

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: P651318

Luminaire Tested: **GALN-SA3D-840-U-T3**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651318
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-SA3D-840-U-T3
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19259.7 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

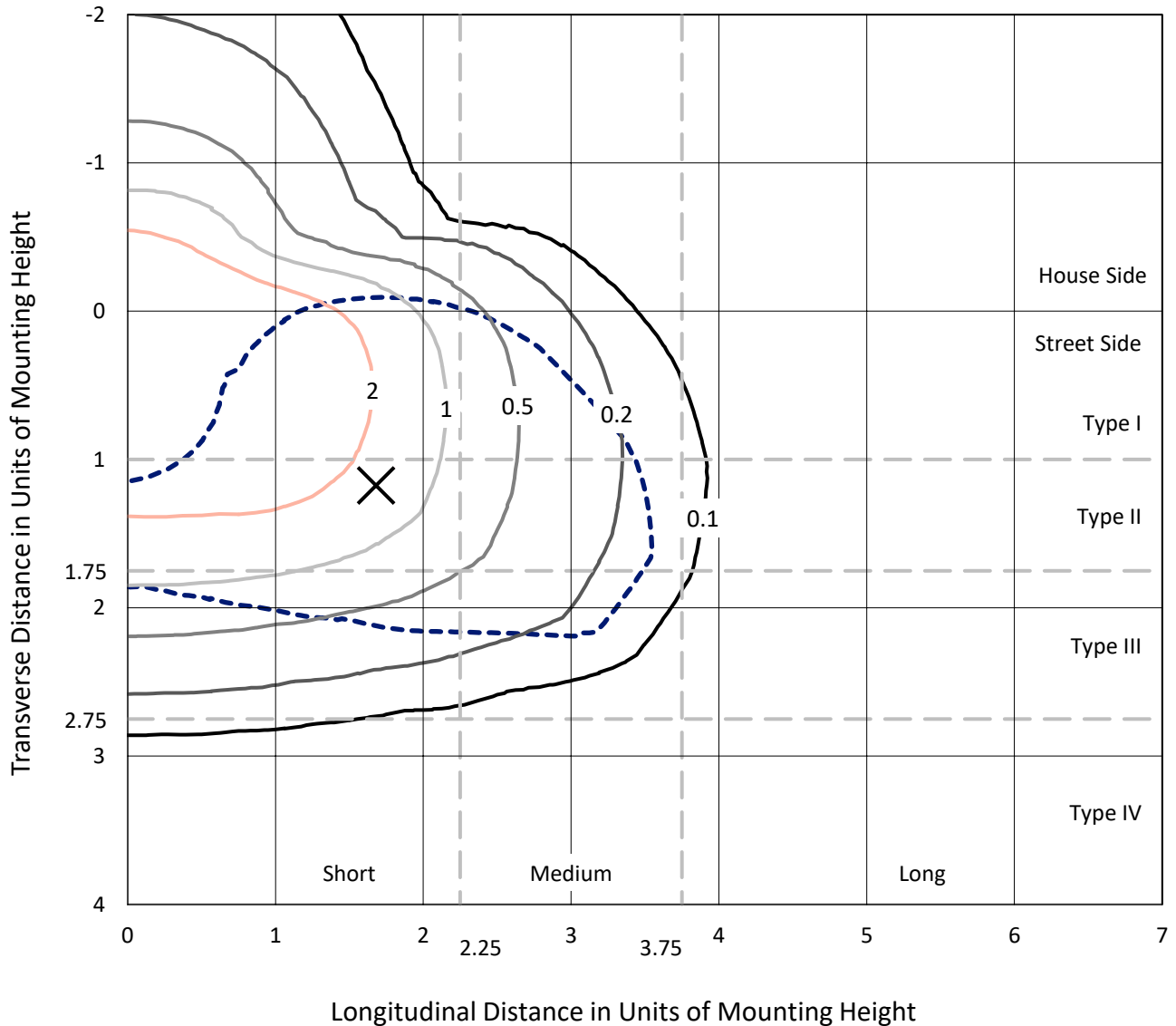
Input Watts (W): 184
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

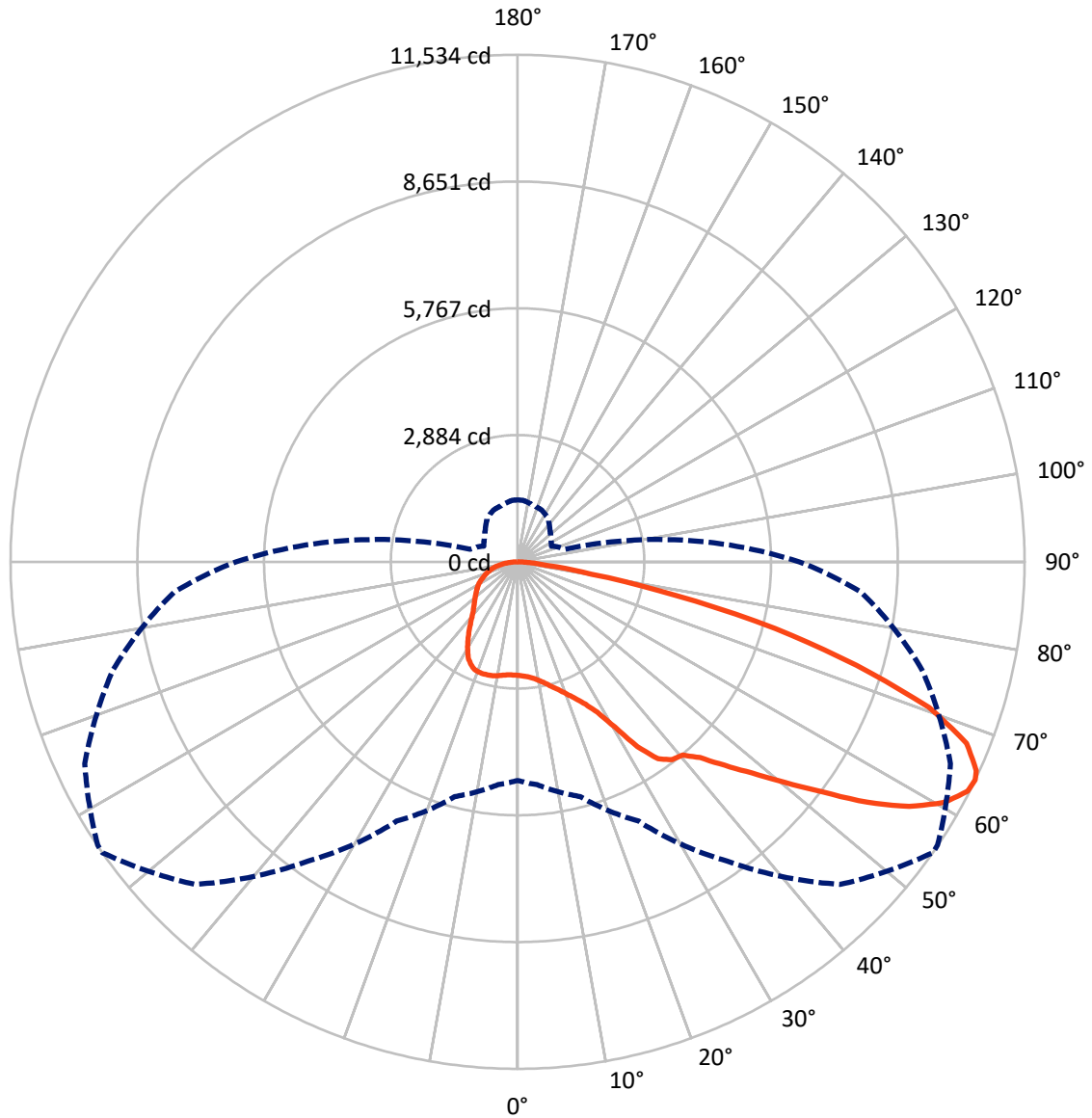
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 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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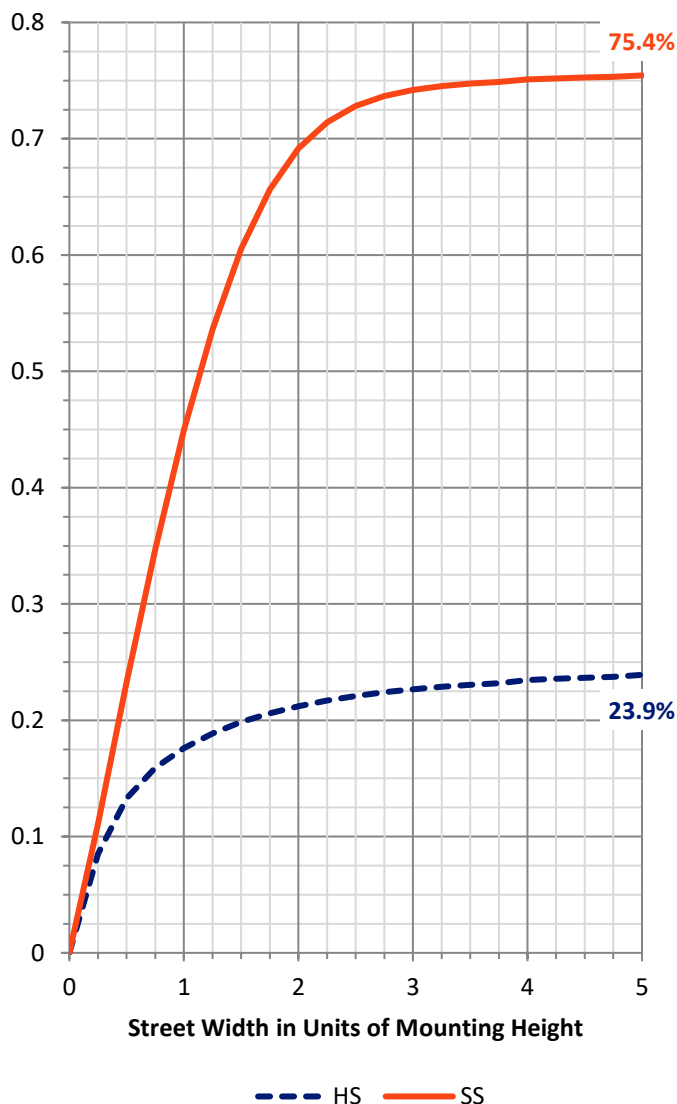
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4678.6	0.0	4678.6
	% Fixture	24.3	0.0	24.3
Street Side	Lumens	14581.2	0.0	14581.2
	% Fixture	75.7	0.0	75.7
Total	Lumens	19259.7	0.0	19259.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.4	1.3
10°-20°	793.1	4.1
20°-30°	1412.0	7.3
30°-40°	2172.5	11.3
40°-50°	3079.6	16.0
50°-60°	4457.7	23.1
60°-70°	4613.2	24.0
70°-80°	2160.4	11.2
80°-90°	319.8	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°	19259.7	100.0
0°-180°	19259.7	100.0

Coefficient of Utilization



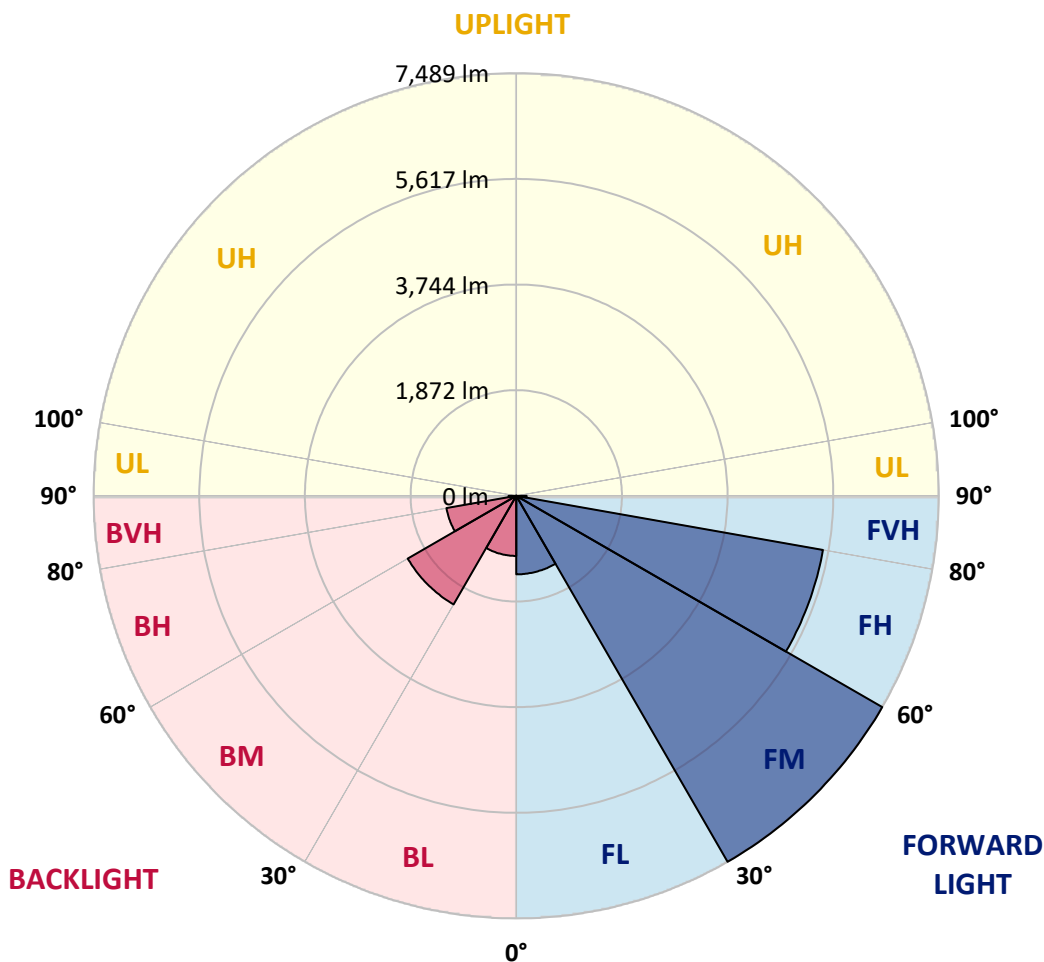
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1390.9	7.2			
FM (30°-60°)	7488.7	38.9			
FH (60°-80°)	5518.5	28.7			G3/7500
FVH (80°-90°)	183.1	1.0			G2/225
BL (0°-30°)	1065.6	5.5	B3/2500		
BM (30°-60°)	2221.1	11.5	B2/2500		
BH (60°-80°)	1255.2	6.5	B3/2500		G3/2500
BVH (80°-90°)	136.7	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°	2584.1	2584.1	2584.1	2584.1	2584.1	2584.1	2584.1	2584.1	2584.1	2584.1	2584.1
2.5°	2613.1	2612.0	2615.2	2612.0	2614.2	2606.6	2603.4	2605.6	2602.3	2596.9	2587.3
5°	2645.3	2644.2	2645.3	2641.0	2643.1	2638.8	2631.3	2633.4	2628.1	2616.3	2602.3
7.5°	2700.0	2695.7	2695.7	2694.6	2690.4	2683.9	2678.6	2676.4	2671.0	2656.0	2634.5
10°	2770.8	2770.8	2771.9	2763.4	2768.7	2756.9	2751.6	2750.5	2732.2	2712.9	2682.9
12.5°	2864.3	2869.7	2866.5	2862.1	2860.0	2855.7	2837.4	2841.7	2821.3	2788.1	2751.6
15°	2980.3	2988.8	2983.4	2981.3	2976.0	2959.8	2952.3	2949.1	2922.2	2873.9	2825.6
17.5°	3133.7	3123.0	3118.7	3113.4	3090.8	3079.0	3066.1	3063.9	3040.4	2983.4	2908.3
20°	3268.0	3282.9	3274.3	3269.1	3246.4	3223.9	3214.2	3211.0	3190.7	3128.4	3008.2
22.5°	3427.9	3431.1	3434.3	3421.4	3410.8	3393.5	3376.4	3371.0	3363.5	3299.1	3152.0
25°	3598.6	3611.5	3600.7	3587.9	3575.0	3573.9	3590.0	3587.9	3584.7	3522.4	3343.1
27.5°	3876.7	3888.4	3891.6	3877.7	3828.3	3832.6	3869.1	3881.0	3930.3	3827.3	3589.0
30°	4033.4	4045.2	4072.0	4124.7	4203.0	4271.7	4359.7	4386.6	4433.8	4239.5	3881.0
32.5°	4130.0	4134.3	4182.6	4280.4	4515.4	4772.0	5011.4	5021.1	5051.1	4778.5	4148.2
35°	4282.5	4285.7	4324.3	4431.6	4707.6	5134.9	5505.3	5517.0	5492.4	4945.9	4272.8
37.5°	4470.3	4478.9	4503.6	4592.7	4922.3	5438.7	5710.3	5701.7	5482.7	5079.1	4492.9
40°	4744.1	4744.1	4715.1	4835.3	5148.9	5612.6	5782.2	5767.2	5709.2	5464.5	4827.8
42.5°	4985.6	4981.3	5050.0	5131.6	5432.3	5881.0	6083.9	6108.6	6204.1	5948.6	5209.0
45°	5300.2	5319.5	5358.2	5506.4	5914.2	6339.4	6601.3	6625.0	6760.2	6518.7	5654.5
47.5°	5618.0	5624.4	5745.7	5943.3	6511.2	6961.0	7175.7	7214.4	7337.8	7185.4	6134.3
50°	5843.4	5904.6	6098.9	6410.3	7126.3	7719.0	7886.4	7932.6	8150.6	7911.1	6693.7
52.5°	6081.8	6141.9	6379.2	6853.6	7832.7	8494.1	8700.2	8731.3	8957.8	8645.4	7265.9
55°	6285.7	6341.6	6611.0	7246.6	8395.3	9285.3	9658.9	9622.4	9730.8	9211.2	7707.2
57.5°	6319.0	6364.1	6703.4	7497.8	8818.3	9963.7	10499.5	10521.0	10395.3	9634.2	8071.1
60°	6061.3	6153.7	6543.4	7470.9	9008.3	10436.1	11126.4	11141.5	10785.1	9851.1	8216.0
62.5°	5605.1	5595.4	6066.7	7039.3	8742.0	10543.5	11495.8	11479.6	10937.5	9746.9	8075.4
64°	4974.9	5090.8	5531.0	6509.0	8312.6	10378.2	11534.4	11525.8	10864.5	9530.0	7835.9
65°	4590.6	4584.1	5018.9	6075.3	7885.4	10129.1	11465.7	11453.9	10712.1	9335.8	7650.2
67.5°	3314.1	3329.1	3758.6	4688.2	6410.3	9155.4	11018.0	10974.0	10110.8	8691.6	6943.8
70°	2007.6	2016.1	2353.3	3110.1	4601.3	7401.1	9931.5	9933.7	9190.8	7729.7	5910.0
72.5°	1057.5	1080.0	1215.2	1766.0	2794.5	5192.8	8057.1	8248.2	7890.7	6597.1	4669.0
75°	588.3	591.6	687.1	870.7	1425.7	2906.2	6056.0	6110.7	6247.1	5309.8	3452.6
77.5°	448.8	455.2	485.3	562.5	776.2	1347.4	3665.2	3940.0	4402.7	3743.5	1970.0
80°	363.9	370.4	396.1	442.3	516.4	638.7	1702.7	1850.8	2356.5	1661.9	768.7
82.5°	283.4	279.1	312.4	342.5	375.8	377.9	698.9	773.0	959.7	715.0	332.8
85°	210.4	210.4	237.2	230.9	242.6	221.2	308.1	340.4	384.3	303.9	154.6
87.5°	83.8	92.3	155.7	139.5	108.4	87.0	113.8	120.3	133.1	119.2	64.4
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°	2584.1	2584.1	2584.1	2584.1	2584.1	2584.1	2584.1	2584.1	2584.1	2584.1	2584.1
2.5°	2588.3	2591.6	2584.1	2578.7	2576.6	2573.4	2570.1	2571.2	2575.5	2579.8	2578.7
5°	2601.2	2602.3	2589.4	2583.0	2578.7	2574.4	2574.4	2577.7	2586.2	2592.6	2592.6
7.5°	2633.4	2633.4	2615.2	2603.4	2596.9	2589.4	2587.3	2588.3	2594.8	2603.4	2604.5
10°	2683.9	2679.6	2656.0	2637.7	2625.9	2607.7	2591.6	2583.0	2586.2	2591.6	2591.6
12.5°	2745.1	2733.3	2703.2	2678.6	2649.6	2615.2	2582.0	2564.7	2563.7	2569.1	2566.9
15°	2810.6	2797.8	2755.9	2710.8	2660.3	2609.9	2570.1	2545.5	2526.1	2520.7	2532.5
17.5°	2886.8	2860.0	2802.0	2739.7	2664.6	2599.1	2536.9	2486.4	2452.0	2442.3	2445.5
20°	2979.2	2943.8	2865.4	2767.6	2661.3	2560.4	2463.9	2396.2	2340.3	2323.2	2325.4
22.5°	3106.9	3045.7	2930.8	2781.6	2634.5	2487.4	2353.3	2265.2	2197.6	2170.8	2186.9
25°	3251.8	3185.3	2993.1	2778.4	2564.7	2370.4	2222.3	2107.4	2046.2	2006.5	2015.1
27.5°	3451.5	3333.4	3059.6	2749.4	2464.9	2227.6	2055.9	1947.4	1891.7	1871.2	1880.9
30°	3707.0	3525.6	3131.6	2671.0	2307.1	2047.3	1888.4	1817.6	1784.3	1758.5	1767.1
32.5°	3891.6	3660.9	3147.7	2539.0	2136.4	1883.0	1774.6	1722.0	1685.5	1660.8	1666.2
35°	4023.8	3775.8	3140.2	2376.9	1958.2	1747.8	1684.4	1641.5	1582.4	1528.8	1519.1
37.5°	4200.9	3919.6	3085.5	2199.7	1782.2	1656.5	1611.4	1532.0	1447.2	1375.2	1372.0
40°	4472.5	4088.2	2968.4	1991.5	1631.8	1588.9	1534.2	1431.0	1339.8	1281.9	1277.6
42.5°	4752.7	4243.8	2809.5	1772.5	1508.3	1518.0	1451.5	1349.5	1293.6	1256.0	1251.7
45°	5095.1	4412.4	2637.7	1582.4	1417.1	1451.5	1379.5	1320.5	1287.2	1262.5	1256.0
47.5°	5465.5	4585.2	2444.5	1411.7	1339.8	1390.3	1349.5	1322.6	1304.4	1287.2	1279.7
50°	5864.9	4778.5	2263.0	1274.3	1270.0	1326.9	1346.3	1336.6	1325.8	1320.5	1314.1
52.5°	6302.9	4975.9	2110.7	1177.7	1208.9	1281.9	1347.4	1354.9	1354.9	1351.7	1347.4
55°	6599.2	5113.4	1956.0	1099.4	1146.5	1245.4	1345.2	1374.2	1384.9	1380.6	1376.3
57.5°	6818.2	5188.5	1761.7	1031.7	1094.0	1209.9	1333.4	1376.3	1387.1	1392.4	1390.3
60°	6863.3	5118.7	1507.3	960.8	1037.0	1158.4	1290.4	1344.1	1358.0	1391.4	1394.5
62.5°	6660.4	4904.0	1253.9	891.0	967.3	1080.0	1232.5	1307.6	1335.5	1387.1	1392.4
64°	6411.4	4663.6	1113.3	847.1	922.2	1036.0	1203.5	1297.9	1334.4	1403.1	1407.4
65°	6228.9	4488.6	1025.3	819.1	893.2	1007.0	1187.3	1301.2	1344.1	1427.8	1434.3
67.5°	5556.8	3886.3	848.1	753.6	824.5	957.6	1190.6	1328.0	1342.0	1437.5	1436.4
70°	4598.1	3094.0	710.7	693.5	757.9	917.9	1177.7	1285.0	1286.1	1349.5	1334.4
72.5°	3443.0	2286.7	616.2	631.3	683.9	823.4	1112.2	1227.1	1208.9	1217.4	1202.4
75°	2365.1	1512.6	530.3	564.7	606.5	727.9	1019.9	1114.3	1085.4	1074.6	1063.9
77.5°	1262.5	836.3	441.3	499.2	527.1	629.2	889.9	981.3	951.2	909.3	895.3
80°	511.0	394.0	355.3	413.4	429.4	506.7	740.8	797.7	775.1	702.2	678.5
82.5°	256.6	236.2	279.1	325.3	326.4	361.8	550.8	604.4	554.0	464.8	444.5
85°	134.2	138.5	192.2	228.7	201.8	195.4	330.7	366.1	336.1	292.0	263.1
87.5°	48.3	55.8	100.9	99.8	70.9	37.6	73.0	35.4	19.3	11.8	15.1
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)