

Photometrics Pro

Luminaire Photometric Report

Filename: HB18B Low Wattage

Manufacturer: ASmart LIGHT CO., LTD

Luminaire Cat: AST-HB18B-150WL1B1T2A1-abc35WD

Lamp Output: 1 lamp, rated Lumens/lamp: 20278.6

Max Candela: 9,902.5 at Horizontal: 225°, Vertical: 16°

Input Wattage: 152.55

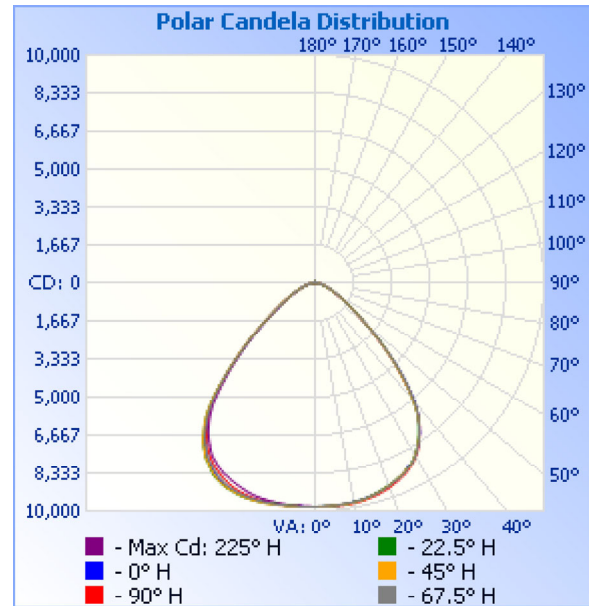
Luminous Opening: Circular (Dia: 8.27")

Test: BLC2209005E-B

Test Lab: UTEST TECHNICAL LABORATORY CO.LTD

Photometry : Type C

Nema Type: 6 X 6



Roadway Summary

Cutoff Classification:	CUTOFF
Distribution:	Type VS
Max Cd, 90 Deg Vert:	12.4
Max Cd, 80 to <90 Deg:	176.0
	Lumens % Lamp
Downward Street Side:	9,951.9 49.1%
Downward House Side:	10,238.7 50.5%
Downward Total:	20,190.5 99.6%
Upward Street Side:	46.0 0.2%
Upward House Side:	42.1 0.2%
Upward Total:	88.1 0.4%
Total Lumens:	20,278.6 100%

Flood Summary

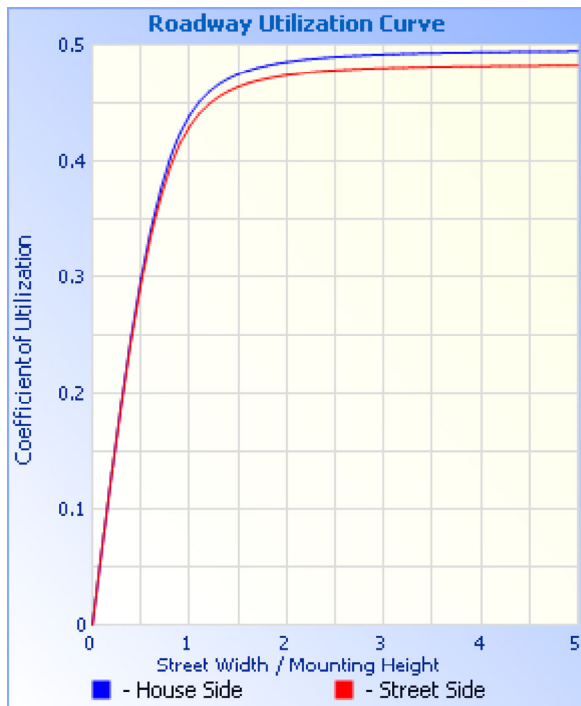
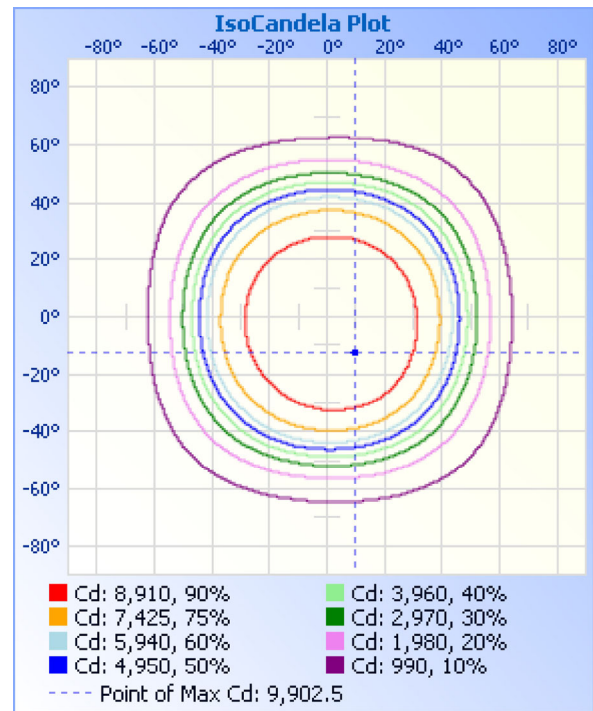
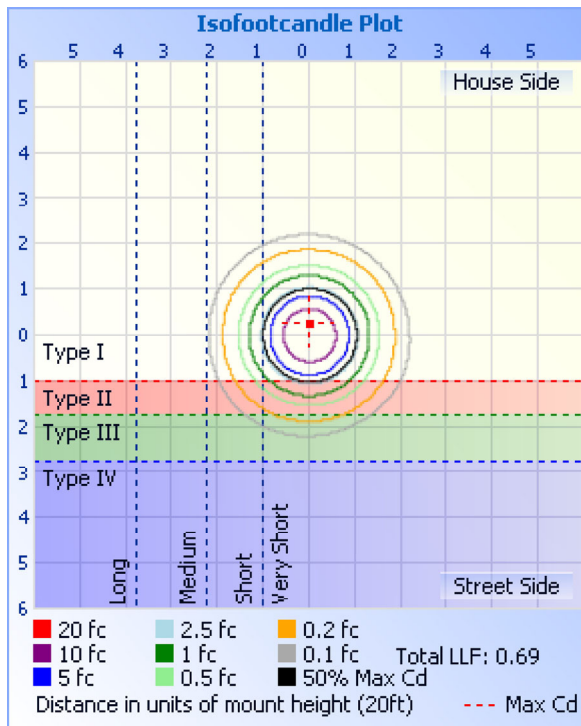
	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	95.2%	19,304.5	125.4	126.7
Beam (50%):	75.9%	15,392.8	87.7	89.1
Total:	100%	20,271.5		

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Luminaire
0-30	8,009.3	39.5%	39.5%
0-40	13,068.1	64.4%	64.5%
0-60	18,900.2	93.2%	93.2%
60-90	1,287.4	6.3%	6.3%
70-100	410.3	2%	2%
90-120	25.0	0.1%	0.1%
0-90	20,187.6	99.6%	99.6%
90-180	88.1	0.4%	0.4%
0-180	20,275.7	100%	100%

Lumens Per Zone

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	936.5	4.6%	90-100	8.2	0%
10-20	2,759.1	13.6%	100-110	7.9	0%
20-30	4,313.7	21.3%	110-120	9.0	0%
30-40	5,058.8	25.0%	120-130	10.8	0.1%
40-50	3,893.2	19.2%	130-140	13.1	0.1%
50-60	1,938.9	9.6%	140-150	14.5	0.1%
60-70	885.2	4.4%	150-160	12.8	0.1%
70-80	344.8	1.7%	160-170	8.7	0%
80-90	57.3	0.3%	170-180	3.1	0%



Illuminance at a Distance

	Center Beam fc	Beam Width	
4.3R	531 fc	8.5 ft	8.3 ft
8.7R	130 fc	17.1 ft	16.7 ft
13.0R	58.0 fc	25.6 ft	25.0 ft
17.3R	32.8 fc	34.1 ft	33.3 ft
21.7R	20.8 fc	42.7 ft	41.7 ft
26.0R	14.5 fc	51.2 ft	50.0 ft

■ Vert. Spread: 89.1°
 ■ Horiz. Spread: 87.7°

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	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	1.11	1.08	1.04	1.01	1.09	1.05	1.02	.89	1.01	.99	.97	.97	.95	.94	.94	.92	.91	.89
2	1.03	.97	.92	.87	1.01	.95	.90	.79	.92	.88	.84	.88	.85	.82	.86	.83	.80	.78
3	.96	.87	.81	.76	.94	.86	.80	.70	.83	.78	.74	.80	.76	.72	.78	.74	.71	.69

4	.89	.79	.72	.66	.87	.78	.71	.63	.75	.70	.65	.73	.68	.64	.71	.67	.63	.61
5	.83	.72	.64	.59	.81	.71	.64	.56	.69	.63	.58	.67	.61	.57	.65	.60	.56	.55
6	.77	.66	.58	.52	.75	.65	.57	.51	.63	.56	.52	.61	.56	.51	.60	.55	.51	.49
7	.72	.60	.52	.47	.70	.59	.52	.46	.58	.51	.47	.56	.51	.46	.55	.50	.46	.44
8	.67	.55	.48	.43	.66	.55	.47	.42	.53	.47	.42	.52	.46	.42	.51	.46	.42	.40
9	.63	.51	.44	.39	.62	.50	.43	.38	.49	.43	.38	.48	.42	.38	.47	.42	.38	.36
10	.59	.47	.40	.35	.58	.47	.40	.35	.46	.40	.35	.45	.39	.35	.44	.39	.35	.33

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	9809	9809	9809	9809	9809	9809	9809	9809	9809	9809	9809	9809	9809	9809	9809	9809	9809
1	9807	9805	9809	9797	9825	9822	9808	9808	9808	9815	9816	9814	9813	9821	9800	9808	9807
2	9805	9804	9809	9803	9823	9819	9800	9816	9812	9812	9818	9805	9816	9808	9796	9808	9805
3	9808	9806	9797	9797	9813	9816	9806	9816	9811	9822	9829	9818	9824	9820	9801	9809	9808
4	9802	9802	9804	9797	9818	9822	9811	9821	9815	9823	9830	9827	9812	9808	9787	9809	9802
5	9795	9801	9794	9797	9824	9829	9813	9818	9822	9826	9831	9814	9817	9808	9796	9811	9795
6	9792	9793	9796	9779	9817	9822	9817	9815	9824	9826	9844	9824	9822	9810	9800	9809	9792
7	9786	9791	9784	9773	9821	9824	9812	9815	9834	9833	9853	9828	9824	9816	9799	9804	9786
8	9778	9781	9790	9766	9817	9817	9808	9822	9833	9832	9853	9826	9825	9813	9793	9798	9778
9	9766	9768	9786	9761	9812	9819	9811	9821	9837	9839	9863	9846	9829	9806	9791	9791	9766
10	9753	9754	9767	9755	9798	9813	9805	9820	9844	9842	9871	9855	9828	9802	9778	9783	9753
11	9736	9740	9755	9741	9782	9806	9813	9827	9842	9864	9875	9854	9826	9803	9772	9766	9736
12	9721	9725	9732	9720	9781	9790	9798	9822	9848	9871	9888	9853	9820	9796	9760	9757	9721
13	9697	9704	9719	9711	9752	9784	9796	9829	9856	9887	9901	9864	9825	9789	9745	9729	9697
14	9672	9671	9693	9679	9741	9762	9777	9832	9868	9893	9898	9857	9822	9789	9726	9700	9672
15	9645	9637	9653	9657	9711	9756	9767	9825	9873	9897	9902	9857	9820	9774	9708	9681	9645
16	9614	9604	9623	9626	9685	9718	9746	9809	9868	9893	9902	9840	9811	9759	9688	9654	9614
17	9574	9565	9583	9598	9655	9687	9722	9799	9870	9897	9896	9841	9789	9720	9653	9616	9574
18	9539	9522	9550	9555	9610	9661	9682	9783	9857	9891	9882	9824	9771	9702	9616	9572	9539
19	9496	9478	9493	9511	9578	9623	9672	9769	9837	9884	9864	9808	9742	9664	9569	9531	9496
20	9446	9436	9449	9457	9543	9571	9625	9737	9814	9866	9843	9786	9717	9627	9525	9485	9446
21	9392	9385	9409	9414	9480	9527	9579	9707	9790	9842	9827	9758	9674	9575	9481	9442	9392
22	9349	9336	9340	9363	9427	9476	9536	9670	9758	9815	9793	9718	9627	9521	9431	9388	9349
23	9301	9283	9297	9311	9372	9417	9480	9619	9729	9781	9769	9677	9577	9468	9377	9338	9301
24	9242	9228	9242	9255	9313	9353	9422	9565	9691	9750	9733	9613	9516	9410	9317	9285	9242
25	9173	9165	9178	9200	9252	9278	9338	9497	9639	9701	9685	9558	9450	9341	9269	9228	9173
26	9099	9090	9086	9131	9181	9213	9284	9421	9565	9634	9622	9484	9367	9276	9207	9166	9099
27	8987	9022	9053	9040	9088	9138	9201	9340	9476	9571	9545	9420	9290	9213	9131	9085	8987
28	8972	8949	8976	8985	9000	9054	9107	9261	9400	9495	9466	9317	9208	9134	9062	8986	8972
29	8852	8833	8860	8875	8899	8950	9012	9168	9292	9375	9351	9221	9121	9044	8954	8924	8852
30	8744	8724	8731	8767	8775	8831	8870	9047	9177	9249	9238	9098	9018	8933	8863	8815	8744
31	8605	8572	8602	8618	8668	8710	8803	8927	9052	9128	9108	9042	8899	8828	8768	8673	8605
32	8467	8429	8450	8472	8495	8564	8669	8797	8956	9024	9029	8883	8772	8697	8615	8542	8467
33	8315	8263	8286	8314	8337	8403	8501	8638	8784	8854	8859	8716	8628	8540	8460	8386	8315
34	8142	8095	8126	8134	8157	8235	8330	8469	8612	8698	8693	8558	8457	8369	8297	8211	8142
35	7973	7914	7942	7957	7968	8048	8144	8288	8412	8515	8528	8388	8264	8179	8131	8043	7973
36	7756	7721	7745	7739	7773	7832	7942	8060	8221	8305	8335	8188	8076	7998	7940	7835	7756
37	7538	7505	7532	7519	7527	7619	7734	7858	7983	8068	8089	7954	7872	7800	7722	7636	7538
38	7328	7262	7283	7312	7286	7395	7479	7632	7770	7838	7867	7720	7630	7583	7499	7413	7328
39	7025	6975	6984	7024	6997	7131	7220	7378	7490	7580	7592	7459	7419	7325	7223	7157	7025
40	6741	6659	6640	6727	6688	6799	6913	7090	7211	7284	7290	7159	7137	7032	6958	6858	6741
41	6425	6318	6323	6366	6320	6442	6566	6727	6850	6940	6939	6822	6814	6692	6610	6522	6425
42	6055	5983	5980	6011	5934	6013	6183	6350	6471	6555	6550	6451	6416	6336	6215	6162	6055
43	5703	5598	5595	5649	5523	5642	5742	5964	6023	6110	6116	6038	6024	5919	5832	5782	5703
44	5332	5231	5226	5261	5166	5282	5349	5553	5630	5697	5703	5649	5609	5527	5448	5401	5332
45	4933	4859	4853	4882	4812	4885	4986	5118	5232	5300	5320	5263	5207	5143	5061	4992	4933
46	4535	4496	4477	4515	4446	4527	4620	4732	4842	4863	4902	4848	4846	4775	4669	4627	4535

47	4173	4157	4120	4152	4058	4168	4268	4349	4436	4496	4546	4488	4490	4429	4316	4252	4173
48	3809	3824	3782	3769	3723	3837	3891	3983	4075	4130	4183	4137	4122	4066	3984	3861	3809
49	3497	3472	3427	3440	3408	3521	3568	3648	3722	3802	3851	3810	3789	3744	3658	3524	3497
50	3192	3184	3153	3120	3122	3200	3259	3301	3408	3469	3511	3499	3466	3433	3339	3211	3192
51	2909	2874	2867	2845	2853	2926	2981	2996	3081	3177	3209	3167	3160	3142	3054	2930	2909
52	2657	2626	2599	2606	2584	2691	2724	2735	2810	2910	2920	2892	2889	2875	2776	2683	2657
53	2434	2406	2384	2390	2348	2465	2482	2501	2560	2660	2654	2641	2658	2629	2541	2455	2434
54	2208	2207	2182	2174	2146	2258	2281	2299	2340	2434	2428	2432	2432	2399	2320	2233	2208
55	2028	2025	1978	1987	1962	2061	2097	2091	2136	2210	2207	2226	2239	2210	2119	2044	2028
56	1846	1845	1826	1828	1775	1888	1925	1926	1944	2025	2035	2055	2054	2027	1940	1875	1846
57	1686	1695	1663	1684	1626	1728	1766	1772	1787	1861	1871	1895	1896	1860	1780	1721	1686
58	1546	1557	1529	1551	1490	1582	1612	1628	1645	1705	1723	1746	1740	1702	1625	1589	1546
59	1408	1429	1407	1423	1360	1431	1482	1485	1512	1570	1588	1612	1588	1557	1492	1457	1408
60	1287	1309	1290	1314	1248	1303	1353	1360	1387	1440	1463	1477	1445	1427	1372	1341	1287
61	1180	1180	1189	1199	1140	1186	1229	1247	1271	1322	1330	1346	1307	1292	1262	1233	1180
62	1077	1079	1078	1108	1043	1079	1113	1144	1169	1220	1227	1231	1193	1184	1163	1138	1077
63	987	978	990	1020	960	971	1013	1041	1078	1127	1130	1129	1080	1077	1075	1041	987
64	895	884	902	935	880	883	926	953	994	1027	1023	1020	978	974	990	952	895
65	819	802	826	865	810	800	840	870	908	941	941	925	883	893	912	887	819
66	747	728	751	793	734	726	764	796	830	862	859	841	802	815	842	807	747
67	680	656	684	723	675	660	688	728	762	786	786	761	729	742	773	742	680
68	612	597	621	659	616	595	627	655	700	718	717	691	661	678	700	671	612
69	563	541	570	601	561	538	569	597	631	651	644	622	604	616	641	608	563
70	503	486	512	538	509	491	516	549	580	588	586	556	537	556	589	558	503
71	462	444	466	490	457	441	462	493	517	530	532	505	491	507	529	501	462
72	415	394	420	436	416	396	418	439	469	474	475	453	443	456	473	454	415
73	384	358	387	389	377	357	380	402	418	421	423	403	402	416	427	408	384
74	340	327	347	351	338	320	338	363	380	377	382	368	364	373	386	369	340
75	301	287	313	310	297	290	299	319	333	334	338	328	324	338	341	325	301
76	270	256	275	274	267	254	267	279	298	294	301	291	286	295	306	289	270
77	237	224	243	238	235	220	232	242	259	256	265	253	253	265	269	258	237
78	212	199	213	213	203	191	201	212	220	220	227	216	222	229	235	226	212
79	180	167	185	176	173	161	165	184	188	185	188	185	186	197	207	193	180
80	156	147	156	150	146	135	137	151	160	157	158	156	159	167	176	165	156
81	127	119	129	121	114	109	114	113	128	132	130	125	130	139	145	137	127
82	103	91	104	100	98	85	87	92	103	100	105	95	107	112	122	112	103
83	79	73	79	78	74	67	62	68	75	83	81	77	84	84	96	87	79
84	56	47	56	59	55	38	49	36	54	42	52	56	66	65	71	63	56
85	42	34	36	35	35	25	23	20	32	32	33	29	50	47	44	40	42
86	24	19	18	23	20	15	13	16	20	16	15	15	31	29	28	29	24
87	15	8	14	13	12	0	10	11	15	10	11	10	17	19	15	12	15
88	13	9	10	13	15	8	12	10	15	8	14	0	13	14	10	11	13
89	10	0	7	11	14	0	9	10	9	7	11	10	7	9	11	12	10
90	11	7	10	10	11	0	8	0	12	0	10	8	12	11	10	8	11
91	9	7	10	9	13	0	8	0	11	0	11	0	8	10	9	12	9
92	12	0	8	11	12	9	0	0	13	0	12	8	11	0	8	9	12
93	10	0	10	11	14	0	11	7	11	0	13	8	11	9	9	10	10
94	9	0	11	10	13	7	11	0	9	0	10	0	13	8	10	9	9
95	8	8	10	11	13	7	0	9	10	0	9	9	13	0	11	10	8

96	8	0	12	12	9	0	0	9	11	7	0	0	12	0	11	9	8
97	12	8	11	0	13	0	9	0	12	0	10	7	11	8	0	9	12
98	9	0	11	8	11	8	11	7	13	0	11	8	14	9	0	10	9
99	11	8	0	0	14	0	10	8	15	0	11	8	10	7	9	7	11
100	9	8	10	9	13	0	9	0	11	0	0	10	11	10	11	9	9
101	10	0	10	10	9	8	7	0	10	0	10	0	11	9	12	9	10
102	10	7	8	0	8	0	9	0	12	10	10	0	12	0	7	0	10
103	8	9	11	10	12	7	12	0	13	8	13	10	14	12	11	0	8
104	11	0	11	0	16	0	9	10	9	0	9	9	11	7	10	10	11
105	0	8	11	9	12	8	9	8	11	0	12	10	13	11	9	9	0
106	10	9	10	0	12	8	0	9	13	7	11	8	11	0	11	9	10
107	0	0	9	9	14	0	11	8	11	0	9	0	13	0	7	7	0
108	10	8	10	11	14	0	0	10	8	0	10	7	8	7	13	9	10
109	7	9	8	11	12	0	9	0	0	8	0	10	12	0	15	11	7
110	11	0	15	0	12	7	0	0	11	0	9	9	11	0	0	10	11
111	15	0	15	10	13	9	12	0	12	0	0	8	14	15	10	9	15
112	10	8	11	12	9	7	7	9	15	0	10	10	11	10	15	13	10
113	11	0	14	11	15	7	10	0	12	0	12	0	11	9	10	9	11
114	12	0	10	13	15	0	11	10	14	7	8	10	8	7	10	8	12
115	11	8	16	0	13	0	10	10	10	0	10	0	10	9	10	10	11
116	11	11	13	12	9	12	12	0	15	0	13	11	12	11	15	0	11
117	11	9	13	13	12	7	11	0	14	11	13	0	11	7	14	8	11
118	13	8	11	12	11	0	9	9	14	8	10	0	13	14	13	10	13
119	13	8	14	12	15	8	11	12	15	0	12	12	10	11	11	9	13
120	12	0	11	10	12	11	10	0	13	0	10	0	15	12	10	0	12
121	14	8	12	8	15	10	11	10	16	0	11	8	16	12	14	13	14
122	11	0	15	12	16	0	14	9	10	7	12	9	12	12	11	13	11
123	12	10	13	14	15	10	16	11	15	0	9	11	14	12	14	9	12
124	14	12	17	13	19	10	11	11	13	8	13	12	15	11	14	10	14
125	15	11	16	14	15	11	14	13	16	8	12	13	9	9	9	13	15
126	0	15	11	14	18	15	13	13	15	10	12	12	13	14	14	9	0
127	12	13	13	14	19	10	13	9	15	10	10	12	13	8	10	14	12
128	12	13	19	15	18	13	15	12	13	10	14	16	15	14	11	11	12
129	11	13	19	11	18	12	11	13	16	0	13	15	13	10	14	14	11
130	17	12	14	12	18	17	15	14	20	8	13	14	13	18	14	16	17
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Luminaire Report Summary

IESNA:LM-63-2002
[TEST] BLC2209005E-B
[ISSUEDATE] 2022/9/27 22:36
[MANUFAC] ASHART LIGHT CO., LTD
[LUMCAT] AST-HB18B-150WL1B1T2A1-abc35WD
[LUMINAIRE]
[LAMPCAT]
[LAMP]
[_VOLTAGE] 120.0 V
[_CURRENT] 1.274 A
[_POWERFACTOR] 0.998
[_THD] 2.06
[TESTLAB] UTEST TECHNICAL LABORATORY CO.LTD
[_TESTINST] GPM-3000
[_TESTDIST] 14.140 m [K=1.0000]
[_TESTTEMPERATURE] 25.7 '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.