

IES INDOOR REPORT

PHOTOMETRIC FILENAME : FS-4-LS-8CS-DIM-UNV_32W_4000K_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM 15180278.01

[TESTLAB] UL Verification Services Inc.

[ISSUE DATE] 2025-03-20

[TEST DATE] 2/23/2024

[MANUFAC] WILLIAMS INDOOR, H.E. WILLIAMS, INC - CARTHAGE, MO

[LUMCAT] FS-4-LS-8CS-DIM-UNV_32W_4000K_

[LUMINAIRE] 45 INCH, 224 LEDS, LUMEN/WATTAGE/CCT SELECTABLE, LED STRIP

[MORE] WITH FROSTED ACRYLIC LENS

[SEARCH_APPLICATION] Indoor, Commercial, Industrial, Manufacturing, Utility, Warehouse, Linear

[SEARCH_MOUNTING] Surface, Suspended

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4538
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	144
Total Luminaire Watts	31.5
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.18
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.34
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	3.71 ft
Luminous Width (90-270)	0.17 ft
Luminous Height	0.04 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	19558	18506	19184
55	17802	17133	18253
65	15683	15629	17265
75	12914	14012	16051
85	8930	12899	15278

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CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>
0.0	1427.934	1427.934	1427.934	1427.934	1427.934	1427.934	1427.934	1427.934	1427.934
0.5	1409.145	1433.460	1430.144	1430.144	1423.513	1431.250	1430.144	1435.670	1410.250
1.0	1408.040	1432.355	1427.934	1431.250	1422.408	1431.250	1427.934	1434.565	1410.250
1.5	1410.250	1432.355	1425.723	1430.144	1423.513	1431.250	1427.934	1433.460	1410.250
2.0	1410.250	1431.250	1427.934	1431.250	1422.408	1433.460	1427.934	1434.565	1409.145
2.5	1409.145	1430.144	1425.723	1430.144	1422.408	1429.039	1427.934	1432.355	1406.935
3.0	1405.830	1430.144	1424.618	1430.144	1422.408	1430.144	1426.829	1433.460	1406.935
3.5	1406.935	1427.934	1423.513	1426.829	1420.197	1427.934	1425.723	1430.144	1408.040
4.0	1403.619	1425.723	1421.303	1427.934	1421.303	1426.829	1424.618	1431.250	1404.724
4.5	1404.724	1422.408	1421.303	1425.723	1419.092	1426.829	1422.408	1429.039	1402.514
5.0	1399.198	1421.303	1417.987	1424.618	1419.092	1425.723	1421.303	1426.829	1402.514
5.5	1398.093	1421.303	1416.882	1423.513	1419.092	1424.618	1421.303	1424.618	1399.198
6.0	1395.883	1417.987	1414.671	1422.408	1415.777	1422.408	1417.987	1424.618	1398.093
6.5	1393.672	1415.777	1413.566	1419.092	1413.566	1421.303	1416.882	1422.408	1395.883
7.0	1390.357	1412.461	1411.356	1415.777	1411.356	1419.092	1415.777	1421.303	1396.988
7.5	1389.251	1411.356	1408.040	1415.777	1409.145	1416.882	1412.461	1419.092	1392.567
8.0	1387.041	1408.040	1405.830	1412.461	1409.145	1415.777	1411.356	1416.882	1390.357
8.5	1383.725	1404.724	1402.514	1409.145	1404.724	1412.461	1409.145	1413.566	1385.936
9.0	1381.515	1401.409	1398.093	1408.040	1402.514	1409.145	1405.830	1412.461	1383.725
9.5	1374.884	1398.093	1398.093	1405.830	1400.304	1408.040	1403.619	1408.040	1380.410
10.0	1373.778	1396.988	1392.567	1399.198	1399.198	1404.724	1401.409	1405.830	1379.305
10.5	1366.042	1390.357	1390.357	1399.198	1393.672	1402.514	1398.093	1401.409	1373.778
11.0	1364.937	1389.251	1387.041	1394.778	1391.462	1399.198	1392.567	1395.883	1373.778
11.5	1360.516	1383.725	1382.620	1391.462	1389.251	1394.778	1390.357	1394.778	1368.252
12.0	1356.095	1379.305	1380.410	1388.146	1384.831	1392.567	1385.936	1390.357	1362.726
12.5	1350.569	1374.884	1375.989	1385.936	1384.831	1387.041	1382.620	1384.831	1360.516
13.0	1348.359	1372.673	1370.463	1381.515	1380.410	1384.831	1379.305	1382.620	1353.885
13.5	1345.043	1367.147	1368.252	1375.989	1375.989	1380.410	1375.989	1379.305	1349.464
14.0	1338.412	1361.621	1362.726	1372.673	1371.568	1377.094	1370.463	1374.884	1345.043
14.5	1330.675	1356.095	1357.200	1368.252	1367.147	1371.568	1367.147	1370.463	1341.727
15.0	1327.360	1352.779	1354.990	1366.042	1362.726	1368.252	1361.621	1364.937	1336.201
15.5	1322.939	1349.464	1348.359	1360.516	1358.306	1362.726	1358.306	1359.411	1331.780
16.0	1319.623	1341.727	1343.938	1357.200	1352.779	1358.306	1351.674	1354.990	1324.044
16.5	1309.676	1337.306	1337.306	1352.779	1348.359	1353.885	1346.148	1349.464	1322.939
17.0	1304.150	1331.780	1333.991	1347.253	1343.938	1347.253	1341.727	1345.043	1315.202
17.5	1298.624	1325.149	1327.360	1340.622	1338.412	1341.727	1335.096	1340.622	1311.887
18.0	1295.308	1317.413	1320.728	1333.991	1333.991	1335.096	1330.675	1331.780	1305.255
18.5	1288.677	1312.992	1315.202	1330.675	1328.465	1330.675	1324.044	1327.360	1299.729
19.0	1279.835	1306.361	1308.571	1324.044	1321.834	1325.149	1319.623	1320.728	1293.098
19.5	1275.415	1300.834	1303.045	1318.518	1315.202	1318.518	1314.097	1315.202	1285.362
20.0	1268.783	1293.098	1296.414	1311.887	1309.676	1314.097	1307.466	1308.571	1279.835
20.5	1261.047	1286.467	1290.888	1306.361	1304.150	1306.361	1301.940	1301.940	1274.309
21.0	1255.521	1279.835	1283.151	1298.624	1297.519	1301.940	1293.098	1297.519	1265.468
21.5	1246.679	1273.204	1276.520	1291.993	1293.098	1296.414	1288.677	1289.782	1259.942
22.0	1241.153	1267.678	1270.994	1285.362	1286.467	1288.677	1282.046	1283.151	1253.310
22.5	1231.206	1257.731	1263.257	1279.835	1282.046	1285.362	1275.415	1275.415	1244.469
23.0	1224.575	1251.100	1256.626	1272.099	1275.415	1277.625	1269.889	1268.783	1240.048
23.5	1219.049	1243.363	1251.100	1266.573	1270.994	1274.309	1263.257	1262.152	1232.311
24.0	1207.997	1236.732	1243.363	1259.942	1264.362	1267.678	1256.626	1252.205	1221.259
24.5	1203.576	1230.101	1235.627	1254.416	1258.836	1262.152	1248.890	1245.574	1214.628
25.0	1194.734	1219.049	1228.996	1248.890	1255.521	1256.626	1242.258	1238.943	1207.997
25.5	1184.787	1212.418	1219.049	1243.363	1249.995	1249.995	1236.732	1232.311	1201.365
26.0	1175.946	1205.786	1212.418	1234.522	1243.363	1243.363	1228.996	1224.575	1191.419
26.5	1168.209	1195.839	1205.786	1230.101	1237.837	1236.732	1221.259	1215.733	1184.787

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27.0	1161.578	1188.103	1199.155	1222.364	1228.996	1230.101	1213.523	1207.997	1175.946
27.5	1151.631	1181.472	1191.419	1216.838	1223.470	1222.364	1206.891	1200.260	1167.104
28.0	1143.894	1170.419	1181.472	1210.207	1217.944	1215.733	1198.050	1191.419	1159.367
28.5	1136.158	1162.683	1174.840	1202.471	1211.312	1209.102	1191.419	1183.682	1151.631
29.0	1127.316	1153.841	1167.104	1195.839	1204.681	1201.365	1183.682	1175.946	1141.684
29.5	1118.475	1146.105	1159.367	1188.103	1196.945	1194.734	1177.051	1165.999	1132.842
30.0	1107.422	1137.263	1151.631	1180.366	1190.313	1188.103	1168.209	1158.262	1122.895
30.5	1098.691	1128.421	1142.789	1173.735	1183.682	1180.366	1160.473	1149.420	1114.054
31.0	1089.407	1118.475	1135.053	1165.999	1177.051	1173.735	1151.631	1140.579	1107.422
31.5	1082.445	1108.528	1127.316	1158.262	1169.314	1167.104	1145.000	1131.737	1095.486
32.0	1070.840	1101.675	1118.475	1151.631	1162.683	1160.473	1137.263	1122.895	1087.308
32.5	1063.324	1091.728	1109.633	1143.894	1156.052	1152.736	1127.316	1112.948	1079.682
33.0	1052.493	1082.887	1099.907	1137.263	1150.526	1146.105	1118.475	1103.223	1067.303
33.5	1042.767	1073.492	1091.618	1130.632	1142.789	1137.263	1110.738	1094.712	1059.456
34.0	1033.926	1064.209	1085.208	1121.790	1136.158	1130.632	1103.665	1086.423	1051.388
34.5	1023.647	1053.820	1075.813	1114.054	1129.527	1122.895	1094.934	1075.261	1040.115
35.0	1015.579	1044.867	1067.966	1107.422	1121.790	1115.159	1086.644	1066.640	1032.710
35.5	1005.522	1034.589	1060.119	1100.239	1116.264	1107.422	1077.250	1056.251	1020.774
36.0	993.696	1023.979	1050.615	1092.392	1108.528	1101.454	1068.408	1047.078	1012.816
36.5	983.418	1014.806	1043.320	1084.213	1102.007	1093.386	1060.230	1037.462	1003.643
37.0	975.460	1004.306	1033.373	1078.024	1095.265	1086.092	1051.057	1027.847	996.017
37.5	964.850	995.685	1025.305	1069.956	1088.081	1077.361	1043.652	1019.005	986.402
38.0	953.466	985.628	1016.132	1062.772	1081.008	1069.624	1034.810	1009.943	975.018
38.5	944.293	975.571	1008.727	1054.704	1073.050	1061.998	1025.084	1000.990	964.187
39.0	933.241	964.850	999.443	1046.857	1065.535	1054.041	1017.348	992.370	953.687
39.5	922.741	954.019	991.044	1038.678	1058.683	1046.304	1007.953	982.644	941.420
40.0	911.468	945.288	982.312	1031.163	1052.272	1039.341	999.222	973.692	929.925
40.5	901.963	935.341	973.692	1023.205	1043.762	1031.384	990.601	962.308	919.094
41.0	889.917	924.178	964.518	1015.911	1035.252	1023.647	981.760	952.251	908.263
41.5	879.970	913.237	957.003	1008.395	1029.505	1014.916	972.255	940.204	897.322
42.0	868.476	903.511	947.388	1000.106	1021.879	1008.727	963.524	928.820	887.485
42.5	858.197	893.122	938.214	992.812	1014.585	999.885	953.687	918.652	876.654
43.0	847.145	883.949	929.373	984.523	1007.069	991.375	945.398	906.495	865.823
43.5	837.530	874.444	920.089	976.234	1000.327	983.197	937.220	895.774	856.318
44.0	828.135	863.171	911.468	968.939	992.701	976.123	927.162	884.280	844.935
44.5	814.983	852.561	900.858	960.429	985.075	968.608	919.647	874.112	834.877
45.0	805.368	842.061	893.564	952.693	977.560	959.103	910.916	862.618	824.488
45.5	795.421	831.783	883.285	944.514	968.497	952.030	901.742	853.334	814.099
46.0	784.479	823.051	874.775	935.562	960.982	944.404	893.122	842.393	802.384
46.5	774.864	812.662	865.270	926.389	953.798	935.120	884.280	832.556	792.769
47.0	763.591	801.500	856.318	919.868	945.840	928.710	876.102	822.388	782.822
47.5	752.539	791.553	847.145	910.695	938.767	920.863	867.149	811.889	770.112
48.0	743.918	781.274	838.745	904.174	929.704	910.805	858.418	801.279	761.491
48.5	731.871	770.996	829.683	894.116	922.520	903.400	849.355	791.111	748.781
49.0	724.798	762.375	821.283	886.491	914.563	895.332	839.961	781.274	738.834
49.5	715.293	750.881	812.331	878.422	905.942	887.596	828.467	770.333	728.998
50.0	704.131	742.039	803.379	870.133	898.869	879.307	820.178	759.833	720.488
50.5	693.078	734.192	792.437	861.734	890.911	870.686	810.673	749.997	711.093
51.0	682.689	724.577	784.922	853.224	883.506	862.397	800.173	739.166	698.936
51.5	672.411	714.962	775.085	845.929	876.654	854.218	791.000	732.866	688.437
52.0	661.580	704.241	766.907	837.861	868.033	846.150	781.053	722.809	677.274
52.5	651.633	694.515	757.733	829.351	859.965	837.640	772.322	713.856	667.106
53.0	640.470	683.795	748.118	821.283	851.676	830.456	763.370	703.025	657.159
53.5	630.413	673.848	739.166	812.662	843.387	821.615	753.423	692.636	645.554
54.0	619.471	664.564	731.098	804.263	834.546	813.325	745.355	682.468	634.281
54.5	608.861	653.733	724.577	794.979	827.693	805.478	735.629	671.858	624.224

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55.0	597.478	643.565	716.067	787.021	819.404	796.526	730.103	662.243	613.061
55.5	587.089	634.502	706.673	777.959	810.452	788.016	721.482	652.075	602.009
56.0	576.700	623.450	697.389	769.117	802.936	780.059	711.978	641.576	592.173
56.5	566.753	613.172	688.105	761.159	793.653	769.891	702.031	630.302	580.899
57.0	555.922	602.783	679.153	752.097	785.695	761.491	692.747	620.466	569.074
57.5	545.754	593.388	670.753	743.697	776.190	752.318	683.242	609.414	558.685
58.0	535.807	582.999	660.696	735.076	767.128	743.476	673.516	599.577	548.185
58.5	525.086	572.721	651.412	729.108	758.728	736.182	664.343	589.299	537.022
59.0	515.250	562.774	643.123	722.698	750.549	729.108	654.285	578.357	527.186
59.5	504.640	553.048	633.397	712.309	741.266	720.819	645.333	568.742	515.913
60.0	494.472	543.212	623.340	703.688	735.850	711.646	635.718	558.685	506.408
60.5	484.193	533.154	613.945	695.841	727.893	702.804	627.208	547.854	494.693
61.0	473.031	523.207	605.214	685.895	719.714	693.299	617.371	538.570	484.304
61.5	462.973	513.150	596.372	676.721	711.093	684.237	608.419	527.518	473.804
62.0	452.695	503.314	587.310	668.101	701.478	676.058	598.141	517.792	463.084
62.5	442.527	493.698	578.247	659.148	692.084	666.111	589.520	507.403	452.695
63.0	432.690	483.641	569.074	650.196	683.242	657.380	580.015	497.677	442.527
63.5	422.301	474.246	559.790	640.581	674.511	648.207	570.289	487.509	432.359
64.0	411.581	464.410	550.948	631.629	665.448	639.365	561.337	477.452	421.307
64.5	400.529	454.574	541.112	622.234	655.722	630.855	551.611	467.726	411.028
65.0	390.913	445.511	531.939	613.282	646.770	621.129	542.770	457.779	400.639
65.5	381.298	435.675	522.876	604.993	638.481	612.177	533.928	447.832	390.582
66.0	370.799	425.949	514.255	594.604	629.197	602.672	523.981	437.774	380.193
66.5	361.625	416.554	504.750	586.094	619.471	593.388	515.250	427.938	370.025
67.0	351.568	407.381	495.577	576.810	610.519	583.552	505.303	418.433	360.410
67.5	342.063	397.876	486.846	567.084	600.793	574.821	496.903	409.039	350.573
68.0	332.227	388.703	477.009	559.016	591.952	565.758	487.288	399.313	341.068
68.5	322.611	379.640	468.610	548.959	582.778	555.922	477.894	389.808	330.458
69.0	312.996	369.804	459.547	540.780	573.494	547.301	468.831	380.856	321.064
69.5	302.828	360.631	450.595	531.054	564.100	538.238	460.100	371.241	310.565
70.0	293.655	351.568	441.201	522.102	554.706	528.402	450.595	361.404	301.170
70.5	284.482	341.842	432.469	512.597	545.643	519.781	441.532	351.899	291.665
71.0	274.424	333.221	423.628	504.198	536.470	510.497	432.690	342.505	281.829
71.5	265.361	323.938	415.339	495.135	527.297	501.987	423.296	333.221	272.103
72.0	255.967	315.538	405.834	485.520	518.013	492.482	414.897	324.380	261.935
72.5	246.683	306.475	397.324	476.788	509.392	483.862	405.723	314.875	252.430
73.0	237.289	297.965	388.261	467.284	499.887	474.136	396.992	305.702	243.810
73.5	228.447	289.344	379.751	457.889	490.383	465.184	388.261	296.749	234.194
74.0	219.385	280.392	371.241	449.932	481.651	456.121	379.198	287.797	225.132
74.5	209.769	271.330	361.957	440.537	472.147	447.390	371.020	278.513	215.516
75.0	200.596	263.040	353.668	432.138	463.747	438.106	362.510	270.003	206.785
75.5	192.307	254.641	345.600	422.854	454.574	429.264	353.557	260.941	197.722
76.0	183.134	246.241	337.090	414.565	445.621	420.754	345.489	252.651	188.770
76.5	174.845	238.063	328.801	405.723	436.559	411.581	336.758	243.699	180.592
77.0	166.666	229.884	320.511	396.771	427.496	403.071	328.027	235.410	171.860
77.5	158.266	221.816	312.443	388.482	419.207	394.119	319.738	226.679	163.461
78.0	149.646	213.748	304.486	379.861	409.923	385.719	311.780	218.832	155.061
78.5	141.467	206.122	296.307	371.462	401.524	377.319	303.712	210.764	146.772
79.0	133.399	198.275	288.681	362.952	392.682	368.699	295.423	203.027	138.925
79.5	125.994	190.539	281.166	354.884	384.614	361.183	287.797	195.070	130.526
80.0	118.479	182.802	273.429	346.373	376.546	352.452	279.840	187.333	123.010
80.5	110.742	175.397	265.803	338.637	367.704	344.605	272.435	180.371	115.274
81.0	103.227	168.324	258.399	330.458	359.746	336.205	264.919	172.745	108.090
81.5	96.043	161.140	250.883	322.722	351.568	328.358	257.514	165.782	100.795
82.0	88.970	154.288	243.699	314.985	342.837	320.622	250.109	158.929	93.722
82.5	82.449	147.214	236.515	307.912	334.879	312.443	242.594	152.188	86.980

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CANDELA TABULATION - (Cont.)

83.0	75.486	140.583	229.442	300.176	327.364	304.707	235.852	145.446	80.238
83.5	68.965	134.173	222.479	292.660	319.406	297.523	228.558	138.925	73.718
84.0	62.555	127.873	215.737	285.255	311.891	290.229	222.037	132.515	67.307
84.5	56.366	121.684	208.996	278.292	304.375	282.824	215.185	126.326	61.339
85.0	50.619	115.937	202.254	270.998	297.081	275.419	208.443	120.358	55.150
85.5	44.872	109.858	196.065	263.814	289.676	268.567	202.033	113.947	49.403
86.0	39.125	104.221	189.875	257.293	282.492	261.714	195.401	108.200	43.545
86.5	33.709	98.695	183.907	250.552	275.640	254.641	189.323	102.343	37.909
87.0	28.293	93.280	177.718	244.031	268.677	248.231	183.355	96.817	32.272
87.5	23.320	88.196	171.971	238.063	262.046	241.931	177.165	91.401	26.857
88.0	18.457	82.670	166.555	231.984	255.967	235.742	171.529	85.875	21.441
88.5	13.594	77.917	161.582	226.458	249.778	230.105	166.224	80.459	15.915
89.0	8.731	73.386	156.940	221.042	244.362	224.358	161.029	75.707	10.721
89.5	4.310	69.628	152.519	216.069	238.947	219.385	156.609	71.507	5.637
90.0	1.547	66.202	148.651	211.206	233.752	214.301	152.519	67.860	1.768
90.5	0.995	63.329	144.893	206.564	228.558	209.327	148.430	64.765	0.995
91.0	0.995	60.897	141.136	202.033	223.695	204.906	144.230	62.334	0.884
91.5	0.995	59.129	137.930	197.612	219.053	200.596	141.025	60.455	0.884
92.0	0.995	57.582	134.615	193.744	214.853	196.728	137.930	58.908	0.884
92.5	0.995	56.145	132.294	190.207	210.764	192.970	135.278	57.471	0.884
93.0	0.995	54.819	129.862	186.781	206.896	189.544	132.846	56.034	0.884
93.5	0.995	53.492	127.652	183.797	203.580	186.339	130.526	54.708	0.884
94.0	0.995	52.277	125.552	180.702	200.264	183.355	128.536	53.382	0.884
94.5	0.995	51.061	123.673	178.050	197.280	180.592	126.436	52.055	0.884
95.0	0.995	49.845	121.794	175.397	194.407	177.608	124.336	50.840	0.884
95.5	0.995	48.740	119.694	172.745	191.202	175.066	122.347	49.735	0.884
96.0	0.995	47.635	117.926	170.092	188.439	172.303	120.358	48.629	0.884
96.5	0.995	46.529	115.937	167.661	185.676	169.871	118.258	47.414	0.884
97.0	0.995	45.424	114.168	164.898	182.802	166.998	116.489	46.308	0.884
97.5	0.995	44.319	112.179	162.687	180.039	164.677	114.610	45.314	0.884
98.0	0.995	43.324	110.411	160.035	177.497	162.135	112.621	44.208	0.884
98.5	0.995	42.440	108.753	157.714	174.955	159.593	110.853	43.103	0.884
99.0	0.995	41.335	106.763	155.503	172.413	157.161	108.974	42.109	0.884
99.5	0.995	40.340	105.106	153.182	169.761	154.840	107.206	41.114	0.884
100.0	0.995	39.456	103.227	150.861	167.219	152.519	105.327	40.119	0.884
100.5	0.995	38.461	101.569	148.540	164.566	150.309	103.669	39.235	0.995
101.0	0.995	37.688	99.911	146.220	162.245	148.098	102.011	38.240	0.995
101.5	0.995	36.693	98.143	144.009	159.924	145.667	100.132	37.356	0.995
102.0	1.105	35.919	96.596	141.799	157.272	143.678	98.585	36.472	0.995
102.5	1.105	35.035	94.938	139.699	154.730	141.578	96.817	35.588	0.995
103.0	1.105	34.262	93.280	137.488	152.409	139.367	95.159	34.704	0.995
103.5	1.105	33.377	91.622	135.610	150.198	137.157	93.611	33.819	0.995
104.0	1.105	32.604	90.185	133.620	147.988	135.057	91.843	32.935	0.995
104.5	1.105	31.830	88.527	131.299	145.888	132.957	90.296	32.162	1.105
105.0	1.105	31.056	87.091	129.420	143.457	130.968	88.749	31.388	1.105
105.5	1.105	30.283	85.654	127.431	141.357	128.757	87.201	30.614	1.105
106.0	1.105	29.509	84.107	125.331	139.257	126.768	85.543	29.841	1.105
106.5	1.105	28.846	82.670	123.563	136.825	124.778	84.107	29.178	1.105
107.0	1.216	28.072	81.233	121.573	134.946	122.679	82.559	28.404	1.105
107.5	1.216	27.409	79.686	119.473	132.957	120.800	81.233	27.741	1.105
108.0	1.216	26.746	78.249	117.816	130.857	118.921	79.796	27.078	1.105
108.5	1.216	25.972	77.033	115.826	128.868	117.152	78.249	26.304	1.216
109.0	1.216	25.309	75.596	113.947	126.878	115.274	76.812	25.641	1.216
109.5	1.216	24.646	74.160	112.068	124.999	113.395	75.486	24.978	1.216
110.0	1.216	24.094	72.944	110.300	123.010	111.516	74.160	24.315	1.216
110.5	1.216	23.430	71.618	108.642	121.021	109.637	72.723	23.652	1.216

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CANDELA TABULATION - (Cont.)

111.0	1.216	22.767	70.291	106.874	119.252	108.090	71.397	23.099	1.216
111.5	1.326	22.215	69.076	105.216	117.374	106.211	69.960	22.436	1.216
112.0	1.326	21.552	67.749	103.337	115.605	104.443	68.744	21.773	1.216
112.5	1.326	20.999	66.423	101.901	113.726	102.785	67.418	21.220	1.326
113.0	1.326	20.446	65.318	100.022	111.847	101.127	66.092	20.557	1.326
113.5	1.326	19.894	63.881	98.364	109.969	99.248	64.876	20.004	1.326
114.0	1.326	19.231	62.776	96.817	108.421	97.590	63.660	19.452	1.326
114.5	1.326	18.678	61.560	95.159	106.542	96.043	62.334	18.789	1.326
115.0	1.326	18.236	60.345	93.611	104.885	94.385	61.008	18.236	1.326
115.5	1.326	17.573	59.129	92.064	103.116	92.727	59.792	17.683	1.326
116.0	1.326	17.131	58.024	90.296	101.458	91.180	58.576	17.131	1.437
116.5	1.326	16.578	56.808	88.859	99.801	89.633	57.471	16.689	1.437
117.0	1.326	16.026	55.592	87.201	98.032	87.975	56.255	16.136	1.437
117.5	1.326	15.473	54.487	85.764	96.485	86.428	55.040	15.583	1.437
118.0	1.326	15.031	53.492	84.107	94.827	84.880	53.934	15.031	1.437
118.5	1.326	14.478	52.387	82.670	93.280	83.333	52.829	14.589	1.437
119.0	1.326	14.036	51.282	81.233	91.622	81.896	51.724	14.036	1.437
119.5	1.326	13.484	50.177	79.796	89.964	80.459	50.619	13.594	1.437
120.0	1.326	13.042	49.071	78.138	88.417	78.802	49.403	13.042	1.437
120.5	1.326	12.599	47.966	76.923	86.759	77.365	48.408	12.599	1.547
121.0	1.326	12.047	46.972	75.375	85.101	75.928	47.303	12.157	1.547
121.5	1.326	11.494	45.977	73.939	83.775	74.491	46.308	11.605	1.547
122.0	1.326	11.052	44.982	72.502	82.007	73.055	45.314	11.163	1.547
122.5	1.326	10.610	43.877	71.065	80.570	71.507	44.319	10.721	1.547
123.0	1.326	10.168	42.882	69.739	79.023	70.181	43.214	10.278	1.547
123.5	1.326	9.726	41.888	68.302	77.475	68.855	42.219	9.836	1.547
124.0	1.326	9.284	41.003	66.865	76.039	67.418	41.224	9.394	1.547
124.5	1.326	8.842	40.009	65.539	74.602	65.871	40.230	8.952	1.658
125.0	1.326	8.400	39.014	64.213	73.165	64.544	39.235	8.510	1.658
125.5	1.326	7.958	38.019	62.887	71.618	63.218	38.240	8.068	1.658
126.0	1.326	7.626	37.025	61.671	70.181	61.892	37.246	7.626	1.658
126.5	1.326	7.184	36.140	60.345	68.744	60.566	36.361	7.184	1.658
127.0	1.326	6.742	35.256	59.018	67.197	59.239	35.477	6.852	1.658
127.5	1.326	6.410	34.372	57.803	65.871	57.913	34.483	6.410	1.658
128.0	1.326	5.968	33.377	56.476	64.544	56.808	33.598	6.079	1.768
128.5	1.326	5.637	32.383	55.261	63.218	55.592	32.714	5.747	1.768
129.0	1.326	5.305	31.499	53.934	61.781	54.266	31.830	5.416	1.768
129.5	1.326	5.084	30.725	52.719	60.455	53.050	30.946	5.194	1.768
130.0	1.437	4.752	29.951	51.503	59.129	51.834	30.172	4.863	1.768
130.5	1.437	4.531	28.957	50.398	57.803	50.729	29.288	4.642	1.879
131.0	1.437	4.310	28.183	49.292	56.476	49.403	28.404	4.421	1.879
131.5	1.437	4.089	27.409	48.077	55.150	48.298	27.630	4.200	1.879
132.0	1.437	3.868	26.525	46.972	53.824	47.082	26.746	3.979	1.879
132.5	1.437	3.647	25.751	45.756	52.608	45.977	25.972	3.758	1.879
133.0	1.437	3.537	24.978	44.540	51.392	44.761	25.199	3.647	1.989
133.5	1.437	3.426	24.094	43.435	50.066	43.656	24.315	3.537	1.989
134.0	1.437	3.316	23.209	42.330	48.961	42.440	23.541	3.426	1.989
134.5	1.437	3.205	22.325	41.224	47.635	41.335	22.767	3.316	1.989
135.0	1.437	3.095	21.441	40.119	46.419	40.230	21.994	3.205	1.989
135.5	1.437	2.984	20.667	38.903	45.203	39.125	21.220	3.095	1.989
136.0	1.437	2.874	19.783	37.798	43.987	38.019	20.446	2.984	1.989
136.5	1.437	2.874	19.010	36.804	42.772	36.914	19.783	2.984	2.100
137.0	1.437	2.763	18.125	35.809	41.556	35.809	19.010	2.874	2.100
137.5	1.437	2.763	17.352	34.704	40.451	34.814	18.236	2.874	2.100
138.0	1.437	2.653	16.578	33.598	39.346	33.709	17.573	2.763	2.100
138.5	1.437	2.653	15.915	32.604	38.240	32.714	16.910	2.763	2.100

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CANDELA TABULATION - (Cont.)

139.0	1.547	2.653	15.141	31.609	37.135	31.609	16.247	2.653	2.210
139.5	1.547	2.542	14.368	30.614	36.030	30.725	15.583	2.653	2.210
140.0	1.547	2.542	13.705	29.620	34.925	29.620	14.810	2.653	2.210
140.5	1.547	2.542	13.042	28.514	33.819	28.625	14.147	2.542	2.210
141.0	1.547	2.431	12.489	27.630	32.714	27.630	13.484	2.542	2.210
141.5	1.547	2.431	11.826	26.636	31.609	26.746	12.820	2.542	2.321
142.0	1.547	2.431	11.273	25.751	30.614	25.751	12.157	2.542	2.321
142.5	1.547	2.321	10.721	24.757	29.509	24.757	11.494	2.431	2.321
143.0	1.547	2.321	10.168	23.873	28.514	23.762	10.942	2.431	2.321
143.5	1.658	2.321	9.615	22.878	27.520	22.878	10.278	2.431	2.321
144.0	1.658	2.321	9.063	21.994	26.415	21.994	9.726	2.321	2.321
144.5	1.658	2.321	8.510	21.110	25.420	20.999	9.063	2.321	2.431
145.0	1.658	2.210	8.068	20.115	24.425	20.115	8.510	2.321	2.431
145.5	1.658	2.210	7.515	19.231	23.430	19.231	7.958	2.321	2.431
146.0	1.658	2.210	7.073	18.457	22.436	18.347	7.405	2.321	2.431
146.5	1.658	2.210	6.631	17.573	21.441	17.462	6.963	2.321	2.431
147.0	1.658	2.210	6.189	16.689	20.557	16.578	6.521	2.210	2.431
147.5	1.658	2.210	5.747	15.805	19.562	15.805	6.079	2.210	2.542
148.0	1.768	2.210	5.416	14.920	18.678	14.920	5.747	2.210	2.542
148.5	1.768	2.210	5.084	14.036	17.683	14.147	5.416	2.210	2.542
149.0	1.768	2.210	4.863	13.042	16.799	13.263	5.084	2.210	2.542
149.5	1.768	2.210	4.531	12.268	15.915	12.489	4.863	2.210	2.542
150.0	1.768	2.210	4.310	11.384	15.031	11.715	4.642	2.321	2.542
150.5	1.768	2.210	4.200	10.610	14.147	10.942	4.421	2.210	2.653
151.0	1.768	2.210	3.979	9.836	13.263	10.168	4.200	2.210	2.653
151.5	1.879	2.210	3.868	9.173	12.489	9.505	4.089	2.321	2.653
152.0	1.879	2.321	3.758	8.400	11.605	8.731	3.868	2.321	2.653
152.5	1.879	2.321	3.647	7.847	10.831	8.068	3.758	2.321	2.653
153.0	1.879	2.321	3.537	7.294	9.947	7.405	3.647	2.321	2.653
153.5	1.879	2.321	3.426	6.742	9.173	6.852	3.537	2.321	2.653
154.0	1.879	2.321	3.316	6.189	8.400	6.410	3.426	2.321	2.763
154.5	1.989	2.321	3.205	5.747	7.736	5.858	3.316	2.321	2.763
155.0	1.989	2.321	3.095	5.305	7.073	5.416	3.205	2.321	2.763
155.5	1.989	2.431	3.095	4.973	6.521	5.084	3.205	2.321	2.763
156.0	1.989	2.431	2.984	4.642	5.968	4.752	3.095	2.431	2.763
156.5	2.100	2.431	2.984	4.310	5.526	4.421	2.984	2.431	2.763
157.0	2.100	2.431	2.874	4.089	5.084	4.200	2.984	2.431	2.763
157.5	2.100	2.431	2.874	3.979	4.642	3.979	2.874	2.431	2.763
158.0	2.100	2.431	2.763	3.758	4.421	3.758	2.874	2.431	2.874
158.5	2.100	2.542	2.763	3.647	4.089	3.647	2.763	2.431	2.874
159.0	2.210	2.542	2.653	3.426	3.868	3.426	2.763	2.542	2.874
159.5	2.210	2.542	2.653	3.316	3.647	3.316	2.653	2.542	2.874
160.0	2.210	2.542	2.653	3.205	3.537	3.205	2.653	2.542	2.874
160.5	2.210	2.542	2.542	3.095	3.316	3.095	2.653	2.542	2.874
161.0	2.210	2.542	2.542	2.984	3.205	2.984	2.542	2.542	2.874
161.5	2.321	2.542	2.542	2.984	3.095	2.984	2.542	2.542	2.874
162.0	2.321	2.653	2.542	2.874	2.984	2.874	2.542	2.542	2.874
162.5	2.321	2.653	2.542	2.763	2.874	2.763	2.542	2.653	2.874
163.0	2.321	2.653	2.542	2.653	2.763	2.763	2.542	2.653	2.984
163.5	2.321	2.653	2.542	2.653	2.653	2.653	2.542	2.653	2.984
164.0	2.431	2.653	2.542	2.542	2.653	2.542	2.542	2.653	2.984
164.5	2.431	2.653	2.542	2.542	2.542	2.542	2.542	2.653	2.984
165.0	2.431	2.763	2.542	2.542	2.542	2.542	2.542	2.653	2.984
165.5	2.431	2.763	2.542	2.542	2.431	2.542	2.542	2.763	2.984
166.0	2.542	2.763	2.653	2.542	2.431	2.431	2.653	2.763	2.984
166.5	2.542	2.763	2.653	2.542	2.431	2.431	2.653	2.763	2.984

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167.0	2.542	2.763	2.653	2.431	2.321	2.431	2.653	2.763	2.984
167.5	2.542	2.763	2.653	2.431	2.321	2.431	2.653	2.763	2.984
168.0	2.542	2.763	2.653	2.431	2.321	2.431	2.653	2.763	2.984
168.5	2.653	2.874	2.653	2.431	2.321	2.431	2.653	2.763	2.984
169.0	2.653	2.874	2.653	2.542	2.321	2.542	2.653	2.874	2.984
169.5	2.653	2.874	2.653	2.542	2.321	2.542	2.653	2.874	2.984
170.0	2.653	2.874	2.653	2.542	2.321	2.431	2.653	2.874	2.984
170.5	2.653	2.874	2.653	2.542	2.321	2.542	2.653	2.874	2.984
171.0	2.653	2.874	2.763	2.542	2.321	2.542	2.653	2.874	2.984
171.5	2.653	2.874	2.763	2.542	2.321	2.542	2.763	2.874	2.984
172.0	2.653	2.874	2.763	2.542	2.321	2.542	2.763	2.874	2.984
172.5	2.763	2.874	2.763	2.542	2.431	2.542	2.763	2.874	2.984
173.0	2.763	2.874	2.763	2.542	2.431	2.542	2.763	2.874	2.984
173.5	2.763	2.874	2.763	2.542	2.431	2.542	2.763	2.874	2.984
174.0	2.763	2.874	2.763	2.542	2.431	2.542	2.763	2.874	2.984
174.5	2.763	2.874	2.763	2.542	2.431	2.542	2.763	2.874	2.984
175.0	2.763	2.874	2.763	2.542	2.431	2.542	2.763	2.874	2.984
175.5	2.874	2.874	2.763	2.542	2.431	2.542	2.763	2.874	2.984
176.0	2.874	2.874	2.763	2.542	2.431	2.542	2.763	2.874	2.984
176.5	2.874	2.874	2.763	2.653	2.431	2.542	2.763	2.874	2.984
177.0	2.874	2.984	2.763	2.653	2.431	2.542	2.763	2.984	2.984
177.5	2.874	2.984	2.763	2.653	2.431	2.542	2.763	2.984	2.984
178.0	2.874	2.984	2.763	2.653	2.431	2.653	2.763	2.984	2.984
178.5	2.874	2.984	2.763	2.653	2.431	2.653	2.763	2.984	2.984
179.0	2.984	2.984	2.763	2.653	2.431	2.653	2.874	2.984	2.984
179.5	2.984	2.984	2.763	2.653	2.431	2.653	2.763	2.984	2.984
180.0	2.763	2.763	2.763	2.763	2.763	2.763	2.763	2.763	2.763

IES INDOOR REPORT
PHOTOMETRIC FILENAME : FS-4-LS-8CS-DIM-UNV_32W_4000K_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	517.39	N.A.	11.40
0-30	1086.82	N.A.	24.00
0-40	1762.12	N.A.	38.80
0-60	3101.92	N.A.	68.40
0-80	3997.87	N.A.	88.10
0-90	4210.89	N.A.	92.80
10-90	4076.08	N.A.	89.80
20-40	1244.73	N.A.	27.40
20-50	1941.03	N.A.	42.80
40-70	1866.78	N.A.	41.10
60-80	895.95	N.A.	19.70
70-80	368.97	N.A.	8.10
80-90	213.02	N.A.	4.70
90-110	208.84	N.A.	4.60
90-120	265.26	N.A.	5.80
90-130	299.04	N.A.	6.60
90-150	323.68	N.A.	7.10
90-180	326.70	N.A.	7.20
110-180	117.86	N.A.	2.60
0-180	4537.6	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	134.82
10-20	382.57
20-30	569.44
30-40	675.29
40-50	696.30
50-60	643.51
60-70	526.98
70-80	368.97
80-90	213.02
90-100	123.35
100-110	85.49
110-120	56.42
120-130	33.78
130-140	17.51
140-150	7.12
150-160	2.01
160-170	0.75
170-180	0.26

IES INDOOR REPORT
PHOTOMETRIC FILENAME : FS-4-LS-8CS-DIM-UNV_32W_4000K_.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	95	95	95	93
1	106	100	96	91	102	97	93	89	92	88	85	87	84	81	82	79	77	75
2	96	87	80	73	92	84	78	72	80	74	69	75	71	66	71	67	64	61
3	87	76	67	61	84	74	66	60	70	63	58	66	60	56	63	58	54	51
4	80	67	58	51	77	65	57	50	62	55	49	59	52	47	56	50	46	44
5	73	60	51	44	70	58	50	43	55	48	42	53	46	41	50	44	40	38
6	67	54	45	38	65	52	44	38	50	42	37	48	41	36	45	40	35	33
7	62	49	40	34	60	48	39	33	45	38	33	43	37	32	41	36	31	29
8	58	44	36	30	56	43	35	30	42	34	29	40	33	28	38	32	28	26
9	54	41	33	27	53	40	32	27	38	31	26	37	30	26	35	29	25	23
10	51	38	30	24	49	37	29	24	35	28	24	34	28	23	33	27	23	21

IES INDOOR REPORT

PHOTOMETRIC FILENAME : FS-4-LS-8CS-DIM-UNV_32W_4000K_.IES

UGR TABLE - CORRECTED

Reflectances

Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

Room Size UGR Viewed Crosswise

X=2H	Y=2H	20.1	21.7	20.6	22.1	22.6	22.6	24.1	23.0	24.6	25.0
	3H	21.6	23.0	22.1	23.5	24.0	25.0	26.4	25.5	26.8	27.4
	4H	22.1	23.4	22.6	23.9	24.4	26.1	27.4	26.6	27.9	28.5
	6H	22.4	23.6	22.9	24.1	24.7	27.2	28.5	27.8	29.0	29.5
	8H	22.5	23.6	23.0	24.2	24.7	27.8	29.0	28.4	29.5	30.1
	12H	22.5	23.6	23.0	24.1	24.7	28.4	29.6	29.0	30.1	30.7

UGR Viewed Endwise

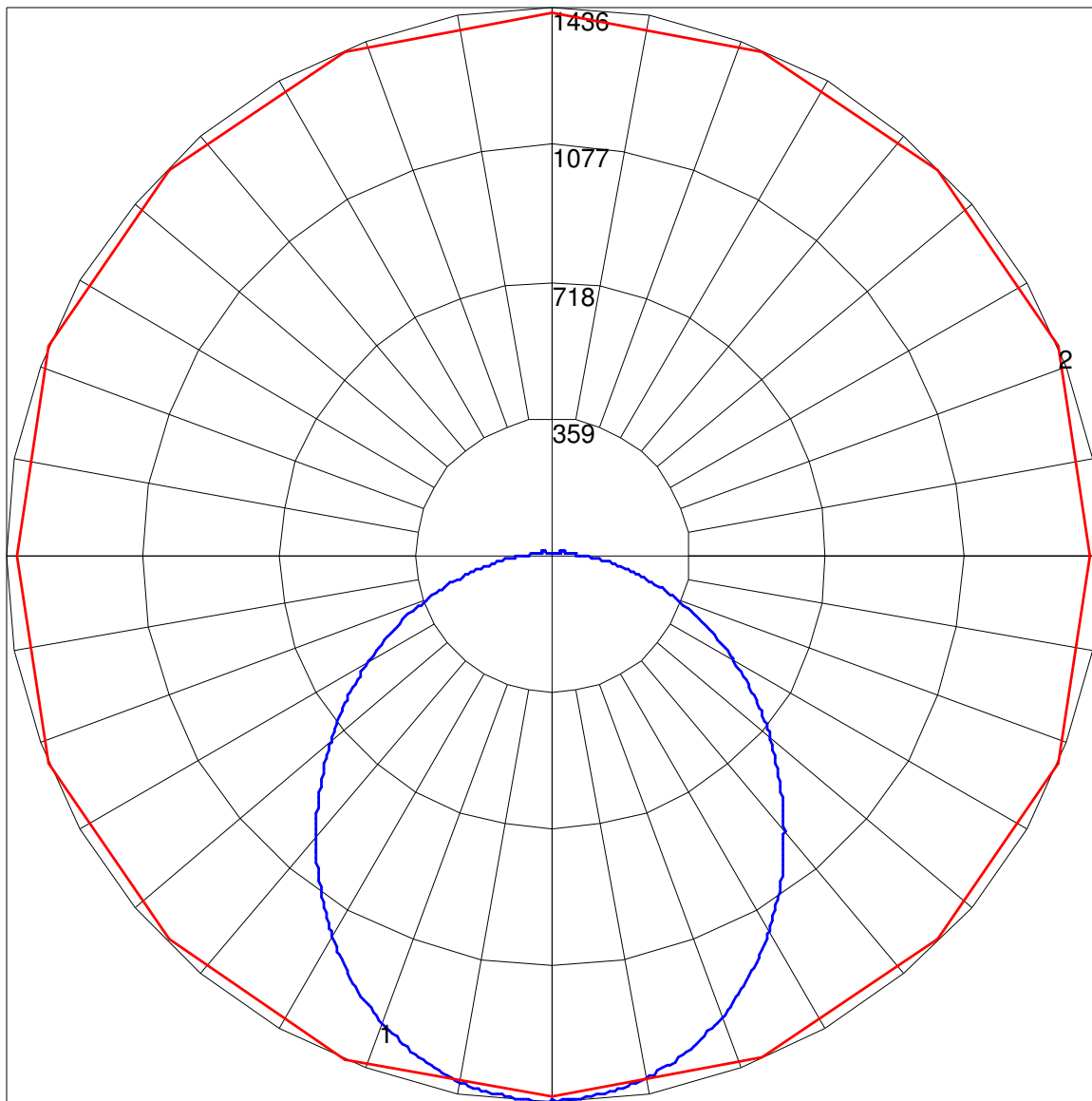
4H	2H	21.1	22.4	21.6	22.9	23.4	23.0	24.3	23.5	24.8	25.3
	3H	22.8	23.9	23.3	24.5	25.0	25.7	26.8	26.2	27.3	27.9
	4H	23.4	24.4	23.9	25.0	25.6	26.9	28.0	27.5	28.5	29.1
	6H	23.8	24.7	24.4	25.3	25.9	28.3	29.2	28.8	29.7	30.3
	8H	23.9	24.8	24.5	25.4	26.0	28.9	29.8	29.5	30.3	31.0
	12H	24.0	24.8	24.6	25.4	26.0	29.7	30.4	30.2	31.0	31.7

8H	4H	24.1	25.0	24.7	25.5	26.1	27.1	28.0	27.7	28.6	29.2
	6H	24.7	25.4	25.3	26.0	26.7	28.6	29.4	29.2	30.0	30.6
	8H	24.9	25.6	25.5	26.2	26.8	29.5	30.1	30.1	30.7	31.3
	12H	25.1	25.6	25.7	26.2	26.9	30.4	30.9	31.0	31.5	32.2

12H	4H	24.3	25.1	24.9	25.7	26.3	27.1	27.9	27.7	28.5	29.1
	6H	25.0	25.7	25.6	26.2	26.9	28.7	29.3	29.3	29.9	30.6
	8H	25.3	25.9	25.9	26.5	27.2	29.5	30.1	30.1	30.7	31.4

Maximum UGR = 32.2

POLAR GRAPH



Maximum Candela = 1435.67 Located At Horizontal Angle = 157.5, Vertical Angle = .5
1 - Vertical Plane Through Horizontal Angles (157.5 - 337.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (.5) (Through Max. Cd.)