

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: P300397

Luminaire Tested: **GLNA-AF-08-LED-E1-AFL-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300397
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-08-LED-E1-AFL-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34235.3 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 334
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

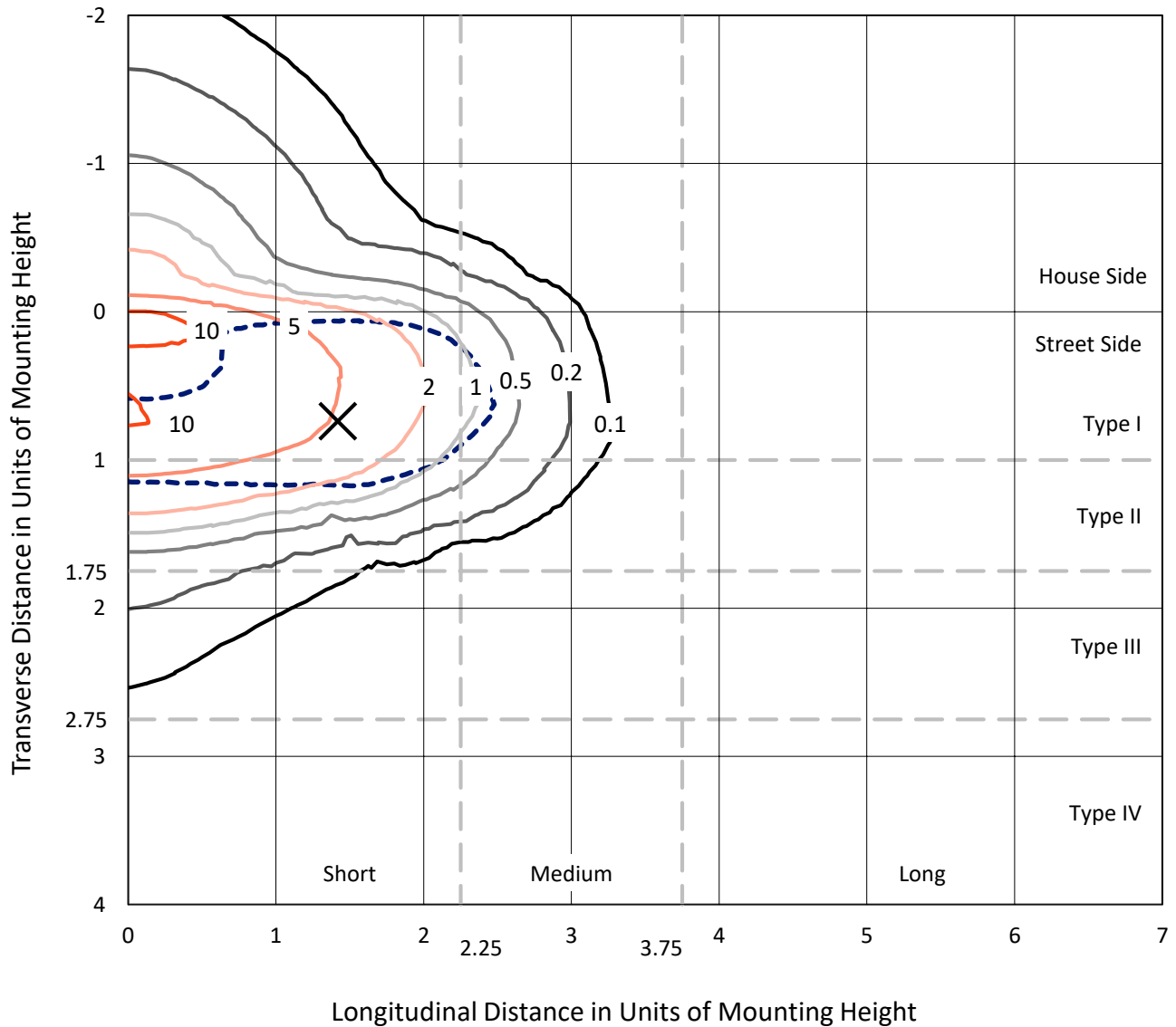


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Iso-Footcandle Lines of Horizontal Illumination

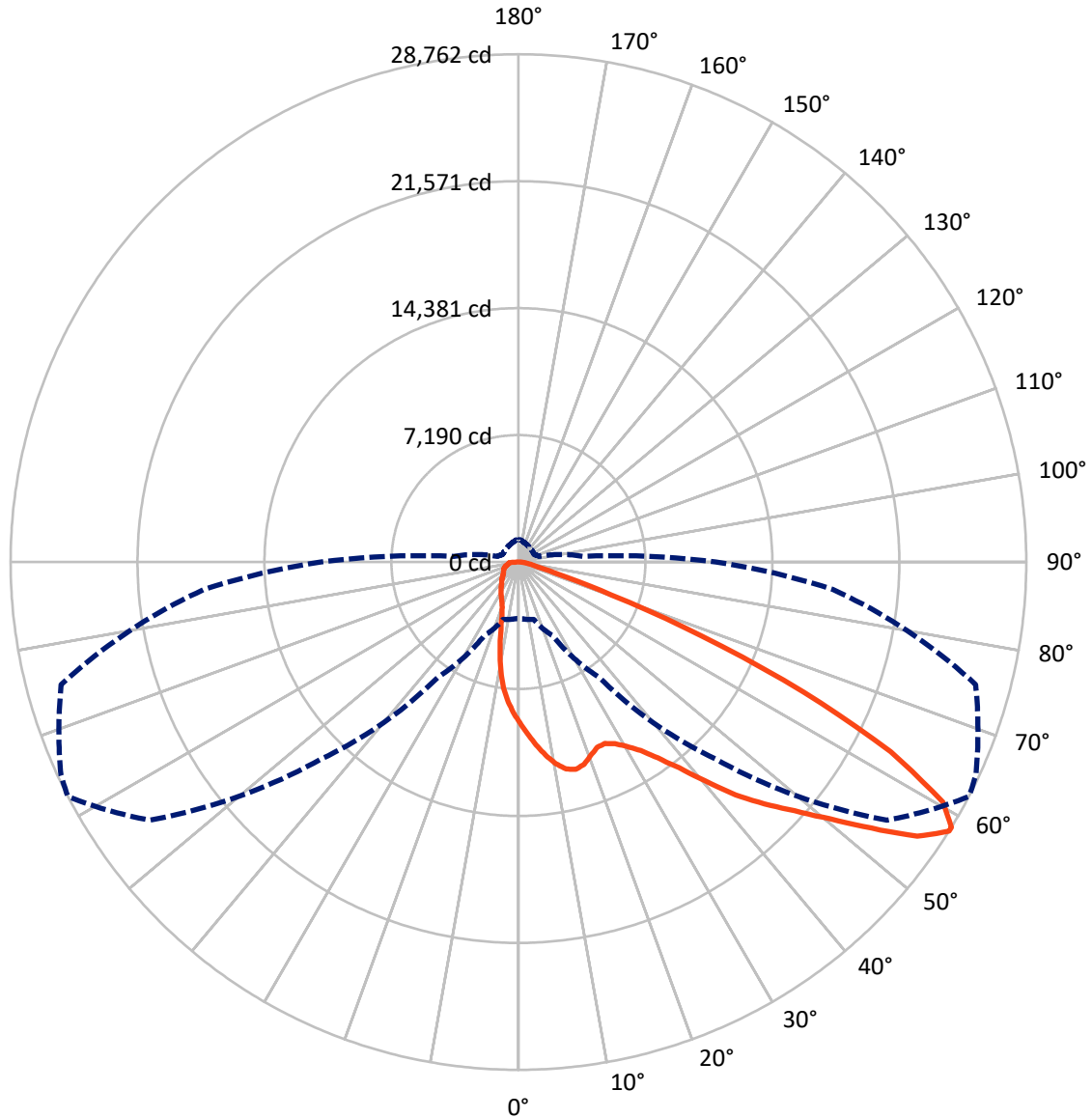
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12.3 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	5221.0	0.0	5221.0
	% Fixture	15.3	0.0	15.3
Street Side	Lumens	29014.3	0.0	29014.3
	% Fixture	84.7	0.0	84.7
Total	Lumens	34235.3	0.0	34235.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	813.3	2.4
10°-20°	2079.0	6.1
20°-30°	3360.7	9.8
30°-40°	5335.1	15.6
40°-50°	7806.4	22.8
50°-60°	8164.8	23.8
60°-70°	4823.8	14.1
70°-80°	1358.9	4.0
80°-90°	493.3	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°	34235.3	100.0
0°-180°	34235.3	100.0



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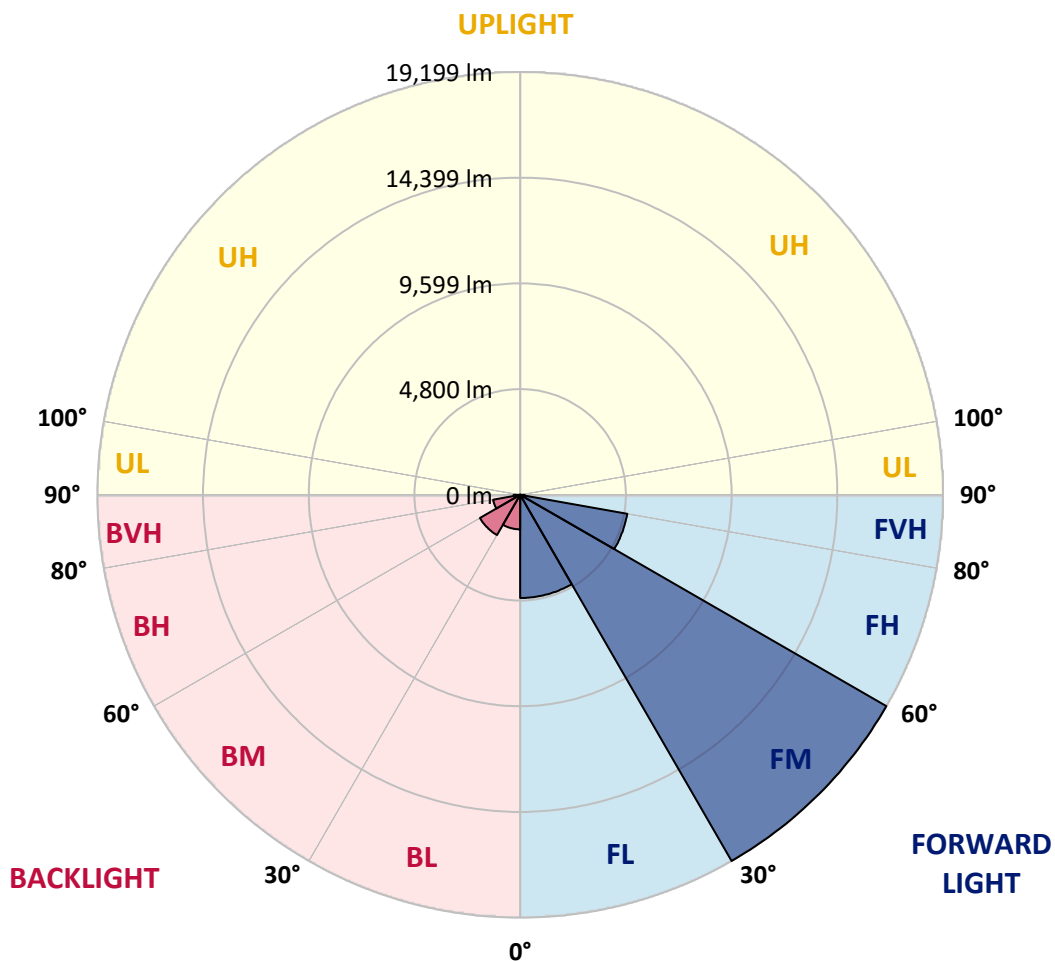
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4683.8	13.7			
FM	(30°-60°)	19199.0	56.1			
FH	(60°-80°)	4936.9	14.4			G2/5000
FVH	(80°-90°)	194.6	0.6			G2/225
BL	(0°-30°)	1569.2	4.6	B3/2500		
BM	(30°-60°)	2107.3	6.2	B2/2500		
BH	(60°-80°)	1245.8	3.6	B3/2500		G3/2500
BVH	(80°-90°)	298.7	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°	9093.9	9093.9	9093.9	9093.9	9093.9	9093.9	9093.9	9093.9	9093.9	9093.9	9093.9
2.5°	10391.7	10307.8	10254.6	10207.9	10146.6	10016.0	9840.3	9729.1	9672.7	9480.8	9253.5
5°	11410.5	11336.4	11281.6	11218.7	11109.1	10904.3	10620.6	10394.9	10283.7	9900.0	9445.4
7.5°	11171.9	11202.6	11297.7	11463.7	11605.6	11578.2	11325.1	11038.1	10891.4	10357.8	9667.8
10°	9733.9	9787.1	9951.6	10340.1	10968.8	11613.6	11810.3	11612.0	11463.7	10810.8	9896.8
12.5°	9445.4	9443.7	9456.6	9559.8	9933.8	10841.4	11826.4	12026.3	11937.7	11242.9	10130.5
15°	9563.0	9566.3	9556.6	9600.1	9716.2	10075.7	11333.1	12185.9	12248.8	11678.1	10372.3
17.5°	9872.6	9864.5	9827.4	9827.4	9869.3	10009.6	10752.8	12037.6	12327.8	12063.4	10585.1
20°	10391.7	10354.6	10256.3	10166.0	10120.8	10196.6	10514.2	11695.9	12190.8	12400.4	10760.8
22.5°	11020.4	10991.4	10831.8	10638.3	10481.9	10480.3	10636.7	11397.6	11953.8	12717.9	10909.2
25°	11832.9	11786.1	11549.2	11239.6	10965.6	10860.8	10904.3	11383.1	11824.8	13062.9	11041.3
27.5°	12787.3	12701.8	12421.3	11974.8	11571.7	11360.5	11297.7	11645.9	11942.5	13490.1	11225.1
30°	13944.8	13846.4	13486.9	12904.9	12335.9	11989.3	11855.5	12111.8	12332.7	14010.9	11520.1
32.5°	15261.9	15120.0	14704.1	14062.4	13314.4	12785.7	12568.0	12727.6	12903.3	14638.0	11889.3
35°	17081.9	16912.7	16311.3	15426.3	14581.5	13854.5	13506.3	13622.3	13793.2	15573.0	12422.9
37.5°	18323.3	18247.5	17847.7	17015.8	16096.9	15260.2	14721.8	14789.5	14886.2	16741.8	13106.5
40°	18312.0	18342.6	18350.7	18358.7	17733.2	16932.0	16353.3	16282.3	16263.0	18025.0	13883.5
42.5°	17394.7	17520.4	17926.7	18750.5	19130.9	18763.4	18233.0	18028.2	17926.7	19537.2	14707.3
45°	15990.5	16058.2	16819.2	18428.0	19846.7	20577.0	20175.6	19530.7	19346.9	20926.8	15390.8
47.5°	15266.7	15340.8	15819.6	17573.6	19838.6	22042.4	22274.5	21046.1	20717.2	22135.9	15980.9
50°	13543.3	13698.1	14301.0	16087.3	19114.8	22716.3	24468.6	22851.7	22171.4	23312.7	16572.5
52.5°	10378.8	10617.4	11292.8	13643.3	17278.6	22382.6	26224.2	25040.9	24080.1	24531.5	17080.3
55°	6546.8	6724.1	7291.6	9635.6	13822.2	20646.3	26890.0	27409.1	26554.7	25685.8	17520.4
57.5°	3559.5	3638.5	3851.3	5320.0	8990.7	16807.9	25919.5	28756.8	28402.2	26665.9	17852.5
58°	3185.5	3238.7	3370.9	4610.6	7973.5	15758.4	25489.1	28761.7	28584.3	26809.4	17878.3
60°	2363.4	2335.9	2218.3	2631.0	4438.1	10886.6	22887.1	27610.6	28131.3	26985.1	17752.6
62.5°	2076.4	2010.3	1770.1	1742.7	2158.6	5015.3	17512.4	23651.3	24881.3	25982.4	16988.4
65°	1950.7	1879.7	1570.2	1470.2	1557.3	2121.5	10315.9	17738.1	19280.8	22942.0	15034.5
67.5°	1857.2	1765.3	1442.8	1305.8	1312.3	1402.5	4135.1	11171.9	12908.2	17418.9	11694.3
70°	1766.9	1666.9	1334.8	1176.8	1139.8	1109.1	1644.4	5592.4	7167.4	11002.7	7456.0
72.5°	1670.1	1571.8	1239.7	1075.3	1002.7	901.2	1073.7	2287.6	3195.2	5205.5	3382.2
75°	1529.9	1441.2	1144.6	985.0	881.8	746.4	810.9	1194.6	1433.2	2073.2	1629.8
77.5°	1357.4	1284.9	1038.2	910.8	781.9	606.2	623.9	828.6	918.9	1186.5	968.9
80°	975.3	1001.1	923.7	819.0	696.4	491.7	478.8	604.5	652.9	762.5	630.3
82.5°	685.1	699.7	764.1	669.0	575.5	386.9	353.1	425.6	454.6	501.4	340.2
85°	472.3	456.2	523.9	465.9	415.9	257.9	241.8	288.6	306.3	311.1	175.7
87.5°	283.7	283.7	303.1	249.9	224.1	133.8	130.6	164.4	175.7	167.7	96.7
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°	9093.9	9093.9	9093.9	9093.9	9093.9	9093.9	9093.9	9093.9	9093.9	9093.9	9093.9
2.5°	9118.1	9003.6	8760.2	8565.1	8318.5	8062.2	7918.7	7765.5	7660.8	7585.0	7705.9
5°	9187.4	8953.7	8450.7	7973.5	7446.3	6898.2	6482.3	6095.4	5826.2	5658.5	5816.5
7.5°	9297.0	8937.5	8136.3	7320.6	6374.3	5461.8	4646.1	4135.1	3836.8	3690.1	3782.0
10°	9422.8	8911.8	7767.2	6435.5	5081.4	3931.9	3322.6	3116.2	3048.5	3021.1	3034.0
12.5°	9527.6	8856.9	7314.1	5365.1	3815.9	3104.9	2929.2	2924.4	2938.9	2942.1	2946.9
15°	9601.7	8776.3	6641.9	4249.5	3051.7	2829.3	2819.6	2848.6	2876.0	2887.3	2893.7
17.5°	9651.7	8610.3	5882.6	3359.6	2734.1	2695.4	2718.0	2755.1	2784.1	2792.2	2798.6
20°	9646.9	8366.9	4978.2	2801.8	2561.6	2561.6	2600.3	2629.4	2631.0	2621.3	2626.1
22.5°	9596.9	8033.1	4101.2	2505.2	2408.5	2435.9	2474.6	2447.2	2334.3	2260.2	2265.0
25°	9513.1	7635.0	3350.0	2316.6	2266.6	2315.0	2303.7	2097.4	1936.1	1863.6	1863.6
27.5°	9438.9	7164.2	2772.8	2152.2	2124.8	2184.4	1984.5	1797.5	1729.8	1695.9	1684.7
30°	9385.7	6656.4	2387.5	1994.2	1991.0	1947.4	1721.7	1670.1	1658.9	1631.5	1621.8
32.5°	9398.6	6142.1	2140.9	1855.5	1866.8	1666.9	1596.0	1607.3	1597.6	1568.6	1555.7
35°	9505.0	5653.7	1979.7	1729.8	1695.9	1505.7	1521.8	1542.8	1539.6	1499.3	1486.4
37.5°	9695.2	5191.0	1873.3	1625.0	1479.9	1425.1	1450.9	1483.1	1475.1	1447.7	1438.0
40°	9895.1	4755.7	1786.2	1542.8	1352.6	1370.3	1392.9	1410.6	1418.7	1426.7	1420.3
42.5°	10090.2	4301.1	1679.8	1459.0	1299.4	1318.7	1328.4	1346.1	1389.6	1420.3	1418.7
45°	10206.3	3873.9	1570.2	1339.7	1257.4	1268.7	1262.3	1297.7	1350.9	1400.9	1402.5
47.5°	10335.2	3541.8	1483.1	1230.0	1217.1	1225.2	1205.9	1241.3	1289.7	1350.9	1357.4
50°	10491.6	3343.5	1413.8	1143.0	1162.3	1162.3	1157.5	1189.7	1257.4	1328.4	1341.3
52.5°	10669.0	3304.8	1355.8	1080.1	1107.5	1105.9	1110.7	1159.1	1233.3	1302.6	1313.9
55°	10885.0	3409.6	1292.9	1033.4	1054.3	1060.8	1076.9	1131.7	1194.6	1273.6	1278.4
57.5°	11136.5	3622.4	1242.9	996.3	1006.0	1026.9	1052.7	1102.7	1170.4	1257.4	1262.3
58°	11178.4	3667.6	1234.9	993.1	996.3	1020.5	1049.5	1097.8	1165.6	1260.7	1265.5
60°	11180.0	3817.5	1217.1	978.6	959.2	999.5	1031.8	1080.1	1157.5	1272.0	1283.2
62.5°	10783.4	3815.9	1204.2	957.6	920.5	970.5	1007.6	1064.0	1149.4	1299.4	1321.9
65°	9495.3	3467.7	1143.0	925.4	889.9	944.7	986.6	1052.7	1172.0	1418.7	1433.2
67.5°	7427.0	2842.2	1028.5	880.2	849.6	918.9	973.7	1051.1	1196.2	1446.1	1455.7
70°	4910.5	2126.4	902.8	828.6	807.7	888.3	980.2	1105.9	1168.8	1388.0	1362.2
72.5°	2548.7	1492.8	801.2	764.1	759.3	860.9	1073.7	1099.5	1141.4	1305.8	1273.6
75°	1338.1	1036.6	712.6	693.2	701.3	854.4	1267.1	1070.4	1105.9	1249.4	1310.6
77.5°	819.0	836.7	636.8	628.7	644.8	835.1	1265.5	1033.4	1054.3	1149.4	1217.1
80°	548.1	678.7	578.7	580.4	591.6	764.1	1136.5	975.3	991.4	1086.6	1155.9
82.5°	346.6	401.4	525.5	553.0	538.4	630.3	965.7	888.3	910.8	1242.9	1313.9
85°	175.7	251.5	456.2	532.0	485.2	441.7	783.5	778.6	789.9	896.3	936.6
87.5°	80.6	138.6	356.3	464.3	365.9	275.7	569.1	577.1	622.3	636.8	636.8
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)