



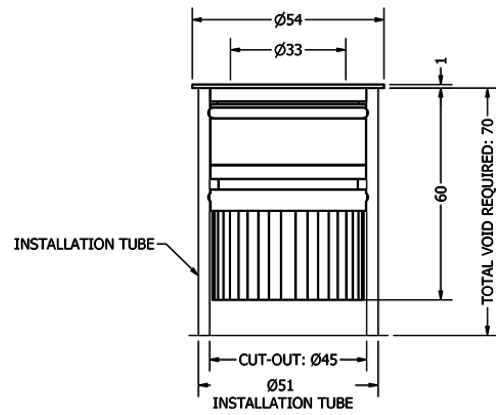
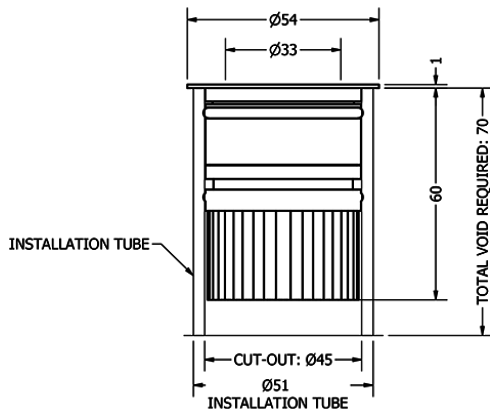
PHOS  
ENGINEERING LIGHT

## PANO MIDI DARKLIGHT SQUARE

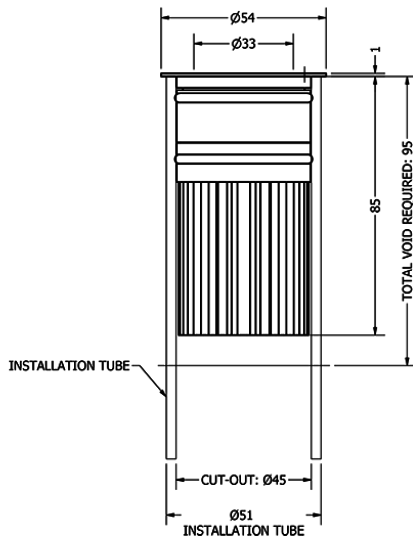
STANDARD



4 & 9W



14W



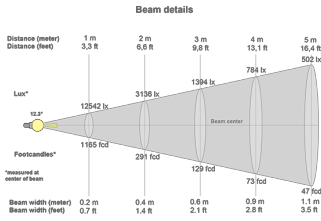
## TECHNICAL SPECIFICATIONS

CCT	2700K											
Wattage	4W				9W				14W			
BeamAngle	10°	25°	35°	50°	10°	25°	35°	50°	10°	25°	35°	50°
Luminaire Lumens (lm)	308	259	260	220	504	420	421	365	634	535	531.00	458
Circuit Watts (c/W)	5.9	5.9	5.9	5.9	10.5	10.5	10.4	10.5	15.6	15.5	15.50	15.5
LuminaireEfficacy (l/cW)	52	44	44	37	48	40	40	35	41	34	34	30
Luminance (Cd)	5157	1199	662	310	8698	1963	1090	514	10226	3036	1847.00	708
Light Source (Lm/W)	95	95	95	95	80	80	80	80	69	69	69	69
Engine (Lm/W)	64	64	64	64	59	59	59	59	51	51	51	51
Forward Volatage (Vf)	11.78	11.78	11.78	11.78	12.36	12.36	12.36	12.36	12.65	12.65	12.65	12.65
Current (mA)	350	350	350	350	700	700	700	700	1050	1050	1050	1050

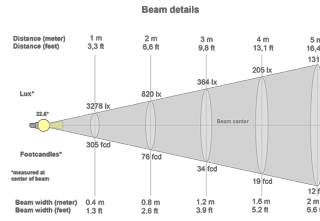
CCT	3000K											
Wattage	4W				9W				14W			
BeamAngle	10°	25°	35°	50°	10°	25°	35°	50°	10°	25°	35°	50°
Luminaire Lumens (lm)	355	298	293	252	541	441	458	423	786	656	651	523
Circuit Watts (c/W)	5.9	5.9	5.9	5.9	10.5	10.5	10.5	10.4	15.8	15.8	15.8	15.7
LuminaireEfficacy (l/cW)	60	51	50	43	52	42	44	41	50	42	41	33
Luminance (Cd)	5255	1404	804	368	6409	2720	1964	627	12486	3253	1922	893
Light Source (Lm/W)	95	95	95	95	80	80	80	80	69	69	69	69
Engine (Lm/W)	76	76	76	76	71	71	71	71	62	62	62	62
Forward Volatage (Vf)	11.78	11.78	11.78	11.78	12.36	12.36	12.36	12.36	12.65	12.65	12.65	12.65
Current (mA)	350	350	350	350	700	700	700	700	1050	1050	1050	1050

Binning	2 step MacAdams
CRI	90+
TM-30-15	Rf87.41 - Rg99.96
Lumen Maintenance	LM80
Lifetime	50,000 hours
Dimming	Mains Dim, DALI, CASAMBI, 0-10V, Non-dim

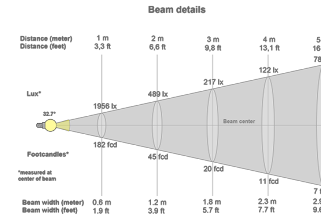
## LIGHT CONES



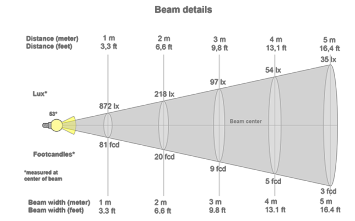
10°



25°

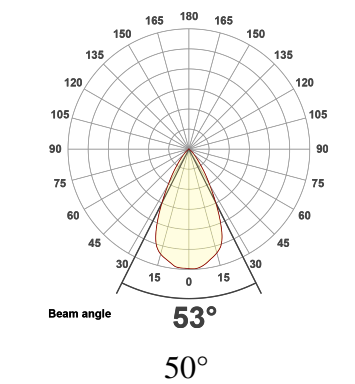
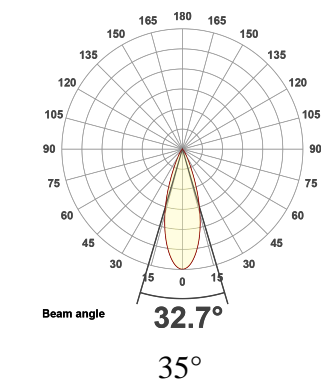
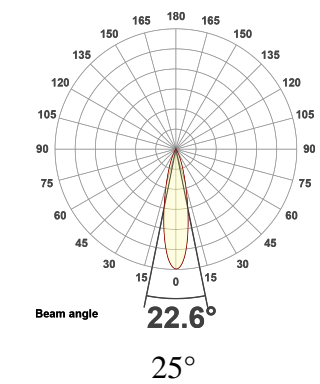
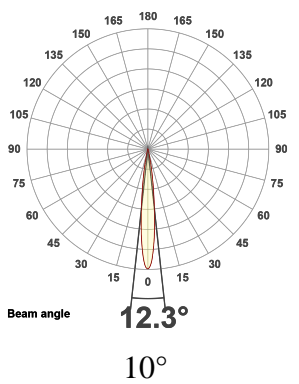


35°



50°

## POLAR CURVES



## PART CODE BUILDER

Example Code: MD-PD-SQ-WT-STD4-27-90-10-350

Family	Variant	Bezel Finish	Engine	Power	CCT	CRI	Beam Angle	Driver Current
MD	PD-SQ	WT	STD	4W	27K	90	10°	350mA
		BT		9W	30K		25°	700mA
		*C		14W			35°	1050mA
							50°	

# REGENERATION FOR GENERATIONS



View ReGen Doc



**TAKE**  
Sourcing material locally



**MAKE**  
Responsible manufacture



**WASTE**  
Lifetime duty of care



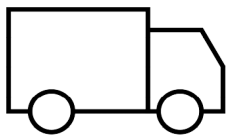
## SOFT TM66 RESULTS

Category	Points Scored	MAX Possible Points	Assessment
Product Design	111.0	134.0	3.3
Manufacturing	35.0	46.5	3.0
Materials	11.0	24.0	1.8
Ecosystem	36.0	43.0	3.3
Overall Performance	193.0	247.5	2.9
2.5 to 4.0	Excellent circularity		

TM65 Available upon request

*Embodied carbon in building services*

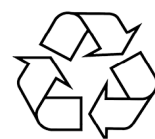
WE ENCOURAGE ALL FIXTURES TO BE RETURNED TO US SO WE CAN REGEN OR RECYCLE.



If a product has failed or has become EOL, we can arrange collection of the interchangeable light engines and associated drivers. Once received, we will review the engine to see if it can be **ReGenerated** or **recycled**.



If we can **ReGenerate** the light engine, we will only need to replace the faulty part of the fitting, which can then be restored to life, utilising all of our original optics and bezels.



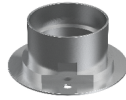
If the unit is beyond the point of repair, we will ensure the raw material is always fully recycled. We encourage all fixtures to be returned to us so we can **ReGen** or **recycle**.

**ACCESSORIES**



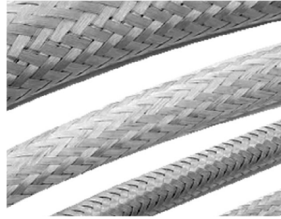
Midi Installation Tube

ACC-MD-TUBE



Midi Collar Tube

ACCS-MD-COLLARTUBE



Exterior Cable Sleeve

ACCS-E-CABLESLEEVE-5MM

**INSERTS**



Elliptical Insert

*NOT available for square versions*

EL



Asymmetric Insert

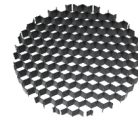
*NOT available for square versions*

AS



Softening Insert

SL



Honeycomb Insert

HC



Halfmoon Insert

*NOT available for square versions*

HM



Colour Change Insert

CCT: 18K

CCT: 22K

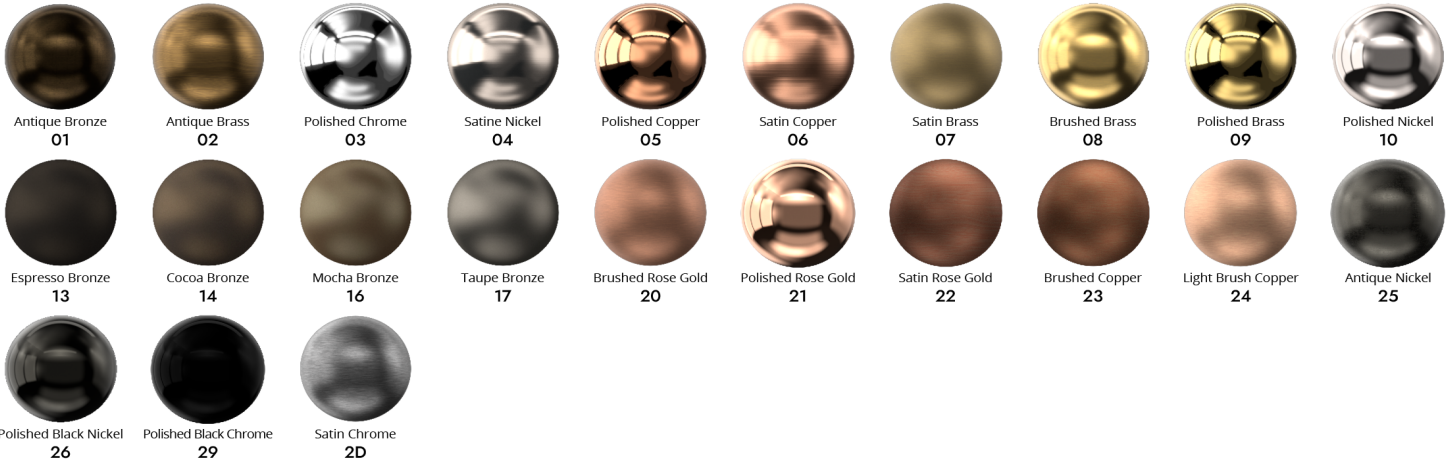
CCT: 24K

CCT: 25K

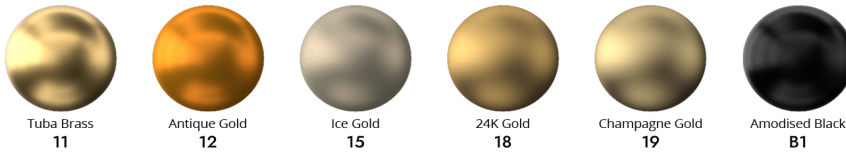
## FINISHES

Every element of your light can be finished in any of the options below, or RAL colour:

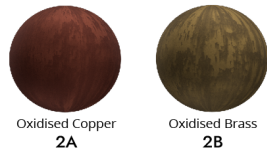
### PLATED (Interior ONLY)



### ANODISED (Interior ONLY)



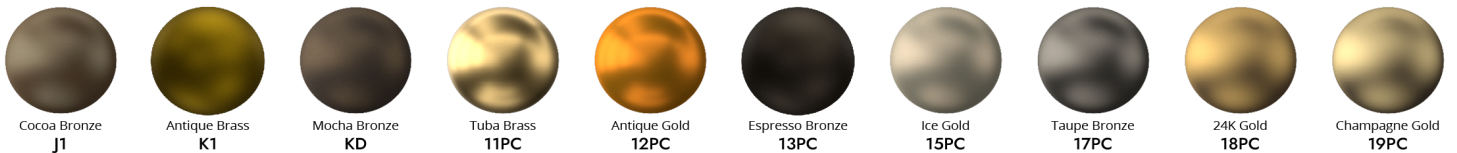
### SPECIALITY PLATED (Interior ONLY)



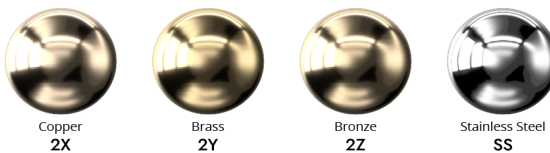
### POWDER COAT (Interior & Exterior)



### METAL POWDER COAT (Interior & Exterior)



### MARINE GRADE (Interior, Exterior & Harsh Environment)



### SPECIALITY POWDER COAT (Interior & Exterior)

