

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: P299017

Luminaire Tested: **GLNA-AF-08-LED-E1-T2-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299017
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24139)
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-T2-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26702.3 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 257
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

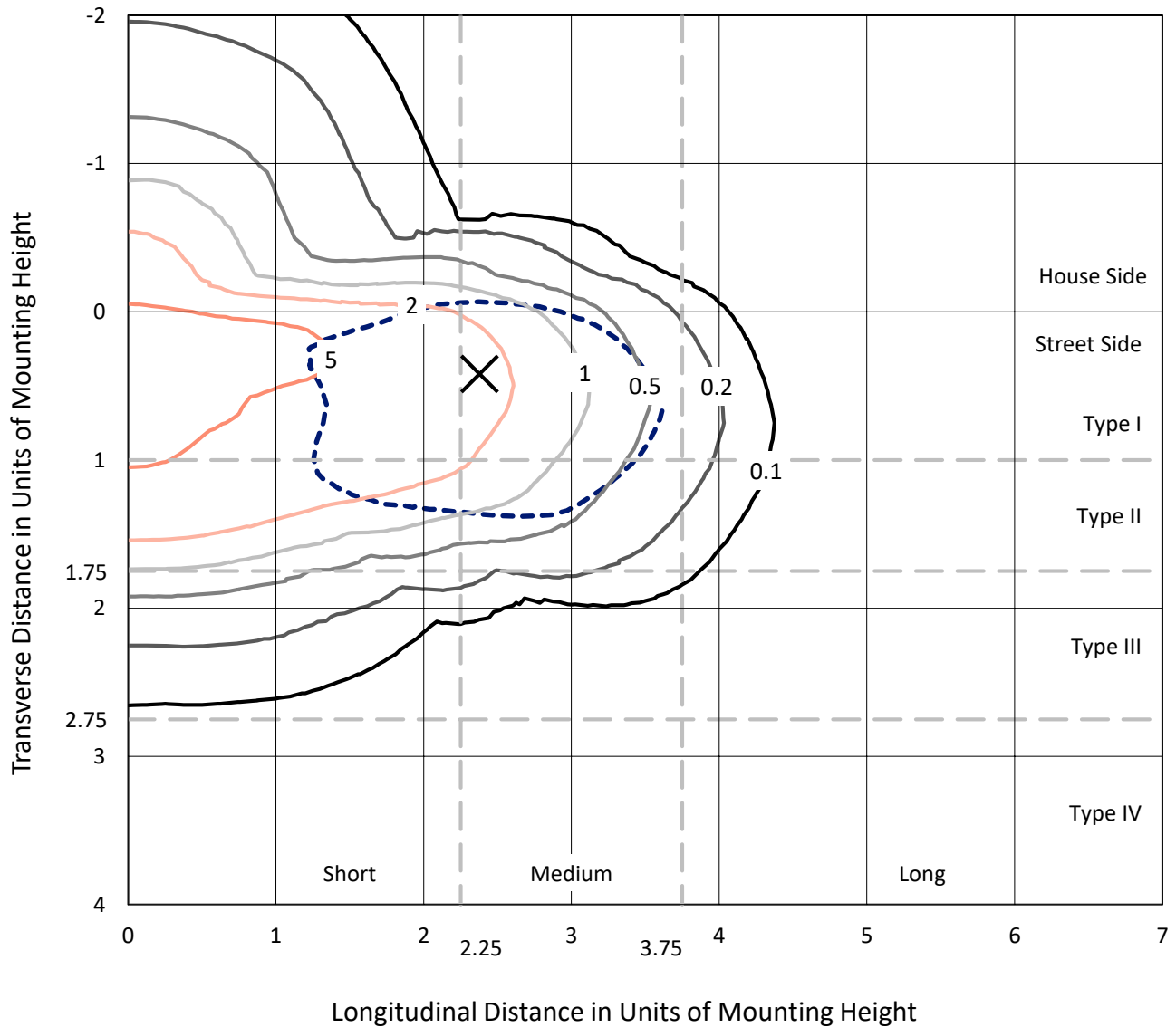


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

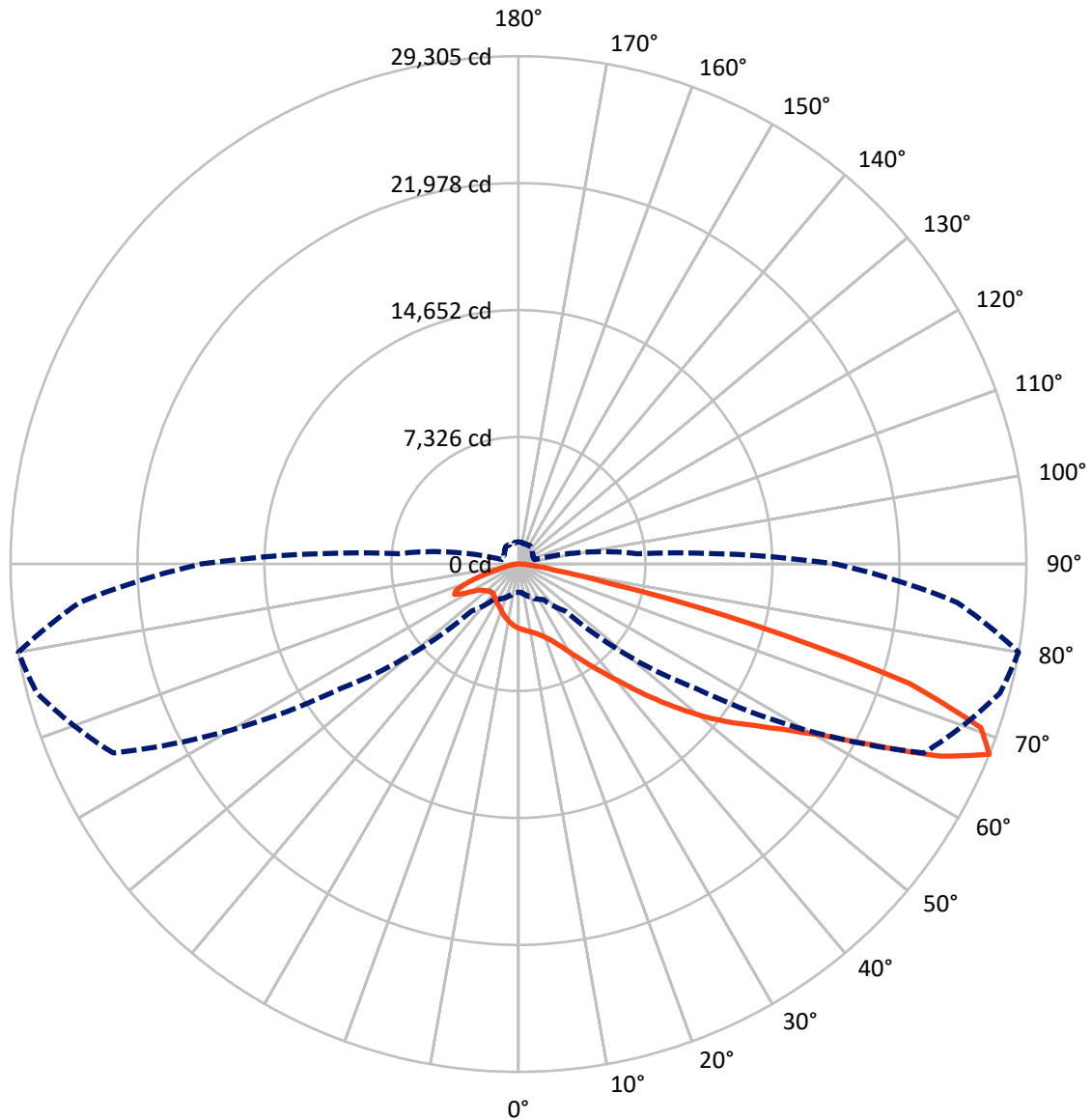


Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 80-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4917.5	0.0	4917.5
	% Fixture	18.4	0.0	18.4
Street Side	Lumens	21784.8	0.0	21784.8
	% Fixture	81.6	0.0	81.6
Total	Lumens	26702.3	0.0	26702.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	342.2	1.3
10°-20°	985.8	3.7
20°-30°	1631.7	6.1
30°-40°	2669.0	10.0
40°-50°	4309.5	16.1
50°-60°	6221.6	23.3
60°-70°	6865.9	25.7
70°-80°	3164.7	11.9
80°-90°	511.9	1.9
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°	26702.3	100.0
0°-180°	26702.3	100.0



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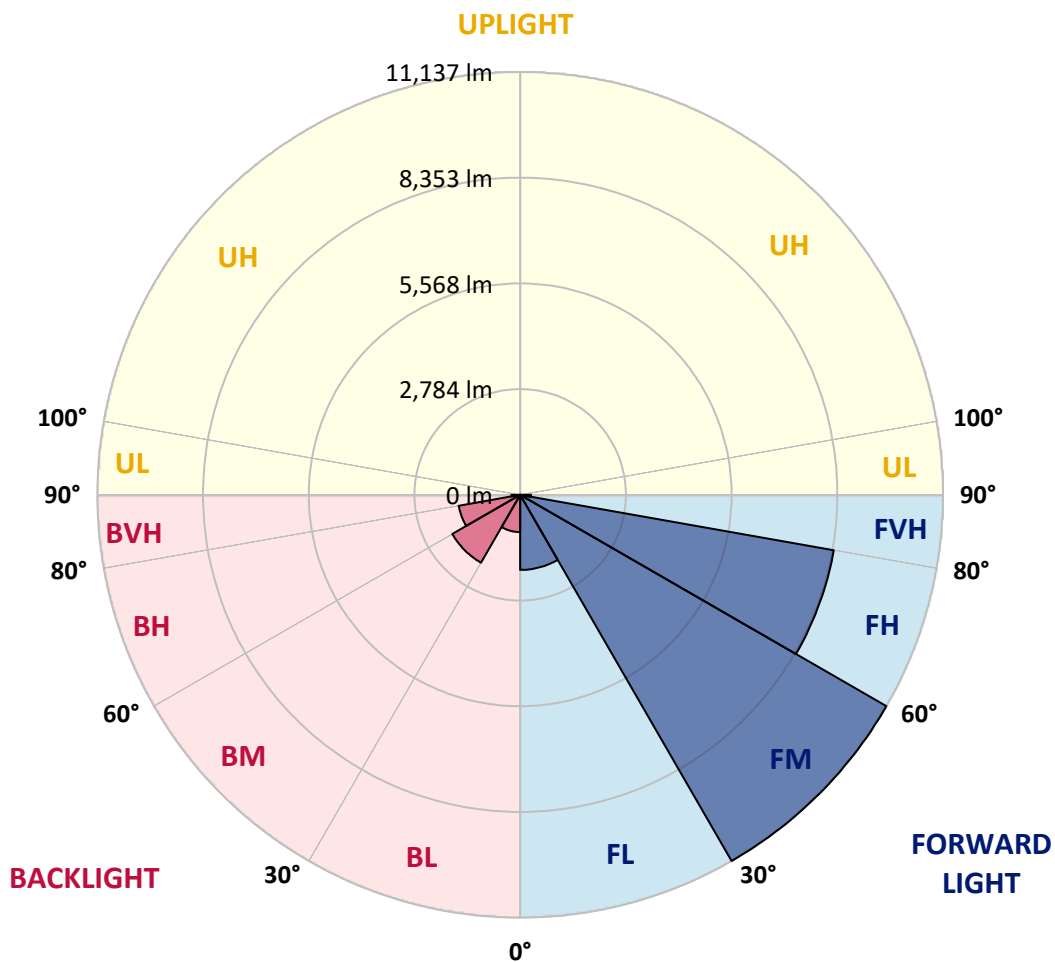
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1978.6	7.4			
FM (30°-60°)	11136.9	41.7			
FH (60°-80°)	8387.9	31.4			G4/12000
FVH (80°-90°)	281.4	1.1			G3/500
BL (0°-30°)	981.1	3.7	B2/1000		
BM (30°-60°)	2063.2	7.7	B2/2500		
BH (60°-80°)	1642.8	6.2	B3/2500		G3/2500
BVH (80°-90°)	230.4	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-G4

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	80°	85°
0°	3709.7	3709.7	3709.7	3709.7	3709.7	3709.7	3709.7	3709.7	3709.7	3709.7	3709.7
2.5°	4058.1	4034.4	4038.4	4031.8	4012.1	3977.9	3941.1	3874.1	3804.4	3767.6	3738.7
5°	4397.3	4390.7	4381.5	4360.4	4310.5	4239.5	4151.4	4033.1	3905.6	3838.6	3774.1
7.5°	4651.0	4647.0	4635.2	4622.0	4573.4	4488.0	4355.2	4186.9	4001.6	3909.5	3809.6
10°	4672.0	4678.6	4687.8	4723.3	4729.8	4683.8	4548.4	4344.7	4101.5	3983.2	3855.6
12.5°	4493.2	4507.7	4543.2	4633.9	4729.8	4786.4	4716.7	4510.3	4218.5	4075.2	3913.5
15°	4256.6	4264.5	4307.9	4432.7	4605.0	4779.8	4845.5	4693.0	4369.6	4193.5	4000.3
17.5°	4155.4	4159.3	4189.5	4272.4	4432.7	4682.5	4917.8	4891.5	4555.0	4340.7	4106.7
20°	4104.1	4113.3	4156.7	4238.2	4339.4	4557.6	4928.3	5105.8	4775.8	4524.8	4240.8
22.5°	4250.0	4246.1	4261.9	4302.6	4388.0	4519.5	4920.5	5326.7	5057.2	4761.4	4415.7
25°	4590.5	4605.0	4577.3	4531.3	4558.9	4651.0	4962.5	5565.9	5409.5	5065.1	4644.4
27.5°	5075.6	5061.1	5020.4	4912.6	4856.0	4895.5	5101.9	5823.6	5847.2	5464.7	4946.7
30°	5559.3	5547.5	5508.1	5376.6	5260.9	5228.1	5372.7	6119.3	6369.1	5944.5	5317.5
32.5°	6061.5	6048.4	6011.5	5880.1	5740.7	5664.5	5757.8	6461.1	6984.3	6517.7	5753.9
35°	6680.7	6655.7	6578.1	6395.4	6258.7	6199.5	6242.9	6891.0	7694.2	7196.0	6283.7
37.5°	7263.0	7301.1	7222.3	6969.9	6792.4	6771.4	6820.0	7415.5	8459.3	7954.5	6892.3
40°	7848.0	7854.6	7783.6	7577.2	7394.5	7360.3	7482.6	8051.8	9362.4	8861.5	7632.4
42.5°	8452.7	8465.9	8346.2	8155.6	8021.5	8028.1	8167.5	8797.1	10398.3	9930.3	8484.3
45°	9169.2	9188.9	9057.4	8807.6	8685.4	8931.2	8873.4	9633.2	11534.1	11145.0	9462.3
47.5°	9918.5	9948.7	9848.8	9614.8	9462.3	9800.2	9579.3	10560.0	12756.6	12447.7	10536.3
50°	10327.3	10370.7	10468.0	10450.9	10418.0	10361.5	10366.7	11553.8	14017.3	13804.3	11640.6
52.5°	10107.8	10106.4	10461.4	10892.6	11352.7	11386.8	11326.4	12601.5	15195.2	15130.8	12680.4
55°	9103.4	9171.8	9709.4	10544.2	11800.9	12585.7	12764.5	13801.7	16352.0	16426.9	13736.0
57.5°	7431.3	7487.8	8213.5	9376.9	11196.2	13298.2	14810.0	15546.2	17645.5	17995.2	15141.3
60°	5040.1	5108.4	5877.5	7274.9	9568.8	12901.2	16756.9	18659.1	19194.1	19989.4	17113.1
62.5°	2961.7	3023.5	3650.6	4589.2	6737.2	11056.9	17611.4	23087.9	21653.7	22998.5	20120.9
65°	2038.9	2081.0	2386.0	2856.6	3871.4	7447.1	16551.8	26145.6	25438.3	26726.6	23608.4
67.5°	1640.6	1635.3	1877.2	2198.0	2492.4	3839.9	12516.1	25799.8	28766.8	29304.5	25418.6
70°	1351.4	1346.1	1510.4	1776.0	1991.6	2162.5	6817.4	21772.0	28088.5	28306.7	23751.7
72.5°	1130.5	1135.8	1241.0	1438.1	1634.0	1628.8	2995.9	15316.1	22096.7	23605.8	18933.8
75°	954.4	957.0	1026.7	1166.0	1326.4	1311.9	1624.8	8297.6	12844.7	13895.1	10495.6
77.5°	812.4	815.0	859.7	937.3	1051.7	1046.4	1185.7	3584.8	5358.2	5292.5	3590.1
80°	724.3	724.3	745.4	759.8	822.9	799.3	879.5	1722.1	2265.0	2091.5	1432.9
82.5°	567.9	570.5	699.4	694.1	648.1	617.9	617.9	1014.9	1200.2	1109.5	838.7
85°	319.4	318.1	450.9	544.2	570.5	435.1	431.2	567.9	653.3	575.8	406.2
87.5°	136.7	139.3	209.0	241.9	323.4	270.8	266.9	293.2	332.6	287.9	188.0
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°	3709.7	3709.7	3709.7	3709.7	3709.7	3709.7	3709.7	3709.7	3709.7	3709.7	3709.7
2.5°	3711.0	3676.9	3601.9	3508.6	3424.5	3369.3	3319.3	3247.0	3250.9	3201.0	3164.2
5°	3708.4	3637.4	3463.9	3257.5	3059.0	2915.7	2807.9	2710.7	2687.0	2641.0	2613.4
7.5°	3711.0	3595.4	3303.5	2973.6	2727.7	2546.3	2454.3	2403.0	2391.2	2375.4	2376.8
10°	3720.2	3557.2	3127.4	2708.0	2450.4	2330.7	2308.4	2324.2	2342.6	2347.8	2349.1
12.5°	3741.3	3523.1	2934.1	2471.4	2276.8	2240.0	2278.2	2332.1	2367.5	2384.6	2383.3
15°	3788.6	3496.8	2748.8	2286.0	2180.9	2200.6	2271.6	2347.8	2399.1	2422.8	2424.1
17.5°	3839.9	3458.6	2558.2	2144.1	2109.9	2159.8	2247.9	2337.3	2400.4	2426.7	2432.0
20°	3906.9	3411.3	2358.3	2037.6	2042.8	2099.4	2182.2	2271.6	2341.3	2363.6	2374.1
22.5°	3995.0	3360.1	2183.5	1950.8	1966.6	2010.0	2074.4	2152.0	2212.4	2222.9	2232.1
25°	4113.3	3304.8	2044.2	1872.0	1878.5	1903.5	1946.9	1992.9	2035.0	2023.1	2032.3
27.5°	4272.4	3257.5	1940.3	1799.7	1787.8	1793.1	1815.4	1829.9	1852.2	1819.4	1823.3
30°	4459.0	3206.2	1860.1	1736.6	1703.7	1694.5	1699.7	1707.6	1724.7	1680.0	1673.5
32.5°	4675.9	3144.5	1785.2	1681.3	1635.3	1616.9	1619.6	1640.6	1706.3	1678.7	1664.3
35°	4928.3	3074.8	1706.3	1620.9	1589.3	1563.0	1560.4	1626.1	1822.0	1804.9	1791.8
37.5°	5224.1	3005.1	1627.4	1552.5	1555.1	1526.2	1517.0	1591.9	1844.3	1777.3	1768.1
40°	5600.1	2968.3	1560.4	1480.2	1513.1	1509.1	1490.7	1528.9	1697.1	1574.9	1559.1
42.5°	6065.4	2973.6	1510.4	1402.7	1463.1	1505.2	1476.3	1477.6	1538.1	1446.0	1431.6
45°	6639.9	3035.4	1475.0	1340.9	1406.6	1501.2	1471.0	1450.0	1455.2	1406.6	1398.7
47.5°	7310.3	3162.9	1450.0	1289.6	1352.7	1486.8	1469.7	1442.1	1430.3	1404.0	1397.4
50°	8055.7	3348.2	1431.6	1241.0	1304.1	1463.1	1471.0	1434.2	1421.1	1410.5	1406.6
52.5°	8787.9	3559.9	1404.0	1198.9	1265.9	1434.2	1475.0	1426.3	1411.9	1404.0	1400.0
55°	9604.3	3824.1	1361.9	1163.4	1234.4	1397.4	1475.0	1414.5	1398.7	1400.0	1398.7
57.5°	10707.2	4251.3	1311.9	1133.2	1196.3	1352.7	1450.0	1401.3	1381.6	1382.9	1384.2
60°	12430.6	5004.6	1251.5	1102.9	1148.9	1300.1	1415.8	1372.4	1352.7	1358.0	1359.3
62.5°	14965.1	6110.1	1172.6	1058.2	1099.0	1243.6	1368.5	1335.6	1315.9	1329.0	1329.0
65°	17599.5	7085.6	1075.3	1001.7	1046.4	1181.8	1309.3	1289.6	1269.9	1300.1	1298.8
67.5°	18308.1	6867.3	978.0	939.9	993.8	1113.4	1238.3	1227.8	1217.3	1269.9	1267.2
70°	16263.9	5513.3	888.7	876.8	936.0	1039.8	1162.1	1162.1	1155.5	1194.9	1185.7
72.5°	12391.2	3909.5	803.2	809.8	870.2	959.6	1079.3	1088.5	1078.0	1097.7	1089.8
75°	6633.3	2237.4	717.8	736.2	788.7	878.1	987.2	996.4	989.9	988.6	992.5
77.5°	2204.5	1093.7	628.4	657.3	703.3	794.0	891.3	905.7	890.0	887.3	886.0
80°	982.0	687.5	529.8	567.9	608.6	698.0	790.1	801.9	784.8	808.5	778.2
82.5°	631.0	452.2	424.6	466.7	506.1	602.1	688.8	691.5	675.7	784.8	669.1
85°	306.3	280.0	319.4	357.6	391.7	473.2	570.5	571.8	532.4	485.1	468.0
87.5°	152.5	163.0	213.0	247.1	264.2	324.7	415.4	407.5	390.4	354.9	327.3
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)