

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: P451122

Luminaire Tested: **GALN-SA2A-727-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451122
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA2A-727-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7766 lumens
Efficiency: N/A
Efficacy: 123.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

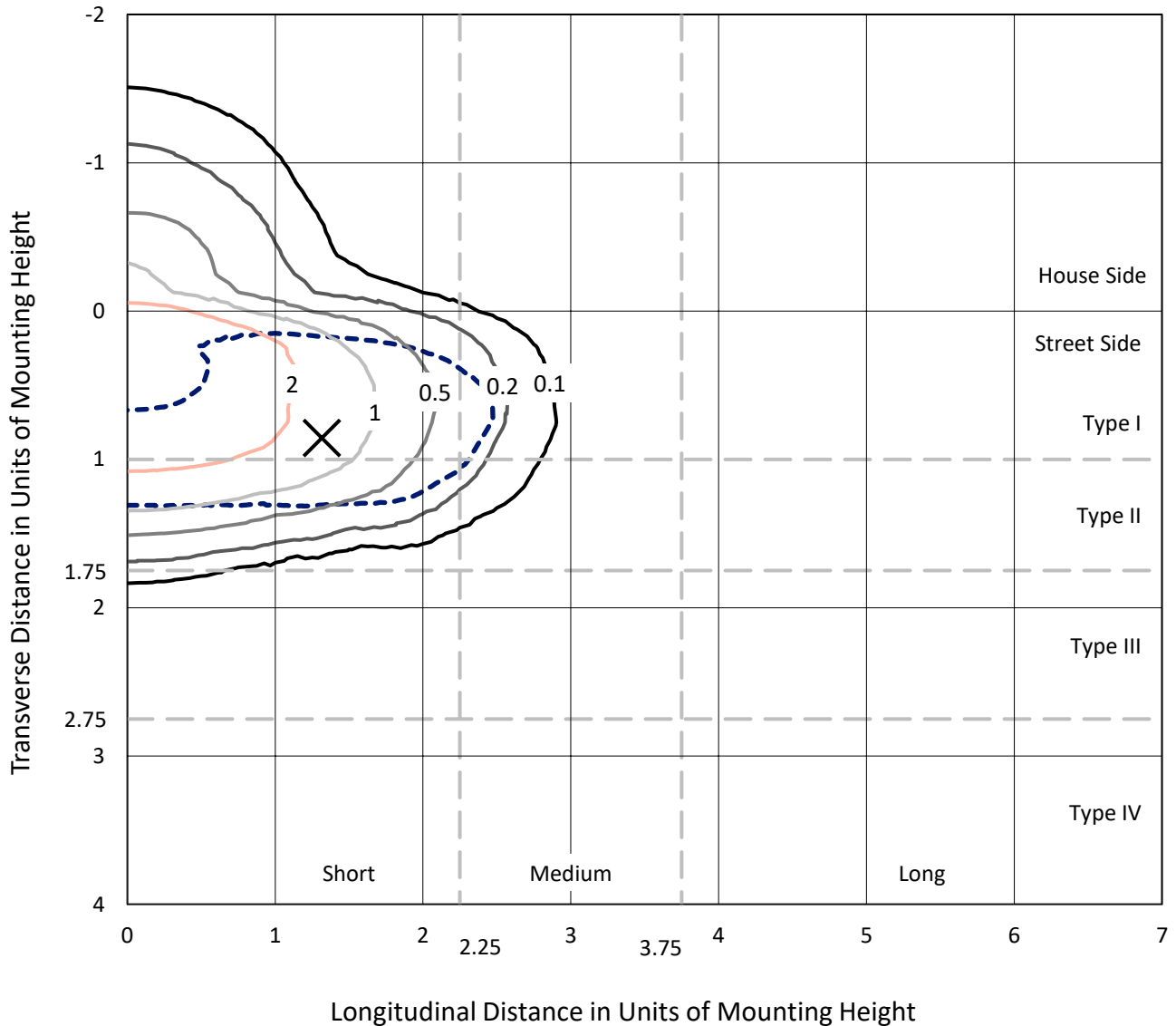
Input Watts (W): 63
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

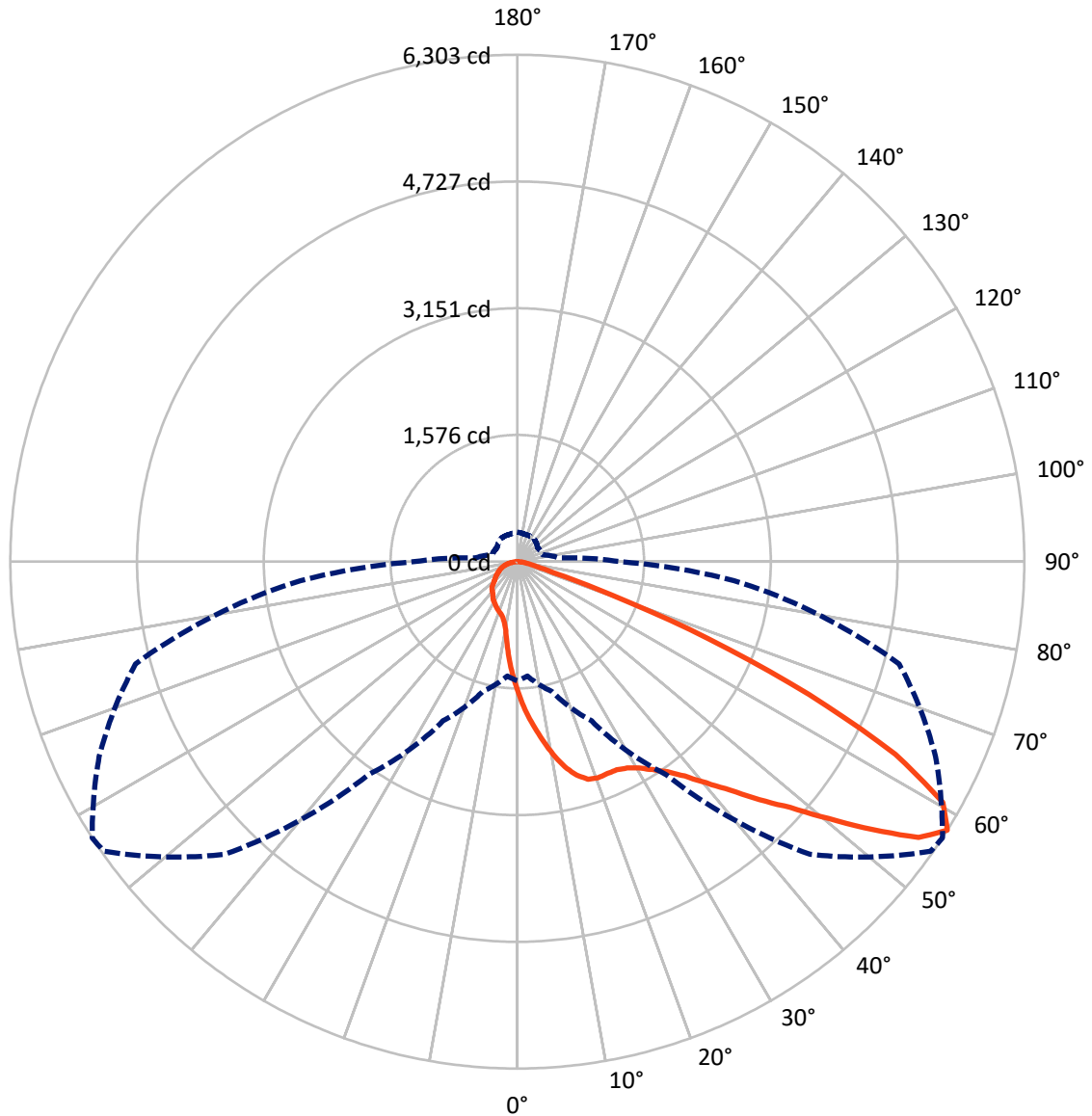
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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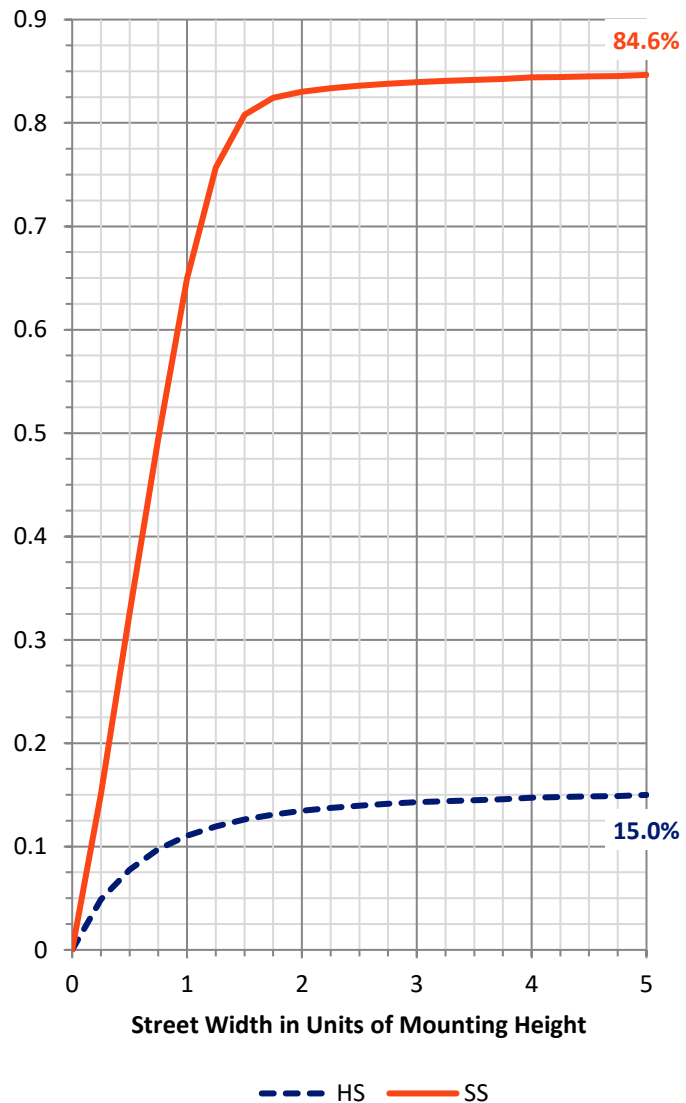
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1181.0	0.0	1181.0
	% Fixture	15.2	0.0	15.2
Street Side	Lumens	6585.0	0.0	6585.0
	% Fixture	84.8	0.0	84.8
Total	Lumens	7766.0	0.0	7766.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.8	2.0
10°-20°	462.1	6.0
20°-30°	767.4	9.9
30°-40°	1155.9	14.9
40°-50°	1735.4	22.3
50°-60°	1945.2	25.0
60°-70°	1138.4	14.7
70°-80°	336.7	4.3
80°-90°	68.1	0.9
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°	7766.0	100.0
0°-180°	7766.0	100.0



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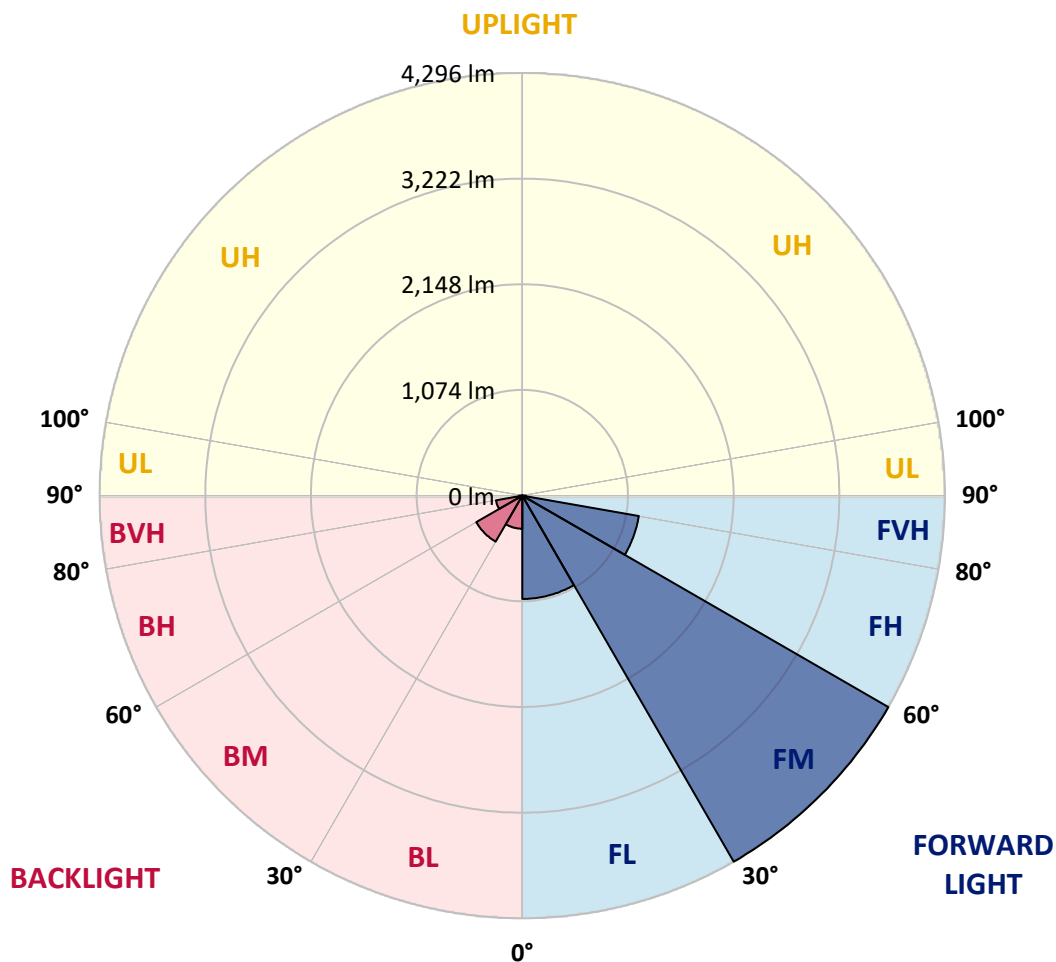
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1049.8	13.5			
FM (30°-60°)	4296.5	55.3			
FH (60°-80°)	1203.4	15.5			G1/1800
FVH (80°-90°)	35.3	0.5			G1/100
BL (0°-30°)	336.5	4.3	B1/500		
BM (30°-60°)	540.0	7.0	B1/1000		
BH (60°-80°)	271.7	3.5	B1/500		G1/500
BVH (80°-90°)	32.8	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1631.5	1631.5	1631.5	1631.5	1631.5	1631.5	1631.5	1631.5	1631.5	1631.5	1631.5
2.5°	2027.3	2005.2	1987.8	1972.5	1952.5	1898.5	1844.5	1843.7	1800.7	1734.4	1666.4
5°	2357.6	2327.9	2331.7	2284.1	2236.5	2158.3	2043.9	2037.9	1946.5	1822.4	1696.2
7.5°	2572.7	2573.2	2561.2	2534.0	2482.6	2393.8	2264.1	2234.8	2107.7	1919.3	1730.2
10°	2561.7	2573.2	2593.1	2616.5	2632.2	2588.5	2470.3	2434.6	2269.2	2036.7	1768.0
12.5°	2414.6	2432.4	2460.9	2519.6	2614.4	2686.7	2646.3	2617.4	2456.2	2153.6	1809.7
15°	2322.8	2333.4	2349.1	2388.7	2490.7	2663.7	2768.3	2753.0	2632.7	2285.8	1856.4
17.5°	2294.7	2305.3	2310.4	2334.7	2407.4	2584.6	2816.3	2843.5	2789.1	2407.4	1903.6
20°	2322.8	2327.9	2327.9	2342.3	2399.3	2538.3	2814.2	2869.0	2917.5	2553.2	1947.8
22.5°	2396.3	2398.4	2395.5	2400.6	2443.1	2551.0	2794.2	2862.2	3021.2	2676.9	1982.3
25°	2515.8	2519.2	2499.6	2487.7	2518.7	2607.2	2805.3	2867.7	3102.4	2795.1	2005.2
27.5°	2651.4	2655.6	2631.8	2604.2	2618.6	2676.5	2848.6	2904.7	3163.2	2911.5	2019.7
30°	2817.6	2819.3	2779.3	2746.2	2736.8	2779.8	2922.6	2974.9	3238.9	3048.8	2041.3
32.5°	2987.6	3000.4	2948.9	2902.2	2886.5	2899.6	3031.8	3082.4	3329.0	3196.4	2076.2
35°	3218.9	3221.0	3159.4	3102.4	3050.5	3067.5	3171.7	3208.3	3453.5	3366.8	2125.5
37.5°	3507.5	3527.1	3442.1	3335.8	3272.0	3247.4	3340.9	3380.8	3628.3	3576.0	2199.9
40°	3828.1	3835.3	3762.6	3696.3	3579.8	3508.4	3573.0	3616.4	3843.8	3825.5	2286.2
42.5°	4029.6	4045.3	4050.8	4044.0	3956.4	3836.6	3861.2	3881.6	4098.8	4059.7	2374.6
45°	4097.6	4121.0	4200.0	4367.5	4376.9	4258.7	4201.3	4220.9	4376.9	4296.1	2459.2
47.5°	3984.9	4024.9	4170.7	4514.2	4771.4	4780.3	4607.3	4564.3	4630.2	4492.1	2520.4
50°	3693.7	3702.2	3925.4	4422.8	4956.3	5278.9	5100.0	5020.0	4870.8	4637.0	2562.5
52.5°	3243.1	3252.9	3439.9	3998.1	4842.4	5627.5	5676.4	5533.6	5115.3	4749.7	2590.2
55°	2407.4	2463.9	2669.7	3209.1	4302.5	5594.8	6134.7	6053.5	5410.7	4839.0	2633.5
57.5°	1480.2	1428.3	1672.4	2183.3	3235.9	5145.0	6276.2	6302.6	5735.9	4913.8	2706.2
60°	681.0	691.2	792.0	1126.1	1972.5	4024.9	5911.5	6078.1	5915.7	4911.2	2724.5
62.5°	469.3	460.0	434.5	494.4	899.5	2545.5	4993.3	5275.5	5555.3	4758.6	2651.8
65°	419.6	410.2	360.9	344.3	413.2	1109.5	3630.0	3986.2	4677.4	4373.5	2470.7
67.5°	391.9	379.2	328.2	295.9	295.0	441.7	2140.4	2569.3	3469.3	3697.6	2140.8
70°	363.0	352.8	302.2	266.5	251.2	277.6	940.8	1231.5	2252.6	2664.5	1667.7
72.5°	334.1	322.2	276.7	238.5	218.5	207.9	360.5	468.9	1272.8	1597.5	1022.4
75°	292.0	286.1	247.4	216.0	194.3	167.9	228.7	261.0	608.7	733.7	513.1
77.5°	255.5	249.1	219.8	188.7	173.0	136.5	162.4	177.3	256.8	297.6	231.7
80°	187.0	193.4	185.3	166.6	154.3	107.1	109.3	121.6	152.6	168.8	141.6
82.5°	118.6	130.5	142.8	128.4	116.9	84.6	75.7	80.3	104.2	110.5	62.9
85°	49.7	50.6	82.9	78.2	66.7	50.2	45.5	48.0	55.7	58.2	29.3
87.5°	19.1	18.7	29.3	27.2	20.8	14.5	14.5	16.2	22.1	20.4	9.4
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°	1631.5	1631.5	1631.5	1631.5	1631.5	1631.5	1631.5	1631.5	1631.5	1631.5	1631.5
2.5°	1637.1	1606.9	1547.0	1472.6	1418.1	1356.9	1302.9	1264.3	1249.8	1243.0	1230.2
5°	1635.8	1576.3	1452.2	1322.1	1217.5	1110.4	1019.8	961.2	956.1	916.9	913.1
7.5°	1636.2	1545.3	1347.6	1156.3	996.9	887.2	812.4	792.8	769.4	763.5	766.5
10°	1637.5	1505.7	1235.4	992.2	837.9	766.0	738.0	730.3	731.2	733.7	734.2
12.5°	1639.2	1467.5	1118.9	867.6	748.6	718.9	715.9	722.7	729.9	735.4	736.7
15°	1641.3	1423.7	1005.4	767.3	704.0	701.4	711.2	722.7	732.9	741.0	742.2
17.5°	1638.8	1372.7	910.1	705.7	679.3	691.6	707.8	722.3	731.6	739.3	740.1
20°	1632.8	1315.7	818.3	662.3	664.0	684.0	701.4	715.0	725.2	729.1	732.0
22.5°	1609.9	1247.7	738.4	628.7	645.7	673.4	694.2	702.3	690.8	682.7	684.8
25°	1570.8	1159.3	664.0	601.5	629.2	658.5	679.7	660.2	650.8	647.4	649.1
27.5°	1521.9	1062.3	607.9	573.0	607.9	641.9	636.0	632.6	628.3	622.8	624.1
30°	1469.2	967.5	560.3	550.9	584.9	604.5	607.0	612.6	607.9	599.4	602.8
32.5°	1420.3	878.3	524.2	532.2	568.8	565.8	584.9	591.3	569.6	541.2	542.4
35°	1378.6	795.4	496.9	514.0	541.2	542.4	561.6	539.5	516.1	502.5	503.3
37.5°	1347.2	730.8	479.1	498.2	505.9	522.0	511.8	500.3	497.4	488.0	488.4
40°	1328.4	674.2	467.6	485.9	484.6	495.7	462.9	474.4	478.7	475.7	476.1
42.5°	1309.7	634.3	455.7	468.9	468.5	446.8	439.6	449.3	460.4	461.7	460.8
45°	1294.9	603.2	443.4	443.0	451.5	417.5	415.3	421.3	437.0	444.7	444.2
47.5°	1278.3	577.3	424.7	412.8	415.3	399.2	395.8	398.3	417.5	429.8	433.2
50°	1257.5	551.4	401.3	385.1	374.5	382.2	383.0	383.4	402.6	416.6	419.6
52.5°	1240.9	531.8	374.5	362.6	349.9	366.9	373.2	374.1	385.6	397.0	399.2
55°	1250.7	520.8	348.2	339.7	328.2	351.1	363.5	365.2	367.7	376.2	377.5
57.5°	1280.0	523.3	326.9	315.9	307.3	332.4	353.3	354.5	352.8	363.0	364.7
60°	1288.9	522.0	311.2	289.5	284.4	312.5	338.4	340.9	340.5	355.4	358.4
62.5°	1251.5	505.9	295.4	267.4	264.0	292.0	317.6	327.8	329.9	351.1	355.0
65°	1163.5	472.7	274.6	244.0	244.0	270.4	297.6	311.6	317.6	346.0	350.3
67.5°	1047.5	433.6	253.4	224.0	223.2	249.5	276.3	290.8	300.1	338.8	341.4
70°	869.3	380.9	227.0	202.3	202.3	226.2	250.4	267.8	281.4	325.2	325.2
72.5°	595.6	316.7	195.1	177.7	178.1	200.2	224.9	244.4	260.6	298.0	298.8
75°	376.6	247.4	160.3	151.3	153.0	173.9	199.4	219.8	252.1	294.6	295.9
77.5°	200.2	173.9	127.5	125.4	127.5	146.7	175.1	203.2	252.9	255.5	251.2
80°	129.7	123.3	100.7	96.5	97.3	118.2	156.0	193.0	203.2	205.8	196.4
82.5°	70.6	78.2	71.4	67.2	67.2	92.2	133.1	153.5	145.8	121.2	115.6
85°	30.2	36.6	37.0	32.3	31.0	57.0	89.3	83.7	77.8	74.4	73.5
87.5°	8.5	11.9	11.9	8.9	6.8	15.7	17.9	5.1	0.0	0.4	0.9
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)