



IES INDOOR REPORT

PHOTOMETRIC FILENAME : BS400LESAWT40120-277V_S.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TESTLAB] Photopia 2017.2.1 see: www.ltioptics.com/ies
 [ISSUEDATE]
 [TESTDATE] Mon Feb 05 12:10:04 2018
 [TEST] 1
 [MANUFAC] BEGHELLI
 [LUMCAT]
 [LUMINAIRE] BS400LESAWT40120-277V
 [LAMP] LED 0.195W White 5630 package (65mA)
 [LAMPCAT] SPMWHT541MP5WAT0S5
 [OTHER]
 IESNA:LM-63-2002[TEST] 6,552
 [TESTLAB] CSA Group
 [ISSUEDATE] 7/24/2013 1:09:24 PM
 [MANUFAC] Beghelli
 [OTHER] Luminous shape: Rectangle
 [OTHER] Luminous dimensions (feet)
 [OTHER] 0 - 180 Axis: 4.2
 [OTHER] 90 - 270 Axis: 0.6
 [OTHER] Height: 0.1

CHARACTERISTICS

Lumens Per Lamp	9.7968 (192 lamps)
Total Lamp Lumens	1880.986
Luminaire Lumens	1881
Total Luminaire Efficiency	100 %
Luminaire Efficacy Rating (LER)	118
Total Luminaire Watts	16
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.82
Spacing Criterion (90-270)	1.82
Spacing Criterion (Diagonal)	1.98
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	1.45 ft
Luminous Width (90-270)	1.45 ft
Luminous Height	0.27 ft

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LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1798	1770	1816
55	2130	1948	2143
65	2565	2215	2544
75	2979	2486	2941
85	3293	2657	3300

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CANDELA TABULATION

	0	5	10	15	20	25	30	35	40	45
0.0	241.673	241.673	241.673	241.673	241.673	241.673	241.673	241.673	241.673	241.673
2.5	241.860	241.699	242.765	245.042	241.909	240.887	239.047	237.029	240.568	242.091
5.0	240.825	243.945	246.769	247.023	244.910	246.090	242.674	243.451	244.176	245.216
7.5	248.953	247.081	249.842	248.180	247.798	248.006	247.822	247.083	247.975	248.292
10.0	258.939	251.823	253.469	254.348	252.304	253.305	251.706	252.959	253.422	252.840
12.5	257.478	261.368	260.367	260.244	259.927	263.086	258.557	262.873	259.477	256.698
15.0	263.068	265.954	265.925	267.197	270.468	263.892	268.694	265.977	268.879	266.297
17.5	271.718	270.218	273.348	272.098	272.847	273.614	275.904	275.301	274.700	275.665
20.0	274.391	276.097	277.394	276.916	280.743	281.052	282.911	281.213	282.311	283.873
22.5	277.742	281.918	283.117	284.034	283.943	285.602	287.565	288.631	290.441	292.547
25.0	284.695	284.679	286.283	288.470	288.387	290.319	295.513	296.665	296.130	296.967
27.5	289.237	289.611	288.124	290.724	291.723	293.587	298.938	301.501	302.840	300.607
30.0	287.648	290.477	291.403	292.487	293.831	298.628	303.001	303.995	303.688	303.935
32.5	288.930	291.944	291.434	294.403	299.426	300.191	304.587	307.016	307.169	307.962
35.0	290.165	291.538	293.574	296.452	300.396	304.333	306.823	309.213	310.549	311.522
37.5	294.601	293.597	294.445	298.298	299.653	305.131	307.897	310.851	310.591	311.932
40.0	296.002	296.054	297.380	298.657	302.528	304.603	307.245	310.476	311.610	311.425
42.5	295.168	295.760	298.134	300.430	303.610	306.103	307.029	311.249	310.157	311.719
45.0	296.626	300.157	301.064	300.617	304.468	305.552	309.026	308.857	309.546	311.041
47.5	298.901	298.386	300.076	301.821	305.627	307.016	309.153	307.775	309.379	308.682
50.0	303.888	299.224	301.155	302.346	304.548	306.340	305.986	307.310	307.710	307.793
52.5	301.244	301.395	302.588	301.730	304.715	305.705	305.763	306.358	305.646	305.011
55.0	304.130	302.806	303.696	304.317	306.150	304.538	304.938	304.411	302.780	302.450
57.5	303.074	305.032	305.029	304.855	305.370	302.622	303.545	300.807	300.911	301.657
60.0	303.456	304.923	302.923	303.238	302.487	301.200	299.621	299.580	297.175	297.131
62.5	301.332	301.717	301.192	301.088	300.589	300.776	297.937	295.352	293.979	291.996
65.0	298.457	298.280	297.856	298.340	297.812	293.751	293.800	290.274	287.786	288.296
67.5	292.846	293.844	292.562	293.114	292.092	289.260	285.527	285.017	283.395	281.632
70.0	283.158	284.411	283.127	284.136	283.371	281.133	278.093	275.967	274.773	273.525
72.5	272.922	271.341	271.170	271.206	270.507	270.756	267.803	267.147	264.371	264.443
75.0	257.228	256.014	258.081	256.420	257.192	256.625	253.968	253.651	251.958	251.246
77.5	237.372	239.892	240.287	240.841	241.184	240.016	239.702	238.945	237.962	235.992
80.0	219.404	218.423	220.392	220.938	221.330	222.323	222.113	222.053	221.525	221.902
82.5	198.531	198.325	200.567	200.899	201.640	201.404	202.675	202.322	201.497	201.360
85.0	176.953	177.213	179.072	179.319	180.562	182.549	181.457	182.447	182.653	183.069
87.5	156.642	156.481	157.360	158.275	161.450	160.935	160.469	161.174	163.857	160.735
90.0	136.942	137.717	137.821	138.759	139.017	140.434	140.912	142.098	142.938	141.721
92.5	118.248	119.514	118.674	119.309	120.357	121.363	121.966	123.456	123.295	124.696
95.0	102.955	102.791	101.738	102.422	103.264	104.476	103.706	105.173	105.849	105.427
97.5	88.416	87.659	87.555	86.598	86.679	87.641	88.496	87.924	89.352	88.371
100.0	75.728	74.454	74.256	73.044	72.920	72.818	73.499	73.424	74.235	73.988
102.5	63.567	63.775	61.984	61.368	60.151	60.239	60.323	60.156	60.627	59.631
105.0	52.325	53.019	51.940	50.950	49.291	49.109	48.617	48.316	48.890	48.025
107.5	44.658	43.363	43.254	42.032	40.305	39.723	38.589	38.459	37.965	38.103
110.0	36.054	35.779	35.620	33.857	32.817	30.820	29.908	29.669	29.705	28.782
112.5	28.998	29.580	28.023	26.593	25.735	24.534	22.989	23.124	21.931	21.910
115.0	23.343	23.421	22.360	21.588	20.012	18.730	17.534	16.463	15.886	15.655
117.5	18.556	18.138	17.984	17.111	15.928	13.993	12.878	11.648	11.058	11.237
120.0	14.323	13.965	13.572	12.914	11.809	10.137	9.082	7.756	7.379	6.999
122.5	10.813	10.353	9.792	9.222	8.689	7.506	6.578	5.322	4.475	4.300
125.0	7.938	7.569	7.129	6.630	6.022	5.398	4.319	3.500	2.590	2.158
127.5	5.340	5.288	5.075	4.537	4.131	3.502	2.759	2.083	1.308	0.926
130.0	3.567	3.401	3.323	3.037	2.540	2.067	1.565	1.040	0.741	0.642
132.5	2.192	2.150	1.950	1.747	1.487	1.071	0.749	0.559	0.588	0.593

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CANDELA TABULATION - (Cont.)

135.0	1.097	0.972	0.905	0.764	0.658	0.572	0.530	0.554	0.650	0.593
137.5	0.507	0.580	0.543	0.588	0.517	0.564	0.536	0.582	0.572	0.468
140.0	0.419	0.460	0.499	0.525	0.460	0.510	0.424	0.494	0.491	0.442
142.5	0.491	0.426	0.458	0.452	0.452	0.439	0.411	0.426	0.424	0.385
145.0	0.315	0.393	0.312	0.361	0.390	0.369	0.338	0.367	0.346	0.411
147.5	0.351	0.299	0.296	0.330	0.299	0.356	0.411	0.328	0.356	0.395
150.0	0.307	0.263	0.302	0.237	0.283	0.239	0.296	0.304	0.328	0.354
152.5	0.216	0.239	0.218	0.247	0.278	0.226	0.255	0.289	0.307	0.205
155.0	0.117	0.185	0.263	0.190	0.221	0.200	0.239	0.205	0.252	0.237
157.5	0.185	0.195	0.179	0.151	0.200	0.166	0.161	0.192	0.190	0.169
160.0	0.216	0.135	0.130	0.135	0.130	0.146	0.130	0.135	0.156	0.153
162.5	0.109	0.104	0.122	0.130	0.148	0.133	0.140	0.122	0.179	0.078
165.0	0.075	0.099	0.065	0.086	0.078	0.062	0.083	0.099	0.075	0.073
167.5	0.031	0.034	0.042	0.042	0.042	0.047	0.042	0.013	0.036	0.060
170.0	0.044	0.010	0.047	0.052	0.052	0.036	0.065	0.010	0.026	0.044
172.5	0.026	0.031	0.021	0.021	0.023	0.026	0.039	0.026	0.013	0.000
175.0	0.005	0.036	0.000	0.000	0.000	0.000	0.000	0.023	0.034	0.000
177.5	0.073	0.042	0.073	0.039	0.000	0.081	0.000	0.029	0.000	0.000
180.0	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034

Vert. Angles **Horizontal Angles**

	<u>50</u>	<u>55</u>	<u>60</u>	<u>65</u>	<u>70</u>	<u>75</u>	<u>80</u>	<u>85</u>	<u>90</u>
0.0	241.673	241.673	241.673	241.673	241.673	241.673	241.673	241.673	241.673
2.5	236.631	242.286	238.469	236.878	247.361	241.350	243.225	240.968	235.310
5.0	246.631	241.285	243.188	245.911	241.457	245.383	246.207	245.279	239.970
7.5	247.611	250.268	246.316	247.777	248.206	250.604	248.074	247.034	254.735
10.0	254.579	254.361	257.145	255.843	252.312	250.757	252.101	254.405	250.518
12.5	260.936	258.242	260.291	260.520	261.365	259.116	256.633	258.921	263.151
15.0	267.719	268.707	267.020	266.204	264.430	267.366	265.868	265.174	267.467
17.5	275.036	275.296	274.292	271.019	271.944	270.379	271.180	272.379	270.712
20.0	283.637	283.005	279.887	279.500	278.366	278.278	275.376	275.184	276.016
22.5	289.692	291.431	287.724	287.121	284.695	282.121	280.098	280.041	280.306
25.0	296.660	294.609	292.562	289.229	289.598	284.682	285.792	283.579	283.850
27.5	301.629	301.657	297.495	294.382	292.055	290.277	288.361	286.452	287.084
30.0	305.661	304.112	302.380	299.751	295.082	292.698	289.728	290.407	286.850
32.5	306.670	306.797	304.504	303.215	299.819	293.987	292.240	289.458	289.669
35.0	310.469	309.865	307.164	304.307	300.921	298.197	295.347	292.786	293.046
37.5	312.109	308.118	307.169	305.617	300.737	298.132	296.395	292.900	294.289
40.0	311.906	312.239	308.724	306.134	303.644	299.296	296.280	294.060	296.655
42.5	311.522	311.038	307.954	306.194	302.817	302.011	297.664	296.491	295.373
45.0	310.518	310.804	308.740	306.818	304.400	301.933	299.481	298.321	299.447
47.5	307.174	308.225	308.043	308.368	304.717	303.345	300.877	300.547	299.595
50.0	308.511	305.789	306.293	306.350	304.164	303.371	302.237	302.019	300.183
52.5	307.076	306.371	302.936	304.671	306.454	304.265	303.833	302.513	302.744
55.0	303.727	303.069	304.707	304.600	303.462	305.952	303.924	301.720	306.119
57.5	300.344	301.301	304.853	305.162	304.026	303.394	302.601	304.049	305.227
60.0	296.761	298.566	301.436	303.199	302.905	303.051	303.792	302.099	303.389
62.5	293.366	295.334	295.558	299.211	300.820	300.817	300.971	301.470	300.789
65.0	290.022	290.124	291.868	294.936	296.590	297.716	296.491	296.280	296.044
67.5	282.742	284.669	286.010	287.950	289.247	288.917	291.000	290.066	290.805
70.0	274.167	276.661	277.774	278.013	280.075	280.959	280.738	280.051	280.106
72.5	263.858	266.063	266.937	268.752	268.354	269.409	269.110	269.022	268.622
75.0	251.670	252.112	254.696	253.191	254.868	254.124	255.161	253.981	253.934
77.5	237.344	237.058	238.742	238.966	238.186	238.134	236.727	237.692	235.128
80.0	219.999	220.524	220.685	221.543	220.568	219.476	219.609	215.839	215.680

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CANDELA TABULATION - (Cont.)

82.5	201.328	201.087	201.367	201.458	201.154	198.063	198.731	197.798	196.656
85.0	181.644	181.436	181.111	180.697	179.982	179.072	176.696	174.788	177.286
87.5	161.327	161.312	161.494	159.461	158.727	157.945	156.458	154.682	154.970
90.0	142.197	141.305	140.382	140.449	138.970	137.511	135.317	136.157	134.602
92.5	123.089	123.685	122.187	120.988	120.528	119.124	118.633	119.618	117.634
95.0	105.388	105.152	104.312	103.399	102.978	102.742	101.650	100.643	103.241
97.5	89.289	88.530	87.149	86.884	86.635	87.051	87.040	87.742	88.345
100.0	74.103	73.437	73.055	73.042	72.088	72.787	74.474	74.337	74.955
102.5	59.680	60.661	60.083	60.442	60.510	61.417	62.741	64.134	63.154
105.0	48.129	48.805	48.407	48.903	48.773	50.250	51.997	52.489	52.923
107.5	38.017	37.833	38.501	38.893	40.162	41.431	42.905	44.273	44.398
110.0	29.377	29.268	29.721	31.385	32.159	34.242	34.819	36.026	35.864
112.5	21.848	22.259	23.156	24.287	25.490	27.446	28.969	28.868	28.917
115.0	16.149	16.442	17.025	18.743	20.428	21.684	22.747	23.332	23.158
117.5	11.333	11.352	12.496	14.427	15.860	16.578	17.784	18.366	18.366
120.0	7.496	7.969	9.066	10.543	11.742	12.906	13.611	14.092	13.902
122.5	4.454	5.372	6.521	7.878	8.369	9.368	10.210	10.585	10.496
125.0	2.608	3.479	4.212	5.109	6.115	6.612	7.517	7.584	7.751
127.5	1.271	2.020	2.818	3.559	4.103	4.740	5.197	5.322	5.424
130.0	0.731	1.014	1.503	2.145	2.634	2.863	3.393	3.601	3.619
132.5	0.608	0.575	0.712	1.050	1.391	1.674	1.945	2.293	2.025
135.0	0.494	0.549	0.621	0.603	0.705	0.881	1.001	1.131	1.154
137.5	0.543	0.476	0.564	0.575	0.590	0.554	0.525	0.616	0.536
140.0	0.567	0.450	0.489	0.463	0.471	0.484	0.455	0.411	0.458
142.5	0.442	0.426	0.460	0.406	0.419	0.476	0.398	0.445	0.434
145.0	0.406	0.393	0.382	0.377	0.411	0.416	0.354	0.413	0.387
147.5	0.328	0.385	0.315	0.356	0.294	0.369	0.341	0.369	0.354
150.0	0.309	0.283	0.346	0.260	0.226	0.268	0.281	0.276	0.263
152.5	0.263	0.242	0.278	0.270	0.221	0.218	0.309	0.247	0.252
155.0	0.218	0.234	0.185	0.208	0.169	0.195	0.164	0.242	0.211
157.5	0.164	0.146	0.216	0.164	0.185	0.182	0.159	0.195	0.125
160.0	0.153	0.094	0.088	0.182	0.148	0.127	0.195	0.166	0.143
162.5	0.070	0.101	0.091	0.094	0.135	0.081	0.127	0.138	0.065
165.0	0.073	0.112	0.091	0.078	0.062	0.068	0.109	0.112	0.055
167.5	0.031	0.039	0.031	0.052	0.034	0.060	0.062	0.018	0.016
170.0	0.021	0.036	0.010	0.018	0.042	0.021	0.044	0.036	0.026
172.5	0.023	0.029	0.042	0.047	0.010	0.005	0.036	0.018	0.029
175.0	0.031	0.039	0.031	0.000	0.016	0.000	0.000	0.000	0.000
177.5	0.036	0.034	0.000	0.039	0.047	0.000	0.000	0.000	0.021
180.0	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	99.55	5.30	5.30
0-30	233.84	12.40	12.40
0-40	423.10	22.50	22.50
0-60	931.40	49.50	49.50
0-80	1489.19	79.20	79.20
0-90	1685.42	89.60	89.60
10-90	1661.81	88.30	88.40
20-40	323.54	17.20	17.20
20-50	559.43	29.70	29.70
40-70	798.86	42.50	42.50
60-80	557.80	29.70	29.70
70-80	267.24	14.20	14.20
80-90	196.23	10.40	10.40
90-110	168.57	9.00	9.00
90-120	188.85	10.00	10.00
90-130	194.13	10.30	10.30
90-150	195.15	10.40	10.40
90-180	195.27	10.40	10.40
110-180	26.70	1.40	1.40
0-180	1880.69	100.00	100.00

Total Luminaire Efficiency = 100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	23.61
10-20	75.94
20-30	134.29
30-40	189.25
40-50	235.88
50-60	272.42
60-70	290.56
70-80	267.24
80-90	196.23
90-100	114.33
100-110	54.24
110-120	20.28
120-130	5.28
130-140	0.78
140-150	0.24
150-160	0.10
160-170	0.02
170-180	0.00

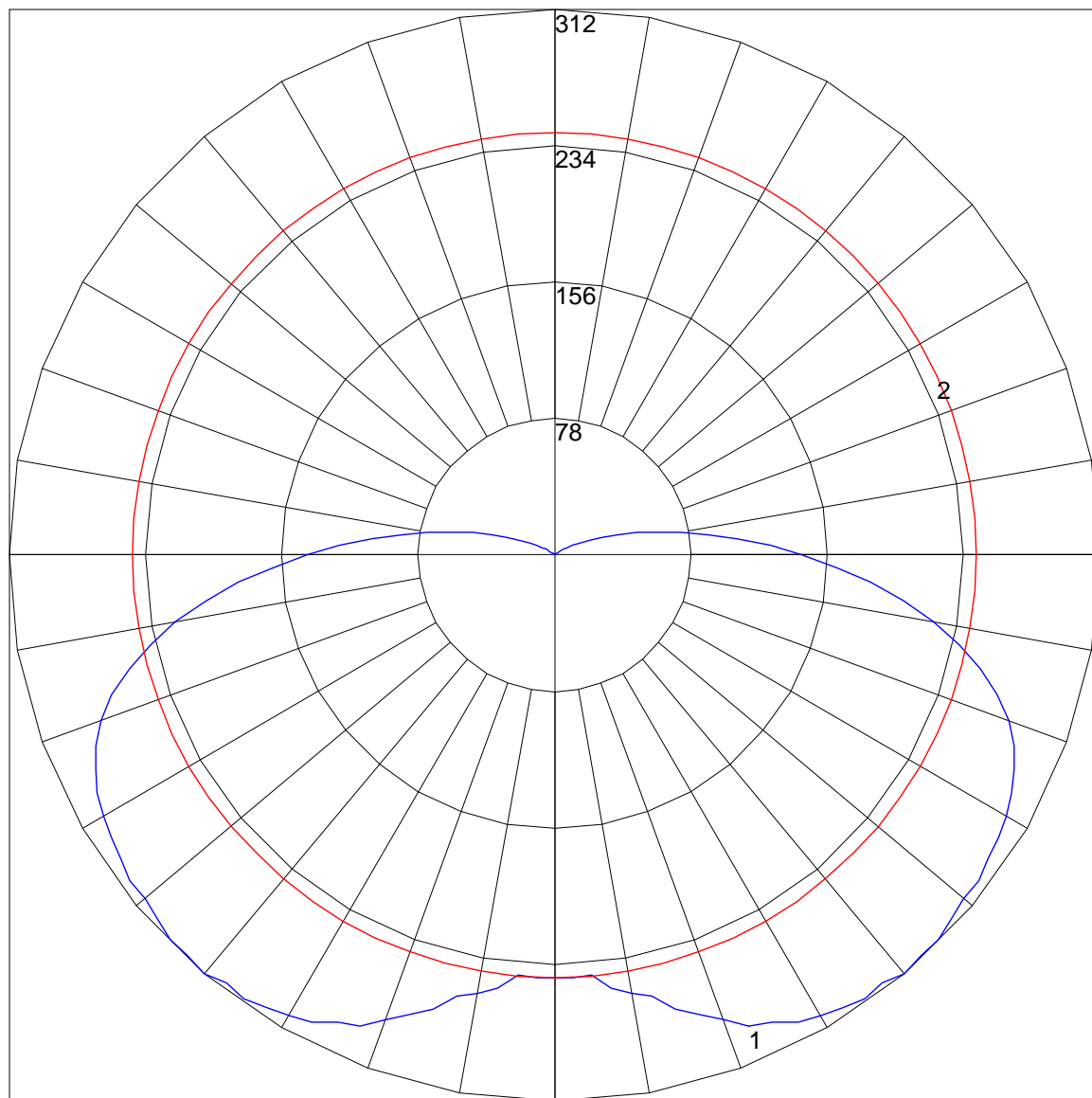
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	117	117	117	117	113	113	113	113	105	105	105	99	99	99	92	92	92	90
1	101	94	88	82	97	91	85	80	84	79	75	78	74	71	73	70	67	64
2	89	79	69	62	85	76	67	60	70	63	57	65	59	54	60	56	52	48
3	80	67	57	49	76	64	55	47	60	52	45	55	49	43	51	46	41	38
4	72	58	47	39	69	56	46	38	52	43	37	48	41	35	45	38	33	31
5	66	51	40	33	63	49	39	32	46	37	31	42	35	29	39	33	28	25
6	60	45	35	28	58	44	34	27	41	32	26	38	30	25	35	29	24	21
7	56	40	31	24	53	39	30	23	36	28	22	34	27	21	32	25	21	18
8	51	37	27	21	49	35	26	20	33	25	20	31	24	19	29	23	18	16
9	48	33	24	18	46	32	24	18	30	23	17	28	21	17	27	20	16	14
10	45	30	22	16	43	30	21	16	28	20	15	26	19	15	25	19	14	12

POLAR GRAPH



Maximum Candela = 312.239 Located At Horizontal Angle = 55, Vertical Angle = 40
1 - Vertical Plane Through Horizontal Angles (55 - 235) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0)