

DME DME Assessment Results for Q176 path CIM_OTTTO

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Steven CTR Smith
Project File:	C:\Users\Steven CTR Smith\Documents\My Received Files\Q176 DME_08182020-RE.tgs
Output File:	C:\Users\Steven CTR Smith\Desktop\T & Q Routes\HNN\Q176\DME\Q176_20200819_1015 CDT\CIM_OTTTO\Q176 RNAV ROUTE CIM OTTTO 20200819_1015 CDT.pdf
Procedure Name:	Q176
Software: DmeDmePlugin:	6.1.0
Date/Time:	08/19/2020 10:15 CDT
Databases:	DTED0 Level 0 MAX

Failures

No Failures

Warnings

No Warnings

Notes For Flight Check

None

Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	Ground Speed (kts)	Turn Type	Leg Type
CIM	WP	N36° 29' 29.03", W104° 52' 19.20"	22000	VNAV	260	FLY_BY	TF
KENTO	WP	N36° 44' 19.10", W103° 05' 57.13"	22000	VNAV	260	FLY_BY	TF
LBL	WP	N37° 02' 39.82", W100° 58' 16.31"	18000	VNAV	260	FLY_BY	TF
ICT	WP	N37° 44' 42.92", W097° 35' 01.79"	18000	VNAV	260	FLY_BY	TF
BUM	WP	N38° 16' 19.49", W094° 29' 17.74"	18000	VNAV	260	FLY_BY	TF
STL	WP	N38° 51' 38.48", W090° 28' 56.52"	18000	VNAV	260	FLY_BY	TF
GBEES	WP	N38° 41' 54.72", W085° 10' 13.03"	18000	VNAV	260	FLY_BY	TF
BICKS	WP	N38° 38' 29.92", W084° 25' 20.82"	18000	VNAV	260	FLY_BY	TF
HNN	WP	N38° 45' 14.85", W082° 01' 34.20"	18000	VNAV	260	FLY_BY	TF
OTTTO	WP	N38° 51' 15.81", W078° 12' 20.01"	18000	VNAV	260	FLY_BY	TF

Flyability

Flight Type:	RNAV_ROUTE
Selected Airport:	
Climb Gradient:	None assigned
Speeds:	200 Ground Speed to 11000 FT
	240 Ground Speed to 18000 FT
	260 Ground Speed to 24000 FT
	340 Ground Speed above 24000 FT
Descent During a Turn:	Allowed
VNAV Mode:	Flight Plan

DME DME Assessment Results for Q176 path CIM_OTTTO

DME/DME	
RNP:	RNP 2
Flight Mode:	Manual
Line of Sight (DTED Level 0 Max):	Evaluated
Inertial Drift:	Enabled
Initial Drift:	0.558 NM
INS Drift Rate:	8.0 NM/Hour
Range Mode:	OSV
RNP Edges:	Evaluated
Min DME Range:	3.0 NM
DME Types:	DME, VOR-DME, VORTAC
DME Include Angles:	30 to 150
Critical DMEs:	Not Allowed
DoD Facilities:	Not included
Foreign Facilities:	Not included
High DMEs:	Included
Low DMEs:	Not included
Terminal DMEs:	Not included
Flight Check DMEs:	Not selected
Higher Altitudes:	Not Evaluated
Near Maximum Altitude:	Not Evaluated
Automatic ESVs:	Enabled
Disabled DMEs:	None

DME DME Assessment Results for Q176 path CIM_OTTTO

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	CSX	N38° 45' 09.88", W090° 21' 39.46"	0.0 E	130	H	IFPA	NO	Enabled	15.4 %	15.4 %
2	HVQ	N38° 20' 58.83", W081° 46' 11.69"	3.0 W	130	H	IFPA	NO	Enabled	15 %	15 %
3	LAA	N38° 11' 49.53", W102° 41' 15.12"	12.0 E	130	H	IFPA	NO	Enabled	13.7 %	13.7 %
4	PUB	N38° 17' 39.31", W104° 25' 46.01"	8.0 E	130	H	IFPA	NO	Enabled	3.5 %	3.5 %
5	ABQ	N35° 02' 37.66", W106° 48' 58.72"	13.0 E	130	H	IFPA	NO	Enabled	0.7 %	0.7 %
6	FLM	N38° 38' 57.99", W084° 18' 38.17"	4.0 W	130	H	IFPA	NO	Enabled	11.9 %	11.9 %
7	LBL	N37° 02' 39.82", W100° 58' 16.31"	11.0 E	130	H	IFPA	NO	Enabled	17 %	17 %
8	ZZV	N39° 56' 27.10", W081° 53' 33.36"	6.0 W	130	H	IFPA	NO	Enabled	13.5 %	13.5 %
9	RIC	N37° 30' 08.45", W077° 19' 12.99"	9.0 W	130	H	IFPA	NO	Enabled	0.8 %	0.8 %
10	FAM	N37° 40' 24.46", W090° 14' 02.61"	1.0 E	130	H	IFPA	NO	Enabled	11.2 %	11.2 %
11	FAK	N37° 31' 42.63", W077° 49' 41.59"	6.0 W	130	H	IFPA	NO	Enabled	3 %	3 %
12	VHP	N39° 48' 53.02", W086° 22' 03.00"	1.0 E	130	H	IFPA	NO	Enabled	11.6 %	11.6 %
13	FTI	N35° 39' 27.18", W105° 08' 08.15"	13.0 E	130	H	IFPA	NO	Enabled	5.1 %	5.1 %
14	LWB	N37° 51' 49.91", W080° 23' 30.54"	8.0 W	130	H	IFPA	NO	Enabled	10.8 %	10.8 %
15	PXV	N37° 55' 41.95", W087° 45' 44.57"	3.0 E	130	H	IFPA	NO	Enabled	12.9 %	12.9 %
16	TTH	N39° 29' 20.19", W087° 14' 56.45"	2.0 E	130	H	IFPA	NO	Enabled	14 %	14 %
17	GVE	N38° 00' 48.96", W078° 09' 10.90"	6.0 W	130	H	IFPA	NO	Enabled	6.4 %	6.4 %
18	BKW	N37° 46' 49.08", W081° 07' 24.44"	6.0 W	130	H	IFPA	NO	Enabled	12 %	12 %
19	HNN	N38° 45' 14.85", W082° 01' 34.20"	3.0 W	130	H	IFPA	NO	Enabled	14.8 %	14.8 %
20	CIM	N36° 29' 29.03", W104° 52' 19.20"	13.0 E	130	H	IFPA	NO	Enabled	6.6 %	6.6 %
21	ALS	N37° 20' 56.97", W105° 48' 55.92"	13.0 E	130	H	IFPA	NO	Enabled	0.7 %	0.7 %
22	BUM	N38° 16' 19.49", W094° 29' 17.74"	7.0 E	130	H	IFPA	NO	Enabled	15.2 %	15.2 %
23	UIN	N39° 50' 52.35", W091° 16' 44.13"	5.0 E	130	H	IFPA	NO	Enabled	11 %	11 %
24	ROD	N40° 17' 16.08", W084° 02' 35.15"	5.0 W	130	H	IFPA	NO	Enabled	0.3 %	0.3 %
25	ICT	N37° 44' 42.92", W097° 35' 01.79"	7.0 E	130	H	IFPA	NO	Enabled	15.2 %	15.2 %
26	EOS	N36° 50' 32.81", W094° 26' 08.52"	7.0 E	130	H	IFPA	NO	Enabled	7.5 %	7.5 %
27	SLN	N38° 55' 30.50", W097° 37' 16.80"	7.0 E	130	H	IFPA	NO	Enabled	10.4 %	10.4 %
28	MCI	N39° 17' 07.02", W094° 44' 13.42"	5.0 E	130	H	IFPA	NO	Enabled	11.8 %	11.8 %
29	GCK	N37° 55' 08.41", W100° 43' 30.03"	11.0 E	130	H	IFPA	NO	Enabled	13.8 %	13.8 %
30	SGF	N37° 21' 21.41", W093° 20' 02.55"	4.0 E	130	H	IFPA	NO	Enabled	11.4 %	11.4 %
31	APE	N40° 09' 03.83", W082° 35' 17.88"	6.0 W	130	H	IFPA	NO	Enabled	7.2 %	7.2 %
32	ACH	N35° 06' 42.14", W105° 02' 23.74"	12.0 E	130	H	IFPA	NO	Enabled	2.5 %	2.5 %
33	AXC	N39° 44' 15.08", W088° 51' 23.15"	3.0 E	130	H	IFPA	NO	Enabled	12.8 %	12.8 %

DME DME Assessment Results for Q176 path CIM_OTTTO

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
34	STL	N38° 51' 38.48", W090° 28' 56.52"	1.0 E	130	H	IFPA	NO	Enabled	15.2 %	15.2 %
35	MMB	N36° 20' 37.44", W099° 52' 48.44"	10.0 E	130	H	IFPA	NO	Enabled	12.5 %	12.6 %
36	GVR	N38° 45' 30.02", W085° 28' 14.32"	0.0 E	130	H	IFPA	NO	Enabled	15.1 %	15.1 %
37	ENL	N38° 25' 12.00", W089° 09' 32.39"	4.0 E	130	H	IFPA	NO	Enabled	15.1 %	15.1 %
38	TCC	N35° 10' 55.94", W103° 35' 54.89"	12.0 E	130	H	IFPA	NO	Enabled	12 %	12 %
39	OKU	N36° 10' 40.30", W097° 03' 13.87"	0.0 E	130	H	IFPA	NO	Enabled	0 %	0 %
40	PER	N36° 44' 47.51", W097° 09' 36.56"	6.0 E	130	H	IFPA	NO	Enabled	11.3 %	11.3 %
41	CSN	N38° 38' 28.33", W077° 51' 55.80"	6.0 W	130	H	IFPA	NO	Enabled	6.5 %	6.5 %
42	IIU	N38° 06' 12.47", W085° 34' 38.77"	1.0 E	130	H	IFPA	NO	Enabled	12.8 %	12.8 %
43	END	N36° 20' 41.88", W097° 55' 06.08"	5.0 E	130	H	IFPA	NO	Enabled	8.1 %	8.2 %
44	AIR	N40° 00' 59.78", W080° 49' 01.94"	7.0 W	130	H	IFPA	NO	Enabled	10 %	10 %
45	SPI	N39° 50' 23.04", W089° 40' 39.85"	1.0 W	130	H	IFPA	NO	Enabled	11.8 %	11.8 %
46	IRK	N40° 08' 06.06", W092° 35' 30.17"	6.0 E	130	H	IFPA	NO	Enabled	4.2 %	4.2 %
47	PNH	N35° 14' 06.22", W101° 41' 56.51"	8.0 E	130	H	IFPA	NO	Enabled	10.7 %	10.7 %
48	HNN	N38° 45' 14.85", W082° 01' 34.20"	0.0 E	130	H	User	NO	Enabled	14.8 %	14.8 %
49	EMI	N39° 29' 42.03", W076° 58' 42.86"	8.0 W	130	H	IFPA	NO	Enabled	2.6 %	2.6 %

DME DME Assessment Results for Q176 path CIM_OTTTO

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	ALS	FTI	ABQ	ACH	TCC	
8.5	CIM	ACH	FTI	TCC		
23.7	CIM	TCC	ACH	FTI	LAA	
31.5	CIM	TCC	FTI	LAA		
60.8	CIM	TCC	LAA	LBL	FTI	
64.7	CIM	TCC	LAA	LBL	PNH	
86.5	LAA	CIM	LBL	PNH		
87.7	LAA	CIM	TCC	LBL	PUB	PNH
88.8	LAA	LBL	TCC	PUB	PNH	
89.1	TCC	PNH	PUB	LAA		
90.8	LAA	LBL	TCC	PNH	PUB	
132.4	LAA	LBL	PNH	GCK	TCC	
154.5	LAA	LBL	PNH	GCK	MMB	
185.1	GCK	MMB	LAA	PNH		
196.6	LBL	GCK	MMB	PNH	LAA	
198.3	LBL	GCK	MMB	LAA		
198.5	LBL	GCK	MMB			
258.1	GCK	MMB	LBL	ICT		
265.2	GCK	MMB	LBL	END	ICT	
291.2	ICT	END	GCK	MMB	PER	
302.4	ICT	END	MMB	PER		
305.0	ICT	END	MMB	PER	SLN	
312.0	ICT	END	SLN	PER		
350.5	ICT	PER	SLN	END	OKU	
350.7	ICT	PER	SLN	END		
353.1	ICT	PER	SLN			
354.4	ICT	PER				
355.2						
361.3	ICT	PER				
361.6	ICT	PER	SLN			
364.3	ICT	PER	SLN	END		
380.6	ICT	SLN	PER			
408.2	ICT	SLN	PER	BUM		
433.5	SLN	PER	MCI	ICT	BUM	
439.0	MCI	SLN	BUM	ICT		
440.9	MCI	SLN	EOS	PER	BUM	ICT
442.5	MCI	SLN	EOS	BUM	ICT	
445.0	BUM	MCI	ICT			
447.7	EOS	MCI	BUM	ICT		
458.5	BUM	EOS	MCI			
478.6	BUM	MCI	EOS	SGF		
505.4	EOS	SGF	MCI			
510.1	EOS	SGF				
511.4	BUM	MCI	EOS	SGF		
539.9	BUM	SGF	MCI			
585.1	BUM	SGF				
590.2	BUM	IRK	SGF			
600.0	BUM	IRK	STL	SGF		
600.6	BUM	IRK	STL	SGF	UIN	
608.6	STL	IRK	CSX	SGF	UIN	
623.9	STL	IRK	CSX	UIN		
635.3	CSX	UIN	STL	IRK	FAM	
644.1	CSX	UIN	STL	FAM		
663.5	CSX	UIN	STL	FAM	SPI	
697.2	CSX	SPI	ENL	UIN	AXC	FAM
704.2	ENL	SPI	FAM	STL	UIN	AXC

DME DME Assessment Results for Q176 path CIM_OTTTO

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
740.7	STL	SPI	CSX	AXC	ENL	FAM
778.9	CSX	AXC	PXV	ENL	STL	SPI
800.5	PXV	ENL	AXC	TTH	SPI	CSX
805.7	AXC	ENL	PXV	TTH	SPI	
814.5	AXC	ENL	PXV	TTH		
815.7	AXC	ENL	PXV	TTH	VHP	
856.6	TTH	GVR	PXV	IIU	VHP	ENL
858.7	TTH	GVR	PXV	IIU	VHP	
912.4	VHP	GVR	IIU	FLM	TTH	
932.2	FLM	IIU	VHP	TTH		
937.9	FLM	IIU	TTH	GVR	VHP	
939.1	FLM	IIU	GVR	VHP		
963.6	GVR	IIU	FLM			
969.3	GVR	IIU				
1000.4						
1002.0	FLM	ROD	GVR	HNN	IIU	
1005.9	ZZV	GVR	HNN			
1012.5	ZZV	HVQ	GVR	HNN		
1021.2	ZZV	HVQ	GVR	FLM	HNN	
1035.5	HVQ	APE	HNN	FLM	ZZV	
1090.4	ZZV	HNN	APE	HVQ	BKW	
1094.3	BKW	AIR	HVQ	ZZV	APE	
1121.8	BKW	HNN	ZZV	HVQ	LWB	AIR
1174.3	LWB	HNN	HVQ	AIR	BKW	
1197.8	LWB	GVE	CSN	BKW	AIR	HVQ
1204.4	LWB	GVE	CSN	BKW	AIR	
1214.0	LWB	GVE	CSN	AIR		
1221.5	LWB	GVE	CSN			
1239.1	LWB	GVE	FAK	CSN		
1243.5	LWB	GVE	EMI	FAK	CSN	
1251.9	GVE	EMI	FAK	CSN		
1266.1	GVE	EMI	FAK	RIC	CSN	

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N37° 44' 00.32", W097° 38' 44.83"	N37° 45' 24.13", W097° 31' 18.27"	6.0577
2	N38° 39' 36.14", W084° 05' 35.10"	N38° 39' 42.73", W084° 03' 33.74"	1.5881

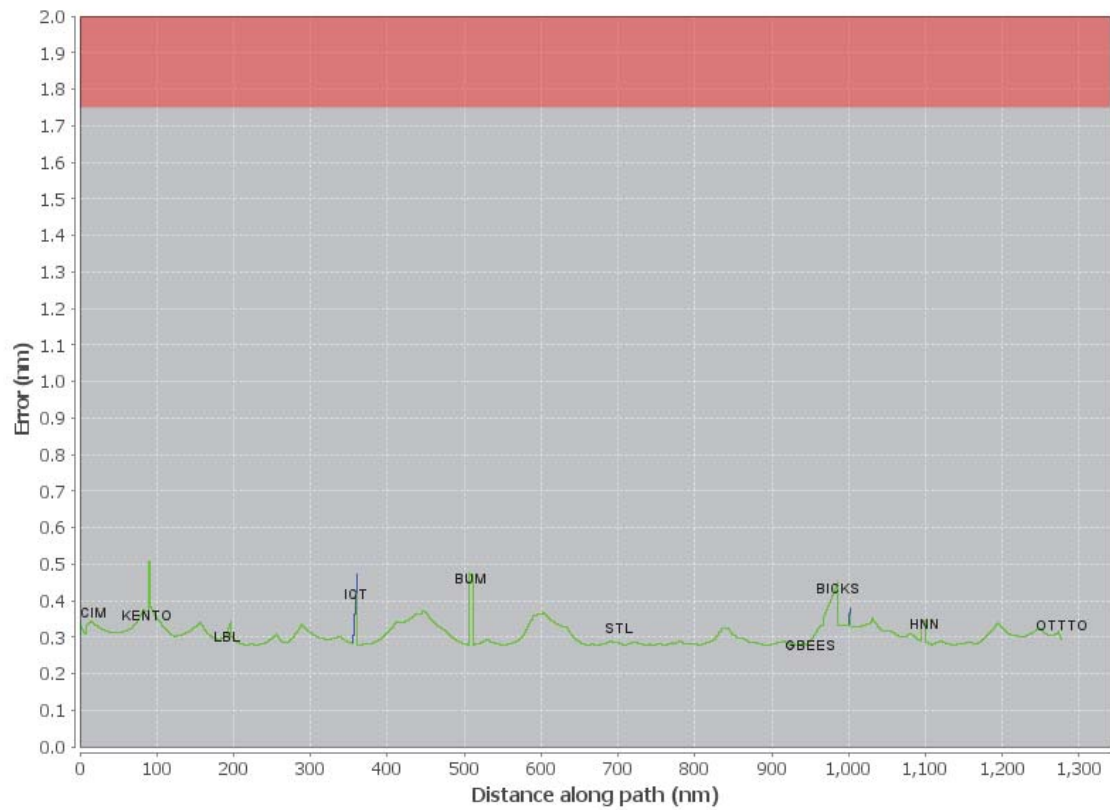
Available DMEs by Waypoints		
Waypoint Before	Waypoint After	DME List
CIM	KENTO	ABQ, TCC, ACH, CIM, LBL, ALS, FTI, PNH, LAA
KENTO	LBL	MMB, TCC, CIM, LBL, PNH, PUB, LAA, GCK
LBL	ICT	MMB, SLN, LBL, OKU, END, PNH, ICT, PER, LAA, GCK
ICT	BUM	MCI, SGF, SLN, EOS, END, ICT, BUM, PER
BUM	STL	MCI, ENL, SGF, IRK, FAM, EOS, CSX, STL, BUM, UIN, AXC, SPI
STL	GBEES	ENL, GVR, FLM, CSX, TTH, STL, AXC, SPI, PXV, FAM, IIU, UIN, VHP
GBEES	BICKS	GVR, IIU, FLM, VHP
BICKS	HNN	GVR, HVQ, IIU, FLM, ROD, APE, ZZV, HNN, AIR, BKW
HNN	OTTTO	EMI, FAK, HVQ, APE, LWB, ZZV, GVE, HNN, AIR, RIC, BKW, CSN

DME DME Assessment Results for Q176 path CIM_OTTTO

User Data Files								
#	File Name							
1	New Analysis.udt							
2	USER Defined ESVs.udt							
User DMEs								
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	TCC FAA698148-026 TCC [IFPA]	N35° 10' 55.94", W103° 35' 54.89"	12.0 E	130	4045.3	113.6	TCC FAA698148-026	
ESV:		Bearing [True]: 320.0° to 42.0° Bearing [Mag]: 308.0° to 30.0°				Arc Distance: Out to 142.0 NM Altitude: 18000.0 to 45000.0 ft		
2	PNH FAA970438-029 PNH [IFPA]	N35° 14' 06.22", W101° 41' 56.51"	8.0 E	130	3594.5	116.6	PNH FAA970438-029	
ESV:		Bearing [True]: 305.0° to 22.0° Bearing [Mag]: 297.0° to 14.0°				Arc Distance: Out to 145.0 NM Altitude: 18000.0 to 45000.0 ft		
3	ABQ FAA 704131-049 ABQ [IFPA]	N35° 02' 37.66", W106° 48' 58.72"	13.0 E	130	5748.5	113.2	ABQ FAA 704131-049	
ESV:		Bearing [True]: 45.0° to 51.0° Bearing [Mag]: 32.0° to 38.0°				Arc Distance: Out to 138.0 NM Altitude: 22000.0 to 45000.0 ft		
4	ALS FAA 870325-043 ALS [IFPA]	N37° 20' 56.97", W105° 48' 55.92"	13.0 E	130	7542.7	113.9	ALS FAA 870325-043	
ESV:		Bearing [True]: 130.0° to 140.0° Bearing [Mag]: 117.0° to 127.0°				Arc Distance: Out to 77.0 NM Altitude: 22000.0 to 45000.0 ft		
5	PUB FAA704244-034 PUB [IFPA]	N38° 17' 39.31", W104° 25' 46.01"	8.0 E	130	4757.2	116.7	PUB FAA704244-034	
ESV:		Bearing [True]: 126.0° to 170.0° Bearing [Mag]: 118.0° to 162.0°				Arc Distance: Out to 140.0 NM Altitude: 18000.0 to 45000.0 ft		
6	LAA FAA701383-020 LAA [IFPA]	N38° 11' 49.53", W102° 41' 15.12"	12.0 E	130	3944	116.9	LAA FAA701383-020	
ESV:		Bearing [True]: 125.0° to 217.0° Bearing [Mag]: 113.0° to 205.0°				Arc Distance: Out to 119.0 NM Altitude: 18000.0 to 45000.0 ft		
7	ZZV FAA162078-006 ZZV [IFPA]	N39° 56' 27.10", W081° 53' 33.36"	6.0 W	130	915.4	114.95	ZZV FAA162078-006	
ESV:		Bearing [True]: 218.0° to 235.0° Bearing [Mag]: 224.0° to 241.0°				Arc Distance: Out to 130.0 NM Altitude: 18000.0 to 45000.0 ft		

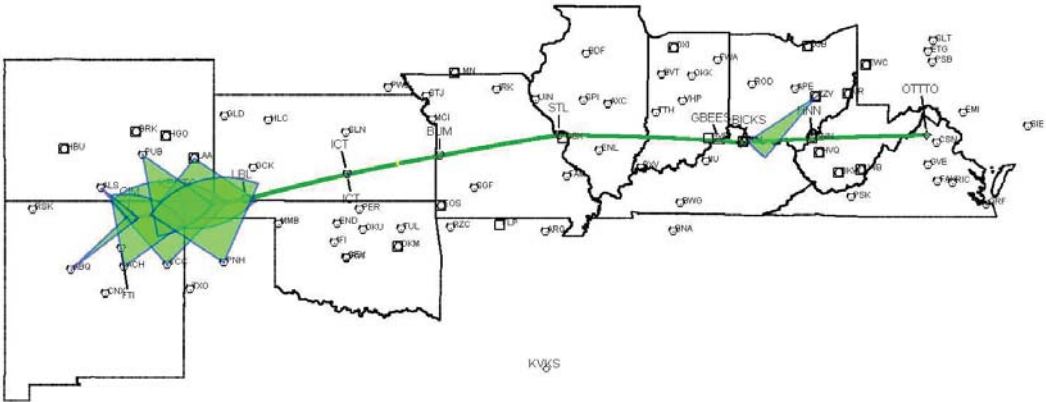
DME DME Assessment Results for Q176 path CIM_OTTTO

DME Error



DME DME Assessment Results for Q176 path CIM_OTTTO

Graphic Depiction 1



Graphic Depiction 2

