



Advisory Circular

Subject:

Date: 7/14/83

Initiated by: AAS-200

AC No: 150/5345-1K

Change:

APPROVED AIRPORT LIGHTING EQUIPMENT

- 1. <u>PURPOSE</u>. This advisory circular contains a listing of manufacturers qualified to supply airport lighting equipment for projects funded under Federal airport assistance programs.
- 2. <u>CANCELLATION</u>. This advisory circular cancels AC 150/5345-1J, Approved Airport Lighting Equipment, dated January 28, 1983.
- 3. PRINCIPAL CHANGES. Several additions and deletions have been made to the lists of qualified manufacturers. The revised list reflects changes made through June 30, 1983.
- 4. <u>REQUESTS FOR INFORMATION</u>. Further information concerning qualification approval may be obtained from the Federal Aviation Administration, Office of Airport Standards, Attention: AAS-200, Washington, D.C. 20591, telephone (202) 426-3824.

LEONARD E. MUDD

Director, Office of Airport Standards



Notice to Users

The catalog numbers listed in this document are not intended for use in ordering equipment. Users should consult equipment manufacturer's catalogs or literature for complete ordering information, especially for equipment having optional features.

The number in parentheses () after the manufacturer's catalog number indicates the specific lamp type approved for use in the equipment. A description of each lamp is given on page 18.

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L-801 - Beacons (AC 150/5345-128)

Manufacturer	Manufacturer's catalog number							Manufacturer Manufac				
	Type L-801A	Type L-801S	Type L-801H									
ADB-ALNACO, Inc.	RB2, RB4 RB-6-750 RB-6-1000		RB-3 (044D0808)									
National Airport Equipment Co.	N-1000A N-1000A4	N-1000S										

$\frac{L-807 - Wind Cones}{(AC 150/5345-27B)}$

	Manufacturer's catalog number							
Manufacturer	With	Without						
	lights	lights						
	Eight-fc	ot wind cones						
	Twelve-foot	wind cones						

<u>L-810 - Lights, Obstruction</u> (AC 150/5345-43C)

Manufacturer	Manufacturer's catalog number					
	Single unit	Double unit				
Crouse-Hinds Co.	40940, 50033 (4)	50021 (4)				
Godfrey Engineering Co.	GEA-60-1,-3 (11) GEA-60-2,-4 (30) (32)	GEA-61-1,-3 (11) GEA-61-2,-4 (30) (32)				
Hubbell, Harvey, Inc.	вумв-3600-АНО (30)	BYMB-36002-AHQ (30)				
TWR Lighting, Inc.	OL-1 (32)	OL-2 (32)				

L-821 - Panel, Airport Lighting Control (AC 150/5345-3C)

Manufacturer	Manufacturer's catalog number
ADB-ALNACO, Inc. Airport Lighting Control Co.	L-821 - all types, classes, styles L-821 - type I, all classes, styles 1 & 2
Associated Engineering Co.	201-204 (821 series) - type I, all classes, style 1; type I, Class F, S, style 2; type II, class F, styles 1,3.
Eaton Corporation	L-821 - type I, II, all classes, styles 2,3
Universe, Inc.	821-1 - type I, all classes, style 1 821-F - type II, all classes, style 3

L-823 - Connectors, Cable (AC 150/5345-26B)

Manufacturer	Туре	Style	Class	Manufacturer's catalog number
Joy Manufacturing Co.	I	3,10	В	X8077-257A X8077-301A X8077-387A
Amerace Corporation (Elastimold)	I I II II II II	2 3,10 9 8 4 11 5 12	A B A B B B B	54MP 54KIT 54MR 93MR 90P 90R 91P 91R

L-824 - Cable, Underground Electrical (AC 150/5345-7D)

	Condu	etors	ı	Rating	Manufacturer's
Manufacturer	S	М	Туре		identification
				(volts)	marking
American Insulated Wire Co.	X X X X	X X	A,B As,Bs B C	600 5000 5000 600	FAA-L824 Type A,B FAA-L824 Type A,B FAA-L824 Type B FAA-L824 Type C
	X	Λ	Cs	5000	FAA-L824 Type C
Anaconda-Eriesson, Inc.	X X X		B B C	600 5000 600	Durasheath EP Durasheath EP Durasheath XLP
Carol Cable Co.	X X		C	600 5000	L-824-C L-824-C
CCS Hatfield Wire & Cable Co.	X X		Cs C	5000 600	Hatfield Permalene XP Permalene XP
Collyer Insulated Wire Co.	X X	X X	C Cs	600 5000	XLP XLP
Essex Group	X X		c c	600 5000	L-824 Type C L-824 Type C
General Electric Co.	x x	X X	C C Cs	600 600 5000 5000	Vulkene Vulkene Flamenol Vulkene Vulkene Flamenol
Hendrix Wire & Cable Corp.	X X		C	600 5000	FAA L-824 Type C FAA L-824 Type C
ITT Royal Electric Division	Х		С	5000	FAA L-824 Type C
Kerite Co., The	X	X	A	5000	Kerite HTK
North American Phillips Corp.	X		С	5000	Dravulteen (XLPE)

L-824 - Cable, Underground Electrical
(AC 150/5345-7D)
(cont'd)

	Condu	ctors		Rating	Manufacturer's
Manufacturer	S	M	Туре		identification
· · · · · · · · · · · · · · · · · · ·				(volts)	marking
2			_		
Pirelli Cable Corp.	X		В	600	EPR/PVC & EPR/N
	X		В	5000	EPR unshielded
	y	X	Bs	5000	EPR
	X		С	600	Type USE, RHH, RHW
		X	С	600	XLPE
	X		С	5000	XLPE unshielded
	Х	X	Cs	5000	XLPE
Reynolds Metals Co.	х	х	Cs	5000	XLP
Rockbestos Co., The	х		Α	600	L-824 Type A
	X	Ì	В	5000	L-824 Type B
	X	Ì	c	600	L-824 Type C
	Х	Ì	c	5000	L-824 Type C
	•	1	Ì		J.F
Rome Cable Co.	X	Ì	В	600	Rome EPR
	Х	Х	С	600	Rome XLP, FR-XLP,
		i	Ì	i	XHHW Cond.
	Х	X	Cs	5000	Rome XLP
	X	İ	В	5000	Rome EPR
		[[[
Southwire Co.	X	[С	600	FAA L-824 Type C
	Х	[С	5000	FAA L-824 Type C
	I	Į .	I	[[
Triangle PWC, Inc.	X	l	С	600	Everene
	l	Х	С	5000	Everene
1	į.	1	1		1
	1	L_{-}	1	!	1 .

NOTES:

- (1) Conductors of 5000-volt cable may be either 7-strand or 19-strand.
- (2) In the column "Conductors", s indicates single conductor and m indicates multiple conductor.
- (3) All cables are nonshielded except s after the "Type" letter indicates both nonshielded and shielded.

L-828 - Regulators, Constant Current (AC 150/5345-10D)

<u></u>	1	Rating	Bright-	1	1	
Manfacturer	KW	Out	In	ness	Primary	Manufacturer's
		Amps	Volts		switch	catalog number
				000,00		
Crouse-Hinds Co.	4	6.6	208	3	Yes	31000-4-3-1
	4	6.6	220	3	Yes	31000-4-3-2
(Air-cooled	4	6.6	240	3	Yes	31000-4-3-3
regulators)	4	6.6	480	3	Yes	31000-4-3-4
	4	6.6	208	5	Yes	31000 - 4 - 5 - 1
	4	6.6	220	3 3 5 5	Yes	31000-4-5-2
	4	6.6	240	55333355555333	Yes	31000-4-5-3
	4	6.6	480	5	Yes	31000 - 4 - 5 - 4
	7월	6.6	208	3	Yes	31000-7 •5-3-1
	71/2	6.6	220	3	Yes	31000-7.5-3-2
	7 1	6.6	240	3	Yes	31000-7.5-3-3
	7월	6.6	480	3	Yes	31000-7 •5-3-4
	7월	6.6	208	5	Yes	31000-7.5-5-1
	7월	6.6	220	5	Yes	31000 -7 • 5 - 5 - 2
	71/2	6.6	240	5	Yes	31000 - 7.5 - 5 - 3
	7월	6.6	480	5	Yes	31000-7.5-5-4
	10	6.6	208	3	Yes	31000-10-3-1
	10	6.6	220	3	Yes	31000-10-3-2
	10	6.6	240	3	Yes	31000-10-3-3
	10	6.6	480	3 5 5	Yes	31000-10-3-4
	10	6.6	208	5	Yes	31000-10-5-1
	10	6.6	220		Yes	31000-10-5-2
	10	6.6	240	5	Yes	31000-10-5-3
	10	6.6	480	5	Yes	31000-10-5-4
				_		01050 10 7 1
(Oil-cooled	10	6.6	208	5	Yes	31060-10-P-1
regulators)	10	6.6	208	5	No	31060-10-E-1
i	10	6.6	220	5	Yes	31060-10-P-2
•	10	6.6	220	5	No	31060-10-E-2
	10	6.6	240	5	Yes	31060-10-P-3
	10	6.6	240	5	No	31060-10-E-3
	10	6.6	480	5	Yes	31060-10-P-4
	10	6.6	480	5	No	31060-10-E-4
	10	6.6	2400	5	Yes	31060-10-P-11
	10	6.6	2400	5	No	31060-10-E-11
	15	6.6	208	5	Yes	31060-15-P-1
	15	6.6	208	5 5 5 5	No	31060-15-E-1
	15	6.6	220	b	Yes	31060-15-P-2
	15	6.6	220	5	No	31060-15-E-2
	15	6.6	240		Yes	31060-15-P-3
	15	6.6	240	5	No	31060-15-E-3

L-828 - Regulators, Constant Current (AC 150/5345-10D) (cont'd)

	Rating					
Manufacturer	KW	Out	In	ness	Primary	Manufacturer's
		Amps	Volts	steps	switch	catalog number
Crouse-Hinds Co.	15	6.6	480	5	Yes	31060 - 15-P-4
	15	6.6	480	5	No	31060-15-E-4
(Oil-c∞oled	15	6.6	2400	5	Yes	31060-15-P-11
regulators)	15	6.6	2400	5	NO	31060-15-E-11
	20	6.6	208	5 5	Yes	31060-20-P-1
	20	6.6	208	5	No	31060 - 20-E-1
	20	6.6	220	5	Yes	31060-20-P-2
	20	6.6	220	5	No	31060-20-E-2
	20	6.6	240	5	Yes	31060-20 - P-3
	20	6.6	240	5 5 5	No	31060-20-E-3
	20	6.6	480	5	Yes	31060-20-P-4
ł	20	6.6	480	5	NO	31060-20-E-4
•	20	6.6	2400	5	Yes	31060-20-P-11
1	20	6.6	2400	5	No	31060-20-E-11
	20	6.6	4160	5	Yes	31060-20 - P-12
1	20	6.6	4160	5	NO	31060-20-E-12
	20	20	208	5	Yes	31060-21-P-1
	20	20	208	5	No	31060-21-E-1
1	20	20	220	5	Yes	31060-21-P-2
	20	20	220	5	Nо	31060-21-E-2
1	20	20	240	5	Yes	31060-21 - P-3
1	20	20	240	5	МО	31060-21-E-3
	20	20	480	5	Yes	31060-21-P-4
1	20	20	480	5	No	31060-21-E-4
	20	20	2400	5	Yes	31060-21-P-11
	20	20	2400	5	No	31060-21-E-11
į	20	20	4160	5 5	Yes	31060-21-P-12
	20	20	4160	5	No	31060-21-E-12
	30	6.6	208	5	Yes	31060-30-P-1
	30	6.6	208	5	No	31060-30-E-1
1	30	6.6	220	5	Yes	31060-30-P-2
	30	6.6	220	5	No Voc	31060-30-E-2
	30	6.6	240	5	Yes	31060-30-P-3 31060-30-E-3
1	30 30	6.6	240 480		No Yes	31060-30-E-3 31060-30-P-4
	30	6.6 6.6	480		No	31060-30-P-4 31060-30-P-4
	30	6.6	2400	5 5	Yes	31060-30-P-11
1	30	6.6	2400		No	31060-30-F-11 31060-30-E-11
	30	6.6	4160		Yes	31060-30-E-11 31060-30-P-12
	30	6.6	4160		No	31060-30-F-12 31060-30-E-12
	1	1	4100		1	51000 50 11 12
	-	1	1			

L-828 - Regulators, Constant Current
(AC 150/5345-10D)
(cont'd)

,	i	Rating	Bright-			
Manfacturer	KW	Out	In	ness	Primarv	Manufacturer's
		Amps	Volts	steps	switch	catalog number
Crouse-Hinds Co.	30	20	208	5	Yes	31060-31-P-1
	30	20	208	5	No	31060-31-E-1
(0il-cooled	30	20	220	5	Yes	31060-31-P-2
regulators)	30	20	220	5	No	31060-31-E-2
	30	20	240	5	Yes	31060-31-P-3
	२०	20	240	5	No	31060-31-E-3
	30	20	480	5	Yes	31060-31-P-4
	30	20	480	5 5	No	31060-31-E-4
	30	20	2400	5	Yes	31060-31-P-11
	30	20	2400	5	No	31060-31-E-11
	30	20	4160	5 5	Yes	31060-31-P-12
	30	20	4160	5	No	31060-31-E-12
	50	20	480	5	Yes	31060-50-P-4
	50	20	480	5 5	No	31060-20-E-4
	50	20	2400	5	Yes	31060-50-P-11
	50	20	2400	5	No	31060-50-E-11
	50	20	4160	5	Yes	31060-50-P-12
	50	20	4160	5	No	31060-50-E-12
	70	20	480	5 5	Yes	31060-70-P-4
	70	20	480	5	No	31060-70-E-4
	70	20	2400	5	Yes	31060-70-P-11
	70 70	20	2400 4160	5 5	No Yes	31060-70-E-11 31060-70-P-12
	70	20 20	4160	7 5	les No	31060-70-F-12 31060-70-E-12
	70	20	4100	י	NO	31000-70-6-12
Hevi-Duty Electric Co.						
(Air-cooled	4	6.6	240	3	Yes	6436300T00
regulators)	7월	6.6	240	3	Yes	6439300T00
regulators)	· 2	0.0	240	.)	162	0439300100
(Oil-cooled	10	6.6	240	3	Yes	6441300T00
regulators)	10	6.6	2400	3	Yes	6441301T00
regardoors)	10	6.6	240	5	Yes	6441302T00
1	10	6.6	2400	5	Yes	6441303T00
	15	6.6	240	3	Yes	6442300T00
}	15	6.6	2400	3	Yes	6442301T00
	15	6.6	240	5	Yes	6442302T00
!	15	6.6	2400	5	Yes	6442303T00
ŀ		· • • • • • • • • • • • • • • • • • • •		· · · · · · · · · · · · · · · · · · ·	· - I	- · · · ·

L-828 - Regulators, Constant Current
(AC 150/5345-10D)
(cont'd)

		Rating		Bright-		
Manufacturer	KW	Out	In	ness	Primary	Manufacturer's
		Amps	Volts	steps	switch	catalog number
Hevi-Duty Electric	20	6.6	240	5	Yes	6443300T00
Co.	20	20	240	5	Yes	6443301T00
	20	6.6	2400	5	Yes	6443302T00
(Oil-cooled	20	20	2400	5	Yes	6443303T00
regulators)	30	6.6	2400	5	Yes	6446301T00
1	30	20	2400	5	Yes	6446300T00
	50	20	2400	5	Yes	6447300T00
	70	20	2400	5	Yes	6449300т00
			<u></u> _			

<u>L-830 - Isolation Transformers, 60 Hz</u> (AC 150/5345-47)

	L-830		Manufacturer's catalog number			
Туре	Watts	Amperes Amerace Corp.		Crouse-Hinds	ADB-ALNACO,	
		Pri/Sec	(Elastimold Div.)	Co.	Inc.	
L-830-1	30/45	6.6/6.6	TA 045666-01	33001	83001-111	
L-830-2	30/45	20/6.6	TA 045266-01			
L-830-3	65	6.6/6.6	TA 065666-01	33003	83003-111	
L-830-4	100	6.6/6.6	TA 100666-01	30004	83004-111	
L-830-5	100	20/6.6	TA 100266-01	33005		
L-830-6	200	6.6/6.6	TA 200666-01	33006	83006-111	
L-830-7	200	20/6.6	TA 200266-01	33007		
L-830-8	300	6.6/20	TA 300626-01	33008		
L-830-9	300	20/20	TA 300226-01	33009		
L-830-10	300	6.6/6.6	TA 300666-01	33010		
L-830-11	300	20/6.6	TA 300266-01		l l	
L-830-12	500	6.6/20	TA 500626-01	1		
L-830-13	500	20/20	TA 500226-01	33013		
L						

L-831 - Isolation Transformers, 50 Hz (AC 150/5345-47)

	L-831		Manufacturer's catalog number		
Туре	Watts	Amperes Pri/Sec	Amerace Corp. (Elastimolo Div.)	Crouse-Hinds Co.	
L-831-1 L-831-2 L-831-3 L-831-4 L-831-5 L-831-6 L-831-7 L-831-8 L-831-9 L-830-10 L-831-11 L-831-12 L-831-13	30/45 30/45 65 100 100 200 200 300 300 300 300 500 500	6.6/6.6 20/6.6 6.6/6.6 6.6/6.6 20/6.6 6.6/6.6 20/6.6 6.6/20 20/20 6.6/6.6 20/6.6 6.6/20	TA 045666-01 TA 045266-01 TA 065666-01 TA 100666-01 TA 200665-01 TA 200265-01 TA 300225-01 TA 300665-01	33001 33003 33004 33005 33006 33007	

<u>L-841 - Cabinet, Auxiliary Relay</u> (AC 150/5345-13)

Manufacturer	Manufacturer's catalog number
Airport Lighting Control Co.	6300, 6301, 6302, 6303
Associated Engineering Co.	714-841
Crouse-Hinds Co.	51503
Hughey & Phillips, Inc.	RC41

L-847 - Switch, Circuit Selector (AC 150/5345-5A)

Manufacturer	Manufacturer's catalog number			
	Туре	Class	Rating	Catalog no.
Crouse-Hinds Co.	1,2,3,4	A,B	1,2	30847

L-849 - Lights, Runway End Identification (AC 150/5345-51)

Manufacturer	Stvle	Manufacturer's catalog number
Flash Technology Corporation	F F	FTS-412 FTS-422
Godfrey Engineering Co.	A E C	GEA-20-100 GE-3836-003 GEA-25-100
Multi-Electric Mfg., Inc.	A E	551325-M, 551325-S 551327-M, 551327-S

L-850 - Lights, Runway, In-pavement (AC 150/5345-46)

Manufacturer	Туре	Manufacturer's catalog number
ADB-ALNACO, Inc.	L-850A L-850B L-850E	44D0464 (29) 44D0469 (34) 44E0496 (21)
Crouse-Hinds Co.	L-850A L-850AS L-850B L-850C L-850D L-850E	20065, 20075 (35), 20335 (15) 20065-LW, 20075-LW (49) 20524 (15) 20355, 20360 (34)(40) 20370, 20365 (34)(40) 20250, 20255 (34) 20260, 20265 (34) 20480 (34)
Multi-Electric Manufacturing, Inc.	L-850C	2950-300 (38)

7/14/83 AC 150/5345-1K

L-851 - Visual Approach Slope Indicators (AC 150/5345-28C)

	Manufac	turer's catalog r	number
Manufacturer	Lamp	Adapter	Aiming and
	housing	unit	calibration bar
ADB-ALNACO, Inc.	44D0107A 44D0154A 44D0152A	44CO12OA	44A0156A
Crouse-Hinds Co.	25950-A 26000-A 29950-AV	26005 -A 26600	26041 - A
Hughey & Phillips, Inc.	VA382, VA384 VA38ST, VA38S	VA38A2 VA38A4	VACB6114
Multi-Electric Manufacturing, Inc.	5556C	5562C	5559

Pulsed Light Approach Slope Indicator

Manufacturer	Manufacturer's catalog number
DeVore Aviation Corporation	DA 1001

<u>L-852 - Lights, Taxiway, In-pavement</u> (AC 150/5345-46)

Manufacturer	Class	Туре	Manufacturer's catalog number
ADB-ALNACO, Inc.	N	I	44D0422 (41)
	W	I	44D0422 (42)
	N	II	44D0423 (41)
	W	II	44D0423 (42)
	N	III	44D0424 (41)
	W	III	44D0424 (42)
	N	IV	44D0452 (41)
	W	IV	44D0452 (42)
	į		
Crouse-Hinds Co.	N	I	19506, 19508 (43), 19506-LW (50)
	W	I	19510, 19512 (44), 19510-LW (51)
	N	II	19505, 19507 (43), 19505-LW (50)
	W	II	19509, 19511 (44), 19509-LW (51)
	N	III	19515, 19516 (43), 19515-LW (50)
	W	III	19513, 19514 (44), 19513-LW (51)
	N	IV	19840, 19850 (43), 19850-LW (50)
	W	IA	19845, 19855 (44), 19855-LW (51)

L-853 - Markers, Retroreflective (AC 150/5345-39B)

Manufacturer	Manufacturer's	catalog number
	Centerline marker	Elevated marker
Amerace Corporation (Signal Products Division)	88 series 911 series	
Behrens Construction Co.		112 series
Carsonite International Corp.		SMD-300-A
National Airport Equipment Co.		RM series
Safe-Way Sign Co.		lA & 600 series
Unipar, Inc.		EVA series
Valley Illuminators, Inc.		AR-100 series

<u>L-854 - Radio Controls</u> (AC 150/5345-49)

Manufacturer	Туре	Manufacturer's catalog number
ADB-ALNACO, Inc.	Ι	RL-854
Control Industries, Inc.	I	RC-1T5A

L-856 - Lights, Obstruction, High Intensity (AC 150/5345-43C)

Manufacturer	System	Manufacturer's catalog number
Flash Technology Corporation	A B	FTB-205A-1 FTB-205B-1
EG&G, Inc.	A B	LS-158A LS-158B

L-858 - Signs, Taxiway Guidance (AC 150/5345-44C)

Manufacturer	Type	Size	Style	Class	Manufacturer's catalog number
ATC International, Inc.	L-858Y,R	1,2,3	2,3,4	1,2	80 series
Crouse-Hinds Co.	L-858Y,R	1,2,3	1,2	1	60,000 series
Gardner, T.J., Co.	L-858B	4	2,3	1	DM-FL series
Standard Signs, Inc.	L-858Y,R	1,2,3	1,2,4	1,2	XX58 series

L-859 - Lights, Flashing, Omnidirectional (AC 150/5345-51)

Manufacturer	Manufacturer's catalog number	Remarks
Flash Technology Corp.	FTS-427	Style F

L-860 - Lights, Runway & Taxiway Edge, Low Intensity (AC 150/5345-48)

Manufacturer	Manufac	turer's catalog n	umber
	Type L-860	<u>Type L-860E</u>	Type L-860T
Crouse-Hinds Co.	40650 (1)	40650-GR,RG (1)	
Godfrey Engineering Co.	GEA-05 (3)(24)	GEA-05 (24)	GEA-05 (24)
Manairco, Inc.	2100 (2)(3) 2125 (6)	2250 (5)	2300 (6)
National Airport Equipment Co.	L-500C (7) L-510C (8)	L-500R/G (8) L-510R/G (9)	L-500B (8) L-510B (9)

14		(AC	150/5345-48)	
Manu	facturer		Manufacturer's ca	atalog number
1		Type L-861	Type L-861E	Type L-861SE
			1	

ADB-ALNACO, Inc.

Crouse-Hinds Co.

Airport Lighting Company

L-861-1,-3 (10)

L-861-2,-4 (12)

MRL-216,217 (10)

ERL Model III

RWL-MIL (10)

L-861 - Lights, Runway & Taxiway Edge, Medium Intensity

L-861-1,-3 (11)

MRL-216,217 (11)

40690,40775

RWL-MIE (11)

ERL Model III

Type L-861T

L-861T-1,-3 (10

L-861T-2,-4 (13

TWL-MIL (10)

MRL-216 (10)

ERL Model III

L-862 - Lights, Runway Edge, High Intensity (AC 150/5345-48)

Manufacturer	Manufacturer's catalog number			
	Edge	Threshold/end		
ADB-ALNACO, Inc.	L-862 (22)	L-862 (23)		
Airport Lighting Co.	HRL-213 (22)	HRL-213 (23)		
Crouse-Hinds Co.	48369 (22) 40722 (36)	48371 (23) 40722 (25)(28)		
Godfrey Engineering, Inc.	GEA-10 (36)(26) GEA-15 (22)	GEA-10 (21) GEA-15 (23)		
Hughey & Phillips, Inc.	HL-62 (22)	HL-62 (23)		
Multi-Electric Manufacturing, Inc.	6283, 6293 (22) 6383, 6393 (36)	6287, 6297 (23) 6387, 6397 (21)		
National Airport Equipment Co.	H-900 (22) H-910 (36)	H-900 (23) H-910 (21)		

L-866 - Lights, Obstruction, Medium Intensity (AC 150/5345-43C)

Manufacturer	Manufacturer's catalog number				
	White lights	Red lights			
Crouse-Hinds Co.		41257F			
EG&G, Inc.	LS-161				
Flash Technology Corporation	FTB-301 FTB-317 FTB-119 FTB-319-2, -3				
TWR Lighting, Inc.		Type FB Beacon (48) A1, A2/3, A4/5 controllers			

16					L-868 - I L-8	ight Bas	se, Load nction Bo		3	
						Mar	ufacture	r's catal	og numb	er
	Manufacturer	Туре	Size		Multipl	e sectio	n hase	Exten-	Conv.	
	<u> </u>		<u> </u>	Base	Bottom	Middle	Тор	_sion	ring	
	1									

1224PVC

1224S

16248

1224PVC-ADJ

L-867 B

L-867

L-867

Gardner,

T.J., Co.

Spacer

rings pl

Cover

plate

12-1-CP-S

16S-EXT

Light Structure, Lightweight (AC 150/5345-45)

Manufacturer	Туре	Class	Manufacturer's catalog number
Jaquith Industries, Inc.	1	A	SM/A
		İ	

Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights (MALSR) (FAA-E-2325)

Component	Manufacturer's catalog number
Remote optical head	41001
	41007
Control cabinet	41010
Power transformer	41005
Junction box	41006
PAR-38 lampholder	41003
Lampholder aiming device	41020
Optical head aiming device	41002
Flashing light	FA-9425/1, FA-9994
	FA-9425/2, FA-9994
Control cabinet	FA-9426/1, FA-9994
Power Transformer	FA-9426/2, FA-9994
PAR-38 lampholder	FA-9426/3, FA-9994
Aiming device	FA-9426/4, FA-9994
	Power transformer Junction box PAR-38 lampholder Lampholder aiming device Optical head aiming device Flashing light Power panel Control cabinet Power Transformer PAR-38 lampholder

LAMP DESCRIPTIONS

Lamp	Designation	Watts	Volts	Amps	Lamp manufacturer
(1)	9201	40	100		Yorkville Industries
(1)	8301	40 15	120 120		· · · · · · · · · · · · · · · · · · ·
(2)	15T6 15T7C	15	120		General Electric, Westinghouse Westinghouse
(3)	69A21TS	69	120		General Electric, Sylvania, West.
(4) (5)	40C9\C/ST	40	120		Sylvania
(5)		40 25	120		
(6) (7)	25FC			1	General Electric, Sylvania
(7)	15A15/CL 25A19/GR/CL	15 25	120		Sylvania
(8)	40A21/GR/CL	25	120	1	Sylvania
(9)		40	120	ا ۽ ۽	Sylvania
(10)	6.6A/T10/1P	30		6.6 6.6	General Electric, Sylvania, West.
(11)	6.6A/T10P	45 40	3.70	0.0	General Electric, Sylvania, West.
(12)	40A/TS		120	1 1	General Electric, Sylvania, West.
(13)	25A/CL	25 40	120 120		General Electric, Sylvania
(14) (15)	40T10P 6.6AQ CL/DCR	200	120	6.6	General Electric, Sylvania
(16)	20058	100		6.6	Sylvania Crouse—Hinds
(17)	40732	45		6.6	
(18)	40732 40737	30		6.6	
(19)	HG132PPF	30 30		6.6	Sylvania
(20)	HG112PPF	45		6.6	-
(21)	EWR	150		6.6	
(22)	6.6A/T14/2P	204	l	6.6	
(23)	6.6A/T14/3P	210	l	6.6	General Electric
(24)	25T8	25	120		General Electric
(25)	40925	175	220	6.6	
(26)	6.6ATSQ/CL2	115	Ì	6.6	
(27)	6.6A2PPF	150	1	6.6	
(28)	Q200T4/CL	200		6.6	
(29)	48A0042	200	1	6.6	ADB
(30)	100A21/TS	100	120	1	General Electric
(31)	EXL	30	1	6.6	General Electric
(32)	116A21/TS	116	120	1	General Electric, Westinghouse
(33)	EXM	45	l	6.6	General Electric
(34)	Q6.6A/T4/DCR	200	Į.	6.6	
(35)	20041-1	200	1	6.6	
(36)	EVV	120	1	6.6	
(37)	T4Q/CL/2PPF	115	1	6.6	
(38)	4		1	6.6	
(39)		30	1	6.6	
(40)		115	1	6.6	
(41)		45 65	1	6.6	
(42)		65 45	I	6.6	
(43)		45 65	1	6.6	
(44) (45)	3	45	1	6.6	•
(48)		620	120	0.0	Westinghouse, Sylvania, GE
(49)		125	120	6.6	
(50)		34	1	6.6	•
(51)		45	1	6.6	•
(TT)	13000	45		0.0	CLOUDE-HIHOD

APPENDIX 1. ADDRESS LIST OF EQUIPMENT MANUFACTURERS

ADB-ALNACO, Inc. 997 Gahanna Parkway P.O. Box 30829 Columbus, Ohio 43230 (614) 861-1304

Airport Lighting Co. 1923 Central Avenue Hot Springs, Arkansas 71901 (501) 624-5488

Airport Lighting Control Co. Terminal Building, Herndon Airport Orlando, Florida 32303 (305) 896-0461

Amerace Corporation Elastimold Division P.O. Box 503 Hackettstown, New Jersey 07840 (201) 852-1122

Amerace Corporation Signal Products Division 7542 North Natchez Street Niles, Illinois 60648 (312) 647-7717

American Insulated Wire Co. Central Avenue and Freeman Street Pawtucket, Rhode Island 02862 (401) 726-0700

Anaconda-Ericsson, Inc. Wire and Cable Division East 8th Street Marion, Indiana 46952 (317) 664-2321

Associated Engineering 11791 Monarch Street Garden Grove, California 92641 (714) 897-7441

ATC International, Inc. 3250 N. Sheridan Tulsa, Oklahoma 74115 (918) 583-7184

Carol Cable Co. 1900 North Fifth Avenue River Grove, Illinois 60171 (312) 456-4000

Carsonite International Corp. 2900 Lockheed Way Carson City, Nevada 89701 (702) 883-5104

Collyer Insulated Wire Co. 100 Higginson Avenue Lincoln, Rhode Island 02865 (401) 723-7800

CCS Hatfield Wire and Cable Co. 12 Commerce Drive Cranford, New Jersey 07016 (201) 272-3850

Control Industries, Inc. 409 Lafayette Avenue Urbana, Ohio 43078 (513) 653-7694

Crouse-Hinds Co. Lighting Products Division 1200 Kennedy Road P.O. Box 1200 Windsor, Connecticut 06095 (203) 683-4300

Devore Aviation Corporation 6104 Kircher Boulevard, N.E. Albuqerque, New Mexico 87109 (505) 345-8713

Eaton Corporation 9475 Center Road Fenton, Michigan 48430 (313) 629-5361

EG&G, Inc. 35 Congress Street Salem, Massachusetts 01970 (617) 754-3200 Essex Group Power Conductor Division 2601 South Adams Street Marion, Indiana 46952 (317) 664-6211

Flash Technology Corporation 55 Lake Street Nashua, New Hampshire 03060 (603) 883-6500

Gardner, T.J., Co. 699B Castro Street San Leandro, California 94577 (415) 483-0694

General Electric Co. 1285 Boston Avenue Bridgeport, Connecticut 06602 (203) 334-1012

Godfrey Engineering Inc. P.O. Box 260803
Tampa, Florida 33685
(813) 855-4428

Hendrix Wire & Cable Corporation Milford, New Hampshire 03055 (603) 673-2040

Hevi-Duty Electric Co. Box 268 Goldsboro, North Carolina 27530 (919) 734-8900

Hubbell, Harvey, Inc. Electric Way Christiansburg, Virginia 24073 (703) 382-6111

Hughey & Phillips, Inc. 3050 North California Street Burbank, California 91504 (213) 849-1104

ITT Royal Electric Division 95 Grand Avenue Pawtucket, Rhode Island 02862 (401) 722-8600 Jaquith Industries, Inc. Syracuse, New York 13205 (315) 478-5701

Joy Manufacturing Co.
La Grange Division
Route 4, Box 156
La Grange, North Carolina 28551
(919) 566-3014

Kerite Co., The 49 Day Street Seymour, Connecticut 06483 (203) 888-2591

Manairco, Inc. Box 111 Mansfield, Ohio 44901 (419) 524-2121

Multi-Electric Manufacturing, Inc. 4223-43 West Lake Street Chicago, Illinois 60624 (312) 722-1900

National Airport Equipment Co. 5910 Wayzata Boulevard Minneapolis, Minnesota 55416 (612) 545-4157

North American Phillips Corporation 100 E. 42nd Street New York, New York 10017 (212) 697-3600

Pirelli Cable Corporation 800 Rahway Avenue Union, New Jersey 07083 (201) 687-0250

Reynolds Metal Co. Richmond, Virginia 23261 (804) 281-2000

Rome Cable Co. 421 Ridge Street Rome, New York 13440 (315) 337-3000 Rockbestos Co., The 860 N. Main St. Ext. Wallingford, Connecticut 06492 (203) 772-2250

Safe-Way Sign Co. Box 324 West Springfield, Massachusetts 01089 (413) 737-6991

Southwire Company Carrollton, Georgia 30117 (404) 832-6311

Standard Signs, Inc. 3190 East 65th Street Cleveland, Ohio 44127 (216) 341-5611

Sterner Lighting Systems, Inc. 1 Park Lane Winsted, Minnesota 55395 (612) 485-2141

Triangle PWC, Inc.
Box 711
New Brunswick, New Jersey 08903
(201) 745-5500

TWR Lighting, Inc. 1923 Antoine B-4 Houston, Texas 77055 (713) 688-6904

Unipar, Inc. Box 1056 State College, Pennsylvania 16801 (814) 238-6481

Universe, Inc.
Box 495
1107 W. Chestnut Street
Bloomington, Illinois 61701
(309) 829-3478

Valley Illuminators, Inc. Box 88866 Tuckwila, Washington 98188 (206) 564-2067

APPENDIX 2. QUALIFICATION PROCEDURES

- 1. QUALIFICATION PROGRAM. A qualification program has been established by the Federal Aviation Administration (FAA) for certain equipment components which are unique to aviation and are used in airport lighting and visual aid systems. This program is administered by the Office of Airport Standards and is intended solely for that equipment funded for installation under Federal grant assistance programs for airports. The purpose of the qualification program is to insure that the equipment meets the required standards for safety, performance, quality, and standardization.
- 2. EQUIPMENT COVERED BY THE QUALIFICATION PROGRAM. The equipment included in the 150/5345 series of advisory circulars, as listed in the contents of this advisory circular, is covered by the qualification program. The equipment covered may be changed periodically to reflect changing needs in airport lighting systems and equipment.
- 3. SUBMITTAL OF QUALIFICATION REQUESTS. Requests for qualification approval must be submitted in writing to the Office of Airport Standards, Attention: AAS-200, Federal Aviation Administration, Washington, D.C. 20591. This request must include:
- a. A list of the types, classes, styles, and sizes of equipment, along with the manufacturer's catalog numbers, for which qualification approval is requested. A list of equipment options should also be included when so specified in individual equipment specifications.
- b. Engineering drawings of the equipment to permit determination of adherence to specification design requirements.
- c. A copy of proposed test procedures and test data sheets and a statement as to whether the manufacturer proposes to conduct the tests or name and location of an independent testing laboratory where the tests are to be conducted. Since the FAA reserves the right to witness any or all tests, the manufacturer should not commence the tests until advised whether the FAA elects to witness, or waives the option to witness, the tests. The manufacturer shall give the FAA at least 2 weeks' notice prior to starting tests.
- d. A statement that the manufacturer agrees to provide the following minimum guarantee for the equipment:

"That the equipment has been manufactured and will perform in accordance with the applicable specifications and that any defect in design, materials, (excluding lamps), or workmanship which may occur during proper and normal use during a period of 1 year from date of installation or a maximum of 2 years from date of shipment will be corrected by repair or replacement by the manufacturer f.o.b. factory."

e. A statement that the manufacturer agrees to provide and maintain a quality control program in accordance with FAA-STD-013, Quality Control Program Requirements (copies of this document may be obtained from the Systems Engineering Service, Federal Aviation Administration, Washington, D.C. 20591). The manufacturer shall also provide a copy of the proposed quality control plan.

- f. A copy of the proposed instruction manual for the equipment.
- 4. REVIEW PROCEDURE FOR QUALIFICATION REQUESTS. The manufacturer will be notified within 1 week after receipt of the qualification request whether the FAA elects or waives the option to witness tests and whether the proposed test procedures and test test data sheets are acceptable. Notification of acceptance, or of changes required for acceptance, of the quality control plan, instruction manual, and the equipment design will be made within 30 days. The manufacturer will be notified in writing within 2 weeks after the last submittal of the required documentation or test results, if acceptable, that the equipment is approved. The manufacturer must provide 10 copies of the approved instruction manual within 30 days after approval of the equipment. These manuals are required by various FAA field offices in monitoring the approval of equipment. The approval will be subject to the condition that it may be rescinded if:
 - a. The manufacturer fails to provide the required instruction manuals.
- b. The manufacturer fails to honor the guarantee (paragraph 3d) or does not maintain quality control in accordance with the approved plan (paragraph 3e).
 - c. The equipment has an unsatisfactory failure rate (paragraph 6).
- d. The manufacturer fails to perform the required production tests (paragraph 5).
 - e. Changes are made in the equipment without FAA approval (paragraph 7).
- f. The equipment specification is cancelled or is revised and the manufacturer fails to requalify (paragraph 8).
- 5. TESTS. The manufacturer must successfully pass all tests in the applicable specification. The manufacturer shall provide all necessary equipment and bear all testing costs. Where the FAA waives the option to witness tests, the manufacturer must submit a certified copy of all test reports. In addition to qualification tests, each equipment specification requires some tests to be conducted on each, or a sampling of, production units. The manufacturer must retain records of the production tests for at least 3 years and permit the FAA (approving office) to witness such tests or inspect previous records on request.
- 6. UNACCEPTABLE FAILURE RATE. Since reliable equipment is of prime importance to safety of aircraft operations, equipment which proves unreliable in use must be removed from the approval listing. The determination of unreliability must be based on judgment and experience with equipment of a like nature. Where any such equipment is deemed to have an unsatisfactory failure rate or is deficient in workmanship or materials, the manufacturer will be notified in writing as to the basis for this determination. The manufacturer shall then notify the FAA in writing as to its plan of action for correcting the problem. If the manufacturer does not resolve the problem within a reasonable time (the time frame will, of necessity, be based on safety considerations and/or the nature of the problem), the equipment will be removed from the approval listing. The FAA reserves the right to require the equipment to be subjected to any or all qualification tests when the equipment has been deemed unreliable or deficient in materials or workmanship.

- 7. MODIFICATIONS TO EQUIPMENT. Once the equipment has been approved, the manufacturer may not make any changes in the equipment without prior FAA approval. Requests for design or component changes must be submitted to the office listed in paragraph 3 and must be accompanied by supporting documentation plus 13 copies of the revised instruction manual pages which reflect the proposed change. Substitution of stock electrical items such as resistors, capacitors, transistors, etc., which are identical in rating and size and which are equal or better in quality does not require FAA approval. This exception does not apply to lamps.
- 8. REVISION OF SPECIFICATIONS. It may be necessary at times to revise the specification for a particular equipment to reflect changing needs of aviation or of new technology. In such a case the revised equipment specification will contain an effective date, normally 6 months, at which time the prior approval automatically expires unless the manufacturer has been requalified to the revised specification. Manufacturers are informed by letter and supplied a copy of the revised specification within a few days of its issuance. The procedure for requalification is the same as for the original qualification as discussed in paragraph 3 with the following exceptions:
 - a. The manufacturer does not have to resubmit the quality control plan.
- b. Depending on the nature of the equipment modification it may not be necessary to perform all qualification tests. Exemption from certain tests may be granted when requested and justified by the manufacturer that the test is not applicable to the modified design.
- 9. EXEMPTION FROM SPECIFICATION REQUIREMENTS. No exemptions from the specifications, except as specified in paragraph 8, will be granted. However, it is recognized that equipment specifications may not cover all specific design and operational applications and that equipment may be submitted for approval that does not meet all specification requirements. If the proposed design is considered to have merit, then the applicable equipment specification will be revised to reflect the proposed design and submitted for comment through the normal coordination process with the aviation community. If no valid adverse comments are received on the proposed revision, then the proposed design may be given an interim approval before final approval and publication of the revised specification. In such cases, other manufacturers of similar equipment will be notified of the approval and of the forth-coming specification revision.
- 10. PUBLICATION OF APPROVAL LISTINGS. A listing of approved manufacturers will be published in this advisory circular which will be updated in January and July of each year. Changes in approval listings made between publication dates may be obtained from the office listed in paragraph 3 or from those FAA offices as listed in AC 150/5000-3, Address List for Regional Airports Divisions and Airport District/Field Offices, current edition.
- 11. Freedom of Information Act. Documentation submitted to the FAA for qualification approval may be made available to the public upon request through the Freedom of Information Act. Material marked "proprietary" will not be accepted under this approval process.

U.S. Department of Transportation

Federal Aviation Administration

800 Independence Ave. S.W. Washington, D.C. 20591

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