HUE SINGLE SUSPENSION

D131002-

Finish Options base number

1. To build a product code in our configurator select the specify button on the base model # product page

2. To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

GENERAL

Series: HUE	
Subseries: Hue Single	
Brand: Knikerboker	
Division: Design	
Mounting Type: Suspension	
Mounting Location: Ceiling	
Subcategory: Ambient	
PHYSICAL	
Shape: Abstract	
Diameter (mm): 36	
Diameter (in): $1\frac{7}{16}$	
Height (mm): 160	
Height (in): 6 ⁵ / ₁₆	
Max. Overall Height (mm): 1500	
Max. Overall Height (in): 59 $\frac{1}{16}$	
Light Distribution: Direct / Indirect	
Fixture Finish: BRL /BFM / BRW / CLF / CLM / CLW / GLF / MBK / SLF / SLM / SLW / WHI	GLM / GLW /
Fixture Material: Metal	
Cable Details: 1500mm Silicon Coaxial Cable	
ELECTRICAL	
Lamp Type: LED	
Total Output Wattage (W): 1.5	
Dimming: Non-Dimmable	
Driver Included: Yes	
Driver Location: Integrated	
Driver Type: Constant Current - Universal	
Driver Class: Class 2	
Input Voltage (V): 120 - 277	
Constant Current (MA): 350	
Upon Request: (See components) Remote: Phase dimmi	ing 120Vac
LED	

LED

Number of LEDs: 1
Color Temperature (°K): 3000
Max. Delivered Lumen (lm): 150
CRI: >80 CRI
Lamp Life (hrs): 50000

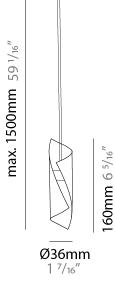
OPTICAL

RATINGS AND CERTIFICATIONS

Certified By: Certified for North American Standards	
IP rating: IP20	

PROJECT			
TYPE			
SPECIFIER			
QUANTITY			
DATE			





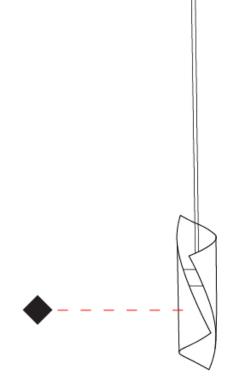
Zaneen Group Inc. © 2024, T 1800-388-3382, F 416-247-9319, www.zaneen.com

ZANEEN.

HUE SINGLE SUSPENSION

D131002-

PROJECT			
TYPE			
SPECIFIER			
QUANTITY			
DATE			



Zaneen Group Inc. © 2024, T 1800-388-3382, F 416-247-9319, www.zaneen.com

HUE 10 SUSPENSION

D131003-

Finish Options base number

1. To build a product code in our configurator select the specify button on the base model # product page

2. To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

GENERAL

Series: HUE
Subseries: Hue 10
Brand: Knikerboker
Division: Design
Mounting Type: Suspension
Mounting Location: Ceiling
Subcategory: Ambient
PHYSICAL
Shape: Abstract
Diameter (mm): 500
Diameter (in): 19 ¹¹ / ₁₆
Height (mm): 160
Height (in): 6 ⁵ / ₁₆
Max. Overall Height (mm): 1500
Max. Overall Height (in): 59 1/16
Light Distribution: Direct / Indirect
Fixture Finish: BRL /BFM / BRW / CLF / CLM / CLW / GLF / GLM / GLW /
MBK / SLF / SLM / SLW / WHI
Fixture Material: Metal
Cable Details: Silicon Coaxial Cable
ELECTRICAL
Lamp Type: LED
Total Output Wattage (W): 15
Dimming: Non-Dimming / Phase Dimming (120vac Only)
Driver Included: Yes
Driver Location: Integrated
Driver Type: Constant Current - Universal
Driver Class: Class 2
Input Voltage (V): 120 - 277
Constant Current (MA): 350
LED
Number of LEDs: 10

Lamp Life (hrs): 50000	
CRI: >80 CRI	
Max. Delivered Lumen (lm): 1500	
Color Temperature (°K): 3000	
Number of LLDS. 10	

OPTICAL

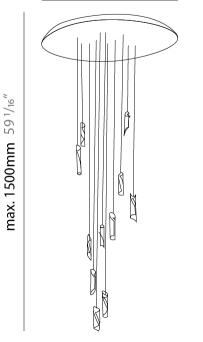
RATINGS AND CERTIFICATIONS

Certified By: Certified for North American Standards	
IP rating: IP20	

PROJECT			
ТҮРЕ			
SPECIFIER			
QUANTITY			
DATE			



Ø500mm 19 11/16"





1 7/16"

Zaneen Group Inc. © 2024, T 1800-388-3382, F 416-247-9319, www.zaneen.com

Available for International specifications by adding 'INT' at the end of the existing Model #. For assistance on 'custom' specifications, contact zteam@zaneen.com.

In a constant effort to supply the best product, we reserve the right to change specifications or materials without notice. The most recent specification sheets are found at zaneen.com

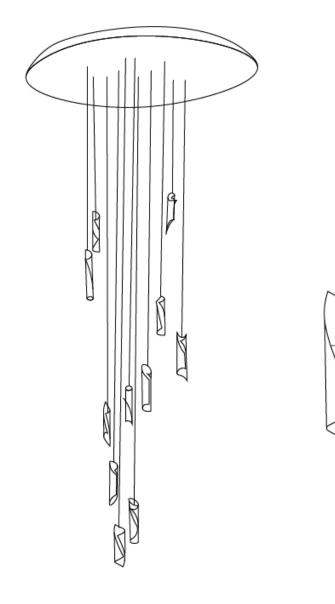
May 16, 2024, 9:52 am

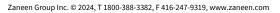


D131003-

PROJECT

PROJECT	
ТҮРЕ	
SPECIFIER	
QUANTITY	
DATE	





Available for International specifications by adding 'INT' at the end of the existing Model #. For assistance on 'custom' specifications, contact zteam@zaneen.com.

|)

HUE 20 SUSPENSION

D131004-

Finish Options base number

1. To build a product code in our configurator select the specify button on the base model # product page

2. To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

GENERAL

Series: HUE	
Subseries: Hue 20	
Brand: Knikerboker	
Division: Design	
Mounting Type: Suspension	
Mounting Location: Ceiling	
Subcategory: Ambient	
PHYSICAL	
Shape: Abstract	
Diameter (mm): 700	
Diameter (in): 27 [%] / ₁₆	
Height (mm): 160	
Height (in): 6 ⁵ / ₁₆	
Max. Overall Height (mm): 1500	
Max. Overall Height (in): 59 $\frac{1}{16}$	
Light Distribution: Direct / Indirect	
Fixture Finish: BRL /BFM / BRW / CLF / CLM / CLW / GLF / GLM / GLW /	
MBK / SLF / SLM / SLW / WHI	
Fixture Material: Metal	
Cable Details: Silicon Coaxial Cable	
ELECTRICAL	
Lamp Type: LED	
Total Output Wattage (W): 30	
Dimming: Phase Dimming (120Vac Only)	
Driver Included: Yes	
Driver Location: Integrated	
Driver Type: Constant Current - Universal	
Driver Class: Class 2	
Input Voltage (V): 120 - 277	
Constant Current (MA): 350	
$ Upon \ Request: \ Phase \ dimming \ @120Vac \ only \ / \ Non-dimming \ 277Vac \ Non-dimming \ 277Vac \ Non-dimming \ 277Vac \ Non-dimming \ 277Vac \ Non-dimming \ Non-dimming \ 277Vac \ Non-dimming \ Non-dim$	
LED	

Number of LEDs: 20

Color Temperature (°K): 3000	
Max. Delivered Lumen (lm): 3000	
CRI: >80 CRI	
Lamp Life (hrs): 50000	
OPTICAL	

OPTICAL

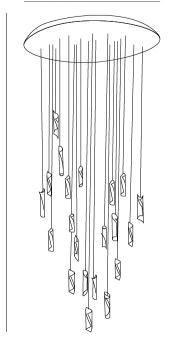
RATINGS AND CERTIFICATIONS

Certified By: Certified for North American Standards	
IP rating: IP20	

PROJECT			
ТҮРЕ			
SPECIFIER			
QUANTITY			
DATE			



Ø700mm 27 9/16"



max. 1500mm 591/16"

60mm 6 ⁵/₁₆"

Ø36mm 1 7/16"

Zaneen Group Inc. © 2024, T 1800-388-3382, F 416-247-9319, www.zaneen.com

Available for International specifications by adding 'INT' at the end of the existing Model #. For assistance on 'custom' specifications, contact zteam@zaneen.com.

In a constant effort to supply the best product, we reserve the right to change specifications or materials without notice. The most recent specification sheets are found at zaneen.com

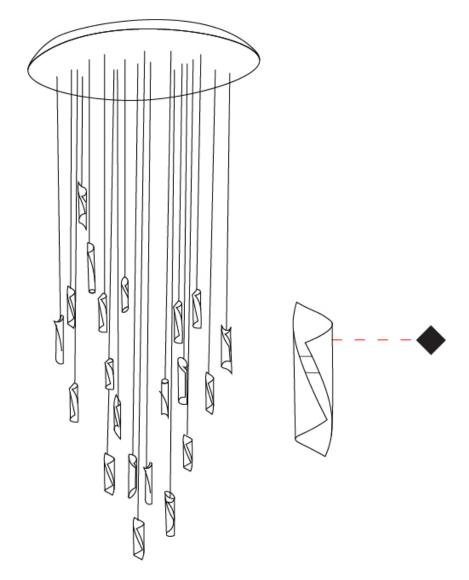
Page 5/22



D131004-

PROJECT

PROJECT		
ТҮРЕ		
SPECIFIER		
QUANTITY		
DATE		



Zaneen Group Inc. © 2024, T 1800-388-3382, F 416-247-9319, www.zaneen.com

Available for International specifications by adding 'INT' at the end of the existing Model #. For assistance on 'custom' specifications, contact zteam@zaneen.com.

In a constant effort to supply the best product, we reserve the right to change specifications or materials without notice. The most recent specification sheets are found at zaneen.com

May 16, 2024, 9:52 am

ZANEEN.

HUE 30 SUSPENSION

D131005-

base number Finish Options

1. To build a product code in our configurator select the specify button on the base model # product page

2. To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

GENERAL

Series: HUE	
Subseries: Hue 30	
Brand: Knikerboker	
Division: Design	
Mounting Type: Suspension	
Mounting Location: Ceiling	
Subcategory: Ambient	
PHYSICAL	
Shape: Abstract	
Diameter (mm): 900	
Diameter (in): 35 ⁷ / ₁₆	
Height (mm): 160	
Height (in): 6 ⁵ ∕₁₀	
Max. Overall Height (mm): 1500	
Max. Overall Height (in): 59 ¹ / ₁₆	
Light Distribution: Direct / Indirect	
Fixture Finish: BRL /BFM / BRW / CL	.F/CLM/CLW/GLF/GLM/GLW/
MBK / SLF / SLM / SLW / WHI	
Fixture Material: Metal	
Cable Details: Silicon Coaxial Cable	2
ELECTRICAL	
Lamp Type: LED	
Total Output Wattage (W): 45	
Dimming: Phase Dimming (120Vac	Only)
Driver Included: Yes	
Driver Location: Integrated	
Driver Type: Constant Current - Uni	iversal
Driver Class: Class 2	
Input Voltage (V): 120 - 277	
Constant Current (MA): 350	
Upon Request: Phase dimming @1	20Vac only / Non-dimming 277Vac
LED	

Number of LEDs: 30

Color Temperature (°K): 3000	
Max. Delivered Lumen (lm): 4500	
CRI: >80 CRI	
Lamp Life (hrs): 50000	

OPTICAL

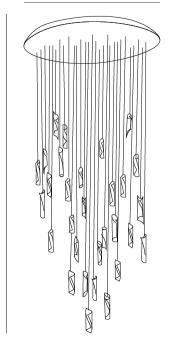
RATINGS AND CERTIFICATIONS

Certified By: Certified for North American Standards	
IP rating: IP20	

PROJECT			
TYPE			
SPECIFIER			
QUANTITY			
DATE			



Ø900mm 35 7/16"



max. 1500mm 59^{1/16}"

60mm 6 ^{5/16}"

Ø36mm 1 ⁷/16″

Zaneen Group Inc. © 2024, T 1800-388-3382, F 416-247-9319, www.zaneen.com

Available for International specifications by adding 'INT' at the end of the existing Model #. For assistance on 'custom' specifications, contact zteam@zaneen.com.

In a constant effort to supply the best product, we reserve the right to change specifications or materials without notice. The most recent specification sheets are found at zaneen.com

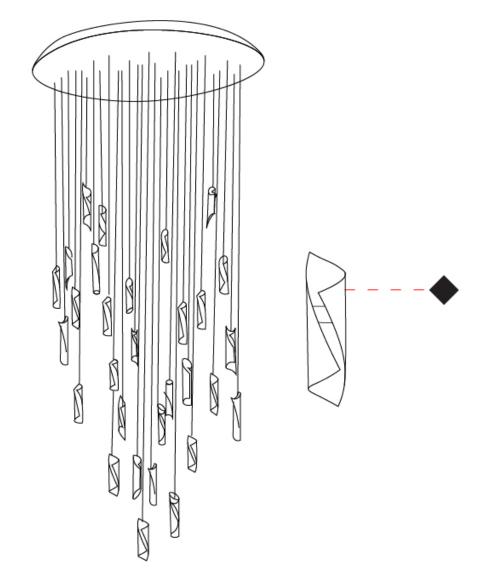
Page 7/22



D131005-

PROJECT

PROJECT		
ТҮРЕ		
SPECIFIER		
QUANTITY		
DATE		



Zaneen Group Inc. © 2024, T 1800-388-3382, F 416-247-9319, www.zaneen.com

HUE SUSPENSION

D131006-

Finish Options base number

1. To build a product code in our configurator select the specify button on the base model # product page

2. To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

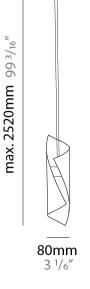
GENERAL

RATINGS AND CERTIFICATIONS

Certified By: Certified for North American Standards IP rating: IP20

1	PROJECT
	YPE
	PECIFIER
(QUANTITY
I	DATE





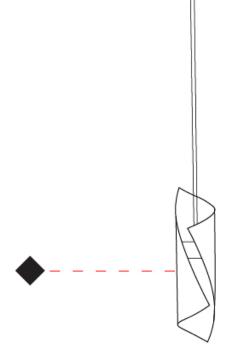
370mm 14 9/16"

Zaneen Group Inc. © 2024, T 1800-388-3382, F 416-247-9319, www.zaneen.com



D131006-

PROJECT
ТҮРЕ
SPECIFIER
QUANTITY
DATE



Zaneen Group Inc. © 2024, T 1800-388-3382, F 416-247-9319, www.zaneen.com

Available for International specifications by adding 'INT' at the end of the existing Model #. For assistance on 'custom' specifications, contact zteam@zaneen.com. In a constant effort to supply the best product, we reserve the right to change specifications or materials without notice. The most recent specification sheets are found at zaneen.com Page 10/22

HUE SUSPENSION

D131012-

base number Finish Options

1. To build a product code in our configurator select the specify button on the base model # product page

2. To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

GENERAL Corioce HUE

Series: HUE
Brand: Knikerboker
Division: Design
Mounting Type: Suspension
Mounting Location: Ceiling
Subcategory: Pendant
PHYSICAL
Shape: Abstract
Diameter (mm): 120
Diameter (in): 4 ³ / ₄
Height (mm): 540
Height (in): $21\frac{1}{4}$
Max. Overall Height (mm): 2750
Max. Overall Height (in): 108 ¼
Light Distribution: Direct / Indirect / Downlight
Fixture Finish: BRL / BFM / BRW / CLF / CLM / CLW / GLF / GLM / GLW / MBK / SLF / SLM / SLW / WHI
Fixture Material: Metal
Cable Details: 1 Silicone Cable 2000mm / 78 3/4"
ELECTRICAL
Number of Lamps: 2
Lamp Type: LED Retrofit
Lamp Shape: MR16
Bulb Included: Bulb Not Included
Max. Wattage Per Lamp (W): 6.5
Lamp Base: GU10
Input Voltage (V): 120
LED

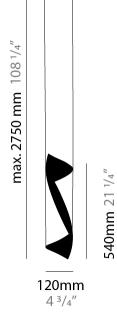
OPTICAL

RATINGS AND CERTIFICATIONS

Certified By: Certified for North American Standards IP rating: IP20

PROJECT			
TYPE			
SPECIFIER			
QUANTITY			
DATE			





Zaneen Group Inc. © 2024, T 1800-388-3382, F 416-247-9319, www.zaneen.com

Available for International specifications by adding 'INT' at the end of the existing Model #. For assistance on 'custom' specifications, contact zteam@zaneen.com.

In a constant effort to supply the best product, we reserve the right to change specifications or materials without notice. The most recent specification sheets are found at zaneen.com



D131012-

PROJECT			
ТҮРЕ			
SPECIFIER			
QUANTITY			
DATE			



Available for International specifications by adding 'INT' at the end of the existing Model #. For assistance on 'custom' specifications, contact zteam@zaneen.com. In a constant effort to supply the best product, we reserve the right to change specifications or materials without notice. The most recent specification sheets are found at zaneen.com Page 12/22

HUE SUSPENSION

D131018-

Finish Options base number

1. To build a product code in our configurator select the specify button on the base model # product page

2. To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

GENERAL

Series: HUE
Brand: Knikerboker
Division: Design
Mounting Type: Suspension
Mounting Location: Ceiling
Subcategory: Pendant
PHYSICAL
Shape: Abstract
Diameter (mm): 120
Diameter (in): 4 ³ / ₄
Height (mm): 1100
Height (in): 43 ⁵ / ₁₆
Max. Overall Height (mm): 2750
Max. Overall Height (in): 108 ¼
Light Distribution: Direct / Indirect
Fixture Finish: BRL /BFM / BRW / CLF / CLM / CLW / GLF / GLM / GLW /
MBK / SLF / SLM / SLW / WHI
Fixture Material: Metal
Cable Details: 1 Silicone Cable 2000mm / 78 3/4"
ELECTRICAL
Number of Lamps: 4
Lamp Type: LED Retrofit
Lamp Shape: MR16
Bulb Included: Bulb Not Included
Max. Wattage Per Lamp (W): 6.5
Lamp Base: GU10
Input Voltage (V): 120
LED
ODTICAL

OPTICAL

RATINGS AND CERTIFICATIONS

Certified By: Certified for North American Standards IP rating: IP20



PROJECT			
TYPE			
SPECIFIER			
QUANTITY			
DATE			_





Zaneen Group Inc. © 2024, T 1800-388-3382, F 416-247-9319, www.zaneen.com

Available for International specifications by adding 'INT' at the end of the existing Model #. For assistance on 'custom' specifications, contact zteam@zaneen.com.

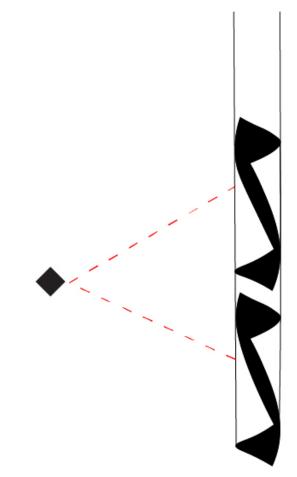
Page 13/22



D131018-

PROJECT

PROJECT		
ТҮРЕ		
SPECIFIER		
QUANTITY		
DATE		



HUE SUSPENSION

D131024-

Finish Options base number

1. To build a product code in our configurator select the specify button on the base model # product page

2. To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

GENERAL

Series: HUE	
Brand: Knikerboker	
Division: Design	
Mounting Type: Suspension	
Mounting Location: Ceiling	
Subcategory: Pendant	
PHYSICAL	
Shape: Abstract	
Diameter (mm): 120	
Diameter (in): 4 ¾	
Height (mm): 1620	
Height (in): 63 ³ / ₄	
Max. Overall Height (mm): 2750	
Max. Overall Height (in): 108 $\frac{1}{4}$	
Light Distribution: Direct / Indirect	
Fixture Finish: BRL /BFM / BRW / CLF / CLM / CLW / GLF / GLM / GI	LW /
MBK / SLF / SLM / SLW / WHI	
Fixture Material: Metal	
Cable Details: 1 Silicone Cable 2000mm / 78 3/4"	
ELECTRICAL	
Number of Lamps: 6	
Lamp Type: LED Retrofit	
Lamp Shape: MR16	
Bulb Included: Bulb Not Included	
Max. Wattage Per Lamp (W): 6.5	
Lamp Base: GU10	
Input Voltage (V): 120	
LED	
OPTICAL	

OPTICAL

RATINGS AND CERTIFICATIONS

Certified By: Certified for North American Standards IP rating: IP20





max. 2750 mm 108 ^{1/4"}

120mm $4^{3}/4''$

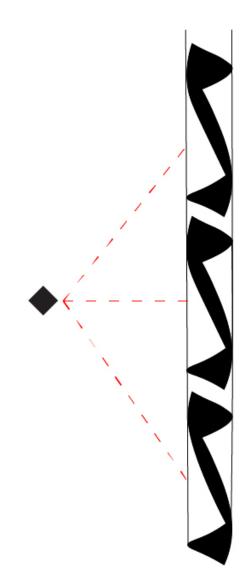
1620mm 63 ³/4"

Zaneen Group Inc. © 2024, T 1800-388-3382, F 416-247-9319, www.zaneen.com



D131024-

PROJECT			
TYPE			
SPECIFIER			
QUANTITY			
DATE			
			-



Zaneen Group Inc. © 2024, T 1800-388-3382, F 416-247-9319, www.zaneen.com

HUE SUSPENSION

D131107-

base number Finish Options

1. To build a product code in our configurator select the specify button on the base model # product page

2. To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

GENERAL

Series: HUE
Brand: Knikerboker
Division: Design
Mounting Type: Suspension
Mounting Location: Ceiling
Subcategory: Pendant
PHYSICAL
Shape: Abstract
Diameter (mm): 160
Diameter (in): 6 ⁵ / ₁₆
Height (mm): 1350
Height (in): 53 $\frac{1}{8}$
Max. Overall Height (mm): 3700
Max. Overall Height (in): 145 ¹¹ / ₁₆
Light Distribution: Direct / Indirect
Fixture Finish: BRL /BFM / BRW / CLF / CLM / CLW / GLF / GLM / GLW /
MBK / SLF / SLM / SLW / WHI
Fixture Material: Metal
Cable Details: 2 Silicone Cable 2000mm / 78 3/4"
ELECTRICAL
Number of Lamps: 4
Lamp Type: LED Retrofit
Bulb Included: Bulb Not Included
Max. Wattage Per Lamp (W): 4.5
Lamp Base: E26
Input Voltage (V): 120
Upon Request: 277Vac / GU10
LED
OPTICAL

OPTICAL

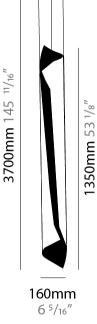
RATINGS AND CERTIFICATIONS

Certified By: Certified for North American Standards IP rating: IP20



PROJECT			
ТҮРЕ			
SPECIFIER			
QUANTITY			
DATE			



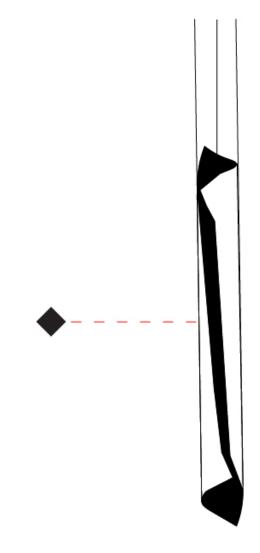


Zaneen Group Inc. © 2024, T 1800-388-3382, F 416-247-9319, www.zaneen.com



D131107-

PROJECT			
ТҮРЕ			
SPECIFIER			
QUANTITY			
DATE			



Zaneen Group Inc. © 2024, T 1800-388-3382, F 416-247-9319, www.zaneen.com

HUE SUSPENSION

D131213-

base number Finish Options

1. To build a product code in our configurator select the specify button on the base model # product page

2. To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

GENERAL

Series: HUE
Brand: Knikerboker
Division: Design
Mounting Type: Suspension
Mounting Location: Ceiling
Subcategory: Pendant
PHYSICAL
Shape: Abstract
Diameter (mm): 160
Diameter (in): 6 ⁵ / ₁₆
Height (mm): 1350
Height (in): 53 $\frac{1}{8}$
Max. Overall Height (mm): 3700
Max. Overall Height (in): 145 ¹¹ / ₁₆
Light Distribution: Direct / Indirect
Fixture Finish: BRL /BFM / BRW / CLF / CLM / CLW / GLF / GLM / GLW /
MBK / SLF / SLM / SLW / WHI
Fixture Material: Metal
Cable Details: 1 Silicone Cable 2000mm / 78 3/4"
ELECTRICAL
Number of Lamps: 4
Lamp Type: LED Retrofit
Bulb Included: Bulb Not Included
Max. Wattage Per Lamp (W): 4.5
Lamp Base: E26
Input Voltage (V): 120
Upon Request: 277Vac / GU10
LED
ΟΡΤΙζΑΙ

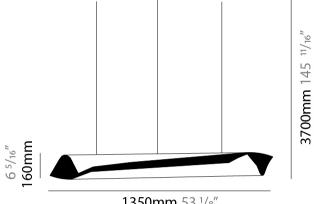
OPTICAL

RATINGS AND CERTIFICATIONS

Certified By: Certified for North American Standards IP rating: IP20

PROJECT	
ТҮРЕ	
SPECIFIER	
QUANTITY	
DATE	
	TYPE SPECIFIER QUANTITY





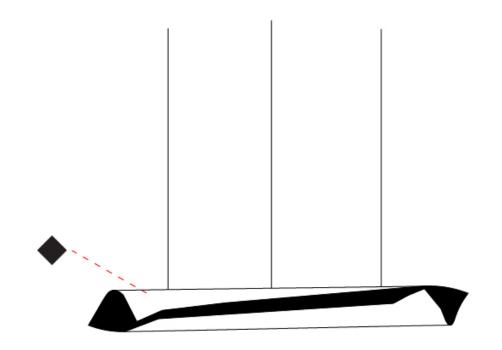
1350mm 53 1/8"

Zaneen Group Inc. © 2024, T 1800-388-3382, F 416-247-9319, www.zaneen.com



D131213-

PROJECT



Zaneen Group Inc. © 2024, T 1800-388-3382, F 416-247-9319, www.zaneen.com



HUE COLOR FINISH CHART

PROJECT

TROJECT			
TYPE			
SPECIFIER			
QUANTITY			
DATE			

Fixture Finish









Bronze Leaf/White - BRW





Gold Leaf/White - GLW



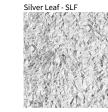


Copper Leaf - CLF



Copper Leaf/Matte Black - CLM







Copper Leaf/White CLW - CLW

Silver Leaf/White - SLW



White - WHI

Digital: Not all screens are calibrated the same, and therefore, colors will appear differently between screens. Physical: When texture is involved, there will be variations in color, character and tone within a product series and between product families.



Zaneen Group Inc. © 2024, T 1800-388-3382, F 416-247-9319, www.zaneen.com

ZANEEN.

HUE

PROJECT

TYPE

SPECIFIER

QUANTITY

DATE

LEGEND

		_			
↓_	floor-mounted	¥	pivotable	\circledast	special LED (upon request) RGB, RGBW, tunable, gold+, meat+, art+, fashion+
$\overline{}$	wall and ceiling: recessed and surface mounted	C	rotating	0	warm dim / natural dimming LED
\uparrow	ceiling-mounted and wall-mounted	Œ	illuminate tilted	Ø	rechargeable battery powered
\rightarrow	wall-mounted	T	color of suspension cable	1111 1140	fixture with natural vivid LED (upon request)
Y	omni-directional light distribution	÷	length of suspension cable	CRI	color rendering index
	direct light distribution	Δ	reflector degree selection	°К	color temperature
	direct/indirect light distribution	s s	super spot	LM	lumen (luminous flux)
Y	indirect light distribution	Å	lens	₩.	efficacy (lumens per watt)
	asymmetric light distribution	8	lens pack	UGR	Unified Glare Rating (UGR) range from 5-40
	aura light distribution	0	shine ring	318	marine grade (AISI 316 stainless steel)
R	round wall or ceiling cut-out	\odot	integrated shine ring with diffuser	٢	walk on
5	square wall or ceiling cut-out	Ċ	free individual colors 01-29	۲	drive on
d	the supplied jig specifies the cutout dimensions	ů).	individual colors: 00 (free of charge), 01-25 (extra charge)	B SC	Dark Sky Compliance
(++)	minimum distance (meters) lamp - object	۲	luminaire part to be colored (F1)	Ġ	Americans with Disabilities Act (less than 4" off the wall located between 27"-84" from floor)
£	recessed depth		luminaire part to be colored (F2)		lamp protected against explosion
1	ceiling thickness in mm		luminaire part to be colored (F3)	٢	blown glass using traditional methods by master glass blower
	ceiling thickness selection		luminaire part to be colored (F4)	(ه)	acoustic material
	dimmable DP (phase), DV (0-10V), DD (dali), DS (step-dim)		luminaire part to be colored (F5)		protection class I, protection insulation
<u>لي</u>	included or excluded LED driver/transformer/ control gear		color of 3-circuit adaptor		protection class II, protection insulation
У	separately switchable	\odot	indirect diffuser		ETL Certified to UL and CSA Standards
シリ	sensor	D	direct diffuser	c (UL) us	UL Certified to UL and CSA Standards
() [®]	remote control	$\boldsymbol{\Theta}$	ball-proof (upon request)	SP:	CSA Certified to UL and CSA Standards
2	available upon request	U	accessory	Z	Certified for North American Standards

IP RATING

IP20	protected against ingress of solid bodies greater than 12.5mm (finger)
IP33	protected against ingress of solid bodies greater than 2.5mm protected against sprays of water up to 60 degrees from the vertical (rain)
IP40	protected against ingress of solid bodies greater than 1mm (wire) no protection against the ingress of moisture
IP43	protected against ingress of solid bodies greater than 1mm (wire) protected against sprays of water up to 60 degrees from the vertical (rain)
IP44	protected against ingress of solid bodies greater than 1mm (wire) protected against water splashed from all directions
IP54	protected against limited ingress of dust (wet rooms/covered outdoor areas) protected against water splashed from all directions
1965	protected against ingress of dust protected against jets of water
IP66	protected against ingress of dust protected against powerful jets of water or heavy seas
IP67	protected against ingress of dust protected against immersion of water between 15cm - 1m for 30 minutes
IP68	protected against ingress of dust protected against immersion of water under pressure for long periods

IK RATING

КО1	protected against 0.14 joules impact (equivalent to 0.25kg mass dropped from 56mm above the surface)
IK02	protected against 0.2 joules impact (equivalent to 0.25kg mass dropped from 80mm above the surface)
КОЗ	protected against 0.35 joules impact (equivalent to 0.25kg mass dropped from 140mm above the surface)
КО4	protected against 0.5 joules impact (equivalent to 0.25kg mass dropped from 200mm above the surface)
КО5	protected against 0.7 joules impact (equivalent to 0.25kg mass dropped from 280mm above the surface)
KOS	protected against 1 joules impact (equivalent to 0.25kg mass dropped from 400mm above the surface)
IK07	protected against 2 joules impact (equivalent to 0.5kg mass dropped from 400mm above the surface)
КОВ	protected against 5 joules impact (equivalent to 1.7kg mass dropped from 300mm above the surface)
1609	protected against 10 joules impact (equivalent to 5.0kg mass dropped from 200mm above the surface)
К10	protected against 20 joules impact (equivalent to 5.0kg mass dropped from 400mm above the surface)