



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: 14356

DATE: 11-11-2008

PREPARED FOR: USA ILLUMINATION

CATALOG NUMBER: 9373-TRIM/BL101X/71W MR16 MAX TILT

LUMINAIRE: FORMED STEEL HOUSING, FROSTED GLASS ENCLOSURE ABOVE CAST WHITE ENAMEL ALUMINUM LOWER REFLECTOR.

LAMP: ONE VBU 71 WATT MR16 HALOGEN REFLECTOR LAMP RATED AT 1200 LUMENS.

LAMP CATALOG NUMBER: GE Q71MR16C/FL

MOUNTING: RECESSED

CANDELA DISTRIBUTION										FLUX
0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0		
0	126	126	126	126	126	126	126	126	126	
5	176	169	155	139	125	113	105	101	100	13
15	402	347	245	163	115	91	81	77	76	49
25	860	661	335	164	98	77	72	71	71	113
35	1205	872	332	125	77	68	67	67	66	174
45	1059	744	224	81	59	58	58	56	54	176
55	467	347	115	47	39	41	43	40	36	104
65	43	45	34	18	19	21	22	23	22	29
75	5	6	7	9	11	11	11	12	11	10
85	0	0	1	2	2	3	2	3	2	2
90	0	0	0	0	0	0	0	0	0	

ZONAL LUMEN SUMMARY	LUMENS	%LAMP	%FIXT
0- 30	175	14.6	26.1
0- 40	349	29.1	52.1
0- 60	628	52.4	93.8
0- 90	670	55.8	100.0
90-180	0	0.0	0.0
0-180	670	55.8	100.0

TOTAL LUMINAIRE EFFICIENCY: 55.8%

CIE TYPE: DIRECT

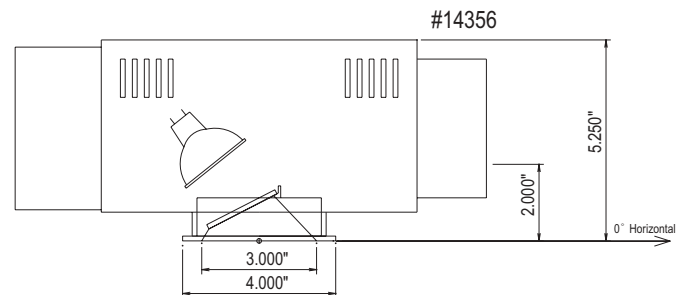
PLANE: 0-DEG 90-DEG 180-DEG

SPACING CRITERIA: 3.0 1.1 0.7

LUMINOUS LENGTH: 3.000 3.000

LUMINANCE IN CANDELA PER SQUARE METER

ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 45-DEG	AVERAGE 90-DEG
0	21698.	21698.	21698.
45	257910.	54553.	14369.
55	140211.	34527.	11709.
65	17522.	13854.	7742.
75	3327.	4658.	7319.
85	0.	1976.	3952.



Approved By: MG

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



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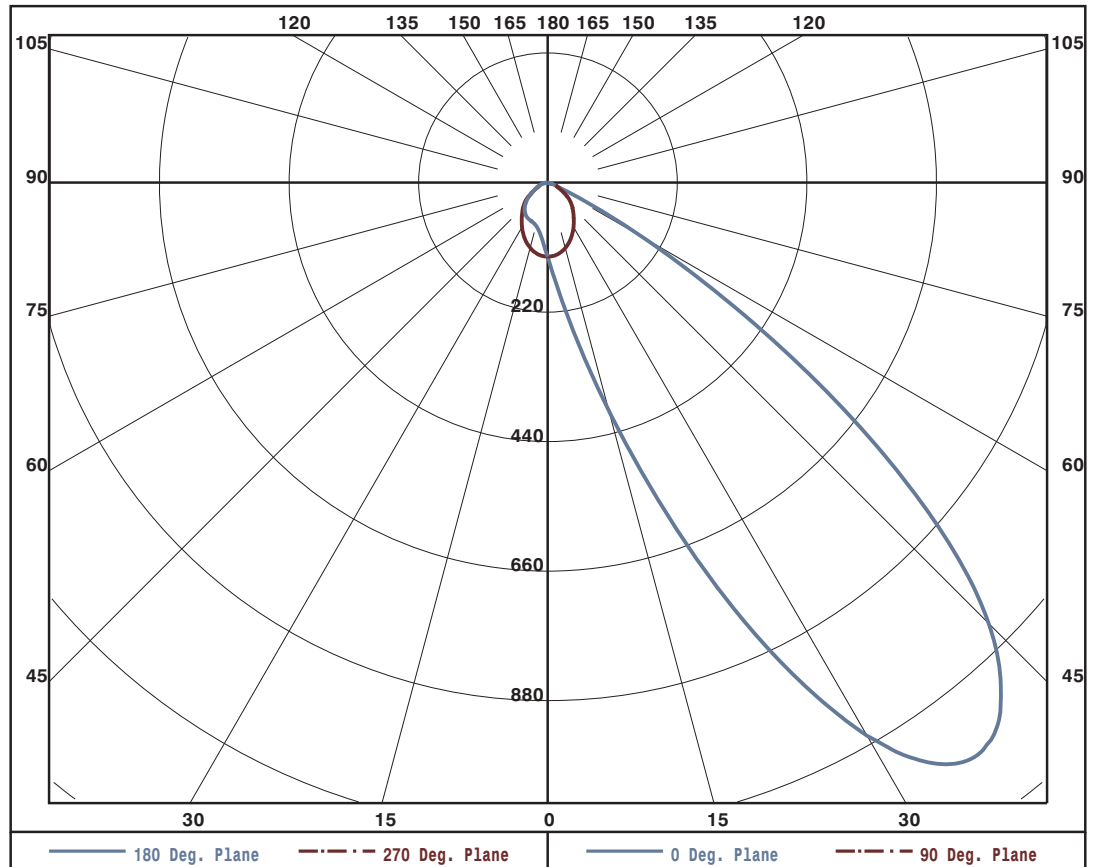
DATE: 11-11-2008

CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0
0	126	126	126	126	126	126	126	126	126
5	176	169	155	139	125	113	105	101	100
10	261	240	196	153	121	101	91	86	84
15	402	347	245	163	115	91	81	77	76
20	610	494	295	168	107	83	75	73	72
25	860	661	335	164	98	77	72	71	71
30	1085	802	349	149	87	72	70	69	69
35	1205	872	332	125	77	68	67	67	66
40	1192	852	285	101	68	63	64	62	61
45	1059	744	224	81	59	58	58	56	54
50	799	571	164	63	50	51	52	49	46
55	467	347	115	47	39	41	43	40	36
60	188	154	72	30	27	30	34	29	27
65	43	45	34	18	19	21	22	23	22
70	9	11	13	13	15	15	16	17	16
75	5	6	7	9	11	11	11	12	11
80	3	3	4	5	6	7	6	7	6
85	0	0	1	2	2	3	2	3	2
90	0	0	0	0	0	0	0	0	0

ZONAL LUMEN SUMMARY

0- 5	3.
5- 10	10.
10- 15	19.
15- 20	31.
20- 25	47.
25- 30	66.
30- 35	82.
35- 40	92.
40- 45	93.
45- 50	83.
50- 55	64.
55- 60	40.
60- 65	20.
65- 70	10.
70- 75	6.
75- 80	4.
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	66	66	66	66	65	65	65	65	62	62	62	59	59	59	57	57	57	56
1	62	60	58	57	61	59	57	56	57	55	54	54	53	52	53	52	51	50
2	58	54	51	49	57	53	51	48	51	49	47	50	48	46	48	47	45	44
3	54	49	45	42	52	48	45	42	46	44	41	45	43	40	44	42	40	39
4	50	44	40	37	48	43	39	36	42	39	36	41	38	36	40	37	35	34
5	46	39	35	32	45	39	35	32	38	34	31	37	34	31	36	33	31	30
6	42	35	31	27	41	35	30	27	34	30	27	33	29	27	32	29	27	26
7	38	31	27	23	37	31	26	23	30	26	23	29	26	23	28	25	23	22
8	35	28	23	20	34	27	23	20	27	23	20	26	22	20	25	22	20	19
9	32	25	20	17	31	24	20	17	24	20	17	23	19	17	23	19	17	16
10	29	22	17	15	29	22	17	14	21	17	14	21	17	14	20	17	14	13

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.

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.