

ROADMAX[®] RX1

Evluma's Next Generation Roadway Luminaire
LED ROADWAY LIGHTING

Applications:

Residential streets &
local roadways, parking lots,
campuses, industrial parks.



RX1 Wattage Range: 30-100W

RX1 Lumen Range: 2,840-13,000 lumens

RoadMax RX1 delivers high-performance roadway distributions coupled with exceptional glare control. This sleek, utility-grade luminaire is easily configurable to meet a multitude of application requirements. RX1 is one model in a series. See also, RX2 & RX3.

Replaces 70W-200W HID

The RoadMax RX1 is a single light engine luminaire with a lumen output ranging from 2,840 – 13,000 lumens and wattages ranging from 30 – 100 watts. Lumen output and wattage can be changed in the field through your choice of optional manual or wireless controls.

Construction & Finish

Cast aluminum housing with TGIC-free, polyester powder-coat in a variety of colors. Hinged tool-less access panel for wiring access. 2-bolt tenon clamp accepts 2" or 1-1/4" diameter arm. Step adjustment of +/- 5° tilt plus integral bubble level for luminaire leveling. Removable wildlife shield. Coastal version with enhanced hardware available meeting 3000-hour salt spray requirements.

Thermal Protection

Solid aluminum housing provides excellent passive cooling for all electronics. LED & driver life is ensured by thermal management protection that limits current levels to the LEDs based on system temperature. Luminaire is rated for full performance at -40°C min – 50°C max ambient temperature.

Lumen Maintenance

Projected per IES TM-21-21 at 25°C and based on LM80 10,000 hr testing.

| | |
|-----|------------|
| L95 | 25,000 hrs |
| L91 | 50,000 hrs |
| L89 | 60,000 hrs |

LED & Optical

High-efficacy LEDs with color temperature options of 2700 – 5000 Kelvin and CRI > 70. High-performance Type II, III, IV and V primary borosilicate optics rated at IP66. Factory or field-installable secondary lens available on all optics for managing glare while achieving superior pole spacing. All configurations are Zero Uplight (U0 BUG). Field-installable light trespass shields are available.

Electrical

120-277 VAC 60 Hz auto-adjusting. Driver is Evluma-proprietary Class II with 0-10V ANSI C137.1-2019 (9-Volt). THD < 20% and PF > 0.9. 20kV/10kA surge protection per ANSI C136.2 – 2018 Extreme rating. Three-position terminal block with optional pigtails. Separate electronics compartment is rated IP66.

Controls

Dimmable driver. 0-10V interface standard with 7-pin NEMA receptacle option. Dimming minimum to 10% of nominal wattage. Manual wattage control (FAO) optional.

Custom packages include Photocontrol FailSafe™ and compatibility with the Bluetooth BLE ConnectLED™ mobile app. Can be combined with Evluma's integrated photocell, 3-pin, or 7-pin receptacles.

Warranty

Ten-year warranty.



ROADMAX RX1

PRODUCT CONFIGURATIONS

SAMPLE NUMBER: RX1-050C3T2G0-S3HGL2-AFBN-PC1

| FAMILY ID | WATTS | LED | CCT (K) | DISTRIBUTION | LENS | PCR /INTEGRATED/ FAILSAFE |
|---------------------|--|--|--|--|--|--|
| RX1 = RoadMax small | 030 = 30 040 = 40 050 = 50 060 = 60 070 = 70 080 = 80* 090 = 90* 100 = 100* * E output option only | C = standard output E = high output | 7 = 2700 3 = 3000 4 = 4000 5 = 5000 | T2 = type II T3 = type III T4 = type IV T5 = type V | G0= none G1= diffused glare control | S3= 3 pin socket only S7= 7 pin socket only (0-10V) SP= Integrated Photocell F3= S3 pin + Failsafe/CLED F7= S7 pin + Failsafe/CLED FP= Integrated P + Failsafe/CLED |

| HOUSING | LEADS | SURGE PROTECTION | Features 1 | DRIVER/INPUT (V) | Features 2 |
|---|--|-------------------------|---------------------|------------------|------------------------------------|
| HG = standard gray HB = standard black HZ = standard bronze ZG = coastal gray ZB = coastal black ZZ = coastal bronze | L0 = none L6 = 6' L1 = 10' L2 = 20' | A = Surge 20kV/10kA SPD | 0 = none F = FAO | B = 120-277VAC | 0 = none N = NEMA wattage label |

LENSES

The primary glass RX1 optics are designed to deliver precise, evenly-distributed light with a low veiling luminance for Type II, Type III, Type IV and Type V distributions.

Choose G1 to add a secondary lens made from a specially formulated LED acrylic for exceptional glare control.

PCR/RECEPTACLE/FAILSAFE

All photocell receptacles are rotatable. Wireless photocell not provided.

Integrated Photocell (P)

Evluma's integrated photocell shortens installation time. This UV-resistant, polycarbonate photocell meets FM 4473 impact resistance.

ConnectLED™ (CLED)

Order the RX1 configured for compatibility with Evluma's ConnectLED app. ConnectLED uses Bluetooth BLE to securely control individual luminaires. Available for an Apple or Android app. Sold separately.

Photocontrol

Failsafe™ (Failsafe)

Photocontrol Failsafe eliminates the need to replace failed photocells, saving truck-rolls. Combine this patented technology with S3, S7 receptacles or the P option. Packaged with ConnectLED.

HOUSING

Standard housings are tested to 1000hrs salt/fog. Coastal housings are tested to 3000hrs and include corrosion resistant enhancements. Recommended for installation within 2000 ft from saltwater. Custom colors available.

FEATURES 1: FAO

Field Adjustable Wattage Selector (FAO) Manually adjust luminaire wattage and lumen output in the field using the FAO. Seven output levels. FAO (AF) combined with S3 is not continuously dimmable. Stepped dimming only.

| SWITCH POSITION | INPUT WATTS MULTIPLIER | DELIVERED LUMENS MULTIPLIER |
|-----------------|------------------------|-----------------------------|
| A | 100% | 100% |
| B | 89% | 91% |
| C | 77% | 84% |
| D | 65% | 72% |
| E | 54% | 61% |
| F | 43% | 50% |
| G | 33% | 39% |
| H | 23% | 28% |

SPECIAL OPTIONS

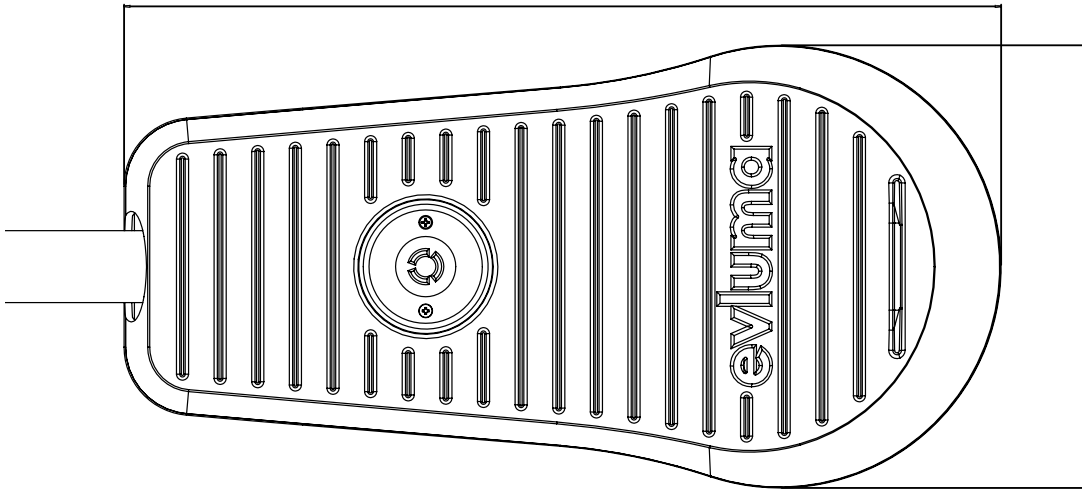
CAP = shorting cap
PC1 = long life NEMA photocell 120-277VAC

Multiply the nominal wattage and/or lumens to arrive at reduced values. Typical accuracy is +/- 10%. Select the A position if using with an S7 receptacle and wireless node.

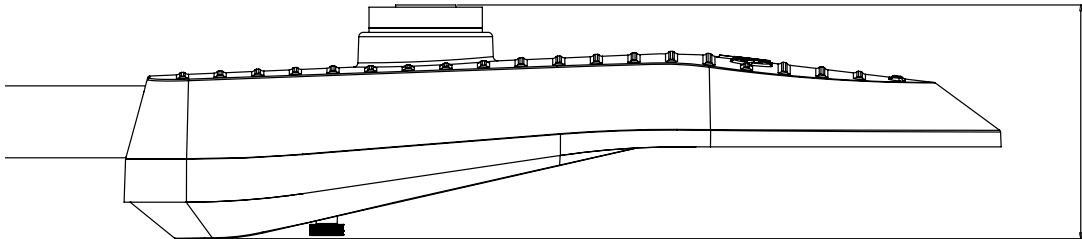


RX1 DIMENSIONS

19.81 in
50.33 cm



10 in
25.40 cm



5.28 in
13.41cm

TECHNICAL SPECS



Electrical Data

120-277 VAC 60 Hz
THD <20% 120-277 VAC
PF >90% 120-277 VAC
Rated Electrical Lifetime
>100,000 hrs
-40°C Min / 50°C Max Temp

Certification Data

UL 1598. MET Labs
IP66. IEC 60598-1
ASTM B117-19 3,000hr
salt fog performance test

EPA under 0.5 sq ft

C136.31-2023
Level2/3G Vibration

ANSI C136.2-2018
20kV/10kA Surge

DLC 30-100W

Not all product variations listed on this datasheet are DLC qualified. Visit <https://qpl.designlights.org> to confirm qualification.

Any RX1 model with S3, but no FAO (A0) is not qualified under DLC 5.1 as these models are not capable of continuous dimming. Example RX1-XXXXXXXXX-S3XXXX-A0XX.

Dark Sky Approved

Multiple RX1 models have received the IDA Dark Sky Seal of Approval. darksky.org.

Models offered in 3000K (3) or 2700K (7) are IDA approved. All RX1 are U0.

Community Friendly Lighting (SOLA) Certified

Models offered in 3000K and 2700K measuring U0 are also CFL SOLA Certified. volt.org.

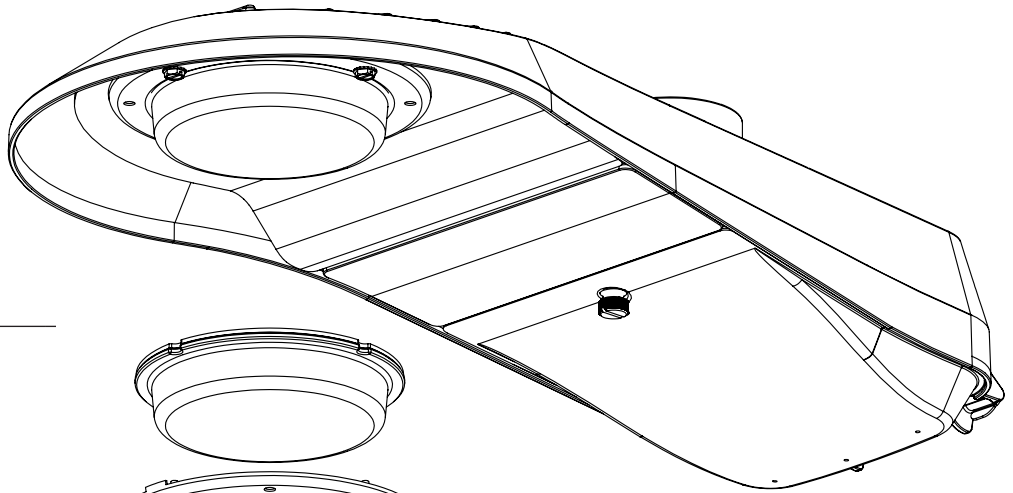
3K = 16% SPD <530nm
27K = 17% SPD <530nm

Shipping

Single unit Weight = 8lbs

LTL pallet qty 42 (466 lbs)
FTL pallet qty 30 (340 lbs)
FTL qty 840

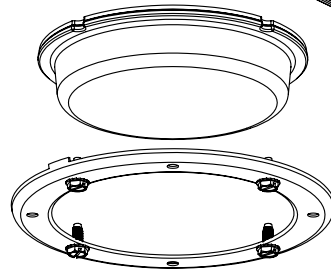
LENS ACCESSORIES



SECONDARY LENS FOR GLARE CONTROL

Push Veiling Luminance even lower while maintaining competitive pole spacing within RP-8 recommendations.

RX1 can be ordered from the factory with a secondary lens installed for additional glare control, or order separately for installation in the field at a later date.



RX1-LENSG1

Prioritize glare reduction while maintaining high roadway performance.

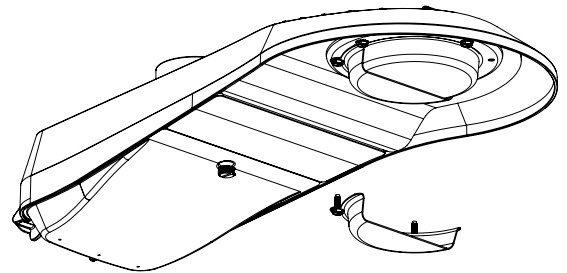
The glare control lens is made from a specially formulated optical acrylic for use with LEDs. Coastal version available. To order separately see the catalog number below.

| FAMILY ID | STYLE | COLOR |
|-----------|---|---|
| RX1 | LENSG1 = secondary lens for glare control | HG = standard gray HB = standard black HZ = standard bronze ZG = coastal gray ZB = coastal black ZZ = coastal bronze |

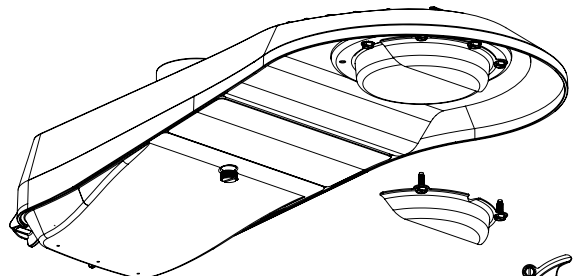
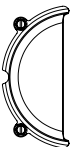
LIGHT TRESPASS SHIELDS

Reduce light trespass and discomfort glare. Field installable shields can be mounted over primary optic or secondary lens and in any position - front, back or sides. Shields maintain No Uplight (U0) rating and add no additional EPS. Coastal version available.

| FAMILY ID | STYLE | COLOR |
|-----------|--|---|
| RX1 | LTS1 = house-side shield (large) LTS2 = front-side shield (small) | HG = standard gray HB = standard black HZ = standard bronze ZG = coastal gray ZB = coastal black ZZ = coastal bronze |



RX1-LTS1
house-side shield



RX1-LTS2
front-side shield



RX1 PERFORMANCE 30-70W

C Standard Output LED

Nominal lumen values reported. Individual fixtures may vary +/- 10%. IES files available at evluma.com

| WATTAGE | DISTRIBUTION Type, Lm/W & BUG | LUMENS (all CCT = >70 CRI) | | | | | | | |
|---------|----------------------------------|----------------------------|----------|----------|----------|---------------------------|----------|----------|----------|
| | | G0 option - primary lens | | | | G1 option - glare control | | | |
| | | 2700K | 3000K | 4000K | 5000K | 2700K | 3000K | 4000K | 5000K |
| 30 | II | 3420 | 3780 | 3930 | 3960 | 3030 | 3360 | 3480 | 3500 |
| | Lm/W | 114 | 126 | 131 | 132 | 101 | 112 | 116 | 117 |
| | BUG | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 |
| | III | 3510 | 3900 | 3990 | 4030 | 3120 | 3450 | 3550 | 3560 |
| | Lm/W | 117 | 130 | 133 | 134 | 104 | 115 | 118 | 119 |
| | BUG | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 |
| | IV | 3350 | 3730 | 3850 | 3860 | 2840 | 3160 | 3260 | 3270 |
| | Lm/W | 112 | 124 | 128 | 129 | 95 | 105 | 109 | 109 |
| | BUG | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 |
| 40 | V | 3780 | 4200 | 4350 | 4380 | 3300 | 3690 | 3780 | 3840 |
| | Lm/W | 126 | 140 | 145 | 146 | 110 | 123 | 126 | 128 |
| | BUG | B2-U0-G1 | B2-U0-G1 | B2-U0-G1 | B2-U0-G1 | B2-U0-G1 | B2-U0-G1 | B2-U0-G1 | B2-U0-G1 |
| | II | 4440 | 5000 | 5120 | 5160 | 3960 | 4400 | 4520 | 4550 |
| | Lm/W | 111 | 125 | 128 | 129 | 99 | 110 | 113 | 114 |
| | BUG | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 |
| | III | 4520 | 5080 | 5230 | 5270 | 4040 | 4480 | 4610 | 4630 |
| | Lm/W | 113 | 127 | 131 | 132 | 101 | 112 | 115 | 116 |
| | BUG | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 |
| 50 | IV | 4360 | 4860 | 5010 | 5040 | 3700 | 4110 | 4240 | 4270 |
| | Lm/W | 109 | 122 | 126 | 126 | 92 | 103 | 106 | 107 |
| | BUG | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 |
| | V | 4920 | 5440 | 5640 | 5680 | 4320 | 4800 | 4920 | 4960 |
| | Lm/W | 123 | 136 | 141 | 142 | 108 | 120 | 123 | 124 |
| | BUG | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B2-U0-G1 | B2-U0-G1 | B2-U0-G1 | B2-U0-G1 |
| | II | 5450 | 6100 | 6250 | 6300 | 4850 | 5400 | 5550 | 5600 |
| | Lm/W | 109 | 122 | 125 | 126 | 97 | 108 | 111 | 112 |
| | BUG | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 |
| 60 | III | 5550 | 6200 | 6400 | 6450 | 4950 | 5500 | 5680 | 5700 |
| | Lm/W | 111 | 124 | 128 | 129 | 99 | 110 | 114 | 114 |
| | BUG | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 |
| | IV | 5330 | 5930 | 6120 | 6150 | 4510 | 5020 | 5180 | 5210 |
| | Lm/W | 107 | 119 | 122 | 123 | 90 | 100 | 104 | 104 |
| | BUG | B1-U0-G1 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 |
| | V | 5850 | 6500 | 6700 | 6750 | 5300 | 5900 | 6050 | 6100 |
| | Lm/W | 117 | 130 | 134 | 135 | 106 | 118 | 121 | 122 |
| | BUG | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 |
| 60 | II | 6420 | 7080 | 7320 | 7380 | 5700 | 6300 | 6480 | 6540 |
| | Lm/W | 107 | 118 | 122 | 123 | 95 | 105 | 108 | 109 |
| | BUG | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 |
| | III | 6540 | 7260 | 7500 | 7560 | 5820 | 6480 | 6680 | 6720 |
| | Lm/W | 109 | 121 | 125 | 126 | 97 | 108 | 111 | 112 |
| | BUG | B1-U0-G1 | B1-U0-G1 | B2-U0-G2 | B2-U0-G2 | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 |
| | IV | 6240 | 6940 | 7160 | 7200 | 5290 | 5880 | 6070 | 6100 |
| | Lm/W | 104 | 116 | 119 | 120 | 88 | 98 | 101 | 102 |
| | BUG | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 |
| 60 | V | 6900 | 7620 | 7860 | 7920 | 6240 | 6900 | 7140 | 7200 |
| | Lm/W | 115 | 127 | 131 | 132 | 104 | 115 | 119 | 120 |
| | BUG | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G2 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 |



Visit <https://qpl.designlights.org> to confirm qualification.
Not all product variations are DLC qualified.

| WATTAGE | DISTRIBUTION Type, Lm/W & BUG | LUMENS (all CCT = >70 CRI) | | | | | | | |
|---------|----------------------------------|----------------------------|----------|----------|----------|---------------------------|----------|----------|----------|
| | | G0 option - primary lens | | | | G1 option - glare control | | | |
| | | 2700K | 3000K | 4000K | 5000K | 2700K | 3000K | 4000K | 5000K |
| 70 | II | 7210 | 7980 | 8260 | 8330 | 6440 | 7140 | 7390 | 7430 |
| | Lm/W | 103 | 114 | 118 | 119 | 92 | 102 | 106 | 106 |
| | BUG | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G1 | B2-U0-G1 | B2-U0-G1 | B2-U0-G1 |
| | III | 7210 | 7980 | 8260 | 8320 | 6370 | 7070 | 7280 | 7350 |
| | Lm/W | 103 | 114 | 118 | 119 | 91 | 101 | 104 | 105 |
| | BUG | B1-U0-G1 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B1-U0-G1 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 |
| | IV | 7020 | 7810 | 8060 | 8100 | 6010 | 6690 | 6900 | 6940 |
| | Lm/W | 100 | 112 | 115 | 116 | 86 | 96 | 99 | 99 |
| | BUG | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B1-U0-G1 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 |
| | V | 7770 | 8610 | 8890 | 8960 | 6790 | 7560 | 7770 | 7840 |
| Lm/W | 111 | 123 | 127 | 128 | 97 | 108 | 111 | 112 | |
| BUG | B3-U0-G1 | B3-U0-G2 | B3-U0-G2 | B3-U0-G2 | B3-U0-G1 | B3-U0-G2 | B3-U0-G2 | B3-U0-G2 | |

PERFORMANCE 80-100W
E High Output LED

| WATTAGE | DISTRIBUTION Type, Lm/W & BUG | LUMENS (all CCT = >70 CRI) | | | | | | | |
|---------|----------------------------------|----------------------------|----------|----------|----------|---------------------------|----------|----------|----------|
| | | G0 option - primary lens | | | | G1 option - glare control | | | |
| | | 2700K | 3000K | 4000K | 5000K | 2700K | 3000K | 4000K | 5000K |
| 80 | II | 8640 | 9680 | 9900 | 9950 | 7600 | 8480 | 8640 | 8720 |
| | Lm/W | 108 | 121 | 124 | 125 | 95 | 106 | 108 | 109 |
| | BUG | B2-U0-G1 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G1 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 |
| | III | 8720 | 9760 | 9920 | 10000 | 7680 | 8560 | 8640 | 8720 |
| | Lm/W | 109 | 122 | 124 | 125 | 96 | 107 | 108 | 109 |
| | BUG | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 |
| | IV | 8250 | 9210 | 9450 | 9500 | 7120 | 7950 | 8160 | 8200 |
| | Lm/W | 103 | 115 | 118 | 119 | 89 | 99 | 102 | 103 |
| | BUG | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 |
| | V | 9280 | 10400 | 10640 | 10720 | 8160 | 9120 | 9360 | 9440 |
| Lm/W | 116 | 130 | 133 | 134 | 102 | 114 | 117 | 118 | |
| BUG | B3-U0-G1 | B3-U0-G1 | B3-U0-G2 | B3-U0-G2 | B3-U0-G1 | B3-U0-G2 | B3-U0-G2 | B3-U0-G2 | |
| 90 | II | 9360 | 10440 | 10710 | 10800 | 8190 | 9090 | 9360 | 9450 |
| | Lm/W | 104 | 116 | 119 | 120 | 91 | 101 | 104 | 105 |
| | BUG | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 |
| | III | 9450 | 10530 | 10800 | 10890 | 8280 | 9180 | 9450 | 9540 |
| | Lm/W | 105 | 117 | 120 | 121 | 92 | 102 | 105 | 106 |
| | BUG | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 |
| | IV | 8900 | 9940 | 10200 | 10250 | 7680 | 8580 | 8800 | 8850 |
| | Lm/W | 99 | 110 | 113 | 114 | 85 | 95 | 98 | 98 |
| | BUG | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 |
| | V | 10350 | 11520 | 11790 | 11880 | 9000 | 9990 | 10260 | 10350 |
| Lm/W | 115 | 128 | 131 | 132 | 100 | 111 | 114 | 115 | |
| BUG | B3-U0-G1 | B3-U0-G2 | B3-U0-G2 | B3-U0-G2 | B3-U0-G1 | B3-U0-G2 | B3-U0-G2 | B3-U0-G2 | |
| 100 | II | 10000 | 11200 | 11500 | 11600 | 8800 | 9900 | 10100 | 10200 |
| | Lm/W | 100 | 112 | 115 | 116 | 88 | 99 | 101 | 102 |
| | BUG | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 |
| | III | 10200 | 11300 | 11600 | 11700 | 9000 | 9900 | 10200 | 10300 |
| | Lm/W | 102 | 113 | 116 | 117 | 90 | 99 | 102 | 103 |
| | BUG | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 |
| | IV | 9580 | 10700 | 10980 | 11040 | 8260 | 9230 | 9470 | 9520 |
| | Lm/W | 96 | 107 | 110 | 110 | 83 | 92 | 95 | 95 |
| | BUG | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 |
| | V | 11300 | 12600 | 12900 | 13000 | 9700 | 10900 | 11100 | 11200 |
| Lm/W | 113 | 126 | 129 | 130 | 97 | 109 | 111 | 112 | |
| BUG | B3-U0-G2 | B3-U0-G2 | B3-U0-G2 | B3-U0-G2 | B3-U0-G2 | B3-U0-G2 | B3-U0-G2 | B3-U0-G2 | |

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