

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: P841481

Luminaire Tested: **ARCH4-180-750-U-T2U**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841481
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: ARCH4-180-750-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1455mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30071 lumens
Efficiency: N/A
Efficacy: 167.1 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): 180
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

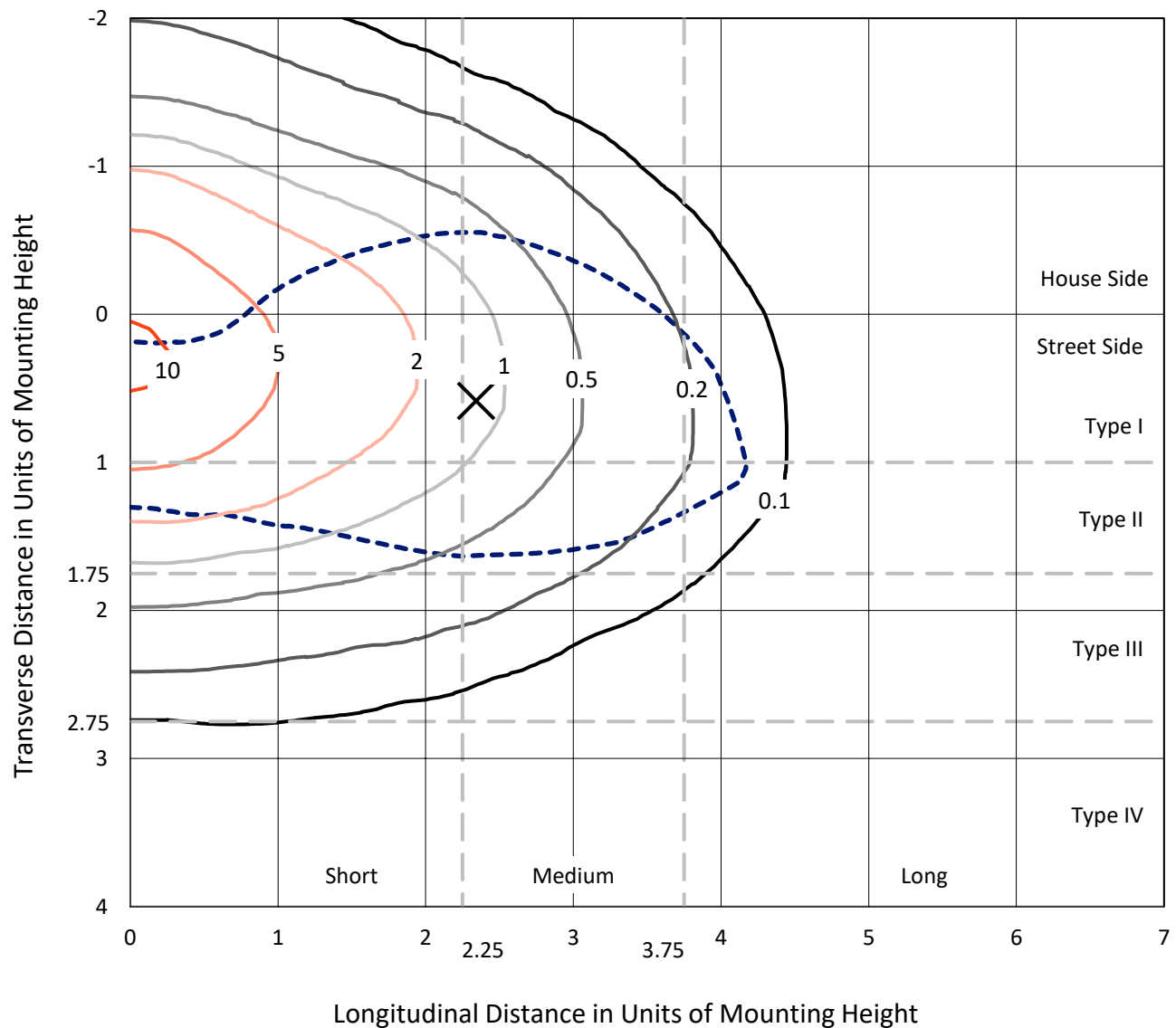


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Iso-Footcandle Lines of Horizontal Illumination

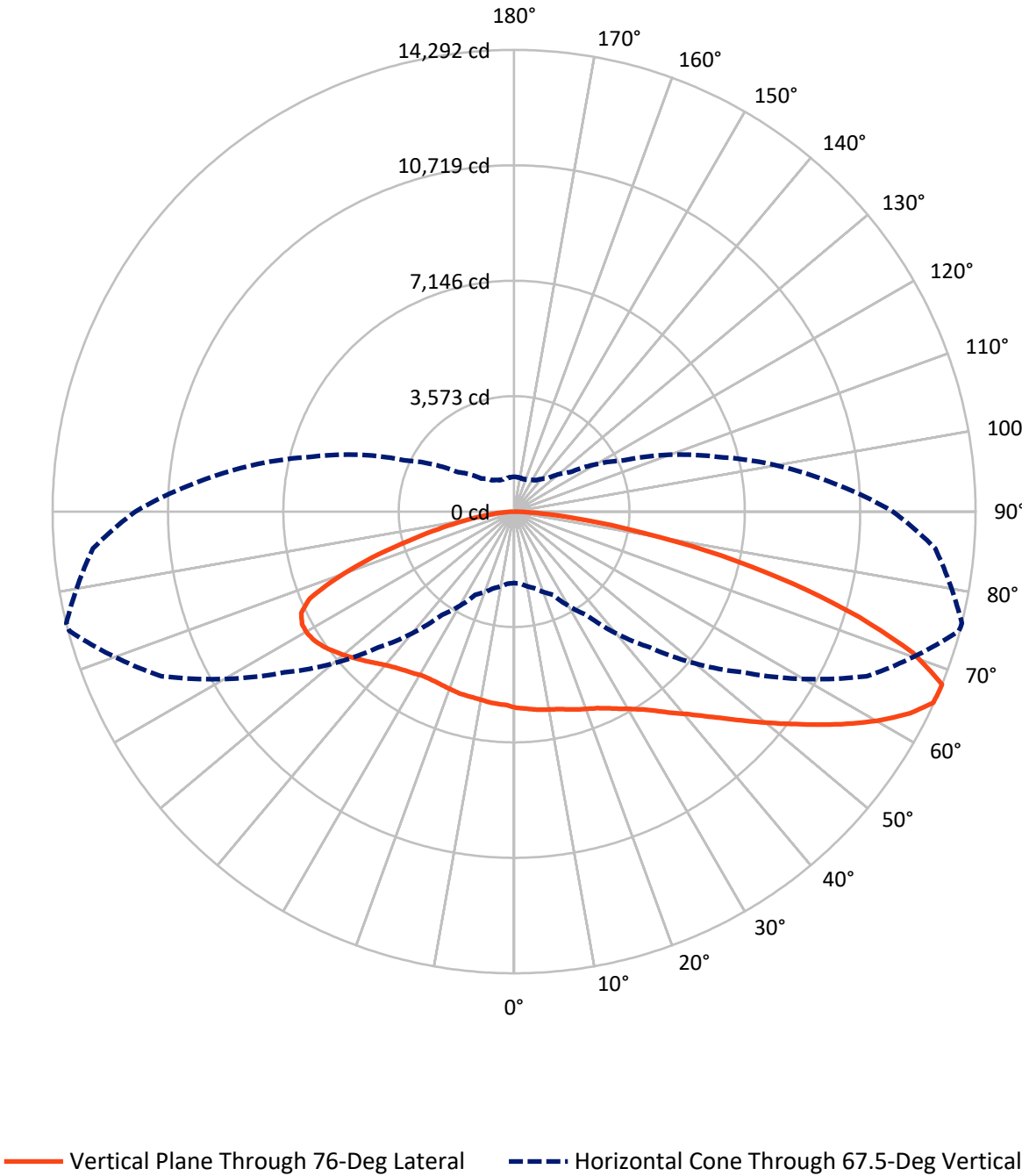
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11 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	10161.1	0.0	10161.1
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	19909.9	0.0	19909.9
	% Fixture	66.2	0.0	66.2
Total	Lumens	30071.0	0.0	30071.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	585.7	1.9
10°-20°	1790.7	6.0
20°-30°	3042.4	10.1
30°-40°	4329.0	14.4
40°-50°	5467.3	18.2
50°-60°	5919.4	19.7
60°-70°	5505.7	18.3
70°-80°	2957.0	9.8
80°-90°	473.8	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°	30071.0	100.0
0°-180°	30071.0	100.0

Coefficient of Utilization



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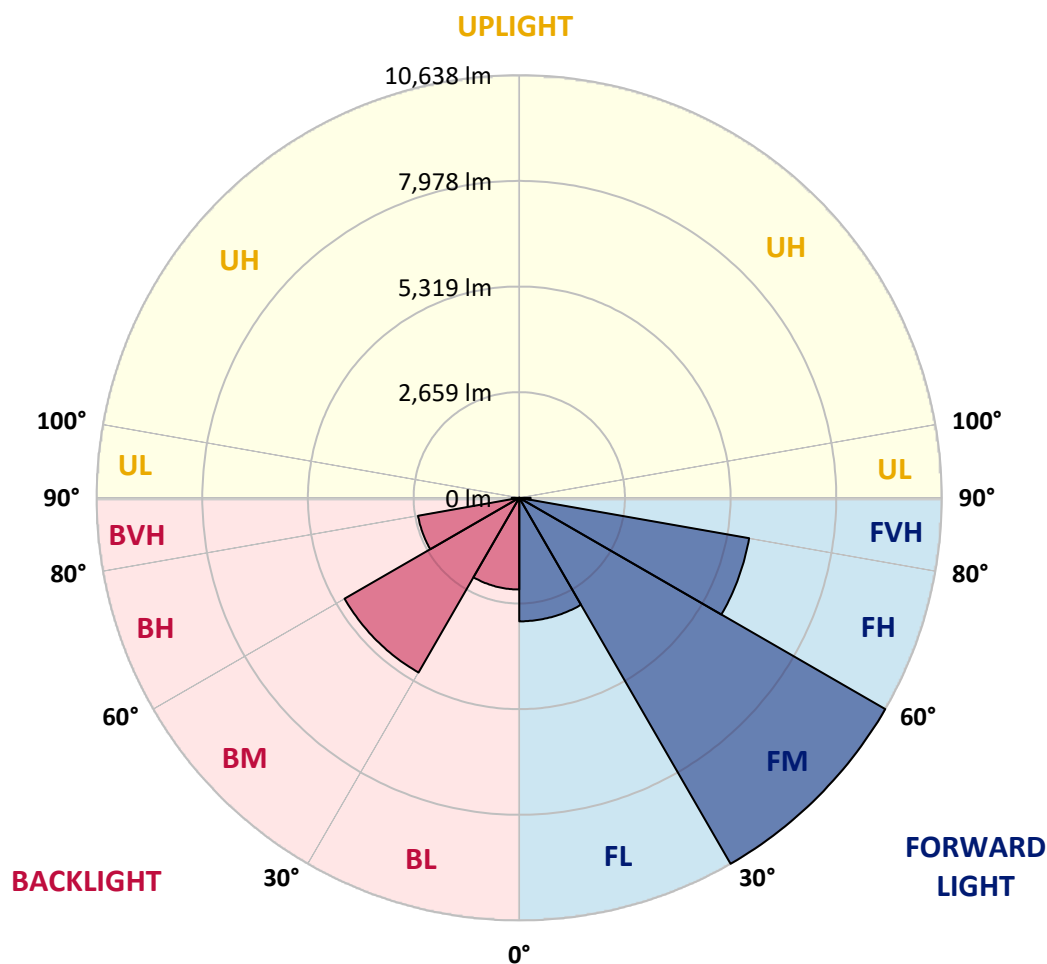
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3109.7	10.3			
FM	(30°-60°)	10638.0	35.4			
FH	(60°-80°)	5875.6	19.5			G3/7500
FVH	(80°-90°)	286.6	1.0			G3/500
BL	(0°-30°)	2309.2	7.7	B3/2500		
BM	(30°-60°)	5077.7	16.9	B4/8500		
BH	(60°-80°)	2587.1	8.6	B4/5000		G4/5000
BVH	(80°-90°)	187.2	0.6			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	6074.3	6074.3	6074.3	6074.3	6074.3	6074.3	6074.3	6074.3	6074.3	6074.3	6074.3
2.5°	6258.5	6247.3	6202.7	6208.3	6208.3	6202.7	6135.7	6107.8	6107.8	6102.2	6040.8
5°	6481.8	6465.1	6414.8	6403.7	6381.3	6353.4	6247.3	6185.9	6158.0	6152.4	6068.7
7.5°	6744.2	6721.9	6660.5	6627.0	6571.2	6498.6	6364.6	6269.7	6202.7	6197.1	6079.9
10°	7006.6	6984.3	6911.7	6850.3	6772.1	6654.9	6481.8	6342.3	6236.2	6225.0	6085.4
12.5°	7319.3	7296.9	7207.6	7129.5	7012.2	6855.9	6627.0	6437.2	6292.0	6275.3	6102.2
15°	7648.7	7615.2	7525.8	7436.5	7291.4	7090.4	6816.8	6565.6	6381.3	6353.4	6152.4
17.5°	7922.2	7877.6	7805.0	7715.7	7553.8	7319.3	7006.6	6694.0	6465.1	6442.8	6202.7
20°	8156.7	8123.2	8045.1	7961.3	7788.2	7531.4	7185.3	6822.4	6543.2	6515.3	6241.8
22.5°	8380.0	8335.4	8290.7	8229.3	8039.5	7754.8	7391.9	6978.7	6643.7	6610.2	6292.0
25°	8636.9	8586.6	8569.9	8536.4	8313.0	8022.7	7643.1	7174.1	6783.3	6744.2	6381.3
27.5°	8955.1	8899.3	8865.8	8865.8	8597.8	8296.3	7911.1	7403.0	6945.2	6911.7	6493.0
30°	9290.1	9223.1	9172.8	9172.8	8871.3	8569.9	8173.5	7631.9	7129.5	7090.4	6638.2
32.5°	9586.0	9519.0	9463.1	9457.6	9144.9	8843.4	8447.0	7883.2	7352.8	7302.5	6816.8
35°	9814.9	9753.5	9703.2	9714.4	9418.5	9122.6	8754.1	8218.1	7631.9	7576.1	7051.3
37.5°	9954.4	9932.1	9904.2	9943.3	9669.7	9390.6	9072.3	8542.0	7950.2	7899.9	7341.6
40°	10027.0	10010.3	10121.9	10172.2	9881.9	9630.6	9390.6	8876.9	8296.3	8240.5	7676.6
42.5°	10133.1	10272.7	10317.3	10306.2	10038.2	9814.9	9680.9	9239.8	8703.9	8653.6	8078.6
45°	9753.5	9720.0	9965.6	10099.6	10049.4	9932.1	9954.4	9675.3	9178.4	9128.2	8542.0
47.5°	9245.4	9200.7	9340.3	9669.7	9865.1	9976.8	10200.1	10127.5	9725.5	9680.9	9083.5
50°	8173.5	8234.9	8754.1	9195.2	9580.4	9965.6	10406.7	10613.2	10328.5	10283.8	9664.1
52.5°	6984.3	7045.7	7587.3	8603.4	9234.2	9881.9	10557.4	11099.0	10981.7	10931.5	10283.8
55°	6118.9	6252.9	6867.1	7604.0	8742.9	9619.5	10646.7	11595.8	11685.2	11640.5	10959.4
57.5°	5259.2	5359.7	5823.0	6476.2	8073.0	9161.7	10641.1	12059.2	12422.1	12377.5	11646.1
60°	4248.6	4377.1	4745.5	5449.0	7179.7	8614.5	10484.8	12422.1	13131.2	13097.7	12310.5
62.5°	3556.4	3595.4	3857.8	4466.4	6029.6	7922.2	10133.1	12617.5	13773.2	13750.9	12907.8
65°	2864.1	2869.6	3109.7	3617.8	4918.6	7062.5	9535.7	12544.9	14258.9	14270.1	13337.7
67.5°	2210.9	2238.8	2456.5	2841.7	3908.1	5945.9	8681.5	12053.6	14264.5	14292.4	13092.1
70°	1529.7	1552.1	1881.5	2255.5	3020.4	4739.9	7525.8	10752.8	13092.1	13114.4	11735.4
72.5°	1077.5	1088.7	1440.4	1803.3	2361.6	3573.1	5677.9	8893.7	11160.4	11177.1	9870.7
75°	803.9	815.1	1016.1	1367.8	1808.9	2473.3	3880.2	6811.2	8916.0	8916.0	7793.8
77.5°	569.5	575.0	658.8	943.5	1205.9	1669.3	2333.7	4460.8	6543.2	6554.4	5677.9
80°	385.2	390.8	429.9	636.5	753.7	904.4	1267.3	2339.3	4125.8	4142.6	3606.6
82.5°	201.0	212.2	240.1	323.8	379.6	502.5	653.2	1189.2	2283.4	2328.1	2166.2
85°	78.2	78.2	89.3	106.1	139.6	195.4	301.5	452.2	1032.9	1066.3	954.7
87.5°	27.9	27.9	33.5	33.5	39.1	44.7	50.2	67.0	117.2	117.2	111.7
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°	6074.3	6074.3	6074.3	6074.3	6074.3	6074.3	6074.3	6074.3	6074.3	6074.3	6074.3
2.5°	6018.4	6018.4	5990.5	6001.7	5996.1	5984.9	5973.8	5990.5	5973.8	5934.7	5929.1
5°	6029.6	6018.4	5973.8	5968.2	5951.5	5929.1	5901.2	5912.4	5884.5	5851.0	5845.4
7.5°	6035.2	6012.9	5951.5	5929.1	5895.6	5851.0	5806.3	5806.3	5767.2	5733.7	5728.1
10°	6024.0	5996.1	5912.4	5867.7	5806.3	5739.3	5677.9	5661.1	5616.5	5577.4	5577.4
12.5°	6029.6	5990.5	5884.5	5811.9	5728.1	5644.4	5566.2	5543.9	5504.8	5465.7	5460.1
15°	6063.1	6007.3	5873.3	5778.4	5655.6	5560.6	5476.9	5460.1	5426.7	5398.7	5398.7
17.5°	6096.6	6024.0	5856.5	5722.5	5571.8	5465.7	5387.6	5387.6	5365.2	5348.5	5348.5
20°	6113.4	6029.6	5823.0	5644.4	5471.3	5359.7	5287.1	5298.2	5292.7	5287.1	5287.1
22.5°	6152.4	6040.8	5795.1	5571.8	5365.2	5248.0	5181.0	5197.7	5192.2	5192.2	5197.7
25°	6213.8	6068.7	5772.8	5504.8	5264.7	5136.3	5063.8	5074.9	5074.9	5074.9	5074.9
27.5°	6297.6	6124.5	5767.2	5443.4	5164.3	5019.1	4929.8	4929.8	4907.4	4913.0	4918.6
30°	6426.0	6230.6	5778.4	5387.6	5058.2	4873.9	4767.9	4751.1	4745.5	4756.7	4762.3
32.5°	6582.3	6375.8	5845.4	5348.5	4946.5	4712.0	4578.0	4572.5	4555.7	4555.7	4555.7
35°	6777.7	6515.3	5906.8	5342.9	4834.9	4539.0	4393.8	4377.1	4338.0	4321.2	4321.2
37.5°	7029.0	6733.1	5979.4	5303.8	4739.9	4371.5	4198.4	4142.6	4097.9	4092.3	4092.3
40°	7336.0	6978.7	6085.4	5259.2	4639.5	4198.4	3969.5	3874.6	3880.2	3902.5	3902.5
42.5°	7698.9	7280.2	6219.4	5236.8	4494.3	4019.7	3701.5	3589.9	3628.9	3651.3	3656.8
45°	8123.2	7637.5	6370.2	5208.9	4360.3	3818.8	3416.8	3277.2	3294.0	3299.5	3305.1
47.5°	8614.5	8033.9	6526.5	5186.6	4209.6	3567.5	3104.1	2919.9	2914.3	2880.8	2892.0
50°	9128.2	8452.6	6688.4	5147.5	4025.3	3271.6	2774.7	2557.0	2512.3	2462.1	2467.7
52.5°	9675.3	8882.5	6839.1	5086.1	3796.4	2970.1	2462.1	2227.6	2138.3	2082.4	2093.6
55°	10278.3	9323.6	6984.3	4991.2	3556.4	2668.7	2182.9	1942.9	1831.2	1786.6	1792.1
57.5°	10831.0	9747.9	7090.4	4873.9	3294.0	2395.1	1937.3	1702.8	1630.2	1624.6	1630.2
60°	11366.9	10105.2	7135.0	4712.0	3026.0	2143.9	1708.4	1529.7	1479.5	1507.4	1513.0
62.5°	11819.2	10334.1	7112.7	4494.3	2752.4	1903.8	1524.2	1395.7	1362.2	1418.1	1423.7
65°	12081.6	10406.7	6956.4	4181.6	2456.5	1669.3	1351.1	1211.5	1194.8	1228.3	1245.0
67.5°	11735.4	9954.4	6532.1	3751.8	2127.1	1451.6	1183.6	1071.9	1044.0	1071.9	1071.9
70°	10401.1	8625.7	5527.1	3070.6	1764.2	1239.4	1027.3	949.1	926.8	949.1	943.5
72.5°	8664.8	7174.1	4354.7	2395.1	1390.2	1044.0	893.3	820.7	798.4	776.0	764.9
75°	6721.9	5449.0	3160.0	1758.6	1049.6	837.4	748.1	681.1	625.3	647.6	636.5
77.5°	4924.2	3824.3	2238.8	1217.1	753.7	647.6	586.2	536.0	496.9	541.5	536.0
80°	3171.1	2473.3	1496.2	815.1	519.2	452.2	429.9	402.0	441.1	575.0	586.2
82.5°	1937.3	1568.8	893.3	530.4	340.6	301.5	279.1	279.1	452.2	496.9	502.5
85°	865.4	831.9	485.7	273.6	189.8	173.1	156.3	201.0	184.2	134.0	139.6
87.5°	139.6	145.2	106.1	94.9	72.6	72.6	55.8	39.1	27.9	16.7	16.7
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)