

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: P298987

Luminaire Tested: **GLNA-AF-03-LED-E1-T2-7027-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P298987  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24139)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-03-LED-E1-T2-7027-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10171.8 lumens  
Efficiency: N/A  
Efficacy: 106.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B2 - U0 - G2

Input Watts (W): 96  
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

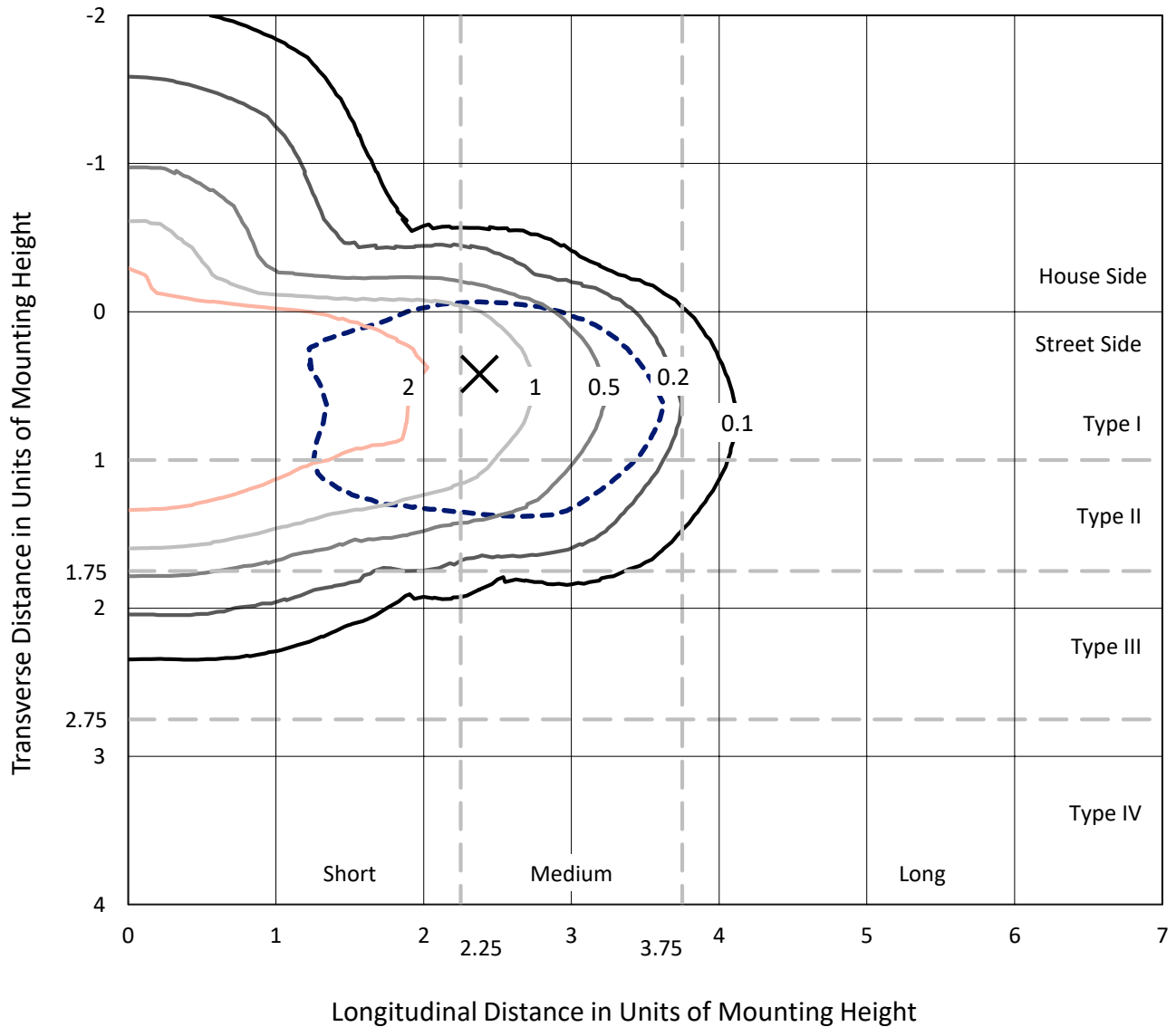


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### Iso-Footcandle Lines of Horizontal Illumination

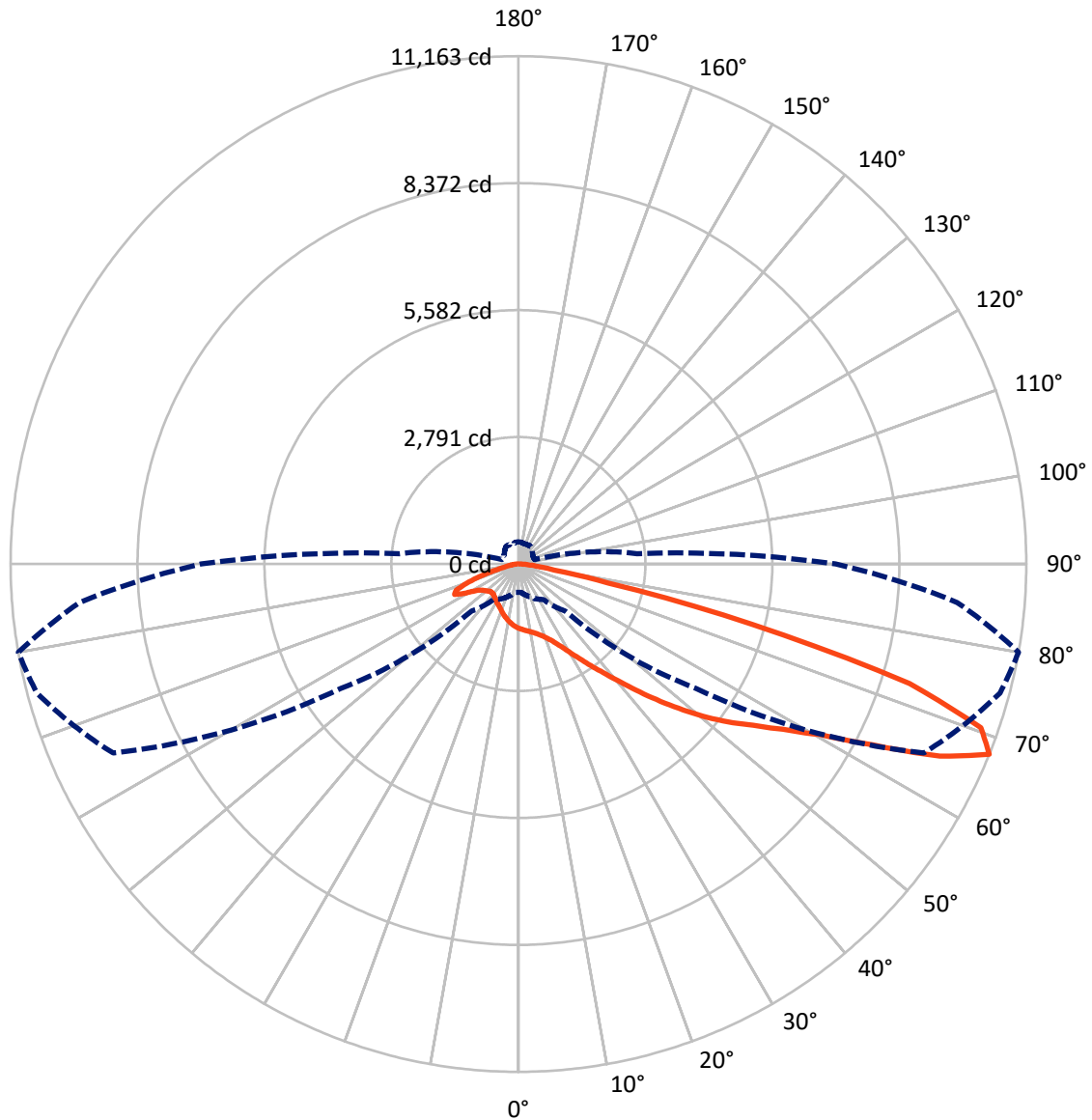
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.3 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 80-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1873.3	0.0	1873.3
	% Fixture	18.4	0.0	18.4
<b>Street Side</b>	Lumens	8298.5	0.0	8298.5
	% Fixture	81.6	0.0	81.6
<b>Total</b>	Lumens	10171.8	0.0	10171.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.4	1.3
10°-20°	375.5	3.7
20°-30°	621.6	6.1
30°-40°	1016.7	10.0
40°-50°	1641.6	16.1
50°-60°	2370.0	23.3
60°-70°	2615.5	25.7
70°-80°	1205.6	11.9
80°-90°	195.0	1.9
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°	10171.8	100.0
0°-180°	10171.8	100.0



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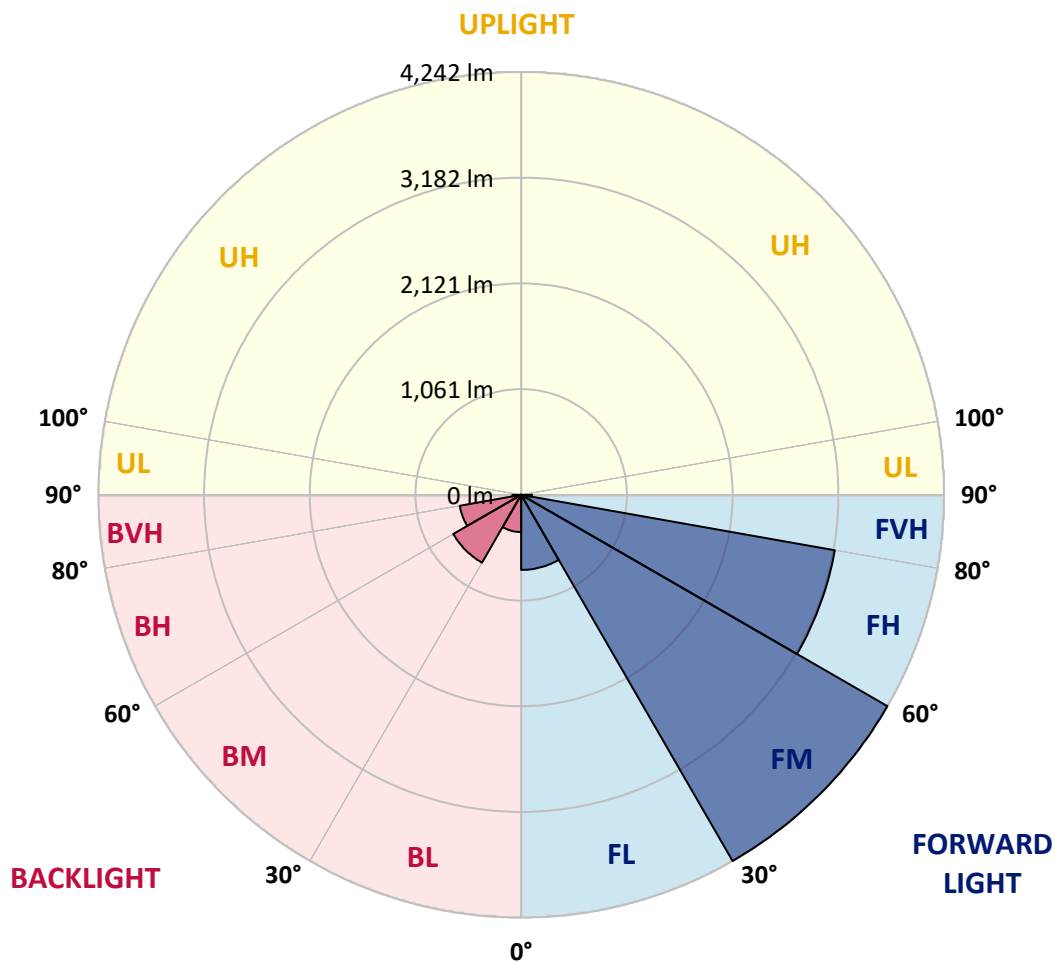
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	753.7	7.4			
FM	(30°-60°)	4242.4	41.7			
FH	(60°-80°)	3195.2	31.4			G2/5000
FVH	(80°-90°)	107.2	1.1			G2/225
BL	(0°-30°)	373.7	3.7	B1/500		
BM	(30°-60°)	786.0	7.7	B1/1000		
BH	(60°-80°)	625.8	6.2	B2/1000		G2/1000
BVH	(80°-90°)	87.8	0.9			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	80°	85°
0°	1413.2	1413.2	1413.2	1413.2	1413.2	1413.2	1413.2	1413.2	1413.2	1413.2	1413.2
2.5°	1545.9	1536.8	1538.3	1535.8	1528.3	1515.3	1501.3	1475.8	1449.2	1435.2	1424.2
5°	1675.1	1672.6	1669.0	1661.0	1642.0	1615.0	1581.4	1536.3	1487.8	1462.2	1437.7
7.5°	1771.7	1770.2	1765.7	1760.7	1742.2	1709.6	1659.0	1594.9	1524.3	1489.3	1451.2
10°	1779.7	1782.2	1785.7	1799.2	1801.8	1784.2	1732.6	1655.0	1562.4	1517.3	1468.7
12.5°	1711.6	1717.1	1730.6	1765.2	1801.8	1823.3	1796.7	1718.1	1607.0	1552.4	1490.8
15°	1621.5	1624.5	1641.0	1688.6	1754.2	1820.8	1845.8	1787.7	1664.5	1597.4	1523.8
17.5°	1582.9	1584.4	1595.9	1627.5	1688.6	1783.7	1873.4	1863.3	1735.2	1653.5	1564.4
20°	1563.4	1566.9	1583.4	1614.5	1653.0	1736.2	1877.4	1945.0	1819.3	1723.6	1615.5
22.5°	1619.0	1617.5	1623.5	1639.0	1671.6	1721.6	1874.4	2029.1	1926.4	1813.8	1682.1
25°	1748.7	1754.2	1743.7	1726.1	1736.7	1771.7	1890.4	2120.2	2060.6	1929.4	1769.2
27.5°	1933.5	1927.9	1912.4	1871.4	1849.8	1864.8	1943.5	2218.4	2227.4	2081.7	1884.4
30°	2117.7	2113.2	2098.2	2048.1	2004.1	1991.5	2046.6	2331.1	2426.2	2264.5	2025.6
32.5°	2309.0	2304.0	2290.0	2239.9	2186.8	2157.8	2193.4	2461.3	2660.6	2482.8	2191.8
35°	2544.9	2535.4	2505.8	2436.2	2384.1	2361.6	2378.1	2625.0	2931.0	2741.2	2393.7
37.5°	2766.7	2781.2	2751.2	2655.1	2587.5	2579.4	2598.0	2824.8	3222.4	3030.1	2625.5
40°	2989.6	2992.1	2965.0	2886.4	2816.8	2803.8	2850.4	3067.2	3566.4	3375.7	2907.4
42.5°	3219.9	3224.9	3179.4	3106.7	3055.7	3058.2	3111.3	3351.1	3961.1	3782.8	3231.9
45°	3492.8	3500.3	3450.3	3355.1	3308.6	3402.2	3380.2	3669.6	4393.7	4245.5	3604.5
47.5°	3778.3	3789.8	3751.7	3662.6	3604.5	3733.2	3649.1	4022.6	4859.4	4741.7	4013.6
50°	3934.0	3950.5	3987.6	3981.1	3968.6	3947.0	3949.0	4401.2	5339.7	5258.5	4434.3
52.5°	3850.4	3849.9	3985.1	4149.3	4324.6	4337.6	4314.6	4800.3	5788.3	5763.8	4830.4
55°	3467.8	3493.8	3698.6	4016.6	4495.4	4794.3	4862.4	5257.5	6229.0	6257.6	5232.5
57.5°	2830.8	2852.4	3128.8	3572.0	4265.0	5065.7	5641.6	5922.0	6721.8	6855.0	5767.8
60°	1919.9	1946.0	2238.9	2771.2	3645.1	4914.5	6383.3	7107.9	7311.7	7614.6	6519.0
62.5°	1128.2	1151.8	1390.6	1748.2	2566.4	4211.9	6708.7	8794.9	8248.6	8760.9	7664.7
65°	776.7	792.7	908.9	1088.2	1474.8	2836.8	6305.1	9959.7	9690.3	10181.1	8993.2
67.5°	625.0	623.0	715.1	837.3	949.5	1462.7	4767.8	9828.0	10958.2	11163.1	9682.8
70°	514.8	512.8	575.4	676.5	758.7	823.8	2597.0	8293.7	10699.8	10783.0	9047.8
72.5°	430.7	432.7	472.7	547.8	622.5	620.4	1141.2	5834.4	8417.4	8992.2	7212.5
75°	363.6	364.6	391.1	444.2	505.3	499.8	618.9	3160.8	4893.0	5293.1	3998.1
77.5°	309.5	310.5	327.5	357.0	400.6	398.6	451.7	1365.6	2041.1	2016.1	1367.6
80°	275.9	275.9	283.9	289.4	313.5	304.5	335.0	656.0	862.8	796.7	545.8
82.5°	216.3	217.3	266.4	264.4	246.9	235.4	235.4	386.6	457.2	422.6	319.5
85°	121.7	121.2	171.8	207.3	217.3	165.8	164.3	216.3	248.9	219.3	154.7
87.5°	52.1	53.1	79.6	92.1	123.2	103.2	101.7	111.7	126.7	109.7	71.6
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1413.2	1413.2	1413.2	1413.2	1413.2	1413.2	1413.2	1413.2	1413.2	1413.2	1413.2
2.5°	1413.7	1400.6	1372.1	1336.5	1304.5	1283.5	1264.4	1236.9	1238.4	1219.4	1205.3
5°	1412.7	1385.6	1319.5	1240.9	1165.3	1110.7	1069.6	1032.6	1023.6	1006.0	995.5
7.5°	1413.7	1369.6	1258.4	1132.7	1039.1	970.0	934.9	915.4	910.9	904.9	905.4
10°	1417.2	1355.1	1191.3	1031.6	933.4	887.9	879.3	885.4	892.4	894.4	894.9
12.5°	1425.2	1342.0	1117.7	941.4	867.3	853.3	867.8	888.4	901.9	908.4	907.9
15°	1443.2	1332.0	1047.1	870.8	830.8	838.3	865.3	894.4	913.9	922.9	923.4
17.5°	1462.7	1317.5	974.5	816.7	803.7	822.8	856.3	890.4	914.4	924.4	926.4
20°	1488.3	1299.5	898.4	776.2	778.2	799.7	831.3	865.3	891.9	900.4	904.4
22.5°	1521.8	1280.0	831.8	743.1	749.1	765.7	790.2	819.8	842.8	846.8	850.3
25°	1566.9	1258.9	778.7	713.1	715.6	725.1	741.6	759.2	775.2	770.7	774.2
27.5°	1627.5	1240.9	739.1	685.5	681.0	683.0	691.6	697.1	705.6	693.1	694.6
30°	1698.6	1221.4	708.6	661.5	649.0	645.5	647.5	650.5	657.0	640.0	637.5
32.5°	1781.2	1197.8	680.0	640.5	623.0	615.9	616.9	625.0	650.0	639.5	634.0
35°	1877.4	1171.3	650.0	617.4	605.4	595.4	594.4	619.4	694.1	687.6	682.5
37.5°	1990.0	1144.7	619.9	591.4	592.4	581.4	577.9	606.4	702.6	677.0	673.5
40°	2133.3	1130.7	594.4	563.9	576.4	574.9	567.9	582.4	646.5	599.9	593.9
42.5°	2310.5	1132.7	575.4	534.3	557.4	573.4	562.4	562.9	585.9	550.8	545.3
45°	2529.4	1156.3	561.9	510.8	535.8	571.9	560.4	552.3	554.3	535.8	532.8
47.5°	2784.8	1204.8	552.3	491.3	515.3	566.4	559.9	549.3	544.8	534.8	532.3
50°	3068.7	1275.4	545.3	472.7	496.8	557.4	560.4	546.3	541.3	537.3	535.8
52.5°	3347.6	1356.1	534.8	456.7	482.2	546.3	561.9	543.3	537.8	534.8	533.3
55°	3658.6	1456.7	518.8	443.2	470.2	532.3	561.9	538.8	532.8	533.3	532.8
57.5°	4078.7	1619.5	499.8	431.7	455.7	515.3	552.3	533.8	526.3	526.8	527.3
60°	4735.2	1906.4	476.7	420.1	437.7	495.3	539.3	522.8	515.3	517.3	517.8
62.5°	5700.7	2327.6	446.7	403.1	418.6	473.7	521.3	508.8	501.3	506.3	506.3
65°	6704.2	2699.1	409.6	381.6	398.6	450.2	498.8	491.3	483.7	495.3	494.8
67.5°	6974.2	2616.0	372.6	358.0	378.6	424.1	471.7	467.7	463.7	483.7	482.7
70°	6195.5	2100.2	338.5	334.0	356.5	396.1	442.7	442.7	440.2	455.2	451.7
72.5°	4720.2	1489.3	306.0	308.5	331.5	365.6	411.1	414.6	410.6	418.1	415.1
75°	2526.9	852.3	273.4	280.4	300.5	334.5	376.1	379.6	377.1	376.6	378.1
77.5°	839.8	416.6	239.4	250.4	267.9	302.5	339.5	345.0	339.0	338.0	337.5
80°	374.1	261.9	201.8	216.3	231.9	265.9	301.0	305.5	299.0	308.0	296.5
82.5°	240.4	172.3	161.7	177.8	192.8	229.4	262.4	263.4	257.4	299.0	254.9
85°	116.7	106.7	121.7	136.2	149.2	180.3	217.3	217.8	202.8	184.8	178.3
87.5°	58.1	62.1	81.1	94.1	100.7	123.7	158.2	155.2	148.7	135.2	124.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)