



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: ITL63910

DATE: 01/06/10

PREPARED FOR: GALLIUM LIGHTING LLC

CATALOG NUMBER: GS6H-120-350-16CXP-50-2080, GS6T-16SS1

LUMINAIRE: FABRICATED METAL HOUSING, EXTRUDED FINNED METAL HEAT SINK,
ONE TAN CIRCUIT BOARD WITH 16 LEDS, FABRICATED SEMI-SPECULAR
METAL 16-CELL LOUVER, OPEN BOTTOM.

LAMP: SIXTEEN WHITE LIGHT EMITTING DIODES (LEDs), CREE XPG
(P/N XPGWHT-L!-0000-00G51-R4), VERTICAL BASE-UP POSITION.

MOUNTING: RECESSED

LED DRIVER: TWO ADVANCE LED120A0350C33F (350 mA DRIVERS)

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE
PROVIDED AT RATED INPUT VOLTAGE
(120VAC, 60Hz) TO THE LED DRIVERS.
LAMP INFORMATION PROVIDED BY CLIENT.

TOTAL INPUT WATTS = 19.5 AT 120.0 VOLTS

TEST PROCEDURE: IESNA LM-79-08

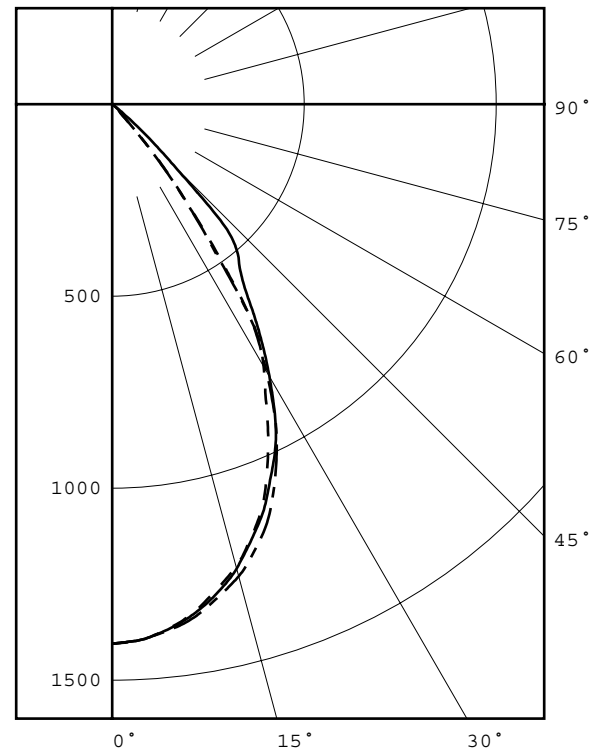
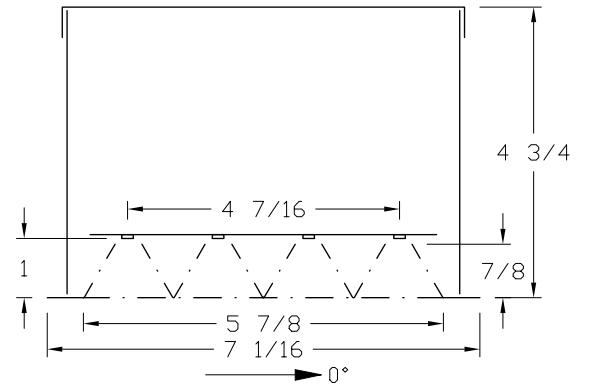
TEST DISTANCE = 33.25 FEET

CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0	1405	1405	1405	1405	1405
5	1383	1385	1384	1390	1385
15	1247	1246	1252	1268	1273
25	961	980	1002	1019	1013
35	488	646	618	642	460
45	27	31	236	46	30
55	6	6	6	7	6
65	2	2	2	2	2
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

FLUX

131
353
456
354
94
6
1
0
0



LEGEND:
0-deg: - - - - -
45-deg: = = = = =
90-deg: - . - . - .

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 30	940	67.4
0- 40	1294	92.8
0- 60	1394	99.9
0- 90	1395	100.0
90-180	0	0.0
0-180	1395	100.0

EFFICACY = 71.5 Lm/W

CIE TYPE - DIRECT

PLANE : 0-DEG 90-DEG

SPACING CRITERIA : 0.9 1.0

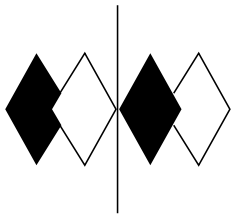
LUMINOUS LENGTH : 5.875 5.875

LUMINANCE DATA IN CANDELA/SQ M

ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 45-DEG	AVERAGE 90-DEG
45	1715.	14988.	1905.
55	470.	470.	470.
65	213.	213.	213.
75	0.	0.	0.
85	0.	0.	0.

Checked *M.KLOPF*

Approved *R.BEATTIE*



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CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0.0	1405	1405	1405	1405	1405
2.5	1400	1397	1399	1402	1399
5.0	1383	1385	1384	1390	1385
7.5	1360	1360	1362	1369	1368
10.0	1327	1331	1333	1345	1342
12.5	1287	1290	1296	1308	1308
15.0	1247	1246	1252	1268	1273
17.5	1191	1199	1196	1222	1224
20.0	1131	1137	1140	1159	1170
22.5	1051	1069	1070	1102	1096
25.0	961	980	1002	1019	1013
27.5	867	892	919	931	918
30.0	789	801	819	828	803
32.5	693	731	719	737	687
35.0	488	646	618	642	460
37.5	304	436	549	420	299
40.0	167	293	509	282	161
42.5	36	154	443	158	46
45.0	27	31	236	46	30
47.5	20	25	123	27	23
50.0	11	17	42	19	14
52.5	8	10	8	11	8
55.0	6	6	6	7	6
57.5	4	5	3	5	4
60.0	2	3	3	3	2
62.5	2	2	2	2	2
65.0	2	2	2	2	2
67.5	2	0	0	1	1
70.0	0	0	0	1	0
72.5	0	0	0	0	0
75.0	0	0	0	0	0
77.5	0	0	0	0	0
80.0	0	0	0	0	0
82.5	0	0	0	0	0
85.0	0	0	0	0	0
87.5	0	0	0	0	0
90.0	0	0	0	0	0

ZONAL LUMEN	SUMMARY
0- 5	33.
5- 10	98.
10- 15	154.
15- 20	199.
20- 25	226.
25- 30	230.
30- 35	212.
35- 40	142.
40- 45	74.
45- 50	20.
50- 55	4.
55- 60	2.
60- 65	1.
65- 70	0.
70- 75	0.
75- 80	0.
80- 85	0.
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	111	110	108	111	109	106	104	104	103	101	101	99	98	97	96	95	93
2	108	103	99	95	106	101	97	94	98	95	92	95	92	90	92	90	88	87
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	84	82	80
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75
5	92	83	77	73	90	82	77	73	81	76	72	79	75	71	77	74	71	69
6	87	78	72	67	86	77	71	67	76	71	67	74	70	66	73	69	66	64
7	83	73	67	63	81	72	67	62	71	66	62	70	65	62	69	65	61	60
8	78	69	62	58	77	68	62	58	67	62	58	66	61	58	65	61	57	56
9	74	65	59	54	73	64	58	54	63	58	54	62	57	54	61	57	54	52
10	71	61	55	51	70	60	55	51	60	54	51	59	54	51	58	54	50	49

ALL CANDELA, LUMENS, LUMINANCE, AND VCP VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS LUMINAIRE SAMPLE.