

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: P573172

Luminaire Tested: **ARCH-S-PA2-40-750-U-T4W-HSS**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573172
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-20)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-40-750-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 420mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4911 lumens
Efficiency: N/A
Efficacy: 112.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

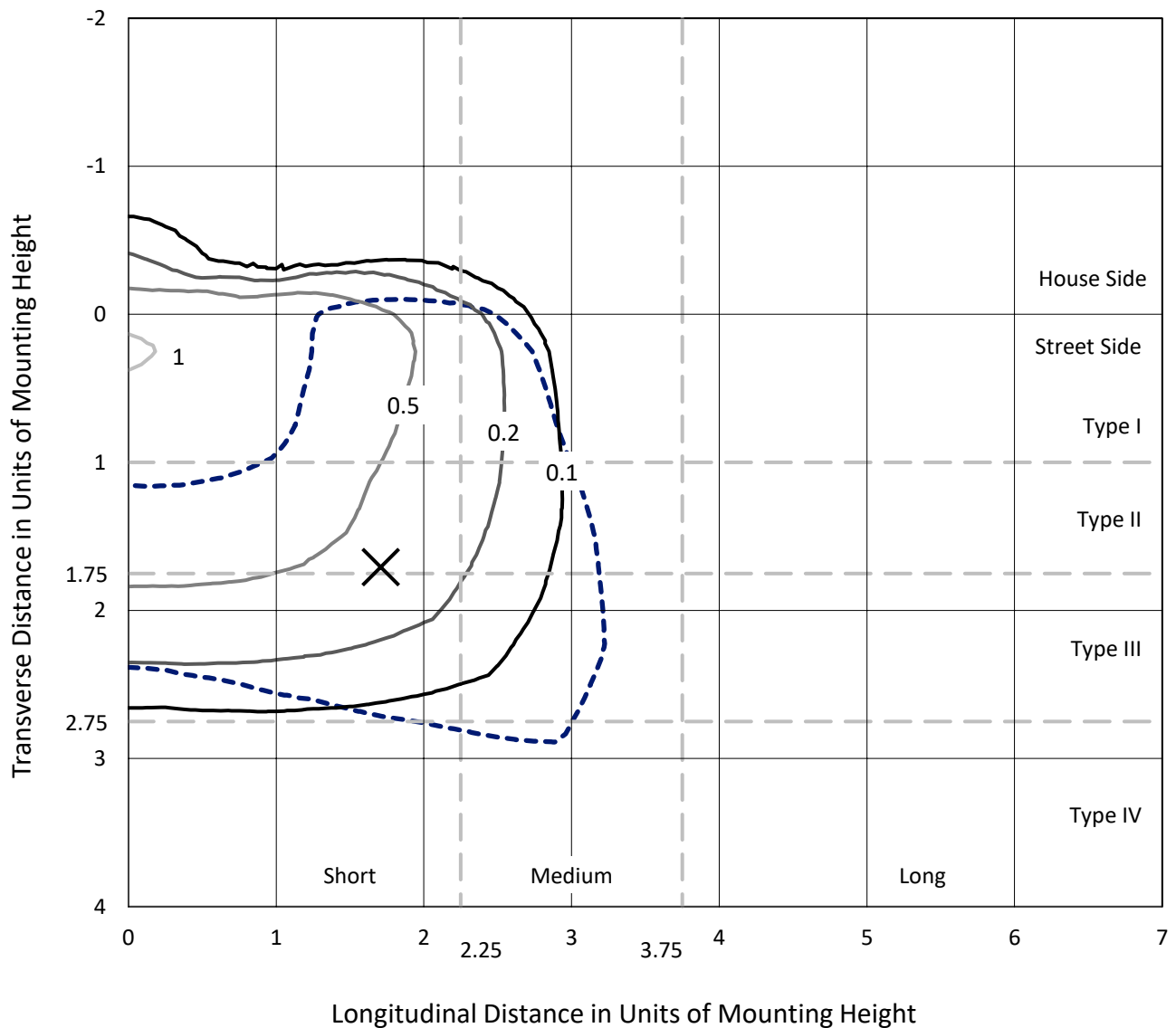
Input Watts (W): 43.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

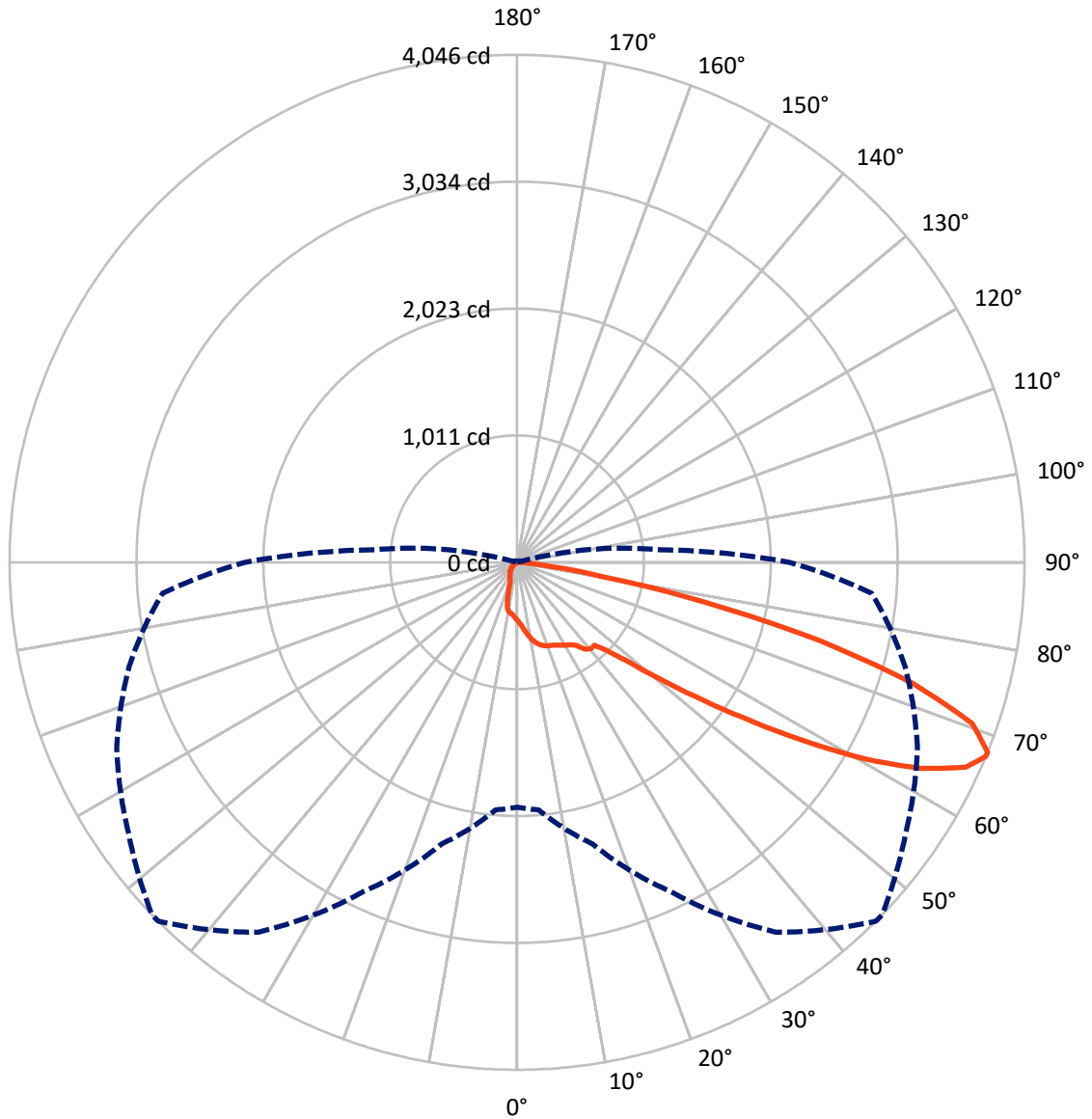
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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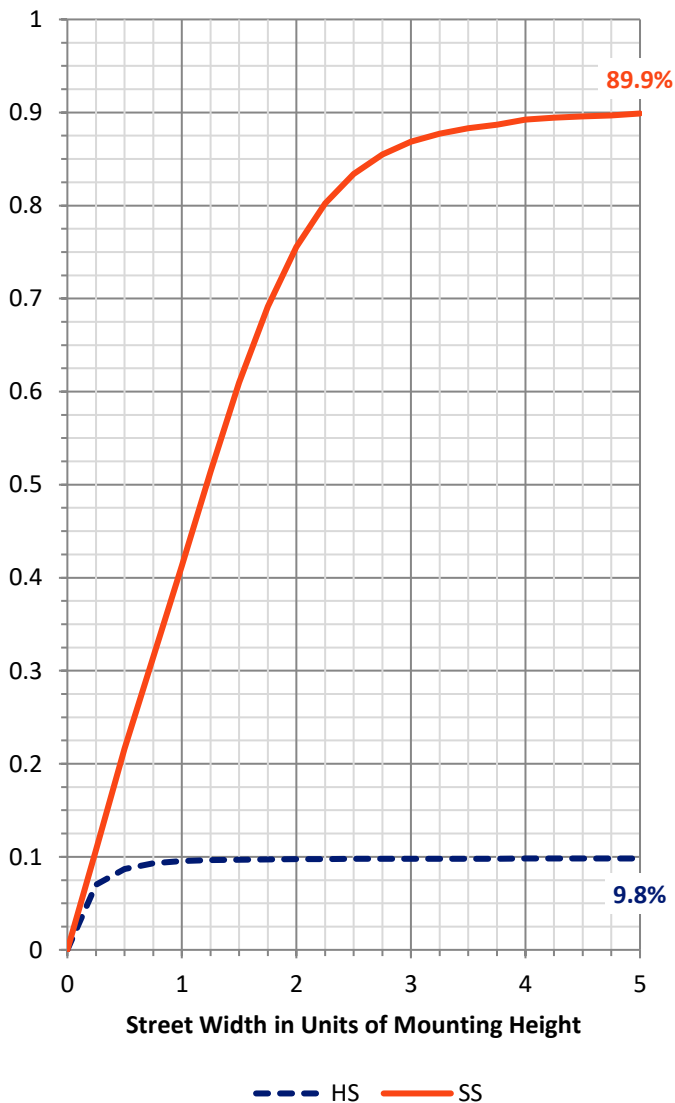
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	486.6	0.0	486.6
	% Fixture	9.9	0.0	9.9
Street Side	Lumens	4424.4	0.0	4424.4
	% Fixture	90.1	0.0	90.1
Total	Lumens	4911.0	0.0	4911.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.6	0.9
10°-20°	140.9	2.9
20°-30°	225.4	4.6
30°-40°	324.4	6.6
40°-50°	569.2	11.6
50°-60°	1199.3	24.4
60°-70°	1658.4	33.8
70°-80°	694.3	14.1
80°-90°	52.5	1.1
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°	4911.0	100.0
0°-180°	4911.0	100.0

Coefficient of Utilization



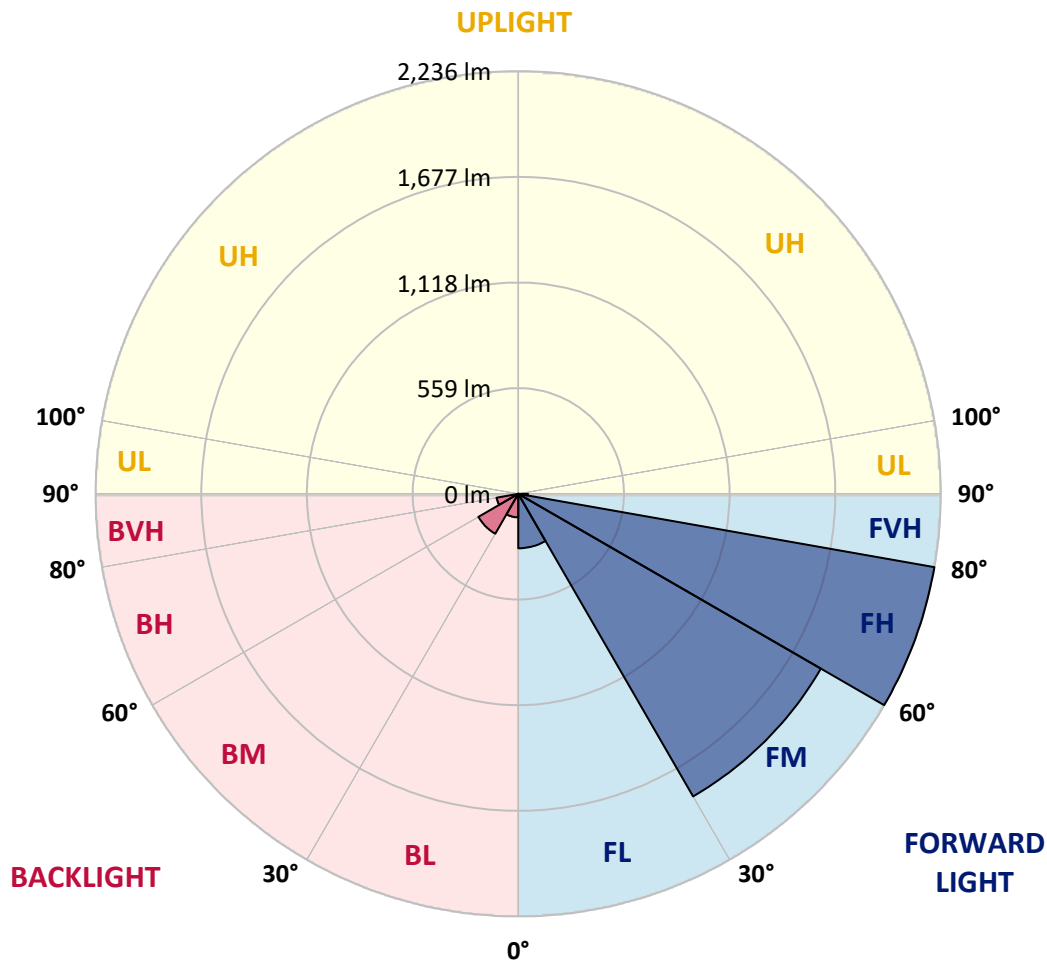
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	288.2	5.9			
FM (30°-60°)	1849.1	37.7			
FH (60°-80°)	2236.4	45.5			G2/5000
FVH (80°-90°)	50.7	1.0			G1/100
BL (0°-30°)	124.7	2.5	B1/500		
BM (30°-60°)	243.8	5.0	B1/1000		
BH (60°-80°)	116.3	2.4	B1/500		G1/500
BVH (80°-90°)	1.8	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	464.4	464.4	464.4	464.4	464.4	464.4	464.4	464.4	464.4	464.4	464.4
2.5°	517.1	508.0	506.2	504.4	498.9	491.7	493.5	488.0	479.0	473.5	468.1
5°	580.6	571.5	567.9	557.0	546.1	529.8	529.8	515.2	498.9	484.4	469.9
7.5°	645.9	638.6	631.4	615.0	598.7	576.9	575.1	553.3	527.9	506.2	482.6
10°	700.3	694.9	685.8	665.8	644.1	620.5	615.0	595.1	562.4	533.4	502.5
12.5°	743.8	738.4	725.7	705.7	678.5	654.9	653.1	627.7	595.1	564.2	526.1
15°	776.5	767.4	752.9	731.1	703.9	682.2	678.5	656.8	625.9	591.4	546.1
17.5°	781.9	776.5	763.8	740.2	716.6	698.5	696.7	680.3	653.1	616.8	569.7
20°	767.4	765.6	754.7	736.6	718.4	709.4	707.6	696.7	674.9	642.2	595.1
22.5°	745.7	743.8	736.6	727.5	720.3	718.4	718.4	714.8	702.1	671.3	627.7
25°	731.1	729.3	725.7	720.3	720.3	731.1	733.0	736.6	725.7	702.1	654.9
27.5°	733.0	729.3	725.7	720.3	727.5	747.5	749.3	758.4	749.3	727.5	685.8
30°	758.4	752.9	742.0	729.3	738.4	765.6	767.4	778.3	771.1	760.2	720.3
32.5°	798.3	794.6	772.9	751.1	756.5	783.8	787.4	807.3	816.4	800.1	751.1
35°	856.3	843.6	816.4	794.6	791.0	811.0	816.4	849.1	872.7	832.7	769.2
37.5°	903.5	892.6	849.1	814.6	834.6	879.9	881.7	921.6	901.7	836.4	798.3
40°	1063.2	1061.3	985.1	876.3	854.5	905.3	912.6	919.8	910.8	878.1	861.8
42.5°	1320.8	1299.0	1213.7	1046.8	898.1	903.5	907.1	945.2	992.4	977.9	983.3
45°	1600.2	1582.0	1485.9	1275.4	1046.8	1001.5	1005.1	1066.8	1157.5	1175.6	1204.7
47.5°	1857.8	1828.8	1774.3	1562.1	1300.8	1168.4	1175.6	1250.0	1400.6	1440.5	1485.9
50°	2075.5	2055.5	2004.7	1865.1	1612.9	1431.4	1438.7	1500.4	1696.3	1759.8	1817.9
52.5°	2391.2	2364.0	2266.0	2200.7	2010.2	1774.3	1758.0	1823.3	2048.3	2090.0	2168.0
55°	2681.5	2625.2	2567.2	2540.0	2460.1	2184.4	2178.9	2191.6	2378.5	2400.3	2540.0
57.5°	2804.8	2793.9	2842.9	2933.6	2951.8	2666.9	2643.4	2594.4	2741.3	2739.5	2902.8
60°	2882.8	2882.8	3013.5	3238.4	3383.6	3182.2	3149.5	2997.1	3049.8	3051.6	3202.2
62.5°	2833.9	2846.6	3049.8	3389.0	3681.1	3619.4	3597.7	3341.9	3338.2	3296.5	3349.1
65°	2530.9	2552.7	2879.2	3305.6	3790.0	3935.1	3926.0	3635.8	3530.5	3378.1	3260.2
67°	2064.6	2104.5	2500.0	3004.4	3666.6	4044.0	4045.8	3762.8	3532.3	3242.1	2946.3
67.5°	1952.1	1981.2	2324.1	2895.5	3599.5	4045.8	4045.8	3779.1	3521.5	3200.3	2837.5
70°	1244.6	1251.8	1625.6	2240.6	3075.2	3849.8	3864.4	3655.7	3207.6	2590.8	1992.0
72.5°	615.0	598.7	858.1	1442.3	2307.7	3294.7	3332.8	3122.3	2538.1	1692.7	1052.3
75°	241.3	257.6	373.7	767.4	1446.0	2483.7	2512.7	2271.4	1632.8	872.7	415.5
77.5°	107.0	107.0	159.7	344.7	760.2	1524.0	1538.5	1386.1	861.8	359.2	127.0
80°	58.1	61.7	83.5	150.6	382.8	700.3	763.8	687.6	390.1	157.8	43.5
82.5°	29.0	30.8	50.8	85.3	192.3	264.9	279.4	292.1	179.6	98.0	18.1
85°	10.9	12.7	27.2	49.0	87.1	88.9	88.9	114.3	98.0	74.4	9.1
87.5°	1.8	3.6	12.7	20.0	34.5	30.8	27.2	36.3	54.4	47.2	5.4
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°	464.4	464.4	464.4	464.4	464.4	464.4	464.4	464.4	464.4	464.4	464.4
2.5°	464.4	460.8	453.6	448.1	444.5	440.9	437.2	437.2	435.4	435.4	437.2
5°	464.4	457.2	442.7	433.6	426.3	420.9	417.3	417.3	415.5	417.3	419.1
7.5°	473.5	462.6	442.7	426.3	417.3	408.2	404.6	402.8	402.8	404.6	402.8
10°	488.0	473.5	448.1	426.3	413.6	400.9	381.0	362.9	346.5	339.3	337.5
12.5°	506.2	488.0	457.2	431.8	411.8	368.3	313.9	279.4	257.6	246.7	243.1
15°	526.1	504.4	468.1	439.0	384.6	303.0	232.2	194.1	181.4	183.2	185.1
17.5°	547.9	524.3	484.4	435.4	330.2	225.0	170.5	161.5	166.9	172.4	172.4
20°	569.7	544.3	500.7	408.2	259.4	166.9	152.4	154.2	159.7	165.1	165.1
22.5°	598.7	571.5	517.1	361.0	192.3	145.1	145.1	148.8	152.4	157.8	157.8
25°	629.5	602.3	527.9	303.0	143.3	136.1	137.9	141.5	145.1	150.6	150.6
27.5°	662.2	635.0	526.1	234.0	125.2	125.2	127.0	132.4	136.1	141.5	141.5
30°	698.5	674.9	506.2	170.5	116.1	114.3	114.3	119.7	125.2	128.8	130.6
32.5°	729.3	709.4	471.7	128.8	108.9	105.2	103.4	105.2	110.7	114.3	116.1
35°	754.7	747.5	420.9	110.7	101.6	96.2	92.5	90.7	92.5	92.5	94.3
37.5°	801.9	803.7	361.0	103.4	96.2	88.9	81.6	76.2	72.6	70.8	68.9
40°	890.8	889.0	297.5	98.0	90.7	81.6	70.8	63.5	54.4	50.8	50.8
42.5°	1016.0	988.8	226.8	92.5	85.3	74.4	59.9	49.0	39.9	38.1	38.1
45°	1240.9	1128.5	170.5	88.9	79.8	65.3	49.0	36.3	30.8	29.0	29.0
47.5°	1489.5	1289.9	136.1	83.5	74.4	58.1	38.1	29.0	23.6	23.6	23.6
50°	1763.5	1444.1	114.3	78.0	65.3	49.0	30.8	23.6	21.8	20.0	21.8
52.5°	2062.8	1565.7	99.8	70.8	56.2	39.9	25.4	21.8	18.1	18.1	18.1
55°	2331.3	1647.3	83.5	61.7	47.2	32.7	23.6	18.1	16.3	14.5	12.7
57.5°	2574.4	1690.9	67.1	52.6	36.3	27.2	20.0	14.5	12.7	9.1	9.1
60°	2699.6	1651.0	52.6	41.7	29.0	21.8	16.3	12.7	9.1	5.4	5.4
62.5°	2719.6	1547.6	41.7	32.7	25.4	18.1	12.7	9.1	5.4	3.6	3.6
65°	2545.4	1366.1	34.5	27.2	20.0	14.5	10.9	7.3	3.6	1.8	1.8
67°	2233.3	1175.6	30.8	23.6	18.1	12.7	9.1	5.4	3.6	1.8	0.0
67.5°	2171.7	1141.2	29.0	23.6	18.1	12.7	9.1	5.4	3.6	1.8	0.0
70°	1426.0	789.2	27.2	21.8	16.3	10.9	7.3	5.4	1.8	0.0	0.0
72.5°	778.3	397.3	25.4	20.0	14.5	10.9	7.3	3.6	1.8	0.0	0.0
75°	284.8	150.6	21.8	18.1	12.7	10.9	7.3	3.6	1.8	0.0	0.0
77.5°	96.2	52.6	20.0	18.1	14.5	10.9	7.3	3.6	1.8	0.0	0.0
80°	32.7	23.6	16.3	14.5	10.9	9.1	7.3	3.6	1.8	0.0	0.0
82.5°	12.7	7.3	5.4	5.4	5.4	7.3	7.3	5.4	1.8	0.0	0.0
85°	5.4	3.6	1.8	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0
87.5°	5.4	3.6	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	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)