

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: P299008

Luminaire Tested: **GLNA-AF-06-LED-E1-T2-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299008  
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-06-LED-E1-T2-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(6) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22936.1 lumens  
Efficiency: N/A  
Efficacy: 118.8 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B3 - U0 - G3

Input Watts (W): 193  
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

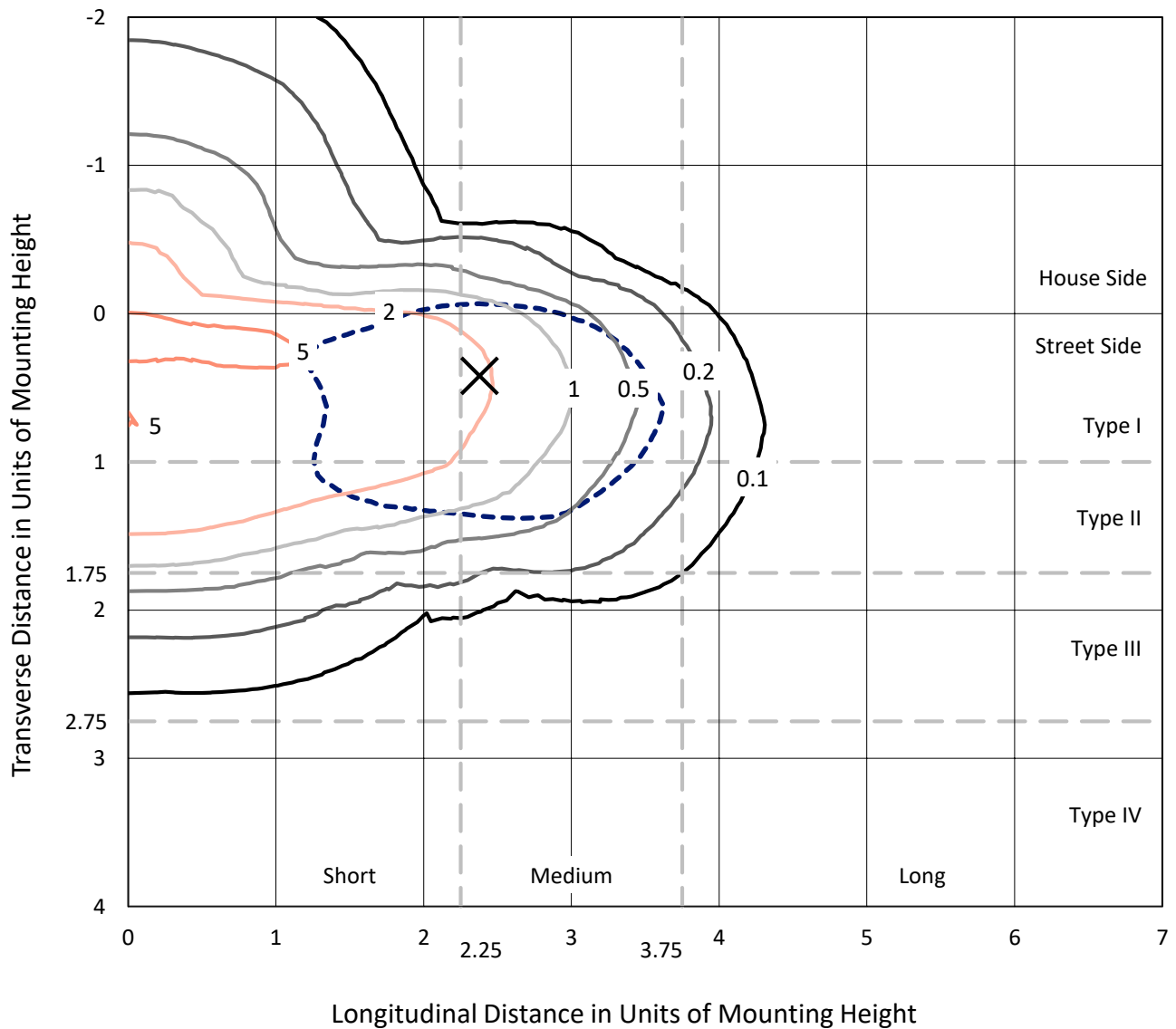


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### Iso-Footcandle Lines of Horizontal Illumination

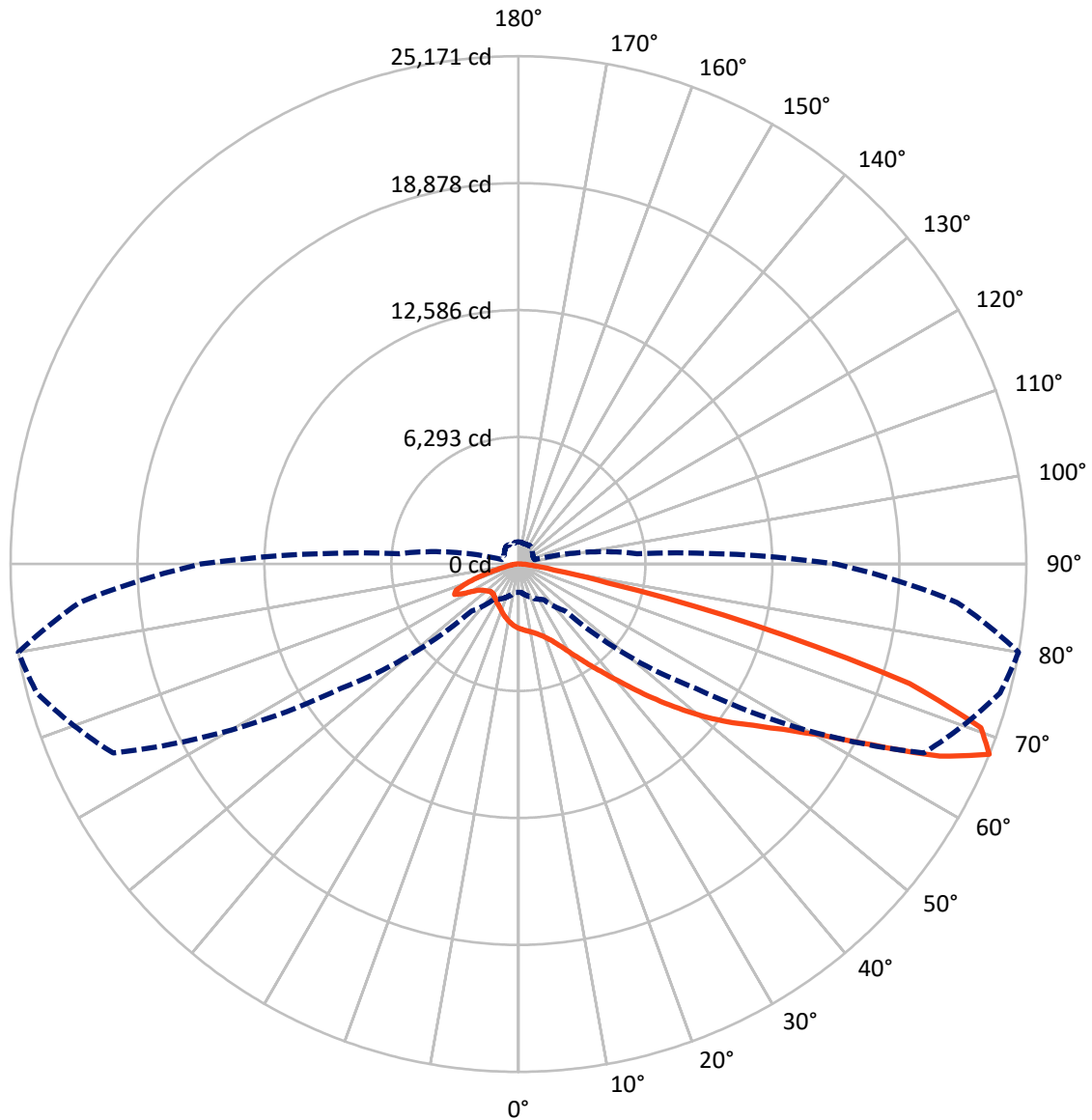
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 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
<b>House Side</b>	Lumens	4224.0	0.0	4224.0
	% Fixture	18.4	0.0	18.4
<b>Street Side</b>	Lumens	18712.2	0.0	18712.2
	% Fixture	81.6	0.0	81.6
<b>Total</b>	Lumens	22936.1	0.0	22936.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	293.9	1.3
10°-20°	846.8	3.7
20°-30°	1401.6	6.1
30°-40°	2292.6	10.0
40°-50°	3701.6	16.1
50°-60°	5344.1	23.3
60°-70°	5897.5	25.7
70°-80°	2718.4	11.9
80°-90°	439.7	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°	22936.1	100.0
0°-180°	22936.1	100.0



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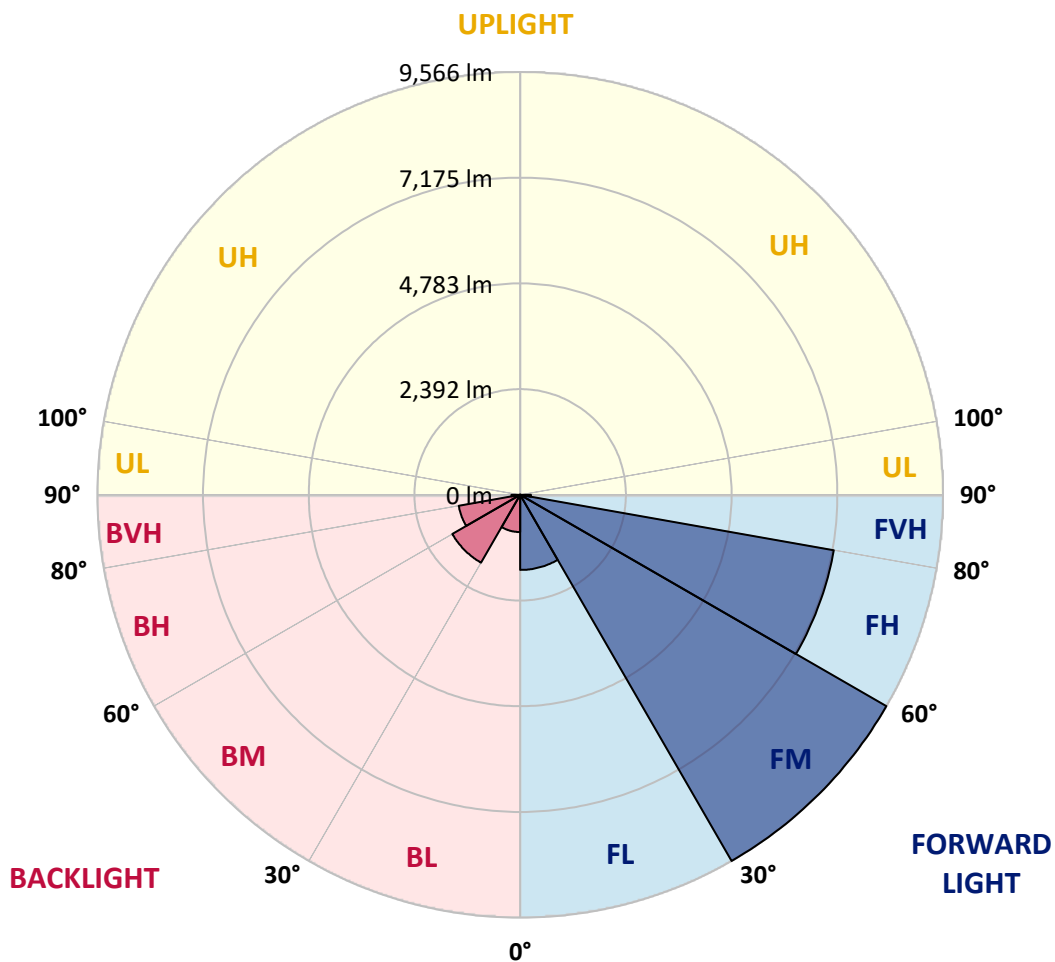
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1699.5	7.4			
FM (30°-60°)	9566.1	41.7			
FH (60°-80°)	7204.8	31.4			G3/7500
FVH (80°-90°)	241.7	1.1			G3/500
BL (0°-30°)	842.7	3.7	B2/1000		
BM (30°-60°)	1772.2	7.7	B2/2500		
BH (60°-80°)	1411.1	6.2	B3/2500		G3/2500
BVH (80°-90°)	198.0	0.9			G2/225
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 Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	80°	85°
0°	3186.5	3186.5	3186.5	3186.5	3186.5	3186.5	3186.5	3186.5	3186.5	3186.5	3186.5
2.5°	3485.7	3465.4	3468.8	3463.1	3446.2	3416.8	3385.2	3327.6	3267.8	3236.2	3211.3
5°	3777.0	3771.4	3763.5	3745.4	3702.5	3641.5	3565.9	3464.3	3354.7	3297.2	3241.8
7.5°	3995.0	3991.6	3981.4	3970.1	3928.4	3855.0	3740.9	3596.4	3437.2	3358.1	3272.3
10°	4013.0	4018.7	4026.6	4057.1	4062.7	4023.2	3906.9	3731.9	3523.0	3421.4	3311.8
12.5°	3859.5	3871.9	3902.4	3980.3	4062.7	4111.3	4051.4	3874.2	3623.5	3500.4	3361.5
15°	3656.2	3663.0	3700.3	3807.5	3955.5	4105.6	4162.1	4031.1	3753.3	3602.0	3436.0
17.5°	3569.3	3572.7	3598.6	3669.8	3807.5	4022.1	4224.2	4201.6	3912.5	3728.5	3527.5
20°	3525.2	3533.1	3570.4	3640.4	3727.4	3914.8	4233.2	4385.7	4102.2	3886.6	3642.7
22.5°	3650.6	3647.2	3660.7	3695.7	3769.1	3882.1	4226.4	4575.4	4343.9	4089.8	3792.9
25°	3943.0	3955.5	3931.7	3892.2	3915.9	3995.0	4262.6	4780.9	4646.5	4350.7	3989.3
27.5°	4359.7	4347.3	4312.3	4219.7	4171.1	4205.0	4382.3	5002.2	5022.5	4693.9	4249.0
30°	4775.2	4765.1	4731.2	4618.3	4518.9	4490.7	4614.9	5256.2	5470.8	5106.1	4567.5
32.5°	5206.6	5195.3	5163.7	5050.7	4931.0	4865.6	4945.7	5549.8	5999.2	5598.4	4942.3
35°	5738.4	5716.9	5650.3	5493.4	5375.9	5325.1	5362.4	5919.1	6609.0	6181.0	5397.4
37.5°	6238.6	6271.4	6203.6	5986.8	5834.4	5816.3	5858.1	6369.6	7266.2	6832.6	5920.2
40°	6741.1	6746.7	6685.8	6508.5	6351.5	6322.2	6427.2	6916.1	8041.9	7611.7	6555.9
42.5°	7260.5	7271.8	7169.0	7005.3	6890.1	6895.8	7015.5	7556.3	8931.7	8529.7	7287.6
45°	7875.9	7892.8	7779.9	7565.4	7460.4	7671.5	7621.8	8274.5	9907.3	9573.0	8127.7
47.5°	8519.5	8545.5	8459.7	8258.7	8127.7	8417.9	8228.2	9070.6	10957.4	10692.0	9050.2
50°	8870.7	8908.0	8991.5	8976.8	8948.6	8900.0	8904.6	9924.2	12040.2	11857.3	9998.7
52.5°	8682.1	8681.0	8985.9	9356.2	9751.4	9780.8	9728.9	10824.1	13052.0	12996.6	10891.9
55°	7819.4	7878.2	8340.0	9057.0	10136.5	10810.6	10964.2	11855.1	14045.6	14110.0	11798.6
57.5°	6383.1	6431.7	7055.0	8054.3	9617.1	11422.6	12721.1	13353.5	15156.7	15457.1	13005.7
60°	4329.2	4387.9	5048.5	6248.8	8219.2	11081.6	14393.4	16027.3	16486.9	17170.0	14699.4
62.5°	2544.0	2597.1	3135.7	3941.9	5787.0	9497.4	15127.4	19831.5	18599.5	19754.7	17282.9
65°	1751.3	1787.5	2049.4	2453.7	3325.4	6396.7	14217.3	22457.9	21850.4	22957.0	20278.6
67.5°	1409.2	1404.7	1612.4	1888.0	2140.9	3298.3	10750.7	22160.9	24709.4	25171.3	21833.5
70°	1160.8	1156.3	1297.4	1525.5	1710.7	1857.5	5855.8	18701.2	24126.8	24314.2	20401.7
72.5°	971.1	975.6	1065.9	1235.3	1403.5	1399.0	2573.4	13155.9	18980.1	20276.3	16263.3
75°	819.8	822.0	881.9	1001.6	1139.3	1126.9	1395.6	7127.3	11033.0	11935.2	9015.2
77.5°	697.8	700.1	738.5	805.1	903.3	898.8	1018.5	3079.2	4602.5	4546.0	3083.7
80°	622.2	622.2	640.2	652.7	706.9	686.5	755.4	1479.2	1945.5	1796.5	1230.8
82.5°	487.8	490.1	600.7	596.2	556.7	530.7	530.7	871.7	1030.9	953.0	720.4
85°	274.4	273.3	387.3	467.5	490.1	373.8	370.4	487.8	561.2	494.6	348.9
87.5°	117.4	119.7	179.5	207.8	277.8	232.6	229.2	251.8	285.7	247.3	161.5
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°	3186.5	3186.5	3186.5	3186.5	3186.5	3186.5	3186.5	3186.5	3186.5	3186.5	3186.5
2.5°	3187.6	3158.3	3093.9	3013.7	2941.5	2894.0	2851.1	2789.0	2792.4	2749.5	2717.9
5°	3185.4	3124.4	2975.3	2798.1	2627.6	2504.5	2411.9	2328.3	2308.0	2268.5	2244.8
7.5°	3187.6	3088.3	2837.6	2554.2	2343.0	2187.2	2108.1	2064.1	2053.9	2040.4	2041.5
10°	3195.5	3055.5	2686.3	2326.1	2104.8	2002.0	1982.8	1996.4	2012.2	2016.7	2017.8
12.5°	3213.6	3026.2	2520.3	2122.8	1955.7	1924.1	1956.8	2003.1	2033.6	2048.3	2047.2
15°	3254.2	3003.6	2361.1	1963.6	1873.3	1890.2	1951.2	2016.7	2060.7	2081.0	2082.2
17.5°	3298.3	2970.8	2197.3	1841.7	1812.3	1855.2	1930.9	2007.6	2061.8	2084.4	2088.9
20°	3355.9	2930.2	2025.7	1750.2	1754.7	1803.3	1874.4	1951.2	2011.0	2030.2	2039.3
22.5°	3431.5	2886.1	1875.5	1675.7	1689.2	1726.5	1781.8	1848.4	1900.4	1909.4	1917.3
25°	3533.1	2838.7	1755.8	1607.9	1613.6	1635.0	1672.3	1711.8	1747.9	1737.8	1745.7
27.5°	3669.8	2798.1	1666.6	1545.8	1535.7	1540.2	1559.4	1571.8	1591.0	1562.8	1566.1
30°	3830.1	2754.0	1597.8	1491.6	1463.4	1455.5	1460.0	1466.8	1481.5	1443.1	1437.4
32.5°	4016.4	2701.0	1533.4	1444.2	1404.7	1388.9	1391.1	1409.2	1465.7	1441.9	1429.5
35°	4233.2	2641.1	1465.7	1392.3	1365.2	1342.6	1340.3	1396.8	1565.0	1550.3	1539.0
37.5°	4487.3	2581.3	1397.9	1333.5	1335.8	1311.0	1303.1	1367.4	1584.2	1526.6	1518.7
40°	4810.2	2549.6	1340.3	1271.4	1299.7	1296.3	1280.5	1313.2	1457.7	1352.7	1339.2
42.5°	5209.9	2554.2	1297.4	1204.8	1256.8	1292.9	1268.0	1269.2	1321.1	1242.1	1229.7
45°	5703.4	2607.2	1266.9	1151.7	1208.2	1289.5	1263.5	1245.5	1250.0	1208.2	1201.4
47.5°	6279.3	2716.8	1245.5	1107.7	1161.9	1277.1	1262.4	1238.7	1228.5	1205.9	1200.3
50°	6919.5	2876.0	1229.7	1065.9	1120.1	1256.8	1263.5	1231.9	1220.6	1211.6	1208.2
52.5°	7548.4	3057.8	1205.9	1029.8	1087.4	1231.9	1266.9	1225.1	1212.7	1205.9	1202.6
55°	8249.7	3284.7	1169.8	999.3	1060.3	1200.3	1266.9	1215.0	1201.4	1202.6	1201.4
57.5°	9197.0	3651.7	1126.9	973.3	1027.5	1161.9	1245.5	1203.7	1186.7	1187.9	1189.0
60°	10677.3	4298.7	1075.0	947.4	986.9	1116.7	1216.1	1178.8	1161.9	1166.4	1167.6
62.5°	12854.4	5248.3	1007.2	909.0	944.0	1068.2	1175.5	1147.2	1130.3	1141.6	1141.6
65°	15117.2	6086.2	923.7	860.4	898.8	1015.1	1124.6	1107.7	1090.8	1116.7	1115.6
67.5°	15725.8	5898.7	840.1	807.4	853.6	956.4	1063.7	1054.6	1045.6	1090.8	1088.5
70°	13970.0	4735.7	763.3	753.2	804.0	893.2	998.2	998.2	992.5	1026.4	1018.5
72.5°	10643.5	3358.1	689.9	695.6	747.5	824.3	927.0	934.9	925.9	942.8	936.1
75°	5697.7	1921.8	616.5	632.3	677.5	754.3	848.0	855.9	850.3	849.1	852.5
77.5°	1893.6	939.5	539.7	564.6	604.1	682.0	765.6	778.0	764.4	762.2	761.1
80°	843.5	590.6	455.1	487.8	522.8	599.6	678.6	688.8	674.1	694.4	668.5
82.5°	542.0	388.4	364.7	400.9	434.7	517.2	591.7	593.9	580.4	674.1	574.7
85°	263.1	240.5	274.4	307.1	336.5	406.5	490.1	491.2	457.3	416.7	402.0
87.5°	131.0	140.0	182.9	212.3	227.0	278.9	356.8	350.0	335.4	304.9	281.2
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)