

## WSS-PR-100 Operational Performance Results

### Tone 1

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	85.0 dB(A)	84.9 dB(A)	0.1 dB(A)	85.0 dB(A)	85.0 dB(A)	0.0 dB(A)
45°	93.0 dB(A)	93.0 dB(A)	0.0 dB(A)	93.1 dB(A)	93.2 dB(A)	0.1 dB(A)
75°	99.4 dB(A)	99.1 dB(A)	0.3 dB(A)	99.2 dB(A)	99.2 dB(A)	0.0 dB(A)
105°	99.6 dB(A)	99.8 dB(A)	0.2 dB(A)	99.3 dB(A)	98.9 dB(A)	0.4 dB(A)
135°	93.8 dB(A)	93.8 dB(A)	0.0 dB(A)	93.2 dB(A)	93.7 dB(A)	0.5 dB(A)
165°	84.4 dB(A)	84.3 dB(A)	0.1 dB(A)	84.5 dB(A)	84.6 dB(A)	0.1 dB(A)

### Tone 2

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	83.5 dB(A)	82.1 dB(A)	1.4 dB(A)	83.7 dB(A)	84.1 dB(A)	0.4 dB(A)
45°	93.1 dB(A)	92.7 dB(A)	0.4 dB(A)	92.9 dB(A)	92.9 dB(A)	0.0 dB(A)
75°	99.5 dB(A)	99.6 dB(A)	0.1 dB(A)	99.3 dB(A)	99.2 dB(A)	0.1 dB(A)
105°	100.1 dB(A)	100.0 dB(A)	0.1 dB(A)	99.5 dB(A)	99.3 dB(A)	0.2 dB(A)
135°	93.5 dB(A)	93.5 dB(A)	0.0 dB(A)	93.1 dB(A)	92.7 dB(A)	0.4 dB(A)
165°	84.9 dB(A)	84.4 dB(A)	0.5 dB(A)	86.0 dB(A)	85.3 dB(A)	0.7 dB(A)

**Tone 3**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	83.4 dB(A)	82.1 dB(A)	1.1 dB(A)	83.4 dB(A)	83.8 dB(A)	0.4 dB(A)
45°	93.0 dB(A)	93.1 dB(A)	0.1 dB(A)	93.1 dB(A)	93.0 dB(A)	0.1 dB(A)
75°	99.7 dB(A)	99.9 dB(A)	0.2 dB(A)	99.1 dB(A)	99.1 dB(A)	0.0 dB(A)
105°	99.9 dB(A)	99.9 dB(A)	0.0 dB(A)	99.5 dB(A)	99.3 dB(A)	0.2 dB(A)
135°	93.4 dB(A)	93.2 dB(A)	0.2 dB(A)	92.7 dB(A)	92.7 dB(A)	0.0 dB(A)
165°	85.4 dB(A)	85.3 dB(A)	0.1 dB(A)	86.2 dB(A)	86.1 dB(A)	0.1 dB(A)

**Tone 4**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	81.4 dB(A)	80.9 dB(A)	0.5 dB(A)	82.6 dB(A)	82.4 dB(A)	0.2 dB(A)
45°	92.7 dB(A)	92.1 dB(A)	0.6 dB(A)	90.7 dB(A)	90.9 dB(A)	0.2 dB(A)
75°	98.6 dB(A)	98.0 dB(A)	0.6 dB(A)	96.3 dB(A)	96.3 dB(A)	0.0 dB(A)
105°	98.7 dB(A)	98.4 dB(A)	0.3 dB(A)	96.7 dB(A)	96.5 dB(A)	0.2 dB(A)
135°	93.0 dB(A)	92.6 dB(A)	0.4 dB(A)	90.7 dB(A)	90.9 dB(A)	0.2 dB(A)
165°	81.0 dB(A)	80.5 dB(A)	0.5 dB(A)	82.8 dB(A)	82.6 dB(A)	0.2 dB(A)

**Tone 5**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	81.3 dB(A)	80.3 dB(A)	1.0 dB(A)	82.5 dB(A)	82.2 dB(A)	0.3 dB(A)
45°	91.7 dB(A)	91.7 dB(A)	0.0 dB(A)	91.1 dB(A)	90.7 dB(A)	0.4 dB(A)
75°	98.1 dB(A)	98.1 dB(A)	0.0 dB(A)	96.4 dB(A)	96.3 dB(A)	0.1 dB(A)
105°	98.2 dB(A)	98.2 dB(A)	0.0 dB(A)	96.8 dB(A)	96.8 dB(A)	0.0 dB(A)
135°	92.3 dB(A)	92.4 dB(A)	0.1 dB(A)	91.1 dB(A)	90.7 dB(A)	0.4 dB(A)
165°	80.1 dB(A)	80.1 dB(A)	0.0 dB(A)	82.3 dB(A)	82.6 dB(A)	0.3 dB(A)

**Tone 6**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	82.6 dB(A)	81.9 dB(A)	0.7 dB(A)	83.8 dB(A)	84.0 dB(A)	0.2 dB(A)
45°	92.7 dB(A)	92.6 dB(A)	0.1 dB(A)	82.9 dB(A)	92.8 dB(A)	0.1 dB(A)
75°	99.2 dB(A)	99.4 dB(A)	0.2 dB(A)	99.2 dB(A)	99.4 dB(A)	0.2 dB(A)
105°	99.6 dB(A)	99.5 dB(A)	0.1 dB(A)	98.8 dB(A)	99.2 dB(A)	0.4 dB(A)
135°	93.2 dB(A)	93.1 dB(A)	0.1 dB(A)	92.2 dB(A)	92.3 dB(A)	0.1 dB(A)
165°	84.3 dB(A)	84.2 dB(A)	0.1 dB(A)	85.2 dB(A)	85.9 dB(A)	0.7 dB(A)

**Tone 7**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	85.5 dB(A)	85.5 dB(A)	0.0 dB(A)	85.4 dB(A)	85.3 dB(A)	0.1 dB(A)
45°	93.6 dB(A)	93.6 dB(A)	0.0 dB(A)	93.5 dB(A)	93.4 dB(A)	0.1 dB(A)
75°	98.8 dB(A)	99.0 dB(A)	0.2 dB(A)	99.0 dB(A)	98.9 dB(A)	0.1 dB(A)
105°	99.1 dB(A)	99.1 dB(A)	0.0 dB(A)	98.6 dB(A)	98.9 dB(A)	0.3 dB(A)
135°	93.8 dB(A)	93.7 dB(A)	0.1 dB(A)	93.4 dB(A)	93.2 dB(A)	0.2 dB(A)
165°	84.4 dB(A)	84.4 dB(A)	0.0 dB(A)	85.2 dB(A)	85.1 dB(A)	0.1 dB(A)

**Tone 8**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	84.4 dB(A)	83.9 dB(A)	0.5 dB(A)	86.0 dB(A)	85.8 dB(A)	0.2 dB(A)
45°	92.6 dB(A)	92.8 dB(A)	0.2 dB(A)	93.0 dB(A)	93.0 dB(A)	0.0 dB(A)
75°	98.9 dB(A)	98.9 dB(A)	0.0 dB(A)	99.3 dB(A)	99.3 dB(A)	0.0 dB(A)
105°	99.4 dB(A)	99.5 dB(A)	0.1 dB(A)	99.2 dB(A)	99.1 dB(A)	0.1 dB(A)
135°	93.2 dB(A)	93.0 dB(A)	0.2 dB(A)	92.4 dB(A)	92.5 dB(A)	0.1 dB(A)
165°	84.9 dB(A)	84.7 dB(A)	0.2 dB(A)	85.7 dB(A)	85.9 dB(A)	0.2 dB(A)

**Tone 9**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	84.3 dB(A)	83.9 dB(A)	0.4 dB(A)	85.3 dB(A)	85.3 dB(A)	0.0 dB(A)
45°	92.8 dB(A)	92.7 dB(A)	0.1 dB(A)	92.9 dB(A)	92.9 dB(A)	0.0 dB(A)
75°	99.0 dB(A)	99.3 dB(A)	0.3 dB(A)	99.0 dB(A)	99.2 dB(A)	0.2 dB(A)
105°	99.8 dB(A)	99.4 dB(A)	0.4 dB(A)	99.1 dB(A)	99.2 dB(A)	0.1 dB(A)
135°	93.1 dB(A)	93.1 dB(A)	0.0 dB(A)	92.6 dB(A)	92.5 dB(A)	0.0 dB(A)
165°	94.6 dB(A)	84.8 dB(A)	0.2 dB(A)	85.7 dB(A)	86.0 dB(A)	0.3 dB(A)

**Tone 10**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	83.9 dB(A)	83.6 dB(A)	0.3 dB(A)	85.0 dB(A)	85.0 dB(A)	0.0 dB(A)
45°	94.5 dB(A)	94.4 dB(A)	0.1 dB(A)	94.4 dB(A)	94.3 dB(A)	0.1 dB(A)
75°	100.2 dB(A)	100.2 dB(A)	0.0 dB(A)	100.0 dB(A)	100.0 dB(A)	0.0 dB(A)
105°	100.7 dB(A)	100.5 dB(A)	0.2 dB(A)	100.2 dB(A)	100.1 dB(A)	0.1 dB(A)
135°	94.4 dB(A)	94.4 dB(A)	0.0 dB(A)	93.5 dB(A)	93.5 dB(A)	0.0 dB(A)
165°	83.9 dB(A)	84.2 dB(A)	0.3 dB(A)	85.4 dB(A)	85.5 dB(A)	0.1 dB(A)

**Tone 11**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	87.0 dB(A)	86.9 dB(A)	0.1 dB(A)	88.4 dB(A)	88.3 dB(A)	0.1 dB(A)
45°	95.4 dB(A)	95.3 dB(A)	0.1 dB(A)	95.8 dB(A)	95.8 dB(A)	0.0 dB(A)
75°	101.4 dB(A)	101.4 dB(A)	0.0 dB(A)	101.3 dB(A)	101.2 dB(A)	0.1 dB(A)
105°	102.0 dB(A)	101.8 dB(A)	0.2 dB(A)	101.4 dB(A)	101.3 dB(A)	0.1 dB(A)
135°	95.7 dB(A)	95.6 dB(A)	0.0 dB(A)	95.3 dB(A)	95.1 dB(A)	0.2 dB(A)
165°	86.6 dB(A)	86.6 dB(A)	0.0 dB(A)	88.2 dB(A)	88.2 dB(A)	0.0 dB(A)

**Tone 12**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	87.4 dB(A)	87.1 dB(A)	0.3 dB(A)	88.5 dB(A)	88.1 dB(A)	0.4 dB(A)
45°	96.4 dB(A)	96.0 dB(A)	0.4 dB(A)	96.6 dB(A)	96.2 dB(A)	0.4 dB(A)
75°	102.9 dB(A)	102.5 dB(A)	0.4 dB(A)	102.9 dB(A)	102.6 dB(A)	0.3 dB(A)
105°	103.2 dB(A)	102.7 dB(A)	0.5 dB(A)	102.9 dB(A)	102.4 dB(A)	0.5 dB(A)
135°	96.8 dB(A)	96.4 dB(A)	0.4 dB(A)	96.5 dB(A)	95.9 dB(A)	0.6 dB(A)
165°	87.8 dB(A)	87.2 dB(A)	0.6 dB(A)	89.0 dB(A)	88.6 dB(A)	0.4 dB(A)

**Tone 13**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	86.4 dB(A)	86.3 dB(A)	0.1 dB(A)	86.9 dB(A)	87.0 dB(A)	0.1 dB(A)
45°	94.3 dB(A)	94.3 dB(A)	0.0 dB(A)	94.8 dB(A)	94.8 dB(A)	0.0 dB(A)
75°	100.1 dB(A)	100.3 dB(A)	0.2 dB(A)	100.4 dB(A)	100.5 dB(A)	0.1 dB(A)
105°	100.6 dB(A)	100.5 dB(A)	0.1 dB(A)	100.2 dB(A)	100.2 dB(A)	0.0 dB(A)
135°	94.6 dB(A)	94.7 dB(A)	0.1 dB(A)	94.3 dB(A)	94.2 dB(A)	0.1 dB(A)
165°	85.3 dB(A)	84.4 dB(A)	0.9 dB(A)	87.1 dB(A)	86.9 dB(A)	0.2 dB(A)

**Tone 14**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	84.8 dB(A)	84.6 dB(A)	0.2 dB(A)	85.1 dB(A)	85.0 dB(A)	0.1 dB(A)
45°	93.3 dB(A)	93.1 dB(A)	0.2 dB(A)	93.0 dB(A)	93.2 dB(A)	0.2 dB(A)
75°	99.1 dB(A)	98.9 dB(A)	0.2 dB(A)	98.9 dB(A)	99.3 dB(A)	0.4 dB(A)
105°	99.3 dB(A)	99.4 dB(A)	0.1 dB(A)	98.8 dB(A)	99.1 dB(A)	0.3 dB(A)
135°	93.8 dB(A)	93.9 dB(A)	0.1 dB(A)	93.2 dB(A)	93.0 dB(A)	0.2 dB(A)
165°	83.9 dB(A)	83.7 dB(A)	0.2 dB(A)	84.9 dB(A)	84.7 dB(A)	0.2 dB(A)

**Tone 15**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	82.5 dB(A)	81.7 dB(A)	0.8 dB(A)	84.3 dB(A)	84.1 dB(A)	0.2 dB(A)
45°	92.7 dB(A)	92.5 dB(A)	0.2 dB(A)	93.1 dB(A)	93.1 dB(A)	0.0 dB(A)
75°	98.8 dB(A)	98.9 dB(A)	0.1 dB(A)	99.2 dB(A)	99.3 dB(A)	0.1 dB(A)
105°	99.8 dB(A)	99.6 dB(A)	0.2 dB(A)	99.0 dB(A)	99.2 dB(A)	0.2 dB(A)
135°	93.3 dB(A)	93.3 dB(A)	0.0 dB(A)	92.5 dB(A)	92.4 dB(A)	0.1 dB(A)
165°	84.3 dB(A)	84.4 dB(A)	0.1 dB(A)	85.6 dB(A)	85.6 dB(A)	0.0 dB(A)

**Tone 16**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	81.6 dB(A)	82.2 dB(A)	0.6 dB(A)	83.7 dB(A)	84.1 dB(A)	0.4 dB(A)
45°	92.8 dB(A)	92.7 dB(A)	0.1 dB(A)	93.1 dB(A)	93.0 dB(A)	0.1 dB(A)
75°	99.3 dB(A)	98.7 dB(A)	0.6 dB(A)	99.1 dB(A)	99.1 dB(A)	0.0 dB(A)
105°	99.7 dB(A)	99.8 dB(A)	0.1 dB(A)	99.3 dB(A)	99.4 dB(A)	0.1 dB(A)
135°	93.3 dB(A)	93.3 dB(A)	0.0 dB(A)	92.7 dB(A)	92.6 dB(A)	0.1 dB(A)
165°	84.4 dB(A)	84.4 dB(A)	0.0 dB(A)	85.9 dB(A)	85.9 dB(A)	0.0 dB(A)



**Tone 17**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	80.4 dB(A)	80.9 dB(A)	0.5 dB(A)	82.6 dB(A)	83.0 dB(A)	0.4 dB(A)
45°	91.5 dB(A)	91.4 dB(A)	0.1 dB(A)	91.7 dB(A)	91.8 dB(A)	0.1 dB(A)
75°	97.3 dB(A)	97.3 dB(A)	0.0 dB(A)	97.2 dB(A)	97.2 dB(A)	0.0 dB(A)
105°	97.7 dB(A)	97.4 dB(A)	0.3 dB(A)	97.8 dB(A)	97.9 dB(A)	0.1 dB(A)
135°	91.7 dB(A)	91.9 dB(A)	0.2 dB(A)	91.7 dB(A)	91.8 dB(A)	0.1 dB(A)
165°	79.2 dB(A)	79.7 dB(A)	0.5 dB(A)	82.2 dB(A)	82.3 dB(A)	0.1 dB(A)

**Tone 18**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	81.8 dB(A)	82.5 dB(A)	0.7 dB(A)	84.0 dB(A)	84.1 dB(A)	0.1 dB(A)
45°	92.7 dB(A)	92.7 dB(A)	0.0 dB(A)	92.8 dB(A)	92.7 dB(A)	0.1 dB(A)
75°	98.7 dB(A)	99.1 dB(A)	0.4 dB(A)	99.0 dB(A)	99.0 dB(A)	0.0 dB(A)
105°	99.5 dB(A)	99.4 dB(A)	0.1 dB(A)	98.6 dB(A)	99.0 dB(A)	0.4 dB(A)
135°	93.2 dB(A)	93.2 dB(A)	0.0 dB(A)	92.6 dB(A)	92.4 dB(A)	0.2 dB(A)
165°	84.5 dB(A)	84.6 dB(A)	0.1 dB(A)	86.2 dB(A)	85.9 dB(A)	0.3 dB(A)

**Tone 19**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	86.2 dB(A)	86.2 dB(A)	0.0 dB(A)	86.3 dB(A)	86.4 dB(A)	0.1 dB(A)
45°	94.2 dB(A)	94.3 dB(A)	0.1 dB(A)	94.4 dB(A)	94.4 dB(A)	0.0 dB(A)
75°	100.2 dB(A)	100.0 dB(A)	0.2 dB(A)	99.9 dB(A)	100.0 dB(A)	0.1 dB(A)
105°	100.4 dB(A)	100.4 dB(A)	0.0 dB(A)	99.9 dB(A)	100.0 dB(A)	0.1 dB(A)
135°	94.5 dB(A)	90.9 dB(A)	3.6 dB(A)	93.7 dB(A)	93.7 dB(A)	0.0 dB(A)
165°	84.9 dB(A)	84.5 dB(A)	0.4 dB(A)	86.6 dB(A)	86.7 dB(A)	0.0 dB(A)

**Tone 20**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	87.1 dB(A)	86.9 dB(A)	0.2 dB(A)	88.1 dB(A)	88.0 dB(A)	0.1 dB(A)
45°	95.5 dB(A)	95.4 dB(A)	0.1 dB(A)	95.9 dB(A)	95.8 dB(A)	0.1 dB(A)
75°	101.2 dB(A)	101.5 dB(A)	0.3 dB(A)	101.7 dB(A)	101.1 dB(A)	0.6 dB(A)
105°	101.9 dB(A)	101.8 dB(A)	0.1 dB(A)	101.6 dB(A)	101.5 dB(A)	0.1 dB(A)
135°	95.7 dB(A)	95.6 dB(A)	0.1 dB(A)	95.4 dB(A)	95.2 dB(A)	0.2 dB(A)
165°	86.8 dB(A)	86.5 dB(A)	0.3 dB(A)	88.1 dB(A)	88.0 dB(A)	0.1 dB(A)

**Tone 21**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	86.7 dB(A)	86.6 dB(A)	0.1 dB(A)	86.9 dB(A)	85.9 dB(A)	1.0 dB(A)
45°	94.6 dB(A)	94.6 dB(A)	0.0 dB(A)	94.5 dB(A)	94.4 dB(A)	0.1 dB(A)
75°	100.1 dB(A)	100.2 dB(A)	0.1 dB(A)	100.2 dB(A)	100.1 dB(A)	0.1 dB(A)
105°	100.7 dB(A)	100.7 dB(A)	0.0 dB(A)	99.7 dB(A)	100.1 dB(A)	0.4 dB(A)
135°	94.7 dB(A)	94.6 dB(A)	0.1 dB(A)	94.2 dB(A)	94.2 dB(A)	0.0 dB(A)
165°	84.3 dB(A)	84.1 dB(A)	0.2 dB(A)	87.0 dB(A)	86.9 dB(A)	0.1 dB(A)

**Tone 22**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	84.3 dB(A)	83.6 dB(A)	0.7 dB(A)	86.3 dB(A)	86.3 dB(A)	0.0 dB(A)
45°	92.2 dB(A)	91.9 dB(A)	0.3 dB(A)	93.2 dB(A)	93.1 dB(A)	0.1 dB(A)
75°	98.4 dB(A)	98.6 dB(A)	0.2 dB(A)	98.5 dB(A)	98.6 dB(A)	0.1 dB(A)
105°	99.0 dB(A)	98.9 dB(A)	0.1 dB(A)	98.3 dB(A)	98.3 dB(A)	0.0 dB(A)
135°	93.0 dB(A)	93.0 dB(A)	0.0 dB(A)	92.5 dB(A)	92.6 dB(A)	0.1 dB(A)
165°	85.0 dB(A)	85.0 dB(A)	0.0 dB(A)	94.1 dB(A)	85.4 dB(A)	0.3 dB(A)

**Tone 23**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	81.0 dB(A)	80.9 dB(A)	0.1 dB(A)	83.0 dB(A)	82.8 dB(A)	0.2 dB(A)
45°	91.4 dB(A)	91.7 dB(A)	0.3 dB(A)	91.7 dB(A)	91.4 dB(A)	0.3 dB(A)
75°	97.6 dB(A)	98.0 dB(A)	0.4 dB(A)	96.8 dB(A)	97.2 dB(A)	0.4 dB(A)
105°	98.0 dB(A)	98.3 dB(A)	0.3 dB(A)	97.7 dB(A)	97.4 dB(A)	0.3 dB(A)
135°	92.1 dB(A)	92.1 dB(A)	0.0 dB(A)	91.9 dB(A)	91.9 dB(A)	0.0 dB(A)
165°	79.6 dB(A)	79.8 dB(A)	0.2 dB(A)	82.6 dB(A)	82.6 dB(A)	0.0 dB(A)

**Tone 24**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	82.7 dB(A)	82.9 dB(A)	0.2 dB(A)	83.1 dB(A)	83.3 dB(A)	0.2 dB(A)
45°	92.9 dB(A)	92.7 dB(A)	0.2 dB(A)	92.3 dB(A)	92.5 dB(A)	0.2 dB(A)
75°	99.6 dB(A)	99.5 dB(A)	0.1 dB(A)	98.6 dB(A)	98.6 dB(A)	0.0 dB(A)
105°	99.9 dB(A)	99.9 dB(A)	0.0 dB(A)	98.8 dB(A)	98.8 dB(A)	0.0 dB(A)
135°	93.6 dB(A)	93.6 dB(A)	0.0 dB(A)	92.0 dB(A)	92.1 dB(A)	0.1 dB(A)
165°	84.4 dB(A)	84.3 dB(A)	0.1 dB(A)	86.0 dB(A)	85.7 dB(A)	0.3 dB(A)

**Tone 25**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	83.0 dB(A)	82.7 dB(A)	0.3 dB(A)	82.9 dB(A)	83.0 dB(A)	0.1 dB(A)
45°	92.9 dB(A)	92.8 dB(A)	0.1 dB(A)	92.2 dB(A)	92.3 dB(A)	0.1 dB(A)
75°	99.2 dB(A)	99.6 dB(A)	0.4 dB(A)	98.3 dB(A)	98.4 dB(A)	0.1 dB(A)
105°	99.9 dB(A)	99.9 dB(A)	0.0 dB(A)	98.8 dB(A)	98.6 dB(A)	0.2 dB(A)
135°	93.3 dB(A)	93.2 dB(A)	0.1 dB(A)	92.1 dB(A)	92.2 dB(A)	0.1 dB(A)
165°	84.6 dB(A)	84.7 dB(A)	0.1 dB(A)	85.1 dB(A)	85.7 dB(A)	0.6 dB(A)

**Tone 26**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	82.3 dB(A)	81.8 dB(A)	0.5 dB(A)	83.6 dB(A)	83.0 dB(A)	0.6 dB(A)
45°	92.8 dB(A)	92.6 dB(A)	0.2 dB(A)	92.4 dB(A)	92.3 dB(A)	0.1 dB(A)
75°	99.0 dB(A)	99.3 dB(A)	0.3 dB(A)	98.9 dB(A)	98.3 dB(A)	0.6 dB(A)
105°	100.0 dB(A)	100.1 dB(A)	0.1 dB(A)	98.7 dB(A)	98.7 dB(A)	0.0 dB(A)
135°	93.4 dB(A)	93.4 dB(A)	0.0 dB(A)	92.0 dB(A)	92.1 dB(A)	0.1 dB(A)
165°	84.4 dB(A)	84.2 dB(A)	0.2 dB(A)	85.3 dB(A)	85.6 dB(A)	0.3 dB(A)

**Tone 27**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	82.4 dB(A)	82.7 dB(A)	0.3 dB(A)	83.5 dB(A)	92.4 dB(A)	1.1 dB(A)
45°	92.9 dB(A)	92.7 dB(A)	0.2 dB(A)	92.1 dB(A)	92.2 dB(A)	0.1 dB(A)
75°	99.6 dB(A)	99.7 dB(A)	0.1 dB(A)	98.3 dB(A)	98.2 dB(A)	0.1 dB(A)
105°	100.3 dB(A)	100.3 dB(A)	0.0 dB(A)	98.7 dB(A)	98.8 dB(A)	0.1 dB(A)
135°	93.6 dB(A)	93.5 dB(A)	0.1 dB(A)	91.8 dB(A)	92.2 dB(A)	0.4 dB(A)
165°	84.7 dB(A)	85.1 dB(A)	0.4 dB(A)	84.9 dB(A)	85.2 dB(A)	0.3 dB(A)

**Tone 28**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	80.7 dB(A)	79.9 dB(A)	0.8 dB(A)	82.4 dB(A)	82.4 dB(A)	0.0 dB(A)
45°	91.6 dB(A)	91.6 dB(A)	0.0 dB(A)	92.3 dB(A)	92.0 dB(A)	0.3 dB(A)
75°	97.8 dB(A)	98.0 dB(A)	0.2 dB(A)	97.7 dB(A)	97.3 dB(A)	0.4 dB(A)
105°	98.1 dB(A)	98.1 dB(A)	0.0 dB(A)	97.9 dB(A)	98.0 dB(A)	0.1 dB(A)
135°	92.3 dB(A)	92.1 dB(A)	0.2 dB(A)	92.7 dB(A)	92.3 dB(A)	0.4 dB(A)
165°	80.0 dB(A)	80.1 dB(A)	0.1 dB(A)	82.2 dB(A)	82.8 dB(A)	0.6 dB(A)

**Tone 29**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	81.9 dB(A)	83.1 dB(A)	1.2 dB(A)	84.1 dB(A)	83.5 dB(A)	0.6 dB(A)
45°	93.0 dB(A)	92.9 dB(A)	0.1 dB(A)	92.4 dB(A)	92.3 dB(A)	0.1 dB(A)
75°	99.8 dB(A)	99.5 dB(A)	0.3 dB(A)	98.7 dB(A)	98.8 dB(A)	0.1 dB(A)
105°	99.8 dB(A)	99.8 dB(A)	0.0 dB(A)	98.8 dB(A)	98.8 dB(A)	0.0 dB(A)
135°	93.7 dB(A)	93.7 dB(A)	0.0 dB(A)	92.0 dB(A)	92.0 dB(A)	0.0 dB(A)
165°	84.6 dB(A)	84.8 dB(A)	0.2 dB(A)	85.9 dB(A)	85.8 dB(A)	0.1 dB(A)

**Tone 30**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	82.8 dB(A)	81.8 dB(A)	1.0 dB(A)	83.5 dB(A)	83.8 dB(A)	0.3 dB(A)
45°	92.8 dB(A)	92.6 dB(A)	0.2 dB(A)	92.3 dB(A)	92.3 dB(A)	0.0 dB(A)
75°	99.1 dB(A)	99.1 dB(A)	0.0 dB(A)	98.7 dB(A)	98.7 dB(A)	0.0 dB(A)
105°	100.1 dB(A)	99.7 dB(A)	0.4 dB(A)	98.7 dB(A)	98.6 dB(A)	0.1 dB(A)
135°	93.7 dB(A)	93.6 dB(A)	0.1 dB(A)	92.4 dB(A)	91.9 dB(A)	0.5 dB(A)
165°	84.3 dB(A)	84.3 dB(A)	0.0 dB(A)	85.7 dB(A)	85.7 dB(A)	0.0 dB(A)

**Tone 31**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	82.6 dB(A)	82.0 dB(A)	0.6 dB(A)	83.0 dB(A)	83.1 dB(A)	0.1 dB(A)
45°	92.7 dB(A)	92.8 dB(A)	0.1 dB(A)	92.2 dB(A)	92.1 dB(A)	0.1 dB(A)
75°	99.1 dB(A)	99.2 dB(A)	0.1 dB(A)	98.9 dB(A)	98.7 dB(A)	0.2 dB(A)
105°	99.7 dB(A)	99.5 dB(A)	0.2 dB(A)	98.7 dB(A)	98.4 dB(A)	0.3 dB(A)
135°	93.5 dB(A)	93.4 dB(A)	0.1 dB(A)	92.0 dB(A)	91.9 dB(A)	0.1 dB(A)
165°	84.3 dB(A)	84.3 dB(A)	0.0 dB(A)	85.5 dB(A)	85.3 dB(A)	0.2 dB(A)

**Tone 32**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	80.3 dB(A)	81.0 dB(A)	0.7 dB(A)	82.9 dB(A)	82.6 dB(A)	0.3 dB(A)
45°	90.9 dB(A)	91.1 dB(A)	0.2 dB(A)	91.8 dB(A)	91.8 dB(A)	0.0 dB(A)
75°	96.8 dB(A)	96.9 dB(A)	0.1 dB(A)	97.2 dB(A)	97.4 dB(A)	0.2 dB(A)
105°	97.2 dB(A)	97.3 dB(A)	0.1 dB(A)	97.8 dB(A)	97.9 dB(A)	0.1 dB(A)
135°	91.4 dB(A)	91.4 dB(A)	0.0 dB(A)	92.4 dB(A)	92.3 dB(A)	0.1 dB(A)
165°	78.9 dB(A)	79.7 dB(A)	0.8 dB(A)	82.5 dB(A)	82.4 dB(A)	0.1 dB(A)



## BSS-PR-100 Operational Performance Results

### Tone 1

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	81.5 dB(A)	81.2 dB(A)	0.3 dB(A)	78.7 dB(A)	79.2 dB(A)	0.5 dB(A)
45°	87.4 dB(A)	87.3 dB(A)	0.1 dB(A)	83.9 dB(A)	84.1 dB(A)	0.2 dB(A)
75°	85.5 dB(A)	85.3 dB(A)	0.2 dB(A)	85.9 dB(A)	85.9 dB(A)	0.0 dB(A)
105°	86.2 dB(A)	86.3 dB(A)	0.1 dB(A)	84.8 dB(A)	85.7 dB(A)	0.9 dB(A)
135°	84.5 dB(A)	84.6 dB(A)	0.1 dB(A)	86.7 dB(A)	86.6 dB(A)	0.1 dB(A)
165°	73.9 dB(A)	72.6 dB(A)	1.3 dB(A)	75.7 dB(A)	75.9 dB(A)	0.2 dB(A)

### Tone 2

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	81.1 dB(A)	79.9 dB(A)	1.2 dB(A)	81.9 dB(A)	77.7 dB(A)	4.2 dB(A)
45°	86.6 dB(A)	86.2 dB(A)	0.4 dB(A)	81.2 dB(A)	80.8 dB(A)	0.4 dB(A)
75°	90.6 dB(A)	90.1 dB(A)	0.5 dB(A)	90.6 dB(A)	91.2 dB(A)	0.6 dB(A)
105°	90.9 dB(A)	90.4 dB(A)	0.5 dB(A)	92.4 dB(A)	91.4 dB(A)	1.0 dB(A)
135°	81.7 dB(A)	81.3 dB(A)	0.4 dB(A)	86.5 dB(A)	86.4 dB(A)	0.1 dB(A)
165°	72.4 dB(A)	72.3 dB(A)	0.1 dB(A)	79.8 dB(A)	81.8 dB(A)	2.0 dB(A)

**Tone 3**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	82.9 dB(A)	81.4 dB(A)	1.5 dB(A)	77.9 dB(A)	78.7 dB(A)	0.8 dB(A)
45°	86.7 dB(A)	86.3 dB(A)	0.4 dB(A)	81.0 dB(A)	80.7 dB(A)	0.3 dB(A)
75°	91.5 dB(A)	91.6 dB(A)	0.1 dB(A)	89.9 dB(A)	90.6 dB(A)	0.7 dB(A)
105°	90.2 dB(A)	90.0 dB(A)	0.2 dB(A)	92.5 dB(A)	92.5 dB(A)	0.0 dB(A)
135°	80.6 dB(A)	80.7 dB(A)	0.1 dB(A)	86.7 dB(A)	86.3 dB(A)	0.4 dB(A)
165°	71.7 dB(A)	72.8 dB(A)	1.1 dB(A)	83.9 dB(A)	83.6 dB(A)	0.3 dB(A)

**Tone 4**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	81.8 dB(A)	81.7 dB(A)	0.1 dB(A)	78.0 dB(A)	78.8 dB(A)	0.8 dB(A)
45°	84.7 dB(A)	84.6 dB(A)	0.1 dB(A)	83.0 dB(A)	83.3 dB(A)	0.3 dB(A)
75°	80.4 dB(A)	80.5 dB(A)	0.1 dB(A)	81.0 dB(A)	81.0 dB(A)	0.0 dB(A)
105°	81.5 dB(A)	81.5 dB(A)	0.0 dB(A)	82.2 dB(A)	82.1 dB(A)	0.1 dB(A)
135°	84.0 dB(A)	82.9 dB(A)	1.1 dB(A)	86.5 dB(A)	86.5 dB(A)	0.0 dB(A)
165°	80.5 dB(A)	80.5 dB(A)	0.0 dB(A)	76.2 dB(A)	78.4 dB(A)	2.2 dB(A)

**Tone 5**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	81.2 dB(A)	81.3 dB(A)	0.1 dB(A)	78.2 dB(A)	79.0 dB(A)	0.8 dB(A)
45°	84.3 dB(A)	84.1 dB(A)	0.2 dB(A)	83.0 dB(A)	83.7 dB(A)	0.7 dB(A)
75°	82.8 dB(A)	81.5 dB(A)	1.3 dB(A)	82.0 dB(A)	81.3 dB(A)	0.7 dB(A)
105°	82.8 dB(A)	82.1 dB(A)	0.7 dB(A)	82.4 dB(A)	82.3 dB(A)	0.1 dB(A)
135°	85.1 dB(A)	84.2 dB(A)	0.9 dB(A)	86.6 dB(A)	86.8 dB(A)	0.2 dB(A)
165°	80.4 dB(A)	80.9 dB(A)	0.5 dB(A)	76.6 dB(A)	76.2 dB(A)	0.4 dB(A)

**Tone 6**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	79.7 dB(A)	80.9 dB(A)	1.2 dB(A)	77.5 dB(A)	76.2 dB(A)	1.3 dB(A)
45°	86.1 dB(A)	87.0 dB(A)	0.9 dB(A)	80.8 dB(A)	80.9 dB(A)	0.1 dB(A)
75°	91.4 dB(A)	90.5 dB(A)	0.9 dB(A)	91.0 dB(A)	91.2 dB(A)	0.2 dB(A)
105°	90.1 dB(A)	90.7 dB(A)	0.6 dB(A)	92.8 dB(A)	92.3 dB(A)	0.5 dB(A)
135°	81.4 dB(A)	81.6 dB(A)	0.2 dB(A)	86.7 dB(A)	86.9 dB(A)	0.2 dB(A)
165°	71.3 dB(A)	70.8 dB(A)	0.5 dB(A)	79.6 dB(A)	83.9 dB(A)	4.3 dB(A)

**Tone 7**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	83.6 dB(A)	86.0 dB(A)	2.4 dB(A)	80.6 dB(A)	81.3 dB(A)	0.7 dB(A)
45°	88.7 dB(A)	88.6 dB(A)	0.1 dB(A)	85.7 dB(A)	85.9 dB(A)	0.2 dB(A)
75°	88.6 dB(A)	89.3 dB(A)	0.7 dB(A)	88.8 dB(A)	88.9 dB(A)	0.1 dB(A)
105°	88.6 dB(A)	88.6 dB(A)	0.0 dB(A)	89.0 dB(A)	88.6 dB(A)	0.4 dB(A)
135°	85.4 dB(A)	85.2 dB(A)	0.2 dB(A)	89.0 dB(A)	88.5 dB(A)	0.5 dB(A)
165°	76.5 dB(A)	75.7 dB(A)	0.8 dB(A)	80.8 dB(A)	79.5 dB(A)	1.3 dB(A)

**Tone 8**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	82.1 dB(A)	82.3 dB(A)	0.2 dB(A)	77.9 dB(A)	79.4 dB(A)	1.5 dB(A)
45°	86.4 dB(A)	85.7 dB(A)	0.7 dB(A)	80.7 dB(A)	80.7 dB(A)	0.0 dB(A)
75°	90.5 dB(A)	90.3 dB(A)	0.2 dB(A)	92.0 dB(A)	92.0 dB(A)	0.0 dB(A)
105°	90.2 dB(A)	90.5 dB(A)	0.3 dB(A)	93.1 dB(A)	92.9 dB(A)	0.2 dB(A)
135°	81.8 dB(A)	81.8 dB(A)	0.0 dB(A)	86.7 dB(A)	86.7 dB(A)	0.0 dB(A)
165°	75.0 dB(A)	75.4 dB(A)	0.4 dB(A)	80.7 dB(A)	78.9 dB(A)	1.8 dB(A)

**Tone 9**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	88.2 dB(A)	82.8 dB(A)	0.6 dB(A)	78.1 dB(A)	79.0 dB(A)	0.9 dB(A)
45°	83.9 dB(A)	83.8 dB(A)	0.1 dB(A)	81.5 dB(A)	81.1 dB(A)	0.4 dB(A)
75°	81.8 dB(A)	81.6 dB(A)	0.2 dB(A)	91.7 dB(A)	91.2 dB(A)	0.5 dB(A)
105°	82.1 dB(A)	82.1 dB(A)	0.0 dB(A)	93.1 dB(A)	91.8 dB(A)	1.3 dB(A)
135°	83.4 dB(A)	83.8 dB(A)	0.4 dB(A)	86.7 dB(A)	86.7 dB(A)	0.0 dB(A)
165°	79.8 dB(A)	79.0 dB(A)	0.8 dB(A)	84.4 dB(A)	79.4 dB(A)	5.0 dB(A)

**Tone 10**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	81.8 dB(A)	81.3 dB(A)	0.5 dB(A)	78.6 dB(A)	79.1 dB(A)	0.5 dB(A)
45°	84.3 dB(A)	84.3 dB(A)	0.0 dB(A)	81.7 dB(A)	81.9 dB(A)	0.2 dB(A)
75°	81.4 dB(A)	81.4 dB(A)	0.0 dB(A)	82.5 dB(A)	82.7 dB(A)	0.2 dB(A)
105°	83.1 dB(A)	83.4 dB(A)	0.3 dB(A)	82.6 dB(A)	82.6 dB(A)	0.0 dB(A)
135°	82.3 dB(A)	83.2 dB(A)	0.9 dB(A)	86.1 dB(A)	86.1 dB(A)	0.0 dB(A)
165°	79.1 dB(A)	79.2 dB(A)	0.1 dB(A)	78.7 dB(A)	78.8 dB(A)	0.1 dB(A)

**Tone 11**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	86.6 dB(A)	87.0 dB(A)	0.4 dB(A)	84.4 dB(A)	83.2 dB(A)	1.2 dB(A)
45°	89.7 dB(A)	90.3 dB(A)	0.6 dB(A)	87.7 dB(A)	87.6 dB(A)	0.1 dB(A)
75°	91.5 dB(A)	91.8 dB(A)	0.3 dB(A)	92.1 dB(A)	91.0 dB(A)	1.1 dB(A)
105°	91.7 dB(A)	91.7 dB(A)	0.0 dB(A)	91.8 dB(A)	90.8 dB(A)	1.0 dB(A)
135°	86.8 dB(A)	86.8 dB(A)	0.0 dB(A)	90.2 dB(A)	89.1 dB(A)	1.1 dB(A)
165°	81.3 dB(A)	81.0 dB(A)	0.3 dB(A)	83.4 dB(A)	86.1 dB(A)	2.7 dB(A)

**Tone 12**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	87.2 dB(A)	84.7 dB(A)	2.5 dB(A)	80.9 dB(A)	80.6 dB(A)	0.3 dB(A)
45°	91.3 dB(A)	90.7 dB(A)	0.6 dB(A)	83.5 dB(A)	84.0 dB(A)	0.5 dB(A)
75°	92.5 dB(A)	92.6 dB(A)	0.1 dB(A)	81.6 dB(A)	81.9 dB(A)	0.3 dB(A)
105°	93.0 dB(A)	92.6 dB(A)	0.4 dB(A)	81.5 dB(A)	81.2 dB(A)	0.3 dB(A)
135°	86.9 dB(A)	86.7 dB(A)	0.2 dB(A)	86.3 dB(A)	86.3 dB(A)	0.0 dB(A)
165°	80.4 dB(A)	80.1 dB(A)	0.3 dB(A)	76.4 dB(A)	76.2 dB(A)	0.2 dB(A)

**Tone 13**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	84.2 dB(A)	85.7 dB(A)	1.5 dB(A)	83.3 dB(A)	81.8 dB(A)	1.5 dB(A)
45°	88.2 dB(A)	88.4 dB(A)	0.2 dB(A)	86.8 dB(A)	86.7 dB(A)	0.1 dB(A)
75°	88.9 dB(A)	89.1 dB(A)	0.2 dB(A)	88.8 dB(A)	88.8 dB(A)	0.0 dB(A)
105°	89.7 dB(A)	89.4 dB(A)	0.3 dB(A)	88.4 dB(A)	87.7 dB(A)	0.7 dB(A)
135°	86.6 dB(A)	86.4 dB(A)	0.2 dB(A)	87.3 dB(A)	87.1 dB(A)	0.2 dB(A)
165°	82.1 dB(A)	80.7 dB(A)	1.4 dB(A)	81.1 dB(A)	80.0 dB(A)	1.1 dB(A)

**Tone 14**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	83.5 dB(A)	83.4 dB(A)	0.1 dB(A)	80.0 dB(A)	80.4 dB(A)	0.4 dB(A)
45°	86.3 dB(A)	85.9 dB(A)	0.4 dB(A)	84.1 dB(A)	84.3 dB(A)	0.2 dB(A)
75°	85.1 dB(A)	85.0 dB(A)	0.1 dB(A)	86.5 dB(A)	86.4 dB(A)	0.1 dB(A)
105°	86.3 dB(A)	86.3 dB(A)	0.0 dB(A)	85.5 dB(A)	86.3 dB(A)	0.8 dB(A)
135°	85.7 dB(A)	85.7 dB(A)	0.0 dB(A)	86.5 dB(A)	86.8 dB(A)	0.3 dB(A)
165°	72.1 dB(A)	72.0 dB(A)	0.1 dB(A)	76.3 dB(A)	76.4 dB(A)	0.1 dB(A)

**Tone 15**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	81.9 dB(A)	81.8 dB(A)	0.1 dB(A)	78.8 dB(A)	78.8 dB(A)	0.0 dB(A)
45°	85.9 dB(A)	85.6 dB(A)	0.3 dB(A)	81.1 dB(A)	80.8 dB(A)	0.3 dB(A)
75°	90.4 dB(A)	91.0 dB(A)	0.6 dB(A)	89.7 dB(A)	90.4 dB(A)	0.7 dB(A)
105°	89.5 dB(A)	88.8 dB(A)	0.7 dB(A)	92.2 dB(A)	92.2 dB(A)	0.0 dB(A)
135°	81.0 dB(A)	81.2 dB(A)	0.2 dB(A)	85.9 dB(A)	85.9 dB(A)	0.0 dB(A)
165°	72.5 dB(A)	72.9 dB(A)	0.4 dB(A)	84.7 dB(A)	82.8 dB(A)	1.9 dB(A)

**Tone 16**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	80.4 dB(A)	82.4 dB(A)	2.0 dB(A)	79.5 dB(A)	77.3 dB(A)	2.2 dB(A)
45°	86.4 dB(A)	86.0 dB(A)	0.4 dB(A)	81.1 dB(A)	81.1 dB(A)	0.0 dB(A)
75°	91.4 dB(A)	90.9 dB(A)	0.5 dB(A)	90.6 dB(A)	91.0 dB(A)	0.4 dB(A)
105°	89.2 dB(A)	90.1 dB(A)	0.9 dB(A)	92.7 dB(A)	92.6 dB(A)	0.1 dB(A)
135°	81.3 dB(A)	80.7 dB(A)	0.6 dB(A)	86.9 dB(A)	86.5 dB(A)	0.4 dB(A)
165°	73.5 dB(A)	71.7 dB(A)	1.8 dB(A)	81.6 dB(A)	82.5 dB(A)	0.9 dB(A)



**Tone 17**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	83.2 dB(A)	82.9 dB(A)	0.3 dB(A)	80.9 dB(A)	79.2 dB(A)	1.7 dB(A)
45°	84.6 dB(A)	84.4 dB(A)	0.2 dB(A)	83.6 dB(A)	84.2 dB(A)	0.6 dB(A)
75°	81.9 dB(A)	82.0 dB(A)	0.1 dB(A)	81.4 dB(A)	81.4 dB(A)	0.0 dB(A)
105°	82.9 dB(A)	82.7 dB(A)	0.2 dB(A)	82.6 dB(A)	82.7 dB(A)	0.1 dB(A)
135°	84.1 dB(A)	83.4 dB(A)	0.7 dB(A)	86.6 dB(A)	86.8 dB(A)	0.2 dB(A)
165°	81.3 dB(A)	80.4 dB(A)	0.9 dB(A)	77.0 dB(A)	77.3 dB(A)	0.3 dB(A)

**Tone 18**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	83.5 dB(A)	83.8 dB(A)	0.3 dB(A)	77.7 dB(A)	79.7 dB(A)	2.0 dB(A)
45°	86.6 dB(A)	86.7 dB(A)	0.1 dB(A)	80.7 dB(A)	80.7 dB(A)	0.0 dB(A)
75°	90.9 dB(A)	90.2 dB(A)	0.7 dB(A)	89.7 dB(A)	90.4 dB(A)	0.7 dB(A)
105°	89.4 dB(A)	90.3 dB(A)	0.9 dB(A)	92.5 dB(A)	92.5 dB(A)	0.0 dB(A)
135°	80.9 dB(A)	80.6 dB(A)	0.3 dB(A)	86.6 dB(A)	86.2 dB(A)	0.4 dB(A)
165°	74.4 dB(A)	73.8 dB(A)	0.6 dB(A)	87.2 dB(A)	82.2 dB(A)	5.0 dB(A)

**Tone 19**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	80.5 dB(A)	83.3 dB(A)	2.8 dB(A)	78.4 dB(A)	77.1 dB(A)	1.3 dB(A)
45°	86.0 dB(A)	86.0 dB(A)	0.0 dB(A)	81.3 dB(A)	80.8 dB(A)	0.5 dB(A)
75°	90.9 dB(A)	91.2 dB(A)	0.3 dB(A)	89.2 dB(A)	90.5 dB(A)	1.3 dB(A)
105°	90.5 dB(A)	90.4 dB(A)	0.1 dB(A)	92.1 dB(A)	92.0 dB(A)	0.1 dB(A)
135°	81.2 dB(A)	81.0 dB(A)	0.2 dB(A)	85.7 dB(A)	86.1 dB(A)	0.4 dB(A)
165°	73.9 dB(A)	74.3 dB(A)	0.4 dB(A)	80.7 dB(A)	81.5 dB(A)	0.8 dB(A)

**Tone 20**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	85.8 dB(A)	85.4 dB(A)	0.4 dB(A)	83.5 dB(A)	83.1 dB(A)	0.4 dB(A)
45°	90.1 dB(A)	89.5 dB(A)	0.6 dB(A)	87.7 dB(A)	87.6 dB(A)	0.1 dB(A)
75°	92.0 dB(A)	91.6 dB(A)	0.4 dB(A)	90.8 dB(A)	91.1 dB(A)	0.3 dB(A)
105°	90.4 dB(A)	91.2 dB(A)	0.8 dB(A)	91.5 dB(A)	92.1 dB(A)	0.6 dB(A)
135°	86.8 dB(A)	86.8 dB(A)	0.0 dB(A)	89.5 dB(A)	90.4 dB(A)	0.9 dB(A)
165°	79.8 dB(A)	79.8 dB(A)	0.0 dB(A)	81.2 dB(A)	81.7 dB(A)	0.5 dB(A)

**Tone 21**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	85.6 dB(A)	86.4 dB(A)	0.8 dB(A)	83.4 dB(A)	82.7 dB(A)	0.7 dB(A)
45°	87.7 dB(A)	87.8 dB(A)	0.1 dB(A)	86.9 dB(A)	87.0 dB(A)	0.1 dB(A)
75°	88.4 dB(A)	87.8 dB(A)	0.6 dB(A)	89.1 dB(A)	88.5 dB(A)	0.6 dB(A)
105°	88.8 dB(A)	89.2 dB(A)	0.4 dB(A)	88.3 dB(A)	87.9 dB(A)	0.4 dB(A)
135°	86.1 dB(A)	86.1 dB(A)	0.0 dB(A)	87.3 dB(A)	87.4 dB(A)	0.1 dB(A)
165°	81.0 dB(A)	81.8 dB(A)	0.8 dB(A)	79.9 dB(A)	79.6 dB(A)	0.3 dB(A)

**Tone 22**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	82.0 dB(A)	81.9 dB(A)	0.1 dB(A)	80.3 dB(A)	78.6 dB(A)	1.7 dB(A)
45°	85.4 dB(A)	85.4 dB(A)	0.0 dB(A)	80.8 dB(A)	80.8 dB(A)	0.0 dB(A)
75°	83.7 dB(A)	83.8 dB(A)	0.1 dB(A)	83.9 dB(A)	84.2 dB(A)	0.3 dB(A)
105°	84.9 dB(A)	84.9 dB(A)	0.0 dB(A)	83.9 dB(A)	83.1 dB(A)	0.8 dB(A)
135°	82.3 dB(A)	82.3 dB(A)	0.0 dB(A)	86.0 dB(A)	86.0 dB(A)	0.0 dB(A)
165°	71.0 dB(A)	71.5 dB(A)	0.5 dB(A)	77.6 dB(A)	77.7 dB(A)	0.1 dB(A)

**Tone 23**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	83.2 dB(A)	83.1 dB(A)	0.1 dB(A)	80.2 dB(A)	79.6 dB(A)	0.6 dB(A)
45°	84.4 dB(A)	84.2 dB(A)	0.2 dB(A)	83.9 dB(A)	83.1 dB(A)	0.8 dB(A)
75°	81.7 dB(A)	81.8 dB(A)	0.1 dB(A)	81.2 dB(A)	81.6 dB(A)	0.4 dB(A)
105°	82.0 dB(A)	82.2 dB(A)	0.2 dB(A)	82.0 dB(A)	81.7 dB(A)	0.3 dB(A)
135°	84.5 dB(A)	83.7 dB(A)	0.8 dB(A)	86.1 dB(A)	86.0 dB(A)	0.1 dB(A)
165°	77.9 dB(A)	79.4 dB(A)	1.5 dB(A)	76.2 dB(A)	76.2 dB(A)	0.0 dB(A)

**Tone 24**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	81.6 dB(A)	80.4 dB(A)	1.2 dB(A)	77.3 dB(A)	77.7 dB(A)	0.4 dB(A)
45°	86.2 dB(A)	86.9 dB(A)	0.7 dB(A)	80.0 dB(A)	79.9 dB(A)	0.1 dB(A)
75°	91.8 dB(A)	91.3 dB(A)	0.5 dB(A)	89.4 dB(A)	89.0 dB(A)	0.4 dB(A)
105°	90.5 dB(A)	91.7 dB(A)	1.2 dB(A)	92.0 dB(A)	91.4 dB(A)	0.6 dB(A)
135°	79.8 dB(A)	79.7 dB(A)	0.1 dB(A)	86.4 dB(A)	86.4 dB(A)	0.0 dB(A)
165°	71.2 dB(A)	73.5 dB(A)	2.3 dB(A)	82.7 dB(A)	83.6 dB(A)	0.9 dB(A)

**Tone 25**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	80.0 dB(A)	79.8 dB(A)	0.2 dB(A)	78.4 dB(A)	79.3 dB(A)	0.9 dB(A)
45°	85.9 dB(A)	86.2 dB(A)	0.3 dB(A)	80.2 dB(A)	80.2 dB(A)	0.0 dB(A)
75°	90.7 dB(A)	91.1 dB(A)	0.4 dB(A)	90.3 dB(A)	90.9 dB(A)	0.6 dB(A)
105°	91.3 dB(A)	90.5 dB(A)	0.8 dB(A)	92.3 dB(A)	92.5 dB(A)	0.2 dB(A)
135°	80.8 dB(A)	80.9 dB(A)	0.1 dB(A)	86.2 dB(A)	86.1 dB(A)	0.1 dB(A)
165°	71.6 dB(A)	72.7 dB(A)	1.1 dB(A)	83.4 dB(A)	84.5 dB(A)	1.1 dB(A)

**Tone 26**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	80.2 dB(A)	85.0 dB(A)	4.8 dB(A)	77.1 dB(A)	78.7 dB(A)	1.6 dB(A)
45°	85.9 dB(A)	86.3 dB(A)	0.4 dB(A)	80.9 dB(A)	81.1 dB(A)	0.2 dB(A)
75°	92.5 dB(A)	93.0 dB(A)	0.5 dB(A)	91.1 dB(A)	90.9 dB(A)	0.2 dB(A)
105°	91.4 dB(A)	91.5 dB(A)	0.1 dB(A)	92.7 dB(A)	92.8 dB(A)	0.1 dB(A)
135°	81.0 dB(A)	81.3 dB(A)	0.3 dB(A)	86.2 dB(A)	86.0 dB(A)	0.2 dB(A)
165°	72.3 dB(A)	72.2 dB(A)	0.1 dB(A)	80.2 dB(A)	84.9 dB(A)	4.7 dB(A)

**Tone 27**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	80.5 dB(A)	81.9 dB(A)	1.4 dB(A)	79.2 dB(A)	77.6 dB(A)	1.6 dB(A)
45°	85.9 dB(A)	86.5 dB(A)	0.6 dB(A)	80.5 dB(A)	80.4 dB(A)	0.1 dB(A)
75°	92.6 dB(A)	91.9 dB(A)	0.7 dB(A)	91.6 dB(A)	91.2 dB(A)	0.4 dB(A)
105°	90.6 dB(A)	90.4 dB(A)	0.2 dB(A)	92.6 dB(A)	91.8 dB(A)	0.8 dB(A)
135°	81.0 dB(A)	81.5 dB(A)	0.5 dB(A)	86.4 dB(A)	85.6 dB(A)	0.8 dB(A)
165°	73.0 dB(A)	73.4 dB(A)	0.4 dB(A)	81.8 dB(A)	83.6 dB(A)	1.8 dB(A)

**Tone 28**

<b>Operational performance</b>						
<b>Specimen № 1</b>						
<b>Maximum Volume dB(A)</b>						
<b>Angle</b>	<b>Horizontal Plane</b>			<b>Vertical Plane</b>		
	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>	<b>Max 29V</b>	<b>Min 15V</b>	<b>Difference</b>
15°	82.9 dB(A)	83.0 dB(A)	0.1 dB(A)	80.6 dB(A)	79.5 dB(A)	1.1 dB(A)
45°	84.1 dB(A)	84.4 dB(A)	0.3 dB(A)	83.4 dB(A)	83.1 dB(A)	0.3 dB(A)
75°	80.7 dB(A)	80.7 dB(A)	0.0 dB(A)	81.3 dB(A)	82.1 dB(A)	0.8 dB(A)
105°	81.6 dB(A)	81.3 dB(A)	0.3 dB(A)	81.9 dB(A)	82.1 dB(A)	0.2 dB(A)
135°	83.4 dB(A)	84.0 dB(A)	0.6 dB(A)	86.4 dB(A)	86.2 dB(A)	0.2 dB(A)
165°	78.0 dB(A)	76.3 dB(A)	1.7 dB(A)	77.3 dB(A)	79.6 dB(A)	2.3 dB(A)

**Tone 29**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	80.3 dB(A)	79.7 dB(A)	0.6 dB(A)	79.4 dB(A)	79.7 dB(A)	0.3 dB(A)
45°	86.4 dB(A)	85.9 dB(A)	0.5 dB(A)	81.2 dB(A)	81.6 dB(A)	0.4 dB(A)
75°	92.6 dB(A)	91.7 dB(A)	0.9 dB(A)	91.1 dB(A)	91.6 dB(A)	0.5 dB(A)
105°	91.4 dB(A)	89.8 dB(A)	1.6 dB(A)	93.5 dB(A)	93.4 dB(A)	0.1 dB(A)
135°	80.9 dB(A)	80.9 dB(A)	0.0 dB(A)	87.2 dB(A)	85.6 dB(A)	1.6 dB(A)
165°	71.1 dB(A)	71.1 dB(A)	0.0 dB(A)	81.6 dB(A)	84.9 dB(A)	3.3 dB(A)

**Tone 30**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	83.5 dB(A)	83.7 dB(A)	0.2 dB(A)	78.8 dB(A)	79.3 dB(A)	0.5 dB(A)
45°	86.2 dB(A)	86.2 dB(A)	0.0 dB(A)	80.8 dB(A)	80.7 dB(A)	0.1 dB(A)
75°	85.4 dB(A)	85.3 dB(A)	0.1 dB(A)	89.2 dB(A)	89.3 dB(A)	0.1 dB(A)
105°	86.4 dB(A)	86.3 dB(A)	0.1 dB(A)	92.9 dB(A)	92.6 dB(A)	0.3 dB(A)
135°	85.1 dB(A)	85.1 dB(A)	0.0 dB(A)	86.5 dB(A)	85.6 dB(A)	0.9 dB(A)
165°	71.5 dB(A)	72.8 dB(A)	1.3 dB(A)	83.8 dB(A)	81.9 dB(A)	1.9 dB(A)

**Tone 31**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	83.1 dB(A)	81.6 dB(A)	1.5 dB(A)	78.9 dB(A)	78.9 dB(A)	0.0 dB(A)
45°	86.5 dB(A)	86.3 dB(A)	0.2 dB(A)	81.2 dB(A)	80.8 dB(A)	0.4 dB(A)
75°	92.5 dB(A)	91.2 dB(A)	1.3 dB(A)	90.7 dB(A)	90.4 dB(A)	0.3 dB(A)
105°	90.1 dB(A)	91.3 dB(A)	1.2 dB(A)	93.2 dB(A)	93.0 dB(A)	0.2 dB(A)
135°	80.4 dB(A)	80.4 dB(A)	0.0 dB(A)	85.7 dB(A)	86.3 dB(A)	0.6 dB(A)
165°	72.5 dB(A)	75.3 dB(A)	2.8 dB(A)	83.4 dB(A)	85.1 dB(A)	1.7 dB(A)

**Tone 32**

Operational performance						
Specimen № 1						
Maximum Volume dB(A)						
Angle	Horizontal Plane			Vertical Plane		
	Max 29V	Min 15V	Difference	Max 29V	Min 15V	Difference
15°	81.9 dB(A)	81.4 dB(A)	0.5 dB(A)	79.6 dB(A)	79.6 dB(A)	0.0 dB(A)
45°	84.8 dB(A)	84.7 dB(A)	0.1 dB(A)	83.6 dB(A)	83.5 dB(A)	0.1 dB(A)
75°	81.3 dB(A)	81.0 dB(A)	0.3 dB(A)	81.6 dB(A)	81.8 dB(A)	0.2 dB(A)
105°	82.1 dB(A)	82.0 dB(A)	0.1 dB(A)	81.4 dB(A)	81.2 dB(A)	0.2 dB(A)
135°	82.9 dB(A)	83.5 dB(A)	0.6 dB(A)	86.5 dB(A)	86.3 dB(A)	0.2 dB(A)
165°	79.4 dB(A)	79.4 dB(A)	0.0 dB(A)	76.8 dB(A)	77.9 dB(A)	1.1 dB(A)