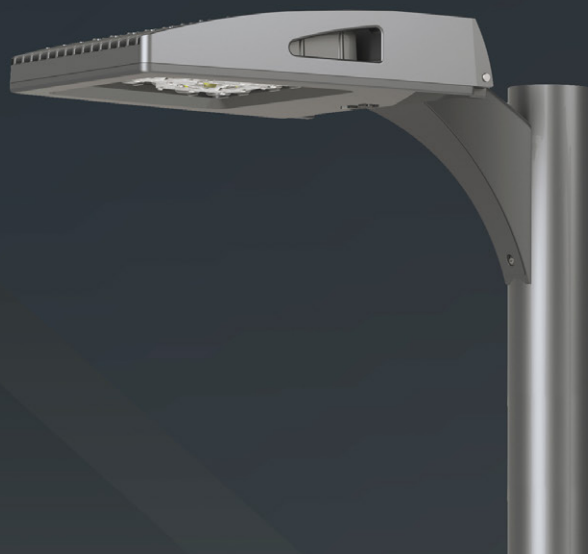




LED WATTAGE CHART

Drive Current	16L	32L	48L	64L
400 milliamps	21w	-	-	-
530 milliamps	28w	-	-	-
700 milliamps	36w-37w	71w	104w-105w	136w-139w
1050 milliamps	55w-56w	106w-107w	156w 157w	200w-207w

FORM AND FUNCTION

- Sleek, low profile housing
- Spec grade performance
- Engineered for optimum thermal management
- Low depreciation rate
- Reduces energy consumption and costs up to 65%
- Exceeds IES foot candle levels utilizing the least number of poles and fixtures per project
- Optical system designed for:
 - Parking Lots
 - Auto Dealerships
 - General Area Lighting

CONSTRUCTION

- Die Cast Aluminum
- External cooling fins
- Corrosion resistant external hardware
- IP65 Rated Against Dust & Water Ingress. IK10 Rated for Tamper/Vandalism/Impact Protection
- One-piece Optics Plate™ mounting silicone Micro Optics
- Two-piece silicone Micro Optic system ensures IP67 level seal around each PCB
- Grade 2 Clear Anodized Optics Plate™ standard

FINISH

- 3-5 mils electrostatic powder coat.
- NLS' standard high-quality finishes prevent corrosion, protects against extreme environmental conditions

WARRANTY

Five-year limited warranty for drivers and LEDs.

BUY AMERICAN

To ensure the latest BAA/TAA/BABA Standards are being met, please select BAA, TAA, or BABA in the options section. Please contact the factory before placing an order for any NLS products requesting BAA (Buy American Act), TAA (Trade American Act), or BABA (Build America, Buy America).



Project Name:

Type:

NV-1 ORDERING GUIDE

Cat#	Light Dist.	# of LEDs	Drive Current	Color Temp. / CCT	Voltage
NV-1 (NV-1)	Type 2 (T2)	16 (16L)	400 (40)	Amber 586-600nm (AMBER) ^{10, 12, 13}	120-277 (UNV)
	Type 3 (T3)		530 (53)	2700K, 70 CRI (27K7) ⁶	347-480 (HV)
	Type 4 (T4)		700 (7)	2700K, 80 CRI (27K8) ^{1, 6}	
	Type 4 Forward Throw Wide (T4FTW) ¹²		1050 (1)	3000K, 70 CRI (30K7) ⁶	
	Type 5 (T5)	32 (32L) ¹⁵	700 (7)	3000K, 80 CRI (30K8) ^{1, 6}	
	Type 5 Wide (T5W)		1050 (1)	3500K, 80 CRI (35K8) ¹	
	Nema 3 30° Narrow Beam (N3)	48 (48L) ¹⁵	700 (7)	4000K, 70 CRI (40K7)	
	Corner Distribution Left (CDL) ¹⁹		1050 (1)	4000K, 80 CRI (40K8) ¹	
	Corner Distribution Right (CDR) ¹⁹	64 (64L)	350 (35)	5000K, 70 CRI (50K7)	
			530 (53)	5000K, 80 CRI (50K8) ¹	
			700 (7)		
			1050 (1)		
			Custom Drive Current (CUS-MA-***) ²⁰ Specify		

Mounting	Color	Controls Options	Options	Lens Options
Architectural Sweep Arm (ASA)	Bronze Textured (BRZ)	Photocell + Receptacle (PCR)	Bird Spikes (BS)	Glass Lens (GL) ^{7, 14}
Direct Pole 3" Arm Single D180 (DPS3) ²	White Textured (WHT)	Nema 7-Pin Receptacle (PE7)	Marine Grade Finish (MGF)	HAL Lens (HAL) ^{8, 14}
Direct Pole 7" Arm D180, D90, T90, T120, Quad (DPS7) ²	Smooth White Gloss (SWT)	Receptacle + Shorting Cap (PER)	Optic Plate Painted to Match Fixture (OPP)	
Knuckle Mount (KM)	Silver Metallic (SVR)	FSP-211 w/Motion Sensor/Photocell (120/277VAC, 230-240VAC)	ASA Round Pole Adaptor 3"-4" Pole (RPA-ASA-4)	NOTES: 1. Consult Factory for Lead Time. Consult Factory for 90 CRI Requests. 2. For Round Pole Specify RPA4 or RPA5 3. Standard finish is stainless steel. Can be painted to match fixture. 4. Universal Voltage 120-277 5. HSS not applicable with Nema 2. 6. 3000K or lower, with fixed mounting options only, must be selected to meet International Dark-Sky Association certification. 7. Glass Lens: Low iron glass, fully tempered per ANSI C1047 (QCH-2201-37) 8. HAL Lens: Yellow Polycarbonate Lens – less than 2% Blue Light Content 9. Please contact Factory for Custom Control Integration requests (nLight, NX, WaveLinx, Crestron, DMX/RDM, Synapse, Casambi, Dali II, Avi-On, or other control systems) 10. Turtle Safe 11. Consult factory for all BAA/TAA/BABA requests 12. Consult Factory for Lead Time and estimated performance data. 13. Not Available above 700mA 14. Contact Factory 15. Available only in 700mA and 1050mA 16. FSP-211, 120V/277V, 230-240VAC (single phase), 50/60Hz 17. FSP-221, 100-347VAC (single phase) or 208/230/480VAC (phase-to-phase) 18. Projects with sensors require Qty. 1 FSIR per project 19. 64L ONLY 20. See estimated scaling chart for multiplier values to estimate lumen output. Please contact Factory to verify the estimated performance data. 21. DPS3 or DPS7 must also be selected with QMB/RQMB options
Wall Mount (WM)	Black Textured (BLK)	9'-20' Heights (FSP-20) ^{4, 16}	ASA Round Pole Adaptor 5"-6" Pole (RPA-ASA-5)	
Trunnion Mount (TM) ³	Smooth Black Gloss (SBK)	21'-40' Heights (FSP-40) ^{4, 16}	Round Pole Adaptor 3"-4" Pole (RPA4)	
Tennis Arm Mount (TA)	Graphite Textured (GPH)	FSP-221 w/Motion Sensor/Photocell (100/347VAC, 208/ 230/480VAC)	Round Pole Adaptor 5"-6" Pole (RPA5)	
Mast Arm Mount (MA)	Grey Textured (GRY)	9'-20' Heights (FSP-HV-20) ¹⁷	Rotated Optic Left (ROL)	
Quick Mount Bracket (QMB) ²¹	Green Textured (GRN)	21'-40' Heights (FSP-HV-40) ¹⁷	Rotated Optic Right (ROR)	
Retrofit Mount Bracket (RQMB) ²¹	Hunter Green Textured (HGN)	Custom Controls Integration (CCI) ⁹	Automotive House Side Shield (AHS)	
	Custom (CS)	Button Type Photocell (PC) ⁴	House Side Shield (HSS) ⁵	
		FSP Remote (FSIR) ¹⁸	Black Optic Frame (BOF)	
			Buy American Act (BAA) ¹¹	
			Trade Agreement Act (TAA) ¹¹	
			Build America Buy American (BABA) ¹¹	



701 Kingshill Place, Carson, CA 90746
Call Us Today (310) 341-2037

nlsighting.com

PRODUCT SPECIFICATIONS

ELECTRICAL

- 120-277 Volts (UNV) or 347-480 Volts (HV)
- 0-10V dimming driver
- Driver power factor at maximum load is $\geq .95$, THD maximum load is 15%
- LED Drivers Ambient Temp. Min is -40°C and Ambient Temp. Max ranges from 50°C to 55°C. Consult the factory for revalidation by providing the fixture catalog string before quoting and specifying it
- All internal wiring UL certified for 600 VAC and 105°C
- All drivers, controls, and sensors housed in enclosed IP65 compartment
- CRI 70, 80 or 90 (Contact factory for 90 CRI)
- Color temperatures: Amber, 2700K, 3000K, 3500K, 4000K, 5000K
- Surge Protection: 20KVA supplied as standard

CONSTRUCTION

- Die Cast Aluminum
- External cooling fins
- Corrosion resistant external hardware
- One-piece silicone gasket ensures IP65 seal for electronics compartment
- One-piece Optics Plate™ mounting silicone Micro Optics
- Two-piece silicone Micro Optic system ensures IP67 level seal around each PCB
- Grade 2 Clear Anodized Optics Plate™ standard

OPTIONS

- BIRD SPIKES (BS) - Offers a practical and humane deterrent for larger bird species and provides a cost-effective long-term solution to nuisance bird infestations and protects your property
- MARINE GRADE FINISH (MGF) - A multi-step process creating protective finishing coat against harsh environments. Chemically washed in a 5 stage cleaning system. Pre-baked, Powder coated 3-5 mils of Zinc Rich Super Durable Polyester Primer. Oven Baked. Finished Powder Coating of Super Durable Polyester Powder Coat 3-5 mil thickness
- OPTIC PLATE PAINTED TO MATCH FIXTURE (OPP) - Optic plate is clear anodized as standard. The optic plate can be powder coated to match the finish of the fixture.
- QUICK MOUNT BRACKET (QMB) - Optional Cast Aluminum Bracket designed for quick mounting on Direct Square or Round Poles. Cleat mounts directly to pole for easily hung fixtures. Has a 2"x4" Drill Pattern
- RETROFIT MOUNT BRACKET - Optional Cast Aluminum Bracket designed for quick mounting on Direct Square or Round Poles. Cleat mounts directly to pole for easily hung fixtures. Drill Pattern is adjustable from 2"x4" to 2"x6"
- ROUND POLE ADAPTER (RPA) - When using round poles, specify Round Pole Adapter (RPA). Specify RPA4 when installing on 3"-4" round poles, and RPA5 when installing on 5"-6" round poles
- ROTATED OPTICS (ROL) (ROR) - Rotated optics are designed for perimeter lighting for auto dealerships
- HOUSE SIDE SHIELD (HSS) Designed for full property line cut-off
- BLACK OPTIC FRAME (BOF) - Optional black optic frame. (includes black hardware) Standard is white
- GLASS LENS (GL) - Low Iron Glass, fully tempered
- HAL LENS (HAL) - High Performance Yellow Polycarbonate Lens – less than 2% Blue Light Content

CONTROL OPTIONS

- **FSP-211 w/Motion Sensor/Photocell (120/277VAC, 230-240VAC)**
(FSP-X) - Passive infrared (PIR) sensor providing multi-level control based on motion/daylight contribution.

- **FSP-221 w/Motion Sensor/Photocell (100-347VAC, 208/230/480VAC)**
(FSP-HV-X) - Passive infrared (PIR) sensor providing multi-level control based on motion/daylight contribution.
 - All control parameters adjustable via wireless configuration remote storing and transmitting sensor profiles
 - FSP-8 mounting heights 8 feet and below
 - FSP-20 mounting heights 9-20 feet
 - FSP-40 mounting heights 21-40 feet
 - Includes 5 dimming event cycles, 0-10V dimming with motion sensing, re-programmable in the field
 - FSIR-100 commissioning remote is required to change sensor settings. Please contact factory for ordering
- NEMA 7-PIN RECEPTACLE (PE7)—An ANSI C136.41-2013 receptacle provides electrical and mechanical interconnection between photo control cell and luminaire. Dimming receptacle available two or four dimming contacts supports 0-10 VDC dimming methods or Digital Addressable Lighting Interface (DALI), providing reliable power interconnect
- PHOTOCCELL + RECEPTACLE (PCR)—7-Pin Receptacle and Electronic Twist Lock Photocell for dusk to dawn operation
- RECEPTACLE + SHORTING CAP (PER)—7-Pin Receptacle and Shorting Cap
- Controls Agnostic: Please contact factory for your preferred controls option. (nLight, NX, WaveLinx, Crestron, DMX/RDM, Synapse, Casambi, DALI II, Avi-On, or other control systems)

FINISH

- 3-5 mils electrostatic powder coat
- NLS Light's standard high-quality finishes prevent corrosion protects against and extreme environmental conditions

WARRANTY

Five-year limited warranty for drivers and LEDs.

OPTICS

Silicone optics high thermal stability and light output provide higher powered LEDs with minimized lumen depreciation. UV stability with scratch resistance increases exterior application durability. Silicone optics do not yellow, crack or brittle over time

LISTINGS

- UL Listed in compliance with UL 1598, the Standard for Safety of Luminaires, including the applicable wet location requirements
- Compliant with UL 8750 LED driver design and test safety standards
- CSA C22.2 No. 250.0
- DesignLights Consortium® (DLC)
- DesignLights Consortium Premium® (DLCP)
- IP65/ IP67 Rated
- 3G Vibration Rated per ANSI C136.31-2010
- IDA Dark Sky Approved
- IK10 Rated

BUY AMERICAN OPTION

While all of the NLS Lighting products listed in this document qualify for the Buy America(n) Act of 1933, we reserve the right to change our listings without notice.

The information provided above is for general informational purposes only. We encourage you to consult legal professionals for advice particular to your projects concerning BAA, TAA, BABA or Buy America.

Additional NLS Products that meet BAA, TAA standards can be found at the following link:

<https://nlsighting.com/buy-american/>



The information and specifications on this document are subject to change without any notification. All values are design, nominal, typical or prorated values when measured under internal and external laboratory conditions.

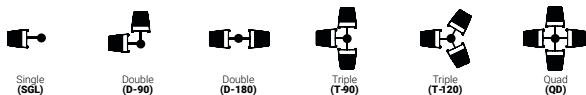


701 Kingshill Place, Carson, CA 90746
Call Us Today (310) 341-2037

nlsighting.com

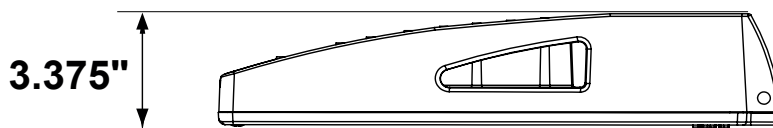
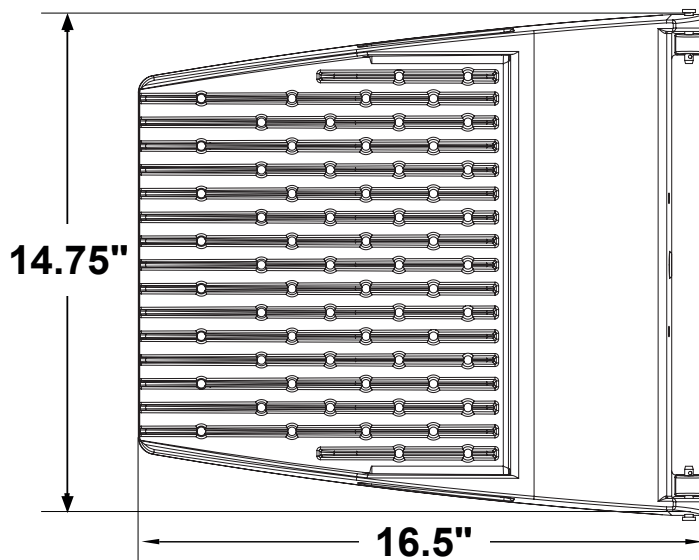
PRODUCT SPECIFICATIONS

MOUNTING CONFIGURATION



EPA

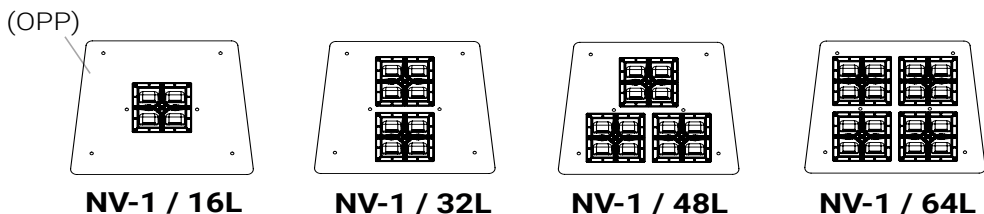
EPA	SGL	D90	D180	T90	T120	QD
NV-1-DP3	0.46	-	0.92	-	-	-
NV-1-DP7	-	1.14	1.05	1.34	1.37	1.34
NV-1-KM	0.54	N/A	1.08	N/A	N/A	N/A
NV-1-ASA	0.75	1.29	1.50	1.99	2.05	1.99



Weight: 24 lbs

OPTICAL CONFIGURATIONS

Rotatable Optics (ROR) Rotated Right, (ROL) Rotated Left options available. Optics field and factory rotatable.

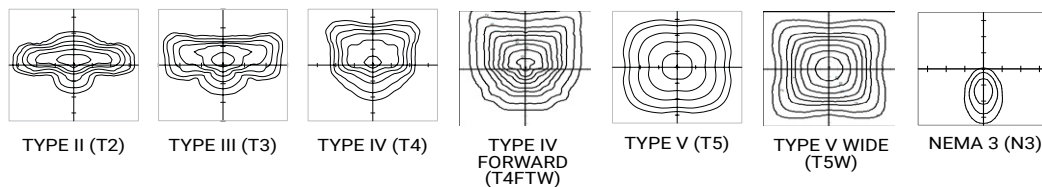


* OPTIC PLATE PAINTED TO MATCH FIXTURE FINISH (OPP)– Optic Plate standard clear anodized, Grade 2. When (OPP) specified, Optic Plate finish will match fixture finish.

OPTICS

Silicone optics high photothermal stability and light output provides higher powered LEDs with minimized lumen depreciation LED life. UV and thermal stability with scratch resistance increases exterior application durability.

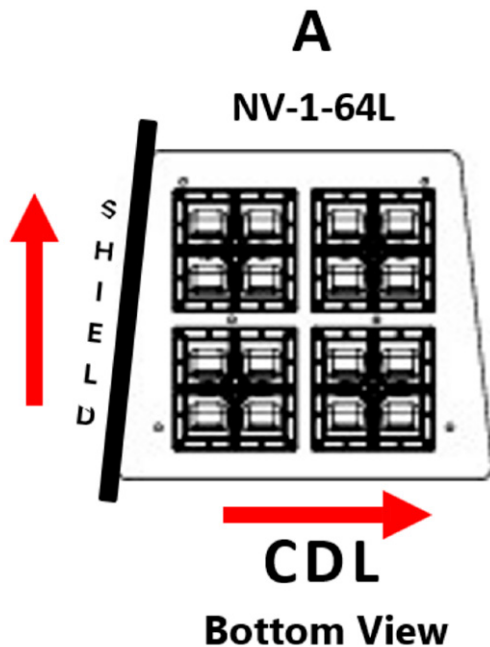
IES Types



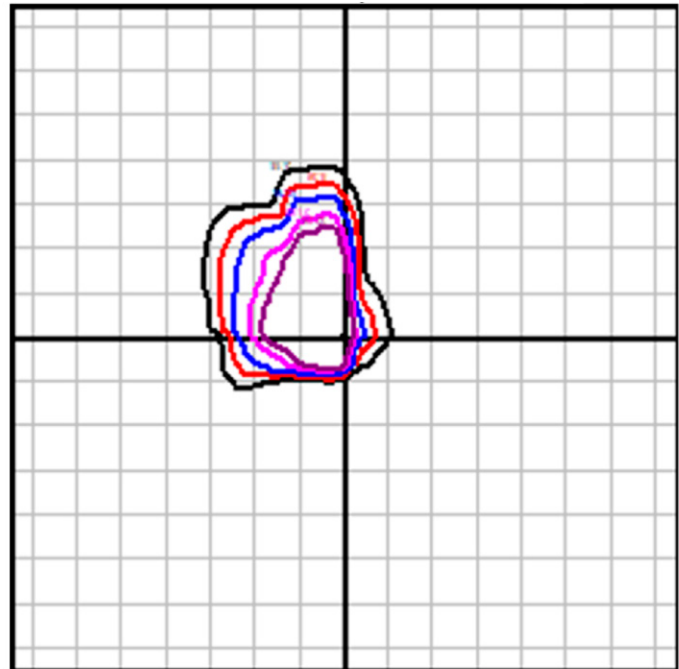
PRODUCT SPECIFICATIONS

OPTICAL CONFIGURATIONS (CONTINUED) - Corner Optics (CDL/CDR)

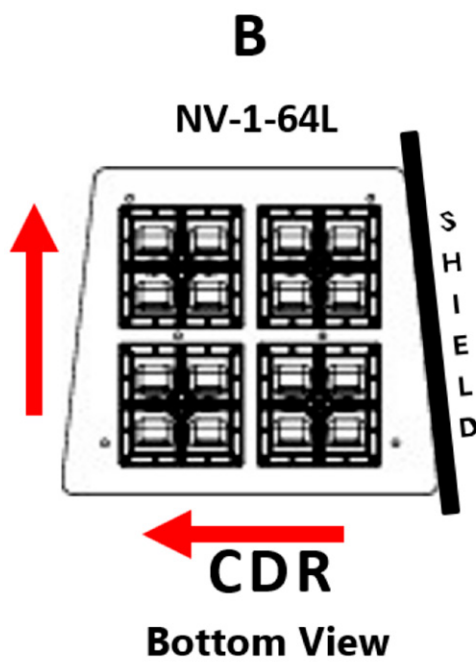
Blended optical distributions include a HSS over the optic and are aimed forward. Fixtures also feature an external side mounted shield.



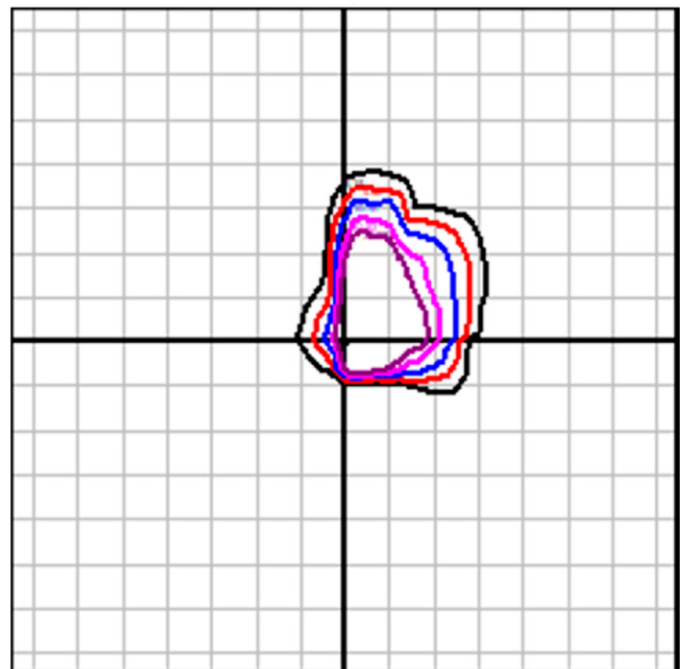
NV-64L-1-40K-CDL (205 Watts, 49LPW)



Mounting Height is 15ft, each sq equals 1 mounting height.



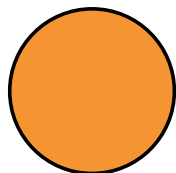
NV-64L-1-40K-CDR (205 Watts, 49LPW)



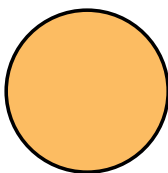
Mounting Height is 15ft, each sq equals 1 mounting height.

PRODUCT SPECIFICATIONS

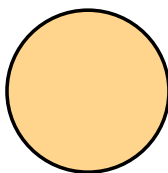
LED KELVIN RANGE



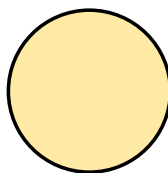
AMBER
585-600 nm



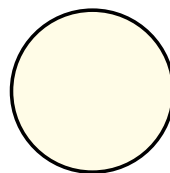
2700K 70 CRI



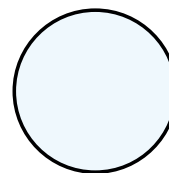
3000K 70 CRI



3500K 80 CRI



4000K 70 CRI



5000K 70 CRI

Color	Dominant or Peak Wavelength Range (nm)	
	Minimum	Maximum
Amber	585	600

LUMEN MAINTENANCE DATA							
Ambient Temperature	Drive Current	L90 Hours*	L70 Hours**	30,000 Hours*	50,000 Hours*	60,000 Hours*	100,000 Hours**
25°C	Up to 700mA	58,000	173,000	95.7%	91.6%	89.6%	82.1%
	1050mA	48,000	143,000	94.3%	89.5%	87.2%	78.5%
*Reported extrapolations per IESNA TM-21				**Projected extrapolations per IESNA TM-21			

MULTIPLIERS FOR 70/80/90 CRI (Scaling Factor from 5000K 70 CRI)			
CCT	70 CRI	80 CRI	90 CRI
2700K	0.840	0.737	0.609
3000K	0.975	0.776	0.640
3500K	0.890	0.800	0.659
4000K	1.000	0.815	0.679
5000K	1.000	0.830	0.710

PRODUCT SPECIFICATIONS

LUMEN CHARTS

LUMEN CHART STANDARD SILICONE MICRO OPTICS											
PART NUMBER	N3	LPW	T2	LPW	T3	LPW	T4	LPW	T5	LPW	WATTAGE
NV-1-16L-40-27K7	1749	83	2324	111	2342	112	2307	110	2360	112	21
NV-1-16L-40-27K8	1638	78	2176	104	2193	104	2160	103	2210	105	21
NV-1-16L-40-30K7	2037	97	2333	111	2532	121	2316	110	2552	122	21
NV-1-16L-40-30K8	1892	90	2167	103	2351	112	2151	102	2370	113	21
NV-1-16L-40-35K8	1892	90	2167	103	2351	112	2151	102	2370	113	21
NV-1-16L-40-40K7	2436	116	2715	129	2736	130	2695	128	2757	131	21
NV-1-16L-40-40K8	2255	107	2513	120	2532	121	2495	119	2552	122	21
NV-1-16L-40-50K7	2436	116	2715	129	2736	130	2695	128	2757	131	21
NV-1-16L-40-50K8	2255	107	2513	120	2532	121	2495	119	2552	122	21
NV-1-16L-53-27K7	2543	91	2588	92	3015	108	2920	104	3041	109	28
NV-1-16L-53-27K8	2381	85	2424	87	2823	101	2734	98	2848	102	28
NV-1-16L-53-30K7	3136	112	3192	114	3220	115	3119	111	3248	116	28
NV-1-16L-53-30K8	2912	104	2964	106	2990	107	2897	103	3016	108	28
NV-1-16L-53-35K8	2912	104	2964	106	2990	107	2897	103	3016	108	28
NV-1-16L-53-40K7	3248	116	3472	124	3472	124	3444	123	3500	125	28
NV-1-16L-53-40K8	3006	107	3214	115	3214	115	3188	114	3240	116	28
NV-1-16L-53-50K7	3248	116	3472	124	3472	124	3444	123	3500	125	28
NV-1-16L-53-50K8	3006	107	3214	115	3214	115	3188	114	3240	116	28
NV-1-16L-7-27K7	3269	91	3327	92	3876	108	3755	104	3910	109	36
NV-1-16L-7-27K8	3061	85	3116	87	3630	101	3516	98	3662	102	36
NV-1-16L-7-30K7	4032	112	3960	110	3960	110	3973	110	3996	111	36
NV-1-16L-7-30K8	3744	104	3678	102	3678	102	3690	102	3711	103	36
NV-1-16L-7-35K8	3744	104	3678	102	3678	102	3690	102	3711	103	36
NV-1-16L-7-40K7	4176	116	4428	123	4284	119	4212	117	4320	120	36
NV-1-16L-7-40K8	3865	107	4099	114	3965	110	3899	108	3999	111	36
NV-1-16L-7-50K7	4176	116	4428	123	4284	119	4212	117	4320	120	36
NV-1-16L-7-50K8	3865	107	4099	114	3965	110	3899	108	3999	111	36
NV-1-16L-1-27K7	5085	91	5176	92	6030	108	5841	104	6082	109	56
NV-1-16L-1-27K8	4762	85	4847	87	5647	101	5470	98	5695	102	56
NV-1-16L-1-30K7	6272	112	6160	110	6384	114	6232	111	6440	115	56
NV-1-16L-1-30K8	5825	104	5721	102	5929	106	5788	103	5981	107	56
NV-1-16L-1-35K8	5825	104	5721	102	5929	106	5788	103	5981	107	56
NV-1-16L-1-40K7	6496	116	6832	122	6888	123	6776	121	6944	124	56
NV-1-16L-1-40K8	6013	107	6324	113	6376	114	6272	112	6427	115	56
NV-1-16L-1-50K7	6496	116	6832	122	6888	123	6776	121	6944	124	56
NV-1-16L-1-50K8	6013	107	6324	113	6376	114	6272	112	6427	115	56

PRODUCT SPECIFICATIONS

LUMEN CHART STANDARD SILICONE MICRO OPTICS											
PART NUMBER	N3	LPW	T2	LPW	T3	LPW	T4	LPW	T5	LPW	WATTAGE
NV-1-32L-7-27K7	6447	91	7313	103	7313	103	7246	102	7379	104	71
NV-1-32L-7-27K8	6037	85	6848	96	6848	96	6785	96	6910	97	71
NV-1-32L-7-30K7	7952	112	9017	127	7810	110	7739	109	7881	111	71
NV-1-32L-7-30K8	7385	104	8374	118	7253	102	7187	101	7319	103	71
NV-1-32L-7-35K8	7385	104	8374	118	7253	102	7187	101	7319	103	71
NV-1-32L-7-40K7	8236	116	9017	127	8449	119	8307	117	8520	120	71
NV-1-32L-7-40K8	7623	107	8346	118	7821	110	7689	108	7886	111	71
NV-1-32L-7-50K7	8236	116	9017	127	8449	119	8733	123	8946	126	71
NV-1-32L-7-50K8	7623	107	8346	118	7821	110	8083	114	8281	117	71
NV-1-32L-1-27K7	11116	105	10917	103	11314	107	11067	104	11414	108	106
NV-1-32L-1-27K8	10410	98	10223	96	10595	100	10364	98	10689	101	106
NV-1-32L-1-30K7	11872	112	11660	110	12084	114	11820	112	12190	115	106
NV-1-32L-1-30K8	11025	104	10828	102	11222	106	10977	104	11321	107	106
NV-1-32L-1-35K8	11025	104	10828	102	11222	106	10977	104	11321	107	106
NV-1-32L-1-40K7	12296	116	12932	122	13038	123	12826	121	13144	124	106
NV-1-32L-1-40K8	11381	107	11970	113	12068	114	11872	112	12166	115	106
NV-1-32L-1-50K7	12296	116	12932	122	13038	123	12826	121	13144	124	106
NV-1-32L-1-50K8	11381	107	11970	113	12068	114	11872	112	12166	115	106
NV-1-48L-7-27K7	10906	105	10711	103	10711	103	10614	102	10809	104	104
NV-1-48L-7-27K8	10213	98	10030	96	10030	96	9939	96	10122	97	104
NV-1-48L-7-30K7	11648	112	11440	110	11440	110	11336	109	11544	111	104
NV-1-48L-7-30K8	10817	104	10624	102	10624	102	10528	101	10721	103	104
NV-1-48L-7-35K8	10817	104	10624	102	10624	102	10528	101	10721	103	104
NV-1-48L-7-40K7	12064	116	13208	127	12376	119	12168	117	12480	120	104
NV-1-48L-7-40K8	11167	107	12226	118	11455	110	11263	108	11552	111	104
NV-1-48L-7-50K7	12480	120	13208	127	12376	119	12168	117	12480	120	104
NV-1-48L-7-50K8	11552	111	12226	118	11455	110	11263	108	11552	111	104
NV-1-48L-1-27K7	16359	105	16067	103	16651	107	16359	105	13104	84	156
NV-1-48L-1-27K8	15319	98	15046	96	15593	100	15319	98	12271	79	156
NV-1-48L-1-30K7	17472	112	17160	110	17784	114	17472	112	16798	108	156
NV-1-48L-1-30K8	16226	104	15936	102	16516	106	16226	104	15600	100	156
NV-1-48L-1-35K8	16226	104	15936	102	16516	106	16226	104	15600	100	156
NV-1-48L-1-40K7	18096	116	19032	122	19188	123	18876	121	17940	115	156
NV-1-48L-1-40K8	16750	107	17616	113	17761	114	17472	112	16606	106	156
NV-1-48L-1-50K7	18720	120	19032	122	19188	123	18876	121	17940	115	156
NV-1-48L-1-50K8	17328	111	17616	113	17761	114	17472	112	16606	106	156

PRODUCT SPECIFICATIONS

LUMEN CHART STANDARD SILICONE MICRO OPTICS											
PART NUMBER	N3	LPW	T2	LPW	T3	LPW	T4	LPW	T5	LPW	WATTAGE
NV-1-64L-7-27K7	14262	103	14007	101	14007	101	13880	100	14135	102	139
NV-1-64L-7-27K8	13356	96	13117	94	13117	94	12998	94	13237	95	139
NV-1-64L-7-30K7	15232	110	14960	108	14960	108	14824	107	15096	109	139
NV-1-64L-7-30K8	14146	102	13893	100	13893	100	13767	99	14019	101	139
NV-1-64L-7-35K8	14146	102	13893	100	13893	100	13767	99	14019	101	139
NV-1-64L-7-40K7	15776	113	17272	124	16184	116	15912	114	16320	117	139
NV-1-64L-7-40K8	14603	105	15987	115	14980	108	14728	106	15106	109	139
NV-1-64L-7-50K7	16320	117	17272	124	16184	116	15912	114	17136	123	139
NV-1-64L-7-50K8	15106	109	15987	115	14980	108	14728	106	15861	114	139
NV-1-64L-1-27K7	21252	103	21114	102	21882	106	16728	81	22074	107	207
NV-1-64L-1-27K8	19901	96	19772	96	20491	99	15665	76	20671	100	207
NV-1-64L-1-30K7	22960	111	22550	109	23370	113	21498	104	23575	114	207
NV-1-64L-1-30K8	21322	103	20942	101	21703	105	19965	96	21894	106	207
NV-1-64L-1-35K8	21322	103	20942	101	21703	105	19965	96	21894	106	207
NV-1-64L-1-40K7	23780	115	25010	121	25215	122	24805	120	25420	123	207
NV-1-64L-1-40K8	22011	106	23150	112	23339	113	22960	111	23529	114	207
NV-1-64L-1-50K7	23780	115	25010	121	25215	122	24805	120	25420	123	207
NV-1-64L-1-50K8	22011	106	23150	112	23339	113	22960	111	23529	114	207

PRODUCT SPECIFICATIONS

LUMEN CHART PERFORMANCE T4FTW SILICONE MICRO OPTICS

PART NUMBER	T4FTW	LPW	WATTAGE
NV-1-16L-40-27K7	2247	107	21
NV-1-16L-40-27K8	2104	100	21
NV-1-16L-40-30K7	2249	107	21
NV-1-16L-40-30K8	2089	99	21
NV-1-16L-40-35K8	2089	99	21
NV-1-16L-40-40K7	2625	125	21
NV-1-16L-40-40K8	2430	116	21
NV-1-16L-40-50K7	2625	125	21
NV-1-16L-40-50K8	2430	116	21
NV-1-16L-53-27K7	2660	95	28
NV-1-16L-53-27K8	2491	89	28
NV-1-16L-53-30K7	2876	103	28
NV-1-16L-53-30K8	2671	95	28
NV-1-16L-53-35K8	2671	95	28
NV-1-16L-53-40K7	3248	116	28
NV-1-16L-53-40K8	3006	107	28
NV-1-16L-53-50K7	3248	116	28
NV-1-16L-53-50K8	3006	107	28
NV-1-16L-7-27K7	3297	92	36
NV-1-16L-7-27K8	3087	86	36
NV-1-16L-7-30K7	3565	99	36
NV-1-16L-7-30K8	3311	92	36
NV-1-16L-7-35K8	3311	92	36
NV-1-16L-7-40K7	3852	107	36
NV-1-16L-7-40K8	3565	99	36
NV-1-16L-7-50K7	3852	107	36
NV-1-16L-7-50K8	3565	99	36
NV-1-16L-1-27K7	5038	90	56
NV-1-16L-1-27K8	4718	84	56
NV-1-16L-1-30K7	5447	97	56
NV-1-16L-1-30K8	5059	90	56
NV-1-16L-1-35K8	5059	90	56
NV-1-16L-1-40K7	5886	105	56
NV-1-16L-1-40K8	5448	97	56
NV-1-16L-1-50K7	5886	105	56
NV-1-16L-1-50K8	5448	97	56

LUMEN CHART PERFORMANCE T5W SILICONE MICRO OPTICS

PART NUMBER	T5W	LPW	WATTAGE
NV-1-16L-40-27K7	2489	119	21
NV-1-16L-40-27K8	2331	111	21
NV-1-16L-40-30K7	2788	133	21
NV-1-16L-40-30K8	2589	123	21
NV-1-16L-40-35K8	2589	123	21
NV-1-16L-40-40K7	2908	138	21
NV-1-16L-40-40K8	2692	128	21
NV-1-16L-40-50K7	2908	138	21
NV-1-16L-40-50K8	2692	128	21
NV-1-16L-53-27K7	3427	122	28
NV-1-16L-53-27K8	3209	115	28
NV-1-16L-53-30K7	3706	132	28
NV-1-16L-53-30K8	3442	123	28
NV-1-16L-53-35K8	3442	123	28
NV-1-16L-53-40K7	4004	143	28
NV-1-16L-53-40K8	3706	132	28
NV-1-16L-53-50K7	4004	143	28
NV-1-16L-53-50K8	3706	132	28
NV-1-16L-7-27K7	4376	122	36
NV-1-16L-7-27K8	4098	114	36
NV-1-16L-7-30K7	4731	131	36
NV-1-16L-7-30K8	4394	122	36
NV-1-16L-7-35K8	4394	122	36
NV-1-16L-7-40K7	5112	142	36
NV-1-16L-7-40K8	4732	131	36
NV-1-16L-7-50K7	5112	142	36
NV-1-16L-7-50K8	4732	131	36
NV-1-16L-1-27K7	6061	108	56
NV-1-16L-1-27K8	5676	101	56
NV-1-16L-1-30K7	6553	117	56
NV-1-16L-1-30K8	6086	109	56
NV-1-16L-1-35K8	6086	109	56
NV-1-16L-1-40K7	7081	126	56
NV-1-16L-1-40K8	6554	117	56
NV-1-16L-1-50K7	7081	126	56
NV-1-16L-1-50K8	6554	117	56

PRODUCT SPECIFICATIONS

LUMEN CHART PERFORMANCE T4FTW SILICONE MICRO OPTICS			
PART NUMBER	T4FTW	LPW	WATTAGE
NV-1-32L-7-27K7	6442	91	71
NV-1-32L-7-27K8	6033	85	71
NV-1-32L-7-30K7	6965	98	71
NV-1-32L-7-30K8	6468	91	71
NV-1-32L-7-35K8	6468	91	71
NV-1-32L-7-40K7	7526	106	71
NV-1-32L-7-40K8	6966	98	71
NV-1-32L-7-50K7	7526	106	71
NV-1-32L-7-50K8	6966	98	71
NV-1-32L-1-27K7	9462	89	106
NV-1-32L-1-27K8	8861	84	106
NV-1-32L-1-30K7	10230	97	106
NV-1-32L-1-30K8	9500	90	106
NV-1-32L-1-35K8	9500	90	106
NV-1-32L-1-40K7	11054	104	106
NV-1-32L-1-40K8	10232	97	106
NV-1-32L-1-50K7	11054	104	106
NV-1-32L-1-50K8	10232	97	106
NV-1-48L-7-27K7	9793	94	104
NV-1-48L-7-27K8	9171	88	104
NV-1-48L-7-30K7	10588	102	104
NV-1-48L-7-30K8	9833	95	104
NV-1-48L-7-35K8	9833	95	104
NV-1-48L-7-40K7	11440	110	104
NV-1-48L-7-40K8	10589	102	104
NV-1-48L-7-50K7	11440	110	104
NV-1-48L-7-50K8	10589	102	104
NV-1-48L-1-27K7	14416	92	156
NV-1-48L-1-27K8	13500	87	156
NV-1-48L-1-30K7	15586	100	156
NV-1-48L-1-30K8	14474	93	156
NV-1-48L-1-35K8	14474	93	156
NV-1-48L-1-40K7	16841	108	156
NV-1-48L-1-40K8	15588	100	156
NV-1-48L-1-50K7	16841	108	156
NV-1-48L-1-50K8	15588	100	156

LUMEN CHART PERFORMANCE T5W SILICONE MICRO OPTICS			
PART NUMBER	T5W	LPW	WATTAGE
NV-1-32L-7-27K7	8873	125	71
NV-1-32L-7-27K8	8309	117	71
NV-1-32L-7-30K7	9594	135	71
NV-1-32L-7-30K8	8910	125	71
NV-1-32L-7-35K8	8910	125	71
NV-1-32L-7-40K7	10366	146	71
NV-1-32L-7-40K8	9595	135	71
NV-1-32L-7-50K7	10366	146	71
NV-1-32L-7-50K8	9595	135	71
NV-1-32L-1-27K7	11794	111	106
NV-1-32L-1-27K8	11044	104	106
NV-1-32L-1-30K7	12752	120	106
NV-1-32L-1-30K8	11843	112	106
NV-1-32L-1-35K8	11843	112	106
NV-1-32L-1-40K7	13778	130	106
NV-1-32L-1-40K8	12753	120	106
NV-1-32L-1-50K7	13778	130	106
NV-1-32L-1-50K8	12753	120	106
NV-1-48L-7-27K7	12730	122	104
NV-1-48L-7-27K8	11921	115	104
NV-1-48L-7-30K7	13764	132	104
NV-1-48L-7-30K8	12782	123	104
NV-1-48L-7-35K8	12782	123	104
NV-1-48L-7-40K7	14872	143	104
NV-1-48L-7-40K8	13766	132	104
NV-1-48L-7-50K7	14872	143	104
NV-1-48L-7-50K8	13766	132	104
NV-1-48L-1-27K7	16981	109	156
NV-1-48L-1-27K8	15902	102	156
NV-1-48L-1-30K7	18360	118	156
NV-1-48L-1-30K8	17051	109	156
NV-1-48L-1-35K8	17051	109	156
NV-1-48L-1-40K7	19838	127	156
NV-1-48L-1-40K8	18362	118	156
NV-1-48L-1-50K7	19838	127	156
NV-1-48L-1-50K8	18362	118	156

PRODUCT SPECIFICATIONS

LUMEN CHART PERFORMANCE T4FTW SILICONE MICRO OPTICS			
PART NUMBER	T4FTW	LPW	WATTAGE
NV-1-64L-35-27K7	8133	120	68
NV-1-64L-35-27K8	7616	112	68
NV-1-64L-35-30K7	8793	129	68
NV-1-64L-35-30K8	8166	120	68
NV-1-64L-35-35K8	8166	120	68
NV-1-64L-35-40K7	9501	140	68
NV-1-64L-35-40K8	8794	129	68
NV-1-64L-35-50K7	9501	140	68
NV-1-64L-35-50K8	8794	129	68
NV-1-64L-53-27K7	11462	111	103
NV-1-64L-53-27K8	10734	104	103
NV-1-64L-53-30K7	12392	120	103
NV-1-64L-53-30K8	11508	112	103
NV-1-64L-53-35K8	11508	112	103
NV-1-64L-53-40K7	13390	130	103
NV-1-64L-53-40K8	12394	120	103
NV-1-64L-53-50K7	13390	130	103
NV-1-64L-53-50K8	12394	120	103
NV-1-64L-7-27K7	14293	103	139
NV-1-64L-7-27K8	13385	96	139
NV-1-64L-7-30K7	15453	111	139
NV-1-64L-7-30K8	14351	103	139
NV-1-64L-7-35K8	14351	103	139
NV-1-64L-7-40K7	16697	120	139
NV-1-64L-7-40K8	15455	111	139
NV-1-64L-7-50K7	16697	120	139
NV-1-64L-7-50K8	15455	111	139
NV-1-64L-1-27K7	20931	101	207
NV-1-64L-1-27K8	19601	95	207
NV-1-64L-1-30K7	22630	109	207
NV-1-64L-1-30K8	21016	102	207
NV-1-64L-1-35K8	21016	102	207
NV-1-64L-1-40K7	24452	118	207
NV-1-64L-1-40K8	22633	109	207
NV-1-64L-1-50K7	22452	108	207
NV-1-64L-1-50K8	20782	100	207

LUMEN CHART PERFORMANCE T5W SILICONE MICRO OPTICS			
PART NUMBER	T5W	LPW	WATTAGE
NV-1-64L-35-27K7	8526	125	68
NV-1-64L-35-27K8	7984	117	68
NV-1-64L-35-30K7	9218	136	68
NV-1-64L-35-30K8	8561	126	68
NV-1-64L-35-35K8	8561	126	68
NV-1-64L-35-40K7	9960	146	68
NV-1-64L-35-40K8	9219	136	68
NV-1-64L-35-50K7	9960	146	68
NV-1-64L-35-50K8	9219	136	68
NV-1-64L-53-27K7	12745	124	103
NV-1-64L-53-27K8	11935	116	103
NV-1-64L-53-30K7	13780	134	103
NV-1-64L-53-30K8	12797	124	103
NV-1-64L-53-35K8	12797	124	103
NV-1-64L-53-40K7	14890	145	103
NV-1-64L-53-40K8	13782	134	103
NV-1-64L-53-50K7	14890	145	103
NV-1-64L-53-50K8	13782	134	103
NV-1-64L-7-27K7	17061	123	139
NV-1-64L-7-27K8	15977	115	139
NV-1-64L-7-30K7	18446	133	139
NV-1-64L-7-30K8	17130	123	139
NV-1-64L-7-35K8	17130	123	139
NV-1-64L-7-40K7	19931	143	139
NV-1-64L-7-40K8	18448	133	139
NV-1-64L-7-50K7	19931	143	139
NV-1-64L-7-50K8	18448	133	139
NV-1-64L-1-27K7	22567	109	207
NV-1-64L-1-27K8	21133	102	207
NV-1-64L-1-30K7	24399	118	207
NV-1-64L-1-30K8	22659	109	207
NV-1-64L-1-35K8	22659	109	207
NV-1-64L-1-40K7	26363	127	207
NV-1-64L-1-40K8	24402	118	207
NV-1-64L-1-50K7	26363	127	207
NV-1-64L-1-50K8	24402	118	207

PRODUCT SPECIFICATIONS

HSS LUMEN CHARTS

LUMEN CHART PERFORMANCE STANDARD SILICONE MICRO OPTICS W/HSS											
PART NUMBER	T2 HSS	LPW	T3 HSS	LPW	T4 HSS	LPW	CDL*	LPW	CDR*	LPW	WATTAGE
NV-1-16L-40-27K7-HSS	1386	66	1336	64	1343	64	-	-	-	-	21
NV-1-16L-40-27K8-HSS	1298	62	1251	60	1258	60	-	-	-	-	21
NV-1-16L-40-30K7-HSS	1499	71	1445	69	1452	69	-	-	-	-	21
NV-1-16L-40-30K8-HSS	1392	66	1342	64	1348	64	-	-	-	-	21
NV-1-16L-40-35K8-HSS	1392	66	1342	64	1348	64	-	-	-	-	21
NV-1-16L-40-40K7-HSS	1620	77	1561	74	1569	75	-	-	-	-	21
NV-1-16L-40-40K8-HSS	1499	71	1445	69	1452	69	-	-	-	-	21
NV-1-16L-40-50K7-HSS	1620	77	1561	74	1569	75	-	-	-	-	21
NV-1-16L-40-50K8-HSS	1499	71	1445	69	1452	69	-	-	-	-	21
NV-1-16L-53-27K7-HSS	1837	66	1771	63	1780	64	-	-	-	-	28
NV-1-16L-53-27K8-HSS	1720	61	1658	59	1667	60	-	-	-	-	28
NV-1-16L-53-30K7-HSS	1986	71	1914	68	1924	69	-	-	-	-	28
NV-1-16L-53-30K8-HSS	1844	66	1777	63	1787	64	-	-	-	-	28
NV-1-16L-53-35K8-HSS	1844	66	1777	63	1787	64	-	-	-	-	28
NV-1-16L-53-40K7-HSS	2146	77	2068	74	2079	74	-	-	-	-	28
NV-1-16L-53-40K8-HSS	1986	71	1914	68	1924	69	-	-	-	-	28
NV-1-16L-53-50K7-HSS	2146	77	2068	74	2079	74	-	-	-	-	28
NV-1-16L-53-50K8-HSS	1986	71	1914	68	1924	69	-	-	-	-	28
NV-1-16L-7-27K7-HSS	2426	67	2338	65	2350	65	-	-	-	-	36
NV-1-16L-7-27K8-HSS	2272	63	2189	61	2201	61	-	-	-	-	36
NV-1-16L-7-30K7-HSS	2623	73	2528	70	2541	71	-	-	-	-	36
NV-1-16L-7-30K8-HSS	2436	68	2348	65	2360	66	-	-	-	-	36
NV-1-16L-7-35K8-HSS	2436	68	2348	65	2360	66	-	-	-	-	36
NV-1-16L-7-40K7-HSS	2835	79	2732	76	2746	76	-	-	-	-	36
NV-1-16L-7-40K8-HSS	2624	73	2529	70	2542	71	-	-	-	-	36
NV-1-16L-7-50K7-HSS	2835	79	2732	76	2746	76	-	-	-	-	36
NV-1-16L-7-50K8-HSS	2624	73	2529	70	2542	71	-	-	-	-	36
NV-1-16L-1-27K7-HSS	3639	65	3508	63	3526	63	-	-	-	-	56
NV-1-16L-1-27K8-HSS	3408	61	3285	59	3302	59	-	-	-	-	56
NV-1-16L-1-30K7-HSS	3935	70	3792	68	3812	68	-	-	-	-	56
NV-1-16L-1-30K8-HSS	3654	65	3522	63	3540	63	-	-	-	-	56
NV-1-16L-1-35K8-HSS	3654	65	3522	63	3540	63	-	-	-	-	56
NV-1-16L-1-40K7-HSS	4252	76	4098	73	4119	74	-	-	-	-	56
NV-1-16L-1-40K8-HSS	3936	70	3793	68	3813	68	-	-	-	-	56
NV-1-16L-1-50K7-HSS	4252	76	4098	73	4119	74	-	-	-	-	56
NV-1-16L-1-50K8-HSS	3936	70	3793	68	3813	68	-	-	-	-	56

PRODUCT SPECIFICATIONS

LUMEN CHART PERFORMANCE STANDARD SILICONE MICRO OPTICS W/HSS											
PART NUMBER	T2 HSS	LPW	T3 HSS	LPW	T4 HSS	LPW	CDL*	LPW	CDR*	LPW	WATTAGE
NV-1-32L-7-27K7-HSS	4853	68	4677	66	4701	66	-	-	-	-	71
NV-1-32L-7-27K8-HSS	4545	64	4380	62	4402	62	-	-	-	-	71
NV-1-32L-7-30K7-HSS	5247	74	5057	71	5083	72	-	-	-	-	71
NV-1-32L-7-30K8-HSS	4873	69	4696	66	4720	66	-	-	-	-	71
NV-1-32L-7-35K8-HSS	4873	69	4696	66	4720	66	-	-	-	-	71
NV-1-32L-7-40K7-HSS	5669	80	5464	77	5492	77	-	-	-	-	71
NV-1-32L-7-40K8-HSS	5247	74	5058	71	5083	72	-	-	-	-	71
NV-1-32L-7-50K7-HSS	5669	80	5464	77	5492	77	-	-	-	-	71
NV-1-32L-7-50K8-HSS	5247	74	5058	71	5083	72	-	-	-	-	71
NV-1-32L-1-27K7-HSS	7279	69	7015	66	7051	67	-	-	-	-	106
NV-1-32L-1-27K8-HSS	6816	64	6569	62	6603	62	-	-	-	-	106
NV-1-32L-1-30K7-HSS	7870	74	7585	72	7624	72	-	-	-	-	106
NV-1-32L-1-30K8-HSS	7309	69	7044	66	7080	67	-	-	-	-	106
NV-1-32L-1-35K8-HSS	7309	69	7044	66	7080	67	-	-	-	-	106
NV-1-32L-1-40K7-HSS	8504	80	8196	77	8238	78	-	-	-	-	106
NV-1-32L-1-40K8-HSS	7871	74	7586	72	7625	72	-	-	-	-	106
NV-1-32L-1-50K7-HSS	8504	80	8196	77	8238	78	-	-	-	-	106
NV-1-32L-1-50K8-HSS	7871	74	7586	72	7625	72	-	-	-	-	106
NV-1-48L-7-27K7-HSS	7279	70	7015	67	7051	68	-	-	-	-	104
NV-1-48L-7-27K8-HSS	6816	66	6569	63	6603	63	-	-	-	-	104
NV-1-48L-7-30K7-HSS	7870	76	7585	73	7624	73	-	-	-	-	104
NV-1-48L-7-30K8-HSS	7309	70	7044	68	7080	68	-	-	-	-	104
NV-1-48L-7-35K8-HSS	7309	70	7044	68	7080	68	-	-	-	-	104
NV-1-48L-7-40K7-HSS	8504	82	8196	79	8238	79	-	-	-	-	104
NV-1-48L-7-40K8-HSS	7871	76	7586	73	7625	73	-	-	-	-	104
NV-1-48L-7-50K7-HSS	8504	82	8196	79	8238	79	-	-	-	-	104
NV-1-48L-7-50K8-HSS	7871	76	7586	73	7625	73	-	-	-	-	104
NV-1-48L-1-27K7-HSS	10918	70	10523	67	10577	68	-	-	-	-	156
NV-1-48L-1-27K8-HSS	10224	66	9854	63	9905	63	-	-	-	-	156
NV-1-48L-1-30K7-HSS	11805	76	11377	73	11436	73	-	-	-	-	156
NV-1-48L-1-30K8-HSS	10963	70	10566	68	10620	68	-	-	-	-	156
NV-1-48L-1-35K8-HSS	10963	70	10566	68	10620	68	-	-	-	-	156
NV-1-48L-1-40K7-HSS	12755	82	12293	79	12356	79	-	-	-	-	156
NV-1-48L-1-40K8-HSS	11806	76	11379	73	11437	73	-	-	-	-	156
NV-1-48L-1-50K7-HSS	12755	82	12293	79	12356	79	-	-	-	-	156
NV-1-48L-1-50K8-HSS	11806	76	11379	73	11437	73	-	-	-	-	156

PRODUCT SPECIFICATIONS

LUMEN CHART PERFORMANCE STANDARD SILICONE MICRO OPTICS W/HSS											
PART NUMBER	T2 HSS	LPW	T3 HSS	LPW	T4 HSS	LPW	CDL*	LPW	CDR*	LPW	WATTAGE
NV-1-64L-7-27K7-HSS	9705	70	9354	67	9402	68	5797	42	5725	41	139
NV-1-64L-7-27K8-HSS	9088	65	8760	63	8804	63	5429	39	5361	39	139
NV-1-64L-7-30K7-HSS	10493	75	10113	73	10165	73	6191	45	6190	45	139
NV-1-64L-7-30K8-HSS	9745	70	9392	68	9440	68	5749	41	5749	41	139
NV-1-64L-7-35K8-HSS	9745	70	9392	68	9440	68	5749	41	5749	41	139
NV-1-64L-7-40K7-HSS	11338	82	10927	79	10983	79	6689	48	6689	48	139
NV-1-64L-7-40K8-HSS	10495	76	10114	73	10166	73	6191	45	6191	45	139
NV-1-64L-7-50K7-HSS	11338	82	10927	79	10983	79	6689	48	6689	48	139
NV-1-64L-7-50K8-HSS	10495	76	10114	73	10166	73	6191	45	6191	45	139
NV-1-64L-1-27K7-HSS	14558	70	14031	68	14103	68	8695	42	8695	42	207
NV-1-64L-1-27K8-HSS	13633	66	13139	63	13207	64	8142	39	8142	39	207
NV-1-64L-1-30K7-HSS	15740	76	15170	73	15248	74	9286	45	9286	45	207
NV-1-64L-1-30K8-HSS	14617	71	14088	68	14160	68	8624	42	8624	42	207
NV-1-64L-1-35K8-HSS	14617	71	14088	68	14160	68	8624	42	8624	42	207
NV-1-64L-1-40K7-HSS	17007	82	16391	79	16475	80	10034	48	10034	48	207
NV-1-64L-1-40K8-HSS	15742	76	15172	73	15250	74	9288	45	9288	45	207
NV-1-64L-1-50K7-HSS	17007	82	16391	79	16475	80	10034	48	10034	48	207
NV-1-64L-1-50K8-HSS	15742	76	15172	73	15250	74	9288	45	9288	45	207

PRODUCT SPECIFICATIONS

LUMEN CHART PERFORMANCE T4FTW SILICONE OPTICS W/HSS			
PART NUMBER	T4FTW-HSS	LPW	WATTAGE
NV-1-16L-40-27K7-HSS	1528	73	21
NV-1-16L-40-27K8-HSS	1431	68	21
NV-1-16L-40-30K7-HSS	1652	79	21
NV-1-16L-40-30K8-HSS	1534	73	21
NV-1-16L-40-35K8-HSS	1534	73	21
NV-1-16L-40-40K7-HSS	1785	85	21
NV-1-16L-40-40K8-HSS	1652	79	21
NV-1-16L-40-50K7-HSS	1785	85	21
NV-1-16L-40-50K8-HSS	1652	79	21
NV-1-16L-53-27K7-HSS	1822	65	28
NV-1-16L-53-27K8-HSS	1706	61	28
NV-1-16L-53-30K7-HSS	1969	70	28
NV-1-16L-53-30K8-HSS	1829	65	28
NV-1-16L-53-35K8-HSS	1829	65	28
NV-1-16L-53-40K7-HSS	2128	76	28
NV-1-16L-53-40K8-HSS	1970	70	28
NV-1-16L-53-50K7-HSS	2128	76	28
NV-1-16L-53-50K8-HSS	1970	70	28
NV-1-16L-7-27K7-HSS	2065	57	36
NV-1-16L-7-27K8-HSS	1933	54	36
NV-1-16L-7-30K7-HSS	2232	62	36
NV-1-16L-7-30K8-HSS	2073	58	36
NV-1-16L-7-35K8-HSS	2073	58	36
NV-1-16L-7-40K7-HSS	2412	67	36
NV-1-16L-7-40K8-HSS	2233	62	36
NV-1-16L-7-50K7-HSS	2412	67	36
NV-1-16L-7-50K8-HSS	2233	62	36
NV-1-16L-1-27K7-HSS	3116	56	56
NV-1-16L-1-27K8-HSS	2918	52	56
NV-1-16L-1-30K7-HSS	3369	60	56
NV-1-16L-1-30K8-HSS	3129	56	56
NV-1-16L-1-35K8-HSS	3129	56	56
NV-1-16L-1-40K7-HSS	3640	65	56
NV-1-16L-1-40K8-HSS	3369	60	56
NV-1-16L-1-50K7-HSS	3640	65	56
NV-1-16L-1-50K8-HSS	3369	60	56

LUMEN CHART PERFORMANCE T4FTW SILICONE OPTICS W/HSS			
PART NUMBER	T4FTW-HSS	LPW	WATTAGE
NV-1-32L-7-27K7-HSS	4011	56	71
NV-1-32L-7-27K8-HSS	3756	53	71
NV-1-32L-7-30K7-HSS	4337	61	71
NV-1-32L-7-30K8-HSS	4028	57	71
NV-1-32L-7-35K8-HSS	4028	57	71
NV-1-32L-7-40K7-HSS	4686	66	71
NV-1-32L-7-40K8-HSS	4337	61	71
NV-1-32L-7-50K7-HSS	4686	66	71
NV-1-32L-7-50K8-HSS	4337	61	71
NV-1-32L-1-27K7-HSS	5807	55	106
NV-1-32L-1-27K8-HSS	5438	51	106
NV-1-32L-1-30K7-HSS	6279	59	106
NV-1-32L-1-30K8-HSS	5831	55	106
NV-1-32L-1-35K8-HSS	5831	55	106
NV-1-32L-1-40K7-HSS	6784	64	106
NV-1-32L-1-40K8-HSS	6279	59	106
NV-1-32L-1-50K7-HSS	6784	64	106
NV-1-32L-1-50K8-HSS	6279	59	106

PRODUCT SPECIFICATIONS

LUMEN CHART PERFORMANCE T4FTW SILICONE OPTICS W/HSS			
PART NUMBER	T4FTW-HSS	LPW	WATTAGE
NV-1-48L-7-27K7-HSS	6232	60	104
NV-1-48L-7-27K8-HSS	5836	56	104
NV-1-48L-7-30K7-HSS	6738	65	104
NV-1-48L-7-30K8-HSS	6257	60	104
NV-1-48L-7-35K8-HSS	6257	60	104
NV-1-48L-7-40K7-HSS	7280	70	104
NV-1-48L-7-40K8-HSS	6738	65	104
NV-1-48L-7-50K7-HSS	7280	70	104
NV-1-48L-7-50K8-HSS	6738	65	104
NV-1-48L-1-27K7-HSS	9080	58	156
NV-1-48L-1-27K8-HSS	8503	55	156
NV-1-48L-1-30K7-HSS	9818	63	156
NV-1-48L-1-30K8-HSS	9117	58	156
NV-1-48L-1-35K8-HSS	9117	58	156
NV-1-48L-1-40K7-HSS	10608	68	156
NV-1-48L-1-40K8-HSS	9819	63	156
NV-1-48L-1-50K7-HSS	10608	68	156
NV-1-48L-1-50K8-HSS	9819	63	156

LUMEN CHART PERFORMANCE T4FTW SILICONE OPTICS W/HSS			
PART NUMBER	T4FTW-HSS	LPW	WATTAGE
NV-1-64L-35-27K7-HSS	5821	86	68
NV-1-64L-35-27K8-HSS	5451	80	68
NV-1-64L-35-30K7-HSS	6293	93	68
NV-1-64L-35-30K8-HSS	5845	86	68
NV-1-64L-35-35K8-HSS	5845	86	68
NV-1-64L-35-40K7-HSS	6800	100	68
NV-1-64L-35-40K8-HSS	6294	93	68
NV-1-64L-35-50K7-HSS	6800	100	68
NV-1-64L-35-50K8-HSS	6294	93	68
NV-1-64L-53-27K7-HSS	7935	77	103
NV-1-64L-53-27K8-HSS	7431	72	103
NV-1-64L-53-30K7-HSS	8579	83	103
NV-1-64L-53-30K8-HSS	7967	77	103
NV-1-64L-53-35K8-HSS	7967	77	103
NV-1-64L-53-40K7-HSS	9270	90	103
NV-1-64L-53-40K8-HSS	8580	83	103
NV-1-64L-53-50K7-HSS	9270	90	103
NV-1-64L-53-50K8-HSS	8580	83	103
NV-1-64L-7-27K7-HSS	9519	68	139
NV-1-64L-7-27K8-HSS	8914	64	139
NV-1-64L-7-30K7-HSS	10292	74	139
NV-1-64L-7-30K8-HSS	9558	69	139
NV-1-64L-7-35K8-HSS	9558	69	139
NV-1-64L-7-40K7-HSS	11120	80	139
NV-1-64L-7-40K8-HSS	10293	74	139
NV-1-64L-7-50K7-HSS	11120	80	139
NV-1-64L-7-50K8-HSS	10293	74	139
NV-1-64L-1-27K7-HSS	13865	67	207
NV-1-64L-1-27K8-HSS	12984	63	207
NV-1-64L-1-30K7-HSS	14990	72	207
NV-1-64L-1-30K8-HSS	13921	67	207
NV-1-64L-1-35K8-HSS	13921	67	207
NV-1-64L-1-40K7-HSS	16197	78	207
NV-1-64L-1-40K8-HSS	14992	72	207
NV-1-64L-1-50K7-HSS	16197	78	207
NV-1-64L-1-50K8-HSS	14992	72	207

PRODUCT SPECIFICATIONS

BUG RATINGS

BUG RATING CHART STANDARD SILICONE MICRO OPTICS					
PART NUMBER	N3	T2	T3	T4	T5
NV-1-16L-40-27K7	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G0
NV-1-16L-40-27K8	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G0
NV-1-16L-40-30K7	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
NV-1-16L-40-30K8	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
NV-1-16L-40-35K8	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
NV-1-16L-40-40K7	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
NV-1-16L-40-40K8	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
NV-1-16L-40-50K7	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
NV-1-16L-40-50K8	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
NV-1-16L-53-27K7	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
NV-1-16L-53-27K8	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
NV-1-16L-53-30K7	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
NV-1-16L-53-30K8	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
NV-1-16L-53-35K8	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
NV-1-16L-53-40K7	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
NV-1-16L-53-40K8	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
NV-1-16L-53-50K7	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
NV-1-16L-53-50K8	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
NV-1-16L-7-27K7	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B3-U0-G1
NV-1-16L-7-27K8	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B3-U0-G1
NV-1-16L-7-30K7	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B3-U0-G1
NV-1-16L-7-30K8	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B3-U0-G1
NV-1-16L-7-35K8	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B3-U0-G1
NV-1-16L-7-40K7	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B3-U0-G1
NV-1-16L-7-40K8	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B3-U0-G1
NV-1-16L-7-50K7	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B3-U0-G1
NV-1-16L-7-50K8	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B3-U0-G1
NV-1-16L-1-27K7	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B3-U0-G1
NV-1-16L-1-27K8	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B3-U0-G1
NV-1-16L-1-30K7	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B3-U0-G1
NV-1-16L-1-30K8	B3-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B3-U0-G1
NV-1-16L-1-35K8	B3-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2
NV-1-16L-1-40K7	B3-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2
NV-1-16L-1-40K8	B3-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2
NV-1-16L-1-50K7	B3-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2
NV-1-16L-1-50K8	B3-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2

BUG RATING CHART PERFORMANCE T4FTW & T5W SILICONE MICRO OPTICS		
PART NUMBER	T4FTW	T5W
NV-1-16L-40-27K7	B1-U0-G2	B2-U0-G1
NV-1-16L-40-27K8	B1-U0-G2	B2-U0-G1
NV-1-16L-40-30K7	B1-U0-G2	B2-U0-G1
NV-1-16L-40-30K8	B1-U0-G2	B2-U0-G1
NV-1-16L-40-35K8	B1-U0-G2	B2-U0-G1
NV-1-16L-40-40K7	B1-U0-G2	B2-U0-G1
NV-1-16L-40-40K8	B1-U0-G2	B2-U0-G1
NV-1-16L-40-50K7	B1-U0-G2	B2-U0-G1
NV-1-16L-40-50K8	B1-U0-G2	B2-U0-G1
NV-1-16L-53-27K7	B1-U0-G2	B3-U0-G2
NV-1-16L-53-27K8	B1-U0-G2	B3-U0-G2
NV-1-16L-53-30K7	B1-U0-G2	B3-U0-G2
NV-1-16L-53-30K8	B1-U0-G2	B3-U0-G2
NV-1-16L-53-35K8	B1-U0-G2	B3-U0-G2
NV-1-16L-53-40K7	B1-U0-G2	B3-U0-G2
NV-1-16L-53-40K8	B1-U0-G2	B3-U0-G2
NV-1-16L-53-50K7	B1-U0-G2	B3-U0-G2
NV-1-16L-53-50K8	B1-U0-G2	B3-U0-G2
NV-1-16L-7-27K7	B1-U0-G2	B3-U0-G2
NV-1-16L-7-27K8	B1-U0-G2	B3-U0-G2
NV-1-16L-7-30K7	B1-U0-G2	B3-U0-G2
NV-1-16L-7-30K8	B1-U0-G2	B3-U0-G2
NV-1-16L-7-35K8	B1-U0-G2	B3-U0-G2
NV-1-16L-7-40K7	B1-U0-G2	B3-U0-G2
NV-1-16L-7-40K8	B1-U0-G2	B3-U0-G2
NV-1-16L-7-50K7	B1-U0-G2	B3-U0-G2
NV-1-16L-7-50K8	B1-U0-G2	B3-U0-G2
NV-1-16L-1-27K7	B1-U0-G2	B3-U0-G2
NV-1-16L-1-27K8	B1-U0-G2	B3-U0-G2
NV-1-16L-1-30K7	B1-U0-G2	B3-U0-G2
NV-1-16L-1-30K8	B1-U0-G2	B3-U0-G2
NV-1-16L-1-35K8	B1-U0-G2	B3-U0-G2
NV-1-16L-1-40K7	B1-U0-G2	B3-U0-G2
NV-1-16L-1-40K8	B1-U0-G2	B3-U0-G2
NV-1-16L-1-50K7	B1-U0-G2	B3-U0-G2
NV-1-16L-1-50K8	B1-U0-G2	B3-U0-G2

PRODUCT SPECIFICATIONS

BUG RATING CHART STANDARD SILICONE MICRO OPTICS

PART NUMBER	N3	T2	T3	T4	T5
NV-1-32L-7-27K7	B4-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2
NV-1-32L-7-27K8	B4-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2
NV-1-32L-7-30K7	B4-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2
NV-1-32L-7-30K8	B4-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2
NV-1-32L-7-35K8	B4-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2
NV-1-32L-7-40K7	B4-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2
NV-1-32L-7-40K8	B4-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2
NV-1-32L-7-50K7	B4-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2
NV-1-32L-7-50K8	B4-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2
NV-1-32L-1-27K7	B4-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B4-U0-G2
NV-1-32L-1-27K8	B4-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B4-U0-G2
NV-1-32L-1-30K7	B4-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B4-U0-G2
NV-1-32L-1-30K8	B4-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B4-U0-G2
NV-1-32L-1-35K8	B4-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B4-U0-G2
NV-1-32L-1-40K7	B4-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G2
NV-1-32L-1-40K8	B4-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G2
NV-1-32L-1-50K7	B4-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G2
NV-1-32L-1-50K8	B4-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G2
NV-1-48L-7-27K7	B4-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B4-U0-G2
NV-1-48L-7-27K8	B4-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B4-U0-G2
NV-1-48L-7-30K7	B4-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B4-U0-G2
NV-1-48L-7-30K8	B4-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B4-U0-G2
NV-1-48L-7-35K8	B4-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B4-U0-G2
NV-1-48L-7-40K7	B4-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G2
NV-1-48L-7-40K8	B4-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G2
NV-1-48L-7-50K7	B4-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G2
NV-1-48L-7-50K8	B4-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G2
NV-1-48L-1-27K7	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G2
NV-1-48L-1-27K8	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G2
NV-1-48L-1-30K7	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G2
NV-1-48L-1-30K8	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G2
NV-1-48L-1-35K8	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G2
NV-1-48L-1-40K7	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B5-U0-G3
NV-1-48L-1-40K8	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B5-U0-G3
NV-1-48L-1-50K7	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B5-U0-G3
NV-1-48L-1-50K8	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B5-U0-G3

**BUG RATING CHART
PERFORMANCE T4FTW & T5W SILICONE MICRO OPTICS**

PART NUMBER	T4FTW	T5W
NV-1-32L-7-27K7	B2-U0-G3	B4-U0-G2
NV-1-32L-7-27K8	B2-U0-G3	B4-U0-G2
NV-1-32L-7-30K7	B2-U0-G3	B4-U0-G2
NV-1-32L-7-30K8	B2-U0-G3	B4-U0-G2
NV-1-32L-7-35K8	B2-U0-G3	B4-U0-G2
NV-1-32L-7-40K7	B2-U0-G3	B4-U0-G2
NV-1-32L-7-40K8	B2-U0-G3	B4-U0-G2
NV-1-32L-7-50K7	B2-U0-G3	B4-U0-G2
NV-1-32L-7-50K8	B2-U0-G3	B4-U0-G2
NV-1-32L-1-27K7	B2-U0-G3	B4-U0-G3
NV-1-32L-1-27K8	B2-U0-G3	B4-U0-G3
NV-1-32L-1-30K7	B2-U0-G3	B4-U0-G3
NV-1-32L-1-30K8	B2-U0-G3	B4-U0-G3
NV-1-32L-1-35K8	B2-U0-G3	B4-U0-G3
NV-1-32L-1-40K7	B2-U0-G3	B4-U0-G3
NV-1-32L-1-40K8	B2-U0-G3	B4-U0-G3
NV-1-32L-1-50K7	B2-U0-G3	B4-U0-G3
NV-1-32L-1-50K8	B2-U0-G3	B4-U0-G3
NV-1-48L-7-27K7	B2-U0-G3	B4-U0-G3
NV-1-48L-7-27K8	B2-U0-G3	B4-U0-G3
NV-1-48L-7-30K7	B2-U0-G3	B4-U0-G3
NV-1-48L-7-30K8	B2-U0-G3	B4-U0-G3
NV-1-48L-7-35K8	B3-U0-G4	B4-U0-G3
NV-1-48L-7-40K7	B3-U0-G4	B4-U0-G3
NV-1-48L-7-40K8	B3-U0-G4	B4-U0-G3
NV-1-48L-7-50K7	B3-U0-G4	B4-U0-G3
NV-1-48L-7-50K8	B3-U0-G4	B4-U0-G3
NV-1-48L-1-27K7	B3-U0-G4	B4-U0-G3
NV-1-48L-1-27K8	B3-U0-G4	B4-U0-G3
NV-1-48L-1-30K7	B3-U0-G4	B5-U0-G3
NV-1-48L-1-30K8	B3-U0-G4	B5-U0-G3
NV-1-48L-1-35K8	B3-U0-G4	B5-U0-G3
NV-1-48L-1-40K7	B3-U0-G4	B5-U0-G3
NV-1-48L-1-40K8	B3-U0-G4	B5-U0-G3
NV-1-48L-1-50K7	B3-U0-G4	B5-U0-G3
NV-1-48L-1-50K8	B3-U0-G4	B5-U0-G3

PRODUCT SPECIFICATIONS

BUG RATING CHART STANDARD SILICONE MICRO OPTICS

PART NUMBER	N3	T2	T3	T4	T5
NV-1-64L-7-27K7	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G2
NV-1-64L-7-27K8	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G2
NV-1-64L-7-30K7	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G2
NV-1-64L-7-30K8	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G2
NV-1-64L-7-35K8	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G2
NV-1-64L-7-40K7	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G2
NV-1-64L-7-40K8	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G2
NV-1-64L-7-50K7	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G2
NV-1-64L-7-50K8	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G2
NV-1-64L-1-27K7	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B5-U0-G3
NV-1-64L-1-27K8	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B5-U0-G3
NV-1-64L-1-30K7	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B5-U0-G3
NV-1-64L-1-30K8	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B5-U0-G3
NV-1-64L-1-35K8	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B5-U0-G3
NV-1-64L-1-40K7	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B5-U0-G3
NV-1-64L-1-40K8	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B5-U0-G3
NV-1-64L-1-50K7	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B5-U0-G3
NV-1-64L-1-50K8	B5-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B5-U0-G3

**BUG RATING CHART
PERFORMANCE T4FTW & T5W SILICONE MICRO OPTICS**

PART NUMBER	T4FTW	T5W
NV-1-64L-35-27K7	B3-U0-G4	B5-U0-G3
NV-1-64L-35-27K8	B3-U0-G4	B5-U0-G3
NV-1-64L-35-30K7	B3-U0-G4	B5-U0-G3
NV-1-64L-35-30K8	B3-U0-G4	B5-U0-G3
NV-1-64L-35-35K8	B3-U0-G4	B5-U0-G3
NV-1-64L-35-40K7	B3-U0-G4	B5-U0-G3
NV-1-64L-35-40K8	B3-U0-G4	B5-U0-G3
NV-1-64L-35-50K7	B3-U0-G4	B5-U0-G3
NV-1-64L-35-50K8	B3-U0-G4	B5-U0-G3
NV-1-64L-53-27K7	B3-U0-G4	B5-U0-G3
NV-1-64L-53-27K8	B3-U0-G4	B5-U0-G3
NV-1-64L-53-30K7	B3-U0-G4	B5-U0-G3
NV-1-64L-53-30K8	B3-U0-G4	B5-U0-G3
NV-1-64L-53-35K8	B3-U0-G4	B5-U0-G3
NV-1-64L-53-40K7	B3-U0-G4	B5-U0-G3
NV-1-64L-53-40K8	B3-U0-G4	B5-U0-G3
NV-1-64L-53-50K7	B3-U0-G4	B5-U0-G3
NV-1-64L-53-50K8	B3-U0-G4	B5-U0-G3
NV-1-64L-7-27K7	B3-U0-G4	B5-U0-G3
NV-1-64L-7-27K8	B3-U0-G4	B5-U0-G3
NV-1-64L-7-30K7	B3-U0-G4	B5-U0-G3
NV-1-64L-7-30K8	B3-U0-G4	B5-U0-G3
NV-1-64L-7-35K8	B3-U0-G4	B5-U0-G3
NV-1-64L-7-40K7	B3-U0-G4	B5-U0-G3
NV-1-64L-7-40K8	B3-U0-G4	B5-U0-G3
NV-1-64L-7-50K7	B3-U0-G4	B5-U0-G3
NV-1-64L-7-50K8	B3-U0-G4	B5-U0-G3
NV-1-64L-1-27K7	B3-U0-G4	B5-U0-G3
NV-1-64L-1-27K8	B3-U0-G4	B5-U0-G3
NV-1-64L-1-30K7	B3-U0-G4	B5-U0-G3
NV-1-64L-1-30K8	B3-U0-G4	B5-U0-G3
NV-1-64L-1-35K8	B3-U0-G4	B5-U0-G3
NV-1-64L-1-40K7	B3-U0-G4	B5-U0-G4
NV-1-64L-1-40K8	B3-U0-G4	B5-U0-G4
NV-1-64L-1-50K7	B3-U0-G4	B5-U0-G4
NV-1-64L-1-50K8	B3-U0-G4	B5-U0-G4

PRODUCT SPECIFICATIONS

HSS BUG RATINGS

BUG RATING CHART PERFORMANCE T4FTW SILICONE OPTICS W/HSS	
PART NUMBER	T4FTW-HSS
NV-1-16L-40-27K7-HSS	B0-U0-G1
NV-1-16L-40-27K8-HSS	B0-U0-G1
NV-1-16L-40-30K7-HSS	B0-U0-G1
NV-1-16L-40-30K8-HSS	B0-U0-G1
NV-1-16L-40-35K8-HSS	B0-U0-G1
NV-1-16L-40-40K7-HSS	B0-U0-G1
NV-1-16L-40-40K8-HSS	B0-U0-G1
NV-1-16L-40-50K7-HSS	B0-U0-G1
NV-1-16L-40-50K8-HSS	B0-U0-G1
NV-1-16L-53-27K7-HSS	B0-U0-G1
NV-1-16L-53-27K8-HSS	B0-U0-G1
NV-1-16L-53-30K7-HSS	B0-U0-G1
NV-1-16L-53-30K8-HSS	B0-U0-G1
NV-1-16L-53-35K8-HSS	B0-U0-G1
NV-1-16L-53-40K7-HSS	B0-U0-G1
NV-1-16L-53-40K8-HSS	B0-U0-G1
NV-1-16L-53-50K7-HSS	B0-U0-G1
NV-1-16L-53-50K8-HSS	B0-U0-G1
NV-1-16L-7-27K7-HSS	B0-U0-G1
NV-1-16L-7-27K8-HSS	B0-U0-G1
NV-1-16L-7-30K7-HSS	B0-U0-G1
NV-1-16L-7-30K8-HSS	B0-U0-G1
NV-1-16L-7-35K8-HSS	B0-U0-G1
NV-1-16L-7-40K7-HSS	B0-U0-G1
NV-1-16L-7-40K8-HSS	B0-U0-G1
NV-1-16L-7-50K7-HSS	B0-U0-G1
NV-1-16L-7-50K8-HSS	B0-U0-G1
NV-1-16L-1-27K7-HSS	B0-U0-G1
NV-1-16L-1-27K8-HSS	B0-U0-G1
NV-1-16L-1-30K7-HSS	B0-U0-G1
NV-1-16L-1-30K8-HSS	B0-U0-G1
NV-1-16L-1-35K8-HSS	B0-U0-G1
NV-1-16L-1-40K7-HSS	B0-U0-G1
NV-1-16L-1-40K8-HSS	B0-U0-G1
NV-1-16L-1-50K7-HSS	B0-U0-G1
NV-1-16L-1-50K8-HSS	B0-U0-G1

BUG RATING CHART PERFORMANCE T4FTW SILICONE OPTICS W/HSS	
PART NUMBER	T4FTW-HSS
NV-1-32L-7-27K7-HSS	B0-U0-G2
NV-1-32L-7-27K8-HSS	B0-U0-G2
NV-1-32L-7-30K7-HSS	B0-U0-G2
NV-1-32L-7-30K8-HSS	B0-U0-G2
NV-1-32L-7-35K8-HSS	B0-U0-G2
NV-1-32L-7-40K7-HSS	B0-U0-G2
NV-1-32L-7-40K8-HSS	B0-U0-G2
NV-1-32L-7-50K7-HSS	B0-U0-G2
NV-1-32L-7-50K8-HSS	B0-U0-G2
NV-1-32L-1-27K7-HSS	B1-U0-G2
NV-1-32L-1-27K8-HSS	B1-U0-G2
NV-1-32L-1-30K7-HSS	B1-U0-G2
NV-1-32L-1-30K8-HSS	B1-U0-G2
NV-1-32L-1-35K8-HSS	B1-U0-G2
NV-1-32L-1-40K7-HSS	B1-U0-G2
NV-1-32L-1-40K8-HSS	B1-U0-G2
NV-1-32L-1-50K7-HSS	B1-U0-G2
NV-1-32L-1-50K8-HSS	B1-U0-G2
NV-1-48L-7-27K7-HSS	B1-U0-G2
NV-1-48L-7-27K8-HSS	B1-U0-G2
NV-1-48L-7-30K7-HSS	B1-U0-G2
NV-1-48L-7-30K8-HSS	B1-U0-G2
NV-1-48L-7-35K8-HSS	B1-U0-G2
NV-1-48L-7-40K7-HSS	B1-U0-G2
NV-1-48L-7-40K8-HSS	B1-U0-G2
NV-1-48L-7-50K7-HSS	B1-U0-G2
NV-1-48L-7-50K8-HSS	B1-U0-G2
NV-1-48L-1-27K7-HSS	B1-U0-G2
NV-1-48L-1-27K8-HSS	B1-U0-G2
NV-1-48L-1-30K7-HSS	B1-U0-G2
NV-1-48L-1-30K8-HSS	B1-U0-G2
NV-1-48L-1-35K8-HSS	B1-U0-G2
NV-1-48L-1-40K7-HSS	B1-U0-G2
NV-1-48L-1-40K8-HSS	B1-U0-G2
NV-1-48L-1-50K7-HSS	B1-U0-G2
NV-1-48L-1-50K8-HSS	B1-U0-G2

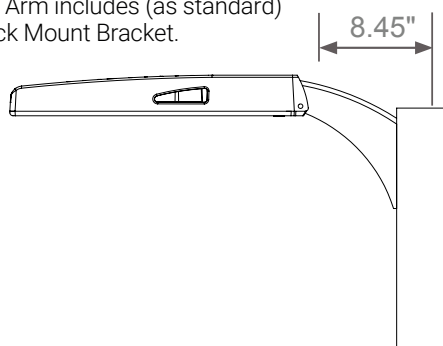
BUG RATING CHART PERFORMANCE T4FTW SILICONE OPTICS W/HSS	
PART NUMBER	T4FTW-HSS
NV-1-64L-35-27K7-HSS	B1-U0-G2
NV-1-64L-35-27K8-HSS	B1-U0-G2
NV-1-64L-35-30K7-HSS	B1-U0-G2
NV-1-64L-35-30K8-HSS	B1-U0-G2
NV-1-64L-35-35K8-HSS	B1-U0-G2
NV-1-64L-35-40K7-HSS	B1-U0-G2
NV-1-64L-35-40K8-HSS	B1-U0-G2
NV-1-64L-35-50K7-HSS	B1-U0-G2
NV-1-64L-35-50K8-HSS	B1-U0-G2
NV-1-64L-53-27K7-HSS	B1-U0-G2
NV-1-64L-53-27K8-HSS	B1-U0-G2
NV-1-64L-53-30K7-HSS	B1-U0-G2
NV-1-64L-53-30K8-HSS	B1-U0-G2
NV-1-64L-53-35K8-HSS	B1-U0-G2
NV-1-64L-53-40K7-HSS	B1-U0-G2
NV-1-64L-53-40K8-HSS	B1-U0-G2
NV-1-64L-53-50K7-HSS	B1-U0-G2
NV-1-64L-53-50K8-HSS	B1-U0-G2
NV-1-64L-7-27K7-HSS	B1-U0-G2
NV-1-64L-7-27K8-HSS	B1-U0-G2
NV-1-64L-7-30K7-HSS	B1-U0-G2
NV-1-64L-7-30K8-HSS	B1-U0-G2
NV-1-64L-7-35K8-HSS	B1-U0-G3
NV-1-64L-7-40K7-HSS	B1-U0-G3
NV-1-64L-7-40K8-HSS	B1-U0-G3
NV-1-64L-7-50K7-HSS	B1-U0-G3
NV-1-64L-7-50K8-HSS	B1-U0-G3
NV-1-64L-1-27K7-HSS	B1-U0-G3
NV-1-64L-1-27K8-HSS	B1-U0-G3
NV-1-64L-1-30K7-HSS	B1-U0-G3
NV-1-64L-1-30K8-HSS	B1-U0-G3
NV-1-64L-1-35K8-HSS	B1-U0-G3
NV-1-64L-1-40K7-HSS	B1-U0-G4
NV-1-64L-1-40K8-HSS	B1-U0-G4
NV-1-64L-1-50K7-HSS	B1-U0-G4
NV-1-64L-1-50K8-HSS	B1-U0-G4

PRODUCT SPECIFICATIONS

MOUNTING OPTIONS

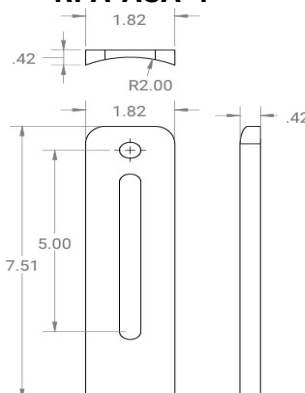
ARCHITECTURAL SWEEP ARM (ASA)

Cast Sweep Arm includes (as standard)
Internal Quick Mount Bracket.

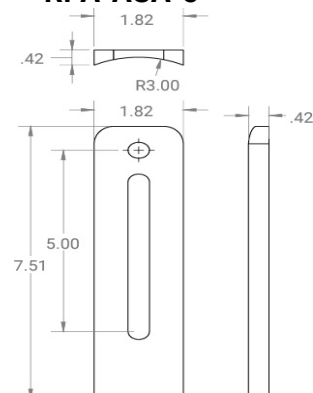


ASA ROUND POLE ADAPTORS

RPA-ASA-4



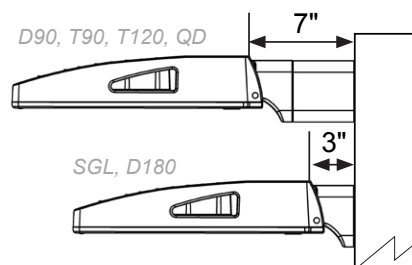
RPA-ASA-5



DIRECT POLE (DP)

Standard mounting arm is extruded
aluminum in lengths of 3" and 7".

**Arm lengths may vary depending on configuration*

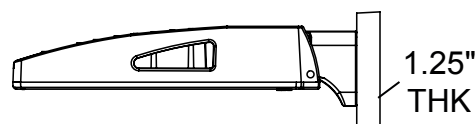


DPX ARM LENGTH

DPX ARM LENGTH	SGL	D90	D180	D180	T90	T120	QD
NV-1	3"	7"	3"	7"	7"	7"	7"

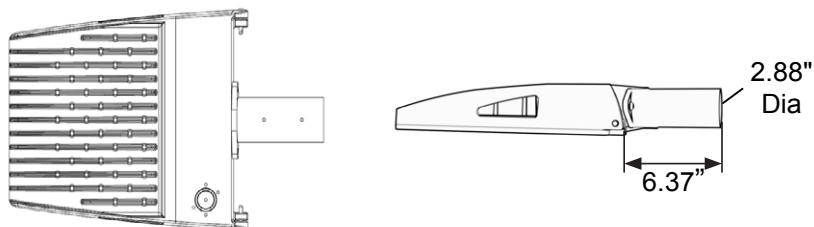
WALL MOUNT (WM)

Cast Aluminum Plate for direct wall mount.
3" extruded aluminum arm mounts directly
to a cast wall mount box.



MAST ARM MOUNT (MA)

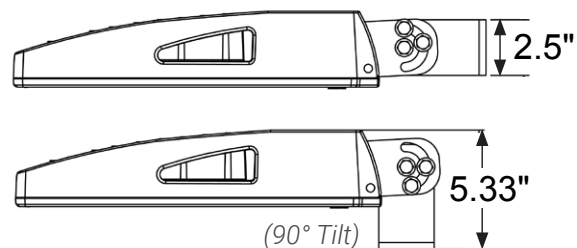
Mast Arm Fitter slips over 2-3/8" OD tenon.



TRUNNION MOUNT (TM)

Steel, bolt-on-mounting for adjustable installation
with a maximum uplift of 90 degrees.

**Unpainted stainless steel is standard*

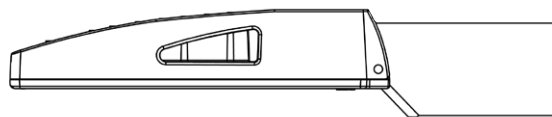


PRODUCT SPECIFICATIONS

MOUNTING OPTIONS (CONTINUED)

TENNIS ARM (TA)

Steel fitter slips over 3.5" x 1.5" rectangular arm. *See Tennis Arm Spec Sheet for details

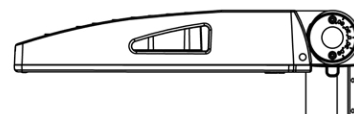
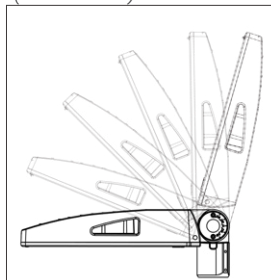


KNUCKLE MOUNT (KM)

Die Cast Knuckle great for adjustable installation on 2-3/8" OD vertical or horizontal tenon.

- Max Up-tilt of 90 degrees
- Adjustable in 6 degree increments
- 1.5G Vibration Rated per ANSI C136.31-2010

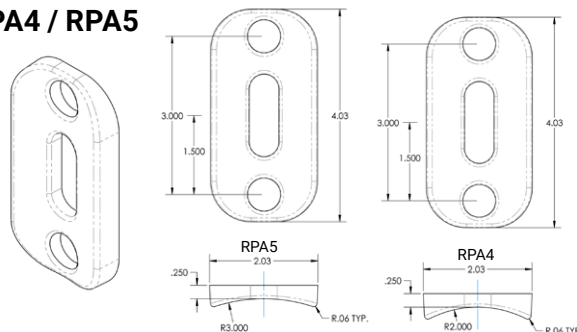
(0-114° Tilt)



ROUND POLE ADAPTER OPTIONS (RPA4) (RPA5)

When using round poles, specify Round Pole Adapter (RPA). Specify RPA4 when installing on 3"-4" round poles, and RPA5 when installing on 5"-6" round poles.

RPA4 / RPA5



QUICK MOUNT BRACKET (QMB)

Optional Cast Aluminum Bracket designed for quick mounting on Direct Square or Round Poles. Cleat mounts directly to pole for easily hung fixtures. Has a 2"x4" Drill Pattern.



RETROFIT MOUNT BRACKET (RQMB)

Optional Cast Aluminum Bracket designed for quick mounting on Direct Square or Round Poles. Cleat mounts directly to pole for easily hung fixtures. Drill Pattern is adjustable from 2"x4" to 2"x6".



PRODUCT SPECIFICATIONS

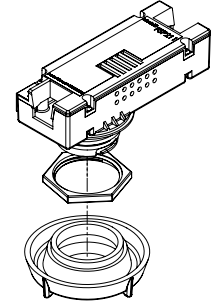
CONTROL OPTIONS

- DIMMING CONTROL (FSP)—Passive infrared (PIR) sensor providing multi-level control based on motion/daylight contribution
- All control parameters adjustable via wireless configuration remote storing and transmitting sensor profiles.
- FSP-8 mounting heights 8 feet and below
- FSP-20 mounting heights 9-20 feet.
- FSP-40 mounting heights 21-40 feet.
- Includes 5 dimming event cycles, 0-10V dimming with motion sensing, re-programmable in the field.

FSP-211 WITH MOTION SENSOR (FSP-XX)

- FSP-211(FSP-X)—Passive infrared (PIR) sensor providing multi-level control based on motion/daylight contribution.
- 120/277VAC, 230-240VAC
- All control parameters adjustable via wireless configuration remote storing and transmitting sensor profiles.
- FSP-8 mounting heights 8 feet and below
- FSP-20 mounting heights 9-20 feet.
- FSP-40 mounting heights 21-40 feet.
- Includes 5 dimming event cycles, 0-10V dimming with motion sensing, re-programmable in the field.

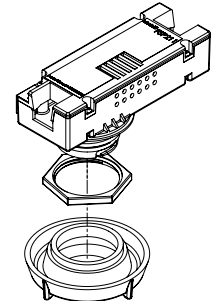
FSP-211



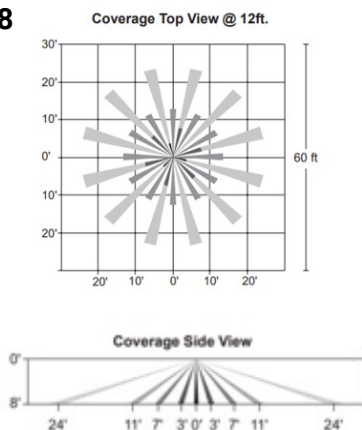
FSP-221 WITH MOTION SENSOR (FSP-HV-XX)

- FSP-221 (FSP-HV-X)—Passive infrared (PIR) sensor providing multi-level control based on motion/daylight contribution.
- 100-347VAC 208/230/480VAC
- All control parameters adjustable via wireless configuration remote storing and transmitting sensor profiles.
- FSP-8 mounting heights 8 feet and below
- FSP-20 mounting heights 9-20 feet.
- FSP-40 mounting heights 21-40 feet.
- Includes 5 dimming event cycles, 0-10V dimming with motion sensing, re-programmable in the field.

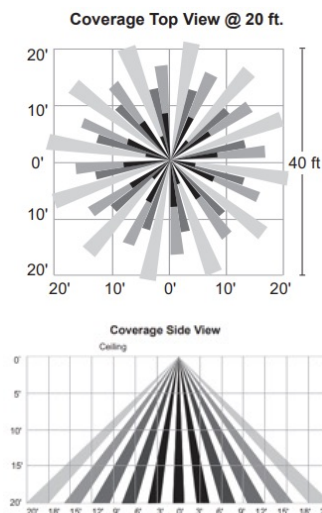
FSP-221



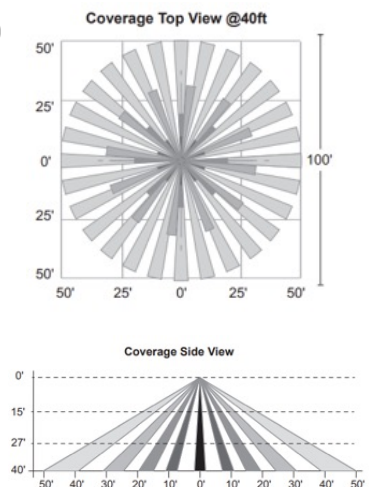
FSP-8



FSP-20



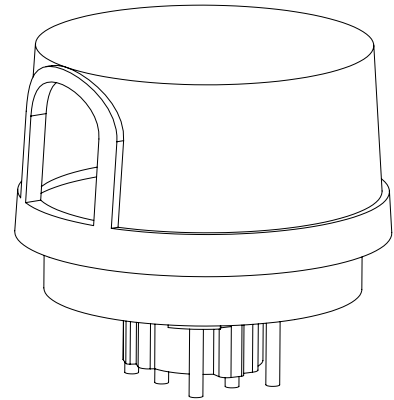
FSP-40



PRODUCT SPECIFICATIONS

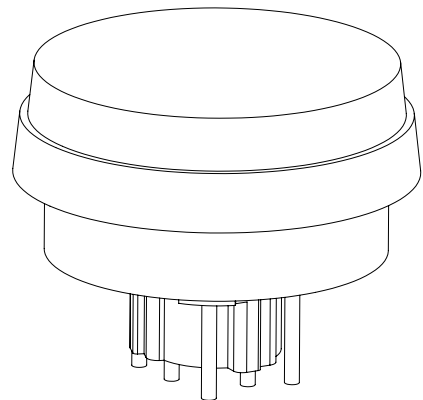
PHOTOCELL + RECEPTACLE (PCR)

7-Pin Receptacle and Electronic Twist Lock Photocell for dusk to dawn operation.



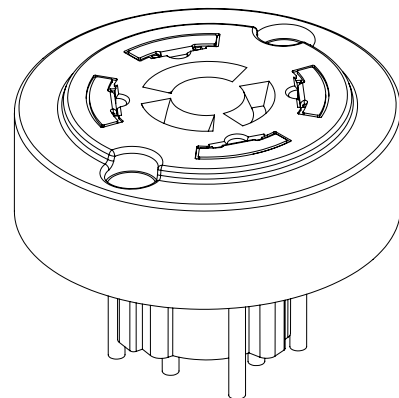
RECEPTACLE + SHORTING CAP (PER)

7-Pin Receptacle and Shorting Cap.



NEMA 7-PIN RECEPTACLE (PE7)

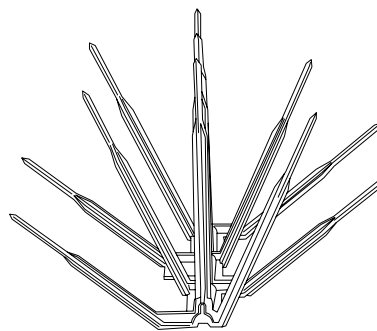
An ANSI C136.41-2013 receptacle provides electrical and mechanical interconnection between photo control cell and luminaire. Dimming receptacle available two or four dimming contacts supports 0-10 VDC dimming methods or Digital Addressable Lighting Interface (DALI), providing reliable power interconnect.



PRODUCT SPECIFICATIONS

BIRD SPIKES (BS)

Bird Spikes offers effective and humane deterrent for larger bird species and provides cost-effective long-term solution to nuisance bird infestations and protect your property.



MARINE GRADE FINISH (MGF)

The **(MGF)** is a multi step process. Chemically washed in a 5 stage cleaning system. Pre-baked. Powder coated 3-5 mils of Zinc Rich Super Durable Polyester Primer. Oven Baked. Finished Powder Coating of Super Durable Polyester Powder Coat 3-5 mil thickness.



Powder Coat Finish

3-5 mil Powder Coat

Primer Layer

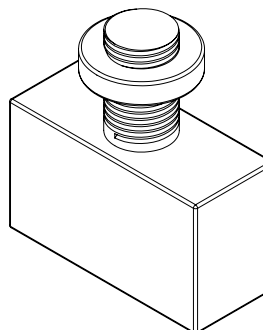
3-5 mil Zinc Rich Super Durable Polyester Primer

Prepared Casting

Chemically washed in multi Step 5 stage cleaning process

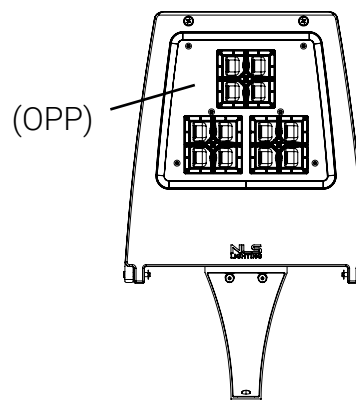
BUTTON PHOTOCELL

Photo Cell for dusk to dawn operation.



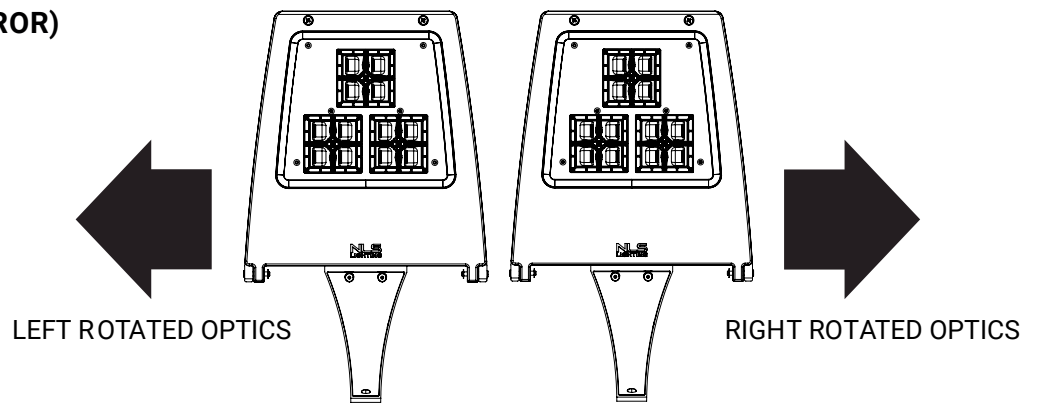
OPTIC PLATE PAINTED TO MATCH (OPP)

Optic plate is clear anodized as standard. The optic plate can be powder coated to match the finish of the fixture.



PRODUCT SPECIFICATIONS

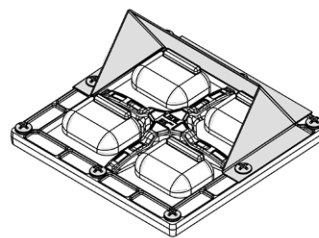
ROTATED OPTICS (ROL) (ROR)



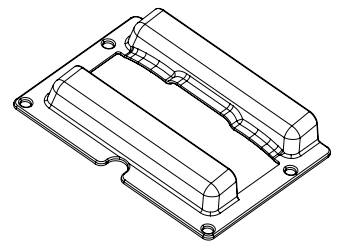
SHIELDING OPTIONS (AHS) (HSS)

SHIELDS (HSS, AHS)—House Side Shield (HSS) is designed for full property line cut-off. Automotive House Side Shield (AHS) is a single-sided shield allowing partial cut-off on either side or front of luminaire.

AUTOMOTIVE HOUSE SIDE SHIELD



HOUSE SIDE SHIELD



BLACK OPTIC FRAME

Optional Black Optic Frame (includes black hardware) Standard Optic Frame is white.

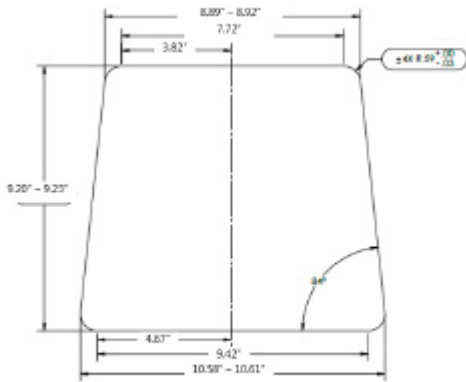


PRODUCT SPECIFICATIONS

LENS OPTIONS

GL LENS (GL)

Low Iron Glass, fully tempered



HAL LENS (HAL)

High Performance Yellow Polycarbonate Lens
(less than 2% Blue Light Content)

