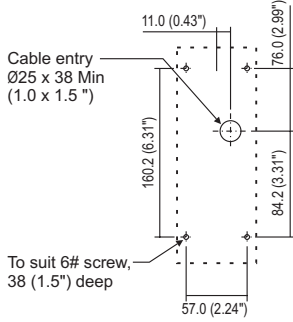
For Installation LS491A MODA: SURFACE MOUNT ONLY

Warning: The Luminaire should only be used complete with its protective shield (cover)

Lumascope Lighting Industries Pty Ltd  
38-44 Enterprise Street, Cleveland, QLD 4163, Australia  
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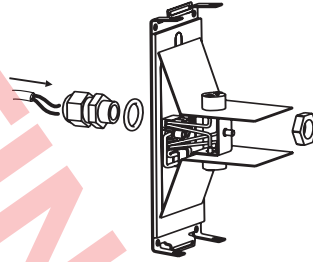
Note: To achieve IP65 rating mount with (TOP) located in the upper most position, use round cable (size 5-10mm) to suit entry gland supplied with fixture.

1 Please exercise caution when placing fixture.  
Place above head height.



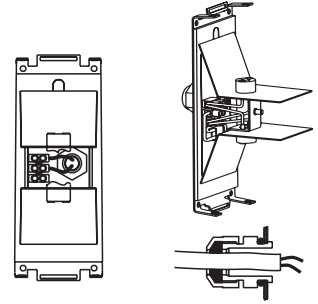
Mark locations of fixtures (refer voltage drop chart over).  
Mark and drill/cast holes.

2



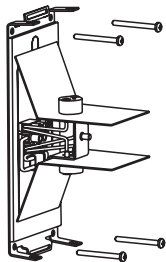
Remove lid (see below) from fixture and insert cable gland and o-ring into base. Do not screw nut onto gland or tighten gland. (optional, required for IP65 rating).

3



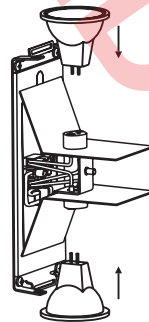
Terminate supply cable in fixture, tighten gland nut and tighten cable gland onto cable. (for IP65).  
Note: Ensure only round supply cable is used and cable gland seals on the outer insulation to ensure maximum IP rating.

4



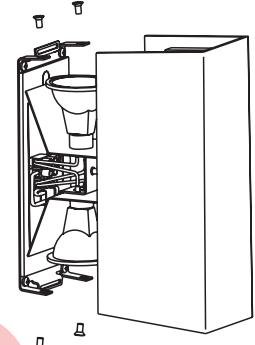
Screw base to mounting surface with TOP up.

5



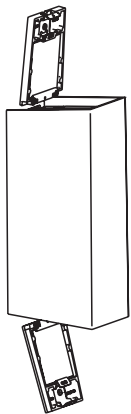
Insert lamp and Test Fixture.  
2X 20W lamps Max.

6



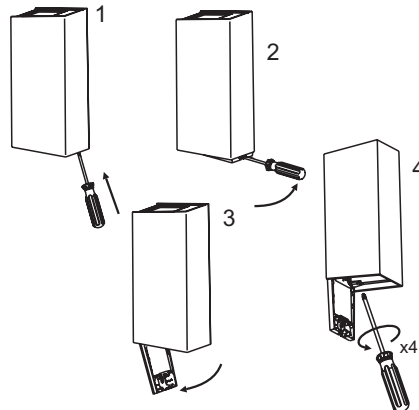
Attach lid to fixture

7



Attach covers and close.

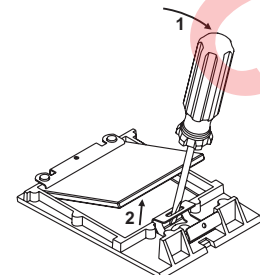
## LID REMOVAL



## RELAMPING

Remove cover and re-lamp as per instructions 5,6,7.

## LENS REMOVAL & REPLACEMENT



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LUMASCOPE  
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NQ LIGHTING  
LUMASCOPE AGENT - NTH QLD  
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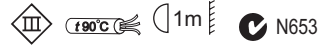
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LUMASCAPE

MODELS LS491A  
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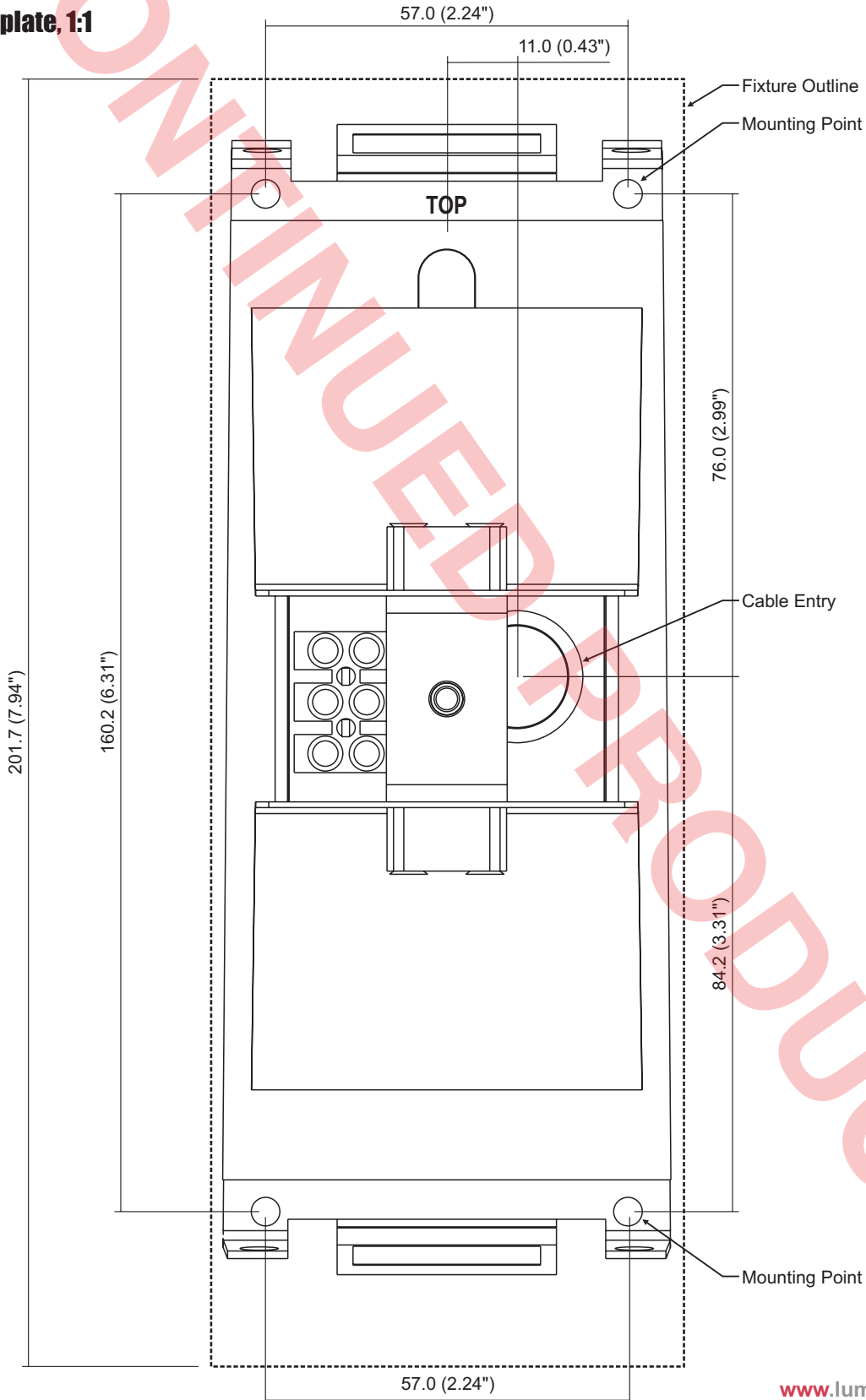
# B IMPORTANT INSTRUCTIONS

## For Installation LS491A MODA: SURFACE MOUNT ONLY

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### Mounting Template, 1:1



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## IMPORTANT SAFETY INSTRUCTIONS

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, OR INJURY TO PERSONS

**WARNING** - To reduce the risk of FIRE or INJURY:

1. Wall mount only
2. Fixtures can become very hot. Use discretion in placement.
3. Turn Off/Unplug and allow to cool before replacing lamp.
4. Lamp gets hot quickly! Contact only switch/plug when turning on.
5. Do not touch hot lens, guard, or enclosure.
6. Keep lamp away from materials that may burn.
7. Do not touch the lamp at any time. Use a soft cloth. Oil from skin may damage lamp.
8. Do not operate the lighting fixture with a missing or damaged shield.
9. CAUTION - HOT SURFACE. Keep away from curtains and other combustible material.
10. Loctite Silver Grade Anti Seize on threads. Reapply if needed.

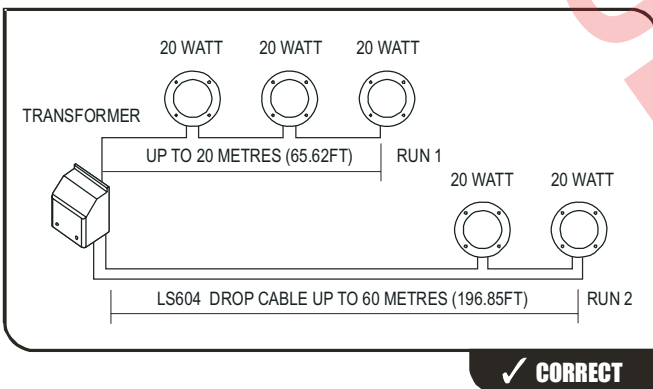
**SAVE THESE INSTRUCTIONS.**

## VOLTAGE DROP CHARTS - 12 VOLT CABLE

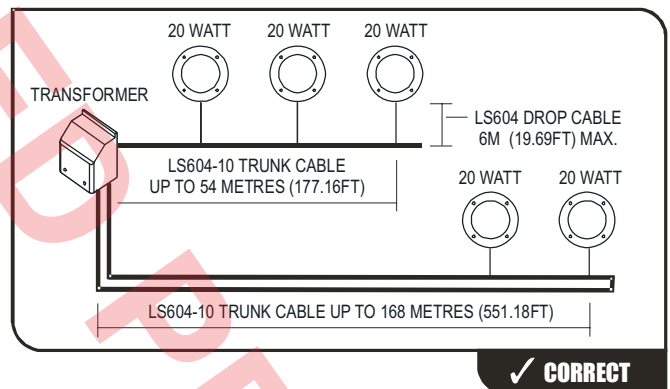
Note: The information below relates to Lumascope LS604 Direct Burial Cable only.

It is important that the Voltage Drop ( the amount of Voltage lost over a length of cable ) is kept to a maximum 1 Volt (ie. the Voltage should not be less than 11 Volts at the fixture).

A larger cable will experience a lower voltage drop over the same length of cable (refer Voltage Drop Chart below).



This example shows the correct way of installing the system using LS604 Drop Cable - The total load on RUN1 is 60 watts over 20 metres (65.62ft) which is allowed in the Voltage Drop Chart below (refer to (1)). The load on RUN2 is 40 watts and using a doubled cable allows the run to be up to 60 metres long (196.85ft) (refer to (2)).



This example shows the correct way of installing the system using LS604-10 Trunk Cable - The total load on RUN1 is 60 watts at 54 metres (177.17ft) which is the maximum allowed in the Voltage Drop Chart below (refer to (3)). The load on RUN2 is 40 watts and using a doubled cable allows the run to be up to 168 metres (551.18ft) long (refer to (4)) in Voltage Drop Chart.

## VOLTAGE DROP CHART

LOAD	3.3MM (0.13IN) LS604 DROP CABLE		6MM (0.24IN) LS604-6 TRUNK CABLE		10MM (0.39IN) LS604-10 TRUNK CABLE	
	Single	Double	Single	Double	Single	Double
20W	70m (229.66ft)	140m (459.32ft)	105m (344.49ft)	210m (688.98ft)	140m (459.32ft)	280m (918.64ft)
40W	30m (98.43ft)	60m (196.85ft) (2)	55m (180.45ft)	110m (360.90ft)	84m (275.59ft)	168m (551.18ft) (4)
50W	25m (82.02ft)	50m (164.04ft)	44m (144.36ft)	88m (288.72ft)	62m (203.41ft)	124m (406.82ft)
60W	20m (65.62ft) (1)	40m (131.24ft)	36m (118.11ft)	72m (236.22ft)	54m (177.16ft) (3)	108m (353.15ft)
70W	15m (49.21ft)	30m (98.42ft)	30m (98.43ft)	60m (196.86ft)	50m (164.04ft)	100m (328.08ft)
80W	14m (45.93ft)	28m (91.86ft)	27m (88.58ft)	54m (177.16ft)	46m (150.92ft)	92m (301.84ft)
90W	13m (42.65ft)	26m (85.30ft)	24m (78.74ft)	48m (157.48ft)	42m (137.76ft)	84m (275.52ft)
100W	12m (39.37ft)	24m (78.74ft)	21m (68.90ft)	41m (137.80ft)	36m (118.11ft)	72m (236.22ft)
120W	10m (32.81ft)	20m (65.62ft)	18m (59.06ft)	36m (118.11ft)	30m (98.43ft)	60m (196.86ft)
250W	4m (13.12ft)	8m (26.24ft)	9m (29.52ft)	18m (59.05ft)	17m (55.77ft)	34m (112ft)

**CAUTION**

The distances and wattages shown are maximum and should not be exceeded.