

IES Report

DoubleRace™ | 107 | 120° Batwing, Flat, up | 120° FlyWing™, Flat, down | 80 CRI | LO

107-DR-XX-4-48-XX-XX-XX-XX-X-X-Z-LO-35-G1G2-X-XX-X

	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	108	110	113	113
Total Lumens, 4' rail length (1219mm)	2962	3036	3098	3098
Lumens per foot (305mm)	741	759	775	775
Lumens per foot UP (305mm)	365	377	385	385
Lumens per foot DOWN (305mm)	370	382	390	390
Input Power (W), 4' rail length (1219mm)	27.6	27.6	27.6	27.6
Watts per foot (305mm)	7.0	7.0	7.0	7.0
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_107_DR_LO_35_G1G2.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] L121911515 / L121911516 (SOURCE REPORTS FOR REFERENCE)

[TESTLAB] REPORT BASED ON DATA FROM NVLAP ACCREDITED LAB

[ISSUE DATE] 12/23/2019

[MANUFAC] Vode Lighting

[LUMCAT] 107-DR-48-Z-LO-35-G1G2-AL

[LUMINAIRE] DoubleRace LED, 48", 3500K, 80 CRI, zipper board, 120° batwing lens up /

[MORE] 120° flywing lens down, low 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	3098
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	111
Total Luminaire Watts	27.84
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)	0.07 ft
Luminous Width (90-270)	3.84 ft
Luminous Height	0.17 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	7661	8567	15984
55	5445	6473	15150
65	3186	4131	13669
75	962	1796	10222
85	44	88	3587

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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	480.199	480.199	480.199	480.199	480.199	480.199	480.199	480.199	480.199	480.199
5	484.671	484.793	484.625	484.480	484.138	483.726	483.285	482.804	482.195	481.539
10	500.523	500.523	499.792	498.748	497.118	495.245	493.012	490.483	487.763	485.037
15	522.887	522.568	521.211	518.851	515.446	511.340	506.502	501.300	495.465	489.439
20	543.791	543.182	541.140	537.863	532.904	526.947	519.825	511.438	502.367	492.890
25	555.362	554.851	552.618	548.750	543.234	536.111	527.406	517.128	505.360	492.524
30	553.564	552.833	550.791	547.027	541.679	534.505	525.318	514.257	501.178	486.446
35	536.987	536.570	534.748	531.663	526.750	520.382	511.728	501.033	487.879	472.491
40	506.549	506.334	504.994	502.587	498.939	493.621	486.324	476.551	463.988	448.990
45	464.255	463.890	463.037	461.581	458.931	454.894	449.135	440.991	430.053	416.196
50	410.675	410.530	410.240	409.387	408.245	405.617	401.488	395.241	386.344	374.407
55	348.835	348.882	349.079	349.079	348.783	347.617	345.210	340.837	334.126	324.527
60	280.819	280.940	281.573	282.205	282.860	282.930	282.129	279.653	275.152	268.006
65	208.910	209.131	210.006	211.340	212.901	214.043	214.554	213.968	211.659	207.257
70	135.743	136.010	137.443	139.484	142.059	144.542	146.508	147.703	147.506	145.661
75	62.623	63.034	64.856	67.825	71.833	76.235	80.417	84.083	86.490	87.441
80	12.250	12.325	12.911	13.903	15.608	18.038	21.466	25.914	30.821	35.322
85	2.772	2.772	2.796	2.871	2.964	3.039	3.161	3.381	3.596	4.037
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	36.221	36.221	36.146	36.024	35.757	35.345	34.713	33.936	32.892	31.140
100	89.946	89.970	90.138	90.236	90.161	89.529	88.195	85.979	82.383	77.447
105	151.444	151.374	151.345	151.229	150.690	149.576	147.482	143.712	138.197	130.465
110	217.662	217.639	217.494	217.053	215.888	214.043	210.685	205.361	197.461	186.690
115	284.467	284.415	283.782	282.814	280.865	277.536	272.600	265.234	255.003	241.680
120	348.104	347.693	346.718	344.845	341.933	337.119	330.409	321.071	308.531	292.337
125	404.840	404.306	402.798	400.055	395.920	389.650	381.454	370.324	355.494	336.487
130	452.000	451.420	449.448	446.165	441.113	433.695	423.800	410.460	393.298	372.099
135	489.195	488.366	486.034	481.852	475.507	466.662	454.772	439.193	420.013	397.503
140	512.772	511.728	508.498	503.365	495.906	485.448	472.079	455.451	435.690	413.105
145	520.260	518.949	515.475	509.733	501.665	490.726	476.847	460.561	441.473	419.671
150	512.969	511.873	508.399	502.541	494.467	483.795	470.937	455.573	437.929	418.795
155	492.646	491.747	488.418	483.094	475.774	466.297	454.940	441.716	427.083	411.139
160	461.483	460.630	457.910	453.583	447.627	439.994	431.120	421.399	410.628	399.568
165	424.676	424.073	422.420	419.769	416.046	411.382	406.081	400.026	393.658	386.976
170	392.979	392.712	391.958	390.549	388.849	386.756	384.250	381.553	378.711	375.596
175	371.879	371.757	371.513	371.223	370.881	370.301	369.715	369.037	368.329	367.627
180	365.267	365.267	365.267	365.267	365.267	365.267	365.267	365.267	365.267	365.267

**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	480.199	480.199	480.199	480.199	480.199	480.199	480.199	480.199	480.199	480.199
5	480.808	480.223	479.567	479.010	478.448	478.158	477.961	477.671	477.334	477.671
10	482.142	479.324	476.969	474.829	472.613	470.914	469.991	469.336	468.628	469.336
15	483.285	477.450	471.644	466.511	462.283	458.855	456.205	454.772	454.094	454.772
20	482.751	472.787	463.426	454.749	447.673	441.937	437.709	435.226	434.350	435.226
25	479.034	465.032	451.878	439.460	429.246	420.981	415.077	411.626	410.431	411.626
30	470.160	452.974	436.398	420.546	407.491	396.964	389.574	385.201	383.496	385.201
35	454.505	435.667	416.289	397.863	382.893	370.492	361.647	356.538	354.861	356.538
40	430.807	411.261	390.961	371.246	355.006	341.835	332.404	327.103	325.160	327.103
45	399.249	379.900	359.211	340.251	323.744	310.764	301.722	296.618	295.011	296.618
50	358.974	341.371	322.654	304.471	289.814	278.046	269.903	265.309	263.755	265.309
55	311.547	296.450	280.500	265.043	252.520	242.556	235.921	232.249	230.933	232.249
60	258.164	246.419	233.926	221.798	212.048	204.560	199.578	196.904	196.075	196.904

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CANDELA TABULATION - (Cont.)

65	200.744	192.502	184.069	175.781	169.140	164.012	160.637	158.711	158.108	158.711
70	142.378	137.831	133.017	128.279	124.387	121.353	119.306	118.192	117.804	118.192
75	87.099	85.765	83.990	82.041	80.318	78.857	77.888	77.256	77.059	77.256
80	38.605	40.380	41.058	41.134	40.913	40.525	40.206	39.939	39.771	39.939
85	4.791	6.177	8.045	10.208	11.525	12.012	12.058	11.936	11.768	11.936
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	28.466	25.404	22.411	19.790	18.061	17.017	16.507	16.240	15.608	16.240
100	71.178	64.397	57.809	52.194	48.279	45.727	44.051	42.787	41.911	42.787
105	120.692	109.951	99.232	89.749	82.870	78.056	74.826	72.610	71.613	72.610
110	173.350	158.079	142.866	129.056	118.749	111.285	106.424	103.315	102.196	103.315
115	224.298	205.146	185.623	167.562	153.874	143.886	137.344	133.435	132.049	133.435
120	271.753	248.849	225.318	203.615	187.299	174.905	166.686	161.849	160.196	161.849
125	312.927	287.262	261.104	236.721	217.860	203.319	193.790	188.175	186.400	188.175
130	346.260	318.762	291.467	265.652	245.299	229.523	218.851	212.703	210.662	212.703
135	371.270	343.557	315.943	290.325	269.683	253.448	242.457	236.014	233.804	236.014
140	387.608	361.305	335.147	310.642	290.980	275.517	264.700	258.309	256.070	258.309
145	396.407	372.586	349.003	327.172	309.743	295.429	285.511	279.508	277.460	279.508
150	398.547	378.056	358.510	340.518	325.595	313.560	304.784	299.489	297.691	299.489
155	394.899	379.198	364.246	350.343	338.894	329.336	322.410	318.037	316.599	318.037
160	388.095	377.516	366.896	357.170	349.148	342.560	337.554	334.370	333.326	334.370
165	380.097	373.729	367.453	361.671	356.880	352.797	349.757	347.838	347.229	347.838
170	372.534	369.495	366.798	364.002	361.914	359.873	358.608	357.779	357.535	357.779
175	366.844	366.119	365.412	364.878	364.391	364.002	363.759	363.567	363.567	363.567
180	365.267	365.267	365.267	365.267	365.267	365.267	365.267	365.267	365.267	365.267

**Vert.
Angles**

Horizontal Angles

	100	105	110	115	120	125	130	135	140	145
0	480.199	480.199	480.199	480.199	480.199	480.199	480.199	480.199	480.199	480.199
5	477.961	478.158	478.448	479.010	479.567	480.223	480.808	481.539	482.195	482.804
10	469.991	470.914	472.613	474.829	476.969	479.324	482.142	485.037	487.763	490.483
15	456.205	458.855	462.283	466.511	471.644	477.450	483.285	489.439	495.465	501.300
20	437.709	441.937	447.673	454.749	463.426	472.787	482.751	492.890	502.367	511.438
25	415.077	420.981	429.246	439.460	451.878	465.032	479.034	492.524	505.360	517.128
30	389.574	396.964	407.491	420.546	436.398	452.974	470.160	486.446	501.178	514.257
35	361.647	370.492	382.893	397.863	416.289	435.667	454.505	472.491	487.879	501.033
40	332.404	341.835	355.006	371.246	390.961	411.261	430.807	448.990	463.988	476.551
45	301.722	310.764	323.744	340.251	359.211	379.900	399.249	416.196	430.053	440.991
50	269.903	278.046	289.814	304.471	322.654	341.371	358.974	374.407	386.344	395.241
55	235.921	242.556	252.520	265.043	280.500	296.450	311.547	324.527	334.126	340.837
60	199.578	204.560	212.048	221.798	233.926	246.419	258.164	268.006	275.152	279.653
65	160.637	164.012	169.140	175.781	184.069	192.502	200.744	207.257	211.659	213.968
70	119.306	121.353	124.387	128.279	133.017	137.831	142.378	145.661	147.506	147.703
75	77.888	78.857	80.318	82.041	83.990	85.765	87.099	87.441	86.490	84.083
80	40.206	40.525	40.913	41.134	41.058	40.380	38.605	35.322	30.821	25.914
85	12.058	12.012	11.525	10.208	8.045	6.177	4.791	4.037	3.596	3.381
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	16.507	17.017	18.061	19.790	22.411	25.404	28.466	31.140	32.892	33.936
100	44.051	45.727	48.279	52.194	57.809	64.397	71.178	77.447	82.383	85.979
105	74.826	78.056	82.870	89.749	99.232	109.951	120.692	130.465	138.197	143.712
110	106.424	111.285	118.749	129.056	142.866	158.079	173.350	186.690	197.461	205.361
115	137.344	143.886	153.874	167.562	185.623	205.146	224.298	241.680	255.003	265.234
120	166.686	174.905	187.299	203.615	225.318	248.849	271.753	292.337	308.531	321.071
125	193.790	203.319	217.860	236.721	261.104	287.262	312.927	336.487	355.494	370.324
130	218.851	229.523	245.299	265.652	291.467	318.762	346.260	372.099	393.298	410.460
135	242.457	253.448	269.683	290.325	315.943	343.557	371.270	397.503	420.013	439.193

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CANDELA TABULATION - (Cont.)

140	264.700	275.517	290.980	310.642	335.147	361.305	387.608	413.105	435.690	455.451
145	285.511	295.429	309.743	327.172	349.003	372.586	396.407	419.671	441.473	460.561
150	304.784	313.560	325.595	340.518	358.510	378.056	398.547	418.795	437.929	455.573
155	322.410	329.336	338.894	350.343	364.246	379.198	394.899	411.139	427.083	441.716
160	337.554	342.560	349.148	357.170	366.896	377.516	388.095	399.568	410.628	421.399
165	349.757	352.797	356.880	361.671	367.453	373.729	380.097	386.976	393.658	400.026
170	358.608	359.873	361.914	364.002	366.798	369.495	372.534	375.596	378.711	381.553
175	363.759	364.002	364.391	364.878	365.412	366.119	366.844	367.627	368.329	369.037
180	365.267	365.267	365.267	365.267	365.267	365.267	365.267	365.267	365.267	365.267

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	480.199	480.199	480.199	480.199	480.199	480.199	480.199
5	483.285	483.726	484.138	484.480	484.625	484.793	484.671
10	493.012	495.245	497.118	498.748	499.792	500.523	500.523
15	506.502	511.340	515.446	518.851	521.211	522.568	522.887
20	519.825	526.947	532.904	537.863	541.140	543.182	543.791
25	527.406	536.111	543.234	548.750	552.618	554.851	555.362
30	525.318	534.505	541.679	547.027	550.791	552.833	553.564
35	511.728	520.382	526.750	531.663	534.748	536.570	536.987
40	486.324	493.621	498.939	502.587	504.994	506.334	506.549
45	449.135	454.894	458.931	461.581	463.037	463.890	464.255
50	401.488	405.617	408.245	409.387	410.240	410.530	410.675
55	345.210	347.617	348.783	349.079	349.079	348.882	348.835
60	282.129	282.930	282.860	282.205	281.573	280.940	280.819
65	214.554	214.043	212.901	211.340	210.006	209.131	208.910
70	146.508	144.542	142.059	139.484	137.443	136.010	135.743
75	80.417	76.235	71.833	67.825	64.856	63.034	62.623
80	21.466	18.038	15.608	13.903	12.911	12.325	12.250
85	3.161	3.039	2.964	2.871	2.796	2.772	2.772
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	34.713	35.345	35.757	36.024	36.146	36.221	36.221
100	88.195	89.529	90.161	90.236	90.138	89.970	89.946
105	147.482	149.576	150.690	151.229	151.345	151.374	151.444
110	210.685	214.043	215.888	217.053	217.494	217.639	217.662
115	272.600	277.536	280.865	282.814	283.782	284.415	284.467
120	330.409	337.119	341.933	344.845	346.718	347.693	348.104
125	381.454	389.650	395.920	400.055	402.798	404.306	404.840
130	423.800	433.695	441.113	446.165	449.448	451.420	452.000
135	454.772	466.662	475.507	481.852	486.034	488.366	489.195
140	472.079	485.448	495.906	503.365	508.498	511.728	512.772
145	476.847	490.726	501.665	509.733	515.475	518.949	520.260
150	470.937	483.795	494.467	502.541	508.399	511.873	512.969
155	454.940	466.297	475.774	483.094	488.418	491.747	492.646
160	431.120	439.994	447.627	453.583	457.910	460.630	461.483
165	406.081	411.382	416.046	419.769	422.420	424.073	424.676
170	384.250	386.756	388.849	390.549	391.958	392.712	392.979
175	369.715	370.301	370.881	371.223	371.513	371.757	371.879
180	365.267	365.267	365.267	365.267	365.267	365.267	365.267

IES INDOOR REPORT
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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	184.58	N.A.	6.00
0-30	409.19	N.A.	13.20
0-40	695.19	N.A.	22.40
0-60	1271.89	N.A.	41.00
0-80	1548.33	N.A.	50.00
0-90	1559.82	N.A.	50.30
10-90	1513.76	N.A.	48.90
20-40	510.61	N.A.	16.50
20-50	815.30	N.A.	26.30
40-70	768.49	N.A.	24.80
60-80	276.44	N.A.	8.90
70-80	84.66	N.A.	2.70
80-90	11.49	N.A.	0.40
90-110	161.55	N.A.	5.20
90-120	381.04	N.A.	12.30
90-130	659.78	N.A.	21.30
90-150	1205.12	N.A.	38.90
90-180	1538.64	N.A.	49.70
110-180	1377.09	N.A.	44.40
0-180	3098.46	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	46.06
10-20	138.52
20-30	224.61
30-40	286.00
40-50	304.69
50-60	272.01
60-70	191.78
70-80	84.66
80-90	11.49
90-100	34.48
100-110	127.06
110-120	219.49
120-130	278.74
130-140	290.22
140-150	255.13
150-160	188.29
160-170	109.89
170-180	35.34

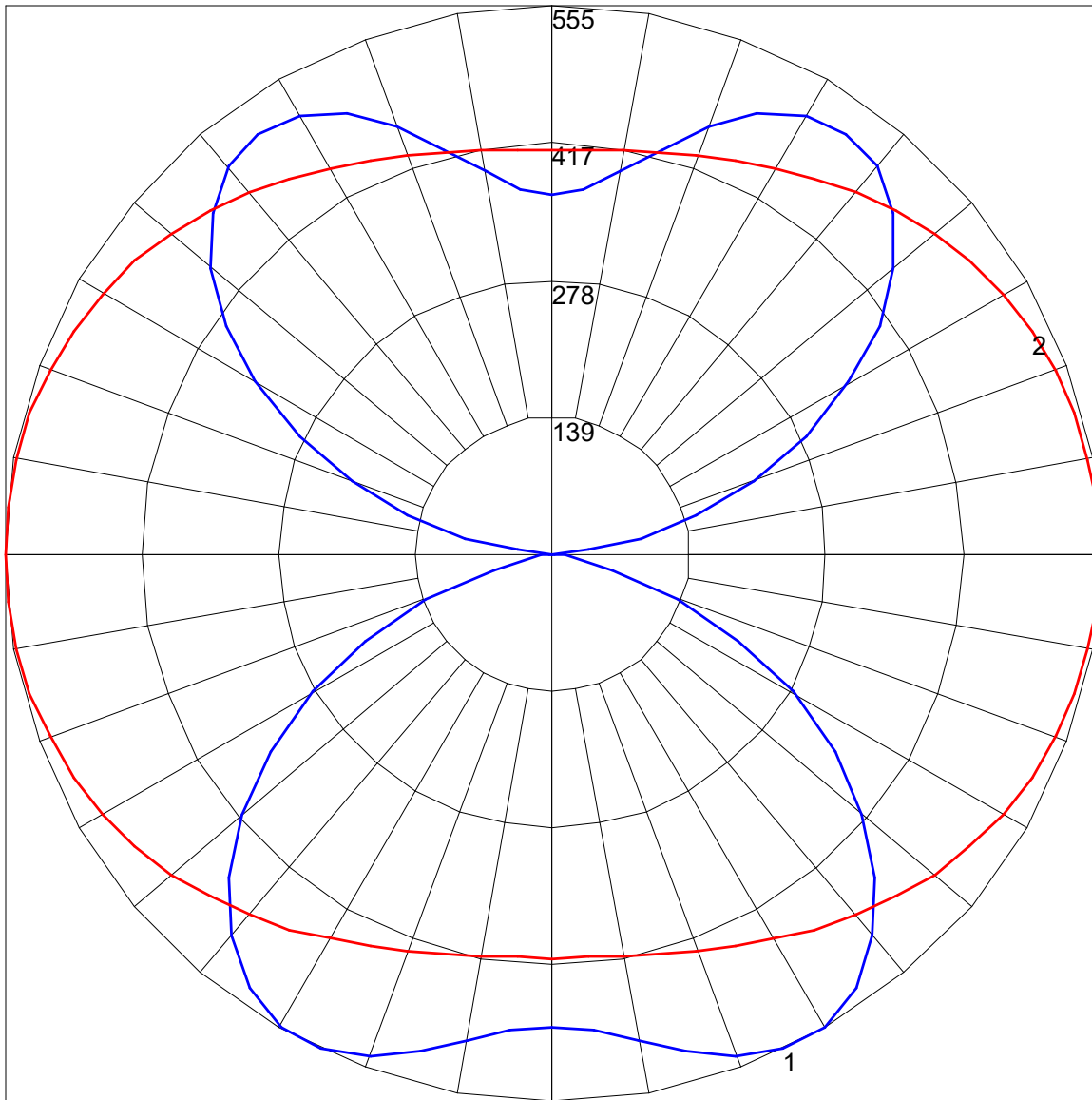
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 PHOTOMETRIC FILENAME : VODE_107_DR_LO_35_G1G2.IES

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	84	84	84	69	69	69	56	56	56	50
1	98	94	90	87	90	87	83	80	73	71	69	61	60	58	50	49	48	43
2	89	82	76	71	82	76	70	66	64	60	57	54	51	48	44	42	40	36
3	81	72	64	59	75	66	60	55	57	52	48	47	44	41	39	36	34	30
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	35	32	29	26
5	68	56	48	42	62	52	45	40	45	39	35	38	33	30	31	28	25	22
6	63	50	42	36	57	47	39	34	40	34	30	34	29	26	28	25	22	19
7	58	45	37	32	53	42	35	30	36	30	26	31	26	23	25	22	19	17
8	53	41	33	28	49	38	31	26	33	27	23	28	23	20	23	20	17	15
9	50	37	30	25	46	35	28	23	30	25	21	26	21	18	21	18	15	13
10	46	34	27	22	43	32	25	21	28	22	19	24	19	16	20	16	14	12

POLAR GRAPH



Maximum Candela = 555.362 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.)