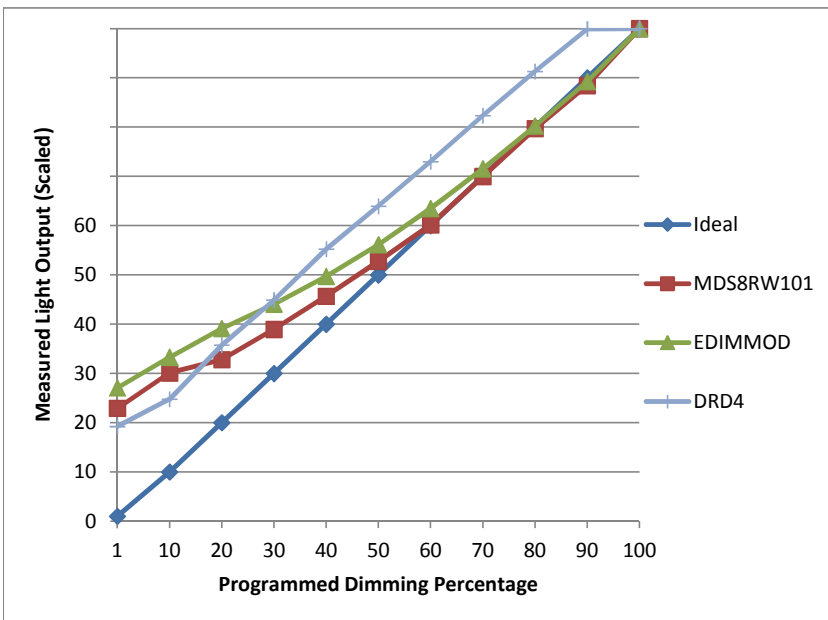


Manufacturer Toshiba
Model 9P20/827NFL25
Description PAR20 LED Lamp, 120V
Driver Internal
Nominal Power (W) 9
Dimming Control
Product Range e-Core
Test Date 4/15/2011

Dimmer Tested Against:	MDS8RW101	EDIMMOD	DRD4
Pass/Fail	Pass	Pass	Pass
Best-Fit Power Profile:			Standard
Minimum ON	4	4	N/A
Maximum ON	70	66	N/A
Adjust	100	100	N/A
Light Output Range (vs. non-dimmed)			
Maximum (Perceived)	95.2%	95.6%	99.8%
Minimum (Perceived)	21.8%	25.9%	19.2%
Minimum (Measured)	4.8%	6.7%	3.7%

Linearity Curves (Best-fit Power Profile Applied):



Observations:

Level stepping was observed throughout lower half of dimming range for all dimmers. During a fade or ramp of the dimming level, these steps result in what would appear to be flicker, but there is no flicker observed at any static dimming level.

Low-end trim avoids unreliable operation exhibited at low dimming levels. Without applying low-end trim on DRD4 (Fluorescent mode), unreliable operation was noted below approximately 7%.

Linearity is significantly improved by application of high-end trim capability of InFusion-series dimmers.

There are no minimum load issues using any Vantage-branded dimmers.