



IES INDOOR REPORT

PHOTOMETRIC FILENAME : QD-33-LED35-HO-D9.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

IESNA:LM-63-2002[ISSUE DATE][TEST] [TEST LAB] LIGHT LABORATORY, INC.[MANUFACTURER] PRUDENTIAL LTG.[LUMCAT] QUALITY

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	22964
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	85
Total Luminaire Watts	270
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.38
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.00 ft
Luminous Width (90-270)	3.00 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	7422	7403	7370
55	7140	7107	7058
65	6765	6712	6670
75	6240	6160	6131
85	5392	5234	5305

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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>	<u>202.5</u>
0.0	6663.889	6663.889	6663.889	6663.889	6663.889	6663.889	6663.889	6663.889	6663.889	6663.889
2.5	6655.449	6657.132	6655.219	6652.950	6654.046	6652.950	6655.219	6657.132	6655.449	6657.132
5.0	6631.887	6632.040	6630.331	6629.745	6627.654	6629.745	6630.331	6632.040	6631.887	6632.040
7.5	6591.163	6591.571	6590.500	6589.531	6588.817	6589.531	6590.500	6591.571	6591.163	6591.571
10.0	6535.242	6536.236	6532.896	6532.029	6530.397	6532.029	6532.896	6536.236	6535.242	6536.236
12.5	6463.816	6466.009	6461.827	6460.731	6458.512	6460.731	6461.827	6466.009	6463.816	6466.009
15.0	6382.012	6380.865	6378.213	6374.847	6374.133	6374.847	6378.213	6380.865	6382.012	6380.865
17.5	6282.435	6282.664	6280.573	6274.581	6273.000	6274.581	6280.573	6282.664	6282.435	6282.664
20.0	6172.402	6170.643	6167.455	6162.508	6157.434	6162.508	6167.455	6170.643	6172.402	6170.643
22.5	6046.560	6045.693	6040.567	6032.917	6030.673	6032.917	6040.567	6045.693	6046.560	6045.693
25.0	5908.860	5907.585	5900.878	5895.064	5892.361	5895.064	5900.878	5907.585	5908.860	5907.585
27.5	5758.206	5755.630	5746.629	5739.718	5735.154	5739.718	5746.629	5755.630	5758.206	5755.630
30.0	5591.410	5591.079	5583.505	5575.626	5570.143	5575.626	5583.505	5591.079	5591.410	5591.079
32.5	5416.786	5416.429	5407.045	5398.197	5397.712	5398.197	5407.045	5416.429	5416.786	5416.429
35.0	5235.430	5232.421	5222.323	5210.058	5211.333	5210.058	5222.323	5232.421	5235.430	5232.421
37.5	5041.350	5036.505	5025.030	5013.070	5013.759	5013.070	5025.030	5036.505	5041.350	5036.505
40.0	4839.237	4831.051	4819.908	4806.801	4802.670	4806.801	4819.908	4831.051	4839.237	4831.051
42.5	4619.044	4616.469	4601.883	4590.051	4588.215	4590.051	4601.883	4616.469	4619.044	4616.469
45.0	4392.043	4394.644	4380.823	4364.401	4361.418	4364.401	4380.823	4394.644	4392.043	4394.644
47.5	4159.866	4161.447	4147.702	4132.198	4128.297	4132.198	4147.702	4161.447	4159.866	4161.447
50.0	3921.135	3919.987	3907.186	3894.028	3886.276	3894.028	3907.186	3919.987	3921.135	3919.987
52.5	3676.768	3674.422	3662.590	3647.902	3640.278	3647.902	3662.590	3674.422	3676.768	3674.422
55.0	3427.557	3425.670	3411.517	3396.141	3387.955	3396.141	3411.517	3425.670	3427.557	3425.670
57.5	3168.910	3170.083	3155.089	3139.228	3132.853	3139.228	3155.089	3170.083	3168.910	3170.083
60.0	2910.213	2911.717	2897.641	2881.372	2878.185	2881.372	2897.641	2911.717	2910.213	2911.717
62.5	2651.439	2649.246	2635.705	2623.975	2618.544	2623.975	2635.705	2649.246	2651.439	2649.246
65.0	2392.563	2385.627	2374.075	2360.356	2359.107	2360.356	2374.075	2385.627	2392.563	2385.627
67.5	2129.734	2125.578	2111.578	2099.262	2098.548	2099.262	2111.578	2125.578	2129.734	2125.578
70.0	1865.044	1862.596	1846.353	1836.892	1838.142	1836.892	1846.353	1862.596	1865.044	1862.596
72.5	1605.556	1601.884	1586.967	1578.909	1580.439	1578.909	1586.967	1601.884	1605.556	1601.884
75.0	1351.704	1345.788	1334.389	1326.841	1328.014	1326.841	1334.389	1345.788	1351.704	1345.788
77.5	1102.696	1094.970	1083.010	1079.185	1078.828	1079.185	1083.010	1094.970	1102.696	1094.970
80.0	856.825	850.603	838.134	835.915	835.431	835.915	838.134	850.603	856.825	850.603
82.5	617.074	616.564	603.075	601.137	606.339	601.137	603.075	616.564	617.074	616.564
85.0	393.312	391.680	381.760	382.933	386.962	382.933	381.760	391.680	393.312	391.680
87.5	186.634	187.144	172.201	174.649	176.205	174.649	172.201	187.144	186.634	187.144
90.0	188.113	194.106	168.529	90.040	22.491	90.040	168.529	194.106	188.113	194.106
92.5	255.331	237.481	179.137	103.224	47.251	103.224	179.137	237.481	255.331	237.481
95.0	256.300	241.459	189.439	121.150	84.430	121.150	189.439	241.459	256.300	241.459
97.5	285.192	270.045	215.832	146.548	115.489	146.548	215.832	270.045	285.192	270.045
100.0	319.566	303.501	249.084	178.270	156.315	178.270	249.084	303.501	319.566	303.501
102.5	356.439	341.445	282.718	212.797	198.211	212.797	282.718	341.445	356.439	341.445
105.0	396.499	381.276	318.495	251.455	236.997	251.455	318.495	381.276	396.499	381.276
107.5	433.449	415.191	355.470	292.255	282.183	292.255	355.470	415.191	433.449	415.191
110.0	467.644	450.279	395.454	335.248	328.618	335.248	395.454	450.279	467.644	450.279
112.5	502.630	487.330	434.698	380.587	360.442	380.587	434.698	487.330	502.630	487.330
115.0	544.756	528.717	478.456	423.121	420.240	423.121	478.456	528.717	544.756	528.717
117.5	589.152	572.985	523.081	470.730	464.559	470.730	523.081	572.985	589.152	572.985
120.0	632.476	620.389	566.763	516.936	504.466	516.936	566.763	620.389	632.476	620.389
122.5	676.846	664.377	615.570	573.138	550.137	573.138	615.570	664.377	676.846	664.377
125.0	719.508	708.058	663.663	616.692	611.209	616.692	663.663	708.058	719.508	708.058
127.5	766.606	753.856	709.333	661.215	644.946	661.215	709.333	753.856	766.606	753.856
130.0	811.716	799.884	759.619	712.087	695.844	712.087	759.619	799.884	811.716	799.884
132.5	857.641	844.381	812.965	756.483	754.749	756.483	812.965	844.381	857.641	844.381

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CANDELA TABULATION - (Cont.)

135.0	901.756	887.476	855.627	803.403	801.184	803.403	855.627	887.476	901.756	887.476
137.5	941.868	928.123	896.937	852.745	837.420	852.745	896.937	928.123	941.868	928.123
140.0	984.300	968.286	937.686	911.140	883.575	911.140	937.686	968.286	984.300	968.286
142.5	1019.617	1007.454	976.956	958.315	942.199	958.315	976.956	1007.454	1019.617	1007.454
145.0	1057.995	1043.358	1020.637	994.882	993.123	994.882	1020.637	1043.358	1057.995	1043.358
147.5	1089.793	1078.497	1058.479	1032.852	1027.140	1032.852	1058.479	1078.497	1089.793	1078.497
150.0	1124.422	1110.933	1091.910	1067.098	1062.075	1067.098	1091.910	1110.933	1124.422	1110.933
152.5	1152.982	1142.808	1122.102	1105.884	1092.726	1105.884	1122.102	1142.808	1152.982	1142.808
155.0	1183.404	1171.062	1154.257	1139.161	1133.169	1139.161	1154.257	1171.062	1183.404	1171.062
157.5	1207.807	1198.602	1181.644	1166.854	1165.656	1166.854	1181.644	1198.602	1207.807	1198.602
160.0	1228.794	1222.674	1208.292	1193.196	1190.697	1193.196	1208.292	1222.674	1228.794	1222.674
162.5	1249.500	1243.431	1234.455	1221.322	1217.752	1221.322	1234.455	1243.431	1249.500	1243.431
165.0	1267.171	1262.071	1252.789	1243.635	1242.207	1243.635	1252.789	1262.071	1267.171	1262.071
167.5	1280.967	1277.626	1271.022	1264.086	1266.942	1264.086	1271.022	1277.626	1280.967	1277.626
170.0	1293.411	1291.320	1284.945	1278.085	1281.834	1278.085	1284.945	1291.320	1293.411	1291.320
172.5	1302.081	1300.602	1297.261	1292.314	1291.932	1292.314	1297.261	1300.602	1302.081	1300.602
175.0	1309.654	1308.762	1304.299	1302.948	1305.396	1302.948	1304.299	1308.762	1309.654	1308.762
177.5	1313.734	1312.230	1310.572	1308.226	1308.685	1308.226	1310.572	1312.230	1313.734	1312.230
180.0	1311.490	1311.490	1311.490	1311.490	1311.490	1311.490	1311.490	1311.490	1311.490	1311.490

Vert. Angles **Horizontal Angles**

	<u>225.0</u>	<u>247.5</u>	<u>270.0</u>	<u>292.5</u>	<u>315.0</u>	<u>337.5</u>	<u>360.0</u>
0.0	6663.889	6663.889	6663.889	6663.889	6663.889	6663.889	6663.889
2.5	6655.219	6652.950	6654.046	6652.950	6655.219	6657.132	6655.449
5.0	6630.331	6629.745	6627.654	6629.745	6630.331	6632.040	6631.887
7.5	6590.500	6589.531	6588.817	6589.531	6590.500	6591.571	6591.163
10.0	6532.896	6532.029	6530.397	6532.029	6532.896	6536.236	6535.242
12.5	6461.827	6460.731	6458.512	6460.731	6461.827	6466.009	6463.816
15.0	6378.213	6374.847	6374.133	6374.847	6378.213	6380.865	6382.012
17.5	6280.573	6274.581	6273.000	6274.581	6280.573	6282.664	6282.435
20.0	6167.455	6162.508	6157.434	6162.508	6167.455	6170.643	6172.402
22.5	6040.567	6032.917	6030.673	6032.917	6040.567	6045.693	6046.560
25.0	5900.878	5895.064	5892.361	5895.064	5900.878	5907.585	5908.860
27.5	5746.629	5739.718	5735.154	5739.718	5746.629	5755.630	5758.206
30.0	5583.505	5575.626	5570.143	5575.626	5583.505	5591.079	5591.410
32.5	5407.045	5398.197	5397.712	5398.197	5407.045	5416.429	5416.786
35.0	5222.323	5210.058	5211.333	5210.058	5222.323	5232.421	5235.430
37.5	5025.030	5013.070	5013.759	5013.070	5025.030	5036.505	5041.350
40.0	4819.908	4806.801	4802.670	4806.801	4819.908	4831.051	4839.237
42.5	4601.883	4590.051	4588.215	4590.051	4601.883	4616.469	4619.044
45.0	4380.823	4364.401	4361.418	4364.401	4380.823	4394.644	4392.043
47.5	4147.702	4132.198	4128.297	4132.198	4147.702	4161.447	4159.866
50.0	3907.186	3894.028	3886.276	3894.028	3907.186	3919.987	3921.135
52.5	3662.590	3647.902	3640.278	3647.902	3662.590	3674.422	3676.768
55.0	3411.517	3396.141	3387.955	3396.141	3411.517	3425.670	3427.557
57.5	3155.089	3139.228	3132.853	3139.228	3155.089	3170.083	3168.910
60.0	2897.641	2881.372	2878.185	2881.372	2897.641	2911.717	2910.213
62.5	2635.705	2623.975	2618.544	2623.975	2635.705	2649.246	2651.439
65.0	2374.075	2360.356	2359.107	2360.356	2374.075	2385.627	2392.563
67.5	2111.578	2099.262	2098.548	2099.262	2111.578	2125.578	2129.734
70.0	1846.353	1836.892	1838.142	1836.892	1846.353	1862.596	1865.044
72.5	1586.967	1578.909	1580.439	1578.909	1586.967	1601.884	1605.556
75.0	1334.389	1326.841	1328.014	1326.841	1334.389	1345.788	1351.704
77.5	1083.010	1079.185	1078.828	1079.185	1083.010	1094.970	1102.696
80.0	838.134	835.915	835.431	835.915	838.134	850.603	856.825

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CANDELA TABULATION - (Cont.)

82.5	603.075	601.137	606.339	601.137	603.075	616.564	617.074
85.0	381.760	382.933	386.962	382.933	381.760	391.680	393.312
87.5	172.201	174.649	176.205	174.649	172.201	187.144	186.634
90.0	168.529	90.040	22.491	90.040	168.529	194.106	188.113
92.5	179.137	103.224	47.251	103.224	179.137	237.481	255.331
95.0	189.439	121.150	84.430	121.150	189.439	241.459	256.300
97.5	215.832	146.548	115.489	146.548	215.832	270.045	285.192
100.0	249.084	178.270	156.315	178.270	249.084	303.501	319.566
102.5	282.718	212.797	198.211	212.797	282.718	341.445	356.439
105.0	318.495	251.455	236.997	251.455	318.495	381.276	396.499
107.5	355.470	292.255	282.183	292.255	355.470	415.191	433.449
110.0	395.454	335.248	328.618	335.248	395.454	450.279	467.644
112.5	434.698	380.587	360.442	380.587	434.698	487.330	502.630
115.0	478.456	423.121	420.240	423.121	478.456	528.717	544.756
117.5	523.081	470.730	464.559	470.730	523.081	572.985	589.152
120.0	566.763	516.936	504.466	516.936	566.763	620.389	632.476
122.5	615.570	573.138	550.137	573.138	615.570	664.377	676.846
125.0	663.663	616.692	611.209	616.692	663.663	708.058	719.508
127.5	709.333	661.215	644.946	661.215	709.333	753.856	766.606
130.0	759.619	712.087	695.844	712.087	759.619	799.884	811.716
132.5	812.965	756.483	754.749	756.483	812.965	844.381	857.641
135.0	855.627	803.403	801.184	803.403	855.627	887.476	901.756
137.5	896.937	852.745	837.420	852.745	896.937	928.123	941.868
140.0	937.686	911.140	883.575	911.140	937.686	968.286	984.300
142.5	976.956	958.315	942.199	958.315	976.956	1007.454	1019.617
145.0	1020.637	994.882	993.123	994.882	1020.637	1043.358	1057.995
147.5	1058.479	1032.852	1027.140	1032.852	1058.479	1078.497	1089.793
150.0	1091.910	1067.098	1062.075	1067.098	1091.910	1110.933	1124.422
152.5	1122.102	1105.884	1092.726	1105.884	1122.102	1142.808	1152.982
155.0	1154.257	1139.161	1133.169	1139.161	1154.257	1171.062	1183.404
157.5	1181.644	1166.854	1165.656	1166.854	1181.644	1198.602	1207.807
160.0	1208.292	1193.196	1190.697	1193.196	1208.292	1222.674	1228.794
162.5	1234.455	1221.322	1217.752	1221.322	1234.455	1243.431	1249.500
165.0	1252.789	1243.635	1242.207	1243.635	1252.789	1262.071	1267.171
167.5	1271.022	1264.086	1266.942	1264.086	1271.022	1277.626	1280.967
170.0	1284.945	1278.085	1281.834	1278.085	1284.945	1291.320	1293.411
172.5	1297.261	1292.314	1291.932	1292.314	1297.261	1300.602	1302.081
175.0	1304.299	1302.948	1305.396	1302.948	1304.299	1308.762	1309.654
177.5	1310.572	1308.226	1308.685	1308.226	1310.572	1312.230	1313.734
180.0	1311.490	1311.490	1311.490	1311.490	1311.490	1311.490	1311.490

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	2429.48	N.A.	10.60
0-30	5148.1	N.A.	22.40
0-40	8414.2	N.A.	36.60
0-60	14838.65	N.A.	64.60
0-80	18602.04	N.A.	81.00
0-90	19055.09	N.A.	83.00
10-90	18425.24	N.A.	80.20
20-40	5984.72	N.A.	26.10
20-50	9361.62	N.A.	40.80
40-70	8774.16	N.A.	38.20
60-80	3763.4	N.A.	16.40
70-80	1413.69	N.A.	6.20
80-90	453.05	N.A.	2.00
90-110	538.84	N.A.	2.30
90-120	1013.34	N.A.	4.40
90-130	1606.09	N.A.	7.00
90-150	2899.07	N.A.	12.60
90-180	3908.73	N.A.	17.00
110-180	3369.89	N.A.	14.70
0-180	22963.82	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	629.85
10-20	1799.63
20-30	2718.62
30-40	3266.1
40-50	3376.9
50-60	3047.55
60-70	2349.71
70-80	1413.69
80-90	453.05
90-100	203.75
100-110	335.09
110-120	474.50
120-130	592.75
130-140	655.12
140-150	637.85
150-160	532.10
160-170	353.59
170-180	123.98

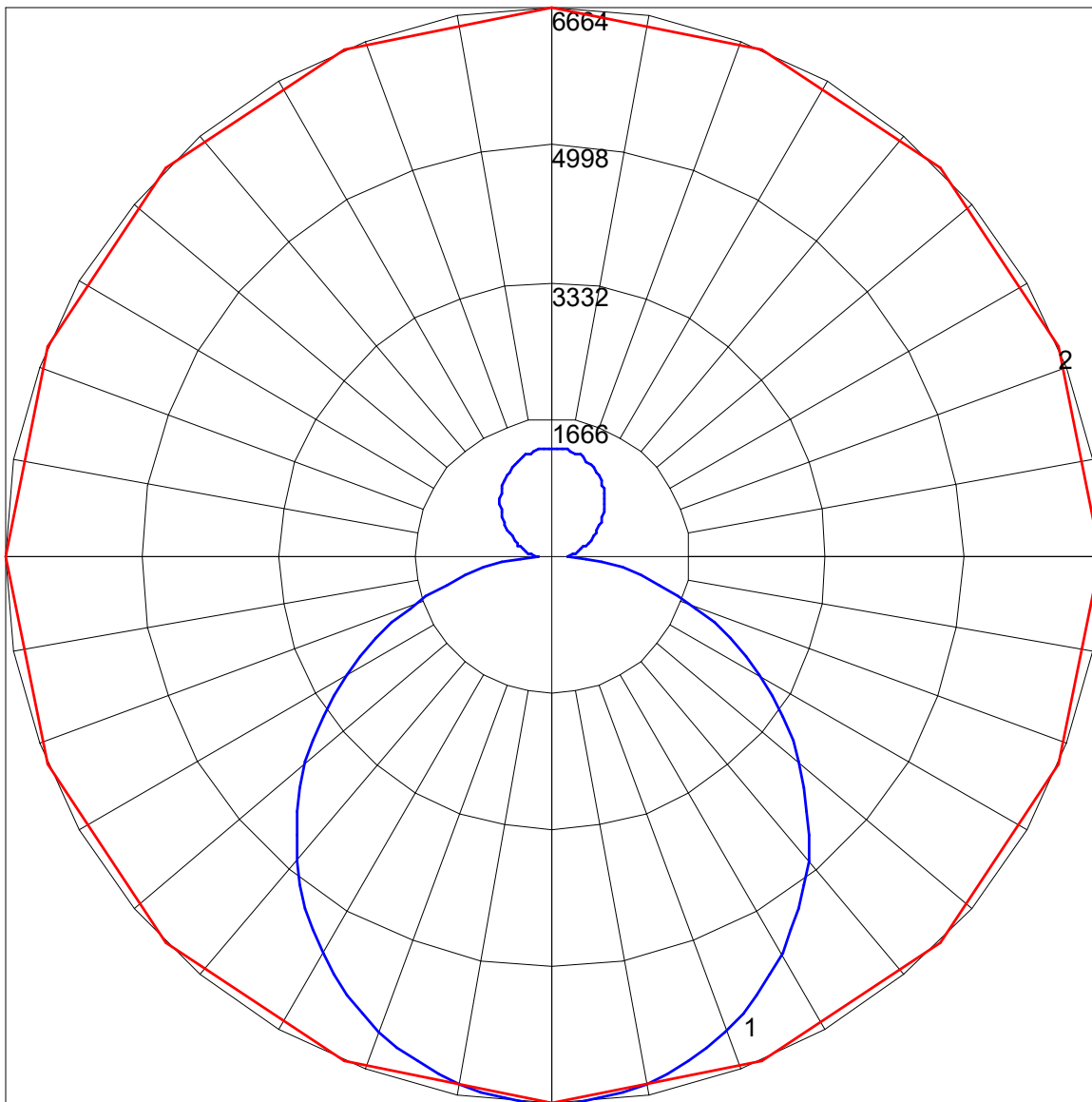
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	115	115	115	115	110	110	110	110	102	102	102	94	94	94	86	86	86	83
1	105	100	96	92	100	96	92	89	89	86	83	82	80	77	76	74	72	69
2	95	87	80	75	91	84	78	72	77	72	68	72	68	64	66	63	60	57
3	87	76	68	62	83	73	66	60	68	62	57	63	58	54	58	54	51	48
4	79	67	59	52	76	65	57	51	60	54	48	56	50	46	52	47	44	41
5	73	60	51	45	69	58	50	44	54	47	42	50	44	40	47	42	38	35
6	67	54	45	39	64	52	44	38	49	42	36	45	39	35	42	37	33	31
7	62	49	40	34	59	47	39	34	44	37	32	41	35	31	39	33	30	27
8	58	45	36	30	55	43	35	30	40	34	29	38	32	28	35	30	26	24
9	54	41	33	27	52	40	32	27	37	30	26	35	29	25	33	28	24	22
10	50	38	30	25	48	36	29	24	34	28	23	32	27	22	30	25	22	20

POLAR GRAPH



Maximum Candela = 6663.889 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)