

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P146236

Luminaire Tested: **VPL-F04-LED-E1-CPR-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P146236
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33704)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: VPL-F04-LED-E1-CPR-7050
Description: VALET LED LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - 90° FORWARD THROW PERIMETER RIGHT
Light Source: (28) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9126.2 lumens
Efficiency: N/A
Efficacy: 89.3 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G3

Input Watts (W): 102.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

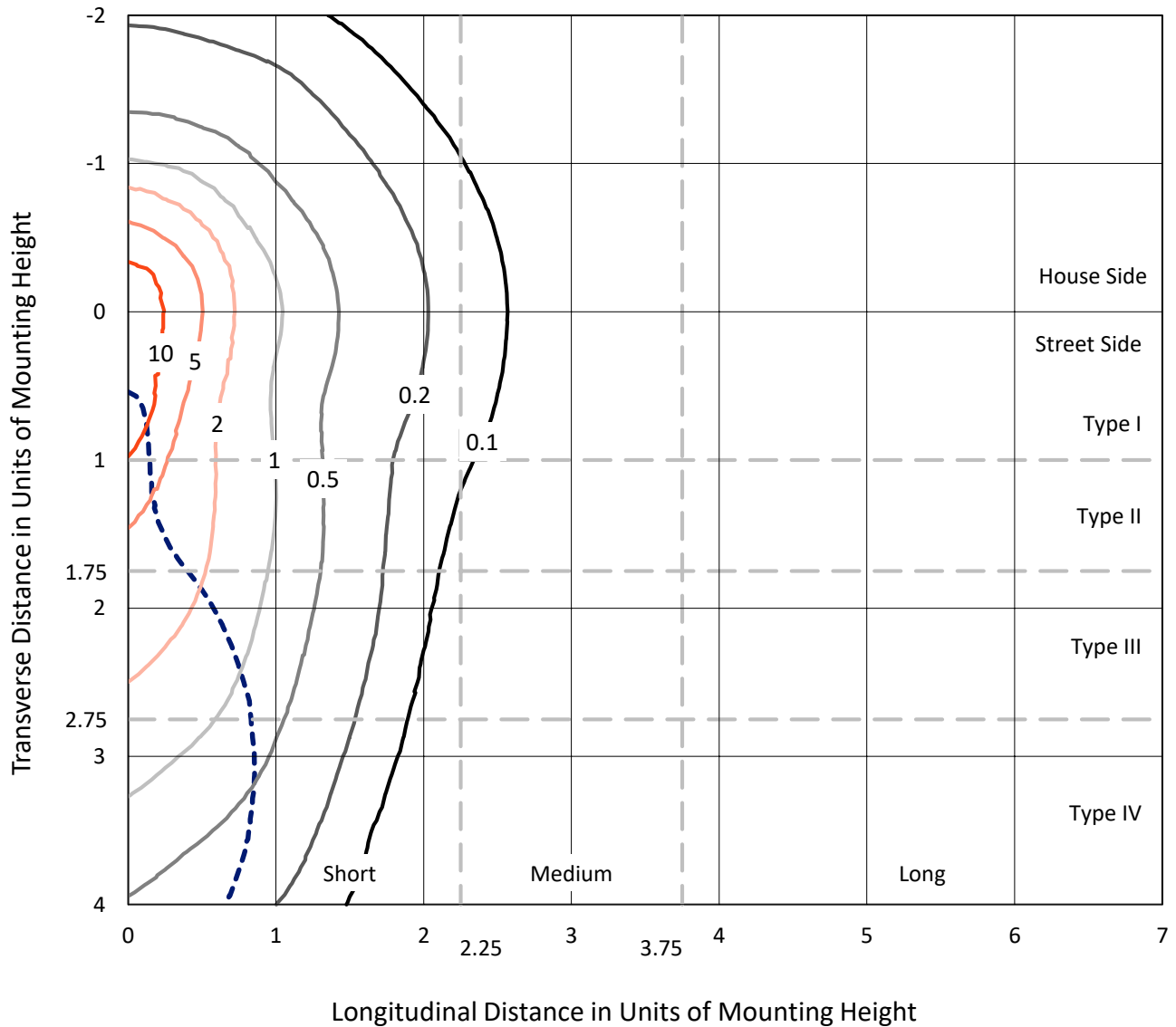


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Iso-Footcandle Lines of Horizontal Illumination

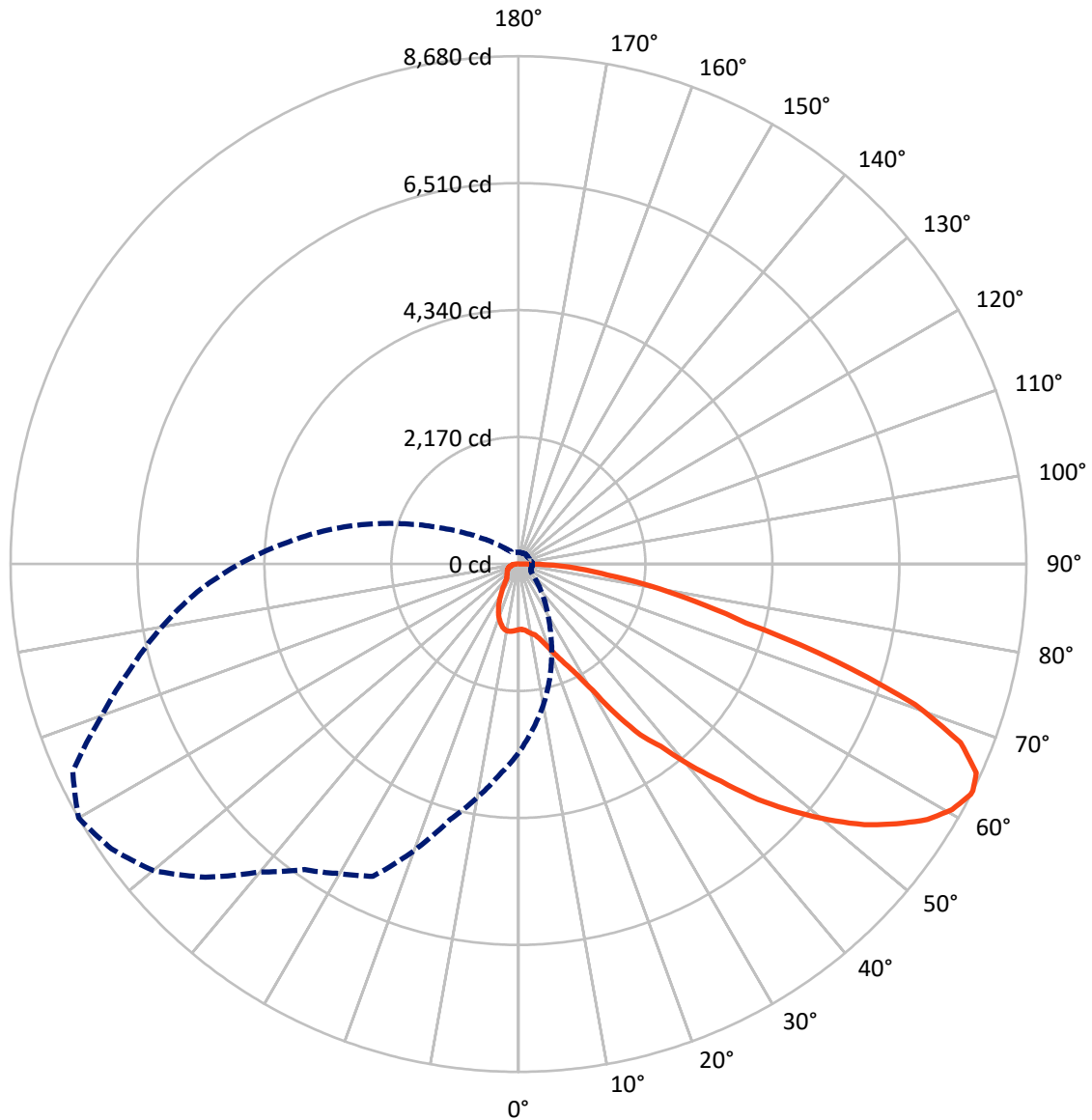
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14.4 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 300-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1910.4	0.0	1910.4
	% Fixture	20.9	0.0	20.9
Street Side	Lumens	7215.8	0.0	7215.8
	% Fixture	79.1	0.0	79.1
Total	Lumens	9126.2	0.0	9126.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.1	1.2
10°-20°	343.6	3.8
20°-30°	607.6	6.7
30°-40°	959.2	10.5
40°-50°	1410.5	15.5
50°-60°	1858.0	20.4
60°-70°	2070.9	22.7
70°-80°	1360.6	14.9
80°-90°	405.8	4.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	9126.2	100.0
0°-180°	9126.2	100.0

Coefficient of Utilization



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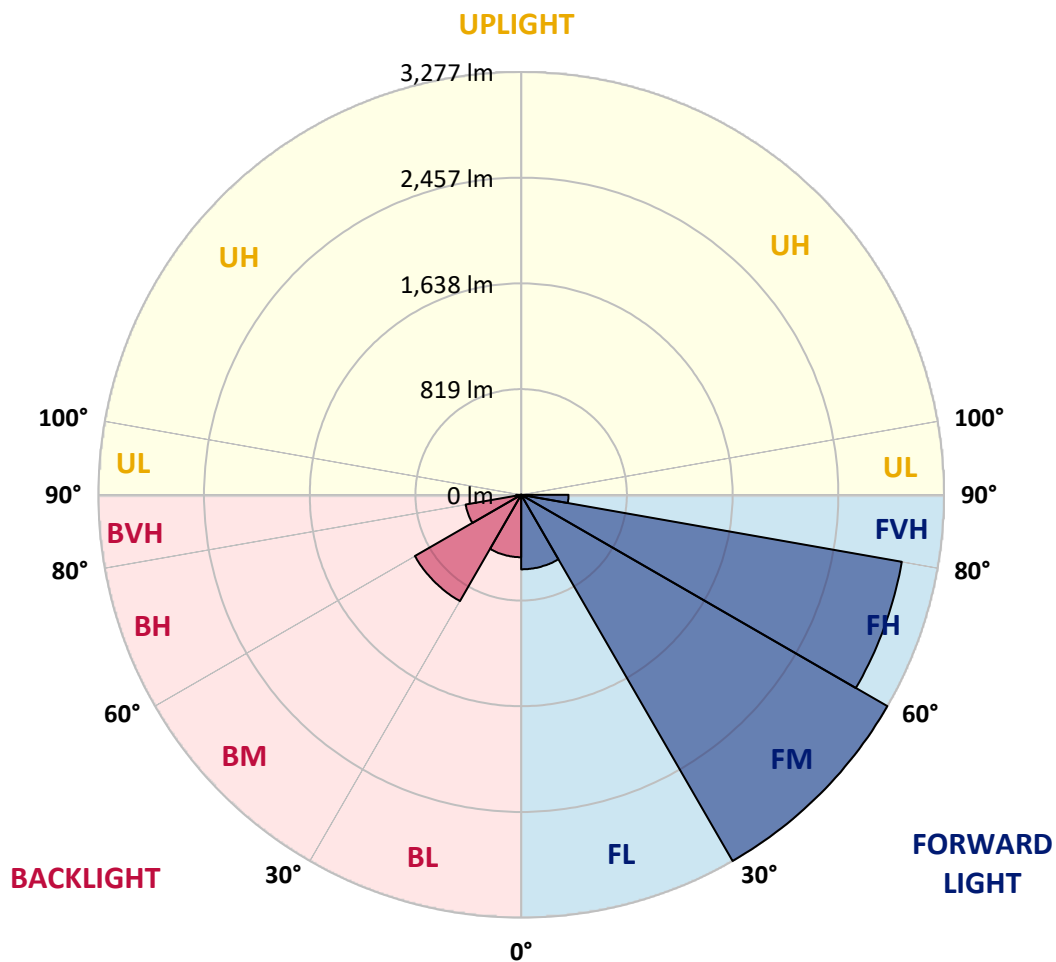
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	577.6	6.3			
FM	(30°-60°)	3276.5	35.9			
FH	(60°-80°)	2994.9	32.8			G2/5000
FVH	(80°-90°)	366.7	4.0			G3/500
BL	(0°-30°)	483.6	5.3	B1/500		
BM	(30°-60°)	951.1	10.4	B1/1000		
BH	(60°-80°)	436.6	4.8	B1/500		G1/500
BVH	(80°-90°)	39.0	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9
2.5°	1119.5	1121.5	1121.5	1119.5	1121.5	1120.9	1120.9	1122.9	1123.6	1126.9	1124.9
5°	1114.1	1114.8	1115.4	1114.1	1114.8	1114.8	1116.1	1118.1	1118.8	1122.9	1120.9
7.5°	1108.0	1109.3	1106.6	1107.3	1109.3	1112.0	1112.0	1114.8	1119.5	1121.5	1120.9
10°	1111.4	1110.0	1108.0	1107.3	1108.7	1109.3	1110.7	1115.4	1119.5	1121.5	1124.9
12.5°	1137.8	1133.7	1131.7	1131.0	1131.7	1130.3	1135.1	1136.4	1137.8	1140.5	1139.1
15°	1187.9	1182.5	1179.1	1175.7	1183.2	1179.8	1179.8	1175.7	1169.0	1158.8	1145.9
17.5°	1257.7	1251.6	1248.9	1247.6	1248.3	1242.2	1230.0	1210.3	1186.6	1159.5	1134.4
20°	1358.0	1367.5	1363.5	1345.2	1338.4	1311.3	1272.6	1232.0	1190.6	1147.3	1105.9
22.5°	1531.5	1526.1	1507.8	1462.4	1421.7	1360.7	1291.6	1225.9	1164.9	1101.9	1047.7
25°	1732.8	1687.4	1635.9	1546.4	1452.9	1352.6	1253.0	1175.1	1093.7	1024.6	959.6
27.5°	1979.4	1881.2	1749.7	1604.0	1464.4	1330.9	1213.0	1110.0	1017.2	943.3	870.8
30°	2222.0	2058.1	1875.1	1682.0	1493.6	1313.3	1157.4	1038.2	931.1	836.2	763.0
32.5°	2390.1	2191.6	1963.9	1725.3	1496.3	1284.8	1096.5	954.1	833.5	738.0	649.9
35°	2528.4	2280.3	1995.0	1718.5	1452.9	1218.4	1009.0	851.1	723.1	624.1	546.9
37.5°	2623.2	2325.7	1993.0	1679.2	1375.7	1112.7	908.7	748.1	628.9	536.7	465.6
40°	2689.6	2340.0	1966.6	1612.2	1286.9	1010.4	801.7	655.3	550.9	479.1	427.6
42.5°	2721.5	2330.5	1927.3	1548.5	1198.8	927.7	721.0	593.0	508.2	454.0	416.1
45°	2735.0	2307.4	1883.2	1486.1	1126.9	856.6	679.7	574.0	507.6	460.8	419.5
47.5°	2731.6	2282.4	1843.9	1434.6	1084.3	837.6	687.8	599.7	532.6	474.4	421.5
50°	2722.2	2259.3	1818.8	1415.6	1083.6	866.1	733.2	643.1	561.8	486.6	419.5
52.5°	2721.5	2257.3	1832.4	1438.0	1122.9	930.4	801.7	693.2	590.2	500.1	420.1
55°	2737.7	2293.9	1890.0	1498.3	1217.8	1020.6	878.9	746.8	622.1	509.6	418.1
57.5°	2803.5	2385.4	1999.1	1633.2	1339.7	1130.3	953.5	786.8	634.3	506.9	408.6
60°	2947.8	2546.0	2167.2	1823.6	1496.3	1230.6	997.5	800.3	628.9	490.6	388.3
62.5°	3172.8	2778.4	2397.6	2010.6	1635.2	1290.9	1007.7	789.5	607.2	463.5	363.2
63°	3230.4	2831.9	2444.3	2049.2	1658.9	1297.0	1007.0	785.4	601.1	456.7	357.1
65°	3471.0	3061.7	2632.0	2176.6	1722.6	1309.2	991.4	759.7	574.0	424.9	329.3
67.5°	3832.8	3315.1	2818.4	2295.2	1757.9	1287.6	942.6	696.0	504.2	369.3	288.0
70°	4074.1	3483.2	2929.5	2333.9	1716.5	1188.6	830.8	583.5	412.0	304.3	246.0
72.5°	4080.2	3332.7	2779.1	2133.3	1482.0	980.6	650.6	441.2	320.5	247.3	212.1
75°	3644.5	2816.4	2271.5	1751.8	1140.5	693.2	457.4	321.9	246.0	204.0	183.6
77.5°	2709.3	2054.7	1639.3	1178.5	740.7	449.3	318.5	238.5	195.2	168.7	153.8
80°	1681.3	1284.2	994.8	704.8	443.9	298.8	233.1	189.7	164.0	141.0	128.8
82.5°	1013.8	719.0	561.8	425.6	283.9	215.5	179.6	159.9	138.9	118.6	109.1
85°	742.7	514.3	376.8	262.9	175.5	142.3	126.0	122.0	107.7	91.5	86.1
87.5°	233.8	245.3	254.8	155.2	84.7	64.4	54.9	64.4	61.7	43.4	47.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9
2.5°	1128.3	1131.0	1129.0	1129.0	1127.6	1126.9	1131.7	1130.3	1131.7	1131.0	1132.4
5°	1124.2	1126.3	1124.9	1126.3	1124.9	1124.9	1131.0	1131.0	1133.7	1135.1	1138.5
7.5°	1125.6	1126.3	1125.6	1127.6	1126.3	1124.9	1128.3	1130.3	1135.1	1139.1	1142.5
10°	1130.3	1132.4	1131.7	1131.7	1127.6	1124.9	1126.9	1128.3	1133.0	1135.1	1139.1
12.5°	1141.9	1139.1	1133.7	1130.3	1120.9	1115.4	1112.7	1111.4	1114.8	1117.5	1119.5
15°	1139.1	1124.2	1112.0	1101.9	1087.6	1078.8	1072.1	1071.4	1072.1	1072.7	1074.8
17.5°	1111.4	1091.0	1066.6	1053.8	1037.5	1028.0	1023.3	1019.9	1019.2	1020.6	1023.9
20°	1071.4	1041.6	1014.5	992.1	974.5	959.6	963.0	955.5	958.9	960.9	967.0
22.5°	1010.4	969.1	937.9	910.8	889.8	874.2	874.2	867.4	868.8	874.9	883.0
25°	911.5	872.8	828.1	809.1	785.4	774.6	772.5	771.2	776.6	784.1	788.8
27.5°	822.0	769.1	725.1	700.0	674.9	677.7	664.1	672.2	678.3	684.4	689.9
30°	701.4	658.0	618.0	593.0	563.1	563.8	565.8	567.2	572.6	580.8	591.6
32.5°	585.5	538.7	501.5	474.4	456.7	451.3	443.9	456.1	462.8	471.0	481.8
35°	489.9	441.2	410.0	386.3	376.1	368.6	366.6	365.3	371.4	375.4	384.2
37.5°	421.5	388.3	365.3	348.3	338.8	330.7	328.7	327.3	326.6	325.3	330.7
40°	393.7	367.3	347.6	332.1	323.2	318.5	316.5	313.8	311.0	307.7	307.0
42.5°	385.6	357.1	334.1	318.5	311.7	311.0	311.0	309.7	307.0	302.2	298.8
45°	382.2	347.6	321.2	309.0	304.3	304.9	304.9	304.9	302.9	298.2	292.7
47.5°	376.1	336.1	309.0	298.8	296.8	298.2	299.5	299.5	298.2	294.1	288.0
50°	364.6	318.5	290.0	280.6	279.9	280.6	280.6	281.9	280.6	277.2	271.7
52.5°	355.8	304.9	275.8	268.4	268.4	267.7	267.0	267.0	266.3	263.6	259.5
55°	347.6	296.1	269.7	263.6	265.0	265.0	263.6	262.9	260.2	256.8	252.8
57.5°	336.1	286.7	263.6	259.5	260.9	260.2	259.5	258.9	256.2	252.1	246.7
60°	315.8	269.7	251.4	248.7	250.7	251.4	254.1	254.8	253.4	248.7	241.2
62.5°	293.4	248.7	235.1	233.1	235.1	237.2	239.2	237.9	237.9	233.1	226.3
63°	286.0	245.3	230.4	230.4	232.4	234.5	235.8	234.5	235.1	229.7	223.0
65°	269.0	233.1	221.6	222.3	224.3	225.7	226.3	226.3	225.7	221.6	215.5
67.5°	240.6	215.5	208.7	212.1	214.8	215.5	215.5	216.9	215.5	212.8	207.4
70°	214.8	198.6	193.8	197.9	199.2	199.9	199.9	199.9	198.6	195.8	191.1
72.5°	195.2	187.0	186.4	185.7	186.4	184.3	184.3	183.0	179.6	177.5	173.5
75°	173.5	169.4	170.1	169.4	168.1	167.4	164.0	162.6	158.6	155.9	150.4
77.5°	149.1	149.8	149.1	149.8	151.1	151.8	147.1	143.7	140.3	137.6	134.9
80°	124.0	125.4	124.0	125.4	126.0	126.0	121.3	115.9	113.2	115.2	115.9
82.5°	110.5	110.5	105.0	106.4	105.0	103.0	99.6	97.6	95.6	94.2	97.6
85°	87.4	88.1	89.5	88.1	85.4	83.4	80.0	77.3	75.2	77.3	82.0
87.5°	52.2	56.2	54.2	54.2	53.5	53.5	50.8	49.5	47.4	55.6	59.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9
2.5°	1131.7	1133.7	1134.4	1133.7	1134.4	1135.8	1130.3	1135.8	1136.4	1132.4	1133.7
5°	1141.2	1144.6	1149.3	1149.3	1152.7	1154.7	1152.0	1159.5	1160.8	1160.2	1163.5
7.5°	1148.0	1152.7	1158.8	1162.2	1168.3	1171.0	1173.0	1179.8	1181.2	1183.9	1186.6
10°	1147.3	1154.1	1159.5	1169.0	1176.4	1181.8	1185.9	1193.4	1196.1	1200.1	1202.2
12.5°	1127.6	1135.1	1145.2	1158.8	1172.4	1181.2	1192.0	1202.8	1206.9	1212.3	1215.7
15°	1083.6	1089.7	1103.9	1121.5	1139.8	1162.2	1177.8	1194.7	1202.2	1207.6	1212.3
17.5°	1026.0	1031.4	1044.3	1059.9	1084.3	1105.9	1129.7	1155.4	1168.3	1174.4	1176.4
20°	972.4	980.6	984.0	1002.3	1010.4	1032.1	1052.4	1080.9	1097.1	1108.0	1114.8
22.5°	888.4	892.5	910.1	917.6	923.7	937.2	962.3	987.4	1009.0	1026.7	1032.1
25°	795.6	806.4	815.9	822.0	836.2	836.9	857.2	874.9	902.0	918.9	932.5
27.5°	693.2	709.5	714.9	719.0	729.8	742.7	750.2	767.8	783.4	803.0	827.4
30°	590.2	605.8	616.7	622.8	632.9	645.1	650.6	662.1	682.4	704.1	723.1
32.5°	494.0	510.3	515.7	535.4	538.1	549.6	553.6	571.9	583.5	601.8	624.1
35°	399.8	416.8	433.0	443.9	456.1	455.4	466.2	483.2	493.3	512.3	527.2
37.5°	335.4	345.6	357.1	369.3	382.9	393.0	403.2	410.7	418.8	431.7	445.2
40°	307.0	309.7	314.4	321.9	331.4	338.8	346.3	352.4	358.5	368.6	377.5
42.5°	295.5	293.4	293.4	292.1	295.5	299.5	305.6	307.7	317.1	323.2	326.6
45°	287.3	282.6	279.2	275.1	273.8	275.1	278.5	283.3	289.4	291.4	291.4
47.5°	282.6	275.1	269.7	263.6	260.2	260.2	262.3	265.6	269.0	269.7	269.0
50°	266.3	258.9	252.1	246.7	244.0	244.0	244.6	249.4	250.1	248.7	249.4
52.5°	254.1	246.7	239.9	235.1	231.8	232.4	234.5	236.5	238.5	237.2	235.8
55°	246.7	237.9	231.8	226.3	222.3	223.6	225.7	228.4	231.8	229.7	227.7
57.5°	239.9	232.4	225.0	219.6	214.8	216.2	218.2	222.3	226.3	222.3	219.6
60°	233.8	226.3	218.9	213.5	208.0	209.4	212.1	216.2	219.6	214.1	210.8
62.5°	218.9	212.1	206.7	204.0	200.6	202.6	204.7	209.4	208.0	202.6	198.6
63°	216.2	209.4	204.7	201.9	199.2	201.9	202.6	207.4	205.3	199.9	196.5
65°	208.0	202.6	197.9	195.2	192.5	193.8	193.8	195.8	193.1	189.1	186.4
67.5°	200.6	194.5	189.7	184.3	181.6	180.3	179.6	178.9	176.9	174.8	174.2
70°	184.3	180.3	176.2	171.4	167.4	164.7	163.3	162.0	160.6	159.9	159.3
72.5°	166.7	163.3	159.3	156.5	153.2	151.1	147.7	147.1	145.7	144.3	143.7
75°	147.7	143.7	142.3	139.6	137.6	136.2	133.5	132.8	131.5	129.4	128.8
77.5°	130.8	129.4	127.4	126.7	123.3	121.3	119.9	119.3	117.9	116.6	115.2
80°	116.6	115.9	114.5	113.8	111.8	109.1	107.7	108.4	106.4	105.7	103.7
82.5°	105.0	105.7	105.7	103.7	101.6	98.3	96.9	98.9	97.6	94.9	92.2
85°	89.5	88.8	89.5	88.8	84.7	81.3	80.0	81.3	80.6	76.6	75.9
87.5°	63.7	63.0	61.7	65.7	60.3	48.8	50.1	56.9	54.9	52.9	51.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9
2.5°	1136.4	1134.4	1135.8	1136.4	1134.4	1139.1	1134.4	1135.1	1136.4	1132.4	1131.7
5°	1166.3	1166.3	1171.7	1172.4	1171.7	1177.8	1177.1	1177.8	1176.4	1175.7	1173.0
7.5°	1190.6	1193.4	1197.4	1203.5	1205.6	1210.3	1211.7	1212.3	1215.0	1217.8	1216.4
10°	1208.3	1215.7	1219.1	1225.2	1231.3	1234.7	1238.1	1243.5	1245.5	1247.6	1244.9
12.5°	1220.5	1229.3	1234.7	1242.2	1249.6	1255.0	1261.1	1267.9	1274.7	1276.7	1273.3
15°	1214.4	1224.5	1232.7	1240.8	1252.3	1262.5	1274.0	1286.2	1295.0	1298.4	1294.3
17.5°	1176.4	1186.6	1198.8	1211.0	1223.2	1242.2	1258.4	1278.7	1293.0	1303.1	1304.5
20°	1124.2	1130.3	1148.0	1160.2	1179.8	1202.2	1226.6	1250.3	1266.5	1284.8	1295.7
22.5°	1047.0	1059.2	1078.8	1099.8	1119.5	1148.6	1174.4	1205.6	1233.3	1258.4	1282.1
25°	952.8	969.7	992.8	1021.9	1047.7	1078.8	1116.1	1150.7	1197.4	1236.7	1287.6
27.5°	851.1	882.3	914.2	944.7	973.1	1008.4	1047.0	1085.6	1139.1	1202.2	1268.6
30°	754.9	780.7	820.6	855.9	889.1	932.5	972.4	1015.1	1066.0	1140.5	1215.7
32.5°	654.6	675.6	706.8	750.2	788.8	839.6	874.9	925.7	984.6	1063.2	1148.6
35°	550.9	580.1	605.2	635.0	664.1	714.9	767.8	824.0	891.8	975.8	1069.3
37.5°	459.5	477.8	489.9	520.4	546.2	589.6	651.2	719.0	793.5	878.9	979.2
40°	383.6	395.1	408.6	429.0	450.6	489.9	546.9	622.8	700.7	786.1	886.4
42.5°	331.4	338.8	340.2	355.8	376.1	414.7	460.1	529.9	616.0	705.4	805.7
45°	295.5	295.5	294.8	301.6	317.8	351.0	392.4	454.7	536.7	630.2	734.6
47.5°	270.4	272.4	271.7	274.5	285.3	309.7	347.0	399.8	474.4	565.8	670.9
50°	251.4	254.1	254.8	255.5	259.5	279.9	311.7	354.4	420.8	508.2	614.0
52.5°	236.5	237.2	237.2	236.5	237.9	249.4	275.8	315.1	376.8	455.4	557.0
55°	228.4	229.0	229.0	229.0	229.0	236.5	255.5	287.3	336.8	410.7	502.8
57.5°	218.9	218.9	220.2	220.2	220.2	223.0	236.5	262.9	300.9	359.8	441.8
60°	210.8	212.8	215.5	216.2	215.5	215.5	222.3	239.9	265.0	307.7	376.8
62.5°	198.6	201.3	204.7	206.0	206.7	205.3	208.7	216.2	231.1	253.4	300.2
63°	196.5	199.2	201.9	203.3	204.0	202.6	205.3	211.4	223.6	241.9	283.9
65°	187.7	191.1	191.8	192.5	191.8	191.1	190.4	190.4	193.8	200.6	223.0
67.5°	175.5	177.5	177.5	178.9	175.5	174.2	172.8	171.4	169.4	170.1	178.2
70°	161.3	162.6	162.0	161.3	159.9	157.9	156.5	154.5	150.4	149.1	153.2
72.5°	145.0	146.4	146.4	146.4	143.7	142.3	141.0	139.6	138.2	139.6	141.0
75°	130.1	130.1	131.5	130.8	128.8	127.4	126.7	126.0	126.0	126.0	125.4
77.5°	115.9	115.2	115.2	113.2	111.8	111.1	112.5	113.2	112.5	111.1	110.5
80°	103.7	100.3	96.9	94.2	93.5	94.9	96.2	100.3	98.3	98.3	96.9
82.5°	88.1	80.6	75.9	76.6	74.5	75.2	76.6	81.3	80.0	80.6	83.4
85°	70.5	63.7	56.2	57.6	57.6	56.2	59.6	61.0	62.3	65.7	63.0
87.5°	49.5	43.4	35.9	31.2	32.5	33.9	35.2	33.9	29.8	31.2	30.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9
2.5°	1130.3	1131.0	1131.0	1126.3	1124.9	1126.3	1125.6	1125.6	1121.5	1122.2	1120.9
5°	1171.7	1173.0	1169.0	1165.6	1160.8	1160.2	1159.5	1156.8	1154.1	1148.6	1145.9
7.5°	1215.7	1209.6	1208.3	1202.2	1200.1	1194.7	1190.6	1186.6	1183.2	1180.5	1178.5
10°	1243.5	1238.8	1237.4	1226.6	1223.2	1216.4	1212.3	1207.6	1203.5	1199.5	1198.8
12.5°	1268.6	1260.4	1255.7	1240.8	1234.0	1226.6	1223.2	1219.1	1217.8	1217.1	1219.8
15°	1288.2	1276.7	1267.9	1254.3	1248.9	1244.9	1245.5	1243.5	1251.6	1256.4	1265.2
17.5°	1301.1	1296.4	1294.3	1284.2	1287.6	1287.6	1297.0	1301.8	1316.7	1328.9	1341.1
20°	1307.9	1316.7	1333.6	1337.0	1345.2	1354.0	1368.2	1376.3	1391.9	1409.5	1426.5
22.5°	1314.0	1351.3	1385.8	1411.6	1429.9	1450.2	1460.4	1477.3	1488.1	1501.0	1526.8
25°	1347.9	1410.2	1471.2	1504.4	1547.8	1576.9	1600.0	1616.9	1635.9	1646.7	1675.9
27.5°	1338.4	1417.7	1499.0	1560.0	1627.7	1682.6	1731.4	1764.0	1788.3	1827.7	1852.0
30°	1295.0	1387.2	1485.4	1572.2	1667.0	1756.5	1841.2	1917.1	1982.2	2035.0	2070.9
32.5°	1233.3	1339.1	1454.3	1561.3	1682.6	1801.9	1923.9	2039.8	2150.2	2237.6	2292.5
35°	1164.2	1278.1	1405.5	1532.2	1677.9	1833.7	1998.4	2154.3	2314.2	2453.8	2563.6
37.5°	1080.2	1203.5	1343.1	1490.2	1657.6	1844.6	2052.0	2264.1	2468.0	2679.5	2834.0
40°	992.1	1112.7	1257.7	1425.8	1618.9	1839.2	2093.3	2368.4	2663.9	2936.3	3171.5
42.5°	916.9	1034.8	1186.6	1352.6	1560.7	1818.8	2121.1	2461.9	2825.8	3178.9	3491.3
45°	843.0	969.1	1122.2	1297.7	1524.7	1810.7	2157.0	2543.3	2958.7	3377.5	3775.9
47.5°	784.7	909.4	1063.9	1252.3	1495.6	1806.0	2190.9	2619.2	3067.1	3525.2	3997.5
50°	729.2	848.4	998.9	1197.4	1465.1	1798.5	2211.2	2679.5	3151.8	3641.1	4154.7
52.5°	672.2	796.3	942.6	1135.1	1425.1	1783.6	2217.3	2726.9	3239.2	3752.2	4301.8
55°	614.6	738.6	885.0	1084.3	1370.9	1754.5	2212.6	2761.5	3330.7	3869.4	4436.0
57.5°	544.2	666.1	819.3	1019.9	1301.1	1696.2	2189.5	2776.4	3387.6	3979.2	4570.8
60°	464.9	580.1	725.1	929.8	1215.7	1612.2	2138.0	2755.4	3413.4	4051.7	4713.8
62.5°	365.3	465.6	599.1	802.4	1091.7	1490.9	2025.5	2662.5	3351.0	4033.4	4775.5
63°	342.9	439.8	577.4	768.5	1055.1	1448.8	1992.3	2630.7	3323.2	4016.5	4768.0
65°	261.6	333.4	447.3	618.0	891.8	1255.0	1817.5	2450.4	3148.4	3847.8	4650.8
67.5°	193.1	230.4	300.2	414.7	627.5	976.5	1489.5	2116.3	2777.1	3434.4	4251.6
70°	159.9	174.2	206.7	265.6	388.3	647.8	1052.4	1610.8	2232.2	2798.1	3536.0
72.5°	143.0	153.2	168.1	194.5	245.3	380.2	684.4	1045.6	1554.6	2043.8	2667.3
75°	128.1	134.9	147.1	162.6	185.7	237.9	361.9	620.1	950.1	1377.0	1829.7
77.5°	112.5	119.3	131.5	143.7	158.6	180.9	224.3	353.1	568.6	803.7	1122.9
80°	97.6	101.0	111.1	128.8	139.6	157.9	172.1	220.9	309.7	420.8	598.4
82.5°	80.6	81.3	88.1	101.6	115.2	122.0	126.0	138.9	178.2	222.3	293.4
85°	57.6	54.9	59.0	64.4	75.2	69.1	73.9	77.9	94.9	114.5	210.1
87.5°	25.8	20.3	23.7	26.4	23.7	16.3	23.7	19.7	24.4	48.1	54.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°	
0°	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	0°
2.5°	1122.2	1118.1	1118.1	1117.5	1118.1	1116.8	1114.1	1114.1	1116.1	1115.4	1115.4	2.5°
5°	1145.9	1140.5	1139.1	1138.5	1138.5	1135.1	1131.0	1129.0	1128.3	1125.6	1123.6	5°
7.5°	1177.1	1173.7	1175.7	1171.7	1170.3	1169.6	1164.2	1160.2	1154.1	1151.3	1141.2	7.5°
10°	1202.8	1200.8	1206.2	1205.6	1206.2	1206.2	1198.8	1194.7	1185.9	1181.2	1168.3	10°
12.5°	1225.2	1226.6	1236.7	1236.7	1238.8	1241.5	1237.4	1228.6	1225.2	1220.5	1206.9	12.5°
15°	1282.1	1287.6	1295.0	1307.2	1310.6	1311.3	1314.7	1307.2	1298.4	1286.2	1269.9	15°
17.5°	1359.4	1370.2	1395.3	1412.9	1416.3	1419.7	1417.7	1416.3	1400.0	1389.9	1372.9	17.5°
20°	1456.3	1482.7	1518.0	1542.4	1553.2	1554.6	1568.1	1558.6	1543.7	1523.4	1499.0	20°
22.5°	1564.7	1608.8	1653.5	1689.4	1710.4	1719.9	1734.1	1720.6	1700.9	1688.7	1656.2	22.5°
25°	1713.1	1761.2	1812.7	1841.2	1894.7	1910.3	1918.5	1914.4	1894.1	1902.9	1873.1	25°
27.5°	1916.4	1957.8	2030.3	2066.2	2116.3	2145.5	2139.4	2173.3	2179.4	2200.4	2203.8	27.5°
30°	2138.0	2206.5	2304.0	2376.6	2453.1	2502.6	2541.9	2571.7	2606.3	2664.6	2699.8	30°
32.5°	2377.2	2476.2	2600.9	2754.7	2917.3	3050.1	3199.9	3225.7	3302.9	3280.6	3265.6	32.5°
35°	2643.6	2768.2	2928.2	3130.1	3366.6	3586.2	3730.5	3803.0	3833.5	3850.5	3747.5	35°
37.5°	3000.0	3168.7	3347.0	3567.2	3748.1	3953.5	4119.5	4299.8	4382.4	4343.1	4145.9	37.5°
40°	3395.1	3553.0	3794.2	3974.5	4187.9	4526.1	4751.1	4967.9	5035.7	4904.9	4595.9	40°
42.5°	3791.5	4008.4	4269.9	4526.1	4771.4	5077.7	5375.9	5590.0	5664.6	5440.9	5074.3	42.5°
45°	4144.6	4422.4	4730.1	4993.0	5335.9	5736.4	6101.7	6273.8	6260.2	5901.1	5488.4	45°
47.5°	4452.2	4812.7	5159.7	5514.1	5859.7	6311.7	6673.6	6871.5	6731.2	6353.7	5886.2	47.5°
50°	4706.4	5142.1	5560.9	5968.2	6392.4	6872.8	7221.8	7404.8	7191.3	6713.6	6191.1	50°
52.5°	4899.5	5439.6	5922.1	6377.5	6884.4	7403.4	7713.8	7824.3	7491.5	6992.1	6419.5	52.5°
55°	5081.8	5692.3	6226.3	6743.4	7374.3	7839.9	8130.6	8110.2	7680.6	7113.4	6562.5	55°
57.5°	5219.3	5907.8	6476.4	7065.3	7745.0	8242.4	8410.4	8276.3	7759.2	7149.3	6603.8	57.5°
60°	5392.8	6075.9	6698.7	7356.0	8097.4	8518.2	8540.6	8300.0	7736.8	7081.6	6545.5	60°
62.5°	5504.0	6180.9	6840.3	7555.2	8365.7	8673.4	8513.4	8197.7	7608.1	6914.2	6412.0	62.5°
63°	5514.8	6191.1	6851.8	7574.9	8403.7	8680.2	8488.4	8151.6	7570.1	6868.1	6376.8	63°
65°	5466.0	6162.0	6799.0	7539.7	8413.2	8600.2	8304.7	7962.5	7360.7	6632.9	6169.4	65°
67.5°	5125.1	5848.9	6456.7	7151.4	8047.2	8150.9	7854.8	7482.7	6917.6	6126.1	5716.1	67.5°
70°	4514.6	5202.4	5633.4	6278.5	7066.6	7190.7	6925.7	6637.7	6135.5	5474.1	5134.0	70°
72.5°	3637.0	4312.6	4571.5	5065.5	5691.7	5664.6	5478.2	5442.3	5178.0	4623.0	4418.3	72.5°
75°	2718.8	3361.9	3471.0	3672.2	4021.9	4013.1	4056.5	4211.0	4343.1	4015.1	3752.9	75°
77.5°	1793.1	2432.8	2500.6	2735.0	2831.9	3097.6	3409.3	3797.6	3990.1	3855.9	3534.0	77.5°
80°	992.1	1664.3	1650.8	1742.3	1913.7	2300.0	2772.3	3349.0	3733.9	3637.7	3285.3	80°
82.5°	515.7	1051.7	1036.1	1052.4	1211.7	1536.3	1895.4	2367.1	2764.9	2773.7	2655.1	82.5°
85°	383.6	754.9	799.6	836.2	941.9	1055.1	1120.9	1272.0	1490.2	1693.5	1766.0	85°
87.5°	141.0	453.4	564.5	606.5	609.2	595.0	484.5	533.3	485.2	574.0	801.7	87.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90°



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DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
1120.9	1120.9	1120.9	1120.9	1120.9	1120.9	1120.9
1116.8	1116.8	1116.1	1117.5	1118.1	1120.2	1119.5
1121.5	1119.5	1117.5	1116.1	1114.8	1115.4	1114.1
1133.7	1126.9	1121.5	1116.8	1112.7	1112.0	1108.0
1160.8	1148.6	1138.5	1131.0	1122.9	1118.8	1111.4
1195.4	1181.8	1169.0	1158.1	1148.6	1143.2	1137.8
1255.7	1236.1	1220.5	1208.9	1199.5	1193.4	1187.9
1345.2	1320.8	1297.0	1274.7	1272.0	1257.7	1257.7
1468.5	1435.3	1404.8	1385.8	1377.0	1358.0	1358.0
1639.3	1606.7	1561.3	1538.3	1540.3	1524.1	1531.5
1860.2	1833.1	1786.3	1776.8	1776.8	1759.2	1732.8
2191.6	2182.1	2130.6	2143.4	2116.3	2050.6	1979.4
2683.5	2683.5	2583.9	2512.1	2449.7	2347.4	2222.0
3176.2	3111.8	2959.3	2837.4	2707.9	2551.4	2390.1
3592.3	3420.8	3266.3	3117.2	2922.7	2754.7	2528.4
3943.3	3780.7	3603.8	3376.8	3148.4	2913.9	2623.2
4378.4	4180.5	3914.8	3629.5	3349.0	3026.4	2689.6
4776.2	4528.1	4192.7	3831.5	3474.4	3114.5	2721.5
5150.2	4830.4	4416.3	3982.6	3576.0	3168.7	2735.0
5502.6	5073.6	4591.8	4090.4	3645.8	3197.9	2731.6
5735.0	5251.9	4702.3	4155.4	3687.8	3208.0	2722.2
5880.7	5361.0	4767.3	4191.3	3708.8	3210.1	2721.5
5962.7	5422.6	4802.6	4216.4	3731.9	3222.3	2737.7
6026.4	5471.4	4841.9	4259.1	3786.8	3279.2	2803.5
6086.7	5599.5	4944.2	4337.7	3882.3	3385.6	2947.8
6111.8	5842.8	5152.3	4482.7	4015.8	3556.4	3172.8
6109.8	5888.9	5212.6	4522.7	4051.1	3601.8	3230.4
6035.9	6035.2	5487.0	4713.8	4215.0	3811.8	3471.0
5817.0	6108.4	5790.6	4965.9	4469.8	4158.1	3832.8
5470.8	6019.7	5831.9	5032.3	4650.8	4475.9	4074.1
4874.4	5595.4	5445.0	4749.0	4589.1	4538.3	4080.2
3942.6	4498.3	4433.9	4057.2	4116.1	4220.5	3644.5
3176.2	3158.6	3149.1	3012.2	3262.9	3475.0	2709.3
2653.0	2185.5	2029.6	1976.7	2390.1	2552.7	1681.3
2480.2	1963.2	1574.9	1508.5	1791.1	1877.8	1013.8
1895.4	1906.3	1650.1	1414.3	1393.3	1275.4	742.7
927.7	943.3	996.8	910.1	780.7	658.0	233.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)