

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: P265695

Luminaire Tested: **ARCH-L-AF72-220-D-U-T4W-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265695
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-220-D-U-T4W-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22537.8 lumens
Efficiency: N/A
Efficacy: 101.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 222
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: 28.75 FT

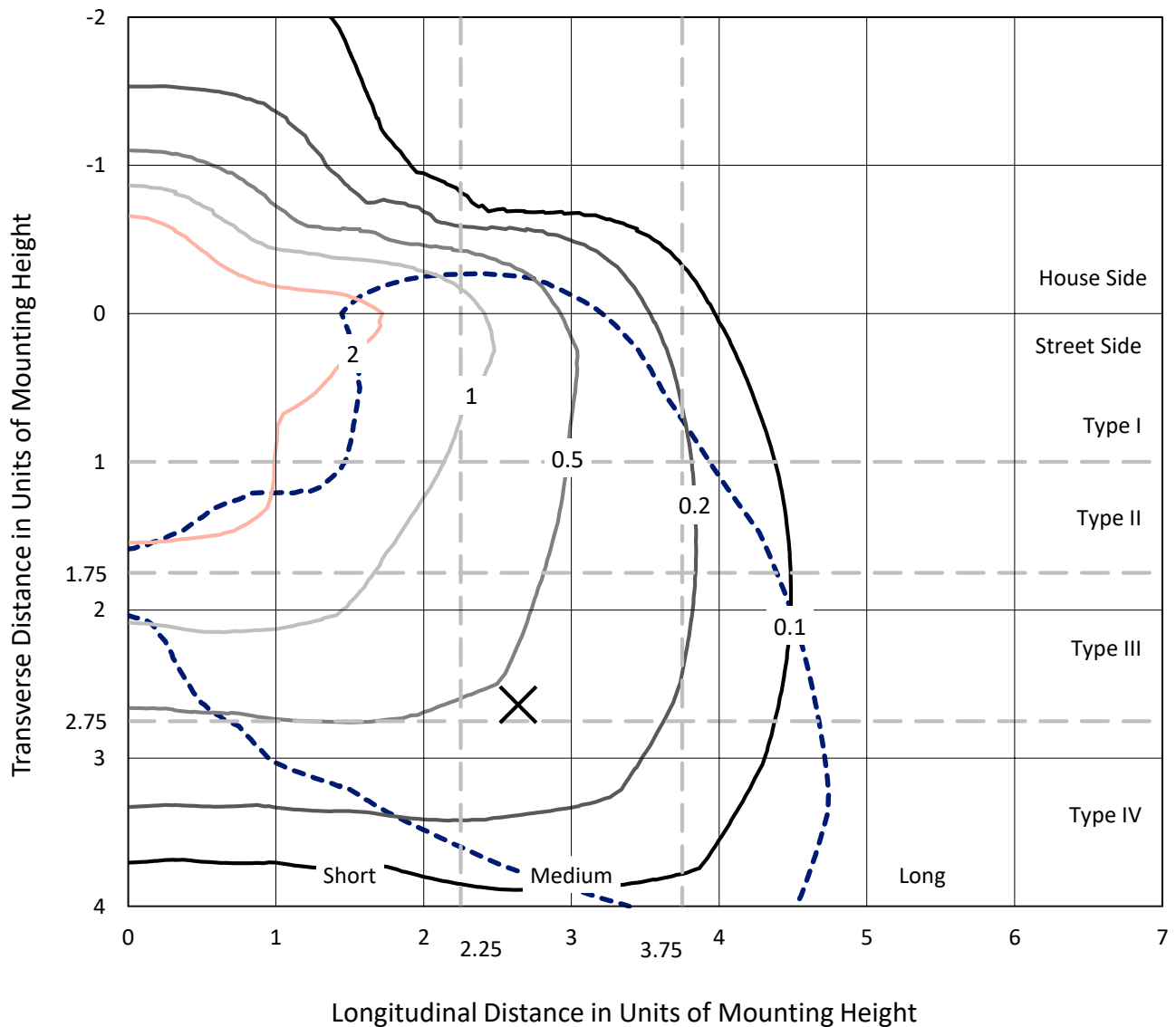


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

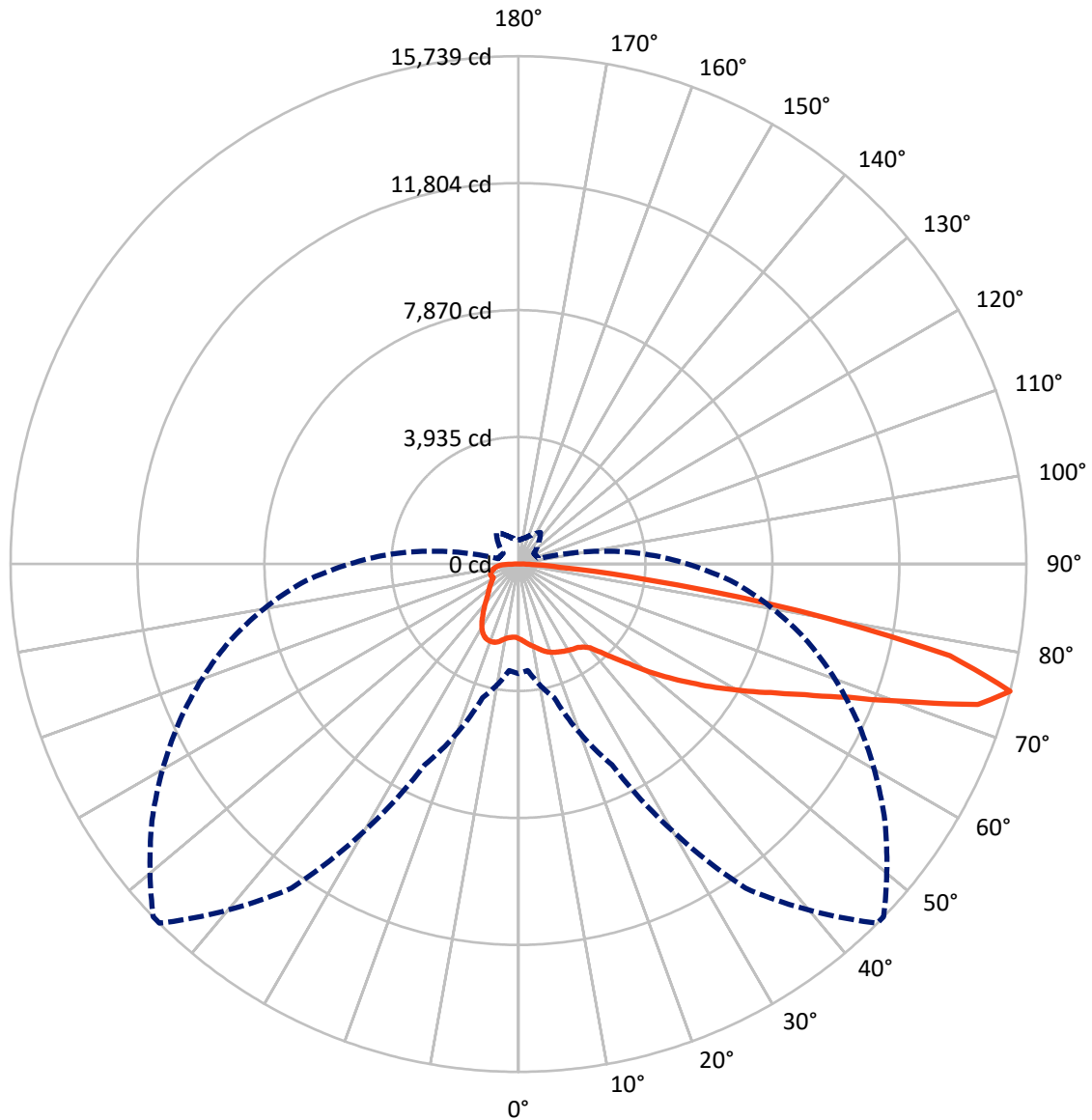


Based on 25 foot mounting height. Maximum calculated value = 4.3 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5221.1	0.0	5221.1
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	17316.7	0.0	17316.7
	% Fixture	76.8	0.0	76.8
Total	Lumens	22537.8	0.0	22537.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.0	1.0
10°-20°	742.0	3.3
20°-30°	1273.2	5.6
30°-40°	1780.7	7.9
40°-50°	2612.2	11.6
50°-60°	4069.1	18.1
60°-70°	5855.1	26.0
70°-80°	5100.5	22.6
80°-90°	875.9	3.9
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°	22537.8	100.0
0°-180°	22537.8	100.0

Coefficient of Utilization



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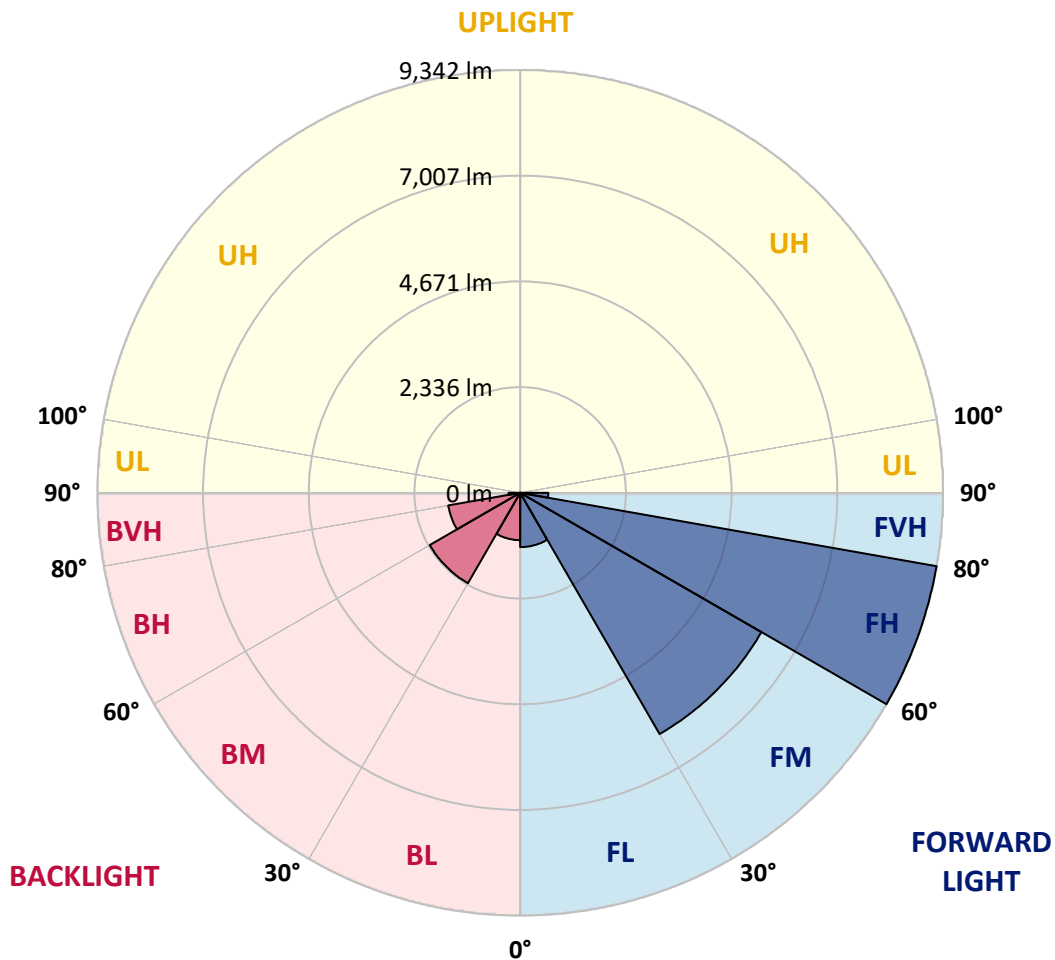
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1198.5	5.3			
FM	(30°-60°)	6154.6	27.3			
FH	(60°-80°)	9342.1	41.5			G4/12000
FVH	(80°-90°)	621.5	2.8			G4/750
BL	(0°-30°)	1045.7	4.6	B3/2500		
BM	(30°-60°)	2307.4	10.2	B2/2500		
BH	(60°-80°)	1613.5	7.2	B3/2500		G3/2500
BVH	(80°-90°)	254.5	1.1			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2310.4	2310.4	2310.4	2310.4	2310.4	2310.4	2310.4	2310.4	2310.4	2310.4	2310.4
2.5°	2424.4	2406.9	2406.9	2393.8	2393.8	2371.9	2363.0	2358.7	2336.8	2323.6	2310.4
5°	2564.8	2542.8	2538.4	2507.7	2494.6	2446.4	2442.0	2411.3	2371.9	2332.4	2301.6
7.5°	2691.9	2678.7	2656.7	2626.0	2586.6	2525.2	2520.9	2472.7	2406.9	2354.3	2310.4
10°	2783.9	2775.1	2744.5	2705.1	2661.1	2599.8	2595.5	2542.8	2464.0	2402.4	2341.2
12.5°	2893.5	2880.3	2840.9	2788.2	2740.1	2683.1	2678.7	2634.9	2547.1	2468.3	2389.3
15°	2998.7	2981.2	2933.0	2880.3	2827.8	2779.5	2779.5	2731.3	2639.2	2547.1	2455.1
17.5°	3051.4	3042.6	2994.4	2937.4	2893.5	2858.4	2854.1	2810.3	2718.2	2621.8	2520.9
20°	3068.9	3073.3	3029.4	2968.1	2937.4	2919.9	2915.4	2884.7	2783.9	2691.9	2595.5
22.5°	3064.5	3077.7	3042.6	2976.9	2968.1	2968.1	2968.1	2933.0	2854.1	2762.0	2665.5
25°	3082.1	3099.6	3073.3	2994.4	2994.4	3011.8	3011.8	2994.4	2924.3	2845.3	2748.9
27.5°	3143.3	3156.6	3134.6	3025.0	3029.4	3055.8	3051.4	3055.8	3011.8	2937.4	2840.9
30°	3218.0	3235.4	3209.1	3073.3	3068.9	3095.2	3095.2	3117.1	3086.4	3007.5	2928.7
32.5°	3419.6	3415.3	3332.0	3125.9	3112.7	3139.0	3139.0	3161.0	3143.3	3082.1	3007.5
35°	4020.3	3954.5	3770.4	3296.9	3165.4	3178.6	3178.6	3218.0	3226.7	3178.6	3112.7
37.5°	4634.0	4612.1	4471.9	3752.8	3358.3	3261.7	3257.4	3314.3	3353.8	3314.3	3270.5
40°	5252.2	5234.7	5204.1	4362.2	3761.7	3410.9	3397.7	3445.9	3516.1	3489.7	3463.4
42.5°	5826.5	5817.8	5848.4	4962.9	4274.6	3730.9	3691.4	3634.5	3735.3	3726.4	3726.4
45°	6278.1	6300.1	6317.5	5523.9	4831.4	4143.1	4094.7	3901.9	4037.8	4072.8	4099.1
47.5°	6532.4	6549.9	6611.3	6072.1	5388.2	4620.9	4585.8	4270.2	4449.9	4555.1	4629.7
50°	6896.3	6848.0	6900.6	6606.9	6058.9	5243.4	5147.0	4765.6	4993.5	5177.7	5353.0
52.5°	7246.9	7168.0	7212.0	7225.1	6821.6	5852.8	5751.9	5348.7	5633.6	5923.0	6234.2
55°	7562.7	7558.2	7602.0	7825.7	7558.2	6506.1	6392.1	5993.1	6405.3	6716.4	7242.6
57.5°	7817.0	7860.8	8053.7	8522.8	8408.8	7216.3	7089.2	6742.8	7229.4	7540.7	8413.2
60°	8115.1	8185.1	8505.2	9114.7	9184.8	7961.6	7830.0	7580.2	8075.6	8391.2	9767.9
62.5°	8215.9	8316.7	8974.3	9737.2	9995.8	8777.0	8658.7	8492.0	8965.5	9250.6	11118.1
65°	7545.1	7738.0	9233.0	10057.2	10868.2	9759.0	9658.2	9513.6	9851.2	10039.6	12034.5
67.5°	7361.0	7448.7	8728.8	10517.5	11688.0	11021.8	10920.9	10671.0	10679.8	10600.9	12332.7
70°	7102.3	7198.7	8211.4	10863.9	12863.1	12749.0	12626.2	11889.7	11438.2	10960.3	11745.1
72.5°	6050.2	6019.5	7075.9	9930.0	13428.7	14888.5	14743.8	13200.7	11999.4	10649.0	9912.5
75°	3397.7	3310.1	4292.1	6870.0	12262.5	15739.1	15734.6	13862.6	11604.8	9276.8	6747.2
77.5°	986.3	960.1	1416.1	2880.3	8255.3	13674.1	13840.7	12503.6	9684.5	6663.8	3704.6
80°	464.8	473.4	609.4	951.3	3524.9	8825.3	9303.1	8233.4	5787.2	3073.3	1530.1
82.5°	293.7	298.1	416.5	613.8	1490.6	4007.1	4401.6	3704.6	2293.0	1328.5	675.2
85°	184.2	184.2	276.1	403.3	890.0	1280.2	1389.8	1262.7	982.0	723.3	368.2
87.5°	100.8	100.8	166.5	232.3	486.6	412.1	425.3	504.2	613.8	442.9	184.2
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°	2310.4	2310.4	2310.4	2310.4	2310.4	2310.4	2310.4	2310.4	2310.4	2310.4	2310.4
2.5°	2306.0	2297.2	2284.1	2279.8	2275.3	2270.9	2275.3	2284.1	2275.3	2275.3	2279.8
5°	2293.0	2284.1	2266.7	2266.7	2270.9	2275.3	2297.2	2310.4	2314.8	2314.8	2314.8
7.5°	2293.0	2279.8	2266.7	2270.9	2279.8	2297.2	2332.4	2354.3	2371.9	2376.1	2376.1
10°	2314.8	2297.2	2288.5	2297.2	2323.6	2336.8	2371.9	2406.9	2428.7	2437.6	2437.6
12.5°	2354.3	2336.8	2336.8	2354.3	2389.3	2406.9	2437.6	2464.0	2490.2	2503.3	2503.3
15°	2420.0	2398.1	2402.4	2433.1	2472.7	2490.2	2512.1	2520.9	2542.8	2560.3	2560.3
17.5°	2481.4	2459.5	2468.3	2503.3	2529.6	2538.4	2551.5	2547.1	2555.9	2569.2	2573.5
20°	2551.5	2529.6	2533.9	2555.9	2560.3	2551.5	2551.5	2538.4	2533.9	2555.9	2564.8
22.5°	2621.8	2599.8	2595.5	2582.3	2560.3	2538.4	2525.2	2512.1	2503.3	2525.2	2533.9
25°	2705.1	2674.3	2652.3	2595.5	2538.4	2498.9	2481.4	2472.7	2468.3	2490.2	2498.9
27.5°	2797.1	2766.4	2700.7	2577.9	2485.8	2420.0	2406.9	2406.9	2415.6	2428.7	2437.6
30°	2884.7	2854.1	2735.7	2538.4	2393.8	2297.2	2284.1	2297.2	2319.2	2332.4	2345.6
32.5°	2972.4	2941.8	2757.6	2477.0	2257.8	2135.1	2126.3	2148.2	2183.3	2192.0	2200.8
35°	3090.8	3060.2	2783.9	2389.3	2086.9	1955.3	1946.5	1959.7	1990.5	2003.6	2016.8
37.5°	3257.4	3239.8	2823.5	2293.0	1929.0	1784.4	1758.1	1749.3	1766.7	1762.5	1779.9
40°	3476.6	3489.7	2893.5	2165.8	1775.6	1626.6	1569.5	1543.2	1525.7	1490.6	1508.2
42.5°	3796.6	3805.4	2972.4	2021.0	1644.1	1477.4	1403.0	1354.7	1319.6	1262.7	1271.5
45°	4265.8	4191.2	3064.5	1867.7	1525.7	1359.0	1271.5	1214.4	1166.2	1117.9	1122.3
47.5°	4888.2	4660.3	3165.4	1740.5	1407.4	1262.7	1183.7	1117.9	1061.0	1021.6	1025.9
50°	5655.5	5243.4	3266.1	1622.1	1289.0	1188.1	1117.9	1047.9	990.8	951.3	947.0
52.5°	6668.3	5945.0	3332.0	1490.6	1170.6	1122.3	1061.0	995.2	925.1	876.8	872.4
55°	7720.5	6760.4	3388.9	1332.7	1056.5	1047.9	1017.2	942.6	859.3	798.0	789.2
57.5°	8877.9	7632.8	3432.8	1179.4	968.9	986.3	977.6	890.0	798.0	740.9	736.5
60°	9930.0	8536.0	3292.5	1043.4	890.0	925.1	933.8	859.3	811.1	824.3	828.5
62.5°	10991.0	9233.0	2757.6	942.6	837.4	885.5	960.1	955.7	933.8	955.7	960.1
65°	11372.5	9377.6	1955.3	859.3	784.8	903.2	1043.4	1034.7	933.8	894.4	885.5
67.5°	11157.6	8948.0	1315.3	793.6	745.4	925.1	1131.1	1034.7	898.8	846.2	828.5
70°	10136.1	7891.4	964.5	727.7	710.2	920.7	1179.4	1030.3	881.1	824.3	802.2
72.5°	8084.3	6089.6	776.0	666.5	657.6	898.8	1205.6	1021.6	863.7	802.2	776.0
75°	5234.7	3788.0	653.2	605.0	578.7	863.7	1192.5	995.2	841.7	762.8	745.4
77.5°	2428.7	1631.0	556.8	534.9	504.2	811.1	1153.1	942.6	793.6	719.1	697.1
80°	1131.1	771.6	469.2	464.8	451.6	767.2	1100.5	881.1	736.5	675.2	640.1
82.5°	605.0	464.8	381.4	381.4	394.5	714.6	1034.7	806.7	662.1	631.2	539.3
85°	320.1	267.4	276.1	298.1	337.6	631.2	947.0	727.7	578.7	482.3	469.2
87.5°	162.2	170.9	170.9	201.7	258.6	512.9	780.4	600.6	491.1	394.5	385.8
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)