Catalog #		Type
Project		
Comments		Date
Prepared by		

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.

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: 21 lbs
Mud-In Trim Weight: 21.5 lbs
Flange Trim with Sensor Weight: 22 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 CCT.

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 attache 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/ White Trim. 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. Energy saving integral sensor options 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
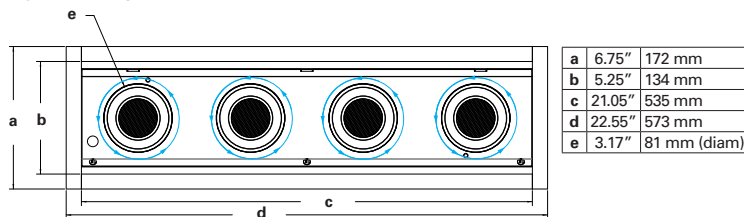Standard five-year limited warranty on all parts.

RSA-MRZ

LED Multi-Head Fixture
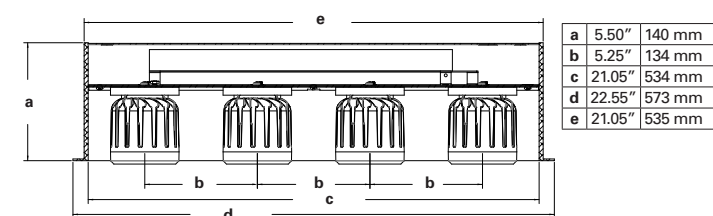
Recessed
LED Multi-head Configuration
4-Head

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

ENERGY & CONNECTED SOLUTIONS
WaveLinx
Enlighted

Top View - Flanged Trim

a	6.75"	172 mm
b	5.25"	134 mm
c	21.05"	535 mm
d	22.55"	573 mm
e	3.17"	81 mm (diam)

Side View - Flanged Trim

a	5.50"	140 mm
b	5.25"	134 mm
c	21.05"	534 mm
d	22.55"	573 mm
e	21.05"	535 mm

ORDERING INFORMATION

Sample number: MRZ-4-REC-FLN-1-L27-97-NFL-UNV-B-STD-SWPD1-K2

Series	Size	Mounting	Trim Type [1]	Light Level/ Head [8] (@ 4000 K)	Color Temp./ Wattage	CRI	Beam Angle	Voltage
MRZ = Multi-Head Integral LED	**4** = 4 Integral LED Head	**REC** = Recessed	**FLN** = Flanged **MUD** = Mud-In	**1** = 650 lumens @5W @80CRI, 500 lumens @5W @ 97CRI **2** = 900 lumens @9W @80CRI, 700 lumens @9W @ 97CRI **3** = 1300 lumens @12W @80CRI, 1000 lumens @12W @ 97CRI **4** = 1700 lumens @16W @80CRI, 1300 lumens @16W @ 97CRI	**L27** = 2700K **L30** = 3000K **L35** = 3500K **L40** = 4000K	**80+** **97+**	**NFL** = 25˚ Narrow Flood **FL** = 40˚ Flood **WFL** = 55˚ Wide Flood	**UNV** = 120-277V **347** = 347 V

Finish [2]	Drivers [9]		Integral Control [1][5][7] (Optional)	Options [3][6] (Optional)	Accessories [4] (Optional Optics Kit)
W = White Housing/ White Trim **B** = Black Housing/ Black Trim **BW** = Black Housing/ White Trim	**STD** = Standard 0-10V 10%-100%) **ELV** = Electronic Low Voltage Dimming **HCD** = 0-10V (1%-100%) **DCD** = 0-10V (0.1%-100%) **5LT** = Fifth Light DALI (1-100%)	**5LTHD** = Fifth Light DALI (1-100%) **LUH** = Lutron H-Series Ecosystem (1-100% Fade to Black)	**WAA** = WaveLinx Wireless Integral Sensor **WAB** = WaveLinx Lite Wireless Integral Sensor **LWIPD1** = Enlighted Wireless Integral Sensor	**REM** = Remote Emergency Battery **CP** = Chicago Plenum **HEX** = Hex Louver **LSL** = Linear Spread Lens **SFL** = Soft Focus Lens **SNT** = Snoot **BF** = Butterfly Brackets	**K1** = (1) 25˚, (1) 40˚, (1) 55˚ lens kit **K2** = (2) 25˚, (2) 40˚, (2) 55˚ lens kit **K3** = (3) 25˚, (3) 40˚, (3) 55˚ lens kit **K4** = (4) 25˚, (4) 40˚, (4) 55˚ lens kit

See page 4 for Technical Notes.

Specifications and dimensions subject to change without notice. See additional information on the following pages.

ADDITIONAL OPTIONS AND VIEWS

Mud-In Trim

a	7.41"	188 mm
b	5.25"	134 mm
c	21.05"	535 mm
d	23.2"	590 mm
e	3.17"	81 mm (diam)

a	5.5"	140 mm
b	5.25"	134 mm
c	21.05"	534 mm
d	23.2"	590 mm
e	21.05"	535 mm
f	0.16"	5 mm
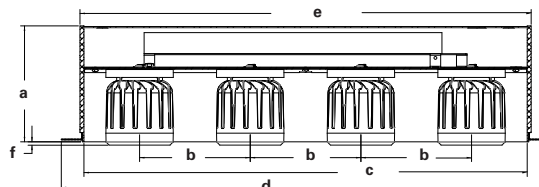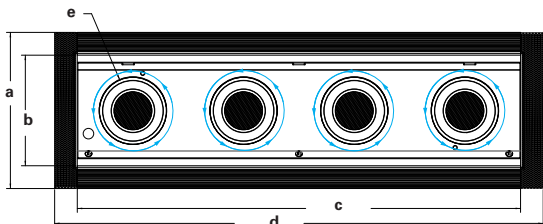
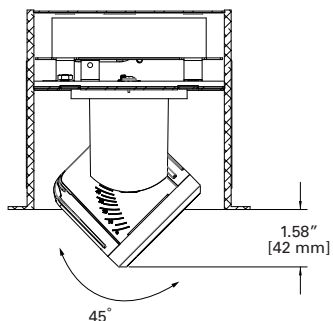**Flange Trim with LumaWatt Pro Sensor LWIPD1 Sensor (WaveLinx sensor, SWPD1, also available)**

a	1.26"	32 mm (diam)
b	2.01"	51 mm
c	23.75"	603 mm
d	6.65"	169 mm

a	17.56"	466 mm
b	16.17"	410 mm
c	0.16"	5 mm
d	5.5"	140 mm
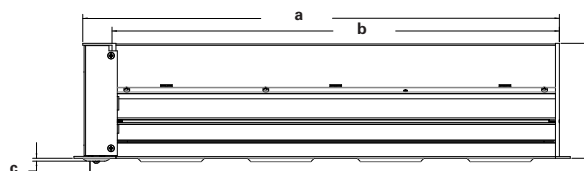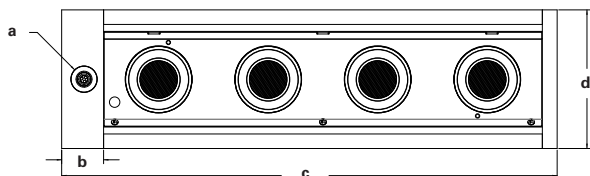
Rotation of 45° per fixture head, and 365°, in plan view.
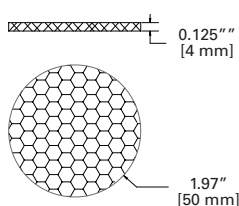
1.58" [42 mm]

45°

Accessories - Linear Spread lens, Hex Louver, Soft Focus Lens, Snoot.
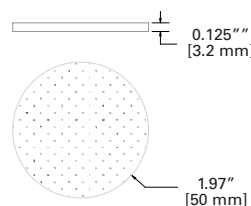**(Note: Only one lens can be used at a time. And, only one lens can be used with snoot)**
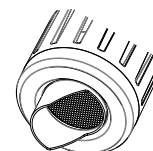
LSL
Linear Spread Lens
0.156" [4 mm]
1.97" [50 mm]

HEX
Hex Louver
0.125"" [4 mm]
1.97" [50 mm]

SFL
Soft Focus Lens
0.125"" [3.2 mm]
1.97" [50 mm]

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.
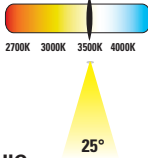- See RSA MRZ brochure for systems information and application.

Specifications and dimensions subject to change without notice.
See additional information on the following pages.

PS520007EN
4/8/2021

PHOTOMETRY

MRZ 1-HEAD - NARROW FLOOD (25°)

Filename	MRZ-1-REC-X-4-L35-97-NFL-UNV-X-STD.ies
Test No.	P219571
Lumcat	MRZ-1-REC-X-4-L35-97-NFL-UNV-X-STD
Lumens	1276 Lm
Watts	15.8 W
LPW	80.8 Lm/W
CCT	3500K
SC (0/90/45)	0.41 / 0.41 / 0.37
Beam Angle	24.1°
CBCP	6600 cd
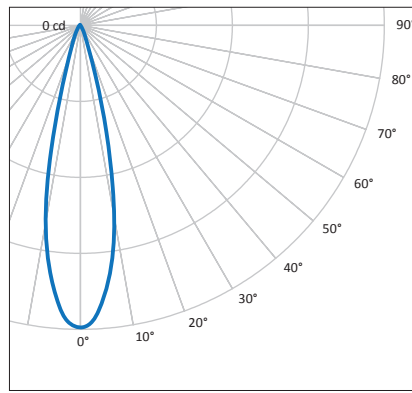
ZONAL LUMENS SUMMARY

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

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

TM-30-15	R_f = 90.1
	R_g = 97.2
CRI/CIE	R_a = 97.3
	R_g = 94.4

25°

COLOR VECTOR GRAPHIC

— Reference Illuminant   — Test Source
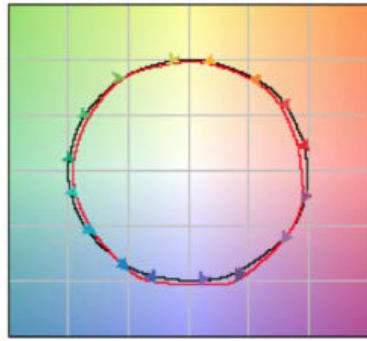
CONE OF LIGHT

0° AIMING ANGLE
HORIZONTAL ILLUMINANCE ON FLOOR
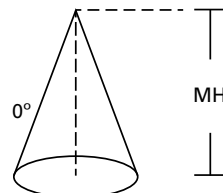
MH	FC	L	W
5'	264	2	2
5.5'	218.2	2.2	2.2
6.5'	156.2	2.6	2.6
7.5'	117.3	3	3

30° AIMING ANGLE
HORIZONTAL ILLUMINANCE ON FLOOR
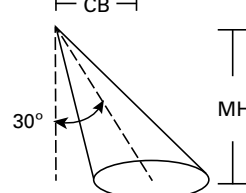
MH	FC	L	W	CB
5'	180	2.5	2.2	2.9
5.5'	148.8	2.7	2.4	3.2
6.5'	106.5	3.2	3	3.8
7.5'	80	3.7	3.4	4.3

30° AIMING ANGLE
VERTICAL ILLUMINANCE ON WALL
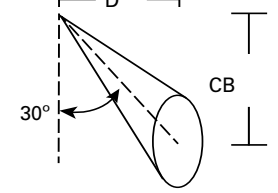
MH	FC	L	W	CB
1'	1177.3	0.9	0.6	1.7
1.5'	523.3	1.4	1	2.6
2'	294.3	1.9	1.2	3.5
2.5'	188.4	2.4	1.6	4.3
3'	130.8	2.9	2	5.2
3.5'	96.1	3.3	2.4	6.1

MRZ 1-HEAD - FLOOD (40°)

Filename	MRZ-1-REC-X-4-L35-97-FL-UNV-X-STD.ies
Test No.	P219726
Lumcat	MRZ-1-REC-X-4-L35-97-FL-UNV-X-STD
Lumens	1283 Lm
Watts	15.8 W
LPW	81.2 Lm/W
CCT	3500K
SC (0/90/45)	0.7 / 0.7 / 0.66
Beam Angle	42.3°
CBCP	2347 cd
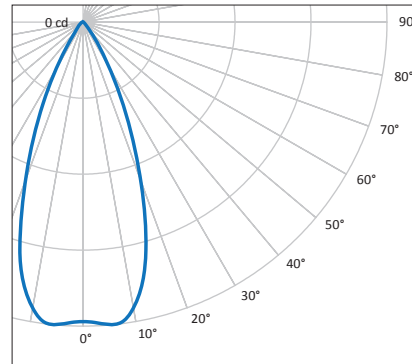
ZONAL LUMENS SUMMARY

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

LUMINANCE DATA (CD/M²)

Angle	0°	45°	90°
45	28538	28538	28538
55	11354	11354	11354
65	5137	5137	5137
75	2859	2859	2859
85	0	0	0
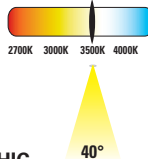
TM-30-15	R_f = 90.1
	R_g = 97.2
CRI/CIE	R_a = 97.3
	R_g = 94.4

40°

COLOR VECTOR GRAPHIC

— Reference Illuminant   — Test Source
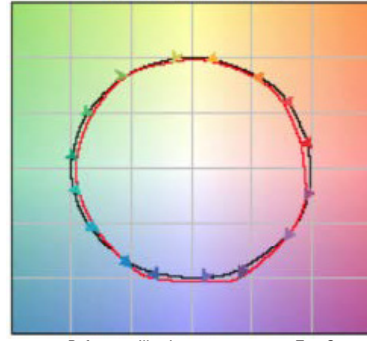
CONE OF LIGHT

0° AIMING ANGLE
HORIZONTAL ILLUMINANCE ON FLOOR
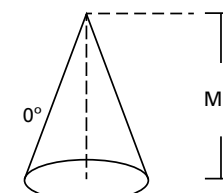
MH	FC	L	W
5'	94.3	3.4	3.4
5.5'	77.9	3.8	3.8
6.5'	55.8	4.4	4.4
7.5'	41.9	5.2	5.2

30° AIMING ANGLE
HORIZONTAL ILLUMINANCE ON FLOOR
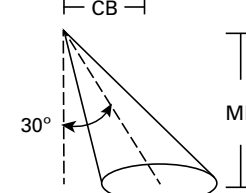
MH	FC	L	W	CB
5'	75.7	3.7	3.6	2.9
5.5'	62.6	4	3.8	3.2
6.5'	44.8	4.8	4.6	3.8
7.5'	33.7	5.6	5.4	4.3

30° AIMING ANGLE
VERTICAL ILLUMINANCE ON WALL
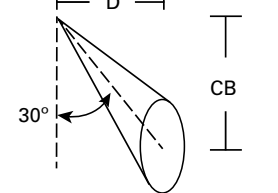
MH	FC	L	W	CB
1'	674.3	0.9	0.8	1.7
1.5'	299.7	1.4	1.2	2.6
2'	168.6	1.9	1.8	3.5
2.5'	107.9	2.4	2.2	4.3
3'	74.9	2.9	2.6	5.2
3.5'	55	3.4	3	6.1

COOPER Lighting Solutions

Specifications and dimensions subject to change without notice.
See additional information on the following pages.

PS520007EN
4/8/2021

MRZ 1-HEAD - WIDE FLOOD (55°)

Filename	MRZ-1-REC-X-4-L35-97-WFL-UNV-X-STD.ies
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
CCT	3500K
SC (0/90/45)	0.91 / 0.91 / 0.91
Beam Angle	60.7°
CBCP	1198 cd
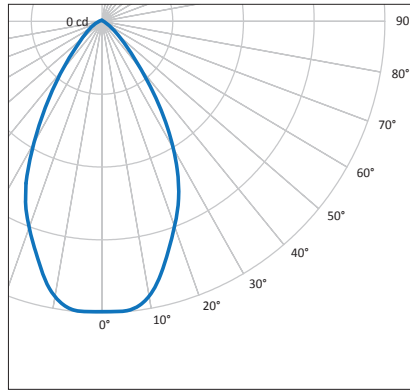
ZONAL LUMENS SUMMARY

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

TM-30-15	R_f = 90.1
	R_g = 97.2
CRI/CIE	R_a = 97.3
	R_g = 94.4
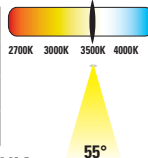
2700K 3000K 3500K 4000K

55°

COLOR VECTOR GRAPHIC

Reference Illuminant — Test Source
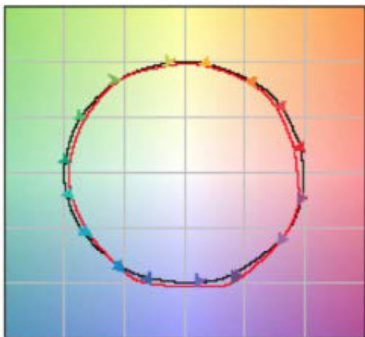
CONE OF LIGHT

0° AIMING ANGLE
HORIZONTAL ILLUMINANCE ON FLOOR
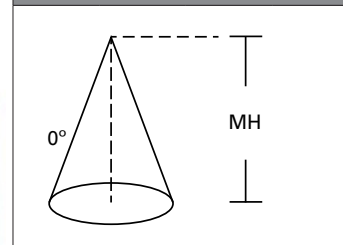
MH	FC	L	W
5'	47.9	4.4	4.4
5.5'	39.6	5	5
6.5'	28.4	5.8	5.8
7.5'	21.3	6.8	6.8

30° AIMING ANGLE
HORIZONTAL ILLUMINANCE ON FLOOR
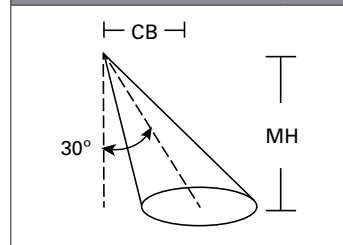
MH	FC	L	W	CB
5'	38.3	4.5	4.6	2.9
5.5'	31.6	5.1	5.2	3.2
6.5'	22.6	6	6	3.8
7.5'	17	6.9	7	4.3

30° AIMING ANGLE
VERTICAL ILLUMINANCE ON WALL
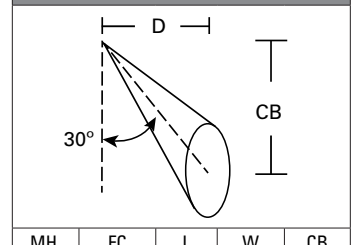
MH	FC	L	W	CB
1'	429	1	1	1.7
1.5'	190.6	1.5	1.6	2.6
2'	107.2	2.1	2.2	3.5
2.5'	68.6	2.6	2.8	4.3
3'	47.7	3.2	3.2	5.2
3.5'	35	3.8	3.8	6.1

MULTIPLIER TABLE

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

TECHNICAL NOTES

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. 14 W Surelite battery. Each fixture head will dim to 25% of output for egress mode.
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. All driver options available.

COOPER
Lighting Solutions

Specifications and dimensions subject to change without notice.
See additional information on the following pages.