12719605

OCEAN CITY 81 MD21

FCC Limits

Table 1 to § 1.1310(e)(1)—Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)
(i) Limits for Occupational/Controlled Exposure			
0.3-3.0	614	1.63	*(100)
3.0-30	1842/f	4.89/f	*($900/f^2$)
30-300	61.4	0.163	1.0
300-1,500			f/300
1,500-100,000			5
(ii) Limits for General Population/Uncontrolled Exposure			
0.3-1.34	614	1.63	*(100)
1.34-30	824/f	2.19/f	*($180/f^2$)
30-300	27.5	0.073	0.2
300-1,500			f/1500
1,500-100,000			1.0

*f = frequency in MHz. * = Plane-wave equivalent power density.*

FCC Limits in different Units

General Population/Uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter (μW/cm2). The general population exposure limit for the 700 and 800 MHz Bands is approximately 467 μW/cm2 and 567 μW/cm2 respectively, and the general population exposure limit for the 1900 MHz PCS and 2100 MHz AWS bands is 1000 μW/cm2. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

Frequency (MHz)	$\mu W/cm^2$	mW/cm^2	W/m^2
700	467	0.467	4.67
850	567	0.567	5.67
>1900 (1900, 2100, 2300, 3450, 3840)	1000	1	10

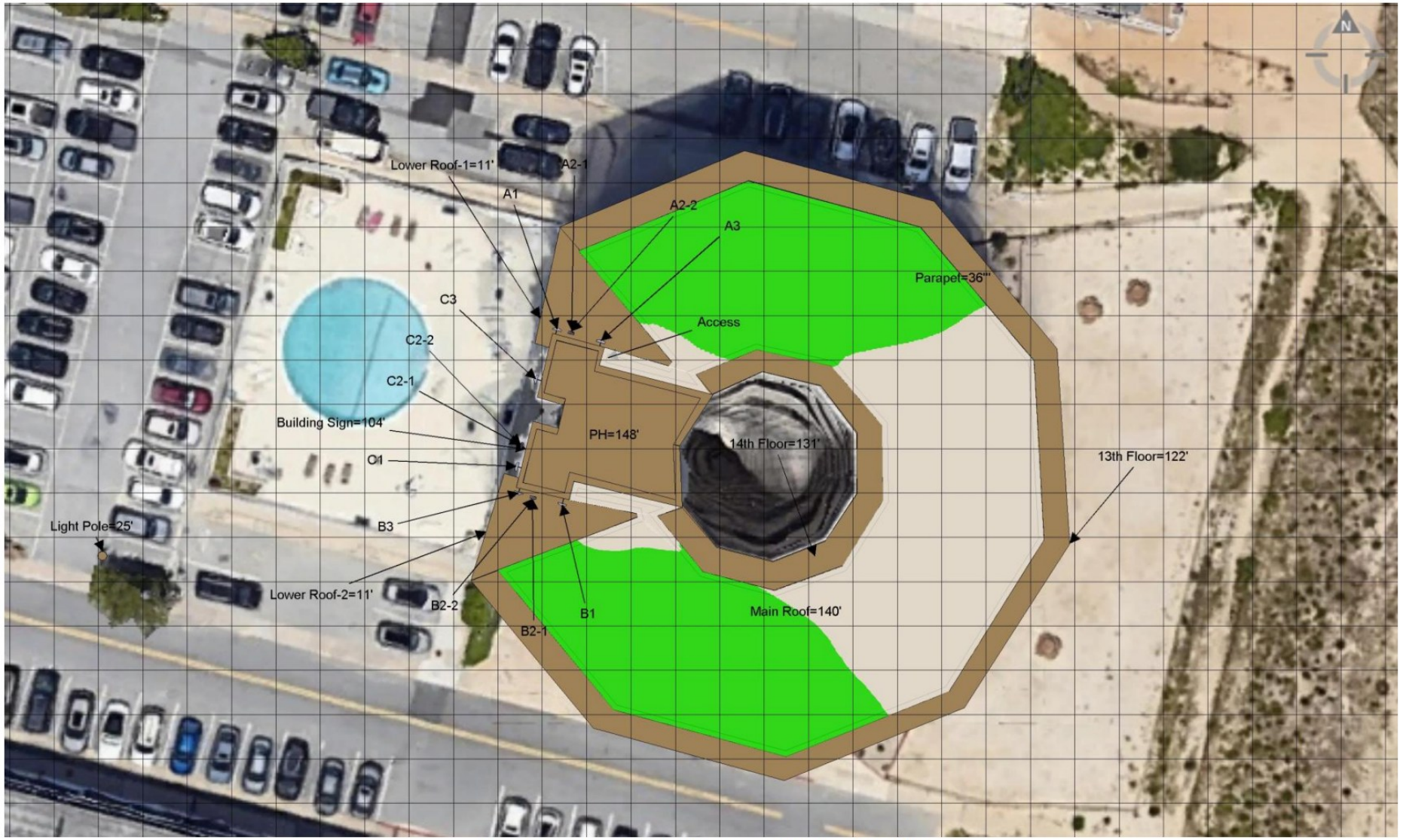
Frequently Used Units

Frequency (MHz)	µW/cm²	mW/cm²	[redacted]
700	467	0.467	[redacted]
850	567	0.567	[redacted]
>1900 (1900, 2100, 2300, 3450, 3840)	1000	1	[redacted]

Predicted RF Exposure at OCEAN CITY 81 MD21 - Summary

Analyzed Level	Max. Predictive RF Exposure
Main Roof	87.70% of FCC General Public Limits
14th Floor	25.11% of FCC General Public Limits
13th Floor & Balcony	8.79% of FCC General Public Limits

4.6 Predictive Cumulative MPE Contribution from All Sources at Main Roof Level (140 ft. AGL)



Max. Predictive Spatial Average MPE% = **87.70%**

Proposed Barrier

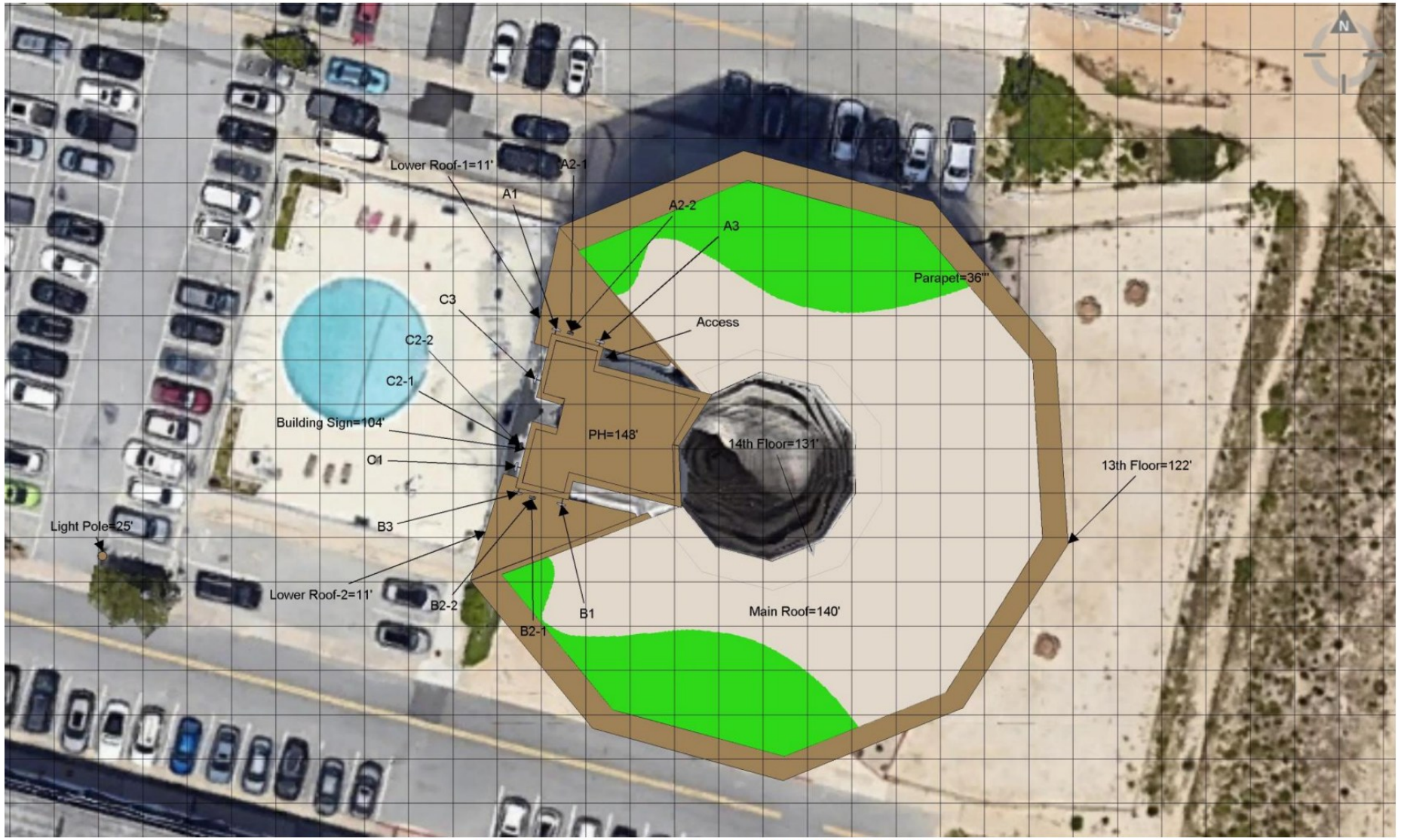
Proposed Posts

% of FCC General Public Exposure Limit (Predictive Spatial Average)

Non-Simulated	0-5	5-100	100-500	500-5000	>5000

Grid Scale = 10 ft

4.7 Predictive Cumulative MPE Contribution from All Sources at 14th Floor Level (131 ft. AGL)



Max. Predictive Spatial Average MPE% = **25.11%**

Proposed Barrier

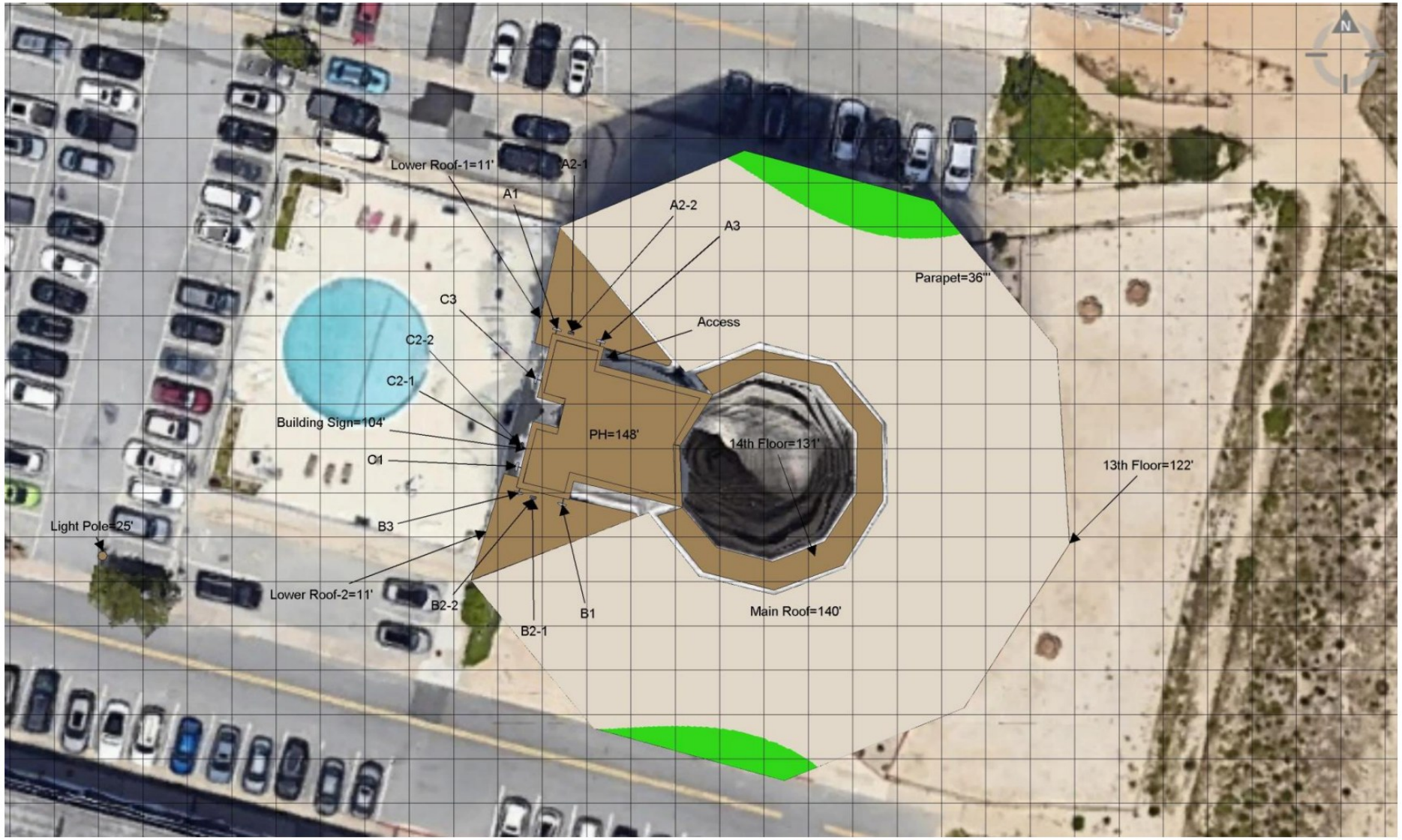
Proposed Posts

% of FCC General Public Exposure Limit (Predictive Spatial Average)

Non-Simulated	0-5	5-100	100-500	500-5000	>5000

Grid Scale = 10 ft

4.8 Predictive Cumulative MPE Contribution from All Sources at 13th Floor Level (122 ft. AGL)



Max. Predictive Spatial Average MPE% = **8.79%**

Proposed Barrier

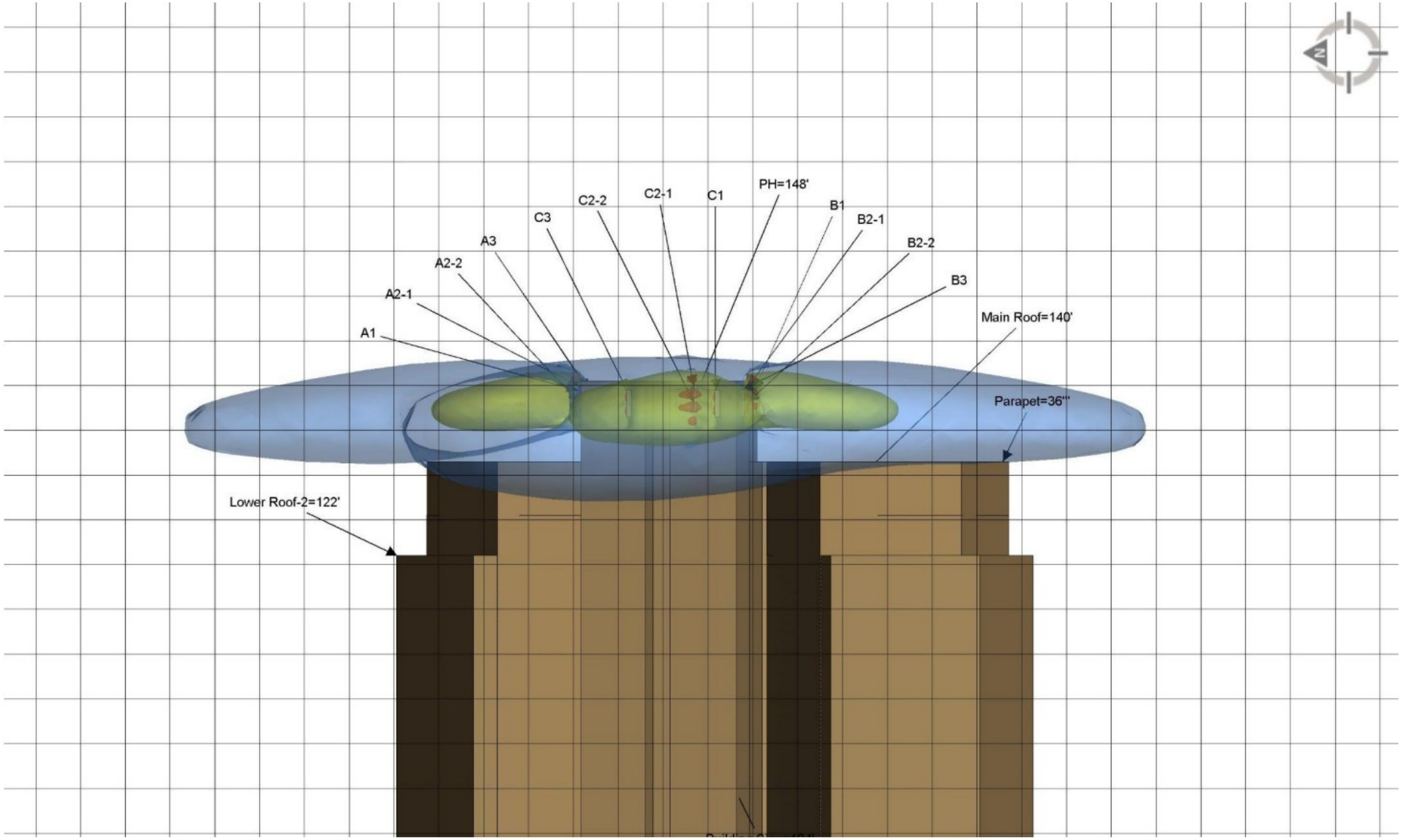
Proposed Posts

% of FCC General Public Exposure Limit (Predictive Spatial Average)

Non-Simulated	0-5	5-100	100-500	500-5000	>5000

Grid Scale = 10 ft

4.4 Predictive Cumulative MPE Contribution from All Sources: 3D Perspective View - 3



% of FCC General Public Exposure Limit

100-500	500-5000	>5000

Grid Scale = 10 ft

Handheld Personal RF Monitor

RadMan2 - Personal radiation monitor

- Up to 8 GHz (LT version) or 60 GHz (XT version)
- Automatic sensor test
- 800 hours operating time
- Conspicuous alarm: visual, audible and vibration
- Patented frequency response assessment according to ICNIRP (Directive 2013/35/EU and others), FCC, SC 6
- Data recorder for continuous recording of exposure values (XT version)
- Isotropic sensors with RMS and pulse recording
- Robust and weatherproof (IP65)
- RF absorber in the holder minimizes the influence of the body on the measurement result
- Includes free RadMan 2-TS PC software

THANK YOU!