

Client:	
Order #:	
Project:	
Type:	

**DESCRIPTION**

The Razor recessed volumetric back lit panel luminaire is an innovative LED fixture designed to deliver a modern aesthetic and complement today's interior spaces. Featuring a low-profile form factor, the Razor is ideal for buildings with a low plenum space and is suitable for all standard 2x2 or 2x4 grid ceilings. Incorporating back-lit LED technology and micro-prismatic conical structures in the diffuser lens, the Razor features a Unified Glare Rating (UGR) of less than 19, delivering light where it is needed and reducing direct glare to inhabitants. This creates a soft and comfortable lighting experience for commercial and institutional spaces including open offices, classrooms, retail and healthcare facilities.

**FEATURES**

- Extruded aluminum frame powder coated white
- Light emitting surfaces are back-lit acrylic for uniform illumination
- Micro-prismatic lens delivers a Unified Glare Rating (UGR) of less than 19
- FCC Compliant
- Die formed CRS housing, powder coated white
- Switchable CCT allows users to select between 4000K, 3500K, and 3000K in the field by simply switching an easily accessible three position switch. Fixture comes set/standard at 40K.
- Meets CCEA Chicago Plenum Compliant
- Wattages are selectable: 2x2 (20W,26W,35W) and 2x4 (26W,35W,45W). The fixture is set at 35W.

**PERFORMANCE DATA**

**CRI**

90+

**CCT**

3500K,4000K, 5000K

**Projected Lifetime**

173,000 Hours (L70);  
50,000 Hours (L90)

**Dimming**

1% Dimming Standard

**Operating Temperature**

-40°C to +50°C

**Warranty**

5 year Standard  
10 year Optional

**ORDERING INFORMATION**

<b>RAZOR</b>						
	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>

<b>A</b>	<b>FIXTURE SERIES</b>	
	RAZOR	Volumetric LED Flat Panel
<b>B</b>	<b>SIZE</b>	
	22	2' x 2'
	24	2' x 4'
<b>C</b>	<b>WATTAGES/LUMENS (2'X2')</b>	
	20	20W/2020 <sup>1,2</sup>
	26	26W/2626 <sup>1</sup>
	35	35W/3535 <sup>1,2</sup>
	<b>WATTAGES/LUMENS (2'X4')</b>	
	26	26W/2444 <sup>1</sup>
	35	35W/3290 <sup>1,2</sup>
	45	45W/4230 <sup>1</sup>
<b>D</b>	<b>CCT</b>	
	354050	3500K-4000K-5000K
<b>E</b>	<b>VOLTAGE</b>	
	U	120-277V

<b>F</b>	<b>OPTIONS</b>	
	E	Emergency
<b>G</b>	<b>WARRANTY<sup>3</sup></b>	
	BLANK	5 Year Warranty
	10	10 Year Warranty
	10L	10 Year Warranty including labor

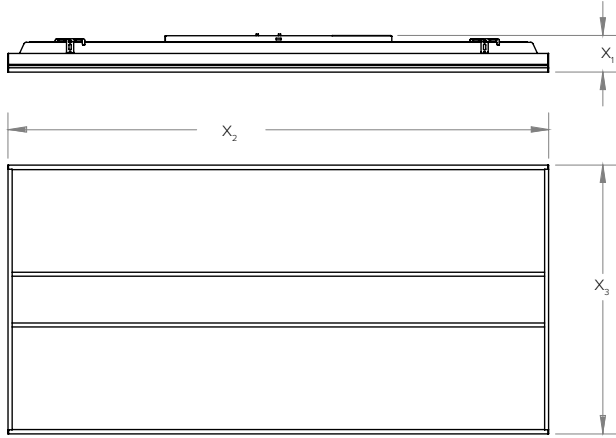
<sup>1</sup> Delivered Lumens (4000K). For full lumen chart please see page 2  
<sup>2</sup> Factory set at this wattage, unless specified  
<sup>3</sup> 5 year standard unless specified



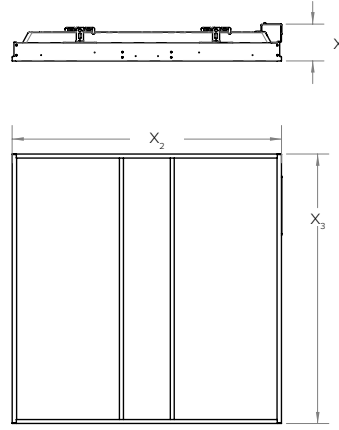
**DIMENSIONS**

	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>
<b>2x2</b>	3.24"	23.75"	23.75"
<b>2x4</b>	3.24"	47.75"	23.75"

**2x4**



**2x2**



**LUMEN CHART**

SIZE	SYS WATT	3000K	LPW	3500K	LPW	4000K	LPW
2x2	26	2418	93	2444	94	2626	101
	35	3255	93	3290	94	3535	101
2x4	26	2262	87	2288	88	2444	94
	35	3045	87	3080	88	3290	94
	45	3915	87	3960	88	4230	94

**Unified Glare Rating (UGR)**

**LED FLAT PANEL WITH FLAT OPTIC LENS:**

- Light is redirected from 60° to 90° degrees of luminaire, UGR <19
- Conical structures built into the lens minimize high angle glare
- Allows for increased efficacy, rather than lumen output glaring at occupants
- High efficiency and energy saving
- Protection class: IP44 Damp Location Rated
- Increased productivity

**STANDARD LENS:**

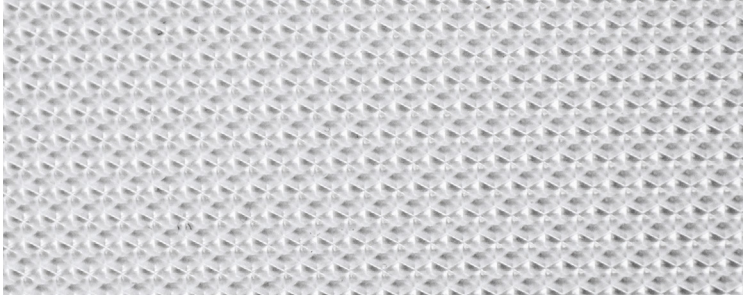
- Harsh glare at viewing angles above 60°, UGR >24
- Wide beam angle at 120°
- Uncomfortable glare
- Reduction in visibility caused by intense light source in field of view
- Protection class: IP22 protects only from objects greater than 12 millimeters
- Loss of productivity



□ = Volumetric flat panel with micro-prismatic lens will reduce glare going into the occupant's eyes  
 = 90° = 60°

■ = High glare flat panel makes occupant's eyes feel uncomfortable  
 — = 90° ..... = 60°

**LENS DETAIL:**



Micro-prismatic technology redirects high-angle light, reducing visual glare. The light above 60° is suppressed to improve the Unified Glare Rating (UGR). This allows for the luminaire to be IESNA RP1-04 & EN12464 compliant, which are standards for office and indoor lighting.

**UGR CRITERIA:**

UGR:	Hopkinson's Criterion:
<10	Imperceptible
<13	Just Perceptible
<16	Perceptible
<19	Acceptable
>22	Unacceptable
>25	Just Uncomfortable
>28	Uncomfortable

Micro-prismatic conical structures provide the most optimal luminance of a fixture from any viewing angle. The UGR rating of less than 19 provides the most acceptable glare for task lighting.

**CLOSE UP DETAIL VIEW**

