

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: P573166

Luminaire Tested: **ARCH-S-PA2-40-750-U-T2R-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573166  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-14)  
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-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 420mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5154 lumens  
Efficiency: N/A  
Efficacy: 118.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B0 - U0 - G1

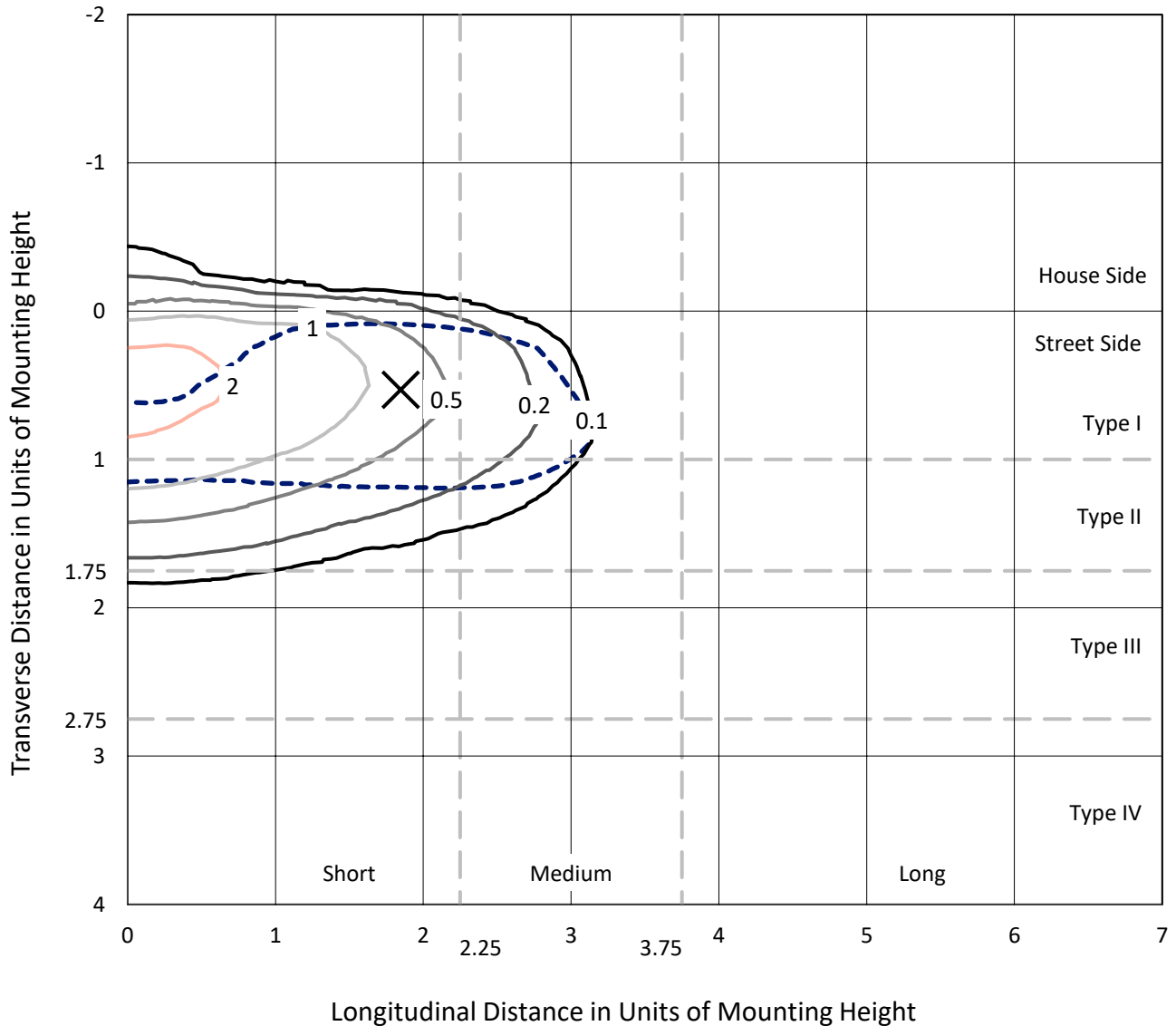
Input Watts (W): 43.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

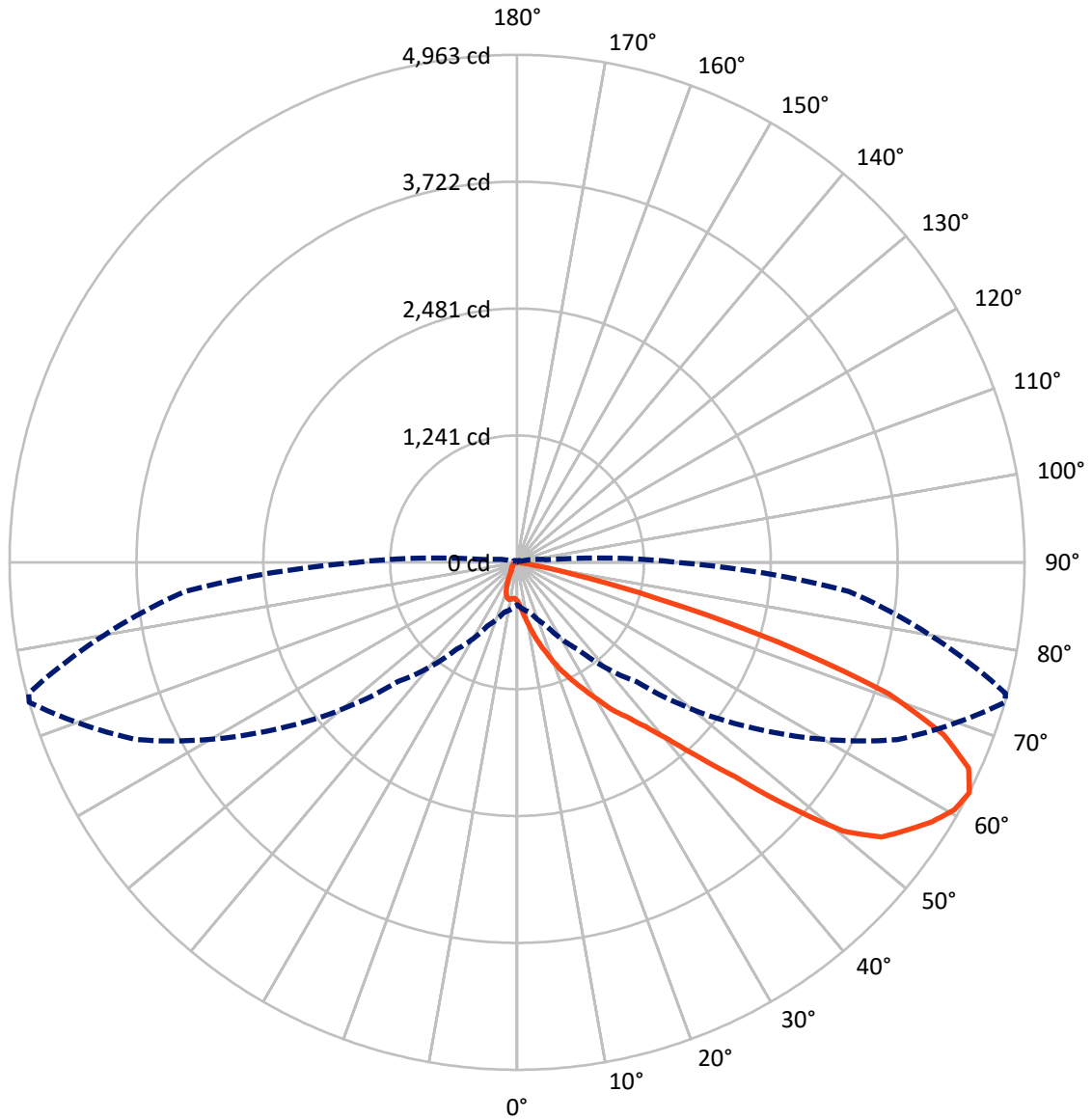
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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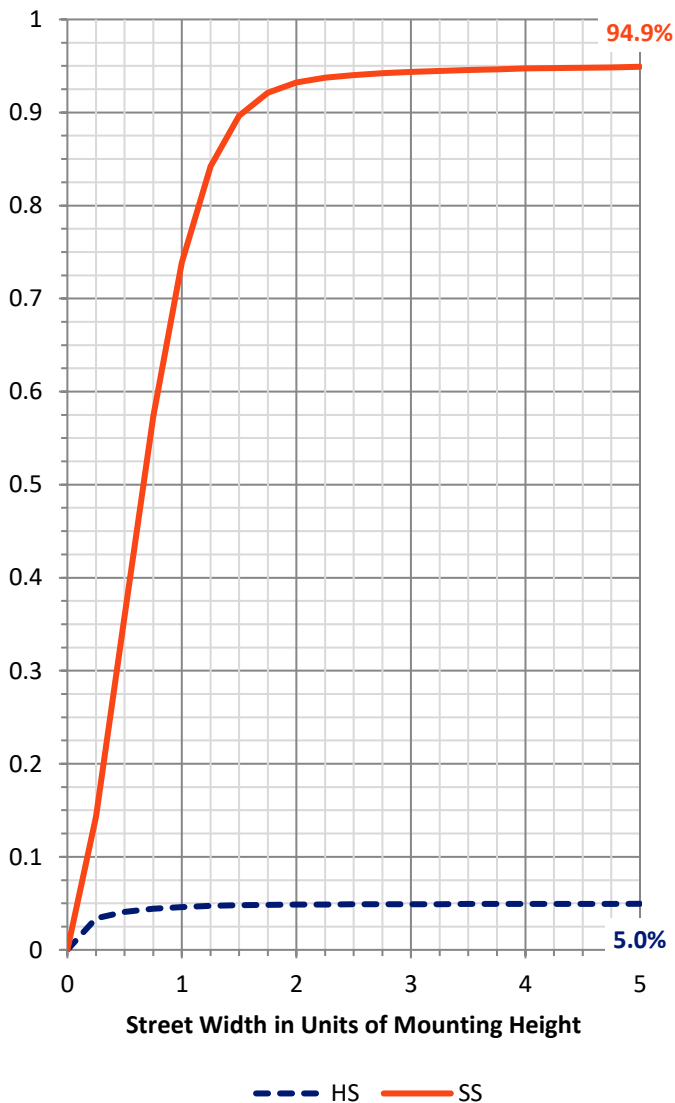
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	257.0	0.0	257.0
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	4896.9	0.0	4896.9
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	5154.0	0.0	5154.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.2	0.9
10°-20°	198.2	3.8
20°-30°	425.3	8.3
30°-40°	746.0	14.5
40°-50°	1156.4	22.4
50°-60°	1333.2	25.9
60°-70°	936.6	18.2
70°-80°	291.8	5.7
80°-90°	19.3	0.4
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°	5154.0	100.0
0°-180°	5154.0	100.0

**Coefficient of Utilization**

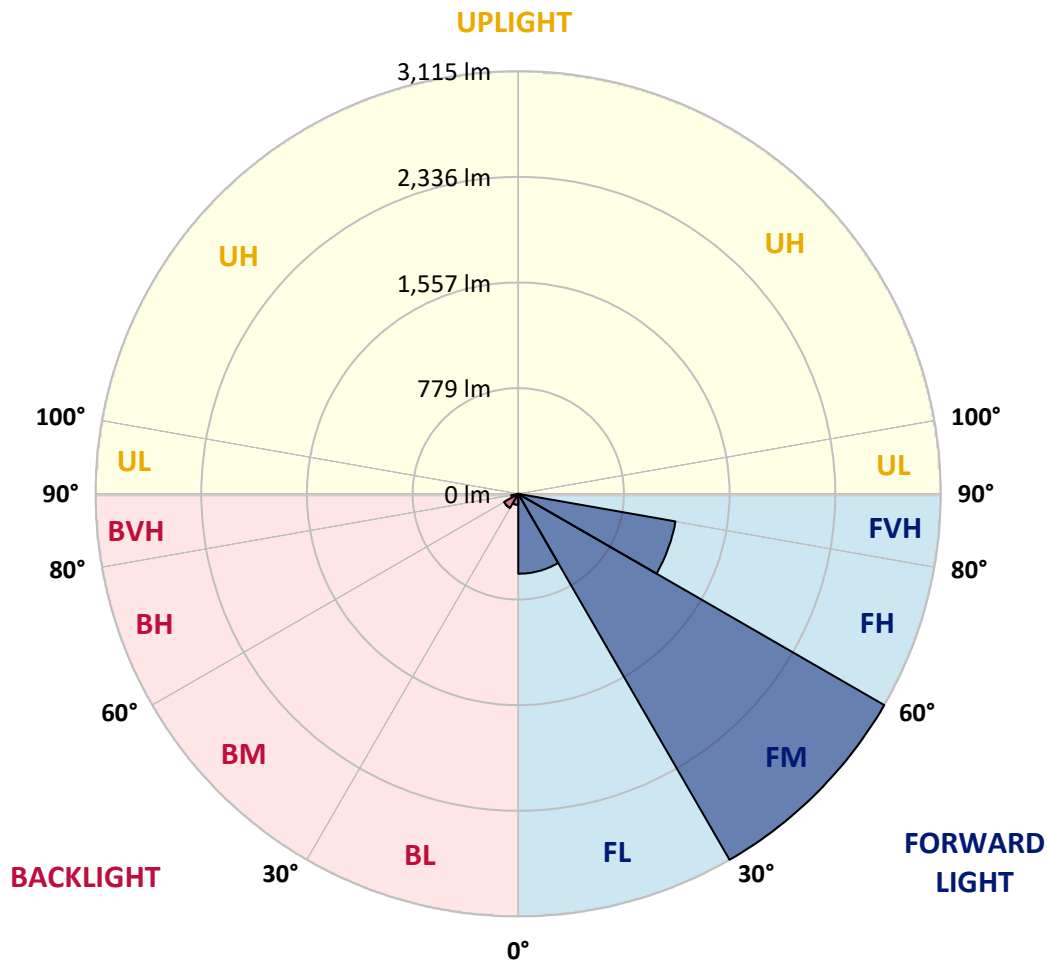


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	589.1	11.4			
FM (30°-60°)	3114.8	60.4			
FH (60°-80°)	1176.4	22.8			G1/1800
FVH (80°-90°)	16.6	0.3			G1/100
BL (0°-30°)	81.6	1.6	B0/110		
BM (30°-60°)	120.8	2.3	B0/220		
BH (60°-80°)	52.0	1.0	B0/110		G0/110
BVH (80°-90°)	2.6	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G1**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	377.3	377.3	377.3	377.3	377.3	377.3	377.3	377.3	377.3	377.3	377.3
2.5°	524.2	515.1	504.3	495.2	477.1	464.4	448.0	429.9	409.9	408.1	391.8
5°	734.6	707.4	707.4	683.8	656.6	607.7	562.3	506.1	464.4	460.7	417.2
7.5°	950.5	928.7	916.0	879.7	836.2	781.8	709.2	614.9	538.7	526.0	455.3
10°	1151.8	1135.5	1111.9	1082.9	1044.8	955.9	865.2	741.9	620.3	611.3	500.6
12.5°	1307.8	1287.9	1277.0	1264.3	1215.3	1144.6	1026.7	870.7	725.6	705.6	546.0
15°	1425.7	1416.6	1405.8	1405.8	1380.4	1311.4	1189.9	1008.5	827.1	803.6	604.0
17.5°	1520.0	1509.2	1507.3	1518.2	1511.0	1462.0	1347.7	1140.9	932.3	914.2	663.9
20°	1625.2	1610.7	1610.7	1619.8	1618.0	1590.8	1491.0	1293.3	1055.7	1023.0	732.8
22.5°	1774.0	1764.9	1757.7	1743.1	1732.3	1706.9	1619.8	1442.0	1173.6	1142.7	803.6
25°	1973.5	1962.6	1930.0	1904.6	1857.4	1819.3	1745.0	1574.5	1293.3	1258.8	872.5
27.5°	2167.6	2145.8	2115.0	2082.3	2029.7	1964.4	1871.9	1699.6	1418.5	1382.2	943.2
30°	2372.6	2356.2	2318.1	2265.5	2200.2	2127.7	2017.0	1850.2	1561.8	1521.9	1019.4
32.5°	2535.8	2510.4	2476.0	2425.2	2358.1	2307.3	2187.5	2015.2	1726.8	1674.2	1099.2
35°	2666.4	2646.5	2601.1	2552.1	2501.4	2486.8	2356.2	2149.5	1859.2	1810.3	1184.5
37.5°	2749.9	2729.9	2691.8	2642.8	2622.9	2648.3	2563.0	2332.7	2037.0	1975.3	1282.4
40°	2815.2	2791.6	2760.7	2739.0	2731.7	2802.5	2793.4	2570.3	2271.0	2234.7	1416.6
42.5°	2862.3	2838.7	2818.8	2817.0	2864.1	3002.0	3103.6	2902.2	2597.5	2523.1	1589.0
45°	2802.5	2782.5	2793.4	2856.9	2971.1	3188.8	3479.0	3372.0	2991.1	2938.5	1864.7
47.5°	2635.6	2622.9	2671.9	2787.9	3000.2	3303.1	3841.8	3887.2	3553.4	3473.6	2222.0
50°	2374.4	2372.6	2450.6	2608.4	2909.5	3346.6	4025.0	4382.4	4130.2	4048.6	2512.2
52.5°	2020.7	2013.4	2127.7	2347.2	2695.4	3265.0	4059.5	4580.1	4464.0	4367.8	2695.4
55°	1619.8	1603.5	1739.5	1980.8	2379.8	3027.4	3967.0	4623.6	4623.6	4536.5	2831.5
57.5°	1139.1	1164.5	1277.0	1567.2	1989.8	2671.9	3738.4	4583.7	4785.0	4710.7	3014.7
60°	718.3	729.2	852.5	1086.5	1509.2	2196.6	3330.3	4411.4	4913.8	4870.3	3161.6
62.5°	413.6	448.0	509.7	687.5	1041.2	1650.6	2826.0	4101.2	4962.8	4944.7	3257.7
65°	252.1	255.8	284.8	388.2	640.3	1126.4	2261.9	3669.5	4852.1	4868.5	3239.6
67.5°	188.6	188.6	197.7	244.9	364.6	716.5	1668.8	3145.3	4498.4	4551.0	3069.1
70°	163.2	163.2	165.1	179.6	224.9	424.4	1102.8	2535.8	3856.3	3850.9	2535.8
72.5°	128.8	134.2	145.1	152.4	170.5	248.5	645.7	1772.2	2679.1	2742.6	1632.5
75°	103.4	105.2	119.7	132.4	143.3	168.7	304.7	984.9	1405.8	1405.8	718.3
77.5°	79.8	83.4	92.5	105.2	119.7	119.7	127.0	380.9	544.2	526.0	212.2
80°	50.8	52.6	67.1	83.4	99.8	85.3	68.9	127.0	148.7	143.3	58.0
82.5°	30.8	32.6	43.5	67.1	67.1	47.2	43.5	52.6	47.2	43.5	23.6
85°	9.1	10.9	30.8	43.5	38.1	18.1	21.8	23.6	21.8	20.0	12.7
87.5°	1.8	1.8	9.1	10.9	9.1	9.1	7.3	9.1	9.1	9.1	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°	377.3	377.3	377.3	377.3	377.3	377.3	377.3	377.3	377.3	377.3	377.3
2.5°	382.7	375.5	361.0	350.1	341.0	331.9	324.7	322.9	319.2	319.2	317.4
5°	399.1	382.7	355.5	337.4	322.9	310.2	299.3	288.4	284.8	281.2	283.0
7.5°	424.4	399.1	361.0	333.8	308.4	279.3	255.8	235.8	221.3	217.7	212.2
10°	457.1	419.0	370.0	326.5	279.3	228.5	195.9	175.9	168.7	159.6	161.4
12.5°	489.7	442.6	377.3	306.5	230.4	179.6	152.4	139.7	134.2	132.4	134.2
15°	527.8	468.0	373.7	270.3	185.0	145.1	128.8	123.3	119.7	119.7	117.9
17.5°	565.9	489.7	361.0	223.1	148.7	123.3	116.1	110.6	107.0	105.2	105.2
20°	607.7	509.7	331.9	177.8	123.3	112.5	105.2	97.9	94.3	94.3	94.3
22.5°	651.2	524.2	293.8	141.5	110.6	99.8	92.5	87.1	83.4	83.4	83.4
25°	689.3	531.5	248.5	117.9	101.6	90.7	83.4	78.0	76.2	74.4	74.4
27.5°	725.6	529.7	201.3	103.4	90.7	81.6	74.4	70.7	67.1	67.1	67.1
30°	761.8	518.8	159.6	94.3	83.4	72.6	67.1	63.5	61.7	59.9	59.9
32.5°	792.7	500.6	125.2	87.1	76.2	65.3	59.9	56.2	56.2	54.4	54.4
35°	823.5	473.4	105.2	81.6	68.9	59.9	54.4	52.6	50.8	50.8	50.8
37.5°	856.2	439.0	92.5	74.4	61.7	54.4	50.8	49.0	47.2	45.3	45.3
40°	896.1	404.5	87.1	68.9	56.2	49.0	45.3	43.5	41.7	41.7	41.7
42.5°	959.5	375.5	81.6	61.7	50.8	45.3	41.7	38.1	38.1	36.3	36.3
45°	1079.3	364.6	76.2	56.2	47.2	39.9	38.1	34.5	32.6	32.6	32.6
47.5°	1235.3	366.4	70.7	50.8	43.5	36.3	34.5	32.6	29.0	29.0	29.0
50°	1364.0	357.3	65.3	47.2	38.1	34.5	30.8	29.0	27.2	27.2	27.2
52.5°	1414.8	341.0	59.9	43.5	36.3	30.8	29.0	27.2	25.4	25.4	25.4
55°	1465.6	333.8	54.4	38.1	32.6	30.8	27.2	25.4	23.6	21.8	21.8
57.5°	1558.1	337.4	49.0	36.3	30.8	29.0	25.4	21.8	18.1	16.3	16.3
60°	1607.1	324.7	45.3	32.6	29.0	27.2	21.8	16.3	12.7	10.9	10.9
62.5°	1565.4	288.4	41.7	30.8	27.2	23.6	16.3	12.7	9.1	5.4	5.4
65°	1449.3	237.6	38.1	29.0	23.6	18.1	14.5	9.1	5.4	3.6	3.6
67.5°	1302.4	186.8	34.5	27.2	21.8	16.3	12.7	7.3	3.6	1.8	1.8
70°	1052.1	134.2	32.6	25.4	20.0	14.5	10.9	7.3	3.6	1.8	1.8
72.5°	678.4	87.1	29.0	23.6	18.1	14.5	9.1	5.4	3.6	1.8	1.8
75°	313.8	58.0	27.2	21.8	18.1	12.7	9.1	7.3	3.6	1.8	1.8
77.5°	92.5	41.7	25.4	20.0	16.3	12.7	9.1	7.3	3.6	1.8	1.8
80°	38.1	29.0	20.0	18.1	16.3	12.7	9.1	7.3	3.6	1.8	1.8
82.5°	18.1	12.7	9.1	7.3	9.1	9.1	7.3	7.3	3.6	1.8	1.8
85°	9.1	5.4	3.6	3.6	3.6	1.8	1.8	3.6	3.6	1.8	1.8
87.5°	5.4	3.6	3.6	3.6	1.8	1.8	1.8	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)