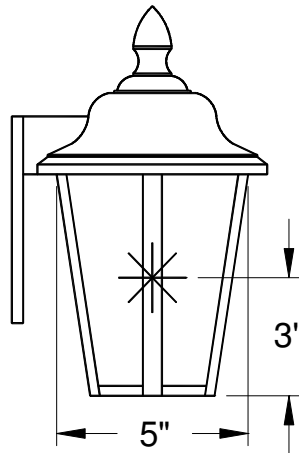




INDEPENDENT TEST LABORATORY REPORT No. 29166

SEAGULL LIGHTING - OUTDOOR WALL LANTERN LUMINAIRE, CAT# 8824-12  
WITH CLEAR FLAT GLASS LENSES ON ALL SIX SIDES  
ONE GE 100 WATT INCANDESCENT LAMP, CAT# 100A/CL-2. LUMEN RATING = 1730 LMS.  
LUMINAIRE OPERATING AT 120 VAC AND 100 WATTS

IESNA CUTOFF CLASSIFICATION: NON-CUTOFF



PREPARED FOR:

SEAGULL LIGHTING  
RIVERSIDE, NJ

DATE: JUN 8, 2011

CERTIFIED BY:

LABORATORY RESULTS MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.  
BALLAST FACTORS HAVE NOT BEEN APPLIED

TESTED IN 30 PLANES LEFT SIDE, 30 PLANES RIGHT SIDE, LEFT AND RIGHT AVERAGED

VERTICAL TEST INCREMENTS ARE 2.5 DEGREES.

TEST DISTANCE EXCEEDS FIVE TIMES THE GREATEST  
LUMINOUS OPENING OF LUMINAIRE.

LIGHTING SCIENCES, INC.  
7826 E. EVANS RD.  
SCOTTSDALE, AZ, USA 85260

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UTILIZATION TABLE

CO-EFFICIENT OF UTILIZATION

RATIO	HOUSE SIDE	STREET SIDE	TOTAL
0.5	0.037	0.029	0.066
1.0	0.076	0.065	0.141
1.5	0.103	0.092	0.195
2.0	0.121	0.109	0.230
2.5	0.132	0.120	0.252
3.0	0.138	0.127	0.265
3.5	0.143	0.134	0.276
4.0	0.145	0.137	0.282
5.0	0.150	0.143	0.293
TOTAL:	0.165	0.170	0.335

PERCENTAGE OUTPUTS

DOWNWARD:	STREET SIDE =	17.0%
	HOUSE SIDE =	16.5%
	TOTAL =	33.5%
UPWARD:	STREET SIDE =	12.1%
	HOUSE SIDE =	9.9%
	TOTAL =	22.0%
TOTAL EFFICIENCY	=	55.4%

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ZONAL LUMEN SUMMARY PER IES PUBLICATION TM-15-07

FORWARD LIGHT:

LUMINAIRE LUMENS	293.8
% LAMP LUMENS	17.0 %
FORWARD LOW ZONE (0 TO 30 DEGREES)	1.0 %
FORWARD MID ZONE (30 TO 60 DEGREES)	6.1 %
FORWARD HIGH ZONE (60 TO 80 DEGREES)	6.4 %
FORWARD VERY HIGH ZONE (80 TO 90 DEGREES)	3.5 %

BACK LIGHT:

LUMINAIRE LUMENS	285.3
% LAMP LUMENS	16.5 %
BACK LIGHT LOW ZONE (0 TO 30 DEGREES)	0.7 %
BACK LIGHT MID ZONE (30 TO 60 DEGREES)	6.8 %
BACK LIGHT HIGH ZONE (60 TO 80 DEGREES)	6.3 %
BACK LIGHT VERY HIGH ZONE (80 TO 90 DEGREES)	2.7 %

UPLIGHT:

LUMINAIRE LUMENS	380.2
% LAMP LUMENS	22.0 %
UPLIGHT LOW ZONE (90 TO 100 DEGREES)	6.1 %
UPLIGHT HIGH ZONE (100 TO 180 DEGREES)	15.9 %

TRAPPED LIGHT:

LUMINAIRE LUMENS	770.7
% LAMP LUMENS	44.6 %

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IES "BUG" RATING (BACK LIGHT, UPLIGHT, GLARE)  
PER ADDENDUM TO IES TM-15-07

	LUMENS	% LAMP LUMENS
BACK LIGHT		
BH (60-80 DEGREES)	109.2	B0
BM (30-60 DEGREES)	117.0	B0
BL (0-30 DEGREES)	12.0	B0
UPLIGHT		
UH (100-180 DEGREES)	275.2	U3
UL (90-100 DEGREES)	105.0	U3
FVH (80-90 DEGREES)	60.3	U1
BVH (80-90 DEGREES)	47.1	U1
GLARE LIGHT		
FVH (80-90 DEGREES)	60.3	G1
BVH (80-90 DEGREES)	47.1	G1
FH (60-80 DEGREES)	110.6	G0
BH (60-80 DEGREES)	109.2	G0

IES BUG RATING: B0 U3 G1

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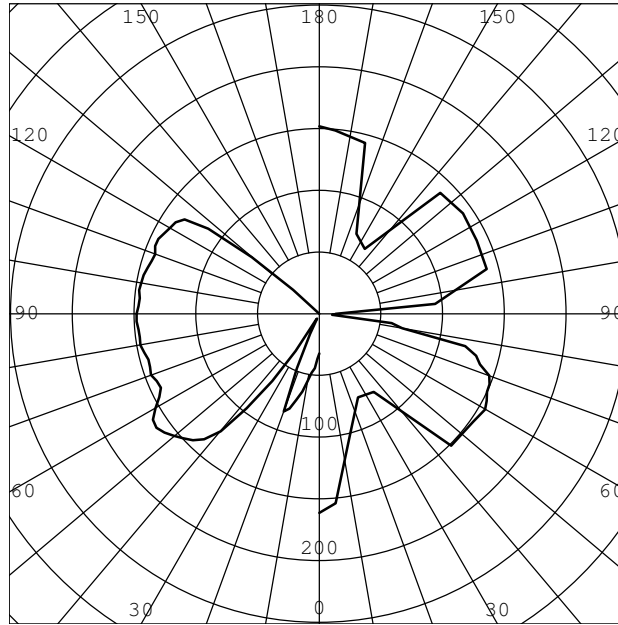
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INTENSITY (CANDLEPOWER)  
 IN MAX. PLANE

INTENSITY (CANDLEPOWER)  
 IN MAX. CONE

ANGLE	CANDLEPOWER
0.0	32
5.0	44
10.0	55
15.0	72
20.0	84
25.0	18
30.0	5
35.0	66
40.0	124
45.0	145
50.0	153
52.5	158
55.0	161
57.5	159
60.0	153
62.5	146
65.0	141
67.5	142
70.0	145
72.5	143
75.0	143
77.5	145
80.0	147
82.5	146
85.0	147
87.5	148
90.0	148
95.0	146
105.0	144
115.0	144
125.0	133
135.0	0
145.0	0
155.0	0
165.0	0
175.0	0
180.0	0



ANGLE	CANDLEPOWER
0.0	161
5.0	154
15.0	99
25.0	74
35.0	77
45.0	151
55.0	152
60.0	155
62.5	152
65.0	150
67.5	149
70.0	146
72.5	136
75.0	131
77.5	121
80.0	68
82.5	59
85.0	10
87.5	13
90.0	13
95.0	94
105.0	140
115.0	140
125.0	142
135.0	138
145.0	64
155.0	71
165.0	143
175.0	149
180.0	152

MAXIMUM INTENSITY (CANDLEPOWER) : 161 CD  
 PLANE OF MAXIMUM: 0.0  
 VERTICAL ANGLE OF MAXIMUM: 55.0

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INTENSITY (CANDLEPOWER) SUMMARY

VERT. ANGLE	HORIZONTAL ANGLES - STREET SIDE									
	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	75.0	85.0
	****									
0.0	32	32	32	32	32	32	32	32	32	32
5.0	44	42	43	44	46	44	44	42	42	41
10.0	55	57	58	59	57	56	53	53	52	48
15.0	72	74	72	73	73	72	69	66	64	63
20.0	84	85	77	75	71	65	60	55	51	46
25.0	18	19	17	20	21	23	23	23	20	18
30.0	5	5	4	4	12	21	25	25	19	3
35.0	66	68	41	24	43	61	72	71	63	3
40.0	124	126	79	52	63	108	119	116	110	5
45.0	145	146	97	67	69	137	137	131	125	7
50.0	153	152	96	76	73	149	147	143	130	9
55.0**	161	154	99	74	77	151	152	150	131	10
60.0	153	144	95	70	79	147	147	145	128	12
65.0	141	137	88	71	80	145	141	141	131	16
70.0	145	139	83	75	84	145	143	141	131	17
75.0	143	141	82	77	86	144	143	139	131	16
80.0	147	144	86	79	86	145	145	141	133	14
85.0	147	145	97	80	86	144	145	142	134	12
90.0	148	147	93	79	86	142	147	144	134	11

VERT. ANGLE	HORIZONTAL ANGLES - HOUSE SIDE										
	90.0	95.0	105.0	115.0	125.0	135.0	145.0	155.0	165.0	175.0	180.0
0.0	32	32	32	32	32	32	32	32	32	32	32
5.0	43	41	40	41	40	37	37	36	36	35	34
10.0	49	49	52	51	47	44	42	42	40	39	39
15.0	63	63	61	56	53	52	53	53	51	49	50
20.0	44	41	37	35	31	27	21	18	15	14	10
25.0	15	13	10	7	5	3	3	3	3	3	3
30.0	3	12	27	32	34	31	23	8	30	42	42
35.0	3	44	74	79	80	75	47	39	87	99	99
40.0	5	76	111	112	112	109	53	57	109	114	112
45.0	7	95	124	124	126	124	59	62	122	132	131
50.0	10	97	134	135	138	134	64	68	139	146	146
55.0**	13	94	140	140	142	138	64	71	143	149	152
60.0	14	108	135	141	139	132	62	73	137	142	153
65.0	15	105	135	138	136	133	61	79	139	134	138
70.0	17	112	142	143	142	139	59	66	101	94	91
75.0	20	116	144	145	146	143	60	28	41	37	34
80.0	21	121	144	145	145	144	64	7	11	9	8
85.0	23	130	141	144	144	145	64	7	8	2	1
90.0	22	130	138	144	144	142	65	6	2	0	0

\*\* DENOTES VERTICAL ANGLE OF MAXIMUM CONE

\*\*\*\* DENOTES LATERAL ANGLE OF MAXIMUM PLANE

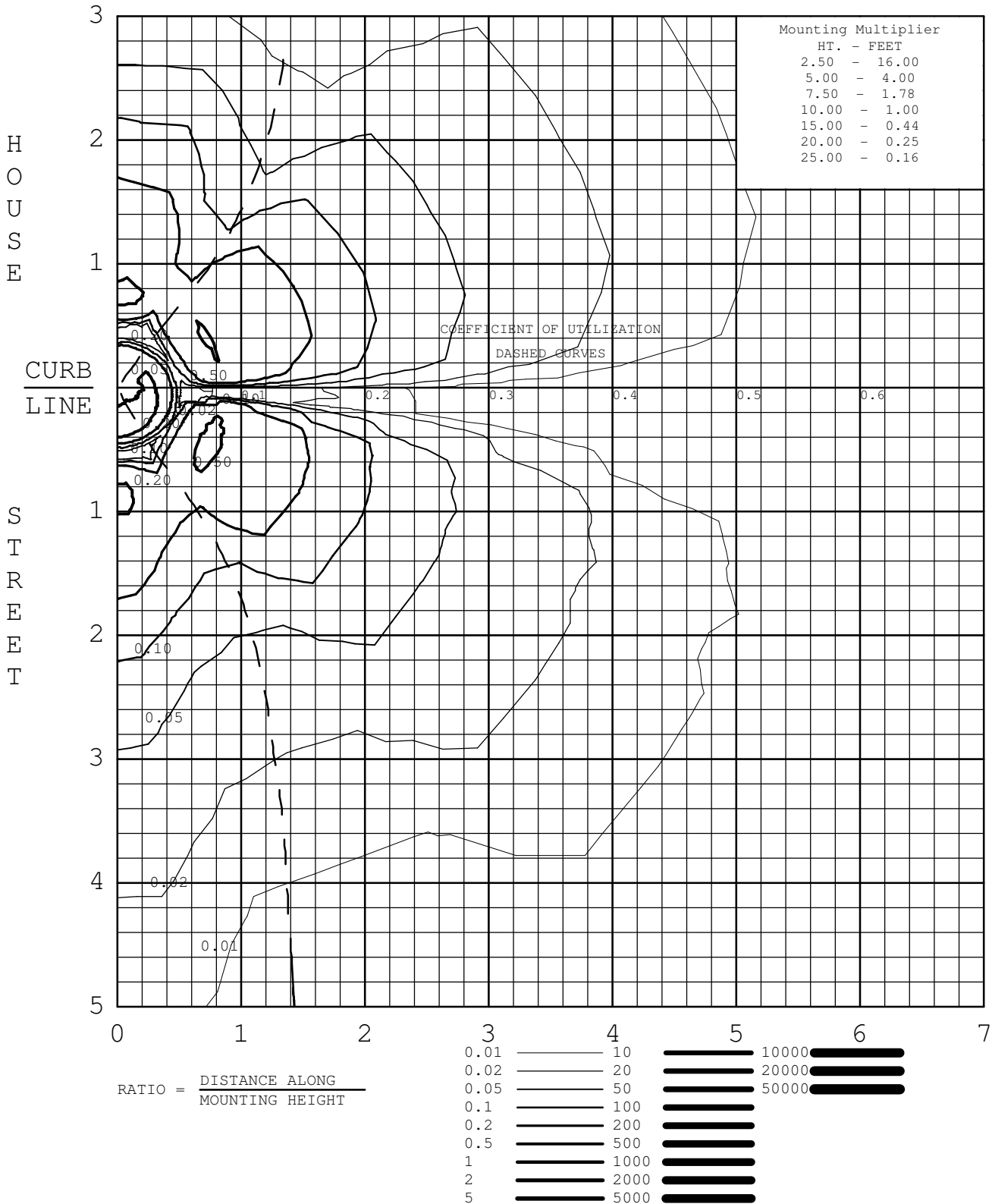
INTENSITY WAS MEASURED IN 2.5 DEGREE STEPS - TABULATIONS ARE AVAILABLE

# ISOFOOTCANDLE

CERTIFIED TEST REPORT NO.29166

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 LUMINAIRE OPERATING AT 120 VAC AND 100 WATTS

## MOUNTING HEIGHT FOR ISOFC 10.0 FEET



LIGHTING SCIENCES, INC.  
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SCOTTSDALE, AZ, USA 85260

INDEPENDENT TEST LABORATORY REPORT No. 29166

** ILLUMINANCE(FOOTCANDLE) TABLE FOR SINGLE LUMINAIRE AT 10.0 FT. **															
LATERAL RATIOS															
-3.00	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	.024	.023	.018	.010	.011	.015	.017	.014	.011	.009	.007	.006	.005	.004	.003
-2.50	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	.058	.056	.034	.020	.024	.029	.022	.017	.013	.010	.008	.006	.005	.004	.003
-2.00	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	0.12	0.11	.053	.038	.052	.038	.028	.020	.015	.012	.009	.007	.005	.004	.004
-1.50	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	0.26	0.17	.073	0.10	.071	.049	.034	.024	.017	.013	.010	.007	.006	.005	.004
-1.00	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	0.46	0.19	0.26	0.15	.094	.060	.040	.027	.019	.013	.010	.007	.006	.005	.004
-0.50	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	.071	0.41	0.39	0.21	0.11	.064	.038	.025	.017	.012	.009	.007	.005	.004	.003
HOUSE		CURB LINE													
STREET	0.32	.058	.028	.024	.013	.009	.006	.004	.003	.002	.002	.001	.001	.001	.001
0.50	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	.069	0.35	0.41	0.21	0.10	.048	.021	.013	.008	.004	.002	.001	.001	.001	.000
1.00	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	0.51	0.21	0.29	0.16	.098	.059	.038	.025	.017	.012	.007	.004	.003	.002	.002
1.50	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	0.27	0.13	.089	0.11	.073	.049	.034	.023	.017	.012	.009	.007	.005	.004	.003
2.00	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	0.12	.079	.050	.049	.054	.038	.027	.020	.015	.011	.009	.007	.005	.004	.003
2.50	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	.073	.051	.033	.028	.028	.029	.022	.017	.013	.010	.008	.006	.005	.004	.003
3.00	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	.046	.035	.022	.018	.016	.017	.018	.014	.011	.009	.007	.006	.005	.004	.003
3.50	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	.030	.025	.015	.013	.011	.010	.011	.011	.009	.007	.006	.005	.004	.004	.003
4.00	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	.021	.018	.012	.009	.008	.008	.007	.008	.008	.006	.005	.004	.004	.003	.003
4.50	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	.015	.014	.009	.007	.006	.006	.005	.005	.006	.005	.005	.004	.003	.003	.002
5.00	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	.011	.010	.008	.006	.005	.004	.004	.004	.004	.004	.004	.003	.003	.003	.002
	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0
	LONGITUDINAL MOUNTING HEIGHT RATIOS														

CORRECTION FACTORS FOR OTHER MOUNTING HEIGHTS: SEE ISOFOOTCANDLE PAGE