

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: INVUE

Report Number: P152815

Luminaire Tested: **VWM-F05-LED-E1-SLL**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P152815
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33681)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: VWM-F05-LED-E1-SLL
Description: VISION WALL MEDIUM LED LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (35) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11484.9 lumens
Efficiency: N/A
Efficacy: 86.2 lumens/watt
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U0 - G3

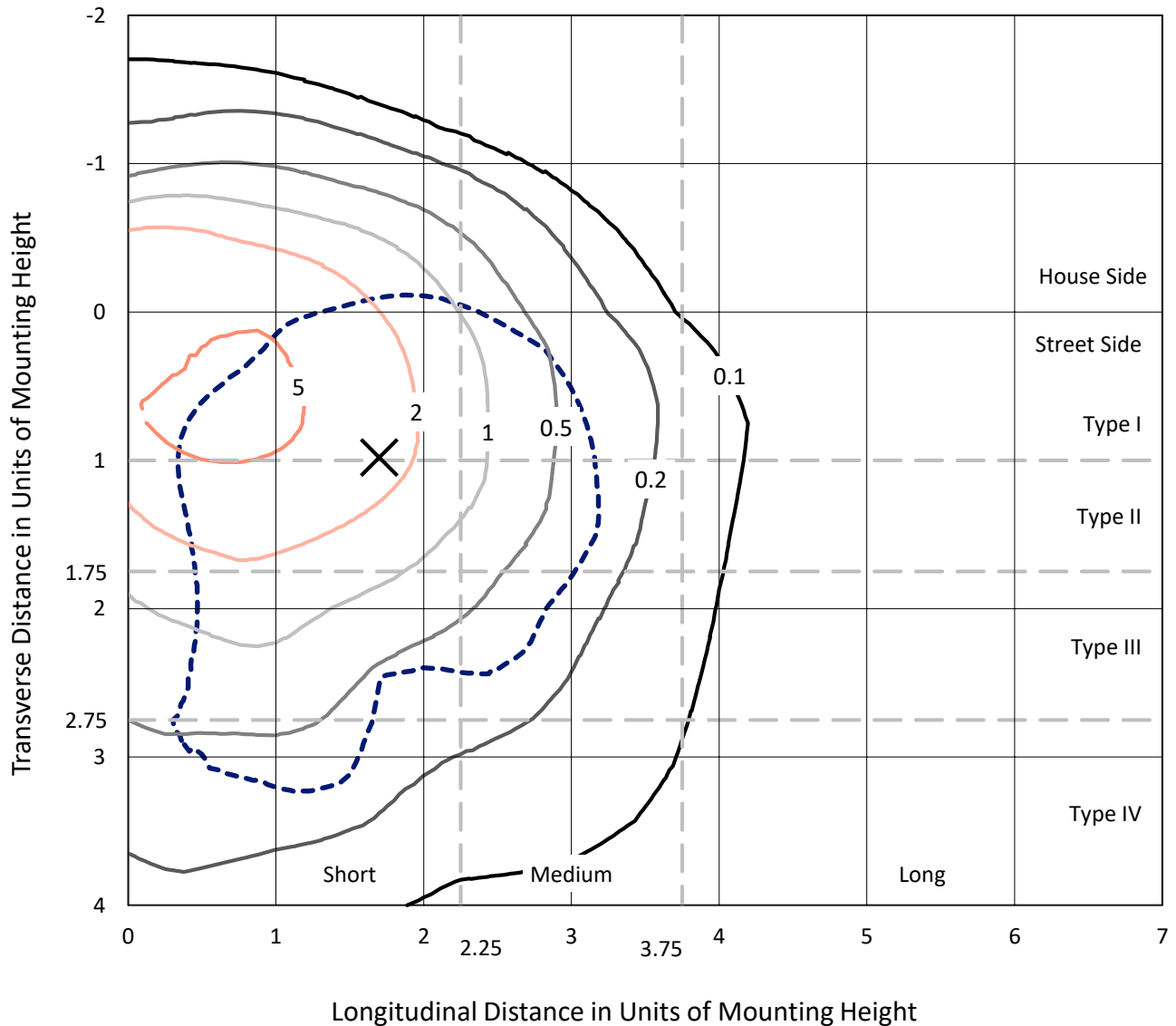
Input Watts (W): 133.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

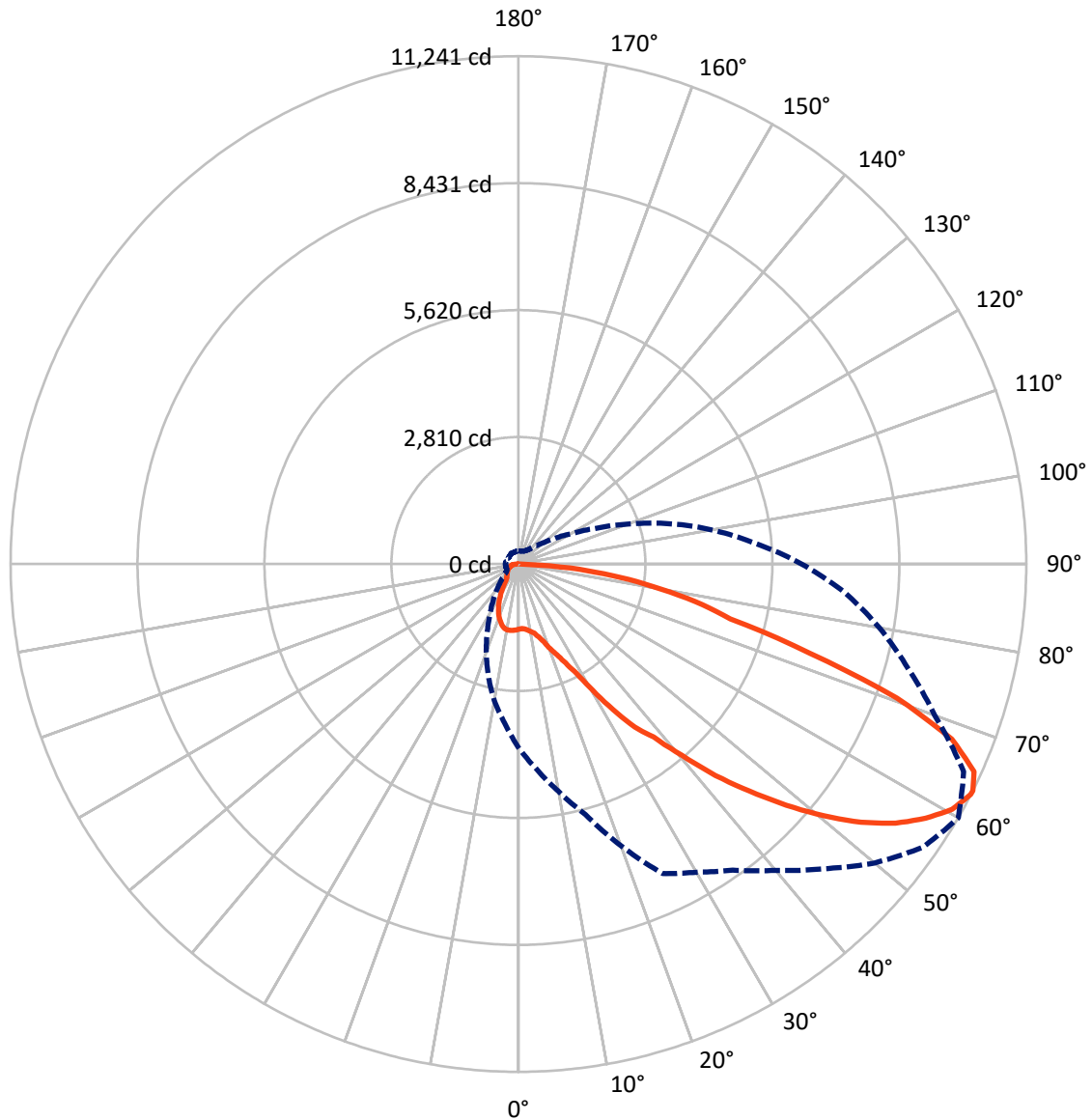


Based on 20 foot mounting height. Maximum calculated value = 7.1 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2490.5	0.0	2490.5
	% Fixture	21.7	0.0	21.7
Street Side	Lumens	8994.5	0.0	8994.5
	% Fixture	78.3	0.0	78.3
Total	Lumens	11484.9	0.0	11484.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.5	1.2
10°-20°	437.6	3.8
20°-30°	777.4	6.8
30°-40°	1224.1	10.7
40°-50°	1801.6	15.7
50°-60°	2393.0	20.8
60°-70°	2635.9	23.0
70°-80°	1653.7	14.4
80°-90°	421.2	3.7
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°	11484.9	100.0
0°-180°	11484.9	100.0

Coefficient of Utilization



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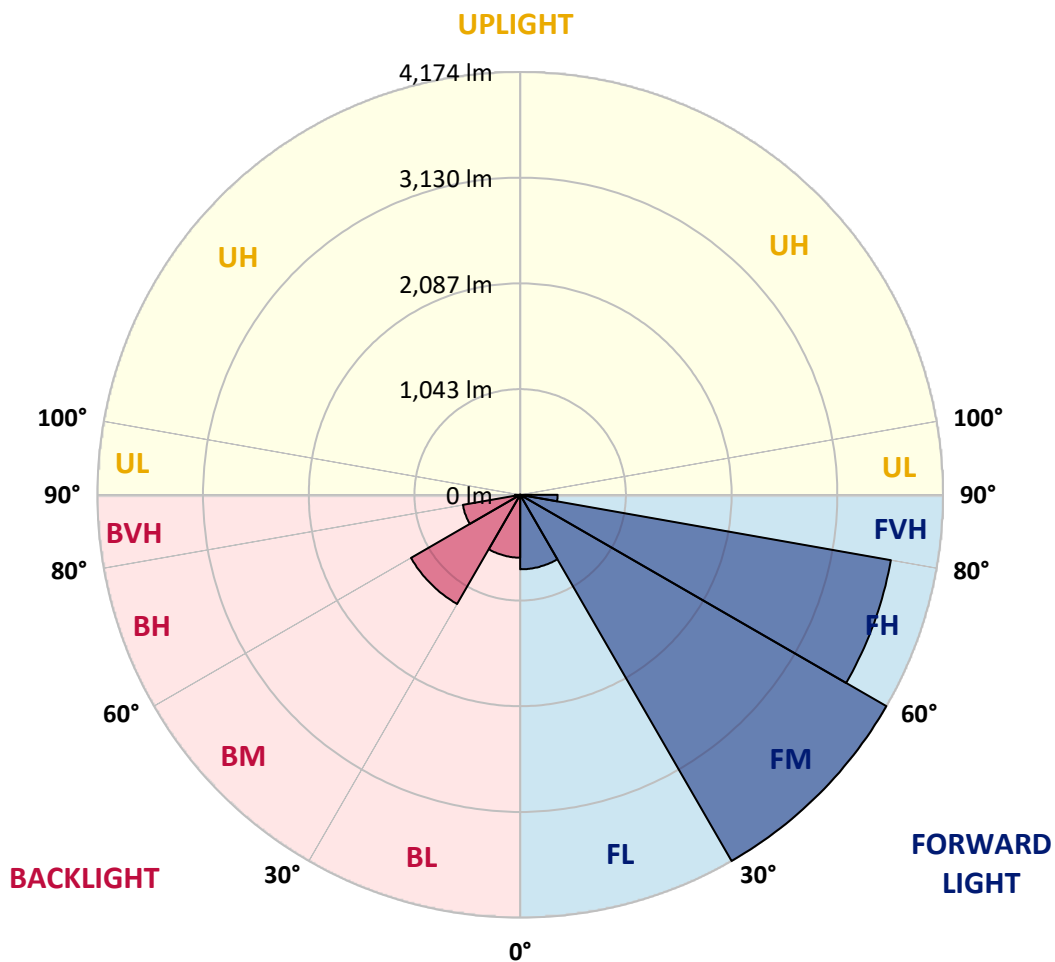
CATALOG NUMBER: VWM-F05-LED-E1-SLL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	735.4	6.4			
FM (30°-60°)	4173.9	36.3			
FH (60°-80°)	3715.6	32.4			G2/5000
FVH (80°-90°)	369.6	3.2			G3/500
BL (0°-30°)	620.0	5.4	B2/1000		
BM (30°-60°)	1244.8	10.8	B2/2500		
BH (60°-80°)	574.1	5.0	B2/1000		G2/1000
BVH (80°-90°)	51.6	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3
2.5°	1424.0	1426.8	1426.8	1425.4	1425.4	1428.2	1426.8	1425.4	1421.3	1426.8	1426.8
5°	1413.0	1415.8	1415.8	1418.5	1421.3	1424.0	1424.0	1426.8	1425.4	1430.9	1435.0
7.5°	1426.8	1429.5	1435.0	1441.9	1446.0	1455.7	1455.7	1462.6	1465.3	1469.4	1468.1
10°	1444.7	1451.5	1463.9	1474.9	1483.2	1494.2	1502.5	1512.1	1512.1	1516.2	1519.0
12.5°	1476.3	1483.2	1497.0	1510.7	1523.1	1536.9	1549.2	1558.9	1568.5	1571.2	1576.8
15°	1528.6	1536.9	1557.5	1576.8	1591.9	1609.8	1626.3	1645.5	1663.4	1667.6	1670.3
17.5°	1607.0	1623.5	1638.7	1673.1	1695.1	1718.5	1744.6	1772.1	1777.6	1806.5	1813.4
20°	1718.5	1739.1	1752.9	1795.5	1832.7	1862.9	1901.5	1933.1	1945.5	1973.0	2000.5
22.5°	1911.1	1907.0	1927.6	1970.3	1997.8	2058.3	2091.3	2124.4	2140.9	2182.1	2204.2
25°	2169.8	2191.8	2237.2	2241.3	2267.4	2337.6	2380.3	2413.3	2414.7	2427.0	2450.4
27.5°	2424.3	2515.1	2586.6	2625.2	2695.3	2760.0	2757.3	2804.0	2731.1	2746.2	2768.3
30°	2732.5	2883.8	3018.7	3109.5	3181.0	3256.7	3293.8	3320.0	3288.3	3274.6	3248.4
32.5°	3021.4	3233.3	3441.1	3602.0	3735.5	3860.7	3943.3	3980.4	4024.4	4135.9	4175.8
35°	3219.5	3519.5	3778.2	4010.7	4233.6	4433.1	4577.5	4660.1	4628.4	4613.3	4605.1
37.5°	3337.9	3703.9	4027.2	4356.0	4611.9	4910.5	5134.8	5352.2	5401.7	5315.0	5272.4
40°	3412.2	3845.6	4261.1	4649.1	4980.7	5365.9	5643.8	5969.9	6217.6	6250.6	6148.8
42.5°	3447.9	3940.5	4424.8	4863.7	5312.3	5784.2	6136.4	6531.3	6901.4	7155.9	7092.6
45°	3453.4	4002.4	4544.5	5057.7	5591.6	6151.5	6605.6	7043.1	7538.4	7974.6	7987.0
47.5°	3453.4	4049.2	4627.1	5198.1	5842.0	6470.7	6966.1	7483.4	8090.1	8606.1	8764.3
50°	3456.2	4080.8	4704.1	5308.1	6033.2	6740.4	7300.4	7911.3	8549.7	9111.0	9416.5
52.5°	3468.6	4104.2	4764.7	5386.6	6157.0	6930.3	7560.4	8264.9	8900.5	9477.0	9871.9
55°	3496.1	4137.3	4808.7	5434.7	6239.6	7054.1	7748.9	8507.0	9127.6	9712.3	10264.0
57.5°	3573.1	4195.0	4862.3	5477.4	6285.0	7135.3	7881.0	8611.6	9214.2	9823.7	10471.8
60°	3727.2	4317.5	4954.5	5562.7	6360.7	7285.3	7944.3	8541.4	9150.9	9790.7	10518.6
62.5°	3973.5	4508.7	5082.5	5707.1	6576.7	7517.8	7896.1	8332.3	8901.9	9599.5	10352.1
63°	4058.8	4550.0	5111.4	5738.8	6635.8	7560.4	7875.5	8270.4	8851.0	9538.9	10292.9
65°	4296.9	4733.0	5249.0	5898.4	6879.4	7603.1	7714.5	7948.4	8498.8	9193.6	9943.4
67.5°	4741.3	5177.4	5544.8	6168.0	7084.4	7435.2	7215.1	7244.0	7819.1	8538.7	9212.9
70°	5021.9	5542.0	5733.3	6202.4	7047.2	7186.2	6568.4	6185.9	6646.9	7466.9	8057.1
72.5°	4949.0	5546.2	5525.5	5744.3	6304.3	6433.6	5793.8	5191.2	5465.0	6077.2	6459.7
75°	4239.1	4953.1	4801.8	4757.8	4954.5	5039.8	4559.6	4467.5	4812.8	5152.7	5158.2
77.5°	3051.7	3837.3	3659.8	3405.3	3391.5	3588.3	3652.9	4257.0	4767.4	5035.7	4917.4
80°	1944.1	2795.8	2611.4	2167.0	2160.1	2416.0	2984.3	3805.7	4346.4	4496.4	4188.2
82.5°	1015.4	1829.9	1900.1	1626.3	1861.6	2285.3	2839.8	3066.8	3271.8	3292.5	2929.2
85°	632.9	1125.5	1323.6	1366.2	1681.3	2026.7	2022.5	1942.7	1851.9	1585.0	1433.7
87.5°	71.5	141.7	214.6	203.6	273.8	383.9	478.8	280.7	196.8	71.5	99.1
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°	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3
2.5°	1429.5	1430.9	1432.3	1432.3	1439.2	1437.8	1439.2	1441.9	1446.0	1448.8	1451.5
5°	1440.5	1440.5	1446.0	1450.2	1458.4	1463.9	1466.7	1474.9	1484.6	1481.8	1490.1
7.5°	1476.3	1474.9	1480.4	1483.2	1490.1	1499.7	1498.3	1505.2	1513.5	1516.2	1523.1
10°	1524.5	1520.3	1520.3	1517.6	1519.0	1516.2	1516.2	1516.2	1521.7	1520.3	1525.8
12.5°	1574.0	1572.6	1569.9	1561.6	1561.6	1550.6	1545.1	1538.2	1536.9	1527.2	1528.6
15°	1675.8	1675.8	1670.3	1653.8	1640.0	1630.4	1616.7	1607.0	1593.3	1575.4	1565.7
17.5°	1824.4	1805.1	1798.3	1795.5	1773.5	1765.2	1735.0	1703.3	1688.2	1663.4	1649.7
20°	2006.0	2001.9	1974.4	1960.6	1933.1	1894.6	1856.1	1814.8	1790.0	1759.7	1743.2
22.5°	2211.0	2180.8	2167.0	2146.4	2103.7	2059.7	2001.9	1946.9	1908.3	1887.7	1875.3
25°	2450.4	2420.2	2406.4	2378.9	2326.6	2279.8	2208.3	2143.6	2109.2	2074.8	2055.6
27.5°	2768.3	2739.4	2722.9	2651.3	2633.4	2556.4	2468.3	2380.3	2334.9	2284.0	2250.9
30°	3242.9	3244.3	3159.0	3072.3	2982.9	2849.4	2757.3	2658.2	2583.9	2511.0	2438.1
32.5°	4045.1	3840.1	3681.8	3496.1	3302.1	3160.4	3046.2	2927.9	2824.7	2718.7	2597.7
35°	4534.9	4435.8	4230.8	3891.0	3695.6	3523.6	3397.0	3253.9	3127.4	2940.2	2755.9
37.5°	5088.0	4858.2	4609.2	4420.7	4199.2	3999.7	3787.8	3625.4	3406.7	3154.9	2893.5
40°	5895.6	5566.8	5266.8	5013.7	4727.5	4518.4	4281.7	4046.4	3756.1	3391.5	3032.4
42.5°	6739.0	6399.2	6002.9	5674.1	5337.0	5092.1	4799.1	4468.8	4042.3	3591.0	3152.1
45°	7623.7	7169.7	6695.0	6293.3	5942.4	5638.3	5275.1	4837.6	4317.5	3769.9	3263.6
47.5°	8496.0	7974.6	7409.1	6977.1	6520.3	6148.8	5703.0	5149.9	4532.1	3939.1	3375.0
50°	9265.1	8762.9	8081.9	7532.9	7070.6	6612.5	6056.6	5390.7	4701.4	4085.0	3475.5
52.5°	9928.3	9496.3	8779.5	8086.0	7553.6	7039.0	6341.4	5584.7	4872.0	4219.8	3558.0
55°	10415.4	10127.8	9467.4	8607.5	7978.7	7365.1	6582.2	5771.8	5033.0	4327.1	3611.7
57.5°	10782.7	10623.1	10056.3	9098.7	8369.4	7681.5	6831.2	5996.1	5192.6	4419.3	3636.4
60°	10983.6	11027.6	10502.1	9527.9	8714.8	7945.7	7080.3	6187.3	5310.9	4473.0	3622.7
62.5°	10964.3	11234.0	10836.4	9792.1	8915.7	8102.5	7248.1	6276.7	5294.4	4387.7	3497.5
63°	10927.2	11240.9	10873.5	9810.0	8928.1	8108.0	7252.2	6264.4	5260.0	4346.4	3447.9
65°	10606.6	11082.7	10841.9	9728.8	8818.0	8004.8	7165.6	6085.5	5017.8	4124.9	3193.4
67.5°	9748.1	10343.8	10275.0	9155.1	8296.5	7578.3	6722.5	5509.0	4419.3	3580.0	2706.3
70°	8329.5	8889.5	8901.9	7962.2	7245.4	6540.9	5829.6	4482.6	3503.0	2775.1	2018.4
72.5°	6384.1	6744.5	6869.7	6250.6	5770.4	5275.1	4636.7	3253.9	2497.2	1887.7	1314.0
75°	4943.5	4844.5	4843.1	4581.7	4386.3	4144.1	3442.4	2195.9	1640.0	1227.3	803.5
77.5°	4444.1	4003.8	3577.3	3263.6	3106.7	3025.5	2257.8	1323.6	967.2	705.8	462.3
80°	3665.3	3015.9	2436.7	2098.2	1963.4	2056.9	1258.9	715.5	529.7	401.8	299.9
82.5°	2527.5	2098.2	1594.6	1320.8	1133.7	1186.0	643.9	366.0	244.9	224.3	185.7
85°	1316.7	1154.4	974.1	836.5	738.8	649.4	334.3	174.7	101.8	89.4	81.2
87.5°	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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°	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3
2.5°	1455.7	1454.3	1457.1	1458.4	1462.6	1465.3	1466.7	1463.9	1468.1	1472.2	1469.4
5°	1494.2	1503.8	1505.2	1509.3	1509.3	1517.6	1517.6	1517.6	1516.2	1517.6	1514.8
7.5°	1527.2	1539.6	1541.0	1546.5	1547.9	1557.5	1553.4	1556.1	1556.1	1549.2	1546.5
10°	1531.3	1543.7	1550.6	1557.5	1567.1	1579.5	1579.5	1586.4	1586.4	1580.9	1579.5
12.5°	1532.7	1542.4	1549.2	1558.9	1572.6	1590.5	1600.1	1609.8	1613.9	1612.5	1608.4
15°	1561.6	1561.6	1563.0	1571.2	1580.9	1602.9	1616.7	1627.7	1634.5	1631.8	1624.9
17.5°	1637.3	1626.3	1618.0	1604.3	1607.0	1618.0	1626.3	1635.9	1637.3	1634.5	1623.5
20°	1725.3	1711.6	1691.0	1668.9	1657.9	1649.7	1644.2	1644.2	1640.0	1626.3	1608.4
22.5°	1850.6	1832.7	1803.8	1770.8	1748.7	1722.6	1691.0	1660.7	1627.7	1594.6	1556.1
25°	2023.9	1999.1	1968.9	1918.0	1871.2	1816.2	1751.5	1684.1	1605.6	1536.9	1480.4
27.5°	2198.6	2143.6	2065.2	1995.0	1908.3	1825.8	1733.6	1651.0	1550.6	1468.1	1406.1
30°	2343.1	2238.5	2125.7	2014.3	1900.1	1788.6	1678.6	1579.5	1469.4	1385.5	1325.0
32.5°	2454.6	2310.1	2153.2	2007.4	1867.1	1730.9	1604.3	1494.2	1382.8	1296.1	1231.4
35°	2557.8	2356.9	2157.4	1977.1	1803.8	1662.1	1519.0	1399.3	1280.9	1190.1	1120.0
37.5°	2634.8	2378.9	2132.6	1920.7	1721.2	1563.0	1417.2	1294.7	1173.6	1074.6	994.8
40°	2684.3	2365.1	2078.9	1839.5	1623.5	1457.1	1308.5	1181.9	1064.9	956.2	859.9
42.5°	2724.2	2347.2	2025.3	1765.2	1546.5	1364.9	1212.1	1075.9	957.6	839.3	733.3
45°	2783.4	2361.0	2001.9	1713.0	1477.7	1286.4	1118.6	976.9	853.0	737.5	635.7
47.5°	2841.2	2367.9	1967.5	1648.3	1391.0	1205.3	1034.7	897.1	770.5	664.5	571.0
50°	2893.5	2363.8	1913.8	1565.7	1307.1	1124.1	959.0	821.4	696.2	598.5	510.4
52.5°	2918.2	2340.4	1847.8	1485.9	1239.7	1052.5	884.7	751.2	627.4	535.2	454.0
55°	2915.5	2279.8	1761.1	1410.3	1165.4	976.9	811.8	679.7	568.2	482.9	412.8
57.5°	2874.2	2186.3	1668.9	1326.3	1067.7	883.3	726.5	598.5	504.9	433.4	374.2
60°	2787.5	2066.6	1547.9	1203.9	945.2	767.7	620.5	510.4	434.8	379.7	341.2
62.5°	2625.2	1894.6	1396.5	1033.3	780.1	617.8	489.8	418.3	361.9	328.8	310.9
63°	2577.0	1847.8	1331.8	992.0	741.6	583.4	462.3	388.0	346.7	317.8	301.3
65°	2337.6	1618.0	1114.5	800.8	576.5	449.9	371.5	315.1	290.3	277.9	276.6
67.5°	1893.2	1272.7	788.4	549.0	392.1	324.7	284.8	261.4	250.4	247.7	250.4
70°	1329.1	803.5	500.8	364.6	290.3	261.4	243.5	233.9	227.0	228.4	231.1
72.5°	847.5	481.6	344.0	276.6	244.9	229.8	221.5	218.8	217.4	216.0	216.0
75°	482.9	320.6	264.2	239.4	222.9	210.5	203.6	200.9	202.3	203.6	200.9
77.5°	319.2	264.2	235.3	218.8	203.6	189.9	185.7	184.4	187.1	189.9	189.9
80°	251.8	235.3	218.8	202.3	177.5	167.9	170.6	172.0	170.6	172.0	167.9
82.5°	177.5	174.7	178.9	172.0	147.2	139.0	136.2	137.6	134.8	134.8	132.1
85°	82.6	82.6	86.7	86.7	83.9	85.3	92.2	100.4	104.6	100.4	94.9
87.5°	0.0	0.0	0.0	0.0	0.0	12.4	24.8	35.8	38.5	48.2	46.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P152815

CATALOG NUMBER: VWM-F05-LED-E1-SLL

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3
2.5°	1465.3	1468.1	1466.7	1465.3	1468.1	1465.3	1466.7	1465.3	1465.3	1463.9	1463.9
5°	1512.1	1516.2	1508.0	1506.6	1503.8	1497.0	1497.0	1494.2	1494.2	1488.7	1484.6
7.5°	1542.4	1543.7	1536.9	1535.5	1528.6	1521.7	1516.2	1510.7	1509.3	1505.2	1497.0
10°	1571.2	1568.5	1563.0	1556.1	1549.2	1539.6	1532.7	1525.8	1524.5	1517.6	1508.0
12.5°	1596.0	1594.6	1583.6	1576.8	1565.7	1556.1	1547.9	1539.6	1535.5	1527.2	1513.5
15°	1612.5	1604.3	1590.5	1578.1	1565.7	1554.7	1545.1	1535.5	1531.3	1521.7	1508.0
17.5°	1605.6	1590.5	1572.6	1557.5	1541.0	1527.2	1519.0	1509.3	1502.5	1497.0	1477.7
20°	1580.9	1558.9	1531.3	1513.5	1491.4	1473.6	1468.1	1458.4	1452.9	1432.3	1407.5
22.5°	1516.2	1484.6	1450.2	1424.0	1399.3	1381.4	1367.6	1358.0	1344.2	1331.8	1293.3
25°	1435.0	1399.3	1363.5	1331.8	1298.8	1271.3	1246.5	1223.2	1216.3	1190.1	1153.0
27.5°	1356.6	1316.7	1280.9	1243.8	1201.1	1166.7	1124.1	1091.1	1069.1	1041.5	1007.1
30°	1272.7	1232.8	1184.6	1135.1	1085.6	1048.4	1000.3	960.4	932.8	903.9	872.3
32.5°	1166.7	1118.6	1060.8	1005.8	960.4	916.3	868.2	829.7	802.1	776.0	745.7
35°	1045.7	982.4	920.5	859.9	811.8	774.6	732.0	703.1	683.8	660.4	628.8
37.5°	906.7	835.2	769.1	722.3	679.7	643.9	613.6	595.8	575.1	562.7	543.5
40°	766.4	696.2	631.5	588.9	553.1	532.5	516.0	511.8	498.1	481.6	469.2
42.5°	642.5	575.1	511.8	477.4	454.0	448.5	440.3	440.3	433.4	421.0	412.8
45°	558.6	488.4	433.4	408.6	396.3	394.9	390.7	390.7	389.4	383.9	374.2
47.5°	498.1	434.8	392.1	377.0	374.2	371.5	367.4	366.0	364.6	360.5	355.0
50°	443.0	389.4	361.9	355.0	356.4	352.2	348.1	344.0	342.6	338.5	333.0
52.5°	392.1	353.6	335.7	331.6	331.6	331.6	328.8	328.8	326.1	324.7	319.2
55°	363.2	334.3	324.7	323.3	322.0	320.6	317.8	317.8	315.1	313.7	306.8
57.5°	338.5	320.6	315.1	312.3	310.9	308.2	306.8	306.8	306.8	306.8	298.6
60°	319.2	310.9	309.6	306.8	305.4	299.9	297.2	295.8	297.2	298.6	290.3
62.5°	298.6	297.2	295.8	293.1	291.7	286.2	282.1	279.3	282.1	284.8	283.4
63°	293.1	291.7	291.7	290.3	288.9	282.1	277.9	275.2	277.9	280.7	280.7
65°	273.8	275.2	275.2	273.8	272.4	268.3	262.8	260.0	261.4	265.5	266.9
67.5°	253.2	254.5	253.2	254.5	253.2	250.4	246.3	243.5	242.2	243.5	244.9
70°	233.9	236.7	235.3	233.9	232.5	232.5	229.8	225.6	224.3	222.9	222.9
72.5°	217.4	217.4	214.6	214.6	213.3	213.3	210.5	206.4	205.0	205.0	202.3
75°	199.5	199.5	195.4	195.4	192.6	194.0	191.2	187.1	185.7	185.7	184.4
77.5°	188.5	184.4	177.5	176.1	174.7	174.7	173.4	169.2	167.9	167.9	166.5
80°	166.5	158.2	151.3	150.0	151.3	154.1	154.1	151.3	151.3	151.3	151.3
82.5°	129.3	126.6	122.5	119.7	119.7	123.8	129.3	132.1	134.8	137.6	137.6
85°	94.9	96.3	94.9	90.8	89.4	93.6	99.1	104.6	105.9	111.4	110.1
87.5°	50.9	52.3	48.2	46.8	50.9	53.7	59.2	60.5	63.3	64.7	66.0
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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CATALOG NUMBER: VWM-F05-LED-E1-SLL

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3
2.5°	1462.6	1461.2	1462.6	1459.8	1459.8	1457.1	1454.3	1452.9	1450.2	1448.8	1446.0
5°	1487.3	1483.2	1479.1	1477.7	1472.2	1466.7	1462.6	1455.7	1450.2	1440.5	1437.8
7.5°	1503.8	1494.2	1488.7	1487.3	1479.1	1474.9	1465.3	1457.1	1448.8	1436.4	1432.3
10°	1510.7	1501.1	1491.4	1487.3	1477.7	1470.8	1461.2	1448.8	1441.9	1429.5	1426.8
12.5°	1519.0	1501.1	1485.9	1474.9	1461.2	1446.0	1436.4	1429.5	1419.9	1413.0	1410.3
15°	1503.8	1480.4	1457.1	1436.4	1414.4	1397.9	1388.3	1377.3	1366.2	1362.1	1362.1
17.5°	1462.6	1432.3	1392.4	1366.2	1342.9	1325.0	1312.6	1301.6	1300.2	1294.7	1297.5
20°	1377.3	1337.4	1298.8	1279.6	1265.8	1254.8	1242.4	1236.9	1232.8	1224.5	1221.8
22.5°	1258.9	1225.9	1198.4	1184.6	1173.6	1159.9	1148.9	1132.3	1128.2	1120.0	1115.8
25°	1128.2	1102.1	1078.7	1069.1	1062.2	1042.9	1036.0	1014.0	998.9	989.3	994.8
27.5°	997.5	978.2	956.2	943.9	939.7	921.8	915.0	890.2	877.8	877.8	864.0
30°	862.7	844.8	831.0	817.3	814.5	792.5	774.6	765.0	751.2	745.7	736.1
32.5°	736.1	718.2	707.2	700.3	689.3	671.4	653.5	637.0	615.0	606.8	602.6
35°	619.1	605.4	591.6	586.1	571.0	551.7	529.7	516.0	489.8	480.2	476.1
37.5°	529.7	513.2	503.6	488.4	473.3	452.7	436.2	423.8	414.1	410.0	410.0
40°	458.2	445.8	434.8	422.4	410.0	399.0	390.7	388.0	386.6	386.6	389.4
42.5°	404.5	393.5	388.0	381.1	377.0	377.0	375.6	377.0	378.4	379.7	383.9
45°	368.7	361.9	359.1	357.7	360.5	363.2	364.6	367.4	372.9	375.6	377.0
47.5°	349.5	344.0	342.6	344.0	348.1	353.6	359.1	363.2	367.4	368.7	370.1
50°	330.2	323.3	320.6	323.3	328.8	337.1	341.2	348.1	350.8	353.6	350.8
52.5°	313.7	308.2	306.8	306.8	312.3	317.8	323.3	328.8	330.2	330.2	328.8
55°	299.9	295.8	291.7	294.4	298.6	304.1	312.3	316.5	319.2	320.6	320.6
57.5°	288.9	284.8	280.7	283.4	287.6	293.1	301.3	305.4	308.2	312.3	313.7
60°	280.7	275.2	271.0	275.2	279.3	287.6	294.4	298.6	305.4	306.8	306.8
62.5°	272.4	266.9	260.0	264.2	264.2	268.3	275.2	280.7	287.6	290.3	290.3
63°	271.0	265.5	258.7	261.4	261.4	264.2	269.7	275.2	283.4	286.2	284.8
65°	260.0	258.7	251.8	251.8	249.0	251.8	255.9	261.4	265.5	269.7	269.7
67.5°	242.2	240.8	239.4	239.4	239.4	242.2	244.9	249.0	253.2	255.9	254.5
70°	221.5	221.5	221.5	222.9	222.9	225.6	227.0	225.6	229.8	232.5	231.1
72.5°	203.6	202.3	200.9	203.6	202.3	202.3	205.0	203.6	207.8	207.8	209.1
75°	184.4	183.0	183.0	184.4	181.6	178.9	180.2	180.2	181.6	181.6	184.4
77.5°	167.9	167.9	167.9	166.5	163.7	162.4	161.0	161.0	161.0	161.0	162.4
80°	152.7	152.7	152.7	151.3	148.6	145.8	143.1	141.7	140.3	133.5	133.5
82.5°	137.6	137.6	137.6	137.6	136.2	133.5	129.3	118.3	112.8	107.3	108.7
85°	108.7	111.4	114.2	118.3	116.9	116.9	108.7	94.9	86.7	81.2	82.6
87.5°	70.2	61.9	61.9	60.5	57.8	55.0	55.0	46.8	38.5	34.4	35.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P152815
 CATALOG NUMBER: VWM-F05-LED-E1-SLL

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°	
0°	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	0°
2.5°	1446.0	1443.3	1440.5	1440.5	1436.4	1436.4	1433.7	1439.2	1433.7	1429.5	1429.5	2.5°
5°	1435.0	1432.3	1424.0	1422.7	1417.2	1417.2	1417.2	1414.4	1414.4	1411.6	1410.3	5°
7.5°	1428.2	1421.3	1414.4	1410.3	1410.3	1407.5	1413.0	1410.3	1411.6	1411.6	1413.0	7.5°
10°	1422.7	1417.2	1414.4	1413.0	1413.0	1417.2	1421.3	1422.7	1421.3	1422.7	1422.7	10°
12.5°	1408.9	1411.6	1413.0	1418.5	1425.4	1433.7	1443.3	1444.7	1447.4	1447.4	1450.2	12.5°
15°	1364.9	1371.7	1380.0	1393.8	1411.6	1429.5	1447.4	1462.6	1476.3	1483.2	1488.7	15°
17.5°	1303.0	1309.8	1325.0	1340.1	1363.5	1389.6	1419.9	1446.0	1474.9	1501.1	1527.2	17.5°
20°	1219.0	1230.0	1234.2	1261.7	1289.2	1325.0	1360.7	1402.0	1451.5	1501.1	1552.0	20°
22.5°	1110.3	1122.7	1142.0	1164.0	1192.9	1236.9	1279.6	1344.2	1410.3	1480.4	1560.2	22.5°
25°	989.3	1003.0	1019.5	1042.9	1071.8	1118.6	1180.5	1249.3	1330.5	1422.7	1521.7	25°
27.5°	864.0	877.8	891.6	908.1	941.1	990.6	1063.6	1135.1	1224.5	1325.0	1440.5	27.5°
30°	738.8	740.2	748.5	769.1	803.5	868.2	921.8	1011.3	1104.8	1210.8	1344.2	30°
32.5°	601.3	599.9	609.5	627.4	660.4	722.3	788.4	875.1	967.2	1100.7	1238.3	32.5°
35°	478.8	478.8	496.7	514.6	551.7	595.8	653.5	730.6	839.3	963.1	1100.7	35°
37.5°	414.1	423.8	434.8	452.7	481.6	516.0	566.9	634.3	719.6	837.9	964.5	37.5°
40°	393.5	399.0	408.6	425.1	449.9	481.6	518.7	569.6	635.7	730.6	846.2	40°
42.5°	385.2	386.6	392.1	404.5	426.5	458.2	496.7	542.1	591.6	659.0	759.5	42.5°
45°	377.0	375.6	378.4	388.0	405.9	441.7	485.7	535.2	584.7	641.2	723.7	45°
47.5°	370.1	370.1	370.1	374.2	390.7	426.5	477.4	535.2	594.4	657.7	738.8	47.5°
50°	350.8	349.5	349.5	352.2	364.6	403.1	463.7	533.8	610.9	693.4	785.6	50°
52.5°	328.8	328.8	330.2	331.6	342.6	381.1	448.5	533.8	630.2	740.2	855.8	52.5°
55°	322.0	323.3	324.7	323.3	331.6	364.6	432.0	525.6	638.4	777.4	931.5	55°
57.5°	316.5	319.2	319.2	317.8	323.3	350.8	415.5	509.1	631.5	791.1	985.1	57.5°
60°	308.2	308.2	308.2	304.1	306.8	331.6	390.7	482.9	609.5	778.7	993.4	60°
62.5°	290.3	290.3	287.6	286.2	284.8	304.1	357.7	444.4	569.6	745.7	972.7	62.5°
63°	286.2	284.8	284.8	280.7	280.7	298.6	350.8	438.9	558.6	737.5	964.5	63°
65°	271.0	271.0	271.0	268.3	266.9	280.7	323.3	400.4	516.0	698.9	923.2	65°
67.5°	254.5	255.9	253.2	251.8	250.4	258.7	291.7	352.2	449.9	617.8	846.2	67.5°
70°	231.1	232.5	232.5	231.1	229.8	235.3	255.9	302.7	372.9	514.6	721.0	70°
72.5°	210.5	213.3	213.3	216.0	216.0	220.1	228.4	251.8	298.6	401.8	566.9	72.5°
75°	188.5	189.9	192.6	195.4	192.6	191.2	192.6	210.5	233.9	297.2	404.5	75°
77.5°	169.2	173.4	173.4	172.0	167.9	165.1	165.1	173.4	192.6	225.6	288.9	77.5°
80°	140.3	147.2	148.6	144.5	140.3	140.3	143.1	148.6	161.0	185.7	218.8	80°
82.5°	112.8	119.7	121.1	122.5	121.1	125.2	125.2	126.6	133.5	152.7	178.9	82.5°
85°	86.7	92.2	96.3	97.7	99.1	100.4	99.1	92.2	96.3	108.7	121.1	85°
87.5°	38.5	39.9	37.1	38.5	37.1	38.5	39.9	33.0	31.6	42.7	44.0	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°



NUMBER: P152815

NUMBER: VWM-F05-LED-E1-SLL

DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
1443.3	1443.3	1443.3	1443.3	1443.3	1443.3	1443.3
1428.2	1428.2	1429.5	1426.8	1426.8	1428.2	1424.0
1406.1	1411.6	1411.6	1411.6	1408.9	1411.6	1413.0
1411.6	1415.8	1418.5	1418.5	1417.2	1422.7	1426.8
1418.5	1425.4	1428.2	1428.2	1428.2	1435.0	1444.7
1444.7	1450.2	1454.3	1454.3	1457.1	1465.3	1476.3
1492.8	1499.7	1499.7	1498.3	1506.6	1516.2	1528.6
1546.5	1565.7	1575.4	1574.0	1580.9	1593.3	1607.0
1597.4	1651.0	1674.4	1691.0	1697.8	1714.3	1718.5
1640.0	1729.5	1794.1	1849.2	1875.3	1891.8	1911.1
1624.9	1746.0	1861.6	1974.4	2054.2	2135.4	2169.8
1563.0	1714.3	1865.7	2030.8	2175.3	2319.7	2424.3
1487.3	1668.9	1872.6	2106.5	2334.9	2556.4	2732.5
1400.6	1626.3	1887.7	2176.6	2476.6	2766.9	3021.4
1291.9	1545.1	1850.6	2183.5	2537.1	2889.3	3219.5
1154.4	1435.0	1763.9	2134.0	2539.9	2943.0	3337.9
1016.8	1296.1	1653.8	2062.4	2504.1	2955.4	3412.2
920.5	1172.2	1542.4	1971.6	2446.3	2936.1	3447.9
854.4	1082.8	1443.3	1889.1	2384.4	2901.7	3453.4
848.9	1044.3	1378.6	1828.5	2334.9	2871.5	3453.4
895.7	1064.9	1356.6	1798.3	2314.2	2861.8	3456.2
983.8	1147.5	1396.5	1821.7	2330.7	2874.2	3468.6
1089.7	1272.7	1503.8	1902.8	2400.9	2915.5	3496.1
1186.0	1417.2	1686.8	2059.7	2528.9	3020.0	3573.1
1242.4	1541.0	1880.8	2279.8	2747.6	3227.8	3727.2
1249.3	1609.8	2052.8	2519.2	3013.2	3465.8	3973.5
1243.8	1615.3	2074.8	2564.6	3069.6	3525.0	4058.8
1213.5	1616.7	2136.7	2724.2	3265.0	3774.0	4296.9
1136.5	1572.6	2158.7	2849.4	3511.2	4101.5	4741.3
1003.0	1447.4	2094.1	2852.2	3606.2	4284.5	5021.9
806.3	1209.4	1814.8	2594.9	3355.8	4104.2	4949.0
590.3	888.8	1371.7	2010.2	2738.0	3416.3	4239.1
392.1	575.1	924.6	1432.3	1963.4	2458.7	3051.7
269.7	356.4	540.7	861.3	1201.1	1441.9	1944.1
198.1	235.3	299.9	440.3	577.9	711.3	1015.4
123.8	134.8	150.0	217.4	310.9	419.6	632.9
33.0	34.4	31.6	42.7	67.4	64.7	71.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)