

**Search for Hot Stars with Recently Formed Dust
in the IRAS Database and Faint Star Positional Catalogs**

Table 1: Positions and photometric data for the new B[e] star candidates

IRAS	00470+6429	02155+6410	06071+2925
R.A.	$0^h 50^m 05^s.98$	$2^h 19^m 22^s.80$	$6^h 10^m 17^s.34$
Decl.	$+64^\circ 45' 35''.0$	$+64^\circ 24' 41''.2$	$+29^\circ 25' 16''.6$
B_j	12.6 ± 0.2	11.54 ± 0.05	14.1 ± 0.3
B	12.3 ± 0.2	11.4 ± 0.1	14.0 ± 0.1
R	11.1 ± 0.1	10.9 ± 0.1	12.8 ± 0.2
I	10.6	10.7	12.2
J	9.04 ± 0.04	9.86 ± 0.02	11.49 ± 0.02
H	7.92 ± 0.04	9.68 ± 0.02	10.68 ± 0.02
K	7.00 ± 0.02	9.45 ± 0.02	9.81 ± 0.02
F ₁₂	4.59 ± 0.06	2.27 ± 0.03	1.20 ± 0.03
F ₂₅	5.13 ± 0.07	2.48 ± 0.03	1.45 ± 0.04
F ₆₀	3.11 ± 0.36	0.87 ± 0.06	0.97 ± 0.04
A	2.77 ± 0.14	1.63 ± 0.08	—
C	2.91 ± 0.20	1.62 ± 0.31	—
D	2.90 ± 0.17	2.23 ± 0.25	—
E	4.47 ± 0.54	2.92 ± 0.79	—

The equatorial coordinates on the 2000.0 epoch are given in lines 1 and 2 (average of those from USNO–B1.0, GSC, and 2MASS), the GSC 2.2 blue magnitude B_j in line 3, the USNO–B1.0 BRI photometric data (magnitudes) in lines 4–6, the 2MASS JHK data (magnitudes) in lines 7–9, the IRAS fluxes (Janskiys) in lines 10–12, and the MSX fluxes (Janskiys) corrected by the ADDSCAN procedure in lines 13–16. The MSX $ACDE$ bands have the effective wavelengths at 8.28, 12.13, 14.65, and 21.34 μm , respectively. The flux difference between the IRAS and MSX data may partially be due to different passbands.

IRAS 00470+6429 was included in a list of PPNe by Meixner et al. (1999, ApJS, 122, 221), but this status was not confirmed. Its SED, corrected for the IS extinction (with an $A_V=2.8$ mag assuming that it is a B–type star), is very similar to those of other B[e] stars with warm dust, such as AS 381. The object is located 0.7 north of the center of Cas OB7, and our IS extinction estimate is consistent with that of the association. At the distance of Cas OB7 (2 kpc), IRAS 00470+6429 would have a luminosity $\log L/L_\odot \sim 3.7$. IRAS 02155+6410 was checked for the presence of a Si–maser emission by Jiang et al. (1999, PASJ, 51, 95) with a negative result.