

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: P349018

Luminaire Tested: **ARCH-N-PA1-20-830-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P349018
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1908-474-2)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-20-830-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 420mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1941 lumens
Efficiency: N/A
Efficacy: 80.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B0 - U0 - G0

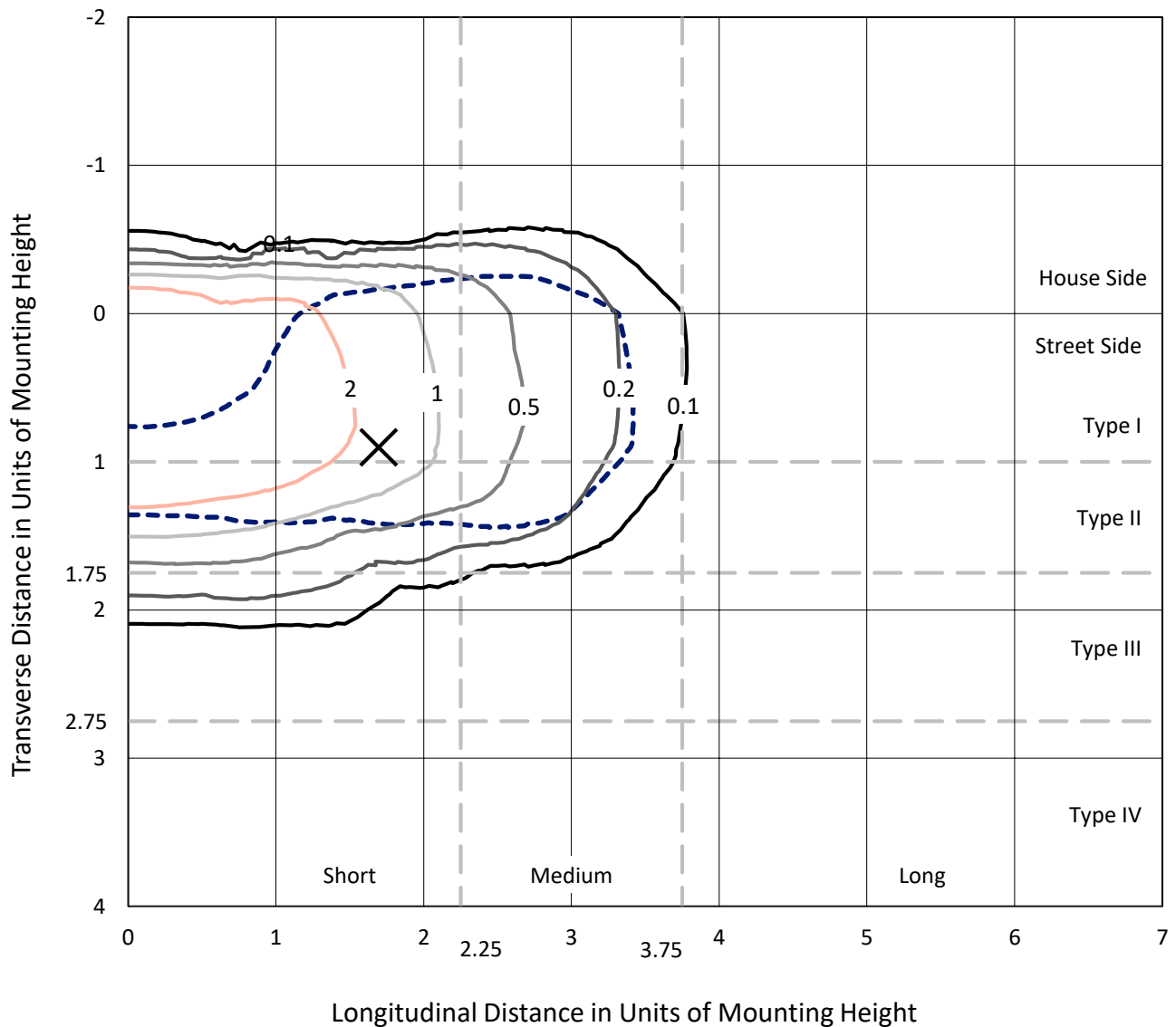
Input Watts (W): 24
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

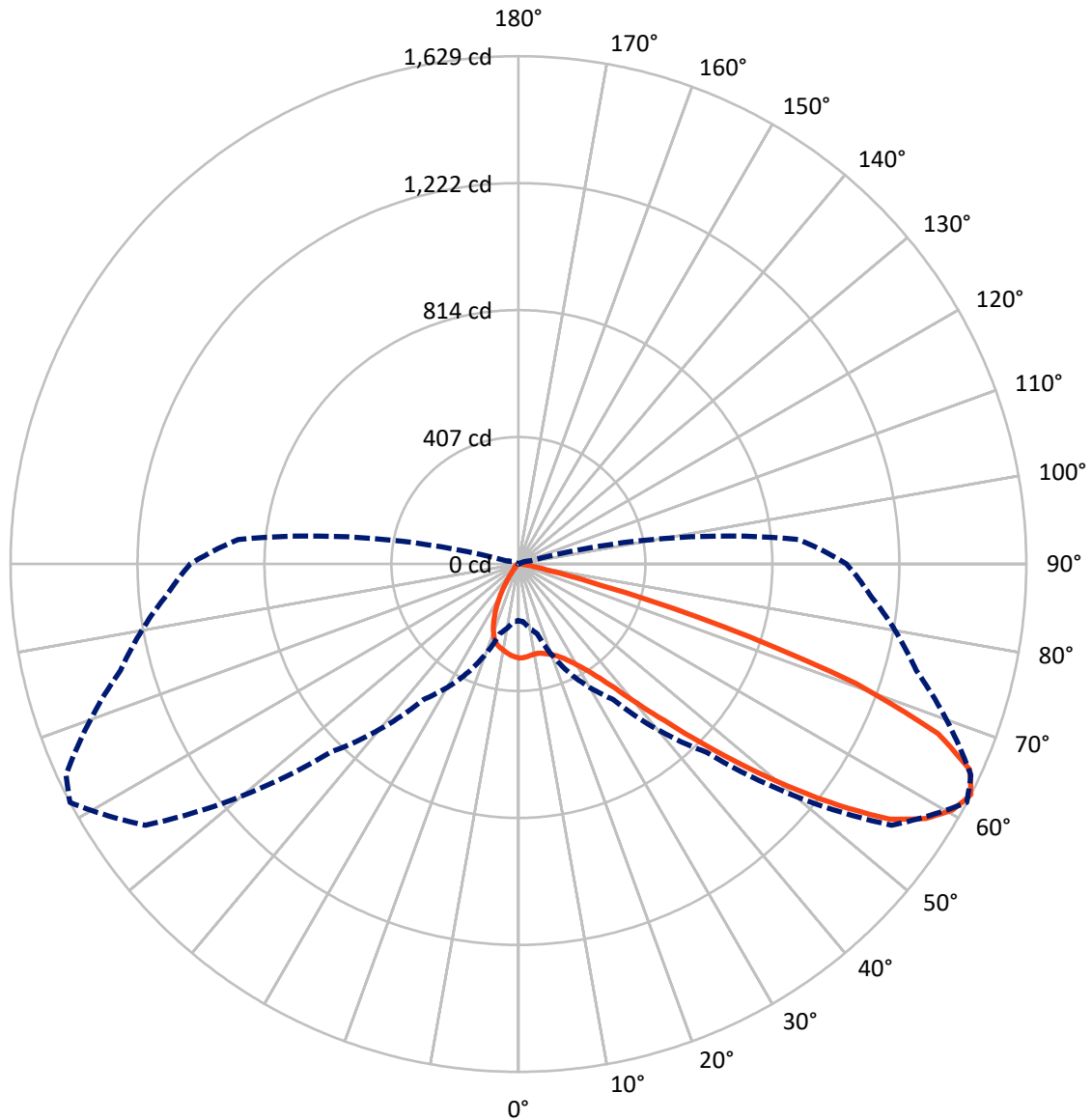
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.3 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical



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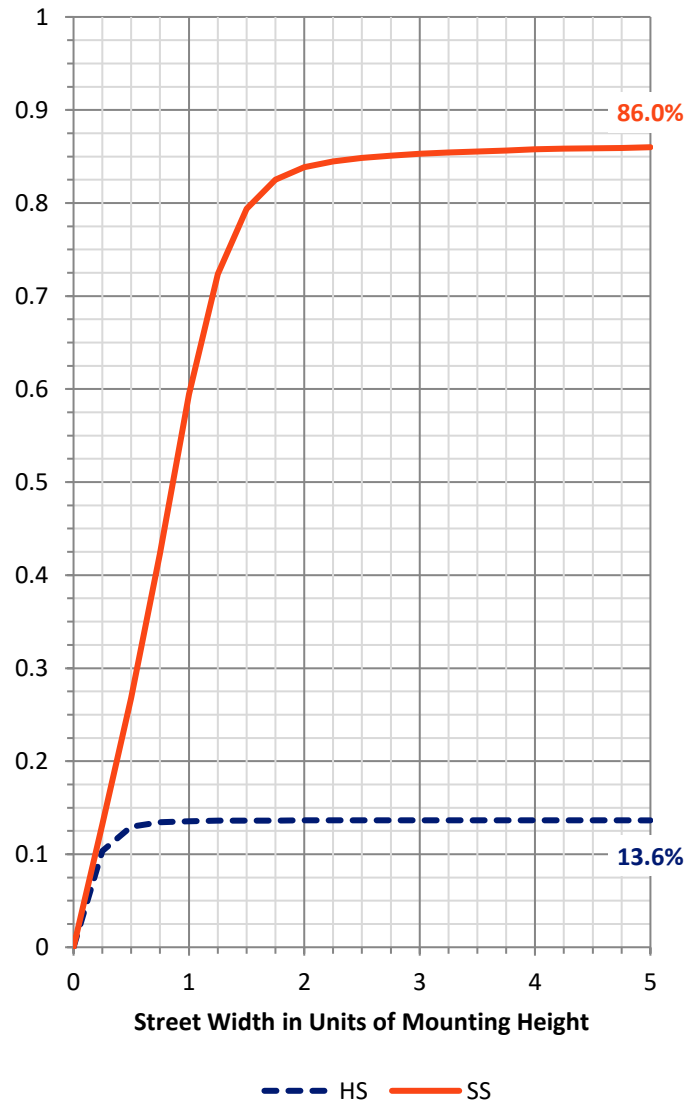
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	268.0	0.0	268.0
	% Fixture	13.8	0.0	13.8
Street Side	Lumens	1673.0	0.0	1673.0
	% Fixture	86.2	0.0	86.2
Total	Lumens	1941.0	0.0	1941.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.5	1.4
10°-20°	68.9	3.6
20°-30°	102.9	5.3
30°-40°	196.1	10.1
40°-50°	409.0	21.1
50°-60°	543.3	28.0
60°-70°	423.6	21.8
70°-80°	160.1	8.2
80°-90°	9.6	0.5
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°	1941.0	100.0
0°-180°	1941.0	100.0

Coefficient of Utilization



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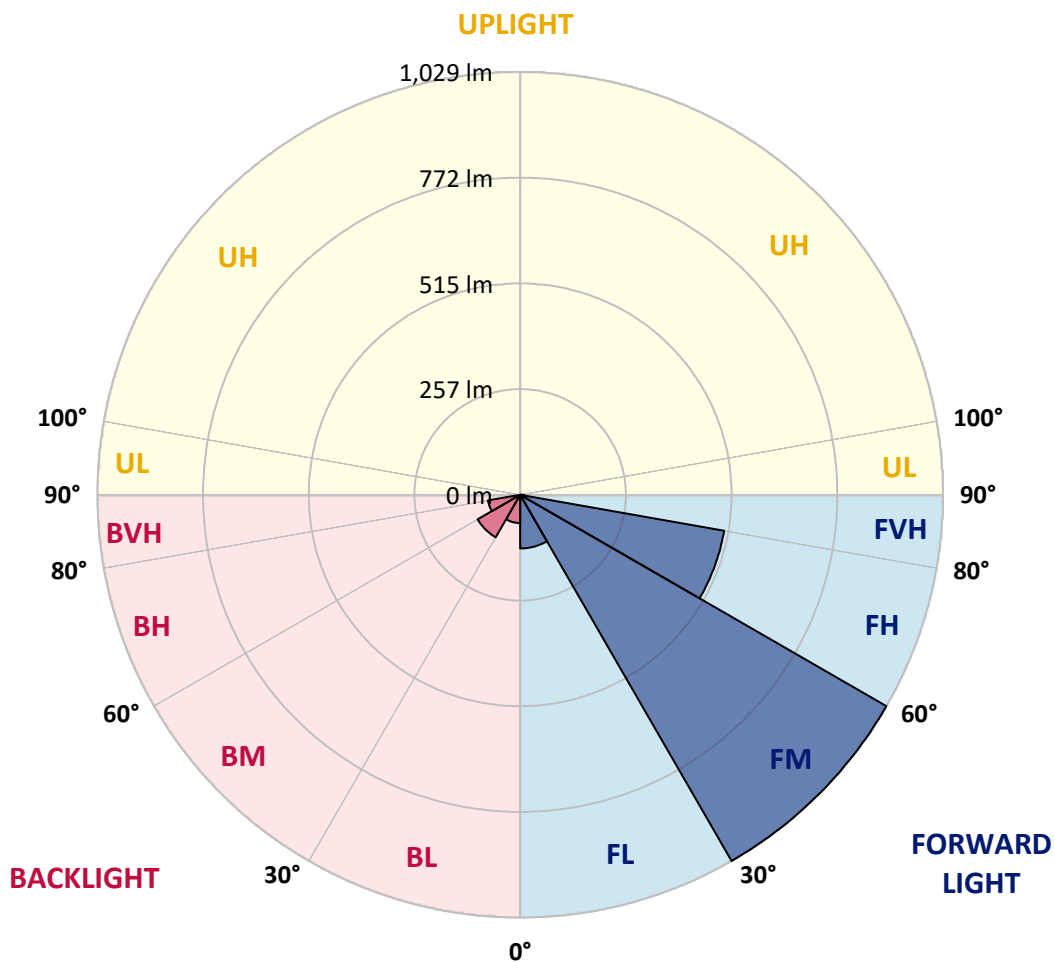
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	130.6	6.7			
FM (30°-60°)	1029.1	53.0			
FH (60°-80°)	504.1	26.0			G0/660
FVH (80°-90°)	9.1	0.5			G0/10
BL (0°-30°)	68.7	3.5	B0/110		
BM (30°-60°)	119.3	6.1	B0/220		
BH (60°-80°)	79.5	4.1	B0/110		G0/110
BVH (80°-90°)	0.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G0

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5
2.5°	300.5	300.0	301.3	301.3	301.0	301.5	301.0	300.8	300.5	300.0	299.5
5°	292.7	292.7	294.4	295.2	296.0	297.5	298.0	298.5	298.3	298.8	299.0
7.5°	283.5	284.1	286.1	287.1	288.4	291.4	293.2	295.2	295.5	297.2	298.3
10°	275.9	276.4	278.5	279.7	281.5	285.6	289.4	292.9	293.4	296.7	297.5
12.5°	270.9	271.4	273.4	275.2	279.0	284.1	289.4	293.4	294.7	298.8	298.8
15°	268.8	269.3	271.9	274.9	280.0	286.6	293.2	297.5	300.0	303.3	301.8
17.5°	268.1	269.1	273.4	278.0	283.5	290.6	298.8	303.3	305.9	309.4	306.1
20°	270.4	271.6	277.2	283.5	289.4	296.7	305.6	310.7	313.2	315.5	309.2
22.5°	278.5	280.5	285.3	292.4	297.0	305.9	314.7	320.6	323.4	323.1	314.7
25°	298.0	300.5	302.8	306.6	308.7	319.3	328.7	334.5	336.5	335.8	326.2
27.5°	344.2	347.5	339.3	331.0	326.4	336.3	346.7	352.8	354.6	353.0	338.3
30°	422.0	422.3	403.8	377.4	357.9	356.8	369.5	377.6	377.6	374.6	355.6
32.5°	535.4	527.3	503.9	457.3	413.1	390.1	399.7	407.6	407.6	403.8	381.9
35°	677.9	671.8	633.3	577.2	498.6	443.3	441.3	448.9	449.2	448.1	423.3
37.5°	823.0	808.0	775.8	708.6	616.3	525.2	500.9	506.2	510.0	509.5	478.6
40°	957.9	942.9	915.8	851.1	760.8	646.0	587.6	587.6	587.9	585.3	548.1
42.5°	1063.9	1057.1	1036.8	991.9	922.1	835.9	704.5	685.3	681.2	678.7	629.7
45°	1132.7	1125.5	1114.6	1105.3	1082.7	1051.7	861.5	811.1	804.5	779.6	720.0
47.5°	1136.5	1125.5	1132.9	1168.4	1219.4	1235.4	1055.3	957.7	940.2	895.3	810.6
50°	1051.7	1052.8	1081.4	1167.6	1305.4	1396.4	1260.7	1119.0	1091.3	1001.5	890.4
52.5°	896.0	906.2	950.6	1083.2	1309.4	1499.4	1439.5	1285.3	1230.5	1096.9	946.7
55°	701.5	710.6	783.2	926.7	1210.8	1514.1	1569.6	1444.6	1372.1	1163.3	997.2
57.5°	496.1	513.3	603.4	735.2	1022.6	1401.7	1605.1	1540.0	1469.7	1228.0	1044.6
60°	301.5	310.2	403.8	557.2	770.7	1166.6	1563.5	1600.8	1544.0	1284.1	1089.0
62.5°	181.3	186.4	231.3	383.7	530.3	854.2	1460.6	1628.7	1600.8	1321.3	1131.6
65°	107.3	110.6	131.6	231.8	353.3	524.0	1238.2	1590.4	1613.0	1353.6	1156.5
67.5°	77.4	78.4	86.0	124.8	237.1	280.8	861.0	1450.9	1535.4	1364.2	1141.8
70°	66.7	68.0	75.3	87.8	167.9	165.6	448.1	1148.4	1301.6	1308.7	1079.6
72.5°	50.5	52.8	64.9	82.4	120.5	117.7	168.9	684.8	883.6	1074.3	930.8
75°	34.2	35.5	48.2	70.0	94.1	87.8	88.5	274.9	432.2	673.6	639.6
77.5°	21.6	22.6	29.4	50.2	80.7	61.9	62.6	97.6	156.0	285.6	274.2
80°	14.7	15.2	17.8	32.5	54.5	53.8	40.3	51.0	58.1	88.0	59.1
82.5°	8.9	8.9	11.7	19.3	33.0	42.6	25.4	28.2	30.9	32.7	13.4
85°	3.0	3.3	7.1	11.9	20.3	21.3	14.5	16.7	17.5	19.0	6.3
87.5°	1.3	1.0	3.8	6.6	8.6	9.9	8.4	7.6	8.4	11.2	2.8
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°	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5
2.5°	299.8	298.8	298.8	298.5	297.0	296.2	295.5	293.4	294.7	293.2	292.2
5°	298.3	297.5	296.2	295.0	291.4	288.4	287.1	284.6	284.3	282.3	281.3
7.5°	298.0	296.2	294.2	289.9	284.6	279.7	275.4	271.1	269.3	267.1	265.8
10°	296.7	294.4	290.6	283.8	275.9	268.3	258.7	246.8	237.9	232.8	232.1
12.5°	297.0	294.4	288.6	278.5	268.1	251.3	225.5	198.3	176.0	166.6	165.1
15°	299.0	296.2	287.3	273.7	255.9	219.1	171.7	130.1	101.2	90.8	88.5
17.5°	301.5	296.7	284.6	266.8	232.6	169.9	108.0	68.2	52.0	46.2	45.1
20°	303.1	296.5	280.0	256.4	197.1	113.6	58.8	40.1	35.3	34.0	33.5
22.5°	306.9	297.2	276.2	240.2	152.4	68.5	37.3	31.2	28.4	26.9	26.6
25°	314.7	302.3	276.4	219.1	106.8	41.3	30.2	25.4	22.8	21.3	20.8
27.5°	326.2	311.4	281.3	193.0	65.9	31.2	25.1	20.5	17.8	16.5	16.2
30°	340.6	322.6	286.8	159.0	41.1	26.1	20.3	16.0	13.9	13.2	12.9
32.5°	363.4	341.9	291.7	118.9	28.4	21.6	16.0	12.7	11.4	10.7	10.7
35°	401.2	375.1	299.5	79.6	22.6	17.2	12.9	10.4	9.4	8.9	8.9
37.5°	454.5	422.5	303.3	49.5	18.5	13.4	10.4	8.6	7.9	7.4	7.4
40°	519.4	480.1	298.0	30.7	15.5	10.9	8.6	7.4	6.6	6.3	6.3
42.5°	594.2	546.3	281.3	21.8	12.9	8.9	7.4	6.3	5.8	5.6	5.6
45°	677.9	618.8	251.1	18.3	10.9	7.6	6.3	5.3	5.1	4.8	4.8
47.5°	761.4	692.4	212.0	15.7	9.1	6.3	5.3	4.6	4.3	4.1	4.1
50°	834.1	756.8	170.7	13.7	7.6	5.6	4.6	3.8	3.6	3.3	3.3
52.5°	875.7	795.1	132.1	11.4	6.6	4.8	3.6	3.0	2.8	2.5	2.5
55°	920.6	827.0	98.7	9.6	5.3	4.1	2.8	2.3	2.0	1.8	1.8
57.5°	962.5	855.7	73.3	7.9	4.6	3.0	2.3	1.8	1.5	1.3	1.3
60°	1003.1	880.0	54.3	6.3	3.8	2.5	1.8	1.3	1.0	0.8	0.8
62.5°	1052.5	902.4	39.8	5.1	3.3	1.8	1.3	0.8	0.5	0.3	0.3
65°	1089.3	913.8	29.9	3.8	2.8	1.3	0.8	0.5	0.0	0.0	0.0
67.5°	1089.0	891.7	21.8	2.8	2.0	1.0	0.5	0.0	0.0	0.0	0.0
70°	1038.1	824.8	15.2	2.3	1.5	0.8	0.3	0.0	0.0	0.0	0.0
72.5°	890.2	652.3	9.9	1.5	1.3	0.5	0.3	0.0	0.0	0.0	0.0
75°	600.8	331.2	5.8	1.3	1.0	0.5	0.3	0.0	0.0	0.0	0.0
77.5°	256.9	130.1	3.0	0.8	0.8	0.3	0.0	0.0	0.0	0.0	0.0
80°	53.8	31.4	1.3	0.5	0.5	0.3	0.0	0.0	0.0	0.0	0.0
82.5°	9.1	4.6	0.5	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.3	1.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.0	0.5	0.3	0.3	0.0	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)