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THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

INDEPENDENT TESTING LABORATORIES, INC.
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REPORT NUMBER: ITL60033

DATE: 04/09/08

PREPARED FOR: KINO FLO LIGHTING SYSTEMS

CATALOG NUMBER: CFX-9604

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.

LAMPS: FOUR 120-WATT T-12 KINO FLO KF29 F120T12/HO/800 LINEAR FLUORESCENTS, EACH LAMP ENCASED IN CLEAR PLASTIC PROTECTIVE SLEEVE.

BALLAST: KINO FLO INCORPORATED BAL-405M

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 LAMPS.

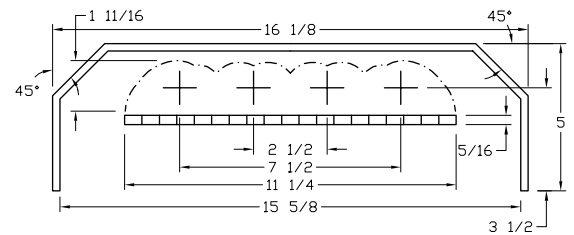
TOTAL INPUT WATTS = 416.0 AT 120.0 VOLTS

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	4316	4316	4316	4316	4316	
5	4182	4157	4141	4163	4196	391
15	3585	3512	3456	3499	3546	986
25	2835	2708	2594	2666	2762	1236
35	1992	1848	1767	1911	2068	1177
45	1109	1020	1064	1154	1242	854
55	306	356	457	376	312	343
65	79	101	54	45	52	70
75	44	45	14	6	6	25
85	24	27	8	2	2	13
90	8	18	5	0	0	



ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT
0- 30	2613	11.5	51.3
0- 40	3790	16.7	74.4
0- 60	4987	22.0	97.9
0- 90	5095	22.5	100.0
90-180	0	0.0	0.0
0-180	5095	22.5	100.0

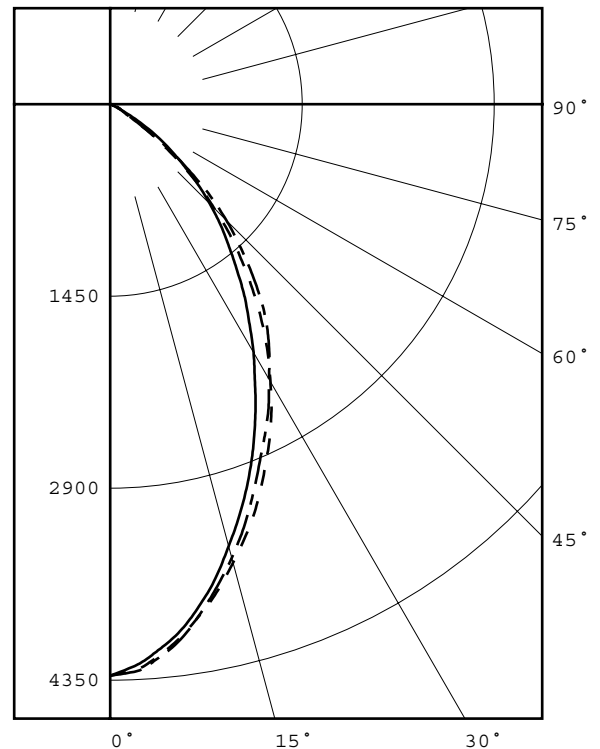
TOTAL LUMINAIRE EFFICIENCY = 22.5 %

CIE TYPE - DIRECT

PLANE	: 0-DEG	90-DEG	
SPACING CRITERIA	: 0.9	0.9	
SHIELDING ANGLES	: 28	28	
BEAM ANGLE (50%)	: 66.2	X 67.4	DEGREES
FIELD ANGLE (10%)	: 106.7	X 107.5	DEGREES
LUMINOUS LENGTH	: 97.000	15.625	

LUMINANCE DATA IN CANDELA/SQ M

ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 45-DEG	AVERAGE 90-DEG
45	1604.	1539.	1796.
55	546.	815.	556.
65	191.	131.	126.
75	174.	55.	24.
85	282.	94.	23.



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	4316	4316	4316	4316	4316
2.5	4277	4253	4247	4265	4290
5.0	4182	4157	4141	4163	4196
7.5	4061	4030	4018	4041	4077
10.0	3915	3873	3853	3877	3910
12.5	3760	3705	3670	3688	3731
15.0	3585	3512	3456	3499	3546
17.5	3412	3334	3251	3301	3354
20.0	3229	3128	3039	3081	3147
22.5	3029	2916	2819	2857	2942
25.0	2835	2708	2594	2666	2762
27.5	2636	2491	2368	2464	2589
30.0	2419	2281	2165	2285	2398
32.5	2212	2063	1954	2090	2238
35.0	1992	1848	1767	1911	2068
37.5	1769	1626	1569	1742	1876
40.0	1551	1425	1392	1547	1661
42.5	1341	1221	1231	1351	1447
45.0	1109	1020	1064	1154	1242
47.5	919	842	905	969	1025
50.0	695	670	739	779	778
52.5	496	509	590	567	550
55.0	306	356	457	376	312
57.5	158	221	318	208	170
60.0	112	139	196	111	103
62.5	94	111	101	69	76
65.0	79	101	54	45	52
67.5	66	93	33	27	32
70.0	53	81	23	15	18
72.5	47	59	15	9	10
75.0	44	45	14	6	6
77.5	39	38	11	5	5
80.0	37	32	11	3	3
82.5	31	31	11	3	2
85.0	24	27	8	2	2
87.5	16	22	6	0	0
90.0	8	18	5	0	0

ZONAL	LUMEN	SUMMARY
0-	5	102.
5-	10	289.
10-	15	439.
15-	20	547.
20-	25	607.
25-	30	629.
30-	35	613.
35-	40	564.
40-	45	481.
45-	50	373.
50-	55	238.
55-	60	105.
60-	65	44.
65-	70	26.
70-	75	15.
75-	80	10.
80-	85	8.
85-	90	5.



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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	27	27	27	27	26	26	26	26	25	25	25	24	24	24	23	23	23	23
1	25	25	24	23	25	24	23	23	23	23	22	22	22	22	22	21	21	21
2	24	22	21	20	23	22	21	20	21	21	20	21	20	19	20	19	19	19
3	22	21	19	18	22	20	19	18	20	19	18	19	18	17	19	18	17	17
4	21	19	17	16	20	19	17	16	18	17	16	18	17	16	17	16	16	15
5	20	17	16	15	19	17	16	15	17	15	14	16	15	14	16	15	14	14
6	18	16	14	13	18	16	14	13	15	14	13	15	14	13	15	14	13	13
7	17	15	13	12	17	15	13	12	14	13	12	14	13	12	14	13	12	12
8	16	14	12	11	16	14	12	11	13	12	11	13	12	11	13	12	11	11
9	15	13	11	10	15	13	11	10	13	11	10	12	11	10	12	11	10	10
10	15	12	11	10	14	12	11	10	12	10	10	12	10	9	11	10	9	9

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.