

Appendix F

Report 10-5050R3

Attended Vibration Measurements

Cover Page

V1- Attended Vibration Measurements, 27 Manorhouse Bvd, 18 January 2007

Channel	Time of Day	Train Type	Cars	Passby Time	Train Speed	Direction	1/3 Octave Frequency Band (Hz) - Maximum Hold 1-Second RMS Vibration Level (0.05 ref 1E-8 m/s)																																	
							2.5	3	4	5	6.3	8	10	12.5	16	20	25	31.5	40	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	Overall		
1	09:58:11	Suburban	6	5:32	81	Up	50	45	46	45	46	45	45	46	51	46	51	48	49	60	50	50	49	48	55	50	53	56	52	53	53	54	54	55	56	57	59	68		
2	10:28:37	Suburban	8	7:30	79	Up	60	61	58	60	60	60	61	60	58	60	61	59	61	60	60	61	60	60	61	62	63	65	64	65	66	66	67	68	69	70	71	72	80	
1	10:45:25	Tangara	8	6:06	95	Down	56	61	60	60	62	65	71	77	75	81	86	88	90	100	101	104	100	95	86	79	73	67	68	66	66	66	67	67	68	69	70	71	72	108
1	10:58:20	Suburban	8	7:07	81	Up	60	59	59	65	67	75	83	76	84	91	101	103	107	102	95	88	81	76	68	67	67	66	66	67	67	68	69	69	70	71	72	110		
1	11:28:30	Suburban	6	5:53	78	Up	62	59	60	61	64	80	85	78	83	93	102	103	106	107	102	91	85	82	70	67	67	66	66	67	67	68	69	72	71	72	73	112		
1	11:31:21	Tangara	8	7:19	80	Down	59	67	61	60	69	75	83	76	82	89	100	101	105	100	96	88	80	74	67	67	66	66	66	66	67	67	68	69	69	70	71	72	108	
1	11:46:17	Tangara	8	6:69	86	Down	67	63	61	60	65	73	82	77	81	89	99	101	103	90	94	87	79	72	66	68	66	66	66	67	67	68	68	69	70	71	72	107		
1	11:59:32	Tangara	8	7:19	80	Up	61	62	62	62	70	77	87	77	85	94	105	107	110	105	97	92	84	80	72	69	69	66	66	66	67	67	68	69	70	71	72	113		
1	12:16:44	Tangara	8	6:25	92	Down	59	62	61	62	66	78	83	80	82	95	104	105	107	106	98	88	83	80	68	66	67	65	68	68	67	67	68	69	71	72	112			
1	12:28:49	Tangara	8	7:87	73	Down	64	61	63	63	83	91	103	91	98	104	115	115	120	119	114	104	98	92	82	78	73	68	67	67	68	68	69	70	71	72	125			
1	12:50:09	Suburban	6	4:62	94	Down	48	48	50	49	64	81	83	79	81	84	102	104	105	107	99	88	83	78	66	64	59	56	53	53	55	56	54	55	56	57	58	111		
1	13:01:22	Tangara	8	8:12	71	Up	49	48	48	49	59	77	89	77	84	93	105	107	109	104	99	92	84	82	71	68	61	54	53	53	54	54	55	56	57	58	113			
1	13:18:46	Suburban	6	5:41	80	Up	47	46	50	48	55	76	79	83	86	93	103	102	103	104	97	87	80	76	65	63	65	65	63	55	55	55	55	55	56	57	59	110		
1	13:23:11	Suburban	6	5:31	81	Down	46	46	47	53	65	78	86	78	86	92	101	103	106	101	96	89	84	74	63	63	63	58	54	53	53	56	54	55	55	57	58	110		
1	13:28:27	Tangara	8	7:65	75	Up	44	46	45	47	58	72	79	79	81	88	100	102	105	101	95	87	79	73	64	65	63	62	57	54	55	55	56	57	58	105				
1	13:54:56	Suburban	8	7:13	81	Down	48	47	46	49	66	72	83	79	82	92	100	102	103	101	95	88	79	75	65	65	65	62	55	55	55	55	57	54	55	56	57	58	108	
1	14:19:33	Suburban	8	6:82	84	Up	58	48	48	49	67	77	87	74	82	87	103	103	106	103	94	89	82	73	63	62	58	54	53	54	55	54	54	55	56	57	58	110		
1	14:23:41	Suburban	8	7:53	76	Down	47	46	49	48	65	73	84	79	86	94	102	101	102	100	93	88	79	74	65	65	62	59	54	54	56	56	54	55	55	56	58	108		
1	14:53:57	Suburban	6	6:00	72	Up	47	51	47	49	66	75	82	79	84	94	102	102	105	101	96	88	80	73	65	65	63	58	54	56	55	54	55	55	56	57	59	109		
1	14:56:50	Suburban	8	6:69	86	Down	47	48	47	48	64	74	83	81	84	90	102	100	102	100	93	87	81	74	65	64	60	57	54	54	55	54	54	55	56	57	58	108		
Average							54	53	53	55	65	74	81	76	81	88	98	105	105	99	93	86	80	74	67	65	63	61	59	60	61	60	61	62	63	63	65	107		
95th Percentile							84	84	82	82	83	79	88	90	83	87	95	105	107	109	108	102	93	85	83	72	70	67	66	67	67	68	68	70	71	71	73	114		
Maximum							85	87	83	83	85	83	91	103	91	98	104	116	115	120	119	114	104	98	92	82	78	73	68	67	67	67	69	70	72	71	72	73	125	

Time of Day			Train Type	Passby Time	Train Speed	Direction	1/3 Octave Frequency Band (Hz) - Maximum Hold 1-Second RMS Variation Level (dB ref 1E-9 m/s)																																Overall		
Channel	Time of Day	Train Type	Cars	Passby Time	Train Speed	Direction	2.5	3	4	5	6.3	8	10	12.5	16	20	25	31.5	40	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	Overall			
2	09:58:11	Suburban	6	5:32	81	Up	49	51	46	44	45	45	46	43	45	46	49	47	55	73	58	47	54	49	62	53	51	57	53	54	57	54	54	55	57	59	99	74	72	105	
2	10:28:37	Suburban	8	7:30	79	Up	63	61	60	60	61	61	60	62	60	60	60	60	71	61	61	61	61	62	63	65	64	66	67	68	68	68	68	69	70	72	72	72	81		
2	10:45:25	Tangara	8	6:06	95	Down	59	61	60	60	59	61	68	75	83	86	97	98	99	95	91	76	71	68	67	64	66	68	66	66	66	67	67	68	70	72	73	104			
2	10:58:20	Suburban	8	7:07	81	Up	61	58	62	59	61	64	71	75	86	89	98	99	100	98	92	80	73	69	65	64	66	66	66	66	66	68	67	68	69	69	70	71	72	105	
2	11:28:30	Suburban	6	5:53	78	Up	59	59	60	61	59	77	76	79	84	92	94	102	100	102	98	82	78	74	68	68	68	68	68	68	68	69	70	71	71	71	72	104			
2	11:31:21	Tangara	8	7:19	80	Down	62	61	61	61	62	63	72	76	86	89	95	97	100	96	92	80	71	68	65	66	65	65	66	66	67	71	67	68	69	70	72	73	104		
2	11:46:17	Tangara	8	6:69	86	Down	68	69	60	59	61	64	73	75	84	88	97	98	95	91	78	71	67	65	64	66	66	66	66	66	66	67	67	68	69	70	71	72	104		
2	11:59:32	Tangara	8	7:19	80	Up	60	61	60	60	68	78	79	83	93	93	99	103	100	93	83	72	77	71	68	67	65	67	65	67	67	68	69	69	70	72	73	107			
2	12:28:49	Tangara	8	7:87	73	Down	65	62	60	59	69	79	91	89	99	103	111	112	115	115	110	97	92	85	80	70	67	73	68	68	68	68	69	71	70	71	72	120			
2	12:50:09	Suburban	6	4:62	94	Down	47	51	45	45	51	67	74	81	87	95	94	102	100	100	94	88	78	72	65	65	64	61	53	57	53	56	55	56	57	58	105				
2	13:01:22	Tangara	8	8:12	71	Up	45	46	45	45	47	57	65	77	77	85	90	99	106	102	97	84	87	79	74	67	59	56	58	53	53	57	56	55	56	57	59	108			
2	13:18:46	Suburban	6	5:41	80	Up	45	46	45	48	48	63	70	81	88	92	96	101	97	97	91	79	71	66	64	56	56	56	59	54	56	60	55	55	57	56	57	59	105		
2	13:23:11	Suburban	6	5:31	81	Down	45	45	45	48	47	54	65	74	77	86	89	97	101	96	90	79	70	66	63	56	56	55	58	53	54	56	55	55	56	56	58	105			
2	13:50:27	Tangara	8	7:65	75	Up	48	47	46	47	54	62	72	78	84	87	97	98	99	96	91	79	70	66	63	56	56	55	58	53	53	59	54	54	56	56	58	104			
2	13:54:56	Suburban	8	7:13	81	Down	56	46	47	47	51	61	74	77	84	89	96	99	97	98	91	78	72	66	61	56	54	52	52	52	53	55	54	55	55	56	57	59	104		
2	14:19:33	Suburban	8	6:54	84	Up	62	48	48	46	62	74	76	83	85	96	99	102	106	102	94	86	79	70	62	59	54	54	54	56	56	56	56	57	57	58	59	106			
2	14:23:41	Suburban	8	7:53	76	Down	47	47	46	47	53	62	76	78																											
2	14:53:57	Suburban	8	6:00	72	Up	45	46	46	46	49	56	64	71	78	85	88	89	97	99	100	97	90	80	72	67	64	56	56	59	53	55	61	56	55	55	56	58	105		
2	14:56:59	Suburban	8	6:09	86	Down	48	48	46	46	48	52	63	74	80	86	89	97	99	96	94	88	78	73	67	64	54	54	54	61	54	55	52	56	55	56	59	59	103		
Average							61	55	54	53	53	56	64	73	76	82	86	93	96	100	96	89	79	73	69	66	60	59	62	59	60	60	63	61	61	62	63	64	85	103	
95th Percentile							55	54	53	53	53	53	62	72	82	89	93	93	96	100	96	89	80	72	67	63	59	56	58	60	60	62	62	62	62	62	63	64	72	77	109
Maximum							68	69	62	62	62	69	79	91	89	99	103	111	112	115	115	110	97	92	85	80	70	67	73	68	68	71	68	70	71	72	72	73	73	120	

V3- Attended Vibration Measurements, Adjacent to 27 Rectory Avenue, 6 February 2007

Channel	Time of Day	Train Type	Cars	Passby Time	Train Speed	Direction	1/3 Octave Frequency Band (Hz) - Maximum Hold 1-Second RMS Vibration Level (0.01-10 Hz)																																
							2.5	3	4	5	6.3	8	10	12.5	16	20	25	31.5	40	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	Overall	
1	13:23:15	Suburban	8	5.90	73	Down	45	47	46	48	50	53	59	66	76	87	89	91	94	88	84	78	75	69	65	59	59	57	55	53	54	54	54	56	56	57	58	98	
1	13:51:15	Tangara	8	5.66	102	Up	47	48	47	49	49	65	65	70	79	89	92	94	91	95	94	89	82	84	76	71	64	65	60	53	53	54	54	54	55	56	58	101	
1	13:56:16	Suburban	8	6:22	93	Down	49	47	49	47	48	57	62	71	84	94	90	91	93	90	85	80	73	69	63	64	60	54	53	54	54	54	55	56	57	58	99		
1	14:22:11	Suburban	8	7:31	79	Up	45	43	46	45	49	51	59	65	78	89	89	92	91	87	84	79	77	73	70	64	63	59	53	53	54	54	54	56	57	57	58	97	
1	14:26:24	Suburban	8	8:09	86	Down	48	46	46	46	46	46	56	68	69	83	83	90	90	95	86	80	72	70	63	63	60	53	53	53	54	54	55	56	57	58	99		
1	14:53:43	Suburban	6	5.94	73	Up	44	45	48	49	48	50	57	62	76	84	88	91	89	87	84	78	76	68	65	59	58	58	53	53	53	54	54	55	56	57	58	96	
1	14:58:01	Tangara	8	5:53	104	Down	47	46	48	47	50	62	65	76	76	90	92	88	92	94	89	81	79	72	68	62	62	57	53	53	56	54	54	58	56	57	58	99	
1	15:11:52	Tangara	8	5:07	96	Down	50	48	50	51	46	63	65	73	79	90	95	91	93	96	89	81	73	69	63	63	59	53	53	54	54	54	55	56	57	58	101		
1	15:23:26	Tangara	8	6:78	85	Up	46	43	45	45	45	49	64	64	73	78	89	93	93	95	89	82	82	77	70	63	63	58	54	53	54	54	54	55	56	57	60	100	
1	15:40:14	Tangara	8	5:75	100	Down	45	47	45	45	45	49	53	62	66	78	86	89	94	91	87	85	79	73	71	63	62	59	54	55	54	54	55	55	56	57	58	98	
1	15:53:35	Suburban	8	7:55	75	Up	45	48	47	46	48	54	60	72	83	92	91	92	92	90	85	79	77	69	67	59	61	58	54	53	53	53	53	54	54	55	57	58	99
1	16:13:34	Suburban	8	5:10	113	Down	52	45	43	43	53	60	61	68	76	91	91	91	93	85	85	80	79	72	69	63	61	58	53	53	53	53	55	54	55	56	57	58	98
1	16:24:11	Tangara	8	6:63	87	Up	46	44	45	43	48	68	71	75	78	90	93	91	94	95	83	85	84	79	74	67	64	58	54	53	53	54	54	55	55	57	57	58	101
1	16:27:24	Tangara	8	6:75	100	Down	43	47	45	44	51	64	62	71	76	91	91	91	96	92	85	83	82	75	69	62	61	58	54	53	53	53	54	54	55	56	57	58	100
1	16:52:21	Tangara	8	6:15	94	Up	47	45	44	46	46	57	63	70	84	92	91	92	85	88	85	80	78	71	68	60	61	58	53	53	53	54	54	55	56	57	58	100	
1	17:05:57	Suburban	8	6:59	87	Down	48	47	46	48	46	55	58	69	83	92	93	93	93	91	85	79	78	70	66	59	62	59	54	53	53	54	54	54	57	56	57	58	100
1	17:19:36	Suburban	8	4:00	94	Up	46	46	47	48	49	61	64	74	78	90	93	93	94	96	88	82	85	78	70	63	64	59	54	55	55	54	55	55	56	57	58	101	
1	17:35:09	Tangara	8	5:94	99	Down	56	53	45	51	56	59	60	64	79	91	91	91	93	94	93	88	85	77	71	63	62	58	54	55	53	54	54	55	56	57	58	100	
1	17:49:15	Tangara	8	7:13	81	Up	48	47	45	49	51	59	62	70	79	93	91	93	97	92	90	84	84	77	73	66	64	59	54	53	53	54	54	55	56	57	58	101	
1	18:07:57	Tangara	8	6:85	84	Down	46	43	45	45	49	64	64	73	78	89	93	90	93	95	89	82	82	77	70	63	63	58	54	53	54	54	54	55	56	57	60	100	
Average							90	47	46	46	47	49	59	63	76	79	90	91	92	93	91	82	81	80	74	69	62	62	58	54	53	54	54	54	56	56	57	58	99
85th Percentile							52	49	49	51	53	65	69	75	84	93	94	94	96	96	90	85	85	78	73	66	64	60	54	55	55	54	55	56	57	57	60	101	
Maximum							56	53	50	51	56	68	71	76	84	94	95	94	97	96	93	85	85	79	74	67	65	60	55	56	56	56	56	56	58	57	58	60	101

Time of Day		Train Type	Passby	Train Speed	Direction	1/3 Octave Frequency Band (Hz) - Maximum Hold 1-Second RMS Vibration Level (dB re 1E-9 m/s)																																		
Channel	Time	Cars				2.5	3	4	5	6.3	8	10	12.5	16	20	25	31.5	40	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	Overall			
2	13:23:15	Suburban	6	5:50	73	Down	44	44	47	44	44	50	52	59	61	68	80	88	93	85	78	74	64	65	57	56	54	52	52	53	53	54	54	55	56	57	58	95		
2	13:51:15	Tangara	8	5:66	102	Up	45	46	46	51	47	48	62	62	69	68	88	88	88	89	94	96	85	81	82	71	65	62	59	53	52	52	53	53	54	55	56	57	58	97
2	13:56:16	Suburban	8	6:22	93	Down	45	44	47	48	47	48	57	59	67	70	87	89	90	93	88	80	76	77	68	62	60	58	53	52	53	53	54	55	56	57	58	97		
2	14:22:11	Suburban	8	7:31	79	Up	78	74	74	74	74	72	70	69	70	71	78	84	91	91	87	81	77	77	68	68	60	58	62	57	58	60	55	55	57	57	58	99		
2	14:26:24	Suburban	8	8:09	86	Down	49	48	45	47	48	50	56	62	68	71	85	85	90	94	86	81	77	76	67	62	60	58	53	52	53	53	54	54	55	56	57	58	97	
2	14:53:43	Suburban	6	5:94	73	Up	48	45	49	46	48	48	53	57	58	65	78	83	91	91	85	79	74	73	64	57	55	53	52	52	53	53	54	54	55	56	58	95		
2	14:58:01	Tangara	8	5:53	104	Down	44	50	45	45	45	47	60	60	66	67	82	89	91	92	97	86	78	75	68	61	58	57	54	51	53	53	54	54	55	56	57	58	100	
2	15:11:52	Tangara	8	5:97	96	Down	46	42	45	48	46	60	61	66	68	83	90	91	92	96	85	78	76	68	61	60	58	52	52	52	53	53	54	54	55	56	57	58	99	
2	15:23:26	Tangara	8	6:78	85	Up	50	45	48	48	48	62	63	64	70	83	89	91	92	96	86	81	79	71	62	59	56	53	52	53	53	54	54	55	56	57	58	100		
2	15:40:14	Tangara	8	5:75	100	Down	47	45	45	45	45	51	56	62	67	72	83	89	91	92	97	86	78	75	67	62	58	57	53	53	53	53	53	54	55	56	57	59	97	
2	15:53:35	Suburban	8	7:55	75	Up	44	46	46	46	47	55	60	66	71	84	88	91	93	92	80	74	72	66	60	56	55	53	52	53	53	54	54	55	56	57	58	98		
2	16:13:34	Suburban	8	5:10	113	Down	55	55	45	50	52	60	60	61	66	85	86	89	97	89	80	77	77	69	61	60	56	53	52	53	53	55	54	55	56	57	58	99		
2	16:24:11	Tangara	8	6:08	87	Up	46	46	48	48	48	50	63	68	74	84	88	88	88	87	84	83	74	68	63	60	56	53	53	53	54	54	55	56	57	58	100			
2	16:37:24	Tangara	8	5:75	100	Down	53	45	45	47	48	61	62	64	65	86	86	87	98	92	82	79	82	70	61	59	56	54	53	53	53	54	54	55	56	57	58	100		
2	16:52:21	Tangara	8	6:15	94	Up	83	81	78	85	80	83	79	75	75	77	74	75	82	95	78	71	77	75	92	70	74	77	74	76	75	69	65	72	70	63	61	68		
2	17:05:57	Suburban	8	6:59	87	Down	47	49	50	49	48	58	60	64	67	84	86	89	95	91	79	75	74	64	59	56	56	53	52	53	53	54	54	55	56	57	58	99		
2	17:19:36	Suburban	8	4:00	94	Up	67	61	61	60	60	61	62	59	64	65	81	86	91	92	97	85	77	79	71	55	65	71	68	69	70	71	63	61	68	65	61	60	99	
2	17:35:09	Tangara	8	5:84	99	Down	60	56	45	50	53	58	63	60	67	82	85	95	90	94	92	84	78	85	72	63	60	58	53	53	54	53	54	54	55	56	57	58	100	
2	17:40:15	Tangara	8	6:13	101	Up	74	65	61	61	61	62	63	64	65	82	81	83	89	91	92	96	85	78	71	61	58	55	53	52	53	53	54	54	55	56	57	58	99	
2	17:50:57	Tangara	8	6:55	84	Down	50	45	48	48	48	62	63	64	70	83	89	91	92	96	86	81	79	71	62	59	58	53	52	53	53	54	54	55	56	57	58	100		
Average						90	52	91	51	71	51	52	60	62	65	68	83	86	89	93	92	82	77	78	69	66	60	56	55	55	56	57	58	58	58	58	98			
95th Percentile						75	75	74	74	74	73	71	75	70	71	71	78	85	89	91	97	87	80	83	73	74	66	60	56	54	54	55	56	57	58	59	64	60	100	
99th Percentile						113	75	78	78	78	83	89	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	100

Channel	Time of Day	Train	Passby	Train Speed	Direction	1/3 Octave Frequency Band (Hz) - Maximum Hold 1-Second RMS Vibration Level (dB re 1 f 1 ms)																																
						2.5	3	4	5	6	8	10	12.5	16	20	25	31.5	40	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	Overall	
1	13:47:11	Suburban	Cars	10.00	Speed	71	67	63	62	55	56	55	57	67	69	82	95	86	89	87	85	77	72	71	64	240	250	57	51	46	44	42	42	43	44	45	102	
1	13:57:11	Tangara	8	7:50	Down	76	69	65	59	58	56	56	55	65	74	85	97	97	93	92	93	86	78	76	69	61	52	47	45	50	42	41	42	43	44	102		
1	14:06:07	Tangara	8	7:50	Up	75	75	61	67	56	60	56	55	68	74	84	98	100	95	93	93	87	77	76	69	63	53	48	46	48	41	41	42	43	44	102		
1	14:30:14	Suburban	8	8:00	Down	72	62	52	58	55	56	55	55	62	68	78	91	92	91	92	83	73	71	65	58	47	41	42	43	43	41	41	42	43	44	101		
1	14:50:07	Suburban	8	8:50	Up	79	72	75	60	63	63	57	58	66	75	83	95	96	88	88	91	73	71	75	63	57	51	46	47	47	41	41	42	44	44	101		
1	15:00:23	Tangara	6	7:50	Down	77	78	71	73	58	63	62	52	64	71	82	96	95	88	91	95	81	75	70	65	58	51	45	46	49	40	42	43	43	44	101		
1	15:13:27	Tangara	6	7:50	Down	77	69	60	66	58	58	58	58	62	69	78	92	95	92	91	91	84	73	70	65	58	51	45	46	49	40	42	43	43	44	101		
1	15:19:36	Tangara	8	7:50	Up	75	70	73	75	75	65	68	62	61	75	83	92	94	91	91	94	86	78	77	69	62	54	47	44	46	41	42	42	43	44	100		
1	15:46:07	Tangara	8	9:50	Down	65	67	65	59	56	56	53	53	65	75	83	94	97	91	89	86	81	73	70	66	60	54	46	45	50	41	42	43	43	44	100		
1	15:51:04	Suburban	8	9:00	Up	71	68	66	59	55	56	52	63	63	69	79	91	90	85	84	81	82	70	70	69	60	52	47	44	43	41	41	42	43	45	95		
1	16:04:43	Suburban	8	9:00	Down	70	63	58	59	55	56	53	58	64	73	84	95	97	95	86	82	75	73	69	64	57	51	45	46	47	41	41	42	43	45	95		
1	16:19:34	Tangara	8	10:00	Speed	75	75	68	62	59	60	51	58	60	74	84	94	90	87	86	85	78	71	70	70	64	59	51	45	43	44	40	41	42	42	43	45	96
1	16:40:18	Tangara	8	8:50	Down	80	72	71	60	60	60	56	56	65	65	76	84	94	97	91	91	88	84	74	73	66	68	69	64	50	52	42	42	45	43	44	100	
1	16:47:34	Tangara	8	7:50	Down	69	73	64	60	55	53	53	56	66	74	83	93	97	91	91	88	83	72															

Channel	Time of Day	Train Type	Cars	Passby Time	Train Speed	Direction	1/3 Octave Frequency Band (Hz) - Maximum Hold 1-Second RMS Vibration Level (dB re 1E-9 m/s)																																	
							2.5	3	4	5	6.3	8	10	12.5	16	20	25	31.5	40	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	Overall		
1	13:47:11	Suburban	8	10:00	58	Up	89	79	80	78	79	75	70	71	68	67	71	78	88	89	85	87	83	79	71	65	56	48	48	43	39	39	42	41	42	44	45	96		
2	13:47:11	Tangara	8	10:00	58	Down	78	78	78	78	78	75	70	69	70	74	77	82	86	89	81	81	80	94	94	95	92	87	82	72	47	43	39	42	43	45	96			
1	14:16:07	Tangara	8	10:00	58	Down	61	58	59	59	54	57	55	57	66	77	66	77	81	80	94	94	95	92	87	77	71	62	53	48	46	41	39	39	41	43	42	43	45	101
1	14:30:14	Suburban	8	10:00	58	Down	73	75	75	76	72	72	71	65	65	64	74	78	81	85	84	84	82	79	73	67	52	49	47	44	40	41	39	42	42	42	44	46	92	
1	14:50:27	Tangara	6	8:50	62	Up	63	63	63	63	63	62	59	58	54	54	74	82	84	85	84	82	74	70	64	54	42	38	35	43	41	41	40	43	41	44	46	95		
2	15:00:23	Tangara	8	7:00	82	Down	81	81	80	83	78	79	77	74	73	68	71	78	85	89	83	90	88	82	71	63	58	47	44	43	40	40	40	41	41	42	43	45	96	
2	15:13:27	Tangara	8	8:50	68	Down	90	89	85	83	83	80	76	74	73	76	78	78	86	89	87	89	86	81	73	65	57	48	44	42	40	40	41	41	42	45	46	97		
1	15:16:36	Tangara	8	8:50	75	Down	71	70	70	78	79	75	74	70	68	66	69	74	79	86	89	81	83	77	72	63	41	43	38	38	39	40	41	41	42	45	97			
2	15:46:07	Tangara	8	7:50	77	Down	73	78	71	71	71	68	66	69	69	74	79	86	90	88	88	86	81	73	66	59	49	45	43	39	39	39	41	41	42	43	45	95		
2	15:51:04	Suburban	8	9:00	64	Up	61	53	50	51	52	54	51	62	60	69	78	83	83	83	83	81	78	71	68	56	48	45	44	38	39	40	40	41	43	43	45	90		
2	16:14:43	Suburban	7	9:00	62	Down	78	74	79	73	74	74	71	71	67	69	76	79	83	89	87	86	84	81	73	65	57	48	44	40	39	40	41	43	42	43	45	94		
2	16:19:34	Tangara	8	9:00	68	Up	68	68	68	68	68	68	68	68	68	68	73	74	81	86	87	86	81	74	66	58	47	44	40	40	40	41	41	42	43	44	92			
2	16:40:18	Tangara	8	8:50	68	Down	60	61	62	62	62	59	57	58	57	68	76	81	86	89	87	90	87	82	73	68	62	50	44	43	39	40	40	40	45	43	43	44	96	
2	16:47:34	Tangara	8	7:50	77	Up	59	66	60	61	58	58	57	57	55	65	74	80	89	90	86	87	87	83	72	67	60	50	45	42	38	39	39	40	41	41	43	44	95	
2	17:08:49	Suburban	8	8:50	67	Down	67	68	69	67	67	67	67	67	67	67	71	77	84	86	86	82	72	67	61	53	42	38	38	39	40	41	41	42	43	44	95			
2	17:16:12	Suburban	8	8:50	66	Up	57	60	60	60	57	61	59	58	58	63	72	76	88	89	85	86	84	78	69	65	57	48	47	43	39	39	40	40	41	42	43	44	94	
2	17:37:51	Tangara	8	6:50	68	Down	59	61	59	60	56	56	55	54	67	73	79	86	90	87	87	86	84	79	71	65	58	49	44	42	39	39	40	42	41	42	43	44	95	
2	17:45:43	Tangara	8	10:00	61	Down	61	59	60	60	58	55	55	55	67	74	80	88	88	87	88	84	79	71	65	57	49	46	43	39	40	41	42	43	44	45	95			
2	18:10:10	Suburban	8	10:00	58	Down	54	53	52	52	55	54	55	54	63	74	81	83	85	84	83	83	76	71	59	55	48	45	43	40	40	40	41	42	43	45	92			
2	18:15:28	Suburban	8	10:00	64	Up	59	58	58	62	59	58	58	58	58	58	62	70	81	83	92	85	85	89	79	71	67	57	49	47	46	39	39	40	41	41	42	44	45	95
Average							66	69	68	68	66	65	63	63	67	74	79	85	89	86	87	86	81	73	67	58	49	46	43	39	39	40	41	42	44	45	95			
95th Percentile							71	77	73	71	70	70	71	77	81	89	90	89	78	77	81	84	83	82	77	71	62	52	47	43	41	41	42	43	47	46	45	96		
Maximum							82	90	89	85	83	83	80	76	74	73	77	82	90	94	94	95	93	89	77	72	62	52	48	46	41	41	43	45	44	45	46	101		