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THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

INDEPENDENT TESTING LABORATORIES, INC.
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REPORT NUMBER: ITL60031

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, OPEN BOTTOM. 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 = 433.0 AT 120.0 VOLTS

LUMEN TO CANDELA RATIO USED = 9.24

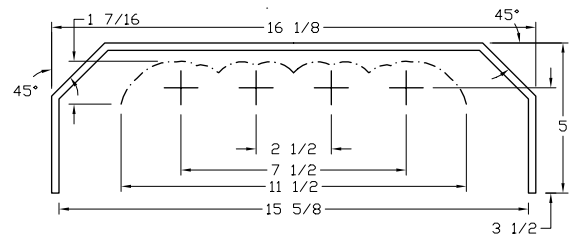
REPORT IS BASED ON 5660 LUMENS PER LAMP.

CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0	5693	5693	5693	5693	5693
5	5653	5627	5632	5657	5699
15	5425	5397	5394	5408	5438
25	5026	4996	4948	4933	4963
35	4426	4400	4341	4514	4622
45	3663	3614	3824	4006	4027
55	2773	2773	3076	3064	3034
65	1745	1970	1995	1859	1784
75	741	1005	760	562	462
85	94	88	23	9	6
90	8	22	6	0	0

FLUX

						537
						1528
						2293
						2783
						2948
						2642
						1872
						783
						62



ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT
0- 30	4358	19.2	28.2
0- 40	7142	31.5	46.2
0- 60	12732	56.2	82.4
0- 90	15448	68.2	100.0
90-180	0	0.0	0.0
0-180	15448	68.2	100.0

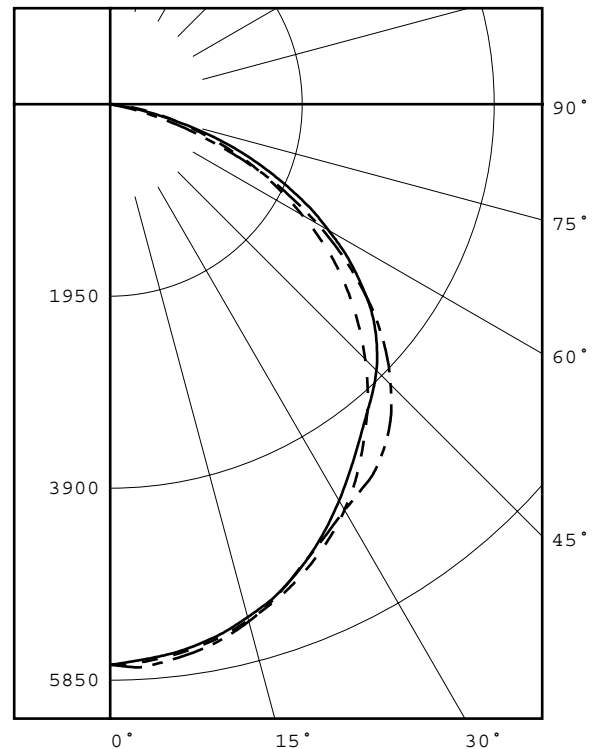
TOTAL LUMINAIRE EFFICIENCY = 68.2 %

CIE TYPE - DIRECT

PLANE	: 0-DEG	90-DEG	
SPACING CRITERIA	: 1.2	1.3	
SHIELDING ANGLES	: 1	14	
BEAM ANGLE (50%)	: 108.1	X 112.9	DEGREES
FIELD ANGLE (10%)	: 154.2	X 148.2	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	5298.	5531.	5824.
55	4944.	5485.	5410.
65	4223.	4828.	4317.
75	2928.	3003.	1826.
85	1103.	270.	70.



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	5693	5693	5693	5693	5693
2.5	5681	5654	5661	5685	5725
5.0	5653	5627	5632	5657	5699
7.5	5615	5590	5595	5618	5655
10.0	5564	5537	5541	5567	5602
12.5	5505	5476	5477	5501	5530
15.0	5425	5397	5394	5408	5438
17.5	5345	5313	5311	5311	5333
20.0	5251	5221	5205	5194	5207
22.5	5146	5112	5083	5063	5076
25.0	5026	4996	4948	4933	4963
27.5	4901	4865	4802	4809	4856
30.0	4758	4724	4650	4698	4762
32.5	4602	4570	4492	4595	4688
35.0	4426	4400	4341	4514	4622
37.5	4243	4209	4196	4428	4517
40.0	4062	4019	4067	4314	4386
42.5	3868	3823	3950	4178	4225
45.0	3663	3614	3824	4006	4027
47.5	3449	3408	3675	3803	3818
50.0	3233	3191	3506	3582	3579
52.5	3008	2978	3309	3334	3323
55.0	2773	2773	3076	3064	3034
57.5	2516	2578	2835	2790	2743
60.0	2251	2371	2561	2489	2431
62.5	2000	2178	2295	2180	2102
65.0	1745	1970	1995	1859	1784
67.5	1488	1752	1696	1526	1418
70.0	1210	1501	1402	1164	1066
72.5	967	1257	1091	847	765
75.0	741	1005	760	562	462
77.5	538	755	469	281	217
80.0	346	502	222	58	18
82.5	196	253	37	9	6
85.0	94	88	23	9	6
87.5	27	33	11	2	0
90.0	8	22	6	0	0

ZONAL	LUMEN	SUMMARY
0-	5	136.
5-	10	401.
10-	15	652.
15-	20	877.
20-	25	1068.
25-	30	1225.
30-	35	1348.
35-	40	1436.
40-	45	1481.
45-	50	1467.
50-	55	1390.
55-	60	1252.
60-	65	1058.
65-	70	814.
70-	75	531.
75-	80	252.
80-	85	54.
85-	90	8.



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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	81	81	81	81	79	79	79	79	76	76	76	73	73	73	70	70	70	68
1	75	72	69	67	73	70	68	66	67	65	63	65	63	62	62	61	60	58
2	68	63	58	55	66	62	57	54	59	56	53	57	54	52	55	53	50	49
3	62	55	50	46	61	54	49	45	52	48	44	50	47	44	49	45	43	41
4	57	49	43	39	55	48	43	38	46	42	38	45	41	37	43	40	37	35
5	52	44	38	33	51	43	37	33	42	37	33	40	36	32	39	35	32	31
6	48	39	33	29	47	39	33	29	37	32	29	36	32	28	35	31	28	27
7	45	36	30	26	44	35	29	25	34	29	25	33	29	25	32	28	25	24
8	42	33	27	23	41	32	27	23	31	26	23	30	26	22	30	25	22	21
9	39	30	24	21	38	29	24	20	29	24	20	28	23	20	27	23	20	19
10	36	28	22	19	36	27	22	19	26	22	18	26	21	18	25	21	18	17

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.