

# SP-401P PORTABLE RUNWAY EDGE LIGHT

# **MEDIUM INTENSITY**

# WHITE/YELLOW









#### Compliance:

ICAO Annex 14 Vol. I (8th. Edition, July 2018) EASA CS-ADR-DSN FAA AC



- 180 hrs of autonomy
- · Remote activation
- Convertible to solar airfield light

#### **APPLICATION**

Mobile airfield light designed to quickly illuminate temporary airfield in accordance with ICAO:

- Temporary runways
- · Remote airfields
- · Backup airport lighting
- Emergency landing airstrips

# **TECHNICAL SPECIFICATIONS**

	Optics														
	• 1.200 cd (white	e) / 850 cd (yellow) light output (tested by accredited laboratory)													
	Combined type	e, omnidirectional and bidirectional													
	LED lifespan:	00.000 hrs													
	<ul> <li>Maximum po</li> </ul>	ver consumption: 9W													
	<ul> <li>NVG-compati</li> </ul>	ble, Infrared LEDs (optional)													
	Color: white /	yellow													
	User-replaces	able													
1	Battery														
		· 2x built-in batteries, user-replaceable, air transportal													
		Autonomy: 180 hrs (minimum intensity)													
	Standard battery	Total capacity: 216W (2x9Ah/12V)													

Battery	
	• 2x built-in batteries, user-replaceable, air transportable
	Autonomy: 180 hrs (minimum intensity)
Standard battery	Total capacity: 216W (2x9Ah/12V)
	Deep-cycle VRLA, 12V/9Ah (available worldwide)
	Lifespan: 1.200 cycles (designed for 4-5 years)
	1x built-in battery, user-replaceable, air transportable
Cyclon battery	Autonomy: 100 hrs (minimum intensity)
(Arctic Pack)	Total capacity: 120W (10Ah/12V)
	Lifespan: 300 cycles (designed for 10-15 years)
Charging	

Charging	
	Via OCT-401 Charger (charging time: 8 hrs)
	Contactless charging in a Trailer (charging time: 8 hrs)
	Optional: solar power supply
Remote Activ	vation & Control
Remote Activ	vation & Control  • Wireless mesh type network
Remote Activ	

- Operating Modes:
   Steady / Flashing / Dusk till dawn
- Visible / Infrared (optional) / Visible + Infrared (optional)

# Remote activation:

- Via UR-101 Handheld Controller
- Via UR-201 Control & Monitoring Unit GSM activation (Cell Phone)
   VHE activation (Air-hand Radio)

	VHF activation (Air-band Radio)  Via ALCMS Computer Interface (requires UR-201)
Casing & Comp	ponents
	Materials
	Dome: glass, UV-resistant
	Casing: Lexan polycarbonate, UV-stabilized, color: aviation yellow
	Carrying handle: polycarbonate, stainless steel (optional)
	Detachable antenna
	Pressure stabilizing valve, transportation fuse
	Battery level indicator
	Transport circuit breaker
	Casing lifespan: 15 years
	Optional: frangible mounting (tested by accredited laboratory)
	Dimensions (LxWxH): 244 mm x 185 mm x 297 mm
	Weight: 7 kg

afety	&	Reliability	

- Five levels of protection against system failure
- Secondary power supply: backup battery
- Real-time monitoring via ALCMS (Airfield Lighting Control and Monitoring System)
- Emergency ON/OFF button

#### Environmental Conditions

- Temperature range: -20 to 50 °C (-4 to 122 °F)
- Optional: -40 to 80 °C (-40 to 176 °F)
- Ingress protection: IP-67 (tested by accredited laboratory)
- Impact Resistance: IK-10 (tested by accredited laboratory)

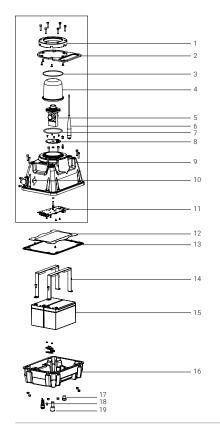
  Let Blood Parishers and All Judy Acceptable for the second distribution of the second distr

			Jet Blast	Resistan	ce:	240	kph	(tested	by	accredited	labora	atory)
--	--	--	-----------	----------	-----	-----	-----	---------	----	------------	--------	--------

Jet Blast Resistant	ce: 240 kpn (tested by accredited laboratory)										
Compliance											
Photometric & Chromaticity	ICAO, Annex 14th, Volume I, 7th Edition dated July 2016, clause 5.3.9.8 & clause 5.3.9.9, Appendix 1, Figure A1-1b										
Lat Diseat Desirator	ICAO, Annex 14th, Volume I, 8th Edition dated July 2018. Doc 9157, Part 6, clause 3.2.2 & clause 4.9.1.										
Jet Blast Resistance	FAA AC 150/5345-50B dated September 2007, clause 3.2.2										
	ICAO Doc 9157 AN901 Aerodrome Design Manual Part 6, 1st Edition dated 2006, clause 4.9										
Frangibility	ICAO, Annex 14th, Volume I, 8th Edition dated July 2018, clause 5.3.1.3										
	FAA AC 150-5345-46E clause 3.4.2.1										
	FAA AC 150/5220-23, clause 3.2										
Secondary Power Supply	ICAO, Annex 14th, Volume I, 7th Edition dated July 2016, clause 8.1.8-8.1.9 & clause 8.1.11										
CE Declaration of Conformity	2014/53/EU RED Directive, clauses 3.1a, 3.1b, 3.2										
GE Deciaration of Comornity	2011/65/EU ROHS Directive, clause 4.1										
Accredited Laboratory Testing											
Photometric & Chromaticity	Intertek Laboratory										
Jet Blast Resistance	Warsaw Institute of Aviation The Laboratory of Aerodynamics										
Frangibility	Laborex Research Laboratory										
Ingress Protection	EMAG Institute of Innovative Technologies										
Impact Resistance	Laborex Research Laboratory										
Electromagnetic Compatibility	Military Institute of Armament Technology										



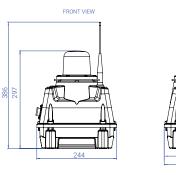
#### TECHNICAL DRAWING



1.	Adapter for glass dome
2.	Carrying handle
3.	O-ring for the glass dome
4.	Glass dome
5.	LED optics
6.	Radio antenna for wireless control & monitoring
7.	O-ring under the glass dome
8.	PCB board
9.	Casing upper part
10.	Charging port
11.	Main micro-computer with integrated radio transceiver
12.	Protective plate
13.	Rubber gasket
14.	Battery holder
15.	2x batteries built-in, VRLA type 12V/9Ah
16.	Casing bottom part
17.	Pressure stabilizing valve
18.	Emergency ON/OFF button
19.	Transportation fuse

SIDE VIEW







# PHOTOMETRIC PERFORMANCE

W	ite																																										
12"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	287	288	289	290	290	290	290	-		-	-				SF	-401 R	UNWA	Y EDGE	LIGHT	ING UN	IT (WH	ITE)				
11,5°	-	-			-	-	-	-	-	-		-		-	320	321	323	324	326	327	327	327	327	327	326	325	325		-		TEST	ADEA			DEOL	UIRED			DEC	ULTS			
11°				- 1		-		-		-	353	355	357	359	361	363	364	365	366	367	367	367	366	366	365	364	364	363	363														
10,5*		-	-	-		-	-	-	394		399	402	404	406	408	409	410	411	412	412	411	411	409	408	407	406	406	405	405		ARI					25 CD		MIN. 818,43 CD					
10°	-	-	-	-	-	-	-	440	444		451	454	455	457	458	460	460	461	461	460	459	459	457	455	453	452	451	450	450		BLUE				AVG MII	N. 50 C	D	AVG: 1069,00 CD					
9,5°	-		-			488	493	497	501	504	507	509	511	514	514	515	515	515	515	514	512	511	508	505	503	501	500	499	498			A 2	_		MIN.	10 CD		MIN. 553,26 CD					
9*	-		-	-	541	546	551	555	559	562	566	568	571	573	5/3	5/5	574	574	573	571	569	567	564	560	558	555	553	552	551		YELLO		T					⊢			_		
8,5°	-	-		600	606	611	615	619	623	626	630	634	637	639	639	641	640	640	639	636	633	631	626	622	618	614	612	610	608			A 3			MIN.	. 5 CD			286,	85 CD			
8°	-		664	671	677	684	689	694	698	/01	704	/08	710	711	711	711	/10	/09	707	704	/00	696	691	085	980	6/6	673	670	669		PINK							-		_	_		
7,5°	-	. 004	738 814	746 821	752 827	760 834	764	769	773 846	7/6	780	781	783	784	783	782	780	7/9	777	7/3	768	703	756	750	744	739	735	733	730	728	727 783	726	725 781	724	725 782	725 782	727 785	730 789		796	-		
6,5°	•	879	887	821	900	834	912	916	920	848	852	852	853	853	852	850	848	844	842	838	831	825	818	810	805	/98	793	/91	/8/	/84	783	839	/81	/80	840	841	845	850		860			
6,5°	_	949	958	965	972	908	983	910	920	922	925	925	927	925	924	922	920	070	072	908	899	0.40	020	020	010	010	851	849	843	841	840	889	839	888	892	893	897	903		913	-		
5,5*	-	1018		1034	1040	1046	1050	1054	1057	1057	1050	1056	1055	1054	1050	1046	1042	1020	1022	1025	1015	1006	939	920	919	910	904	901	073	072	042	0.42	940	0.40	943	944	0.49	955		965	-		
5*	1062	1073		1004	1040	1104	1108	1112	1115	1114	1116	1115	1112	1111	1107	1103	1100	1036	1032	1023	1070	1060	10/8	1033	1022	1011	1001	907	940	986	084	083	940	08/	943	989	994	1001	1008	1012	1021		
4,5°	1115	1124	-	1139	1146	1152	1155	1159	1160	1159	1160	1158	1155	1153	1147	1143	1138	1131	1124	1116	1103	1000	1079	1064	1052	1041	1030	1026	1020	1015	1012	1013	1012	1014	1019	1020	1026	1033	1040				
4°	1155	1161	1168	1174	1180	1186	1190	1194	1196	1194	1195	1192	1189	1186	1182	1177	1172	1166	1157	1150	1136	1123	1110	1095	1083	1071	1060	1056	1049	1045	1041	1041	1041	1043	1049	1051	1058	1065	1072				
3,5*	1176	1185	1194	1201	1208	1213	1216	1218	1219	1216	1215	1212	1207	1205	1199	1193	1189	1182	1173	1165	1150	1136	1123	1106	1093	1082	1070	1066	1060	1055	1052	1052	1052	1055	1061	1062	1069	1077	1084				
3°	1194	1203	1207	1213	1220	1225	1229	1231	1231	1225	1223	1219	1214	1212	1206	1200	1196	1189	1179	1171	1155	1141	1127	1110	1097	1086	1074	1069	1064	1059	1056	1056	1055	1058	1064	1065	1072	1080	1086	1093			
2,5°	1190	1198	1205	1211	1217	1220	1223	1225	1226	1221	1220	1214	1209	1207	1200	1194	1190	1182	1172	1164	1147	1133	1120	1104	1090	1079	1067	1061	1056	1051	1046	1047	1045	1049	1055	1055	1063	1069	1075	1082	1097		
2*	1179	1185	1190	1197	1202	1205	1207	1208	1208	1204	1202	1197	1191	1189	1183	1176	1172	1164	1153	1145	1129	1114	1101	1086	1072	1061	1048	1042	1036	1031	1027	1028	1025	1030	1035	1035	1042	1048	1053	1060	1071		
1,5°		1153	1157	1163	1168	1171	1174	1175	1176	1171	1169	1164	1159	1156	1150	1143	1138	1131	1122	1116	1101	1087	1076	1062	1048	1037	1023	1014	1006	1000	997	999	996	1000	1005	1005	1010	1016	1021	1026	1		
1°	-	1108	1112	1118	1123	1125	1128	1129	1130	1124	1122	1118	1112	1110	1104	1098	1093	1087	1078	1071	1058	1044	1033	1020	1007	997	985	977	972	967	962	962	959	962	966	966	972	977	981	986			
0,5*		1059	1062	1068	1072	1075	1076	1078	1079	1074	1072	1068	1063	1060	1055	1049	1045	1038	1031	1025	1012	1001	990	978	966	957	945	937	933	927	922	922	918	920	924	924	929	932	936	941	100		
0°		- 1	1001	1006	1010	1013	1014	1015	1016	1011	1009	1004	999	997	993	987	982	976	969	965	954	944	936	925	913	905	893	886	881	875	870	869	864	865	866	866	870	873	876	-	-		
V/H	-10	-9,5	-9	-8,5	-8	-7,5	-7	-6,5	-6	-5,5	-5	-4,5	-4	-3,5	-3	-2,5	-2	-1,5	-1	-0,5	0	0,5	1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7	7,5	8	8,5	9	9,5	10		
Ye	low																																										
12	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	297	297	296	295	295	293			-	-	-	-		SP-401 RUNWAY EDGE LIGHTING UNI						T (YEL	LOW)					
11,5		-		-	-		-	-	-	-	·	-	-	-	330			330		_		327		325	324			Ŀ	-		TEST AREA REQUIRED					RESULTS							
10,5	-	-	_	+:	-	+-	+ :	+-	39	- 401	364			365 405				366				363		360	358 398	357 396			353														
10,3		-			-			-	39	9 401	402	403	404	405	405	405	406	406	406	405	404	403	401	400	398	390	395	393	391		AREA 1 MIN 25 CD						MIN. 500,03 CD						

1 011	011																																										
12°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	297	297	296	295	295	293	292	-	-	-	-	-			SP-	401 RU	NWAY	EDGE L	IGHTIN	IG UNIT	IT (YELLOW)					
11,5°		-	-			-	-	-	-	-		-		-	330	330	331	330	329	329	328	327	326	325	324	323	321	-	-		TEST	ADEA			REQU	IIDED		RESULTS					
11°	-	-	-	-	-	-	-	-	-	-	364	364	365	365	366	366	366	366	366	365	363	363	361	360	358		355	354	353														
10,5°			-			-		-	399	401	402	403	404	405	405	405	406	406	406	405	404	403	401	400	398	396	395	393	391		ARE				MIN 2			MIN. 500,03 CD					
10°			-			-		440	441	443	444	446	448	449	449	449	449	449	449	447	446	445	443	442	440	439	438	435	433		BLUE			N	IIN. AV	G. 50 CI	D	AVG. 744,38 CD					
9,5°	-	-	-	-	-	482	484	487	489	489	491	494	495	494	494	495	494	494	493	492	491	491	489	488	486	484	482	480	479		ARE				MIN.	10 CD		r	MIN 4	76.91 CE	0		
9°	-	-	-	-	530	531	533	534	537	539	541	542	542	543	544	544	545	544	544	543	542	541	539	537	535	532	531	528	525	,	YELLOV					10 00		Ш.		0,21 01			
8,5°		-	-	580	581	582	584	586	588	589	592	592	593	594	594	595	596	595	595	595	593	592	590	589	586	585	582	580	578		ARE				MIN.	5 CD		l 1	MIN. 27	76,95 CE	o l		
8°	-	-	629	630	630	631	632	633	636	637	640	641	642	643	644	644	644	643	643	643	641	640	637	636	634	633	631	627	625		PINK	PART								-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
7,5°	-	-	677	678	677	678	679	680	682	683	685	686	688	689	689	689	689	689	690	690	689	689	686	685	682	680	678	674	672	670	670	671	671	669	669	669	668	667	665	-	-		
7°	-	722	720	719	720	719	719	720	723	724	727	727	729	730	730	731	731	731	731	731	731	731	729	728	726	724	722	719	717	715	714	713	714	713	712	714	713	713	712	709	-		
6,5°	-	757	758	758	757	756	756	757	759	760	761	761	763	765	766	768	769	768	769	769	769	768	767	765	764	764	760	756	753	751	751	752	753	753	751	753	753	754	754	751	-		
6°		787	786	784	783	782	781	782	783	783	787	788	790	792	792	794	796	796	797	797	797	798	797	795	793	791	789	785	783	781	782	782	782	784	785	788	787	787	787	785	-		
5,5°	-	808	806	804	801	800	800	799	801	802	806	806	808	810	812	815	817	817	819	820	820	821	819	819	816	815	812	808	806	804	806	808	809	809	809	811	812	815		813	-		
5°	819	817	816	813	811	810	809	809	810	811	814	814	816	819	821	823	826	827	829	831	831	832	831	830	829	827	824	821	819	817	818	819	822	825	825	828	829	831	829	827	830		
4,5°	820	817	815	813	811	810	810	810	811	813	816	816	818	820	822	825	827	828	831	832	834	835	834	833	832	832	829	827	825	823	824	824	827	830	832	836	836	837	836	832	834		
4°	808	805	803	800	798	797	796	796	798	801	803	802	804	808	811	815	818	819	822	825	826	827	826	824	823	822	820	818	817	814	815	816	818	820	822	826	826	828	828	826	829		
3,5°	790	788	787	783	779	777	776	775	777	779	783	785	788	790	791	794	798	801	805	807	809	809	807	806	805	804	802	799	797	795	796	796	800	804	804	806	807	809	810	807	809		
3°	757	755	752	749	748	747	746	746	747	748	751	751	755	758	761	766	769	771	775	776	778	778	779	778	776	776	774	772	771	768	770	771	772	774	775	778	779	781	781	778	782		
2,5°	718	716	713	710	708	708	707	706	707	708	712	713	716	719	723	727	731	734	739	741	741	741	741	740	738	739	736	734	734	733	735	735	735	738	740	742	741	741	743	742	740		
2°	674	672	670	668	666	665	664	664	665	666	669	670	6/3	675	6/9	684	689	693	696	698	699	699	698	697	696	697	696	694	693	691	692	692	693	695	697	699	697	699	698	698	697		
1,5°	•	624	623	621	619	618	618	618	619	620	624	625	628	630	633	639	643	646	650	652	652	652	650	649	648	649	648	647	646	645	646	646	646	648	649	652	652	653	651	650	-		
1°	-	575	574	572	571	571	570	571	572	573	576	577	580	583	586	591	595	598	602	603	603	601	600	600	599	600	597	596	595	593	595	595	596	597	599	601	600	601	600	598	-		
0,5°		525	525	524	524	524	524	524	524	525	528	529	532	534	537	542	546	548	551	553	553	551	550	549	548	548	547	546	547	545	546	545	546	547	547	548	547	547	546	546	-		
0°	-	-	477	476	477	477	477	477	478	478	481	482	404	487	490	495	498	501	503	504	503	502	500	499	499	499	498	498	498	497	498	497	496	496	496	497	496	496	495		-		
V/H	-10	-9,5	-9	-8,5	-8	-7,5	-7	-6,5	-6	-5,5	-5	-4,5	-4	-3,5	-3	-2,5	-2	-1,5	-1	-0,5	0	0,5	1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7 1	7,5	8	8,5	9	9,5	10		

### SHIPPING DATA

Item	Dimensions of Package (L×W×H)	Gross Weight
SP-401 Lighting Unit	270 mm x 210 mm x 370 mm	8,2 kg
SP-401 Lighting Unit, NO batteries	270 mm x 210 mm x 370 mm	3 kg