

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: STREETWORKS

Report Number: P320108

Luminaire Tested: **GAN-SA4A-827-U-SL4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P320108
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: STREETWORKS
Catalog Number: GAN-SA4A-827-U-SL4
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 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: 13131 lumens
Efficiency: N/A
Efficacy: 101.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

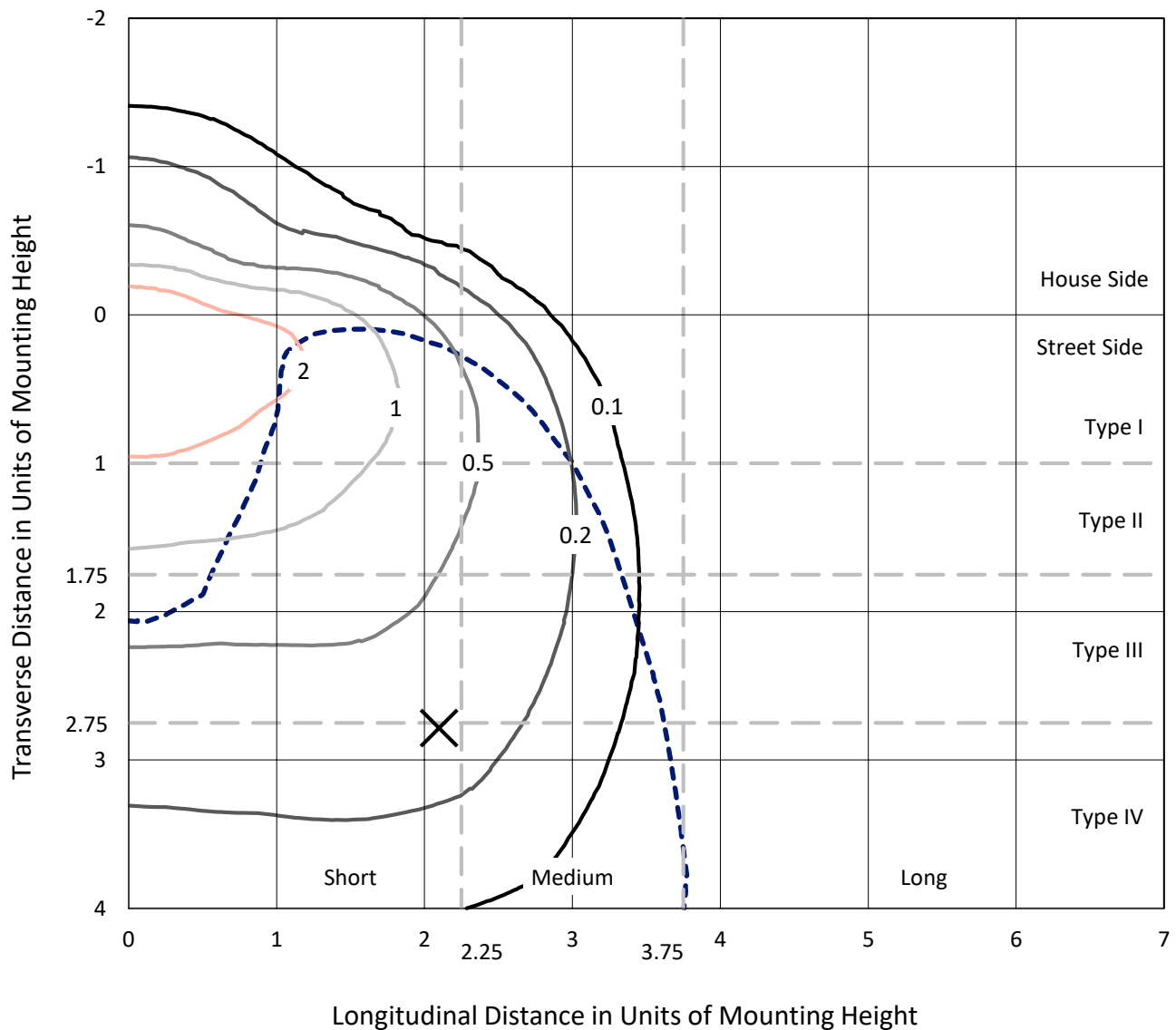
Input Watts (W): 129
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

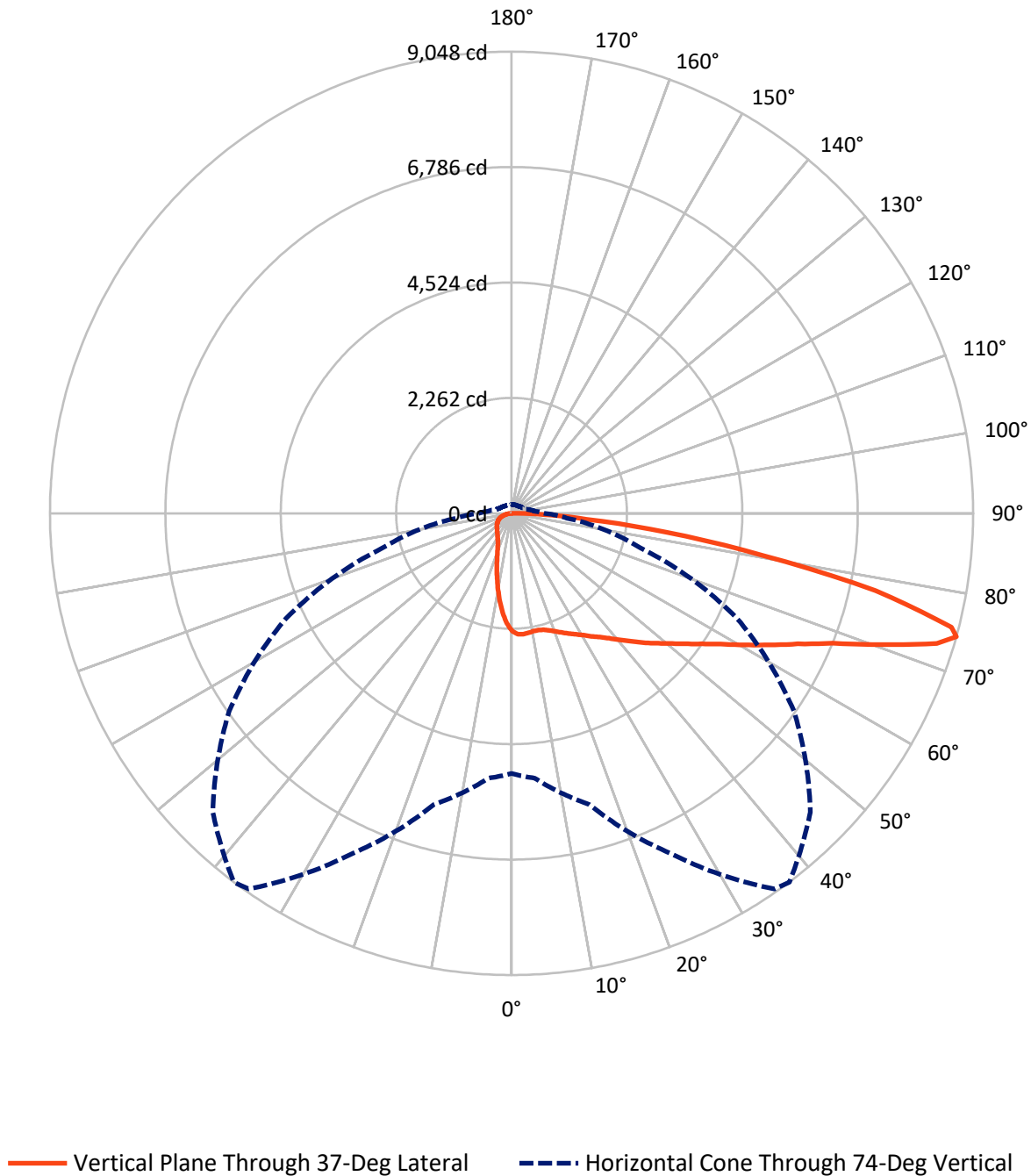
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1806.7	0.0	1806.7
	% Fixture	13.8	0.0	13.8
Street Side	Lumens	11324.3	0.0	11324.3
	% Fixture	86.2	0.0	86.2
Total	Lumens	13131.0	0.0	13131.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.7	1.6
10°-20°	522.2	4.0
20°-30°	804.7	6.1
30°-40°	1170.1	8.9
40°-50°	1722.2	13.1
50°-60°	2418.5	18.4
60°-70°	3061.1	23.3
70°-80°	2695.4	20.5
80°-90°	532.9	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°	13131.0	100.0
0°-180°	13131.0	100.0

Coefficient of Utilization



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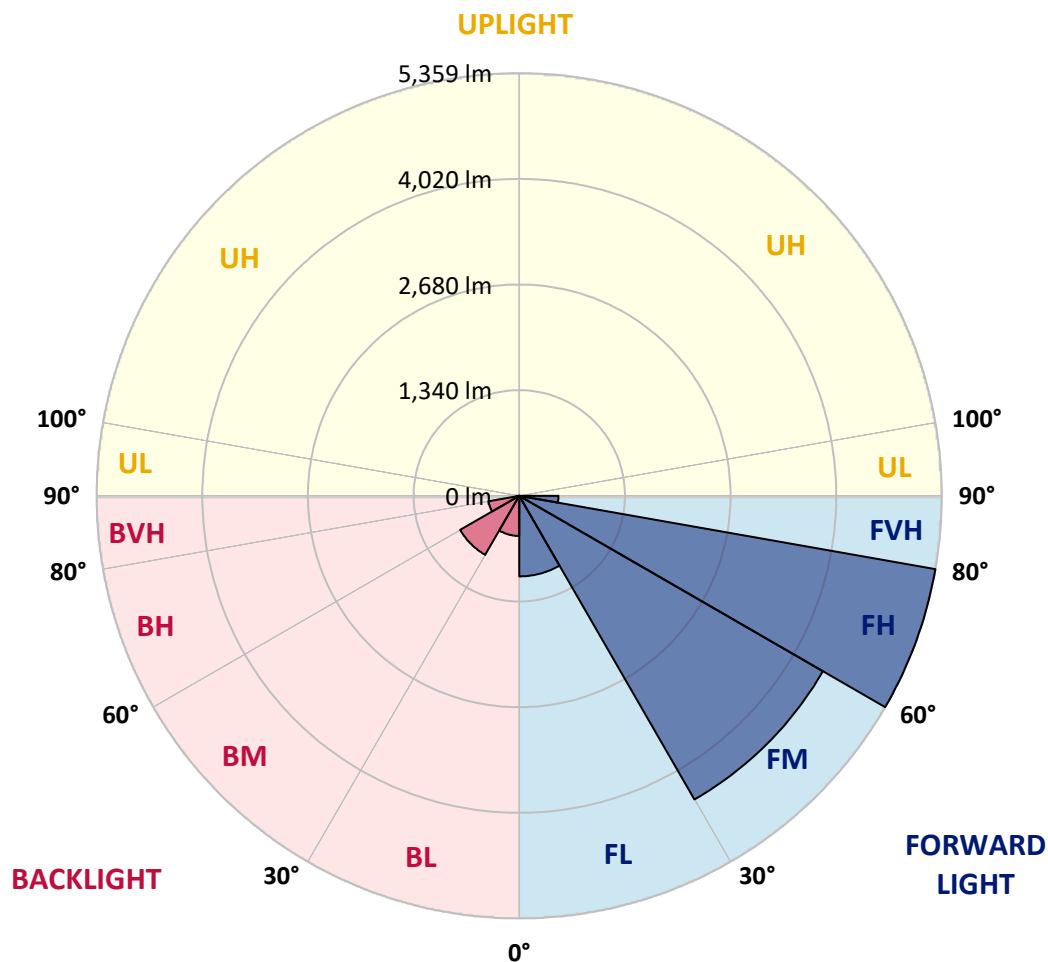
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1021.7	7.8			
FM	(30°-60°)	4446.3	33.9			
FH	(60°-80°)	5359.4	40.8			G3/7500
FVH	(80°-90°)	496.9	3.8			G3/500
BL	(0°-30°)	508.9	3.9	B2/1000		
BM	(30°-60°)	864.6	6.6	B1/1000		
BH	(60°-80°)	397.1	3.0	B1/500		G1/500
BVH	(80°-90°)	36.1	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-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37°	45°	55°	65°	75°	85°
0°	2313.6	2313.6	2313.6	2313.6	2313.6	2313.6	2313.6	2313.6	2313.6	2313.6	2313.6
2.5°	2392.7	2393.2	2392.7	2389.0	2380.2	2372.8	2366.8	2358.0	2338.6	2323.8	2301.6
5°	2415.4	2412.6	2410.8	2403.8	2390.0	2381.6	2370.1	2353.4	2321.5	2291.9	2255.8
7.5°	2404.8	2401.5	2397.4	2389.0	2373.3	2366.4	2350.2	2328.4	2290.0	2251.2	2199.4
10°	2371.9	2371.0	2369.1	2367.3	2353.9	2348.3	2333.5	2310.4	2272.5	2225.3	2164.7
12.5°	2335.4	2337.7	2345.1	2354.8	2348.8	2346.0	2336.8	2321.0	2282.2	2231.3	2158.2
15°	2312.2	2318.7	2338.6	2364.0	2369.1	2368.2	2365.9	2355.7	2314.6	2258.1	2173.0
17.5°	2304.4	2315.0	2352.9	2395.0	2409.8	2413.1	2414.0	2396.4	2350.6	2291.0	2188.3
20°	2318.7	2332.1	2387.6	2445.5	2469.0	2470.9	2466.7	2436.2	2384.9	2319.2	2196.6
22.5°	2362.2	2374.2	2443.6	2508.8	2535.7	2538.4	2525.9	2479.7	2420.9	2352.5	2208.2
25°	2445.9	2460.7	2530.1	2595.3	2609.2	2609.7	2591.6	2534.3	2468.1	2399.2	2233.1
27.5°	2555.1	2569.9	2632.3	2696.2	2688.8	2684.6	2660.1	2602.7	2529.6	2463.5	2277.6
30°	2676.7	2692.9	2752.1	2797.4	2779.9	2771.5	2751.7	2677.7	2615.2	2551.4	2345.5
32.5°	2802.5	2817.3	2869.1	2900.1	2877.9	2874.2	2844.2	2776.6	2726.7	2685.5	2455.6
35°	2931.6	2942.2	2993.1	3010.7	2981.1	2980.2	2971.8	2909.8	2878.4	2897.8	2615.7
37.5°	3063.4	3066.2	3109.7	3110.6	3101.8	3105.5	3114.3	3075.4	3084.2	3144.8	2823.8
40°	3180.9	3188.3	3219.7	3229.5	3244.7	3257.7	3301.6	3276.2	3344.2	3451.5	3082.8
42.5°	3267.9	3282.2	3332.6	3357.6	3407.1	3427.4	3489.4	3513.0	3649.9	3810.9	3390.9
45°	3341.4	3363.6	3444.5	3495.9	3579.6	3615.2	3704.0	3783.1	3995.4	4200.8	3715.1
47.5°	3421.0	3449.2	3550.5	3648.5	3762.3	3802.6	3964.0	4082.4	4364.1	4593.0	4020.9
50°	3538.0	3559.7	3658.7	3812.7	3954.7	4006.5	4229.9	4399.7	4738.7	4966.8	4285.9
52.5°	3701.3	3692.9	3776.6	3992.7	4183.2	4247.1	4513.9	4737.3	5118.5	5304.9	4509.8
55°	3865.5	3851.6	3910.3	4180.9	4449.6	4516.7	4826.6	5076.4	5479.7	5609.2	4681.4
57.5°	4048.2	4021.8	4071.3	4393.2	4753.1	4833.1	5176.8	5436.7	5835.0	5855.3	4790.5
60°	4236.4	4200.8	4256.3	4656.4	5138.4	5232.7	5586.6	5788.2	6169.8	6052.4	4825.7
62.5°	4401.1	4376.1	4461.7	4950.1	5572.7	5676.3	5989.0	6162.0	6500.1	6134.2	4699.0
65°	4544.9	4549.1	4697.1	5280.4	6057.0	6167.5	6450.6	6622.7	6760.0	6085.7	4402.5
67.5°	4716.5	4740.1	4992.7	5715.2	6666.6	6787.8	7122.2	7125.0	6905.3	5800.7	3818.7
70°	4966.8	5015.3	5399.2	6318.3	7533.4	7699.9	7958.0	7420.1	6701.3	5028.3	3004.7
72.5°	5188.8	5279.4	5831.7	7008.4	8589.9	8716.1	8446.9	7249.9	5848.8	3768.3	1871.9
74°	5098.6	5211.0	5910.4	7348.4	8987.6	9048.2	8281.8	6753.1	4876.6	2609.7	1087.9
75°	4904.3	5026.4	5795.6	7345.2	8937.2	8903.5	7883.1	6185.6	4016.2	1779.9	723.9
77.5°	3958.0	4087.0	4883.5	6295.2	7328.0	7296.1	6055.6	4149.5	1759.0	583.7	367.7
80°	2301.1	2399.7	3031.5	3997.7	4941.3	4999.1	3982.5	2053.2	692.0	327.9	249.3
82.5°	1022.2	1090.2	1464.4	2040.7	2982.0	3056.5	2085.6	1075.9	427.4	199.4	149.9
85°	670.7	721.1	889.0	971.8	1420.0	1470.9	1020.8	837.7	282.2	109.6	110.1
87.5°	482.4	531.0	660.5	576.8	651.7	617.0	555.5	775.2	113.3	62.4	37.0
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°	2313.6	2313.6	2313.6	2313.6	2313.6	2313.6	2313.6	2313.6	2313.6	2313.6	2313.6
2.5°	2291.9	2284.5	2267.8	2236.4	2218.8	2204.0	2179.5	2165.2	2158.7	2158.2	2161.0
5°	2235.0	2217.9	2174.9	2122.1	2080.0	2041.7	1994.0	1965.3	1945.0	1933.0	1936.2
7.5°	2168.9	2142.0	2074.5	1990.3	1922.8	1848.3	1774.8	1730.8	1696.6	1671.2	1675.8
10°	2123.5	2086.5	1988.0	1866.8	1754.4	1646.2	1544.9	1484.3	1436.2	1399.2	1402.0
12.5°	2108.3	2058.3	1921.9	1760.0	1602.2	1454.2	1321.9	1229.0	1179.5	1137.4	1140.6
15°	2110.6	2043.5	1866.4	1663.8	1465.3	1278.9	1118.4	1009.7	942.7	913.5	914.0
17.5°	2112.4	2026.4	1808.1	1560.6	1329.8	1115.2	940.8	830.7	767.4	740.5	741.0
20°	2106.4	1998.6	1735.9	1442.2	1188.3	964.9	796.0	702.6	654.5	633.7	633.7
22.5°	2098.5	1965.8	1654.5	1323.3	1048.6	834.4	692.4	621.2	593.4	579.6	579.1
25°	2102.2	1941.3	1571.3	1201.2	920.0	730.4	623.5	576.3	557.8	549.0	548.6
27.5°	2122.1	1929.7	1494.5	1079.6	807.6	652.2	577.3	543.9	531.9	526.4	526.4
30°	2158.2	1929.7	1414.5	976.0	714.2	594.4	541.6	519.0	510.6	506.9	506.9
32.5°	2221.1	1940.4	1337.2	873.3	639.7	549.0	512.0	496.8	490.3	488.4	488.4
35°	2329.4	1976.4	1261.8	776.1	579.6	512.0	483.8	475.0	470.4	469.9	471.3
37.5°	2481.5	2050.0	1191.0	704.5	537.0	482.0	460.2	453.3	450.5	452.8	454.7
40°	2673.0	2149.9	1126.8	639.7	504.6	457.9	438.5	433.9	432.5	435.7	438.5
42.5°	2904.3	2285.0	1074.0	593.0	479.7	437.6	420.0	414.4	413.0	416.7	420.4
45°	3154.5	2430.2	1037.0	558.3	460.2	422.3	403.8	397.8	395.0	396.9	401.0
47.5°	3382.1	2567.6	1022.2	533.8	441.7	409.3	389.5	382.1	377.4	376.5	379.7
50°	3574.1	2669.8	1029.2	519.0	426.9	395.0	375.6	367.3	360.3	356.2	358.5
52.5°	3713.7	2734.1	1035.6	512.5	415.4	379.3	360.3	352.5	343.2	336.3	336.3
55°	3815.0	2748.9	1021.3	507.4	406.6	362.2	343.2	335.8	326.6	318.7	317.8
57.5°	3854.8	2707.3	968.1	500.0	400.6	346.0	325.2	319.6	311.8	302.5	302.0
60°	3801.2	2578.7	865.4	484.3	392.7	332.6	307.1	303.4	299.7	290.9	290.5
62.5°	3585.6	2296.5	732.7	452.4	377.0	318.2	290.5	292.3	292.8	286.8	285.9
65°	3194.8	1908.9	603.2	410.7	353.4	301.1	273.4	282.2	287.2	286.3	284.9
67.5°	2626.8	1485.7	511.1	366.8	322.4	277.5	254.9	265.0	269.2	272.4	271.5
70°	1949.6	1047.7	422.8	320.5	284.9	249.8	230.8	235.9	233.1	236.8	238.2
72.5°	1087.0	628.6	344.6	274.3	246.1	217.4	204.0	203.1	197.0	197.0	197.0
74°	652.2	461.2	303.0	245.6	222.5	196.1	184.6	180.4	174.8	175.3	174.8
75°	524.5	396.4	278.0	226.6	205.8	183.6	172.1	166.5	162.4	162.4	161.9
77.5°	331.2	301.1	223.9	180.4	164.7	151.3	143.4	136.0	136.0	135.5	135.1
80°	250.2	239.6	174.4	136.4	126.3	116.1	111.0	107.8	107.8	109.2	108.7
82.5°	171.6	180.4	122.6	95.3	90.2	82.8	81.9	82.3	80.9	79.1	78.6
85°	125.3	135.5	82.8	60.1	55.0	50.4	54.1	56.0	53.7	49.5	47.6
87.5°	48.1	88.8	44.4	25.0	23.1	19.9	23.1	24.1	25.9	20.4	20.8
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)