

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: P320109

Luminaire Tested: **GLEON-SA5A-827-U-SL4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P320109
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-24)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA5A-827-U-SL4
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16270 lumens
Efficiency: N/A
Efficacy: 100.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

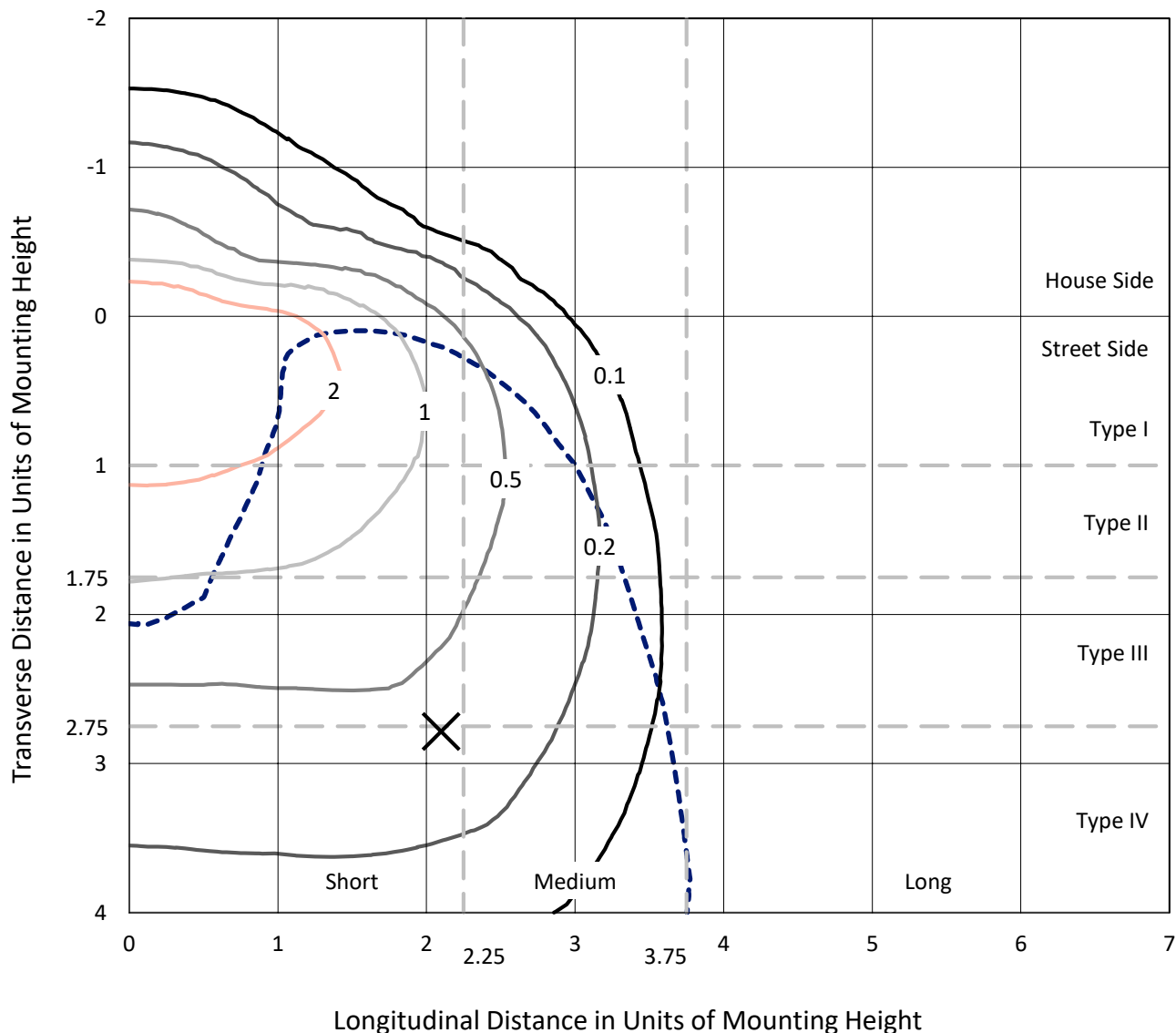
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

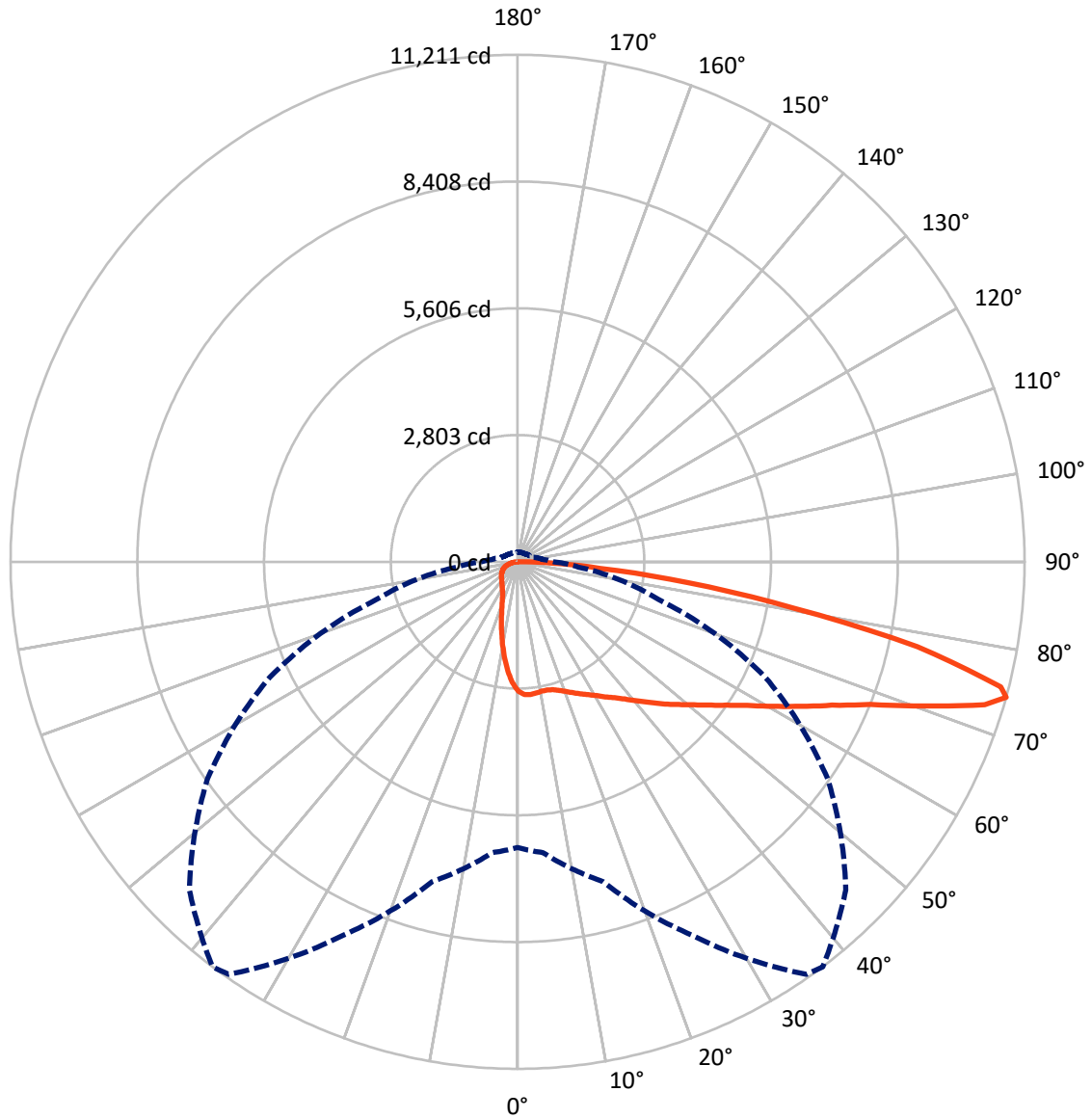
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 37-Deg Lateral - - - Horizontal Cone Through 74-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2238.6	0.0	2238.6
	% Fixture	13.8	0.0	13.8
Street Side	Lumens	14031.4	0.0	14031.4
	% Fixture	86.2	0.0	86.2
Total	Lumens	16270.0	0.0	16270.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.4	1.6
10°-20°	647.1	4.0
20°-30°	997.0	6.1
30°-40°	1449.8	8.9
40°-50°	2133.9	13.1
50°-60°	2996.7	18.4
60°-70°	3792.9	23.3
70°-80°	3339.8	20.5
80°-90°	660.3	4.1
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°	16270.0	100.0
0°-180°	16270.0	100.0

Coefficient of Utilization



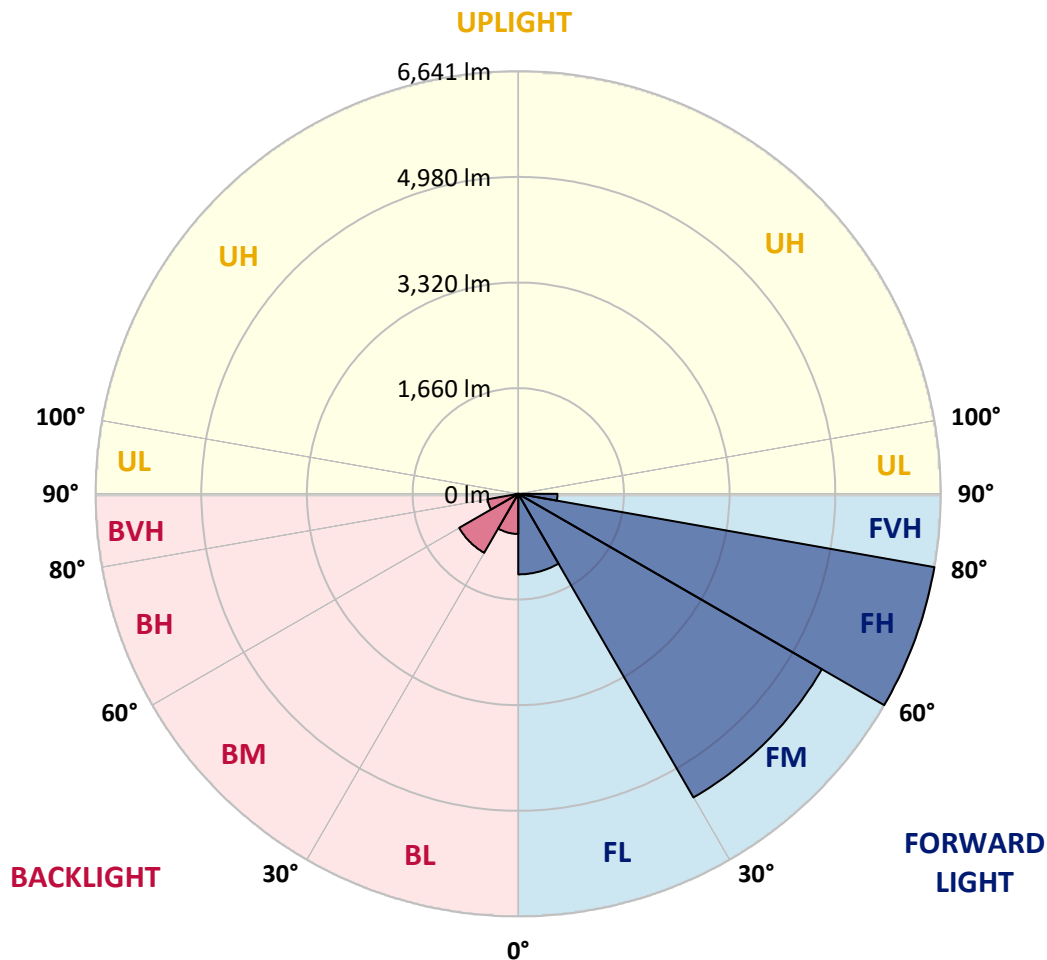
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1266.0	7.8			
FM (30°-60°)	5509.2	33.9			
FH (60°-80°)	6640.6	40.8			G3/7500
FVH (80°-90°)	615.6	3.8			G4/750
BL (0°-30°)	630.6	3.9	B2/1000		
BM (30°-60°)	1071.3	6.6	B2/2500		
BH (60°-80°)	492.1	3.0	B1/500		G1/500
BVH (80°-90°)	44.7	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37°	45°	55°	65°	75°	85°
0°	2866.7	2866.7	2866.7	2866.7	2866.7	2866.7	2866.7	2866.7	2866.7	2866.7	2866.7
2.5°	2964.7	2965.3	2964.7	2960.1	2949.2	2940.1	2932.6	2921.7	2897.7	2879.3	2851.8
5°	2992.8	2989.4	2987.1	2978.5	2961.3	2951.0	2936.6	2916.0	2876.5	2839.8	2795.1
7.5°	2979.6	2975.6	2970.4	2960.1	2940.6	2932.0	2912.0	2885.1	2837.5	2789.3	2725.2
10°	2938.9	2937.8	2935.5	2933.2	2916.6	2909.7	2891.4	2862.7	2815.7	2757.2	2682.2
12.5°	2893.6	2896.5	2905.7	2917.7	2910.3	2906.8	2895.4	2875.9	2827.7	2764.7	2674.1
15°	2865.0	2873.0	2897.7	2929.2	2935.5	2934.3	2931.5	2918.9	2867.9	2797.9	2692.5
17.5°	2855.2	2868.4	2915.4	2967.6	2985.9	2989.9	2991.1	2969.3	2912.6	2838.6	2711.4
20°	2873.0	2889.6	2958.4	3030.0	3059.3	3061.6	3056.4	3018.6	2955.0	2873.6	2721.7
22.5°	2926.9	2941.8	3027.8	3108.6	3141.8	3145.2	3129.8	3072.5	2999.7	2914.9	2736.0
25°	3030.6	3049.0	3134.9	3215.7	3232.9	3233.5	3211.2	3140.1	3058.1	2972.7	2767.0
27.5°	3165.9	3184.2	3261.6	3340.7	3331.5	3326.3	3296.0	3224.9	3134.4	3052.4	2822.0
30°	3316.6	3336.7	3410.0	3466.2	3444.4	3434.1	3409.4	3317.8	3240.4	3161.3	2906.3
32.5°	3472.5	3490.8	3555.0	3593.4	3565.9	3561.3	3524.1	3440.4	3378.5	3327.5	3042.7
35°	3632.4	3645.6	3708.6	3730.4	3693.7	3692.6	3682.3	3605.5	3566.5	3590.6	3241.0
37.5°	3795.7	3799.2	3853.0	3854.2	3843.3	3847.9	3858.8	3810.6	3821.5	3896.6	3498.9
40°	3941.3	3950.5	3989.4	4001.5	4020.4	4036.4	4090.9	4059.4	4143.6	4276.6	3819.8
42.5°	4049.0	4066.8	4129.3	4160.2	4221.5	4246.8	4323.6	4352.8	4522.4	4721.9	4201.5
45°	4140.2	4167.7	4268.0	4331.6	4435.3	4479.5	4589.5	4687.5	4950.5	5205.0	4603.2
47.5°	4238.7	4273.7	4399.2	4520.7	4661.7	4711.6	4911.6	5058.3	5407.3	5691.0	4982.1
50°	4383.7	4410.7	4533.3	4724.2	4900.1	4964.3	5241.1	5451.5	5871.5	6154.1	5310.5
52.5°	4586.0	4575.7	4679.5	4947.1	5183.2	5262.3	5593.0	5869.8	6342.1	6573.0	5587.9
55°	4789.5	4772.3	4845.1	5180.4	5513.3	5596.4	5980.4	6289.9	6789.7	6950.1	5800.5
57.5°	5015.9	4983.2	5044.5	5443.4	5889.3	5988.5	6414.3	6736.4	7229.8	7255.0	5935.7
60°	5249.1	5205.0	5273.8	5769.5	6366.7	6483.6	6922.1	7171.9	7644.8	7499.2	5979.3
62.5°	5453.2	5422.2	5528.2	6133.5	6904.9	7033.2	7420.7	7635.0	8054.0	7600.6	5822.3
65°	5631.4	5636.6	5820.0	6542.7	7504.9	7641.9	7992.6	8205.8	8376.0	7540.4	5454.9
67.5°	5844.0	5873.3	6186.2	7081.4	8260.3	8410.4	8824.8	8828.2	8556.0	7187.4	4731.6
70°	6154.1	6214.3	6689.9	7828.7	9334.3	9540.6	9860.4	9193.9	8303.3	6230.3	3722.9
72.5°	6429.2	6541.5	7225.8	8683.8	10643.3	10799.7	10466.2	8983.0	7247.0	4669.2	2319.4
74°	6317.4	6456.7	7323.2	9105.0	11136.2	11211.2	10261.6	8367.4	6042.3	3233.5	1348.0
75°	6076.7	6228.0	7181.1	9101.0	11073.7	11031.9	9767.6	7664.2	4976.3	2205.3	896.9
77.5°	4904.1	5064.0	6050.9	7800.1	9079.8	9040.3	7503.2	5141.4	2179.5	723.3	455.6
80°	2851.2	2973.3	3756.2	4953.4	6122.6	6194.2	4934.5	2544.0	857.4	406.3	308.9
82.5°	1266.6	1350.8	1814.5	2528.6	3694.9	3787.1	2584.2	1333.1	529.6	247.0	185.7
85°	831.0	893.5	1101.5	1204.1	1759.5	1822.5	1264.9	1037.9	349.6	135.8	136.4
87.5°	597.8	657.9	818.4	714.7	807.5	764.5	688.3	960.5	140.4	77.4	45.8
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°	2866.7	2866.7	2866.7	2866.7	2866.7	2866.7	2866.7	2866.7	2866.7	2866.7	2866.7
2.5°	2839.8	2830.6	2810.0	2771.0	2749.2	2730.9	2700.5	2682.7	2674.7	2674.1	2677.6
5°	2769.3	2748.1	2694.8	2629.4	2577.3	2529.7	2470.7	2435.2	2409.9	2395.0	2399.1
7.5°	2687.3	2654.1	2570.4	2466.1	2382.4	2290.2	2199.0	2144.6	2102.2	2070.7	2076.4
10°	2631.2	2585.3	2463.2	2313.1	2173.8	2039.7	1914.2	1839.1	1779.5	1733.7	1737.1
12.5°	2612.2	2550.4	2381.3	2180.7	1985.3	1801.9	1638.0	1522.8	1461.4	1409.3	1413.3
15°	2615.1	2532.0	2312.5	2061.5	1815.6	1584.7	1385.8	1251.1	1168.0	1131.9	1132.5
17.5°	2617.4	2510.8	2240.3	1933.7	1647.7	1381.8	1165.7	1029.3	950.8	917.6	918.1
20°	2610.0	2476.4	2150.9	1787.0	1472.3	1195.5	986.3	870.6	811.0	785.2	785.2
22.5°	2600.2	2435.7	2050.0	1639.7	1299.2	1033.9	858.0	769.7	735.3	718.1	717.5
25°	2604.8	2405.4	1946.9	1488.4	1139.9	904.9	772.6	714.1	691.2	680.3	679.7
27.5°	2629.4	2391.0	1851.7	1337.6	1000.7	808.1	715.2	674.0	659.1	652.2	652.2
30°	2674.1	2391.0	1752.6	1209.3	884.9	736.5	671.1	643.0	632.7	628.1	628.1
32.5°	2752.1	2404.2	1656.9	1082.0	792.6	680.3	634.4	615.5	607.5	605.2	605.2
35°	2886.2	2448.9	1563.5	961.7	718.1	634.4	599.5	588.6	582.9	582.3	584.0
37.5°	3074.8	2540.0	1475.8	872.9	665.4	597.2	570.2	561.7	558.2	561.1	563.4
40°	3312.0	2663.8	1396.1	792.6	625.3	567.4	543.3	537.6	535.9	539.9	543.3
42.5°	3598.6	2831.2	1330.8	734.7	594.3	542.2	520.4	513.5	511.8	516.4	521.0
45°	3908.6	3011.1	1284.9	691.7	570.2	523.3	500.3	492.9	489.4	491.7	496.9
47.5°	4190.6	3181.3	1266.6	661.4	547.3	507.2	482.6	473.4	467.7	466.5	470.5
50°	4428.4	3308.0	1275.2	643.0	529.0	489.4	465.4	455.1	446.5	441.3	444.2
52.5°	4601.5	3387.7	1283.2	635.0	514.7	470.0	446.5	436.7	425.2	416.7	416.7
55°	4727.0	3406.0	1265.4	628.7	503.8	448.7	425.2	416.1	404.6	394.9	393.7
57.5°	4776.3	3354.4	1199.5	619.5	496.3	428.7	402.9	396.0	386.3	374.8	374.2
60°	4709.8	3195.1	1072.3	600.0	486.6	412.1	380.5	376.0	371.4	360.5	359.9
62.5°	4442.8	2845.5	907.8	560.5	467.1	394.3	359.9	362.2	362.8	355.3	354.2
65°	3958.5	2365.2	747.3	508.9	437.9	373.1	338.7	349.6	355.9	354.8	353.0
67.5°	3254.7	1840.8	633.3	454.5	399.5	343.9	315.8	328.4	333.6	337.6	336.4
70°	2415.7	1298.1	523.8	397.2	353.0	309.5	286.0	292.3	288.8	293.4	295.2
72.5°	1346.8	778.9	427.0	339.9	304.9	269.4	252.7	251.6	244.1	244.1	244.1
74°	808.1	571.4	375.4	304.3	275.7	243.0	228.7	223.5	216.6	217.2	216.6
75°	649.9	491.2	344.4	280.8	255.0	227.5	213.2	206.3	201.2	201.2	200.6
77.5°	410.3	373.1	277.4	223.5	204.0	187.4	177.7	168.5	168.5	167.9	167.3
80°	310.1	296.9	216.1	169.1	156.5	143.9	137.5	133.5	133.5	135.3	134.7
82.5°	212.6	223.5	151.9	118.1	111.8	102.6	101.4	102.0	100.3	98.0	97.4
85°	155.3	167.9	102.6	74.5	68.2	62.5	67.1	69.3	66.5	61.3	59.0
87.5°	59.6	110.0	55.0	30.9	28.7	24.6	28.7	29.8	32.1	25.2	25.8
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)