

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: P141411

Luminaire Tested: **ECM-E04-LED-E1-SLL-7050**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P141411
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33693)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ECM-E04-LED-E1-SLL-7050
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (84) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10735.2 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U0 - G3

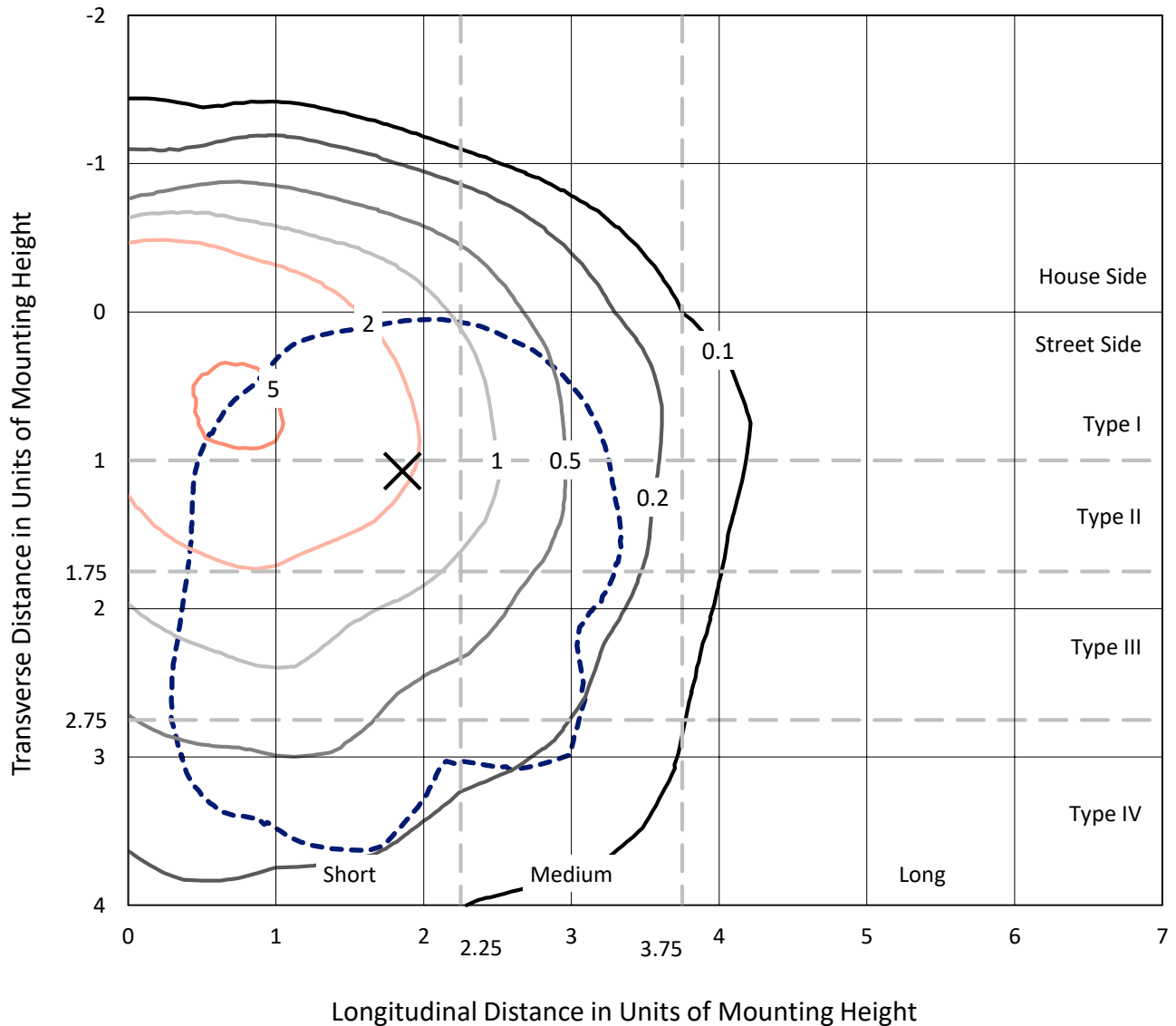
Input Watts (W): 97.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

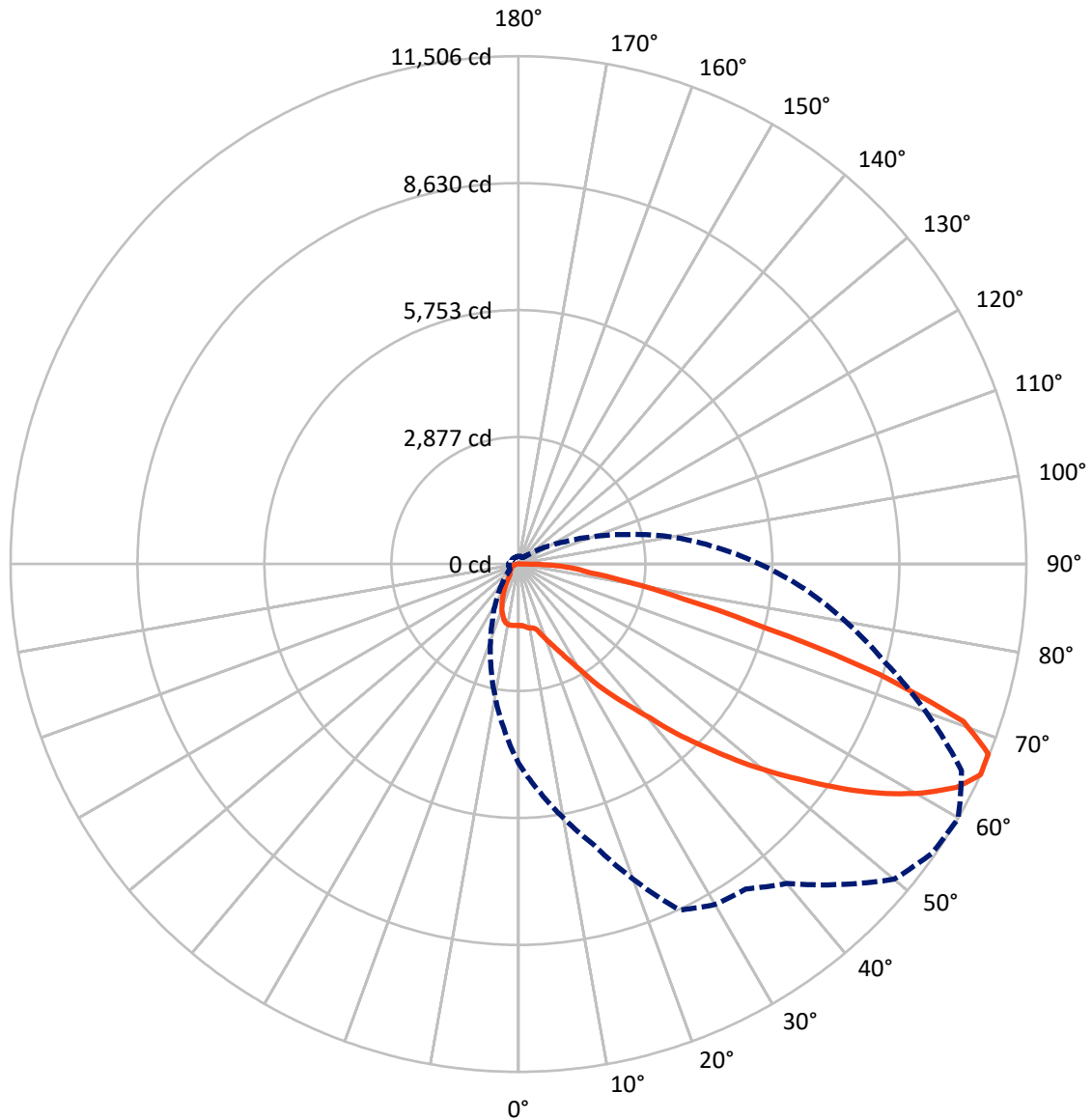
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.7 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1991.1	0.0	1991.1
	% Fixture	18.5	0.0	18.5
Street Side	Lumens	8744.1	0.0	8744.1
	% Fixture	81.5	0.0	81.5
Total	Lumens	10735.2	0.0	10735.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.0	1.3
10°-20°	405.5	3.8
20°-30°	673.7	6.3
30°-40°	984.8	9.2
40°-50°	1498.1	14.0
50°-60°	2153.4	20.1
60°-70°	2647.6	24.7
70°-80°	1771.1	16.5
80°-90°	466.0	4.3
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°	10735.2	100.0
0°-180°	10735.2	100.0

Coefficient of Utilization



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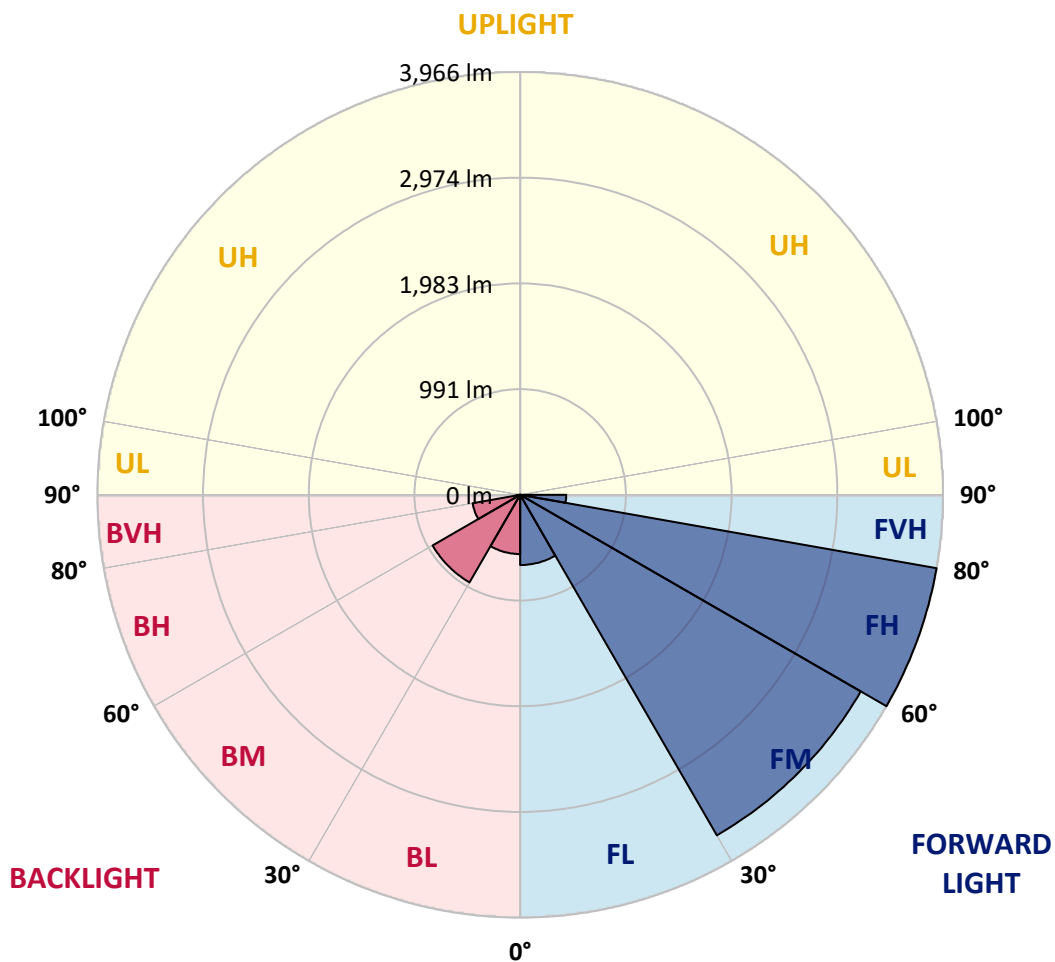
CATALOG NUMBER: ECM-E04-LED-E1-SLL-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	658.5	6.1			
FM	(30°-60°)	3687.9	34.4			
FH	(60°-80°)	3965.6	36.9			G2/5000
FVH	(80°-90°)	432.1	4.0			G3/500
BL	(0°-30°)	555.7	5.2	B2/1000		
BM	(30°-60°)	948.4	8.8	B1/1000		
BH	(60°-80°)	453.1	4.2	B1/500		G1/500
BVH	(80°-90°)	33.9	0.3			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°	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5
2.5°	1396.9	1398.2	1398.2	1396.9	1395.5	1396.9	1394.1	1396.9	1395.5	1394.1	1395.5
5°	1379.1	1380.5	1383.2	1383.2	1385.9	1391.4	1392.8	1399.6	1403.7	1405.1	1410.6
7.5°	1336.7	1343.5	1347.6	1353.1	1361.3	1375.0	1384.6	1401.0	1413.3	1424.2	1439.3
10°	1310.7	1318.9	1327.1	1339.4	1351.7	1369.5	1385.9	1406.4	1422.9	1439.3	1457.1
12.5°	1317.5	1327.1	1338.0	1347.6	1366.8	1383.2	1403.7	1428.3	1436.5	1453.0	1468.0
15°	1373.6	1381.8	1390.0	1401.0	1418.8	1437.9	1465.3	1492.6	1498.1	1515.9	1532.3
17.5°	1448.9	1450.2	1463.9	1483.1	1499.5	1530.9	1563.8	1600.7	1624.0	1634.9	1644.5
20°	1526.8	1530.9	1552.8	1570.6	1607.6	1648.6	1696.5	1751.2	1770.4	1818.3	1836.0
22.5°	1643.1	1641.8	1667.8	1692.4	1733.4	1777.2	1847.0	1922.2	1966.0	2003.0	2016.6
25°	1819.6	1823.7	1819.6	1855.2	1897.6	1968.8	2038.5	2113.8	2139.8	2204.1	2234.2
27.5°	1994.7	2026.2	2068.6	2079.6	2131.6	2213.7	2268.4	2349.1	2412.0	2429.8	2479.1
30°	2157.6	2223.2	2293.0	2351.8	2444.9	2544.7	2626.8	2718.5	2722.6	2755.4	2769.1
32.5°	2323.1	2425.7	2528.3	2603.6	2693.9	2826.6	2978.4	3127.6	3224.7	3324.6	3274.0
35°	2531.1	2691.1	2834.8	2951.1	3027.7	3150.8	3325.9	3568.1	3724.1	3843.1	3911.5
37.5°	2721.2	2963.4	3183.7	3349.2	3536.6	3624.2	3739.1	3914.3	4093.5	4204.3	4261.8
40°	2860.8	3191.9	3503.8	3743.2	3981.3	4190.6	4335.6	4477.9	4720.1	4858.3	4869.2
42.5°	2970.2	3391.6	3767.9	4111.3	4461.5	4754.3	4929.4	5110.0	5417.8	5577.9	5565.6
45°	3045.5	3540.7	4007.3	4430.0	4854.2	5235.9	5573.8	5842.0	6156.6	6461.7	6400.2
47.5°	3111.2	3663.9	4197.5	4674.9	5183.9	5660.0	6081.4	6459.0	6874.9	7286.7	7311.3
50°	3176.8	3763.8	4369.8	4919.8	5493.1	6091.0	6599.9	7085.6	7605.5	8129.5	8249.9
52.5°	3267.1	3875.9	4529.9	5142.8	5809.1	6439.8	7007.6	7612.3	8255.4	8761.6	9103.6
55°	3402.6	4031.9	4728.3	5365.8	6092.3	6787.3	7415.3	8113.1	8704.1	9329.4	9816.4
57.5°	3624.2	4239.9	4958.1	5609.4	6366.0	7102.0	7754.6	8486.6	9050.2	9743.9	10355.5
60°	3904.7	4523.1	5218.1	5898.1	6687.5	7543.9	8202.0	8743.8	9308.8	10010.7	10746.7
62.5°	4223.4	4843.2	5535.5	6237.4	7134.9	8062.5	8627.5	8936.7	9429.2	10194.0	10999.9
65°	4503.9	5142.8	5833.8	6578.0	7593.2	8648.0	8908.0	8985.9	9447.0	10267.9	11109.3
67.5°	4733.8	5468.5	6112.9	6854.4	8076.1	9020.2	8913.4	8757.5	9204.8	10088.7	10900.0
70°	4854.2	5613.5	6245.6	6879.0	8178.7	9072.1	8698.6	8274.5	8478.4	9343.0	10021.6
72.5°	4721.5	5499.9	5999.3	6393.3	7564.4	8431.9	7955.7	7155.4	7341.4	8178.7	8353.9
75°	4201.6	5141.5	5432.9	5419.2	6049.9	6498.7	6153.9	5643.6	6118.3	6467.2	6288.0
77.5°	3137.1	4211.1	4373.9	4074.3	4208.4	4586.0	4260.4	4657.2	5233.1	5390.5	5051.2
80°	1972.9	3086.5	3104.3	2730.8	2659.7	2807.4	3227.4	4071.6	4621.6	4588.7	4140.0
82.5°	1098.6	2001.6	2191.8	1849.7	1762.2	2124.7	2874.5	3323.2	3250.7	3223.3	2639.1
85°	751.1	1366.8	1670.5	1602.1	1771.7	2119.2	2357.3	2106.9	2029.0	1728.0	1402.3
87.5°	305.1	615.7	1035.7	1190.3	1262.8	1550.1	1357.2	1105.5	851.0	807.2	693.6
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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CATALOG NUMBER: ECM-E04-LED-E1-SLL-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5
2.5°	1391.4	1394.1	1394.1	1395.5	1396.9	1398.2	1398.2	1398.2	1399.6	1401.0	1399.6
5°	1411.9	1416.0	1418.8	1418.8	1421.5	1424.2	1427.0	1425.6	1429.7	1432.4	1433.8
7.5°	1444.8	1453.0	1459.8	1465.3	1468.0	1468.0	1468.0	1463.9	1468.0	1469.4	1470.8
10°	1468.0	1477.6	1479.0	1484.4	1483.1	1481.7	1479.0	1476.2	1477.6	1480.3	1484.4
12.5°	1474.9	1484.4	1487.2	1491.3	1489.9	1488.5	1483.1	1483.1	1481.7	1485.8	1489.9
15°	1530.9	1539.2	1552.8	1540.5	1541.9	1530.9	1521.4	1515.9	1513.2	1515.9	1518.6
17.5°	1659.6	1673.2	1667.8	1648.6	1647.2	1624.0	1619.9	1592.5	1592.5	1592.5	1584.3
20°	1836.0	1834.7	1825.1	1805.9	1764.9	1756.7	1726.6	1704.7	1684.2	1680.1	1670.5
22.5°	2029.0	2008.4	2003.0	1963.3	1937.3	1888.0	1842.9	1826.5	1807.3	1803.2	1801.8
25°	2216.4	2224.6	2184.9	2165.8	2100.1	2056.3	2030.3	1989.3	1989.3	1983.8	1977.0
27.5°	2451.7	2479.1	2435.3	2407.9	2346.4	2284.8	2239.6	2215.0	2189.0	2171.2	2122.0
30°	2784.2	2802.0	2771.9	2715.8	2639.1	2529.7	2468.1	2440.8	2392.9	2332.7	2252.0
32.5°	3252.1	3227.4	3124.8	3026.3	2926.5	2822.5	2748.6	2699.3	2625.5	2505.1	2351.8
35°	3858.2	3646.1	3517.5	3382.0	3267.1	3150.8	3094.7	3005.8	2837.5	2641.9	2436.7
37.5°	4156.4	4062.0	3914.3	3813.0	3676.2	3559.9	3432.7	3280.8	3063.3	2782.8	2498.2
40°	4754.3	4576.4	4461.5	4346.6	4178.3	4019.6	3847.2	3602.3	3252.1	2903.2	2546.1
42.5°	5382.3	5250.9	5043.0	4889.7	4763.9	4501.2	4227.6	3885.5	3445.0	3012.6	2589.9
45°	6200.4	5899.4	5642.2	5512.2	5264.6	4944.5	4625.7	4137.3	3622.8	3127.6	2639.1
47.5°	7022.7	6635.5	6370.1	6127.9	5863.9	5434.3	4937.6	4356.2	3759.7	3223.3	2680.2
50°	7905.1	7394.8	7088.3	6798.3	6363.2	5843.3	5211.2	4536.8	3901.9	3313.6	2717.1
52.5°	8802.6	8158.2	7720.4	7382.5	6843.4	6200.4	5458.9	4724.2	4053.8	3401.2	2747.2
55°	9609.8	9005.1	8440.1	7918.8	7270.3	6523.3	5686.0	4892.5	4190.6	3492.9	2766.4
57.5°	10341.8	9815.0	9140.5	8441.4	7663.0	6822.9	5895.3	5074.4	4319.2	3559.9	2765.0
60°	10843.9	10536.1	9835.6	8983.2	8073.4	7097.9	6147.1	5276.9	4432.8	3607.8	2754.1
62.5°	11205.1	11143.5	10531.9	9504.5	8408.6	7345.5	6390.6	5445.2	4514.9	3613.3	2707.6
65°	11430.8	11506.1	11076.5	9835.6	8596.0	7534.4	6511.0	5460.2	4456.0	3523.0	2584.4
67.5°	11288.5	11482.8	11073.7	9691.9	8416.8	7357.9	6334.5	5208.5	4142.7	3242.5	2308.1
70°	10406.1	10697.5	10293.9	8739.7	7539.8	6676.5	5684.6	4473.8	3564.0	2670.6	1823.7
72.5°	8162.3	8546.8	8193.8	7128.0	6241.5	5519.1	4783.0	3513.4	2717.1	1961.9	1225.9
75°	5631.3	5779.0	5568.3	4832.3	4560.0	4278.2	3590.0	2361.4	1795.0	1210.8	721.0
77.5°	4368.5	3833.5	3429.9	3128.9	3123.5	3071.5	2349.1	1413.3	1074.0	666.3	400.9
80°	3284.9	2578.9	2128.8	1862.0	1935.9	2164.4	1369.5	725.1	555.5	368.0	246.3
82.5°	2161.7	1645.9	1313.4	1162.9	1175.2	1357.2	688.2	399.5	273.6	209.3	160.1
85°	1317.5	1279.2	1141.0	1035.7	955.0	933.1	534.9	306.5	151.9	108.1	82.1
87.5°	643.0	762.1	930.3	942.6	809.9	686.8	277.7	87.6	64.3	34.2	24.6
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°	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5
2.5°	1401.0	1407.8	1405.1	1403.7	1403.7	1410.6	1410.6	1407.8	1407.8	1409.2	1409.2
5°	1433.8	1440.7	1437.9	1439.3	1442.0	1443.4	1447.5	1443.4	1440.7	1443.4	1442.0
7.5°	1472.1	1479.0	1477.6	1480.3	1483.1	1485.8	1488.5	1487.2	1484.4	1484.4	1483.1
10°	1488.5	1502.2	1507.7	1513.2	1520.0	1522.7	1526.8	1526.8	1521.4	1521.4	1514.5
12.5°	1499.5	1510.4	1524.1	1532.3	1544.6	1554.2	1558.3	1559.7	1555.6	1550.1	1543.3
15°	1522.7	1530.9	1544.6	1552.8	1567.9	1580.2	1588.4	1587.0	1581.6	1566.5	1546.0
17.5°	1580.2	1578.8	1584.3	1589.8	1593.9	1600.7	1598.0	1585.7	1559.7	1532.3	1503.6
20°	1666.4	1665.0	1656.8	1644.5	1629.5	1610.3	1580.2	1543.3	1499.5	1450.2	1406.4
22.5°	1788.2	1775.8	1764.9	1732.1	1680.1	1615.8	1537.8	1465.3	1413.3	1365.4	1317.5
25°	1949.6	1919.5	1866.1	1789.5	1707.4	1611.7	1498.1	1401.0	1335.3	1279.2	1231.3
27.5°	2050.8	1981.1	1892.1	1786.8	1677.3	1554.2	1428.3	1332.6	1258.7	1197.1	1142.4
30°	2137.0	2011.2	1886.7	1752.6	1614.4	1487.2	1354.5	1251.8	1165.7	1097.2	1031.6
32.5°	2184.9	2016.6	1860.7	1700.6	1550.1	1405.1	1261.4	1150.6	1068.5	983.7	893.4
35°	2215.0	2000.2	1811.4	1630.8	1465.3	1314.8	1164.3	1042.5	934.4	830.5	740.2
37.5°	2223.2	1972.9	1747.1	1552.8	1364.0	1199.9	1057.6	915.3	807.2	695.0	591.0
40°	2219.1	1920.9	1666.4	1431.1	1232.7	1074.0	935.8	805.8	686.8	586.9	487.1
42.5°	2202.7	1862.0	1570.6	1331.2	1131.5	979.6	852.4	721.0	614.3	507.6	422.8
45°	2197.2	1804.6	1498.1	1254.6	1063.0	913.9	789.4	662.2	550.0	448.8	363.9
47.5°	2184.9	1752.6	1431.1	1195.8	1007.0	863.3	734.7	610.2	493.9	402.2	320.1
50°	2157.6	1696.5	1381.8	1150.6	960.4	812.7	681.3	547.3	433.7	343.4	280.5
52.5°	2128.8	1660.9	1350.4	1105.5	911.2	752.5	622.5	487.1	380.3	295.5	247.6
55°	2100.1	1633.6	1307.9	1052.1	846.9	690.9	559.6	435.1	335.2	262.7	228.5
57.5°	2068.6	1596.6	1256.0	983.7	774.4	622.5	491.2	373.5	291.4	236.7	213.4
60°	2042.6	1544.6	1165.7	887.9	677.2	526.7	407.7	311.9	247.6	213.4	203.9
62.5°	1974.2	1444.8	1035.7	747.0	550.0	411.8	310.6	243.5	208.0	191.5	192.9
65°	1808.7	1221.7	822.3	582.8	385.8	276.4	221.6	186.1	169.6	169.6	173.8
67.5°	1524.1	930.3	582.8	370.8	253.1	199.7	169.6	154.6	151.9	154.6	161.4
70°	1079.5	603.4	365.3	242.2	190.2	161.4	146.4	140.9	138.2	140.9	143.7
72.5°	664.9	355.7	232.6	188.8	162.8	145.0	135.4	131.3	130.0	130.0	128.6
75°	362.6	238.1	186.1	164.2	147.8	134.1	124.5	117.7	116.3	117.7	114.9
77.5°	231.2	186.1	165.5	151.9	136.8	119.0	110.8	105.3	105.3	104.0	101.2
80°	180.6	165.5	151.9	138.2	114.9	101.2	93.0	91.7	90.3	88.9	88.9
82.5°	135.4	131.3	124.5	112.2	91.7	80.7	76.6	76.6	75.2	71.1	71.1
85°	78.0	76.6	82.1	72.5	61.6	53.4	53.4	54.7	56.1	54.7	50.6
87.5°	26.0	21.9	23.3	23.3	19.2	15.0	20.5	24.6	23.3	20.5	24.6
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: P141411

CATALOG NUMBER: ECM-E04-LED-E1-SLL-7050

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5
2.5°	1405.1	1407.8	1413.3	1407.8	1405.1	1405.1	1402.3	1403.7	1399.6	1395.5	1396.9
5°	1439.3	1436.5	1439.3	1435.2	1427.0	1425.6	1420.1	1420.1	1414.7	1409.2	1406.4
7.5°	1477.6	1473.5	1474.9	1466.6	1457.1	1450.2	1443.4	1440.7	1433.8	1425.6	1420.1
10°	1507.7	1503.6	1500.9	1491.3	1479.0	1472.1	1462.5	1457.1	1450.2	1439.3	1433.8
12.5°	1526.8	1517.3	1511.8	1495.4	1484.4	1477.6	1466.6	1463.9	1455.7	1446.1	1442.0
15°	1522.7	1500.9	1484.4	1465.3	1450.2	1440.7	1431.1	1428.3	1424.2	1420.1	1411.9
17.5°	1455.7	1428.3	1410.6	1370.9	1349.0	1339.4	1338.0	1336.7	1333.9	1333.9	1324.4
20°	1362.7	1331.2	1303.8	1265.5	1236.8	1227.2	1201.2	1194.4	1186.2	1194.4	1186.2
22.5°	1279.2	1239.5	1208.1	1176.6	1142.4	1115.0	1080.8	1064.4	1041.2	1035.7	1038.4
25°	1190.3	1141.0	1101.4	1064.4	1027.5	989.2	957.7	934.4	919.4	898.9	879.7
27.5°	1082.2	1041.2	987.8	957.7	913.9	871.5	838.7	814.0	786.7	770.3	742.9
30°	972.7	909.8	856.5	814.0	766.2	745.6	714.2	688.2	663.5	645.8	622.5
32.5°	830.5	764.8	708.7	659.4	626.6	597.9	578.7	556.8	544.5	529.5	514.4
35°	680.0	597.9	530.8	508.9	472.0	473.4	463.8	452.9	443.3	429.6	428.2
37.5°	513.1	448.8	405.0	377.6	372.1	363.9	365.3	363.9	361.2	357.1	357.1
40°	406.3	348.9	320.1	314.7	314.7	313.3	311.9	311.9	311.9	309.2	307.8
42.5°	347.5	306.5	296.9	294.2	291.4	290.0	287.3	283.2	283.2	280.5	276.4
45°	306.5	283.2	280.5	277.7	277.7	273.6	269.5	266.8	265.4	264.1	261.3
47.5°	280.5	268.2	265.4	262.7	261.3	258.6	254.5	250.4	249.0	247.6	247.6
50°	251.7	243.5	243.5	243.5	239.4	236.7	232.6	229.8	229.8	228.5	227.1
52.5°	231.2	227.1	225.7	224.4	221.6	217.5	214.8	213.4	212.1	213.4	212.1
55°	221.6	218.9	217.5	214.8	212.1	208.0	205.2	201.1	199.7	202.5	202.5
57.5°	210.7	209.3	208.0	205.2	202.5	197.0	192.9	190.2	190.2	194.3	192.9
60°	206.6	205.2	203.9	202.5	198.4	191.5	184.7	182.0	182.0	186.1	186.1
62.5°	197.0	195.6	194.3	192.9	187.4	182.0	175.1	172.4	173.8	176.5	180.6
65°	179.2	180.6	179.2	179.2	175.1	171.0	166.9	164.2	162.8	164.2	168.3
67.5°	162.8	164.2	164.2	164.2	162.8	158.7	156.0	151.9	149.1	150.5	151.9
70°	147.8	149.1	150.5	150.5	147.8	143.7	139.6	135.4	134.1	135.4	135.4
72.5°	131.3	131.3	131.3	132.7	131.3	130.0	124.5	119.0	119.0	117.7	119.0
75°	114.9	114.9	114.9	114.9	112.2	112.2	109.5	104.0	102.6	104.0	105.3
77.5°	101.2	98.5	97.1	97.1	97.1	94.4	93.0	93.0	91.7	91.7	91.7
80°	83.5	80.7	78.0	76.6	78.0	78.0	80.7	80.7	79.4	79.4	79.4
82.5°	65.7	60.2	58.8	58.8	56.1	58.8	64.3	71.1	68.4	69.8	69.8
85°	47.9	42.4	39.7	39.7	36.9	42.4	49.3	54.7	52.0	54.7	53.4
87.5°	21.9	20.5	16.4	13.7	16.4	24.6	28.7	30.1	26.0	31.5	31.5
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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CATALOG NUMBER: ECM-E04-LED-E1-SLL-7050

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5
2.5°	1402.3	1396.9	1395.5	1396.9	1394.1	1398.2	1398.2	1396.9	1396.9	1395.5	1398.2
5°	1410.6	1403.7	1399.6	1399.6	1396.9	1401.0	1398.2	1396.9	1395.5	1395.5	1395.5
7.5°	1422.9	1413.3	1406.4	1402.3	1396.9	1396.9	1392.8	1388.7	1385.9	1384.6	1384.6
10°	1433.8	1420.1	1409.2	1399.6	1391.4	1384.6	1377.7	1368.1	1365.4	1362.7	1364.0
12.5°	1432.4	1417.4	1401.0	1385.9	1366.8	1358.6	1340.8	1329.8	1329.8	1323.0	1327.1
15°	1402.3	1376.3	1353.1	1328.5	1305.2	1288.8	1266.9	1254.6	1247.7	1246.4	1256.0
17.5°	1312.0	1287.4	1265.5	1238.2	1208.1	1197.1	1182.1	1176.6	1172.5	1179.3	1186.2
20°	1190.3	1158.8	1138.3	1121.9	1121.9	1119.1	1112.3	1102.7	1094.5	1093.1	1101.4
22.5°	1017.9	1005.6	1009.7	998.7	998.7	993.3	1004.2	986.4	996.0	987.8	991.9
25°	874.2	868.8	866.0	864.7	864.7	874.2	872.9	875.6	866.0	871.5	870.1
27.5°	744.3	737.4	727.9	733.3	738.8	745.6	748.4	749.7	757.9	742.9	748.4
30°	619.8	608.8	615.7	610.2	612.9	611.6	611.6	611.6	617.0	628.0	619.8
32.5°	507.6	502.1	508.9	499.4	500.7	500.7	498.0	493.9	496.6	484.3	493.9
35°	420.0	413.2	418.7	414.5	410.4	399.5	395.4	388.6	389.9	387.2	385.8
37.5°	351.6	350.2	346.1	346.1	343.4	342.0	335.2	336.6	337.9	340.7	340.7
40°	303.7	302.4	301.0	303.7	305.1	306.5	309.2	311.9	316.0	320.1	324.2
42.5°	276.4	276.4	276.4	281.8	285.9	292.8	296.9	302.4	307.8	314.7	320.1
45°	259.9	258.6	261.3	265.4	272.3	279.1	285.9	294.2	302.4	309.2	313.3
47.5°	246.3	244.9	247.6	251.7	258.6	269.5	279.1	288.7	298.3	305.1	307.8
50°	228.5	228.5	229.8	234.0	240.8	250.4	259.9	270.9	280.5	285.9	288.7
52.5°	214.8	216.2	216.2	220.3	227.1	235.3	244.9	254.5	261.3	265.4	270.9
55°	201.1	203.9	203.9	208.0	214.8	224.4	236.7	244.9	253.1	258.6	262.7
57.5°	191.5	192.9	192.9	198.4	206.6	214.8	227.1	238.1	247.6	254.5	259.9
60°	183.3	184.7	183.3	190.2	197.0	206.6	217.5	229.8	243.5	253.1	257.2
62.5°	176.5	176.5	175.1	180.6	184.7	190.2	199.7	213.4	225.7	234.0	238.1
65°	168.3	168.3	165.5	171.0	171.0	179.2	186.1	198.4	208.0	217.5	220.3
67.5°	151.9	154.6	153.2	157.3	162.8	168.3	176.5	186.1	195.6	202.5	206.6
70°	135.4	136.8	140.9	143.7	149.1	151.9	158.7	165.5	175.1	179.2	183.3
72.5°	120.4	121.8	124.5	127.2	132.7	135.4	140.9	146.4	154.6	158.7	162.8
75°	105.3	106.7	108.1	110.8	113.6	116.3	119.0	124.5	130.0	135.4	139.6
77.5°	90.3	91.7	95.8	94.4	97.1	98.5	102.6	105.3	108.1	113.6	119.0
80°	79.4	78.0	80.7	82.1	84.8	84.8	87.6	87.6	91.7	91.7	93.0
82.5°	67.0	65.7	68.4	72.5	73.9	73.9	76.6	71.1	69.8	71.1	75.2
85°	50.6	52.0	53.4	58.8	60.2	60.2	62.9	58.8	53.4	53.4	56.1
87.5°	28.7	21.9	31.5	36.9	36.9	38.3	41.0	39.7	38.3	30.1	31.5
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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REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°	
0°	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	0°
2.5°	1396.9	1398.2	1399.6	1401.0	1402.3	1401.0	1403.7	1401.0	1402.3	1399.6	1398.2	2.5°
5°	1395.5	1396.9	1396.9	1399.6	1401.0	1396.9	1399.6	1395.5	1395.5	1392.8	1388.7	5°
7.5°	1385.9	1388.7	1388.7	1391.4	1391.4	1387.3	1387.3	1379.1	1376.3	1366.8	1359.9	7.5°
10°	1366.8	1370.9	1373.6	1379.1	1381.8	1375.0	1370.9	1361.3	1350.4	1339.4	1328.5	10°
12.5°	1333.9	1335.3	1344.9	1353.1	1357.2	1361.3	1358.6	1357.2	1346.3	1339.4	1335.3	12.5°
15°	1258.7	1269.6	1279.2	1298.4	1312.0	1327.1	1338.0	1350.4	1355.8	1362.7	1365.4	15°
17.5°	1193.0	1205.3	1212.2	1228.6	1242.3	1265.5	1294.3	1325.7	1347.6	1375.0	1401.0	17.5°
20°	1101.4	1121.9	1127.3	1153.3	1171.1	1201.2	1232.7	1272.4	1316.2	1358.6	1405.1	20°
22.5°	998.7	1008.3	1019.3	1046.6	1068.5	1106.8	1154.7	1209.4	1260.1	1318.9	1385.9	22.5°
25°	874.2	886.6	897.5	927.6	959.1	994.6	1052.1	1119.1	1183.4	1261.4	1349.0	25°
27.5°	751.1	760.7	779.8	801.7	837.3	875.6	946.8	1020.6	1094.5	1188.9	1292.9	27.5°
30°	622.5	632.1	641.7	667.7	704.6	749.7	814.0	901.6	989.2	1090.4	1213.5	30°
32.5°	499.4	502.1	521.3	540.4	571.9	610.2	680.0	764.8	859.2	982.3	1104.1	32.5°
35°	389.9	406.3	414.5	440.5	459.7	499.4	558.2	636.2	734.7	859.2	990.5	35°
37.5°	346.1	351.6	362.6	381.7	407.7	443.3	484.3	544.5	629.3	734.7	857.8	37.5°
40°	329.7	335.2	343.4	358.5	383.1	415.9	450.1	498.0	563.7	647.1	757.9	40°
42.5°	324.2	325.6	328.4	342.0	366.7	403.6	444.6	489.8	540.4	607.5	695.0	42.5°
45°	317.4	317.4	318.8	328.4	350.2	388.6	440.5	498.0	555.5	615.7	689.5	45°
47.5°	311.9	313.3	311.9	316.0	332.5	369.4	426.9	496.6	573.3	651.2	732.0	47.5°
50°	290.0	290.0	291.4	292.8	305.1	340.7	396.8	473.4	567.8	673.1	783.9	50°
52.5°	272.3	275.0	275.0	277.7	285.9	314.7	370.8	451.5	554.1	677.2	826.4	52.5°
55°	266.8	269.5	270.9	270.9	276.4	301.0	354.3	431.0	539.0	673.1	842.8	55°
57.5°	262.7	265.4	266.8	265.4	269.5	290.0	339.3	414.5	522.6	663.5	849.6	57.5°
60°	258.6	259.9	257.2	254.5	255.8	273.6	317.4	391.3	503.5	649.9	846.9	60°
62.5°	239.4	240.8	238.1	235.3	232.6	246.3	285.9	358.5	463.8	618.4	825.0	62.5°
65°	223.0	223.0	223.0	220.3	217.5	225.7	254.5	316.0	407.7	562.3	774.4	65°
67.5°	209.3	208.0	208.0	206.6	203.9	206.6	224.4	266.8	337.9	473.4	682.7	67.5°
70°	187.4	186.1	187.4	186.1	183.3	183.3	191.5	214.8	262.7	347.5	530.8	70°
72.5°	165.5	166.9	169.6	169.6	169.6	171.0	171.0	177.9	203.9	249.0	361.2	72.5°
75°	142.3	143.7	147.8	153.2	150.5	151.9	151.9	156.0	169.6	197.0	253.1	75°
77.5°	120.4	124.5	130.0	131.3	127.2	127.2	130.0	136.8	149.1	165.5	192.9	77.5°
80°	98.5	104.0	105.3	108.1	109.5	109.5	112.2	117.7	130.0	150.5	172.4	80°
82.5°	78.0	82.1	86.2	90.3	93.0	97.1	98.5	101.2	113.6	134.1	158.7	82.5°
85°	58.8	62.9	68.4	72.5	75.2	79.4	78.0	79.4	86.2	102.6	120.4	85°
87.5°	35.6	35.6	39.7	41.0	42.4	42.4	45.1	39.7	42.4	54.7	65.7	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°



NUMBER: P141411

NUMBER: ECM-E04-LED-E1-SLL-7050

DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
1395.5	1395.5	1395.5	1395.5	1395.5	1395.5	1395.5
1399.6	1398.2	1396.9	1398.2	1401.0	1401.0	1396.9
1390.0	1385.9	1383.2	1383.2	1383.2	1381.8	1379.1
1357.2	1350.4	1346.3	1343.5	1342.1	1342.1	1336.7
1321.6	1317.5	1309.3	1306.6	1307.9	1312.0	1310.7
1329.8	1317.5	1313.4	1313.4	1312.0	1318.9	1317.5
1375.0	1375.0	1369.5	1368.1	1365.4	1373.6	1373.6
1422.9	1435.2	1440.7	1435.2	1436.5	1437.9	1448.9
1448.9	1484.4	1503.6	1518.6	1520.0	1528.2	1526.8
1453.0	1517.3	1567.9	1600.7	1630.8	1645.9	1643.1
1432.4	1521.4	1610.3	1693.8	1756.7	1790.9	1819.6
1405.1	1510.4	1625.4	1743.0	1845.6	1937.3	1994.7
1340.8	1474.9	1622.6	1773.1	1919.5	2050.8	2157.6
1250.5	1405.1	1581.6	1780.0	1985.2	2167.1	2323.1
1130.1	1295.6	1510.4	1754.0	2024.8	2295.7	2531.1
1000.1	1182.1	1417.4	1710.2	2045.4	2398.4	2721.2
886.6	1065.8	1323.0	1654.1	2042.6	2465.4	2860.8
812.7	981.0	1240.9	1600.7	2029.0	2503.7	2970.2
788.0	939.9	1186.2	1558.3	2020.7	2531.1	3045.5
820.9	952.2	1173.9	1539.2	2018.0	2562.5	3111.2
897.5	1020.6	1220.4	1570.6	2042.6	2594.0	3176.8
970.0	1116.4	1321.6	1660.9	2134.3	2685.7	3267.1
1028.8	1220.4	1431.1	1780.0	2265.6	2827.9	3402.6
1061.7	1301.1	1573.4	1945.5	2444.9	3037.3	3624.2
1075.4	1357.2	1695.1	2119.2	2670.6	3276.7	3904.7
1069.9	1383.2	1782.7	2278.0	2874.5	3539.4	4223.4
1035.7	1383.2	1837.4	2405.2	3045.5	3748.7	4503.9
953.6	1335.3	1842.9	2479.1	3176.8	3925.2	4733.8
803.1	1197.1	1751.2	2470.9	3217.9	3981.3	4854.2
562.3	893.4	1461.2	2232.8	3042.7	3848.6	4721.5
348.9	556.8	1046.6	1726.6	2532.4	3265.8	4201.6
244.9	337.9	599.2	1093.1	1743.0	2433.9	3137.1
203.9	249.0	342.0	602.0	1048.0	1499.5	1972.9
176.5	201.1	238.1	343.4	533.6	799.0	1098.6
131.3	146.4	164.2	225.7	336.6	493.9	751.1
53.4	60.2	67.0	90.3	206.6	284.6	305.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)