



REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G101607677 Original IssueDate: April 29, 2014

Revision Date: May 1, 2014

REPORT NO. 101607677LAX-002

TEST OF ONE OUTDOOR 6 IN 1 LED PAR

MODEL NO. SIXPAR 300IP

RENDERED TO

ELATION PROFESSIONAL 6122 S. EASTERN AVENUE COMMERCE, CA, 90040

Revision Note May 1, 2014: Updated model number.

<u>TEST</u>: Electrical and Photometric tests as required to the IESNA test standard.

STATEMENT OF LIMITATION: This report must not be used by the client to claim product certification, approval, or

endorsement by A2LA, NIST, or any agency of the federal government.

<u>AUTHORIZATION</u>: The testing performed was authorized by signed quote number 500519256.

STANDARDS USED: The following American National Standards or Illuminating Engineering Society of

North America Test Guides were used in part or totally to test each specimen:

IESNA LM-79 - 2008: Electrical and Photometric Measurements of Solid State Lighting

<u>DESCRIPTION OF SAMPLE</u>: The client submitted one production sample of model number SIXPAR 300IP. The

sample was received by Intertek on April 25, 2014, in undamaged condition and one sample was tested as received. The sample designation was LAN1404250928-002.

DATES OF TESTS: April 28, 2014

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SUMMARY

Model No.: SIXPAR 300IP
Description: Outdoor 6 In 1 LED PAR

Criteria	Result
Total Lumen Output (Lumens)	3430.8
Total Power (W)	136.43
Luminaire Efficacy (LPW)	25.15
Power Factor	0.968

EQUIPMENT LIST

	Model	Control	Last Date	Calibration
Equipment Used	Number	Number	Calibrated	Due Date
LSI High Speed Mirror Goniometer	6440T	000943	VBU	VBU
Elgar Power Supply	CW1251	000944	VBU	VBU
Yokogawa Power Analyzer	WT210	000945	11/14/13	11/14/14
Omega Environmental Monitor	iBTHX-W	000886	09/09/13	09/09/14
Tape Measure	33-428	000684	12/09/13	12/09/14
Stopwatch	365510	001380	11/05/13	11/05/14

TEST METHODS

Seasoning in Sample Orientation - LED Products

No seasoning was performed in accordance with IESNA LM-79.

Photometric and Electrical Measurements - Distribution Method

A LSI Type C High Speed Model 6440 Mirror Goniometer was used to measure the intensity (candelas) at each angle of distribution for each sample.

Ambient temperature was measured equal to the height of the sample mounted on the Goniometer equipment. Each sample was operated at input rated voltage in its designated orientation. Each sample was allowed to stabilize for at least thirty minutes before measurements were made. Electrical measurements including voltage, current, and power were measured using the Yokogawa Power Analyzer.

Some graphics were created with Photometrics Plus software.

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RESULTS OF TEST

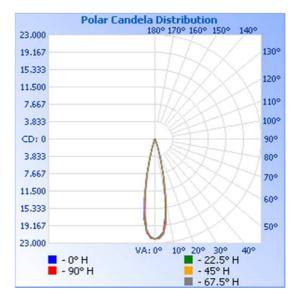
Photometric and Electrical Measurements at Ambient Temperature (25°C +/- 1°C) - Distribution Method

			Input	Input	Input	Input	Absolute	Lumen Efficacy
		Base	Voltage	Current	Power	Power	Luminous Flux	(Lumens Per
	Intertek Sample No.	Orientation	{Vac}	(mA)	(Watts)	Factor	(Lumens)	Watt)
,	LAN1404250928-002	UP	120.0	1175	136.4	0.968	3430.8	25.15

Intensity (Candlepower) Summary at 25°C - Candelas

Maximum Candela Value	22080
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Angle	0	22.5	45	67.5	90
0	22080	22049	22036	21998	22000
5	20547	20726	20807	20942	21096
10	12491	12831	13169	13465	13871
15	4424	4627	4803	5059	5163
20	1104	1154	1195	1187	1267
25	336	349	352	360	390
30	136	141	138	149	150
35	92	86	88	91	87
40	70	69	58	53	62
45	67	60	79	74	83
50	36	31	41	40	45
55	36	40	30	46	26
60	28	26	26	37	34
65	29	19	30	23	27
70	11	32	25	26	0
75	1	2	7	4	8
80	0	0	7	2	0
85	2	0	14	0	0
90	0	4	4	0	15



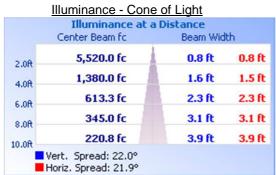
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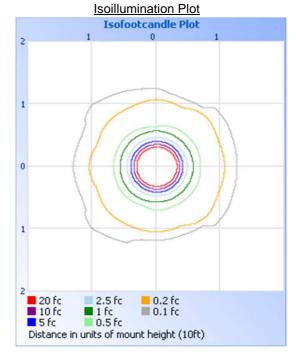


RESULTS OF TEST (cont'd)

Illumination Plots

Mounting Height: 10 ft.





Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	3261	95.1%
0-40	3316	96.6%
0-60	3397	99.0%
60-90	33.2	1.0%
0-90	3430.5	0.3%
90-180	0.4	0.0%
0-180	3430.8	100.0%

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	0.0	0.0%
10-20	1704	49.7%
20-30	1372	40.0%
30-40	186.4	5.4%
40-50	54.4	1.6%
50-60	48.8	1.4%
60-70	32.8	1.0%
70-80	22.4	0.7%
80-90	7.2	0.2%
90-100	0.4	0.0%
		0.0%
		0.0%
		0.0%
		0.0%
		0.0%
		0.0%
		0.0%
		0.0%

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PICTURE (not to scale)



CONCLUSION

The results tabulated in this report are representative of the actual test samples submitted for this report only. The data is provided to the client for further evaluation. Compliance to the referenced specification requirements was not determined in this report.

In Charge Of Tests:

Matthew Felix Technician **Lighting Division**

Attachment: None

Report Reviewed By:

Kenda Branch Engineer Lighting Division

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