



# TENNIS to PICKLEBALL

Court Lighting Conversion Guide

# LIGHTING SOLUTIONS AT ALL LEVELS

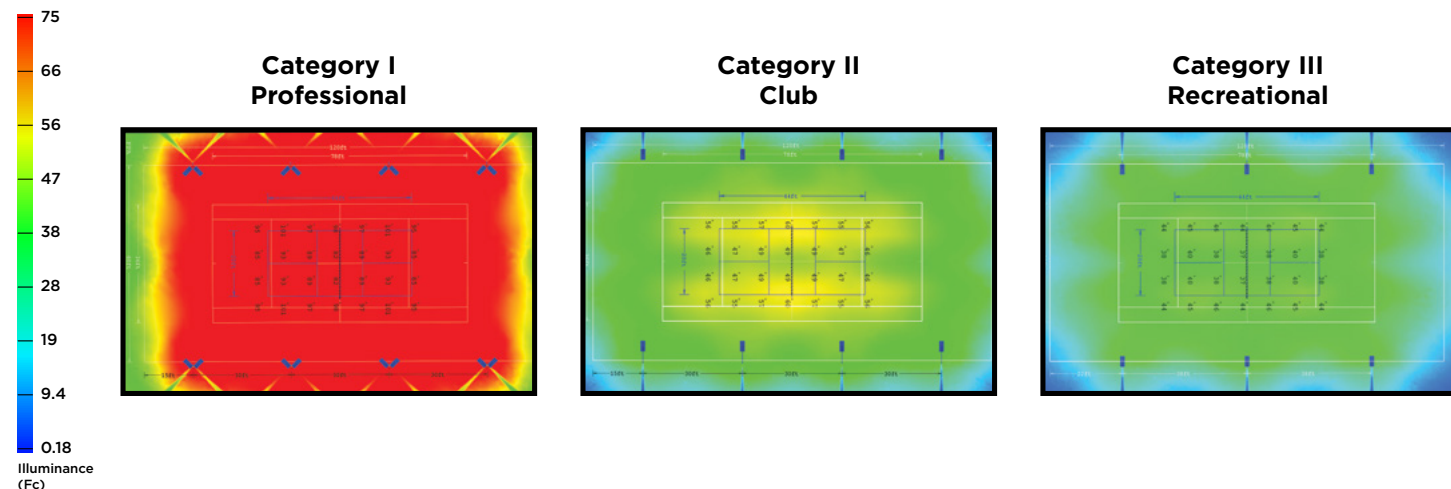
The conversion of existing lighted tennis courts to pickleball courts is straight forward. Most tennis courts in use today utilize 6 or 8 poles with 1 or 2 HID luminaires per pole. The 3 scenarios on the right show a one, two and four pickleball court layout per tennis court. Existing HID fixtures are replaced with new LED ZONE luminaires which incorporate a unique court optic to meet USA Pickleball recommended lighting requirements based on category of play. Existing poles and pole locations are used to minimize costs. All courts are designed to USA Pickleball recommended levels (see below for details) based on the category of play from recreational to professional. Below is a graphic representation of the intensity of LSI outdoor pickleball court lighting to compare the three categories of play.



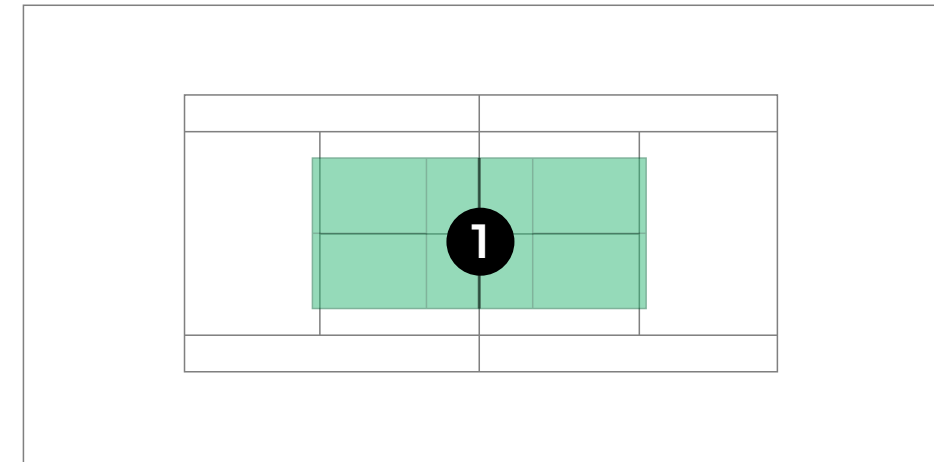
Recommended Horizontal Illumination			
Performance Criteria	Category I	Category II	Category III
Average Maintained Horizontal Foot-candles within PPA (HA)	75 (750 lux)	50 (500 lux)	30 (300 lux)
Minimum Maintained Horizontal Foot-candles within PPA (HM)	60 (600 lux)	40 (400 lux)	20 (200 lux)
Maximum Uniformity Ratio (HMM)	1.7	2.0	2.0

Recommended Vertical Illumination			
Performance Criteria	Category I	Category II	Category III
Average Maintained Vertical Foot-candles within PPA (VA)	50 (500 lux)	30 (300 lux)	20 (200 lux)
Maximum Uniformity Ratio (VMM)	1.7	2.0	2.0

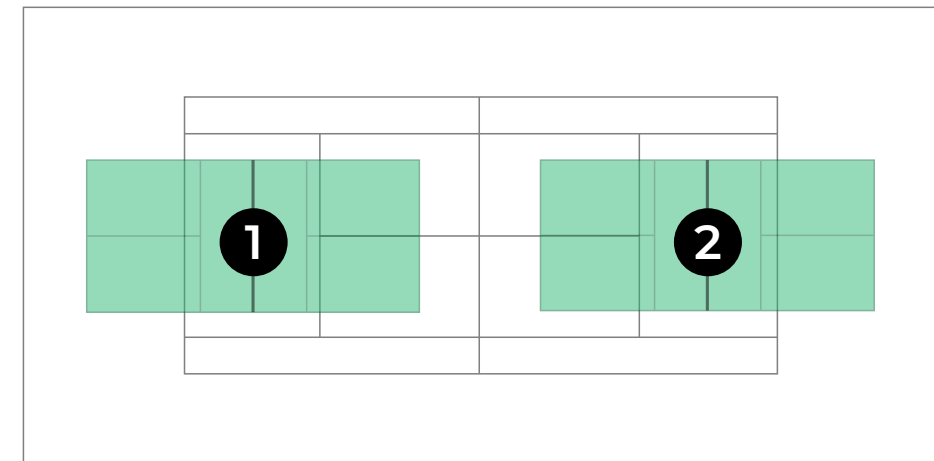
\*As seen in ASBA construction and maintenance manual.



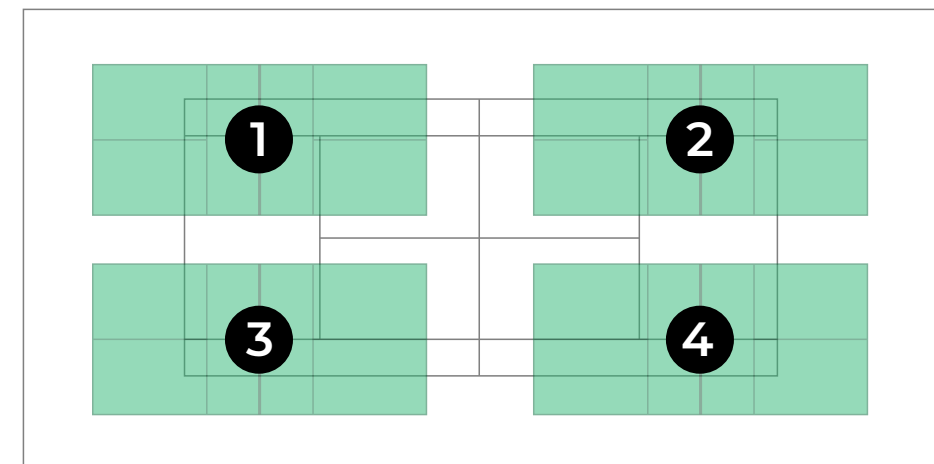
1 Pickleball Court per Tennis Court



2 Pickleball Courts per Tennis Court



4 Pickleball Courts per Tennis Court





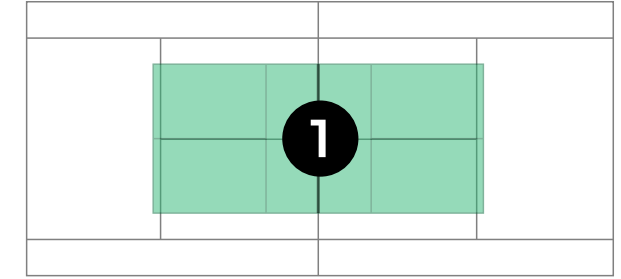
# APPLICATION SUMMARY TABLE - 1:1

The table below indicates the category of play that a specific pole/fixture combination and ZONE fixture combination meet in all the key lighting criteria.

The LSI Courtsider HID (CXLS) design is shown first as a baseline for comparison to LSI's new ZONE LED luminaire with our court optic. The table includes four common pole/fixture combinations and shows light levels for the key criteria. The colors indicate the highest category of play for each of the key criteria achieved by that specific design. If all colors are the same for a given pole/fixture configuration and ZONE fixture then all criteria have been met for the category of play (i.e. all red means Class 1 Professional criteria was achieved). If all 3 colors are different for a given pole/fixture configuration and ZONE fixture then only the minimum criteria was achieved (i.e. 1 red, 1 blue and 3 green means Class 3 Recreation criteria was achieved).

## Class 2 - Club Level Example

(8) Poles & (8) Fixtures				
HA	HM	HMM	VA	VMM
52	46	1.3	36	1.1



### Play Level

- = Class 1 Professional
- = Class 2 Club
- = Class 3 Recreation

### Key Criteria (Footcandles)

- HA = Horizontal Average
- HM = Horizontal Minimum
- HMM = Horizontal Max to Min
- VA = Vertical Average
- VMM = Vertical Max to Min

Fixture	Lumens	Delivered Lumens <sup>1</sup>	Energy Consumption	(6) Poles & (6) Fixtures					(8) Poles & (8) Fixtures					(6) Poles & (12) Fixtures 180° vs. 70° Fixture Mounting					(8) Poles & (16) Fixtures 180° vs. 70° Fixture Mounting					Fixture Mounting Height	
				HA	HM	HMM	VA	VMM	HA	HM	HMM	VA	VMM	HA	HM	HMM	VA	VMM	HA	HM	HMM	VA	VMM		
LSI Courtsider																									
CXLS 1000 MHR F	81,416	100%	100%	35	31	1.3	6	1.0	45	42	1.3	24	1.5	46	22	3.8	15	1.2	62	31	2.9	23	1.6	22"	
LSI Zone Area Light																									
Zone Area with Court Optic	ZNM-24L-CT-50	26,393	51%	16%															32	21	2.1	15	1.6	20"	
	ZNM-30L-CT-50	32,960	63%	22%										30	18	2.9	7	1.3	40	27	2.1	18	1.6	20"	
	ZNM-36L-CT-50	38,916	75%	27%										35	21	3.0	8	1.3	46	37	1.5	21	1.3	22"	
	ZNM-42L-CT-50	44,859	86%	33%						32	22	2.0	15	1.4	41	24	3.0	9	1.3	47	32	2.0	22	1.6	20"
	ZNM-48L-CT-50	49,615	95%	37%						35	25	1.9	17	1.4	45	27	2.9	10	1.3	55	44	1.5	25	1.3	22"
	ZNL-50L-CT-50	54,622	105%	35%						37	26	1.9	18	1.5	47	26	3.2	11	1.3	54	36	2.1	25	1.6	20"
	ZNL-60L-CT-50	60,978	117%	42%						42	30	1.8	20	1.4	53	29	3.2	12	1.3	63	51	1.5	29	1.3	22"
	ZNL-65L-CT-50	70,062	135%	48%	35	21	2.9	6	1.1	47	33	1.9	23	1.5	61	34	3.2	14	1.3	60	40	2.1	28	1.6	20"
	ZNL-78L-CT-50	80,625	155%	61%	40	25	2.8	6	1.1	54	38	1.9	26	1.5	70	39	3.2	16	1.3	70	56	1.5	32	1.3	22"
																			80	64	1.5	38	1.3	22"	
																			81	53	2.1	37	1.8	20"	
																			92	74	1.5	43	1.3	22"	
																			94	61	2.1	42	1.8	20"	
																			105	85	1.5	50	1.3	22"	
Zone Area with Forward Throw Optic	ZNM-24L-FT-50	25,964	50%	16%										29	28	1.1	17	1.1	37	35	1.1	26	1.0	20'	
	ZNM-30L-FT-50	32,425	62%	22%					25	24	1.1	17	1.0	37	34	1.2	21	1.1	46	44	1.1	33	1.0	20'	
	ZNM-36L-FT-50	38,284	74%	27%					30	28	1.1	20	1.0	44	41	1.1	24	1.1	55	51	1.2	39	1.0	20'	
	ZNM-42L-FT-50	44,130	85%	33%					34	32	1.2	24	1.0	50	47	1.1	28	1.1	63	59	1.2	44	1.0	20'	
	ZNM-48L-FT-50	48,810	94%	37%					38	36	1.1	26	1.0	56	52	1.1	31	1.1	70	66	1.1	49	1.0	20'	
	ZNL-50L-FT-50	53,978	104%	35%	32	29	1.2	16	1.1	41	36	1.3	28	1.1	59	51	1.3	33	1.1	74	65	1.3	51	1.1	20'
	ZNL-60L-FT-50	60,561	116%	42%	36	32	1.3	18	1.1	46	41	1.3	31	1.1	66	57	1.3	37	1.1	83	72	1.3	57	1.3	20'
	ZNL-65L-FT-50	69,237	133%	48%	42	37	1.2	21	1.1	52	46	1.3	36	1.1	75	65	1.3	42	1.1	95	83	1.3	65	1.1	20'
	ZNL-78L-FT-50	79,676	153%	61%	48	42	1.3	24	1.1	60	53	1.3	41	1.1	86	75	1.3	48	1.1	109	95	1.3	75	1.1	20'

<sup>1</sup>HID Fixture Lumen Efficiency = 62%, LED Fixture Lumen Efficiency = 97%



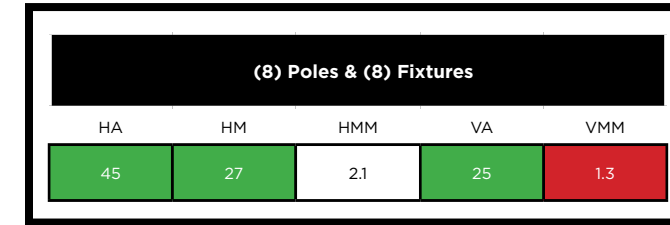


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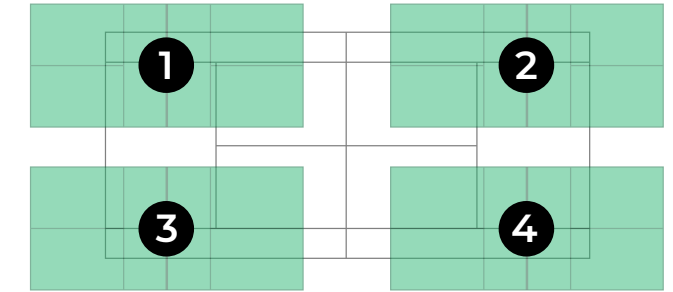


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# CONTROL YOUR LIGHTING

We offer two wireless outdoor lighting control systems that are ideal for pickleball courts.

## AIRLINK BLUE

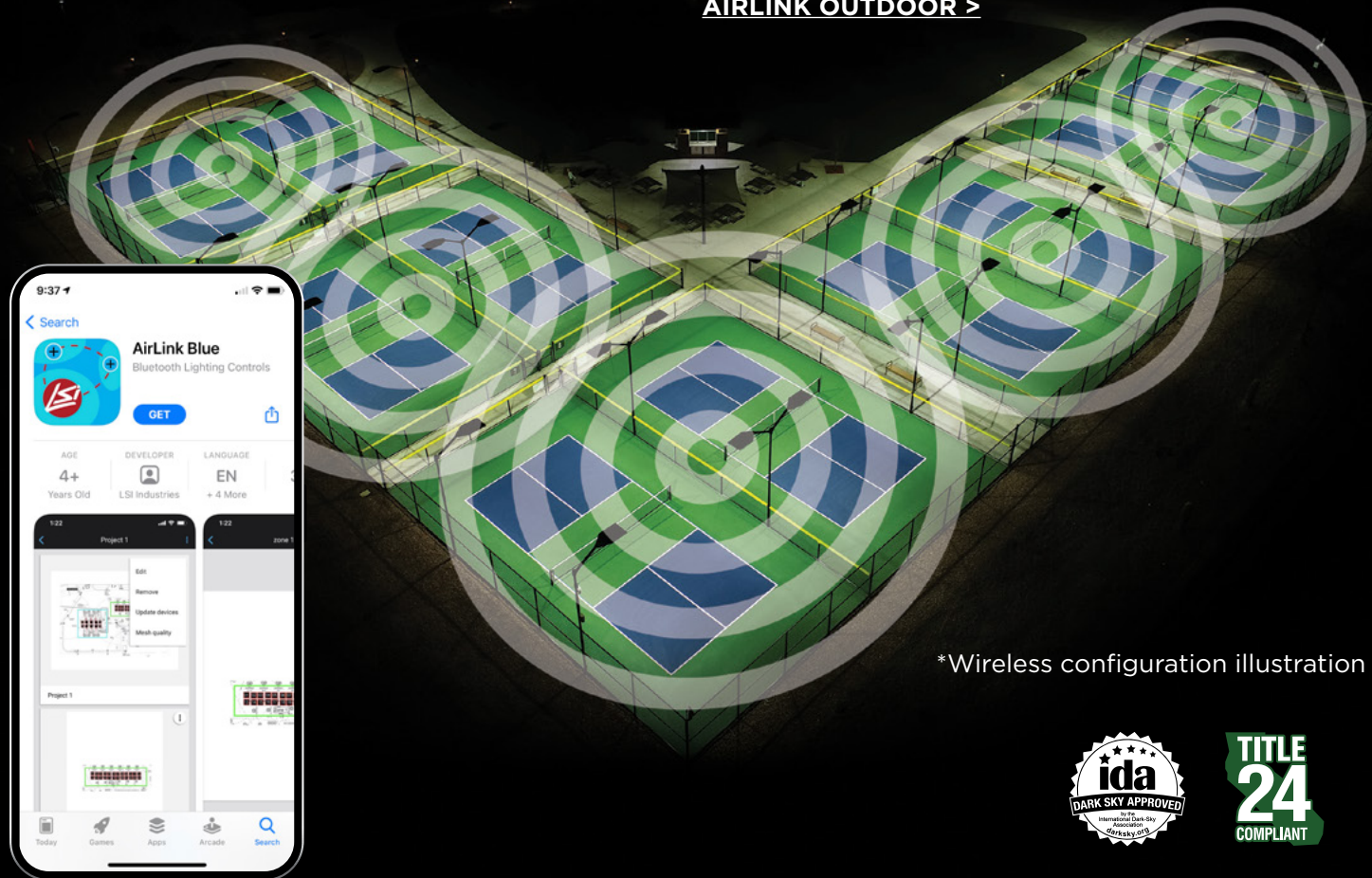
- Simple, highly configurable wireless control system
- Bluetooth Mesh technology
- Fixture integrated motion sensors
- System settings are easily changed with iOS smartphone app
- User friendly interface
- Setup multiple zones, each with their own configuration
- Add a Time Keeper and configure based on the time of day

[AIRLINK BLUE >](#)

## AIRLINK OUTDOOR

- Highly configurable wireless control system
- Utilizes a 2.4 GHz self-healing mesh network
- Web interface for remote and local access
- Menu allows quick view and edit of fixtures, zones, scenes & schedules
- Fixture integrated motion sensors
- Group fixtures into zones to manage daily functions
- Scheduling and timed event capabilities
- Satellite map view displays energy usage information

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\*Wireless configuration illustration



# CREATE YOUR COURT

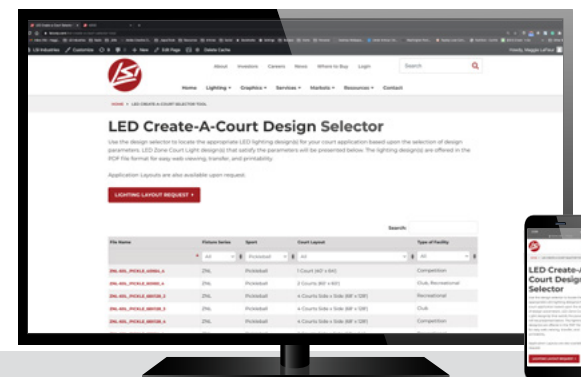
Use the design selector to locate the appropriate LED lighting design(s) for your court application based upon the selection of design parameters. LED Zone Court Light design(s) that satisfy the parameters will be presented. The lighting design(s) are offered in the PDF file format for easy web viewing, transfer, and printability.

Application requests for custom designs are also available upon request.

Visit us online at [www.lsicorp.com/led-create-a-court-selector-tool/](http://www.lsicorp.com/led-create-a-court-selector-tool/) to get started.



Click the link above or scan the QR code to learn more.



# UPGRADE YOUR COURT

Use the Court Lighting Upgrade Guide to understand what it takes to upgrade existing HID lighting to LSI's high-performance LED lighting in just **4 easy steps**. Upgrading your pickleball court lighting will help lower energy and maintenance costs while improving the player and fan experience.

Visit us online at [www.lsicorp.com/pickleball](http://www.lsicorp.com/pickleball) to get started.



Scan the QR code to download our quick reference guide.



Official Lighting Partner of USA Pickleball



Official pickleball court lighting provider for the IFP



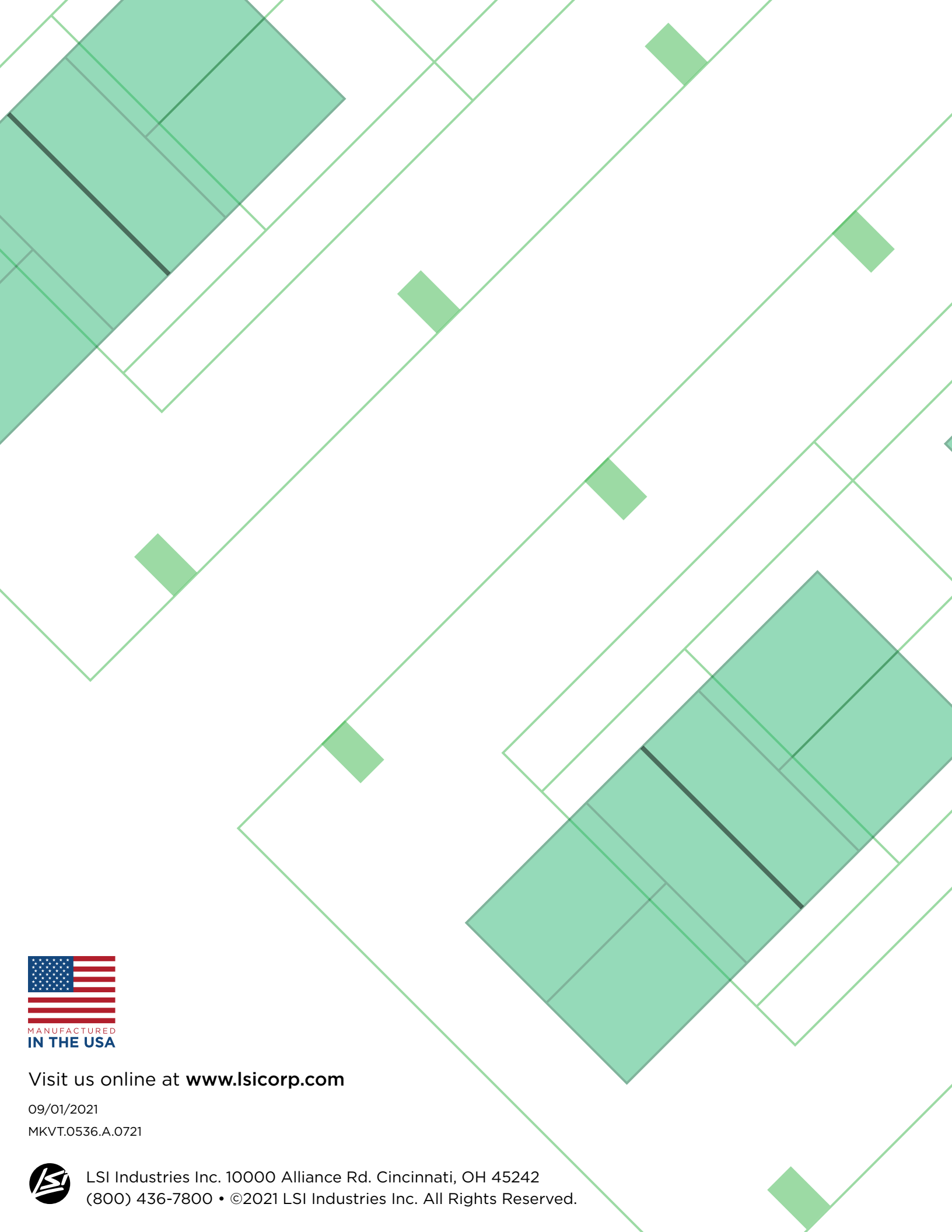
Exclusive Lighting Partner of APP



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