



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: ITL61306

DATE: 11/11/08

PREPARED FOR: AMERICAN LIGHTING, LLC

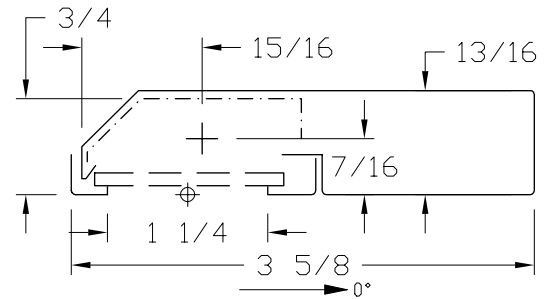
CATALOG NUMBER: 043X-3P-BS

LUMINAIRE: EXTRUDED METAL HOUSING WITH MOLDED GRAY PLASTIC END CAPS,
FORMED SEMI-SPECULAR METAL REFLECTOR, CLEAR FLAT
MICRO-PRISMATIC GLASS LENS IN FABRICATED SEMI-SPECULAR METAL
DOOR FRAME, LENS PRISMS UP.

LAMPS: THREE 20-WATT CLEAR T-4 INCANDESCENTS, AMERICAN LIGHTING
PROPRIETARY 043X-20BP, HORIZONTAL POSITION.

MOUNTING: SURFACE

NOTE: LAMP INFORMATION PROVIDED BY
CLIENT. LUMINAIRE HAS A SWITCH
WITH A HIGH AND LOW SETTING.
THIS TEST PERFORMED WITH THE
SWITCH IN THE HIGH POSITION.
REPORT IS BASED ON 165 LUMENS PER LAMP.

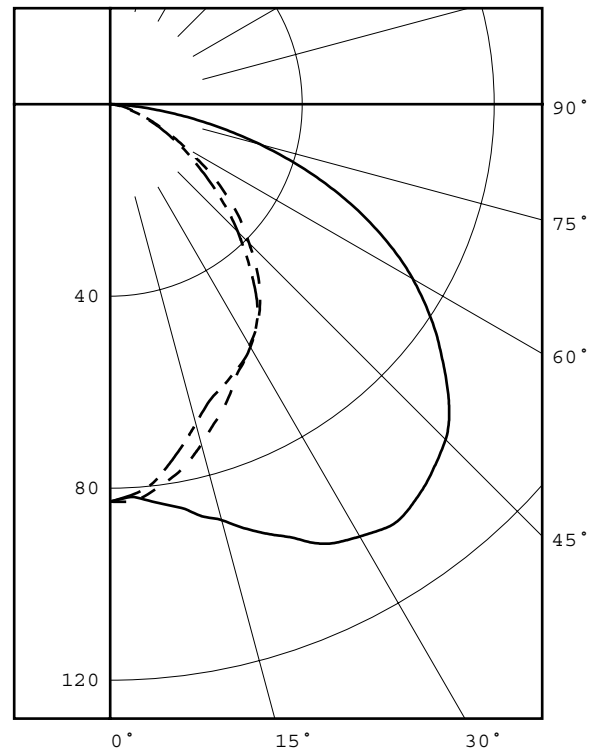


CANDELA DISTRIBUTION						FLUX
	0.0	45.0	90.0	135.0	180.0	
0	83	83	83	83	83	
5	82	83	83	81	81	8
15	73	82	90	78	69	23
25	62	83	101	76	62	37
35	54	77	105	71	54	48
45	41	61	99	57	38	49
55	26	42	83	40	22	42
65	12	24	61	24	11	29
75	5	10	32	10	4	15
85	1	2	6	2	1	3
90	0	0	0	0	0	

ZONAL LUMEN SUMMARY			
ZONE	LUMENS	%LAMP	%FIXT
0- 30	68	13.7	26.8
0- 40	116	23.3	45.6
0- 60	207	41.8	81.6
0- 90	253	51.2	100.0
90-180	0	0.0	0.0
0-180	253	51.2	100.0

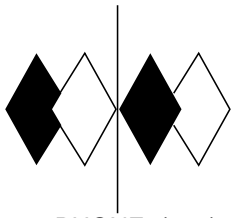
TOTAL LUMINAIRE EFFICIENCY = 51.2 %
CIE TYPE - DIRECT
PLANE : 0-DEG 90-DEG 180-DEG
SPACING CRITERIA : 1.1 1.8 1.1
LUMINOUS LENGTH : 1.250 19.188

LUMINANCE DATA IN CANDELA/SQ M			
ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 90-DEG	AVERAGE 180-DEG
45	3738.	9030.	3436.
55	2941.	9329.	2501.
65	1820.	9297.	1713.
75	1124.	8065.	974.
85	890.	4078.	593.



LEGEND:
0-deg: - - - - -
90-deg: _____
180-deg: - . - . - .

Checked B.HYRE
Approved R.BEATTIE



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CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0
0.0	83	83	83	83	83	83	83	83	83
2.5	83	83	83	83	82	82	82	82	82
5.0	82	82	83	83	83	82	81	81	81
7.5	80	81	82	84	84	83	81	79	78
10.0	78	80	82	85	85	84	80	76	75
12.5	76	78	83	87	88	85	79	74	72
15.0	73	76	82	89	90	86	78	72	69
17.5	71	74	83	91	93	87	78	69	66
20.0	68	72	83	94	95	88	77	68	64
22.5	65	70	83	96	98	89	76	67	63
25.0	62	68	83	98	101	90	76	66	62
27.5	60	66	82	100	103	90	75	65	60
30.0	58	63	81	101	104	90	74	64	58
32.5	56	61	79	102	105	89	72	61	56
35.0	54	58	77	101	105	87	71	59	54
37.5	51	55	74	100	104	85	68	55	50
40.0	48	52	70	98	103	82	65	51	46
42.5	45	49	66	96	101	79	61	47	42
45.0	41	45	61	92	99	76	57	43	38
47.5	38	41	56	88	96	72	53	39	34
50.0	34	37	52	83	92	68	48	35	30
52.5	30	34	47	78	87	63	44	31	26
55.0	26	29	42	71	83	58	40	27	22
57.5	22	26	38	65	78	54	36	24	19
60.0	18	22	33	59	73	49	32	21	16
62.5	15	18	28	53	67	44	28	18	14
65.0	12	15	24	47	61	39	24	15	11
67.5	10	12	20	40	54	34	20	12	9
70.0	7	9	16	34	47	29	17	10	7
72.5	6	7	13	28	40	24	13	7	5
75.0	5	6	10	23	32	19	10	6	4
77.5	3	4	7	17	25	14	8	4	3
80.0	3	3	5	12	18	10	5	3	2
82.5	2	2	3	8	11	6	3	2	1
85.0	1	1	2	4	6	3	2	1	1
87.5	1	1	1	1	2	1	1	0	0
90.0	0	0	0	0	0	0	0	0	0



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ZONAL LUMEN SUMMARY

0- 5	2.
5- 10	6.
10- 15	10.
15- 20	13.
20- 25	17.
25- 30	20.
30- 35	23.
35- 40	25.
40- 45	25.
45- 50	24.
50- 55	22.
55- 60	20.
60- 65	16.
65- 70	13.
70- 75	9.
75- 80	5.
80- 85	2.
85- 90	0.



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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	61	61	61	61	60	60	60	60	57	57	57	55	55	55	52	52	52	51
1	56	54	52	50	55	53	51	49	50	49	47	48	47	46	46	45	44	43
2	51	47	43	41	50	46	43	40	44	41	39	42	40	38	41	39	37	36
3	47	41	37	34	45	40	37	33	39	36	33	37	35	32	36	34	32	31
4	43	36	32	29	41	36	32	28	35	31	28	33	30	28	32	29	27	26
5	39	33	28	25	38	32	28	24	31	27	24	30	27	24	29	26	24	23
6	36	29	25	21	35	29	24	21	28	24	21	27	24	21	26	23	21	20
7	33	26	22	19	33	26	22	19	25	21	19	25	21	18	24	21	18	17
8	31	24	20	17	30	24	20	17	23	19	17	22	19	16	22	19	16	15
9	29	22	18	15	28	22	18	15	21	18	15	21	17	15	20	17	15	14
10	27	20	16	14	26	20	16	14	20	16	13	19	16	13	19	16	13	12

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.