

Photometrics Pro

Luminaire Photometric Report

Filename: AST-HB11B-240WL1B1T2A1-abc40WD-277V

Lamp Output: 1 lamp, rated Lumens/lamp: 33130.1

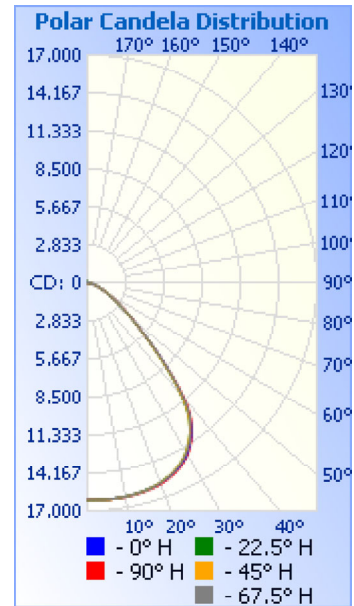
Max Candela: 16,213.0 at Horizontal: 90°, Vertical: 8°

Input Wattage: 228.91

Luminous Opening: Point

Photometry : Type C

Nema Type: 6 X 6



Roadway Summary

Cutoff Classification:	CUTOFF
Distribution:	Type VS
Max Cd, 90 Deg Vert:	11.9
Max Cd, 80 to <90 Deg:	255.7
	Lumens % Lamp
Downward Street Side:	16,080.4 48.5%
Downward House Side:	16,956.9 51.2%
Downward Total:	33,037.3 99.7%
Upward Street Side:	49.4 0.1%
Upward House Side:	43.5 0.1%
Upward Total:	92.9 0.3%
Total Lumens:	33,130.1 100%

Flood Summary

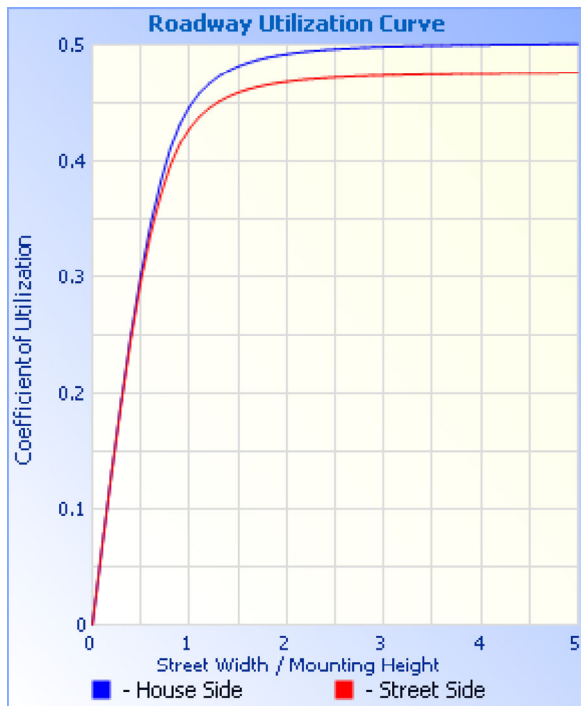
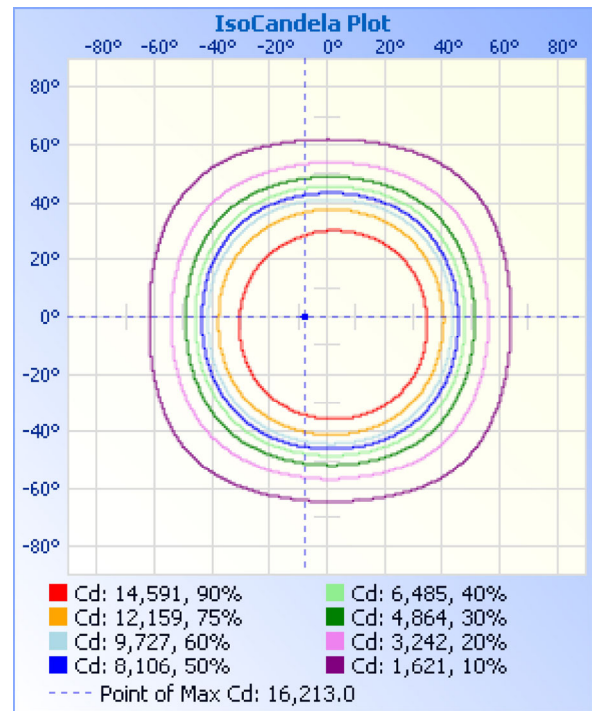
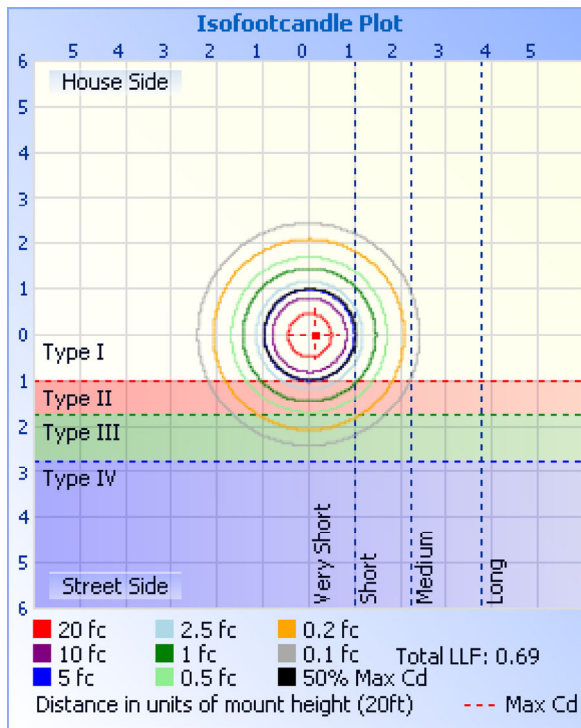
	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	95.5%	31,627.6	125.9	125.6
Beam (50%):	76.2%	25,246.0	89.2	88.1
Total:	100%	33,117.4		

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Luminaire
0-30	13,316.1	40.2%	40.2%
0-40	21,943.4	66.2%	66.2%
0-60	31,080.1	93.8%	93.8%
60-90	1,952.4	5.9%	5.9%
70-100	585.9	1.8%	1.8%
90-120	15.4	0%	0%
0-90	33,032.5	99.7%	99.7%
90-180	92.8	0.3%	0.3%
0-180	33,125.3	100%	100%

Lumens Per Zone

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	1,543.4	4.7%	90-100	5.3	0%
10-20	4,554.4	13.7%	100-110	4.2	0%
20-30	7,218.3	21.8%	110-120	5.8	0%
30-40	8,627.4	26.0%	120-130	10.6	0%
40-50	6,131.9	18.5%	130-140	15.0	0%
50-60	3,004.7	9.1%	140-150	18.4	0.1%
60-70	1,371.8	4.1%	150-160	17.2	0.1%
70-80	496.6	1.5%	160-170	12.1	0%
80-90	84.0	0.3%	170-180	4.2	0%



Illuminance at a Distance

	Center Beam fc	Beam Width	
2.5R	2,588 fc	4.8 ft	4.9 ft
5.0R	647 fc	9.7 ft	9.9 ft
7.5R	288 fc	14.5 ft	14.8 ft
10.0R	162 fc	19.3 ft	19.7 ft
12.5R	104 fc	24.2 ft	24.6 ft
15.0R	71.9 fc	29.0 ft	29.6 ft

■ Vert. Spread: 88.1°
 ■ Horiz. Spread: 89.2°

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

RCC %:	80				70				50				30				10				0
RW %:	70	50	30	0	70	50	30	0	50	30	20	50	30	20	50	30	20	50	30	20	0
RCR: 0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.00	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00	1.00	1.00	1.00
1	1.11	1.08	1.05	1.02	1.09	1.06	1.03	.90	1.01	.99	.97	.98	.96	.94	.94	.93	.91	.89	.89	.89	.89
2	1.04	.97	.92	.87	1.01	.95	.91	.80	.92	.88	.84	.89	.86	.83	.86	.83	.81	.79	.79	.79	.79
3	.96	.88	.81	.76	.94	.86	.80	.71	.84	.78	.74	.81	.77	.73	.78	.75	.72	.70	.70	.70	.70

4	.89	.80	.72	.67	.87	.78	.72	.63	.76	.70	.66	.74	.69	.65	.72	.67	.64	.62
5	.83	.72	.65	.59	.81	.71	.64	.57	.69	.63	.58	.67	.62	.58	.66	.61	.57	.55
6	.78	.66	.58	.53	.76	.65	.58	.51	.64	.57	.52	.62	.56	.52	.60	.55	.51	.50
7	.72	.61	.53	.48	.71	.60	.53	.46	.58	.52	.47	.57	.51	.47	.56	.50	.47	.45
8	.68	.56	.48	.43	.66	.55	.48	.42	.54	.47	.43	.53	.47	.42	.52	.46	.42	.41
9	.64	.52	.44	.39	.62	.51	.44	.38	.50	.43	.39	.49	.43	.39	.48	.43	.39	.37
10	.60	.48	.41	.36	.59	.47	.40	.35	.46	.40	.36	.45	.40	.36	.45	.39	.35	.34

Candela Table - Type C

	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5	360
0	16172	16172	16172	16172	16172	16172	16172	16172	16172	16172	16172	16172	16172	16172	16172	16172	16172
1	16176	16183	16180	16180	16178	16176	16175	16173	16172	16167	16165	16167	16164	16166	16175	16175	16176
2	16182	16189	16188	16185	16188	16186	16178	16173	16169	16164	16162	16162	16159	16160	16175	16178	16182
3	16183	16192	16199	16193	16196	16187	16180	16172	16168	16161	16158	16157	16150	16155	16173	16178	16183
4	16188	16197	16204	16198	16201	16191	16184	16170	16169	16156	16154	16151	16145	16149	16173	16181	16188
5	16191	16199	16209	16199	16207	16194	16188	16170	16167	16153	16150	16145	16136	16146	16170	16181	16191
6	16192	16199	16207	16198	16209	16194	16190	16166	16166	16151	16146	16137	16128	16146	16165	16181	16192
7	16190	16195	16203	16195	16212	16197	16192	16164	16166	16146	16138	16130	16121	16139	16163	16180	16190
8	16184	16189	16196	16190	16213	16192	16191	16162	16162	16142	16133	16121	16114	16135	16160	16177	16184
9	16176	16179	16186	16179	16207	16190	16193	16164	16157	16136	16123	16112	16109	16132	16156	16171	16176
10	16167	16164	16171	16169	16204	16190	16189	16161	16152	16129	16117	16102	16106	16126	16148	16162	16167
11	16153	16144	16154	16152	16188	16183	16182	16160	16149	16120	16109	16094	16097	16118	16141	16147	16153
12	16138	16127	16137	16134	16178	16169	16176	16152	16143	16114	16103	16088	16090	16110	16130	16132	16138
13	16119	16101	16118	16117	16159	16159	16166	16144	16139	16108	16099	16088	16078	16095	16113	16115	16119
14	16093	16075	16097	16096	16145	16142	16155	16136	16136	16098	16094	16082	16065	16079	16095	16091	16093
15	16064	16048	16068	16070	16123	16127	16143	16127	16129	16092	16087	16076	16052	16062	16074	16067	16064
16	16032	16014	16031	16038	16099	16105	16132	16119	16125	16083	16079	16066	16037	16040	16056	16040	16032
17	15998	15975	15988	16003	16065	16081	16116	16110	16115	16079	16074	16056	16023	16020	16032	16010	15998
18	15959	15934	15943	15959	16030	16051	16090	16095	16106	16073	16069	16044	16006	15997	16006	15977	15959
19	15913	15881	15890	15906	15990	16013	16062	16076	16090	16063	16060	16037	15984	15974	15977	15940	15913
20	15855	15819	15823	15846	15936	15964	16026	16051	16071	16051	16050	16027	15964	15950	15943	15895	15855
21	15782	15731	15748	15771	15871	15913	15987	16022	16053	16033	16032	16006	15943	15920	15899	15842	15782
22	15704	15650	15657	15684	15802	15854	15941	15988	16031	16011	16008	15983	15920	15885	15846	15778	15704
23	15626	15563	15571	15602	15712	15792	15889	15949	15996	15984	15986	15954	15891	15842	15786	15696	15626
24	15535	15461	15466	15499	15614	15717	15827	15900	15962	15953	15956	15919	15848	15787	15716	15627	15535
25	15431	15350	15350	15392	15534	15620	15761	15850	15923	15920	15917	15882	15801	15721	15633	15528	15431
26	15318	15230	15220	15274	15408	15528	15670	15790	15881	15880	15880	15844	15745	15643	15559	15425	15318
27	15189	15079	15093	15142	15278	15414	15587	15714	15818	15834	15831	15794	15685	15572	15462	15311	15189
28	15045	14928	14933	14978	15126	15285	15477	15646	15746	15771	15774	15727	15613	15473	15349	15189	15045
29	14888	14760	14750	14809	14960	15140	15353	15521	15661	15691	15698	15657	15521	15365	15210	15034	14888
30	14698	14552	14564	14620	14780	14976	15208	15399	15557	15614	15614	15554	15414	15239	15065	14866	14698
31	14481	14336	14339	14411	14578	14778	15035	15261	15434	15505	15505	15438	15284	15080	14887	14663	14481
32	14258	14093	14113	14183	14330	14573	14852	15108	15281	15371	15380	15309	15128	14904	14678	14437	14258
33	13987	13851	13834	13928	14077	14335	14645	14923	15112	15217	15228	15151	14934	14696	14438	14179	13987
34	13713	13555	13555	13655	13806	14072	14407	14704	14914	15031	15050	14961	14738	14452	14192	13912	13713
35	13379	13230	13243	13356	13497	13780	14128	14415	14668	14800	14824	14692	14479	14147	13848	13594	13379
36	13012	12876	12890	13000	13162	13425	13775	14112	14378	14529	14525	14396	14147	13822	13508	13203	13012
37	12601	12469	12476	12628	12745	13058	13412	13758	14034	14155	14189	14040	13786	13412	13083	12803	12601
38	12069	11942	11964	12178	12288	12635	13002	13353	13586	13750	13776	13614	13355	12979	12638	12334	12069
39	11466	11373	11422	11628	11731	12126	12531	12839	13110	13264	13290	13060	12854	12463	12103	11705	11466
40	10804	10734	10722	10972	11075	11506	11970	12290	12567	12706	12647	12459	12295	11828	11455	11019	10804
41	10121	10040	10058	10236	10340	10776	11190	11612	11914	12049	11949	11745	11576	11095	10709	10297	10121
42	9360	9260	9285	9451	9543	9978	10380	10817	11146	11297	11177	10962	10753	10316	9865	9576	9360
43	8653	8497	8498	8667	8674	9068	9551	9997	10245	10421	10384	10169	9961	9531	9110	8854	8653
44	7955	7762	7782	7916	7937	8274	8706	9072	9416	9615	9504	9290	9154	8699	8353	8082	7955
45	7242	7084	7049	7210	7227	7448	7839	8237	8567	8792	8684	8510	8345	7893	7608	7436	7242
46	6572	6515	6455	6536	6587	6778	7138	7464	7763	7902	7902	7716	7539	7137	6914	6692	6572

47	5977	5947	5880	5958	5972	6188	6528	6796	7048	7167	7166	7017	6834	6539	6322	6127	5977
48	5504	5411	5389	5501	5484	5676	5992	6166	6377	6524	6528	6412	6259	5952	5758	5584	5504
49	5031	4981	4978	5036	5051	5226	5499	5665	5848	5972	5937	5824	5704	5478	5263	5146	5031
50	4625	4580	4600	4622	4665	4789	5029	5220	5380	5492	5469	5356	5233	5041	4845	4699	4625
51	4259	4206	4245	4277	4309	4423	4636	4801	4955	5015	5045	4924	4834	4641	4457	4321	4259
52	3920	3840	3905	3933	3949	4103	4270	4429	4528	4621	4663	4539	4409	4267	4102	3974	3920
53	3611	3533	3603	3627	3641	3792	3915	4057	4166	4245	4298	4175	4076	3948	3805	3663	3611
54	3340	3261	3310	3333	3365	3499	3594	3741	3845	3901	3927	3813	3740	3619	3493	3411	3340
55	3061	2980	3057	3083	3108	3194	3283	3449	3557	3555	3616	3524	3441	3324	3186	3142	3061
56	2843	2738	2813	2839	2840	2945	3022	3178	3262	3262	3329	3249	3159	3061	2934	2866	2843
57	2612	2535	2585	2604	2606	2719	2785	2902	3001	3006	3068	2966	2895	2810	2696	2633	2612
58	2386	2315	2381	2381	2381	2504	2564	2668	2753	2769	2824	2712	2655	2584	2480	2391	2386
59	2196	2143	2180	2179	2175	2304	2347	2454	2527	2549	2579	2483	2446	2391	2261	2190	2196
60	2001	1964	2010	1982	1983	2095	2163	2248	2308	2346	2369	2267	2237	2188	2068	2008	2001
61	1830	1800	1845	1817	1799	1917	1989	2060	2096	2136	2174	2077	2054	2007	1896	1835	1830
62	1665	1643	1678	1661	1648	1752	1824	1874	1924	1963	1979	1890	1876	1836	1735	1678	1665
63	1514	1502	1517	1515	1507	1584	1656	1711	1763	1793	1808	1727	1704	1661	1577	1526	1514
64	1370	1354	1384	1373	1377	1439	1508	1560	1612	1639	1649	1576	1559	1526	1439	1394	1370
65	1245	1224	1251	1251	1258	1308	1368	1418	1471	1478	1503	1444	1420	1382	1311	1266	1245
66	1133	1108	1133	1145	1132	1174	1239	1286	1323	1346	1366	1315	1287	1248	1194	1160	1133
67	1032	998	1019	1035	1030	1060	1121	1153	1202	1227	1239	1184	1167	1135	1085	1050	1032
68	921	903	922	934	933	940	1002	1046	1089	1114	1114	1074	1057	1010	979	950	921
69	826	815	818	841	834	834	903	945	968	998	1006	969	949	901	876	854	826
70	740	726	734	761	751	735	810	843	858	898	902	877	848	810	778	768	740
71	664	656	658	680	676	652	729	744	770	805	804	778	767	728	710	691	664
72	598	585	596	617	595	581	645	651	676	730	722	700	685	648	636	624	598
73	534	532	534	548	521	509	573	571	598	645	643	624	612	577	567	556	534
74	479	474	476	491	453	461	504	493	540	575	577	558	541	516	510	501	479
75	424	415	416	432	405	409	447	407	491	512	505	489	483	455	444	441	424
76	372	369	369	381	355	364	402	352	441	454	445	432	420	396	391	394	372
77	332	322	327	339	310	323	362	308	393	398	391	377	370	351	349	342	332
78	291	283	284	292	265	281	317	276	344	343	345	324	322	307	301	296	291
79	245	242	246	257	223	246	275	239	294	298	288	282	279	260	257	256	245
80	208	201	208	215	192	211	232	210	256	251	242	231	239	217	214	215	208
81	173	172	170	178	162	173	193	184	212	206	202	186	189	178	175	174	173
82	135	132	137	137	127	142	160	155	170	169	160	150	153	142	141	144	135
83	110	103	107	111	98	110	126	123	136	133	124	115	112	105	106	111	110
84	75	82	72	82	70	83	91	96	102	101	88	86	82	79	78	85	75
85	58	61	54	52	47	60	68	70	78	74	57	59	59	50	39	55	58
86	40	36	30	36	28	34	48	50	51	47	27	33	40	28	34	36	40
87	17	16	13	20	10	21	22	29	29	28	20	12	11	15	15	15	17
88	10	9	9	12	14	0	12	12	16	7	11	0	0	9	12	0	10
89	9	10	12	9	0	9	0	10	11	9	8	0	0	10	10	12	9
90	7	8	10	10	0	12	0	0	10	0	8	9	0	0	10	8	7
91	0	8	10	7	0	12	7	0	8	9	0	0	0	0	10	9	0
92	7	11	8	0	0	7	7	0	7	9	9	8	0	0	8	7	7
93	10	0	7	8	0	8	0	9	0	8	0	8	0	0	10	8	10
94	0	9	10	8	0	12	8	0	8	0	10	7	0	9	9	10	0
95	12	9	10	8	0	8	0	0	0	7	10	0	0	0	9	0	12

96	9	9	8	7	0	7	0	8	0	0	10	7	0	0	0	9	9
97	8	7	8	9	0	10	8	0	0	7	11	0	0	7	11	0	8
98	0	8	0	0	0	0	0	0	0	10	0	7	0	10	10	8	0
99	9	8	8	8	8	0	0	7	0	10	0	0	0	0	9	0	9
100	0	8	9	0	0	0	8	0	7	7	10	8	0	0	7	0	0
101	0	8	8	9	0	0	8	0	0	0	0	0	0	0	0	9	0
102	10	9	7	12	7	0	0	0	7	0	8	0	0	0	7	7	10
103	0	0	9	9	0	0	7	0	0	7	0	8	0	9	7	7	0
104	0	9	0	8	0	0	0	0	0	0	9	0	0	0	9	0	0
105	0	10	9	9	0	0	0	0	7	7	0	0	0	7	0	0	0
106	9	7	9	14	0	0	9	7	0	0	0	8	0	0	8	7	9
107	9	8	9	10	0	0	0	0	8	7	7	7	0	0	0	0	9
108	11	11	10	8	9	8	8	0	7	0	8	0	0	0	10	9	11
109	8	8	8	8	0	0	9	0	0	0	0	0	0	0	8	12	8
110	10	10	7	9	0	0	0	7	0	0	9	0	0	7	9	7	10
111	0	13	9	10	0	0	7	0	11	8	8	8	0	8	8	11	0
112	9	12	8	13	0	0	0	0	0	0	0	8	0	8	0	10	9
113	0	11	10	9	0	9	0	7	0	9	0	0	0	8	0	0	0
114	10	11	8	12	0	0	10	8	0	9	7	0	0	0	10	0	10
115	9	14	10	8	7	0	0	0	8	9	10	0	0	10	0	7	9
116	11	14	9	9	0	0	7	8	7	0	9	9	0	0	10	12	11
117	8	11	10	10	8	7	0	0	12	0	9	0	0	9	10	7	8
118	9	13	10	10	8	0	0	10	0	7	9	9	0	0	0	9	9
119	11	14	12	10	9	8	11	0	8	10	10	10	0	0	10	8	11
120	12	13	8	14	8	8	0	0	12	0	12	9	0	9	0	9	12
121	8	11	14	12	10	10	10	8	9	10	13	0	0	0	12	10	8
122	11	13	10	12	8	8	12	13	7	10	12	9	0	7	9	9	11
123	14	14	13	8	11	9	15	10	9	12	13	9	0	12	12	12	14
124	11	15	13	14	0	9	8	10	10	10	14	11	7	11	12	13	11
125	15	17	14	14	13	9	10	13	13	10	12	14	7	12	14	12	15
126	15	12	9	16	12	14	15	12	13	11	14	13	11	16	13	13	15
127	14	17	13	16	9	11	10	14	15	12	16	14	10	12	17	16	14
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129	17	17	14	14	15	14	16	14	19	16	16	12	10	14	17	17	17
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Luminaire Report Summary

IESNA:LM-63-1995
[TEST]
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[LUMCAT]
[LUMINAIRE]
[LAMPCAT]
[LAMP]
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[_CURRENT] 0.861 A
[_POWERFACTOR] 0.960
[TESTLAB]
[_TESTINST] GPM-3000
[_TESTDIST] 14.140 m [K=1.0000]
[_TESTTEMPERATURE] 25.0 'C
[_TESTHUMIDITY]
[_TESTOPERATOR]
[BALLAST]
[BALLASTCAT]
FILE: CANDELA MULTIPLIER: 1
FILE: VERTICAL ANGLES: 181, HORIZONTAL ANGLES: 17
FILE: COORDINATE SYSTEM: TYPE C
FILE: UNIT OF MEASURE: METRIC
FILE: BALLAST FACTOR: 1

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Reported data calculated from manufacturer's data file, based on IES recommended methods.