

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: P842239

Luminaire Tested: **ARCH4-290-727-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842239
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-290-727-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1120mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39587 lumens
Efficiency: N/A
Efficacy: 136.6 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B4 - U0 - G4

Input Watts (W): 289.7
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

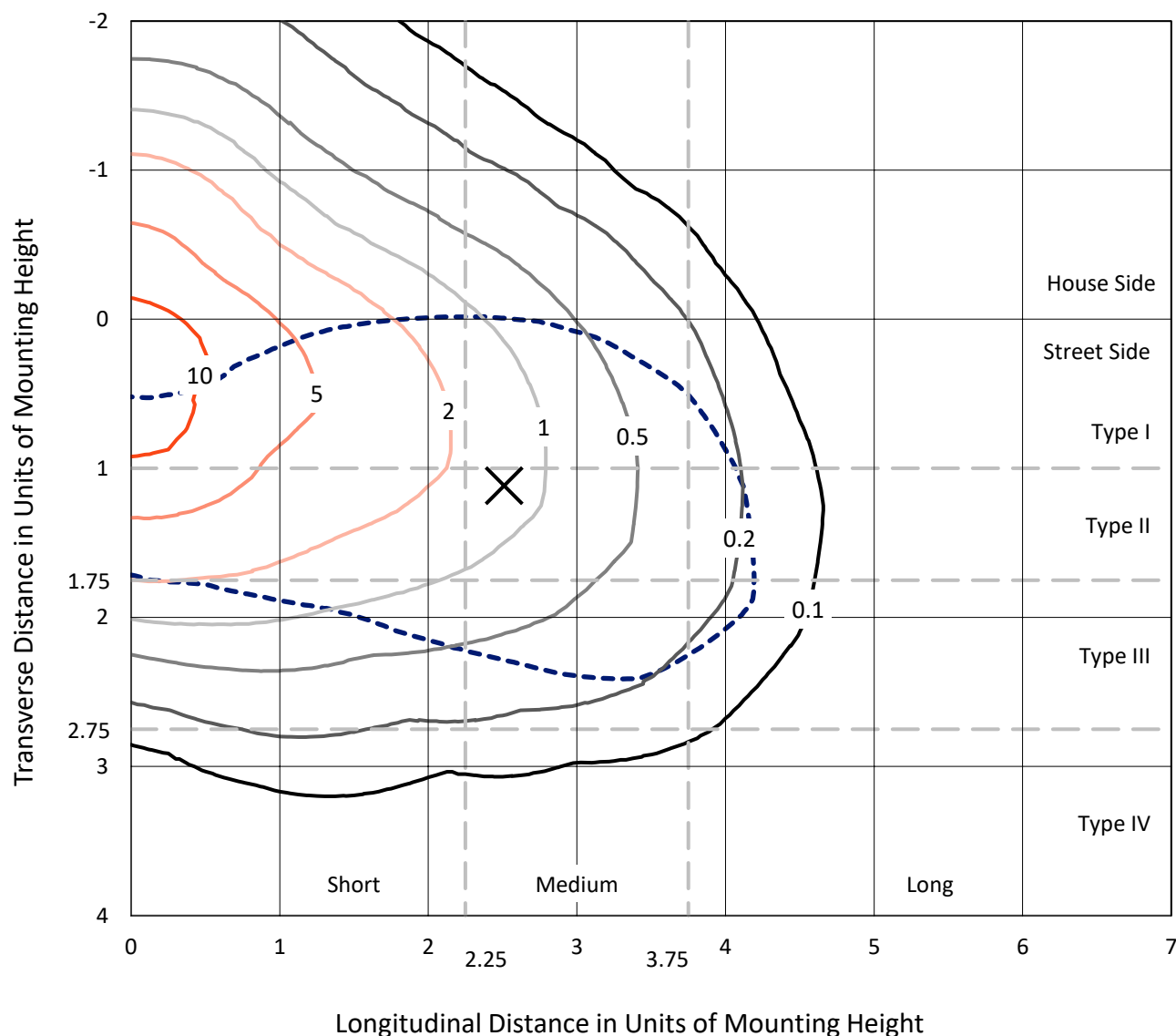


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Iso-Footcandle Lines of Horizontal Illumination

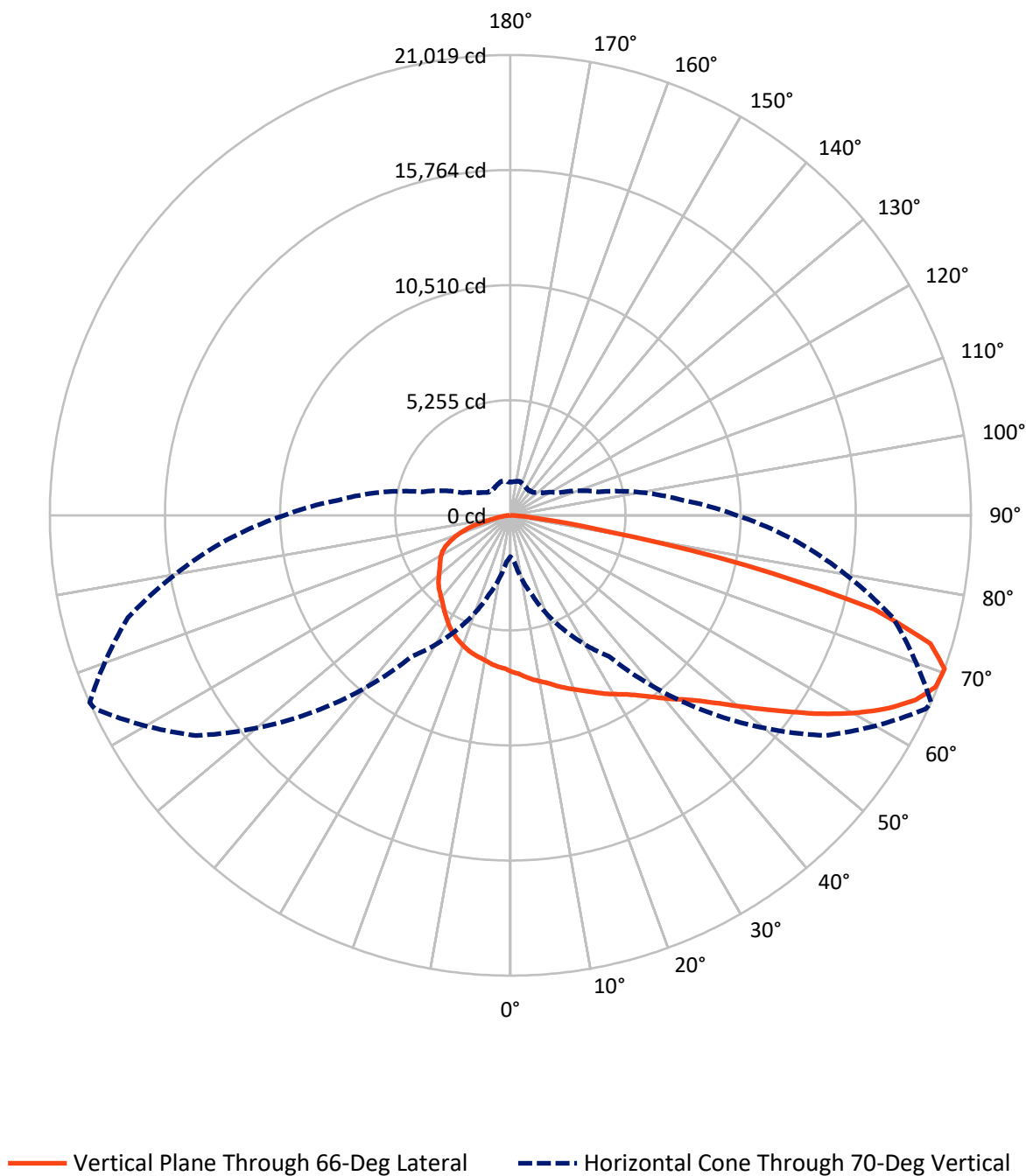
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.4 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10489.7	0.0	10489.7
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	29097.3	0.0	29097.3
	% Fixture	73.5	0.0	73.5
Total	Lumens	39587.0	0.0	39587.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	686.5	1.7
10°-20°	2059.3	5.2
20°-30°	3452.1	8.7
30°-40°	5168.9	13.1
40°-50°	6910.8	17.5
50°-60°	8068.6	20.4
60°-70°	8023.0	20.3
70°-80°	4749.7	12.0
80°-90°	468.1	1.2
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°	39587.0	100.0
0°-180°	39587.0	100.0

Coefficient of Utilization



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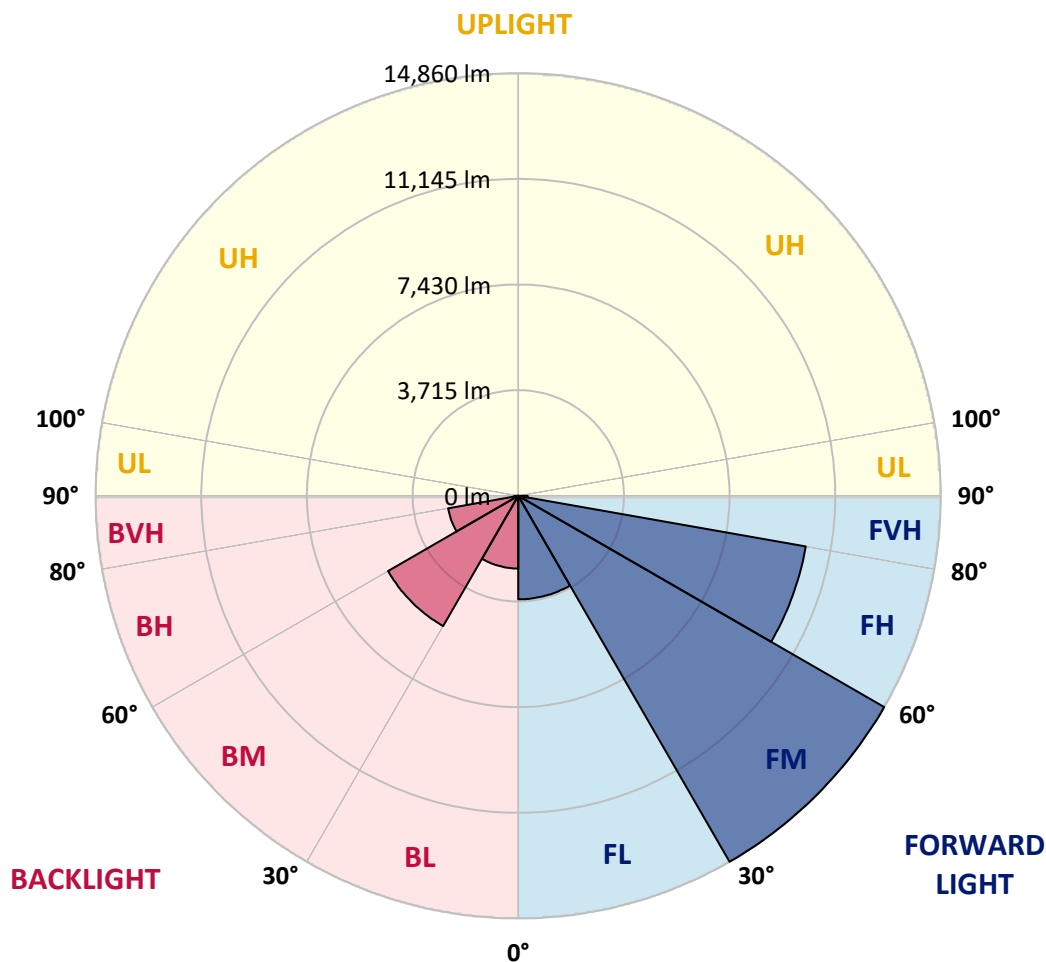
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3641.0	9.2			
FM	(30°-60°)	14860.4	37.5			
FH	(60°-80°)	10267.0	25.9			G4/12000
FVH	(80°-90°)	329.0	0.8			G3/500
BL	(0°-30°)	2556.9	6.5	B4/5000		
BM	(30°-60°)	5287.9	13.4	B4/8500		
BH	(60°-80°)	2505.7	6.3	B4/5000		G4/5000
BVH	(80°-90°)	139.1	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6
2.5°	7407.2	7395.5	7389.7	7366.4	7313.8	7337.2	7284.6	7249.6	7243.8	7162.1	7115.4
5°	7710.7	7704.9	7693.2	7658.2	7576.5	7588.2	7500.6	7436.4	7418.9	7290.5	7191.2
7.5°	7967.6	7955.9	7950.1	7903.4	7815.8	7810.0	7704.9	7611.5	7582.3	7407.2	7255.5
10°	8166.0	8148.5	8160.2	8113.5	8020.1	8002.6	7868.3	7745.8	7716.6	7494.8	7284.6
12.5°	8335.3	8323.6	8341.1	8300.3	8224.4	8206.9	8072.6	7915.0	7880.0	7623.2	7348.8
15°	8522.1	8481.2	8516.3	8498.7	8446.2	8440.4	8317.8	8142.7	8096.0	7786.6	7448.1
17.5°	8621.3	8598.0	8638.8	8644.7	8621.3	8662.2	8545.4	8335.3	8294.5	7938.4	7535.6
20°	8691.4	8656.3	8703.0	8738.1	8755.6	8837.3	8743.9	8539.6	8492.9	8084.3	7617.4
22.5°	8930.7	8854.8	8860.6	8884.0	8895.7	9012.4	8954.0	8755.6	8708.9	8265.3	7716.6
25°	9531.9	9380.1	9280.9	9210.9	9129.1	9228.4	9193.4	9000.7	8959.9	8481.2	7839.2
27.5°	10465.8	10273.2	10074.8	9870.5	9549.4	9508.6	9450.2	9275.1	9228.4	8697.2	7961.7
30°	11528.2	11335.6	11102.1	10775.2	10174.0	9858.8	9724.5	9531.9	9479.4	8889.8	8078.5
32.5°	12584.7	12415.4	12181.9	11785.0	10927.0	10284.9	9998.9	9800.4	9747.9	9100.0	8218.6
35°	13407.7	13302.6	13150.9	12654.7	11674.1	10786.9	10395.8	10156.5	10098.1	9432.7	8475.4
37.5°	14073.1	13997.3	13868.8	13349.3	12217.0	11288.9	10851.1	10576.7	10512.5	9794.6	8749.7
40°	15053.8	14855.3	14750.2	13997.3	12689.8	11744.1	11364.7	11078.7	11008.7	10179.8	8971.5
42.5°	15888.5	15742.5	15614.1	14575.1	13139.2	12135.2	11849.2	11586.5	11493.2	10559.2	9210.9
45°	16028.5	16086.9	16022.7	14861.1	13851.3	12520.5	12339.5	12170.3	12082.7	11072.9	9572.8
47.5°	16034.4	16034.4	15655.0	15024.6	14732.7	12952.4	12864.9	12923.2	12829.8	11726.6	10004.7
50°	15614.1	15690.0	15491.5	15065.4	14966.2	13384.4	13506.9	13822.1	13728.7	12421.2	10471.7
52.5°	14744.4	14995.4	14989.6	15001.2	14627.7	13752.1	14184.0	14902.0	14744.4	13203.4	10967.8
55°	13209.2	13711.2	14160.7	14545.9	14335.8	13973.9	15012.9	16051.9	15888.5	14079.0	11469.8
57.5°	11895.9	12217.0	12777.3	13868.8	13991.4	14166.5	15789.2	17254.3	17108.4	15047.9	11995.1
60°	10395.8	10839.4	11399.8	12952.4	13571.1	14417.5	16641.4	18427.6	18287.5	16028.5	12503.0
62.5°	8090.2	8662.2	9782.9	11545.7	12958.3	14575.1	17312.7	19460.7	19396.5	16956.6	12958.3
65°	5638.6	6146.4	7716.6	9817.9	11983.5	14505.1	17849.7	20383.0	20324.6	17715.5	13279.3
67.5°	3292.1	3881.6	5656.1	7903.4	10261.5	14020.6	18024.8	20925.8	20925.8	18176.6	13366.8
70°	1879.5	2153.9	3729.9	5761.2	7868.3	12683.9	17534.5	20920.0	21019.2	18071.5	13005.0
72.5°	1313.3	1435.9	2509.9	3875.8	5335.1	10261.5	16250.4	19910.2	20044.4	17079.2	11767.5
75°	1021.5	1109.0	1768.6	2644.2	3362.1	6969.4	13442.7	16787.4	17143.4	14557.6	9514.4
77.5°	776.3	840.5	1033.2	1651.9	2153.9	4004.2	8872.3	11008.7	11032.0	8913.2	5101.6
80°	566.2	630.4	688.8	1009.8	1144.1	1873.7	3350.5	4599.6	4471.2	4313.6	2760.9
82.5°	338.5	402.8	420.3	548.7	560.4	799.7	1173.2	1482.6	1424.2	1897.0	1295.8
85°	145.9	204.3	216.0	251.0	239.3	326.9	467.0	391.1	350.2	402.8	280.2
87.5°	35.0	58.4	58.4	64.2	52.5	81.7	87.6	64.2	58.4	70.0	70.0
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°	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6
2.5°	7103.7	7086.2	7092.0	6992.8	6963.6	6934.4	6916.9	6905.2	6893.6	6911.1	6928.6
5°	7156.2	7115.4	7068.7	6922.7	6864.4	6800.2	6753.5	6712.6	6695.1	6695.1	6712.6
7.5°	7197.1	7127.0	7027.8	6835.2	6730.1	6642.6	6566.7	6514.2	6485.0	6485.0	6502.5
10°	7202.9	7103.7	6946.1	6712.6	6572.5	6444.1	6356.5	6298.2	6257.3	6257.3	6269.0
12.5°	7237.9	7103.7	6899.4	6619.2	6444.1	6286.5	6181.4	6093.9	6076.4	6076.4	6088.0
15°	7296.3	7132.9	6870.2	6537.5	6327.4	6146.4	6029.7	5936.3	5901.3	5924.6	5930.4
17.5°	7348.8	7150.4	6817.7	6432.4	6181.4	5983.0	5854.6	5772.8	5726.1	5778.7	5778.7
20°	7383.9	7150.4	6741.8	6298.2	6023.8	5802.0	5679.5	5580.2	5545.2	5609.4	5615.2
22.5°	7436.4	7144.6	6660.1	6163.9	5854.6	5621.1	5498.5	5422.6	5405.1	5475.2	5498.5
25°	7494.8	7156.2	6572.5	6012.2	5667.8	5440.1	5346.7	5311.7	5323.4	5410.9	5440.1
27.5°	7559.0	7179.6	6485.0	5842.9	5463.5	5259.2	5206.7	5224.2	5270.9	5381.8	5416.8
30°	7617.4	7185.4	6362.4	5644.4	5230.0	5037.4	5060.7	5136.6	5206.7	5317.6	5358.4
32.5°	7693.2	7191.2	6234.0	5428.5	4979.0	4838.9	4944.0	5066.6	5136.6	5241.7	5288.4
35°	7880.0	7290.5	6134.7	5218.3	4745.5	4669.6	4844.8	5002.4	5043.2	5136.6	5177.5
37.5°	8096.0	7453.9	6082.2	5002.4	4517.9	4500.4	4722.2	4879.8	4891.4	4949.8	4990.7
40°	8230.2	7524.0	6023.8	4821.4	4313.6	4325.3	4552.9	4675.5	4652.1	4693.0	4722.2
42.5°	8364.5	7547.3	5901.3	4669.6	4121.0	4132.6	4307.7	4395.3	4407.0	4494.5	4535.4
45°	8592.1	7611.5	5767.0	4529.6	3945.8	3905.0	4010.1	4126.8	4278.6	4447.8	4494.5
47.5°	8895.7	7745.8	5626.9	4360.3	3776.6	3642.3	3683.2	3887.5	4045.1	4202.7	4231.9
50°	9205.0	7880.0	5498.5	4156.0	3607.3	3362.1	3379.7	3566.4	3694.9	3817.4	3834.9
52.5°	9508.6	7996.8	5387.6	3963.4	3414.7	3029.4	3099.5	3292.1	3379.7	3438.0	3455.5
55°	9812.1	8096.0	5288.4	3799.9	3192.9	2766.8	2831.0	3011.9	3099.5	3128.7	3140.3
57.5°	10127.3	8212.7	5212.5	3659.8	2941.9	2533.3	2574.1	2702.6	2784.3	2819.3	2807.6
60°	10390.0	8312.0	5171.6	3513.9	2690.9	2317.3	2305.6	2422.4	2539.1	2574.1	2562.5
62.5°	10594.2	8376.2	5107.4	3327.1	2469.1	2101.3	2043.0	2194.7	2317.3	2340.7	2358.2
65°	10705.2	8382.0	4949.8	3087.8	2241.4	1867.9	1827.0	1978.8	2054.6	2078.0	2078.0
67.5°	10687.6	8288.6	4640.5	2766.8	2031.3	1657.7	1622.7	1716.1	1827.0	1844.5	1827.0
70°	10325.7	7903.4	4144.3	2428.2	1780.3	1470.9	1406.7	1500.1	1605.2	1541.0	1511.8
72.5°	9298.4	6905.2	3414.7	2054.6	1500.1	1237.5	1208.3	1301.7	1307.5	1319.2	1290.0
75°	7337.2	5142.4	2556.6	1599.4	1214.1	1039.0	1033.2	1015.6	1039.0	1085.7	1050.7
77.5°	3852.5	2568.3	1383.4	980.6	881.4	834.7	793.8	788.0	858.0	887.2	852.2
80°	2089.7	1441.8	793.8	589.5	537.0	542.8	595.4	583.7	659.6	677.1	647.9
82.5°	910.6	682.9	391.1	356.1	356.1	350.2	367.7	408.6	490.3	490.3	391.1
85°	198.5	169.3	151.8	175.1	198.5	198.5	198.5	198.5	140.1	75.9	52.5
87.5°	64.2	64.2	64.2	70.0	75.9	75.9	64.2	46.7	29.2	5.8	0.0
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)