Bid Request Number

5950

Organization Lincoln Purchasing

Title

Floodlights With Mounts

Bid Creator Email

Sharon Mulder Asst Purchasing Agent smulder@lincoln.ne.gov

Description

Bid Type

Quote

Phone

(402) 441-7428 x

Open Date **Close Date** 11/19/2018 03:00:28 PM (CT) 11/27/2018 11:00:00 PM (CT) Fax

(402) 441-6513 x

Responding Suppliers

Name	City	State	Response Submitted	Lines Responded	Response Total
TraStar, Inc.	Richardson	TX	11/27/2018 11:59:25 AM	2	\$6,160.00
Sebek Lighting & Electronics	Lincoln	NE	11/27/2018 11:32:43 AM	1	\$9,720.00
Bell Electrical Supply Co., Inc.	Woodside	NY	11/27/2018 11:49:34 AM	2	\$12,200.00
Graybar Electric	Lncoln	NE	11/20/2018 02:35:12 PM	2	\$13,186.00
Midwest Electrical Controls, Ll	. Omaha	NE	11/26/2018 05:25:38 PM	2	\$17,600.00

Response Notes

Supplier

Notes

Graybar Electric

Pricing is good until 12/27/18. Atlas has announced a price increase after Dec 27th. Any releases after 12/27 will be subject to the price increase.

Midwest Electrical Controls, Sharon, My name is wrong in above user profile. Dr. is not an appropriate title?

L	ine	Item	S
_		100111	•

<u>Line Items</u>						
Line 1			Atlas	PFXL2G300LED	Optic Floodlights	
Name	QTY <u>UOM</u>	Unit Price Extended		<u>MfgNo</u>	Alternate Specification	Note to Buyer
TraStar, Inc.	20 EA		60.00			
Sebek Lighting & Electronics	20 EA	\$486.00 \$9,73	20.00			This price includes the
	00 = 4	****	00.00			This price includes the mount
Bell Electrical Supply Co., Inc.	20 EA	\$610.00 \$12,2				mount
Graybar Electric	20 EA	\$659.30 \$13,1	86.00			
Midwest Electrical Controls, LLC.	20 EA	\$880.00 \$17,6	00.00			Atlas optical flood light assembly, 35,380 Lumens, 300 Watt, High Efficiency 130-277, dimming 0 – 10 volt, Atlas PN PFXL2G300LED with Trunnion mounted. Reference quotation #MEC4113 and Atlas specifications PFXL2G300LED attached
Line 2			Atlas	Trunnion	Mounting Frames	
Name	QTY UOM	Unit Price Extende		<u>MfgNo</u>	Alternate Specification	Note to Buyer
TraStar, Inc.	20 EA	\$0.00	\$0.00			

Line 2					Atlas	Trunnion	Mounting Frames	
Name	<u>QTY</u>	<u>UOM</u>	Unit Price	Extended	<u>Mfgr</u>	<u>MfgNo</u>	Alternate Specification	Note to Buyer
TraStar, Inc.	2	0 EA	\$0.	00 \$	0.00			
Midwest Electrical Controls, LLC.	_	0 EA	\$0.	00 \$	80.00			
Sebek Lighting & Electronics Bell Electrical Supply Co., Inc. Graybar Electric	2	0 EA 0 EA 0 EA	No Bid \$0. \$0.		\$0.00 \$0.00			

Manufacturer and Model (Required)

TRASTAR, INC. JXM-ST-A5L lleding Lighting - RG-A5FL300W-50K

Atlas PFXL2G300LED Atlas PFXL2G300LED

Reference attachment PFXL2G300LED

Manufacturer and Model (Required)

TraStar, Inc. - Mounting is included with flood lights.

Trunnion Mount, Furnished assembled to item 1 = 16" wide x 17'07" high x 12.21" deep, cost covered in assembly cost.

Atlas Trunnion
Trunnion comes with the fixture

Header Attributes

	5 (Required)	6 (Required)	
Supplier Name	Delivery State number of delivery days after receipt of order (ARO). FOB to the City/County at the location specified	Contact	
·	with all transportation charges paid.	Name of person submitting this bid:	
Bell Electrical Supply Co., Inc.	5 Days	Anthony Baek	
Graybar Electric	Appx 1-2wks aro.	Eric Angell	
Midwest Electrical Controls, LLC.	35	Donald E. Reiner	
Sebek Lighting & Electronics	60-75 days from date of order	Rick Sebek	
TraStar, Inc.	45-60 days	Sandra Godoy	

City of Lincoln/Lancaster County (Lincoln Purchasing) Supplier Response

Bid Informatio	n	Contact Info	ormation	Ship to Info	ormation
Bid Creator Email Phone Fax	Sharon Mulder Asst Purchasing Agent smulder@lincoln.ne.gov (402) 441-7428 x (402) 441-6513 x	Address	Purchasing 440 S. 8th St. Lincoln, NE 68508 Sharon Mulder Asst Purchasing Agent	Address Contact	Lancaster County Corrections 3801 West O Street Lincoln, NE 68528
Bid Number 5950 Title Floodlights With Mounts Bid Type Quote Issue Date 11/19/2018 03:00 PM (CT) Close Date 11/27/2018 11:00:00 PM (CT)		Department Building Suite 200 Floor/Room Telephone (402) 441-7428 x Fax (402) 441-6513 x Email smulder@lincoln.ne.gov		Department Building Floor/Room Telephone Fax Email	
Supplier Inform	mation				
Company Address	TraStar, Inc. 860 N. Dorothy Dr., Suite 600				
Contact Department Building	Richardson, TX 75081-2770 Elaine Davis				
Floor/Room Telephone Fax Email Submitted Total	(972) 480-0888 (972) 480-8884 edavis@trastarusa.com 11/27/2018 11:59:25 AM (CT) \$6,160.00				
By submitting	your response, you certify that yo	ou are author	ized to represent and bind y	our compan	y.
Signature Sa	ndra Godoy		Email sgodoy	/@trastarus	a.com
Supplier Note	S		Market Market Constitution of the Constitution		
Bid Notes					
Bid Activities					
Bid Messages			Malacet Control of the Workship of the Control of t		
		74.07	11-01-02-01-02-02-02-02-02-02-02-02-02-02-02-02-02-		
Bid Attributes					

Please review the following and respond where necessary

Name	Note	Response
Instructions to Bidders	I acknowledge reading and understanding the Instructions to Bidders.	Yes
Specifications	I acknowledge reading and understanding the specifications.	Yes
Sample Contract	I acknowledge reading and understanding the sample contract.	Yes
Quantities	I acknowledge that the quantities listed for each line item are an estimated amount. The City/County does not guarantee any dollar amount or order quantities for the term of the contract.	Y .
Delivery	State number of delivery days after receipt of order (ARO). FOB to the City/County at the location specified with all transportation charges paid.	45-60 days
Contact	Name of person submitting this bid:	Sandra Godoy
Tax Exempt Certification Forms	Materials being purchased in this bid are tax exempt and unit prices are reflected as such. A Purchasing Agent Appointment form and a Exempt Sales Certificate form shall be issued with contract documents. (Note: State Tax Law does not provide for sales tax exemption for proprietary functions for government, thereby excluding the purchases of pipes to be installed in water lines and purchase of water meters.)	Yes
U.S. Citizenship Attestation	Is your company legally considered an Individual or Sole Proprietor: YES or NO	YES
	As a Vendor who is legally considered an Individual or a Sole Proprietor I hereby understand and agree to comply with the requirements of the United States Citizenship Attestation Form, available at: http://www.sos.ne.gov/business/notary/citizenforminfo.html	
	All awarded Vendors who are legally considered an Individual or a Sole Proprietor must complete the form and submit it with contract documents at time of execution.	
	If a Vendor indicates on such attestation form that he or she is a qualified alien, the Vendor agrees to provide the US Citizenship and Immigration Services documentation required to verify the Vendor's lawful presence in the United States using the Systematic Alien Verification for Entitlements (SAVE) Program.	
	Vendor further understands and agrees that lawful presence in the United States is required and the Vendor may be disqualified or the Contract terminated if such lawful presence cannot be verified as required by Neb. Rev. Stat. 4-108.	
	100. 000. 1 100.	

#	Qty	UOM	Description			Response
1	20	EA	Optic Floodlights			\$308.00
	Manuf	acturer: Atlas	Manufacturer #:	PFXL2G300LED		
	Item N	lotes:				
	Suppli	er Notes:				
	Item At	tributes: Pleas	e review the following an	d respond where necessary		
		lame		Note	Response	
	1 M	lanufacturer an	d Model	Please provide manufacturer and model bidding.	TRASTAR, INC. JX	(M-ST-A5L
2	20	EA	Mounting Frames			\$0.00
	Manuf	acturer: Atlas	Manufacturer #:	Trunnion		
	Item N	lotes: Size	e: 16" W x 17.07" H x 1	2.21" D		
	Suppli	er Notes:				
	Item At	tributes: Pleas	e review the following an	d respond where necessary		
		ame	o to the time to the wing dis	Note	Response	
	1 Manufacturer and Model		d Model	Please provide manufacturer and model bidding.	TraStar, Inc Mounting is included with flood lights.	
					Response Total:	\$6,160.00

© DURALIGHT °

TECHNICAL DATA

POWER CONSUMPTION - Saves 50-70%.

EXPECTED LED LIFE - 100,000 hrs.

<u>LED TECHNOLOGY</u> – Latest technology on Hi-Flux LEDs. Minimal CRI of 70.

<u>OPTICS</u> – Special optical lens design to maximize light output & uniformity. Each lens allows the fixture to generate different lighting patterns. Equipped with diffusing lens to minimize glare.

OPERATING TEMPERATURE $-40 \, \text{C}^{\circ} \sim +70 \, \text{C}^{\circ}$.

HOUSING – Die cast aluminum housing with powder coat finish.
 Tempered glass. Single, self-contained device, not requiring on-site assembly for installation. Watertight IP66.

<u>THERMAL MANAGEMENT</u> – Heat sink fins are incorporated into the external design of the fixture, allowing it to evenly dispense heat.

<u>MOUNTING</u> – Easy yoke mounting hardware for indoor/outdoor lighting on parking garage/lots, buildings, storage sites, etc.

ELECTRICAL FEATURES – Comes with a variable voltage power supply 120-277VAC. Also available with a step-down transformer built onto the unit to accommodate 480VAC. ETL listed conforming to UL STD 1598.

LUMINAIRE EFFICIENCY − ≥ 115 lm/w.

<u>COLOR CORRELATED TEMPERATURE (CCT)</u> – 4,000K to 6,000K.





Model Number:	JXM-ST-A1	JXM-ST-A2	JXM-ST-A3	JXM-ST-A4	JXM-ST-A5	JXM-ST-A5L
Wattage Level:	35W	65W	130W	185W	240W	300VV
Lumen Output:	≈ 4 000	≈ 7500	≈ 15000	≈ 21000	≈ 27000	≈ 35000
CRI:	> 70	> 70	> 70	> 70	> 70	> 70
Power Factor:	0.9	0.9	0.9	0.9	0.9	0.9

Any additional technical information or sales support regarding these and other LED Products, please contact us:



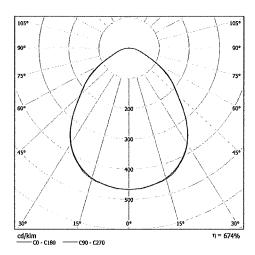


JXM-ST Flood Light

Certified by ISO9001 International Quality Control System

DISTRIBUTION:

Typical Distribution Pattern



Flood Light **ORDERING/OPTIONS** Example: JXM-ST **PREFIX SERIES** WATTAGE LEVEL CCT≈35W **JXM DURALIGHT** ST Lighting **A1** 3K $3000K (\pm 300)$ LED **A2** ≈ 65W Series 4K $4000K (\pm 300)$ **A3** ≈ 130W (Standard CCT) **A4** ≈ 185W 5K $5000K (\pm 300)$ **A5** ≈ 240W $6000K (\pm 300)$ 6**K** ≈ 300W A5L **VOLTAGE** DISTRIBUTION **FINISH OPTIONS** 120 120V - 277V 2 Type II GR **Gray Housing** \mathbf{L} Utility Label Black 2 Type III BK 3 (Standard Driver) Type IV Bronze 2 480 480V 4 BZ5 Type V DG Dark Green² SP Special Color² (Provide Chip)

NOTE:

- 1. Fixtures come with a Standard 7-Pin Receptacle.
- 2. Color other than the standard Gray may incur an extra charge. Please contact us for additional information.

TRASTAR, INC.

860 N. DOROTHY DRIVE, SUITE 600, RICHARDSON, TX 75081

PH: (972) 480-0888 | FX: (972) 480-8884



LM-80 Test Report

NVSL219B

Issue Date:

November 17, 2014

Revision Date:

_

Test Initiation Date: August 4, 2011

Test Completion Date: October 5, 2012

Test Duration: 10,000 hours

Report Number:

SQETMLH17101

Customer Information:

Company Name:

Nichia Corporation

Address:

491-100, Oka, Kaminaka-cho, Anan-shi, Tokushima, 774-8601, JAPAN

Description of Test Samples:

Classification:

LED Package

Model Name:

Warm White LED

Model Number:

NVSL219B (Nominal CCT: 2700 K)

Test Summary:

Data Set	Case Temperature [T _s]	Ambient Temperature [T _A]	Drive Current [I _F]	Lumen Maintenance at 10,000 hours	Chromaticity Shift (Δu'v') at 10,000 hours	TM-21 Projection L ₇₀ (10K)
1	55 °C	> 50 °C	700 mA	99.3 %	0.0022	> 60100 hours
2	55 °C	> 50 °C	1200 mA	97.9 %	0.0025	> 60100 hours
3	85 °C	> 80 °C	700 mA	97.5 %	0.0025	> 60000 hours
4	85 °C	> 80 °C	1200 mA	94.8 %	0.0031	> 60000 hours
5	105 °C	> 100 °C	700 mA	95.5 %	0.0027	> 60100 hours
6	105 °C	> 100 °C	1000 mA	93.7 %	0.0035	> 60100 hours



Approved Signatory:

Hitoshi TOHYAMA, Lab Manager

Nichia Corporation LED Testing Laboratory 1-1,Tatsumi-Cho, Anan-Shi, TOKUSHIMA 774-0001, JAPAN



Applicable Model Numbers:

This LM-80 test report applies to the following models:

Series	Model Number	Case Temperature [°C]	Forward Current [mA]	Nominal CCT [K]	Data Set Number
		55	700	≥ 2700	1
		55	1200	≥ 2700	2
219	NVSW219B	85	700	≥ 2700	3
213	14/2//2130	85	1200	≥ 2700	4
		105	700	≥ 2700	5
		105	1000	≥ 2700	6
		55	700	≥ 2700	1
		55	1200	≥ 2700	2
219	NVSL219B-V1	85	700	≥ 2700	3
219	INASESTAD-AT	85	1200	≥ 2700	4
		105	700	≥ 2700	5
		105	1000	≥ 2700	6
		55	700	≥ 2700	1
		55	1200	≥ 2700	2
219	NVSW219B-V1	85	700	≥ 2700	3
219	1442445130-41	85	1200	≥ 2700	4
		105	700	≥ 2700	5
		105	1000	≥ 2700	6







IES LM-80-08 Test Report Requirement:

1. Number of LED light sources tested

See tables.

2. Description of LED light sources

See Description of Test Samples

3. Description of auxiliary equipment

Active cooling life test system

Consisting of small boxes, in which each box contains a reliability test board, and a water-cooled heat sink or a heater to control device temperature.

LED Tester

Consisting of an integrating sphere, a programmable current-source meter, and a spectroradiometer.

4. Operating cycle

Constant direct current (DC).

5. Ambient conditions including airflow, temperature, and relative humidity

Ambient Temperature (T_A): See tables

Ambient temperature is the temperature of the air at a distance of 1.5 mm above the reliability test board.

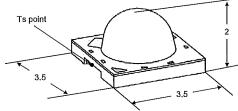
Air flow: < 0.1 m/s

Relative Humidity: < 45 %

6. Case temperature (test point temperature)

See tables.

For the case temperature (T_s) measurement point, see the figure below.



- Drive current of the LED light sources during lifetime test See tables.
- 8. Initial luminous flux and forward voltage at photometric measurement current See tables.
- Lumen maintenance data for each individual LED light source along with median value, standard deviation, minimum and maximum lumen maintenance value for all of the LED light sources. See tables.
- Observation of LED light sources failures including the failure conditions and time of failure.
 No failure observed
- 11. LED light source monitoring interval

See tables.

12. Photometric measurement uncertainty

Flux measurement: 4.8% (k=2)

Lumen maintenance:

1.8% (k=2)

13. Chromaticity shift reported over the measurement time.

See tables.

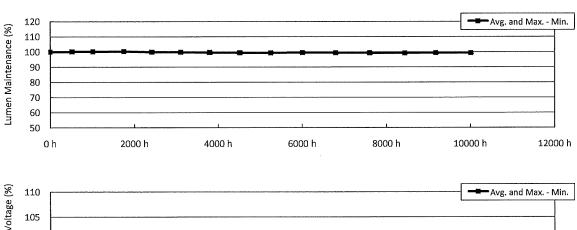


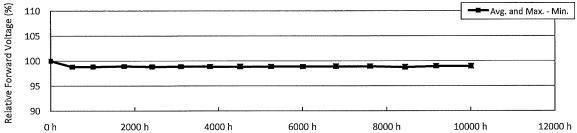
Data Set 1:55 °C, 700 mA

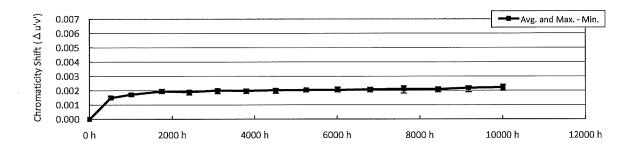
Actual Case Temperature [T _s]	57.0 °C
Actual Ambient Temperature [T _A]	56.5 °C
Drive Current [I _F]	700 mA
Measurement Current	700 mA

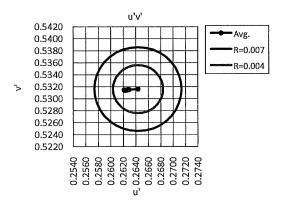
NOTES:

 T_S and T_A were measured during initial setup.











Report No.: SQETMLH17101



Data Set 1:55 °C, 700 mA

Actual Case Temperature [T _s]	57.0 °C
Actual Ambient Temperature [TA]	56.5 °C
Drive Current [I _F]	700 mA
Measurement Current	700 mA

NOTES:

 T_{S} and T_{A} were measured during initial setup.

TABLE 1-1 Initial Characteristics

LED	Luminous flux	Forward voltage	CCT	CIE:	1931	ClE	1976		T	<u> </u>	1
No.	Φ _v [lm]	V _F [V]	T _{CP} [K]	×	у	u¹	ν'				
1	195	3.22	2614	0.472	0.420	0.266	0.533				
2	195	3.25	2605	0.473	0.422	0.266	0.534				
3	192	3.27	2578	0.476	0.422	0.267	0.534				
4	191	3.25	2620	0.472	0.421	0.265	0.533				
5	189	3.25	2533	0.481	0.424	0.270	0.536				
6	197	3.24	2657	0.467	0.418	0.264	0.531				
7	197	3.25	2678	0.465	0.418	0.263	0.531				
8	194	3.28	2662	0.466	0.417	0.264	0.531				
9	196	3.32	2694	0.463	0.416	0.262	0.530				
10	197	3.28	2649	0.468	0.418	0.264	0.531				
11	196	3.24	2706	0.462	0.415	0.262	0.529				
12	199	3.22	2669	0.466	0.417	0.263	0.531				
13	197	3.24	2639	0.469	0.418	0.265	0.532				
14	194	3.23	2637	0.469	0.419	0.265	0.532				
15	192	3.21	2617	0.473	0.423	0.265	0.534				
16	198	3.27	2679	0.464	0.415	0.263	0.530				
17	196	3.25	2671	0.465	0.417	0.263	0.530				
18	195	3.26	2676	0.465	0.416	0.263	0.530				
19	198	3.26	2691	0.464	0.417	0.262	0.530				
20	196	3.25	2615	0.472	0.421	0.266	0.533				
21	195	3.22	2675	0.466	0.419	0.263	0.531				
22	195	3.27	2645	0.467	0.416	0.265	0.531				
23	197	3.30	2718	0.462	0.416	0.261	0.530				
24	196	3.24	2593	0.474	0.421	0.267	0.533				
n	24	24	24	24	24	24	24				
Avg.	195	3.25	2647	0.468	0.419	0.264	0.532				
Med.	196	3.25	2653	0.467	0.418	0.264	0.531				
σ	2.3	0.026	43.8	0.0048	0.0026	0.0020	0.0016	 			
Min.	189	3.21	2533	0.462	0.415	0.261	0.529	 			
Max.	199	3.32	2718	0.481	0.424	0.270	0.536				



Report No. : SQETMLH17101

Data Set 1:55 °C, 700 mA

Actual Case Temperature [Ts]	57.0 °C
Actual Ambient Temperature [T _A]	56.5 °C
Drive Current [l _F]	700 mA
Measurement Current	700 mA

NOTES:

 T_{S} and T_{A} were measured during initial setup.

TABLE 1-2 Lumen Maintenance

LED		Lumen Maintenance % (Normalized to 100 % at 0 hours)													
No.	0 h	519 h	1013 h	1752 h	2417 h	3109 h	3798 h	4513 h	5251 h	6014 h	6797 h	7609 h	8443 h	9181 h	10012 h
1	100.0	100.3	100.4	100.5	99.8	100.2	99.9	99.9	99.8	99.9	99.6	99.7	99.4	99.7	99.6
2	100.0	100.2	100.1	100.3	100.0	100.1	100.0	99.4	99.5	99.7	99.6	99.5	99.3	99.6	99.4
3	100.0	100.6	100.2	100.6	100.5	100.0	100.1	99.4	99.4	99.7	99.5	99,6	99.3	99.5	99.4
4	100.0	100.7	100.5	100.6	100.3	99.7	99.8	99.3	99.3	99.5	99.3	99.4	99.1	99.3	99.1
5	100.0	100.4	100.3	100.4	99.7	99.4	99.3	99.1	99.1	99.3	99.1	99.1	98.8	98.7	98.9
6	100.0	100.3	100.3	100.4	99.6	99.9	99.7	99.7	99.6	99.7	99.3	99.4	99.1	99.4	99,2
7	100.0	100.0	100.0	100.2	99.5	99.7	99.6	99.4	99.3	99.0	99.3	99.2	98.9	99,2	99.1
8	100.0	100.1	100.0	100.3	99.9	100.0	99.7	99.3	99.3	99.5	99.5	99.5	99.3	99.6	99.4
9	100.0	100.6	100.6	100.8	100.7	100.1	100.0	99.8	99.7	99.8	99.8	99.9	99.6	99.9	99.7
10	100.0	100.3	100.2	100.3	100.0	99.5	99,4	99.2	99.1	99.2	99,2	98.5	99.0	99.3	99.1
11	100.0	100.3	100.2	100.1	99.6	99.2	99.2	99.2	99.1	99.2	99.0	99.0	98.8	99.1	98.9
12	100.0	100.6	100.5	100.7	100.1	100.3	100.1	100.2	100.1	100.3	99.8	99.9	99.5	99.8	99.7
13	100.0	100.1	100.1	100.3	99.7	99.9	99.9	99.7	99.5	99.6	99.5	99.4	99.2	99.5	99.3
14	100.0	99.7	100.4	100.5	100.3	100.2	100.0	99.7	99.5	99.7	99.8	99.5	99.6	100.0	99.9
15	100.0	99.7	100.4	100.4	100.4	99.9	99.7	99.5	99.4	99.5	99.6	99.7	99.4	99.6	99.5
16	100.0	100.1	100.1	100.2	100.0	99.7	98.7	99.3	99.1	99.4	99.4	99.4	99.1	99.0	99.1
17	100.0	99.8	99.7	100.0	99.5	99.2	99.1	99.0	98.9	99.0	98.8	98.8	98.6	98.7	98.7
18	100.0	100.2	100.1	100.3	99.7	99.9	100.0	99.9	99.2	99.1	99.5	99.2	99.2	99.5	99.4
19	100.0	100.1	100.0	100.1	99.6	99.8	99.9	99.6	99.5	99.7	99.5	99.4	99.2	99.5	99.4
20	100.0	100.1	100.1	100.0	99.9	99.9	99.7	99.4	99.3	99.6	99.5	99.5	99.3	99.6	99.4
21	100.0	100.1	100.4	100.4	100.3	100.0	99.8	99.5	99.5	99.7	99.6	99.6	99.5	99.6	99.6
22	100.0	100.1	100.0	100.1	99.9	99.3	99.2	98.8	99.1	99.3	99.2	99.2	98.9	99.0	99.0
23	100.0	100.1	100.0	100.1	99.8	99.4	99.3	99.2	99.2	99.5	99.2	99.2	98.9	99.2	99.0
24	100.0	100.3	100.1	100.2	99.4	99.8	99.9	99.7	99.7	99.8	99.5	99.5	99.3	99.6	99.4
n	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
Avg.	100.0	100.2	100.2	100.3	99.9	99.8	99.7	99.5	99.4	99.5	99.4	99.4	99.2	99.4	99.3
Med.	100.0	100.2	100.2	100.3	99.9	99,9	99.7	99.4	99.4	99.6	99.5	99.4	99.2	99.5	99.4
σ	0.00	0.27	0.21	0.21	0.34	0.32	0.36	0.32	0.28	0.32	0.25	0.32	0.27	0.34	0.29
Min.	100.0	99.7	99.7	100.0	99.4	99.2	98.7	98.8	98.9	99.0	98.8	98.5	98.6	98.7	98.7
Max.	100.0	100.7	100.6	100.8	100.7	100.3	100.1	100.2	100.1	100.3	99.8	99.9	99.6	100.0	99,9

TM-21 Projection

	1141-77	IVI-ZI FIOJECTION											
I	Time	4513 h	5251 h	6014 h	6797 h	7609 h	8443 h	9181 h	10012 h				
ı	In(Avg.)	-0.0053	-0.0063	-0.0046	-0.0058	-0.0062	-0.0083	-0.0059	-0.0070				

Test duration used	4513 h	to	10012 h			
В] (0.9962				
α	3.2	3.2532E-07				
R ²	0.3325					
Calculated L ₇₀ (10K)	10800	00	hours			
Reported L ₇₀ (10K)	> 601	00	hours			

Curve-fit equation: $\Phi(t)$ =Bexp(- αt)

Lumen maintenance life eqation: $L_{70} = \ln(B/0.7)/\alpha$



TM-21 Report

Description of LED Ligh (manufacturer, catalog num	nt Source Tested model,	able 1: Report at each LWI NICHIA, Nichia Chip Type	Physical Research Conference (Conference (elegation de sous de Colonie de la selegation de Colonie de Colonie de Colonie de Colonie de Colonie de Colonie	
Test Condition 1 - 55°C	Case Temp	Test Condition 2 - 85%	C Case Temp	Test Condition 3 - 105°	C Case Temp
Sample size	25	Sample size	25	Sample size	25
Number of failures	0	Number of failures	0	Number of failures	0
DUT drive current used in the test (mA)	1000	DUT drive current used in the test (mA)	1000	DUT drive current used in the test (mA)	1000
Test duration (hours)	10,000	Test duration (hours)	10,000	Test duration (hours)	10,000
Test duration used for projection (hour to hour)	5,234 - 10,045	Test duration used for projection (hour to hour)	5,234 - 10,045	Test duration used for projection (hour to hour)	5,234 - 10,045
Tested case temperature (°C)	55	Tested case temperature (°C)	85	Tested case temperature (°C)	105
α	1.738E-06	α	2.546E-06	α	1.722E-06
В	0.989	В	0.982	В	0.976
Calculated L70(10k) (hours)	199,000	Calculated L70(10k) (hours)	133,000	Calculated L70(10k) (hours)	193,000
Reported L70(10k) (hours)	>60000	Reported L70(10k) (hours)	>60000	Reported L70(10k) (hours)	>60000

	2: Interpolation Report d on <i>in-situ</i> temperature entered)
T _{s,1} (°C)	55,00
T _{s,1} (K)	328.15
α ₁	1.738E-06
B ₁	0.989
T _{s,2} (°C)	85.00
T _{s,2} (K)	358.15
α_2	2.546E-06
B ₂	0.982
E _a /k _b	1.50E+03
Α	1.657E-04
B ₀	0.986
T _{s,i} (°C)	69.30
T _{s,i} (K)	342.45
α_{i}	2.102E-06
Projected L70(10k) at 69.3°C (hours)	163,000
Reported L70(10k) at 69.3ºC (hours)	>60000

Report Generated By: Corey Gentry	Notes: Duralight LED Area Light, JXM-ST-A5
Company: TraStar, Inc.	
11/27/2018	

Sharon R. Mulder

From:

David M. Scharf

Sent:

Tuesday, December 18, 2018 1:35 PM

To: Subject: Sharon R. Mulder RE: Floodlights Results

Sharon,

My recommendation is to go with Trastar JXM-ST-A5L. I was wondering if we could order 25 instead of the 20 on the quote? Let me know how to proceed from this point. Thank you for helping with this endeavor.

Dave Scharf Facility Manager Lancaster County Adult Detention Facility 402-441-1972 (work) 402-450-5671 (Cell)

From: Sharon R. Mulder < SMulder@lincoln.ne.gov>

Sent: Tuesday, December 18, 2018 9:31 AM **To:** David M. Scharf < DScharf@lancaster.ne.gov >

Subject: RE: Floodlights Results

Hi Dave,

Do you have an award recommendation on this quote?

Thanks, Sharon

From: David M. Scharf

Sent: Wednesday, November 28, 2018 10:36 AM **To:** Sharon R. Mulder <<u>SMulder@lincoln.ne.gov</u>>

Subject: RE: Floodlights Results

Sharon,

Can you get me the dimensions of the light that was low bid? Just need to know how big this is in comparison to the lights that are one the building now. Thanks.

Dave Scharf Facility Manager Lancaster County Adult Detention Facility 402-441-1972 (work) 402-450-5671 (Cell)

From: Sharon R. Mulder < SMulder@lincoln.ne.gov > Sent: Wednesday, November 28, 2018 8:01 AM
To: David M. Scharf < DScharf@lancaster.ne.gov >

Subject: Floodlights Results

Hi Dave,

Sharon R. Mulder

From: Sent: Sandy Godoy <sgodoy@trastarusa.com> Thursday, December 20, 2018 2:56 PM

To:

Sharon R. Mulder

Cc:

'Margaret Chavira'; 'Peter Tian'; Corey Gentry; sherwing@trastarusa.com

Subject:

Bid# 5950

Hello Sharon,

The pricing will stay the same for a quantity of 25 for the above bid number.

Thank you.

Sincerely,

Sandra Godoy *TraStar Inc.*



860 N. Dorothy Drive #600, Richardson, Texas 75081

Phone: (972) 480-0888 | Fax: (972) 480-8884

E-mail: sgodoy@trastarusa.com | **Website**: www.trastarusa.com