

RDS Compatibility – WPOC – Tabular Data

Engineer Thomas Walker **Observer** Alan Rosner **PAGE** 1 **OF** 1

IBOC Call Sign WPOC **IBOC Frequency** 93.1 **MHz**

IBOC Latitude 39.28694 **D.ddddd** **RDS Injection (Percent)** 1-2 **Percent**
IBOC Longitude 76.75444 **D.ddddd** **RDS Frequency (kHz)** 57 **kHz**

Location #1 - Select Location w/ Block Error Free Reception (w/ DAB Off)

Latitude	39-17-41.8	Longitude	76-47-08.6	Location Description	Patapsco State Park-Entrance parking lot			
Time (30 Min)		DAB Mode	RDS Block Errors	Time (30 Min)		DAB Mode	RDS Block Errors	Error % Increase
From	To			From	To			
10:54am	11:24am	Off	0%	10:18am	10:53am	On	0%	0

Location #2 - Select Location w/ 1% Block Errors (w/ DAB Off)

Latitude	39-22-06.0	Longitude	77-11-37.5	Location Description	Bill Moxley Rd & Old Fredrick Rd, Fred. Co. MD			
Time (3 Min)		DAB Mode	RDS Block Errors	Time (3 Min)		DAB Mode	RDS Block Errors	Error % Increase
From	To			From	To			
12:22pm	12:25pm	Off	1.20%	12:28pm	12:31pm	On	1.40%	0.2
12:32pm	12:35pm		2.60%	12:36pm	12:40pm		2.70%	0.1
12:40pm	12:43pm		1.40%	12:45pm	12:48pm		1.30%	-0.1

Location #3 - Select Location w/ 10% Block Errors (w/ DAB Off)

Latitude	39-23-02.4	Longitude	77-15-19.5	Location Description	Food Lion parking lot, New Market, MD			
Time (3 Min)		DAB Mode	RDS Block Errors	Time (3 Min)		DAB Mode	RDS Block Errors	Error % Increase
From	To			From	To			
1:13pm	1:16pm	Off	9.40%	1:18pm	1:21pm	On	9.10%	-0.3
1:23pm	1:26pm		10.80%	1:27pm	1:30pm		13.40%	2.6
1:31pm	1:34pm		12.40%	1:35pm	1:38pm		6.10%	-6.3

HSSC Compatibility – WD2XAB – Tabular Data

1	Measurements at Locations 2, 3 & 4 were made by alternating DAB ON and DAB OFF conditions lasted for approximately 10,000 blocks, yielding about 30,000 blocks of DAB ON and 30,000 blocks of DAB OFF. The BLER results for these locations are aggregated by D
2	Location 5 data were taken for one time DAB ON and DAB OFF conditions, each for the duration of about 100,000 blocks. Location 5 represents excellent signal conditions, demonstrating BLER floors for DAB ON versus DAB OFF
3	All measurements are made using the Sectra model TSE 760 encoder at 10 % FM injection on station W2DXAB.
4	The receiver is Sectra model DRM 3000
5	Uncorrected BLER represent performance before DARC horizontal and vertical corrections.
6	Corrected BLER is post-H&V corrections

NRSC HSSC Compatibility Measurements

Engineer	Greg Nease	Observer	Alan Rosner	PAGE	1 OF 1
IBOC Call Sign	WD2XAM	HSSC Generator (Make/Model)	Sectra/TSE760		
IBOC Frequency	93.5 MHz	HSSC Generator (Serial No.)	209719002		
		HSSC Receiver (Make/Model)	Sectra/DRM3000		
IBOC Latitude	39.19083 D.ddddd	HSSC Receiver (Serial No.)	340002548		
IBOC Longitude	76.81694 D.ddddd	HSSC Injection (Percent)	10	Percent	

Location #2 - Impaired Signal Conditions

Latitude	39.22742	Longitude	76.85703	Location Description	Parking Lot of Running Brook Center											
Test Segments																
Group	From	To	DAB Mode	Samples frames In Sync	Average BLER (%)	Uncorr	Corrected	From	To	DAB Mode	Samples frames In Sync	Average BLER (%)	Uncorr	Corrected	Error % Increase (Corr.)	
1	10:54:00	10:57:00	On	38	0.366	0.000		10:57:00	11:00:00	Off	39	0.254	0.000		0.000	
2	11:00:00	11:03:00		37	0.151	0.000		11:03:00	11:06:00		38	0.213	0.000		0.000	
3	11:06:00	11:09:00		38	0.234	0.000		11:09:00	11:12:00		39	0.387	0.000		0.000	
Total BLER Performance Weighted aggregate of interleaved msmt method DAB on-off-on-off-on-off			On	Total Blocks	Average BLER (%)	Uncorr	Corrected	Total BLER Performance Weighted aggregate of interleaved msmt method DAB on-off-on-off-on-off			Off	Total Blocks	Average BLER (%)	Uncorr	Corrected	Error % Increase (Corr.)
				30736	0.25	0						31552	0.29	0	0.000	

Location #3 - Impaired Signal Conditions

Latitude	39.17698	Longitude	76.84953	Location Description	Arbitron Parking Lot - SE Corner											
Test Segments																
Group	From	To	DAB Mode	Samples frames In Sync	Average BLER (%)	Uncorr	Corrected	From	To	DAB Mode	Samples frames In Sync	Average BLER (%)	Uncorr	Corrected	Error % Increase (Corr.)	
1	11:40:00	11:43:00	On	37	0.173	0.000		11:43:00	11:46:00	Off	37	0.127	0.000		0.000	
2	11:46:00	11:49:00		38	0.147	0.000		11:49:00	11:52:00		38	0.861	0.232		-0.232	
3	11:52:00	11:55:00		38	0.234	0.000		11:55:00	11:58:00		38	0.261	0.000		0.000	
Total BLER Performance Weighted aggregate of interleaved msmt method DAB on-off-on-off-on-off			On	Total Blocks	Average BLER (%)	Uncorr	Corrected	Total BLER Performance Weighted aggregate of interleaved msmt method DAB on-off-on-off-on-off			Off	Total Blocks	Average BLER (%)	Uncorr	Corrected	Error % Increase (Corr.)
				30736	0.18	0						30736	0.42	0.08	-0.080	

Location #4 - Impaired Signal Conditions

Latitude	39.16965	Longitude	76.78502	Location Description	Burlington Coat Factory Entrance											
Test Segments																
Group	From	To	DAB Mode	Samples frames In Sync	Average BLER (%)	Uncorr	Corrected	From	To	DAB Mode	Samples frames In Sync	Average BLER (%)	Uncorr	Corrected	Error % Increase (Corr.)	
1	12:30:00	12:33:00	On	39	10.849	0.046		12:33:00	12:36:00	Off	39	9.856	0.351		-0.305	
2	12:36:00	12:39:00		39	7.744	0.021		12:39:00	12:42:00		37	6.154	0.000		0.021	
3	12:42:00	12:45:00		38	8.208	0.097		12:45:00	12:48:00		39	7.477	0.077		0.020	
Total BLER Performance Weighted aggregate of interleaved msmt method DAB on-off-on-off-on-off			On	Total Blocks	Average BLER (%)	Uncorr	Corrected	Total BLER Performance Weighted aggregate of interleaved msmt method DAB on-off-on-off-on-off			Off	Total Blocks	Average BLER (%)	Uncorr	Corrected	Error % Increase (Corr.)
				31552	8.94	0.054						31280	7.86	0.145	-0.091	

Location #5 - Excellent Signal Conditions

Latitude	39.19318	Longitude	76.81527	Location Description	Wellesley Hotel - South side parking lot											
Test Segments																
Group	Length (Min)	DAB Mode	Samples frames In Sync	Average BLER (%)	Uncorr	Corrected	Length (Min)	DAB Mode	Samples frames In Sync	Average BLER (%)	Uncorr	Corrected	Error % Increase			
1	30	On	363	0.074	0.000		30	Off	366	0.000	0.000		0.000			
Total BLER Performance Weighted aggregate of interleaved msmt method DAB on-off-on-off-on-off			On	Total Blocks	Average BLER (%)	Uncorr	Corrected		Total BLER Performance Weighted aggregate of interleaved msmt method DAB on-off-on-off-on-off			Off	Total Blocks	Average BLER (%)	Uncorr	Corrected
				98736	0.07	0						99552	0	0	0.000	