

FEATURES

- Reliable, uniform, glare free illumination
- Types 1, 2, 3, 4W, 5Q, and 5W distributions
- 3000K, 4000K, 5000K CCT
- 0-10V dimming ready
- Integral surge suppression
- Upgrade Kits



SPECIFICATIONS

CONSTRUCTION

- All housing components aluminum 360 alloy, sealed with continuous silicone rubber gaskets
- Standard configurations do not require a flat lens, optional lenses is tempered glass
- All internal and external hardware is stainless steel
- Finish: fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat
- Optical bezel finish is match the luminaire housing

LED/OPTICS

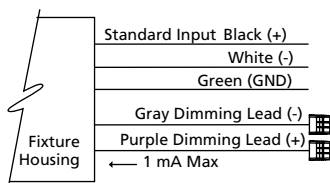
- Optical cartridge system consisting of a die cast heat sink, LED engine, TIR optics, gasket and bezel plate.
- Cartridge is easily disassembled to replace components. Optics are held in place without the use of adhesives.
- Molded silicone gasket ensures a weather-proof seal around each individual LED.
- Features revolutionary individual LED optical control based on high performance TIR optical designs.
- House Side Shield is available on Standard and Clear Lens options except any Type 5 distribution. House Side Shield is not available for any distribution using a Diffused Lens.

INSTALLATION

- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

ELECTRICAL

- Luminaires have integral surge protection, UL recognized and have a surge current rating of 10,000 Amps using the industry standard 8/20uSec wave and surge rating of 372J
- Drivers are UL recognized with an inrush current maximum of <20.0 Amps maximum at 230VAC
- 100%-1% dimming range. Fixture will be wired for low voltage 0-10V dimming control



- Driver and surge suppressor are mounted to a prewired tray with quick disconnects that may be removed from the gear compartment

CONTROLS

- Egress adapter(s) shall slip over a 4"/100mm DIA. pole with the luminaire or arm slipping over the adapter to add a total of 4.5"/114mm to the overall height. Adapter(s) shall be prewired, independently rotatable 359°, and have a cast access cover with an integral lens and lanyard.

MITRE™



Mitre Medium

RELATED PRODUCTS

[M22-LK](#)

[M2 Install](#)

CONTROLS (CONTINUED)

- Photocell adapter shall include an internal twist lock receptacle. Photocell by others.
- Egress adapter shall require an auxiliary 120 volt supply for operation of an integral MR16 lamp in the event of emergency. The lamp may be aimed and locked into position with an adjustment range of 15°-45°. Adapter shall have a socket that accepts miniature bi-pin MR16 lamps up to 50 watts, lamp by others

CERTIFICATIONS

- ETL listed under UL 1598 and CSA C22.2 No. 250.0-08 for wet locations
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 6/06/2020. [See Buy American Solutions.](#)

WARRANTY

- See [HLI Standard Warranty](#) for additional information

KEY DATA	
LUMEN RANGE	1,686–9,051
WATTAGE RANGE	32.2–71.2
EFFICACY RANGE (LPW)	49.1–135.3
INPUT CURRENT RANGE (mA)	260/420/615 mA
WEIGHT	32 lbs / 14.51 kg
EPA	0.90

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

ORDERING GUIDE

Example: M22-36L-325-5K7-4W-BL-PXA-CL-HS-UNV

CATALOG #

HOUSING

M22											
Housing		LED Quantity		Lumen output		CCT/CRI		Distribution		Finish	
M22	Mitre Medium 2.0	36L	36 LED	260	260mA, 4000 Lumens	AMB	Amber-595nm Peak ¹	1	Type I	BLS	Black Gloss Smooth
				325	450mA Microcore Crossover	3K7	3000K, 70 CRI	2	Type II	BLT	Black Matte Textured
				420	420mA, 6000 Lumens	4K7	4000K, 70 CRI	3	Type III	DBS	Dark Bronze Gloss Smooth
				475	700mA Microcore Crossover	5K7	5000K, 70 CRI	4W	Type IV Wide	DBT	Dark Bronze Matte Textured
				615	615mA, 7500 Lumens			5Q	Type V Square	GTT	Graphite Matte Textured
								5W	Type V Wide	LGS	Light Grey Gloss Smooth
										LGT	Light Grey Matte Textured
										PSS	Platinum Silver Gloss Smooth
										VGT	Verde Green Matte Textured
										WHS	White Gloss Smooth
										WHT	White Matte Textured
										Color Option	
										CC ²	Custom Color

DELIVERED LUMENS

The table below shows the delivered lumens for the various lumen outputs and beam distributions. Use this chart in connection with the lumen factor (LF) capability to deliver any output required.

LED #	Drive Current	Lumen Package	Lens	Distribution	3000K 70CRI					4000K 70CRI					5000K 70CRI				
					Lumen	Bug Rating			Efficacy (Lm/W)	Lumen	Bug Rating			Efficacy (Lm/W)	Lumen	Bug Rating			Efficacy (Lm/W)
36	260	4000	None	1	4061	1	0	0	126.2	4162	1	0	0	129.3	4370	1	0	0	135.3
				2	3734	1	0	1	116.0	3826	1	0	1	118.9	4018	1	0	1	124.5
				3	3684	1	0	1	114.2	3775	1	0	1	117.5	3964	1	0	1	122.6
				4W	3663	1	0	2	113.8	3753	1	0	2	116.6	3941	1	0	2	122.7
				1-HS	2330	0	0	0	72.4	2387	0	0	0	74.2	2507	0	0	0	78.2
				2-HS	2017	0	0	0	62.7	2067	0	0	0	64.2	2170	0	0	0	67.2
				3-HS	1967	0	0	1	61.1	2016	0	0	1	62.6	2117	0	0	1	66.1
				4W-HS	2047	0	0	1	63.6	2098	0	0	1	65.2	2203	0	0	1	68.6
				5Q	3867	2	0	0	120.2	3963	2	0	0	123.1	4161	2	0	0	129.5
				5W	3759	2	0	1	116.8	3852	2	0	1	119.7	4045	3	0	1	125.8
			Clear	1	3479	1	0	0	108.1	3565	1	0	0	110.8	3744	1	0	0	116.3
				2	3199	1	0	1	99.4	3278	1	0	1	101.9	3442	1	0	1	107.0
				3	3156	1	0	1	98.1	3234	1	0	1	100.5	3396	1	0	1	105.7
				4W	3138	1	0	1	97.5	3215	1	0	1	99.9	3376	1	0	1	104.9
				1-HS	1996	0	0	0	62.0	2045	0	0	0	63.6	2148	0	0	0	66.7
				2-HS	1728	0	0	0	53.7	1770	0	0	0	55.0	1859	0	0	0	57.8
				3-HS	1686	0	0	1	52.4	1727	0	0	1	53.7	1814	0	0	1	56.4
				4W-HS	1754	0	0	1	54.5	1797	0	0	1	55.9	1887	0	0	1	58.6
				5Q	3313	2	0	0	103.0	3395	2	0	0	105.5	3565	2	0	0	110.8
				5W	3221	2	0	1	100.1	3300	2	0	1	102.6	3465	2	0	1	107.7
			Diffused	3	2643	1	0	1	82.3	2708	1	0	1	84.4	2844	1	0	1	88.5
				5W	2638	1	0	1	82.2	2704	1	0	1	84.2	2839	1	0	1	88.6
	325	Microcore Crossover	None	1	4948	1	0	0	119.9	5070	1	0	0	122.9	5324	1	0	0	129.1
				2	4549	1	0	1	110.3	4661	1	0	1	113.0	4895	1	0	1	118.7
				3	4488	1	0	1	108.8	4599	1	0	1	111.5	4829	1	0	2	117.1
				4W	4462	1	0	2	108.2	4572	1	0	2	110.8	4801	1	0	2	116.4
				1-HS	2838	0	0	0	68.8	2908	0	0	0	70.5	3054	0	0	0	74.0
				2-HS	2457	0	0	0	59.6	2517	0	0	0	61.0	2644	0	0	0	64.1
				3-HS	2397	0	0	1	58.1	2456	0	0	1	59.5	2579	0	0	1	62.5
				4W-HS	2494	0	0	1	60.5	2556	0	0	1	62.0	2684	0	0	1	65.1
				5Q	4711	2	0	1	114.2	4827	2	0	1	117.0	5069	2	0	1	122.9
				5W	4580	3	0	1	111.0	4693	3	0	1	113.8	4928	3	0	1	119.5
			Clear	1	4239	1	0	0	102.8	4343	1	0	0	105.3	4561	1	0	0	110.6
				2	3897	1	0	1	94.5	3993	1	0	1	96.8	4193	1	0	1	101.7
				3	3845	1	0	1	93.2	3940	1	0	1	95.5	4137	1	0	1	100.3
				4W	3823	1	0	2	92.7	3917	1	0	2	95.0	4113	1	0	2	99.7
				1-HS	2432	0	0	0	58.9	2492	0	0	0	60.4	2616	0	0	0	63.4
				2-HS	2105	0	0	0	51.0	2157	0	0	0	52.3	2265	0	0	0	54.9
				3-HS	2053	0	0	1	49.8	2104	0	0	1	51.0	2209	0	0	1	53.6
				4W-HS	2137	0	0	1	51.8	2190	0	0	1	53.1	2299	0	0	1	55.7
				5Q	4036	2	0	0	97.8	4136	2	0	0	100.3	4343	2	0	1	105.3
				5W	3923	3	0	1	95.1	4020	3	0	1	97.5	4222	3	0	1	102.3
			Diffused	3	3185	1	0	1	77.2	3264	1	0	1	79.1	3427	1	0	1	83.1
				5W	3250	1	0	1	78.8	3330	1	0	1	80.7	3497	1	0	1	84.8

DELIVERED LUMENS (CONTINUED)

The table below shows the delivered lumens for the various lumen outputs and beam distributions. Use this chart in connection with the lumen factor (LF) capability to deliver any output required.

LED #	Drive Current	Lumen Package	Lens	Distribution	3000K 70CRI					4000K 70CRI					5000K 70CRI				
					Lumen	Bug Rating			Efficacy (Lm/W)	Lumen	Bug Rating			Efficacy (Lm/W)	Lumen	Bug Rating			Efficacy (Lm/W)
36	420	6000	None	1	6054	1	0	1	122.0	6204	1	0	1	125.0	6514	1	0	1	131.3
				2	5566	1	0	1	112.2	5704	1	0	1	115.0	5989	1	0	1	120.7
				3	5492	1	0	2	110.7	5627	1	0	2	113.4	5909	1	0	2	119.1
				4W	5460	1	0	2	110.0	5595	1	0	2	112.7	5875	1	0	2	118.4
				1-HS	3473	0	0	0	70.0	3559	0	0	0	71.7	3737	0	0	0	75.3
				2-HS	3006	0	0	1	60.6	3081	0	0	1	62.1	3235	0	0	1	65.2
				3-HS	2933	0	0	1	59.1	3005	0	0	1	60.6	3156	0	0	1	63.6
				4W-HS	3052	0	0	1	61.5	3127	0	0	1	63.0	3284	0	0	1	66.2
				5Q	5765	2	0	1	116.2	5907	2	0	1	119.0	6203	2	0	1	125.0
				5W	5604	3	0	1	112.9	5742	3	0	1	115.7	6030	3	0	1	121.5
			Clear	1	5187	1	0	0	104.6	5315	1	0	0	107.2	5581	1	0	0	112.5
				2	4769	1	0	1	96.1	4887	1	0	1	98.5	5131	1	0	1	103.5
				3	4705	1	0	1	94.9	4821	1	0	1	97.2	5062	1	0	1	102.1
				4W	4677	1	0	2	94.3	4793	1	0	2	96.6	5033	1	0	2	101.5
				1-HS	2975	0	0	0	60.0	3049	0	0	0	61.5	3202	0	0	0	64.5
				2-HS	2575	0	0	0	51.9	2639	0	0	0	53.2	2771	0	0	0	55.9
				3-HS	2513	0	0	1	50.7	2575	0	0	1	51.9	2704	0	0	1	54.5
				4W-HS	2615	0	0	1	52.7	2679	0	0	1	54.0	2813	0	0	1	56.7
				5Q	4939	2	0	1	99.6	5061	2	0	1	102.0	5314	2	0	1	107.1
				5W	4801	3	0	1	96.8	4919	3	0	1	99.2	5166	3	0	1	104.1
			Diffused	3	3897	1	0	1	78.6	3993	1	0	1	80.5	4193	1	0	1	84.5
				5W	3977	2	0	1	80.2	4075	2	0	1	82.2	4279	2	0	1	86.3
	475	Microcore Crossover	None	1	6733	1	0	1	118.8	6900	1	0	1	121.8	7245	1	0	1	127.8
				2	6191	1	0	1	109.2	6344	1	0	2	111.9	6662	1	0	2	117.5
				3	6108	1	0	2	107.8	6259	1	0	2	110.4	6572	1	0	2	116.0
				4W	6072	1	0	2	107.2	6222	1	0	2	109.8	6534	1	0	2	115.3
				1-HS	3863	0	0	0	68.2	3958	0	0	0	69.8	4156	0	0	0	73.3
				2-HS	3344	0	0	1	59.0	3426	0	0	1	60.5	3598	0	0	1	63.5
				3-HS	3262	0	0	1	57.6	3342	0	0	1	59.0	3510	0	0	1	61.9
				4W-HS	3394	0	0	1	59.9	3478	0	0	1	61.4	3652	0	0	1	64.5
				5Q	6411	2	0	1	113.1	6570	3	0	1	115.9	6899	3	0	1	121.7
				5W	6233	3	0	1	110.0	6387	3	0	1	112.7	6706	3	0	1	118.3
			Clear	1	5769	1	0	0	101.8	5911	1	0	1	104.3	6207	1	0	1	109.5
				2	5304	1	0	1	93.6	5435	1	0	1	95.9	5707	1	0	1	100.7
				3	5233	1	0	2	92.3	5362	1	0	2	94.6	5630	1	0	2	99.4
				4W	5202	1	0	2	91.8	5331	1	0	2	94.1	5598	1	0	2	98.8
				1-HS	3309	0	0	0	58.4	3391	0	0	0	59.8	3561	0	0	0	62.8
				2-HS	2864	0	0	0	50.5	2935	0	0	1	51.8	3082	0	0	1	54.4
				3-HS	2795	0	0	1	49.3	2864	0	0	1	50.5	3007	0	0	1	53.1
				4W-HS	2908	0	0	1	51.3	2980	0	0	1	52.6	3129	0	0	1	55.2
				5Q	5493	2	0	1	96.9	5628	2	0	1	99.3	5910	2	0	1	104.3
				5W	5340	3	0	1	94.2	5471	3	0	1	96.5	5745	3	0	1	101.4
			Diffused	3	4334	1	0	1	76.5	4441	1	0	1	78.4	4664	1	0	1	82.3
				5W	4423	2	0	1	78.0	4532	2	0	1	80.0	4759	2	0	1	84.0

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

DELIVERED LUMENS (CONTINUED)

The table below shows the delivered lumens for the various lumen outputs and beam distributions. Use this chart in connection with the lumen factor (LF) capability to deliver any output required.

LED #	Drive Current	Lumen Package	Lens	Distribution	3000K 70CRI					4000K 70CRI					5000K 70CRI				
					Lumen	Bug Rating			Efficacy (Lm/W)	Lumen	Bug Rating			Efficacy (Lm/W)	Lumen	Bug Rating			Efficacy (Lm/W)
36	615	7500	None	1	8412	1	0	1	118.3	8619	1	0	1	121.2	9051	1	0	1	127.2
				2	7734	1	0	2	108.7	7925	1	0	2	111.4	8322	1	0	2	117.0
				3	7630	1	0	2	107.3	7819	1	0	2	109.9	8210	1	0	2	115.4
				4W	7586	1	0	2	106.6	7773	1	0	3	109.3	8162	1	0	3	114.8
				1-HS	4826	0	0	0	67.8	4945	0	0	0	69.5	5192	0	0	0	73.0
				2-HS	4177	0	0	1	58.7	4280	0	0	1	60.2	4494	0	0	1	63.2
				3-HS	4075	0	0	1	57.3	4176	0	0	1	58.7	4385	0	0	1	61.6
				4W-HS	4240	0	0	1	59.6	4345	0	0	1	61.1	4563	0	0	2	64.1
				5Q	8009	3	0	1	112.6	8207	3	0	1	115.4	8618	3	0	1	121.2
			5W	7786	3	0	2	109.5	7978	3	0	2	112.2	8378	3	0	2	117.8	
			Clear	1	7206	1	0	1	101.4	7384	1	0	1	103.9	7754	1	0	1	109.1
				2	6626	1	0	2	93.2	6789	1	0	2	95.5	7129	1	0	2	100.3
				3	6537	1	0	2	91.9	6698	1	0	2	94.2	7034	1	0	2	98.9
				4W	6499	1	0	2	91.4	6659	1	0	2	93.7	6993	1	0	2	98.4
				1-HS	4134	0	0	0	58.1	4236	0	0	0	59.6	4448	0	0	0	62.6
				2-HS	3578	0	0	1	50.3	3667	0	0	1	51.6	3850	0	0	1	54.2
				3-HS	3491	0	0	1	49.1	3577	0	0	1	50.3	3756	0	0	1	52.8
				4W-HS	3633	0	0	1	51.1	3723	0	0	1	52.4	3909	0	0	1	55.0
				5Q	6862	3	0	1	96.5	7031	3	0	1	98.9	7383	3	0	1	103.8
			5W	6670	3	0	1	93.8	6835	3	0	1	96.1	7177	3	0	2	100.9	
			Diffused	3	5415	1	0	1	76.2	5548	1	0	1	78.0	5826	2	0	1	81.9
				5W	5525	2	0	1	77.7	5662	2	0	1	79.6	5945	2	0	1	83.6

PHOTOMETRY

M2-36L-615-4K7-1

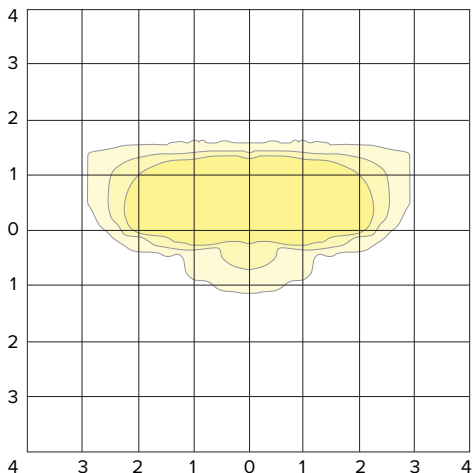
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	8619
Watts	71.13
Efficacy	121.2
IES Type	II
BUG Rating	B1-U0-G1
Mounting Height	15 ft
Grid Scale	15 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	7652	89%
Downward House Side	967	11%
Downward Total	8619	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	8619	100%

ISOFOOT CANDLE PLOT



M2-36L-615-4K7-2

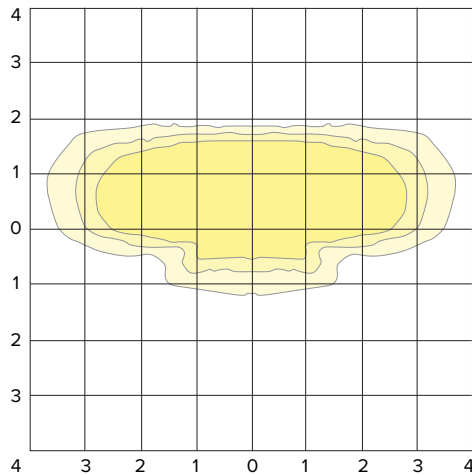
LUMINAIRE DATA

Description	4000 Kelvin, 70CRI
Delivered Lumens	7925
Watts	71.13
Efficacy	111.4
IES Type	II
BUG Rating	B1-U0-G2
Mounting Height	15 ft
Grid Scale	15 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6643	84%
Downward House Side	1281	16%
Downward Total	7925	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	7925	100%

ISOFOOT CANDLE PLOT



M2-36L-615-4K7-3

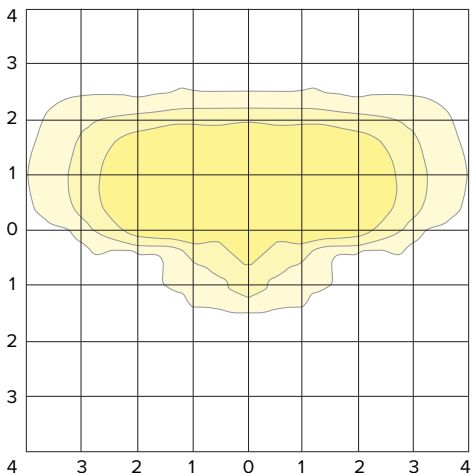
LUMINAIRE DATA

Description	4000 Kelvin, 70CRI
Delivered Lumens	7819
Watts	71.13
Efficacy	109.9
IES Type	III
BUG Rating	B1-U0-G2
Mounting Height	15 ft
Grid Scale	15 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6622	85%
Downward House Side	1197	15%
Downward Total	7819	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	7819	100%

ISOFOOT CANDLE PLOT



PHOTOMETRY

M2-36L-615-4K7-4W

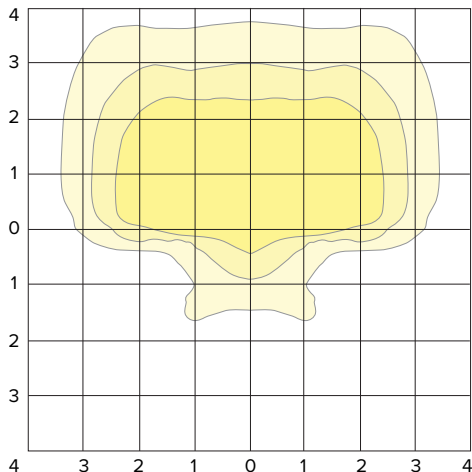
LUMINAIRE DATA

Description	4000 Kelvin, 70CRI
Delivered Lumens	7773
Watts	71.13
Efficacy	109.3
IES Type	IV
BUG Rating	B1-U0-G3
Mounting Height	15 ft
Grid Scale	15 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6846	88%
Downward House Side	927	12%
Downward Total	7773	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	7773	100%

ISOFOOT CANDLE PLOT



M2-36L-615-4K7-5Q

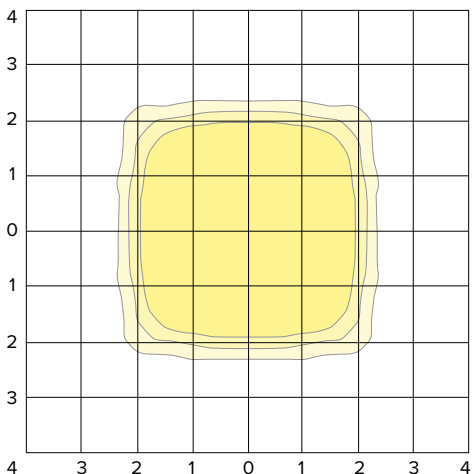
LUMINAIRE DATA

Description	4000 Kelvin, 70CRI
Delivered Lumens	8207
Watts	71.13
Efficacy	115.4
IES Type	VS
BUG Rating	B3-U0-G1
Mounting Height	15 ft
Grid Scale	15 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	4103	50%
Downward House Side	4103	50%
Downward Total	8207	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	8207	100%

ISOFOOT CANDLE PLOT



M2-36L-615-4K7-5W

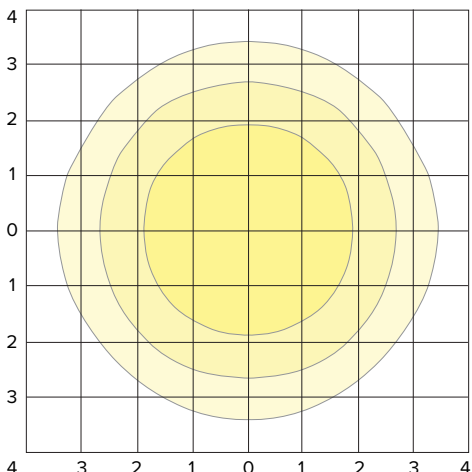
LUMINAIRE DATA

Description	4000 Kelvin, 70CRI
Delivered Lumens	7978
Watts	71.13
Efficacy	112.2
IES Type	VS
BUG Rating	B3-U0-G2
Mounting Height	15 ft
Grid Scale	15 ft

ZONAL LUMEN SUMMARY

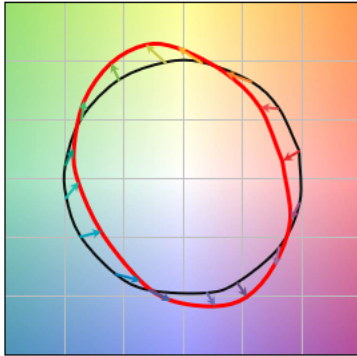
Zone	Lumens	% Luminaire
Downward Street Side	3989	50%
Downward House Side	3989	50%
Downward Total	7978	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	7978	100%

ISOFOOT CANDLE PLOT



TM-30 DATA

COLOR VECTOR GRAPHIC

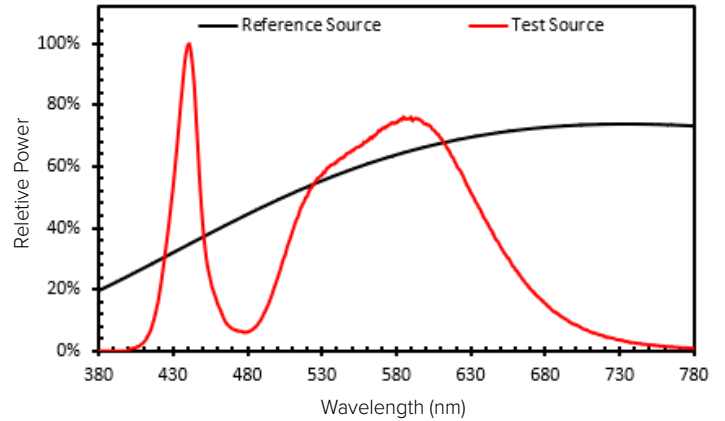


— Reference Illuminant — Test Source

TEST SOURCE

MBM TEST RESULTS	
CCT (K)	3947
CIE Ra	72
Duv	0.0004
x	0.3831
y	0.3793
Rf	68
Rg	99

SPECTRAL POWER DISTRIBUTION COMPARISON



ELECTRICAL DATA

Electrical									Dimming					
System Current	System Watts	Line Voltage		Amps AC				Min. Power Factor	Max THD (%)	Dimming Range	Source current out of 0-10V		Absolute voltage range on 0-10V (+)	
		VAC	HZ	120	208	240	277				Min	Max	Min	Max
260 mA	32.2	120-277	50/60	0.27	0.15	0.13	0.12	>0.9	20	10% to 100%	0mA	1mA	0V	10V
325 mA	41.3			0.34	0.20	0.17	0.15							
420 mA	49.6			0.41	0.24	0.21	0.18							
475 mA	56.7			0.47	0.27	0.24	0.20							
615 mA	71.1			0.59	0.34	0.30	0.26							

AMBER MULTIPLIER	
CCT	MULTIPLIER
5000K	1
AM	0.1727

2700K MULTIPLIER	
CCT	MULTIPLIER
5000K	1
2700K	0.897

LENS OPTION MULTIPLIER	
CLEAR LENS	DIFFUSED LENS
0.8567	0.7096