

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: P300473

Luminaire Tested: **GLNA-AF-10-LED-E1-AFL-7050-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300473
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-7050-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 5000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39682.4 lumens
Efficiency: N/A
Efficacy: 122.9 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

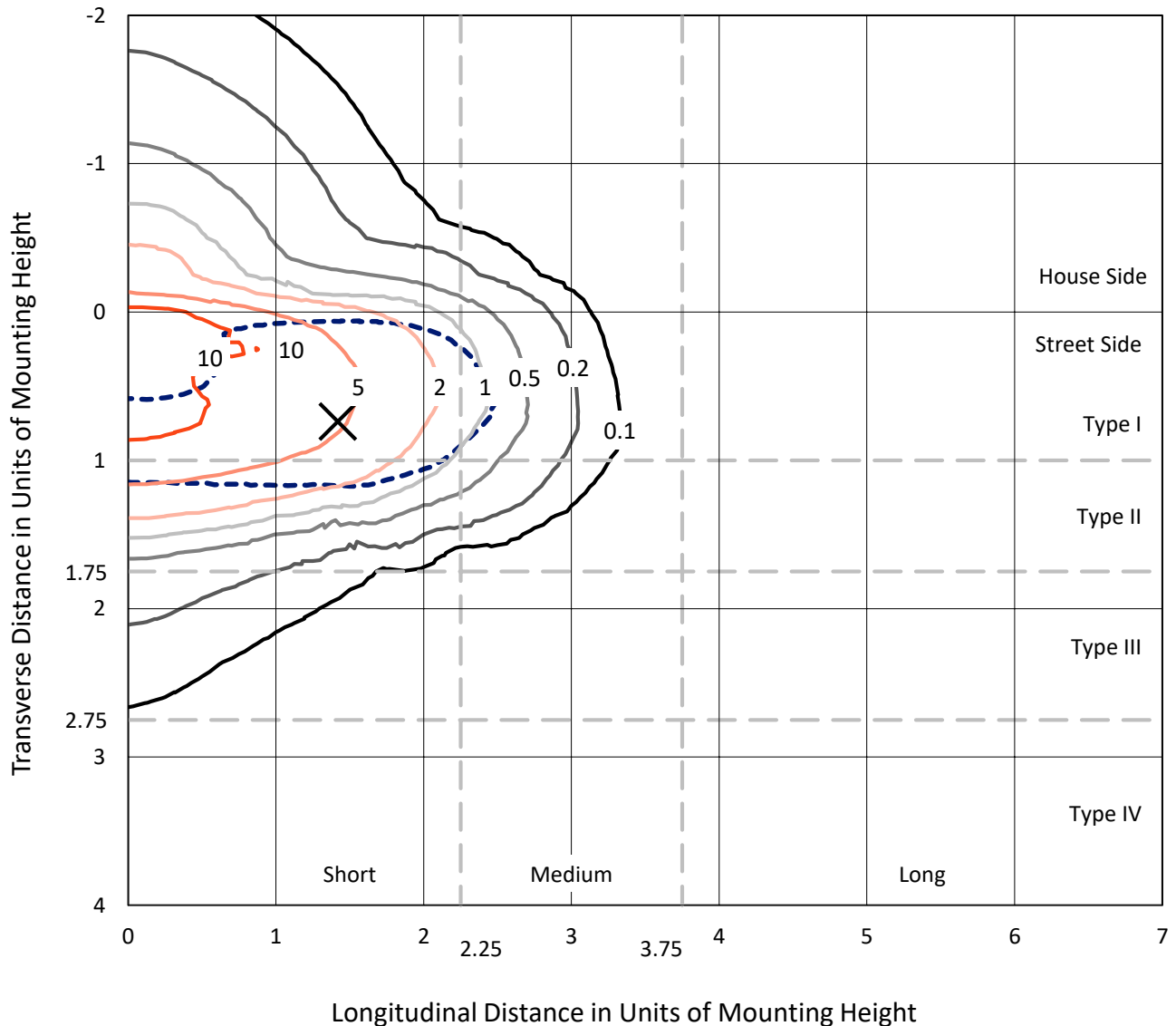
Input Watts (W): 323
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

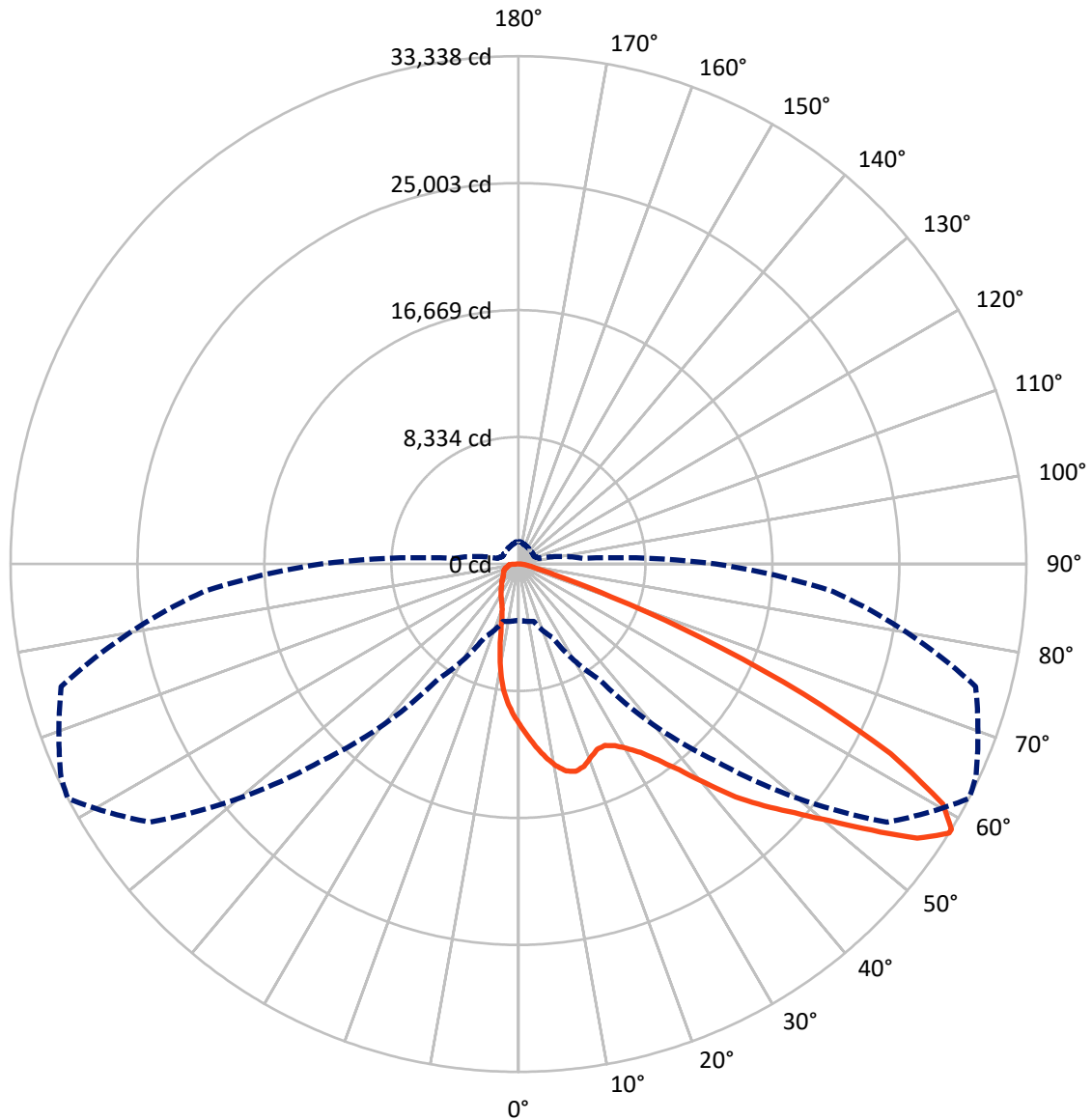
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 14.3 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
House Side	Lumens	6051.7	0.0	6051.7
	% Fixture	15.3	0.0	15.3
Street Side	Lumens	33630.7	0.0	33630.7
	% Fixture	84.7	0.0	84.7
Total	Lumens	39682.4	0.0	39682.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	942.7	2.4
10°-20°	2409.7	6.1
20°-30°	3895.4	9.8
30°-40°	6184.0	15.6
40°-50°	9048.4	22.8
50°-60°	9463.9	23.8
60°-70°	5591.3	14.1
70°-80°	1575.1	4.0
80°-90°	571.8	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°	39682.4	100.0
0°-180°	39682.4	100.0

Coefficient of Utilization



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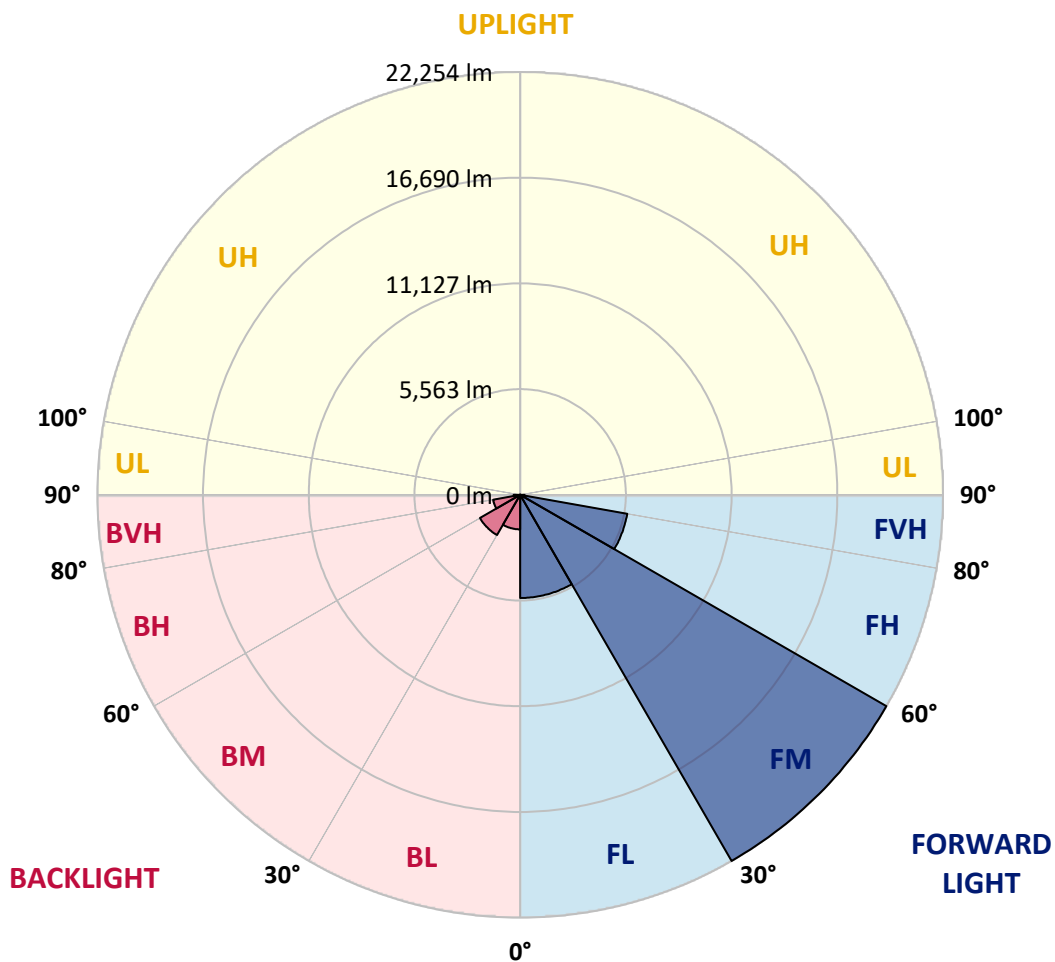
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5429.0	13.7			
FM	(30°-60°)	22253.7	56.1			
FH	(60°-80°)	5722.4	14.4			G3/7500
FVH	(80°-90°)	225.6	0.6			G3/500
BL	(0°-30°)	1818.9	4.6	B3/2500		
BM	(30°-60°)	2442.6	6.2	B2/2500		
BH	(60°-80°)	1444.0	3.6	B3/2500		G3/2500
BVH	(80°-90°)	346.2	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°	10540.8	10540.8	10540.8	10540.8	10540.8	10540.8	10540.8	10540.8	10540.8	10540.8	10540.8
2.5°	12045.0	11947.9	11886.2	11832.0	11761.0	11609.7	11406.0	11277.0	11211.6	10989.3	10725.8
5°	13226.0	13140.0	13076.5	13003.6	12876.6	12639.3	12310.4	12048.8	11919.8	11475.1	10948.2
7.5°	12949.4	12985.0	13095.2	13287.7	13452.1	13420.3	13127.0	12794.4	12624.3	12005.8	11206.0
10°	11282.7	11344.3	11534.9	11985.2	12714.0	13461.4	13689.4	13459.6	13287.7	12530.9	11471.4
12.5°	10948.2	10946.3	10961.2	11080.8	11514.4	12566.4	13708.1	13939.8	13837.0	13031.7	11742.3
15°	11084.6	11088.3	11077.1	11127.6	11262.1	11678.8	13136.3	14124.8	14197.7	13536.2	12022.6
17.5°	11443.4	11434.0	11391.0	11391.0	11439.6	11602.2	12463.6	13952.9	14289.2	13982.8	12269.3
20°	12045.0	12002.1	11888.1	11783.4	11731.1	11818.9	12187.1	13556.7	14130.4	14373.3	12473.0
22.5°	12773.8	12740.2	12555.2	12330.9	12149.7	12147.8	12329.1	13211.1	13855.7	14741.4	12644.9
25°	13715.6	13661.4	13386.7	13027.9	12710.3	12588.8	12639.3	13194.2	13706.2	15141.3	12798.1
27.5°	14821.8	14722.8	14397.6	13880.0	13412.9	13168.1	13095.2	13498.8	13842.6	15636.5	13011.1
30°	16163.5	16049.5	15632.8	14958.2	14298.6	13896.8	13741.7	14038.8	14294.8	16240.1	13353.1
32.5°	17690.1	17525.7	17043.6	16299.9	15432.8	14819.9	14567.7	14752.7	14956.3	16967.0	13781.0
35°	19799.8	19603.6	18906.6	17880.7	16901.6	16058.8	15655.2	15789.7	15987.8	18050.7	14399.5
37.5°	21238.6	21150.8	20687.3	19723.1	18658.0	17688.2	17064.1	17142.6	17254.7	19405.5	15191.8
40°	21225.5	21261.0	21270.4	21279.7	20554.7	19626.0	18955.2	18872.9	18850.5	20892.9	16092.4
42.5°	20162.3	20308.0	20778.9	21733.8	22174.8	21748.7	21133.9	20896.6	20778.9	22645.7	17047.3
45°	18534.7	18613.2	19495.2	21360.0	23004.4	23850.9	23385.6	22638.2	22425.2	24256.4	17839.6
47.5°	17695.7	17781.7	18336.6	20369.7	22995.1	25549.5	25818.5	24394.7	24013.5	25657.8	18523.5
50°	15698.2	15877.6	16576.4	18646.8	22156.1	26330.5	28361.7	26487.5	25699.0	27021.9	19209.3
52.5°	12030.1	12306.6	13089.6	15814.0	20027.7	25943.7	30396.6	29025.1	27911.4	28434.6	19797.9
55°	7588.4	7794.0	8451.7	11168.7	16021.4	23931.3	31168.4	31770.1	30779.7	29772.5	20308.0
57.5°	4125.9	4217.4	4464.1	6166.4	10421.2	19482.1	30043.5	33332.2	32921.1	30908.6	20693.0
58°	3692.4	3754.0	3907.3	5344.2	9242.1	18265.6	29544.5	33337.8	33132.3	31074.9	20722.9
60°	2739.4	2707.6	2571.2	3049.6	5144.3	12618.7	26528.6	32003.6	32607.2	31278.6	20577.1
62.5°	2406.8	2330.2	2051.7	2020.0	2502.1	5813.2	20298.7	27414.3	28840.1	30116.3	19691.4
65°	2261.0	2178.8	1820.0	1704.2	1805.1	2459.1	11957.2	20560.3	22348.5	26592.1	17426.6
67.5°	2152.6	2046.1	1672.4	1513.6	1521.0	1625.7	4793.0	12949.4	14961.9	20190.3	13554.9
70°	2048.0	1932.1	1547.2	1364.1	1321.1	1285.6	1906.0	6482.2	8307.8	12753.2	8642.3
72.5°	1935.9	1821.9	1437.0	1246.4	1162.3	1044.6	1244.5	2651.6	3703.6	6033.7	3920.3
75°	1773.3	1670.5	1326.7	1141.7	1022.1	865.2	939.9	1384.6	1661.2	2403.0	1889.2
77.5°	1573.4	1489.3	1203.4	1055.8	906.3	702.6	723.2	960.5	1065.1	1375.3	1123.0
80°	1130.5	1160.4	1070.7	949.3	807.2	569.9	555.0	700.7	756.8	883.9	730.6
82.5°	794.2	811.0	885.7	775.5	667.1	448.5	409.2	493.3	526.9	581.1	394.3
85°	547.5	528.8	607.3	540.0	482.1	299.0	280.3	334.5	355.0	360.6	203.7
87.5°	328.9	328.9	351.3	289.6	259.7	155.1	151.4	190.6	203.7	194.3	112.1
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°	10540.8	10540.8	10540.8	10540.8	10540.8	10540.8	10540.8	10540.8	10540.8	10540.8	10540.8
2.5°	10568.8	10436.2	10154.0	9927.9	9642.0	9344.9	9178.6	9001.1	8879.6	8791.8	8931.9
5°	10649.2	10378.2	9795.2	9242.1	8631.1	7995.8	7513.7	7065.2	6753.1	6558.8	6741.9
7.5°	10776.3	10359.6	9430.9	8485.3	7388.5	6330.8	5385.3	4793.0	4447.3	4277.2	4383.8
10°	10922.0	10329.7	9002.9	7459.5	5889.8	4557.5	3851.2	3612.0	3533.5	3501.8	3516.7
12.5°	11043.5	10266.1	8477.9	6218.7	4423.0	3598.9	3395.3	3389.7	3406.5	3410.2	3415.8
15°	11129.4	10172.7	7698.7	4925.6	3537.3	3279.4	3268.2	3301.8	3333.6	3346.7	3354.1
17.5°	11187.4	9980.2	6818.5	3894.2	3169.2	3124.3	3150.5	3193.4	3227.1	3236.4	3243.9
20°	11181.7	9698.1	5770.3	3247.6	2969.2	2969.2	3014.1	3047.7	3049.6	3038.4	3044.0
22.5°	11123.8	9311.3	4753.7	2903.8	2791.7	2823.5	2868.3	2836.5	2705.7	2619.8	2625.4
25°	11026.7	8849.7	3883.0	2685.2	2627.3	2683.3	2670.2	2431.1	2244.2	2160.1	2160.1
27.5°	10940.7	8304.1	3214.0	2494.6	2462.8	2532.0	2300.3	2083.5	2005.0	1965.8	1952.7
30°	10879.0	7715.5	2767.4	2311.5	2307.7	2257.3	1995.7	1935.9	1922.8	1891.0	1879.8
32.5°	10894.0	7119.4	2481.5	2150.8	2163.8	1932.1	1849.9	1863.0	1851.8	1818.2	1803.2
35°	11017.3	6553.2	2294.6	2005.0	1965.8	1745.3	1764.0	1788.3	1784.5	1737.8	1722.9
37.5°	11237.8	6016.9	2171.3	1883.6	1715.4	1651.8	1681.7	1719.1	1709.8	1678.0	1666.8
40°	11469.5	5512.4	2070.4	1788.3	1567.8	1588.3	1614.5	1635.0	1644.4	1653.7	1646.2
42.5°	11695.6	4985.4	1947.1	1691.1	1506.1	1528.5	1539.7	1560.3	1610.7	1646.2	1644.4
45°	11830.2	4490.3	1820.0	1552.8	1457.5	1470.6	1463.1	1504.2	1565.9	1623.8	1625.7
47.5°	11979.6	4105.3	1719.1	1425.7	1410.8	1420.1	1397.7	1438.8	1494.9	1565.9	1573.4
50°	12160.9	3875.5	1638.8	1324.8	1347.3	1347.3	1341.7	1379.0	1457.5	1539.7	1554.7
52.5°	12366.4	3830.6	1571.5	1252.0	1283.7	1281.9	1287.5	1343.5	1429.5	1509.8	1522.9
55°	12616.8	3952.1	1498.6	1197.8	1222.1	1229.5	1248.2	1311.8	1384.6	1476.2	1481.8
57.5°	12908.3	4198.8	1440.7	1154.8	1166.0	1190.3	1220.2	1278.1	1356.6	1457.5	1463.1
58°	12956.9	4251.1	1431.4	1151.1	1154.8	1182.8	1216.5	1272.5	1351.0	1461.3	1466.9
60°	12958.8	4424.9	1410.8	1134.2	1111.8	1158.5	1195.9	1252.0	1341.7	1474.3	1487.4
62.5°	12499.1	4423.0	1395.8	1110.0	1067.0	1124.9	1167.9	1233.3	1332.3	1506.1	1532.3
65°	11006.1	4019.4	1324.8	1072.6	1031.5	1095.0	1143.6	1220.2	1358.5	1644.4	1661.2
67.5°	8608.7	3294.4	1192.2	1020.3	984.8	1065.1	1128.6	1218.3	1386.5	1676.1	1687.4
70°	5691.8	2464.7	1046.4	960.5	936.2	1029.6	1136.1	1281.9	1354.7	1608.9	1579.0
72.5°	2954.3	1730.3	928.7	885.7	880.1	997.8	1244.5	1274.4	1323.0	1513.6	1476.2
75°	1550.9	1201.5	825.9	803.5	812.8	990.4	1468.7	1240.8	1281.9	1448.2	1519.2
77.5°	949.3	969.8	738.1	728.8	747.4	967.9	1466.9	1197.8	1222.1	1332.3	1410.8
80°	635.3	786.7	670.8	672.7	685.8	885.7	1317.4	1130.5	1149.2	1259.4	1339.8
82.5°	401.8	465.3	609.2	640.9	624.1	730.6	1119.3	1029.6	1055.8	1440.7	1522.9
85°	203.7	291.5	528.8	616.6	562.5	512.0	908.1	902.5	915.6	1038.9	1085.7
87.5°	93.4	160.7	413.0	538.2	424.2	319.5	659.6	669.0	721.3	738.1	738.1
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)