

# SGAL

## EXPERIENCES WITH LIGHTING OF SPORTS FIELDS





# SGL

HOW IT ALL BEGAN



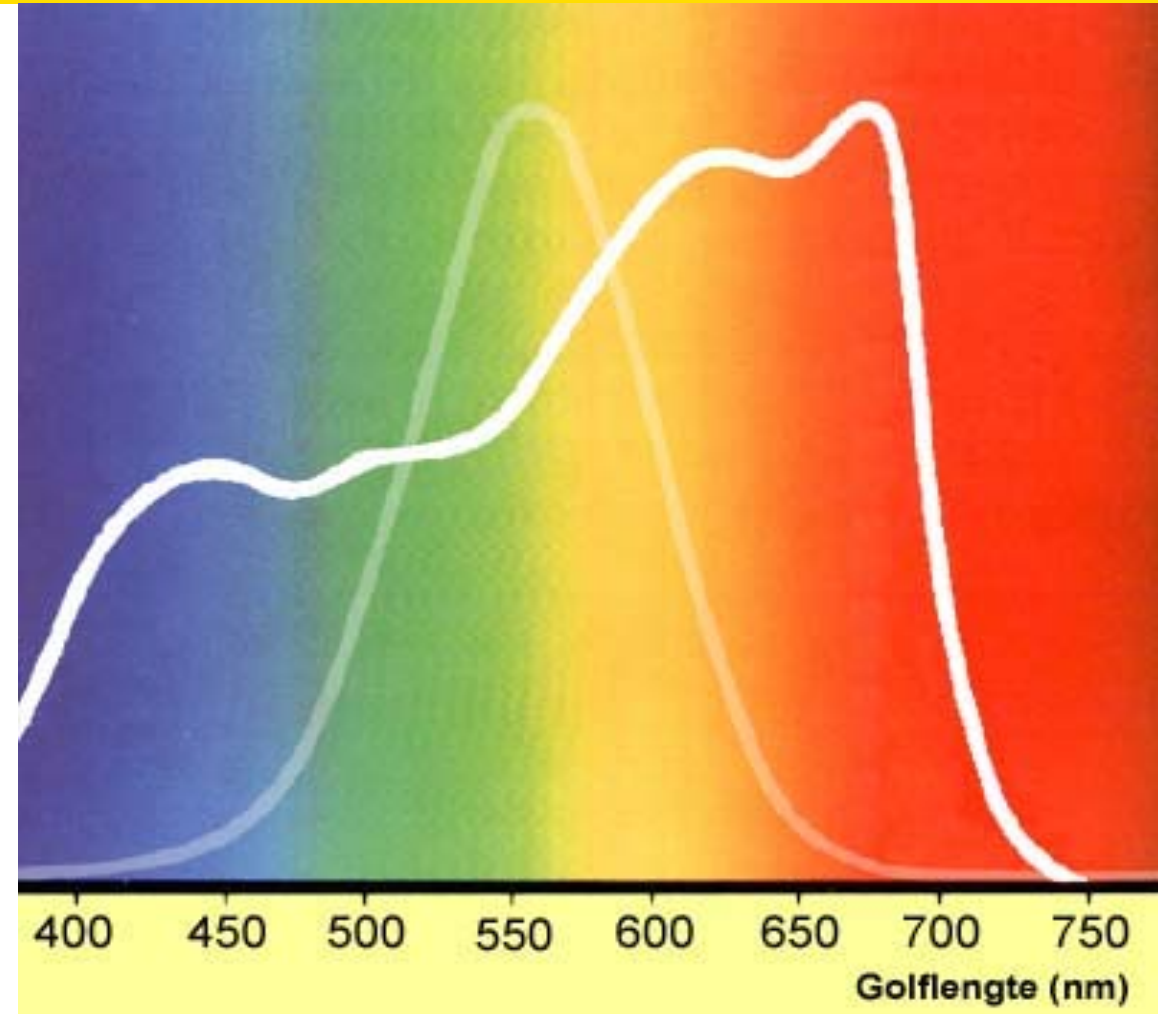
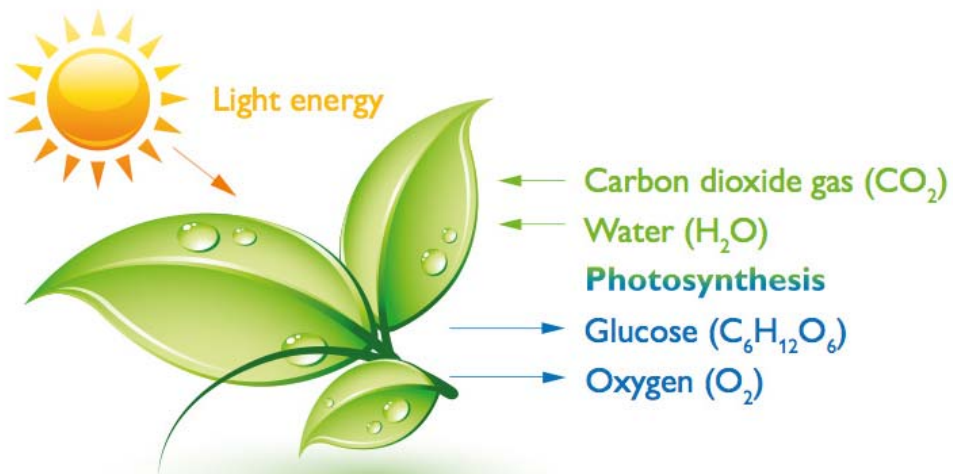


# SGL

HOW IT ALL BEGAN



- Photosynthetic Active Radiation (PAR light)
- Photosynthesis >> grass growth







## BENEFITS

- Influence on temperature and humidity
- Fewer fungal diseases and other moisture-related problems (air circulation)
- Recovery time extremely high all year round
- Overseeding possible in the winter
- But... a good pitch is not lights only

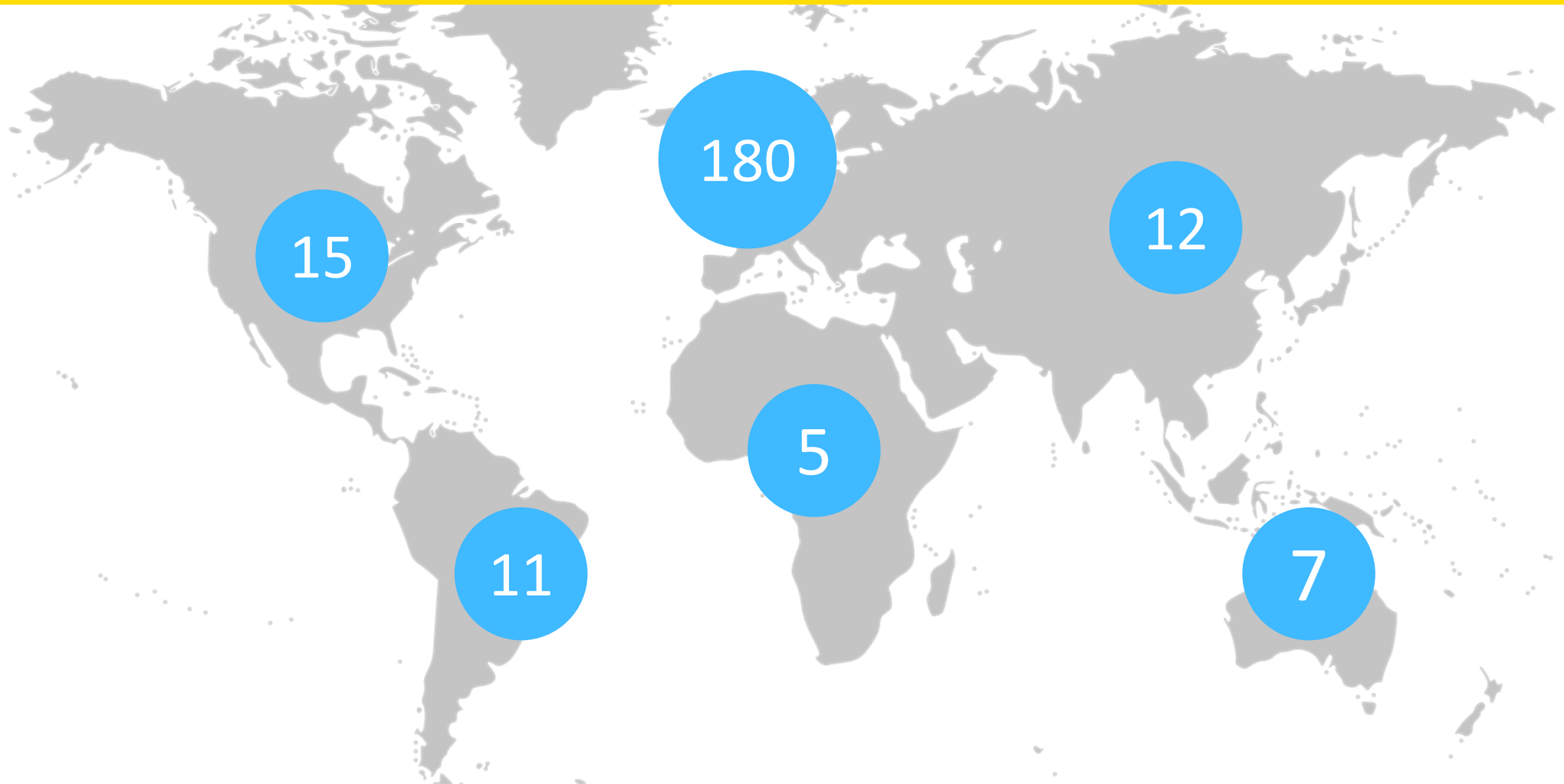
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FIRST STADIUM TRIAL 2002





WHERE WE ARE NOW





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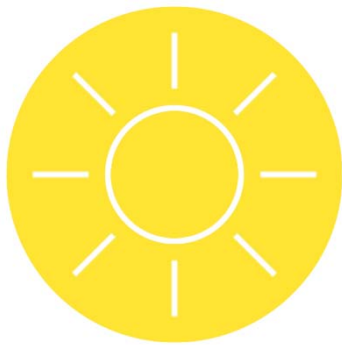
WHERE WE ARE NOW







WHAT IS SGL?



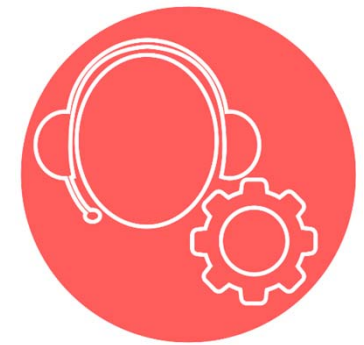
GRASS LIGHTING



GRASS MONITORING



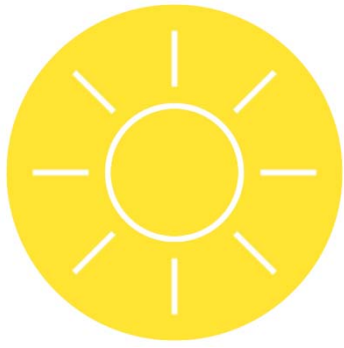
GRASS CARE



SERVICE

# SGL

## GRASS LIGHTING



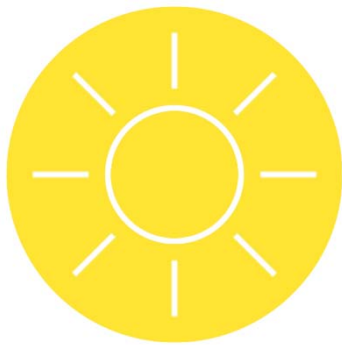
GRASS LIGHTING





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GRASS LIGHTING



GRASS LIGHTING



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## GRASS MONITORING



GRASS MONITORING





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## GRASS MONITORING

Soil moisture

Soil temperature

Salinity

PAR light inside stadium

Humidity

Air temperature





# GRASS MONITORING

HOME PITCH REGISTER DATA ▾ ANALYSER REPORTS WEATHER PITCHCAM MANUALS NEWS 9 ▾

### MOST RECENT VALUES

21/06/2017 08:11 next: 38sec

**BMO - Field**

- Rel. Humidity 95.9 %
- Temperature 14 °C
- Battery Pitch Cube 97 %
- Battery Roof sensor 99 %
- Battery Soil Cube 94 %
- Leaf wetness Pitch Cube 675 -
- Leaf wetness Soil Cube 815 -
- PPFD pitch 152  $\mu\text{mol}/\text{m}^2/\text{s}$
- PPFD Roof 752  $\mu\text{mol}/\text{m}^2/\text{s}$
- Soil Moisture 0 vol.%
- Canopy Temperature 14.6 °C
- Dewpoint 13.4 °C
- EC 0 dS/m

### PITCH QUALITY AND USAGE HOURS

8. May 22. May 5. Jun

Legend: Goal areas (diamond), Corners (square), Pitch (circle), Pitch usage hours (bar)

### PITCHCAM

[Live stream >](#)

### REGISTERED LIGHTING HOURS 3 WEEKS

		East					
		A	B	C	D	E	F
North	1	43	63.5	129	88	63.5	180
	2	43	63.5	129	88	63.5	180
	3	43	63.5	129	88	63.5	180
		West					

### LIGHTING ADVICE TODAY- 25 JUNE

		East					
		A	B	C	D	E	F
North	1	0	0	0	0	0	0
	2	0	0	0	0	0	0
	3	0	26	0	11	18	0
		West					

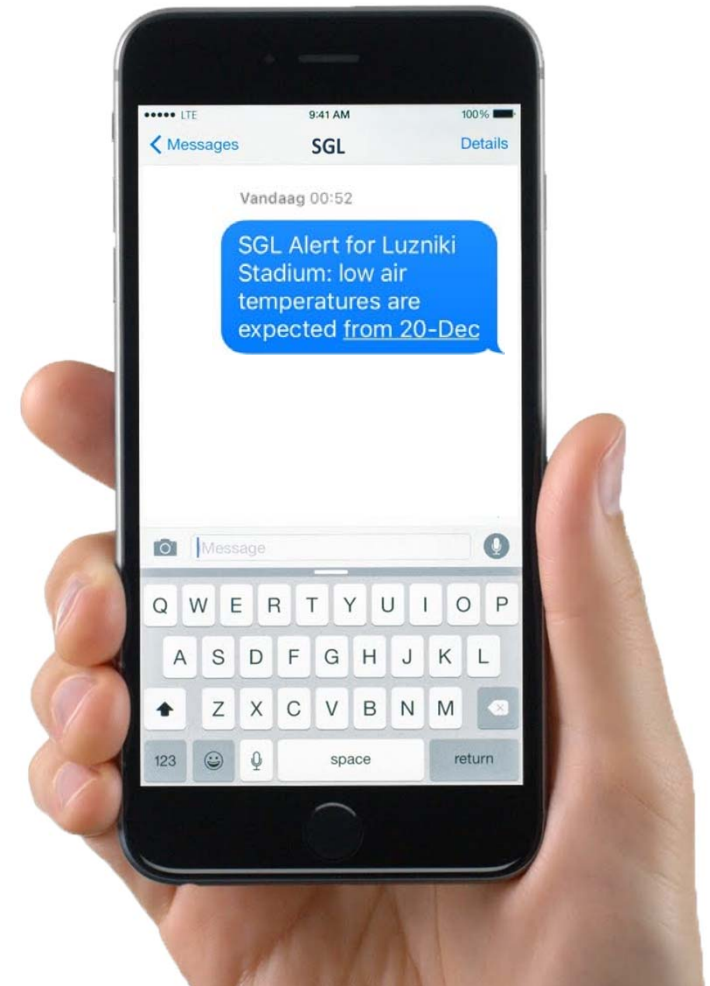
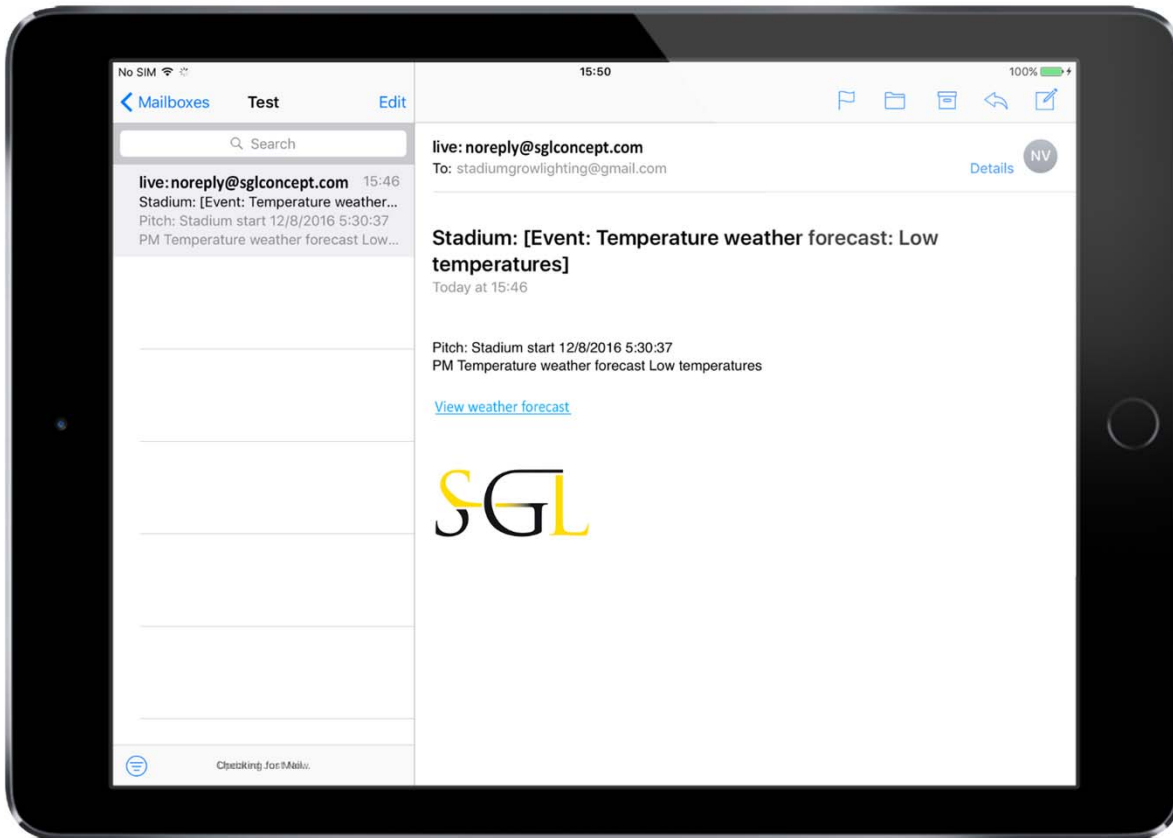
### WEATHER FORECAST

	Temp (°C)	Precip (mm)	PAR (mol/m <sup>2</sup> )	Wind (bft)
<b>21 June</b>				
09:00	16	0	2.0	10
10:00	17	0	3.3	10
11:00	18	0	4.6	10
12:00	19	0	5.1	10
13:00	19	0	5.6	10
14:00	20	0	6.1	10
15:00	20	0.0	6.0	10
16:00	20	0.0	5.9	10





## GRASS MONITORING



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GRASS CARE



GRASS CARE







## GRASS CARE

	White mold	Dollar spot	Brown patch	Microdochium patch	Summer patch	Pythium / blight	Net blotch	Leaf spot	Grey Leaf Spot
1-1-2017	0	4	0	0	0	3	1	0	0
2-1-2017	1	3	0	0	0	2	0	0	0
3-1-2017	2	0	0	0	0	2	1	0	0
4-1-2017	3	0	0	0	0	1	0	0	0
5-1-2017	0	3	0	0	0	0	0	1	0
6-1-2017	4	0	0	0	0	0	0	0	0
7-1-2017	5	1	0	0	0	0	0	0	0

Legend disease severity	
0	Remote
1	Low
2	Medium
3	Likely
4	Most likely
5	Almost certain



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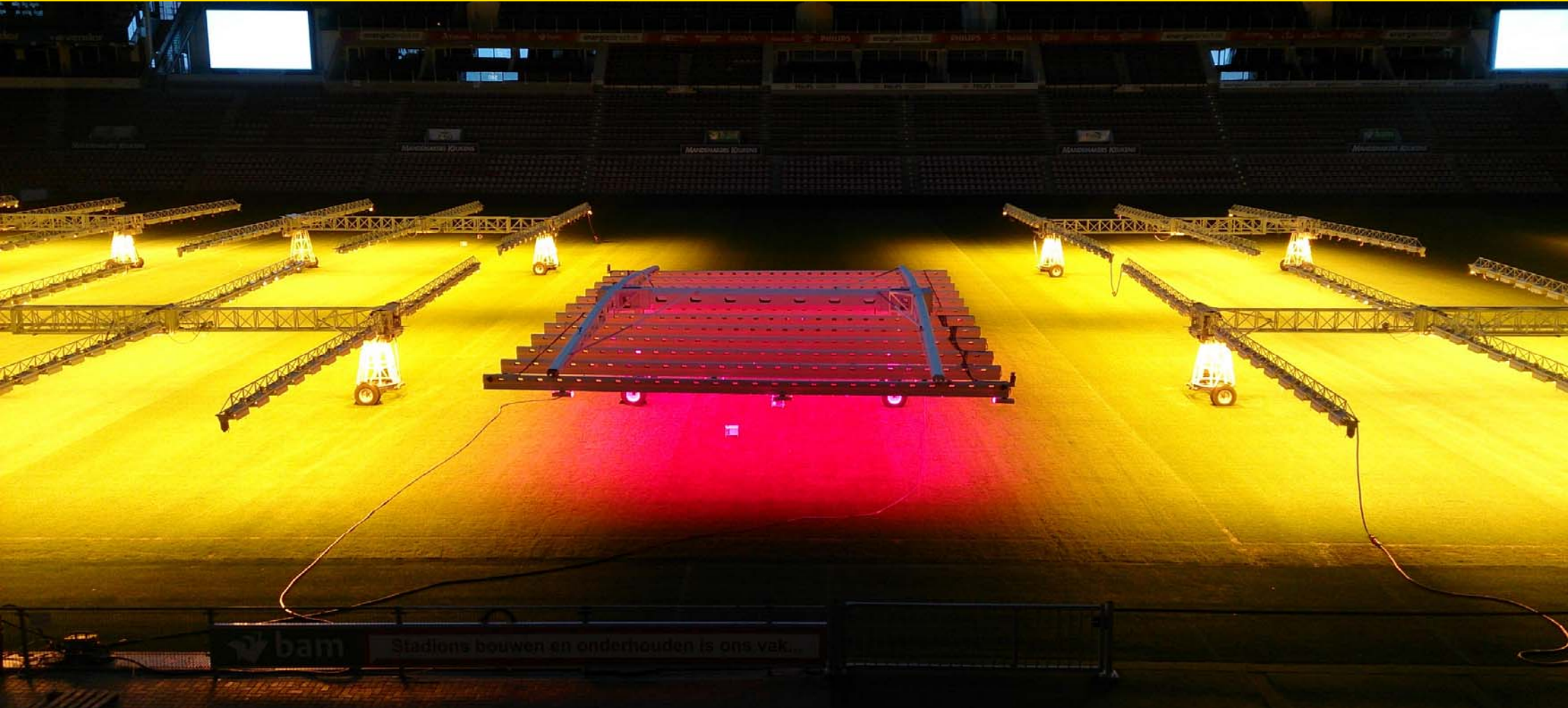
RESEARCH AND DEVELOPMENT





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## RESEARCH AND DEVELOPMENT





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THANK YOU

