

**MAKING THE  
MESSAGE  
CLEAR**

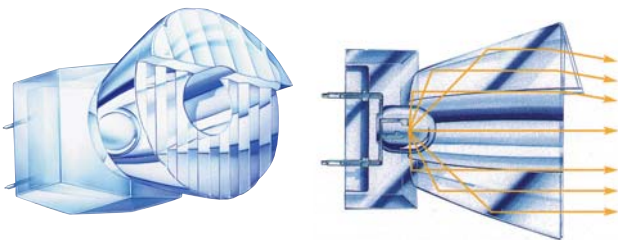
**RIGEL**  
LED TECHNOLOGY



**RIGEL** LED Technology, from Variable Message Signs Limited, is the first display system designed to meet and exceed the stringent optical performance standards demanded by European standard EN12966 and UK Highways Agency TR2136 Issue C.

It's benefits are offered in a variety of highway and urban transport applications providing fixed and mobile messaging products and complete system solutions.

Rigel technology is a unique and innovative method of enhancing effective and useful light, developed by Variable Message Signs Limited (VMSL). By applying a patented process to a high-intensity LED, VMSL has produced higher light output from a single cell thus overcoming many of the drawbacks which impaired conventional LED or fibre-optic systems. Its output is more consistent than cluster LEDs, not subject to degradation, easier to maintain, significantly reliable and cheaper to run.



Because of its advanced construction, a very high proportion of a Rigel LED's light output is projected forward into the desired viewing pattern.

Other features provide excellent 'phantom' protection and legibility in direct sunlight and other high ambient light conditions. All Rigel LEDs function well within their normal drive current range, so luminance and uniformity remain virtually unchanged for many years.

In addition, VMSL further enhance optical performance by utilising a variety of innovative and unique internal visors to avoid 'washout' and 'phantom' from incident high-intensity low-angle solar radiation. These are moulded in high-temperature/UV stabilised and resistant plastics.

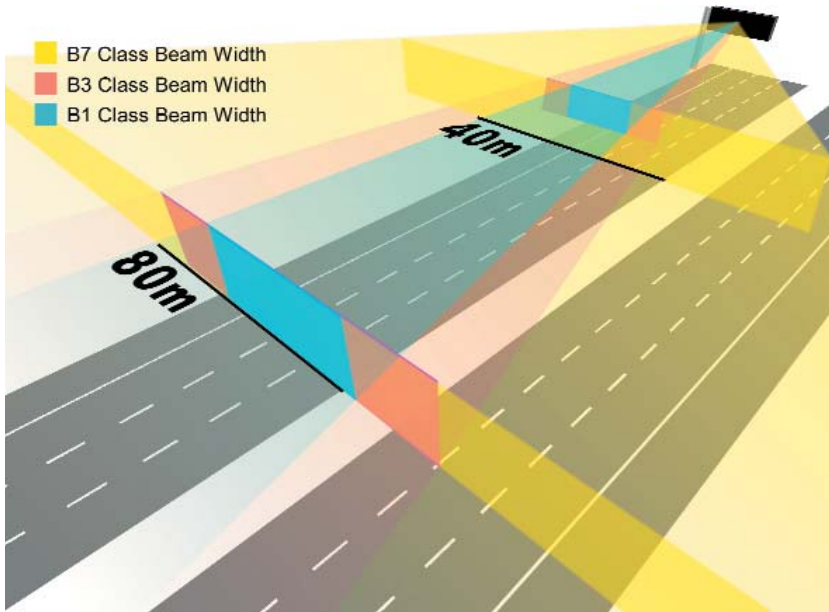


**VMS**  
VARIABLE MESSAGE SIGNS

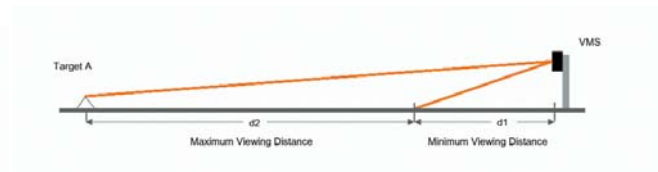
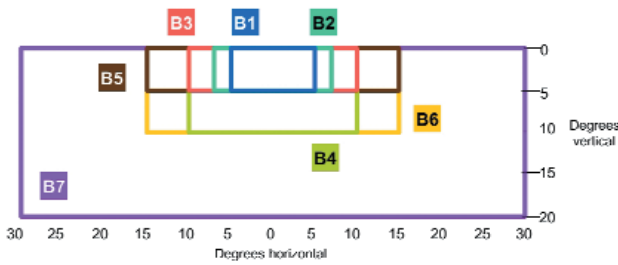
# CEN – EN12966

Representation of beam areas, beam widths and viewing and alignment,

# FEATURES AND BENEFITS



- Flexible multicolour display; red, amber, green, white
- Full matrix display – available in a number of different sizes
- Alphanumeric, legend and symbol display
- Character size, configuration and mounting options
- Fully programmable – can display an infinite number of traffic symbols and text displays
- Cost effective, lighter in weight
- Long life expectancy
- Performance to European specification EN12966
- Controlled motorway applications allowing variable speed limits
- Optical feedback for legal enforcement
- Applications include: Variable Speed Limit Signs, Lane Control Indicators, Dynamic Lane Control Unit, Lane Control Signal, Controlled Motorway Indicator
- Fixed and mobile applications



## Character Details Table

Height (mm)	Matrix	Aspect Ratio	No. of LEDs/pixel	Luminance Ratio	Beam Width	Viewing Angle Horizontal	Vertical Down	cd/m <sup>2</sup>	Weight kg
100	7x5	0.5	1	>10:1	B6	+/-20°	20°	<20mA	0.25
100	7x5	0.7	1	>10:1	B6	+/-20°	20°	<20mA	0.25
160	7x5	0.5	1	>20:1	B3	+/-10°	5°	<25mA	1.30
160	7x5	0.7	1	>20:1	B3	+/-10°	5°	<25mA	1.30
200	7x5	0.7	1	>20:1	B1	+/-5°	5°	<25mA	1.80
240	7x5	0.7	1	>20:1	B1	+/-5°	5°	<25mA	2.00
320	7x5	0.7	3	>20:1	B1	+/-5°	5°	<20mA	3.00
320	7x5	0.7	3	>20:1	B3	+/-10°	5°	<25mA	3.00
400	7x5	0.7	3	>20:1	B1	+/-5°	5°	<20mA	4.20
400	7x5	0.7	4	>20:1	B3	+/-10°	5°	<30mA	4.20
450	7x5	0.7	4	>20:1	B1	+/-5°	5°	<30mA	
490	7x5	0.7	4	>20:1	B1	+/-5°	5°	<30mA	
550	13x11	-	3	>20:1	B1	+/-5°	5°	<20mA	7.00

**Materials** High temperature and ultraviolet stable precision plastics.  
**Colours** A variety of colours are available to suit particular applications; yellow, white, red and green.

Contact Variable Message Signs Limited for details of compliance with EN 12966 European Specification for VMS

