Table 1: *Cross-correlation between ISOCAM and the Chandra X-ray observatory (CXO) in the HDFN+FF. Col.(1) identification of Chandra sources from Hornschemeier et al. (2001) and Brandt et al. (2001). Col.(2) identification of ISOCAM sources from Aussel et al. (1999, 2001), e.g. HDF_PM3_2. Galaxies detected in the HDFN proper are marked with a* $^{(p)}$. *Col.(3) spectroscopic redshift as given in the CXO papers except for HDF_PM3_5, recently obtained by Dawson et al. (2001). Col.(4) ISOCAM-LW3 flux density in* μJy *with 1-*σ *error bars. Col.(5) logarithm of the rest-frame IR luminosity (from 8 to 1000*$\,\mu m$*). Since some galaxies are powered by AGN activity, we also estimated IR luminosities assuming that their SEDs were similar to either NGC 1068 (left value) or NGC 6240 (right value). Col.(6) galaxies identified as AGNs in the CXO papers are marked with a cross. The two + signs indicate the two galaxies that we also consider as AGNs. Col.(7),(8),(9) logarithm of the rest-frame 0.5-8 keV (FB: full band), 0.5-2 keV (SB: soft band), 2-8 keV (HB: hard band) X-ray luminosities in* $erg\ s^{-1}$*, calculated from the observed values using the X-ray photon index given in the CXO papers and quoted in the Col.(10). The last two galaxies,PM3_24 and PM3_27a, were only detected in the deeper image from Brandt et al. (2001).*

ID CXO	ID CAM	z	S_{LW3} (μJy)	L_{IR}^{RF} ($L_{\odot}$)	AGN	$log(L_X^{RF})$ $(erg\ s^{-1})$ FB	SB	HB	Γ
J123634.4+621212	PM3_2	0.456	448±63	11.3 [10.8,11.7]		41.4	40.9	$<$ 41.7	1.40
J123635.6+621424	PM3_5	2.010	441±40	- [12.5,13.7]	+	43.2	42.4	43.1	0.75
J123636.5+621348	PM3_6	0.960	353±53	12.2 [11.5,12.2]	x	43.3	43.0	43.0	1.99
J123641.8+621131	PM3_12$^{(p)}$	0.089	236±59	9.1 [8.7, 9.5]		39.9	39.4	$<$ 39.8	1.40
J123642.1+621545	PS3_10	0.857	459±66	12.1 [11.5,12.2]	+	42.6	41.8	42.5	0.98
J123644.2+621251	PM3_17$^{(p)}$	0.557	282±62	11.2 [10.8,11.7]	x	$<$ 41.3	40.6	$<$ 41.2	1.40
J123646.4+621406	PM3_20$^{(p)}$	0.960	107±57	11.8 [11.0,11.7]	x	43.5	42.6	43.5	0.70
J123702.2+621124	PM3_42	0.136	162±62	9.3 [9.0, 9.7]		39.9	$<$ 39.9	$<$ 40.6	1.40
J123648.4+621426	PM3_24$^{(p)}$	0.139	307±64	9.6 [9.3,10.0]		$<$ 40.1	39.4	$<$ 40.0	1.40
J123649.7+621312	PM3_27a$^{(p)}$	0.475	115±40	10.5 [10.2,11.2]		41.1	40.7	$<$ 41.1	1.40