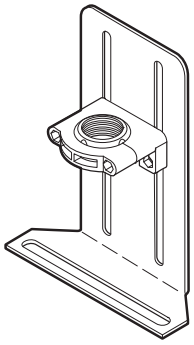
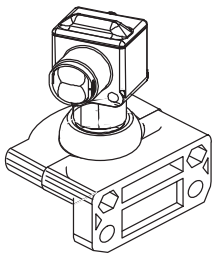
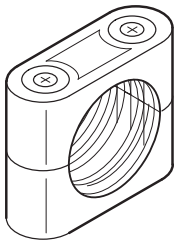
Accessories

Contents







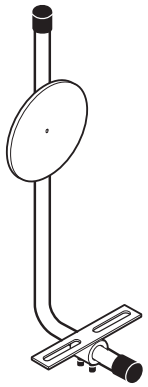
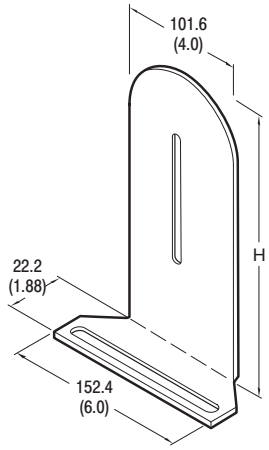
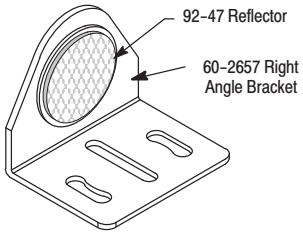
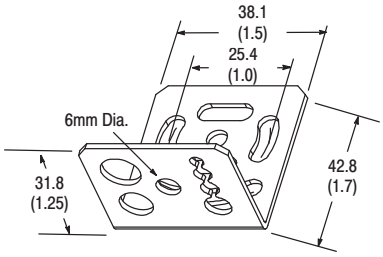
Description

Rockwell Automation/Allen-Bradley offers a wide range of accessories to complement your selection of photoelectric sensors. These range from sensor and reflector mounting brackets, reflectors, reflective tape, to intrinsic safety barriers for hazardous location applications.

For mounting of photoelectric sensors we offer a variety of 18mm and 30mm swivel/tilt brackets which allow for 360° rotation and up to 10° vertical height adjustment. These brackets are made of a durable Valox® material to withstand the harshest washdown environments. For light duty applications select from many of our metal straight and right angle mounting brackets. To protect your investment we also offer impact brackets to aid in the protection of the sensor from moving objects.

For photoelectric sensors which require reflectors and reflective tape, we offer the most complete line in the industry. Select from general purpose reflectors of varying dimensions or from high reflectivity microcube reflectors for extended sensing range or higher margin in heavily contaminated environments.

When installing sensors in hazardous locations, Rockwell Automation/ Allen-Bradley offers a complete line of intrinsic safety barriers and isolators for use with our line of intrinsically safe photoelectric sensors. When the installation calls for explosionproof technology, select from our line of explosionproof (NEMA 7/9) rated enclosures.

Description	Catalog Number	Used for	Dimensions
Right angle reflector bracket set for mounting up to 3in diameter reflectors.	**60–2717**	92–39 92–89 92–46 92–47 92–105 92–106	
Reflector vertical height adjustment bracket for mounting up to 3in diameter reflectors.	**60–2718** (2in x 8in) **60–2719** (2in x 10in) **60–2720** (2in x 12in)	92–39 92–89 92–46 92–47 92–105 92–106	
Reflector bracket provides both vertical and horizontal height adjustment. Bracket comes with 3in reflector **92–39**.	**60–2685**	92–39 92–89 92–46 92–47 92–105 92–106	Available Now
Mounting bracket with 92–47 reflector mounted at right angle	**60–2692**	92–47	
Right angle mounting bracket for both reflectors and fiber optic cables	**60–2696**	92–105 92–106 92–47 92–46	

Accessories

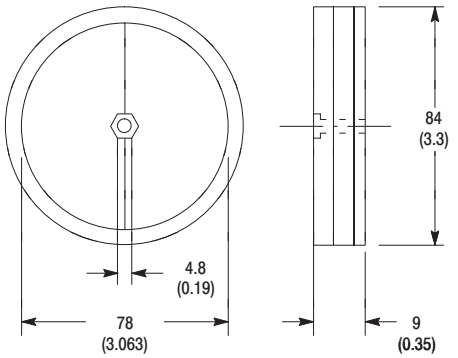
Reflectors, Reflective Tape

Specifications

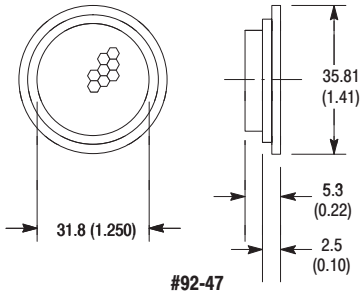
Catalog Number	92–39
Description	Reflector, 76mm (3in) dia. with center mount hole. (Plastic back)
Suitable for Polarized Sensor	Yes
Cube Style	Corner cube
Optimum Range❶	150mm (6in) to 2.0m (80in)
Recommended Application	Suitable for general purpose applications up to 65° (150°).

Catalog Number	92–89
Description	Reflector, 76mm (3in) dia. with center mount hole. (Aluminum back)
Suitable for Polarized Sensor	Yes
Cube Style	Corner cube
Optimum Range❶	150mm (6in) to 2.0m (80in)
Recommended Application	Suitable for general purpose applications up to 65° (150°).

Dimensions—mm (inches)

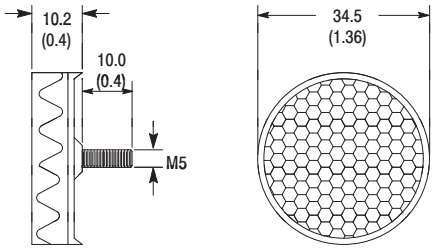


Catalog Number	92–47
Description	Reflector, 32mm (1.25in) dia. Requires adhesive backing.
Suitable for Polarized Sensor	Yes
Cube Style	Corner cube
Optimum Range❶	150mm (6in) to 1.5m (5ft)
Recommended Application	Suitable for general purpose applications up to 65°C (150°F).



#92-47

Catalog Number	92–105
Description	Reflector, 32mm (1.25in) dia. with M5 screw
Suitable for Polarized Sensor	Yes
Cube Style	Corner cube
Optimum Range❶	150mm (6in) to 1.5m (5ft)
Recommended Application	Suitable for general purpose applications up to 65°C (150°F).



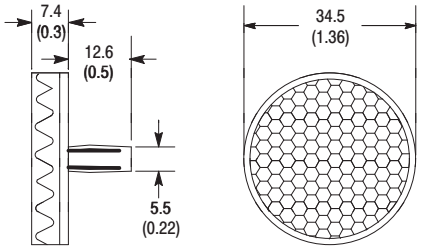
#92-105

❶ Optimum range varies with sensor optics. See table on page 1–393 for reflectivity performance.

Specifications

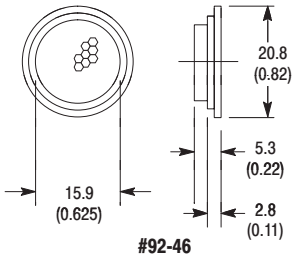
Catalog Number	92–106
Description	Reflector, 32mm (1.25in) dia. with snap fit post
Suitable for Polarized Sensor	Yes
Cube Style	Corner cube
Optimum Range❶	150mm (6in) to 1.5m (5ft)
Recommended Application	Suitable for general purpose applications up to 65°C (150°F).

Dimensions—mm (inches)



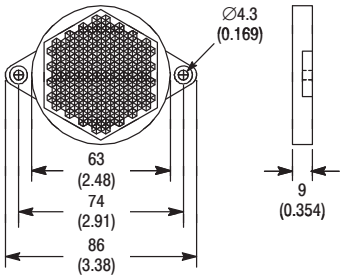
#92-106

Catalog Number	92–46
Description	Reflector, 16mm (0.625in) dia. Requires adhesive backing.
Suitable for Polarized Sensor	Yes
Cube Style	Corner cube
Optimum Range❶	51mm (2in) to 150mm (6in)
Recommended Application	Suitable for general purpose applications up to 65°C (150°F).



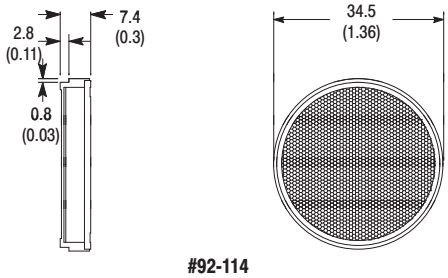
#92-46

Catalog Number	92–90
Description	Reflector, 86mm (3in) dia. with mounting tabs.
Suitable for Polarized Sensor	Yes
Cube Style	Corner cube
Optimum Range❶	51mm (2in) to 1.5m (5ft)
Recommended Application	Suitable for ClearSight photoelectric sensors and general purpose applications up to 65°C (150°F).



#92-90

Catalog Number	92–114
Description	Reflector, 34mm (1.35in) dia. Requires adhesive backing.
Suitable for Polarized Sensor	Yes
Cube Style	Micro cube
Optimum Range❶	
Recommended Application	Ideal for laser-based photoelectric sensors such as LaserSight as well as general purpose applications up to 65°C (150°F).



#92-114

❶ Optimum range varies with sensor optics. See table on page 1–393 for reflectivity performance.
❷ 92–47 and 92–46 can be mounted with adhesive tape (not included).

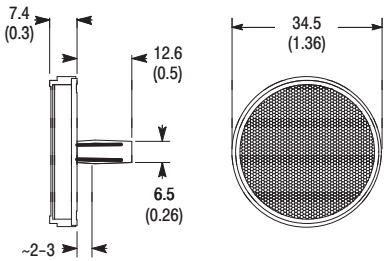
Accessories

Reflectors, Reflective Tape

Specifications

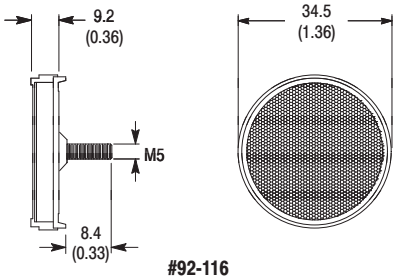
Catalog Number	92–115
Description	Reflector, 34mm (1.35in) dia. with snap fit post.
Suitable for Polarized Sensor	Yes
Cube Style	Micro cube
Optimum Range❶	
Recommended Application	Ideal for laser-based photoelectric sensors such as LaserSight as well as general purpose applications up to 65°C (150°F).

Dimensions—mm (inches)



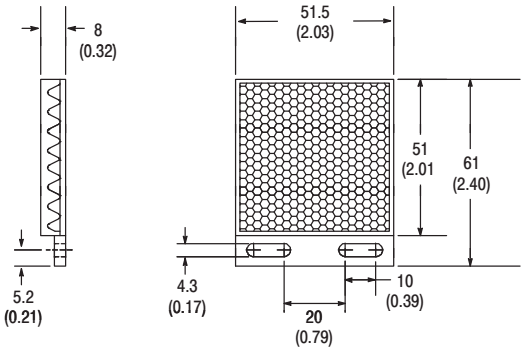
#92-115

Catalog Number	92–116
Description	Reflector, 34mm (1.35in) dia. with threaded post.
Suitable for Polarized Sensor	Yes
Cube Style	Micro cube
Optimum Range❶	
Recommended Application	Ideal for laser-based photoelectric sensors such as LaserSight as well as general purpose applications up to 65°C (150°F).



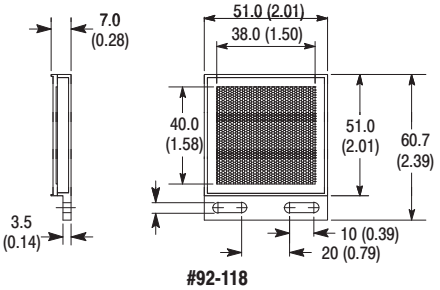
#92-116

Catalog Number	92–109
Description	Reflector, 51mm x 61mm (2 x 2.5in) rectangular with mounting tabs.
Suitable for Polarized Sensor	Yes
Cube Style	Corner cube
Optimum Range❶	51mm (2in) to 3.0m (10ft)
Recommended Application	Suitable for general purpose applications up to 65°C (150°F).



#92-109

Catalog Number	92–118
Description	Reflector, 51mm x 61mm (2 x 2.5in) rectangular with mounting tabs.
Suitable for Polarized Sensor	Yes
Cube Style	Micro cube
Optimum Range❶	
Recommended Application	Suitable for general purpose applications up to 65°C (150°F). The **92–118** is also suitable for laser-based photoelectric sensors such as LaserSight.



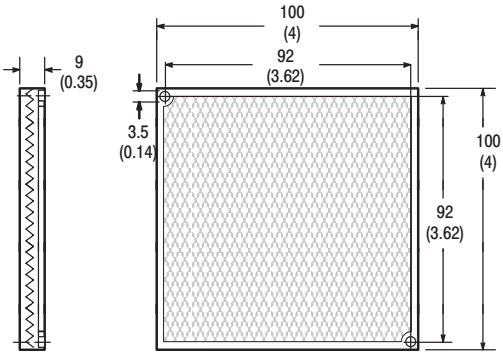
#92-118

❶ Optimum range varies with sensor optics. See table on page 1–393 for reflectivity performance.

Specifications

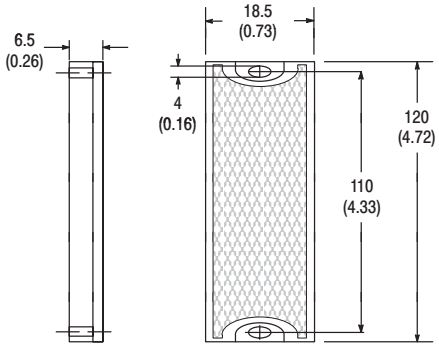
Catalog Number	92–108
Description	Reflector, 100mm x 100mm (4 x 4in) square with mounting tabs.
Suitable for Polarized Sensor	Yes
Cube Style	Corner cube
Optimum Range❶	150mm (6in) to 3.0m (10ft)
Recommended Application	Suitable for general purpose applications up to 65°C (150°F).

Dimensions—mm (inches)



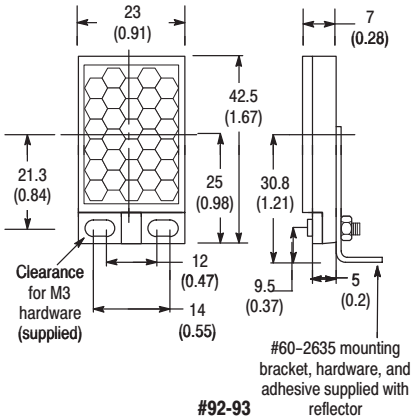
#92-108

Catalog Number	92–107
Description	Reflector, 18.5 x 120mm (0.73 x 4.72in) rectangular with mounting tabs.
Suitable for Polarized Sensor	Yes
Cube Style	Corner cube
Optimum Range❶	51mm (2in) to 1.5m (5ft)
Recommended Application	Suitable for general purpose applications up to 65°C (150°F).



#92-107

Catalog Number	92–93
Description	Reflector, 23 x 42.5mm (0.91 x 1.67in) rectangular with mounting tabs and bracket. Right angle bracket and adhesive tape.
Suitable for Polarized Sensor	Yes
Cube Style	Corner cube
Optimum Range❶	51mm (2in) and 150mm (6in)
Recommended Application	Suitable for general purpose applications up to 55°C (130°F).



#92-93

❶ Optimum range varies with sensor optics. See table on page 1–393 for reflectivity performance.

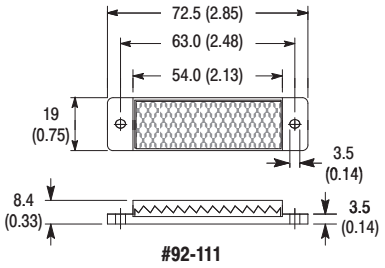
Accessories

Reflectors, Reflective Tape

Specifications

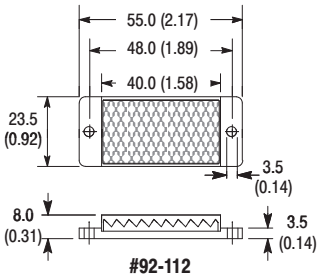
Catalog Number	92–111
Description	Reflector, 19 x 72.5mm (0.75 x 2.85in) rectangular with mounting tabs.
Suitable for Polarized Sensor	Yes
Cube Style	Corner cube
Optimum Range❶	
Recommended Application	Suitable for general purpose applications up to 55°C (130°F).

Dimensions—mm (inches)



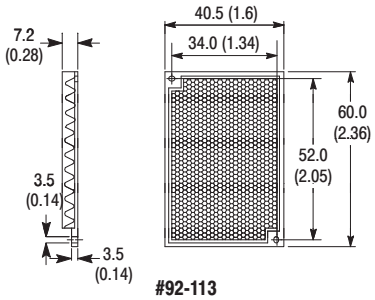
#92-111

Catalog Number	92–112
Description	Reflector, 23.5 x 55mm (0.924 x 2.17in) rectangular with mounting tabs.
Suitable for Polarized Sensor	Yes
Cube Style	Corner cube
Optimum Range❶	
Recommended Application	Suitable for general purpose applications up to 55°C (130°F).



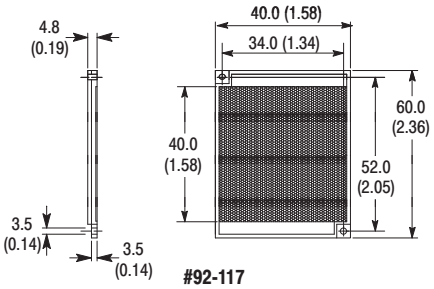
#92-112

Catalog Number	92–113
Description	Reflector, 40.5 x 60mm (1.6 x 2.36in) rectangular with mounting tabs.
Suitable for Polarized Sensor	Yes
Cube Style	Corner cube
Optimum Range❶	
Recommended Application	Suitable for general purpose applications up to 55°C (130°F).



#92-113

Catalog Number	92–117
Description	Reflector, 40.5 x 60mm (1.6 x 2.36in) rectangular with mounting tabs.
Suitable for Polarized Sensor	Yes
Cube Style	Corner cube
Optimum Range❶	
Recommended Application	Suitable for general purpose applications up to 55°C (130°F). The **92–117** is also suited for laser-based photoelectric sensors such as LaserSight.



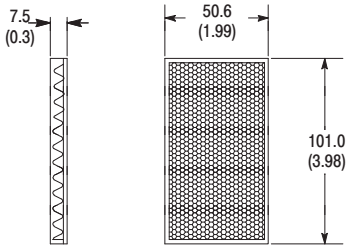
#92-117

❶ Optimum range varies with sensor optics. See table on page 1–393 for reflectivity performance.

Specifications

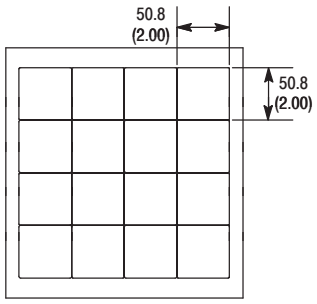
Catalog Number	92–119
Description	Reflector, 51 x 101mm (2 x 4in) rectangular with adhesive backing.
Suitable for Polarized Sensor	Yes
Cube Style	Corner cube
Optimum Range❶	
Recommended Application	Suitable for general purpose applications up to 65°C (150°F).

Dimensions—mm (inches)



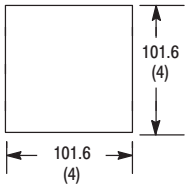
#92-119

Catalog Number	92–97
Description	Reflective tape, 51mm (2in) square, sheet of 16 pieces with adhesive backing.
Suitable for Polarized Sensor	Yes
Cube Style	Glass bead
Optimum Range❶	150mm (6in) to 1.5m (5ft)
Recommended Application	Suitable for general purpose applications up to 121°C (250°F). Also suitable for polarized retroreflective sensors.



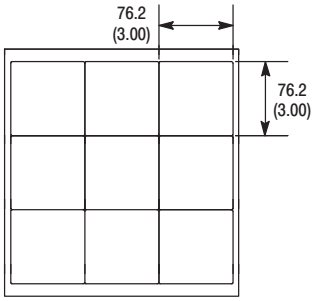
#92-97

Catalog Number	92–91
Description	Reflective tape, 100 x 100mm (4 x 4in) square.
Suitable for Polarized Sensor	No
Cube Style	Glass bead
Optimum Range❶	150mm (6in) to 1.5m (5ft)
Recommended Application	Suitable for general purpose applications up to 65°C (150°F). The **92–91** is intended for use in high temperature applications up to 480°C (900°F) but not with polarized retroreflective sensors.



#92-91

Catalog Number	92–98
Description	Reflective tape, 76mm (2.75in) square, sheet of 9 pieces with adhesive backing.
Suitable for Polarized Sensor	Yes
Cube Style	Glass bead
Optimum Range❶	150mm (6in) to 1.5m (5ft)



#92-98

❶ Optimum range varies with sensor optics. See table on page 1–393 for reflectivity performance.

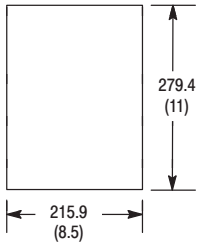
Accessories

Reflectors, Reflective Tape

Specifications

Catalog Number	92–104
Description	Reflective tape, 101 x 101mm (8.5 x 11in) sheet with adhesive backing.
Suitable for Polarized Sensor	Yes
Cube Style	Glass bead
Optimum Range❶	200mm (8in) to 1.5m (5ft)
Recommended Application	Suitable for general purpose applications up to 60°C (140°F) with polarized retroreflective sensors.

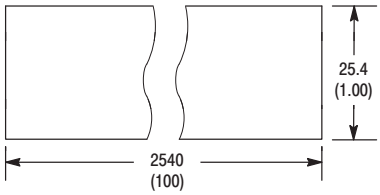
Dimensions—mm (inches)



#92-104

Catalog Number	92–99
Description	Reflective tape, roll of 25 x 2540mm (1 x 100in).
Suitable for Polarized Sensor	Yes
Cube Style	Glass bead
Optimum Range❶	150mm (6in) to 1.0m (40in)
Recommended Application	Suitable for general purpose applications up to 65°C (150°F).

Catalog Number	92–100
Description	Reflective tape, 25 x 2540mm (1 x 100in).
Suitable for Polarized Sensor	No
Cube Style	Glass bead
Optimum Range❶	150mm (6in) to 1.0m (40in)
Recommended Application	Suitable for general purpose applications up to 79°C (175°F).



#92-99 & #92-100

❶ Optimum range varies with sensor optics. See table on page 1–393 for reflectivity performance.

Relative Reflectivity

Reflectivity varies with distance and with sensor optics. The table below is designed to be used as a comparison between reflectors. The numbers represent a reflectivity at a given range by a class of sensors relative to the standard 92–39 3in round reflector.

The two classes of sensors shown represent optic styles. The standard size optic includes the Series 9000, 10,000, 5000 and 4000.

The miniature optics are used in the smaller sensor families: RightSight™, MiniSight™, 5000, 6000, and 7000 Series.

Reflector		Standard Polarized Sensors			Miniature Polarized Sensors			Laser-Based Sensors	
		Series 10,000, 9000, 5000, and 4000			RightSight, MiniSight, Series 6000, 7000, and 42xx			LaserSight	
Catalog Number	Description	3.0m (10ft)	1.5m (5ft)	0.61m (2ft)	450mm (18in)	200mm (8in)	100mm (4in)	15.2m (50ft)	3.05m (10ft)
92–39, 92–89	Reflector, 3in round	100	100	100	100	100	100	100	100
92–46	Reflector, 3/4in round	—	—	50	50	40	25	—	100
92–47	Reflector, 1 1/4in round	—	40	100	100	80	30	—	90
92–90	Reflector, 2in hexagon	70	150	150	350	150	200	130	100
92–91	Reflective tape, high temperature	—	—	—	—	—	—	—	—
92–93	Reflector, 3/4 x 1.5in rectangular	—	—	50	50	50	25	—	100
92–97	Reflector, $2in^2$	—	90	150	200	80	50	—	80
92–98	Reflector, 2 3/4in^2	—	100	150	200	80	50	—	70
92–99	Reflective tape, polarized	—	40	70	100	50	30	—	—
92–100	Reflective tape, nonpolarized	—	—	—	—	—	—	—	—
92–104	Reflective tape, 8.5 x 11in	25	50	50	70	30	40	—	70
92–105	Reflector, 1 1/4in round	—	40	75	100	120	200	70	90
92–106	Reflector, 1 1/4in round	—	40	75	100	120	200	70	90
92–107	Reflector, 3/4 x 4 3/4in rectangular	—	50	100	100	60	60	—	110
92–108	Reflector, $4in^2$ square	250	150	100	120	90	150	—	100
92–109	Reflector, $2in^2$ square	100	150	100	100	90	150	150	110
92–111	Reflector, 2 x 1, rectangular	20	50	90	100	60	100	—	—
92–112	Reflector, 2.8 x 3/4in rectangular	20	60	100	100	60	110	—	100
92–113	Reflector, 1.6 x 2 1/4in rectangular	90	115	50	90	50	170	210	110
92–114	Reflector, 1 1/4in round	20	70	70	90	20	—	110	110
92–115	Reflector, 1 1/4in round	20	70	70	90	20	—	110	110
92–116	Reflector, 1 1/4in round	20	70	70	90	20	—	110	110
92–117	Reflector, 1 1/2 x 2 1/4in rectangular	30	130	140	200	60	50	30	100
92–118	Reflector, 2 x 2 rectangular	80	70	50	50	30	—	260	90

For more information on the theory of retroreflective sensing, see page 1–18. Some variation may be seen across the reflector. Data was measured with reflector rotating to normalize reflectance.