

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: P299194

Luminaire Tested: **GLNA-AF-07-LED-E1-T3-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299194
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24140)
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-T3-800
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33904.3 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B3 - U0 - G4

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

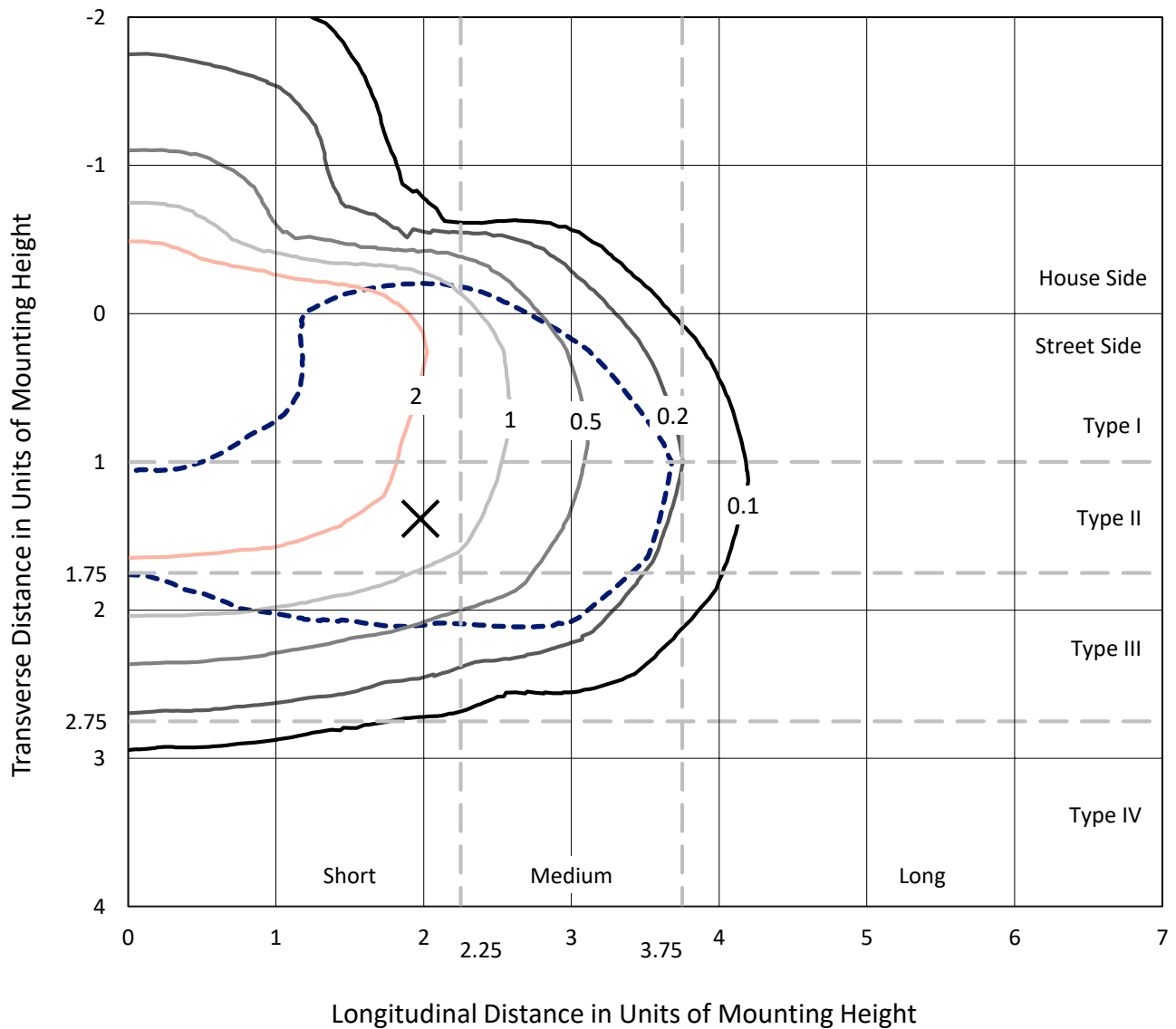


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Iso-Footcandle Lines of Horizontal Illumination

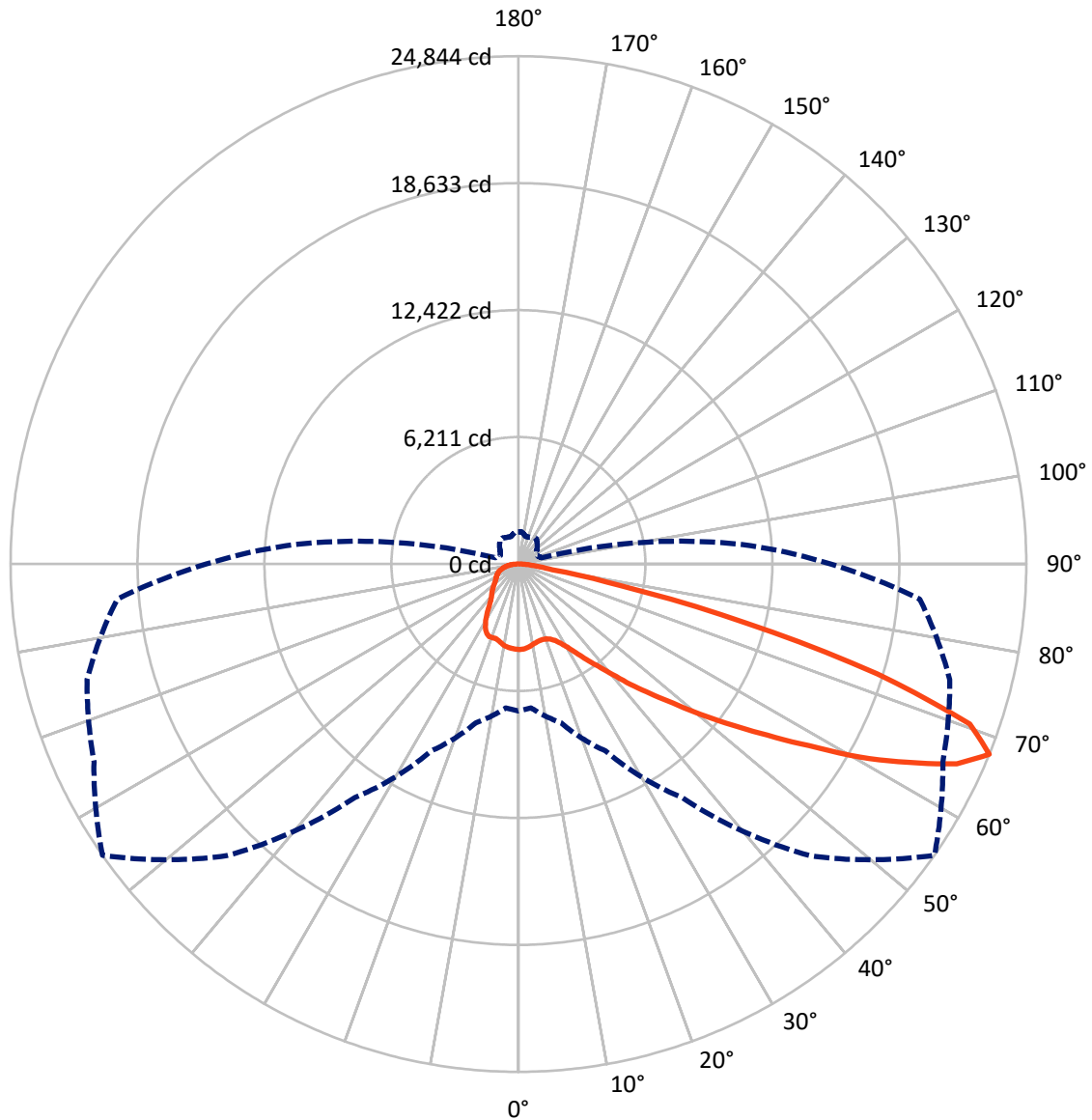
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.8 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7324.0	0.0	7324.0
	% Fixture	21.6	0.0	21.6
Street Side	Lumens	26580.2	0.0	26580.2
	% Fixture	78.4	0.0	78.4
Total	Lumens	33904.3	0.0	33904.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	390.2	1.2
10°-20°	1105.2	3.3
20°-30°	1851.3	5.5
30°-40°	3044.4	9.0
40°-50°	5124.6	15.1
50°-60°	8065.8	23.8
60°-70°	9625.7	28.4
70°-80°	4133.4	12.2
80°-90°	563.6	1.7
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°	33904.3	100.0
0°-180°	33904.3	100.0



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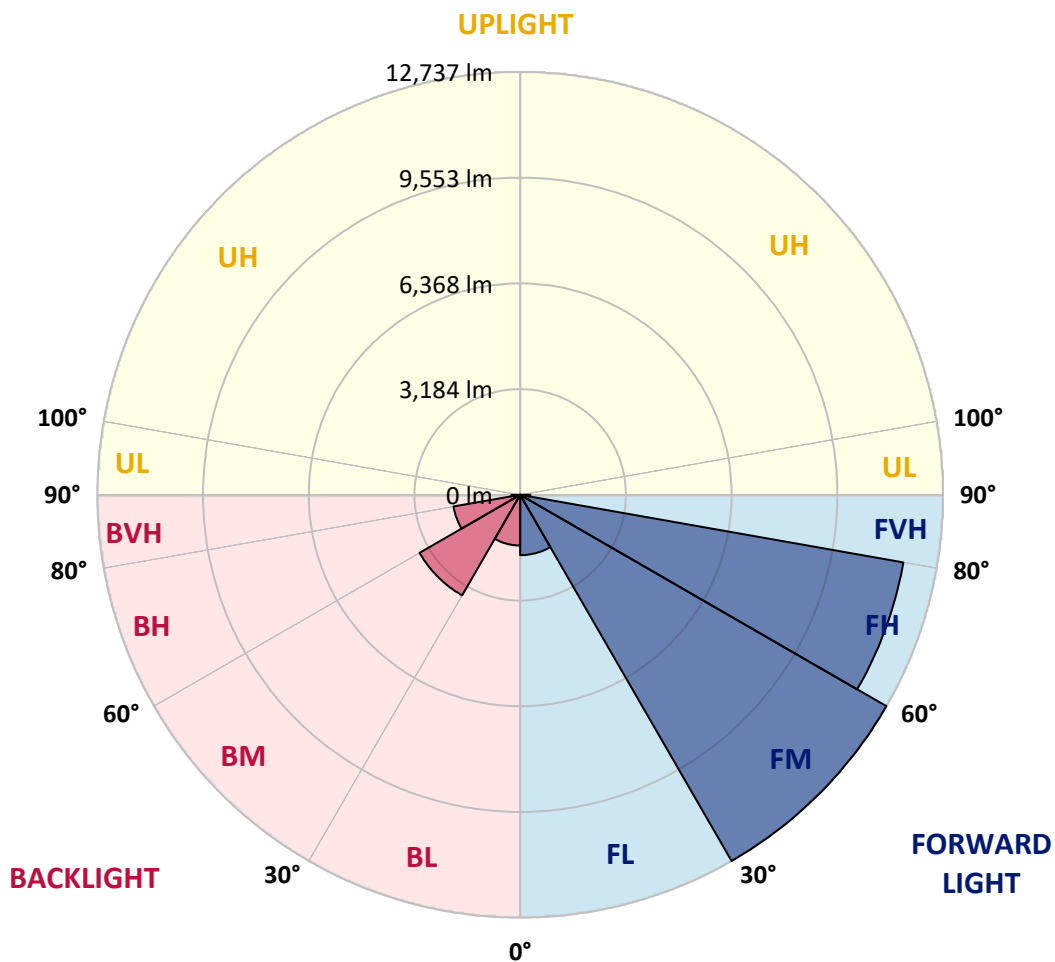
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1817.3	5.4			
FM	(30°-60°)	12736.9	37.6			
FH	(60°-80°)	11720.9	34.6			G4/12000
FVH	(80°-90°)	305.1	0.9			G3/500
BL	(0°-30°)	1529.4	4.5	B3/2500		
BM	(30°-60°)	3497.9	10.3	B3/5000		
BH	(60°-80°)	2038.3	6.0	B3/2500		G3/2500
BVH	(80°-90°)	258.5	0.8			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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4180.8	4180.8	4180.8	4180.8	4180.8	4180.8	4180.8	4180.8	4180.8	4180.8	4180.8
2.5°	4144.7	4146.4	4149.7	4162.8	4174.2	4170.9	4172.6	4166.0	4164.4	4154.6	4164.4
5°	4092.3	4097.2	4098.9	4120.2	4133.3	4136.6	4131.6	4123.4	4113.6	4103.8	4108.7
7.5°	3972.8	3985.9	3987.5	4017.0	4038.3	4066.1	4067.8	4069.4	4064.5	4057.9	4067.8
10°	3897.5	3900.7	3899.1	3920.4	3936.8	3967.9	3985.9	4017.0	4030.1	4033.4	4039.9
12.5°	3892.5	3889.3	3884.4	3884.4	3879.4	3892.5	3925.3	3969.5	4000.6	4010.5	4018.6
15°	3945.0	3943.3	3926.9	3902.4	3871.3	3861.4	3889.3	3938.4	3979.3	4000.6	4008.8
17.5°	4062.9	4053.0	4026.8	3971.2	3904.0	3877.8	3881.1	3922.0	3969.5	3997.4	4005.5
20°	4279.0	4279.0	4223.3	4118.5	3999.0	3936.8	3907.3	3931.9	3977.7	4015.4	4026.8
22.5°	4652.4	4655.7	4562.3	4390.4	4189.0	4056.3	3982.6	3977.7	4031.7	4074.3	4087.4
25°	5181.3	5168.2	5037.2	4791.6	4485.4	4265.9	4138.2	4108.7	4154.6	4202.1	4218.4
27.5°	5797.1	5749.6	5594.0	5297.6	4901.3	4580.3	4383.8	4336.3	4380.6	4434.6	4451.0
30°	6406.2	6357.1	6172.1	5847.8	5407.3	5001.2	4719.5	4642.6	4704.8	4781.8	4791.6
32.5°	7015.4	7015.4	6809.1	6430.8	5951.0	5503.9	5166.6	5074.9	5178.1	5271.4	5292.7
35°	7744.2	7747.4	7547.6	7092.4	6576.6	6103.3	5731.6	5664.4	5820.0	5885.5	5936.3
37.5°	8639.9	8657.9	8400.8	7850.6	7285.6	6787.8	6345.7	6254.0	6409.5	6588.0	6751.8
40°	9607.7	9630.7	9347.4	8669.4	8104.4	7583.7	7105.5	6940.1	7198.8	7539.5	7750.7
42.5°	10531.3	10649.2	10375.8	9678.2	9070.6	8531.8	8047.1	7806.4	8130.6	8644.8	8828.2
45°	11866.0	11951.1	11474.6	10842.5	10271.0	9668.3	9026.4	8772.6	9226.2	9874.7	9912.3
47.5°	12755.2	12691.3	12449.0	12055.9	11694.0	11130.7	10164.5	9886.1	10488.8	11251.9	11040.6
50°	13228.4	13248.1	13215.3	13238.3	13251.4	12897.7	11559.7	11178.2	11897.1	12819.0	12332.7
52.5°	13670.6	13539.6	13647.7	14184.8	14833.3	14702.3	13077.8	12679.9	13406.9	14558.2	13698.4
55°	13660.8	13461.0	13813.1	14761.2	16167.9	16318.6	14782.5	14324.0	15003.6	16423.4	15146.1
57.5°	13177.7	13187.5	13729.5	14970.8	17098.1	17838.3	16760.7	16072.9	16696.9	18313.2	16467.6
60°	12512.8	12602.9	13384.0	14936.5	17843.2	19084.5	19187.6	17957.8	18355.7	20031.0	17561.5
62.5°	11440.2	11535.2	12612.7	14579.5	17730.2	20284.8	21382.0	20096.5	20089.9	21072.5	17882.5
65°	9748.6	9720.7	10852.3	13244.8	16782.0	21172.4	23561.6	21945.3	21396.7	21088.9	17237.3
67.5°	7189.0	7064.6	8035.6	10087.5	13949.0	20178.4	24843.9	22908.2	21842.2	19701.8	15265.6
70°	3730.4	3606.0	4392.0	5890.4	9173.8	15748.7	23424.1	22410.4	20858.0	16515.1	11959.3
72.5°	1595.0	1573.7	1893.1	2584.1	4437.9	9083.7	18367.2	19397.2	17897.2	12304.8	8222.3
75°	1072.6	1066.1	1185.6	1408.3	1996.2	3686.2	11494.2	13768.8	13094.2	7629.5	4624.6
77.5°	841.7	833.5	903.9	1012.0	1293.7	1454.2	5101.1	7392.1	6841.8	3321.0	2024.1
80°	658.3	651.8	696.0	754.9	930.2	917.0	1678.5	2941.1	2276.2	1272.4	984.2
82.5°	519.1	519.1	555.1	556.8	659.9	625.6	876.1	1295.3	1136.5	741.8	602.6
85°	474.9	474.9	512.6	415.9	430.7	394.7	543.7	768.0	720.5	304.6	262.0
87.5°	239.1	232.5	430.7	368.5	234.2	209.6	265.3	371.7	399.6	168.7	131.0
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4180.8	4180.8	4180.8	4180.8	4180.8	4180.8	4180.8	4180.8	4180.8	4180.8
2.5°	4161.1	4159.5	4162.8	4164.4	4177.5	4195.5	4203.7	4215.2	4221.7	4218.4
5°	4112.0	4115.3	4128.4	4138.2	4161.1	4190.6	4207.0	4220.1	4231.5	4226.6
7.5°	4071.0	4079.2	4098.9	4107.1	4120.2	4128.4	4126.7	4131.6	4141.5	4130.0
10°	4048.1	4057.9	4072.7	4061.2	4030.1	3985.9	3945.0	3923.7	3930.2	3922.0
12.5°	4025.2	4038.3	4026.8	3972.8	3886.0	3828.7	3797.6	3800.8	3815.6	3818.9
15°	4012.1	4017.0	3967.9	3866.3	3777.9	3769.7	3786.1	3782.8	3784.5	3784.5
17.5°	4012.1	3999.0	3907.3	3805.8	3768.1	3753.4	3702.6	3638.7	3610.9	3601.1
20°	4033.4	3999.0	3887.6	3820.5	3738.6	3612.5	3478.2	3360.3	3307.9	3293.2
22.5°	4097.2	4038.3	3943.3	3827.0	3594.5	3383.3	3170.4	3029.5	2934.6	2918.2
25°	4226.6	4161.1	4053.0	3740.3	3365.2	3063.9	2821.6	2664.4	2569.4	2556.3
27.5°	4452.6	4410.0	4112.0	3548.7	3060.7	2738.0	2513.7	2392.5	2322.1	2317.2
30°	4793.2	4771.9	4082.5	3265.4	2685.6	2422.0	2313.9	2243.5	2191.1	2189.5
32.5°	5336.9	5165.0	3985.9	2919.8	2343.4	2197.6	2153.4	2110.9	2069.9	2069.9
35°	6036.2	5482.6	3802.5	2549.7	2135.4	2073.2	2017.5	1950.4	1896.3	1893.1
37.5°	6858.2	5679.2	3473.3	2251.7	2037.2	1989.7	1907.8	1807.9	1712.9	1696.5
40°	7688.5	5738.1	3009.9	2068.3	1974.9	1906.2	1806.3	1688.4	1596.6	1591.7
42.5°	8450.0	5625.1	2518.6	1942.2	1912.7	1821.0	1716.2	1611.4	1539.3	1537.7
45°	9088.6	5332.0	2105.9	1822.6	1847.2	1744.0	1650.7	1565.5	1509.9	1498.4
47.5°	9689.6	4917.7	1816.1	1696.5	1781.7	1701.5	1622.9	1542.6	1488.6	1480.4
50°	10387.2	4470.6	1613.0	1573.7	1724.4	1686.7	1645.8	1562.3	1472.2	1462.4
52.5°	11232.2	4084.1	1454.2	1465.6	1680.2	1706.4	1704.7	1617.9	1460.7	1447.6
55°	12175.5	3655.1	1334.6	1377.2	1662.2	1742.4	1719.5	1670.3	1470.6	1450.9
57.5°	13104.0	3154.0	1251.1	1310.1	1636.0	1739.1	1649.1	1578.6	1493.5	1465.6
60°	13800.0	2480.9	1187.3	1251.1	1578.6	1685.1	1572.1	1478.7	1488.6	1467.3
62.5°	13845.8	1917.6	1110.3	1200.4	1491.8	1631.0	1521.3	1434.5	1509.9	1490.2
65°	13031.9	1449.3	1036.6	1139.8	1398.5	1596.6	1472.2	1410.0	1554.1	1532.8
67.5°	10971.8	1166.0	974.4	1077.5	1305.2	1524.6	1428.0	1387.0	1593.4	1555.7
70°	7921.0	994.0	913.8	1002.2	1221.6	1442.7	1388.7	1346.1	1486.9	1428.0
72.5°	4876.7	861.4	845.0	902.3	1157.8	1357.6	1329.7	1269.1	1339.5	1292.1
75°	2435.1	746.7	768.0	804.1	1067.7	1260.9	1231.5	1170.9	1180.7	1170.9
77.5°	1166.0	638.7	678.0	705.8	951.4	1151.2	1120.1	1057.9	1046.4	1048.1
80°	738.6	533.9	571.5	591.2	849.9	1023.5	992.4	930.2	1061.2	984.2
82.5°	461.8	434.0	443.8	479.8	740.2	890.8	849.9	794.2	956.4	756.6
85°	255.5	303.0	316.1	347.2	569.9	745.1	704.2	633.7	568.2	558.4
87.5°	152.3	180.1	185.0	208.0	383.2	538.8	476.5	452.0	375.0	373.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)