

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: P301177

Luminaire Tested: **GLNA-AF-07-LED-E1-T3R-7030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301177
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-07-LED-E1-T3R-7030-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(7) 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: 33521.6 lumens
Efficiency: N/A
Efficacy: 113.6 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

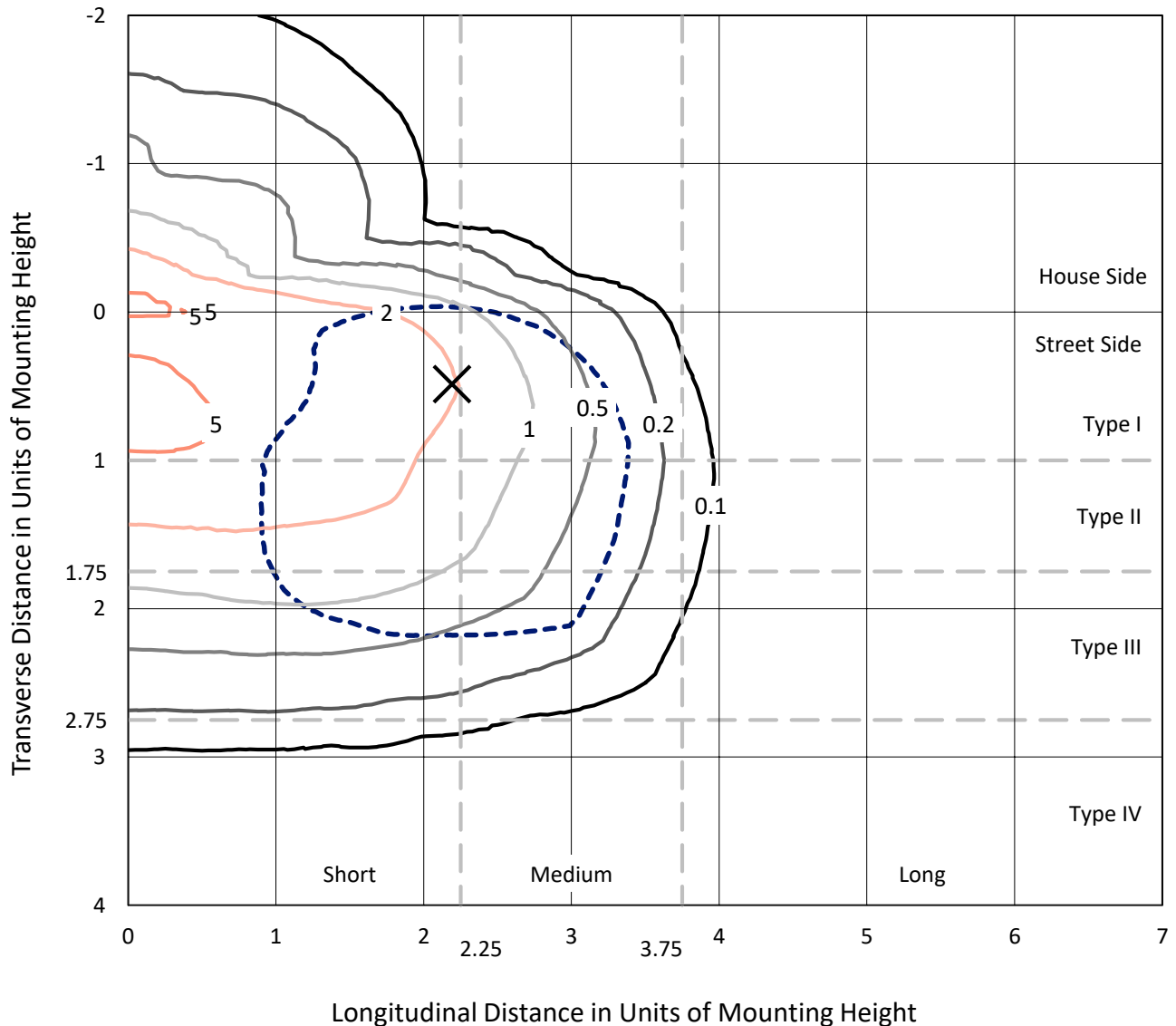
Input Watts (W): 295
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

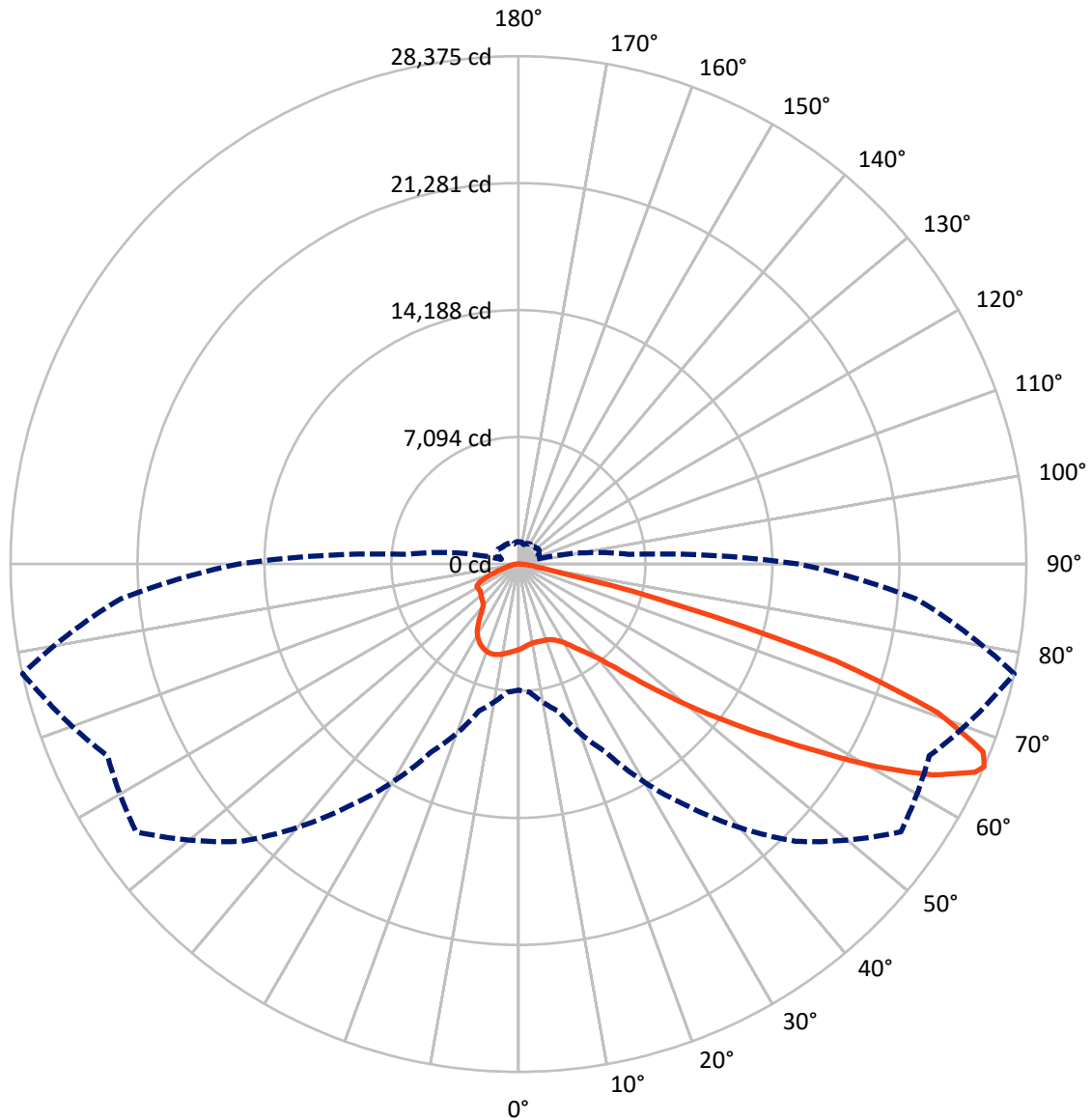
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.5 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	5727.0	0.0	5727.0
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	27794.6	0.0	27794.6
	% Fixture	82.9	0.0	82.9
Total	Lumens	33521.6	0.0	33521.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	426.8	1.3
10°-20°	1204.0	3.6
20°-30°	2054.9	6.1
30°-40°	3289.4	9.8
40°-50°	5081.9	15.2
50°-60°	7207.9	21.5
60°-70°	9642.2	28.8
70°-80°	4187.5	12.5
80°-90°	427.0	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°	33521.6	100.0
0°-180°	33521.6	100.0



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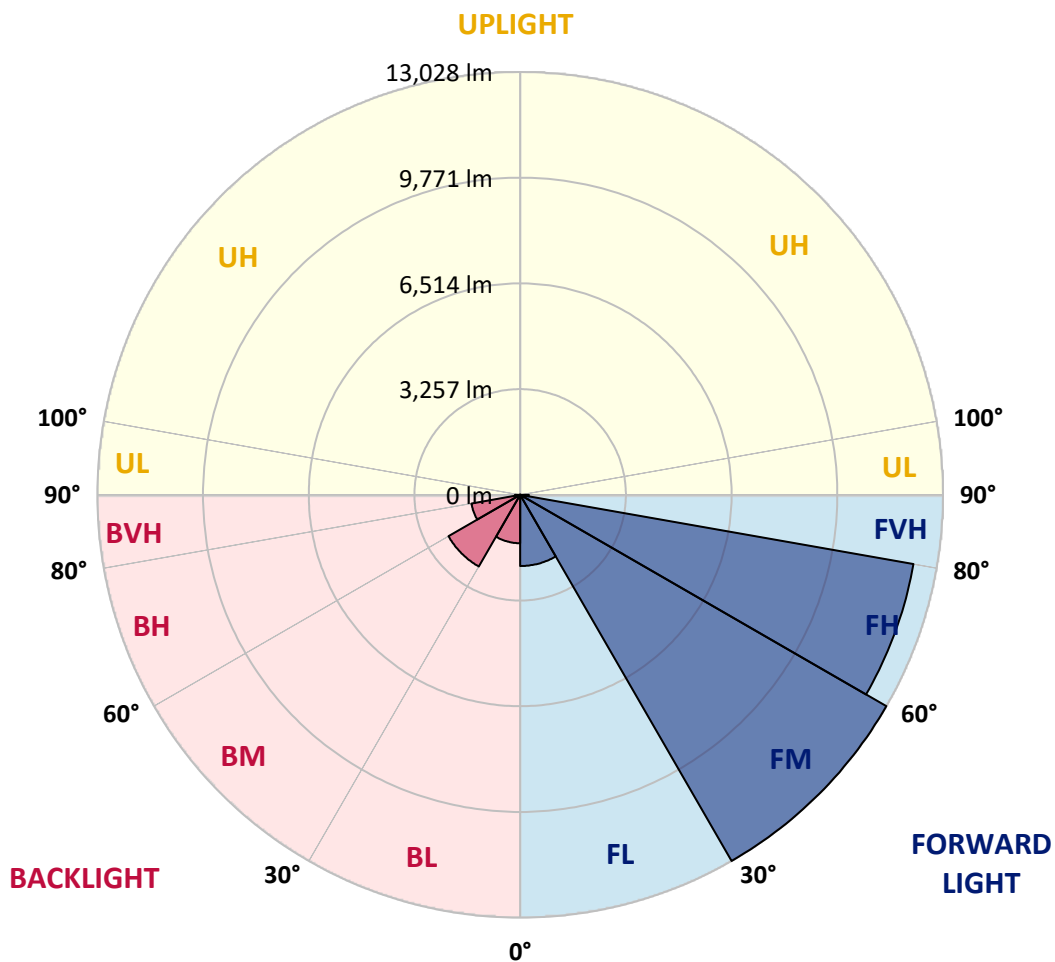
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2194.1	6.5			
FM (30°-60°)	13028.2	38.9			
FH (60°-80°)	12304.5	36.7			G5
FVH (80°-90°)	267.8	0.8			G3/500
BL (0°-30°)	1491.5	4.4	B3/2500		
BM (30°-60°)	2551.0	7.6	B3/5000		
BH (60°-80°)	1525.2	4.5	B3/2500		G3/2500
BVH (80°-90°)	159.2	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°	4776.9	4776.9	4776.9	4776.9	4776.9	4776.9	4776.9	4776.9	4776.9	4776.9	4776.9
2.5°	4225.9	4254.2	4278.2	4300.2	4344.4	4417.3	4501.2	4569.3	4667.6	4686.8	4739.0
5°	3837.9	3837.9	3856.7	3890.2	3950.2	4059.5	4173.6	4325.7	4539.6	4589.9	4729.5
7.5°	3649.5	3650.9	3661.9	3690.2	3742.5	3842.3	3967.4	4146.8	4436.4	4520.4	4757.8
10°	3719.0	3703.2	3679.2	3665.3	3673.0	3731.5	3850.4	4049.9	4373.1	4480.6	4821.5
12.5°	4108.4	4078.7	3996.2	3886.9	3782.3	3739.6	3809.2	4003.9	4346.3	4471.5	4905.5
15°	4745.3	4732.8	4578.9	4352.5	4099.3	3886.9	3839.4	3986.6	4349.2	4482.5	5005.2
17.5°	5543.8	5526.0	5323.6	4994.2	4580.8	4167.4	3945.4	4001.0	4360.2	4501.2	5101.6
20°	6349.9	6295.7	6077.5	5684.7	5153.9	4548.7	4121.4	4037.4	4374.6	4521.8	5203.3
22.5°	6951.8	6907.2	6711.0	6329.3	5717.8	4990.8	4357.3	4100.8	4420.6	4582.2	5328.0
25°	7480.7	7483.6	7288.9	6920.1	6288.0	5459.8	4661.4	4270.0	4537.6	4705.5	5499.2
27.5°	8134.8	8097.0	7914.7	7548.8	6852.0	5933.2	5028.7	4503.1	4712.2	4881.5	5724.1
30°	8917.0	8890.2	8679.6	8264.8	7477.4	6441.5	5448.3	4773.6	4937.1	5112.6	6018.5
32.5°	9837.3	9824.8	9606.1	9072.4	8199.6	7040.5	5941.3	5131.8	5272.8	5455.0	6441.5
35°	10917.8	10919.2	10661.2	10019.5	8989.9	7737.3	6500.0	5592.7	5681.4	5871.3	6945.5
37.5°	11582.9	11663.5	11567.1	10913.0	9884.8	8516.6	7225.6	6204.1	6147.0	6338.9	7485.5
40°	11725.3	11823.6	12129.1	11796.8	10886.1	9375.0	7868.7	6791.6	6720.6	6954.6	8180.9
42.5°	11525.8	11662.0	12308.5	12542.5	11948.8	10432.9	8733.3	7664.4	7574.2	7889.3	9045.5
45°	11406.9	11508.6	12256.2	12931.0	12870.5	11628.9	9834.4	8760.2	8727.1	9140.5	10043.5
47.5°	11201.2	11293.2	12012.1	13021.1	13412.4	12724.7	11157.1	10100.6	10165.3	10707.2	11169.5
50°	11312.0	11349.8	11739.7	12791.4	13569.3	13528.0	12634.6	11652.4	11874.5	12550.7	12444.7
52.5°	11296.1	11394.4	11708.1	12414.5	13589.9	14023.9	14090.1	13383.7	13851.2	14627.2	13858.9
55°	9132.8	9313.1	11335.9	12319.5	13662.3	14509.7	15385.8	15208.4	16079.3	16983.8	15455.4
57.5°	8720.9	8835.0	9956.2	12519.0	14048.8	15438.1	16826.9	17216.8	18673.7	19724.0	17400.5
60°	8639.8	8780.8	9941.8	12763.1	14832.9	16950.7	18963.9	19648.2	21830.7	22980.7	19655.9
62.5°	8388.1	8540.1	9848.3	12731.0	15946.5	19043.0	21699.3	22233.1	24824.1	25942.5	21542.5
65°	7590.1	7732.5	9086.8	12219.8	16697.5	21276.3	24936.4	24602.6	27187.4	28028.1	22482.9
66°	7043.4	7182.9	8486.4	11617.9	16522.9	21909.8	26083.5	25335.8	27716.4	28375.3	22299.2
67.5°	6043.9	6153.3	7320.5	10269.9	15596.4	22087.3	27047.9	25886.9	27771.5	28004.6	21249.5
70°	3818.8	3850.4	4757.8	7089.4	11806.4	19155.2	25579.5	24518.7	25481.6	24851.0	17813.9
72.5°	1656.9	1645.9	2284.2	3606.3	6684.2	12853.3	20691.7	20230.9	19988.7	18550.5	12470.1
75°	921.7	934.7	1186.4	1674.2	2716.2	6313.5	13535.7	12953.0	10936.5	9332.3	5654.5
77.5°	739.5	757.2	983.6	1187.9	1219.5	2201.7	6334.1	5153.9	3102.8	2489.9	1571.1
80°	584.6	616.2	858.4	925.1	822.0	907.3	2046.3	1636.3	1227.7	1126.0	814.3
82.5°	462.3	484.8	736.6	700.2	575.0	611.4	980.2	955.3	798.5	727.0	470.5
85°	332.8	373.6	605.2	527.5	376.9	411.9	650.8	623.9	457.5	373.6	207.7
87.5°	136.2	177.4	427.8	350.1	210.5	191.8	324.7	305.5	216.8	158.3	103.1
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°	4776.9	4776.9	4776.9	4776.9	4776.9	4776.9	4776.9	4776.9	4776.9	4776.9	4776.9
2.5°	4772.1	4810.0	4859.4	4889.6	4905.5	4916.5	4933.8	4932.3	4937.1	4938.5	4944.8
5°	4803.8	4867.1	4938.5	4957.7	4957.7	4940.0	4922.7	4893.9	4882.9	4880.0	4882.9
7.5°	4886.3	4955.8	5017.7	4995.6	4948.1	4878.1	4788.0	4708.8	4666.2	4651.8	4648.9
10°	4990.8	5074.7	5100.2	5016.2	4876.7	4708.8	4530.0	4400.0	4325.7	4305.0	4298.8
12.5°	5117.4	5196.6	5162.0	4984.6	4726.1	4455.6	4208.2	4001.0	3845.6	3796.7	3793.3
15°	5257.0	5318.8	5196.6	4886.3	4501.2	4102.2	3661.9	3304.2	3110.9	3049.1	3044.3
17.5°	5386.9	5418.6	5175.9	4715.1	4170.3	3524.3	2939.7	2664.0	2597.8	2613.6	2616.5
20°	5497.7	5497.7	5106.4	4469.5	3649.5	2762.3	2393.0	2388.7	2436.2	2483.7	2493.3
22.5°	5619.5	5546.6	4984.6	4122.8	2911.0	2260.2	2206.5	2250.6	2304.3	2356.6	2364.7
25°	5770.1	5586.4	4814.8	3597.2	2288.5	2052.5	2073.2	2109.6	2136.5	2170.0	2174.8
27.5°	5938.0	5636.8	4591.8	2873.1	1986.4	1923.1	1938.9	1951.3	1948.0	1960.9	1963.8
30°	6138.9	5695.8	4285.9	2245.8	1861.2	1811.8	1783.5	1772.5	1772.5	1793.1	1800.8
32.5°	6408.4	5782.6	3847.1	1924.5	1800.8	1732.7	1641.1	1599.8	1615.7	1685.2	1701.0
35°	6704.8	5876.1	3253.4	1815.1	1788.3	1696.2	1553.8	1477.5	1479.5	1544.2	1564.8
37.5°	7027.5	5995.0	2602.1	1794.5	1816.6	1698.1	1507.7	1403.2	1360.5	1360.5	1368.7
40°	7440.9	6116.8	2106.7	1808.9	1877.0	1716.8	1484.3	1344.7	1224.3	1227.7	1233.9
42.5°	7979.5	6221.4	1840.6	1838.6	1949.9	1742.3	1482.3	1267.0	1162.5	1233.9	1298.7
45°	8578.4	6273.7	1723.1	1866.0	2008.4	1758.1	1457.4	1254.5	1170.6	1382.6	1506.3
47.5°	9267.1	6243.4	1658.3	1875.1	2022.8	1758.1	1428.6	1284.8	1225.8	1601.3	1745.6
50°	10022.9	6156.6	1595.0	1856.4	2018.0	1754.7	1455.5	1314.5	1246.4	1639.1	1738.9
52.5°	10911.5	6083.7	1528.4	1815.1	1984.4	1737.5	1487.1	1302.0	1181.6	1490.5	1560.0
55°	11924.8	6104.4	1454.0	1756.6	1932.2	1704.4	1476.1	1251.2	1113.5	1313.0	1355.7
57.5°	13220.6	6349.9	1365.3	1682.3	1861.2	1648.7	1436.8	1227.7	1092.9	1191.2	1216.7
60°	14666.5	6777.2	1254.5	1607.5	1772.5	1560.0	1406.6	1238.7	1102.5	1181.6	1194.1
62.5°	15727.8	7026.1	1159.6	1498.2	1652.1	1461.7	1368.7	1252.6	1127.9	1214.7	1211.9
65°	16016.0	6617.5	1040.7	1338.5	1489.0	1359.1	1320.7	1268.4	1139.0	1241.6	1227.7
66°	15612.2	6177.3	988.4	1264.1	1406.6	1308.3	1297.2	1267.0	1134.2	1244.9	1221.0
67.5°	14632.0	5274.2	898.2	1154.8	1275.2	1232.5	1259.3	1252.6	1121.2	1241.6	1208.5
70°	11933.0	3598.6	768.3	961.5	1061.3	1084.8	1186.4	1202.3	1080.0	1186.4	1113.5
72.5°	8337.7	2192.1	679.5	746.2	858.4	925.1	1086.7	1132.3	1024.8	1035.9	966.3
75°	4029.3	1164.4	616.2	578.4	666.6	773.1	966.3	1037.3	937.5	866.6	841.2
77.5°	1256.0	711.2	522.7	465.7	522.7	623.9	807.6	909.3	834.9	725.6	716.0
80°	674.7	522.7	402.4	373.6	413.4	489.6	634.9	758.7	717.4	650.8	581.2
82.5°	445.0	339.1	297.8	289.7	315.1	373.6	471.9	628.7	628.7	557.7	405.7
85°	229.7	207.7	204.3	204.3	220.1	248.9	321.3	484.8	516.5	294.5	244.1
87.5°	114.1	118.9	110.8	115.6	123.7	121.8	153.5	244.1	291.6	178.9	148.7
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)