

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: P842196

Luminaire Tested: **ARCH4-280-740-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842196
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-280-740-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1085mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40968 lumens
Efficiency: N/A
Efficacy: 146.5 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G4

Input Watts (W): 279.7
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



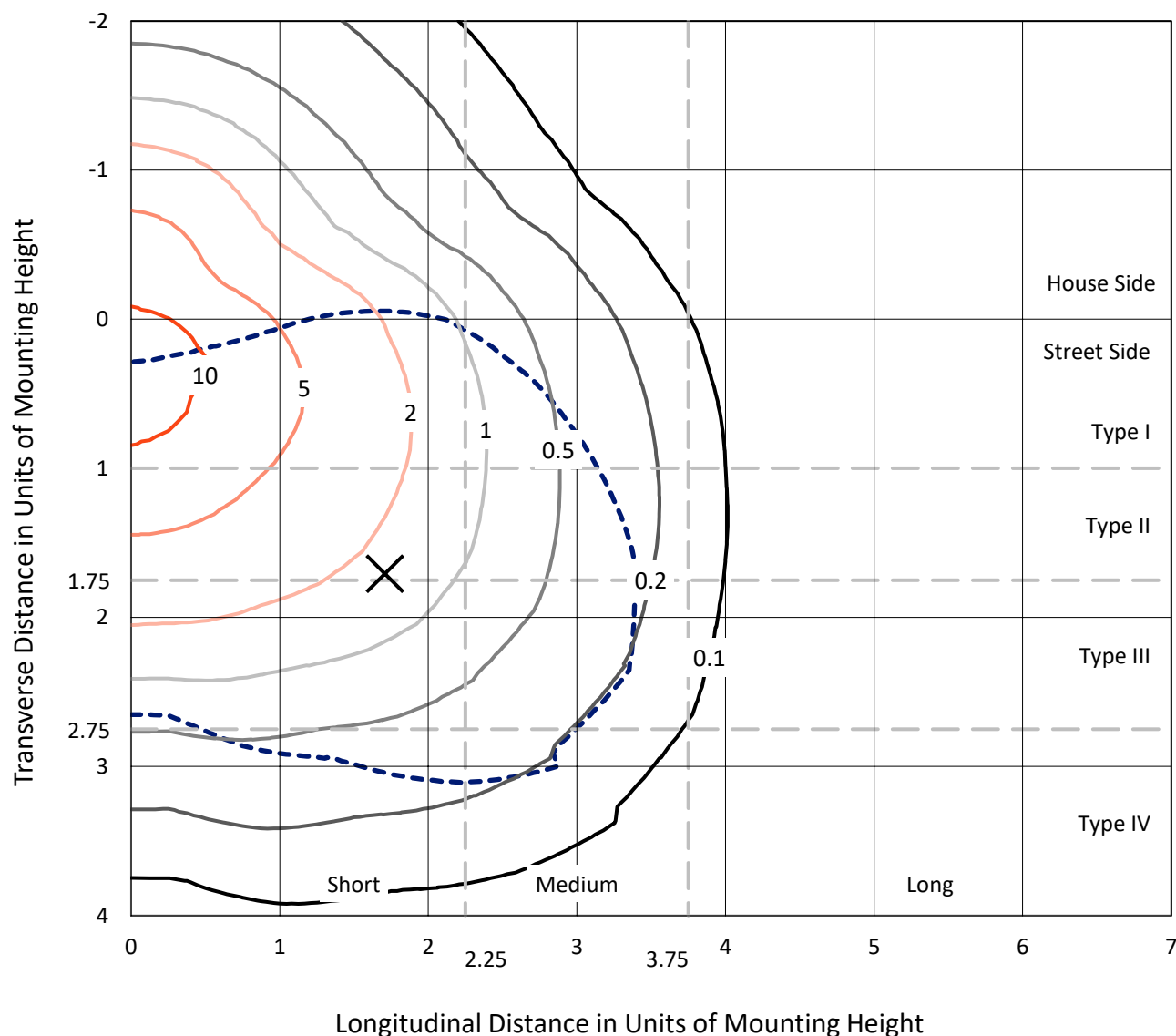
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

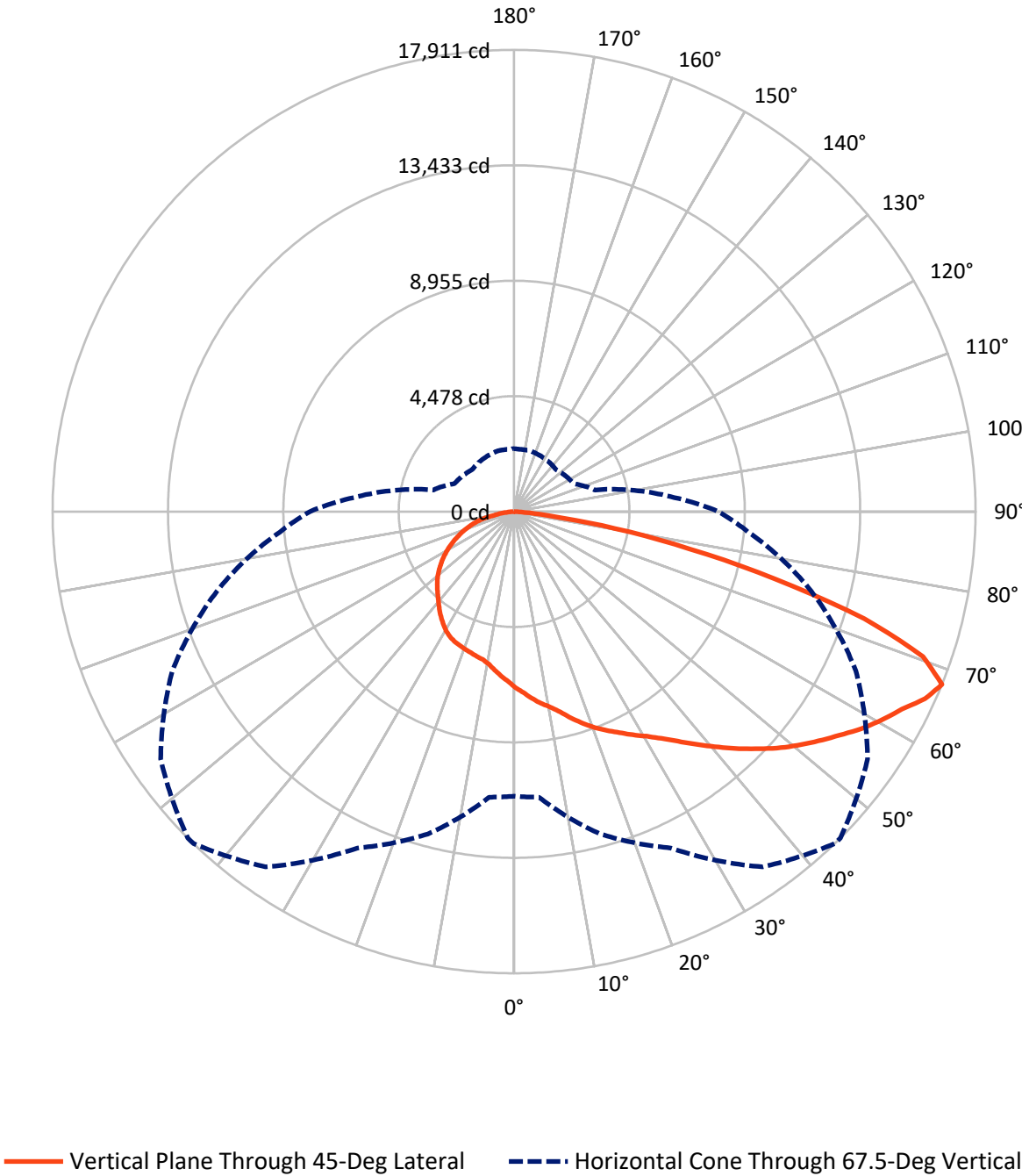


Based on 25 foot mounting height. Maximum calculated value = 12.7 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10944.6	0.0	10944.6
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	30023.4	0.0	30023.4
	% Fixture	73.3	0.0	73.3
Total	Lumens	40968.0	0.0	40968.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	654.2	1.6
10°-20°	2020.9	4.9
20°-30°	3488.3	8.5
30°-40°	5144.0	12.6
40°-50°	6969.1	17.0
50°-60°	8517.9	20.8
60°-70°	8785.0	21.4
70°-80°	4811.8	11.7
80°-90°	576.7	1.4
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°	40968.0	100.0
0°-180°	40968.0	100.0

Coefficient of Utilization



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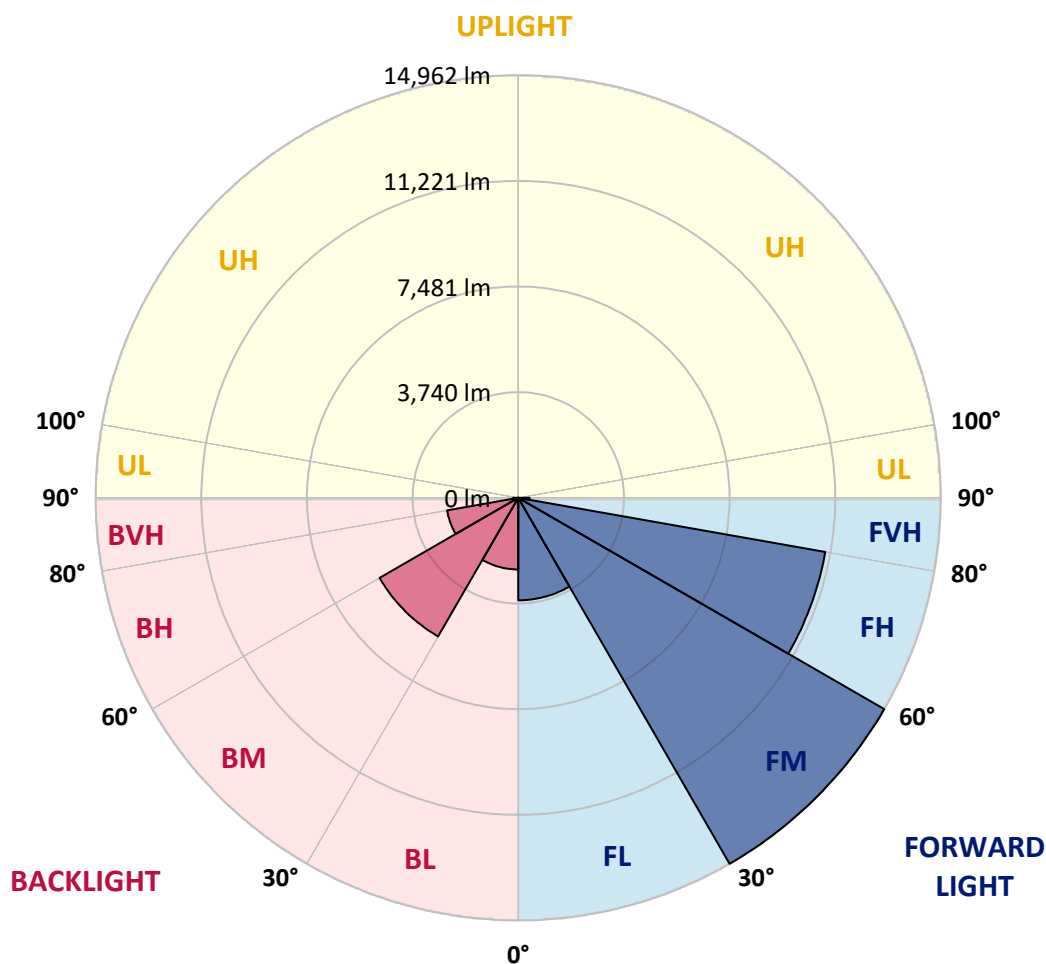
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3626.8	8.9			
FM	(30°-60°)	14961.9	36.5			
FH	(60°-80°)	11037.4	26.9			G4/12000
FVH	(80°-90°)	397.3	1.0			G3/500
BL	(0°-30°)	2536.6	6.2	B4/5000		
BM	(30°-60°)	5669.1	13.8	B4/8500		
BH	(60°-80°)	2559.5	6.2	B4/5000		G4/5000
BVH	(80°-90°)	179.4	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	6832.7	6832.7	6832.7	6832.7	6832.7	6832.7	6832.7	6832.7	6832.7	6832.7	6832.7
2.5°	7131.9	7125.7	7138.2	7094.5	7038.4	7032.2	7032.2	6994.8	6951.1	6863.9	6795.3
5°	7468.6	7456.1	7462.3	7400.0	7325.2	7287.8	7281.5	7200.5	7100.8	6963.6	6838.9
7.5°	7780.3	7767.8	7761.6	7693.0	7580.8	7518.4	7512.2	7393.8	7275.3	7063.4	6882.6
10°	8073.3	8060.8	8048.4	7954.8	7817.7	7724.2	7711.7	7562.1	7412.5	7150.6	6920.0
12.5°	8447.3	8422.4	8409.9	8297.7	8098.2	7998.5	7979.8	7780.3	7593.3	7275.3	6994.8
15°	8840.1	8821.4	8802.7	8696.7	8472.3	8341.4	8310.2	8060.8	7805.2	7437.4	7107.0
17.5°	9133.1	9114.4	9114.4	9020.9	8815.2	8665.5	8640.6	8341.4	8023.4	7587.0	7194.3
20°	9313.9	9295.2	9313.9	9257.8	9101.9	8977.3	8952.3	8621.9	8241.6	7724.2	7269.1
22.5°	9444.8	9426.1	9457.3	9432.3	9320.1	9245.3	9226.6	8902.4	8466.0	7867.6	7343.9
25°	9675.5	9675.5	9675.5	9631.8	9525.9	9500.9	9500.9	9220.4	8752.8	8054.6	7456.1
27.5°	10136.8	10111.9	10080.7	9956.0	9775.2	9769.0	9806.4	9544.6	9083.2	8297.7	7593.3
30°	10816.3	10803.9	10685.4	10423.6	10118.1	10086.9	10111.9	9893.7	9438.6	8553.3	7749.1
32.5°	11695.4	11651.7	11408.6	11015.8	10579.4	10436.1	10485.9	10255.3	9812.6	8815.2	7898.7
35°	12318.8	12331.3	12156.7	11801.3	11283.9	10903.6	10941.0	10660.5	10217.9	9108.2	8085.8
37.5°	13035.7	13079.4	12817.5	12549.4	12069.4	11421.1	11458.5	11078.2	10623.1	9476.0	8285.3
40°	14027.0	13939.7	13497.0	13179.1	12649.2	11963.4	11994.6	11545.7	11090.6	9825.1	8515.9
42.5°	14856.1	14700.2	14164.1	13758.9	13123.0	12537.0	12568.2	12050.7	11564.4	10211.6	8771.5
45°	16046.8	15616.7	14843.6	14644.1	13609.3	13098.1	13129.2	12586.9	12063.2	10623.1	9045.8
47.5°	16738.8	16053.1	15560.6	15454.6	14145.4	13677.8	13715.2	13154.2	12599.3	11090.6	9332.6
50°	16695.2	16252.6	16109.2	15847.3	14619.2	14220.2	14257.6	13740.2	13141.7	11552.0	9606.9
52.5°	16408.4	16489.5	16414.7	15978.3	15093.0	14743.9	14787.5	14320.0	13696.5	11982.1	9862.5
55°	16851.0	16907.2	16763.8	16190.2	15616.7	15267.6	15317.4	14930.9	14245.2	12362.4	10080.7
57.5°	17381.0	17181.5	17038.1	16564.3	16159.1	15834.9	15891.0	15554.3	14719.0	12667.9	10249.0
60°	17356.0	16938.3	17081.7	16589.2	16526.9	16358.5	16408.4	16065.5	15080.5	12892.3	10317.6
62.5°	16078.0	15853.6	16576.7	16408.4	16826.1	16826.1	16888.5	16377.2	15298.7	12985.8	10280.2
65°	13858.6	13871.1	15142.9	15841.1	17181.5	17468.2	17518.1	16570.5	15174.0	12711.5	9931.1
67.5°	11040.8	11121.8	12948.4	14401.0	16826.1	17904.6	17910.9	16745.1	14637.9	11938.5	9120.6
70°	8079.5	8141.9	10298.9	12063.2	15149.1	16938.3	16838.6	16252.6	13472.1	10591.9	7855.1
72.5°	5461.2	5517.3	7736.6	9264.0	12431.0	14425.9	14207.7	14363.6	11483.4	8702.9	6315.2
75°	3671.9	3740.5	5504.8	6627.0	9145.6	10953.5	10467.2	10878.7	8883.7	6589.6	4607.1
77.5°	2312.9	2356.5	3497.4	4345.2	6246.7	7456.1	6969.8	6976.1	5118.3	3547.3	2475.0
80°	1471.3	1483.7	2119.6	2506.1	3615.8	4482.4	3965.0	3223.1	2306.7	1882.7	1477.5
82.5°	854.1	835.4	1265.5	1415.2	1720.6	1701.9	1408.9	1334.1	1009.9	941.4	754.3
85°	342.9	317.9	554.8	517.4	523.7	554.8	411.5	411.5	330.4	255.6	187.0
87.5°	68.6	68.6	74.8	68.6	68.6	74.8	56.1	56.1	49.9	49.9	49.9
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°	6832.7	6832.7	6832.7	6832.7	6832.7	6832.7	6832.7	6832.7	6832.7	6832.7	6832.7
2.5°	6782.8	6770.3	6739.2	6658.1	6614.5	6589.6	6552.1	6539.7	6533.4	6539.7	6558.4
5°	6801.5	6757.9	6670.6	6539.7	6452.4	6396.3	6333.9	6309.0	6290.3	6290.3	6309.0
7.5°	6814.0	6745.4	6595.8	6402.5	6277.8	6190.6	6115.8	6084.6	6078.3	6097.0	6103.3
10°	6820.2	6720.5	6508.5	6265.4	6103.3	5991.1	5916.3	5897.6	5916.3	5953.7	5959.9
12.5°	6863.9	6726.7	6458.6	6171.9	5978.6	5866.4	5810.3	5810.3	5860.1	5928.7	5935.0
15°	6938.7	6770.3	6433.7	6097.0	5897.6	5797.8	5779.1	5810.3	5885.1	5991.1	6003.5
17.5°	6994.8	6795.3	6377.6	5997.3	5791.6	5729.2	5760.4	5835.2	5941.2	6084.6	6097.0
20°	7032.2	6795.3	6296.5	5878.9	5685.6	5673.1	5760.4	5878.9	5991.1	6159.4	6178.1
22.5°	7069.6	6782.8	6203.0	5735.5	5567.1	5604.5	5766.6	5916.3	6028.5	6209.3	6240.4
25°	7138.2	6801.5	6109.5	5592.1	5442.5	5548.4	5760.4	5941.2	6059.6	6246.7	6296.5
27.5°	7231.7	6845.2	6040.9	5461.2	5317.8	5461.2	5716.8	5935.0	6059.6	6240.4	6296.5
30°	7331.4	6895.0	5959.9	5317.8	5174.4	5336.5	5623.3	5866.4	6009.8	6178.1	6246.7
32.5°	7437.4	6951.1	5891.3	5161.9	4999.8	5168.2	5486.1	5760.4	5916.3	6072.1	6146.9
35°	7580.8	7050.9	5853.9	5037.2	4844.0	4993.6	5311.5	5623.3	5791.6	5935.0	6022.2
37.5°	7755.3	7175.6	5835.2	4912.6	4675.7	4800.3	5124.5	5454.9	5635.7	5754.2	5835.2
40°	7954.8	7331.4	5829.0	4794.1	4507.3	4600.8	4931.3	5261.7	5436.2	5529.7	5598.3
42.5°	8179.3	7506.0	5816.5	4675.7	4339.0	4413.8	4744.2	5068.4	5218.0	5299.1	5361.4
45°	8416.2	7680.5	5791.6	4532.3	4158.2	4245.5	4551.0	4837.7	4993.6	5062.2	5130.7
47.5°	8653.1	7855.1	5741.7	4370.2	3996.1	4077.2	4345.2	4594.6	4719.3	4781.6	4850.2
50°	8883.7	8010.9	5623.3	4183.1	3827.8	3902.6	4108.3	4276.7	4370.2	4420.0	4488.6
52.5°	9089.5	8116.9	5454.9	3965.0	3659.5	3696.9	3834.0	3977.4	4052.2	4058.5	4120.8
55°	9264.0	8173.0	5211.8	3740.5	3478.7	3484.9	3559.7	3671.9	3703.1	3678.2	3721.8
57.5°	9363.8	8141.9	4943.7	3509.9	3291.7	3266.7	3322.8	3378.9	3385.2	3322.8	3366.5
60°	9388.7	7998.5	4594.6	3279.2	3104.6	3036.1	3054.8	3042.3	3029.8	3004.9	3042.3
62.5°	9264.0	7693.0	4208.1	3054.8	2905.1	2799.2	2792.9	2786.7	2805.4	2811.6	2817.9
65°	8808.9	7119.5	3746.8	2824.1	2693.2	2549.8	2543.6	2618.4	2643.3	2605.9	2618.4
67.5°	7929.9	6240.4	3241.8	2556.0	2425.1	2300.4	2350.3	2393.9	2437.6	2425.1	2437.6
70°	6683.1	5124.5	2780.5	2256.8	2132.1	2063.5	2119.6	2157.0	2163.3	2150.8	2163.3
72.5°	5255.4	4002.4	2350.3	1951.3	1839.1	1807.9	1876.5	1907.7	1963.8	1988.7	1994.9
75°	3796.6	2955.0	1926.4	1620.9	1527.4	1527.4	1589.7	1645.8	1695.7	1664.5	1645.8
77.5°	2119.6	1764.3	1384.0	1115.9	1134.6	1221.9	1246.8	1309.2	1359.1	1352.8	1340.4
80°	1284.2	1103.5	935.1	723.2	716.9	785.5	947.6	1053.6	1078.5	1022.4	1016.2
82.5°	667.1	579.8	498.7	405.2	448.9	523.7	548.6	660.8	729.4	704.5	735.6
85°	168.3	162.1	180.8	187.0	230.7	255.6	280.5	330.4	218.2	106.0	106.0
87.5°	49.9	49.9	62.3	62.3	81.0	99.7	93.5	93.5	49.9	6.2	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)