

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: P265698

Luminaire Tested: **ARCH-L-AF72-230-D-U-T2R-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265698
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-230-D-U-T2R-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23360.2 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B3 - U0 - G3

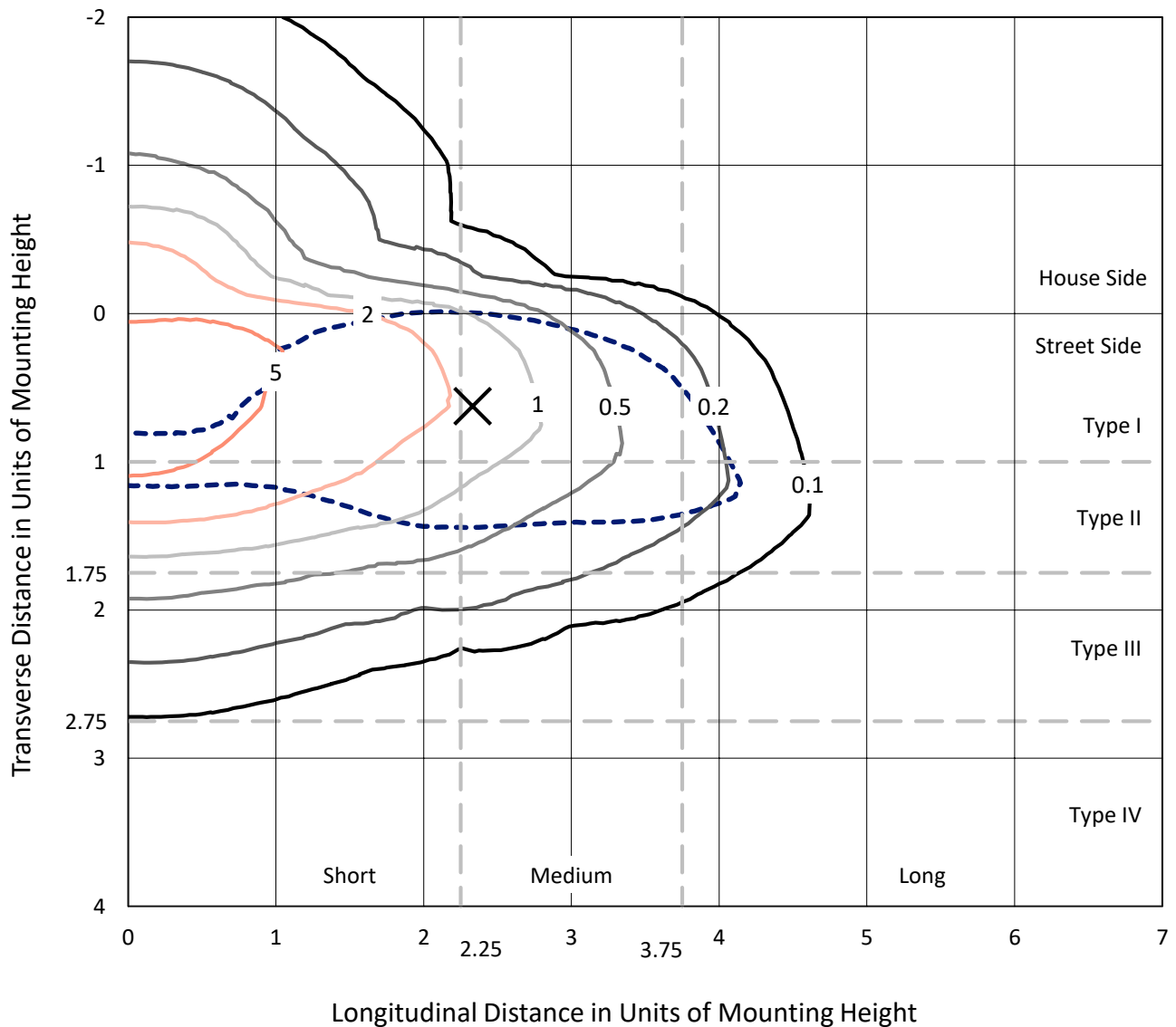
Input Watts (W): 229
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

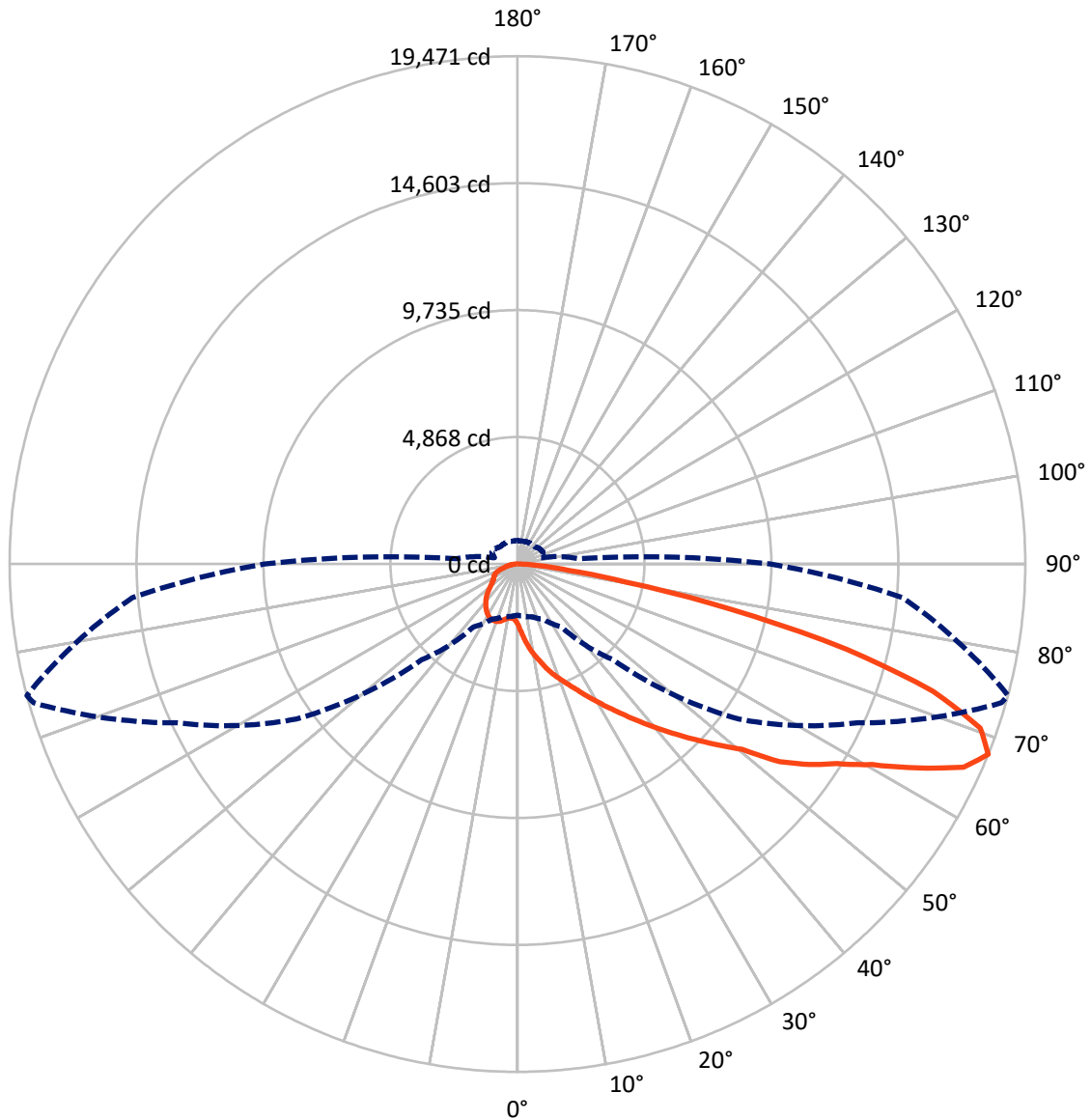


Based on 25 foot mounting height. Maximum calculated value = 7.8 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3989.1	0.0	3989.1
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	19371.2	0.0	19371.2
	% Fixture	82.9	0.0	82.9
Total	Lumens	23360.2	0.0	23360.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.9	1.2
10°-20°	982.7	4.2
20°-30°	1792.5	7.7
30°-40°	2942.1	12.6
40°-50°	4254.8	18.2
50°-60°	5014.2	21.5
60°-70°	4872.6	20.9
70°-80°	2708.5	11.6
80°-90°	520.8	2.2
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°	23360.2	100.0
0°-180°	23360.2	100.0



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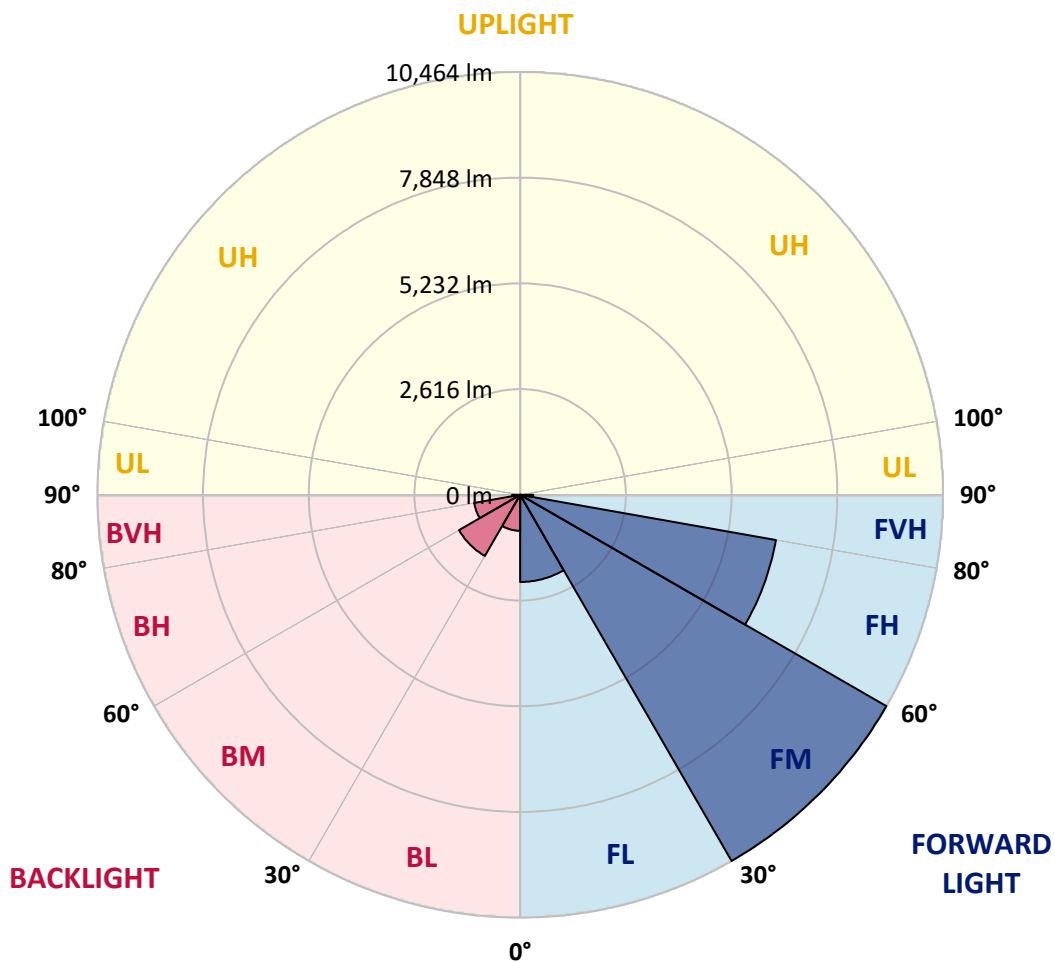
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2156.8	9.2			
FM	(30°-60°)	10464.1	44.8			
FH	(60°-80°)	6426.1	27.5			G3/7500
FVH	(80°-90°)	324.1	1.4			G3/500
BL	(0°-30°)	890.4	3.8	B2/1000		
BM	(30°-60°)	1747.0	7.5	B2/2500		
BH	(60°-80°)	1155.0	4.9	B3/2500		G3/2500
BVH	(80°-90°)	196.7	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	2314.8	2314.8	2314.8	2314.8	2314.8	2314.8	2314.8	2314.8	2314.8	2314.8	2314.8
2.5°	3281.7	3291.5	3271.9	3228.0	3164.5	3047.3	2944.7	2764.1	2602.8	2583.3	2412.5
5°	3858.0	3867.7	3843.3	3789.6	3721.1	3594.3	3452.6	3218.2	2959.3	2910.6	2549.2
7.5°	4253.6	4258.3	4229.1	4175.4	4121.7	3994.8	3853.1	3589.4	3271.9	3232.9	2725.0
10°	4590.5	4600.2	4561.1	4527.0	4468.3	4341.4	4194.9	3916.6	3589.4	3535.6	2905.7
12.5°	4902.9	4912.8	4888.3	4859.0	4839.4	4722.3	4561.1	4229.1	3877.4	3818.9	3120.5
15°	5113.1	5122.8	5127.6	5166.7	5191.1	5108.1	4947.0	4585.6	4190.1	4136.3	3374.6
17.5°	5054.5	5078.7	5152.0	5293.7	5445.0	5449.9	5318.1	4937.3	4497.6	4439.1	3633.4
20°	4883.5	4902.9	4991.0	5205.8	5503.6	5674.7	5664.8	5293.7	4785.8	4722.3	3872.7
22.5°	5025.1	5049.6	5049.6	5181.3	5474.5	5791.8	5918.8	5645.3	5073.9	5015.3	4111.9
25°	5630.7	5645.3	5542.7	5489.1	5596.5	5889.5	6128.7	6026.2	5425.6	5357.2	4370.8
27.5°	6475.5	6451.1	6324.1	6109.3	5992.1	6070.1	6314.4	6387.6	5830.9	5747.9	4639.2
30°	7315.4	7300.9	7154.3	6866.1	6602.5	6436.4	6519.4	6709.9	6270.3	6172.8	4898.2
32.5°	8101.8	8077.3	7916.1	7579.2	7281.3	6973.6	6812.4	7002.8	6739.3	6626.8	5186.3
35°	8824.5	8761.0	8599.8	8248.1	7940.6	7647.5	7251.9	7281.3	7247.0	7129.8	5503.6
37.5°	9410.5	9361.6	9185.8	8858.6	8531.5	8253.1	7838.0	7598.8	7794.1	7681.8	5870.0
40°	9928.1	9874.3	9693.7	9366.4	9063.8	8800.1	8472.9	7984.5	8409.4	8282.5	6280.2
42.5°	10318.8	10279.8	10133.2	9810.8	9517.9	9278.7	9117.4	8472.9	9049.0	8926.9	6729.5
45°	10528.8	10489.7	10411.5	10152.7	9884.2	9698.6	9713.3	9053.9	9718.1	9615.5	7261.8
47.5°	10270.0	10299.2	10367.6	10318.8	10152.7	10064.9	10245.6	9654.7	10465.3	10367.6	7838.0
50°	9576.6	9605.8	9879.3	10216.2	10274.9	10382.3	10724.1	10348.0	11256.4	11178.2	8551.0
52.5°	7872.1	8033.4	8790.3	9596.1	10147.9	10592.3	11256.4	11378.6	12589.7	12589.7	9810.8
55°	5948.0	6089.7	6954.0	8360.5	9654.7	10611.8	11647.2	12076.9	13551.7	13571.2	10470.1
57.5°	4819.9	4907.9	5332.8	6773.4	8619.3	10367.6	12110.9	12677.5	14352.6	14440.4	11319.9
60°	3911.7	3960.4	4238.8	5240.0	7188.4	9708.3	12443.1	13537.0	15495.4	15617.4	12404.1
62.5°	3145.0	3193.8	3379.3	3980.0	5640.4	8472.9	12384.6	14430.7	17018.8	17219.3	13825.2
65°	2510.1	2563.9	2685.9	3057.0	4180.3	6939.4	11783.8	14889.8	18596.4	18791.6	14767.6
67.5°	1958.2	2007.2	2090.1	2334.2	2944.7	5191.1	10362.8	14406.3	19304.3	19470.5	14816.5
70°	1479.7	1504.1	1572.6	1728.8	2104.8	3447.8	8111.4	12784.9	18669.6	18821.0	13839.7
72.5°	1147.7	1142.7	1181.8	1260.0	1469.9	2373.4	5376.7	10397.0	16506.1	16662.4	11808.3
75°	937.7	932.7	957.1	981.6	1064.6	1592.1	3174.3	7828.2	13322.1	13024.3	8858.6
77.5°	791.1	786.2	810.7	815.5	849.7	1098.7	1806.9	5152.0	8887.9	8375.2	4991.0
80°	669.1	664.1	693.4	703.3	727.6	805.8	1040.1	2788.5	4463.5	4229.1	2383.2
82.5°	503.1	522.5	576.3	600.6	630.0	595.8	644.7	1230.7	2070.7	1977.8	1035.2
85°	244.2	288.1	434.6	483.5	517.7	376.0	439.5	581.2	932.7	888.9	420.0
87.5°	83.1	73.2	258.8	307.7	337.0	170.9	244.2	322.3	385.8	351.5	131.8
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°	2314.8	2314.8	2314.8	2314.8	2314.8	2314.8	2314.8	2314.8	2314.8	2314.8	2314.8
2.5°	2339.1	2266.0	2158.4	2075.4	2021.7	1977.8	1958.2	1953.4	1943.7	1938.7	1938.7
5°	2388.1	2256.2	2090.1	2002.2	1977.8	1958.2	1968.0	1972.9	1972.9	1972.9	1972.9
7.5°	2461.3	2275.6	2075.4	2016.9	2012.1	2012.1	2041.3	2056.0	2065.7	2065.7	2065.7
10°	2558.9	2309.9	2099.9	2051.1	2065.7	2075.4	2109.7	2129.3	2139.0	2143.8	2148.7
12.5°	2690.9	2383.2	2148.7	2109.7	2129.3	2134.1	2158.4	2168.2	2178.0	2182.9	2182.9
15°	2866.6	2490.6	2226.9	2178.0	2182.9	2178.0	2178.0	2168.2	2163.4	2163.4	2173.2
17.5°	3047.3	2593.1	2295.2	2226.9	2207.3	2168.2	2139.0	2114.5	2099.9	2090.1	2094.9
20°	3228.0	2685.9	2334.2	2236.6	2182.9	2119.5	2065.7	2031.5	2012.1	1992.5	2002.2
22.5°	3408.7	2773.8	2349.0	2207.3	2129.3	2036.4	1977.8	1924.1	1880.2	1850.9	1855.7
25°	3608.9	2871.5	2349.0	2173.2	2056.0	1958.2	1885.1	1797.1	1733.5	1709.2	1718.9
27.5°	3809.2	2954.5	2324.5	2109.7	1972.9	1875.2	1767.9	1665.3	1626.2	1611.6	1616.4
30°	4009.3	3017.9	2270.8	2031.5	1885.1	1777.6	1636.0	1567.6	1518.8	1479.7	1484.5
32.5°	4209.5	3062.0	2197.6	1933.8	1792.3	1655.4	1538.3	1460.1	1372.3	1323.5	1328.4
35°	4439.1	3096.1	2109.7	1836.1	1689.7	1548.0	1460.1	1333.2	1240.4	1201.4	1191.6
37.5°	4678.4	3120.5	2016.9	1728.8	1587.1	1469.9	1382.0	1225.7	1137.9	1084.2	1079.3
40°	4937.3	3130.4	1904.5	1616.4	1489.5	1421.1	1279.5	1162.2	1011.0	976.6	976.6
42.5°	5244.8	3125.5	1792.3	1504.1	1382.0	1308.8	1206.2	1152.4	1020.7	986.5	966.9
45°	5596.5	3125.5	1670.2	1372.3	1274.5	1167.2	1123.2	1089.0	1001.2	1015.8	1025.5
47.5°	5996.9	3115.6	1523.6	1264.9	1186.8	1093.9	1069.5	996.2	962.1	971.7	981.6
50°	6548.7	3130.4	1391.8	1176.9	1123.2	1045.1	1015.8	976.6	962.1	966.9	962.1
52.5°	7315.4	3081.5	1264.9	1123.2	1074.4	971.7	971.7	966.9	971.7	966.9	966.9
55°	7735.5	2974.1	1172.0	1093.9	1040.1	937.7	957.1	966.9	976.6	971.7	971.7
57.5°	8331.2	2900.7	1098.7	1074.4	1020.7	927.9	947.4	966.9	971.7	966.9	966.9
60°	9034.4	2851.9	1049.9	1079.3	1006.0	927.9	952.3	966.9	962.1	957.1	957.1
62.5°	9849.9	2832.4	1015.8	1093.9	991.4	932.7	952.3	966.9	947.4	942.5	942.5
65°	10157.7	2656.6	971.7	1103.7	1001.2	932.7	947.4	952.3	927.9	923.0	918.1
67.5°	9684.0	2353.9	908.4	1084.2	1030.4	932.7	932.7	927.9	898.6	893.6	883.9
70°	8624.3	1953.4	810.7	1020.7	1049.9	937.7	913.1	888.9	859.5	859.5	839.9
72.5°	7061.5	1538.3	683.7	908.4	1035.2	952.3	874.1	839.9	805.8	805.8	786.2
75°	5088.5	1147.7	547.0	756.9	971.7	947.4	825.4	781.3	742.3	737.4	713.0
77.5°	2900.7	805.8	444.4	590.9	864.3	923.0	781.3	713.0	669.1	654.3	639.8
80°	1489.5	542.0	361.4	464.0	717.8	854.6	747.2	634.8	586.1	561.6	537.1
82.5°	708.1	361.4	278.4	341.9	542.0	747.2	703.3	547.0	493.2	464.0	434.6
85°	317.5	214.9	185.6	219.7	385.8	581.2	620.2	449.3	385.8	483.5	356.4
87.5°	102.5	97.6	97.6	102.5	185.6	254.0	454.2	332.1	307.7	254.0	214.9
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)