

PRODUCT DATASHEET F16048_LINNEA-UP

LINNEA-UP

Asymmetric beam for uplighting optimized for 1.0 mm metal sheet or profile. Variant made from PC.

SPECIFICATION:

Dimensions	285.0 x 40.0 mm
Height	10.3 mm
Fastening	clips
ROHS compliant	yes 🛈



MATERIALS:

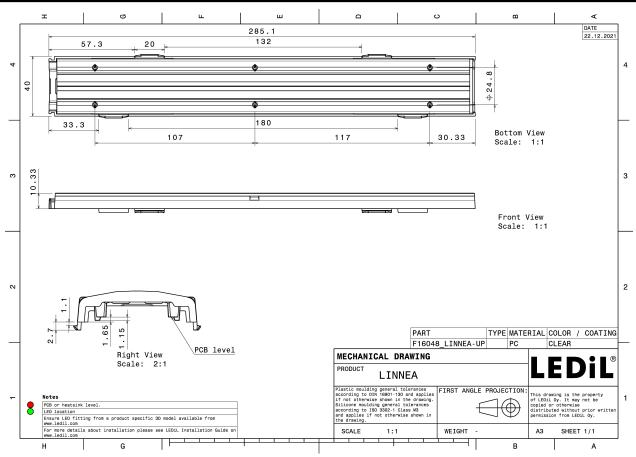
Component	Туре	Material	Colour	Finish
LINNEA-UP	Linear lens	PC	clear	

ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
F16048_LINNEA-UP	162	36	36	8.2
» Box size: 398 x 298 x 265 mm				



PRODUCT DATASHEET F16048_LINNEA-UP



See also our general installation guide: www.ledil.com/installation_guide



LED	XP-E	90* 90*
		75* (100) 75*
FWHM / FWTM	Asymmetric	
Efficiency	76 %	63* 200 60*
Peak intensity	0.3 cd/lm	
LEDs/each optic	1	
Light colour	White	45° 45*
Required compone	ents:	400
		\times \top \times
		200
		\times / \setminus \times
		30° 15° 66 15° 30°
Helvar		NY KT
		90° 90°
LED	L-iC-282-827-865-011A	
FWHM / FWTM	Asymmetric	
Efficiency	74 %	
Peak intensity	0.3 cd/lm	60* <u>200</u> 60*
LEDs/each optic	1	
Light colour	White	45° 200 45°
Required compone		
		400
		\times / \top / \times
		30* 30*
		15 ⁵ 0° 15°
Holyan		
Helvar		90° 35°
LED	LP-282-840-009A 60/300	90° 35°
	LP-282-840-009A 60/300 Asymmetric	15 ⁴ 0 ⁴ 15 ⁴
LED		
LED FWHM / FWTM Efficiency	Asymmetric	
LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 75 % 0.3 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 75 % 0.3 cd/lm 1	9)* 9)*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 75 % 0.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 75 % 0.3 cd/lm 1 White	9)* 9)*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 75 % 0.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 75 % 0.3 cd/lm 1 White	9)* 9)*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 75 % 0.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 75 % 0.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 75 % 0.3 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 75 % 0.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 75 % 0.3 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 75 % 0.3 cd/lm 1 White ents: LS-282-840-011A	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Helvar LED FWHM / FWTM Efficiency	Asymmetric 75 % 0.3 cd/lm 1 White ents: LS-282-840-011A Asymmetric 74 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Helvar LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 75 % 0.3 cd/lm 1 White ents: LS-282-840-011A Asymmetric 74 % 0.3 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Helvar LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 75 % 0.3 cd/lm 1 White ents: LS-282-840-011A Asymmetric 74 % 0.3 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Helvar LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 75 % 0.3 cd/lm 1 White ents: LS-282-840-011A Asymmetric 74 % 0.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Helvar LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 75 % 0.3 cd/lm 1 White ents: LS-282-840-011A Asymmetric 74 % 0.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Helvar LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 75 % 0.3 cd/lm 1 White ents: LS-282-840-011A Asymmetric 74 % 0.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Helvar LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 75 % 0.3 cd/lm 1 White ents: LS-282-840-011A Asymmetric 74 % 0.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Helvar LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 75 % 0.3 cd/lm 1 White ents: LS-282-840-011A Asymmetric 74 % 0.3 cd/lm 1 White	



Helvar		
LED	LX-282-840-023A	
FWHM / FWTM	Asymmetric	75"
Efficiency	75 %	
Peak intensity	0.3 cd/lm	60° 200
LEDs/each optic	1	$\perp \times / \top \setminus \times$
Light colour	White	43" 300
Required componer		
		40
		\times
		200
		30° 15° 0° 15°
		90*
LED	LinearZ 280-112 Circadian TW	
FWHM / FWTM	Asymmetric	780
Efficiency	77 %	
Peak intensity	0.2 cd/lm	.50*
LEDs/each optic	1	200
Light colour	Tunable White	45'
Required componer	ts:	
		30
		\times $() >$
		400
		30° 15 ⁵ 0° 15°
		90*
LED	LinearZ 280-26	
FWHM / FWTM	Asymmetric	750
Efficiency	75 %	
Peak intensity	0.2 cd/lm	
LEDs/each optic	1	\times / / / \times
Light colour	White	45*
Required componer	ts:	
		X X
1		400
		30*
<u>\</u>		400 50° 55° 0° 15°
* LUMITI	initigies & autoinits	
LED	LinearZ 280-40 TW	
LED FWHM / FWTM	LinearZ 280-40 TW Asymmetric	
EED FWHM / FWTM Efficiency	LinearZ 280-40 TW Asymmetric 76 %	
LED FWHM / FWTM Efficiency Peak intensity	LinearZ 280-40 TW Asymmetric 76 % 0.3 cd/lm	
EED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LinearZ 280-40 TW Asymmetric 76 % 0.3 cd/lm 1	
EED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LinearZ 280-40 TW Asymmetric 76 % 0.3 cd/lm 1 Tunable White	
EED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LinearZ 280-40 TW Asymmetric 76 % 0.3 cd/lm 1 Tunable White	
EED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LinearZ 280-40 TW Asymmetric 76 % 0.3 cd/lm 1 Tunable White	
EED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LinearZ 280-40 TW Asymmetric 76 % 0.3 cd/lm 1 Tunable White	
EFWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LinearZ 280-40 TW Asymmetric 76 % 0.3 cd/lm 1 Tunable White	



MST Your solut	ions	
		90* 90*
LED FWHM / FWTM	LinLED 280x24mm 1100lm 830 2C 30V LINNEA-GC G1	75* 75*
	Asymmetric 76 %	
Efficiency Peak intensity	0.3 cd/lm	60.
LEDs/each optic	1	200
Light colour	' White	
Required compone		300
		\times
		400
		30* 15 ³ 36 ⁶ 15 ⁴ 30 ⁴
Ø NICHI∕		90° 90°
LED	NF2x757G	
FWHM / FWTM	Asymmetric	75*
Efficiency	77 %	
Peak intensity	0.3 cd/lm	
LEDs/each optic	1	\times
Light colour	White	65°
Required compone	nts:	400
		X / X
		30° 500 30° 30° 30°
ØNICHI		00°
LED	NFSW757H	
FWHM / FWTM	Asymmetric	25* (100) 75*
Efficiency	74 %	
Peak intensity	0.3 cd/lm	. 60° 200 60°
LEDs/each optic	1	
Light colour	White	45* 30 45*
Required compone	nts:	\times
		400
		30° 13 ⁵ 0° 15° 30°
OSRAM		
LED	PL-LIN-IND-Z1 2800 560x24	90* 90*
EED FWHM / FWTM	Asymmetric	73*
Efficiency	78 %	
Peak intensity	0.3 cd/lm	edt edd
LEDs/each optic	1	X771XX
Light colour	White	6° 6*
Required compone		× / /* / /
		400
		30° 33°



OSRAN		90° 90°
LED	– PL-LIN-Z5 1100 280x20	
FWHM / FWTM	Asymmetric	78*
Efficiency	74 %	
	0.3 cd/lm	60°
Peak intensity		200
LEDs/each optic	1	
Light colour	White	45° 300 43°
Required compone	nts:	\times
		400
		\times \times
		30° 500 30° 30° 30°
OSRAN	1	
LED	PL-LIN-Z5 2000 280x20	
EED FWHM / FWTM	Asymmetric	751 () 751
	Asymmetric 74 %	
Efficiency		604 604
Peak intensity	0.3 cd/lm	200
LEDs/each optic	1	
Light colour	White	45° 300 43°
Required compone	nts:	\times \land \times
		400
		\times / \times
		30* 35 ⁵ 0 ⁸ 15* 30*
OSRAM		
Opto Semiconductors		90° 90°
LED	Duris S5 (2 chip)	
FWHM / FWTM	Asymmetric	25*
Efficiency	75 %	
Peak intensity	0.3 cd/lm	20
LEDs/each optic	1	
Light colour	White	45° 300 45°
Required compone	nts:	\times
		400
		X X
		200
		30° 15° 30°
OSRAM Opto Semiconductors		90* 90*
LED	Duris S5 (Single chip)	
FWHM / FWTM	Asymmetric	75 (100) 75*
Efficiency	76 %	
Peak intensity	0.3 cd/lm	.60* 200 60*
LEDs/each optic	1	
Light colour	White	
Required compone		
		40
		X X
		20
		30° 13° 0° 15° 30°



PHILIP	5	50° 50°
LED	Fortimo LED Strip 1ft 1100lm FC HV4 & LV4	
FWHM / FWTM	Asymmetric	75* (100) 77*
Efficiency	73 %	
Peak intensity	0.3 cd/lm	60* 60*
LEDs/each optic	1	200
Light colour	White	
Required compone		45, 30 45,
Required compone	no.	
		400
		30° 500 30° 30°
PHILIP		
		90* 90*
LED	Fortimo LED Strip 1ft 1100lm FC HV5 & LV5	715
FWHM / FWTM	Asymmetric	
Efficiency	77 %	604 604
Peak intensity	0.3 cd/lm	
LEDs/each optic	1	
Light colour	White	45* 300 45*
Required compone	its:	
		30* 30*
DIIIII		15 ³ 30 ⁰ 15 ⁴
PHILIP	·5	90° 90°
LED	Fortimo LED Strip 1ft 650lm FC HV4 & LV4	
FWHM / FWTM	Asymmetric	75*
Efficiency	73 %	
Peak intensity	0.2 cd/lm	
LEDs/each optic	1	
Light colour	White	45°
Required compone	its:	***
		\times
		400
		30° 30°
	6	182 00 100 W
PHILIF	5	90* 90*
LED	Fortimo LED Strip 1ft 650im FC HV5 & LV5	
	Fortimo LED Strip 1ft 650lm FC HV5 & LV5 Asymmetric	75°
FWHM / FWTM	Asymmetric	73*
FWHM / FWTM Efficiency	Asymmetric 77 %	75°
FWHM / FWTM Efficiency Peak intensity	Asymmetric 77 % 0.3 cd/lm	70° 500 70°
FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 77 % 0.3 cd/lm 1	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 77 % 0.3 cd/lm 1 White	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 77 % 0.3 cd/lm 1 White	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 77 % 0.3 cd/lm 1 White	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 77 % 0.3 cd/lm 1 White	



	3	8ª / / / / / / / / / / / / / / / / / / /
EWHM / EW/TM Asymm	B Series	
1 WI IIVI / I WI IVI / (Syllin	netric	759 200 77
Efficiency 82 %		200
Peak intensity 0.2 cd/	lm	
LEDs/each optic 1		20
Light colour White		407 400 4
Required components:		\times
		200
		000
		30° 113° 3
SAMSUNG)	8° 77
LED LM301		
FWHM / FWTM Asymn		75*
Efficiency 75 %		
Peak intensity 0.3 cd/	'Im	50 ⁴ 210 6
LEDs/each optic 1		
Light colour White		
Required components:		
		400
		30° <u>50</u> 30° 30° 30° 30° 30° 30° 30° 30° 30° 30°
SAMSUNG		
	B Plus	×
FWHM / FWTM Asymn		75 (100) 77
Efficiency 76 %		
Peak intensity 0.3 cd/	'Im	60* 200 6
LEDs/each optic 1		
Light colour White		a. 300 a
Required components:		
		400
		\times / \setminus \times
		30* <u>500</u> 0* <u>15</u> ³ <u>0</u> ⁴ <u>15</u> ⁴ 30
	3	
271/1211/1/1		99*
		751 (100) 77
LED LT-H28		
LED LT-H28 FWHM / FWTM Asymm		
LED LT-H24 FWHM / FWTM Asymm Efficiency 77 %		
LEDLT-H2iFWHM / FWTMAsymmEfficiency77 %Peak intensity0.3 cd/		
LED LT-H28 FWHM / FWTM Asymm Efficiency 77 % Peak intensity 0.3 cd/		
LED LT-H2i FWHM / FWTM Asymm Efficiency 77 % Peak intensity 0.3 cd/ LEDs/each optic 1		
LED LT-H2i FWHM / FWTM Asymm Efficiency 77 % Peak intensity 0.3 cd/ LEDs/each optic 1 Light colour White		
LED LT-H2i FWHM / FWTM Asymm Efficiency 77 % Peak intensity 0.3 cd/ LEDs/each optic 1 Light colour White		



SAMSU		
	NG	90° 90°
	T-Q282B	80 ₆ 30 ₆
	symmetric	25* (100) 75*
	7 %	
	.3 cd/lm	60 ⁴ 200 60*
LEDs/each optic 1		$\vee \times \square \times \vee$
	Vhite	55° 55°
Required components		400
		\times
		540
		30° 660 30° 30°
SAMSU	NG	50° 93°
	T-S282H	
FWHM / FWTM A	symmetric	73*
Efficiency 7	7 %	60 ⁴ 20 60 ⁴
Peak intensity 0	.3 cd/lm	
LEDs/each optic 1		X 700 X
•	Vhite	45' 45'
Required components	:	400
		30° 500 30°
0.0.0.0.0.0.0		13 ³ 0 ⁶ 10 ⁴
SAMSU	NG	90° 90°
LED L	T-V282E	
	symmetric	.75*
Efficiency 7	7 %	
		200 600
Peak intensity 0	.3 cd/lm	64° 200 60°.
Peak intensity0LEDs/each optic1	.3 cd/lm	ger 29 67, 30
Peak intensity0LEDs/each optic1Light colourV	.3 cd/lm Vhite	gi <u>20</u> (r. 30 6' c'
Peak intensity0LEDs/each optic1	.3 cd/lm Vhite	
Peak intensity0LEDs/each optic1Light colourV	.3 cd/lm Vhite	
Peak intensity0LEDs/each optic1Light colourV	.3 cd/lm Vhite	
Peak intensity0LEDs/each optic1Light colourV	.3 cd/lm Vhite	
Peak intensity0LEDs/each optic1Light colourV	.3 cd/lm Vhite	
Peak intensity 0 LEDs/each optic 1 Light colour V Required components	.3 cd/lm Vhite :	
Peak intensity 0 LEDs/each optic 1 Light colour V Required components seoul semiconductor LED S	.3 cd/lm Vhite : :	
Peak intensity 0 LEDs/each optic 1 Light colour V Required components seoul semiconductor LED S FWHM / FWTM A	.3 cd/lm Vhite : SEOUL DC 3030 Isymmetric	
Peak intensity 0 LEDs/each optic 1 Light colour V Required components seous semiconoucror LED S FWHM / FWTM A Efficiency 7	.3 cd/lm Vhite : SEOUL DC 3030 Isymmetric 6 %	
Peak intensity 0 LEDs/each optic 1 Light colour V Required components seous semconductor LED S FWHM / FWTM A Efficiency 7 Peak intensity 0	.3 cd/lm Vhite : SEOUL DC 3030 Isymmetric 6 % .3 cd/lm	50 50 50 50 50 50 50 50 50 50
Peak intensity 0 LEDs/each optic 1 Light colour V Required components seoul senconductor LED S FWHM / FWTM A Efficiency 7 Peak intensity 0 LEDs/each optic 1	.3 cd/lm Vhite : SEOUL DC 3030 isymmetric 6 % .3 cd/lm	
Peak intensity 0 LEDs/each optic 1 Light colour V Required components seous semiconourcor LED S FWHM / FWTM A Efficiency 7 Peak intensity 0 LEDs/each optic 1 Light colour V	.3 cd/lm Vhite : SEOUL DC 3030 Isymmetric 6 % .3 cd/lm Vhite	
Peak intensity 0 LEDs/each optic 1 Light colour V Required components seoul semconductor LED S FWHM / FWTM A Efficiency 7 Peak intensity 0 LEDs/each optic 1	.3 cd/lm Vhite : SEOUL DC 3030 Isymmetric 6 % .3 cd/lm Vhite	
Peak intensity 0 LEDs/each optic 1 Light colour 4 Required components stout stanconductor LED 5 FWHM / FWTM 4 Efficiency 7 Peak intensity 0 LEDs/each optic 1 Light colour 4	.3 cd/lm Vhite : SEOUL DC 3030 Isymmetric 6 % .3 cd/lm Vhite	
Peak intensity 0 LEDs/each optic 1 Light colour V Required components stout staticohoucror S EDD S FWHM / FWTM A Efficiency 7 Peak intensity 0 LEDs/each optic 1 Light colour V	.3 cd/lm Vhite : SEOUL DC 3030 Isymmetric 6 % .3 cd/lm Vhite	



TRIDO		5 ¹
LED	LLE G4 24x280mm 1250lm	75
FWHM / FWTM	Asymmetric	
Efficiency	75 %	60° 60°
Peak intensity	0.3 cd/lm	× / *** ×
LEDs/each optic	1	
Light colour	White	45° 300 45'
Required compone	ents:	20 ⁴ 23 ³ 0 ⁴ 13 ⁴ 30
TRIDO	NIC .	50°
LED	LLE G4 24x280mm 2000lm ADV	
FWHM / FWTM	Asymmetric	25* (200) 750
Efficiency	75 %	
Peak intensity	0.3 cd/lm	.60 ⁶ 200 60 ⁴
LEDs/each optic	1	
Light colour	White	45° 300 457
Required compone	ents:	50° 25 ⁵ 0° 15° 30
TRIDO	NIC .	80°
LED	LLE G4 24x280mm 650lm	
FWHM / FWTM	Asymmetric	75* (200) 75
Efficiency	75 %	
Peak intensity	0.3 cd/lm	60 ¹⁶ 200 60 ¹
LEDs/each optic	1	
Light colour	White	45° 300 45
Required compone	ents:	



OPTICAL RESULTS (SIMULATED):

	DS	** **
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	LUXEON 3030 2D (Round LES) Asymmetric 75 % 0.3 cd/lm 1 White S:	
SEOUL		90° 90°
LED	SEOUL DC 3030C	
FWHM / FWTM	Asymmetric	759 510 75'
Efficiency	79 %	20
Peak intensity	0.3 cd/lm	50°
LEDs/each optic	1	300
Light colour	White	457
Required components	5:	90



GENERAL INFORMATION:

NOTE: The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value.

MATERIALS:

As part of our continuous research and improvement processes, and to ensure the best possible quality and availability of our products, LEDiL reserves the right to change material grades without notice.

PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

The measured data in the provided downloadable LEDiL Product Datasheets and Mechanical 2D-Drawings is rounded and provided as reference for planning. LEDiL Oy's optical specifications have been verified by conducting performance testing of the products in accordance with the company's quality system. The reported data are averaged results of multiple measurements with typical variation. LEDiL Oy reserves the right to without prior notification make changes and improvements to its products.

LEDiL Oy assumes neither warranty, nor guarantee nor any other liability of any kind for the contents and correctness of the provided data. The provided data has been generated with highest diligence but the provided data may in reality not represent the complete possible variation range of all intrinsic parameters. Therefore, in certain cases a deviation from the provided data could occur.

LEDiL Oy reserves the right to undertake technical changes of its products without further notification which could lead to changes in the provided data. LEDiL Oy assumes no liability of any kind for the possible deviation from any provided data or any other damage resulting from the usage of the provided data.

The user agrees to this disclaimer and user agreement with the download or usage of the provided files.

LEDiL Oy

Joensuunkatu 13 FI-24240 SALO Finland

LEDiL Inc. 228 West Page Street Suite D Sycamore IL 60178 USA

Ledil Optics Technology (Shenzhen) Co., Ltd. # 405 , Block B Casic Motor Building Shenzhen 518057 P.R.CHINA

Local sales and technical support www.ledil.com/ where_to_buy

Shipping locations Salo, Finland Hong Kong, China

Distribution Partners www.ledil.com/ where_to_buy

Last update: 18/08/2023Subject to change without prior noticePublished: 07/02/2019LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.12/12