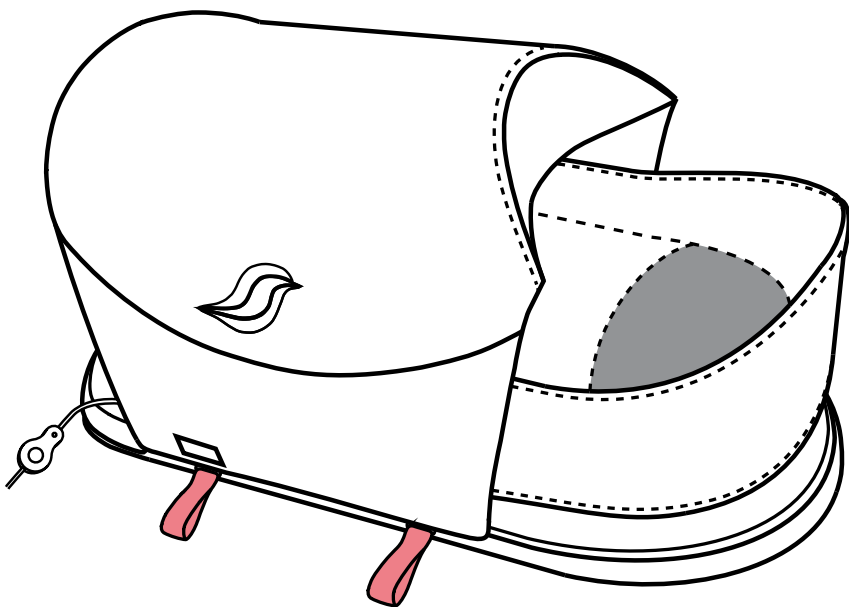


bili-hut™ Home Use Guide



CAUTION



U.S. federal law restricts this device to sale by or on the order of a physician or properly licensed practitioner.

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Little Sparrows Technologies
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Newtonville, MA 02460

bili-hut™ is a trademark of Little Sparrows Technologies.

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Product Responsibility

The **bili-hut™** was designed by Little Sparrows Technologies. This guide provides information on how to assemble, operate, disassemble, clean, and store the **bili-hut™**. Follow all instructional materials and labels provided with the **bili-hut™**. Check this device regularly for defects. NEVER use a **bili-hut™** or any **bili-hut™** components that appear to be defective.







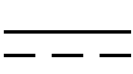


DO NOT make changes to the **bili-hut™**. DO NOT alter the **bili-hut™**. Changes to the **bili-hut™** should only be made by a Little Sparrows Technologies representative. Damage to this device due to improper use is solely the responsibility of the user. Little Sparrows Technologies is not responsible for damage from the user making repairs or taking any action not stated in this guide, **bili-hut™** labels, or other instructional materials prepared by Little Sparrows Technologies.

See **Section 5** for instructions on troubleshooting problems with the **bili-hut™**.

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Label Symbols Key

Symbol	Meaning
	<p>Cautions draw your attention to any hazards that could damage the device or could result in severe but reversible injury to you and/or your baby.</p> <p>Warnings describe serious adverse reactions and potential safety hazards, limitations in use imposed by them, and steps that should be taken if they occur.</p>
	Single use
	Consult instructions for use
	Eye protection
	IEC Type BF applied part
	IEC Class II equipment
	Direct current
Rx Only	CAUTION: Federal law restricts this device to sale by or on the order of a physician.
	Temperature limit
	Manufacturer

Section 1: Overview

1.1 Intended Use

The intended use of the **bili-hut™** is for the treatment of neonatal hyperbilirubinemia.

Use the **bili-hut™** only as directed by your healthcare provider. Not doing so may result in too much or too little treatment for your baby.

The **bili-hut™** is not intended to prevent the onset of jaundice.

1.2 Introduction

1.2.1 Purpose of this Guide

The purpose of this guide is to show you how to use the **bili-hut™** to treat your baby's jaundice. The **bili-hut™** should only be used by individuals who have read and thoroughly understand this guide.

1.2.2 What is Jaundice?

Jaundice is a condition that causes yellow discoloration of the skin, eyes, and mucus membranes. It is caused by increased blood levels of bilirubin. Jaundice is treated with phototherapy.

1.2.3 What is Bilirubin?

Bilirubin is a yellow pigment that occurs naturally in the body as a product of red blood cells, which break down over time. Bilirubin is normally broken down by the liver and passed out of the body through urine and stool.

1.2.4 What is Phototherapy?

Phototherapy exposes a jaundiced baby's skin to a bright blue LED (Light Emitting Diode) light. The light converts bilirubin in the blood into a form that can naturally pass through the body. Nearly all babies with jaundice can be treated with phototherapy.

1.2.5 What is the **bili-hut**™?

The **bili-hut**™ is a portable device that uses a curved blue LED light array. It is specially designed to deliver high-intensity phototherapy treatment to more quickly decrease the amount of bilirubin in a baby's body. The **bili-hut**™ is easy to use, clean, and transport.

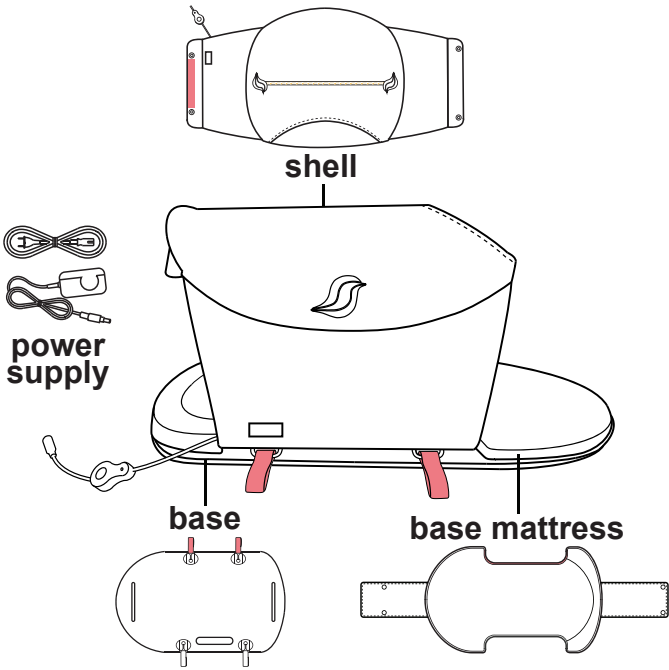
The **bili-hut**™ allows for safe and effective treatment in either the clinical environment or home when used as instructed.

1.3 Components

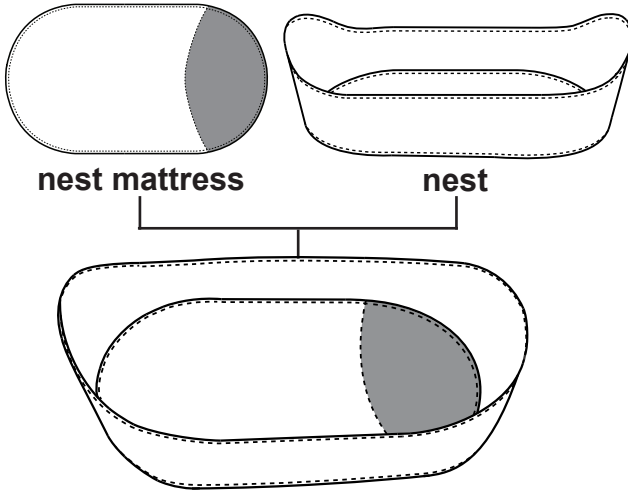
NOTE: Only use the components provided by Little Sparrows Technologies shown in this section with the **bili-hut™**.

The diagrams on this page and the next page show the location of all **bili-hut™** components.

assembled hut
base
base mattress
shell
power supply

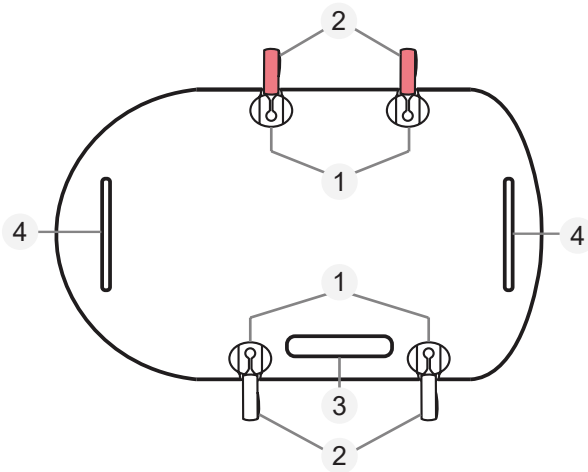


nest components
nest
nest mattress



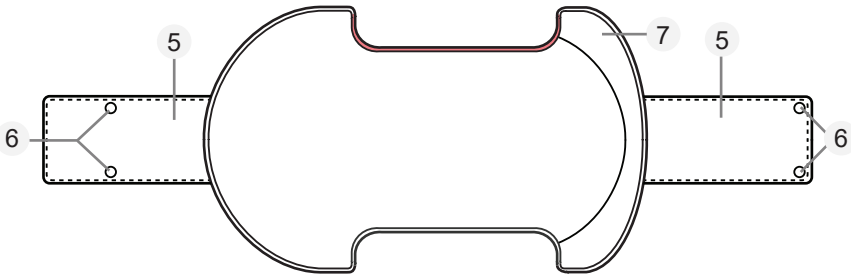
1.3.1 base and base mattress

The **base** maintains the structure of the **shell** during treatment.



Feature #	Description
1	Magnetic clasps on the base attach to the shell clasps for assembly.
2	Red and gray straps signal proper assembly of the shell and allow easy disassembly.
3	Handle enables surface-free assembly of the shell .
4	Slots in the base allow easy attachment of the base mattress .

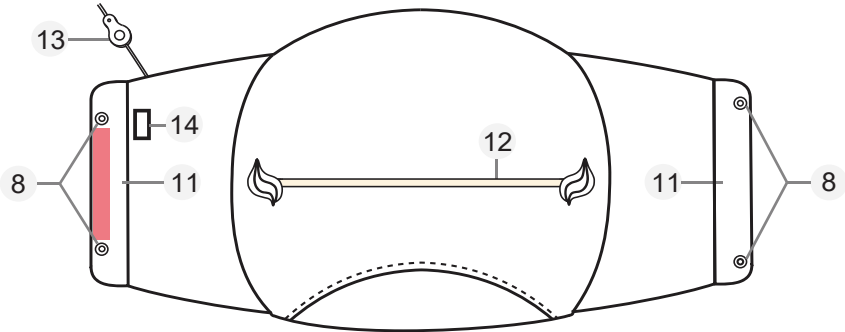
The **base mattress** cushions and aligns the treatment area.



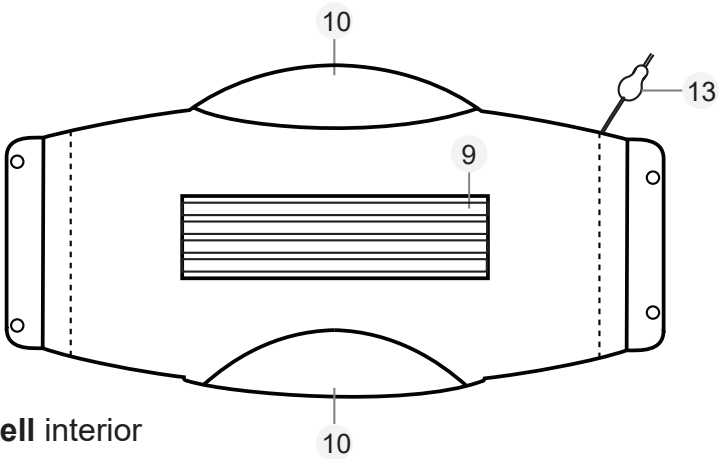
Feature #	Description
5	Straps slide through slots in the base to attach the base to the base mattress .
6	Snaps attach the straps to secure the base to the base mattress .
7	The bumper helps properly align the nest for treatment.

1.3.2 shell

The **shell** provides high-intensity phototherapy treatment with blue LED treatment lights.



shell exterior



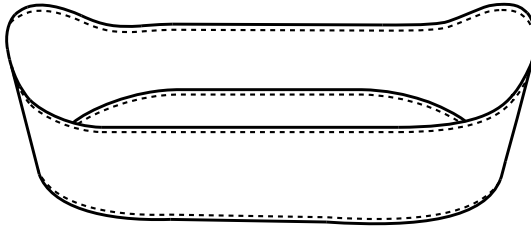
shell interior

Feature #	Description
8	Magnetic clasps on the shell pair with the base clasps for secure attachment.
9	Blue LED (Light Emitting Diode) treatment lights form the light array to administer high-intensity phototherapy to your baby.
10	Back and front flaps focus light on the treatment area. The flaps also shield the area around the bili-hut™ so that you will only see a small amount of blue light.
11	Red and gray tabs indicate proper shell assembly.
12	The yellow indicator light alerts you to an Environment High Temperature Warning. See Section 3.4 of this guide for more information. The yellow indicator light is not visible unless the bili-hut™ is used in a too-hot environment.
13	The power cord connects the assembled hut to a safe power supply . After the power supply is plugged in to a safe and active outlet, the power switch controls whether the bili-hut™ is “ON” or “OFF”. A small blue indicator light on the power switch illuminates when the power cord is plugged in and the power switch is in the “ON” position.
14	The timer tracks the total use of the blue LED treatment lights in hours. The timer does NOT track individual treatment times.

1.3.3 nest (disposable)



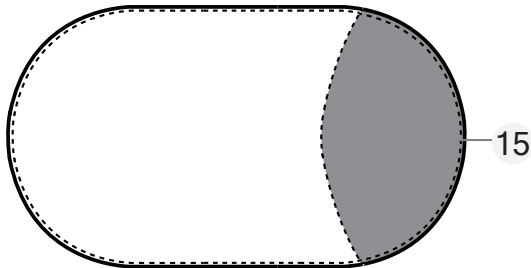
The **nest** properly positions your baby for treatment and improves light array efficacy. The **nest** is disposable for when soiled and between patients. Please see the contact information in **Section 6** of this guide to order additional **nests**.



1.3.4 nest mattress (disposable)



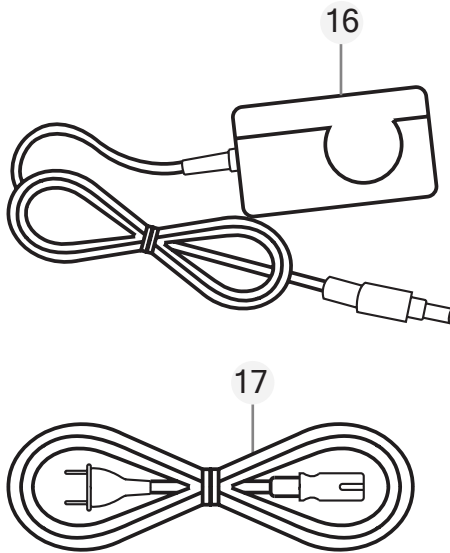
The **nest mattress** provides cushioning for your baby and uses color-blocking to guide placement of your baby. The **nest mattress** is disposable for when soiled and between patients. Please see **Section 6** of this guide to order additional **nest mattresses**.



Feature #	Description
15	The dark section of the nest mattress guides proper placement of your baby within the nest . Specifically, your baby's head and neck are placed entirely within the dark section of the nest mattress .

1.3.5 power supply

The medical-grade **power supply** attaches the **bili-hut™** power cord on the **shell** (see **Feature #13** of **Section 1.3.2**) to a safe and active electrical outlet. The **power supply** is composed of the power brick and AC cord.



Feature #	Description
16	Power brick connects to the bili-hut™ power cord and the AC cord.
17	AC cord connects the power brick to a safe and active electrical outlet.

Section 2: Safety

2.1 Indications for Use

The **bili-hut™** provides phototherapy for the treatment of neonatal hyperbilirubinemia, commonly known as neonatal jaundice, during the newborn period in the clinical or home setting.

2.2 Contraindications

Contraindications are conditions when the **bili-hut™** should not be used because the risks outweigh the benefits of using it.

There are no known contraindications for the **bili-hut™** in the home use setting.

2.3 Recommendations

Little Sparrows Technologies recommends that the **bili-hut™** be used for patients with a birthweight of more than 2500 grams (5.5 pounds) and with a gestational age of greater than or equal to 35 weeks. However, the prescribing clinician defines the need for phototherapy with each patient.



Use the **bili-hut™** in these environments:

- recommended room temperature: select a location where the room temperature can be maintained between 70°F and 76°F (21.1° C and 24.4°C) for your baby's comfort and safety during treatment
- humidity range: 10 to 90% rH non-condensing


2.4 General Warnings

Warnings describe serious adverse reactions and potential safety hazards, limitations in use imposed by them, and steps that should be taken if they occur. General warnings are listed in this section. Specific warnings are listed with the relevant device use instructions.






2.4.1 Electrical Warnings

	Only use the power supply supplied by Little Sparrows Technologies. Using non-standard electrical parts may result in undertreatment or electrical shock of your baby.
	Only plug the bili-hut™ into a properly grounded electrical outlet. Plugging the bili-hut™ into an unsafe outlet could result in malfunction of the device or injury to your baby.






2.4.2 Environmental Warnings

	<p>DO NOT operate the bili-hut™ if any of the below are present:</p> <ul style="list-style-type: none">• nitrous oxide• an oxygen-rich environment• a flammable anesthetic mixture of gases• flammable cleaning agents <p>Doing so could result in danger to you and/or your baby.</p>
---	--

2.4.2 Environmental Warnings (continued)

	NEVER lay anything on top of the assembled bili-hut™ or any of its components. Doing so could result in damage to the structure of the bili-hut™ and/or injury to your baby.
	DO NOT block the front and rear openings of the bili-hut™ during treatment. Doing so could result in over-heating of both your baby and the device as well as suffocation of your baby.
	DO NOT use or store the bili-hut™ in direct sunlight. Doing so could damage the device or result in over-heating of your baby.
	NEVER stack the assembled bili-hut™ on top of other equipment. Doing so could result in damage to the device. During treatment, this could result in injury to your baby.
	DO NOT transport the bili-hut™ with a baby inside. The bili-hut™ is not a “transporting” device. Doing so could result in injury to the baby.

2.4.3 Warnings About Your Baby

	DO tend to other medical needs of your baby as needed. Determine safe sleeping positions for your baby with your healthcare provider if these needs require special attention.
	NEVER carry the nest or assembled hut with your baby inside of it. Doing so could lead to injury of your baby.
	DO NOT treat your baby in the bili-hut™ if he or she has other medical conditions that require additional medical equipment. No medical equipment should be placed in the bili-hut™ .
	Your baby's water balance may be altered by phototherapy treatment. A baby will typically have a wet diaper about every three hours if he or she is well hydrated. Wet diapers should be changed so that you can keep track of fluid output. Changing wet diapers also prevents your baby from becoming too cold during treatment.
	Note that the reflective interior of the bili-hut™ shell is designed to increase patient exposure to the blue treatment lights; however, in certain environments, it may result in increased patient body temperatures. Regularly check on your baby and monitor your baby's body temperature to prevent over-heating.

2.5 General Cautions

Cautions draw your attention to any hazards that could damage the device or could result in severe but reversible injury to you and/or your baby. General cautions are listed in this section. Specific cautions are listed with the relevant device use instructions.

2.5.1 Electrical Cautions

	Disconnect the bili-hut™ from the power supply when the device is not in use and before cleaning.
	DO NOT move the bili-hut™ by pulling on the power cord. This could result in damage to the device.

2.5.2 Cautions About Your Baby

 	Use and assemble this device only in the way described in this guide and only for the intended use as specified in Sections 1.1, 3.1, and 3.2 . Using the bili-hut™ for other purposes may be harmful to you and/or your baby.
------	--

2.5.3 User Cautions

 	The bili-hut™ flaps shield the area around it from the blue treatment lights so that only a small amount of blue light will be seen by you. However, some people are very sensitive to blue light and may experience discomfort such as eye irritation, nausea, or headache. If you or anyone else experiences this type of discomfort while near the bili-hut™ , discomfort will likely be resolved by wearing yellow goggles.
	Use only the instructions supplied with the bili-hut™ . Use of an unauthorized guide or other unauthorized instructional materials may lead to misuse and undesirable results.
	This guide is not a substitute for healthcare professional guidance.

Section 3: Using the bili-hut™

3.1 Assembling and Setting-up the bili-hut™

Complete the following six (6) steps to assemble and set-up the **bili-hut™**.

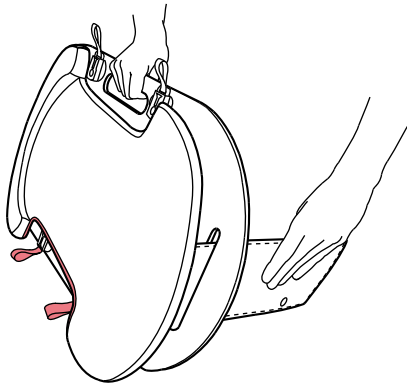
Unpacking:

- 1 Remove all components from their packaging.

NOTE: The **nest** may require a short time to assume its shape after unpacking. Gently push the **nest** to shape if needed.

Assembling the base:

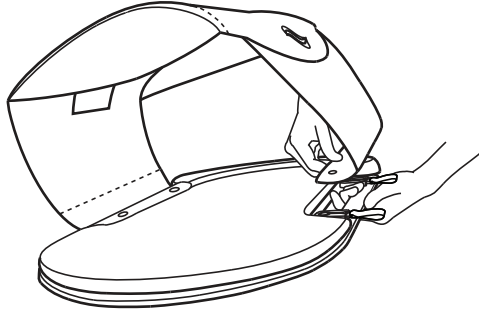
- 2 If not already attached, pull the **base mattress** straps through the slots in the **base**. The red trim on the **base mattress** should face up and align with the side of the **base** with red straps. Secure the snaps.



Assembling the hut:






- 3 Align the red-striped **shell** tab with the matching red straps on the **base**. Attach the magnetic clasps. The clasps will “click” and mechanically lock when in place.

- 4 Holding the **base** by the handle, align the solid gray tab of the **shell** with the matching gray straps on the **base**. Attach the magnetic clasps. The clasps will “click” and mechanically lock when in place.



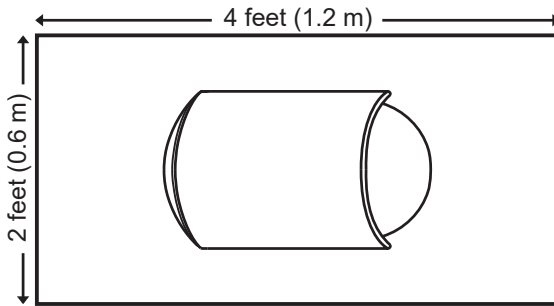
NOTE: Check for secure attachment by gently tugging upward on the **shell**. Look to see if all four clasps are still in place. If any of the four clasps are not in place, reference troubleshooting item #8 in **Section 5** of this guide.

Section 3: Using the bili-hut™

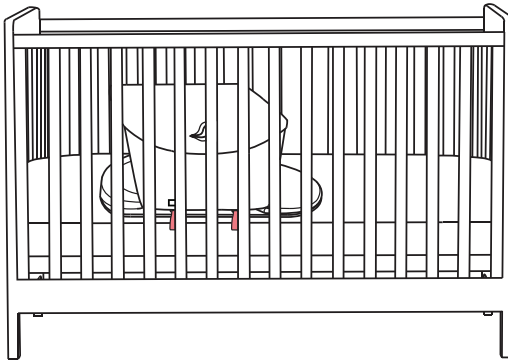
<p>WARNING</p> 	<p>DO NOT place the bili-hut™ near a:</p> <ul style="list-style-type: none">• space heater• radiator or heating vent• other device that gives off heat or has a hot surface <p>Also DO NOT place the bili-hut™ in:</p> <ul style="list-style-type: none">• direct sunlight• extremely high room temperatures <p>Doing so could damage the device, lead to your baby becoming over-heated or cause burns or other injury of your baby, and/or lead to the Environment High Temperature Warning turning on.</p>
<p>WARNING</p> 	<p>DO NOT place the bili-hut™ near cooling sources such as:</p> <ul style="list-style-type: none">• fans• air conditioners or other devices that are cold or cool the air <p>Also DO NOT place the bili-hut™ in extremely low room temperatures. Doing so could lead to your baby becoming too cold. The Environment High Temperature Warning is NOT caused by cooling sources or low room temperatures.</p>
<p>WARNING</p> 	<p>DO NOT place the bili-hut™ on an uneven surface or a surface smaller than 2 x 4 feet (0.6 m x 1.2 m) without barriers. Doing so could result in injury to your baby.</p>
<p>WARNING</p> 	<p>DO NOT place the bili-hut™ near a source of liquid that could spill into or onto the device. Doing so could result in damage to the device and/or electrical shock of you and/or your baby.</p>
<p>CAUTION</p> 	<p>DO NOT place or store the bili-hut™ on or near an abrasive surface. Doing so could damage the device and/or its components.</p>

Placement of the assembled hut:

- 5 Place the **assembled hut** on a smooth, sturdy, even surface, such as a table measuring at least 2 x 4 feet (0.6 m x 1.2 m).



Alternatively, the **bili-hut™** can be used in a crib.



Assembling the power supply:



- 6 To assemble the **power supply**, connect the AC cord to the power brick.

3.2 Operating the bili-hut™

NOTE: Before starting treatment, complete the following steps:

1. Completely read and understand this guide.
2. Read the **bili-hut™ Home Record Sheet Instructions**.

NOTE: Fill out the top section of the **bili-hut™ Home Record Sheet**.

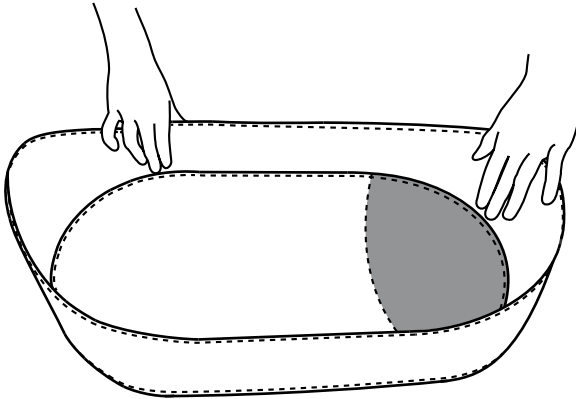
<p>WARNING</p> 	<p>DO NOT put any creams or lotions on your baby's skin before or during treatment. Doing so could change the effectiveness of the phototherapy, resulting in less treatment for your baby than desired.</p>
<p>CAUTION</p> 	<p>DO NOT place items in the assembled hut or nest that could alter or lift your baby's position. Keeping your baby flat on the nest mattress provides the best possible treatment for your baby and prevents suffocation or over-heating of your baby.</p>

NOTE: Blue light can hinder clinical observations by masking skin color changes, such as cyanosis.

Cyanosis occurs when a person has poor circulation or is not receiving enough oxygen, resulting in blue discoloration of the person's skin.

Once the **assembled hut** is set up according to the instructions in **Section 3.1** and placed in an appropriate location, follow the next six (6) steps.

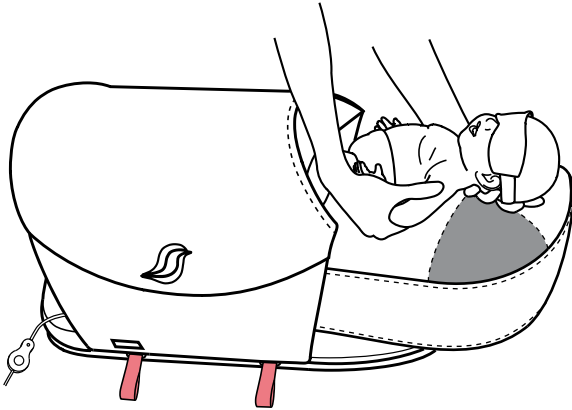
- 1 Place the **nest mattress** in the **nest** so that the dark section of the **nest mattress** is facing up.






- 2 Place the **nest** partially into the head-end of the **assembled hut**. The dark section of the **nest mattress** should stick out of the **assembled hut**.

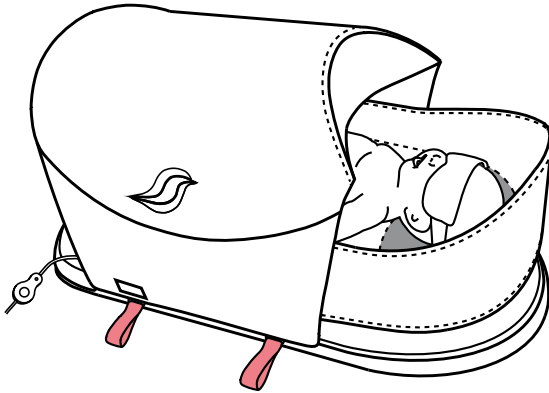
Section 3: Using the bili-hut™

- 3 Undress your baby except for a diaper. Place eye protection over your baby's eyes. Then, place your diapered baby in the **nest** on his or her back. Your baby's head and neck should lie entirely within the dark section of the **nest mattress**.

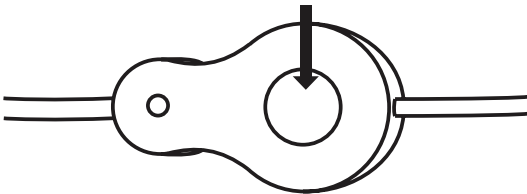


<p>WARNING</p> 	<p>DO NOT operate the bili-hut™ before protecting your baby's eyes using eye protection. Treatment without eye protection could damage your baby's vision.</p>
<p>WARNING</p> 	<p>Only place a single diapered baby in the bili-hut™. Placing any other objects in the bili-hut™ could result in suffocation of your baby, over-heating, or other injury. It could also damage the bili-hut™.</p>
<p>WARNING</p> 	<p>NEVER place your baby in the assembled hut without the nest. Only use the bili-hut™ with the nest. Use of the bili-hut™ without the nest could lead to injury or undertreatment of your baby.</p>

- 4 Gently slide the **nest** into the **bili-hut™** until the **nest** touches the bumper at the foot-end of the **base mattress**. Ensure that the **shell** front flap is pushed down and inward and the **shell** back flap is pulled down and outward toward the foot-end of the **assembled hut**.





- 5 Plug the pronged end of the **power supply** into a safe and active electrical outlet. Plug the other end of the **power supply** into the barrel connector of the **bili-hut™** power cord. Route the **power supply** and cord in such a way as to not interfere with the operation of the **bili-hut™**.
- 6 Press the power switch on the power cord to turn on the blue treatment lights. Check to make sure the blue treatment lights are on.



NOTE: Complete the **bili-hut™ Home Record Sheet** for steps completed so far (ex. start of treatment).

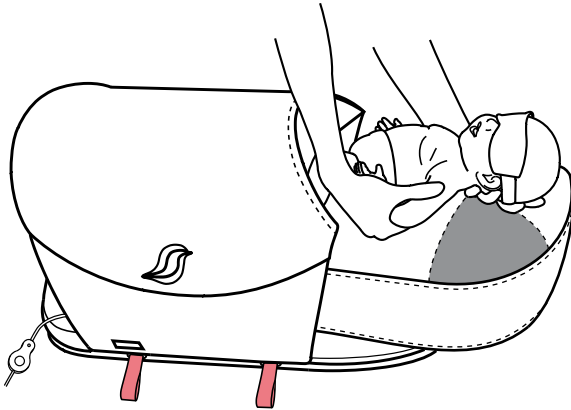
3.3 Removing Your Baby from the **bili-hut™**

<p>WARNING</p> 	<p>Phototherapy may alter your baby's body temperature. Therefore, check the following every 2 to 4 hours:</p> <ul style="list-style-type: none">• your baby's body temperature• your baby's diaper• ensure your baby's head and neck lie entirely within the dark section of the nest mattress• ensure the Environment High Temperature Warning's yellow indicator light is NOT on
<p>CAUTION</p> 	<p>Phototherapy treatment should only be interrupted when needed for:</p> <ul style="list-style-type: none">• feeding• diaper changes• medical needs• end of treatment• an Environment High Temperature Warning• other necessary interruptions

Complete the following two (2) steps to remove your baby from the **bili-hut™**. Return your baby to the **bili-hut™** as soon as possible after an interruption.

- 1 Turn off the blue treatment lights before removing your baby from the **bili-hut™**. To turn off the blue treatment lights, press the power switch on the power cord.

- 2 Gently slide the **nest** out of the **assembled hut**. Carefully lift your baby out of the **nest** and place your baby in a safe location. Remove your baby's eye protection.



NOTE: Record any treatment interruptions using the bili-hut™ Home Record Sheet.

To resume treatment, follow the instructions starting at **Step 3** of **Section 3.2** of this guide.

WARNING



Avoid interrupting treatment unless necessary. Resume therapy as soon as possible after the interruption. If treatment is interrupted for a long period or is interrupted too frequently, it could reduce the effectiveness of the treatment.

3.4 Actions for an Environment High Temperature Warning

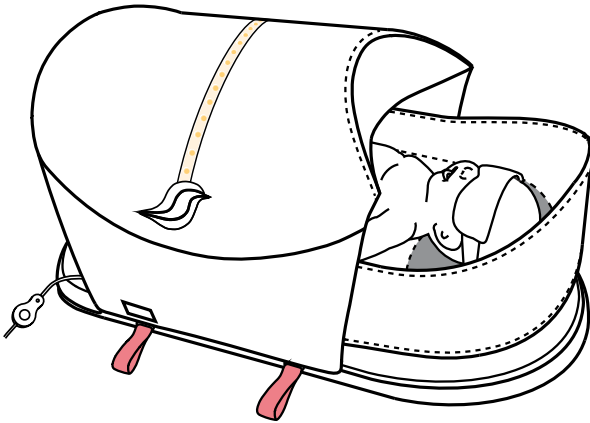
The Environment High Temperature Warning automatically turns on when the environment temperature surrounding the **bili-hut™** is too high. During the Environment High Temperature Warning, the blue treatment lights turn off and a yellow indicator light turns on.

The Environment High Temperature Warning may occur if the **bili-hut™** is used near:

- radiators
- heating vents
- space heaters
- other heat sources

OR if the **bili-hut™** is used in:

- direct sunlight
- extremely high room temperatures



When the environment temperature lowers to a safe range, the yellow indicator light will turn off. At that time, the blue treatment lights will automatically turn back on.

Follow the flowchart instructions starting at the top of the next page when the Environment High Temperature Warning occurs. This warning is visible when the yellow indicator light turns on and the blue treatment lights turn off.

NOTE: Record interruptions to treatment on the **bili-hut™ Home Record Sheet** when the Environment High Temperature Warning occurs.

Environment High Temperature Warning turns on.

REMOVE YOUR BABY:

- 1. DO NOT** turn off the **bili-hut™**.
- Gently slide the **nest** out of the **assembled hut**.
- Carefully lift your baby out of the **nest** and place in a safe location. Remove your baby's eye protection.

TROUBLESHOOT:

First:

- Turn off and/or move any heat sources such as radiators, heating vents, or space heaters. Relocate the **bili-hut™** away from heat sources if necessary.

In addition, you can:

- Ensure the **bili-hut™** is not in direct sunlight.
- Lower the ambient temperature of the room.
- Move the **bili-hut™** to a cooler, safe location.

Wait for the blue treatment lights to turn back on. This may take a few minutes. The **bili-hut™** must be left on during this time to see when the Environment High Temperature Warning automatically turns off.

If the blue treatment lights remain off for >1 hour and you completed all possible troubleshooting items as listed above, call Little Sparrows Technologies using the contact information in **Section 6**.

The yellow indicator light turns off and the blue treatment lights turn back on.

RESUME TREATMENT:

Place eye protection over your baby's eyes. Place your baby in the **nest** and gently slide the **nest** into the **assembled hut** until the **nest** touches the bumper at the foot-end of the **base mattress**.

3.5 Disassembly

WARNING



DO NOT disassemble the **bili-hut™** while your baby is inside. Doing so could lead to injury of your baby.

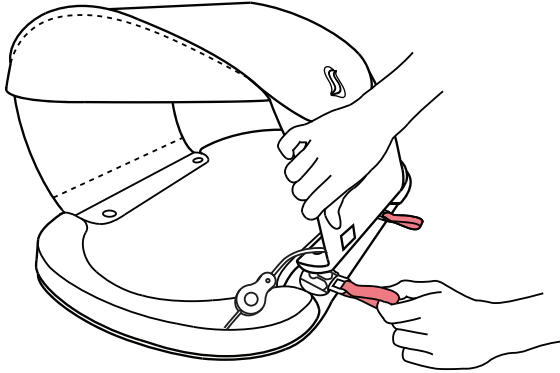
NOTE: Record the end of treatment on the **bili-hut™ Home Record Sheet**.

Disassemble the **bili-hut™** using the following seven (7) steps when treatment is complete.

- 1 Follow the instructions to remove your baby from the **bili-hut™** in **Section 3.3**.
- 2 Unplug the **bili-hut™** from the electrical outlet and disconnect the **power supply** from the **bili-hut™** power cord.
- 3 Completely remove the **nest** from the **assembled hut**.
- 4 Dispose of the **nest** and **nest mattress** in your trash bin.

NOTE: Please see the contact information in **Section 6** of this guide to reorder **disposable nest packages**.

- 5 Pull the red straps outward from the **assembled hut** to release the magnetic clasps. Repeat this step with the gray straps on the other side of the **shell** to release the **shell** from the **base**.



- 6 Clean the **shell**, **base**, and **base mattress** according to the instructions in **Section 4.1** of this guide.


CAUTION







DO NOT store the **bili-hut™** near open water such as a tub or sink where it could fall in. Doing so could damage the device and/or its components.

- 7 Return the **bili-hut™** components using the information provided to you by the medical personnel who provided you with the **bili-hut™**.

Section 4: Maintenance

<p>WARNING</p> 	<p>DO NOT perform service or maintenance on the bili-hut™ or any of its components during use. Doing so could result in injury or electric shock to you or your baby.</p>
--	--

4.1 Cleaning

<p>WARNING</p> 	<p>DO NOT use flammable cleaning agents when cleaning the device. DO NOT use cleaning agents containing ethanol or hydrogen peroxide, abrasive cleaning agents, or abrasive cleaning tools to clean the bili-hut™ because these may damage the device. Only use the cleaning agents and tools specified in Section 4.1 to clean the bili-hut™.</p>
<p>WARNING</p> 	<p>DO NOT use a soiled bili-hut™. Failure to complete the cleaning described in Section 4.1 could lead to undertreatment, skin irritation, and/or infection of your baby.</p>
<p>CAUTION</p> 	<p>Disconnect the bili-hut™ from the power supply when the device is not in use and before cleaning.</p>
<p>CAUTION</p> 	<p>DO NOT immerse any bili-hut™ components in liquid such as water or cleaning solutions. DO NOT spray water, cleaning agents, or any other liquid directly on the bili-hut™. DO NOT clean the bili-hut™ using an over-saturated wipe/cloth. Any of these actions may damage the efficiency and integrity of the device.</p>

Acceptable cleaning methods:

Use a cleaning agent with one of the following active ingredients:

- quaternary ammonium OR
- bleach

DO NOT use cleaning agents containing ethanol or hydrogen peroxide, abrasive cleaning agents, or abrasive cleaning tools to clean the **bili-hut™** because these may damage the device.

Follow the instructions provided by the manufacturer of the cleaning agent including any instructions which recommend wiping the device with water before/after cleaning.

Clean the **bili-hut™** components as outlined in this section by using a wipe/cloth that has been:

- sprayed with cleaning agent OR
- dampened with cleaning agent OR
- pre-dampened with cleaning agent by the manufacturer

When to clean the bili-hut™:

If any component(s) become soiled during use, stop treatment using the instructions in **Section 3.3**. Replace a soiled disposable **nest** or **nest mattress** with a new **nest** or **nest mattress**. If a reusable portion of the **bili-hut™** (**shell, base mattress, or base**) also becomes soiled during use, clean the soiled component(s) using the following instructions, and then resume treatment.

Dispose of the **nest** and **nest mattress** at the end of treatment.

DO NOT resume treatment or pack up the device into its carrier until all components are clean and dry.

4.1.1 Cleaning the **shell**

Clean the interior of the **shell** by wiping down the light array and reflective material. Allow to air dry.

If dirtied, wipe down the exterior of the **shell**. DO NOT use excess cleaning agent. Allow to air dry.

4.1.2 Cleaning the **base** and **base mattress**

To clean the **base mattress**, undo the snaps and remove from the **base**. Wipe down the **base** and **base mattress**. Allow to air dry.

Once dry, reattach the **base** and **base mattress**.

4.2 Disposal

Dispose of the **nest** and **nest mattress** when soiled and at the end of treatment.

To dispose of a soiled **nest** or **nest mattress**, place the item in your trash bin.

Please see the contact information in **Section 6** of this guide to order additional **disposable nest packages**.

For questions regarding the disposal of any other of the **bili-hut™**'s components, contact Little Sparrows Technologies. For contact information, see **Section 6** of this guide.

Section 5: Troubleshooting

The following are a list of problems that may occur while using the **bili-hut™**.

DO NOT attempt to service the **bili-hut™** or its components beyond the instructions given in the following troubleshooting scenarios. If these steps below do not solve the problem, contact a Little Sparrows Technologies representative for assistance using the contact information in **Section 6**.

#	Problem	Action
1	The Environment High Temperature Warning remains on after following the troubleshooting instructions in Section 3.4 .	Contact Little Sparrows Technologies for assistance.
2	Your baby is too cold.	<ol style="list-style-type: none"> 1. Remove your baby from the bili-hut™ and warm your baby, ideally using skin-to-skin care. 2. If possible, adjust the ambient temperature of the room or move the bili-hut™ to a warmer area. NEVER place the bili-hut™ near a space heater or other heat-emitting device.
3	Your baby is too warm.	<ol style="list-style-type: none"> 1. If the Environment High Temperature Warning is on, refer to Section 3.4. 2. Otherwise, remove your baby and take his or her body temperature again. Notify your baby's healthcare provider if you have concerns that your baby has a fever.

Section 5: Troubleshooting

#	Problem	Action
4	Liquid is spilled in or on the bili-hut™ .	<ol style="list-style-type: none">1. If in use, immediately press the power switch to turn off the bili-hut™. Then unplug the power supply from the electrical outlet. Remove your baby according to the instructions in Section 3.3.2. Dry the bili-hut™ and replace any wet nest or nest mattress.3. If the bili-hut™ turns back on and operates normally, resume treatment. If not, DO NOT use. Contact Little Sparrows Technologies for assistance.
5	The bili-hut™ is not turning on or the light array is not emitting light.	<ol style="list-style-type: none">1. Check to see if the Environment High Temperature Warning is on. If it is on, follow the instructions in Section 3.4.2. Ensure the power supply is properly assembled (AC cord is fully plugged in to the power brick). Ensure the power supply is properly connected to a safe and active outlet and the bili-hut™ power cord.3. Ensure the power switch on the power cord is in the "ON" position.4. If the issue continues, DO NOT use. Contact Little Sparrows Technologies for assistance.
6	Power cord or power supply appears frayed or is deteriorating.	DO NOT use. Contact Little Sparrows Technologies for assistance.

#	Problem	Action
7	The bili-hut™ appears distorted or deformed when compared to the pictures of the device in this guide.	DO NOT use. Contact Little Sparrows Technologies for assistance.
8	One or more magnetic clasps on the shell is not clicking into place on the base or becomes undone after attachment.	Remove any debris from the magnetic clasps on the base and re-attach the magnetic clasp. The clasp will “click” and mechanically lock when in place. Check for secure attachment by gently tugging upward on the shell .
9	Blue LED treatment lights flicker or substantially increase/ decrease in brightness.	<ol style="list-style-type: none"> 1. Ensure only the power supply supplied by Little Sparrows Technologies for use with the bili-hut™ is used. 2. Ensure the power supply is properly assembled (AC cord is fully plugged in to the power brick). Ensure the power supply is properly connected to a safe and active outlet and the bili-hut™ power cord. 3. Ensure that nothing is pressing on the power switch. 4. If the issue continues, DO NOT use. Contact Little Sparrows Technologies for assistance.

IMPORTANT: If troubleshooting reveals a health problem with your baby rather than an issue with the **bili-hut™**, call 911 for emergency assistance or your healthcare provider for non-emergency situations.

Section 6: Contact and Reorder Information

Contact a Little Sparrows Technologies representative if:

- taking the troubleshooting steps listed in **Section 5** does not resolve the associated problem
- more information is needed for operation or repair of the device
- you have any other comments or questions
- you need to reorder **disposable nest packages**

disposable nest package component # 0133AFD
Box of 1 **nest (disposable)** and 1 **nest mattress (disposable)**

To contact Little Sparrows Technologies:

Phone: (781) 725-2460

Email: info@littlesparrowstech.com

Mailing address:

Little Sparrows Technologies

288 Walnut St, suite 300

Newton, MA 02460

Website: www.littlesparrowstech.com




Twitter: [@TechSparrows](https://twitter.com/TechSparrows)

Facebook: Little Sparrows Technologies

Copies of this guide and other instructional materials to be available electronically via the Little Sparrows Technologies website.

Translated instructional materials to be available electronically via the Little Sparrows Technologies website.

Section 7: Specifications

	IEC Type BF applied part
	CE
	EN
	IEC Class II equipment
	FDA Class II
	Direct Current

Component	PN or REF
base	0106C
base mattress	0109H
carrier	NA
disposable nest package	0133AFD
power supply	0116CPS
power switch	NA
shell	0102D

Section 7: Specifications

7.1 Electrical

Power Consumption	20 Watts
LED Module Estimated Life	Up to 50,000 hours
Size of Light Source	16 x 6 inches (40.6 x 15.2 cm)
bili-hut™ Fuses	3.0A 32Vdc and 2.5A 40Vdc on DC input
Power Supply Fuses	2.0A 250Vac on Line and 2.0A 250Vac on Neutral
Degree of Protection Against Electrical Shock	2x MOPP
Cable Length	10 inches (25.4 cm)
Power Supply: Input	90-264VAC, 50/60Hz, 1.2A, Class II
Power Supply: Output	12VDC, 3.4A

7.2 shell

Dimensions (flat)	34 x 17 inches (86.5 x 43 cm)
Materials	Nylon, thermoplastic polyurethane (TPU), mylar, polycarbonate, foam
Service Life	Up to 3 years of continuous use if used with care and within the ranges recommended in this document

7.3 base

Dimensions	24.5 x 14 inches (62 x 35.5 cm)
Materials	High-density polyethylene, nylon, aluminum, rubber, steel
Service Life	Up to 3 years of continuous use if used with care and within the ranges recommended in this document

7.4 base mattress

Dimensions	24.5 x 14 inches (62 x 35.5 cm)
Materials	Vinyl, foam, nylon, metal, polyester, cotton
Service Life	Up to 1 year of continuous use if used with care and within the ranges recommended in this document

7.5 disposable nest package

Dimensions	(assembled)**
Materials	Polypropylene, foam
Service Life	Single use disposable nest and nest mattress

7.6 bili-hut™ (assembled)

Dimensions	25 x 16 x 12 inches (63.5 x 40.5 x 30.5 cm)
Weight	8 lbs (3.5 kg)**
Estimated Device Lifetime	Up to 3 years of continuous use if used with care and within the ranges recommended in this document
Maximum Noise Level	0.5 dB
Treatment Distance	8.7 inches (22 cm)**
Effective Surface Treatment Area	170 square inches (1097 square cm)**

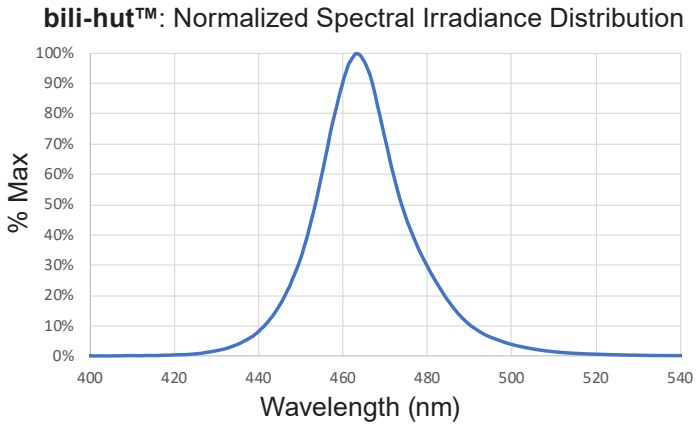
7.7 Environmental

Storage Temperature	-40°F to +158°F (-40°C to +70°C)
Storage Humidity	10 to 90% rH non-condensing
Storage Altitude	10,000 feet (3000 m) maximum
Operating Temperature* (range over which the bili-hut™ meets all performance specifications)	41°F—104°F (5°C—40°C)
Operating Humidity	10 to 90% rH non-condensing
Operating Altitude	10,000 feet (3000 m) maximum
Operating Electromagnetic Environment	Not to be used around high-intensity EM disturbances (e.g. HF equipment, near a shielded room of an MRI system).
Internal Temperature of the bili-hut™ that triggers the Environment High Temperature Warning	≤109.4°F (≤43°C) (in accordance with IEC 60601-2-50)
Ingress Protection	IP23 protects against solid objects over 12 mm and sprays of water from any angle up to 60° from the vertical

***NOTE:** The recommended room temperature range for treatment with the **bili-hut™** is 70°F—76°F (21.1°C—24.4°C). For more information on recommendations for safe treatment, see **Section 2.3** of this guide. Phototherapy with the **bili-hut™** may alter your baby's body temperature.

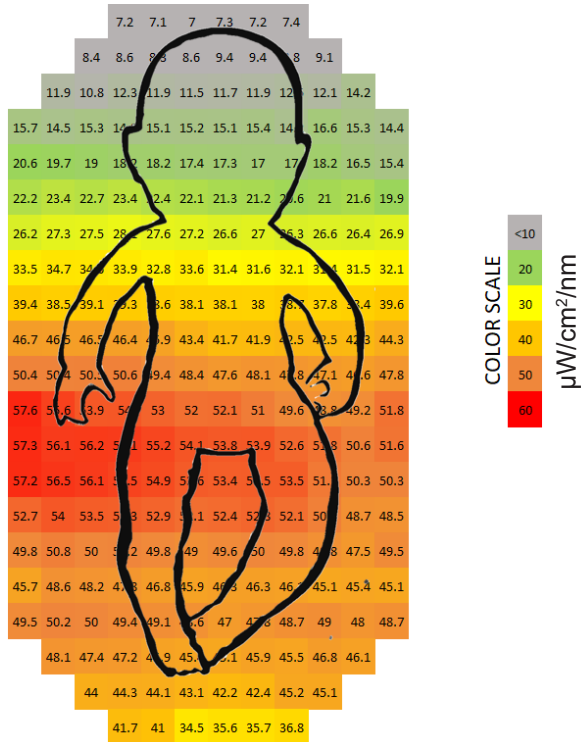
7.8 Effects

7.8.1 Wavelength



Section 7: Specifications

7.8.2 Irradiance Map**

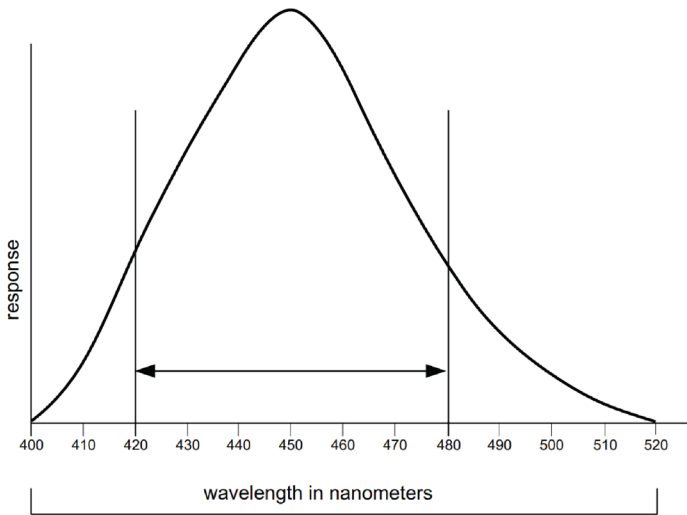


Measured at a distance of 22 cm** from the blue LED treatment lights

Total Treatment Area	228 in ² (1470 cm ²)**
Effective Treatment Area	170 in ² (1097 cm ²)**
E _{bi max}	57.6 $\mu\text{W}/\text{cm}^2/\text{nm}$ **
40% E _{bi max}	23.0 $\mu\text{W}/\text{cm}^2/\text{nm}$ **
Effective Area Average	45.1 $\mu\text{W}/\text{cm}^2/\text{nm}$ **

7.8.3 Spectral Sensitivity of the Irradiance Measurement Device

The following graph shows the nominal response characteristics of the GE BiliBlanket Light Meter II, which corresponds to the peak absorption spectrum of bilirubin. The irradiance of every **bili-hut™** device is measured with the BiliBlanket Light Meter II at the manufacturer prior to shipment.



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