

itl boulder

THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

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

PHONE: (303)442-1255 • FAX: (303)449-5274 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL60020

DATE: 03/12/08

PREPARED FOR: KINO FLO LIGHTING SYSTEMS

CATALOG NUMBER: CFX-7201

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.

LAMP: ONE 100-WATT T-12 KINO FLO KF29 F100T12/HO/800 LINEAR FLUORESCENT, LAMP ENCASED IN CLEAR PLASTIC PROTECTIVE SLEEVE.

BALLAST: KINO FLO INCORPORATED BAL-105M

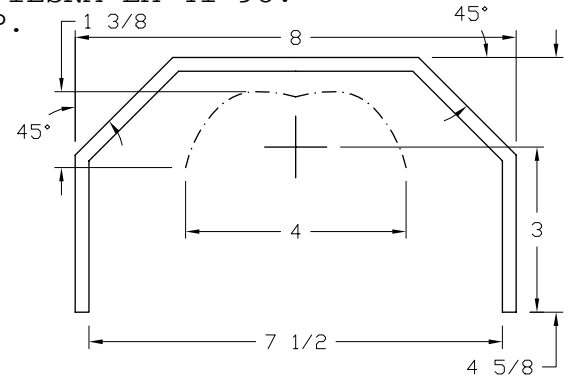
NOTE: THE LAMP UTILIZED FOR THIS TEST WAS NOT CHECKED FOR LIGHT OUTPUT SYMMETRY, AS IS STANDARD PRACTICE PER IESNA LM-41-98.

THE 0 DEGREE PLANE IS PARALLEL WITH THE LAMP.

TOTAL INPUT WATTS = 95.4 AT 120.0 VOLTS

LUMEN TO CANDELA RATIO USED = 9.20

REPORT IS BASED ON 4675 LUMENS PER LAMP.



CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0	FLUX
0	1345	1345	1345	1345	1345	
5	1329	1334	1340	1328	1329	127
15	1275	1273	1275	1268	1268	359
25	1172	1170	1171	1165	1155	538
35	1023	1021	1006	931	886	611
45	835	839	722	572	492	539
55	616	615	369	170	101	340
65	374	323	46	14	13	147
75	156	55	11	8	6	45
85	21	10	1	0	0	7
90	0	0	0	0	0	

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT
0- 30	1023	21.9	37.7
0- 40	1634	35.0	60.3
0- 60	2513	53.7	92.7
0- 90	2712	58.0	100.0
90-180	0	0.0	0.0
0-180	2712	58.0	100.0

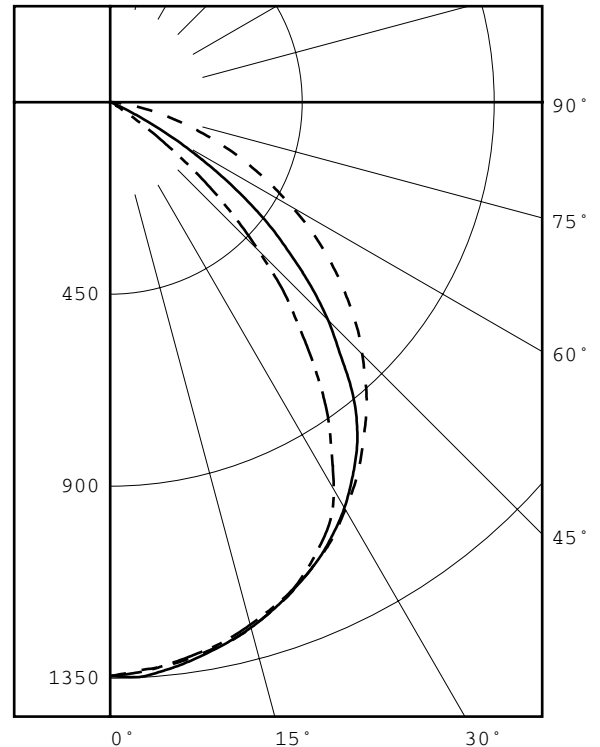
TOTAL LUMINAIRE EFFICIENCY = 58.0 %

CIE TYPE - DIRECT

PLANE	: 0-DEG	90-DEG	
SPACING CRITERIA	: 1.2	1.2	
SHIELDING ANGLES	: 0	32	
BEAM ANGLE (50%)	: 105.0	X 80.9	DEGREES
FIELD ANGLE (10%)	: 152.3	X 108.0	DEGREES
LUMINOUS LENGTH	: 73.250	7.500	

LUMINANCE DATA IN CANDELA/SQ M

ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 45-DEG	AVERAGE 90-DEG
45	3332.	2881.	1963.
55	3030.	1815.	497.
65	2497.	307.	87.
75	1701.	120.	65.
85	680.	32.	0.



LEGEND:

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

Checked N. WHITE

Approved R. BEATTIE



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

PHONE: (303)442-1255 • FAX: (303)449-5274 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL60020
 PREPARED FOR: KINO FLO LIGHTING SYSTEMS

DATE: 03/12/08

CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0.0	1345	1345	1345	1345	1345
2.5	1335	1340	1349	1336	1339
5.0	1329	1334	1340	1328	1329
7.5	1320	1323	1327	1315	1316
10.0	1307	1310	1311	1301	1303
12.5	1294	1293	1294	1287	1288
15.0	1275	1273	1275	1268	1268
17.5	1252	1250	1252	1247	1247
20.0	1228	1226	1227	1225	1225
22.5	1200	1199	1200	1198	1193
25.0	1172	1170	1171	1165	1155
27.5	1140	1137	1136	1126	1113
30.0	1102	1102	1098	1078	1048
32.5	1065	1063	1053	1017	965
35.0	1023	1021	1006	931	886
37.5	978	978	950	847	790
40.0	935	934	881	762	690
42.5	886	889	796	669	601
45.0	835	839	722	572	492
47.5	786	792	638	476	390
50.0	730	736	548	371	288
52.5	674	679	464	267	184
55.0	616	615	369	170	101
57.5	557	544	273	94	40
60.0	493	469	183	37	18
62.5	433	399	103	17	15
65.0	374	323	46	14	13
67.5	318	251	19	13	13
70.0	259	180	15	13	12
72.5	205	112	13	11	9
75.0	156	55	11	8	6
77.5	111	28	9	4	4
80.0	74	23	4	2	2
82.5	43	17	2	1	1
85.0	21	10	1	0	0
87.5	7	6	1	0	0
90.0	0	0	0	0	0

ZONAL	LUMEN	SUMMARY
0-	5	32.
5-	10	94.
10-	15	153.
15-	20	206.
20-	25	251.
25-	30	286.
30-	35	305.
35-	40	305.
40-	45	287.
45-	50	252.
50-	55	200.
55-	60	140.
60-	65	90.
65-	70	57.
70-	75	32.
75-	80	13.
80-	85	6.
85-	90	1.



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

PHONE: (303)442-1255 • FAX: (303)449-5274 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL60020

DATE: 03/12/08

PREPARED FOR: KINO FLO LIGHTING SYSTEMS

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	69	69	69	69	67	67	67	67	64	64	64	62	62	62	59	59	59	58
1	65	62	60	59	63	61	59	58	59	57	56	56	55	54	54	54	53	52
2	60	56	53	50	58	55	52	49	53	50	48	51	49	47	49	48	46	45
3	55	50	46	43	54	49	46	43	48	45	42	46	44	41	45	43	41	40
4	51	45	41	38	50	45	40	37	43	40	37	42	39	36	41	38	36	35
5	48	41	36	33	46	40	36	33	39	35	33	38	35	32	37	34	32	31
6	44	37	33	29	43	37	32	29	36	32	29	35	31	29	34	31	29	28
7	41	34	30	26	40	34	29	26	33	29	26	32	29	26	31	28	26	25
8	38	31	27	24	38	31	27	24	30	26	24	30	26	23	29	26	23	22
9	36	29	25	22	35	29	24	22	28	24	21	27	24	21	27	24	21	20
10	34	27	23	20	33	27	22	20	26	22	20	25	22	20	25	22	19	19

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.