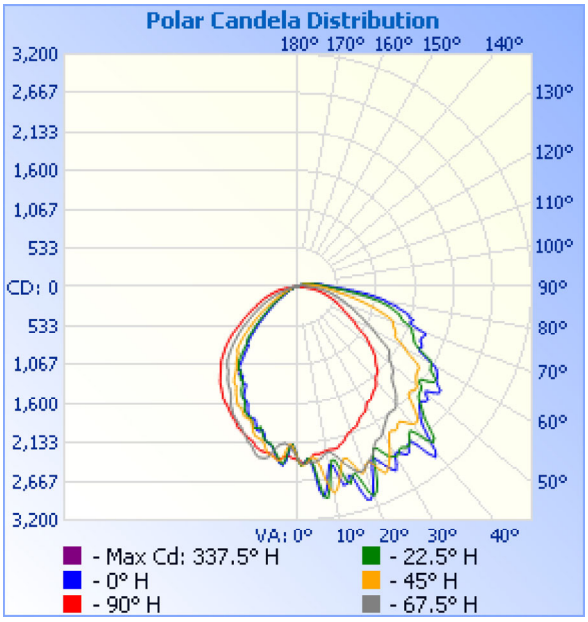
Photometrics Pro

Luminaire Photometric Report

Filename: **SWP02 - Wall Pack - 55W - 120V - IES**
Manufacturer: SARIN Energy Inc.
Luminaire: SES-SWP-4000-55 120V
Lamp Output: 1 lamp, rated Lumens/lamp: 7552.1
Max Candela: 3,122.8 at Horizontal: 337.5°, Vertical: 20°
Input Wattage: 57.39
Luminous Opening: Point
Test Lab: Shenzhen Belling Test Laboratory
Photometry : Type C
Nema Type: 7 X 7



Roadway Summary

Cutoff Classification:	NONCUTOFF	
Distribution:	TYPE IV, VERY SHORT	
Max Cd, 90 Deg Vert:	463.3	
Max Cd, 80 to <90 Deg:	1,255.5	
	Lumens	% Lamp
Downward Street Side:	4,999.8	66.2%
Downward House Side:	2,306.7	30.5%
Downward Total:	7,306.5	96.7%
Upward Street Side:	210.3	2.8%
Upward House Side:	35.3	0.5%
Upward Total:	245.6	3.3%
Total Lumens:	7,552.1	100%

Flood Summary

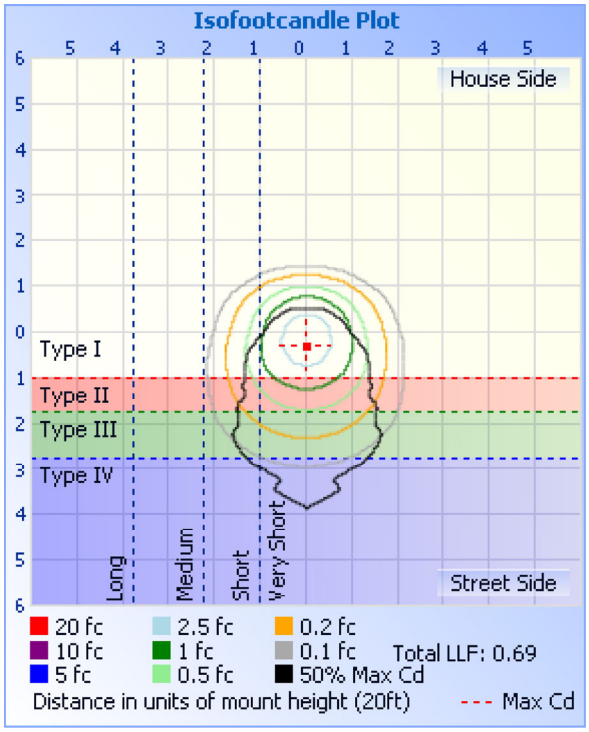
	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	94.8%	7,156.2	157	152.5
Beam (50%):	65%	4,908.6	98.1	103.5
Total:	100%	7,549.0		

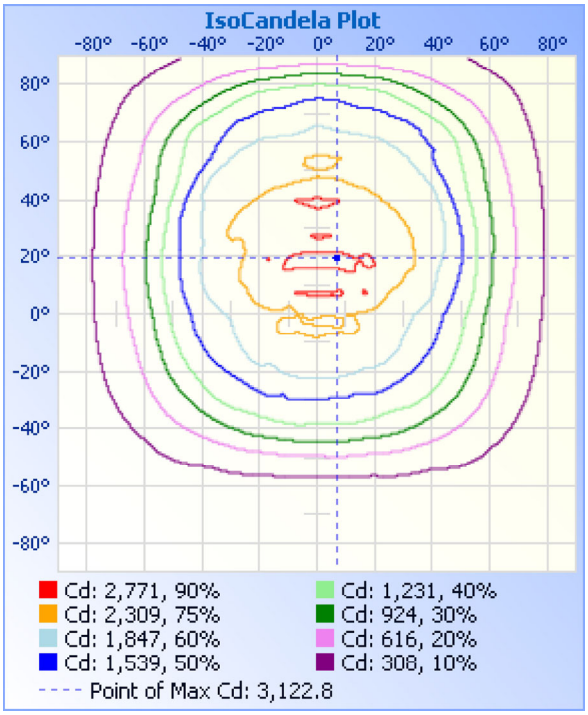
Zonal Lumen Summary

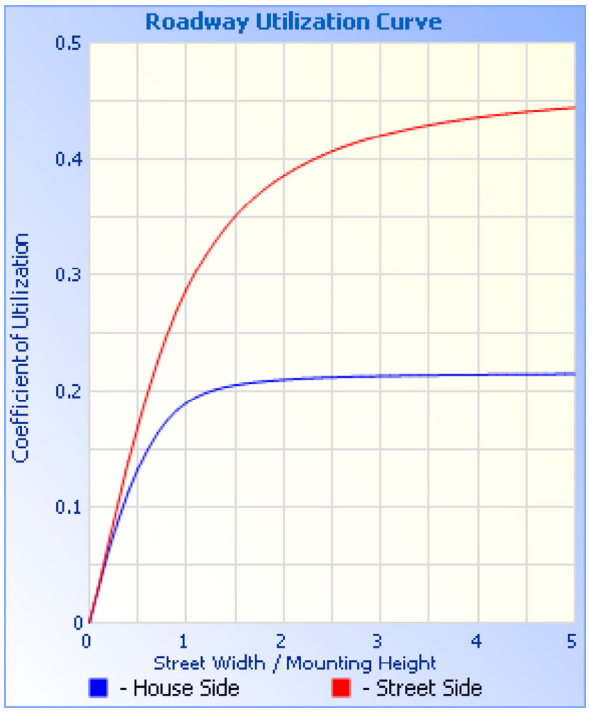
Zone	Lumens	% Lamp	% Luminaire
0-30	1,924.8	25.5%	25.5%
0-40	3,150.3	41.7%	41.7%
0-60	5,528.3	73.2%	73.2%
60-90	1,777.7	23.5%	23.5%
70-100	1,051.6	13.9%	13.9%
90-120	222.0	2.9%	2.9%
0-90	7,306.0	96.7%	96.7%
90-180	245.7	3.3%	3.3%
0-180	7,551.6	100%	100%

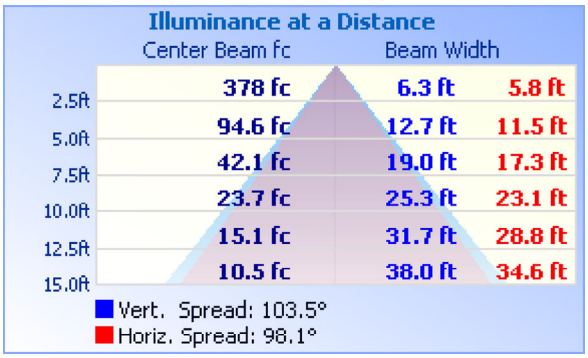
Lumens Per Zone

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	230.9	3.1%	90-100	128.4	1.7%
10-20	672.9	8.9%	100-110	64.6	0.9%
20-30	1,021.0	13.5%	110-120	28.9	0.4%
30-40	1,225.5	16.2%	120-130	10.0	0.1%
40-50	1,264.1	16.7%	130-140	4.4	0.1%
50-60	1,113.9	14.7%	140-150	3.7	0%
60-70	854.5	11.3%	150-160	3.0	0%
70-80	615.9	8.2%	160-170	2.0	0%
80-90	307.3	4.1%	170-180	0.7	0%









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	1.18	1.18	1.18	1.18	1.15	1.15	1.15	.97	1.09	1.09	1.09	1.04	1.04	1.04	.99	.99	.99	.97
1	1.07	1.02	.97	.93	1.04	.99	.95	.80	.94	.91	.87	.90	.87	.84	.86	.83	.81	.79
2	.97	.88	.81	.75	.94	.86	.79	.66	.82	.76	.72	.78	.73	.69	.75	.71	.67	.65
3	.88	.77	.69	.62	.85	.75	.68	.56	.72	.65	.60	.69	.63	.58	.66	.61	.57	.55

4	.81	.68	.59	.52	.78	.67	.58	.48	.64	.57	.51	.61	.55	.50	.59	.53	.49	.46
5	.74	.61	.52	.45	.72	.60	.51	.42	.57	.50	.44	.55	.48	.43	.53	.47	.42	.40
6	.69	.55	.46	.39	.66	.54	.45	.37	.52	.44	.38	.50	.43	.38	.48	.42	.37	.35
7	.64	.50	.41	.35	.62	.49	.40	.33	.47	.39	.34	.45	.39	.34	.44	.38	.33	.31
8	.59	.45	.37	.31	.57	.45	.36	.29	.43	.36	.30	.41	.35	.30	.40	.34	.30	.28
9	.55	.42	.33	.28	.54	.41	.33	.27	.40	.32	.27	.38	.32	.27	.37	.31	.27	.25
10	.52	.38	.30	.25	.50	.38	.30	.24	.37	.30	.25	.35	.29	.25	.34	.28	.24	.22

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	2366	2366	2366	2366	2366	2366	2366	2366	2366	2366	2366	2366	2366	2366	2366	2366	2366
1	2440	2451	2437	2410	2388	2343	2289	2261	2241	2245	2259	2286	2349	2402	2438	2434	2440
2	2406	2426	2441	2422	2412	2324	2229	2180	2159	2157	2179	2232	2341	2427	2463	2435	2406
3	2353	2358	2402	2419	2402	2304	2217	2217	2223	2193	2154	2183	2313	2427	2441	2379	2353
4	2371	2349	2358	2395	2368	2274	2276	2357	2382	2336	2218	2161	2312	2412	2399	2361	2371
5	2538	2464	2334	2404	2310	2249	2398	2447	2458	2430	2333	2145	2335	2418	2372	2469	2538
6	2801	2683	2362	2396	2294	2277	2447	2433	2420	2397	2383	2164	2365	2420	2420	2689	2801
7	2899	2890	2480	2379	2301	2322	2423	2365	2365	2328	2377	2182	2365	2416	2549	2893	2899
8	2810	2925	2644	2356	2292	2365	2372	2304	2287	2272	2350	2231	2349	2412	2730	2907	2810
9	2617	2787	2802	2313	2280	2412	2303	2241	2215	2212	2328	2293	2319	2386	2878	2748	2617
10	2472	2562	2869	2292	2267	2448	2255	2207	2192	2173	2320	2363	2305	2371	2948	2527	2472
11	2494	2411	2825	2299	2266	2453	2211	2196	2168	2174	2284	2383	2305	2381	2899	2411	2494
12	2651	2422	2718	2343	2269	2447	2169	2172	2149	2145	2206	2387	2299	2406	2764	2471	2651
13	2790	2577	2579	2384	2270	2426	2157	2112	2066	2109	2159	2388	2296	2480	2610	2633	2790
14	2783	2745	2477	2447	2261	2386	2143	2043	2017	2043	2145	2368	2275	2577	2477	2796	2783
15	2681	2790	2425	2513	2228	2342	2110	1982	2044	1986	2132	2325	2251	2666	2454	2800	2681
16	2712	2695	2440	2573	2212	2292	2082	2006	2034	2008	2120	2279	2214	2745	2520	2694	2712
17	2912	2672	2522	2626	2182	2255	2038	1998	1971	2024	2085	2246	2185	2798	2617	2691	2912
18	3065	2798	2640	2667	2141	2186	1969	1958	1904	1995	2020	2224	2182	2797	2706	2859	3065
19	3079	2973	2708	2679	2113	2115	1941	1906	1907	1943	1949	2179	2156	2764	2729	3050	3079
20	3003	3044	2677	2659	2103	2087	1971	1890	1913	1898	1930	2138	2148	2703	2662	**3123**	3003
21	2872	3003	2596	2613	2081	2082	1962	1902	1881	1905	1930	2116	2128	2647	2610	3080	2872
22	2713	2896	2570	2575	2073	2088	1903	1888	1841	1881	1922	2075	2107	2599	2637	2972	2713
23	2583	2708	2640	2544	2058	2073	1863	1872	1761	1858	1906	2054	2097	2525	2741	2810	2583
24	2562	2528	2742	2509	2023	2045	1825	1804	1719	1814	1870	2030	2066	2475	2840	2617	2562
25	2633	2435	2815	2457	1987	2028	1811	1722	1706	1720	1836	2006	2025	2433	2894	2527	2633
26	2724	2454	2803	2392	1967	2020	1810	1732	1686	1706	1826	1977	2010	2420	2872	2551	2724
27	2803	2534	2732	2356	1953	1969	1790	1722	1628	1683	1818	1959	1990	2404	2802	2630	2803
28	2853	2613	2666	2351	1943	1891	1754	1687	1515	1643	1784	1921	1959	2394	2711	2698	2853
29	2777	2650	2593	2344	1914	1825	1723	1602	1506	1601	1737	1883	1942	2396	2597	2766	2777
30	2647	2680	2503	2316	1868	1788	1662	1518	1528	1515	1699	1847	1911	2397	2493	2801	2647
31	2628	2667	2418	2271	1842	1772	1608	1532	1476	1479	1651	1786	1890	2370	2403	2742	2628
32	2684	2620	2355	2232	1839	1745	1600	1528	1425	1489	1598	1736	1877	2342	2379	2673	2684
33	2733	2613	2348	2202	1829	1718	1585	1458	1445	1454	1584	1703	1854	2318	2395	2654	2733
34	2719	2644	2372	2166	1800	1684	1527	1418	1436	1394	1569	1671	1835	2303	2416	2689	2719
35	2628	2652	2362	2143	1776	1643	1463	1439	1375	1390	1521	1656	1801	2301	2413	2701	2628
36	2603	2600	2321	2134	1758	1609	1407	1389	1404	1394	1456	1629	1770	2309	2398	2656	2603
37	2707	2521	2309	2132	1744	1582	1370	1356	1295	1344	1407	1599	1741	2310	2418	2574	2707
38	2880	2501	2347	2135	1728	1552	1360	1343	1215	1323	1372	1565	1716	2298	2454	2522	2880
39	2993	2584	2407	2123	1696	1530	1338	1248	1143	1275	1346	1521	1694	2264	2488	2578	2993
40	2927	2725	2451	2089	1650	1511	1300	1183	1054	1195	1310	1488	1659	2203	2499	2713	2927
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42	2543	2785	2449	2006	1613	1453	1246	1039	1016	1049	1231	1449	1586	2044	2446	2788	2543
43	2456	2637	2372	1955	1598	1406	1217	1021	973	1017	1213	1422	1552	1978	2363	2630	2456
44	2405	2490	2262	1887	1559	1359	1169	967	903	992	1195	1392	1520	1946	2245	2466	2405
45	2350	2410	2161	1826	1509	1308	1126	923	855	932	1156	1347	1494	1932	2162	2392	2350
46	2309	2336	2103	1782	1472	1247	1065	857	793	878	1098	1302	1464	1921	2158	2331	2309

47	2303	2260	2096	1761	1450	1204	996	806	734	818	1043	1258	1420	1904	2187	2292	2303
48	2349	2219	2107	1751	1421	1169	942	748	666	765	982	1209	1375	1875	2221	2263	2349
49	2359	2200	2131	1717	1374	1124	886	685	609	707	929	1161	1336	1830	2236	2242	2359
50	2281	2191	2124	1672	1322	1078	824	626	556	648	872	1106	1296	1790	2203	2250	2281
51	2260	2175	2085	1624	1266	1024	776	573	507	592	813	1061	1255	1761	2173	2232	2260
52	2347	2098	2046	1577	1219	971	722	525	463	541	769	1023	1205	1732	2167	2153	2347
53	2409	2100	2023	1553	1174	924	669	480	424	493	719	980	1162	1698	2134	2139	2409
54	2408	2191	2006	1549	1118	878	620	433	386	451	668	932	1120	1661	2091	2230	2408
55	2328	2266	1999	1522	1051	835	566	395	350	407	615	879	1073	1595	2050	2308	2328
56	2282	2275	1998	1455	991	788	519	359	315	371	563	832	1017	1500	2021	2317	2282
57	2270	2203	1953	1369	944	751	476	326	289	336	514	783	966	1432	1945	2256	2270
58	2243	2139	1846	1291	909	709	434	298	261	306	472	743	919	1388	1828	2208	2243
59	2212	2120	1745	1239	863	667	396	271	241	280	431	699	885	1357	1735	2174	2212
60	2150	2106	1687	1207	821	629	358	250	223	256	390	653	841	1304	1699	2134	2150
61	2010	2066	1620	1158	781	586	326	232	208	238	354	619	798	1238	1669	2098	2010
62	1894	1944	1533	1088	740	552	297	214	194	221	323	583	754	1173	1598	2002	1894
63	1853	1843	1487	1034	698	511	270	200	184	207	294	550	720	1141	1558	1897	1853
64	1884	1781	1487	992	677	471	245	187	172	193	266	512	686	1093	1550	1819	1884
65	1866	1750	1472	936	643	431	224	175	160	180	244	478	631	1032	1554	1790	1866
66	1834	1734	1458	888	613	394	205	164	148	168	224	438	618	996	1542	1769	1834
67	1826	1712	1431	855	588	360	188	153	137	158	207	405	596	964	1504	1737	1826
68	1840	1687	1400	822	557	326	174	142	125	147	190	367	548	919	1470	1718	1840
69	1863	1666	1393	775	547	292	160	131	111	136	176	335	542	862	1464	1727	1863
70	1846	1654	1385	731	507	262	148	119	100	125	164	304	508	825	1457	1721	1846
71	1717	1601	1346	701	487	233	136	108	90	112	152	274	484	795	1415	1665	1717
72	1620	1524	1275	667	456	208	125	98	83	103	141	248	448	750	1326	1569	1620
73	1612	1480	1195	633	429	183	116	89	77	93	131	220	429	707	1247	1496	1612
74	1643	1455	1129	597	400	167	107	82	72	87	121	200	398	677	1181	1488	1643
75	1572	1426	1052	570	378	152	98	75	67	80	111	179	375	636	1119	1475	1572
76	1553	1372	972	542	352	139	90	69	63	74	102	160	350	612	1040	1410	1553
77	1486	1325	898	506	327	129	81	63	58	66	95	146	323	578	965	1359	1486
78	1400	1266	828	486	301	120	75	57	54	61	86	131	301	534	898	1310	1400
79	1369	1197	756	455	279	113	70	52	49	56	80	122	284	507	824	1226	1369
80	1256	1126	687	435	249	106	64	47	46	51	75	115	257	484	759	1175	1256
81	1210	1033	629	409	216	100	58	43	42	45	68	106	222	466	697	1088	1210
82	1129	949	572	383	174	95	53	38	39	42	63	99	188	424	641	1009	1129
83	1038	857	530	353	134	89	47	34	35	37	58	94	150	405	593	921	1038
84	953	767	490	328	107	83	42	30	30	33	52	88	118	367	547	828	953
85	848	686	452	296	85	77	38	25	27	28	48	81	92	341	502	748	848
86	748	614	421	268	68	71	32	20	23	23	42	76	74	299	464	663	748
87	666	548	392	240	55	66	28	17	18	20	37	70	57	273	426	594	666
88	590	494	367	209	48	61	24	13	14	16	33	65	49	240	395	533	590
89	522	448	345	184	45	57	20	9	10	12	28	61	44	215	371	479	522
90	463	410	320	161	44	53	18	6	6	7	26	58	43	193	348	440	463
91	417	382	297	141	45	48	16	5	5	7	22	54	43	167	324	402	417
92	391	355	278	127	47	45	14	5	5	5	21	51	42	150	303	371	391
93	366	334	257	115	48	43	13	5	5	5	19	49	44	133	282	347	366
94	345	316	242	106	50	41	13	5	6	6	18	47	45	120	263	328	345
95	325	297	227	99	50	37	12	5	5	5	17	44	44	109	249	309	325

96	308	281	214	95	50	36	12	5	5	4	16	41	45	101	234	292	308
97	294	263	200	91	50	34	10	5	6	6	15	40	45	96	220	275	294
98	277	246	186	88	49	31	10	5	6	6	15	38	44	91	202	257	277
99	261	228	174	86	49	29	10	5	4	6	14	36	43	87	188	238	261
100	246	211	159	82	47	28	10	5	6	6	13	34	43	83	172	221	246
101	231	196	147	79	46	26	8	6	6	5	13	32	41	80	158	206	231
102	214	180	135	75	44	24	8	4	5	6	12	31	39	76	144	190	214
103	196	166	125	69	42	23	9	5	6	7	11	29	38	71	131	176	196
104	181	152	115	65	39	21	8	5	6	6	11	28	36	67	120	161	181
105	166	140	109	60	38	20	7	6	6	6	10	26	36	61	110	147	166
106	152	129	101	55	36	19	8	6	6	6	10	24	33	56	102	135	152
107	139	122	93	52	35	17	6	6	6	6	9	23	32	51	96	125	139
108	130	114	88	50	33	17	7	6	7	7	10	22	30	47	88	118	130
109	120	107	83	46	32	15	7	5	6	7	9	20	29	44	82	110	120
110	109	100	78	44	29	14	6	6	6	6	9	18	26	40	79	103	109
111	98	94	73	40	28	13	5	7	7	6	9	19	25	37	75	96	98
112	92	86	69	38	26	13	6	5	6	7	8	18	24	34	71	88	92
113	84	77	63	35	24	10	6	6	6	6	8	17	22	32	66	81	84
114	74	71	56	33	23	10	6	6	5	7	6	15	20	30	60	74	74
115	68	66	48	30	21	11	5	6	7	6	7	15	18	28	52	67	68
116	61	61	40	28	20	7	5	6	7	6	8	14	18	25	45	62	61
117	57	55	33	26	19	9	5	5	6	6	7	14	16	23	37	57	57
118	52	51	27	24	16	8	5	6	6	6	7	13	15	21	30	53	52
119	49	46	22	22	15	7	5	5	6	7	6	12	14	19	24	48	49
120	46	42	17	20	14	8	6	6	6	6	7	12	13	17	20	43	46
121	44	37	15	19	12	7	5	5	6	6	5	11	13	16	16	41	44
122	41	34	12	18	13	6	5	6	6	7	5	10	12	14	13	36	41
123	33	30	9	16	12	7	6	6	6	6	7	10	10	12	11	31	33
124	25	24	11	15	10	6	3	7	7	5	6	9	10	11	9	26	25
125	22	18	10	13	10	6	5	6	6	7	7	9	9	10	9	19	22
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Luminaire Report Summary

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[TEST]
[TESTLAB] Shenzhen Belling Test Laboratory
[ISSUEDATE] 2018-7-31 20:12
[MANUFAC] SARIN Energy Inc.
[LUMINAIRE] SES-SWP-4000-55 120V
[_TOTALLUMINAIRELUMENS] 7551.6
[TESTINST] GPM-3000
[TESTDIST] 17.398 M
[TESTTEMPERATURE] 28.7 'C
[TESTHUMIDITY]
[TESTOPERATOR]
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.