

IES Report

DoubleRace™ | 107 | 120° Batwing, Flat, up | Diffuse, Round, down | 90 CRI | SO

107-DR-XX-4-48-XX-XX-XX-XX-X-X-Z-SO-359-G12-X-XX-X

	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	116	119	122	123
Total Lumens, 4' rail length (1219mm)	5502	5676	5792	5850
Lumens per foot (305mm)	1376	1419	1448	1462
Lumens per foot UP (305mm)	652	672	686	693
Lumens per foot DOWN (305mm)	724	747	762	770
Input Power (W), 4' rail length (1219mm)	47.8	47.8	47.8	47.8
Watts per foot (305mm)	12.0	12.0	12.0	12.0
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_107_DR_SO_359_G12.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] L121911515 / L121911517 (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-SO-359-G12-AL

[LUMINAIRE] DoubleRace LED, 48", 3500K, 90 CRI, zipper board, 120° batwing lens up /

[MORE] round diffuse lens down, standard 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	5792
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	121
Total Luminaire Watts	47.84
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	11799	14862	36517
55	7930	10491	30899
65	4773	6836	24554
75	2734	4046	17776
85	1596	2297	10668

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VODE_107_DR_SO_359_G12.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	1146.00	1146.00	1146.00	1146.00	1146.00	1146.00	1146.00	1146.00	1146.00	1146.00
5	1143.00	1143.00	1143.00	1143.00	1143.00	1143.00	1143.00	1143.00	1143.00	1143.00
10	1129.00	1129.00	1129.00	1129.00	1129.00	1129.00	1128.00	1128.00	1128.00	1128.00
15	1104.00	1105.00	1104.00	1104.00	1104.00	1103.00	1103.00	1103.00	1103.00	1102.00
20	1070.00	1070.00	1070.00	1070.00	1069.00	1068.00	1067.00	1067.00	1066.00	1065.00
25	1025.00	1025.00	1025.00	1024.00	1023.00	1022.00	1021.00	1020.00	1019.00	1017.00
30	969.00	969.00	969.00	968.00	967.00	966.00	964.00	962.00	960.00	958.00
35	900.00	900.00	900.00	900.00	899.00	899.00	897.00	895.00	892.00	889.00
40	814.00	814.00	815.00	816.00	816.00	817.00	817.00	816.00	814.00	811.00
45	715.00	716.00	717.00	718.00	720.00	722.00	724.00	725.00	724.00	722.00
50	613.00	613.00	614.00	616.00	619.00	621.00	624.00	625.00	626.00	625.00
55	508.00	508.00	510.00	513.00	516.00	520.00	524.00	526.00	527.00	526.00
60	405.00	406.00	408.00	412.00	416.00	421.00	426.00	430.00	432.00	432.00
65	313.00	314.00	316.00	319.00	324.00	329.00	334.00	339.00	342.00	343.00
70	238.00	238.00	240.00	243.00	247.00	251.00	256.00	260.00	262.00	263.00
75	178.00	178.00	180.00	182.00	185.00	189.00	192.00	195.00	197.00	197.00
80	134.00	134.00	135.00	137.00	139.00	142.00	144.00	146.00	147.00	146.00
85	100.00	100.00	101.00	102.00	104.00	105.00	107.00	107.00	107.00	105.00
90	76.00	76.00	76.00	77.00	78.00	78.00	79.00	79.00	78.00	75.00
95	120.45	120.45	120.32	120.11	119.65	119.94	117.85	116.51	112.71	106.69
100	199.08	199.12	199.41	199.58	199.45	198.36	195.06	190.24	182.04	170.53
105	295.11	294.99	294.94	294.74	292.81	290.89	286.28	278.78	267.27	250.94
110	401.28	401.24	400.99	400.23	397.22	394.04	387.25	376.07	360.45	339.88
115	510.46	510.37	509.28	507.61	503.25	496.51	487.00	473.30	453.66	428.69
120	615.18	614.47	612.79	609.56	603.54	594.24	582.67	564.57	541.95	513.03
125	709.00	708.08	705.48	700.75	692.62	681.81	666.68	646.49	619.92	586.15
130	787.31	786.31	782.91	777.25	768.54	755.75	737.69	714.69	684.10	646.55
135	850.44	849.01	844.99	837.78	825.84	810.59	790.09	762.23	729.16	689.35
140	890.09	888.29	882.72	873.87	860.01	841.98	818.93	789.26	755.19	716.25
145	902.00	899.74	893.75	883.85	869.94	850.08	826.15	794.07	761.16	723.57
150	888.43	886.54	880.55	870.45	856.53	838.13	811.96	785.47	755.05	722.06
155	849.39	847.84	842.10	832.92	820.30	803.96	784.38	761.58	736.35	708.86
160	795.66	794.19	789.50	782.04	771.77	758.61	743.31	726.55	707.98	688.91
165	732.20	731.16	728.31	723.74	717.32	709.28	700.14	689.70	678.72	667.20
170	677.55	677.09	675.79	673.36	670.43	666.82	662.50	657.85	652.95	647.58
175	641.17	640.96	640.54	640.04	639.45	638.45	637.44	636.27	635.05	633.84
180	629.77	629.77	629.77	629.77	629.77	629.77	629.77	629.77	629.77	629.77

**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	1146.00	1146.00	1146.00	1146.00	1146.00	1146.00	1146.00	1146.00	1146.00	1146.00
5	1143.00	1143.00	1143.00	1143.00	1143.00	1143.00	1143.00	1143.00	1144.00	1143.00
10	1128.00	1128.00	1128.00	1128.00	1128.00	1128.00	1128.00	1128.00	1128.00	1128.00
15	1101.00	1101.00	1100.00	1100.00	1099.00	1100.00	1099.00	1099.00	1100.00	1099.00
20	1064.00	1063.00	1061.00	1061.00	1060.00	1059.00	1059.00	1058.00	1059.00	1058.00
25	1015.00	1013.00	1011.00	1009.00	1008.00	1006.00	1006.00	1006.00	1006.00	1006.00
30	955.00	952.00	949.00	946.00	944.00	941.00	940.00	939.00	939.00	939.00
35	886.00	881.00	877.00	872.00	868.00	865.00	862.00	861.00	861.00	861.00
40	806.00	800.00	794.00	788.00	782.00	778.00	774.00	772.00	771.00	772.00
45	717.00	711.00	703.00	696.00	689.00	682.00	677.00	674.00	674.00	674.00
50	621.00	616.00	608.00	599.00	590.00	582.00	576.00	572.00	572.00	572.00
55	523.00	518.00	511.00	501.00	492.00	483.00	476.00	472.00	471.00	472.00
60	429.00	423.00	415.00	407.00	397.00	387.00	379.00	375.00	373.00	375.00

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VODE_107_DR_SO_359_G12.IES

CANDELA TABULATION - (Cont.)

65	341.00	335.00	328.00	318.00	308.00	298.00	290.00	285.00	284.00	285.00
70	262.00	257.00	250.00	240.00	229.00	219.00	210.00	205.00	203.00	205.00
75	195.00	190.00	183.00	174.00	163.00	152.00	143.00	137.00	134.00	137.00
80	143.00	138.00	130.00	120.00	109.00	98.00	88.00	81.00	79.00	81.00
85	102.00	96.00	88.00	79.00	68.00	56.00	46.00	38.00	35.00	38.00
90	71.00	66.00	58.00	49.00	39.00	29.00	19.00	10.00	4.00	10.00
95	98.08	87.80	75.64	63.12	52.14	42.34	34.46	30.00	27.91	30.00
100	155.72	140.03	122.67	106.99	95.24	84.84	77.95	74.77	72.26	74.77
105	231.09	208.57	186.09	164.74	148.88	137.58	130.01	125.19	123.47	125.19
110	313.88	284.55	255.32	228.51	208.74	193.87	183.49	178.13	176.20	178.13
115	396.72	361.70	326.04	292.90	268.30	248.08	236.80	230.06	227.67	230.06
120	475.54	435.05	392.48	354.06	324.93	301.56	287.39	279.05	276.20	279.05
125	545.53	500.28	454.18	411.14	375.62	350.55	334.12	324.44	321.38	324.44
130	601.00	553.59	505.53	461.02	422.93	395.73	377.33	366.73	363.21	366.73
135	644.12	595.34	544.73	500.56	464.97	436.98	418.03	406.92	403.11	406.92
140	671.29	625.94	577.84	535.59	501.69	475.03	456.38	445.36	441.50	445.36
145	683.46	642.39	601.73	564.09	534.04	509.36	492.26	481.91	478.38	481.91
150	687.15	651.82	618.12	587.10	561.37	540.62	525.49	516.36	513.26	516.36
155	680.86	653.79	628.01	604.04	584.30	567.82	555.88	548.34	545.86	548.34
160	669.13	650.89	632.58	615.81	601.98	590.62	581.99	576.50	574.70	576.50
165	655.34	644.36	633.54	623.57	615.31	608.27	603.03	599.72	598.67	599.72
170	642.30	637.06	632.41	627.59	623.99	620.47	618.29	616.86	616.44	616.86
175	632.49	631.24	630.02	629.10	628.26	627.59	627.17	626.84	626.84	626.84
180	629.77	629.77	629.77	629.77	629.77	629.77	629.77	629.77	629.77	629.77

**Vert.
Angles**

Horizontal Angles

	100	105	110	115	120	125	130	135	140	145
0	1146.00	1146.00	1146.00	1146.00	1146.00	1146.00	1146.00	1146.00	1146.00	1146.00
5	1143.00	1143.00	1143.00	1143.00	1143.00	1143.00	1143.00	1143.00	1143.00	1143.00
10	1128.00	1128.00	1128.00	1128.00	1128.00	1128.00	1128.00	1128.00	1128.00	1128.00
15	1099.00	1100.00	1099.00	1100.00	1100.00	1101.00	1101.00	1102.00	1103.00	1103.00
20	1059.00	1059.00	1060.00	1061.00	1061.00	1063.00	1064.00	1065.00	1066.00	1067.00
25	1006.00	1006.00	1008.00	1009.00	1011.00	1013.00	1015.00	1017.00	1019.00	1020.00
30	940.00	941.00	944.00	946.00	949.00	952.00	955.00	958.00	960.00	962.00
35	862.00	865.00	868.00	872.00	877.00	881.00	886.00	889.00	892.00	895.00
40	774.00	778.00	782.00	788.00	794.00	800.00	806.00	811.00	814.00	816.00
45	677.00	682.00	689.00	696.00	703.00	711.00	717.00	722.00	724.00	725.00
50	576.00	582.00	590.00	599.00	608.00	616.00	621.00	625.00	626.00	625.00
55	476.00	483.00	492.00	501.00	511.00	518.00	523.00	526.00	527.00	526.00
60	379.00	387.00	397.00	407.00	415.00	423.00	429.00	432.00	432.00	430.00
65	290.00	298.00	308.00	318.00	328.00	335.00	341.00	343.00	342.00	339.00
70	210.00	219.00	229.00	240.00	250.00	257.00	262.00	263.00	262.00	260.00
75	143.00	152.00	163.00	174.00	183.00	190.00	195.00	197.00	197.00	195.00
80	88.00	98.00	109.00	120.00	130.00	138.00	143.00	146.00	147.00	146.00
85	46.00	56.00	68.00	79.00	88.00	96.00	102.00	105.00	107.00	107.00
90	19.00	29.00	39.00	49.00	58.00	66.00	71.00	75.00	78.00	79.00
95	34.46	42.34	52.14	63.12	75.64	87.80	98.08	106.69	112.71	116.51
100	77.95	84.84	95.24	106.99	122.67	140.03	155.72	170.53	182.04	190.24
105	130.01	137.58	148.88	164.74	186.09	208.57	231.09	250.94	267.27	278.78
110	183.49	193.87	208.74	228.51	255.32	284.55	313.88	339.88	360.45	376.07
115	236.80	248.08	268.30	292.90	326.04	361.70	396.72	428.69	453.66	473.30
120	287.39	301.56	324.93	354.06	392.48	435.05	475.54	513.03	541.95	564.57
125	334.12	350.55	375.62	411.14	454.18	500.28	545.53	586.15	619.92	646.49
130	377.33	395.73	422.93	461.02	505.53	553.59	601.00	646.55	684.10	714.69
135	418.03	436.98	464.97	500.56	544.73	595.34	644.12	689.35	729.16	762.23

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VODE_107_DR_SO_359_G12.IES

CANDELA TABULATION - (Cont.)

140	456.38	475.03	501.69	535.59	577.84	625.94	671.29	716.25	755.19	789.26
145	492.26	509.36	534.04	564.09	601.73	642.39	683.46	723.57	761.16	794.07
150	525.49	540.62	561.37	587.10	618.12	651.82	687.15	722.06	755.05	785.47
155	555.88	567.82	584.30	604.04	628.01	653.79	680.86	708.86	736.35	761.58
160	581.99	590.62	601.98	615.81	632.58	650.89	669.13	688.91	707.98	726.55
165	603.03	608.27	615.31	623.57	633.54	644.36	655.34	667.20	678.72	689.70
170	618.29	620.47	623.99	627.59	632.41	637.06	642.30	647.58	652.95	657.85
175	627.17	627.59	628.26	629.10	630.02	631.24	632.49	633.84	635.05	636.27
180	629.77	629.77	629.77	629.77	629.77	629.77	629.77	629.77	629.77	629.77

Vert. Horizontal Angles
Angles

	150	155	160	165	170	175	180
0	1146.00	1146.00	1146.00	1146.00	1146.00	1146.00	1146.00
5	1143.00	1143.00	1143.00	1143.00	1143.00	1143.00	1143.00
10	1128.00	1129.00	1129.00	1129.00	1129.00	1129.00	1129.00
15	1103.00	1103.00	1104.00	1104.00	1104.00	1105.00	1104.00
20	1067.00	1068.00	1069.00	1070.00	1070.00	1070.00	1070.00
25	1021.00	1022.00	1023.00	1024.00	1025.00	1025.00	1025.00
30	964.00	966.00	967.00	968.00	969.00	969.00	969.00
35	897.00	899.00	899.00	900.00	900.00	900.00	900.00
40	817.00	817.00	816.00	816.00	815.00	814.00	814.00
45	724.00	722.00	720.00	718.00	717.00	716.00	715.00
50	624.00	621.00	619.00	616.00	614.00	613.00	613.00
55	524.00	520.00	516.00	513.00	510.00	508.00	508.00
60	426.00	421.00	416.00	412.00	408.00	406.00	405.00
65	334.00	329.00	324.00	319.00	316.00	314.00	313.00
70	256.00	251.00	247.00	243.00	240.00	238.00	238.00
75	192.00	189.00	185.00	182.00	180.00	178.00	178.00
80	144.00	142.00	139.00	137.00	135.00	134.00	134.00
85	107.00	105.00	104.00	102.00	101.00	100.00	100.00
90	79.00	78.00	78.00	77.00	76.00	76.00	76.00
95	117.85	119.94	119.65	120.11	120.32	120.45	120.45
100	195.06	198.36	199.45	199.58	199.41	199.12	199.08
105	286.28	290.89	292.81	294.74	294.94	294.99	295.11
110	387.25	394.04	397.22	400.23	400.99	401.24	401.28
115	487.00	496.51	503.25	507.61	509.28	510.37	510.46
120	582.67	594.24	603.54	609.56	612.79	614.47	615.18
125	666.68	681.81	692.62	700.75	705.48	708.08	709.00
130	737.69	755.75	768.54	777.25	782.91	786.31	787.31
135	790.09	810.59	825.84	837.78	844.99	849.01	850.44
140	818.93	841.98	860.01	873.87	882.72	888.29	890.09
145	826.15	850.08	869.94	883.85	893.75	899.74	902.00
150	811.96	838.13	856.53	870.45	880.55	886.54	888.43
155	784.38	803.96	820.30	832.92	842.10	847.84	849.39
160	743.31	758.61	771.77	782.04	789.50	794.19	795.66
165	700.14	709.28	717.32	723.74	728.31	731.16	732.20
170	662.50	666.82	670.43	673.36	675.79	677.09	677.55
175	637.44	638.45	639.45	640.04	640.54	640.96	641.17
180	629.77	629.77	629.77	629.77	629.77	629.77	629.77

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VODE_107_DR_SO_359_G12.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	419.44	N.A.	7.20
0-30	887.14	N.A.	15.30
0-40	1439.42	N.A.	24.90
0-60	2439.1	N.A.	42.10
0-80	2949.75	N.A.	50.90
0-90	3048.44	N.A.	52.60
10-90	2939.83	N.A.	50.80
20-40	1019.98	N.A.	17.60
20-50	1565.03	N.A.	27.00
40-70	1319.49	N.A.	22.80
60-80	510.65	N.A.	8.80
70-80	190.83	N.A.	3.30
80-90	98.69	N.A.	1.70
90-110	348.45	N.A.	6.00
90-120	738.11	N.A.	12.70
90-130	1224.21	N.A.	21.10
90-150	2168.53	N.A.	37.40
90-180	2743.71	N.A.	47.40
110-180	2395.25	N.A.	41.40
0-180	5792.15	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	108.62
10-20	310.82
20-30	467.70
30-40	552.28
40-50	545.05
50-60	454.63
60-70	319.81
70-80	190.83
80-90	98.69
90-100	106.41
100-110	242.04
110-120	389.66
120-130	486.10
130-140	503.23
140-150	441.09
150-160	324.78
160-170	189.46
170-180	60.93

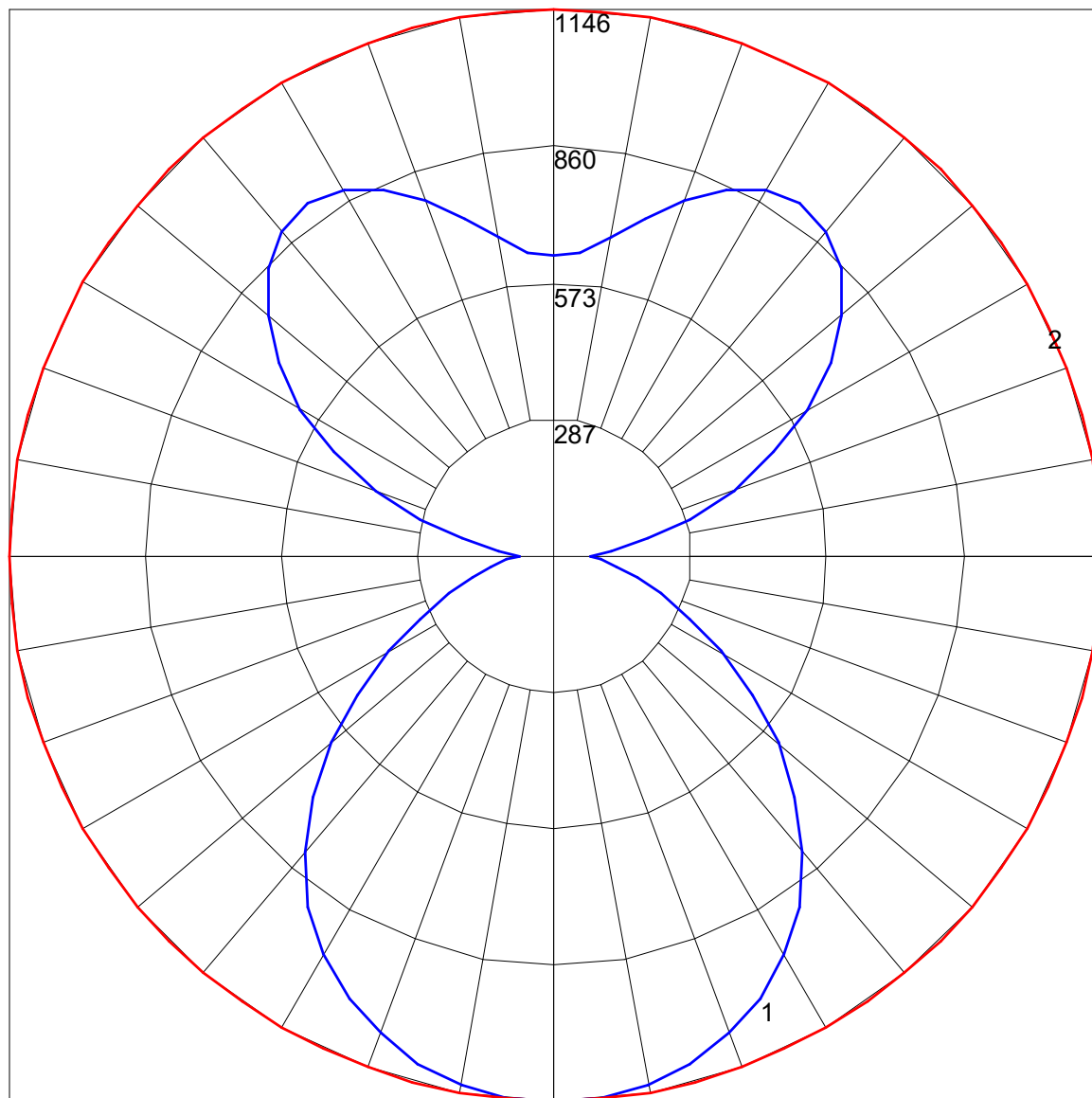
IES INDOOR REPORT
 PHOTOMETRIC FILENAME : VODE_107_DR_SO_359_G12.IES

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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59	53
1	98	94	90	86	91	87	83	80	74	72	69	62	60	59	51	50	49	44
2	89	82	76	70	82	76	71	66	65	61	57	55	52	49	45	43	41	37
3	82	72	65	59	75	67	60	55	57	52	48	48	45	42	40	38	35	31
4	75	64	56	50	69	59	52	47	51	46	41	43	39	36	36	33	30	27
5	69	57	49	43	63	53	46	40	46	40	36	39	34	31	32	29	27	23
6	63	51	43	37	58	48	40	35	41	35	31	35	31	27	29	26	23	21
7	58	46	38	32	54	43	36	31	37	32	27	32	27	24	27	23	21	18
8	54	42	34	29	50	39	32	27	34	28	24	29	25	21	25	21	19	16
9	51	38	31	26	47	36	29	24	31	26	22	27	22	19	23	19	17	15
10	47	35	28	23	44	33	26	22	29	23	20	25	21	17	21	18	15	13

POLAR GRAPH



Maximum Candela = 1146 Located At Horizontal Angle = 0, Vertical Angle = 0

1 - Vertical Plane Through Horizontal Angles (0 - 180)

2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)