

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: P301171

Luminaire Tested: **GLNA-AF-06-LED-E1-T3R-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P301171  
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-06-LED-E1-T3R-7030-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(6) 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: 28345.3 lumens  
Efficiency: N/A  
Efficacy: 113.8 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B3 - U0 - G4

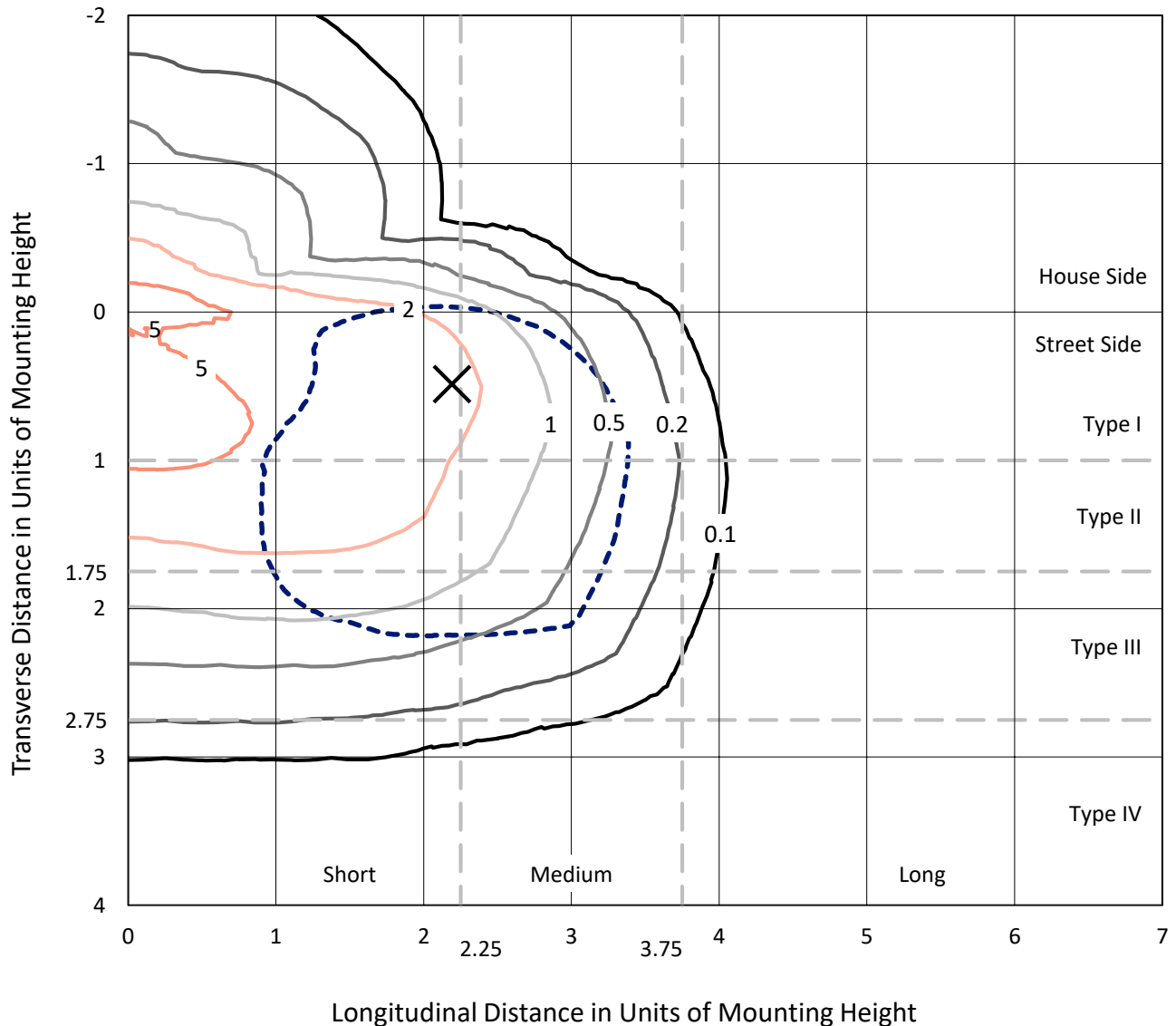
Input Watts (W): 249  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

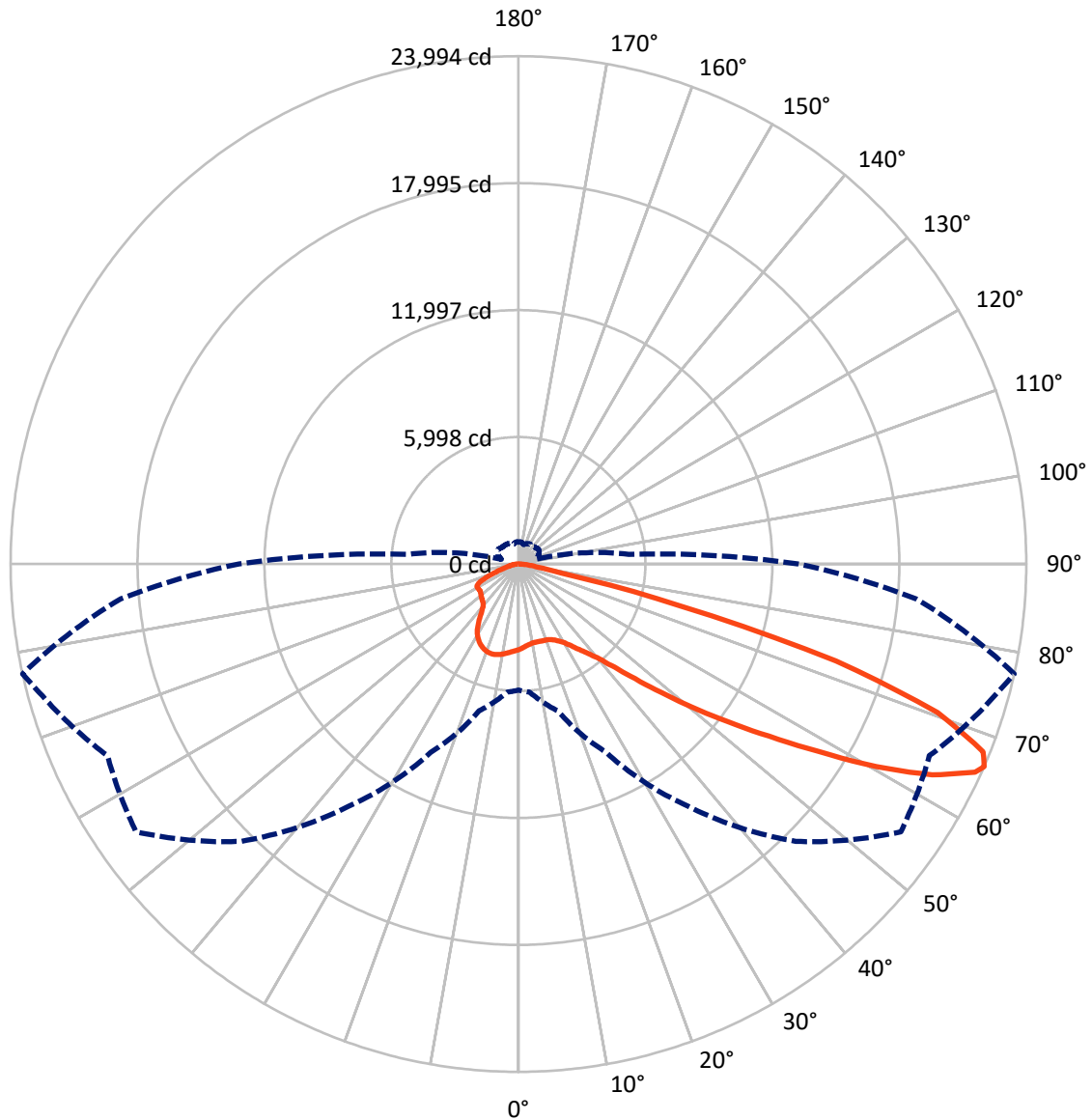
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8 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
<b>House Side</b>	Lumens	4842.6	0.0	4842.6
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	23502.7	0.0	23502.7
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	28345.3	0.0	28345.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	360.9	1.3
10°-20°	1018.1	3.6
20°-30°	1737.6	6.1
30°-40°	2781.5	9.8
40°-50°	4297.2	15.2
50°-60°	6094.9	21.5
60°-70°	8153.3	28.8
70°-80°	3540.8	12.5
80°-90°	361.0	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°	28345.3	100.0
0°-180°	28345.3	100.0



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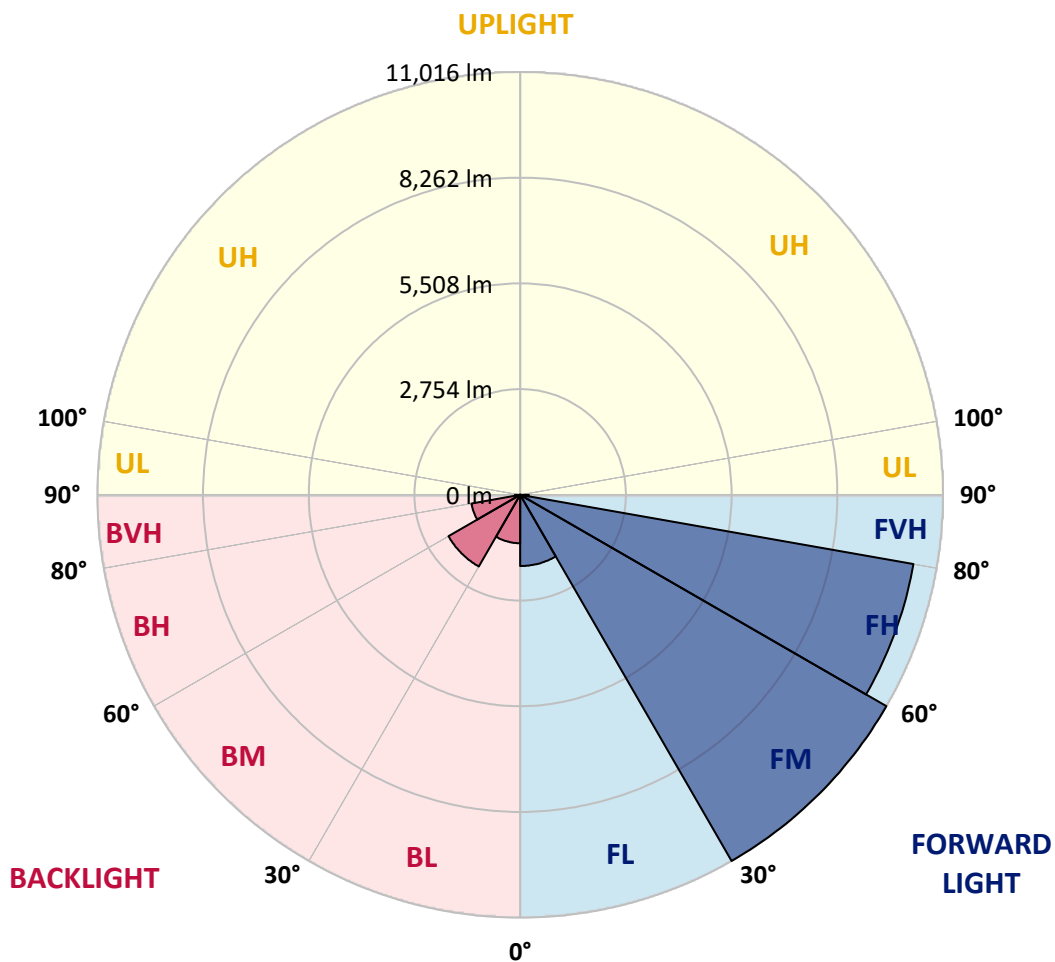
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1855.3	6.5			
FM	(30°-60°)	11016.5	38.9			
FH	(60°-80°)	10404.4	36.7			G4/12000
FVH	(80°-90°)	226.4	0.8			G3/500
BL	(0°-30°)	1261.2	4.4	B3/2500		
BM	(30°-60°)	2157.1	7.6	B2/2500		
BH	(60°-80°)	1289.7	4.5	B3/2500		G3/2500
BVH	(80°-90°)	134.6	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-G4**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77.5°	85°
0°	4039.3	4039.3	4039.3	4039.3	4039.3	4039.3	4039.3	4039.3	4039.3	4039.3	4039.3
2.5°	3573.4	3597.3	3617.6	3636.2	3673.5	3735.2	3806.1	3863.7	3946.8	3963.1	4007.3
5°	3245.3	3245.3	3261.1	3289.5	3340.2	3432.7	3529.2	3657.7	3838.6	3881.2	3999.2
7.5°	3085.9	3087.2	3096.5	3120.4	3164.6	3249.0	3354.8	3506.5	3751.4	3822.4	4023.1
10°	3144.7	3131.4	3111.1	3099.3	3105.8	3155.3	3255.9	3424.5	3697.9	3788.7	4077.0
12.5°	3474.0	3448.9	3379.1	3286.7	3198.3	3162.2	3221.0	3385.6	3675.2	3781.0	4148.0
15°	4012.5	4002.0	3871.8	3680.4	3466.3	3286.7	3246.5	3371.0	3677.6	3790.3	4232.3
17.5°	4687.7	4672.7	4501.6	4223.0	3873.4	3523.9	3336.1	3383.2	3686.9	3806.1	4313.8
20°	5369.4	5323.6	5139.0	4806.9	4358.0	3846.3	3485.0	3414.0	3699.1	3823.6	4399.8
22.5°	5878.3	5840.6	5674.7	5351.9	4834.9	4220.2	3684.5	3467.5	3738.0	3874.7	4505.2
25°	6325.6	6328.0	6163.4	5851.5	5317.1	4616.7	3941.6	3610.7	3837.0	3978.9	4650.0
27.5°	6878.7	6846.7	6692.6	6383.2	5793.9	5017.0	4252.2	3807.8	3984.6	4127.7	4840.2
30°	7540.1	7517.4	7339.4	6988.6	6322.7	5446.8	4607.0	4036.5	4174.7	4323.2	5089.2
32.5°	8318.3	8307.7	8122.8	7671.5	6933.4	5953.3	5023.9	4339.4	4458.6	4612.7	5446.8
35°	9231.9	9233.1	9014.9	8472.4	7601.7	6542.5	5496.3	4729.1	4804.1	4964.7	5873.0
37.5°	9794.3	9862.4	9780.9	9227.8	8358.4	7201.5	6109.8	5246.1	5197.8	5360.1	6329.6
40°	9914.8	9997.9	10256.2	9975.2	9205.1	7927.3	6653.6	5742.9	5682.8	5880.7	6917.6
42.5°	9746.1	9861.2	10407.9	10605.7	10103.7	8821.9	7384.8	6480.9	6404.6	6671.1	7648.8
45°	9645.5	9731.5	10363.7	10934.2	10883.1	9833.3	8315.8	7407.5	7379.5	7729.1	8492.6
47.5°	9471.5	9549.4	10157.3	11010.5	11341.3	10759.8	9434.2	8540.9	8595.6	9053.9	9444.8
50°	9565.2	9597.2	9926.9	10816.2	11473.9	11439.1	10683.6	9853.1	10040.9	10612.6	10523.0
52.5°	9551.8	9635.0	9900.2	10497.5	11491.4	11858.4	11914.3	11317.0	11712.4	12368.5	11718.9
55°	7722.6	7875.0	9585.5	10417.2	11552.6	12269.2	13010.0	12860.0	13596.4	14361.2	13068.8
57.5°	7374.2	7470.7	8418.8	10585.9	11879.5	13054.2	14228.6	14558.3	15790.2	16678.3	14713.6
60°	7305.7	7424.9	8406.7	10792.3	12542.5	14333.2	16035.5	16614.2	18459.7	19432.1	16620.7
62.5°	7092.8	7221.4	8327.6	10765.1	13484.1	16102.5	18348.6	18799.9	20990.9	21936.6	18216.0
65°	6418.0	6538.5	7683.6	10332.8	14119.1	17990.9	21085.8	20803.6	22989.3	23700.1	19011.2
66°	5955.7	6073.8	7175.9	9823.9	13971.5	18526.6	22055.8	21423.6	23436.5	23993.7	18855.9
67.5°	5110.7	5203.1	6190.1	8684.0	13188.0	18676.6	22871.3	21889.5	23483.2	23680.3	17968.2
70°	3229.1	3255.9	4023.1	5994.7	9983.3	16197.3	21629.6	20732.6	21546.9	21013.6	15063.1
72.5°	1401.0	1391.7	1931.5	3049.4	5652.0	10868.5	17496.6	17106.9	16902.1	15686.0	10544.5
75°	779.4	790.3	1003.2	1415.6	2296.8	5338.6	11445.6	10952.9	9247.7	7891.3	4781.4
77.5°	625.3	640.3	831.7	1004.5	1031.2	1861.7	5356.0	4358.0	2623.7	2105.4	1328.5
80°	494.3	521.1	725.9	782.2	695.0	767.2	1730.3	1383.6	1038.1	952.1	688.6
82.5°	390.9	410.0	622.9	592.0	486.2	517.0	828.9	807.8	675.2	614.8	397.8
85°	281.4	315.9	511.8	446.1	318.7	348.3	550.3	527.6	386.9	315.9	175.6
87.5°	115.2	150.0	361.7	296.0	178.0	162.2	274.5	258.3	183.3	133.8	87.2
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°	4039.3	4039.3	4039.3	4039.3	4039.3	4039.3	4039.3	4039.3	4039.3	4039.3	4039.3
2.5°	4035.2	4067.3	4109.0	4134.6	4148.0	4157.3	4171.9	4170.7	4174.7	4176.0	4181.2
5°	4062.0	4115.5	4176.0	4192.2	4192.2	4177.2	4162.6	4138.2	4128.9	4126.5	4128.9
7.5°	4131.8	4190.6	4242.9	4224.2	4184.1	4124.9	4048.6	3981.7	3945.6	3933.5	3931.0
10°	4220.2	4291.1	4312.6	4241.7	4123.6	3981.7	3830.5	3720.6	3657.7	3640.3	3635.0
12.5°	4327.2	4394.1	4364.9	4214.9	3996.3	3767.6	3558.4	3383.2	3251.8	3210.4	3207.6
15°	4445.2	4497.5	4394.1	4131.8	3806.1	3468.7	3096.5	2794.0	2630.6	2578.2	2574.2
17.5°	4555.1	4581.9	4376.7	3987.0	3526.3	2980.1	2485.8	2252.6	2196.7	2210.0	2212.5
20°	4648.8	4648.8	4317.9	3779.4	3085.9	2335.7	2023.5	2019.9	2060.0	2100.1	2108.3
22.5°	4751.8	4690.1	4214.9	3486.2	2461.5	1911.2	1865.8	1903.1	1948.5	1992.7	1999.6
25°	4879.1	4723.8	4071.3	3041.7	1935.1	1735.6	1753.0	1783.8	1806.6	1834.9	1839.0
27.5°	5021.0	4766.4	3882.8	2429.4	1679.6	1626.1	1639.5	1650.0	1647.2	1658.1	1660.6
30°	5191.0	4816.3	3624.1	1899.0	1573.8	1532.0	1508.1	1498.8	1498.8	1516.2	1522.7
32.5°	5418.9	4889.7	3253.0	1627.3	1522.7	1465.1	1387.7	1352.8	1366.2	1425.0	1438.3
35°	5669.5	4968.7	2751.0	1534.9	1512.2	1434.3	1313.9	1249.4	1251.0	1305.7	1323.2
37.5°	5942.4	5069.3	2200.3	1517.4	1536.1	1435.9	1274.9	1186.5	1150.4	1150.4	1157.3
40°	6291.9	5172.3	1781.4	1529.6	1587.2	1451.7	1255.1	1137.1	1035.3	1038.1	1043.4
42.5°	6747.3	5260.7	1556.4	1554.7	1648.8	1473.2	1253.4	1071.4	983.0	1043.4	1098.1
45°	7253.8	5304.9	1457.0	1577.8	1698.3	1486.6	1232.3	1060.8	989.9	1169.1	1273.7
47.5°	7836.1	5279.4	1402.3	1585.6	1710.4	1486.6	1208.0	1086.4	1036.5	1354.0	1476.1
50°	8475.2	5206.0	1348.7	1569.7	1706.4	1483.8	1230.7	1111.5	1053.9	1386.0	1470.4
52.5°	9226.6	5144.3	1292.4	1534.9	1678.0	1469.2	1257.5	1101.0	999.2	1260.3	1319.1
55°	10083.5	5161.8	1229.5	1485.4	1633.8	1441.2	1248.2	1058.0	941.6	1110.3	1146.4
57.5°	11179.1	5369.4	1154.5	1422.5	1573.8	1394.1	1214.9	1038.1	924.2	1007.3	1028.8
60°	12401.8	5730.7	1060.8	1359.3	1498.8	1319.1	1189.4	1047.4	932.3	999.2	1009.7
62.5°	13299.2	5941.2	980.5	1266.8	1397.0	1236.0	1157.3	1059.2	953.8	1027.2	1024.7
65°	13542.9	5595.7	880.0	1131.8	1259.1	1149.2	1116.8	1072.6	963.1	1049.9	1038.1
66°	13201.4	5223.4	835.8	1068.9	1189.4	1106.2	1096.9	1071.4	959.0	1052.7	1032.4
67.5°	12372.6	4459.8	759.5	976.5	1078.3	1042.2	1064.9	1059.2	948.1	1049.9	1021.9
70°	10090.3	3043.0	649.6	813.1	897.4	917.3	1003.2	1016.6	913.2	1003.2	941.6
72.5°	7050.2	1853.6	574.6	631.0	725.9	782.2	918.9	957.4	866.6	875.9	817.1
75°	3407.1	984.6	521.1	489.0	563.7	653.7	817.1	877.1	792.8	732.8	711.3
77.5°	1062.0	601.4	442.0	393.8	442.0	527.6	682.9	768.8	706.0	613.5	605.4
80°	570.6	442.0	340.2	315.9	349.6	414.0	536.9	641.5	606.6	550.3	491.5
82.5°	376.3	286.7	251.8	244.9	266.4	315.9	399.0	531.6	531.6	471.6	343.1
85°	194.2	175.6	172.7	172.7	186.1	210.5	271.7	410.0	436.7	249.0	206.4
87.5°	96.5	100.6	93.7	97.7	104.6	103.0	129.8	206.4	246.6	151.3	125.7
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)