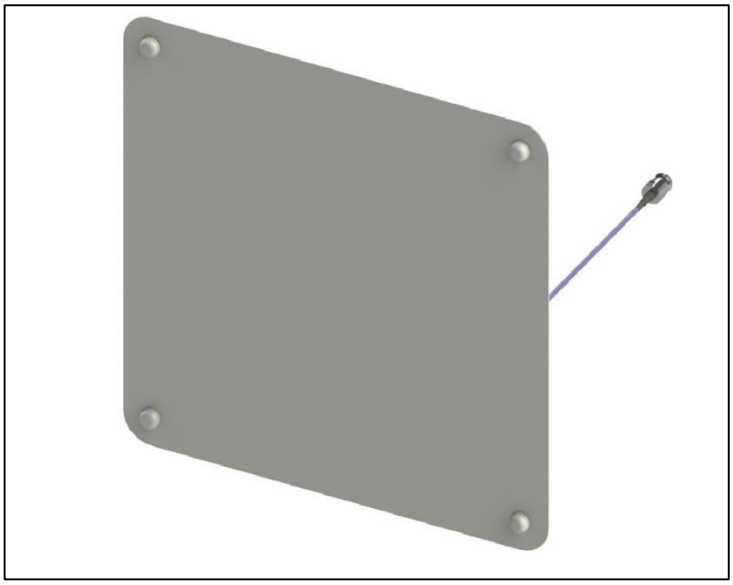
PulseLARSEN Antennas

TECHNICAL DATA SHEET

Description: In Building Public Safety Antenna, 132-174MHz

Series: V-Thinity

PART NUMBER: PSIBVHF





Installed Antenna

All dimensions are in mm / inches

Features:

- Wide bandwidth VHF
  - 132-174 MHz operation
- Aesthetically pleasing:
  - 1.5mm (0.060 inch) thickness to ceiling
- VSWR < 2:1
- Optimized To Low-Frequency In-Building Environments
- 15 x 15 inch (380 x 380 mm)

Applications:

- In-building repeater systems
  - Bi-Directional Amplifier
- Police, Fire, Government
- Low profile ceiling mounting
- Enhanced for In-Building:
  - Gain-set to IB environment
  - Multi-floor coverage
  - Avoids the nulls of traditional dipoles.

Issue: 1626

RoHS COMPLIANT

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Pulse (Suzhou) Wireless Products Co, Inc.
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Suzhou New District
Jiangsu Province, Suzhou 215009 PR China
Tel: 86 512 6807 9998

Description: In Building Public Safety Antenna, 132-174MHz

Series: V-Thinity

PART NUMBER: PSIBVHF

ELECTRICAL SPECIFICATIONS

Frequency	132-174 MHz
Nominal Impedance	50 Ω
VSWR	2:1
Power withstanding	6W
Connector type	N female
Cable type	Ø 4mm / 0.16”
Cable length	500mm / 19.7”

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PulseLARSEN Antennas

TECHNICAL DATA SHEET

Description: In Building Public Safety Antenna, 132-174MHz

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MECHANICAL SPECIFICATIONS

Color	White
Weight	550 g
Cable retention: Pull off	30 N
Fixing system	4pcs M6 hex slot bolt & nut

ENVIRONMENTAL SPECIFICATIONS

Operating temperature	0 - 60° C
Storage temperature	MIL STD 801G: 24h at 85C and 24h at -40C
Temperature shock	MIL STD 810G: Method 503.5, -40 for 1 hr to +85 C for 1 hr @ 15 deg.C/min rate of change; 3 cycles
Humidity	MIL STD 810G: 24h at 60C and 95%RH
Vibration	MIL STD 810G: 514.6 C-II
Chemical resistance	MIL STD 810G
Drop test	Top, bottom, side. 3 times/orientation, 40”
Package drop	All faces & corners, 40”

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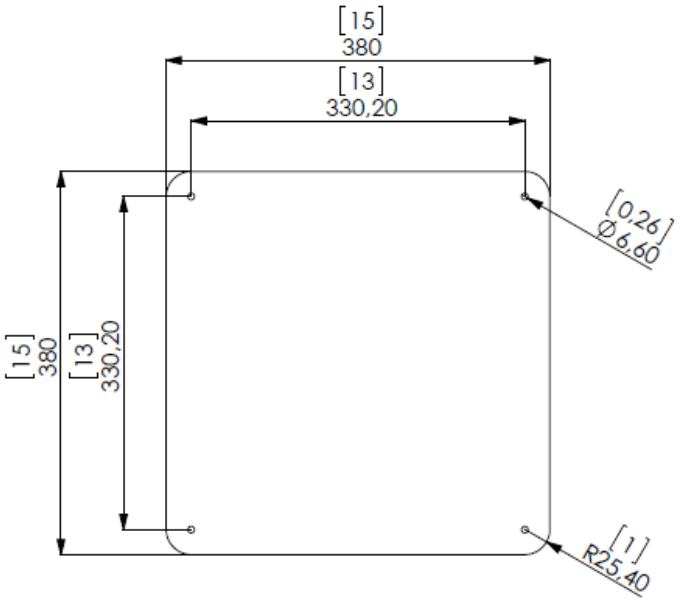
RoHS COMPLIANT

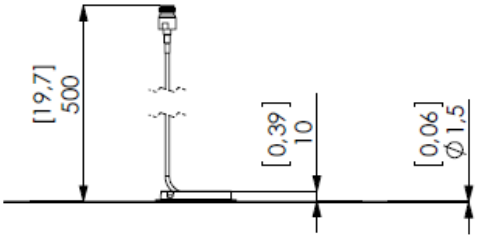
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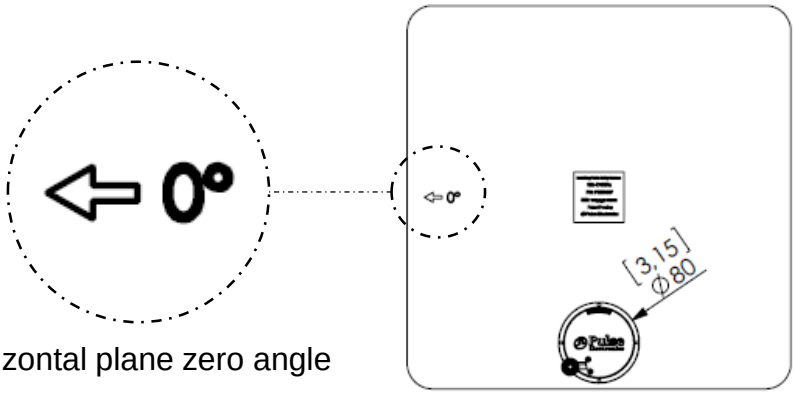
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MECHANICAL DRAWING







Horizontal plane zero angle

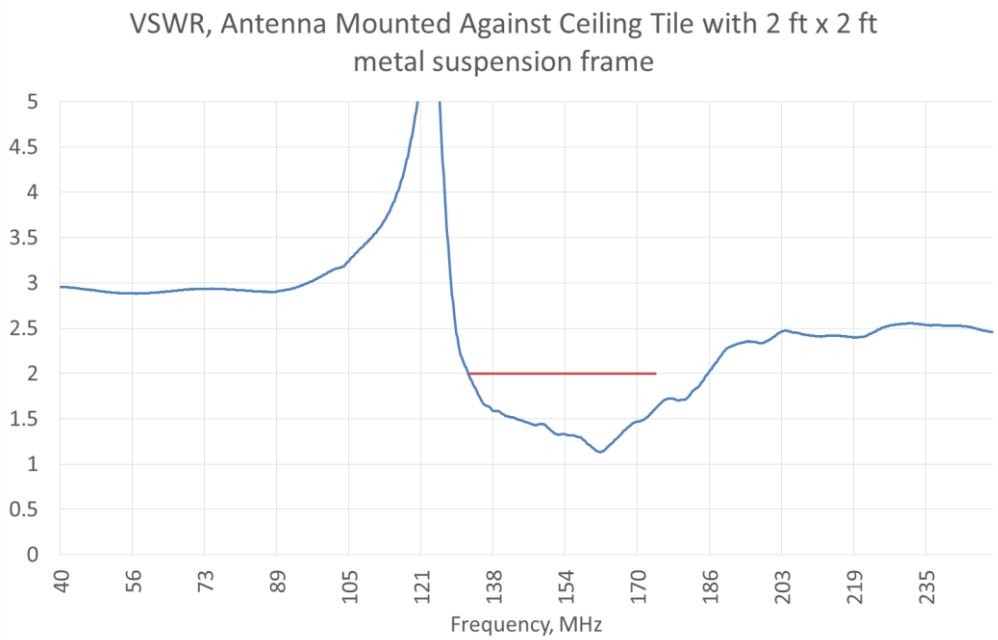
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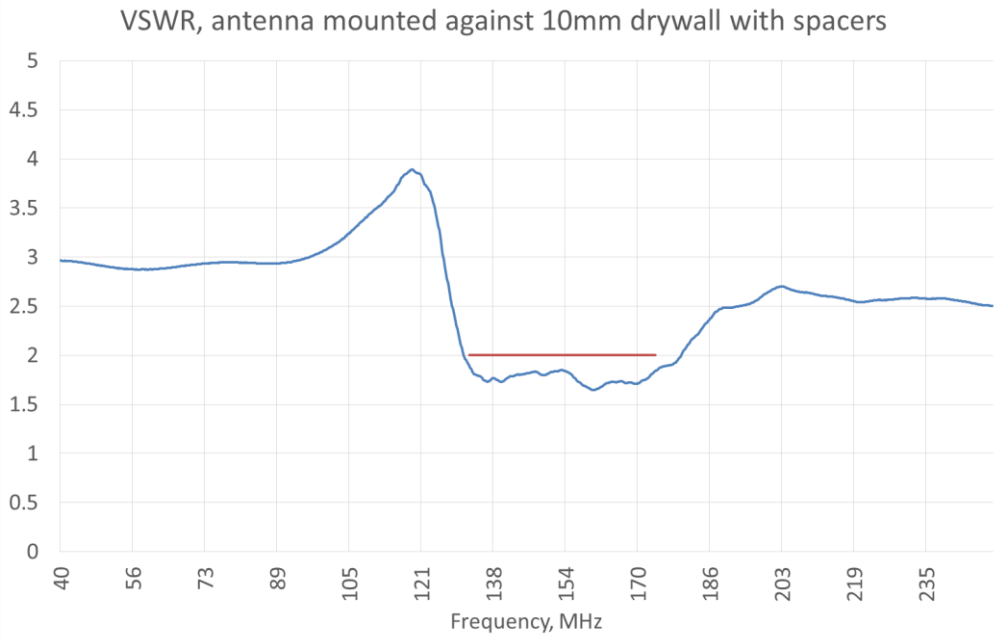
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CHARTS





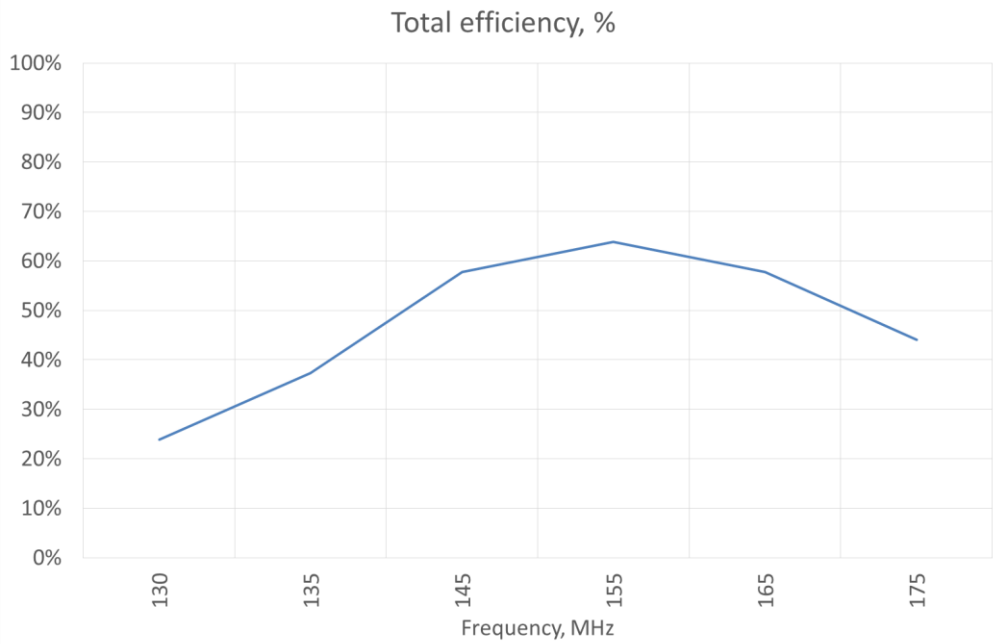
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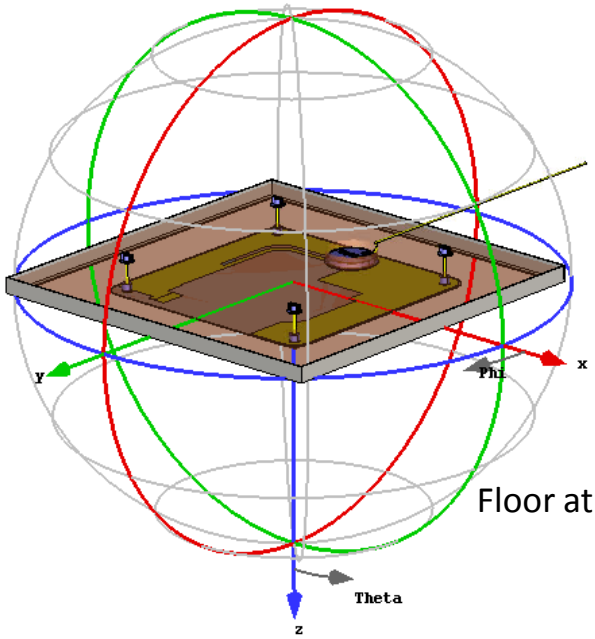
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CHARTS



Antenna alignment in spherical coordinate system



Floor at theta=0deg

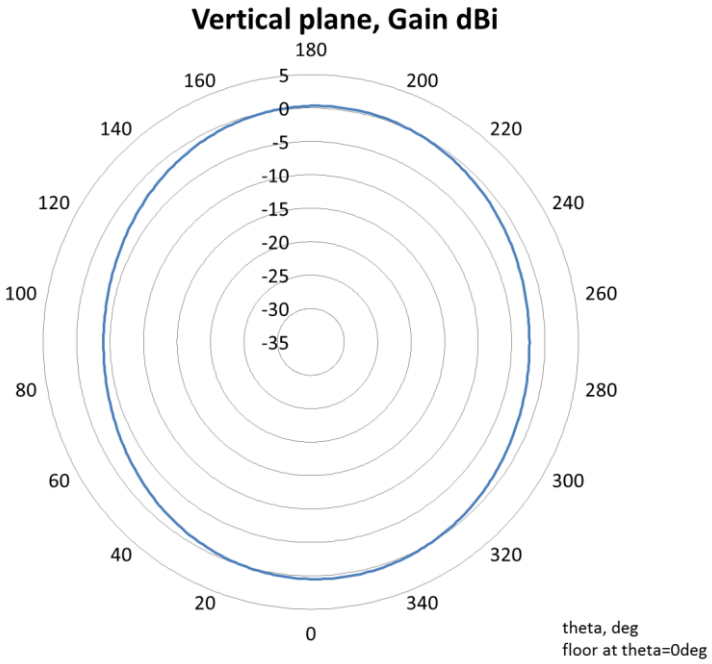
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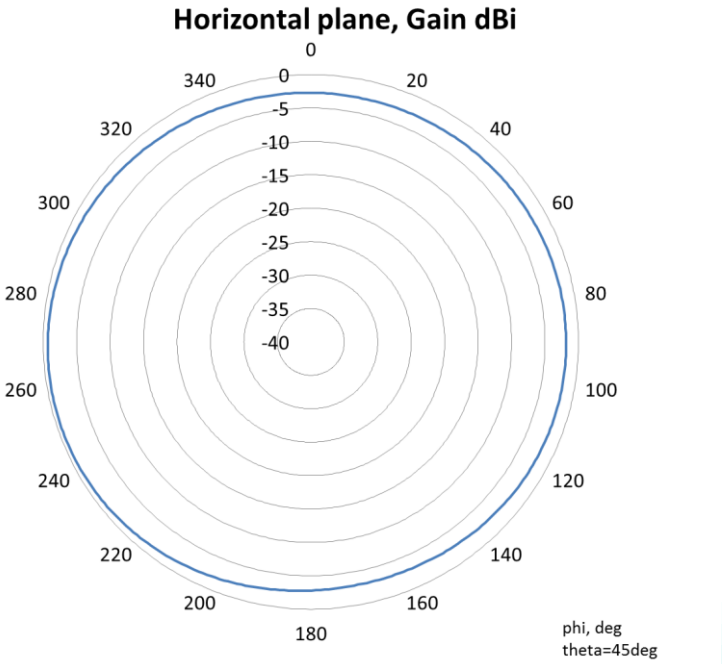
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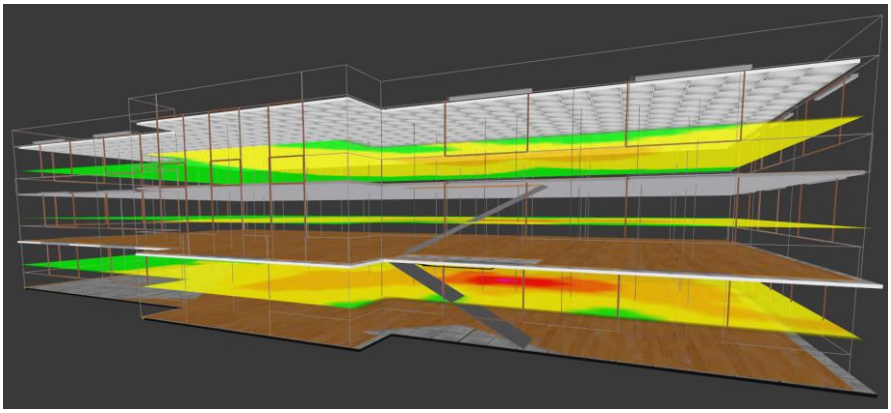
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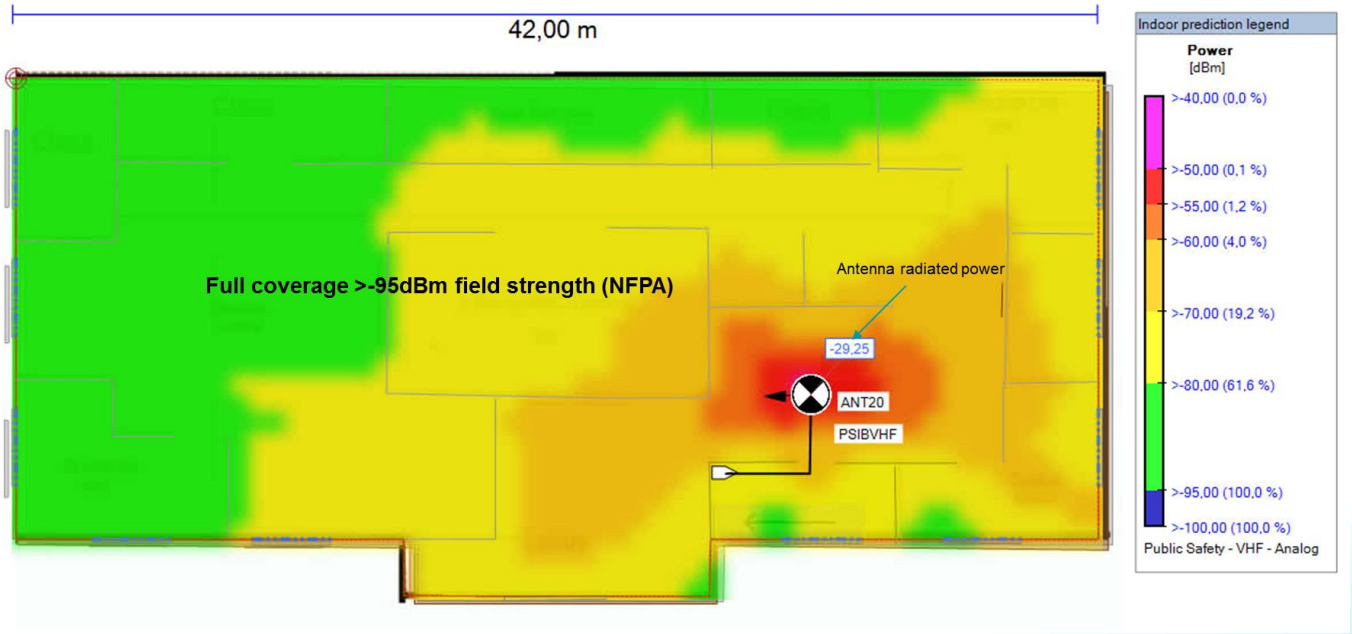
CHARTS

IBWAVE propagation simulation for VHF



Outside wall material: Brick, attn 1.13dB
Inside wall material: sheetrock, heavy, attn 1.79dB
Material between floors:Concrete, light, attn 0.73dB
Floor material: Wood, attn 0.5dB
Ceiling material: plaster, attn 0.49dB, ceiling height h=3m
Antenna placed on lowered ceiling, h=2.5m

Field strength in first floor



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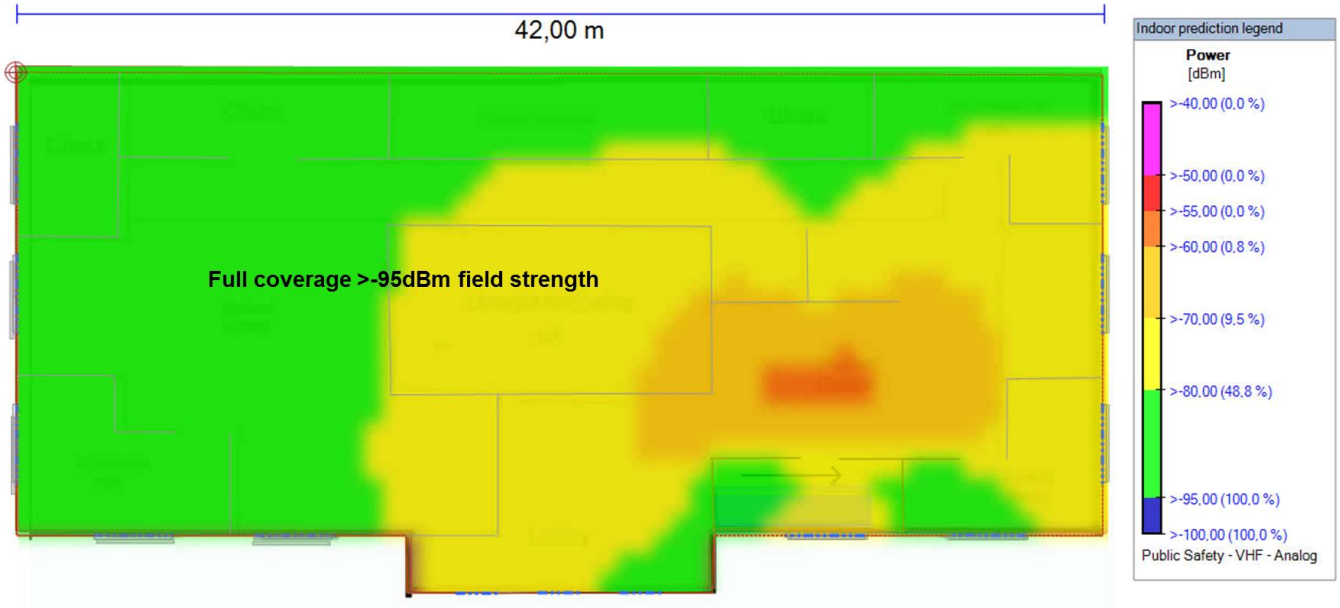
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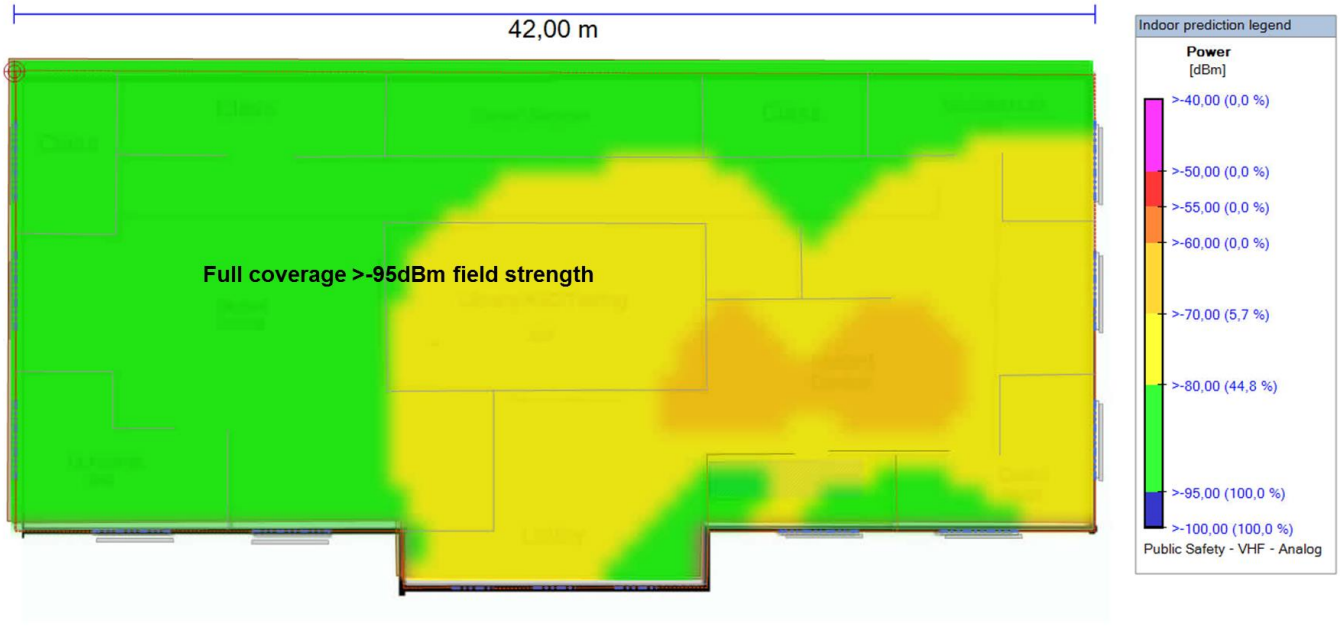
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Field strength in second floor



Field strength in 3rd floor



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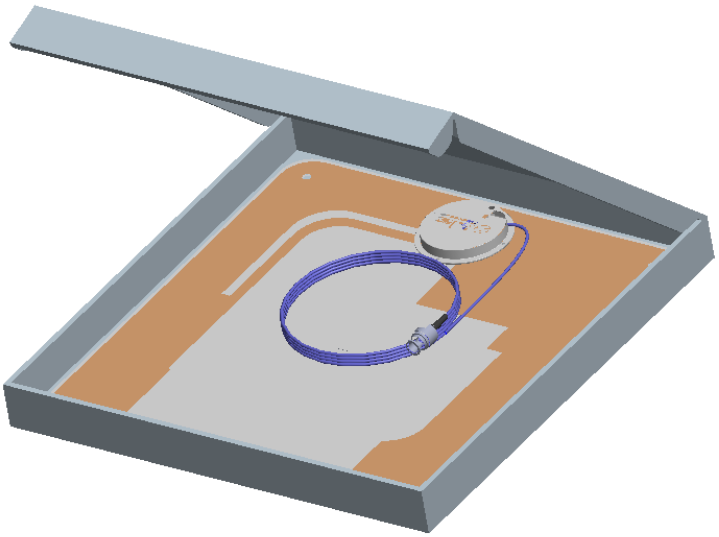
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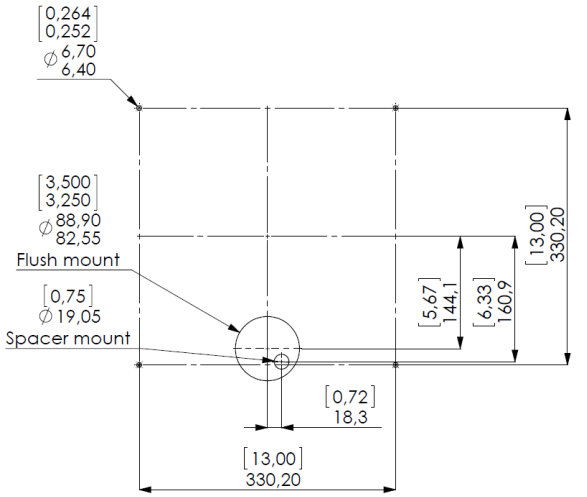
PACKAGING



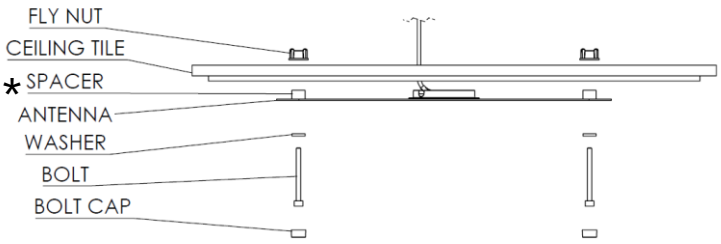
(15.75x15.75x1.57) inch

(400x400x40) mm

ASSEMBLY



DRILL MAP



* Spacer to be used in gypsum & concrete installations

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