

Appendix from Engelke, Price, & Kraemer, “Spectral Irradiance Calibration in the Infrared. XVI. Improved Accuracy in the Infrared Spectra of the Secondary and Tertiary Standard Calibration Stars” (AJ, vol. 132, no. 4, p. 1445)

PHOTOMETRIC SCALING OF THE CALIBRATED SPECTRA

This appendix contains information (Tables 8–45) on the adjustments that were used to rationalize the spectra and to scale the result to absolute values for each of the stars in Tables 1–3. The stars are listed in the order that they appear in the tables. The adjustments, photometric scaling, and derived parameters are listed for each star. Plots for each star (Fig. Set 13) display the measured photometry against what is predicted from the absolute spectrum.

The *ISO* SWS spectra we used were the averaged spectral fragments given by Sloan et al. (2003), and the listed adjustments are applied to those fragments as described in the main text. The short-wavelength spectra from Strecker et al. (1979) are seamed onto the SWS with the listed adjustments. Additional short spectral fragments from other resources were used for a small number of stars as noted.

For convenience, the photometric magnitude scale for a given photometric reference was adjusted so that $[IR_{\text{Sirius}}] = -1.36$. The DIRBE photometry was taken from Smith et al. (2004), but 0.045 mag was added to DIRBE band 1 results to correct a bias for Sirius in the DIRBE data. If a photometric reference had no Sirius measurement, Vega was then used, with magnitudes being calculated using the appropriate bandpass and the Kurucz model from Paper I. The *MSX* photometry is from Price et al. (2004), while the *IRAS* information was obtained from the VizieR Web site.⁶

The stellar effective temperature (T_{eff}) and angular diameter (θ) in milliarcseconds were derived by fitting the *autoshape* function to the photometry. The plots show how well the *autoshape* function using the derived parameters fits the observations.

⁶ See <http://vizier.hia.nrc.ca/viz-bin/VizieR>.

Star: α Boo
 HD 124897, HR 5340, IRAS 14133+1925
 K1.5 III
 CWW composite star

Fit Parameters: $T_{\text{eff}} = 4350$ K, $\theta = 21.06$ mas

Spectral Data:

SWS TDT: 45200101 2.4–21 μm
 Hinkle et al. (1995): 2.1–2.4 μm
 Strecker et al. (1979): 1.22–2.4 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond
 Normalization relative to Sirius: 0.15%

Spectral Adjustments:

SWS: 1A	$0.94(\lambda/2.5)^{0.10}$	
1B	$0.95(\lambda/2.6)^{0.02}$	
1D	$0.96(\lambda/3.0)^{0.13}$	
1E	$0.975(\lambda/3.7)^{0.17}$	
2A	$1.06(\lambda/4.05)^{0.16}$	
2B	$1.12(\lambda/5.35)^{0.15}$	
2C	$0.975(\lambda/7.4)^{0.20}$	(7.0 $\mu\text{m} < \lambda < 8.5 \mu\text{m}$)
	$1.00(\lambda/8.5)^{0.15}$	(8.5 $\mu\text{m} < \lambda < 10.5 \mu\text{m}$)
	$1.03(\lambda/10.4)^{-0.5}$	(10.5 $\mu\text{m} < \lambda < 11.9 \mu\text{m}$)
	0.92 \times	($\lambda \geq 11.9 \mu\text{m}$)
3A	$1.074(\lambda/12.0)^{0.1}$	
3C	1.06 \times	
3D	$1.04(\lambda/18)^{0.15}$	
Strecker et al. (1979)	$0.98(\lambda/2.0)^{0.05}$	
Hinkle et al. (1995)	$1.005(\lambda/2.2)^{-0.35}$	

TABLE 8
 α Boo Photometry

Band	Magnitude	Reference
DIRBE 1	-2.221 ± 0.030 (0.04 \pm 0.03)	Smith et al. (2004)
DIRBE 2	-2.988 ± 0.009 (0.01 \pm 0.01)	Smith et al. (2004)
DIRBE 3	-3.083 ± 0.022 (0.04 \pm 0.02)	Smith et al. (2004)
DIRBE 4	-2.934 ± 0.020 (0.01 \pm 0.01)	Smith et al. (2004)
<i>J</i>	-2.198 ± 0.007	Hammersley et al. (1998)
<i>H</i>	-2.853 ± 0.007	Hammersley et al. (1998)
<i>K</i>	-2.964 ± 0.014	Hammersley et al. (1998)
<i>L</i>	-3.097 ± 0.010	Hammersley et al. (1998)
<i>J</i>	-2.22 ± 0.02	Selby et al. (1988)
<i>K</i>	-3.05 ± 0.02	Selby et al. (1988)
<i>L</i>	-3.14 ± 0.02	Selby et al. (1988)
<i>MSX A</i>	-3.140 ± 0.004	Price et al. (2004)
<i>MSX B</i> ₁	-3.082 ± 0.007	Price et al. (2004)
<i>MSX B</i> ₂	-3.031 ± 0.006	Price et al. (2004)
<i>MSX C</i>	-3.187 ± 0.003	Price et al. (2004)
<i>MSX D</i>	-3.182 ± 0.002	Price et al. (2004)
<i>MSX E</i>	-3.199 ± 0.008	Price et al. (2004)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: β Gem
 HD 62509, HR 2990, IRAS 07422+2808
 K0 III
 CWW composite star

Fit Parameters: $T_{\text{eff}} = 4850$ K, $\theta = 8.03$ mas

Spectral Data:

SWS: (Average of normalized δ Eri and θ Cen) \times Engelke function with $T_{\text{eff}} = 4850$ K and $\theta = 8.03$ mas
 Strecker et al. (1979): 1.22–2.36 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond
 Normalization relative to Sirius: 1%

Spectral Adjustments:

SWS See comments for δ Eri and θ Cen
 Strecker et al. (1979) 1.015 \times

TABLE 9
 β Gem Photometry

Band	Magnitude	Reference
DIRBE 1	-0.500 ± 0.030 (0.01 \pm 0.03)	Smith et al. (2004)
DIRBE 2	-1.081 ± 0.009 (0.01 \pm 0.01)	Smith et al. (2004)
DIRBE 3	-1.149 ± 0.022 (0.03 \pm 0.03)	Smith et al. (2004)
DIRBE 4	-1.067 ± 0.020 (0.01 \pm 0.02)	Smith et al. (2004)
<i>J</i>	-0.525 ± 0.009	Hammersley et al. (1998)
<i>H</i>	-0.999 ± 0.009	Hammersley et al. (1998)
<i>K</i>	-1.088 ± 0.012	Hammersley et al. (1998)
<i>L</i>	-1.151 ± 0.020	Hammersley et al. (1998)
<i>J</i>	-0.55 ± 0.01	Selby et al. (1988)
<i>K</i>	-1.12 ± 0.01	Selby et al. (1988)
<i>L</i>	-1.20 ± 0.02	Selby et al. (1988)
<i>MSX A</i>	-1.197 ± 0.008	Price et al. (2004)
<i>MSX B₁</i>	-1.162 ± 0.007	Price et al. (2004)
<i>MSX B₂</i>	-1.115 ± 0.006	Price et al. (2004)
<i>MSX C</i>	-1.228 ± 0.004	Price et al. (2004)
<i>MSX D</i>	-1.235 ± 0.003	Price et al. (2004)
10.1 μm	-1.24 ± 0.025	Tokunaga (1984)
20.1 μm	-1.21 ± 0.025	Tokunaga (1984)
12 μm	-1.21 ± 0.04	Beichman et al. (1988)
25 μm	-1.19 (0.05)	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1 σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: β UMi
 HD 131873, HR 5563, IRAS 14508+7421
 K4 III
 CWW template star

Fit Parameters: $T_{\text{eff}} = 4150$ K, $\theta = 10.00$ mas

Spectral Data:

SWS TDT: 18205639 2.36–16 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond

Normalization relative to Sirius: 0.5% for average

Spectral Adjustments:

SWS: 1A 0.98 \times
 1B 0.98 \times
 1D 0.98 \times
 1E 0.98 \times
 2A 0.932 \times
 2B $0.91(\lambda/7.0)^{0.04}$
 2C $0.92(\lambda/7.0)^{0.04}$
 3A 0.89 \times
 3C 0.95 \times

TABLE 10
 β UMi Photometry

Band	Magnitude	Reference
DIRBE 1	-0.469 ± 0.026 (0.04 \pm 0.03)	Smith et al. (2004)
DIRBE 2	-1.292 ± 0.010 (0.01 \pm 0.01)	Smith et al. (2004)
DIRBE 3	-1.410 ± 0.023 (0.03 \pm 0.03)	Smith et al. (2004)
DIRBE 4	-1.215 ± 0.023 (0.02 \pm 0.02)	Smith et al. (2004)
12 μm	-1.47 ± 0.05	Beichman et al. (1988)
25 μm	-1.48 ± 0.06	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

App. from Engelke, Price, & Kraemer, “Spectral Irradiance Calibration. XVI.”

Star: α Tau
 HD 29139, HR 1457, IRAS 04330+1624
 K5 III
 CWW composite star

Fit Parameters: $T_{\text{eff}} = 4050$ K, $\theta = 20.75$ mas

Spectral Data:

SWS TDT: 63602102 2.4–35 μm
 Strecker et al. (1979): 1.22–2.4 μm
 Wallace & Hinkle (1996, 1997): 2.04–2.4 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond
 Normalization relative to Sirius: 0.2%

Spectral Adjustments:

SWS: 1A	0.980 \times	
1B	0.985 \times	
1D	$0.976(\lambda/3.3)^{-0.05}$	
1E	$0.965(\lambda/3.3)^{0.05}$	
2A	$0.995(\lambda/4.1)^{-0.1}$	
2B	$1.07(\lambda/5.5)^{0.12}$	
2C	$0.93(\lambda/7.0)^{0.10}$	($\lambda \leq 9.3 \mu\text{m}$)
	$0.96(\lambda/9.3)^{0.45}$	($\lambda > 9.3 \mu\text{m}$)
3A	0.88 \times	
3C	0.825 \times	
3D	$0.94(\lambda/28)^{-2}$	
3E	$1.00(\lambda/31)^{-0.7}$	
Strecker et al. (1979)	$0.993(\lambda/2.2)^{0.05}$	
Wallace & Hinkle (1996, 1997)	$1.00(\lambda/2.35)^{-0.3}$	

TABLE 11
 α Tau Photometry

Band	Magnitude	Reference
DIRBE 1	
DIRBE 2	-2.834 ± 0.005 (0.00 ± 0.01)	Smith et al. (2004)
DIRBE 3	-2.958 ± 0.016 (0.02 ± 0.02)	Smith et al. (2004)
DIRBE 4	-2.748 ± 0.006 (0.00 ± 0.01)	Smith et al. (2004)
<i>J</i>	-1.887 ± 0.016	Hammersley et al. (1998)
<i>H</i>	-2.624 ± 0.007	Hammersley et al. (1998)
<i>K</i>	-2.826 ± 0.013	Hammersley et al. (1998)
<i>L</i>	-2.960 ± 0.009	Hammersley et al. (1998)
<i>J</i>	-1.93 ± 0.02	Selby et al. (1988)
<i>K</i>	-2.91 ± 0.02	Selby et al. (1988)
<i>L</i>	-3.04 ± 0.02	Selby et al. (1988)
<i>MSX A</i>	-2.994 ± 0.004	Price et al. (2004)
<i>MSX B</i> ₁	-2.907 ± 0.007	Price et al. (2004)
<i>MSX B</i> ₂	-2.854 ± 0.006	Price et al. (2004)
<i>MSX C</i>	-3.078 ± 0.003	Price et al. (2004)
<i>MSX D</i>	-3.071 ± 0.002	Price et al. (2004)
<i>MSX E</i>	-3.094 ± 0.008	Price et al. (2004)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: γ Dra
 HD 164058, HR 6705, IRAS 1755+5129
 K5 III
 CWW composite star

Fit Parameters: $T_{\text{eff}} = 4030$ K, $\theta = 10.17$ mas

Spectral Data:

SWS TDT: 37704637 2.36–27 μm
 Wallace & Hinkle (1996, 1997): 2.01–2.36 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond
 Normalization relative to Sirius: 0.2% for average

Spectral Adjustments:

SWS: 1A 0.976 \times
 1B 0.973 \times
 1D 0.975 \times
 1E $0.98(\lambda/3.8)^{0.07}$
 2A 0.933 \times
 2B $0.98(\lambda/6.8)^{0.22}$
 2C $0.885(\lambda/7.0)^{0.035}$
 3A 0.972 \times
 3C 0.94 \times
 3D 0.89 \times
 Strecker et al. (1979) $0.95(\lambda/2.4)^{-0.2}$

TABLE 12
 γ Dra Photometry

Band	Magnitude	Reference
DIRBE 1	-0.400 ± 0.030 (0.05 ± 0.03)	Smith et al. (2004)
DIRBE 2	-1.281 ± 0.013 (0.02 ± 0.01)	Smith et al. (2004)
DIRBE 3	-1.410 ± 0.023 (0.03 ± 0.02)	Smith et al. (2004)
DIRBE 4	-1.185 ± 0.020 (0.02 ± 0.02)	Smith et al. (2004)
<i>J</i>	-0.382 ± 0.007	Hammersley et al. (1998)
<i>H</i>	-1.123 ± 0.007	Hammersley et al. (1998)
<i>K</i>	-1.281 ± 0.013	Hammersley et al. (1998)
<i>L</i>	-1.416 ± 0.009	Hammersley et al. (1998)
<i>J</i>	-0.40 ± 0.02	Selby et al. (1988)
<i>K</i>	-1.34 ± 0.02	Selby et al. (1988)
<i>L</i>	-1.45 ± 0.03	Selby et al. (1988)
<i>MSX A</i>	-1.437 ± 0.008	Price et al. (2004)
<i>MSX B₁</i>	-1.338 ± 0.010	Price et al. (2004)
<i>MSX B₂</i>	-1.276 ± 0.014	Price et al. (2004)
<i>MSX C</i>	-1.520 ± 0.007	Price et al. (2004)
<i>MSX D</i>	-1.500 ± 0.006	Price et al. (2004)
<i>MSX E</i>	-1.56 ± 0.05	Price et al. (2004)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: μ UMa
 HD 89758, HR 4069, IRAS 10193+4145
 Spectroscopic binary
 M0 III
 CWW composite star

Fit Parameters: $T_{\text{eff}} = 3900$ K, $\theta = 8.45$ mas

Spectral Data:

SWS TDT: 16000806 2.4–9.9 μm
 Wallace & Hinkle (1996, 1997): 2.05–2.4 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond
 Normalization relative to Sirius: 0.5% for average

Spectral Adjustments:

SWS: 1A $0.951 \times$
 1B $0.955(\lambda/3.0)^{0.1}$
 1D $0.96 \times$
 1E $0.965(\lambda/3.9)^{0.1}$
 2A $1.01 \times$
 2B $0.972(\lambda/5.5)^{0.1}$
 2C $1.022(\lambda/7.0)^{-0.07}$
 3A $1.10(\lambda/12.5)^{0.35}$
 Wallace & Hinkle (1996, 1997) $0.98(\lambda/2.35)^{-0.7}$

TABLE 13
 μ UMa Photometry

Band	Magnitude	Reference
DIRBE 1	0.13 ± 0.03 (0.03 ± 0.03)	Smith et al. (2004)
DIRBE 2	-0.82 ± 0.01 (0.01 ± 0.01)	Smith et al. (2004)
DIRBE 3	-0.95 ± 0.02 (0.03 ± 0.03)	Smith et al. (2004)
DIRBE 4	-0.73 ± 0.02 (0.03 ± 0.03)	Smith et al. (2004)
10.1 μm	-1.03 ± 0.025	Tokunaga (1984)
20.1 μm	-1.08 ± 0.025	Tokunaga (1984)
12 μm	-0.98 ± 0.05	Beichman et al. (1988)
25 μm	-1.04 ± 0.06	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: β And
 HD 6860, HR 337, IRAS 01069+3521
 K5 III
 CWW composite star

Fit Parameters: $T_{\text{eff}} = 3900$ K, $\theta = 13.65$ mas

Spectral Data:

SWS TDT: 79501002 2.36–27 μm
 Strecker et al. (1979): 1.22–2.36 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond
 Normalization relative to Sirius: 1.0%

Spectral Adjustments:

SWS: 1A 0.95 \times
 1B 0.95 \times
 1D 0.945 \times
 1E 1.03 \times
 2A 1.117 \times
 2B $0.90(\lambda/7.5)^{0.107}$
 2C 1.0 \times
 3A $1.09(\lambda/13.0)^{0.05}$
 3C $1.015(\lambda/18.0)^{0.20}$
 3D $1.03(\lambda/24.0)^{0.20}$
 Strecker et al. (1979) 0.97 \times

TABLE 14
 β And Photometry

Band	Magnitude	Reference
DIRBE 1	-0.873 ± 0.025 (0.02 \pm 0.03)	Smith et al. (2004)
DIRBE 2	-1.844 ± 0.015 (0.01 \pm 0.01)	Smith et al. (2004)
DIRBE 3	-1.978 ± 0.022 (0.04 \pm 0.02)	Smith et al. (2004)
DIRBE 4	-1.749 ± 0.016 (0.01 \pm 0.01)	Smith et al. (2004)
<i>J</i>	-0.911 ± 0.007	Hammersley et al. (1998)
<i>H</i>	-1.731 ± 0.007	Hammersley et al. (1998)
<i>K</i>	-1.914 ± 0.013	Hammersley et al. (1998)
<i>L</i>	-1.983 ± 0.009	Hammersley et al. (1998)
<i>J</i>	-0.89 ± 0.02	Selby et al. (1988)
<i>K</i>	-1.90 ± 0.01	Selby et al. (1988)
<i>L</i>	-2.05 ± 0.01	Selby et al. (1988)
<i>MSX A</i>	-2.030 ± 0.016	Price et al. (2004)
<i>MSX B</i> ₁	-1.870 ± 0.015	Price et al. (2004)
<i>MSX B</i> ₂	-1.870 ± 0.018	Price et al. (2004)
<i>MSX C</i>	-2.128 ± 0.012	Price et al. (2004)
<i>MSX E</i>	-2.108 ± 0.028	Price et al. (2004)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1 σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: α Cet
 HD 18884, HR 911, IRAS 02596+0353
 M2 III
 CWW composite star

Fit Parameters: $T_{\text{eff}} = 3750$ K, $\theta = 12.94$ mas

Spectral Data:

SWS TDT: 79702803 2.36–27 μm
 Strecker et al. (1979) 1.22–2.36 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond
 Normalization relative to Sirius: 1.0%

Spectral Adjustments:

SWS: 1A $0.91 \times$
 1B $0.91(\lambda/2.56)^{0.15}$
 1D $0.96(\lambda/3.1)^{0.11}$
 1E $0.97(\lambda/3.6)^{0.10}$
 2A $0.97 \times$
 2B $1.013(\lambda/5.9)^{0.15}$
 2C $0.85(\lambda/7.0)^{0.14}$
 3A $0.99(\lambda/12.7)^{-0.16}$
 3C $0.97 \times$
 3D $0.95 \times$
 Strecker et al. (1979) $0.99(\lambda/2.2)^{0.045}$

TABLE 15
 α Cet Photometry

Band	Magnitude	Reference
DIRBE 1	-0.672 ± 0.020 (0.03 ± 0.03)	Smith et al. (2004)
DIRBE 2	-1.667 ± 0.009 (0.01 ± 0.01)	Smith et al. (2004)
DIRBE 3	-1.812 ± 0.023 (0.03 ± 0.03)	Smith et al. (2004)
DIRBE 4	-1.568 ± 0.020 (0.03 ± 0.02)	Smith et al. (2004)
<i>J</i>	-0.67 ± 0.02	Selby et al. (1988)
<i>K</i>	-1.69 ± 0.02	Selby et al. (1988)
<i>L</i>	-1.85 ± 0.02	Selby et al. (1988)
12 μm	-1.93 ± 0.04	Beichman et al. (1988)
25 μm	-1.99 ± 0.05	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: γ Cru
 HD 108903, HR 4763, IRAS 12283–5650
 M4 III
 CWW composite star

Fit Parameters: $T_{\text{eff}} = 3626$ K, $\theta = 26.37$ mas

Spectral Data:

SWS TDT: 60900804 2.36–12 μm

Averaged with TDT 25806177 for $\lambda > 8$ μm prior to scaling

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond

Normalization relative to Sirius: 0.2%

Spectral Adjustments:

SWS: 1A $1.29 \times$
 1B $1.33 \times$
 1D $1.07(\lambda/3.0)^{-0.17}$
 1E $1.04 \times$
 2A $0.80(\lambda/4.0)^{0.22}$
 2B $0.82(\lambda/5.5)^{0.30}$
 2C $0.739(\lambda/7.0)^{0.25}$
 3A $2.2(\lambda/14.0)^{-0.25}$
 3C $1.13 \times$

TABLE 16
 γ Cru Photometry

Band	Magnitude	Reference
DIRBE 1	-2.112 ± 0.026 (0.04 ± 0.03)	Smith et al. (2004)
DIRBE 2	-3.151 ± 0.009 (0.00 ± 0.01)	Smith et al. (2004)
DIRBE 3	-3.295 ± 0.022 (0.03 ± 0.02)	Smith et al. (2004)
DIRBE 4	-3.072 ± 0.016 (0.02 ± 0.01)	Smith et al. (2004)
MSX A	-3.351 ± 0.007	Price et al. (2004)
MSX B ₁	-3.212 ± 0.010	Price et al. (2004)
MSX B ₂	-3.159 ± 0.010	Price et al. (2004)
MSX C	-3.465 ± 0.006	Price et al. (2004)
MSX D	-3.460 ± 0.005	Price et al. (2004)
MSX E	-3.482 ± 0.016	Price et al. (2004)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: α Cen A
 HD 128620 J, HR 5459, IRAS 14359–6037
 G2 V
 CWW model star

Fit Parameters: $T_{\text{eff}} = 5870$ K, $\theta = 8.51$ mas

Spectral Data:

SWS TDT: 60702006 2.36–9 μm

Pickles (1998): 1.0–2.36 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond

Normalization relative to Sirius: 0.75% for average

Spectral Adjustments:

SWS: 1A 0.961 \times
 1B 0.961 \times
 1D 0.964 \times
 1E 0.960 \times
 2A 1.048 \times
 2B 1.096 \times
 2C $0.89(\lambda/7.3)^{-0.09}$
 Pickles (1998) $1.003(\lambda/1.5)^{0.08}$

TABLE 17
 α Cen A Photometry

Band	Magnitude	Reference
<i>L</i>	-1.55 ± 0.02	Engels et al. (1981)
<i>M</i>	-1.44 ± 0.03	Engels et al. (1981)
<i>N</i> ₁	-1.56 ± 0.02	Bouchet et al. (1989)
<i>N</i> ₂	-1.55 ± 0.03	Bouchet et al. (1989)
<i>J</i>	-1.06 ± 0.03	Thomas et al. (1973)
<i>H</i>	-1.49 ± 0.03	Thomas et al. (1973)
<i>K</i>	-1.52 ± 0.03	Thomas et al. (1973)
<i>L</i>	-1.53 ± 0.03	Thomas et al. (1973)
<i>M</i>	-1.52 ± 0.03	Thomas et al. (1973)
8.4 μm	-1.54 ± 0.03	Thomas et al. (1973)
<i>N</i>	-1.62 ± 0.05	Thomas et al. (1973)
11.2 μm	-1.62 ± 0.05	Thomas et al. (1973)

Notes.— DIRBE and IRAS fluxes are contaminated by α Cen B. Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1 σ from the given reference and taking the Sirius scaling into account.

Star: β Dra
 HD 159181, HR 6536, IRAS 17292+5220
 G2 II
 No CWW template or composite

Fit Parameters: $T_{\text{eff}} = 5100$ K, $\theta = 3.345$ mas

Spectral Data:

SWS TDT: 08001631 2.36–9.1 μm
 Strecker et al. (1979): 1.24–2.36 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond
 Normalization relative to Sirius: 2.0%

Spectral Adjustments:

SWS: 1A $0.91 \times$
 1B $0.91 \times$
 1D $0.942(\lambda/3.05)^{0.05}$
 1E $0.934 \times$
 2A $0.953 \times$
 2B $0.953 \times$
 2C $1.049(\lambda/7.0)^{-0.1}$
 Strecker et al. (1979) $1.01 \times$

TABLE 18
 β Dra Photometry

Band	Magnitude	Reference
DIRBE 1	1.21 ± 0.03 (0.05 ± 0.04)	Smith et al. (2004)
DIRBE 2	0.74 ± 0.01 (0.04 ± 0.03)	Smith et al. (2004)
DIRBE 3	0.67 ± 0.03 (0.09 ± 0.07)	Smith et al. (2004)
DIRBE 4	0.72 ± 0.03 (0.10 ± 0.10)	Smith et al. (2004)
<i>J</i>	1.38 ± 0.05	Strutskie et al. (2006)
<i>H</i>	0.83 ± 0.05	Strutskie et al. (2006)
<i>K_s</i>	0.79 ± 0.05	Strutskie et al. (2006)
12 μm	0.58 ± 0.05	Beichman et al. (1988)
25 μm	0.61 ± 0.06	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: δ Dra
 HD 180711, HR 7310, IRAS 19125+6734
 G9 III
 Cohen template for *ISO*

Fit Parameters: $T_{\text{eff}} = 4950$ K, $\theta = 3.349$ mas

Spectral Data:

SWS TDT: 20601232 2.36–10 μm

ISOCAM CVF TDT: 49600802 and 49600803 10–15.5 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond

Normalization relative to Sirius: 5%

DIRBE variability: 10%–41% in bands 2–4

Spectral Adjustments:

SWS: 1A 0.99 \times
 1B $1.008(\lambda/3.0)^{0.05}$
 1D $1.05(\lambda/3.5)^{0.11}$
 1E 1.05 \times
 2A $1.025(\lambda/4.2)^{0.22}$
 2B $1.027(\lambda/7.0)^{-0.02}$
 2C $1.12(\lambda/7.0)^{-0.08}$

TABLE 19
 δ Dra Photometry

Band	Magnitude	Reference
<i>K</i>	0.77 ± 0.01	Hammersley et al. (1998)
<i>L'</i>	0.71 ± 0.06	Hammersley et al. (1998)
12 μm	0.71 ± 0.05	Beichman et al. (1988)
25 μm	0.68 ± 0.06	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07).
 Uncertainties are 1σ from the given reference and taking the Sirius
 scaling into account.

Star: δ Eri
 HD 23249, HR 1136, IRAS 03408–0955
 K0 IV
 CWW template

Fit Parameters: $T_{\text{eff}} = 4900$ K, $\theta = 2.476$ mas

Spectral Data:

SWS TDT: 66301815 2.36–8.8 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond

Normalization relative to Sirius: 2%

Spectral Adjustments:

SWS: 1A $0.895 \times$
 1B $0.906(\lambda/2.6)^{0.10}$
 1C $0.931(\lambda/3.1)^{0.10}$
 1E $0.931(\lambda/3.05)^{0.07}$
 2A $0.960(\lambda/4.3)^{-0.04}$
 2B $0.931(\lambda/6.1)^{0.20}$
 2C $0.99(\lambda/7.5)^{-0.30}$

TABLE 20
 δ Eri Photometry

Band	Magnitude	Reference
<i>H</i>	1.60 \pm 0.03	Bouchet et al. (1989, 1991)
<i>K</i>	1.48 \pm 0.02	Bouchet et al. (1989, 1991)
<i>L</i>	1.37 \pm 0.02	Bouchet et al. (1989, 1991)
<i>M</i>	1.47 \pm 0.02	Bouchet et al. (1989, 1991)
<i>J</i>	2.01 \pm 0.03	Carter (1993)
<i>H</i>	1.51 \pm 0.03	Carter (1993)
<i>K</i>	1.43 \pm 0.03	Carter (1993)
<i>L</i>	1.41 \pm 0.03	Carter (1993)
<i>H</i> ₀	1.550 \pm 0.005	Van der Bliik et al. (1996) ^a
<i>K</i> ₀	1.434 \pm 0.005	Van der Bliik et al. (1996)
<i>L</i> ₀	1.365 \pm 0.005	Van der Bliik et al. (1996)
<i>N</i> ₁	1.30 \pm 0.03	Van der Bliik et al. (1996)
<i>N</i> ₂	1.30 \pm 0.03	Van der Bliik et al. (1996)
<i>N</i> ₃	1.32 \pm 0.04	Van der Bliik et al. (1996)
12 μm	1.35 \pm 0.05	Beichman et al. (1988)
25 μm	1.34 \pm 0.06	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account.

^a See also the Web pages on the ISO Ground Based Preparatory Programme at http://www.iso.vilspa.esa.es/users/expl_lib/ISO/wwwcal/isoprep/gbpb/photom.

Star: θ Cen
 HD 123139, HR 5288, IRAS 14037–3607
 K0 III
 CWW template star

Fit Parameters: $T_{\text{eff}} = 4800$ K, $\theta = 5.46$ mas

Spectral Data:

SWS TDT: 43600940 2.36–9.1 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond

Normalization relative to Sirius: 2.0%

Spectral Adjustments:

SWS: 1A $0.97 \times$
 1B $0.99 \times$
 1C $1.00 \times$
 1E $1.00 \times$
 2A $1.04(\lambda/4.2)^{-0.08}$
 2B $0.99(\lambda/5.6)^{0.20}$
 2C $1.14(\lambda/7.0)^{-0.25}$

TABLE 21
 θ Cen Photometry

Band	Magnitude	Reference
DIRBE 1
DIRBE 2	-0.231 ± 0.012 (0.01 ± 0.02)	Smith et al. (2004)
DIRBE 3	-0.307 ± 0.038 (0.07 ± 0.05)	Smith et al. (2004)
DIRBE 4	-0.201 ± 0.039 (0.06 ± 0.05)	Smith et al. (2004)
<i>H</i>	-0.18 ± 0.05	Bouchet et al. (1991)
<i>K</i>	-0.30 ± 0.05	Bouchet et al. (1991)
<i>L</i>	-0.36 ± 0.05	Bouchet et al. (1991)
<i>M</i>	-0.20 ± 0.05	Bouchet et al. (1991)
<i>J</i>	0.38 ± 0.03	Carter (1990)
<i>H</i>	-0.16 ± 0.03	Carter (1990)
<i>K</i>	-0.25 ± 0.03	Carter (1990)
<i>L</i>	-0.35 ± 0.03	Carter (1990)
K_0	-0.251 ± 0.008	Van der Blik et al. (1996) ^a
L_0	-0.323 ± 0.005	Van der Blik et al. (1996)
12 μm	-0.36 ± 0.05	Beichman et al. (1988)
25 μm	-0.36 ± 0.06	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

^a See also the Web pages on the ISO Ground Based Preparatory Programme at http://www.iso.vilspa.esa.es/users/expl_lib/ISO/wwwcal/isoprep/gbpp/photom.

Star: α UMa
 HD 95689, HR 4301, IRAS 11006+6201
 K0 IIIab
 CWW template star

Fit Parameters: $T_{\text{eff}} = 4790$ K, $\theta = 6.684$ mas

Spectral Data:

SWS TDT: 14300723 2.36–8.7 μm

Strecker et al. (1979): 1.23–2.36 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1.5% for 2.5–12 μm , 1.5% beyond

Normalization relative to Sirius: 0.5%

Spectral Adjustments:

SWS: 1A $0.978 \times$
 1B $0.978(\lambda/2.65)^{0.10}$
 1D $1.035 \times$
 1E $1.045(\lambda/3.6)^{0.05}$
 2A $1.00(\lambda/4.1)^{-0.05}$
 2B $0.93(\lambda/5.4)^{-0.15}$
 2C $0.978(\lambda/7.0)^{-0.05}$
 Strecker et al. (1979) $0.99 \times$

TABLE 22
 α UMa Photometry

Band	Magnitude	Reference
DIRBE 1	-0.009 ± 0.025 (0.05 ± 0.03)	Smith et al. (2004)
DIRBE 2	-0.660 ± 0.010 (0.01 ± 0.01)	Smith et al. (2004)
DIRBE 3	-0.750 ± 0.023 (0.05 ± 0.02)	Smith et al. (2004)
DIRBE 4	-0.630 ± 0.023 (0.03 ± 0.03)	Smith et al. (2004)
<i>H</i>	-0.58 ± 0.03	Kenyon (1988)
<i>K</i>	-0.69 ± 0.03	Kenyon (1988)
12 μm	-0.81 ± 0.02	Beichman et al. (1988)
25 μm	-0.78 ± 0.03	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: ξ Dra
 HD 163588, HR 6688, IRAS 17526+5652
 K2 III
 CWW template

Fit Parameters: $T_{\text{eff}} = 4570$ K, $\theta = 3.09$ mas

Spectral Data:

SWS TDT: 31404910 2.36–10.0 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond

Normalization relative to Sirius: 1.5%

DIRBE variability: 10%–24% in bands 2–4

Spectral Adjustments:

SWS: 1A $0.94 \times$
 1B $0.93(\lambda/2.6)^{0.06}$
 1C $0.97(\lambda/3.3)^{0.28}$
 1E $0.965(\lambda/3.05)^{0.028}$
 2A $1.089(\lambda/4.2)^{-0.02}$
 2B $1.078(\lambda/5.5)^{-0.25}$
 2C $0.992(\lambda/8.0)^{-0.20}$

TABLE 23
 ξ Dra Photometry

Band	Magnitude	Reference
<i>J</i>	1.789 ± 0.020	Hammersley et al. (1998)
<i>H</i>	1.197 ± 0.008	Hammersley et al. (1998)
<i>K</i>	1.084 ± 0.005	Hammersley et al. (1998)
<i>L</i>	0.988 ± 0.005	Hammersley et al. (1998)
<i>J</i>	1.81 ± 0.02	Selby et al. (1988)
<i>K</i>	1.04 ± 0.03	Selby et al. (1988)
<i>L</i>	0.98 ± 0.02	Selby et al. (1988)
12 μm	0.96 ± 0.05	Beichman et al. (1988)
25 μm	0.93 ± 0.06	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07).
 Uncertainties are 1σ from the given reference and taking the Sirius
 scaling into account.

Star: α Ari
 HD 12929, HR 617, IRAS 02043+2313
 K2 III
 CWW template star

Fit Parameters: $T_{\text{eff}} = 4500$ K, $\theta = 6.893$ mas

Spectral Data:

SWS TDT: 45002411 2.36–9.2 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond

Normalization relative to Sirius: 1.0%

Spectral Adjustments:

SWS: 1A $0.90 \times$
 1B $0.905(\lambda/2.56)^{0.12}$
 1D $0.943(\lambda/3.1)^{0.10}$
 1E $0.95(\lambda/3.6)^{0.10}$
 2A $1.04 \times$
 2B $1.023(\lambda/5.9)^{0.15}$
 2C $1.11(\lambda/7.0)^{-0.045}$

TABLE 24
 α Ari Photometry

Band	Magnitude	Reference
DIRBE 1	0.080 ± 0.020 (0.03 ± 0.03)	Smith et al. (2004)
DIRBE 2	-0.620 ± 0.009 (0.01 ± 0.01)	Smith et al. (2004)
DIRBE 3	-0.705 ± 0.022 (0.05 ± 0.03)	Smith et al. (2004)
DIRBE 4	-0.586 ± 0.020 (0.04 ± 0.03)	Smith et al. (2004)
<i>H</i>	-0.53 ± 0.03	Alonso et al. (2000)
<i>K</i>	-0.66 ± 0.03	Alonso et al. (2000)
<i>L</i>	-0.69 ± 0.03	Alonso et al. (2000)
<i>L'</i>	-0.74 ± 0.01	Paper X
<i>MSX A</i>	-0.78 ± 0.03	Price et al. (2006)
<i>MSX C</i>	-0.84 ± 0.03	Price et al. (2006)
<i>MSX E</i>	-0.78 ± 0.03	Price et al. (2006)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: γ And
 HD 12533, HR 603, IRAS 02008+4205
 K3 Ib
 CWW template

Fit Parameters: $T_{\text{eff}} = 4200$ K, $\theta = 7.96$ mas

Spectral Data:

SWS TDT: 43502924 2.36–10 μm

Strecker et al. (1979): 1.22–2.36 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond

Normalization relative to Sirius: 1.0%

Spectral Adjustments:

SWS: 1A $0.957 \times$

1B $0.96(\lambda/2.56)^{0.01}$

1C $0.993 \times$

1E $0.9905(\lambda/3.5)^{0.1}$

2A $0.9955 \times$

2B $0.956 \times$

2C $0.985 \times$

Strecker et al. (1979) $1.02(\lambda/2.2)^{0.09}$

TABLE 25
 γ And Photometry

Band	Magnitude	Reference
DIRBE 1	-0.031 ± 0.020 (0.02 ± 0.03)	Smith et al. (2004)
DIRBE 2	-0.804 ± 0.011 (0.02 ± 0.01)	Smith et al. (2004)
DIRBE 3	-0.929 ± 0.022 (0.03 ± 0.03)	Smith et al. (2004)
DIRBE 4	-0.722 ± 0.023 (0.03 ± 0.03)	Smith et al. (2004)
<i>H</i>	-0.701 ± 0.014	Alonso et al. (2000)
<i>K</i>	-0.847 ± 0.005	Alonso et al. (2000)
<i>L</i>	-0.932 ± 0.005	Alonso et al. (2000)
12 μm	-0.97 ± 0.05	Beichman et al. (1988)
25 μm	-0.98 ± 0.06	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: α Tuc
 HD 211416, HR 8502, IRAS 22150–6030
 K3 III
 CWW template star

Fit Parameters: $T_{\text{eff}} = 4200$ K, $\theta = 6.19$ mas

Spectral Data:

SWS TDT: 86602401 2.36–15 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond

Normalization relative to Sirius: 1.0%

Spectral Adjustments:

SWS: 1A $0.946 \times$
 1B $0.947 \times$
 1D $0.955(\lambda/3.1)^{0.1}$
 1E $0.970 \times$
 2A $1.00 \times$
 2B $0.9855 \times$
 2C $1.012(\lambda/7.0)^{0.037}$
 3A $0.95(\lambda/15.5)^{-0.35}$

TABLE 26
 α Tuc Photometry

Band	Magnitude	Reference
DIRBE 1	0.54 ± 0.03 (0.03 ± 0.03)	Smith et al. (2004)
DIRBE 2	-0.274 ± 0.014 (0.02 ± 0.02)	Smith et al. (2004)
DIRBE 3	-0.389 ± 0.029 (0.03 ± 0.04)	Smith et al. (2004)
DIRBE 4	-0.204 ± 0.033 (0.04 ± 0.04)	Smith et al. (2004)
<i>J</i>	0.56 ± 0.03	Carter (1993)
<i>H</i>	-0.14 ± 0.03	Carter (1993)
<i>K</i>	-0.28 ± 0.03	Carter (1993)
<i>L</i>	-0.39 ± 0.03	Carter (1993)
12 μm	-0.48 ± 0.04	Beichman et al. (1988)
25 μm	-0.55 ± 0.05	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: λ Gru
 HD 209688, HR 8411, IRAS 022031–3947
 K3 III
 CWW template star

Fit Parameters: $T_{\text{eff}} = 4200$ K, $\theta = 2.82$ mas

Spectral Data:

SWS TDT: 53904837 2.36–11 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond

Normalization relative to Sirius: 2.5%

Spectral Adjustments:

SWS: 1A 0.944 \times
 1B 0.944 \times
 1C $1.01(\lambda/3.6)^{0.24}$
 1E 1.005 \times
 2A 0.993 \times
 2B 0.95 \times
 2C $1.02(\lambda/7.5)^{-0.30}$

TABLE 27
 λ Gru Photometry

Band	Magnitude	Reference
<i>J</i>	2.20 ± 0.03	Carter (1990)
<i>H</i>	1.58 ± 0.03	Carter (1990)
<i>K</i>	1.44 ± 0.03	Carter (1990)
<i>L</i>	1.33 ± 0.03	Carter (1990)
12 μm	1.29 ± 0.05	Beichman et al. (1988)
25 μm	1.28 ± 0.06	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07).
 Uncertainties are 1σ from the given reference and taking the
 Sirius scaling into account.

Star: σ Oph
 HD 157999, HR 6498, IRAS 17240+0410
 K2 II
 CWW template

Fit Parameters: $T_{\text{eff}} = 4100$ K, $\theta = 3.518$ mas

Spectral Data:

SWS TDT: 10200835 2.36–9.5 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond

Normalization relative to Sirius: 2.0%

DIRBE variability: 4%–10%

Spectral Adjustments:

SWS: 1A 1.003 \times
 1B 1.019 \times
 1C 1.009 \times
 1E 1.019 \times
 2A 1.00 \times
 2B $0.99(\lambda/7.0)^{-0.05}$
 2C $1.79(\lambda/7.0)^{-0.25}$

TABLE 28
 σ Oph Photometry

Band	Magnitude	Reference
DIRBE 1	1.821 ± 0.024 (0.04 ± 0.04)	Smith et al. (2004)
DIRBE 2	0.978 ± 0.011 (0.05 ± 0.04)	Smith et al. (2004)
DIRBE 3	0.828 ± 0.022 (0.10 ± 0.07)	Smith et al. (2004)
DIRBE 4	1.036 ± 0.023 (0.10 ± 0.12)	Smith et al. (2004)
<i>J</i>	1.83 ± 0.03	Hammersley et al. (1998)
<i>H</i>	1.16 ± 0.03	Hammersley et al. (1998)
<i>K</i>	1.00 ± 0.03	Hammersley et al. (1998)
<i>L</i>	0.87 ± 0.03	Hammersley et al. (1998)
12 μm	0.85 ± 0.05	Beichman et al. (1988)
25 μm	0.75 ± 0.06	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: δ Psc
 HD 4656, HR 224, IRAS 00460+0718
 K5 III
 CWW template star

Fit Parameters: $T_{\text{eff}} = 4050$ K, $\theta = 3.746$ mas

Spectral Data:

SWS TDT: 39502401 2.36–12 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond

Normalization relative to Sirius: 2%

DIRBE variability: 6%–14%

Spectral Adjustments:

SWS: 1A 1.01 \times
 1B 1.02 \times
 1D $1.06(\lambda/3.4)^{0.05}$
 1E 1.06 \times
 2A 0.985 \times
 2B 1.008 \times
 2C $1.06(\lambda/7.0)^{0.01}$

TABLE 29
 δ Psc Photometry

Band	Magnitude	Reference
DIRBE 1	1.70 ± 0.06 (0.08 ± 0.04)	Smith et al. (2004)
DIRBE 2	0.82 ± 0.05 (0.06 ± 0.03)	Smith et al. (2004)
DIRBE 3	0.70 ± 0.05 (0.07 ± 0.05)	Smith et al. (2004)
DIRBE 4	0.90 ± 0.10 (0.14 ± 0.10)	Smith et al. (2004)
<i>J</i>	1.78 ± 0.02	Selby et al. (1988)
<i>K</i>	0.83 ± 0.02	Selby et al. (1988)
<i>L</i>	0.69 ± 0.03	Selby et al. (1988)
<i>H</i> ₀	1.152 ± 0.005	Van der Bliek et al. (1996) ^a
<i>K</i> ₀	0.865 ± 0.005	Van der Bliek et al. (1996)
<i>L</i> ₀	0.736 ± 0.005	Van der Bliek et al. (1996)
12 μm	0.68 ± 0.05	Beichman et al. (1988)
25 μm	0.70 ± 0.06	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

^a See also the Web pages on the ISO Ground Based Preparatory Programme at http://www.iso.vilspa.esa.es/users/expl_lib/ISO/wwwcal/isoprep/gbpp/photom.

Star: γ Phe
 HD 9053, HR 429, IRAS 01261–4334
 K4/5 III
 CWW template star

Fit Parameters: $T_{\text{eff}} = 3950$ K, $\theta = 6.76$ mas

Spectral Data:

SWS TDT: 54901434 2.36–9.5 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond

Normalization relative to Sirius: 1.0%

Spectral Adjustments:

SWS: 1A 0.93 \times
 1B 0.93 \times
 1D 0.93 \times
 1E 0.93 \times
 2A 0.972 \times
 2B $0.949(\lambda/5.5)^{-0.05}$
 2C $0.958(\lambda/7.5)^{0.05}$

TABLE 30
 γ Phe Photometry

Band	Magnitude	Reference
DIRBE 1	0.597 ± 0.027 (0.04 \pm 0.03)	Smith et al. (2004)
DIRBE 2	-0.356 ± 0.014 (0.04 \pm 0.02)	Smith et al. (2004)
DIRBE 3	-0.489 ± 0.025 (0.04 \pm 0.03)	Smith et al. (2004)
DIRBE 4	-0.272 ± 0.031 (0.06 \pm 0.04)	Smith et al. (2004)
12 μm	-0.58 ± 0.05	Beichman et al. (1988)
25 μm	-0.59 ± 0.06	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: H Sco
 HD 149447, HR 6166, IRAS 16330–3509
 K5 III
 CWW template star

Fit Parameters: $T_{\text{eff}} = 3850$ K, $\theta = 4.90$ mas

Spectral Data:

SWS TDT: 84700107 2.36–11 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond

Normalization relative to Sirius: 5%

Spectral Adjustments:

SWS: 1A $0.95 \times$
 1B $0.957 \times$
 1D $0.965(\lambda/3.05)^{0.15}$
 1E $0.978(\lambda/3.6)^{0.08}$
 2A $1.045(\lambda/4.2)^{0.13}$
 2B $1.043(\lambda/5.5)^{0.15}$
 2C $1.11(\lambda/7.5)^{0.16}$

TABLE 31
 H Sco Photometry

Band	Magnitude	Reference
DIRBE 1	1.36 ± 0.03 (...)	Smith et al. (2004)
DIRBE 2	0.41 ± 0.08 (...)	Smith et al. (2004)
DIRBE 3	0.22 ± 0.10 (0.19 ± 0.11)	Smith et al. (2004)
DIRBE 4	0.45 ± 0.03 (0.10 ± 0.13)	Smith et al. (2004)
<i>J</i>	1.32 ± 0.03	Carter (1990)
<i>H</i>	0.55 ± 0.03	Carter (1990)
<i>K</i>	0.38 ± 0.03	Carter (1990)
<i>L</i>	0.26 ± 0.03	Carter (1990)
12 μm	0.21 ± 0.05	Beichman et al. (1988)
25 μm	0.17 ± 0.07	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: δ Oph
 HD 146051, HR 6056, IRAS 16117–0334
 M1 III
 CWW template star

Fit Parameters: $T_{\text{eff}} = 3850$ K, $\theta = 10.23$ mas

Spectral Data:

SWS TDT: 8201231 2.36–12.5 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond

Normalization relative to Sirius: 1.0%

Spectral Adjustments:

SWS: 1A 0.953 \times
 1B 0.945 \times
 1D 0.97 \times
 1E 1.00 \times
 2A 1.02 \times
 2B 0.98 \times
 2C $1.04(\lambda/7.5)^{0.17}$
 3A $0.99(\lambda/15.5)^{0.1}$

TABLE 32
 δ Oph Photometry

Band	Magnitude	Reference
DIRBE 1	-0.26 ± 0.03 (...)	Smith et al. (2004)
DIRBE 2	-1.22 ± 0.01 (0.01 ± 0.01)	Smith et al. (2004)
DIRBE 3	-1.35 ± 0.03 (0.04 ± 0.03)	Smith et al. (2004)
DIRBE 4	-1.13 ± 0.02 (0.01 ± 0.02)	Smith et al. (2004)
<i>J</i>	-0.27 ± 0.03	Carter (1990)
<i>H</i>	-1.04 ± 0.03	Carter (1990)
<i>K</i>	-1.22 ± 0.03	Carter (1990)
<i>L</i>	-1.34 ± 0.03	Carter (1990)
12 μm	-1.44 ± 0.05	Beichman et al. (1988)
25 μm	-1.47 ± 0.06	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: AE Cet
 HD 1038, HR 48, 00121–1912
 M1 III
 CWW template star

Fit Parameters: $T_{\text{eff}} = 3850 \text{ K}$, $\theta = 5.186 \text{ mas}$

Spectral Data:

SWS TDT: 55502138 2.36–11 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond

Normalization relative to Sirius: 1.0%

Spectral Adjustments:

SWS: 1A 0.89 \times
 1B 0.90 \times
 1D $0.90(\lambda/3.6)^{-0.10}$
 1E 0.90
 2A 0.945 \times
 2B $0.920(\lambda/5.9)^{0.01}$
 2C $0.965(\lambda/7.0)^{-0.04}$

TABLE 33
 AE Cet Photometry

Band	Magnitude	Reference
DIRBE 1	1.23 ± 0.03 (0.03 ± 0.03)	Smith et al. (2004)
DIRBE 2	0.22 ± 0.02 (0.02 ± 0.02)	Smith et al. (2004)
DIRBE 3	0.08 ± 0.05 (0.09 ± 0.06)	Smith et al. (2004)
DIRBE 4	0.28 ± 0.04 (0.03 ± 0.05)	Smith et al. (2004)
<i>H</i>	0.40 ± 0.01	Feast et al. (1990)
<i>K</i>	0.21 ± 0.01	Feast et al. (1990)
<i>L</i>	0.08 ± 0.02	Feast et al. (1990)
12 μm	-0.05 ± 0.06	Beichman et al. (1988)
25 μm	-0.04 ± 0.07	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1 σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: δ Vir
 HD 112300, HR 4910, IRAS 12530+0340
 M3 III
 CWW template star

Fit Parameters: $T_{\text{eff}} = 3660$ K, $\theta = 10.71$ mas

Spectral Data:

SWS TDT: 24201225 2.36–11 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond

Normalization relative to Sirius: 0.5%

Spectral Adjustments:

SWS: 1A $0.985 \times$
 1B $1.01 \times$
 1D $0.987(\lambda/3.6)^{-0.10}$
 1E $0.987 \times$
 2A $1.00 \times$
 2B $0.99(\lambda/5.9)^{0.1}$
 2C $1.00(\lambda/7.5)^{-0.10}$

TABLE 34
 δ Vir Photometry

Band	Magnitude	Reference
DIRBE 1	-0.20 ± 0.03 (0.03 ± 0.03)	Smith et al. (2004)
DIRBE 2	-1.21 ± 0.01 [0.01 ± 0.01]	Smith et al. (2004)
DIRBE 3	-1.37 ± 0.03 [0.02 ± 0.02]	Smith et al. (2004)
DIRBE 4	-1.13 ± 0.04 [0.02 ± 0.02]	Smith et al. (2004)
<i>H</i>	-1.01 (0.02)	Kenyon (1988)
<i>K</i>	-1.23 (0.02)	Kenyon (1988)
12 μm	-1.50 (0.05)	Beichman et al. (1988)
25 μm	-1.55 (0.06)	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: ρ Per
 HD 19058, HR 921, IRAS 03019+3838
 M4 II
 CWW template star

Fit Parameters: $T_{\text{eff}} = 3540$ K, $\theta = 15.50$ mas

Spectral Data:

SWS TDT: 79501105 2.36–18.5 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond

Normalization relative to Sirius: 1.0%

DIRBE variability: 5% in band 3

Spectral Adjustments:

SWS: 1A $1.00 \times$
 1B $0.99 \times$
 1D $0.948(\lambda/3.6)^{-0.15}$
 1E $0.940(\lambda/3.6)^{-0.15}$
 2A $0.935(\lambda/4.2)^{0.12}$
 2B $0.934(\lambda/5.9)^{0.10}$
 2C $0.928(\lambda/7.5)^{0.02}$
 3A $0.913(\lambda/15.5)^{-0.08}$
 3C $0.915(\lambda/19.3)^{-0.15}$

TABLE 35
 ρ Per Photometry

Band	Magnitude	Reference
DIRBE 1	-0.90 ± 0.03 (...)	Smith et al. (2004)
DIRBE 2	-1.95 ± 0.02 (0.01 \pm 0.01)	Smith et al. (2004)
DIRBE 3	-2.11 ± 0.03 (0.05 \pm 0.02)	Smith et al. (2004)
DIRBE 4	-1.92 ± 0.02 (0.04 \pm 0.02)	Smith et al. (2004)
<i>H</i>	-1.73 ± 0.04	Alonso et al. (2000)
<i>K</i>	-1.98 ± 0.04	Alonso et al. (2000)
<i>L</i>	-2.13 ± 0.04	Alonso et al. (2000)
12 μm	-2.21 ± 0.05	Beichman et al. (1988)
25 μm	-2.25 ± 0.06	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: π Aur
 HD 40239, HR 2091, IRAS 05562+4556
 M3 II
 CWW template star

Fit Parameters: $T_{\text{eff}} = 3500$ K, $\theta = 9.05$ mas

Spectral Data:

SWS TDT: 83802031 2.36–9.9 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 5% near 2 μm , 5% for 2.5–12 μm , 5% beyond

Normalization relative to Sirius: 3.0%

DIRBE variability: 5%–12% in bands 3–4

SWS data noisy and unusually low relative to photometry

Spectral Adjustments:

SWS: 1A 1.45 \times
 1B 1.43 \times
 1D 1.54 \times
 1E $1.55(\lambda/3.6)^{0.30}$
 2A $1.82(\lambda/4.2)^{0.30}$
 2B 1.86 \times
 2C 2.00 \times

TABLE 36
 π Aur Photometry

Band	Magnitude	Reference
DIRBE 1	0.28 ± 0.02 (...)	Smith et al. (2004)
DIRBE 2	-0.82 ± 0.01 (...)	Smith et al. (2004)
DIRBE 3	-1.00 ± 0.06 (0.12 ± 0.06)	Smith et al. (2004)
DIRBE 4	-0.74 ± 0.04 (0.05 ± 0.03)	Smith et al. (2004)
<i>H</i>	-0.58 ± 0.02	Kenyon (1988)
<i>K</i>	-0.82 ± 0.02	Kenyon (1988)
12 μm	-1.10 ± 0.05	Beichman et al. (1988)
25 μm	-1.16 ± 0.05	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: β Peg
 HD 217906, HR 8775, IRAS 23013+2748
 M2.5 III
 CWW composite star

Fit Parameters: $T_{\text{eff}} = 3490$ K, $\theta = 17.88$ mas

Spectral Data:

SWS TDT: 55100705 2.36–35 μm
 Strecker et al. (1979): 1.22–2.36 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% for 2–3 μm , 1% for 3–12 μm , 1.5% beyond
 Normalization relative to Sirius: 1.0%
 MSX variability: 8%

Spectral Adjustments:

SWS: 1A 0.96 \times
 1B 0.96 \times
 1D 0.972 \times
 1E $0.97(\lambda/3.2)^{-0.02}$
 2A 1.075 \times
 2B 1.135 \times
 2C 0.950 \times
 3A 0.978 \times
 3C 0.975 \times
 3D 0.96 \times
 3E 1.07 \times
 4 0.78 \times
 Strecker et al. (1979) 1.02 \times

TABLE 37
 β Peg Photometry

Band	Magnitude	Reference
DIRBE 1	-1.20 ± 0.01 (0.05 ± 0.03)	Smith et al. (2004)
DIRBE 2	-2.22 ± 0.01 (0.03 ± 0.01)	Smith et al. (2004)
DIRBE 3	-2.37 ± 0.02 (0.04 ± 0.02)	Smith et al. (2004)
DIRBE 4	-2.17 ± 0.02 (0.04 ± 0.01)	Smith et al. (2004)
<i>J</i>	-1.20 ± 0.01	Hammersley et al. (1998)
<i>H</i>	-2.09 ± 0.01	Hammersley et al. (1998)
<i>K</i>	-2.31 ± 0.01	Hammersley et al. (1998)
<i>L</i>	-2.39 ± 0.01	Hammersley et al. (1998)
<i>J</i>	-1.17 ± 0.01	Selby et al. (1988)
<i>K</i>	-2.30 ± 0.01	Selby et al. (1988)
<i>L</i>	-2.48 ± 0.01	Selby et al. (1988)
MSX A	-2.47 ± 0.02	Price et al. (2004)
MSX B ₁	-2.32 ± 0.02	Price et al. (2004)
MSX B ₂	-2.26 ± 0.02	Price et al. (2004)
MSX C	-2.57 ± 0.02	Price et al. (2004)
MSX D	-2.58 ± 0.02	Price et al. (2004)
MSX E	-2.63 ± 0.02	Price et al. (2004)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: β Gru
 HD 214952, HR 8636, IRAS 22396–4708
 M5 III
 No CWW template or composite

Fit Parameters: $T_{\text{eff}} = 3480$ K, $\theta = 27.80$ mas

Spectral Data:

SWS TDT: 53802302 2.36–26 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 3% for 2–3 μm , 1% for 3–12 μm , 1.5% beyond

Normalization relative to Sirius: 1.0%

DIRBE variability: 6% in band 1

Spectral Adjustments:

SWS: 1A	0.97 \times	
1B	$0.99(\lambda/2.7)^{-0.05}$	
1D	$0.985(\lambda/3.3)^{-0.20}$	
1E	$0.967(\lambda/3.9)^{-0.03}$	
2A	0.903 \times	
2B	$0.920(\lambda/5.5)^{0.10}$	
2C	$0.78(\lambda/7.0)^{0.28}$	($\lambda < 10.5 \mu\text{m}$)
	0.865 \times	($\lambda > 10.5 \mu\text{m}$)
3A	0.910 \times	
3C	0.930 \times	
3D	0.905 \times	

TABLE 38
 β Gru Photometry

Band	Magnitude	Reference
DIRBE 1	-2.19 ± 0.04 (0.06 ± 0.03)	Smith et al. (2004)
DIRBE 2	-3.19 ± 0.01 (0.02 ± 0.01)	Smith et al. (2004)
DIRBE 3	-3.35 ± 0.03 (0.04 ± 0.02)	Smith et al. (2004)
DIRBE 4	-3.11 ± 0.02 (0.02 ± 0.01)	Smith et al. (2004)
<i>H</i>	-3.10 ± 0.02	Thomas et al. (1973)
<i>K</i>	-3.23 ± 0.02	Thomas et al. (1973)
<i>L</i>	-3.39 ± 0.01	Thomas et al. (1973)
<i>M</i>	-3.09 ± 0.02	Thomas et al. (1973)
8.4 μm	-3.40 ± 0.02	Thomas et al. (1973)
<i>N</i>	-3.51 ± 0.02	Thomas et al. (1973)
11.2 μm	-3.52 ± 0.02	Thomas et al. (1973)
12 μm	-3.45 ± 0.06	Beichman et al. (1988)
25 μm	-3.47 ± 0.06	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: GZ Peg (57 Peg)
 HD 218634, HR 8815, IRAS 23070+0824
 M4 III + A2 V
 CWW template star

Fit Parameters: $T_{\text{eff}} = 3450$ K, $\theta = 7.82$ mas

Spectral Data:

SWS TDT: 37600306 2.36–12 μm

Uncertainty:

Spectral shape: 10% near 1 μm , 4% near 2 μm , 1.5% for 2.5–12 μm , 1.5% beyond

Normalization relative to Sirius: 1.5%

Spectral Adjustments:

SWS: 1A 0.94 \times
 1B 0.94 \times
 1D 0.945 \times
 1E $0.955(\lambda/3.6)^{0.05}$
 2A $0.96(\lambda/4.2)^{0.01}$
 2B 0.942 \times
 2C $0.95(\lambda/7.0)^{-0.03}$
 3A $0.87(\lambda/15.5)^{-0.1}$

TABLE 39
 GZ Peg Photometry

Band	Magnitude	Reference
DIRBE 1	0.69 ± 0.03 (...)	Smith et al. (2004)
DIRBE 2	-0.43 ± 0.01 (0.02 ± 0.02)	Smith et al. (2004)
DIRBE 3	-0.60 ± 0.04 (0.06 ± 0.05)	Smith et al. (2004)
DIRBE 4	-0.36 ± 0.03 (...)	Smith et al. (2004)
<i>H</i>	-0.12 ± 0.04	Kerschbaum & Hron (1994)
<i>K</i>	-0.42 ± 0.04	Kerschbaum & Hron (1994)
<i>L'</i>	-0.65 ± 0.04	Kerschbaum & Hron (1994)
<i>M</i>	-0.32 ± 0.04	Kerschbaum & Hron (1994)
12 μm	-0.74 ± 0.05	Beichman et al. (1988)
25 μm	-0.79 ± 0.06	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: δ^2 Lyr
 HD 175588, HR 7139, IRAS 18527+3650
 M4 II
 Walker & Cohen (1998) IR Bright Star Atlas template

Fit Parameters: $T_{\text{eff}} = 3300$ K, $\theta = 11.50$ mas

Spectral Data:

SWS TDT: 10200126 2.36–26.9 μm

Uncertainty:

Spectral shape: 5% near 1 μm , 5% near 2 μm , 5% for 2.5–12 μm , 5% beyond

Normalization relative to Sirius: 1.0%

Spectral Adjustments:

SWS: 1A 0.935 \times
 1B 0.936 \times
 1D 0.936 \times
 1E $0.921(\lambda/3.7)^{-0.03}$
 2A $0.961(\lambda/4.05)^{-0.13}$
 2B $0.857(\lambda/5.7)^{-0.05}$
 2C $0.904(\lambda/7.0)^{-0.07}$
 3A 0.907 \times
 3C $0.857(\lambda/18.0)^{-0.4}$
 3D 0.834 \times

TABLE 40
 δ^2 Lyr Photometry

Band	Magnitude	Reference
DIRBE 1	-0.07 ± 0.02 (0.02 \pm 0.02)	Smith et al. (2004)
DIRBE 2	-1.17 ± 0.01 (0.02 \pm 0.01)	Smith et al. (2004)
DIRBE 3	-1.37 ± 0.03 (0.04 \pm 0.03)	Smith et al. (2004)
DIRBE 4	-1.08 ± 0.03 (0.03 \pm 0.02)	Smith et al. (2004)
12 μm	-1.45 ± 0.08	Beichman et al. (1988)
25 μm	-1.65 ± 0.08	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: α Aur
 HD 34029, HR 1708, IRAS 05130+4556
 G4 III
 No CWW template or composite

Fit Parameters: $T_{\text{eff}} = 5450$ K, $\theta = 10.23$ mas

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond

Normalization relative to Sirius: 0.5%

RS CVn variable star, but DIRBE and other photometries are consistent

TABLE 41
 α Aur Photometry

Band	Magnitude	Reference
DIRBE 1	-1.297 ± 0.022 (0.01 \pm 0.03)	Smith et al. (2004)
DIRBE 2	-1.788 ± 0.009 (0.00 \pm 0.01)	Smith et al. (2004)
DIRBE 3	-1.850 ± 0.023 (0.02 \pm 0.02)	Smith et al. (2004)
DIRBE 4	-1.815 ± 0.021 (0.02 \pm 0.01)	Smith et al. (2004)
12 μm	-1.91 ± 0.05	Beichman et al. (1988)
25 μm	-1.93 ± 0.06	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: α Hya
 HD 81797, HR 3748, IRAS 09251–0826
 K3 II
 CWW composite star

Fit Parameters: $T_{\text{eff}} = 4150$ K, $\theta = 9.588$ mas

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond

Normalization relative to Sirius: 0.5%

TABLE 42
 α Hya Photometry

Band	Magnitude	Reference
DIRBE 1	-0.38 ± 0.03 (0.02 \pm 0.03)	Smith et al. (2004)
DIRBE 2	-1.20 ± 0.01 (0.01 \pm 0.01)	Smith et al. (2004)
DIRBE 3	-1.32 ± 0.02 (0.02 \pm 0.03)	Smith et al. (2004)
DIRBE 4	-1.12 ± 0.02 (0.02 \pm 0.02)	Smith et al. (2004)
<i>J</i>	-0.38 ± 0.03	Carter (1993)
<i>H</i>	-1.06 ± 0.04	Carter (1993)
<i>K</i>	-1.21 ± 0.04	Carter (1993)
<i>L</i>	-1.33 ± 0.04	Carter (1993)
<i>M</i>	-1.11 ± 0.04	Bessel & Brett (1988)
<i>M</i>	-1.17 ± 0.04	Bouchet et al. (1989, 1991)
<i>N</i> ₁	-1.29 ± 0.05	Bouchet et al. (1989, 1991)
<i>N</i> ₂	-1.32 ± 0.05	Bouchet et al. (1989, 1991)
<i>N</i> ₃	-1.43 ± 0.05	Bouchet et al. (1989, 1991)
12 μm	-1.47 ± 0.05	Beichman et al. (1988)
25 μm	-1.35 ± 0.06	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1 σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: γ Aql
 HD 186791, HR 7525, IRAS 19438+1029
 K3 II
 CWW template star

Fit Parameters: $T_{\text{eff}} = 4050$ K, $\theta = 7.29$ mas

Uncertainty:

Spectral shape: 5% near $1 \mu\text{m}$, 3% near $2 \mu\text{m}$, 2% for $2.5\text{--}12 \mu\text{m}$, 2% beyond
 Normalization relative to Sirius: 3%

TABLE 43
 γ Aql Photometry

Band	Magnitude	Reference
DIRBE 1	0.29 ± 0.03 (0.04 ± 0.04)	Smith et al. (2004)
DIRBE 2	-0.55 ± 0.02 (0.00 ± 0.02)	Smith et al. (2004)
DIRBE 3	-0.68 ± 0.03 (0.03 ± 0.04)	Smith et al. (2004)
DIRBE 4	-0.44 ± 0.03 (0.05 ± 0.04)	Smith et al. (2004)
<i>J</i>	0.27 ± 0.01	Hammersley et al. (1998)
<i>H</i>	-0.44 ± 0.01	Hammersley et al. (1998)
<i>K</i>	-0.60 ± 0.01	Hammersley et al. (1998)
<i>L</i>	-0.72 ± 0.02	Hammersley et al. (1998)
<i>J</i>	0.23 ± 0.02	Selby et al. (1988)
<i>K</i>	-0.63 ± 0.02	Selby et al. (1988)
<i>L</i>	-0.72 ± 0.03	Selby et al. (1988)
$10.1 \mu\text{m}$	-0.74 ± 0.02	Tokunaga (1984)
$20.1 \mu\text{m}$	-0.82 ± 0.02	Tokunaga (1984)
$12 \mu\text{m}$	-0.68 ± 0.05	Beichman et al. (1988)
$25 \mu\text{m}$	-0.78 ± 0.06	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: α TrA
 HD 150798, HR 6217, IRAS 16433–6856
 K2 II
 CWW composite star

Fit Parameters: $T_{\text{eff}} = 4000$ K, $\theta = 9.81$ mas

Uncertainty:

Spectral shape: 5% near 1 μm , 3% near 2 μm , 1% for 2.5–12 μm , 1.5% beyond, 3% in molecular bands

Normalization relative to Sirius: 1.0% for average

DIRBE variability: 6% in band 3

TABLE 44
 α TrA Photometry

Band	Magnitude	Reference
DIRBE 1	-0.38 ± 0.02 (...)	Smith et al. (2004)
DIRBE 2	-1.18 ± 0.02 (0.001 ± 0.02)	Smith et al. (2004)
DIRBE 3	-1.34 ± 0.03 (0.06 ± 0.03)	Smith et al. (2004)
DIRBE 4	-1.14 ± 0.04 (0.05 ± 0.02)	Smith et al. (2004)
<i>H</i>	-1.055 ± 0.005	Carter (1993)
<i>K</i>	-1.199 ± 0.009	Carter (1993)
<i>L</i>	-1.328 ± 0.008	Carter (1993)
12 μm	-1.37 ± 0.05	Beichman et al. (1988)
25 μm	-1.36 ± 0.06	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

Star: ϵ Car
 HD 71129, HR 3307, IRAS 08214–5920
 K3 III (+B2 V?)
 CWW composite star

Fit Parameters: $T_{\text{eff}} = 3300$ K, $\theta = 14.59$ mas

Uncertainty:

Spectral shape: 5% near 1 μm , 5% near 2 μm , 5% for 2.5–12 μm , 5% beyond

Normalization relative to Sirius: 5%

TABLE 45
 ϵ Car Photometry

Band	Magnitude	Reference
DIRBE 1	-0.79 ± 0.03 (0.03 \pm 0.03)	Smith et al. (2004)
DIRBE 2	-1.69 ± 0.01 (0.01 \pm 0.01)	Smith et al. (2004)
DIRBE 3	-1.88 ± 0.03 (0.03 \pm 0.03)	Smith et al. (2004)
DIRBE 4	-1.56 ± 0.04 (0.04 \pm 0.04)	Smith et al. (2004)
J	-0.76 ± 0.05	Strutskie et al. (2006)
H	-1.53 ± 0.05	Strutskie et al. (2006)
K_s	-1.75 ± 0.05	Strutskie et al. (2006)
L	-1.90 ± 0.02	Carter (1993)
12 μm	-1.95 ± 0.05	Beichman et al. (1988)
25 μm	-2.02 ± 0.06	Beichman et al. (1988)

Notes.— Photometry scaled assuming Sirius is -1.36 (0.07). Uncertainties are 1σ from the given reference and taking the Sirius scaling into account. Numbers in parentheses for DIRBE are the variability amplitudes and associated uncertainties.

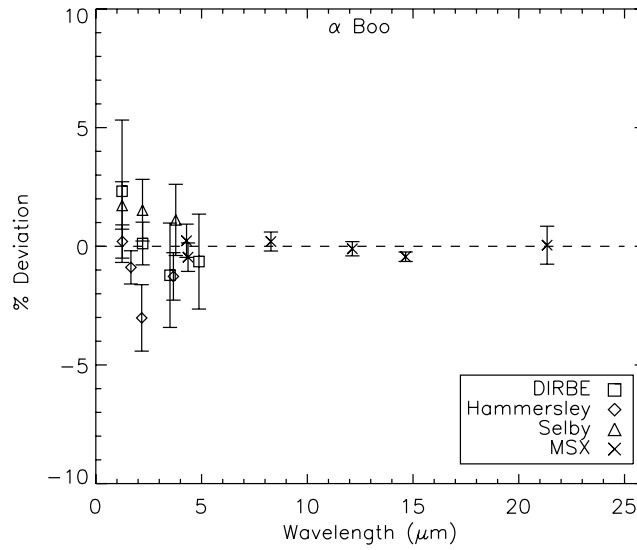


Fig. 13.2. Final photometric fit for α Boo

Fig. Set 13.— Final photometric fits for the stars in the sample. [See the electronic edition of the *Astronomical Journal* for Figs. 13.1–13.38.]