

## RF EMISSIONS COMPLIANCE REPORT

### Crown Castle on behalf of T-Mobile

Crown Castle Site ID: 880416

Crown Castle Site Name: SEATTLE QWEST - SEA155

T-Mobile Site ID: SE02525A

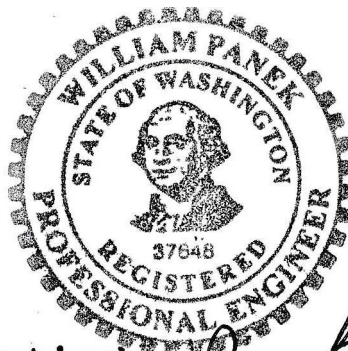
Crown Castle Site 8477 SE 68th Street  
Address: Mercer Island, WA 98040

Crown Castle Order  
Number: 681386

Report generated date: 2024/11/08

Report Status:

**T-Mobile is Compliant**



*William Panek 12/8/24*  
*Exp. Date 12/10/25*

## **Engineering Statement in Re: Electromagnetic Energy Analysis**

My signature and seal on the cover of this document indicates:

That I am registered as a Professional Engineer in the jurisdiction indicated; and That I have extensive professional experience in the wireless communications engineering industry; and

That I am providing professional engineering services on behalf of InfraServices Engineering, P.C., and am an employee of InfraServices Group Wireless, LLC, in Blue Bell, Pennsylvania, at which place the staff provides RF compliance services to clients in the wireless communications industry; and

That I am thoroughly familiar with the Rules and Regulations of the Federal Communications Commission ("the FCC" and "the FCC Rules" both in general and specifically as they apply to the FCC's Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields; and

That the technical information serving as the basis for this report was supplied by Crown Castle on behalf of T-Mobile (see attached Site Summary and Carrier documents and that's installation involves communications equipment, antennas and associated technical equipment at a location referred to as "SEATTLE QWEST - SEA155" ("the site")); and

T-Mobile proposes to operate at the site with transmit antennas listed in the Equipment Installed at this Site section and with a maximum effective radiated power as specified by T-Mobile and shown on the worksheet; and

That this analysis has been performed with the assumption that the ground immediately surrounding the tower is primarily flat or falling; and

That at this time, the FCC requires that certain licensees address specific levels of radio frequency energy to which workers or members of the public might possibly be exposed in §1.1307(b) of the FCC Rules; and

That such consideration of possible exposure of humans to radio frequency energy must utilize the standards set by the FCC, which is the federal agency having jurisdiction over communications facilities; and

That the FCC rules define two tiers of permissible exposure guidelines: 1 "uncontrolled environments," which defines situations in which persons may not be aware of (the "general public"), or may not be able to control their exposure to a transmission facility; and 2 "controlled environments," which defines situations in which persons are aware of their potential for exposure (industry personnel); and

That this statement specifically addresses the uncontrolled environment (which is more conservative than the controlled environment and the limit set forth in the FCC rules for operations such as T-Mobile's as shown on the attached antenna worksheet; and

That when applying the uncontrolled environment standards, the predicted Maximum Power Density at six feet above ground level from the proposed T-Mobile operation is no more than 2.3574% of the maximum permissible exposure limits in any accessible area on the ground; and

That it is understood per FCC Guidelines in OET65 Appendix A, that regardless of the existent radio frequency environment, only those licenses whose contributions exceed 5% of the exposure limit pertinent to their operation(s) bear any responsibility for bringing any non-compliant area(s) into compliance; and

That when applying the uncontrolled environment standards, the cumulative predicted energy density from the proposed operation(s) combined is no more than 2.5340% of the maximum permissible exposure in any accessible area up to six feet above the ground; and

That the calculations provided in this report are based on data provided by the client and antenna pattern data supplied by the antenna manufacturer, in accordance with FCC guidelines listed in OET 65. Horizontal and vertical antenna patterns are combined for modeling purposes to accurately reflect the energy six feet above ground level where on-axis energy refers to maximum energy six feet above the ground along the azimuth of the antenna and where area energy refers to the maximum energy anywhere six feet above the ground regardless of the antenna azimuth, accounting for cumulative energy from multiple antennas for the carrier(s) and frequency range(s) indicated; and

That the Occupational Safety and Health Administration has policies in place which address worker safety in and around communications sites, thus individual companies will be responsible for their employees' training regarding Radio Frequency Safety.

In summary, it is stated here that the proposed operation at the site would not result in exposure of the Public to excessive levels of radio-frequency energy as defined in the FCC Rules and Regulations, specifically 47 CFR 1.1307 and that T-Mobile's proposed operation is completely compliant.

Finally, it is stated that access to the tower should be restricted to communication industry professionals, and approved contractor personnel trained in radio-frequency safety; and that the instant analysis addresses exposure levels at six feet above ground level and does not address exposure levels on the tower, or in the immediate proximity of the antennas.

If you have any questions or comments in regard to this report, please do not hesitate to contact Sitesafe's Customer Support Department at (703) 276-1100.

## Emissions Visualized

### Emissions on Ground level

Environmental Slice values (% of FCC OET 65 general public limit)	
This is a list of the Environmental Slices that were specified and the value it measured	
Composite Contribution	2.5340%
Contribution	2.3574%

## Equipment Installed at this Site

Report Ref	Owner	Type/Make/Model	h (ft)	Az (°)	System/Frequency	Power (Watts)
1A	T-Mobile (P)	Panel/Nokia/AEHC	128	0	LTE 2500	160
1A	T-Mobile (P)	Panel/Nokia/AEHC	128	0	5G 2500	160
2A	T-Mobile (P)	Panel/CommScope/FFVV-65C-R3-V1	115	0	LTE 1900	240
2A	T-Mobile (P)	Panel/CommScope/FFVV-65C-R3-V1	115	0	LTE 2100	240
2A	T-Mobile (P)	Panel/CommScope/FFVV-65C-R3-V1	115	0	LTE 600	160
2A	T-Mobile (P)	Panel/CommScope/FFVV-65C-R3-V1	115	0	LTE 700	160
3A	T-Mobile (P)	Panel/Nokia/AEHC	128	120	LTE 2500	160
3A	T-Mobile (P)	Panel/Nokia/AEHC	128	120	5G 2500	160
4A	T-Mobile (P)	Panel/CommScope/FFVV-65C-R3-V1	115	120	LTE 1900	240
4A	T-Mobile (P)	Panel/CommScope/FFVV-65C-R3-V1	115	120	LTE 2100	240
4A	T-Mobile (P)	Panel/CommScope/FFVV-65C-R3-V1	115	120	LTE 600	160
4A	T-Mobile (P)	Panel/CommScope/FFVV-65C-R3-V1	115	120	LTE 700	160
5A	T-Mobile (P)	Panel/Nokia/AEHC	128	240	LTE 2500	160
5A	T-Mobile (P)	Panel/Nokia/AEHC	128	240	5G 2500	160
6A	T-Mobile (P)	Panel/CommScope/FFVV-65C-R3-V1	115	240	LTE 1900	240
6A	T-Mobile (P)	Panel/CommScope/FFVV-65C-R3-V1	115	240	LTE 2100	240
6A	T-Mobile (P)	Panel/CommScope/FFVV-65C-R3-V1	115	240	LTE 600	160
6A	T-Mobile (P)	Panel/CommScope/FFVV-65C-R3-V1	115	240	LTE 700	160

Report Ref	Owner	Type/Make/Model	h (ft)	Az (°)	System/Frequency	Power (Watts)
7	Dish Wireless	Panel/JMA Wireless/MX08FRO665-21	146	0	5G 600	120
7	Dish Wireless	Panel/JMA Wireless/MX08FRO665-21	146	0	5G 700	160
7	Dish Wireless	Panel/JMA Wireless/MX08FRO665-21	146	0	5G 1900	160
7	Dish Wireless	Panel/JMA Wireless/MX08FRO665-21	146	0	5G 2100	160
8	Dish Wireless	Panel/JMA Wireless/MX08FRO665-21	146	240	5G 600	120
8	Dish Wireless	Panel/JMA Wireless/MX08FRO665-21	146	240	5G 700	160
8	Dish Wireless	Panel/JMA Wireless/MX08FRO665-21	146	240	5G 1900	160
8	Dish Wireless	Panel/JMA Wireless/MX08FRO665-21	146	240	5G 2100	160
9	Dish Wireless	Panel/JMA Wireless/MX08FRO665-21	146	120	5G 600	120
9	Dish Wireless	Panel/JMA Wireless/MX08FRO665-21	146	120	5G 700	160
9	Dish Wireless	Panel/JMA Wireless/MX08FRO665-21	146	120	5G 1900	160
9	Dish Wireless	Panel/JMA Wireless/MX08FRO665-21	146	120	5G 2100	160
10	Verizon Wireless	Panel/CommScope/NHHS4-65A-R3B	105	290	5G C-Band 3700	320
10	Verizon Wireless	Panel/CommScope/NHHS4-65A-R3B	105	290	5G/DOD Band 3500	20
10	Verizon Wireless	Panel/CommScope/NHHS4-65A-R3B	105	290	LTE 2100	160
10	Verizon Wireless	Panel/CommScope/NHHS4-65A-R3B	105	290	LTE 1900	160
10	Verizon Wireless	Panel/CommScope/NHHS4-65A-R3B	105	290	LTE 850	160
10	Verizon Wireless	Panel/CommScope/NHHS4-65A-R3B	105	290	LTE 700	160
11	Verizon Wireless	Panel/CommScope/NHHS4-65A-R3B	105	110	5G C-Band 3700	320

Report Ref	Owner	Type/Make/Model	h (ft)	Az (°)	System/Frequency	Power (Watts)
11	Verizon Wireless	Panel/CommScope/NHHS4-65A-R3B	105	110	5G/DOD Band 3500	20
11	Verizon Wireless	Panel/CommScope/NHHS4-65A-R3B	105	110	LTE 2100	160
11	Verizon Wireless	Panel/CommScope/NHHS4-65A-R3B	105	110	LTE 1900	160
11	Verizon Wireless	Panel/CommScope/NHHS4-65A-R3B	105	110	LTE 850	160
11	Verizon Wireless	Panel/CommScope/NHHS4-65A-R3B	105	110	LTE 700	160
12	Verizon Wireless	Panel/CommScope/NHHS4-65A-R3B	105	200	5G C-Band 3700	320
12	Verizon Wireless	Panel/CommScope/NHHS4-65A-R3B	105	200	5G/DOD Band 3500	20
12	Verizon Wireless	Panel/CommScope/NHHS4-65A-R3B	105	200	LTE 2100	160
12	Verizon Wireless	Panel/CommScope/NHHS4-65A-R3B	105	200	LTE 1900	160
12	Verizon Wireless	Panel/CommScope/NHHS4-65A-R3B	105	200	LTE 850	160
12	Verizon Wireless	Panel/CommScope/NHHS4-65A-R3B	105	200	LTE 700	160