

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: STREETWORKS

Report Number: P190967

Luminaire Tested: **GAN-AF-09-LED-U-AFL-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P190967  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-AF-09-LED-U-AFL-800  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 45120.3 lumens  
Efficiency: N/A  
Efficacy: 120.6 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B3 - U0 - G3

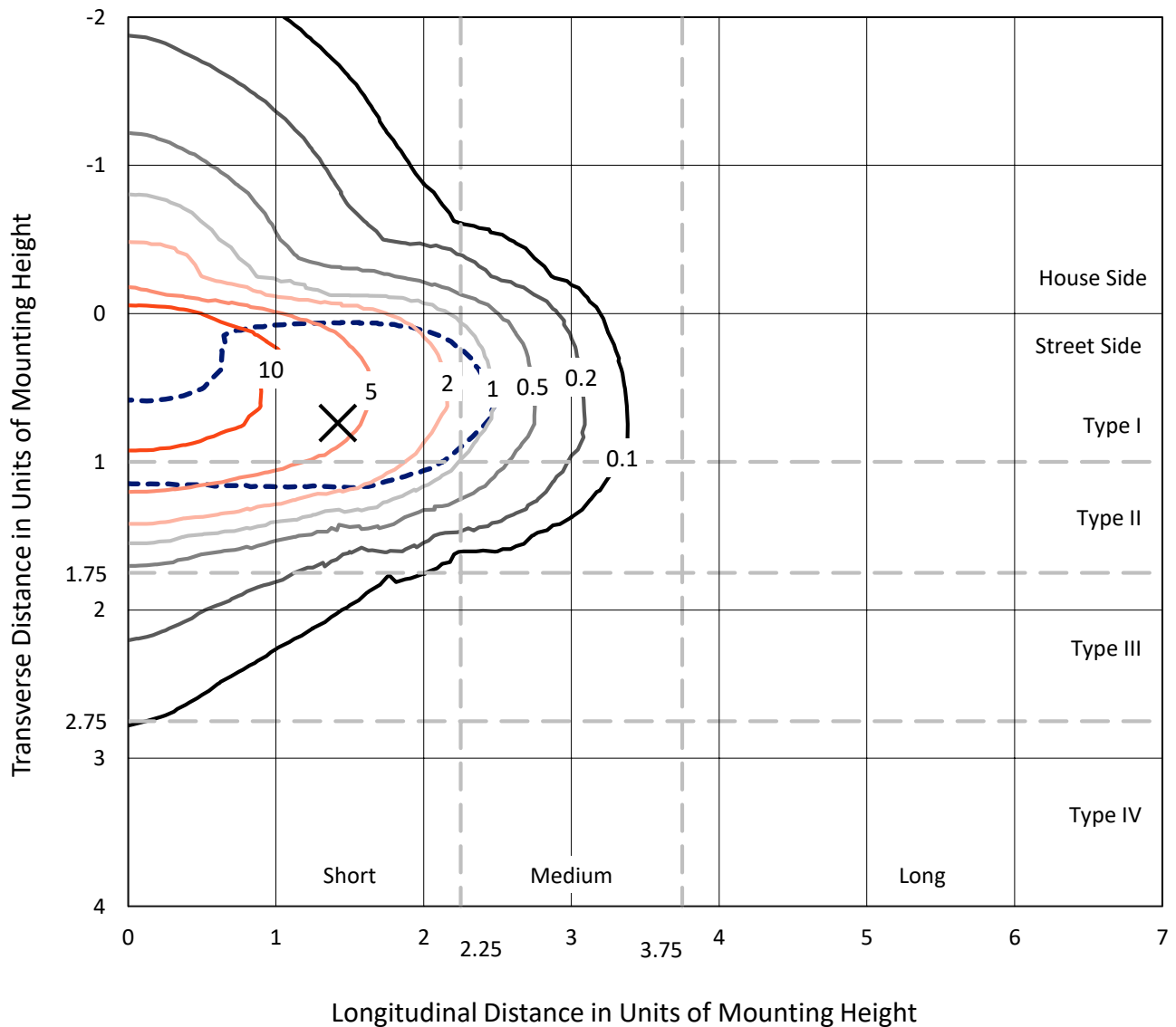
Input Watts (W): 374  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

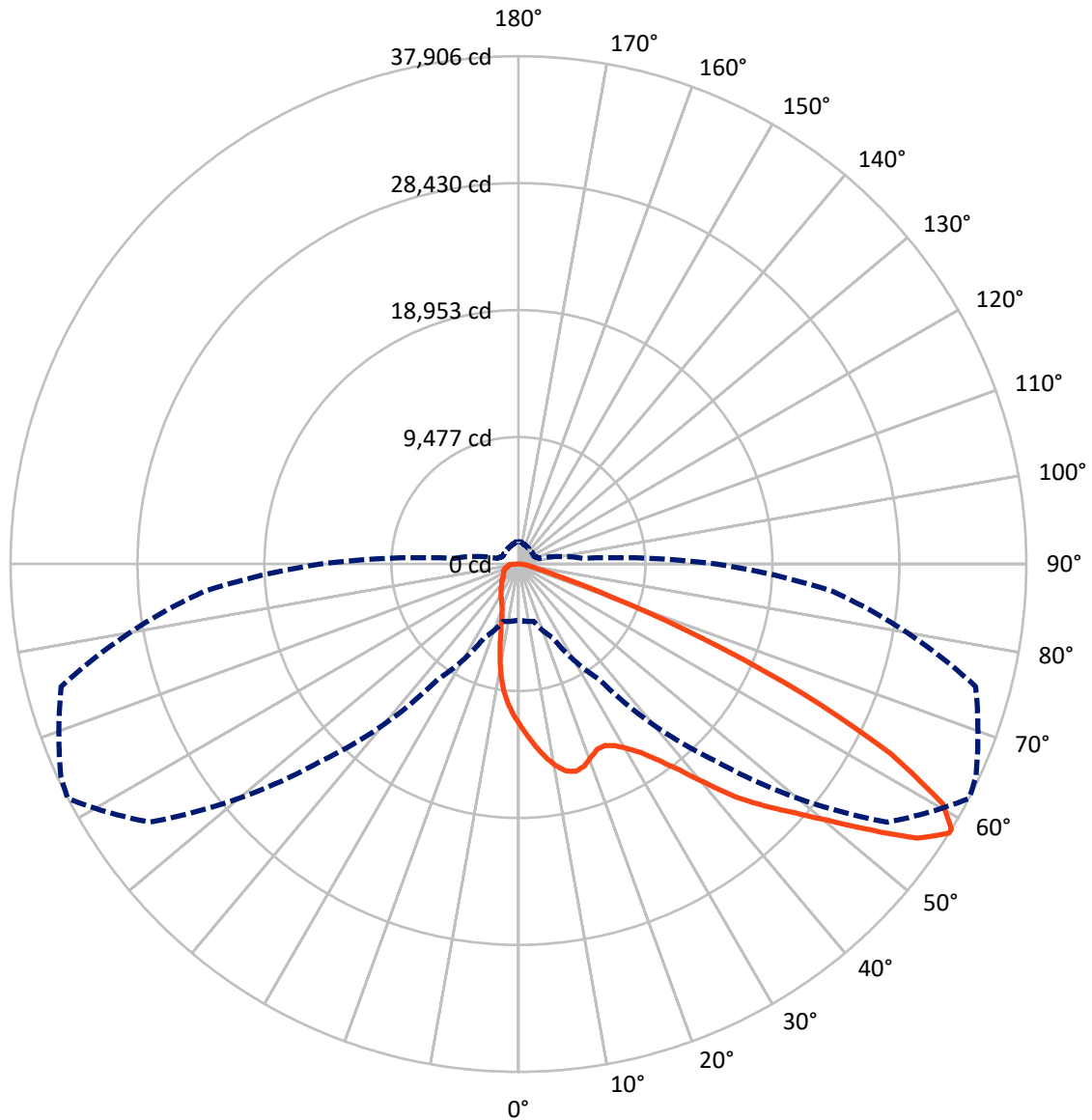
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 16.2 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral    - - - Horizontal Cone Through 58-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6881.0	0.0	6881.0
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	38239.3	0.0	38239.3
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	45120.3	0.0	45120.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1071.9	2.4
10°-20°	2740.0	6.1
20°-30°	4429.2	9.8
30°-40°	7031.4	15.6
40°-50°	10288.4	22.8
50°-60°	10760.8	23.8
60°-70°	6357.5	14.1
70°-80°	1790.9	4.0
80°-90°	650.2	1.4
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°	45120.3	100.0
0°-180°	45120.3	100.0



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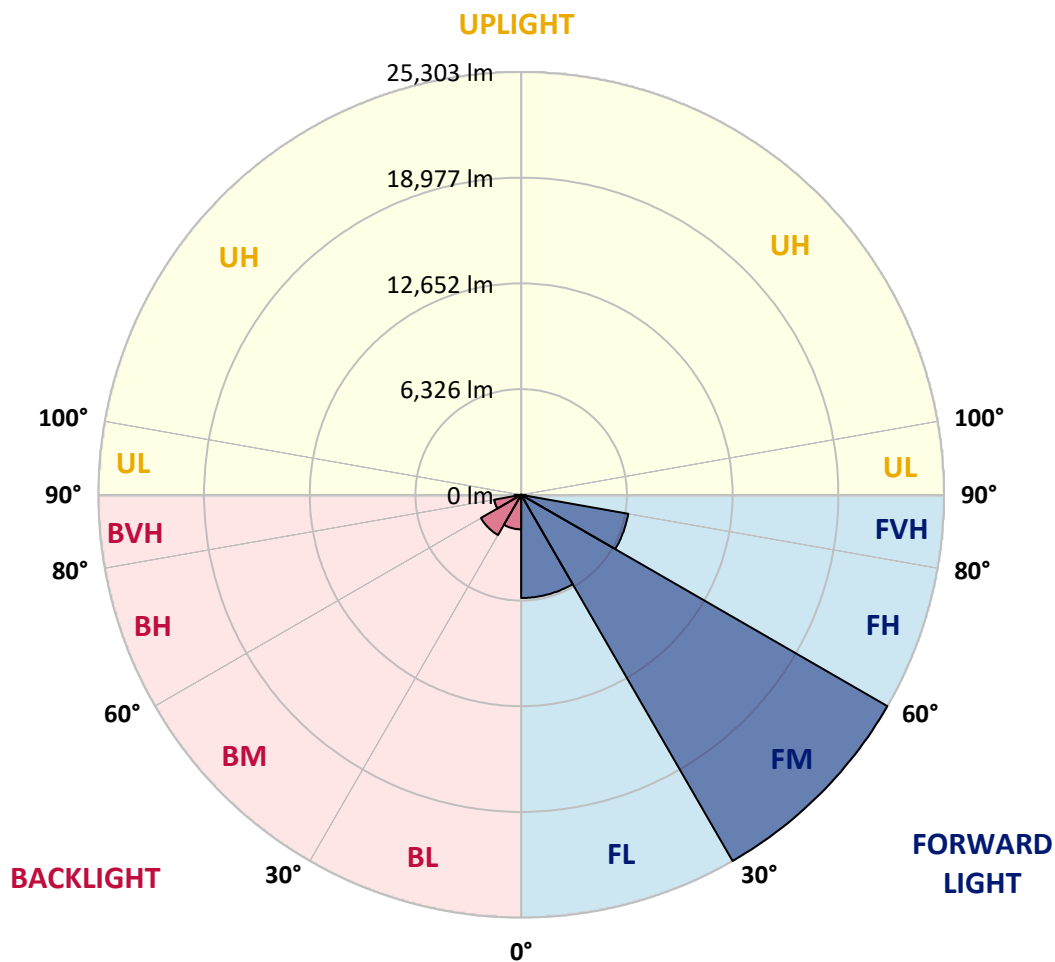
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6173.0	13.7			
FM (30°-60°)	25303.2	56.1			
FH (60°-80°)	6506.5	14.4			G3/7500
FVH (80°-90°)	256.5	0.6			G3/500
BL (0°-30°)	2068.1	4.6	B3/2500		
BM (30°-60°)	2777.4	6.2	B3/5000		
BH (60°-80°)	1641.9	3.6	B3/2500		G3/2500
BVH (80°-90°)	393.7	0.9			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	11985.3	11985.3	11985.3	11985.3	11985.3	11985.3	11985.3	11985.3	11985.3	11985.3	11985.3
2.5°	13695.7	13585.2	13515.0	13453.4	13372.7	13200.6	12969.0	12822.4	12748.0	12495.2	12195.6
5°	15038.4	14940.7	14868.5	14785.6	14641.1	14371.3	13997.3	13699.9	13553.3	13047.6	12448.5
7.5°	14724.0	14764.4	14889.8	15108.6	15295.6	15259.5	14925.9	14547.7	14354.4	13651.1	12741.7
10°	12828.8	12898.9	13115.7	13627.6	14456.3	15306.2	15565.3	15304.1	15108.6	14248.1	13043.3
12.5°	12448.5	12446.3	12463.3	12599.3	13092.2	14288.5	15586.6	15850.1	15733.2	14817.4	13351.5
15°	12603.6	12607.9	12595.1	12652.5	12805.4	13279.2	14936.5	16060.4	16143.3	15391.1	13670.2
17.5°	13011.5	13000.9	12952.0	12952.0	13007.2	13192.1	14171.6	15864.9	16247.4	15898.9	13950.6
20°	13695.7	13646.8	13517.2	13398.2	13338.7	13438.6	13857.1	15414.5	16066.8	16343.0	14182.2
22.5°	14524.3	14486.0	14275.7	14020.8	13814.6	13812.5	14018.6	15021.4	15754.5	16761.6	14377.7
25°	15595.1	15533.5	15221.2	14813.2	14452.0	14313.9	14371.3	15002.3	15584.5	17216.3	14551.9
27.5°	16852.9	16740.3	16370.6	15782.1	15251.0	14972.6	14889.8	15348.7	15739.6	17779.3	14794.1
30°	18378.4	18248.8	17775.0	17008.0	16258.1	15801.2	15624.9	15962.6	16253.8	18465.6	15182.9
32.5°	20114.3	19927.3	19379.2	18533.5	17547.7	16850.8	16563.9	16774.3	17005.9	19292.0	15669.5
35°	22513.1	22290.0	21497.4	20331.0	19217.7	18259.5	17800.6	17953.5	18178.8	20524.4	16372.7
37.5°	24149.1	24049.2	23522.2	22425.9	21214.9	20112.1	19402.5	19491.8	19619.3	22064.7	17273.6
40°	24134.2	24174.6	24185.2	24195.8	23371.5	22315.5	21552.8	21459.3	21433.7	23756.0	18297.7
42.5°	22925.2	23091.0	23626.4	24712.1	25213.5	24729.1	24030.0	23760.3	23626.4	25748.9	19383.4
45°	21074.6	21163.9	22166.7	24287.2	26156.9	27119.3	26590.3	25740.4	25498.3	27580.4	20284.3
47.5°	20120.6	20218.4	20849.5	23161.0	26146.2	29050.7	29356.6	27737.6	27304.2	29173.9	21061.9
50°	17849.4	18053.3	18848.0	21202.1	25192.3	29938.8	32248.3	30117.3	29220.7	30724.9	21841.6
52.5°	13678.7	13993.1	14883.3	17981.1	22772.3	29499.0	34562.1	33002.5	31736.2	32331.2	22511.0
55°	8628.3	8862.0	9609.9	12699.2	18217.0	27210.7	35439.6	36123.8	34997.6	33852.4	23091.0
57.5°	4691.3	4795.4	5075.9	7011.4	11849.4	22151.9	34160.5	37899.9	37432.5	35144.3	23528.7
58°	4198.4	4268.5	4442.7	6076.5	10508.7	20768.7	33593.2	37906.4	37672.6	35333.3	23562.6
60°	3114.8	3078.7	2923.6	3467.5	5849.2	14347.9	30164.1	36389.3	37075.6	35564.9	23396.9
62.5°	2736.6	2649.4	2332.9	2296.7	2844.9	6609.9	23080.3	31171.2	32792.2	34243.4	22389.8
65°	2570.9	2477.4	2069.4	1937.7	2052.4	2796.0	13595.8	23377.8	25411.1	30236.3	19814.8
67.5°	2447.6	2326.5	1901.6	1721.0	1729.5	1848.5	5449.8	14724.0	17012.3	22957.2	15412.4
70°	2328.6	2196.9	1759.3	1551.0	1502.1	1461.8	2167.1	7370.5	9446.3	14500.9	9826.7
72.5°	2201.2	2071.6	1633.9	1417.2	1321.6	1187.6	1415.0	3014.9	4211.1	6860.6	4457.6
75°	2016.3	1899.4	1508.5	1298.2	1162.2	983.8	1068.7	1574.4	1888.9	2732.3	2148.1
77.5°	1788.9	1693.4	1368.3	1200.4	1030.4	798.9	822.2	1092.1	1211.1	1563.8	1276.9
80°	1285.4	1319.4	1217.4	1079.3	917.9	648.0	631.1	796.8	860.5	1004.9	830.7
82.5°	903.0	922.1	1007.1	881.8	758.5	509.9	465.3	560.9	599.1	660.7	448.3
85°	622.6	601.3	690.5	614.1	548.2	339.9	318.8	380.3	403.7	410.1	231.6
87.5°	374.0	374.0	399.5	329.3	295.3	176.4	172.1	216.8	231.6	221.0	127.5
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	11985.3	11985.3	11985.3	11985.3	11985.3	11985.3	11985.3	11985.3	11985.3	11985.3	11985.3
2.5°	12017.1	11866.3	11545.5	11288.4	10963.4	10625.5	10436.5	10234.5	10096.4	9996.6	10156.0
5°	12108.6	11800.5	11137.6	10508.7	9813.9	9091.5	8543.3	8033.4	7678.6	7457.6	7665.8
7.5°	12253.0	11779.2	10723.3	9648.2	8401.0	7198.4	6123.3	5449.8	5056.8	4863.4	4984.5
10°	12418.7	11745.2	10236.7	8481.7	6697.0	5182.1	4378.9	4107.0	4017.7	3981.6	3998.6
12.5°	12556.8	11673.0	9639.7	7070.9	5029.1	4092.1	3860.5	3854.2	3873.3	3877.5	3883.9
15°	12654.5	11566.7	8753.7	5600.7	4022.0	3728.8	3716.1	3754.3	3790.4	3805.3	3813.8
17.5°	12720.4	11347.9	7752.9	4427.8	3603.4	3552.5	3582.2	3631.1	3669.3	3680.0	3688.5
20°	12714.1	11027.1	6561.0	3692.6	3376.1	3376.1	3427.1	3465.3	3467.5	3454.7	3461.1
22.5°	12648.2	10587.2	5405.2	3301.8	3174.2	3210.4	3261.4	3225.3	3076.5	2978.8	2985.2
25°	12537.7	10062.5	4415.1	3053.2	2987.3	3051.1	3036.1	2764.2	2551.8	2456.1	2456.1
27.5°	12440.0	9442.0	3654.5	2836.4	2800.3	2878.9	2615.5	2369.1	2279.7	2235.1	2220.3
30°	12369.8	8772.8	3146.6	2628.3	2624.0	2566.6	2269.1	2201.2	2186.3	2150.1	2137.5
32.5°	12386.8	8095.0	2821.6	2445.5	2460.4	2196.9	2103.4	2118.3	2105.5	2067.3	2050.3
35°	12527.1	7451.3	2609.1	2279.7	2235.1	1984.4	2005.7	2033.3	2029.0	1975.9	1959.0
37.5°	12777.8	6841.5	2468.9	2141.6	1950.5	1878.2	1912.2	1954.7	1944.1	1908.0	1895.2
40°	13041.3	6267.8	2354.1	2033.3	1782.6	1806.0	1835.7	1859.1	1869.7	1880.4	1871.8
42.5°	13298.4	5668.7	2213.9	1922.8	1712.5	1738.0	1750.8	1774.1	1831.5	1871.8	1869.7
45°	13451.3	5105.5	2069.4	1765.6	1657.3	1672.1	1663.6	1710.4	1780.4	1846.3	1848.5
47.5°	13621.3	4667.9	1954.7	1621.2	1604.1	1614.7	1589.3	1636.0	1699.7	1780.4	1788.9
50°	13827.4	4406.6	1863.3	1506.4	1531.9	1531.9	1525.5	1568.0	1657.3	1750.8	1767.8
52.5°	14061.1	4355.6	1786.9	1423.5	1459.6	1457.5	1463.9	1527.7	1625.4	1716.7	1731.7
55°	14345.8	4493.7	1704.0	1362.0	1389.6	1398.1	1419.2	1491.6	1574.4	1678.5	1684.9
57.5°	14677.3	4774.1	1638.2	1313.1	1325.8	1353.5	1387.4	1453.3	1542.5	1657.3	1663.6
58°	14732.5	4833.6	1627.5	1308.8	1313.1	1344.9	1383.1	1446.9	1536.2	1661.5	1667.8
60°	14734.6	5031.3	1604.1	1289.6	1264.2	1317.3	1359.8	1423.5	1525.5	1676.4	1691.2
62.5°	14212.0	5029.1	1587.1	1262.0	1213.2	1279.1	1327.9	1402.3	1514.9	1712.5	1742.2
65°	12514.4	4570.1	1506.4	1219.6	1172.8	1245.0	1300.3	1387.4	1544.7	1869.7	1888.9
67.5°	9788.4	3745.8	1355.5	1160.0	1119.7	1211.1	1283.3	1385.3	1576.5	1905.9	1918.5
70°	6471.8	2802.5	1189.8	1092.1	1064.5	1170.7	1291.8	1457.5	1540.4	1829.3	1795.4
72.5°	3359.1	1967.4	1056.0	1007.1	1000.8	1134.6	1415.0	1449.0	1504.2	1721.0	1678.5
75°	1763.5	1366.2	939.1	913.6	924.2	1126.1	1670.0	1410.8	1457.5	1646.6	1727.4
77.5°	1079.3	1102.7	839.2	828.6	849.9	1100.6	1667.8	1362.0	1389.6	1514.9	1604.1
80°	722.4	894.5	762.7	764.9	779.8	1007.1	1497.9	1285.4	1306.7	1432.0	1523.4
82.5°	456.8	529.1	692.6	728.8	709.6	830.7	1272.7	1170.7	1200.4	1638.2	1731.7
85°	231.6	331.4	601.3	701.1	639.5	582.2	1032.6	1026.2	1041.1	1181.3	1234.4
87.5°	106.3	182.7	469.5	611.9	482.3	363.4	750.0	760.7	820.1	839.2	839.2
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)