

| Characteristics                        | Metal Halide  | High Pressure Sodium   | LED   |
|--|---|--|---|
| Light Quality Comparison               |  |  |  |
| Energy Efficiency                      | 70 – 80 Lumens /Watt  | 50 – 80 Lumens / Watt  | 100 – 150 Lumens / Watt   |
| Durability                             | Fragile – has moving parts, glass bulbs, and filaments                            | Fragile – has moving parts, glass bulbs, and filaments                             | Heavy-duty – has no electrode or filament, shock & vibration resistant              |
| Rated Lifespan                         | 8,000 – 12,000 hours  | 15,000 – 18,000 hours  | < 50,000 hours  |
| Lumen Depreciation to 70%              | 10,000 hours  | 15,000 hours   | 40,000 hours  |
| Restrike (In Minutes)                  | 15 – 20 Minutes   | 15 – 20 Minutes  | Instant   |
| Colour Rendering Index                 | 65 – 80 CRI   | 50 – 60 CRI  | < 85 CRI  |
| Colour Temperatures                    | Few Options (3,000 to 4,500 Kelvin)   | Few Options (2,500 to 3,500 Kelvin)  | Many Options (2,500 to 6,500 Kelvin)  |
| Direction of Light                     | 360°<br>Reflector Required  | 360°<br>Reflector Required   | 60° 90° or 120°<br><br>Focused Beam Angle   |
| Flicker                                | Present due to ballast  | Present due to ballast   | None  |
| Noise                                  | Buzzing from Ballast  | Buzzing from Ballast   | None  |
| Warranty                               | 1 Year  | 1 Year   | 5 Years   |
| Typical Wattages for same light output | 1,000W  | 1,000W   | 300W  |
|  |   |  |   |