

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: P841951

Luminaire Tested: **ARCH4-250-727-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841951
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: ARCH4-250-727-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 975mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35555 lumens
Efficiency: N/A
Efficacy: 142.5 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 249.5
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

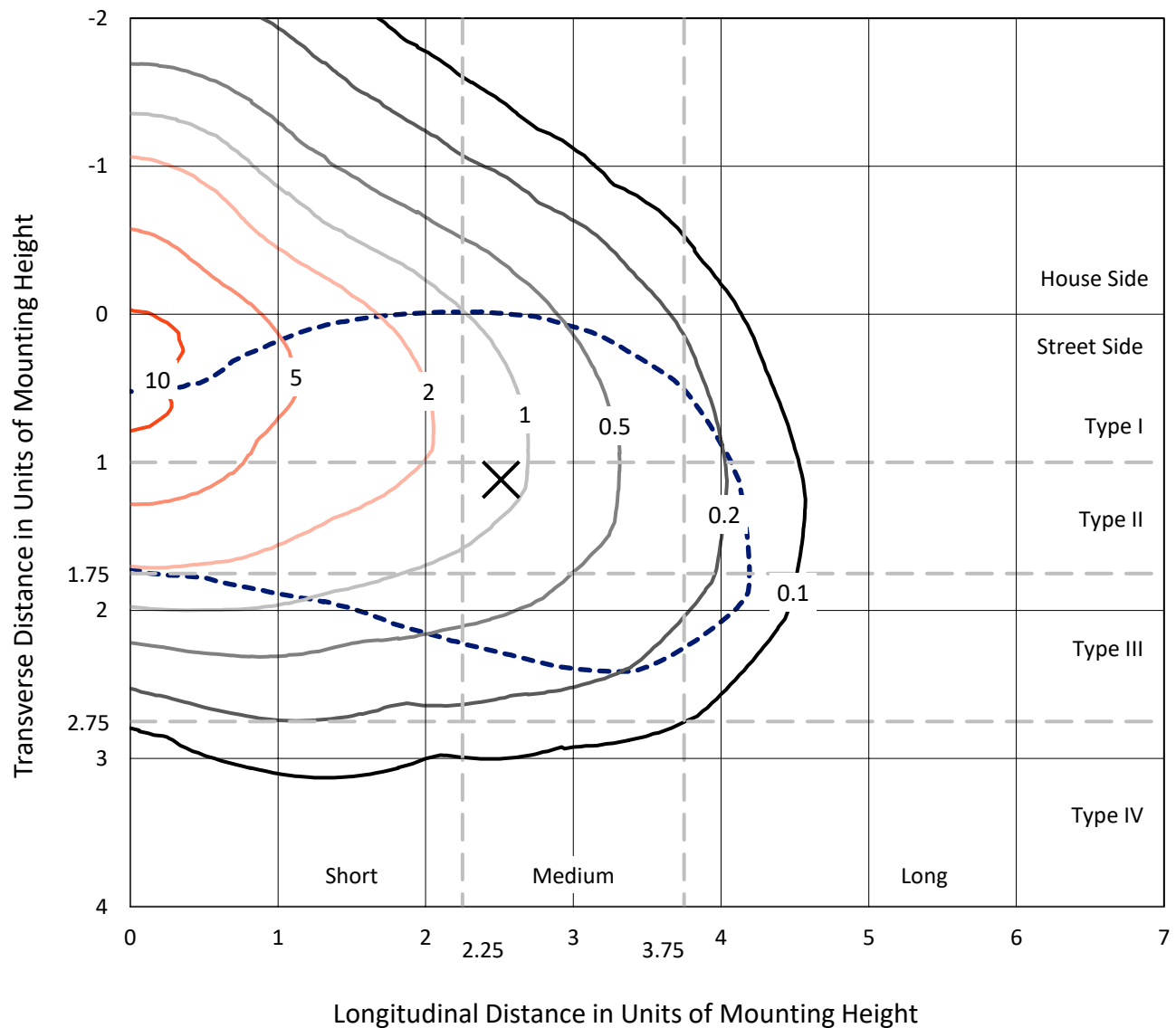


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Iso-Footcandle Lines of Horizontal Illumination

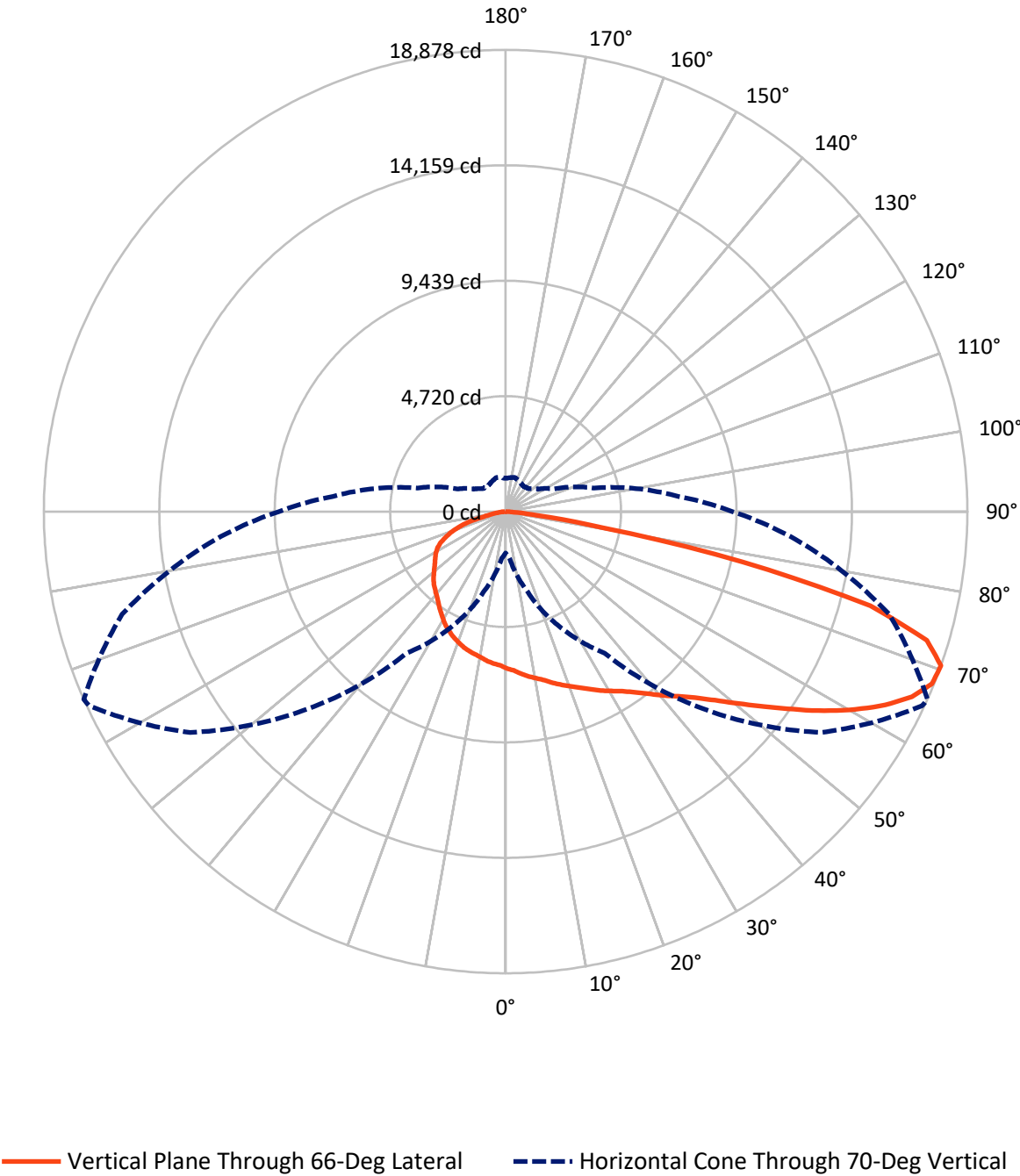
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.1 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	9421.3	0.0	9421.3
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	26133.7	0.0	26133.7
	% Fixture	73.5	0.0	73.5
Total	Lumens	35555.0	0.0	35555.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	616.6	1.7
10°-20°	1849.6	5.2
20°-30°	3100.5	8.7
30°-40°	4642.4	13.1
40°-50°	6206.9	17.5
50°-60°	7246.8	20.4
60°-70°	7205.8	20.3
70°-80°	4265.9	12.0
80°-90°	420.5	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°	35555.0	100.0
0°-180°	35555.0	100.0

Coefficient of Utilization



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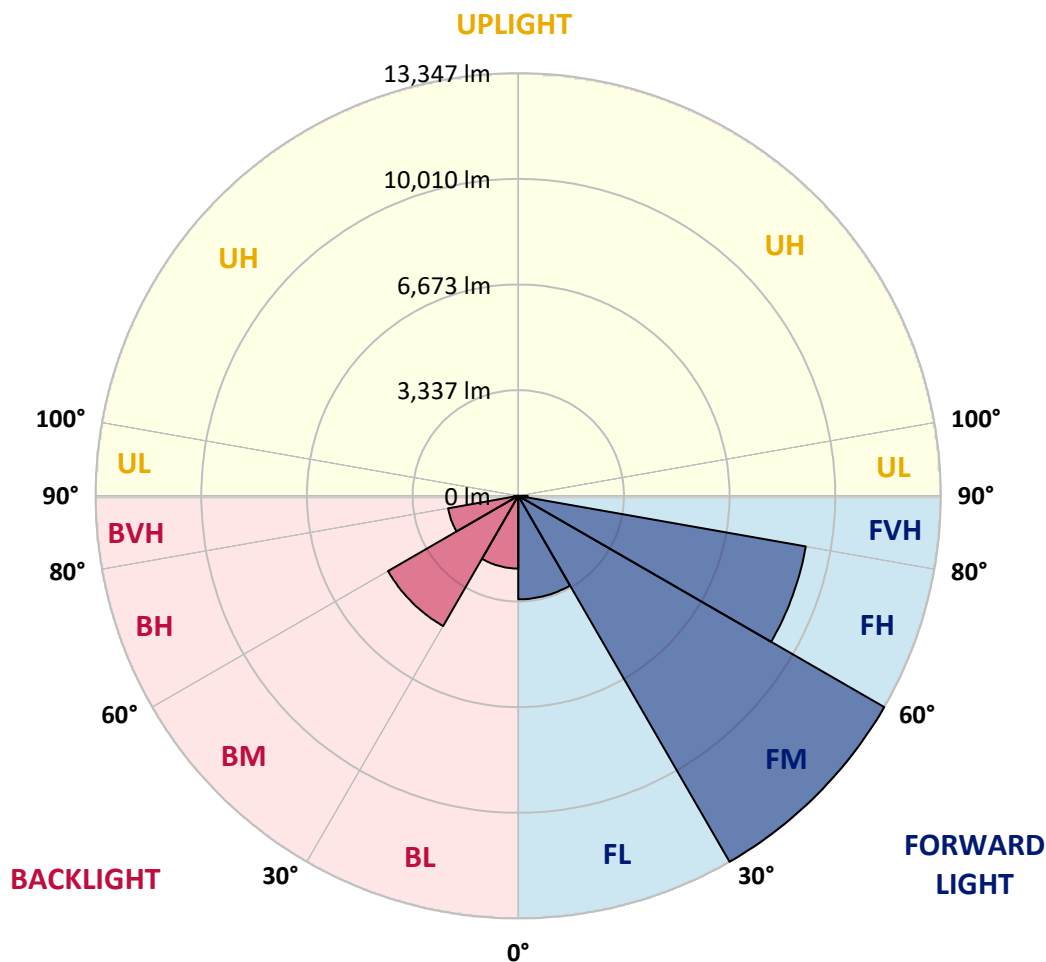
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3270.1	9.2			
FM	(30°-60°)	13346.9	37.5			
FH	(60°-80°)	9221.3	25.9			G4/12000
FVH	(80°-90°)	295.5	0.8			G3/500
BL	(0°-30°)	2296.5	6.5	B3/2500		
BM	(30°-60°)	4749.3	13.4	B3/5000		
BH	(60°-80°)	2250.5	6.3	B3/2500		G3/2500
BVH	(80°-90°)	125.0	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	6416.9	6416.9	6416.9	6416.9	6416.9	6416.9	6416.9	6416.9	6416.9	6416.9	6416.9
2.5°	6652.8	6642.3	6637.1	6616.1	6568.9	6589.9	6542.7	6511.2	6506.0	6432.6	6390.7
5°	6925.4	6920.2	6909.7	6878.2	6804.8	6815.3	6736.7	6679.0	6663.3	6547.9	6458.8
7.5°	7156.1	7145.6	7140.3	7098.4	7019.8	7014.5	6920.2	6836.3	6810.1	6652.8	6516.5
10°	7334.3	7318.6	7329.1	7287.1	7203.2	7187.5	7066.9	6956.8	6930.6	6731.4	6542.7
12.5°	7486.3	7475.9	7491.6	7454.9	7386.7	7371.0	7250.4	7108.9	7077.4	6846.8	6600.4
15°	7654.1	7617.4	7648.9	7633.1	7586.0	7580.7	7470.6	7313.3	7271.4	6993.5	6689.5
17.5°	7743.2	7722.3	7759.0	7764.2	7743.2	7779.9	7675.1	7486.3	7449.6	7129.9	6768.1
20°	7806.1	7774.7	7816.6	7848.1	7863.8	7937.2	7853.3	7669.8	7627.9	7260.9	6841.5
22.5°	8021.1	7952.9	7958.2	7979.1	7989.6	8094.5	8042.1	7863.8	7821.9	7423.4	6930.6
25°	8561.1	8424.8	8335.6	8272.7	8199.3	8288.5	8257.0	8084.0	8047.3	7617.4	7040.7
27.5°	9399.9	9226.9	9048.6	8865.1	8576.8	8540.1	8487.7	8330.4	8288.5	7811.4	7150.8
30°	10354.0	10181.0	9971.3	9677.7	9137.7	8854.6	8734.1	8561.1	8513.9	7984.4	7255.7
32.5°	11302.9	11150.9	10941.2	10584.7	9814.0	9237.4	8980.5	8802.2	8755.0	8173.1	7381.5
35°	12042.1	11947.7	11811.4	11365.8	10485.1	9688.2	9337.0	9122.0	9069.6	8471.9	7612.2
37.5°	12639.8	12571.6	12456.3	11989.7	10972.6	10139.1	9745.9	9499.5	9441.8	8797.0	7858.6
40°	13520.5	13342.3	13247.9	12571.6	11397.3	10548.0	10207.2	9950.3	9887.4	9143.0	8057.8
42.5°	14270.2	14139.1	14023.8	13090.6	11801.0	10899.2	10642.4	10406.4	10322.6	9483.8	8272.7
45°	14396.0	14448.4	14390.8	13347.5	12440.5	11245.2	11082.7	10930.7	10852.1	9945.1	8597.8
47.5°	14401.3	14401.3	14060.5	13494.3	13232.2	11633.2	11554.6	11607.0	11523.1	10532.3	8985.7
50°	14023.8	14091.9	13913.7	13531.0	13441.9	12021.1	12131.2	12414.3	12330.5	11156.1	9405.1
52.5°	13242.7	13468.1	13462.8	13473.3	13137.8	12351.4	12739.4	13384.2	13242.7	11858.6	9850.7
55°	11863.9	12314.7	12718.4	13064.4	12875.7	12550.6	13483.8	14417.0	14270.2	12645.0	10301.6
57.5°	10684.3	10972.6	11475.9	12456.3	12566.4	12723.6	14181.1	15496.9	15365.9	13515.3	10773.4
60°	9337.0	9735.4	10238.7	11633.2	12188.9	12949.1	14946.5	16550.7	16424.9	14396.0	11229.5
62.5°	7266.2	7779.9	8786.5	10369.7	11638.4	13090.6	15549.4	17478.6	17421.0	15229.6	11638.4
65°	5064.3	5520.4	6930.6	8818.0	10762.9	13027.7	16031.7	18306.9	18254.5	15911.1	11926.8
67.5°	2956.8	3486.3	5080.0	7098.4	9216.4	12592.6	16189.0	18794.5	18794.5	16325.3	12005.4
70°	1688.1	1934.5	3350.0	5174.4	7066.9	11392.0	15748.6	18789.3	18878.4	16230.9	11680.4
72.5°	1179.6	1289.7	2254.3	3481.0	4791.7	9216.4	14595.2	17882.3	18002.9	15339.7	10569.0
75°	917.4	996.1	1588.5	2374.9	3019.7	6259.6	12073.6	15077.5	15397.3	13074.9	8545.3
77.5°	697.3	754.9	927.9	1483.6	1934.5	3596.4	7968.7	9887.4	9908.4	8005.4	4582.0
80°	508.5	566.2	618.6	907.0	1027.5	1682.9	3009.2	4131.1	4015.8	3874.2	2479.7
82.5°	304.1	361.7	377.5	492.8	503.3	718.2	1053.8	1331.6	1279.2	1703.8	1163.8
85°	131.1	183.5	194.0	225.4	214.9	293.6	419.4	351.3	314.6	361.7	251.6
87.5°	31.5	52.4	52.4	57.7	47.2	73.4	78.6	57.7	52.4	62.9	62.9
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°	6416.9	6416.9	6416.9	6416.9	6416.9	6416.9	6416.9	6416.9	6416.9	6416.9	6416.9
2.5°	6380.2	6364.4	6369.7	6280.6	6254.3	6228.1	6212.4	6201.9	6191.4	6207.2	6222.9
5°	6427.4	6390.7	6348.7	6217.7	6165.2	6107.6	6065.6	6028.9	6013.2	6013.2	6028.9
7.5°	6464.1	6401.1	6312.0	6139.0	6044.6	5966.0	5897.9	5850.7	5824.5	5824.5	5840.2
10°	6469.3	6380.2	6238.6	6028.9	5903.1	5787.8	5709.1	5656.7	5620.0	5620.0	5630.5
12.5°	6500.7	6380.2	6196.7	5945.0	5787.8	5646.2	5551.8	5473.2	5457.5	5457.5	5468.0
15°	6553.2	6406.4	6170.5	5871.6	5682.9	5520.4	5415.5	5331.7	5300.2	5321.2	5326.4
17.5°	6600.4	6422.1	6123.3	5777.3	5551.8	5373.6	5258.3	5184.9	5142.9	5190.1	5190.1
20°	6631.8	6422.1	6055.1	5656.7	5410.3	5211.1	5101.0	5011.9	4980.4	5038.1	5043.3
22.5°	6679.0	6416.9	5981.7	5536.1	5258.3	5048.6	4938.5	4870.3	4854.6	4917.5	4938.5
25°	6731.4	6427.4	5903.1	5399.8	5090.5	4886.0	4802.2	4770.7	4781.2	4859.8	4886.0
27.5°	6789.1	6448.3	5824.5	5247.8	4907.0	4723.5	4676.3	4692.1	4734.0	4833.6	4865.1
30°	6841.5	6453.6	5714.4	5069.5	4697.3	4524.3	4545.3	4613.4	4676.3	4776.0	4812.7
32.5°	6909.7	6458.8	5599.0	4875.6	4471.9	4346.1	4440.4	4550.5	4613.4	4707.8	4749.7
35°	7077.4	6547.9	5509.9	4686.8	4262.2	4194.0	4351.3	4492.9	4529.6	4613.4	4650.1
37.5°	7271.4	6694.7	5462.7	4492.9	4057.7	4042.0	4241.2	4382.8	4393.2	4445.7	4482.4
40°	7392.0	6757.6	5410.3	4330.3	3874.2	3884.7	4089.2	4199.3	4178.3	4215.0	4241.2
42.5°	7512.6	6778.6	5300.2	4194.0	3701.2	3711.7	3869.0	3947.6	3958.1	4036.8	4073.5
45°	7717.0	6836.3	5179.6	4068.2	3544.0	3507.3	3601.6	3706.5	3842.8	3994.8	4036.8
47.5°	7989.6	6956.8	5053.8	3916.2	3391.9	3271.3	3308.0	3491.5	3633.1	3774.6	3800.8
50°	8267.5	7077.4	4938.5	3732.7	3239.9	3019.7	3035.4	3203.2	3318.5	3428.6	3444.3
52.5°	8540.1	7182.3	4838.9	3559.7	3066.9	2720.9	2783.8	2956.8	3035.4	3087.9	3103.6
55°	8812.7	7271.4	4749.7	3412.9	2867.7	2485.0	2542.6	2705.2	2783.8	2810.0	2820.5
57.5°	9095.8	7376.3	4681.6	3287.1	2642.2	2275.3	2312.0	2427.3	2500.7	2532.1	2521.7
60°	9331.7	7465.4	4644.9	3156.0	2416.8	2081.3	2070.8	2175.7	2280.5	2312.0	2301.5
62.5°	9515.2	7523.0	4587.2	2988.2	2217.6	1887.3	1834.9	1971.2	2081.3	2102.3	2118.0
65°	9614.8	7528.3	4445.7	2773.3	2013.1	1677.6	1640.9	1777.2	1845.4	1866.3	1866.3
67.5°	9599.1	7444.4	4167.8	2485.0	1824.4	1488.9	1457.4	1541.3	1640.9	1656.6	1640.9
70°	9274.1	7098.4	3722.2	2180.9	1599.0	1321.1	1263.5	1347.3	1441.7	1384.0	1357.8
72.5°	8351.4	6201.9	3066.9	1845.4	1347.3	1111.4	1085.2	1169.1	1174.3	1184.8	1158.6
75°	6589.9	4618.7	2296.2	1436.5	1090.4	933.2	927.9	912.2	933.2	975.1	943.7
77.5°	3460.1	2306.7	1242.5	880.7	791.6	749.7	713.0	707.7	770.7	796.9	765.4
80°	1876.8	1294.9	713.0	529.5	482.3	487.6	534.7	524.3	592.4	608.1	581.9
82.5°	817.8	613.4	351.3	319.8	319.8	314.6	330.3	367.0	440.4	440.4	351.3
85°	178.2	152.0	136.3	157.3	178.2	178.2	178.2	178.2	125.8	68.2	47.2
87.5°	57.7	57.7	57.7	62.9	68.2	68.2	57.7	41.9	26.2	5.2	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)