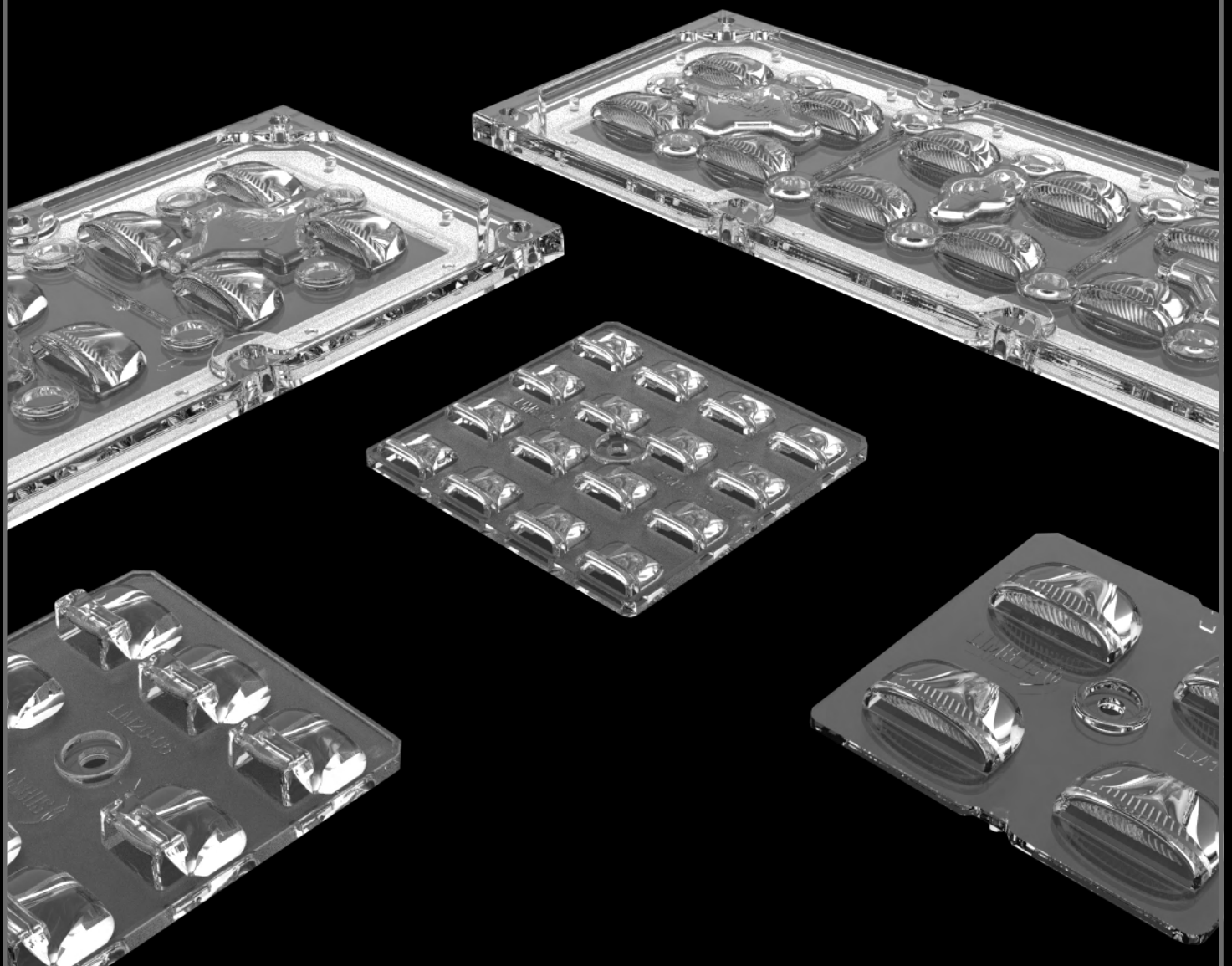


# LIMBUS

CONTROL YOUR LIGHT



***STREET LIGHTING***

# TL504NI-5050-STL-M2M3



## Details

- Degree (FWHM): ASYM
- Size W x L x H: 50x50x6.35mm
- Efficiency: 95%
- Material: PMMA / PC
- Fastening: Screw, Pin

MADE IN  
TURKEY

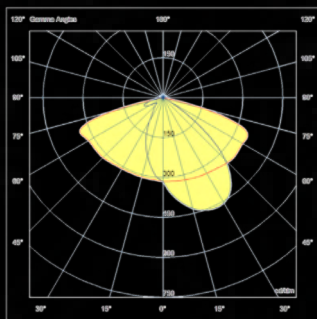
PATENT  
PENDING

COMPATIBLE  
MODULE OPTIONS

HIGH QUALITY

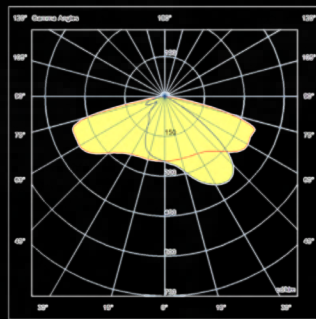
## Optical Results

LUMILEDS



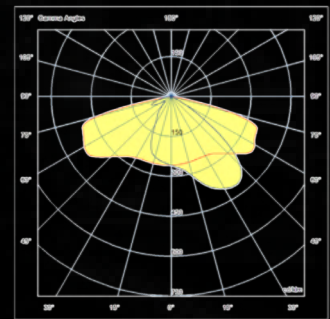
5050-SQ

NICHIA



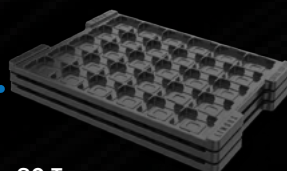
NVSW319B

NICHIA



NVSW219F

## Packing

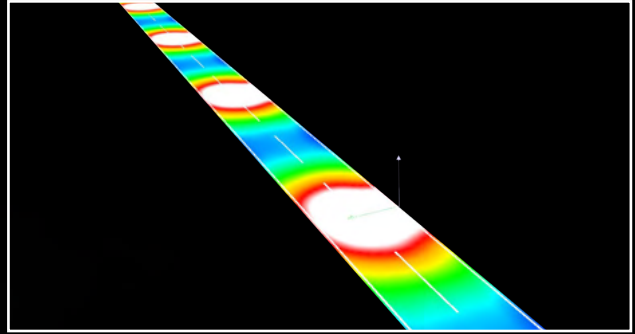
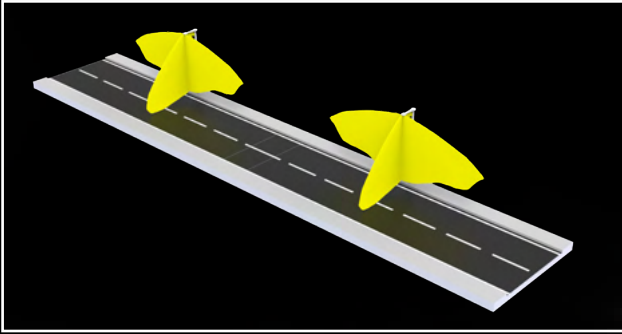


30 Trays  
30 Optics each



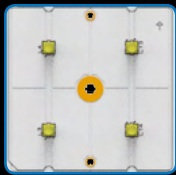
30 Trays  
900 Pcs  
Outer Box

# Polar Curves



## Module

### X-MS51221NCxx-NVSW319B-16



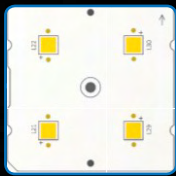
**NICHIA**  
NVSW219F

350mA	15,62W	2.500lm
700mA	32,48W	4.742lm
1400mA	68,54W	8.637lm

**NICHIA**  
NVSW319B

350mA	15,23W	2.513lm
700mA	31,81W	4.803lm
1400mA	66,98W	8.841lm

### X-MS51222LMxx-5050-16



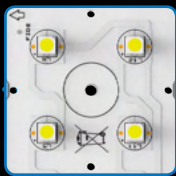
**LUMILEDS**  
5050-Round

700mA	15,12W	2.933lm
1400mA	31,58W	5.464lm
2000mA	46,56W	7.356lm

**LUMILEDS**  
5050-SQ

700mA	15,20W	3.102lm
1400mA	31,36W	5.896lm
2000mA	45,92W	8.082lm

### X-MS50172NCxx-NVSW319B-12



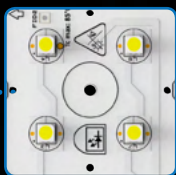
**NICHIA**  
NVSW219F

350mA	11,72W	1.875lm
700mA	24,36W	3.557lm
1400mA	51,41W	6.477lm

**NICHIA**  
NVSW319B

350mA	11,42W	1.885lm
700mA	23,86W	3.602lm
1400mA	50,23W	6.631lm

### X-MS50122LMxx-5050-8



**LUMILEDS**  
5050-Round

500mA	10,60W	2.056lm
700mA	15,40W	2.664lm
1000mA	23,40W	3.697lm

**LUMILEDS**  
5050-SQ

500mA	10,60W	2.162lm
700mA	15,40W	2.895lm
1000mA	23,40W	4.118lm

# TL508NI-5050-STL-M2M3



## Details

- Degree (FWHM): ASYM
- Size W x L x H: 50x50x6.35mm
- Efficiency: 93%
- Material: PMMA
- Fastening: Screw, Pin

MADE IN  
TURKEY

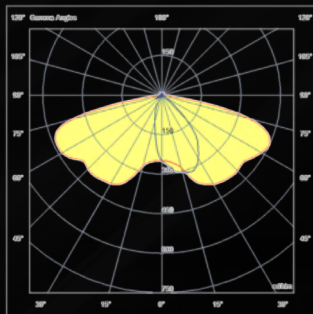
PATENT  
PENDING

COMPATIBLE  
MODULE OPTIONS

HIGH QUALITY

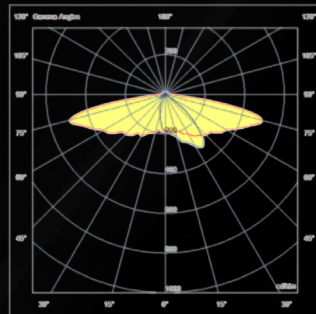
## Optical Results

 LUMILEDS



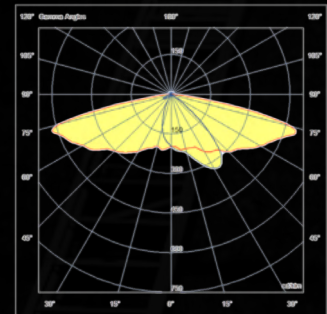
LUXEON 5050

 NICHIA



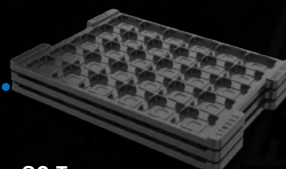
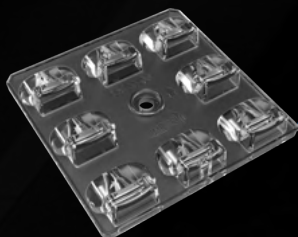
NVSW319B

 NICHIA



NVSW219F

## Packing

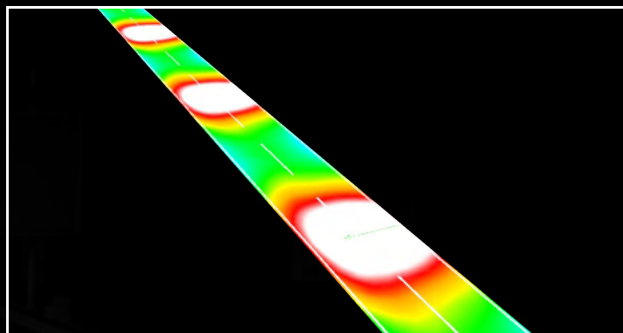
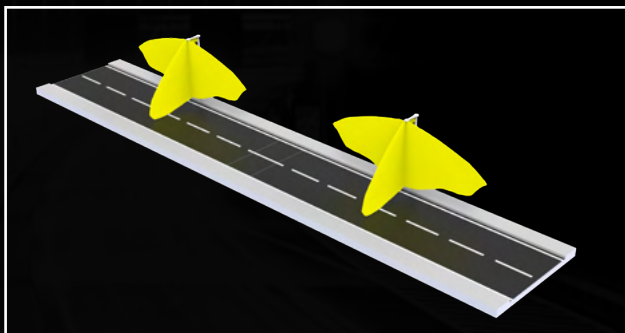


30 Trays  
30 Optics each



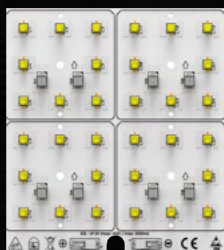
30 Trays  
900 Pcs  
Outer Box

# Polar Curves



## Module

### X-MS100112NCxx-NVSW219F-32



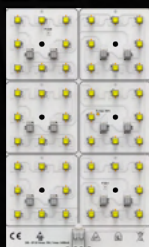
**NICHIA**  
NVSW219F-V1

500mA	44,64W	6.562lm
600mA	63,39W	9.065lm
700mA	64,06W	8.969lm

**NICHIA**  
NVSW219F

500mA	44,64W	7.410lm
600mA	54,34W	8.748lm
700mA	64,06W	10.058lm

### X-MS170100NCxx-NVSW219F-48



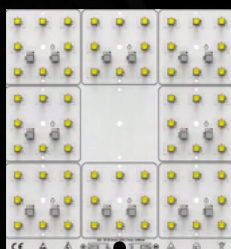
**NICHIA**  
NVSW219F-V1

1000mA	66,96W	9.843lm
1200mA	81,50W	11.655lm
1400mA	96,10W	13.453lm

**NICHIA**  
NVSW219F

1000mA	66,96W	11.115lm
1200mA	81,50W	13.122lm
1400mA	96,10W	15.087lm

### X-MS150162NCxx-NVSW219F-64



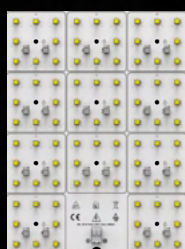
**NICHIA**  
NVSW219F-V1

1000mA	89,28W	13.124lm
1200mA	108,67W	15.540lm
1400mA	128,13W	17.938lm

**NICHIA**  
NVSW219F

1000mA	89,28W	14.820lm
1200mA	108,67W	17.496lm
1400mA	128,13W	20.116lm

### X-MS205150NC-40xx-NVSW219F-88



**NICHIA**  
NVSW219F-V1

1000mA	122,76W	18.046lm
1200mA	149,42W	21.368lm
1400mA	176,18W	24.665lm

**NICHIA**  
NVSW219F

1000mA	122,76W	20.378lm
1200mA	149,42W	24.057lm
1400mA	176,18W	27.660lm

# TL512NI-W71L173-STL-V-M2M3-IP



## Details

- Degree (FWHM): ASYM – 75×154
- Size W x L x H: 71x173x8.14 mm
- Efficiency: 91%
- Material: PC
- Fastening: Screw, Pin

MADE IN  
TURKEY

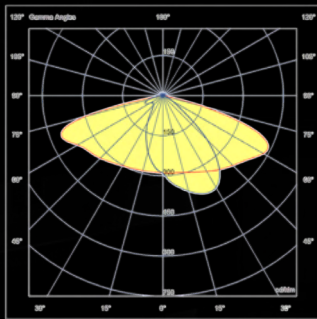
PATENT  
PENDING

COMPATIBLE  
MODULE OPTIONS

HIGH QUALITY

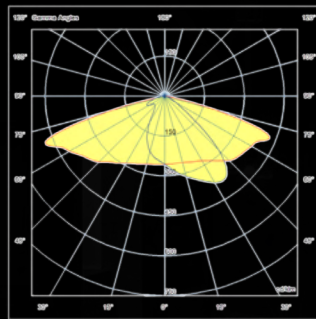
## Optical Results

 LUMILEDS



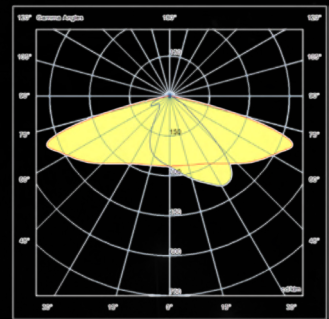
LUXEON 5050

 NICHIA



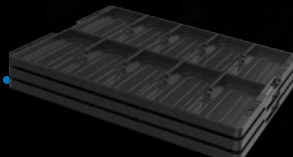
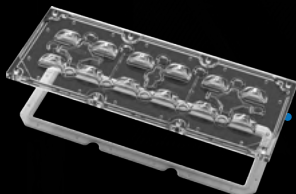
NVSW319B

 NICHIA



NVSW219F

## Packing

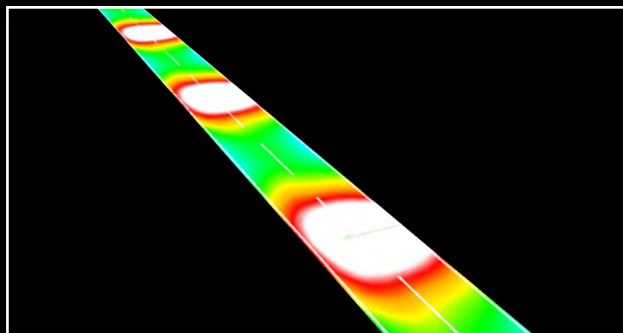
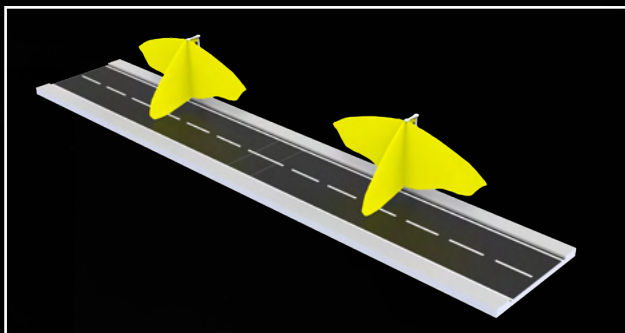


19 Trays  
10 Optics each



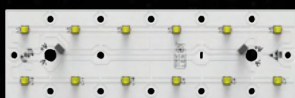
19 Trays  
190 Pcs  
Outer Box

# Polar Curves



## Module

### X-ML45146NCxx-NVSW219F-12



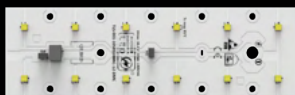
**NICHIA**  
NVSW219F

350mA	11,72W	1.875lm
700mA	24,36W	3.557lm
1400mA	51,41W	6.477lm

**NICHIA**  
NVSW319B

350mA	11,42W	1.885lm
700mA	23,86W	3.602lm
1400mA	50,23W	6.631lm

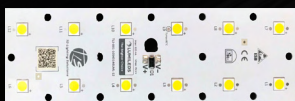
### X-ML45146NCxx-NVSxE21A-12



**NICHIA**  
NVSLE21AT

350mA	11,42W	1.862lm
700mA	23,94W	3.471lm
1400mA	49,56W	5.997lm

### X-ML45146LM-4070-5050xx-12-V2



**LUMILEDS**  
5050-Round

500mA	35,16W	6.118lm
700mA	50,99W	8.107lm
800mA	59,23W	9.003lm

**LUMILEDS**  
5050-SQ

500mA	34,50W	6.141lm
700mA	49,64W	8.142lm
900mA	65,45W	9.948lm

### X-ML45146NCxx-NVSW319B-12



**NICHIA**  
NVSW319B

350mA	11,72W	1.885lm
700mA	23,86W	3.602lm
1400mA	50,23W	6.631lm

**NICHIA**  
NVSW219F-V1

350mA	11,72W	1.875lm
700mA	24,36W	3.557lm
1400mA	51,41W	6.477lm

# TL512NI-W71L173-STL-H-M2M3-IP



## Details

- Degree (FWHM): ASYM – 75×154
- Size W x L x H: 71x173x8 mm
- Efficiency: 91%
- Material: PMMA / PC
- Fastening: Screw, Pin

MADE IN  
TURKEY

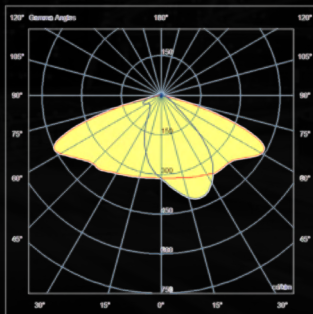
PATENT  
PENDING

COMPATIBLE  
MODULE OPTIONS

HIGH QUALITY

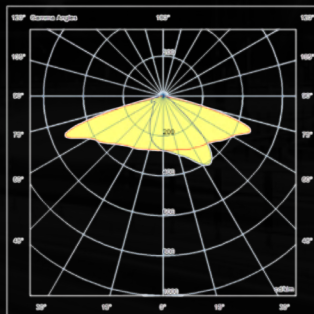
## Optical Results

 LUMILEDS



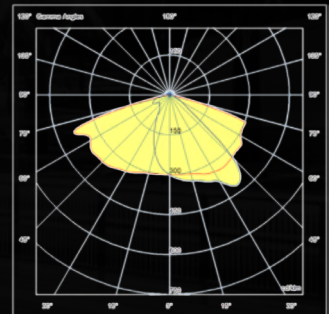
LUXEON 5050

 NICHIA



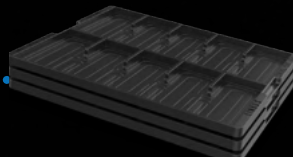
NVSW319B

 NICHIA



NVSW219F

## Packing



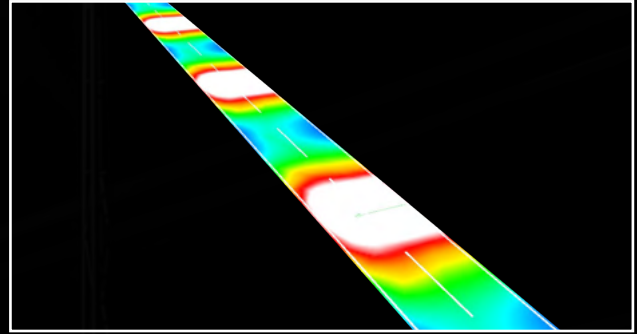
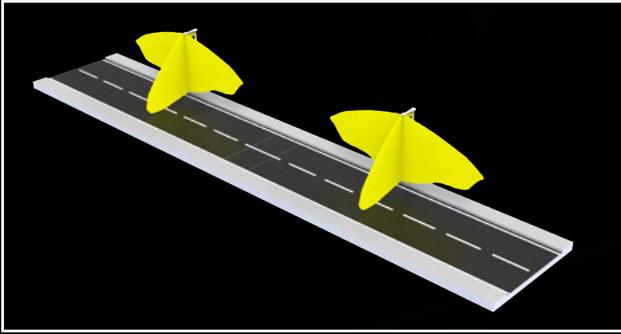
19 Trays  
10 Optics each



19 Trays  
190 Pcs  
Outer Box

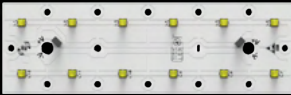


# Polar Curves



## Module

### X-ML45146NCxx-NVSW219F-12



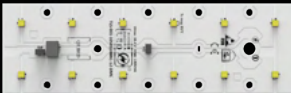
**NICHIA**  
NVSW219F

350mA	11,72W	1.875lm
700mA	24,36W	3.557lm
1400mA	51,41W	6.477lm

**NICHIA**  
NVSW319B

350mA	11,42W	1.885lm
700mA	23,86W	3.602lm
1400mA	50,23W	6.631lm

### X-ML45146NCxx-NVSxE21A-12



**NICHIA**  
NVSLE21AT

350mA	11,42W	1.862lm
700mA	23,94W	3.471lm
1400mA	49,56W	5.997lm

### X-ML45146LM-4070-5050xx-12-V2



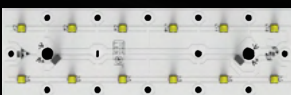
**LUMILEDS**  
5050-Round

500mA	35,16W	6.118lm
700mA	50,99W	8.107lm
800mA	59,23W	9.003lm

**LUMILEDS**  
5050-SQ

500mA	34,50W	6.141lm
700mA	49,64W	8.142lm
900mA	65,45W	9.948lm

### X-ML45146NCxx-NVSW319B-12



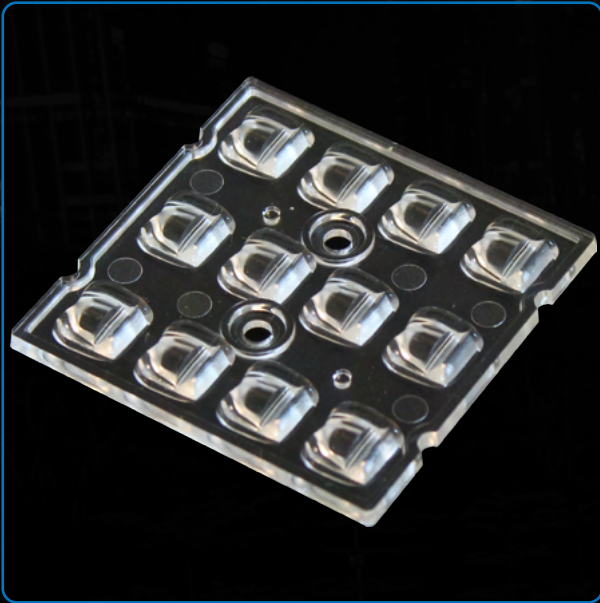
**NICHIA**  
NVSW319B

350mA	11,72W	1.885lm
700mA	23,86W	3.602lm
1400mA	50,23W	6.631lm

**NICHIA**  
NVSW219F-V1

350mA	11,72W	1.875lm
700mA	24,36W	3.557lm
1400mA	51,41W	6.477lm

# TL512NI-CT7575T-M2M3-V1



## Details

- Degree (FWHM): ASYM
- Size W x L x H: 50x50x5.75mm
- Efficiency: 92%
- Material: PMMA
- Fastening: Screw, Pin

MADE IN  
TURKEY

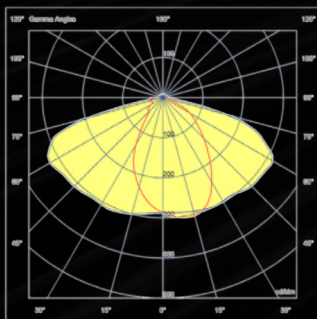
PATENT  
PENDING

COMPATIBLE  
MODULE OPTIONS

HIGH QUALITY

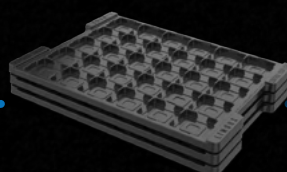
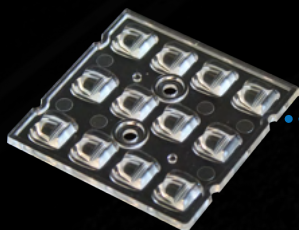
## Optical Results

NICHIA



NF2W757GR-V3

## Packing

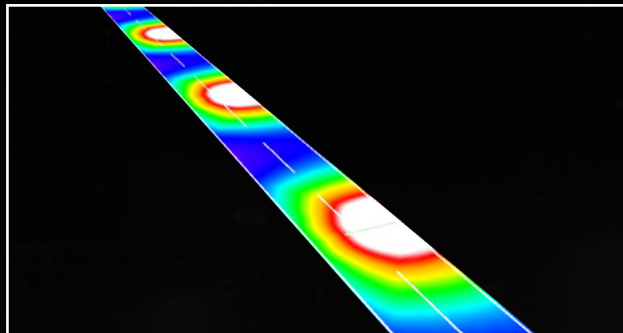
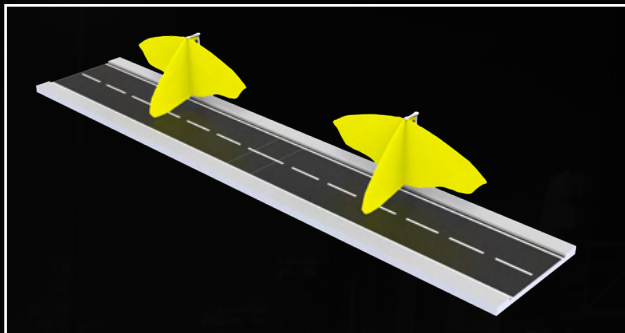


45 Trays  
30 Optics each



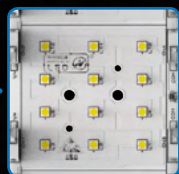
45 Trays  
1350 Pcs  
Outer Box

# Polar Curves



## Module

### X-MS60205NCxx-NF2W757GRV3-48



**NICHIA**  
NF2W757GR-V3

350mA	24,36W	3.703lm
500mA	34,80W	4.872lm
700mA	52,08W	7.187lm

**LUMILEDS**  
3030 2D-SQ

350mA	25,07W	4.263lm
500mA	36,60W	5.783lm
700mA	52,92W	7.832lm

# TL512NI-STL-ME3-V1



## Details

- Degree (FWHM): ASYM
- Size W x L x H: 50x50x4.79mm
- Efficiency: 94%
- Material: PMMA
- Fastening: Screw, Pin

MADE IN  
TURKEY

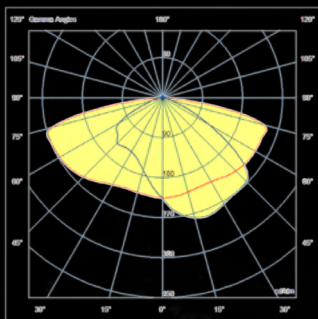
PATENT  
PENDING

COMPATIBLE  
MODULE OPTIONS

HIGH QUALITY

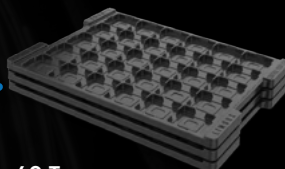
## Optical Results

NICHIA



NF2W757GR-V3

## Packing

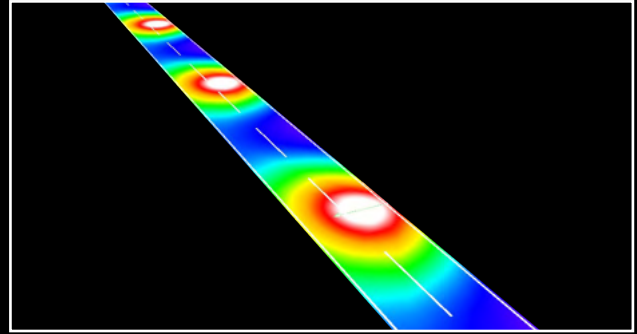
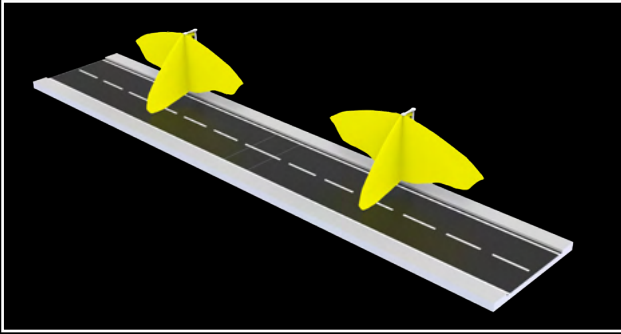


40 Trays  
30 Optics each



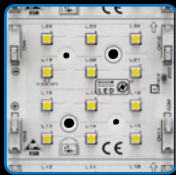
40 Trays  
1200 Pcs  
Outer Box

# Polar Curves



## Module

### X-MS60203NCxx-NF2W757GRV3-48



**NICHIA**  
NF2W757GR-V3

350mA	24,36W	3.703lm
500mA	34,80W	4.872lm
700mA	52,08W	7.187lm

**LUMILEDS**  
3030 2D-SQ

350mA	25,07W	4.263lm
500mA	36,60W	5.783lm
700mA	52,92W	7.832lm

### X-MS104173NCxx-NF2W757GRV3-72



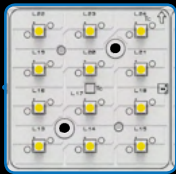
**NICHIA**  
NF2W757GR-V3

350mA	36,54W	5.554lm
500mA	52,20W	7.308lm
700mA	78,12W	10.781lm

**LUMILEDS**  
3030 2D-SQ

350mA	37,61W	6.394lm
500mA	54,90W	8.674lm
700mA	79,38W	11.748lm

### X-MS154173NCxx-NF2W757GRV3-108



**NICHIA**  
NF2W757GR-V3

350mA	54,81W	8.331lm
500mA	78,30W	10.962lm
700mA	117,18W	16.171lm

**LUMILEDS**  
3030 2D-SQ

350mA	56,42W	9.591lm
500mA	82,35W	13.011lm
700mA	119,07W	17.622lm

### X-MS255274NCxx-NF2W757GRV3-300



**NICHIA**  
NF2W757GR-V3

500mA	145,00W	22.040lm
700mA	208,25W	29.155lm
1050mA	325,50W	41.155lm

**LUMILEDS**  
3030 2D-SQ

500mA	149,25W	24.626lm
700mA	213,50W	33.733lm
1050mA	330,75W	45.644lm

# TL516NI-5050-STL-M2M3



## Details

- Degree (FWHM): ASYM
- Size W x L x H: 50x50x4.45mm
- Efficiency: 90%
- Material: PMMA
- Fastening: Screw, Pin

MADE IN  
TURKEY

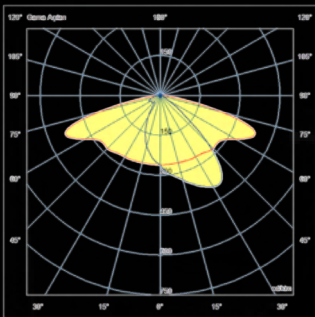
PATENT  
PENDING

COMPATIBLE  
MODULE OPTIONS

HIGH QUALITY

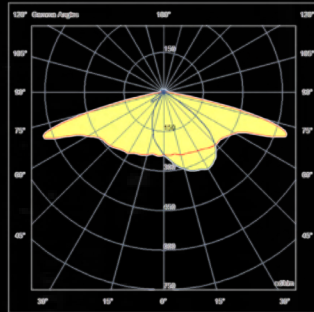
## Optical Results

 NICHIA



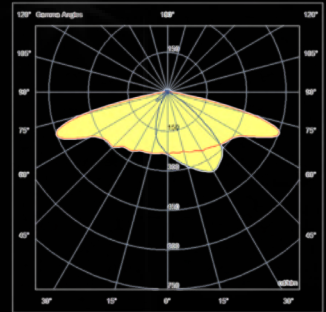
NF2x757GR-V3

 LUMILEDS



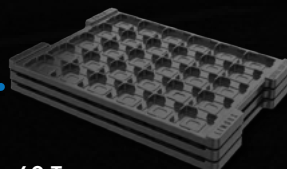
LUXEON 2835

 LUMILEDS



LUXEON 3030 2D SQ

## Packing

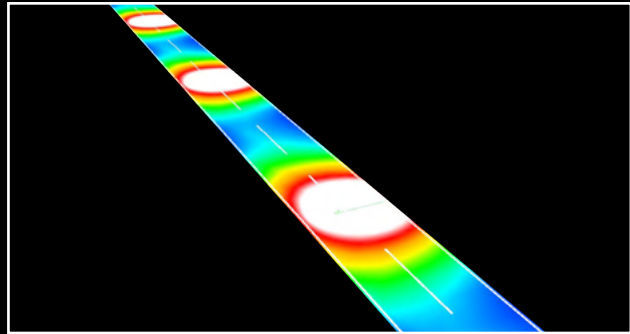
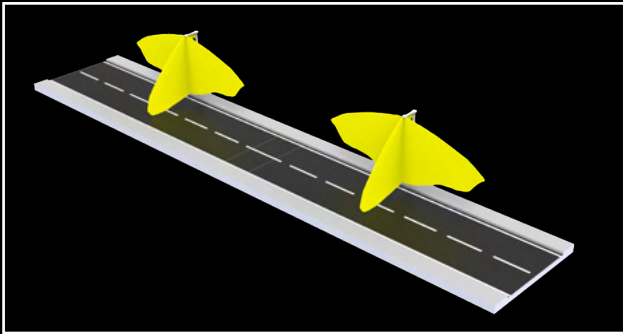


40 Trays  
30 Optics each



40 Trays  
1200 Pcs  
Outer Box

# Polar Curves



## Module

### X-MS17052NCxx-NF2W757GRV3-48



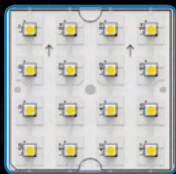
**NICHIA**  
NF2W757GR-V3

700mA	24,36W	3.703lm
1050mA	36,54W	5.116lm
1400mA	52,08W	7.187lm

**LUMILEDS**  
3030 2D-SQ

700mA	25,07W	4.263lm
1050mA	38,43W	6.072lm
1400mA	52,92W	7.832lm

### X-MS213106NCxx-NF2W757GRV3-120



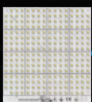
**NICHIA**  
NF2W757GR-V3

700mA	60,90W	9.257lm
1050mA	89,25W	12.495lm
1400mA	130,20W	17.968lm

**LUMILEDS**  
3030 2D-SQ

700mA	62,69W	10.656lm
1000mA	91,50W	14.457lm
1400mA	132,30W	19.580lm

### X-MS223205NCxx-NF2W757GRV3-252



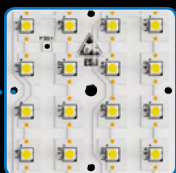
**NICHIA**  
NF2W757GR-V3

500mA	121,80W	18.514lm
700mA	174,93W	24.490lm
1050mA	273,42W	34.998lm

**LUMILEDS**  
3030 2D-SQ

500mA	125,37W	20.686lm
700mA	179,34W	28.336lm
1050mA	277,93W	38.341lm

### X-MS50223NCxx-NFSW757GT-V3-64



**Zhaga**

**NICHIA**  
NFSW757GT-V3

350mA	15,90W	2.879lm
500mA	23,68W	4.002lm
700mA	34,94W	5.416lm

**NICHIA**  
NF2W757GR-V3

350mA	31,58W	5.085lm
500mA	46,88W	6.798lm
700mA	68,66W	9.543lm

# TLS36NI-W71L173-STL-143x50-IP



## Details

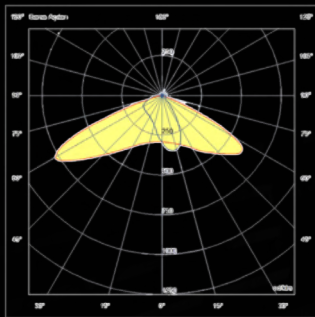
- Degree (FWHM): ASYM
- Size W x L x H: 173x71,4x5,2mm
- Efficiency: 92%
- Material: PC
- Fastening: Screw, Pin

COMPATIBLE  
MODULE OPTIONS

HIGH QUALITY

## Optical Results

NICHIA



NF2757GR-V3

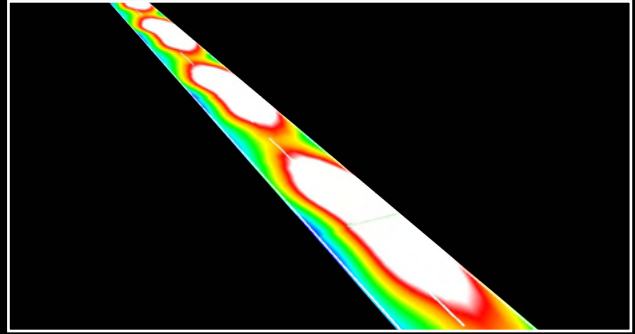
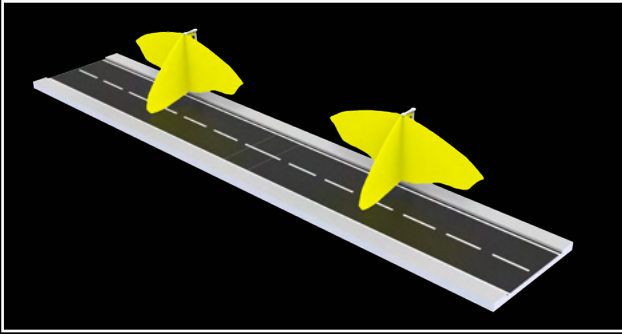
## Packing



90 Pcs  
Outer Box

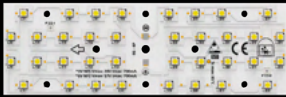


# Polar Curves



## Module

### X-MS47146NCxx-NF2W757GRV3-36



**NICHIA**  
NF2W757GR-V3

350mA	18,27W	2.777lm
500mA	26,10W	3.654lm
700mA	39,06W	5.390lm

**LUMILEDS**  
3030 2D-SQ

88mA	18,81W	3.197lm
125mA	27,45W	4.337lm
175mA	39,69W	5.874lm



# TL536NI-W71L173-STL-145×63-IP



## Details

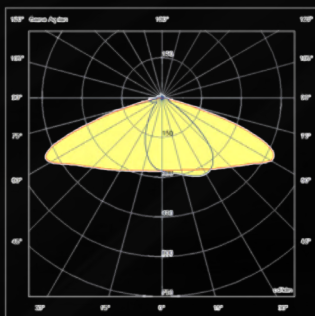
- Degree (FWHM): ASYM
- Size W x L x H: 173x71,4x6,5mm
- Efficiency: 92%
- Material: PC
- Fastening: Screw, Pin

COMPATIBLE  
MODULE OPTIONS

HIGH QUALITY

## Optical Results

NICHIA



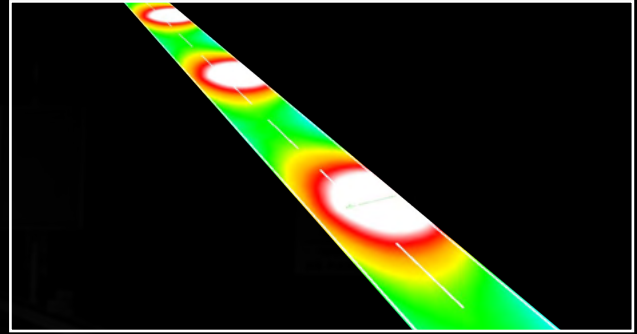
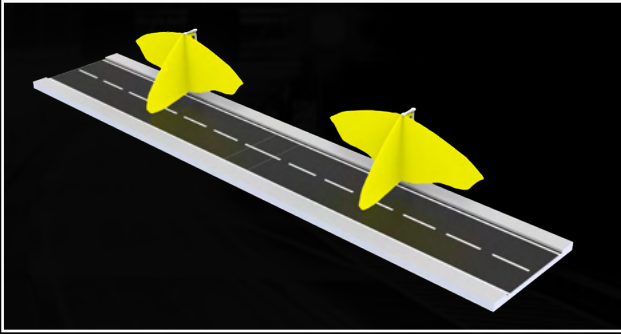
NF2757GR-V3

## Packing



94 Pcs  
Outer Box

# Polar Curves



# Module

## X-MS47146NCxx-NF2W757GRV3-36



**NICHIA**  
NF2W757GR-V3

350mA	18,27W	2.777lm
500mA	26,10W	3.654lm
700mA	39,06W	5.390lm

**LUMILEDS**  
3030 2D-SQ

88mA	18,81W	3.197lm
125mA	27,45W	4.337lm
175mA	39,69W	5.874lm

# CUSTOMIZATION PROCESS

1

## Optical Requirement

Target FWHM, IES  
Lens Size  
LED  
Application

## Optical Design Report

Our R&D will design and share the datas within 10 days.

2

3

## Structure Design

If you are satisfied with the optical report, we will process to structure designing. Please provide us with the assembly drawing, structure drawing and any files that are helpful for us to design structure which will perfectly meet your expectations.

## Structure Confirm

We ask for your confirmation whether the lens structure conflict with the PCB, component location and luminaire.

4

5

## Mold Production

We need 20-35 working days to produce the mold, then will send you the samples when the mold finished.

## Confirm The Samples

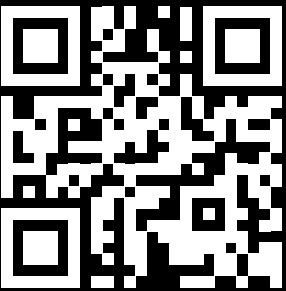
Whether the samples are the same as the optical design and structure design.

6

7

## Mass Production

After sample approval, we will start producing the best optics for you!



[www.limbus.com.tr](http://www.limbus.com.tr)



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