

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: P458999

Luminaire Tested: **GALN-SA5A-735-U-T3**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P458999
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-SA5A-735-U-T3
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21156 lumens
Efficiency: N/A
Efficacy: 137.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

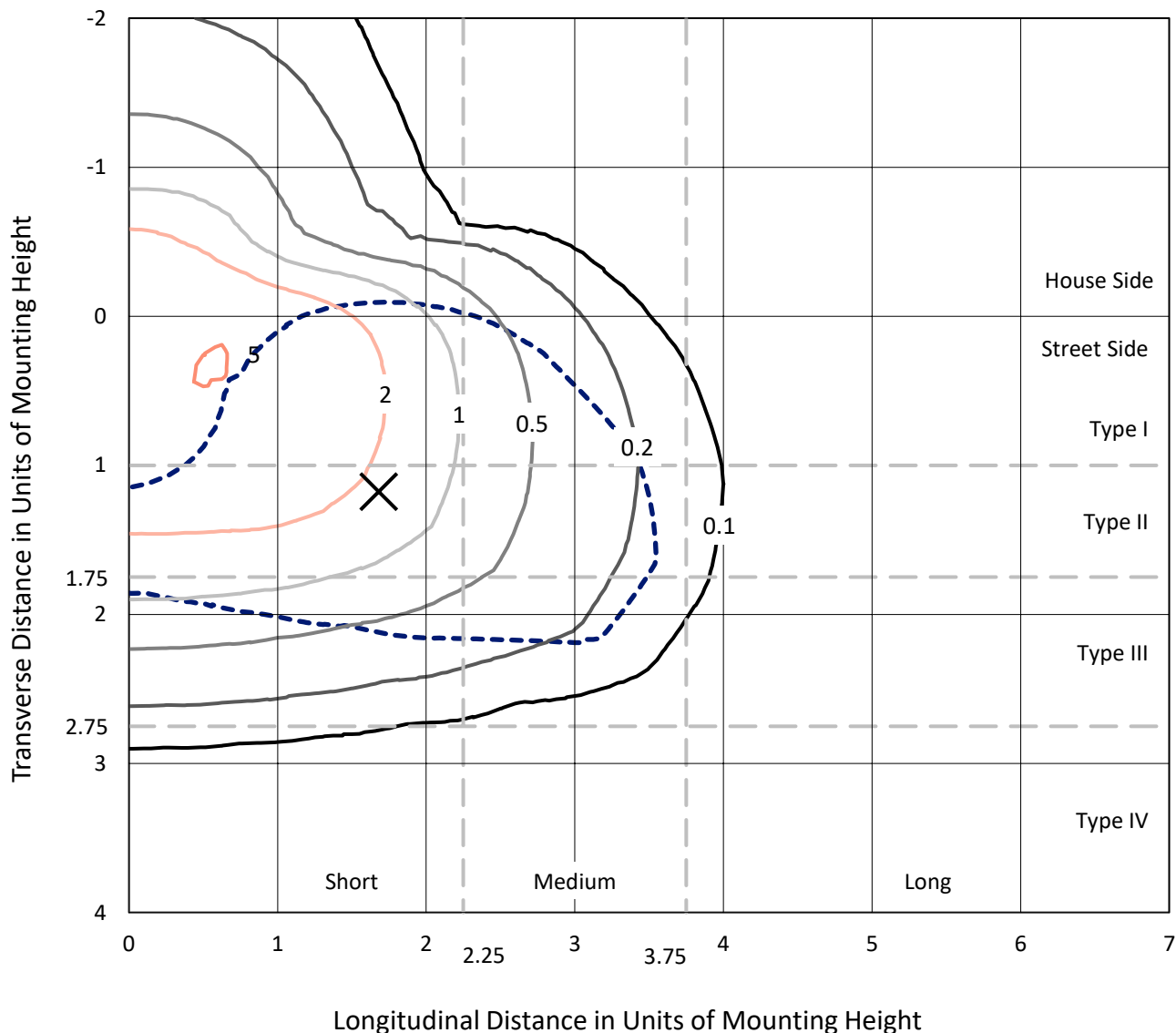
Input Watts (W): 154
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

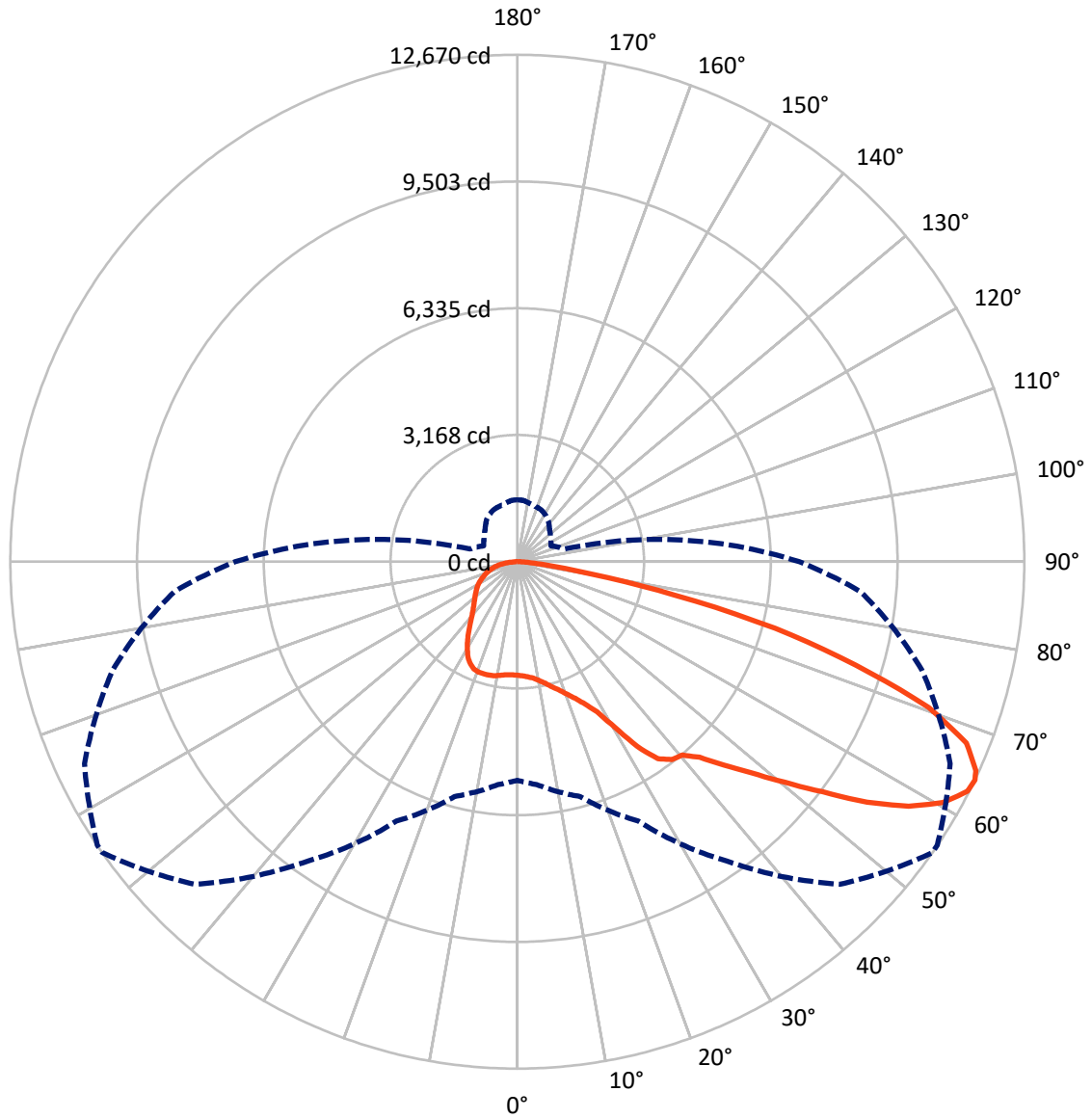
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 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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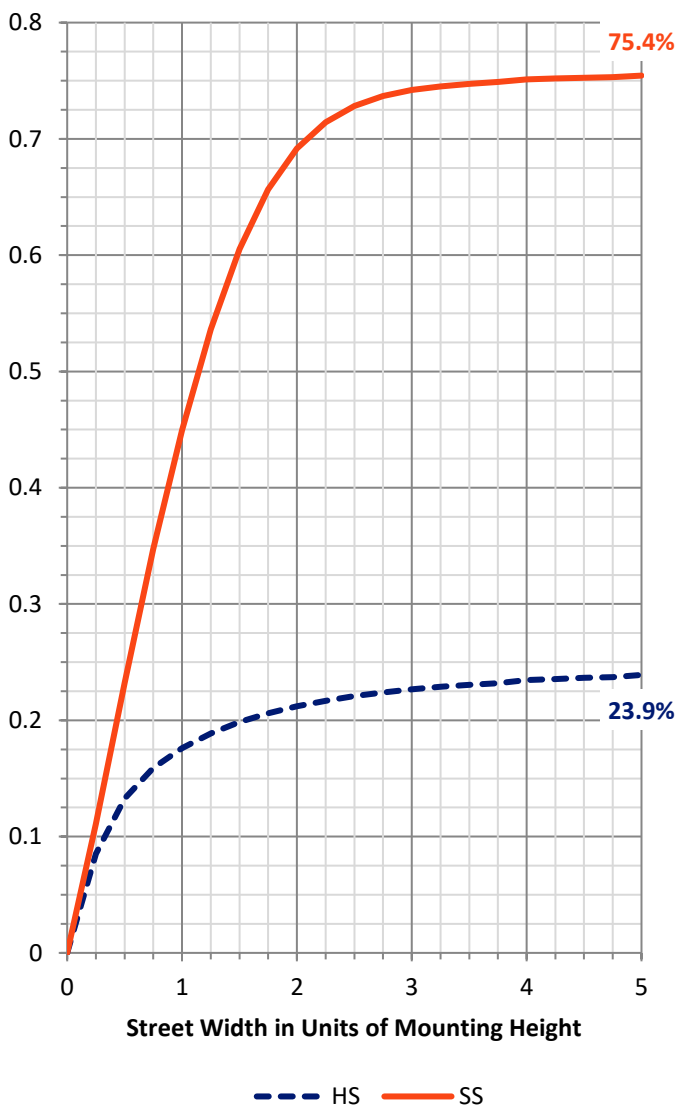
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5139.2	0.0	5139.2
	% Fixture	24.3	0.0	24.3
Street Side	Lumens	16016.8	0.0	16016.8
	% Fixture	75.7	0.0	75.7
Total	Lumens	21156.0	0.0	21156.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	276.1	1.3
10°-20°	871.2	4.1
20°-30°	1551.0	7.3
30°-40°	2386.4	11.3
40°-50°	3382.9	16.0
50°-60°	4896.6	23.1
60°-70°	5067.5	24.0
70°-80°	2373.1	11.2
80°-90°	351.3	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°	21156.0	100.0
0°-180°	21156.0	100.0



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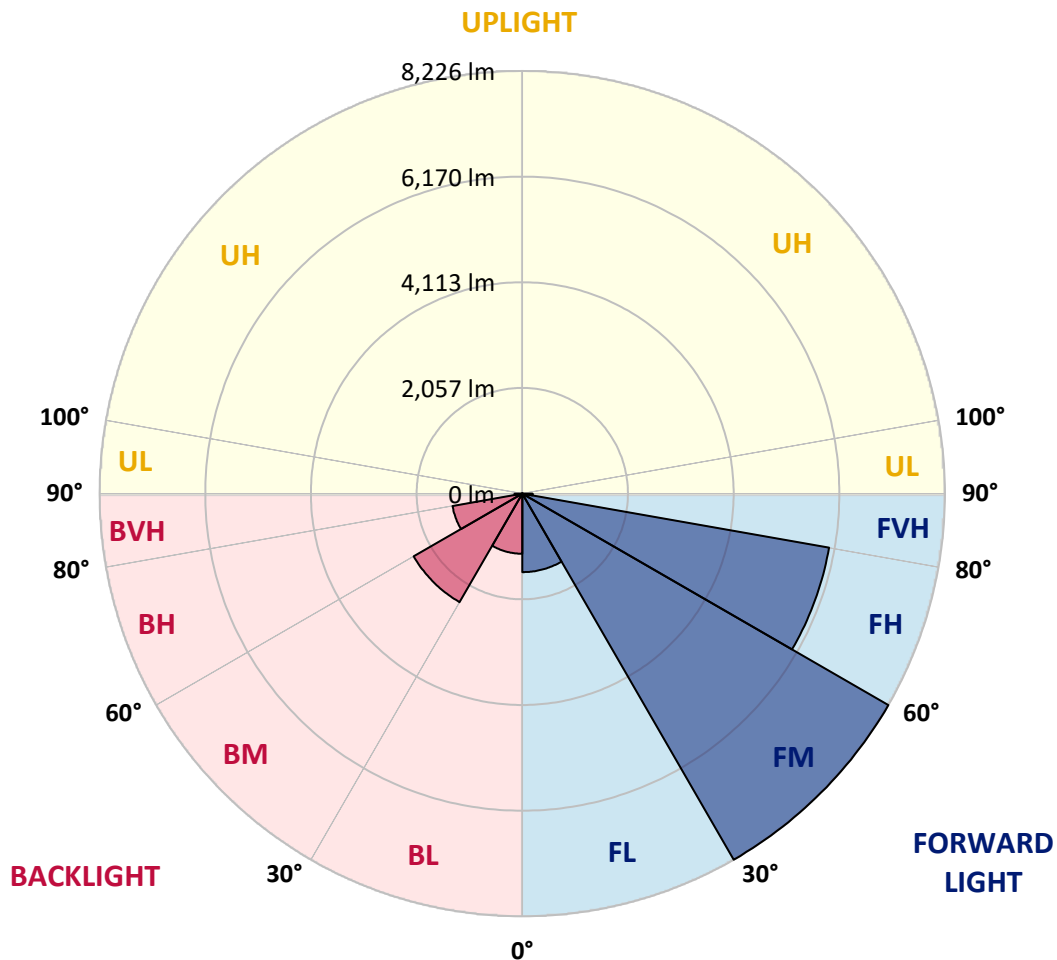
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1527.8	7.2			
FM (30°-60°)	8226.0	38.9			
FH (60°-80°)	6061.8	28.7			G3/7500
FVH (80°-90°)	201.1	1.0			G2/225
BL (0°-30°)	1170.5	5.5	B3/2500		
BM (30°-60°)	2439.8	11.5	B2/2500		
BH (60°-80°)	1378.7	6.5	B3/2500		G3/2500
BVH (80°-90°)	150.2	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°	2838.5	2838.5	2838.5	2838.5	2838.5	2838.5	2838.5	2838.5	2838.5	2838.5	2838.5
2.5°	2870.3	2869.2	2872.7	2869.2	2871.5	2863.3	2859.7	2862.1	2858.5	2852.6	2842.0
5°	2905.7	2904.5	2905.7	2901.0	2903.4	2898.6	2890.4	2892.7	2886.8	2873.9	2858.5
7.5°	2965.9	2961.1	2961.1	2960.0	2955.2	2948.2	2942.3	2939.9	2934.0	2917.5	2893.9
10°	3043.7	3043.7	3044.9	3035.4	3041.3	3028.4	3022.5	3021.3	3001.2	2980.0	2947.0
12.5°	3146.3	3152.2	3148.6	3143.9	3141.6	3136.9	3116.8	3121.5	3099.1	3062.6	3022.5
15°	3273.6	3283.1	3277.2	3274.8	3268.9	3251.2	3243.0	3239.4	3210.0	3156.9	3103.8
17.5°	3442.3	3430.5	3425.8	3419.9	3395.1	3382.1	3368.0	3365.6	3339.7	3277.2	3194.6
20°	3589.7	3606.2	3596.8	3590.9	3566.1	3541.3	3530.7	3527.2	3504.8	3436.4	3304.3
22.5°	3765.4	3768.9	3772.5	3758.3	3746.5	3727.7	3708.8	3702.9	3694.6	3623.9	3462.3
25°	3952.9	3967.1	3955.3	3941.1	3927.0	3925.8	3943.5	3941.1	3937.6	3869.2	3672.2
27.5°	4258.3	4271.3	4274.8	4259.5	4205.3	4210.0	4250.1	4263.1	4317.3	4204.1	3942.3
30°	4430.5	4443.5	4473.0	4530.7	4616.8	4692.3	4789.0	4818.5	4870.4	4656.9	4263.1
32.5°	4536.6	4541.4	4594.4	4701.7	4960.0	5241.8	5504.8	5515.4	5548.5	5248.9	4556.7
35°	4704.1	4707.6	4750.1	4868.0	5171.1	5640.4	6047.3	6060.3	6033.1	5432.9	4693.5
37.5°	4910.5	4919.9	4947.0	5044.9	5406.9	5974.2	6272.5	6263.1	6022.5	5579.1	4935.2
40°	5211.2	5211.2	5179.3	5311.4	5655.8	6165.2	6351.5	6335.0	6271.3	6002.5	5303.2
42.5°	5476.5	5471.8	5547.3	5636.9	5967.1	6460.0	6682.9	6710.0	6815.0	6534.3	5721.8
45°	5822.0	5843.3	5885.7	6048.5	6496.6	6963.6	7251.3	7277.3	7425.8	7160.5	6211.2
47.5°	6171.1	6178.2	6311.4	6528.4	7152.3	7646.4	7882.2	7924.7	8060.3	7892.8	6738.3
50°	6418.8	6486.0	6699.4	7041.4	7828.0	8478.9	8662.9	8713.6	8953.0	8690.0	7352.7
52.5°	6680.5	6746.6	7007.2	7528.4	8603.9	9330.4	9556.8	9591.0	9839.8	9496.6	7981.3
55°	6904.6	6965.9	7261.9	7960.1	9221.9	10199.5	10609.9	10569.8	10688.9	10118.1	8466.0
57.5°	6941.2	6990.7	7363.3	8236.0	9686.5	10944.8	11533.2	11556.8	11418.8	10582.7	8865.7
60°	6658.1	6759.6	7187.6	8206.5	9895.2	11463.7	12221.9	12238.4	11846.9	10821.0	9024.9
62.5°	6157.0	6146.3	6664.0	7732.5	9602.8	11581.6	12627.6	12609.9	12014.4	10706.6	8870.4
64°	5464.7	5592.1	6075.6	7149.9	9131.1	11400.0	12670.0	12660.6	11934.2	10468.4	8607.5
65°	5042.5	5035.5	5513.1	6673.5	8661.7	11126.4	12594.6	12581.6	11766.7	10254.9	8403.5
67.5°	3640.4	3656.9	4128.6	5149.9	7041.4	10056.8	12102.8	12054.5	11106.3	9547.3	7627.5
70°	2205.2	2214.7	2585.0	3416.3	5054.3	8129.9	10909.4	10911.8	10095.7	8490.7	6491.9
72.5°	1161.6	1186.3	1334.9	1939.9	3069.6	5704.1	8850.4	9060.3	8667.6	7246.6	5128.6
75°	646.2	649.8	754.7	956.4	1566.1	3192.3	6652.2	6712.4	6862.2	5832.7	3792.5
77.5°	492.9	500.0	533.0	617.9	852.6	1480.0	4026.0	4327.9	4836.2	4112.1	2164.0
80°	399.8	406.8	435.1	485.9	567.2	701.7	1870.3	2033.1	2588.5	1825.5	844.4
82.5°	311.3	306.6	343.2	376.2	412.7	415.1	767.7	849.1	1054.3	785.4	365.6
85°	231.1	231.1	260.6	253.5	266.5	242.9	338.4	373.8	422.2	333.7	169.8
87.5°	92.0	101.4	171.0	153.3	119.1	95.5	125.0	132.1	146.2	130.9	70.8
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°	2838.5	2838.5	2838.5	2838.5	2838.5	2838.5	2838.5	2838.5	2838.5	2838.5	2838.5
2.5°	2843.2	2846.8	2838.5	2832.6	2830.2	2826.7	2823.2	2824.3	2829.1	2833.8	2832.6
5°	2857.4	2858.5	2844.4	2837.3	2832.6	2827.9	2827.9	2831.4	2840.9	2847.9	2847.9
7.5°	2892.7	2892.7	2872.7	2859.7	2852.6	2844.4	2842.0	2843.2	2850.3	2859.7	2860.9
10°	2948.2	2943.5	2917.5	2897.5	2884.5	2864.4	2846.8	2837.3	2840.9	2846.8	2846.8
12.5°	3015.4	3002.4	2969.4	2942.3	2910.4	2872.7	2836.1	2817.3	2816.1	2822.0	2819.6
15°	3087.3	3073.2	3027.2	2977.7	2922.2	2866.8	2823.2	2796.0	2774.8	2768.9	2781.9
17.5°	3171.1	3141.6	3077.9	3009.5	2926.9	2855.0	2786.6	2731.2	2693.4	2682.8	2686.4
20°	3272.5	3233.6	3147.5	3040.2	2923.4	2812.6	2706.4	2632.1	2570.8	2551.9	2554.3
22.5°	3412.8	3345.6	3219.4	3055.5	2893.9	2732.4	2585.0	2488.3	2414.0	2384.5	2402.2
25°	3572.0	3498.9	3287.8	3051.9	2817.3	2603.8	2441.1	2314.9	2247.7	2204.1	2213.5
27.5°	3791.3	3661.6	3360.9	3020.1	2707.6	2447.0	2258.3	2139.2	2077.9	2055.5	2066.1
30°	4072.0	3872.7	3439.9	2934.0	2534.2	2248.9	2074.3	1996.5	1959.9	1931.6	1941.1
32.5°	4274.8	4021.3	3457.6	2789.0	2346.7	2068.4	1949.3	1891.5	1851.4	1824.3	1830.2
35°	4419.9	4147.5	3449.4	2610.9	2151.0	1919.8	1850.3	1803.1	1738.2	1679.3	1668.7
37.5°	4614.5	4305.5	3389.2	2416.3	1957.6	1819.6	1770.1	1682.8	1589.7	1510.6	1507.1
40°	4912.8	4490.7	3260.7	2187.5	1792.5	1745.3	1685.2	1572.0	1471.7	1408.0	1403.3
42.5°	5220.6	4661.6	3086.1	1947.0	1656.9	1667.5	1594.4	1482.3	1421.0	1379.7	1375.0
45°	5596.8	4846.8	2897.5	1738.2	1556.6	1594.4	1515.4	1450.5	1413.9	1386.8	1379.7
47.5°	6003.7	5036.7	2685.2	1550.7	1471.7	1527.2	1482.3	1452.9	1432.8	1413.9	1405.7
50°	6442.3	5248.9	2485.9	1399.8	1395.1	1457.6	1478.8	1468.2	1456.4	1450.5	1443.4
52.5°	6923.5	5465.9	2318.4	1293.7	1327.9	1408.0	1480.0	1488.2	1488.2	1484.7	1480.0
55°	7249.0	5616.9	2148.6	1207.6	1259.5	1368.0	1477.6	1509.5	1521.3	1516.5	1511.8
57.5°	7489.5	5699.4	1935.2	1133.3	1201.7	1329.0	1464.7	1511.8	1523.6	1529.5	1527.2
60°	7539.1	5622.7	1655.7	1055.4	1139.2	1272.4	1417.5	1476.4	1491.8	1528.3	1531.9
62.5°	7316.2	5386.9	1377.4	978.8	1062.5	1186.3	1353.8	1436.3	1467.0	1523.6	1529.5
64°	7042.6	5122.7	1222.9	930.4	1013.0	1138.0	1322.0	1425.7	1465.8	1541.3	1546.0
65°	6842.1	4930.5	1126.2	899.8	981.2	1106.2	1304.3	1429.3	1476.4	1568.4	1575.5
67.5°	6103.9	4268.9	931.6	827.8	905.7	1051.9	1307.8	1458.8	1474.1	1579.0	1577.9
70°	5050.8	3398.6	780.7	761.8	832.6	1008.3	1293.7	1411.6	1412.8	1482.3	1465.8
72.5°	3781.9	2511.8	676.9	693.4	751.2	904.5	1221.7	1347.9	1327.9	1337.3	1320.8
75°	2597.9	1661.6	582.6	620.3	666.3	799.5	1120.3	1224.1	1192.2	1180.4	1168.7
77.5°	1386.8	918.6	484.7	548.4	579.0	691.1	977.6	1077.9	1044.8	998.8	983.5
80°	561.3	432.8	390.3	454.0	471.7	556.6	813.7	876.2	851.4	771.2	745.3
82.5°	281.8	259.4	306.6	357.3	358.5	397.4	605.0	663.9	608.5	510.6	488.2
85°	147.4	152.1	211.1	251.2	221.7	214.6	363.2	402.1	369.1	320.8	288.9
87.5°	53.1	61.3	110.9	109.7	77.8	41.3	80.2	38.9	21.2	13.0	16.5
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)