



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: ITL57395

DATE: 04/13/06

PREPARED FOR: OXYGEN LIGHTING

CATALOG NUMBER: 2-5112-24, 2-5112-24-EM

LUMINAIRE: FABRICATED SEMI-SPECULAR METAL HOUSING, TWO FORMED BARE METAL LENS CLIPS, FABRICATED TRANSLUCENT WHITE ACRYLIC DIFFUSER.

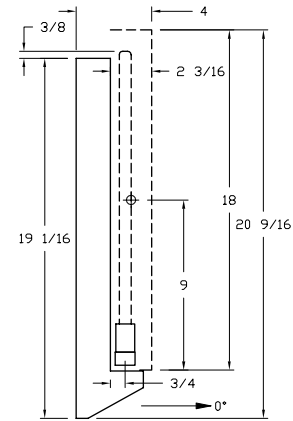
LAMP: ONE 36-WATT SINGLE ENDED TWIN TUBE FLUORESCENT, OSRAM F36/39WRS/4100, VERTICAL BASE-DOWN POSITION.

BALLAST: ANTRON CSS-UV42PS

MOUNTING: WALL

TOTAL INPUT WATTS= 30.1 AT 120.0 VOLTS

REPORT IS BASED ON 2900 LUMENS PER LAMP.



CANDELA DISTRIBUTION

FLUX

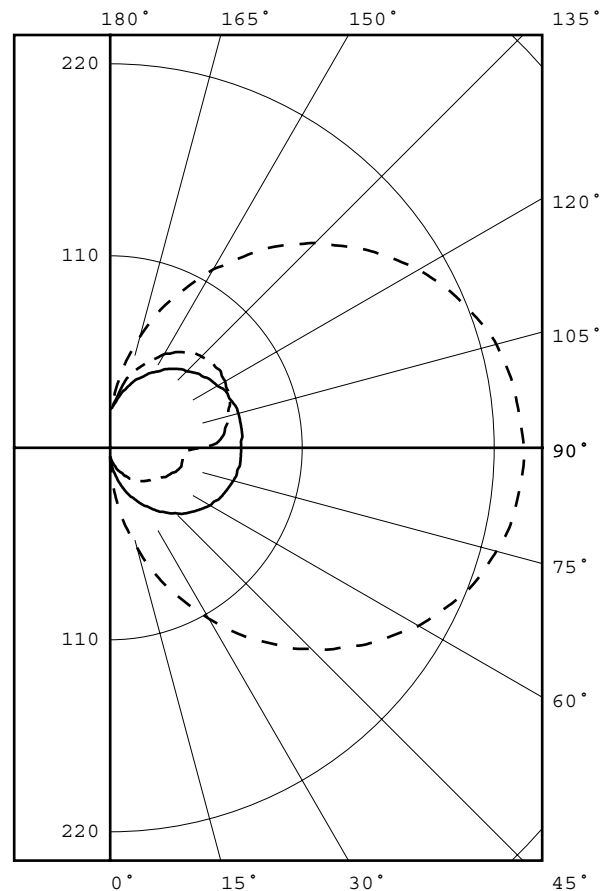
	0.0	45.0	90.0	135.0	180.0	
0	5	5	5	5	5	
5	24	20	10	9	7	1
15	59	52	21	19	11	9
25	95	83	32	28	16	23
35	131	113	43	38	22	43
45	163	141	53	47	27	66
55	191	165	62	55	32	90
65	214	183	69	63	37	111
75	229	196	73	71	42	128
85	236	202	75	76	43	138
90	235	202	75	79	52	
95	235	202	76	83	64	142
105	229	196	76	86	70	137
115	214	185	74	87	75	124
125	192	167	69	85	77	104
135	166	144	62	79	74	80
145	134	118	55	70	67	55
155	100	89	45	58	55	32
165	66	59	35	44	43	14
175	32	30	25	27	26	3
180	22	22	22	22	22	

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT
0- 30	34	1.2	2.6
0- 40	77	2.7	5.9
0- 60	233	8.0	17.9
0- 90	610	21.0	47.0
90-120	402	13.9	31.0
90-130	506	17.4	39.0
90-150	640	22.1	49.3
90-180	688	23.7	53.0
0-180	1298	44.8	100.0

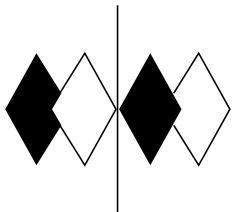
TOTAL LUMINAIRE EFFICIENCY = 44.8 %

CIE TYPE - DIRECT-INDIRECT



LEGEND:
0-deg: - - - - -
90-deg: = = = = =
180-deg: - - - - -

Checked *N. WHITE*
Approved *R. BEATTIE*



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	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0
0.0	5	5	5	5	5	5	5	5	5
5.0	24	20	20	13	10	9	9	7	7
10.0	42	38	36	24	15	15	14	11	9
15.0	59	56	52	35	21	20	19	15	11
20.0	78	74	67	46	27	26	24	18	14
25.0	95	92	83	57	32	31	28	21	16
30.0	113	110	98	68	38	37	33	25	19
35.0	131	128	113	78	43	42	38	28	22
40.0	147	145	127	89	48	48	42	31	25
45.0	163	161	141	98	53	53	47	34	27
50.0	177	175	153	106	58	57	51	37	29
55.0	191	189	165	115	62	62	55	40	32
60.0	204	202	175	122	66	66	59	43	34
65.0	214	212	183	128	69	70	63	48	37
70.0	223	221	190	133	71	73	67	51	40
75.0	229	228	196	137	73	77	71	54	42
80.0	234	233	200	140	74	79	73	57	42
85.0	236	235	202	141	75	81	76	61	43
90.0	235	236	202	141	75	82	79	67	52
95.0	235	235	202	141	76	84	83	72	64
100.0	233	233	200	140	76	85	85	75	67
105.0	229	228	196	138	76	85	86	77	70
110.0	222	222	191	135	75	84	87	79	73
115.0	214	213	185	131	74	83	87	81	75
120.0	204	203	177	125	71	81	86	82	76
125.0	192	191	167	119	69	78	85	81	77
130.0	179	178	156	111	66	74	82	80	76
135.0	166	164	144	104	62	71	79	78	74
140.0	151	149	132	96	59	67	75	75	71
145.0	134	133	118	86	55	62	70	70	67
150.0	118	115	104	76	50	56	64	64	62
155.0	100	98	89	66	45	50	58	57	55
160.0	84	81	74	56	41	44	52	51	49
165.0	66	63	59	45	35	38	44	44	43
170.0	49	46	44	35	30	31	35	34	34
175.0	32	30	30	26	25	25	27	26	26
180.0	22	22	22	22	22	22	22	22	22



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0- 5	0.
5- 10	1.
10- 15	3.
15- 20	6.
20- 25	10.
25- 30	14.
30- 35	19.
35- 40	24.
40- 45	30.
45- 50	36.
50- 55	42.
55- 60	48.
60- 65	53.
65- 70	58.
70- 75	62.
75- 80	66.
80- 85	68.
85- 90	70.
90- 95	71.
95-100	71.
100-105	70.
105-110	67.
110-115	64.
115-120	60.
120-125	55.
125-130	49.
130-135	43.
135-140	37.
140-145	30.
145-150	24.
150-155	18.
155-160	13.
160-165	9.
165-170	5.
170-175	2.
175-180	1.



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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC	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	48	48	48	48	44	44	44	44	37	37	37	30	30	30	24	24	24	21
1	41	38	35	33	37	35	32	30	28	27	25	23	21	20	17	16	15	13
2	36	32	28	25	33	29	26	23	24	21	19	18	17	15	14	12	11	9
3	33	27	23	20	29	25	21	18	20	17	15	16	13	12	11	10	8	6
4	30	24	19	16	27	21	18	15	17	14	12	13	11	9	10	8	7	5
5	27	21	16	13	24	19	15	12	15	12	10	12	9	8	9	7	5	4
6	25	18	14	11	22	17	13	10	13	10	8	10	8	6	8	6	4	3
7	23	16	12	10	20	15	11	9	12	9	7	9	7	5	7	5	4	2
8	21	15	11	8	19	13	10	7	11	8	6	8	6	5	6	4	3	2
9	19	13	10	7	17	12	9	6	10	7	5	8	6	4	6	4	3	2
10	18	12	9	6	16	11	8	6	9	6	5	7	5	3	5	4	2	1

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.

NOTE: THE ZONAL CAVITY CALCULATION TECHNIQUE IS ACCURATE WHEN LUMINAIRES WITH SYMMETRIC CANDELA DISTRIBUTIONS ARE EMPLOYED AND WHEN THE LUMINAIRES ARE LOCATED SYMMETRICALLY THROUGHOUT THE ROOM. THIS UNIT HAS SPECIAL CHARACTERISTICS AND THEREFORE THESE COEFFICIENTS SHOULD BE USED WITH CAUTION.