

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: P299012

Luminaire Tested: **GLNA-AF-07-LED-E1-T2-7030-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299012  
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-07-LED-E1-T2-7030-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26237 lumens  
Efficiency: N/A  
Efficacy: 116.1 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): 226  
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

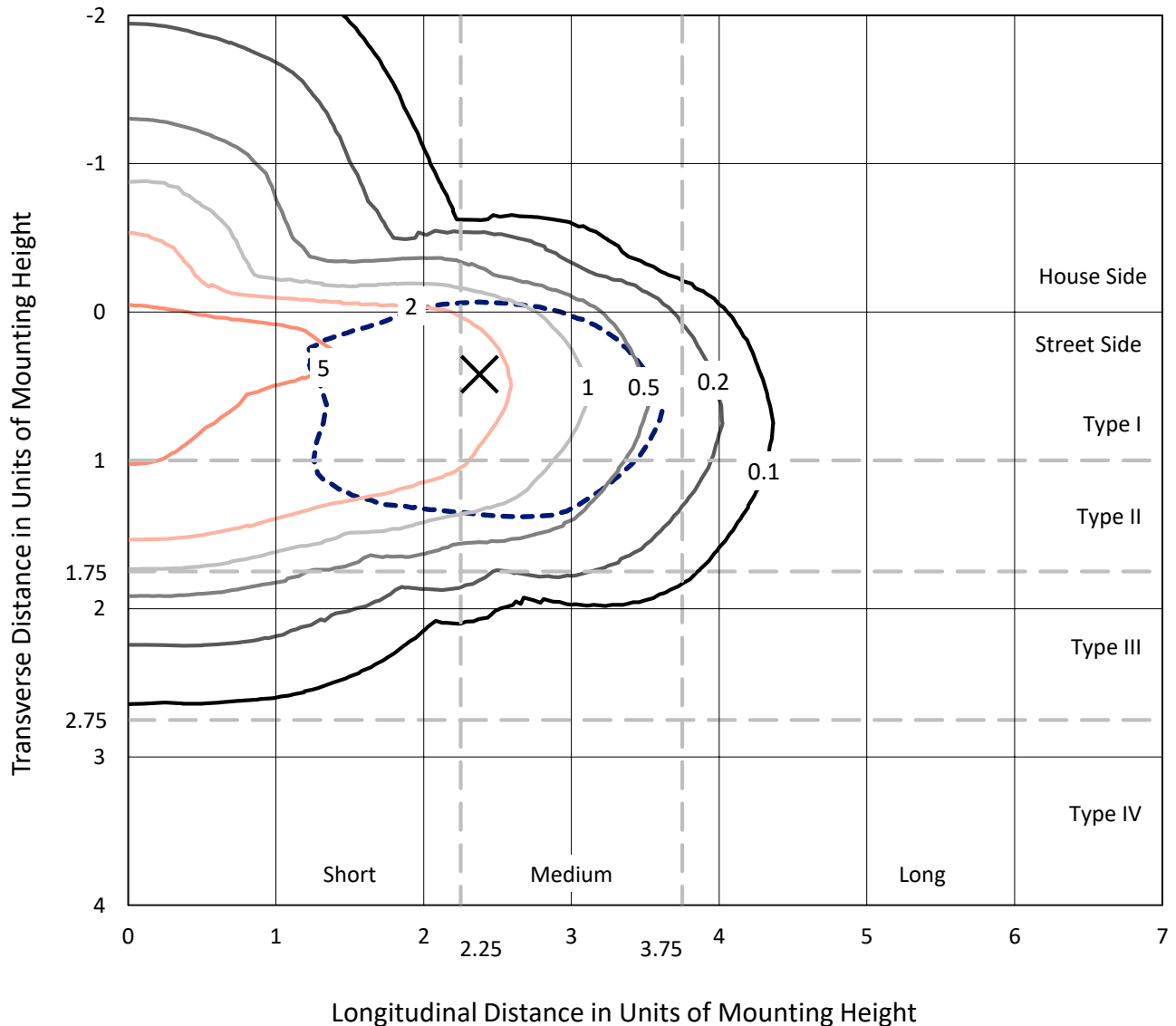


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### Iso-Footcandle Lines of Horizontal Illumination

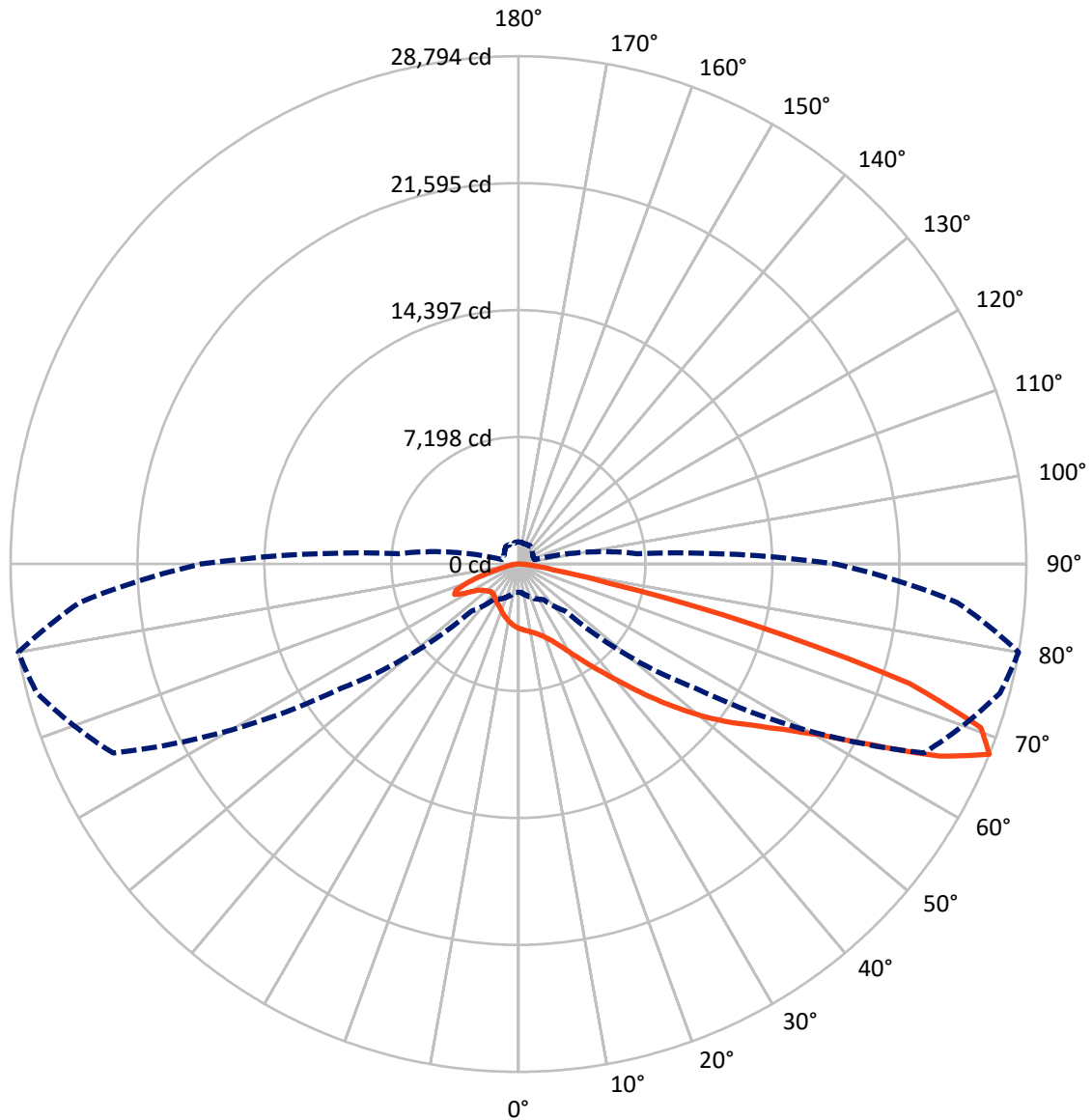
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 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	4831.9	0.0	4831.9
	% Fixture	18.4	0.0	18.4
<b>Street Side</b>	Lumens	21405.2	0.0	21405.2
	% Fixture	81.6	0.0	81.6
<b>Total</b>	Lumens	26237.0	0.0	26237.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	336.2	1.3
10°-20°	968.6	3.7
20°-30°	1603.3	6.1
30°-40°	2622.5	10.0
40°-50°	4234.4	16.1
50°-60°	6113.2	23.3
60°-70°	6746.3	25.7
70°-80°	3109.6	11.9
80°-90°	503.0	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°	26237.0	100.0
0°-180°	26237.0	100.0



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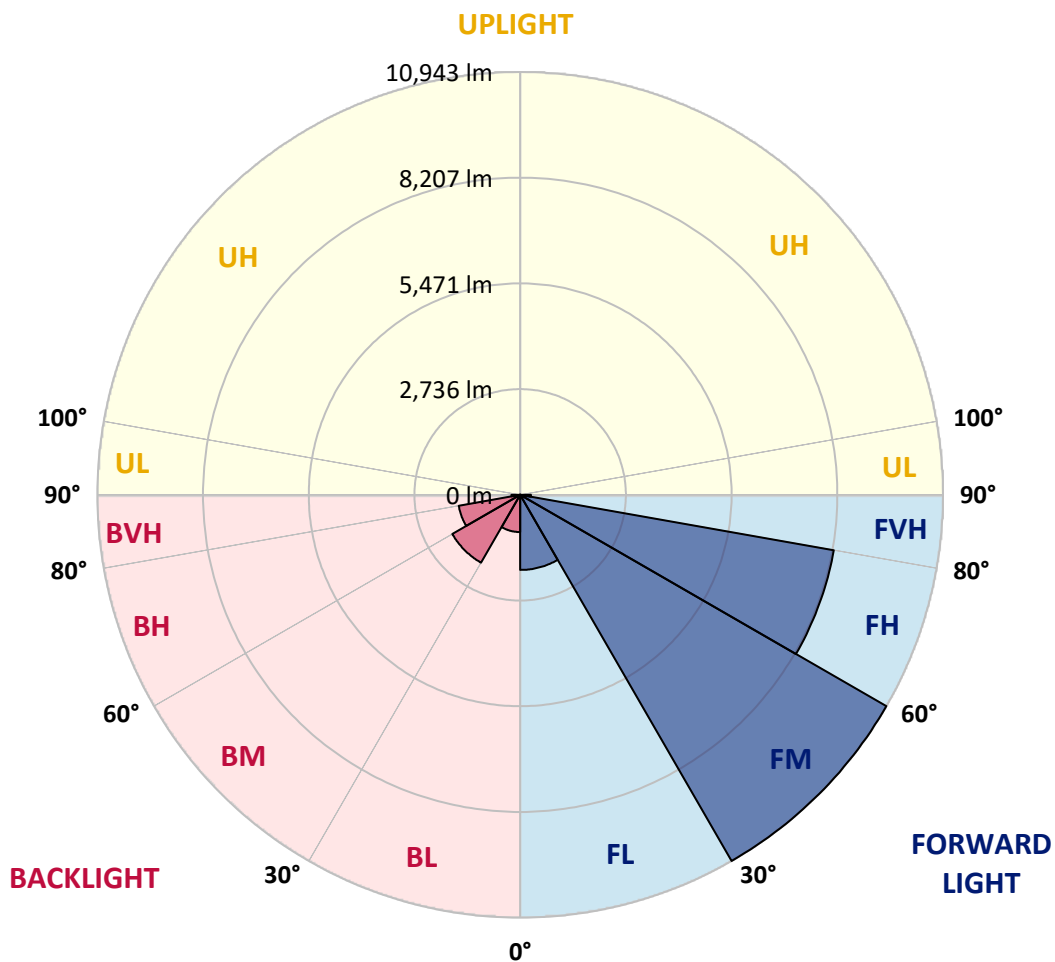
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1944.1	7.4			
FM	(30°-60°)	10942.8	41.7			
FH	(60°-80°)	8241.7	31.4			G4/12000
FVH	(80°-90°)	276.5	1.1			G3/500
BL	(0°-30°)	964.0	3.7	B2/1000		
BM	(30°-60°)	2027.3	7.7	B2/2500		
BH	(60°-80°)	1614.1	6.2	B3/2500		G3/2500
BVH	(80°-90°)	226.4	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°	3645.1	3645.1	3645.1	3645.1	3645.1	3645.1	3645.1	3645.1	3645.1	3645.1	3645.1
2.5°	3987.4	3964.1	3968.0	3961.5	3942.2	3908.6	3872.4	3806.5	3738.1	3701.9	3673.5
5°	4320.6	4314.2	4305.1	4284.5	4235.4	4165.6	4079.1	3962.8	3837.5	3771.7	3708.4
7.5°	4569.9	4566.0	4554.4	4541.5	4493.7	4409.8	4279.3	4114.0	3931.8	3841.4	3743.3
10°	4590.6	4597.0	4606.1	4641.0	4647.4	4602.2	4469.2	4269.0	4030.0	3913.8	3788.5
12.5°	4414.9	4429.1	4464.0	4553.1	4647.4	4703.0	4634.5	4431.7	4145.0	4004.2	3845.3
15°	4182.4	4190.2	4232.8	4355.5	4524.7	4696.5	4761.1	4611.3	4293.5	4120.4	3930.5
17.5°	4083.0	4086.8	4116.5	4197.9	4355.5	4600.9	4832.1	4806.3	4475.6	4265.1	4035.2
20°	4032.6	4041.6	4084.3	4164.3	4263.8	4478.2	4842.5	5016.8	4692.6	4445.9	4166.9
22.5°	4176.0	4172.1	4187.6	4227.6	4311.6	4440.8	4834.7	5233.8	4969.0	4678.4	4338.7
25°	4510.5	4524.7	4497.6	4452.4	4479.5	4569.9	4876.0	5468.9	5315.2	4976.8	4563.5
27.5°	4987.1	4972.9	4932.9	4827.0	4771.4	4810.2	5013.0	5722.1	5745.3	5369.5	4860.5
30°	5462.5	5450.8	5412.1	5282.9	5169.3	5137.0	5279.0	6012.7	6258.1	5840.9	5224.8
32.5°	5955.9	5943.0	5906.8	5777.6	5640.7	5565.8	5657.5	6348.5	6862.6	6404.1	5653.6
35°	6564.3	6539.7	6463.5	6284.0	6149.6	6091.5	6134.1	6770.9	7560.1	7070.6	6174.2
37.5°	7136.5	7173.9	7096.4	6848.4	6674.0	6653.4	6701.2	7286.3	8311.9	7815.9	6772.2
40°	7711.3	7717.7	7648.0	7445.2	7265.6	7232.1	7352.2	7911.5	9199.3	8707.1	7499.4
42.5°	8305.4	8318.3	8200.8	8013.5	7881.8	7888.2	8025.1	8643.8	10217.1	9757.3	8336.4
45°	9009.4	9028.8	8899.6	8654.2	8534.1	8775.6	8718.8	9465.3	11333.1	10950.8	9297.4
47.5°	9745.6	9775.3	9677.2	9447.3	9297.4	9629.4	9412.4	10376.0	12534.3	12230.8	10352.7
50°	10147.3	10190.0	10285.6	10268.8	10236.5	10180.9	10186.1	11352.5	13773.1	13563.8	11437.7
52.5°	9931.6	9930.3	10279.1	10702.8	11154.8	11188.4	11129.0	12381.9	14930.4	14867.1	12459.4
55°	8944.8	9012.0	9540.3	10360.5	11595.3	12366.4	12542.1	13561.2	16067.1	16140.7	13496.6
57.5°	7301.8	7357.3	8070.3	9213.5	11001.1	13066.5	14551.9	15275.3	17338.1	17681.6	14877.4
60°	4952.3	5019.4	5775.0	7148.1	9402.1	12676.4	16464.9	18333.9	18859.6	19641.1	16814.9
62.5°	2910.1	2970.8	3587.0	4509.2	6619.8	10864.2	17304.5	22685.6	21276.4	22597.7	19770.3
65°	2003.4	2044.7	2344.4	2806.8	3804.0	7317.3	16263.4	25690.0	24995.1	26260.9	23197.1
67.5°	1612.0	1606.8	1844.5	2159.7	2449.0	3773.0	12298.0	25350.3	28265.6	28793.9	24975.7
70°	1327.8	1322.7	1484.1	1745.0	1956.9	2124.8	6698.6	21392.6	27599.1	27813.5	23337.9
72.5°	1110.8	1116.0	1219.3	1413.1	1605.5	1600.4	2943.7	15049.2	21711.7	23194.5	18603.9
75°	937.8	940.3	1008.8	1145.7	1303.3	1289.1	1596.5	8153.0	12620.9	13652.9	10312.7
77.5°	798.3	800.8	844.8	921.0	1033.3	1028.2	1165.1	3522.4	5264.8	5200.3	3527.5
80°	711.7	711.7	732.4	746.6	808.6	785.3	864.1	1692.1	2225.5	2055.0	1407.9
82.5°	558.0	560.6	687.2	682.0	636.8	607.1	607.1	997.2	1179.3	1090.2	824.1
85°	313.9	312.6	443.0	534.8	560.6	427.5	423.7	558.0	642.0	565.8	399.1
87.5°	134.3	136.9	205.4	237.7	317.8	266.1	262.2	288.0	326.8	282.9	184.7
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°	3645.1	3645.1	3645.1	3645.1	3645.1	3645.1	3645.1	3645.1	3645.1	3645.1	3645.1
2.5°	3646.4	3612.8	3539.2	3447.5	3364.8	3310.5	3261.5	3190.4	3194.3	3145.2	3109.0
5°	3643.8	3574.0	3403.5	3200.8	3005.7	2864.9	2759.0	2663.4	2640.2	2595.0	2567.8
7.5°	3646.4	3532.7	3246.0	2921.8	2680.2	2502.0	2411.5	2361.2	2349.5	2334.0	2335.3
10°	3655.4	3495.3	3072.9	2660.8	2407.7	2290.1	2268.2	2283.7	2301.8	2306.9	2308.2
12.5°	3676.1	3461.7	2883.0	2428.3	2237.2	2201.0	2238.5	2291.4	2326.3	2343.1	2341.8
15°	3722.6	3435.8	2700.9	2246.2	2142.9	2162.3	2232.0	2306.9	2357.3	2380.5	2381.8
17.5°	3773.0	3398.4	2513.6	2106.7	2073.1	2122.2	2208.8	2296.6	2358.6	2384.4	2389.6
20°	3838.8	3351.9	2317.3	2002.1	2007.3	2062.8	2144.2	2232.0	2300.5	2322.4	2332.8
22.5°	3925.4	3301.5	2145.5	1916.8	1932.3	1975.0	2038.3	2114.5	2173.9	2184.2	2193.3
25°	4041.6	3247.3	2008.5	1839.3	1845.8	1870.3	1913.0	1958.2	1999.5	1987.9	1996.9
27.5°	4197.9	3200.8	1906.5	1768.3	1756.7	1761.8	1783.8	1798.0	1820.0	1787.7	1791.5
30°	4381.3	3150.4	1827.7	1706.3	1674.0	1665.0	1670.1	1677.9	1694.7	1650.8	1644.3
32.5°	4594.5	3089.7	1754.1	1652.0	1606.8	1588.8	1591.3	1612.0	1676.6	1649.5	1635.3
35°	4842.5	3021.2	1676.6	1592.6	1561.6	1535.8	1533.2	1597.8	1790.3	1773.5	1760.5
37.5°	5133.1	2952.8	1599.1	1525.5	1528.0	1499.6	1490.6	1564.2	1812.2	1746.3	1737.3
40°	5502.5	2916.6	1533.2	1454.4	1486.7	1482.8	1464.8	1502.2	1667.5	1547.4	1531.9
42.5°	5959.8	2921.8	1484.1	1378.2	1437.6	1479.0	1450.5	1451.8	1511.3	1420.8	1406.6
45°	6524.2	2982.5	1449.3	1317.5	1382.1	1475.1	1445.4	1424.7	1429.9	1382.1	1374.3
47.5°	7183.0	3107.8	1424.7	1267.1	1329.1	1460.9	1444.1	1417.0	1405.3	1379.5	1373.0
50°	7915.3	3289.9	1406.6	1219.3	1281.3	1437.6	1445.4	1409.2	1396.3	1386.0	1382.1
52.5°	8634.8	3497.8	1379.5	1178.0	1243.9	1409.2	1449.3	1401.5	1387.3	1379.5	1375.6
55°	9436.9	3757.5	1338.2	1143.1	1212.9	1373.0	1449.3	1389.8	1374.3	1375.6	1374.3
57.5°	10520.6	4177.3	1289.1	1113.4	1175.4	1329.1	1424.7	1376.9	1357.5	1358.8	1360.1
60°	12214.0	4917.4	1229.7	1083.7	1128.9	1277.5	1391.1	1348.5	1329.1	1334.3	1335.6
62.5°	14704.4	6003.7	1152.2	1039.8	1079.8	1221.9	1344.6	1312.3	1293.0	1305.9	1305.9
65°	17292.9	6962.1	1056.6	984.3	1028.2	1161.2	1286.5	1267.1	1247.8	1277.5	1276.2
67.5°	17989.1	6747.7	961.0	923.5	976.5	1094.0	1216.8	1206.4	1196.1	1247.8	1245.2
70°	15980.5	5417.3	873.2	861.5	919.7	1021.7	1141.8	1141.8	1135.4	1174.1	1165.1
72.5°	12175.3	3841.4	789.2	795.7	855.1	942.9	1060.5	1069.5	1059.2	1078.5	1070.8
75°	6517.8	2198.4	705.3	723.3	775.0	862.8	970.0	979.1	972.6	971.3	975.2
77.5°	2166.1	1074.7	617.4	645.8	691.0	780.2	875.8	890.0	874.5	871.9	870.6
80°	964.9	675.5	520.5	558.0	598.0	685.9	776.3	787.9	771.1	794.4	764.7
82.5°	620.0	444.3	417.2	458.5	497.3	591.6	676.8	679.4	663.9	771.1	657.5
85°	301.0	275.1	313.9	351.3	384.9	465.0	560.6	561.9	523.1	476.6	459.8
87.5°	149.8	160.2	209.3	242.8	259.6	319.0	408.2	400.4	383.6	348.8	321.6
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)