

IES Report

ZipTwo® | 707 | Square, Side Diffuse | 80 CRI | HO

707-Z2-4-48-XX-XX-X-0-Z-HO-35-S9-X-WH-0

	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	97	100	102	102
Total Lumens, 4' rail length (1219mm)	3828	3949	4030	4030
Lumens per foot (305mm)	957	987	1007	1007
Input Power (W), 4' rail length (1219mm)	39.6	39.6	39.6	39.6
Watts per foot (305mm)	9.9	9.9	9.9	9.9
CRI	82	82	82	82

Due to the large number of options in Vode's product offering, most Vode IES reports are factored reports prepared from source reports. Source reports are the IES test reports prepared for Vode by an NVLAP accredited photometric test laboratory. Factored reports are based on data from the Vode source reports.

If the data above is in black, it is directly from a Vode source report. If it is in grey, it is factored from Vode source reports. Reference details on Vode source reports can be found on the [IES File Finder](#) page on [vode.com](#).



IES INDOOR REPORT

PHOTOMETRIC FILENAME : VODE_707_Z2_HO_35_S9.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] L121911537 (SOURCE REPORT FOR REFERENCE)

[TESTLAB] REPORT BASED ON DATA FROM NVLAP ACCREDITED LAB

[ISSUE DATE] 12/23/2019

[MANUFAC] Vode Lighting

[LUMCAT] 707-Z2-48-Z-HO-35-S9-AL

[LUMINAIRE] ZipTwo LED, 48", 3500K, 80 CRI, zipper board, square side diffuse lens,

[MORE] high output, clear anodized finish

[TEST PROCEDURE] IESNA:LM-79-08

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4030
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	102
Total Luminaire Watts	39.55
Ballast Factor	1.00
CIE Type	General Diffuse
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	0.11 ft
Luminous Width (90-270)	3.98 ft
Luminous Height	0.08 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	12112	12455	14784
55	9587	10268	14066
65	6740	7677	13137
75	3928	4880	12264
85	1174	1785	9475

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PHOTOMETRIC FILENAME : VODE_707_Z2_HO_35_S9.IES

CANDELA TABULATION

	<u>0</u>	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>	<u>25</u>	<u>30</u>	<u>35</u>	<u>40</u>	<u>45</u>
0	620.606	620.606	620.606	620.606	620.606	620.606	620.606	620.606	620.606	620.606
5	645.105	644.931	644.757	643.748	642.930	641.938	640.790	639.485	638.041	636.457
10	673.693	673.241	671.936	670.422	668.508	666.211	663.566	659.756	655.736	651.491
15	702.281	701.481	699.376	696.974	693.703	688.762	683.368	677.608	671.518	664.384
20	725.041	723.875	721.300	717.889	712.130	705.953	699.080	690.641	682.237	672.632
25	736.124	734.245	731.948	726.380	720.151	712.513	703.952	695.826	683.402	670.822
30	730.139	728.103	725.284	719.629	712.843	704.857	696.296	684.916	672.423	659.147
35	705.500	703.447	699.950	695.426	688.344	680.723	672.040	659.077	647.489	633.290
40	661.739	660.104	656.432	651.734	646.619	640.790	630.350	619.631	605.851	592.766
45	602.231	601.448	598.786	595.863	590.434	585.701	576.914	570.633	556.730	548.030
50	534.702	533.432	530.891	528.020	523.844	518.781	512.743	505.331	496.248	485.582
55	456.385	455.306	454.436	453.026	450.416	446.032	441.073	434.704	428.701	420.715
60	375.875	375.214	374.970	374.083	372.812	369.889	365.957	362.007	357.048	350.158
65	296.809	296.757	297.331	296.757	295.887	294.408	292.320	289.275	285.760	281.793
70	221.989	222.476	223.277	223.346	223.468	222.442	221.328	219.710	217.309	213.950
75	153.729	154.721	155.765	156.530	156.583	156.617	155.800	154.790	154.060	152.842
80	92.759	94.256	95.770	96.744	96.901	96.935	97.092	96.918	95.648	94.465
85	38.802	41.708	43.222	44.231	44.666	44.631	44.822	44.927	44.962	44.579
90	8.439	7.726	7.447	7.291	7.151	6.856	6.421	6.125	5.690	5.394
95	38.802	41.708	43.222	44.231	44.666	44.631	44.822	44.927	44.962	44.579
100	92.759	94.256	95.770	96.744	96.901	96.935	97.092	96.918	95.648	94.465
105	153.729	154.721	155.765	156.530	156.583	156.617	155.800	154.790	154.060	152.842
110	221.989	222.476	223.277	223.346	223.468	222.442	221.328	219.710	217.309	213.950
115	296.809	296.757	297.331	296.757	295.887	294.408	292.320	289.275	285.760	281.793
120	375.875	375.214	374.970	374.083	372.812	369.889	365.957	362.007	357.048	350.158
125	456.385	455.306	454.436	453.026	450.416	446.032	441.073	434.704	428.701	420.715
130	534.702	533.432	530.891	528.020	523.844	518.781	512.743	505.331	496.248	485.582
135	602.231	601.448	598.786	595.863	590.434	585.701	576.914	570.633	556.730	548.030
140	661.739	660.104	656.432	651.734	646.619	640.790	630.350	619.631	605.851	592.766
145	705.500	703.447	699.950	695.426	688.344	680.723	672.040	659.077	647.489	633.290
150	730.139	728.103	725.284	719.629	712.843	704.857	696.296	684.916	672.423	659.147
155	736.124	734.245	731.948	726.380	720.151	712.513	703.952	695.826	683.402	670.822
160	725.041	723.875	721.300	717.889	712.130	705.953	699.080	690.641	682.237	672.632
165	702.281	701.481	699.376	696.974	693.703	688.762	683.368	677.608	671.518	664.384
170	673.693	673.241	671.936	670.422	668.508	666.211	663.566	659.756	655.736	651.491
175	645.105	644.931	644.757	643.748	642.930	641.938	640.790	639.485	638.041	636.457
180	619.440	619.440	619.440	619.440	619.440	619.440	619.440	619.440	619.440	619.440

**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>	<u>95</u>
0	620.606	620.606	620.606	620.606	620.606	620.606	620.606	620.606	620.606	620.606
5	634.769	632.960	631.046	629.062	627.026	624.921	622.798	620.641	618.500	616.865
10	647.071	642.478	637.867	633.517	629.219	624.921	620.641	616.395	612.219	609.035
15	656.902	649.351	641.816	634.352	626.957	620.380	613.994	607.799	601.796	597.133
20	661.966	650.899	640.250	629.932	619.997	610.462	602.144	594.297	586.850	581.543
25	658.816	645.366	631.550	618.587	606.164	594.454	584.170	575.766	568.110	561.341
30	644.722	629.932	614.603	599.691	586.919	574.270	562.942	552.554	543.089	535.502
35	618.170	604.058	587.267	572.599	558.853	545.455	532.544	521.391	511.734	504.461
40	581.734	567.814	552.537	536.738	521.948	508.933	495.743	484.486	474.898	468.217
45	533.327	520.521	505.644	490.645	477.334	465.050	452.922	442.586	434.130	427.692
50	475.472	464.841	451.617	438.236	426.143	414.764	404.306	395.241	388.403	382.661
55	411.092	401.923	391.430	380.869	370.081	360.806	352.646	345.059	337.873	334.550
60	343.302	336.046	328.756	320.299	311.825	304.552	298.427	292.720	287.483	284.629

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VODE_707_Z2_HO_35_S9.IES

CANDELA TABULATION - (Cont.)

65	276.660	271.127	264.950	258.355	252.718	247.741	241.756	237.684	235.770	232.081
70	210.175	206.921	202.884	198.638	194.984	191.713	187.572	184.910	183.483	181.308
75	149.483	148.613	147.274	146.543	145.725	142.784	141.044	140.174	138.922	138.765
80	93.873	94.151	92.446	90.132	89.349	87.487	85.504	85.312	84.668	83.868
85	43.326	43.970	43.396	41.743	42.456	41.986	40.351	41.447	41.342	40.351
90	4.959	4.524	3.932	3.932	3.358	2.767	3.654	2.923	2.036	3.932
95	43.326	43.970	43.396	41.743	42.456	41.986	40.351	41.447	41.342	40.351
100	93.873	94.151	92.446	90.132	89.349	87.487	85.504	85.312	84.668	83.868
105	149.483	148.613	147.274	146.543	145.725	142.784	141.044	140.174	138.922	138.765
110	210.175	206.921	202.884	198.638	194.984	191.713	187.572	184.910	183.483	181.308
115	276.660	271.127	264.950	258.355	252.718	247.741	241.756	237.684	235.770	232.081
120	343.302	336.046	328.756	320.299	311.825	304.552	298.427	292.720	287.483	284.629
125	411.092	401.923	391.430	380.869	370.081	360.806	352.646	345.059	337.873	334.550
130	475.472	464.841	451.617	438.236	426.143	414.764	404.306	395.241	388.403	382.661
135	533.327	520.521	505.644	490.645	477.334	465.050	452.922	442.586	434.130	427.692
140	581.734	567.814	552.537	536.738	521.948	508.933	495.743	484.486	474.898	468.217
145	618.170	604.058	587.267	572.599	558.853	545.455	532.544	521.391	511.734	504.461
150	644.722	629.932	614.603	599.691	586.919	574.270	562.942	552.554	543.089	535.502
155	658.816	645.366	631.550	618.587	606.164	594.454	584.170	575.766	568.110	561.341
160	661.966	650.899	640.250	629.932	619.997	610.462	602.144	594.297	586.850	581.543
165	656.902	649.351	641.816	634.352	626.957	620.380	613.994	607.799	601.796	597.133
170	647.071	642.478	637.867	633.517	629.219	624.921	620.641	616.395	612.219	609.035
175	634.769	632.960	631.046	629.062	627.026	624.921	622.798	620.641	618.500	616.865
180	619.440	619.440	619.440	619.440	619.440	619.440	619.440	619.440	619.440	619.440

**Vert.
Angles**

Horizontal Angles

	100	105	110	115	120	125	130	135	140	145
0	620.606	620.606	620.606	620.606	620.606	620.606	620.606	620.606	620.606	620.606
5	615.247	613.663	612.149	610.688	609.296	607.991	606.790	605.677	604.685	603.815
10	605.955	603.014	600.230	597.620	595.202	593.827	592.627	591.583	590.678	589.947
15	592.731	588.625	585.110	582.952	581.299	579.977	578.985	578.567	578.411	577.837
20	576.619	572.303	568.858	566.231	564.282	563.673	563.725	563.864	563.847	563.847
25	555.286	550.640	547.160	544.690	544.115	544.359	544.742	544.550	545.177	546.499
30	528.873	524.610	521.287	520.086	520.034	520.260	520.556	521.374	522.766	523.966
35	498.440	493.951	491.446	490.993	491.115	492.107	492.385	493.829	495.448	496.666
40	462.649	458.177	456.663	456.576	457.011	458.229	459.708	461.257	463.014	464.719
45	422.646	419.166	418.226	417.809	418.383	419.671	421.254	423.881	425.134	427.657
50	378.206	375.857	375.944	375.544	376.536	378.085	379.790	381.478	383.426	385.358
55	331.557	329.556	329.104	329.573	330.983	332.549	334.237	336.638	337.630	337.177
60	282.437	281.184	281.045	281.723	282.837	284.838	286.091	284.560	282.733	279.792
65	230.533	231.316	231.629	232.255	233.473	234.796	234.709	230.063	225.956	222.824
70	180.577	181.012	181.969	182.456	183.257	182.770	180.229	176.871	174.052	172.069
75	139.687	132.884	132.884	133.336	134.450	133.388	130.691	128.047	125.906	124.062
80	85.086	85.573	86.287	86.965	87.209	84.129	81.780	79.466	76.682	73.654
85	42.125	42.578	41.708	39.411	36.366	32.799	31.807	31.129	30.206	29.858
90	3.497	3.793	4.228	4.663	5.098	6.125	6.856	7.151	7.586	7.882
95	42.125	42.578	41.708	39.411	36.366	32.799	31.807	31.129	30.206	29.858
100	85.086	85.573	86.287	86.965	87.209	84.129	81.780	79.466	76.682	73.654
105	139.687	132.884	132.884	133.336	134.450	133.388	130.691	128.047	125.906	124.062
110	180.577	181.012	181.969	182.456	183.257	182.770	180.229	176.871	174.052	172.069
115	230.533	231.316	231.629	232.255	233.473	234.796	234.709	230.063	225.956	222.824
120	282.437	281.184	281.045	281.723	282.837	284.838	286.091	284.560	282.733	279.792
125	331.557	329.556	329.104	329.573	330.983	332.549	334.237	336.638	337.630	337.177
130	378.206	375.857	375.944	375.544	376.536	378.085	379.790	381.478	383.426	385.358
135	422.646	419.166	418.226	417.809	418.383	419.671	421.254	423.881	425.134	427.657

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VODE_707_Z2_HO_35_S9.IES

CANDELA TABULATION - (Cont.)

140	462.649	458.177	456.663	456.576	457.011	458.229	459.708	461.257	463.014	464.719
145	498.440	493.951	491.446	490.993	491.115	492.107	492.385	493.829	495.448	496.666
150	528.873	524.610	521.287	520.086	520.034	520.260	520.556	521.374	522.766	523.966
155	555.286	550.640	547.160	544.690	544.115	544.359	544.742	544.550	545.177	546.499
160	576.619	572.303	568.858	566.231	564.282	563.673	563.725	563.864	563.847	563.847
165	592.731	588.625	585.110	582.952	581.299	579.977	578.985	578.567	578.411	577.837
170	605.955	603.014	600.230	597.620	595.202	593.827	592.627	591.583	590.678	589.947
175	615.247	613.663	612.149	610.688	609.296	607.991	606.790	605.677	604.685	603.815
180	619.440	619.440	619.440	619.440	619.440	619.440	619.440	619.440	619.440	619.440

Vert. Horizontal Angles
Angles

	<u>150</u>	<u>155</u>	<u>160</u>	<u>165</u>	<u>170</u>	<u>175</u>	<u>180</u>
0	620.606	620.606	620.606	620.606	620.606	620.606	620.606
5	603.067	602.458	601.970	601.640	601.448	601.396	601.501
10	589.425	588.590	587.981	587.581	587.389	587.407	587.650
15	577.645	577.784	578.272	578.254	578.254	578.480	578.898
20	564.421	564.508	564.804	565.552	565.622	565.778	566.353
25	546.656	547.578	548.465	549.092	550.136	550.188	550.884
30	525.515	526.472	527.551	528.560	529.708	530.108	530.909
35	498.962	500.059	501.190	502.634	503.399	504.252	504.948
40	466.250	468.408	469.278	470.183	471.383	472.584	473.002
45	428.736	430.981	432.199	433.277	434.321	435.331	435.661
50	387.011	388.629	390.056	391.082	391.952	392.770	393.362
55	340.031	340.118	343.441	345.477	346.260	346.852	347.426
60	278.122	278.591	282.228	289.484	296.722	298.601	299.141
65	221.711	220.771	222.128	225.887	236.135	248.611	249.272
70	173.617	175.009	175.235	174.539	175.061	190.756	198.952
75	122.792	124.410	126.428	128.638	128.377	126.098	146.299
80	73.063	73.115	74.194	76.543	77.743	76.577	89.854
85	31.390	32.816	35.078	36.871	38.576	40.385	39.811
90	8.891	10.214	11.519	12.841	13.572	13.850	0.000
95	31.390	32.816	35.078	36.871	38.576	40.385	39.811
100	73.063	73.115	74.194	76.543	77.743	76.577	89.854
105	122.792	124.410	126.428	128.638	128.377	126.098	146.299
110	173.617	175.009	175.235	174.539	175.061	190.756	198.952
115	221.711	220.771	222.128	225.887	236.135	248.611	249.272
120	278.122	278.591	282.228	289.484	296.722	298.601	299.141
125	340.031	340.118	343.441	345.477	346.260	346.852	347.426
130	387.011	388.629	390.056	391.082	391.952	392.770	393.362
135	428.736	430.981	432.199	433.277	434.321	435.331	435.661
140	466.250	468.408	469.278	470.183	471.383	472.584	473.002
145	498.962	500.059	501.190	502.634	503.399	504.252	504.948
150	525.515	526.472	527.551	528.560	529.708	530.108	530.909
155	546.656	547.578	548.465	549.092	550.136	550.188	550.884
160	564.421	564.508	564.804	565.552	565.622	565.778	566.353
165	577.645	577.784	578.272	578.254	578.254	578.480	578.898
170	589.425	588.590	587.981	587.581	587.389	587.407	587.650
175	603.067	602.458	601.970	601.640	601.448	601.396	601.501
180	619.440	619.440	619.440	619.440	619.440	619.440	619.440

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VODE_707_Z2_HO_35_S9.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	235.04	N.A.	5.80
0-30	514.47	N.A.	12.80
0-40	864.71	N.A.	21.50
0-60	1568.53	N.A.	38.90
0-80	1967.94	N.A.	48.80
0-90	2014.91	N.A.	50.00
10-90	1955.62	N.A.	48.50
20-40	629.68	N.A.	15.60
20-50	999.73	N.A.	24.80
40-70	954.88	N.A.	23.70
60-80	399.41	N.A.	9.90
70-80	148.35	N.A.	3.70
80-90	46.97	N.A.	1.20
90-110	195.32	N.A.	4.80
90-120	446.38	N.A.	11.10
90-130	780.14	N.A.	19.40
90-150	1500.44	N.A.	37.20
90-180	2014.9	N.A.	50.00
110-180	1819.57	N.A.	45.20
0-180	4029.81	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	59.29
10-20	175.74
20-30	279.43
30-40	350.24
40-50	370.06
50-60	333.76
60-70	251.06
70-80	148.35
80-90	46.97
90-100	46.97
100-110	148.35
110-120	251.06
120-130	333.76
130-140	370.06
140-150	350.24
150-160	279.43
160-170	175.74
170-180	59.28

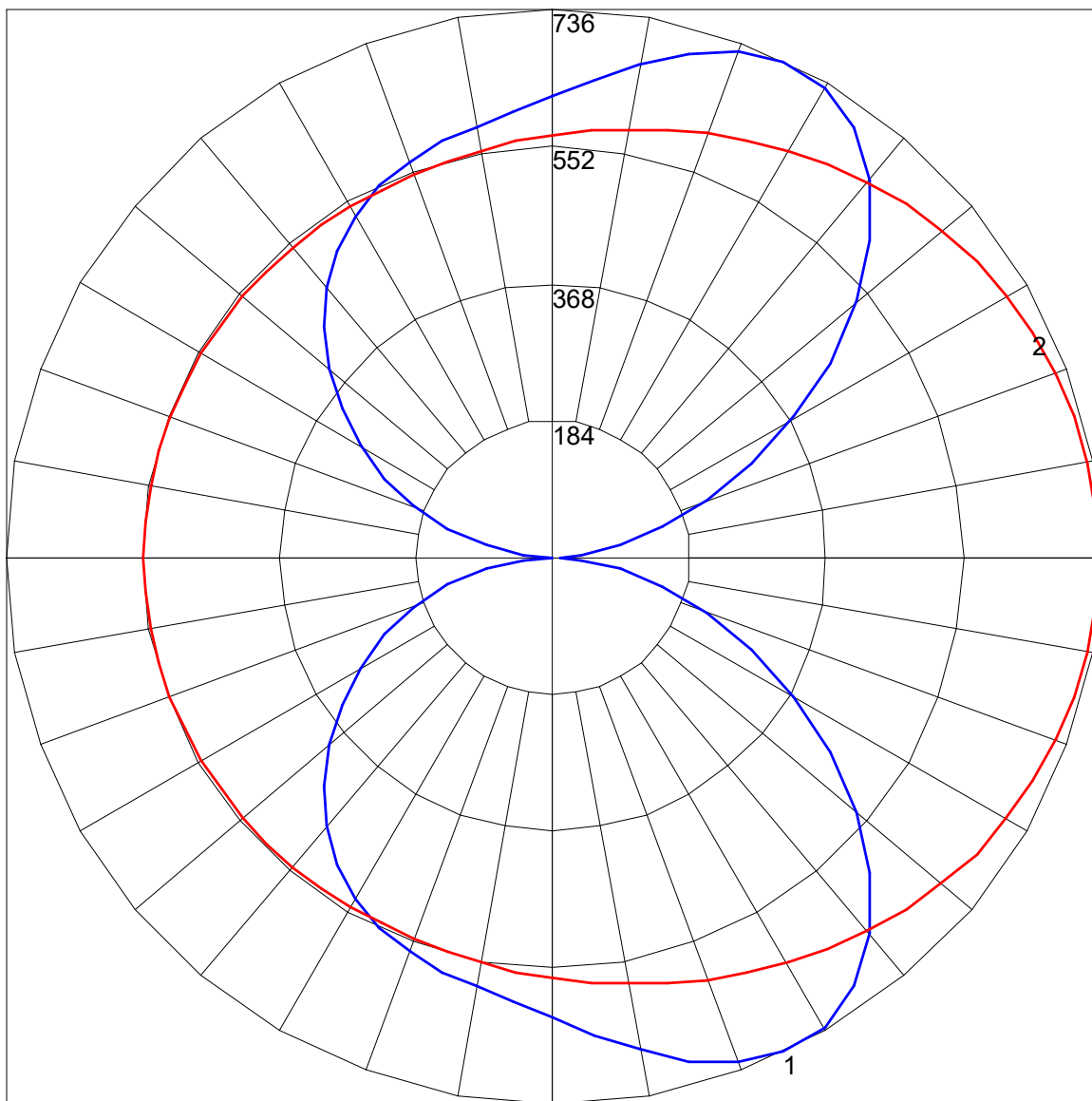
IES INDOOR REPORT
PHOTOMETRIC FILENAME : VODE_707_Z2_HO_35_S9.IES

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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	97	93	89	85	90	86	82	79	73	70	68	60	59	57	49	48	47	41
2	89	81	75	69	81	75	69	65	63	59	56	53	50	47	43	41	39	34
3	81	71	63	57	74	66	59	54	56	51	46	46	43	40	38	35	33	29
4	74	63	54	48	67	58	51	45	49	44	39	41	37	34	34	31	28	24
5	67	56	47	41	62	51	44	39	44	38	34	37	32	29	30	27	24	21
6	62	50	41	36	57	46	39	33	39	34	29	33	29	25	27	24	21	18
7	57	45	37	31	53	42	34	29	36	30	26	30	25	22	25	21	19	16
8	53	41	33	27	49	38	31	26	32	27	23	27	23	20	23	19	17	14
9	49	37	29	24	45	34	28	23	30	24	20	25	21	18	21	17	15	13
10	46	34	26	22	42	32	25	20	27	22	18	23	19	16	19	16	13	11

POLAR GRAPH



Maximum Candela = 736.124 Located At Horizontal Angle = 0, Vertical Angle = 25
1 - Vertical Plane Through Horizontal Angles (0 - 180)
2 - Horizontal Cone Through Vertical Angle (25) (Through Max. Cd.)