

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: P265650

Luminaire Tested: **ARCH-L-AF72-170-D-U-T4W-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265650
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-AF72-170-D-U-T4W-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19018.2 lumens
Efficiency: N/A
Efficacy: 109.9 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): 173
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

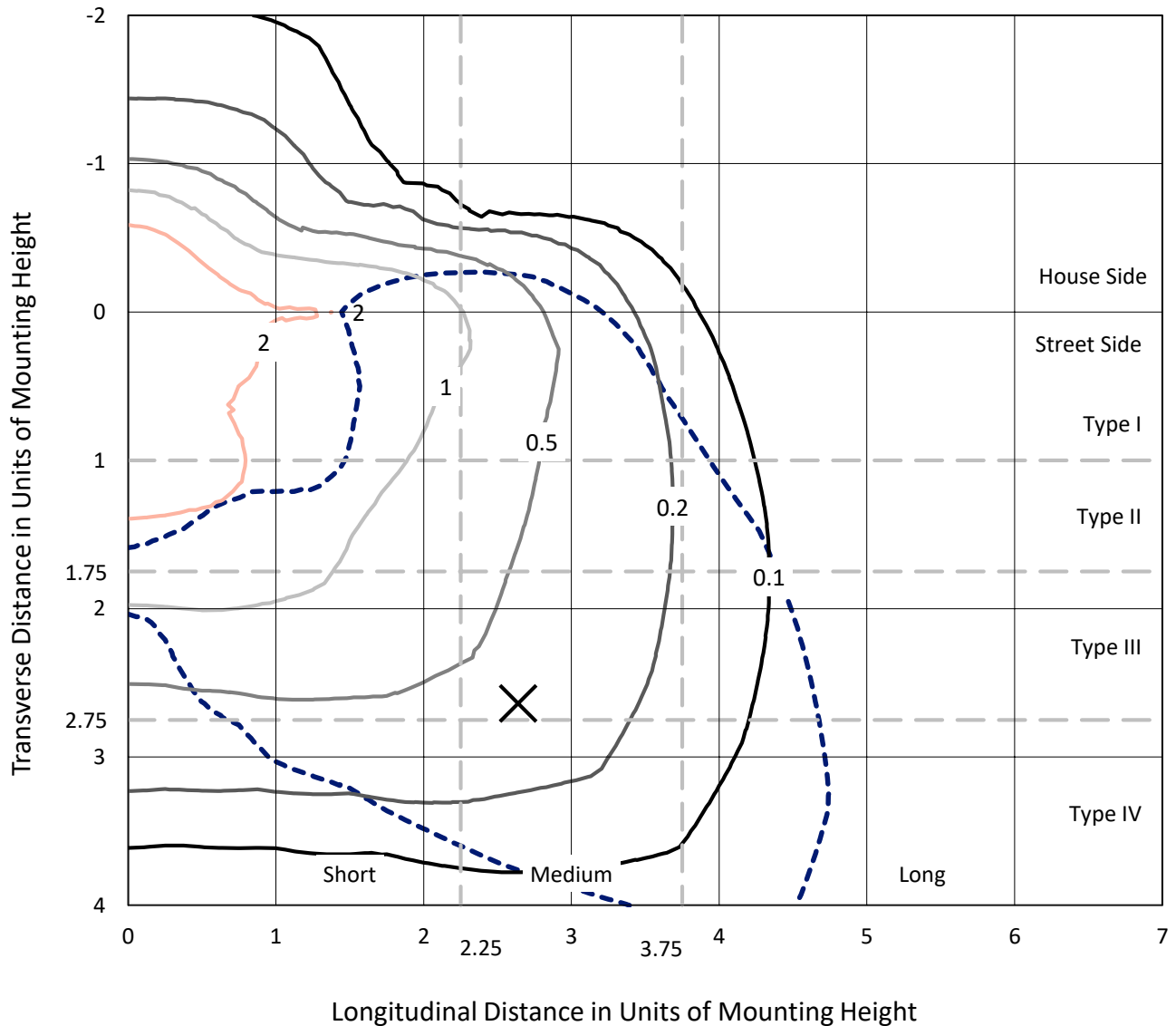


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

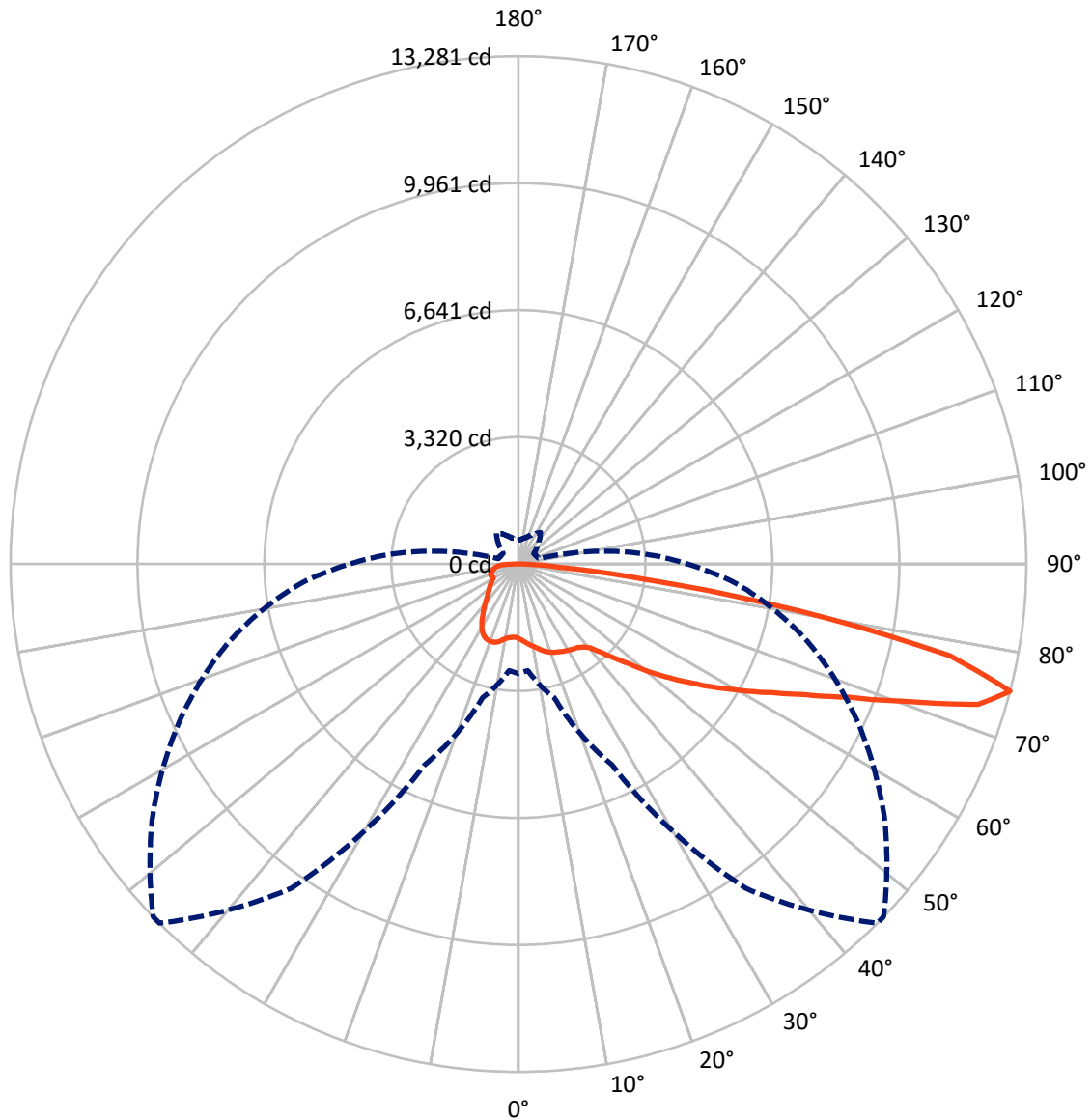


Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type IV - Medium - Non-Cutoff

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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	4405.7	0.0	4405.7
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	14612.4	0.0	14612.4
	% Fixture	76.8	0.0	76.8
Total	Lumens	19018.2	0.0	19018.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.2	1.0
10°-20°	626.1	3.3
20°-30°	1074.4	5.6
30°-40°	1502.7	7.9
40°-50°	2204.3	11.6
50°-60°	3433.7	18.1
60°-70°	4940.8	26.0
70°-80°	4303.9	22.6
80°-90°	739.2	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°	19018.2	100.0
0°-180°	19018.2	100.0

Coefficient of Utilization



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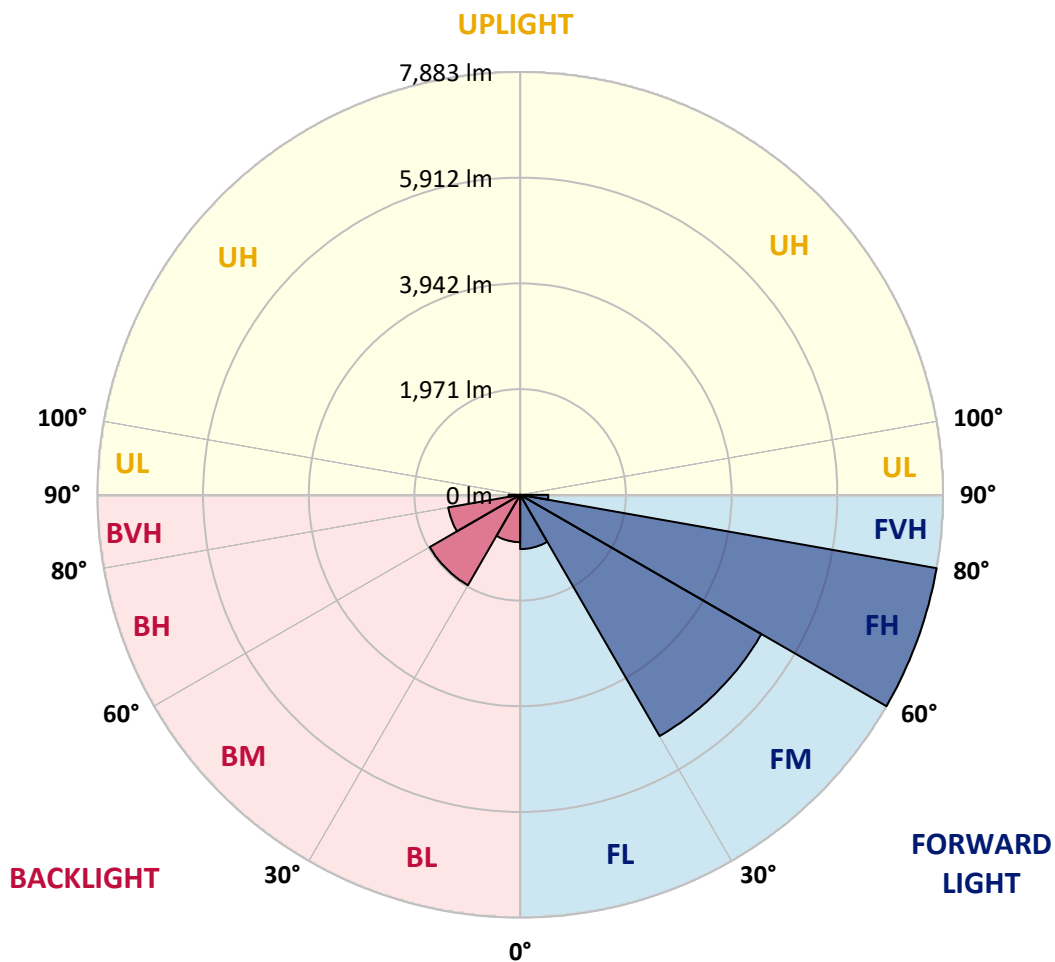
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1011.3	5.3			
FM	(30°-60°)	5193.5	27.3			
FH	(60°-80°)	7883.2	41.5			G4/12000
FVH	(80°-90°)	524.4	2.8			G4/750
BL	(0°-30°)	882.4	4.6	B2/1000		
BM	(30°-60°)	1947.1	10.2	B2/2500		
BH	(60°-80°)	1361.5	7.2	B3/2500		G3/2500
BVH	(80°-90°)	214.7	1.1			G2/225
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°	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6
2.5°	2045.8	2031.0	2031.0	2019.8	2019.8	2001.5	1994.0	1990.4	1971.8	1960.7	1949.6
5°	2164.1	2145.7	2142.0	2116.0	2105.0	2064.3	2060.6	2034.8	2001.5	1968.1	1942.2
7.5°	2271.5	2260.3	2241.9	2215.9	2182.7	2130.9	2127.1	2086.6	2031.0	1986.6	1949.6
10°	2349.2	2341.8	2315.9	2282.7	2245.7	2193.8	2190.1	2145.7	2079.0	2027.4	1975.6
12.5°	2441.7	2430.5	2397.2	2352.9	2312.1	2264.1	2260.3	2223.3	2149.5	2082.8	2016.2
15°	2530.4	2515.7	2475.0	2430.5	2386.2	2345.5	2345.5	2304.8	2227.1	2149.5	2071.8
17.5°	2574.8	2567.4	2526.8	2478.7	2441.7	2412.0	2408.4	2371.3	2293.7	2212.3	2127.1
20°	2589.6	2593.3	2556.3	2504.6	2478.7	2463.8	2460.2	2434.2	2349.2	2271.5	2190.1
22.5°	2586.0	2597.0	2567.4	2511.9	2504.6	2504.6	2504.6	2475.0	2408.4	2330.7	2249.3
25°	2600.8	2615.5	2593.3	2526.8	2526.8	2541.6	2541.6	2526.8	2467.6	2401.0	2319.6
27.5°	2652.5	2663.7	2645.1	2552.7	2556.3	2578.6	2574.8	2578.6	2541.6	2478.7	2397.2
30°	2715.4	2730.2	2708.0	2593.3	2589.6	2611.8	2611.8	2630.3	2604.5	2537.8	2471.2
32.5°	2885.5	2881.9	2811.7	2637.8	2626.6	2648.8	2648.8	2667.3	2652.5	2600.8	2537.8
35°	3392.4	3336.9	3181.5	2782.1	2671.0	2682.1	2682.1	2715.4	2722.9	2682.1	2626.6
37.5°	3910.3	3891.8	3773.5	3166.7	2833.9	2752.4	2748.8	2796.9	2830.1	2796.9	2759.9
40°	4432.0	4417.1	4391.4	3681.0	3174.3	2878.2	2867.1	2907.9	2967.0	2944.9	2922.5
42.5°	4916.7	4909.2	4935.1	4187.8	3607.1	3148.3	3115.0	3066.9	3152.0	3144.5	3144.5
45°	5297.7	5316.2	5331.0	4661.3	4076.9	3496.1	3455.3	3292.6	3407.2	3436.8	3459.1
47.5°	5512.2	5527.0	5578.8	5123.8	4546.7	3899.3	3869.7	3603.3	3754.9	3843.8	3906.6
50°	5819.3	5778.5	5823.1	5575.2	5112.8	4424.6	4343.2	4021.4	4213.7	4369.0	4517.0
52.5°	6115.2	6048.6	6085.7	6096.7	5756.3	4938.8	4853.7	4513.4	4753.8	4998.0	5260.7
55°	6381.6	6378.0	6414.9	6603.6	6378.0	5490.0	5393.9	5057.2	5404.9	5667.6	6111.6
57.5°	6596.2	6633.2	6795.9	7191.8	7095.6	6089.4	5982.1	5689.9	6100.5	6363.1	7099.3
60°	6847.8	6907.0	7177.0	7691.3	7750.4	6718.2	6607.4	6396.4	6814.5	7080.8	8242.5
62.5°	6932.8	7017.9	7572.8	8216.5	8434.8	7406.3	7306.5	7165.9	7565.4	7805.9	9381.9
65°	6366.8	6529.6	7791.1	8486.6	9171.1	8235.0	8150.1	8028.0	8312.7	8471.8	10155.1
67.5°	6211.4	6285.4	7365.7	8875.1	9862.9	9300.5	9215.4	9004.6	9011.9	8945.4	10406.7
70°	5993.2	6074.6	6929.2	9167.4	10854.3	10758.1	10654.5	10033.0	9652.0	9248.7	9910.9
72.5°	5105.2	5079.3	5970.9	8379.3	11331.5	12563.4	12441.3	11139.2	10125.5	8986.0	8364.6
75°	2867.1	2793.1	3621.7	5797.1	10347.4	13281.3	13277.5	11697.8	9792.6	7828.1	5693.5
77.5°	832.4	810.2	1194.9	2430.5	6966.1	11538.6	11679.4	10551.0	8172.2	5623.2	3126.1
80°	392.1	399.6	514.2	802.7	2974.4	7447.0	7850.3	6947.6	4883.4	2593.3	1291.1
82.5°	247.8	251.5	351.4	518.0	1257.8	3381.3	3714.3	3126.1	1934.8	1120.9	569.7
85°	155.3	155.3	233.1	340.4	751.1	1080.2	1172.7	1065.5	828.6	610.4	310.8
87.5°	85.1	85.1	140.6	196.1	410.6	347.7	358.9	425.4	518.0	373.6	155.3
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°	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6
2.5°	1945.9	1938.5	1927.5	1923.7	1920.0	1916.4	1920.0	1927.5	1920.0	1920.0	1923.7
5°	1934.8	1927.5	1912.6	1912.6	1916.4	1920.0	1938.5	1949.6	1953.4	1953.4	1953.4
7.5°	1934.8	1923.7	1912.6	1916.4	1923.7	1938.5	1968.1	1986.6	2001.5	2005.1	2005.1
10°	1953.4	1938.5	1931.1	1938.5	1960.7	1971.8	2001.5	2031.0	2049.6	2056.8	2056.8
12.5°	1986.6	1971.8	1971.8	1986.6	2016.2	2031.0	2056.8	2079.0	2101.3	2112.5	2112.5
15°	2042.0	2023.6	2027.4	2053.3	2086.6	2101.3	2119.8	2127.1	2145.7	2160.6	2160.6
17.5°	2093.9	2075.4	2082.8	2112.5	2134.6	2142.0	2153.1	2149.5	2156.8	2167.9	2171.7
20°	2153.1	2134.6	2138.3	2156.8	2160.6	2153.1	2153.1	2142.0	2138.3	2156.8	2164.1
22.5°	2212.3	2193.8	2190.1	2179.0	2160.6	2142.0	2130.9	2119.8	2112.5	2130.9	2138.3
25°	2282.7	2256.7	2238.1	2190.1	2142.0	2108.7	2093.9	2086.6	2082.8	2101.3	2108.7
27.5°	2360.2	2334.3	2278.9	2175.2	2097.6	2042.0	2031.0	2031.0	2038.4	2049.6	2056.8
30°	2434.2	2408.4	2308.5	2142.0	2019.8	1938.5	1927.5	1938.5	1957.0	1968.1	1979.2
32.5°	2508.2	2482.3	2327.0	2090.3	1905.2	1801.6	1794.3	1812.8	1842.3	1849.7	1857.2
35°	2608.1	2582.3	2349.2	2016.2	1760.9	1649.9	1642.6	1653.7	1679.7	1690.7	1701.7
37.5°	2748.8	2733.9	2382.5	1934.8	1627.8	1505.6	1483.6	1476.1	1490.8	1487.2	1502.0
40°	2933.7	2944.9	2441.7	1827.5	1498.4	1372.5	1324.5	1302.3	1287.5	1257.8	1272.5
42.5°	3203.7	3211.1	2508.2	1705.4	1387.3	1246.8	1183.8	1143.2	1113.5	1065.5	1072.8
45°	3599.6	3536.6	2586.0	1575.9	1287.5	1146.9	1072.8	1024.7	984.1	943.4	947.1
47.5°	4124.9	3932.6	2671.0	1468.6	1187.5	1065.5	998.8	943.4	895.3	862.0	865.6
50°	4772.3	4424.6	2756.1	1368.7	1087.7	1002.6	943.4	884.2	836.1	802.7	799.1
52.5°	5627.0	5016.6	2811.7	1257.8	987.7	947.1	895.3	839.7	780.5	739.9	736.3
55°	6514.8	5704.5	2859.8	1124.7	891.6	884.2	858.3	795.4	725.1	673.3	666.0
57.5°	7491.4	6440.8	2896.8	995.1	817.5	832.4	825.1	751.1	673.3	625.2	621.4
60°	8379.3	7202.9	2778.3	880.5	751.1	780.5	788.1	725.1	684.4	695.5	699.2
62.5°	9274.6	7791.1	2327.0	795.4	706.5	747.3	810.2	806.5	788.1	806.5	810.2
65°	9596.5	7913.2	1649.9	725.1	662.2	762.1	880.5	873.2	788.1	754.7	747.3
67.5°	9415.2	7550.7	1109.9	669.5	629.0	780.5	954.4	873.2	758.3	714.1	699.2
70°	8553.2	6659.0	813.9	614.1	599.3	776.9	995.1	869.4	743.5	695.5	677.1
72.5°	6821.9	5138.6	654.9	562.2	555.0	758.3	1017.4	862.0	728.9	677.1	654.9
75°	4417.1	3196.3	551.2	510.5	488.3	728.9	1006.2	839.7	710.3	643.7	629.0
77.5°	2049.6	1376.3	469.9	451.4	425.4	684.4	973.0	795.4	669.5	606.7	588.2
80°	954.4	651.1	395.9	392.1	381.1	647.4	928.6	743.5	621.4	569.7	540.2
82.5°	510.5	392.1	321.9	321.9	332.9	603.0	873.2	680.6	558.7	532.8	455.0
85°	270.1	225.7	233.1	251.5	284.9	532.8	799.1	614.1	488.3	406.9	395.9
87.5°	136.9	144.3	144.3	170.1	218.3	432.9	658.5	506.9	414.4	332.9	325.5
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)