

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: P301183

Luminaire Tested: **GLNA-AF-08-LED-E1-T3R-7030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301183
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194839)
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-T3R-7030-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
Roadway OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37981.4 lumens
Efficiency: N/A
Efficacy: 113.7 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B3 - U0 - G5

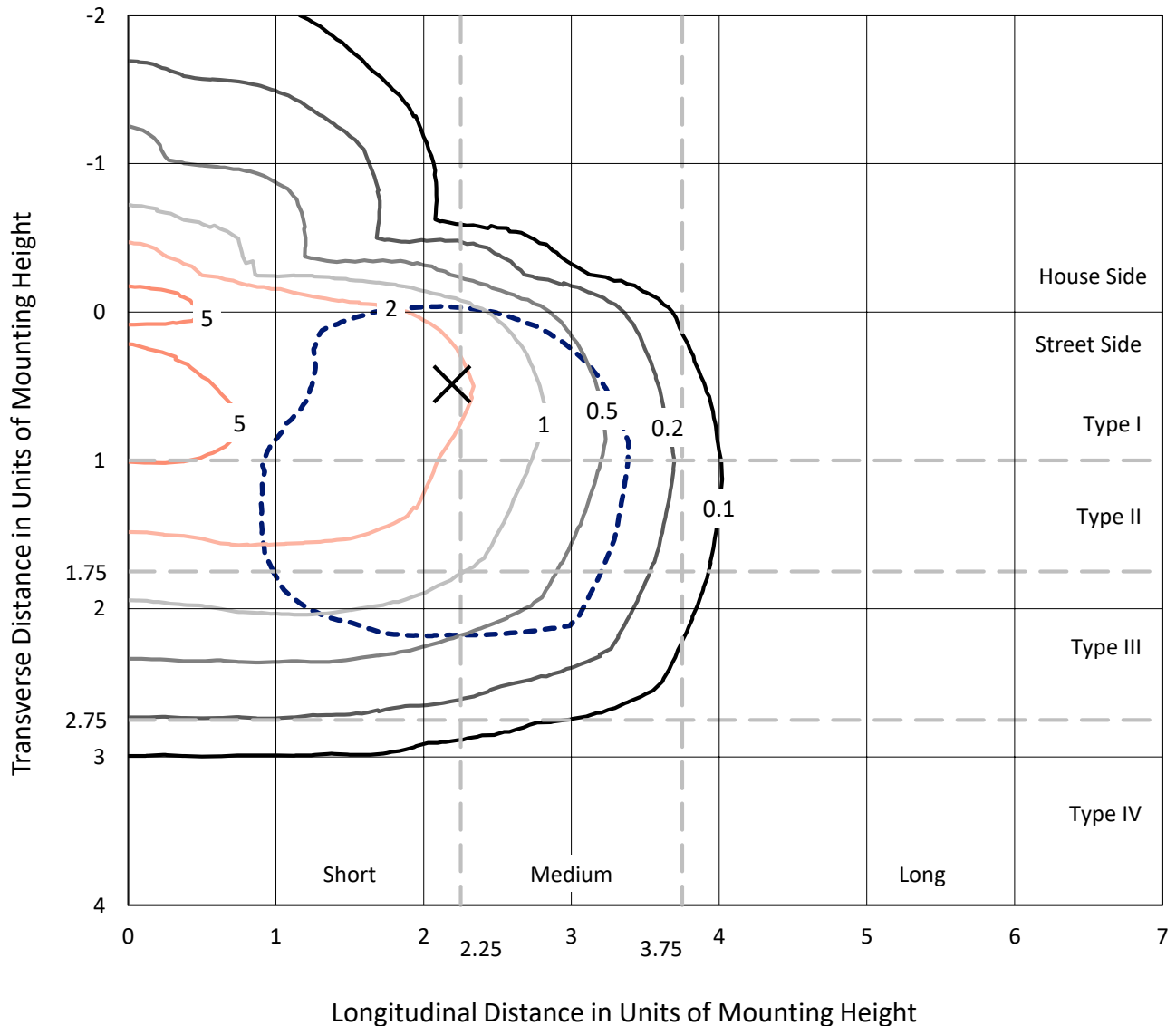
Input Watts (W): 334
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

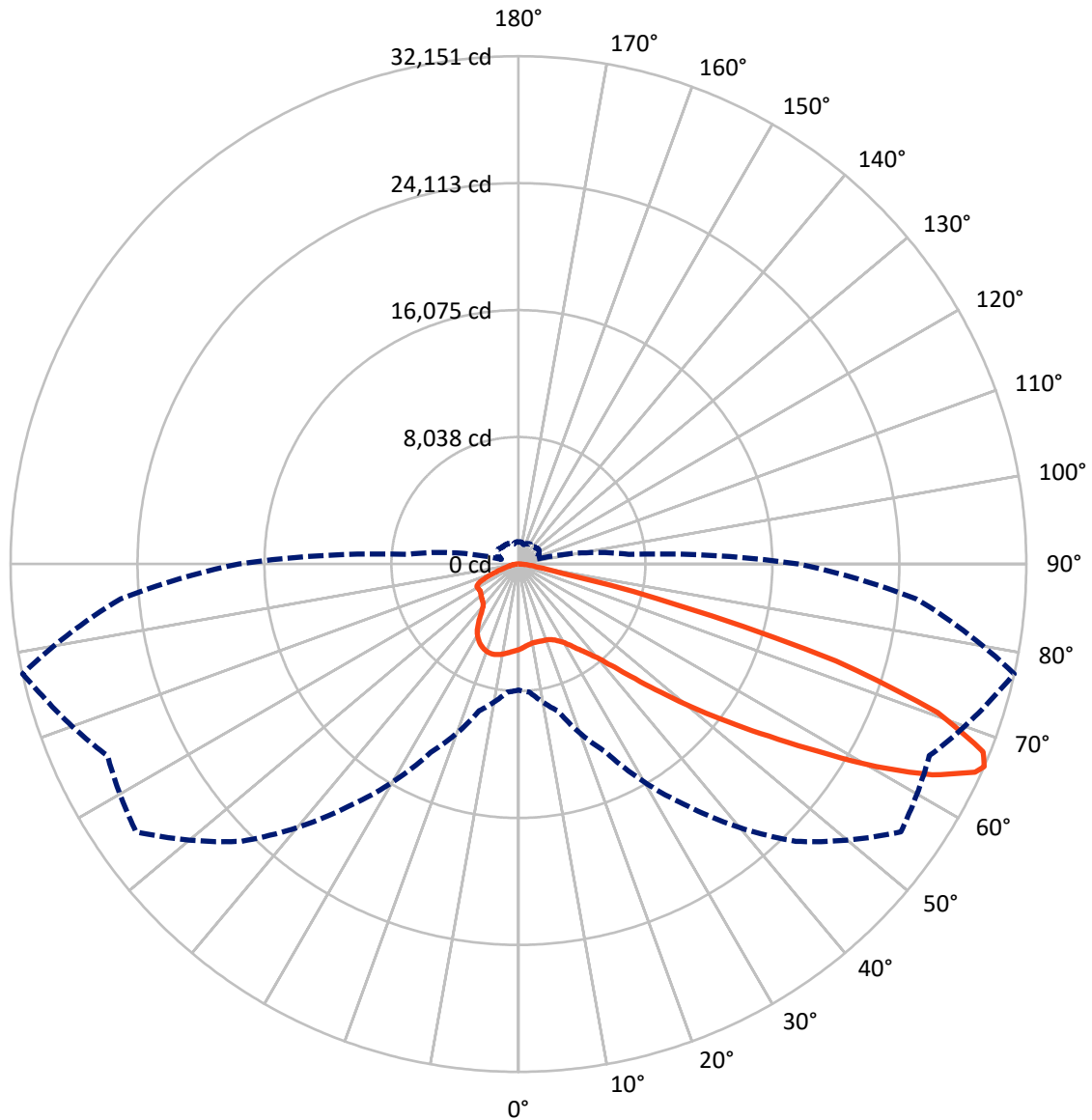
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.4 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6488.9	0.0	6488.9
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	31492.5	0.0	31492.5
	% Fixture	82.9	0.0	82.9
Total	Lumens	37981.4	0.0	37981.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	483.6	1.3
10°-20°	1364.2	3.6
20°-30°	2328.2	6.1
30°-40°	3727.1	9.8
40°-50°	5758.0	15.2
50°-60°	8166.9	21.5
60°-70°	10925.1	28.8
70°-80°	4744.6	12.5
80°-90°	483.8	1.3
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°	37981.4	100.0
0°-180°	37981.4	100.0



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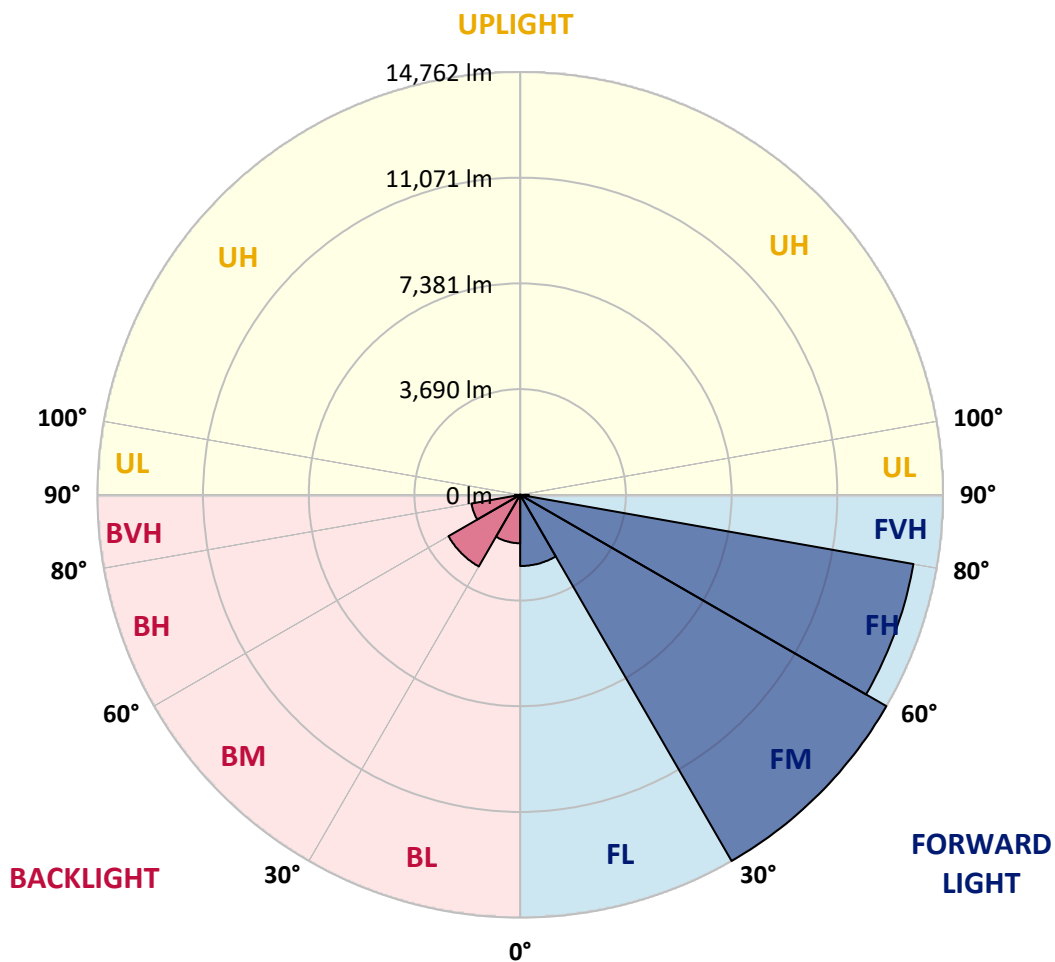
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2486.1	6.5			
FM	(30°-60°)	14761.6	38.9			
FH	(60°-80°)	13941.5	36.7			G5
FVH	(80°-90°)	303.4	0.8			G3/500
BL	(0°-30°)	1690.0	4.4	B3/2500		
BM	(30°-60°)	2890.4	7.6	B3/5000		
BH	(60°-80°)	1728.1	4.5	B3/2500		G3/2500
BVH	(80°-90°)	180.4	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77.5°	85°
0°	5412.5	5412.5	5412.5	5412.5	5412.5	5412.5	5412.5	5412.5	5412.5	5412.5	5412.5
2.5°	4788.2	4820.2	4847.4	4872.4	4922.4	5005.0	5100.0	5177.2	5288.6	5310.3	5369.6
5°	4348.6	4348.6	4369.8	4407.8	4475.7	4599.6	4728.9	4901.2	5143.5	5200.6	5358.7
7.5°	4135.0	4136.7	4149.2	4181.2	4240.4	4353.5	4495.3	4698.5	5026.7	5121.8	5390.7
10°	4213.8	4195.9	4168.7	4153.0	4161.6	4227.9	4362.7	4588.7	4955.0	5076.7	5463.0
12.5°	4655.0	4621.3	4527.9	4404.0	4285.5	4237.2	4316.0	4536.6	4924.5	5066.4	5558.1
15°	5376.6	5362.5	5188.1	4931.6	4644.7	4404.0	4350.2	4517.0	4927.8	5078.9	5671.1
17.5°	6281.3	6261.2	6031.9	5658.6	5190.2	4721.9	4470.3	4533.3	4940.3	5100.0	5780.3
20°	7194.7	7133.3	6886.1	6441.1	5839.6	5153.8	4669.7	4574.6	4956.6	5123.4	5895.5
22.5°	7876.7	7826.1	7603.9	7171.4	6478.6	5654.8	4937.0	4646.3	5008.8	5191.9	6036.8
25°	8476.0	8479.2	8258.6	7840.8	7124.6	6186.2	5281.5	4838.1	5141.3	5331.5	6230.8
27.5°	9217.1	9174.2	8967.7	8553.1	7763.6	6722.5	5697.7	5102.2	5339.1	5530.9	6485.6
30°	10103.4	10072.9	9834.4	9364.4	8472.2	7298.5	6173.2	5408.7	5594.0	5792.8	6819.3
32.5°	11146.1	11132.0	10884.2	10279.4	9290.5	7977.2	6731.8	5814.6	5974.3	6180.8	7298.5
35°	12370.3	12371.9	12079.6	11352.6	10186.0	8766.7	7364.8	6336.7	6437.3	6652.4	7869.6
37.5°	13123.9	13215.2	13106.0	12364.9	11199.9	9649.7	8186.9	7029.5	6964.9	7182.2	8481.4
40°	13285.3	13396.7	13742.8	13366.3	12334.4	10622.3	8915.6	7695.2	7614.7	7879.9	9269.3
42.5°	13059.3	13213.6	13946.1	14211.2	13538.5	11821.0	9895.3	8684.1	8581.9	8938.9	10249.0
45°	12924.5	13039.7	13886.8	14651.4	14582.9	13176.1	11142.8	9925.7	9888.2	10356.6	11379.7
47.5°	12691.4	12795.8	13610.3	14753.5	15196.9	14417.7	12641.4	11444.4	11517.8	12131.8	12655.6
50°	12816.9	12859.9	13301.6	14493.2	15374.6	15327.8	14315.6	13202.7	13454.3	14220.5	14100.4
52.5°	12799.0	12910.4	13265.8	14066.1	15397.9	15889.7	15964.7	15164.3	15694.1	16573.2	15702.8
55°	10347.9	10552.2	12844.1	13958.6	15480.0	16440.1	17432.8	17231.8	18218.6	19243.3	17511.6
57.5°	9881.1	10010.5	11280.8	14184.6	15917.9	17492.1	19065.7	19507.4	21158.2	22348.1	19715.5
60°	9789.3	9949.1	11264.5	14461.2	16806.3	19205.9	21486.9	22262.3	24735.2	26038.2	22271.0
62.5°	9504.0	9676.3	11158.6	14424.8	18068.0	21576.6	24586.3	25191.0	28126.9	29394.0	24408.6
65°	8599.9	8761.3	10295.7	13845.5	18919.0	24107.0	28254.0	27875.8	30804.6	31757.1	25474.1
66°	7980.4	8138.6	9615.4	13163.6	18721.2	24824.8	29553.7	28706.6	31403.9	32150.5	25266.0
67.5°	6848.1	6971.9	8294.5	11636.2	17671.4	25025.9	30646.5	29331.0	31466.4	31730.5	24076.6
70°	4326.8	4362.7	5390.7	8032.6	13377.2	21703.7	28982.7	27780.7	28871.8	28157.3	20183.9
72.5°	1877.3	1864.8	2588.1	4086.1	7573.5	14563.3	23444.7	22922.5	22648.1	21018.5	14129.2
75°	1044.4	1059.0	1344.3	1896.9	3077.6	7153.4	15336.5	14676.3	12391.5	10573.9	6406.8
77.5°	837.9	858.0	1114.4	1345.9	1381.8	2494.6	7176.8	5839.6	3515.6	2821.2	1780.1
80°	662.4	698.2	972.6	1048.2	931.3	1028.1	2318.5	1854.0	1391.0	1275.8	922.6
82.5°	523.8	549.3	834.6	793.3	651.5	692.8	1110.6	1082.4	904.7	823.7	533.0
85°	377.1	423.3	685.7	597.7	427.1	466.8	737.3	706.9	518.4	423.3	235.3
87.5°	154.3	201.0	484.7	396.7	238.5	217.3	367.9	346.1	245.6	179.3	116.8
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°	5412.5	5412.5	5412.5	5412.5	5412.5	5412.5	5412.5	5412.5	5412.5	5412.5	5412.5
2.5°	5407.0	5450.0	5505.9	5540.2	5558.1	5570.6	5590.2	5588.5	5594.0	5595.6	5602.7
5°	5442.9	5514.6	5595.6	5617.3	5617.3	5597.2	5577.7	5545.1	5532.6	5529.3	5532.6
7.5°	5536.4	5615.2	5685.3	5660.3	5606.5	5527.1	5425.0	5335.3	5287.0	5270.7	5267.4
10°	5654.8	5749.9	5778.7	5683.6	5525.5	5335.3	5132.6	4985.4	4901.2	4877.8	4870.7
12.5°	5798.3	5887.9	5848.8	5647.8	5354.9	5048.4	4768.0	4533.3	4357.3	4301.8	4298.0
15°	5956.4	6026.5	5887.9	5536.4	5100.0	4648.0	4149.2	3743.8	3524.8	3454.7	3449.3
17.5°	6103.6	6139.5	5864.6	5342.4	4725.1	3993.2	3330.8	3018.4	2943.4	2961.4	2964.6
20°	6229.2	6229.2	5785.8	5064.2	4135.0	3129.8	2711.4	2706.5	2760.3	2814.1	2825.0
22.5°	6367.2	6284.6	5647.8	4671.3	3298.2	2560.9	2500.0	2550.0	2610.9	2670.1	2679.3
25°	6537.8	6329.7	5455.4	4075.8	2592.9	2325.6	2349.0	2390.3	2420.7	2458.7	2464.2
27.5°	6728.0	6386.7	5202.7	3255.3	2250.6	2178.9	2196.8	2211.0	2207.2	2221.8	2225.1
30°	6955.6	6453.6	4856.1	2544.6	2108.8	2052.8	2020.8	2008.3	2008.3	2031.6	2040.3
32.5°	7261.0	6551.9	4358.9	2180.5	2040.3	1963.2	1859.4	1812.7	1830.6	1909.4	1927.3
35°	7596.8	6657.9	3686.2	2056.6	2026.2	1921.9	1760.5	1674.1	1676.3	1749.6	1773.0
37.5°	7962.5	6792.6	2948.3	2033.3	2058.3	1924.1	1708.3	1589.9	1541.5	1541.5	1550.8
40°	8430.9	6930.6	2387.0	2049.6	2126.7	1945.3	1681.7	1523.6	1387.2	1391.0	1398.1
42.5°	9041.1	7049.1	2085.4	2083.3	2209.3	1974.1	1679.5	1435.6	1317.1	1398.1	1471.4
45°	9719.8	7108.3	1952.3	2114.2	2275.6	1992.0	1651.3	1421.4	1326.4	1566.5	1706.7
47.5°	10500.0	7074.1	1879.0	2124.6	2291.9	1992.0	1618.7	1455.7	1388.8	1814.3	1977.9
50°	11356.4	6975.7	1807.2	2103.4	2286.5	1988.2	1649.1	1489.4	1412.2	1857.2	1970.2
52.5°	12363.2	6893.2	1731.7	2056.6	2248.5	1968.6	1685.0	1475.2	1338.9	1688.8	1767.6
55°	13511.4	6916.5	1647.5	1990.4	2189.2	1931.1	1672.5	1417.6	1261.7	1487.7	1536.1
57.5°	14979.5	7194.7	1547.0	1906.1	2108.8	1868.1	1627.9	1391.0	1238.3	1349.7	1378.5
60°	16617.8	7678.9	1421.4	1821.4	2008.3	1767.6	1593.7	1403.5	1249.2	1338.9	1353.0
62.5°	17820.3	7960.9	1313.9	1697.5	1871.9	1656.2	1550.8	1419.3	1278.0	1376.3	1373.1
65°	18146.8	7497.9	1179.1	1516.5	1687.2	1539.9	1496.4	1437.2	1290.5	1406.8	1391.0
66°	17689.3	6999.1	1119.9	1432.3	1593.7	1482.3	1469.8	1435.6	1285.1	1410.6	1383.4
67.5°	16578.7	5976.0	1017.7	1308.4	1444.8	1396.5	1426.9	1419.3	1270.4	1406.8	1369.3
70°	13520.6	4077.4	870.5	1089.5	1202.5	1229.1	1344.3	1362.2	1223.7	1344.3	1261.7
72.5°	9447.0	2483.7	770.0	845.5	972.6	1048.2	1231.3	1282.9	1161.2	1173.7	1094.9
75°	4565.4	1319.3	698.2	655.3	755.3	875.9	1094.9	1175.3	1062.3	981.9	953.1
77.5°	1423.1	805.8	592.3	527.6	592.3	706.9	915.0	1030.2	946.0	822.1	811.2
80°	764.5	592.3	455.9	423.3	468.4	554.8	719.4	859.6	812.9	737.3	658.6
82.5°	504.2	384.2	337.4	328.2	357.0	423.3	534.7	712.4	712.4	631.9	459.7
85°	260.3	235.3	231.5	231.5	249.4	282.0	364.1	549.3	585.2	333.6	276.6
87.5°	129.3	134.8	125.5	131.0	140.2	138.0	173.9	276.6	330.4	202.7	168.4
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)