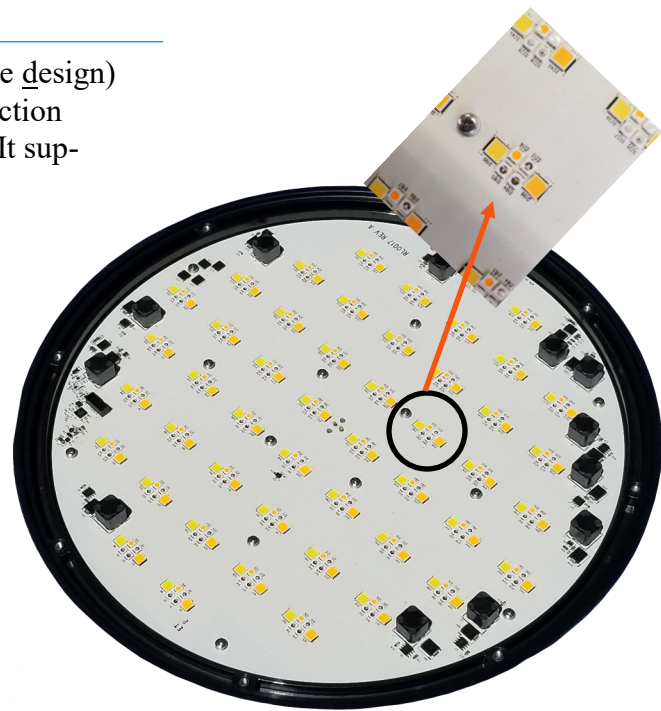# rNET-IDCRF-HB-20KUFO

Integrated Light Engine, Driver, & Controls—power & data, all over 2 LV wires

Overview

Any Color. Any White. Any intensity. Anywhere in the world

The rNET-IDCRF-HB-20KUFO (Integrated driver, controls reference design) is a UFO Style High Bay that hosts a LED light engine, the driver function (constant voltage to constant current) and controls all on one design. It supports dimming intensity down to 0.1%, levels with dynamic blending of up to 6 different colors of LEDs . Each fixture is individually addressable using the rNET-PDG-IDC power distribution gateway, which when networked together can be accessible anywhere in the world using a standard web browser on any device.

The white LED's are 80 CRI and > 130 lm/w to support premium DLC certification. The design is all low voltage (24V DC) and may qualify for a UL Class II rating which supports a faster time to market and many variants under one classification effort.

Ordering Information

Ex rNET-IDCRF-HB-20KUFO-W-C-x-x-x-x

	Ch3	Ch4	Ch5	Ch6
rNET-IDCRF-HB-20KUFO-W-C-	X-	X-	X-	X-

| Where X (optional) =	R (Red)	G (Green)	A (Amber)	L (Lime)	B (Blue)	RB (Royal Blue)

Each Warm and Cool array is ~ 20K lumens and can be blended to support any color between 2700K and 6500 (5000K upon request).

Intensities can vary between 0.1% up to 100% and colors can be blended into the whites as desired.

For more information, visit rvlti.com or call 877-578-2736.

rNET-IDCRF-HB-20KUFO

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Features & Benefits

- The capabilities of a DMX system without the cost and headaches

- The individual addressability of DALI without extra wires

- Reuse of existing 2 wire conductors (Romex) saves material, cost, and time

- Low voltage (24V DC) supports safety and lower labor install costs, faster certification

- Polarity & Topology agnostic wiring prevents install headaches

- On board microprocessor supports redundant localized response in the event of communication loss.

- Multiple redundant on board drivers removes the single point of failure that exists in legacy fixture designs

- Driver function does not use any dielectric capacitors - the primary failure component of traditional drivers.

- Low voltage design ensures much longer life and reliability - no "dirty power" issues.

- Wired infrastructure supports high performance applications such as gov't/military/theatre & schools.

- Digital precision and multiple channel control supports theatrical grade settings for CCT and specific color matching (Ex brand logos)

- Lightweight design supports easier install

- 2-wire daisy chain architecture enables fixtures with no external power cord when using integrated conductor/aircraft cables.
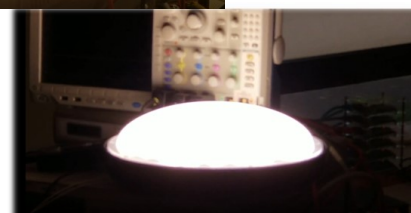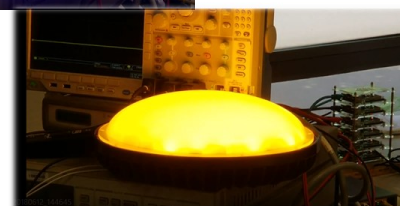
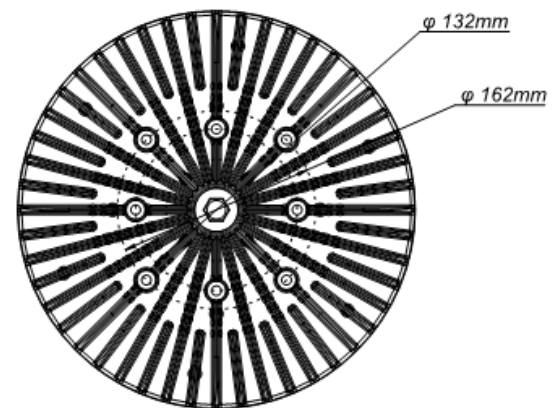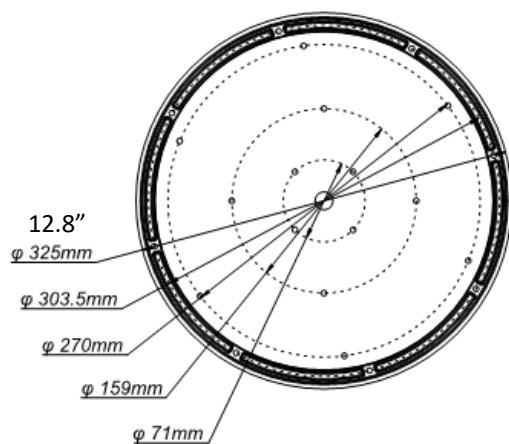For more information, visit rvlti.com or call 877-578-2736.

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Physical Size

Note: Measurements are reference.

With design services, custom sizes and shapes can be developed

Weight: 2.45kg / 5.40 lbs

2.2"

57mm

φ 132mm

φ 162mm

12.8"

φ 325mm

φ 303.5mm

φ 270mm

φ 159mm

φ 71mm

The heat sink uses an advanced Graphene to achieve light weight, thermal conductivity in a highly durable (200 times stronger than steel) design

Revolution Lighting Technologies, Inc.

177 Broad Street · 12th Floor · Stamford, CT 06901

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LED details

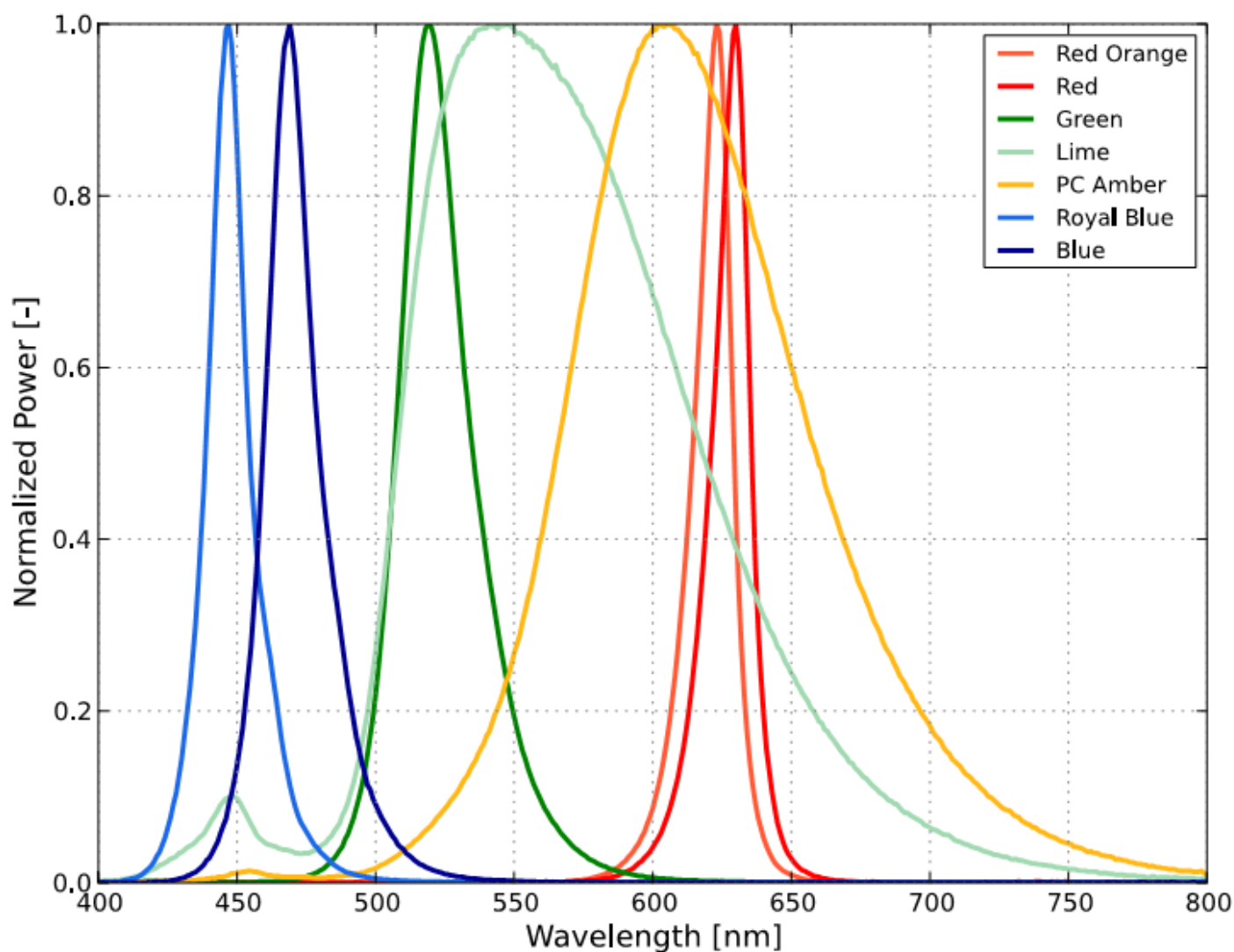| Color	Manufacturer	Manufacturer P/N	Description	Power (W)	Output (lm)	Efficacy (lm/w)
Red (625nM)	Luxeon	L135-R625003500000	3535L Color	0.21	13.5	64
Red-Orange (615 nM)	Luxeon	L135-O615003500000	3535L Color	0.21	15.5	74
Green (530 nM)	Luxeon	L135-G525003500000	3535L Color	0.32	23	712
Blue (475 nM)	Luxeon	L135-B475003500000	3535L Color	0.30	11	37
Amber	Luxeon	L135-A589003500000	3535L Color	0.31	35	115
Lime	Luxeon	L135-L567003500000	3535L Color	0.31	56	184
Royal Blue	Luxeon	L135-U450003500000	3535L Color	0.31	11.3	37
Cool White	Luxeon	BXEP-65E-435-09A-00-00-0	SMD 5050 6500k 80 CRI	4.4	712	162
Warm White	Luxeon	BXEP-27E-435-09A-00-00-0	SMD 5050 2700k 80 CRI	4.4	612	139

Each PCB holds up to 48 channels. Each channel has a Warm, Cool and up to 4 channels of 1 or more colors

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Spectral Output—Colors

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Typical Color Spectrum - Whites @ 80 CRI
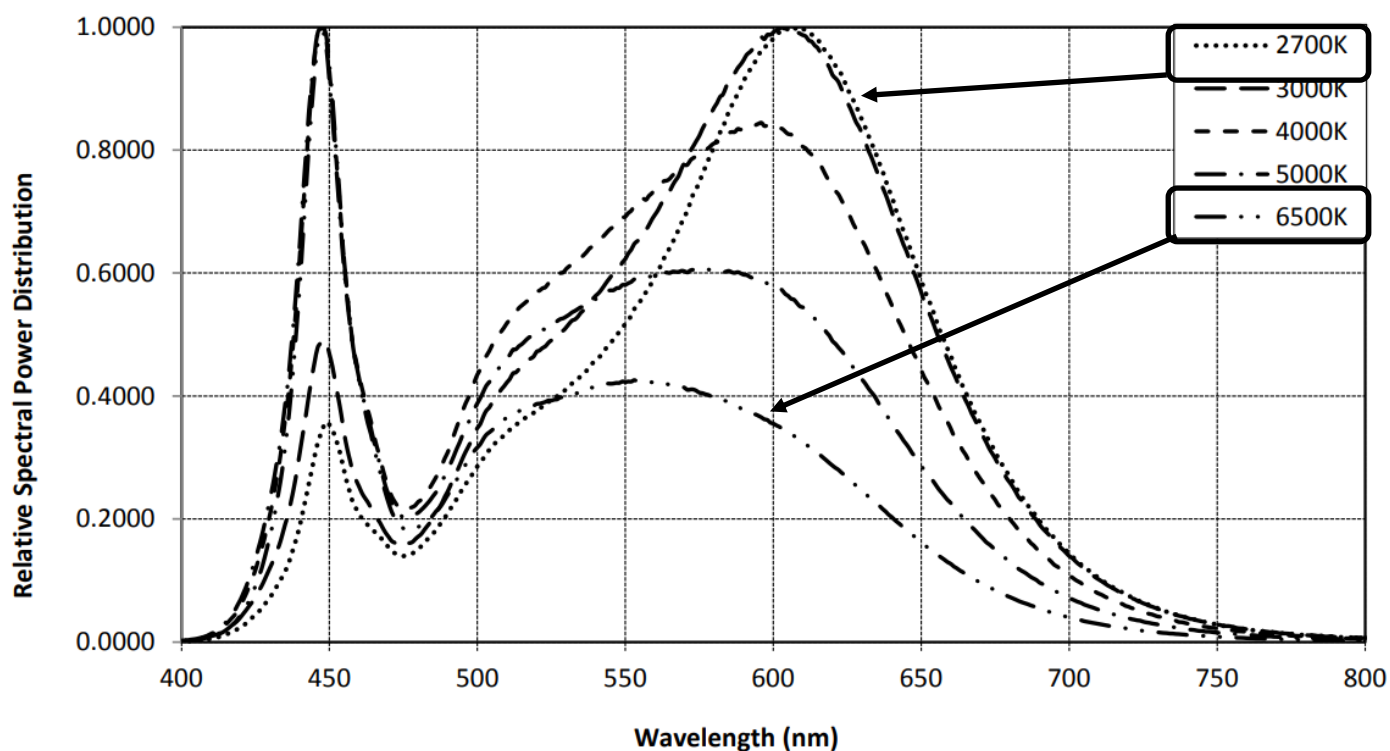
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Radiation Pattern
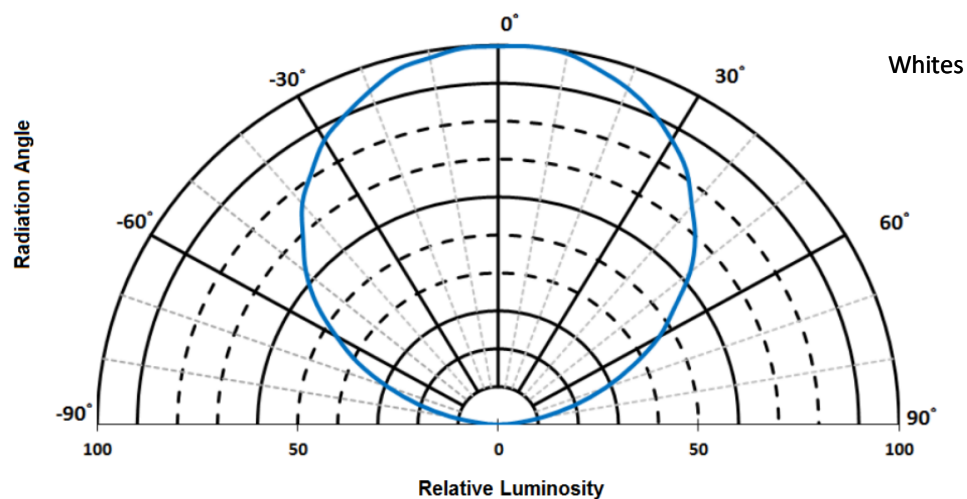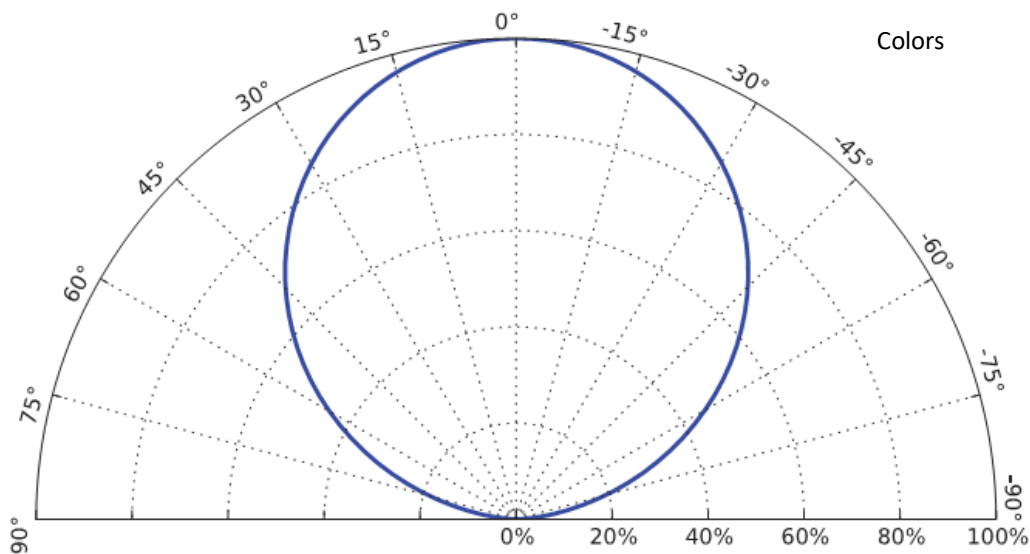
Colors

Whites

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Wiring example

rNET-PDG-IDC

Cat 6 Internet

rNET-IDCRF-2ftlinear

rNET-IDCRF-2ftlinear

Up to 4 outputs, each up to 200W

Wiring is polarity & topology agnostic

WiFi Hotspot, 802.15.4 mesh, DMX and Enocean interfaces

rNET-IDCRF-MR16

24V Power Supply

rNET-IDCRF -HB- 20KUFO

Each fixture individu-ally addressable

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