

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: P141416

Luminaire Tested: **ECM-F04-LED-E1-SLL-7050**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P141416
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-F04-LED-E1-SLL-7050
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (28) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8862.2 lumens
Efficiency: N/A
Efficacy: 86.7 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

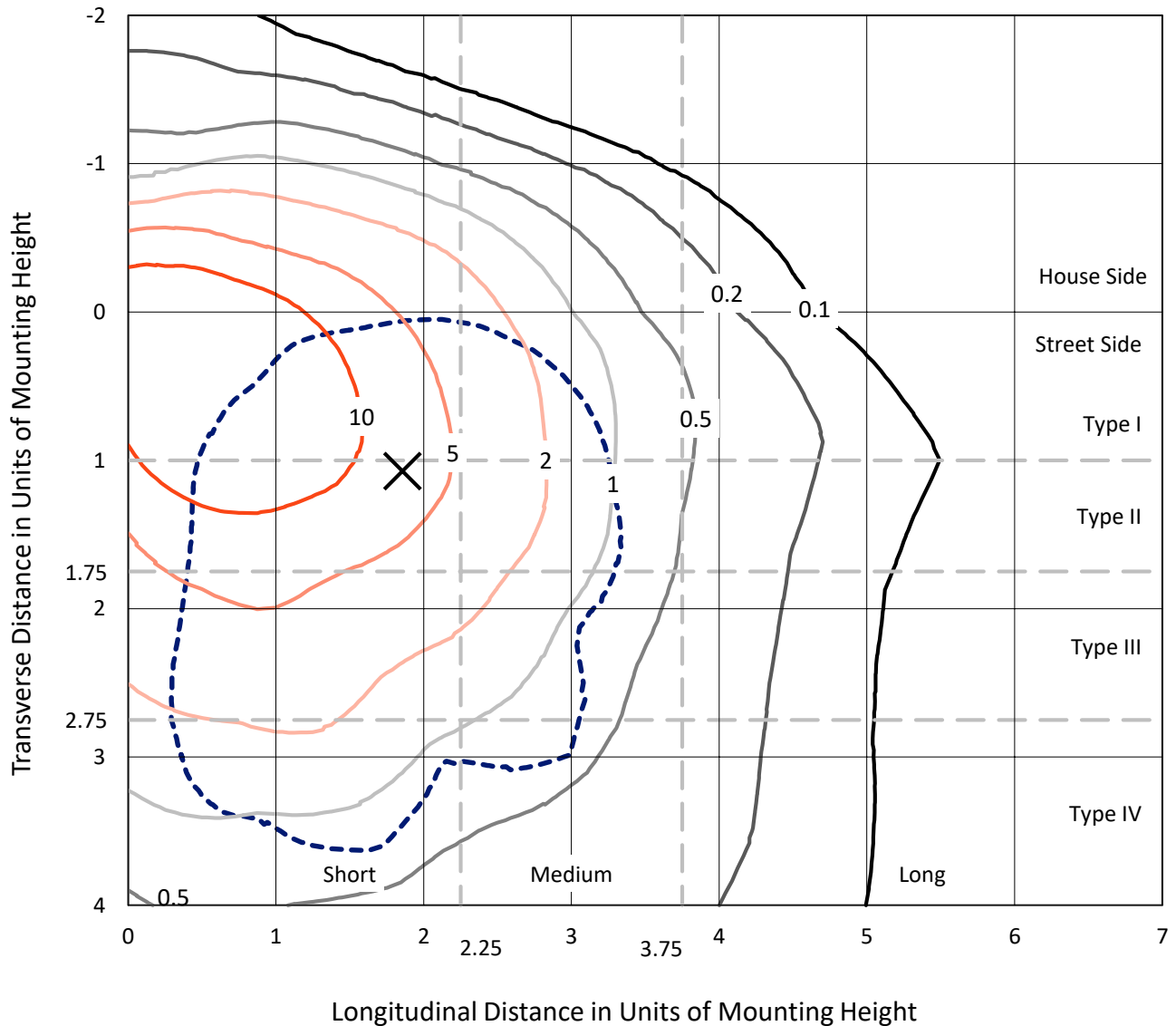
Input Watts (W): 102.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

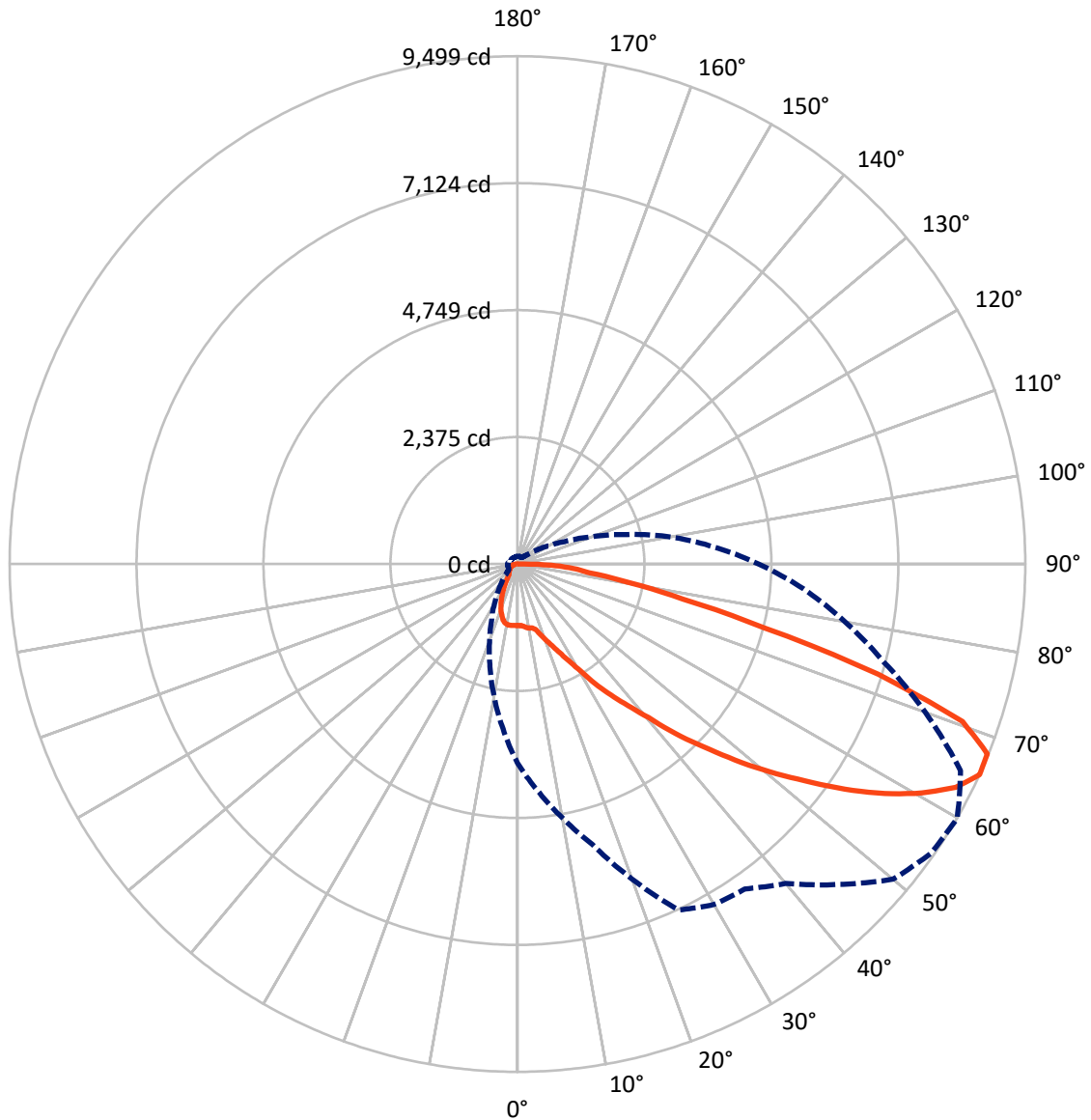
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 18.7 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	1643.7	0.0	1643.7
	% Fixture	18.5	0.0	18.5
Street Side	Lumens	7218.5	0.0	7218.5
	% Fixture	81.5	0.0	81.5
Total	Lumens	8862.2	0.0	8862.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.5	1.3
10°-20°	334.7	3.8
20°-30°	556.1	6.3
30°-40°	813.0	9.2
40°-50°	1236.7	14.0
50°-60°	1777.7	20.1
60°-70°	2185.6	24.7
70°-80°	1462.1	16.5
80°-90°	384.7	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°	8862.2	100.0
0°-180°	8862.2	100.0

Coefficient of Utilization



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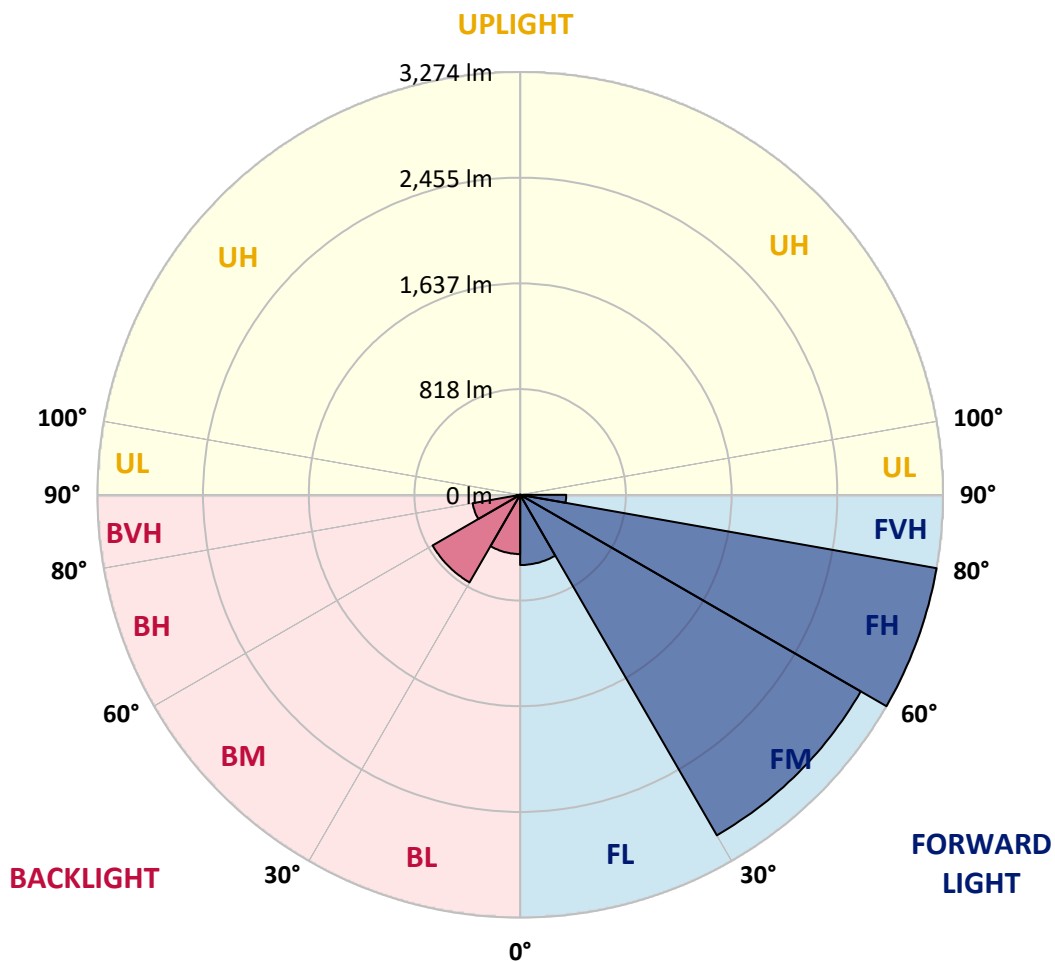
CATALOG NUMBER: ECM-F04-LED-E1-SLL-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	543.6	6.1			
FM	(30°-60°)	3044.5	34.4			
FH	(60°-80°)	3273.7	36.9			G2/5000
FVH	(80°-90°)	356.7	4.0			G3/500
BL	(0°-30°)	458.7	5.2	B1/500		
BM	(30°-60°)	782.9	8.8	B1/1000		
BH	(60°-80°)	374.1	4.2	B1/500		G1/500
BVH	(80°-90°)	28.0	0.3			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°	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0
2.5°	1153.2	1154.3	1154.3	1153.2	1152.0	1153.2	1150.9	1153.2	1152.0	1150.9	1152.0
5°	1138.5	1139.6	1141.9	1141.9	1144.1	1148.6	1149.8	1155.4	1158.8	1159.9	1164.4
7.5°	1103.5	1109.1	1112.5	1117.0	1123.8	1135.1	1143.0	1156.5	1166.7	1175.7	1188.2
10°	1082.0	1088.8	1095.6	1105.7	1115.9	1130.6	1144.1	1161.1	1174.6	1188.2	1202.8
12.5°	1087.6	1095.6	1104.6	1112.5	1128.3	1141.9	1158.8	1179.1	1185.9	1199.5	1211.9
15°	1134.0	1140.7	1147.5	1156.5	1171.2	1187.0	1209.6	1232.2	1236.7	1251.4	1265.0
17.5°	1196.1	1197.2	1208.5	1224.3	1237.9	1263.8	1290.9	1321.4	1340.6	1349.7	1357.6
20°	1260.4	1263.8	1281.9	1296.6	1327.1	1361.0	1400.5	1445.7	1461.5	1501.0	1515.7
22.5°	1356.5	1355.3	1376.8	1397.1	1431.0	1467.1	1524.7	1586.9	1623.0	1653.5	1664.8
25°	1502.1	1505.5	1502.1	1531.5	1566.5	1625.3	1682.9	1745.0	1766.4	1819.5	1844.4
27.5°	1646.7	1672.7	1707.7	1716.7	1759.7	1827.4	1872.6	1939.2	1991.2	2005.9	2046.5
30°	1781.1	1835.3	1892.9	1941.5	2018.3	2100.7	2168.5	2244.2	2247.6	2274.7	2286.0
32.5°	1917.8	2002.5	2087.2	2149.3	2223.9	2333.4	2458.8	2581.9	2662.1	2744.5	2702.7
35°	2089.5	2221.6	2340.2	2436.2	2499.4	2601.1	2745.7	2945.6	3074.3	3172.6	3229.1
37.5°	2246.4	2446.4	2628.2	2764.9	2919.6	2991.9	3086.7	3231.3	3379.3	3470.8	3518.2
40°	2361.6	2635.0	2892.5	3090.1	3286.7	3459.5	3579.2	3696.6	3896.5	4010.6	4019.7
42.5°	2452.0	2799.9	3110.5	3393.9	3683.1	3924.8	4069.4	4218.4	4472.6	4604.7	4594.5
45°	2514.1	2923.0	3308.1	3657.1	4007.2	4322.3	4601.3	4822.7	5082.5	5334.3	5283.5
47.5°	2568.3	3024.6	3465.1	3859.3	4279.4	4672.5	5020.3	5332.1	5675.4	6015.4	6035.7
50°	2622.5	3107.1	3607.4	4061.4	4534.7	5028.2	5448.4	5849.3	6278.5	6711.1	6810.5
52.5°	2697.1	3199.7	3739.6	4245.5	4795.6	5316.2	5785.0	6284.2	6815.0	7232.9	7515.3
55°	2808.9	3328.4	3903.3	4429.6	5029.4	5603.1	6121.5	6697.5	7185.5	7701.6	8103.7
57.5°	2991.9	3500.1	4093.1	4630.7	5255.3	5862.9	6401.6	7005.9	7471.2	8043.8	8548.7
60°	3223.4	3733.9	4307.7	4869.0	5520.7	6227.7	6771.0	7218.2	7684.7	8264.1	8871.7
62.5°	3486.6	3998.2	4569.7	5149.1	5890.0	6655.8	7122.2	7377.5	7784.1	8415.4	9080.7
65°	3718.1	4245.5	4815.9	5430.3	6268.4	7139.2	7353.7	7418.1	7798.7	8476.4	9171.0
67.5°	3907.8	4514.3	5046.3	5658.5	6667.0	7446.4	7358.3	7229.5	7598.8	8328.4	8998.2
70°	4007.2	4634.1	5155.9	5678.8	6751.8	7489.3	7180.9	6830.8	6999.1	7712.9	8273.1
72.5°	3897.7	4540.3	4952.6	5277.8	6244.6	6960.7	6567.7	5906.9	6060.5	6751.8	6896.3
75°	3468.5	4244.4	4485.0	4473.7	4994.4	5364.8	5080.2	4658.9	5050.8	5338.8	5190.9
77.5°	2589.8	3476.4	3610.8	3363.5	3474.1	3785.9	3517.1	3844.6	4320.1	4450.0	4169.9
80°	1628.6	2548.0	2562.7	2254.4	2195.6	2317.6	2664.3	3361.2	3815.2	3788.1	3417.7
82.5°	906.9	1652.4	1809.4	1527.0	1454.7	1754.0	2372.9	2743.4	2683.5	2660.9	2178.7
85°	620.1	1128.3	1379.0	1322.6	1462.6	1749.5	1946.0	1739.3	1675.0	1426.5	1157.7
87.5°	251.9	508.2	855.0	982.6	1042.5	1279.6	1120.4	912.6	702.5	666.4	572.6
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0
2.5°	1148.6	1150.9	1150.9	1152.0	1153.2	1154.3	1154.3	1154.3	1155.4	1156.5	1155.4
5°	1165.6	1169.0	1171.2	1171.2	1173.5	1175.7	1178.0	1176.9	1180.3	1182.5	1183.6
7.5°	1192.7	1199.5	1205.1	1209.6	1211.9	1211.9	1211.9	1208.5	1211.9	1213.0	1214.1
10°	1211.9	1219.8	1220.9	1225.4	1224.3	1223.2	1220.9	1218.7	1219.8	1222.0	1225.4
12.5°	1217.5	1225.4	1227.7	1231.1	1230.0	1228.8	1224.3	1224.3	1223.2	1226.6	1230.0
15°	1263.8	1270.6	1281.9	1271.7	1272.9	1263.8	1255.9	1251.4	1249.2	1251.4	1253.7
17.5°	1370.0	1381.3	1376.8	1361.0	1359.8	1340.6	1337.3	1314.7	1314.7	1314.7	1307.9
20°	1515.7	1514.6	1506.7	1490.9	1457.0	1450.2	1425.3	1407.3	1390.3	1386.9	1379.0
22.5°	1675.0	1658.0	1653.5	1620.7	1599.3	1558.6	1521.3	1507.8	1492.0	1488.6	1487.5
25°	1829.7	1836.5	1803.7	1787.9	1733.7	1697.5	1676.1	1642.2	1642.2	1637.7	1632.0
27.5°	2023.9	2046.5	2010.4	1987.8	1937.0	1886.2	1848.9	1828.6	1807.1	1792.4	1751.8
30°	2298.4	2313.1	2288.2	2241.9	2178.7	2088.3	2037.5	2014.9	1975.4	1925.7	1859.0
32.5°	2684.7	2664.3	2579.6	2498.3	2415.9	2330.0	2269.0	2228.4	2167.4	2068.0	1941.5
35°	3185.0	3009.9	2903.8	2792.0	2697.1	2601.1	2554.8	2481.4	2342.4	2180.9	2011.5
37.5°	3431.2	3353.3	3231.3	3147.7	3034.8	2938.8	2833.8	2708.4	2528.8	2297.3	2062.3
40°	3924.8	3778.0	3683.1	3588.2	3449.3	3318.3	3176.0	2973.8	2684.7	2396.7	2101.9
42.5°	4443.2	4334.8	4163.1	4036.6	3932.7	3715.8	3490.0	3207.6	2843.9	2487.0	2138.0
45°	5118.6	4870.1	4657.8	4550.5	4346.1	4081.8	3818.6	3415.4	2990.7	2581.9	2178.7
47.5°	5797.4	5477.8	5258.6	5058.7	4840.8	4486.1	4076.1	3596.1	3103.7	2660.9	2212.6
50°	6525.9	6104.6	5851.6	5612.2	5253.0	4823.8	4302.0	3745.2	3221.1	2735.5	2243.1
52.5°	7266.8	6734.8	6373.4	6094.4	5649.4	5118.6	4506.4	3899.9	3346.5	2807.8	2267.9
55°	7933.1	7433.9	6967.5	6537.2	6001.8	5385.1	4693.9	4038.9	3459.5	2883.4	2283.7
57.5°	8537.4	8102.6	7545.7	6968.6	6326.0	5632.5	4866.7	4189.1	3565.6	2938.8	2282.6
60°	8951.9	8697.8	8119.5	7415.9	6664.8	5859.5	5074.5	4356.2	3659.4	2978.3	2273.6
62.5°	9250.1	9199.2	8694.4	7846.2	6941.5	6063.9	5275.6	4495.1	3727.1	2982.8	2235.2
65°	9436.4	9498.5	9143.9	8119.5	7096.2	6219.8	5375.0	4507.6	3678.6	2908.3	2133.5
67.5°	9319.0	9479.3	9141.6	8000.9	6948.3	6074.1	5229.3	4299.8	3419.9	2676.8	1905.4
70°	8590.5	8831.0	8497.9	7214.8	6224.3	5511.6	4692.8	3693.2	2942.2	2204.7	1505.5
72.5°	6738.2	7055.6	6764.2	5884.4	5152.5	4556.1	3948.5	2900.4	2243.1	1619.6	1012.0
75°	4648.8	4770.7	4596.8	3989.2	3764.4	3531.7	2963.6	1949.4	1481.8	999.5	595.2
77.5°	3606.3	3164.7	2831.5	2583.0	2578.5	2535.6	1939.2	1166.7	886.6	550.0	330.9
80°	2711.8	2129.0	1757.4	1537.2	1598.1	1786.8	1130.6	598.6	458.6	303.8	203.3
82.5°	1784.5	1358.7	1084.3	960.0	970.2	1120.4	568.1	329.8	225.9	172.8	132.1
85°	1087.6	1056.0	941.9	855.0	788.3	770.3	441.6	253.0	125.4	89.2	67.8
87.5°	530.8	629.1	768.0	778.2	668.6	567.0	229.3	72.3	53.1	28.2	20.3
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°	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0
2.5°	1156.5	1162.2	1159.9	1158.8	1158.8	1164.4	1164.4	1162.2	1162.2	1163.3	1163.3
5°	1183.6	1189.3	1187.0	1188.2	1190.4	1191.6	1194.9	1191.6	1189.3	1191.6	1190.4
7.5°	1215.3	1220.9	1219.8	1222.0	1224.3	1226.6	1228.8	1227.7	1225.4	1225.4	1224.3
10°	1228.8	1240.1	1244.6	1249.2	1254.8	1257.1	1260.4	1260.4	1255.9	1255.9	1250.3
12.5°	1237.9	1246.9	1258.2	1265.0	1275.1	1283.0	1286.4	1287.6	1284.2	1279.6	1274.0
15°	1257.1	1263.8	1275.1	1281.9	1294.3	1304.5	1311.3	1310.1	1305.6	1293.2	1276.3
17.5°	1304.5	1303.4	1307.9	1312.4	1315.8	1321.4	1319.2	1309.0	1287.6	1265.0	1241.2
20°	1375.7	1374.5	1367.7	1357.6	1345.2	1329.3	1304.5	1274.0	1237.9	1197.2	1161.1
22.5°	1476.2	1466.0	1457.0	1429.9	1386.9	1333.9	1269.5	1209.6	1166.7	1127.2	1087.6
25°	1609.4	1584.6	1540.5	1477.3	1409.5	1330.5	1236.7	1156.5	1102.3	1056.0	1016.5
27.5°	1693.0	1635.4	1562.0	1475.0	1384.7	1283.0	1179.1	1100.1	1039.1	988.3	943.1
30°	1764.2	1660.3	1557.5	1446.8	1332.7	1227.7	1118.1	1033.4	962.3	905.8	851.6
32.5°	1803.7	1664.8	1536.0	1403.9	1279.6	1159.9	1041.3	949.9	882.1	812.1	737.5
35°	1828.6	1651.2	1495.4	1346.3	1209.6	1085.4	961.1	860.6	771.4	685.6	611.0
37.5°	1835.3	1628.6	1442.3	1281.9	1126.0	990.5	873.1	755.6	666.4	573.8	487.9
40°	1831.9	1585.7	1375.7	1181.4	1017.6	886.6	772.5	665.2	567.0	484.5	402.1
42.5°	1818.4	1537.2	1296.6	1098.9	934.0	808.7	703.6	595.2	507.1	419.0	349.0
45°	1813.9	1489.7	1236.7	1035.7	877.6	754.5	651.7	546.6	454.0	370.5	300.4
47.5°	1803.7	1446.8	1181.4	987.1	831.3	712.7	606.5	503.7	407.7	332.1	264.3
50°	1781.1	1400.5	1140.7	949.9	792.9	670.9	562.5	451.8	358.0	283.5	231.5
52.5°	1757.4	1371.1	1114.8	912.6	752.2	621.2	513.9	402.1	314.0	244.0	204.4
55°	1733.7	1348.5	1079.7	868.5	699.1	570.4	461.9	359.2	276.7	216.9	188.6
57.5°	1707.7	1318.0	1036.8	812.1	639.3	513.9	405.5	308.3	240.6	195.4	176.2
60°	1686.2	1275.1	962.3	733.0	559.1	434.8	336.6	257.5	204.4	176.2	168.3
62.5°	1629.8	1192.7	855.0	616.7	454.0	340.0	256.4	201.0	171.7	158.1	159.3
65°	1493.1	1008.6	678.8	481.1	318.5	228.1	183.0	153.6	140.0	140.0	143.4
67.5°	1258.2	768.0	481.1	306.1	208.9	164.9	140.0	127.6	125.4	127.6	133.3
70°	891.1	498.1	301.6	199.9	157.0	133.3	120.8	116.3	114.1	116.3	118.6
72.5°	548.9	293.7	192.0	155.9	134.4	119.7	111.8	108.4	107.3	107.3	106.2
75°	299.3	196.5	153.6	135.5	122.0	110.7	102.8	97.1	96.0	97.1	94.9
77.5°	190.9	153.6	136.7	125.4	112.9	98.3	91.5	87.0	87.0	85.8	83.6
80°	149.1	136.7	125.4	114.1	94.9	83.6	76.8	75.7	74.5	73.4	73.4
82.5°	111.8	108.4	102.8	92.6	75.7	66.6	63.2	63.2	62.1	58.7	58.7
85°	64.4	63.2	67.8	59.9	50.8	44.0	44.0	45.2	46.3	45.2	41.8
87.5°	21.5	18.1	19.2	19.2	15.8	12.4	16.9	20.3	19.2	16.9	20.3
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: P141416

CATALOG NUMBER: ECM-F04-LED-E1-SLL-7050

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0
2.5°	1159.9	1162.2	1166.7	1162.2	1159.9	1159.9	1157.7	1158.8	1155.4	1152.0	1153.2
5°	1188.2	1185.9	1188.2	1184.8	1178.0	1176.9	1172.4	1172.4	1167.8	1163.3	1161.1
7.5°	1219.8	1216.4	1217.5	1210.8	1202.8	1197.2	1191.6	1189.3	1183.6	1176.9	1172.4
10°	1244.6	1241.2	1239.0	1231.1	1220.9	1215.3	1207.4	1202.8	1197.2	1188.2	1183.6
12.5°	1260.4	1252.5	1248.0	1234.5	1225.4	1219.8	1210.8	1208.5	1201.7	1193.8	1190.4
15°	1257.1	1239.0	1225.4	1209.6	1197.2	1189.3	1181.4	1179.1	1175.7	1172.4	1165.6
17.5°	1201.7	1179.1	1164.4	1131.7	1113.6	1105.7	1104.6	1103.5	1101.2	1101.2	1093.3
20°	1124.9	1098.9	1076.4	1044.7	1021.0	1013.1	991.6	986.0	979.2	986.0	979.2
22.5°	1056.0	1023.3	997.3	971.3	943.1	920.5	892.3	878.7	859.5	855.0	857.2
25°	982.6	941.9	909.2	878.7	848.2	816.6	790.6	771.4	759.0	742.0	726.2
27.5°	893.4	859.5	815.5	790.6	754.5	719.4	692.3	672.0	649.4	635.9	613.3
30°	803.0	751.1	707.0	672.0	632.5	615.5	589.6	568.1	547.8	533.1	513.9
32.5°	685.6	631.4	585.0	544.4	517.3	493.6	477.8	459.7	449.5	437.1	424.7
35°	561.3	493.6	438.2	420.1	389.7	390.8	382.9	373.8	365.9	354.6	353.5
37.5°	423.5	370.5	334.3	311.7	307.2	300.4	301.6	300.4	298.2	294.8	294.8
40°	335.4	288.0	264.3	259.8	259.8	258.6	257.5	257.5	257.5	255.3	254.1
42.5°	286.9	253.0	245.1	242.8	240.6	239.4	237.2	233.8	233.8	231.5	228.1
45°	253.0	233.8	231.5	229.3	229.3	225.9	222.5	220.2	219.1	218.0	215.7
47.5°	231.5	221.4	219.1	216.9	215.7	213.5	210.1	206.7	205.6	204.4	204.4
50°	207.8	201.0	201.0	201.0	197.7	195.4	192.0	189.7	189.7	188.6	187.5
52.5°	190.9	187.5	186.4	185.2	183.0	179.6	177.3	176.2	175.1	176.2	175.1
55°	183.0	180.7	179.6	177.3	175.1	171.7	169.4	166.0	164.9	167.2	167.2
57.5°	173.9	172.8	171.7	169.4	167.2	162.6	159.3	157.0	157.0	160.4	159.3
60°	170.5	169.4	168.3	167.2	163.8	158.1	152.5	150.2	150.2	153.6	153.6
62.5°	162.6	161.5	160.4	159.3	154.7	150.2	144.6	142.3	143.4	145.7	149.1
65°	148.0	149.1	148.0	148.0	144.6	141.2	137.8	135.5	134.4	135.5	138.9
67.5°	134.4	135.5	135.5	135.5	134.4	131.0	128.8	125.4	123.1	124.2	125.4
70°	122.0	123.1	124.2	124.2	122.0	118.6	115.2	111.8	110.7	111.8	111.8
72.5°	108.4	108.4	108.4	109.6	108.4	107.3	102.8	98.3	98.3	97.1	98.3
75°	94.9	94.9	94.9	94.9	92.6	92.6	90.4	85.8	84.7	85.8	87.0
77.5°	83.6	81.3	80.2	80.2	80.2	77.9	76.8	76.8	75.7	75.7	75.7
80°	68.9	66.6	64.4	63.2	64.4	64.4	66.6	66.6	65.5	65.5	65.5
82.5°	54.2	49.7	48.6	48.6	46.3	48.6	53.1	58.7	56.5	57.6	57.6
85°	39.5	35.0	32.8	32.8	30.5	35.0	40.7	45.2	42.9	45.2	44.0
87.5°	18.1	16.9	13.6	11.3	13.6	20.3	23.7	24.8	21.5	26.0	26.0
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: P141416

CATALOG NUMBER: ECM-F04-LED-E1-SLL-7050

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0
2.5°	1157.7	1153.2	1152.0	1153.2	1150.9	1154.3	1154.3	1153.2	1153.2	1152.0	1154.3
5°	1164.4	1158.8	1155.4	1155.4	1153.2	1156.5	1154.3	1153.2	1152.0	1152.0	1152.0
7.5°	1174.6	1166.7	1161.1	1157.7	1153.2	1153.2	1149.8	1146.4	1144.1	1143.0	1143.0
10°	1183.6	1172.4	1163.3	1155.4	1148.6	1143.0	1137.3	1129.4	1127.2	1124.9	1126.0
12.5°	1182.5	1170.1	1156.5	1144.1	1128.3	1121.5	1106.8	1097.8	1097.8	1092.2	1095.6
15°	1157.7	1136.2	1117.0	1096.7	1077.5	1063.9	1045.9	1035.7	1030.0	1028.9	1036.8
17.5°	1083.1	1062.8	1044.7	1022.1	997.3	988.3	975.8	971.3	967.9	973.6	979.2
20°	982.6	956.6	939.7	926.1	926.1	923.9	918.2	910.3	903.5	902.4	909.2
22.5°	840.3	830.1	833.5	824.5	824.5	820.0	829.0	814.3	822.2	815.5	818.8
25°	721.7	717.2	714.9	713.8	713.8	721.7	720.6	722.8	714.9	719.4	718.3
27.5°	614.4	608.8	600.9	605.4	609.9	615.5	617.8	618.9	625.7	613.3	617.8
30°	511.6	502.6	508.2	503.7	506.0	504.9	504.9	504.9	509.4	518.4	511.6
32.5°	419.0	414.5	420.1	412.2	413.4	413.4	411.1	407.7	410.0	399.8	407.7
35°	346.7	341.1	345.6	342.2	338.8	329.8	326.4	320.8	321.9	319.6	318.5
37.5°	290.3	289.1	285.7	285.7	283.5	282.4	276.7	277.8	279.0	281.2	281.2
40°	250.7	249.6	248.5	250.7	251.9	253.0	255.3	257.5	260.9	264.3	267.7
42.5°	228.1	228.1	228.1	232.7	236.1	241.7	245.1	249.6	254.1	259.8	264.3
45°	214.6	213.5	215.7	219.1	224.8	230.4	236.1	242.8	249.6	255.3	258.6
47.5°	203.3	202.2	204.4	207.8	213.5	222.5	230.4	238.3	246.2	251.9	254.1
50°	188.6	188.6	189.7	193.1	198.8	206.7	214.6	223.6	231.5	236.1	238.3
52.5°	177.3	178.5	178.5	181.8	187.5	194.3	202.2	210.1	215.7	219.1	223.6
55°	166.0	168.3	168.3	171.7	177.3	185.2	195.4	202.2	208.9	213.5	216.9
57.5°	158.1	159.3	159.3	163.8	170.5	177.3	187.5	196.5	204.4	210.1	214.6
60°	151.3	152.5	151.3	157.0	162.6	170.5	179.6	189.7	201.0	208.9	212.3
62.5°	145.7	145.7	144.6	149.1	152.5	157.0	164.9	176.2	186.4	193.1	196.5
65°	138.9	138.9	136.7	141.2	141.2	148.0	153.6	163.8	171.7	179.6	181.8
67.5°	125.4	127.6	126.5	129.9	134.4	138.9	145.7	153.6	161.5	167.2	170.5
70°	111.8	112.9	116.3	118.6	123.1	125.4	131.0	136.7	144.6	148.0	151.3
72.5°	99.4	100.5	102.8	105.0	109.6	111.8	116.3	120.8	127.6	131.0	134.4
75°	87.0	88.1	89.2	91.5	93.7	96.0	98.3	102.8	107.3	111.8	115.2
77.5°	74.5	75.7	79.1	77.9	80.2	81.3	84.7	87.0	89.2	93.7	98.3
80°	65.5	64.4	66.6	67.8	70.0	70.0	72.3	72.3	75.7	75.7	76.8
82.5°	55.3	54.2	56.5	59.9	61.0	61.0	63.2	58.7	57.6	58.7	62.1
85°	41.8	42.9	44.0	48.6	49.7	49.7	52.0	48.6	44.0	44.0	46.3
87.5°	23.7	18.1	26.0	30.5	30.5	31.6	33.9	32.8	31.6	24.8	26.0
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: ECM-F04-LED-E1-SLL-7050

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°	
0°	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	0°
2.5°	1153.2	1154.3	1155.4	1156.5	1157.7	1156.5	1158.8	1156.5	1157.7	1155.4	1154.3	2.5°
5°	1152.0	1153.2	1153.2	1155.4	1156.5	1153.2	1155.4	1152.0	1152.0	1149.8	1146.4	5°
7.5°	1144.1	1146.4	1146.4	1148.6	1148.6	1145.2	1145.2	1138.5	1136.2	1128.3	1122.7	7.5°
10°	1128.3	1131.7	1134.0	1138.5	1140.7	1135.1	1131.7	1123.8	1114.8	1105.7	1096.7	10°
12.5°	1101.2	1102.3	1110.2	1117.0	1120.4	1123.8	1121.5	1120.4	1111.4	1105.7	1102.3	12.5°
15°	1039.1	1048.1	1056.0	1071.8	1083.1	1095.6	1104.6	1114.8	1119.3	1124.9	1127.2	15°
17.5°	984.9	995.0	1000.7	1014.2	1025.5	1044.7	1068.4	1094.4	1112.5	1135.1	1156.5	17.5°
20°	909.2	926.1	930.7	952.1	966.8	991.6	1017.6	1050.4	1086.5	1121.5	1159.9	20°
22.5°	824.5	832.4	841.4	864.0	882.1	913.7	953.2	998.4	1040.2	1088.8	1144.1	22.5°
25°	721.7	731.9	740.9	765.8	791.7	821.1	868.5	923.9	977.0	1041.3	1113.6	25°
27.5°	620.1	628.0	643.8	661.8	691.2	722.8	781.6	842.6	903.5	981.5	1067.3	27.5°
30°	513.9	521.8	529.7	551.2	581.7	618.9	672.0	744.3	816.6	900.2	1001.8	30°
32.5°	412.2	414.5	430.3	446.1	472.1	503.7	561.3	631.4	709.3	810.9	911.5	32.5°
35°	321.9	335.4	342.2	363.7	379.5	412.2	460.8	525.2	606.5	709.3	817.7	35°
37.5°	285.7	290.3	299.3	315.1	336.6	365.9	399.8	449.5	519.5	606.5	708.2	37.5°
40°	272.2	276.7	283.5	295.9	316.2	343.3	371.6	411.1	465.3	534.2	625.7	40°
42.5°	267.7	268.8	271.1	282.4	302.7	333.2	367.1	404.3	446.1	501.5	573.8	42.5°
45°	262.0	262.0	263.2	271.1	289.1	320.8	363.7	411.1	458.6	508.2	569.2	45°
47.5°	257.5	258.6	257.5	260.9	274.5	304.9	352.4	410.0	473.2	537.6	604.2	47.5°
50°	239.4	239.4	240.6	241.7	251.9	281.2	327.5	390.8	468.7	555.7	647.2	50°
52.5°	224.8	227.0	227.0	229.3	236.1	259.8	306.1	372.7	457.4	559.1	682.2	52.5°
55°	220.2	222.5	223.6	223.6	228.1	248.5	292.5	355.8	445.0	555.7	695.7	55°
57.5°	216.9	219.1	220.2	219.1	222.5	239.4	280.1	342.2	431.4	547.8	701.4	57.5°
60°	213.5	214.6	212.3	210.1	211.2	225.9	262.0	323.0	415.6	536.5	699.1	60°
62.5°	197.7	198.8	196.5	194.3	192.0	203.3	236.1	295.9	382.9	510.5	681.0	62.5°
65°	184.1	184.1	184.1	181.8	179.6	186.4	210.1	260.9	336.6	464.2	639.3	65°
67.5°	172.8	171.7	171.7	170.5	168.3	170.5	185.2	220.2	279.0	390.8	563.6	67.5°
70°	154.7	153.6	154.7	153.6	151.3	151.3	158.1	177.3	216.9	286.9	438.2	70°
72.5°	136.7	137.8	140.0	140.0	140.0	141.2	141.2	146.8	168.3	205.6	298.2	72.5°
75°	117.5	118.6	122.0	126.5	124.2	125.4	125.4	128.8	140.0	162.6	208.9	75°
77.5°	99.4	102.8	107.3	108.4	105.0	105.0	107.3	112.9	123.1	136.7	159.3	77.5°
80°	81.3	85.8	87.0	89.2	90.4	90.4	92.6	97.1	107.3	124.2	142.3	80°
82.5°	64.4	67.8	71.2	74.5	76.8	80.2	81.3	83.6	93.7	110.7	131.0	82.5°
85°	48.6	52.0	56.5	59.9	62.1	65.5	64.4	65.5	71.2	84.7	99.4	85°
87.5°	29.4	29.4	32.8	33.9	35.0	35.0	37.3	32.8	35.0	45.2	54.2	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: P141416

NUMBER: ECM-F04-LED-E1-SLL-7050

DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
1152.0	1152.0	1152.0	1152.0	1152.0	1152.0	1152.0
1155.4	1154.3	1153.2	1154.3	1156.5	1156.5	1153.2
1147.5	1144.1	1141.9	1141.9	1141.9	1140.7	1138.5
1120.4	1114.8	1111.4	1109.1	1108.0	1108.0	1103.5
1091.0	1087.6	1080.9	1078.6	1079.7	1083.1	1082.0
1097.8	1087.6	1084.3	1084.3	1083.1	1088.8	1087.6
1135.1	1135.1	1130.6	1129.4	1127.2	1134.0	1134.0
1174.6	1184.8	1189.3	1184.8	1185.9	1187.0	1196.1
1196.1	1225.4	1241.2	1253.7	1254.8	1261.6	1260.4
1199.5	1252.5	1294.3	1321.4	1346.3	1358.7	1356.5
1182.5	1255.9	1329.3	1398.2	1450.2	1478.4	1502.1
1159.9	1246.9	1341.8	1438.9	1523.6	1599.3	1646.7
1106.8	1217.5	1339.5	1463.7	1584.6	1693.0	1781.1
1032.3	1159.9	1305.6	1469.4	1638.8	1789.0	1917.8
932.9	1069.6	1246.9	1447.9	1671.6	1895.2	2089.5
825.6	975.8	1170.1	1411.8	1688.5	1979.9	2246.4
731.9	879.8	1092.2	1365.5	1686.2	2035.2	2361.6
670.9	809.8	1024.4	1321.4	1675.0	2066.9	2452.0
650.6	775.9	979.2	1286.4	1668.2	2089.5	2514.1
677.7	786.1	969.1	1270.6	1665.9	2115.4	2568.3
740.9	842.6	1007.5	1296.6	1686.2	2141.4	2622.5
800.8	921.6	1091.0	1371.1	1761.9	2217.1	2697.1
849.3	1007.5	1181.4	1469.4	1870.3	2334.5	2808.9
876.4	1074.1	1298.8	1606.1	2018.3	2507.3	2991.9
887.7	1120.4	1399.4	1749.5	2204.7	2705.0	3223.4
883.2	1141.9	1471.7	1880.5	2372.9	2921.8	3486.6
855.0	1141.9	1516.8	1985.5	2514.1	3094.6	3718.1
787.2	1102.3	1521.3	2046.5	2622.5	3240.3	3907.8
663.0	988.3	1445.7	2039.8	2656.4	3286.7	4007.2
464.2	737.5	1206.2	1843.2	2511.9	3177.1	3897.7
288.0	459.7	864.0	1425.3	2090.6	2696.0	3468.5
202.2	279.0	494.7	902.4	1438.9	2009.3	2589.8
168.3	205.6	282.4	497.0	865.1	1237.9	1628.6
145.7	166.0	196.5	283.5	440.5	659.6	906.9
108.4	120.8	135.5	186.4	277.8	407.7	620.1
44.0	49.7	55.3	74.5	170.5	234.9	251.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)