# **DESCRIPTION**

The RSA-MRZ family of fixtures is a multi-head, recessed group of products with an integral LED dedicated head. Each head offers four different light levels and lumen packages, with 25°, 40°, and 55° beam spreads. Four color temperatures, 2700K, 3000K, 3500K, 4000K in both 80+ and 97+ CRI are also part of the standard offering. Each head can tilt 45° out of the fixture, and rotate 365° around. The RSA-MRZ family now includes intelligent wireless controls (Enlighted) or simplified wireless controls (WaveLinx) options. Accessories include hex louver, linear spread lens, or soft focus lens. A snoot is also available for high angle glare cutoff.

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Project	
Comments	Date
Prepared by	

# **SPECIFICATION FEATURES**

# Construction

Housing is 6063-T5 extruded aluminum, 20 gauge cold rolled steel. Each head construction is die cast metal. Flanged trim and mud-in trim available. New construction housings equivalent to remodel. Housing constructed by fasteners.

Weights of full fixture assembly: Flange Trim Weight: 8 lbs Mud-In Trim Weight: 8.5 lbs Flange Trim with Sensor Weight: 9 lbs

#### **Electrical**

Standard drivers feature electronic universal voltage (120-277V/ 50-60 Hz), greater than 0.9 power factor, less than 20% harmonic distortion, and features ambient temperature of 25°C (77°F). 0-10V dimming standard.

### **LED Optics**

Each fixture head features precision molded TIR optics made of virgin optical grade acrylic with 95% efficiency and is field changeable. Each lens is injection molded for precision optics with the

choice of 25°, 40°, 55° beam spreads. The LEDs are also offered in 80+ CRI and 97+ CRI in 2700K, 3000K, 3500K, and 4000K

# Mounting

Housing includes holes for tie back to structure. Knockouts are provided for threaded rods (by others) to secure fixture to structure. Provide flexible whip or conduit to fixture, and attach to fixture via knock outs on junction box side.

# **Finish**

Fixture housing is coated using electrostatically charged polyester powder coat paint for superior protection against fade and wear. Paint Colors:

B = (All Black) Black Housing/ Black Trim, W = (All White) White Housing/White Trim. BW = Black Housing/WhiteTrim. Consult factory for other color options.

# Compliance

Components are UL recognized and luminaires are cULus listed for 25°C ambient environments, IC rated, Chicago plenum rated, and NYC compliant. Dry listed.

# **Environment**

Suited for indoor only, dry listing. 25° C ambient temperature.

#### Control

Standard offering is 0-10V dimming and energy saving integral sensor device available. Enlighted sensors are available for building management applications. WaveLinx sensors are available for simplified controls solutions. Addressable Lighting Interface (DALI) driver option can be used with Fifth Light Technology.

**Life and Warranty** Standard five-year limited warranty on all parts.



# **RSA-MRZ**

**LED Multi-Head Fixture** 

Recessed

WaveLinx Enlighted

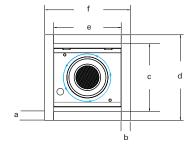
LED Multi-head Configuration 1-Head

CERTIFICATION DATA

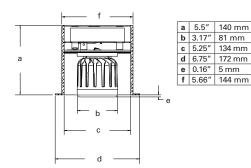
UL/cUL Dry Location Listed LM-79, LM-80, TM-30 , TM-21

**ENERGY & CONNECTED SOLUTIONS** 

# Top View - Flanged Trim



а	0.75"	20 mm
b	0.75"	20 mm
С	5.25"	134 mm
d	6.75"	172 mm
е	5.25"	134 mm
f	6.75"	172 mm

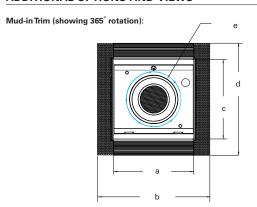


Side View - Flanged Trim

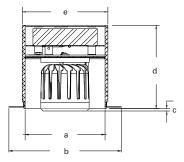
# ORDERING INFORMATION

Sample Number: MRZ-1-REC-MUD-1-L30-80-WFL-UNV-BW-HCD-SWPD1-K1

Series	Size	Mounting	Trim Type (1)	Light Level/ Head <sup>®</sup> (@ 4000 K)			Color Temp./ Wattage	CRI	Beam Angle	Voltage <sup>(9)</sup>
MRZ = Multi-Head Integral LED	1 = 1 Integral LED Head	REC = Recessed	FLN = Flanged MUD = Mud-In	2 = 900 lumens @9W @80CRI, 700 lumens @9W @ 97CRI 3 = 1300 lumens @12W @80CRI, 1000 lumens @12W @ 97CRI		<b>L27</b> = 2700K <b>L30</b> = 3000K <b>L35</b> = 3500K <b>L40</b> = 4000K	80+ 97+	NFL = 25° Narrow Flood FL = 40° Flood WFL = 55° Wide Flood	UNV = 120- 277V	
Finish (2)			Drivers (10)		Integral Control (Optional)		Options (Optional)		Accessorie (Optional Opt	
W = White Housing/ WhiteTrim B = Black Housing/ BlackTrim BW = Black Housing/ WhiteTrim	(10 ELV = Ele Vol HCD = 0-1 DCD = 0-1	andard 0-10V %-100%) ctronic Low ttage Dimming 0V (1%-100%) 0V (0.1%-100%) h Light DALI (5-100%	LUH = Lu (1	fth Light DALI (1-100%) utron H-Series Ecosystem I-100% Fade to Black)	WAA = WaveLinx Wireless Integral Sensor WAB = WaveLinx Lite Wireless Integral Sensor LWIPD1 = Enlighted Wireless Integral Sensor	CP = C HEX = H LSL = L SFL = S SNT = S	Remote Emergend Battery Chicago Plenum Hex Louver Linear Spread Len Soft Focus Lens Snoot Butterfly Brackets		<b>K1</b> = (1) 25°, (1) 40°, (1	) 55° lens kit

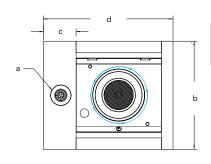


а	5.25"	134 mm
b	7.41"	189 mm
С	5.25"	134 mm
d	7.41"	189 mm
е	3.17"	81 mm (diam)

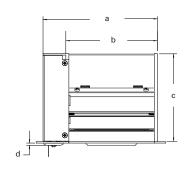


а	5.25"	134 mm
b	7.41"	189 mm
С	0.16"	5 mm
d	5.5"	140 mm
е	5.66"	144 mm

# Flange Trim with Enlighted (LWIPD1) or WaveLinx (WAA) sensor

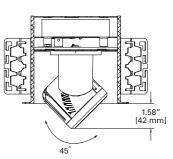


а	1.26"	32 mm (diam)
b	6.64"	169 mm
С	2.0"	52 mm
d	7.97"	203 mm

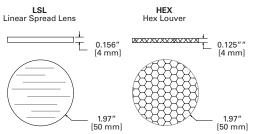


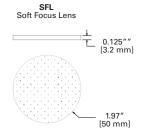
а	7.03"	179 mm (diam)
b	5.63"	143 mm
С	5.5"	140 mm
d	0.16"	5 mm

Rotation of 45 $^{\circ}$  per fixture head, and 365 $^{\circ}$  , in plan view.



Accessories - Linear Spread lens, Hex Louver, Soft Focus Lens, Snoot. (Note: Only one lens can be used at a time. And, only one lens can be used with snoot)







SNT Snoot -(Shown with Hex Louver)

# **LUMEN MAINTENANCE**

AMBIENT TEMPERATURE	TM-21 LUMEN MAINTENANCE (60,000 Hours)	THEORETICAL L70 (Hours)
25°C	> 86%	> 90,000

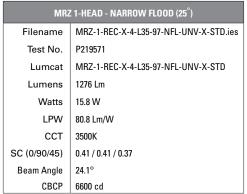
# CONNECTED CONTROL

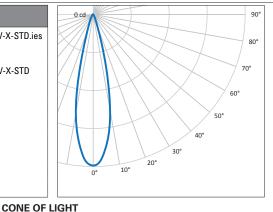
Enlighted Intelligent (LWIPD1) and WaveLinx (WAA, WAB) Wireless Sensor Ordering Information:

- WAA, WAB and LW sensors must be used with 0-10V drivers (STD, HCD, DCD)
- The WaveLinx integrated sensors (WAA, WAB) offer passive infrared (PIR) occupancy and a photocell for closed loop daylighting.
- See RSA MRZ brochure for systems information and application.



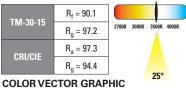
# **PHOTOMETRY**



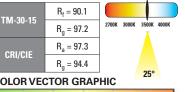


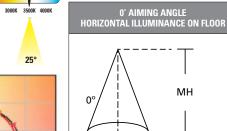
ZONAL LUMENS SUMMARY					
Zone	Lumens	% Fixture			
0-30°	1190	93.2			
0-40°	1248	97.8			
0-60°	1273	99.8			
0-90°	1276	100			
90-180°	0	0			
0-180°	1276	100			

LUN	LUMINANCE DATA (CD/M²)					
Angle	0°	45°	90°			
45	18351	18351	18351			
55	4989	4989	4989			
65	1751	1751	1751			
75	2859	2859	2859			
85	0	0	0			



Reference Illuminant

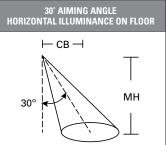




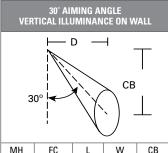
Test Source

МН	FC	L	W
5'	264	2	2
5.5'	218.2	2.2	2.2
6.5'	156.2	2.6	2.6
7.5'	117.3	3	3

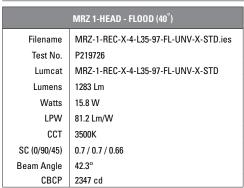
МН

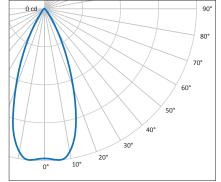


МН	FC	L	W	СВ
5'	180	2.5	2.2	2.9
5.5'	148.8	2.7	2.4	3.2
6.5'	106.5	3.2	3	3.8
7.5'	80	3.7	3.4	4.3



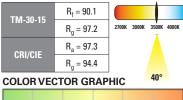
MH	FC	L	W	СВ
1'	1177.3	0.9	0.6	1.7
1.5'	523.3	1.4	1	2.6
2'	294.3	1.9	1.2	3.5
2.5'	188.4	2.4	1.6	4.3
3'	130.8	2.9	2	5.2
3.5'	96.1	3.3	2.4	6.1

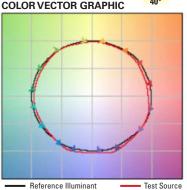




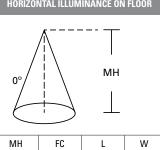
ZONAL L	MMARY	
Zone	Lumens	% Fixture
0-30°	1103	86
0-40°	1229	95.8
0-60°	1275	99.4
0-90°	1283	100
90-180°	0	0
0-180°	1283	100

LUN	IINANCE	DATA (CD	/ <b>M</b> <sup>2</sup> )
Angle	0°	45°	90°
45	28538	28538	28538
55	11354	11354	11354
65	5137	5137	5137
75	2859	2859	2859
85	0	0	0





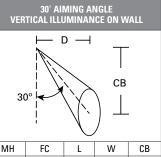
# **CONE OF LIGHT** 0° AIMING ANGLE HORIZONTAL ILLUMINANCE ON FLOOR



МН	FC	L	W
5'	94.3	3.4	3.4
5.5'	77.9	3.8	3.8
6.5'	55.8	4.4	4.4
7.5'	41.9	5.2	5.2

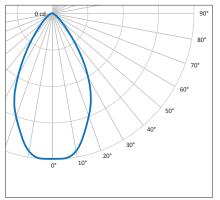
# 30° AIMING ANGLE HORIZONTAL ILLUMINANCE ON FLOOR $\vdash$ CB $\dashv$ $\mathsf{MH}$ 309

МН	FC	L	W	СВ
5'	75.7	3.7	3.6	2.9
5.5'	62.6	4	3.8	3.2
6.5'	44.8	4.8	4.6	3.8
7.5'	33.7	5.6	5.4	4.3



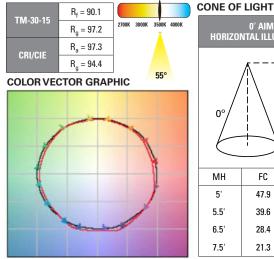
МН	FC	L	W	СВ
1'	674.3	0.9	0.8	1.7
1.5'	299.7	1.4	1.2	2.6
2'	168.6	1.9	1.8	3.5
2.5'	107.9	2.4	2.2	4.3
3'	74.9	2.9	2.6	5.2
3.5'	55	3.4	3	6.1

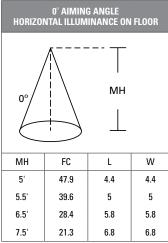
	MRZ 1-HEAD - WIDE FLOOD (55°)					
Filename MRZ-1-REC-X-4-L35-97-WFL-UNV-X-STD						
Test No.	P219850					
Lumcat MRZ-1-REC-X-4-L35-97-WFL-UNV-X-STD						
Lumens	1194 Lm					
Watts	15.8 W					
LPW	75.6 Lm/W					
ССТ	3500K					
SC (0/90/45)	0.91 / 0.91 / 0.91					
Beam Angle	60.7°					
CBCP	1198 cd					

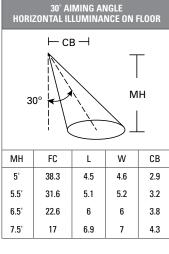


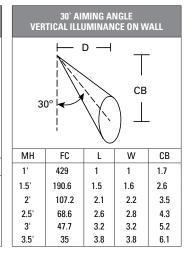
ZONAL LUMENS SUMMARY								
Zone	Lumens	% Fixture						
0-30°	755	63.2						
0-40°	1016	85.1						
0-60°	1180	98.8						
0-90°	1194	100						
90-180°	0	0						
0-180°	1194	100						

LUMINANCE DATA (CD/M²)								
Angle	0°	45°	90°					
45	105010	105010	105010					
55	40256	40256	40256					
65	11908	11908	11908					
75	5528	5528	5528					
85	0	0	0					









MULTIPLIER TABLE								
CRI	80+				97+			
CCT	2700K 3000K 3500K 4000K			4000K	2700K	3000K	3500K	4000K
MULTIPLIER	1.226	1.246	1.314	1.332	0.875	0.957	1.000	1.039

# **TECHNICAL NOTES**

Reference Illuminant

- 1. Sensor only available for Flange Trim.
- 2. W = (White) White Housing, White Trim. B = (Black) Black Housing, Black Trim. BW = Black Housing, White Trim. Consult factory for custom colors.
- 3. When SFL, LSL, HEX, or SNT are selected, all fixture heads receive this option. Only one shielding media can be used at a time. However, the SNT (snoot) option can take one hex louver, linear spread, or soft focus lens media.
- 4. K1 is a kit that contains one 25°, one 40°, and one 55° lens in one box for field changeable optic distributions. K2 is a kit that contains two 25°, two 40°, and two 55° lenses in one box for field changeable optic distributions. K3 is a kit that contains three 25°, three 40°, and three 55° lenses in one box for field changeable optic distributions. K4 is a kit that contains four 25°, four 40°, and four 55° lenses in one box for field changeable optic distributions.
- 5. See CONNECTED CONTROL for detailed information and full specification.
- 6. No remote Emergency Battery option available for 1-head

Test Source

- 7. Integral sensors are only compatible with 0-10V dimming drivers. They must be used with their respective wireless control systems.
- 8. Refer to "IES Files" section for all options of color temperatures, CRIs, optical distributions, and shielding media.
- 9. 347 V not available
- 10. Driver Table availability for 1-Head:

DRIVER AVAILA	DRIVER AVAILABILITY TABLE - 1 HEAD									
LIGHT LEVEL	STD 0-10V (10-100%	ELV Electronic Low Voltage	<b>HCD</b> (1-100%)	<b>DCD</b> (0.1-100%)	<b>5LT</b> Fifth Light Dali (5-100%)	<b>5LTHD</b> Fifth Light Dali (1-100%)	LUH Lutron-EcoSys (1-100%)			
1	YES	N0	N0	YES	N0	N0	N0			
2	YES	YES	N0	YES	N0	YES	YES			
3	YES	YES	N0	YES	N0	YES	YES			
4	YES	YES	YES	YES	N0	YES	YES			

