

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: P300404

Luminaire Tested: **GLNA-AF-09-LED-E1-AFL-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300404  
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-09-LED-E1-AFL-7030-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 42516.4 lumens  
Efficiency: N/A  
Efficacy: 113.7 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: 25 FT

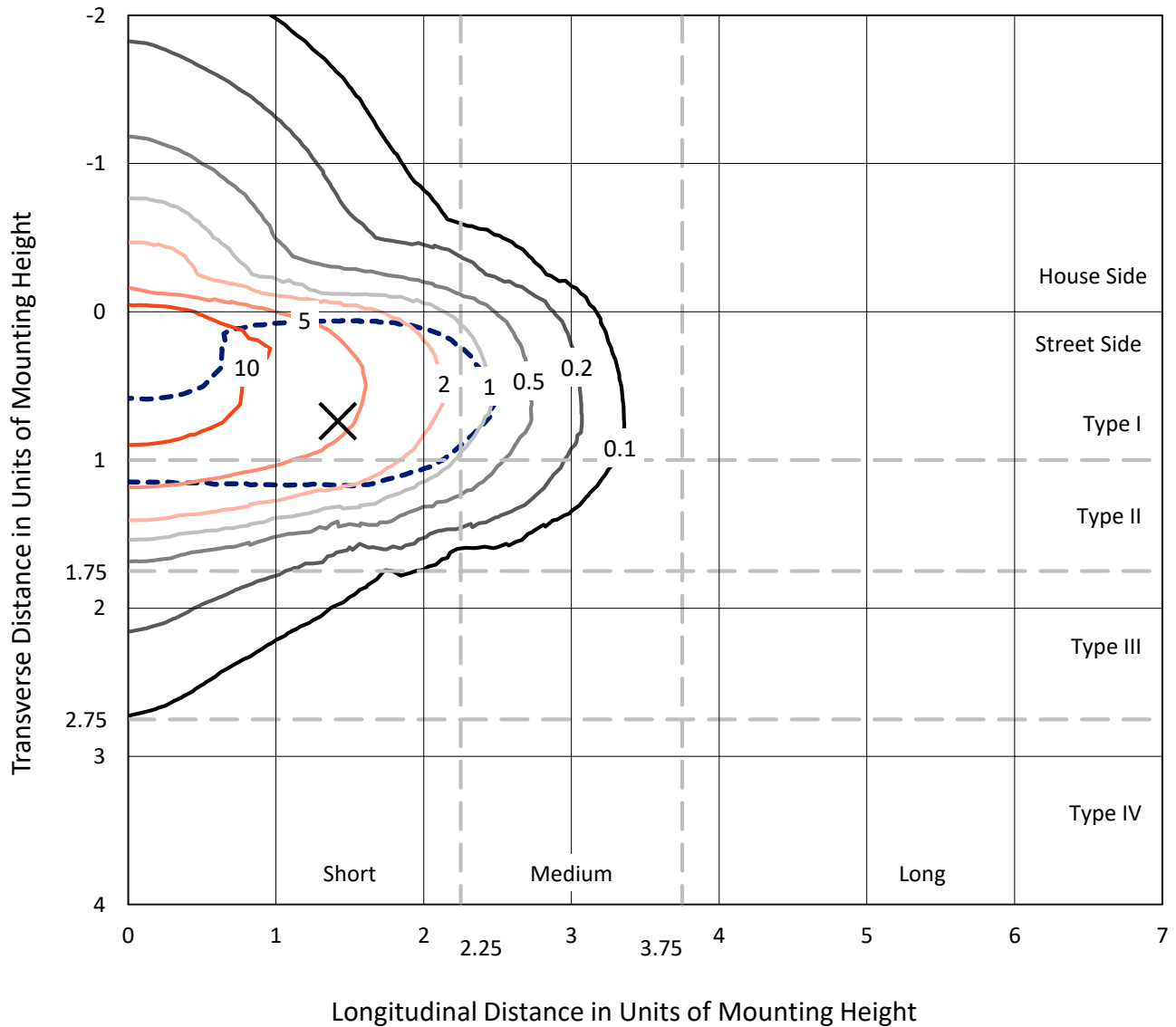


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### Iso-Footcandle Lines of Horizontal Illumination

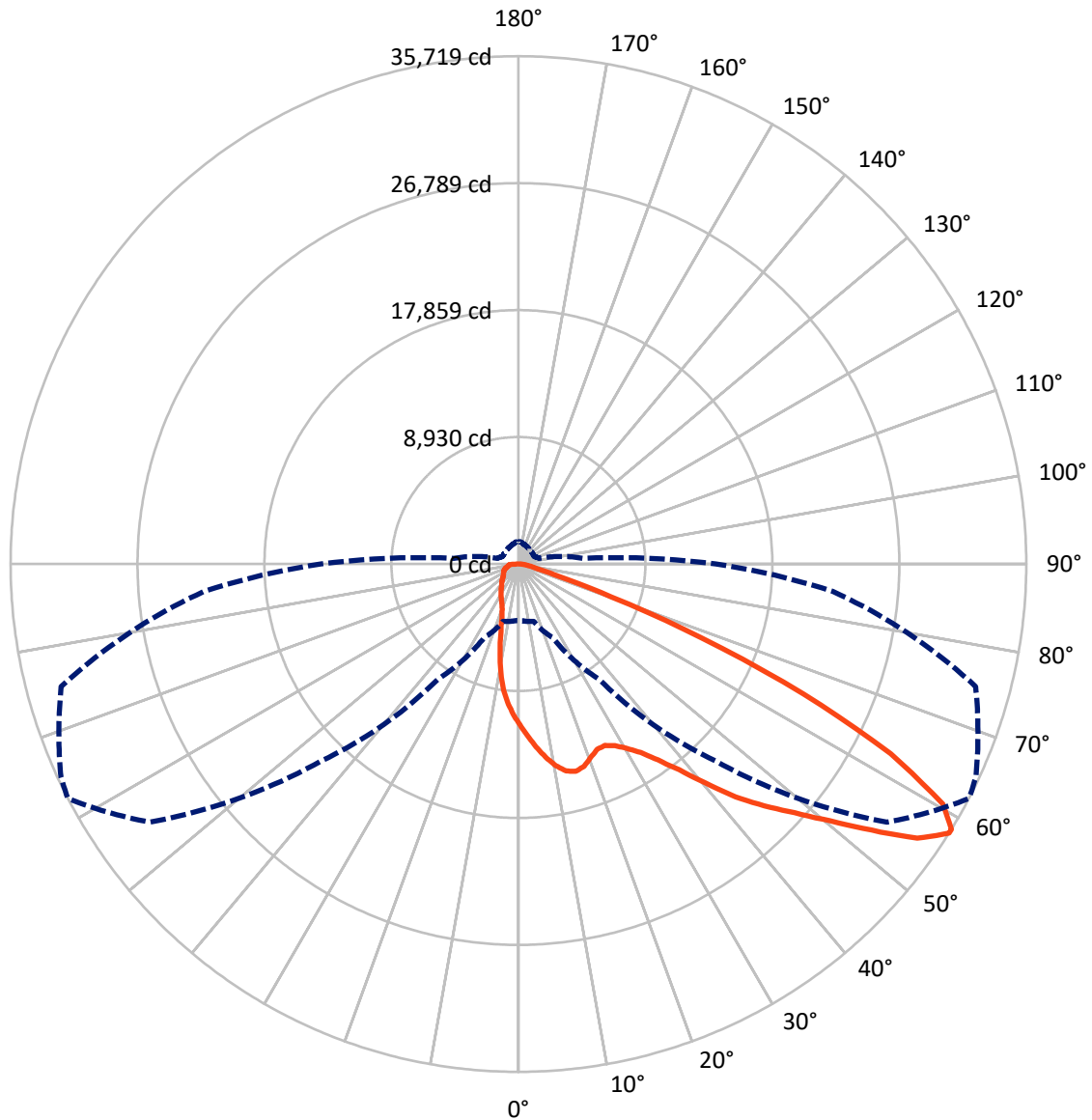
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 15.3 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
<b>House Side</b>	Lumens	6483.9	0.0	6483.9
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	36032.5	0.0	36032.5
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	42516.4	0.0	42516.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1010.1	2.4
10°-20°	2581.8	6.1
20°-30°	4173.6	9.8
30°-40°	6625.6	15.6
40°-50°	9694.6	22.8
50°-60°	10139.8	23.8
60°-70°	5990.6	14.1
70°-80°	1687.6	4.0
80°-90°	612.7	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°	42516.4	100.0
0°-180°	42516.4	100.0



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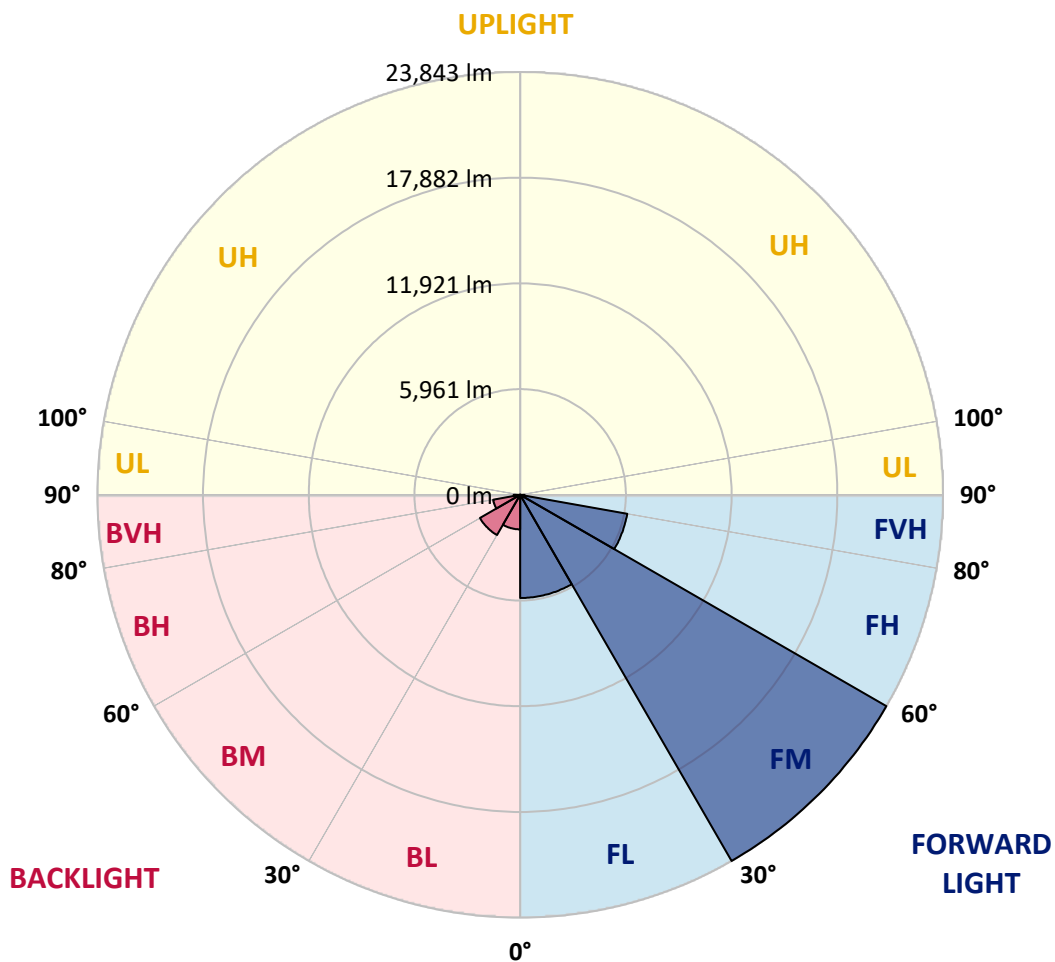
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5816.8	13.7			
FM	(30°-60°)	23843.0	56.1			
FH	(60°-80°)	6131.1	14.4			G3/7500
FVH	(80°-90°)	241.7	0.6			G3/500
BL	(0°-30°)	1948.8	4.6	B3/2500		
BM	(30°-60°)	2617.1	6.2	B3/5000		
BH	(60°-80°)	1547.1	3.6	B3/2500		G3/2500
BVH	(80°-90°)	371.0	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°	11293.6	11293.6	11293.6	11293.6	11293.6	11293.6	11293.6	11293.6	11293.6	11293.6	11293.6
2.5°	12905.3	12801.2	12735.1	12677.0	12601.0	12438.8	12220.6	12082.4	12012.4	11774.1	11491.8
5°	14170.6	14078.5	14010.4	13932.3	13796.2	13541.9	13189.6	12909.3	12771.1	12294.7	11730.1
7.5°	13874.3	13912.3	14030.4	14236.6	14412.8	14378.8	14064.5	13708.1	13525.9	12863.2	12006.4
10°	12088.4	12154.5	12358.7	12841.2	13622.0	14422.8	14667.1	14420.8	14236.6	13425.8	12290.6
12.5°	11730.1	11728.1	11744.1	11872.2	12336.7	13463.9	14687.1	14935.4	14825.3	13962.4	12580.9
15°	11876.2	11880.2	11868.2	11922.3	12066.4	12512.9	14074.5	15133.6	15211.7	14502.9	12881.3
17.5°	12260.6	12250.6	12204.6	12204.6	12256.6	12430.8	13353.7	14949.4	15309.8	14981.4	13145.5
20°	12905.3	12859.2	12737.1	12625.0	12568.9	12663.0	13057.4	14524.9	15139.6	15399.8	13363.8
22.5°	13686.1	13650.0	13451.8	13211.6	13017.4	13015.4	13209.6	14154.6	14845.3	15794.3	13547.9
25°	14695.1	14637.1	14342.8	13958.4	13618.0	13487.9	13541.9	14136.5	14685.1	16222.7	13712.1
27.5°	15880.3	15774.2	15425.9	14871.3	14370.8	14108.5	14030.4	14462.9	14831.3	16753.2	13940.3
30°	17317.8	17195.7	16749.2	16026.5	15319.8	14889.3	14723.2	15041.5	15315.8	17399.9	14306.7
32.5°	18953.5	18777.3	18260.8	17464.0	16535.0	15878.3	15608.1	15806.3	16024.5	18178.7	14765.2
35°	21213.8	21003.6	20256.8	19157.7	18108.6	17205.7	16773.3	16917.4	17129.6	19339.9	15427.9
37.5°	22755.4	22661.3	22164.8	21131.7	19990.6	18951.5	18282.8	18366.9	18487.0	20791.4	16276.7
40°	22741.4	22779.4	22789.5	22799.5	22022.7	21027.6	20308.9	20220.8	20196.8	22385.0	17241.7
42.5°	21602.2	21758.4	22262.9	23286.0	23758.4	23302.0	22643.3	22389.0	22262.9	24263.0	18264.8
45°	19858.4	19942.5	20887.5	22885.5	24647.4	25554.3	25055.8	24255.0	24026.7	25988.7	19113.7
47.5°	18959.5	19051.6	19646.2	21824.5	24637.4	27374.2	27662.5	26136.9	25728.5	27490.3	19846.4
50°	16819.3	17011.5	17760.3	19978.6	23738.4	28211.0	30387.3	28379.2	27534.3	28951.8	20581.2
52.5°	12889.3	13185.6	14024.4	16943.4	21458.1	27796.6	32567.5	31098.0	29904.8	30465.3	21211.8
55°	8130.4	8350.6	9055.3	11966.3	17165.7	25640.4	33394.4	34039.0	32977.9	31898.8	21758.4
57.5°	4420.5	4518.6	4782.9	6606.8	11165.5	20873.5	32189.1	35712.7	35272.3	33116.1	22170.8
58°	3956.1	4022.1	4186.3	5725.9	9902.2	19570.1	31654.6	35718.8	35498.5	33294.3	22202.8
60°	2935.0	2901.0	2754.8	3267.4	5511.7	13519.9	28423.2	34289.3	34935.9	33512.5	22046.7
62.5°	2578.7	2496.6	2198.3	2164.2	2680.8	6228.4	21748.4	29372.2	30899.8	32267.2	21097.7
65°	2422.5	2334.4	1950.0	1825.9	1934.0	2634.7	12811.2	22028.7	23944.6	28491.3	18671.2
67.5°	2306.4	2192.3	1791.8	1621.7	1629.7	1741.8	5135.3	13874.3	16030.5	21632.3	14522.9
70°	2194.3	2070.1	1657.7	1461.5	1415.5	1377.4	2042.1	6945.1	8901.2	13664.1	9259.5
72.5°	2074.1	1952.0	1539.6	1335.4	1245.3	1119.2	1333.4	2840.9	3968.1	6464.7	4200.3
75°	1900.0	1789.8	1421.5	1223.3	1095.1	927.0	1007.0	1483.5	1779.8	2574.6	2024.1
77.5°	1685.7	1595.6	1289.3	1131.2	971.0	752.8	774.8	1029.1	1141.2	1473.5	1203.2
80°	1211.2	1243.3	1147.2	1017.0	864.9	610.6	594.6	750.8	810.8	947.0	782.8
82.5°	850.9	868.9	949.0	830.9	714.7	480.5	438.5	528.5	564.6	622.6	422.4
85°	586.6	566.6	650.7	578.6	516.5	320.3	300.3	358.4	380.4	386.4	218.2
87.5°	352.4	352.4	376.4	310.3	278.3	166.2	162.2	204.2	218.2	208.2	120.1
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°	11293.6	11293.6	11293.6	11293.6	11293.6	11293.6	11293.6	11293.6	11293.6	11293.6	11293.6
2.5°	11323.7	11181.5	10879.2	10636.9	10330.6	10012.3	9834.1	9643.9	9513.8	9419.7	9569.8
5°	11409.7	11119.4	10494.8	9902.2	9247.5	8566.8	8050.3	7569.8	7235.4	7027.2	7223.4
7.5°	11545.9	11099.4	10104.4	9091.4	7916.1	6783.0	5769.9	5135.3	4764.9	4582.7	4696.8
10°	11702.0	11067.4	9645.9	7992.2	6310.5	4883.0	4126.2	3870.0	3785.9	3751.9	3767.9
12.5°	11832.2	10999.3	9083.3	6662.9	4738.9	3856.0	3637.7	3631.7	3649.8	3653.8	3659.8
15°	11924.3	10899.2	8248.5	5277.4	3789.9	3513.6	3501.6	3537.6	3571.7	3585.7	3593.7
17.5°	11986.3	10693.0	7305.5	4172.3	3395.5	3347.4	3375.5	3421.5	3457.6	3467.6	3475.6
20°	11980.3	10390.7	6182.4	3479.6	3181.3	3181.3	3229.3	3265.4	3267.4	3255.3	3261.4
22.5°	11918.3	9976.3	5093.2	3111.2	2991.1	3025.1	3073.2	3039.1	2899.0	2806.9	2812.9
25°	11814.2	9481.8	4160.3	2877.0	2814.9	2875.0	2860.9	2604.7	2404.5	2314.4	2314.4
27.5°	11722.1	8897.2	3443.5	2672.8	2638.7	2712.8	2464.5	2232.3	2148.2	2106.2	2092.2
30°	11656.0	8266.5	2965.1	2476.5	2472.5	2418.5	2138.2	2074.1	2060.1	2026.1	2014.1
32.5°	11672.0	7627.8	2658.7	2304.4	2318.4	2070.1	1982.0	1996.1	1984.0	1948.0	1932.0
35°	11804.1	7021.2	2458.5	2148.2	2106.2	1869.9	1889.9	1916.0	1912.0	1861.9	1845.9
37.5°	12040.4	6446.6	2326.4	2018.1	1837.9	1769.8	1801.9	1841.9	1831.9	1797.9	1785.8
40°	12288.6	5906.1	2218.3	1916.0	1679.7	1701.8	1729.8	1751.8	1761.8	1771.8	1763.8
42.5°	12530.9	5341.5	2086.1	1811.9	1613.7	1637.7	1649.7	1671.7	1725.8	1763.8	1761.8
45°	12675.0	4811.0	1950.0	1663.7	1561.6	1575.6	1567.6	1611.7	1677.7	1739.8	1741.8
47.5°	12835.2	4398.5	1841.9	1527.6	1511.6	1521.6	1497.5	1541.6	1601.6	1677.7	1685.7
50°	13029.4	4152.3	1755.8	1419.5	1443.5	1443.5	1437.5	1477.5	1561.6	1649.7	1665.7
52.5°	13249.6	4104.2	1683.7	1341.4	1375.4	1373.4	1379.4	1439.5	1531.6	1617.7	1631.7
55°	13517.9	4234.4	1605.7	1283.3	1309.3	1317.4	1337.4	1405.4	1483.5	1581.6	1587.6
57.5°	13830.2	4498.6	1543.6	1237.3	1249.3	1275.3	1307.3	1369.4	1453.5	1561.6	1567.6
58°	13882.3	4554.7	1533.6	1233.3	1237.3	1267.3	1303.3	1363.4	1447.5	1565.6	1571.6
60°	13884.3	4740.9	1511.6	1215.3	1191.2	1241.3	1281.3	1341.4	1437.5	1579.6	1593.6
62.5°	13391.8	4738.9	1495.5	1189.2	1143.2	1205.2	1251.3	1321.4	1427.5	1613.7	1641.7
65°	11792.1	4306.4	1419.5	1149.2	1105.1	1173.2	1225.3	1307.3	1455.5	1761.8	1779.8
67.5°	9223.5	3529.6	1277.3	1093.1	1055.1	1141.2	1209.2	1305.3	1485.5	1795.8	1807.9
70°	6098.3	2640.7	1121.2	1029.1	1003.0	1103.1	1217.3	1373.4	1451.5	1723.8	1691.7
72.5°	3165.3	1853.9	995.0	949.0	943.0	1069.1	1333.4	1365.4	1417.5	1621.7	1581.6
75°	1661.7	1287.3	884.9	860.9	870.9	1061.1	1573.6	1329.4	1373.4	1551.6	1627.7
77.5°	1017.0	1039.1	790.8	780.8	800.8	1037.1	1571.6	1283.3	1309.3	1427.5	1511.6
80°	680.7	842.9	718.7	720.7	734.8	949.0	1411.5	1211.2	1231.3	1349.4	1435.5
82.5°	430.4	498.5	652.7	686.7	668.7	782.8	1199.2	1103.1	1131.2	1543.6	1631.7
85°	218.2	312.3	566.6	660.7	602.6	548.6	973.0	967.0	981.0	1113.1	1163.2
87.5°	100.1	172.2	442.5	576.6	454.5	342.4	706.7	716.7	772.8	790.8	790.8
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)