

THIS REPORT IS BASED ON PUBLISHED INDUSTRY PROCEDURES. FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE.



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REPORT NUMBER: ITL64525 PREPARED FOR: ENCAPSULITE INTERNATIONAL INC. DATE: 05/07/10

LUN	IINAN	JCE DATA	IN CANDE	ELA/SQ M
ANC	JLE	AVERAGE	AVERAGE	AVERAGE
IN	DEG	0-DEG	45-DEG	90-DEG
	45	9499.	11604.	11285.
	55	8782.	10646.	10217.
	65	6994.	9227.	8622.
	75	4510.	7063.	6386.
	85	1062.	3996.	3786.



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CANDELA DISTRIBUTION

90.0 1161 1177 1202 1216 1222 1223 1207 163 1090 1020 942 847 745 643 529 419 310 213 142 103 65 34 14 5 2 100 0 0 0 0 0 0 0
67.5 1161 1171 1203 1205 1199 1149 1083 1006 925 834 732 631 520 406 200 133 87 51 23 9 31 0 0 0 0 0 0 0 0
45.0 1161 1182 1191 1179 1158 1036 971 879 783 683 576 257 165 970 290 10 0 0 0 0 0 0 0
22.5 1161 1154 1139 113 1075 1026 973 911 843 771 687 598 495 382 276 177 96 14 3 0 0 0 0 0 0 0 0
0.0 1161 1156 1137 1071 1022 958 889 810 725 632 522 427 319 215 126 52 10 0 0 0 0 0 0 0
0.0 5.0 10.0 25.0 25.0 30.0 40.0 45.0 55.0 60.0 75.0 85.0 95.0 105.0



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5-DEGREE		10-DEGREE	
ZONAL LUMEN	SUMMARY	ZONAL LUMEN	SUMMARY
0- 5	28.	0- 10	112.
5- 10	84.	0-20	444.
10- 15	140.	0-30	969.
15- 20	192.	0-40	1631.
20- 25	241.	0-50	2342.
25- 30	284.	0- 60	3011.
30- 35	319.	0-70	3550.
35- 40	343.	0- 80	3899.
40-45	355.	0-90	4061.
45- 50	356.	0-100	4120.
50- 55	345.	0-110	4135.
55- 60	324.	0-120	4137.
60- 65	291.	0-130	4137.
65- 70	248.	0-140	4137.
70- 75	199.	0-150	4137.
75- 80	149.	0-160	4137.
80- 85	101.	0-170	4137.
85-90	61.	0-180	4137.
90-95	38.		
95-100	22.		
100-105	11.		
105-110	4.		
110-115	1.		
115-120	0.		
120-125	0.		
125-130	0.		
130-135	0.		
135-140	0.		
140-145	0.		
145-15U	0.		
150-155 155 160	0.		
100 105 100 105	0.		
165 170	0.		
$170 \ 175$	0.		
175 100	0.		
T 1 2 - T 8 0	υ.		



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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC	RC 80					70					50		30					10		0
RW	70	50	30	10	70	50	30	10	Ĩ	50	30	10	50	30	10	5	0	30	10	0
0	74	74	74	74	72	72	72	72	(59	69	69	66	66	66	6	3	63	63	62
1	67	64	61	58	65	62	59	57	ļ	59	57	55	57	55	53	5	54	53	51	50
2	61	55	50	47	59	54	49	46	ļ	51	48	45	49	46	43	4	.7	44	42	41
3	55	48	43	38	53	47	42	38	4	45	40	37	43	39	36	4	:1	38	35	34
4	50	42	36	32	49	41	36	32	4	40	35	31	38	34	31	3	6	33	30	29
5	46	38	32	27	45	37	31	27	-	35	30	27	34	30	26	3	3	29	26	24
6	42	34	28	24	41	33	28	24	-	32	27	23	31	26	23	2	29	26	23	21
7	39	30	25	21	38	30	24	21	2	29	24	20	28	23	20	2	27	23	20	19
8	36	28	22	18	35	27	22	18	2	26	22	18	25	21	18	2	25	21	18	17
9	34	25	20	16	33	25	20	16	2	24	19	16	23	19	16	2	23	19	16	15
10	32	23	18	15	31	23	18	15	2	22	18	15	22	17	15	2	21	17	14	13

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 quidelines 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 the lamps 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 total luminaire efficiency on the report 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 25 degree C ambient temperature. Since this report was based the lumen lamp lumen rating at 25 degrees C, the candela values in this report should be accurate, as long as the lamp(s) used for this test follow the manufacturer's light output vs. temperature curve.

T5TEMP3.DIS