

# Photometrics Pro



## Luminaire Photometric Report

**Filename:** T8 4ft Tube 18W T84FT  
**Manufacturer:** SARIN Energy Inc.  
**Luminaire:** SES-T84FT-3000-18  
**Lamp Output:** 2 lamps, rated Lumens/lamp: 1783.7  
**Max Candela:** 1,427.6 at Horizontal: 67.5°, Vertical: 3°  
**Input Wattage:** 36.4  
**Luminous Opening:** Rectangle (L: 20.87", W: 20.87")  
**Test Date:** 2014-12-09  
**Test Lab:** Standard-Tech Co.,Ltd  
**Photometry :** Type C  
**Nema Type:** 6 X 7

Roadway Summary		
Cutoff Classification:	CUTOFF	
Distribution:	Type VS	
Max Cd, 90 Deg Vert:	0.0	
Max Cd, 80 to <90 Deg:	41.9	
	Lumens	% Lamp
Downward Street Side:	1,827.5	51.2%
Downward House Side:	1,739.1	48.7%
Downward Total:	3,566.5	100%
Upward Street Side:	0.2	0%
Upward House Side:	0.7	0%
Upward Total:	0.9	0%
Total Lumens:	3,567.5	100%

Flood Summary				
	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	97.1%	3,465.5	128.6	140.5
Beam (50%):	85.1%	3,037.2	110.1	110.2
Total:	100%	3,566.5		

Zonal Lumen Summary			
Zone	Lumens	% Lamp	% Luminaire
0-30	1,090.4	30.6%	30.6%
0-40	1,818.4	51%	51%
0-60	3,246.9	91%	91%
60-90	319.1	8.9%	8.9%
70-100	72.0	2%	2%
90-120	0.0	0%	0%
0-90	3,566.0	100%	100%
90-180	0.9	0%	0%
0-180	3,567.0	100%	100%

Lumens Per Zone						
Zone	Lumens	% Total	Zone	Lumens	% Total	
0-10	132.3	3.7%	90-100	0.0	0%	
10-20	377.5	10.6%	100-110	0	0%	
20-30	580.5	16.3%	110-120	0.0	0%	
30-40	728.1	20.4%	120-130	0.1	0%	
40-50	787.7	22.1%	130-140	0.1	0%	
50-60	640.8	18.0%	140-150	0.2	0%	
60-70	247.2	6.9%	150-160	0.3	0%	
70-80	62.7	1.8%	160-170	0.2	0%	
80-90	9.3	0.3%	170-180	0.1	0%	



**Coefficients Of Utilization - Zonal Cavity Method**

Effective Floor Cavity Reflectance: 20%

RCC %:	<b>80</b>				<b>70</b>				<b>50</b>			<b>30</b>			<b>10</b>			<b>0</b>
RW %:	<u>70</u>	<u>50</u>	<u>30</u>	<u>0</u>	<u>70</u>	<u>50</u>	<u>30</u>	<u>0</u>	<u>50</u>	<u>30</u>	<u>20</u>	<u>50</u>	<u>30</u>	<u>20</u>	<u>50</u>	<u>30</u>	<u>20</u>	<u>0</u>
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	1.07	1.03	1.00	1.08	1.04	1.01	.88	1.00	.98	.95	.96	.94	.92	.93	.91	.90	.88
2	1.02	.95	.89	.84	.99	.93	.87	.77	.89	.85	.81	.86	.82	.79	.83	.80	.77	.75
3	.94	.84	.77	.71	.91	.83	.76	.66	.80	.74	.69	.77	.72	.68	.75	.70	.67	.65

4	.86	.75	.67	.61	.84	.74	.66	.58	.71	.65	.60	.69	.63	.59	.67	.62	.58	.56
5	.79	.67	.59	.53	.77	.66	.58	.51	.64	.57	.52	.62	.56	.51	.60	.55	.51	.49
6	.73	.61	.52	.46	.71	.60	.52	.45	.58	.51	.46	.56	.50	.45	.55	.49	.45	.43
7	.68	.55	.47	.41	.66	.54	.46	.40	.53	.46	.40	.51	.45	.40	.50	.44	.40	.38
8	.63	.50	.42	.36	.62	.49	.42	.36	.48	.41	.36	.47	.41	.36	.46	.40	.36	.34
9	.59	.46	.38	.33	.58	.45	.38	.32	.44	.37	.32	.43	.37	.32	.42	.36	.32	.30
10	.55	.42	.35	.30	.54	.42	.35	.29	.41	.34	.29	.40	.34	.29	.39	.33	.29	.27

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	1410	1410	1410	1410	1410	1410	1410	1410	1410	1410	1410	1410	1410	1410	1410	1410	1410
1	1411	1419	1409	1413	1412	1414	1412	1421	1409	1409	1405	1407	1407	1413	1411	1414	1411
2	1414	1423	1419	1424	1410	1411	1405	1409	1396	1408	1407	1404	1408	1415	1409	1418	1414
3	1391	1401	1408	1428	1412	1412	1393	1401	1389	1401	1398	1402	1413	1413	1413	1403	1391
4	1368	1385	1388	1425	1415	1406	1389	1392	1387	1396	1392	1406	1412	1415	1396	1384	1368
5	1361	1379	1379	1412	1409	1395	1386	1390	1388	1397	1392	1398	1415	1417	1381	1378	1361
6	1362	1377	1374	1397	1402	1386	1385	1393	1384	1395	1394	1392	1415	1410	1368	1372	1362
7	1371	1386	1376	1387	1395	1377	1387	1394	1382	1388	1390	1388	1412	1399	1366	1371	1371
8	1356	1372	1384	1374	1389	1371	1386	1392	1381	1387	1387	1387	1413	1391	1363	1370	1356
9	1346	1370	1381	1366	1377	1364	1378	1391	1368	1384	1382	1383	1409	1385	1365	1366	1346
10	1351	1369	1369	1360	1370	1356	1373	1379	1352	1367	1376	1387	1410	1380	1363	1360	1351
11	1356	1376	1363	1352	1363	1345	1364	1356	1326	1347	1370	1382	1407	1373	1360	1360	1356
12	1364	1373	1353	1343	1352	1338	1346	1329	1313	1324	1354	1375	1407	1371	1358	1367	1364
13	1364	1381	1351	1338	1351	1332	1326	1317	1306	1311	1342	1372	1410	1367	1353	1364	1364
14	1338	1368	1345	1334	1342	1329	1313	1311	1305	1311	1330	1366	1406	1363	1346	1364	1338
15	1337	1349	1338	1325	1333	1322	1294	1309	1310	1317	1317	1364	1402	1363	1350	1347	1337
16	1323	1351	1340	1315	1330	1317	1271	1309	1308	1316	1302	1356	1401	1357	1353	1333	1323
17	1310	1344	1329	1304	1320	1315	1264	1304	1291	1310	1298	1352	1393	1355	1349	1335	1310
18	1313	1335	1309	1303	1313	1305	1253	1292	1278	1297	1294	1344	1388	1355	1349	1319	1313
19	1313	1330	1294	1293	1308	1297	1251	1271	1256	1281	1292	1335	1383	1352	1338	1311	1313
20	1314	1331	1297	1283	1302	1292	1246	1250	1241	1264	1294	1328	1380	1343	1325	1311	1314
21	1307	1326	1289	1276	1297	1280	1247	1234	1241	1244	1292	1306	1374	1335	1314	1310	1307
22	1292	1321	1273	1274	1290	1269	1239	1224	1237	1244	1280	1291	1368	1330	1309	1306	1292
23	1289	1305	1266	1272	1283	1259	1233	1218	1238	1244	1261	1282	1365	1325	1300	1299	1289
24	1270	1296	1259	1265	1277	1247	1212	1212	1231	1240	1249	1270	1359	1320	1292	1284	1270
25	1258	1278	1253	1258	1271	1243	1199	1209	1210	1241	1232	1258	1353	1309	1280	1276	1258
26	1257	1261	1248	1252	1263	1231	1183	1197	1194	1223	1211	1249	1351	1304	1276	1256	1257
27	1257	1251	1244	1244	1256	1213	1168	1174	1173	1204	1202	1233	1344	1302	1272	1241	1257
28	1254	1248	1233	1233	1250	1197	1160	1156	1170	1188	1198	1225	1342	1302	1262	1237	1254
29	1243	1242	1216	1223	1241	1186	1155	1136	1174	1173	1197	1219	1339	1302	1261	1235	1243
30	1233	1234	1212	1208	1237	1182	1152	1133	1176	1175	1192	1210	1333	1293	1246	1236	1233
31	1205	1216	1193	1193	1229	1175	1146	1134	1162	1179	1183	1205	1327	1289	1233	1226	1205
32	1196	1200	1176	1182	1221	1167	1142	1132	1139	1178	1167	1202	1322	1286	1228	1211	1196
33	1187	1175	1168	1175	1215	1160	1126	1123	1118	1160	1153	1201	1317	1277	1211	1197	1187
34	1181	1163	1156	1165	1206	1157	1107	1099	1104	1135	1137	1195	1317	1266	1196	1168	1181
35	1170	1156	1148	1150	1197	1149	1089	1076	1106	1114	1121	1190	1308	1256	1190	1164	1170
36	1154	1149	1135	1138	1187	1146	1071	1060	1099	1105	1116	1177	1306	1244	1186	1155	1154
37	1133	1130	1117	1125	1174	1135	1063	1050	1080	1099	1118	1159	1296	1240	1179	1149	1133
38	1123	1108	1099	1115	1162	1123	1060	1048	1044	1095	1116	1144	1289	1234	1177	1134	1123
39	1108	1082	1079	1105	1150	1109	1059	1040	1017	1068	1104	1129	1284	1223	1164	1113	1108
40	1098	1073	1054	1090	1139	1091	1055	1010	1013	1039	1083	1113	1274	1214	1147	1091	1098
41	1075	1056	1037	1076	1130	1074	1040	979	1011	1011	1066	1095	1264	1202	1124	1083	1075
42	1053	1040	1024	1062	1123	1057	1016	960	994	1002	1039	1077	1254	1181	1106	1071	1053
43	1039	1010	1013	1046	1119	1037	994	960	966	995	1030	1067	1242	1175	1098	1058	1039
44	1029	987	992	1029	1113	1029	978	955	944	978	1021	1056	1227	1165	1088	1033	1029
45	1011	968	972	1019	1105	1023	966	932	938	947	1007	1045	1213	1152	1078	1010	1011
46	982	954	946	1005	1095	1015	955	904	930	927	987	1032	1196	1141	1065	1003	982

47	958	937	927	987	1082	1007	938	891	898	918	957	1016	1173	1127	1042	992	958
48	938	905	906	975	1069	998	906	890	873	907	922	989	1152	1105	1014	971	938
49	917	881	888	965	1053	989	875	873	861	871	910	956	1128	1080	1002	946	917
50	881	861	856	949	1034	976	855	837	844	848	896	930	1108	1051	984	927	881
51	850	837	824	933	1014	955	846	824	795	834	872	892	1087	1020	969	910	850
52	827	803	806	914	991	928	838	813	767	806	835	871	1064	996	939	883	827
53	794	775	789	885	969	896	812	783	747	759	805	853	1031	962	905	850	794
54	761	753	768	864	936	866	782	738	699	738	786	828	916	938	889	828	761
55	734	718	742	833	859	837	764	718	666	708	756	785	604	900	866	801	734
56	697	687	713	797	611	800	750	683	643	659	711	577	274	746	830	767	697
57	665	660	692	765	348	717	717	634	598	634	676	340	166	487	778	741	665
58	639	622	661	706	280	495	671	615	580	602	643	179	151	233	742	707	639
59	599	590	622	543	264	291	641	579	542	563	582	150	144	169	699	669	599
60	564	559	587	316	251	249	608	544	506	539	535	139	137	155	638	642	564
61	520	521	543	230	238	232	552	509	462	491	494	129	130	145	589	593	520
62	476	479	493	209	226	218	507	463	417	459	425	121	123	136	483	552	476
63	435	446	452	193	213	205	452	424	371	405	291	113	116	128	307	503	435
64	394	404	407	181	201	192	309	373	333	360	159	105	110	120	169	456	394
65	356	366	351	169	188	180	194	327	301	311	111	98	103	112	132	405	356
66	314	321	244	157	176	168	164	283	267	275	96	91	96	104	116	354	314
67	277	282	157	146	164	156	144	250	227	240	85	84	90	97	103	304	277
68	242	246	135	135	153	144	129	214	186	197	75	77	84	90	92	258	242
69	207	210	119	124	142	133	116	175	153	151	66	71	79	83	82	212	207
70	173	176	105	115	132	123	104	136	125	116	58	65	73	77	74	167	173
71	145	145	93	105	122	113	93	107	104	89	51	59	68	71	66	129	145
72	122	119	81	96	113	103	83	87	88	73	45	54	63	65	58	98	122
73	101	98	71	88	103	94	73	73	73	61	39	49	58	60	52	79	101
74	83	82	62	79	94	85	64	61	60	50	34	44	54	54	46	65	83
75	68	68	55	71	85	76	55	52	50	41	30	40	49	49	40	54	68
76	55	56	47	63	75	68	48	44	41	34	26	35	44	44	36	45	55
77	45	46	41	56	66	59	42	37	34	28	23	31	39	39	31	37	45
78	37	38	36	48	57	51	36	31	28	23	19	26	34	34	27	31	37
79	30	31	31	41	49	44	31	26	23	19	16	22	29	29	23	25	30
80	24	25	26	35	42	37	26	22	18	16	14	18	25	24	20	21	24
81	19	20	22	29	35	31	22	17	15	12	11	15	20	20	16	17	19
82	15	16	18	24	29	25	18	14	11	9	9	12	17	16	13	13	15
83	12	13	15	20	23	20	14	11	8	7	6	9	13	13	10	10	12
84	8	10	12	16	18	16	11	8	6	5	4	6	10	10	8	7	8
85	6	7	9	12	14	12	8	5	4	3	3	4	6	6	6	5	6
86	4	5	6	8	10	8	5	3	2	1	1	2	4	4	3	3	4
87	2	3	4	5	6	5	3	2	1	0	0	0	1	1	2	2	2
88	1	1	2	3	3	2	1	0	0	0	0	0	0	0	0	1	1
89	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
108	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
112	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
116	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
118	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
119	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
121	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
126	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
129	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
133	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
134	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
136	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
137	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
138	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
139	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0
140	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0
141	0	0	0	0	1	0	0	1	1	1	0	0	0	0	0	0
142	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0
143	0	0	0	0	1	0	0	1	1	1	0	0	0	0	0	0
144	0	0	0	0	1	0	0	1	1	1	0	0	0	0	0	0

145	0	0	0	0	1	1	0	1	1	1	0	0	0	0	0	0	0
146	0	0	0	0	1	0	0	1	1	1	0	0	0	0	0	0	0
147	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0
148	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0
149	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0
150	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0
151	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0
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156	0	1	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0
157	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0
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179	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1
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**Luminaire Report Summary**

IESNA:LM-63-2002  
[TEST]  
[TESTDATE] 2014-12-09  
[TESTLAB] Standard-Tech Co.,Ltd  
[ISSUE DATE] 2014-12-09 15:11:13  
[MANUFAC] SARIN Energy Inc.  
[LUMINAIRE] SES-T84FT-3000-18  
[\_TOTALLUMINAIRELUMENS] 3567  
[\_LAMPPOSITION] 0,0  
[OTHER] EVERFINE GO-R5000\_V2 SYSTEM  
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.