

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: P651640

Luminaire Tested: **GALN-SA9D-840-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651640
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA9D-840-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 59315.8 lumens
Efficiency: N/A
Efficacy: 107.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G5

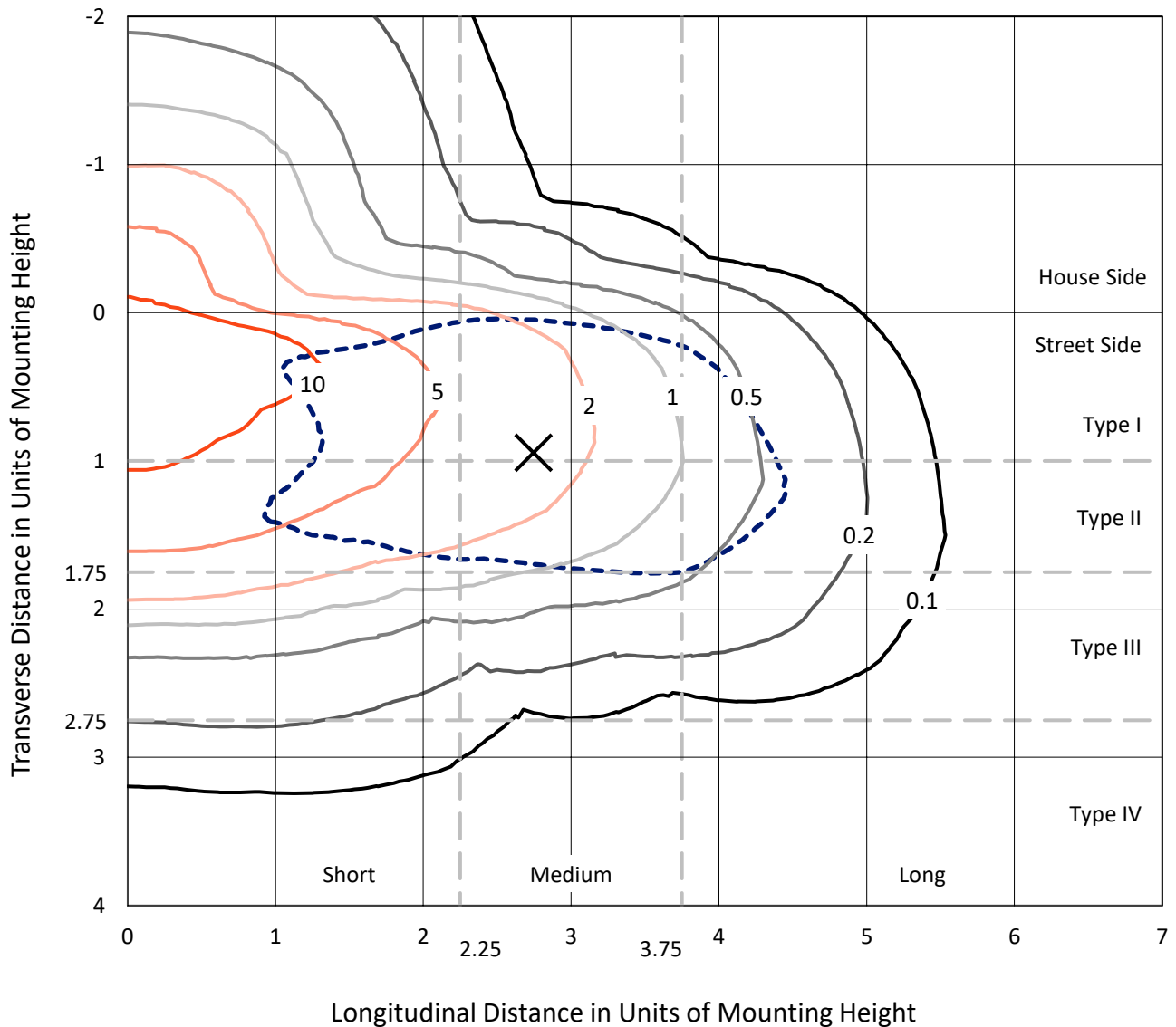
Input Watts (W): 552
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P651640
 CATALOG NUMBER: GALN-SA9D-840-U-T2

Iso-Footcandle Lines of Horizontal Illumination

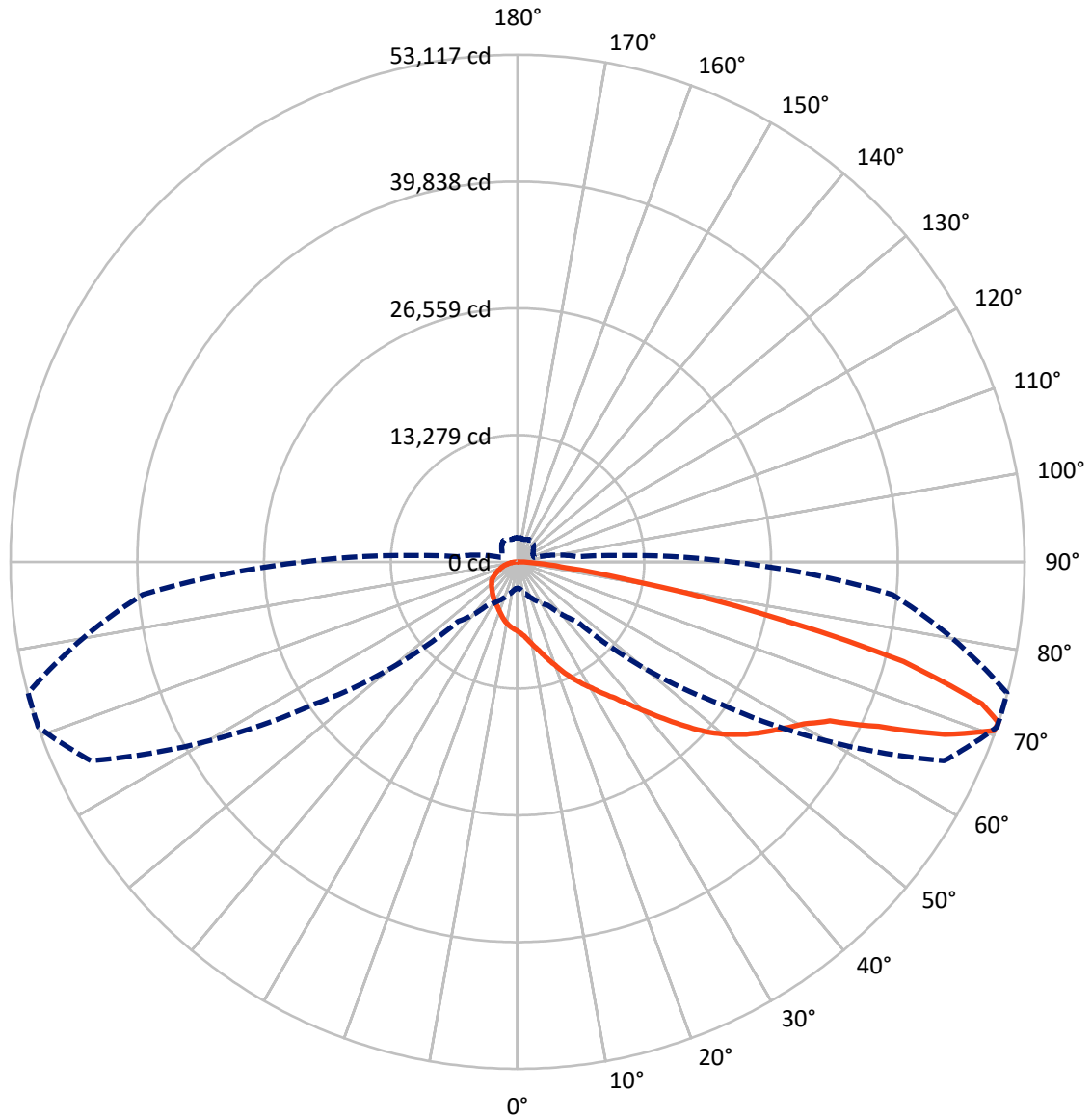
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16.5 fc
 Type II - Medium - N/A

REPORT NUMBER: P651640
CATALOG NUMBER: GALN-SA9D-840-U-T2

Luminous Intensity Polar Plot



— Vertical Plane Through 71-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

REPORT NUMBER: P651640
 CATALOG NUMBER: GALN-SA9D-840-U-T2

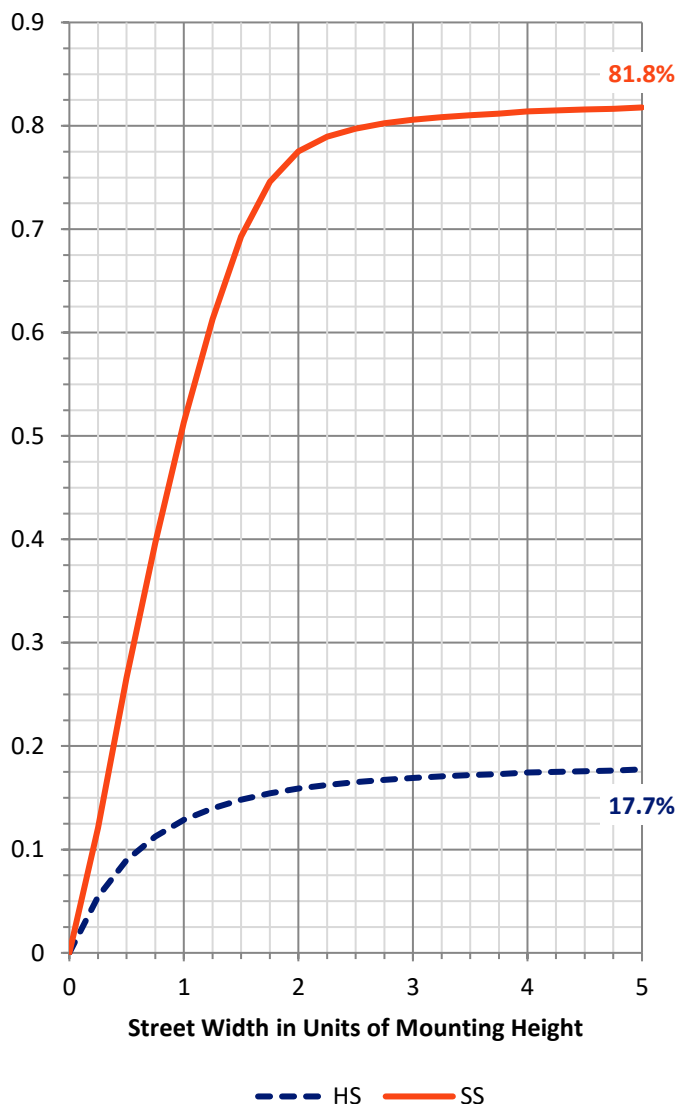
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10667.8	0.0	10667.8
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	48648.0	0.0	48648.0
	% Fixture	82.0	0.0	82.0
Total	Lumens	59315.8	0.0	59315.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	731.0	1.2
10°-20°	2374.8	4.0
20°-30°	4150.1	7.0
30°-40°	6172.8	10.4
40°-50°	9094.8	15.3
50°-60°	12732.9	21.5
60°-70°	14241.3	24.0
70°-80°	8699.1	14.7
80°-90°	1119.1	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°	59315.8	100.0
0°-180°	59315.8	100.0

Coefficient of Utilization

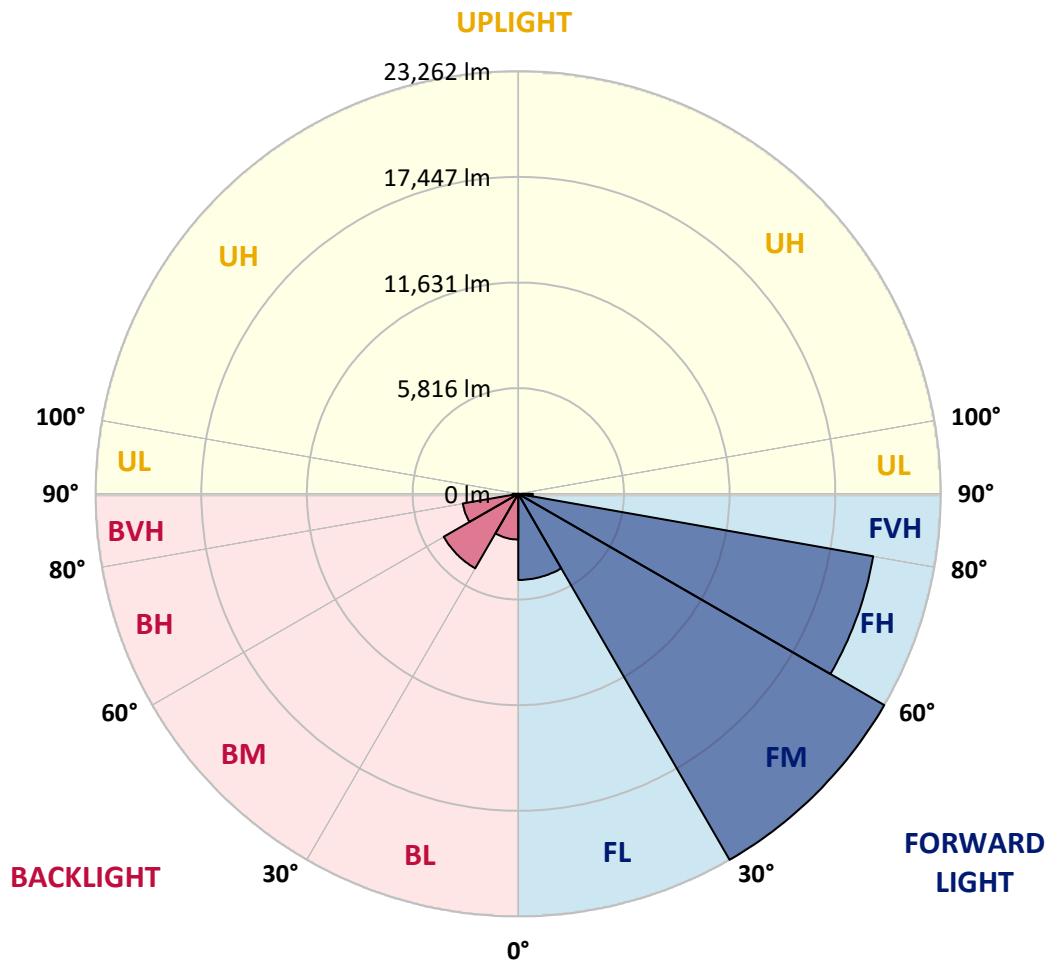


REPORT NUMBER: P651640
 CATALOG NUMBER: GALN-SA9D-840-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4739.4	8.0			
FM (30°-60°)	23262.5	39.2			
FH (60°-80°)	19840.9	33.4			G5
FVH (80°-90°)	805.2	1.4			G5
BL (0°-30°)	2516.5	4.2	B4/5000		
BM (30°-60°)	4738.0	8.0	B3/5000		
BH (60°-80°)	3099.5	5.2	B4/5000		G4/5000
BVH (80°-90°)	313.9	0.5			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5
 Type II Medium





REPORT NUMBER: P651640

CATALOG NUMBER: GALN-SA9D-840-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	7279.9	7279.9	7279.9	7279.9	7279.9	7279.9	7279.9	7279.9	7279.9	7279.9	7279.9
2.5°	8081.8	8042.7	8045.9	7990.5	7918.9	7840.6	7729.7	7631.9	7553.7	7508.0	7374.4
5°	8955.6	8916.5	8867.5	8746.9	8694.8	8502.3	8257.9	8036.2	7866.6	7772.1	7504.7
7.5°	9663.0	9653.2	9640.1	9571.7	9438.0	9170.7	8962.0	8577.4	8326.3	8147.0	7690.6
10°	10099.8	10116.1	10125.9	10138.9	10083.5	9943.3	9656.4	9170.7	8851.2	8623.0	7931.9
12.5°	10321.5	10337.8	10393.2	10513.8	10588.9	10572.5	10337.8	9861.8	9421.7	9121.8	8189.4
15°	10458.4	10484.5	10582.3	10742.1	10993.1	11152.8	11038.7	10598.6	10116.1	9760.8	8495.9
17.5°	10608.4	10637.7	10745.4	10973.5	11302.8	11648.4	11772.2	11394.1	10869.3	10445.4	8838.2
20°	10693.1	10732.3	10885.5	11185.5	11570.1	12072.2	12483.0	12284.2	11710.3	11240.9	9232.7
22.5°	10830.1	10862.7	10993.1	11312.6	11772.2	12401.5	13193.7	13151.3	12645.9	12039.6	9666.2
25°	11201.8	11253.9	11319.1	11511.4	11954.8	12737.3	13783.7	14077.2	13552.3	12874.2	10064.0
27.5°	11902.7	11945.1	11941.8	11967.9	12218.9	13027.4	14295.6	14993.3	14452.1	13718.6	10448.7
30°	12701.4	12717.7	12730.7	12672.1	12727.5	13324.0	14765.1	15899.6	15358.4	14585.7	10784.5
32.5°	13672.9	13705.5	13594.7	13444.7	13399.1	13764.2	15153.1	16805.9	16431.0	15466.0	11117.0
35°	14820.5	14905.2	14680.3	14416.3	14230.4	14396.7	15674.6	17731.7	17529.6	16590.7	11557.1
37.5°	16131.1	16235.3	16026.7	15508.4	15244.3	15290.0	16356.0	18876.1	18918.5	17871.9	12212.4
40°	17203.7	17340.6	17347.1	16613.5	16212.5	16264.7	17219.9	20108.4	20594.2	19456.4	12985.0
42.5°	17911.0	18044.7	18184.9	17754.6	17334.0	17630.7	18227.3	21445.0	22478.5	21379.8	14064.1
45°	18686.9	18807.6	18885.8	18690.2	18455.5	19224.9	19443.3	22866.5	24486.7	23528.2	15244.3
47.5°	19586.8	19720.4	19795.4	19609.6	19521.5	20623.5	20753.9	24193.3	26631.9	25614.8	16548.4
50°	20786.5	20887.6	20848.5	20731.1	20711.5	21696.0	22012.3	25435.4	28402.1	27860.9	17901.3
52.5°	22279.6	22400.3	22442.6	22276.3	22201.4	22462.2	23026.2	26566.7	30012.6	29790.9	19345.5
55°	23182.7	23375.0	24020.6	24281.4	24460.7	23453.3	24118.4	27815.3	31456.8	31825.2	20897.3
57.5°	22025.4	22273.1	23717.3	25021.3	26706.9	25931.0	25666.9	29119.4	32901.1	33797.6	22755.6
60°	19202.0	19257.5	21119.0	23521.8	26912.3	29116.1	28897.7	31192.8	34465.9	35786.3	25203.9
62.5°	13320.9	13438.2	15638.7	19472.7	24375.9	30263.6	34394.2	34772.4	36708.9	38762.8	28793.3
65°	6869.0	6715.8	8720.8	12238.5	18377.3	27538.2	38847.6	41354.6	41573.0	43418.2	33846.5
67.5°	4228.4	4296.8	5235.7	7146.1	10866.0	20013.9	38381.3	49397.2	48246.4	49133.2	38537.8
70°	3175.4	3260.1	3905.6	4890.2	6624.6	11443.0	30866.8	51346.8	52954.1	52725.8	39965.7
71°	2761.3	2849.3	3520.9	4450.1	5565.0	8831.7	26005.9	49306.0	53117.1	53077.9	39427.8
72.5°	2353.8	2409.2	2934.1	3768.7	4691.3	6190.9	19537.9	44220.2	50851.2	52152.1	37507.6
75°	1848.5	1890.9	2125.6	2875.5	3693.7	3801.3	10484.5	33152.1	41765.3	44243.0	31225.4
77.5°	1506.1	1535.5	1656.1	2135.4	2849.3	2692.9	5499.8	21578.7	26165.7	28659.7	18393.6
80°	1196.5	1229.0	1300.8	1447.5	2135.4	1920.2	2624.4	10934.4	12639.5	12613.4	7341.8
82.5°	929.1	938.9	1023.7	1062.8	1460.6	1362.8	1421.4	4629.4	5128.2	5297.7	2650.5
85°	586.8	616.2	906.3	815.0	873.7	798.7	700.9	1838.7	2265.7	2233.2	1059.6
87.5°	179.3	189.1	306.5	345.6	388.0	348.8	257.5	541.2	661.8	717.2	264.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P651640
 CATALOG NUMBER: GALN-SA9D-840-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7279.9	7279.9	7279.9	7279.9	7279.9	7279.9	7279.9	7279.9	7279.9	7279.9	7279.9
2.5°	7322.3	7286.3	7159.2	7054.9	6957.1	6849.5	6758.2	6732.1	6709.3	6699.6	6696.3
5°	7390.7	7283.1	7032.1	6826.6	6663.7	6513.7	6419.2	6376.8	6334.4	6334.4	6347.4
7.5°	7488.5	7292.9	6904.9	6598.5	6393.1	6252.9	6184.5	6177.9	6187.7	6197.5	6200.8
10°	7596.1	7286.3	6719.1	6337.7	6155.1	6089.9	6093.1	6148.6	6200.8	6239.9	6246.4
12.5°	7700.4	7247.2	6500.7	6093.1	5975.8	5988.8	6080.1	6204.0	6305.1	6360.5	6363.8
15°	7817.8	7185.3	6236.6	5861.7	5822.6	5923.7	6093.1	6282.3	6435.5	6526.7	6536.5
17.5°	7915.6	7081.0	5959.5	5636.7	5685.7	5871.4	6106.2	6350.7	6536.5	6650.6	6670.2
20°	8026.4	6947.3	5672.6	5421.6	5561.8	5812.8	6080.1	6344.2	6536.5	6647.3	6673.4
22.5°	8114.4	6758.2	5398.7	5245.5	5450.9	5741.1	5992.1	6204.0	6360.5	6419.2	6458.3
25°	8150.3	6520.2	5141.2	5102.1	5362.9	5623.7	5793.2	5913.8	5962.8	5956.2	5972.5
27.5°	8130.7	6246.4	4919.5	4988.0	5252.0	5441.1	5525.9	5516.1	5428.1	5346.6	5385.7
30°	8049.2	5920.4	4733.7	4870.7	5108.6	5212.9	5199.9	5072.7	4906.5	4753.2	4763.0
32.5°	7902.5	5568.3	4560.9	4736.9	4906.5	4952.1	4864.1	4697.8	4459.8	4261.0	4231.7
35°	7778.7	5232.4	4407.7	4583.7	4704.4	4681.5	4596.7	4381.6	4166.4	3990.4	3961.0
37.5°	7759.1	4945.6	4261.0	4411.0	4479.4	4446.8	4342.5	4159.9	4081.6	3948.0	3931.7
40°	7863.4	4743.5	4111.0	4228.4	4261.0	4234.9	4120.8	4016.4	4088.2	4055.6	4055.6
42.5°	8147.0	4635.8	3977.3	4045.8	4071.9	4091.5	4010.0	3921.9	4010.0	3859.9	3811.1
45°	8597.0	4639.1	3856.7	3866.5	3944.7	4013.2	3957.7	3827.4	3781.7	3481.8	3423.1
47.5°	9258.7	4750.0	3758.9	3697.0	3837.1	3951.3	3873.1	3683.9	3481.8	3282.9	3247.1
50°	10031.4	4948.9	3670.9	3520.9	3693.7	3873.1	3814.4	3592.7	3384.0	3263.4	3240.5
52.5°	10888.8	5199.9	3563.3	3325.3	3517.7	3837.1	3827.4	3579.6	3292.7	3211.2	3191.7
55°	11948.3	5447.7	3429.7	3097.2	3361.1	3807.8	3791.5	3472.0	3273.2	3214.5	3208.0
57.5°	13180.7	5806.3	3237.3	2865.6	3181.8	3687.2	3651.4	3406.8	3208.0	3165.6	3162.3
60°	15166.1	6363.8	2963.4	2653.7	2999.3	3475.3	3520.9	3296.0	3103.6	3093.9	3090.6
62.5°	17777.4	7146.1	2679.8	2435.3	2787.4	3201.4	3331.9	3146.0	2992.8	3041.7	3048.2
65°	21383.1	7804.7	2386.4	2249.5	2552.7	2937.4	3152.6	3005.8	2868.9	2963.4	2963.4
67.5°	23733.6	7817.8	2119.1	2057.2	2314.7	2715.7	2963.4	2839.6	2709.1	2868.9	2875.5
70°	23244.7	6849.5	1897.4	1855.0	2083.2	2477.7	2754.8	2657.0	2507.0	2650.5	2598.3
71°	22455.7	6311.6	1809.3	1776.8	1991.9	2363.5	2657.0	2575.5	2425.5	2520.1	2490.7
72.5°	21197.2	5480.3	1665.9	1672.4	1855.0	2220.2	2520.1	2435.3	2285.3	2337.5	2327.7
75°	17917.6	4785.9	1424.7	1454.0	1594.2	1975.6	2246.2	2181.0	2027.8	2027.8	2018.0
77.5°	11201.8	3344.9	1183.5	1199.7	1352.9	1692.0	1930.0	1874.6	1727.8	1679.0	1665.9
80°	4179.4	1727.8	925.9	945.5	1040.0	1333.4	1597.5	1545.3	1395.3	1339.9	1287.7
82.5°	1581.2	867.2	681.4	665.1	766.2	1017.2	1251.9	1189.9	1072.6	938.9	899.8
85°	596.6	430.3	417.3	404.3	449.9	603.1	775.9	762.9	639.0	544.5	534.6
87.5°	156.5	140.2	163.0	120.6	127.2	114.1	117.4	48.9	22.8	9.8	6.6
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)