

Photometrics Pro

Luminaire Photometric Report

Filename: AST-FL17-13WBH5DA1-a30-120V

Manufacturer: ASmart LIGHT CO., LTD

Luminaire Cat: AST-FL17-13WBH5DA1-a30

Lamp Output: 1 lamp, rated Lumens/lamp: 1734.5

Max Candela: 2,533.0 at Horizontal: 90°, Vertical: 2°

Input Wattage: 12.78

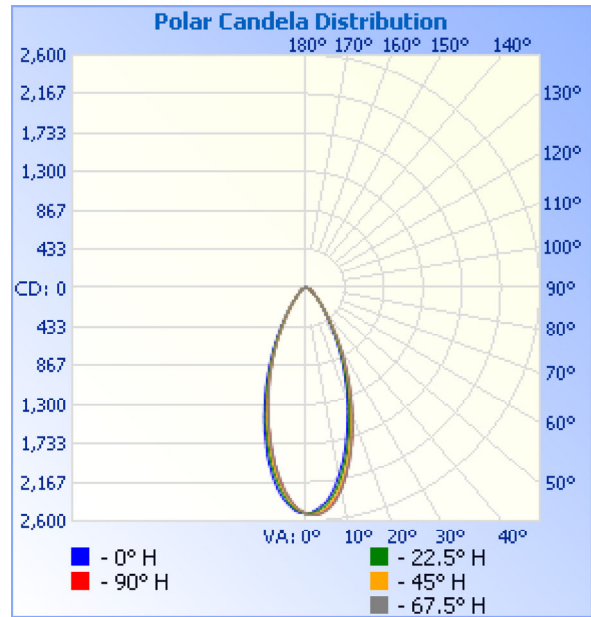
Luminous Opening: (L: 2.76", W: 2.76", H: 0")

Test: BLC2209013E-A

Test Lab: UTEST TECHNICAL LABORATORY CO.LTD

Photometry : Type C

Nema Type: 5 X 5



Roadway Summary

Cutoff Classification:	CUTOFF	
Distribution:	TYPE I, VERY SHORT	
Max Cd, 90 Deg Vert:	2.1	
Max Cd, 80 to <90 Deg:	10.4	
	Lumens	% Lamp
Downward Street Side:	863.1	49.8%
Downward House Side:	860.9	49.6%
Downward Total:	1,724.0	99.4%
Upward Street Side:	5.4	0.3%
Upward House Side:	5.1	0.3%
Upward Total:	10.5	0.6%
Total Lumens:	1,734.5	100%

Flood Summary

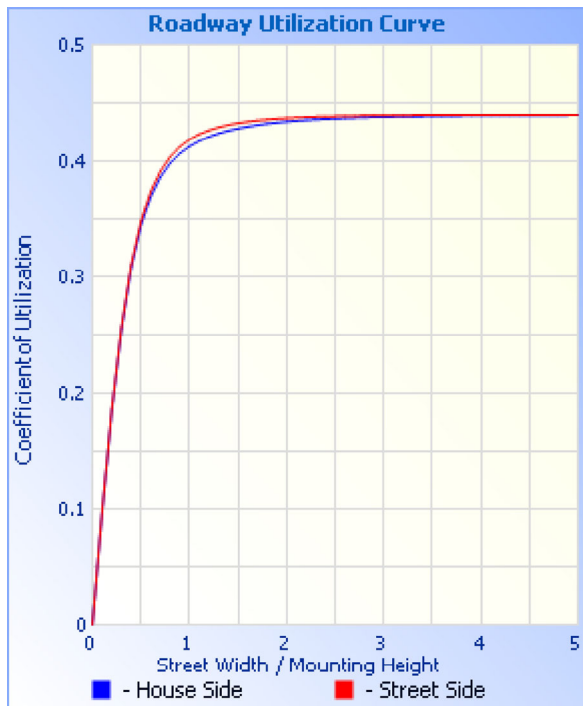
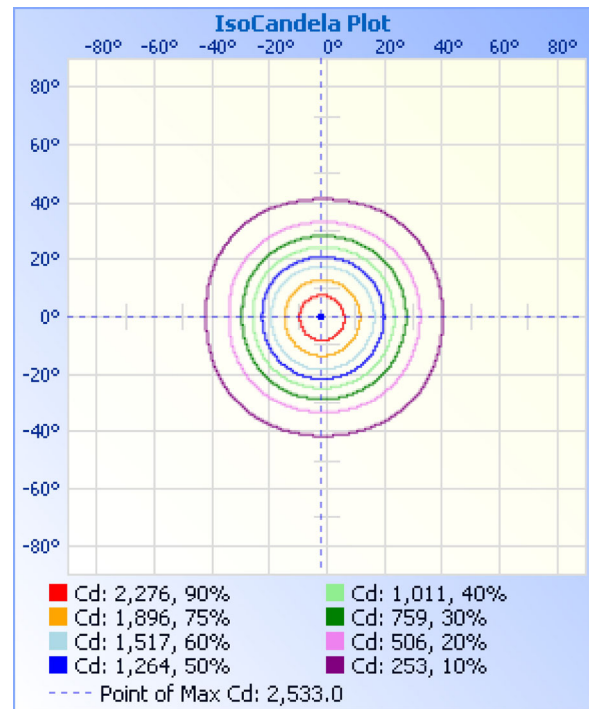
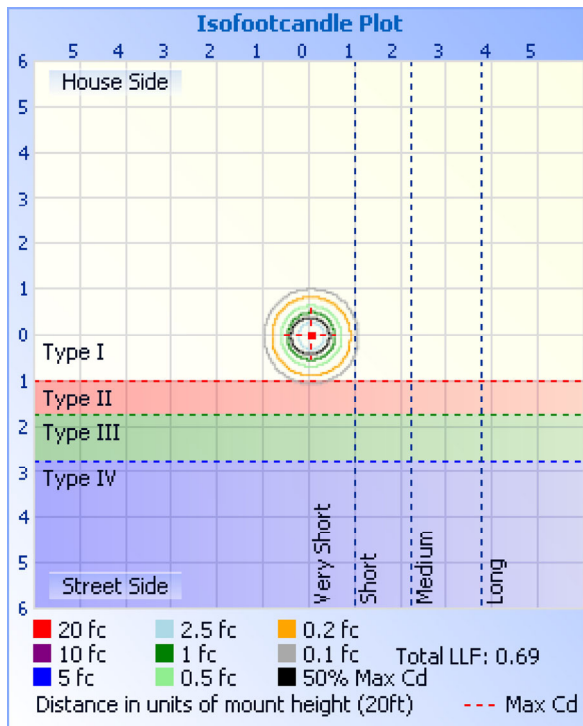
	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	83.9%	1,455.1	82.3	82.6
Beam (50%):	43.4%	753.3	42.3	42.3
Total:	99.9%	1,733.5		

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Luminaire
0-30	1,154.1	66.5%	66.6%
0-40	1,430.5	82.5%	82.5%
0-60	1,657.8	95.6%	95.6%
60-90	65.6	3.8%	3.8%
70-100	19.4	1.1%	1.1%
90-120	3.2	0.2%	0.2%
0-90	1,723.4	99.4%	99.4%
90-180	10.5	0.6%	0.6%
0-180	1,733.9	100%	100%

Lumens Per Zone

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	220.9	12.7%	90-100	1.1	0.1%
10-20	482.5	27.8%	100-110	1.1	0.1%
20-30	450.8	26.0%	110-120	1.1	0.1%
30-40	276.4	15.9%	120-130	1.0	0.1%
40-50	146.5	8.5%	130-140	1.2	0.1%
50-60	80.8	4.7%	140-150	1.5	0.1%
60-70	47.3	2.7%	150-160	1.7	0.1%
70-80	16.4	0.9%	160-170	1.3	0.1%
80-90	1.9	0.1%	170-180	0.5	0%



Illuminance at a Distance

	Center Beam fc	Beam Width	
1.7R	869 fc	1.3 ft	1.3 ft
3.3R	231 fc	2.6 ft	2.6 ft
5.0R	101 fc	3.9 ft	3.9 ft
6.7R	56.0 fc	5.2 ft	5.2 ft
8.3R	36.5 fc	6.4 ft	6.4 ft
10.0R	25.1 fc	7.7 ft	7.7 ft

■ Vert. Spread: 42.3°
■ Horiz. Spread: 42.3°

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	0	50	30	20	0	50	30	20	0	0
RCR: 0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	.99	1.11	1.11	1.11	1.06	1.06	1.06	1.06	1.01	1.01	1.01	1.01	.99	
1	1.13	1.10	1.07	1.05	1.10	1.08	1.05	.92	1.03	1.01	1.00	1.00	.98	.97	.96	.95	.94	.94	.94	.92	
2	1.07	1.01	.97	.93	1.04	1.00	.96	.85	.96	.93	.90	.93	.90	.88	.90	.88	.86	.86	.86	.84	
3	1.01	.94	.89	.84	.99	.92	.88	.79	.90	.86	.82	.87	.84	.81	.85	.82	.79	.78	.78	.78	

4	.95	.87	.81	.77	.94	.86	.81	.73	.84	.79	.75	.82	.78	.75	.80	.76	.74	.72
5	.90	.82	.75	.71	.89	.81	.75	.68	.79	.74	.70	.77	.73	.69	.75	.72	.68	.67
6	.86	.76	.70	.66	.84	.76	.70	.64	.74	.69	.65	.73	.68	.64	.71	.67	.64	.62
7	.82	.72	.66	.61	.80	.71	.65	.60	.70	.65	.61	.69	.64	.60	.67	.63	.60	.58
8	.78	.68	.62	.57	.76	.67	.61	.56	.66	.61	.57	.65	.60	.57	.64	.60	.56	.55
9	.74	.64	.58	.54	.73	.64	.58	.53	.63	.57	.54	.62	.57	.53	.61	.56	.53	.52
10	.71	.61	.55	.51	.70	.60	.55	.50	.59	.54	.51	.59	.54	.50	.58	.53	.50	.49

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	2513	2513	2513	2513	2513	2513	2513	2513	2513	2513	2513	2513	2513	2513	2513	2513	2513
1	2516	2516	2530	2524	2523	2525	2524	2519	2510	2502	2493	2494	2493	2488	2503	2505	2516
2	2491	2508	2521	2526	2533	2528	2519	2514	2500	2482	2474	2467	2465	2462	2478	2484	2491
3	2468	2493	2521	2531	2524	2518	2513	2493	2479	2459	2444	2428	2424	2436	2439	2456	2468
4	2435	2463	2496	2513	2517	2509	2503	2481	2446	2429	2398	2380	2380	2386	2403	2418	2435
5	2408	2442	2474	2498	2486	2491	2477	2455	2410	2383	2350	2330	2326	2330	2350	2369	2408
6	2363	2400	2439	2474	2463	2458	2446	2409	2372	2328	2292	2269	2271	2261	2287	2317	2363
7	2311	2354	2389	2436	2426	2421	2408	2366	2321	2273	2233	2209	2203	2207	2228	2259	2311
8	2252	2301	2345	2393	2375	2371	2354	2311	2266	2209	2168	2131	2142	2136	2164	2202	2252
9	2181	2243	2288	2335	2325	2321	2303	2258	2200	2143	2099	2060	2066	2065	2094	2132	2181
10	2112	2175	2227	2275	2269	2260	2236	2189	2138	2076	2029	1986	1994	1996	2022	2054	2112
11	2036	2103	2159	2206	2198	2199	2168	2121	2060	2003	1946	1907	1913	1909	1949	1983	2036
12	1966	2026	2094	2140	2134	2120	2098	2045	1986	1925	1869	1832	1836	1835	1860	1917	1966
13	1890	1955	2014	2058	2055	2050	2020	1977	1913	1844	1791	1751	1758	1758	1786	1835	1890
14	1816	1881	1937	1991	1978	1977	1951	1892	1823	1762	1714	1667	1677	1680	1710	1752	1816
15	1733	1799	1864	1912	1901	1894	1868	1820	1740	1684	1635	1600	1601	1598	1630	1684	1733
16	1654	1725	1780	1828	1823	1816	1789	1740	1672	1610	1559	1514	1524	1524	1557	1603	1654
17	1574	1646	1700	1748	1742	1726	1701	1647	1585	1529	1470	1434	1442	1453	1478	1521	1574
18	1499	1557	1622	1670	1662	1641	1620	1569	1505	1437	1394	1360	1367	1372	1407	1450	1499
19	1423	1483	1544	1591	1570	1564	1538	1489	1421	1361	1318	1290	1295	1300	1329	1375	1423
20	1347	1401	1455	1510	1492	1486	1454	1400	1343	1288	1243	1211	1224	1227	1257	1303	1347
21	1280	1332	1378	1429	1412	1405	1380	1319	1262	1209	1170	1141	1155	1160	1188	1233	1280
22	1200	1253	1304	1344	1334	1325	1301	1243	1188	1136	1092	1073	1087	1095	1122	1154	1200
23	1125	1176	1229	1269	1258	1240	1213	1165	1111	1062	1022	1004	1017	1026	1053	1090	1125
24	1056	1101	1152	1193	1180	1164	1140	1090	1039	985	953	937	952	958	990	1022	1056
25	991	1033	1084	1116	1099	1092	1066	1018	960	914	889	876	888	897	922	954	991
26	925	967	1006	1040	1029	1021	993	944	896	850	820	809	824	838	859	890	925
27	856	897	936	967	957	943	917	875	828	788	761	749	768	776	797	823	856
28	793	831	868	902	887	873	848	808	768	730	703	693	707	714	734	760	793
29	736	769	806	831	820	805	781	748	707	670	647	639	648	662	680	704	736
30	674	710	740	770	752	743	720	685	645	614	594	588	598	603	626	649	674
31	622	653	683	707	692	684	663	629	594	568	550	535	550	556	570	592	622
32	573	603	627	649	637	627	608	572	546	522	500	492	500	508	521	546	573
33	523	549	575	598	584	569	551	524	500	480	460	452	457	464	477	501	523
34	479	505	531	548	534	521	504	481	459	436	423	414	418	425	440	460	479
35	441	464	488	498	485	477	461	440	421	402	389	381	383	390	400	421	441
36	406	426	446	457	444	436	422	404	382	369	357	346	349	354	369	386	406
37	373	391	410	420	407	399	386	367	351	340	326	318	319	324	337	355	373
38	342	357	373	386	373	363	351	337	323	310	300	293	294	298	310	327	342
39	315	329	343	352	340	334	323	309	297	284	276	270	269	274	284	299	315
40	289	303	316	324	312	306	296	284	273	262	256	249	249	254	262	276	289
41	264	280	291	297	286	281	272	261	248	241	235	229	228	233	242	254	264
42	244	255	266	274	262	258	250	239	228	222	216	210	211	214	223	235	244
43	223	235	245	250	242	236	229	220	212	203	198	194	193	197	203	216	223
44	206	216	225	233	221	217	211	203	194	187	183	179	180	183	188	199	206
45	190	198	207	214	204	201	196	185	178	173	169	164	165	169	174	183	190
46	174	182	191	194	187	185	181	172	163	159	156	152	153	157	161	169	174

47	160	168	176	180	174	172	166	158	150	147	143	140	141	144	148	155	160
48	147	154	162	166	160	158	153	146	139	134	133	131	131	135	138	144	147
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55	80	83	91	101	101	101	97	89	83	81	85	86	85	86	85	82	80
56	72	76	84	94	96	95	92	84	79	77	80	82	81	83	80	75	72
57	66	70	78	88	91	91	87	80	74	73	77	79	76	78	75	69	66
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59	55	59	67	78	82	84	80	72	67	66	70	73	70	71	65	58	55
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61	47	50	57	69	76	77	72	65	60	59	63	66	63	63	58	49	47
62	43	46	53	64	72	74	70	62	57	56	60	63	60	59	53	45	43
63	39	42	49	60	69	71	67	58	53	53	56	60	57	56	49	41	39
64	35	38	45	56	64	67	64	55	50	50	53	56	54	51	45	38	35
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66	29	32	37	48	57	62	57	49	43	43	45	49	48	44	36	31	29
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68	22	25	31	40	49	55	50	42	37	36	39	42	40	36	30	24	22
69	20	21	28	37	45	51	46	39	34	34	35	38	36	32	26	22	20
70	16	19	25	34	41	47	42	36	31	30	32	34	32	28	23	19	16
71	13	16	22	30	37	43	38	33	28	27	28	31	28	25	20	16	13
72	11	13	19	27	33	39	34	29	24	24	24	27	25	21	18	13	11
73	8	10	16	24	29	35	30	26	21	20	21	24	21	18	14	11	8
74	5	7	13	22	26	32	27	22	18	18	18	20	19	15	12	7	5
75	3	4	11	19	23	27	24	19	15	14	15	17	14	12	10	5	3
76	2	2	8	16	19	23	20	16	12	12	13	14	12	10	8	3	2
77	2	2	5	13	16	20	17	13	9	9	10	11	9	8	6	2	2
78	2	2	3	11	13	16	14	10	7	7	8	9	7	6	4	2	2
79	1	1	2	9	11	12	11	7	5	5	5	7	5	4	3	2	1
80	1	1	2	7	8	10	9	5	2	4	4	5	3	3	2	1	1
81	1	1	2	5	6	8	6	3	3	2	3	3	2	2	1	2	1
82	1	1	1	3	3	6	5	2	2	2	2	2	0	1	1	2	1
83	1	1	2	2	2	2	3	2	2	2	2	2	0	1	1	1	1
84	1	1	2	2	2	3	2	2	2	2	2	2	0	1	1	1	1
85	1	1	1	2	0	1	1	2	2	1	2	2	0	1	1	2	1
86	1	1	2	1	0	1	2	2	2	2	2	2	0	0	1	1	1
87	1	1	2	2	0	0	2	2	2	2	2	2	0	0	1	1	1
88	1	2	2	1	0	1	2	2	1	2	2	2	0	1	1	1	1
89	1	1	1	2	0	0	1	1	2	2	2	2	0	0	1	1	1
90	1	1	1	2	0	0	1	1	2	2	2	2	0	1	1	1	1
91	1	1	1	2	0	0	1	1	1	2	2	2	0	1	1	1	1
92	1	1	2	2	0	0	1	1	2	1	2	2	0	1	1	1	1
93	1	2	1	2	0	0	1	1	1	1	2	2	0	0	1	1	1
94	0	1	2	2	0	0	1	2	0	1	2	1	0	1	0	1	0
95	1	2	1	2	0	0	1	1	1	1	1	1	0	0	1	1	1

96	1	1	1	1	0	0	1	1	1	1	1	2	0	0	1	1	1
97	1	1	2	2	0	0	1	1	1	1	2	2	0	0	1	1	1
98	1	1	1	2	0	0	1	0	1	1	2	1	0	1	1	1	1
99	1	1	1	1	0	0	1	2	1	2	2	2	0	1	1	1	1
100	1	1	1	2	0	0	1	1	1	1	2	1	0	1	1	1	1
101	1	1	2	1	0	0	1	1	1	1	1	2	0	1	1	2	1
102	1	2	1	2	0	0	1	1	1	2	2	2	0	0	1	1	1
103	1	1	1	1	0	0	1	1	0	2	1	1	0	1	1	1	1
104	1	1	1	2	0	0	1	1	1	1	1	1	0	0	1	2	1
105	1	2	1	2	0	0	1	1	1	1	2	2	0	1	1	1	1
106	1	1	2	2	0	0	1	1	1	2	2	2	0	1	1	2	1
107	1	1	1	2	0	0	1	1	1	1	2	2	0	1	1	1	1
108	1	2	2	1	0	0	1	1	1	1	2	1	0	1	1	1	1
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110	1	1	1	1	0	0	1	2	1	1	2	2	0	1	1	1	1
111	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1
112	1	1	1	2	0	0	1	1	1	1	2	2	0	1	1	1	1
113	1	1	1	2	0	0	1	1	1	1	2	2	0	1	1	1	1
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119	1	1	2	1	0	0	1	1	1	1	2	2	0	1	1	2	1
120	1	1	2	2	0	0	1	1	1	2	1	2	0	1	1	1	1
121	1	2	2	2	0	0	1	1	1	1	2	2	0	1	1	1	1
122	1	1	2	2	0	0	1	1	1	2	1	2	0	1	1	2	1
123	1	1	2	2	0	0	1	1	1	1	2	2	0	0	1	1	1
124	1	2	1	2	0	0	2	1	1	1	2	2	0	1	1	1	1
125	2	1	2	2	0	0	1	1	1	1	2	2	0	1	1	1	2
126	1	1	2	2	0	1	1	1	1	1	2	2	0	1	1	2	1
127	1	1	1	1	0	1	1	2	2	2	2	2	0	1	1	1	1
128	1	1	1	2	0	0	1	1	1	2	2	2	0	1	1	2	1
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131	1	1	2	2	0	1	1	1	1	2	2	2	0	1	1	2	1
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133	2	2	2	2	0	1	1	1	1	2	2	2	1	1	2	2	2
134	2	2	2	2	0	0	1	2	2	2	2	2	0	1	1	2	2
135	2	2	2	2	0	1	1	2	2	2	2	2	0	2	2	2	2
136	2	2	2	2	0	1	1	2	2	2	2	2	1	1	2	2	2
137	2	2	2	2	0	1	1	2	2	2	2	3	1	2	2	1	2
138	2	2	2	2	0	1	2	2	2	2	2	3	1	2	1	2	2
139	2	2	2	2	0	1	1	2	2	3	2	3	1	2	2	2	2
140	2	2	2	2	1	1	2	2	2	2	3	3	1	2	2	2	2
141	3	2	2	3	1	1	2	2	2	2	3	3	1	2	2	2	3
142	2	2	3	2	1	2	2	2	2	2	3	3	2	2	2	2	2
143	2	2	3	3	1	2	2	3	2	3	3	3	2	2	2	3	2
144	1	3	3	3	0	2	2	2	2	3	3	3	2	2	2	2	1

145	2	3	2	3	1	1	2	3	2	3	3	2	2	3	2	2	2
146	3	3	3	3	1	2	3	2	2	3	3	4	2	2	3	3	3
147	3	2	3	3	1	2	3	3	3	3	3	3	2	3	3	2	3
148	3	3	3	3	2	2	2	3	2	3	3	3	2	3	3	3	3
149	3	3	3	3	1	2	2	3	3	3	3	4	3	2	3	3	3
150	3	3	4	3	2	2	3	3	3	3	4	4	2	3	3	4	3
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152	3	4	3	3	2	3	3	3	3	4	4	4	3	4	3	4	3
153	3	3	3	4	2	3	4	3	2	4	4	4	3	3	3	3	3
154	4	4	4	4	2	3	3	4	3	4	4	4	3	3	4	4	4
155	4	4	4	3	2	3	3	4	4	4	4	4	2	4	4	4	4
156	4	4	4	3	3	3	3	3	4	4	5	5	4	4	3	4	4
157	4	4	4	4	2	3	4	4	3	4	5	5	2	4	4	3	4
158	4	4	5	5	2	3	4	4	4	4	4	5	3	4	4	5	4
159	4	4	5	4	3	4	4	4	4	5	5	5	4	4	5	4	4
160	5	5	4	5	3	3	4	5	4	5	5	5	3	5	5	4	5
161	5	5	5	5	3	4	4	5	4	5	4	5	4	4	4	4	5
162	5	3	5	5	4	3	4	5	5	5	5	5	4	4	5	4	5
163	5	5	5	5	4	4	5	5	5	5	5	5	4	4	5	4	5
164	5	5	5	5	4	4	5	5	5	5	5	6	4	5	4	5	5
165	5	5	5	5	4	4	5	5	5	5	6	6	4	4	5	5	5
166	5	5	5	5	4	4	5	6	5	5	5	6	4	5	5	5	5
167	5	5	6	5	3	5	5	4	5	6	5	6	4	4	5	5	5
168	5	6	5	6	4	5	5	5	5	5	6	6	5	5	5	5	5
169	5	5	5	6	4	4	5	5	5	5	6	6	4	4	5	5	5
170	6	5	5	6	4	4	5	6	6	6	6	6	4	5	5	5	6
171	5	5	5	5	4	4	6	6	6	6	6	6	5	5	5	5	5
172	5	5	6	6	3	5	5	6	6	6	5	7	5	5	5	5	5
173	5	5	5	5	5	5	5	6	6	6	6	6	5	5	6	5	5
174	5	6	6	6	5	5	6	6	6	6	6	6	4	5	5	5	5
175	5	6	6	6	4	5	5	6	5	6	6	6	5	5	5	5	5
176	5	5	6	6	4	5	5	6	6	6	6	6	4	5	4	5	5
177	6	5	5	6	4	5	5	5	6	6	7	6	4	4	5	6	6
178	5	6	6	6	4	5	5	6	6	5	6	6	5	5	5	5	5
179	6	6	6	6	4	5	5	6	5	6	5	6	5	5	5	6	6
180	6	6	6	6	4	4	5	6	6	6	6	6	4	5	6	6	6

Luminaire Report Summary

IESNA:LM-63-2002
[TEST] BLC2209013E-A
[ISSUEDATE] 2022/9/22 09:00
[MANUFAC] ASMART LIGHT CO., LTD
[LUMCAT] AST-FL17-13WBH5DA1-a30
[LUMINAIRE]
[LAMPCAT]
[LAMP]
[_VOLTAGE] 120.0 V
[_CURRENT] 0.108 A
[_POWERFACTOR] 0.988
[_THD] 8.56
[TESTLAB] UTEST TECHNICAL LABORATORY CO.LTD
[_TESTINST] GPM-3000
[_TESTDIST] 14.140 m [K=1.0000]
[_TESTTEMPERATURE] 25.1 '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.