

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: P647413

Luminaire Tested: **GALN-SA4D-835-U-T3**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P647413
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4D-835-U-T3
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23762.5 lumens
Efficiency: N/A
Efficacy: 97.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

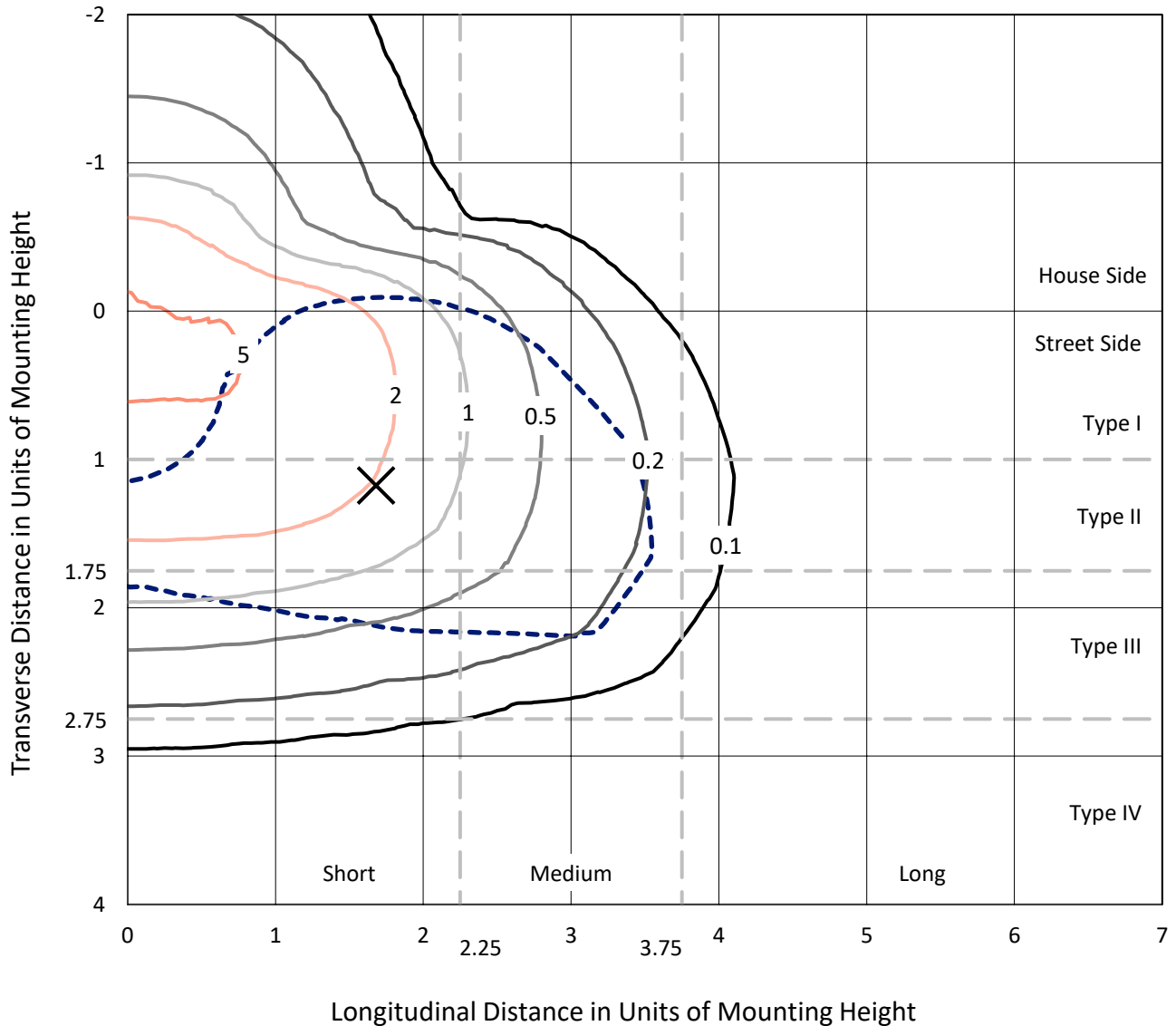
Input Watts (W): 245
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

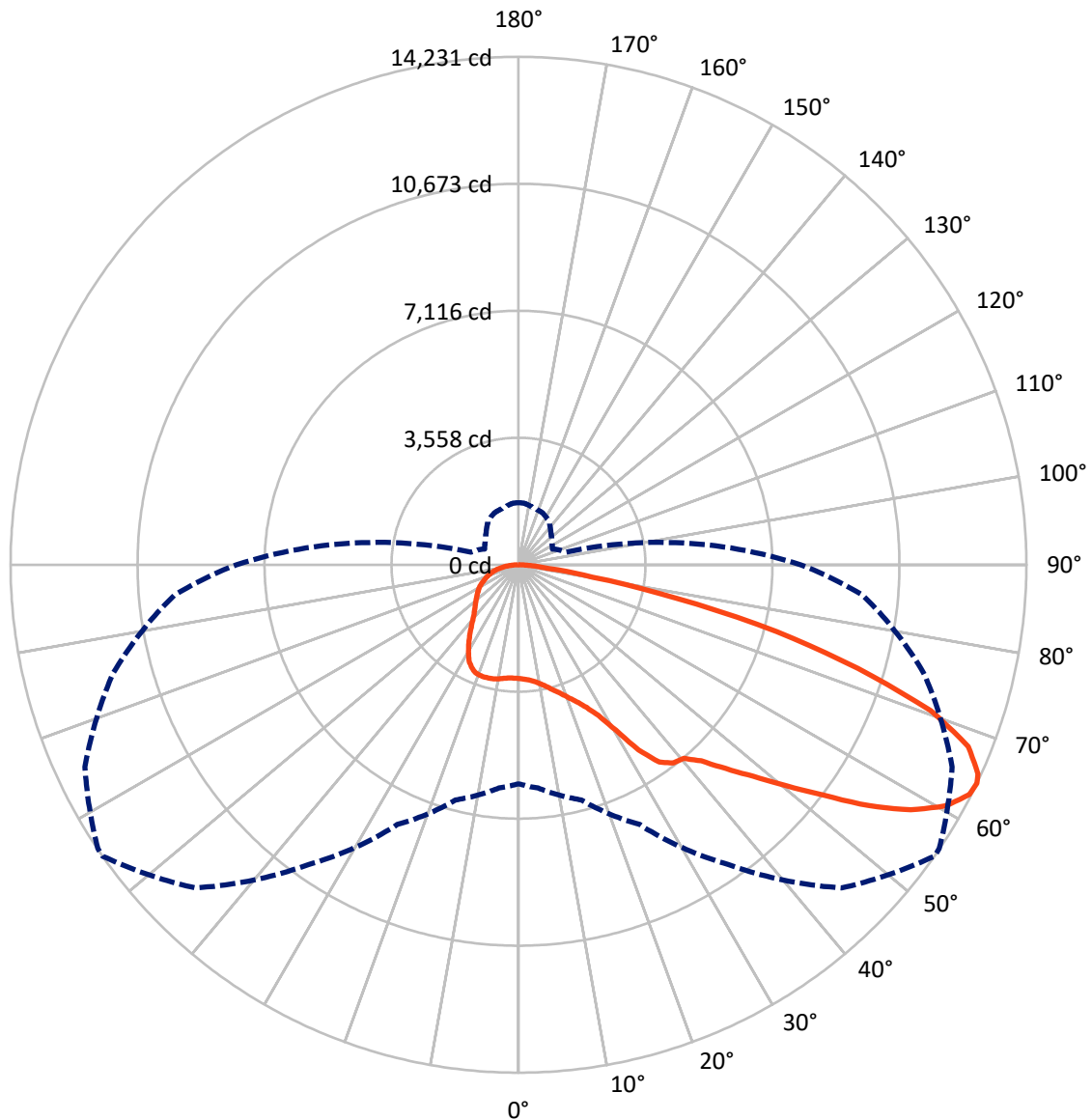
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 64-Deg Vertical

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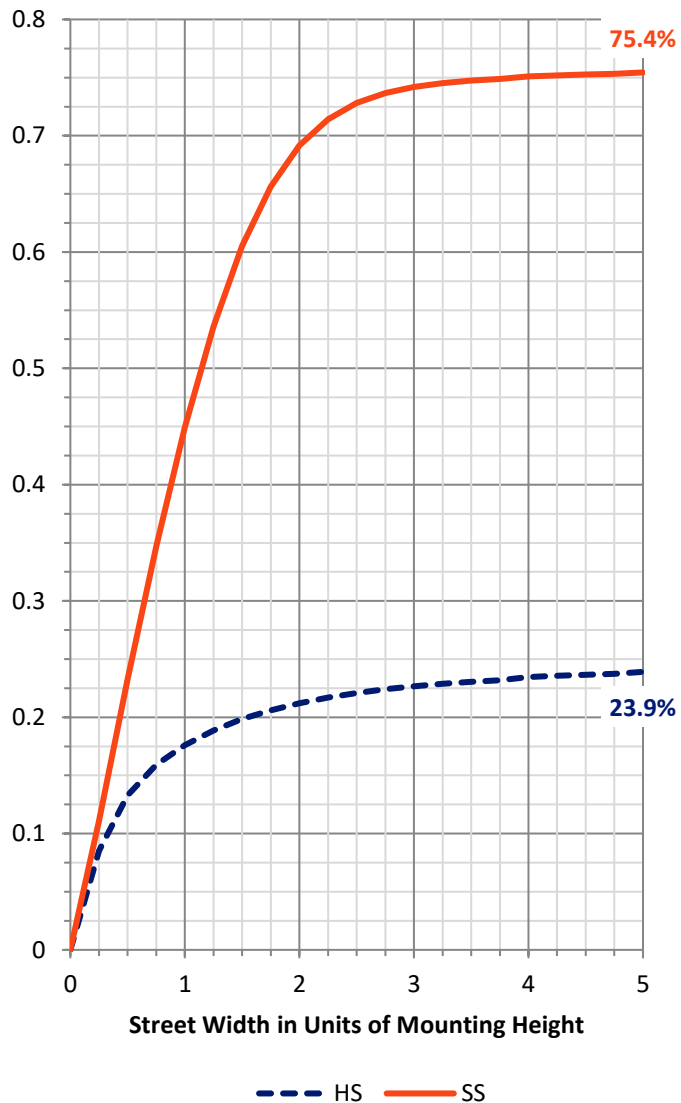
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5772.4	0.0	5772.4
	% Fixture	24.3	0.0	24.3
Street Side	Lumens	17990.1	0.0	17990.1
	% Fixture	75.7	0.0	75.7
Total	Lumens	23762.5	0.0	23762.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	310.1	1.3
10°-20°	978.5	4.1
20°-30°	1742.1	7.3
30°-40°	2680.4	11.3
40°-50°	3799.6	16.0
50°-60°	5499.9	23.1
60°-70°	5691.8	24.0
70°-80°	2665.5	11.2
80°-90°	394.6	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°	23762.5	100.0
0°-180°	23762.5	100.0

Coefficient of Utilization



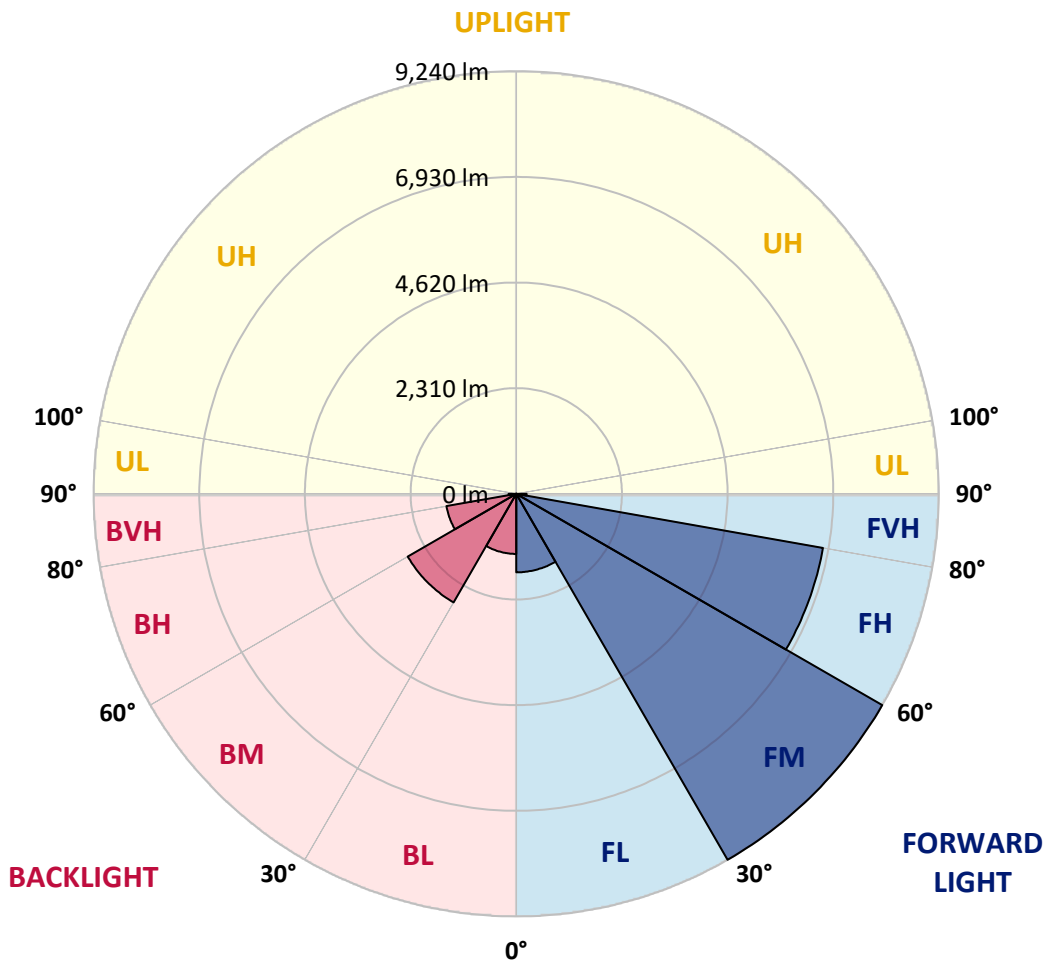
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1716.0	7.2			
FM (30°-60°)	9239.5	38.9			
FH (60°-80°)	6808.6	28.7			G3/7500
FVH (80°-90°)	225.9	1.0			G3/500
BL (0°-30°)	1314.7	5.5	B3/2500		
BM (30°-60°)	2740.4	11.5	B3/5000		
BH (60°-80°)	1548.6	6.5	B3/2500		G3/2500
BVH (80°-90°)	168.7	0.7			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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	3188.2	3188.2	3188.2	3188.2	3188.2	3188.2	3188.2	3188.2	3188.2	3188.2	3188.2
2.5°	3224.0	3222.7	3226.6	3222.7	3225.3	3216.0	3212.0	3214.7	3210.7	3204.1	3192.2
5°	3263.7	3262.4	3263.7	3258.4	3261.0	3255.8	3246.5	3249.1	3242.5	3227.9	3210.7
7.5°	3331.3	3325.9	3325.9	3324.6	3319.4	3311.4	3304.8	3302.1	3295.5	3276.9	3250.5
10°	3418.7	3418.7	3420.0	3409.4	3416.0	3401.4	3394.9	3393.5	3371.0	3347.2	3310.1
12.5°	3533.9	3540.6	3536.6	3531.3	3528.6	3523.3	3500.8	3506.1	3480.9	3439.9	3394.9
15°	3677.0	3687.5	3681.0	3678.3	3671.6	3651.8	3642.5	3638.5	3605.5	3545.8	3486.2
17.5°	3866.4	3853.1	3847.8	3841.2	3813.4	3798.8	3782.9	3780.3	3751.1	3681.0	3588.3
20°	4032.0	4050.5	4039.9	4033.3	4005.4	3977.6	3965.7	3961.7	3936.6	3859.7	3711.4
22.5°	4229.3	4233.3	4237.3	4221.4	4208.2	4186.9	4165.7	4159.1	4149.8	4070.3	3888.9
25°	4439.9	4455.8	4442.6	4426.7	4410.8	4409.5	4429.4	4426.7	4422.7	4345.9	4124.7
27.5°	4783.0	4797.5	4801.5	4784.3	4723.4	4728.7	4773.7	4788.3	4849.2	4722.0	4428.0
30°	4976.4	4990.9	5024.0	5089.0	5185.7	5270.4	5379.1	5412.2	5470.4	5230.7	4788.3
32.5°	5095.6	5100.9	5160.4	5281.0	5571.1	5887.7	6183.0	6194.9	6232.1	5895.6	5118.1
35°	5283.7	5287.6	5335.3	5467.8	5808.2	6335.3	6792.3	6806.9	6776.4	6102.2	5271.7
37.5°	5515.5	5526.0	5556.5	5666.5	6073.1	6710.2	7045.4	7034.7	6764.5	6266.5	5543.2
40°	5853.2	5853.2	5817.5	5965.8	6352.6	6924.8	7134.1	7115.5	7044.0	6742.0	5956.5
42.5°	6151.2	6145.9	6230.7	6331.4	6702.2	7255.9	7506.2	7536.8	7654.6	7339.4	6426.8
45°	6539.3	6563.2	6610.9	6793.6	7297.0	7821.5	8144.7	8173.8	8340.8	8042.7	6976.5
47.5°	6931.4	6939.3	7089.0	7332.7	8033.4	8588.4	8853.3	8901.0	9053.4	8865.3	7568.6
50°	7209.6	7285.0	7524.8	7908.9	8792.4	9523.6	9730.2	9787.2	10056.1	9760.6	8258.6
52.5°	7503.6	7577.8	7870.5	8456.0	9663.9	10479.9	10734.2	10772.6	11052.1	10666.7	8964.6
55°	7755.3	7824.1	8156.6	8940.8	10358.1	11456.1	11917.0	11872.0	12005.8	11364.7	9509.0
57.5°	7796.3	7852.0	8270.5	9250.7	10879.9	12293.2	12954.2	12980.7	12825.7	11886.6	9958.0
60°	7478.4	7592.4	8073.2	9217.6	11114.4	12876.0	13727.7	13746.3	13306.5	12154.1	10136.8
62.5°	6915.5	6903.6	7485.1	8685.1	10785.9	13008.4	14183.3	14163.5	13494.6	12025.6	9963.3
64°	6138.0	6281.1	6824.1	8030.8	10256.0	12804.5	14231.0	14220.5	13404.5	11758.1	9667.9
65°	5663.8	5655.8	6192.3	7495.7	9728.9	12497.2	14146.3	14131.7	13216.4	11518.3	9438.8
67.5°	4088.9	4107.5	4637.2	5784.3	7908.9	11295.8	13593.9	13539.6	12474.7	10723.6	8567.2
70°	2476.9	2487.5	2903.4	3837.2	5677.1	9131.5	12253.5	12256.1	11339.6	9536.8	7291.7
72.5°	1304.7	1332.5	1499.4	2178.9	3447.8	6406.9	9940.8	10176.6	9735.5	8139.4	5760.5
75°	725.8	729.8	847.8	1074.2	1759.0	3585.6	7471.9	7539.4	7707.6	6551.3	4259.8
77.5°	553.7	561.6	598.7	694.1	957.7	1662.3	4522.1	4861.1	5432.0	4618.8	2430.6
80°	449.1	457.0	488.7	545.8	637.1	788.1	2100.7	2283.5	2907.4	2050.4	948.4
82.5°	349.7	344.4	385.5	422.5	463.6	466.3	862.3	953.7	1184.1	882.1	410.6
85°	259.6	259.6	292.8	284.8	299.3	272.9	380.1	419.9	474.2	374.8	190.7
87.5°	103.3	113.9	192.1	172.2	133.8	107.3	140.4	148.4	164.3	147.0	79.5
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°	3188.2	3188.2	3188.2	3188.2	3188.2	3188.2	3188.2	3188.2	3188.2	3188.2	3188.2
2.5°	3193.5	3197.5	3188.2	3181.6	3178.9	3175.0	3171.0	3172.3	3177.6	3182.9	3181.6
5°	3209.4	3210.7	3194.8	3186.9	3181.6	3176.3	3176.3	3180.2	3190.9	3198.8	3198.8
7.5°	3249.1	3249.1	3226.6	3212.0	3204.1	3194.8	3192.2	3193.5	3201.5	3212.0	3213.4
10°	3311.4	3306.1	3276.9	3254.5	3239.9	3217.3	3197.5	3186.9	3190.9	3197.5	3197.5
12.5°	3386.9	3372.3	3335.3	3304.8	3269.0	3226.6	3185.6	3164.3	3163.0	3169.7	3167.0
15°	3467.7	3451.8	3400.1	3344.5	3282.3	3220.0	3171.0	3140.5	3116.7	3110.1	3124.6
17.5°	3561.7	3528.6	3457.1	3380.3	3287.6	3206.8	3130.0	3067.6	3025.3	3013.4	3017.4
20°	3675.6	3631.9	3535.2	3414.7	3283.6	3159.1	3039.8	2956.4	2887.5	2866.3	2869.0
22.5°	3833.3	3757.8	3616.1	3431.9	3250.5	3069.0	2903.4	2794.8	2711.4	2678.3	2698.1
25°	4012.1	3930.0	3692.9	3428.0	3164.3	2924.6	2741.8	2600.1	2524.6	2475.6	2486.2
27.5°	4258.4	4112.8	3775.0	3392.2	3041.2	2748.5	2536.5	2402.7	2333.9	2308.7	2320.7
30°	4573.7	4349.9	3863.7	3295.5	2846.4	2526.0	2329.9	2242.5	2201.4	2169.6	2180.2
32.5°	4801.5	4516.7	3883.6	3132.5	2635.9	2323.2	2189.5	2124.6	2079.6	2049.1	2055.7
35°	4964.5	4658.5	3874.4	2932.6	2416.0	2156.4	2078.2	2025.2	1952.4	1886.2	1874.3
37.5°	5183.0	4836.0	3806.8	2714.0	2198.7	2043.8	1988.2	1890.2	1785.5	1696.8	1692.8
40°	5518.1	5043.9	3662.4	2457.1	2013.3	1960.3	1892.8	1765.7	1653.1	1581.5	1576.3
42.5°	5863.8	5236.0	3466.3	2186.8	1861.0	1872.9	1790.8	1665.0	1596.1	1549.7	1544.5
45°	6286.3	5444.0	3254.5	1952.4	1748.4	1790.8	1702.1	1629.2	1588.2	1557.7	1549.7
47.5°	6743.4	5657.2	3016.0	1741.8	1653.1	1715.3	1665.0	1631.9	1609.3	1588.2	1578.8
50°	7236.0	5895.6	2792.2	1572.3	1566.9	1637.2	1661.0	1649.1	1635.8	1629.2	1621.3
52.5°	7776.4	6139.3	2604.1	1453.0	1491.5	1581.5	1662.3	1671.6	1671.6	1667.6	1662.3
55°	8142.0	6308.9	2413.4	1356.3	1414.6	1536.5	1659.6	1695.4	1708.7	1703.4	1698.1
57.5°	8412.2	6401.6	2173.6	1272.9	1349.7	1492.8	1645.1	1698.1	1711.3	1718.0	1715.3
60°	8467.9	6315.5	1859.7	1185.5	1279.5	1429.2	1592.2	1658.3	1675.5	1716.6	1720.6
62.5°	8217.6	6050.6	1547.1	1099.4	1193.4	1332.5	1520.6	1613.3	1647.7	1711.3	1718.0
64°	7910.3	5753.9	1373.5	1045.1	1137.8	1278.2	1484.8	1601.4	1646.4	1731.2	1736.5
65°	7685.1	5538.0	1264.9	1010.6	1102.0	1242.5	1465.0	1605.4	1658.3	1761.7	1769.6
67.5°	6855.9	4794.9	1046.4	929.8	1017.3	1181.5	1468.9	1638.5	1655.7	1773.6	1772.2
70°	5673.1	3817.4	876.9	855.7	935.1	1132.5	1453.0	1585.5	1586.8	1665.0	1646.4
72.5°	4247.9	2821.3	760.3	778.9	843.8	1015.9	1372.2	1513.9	1491.5	1502.0	1483.5
75°	2918.0	1866.3	654.4	696.7	748.4	898.0	1258.4	1374.9	1339.2	1325.9	1312.6
77.5°	1557.7	1031.8	544.4	615.9	650.4	776.2	1098.1	1210.7	1173.6	1121.9	1104.7
80°	630.5	486.1	438.4	510.0	529.9	625.2	913.9	984.2	956.4	866.2	837.1
82.5°	316.6	291.4	344.4	401.4	402.7	446.4	679.5	745.7	683.5	573.5	548.3
85°	165.6	170.9	237.1	282.1	249.0	241.1	407.9	451.7	414.6	360.3	324.6
87.5°	59.6	68.9	124.5	123.2	87.4	46.4	90.0	43.7	23.8	14.6	18.6
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)