

IES Report

ZipTwo® | 707 | Square 3519, Side Diffuse | 90 CRI | HO

707-Z2-4-48-XX-XX-X-0-Z-HO-359-F9-X-BL-0

	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	50	51	52	53
Total Lumens, 4' rail length (1219mm)	1944	2005	2046	2066
Lumens per foot (305mm)	486	501	511	517
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	94	94	94	94

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_359_F9_BL.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] L082011213 (SOURCE REPORT FOR REFERENCE)

[TESTLAB] REPORT BASED ON DATA FROM NVLAP ACCREDITED LAB

[ISSUE DATE] 9/9/2020

[MANUFAC] Vode Lighting

[LUMCAT] 707-Z2-48-Z-HO-359-F9-BL

[LUMINAIRE] ZipTwo LED, 48", 3500K, 90 CRI, zipper board,

[MORE] square 3519, side diffuse black lens, high output

[TEST PROCEDURE] IESNA:LM-79-08

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2046
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	52
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)	0.13 ft
Luminous Width (90-270)	3.99 ft
Luminous Height	0.05 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	5288	3587	298
55	7404	4960	299
65	10026	6799	295
75	13234	9427	318
85	17959	14088	549

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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	14.730	14.730	14.730	14.730	14.730	14.730	14.730	14.730	14.730	14.730
5	28.665	28.665	28.410	28.170	27.795	27.285	26.655	25.905	25.155	24.135
10	48.540	48.285	47.910	47.280	46.275	45.270	43.755	42.120	40.110	38.100
15	70.155	69.915	69.150	68.025	66.270	64.125	61.740	58.845	55.455	52.050
20	94.305	93.930	92.925	91.155	88.515	85.245	81.480	77.070	72.180	67.140
25	121.710	121.080	119.445	116.940	113.295	108.630	103.350	97.065	90.285	83.235
30	151.140	150.510	148.365	144.975	140.190	134.160	127.365	119.070	110.025	100.590
35	182.325	181.440	178.800	174.645	168.480	160.950	152.145	141.960	130.770	118.950
40	215.265	214.125	210.855	205.455	197.910	188.610	177.915	165.465	151.890	137.685
45	249.720	248.205	244.185	237.765	228.210	217.020	204.195	189.480	173.265	156.675
50	283.920	282.405	277.380	269.700	258.510	245.445	230.220	212.745	193.890	174.900
55	317.355	315.225	309.810	300.630	287.805	272.715	255.240	235.260	214.005	192.255
60	347.280	345.270	339.105	329.055	314.340	297.615	278.130	256.005	232.110	208.095
65	372.930	370.425	363.630	352.185	336.975	318.870	297.750	273.735	247.695	222.045
70	391.290	388.905	381.615	370.035	354.330	335.085	312.960	288.570	260.400	232.995
75	402.360	399.720	392.670	381.105	365.010	345.645	323.265	298.125	270.210	241.035
80	406.890	404.625	397.575	386.265	370.800	351.180	328.050	302.775	275.490	246.825
85	407.385	405.120	398.085	387.135	372.180	352.695	330.810	305.040	278.010	249.330
90	404.865	402.615	396.075	385.005	370.290	351.435	329.685	304.410	276.870	248.580
95	400.845	398.715	392.175	381.735	366.900	348.165	326.910	302.025	274.860	246.825
100	395.070	392.925	386.385	376.200	361.485	343.005	322.005	297.615	270.840	243.420
105	386.010	384.000	377.580	367.530	353.070	335.220	314.595	290.700	264.675	238.140
110	373.185	371.055	365.010	355.200	341.130	323.895	303.900	280.890	255.870	230.355
115	356.340	354.330	348.420	339.105	325.410	309.435	290.445	268.830	245.055	220.800
120	335.715	333.825	328.305	319.245	306.795	291.705	274.230	253.860	231.990	209.220
125	311.325	309.690	304.665	296.355	285.045	271.470	255.615	237.645	216.765	195.765
130	284.925	283.155	278.760	271.470	261.405	249.090	234.750	218.655	198.915	175.905
135	256.500	255.240	251.100	244.815	235.875	225.075	211.995	193.005	172.260	151.515
140	226.575	225.315	221.925	216.015	207.840	197.655	179.685	162.450	146.355	131.025
145	193.380	192.375	189.480	184.710	178.050	163.200	149.505	136.800	123.975	111.525
150	163.965	162.960	160.695	156.795	145.725	133.410	122.475	112.155	103.860	95.310
155	134.040	133.275	131.145	123.480	113.160	104.115	96.570	91.785	85.875	77.460
160	102.855	102.225	98.835	89.145	82.860	77.460	74.820	70.545	63.750	57.330
165	68.655	67.905	61.995	59.100	55.695	55.320	52.440	48.165	44.265	41.235
170	44.505	40.740	38.475	37.350	38.985	38.595	37.590	36.345	34.950	33.450
175	26.910	23.640	24.390	26.160	26.280	25.905	25.395	25.155	24.525	23.760
180	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**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	14.730	14.730	14.730	14.730	14.730	14.730	14.730	14.730	14.730	14.730
5	23.265	22.125	21.000	19.740	18.615	17.355	16.095	15.090	14.085	13.455
10	35.835	33.315	30.675	27.795	25.020	22.125	19.245	16.350	13.950	12.825
15	48.405	44.385	40.485	36.090	31.560	26.910	22.380	17.850	13.830	12.570
20	61.605	55.575	49.785	43.890	37.980	31.560	25.275	19.110	13.335	12.945
25	75.825	67.650	59.850	51.675	43.890	36.090	28.290	20.250	12.945	13.455
30	90.780	80.220	70.155	60.225	50.040	40.365	30.930	21.375	12.450	14.460
35	106.380	93.420	80.850	68.520	56.085	44.385	33.450	22.380	11.820	15.465
40	122.595	106.995	91.920	76.950	62.235	48.285	35.580	23.265	11.070	16.350
45	139.320	120.705	103.110	85.125	68.400	52.185	37.725	24.015	10.305	17.220
50	155.040	133.665	113.790	93.420	74.190	55.830	39.480	24.525	9.435	18.105
55	169.995	146.730	123.855	101.220	79.965	59.355	41.115	24.645	8.430	18.735
60	183.450	158.055	132.780	108.135	85.125	62.745	42.630	24.765	7.290	19.110

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CANDELA TABULATION - (Cont.)

65	195.390	167.865	140.700	114.165	89.655	65.505	43.755	24.645	6.165	19.365
70	205.080	175.905	147.240	119.325	93.300	67.905	45.015	23.895	5.160	19.485
75	211.995	181.935	152.145	123.090	96.060	69.660	45.015	23.520	4.155	19.485
80	216.525	185.970	155.415	125.610	97.830	70.665	45.390	23.010	3.645	19.365
85	217.905	187.980	157.290	127.125	98.955	72.180	45.645	22.755	2.640	19.740
90	218.160	188.235	157.545	127.245	98.955	72.045	46.275	23.130	1.635	19.620
95	216.765	187.350	156.915	126.870	98.700	71.925	46.020	23.010	1.890	20.250
100	214.125	184.080	155.160	126.495	97.830	71.415	45.900	21.120	2.265	21.120
105	209.475	180.435	152.145	124.230	97.200	69.660	42.630	18.615	2.895	20.625
110	203.700	175.020	147.870	120.960	93.930	65.640	41.235	16.725	3.525	17.985
115	195.645	168.990	142.335	115.680	88.650	63.750	38.985	15.465	4.530	16.095
120	185.580	160.695	135.300	108.255	84.615	59.355	34.575	14.340	5.280	14.460
125	173.775	148.125	121.710	98.205	75.570	52.440	30.675	13.335	6.030	13.200
130	152.895	129.510	108.390	87.135	66.510	46.020	26.910	12.450	6.915	12.945
135	132.525	114.300	95.310	76.065	57.960	39.990	23.265	12.075	7.665	12.945
140	115.170	98.955	82.365	65.505	49.410	33.705	21.375	11.820	8.295	13.080
145	99.840	86.505	69.285	54.315	41.235	28.170	19.620	11.445	8.925	13.080
150	84.870	70.920	57.960	46.140	34.455	27.795	19.245	12.075	10.560	14.085
155	66.390	56.580	47.910	37.980	32.310	26.025	18.615	13.200	12.450	15.345
160	51.045	42.870	37.845	33.825	29.175	23.385	17.475	14.085	13.830	16.095
165	38.730	36.090	32.940	29.175	25.020	20.625	16.725	15.210	15.090	16.725
170	31.680	29.550	27.030	24.390	21.255	18.480	16.980	16.725	16.845	17.730
175	22.515	21.375	19.995	18.735	18.225	17.850	17.730	17.850	18.105	18.480
180	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**Vert.
Angles**

Horizontal Angles

	100	105	110	115	120	125	130	135	140	145
0	14.730	14.730	14.730	14.730	14.730	14.730	14.730	14.730	14.730	14.730
5	13.080	12.945	13.080	13.455	14.085	14.970	15.840	16.605	17.475	18.225
10	13.200	14.970	17.475	19.995	22.755	25.020	27.030	29.175	31.065	32.685
15	15.090	19.245	23.385	27.285	31.305	34.830	38.355	41.745	44.760	47.655
20	17.610	23.640	29.040	34.455	39.990	45.015	50.040	55.080	59.355	63.495
25	20.370	27.660	34.710	41.625	49.035	55.575	62.370	68.910	74.940	80.475
30	23.010	31.560	40.365	48.915	57.960	66.765	75.060	83.370	91.290	98.325
35	25.395	35.460	45.900	56.205	67.515	77.835	88.140	98.445	107.880	117.180
40	27.405	39.225	51.420	63.495	76.830	89.145	101.340	113.790	125.355	136.305
45	29.550	42.750	56.715	70.785	86.010	100.470	114.795	129.390	143.340	156.045
50	31.560	46.395	61.995	77.835	95.190	111.525	127.995	144.855	160.950	175.785
55	33.315	49.665	66.885	84.495	103.605	122.220	140.700	159.690	178.050	195.015
60	34.830	52.440	71.295	90.405	111.525	131.895	152.265	173.775	193.635	212.625
65	36.090	54.945	75.195	95.805	118.575	140.445	162.585	186.090	207.840	228.585
70	37.095	57.090	78.585	100.335	124.605	147.990	171.510	196.395	219.660	241.785
75	37.980	58.725	80.970	104.115	129.390	153.780	178.425	203.820	228.720	251.850
80	39.105	60.735	83.115	106.755	132.900	157.920	183.330	209.610	234.240	258.645
85	39.360	61.365	84.240	108.390	135.045	160.695	186.465	212.865	237.765	262.290
90	39.615	61.740	85.620	110.145	135.420	161.070	186.975	214.005	238.770	263.160
95	39.990	61.740	85.500	110.655	135.795	161.190	186.840	213.885	238.140	262.290
100	40.860	62.235	85.620	109.770	135.300	161.190	186.465	211.995	236.010	259.515
105	41.235	62.115	85.245	108.630	134.415	158.925	183.450	208.350	231.600	254.370
110	40.620	61.740	84.240	106.875	131.775	155.535	179.055	202.935	226.200	247.320
115	39.105	60.855	82.365	104.115	127.995	150.510	172.890	196.395	217.650	237.645
120	33.075	58.335	79.335	100.335	122.970	144.090	165.225	187.215	207.090	225.825
125	29.175	51.810	72.675	91.920	113.040	133.785	155.160	176.415	194.640	211.740
130	25.395	42.750	65.760	83.235	101.970	120.210	138.810	158.550	178.920	196.155
135	21.885	36.720	55.455	74.565	91.290	107.130	123.090	139.950	156.915	174.270

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CANDELA TABULATION - (Cont.)

140	20.625	31.935	43.635	63.240	80.850	95.190	107.880	121.965	136.305	150.510
145	19.365	26.400	37.845	48.405	67.140	84.375	96.060	105.990	116.310	127.875
150	19.995	25.905	32.445	42.375	51.555	66.135	81.600	92.550	100.080	106.995
155	19.995	25.530	30.045	35.340	43.380	50.925	58.965	72.555	81.975	89.025
160	19.860	24.765	29.040	32.820	35.955	40.860	46.650	52.305	58.470	63.495
165	19.365	23.010	27.165	30.675	33.315	35.580	37.215	40.110	42.750	46.530
170	19.365	21.630	24.135	26.910	29.295	31.680	33.075	33.705	35.085	35.955
175	19.110	20.115	21.255	22.380	23.760	25.020	26.280	27.285	28.035	28.410
180	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Vert. Horizontal Angles
Angles

	150	155	160	165	170	175	180
0	14.730	14.730	14.730	14.730	14.730	14.730	14.730
5	18.855	19.485	19.995	20.370	20.625	20.625	20.625
10	34.200	35.460	36.585	37.470	38.100	38.355	38.475
15	49.920	52.185	54.195	55.575	56.460	57.090	57.330
20	67.140	70.545	73.185	75.315	76.830	77.700	77.955
25	85.500	90.030	93.675	96.570	98.700	100.080	100.590
30	104.985	110.655	115.425	119.325	122.085	123.855	124.485
35	125.490	132.405	138.555	143.460	146.985	149.250	149.880
40	146.490	155.160	162.585	168.735	173.010	175.905	176.790
45	168.105	178.545	187.350	195.015	200.175	203.820	204.945
50	189.480	202.305	212.865	221.925	228.090	232.365	233.625
55	210.735	225.690	237.900	248.205	255.750	260.520	262.035
60	230.355	247.065	261.030	272.715	281.265	286.800	288.435
65	248.205	265.935	282.150	294.720	304.275	310.185	312.075
70	262.785	282.405	299.250	312.585	322.395	328.800	330.945
75	273.600	293.715	311.325	325.035	335.220	341.745	343.770
80	281.400	301.260	318.615	332.325	342.630	349.170	351.060
85	285.045	304.665	322.005	335.970	345.900	352.065	353.820
90	285.540	304.785	321.885	335.340	345.150	350.925	353.070
95	284.160	303.270	319.995	333.330	342.630	348.420	350.550
100	281.025	299.760	315.600	329.175	338.355	344.265	346.020
105	275.490	293.475	308.940	321.765	331.185	336.720	338.475
110	267.435	284.670	299.625	312.075	320.880	326.670	328.425
115	256.125	273.225	287.310	298.995	307.680	312.825	314.595
120	243.045	258.390	272.475	283.035	290.835	295.980	297.495
125	227.715	241.665	254.490	264.165	271.215	275.745	277.125
130	210.360	223.440	234.375	243.180	249.465	253.485	254.745
135	191.880	203.190	213.000	220.545	226.200	229.725	230.850
140	165.840	181.560	190.365	197.025	201.675	204.825	205.710
145	140.070	152.640	166.860	172.755	176.910	179.430	180.300
150	116.175	125.610	136.545	147.870	151.635	153.645	154.410
155	93.795	100.335	108.255	117.810	125.985	127.875	128.250
160	67.905	72.045	78.210	85.245	96.060	99.210	99.840
165	49.290	51.045	51.180	54.060	58.725	67.140	67.650
170	35.955	35.835	34.710	32.820	34.080	39.225	44.760
175	28.410	28.290	27.660	25.770	22.890	21.495	26.910
180	0.000	0.000	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	15.00	N.A.	0.70
0-30	48.26	N.A.	2.40
0-40	112.58	N.A.	5.50
0-60	367.01	N.A.	17.90
0-80	783.00	N.A.	38.30
0-90	1020.2	N.A.	49.90
10-90	1017.94	N.A.	49.80
20-40	97.58	N.A.	4.80
20-50	202.11	N.A.	9.90
40-70	447.05	N.A.	21.90
60-80	415.99	N.A.	20.30
70-80	223.37	N.A.	10.90
80-90	237.20	N.A.	11.60
90-110	456.94	N.A.	22.30
90-120	649.87	N.A.	31.80
90-130	803.23	N.A.	39.30
90-150	977.67	N.A.	47.80
90-180	1025.77	N.A.	50.10
110-180	568.82	N.A.	27.80
0-180	2045.96	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	2.25
10-20	12.74
20-30	33.27
30-40	64.31
40-50	104.53
50-60	149.90
60-70	192.62
70-80	223.37
80-90	237.20
90-100	235.80
100-110	221.14
110-120	192.92
120-130	153.36
130-140	108.17
140-150	66.27
150-160	33.71
160-170	12.18
170-180	2.21

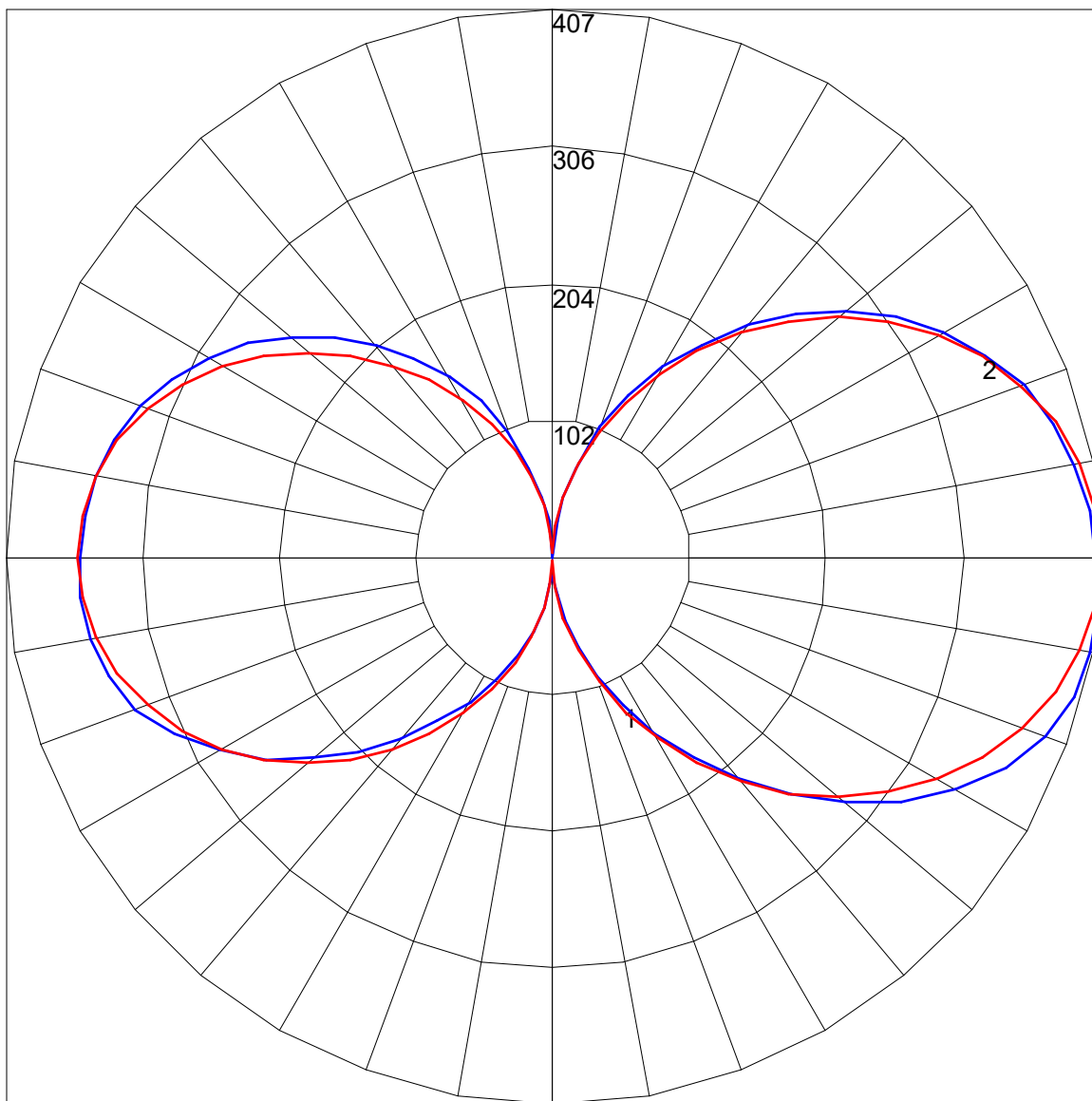
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	92	85	79	73	84	78	72	67	64	60	56	52	48	45	40	38	35	30
2	81	71	62	55	74	64	57	50	53	47	42	42	37	33	32	28	25	20
3	73	60	51	43	66	55	46	39	45	38	32	35	30	26	26	22	19	14
4	66	52	42	35	59	47	39	32	38	31	26	30	25	20	22	18	15	11
5	60	46	36	29	54	42	33	26	34	27	21	26	21	17	20	15	12	8
6	55	40	31	24	49	37	28	22	30	23	18	23	18	14	17	13	10	7
7	50	36	27	20	45	33	25	19	27	20	15	21	16	12	16	11	8	5
8	46	32	24	18	42	30	22	16	24	18	13	19	14	10	14	10	7	4
9	43	29	21	15	39	27	19	14	22	16	11	17	12	9	13	9	6	4
10	40	27	19	13	36	24	17	12	20	14	10	16	11	8	12	8	5	3

POLAR GRAPH



Maximum Candela = 407.385 Located At Horizontal Angle = 0, Vertical Angle = 85
1 - Vertical Plane Through Horizontal Angles (0 - 180)
2 - Horizontal Cone Through Vertical Angle (85) (Through Max. Cd.)