

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: P300395

Luminaire Tested: **GLNA-AF-07-LED-E1-AFL-7050-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300395  
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-07-LED-E1-AFL-7050-800  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 5000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 34776.7 lumens  
Efficiency: N/A  
Efficacy: 117.9 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

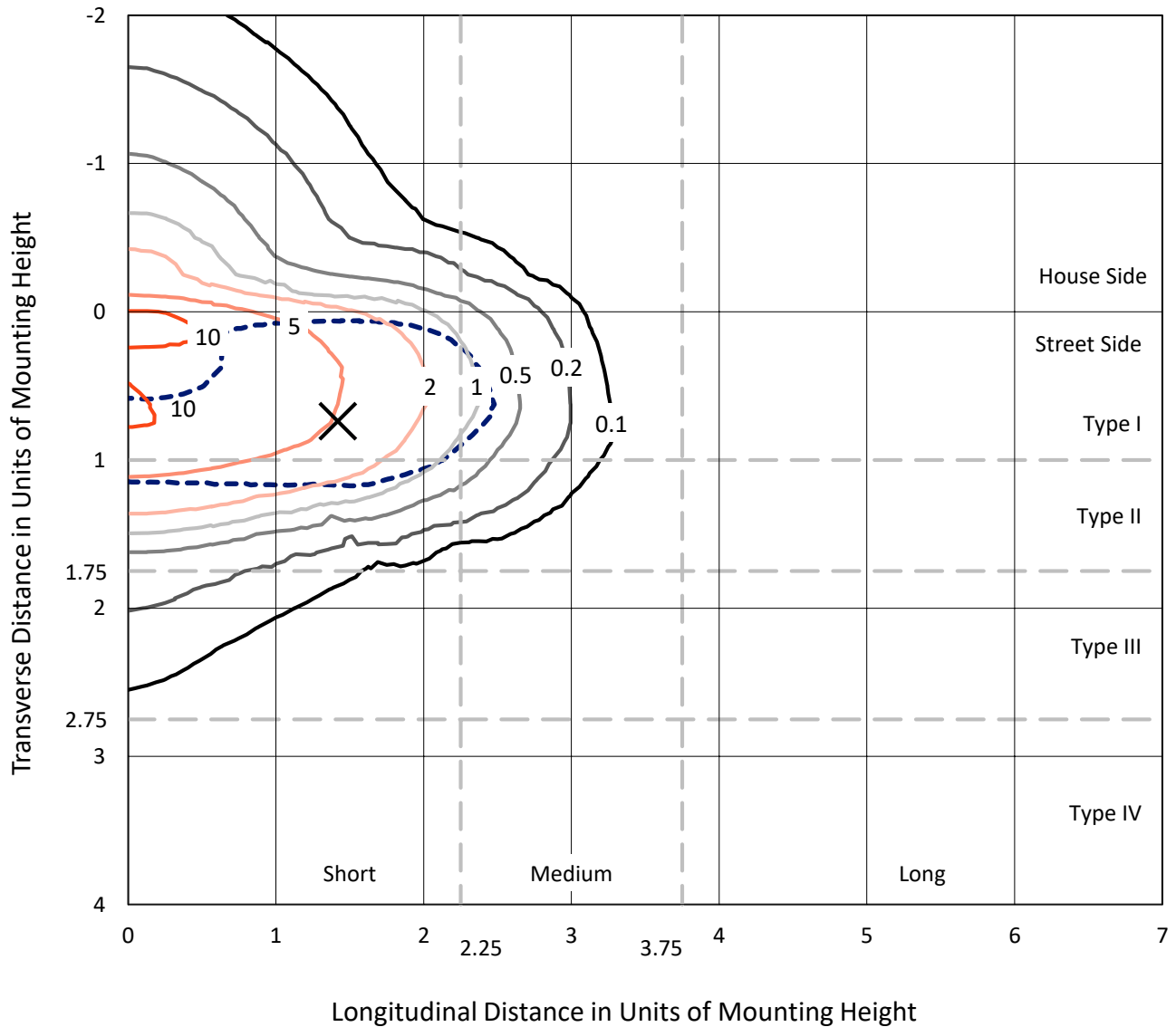
Input Watts (W): 295  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

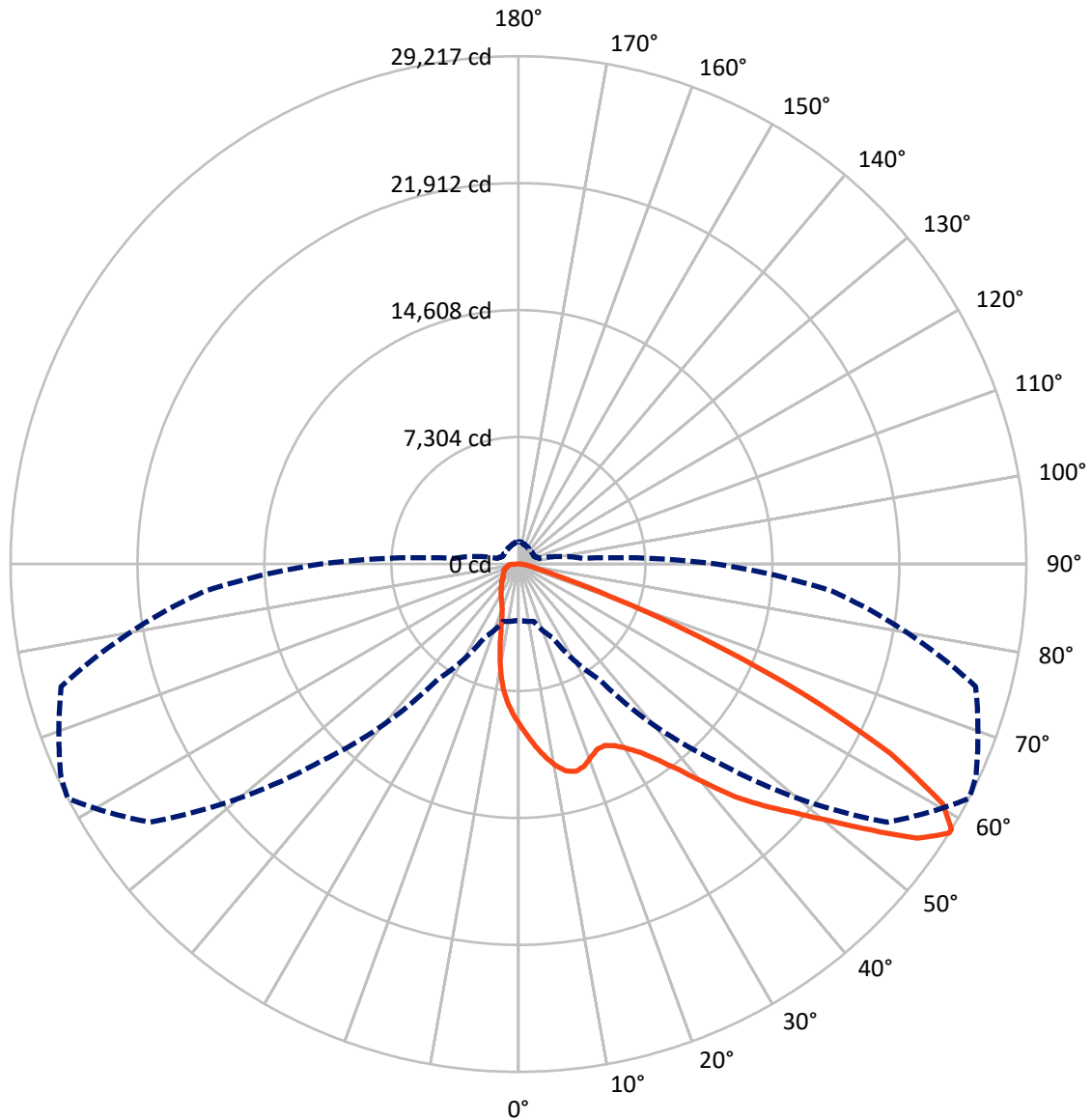
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12.5 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	5303.6	0.0	5303.6
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	29473.1	0.0	29473.1
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	34776.7	0.0	34776.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	826.2	2.4
10°-20°	2111.8	6.1
20°-30°	3413.9	9.8
30°-40°	5419.5	15.6
40°-50°	7929.8	22.8
50°-60°	8293.9	23.8
60°-70°	4900.1	14.1
70°-80°	1380.4	4.0
80°-90°	501.1	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°	34776.7	100.0
0°-180°	34776.7	100.0

**Coefficient of Utilization**



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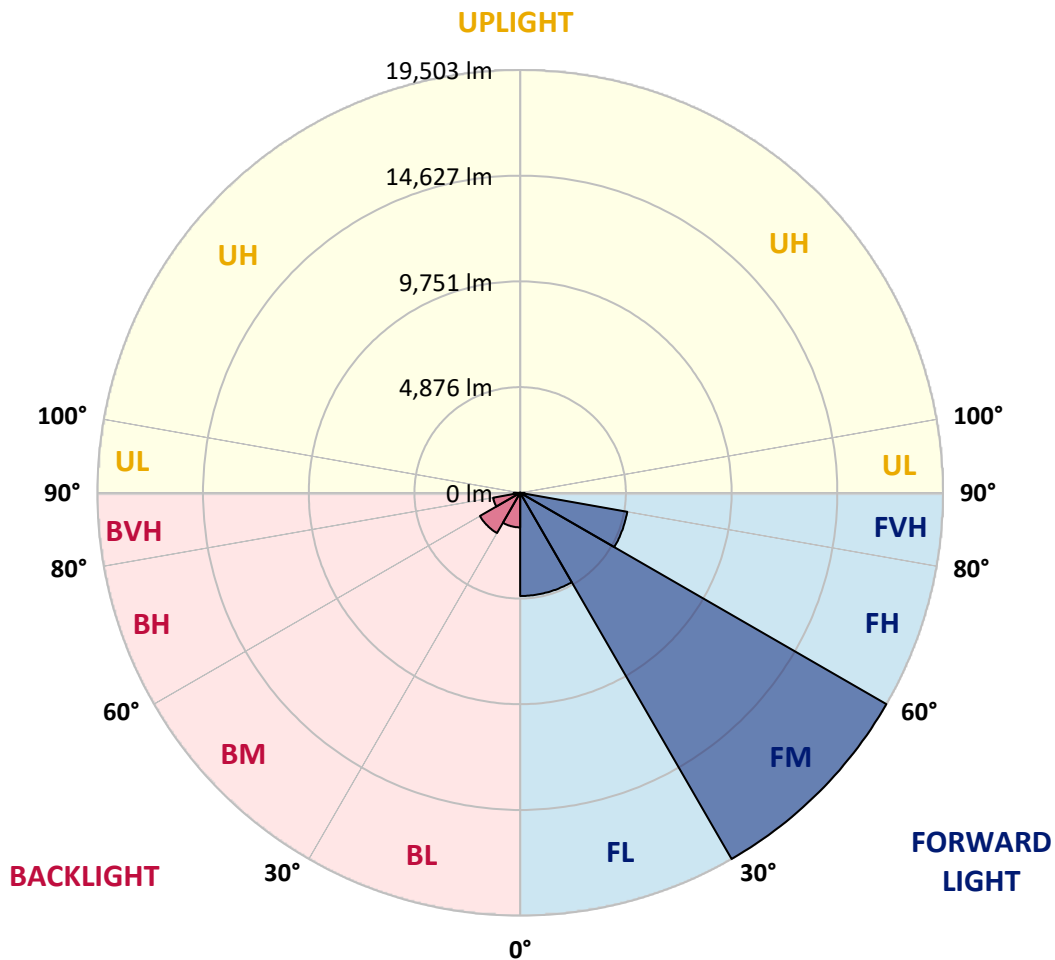
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4757.9	13.7			
FM	(30°-60°)	19502.6	56.1			
FH	(60°-80°)	5014.9	14.4			G3/7500
FVH	(80°-90°)	197.7	0.6			G2/225
BL	(0°-30°)	1594.0	4.6	B3/2500		
BM	(30°-60°)	2140.7	6.2	B2/2500		
BH	(60°-80°)	1265.5	3.6	B3/2500		G3/2500
BVH	(80°-90°)	303.4	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°	9237.7	9237.7	9237.7	9237.7	9237.7	9237.7	9237.7	9237.7	9237.7	9237.7	9237.7
2.5°	10556.0	10470.8	10416.8	10369.3	10307.1	10174.4	9995.9	9882.9	9825.6	9630.7	9399.8
5°	11591.0	11515.6	11460.0	11396.1	11284.7	11076.8	10788.5	10559.3	10446.3	10056.5	9594.7
7.5°	11348.6	11379.7	11476.3	11645.0	11789.1	11761.3	11504.2	11212.7	11063.7	10521.6	9820.7
10°	9887.9	9941.9	10108.9	10503.6	11142.3	11797.3	11997.1	11795.7	11645.0	10981.8	10053.2
12.5°	9594.7	9593.1	9606.2	9711.0	10090.9	11012.9	12013.5	12216.5	12126.5	11420.6	10290.7
15°	9714.3	9717.5	9707.7	9751.9	9869.8	10235.0	11512.4	12378.6	12442.5	11862.8	10536.3
17.5°	10028.7	10020.5	9982.8	9982.8	10025.4	10167.9	10922.8	12228.0	12522.8	12254.2	10752.5
20°	10556.0	10518.3	10418.4	10326.7	10280.9	10357.8	10680.5	11880.8	12383.6	12596.4	10931.0
22.5°	11194.7	11165.2	11003.1	10806.5	10647.7	10646.1	10804.9	11577.9	12142.8	12919.1	11081.7
25°	12020.0	11972.5	11731.8	11417.4	11139.0	11032.5	11076.8	11563.1	12011.8	13269.5	11215.9
27.5°	12989.5	12902.7	12617.7	12164.1	11754.7	11540.2	11476.3	11830.0	12131.4	13703.5	11402.6
30°	14165.3	14065.4	13700.2	13109.0	12530.9	12178.9	12042.9	12303.3	12527.7	14232.4	11702.3
32.5°	15503.2	15359.1	14936.6	14284.8	13525.0	12987.8	12766.8	12928.9	13107.4	14869.4	12077.3
35°	17352.0	17180.1	16569.3	15670.2	14812.1	14073.6	13719.8	13837.8	14011.3	15819.3	12619.4
37.5°	18613.0	18536.0	18129.9	17284.9	16351.5	15501.6	14954.6	15023.4	15121.6	17006.5	13313.7
40°	18601.5	18632.7	18640.8	18649.0	18013.6	17199.8	16611.9	16539.8	16520.1	18310.0	14103.0
42.5°	17669.7	17797.5	18210.2	19047.0	19433.4	19060.1	18521.3	18313.3	18210.2	19846.1	14939.9
45°	16243.4	16312.2	17085.1	18719.4	20160.5	20902.4	20494.6	19839.6	19652.9	21257.7	15634.2
47.5°	15508.1	15583.4	16069.8	17851.5	20152.4	22391.0	22626.8	21378.9	21044.8	22485.9	16233.6
50°	13757.5	13914.7	14527.2	16341.6	19417.1	23075.5	24855.5	23213.0	22522.0	23681.4	16834.6
52.5°	10542.9	10785.3	11471.4	13859.0	17551.8	22736.5	26638.9	25436.9	24460.9	24919.4	17350.4
55°	6650.3	6830.4	7406.9	9788.0	14040.8	20972.8	27315.2	27842.5	26974.6	26091.9	17797.5
57.5°	3615.8	3696.1	3912.2	5404.1	9132.9	17073.7	26329.4	29211.6	28851.3	27087.6	18134.8
58°	3235.9	3289.9	3424.2	4683.5	8099.6	16007.6	25892.2	29216.5	29036.4	27233.4	18161.0
60°	2400.7	2372.9	2253.3	2672.6	4508.3	11058.7	23249.1	28047.2	28576.2	27411.8	18033.3
62.5°	2109.2	2042.1	1798.1	1770.2	2192.8	5094.6	17789.3	24025.3	25274.8	26393.3	17257.1
65°	1981.5	1909.4	1595.0	1493.5	1581.9	2155.1	10479.0	18018.6	19585.7	23304.7	15272.3
67.5°	1886.5	1793.2	1465.7	1326.5	1333.0	1424.7	4200.5	11348.6	13112.3	17694.3	11879.2
70°	1794.8	1693.3	1355.9	1195.5	1157.8	1126.7	1670.4	5680.8	7280.8	11176.6	7573.9
72.5°	1696.6	1596.7	1259.3	1092.3	1018.6	915.4	1090.6	2323.8	3245.7	5287.8	3435.7
75°	1554.1	1464.0	1162.7	1000.6	895.8	758.2	823.7	1213.5	1455.8	2106.0	1655.6
77.5°	1378.9	1305.2	1054.6	925.2	794.2	615.7	633.8	841.7	933.4	1205.3	984.2
80°	990.8	1017.0	938.3	831.9	707.4	499.5	486.4	614.1	663.2	774.6	640.3
82.5°	696.0	710.7	776.2	679.6	584.6	393.0	358.6	432.3	461.8	509.3	345.5
85°	479.8	463.4	532.2	473.3	422.5	262.0	245.6	293.1	311.1	316.1	178.5
87.5°	288.2	288.2	307.9	253.8	227.6	135.9	132.6	167.0	178.5	170.3	98.3
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°	9237.7	9237.7	9237.7	9237.7	9237.7	9237.7	9237.7	9237.7	9237.7	9237.7	9237.7
2.5°	9262.3	9146.0	8898.7	8700.6	8450.0	8189.7	8043.9	7888.3	7781.9	7704.9	7827.7
5°	9332.7	9095.3	8584.3	8099.6	7564.1	7007.3	6584.8	6191.8	5918.3	5748.0	5908.5
7.5°	9444.1	9078.9	8265.0	7436.4	6475.1	5548.2	4719.6	4200.5	3897.5	3748.5	3841.8
10°	9571.8	9052.7	7890.0	6537.3	5161.7	3994.1	3375.1	3165.5	3096.7	3068.9	3082.0
12.5°	9678.2	8997.0	7429.8	5449.9	3876.2	3154.0	2975.5	2970.6	2985.4	2988.6	2993.5
15°	9753.6	8915.1	6746.9	4316.7	3100.0	2874.0	2864.2	2893.6	2921.5	2932.9	2939.5
17.5°	9804.3	8746.4	5975.6	3412.8	2777.4	2738.1	2761.0	2798.7	2828.1	2836.3	2842.9
20°	9799.4	8499.2	5056.9	2846.2	2602.2	2602.2	2641.5	2670.9	2672.6	2662.7	2667.7
22.5°	9748.7	8160.2	4166.1	2544.8	2446.6	2474.4	2513.7	2485.9	2371.3	2295.9	2300.8
25°	9663.5	7755.7	3402.9	2353.2	2302.5	2351.6	2340.1	2130.5	1966.8	1893.1	1893.1
27.5°	9588.2	7277.5	2816.7	2186.2	2158.4	2219.0	2015.9	1825.9	1757.1	1722.8	1711.3
30°	9534.1	6761.7	2425.3	2025.7	2022.4	1978.2	1749.0	1696.6	1685.1	1657.3	1647.4
32.5°	9547.2	6239.3	2174.7	1884.9	1896.3	1693.3	1621.2	1632.7	1622.9	1593.4	1580.3
35°	9655.3	5743.1	2011.0	1757.1	1722.8	1529.5	1545.9	1567.2	1563.9	1523.0	1509.9
37.5°	9848.5	5273.1	1902.9	1650.7	1503.3	1447.6	1473.8	1506.6	1498.4	1470.6	1460.7
40°	10051.6	4830.9	1814.5	1567.2	1373.9	1392.0	1414.9	1432.9	1441.1	1449.3	1442.7
42.5°	10249.8	4369.1	1706.4	1482.0	1319.9	1339.6	1349.4	1367.4	1411.6	1442.7	1441.1
45°	10367.7	3935.2	1595.0	1360.8	1277.3	1288.8	1282.2	1318.3	1372.3	1423.1	1424.7
47.5°	10498.7	3597.8	1506.6	1249.5	1236.4	1244.6	1224.9	1261.0	1310.1	1372.3	1378.9
50°	10657.5	3396.4	1436.2	1161.1	1180.7	1180.7	1175.8	1208.6	1277.3	1349.4	1362.5
52.5°	10837.7	3357.1	1377.2	1097.2	1125.0	1123.4	1128.3	1177.4	1252.8	1323.2	1334.6
55°	11057.1	3463.5	1313.4	1049.7	1071.0	1077.5	1093.9	1149.6	1213.5	1293.7	1298.6
57.5°	11312.6	3679.7	1262.6	1012.0	1021.9	1043.2	1069.4	1120.1	1188.9	1277.3	1282.2
58°	11355.1	3725.5	1254.4	1008.8	1012.0	1036.6	1066.1	1115.2	1184.0	1280.6	1285.5
60°	11356.8	3877.8	1236.4	994.0	974.4	1015.3	1048.1	1097.2	1175.8	1292.1	1303.5
62.5°	10953.9	3876.2	1223.3	972.7	935.1	985.8	1023.5	1080.8	1167.6	1319.9	1342.8
65°	9645.5	3522.5	1161.1	940.0	904.0	959.6	1002.2	1069.4	1190.5	1441.1	1455.8
67.5°	7544.4	2887.1	1044.8	894.1	863.0	933.4	989.1	1067.7	1215.1	1468.9	1478.8
70°	4988.1	2160.0	917.1	841.7	820.4	902.3	995.7	1123.4	1187.3	1410.0	1383.8
72.5°	2589.1	1516.4	813.9	776.2	771.3	874.5	1090.6	1116.8	1159.4	1326.5	1293.7
75°	1359.2	1053.0	723.8	704.2	712.4	867.9	1287.2	1087.4	1123.4	1269.1	1331.4
77.5°	831.9	849.9	646.9	638.7	655.0	848.3	1285.5	1049.7	1071.0	1167.6	1236.4
80°	556.8	689.4	587.9	589.5	601.0	776.2	1154.5	990.8	1007.1	1103.7	1174.2
82.5°	352.1	407.8	533.9	561.7	547.0	640.3	980.9	902.3	925.2	1262.6	1334.6
85°	178.5	255.5	463.4	540.4	492.9	448.7	795.9	791.0	802.4	910.5	951.4
87.5°	81.9	140.8	361.9	471.6	371.7	280.0	578.1	586.3	632.1	646.9	646.9
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)