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INDEPENDENT TESTING LABORATORIES, INC.
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REPORT NUMBER: ITL57116

DATE: 01/25/06

PREPARED FOR: ELLIPTIPAR

CATALOG NUMBER: 3030-T128-S-02-1-00-0-00-00-B

LUMINAIRE: EXTRUDED SPECULAR METAL REFLECTOR WITH FABRICATED UNFINISHED METAL END PLATES, FABRICATED FOUR-PIECE SEMI-SPECULAR PLASTIC 33-CELL LOUVER.

LAMP: ONE 28-WATT T-5 SYLVANIA FP28/835 LINEAR FLUORESCENT.

BALLAST: ADVANCE ICN-2S28

MOUNTING: SUSPENDED

THE 0 DEGREE PLANE IS PARALLEL WITH THE LAMP.

TOTAL INPUT WATTS= 33.3 AT 120.0 VOLTS

LUMEN TO CANDELA RATIO USED= 9.17

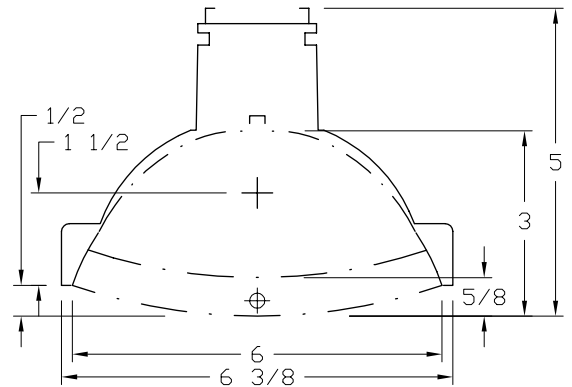
REPORT IS BASED ON 2900 LUMENS PER LAMP. *

CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0	1046	1046	1046	1046	1046
5	1068	1181	1346	1420	1463
15	1043	1470	1765	1811	1781
25	991	1548	1320	845	740
35	893	1236	602	477	433
45	735	599	333	330	351
55	434	256	242	303	330
65	74	86	180	159	115
75	4	17	12	21	11
85	1	0	0	0	1
90	0	0	0	0	0

FLUX

130
444
527
466
352
267
128
17
1
0



ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT
0- 30	1101	38.0	47.2
0- 40	1568	54.1	67.2
0- 60	2186	75.4	93.8
0- 90	2332	80.4	100.0
90-180	0	0.0	0.0
0-180	2332	80.4	100.0

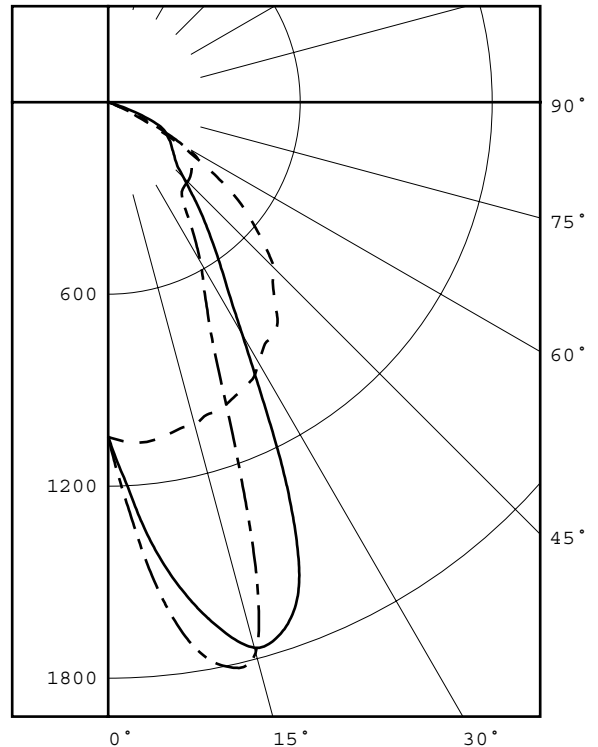
TOTAL LUMINAIRE EFFICIENCY = 80.4 % *

CIE TYPE - DIRECT

PLANE	: 0-DEG	90-DEG
SPACING CRITERIA	: 1.3	1.0
SHIELDING ANGLES	: 4	22
PLANE	: 0-DEG	90-DEG
LUMINOUS LENGTH	: 47.875	6.000

LUMINANCE DATA IN CANDELA/SQ M

ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 45-DEG	AVERAGE 90-DEG
45	5607.	2540.	2678.
55	4081.	2276.	3103.
65	944.	2297.	1468.
75	83.	250.	229.
85	62.	0.	62.



LEGEND:
0-deg: - - - - -
45-deg: = = = = =
90-deg: - . - . - .

Checked B.HYRE

Approved R.BEATTIE

* SEE ADDENDUM FOR FURTHER INFORMATION



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CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0.0	1046	1046	1046	1046	1046
2.5	1060	1097	1180	1220	1242
5.0	1068	1181	1346	1420	1463
7.5	1066	1265	1488	1598	1646
10.0	1056	1339	1604	1729	1762
12.5	1044	1402	1700	1800	1810
15.0	1043	1470	1765	1811	1781
17.5	1024	1501	1754	1688	1536
20.0	1023	1536	1694	1401	1177
22.5	1006	1555	1557	1062	895
25.0	991	1548	1320	845	740
27.5	976	1515	1044	715	646
30.0	940	1454	838	629	577
32.5	905	1362	697	555	502
35.0	893	1236	602	477	433
37.5	869	1106	521	410	381
40.0	809	951	451	360	360
42.5	761	765	386	337	354
45.0	735	599	333	330	351
47.5	665	483	293	326	347
50.0	593	399	272	321	339
52.5	524	323	256	312	330
55.0	434	256	242	303	330
57.5	332	206	230	302	332
60.0	237	156	215	294	276
62.5	141	115	201	230	193
65.0	74	86	180	159	115
67.5	37	63	135	89	37
70.0	18	44	78	40	23
72.5	7	31	32	30	16
75.0	4	17	12	21	11
77.5	3	7	5	11	7
80.0	1	2	2	5	4
82.5	1	1	1	1	2
85.0	1	0	0	0	1
87.5	0	0	0	0	0
90.0	0	0	0	0	0

ZONAL	LUMEN	SUMMARY
0-	5	28.
5-	10	102.
10-	15	188.
15-	20	256.
20-	25	269.
25-	30	258.
30-	35	244.
35-	40	222.
40-	45	189.
45-	50	162.
50-	55	143.
55-	60	124.
60-	65	87.
65-	70	41.
70-	75	14.
75-	80	4.
80-	85	1.
85-	90	0.



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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC	80				70				50			30			10			0	
	RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	96	96	96	96	94	94	94	94	89	89	89	86	86	86	82	82	82	80	0
1	90	87	85	82	88	85	83	81	82	80	79	79	78	76	76	75	74	72	0
2	84	79	75	71	82	77	74	70	75	71	69	72	70	67	70	68	66	64	0
3	78	71	66	62	76	70	65	62	68	64	61	66	62	60	64	61	59	57	0
4	73	65	59	55	71	64	59	55	62	57	54	60	56	53	59	55	53	51	0
5	68	59	53	49	66	58	53	49	57	52	48	55	51	48	54	50	47	46	0
6	63	54	48	44	62	54	48	44	52	47	44	51	47	43	50	46	43	42	0
7	59	50	44	40	58	50	44	40	48	43	40	47	43	39	46	42	39	38	0
8	56	47	41	37	55	46	40	36	45	40	36	44	39	36	43	39	36	35	0
9	53	43	38	34	52	43	37	34	42	37	33	41	37	33	40	36	33	32	0
10	50	40	35	31	49	40	35	31	39	34	31	39	34	31	38	34	31	29	0

ALL CANDELA, LUMENS, LUMINANCE, COEFFICIENT OF UTILIZATION AND VCP VALUES IN THIS REPORT ARE BASED ON RELATIVE PHOTOMETRY WHICH ASSUMES A BALLAST FACTOR OF 1.000. ANY CALCULATIONS PREPARED FROM THESE DATA SHOULD INCLUDE AN APPROPRIATE BALLAST FACTOR.



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ADDENDUM

SPECIAL TEST PROCEDURES FOR T-5 LAMPS INCLUDING EXPLANATION OF THE IMPORTANCE OF LAMP LUMEN RATINGS.

This test was performed using standard relative photometric practices in accordance with recommendations of the Illuminating Engineering Society of North America. Fluorescent testing using the guidelines of relative photometric practice presupposes that the lamps will be operated at their nominal electrical characteristics (e.g., a 40 watt lamp will operate very nearly at 40 watts, and at the voltage and current required for 40-watt operation). Fluorescent lamps in general are temperature sensitive, the lumen output varies with ambient temperature and follows a characteristic curve. The T-5 fluorescent lamps used in this test produce maximum light output in an ambient temperature other than 25 degrees C. A critical step in relative photometric testing involves measurement of the total flux output from the lamp(s) suspended in free air at a 25 degree C ambient temperature per IES LM41-1998. This measurement process is a separate step from the photometric exploration of the luminaire itself. This "bare lamp" measurement is made with the lamp(s) operated by the same ballast(s) which are to be used in the luminaire. Since the test procedure involves measuring the bare lamp flux output at 25 degrees C and this lamp type peaks at a temperature other than 25 degrees C, the flux measured for this lamp type will be less than the maximum output the lamp is designed to produce.

As a result, the measurement of the "bare lamp" total flux output is lower than it would be if they were operated at their optimum operating temperature and at nominal electrical characteristics. When this "bare lamp" measurement is incorporated into the luminaire test report, the net effect is that the candela values on the luminaire test report are higher than what the luminaire actually produced and the total luminaire efficiency is higher than what the lighting industry would expect this luminaire to produce. These lighting industry expectations are based on comparisons to the total luminaire efficiency of the same luminaire with T-12 or T-8 lamps.

On this particular test, the lamp lumen rating shown is for a 35 degree C ambient temperature.

T5TEMP.DIS