

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: P348878

Luminaire Tested: **ARCH-N-PA1-20-740-U-T4W-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348878  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-20-740-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 420mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2419 lumens  
Efficiency: N/A  
Efficacy: 100.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B0 - U0 - G1

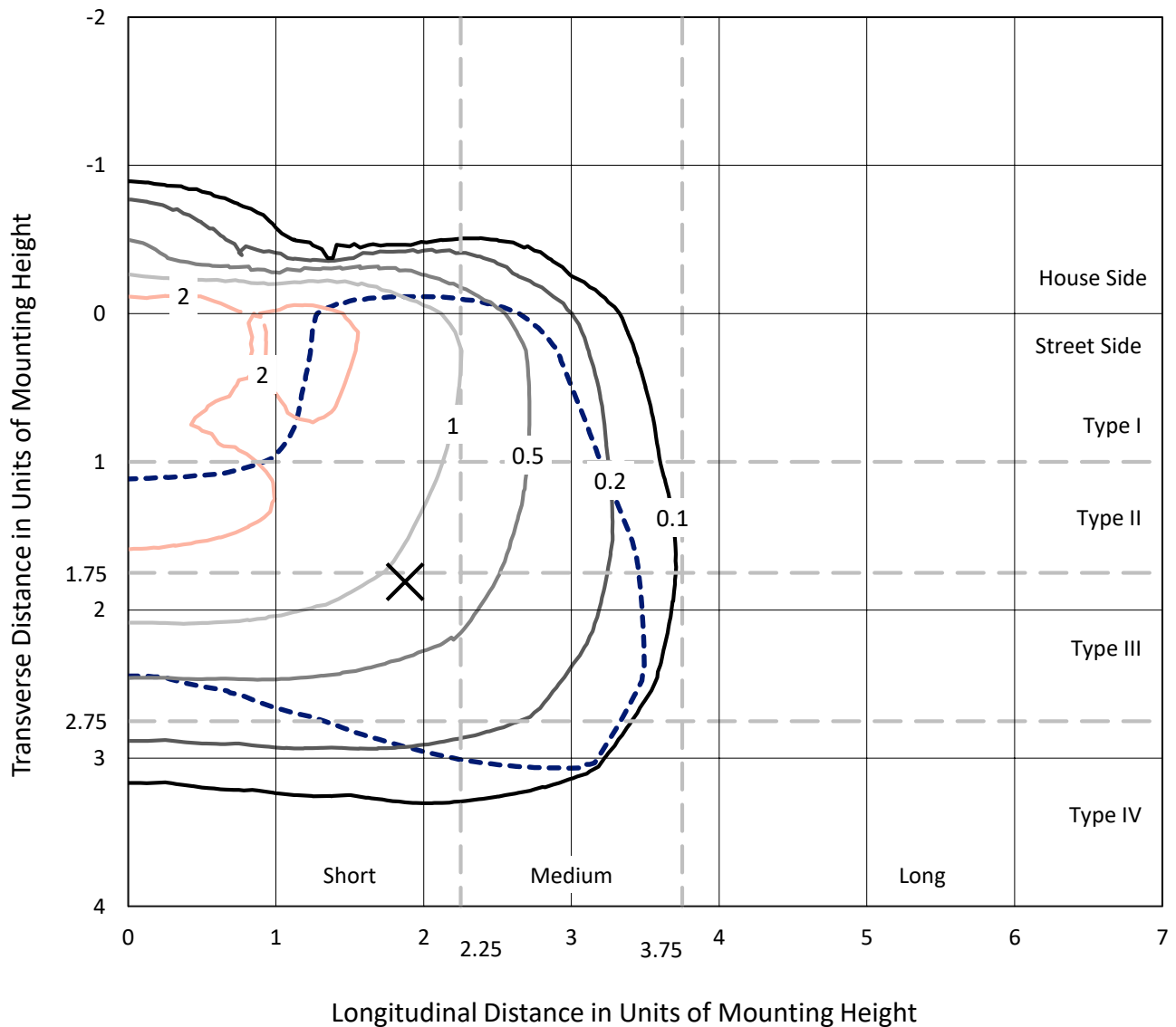
Input Watts (W): 24  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

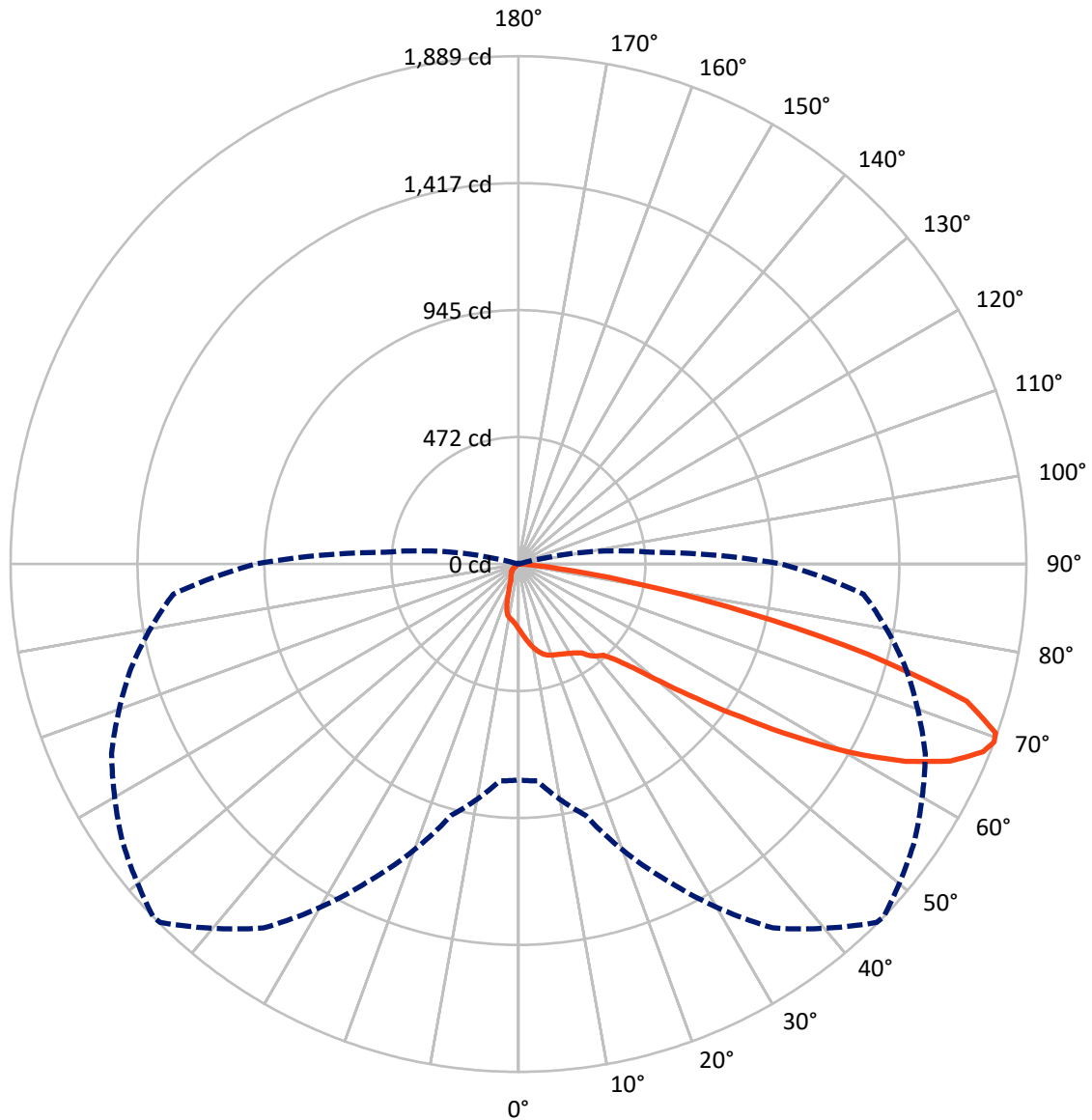


Based on 10 foot mounting height. Maximum calculated value = 3.5 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical



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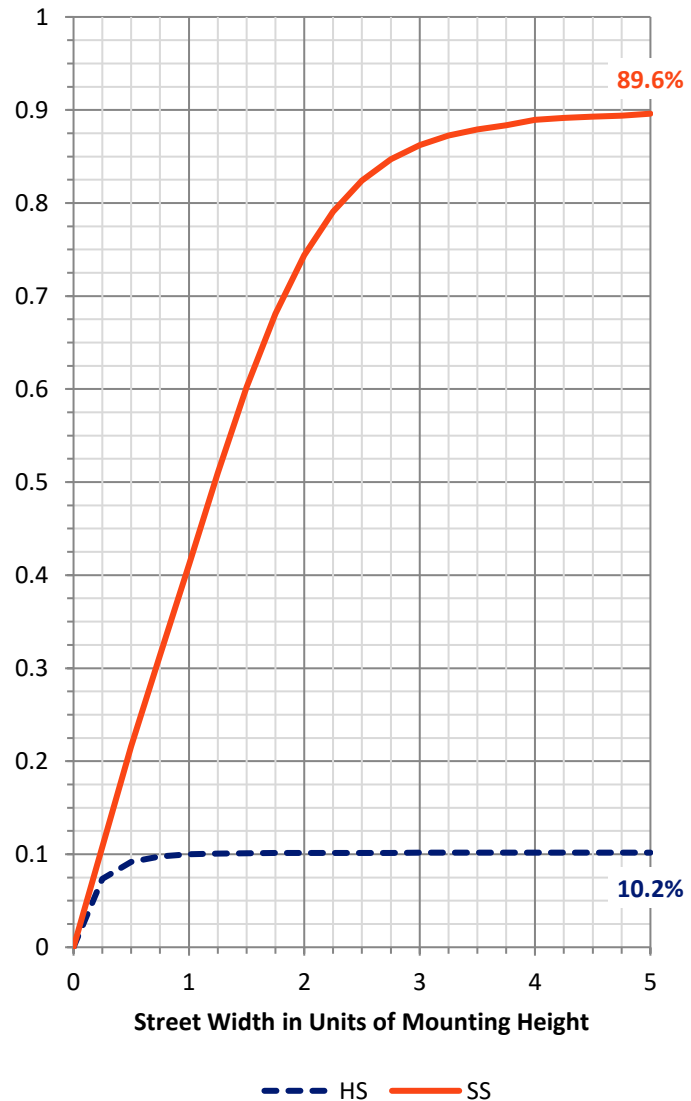
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	248.3	0.0	248.3
	% Fixture	10.3	0.0	10.3
<b>Street Side</b>	Lumens	2170.7	0.0	2170.7
	% Fixture	89.7	0.0	89.7
<b>Total</b>	Lumens	2419.0	0.0	2419.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	24.1	1.0
10°-20°	73.2	3.0
20°-30°	115.1	4.8
30°-40°	165.1	6.8
40°-50°	285.3	11.8
50°-60°	563.6	23.3
60°-70°	787.7	32.6
70°-80°	380.5	15.7
80°-90°	24.5	1.0
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°	2419.0	100.0
0°-180°	2419.0	100.0



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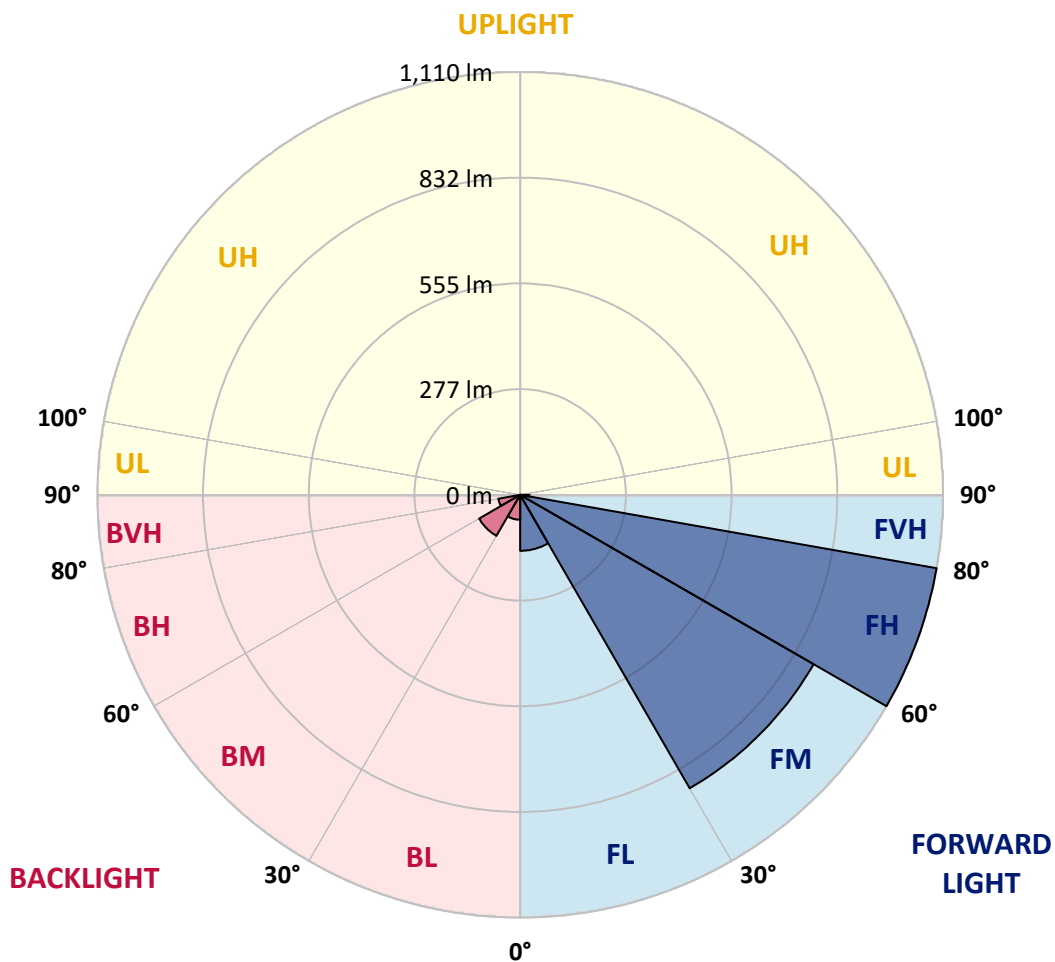
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	147.0	6.1			
FM	(30°-60°)	889.5	36.8			
FH	(60°-80°)	1110.0	45.9			G1/1800
FVH	(80°-90°)	24.3	1.0			G1/100
BL	(0°-30°)	65.4	2.7	B0/110		
BM	(30°-60°)	124.4	5.1	B0/220		
BH	(60°-80°)	58.2	2.4	B0/110		G0/110
BVH	(80°-90°)	0.2	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-G1**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	242.4	242.4	242.4	242.4	242.4	242.4	242.4	242.4	242.4	242.4	242.4
2.5°	269.3	268.9	267.3	266.6	262.8	260.5	259.6	256.8	252.7	248.6	244.1
5°	299.9	299.8	296.8	294.0	286.7	279.9	278.7	272.1	262.9	254.3	245.7
7.5°	331.2	329.7	326.8	321.3	310.8	299.9	298.9	289.6	276.5	264.0	251.7
10°	357.7	356.8	353.0	344.7	332.3	320.0	318.7	307.2	292.5	277.2	261.4
12.5°	378.4	377.7	372.6	362.3	349.1	336.3	334.6	324.4	308.6	291.5	272.9
15°	391.0	390.6	384.4	373.4	360.4	349.3	347.9	338.9	324.3	306.3	285.4
17.5°	393.9	394.0	387.6	376.4	365.8	357.8	356.7	349.9	337.6	319.8	297.8
20°	387.3	388.7	382.9	373.3	366.7	362.5	361.6	357.5	347.2	330.4	307.8
22.5°	378.0	378.7	374.7	368.3	365.5	366.3	365.9	363.6	354.9	339.5	317.7
25°	372.4	372.4	370.0	364.5	366.3	371.2	371.3	370.9	364.0	350.6	329.7
27.5°	372.1	371.4	368.7	364.6	369.6	377.1	377.6	380.6	376.3	364.1	344.7
30°	381.2	380.4	374.6	369.3	375.6	383.7	384.8	391.5	389.4	378.7	361.4
32.5°	402.4	399.6	386.8	378.0	382.8	392.4	393.9	404.6	408.0	396.7	377.5
35°	431.4	422.5	404.0	394.6	395.0	405.1	406.5	422.1	432.2	413.3	389.9
37.5°	471.5	467.1	437.0	411.8	413.9	429.2	433.1	450.2	447.3	422.4	404.1
40°	559.3	552.3	520.4	460.1	431.9	448.7	449.9	459.0	459.2	442.9	433.6
42.5°	678.8	676.0	642.3	547.8	467.4	461.7	464.0	479.3	496.4	486.2	485.8
45°	811.2	809.7	774.0	664.2	539.2	504.5	507.3	527.8	560.6	562.9	577.3
47.5°	917.7	917.0	896.5	794.0	649.1	577.0	577.9	599.6	657.3	685.7	708.8
50°	1014.8	1018.0	1001.8	934.6	798.8	690.5	688.3	702.9	795.4	842.0	870.6
52.5°	1149.7	1154.4	1108.9	1065.7	955.9	831.4	829.7	844.9	961.4	996.4	1001.5
55°	1268.9	1261.0	1225.0	1212.6	1147.5	1005.3	1004.9	1018.3	1122.0	1136.9	1146.3
57.5°	1321.5	1318.5	1335.8	1364.4	1348.1	1211.0	1209.9	1199.7	1265.7	1267.3	1296.3
60°	1354.8	1358.5	1411.7	1499.8	1540.6	1432.2	1425.7	1363.4	1403.0	1399.5	1430.4
62.5°	1329.8	1337.2	1432.9	1579.8	1684.6	1625.4	1616.1	1513.3	1520.3	1508.1	1536.9
65°	1197.4	1208.8	1365.7	1564.7	1756.1	1776.4	1766.9	1645.7	1613.4	1593.4	1577.4
67.5°	972.2	979.0	1142.8	1433.5	1723.8	1866.4	1864.5	1761.7	1683.7	1579.0	1454.9
69°	803.5	810.1	967.8	1295.3	1653.0	1885.7	1889.4	1798.9	1670.3	1491.4	1289.1
70°	680.5	687.7	834.5	1176.9	1570.7	1876.7	1883.4	1795.4	1632.0	1390.1	1143.6
72.5°	356.9	363.1	513.8	810.8	1280.5	1723.3	1743.6	1643.7	1383.4	1009.5	676.2
75°	112.2	115.7	200.6	423.8	876.7	1339.9	1344.6	1289.3	982.3	555.3	281.6
77.5°	42.8	41.7	66.8	156.2	443.2	843.7	872.2	805.7	515.5	196.3	65.0
80°	23.0	23.1	34.7	64.6	189.6	433.6	457.6	390.5	183.2	61.2	15.0
82.5°	10.0	10.4	19.5	34.3	87.1	159.9	171.9	143.1	70.0	41.2	5.6
85°	2.2	2.4	9.4	18.6	35.5	44.9	47.1	46.4	44.6	32.0	2.2
87.5°	0.0	0.0	4.2	6.7	9.0	10.2	9.0	11.7	24.6	21.5	1.1
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°	242.4	242.4	242.4	242.4	242.4	242.4	242.4	242.4	242.4	242.4	242.4
2.5°	242.6	240.6	237.0	233.2	230.5	227.6	225.4	224.3	223.2	222.4	223.4
5°	242.1	238.2	231.4	224.8	220.0	216.2	213.0	211.8	210.5	209.6	209.5
7.5°	246.1	240.6	230.1	220.5	213.1	207.9	203.6	201.8	200.3	199.6	199.0
10°	253.7	246.6	232.6	220.0	210.5	201.7	192.4	185.2	180.6	178.4	177.6
12.5°	263.6	254.6	237.4	222.4	208.6	191.6	171.8	154.8	143.8	140.2	138.0
15°	275.2	264.0	243.6	225.5	201.5	170.5	137.0	114.8	104.6	102.5	100.3
17.5°	286.3	274.0	251.1	226.0	186.1	136.2	100.4	85.3	81.3	82.7	83.0
20°	296.0	283.9	258.5	221.1	158.1	102.2	77.7	73.9	75.4	78.0	78.5
22.5°	305.9	293.4	265.3	207.9	122.3	77.6	70.0	70.9	72.4	75.0	75.4
25°	317.9	305.0	271.6	183.7	91.8	66.0	66.5	67.8	69.3	71.7	71.9
27.5°	331.7	319.6	275.8	152.3	68.1	60.7	62.2	64.2	65.7	67.9	68.4
30°	350.1	338.9	277.2	119.8	57.0	55.9	56.6	59.1	61.2	63.3	63.6
32.5°	367.4	357.9	272.7	90.4	52.9	51.5	51.5	53.0	55.5	57.4	57.8
35°	383.2	377.1	258.1	66.1	49.7	47.4	46.3	46.3	47.9	49.5	49.9
37.5°	404.2	404.0	234.7	52.7	46.6	44.0	41.6	39.8	39.2	39.6	39.8
40°	440.2	440.5	204.0	47.3	44.0	40.5	36.9	33.6	30.5	29.5	29.4
42.5°	496.3	491.2	171.9	44.7	41.7	36.9	31.4	27.0	22.2	20.8	20.6
45°	585.5	555.2	137.9	42.3	39.4	32.8	26.0	20.0	16.1	15.0	15.0
47.5°	715.3	639.2	106.8	39.7	36.2	28.1	19.6	14.4	11.8	11.2	11.3
50°	849.6	721.6	81.9	36.4	32.3	23.3	14.5	10.4	9.0	9.0	9.1
52.5°	968.7	781.9	63.9	32.9	27.6	18.3	11.0	8.2	7.5	7.4	7.5
55°	1080.2	820.8	48.9	28.8	21.9	13.6	8.4	6.7	6.2	6.0	5.9
57.5°	1187.7	840.1	36.6	23.3	15.9	9.9	6.7	5.7	5.2	4.9	4.8
60°	1259.3	824.4	25.2	17.1	11.0	7.1	5.6	4.9	4.3	4.0	3.9
62.5°	1299.7	781.7	16.2	12.4	7.8	5.3	4.4	4.1	3.3	2.9	2.9
65°	1283.3	711.1	11.3	8.8	5.7	4.0	3.3	3.3	2.4	1.9	1.8
67.5°	1137.2	600.8	8.6	6.6	4.1	2.9	2.5	2.8	1.5	0.9	0.9
69°	978.5	497.9	7.4	5.4	3.4	2.4	2.2	2.6	1.0	0.7	0.6
70°	850.4	429.5	6.7	4.8	2.8	2.0	1.9	2.5	1.0	0.6	0.5
72.5°	508.8	239.5	5.1	3.4	1.8	1.6	1.6	2.8	1.0	0.6	0.5
75°	205.6	84.4	3.7	2.4	1.4	1.4	1.9	3.6	0.9	0.5	0.3
77.5°	46.6	18.5	2.2	1.5	0.9	1.4	2.3	2.8	0.6	0.2	0.0
80°	11.3	4.5	1.4	0.9	0.6	1.0	1.7	1.6	0.1	0.0	0.0
82.5°	3.7	1.6	0.6	0.5	0.1	0.3	0.8	0.5	0.0	0.0	0.0
85°	1.6	0.9	0.2	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
87.5°	1.0	0.3	0.0	0.0	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)