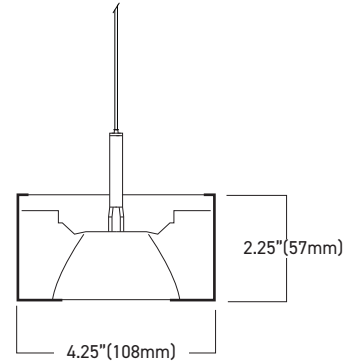
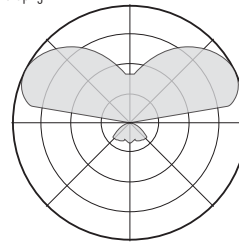


QūB QUB4 Bi-Direct

4-Way Pendant Remote Driver



QUB4
16% Downlight
84% Uplight



Light Output and Energy Consumption*

Light Level	lm/ft	Watts/ft	Efficacy
05	499.8	3.8	132.0
08	855.5	6.5	132.0
11	1103.5	8.5	130.0

Lumen output may vary. 3500K / 80CRI used for above results.

- Architectural pendant ideally suited for general illumination within office spaces, conference rooms, and schools.
- Open optical system creates an optimal direct-indirect light distribution through the precise design and alignment of LED emitters and luminaire painted reflector surfaces.
- Extruded aluminum housing with die cast aluminum end caps. Connector is constructed milled aluminum. Power coat white finish is standard. Optional silver, black, custom colors, delicate straight wood grain, light black gunstock wood grain, two-tone ash gray wood grain, or ebony walnut wood grain finishes are available. Wood grain finish utilizes a hydro-dipping process.
- Standard constant current electronic driver houses in separate enclosure with 0-10V dimming input; dimming range from 100% down to 1%. Optional drivers available.
- Distributed LED array in a wide variety of lumen output packages. LED color is available in 3000K, 3500K or 4000K with a CRI of 80 or 90. Custom outputs are available. Module is replaceable. L90> 100,000 hrs. Tunable white utilizes 50% 2700K and 50% 6500K diodes with a CRI of 90.

ORDERING INFORMATION

SAMPLE NUMBER: QUB4-2-20-08L35-1C-U-D-W-W-T1/48

QUB4	LENGTH	20	LUMEN PACKAGE ¹	CRI/ CCT	CIRCUIT ³	VOLTAGE
SERIES		LIGHT DISTRIBUTION				
QUB4 - QūB remote 4-way pendant	2 - Nominal 2 ft legs 4 - Nominal 4 ft legs	20 - 16% Downlight, 84% Uplight	05 - ~500 lm/ft 08 - ~800 lm/ft 11 - ~1100 lm/ft XX ²	L30 - 80 CRI, 3000K L35 - 80 CRI, 3500K L40 - 80 CRI, 4000K H30 - 90 CRI, 3000K H35 - 90 CRI, 3500K H40 - 90 CRI, 4000K	1C - Single Circuit 1E - Single Circuit with EM Circuit 1B5 - Single Circuit with 5W Battery Pack 1B7 - Single Circuit with 7W Battery Pack 1B10 - Single Circuit with 10W Battery Pack 1B12 - Single Circuit with 12W Battery Pack CEC - CEC Compliant (10W Battery Pack)	U - Universal 1 - 120 volt 2 - 277 volt

Notes:

- Nominal lumen output for 3500K, 80CRI
- Consult factory for custom lumen package
- See page 3-4 for additional information. Option GP not available with battery
- Consult factory for specifications and custom dimming options. See page 2 for additional information
- Specify 1 - 120 volt or 2 - 277 volt

DRIVER ⁴	LUMINAIRE FINISH	CANOPY FINISH	DRIVER ENCLOSURE / SUSPENSION LENGTH (IN INCHES)		OPTIONS
<u>Dimming 0-10v</u> D - Dims to 1% (Standard) D0 - Dims to 1%, fade to off D02 - Eldoled Solodrive, dims to 0%	<u>DALI Dimming</u> ELE - Eldoled Ecodrive, dims to 1% ELS - Eldoled Solodrive, dims to 0% <u>Lutron Dimming</u> L12 - Lutron HiLume™ 2-Wire 120V Forward Phase, dims to 1% L15 - Lutron HiLume™ H-Series, dims to 1% L16 - Lutron HiLume™ 5-Series, dims to 5%	W - White (Standard) S - Silver B - Black CC - Custom Color ST - Delicate Straight Wood Grain BG - Light Black Gunstock Wood Grain AG - Two-Tone Ash Gray Wood Grain EW - Ebony Walnut Wood Grain	<u>Grid Ceiling Plenum Enclosure</u> T1 / 48 T1 / 120 T9 / 48 T9 / 120 TS / 48 TS / 120	<u>Inaccessible / Grid Ceiling Enclosure</u> GP / 48 GP / 120 <u>Surface Enclosure</u> SR / 48 SR / 120 SR-BAT / 48 SR-BAT / 120	N - Nightlight GTD ⁵ - Remote generator transfer device ETS ⁵ - Remote electronic transfer switch GLR - Remote fusing CP - Chicago plenum

PHOTOMETRICS

QUB

BI-DIRECT DISTRIBUTION

Cat # QUB-20-08L35-1C-U-D-W-W-T1/48-4 (linear output*)

ITL Test #: ITL 90440

Total Delivered Lumens: 3422

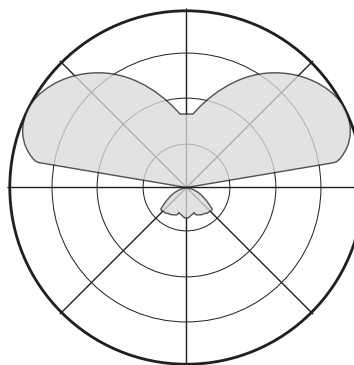
Input Watts: 26

Efficacy: 132 lm/W

16% Downlight

84% Uplight

*Refer to supporting document on assembling QUB4 in AGi32



Luminance Data (CD/SQ.M)

Angle in Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2297	2751	3312
55	2470	3375	3474
65	2659	3419	2972
75	2627	2810	2445
85	1625	1842	1625

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-30	112	3
0-40	195	6
0-60	405	12
0-90	557	16
90-120	1276	37
90-130	1781	52
90-150	2513	73
90-180	2865	84
0-180	3422	100

LIGHTING CONTROL

Nulite provides flexibility in meeting the needs of each project by easily integrating with several manufacturers for lighting control options.

0-10V: A non-directional dimming system. The control system tells the LED driver what to do and it adjusts according to the voltage on the control circuit.

DALI: Digital Addressable Lighting Interface is a simple two-wire control connection that goes to each fixture to form the control network. It allows LED drivers to be controlled independently from lighting control circuits.

TUNABLE WHITE: Aims to create lighting environments that are optimal for visual, mental, and biological health by being able to tune the color temperature of a light source. Utilizes a number of controllable channels to adjust the color temperature of the luminaire's white light output with precise varying of color temperature from a warm tone to a cool tone.

Solution	Manufacturer	Prefix	Series	Dim Level	Quantity of Wires	Dim to Dark (Smooth)	Fade to Off
Dimming 0-10V							
D	Variable			1%	2		
D0	Variable			0%	2		X
D02	eldoLed		SOLOdrive	0%	2	X	
DALI Dimming							
ELE	eldoLed		ECOdrive	1%	2	X	
ELS	eldoLed		SOLOdrive	0%	2	X	
Tunable White							
TWW - 0-10V	Variable			0%	2	X	
TWD - DALI	eldoLed		DUALdrive	0%	2	X	
Lutron Dimming							
L12	Lutron	LTEA	Hi-lume™ 2-Wire 120V forward phase	1%	No Control Wires - Uses Hot		
L15	Lutron	LDE1	Hi-lume™ - H Series	1%	2	X	
L16	Lutron	LDE5	5-Series	5%	2		

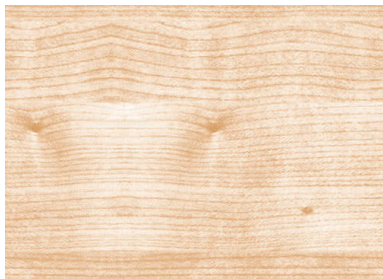
WOOD GRAIN FINISHES

ORDERING EXAMPLE

QUB4-2-20-08L35-1C-U-D-AG-W-T1/48



AG - Two-tone Ash Gray Wood Grain



ST - Delicate Straight Wood Grain



BG - Light Black Gunstock Wood Grain



AG - Two-Tone Ash Gray Wood Grain

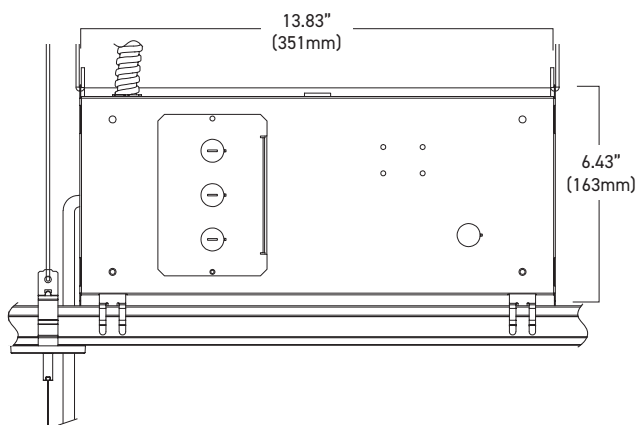


EW - Ebony Walnut Wood Grain

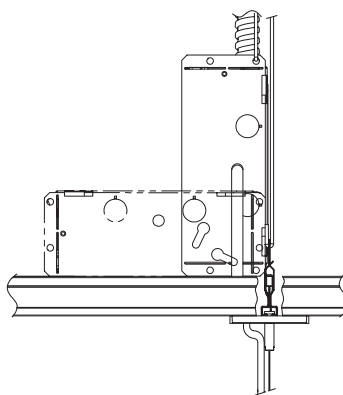
REMOTE DRIVER PENDANT INSTALLATION DETAILS

GRID CEILING PLENUM ENCLOSURE (T1, T9 OR TS)

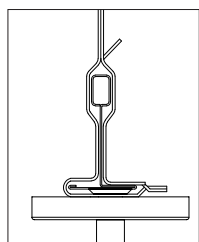
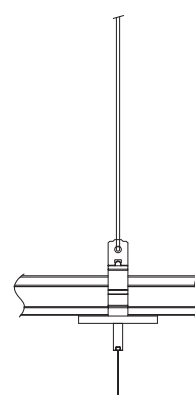
Power Feed - Side View



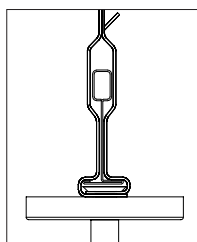
Power Feed - End View



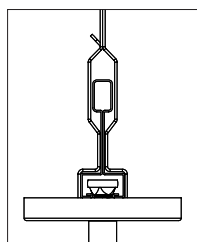
Non-Power Feed



T1
15/16\" Grid



T9
9/16\" Grid



TS
Slot Grid

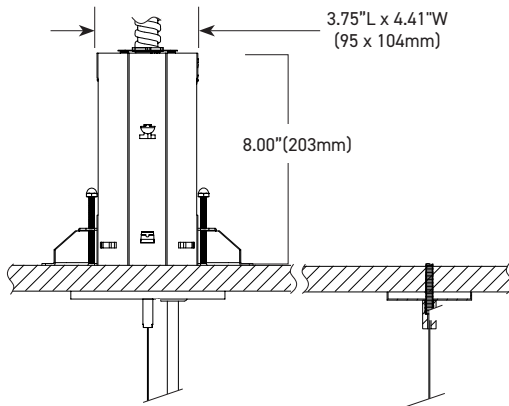
REMOTE DRIVER PENDANT INSTALLATION DETAILS (CONT.)

INACCESSIBLE CEILING / GRID CEILING ENCLOSURE (OPTION

Direct Access Suspension Enclosure for Inaccessible Ceiling

Power Feed

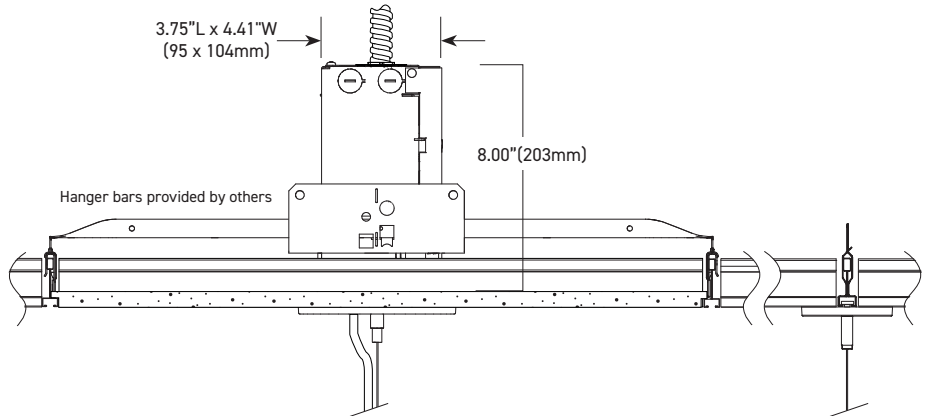
Non-Power Feed



Direct Access Suspension Enclosure for Grid Ceiling w/Hanger Bars

Power Feed

Non-Power Feed



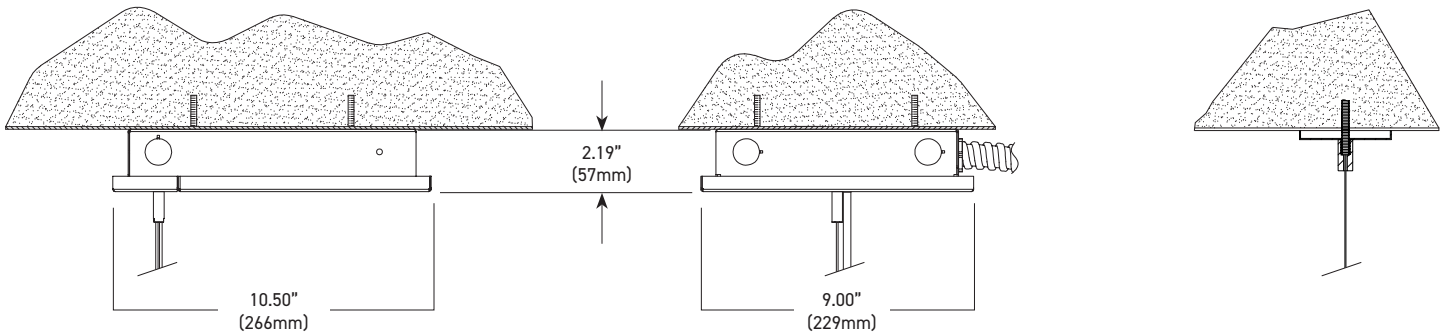
NOTE: If battery is required, contractor to supply and remote battery

SURFACE MOUNT ENCLOSURE (OPTION SR)

Power Feed - Side View

Power Feed - End View

Non-Power Feed

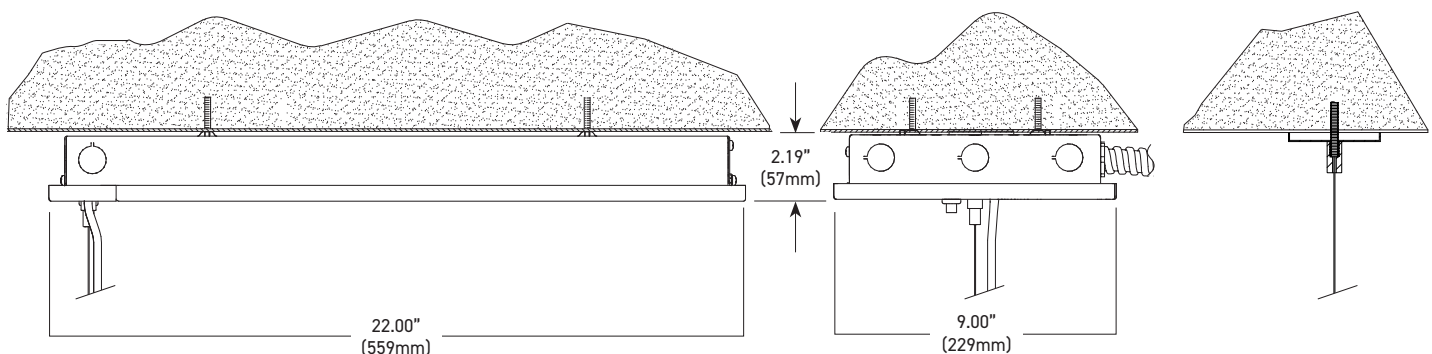


SURFACE MOUNT ENCLOSURE W/ BATTERY (OPTION SR-BAT)

Power Feed - Side View

Power Feed - End View

Non-Power Feed



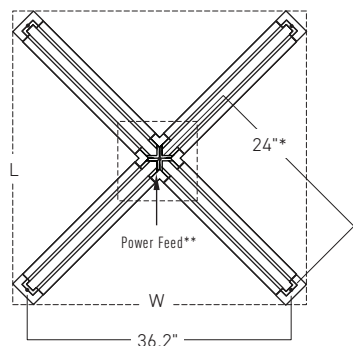
PRODUCT CONFIGURATIONS AND DIMENSIONS

QūB 4-WAY PENDANT / 2' LEGS

CAT# QUB-4-2-20

FOOTPRINT

W38.4" X L38.4"



*Dimensions from mounting point to mounting point

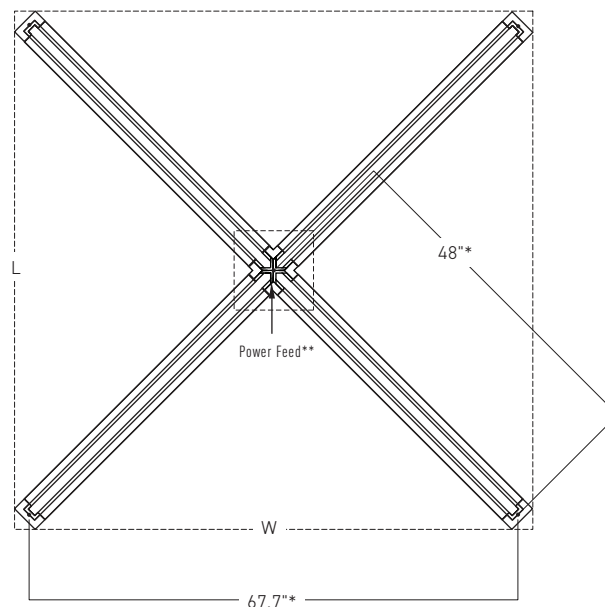
**Power cord and remote mounted driver enclosure located at center of luminaire configuration. See page 1 for specification information and page 3 and 4 for drawing details of the driver enclosures.

QūB 4-WAY PENDANT / 4' LEGS

CAT# QUB-4-4-20

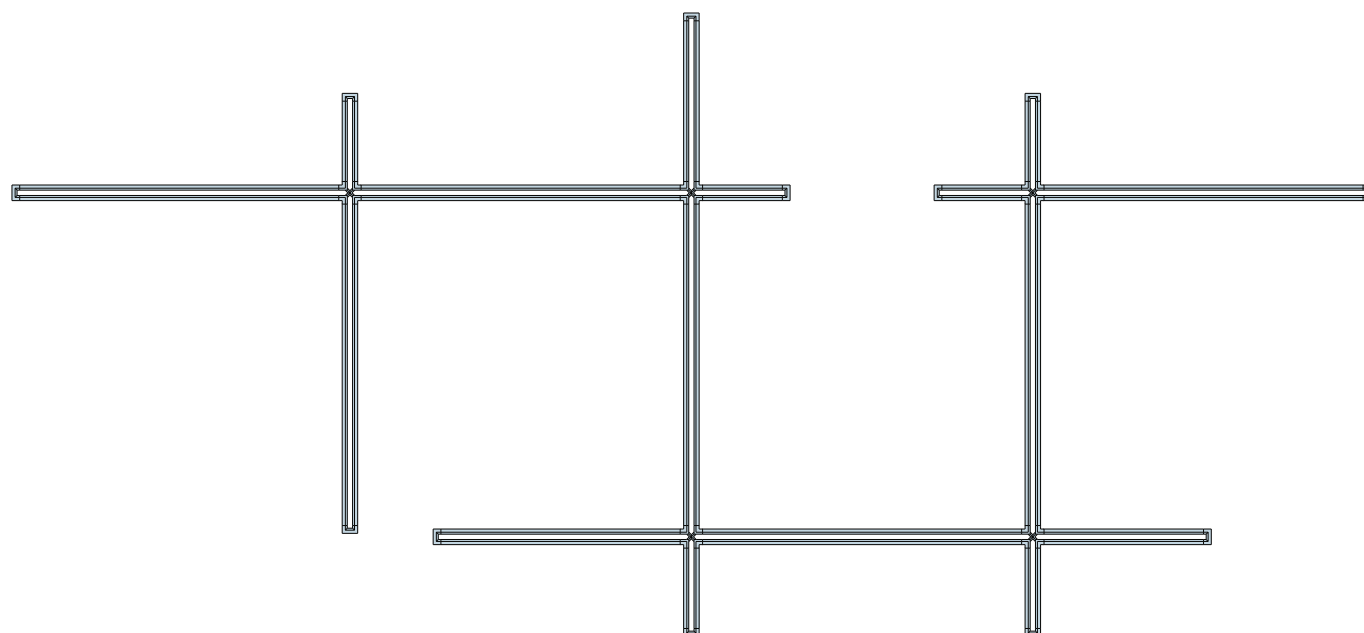
FOOTPRINT

W72.4" X L72.4"



CREATIVE LAYOUT CONFIGURATIONS

With the QūB connector system there are limitless layout possibilities that allow designers to personalize an interior space. Consult factory for more information regarding the design process and layout guidelines. Longer lead times will apply.



PRODUCT DETAILS

LIGHT SOURCE LED custom linear array is mounted with quick-connect wiring to facilitate service. Three lumen packages available (05, 08, 11). Custom outputs are available. All luminaire configurations tested in accordance with IESNA LM-79. Diodes tested in accordance with IESNA LM-80.

DRIVER Standard constant current remote electronic driver with 0-10V dimming input standard; dimming range from 100% down to 1%. Dims to 0%, DALI, and Tunable white available. Universal (U), 120 volt (1) and 277 volt (2).

OPTIONAL DALI Digital Addressable Lighting Interface is a simple two-wire control connection that goes to each fixture to form the control network. DALI enables dimmable transformers, relay modules, emergency fittings, and controllers from different manufacturers to be mixed and matched into a single control system, allowing LED drivers to be controlled independently from lighting control circuits.

OPTIONAL BATTERY AND EMERGENCY OPTIONS Recyclable Ni-Cad battery pack, battery run time is 90 minutes. 5W, 7W, 10W, or 12W battery packs are available. Total output is determined by exact efficacy of specified configuration multiplied by battery wattage (i.e. QUB-20-08L35 with a 10W battery pack is a 1,320 battery lumen output). Recharge time of 24 hours. Emergency circuit or night light circuit available.

SECURE TOOL-FREE JOINING DESIGN A dynamic mechanism that ensures stable positioning, no light leak, and speeds up installation for continuous rows. Constructed with spring steel over center draw latch, 22 gauge thick.

WOOD GRAIN FINISH Hydro-dipped finish (also known as immersion printing, water transfer printing, and hydro imaging). A hydrographic film dissolves into water and leaves ink on the surface. The fixture is carefully placed on the water's surface where the surface tension of the water will allow the pattern to curve around any shape. The fixture is then allowed to dry. This is followed by another two step clear coat process to increase durability.

MOUNTING Designed to install into grid plenum (T1, T9, or TS clips), inaccessible / grid ceiling, and surface ceilings. Five mounting points; power feed will be mounted from center of fixture. Supplied with five 3" (76mm) power and non-power canopies. Sheet rock / grid ceiling enclosure (option GP) supplied with four 3" (76mm) non-power and one 5" (127mm) power canopy. Refer to installation instructions for appropriate ceiling detail.

WARRANTY 5-year limited warranty on LED and driver from date of shipment. Refer to the full warranty details on www.nulite-lighting.com.

WEIGHT QUB4-2: ~19 lbs, QUB4-4: ~35 lbs.

APPROVALS ETL listed, conforms to UL Standard 1598 / 8750 and CSA Standard C22.2, indoor dry/damp locations.

INDEPENDENT TESTING

IESNA LM79 - Testing method for the Electrical and Photometric Measurements of Solid State Lighting on the complete system, such as luminous flux, electrical power, luminous intensity distribution, and various properties of chromaticity.

IESNA LM80 - Testing method for measuring lumen maintenance of LED light sources, applies to the LED package, array or module alone, not the complete system.