

PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: [itl@itlboulder.com](mailto:itl@itlboulder.com) • WEBSITE: [www.itlboulder.com](http://www.itlboulder.com)

REPORT NUMBER: ITL87399-GONIOPHOTOMETRY

PAGE: 1 OF 5

ISSUE DATE: 05/13/16

PREPARED FOR: OXYGEN LIGHTING

CATALOG NUMBER: 3-550

LUMINAIRE: FABRICATED BROWN PAINTED METAL HOUSING, 1 WHITE CIRCUIT BOARD WITH 36 LEDS, FROSTED TRANSLUCENT WHITE ACRYLIC DIFFUSER. DIFFUSER FROSTED SIDE IN.

LAMPS: THIRTY-SIX WHITE LIGHT EMITTING DIODES (LEDS), VERTICAL BASE-DOWN POSITION.

INPUT ELECTRICAL: 120.0 VOLTS, 15.5 WATTS, 0.131 AMPS

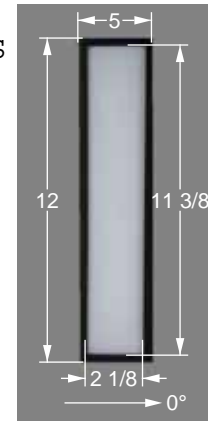
MOUNTING: WALL

LED DRIVER: L.T.F. DA12W350C1834D010-0000, DRIVER HAS MULTIPLE LEADS, ONLY LINE INPUT AND LED OUTPUT LEADS CONNECTED FOR THIS TEST.

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

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 35.0 FEET



CANDELA DISTRIBUTION

FLUX

	0.0	45.0	90.0	135.0	180.0	
90	0	0	0	0	0	7
95	3	5	7	4	2	
105	38	39	43	39	37	42
115	78	81	84	81	79	80
125	117	119	122	120	118	107
135	152	153	156	154	153	119
145	182	182	184	183	183	114
155	205	205	207	206	206	95
165	222	222	222	222	222	63
175	230	230	230	230	230	22
180	231	231	231	231	231	

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 90	0	0.0
90-120	129	19.9
90-130	236	36.4
90-150	469	72.4
90-180	649	100.0
0-180	649	100.0

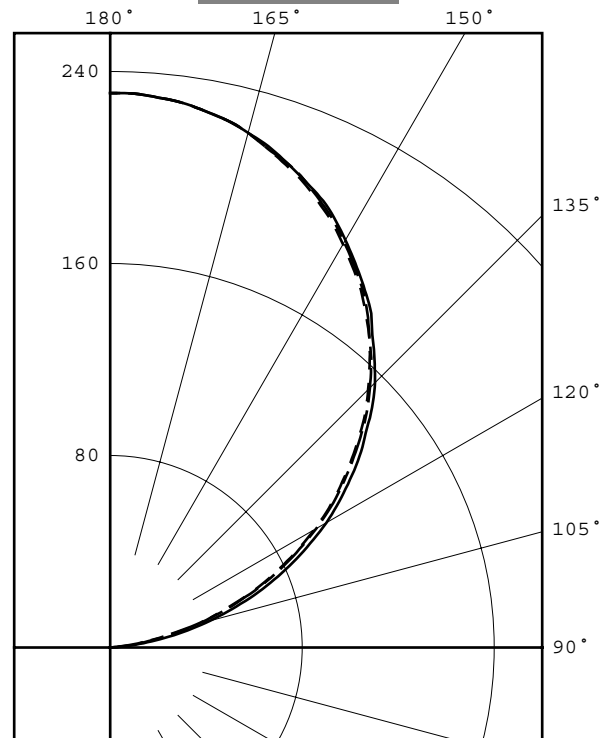
EFFICACY = 41.9 lm/W

CIE TYPE - INDIRECT

PLANE : 0-DEG 90-DEG

BEAM ANGLE (50%) : 179.7 X 180.0 DEGREES

FIELD ANGLE (10%) : 180.4 X 180.0 DEGREES



LEGEND:

0-deg	-----
90-deg	=====
180-deg	-----

Checked       M KLOPF        
Approved       R BEATTIE        
Lighting Engineer



INDEPENDENT TESTING LABORATORIES, INC.  
4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL87399-GONIOPHOTOMETRY  
ISSUE DATE: 05/13/16  
PREPARED FOR: OXYGEN LIGHTING

PAGE: 2 OF 5

CANDELA DISTRIBUTION  
LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0
90.0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	1	2	1	0	0	0
95.0	3	4	5	6	7	6	4	3	2
97.5	10	10	12	13	14	13	11	9	8
100.0	18	19	20	22	23	22	20	17	17
102.5	28	28	29	32	33	32	29	27	26
105.0	38	38	39	42	43	42	39	37	37
107.5	47	48	50	52	53	52	50	48	48
110.0	57	58	60	62	64	62	60	59	58
112.5	68	69	71	73	74	73	71	69	69
115.0	78	79	81	83	84	83	81	80	79
117.5	88	89	91	93	94	93	91	90	89
120.0	98	99	101	102	104	102	101	100	99
122.5	108	108	110	112	113	112	110	110	109
125.0	117	118	119	121	122	121	120	119	118
127.5	126	127	128	130	131	130	129	128	127
130.0	135	136	137	139	139	138	138	137	136
132.5	144	144	145	147	148	147	146	145	145
135.0	152	153	153	155	156	155	154	153	153
137.5	160	160	161	163	163	163	162	161	161
140.0	168	168	169	170	170	170	169	169	168
142.5	175	175	176	177	178	177	176	176	176
145.0	182	182	182	184	184	184	183	183	183
147.5	188	188	189	190	190	190	189	189	189
150.0	194	194	195	196	196	196	195	195	195
152.5	200	200	200	201	202	201	201	201	201
155.0	205	205	205	206	207	206	206	206	206
157.5	210	210	210	211	211	211	210	210	211
160.0	214	214	214	215	215	215	215	215	215
162.5	218	218	218	219	219	218	218	219	218
165.0	222	222	222	222	222	222	222	222	222
167.5	225	225	225	225	225	225	225	225	225
170.0	227	227	227	227	227	227	227	227	227
172.5	229	229	229	229	229	229	229	229	229
175.0	230	230	230	230	230	230	230	230	230
177.5	231	231	231	231	231	231	231	231	231
180.0	231	231	231	231	231	231	231	231	231



INDEPENDENT TESTING LABORATORIES, INC.  
4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL87399-GONIOPHOTOMETRY  
ISSUE DATE: 05/13/16  
PREPARED FOR: OXYGEN LIGHTING

PAGE: 3 OF 5

5-DEGREE  
ZONAL LUMEN SUMMARY

90- 95	1
95-100	6
100-105	16
105-110	26
110-115	36
115-120	44
120-125	51
125-130	56
130-135	59
135-140	60
140-145	59
145-150	56
150-155	51
155-160	44
160-165	36
165-170	27
170-175	16
175-180	6

10-DEGREE  
ZONAL LUMEN SUMMARY

90-100	7
90-110	49
90-120	129
90-130	236
90-140	355
90-150	469
90-160	564
90-170	627
90-180	649



INDEPENDENT TESTING LABORATORIES, INC.  
4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL87399-GONIOPHOTOMETRY

PAGE: 4 OF 5

ISSUE DATE: 05/13/16

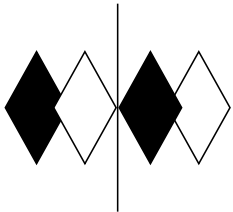
PREPARED FOR: OXYGEN LIGHTING

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	
0	95	95	95	95	81	81	81	81	56	56	56	32	32	32	10	10	10	0
1	87	83	79	76	74	71	68	65	48	47	45	28	27	26	9	9	8	0
2	79	72	66	62	67	62	57	53	42	40	37	24	23	22	8	7	7	0
3	72	63	57	51	61	54	49	44	37	34	31	21	20	18	7	6	6	0
4	65	56	48	43	56	48	42	37	33	29	26	19	17	16	6	6	5	0
5	60	49	42	36	51	42	36	32	29	25	22	17	15	13	5	5	4	0
6	55	44	36	31	47	38	32	27	26	22	19	15	13	11	5	4	4	0
7	50	39	32	27	43	34	28	23	23	19	17	14	11	10	4	4	3	0
8	47	35	28	23	40	30	24	20	21	17	14	12	10	9	4	3	3	0
9	43	32	25	20	37	27	22	18	19	15	13	11	9	8	4	3	3	0
10	40	29	22	18	34	25	19	16	17	14	11	10	8	7	3	3	2	0

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 TEST SAMPLE.



**itl boulder**  
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955



NVLAP LAB CODE: 200925-0

INDEPENDENT TESTING LABORATORIES, INC.  
4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: [itl@itlboulder.com](mailto:itl@itlboulder.com) • WEBSITE: [www.itlboulder.com](http://www.itlboulder.com)

REPORT NUMBER: ITL87399-GONIOPHOTOMETRY  
ISSUE DATE: 05/13/16  
PREPARED FOR: OXYGEN LIGHTING

PAGE: 5 OF 5

ADDRESS: 201 RAILHEAD ROAD  
FORT WORTH, TX 76106

THIS ITL REPORT WITH THE USE OF THE NVLAP LOGO SHALL NOT BE USED BY THE CLIENT TO CLAIM PRODUCT CERTIFICATION, APPROVAL, OR ENDORSEMENT BY NVLAP, NIST, OR ANY AGENCY OF THE FEDERAL GOVERNMENT.