Diffuse reflector design guide

Thank you for considering Genesis Plastics Technologies to manufacture your luminaire diffuse reflector. We strive to provide you the best product possible while keeping your tooling costs reasonable. Below are several design considerations to keep in mind while designing your luminaire.

In order to keep tooling costs reasonable and have an optimized part formation, there are a few simple guidelines to follow.
Form

- Positive draft allowance of 3 to 5 degrees is standard. There may be smaller areas of 0° as well as much larger draft angles.
- Minimum interior radius 0.032" [0.81mm] recommended for material flow and mold manufacture.
- Formed clearances for components and mounting hardware can be very beneficial to light output by covering them up with our reflective materials.
Trim

- Trim flanges are required for high speed in-line processing. Either the exterior or interior flange should be 0.063" [1.60mm] or greater. The other trim flange may be as small as 0.032" [0.81mm]. Smaller or zero flange will typically require a secondary operation.
• Minimum trim radii 0.032” [0.81mm] for tooling stability is recommended, however hard corners are acceptable.

• Round holes are preferred for tooling economy, but square and rectangular holes are possible.

• Minimum spacing between trimmed holes 0.063” [1.60mm] to maintain part stability and prevent material fracture.

• Standard Tolerancing: Form and trim features +/-0.020” [0.51mm] while the location of the trim to the form +/-0.030” [0.76mm]