



itl boulder

THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

INDEPENDENT TESTING LABORATORIES, INC.
3386 LONGHORN ROAD, BOULDER, CO 80302 USA

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DATE: 04/04/08

REPORT NUMBER: ITL60025
PREPARED FOR: KINO FLO LIGHTING SYSTEMS
CATALOG NUMBER: CFX-9601

LUMINAIRE: FABRICATED CORRUGATED BLACK PLASTIC ADJUSTABLE HOUSING WITH WHITE UPPER INTERIOR, FORMED MULTI-FACETED SPECULAR METAL REFLECTOR, MOLDED TWO PIECE BLACK PLASTIC MULTI-CELL LOUVER. ADJUSTABLE HOUSING ADJUSTED AS SHOWN IN DRAWING.

LAMP: ONE 120-WATT T-12 KINO FLO KF29 F120T12/HO/800 LINEAR FLUORESCENT, LAMP ENCASED IN CLEAR PLASTIC PROTECTIVE SLEEVE.

BALLAST: KINO FLO INCORPORATED BAL-105M

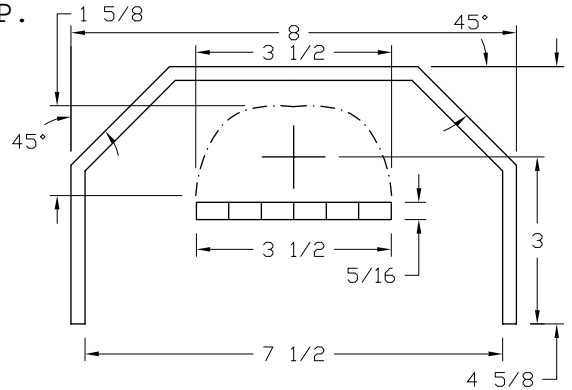
NOTE: THE LAMP UTILIZED FOR THIS TEST WAS NOT CHECKED FOR LIGHT OUTPUT SYMMETRY, AS IS STANDARD PRACTICE PER IESNA LM-41-98.

THE 0 DEGREE PLANE IS PARALLEL WITH THE LAMP.

TOTAL INPUT WATTS = 111.3 AT 120.0 VOLTS

LUMEN TO CANDELA RATIO USED = 9.24

REPORT IS BASED ON 5660 LUMENS PER LAMP.



CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0	FLUX
0	1111	1111	1111	1111	1111	
5	1080	1076	1078	1080	1086	101
15	925	915	913	937	952	260
25	725	710	713	741	765	334
35	509	493	490	534	563	320
45	283	279	294	325	327	231
55	76	101	124	75	55	85
65	19	38	7	9	10	18
75	8	8	4	2	2	5
85	4	5	1	0	0	3
90	0	3	0	0	0	

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT
0- 30	696	12.3	51.3
0- 40	1016	17.9	74.8
0- 60	1331	23.5	98.1
0- 90	1357	24.0	100.0
90-180	0	0.0	0.0
0-180	1357	24.0	100.0

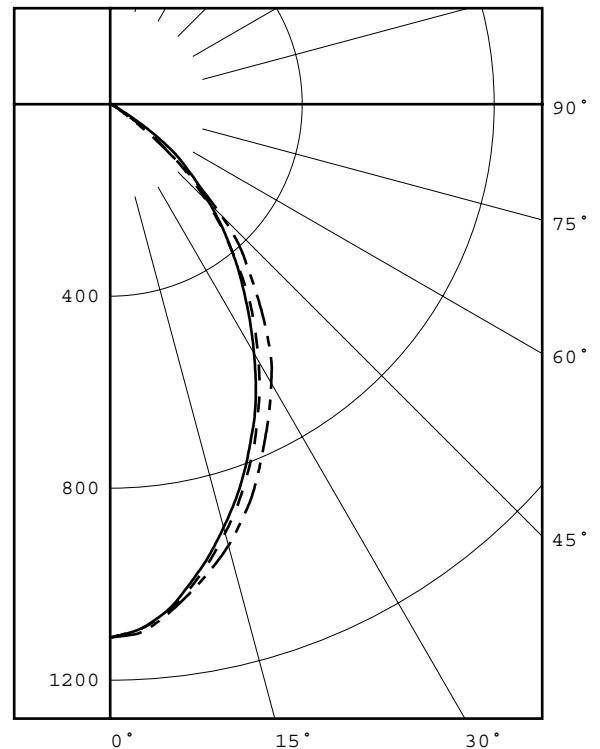
TOTAL LUMINAIRE EFFICIENCY = 24.0 %

CIE TYPE - DIRECT

PLANE	: 0-DEG	90-DEG	
SPACING CRITERIA	: 0.9	1.0	
SHIELDING ANGLES	: 28	28	
BEAM ANGLE (50%)	: 65.7	X 70.6	DEGREES
FIELD ANGLE (10%)	: 106.3	X 104.8	DEGREES
LUMINOUS LENGTH	: 97.000	7.500	

LUMINANCE DATA IN CANDELA/SQ M

ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 45-DEG	AVERAGE 90-DEG
45	853.	886.	985.
55	282.	461.	204.
65	96.	35.	50.
75	66.	33.	16.
85	98.	24.	0.

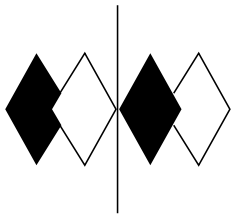


LEGEND:

0-deg: - - - - -
45-deg: - - - - -
90-deg: - . - . - .

Checked B. HYRE

Approved R. BEATTIE



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	0.0	22.5	45.0	67.5	90.0
0.0	1111	1111	1111	1111	1111
2.5	1100	1097	1100	1100	1106
5.0	1080	1076	1078	1080	1086
7.5	1050	1045	1046	1049	1055
10.0	1012	1007	1003	1014	1022
12.5	970	964	960	977	988
15.0	925	915	913	937	952
17.5	879	866	866	895	910
20.0	829	815	816	847	866
22.5	779	763	763	794	815
25.0	725	710	713	741	765
27.5	674	656	657	689	718
30.0	618	601	599	639	671
32.5	563	550	544	587	623
35.0	509	493	490	534	563
37.5	450	437	441	477	503
40.0	390	384	391	421	447
42.5	339	332	343	375	397
45.0	283	279	294	325	327
47.5	229	232	251	261	249
50.0	175	185	209	190	172
52.5	123	141	172	126	109
55.0	76	101	124	75	55
57.5	40	68	74	36	28
60.0	28	47	39	19	19
62.5	23	40	16	13	14
65.0	19	38	7	9	10
67.5	15	35	6	6	6
70.0	12	24	5	4	4
72.5	10	12	4	3	3
75.0	8	8	4	2	2
77.5	7	7	3	2	1
80.0	7	7	3	1	1
82.5	6	6	2	0	1
85.0	4	5	1	0	0
87.5	4	4	1	0	0
90.0	0	3	0	0	0

ZONAL LUMEN SUMMARY

0- 5	26.
5- 10	75.
10- 15	115.
15- 20	145.
20- 25	163.
25- 30	171.
30- 35	167.
35- 40	153.
40- 45	131.
45- 50	99.
50- 55	60.
55- 60	25.
60- 65	11.
65- 70	7.
70- 75	3.
75- 80	2.
80- 85	2.
85- 90	1.



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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC RW	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	29	29	29	29	28	28	28	28	27	27	27	26	26	26	24	24	24	24
1	27	26	26	25	26	26	25	24	25	24	24	24	23	23	23	23	22	22
2	25	24	23	22	25	24	22	22	23	22	21	22	21	21	21	21	20	20
3	24	22	21	19	23	22	20	19	21	20	19	20	19	19	20	19	18	18
4	22	20	19	17	22	20	18	17	19	18	17	19	18	17	18	17	17	16
5	21	19	17	16	20	18	17	16	18	16	15	17	16	15	17	16	15	15
6	20	17	15	14	19	17	15	14	17	15	14	16	15	14	16	15	14	13
7	18	16	14	13	18	16	14	13	15	14	13	15	14	13	15	14	13	12
8	17	15	13	12	17	15	13	12	14	13	12	14	13	12	14	13	12	11
9	16	14	12	11	16	14	12	11	13	12	11	13	12	11	13	12	11	10
10	15	13	11	10	15	13	11	10	13	11	10	12	11	10	12	11	10	10

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.