

Federal Communications Commission

AM STATION LICENSE

Licensee/Permittee

Central Baptist Theological Seminary Of
Minneapolis
900 Forestview Lane North
Plymouth, MN, 55441

Call Sign

WCTS

Facility ID

12114

File Number 0000225729	This License Modifies License No. BMML-20140619ACD		
Filing Date 11/13/2023	Grant Date 01/30/2024	Expiration Date 04/01/2029	
Community of License City: Maplewood State: MN	Frequency (KHz) 1030	Station Class B	Service Type Main
Facility Type Noncommercial Educational			
Hours of Operation Daytime Nighttime			
Station Antenna Modes/Antenna Types Daytime: Directional Nighttime: Directional			

Average Hours of Sunrise and Sunset

Local Standard Time (Non-Advanced)

Month	Sunrise	Sunset
January	7:45	17:00
February	7:15	17:45
March	6:30	18:15
April	5:30	19:00
May	4:45	19:30
June	4:30	20:00
July	4:45	20:00
August	5:15	19:15
September	5:45	18:30
October	6:30	17:30
November	7:15	16:45
December	7:45	16:30

Transmitter

Type Accepted. See Sections 73.1660, 73.1665, and 73.1670 of the Commission's Rules

Antenna Mode: Daytime

Antenna Type: Directional

Antenna Coordinates (NAD 83) Latitude 44° 52' 0.9" N Longitude 92° 54' 2.8" W	Nominal Power (kW) 50.000 Antenna Input Power (kW) 52.650 Current (Amperes) 32.450 Resistance (Ohms) 50																					
Antenna Structure Registration Number(s) <table border="1"><thead><tr><th>Tower No.</th><th>ASRN</th><th>Overall Height (m)</th></tr></thead><tbody><tr><td>3</td><td>1025273</td><td>74.3</td></tr><tr><td>4</td><td>1025272</td><td>74.2</td></tr></tbody></table>		Tower No.	ASRN	Overall Height (m)	3	1025273	74.3	4	1025272	74.2												
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Augmentation Parameters

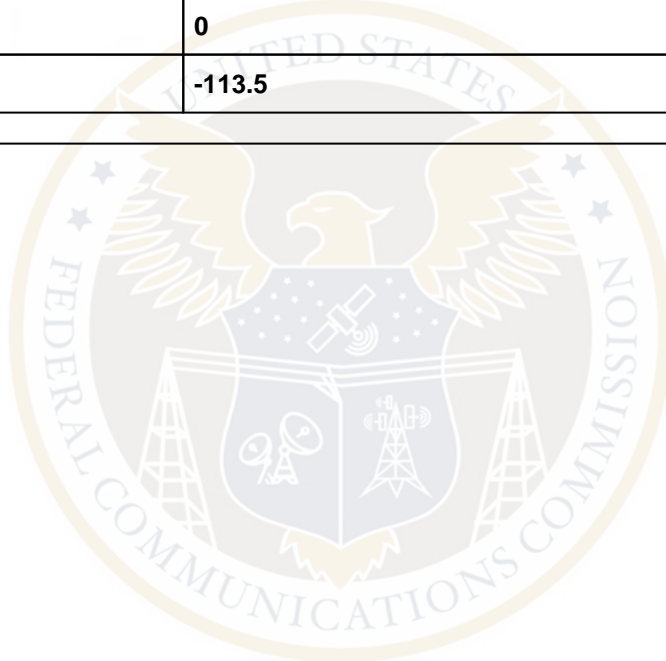
Aug. No.	Central Azimuth (Deg. T)	Span (Deg.)	Radiation at Central Azimuth (mV/m @ 1 km)
1	20.0	60.0	3235.00
2	338.4	60.0	3460.00

Monitoring Points

Radial (Deg. T)	Distance From Transmitter (km)	Maximum Field Strength (mV/m)
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Operating Parameters

Tower	Antenna monitor current sample or voltage sample ratio	Antenna monitor phase indication (degree)
3	1.000	0
4	0.827	-113.5



Antenna Mode: Nighttime

Antenna Type: Directional

Antenna Coordinates (NAD 83) Latitude 44° 52' 0.9" N Longitude 92° 54' 2.8" W	Nominal Power (kW) 4.000 Antenna Input Power (kW) 5.088 Current (Amperes) 10.09 Resistance (Ohms) 50
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Antenna Structure Registration Number(s)

Tower No.	ASRN	Overall Height (m)
1	1025275	74.2
2	1025274	74.2
3	1025273	74.3
4	1025272	74.2
5	1025271	74.2

Description of Nighttime Directional Antenna System

Theoretical RMS (mV/m/km)	Standard RMS (mV/m/km)	Augmented RMS (mV/m/km)	Q Factor
665.74	700.98		

Theoretical Parameters

Tower No.	Field Ratio	Phasing (deg.)	Spacing (deg.)	Orientation (deg.)	Tower Ref. Switch*	Height (deg.)
1	0.21	-59.7	0	0	0	90.0
2	0.71	153.5	90	338.4	0	90.0
3	1	0	180	338.4	0	90.0
4	0.76	-160.9	270	338.4	0	90.0
5	0.285	37.8	360	338.4	0	90.0

* Tower Reference Switch

0 = Spacing and orientation from reference tower

1 = Spacing and orientation from previous tower

Top-Loaded/Sectionalized Tower Parameters: (See 47 CFR 73.160)

Tower No.	Tower Type	A	B	C	D
1	Neither				
2	Neither				
3	Neither				
4	Neither				
5	Neither				

Monitoring Points

Radial (Deg. T)	Distance From Transmitter (km)	Maximum Field Strength (mV/m)
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Operating Parameters

Tower	Antenna monitor current sample or voltage sample ratio	Antenna monitor phase indication (degree)
1	0.233	-59.8
2	0.723	+153.7
3	1.0	0
4	0.735	-162.9
5	0.284	+30.5

Special operating conditions or restrictions

The permittee /licensee in coordination with other users of the site must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.

- The ground system consists of 120 equally spaced, buried, copper radials, each 72.5 meters in length except where intersecting radials are shortened and bonded to a transverse copper strap midway between adjacent towers, plus a copper ground screen 7.3 meters square, about the base of the tower.
- The station should be licensed with its authorized nominal power of 4000 watts with an input power 4320 watts, the difference between the common point input power (5088 watts) and the power returned to the dummy load (769 watts).

Subject to the provisions of the Communications Act of 1934, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this license, the licensee is hereby authorized to use and operate the radio transmitting apparatus herein described.

This license is issued on the licensee's representation that the statements contained in licensee's application are true and that the undertakings therein contained so far as they are consistent herewith, will be carried out in good faith. The licensee shall, during the term of this license, render such broadcasting service as will serve the public interest, convenience, or necessity to the full extent of the privileges herein conferred.

This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequency designated in the license beyond the term hereof, nor in any other manner than authorized herein. Neither the license nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This license is subject to the right of use or control by the Government of the United States conferred by Section 606 of the Communications Act of 1934.