



**QPS Evaluation Services Inc**  
**Testing, Certification and Field Evaluation Body**  
**Accredited in Canada, the USA, and Internationally**

<b>File</b>
<b>LR1311</b>

**CERTIFICATE OF COMPLIANCE**  
**(ISO TYPE 3 CERTIFICATION SYSTEM)**

Issued to	Raytec Ltd.
Address	Unit 15 Wansbeck Business Park, Rotary Parkway Ashington, Northumberland NE63 8QW, United Kingdom
Project Number	LR1311-1R4
Product	SPARTAN LED Standard Floodlight with emergency variants option
Model Number	SPX-FL-XX-W/I-YYZZ-xv SPX-BL-XX-W/I-YYZZ SPZ-HP-(22) (33) K-W-xyxy-xv SPZ-BL24-emergency variants. See Annex below for full model code
Ratings	See Annex below for Ratings and Markings
Applicable Standards	CSA C22.2 No. 94.2-07 CSA C22.2 No. 25-1996 CSA C22.2 No. 213-2016 CSA C22.2 No. 250.13-14 CSA C22.2 No. 141-15 UL 50E 1st edition ANS/ISA-12.12.01-2015 UL 8750 2nd edition UL 1203 5th edition UL 844 13 <sup>th</sup> edition UL 924 10 <sup>th</sup> edition
Factory/Manufacturing Location	Same as Applicant

**Statement of Compliance:** The product(s) identified in this Certificate and described in the Report covered under the above referenced project number have been investigated and found to be in compliance with the relevant requirements of the above referenced standard(s). As such, they are eligible to bear the QPS Certification Mark shown below, in accordance with the provisions of QPS's Service Agreement.



Issued By: **Dave Adams, P.Eng.**  
 Manager, Hazardous Locations [Ex Equipment] Department

Signature:

Date: January 25, 2019



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**ANNEX**

SPARTAN LED Standard Floodlight.  
 Model: SPX-FL and SPX-BL, SPZ-HP and SPZ-BL24 Series.

**A. SPX-FL and SPX-BL Model Number with suffix:**

Model # SPX-FL-XX-W/I-YYZZ -xv\*

Model # SPX-BL-XX-W/I-YYZZ -xv\*

Option: \*      XX: Size of the Floodlight: 12: Small, 24: Medium, 48: Large  
                   W:      White light, or I: Infra-Red.  
                   YYZZ-Light projection angle and distance: YY: Horizontal, ZZ: Vertical  
                   Available option combinations:  
                   xv: In put voltage. –HV: high voltage (110-254 Vac), -LV: Low voltage (18-40Vdc)

Code	Projection Angle	Code	Projection Angle
1010:	10°x10°	3510	35°x10°
3030:	30°x30°	5050:	50°x50°
6025:	60°x25°	8030:	80°x30°
12050:	20°x50°	120120:	120°x120°

Rating:

Model #	SPX-FL-12-	SPX-FL-24, SPX-BL-24	SPX-FL-48
<b>Input Voltage</b>	110-254 Vac (HV) or 18-40Vdc (LV)		
<b>Consumption</b>	33 Watts Max.	66 Watts Max.	132 Watts Max.
<b>Current</b>	0.3A Max.	0.6 A Max.	1.2 A Max.
<b>Mains Frequency</b>	50/60 Hz		
<b>Ingress protection</b>	Enclosure Type 4X.		

Class I, Div. 2 Gr ABCD T5  
 Class II, Div. 1, Div. 2 Gr EFG  
 Tamb= -52°C to + 50°C  
 Enclosure Type 4X

**B. SPZ-HP Model Number with suffix:**

SP (1) - HP (22) (33) K - W - xxyy

Where:

- SP                    SPARTAN High Power Flood,
- (1)    Z             Division 2, Groups A, B, C, D, E, F, G
- (22)   FL           Floodlight
- BY           Highbay
- (33)   \*\*           Lumens (x 1,000) up to a maximum of 25
- K             Lumens (x 1,000)
- W             White Light
- xxyy          Circular beam pattern, xx° x yy° beam



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Code	Projection Angle
1010:	10°x10°
3030:	30°x30°
9090:	90°x90°

Ratings:

Model #	150W version	300W version
<b>Input Voltage</b>	120-277 Vac or 186-275 Vdc	
<b>Consumption</b>	150 Watts Max.	300 Watts Max.
<b>Current (230Vac, full load)</b>	0.7A Max.	1.4 A Max.
<b>Power Factor (230Vac, full load)</b>	>0.97	
<b>Inrush Current (I<sub>peak</sub>@50%)</b>	53A, Δt <300μs	60A, Δt <300μs
<b>Total Harmonic Distortion (230Vac, full load)</b>	<3%	
<b>Mains Frequency</b>	50/60 Hz	
<b>Ingress protection</b>	Enclosure Type 4X.	

Class I, Div. 2 Gr ABCD T4  
 Class II, Div. 1, Div. 2 Gr EFG  
 Tamb= -40°C to + 50°C  
 Enclosure Type 4X

**C. SPZ SPARTAN Model Number with suffix:**

Rating:

Model #	SPZ-BL24			SPZ-BL24-Emergency		
<b>Input Voltage</b>	110-254 Vac/Vdc (HV) or 18-40Vdc or 18-69Vdc			110-254 Vac		
<b>Consumption</b>	34 Watt Max			37 Watts		
<b>Current</b>	0.375A Max.			0.375 A		
<b>Frequency (AC)</b>	AC: 50/60 Hz or Dc					
<b>Ingress protection</b>	Enclosure Type 4X.					
<b>Emergency Option</b>	N/A	N/A	N/A	3 hr @ 25% Power light output or See suffix "AB" for Detail		
<b>Emergency Charge Time:</b>	N/A			20 Hr.		
<b>Tamb:</b>	-50°C to + 55°C			-20°C to + 55°C		
<b>Hazardous Loc.</b>	Class I, Div. 2 Gr ABCD T5 Class II, Div. 1, Div. 2 Gr EFG					

**Nomenclature.**

Operation model	SPZ	-BL24	W	1010	EMX25	CID2	-xv
Standard	SPZ	-BL24	W	YYZZ	N/A	CID2	-HV/-LV
Emergency operation	SPZ	-BL24	W	YYZZ	AB	CID2	N/A

*Where:*

SPZ            SPZ SPARTAN Series  
 BL24        Bulkhead with 24 LEDs  
 W            W: White Light  
 YYZZ        Circular beam pattern, YY° ZZ° beam

Code	Projection Angle	Code	Projection Angle
1010:	10°x10°	3510	35°x10°
3030:	30°x30°	5050:	50°x50°
6025:	60°x25°	8030:	80°x30°



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12050:	20°x50°	120120:	120°x120°
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AB            % of Light output in Emergency mode.

Code:	Light output in Emergency mode	Time (Min)
EMX25	25%	180
EMX50	50%	90
EMX75	75%	60
EMX100	100%	45

CID2            Unit with protection level  
 Class I Div 2. Gr. A B C D. Class II. Div 1, 2 Gr. E F G

xv              In put voltage. -HV: high voltage(110-254 Vac), -LV: Low voltage (18-40Vdc)

- **Marking**  
 Class I, Div. 2 Gr ABCD T5  
 Class II, Div. 1, Div. 2 Gr EFG  
 Tamb" -40°C to + 50°C(SPZ-BL24), or Tamb: -20°C to + 55°C (SPZ-BL24-emergency)  
 Enclosure Type 4X