Aper PSF

This table lists the results of the visual inspection of the *postcards* posted at https://hops.ipac.caltech.edu/PACSData/Phot/Etc/postcards/. The first column lists the HOPS number, the second column the group in which the aperture photometry was measured, the third column identifies whether aperture or PSF photometry should be adopted, and the fourth column contains notes about the PSF fit. All objects with **bold** comments or an 'n' in the third column need their PACS photometry adjusted.

HOPS	Group	use Aperture Photometry?	Comments and Notes
1	0	y	PSF fit also ok, just slightly higher; relatively isolated source
2	0	у	no successful PSF fit; very faint source, surrounded by nebulosity; need to fix PACS160 flux (too high)
3	1	у	no successful PSF fit; isolated source
<u> </u>	1	у	no successful PSF fit; isolated source
5	3	y	no successful PSF fit; isolated source, some nebulosity
<u>6</u>	3	у	no successful PSF fit; very faint source, surrounded by nebulosity; need to fix PACS160 flux (too high)
<u>7</u>	3	y	PSF fit also ok, just slightly higher; isolated source
3	6	N/A	NO POSTCARD; not detected at 70 and 100 micron
9	-1	N/A	NOT OBSERVED
<u>10</u>	5	у	PSF flux overestimated; relatively isolated source, some nebulosity
<u>11</u>	5	y	PSF flux overestimated; relatively isolated source, some nebulosity
12	5	n	PSF fit finds 2–3 sources; choose PSF source closest to target in Group 5; some nebulosity
13	6	y	no successful PSF fit; faint target, some nebulosity
14	7	N/A	no successful PSF fit; not detected at 70 and 160 micron (close to HOPS 15)
<u>15</u>	7	у	no successful PSF fit; no point source at 160 micron, bright nebulosity; keep upper limit of PACS160
<u>16</u>	5	у	PSF fit only of 1–2 "sources" in nearby nebulosity; no point source at 160 micron; <i>keep upper limit of PACS160</i>
<u>17</u>	8	у	no successful PSF fit; no point source at 160 micron, bright nebulosity; keep upper limit of PACS160
18	8	у	PSF flux overestimated; 160 micron point source at the end of filament
<u> 19</u>	8	у	no successful PSF fit; very faint source, surrounded by nebulosity; need to fix PACS160 flux (too high)
<u>20</u>	9	у	PSF fit also ok, similar flux; isolated source
21	10	y	no successful PSF fit; very faint at 70 micron, not detected at 160 micron
22	8	у	no successful PSF fit; no point source at 160 micron, bright nebulosity; keep upper limit of PACS160
23	10	N/A	NO POSTCARD; not detected at 70 and 160 micron
<u>24</u>	12	у	no successful PSF fit; no point source at 160 micron; need to fix PACS160 flux (adopt upper limit)
25	13	N/A	NO POSTCARD; not detected at 70 and 160 micron
<u> 26</u>	13	y	no successful PSF fit; no point source at 160 micron; keep upper limit of PACS160
27	-1	N/A	NOT OBSERVED

<u>28</u>	12	n	choose PSF source closest to target (2 sources found); PSF fit good
<u>29</u>	12	n	choose PSF source closest to target (2 sources found); PSF fit good
30	12	n	PSF fit finds 2–3 sources, but source closest to target in Group 12 has similar flux, good PSF fit
31	13	y	NO POSTCARD; possibly faint detection at 70 micron, not detected at 160 micron; need to measure PACS70 flux
<u>32</u>	14	у	PSF fit finds several sources, but source closest to target has similar flux, good PSF fit
33	12	y	no successful PSF fit; very faint source at 70 micron, not detected at 160 micron; need to fix PACS70 and PACS160 fluxes (too high)
34	15	N/A	NO POSTCARD; not detected at 70 and 160 micron
35	15	y	NO POSTCARD; possibly faint detection at 70 micron, not detected at 160 micron; need to measure PACS70 flux
<u>36</u>	14	y	no successful PSF fit; faint source, surrounded by bright nebulosity
37	14	N/A	NO POSTCARD; not detected at 70 and 160 micron
<u>38</u>	15	у	PSF fit only of two "sources" in nearby nebulosity; no point source at 160 micron, nebulosity; need to fix PACS160 flux (adopt upper limit)
39	-1	N/A	NOT OBSERVED
<u>40</u>	15	n	PSF fit finds one source, with position slightly offset; flux better than aperture photometry
<u>41</u>	14	у	PSF fit finds 2–3 sources, but source closest to target in Group 14 has similar flux to aperture photometry
<u>42</u>	15	y	no successful PSF fit; very faint at 70 micron, no point source at 160 micron, nebulosity; keep upper limit of PACS160; need to fix PACS70 flux (too high)
<u>43</u>	15	n	PSF fit finds several sources; choose PSF source closest to target in Group 16; extended emission
<u>44</u>	15	n	PSF fit find two sources; choose PSF source closest to target; extended emission
<u>45</u>	15	n	PSF fit finds 2 sources; no 160 micron point source; could adopt PSF flux for source closest to target's position in Group 15
<u>46</u>	16	N/A	PSF fit only of nearby structure; no point source at 70 and 160 micron, extended nebulosity
<u>47</u>	308	y	no successful PSF fit; no point source at 160 micron; keep upper limit of PACS160
48	15	N/A	NO POSTCARD; not detected at 70 and 160 micron
<u>49</u>	16	y	no successful PSF fit; point source barely detected at 160 micron
<u>50</u>	16	y	PSF fit finds 1–2 sources; PSF flux of source at target's position is overestimated
51	17	y	NO POSTCARD; very faint at 70 micron, not detected at 160 micron
52	17	N/A	NO POSTCARD; not detected at 70 and 160 micron
<u>53</u>	18	y	PSF fit finds 2 sources; PSF flux of source at target's position is highly overestimated
54	-1	N/A	NOT OBSERVED
<u>55</u>	18	у	no successful PSF fit; very faint and extended at 70 and 160 micron; likely extragalactic contamination
<u>56</u>	200	у	PSF fit finds 1–2 sources; PSF fluxes of all sources are overestimated; some extended emission
<u>57</u>	200	у	PSF fit only of nearby structure; no point source at 160 micron, nebulosity; keep upper limit of PACS160

<u>58</u>	130	у	PSF fit only of nearby structure; no point source at 160 micron; need to fix PACS160 flux (adopt upper limit)
<u>59</u>	130	у	PSF fit finds several sources; source sits on bright filament; need to fix PACS160 flux (too high)
<u>60</u>	130	y	PSF fit finds 2–3 sources; source is surrounded by nebulosity
61	-1	N/A	NOT OBSERVED
<u>62</u>	130	y	no successful PSF fit; possibly faint detection at 70 micron, not detected at 160 micron; need to measure PACS70 flux
63	130	N/A	NO POSTCARD; not detected at 70 and 160 micron
64	130	N/A	NO POSTCARD; no point source at 70 and 160 micron, extended nebulosity
<u>65</u>	130	у	no successful PSF fit; very faint at 70 micron, no point source at 160 micron; keep upper limit of PACS160
<u>66</u>	130	y	PSF fit only of nearby structure; no clear point source at 160 micron, at the end of a filament; <i>keep upper limit of PACS160</i> ; need to fix PACS70 flux (too high)
67	130	N/A	NO POSTCARD; not detected at 70 and 160 micron
<u>68</u>	130	у	PSF fit finds several sources; PSF flux of source closest to target's position is overestimated; filaments around target
<u>69</u>	130	N/A	PSF fit finds several sources, overestimates flux; not detected at 70 micron, extended emission at 160 micron
<u>70</u>	130	n	PSF fit finds 3 sources; choose PSF source closest to target; elongated and extended at 70 micron, no real point source at 160 micron; need to fix PACS70 flux (too high)
<u>71</u>	130	y	PSF fit only of nearby structure; no point source at 160 micron, bright nebulosity; keep upper limit of PACS160
72	135	N/A	NO POSTCARD; not detected at 70 and 160 micron
<u>73</u>	130	n	PSF fit finds 2 sources; choose PSF source closest to target in Group 19; need to fix PACS70 flux (too low)
<u>74</u>	130	y	no successful PSF fit; faint at 70 micron, no point source at 160 micron, nebulosity
<u>75</u>	130	n	PSF fit finds several sources; choose PSF source 6" from target in Group 130; bright source nearby, some nebulosity
<u>76</u>	130	n	PSF fit finds several sources; choose PSF source closest to target in Group 130; very faint at 160 micron, bright source nearby; need to fix PACS70 flux (too high)
<u>77</u>	130	у	PSF fit finds several sources, but fit only of nearby structure; no point source at 160 micron, nebulosity; <i>keep upper limit of PACS160</i>
<u>78</u>	130	y	PSF fit finds several sources, PSF flux of source closest to target's position is overestimated
79	130	N/A	NO POSTCARD; not detected at 70 and 160 micron
80	130	y	NO POSTCARD; very faint at 70 micron, no point source at 160 micron
<u>81</u>	130	n	PSF fit finds several sources; choose PSF source closest to target in Group 130; very faint point source at 160 micron
<u>82</u>	130	n	PSF fit finds several sources; choose PSF source closest to target in Group 135; extended emission at 160 micron
83	-1	N/A	NOT OBSERVED
84	19	У	PSF fit finds several sources; PSF flux similar to aperture photometry flux in Group 19, but overestimated in Groups 130 and 135
<u>85</u>	135	n	PSF fit finds 2 sources; choose PSF source closest to target in Group 19; extended emission, bright nearby source

<u>86</u>	19	y	PSF fit finds 2–3 sources; very faint at 160 micron, close to HOPS 87, no real point source; <i>keep upper limit of PACS160</i> ; need to fix PACS70 flux (too high)
<u>87</u>	19	y	PSF fit finds 2–3 sources; PSF fluxes are overestimated
88	19	y	PSF fit finds 2 sources, all offset with target; close to bright HOPS 87
<u>89</u>	19	y	PSF fit only finds sources offset with target; no point source at 160 micron, extended emission, filament; need to fix PACS160 flux (adopt upper limit)
<u>90</u>	19	y	no successful PSF fit; no point source at 160 micron, nebulosity; need to fix PACS160 flux (adopt upper limit)
<u>91</u>	19	n	PSF fit finds 2–3 sources; choose PSF source closest to target in Group 19; source on filament, bright object nearby
<u>92</u>	19	n	PSF fit finds 2–3 sources; choose PSF source closest to target in Group 19; source on filament
93	19	у	PSF fit only finds source offset with target; no point source at 160 micron, nebulosity filaments; <i>keep upper limit of PACS160</i> ; need to fix PACS70 flux (too high)
94	19	n	PSF fit finds 1–2 sources; choose PSF source closest to target in Group 20; extended emission surrounding target at 160 micron
<u>95</u>	19	n	PSF fit finds 3 sources; choose PSF source closest to target in Group 19; source on filament
<u>96</u>	19	y	PSF flux overestimated; 160 micron point source surrounded by nebulosity
97	307	N/A	NO POSTCARD; not detected at 70 and 160 micron
<u>98</u>	20	y	no successful PSF fit; no point source at 160 micron, nebulosity; need to fix PACS70 flux (too high) and PACS160 flux (adopt upper limit)
<u>99</u>	21	y	PSF flux overestimated; isolated source, some nebulosity
<u>100</u>	21	у	no successful PSF fit; very faint at 70 micron, no point source at 160 micron; keep upper limit of PACS160
<u>101</u>	20	у	NO POSTCARD; very faint at 70 micron, no point source at 160 micron, nebulosity; likely extragalactic contamination
<u>102</u>	21	у	no successful PSF fit; no point source at 160 micron, nebulosity; keep upper limit of PACS160
103	21	у	NO POSTCARD; very faint at 70 micron, no point source at 160 micron, nebulosity; need to measure PACS70 flux
104	20	N/A	NO POSTCARD; not detected at 70 and 160 micron
<u>105</u>	306	y	no successful PSF fit; no point source at 160 micron, nebulosity; need to fix PACS160 flux (adopt upper limit)
106	-1	N/A	NOT OBSERVED
<u>107</u>	24	y	no successful PSF fit; source lies at the end of a bright filament
108	130	n	PSF fit finds several sources; choose PSF source closest to target in Group 130; source lies on a filament, no clear point source even at 70 micron; need to fix PACS70 flux (too high)
109	-1	N/A	DUPLICATE OF HOPS 40
110	-1	N/A	NOT OBSERVED
111	-1	N/A	DUPLICATE OF HOPS 60
112	-1	N/A	NOT OBSERVED
<u>113</u>	25	у	no successful PSF fit; no clear point source at 160 micron, nebulosity; need to fix PACS160 flux (adopt upper limit)
114	25		no successful PSF fit; source faint at 160 micron, surrounded by nebulosity

<u>115</u>	25	у	no successful PSF fit; source faint at 160 micron, surrounded by nebulosity
<u>116</u>	25	y	no successful PSF fit; source faint at 160 micron, surrounded by nebulosity, bright source nearby
<u>117</u>	25	у	no successful PSF fit; source faint at 160 micron, surrounded by nebulosity
118	25	y	no successful PSF fit; no point source at 160 micron, nebulosity; need to fix PACS160 flux (adopt upper limit)
<u>119</u>	25	у	no successful PSF fit; source bright at 160 micron, surrounded by nebulosity
<u>120</u>	25	у	no successful PSF fit; source embedded in nebulosity at 160 micron, no clear point source; need to fix PACS160 flux (adopt upper limit)
121	26	y	PSF fit finds nearby HOPS 123; source very faint at 70 micron, not detected at 160 micron; keep upper limit of PACS160; need to fix PACS70 flux (too high)
122	25	y	NO POSTCARD; possible detection at 70 micron, not detected at 160 micron; need to measure PACS70 flux
<u>123</u>	26	y	PSF fit also ok, flux very similar to aperture photometry
124	26	у	PSF fit (in Group 26) overestimates flux; extended emission?
125	26	y	NO POSTCARD; source very faint at 70 micron, not detected at 160 micron (bright HOPS 124 nearby); need to fix PACS70 flux (too high) and PACS160 flux (adopt upper limit)
126	-1	N/A	NOT OBSERVED
<u>127</u>	28	у	PSF fit also ok, flux slightly lower; isolated source, nebulosity
128	28	у	no successful PSF fit; source is a binary (both objects included in PACS flux measurements)
<u>129</u>	29	n	PSF fit finds 4 sources; choose PSF source closest to target; relatively isolated source, some nebulosity
<u>130</u>	29	у	PSF fit also ok, flux very similar to aperture photometry; isolated source
<u>131</u>	29	у	no successful PSF fit; source faint at 160 micron, very bright HOPS 133 nearby; need to fix PACS160 flux (too high)
<u>132</u>	29	у	no successful PSF fit; source faint at 160 micron, very bright HOPS 133 nearby; need to fix PACS160 flux (too high)
133	29	у	PSF fit finds 3 sources; PSF flux of source closest to target is similar to flux from aperture photometry
134	30	у	PSF fit finds 2 sources, combined flux similar to flux from aperture photometry; isolated source
<u>135</u>	30	у	PSF fit also ok, flux very similar to aperture photometry; relatively isolated source, some nebulosity
<u>136</u>	312	у	PSF fit also ok, flux very similar to aperture photometry; isolated source
<u>137</u>	31	у	no successful PSF fit; source very faint at 70 micron, not detected at 160 micron; keep upper limit of PACS160
<u>138</u>	31	у	no successful PSF fit; no point source at 160 micron; keep upper limit of PACS160
<u>139</u>	31	у	PSF fit also ok, flux similar to aperture photometry; some nebulosity
140	31	n	PSF fit is better than aperture photometry; bright sources and nebulosity nearby
141	31	у	no successful PSF fit; no point source at 160 micron; bright sources and nebulosity nearby; need to fix PACS160 flux (adopt upper limit)
142	31	у	no successful PSF fit; no point source at 160 micron; bright sources and nebulosity nearby; need to fix PACS160 flux (adopt upper limit)
<u>143</u>	31	n	PSF fit finds 2–3 sources; choose PSF source closest to target in Group 31; bright sources and nebulosity nearby

<u>144</u>	31	n	PSF fit finds several sources; choose PSF source closest to target in Group 31; bright sources and nebulosity nearby
145	31	n	PSF fit is better than aperture photometry; bright source with nebulosity nearby
146	31	N/A	no successful PSF fit; not detected at 70 and 160 micron
<u>147</u>	31	у	no successful PSF fit; faint at 70 micron, not detected at 160 micron; need to measure PACS70 flux
148	31	у	no successful PSF fit; some nebulosity
149	31	у	PSF fit also ok, flux very similar to aperture photometry; nebulosity surrounding source
<u>150</u>	32	у	PSF fit finds 2 sources, combined flux somewhat higher than flux from aperture photometry; relatively isolated source
151	31	N/A	NO POSTCARD; not detected at 70 and 160 micron
<u>152</u>	32	у	PSF fit also ok, flux very similar to aperture photometry (but still too high); close to bright source (HOPS 153); need to fix PACS70 flux (too high)
<u>153</u>	32	y	PSF fit also ok, flux a bit higher to aperture photometry; possibly a bit extended
<u>154</u>	33	у	no successful PSF fit; faint point source at 160 micron; surrounded by bright, patchy nebulosity
155	-1	N/A	NOT OBSERVED
<u>156</u>	34	у	PSF fit also ok, flux a bit lower than aperture photometry; relatively isolated
<u>157</u>	34	у	PSF fit overestimates flux somewhat; relatively isolated
<u>158</u>	35	n	PSF fit is better than aperture photometry; bright source sits at end of a filament
<u>159</u>	36	y	no successful PSF fit; faint at 160 micron, close to bright object (HOPS 160)
<u>160</u>	36	у	PSF fit finds 3 sources; combined flux is somewhat higher than flux from aperture photometry; extended object?
161	-1	N/A	NOT OBSERVED
162	-1	N/A	NOT OBSERVED
163	37	y	no successful PSF fit; isolated source, some nebulosity
<u>164</u>	37	У	PSF fit finds 2 sources; more distant source (offset with target position) has similar flux to aperture photometry; extended emission
<u>165</u>	38	y	no successful PSF fit; faint point source at 70 micron, not detected at 160 micron; close to bright object (HOPS 203); <i>keep upper limit of PACS160</i> ; need to fix PACS70 flux (too high)
<u>166</u>	38	у	PSF fit finds 2 sources; PSF source closest to target in Group 38 has flux similar to aperture photometry
<u>167</u>	38	y	no successful PSF fit; very faint point source at 70 micron, not detected at 160 micron; keep upper limit of PACS160
<u>168</u>	38	y	PSF fit finds 2 sources, both offset with target; some extended emission surrounding target
169	40	y	PSF flux is overestimated; faint nebulosity around target
<u>170</u>	39	y	PSF fit also ok; isolated source
<u>171</u>	40	y	PSF fit finds 2 sources, both offset with target; combined flux is a bit higher than aperture photometry; some nebulosity
<u>172</u>	41	n	PSF fit is a bit better than aperture photometry (lower flux); nebulosity surrounding target
<u>173</u>	42	n	PSF fit finds 2 sources; choose PSF source closest to target in Group 41; close to bright object (HOPS 176) and nebulosity; need to fix PACS70 flux (too high)

<u>174</u>	42	у	PSF fit finds nearby bright HOPS 173; very faint at 160 micron, just extended emission; bright HOPS 176 also nearby; <i>keep upper limit of PACS160</i> ; need to fix PACS70 flux (too high)
<u>175</u>	42	у	PSF fit only of nearby structure; very faint point source at 70 micron, extended emission at 160 micron (between HOPS 173 and 176); <i>keep upper limit of PACS160</i> ; need to fix PACS70 flux (too high)
<u>176</u>	42	у	PSF fit finds 4 sources; combined fluxes of all 3 sources within 10" of target's position are similar to aperture photometry; extended emission; need to fix PACS70 and PACS160 fluxes (too high)
<u>177</u>	43	n	PSF fit is a bit better than aperture photometry (lower flux); bright, extended nebulosity around source at 160 micron
<u>178</u>	42	y	PSF flux is overestimated; some nebulosity
<u>179</u>	42	n	PSF fit finds 3 sources; choose PSF source closest to target position; source surrounded by bright targets (HOPS 178, 182) and nebulosity
180	-1	N/A	NOT OBSERVED
181	42	у	NO POSTCARD; very faint point source at 70 and 160 micron, very close to bright HOPS 182; need to fix PACS70 flux (too high); need to fix PACS160 flux (adopt upper limit)
<u>182</u>	42	y	PSF fit overestimates flux; very bright object, probably extended at 160 micron
183	42	N/A	NO POSTCARD; no point source at 70 and 160 micron, extended emission next to bright source
<u>184</u>	42	у	no successful PSF fit; very faint point source at 160 micron, filaments and bright HOPS 182 nearby; need to fix PACS160 flux (too high)
<u>185</u>	44	n	PSF fit finds 3 sources; choose PSF source closest to target position; source sits on filament
<u>186</u>	45	y	PSF flux is also ok, similar to flux from aperture photometry; patchy nebulosity surrounding target
187	-1	N/A	NOT OBSERVED
<u>188</u>	45	y	PSF flux is overestimated; some nebulosity, also extended emission?
<u>189</u>	45	n	PSF fit finds 3 sources; choose PSF source closest to target position; bright HOPS 188 nearby, also extended emission, no clear point source at 160 micron
<u>190</u>	45	у	no successful PSF fit; very faint at 70 micron, not detected at 160 micron; nebulosity, close to bright HOPS 188; need to fix PACS160 flux (adopt upper limit)
<u>191</u>	47	у	PSF fit finds 2 sources, both offset with target (combined flux is similar to flux from aperture photometry); some filaments; need to fix PACS160 flux (too high)
<u>192</u>	48	n	PSF fit finds 2 sources; choose PSF source closest to target position; bright nebulosity surrounding target
<u>193</u>	48	n	PSF fit seems ok; faint point source at 160 micron, embedded in bright nebulosity, close to bright HOPS 192
<u>194</u>	49	y	PSF flux overestimated; isolated source, some nebulosity
195	49	N/A	NO POSTCARD; not detected at 70 and 160 micron
196	-1	N/A	NOT OBSERVED
<u>197</u>	50	у	no successful PSF fit; very weak at 160 micron, surrounded by bright, patchy nebulosity
<u>198</u>	51	n	PSF fit finds 3 sources; choose PSF source closest to target position; extended emission at 160 micron
<u>199</u>	311	y	no successful PSF fit; very weak at 160 micron, surrounded by bright, patchy nebulosity; need to fix PACS160 flux (too high)

<u>200</u>	52	y	no successful PSF fit; weak point source at 160 micron, surrounded by bright, patchy nebulosity; need to fix PACS160 flux (too high)
201	50	у	no successful PSF fit; weak at 70 micron, no point source at 160 micron; keep upper limit of PACS160
202	-1	N/A	NOT OBSERVED
203	38	y	PSF flux overestimated; very bright target, possibly extended
204	53	y	PSF fit finds 2 sources; source closest to target's position has flux very similar to aperture photometry; relatively isolated source
<u>205</u>	53	y	no successful PSF fit; faint at 70 micron, no point source at 160 micron, filament; keep upper limit of PACS160
<u>206</u>	53	у	PSF flux overestimated; some extended emission?; need to fix PACS160 flux (too high)
207	54	у	no successful PSF fit; target elongated at 160 micron, surrounded by bright, patchy nebulosity
208	53	у	no successful PSF fit; very faint at 70 micron, not detected at 160 micron; keep upper limit of PACS160
<u>209</u>	55	y	no successful PSF fit; faint point source at 160 micron, bright nebulosity nearby
210	56	n	PSF fit is better than aperture photometry (lower flux); bright HOPS 211 nearby, nebulosity
<u>211</u>	56	n	PSF fit is better than aperture photometry (lower flux); close to bright HOPS 210
212	-1	N/A	DUPLICATE OF HOPS 211
213	55	y	PSF fit also ok, flux similar to aperture photometry; some nebulosity
214	56	y	no successful PSF fit; faint at 160 micron, surrounded by bright, patchy nebulosity
215	58	y	no successful PSF fit; some extended emission at 160 micron?
<u>216</u>	59	n	PSF fit is better than aperture photometry (slightly lower flux); nebulosity surrounding target
217	-1	N/A	NOT OBSERVED
218	-1	N/A	NOT OBSERVED
219	60	у	PSF fit also ok, flux slightly higher than aperture photometry; relatively isolated source
220	60	у	no successful PSF fit; very faint point source at 160 micron, close to bright HOPS 219, some nebulosity; need to fix PACS160 flux (too high)
<u>221</u>	61	y	PSF flux overestimated; HOPS 223 nearby, but no contamination
222	60	у	no successful PSF fit; faint at 160 micron, close to patchy nebulosity; need to fix PACS160 flux (too low)
223	61	y	PSF flux is somewhat higher; 2 sources nearby (but no contamination)
<u>224</u>	60	y	PSF flux overestimated; relatively isolated source, some nebulosity
225	60	n	PSF fit finds 2 sources; choose PSF source closest to target; nearby HOPS 226 and 224 contaminate aperture photometry; need to fix PACS70 flux (too high)
226	60	n	PSF fit finds 2 sources; choose PSF source closest to target; nearby HOPS 225 and 224 contaminate aperture photometry; need to fix PACS70 flux (too high)
<u>227</u>	117	у	no successful PSF fit; target surrounded by patchy nebulosity
228	117	у	PSF fit finds 2–3 sources; PSF source closest to target in Group 117 has similar flux to aperture photometry; bright nebulosity close to target
229	62	у	no successful PSF fit; target embedded in nebulosity, bright patches nearby; need to fix PACS160 flux (too high)

230	-1	N/A	NOT OBSERVED
231	-1	N/A	NOT OBSERVED
232	63	y	no successful PSF fit; target sits on filament, surrounded by nebulosity
233	64	у	no successful PSF fit; no point source at 160 micron, next to bright (and extended) HOPS 234; need to fix PACS160 flux (adopt upper limit)
<u>234</u>	64	n	PSF fit is better than aperture photometry (lower flux); extended, bright emission around target
<u>235</u>	65	у	PSF flux is a bit higher than flux from aperture photometry; some nebulosity around target
<u>236</u>	65	y	PSF flux similar to aperture photometry in Group 65; some nebulosity
237	65	у	no successful PSF fit; target is next to bright HOPS 236; faint point source at 160 micron embedded in extended emission; need to fix PACS160 flux (too high)
238	65	y	no successful PSF fit; some nebulosity, bright HOPS 236 and 237 nearby
239	65	у	PSF fit finds only nearby bright HOPS 241; no point source at 160 micron, nebulosity; <i>keep upper limit of PACS160</i> ; need to fix PACS70 flux (too high)
<u>240</u>	65	у	no successful PSF fit; very faint point source at 160 micron, very close to bright HOPS 241; need to fix PACS160 flux (adopt upper limit)
241	65	n	PSF fit is better than aperture photometry (lower flux); nebulosity around target
242	119	у	no successful PSF fit; faint point source at 160 micron, surrounded by bright, patch nebulosity
243	66	n	PSF fit is better than aperture photometry (lower flux); some extended emission, close to bright HOPS 244
<u>244</u>	66	у	PSF flux is similar to aperture photometry; some nebulosity, other sources nearby (but no contamination)
<u>245</u>	65	y	no successful PSF fit; very faint point source at 160 micron, nebulosity
<u>246</u>	119	у	PSF flux is very similar to aperture photometry; isolated source, some nebulosity
<u>247</u>	65	y	PSF flux is a bit overestimated; very bright target
<u>248</u>	65	у	PSF fit find source slightly offset, overestimates flux; source embedded in extended (mostly smooth) emission
<u>249</u>	66	у	no successful PSF fit; very faint point source at 160 micron, surrounded by bright targets and nebulosity; keep upper limit of PACS160
<u>250</u>	66	у	PSF fit finds 2 sources; combined flux is higher than aperture photometry; some nebulosity surrounding target
251	66	y	no successful PSF fit; some nebulosity and bright sources nearby (no contamination)
<u>252</u>	66	n	PSF fit is better than aperture photometry (lower flux); very close to bright, extended emission
<u>253</u>	121	у	PSF flux is similar to aperture photometry; bright sources nearby (but no contamination)
<u>254</u>	121	у	PSF fit finds 2 sources; combined flux is higher than aperture photometry; source is surrounded by extended emission
<u>255</u>	66	у	no successful PSF fit; no point source at 160 micron, nebulosity, close to bright sources; need to fix PACS160 flux (adopt upper limit)
<u>256</u>	66	y	no successful PSF fit; very faint point source at 160 micron; source surrounded by extended emission, next to bright sources; need to fix PACS160 flux (adopt upper limit)
<u>257</u>	121	n	PSF fit is better than aperture photometry (lower flux); very close to bright HOPS 261 (not included in PSF fit)

<u>258</u>	121	n	PSF fit finds 2 sources; choose PSF source closest to target in Group 65; very close to bright sources, some extended emission
<u>259</u>	67	n	PSF fit finds 2 sources; choose PSF source closest to target; binary, with PSF fit separating two components; also close to bright HOPS 260
260	67	y	PSF fit slightly lower than aperture photometry; close to HOPS 259 binary
261	121	y	PSF fit finds 3 sources, with combined flux similar to aperture photometry; extended?
<u>262</u>	121	у	PSF fit finds 2 sources, resolves components of this binary system (other source is HOPS 263), but combined flux is higher than aperture photometry; need to fix PACS70 and PACS160 fluxes (too high)
<u>263</u>	121	у	PSF fit finds 2 sources, resolves components of this binary system (other source is HOPS 262), but combined flux is higher than aperture photometry; need to fix PACS70 and PACS160 fluxes (too high)
264	65	y	NO POSTCARD; faint point source close to map edge at 70 micron, no point source at 160 micron; need to fix PACS160 flux (adopt upper limit)
<u>265</u>	121	y	no successful PSF fit; no detected at 160 micron; keep upper limit of PACS160
<u>266</u>	121	y	no successful PSF fit; very faint at 160 micron, embedded in patchy nebulosity
<u>267</u>	121	y	PSF flux is very similar to aperture photometry; isolated source, some nebulosity
<u>268</u>	69	y	PSF flux is very similar to aperture photometry; isolated source, some nebulosity
269	-1	N/A	NOT OBSERVED
270	70	y	no successful PSF fit; isolated source, surrounded by patchy nebulosity
<u>271</u>	71	у	no successful PSF fit; source embedded in bright nebulosity; need to fix PACS160 flux (too high)
<u>272</u>	72	n	PSF fit is better than aperture photometry (lower flux); very close to HOPS 273, some nebulosity
<u>273</u>	72	n	PSF fit finds 3 sources (one of them is nearby HOPS 272); combined flux of the two closest sources is slightly lower than aperture photometry; some extended emission
<u>274</u>	72	y	PSF flux is very similar to aperture photometry; some nebulosity surrounding target
<u>275</u>	71	y	no successful PSF fit; very faint at 160 micron, surrounded by bright, patchy nebulosity
<u>276</u>	73	у	no successful PSF fit; no point source at 160 micron; bright nebulosity surrounding target; need to fix PACS160 flux (adopt upper limit)
<u>277</u>	73	у	no successful PSF fit; no point source at 160 micron, just bright nebulosity; keep upper limit of PACS160
<u>278</u>	74	y	no successful PSF fit; isolated source, some nebulosity; need to fix PACS160 flux (too high)
<u>279</u>	74	y	PSF flux is slightly lower than aperture photometry; bright HOPS 280 nearby (but no contamination)
<u>280</u>	74	y	PSF flux is somewhat overestimated; close to fainter HOPS 279 (but no contamination), some nebulosity
<u>281</u>	75	y	PSF flux is similar to aperture photometry; isolated source, some extended emission
<u>282</u>	76	y	PSF flux is similar to aperture photometry; isolated source
<u>283</u>	77	y	Relatively clean background. Not sure why starfinder did not find a source here.
<u>284</u>	78	y	Same comment as for HOPS 283.
<u>285</u>	25	y	no successful PSF fit; faint at 160 micron, close to map edge; also close to several bright sources (but no contamination)
<u>286</u>	25	n	Very similar to HOPS 287. But, the PSF and aperture do not agree in this case. PSF flux is somewhat lower (better), since very bright HOPS 288 is nearby.

<u>287</u>	25	y	Agrees with PSF photometry.
288	25	n	Very strong source on top of a peak in extended nebulosity. Background aperture is likely over subtracting. Multiple PSF photometry values agree, but residuals look funky. Nonetheless, PSF is the way to go.
289	79	N/A	NO POSTCARD; not detected at 70 and 160 micron
<u>290</u>	25	у	Strong source, relatively clean background. Good agreement in multiple photometry measurements all around. Close to very bright HOPS 288, nebulosity.
<u>291</u>	25	y	no successful PSF fit; faint at 70 micron, no point source at 160 micron; need to fix PACS160 flux (adopt upper limit)
292	-1	N/A	NOT OBSERVED
<u>293</u>	320	у	Nothing there. No point source at 160 micron; surrounded by bright, patchy nebulosity; need to fix PACS160 flux (adopt upper limit)
<u>294</u>	80	n	Complicated filamentary morphology. The PSF-fitted residuals look good. Believe PSF over aperture here.
<u>295</u>	81	n	Sitting on top of a nebulosity peak. PSF photometry is probably better.
296	82	N/A	NO POSTCARD; not detected at 70 and 160 micron
<u>297</u>	82	у	Nothing there. Very faint at 70 micron, not detected at 160 micron; <i>keep upper limit of PACS160</i>
<u>298</u>	83	y	Agrees with PSF photometry anyway. Not sure why the RESIDUAL IMAGE IS MISSING. Typical source with crud.
<u>299</u>	83	у	The bright companion with HOPS 301 in a close pair. However, it is not clear what is being measured in the 160um image. Believe PSF if we have to take photometry value? The spot where the object is supposed to be is the termination point of a long filament. May simply be nebulosity. PSF fit finds source offset with target by 14". Rather use aperture photometry, but need to fix PACS160 flux (too high) .
300	82	n	Aperture photometry is likely contaminated by the nebulosity in the region. Very hard to believe that a brighter than 70um source is present there.
301	83	у	Two sources (bright one to the south is HOPS 299). This one disappears at 160um. Aperture photometry is contaminated. Nothing detected by PSF photometry. Likely extragalactic contamination.
302	-1	N/A	NOT OBSERVED
<u>303</u>	85	y	Agrees with PSF photometry. Single bright source. Some extended emission.
304	86	у	Not sure there is a star there at either 70 or 160 um. Really do not believe 248 Jy for 160 um. Very faint at 70 micron, no point source at 160 micron; close to very bright, big filament; keep upper limit of PACS160; need to fix PACS70 flux (too high)
305	86	N/A	NO POSTCARD; not detected at 70 and 160 micron
306	-1	N/A	NOT OBSERVED
307	-1	N/A	NOT OBSERVED
308	-1	N/A	NOT OBSERVED
309	-1	N/A	NOT OBSERVED
310	89	у	Not sure what to believe. PSF-photometry claims two sources of ~equal brightness. The residuals look weird. Likely an error. Aperture photometry is probably okay. Isolated source.
311	90	у	Strong isolated source. Relatively clean background. PSF and aperture photometry roughly agree.
312	90	у	PSF and Aperture agree. Strong left over emission in the residual (due to 2 sources found, with most flux contribution from "source" ~10" from target's position). Very interesting extension around the core PSF. Very likely extended something.

313	-1	N/A	NOT OBSERVED
314	$-\frac{1}{-1}$	$-\frac{N/A}{N/A}$	NOT OBSERVED NOT OBSERVED
315 315	91	y y	Relatively bright isolated source. PSF and Aperture photometry agree.
<u>313</u>	_		NO POSTCARD; no point sources at 70 and 160 micron, just extended emission from
316	91	N/A	HOPS 358
<u>317</u>	91	n	70um image shows two sources (very close). PSF photometry reports two sources that add to somewhat more what is reported by aperture photometry. Adopt PSF flux of northern source; need to fix PACS70 flux (too high)
<u>318</u>	91	у	no successful PSF fit; faint at 70 micron, no point source at 160 micron; keep upper limit of PACS160
<u>319</u>	92	у	no successful PSF fit; very faint at 70 micron, no point source at 160 micron; keep upper limit of PACS160
320	92	n	Aperture photometry is probably okay because it agrees with PSF photometry. PSF-fitted residuals show either a core over subtraction or extended region around PSF. PSF fit (in Group 92) finds 2 sources; choose PSF source closest to target's position
<u>321</u>	93	y	Isolated source. The background is not flat. Despite that, there is good agreement in photometry. PSF fit finds 3 sources; PSF flux of source closest to target is very similar to aperture photometry; some nebulosity and filaments around source.
322	93	у	Faint. Not detected by PSF photometry. Aperture photometry is clearly contaminated by the strong nearby source HOPS 323. No point source at 160 micron; <i>keep upper limit of PACS160</i> ; need to fix PACS70 flux (too low)
<u>323</u>	93	y	The residual images show a relatively clean fit and perhaps an extended envelope. Good for follow-up. A strong candidate for an extended something around a PSF.
<u>324</u>	93	n	Strong isolated source on a complicated background. Elongated conical structure surrounds the source. PSF is consistent with itself and disagrees with aperture. Aperture is probably contaminated by the extended conical nebulosity. Choose PSF source closest to target's position.
<u>325</u>	93	у	Strong isolated source on a complicated background. The PSF photometry from one measurement is consistent with Aperture, but a 2nd measurement disagrees with both. Residuals show some extended emission that may be real.
326	94	n	PSF photometry claims several faintish sources. Aperture photometry reports one strong one. There is strong nebulosity. The PSF-fitting is likely finding knots in the nebulosity. Interesting region to follow-up but the photometry is probably bunk, or at least we need to define what it is we want to measure here. A "clean" source is not visible in the 160um images as it is in the 70um one. Choose PSF source closest to target's position.
327	-1	N/A	NOT OBSERVED
328	-1	N/A	NOT OBSERVED
329	96	n	Region is slightly complicated but not excessively so. Aperture photometry disagrees with PSF photometry. However, this source was detected 3 times with the PSF photometry and there is good agreement among the 3 PSF-fitted measurements.
330	95	N/A	NO POSTCARD; not detected at 70 and 160 micron
331	302	y	Aperture and PSF agree despite a strong source in the background aperture! If the agreement wasn't there, I would have said not.
332	303	N/A	NO POSTCARD; not detected at 70 and 160 micron; very close to HOPS 390
333	96	у	no successful PSF fit; very faint at 70 and 160 micron, close to bright HOPS 359; need to fix PACS160 flux (too high)
334	128	y	no successful PSF fit; very faint at 70 micron, no point source at 160 micron; keep upper limit of PACS160

335	128	n	Same as HOPS 338 (below). PSF flux is better than aperture photometry (lower flux). Close to very bright (and extended) HOPS 361; embedded in patchy nebulosity.
336	301	у	no successful PSF fit; very faint at 70 and 160 micron; surrounded by bright, patchy nebulosity at 160 micron
337	128	n	Same story as HOPS 338 (below). Source is embedded in patchy nebulosity; PSF flux is slightly higher, but good PSF fit.
338	096	n	Both aperture and PSF photometry claim an ~2 Jy source there. Hard to see, but the region is relatively clean so the aperture photometry is likely okay. For HOPS 338 only: close binary, but only northern component is bright at 160 micron; PSF flux is slightly lower, but good PSF fit.
339	301	у	Nothing there except something very faint that is probably at the level claimed by aperture photometry. Looks like an extragalactic source in WFC3 H band.
<u>340</u>	128	у	Two sources successfully deblended with PSF photometry (HOPS 340 and 341). It actually worked the way it was supposed to. The 70um images are very useful here. Since 70 micron flux is combined flux, rather use aperture photometry of unresolved binary also at 160 micron.
<u>341</u>	128	y	Same comment as for HOPS 340.
342	97	у	Not detected in PSF photometry. Has a bright contaminant in the background aperture (HOPS 343). Aperture photometry is probably okay to within 20–30%; better to fix PACS160 flux (adopt upper limit)
343	97	y	Bright, isolated source sitting on nebulosity. 10–15% agreement between PSF and aperture photometry. Aperture is lower again. PSF core is over subtracted. Nothing interesting in the residuals.
344	98	У	no successful PSF fit; very faint point source at 160 micron, surrounded by bright, patchy nebulosity
<u>345</u>	98	у	Faintish. Steep gradient in background and a bright source outside of background aperture nearby. Not detected by PSF photometry, but interestingly pops out faintly in the residual image after the nearby bright source is taken out.
346	300	у	Faint. Not detected in PSF photometry. Region looks relatively flat. No clear point source at 160 micron, embedded in patchy nebulosity; need to fix PACS160 flux (adopt upper limit)
<u>347</u>	96	у	Something very faint maybe. But, 4 Jy is hard to believe for this target. PSF fit finds 2–3 sources; combined flux is similar to aperture photometry. Maybe a bit extended at 160 micron.
348	96	у	no successful PSF fit; very faint at 70 micron, not detected at 160 micron; likely extragalactic contamination
349	130	N/A	NO POSTCARD; no point source at 70 and 160 micron, just extended emission
<u>350</u>	130	у	no successful PSF fit; very faint at 70 micron, not detected at 160 micron; filaments and nebulosity
351	130	N/A	NO POSTCARD; not detected at 70 and 160 micron; likely extragalactic contamination
352	135	N/A	NO POSTCARD; no point source at 70 and 160 micron, very close to HOPS 84
353	0	N/A	NO POSTCARD; no point source at 70 and 160 micron, close to HOPS 1
<u>354</u>	0	у	Again an isolated bright source on nebulosity. Aperture is low compared to PSF photometry. Could be due to nebulosity. The residuals show an interesting left over profile with a sharp bright ridge.
<u>355</u>	101	у	Good agreement between PSF and Aperture. Strong isolated source sitting on nebulosity (relatively flatish).
356	-1	N/A	NOT OBSERVED

			There is no source. I have no idea what we measured. The only thing showing up is a
<u>357</u>	86	у	faint source in Scanamorphos images. Source is very faint at 70 micron, not detected at 160 micron; <i>keep upper limit of PACS160</i>
358	91	у	Isolated and sitting on nebulosity. PSF and aperture kind of agree (PSF flux is higher) but residuals show not a great fit to the PSF. Probably extended emission.
<u>359</u>	303	у	Relatively isolated source. Background is mostly flat. Two PSF photometry measurements agree well. Aperture photometry is discrepant and low like HOPS 365. Perhaps another example of extended source?
360	303	y	NO POSTCARD; no point source at 70 and 160 micron, very close to a bright source
<u>361</u>	128	y	Very bright and elongated. Residuals show core over subtraction. There is a lot of crud around this source. PSF photometry is maybe better, but probably not that accurate either. SED looks fine with fluxes from aperture photometry.
362	-1	N/A	DUPLICATE OF HOPS 169
<u>363</u>	93	у	PSF (2 measurements) and Aperture agree well. Looks isolated with some crud, but the source PSF stands out from the crud.
<u>364</u>	303	y	Strong source, but major discrepancy in PSF vs Aperture photometry (PSF is much higher). It looks extended, or at least has some crud around it. Interesting. Worth exploring further.
<u>365</u>	96	у	Isolated source. Background looks ok, but a big dispersion in photometry values. Not sure why aperture photometry is so much lower than PSF (by about 20–25%). Two measurements in PSF agree well. A 3rd stands out.
<u>366</u>	96	у	Not detected at 160 micron. Contamination from a strong nearby source (HOPS 361) in the background aperture. Embedded in extended emission; need to fix PACS160 flux (adopt upper limit)
<u>367</u>	4	y	No discernable source in PSF image. Some blobs in 160um HPF data, but likely just nebulosity. Close to very bright nebulosity patches; need to fix PACS160 flux (too high)
<u>368</u>	130	у	Some contamination and steep gradient across the field, but likely okay for aperture photometry. PSF flux is somewhat similar to aperture photometry. Source is very close to bright (and extended) HOPS 108.
<u>369</u>	130	у	There is no source I can see. The PSF found something at the edge of long nebulosity. Source is also very close to bright (and extended) HOPS 108; no clear point source at 160 micron; <i>keep upper limit of PACS160</i> , need to fix PACS70 flux (too high)
370	130	у	Source is likely extended. Residuals look over subtracted. Background aperture contaminated by strong nebulosity. On filament next to HOPS 108. Note appears in multiple groups. Those starting with 9nn are either low-gain measurements or SDP measurements.
<u>371</u>	5	n	PSF fit finds 2–3 sources; choose PSF source closest to target's position; faint at 160 micron, close to very bright HOPS 12; some nebulosity