

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: P842120

Luminaire Tested: **ARCH4-270-740-U-T2U**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842120
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-270-740-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1045mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40506 lumens
Efficiency: N/A
Efficacy: 150.6 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G4

Input Watts (W): 269
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



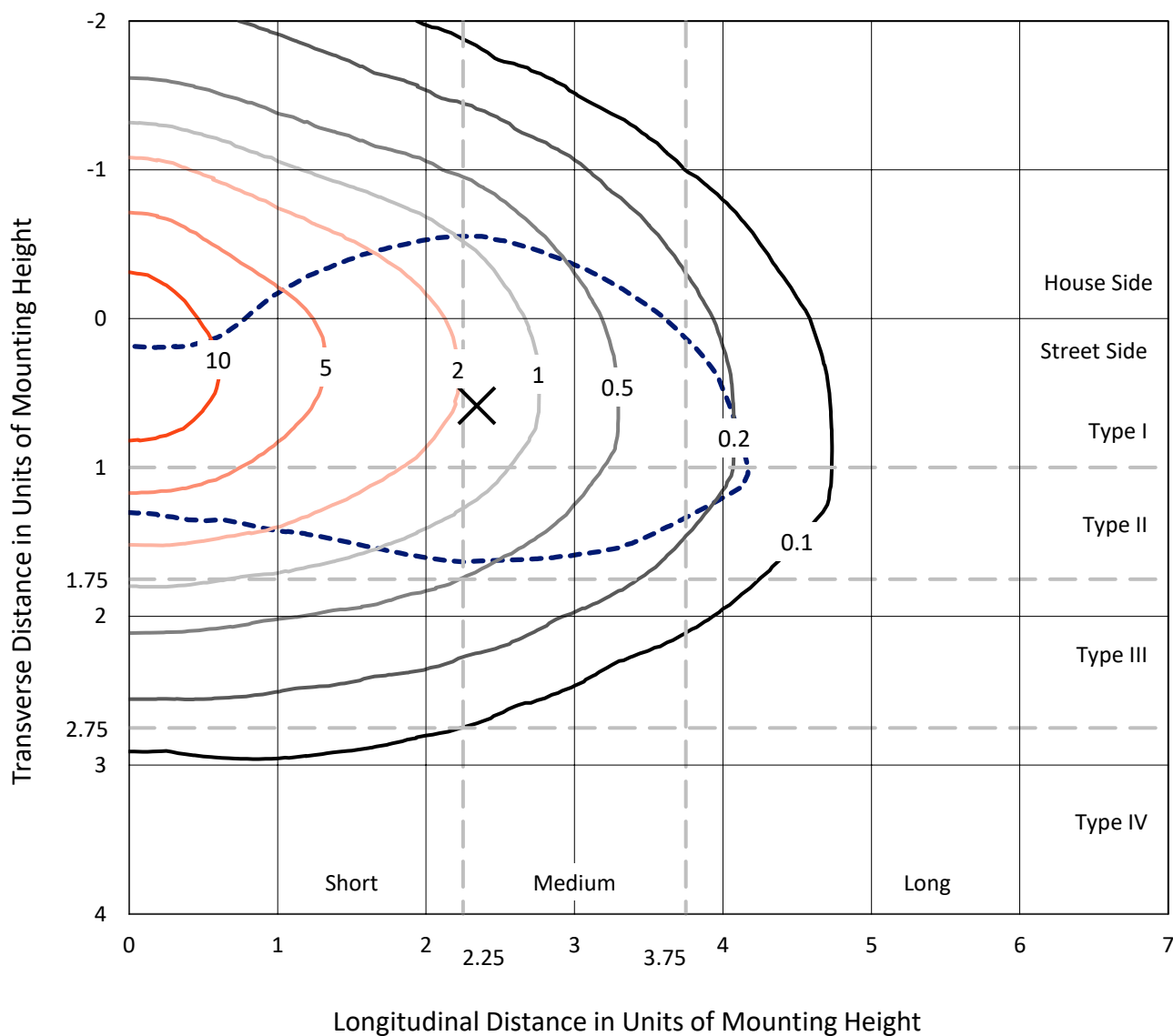
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

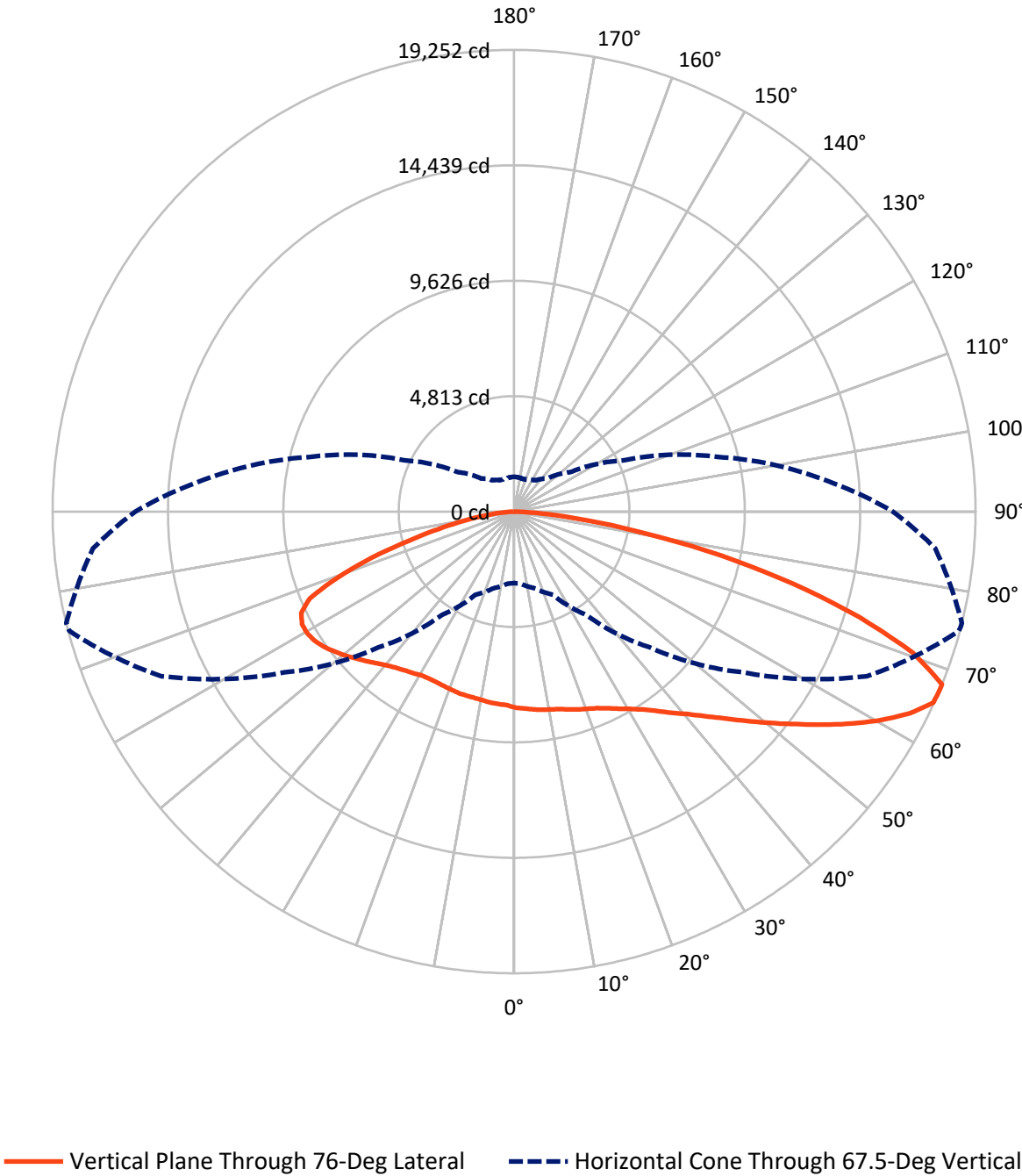
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.8 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13687.2	0.0	13687.2
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	26818.8	0.0	26818.8
	% Fixture	66.2	0.0	66.2
Total	Lumens	40506.0	0.0	40506.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	789.0	1.9
10°-20°	2412.1	6.0
20°-30°	4098.2	10.1
30°-40°	5831.2	14.4
40°-50°	7364.5	18.2
50°-60°	7973.5	19.7
60°-70°	7416.2	18.3
70°-80°	3983.2	9.8
80°-90°	638.3	1.6
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°	40506.0	100.0
0°-180°	40506.0	100.0

Coefficient of Utilization



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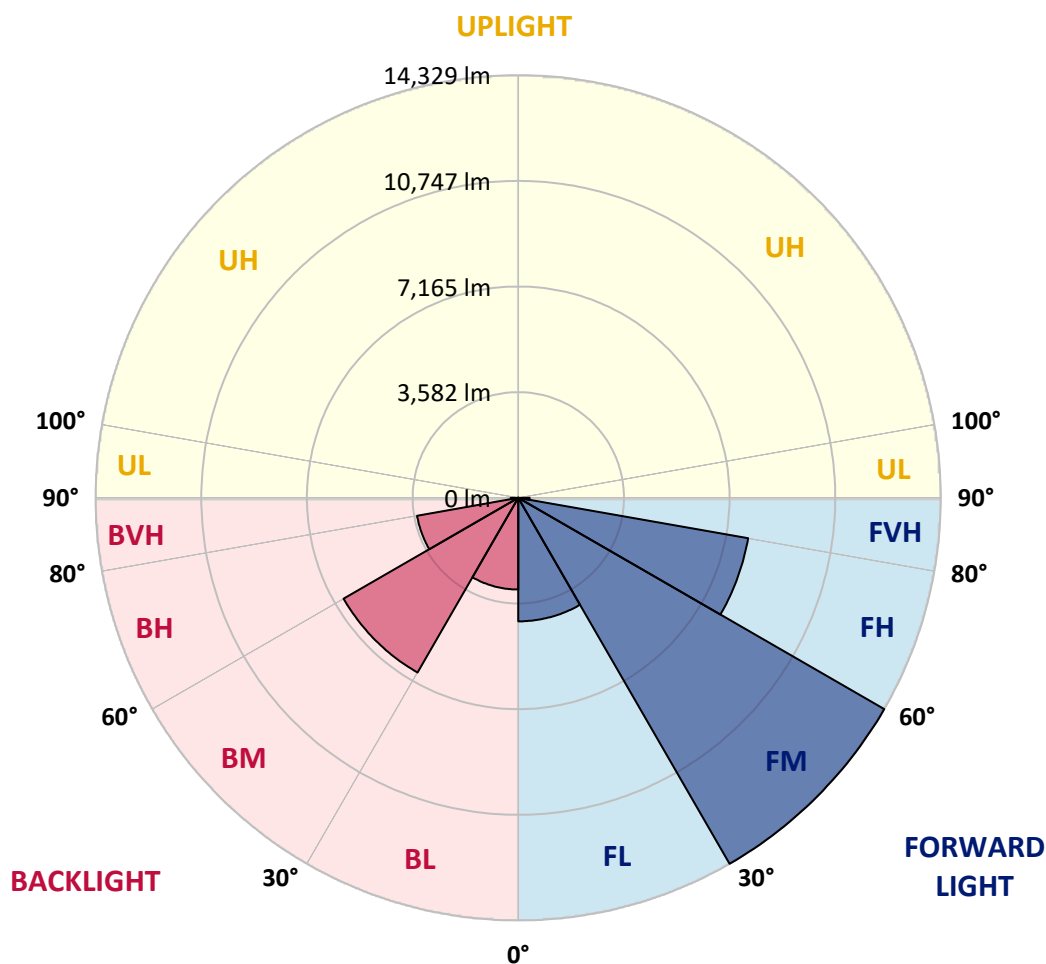
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4188.8	10.3			
FM	(30°-60°)	14329.5	35.4			
FH	(60°-80°)	7914.5	19.5			G4/12000
FVH	(80°-90°)	386.1	1.0			G3/500
BL	(0°-30°)	3110.5	7.7	B4/5000		
BM	(30°-60°)	6839.7	16.9	B4/8500		
BH	(60°-80°)	3484.9	8.6	B4/5000		G4/5000
BVH	(80°-90°)	252.2	0.6			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	8182.1	8182.1	8182.1	8182.1	8182.1	8182.1	8182.1	8182.1	8182.1	8182.1	8182.1
2.5°	8430.3	8415.3	8355.1	8362.6	8362.6	8355.1	8264.8	8227.2	8227.2	8219.7	8137.0
5°	8731.1	8708.5	8640.9	8625.8	8595.7	8558.1	8415.3	8332.5	8294.9	8287.4	8174.6
7.5°	9084.6	9054.5	8971.8	8926.6	8851.4	8753.7	8573.2	8445.3	8355.1	8347.6	8189.6
10°	9438.0	9407.9	9310.2	9227.4	9122.2	8964.2	8731.1	8543.1	8400.2	8385.2	8197.2
12.5°	9859.2	9829.1	9708.8	9603.5	9445.5	9235.0	8926.6	8670.9	8475.4	8452.9	8219.7
15°	10302.9	10257.7	10137.4	10017.1	9821.6	9550.8	9182.3	8843.9	8595.7	8558.1	8287.4
17.5°	10671.4	10611.2	10513.4	10393.1	10175.0	9859.2	9438.0	9016.9	8708.5	8678.5	8355.1
20°	10987.2	10942.1	10836.8	10724.0	10490.9	10144.9	9678.7	9189.8	8813.8	8776.2	8407.7
22.5°	11288.0	11227.9	11167.7	11085.0	10829.3	10445.7	9956.9	9400.4	8949.2	8904.1	8475.4
25°	11634.0	11566.3	11543.7	11498.6	11197.8	10806.7	10295.3	9663.6	9137.2	9084.6	8595.7
27.5°	12062.6	11987.4	11942.3	11942.3	11581.3	11175.2	10656.3	9972.0	9355.3	9310.2	8746.1
30°	12513.8	12423.6	12355.9	12355.9	11949.8	11543.7	11009.8	10280.3	9603.5	9550.8	8941.7
32.5°	12912.4	12822.2	12747.0	12739.4	12318.3	11912.2	11378.3	10618.7	9904.3	9836.6	9182.3
35°	13220.7	13138.0	13070.3	13085.4	12686.8	12288.2	11791.9	11069.9	10280.3	10205.1	9498.2
37.5°	13408.8	13378.7	13341.1	13393.7	13025.2	12649.2	12220.5	11506.1	10709.0	10641.3	9889.2
40°	13506.5	13484.0	13634.4	13702.0	13311.0	12972.6	12649.2	11957.3	11175.2	11100.0	10340.5
42.5°	13649.4	13837.4	13897.6	13882.5	13521.6	13220.7	13040.3	12446.2	11724.2	11656.5	10881.9
45°	13138.0	13092.9	13423.8	13604.3	13536.6	13378.7	13408.8	13032.7	12363.4	12295.7	11506.1
47.5°	12453.7	12393.5	12581.5	13025.2	13288.4	13438.8	13739.6	13641.9	13100.4	13040.3	12235.6
50°	11009.8	11092.5	11791.9	12386.0	12904.9	13423.8	14017.9	14296.2	13912.6	13852.5	13017.7
52.5°	9407.9	9490.7	10220.1	11588.8	12438.6	13311.0	14221.0	14950.4	14792.5	14724.8	13852.5
55°	8242.3	8422.8	9250.0	10242.7	11776.8	12957.5	14341.3	15619.7	15740.1	15679.9	14762.4
57.5°	7084.2	7219.5	7843.7	8723.6	10874.4	12340.9	14333.8	16243.9	16732.7	16672.6	15687.4
60°	5723.0	5895.9	6392.3	7339.8	9671.1	11603.9	14123.2	16732.7	17687.8	17642.7	16582.3
62.5°	4790.5	4843.1	5196.6	6016.3	8122.0	10671.4	13649.4	16996.0	18552.7	18522.6	17387.0
65°	3857.9	3865.5	4188.8	4873.2	6625.4	9513.2	12844.7	16898.2	19206.9	19222.0	17966.1
67.5°	2978.1	3015.7	3308.9	3827.8	5264.2	8009.2	11694.1	16236.4	19214.5	19252.1	17635.2
70°	2060.6	2090.7	2534.4	3038.2	4068.5	6384.8	10137.4	14484.2	17635.2	17665.3	15807.7
72.5°	1451.4	1466.5	1940.2	2429.1	3181.1	4813.0	7648.2	11979.9	15033.1	15055.7	13295.9
75°	1082.9	1098.0	1368.7	1842.5	2436.6	3331.5	5226.6	9174.8	12010.0	12010.0	10498.4
77.5°	767.1	774.6	887.4	1270.9	1624.4	2248.6	3143.5	6008.7	8813.8	8828.9	7648.2
80°	518.9	526.4	579.1	857.3	1015.2	1218.3	1707.1	3151.0	5557.5	5580.1	4858.1
82.5°	270.7	285.8	323.4	436.2	511.4	676.8	879.9	1601.8	3075.8	3136.0	2917.9
85°	105.3	105.3	120.3	142.9	188.0	263.2	406.1	609.1	1391.3	1436.4	1286.0
87.5°	37.6	37.6	45.1	45.1	52.6	60.2	67.7	90.2	157.9	157.9	150.4
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°	8182.1	8182.1	8182.1	8182.1	8182.1	8182.1	8182.1	8182.1	8182.1	8182.1	8182.1
2.5°	8106.9	8106.9	8069.3	8084.4	8076.8	8061.8	8046.8	8069.3	8046.8	7994.1	7986.6
5°	8122.0	8106.9	8046.8	8039.2	8016.7	7986.6	7949.0	7964.0	7926.4	7881.3	7873.8
7.5°	8129.5	8099.4	8016.7	7986.6	7941.5	7881.3	7821.1	7821.1	7768.5	7723.4	7715.9
10°	8114.4	8076.8	7964.0	7903.9	7821.1	7730.9	7648.2	7625.6	7565.5	7512.8	7512.8
12.5°	8122.0	8069.3	7926.4	7828.7	7715.9	7603.1	7497.8	7467.7	7415.0	7362.4	7354.9
15°	8167.1	8091.9	7911.4	7783.5	7618.1	7490.3	7377.4	7354.9	7309.8	7272.2	7272.2
17.5°	8212.2	8114.4	7888.8	7708.3	7505.3	7362.4	7257.1	7257.1	7227.0	7204.5	7204.5
20°	8234.8	8122.0	7843.7	7603.1	7369.9	7219.5	7121.8	7136.8	7129.3	7121.8	7121.8
22.5°	8287.4	8137.0	7806.1	7505.3	7227.0	7069.1	6978.9	7001.4	6993.9	6993.9	7001.4
25°	8370.1	8174.6	7776.0	7415.0	7091.7	6918.7	6820.9	6836.0	6836.0	6836.0	6836.0
27.5°	8482.9	8249.8	7768.5	7332.3	6956.3	6760.8	6640.5	6640.5	6610.4	6617.9	6625.4
30°	8655.9	8392.7	7783.5	7257.1	6813.4	6565.3	6422.4	6399.8	6392.3	6407.3	6414.8
32.5°	8866.5	8588.2	7873.8	7204.5	6663.0	6347.2	6166.7	6159.2	6136.6	6136.6	6136.6
35°	9129.7	8776.2	7956.5	7197.0	6512.6	6114.0	5918.5	5895.9	5843.3	5820.7	5820.7
37.5°	9468.1	9069.5	8054.3	7144.3	6384.8	5888.4	5655.3	5580.1	5519.9	5512.4	5512.4
40°	9881.7	9400.4	8197.2	7084.2	6249.4	5655.3	5347.0	5219.1	5226.6	5256.7	5256.7
42.5°	10370.5	9806.5	8377.7	7054.1	6053.9	5414.6	4986.0	4835.6	4888.2	4918.3	4925.8
45°	10942.1	10287.8	8580.7	7016.5	5873.4	5143.9	4602.4	4414.4	4437.0	4444.5	4452.0
47.5°	11603.9	10821.8	8791.3	6986.4	5670.3	4805.5	4181.3	3933.1	3925.6	3880.5	3895.5
50°	12295.7	11385.8	9009.4	6933.7	5422.2	4406.9	3737.6	3444.3	3384.1	3316.5	3324.0
52.5°	13032.7	11964.9	9212.4	6851.0	5113.8	4000.8	3316.5	3000.6	2880.3	2805.1	2820.1
55°	13844.9	12559.0	9407.9	6723.2	4790.5	3594.7	2940.5	2617.1	2466.7	2406.5	2414.0
57.5°	14589.4	13130.5	9550.8	6565.3	4437.0	3226.2	2609.6	2293.7	2195.9	2188.4	2195.9
60°	15311.4	13611.8	9611.0	6347.2	4076.0	2887.8	2301.2	2060.6	1992.9	2030.5	2038.0
62.5°	15920.5	13920.1	9580.9	6053.9	3707.5	2564.4	2053.1	1880.1	1835.0	1910.2	1917.7
65°	16274.0	14017.9	9370.3	5632.7	3308.9	2248.6	1819.9	1631.9	1609.4	1654.5	1677.0
67.5°	15807.7	13408.8	8798.8	5053.7	2865.2	1955.3	1594.3	1443.9	1406.3	1443.9	1443.9
70°	14010.4	11618.9	7445.1	4136.2	2376.4	1669.5	1383.7	1278.5	1248.4	1278.5	1270.9
72.5°	11671.6	9663.6	5865.9	3226.2	1872.6	1406.3	1203.3	1105.5	1075.4	1045.3	1030.3
75°	9054.5	7339.8	4256.5	2368.9	1413.8	1128.0	1007.7	917.5	842.3	872.4	857.3
77.5°	6632.9	5151.4	3015.7	1639.4	1015.2	872.4	789.6	722.0	669.3	729.5	722.0
80°	4271.5	3331.5	2015.4	1098.0	699.4	609.1	579.1	541.5	594.1	774.6	789.6
82.5°	2609.6	2113.2	1203.3	714.4	458.7	406.1	376.0	376.0	609.1	669.3	676.8
85°	1165.7	1120.5	654.3	368.5	255.7	233.1	210.6	270.7	248.2	180.5	188.0
87.5°	188.0	195.5	142.9	127.8	97.8	97.8	75.2	52.6	37.6	22.6	22.6
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)