

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: P300470

Luminaire Tested: **GLNA-AF-10-LED-E1-AFL-7030-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300470  
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: MCGRAW-EDISON  
Catalog Number: GLNA-AF-10-LED-E1-AFL-7030-600  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(10) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

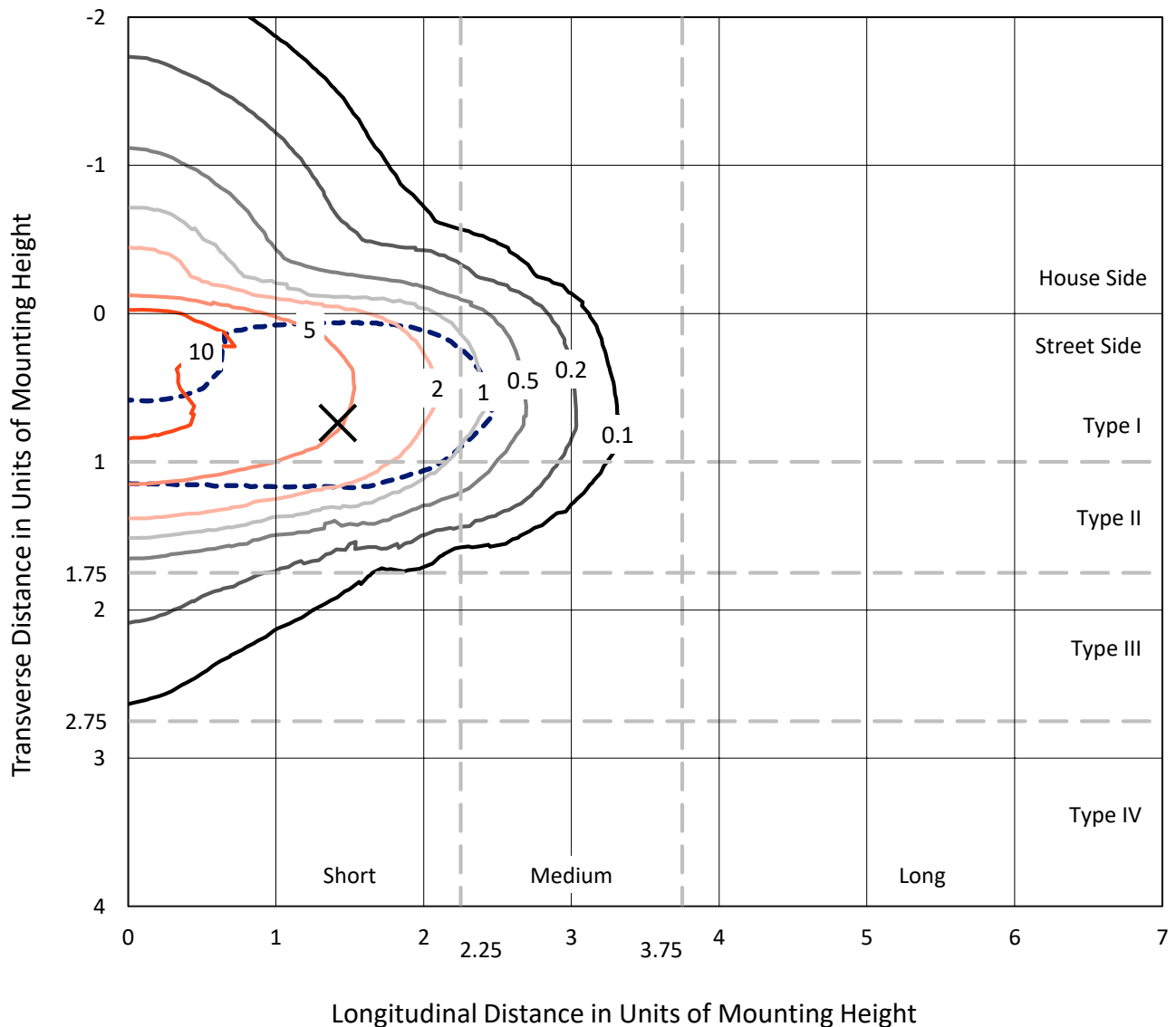
Lumens per Lamp: N/A  
Luminaire Lumens: 38383.9 lumens  
Efficiency: N/A  
Efficacy: 118.8 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 323  
Input Voltage (V): NR  
Input Current (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

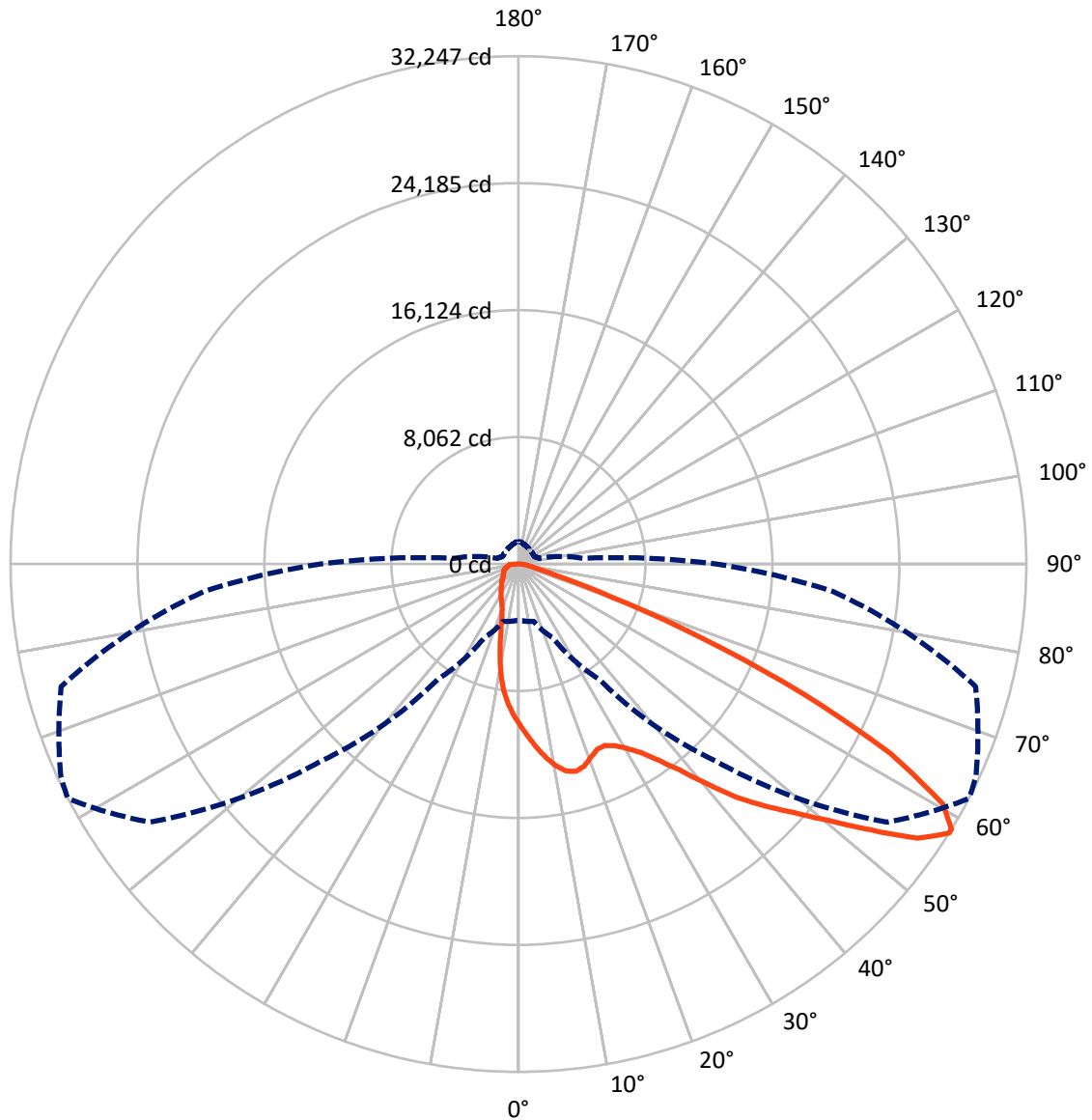
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.8 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	5853.7	0.0	5853.7
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	32530.2	0.0	32530.2
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	38383.9	0.0	38383.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	911.9	2.4
10°-20°	2330.9	6.1
20°-30°	3768.0	9.8
30°-40°	5981.6	15.6
40°-50°	8752.4	22.8
50°-60°	9154.2	23.8
60°-70°	5408.3	14.1
70°-80°	1523.6	4.0
80°-90°	553.1	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°	38383.9	100.0
0°-180°	38383.9	100.0



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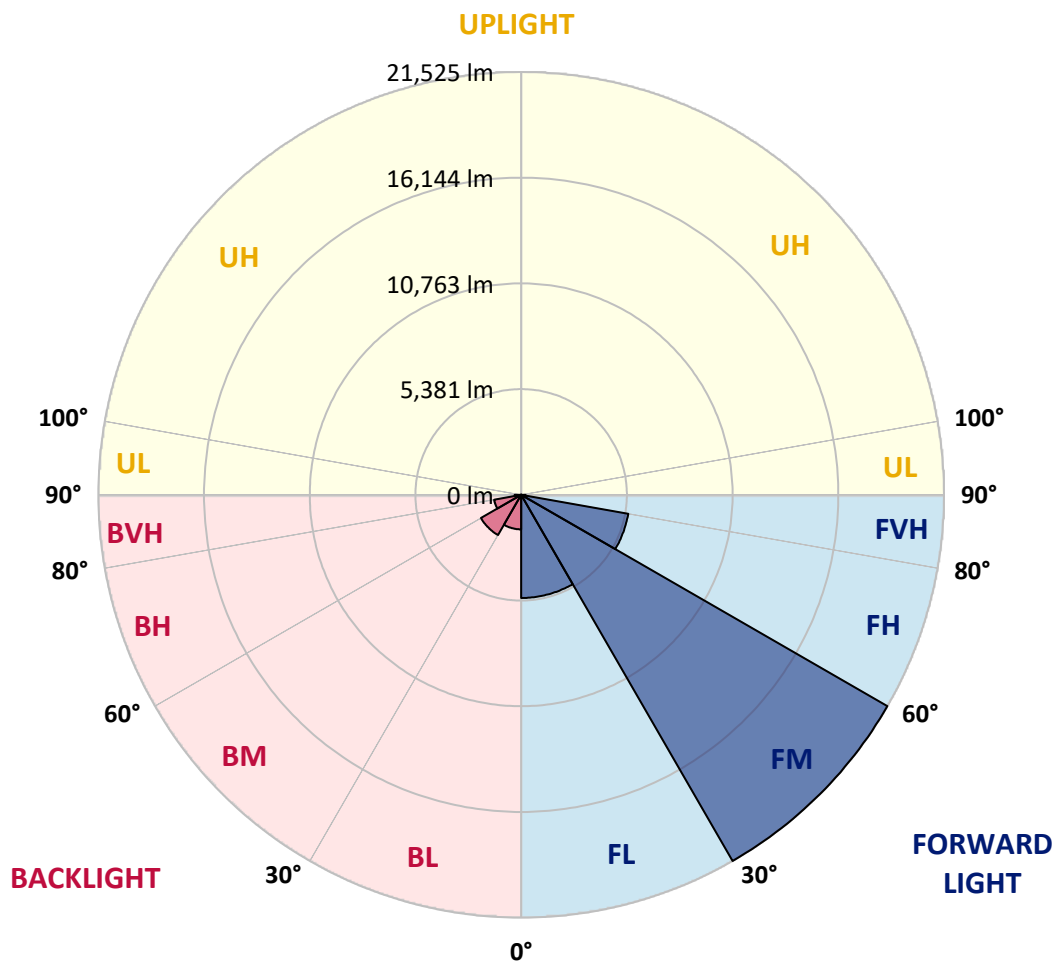
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5251.4	13.7			
FM (30°-60°)	21525.5	56.1			
FH (60°-80°)	5535.1	14.4			G3/7500
FVH (80°-90°)	218.2	0.6			G2/225
BL (0°-30°)	1759.3	4.6	B3/2500		
BM (30°-60°)	2362.7	6.2	B2/2500		
BH (60°-80°)	1396.7	3.6	B3/2500		G3/2500
BVH (80°-90°)	334.9	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°	10195.9	10195.9	10195.9	10195.9	10195.9	10195.9	10195.9	10195.9	10195.9	10195.9	10195.9
2.5°	11650.9	11556.9	11497.3	11444.9	11376.2	11229.8	11032.8	10908.1	10844.8	10629.7	10374.8
5°	12793.2	12710.1	12648.6	12578.1	12455.2	12225.7	11907.6	11654.5	11529.8	11099.6	10589.9
7.5°	12525.7	12560.1	12666.7	12852.9	13011.9	12981.2	12697.4	12375.7	12211.2	11613.0	10839.4
10°	10913.5	10973.1	11157.5	11593.1	12298.0	13021.0	13241.5	13019.2	12852.9	12120.9	11096.0
12.5°	10589.9	10588.1	10602.6	10718.3	11137.6	12155.2	13259.6	13483.7	13384.3	12605.3	11358.1
15°	10721.9	10725.5	10714.7	10763.5	10893.6	11296.7	12706.5	13662.6	13733.1	13093.3	11629.2
17.5°	11068.9	11059.9	11018.3	11018.3	11065.3	11222.6	12055.8	13496.3	13821.7	13525.3	11867.8
20°	11650.9	11609.3	11499.1	11397.9	11347.3	11432.2	11788.3	13113.2	13668.1	13903.0	12064.8
22.5°	12355.8	12323.3	12144.4	11927.5	11752.1	11750.3	11925.7	12778.8	13402.4	14259.1	12231.1
25°	13266.8	13214.4	12948.7	12601.6	12294.4	12176.9	12225.7	12762.5	13257.8	14645.9	12379.3
27.5°	14336.8	14241.0	13926.5	13425.9	12974.0	12737.2	12666.7	13057.1	13389.7	15124.9	12585.4
30°	15634.6	15524.3	15121.3	14468.8	13830.7	13442.1	13292.1	13579.5	13827.1	15708.7	12916.1
32.5°	17111.3	16952.2	16485.9	15766.5	14927.9	14335.0	14091.0	14269.9	14467.0	16411.8	13330.1
35°	19151.9	18962.1	18287.9	17295.6	16348.5	15533.4	15142.9	15273.1	15464.7	17460.1	13928.3
37.5°	20543.6	20458.7	20010.4	19077.8	18047.5	17109.5	16505.8	16581.7	16690.1	18770.5	14694.7
40°	20531.0	20565.3	20574.4	20583.4	19882.1	18983.8	18334.9	18255.4	18233.7	20209.3	15565.9
42.5°	19502.5	19643.5	20099.0	21022.6	21449.2	21037.1	20442.4	20212.9	20099.0	21904.7	16489.5
45°	17928.2	18004.2	18857.3	20661.1	22251.7	23070.5	22620.4	21897.4	21691.4	23462.7	17255.9
47.5°	17116.7	17199.8	17736.7	19703.2	22242.7	24713.5	24973.7	23596.5	23227.7	24818.3	17917.4
50°	15184.5	15358.0	16034.0	18036.7	21431.1	25469.0	27433.7	25620.8	24858.1	26137.8	18580.7
52.5°	11636.5	11904.0	12661.3	15296.6	19372.4	25094.8	29402.0	28075.4	26998.1	27504.2	19150.1
55°	7340.1	7538.9	8175.2	10803.2	15497.2	23148.2	30148.5	30730.5	29772.6	28798.3	19643.5
57.5°	3990.9	4079.4	4318.0	5964.6	10080.2	18844.6	29060.4	32241.6	31843.9	29897.3	20015.9
58°	3571.6	3631.2	3779.4	5169.4	8939.7	17668.0	28577.8	32247.0	32048.2	30058.1	20044.8
60°	2649.7	2619.0	2487.1	2949.8	4976.0	12205.8	25660.6	30956.5	31540.3	30255.2	19903.8
62.5°	2328.0	2253.9	1984.6	1953.9	2420.2	5623.0	19634.5	26517.3	27896.4	29130.9	19047.1
65°	2187.0	2107.5	1760.5	1648.4	1746.0	2378.6	11566.0	19887.5	21617.3	25722.0	16856.4
67.5°	2082.2	1979.2	1617.7	1464.0	1471.3	1572.5	4636.1	12525.7	14472.4	19529.7	13111.4
70°	1981.0	1868.9	1496.6	1319.4	1277.9	1243.5	1843.6	6270.1	8036.0	12335.9	8359.5
72.5°	1872.5	1762.3	1389.9	1205.6	1124.2	1010.4	1203.8	2564.8	3582.4	5836.3	3792.1
75°	1715.3	1615.9	1283.3	1104.4	988.7	836.9	909.2	1339.3	1606.8	2324.4	1827.3
77.5°	1521.9	1440.5	1164.0	1021.2	876.6	679.6	699.5	929.0	1030.3	1330.3	1086.3
80°	1093.5	1122.4	1035.7	918.2	780.8	551.3	536.8	677.8	732.0	854.9	706.7
82.5°	768.2	784.4	856.7	750.1	645.3	433.8	395.8	477.2	509.7	562.1	381.4
85°	529.6	511.5	587.4	522.4	466.3	289.2	271.1	323.5	343.4	348.8	197.0
87.5°	318.1	318.1	339.8	280.2	251.2	150.0	146.4	184.4	197.0	188.0	108.4
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°	10195.9	10195.9	10195.9	10195.9	10195.9	10195.9	10195.9	10195.9	10195.9	10195.9	10195.9
2.5°	10223.0	10094.7	9821.8	9603.1	9326.5	9039.1	8878.3	8706.6	8589.1	8504.1	8639.7
5°	10300.7	10038.7	9474.7	8939.7	8348.7	7734.1	7267.8	6834.0	6532.2	6344.2	6521.3
7.5°	10423.7	10020.6	9122.3	8207.7	7146.7	6123.7	5209.1	4636.1	4301.8	4137.3	4240.3
10°	10564.6	9991.7	8708.4	7215.4	5697.1	4408.4	3725.2	3493.8	3417.9	3387.2	3401.6
12.5°	10682.1	9930.2	8200.5	6015.2	4278.3	3481.2	3284.2	3278.7	3295.0	3298.6	3304.0
15°	10765.3	9839.8	7446.8	4764.5	3421.5	3172.1	3161.3	3193.8	3224.5	3237.2	3244.4
17.5°	10821.3	9653.7	6595.4	3766.8	3065.5	3022.1	3047.4	3089.0	3121.5	3130.5	3137.8
20°	10815.9	9380.7	5581.5	3141.4	2872.1	2872.1	2915.4	2948.0	2949.8	2938.9	2944.4
22.5°	10759.8	9006.6	4598.2	2808.8	2700.4	2731.1	2774.5	2743.7	2617.2	2534.1	2539.5
25°	10665.9	8560.2	3755.9	2597.3	2541.3	2595.5	2582.9	2351.5	2170.8	2089.4	2089.4
27.5°	10582.7	8032.4	3108.8	2413.0	2382.2	2449.1	2225.0	2015.3	1939.4	1901.5	1888.8
30°	10523.1	7463.0	2676.9	2235.8	2232.2	2183.4	1930.4	1872.5	1859.9	1829.2	1818.3
32.5°	10537.5	6886.4	2400.3	2080.4	2093.0	1868.9	1789.4	1802.0	1791.2	1758.7	1744.2
35°	10656.8	6338.8	2219.6	1939.4	1901.5	1688.2	1706.2	1729.7	1726.1	1680.9	1666.5
37.5°	10870.1	5820.0	2100.3	1821.9	1659.3	1597.8	1626.7	1662.9	1653.8	1623.1	1612.3
40°	11094.2	5332.0	2002.7	1729.7	1516.5	1536.3	1561.6	1581.5	1590.6	1599.6	1592.4
42.5°	11312.9	4822.3	1883.4	1635.8	1456.8	1478.5	1489.4	1509.2	1558.0	1592.4	1590.6
45°	11443.1	4343.3	1760.5	1502.0	1409.8	1422.5	1415.2	1455.0	1514.7	1570.7	1572.5
47.5°	11587.7	3971.0	1662.9	1379.1	1364.6	1373.7	1352.0	1391.7	1446.0	1514.7	1521.9
50°	11763.0	3748.7	1585.1	1281.5	1303.2	1303.2	1297.8	1333.9	1409.8	1489.4	1503.8
52.5°	11961.8	3705.3	1520.1	1211.0	1241.7	1239.9	1245.3	1299.6	1382.7	1460.4	1473.1
55°	12204.0	3822.8	1449.6	1158.6	1182.1	1189.3	1207.4	1268.8	1339.3	1427.9	1433.3
57.5°	12486.0	4061.4	1393.6	1117.0	1127.9	1151.4	1180.3	1236.3	1312.2	1409.8	1415.2
58°	12533.0	4112.0	1384.5	1113.4	1117.0	1144.1	1176.7	1230.9	1306.8	1413.4	1418.9
60°	12534.8	4280.1	1364.6	1097.1	1075.4	1120.6	1156.8	1211.0	1297.8	1426.1	1438.7
62.5°	12090.1	4278.3	1350.2	1073.6	1032.1	1088.1	1129.7	1192.9	1288.7	1456.8	1482.1
65°	10646.0	3887.9	1281.5	1037.5	997.7	1059.2	1106.2	1180.3	1314.0	1590.6	1606.8
67.5°	8327.0	3186.6	1153.2	986.9	952.5	1030.3	1091.7	1178.5	1341.1	1621.3	1632.1
70°	5505.5	2384.0	1012.2	929.0	905.5	995.9	1098.9	1239.9	1310.4	1556.2	1527.3
72.5°	2857.6	1673.7	898.3	856.7	851.3	965.2	1203.8	1232.7	1279.7	1464.0	1427.9
75°	1500.2	1162.2	798.9	777.2	786.2	958.0	1420.7	1200.2	1239.9	1400.8	1469.5
77.5°	918.2	938.1	713.9	704.9	723.0	936.3	1418.9	1158.6	1182.1	1288.7	1364.6
80°	614.5	760.9	648.9	650.7	663.3	856.7	1274.3	1093.5	1111.6	1218.2	1296.0
82.5°	388.6	450.1	589.2	620.0	603.7	706.7	1082.7	995.9	1021.2	1393.6	1473.1
85°	197.0	282.0	511.5	596.5	544.0	495.2	878.4	873.0	885.7	1005.0	1050.1
87.5°	90.4	155.4	399.4	520.5	410.3	309.1	638.0	647.1	697.7	713.9	713.9
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)