



REPORT NUMBER: ITL84577
ISSUE DATE: 05/06/15
PREPARED FOR: OXYGEN LIGHTING
CATALOG NUMBER: 3-522-XX

PAGE: 1 OF 9
REVISED: 04/04/16

LUMINAIRE: FABRICATED DIFFUSE METAL HOUSING, 1 WHITE CIRCUIT BOARD WITH 30 LEDS, TRANSLUCENT WHITE FROSTED ACRYLIC DIFFUSER WITH TOP AND BOTTOM END CAPS. DIFFUSER FROSTED SIDE OUT.

LAMPS: THIRTY WHITE LIGHT EMITTING DIODES (LEDS), AIMED AT THE HORIZON.

INPUT ELECTRICAL: 120.0 VOLTS, 12.4 WATTS, 0.105 AMPS

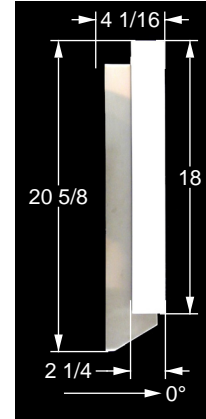
MOUNTING: WALL

LED DRIVER: ESPEN VEL12030MVH-1

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

TEST PROCEDURE: IESNA LM-79-08

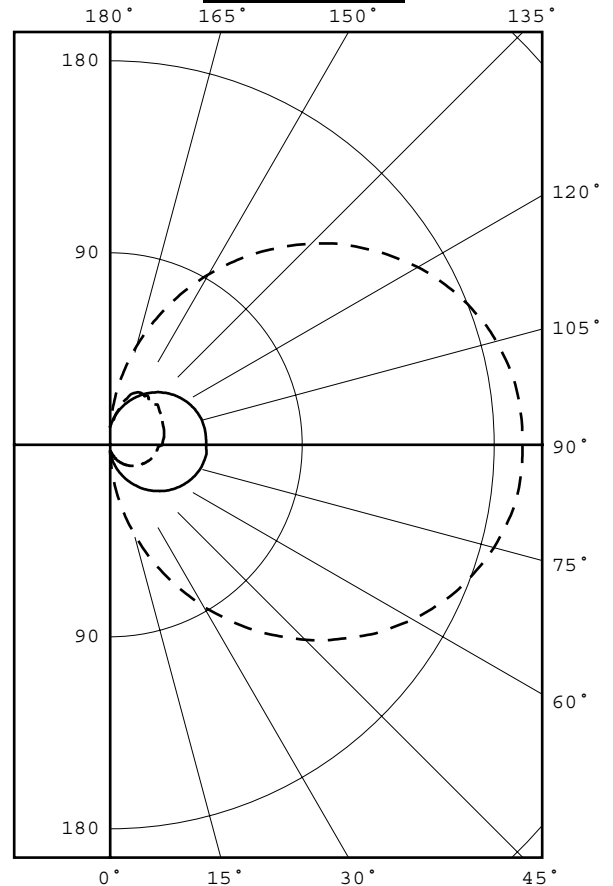
TEST DISTANCE = 20.0 FEET



CANDELA DISTRIBUTION

	0.0	45.0	90.0	135.0	180.0	
0	3	3	3	3	3	
5	15	12	5	4	3	1
15	43	36	11	9	5	6
25	72	60	18	15	8	16
35	102	83	25	20	11	30
45	129	105	31	26	14	46
55	154	124	36	31	17	64
65	173	139	41	35	19	79
75	186	150	44	38	21	91
85	193	155	45	41	22	97
90	193	154	45	41	25	98
95	193	154	45	41	25	98
105	187	150	45	42	26	93
115	175	140	42	41	27	83
125	157	126	39	39	28	68
135	133	109	35	36	29	52
145	107	87	29	32	28	35
155	78	64	23	26	27	20
165	48	40	17	18	18	8
175	20	17	11	11	10	1
180	9	9	9	9	9	

FLUX



LEGEND:
0-deg - - - - -
90-deg = = = = =
180-deg - - - - -

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 30	23	2.6
0- 40	53	5.9
0- 60	163	18.3
0- 90	430	48.5
90-120	273	30.8
90-130	342	38.5
90-150	428	48.2
90-180	457	51.5
0-180	888	100.0

EFFICACY = 71.6 lm/W
CIE TYPE - GENERAL DIFFUSE

Checked B. HYRE
Approved R. BEATTIE
Lighting Engineer



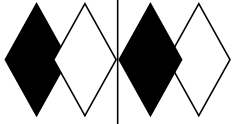
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LUMINANCE DATA IN CANDELA/SQ M			
ANGLE	AVERAGE	AVERAGE	AVERAGE
IN DEG	0-DEG	45-DEG	90-DEG
45	2586.	2154.	1480.
55	2696.	2226.	1557.
65	2780.	2285.	1620.
75	2842.	2326.	1678.
85	2885.	2355.	1722.



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NVLAP LAB CODE: 200925-0

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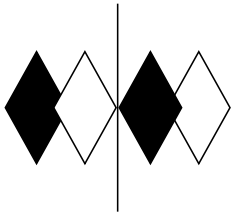
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CANDELA DISTRIBUTION
 LATERAL ANGLE

	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	75.0	85.0	90.0	112.5	135.0	157.5
0.0	3	3	3	3	3	3	3	3	3	3	3	3	3	3
2.5	9	8	8	8	8	7	6	6	5	4	4	3	3	3
5.0	15	15	15	14	14	12	11	9	8	6	5	5	4	3
7.5	22	21	21	20	19	18	16	13	10	8	7	6	5	4
10.0	29	28	28	27	26	24	21	18	14	10	8	8	7	5
12.5	36	36	35	34	32	29	26	22	17	12	10	9	8	6
15.0	43	43	43	42	39	36	31	26	20	14	11	11	9	7
17.5	51	50	50	49	46	42	36	30	23	16	13	12	10	8
20.0	58	58	58	56	53	48	42	34	26	18	15	14	12	8
22.5	65	65	65	63	59	54	47	38	29	20	16	15	13	9
25.0	72	73	72	70	66	60	52	42	32	22	18	17	15	10
27.5	80	80	80	78	72	66	57	47	36	24	20	19	16	11
30.0	88	88	87	85	79	72	62	51	39	27	21	21	17	12
32.5	95	95	95	92	86	77	67	55	42	29	23	22	19	13
35.0	102	102	102	99	92	83	72	59	45	31	25	24	20	14
37.5	109	109	109	105	99	89	77	63	48	33	26	25	22	15
40.0	116	116	116	112	105	94	82	67	51	35	28	27	23	16
42.5	123	123	122	119	111	100	86	70	54	37	29	29	24	17
45.0	129	130	129	125	117	105	91	74	56	39	31	30	26	17
47.5	136	136	136	131	122	110	95	77	59	40	32	32	27	18
50.0	141	142	142	137	128	115	99	81	61	42	34	33	28	19
52.5	148	148	148	143	133	120	103	84	64	44	35	35	29	20
55.0	154	154	153	148	138	124	107	87	66	45	36	36	31	21
57.5	158	159	159	153	142	128	110	90	68	47	37	37	32	21
60.0	164	164	164	158	147	132	114	93	70	48	39	39	33	22
62.5	168	169	168	162	151	136	117	95	72	49	40	40	34	23
65.0	173	174	173	167	155	139	120	97	74	51	41	41	35	24
67.5	177	178	177	170	159	142	122	100	75	52	41	42	36	25
70.0	180	181	180	174	162	145	125	101	77	53	42	43	37	25
72.5	183	184	183	177	164	147	127	103	78	53	43	44	38	26
75.0	186	187	186	179	167	150	128	105	79	54	44	44	38	27
77.5	189	190	189	182	169	152	130	106	80	55	44	45	39	27
80.0	191	192	190	184	171	153	131	107	81	55	45	46	40	27
82.5	192	193	192	185	172	154	132	108	81	56	45	46	40	28
85.0	193	194	193	186	173	155	133	108	82	56	45	47	41	28
87.5	193	194	193	186	173	155	133	108	82	56	45	47	41	28
90.0	193	194	193	186	173	154	132	107	81	55	45	47	41	29
92.5	193	194	193	186	173	154	132	107	81	55	45	47	41	30
95.0	193	194	193	185	172	154	132	107	81	55	45	47	41	30
97.5	192	193	192	185	172	153	132	107	81	55	45	47	42	30
100.0	191	192	191	184	171	153	131	106	80	55	45	47	42	31
102.5	189	190	189	182	169	151	130	105	80	54	45	47	42	31
105.0	187	188	187	180	168	150	129	104	79	54	45	47	42	31
107.5	185	186	185	178	165	148	127	103	78	53	44	46	42	31
110.0	182	183	182	175	163	146	125	102	77	53	44	46	41	31
112.5	179	179	178	172	160	143	123	100	76	52	43	46	41	31
115.0	175	176	175	168	157	140	121	98	75	51	42	45	41	31
117.5	171	172	171	164	153	137	118	96	73	50	42	44	40	31
120.0	167	167	166	161	150	134	115	94	72	49	41	44	40	31
122.5	162	162	162	156	145	130	112	91	70	48	40	43	39	31
125.0	157	157	157	151	141	126	109	89	68	47	39	42	39	31
127.5	151	152	151	146	136	122	106	86	66	46	38	41	38	31
130.0	146	146	146	141	131	118	102	83	64	44	37	40	38	31
132.5	140	140	140	135	126	114	98	80	62	43	36	39	37	31
135.0	133	134	133	129	120	109	94	77	59	41	35	38	36	31
137.5	127	128	127	123	115	104	90	74	57	40	34	36	35	30
140.0	120	121	120	117	109	98	85	70	54	38	32	35	34	30
142.5	114	114	114	110	103	93	81	66	51	36	31	34	33	29
145.0	107	107	107	104	97	87	76	63	49	34	29	32	32	29
147.5	99	100	100	97	90	82	71	59	46	33	28	31	30	29
150.0	92	93	92	90	84	76	66	55	43	31	26	29	29	28
152.5	85	85	85	83	77	70	61	51	40	29	25	27	28	26
155.0	78	78	78	75	71	64	56	47	37	27	23	26	26	25
157.5	70	70	70	68	64	58	51	43	34	25	22	24	24	24



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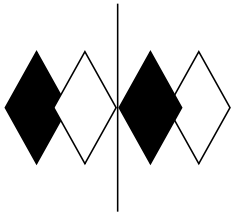
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CANDELA DISTRIBUTION
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	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	75.0	85.0	90.0	112.5	135.0	157.5
160.0	63	63	63	61	57	52	46	39	31	23	20	22	22	22
162.5	55	55	55	54	51	46	41	35	28	21	19	20	21	20
165.0	48	48	48	46	44	40	36	30	25	19	17	18	18	18
167.5	41	41	41	39	38	34	31	26	22	17	16	16	16	16
170.0	34	33	33	33	31	29	26	22	19	15	14	14	14	14
172.5	27	27	26	26	25	23	21	18	16	13	13	13	12	11
175.0	20	20	19	19	18	17	16	14	13	11	11	11	11	10
177.5	13	13	13	13	12	12	11	11	10	10	10	9	9	9
180.0	9	9	9	9	9	9	9	9	9	9	9	9	9	9



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CANDELA DISTRIBUTION
 LATERAL ANGLE

	180.0
0.0	3
2.5	3
5.0	3
7.5	4
10.0	4
12.5	5
15.0	5
17.5	6
20.0	7
22.5	7
25.0	8
27.5	9
30.0	10
32.5	10
35.0	11
37.5	12
40.0	13
42.5	13
45.0	14
47.5	15
50.0	15
52.5	16
55.0	17
57.5	17
60.0	18
62.5	18
65.0	19
67.5	20
70.0	20
72.5	21
75.0	21
77.5	21
80.0	21
82.5	22
85.0	22
87.5	23
90.0	25
92.5	25
95.0	25
97.5	25
100.0	26
102.5	26
105.0	26
107.5	26
110.0	26
112.5	27
115.0	27
117.5	27
120.0	28
122.5	28
125.0	28
127.5	29
130.0	29
132.5	28
135.0	29
137.5	29
140.0	28
142.5	29
145.0	28
147.5	28
150.0	28
152.5	28
155.0	27
157.5	26



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CANDELA DISTRIBUTION
 LATERAL ANGLE

	180.0
160.0	23
162.5	21
165.0	18
167.5	16
170.0	14
172.5	11
175.0	10
177.5	9
180.0	9



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	0
5- 10	1
10- 15	2
15- 20	4
20- 25	6
25- 30	9
30- 35	13
35- 40	17
40- 45	21
45- 50	25
50- 55	30
55- 60	34
60- 65	38
65- 70	41
70- 75	44
75- 80	47
80- 85	48
85- 90	49
90- 95	49
95-100	49
100-105	47
105-110	45
110-115	43
115-120	40
120-125	36
125-130	32
130-135	28
135-140	24
140-145	19
145-150	15
150-155	12
155-160	8
160-165	5
165-170	3
170-175	1
175-180	0

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	1
0- 20	7
0- 30	23
0- 40	53
0- 50	99
0- 60	163
0- 70	242
0- 80	333
0- 90	430
0-100	528
0-110	621
0-120	703
0-130	772
0-140	823
0-150	858
0-160	878
0-170	886
0-180	888



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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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55	48	
1	92	85	79	74	84	78	72	68	64	60	56	51	48	45	39	37	35	29	
2	81	71	63	56	74	65	57	51	53	47	42	42	37	33	32	28	25	20	
3	73	61	51	44	66	55	47	40	45	38	33	35	30	26	26	22	19	15	
4	66	53	43	35	59	48	39	32	39	32	26	30	25	21	22	18	15	11	
5	60	46	36	29	54	42	33	27	34	27	22	26	21	17	20	15	12	9	
6	55	41	31	25	49	37	29	22	30	23	18	23	18	14	17	13	10	7	
7	50	36	27	21	46	33	25	19	27	20	16	21	16	12	16	12	8	6	
8	47	33	24	18	42	30	22	16	24	18	13	19	14	10	14	10	7	5	
9	43	30	21	16	39	27	19	14	22	16	12	17	12	9	13	9	6	4	
10	40	27	19	14	36	25	17	13	20	14	10	16	11	8	12	8	5	3	

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.

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.



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FORT WORTH, TX 76106

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