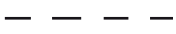


SmartCell

Sounder Data

Sounder tone table

TONE	TONE TYPE	TONE DESCRIPTION / APPLICATION
1. *		970Hz
2.		800Hz/970Hz at 2Hz
3.		800Hz - 970Hz at 1Hz
4. *		970Hz 1s OFF / 1s ON
5. * †		970Hz, 0.5s / 630Hz at 1 Hz
6.		554Hz, 0.1s / 440Hz, 0.4s (AFNOR NF S 32 001)
7. *		500 - 1200Hz, 3.5s / 0.5s OFF (NEN 2575:2000 Dutch slow whoop)
8.		420Hz 0.6s ON / 0.6s OFF (Australia AS1670 Alert tone)
9.		1000 - 2500Hz, 0.5s / 0.5s OFF x 3 / 1.5s OFF (AS1670 Evacuation)
10.		550Hz / 440Hz at 0.5Hz
11.		970Hz, 0.5s ON / 0.5s OFF x 3 / 1.5s OFF (ISO 8201)
12.		2850Hz, 0.5s ON / 0.5s OFF x 3 / 1.5s OFF (ISO 8201)
13.		1200Hz - 500Hz at 1Hz (DIN 33 404)
14.		400Hz
15.		550Hz, 0.7s / 1000Hz, 0.33s
16.		1500Hz - 2700Hz at 3Hz
17.		750Hz
18.		2400Hz
19.		660Hz
20.		660Hz 1.8s ON / 1.8s OFF
21.		660Hz 0.15s ON / 0.15s OFF
22.		510Hz, 0.2s / 610Hz, 0.2s
23.		800 / 1000Hz 0.5s each (1Hz)
24.		250Hz - 1200Hz at 12Hz
25.		500Hz - 1200Hz at 0.33Hz
26. ‡		2400Hz - 2900Hz at 9Hz
27.		2400Hz - 2900Hz at 3Hz
28.		500 - 1200Hz, 0.5s / 0.5s OFF x 3 / 1.5s OFF (AS1670 Evacuation)
29.		800Hz - 970Hz at 9Hz
30.		800Hz - 970Hz at 3Hz
31.		800Hz, 0.25s ON / 1s OFF
32.		500Hz - 1200Hz, 3.75s / 0.25s OFF (AS2220)

* EN54-3 Approved Tones. † Default fire tone. ‡ Default information tone.

Note: Sounder tones are selected at the SmartCell control panel. Refer to the SmartCell Programming Manual (document reference: TSD155) for details.

Sounder data

Dual Smoke/Heat Detector and Combined Sounder

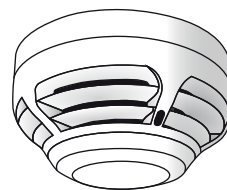
SC-22-0200-XXXX-XX

Tone 1 88 dB(A) at 1 m max. / 73 dB(A) at 1 m min.

Tone 4 86 dB(A) at 1 m max. / 73 dB(A) at 1 m min.

Tone 5 87 dB(A) at 1 m max. / 73 dB(A) at 1 m min.

Tone 7 89 dB(A) at 1 m max. / 73 dB(A) at 1 m min.



TONE 1	Horizontal Plane dB(A) at 1 m			Vertical Plane dB(A) at 1 m		
Position	Vmin	Vmax	Diff	Vmin	Vmax	Diff
15 °	75.69	77.46	1.8	73.35	74.33	1
45 °	75.71	75.97	0.3	74.89	74.09	-0.8
75 °	86.43	87.25	0.8	85.84	86.18	0.3
105 °	87.06	87.31	0.3	87.36	86.95	-0.4
135 °	77.52	78.45	0.9	78.02	77.43	-0.6
165 °	76.76	77.07	0.3	75.85	75.32	-0.5

TONE 4	Horizontal Plane dB(A) at 1 m			Vertical Plane dB(A) at 1 m		
Position	Vmin	Vmax	Diff	Vmin	Vmax	Diff
15 °	77.36	77.64	0.3	74.28	74.52	0.2
45 °	76.91	77.20	0.3	76.24	77.23	1
75 °	86.18	86.07	-0.1	84.81	85.32	0.5
105 °	84.76	85.64	0.9	85.44	82.43	-3
135 °	76.46	77.96	1.5	77.04	77.53	0.5
165 °	74.64	75.71	1.1	73.61	75.08	1.5

TONE 5	Horizontal Plane dB(A) at 1 m			Vertical Plane dB(A) at 1 m		
Position	Vmin	Vmax	Diff	Vmin	Vmax	Diff
15 °	80.31	77.52	-2.8	76.48	75.90	-0.5
45 °	76.64	77.66	1	77.07	76.97	-0.1
75 °	87.31	86.13	-1.2	85.33	85.77	0.4
105 °	82.17	85.23	3.1	85.21	85.99	0.8
135 °	75.48	77.49	2	76.26	77.41	1.2
165 °	73.37	75.64	2.3	75.25	75.24	0

TONE 7	Horizontal Plane dB(A) at 1 m			Vertical Plane dB(A) at 1 m		
Position	Vmin	Vmax	Diff	Vmin	Vmax	Diff
15 °	79.01	79.32	0.3	79.20	79.17	0
45 °	78.56	77.53	-1	78.34	74.01	-4.3
75 °	88.45	88.27	-0.2	87.60	88.33	0.7
105 °	88.59	88.28	-0.3	88.62	89.16	0.6
135 °	75.58	77.04	1.5	75.94	73.55	-2.4
165 °	77.32	77.22	0	78.70	78.84	0.1

Sounder data *continued*

Dual Smoke/Heat Detector and Combined Sounder-Beacon

SC-23-0210-XXXX-XX / SC-23-0220-XXXX-XX

Tone 1 88dB(A) at 1 m max. / 73dB(A) at 1 m min.

Tone 4 88dB(A) at 1 m max. / 73dB(A) at 1 m min.

Tone 5 89dB(A) at 1 m max. / 78dB(A) at 1 m min.

Tone 7 93dB(A) at 1 m max. / 78dB(A) at 1 m min.



TONE 1	Horizontal Plane dB(A) at 1 m			Vertical Plane dB(A) at 1 m		
Position	Vmin	Vmax	Diff	Vmin	Vmax	Diff
15 °	81.04	81.14	0.1	77.84	77.74	-0.1
45 °	78.94	77.64	-1.3	79.54	79.54	0
75 °	87.54	87.44	-0.1	87.64	87.14	-0.5
105 °	86.74	86.24	-0.5	86.94	86.44	-0.5
135 °	79.94	79.94	0	78.74	78.94	0.2
165 °	76.84	76.64	-0.2	74.14	73.94	-0.2

TONE 4	Horizontal Plane dB(A) at 1 m			Vertical Plane dB(A) at 1 m		
Position	Vmin	Vmax	Diff	Vmin	Vmax	Diff
15 °	79.34	80.54	1.2	76.84	74.24	-2.6
45 °	78.14	78.74	0.6	79.14	78.44	-0.7
75 °	86.84	86.54	-0.3	87.54	86.94	-0.6
105 °	85.54	85.74	0.2	85.64	85.64	0
135 °	78.74	78.94	0.2	78.14	77.64	-0.5
165 °	73.54	74.04	0.5	75.54	73.94	-1.6

TONE 5	Horizontal Plane dB(A) at 1 m			Vertical Plane dB(A) at 1 m		
Position	Vmin	Vmax	Diff	Vmin	Vmax	Diff
15 °	82.24	82.54	0.3	81.14	80.84	-0.3
45 °	78.14	78.84	0.7	78.44	78.64	0.2
75 °	89.24	88.84	-0.4	89.04	88.64	-0.4
105 °	87.14	86.14	-1	87.54	86.74	-0.8
135 °	79.74	79.74	0	79.64	79.44	-0.2
165 °	79.94	79.94	0	81.94	81.54	-0.4

TONE 7	Horizontal Plane dB(A) at 1 m			Vertical Plane dB(A) at 1 m		
Position	Vmin	Vmax	Diff	Vmin	Vmax	Diff
15 °	81.34	83.34	2	80.64	82.14	1.5
45 °	79.84	79.94	0.1	79.24	78.84	-0.4
75 °	92.64	92.74	0.1	92.74	92.44	-0.3
105 °	89.74	90.44	0.7	90.64	91.14	0.5
135 °	81.94	79.14	-2.8	80.74	81.04	0.3
165 °	80.54	80.54	0	80.84	80.64	-0.2

Sounder data *continued*

Sounder and Ceiling Beacon

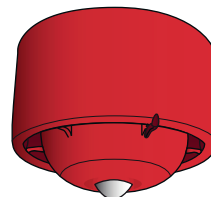
SC-33-0110-XXXX-XX / SC-33-0120-XXXX-XX / SC-33-0210-XXXX-XX / SC-33-0220-XXXX-XX

Tone 1 87dB(A) at 1 m max. / 74dB(A) at 1 m min.

Tone 4 87dB(A) at 1 m max. / 73dB(A) at 1 m min.

Tone 5 91dB(A) at 1 m max. / 77dB(A) at 1 m min.

Tone 7 92dB(A) at 1 m max. / 76dB(A) at 1 m min.



TONE 1	Horizontal Plane dB(A) at 1 m			Vertical Plane dB(A) at 1 m		
Position	Vmin	Vmax	Diff	Vmin	Vmax	Diff
15 °	74.81	77.26	2.4	75.53	75.90	0.4
45 °	74.24	76.55	2.3	78.16	74.38	-3.8
75 °	85.69	84.28	-1.4	85.39	85.04	-0.4
105 °	85.97	87.17	1.2	86.44	85.48	-1
135 °	75.85	80.03	4.2	78.19	77.13	-1.1
165 °	75.43	76.69	1.3	76.32	75.26	-1.1

TONE 4	Horizontal Plane dB(A) at 1 m			Vertical Plane dB(A) at 1 m		
Position	Vmin	Vmax	Diff	Vmin	Vmax	Diff
15 °	77.39	74.65	-2.7	76.48	76.00	-0.5
45 °	77.50	75.26	-2.2	74.38	73.57	-0.8
75 °	87.32	87.25	-0.1	82.39	85.93	3.5
105 °	86.39	87.29	0.9	86.84	86.86	0
135 °	75.13	76.98	1.4	72.84	77.12	4.3
165 °	74.46	76.18	1.7	75.70	75.89	0.2

TONE 5	Horizontal Plane dB(A) at 1 m			Vertical Plane dB(A) at 1 m		
Position	Vmin	Vmax	Diff	Vmin	Vmax	Diff
15 °	80.90	79.59	-1.3	79.58	79.85	0.3
45 °	79.42	79.74	0.3	79.30	78.87	-0.4
75 °	91.01	89.93	-1.1	89.85	89.00	-0.9
105 °	90.83	90.25	-0.6	90.33	89.84	-0.5
135 °	77.71	77.09	-0.6	78.40	78.22	-0.2
165 °	80.82	80.17	-0.7	80.36	79.67	-0.7

TONE 7	Horizontal Plane dB(A) at 1 m			Vertical Plane dB(A) at 1 m		
Position	Vmin	Vmax	Diff	Vmin	Vmax	Diff
15 °	80.85	82.14	1.3	83.10	83.02	-0.1
45 °	83.84	82.08	-1.8	76.67	80.04	3.4
75 °	87.79	90.71	2.9	90.79	90.77	0
105 °	92.02	91.60	-0.4	91.56	89.43	-2.1
135 °	83.13	81.23	-1.9	82.19	82.06	-0.1
165 °	85.48	80.51	-5	82.58	77.39	-5.2

Sounder data *continued*

Sounder and Wall Beacon

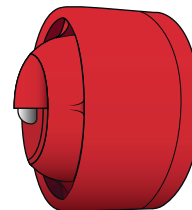
SC-32-0110-XXXX-XX / SC-32-0120-XXXX-XX / SC-32-0210-XXXX-XX / SC-32-0220-XXXX-XX

Tone 1 91dB(A) at 1 m max. / 77dB(A) at 1 m min.

Tone 4 91dB(A) at 1 m max. / 77dB(A) at 1 m min.

Tone 5 91dB(A) at 1 m max. / 79dB(A) at 1 m min.

Tone 7 95dB(A) at 1 m max. / 82dB(A) at 1 m min.



TONE 1	Horizontal Plane dB(A) at 1 m			Vertical Plane dB(A) at 1 m		
Position	Vmin	Vmax	Diff	Vmin	Vmax	Diff
15 °	80.34	80.14	-0.2	80.05	80.16	0.1
45 °	77.98	78.33	0.3	78.47	79.24	0.8
75 °	89.85	90.15	0.3	89.44	89.15	-0.3
105 °	89.99	90.98	1	91.06	90.22	-0.8
135 °	81.52	81.64	0.1	83.12	82.59	-0.5
165 °	78.99	79.84	0.9	79.51	79.00	-0.5

TONE 4	Horizontal Plane dB(A) at 1 m			Vertical Plane dB(A) at 1 m		
Position	Vmin	Vmax	Diff	Vmin	Vmax	Diff
15 °	78.84	80.22	1.4	81.41	80.67	-0.7
45 °	79.30	79.35	0.1	80.84	80.11	-0.7
75 °	88.81	89.83	1	89.85	88.78	-1.1
105 °	89.74	90.24	0.5	90.95	89.98	-1
135 °	78.54	79.86	1.3	79.80	83.17	3.4
165 °	77.73	78.75	1	79.38	79.44	0.1

TONE 5	Horizontal Plane dB(A) at 1 m			Vertical Plane dB(A) at 1 m		
Position	Vmin	Vmax	Diff	Vmin	Vmax	Diff
15 °	79.88	80.39	0.5	81.23	81.13	-0.1
45 °	80.94	81.30	0.4	81.27	81.35	0.1
75 °	90.15	90.19	0	90.61	90.37	-0.2
105 °	90.86	90.71	-0.2	91.10	90.72	-0.4
135 °	82.28	82.41	0.1	82.49	82.78	0.3
165 °	81.33	81.47	0.1	81.96	81.75	-0.2

TONE 7	Horizontal Plane dB(A) at 1 m			Vertical Plane dB(A) at 1 m		
Position	Vmin	Vmax	Diff	Vmin	Vmax	Diff
15 °	85.34	85.63	0.3	86.29	86.41	0.1
45 °	82.66	83.04	0.4	83.30	83.11	-0.2
75 °	92.14	94.58	2.4	92.23	93.88	1.7
105 °	94.77	94.75	0	95.24	94.18	-1.1
135 °	84.38	84.81	0.4	82.83	85.67	2.8
165 °	85.07	84.79	-0.3	84.76	82.32	-2.4

Sounder data *continued*

Sounder

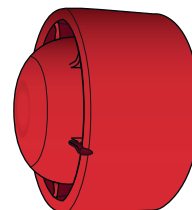
SC-31-0100-XXXX-XX / SC-31-0200-XXXX-XX

Tone 1 91dB(A) at 1 m max. / 79dB(A) at 1 m min.

Tone 4 91dB(A) at 1 m max. / 79dB(A) at 1 m min.

Tone 5 92dB(A) at 1 m max. / 80dB(A) at 1 m min.

Tone 7 95dB(A) at 1 m max./ 81dB(A) at 1 m min.



TONE 1	Horizontal Plane dB(A) at 1 m			Vertical Plane dB(A) at 1 m		
Position	Vmin	Vmax	Diff	Vmin	Vmax	Diff
15 °	80.63	80.25	-0.4	80.37	80.61	0.3
45 °	79.88	80.13	0.3	79.89	79.95	0.1
75 °	90.47	90.52	0.1	90.33	90.77	0.4
105 °	90.38	91.06	0.7	90.45	90.85	0.4
135 °	82.17	82.50	0.3	82.19	82.35	0.2
165 °	80.36	81.11	0.7	80.39	80.58	0.2

TONE 4	Horizontal Plane dB(A) at 1 m			Vertical Plane dB(A) at 1 m		
Position	Vmin	Vmax	Diff	Vmin	Vmax	Diff
15 °	80.22	80.66	0.5	79.68	80.45	0.8
45 °	81.11	81.59	0.5	81.36	81.54	0.2
75 °	89.74	90.54	0.8	89.84	90.41	0.6
105 °	89.83	90.15	0.3	89.83	90.09	0.3
135 °	82.41	82.29	-0.1	82.29	82.18	-0.1
165 °	80.10	79.59	-0.5	79.73	79.45	-0.3

TONE 5	Horizontal Plane dB(A) at 1 m			Vertical Plane dB(A) at 1 m		
Position	Vmin	Vmax	Diff	Vmin	Vmax	Diff
15 °	80.80	81.90	1.1	81.20	81.76	0.6
45 °	82.44	82.60	0.2	82.36	82.62	0.3
75 °	91.54	91.97	0.4	91.50	91.91	0.4
105 °	92.08	91.84	-0.3	91.98	91.86	-0.1
135 °	82.53	82.00	-0.5	82.51	82.00	-0.5
165 °	82.86	82.44	-0.4	82.86	82.35	-0.5

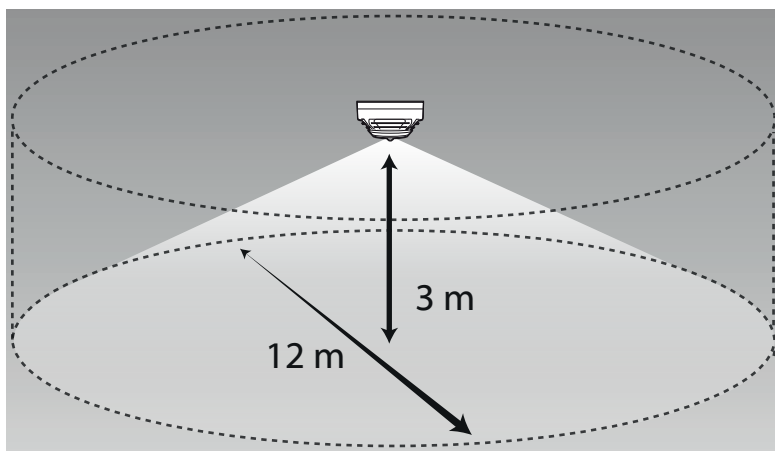
TONE 7	Horizontal Plane dB(A) at 1 m			Vertical Plane dB(A) at 1 m		
Position	Vmin	Vmax	Diff	Vmin	Vmax	Diff
15 °	89.22	89.23	0	89.43	89.34	-0.1
45 °	88.56	86.42	-2.2	86.66	86.31	-0.4
75 °	94.35	94.16	-0.2	94.43	93.61	-0.8
105 °	95.24	94.52	-0.7	94.92	94.51	-0.4
135 °	81.65	82.52	0.9	87.16	89.49	2.3
165 °	89.68	88.58	-1.1	89.02	88.72	-0.3

Beacon coverage (*WHITE flash*)

Dual Smoke/Heat Detector and Combined Sounder-Beacon

SC-23-0220-XXXX-XX

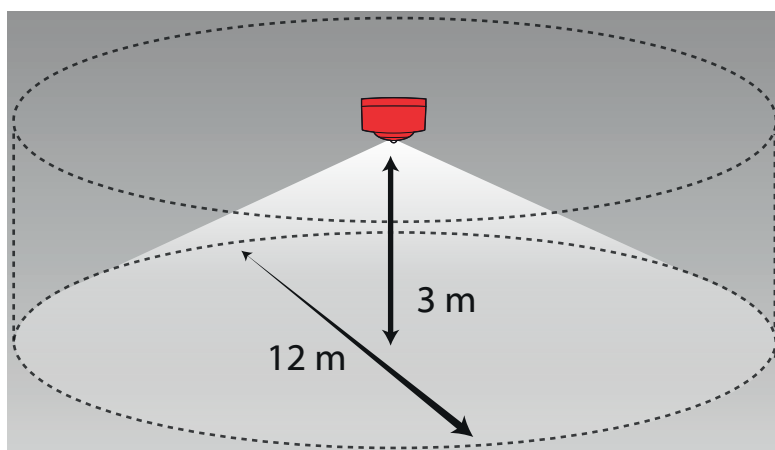
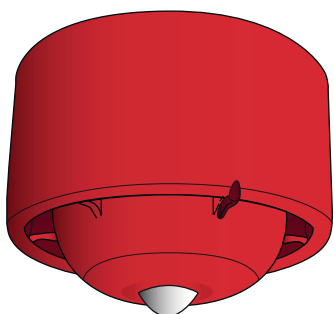
EN54-23 Coverage:
C-3-12



Sounder and Ceiling Beacon

SC-33-0120-XXXX-XX / SC-33-0220-XXXX-XX

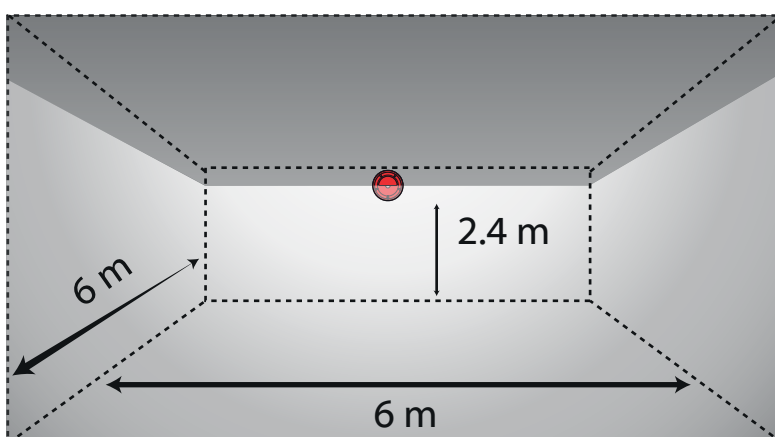
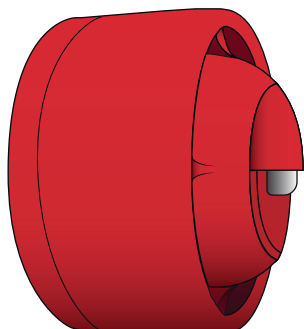
EN54-23 Coverage:
C-3-12



Sounder and Wall Beacon

SC-32-0120-XXXX-XX / SC-32-0220-XXXX-XX

EN54-23 Coverage:
W-2.4-6

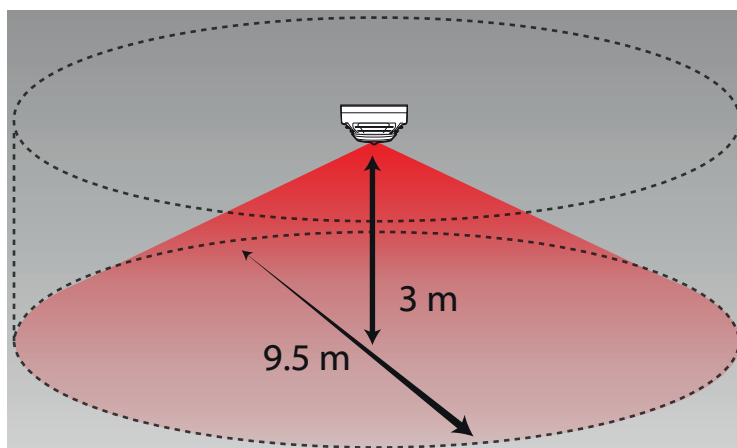


Beacon coverage (*RED flash*)

Dual Smoke/Heat Detector and Combined Sounder-Beacon

SC-23-0210-XXXX-XX

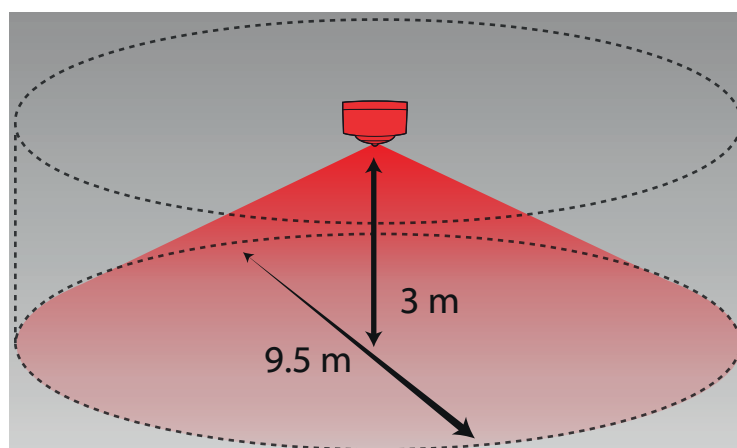
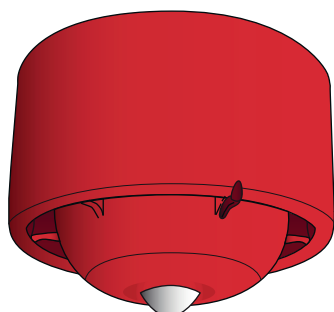
EN54-23 Coverage:
C-3-9.5



Sounder and Ceiling Beacon

SC-33-0120-XXXX-XX / SC-33-0220-XXXX-XX

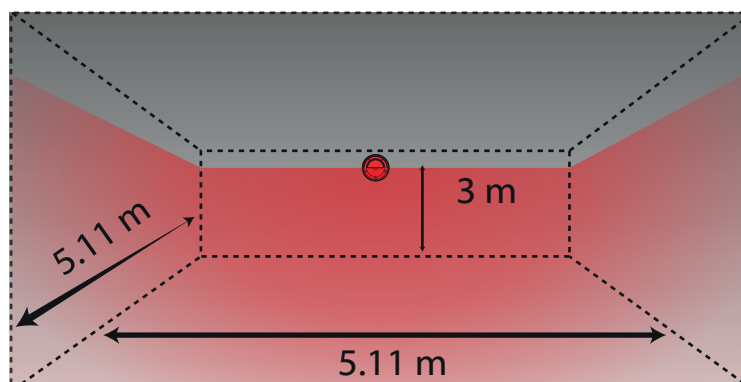
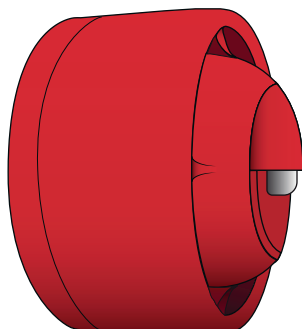
EN54-23 Coverage:
C-3-9.5



Sounder and Wall Beacon

SC-32-0110-XXXX-XX / SC-32-0210-XXXX-XX

EN54-23 Coverage:
W-3-5.11



SmartCell

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