

NWCTUS

KHATOD

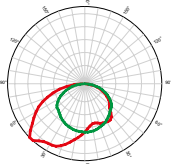
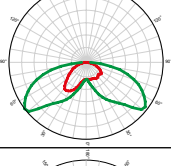
NACTUS PATENT SYSTEM

FIRST AND UNIQUE OPTICAL SYSTEM using **DIFFERENT OPTICS WITH DIFFERENT GEOMETRIES**, combined and set together in the **SAME SYSTEM**.

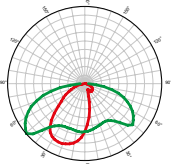
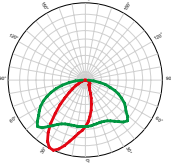
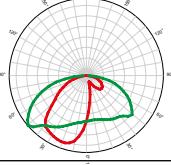
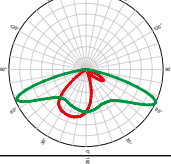
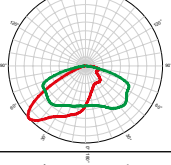
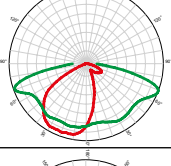
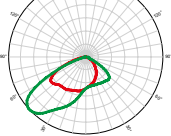
Any shape, any lighting pattern, any configuration can be realized thanks to its specific optical design that makes NACTUS special and unique.



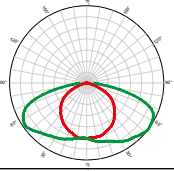
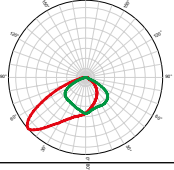
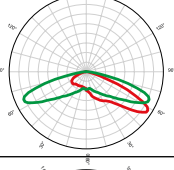
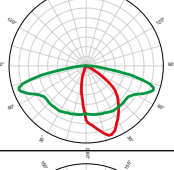
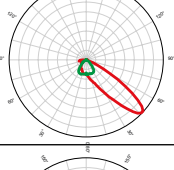
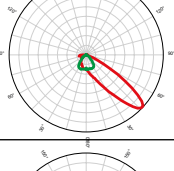
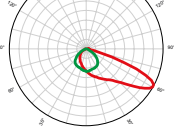
NACTUS 2X2 STREET LIGHTING

PART #	LEDs	LED TYPE	BEAM	IESNA CLASSIFICATION	EU CLASS.	MOUNTING HEIGHT	ROAD WIDTH	POLE DISTANCE	LONGITUDINAL CLASSIFICATION	CUT OFF	MAX TEMP.
KNAC0401ASM	4	3535 5050		Type IV	Wide Area	5 to 10 m	2.5 MH	NA	Short	Non-Cutoff	+90° C
KNAC0403ASM	4	3535 5050		Type I	P	5 to 10 m	>= 1 MH	4 MH	Medium	Non-Cutoff	+90° C
KNAC0404ASM	4	3535 5050		Type VS	Wide Area	5 to 10 m	1.5 MH	NA	Short	Cutoff	+90° C
KNAC0405ASM	4	3535 5050		Type I	P	Below 5 m	<=1 MH	6 MH	Medium	Semi-Cutoff	+90° C
KNAC0406ASM	4	3535 5050		Type II	M	8 to 12 m	0.7 MH	4 MH	Medium	Semi-Cutoff	+90° C
KNAC0412ASM	4	3535 5050		Type I	P	3 to 5 m	0.5 MH	5 MH	Medium	Semi-Cutoff	+90° C
KNAC0413ASM	4	3535 5050		Type I	P	3 to 5 m	0.5 MH	7 MH	Short	Non-Cutoff	+90° C

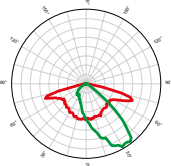
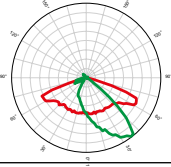
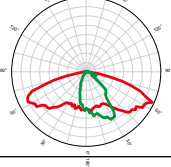
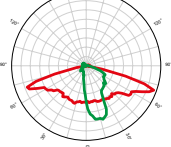
NACTUS 2X2 STREET LIGHTING

PART #	LEDs	LED TYPE	BEAM	IESNA CLASSIFICATION	EU CLASS.	MOUNTING HEIGHT	ROAD WIDTH	POLE DISTANCE	LONGITUDINAL CLASSIFICATION	CUT OFF	MAX TEMP.
KNAC0424ASM	4	3535		Type III	M	8 to 12 m	>1 MH	4.5 MH	Medium	Semi-Cutoff	+90° C
KNAC0425ASM	4	3535		Type II	M	8 to 12 m	0.5 MH	3.5 MH	Very Short	Semi-Cutoff	+90° C
KNAC0426ASM	4	3535		Type III	M	8 to 12 m	1 MH	4.5 MH	Medium	Cutoff	+90° C
KNAC0428ASM	4	3535 5050		Type II	M	8 to 12 m	1.2 MH	3.5 MH	Medium	Cutoff	+90° C
KNAC0429ASM	4	3535		Type III	M	8 to 12 m	0.8 MH	4 MH	Very Short	Cutoff	+90° C
KNAC0430ASM	4	3535		Type III	M	8 to 12 m	1 MH	4.5 MH	Medium	Non-Cutoff	+90° C
KNAC0431ASM	4	3535 5050		Type I	P	Up to 5 m	0.8 MH	6 MH Staggered	Very Short	Cutoff	+90° C

NACTUS 2X2 STREET LIGHTING

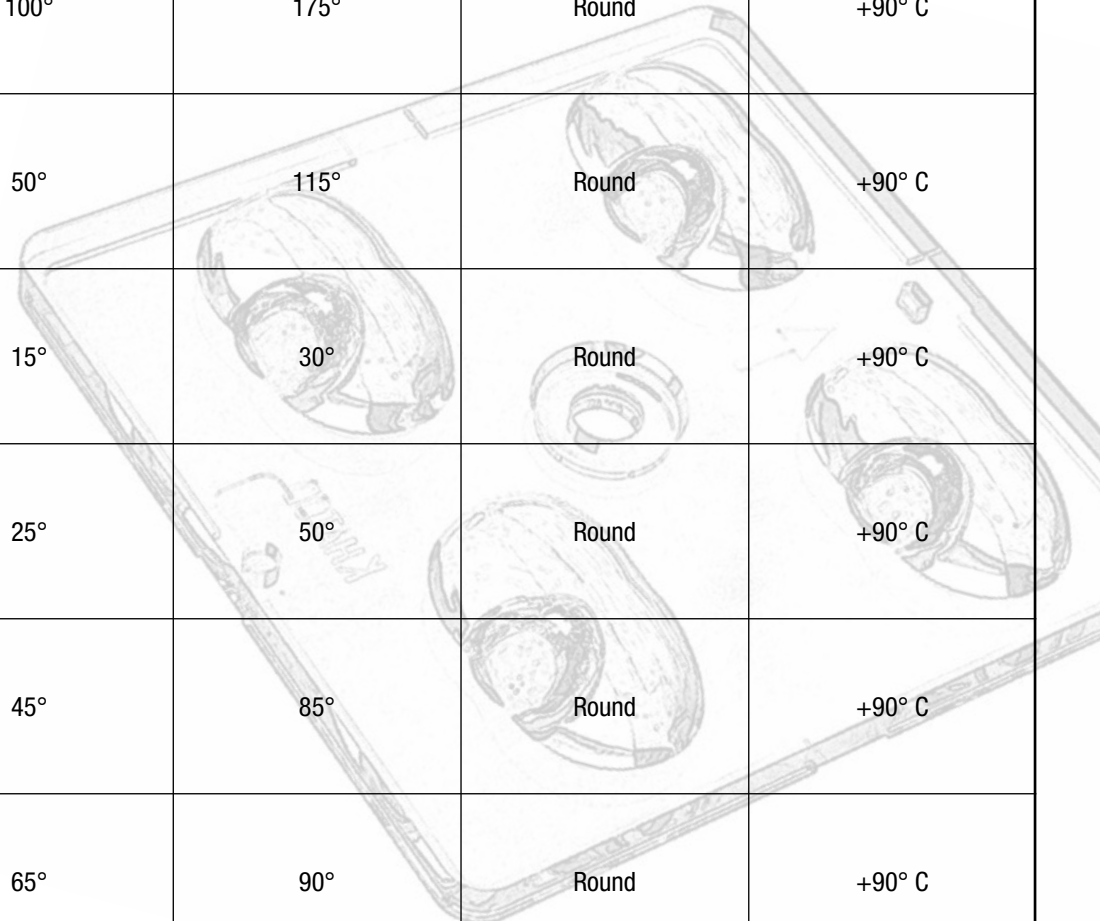
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KNAC0432ASM	4	3535 5050		Type I	P	5 to 10 m	0.8 MH	7 MH Staggered	Short	Semi-Cutoff	+90° C
KNAC0433ASM	4	3535 5050		Type III	M	TUNNEL LIGHTING	NA	NA	Very Short	Semi-Cutoff	+90° C
KNAC0434ASM	4	3535 5050		Type IV	P	5 to 10 m	1 MH	4 MH	Short	Semi-Cutoff	+90° C
KNAC0435ASM	4	3535 5050		Type II	M	8 to 12 m	0.5 MH	4.5 MH	Medium	Non-Cutoff	+90° C
KNAC0436 ASMPMA	4	3535		Type III	M	TUNNEL LIGHTING	NA	NA	Very Short	Semi-Cutoff	+90° C
KNAC0436ASM	4	3535		Type III	M	TUNNEL LIGHTING	NA	NA	Very Short	Semi-Cutoff	+110° C
KNAC0438ASM	4	3535 5050		Type IV	M	TUNNEL LIGHTING	NA	NA	Very Short	Cutoff	+90° C

NACTUS 2X2 STREET LIGHTING

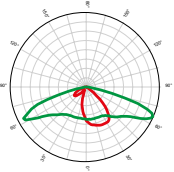
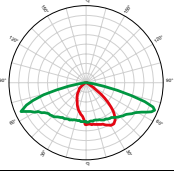
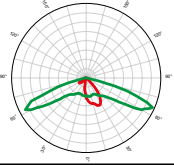
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KNAC0445ASM	4	3535 5050		Type II	M	8 to 12 m	0.8 MH	4 MH	Medium	Semi-Cutoff	+90° C
KNAC0446ASM	4	3535 5050		Type II	M	8 to 12 m	0.8 MH	4 MH	Short	Non-Cutoff	+90° C
KNAC0447ASM	4	3535 5050		Type II	M	8 to 12 m	0.8 MH	4 MH	Short	Non-Cutoff	+90° C
KNAC0448ASM	4	3535 5050		Type II	M	5 to 10 m	0.6 MH	4.5 MH	Short	Non-Cutoff	+90° C

NACTUS 2X2 ROTOSYMMETRICAL

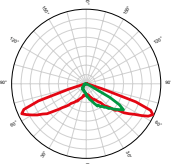
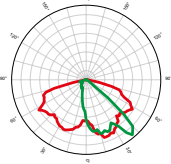
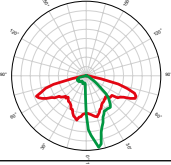
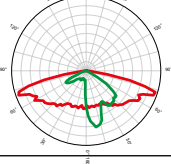
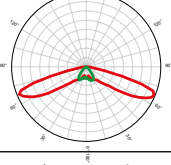
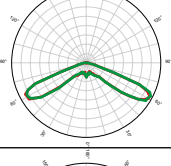
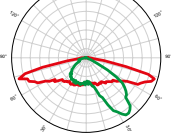
PART #	LEDs	LED TYPE	BEAM	BEAM ANGLE	FIELD ANGLE	BEAM SHAPE	MAX TEMPERATURE
KNAC0407ASM	4	3535 5050		100°	175°	Round	+90° C
KNAC0420ASM	4	3535 5050		50°	115°	Round	+90° C
KNAC0437ASM	4	3535		15°	30°	Round	+90° C
KNAC0441ASM	4	3535 5050		25°	50°	Round	+90° C
KNAC0442ASM	4	3535 5050		45°	85°	Round	+90° C
KNAC0443ASM	4	3535 5050		65°	90°	Round	+90° C
KNAC0444ASM	4	3535 5050		80°	140°	Round	+90° C



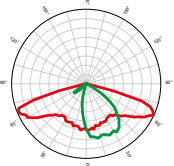
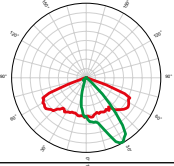
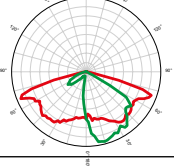
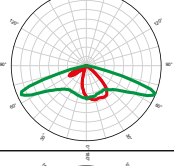
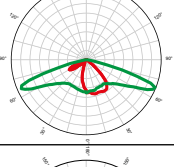
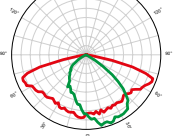
NACTUS 6 STREET LIGHTING

PART #	LEDs	LED TYPE	BEAM	IESNA CLASSIFICATION	EU CLASS.	MOUNTING HEIGHT	ROAD WIDTH	POLE DISTANCE	LONGITUDINAL CLASSIFICATION	CUT OFF	MAX TEMP.
KNAC0601ASM	6	5050		Type II	M	8 to 12 m	0.7 MH	4 MH	Medium	Cutoff	+90° C
KNAC0602ASM	6	5050		Type II	M	8 to 12 m	0.7 MH	4 MH	Medium	Cutoff	+90° C
KNAC0603ASM	6	5050		Type I	P	Up to 5 m	0.8 MH	7 MH Staggered	Short	Cutoff	+90° C

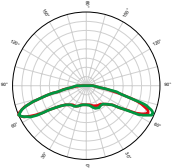
NACTUS 6X2 STREET LIGHTING

PART #	LEDs	LED TYPE	BEAM	IESNA CLASSIFICATION	EU CLASS.	MOUNTING HEIGHT	ROAD WIDTH	POLE DISTANCE	LONGITUDINAL CLASSIFICATION	CUT OFF	IK	IP	MAX TEMP.
PLL120005	12	3535 5050		Type III	P	5 to 10 m	0.6 MH	7 MH Staggered	Short	Cutoff	IK06	IPX5	+90° C
PLL120006	12	3535		Type III	M	8 to 12 m	0.7 MH	5 MH	Medium	Semi-Cutoff	IK06	IPX5	+90° C
PLL120007	12	3535 5050		Type II	M	8 to 12 m	0.5 MH	4 MH	Medium	Non-Cutoff	IK06	IPX5	+90° C
PLL120008	12	3535		Type III	M	8 to 12 m	>= 1 MH	4 MH	Medium	Non-Cutoff	IK06	IPX5	+90° C
PLL120403	12	3535 5050		Type I	P	5 to 10 m	>= 1 MH	4 MH	Medium	Non-Cutoff	IK06	IPX5	+90° C
PLL120404	12	3535 5050		Type VS	Wide Area	5 to 10 m	1.5 MH	NA	Short	Cutoff	IK06	IPX5	+90° C
PLL120406	12	3535 5050		Type II	M	8 to 12 m	0.7 MH	4 MH	Short	Semi-Cutoff	IK06	IPX5	+90° C

NACTUS 6X2 STREET LIGHTING

PART #	LEDs	LED TYPE	BEAM	IESNA CLASSIFICATION	EU CLASS.	MOUNTING HEIGHT	ROAD WIDTH	POLE DISTANCE	LONGITUDINAL CLASSIFICATION	CUT OFF	IK	IP	MAX TEMP.
PLL120424	12	3535		Type III	M	8 to 12 m	> 1 MH	4.5 MH	Medium	Semi-Cutoff	IK06	IPX5	+90° C
PLL120425	12	3535		Type II	M	8 to 12 m	0.5 MH	3.5 MH	Very Short	Semi-Cutoff	IK06	IPX5	+90° C
PLL120426	12	3535		Type III	M	8 to 12 m	1 MH	4.5 MH	Medium	Cutoff	IK06	IPX5	+90° C
PLL120428	12	3535 5050		Type II	M	8 to 12 m	1.2 MH	3.5 MH	Medium	Cutoff	IK06	IPX5	+90° C
PLL12900428	12	3535 5050		Type II	M	8 to 12 m	1.2 MH	3.5 MH	Medium	Cutoff	IK06	IPX5	+90° C
PLL121923	12	3535 5050		Type II	M	8 to 12 m	1.2 MH	4 MH	Medium	Semi-Cutoff	IK06	IPX5	+90° C

NACTUS 6X2 SIL STREET LIGHTING

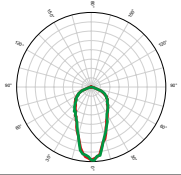
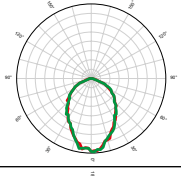
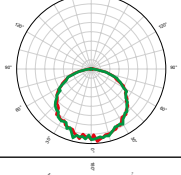
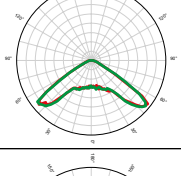
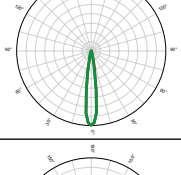
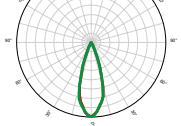
PART #	LEDs	LED TYPE	BEAM	IESNA CLASSIFICATION	EU CLASS.	MOUNTING HEIGHT	ROAD WIDTH	POLE DISTANCE	LONGITUDINAL CLASSIFICATION	CUT OFF	IK	IP	MAX TEMP.
PLL120002SR	12	3535 5050		Type VS	Wide Area	5 to 12 m	2.5 MH	NA	Short	Cutoff	IK10	IPX6	+130° C
PLL120003SR	12	3535 5050		Type II	M	8 to 12 m	0.5 MH	3 MH	Short	Cutoff	IK10	IPX6	+130° C
PLL129003SR	12	3535 5050		Type II	M	8 to 12 m	0.5 MH	3 MH	Short	Cutoff	IK10	IPX6	+130° C
PLL120004SR	12	3535 5050		Type III	M	8 to 12 m	1 MH	4 MH	Short	Cutoff	IK10	IPX6	+130° C
PLL129004SR	12	3535 5050		Type III	M	8 to 12 m	1 MH	4 MH	Short	Cutoff	IK10	IPX6	+130° C

NACTUS 6x2 SIL Optical System is supplied without holder.

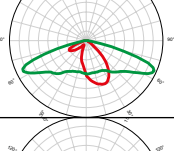
The **holders** are optional and will be **supplied only on request** under the following part numbers:

PART #	MATERIAL
KEL12	PPS Natural
KEL12/01	PPS Black
KEL12/ALU	Aluminium

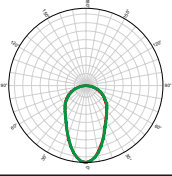
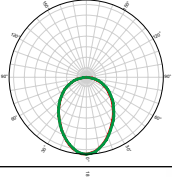
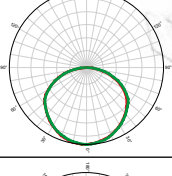
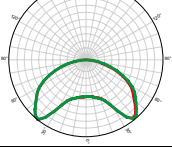
NACTUS 6X2 ROTOSYMMETRICAL

PART #	LEDs	LED TYPE	BEAM	BEAM ANGLE	FIELD ANGLE	BEAM SHAPE	IK	IP	MAX TEMPERATURE
PLL120001	12	3535 5050		55°	160°	Round	IK06	IPX5	+90° C
PLL120002	12	3535 5050		80°	160°	Round	IK06	IPX5	+90° C
PLL120003	12	3535 5050		125°	175°	Square	IK06	IPX5	+90° C
PLL120004	12	3535 5050		120°	150°	Square	IK06	IPX5	+90° C
PLL120001TR	12	3535 5050		15°	30°	Round	IK06	IPX5	+90° C
PLL120002TR	12	3535 5050		35°	55°	Round	IK06	IPX5	+90° C

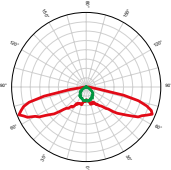
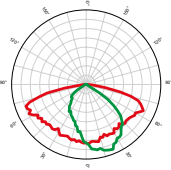
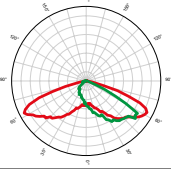
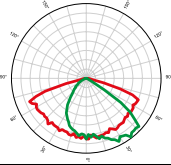
NACTUS 4X2 STREET LIGHTING

PART #	LEDs	LED TYPE	BEAM	IESNA CLASSIFICATION	EU CLASS.	MOUNTING HEIGHT	ROAD WIDTH	POLE DISTANCE	LONGITUDINAL CLASSIFICATION	CUT OFF	IK	IP	MAX TEMP.
PLL080005	8	3535 5050		Type III	P	5 to 10 m	0.6 MH	7 MH Staggered	Short	Cutoff	-	-	+90° C
PLL080403	8	3535 5050		Type I	P	5 to 10 m	>= 1 MH	4 MH	Medium	Non-Cutoff	-	-	+90° C
PLL080404	8	3535 5050		Type VS	Wide Area	5 to 10 m	1.5 MH	NA	Short	Cutoff	-	-	+90° C
PLL080406	8	3535 5050		Type II	M	8 to 12 m	0.7 MH	4 MH	Short	Semi-Cutoff	-	-	+90° C
PLL080425	8	3535		Type II	M	8 to 12 m	0.5 MH	3.5 MH	Very Short	Semi-Cutoff	-	-	+90° C
PLL080426	8	3535		Type III	M	8 to 12 m	1 MH	4.5 MH	Medium	Cutoff	-	-	+90° C
PLL12801A	8	3535 5050		Type II	M	8 to 12 m	0.7 MH	3.5 MH	Medium	Semi-Cutoff	IK06	IPX5	+90° C
PLL1289001A	8	3535 5050		Type II	M	8 to 12 m	0.7 MH	3.5 MH	Medium	Semi-Cutoff	IK06	IPX5	+90° C

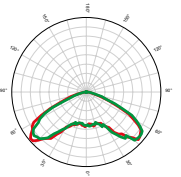
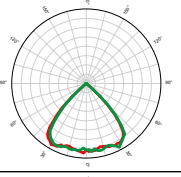
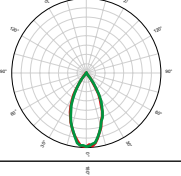
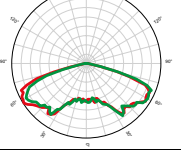
NACTUS 4X2 ROTOSYMMETRICAL

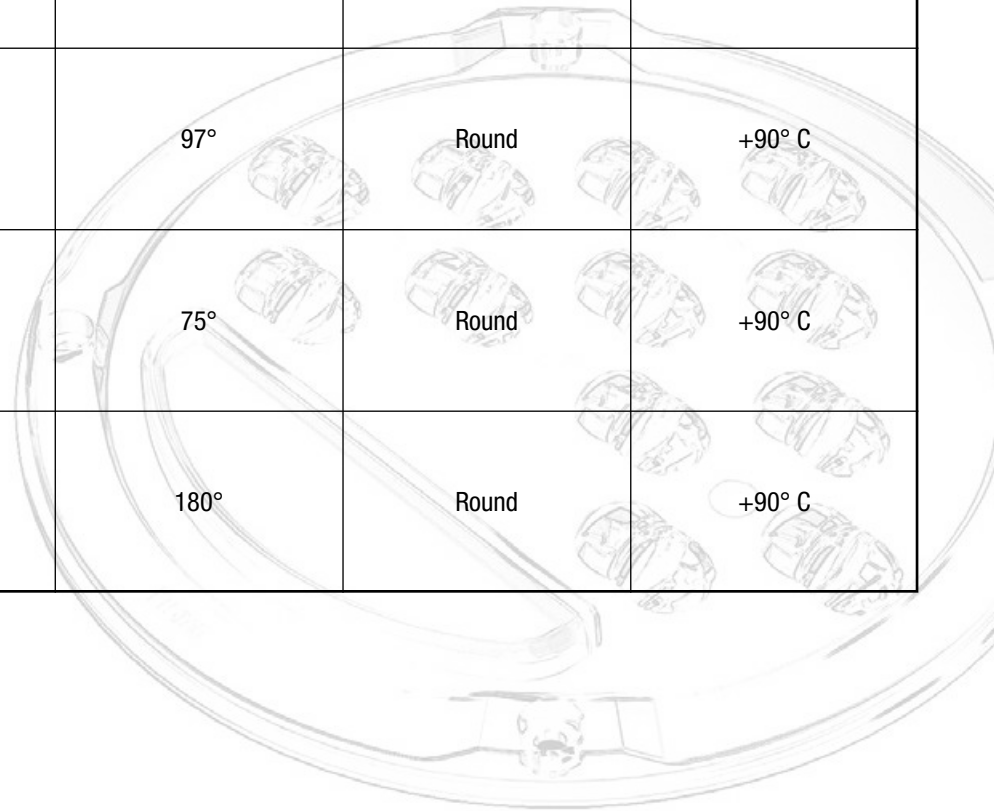
PART #	LEDs	LED TYPE	BEAM	BEAM ANGLE	FIELD ANGLE	BEAM SHAPE	MAX TEMPERATURE
PLL080001	8	3535 5050		55°	160°	Round	+90° C
PLL080002	8	3535 5050		90°	160°	Round	+90° C
PLL080003	8	3535 5050		120°	175°	Square	+90° C
PLL080004	8	3535 5050		130°	150°	Square	+90° C

NACTUS SMILE STREET LIGHTING

PART #	LEDs	LED TYPE	BEAM	IESNA CLASSIFICATION	EU CLASS.	MOUNTING HEIGHT	ROAD WIDTH	POLE DISTANCE	LONGITUDINAL CLASSIFICATION	CUT OFF	MAX TEMP.
KMF1201M	12	3535		Type I	P	5 to 10 m	1 MH	4 MH Staggered	Short	Cutoff	+85° C
KMF1202M	12	3535		Type II	P	5 to 10 m	>= 1M H	4 MH	Very Short	Cutoff	+85° C
KMF1203M	12	3535		Type III	P	Up to 5 m	2 MH	7 MH	Short	Semi-Cutoff	+85° C
KMF12M3A	12	3535		Type II	P	5 to 10 m	1,5 MH	6 MH	Short	Cutoff	+85° C

NACTUS SMILE ROTOSYMMETRICAL

PART #	LEDs	LED TYPE	BEAM	BEAM ANGLE	FIELD ANGLE	BEAM SHAPE	MAX TEMPERATURE
KMF12SQA	12	3535		135°	165°	Square	+90° C
KMF1290A	12	3535		90°	97°	Round	+90° C
KMF1260A	12	3535		60°	75°	Round	+90° C
KMF1205M	12	3535		155°	180°	Round	+90° C



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