



LUMINAIRE TESTING LABORATORY, INC.

SUSTAINING
MEMBER
of the
IESNA

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LTL NUMBER: 18529

DATE: 03-15-2010

PREPARED FOR: SUNOVIA ENERGY TECHNOLOGIES, INC.

CATALOG NUMBER: SCHX5/120-43/PAL/T3/277/LG

LUMINAIRE: CAST ALUMINUM HOUSING, MACHINED ALUMINUM REFLECTOR, CLEAR ACRYLIC ENCLOSURE.

LAMP: 56 WHITE LEDS- 24 WITH CLEAR PLASTIC OPTICS, 24 WITH CLEAR PRISMATIC PLASTIC OPTICS AND 8 WITH FROSTED PLASTIC OPTICS.

LED POWER SUPPLY: TWO HIGH PERFECTION TECH LP1090-36-GG-170

ELECTRICAL VALUES: 120.0VAC, 1.0028A, 118.64W, PF=0.986

LUMINAIRE EFFICACY: 72.2 LUMENS/WATT

NOTE: THIS TEST WAS PERFORMED USING THE CALIBRATED PHOTODETECTOR METHOD OF ABSOLUTE PHOTOMETRY.*



IES CLASSIFICATION: **TYPE III**
LONGITUDINAL CLASSIFICATION: **SHORT**

**CUTOFF DESIGNATION IS NOT DEFINED FOR ABSOLUTE PHOTOMETRIC TESTS. THIS CUTOFF RATING IS BASED ON THE MAXIMUM CANDELA READING PER LUMINAIRE RATED AT 1000 LUMENS.

FLUX DISTRIBUTION

LUMENS	DOWNWARD	UPWARD	TOTALS
HOUSE SIDE	1658.39	0.00	1658.39
STREET SIDE	6905.12	0.00	6905.12
TOTALS	8563.51	0.00	8563.51

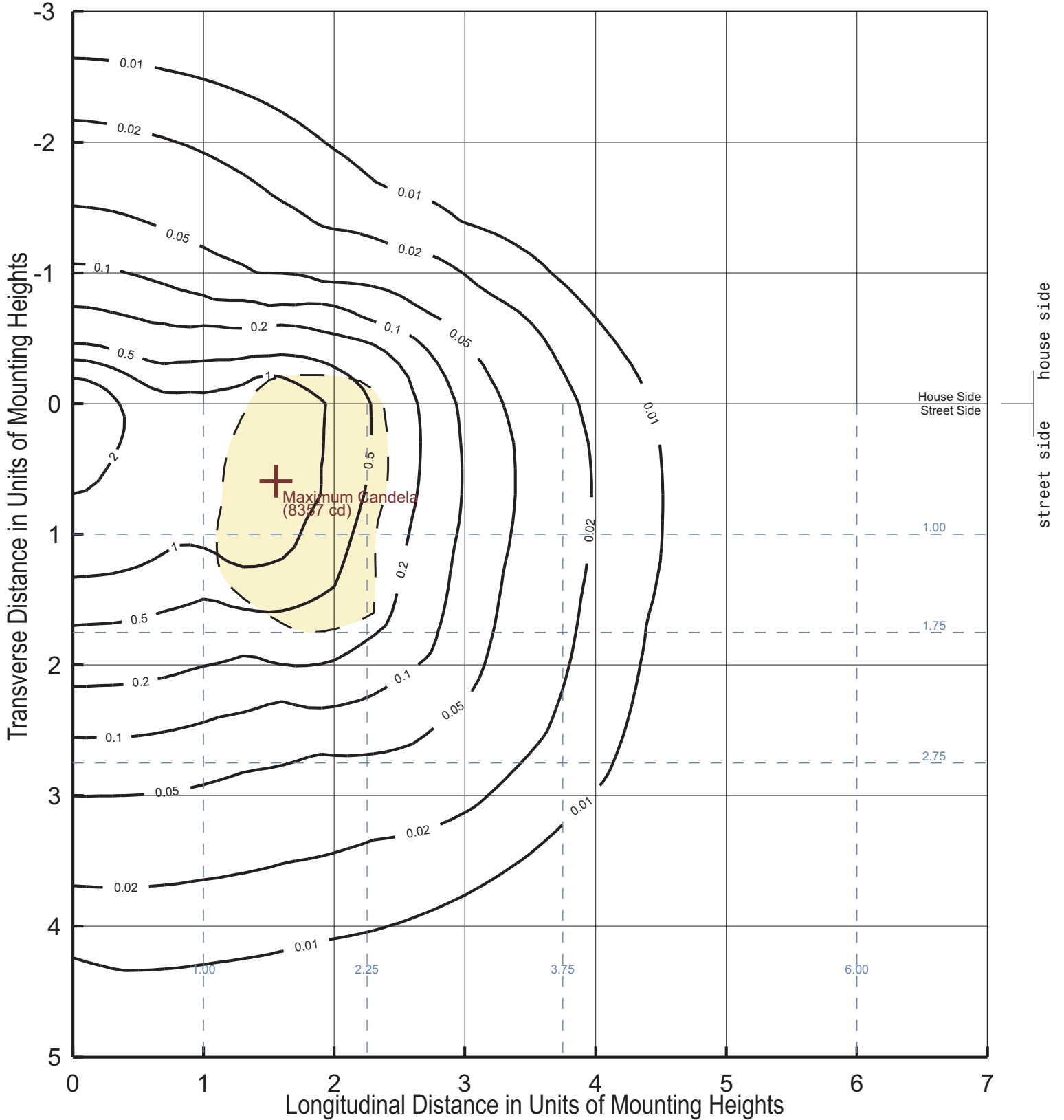
Approved By: MG

*DATA WAS ACQUIRED USING THE CALIBRATED PHOTODETECTOR METHOD OF ABSOLUTE PHOTOMETRY. A UDT MODEL #211 PHOTODETECTOR AND UDT MODEL #S370 OPTOMETER COMBINATION WERE USED AS A STANDARD. A SPECTRAL MISMATCH CORRECTION FACTOR WAS EMPLOYED BASED ON THE SPECTRAL RESPONSIVITY OF THE PHOTODETECTOR AND THE SPECTRAL POWER DISTRIBUTION OF THE TEST SUBJECT.

TESTING WAS PERFORMED IN ACCORDANCE WITH IES LM-79-08.
TEST ANGULAR INCREMENTS AND REPORT FORMATTING WAS BASED ON IES LM-31-95.



ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINATION VALUES BASED ON 25.00 FOOT MOUNTING HEIGHT



PROJECTION OF HALF-MAX CANDELA CONTOUR



CANDELA DISTRIBUTION

Table with 12 columns (0, 5, 15, 25, 35, 45, 55, 65, 69, 75, 85) and 21 rows (180, 175, 165, 155, 145, 135, 125, 115, 105, 95, 90, 87.5, 85, 82.5, 80, 77.5, 75, 72.5, 70, 67.5, 65, 62.5, 60, 59, 57.5, 55, 52.5, 50, 47.5, 45, 40, 35, 30, 25, 20, 15, 10, 5, 0). Values represent candela distribution for various beam angles.

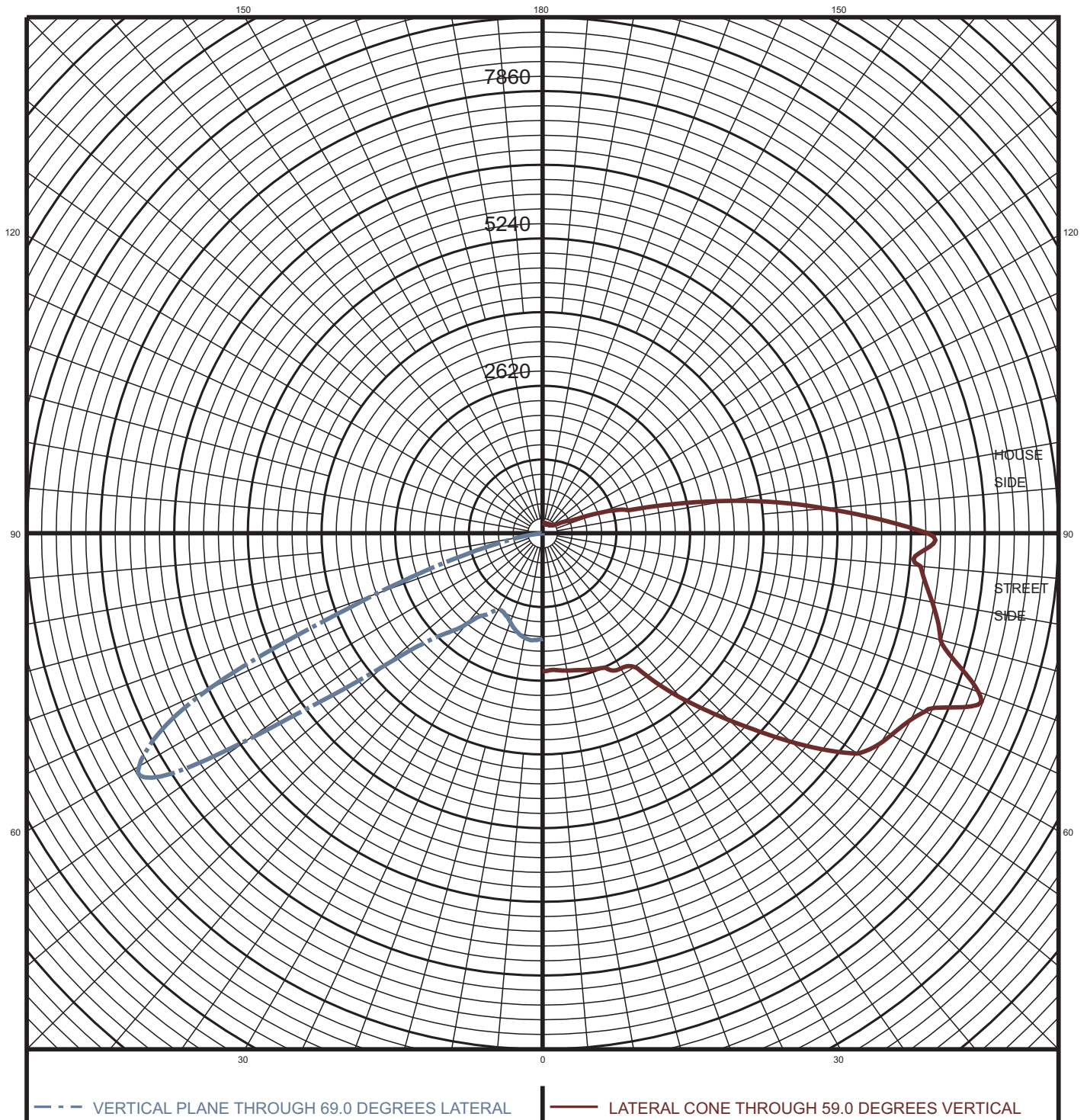


CANDELA DISTRIBUTION

	90	95	105	115	125	135	145	155	165	175	180
180	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0	0
87.5	2	2	1	1	0	1	1	1	1	1	1
85	28	23	17	14	14	15	18	19	19	19	19
82.5	113	105	70	49	42	44	45	44	42	43	45
80	258	210	160	100	78	78	78	70	64	65	66
77.5	557	470	267	151	114	109	103	90	83	81	82
75	890	705	398	208	143	134	123	107	100	98	98
72.5	1414	1127	535	269	167	149	140	126	116	115	115
70	2378	1958	802	320	183	162	155	145	136	134	135
67.5	3928	3296	1029	363	198	173	165	159	154	155	156
65	5618	4213	1280	419	215	181	173	169	166	169	171
62.5	6462	4645	1504	459	229	189	179	175	173	177	179
60	6836	4929	1565	494	249	198	184	179	178	182	183
59	6845	5045	1573	506	256	203	185	180	180	183	185
57.5	6487	4981	1535	526	269	208	188	182	181	184	186
55	5195	4214	1446	562	290	218	192	184	184	185	186
52.5	3758	2984	1299	575	310	229	199	188	186	187	187
50	2980	2416	1248	613	334	242	208	194	190	189	189
47.5	2469	2030	1147	597	344	254	218	201	194	194	194
45	2099	1747	1069	593	361	272	228	210	202	201	201
40	1716	1445	943	581	389	295	252	231	223	220	220
35	1398	1210	863	598	430	337	291	267	254	251	251
30	1319	1186	920	704	531	422	359	325	307	300	299
25	1369	1282	1088	904	736	597	500	442	408	393	389
20	1472	1405	1276	1134	996	875	769	692	638	606	600
15	1642	1591	1503	1398	1294	1201	1130	1067	1026	1001	993
10	1798	1764	1715	1652	1590	1529	1477	1442	1422	1410	1404
5	1866	1842	1825	1797	1767	1745	1724	1708	1707	1703	1696
0	1874	1874	1874	1874	1874	1874	1874	1874	1874	1874	1874



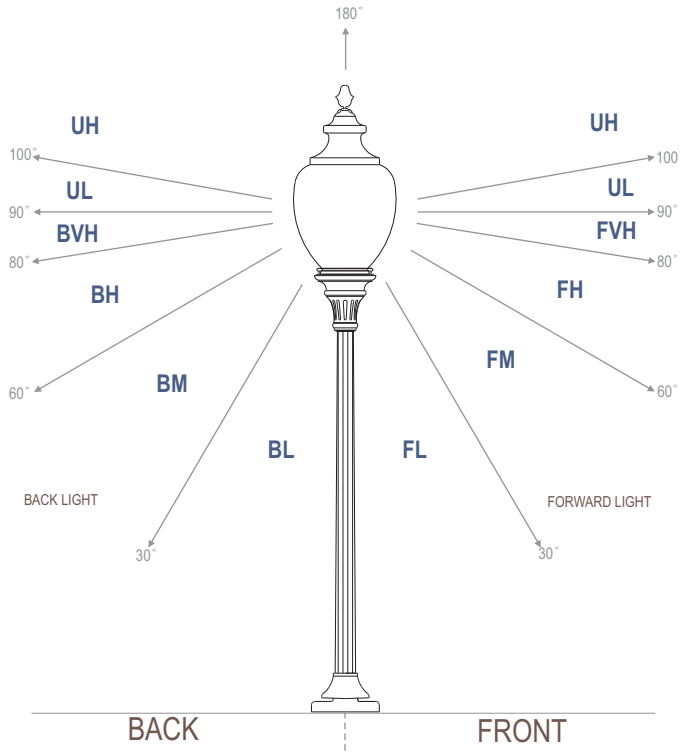
MAXIMUM PLANE AND CONE PLOTS OF CANDELA





FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM

FLUX



ZONE	LUMINAIRE LUMENS	% OF LUMINAIRE LUMENS
FORWARD LIGHT	6905	80.6
FL (0° -30°)	761	8.9
FM (30° -60°)	3447	40.3
FH (60° -80°)	2633	30.7
FVH (80° -90°)	64	0.7

BACK LIGHT	1658	19.4
BL (0° -30°)	416	4.9
BM (30° -60°)	736	8.6
BH (60° -80°)	490	5.7
BVH (80° -90°)	16	0.2

UPLIGHT	0	0.0
UL (90° -100°)	0	0.0
UH (100° -180°)	0	0.0

TRAPPED LIGHT	NA	NA
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BUG (Backlight, Uplight, Glare) Rating	
Asymmetrical Luminaire Types (Type I, II, III, IV)	B1 U1 G2
Quadrilateral Symmetrical Luminaire Types (Type V, Area Light)	B1 U1 G2