



# LUMINAIRE TESTING LABORATORY, INC.

SUSTAINING  
MEMBER  
of the  
IESNA

905 Harrison Street · Allentown, PA 18103 · 610-770-1044 · Fax 610-770-8912 · www.LuminaireTesting.com

LTL NUMBER: 13905

DATE: 10-27-2008

PREPARED FOR: USA ILLUMINATION

CATALOG NUMBER: 1624-TRIM/BL420-HOUSING/(2) 39W CMHMR16

LUMINAIRE: FORMED STEEL HOUSING, CAST WHITE ENAMEL ALUMINUM AND STEEL TRIM WITH FROSTED GLASS ENCLOSURE.

LAMPS: TWO VBU M130 39 WATT CERAMIC METAL HALIDE MR16 LAMPS RATED AT 2100 LUMENS EACH.

LAMP CATALOG NUMBER: GE CMH39MR16/930/FL

BALLASTS: TWO METROLIGHT SUPER HID 39

MOUNTING: RECESSED

TOTAL INPUT WATTS = 89.4 AT 120.0 VOLTS

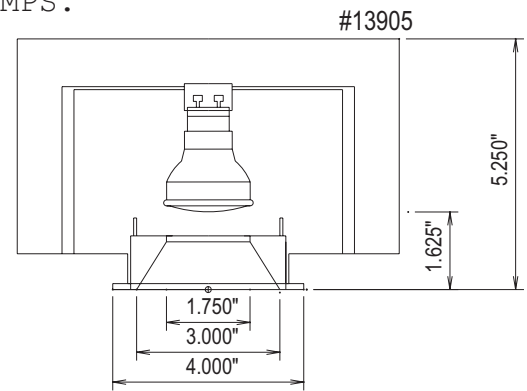
THE 0 DEGREE PLANE IS PARALLEL WITH THE LAMPS.

### CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0	4757	4757	4757	4757	4757
5	4496	4469	4456	4443	4448
15	2782	2770	2766	2762	2755
25	1357	1355	1351	1331	1314
35	690	696	690	643	611
45	381	383	370	312	286
55	219	217	191	146	129
65	126	117	76	57	50
75	39	35	19	18	18
85	1	1	1	1	1
90	0	0	0	0	0

### FLUX

407
767
623
423
272
164
84
28
2



### ZONAL LUMEN SUMMARY

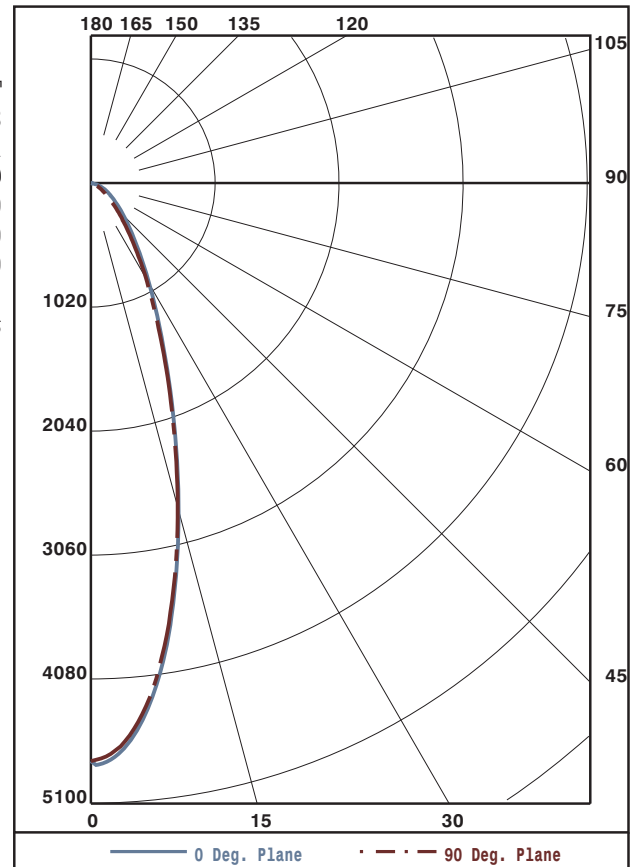
ZONE	LUMENS	%LAMP	%FIXT
0- 30	1797	42.8	64.8
0- 40	2220	52.9	80.1
0- 60	2657	63.3	95.9
0- 90	2772	66.0	100.0
90-180	0	0.0	0.0
0-180	2772	66.0	100.0

TOTAL LUMINAIRE EFFICIENCY: 66.0%

CIE TYPE: DIRECT  
 PLANE: 0-DEG 90-DEG  
 SPACING CRITERIA: 0.6 0.6  
 LUMINOUS LENGTH: 5.250 3.000

### LUMINANCE IN CANDELA PER SQUARE METER

ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 45-DEG	AVERAGE 90-DEG
0	468115.	468115.	468115.
45	53022.	51492.	39802.
55	37573.	32769.	22132.
65	29339.	17696.	11642.
75	14828.	7224.	6844.
85	1129.	1129.	1129.



Approved By: MG

THIS REPORT BASED ON LM-46 AND OTHER PERTINENT IESNA PROCEDURES.



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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	79	79	79	79	77	77	77	77	73	73	73	70	70	70	67	67	67	66
1	75	73	71	70	73	72	70	69	69	68	67	66	65	65	64	63	63	62
2	71	68	65	63	69	66	64	62	64	62	60	62	61	59	60	59	58	57
3	67	63	60	57	66	62	59	56	60	58	56	59	57	55	57	55	54	53
4	64	59	55	52	63	58	54	52	56	53	51	55	53	50	54	52	50	49
5	60	55	51	48	59	54	50	47	53	50	47	52	49	47	51	48	46	45
6	57	51	47	44	56	51	47	44	50	46	44	49	46	44	48	45	43	42
7	54	48	44	41	54	48	44	41	47	43	41	46	43	41	45	43	41	40
8	52	45	41	38	51	45	41	38	44	41	38	43	40	38	43	40	38	37
9	49	42	38	35	48	42	38	35	41	38	35	41	37	35	40	37	35	34
10	46	40	36	33	46	39	36	33	39	35	33	38	35	33	38	35	33	32

CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0	4757	4757	4757	4757	4757
5	4496	4469	4456	4443	4448
10	3726	3702	3692	3687	3682
15	2782	2770	2766	2762	2755
20	1956	1951	1949	1936	1924
25	1357	1355	1351	1331	1314
30	961	960	953	923	903
35	690	696	690	643	611
40	509	512	508	446	418
45	381	383	370	312	286
50	289	289	268	215	193
55	219	217	191	146	129
60	168	162	128	95	83
65	126	117	76	57	50
70	87	77	40	30	28
75	39	35	19	18	18
80	11	10	9	8	8
85	1	1	1	1	1
90	0	0	0	0	0

ZONAL LUMEN SUMMARY

0- 5	112.
5- 10	295.
10- 15	383.
15- 20	384.
20- 25	339.
25- 30	284.
30- 35	234.
35- 40	189.
40- 45	152.
45- 50	120.
50- 55	94.
55- 60	71.
60- 65	51.
65- 70	34.
70- 75	20.
75- 80	8.
80- 85	2.
85- 90	0.

THIS TEST WAS CONDUCTED USING RELATIVE PHOTOMETRY TECHNIQUES ACCORDING TO STANDARD IESNA PROCEDURES. THE USER MUST THEREFORE USE CAUTION IN THE FOLLOWING SITUATIONS: 1) ACCORDING TO IESNA PROCEDURES, THE BALLAST(S) AND LAMP(S) ARE PRESUMED TO PRODUCE 100% OF RATED OUTPUT. AN APPROPRIATE BALLAST FACTOR MUST BE APPLIED TO THE LUMEN OUTPUT RATINGS AND LUMINOUS INTENSITY VALUES GIVEN. 2) THIS TEST WAS CONDUCTED IN A CONTROLLED LABORATORY ENVIRONMENT, FIELD PERFORMANCE MAY DIFFER.



LTL TEST #13905

CIRCLE-OF-LIGHT

Ft below	FC nadir	Dia @ 50%
6.0	132.1	3.4
8.0	74.3	4.5
10.0	47.6	5.6
12.0	33.0	6.7
14.0	24.3	7.8
16.0	18.6	8.9

NOTE: 'Dia' spans the edge-points that are half of nadir FC