

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: P348871

Luminaire Tested: **ARCH-N-PA1-20-730-U-T4W-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348871  
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-PA1-20-730-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 420mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2203 lumens  
Efficiency: N/A  
Efficacy: 91.8 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

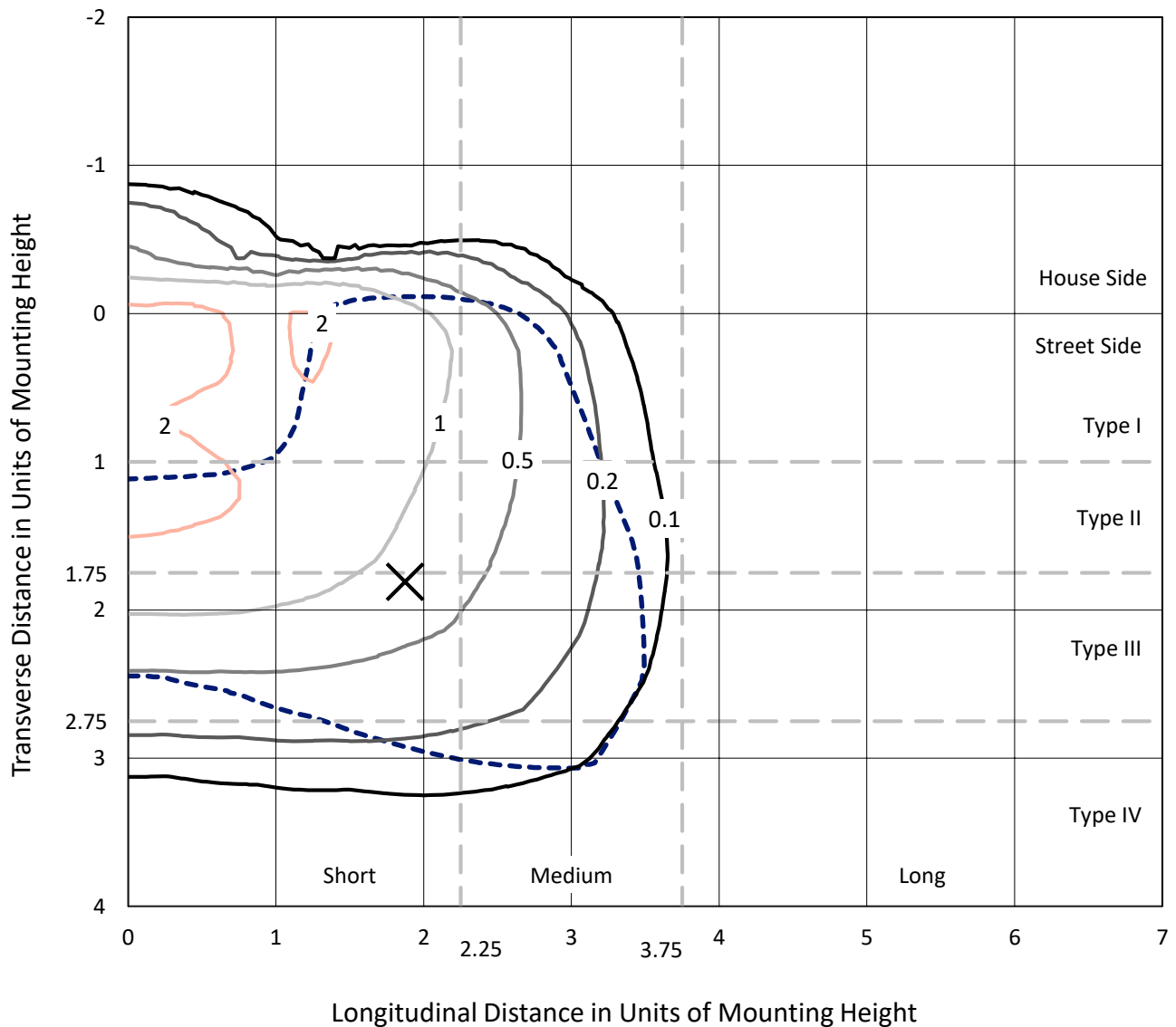


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

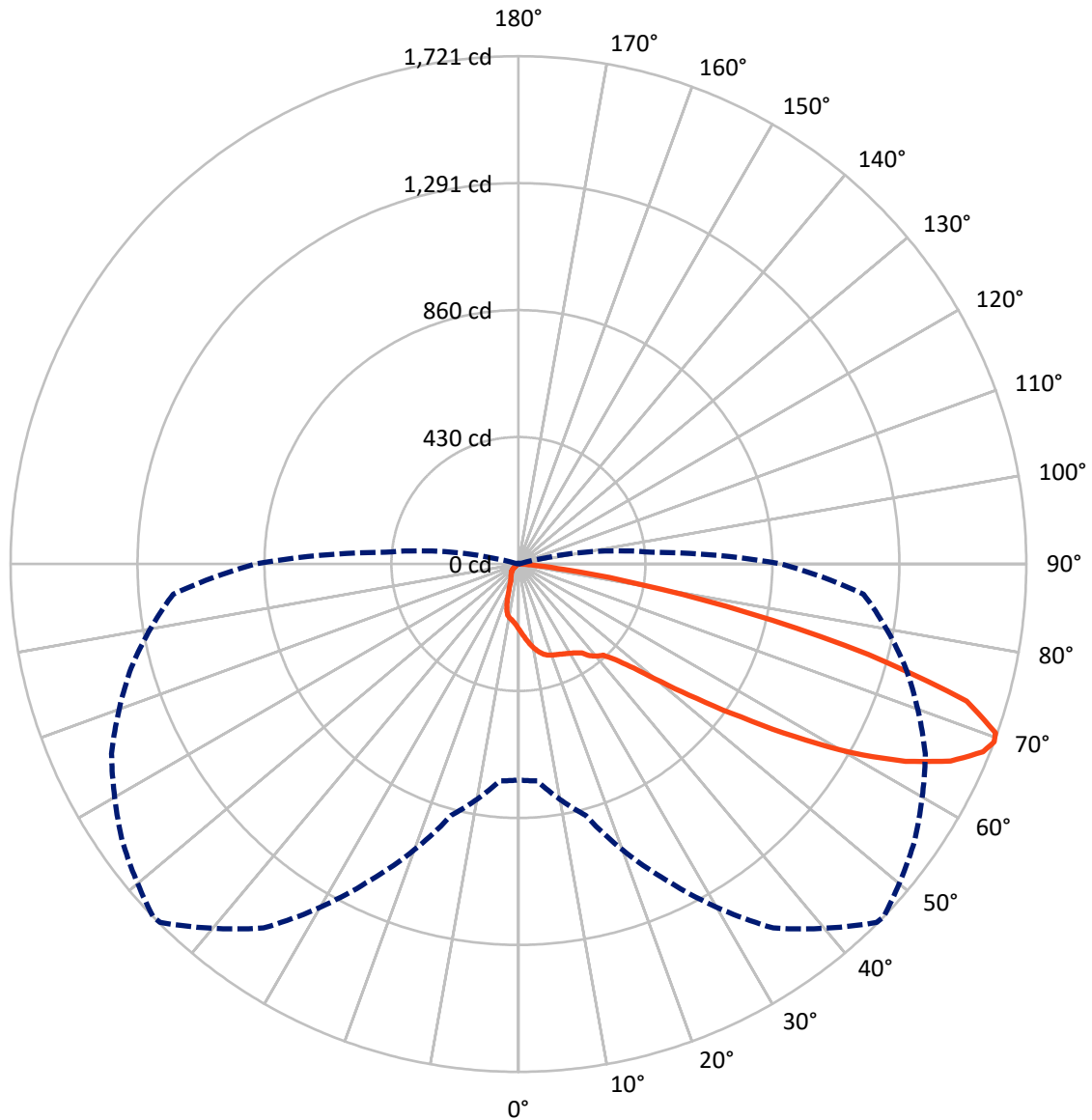


Based on 10 foot mounting height. Maximum calculated value = 3.2 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



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



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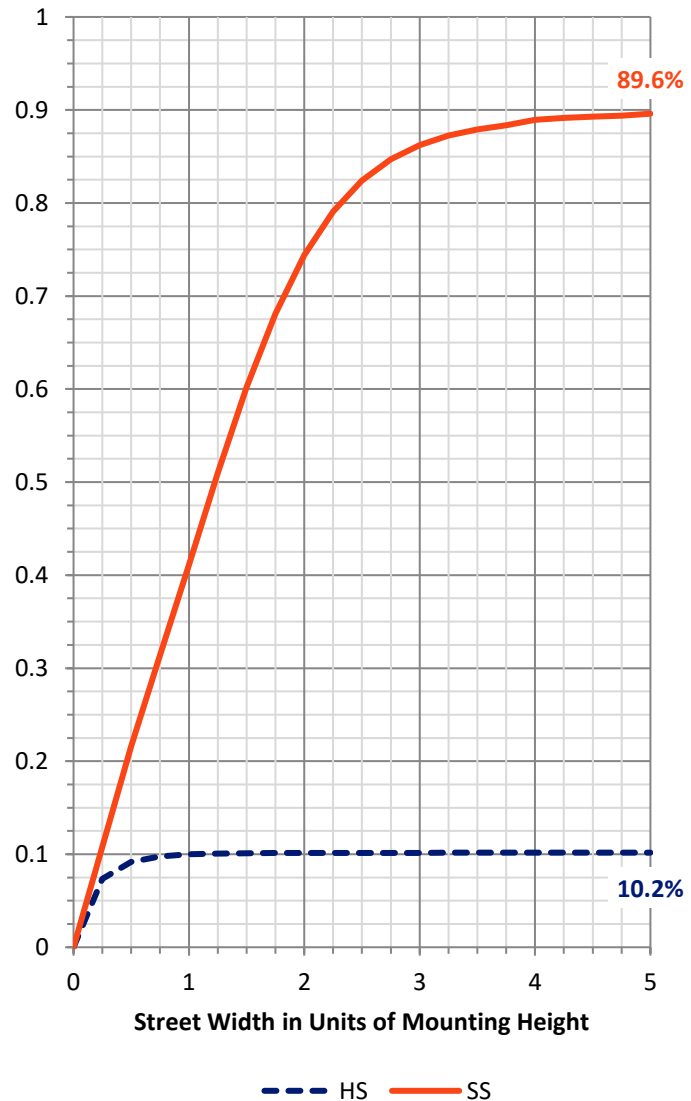
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	226.1	0.0	226.1
	% Fixture	10.3	0.0	10.3
<b>Street Side</b>	Lumens	1976.9	0.0	1976.9
	% Fixture	89.7	0.0	89.7
<b>Total</b>	Lumens	2203.0	0.0	2203.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	22.0	1.0
10°-20°	66.7	3.0
20°-30°	104.8	4.8
30°-40°	150.3	6.8
40°-50°	259.8	11.8
50°-60°	513.3	23.3
60°-70°	717.3	32.6
70°-80°	346.5	15.7
80°-90°	22.3	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°	2203.0	100.0
0°-180°	2203.0	100.0



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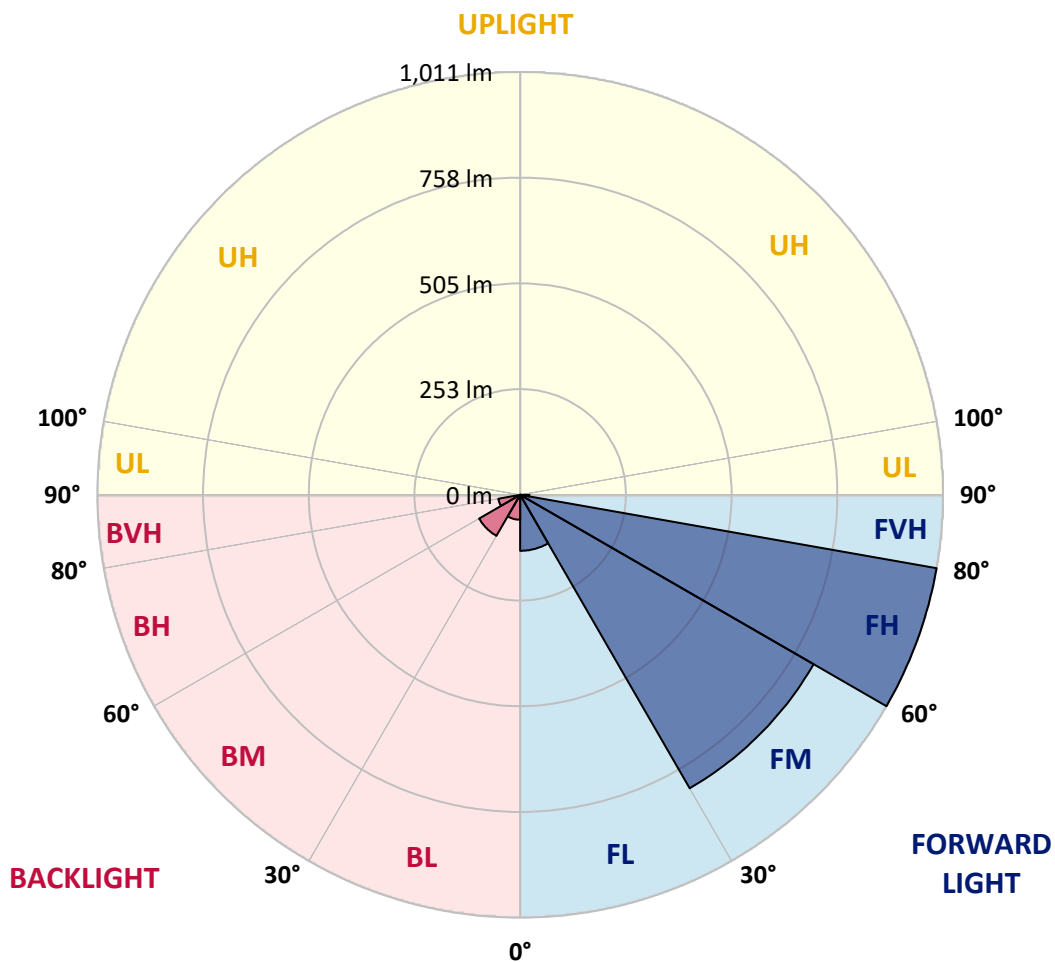
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	133.9	6.1			
FM	(30°-60°)	810.1	36.8			
FH	(60°-80°)	1010.9	45.9			G1/1800
FVH	(80°-90°)	22.1	1.0			G1/100
BL	(0°-30°)	59.6	2.7	B0/110		
BM	(30°-60°)	113.3	5.1	B0/220		
BH	(60°-80°)	53.0	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°	220.7	220.7	220.7	220.7	220.7	220.7	220.7	220.7	220.7	220.7	220.7
2.5°	245.2	244.9	243.5	242.8	239.3	237.3	236.4	233.9	230.1	226.4	222.3
5°	273.1	273.0	270.3	267.7	261.1	254.9	253.8	247.8	239.4	231.6	223.7
7.5°	301.6	300.3	297.6	292.6	283.0	273.1	272.2	263.7	251.8	240.5	229.2
10°	325.8	325.0	321.4	313.9	302.6	291.4	290.2	279.8	266.4	252.4	238.1
12.5°	344.6	344.0	339.3	329.9	317.9	306.3	304.7	295.4	281.1	265.5	248.5
15°	356.0	355.7	350.1	340.0	328.3	318.1	316.8	308.6	295.3	279.0	259.9
17.5°	358.7	358.8	352.9	342.8	333.1	325.9	324.8	318.7	307.5	291.3	271.2
20°	352.7	354.0	348.7	339.9	333.9	330.1	329.3	325.6	316.2	300.9	280.3
22.5°	344.3	344.9	341.3	335.4	332.9	333.6	333.2	331.2	323.2	309.1	289.3
25°	339.1	339.1	336.9	332.0	333.6	338.1	338.2	337.8	331.5	319.3	300.3
27.5°	338.9	338.3	335.8	332.1	336.6	343.4	343.9	346.6	342.7	331.6	313.9
30°	347.2	346.4	341.2	336.3	342.1	349.4	350.5	356.6	354.6	344.9	329.1
32.5°	366.5	363.9	352.2	344.3	348.6	357.4	358.7	368.4	371.5	361.3	343.8
35°	392.9	384.8	367.9	359.3	359.8	369.0	370.2	384.4	393.6	376.4	355.1
37.5°	429.4	425.4	398.0	375.0	376.9	390.9	394.5	410.0	407.4	384.7	368.0
40°	509.3	503.0	473.9	419.1	393.3	408.6	409.8	418.0	418.2	403.4	394.9
42.5°	618.2	615.6	584.9	498.9	425.7	420.5	422.6	436.5	452.1	442.8	442.4
45°	738.7	737.4	704.9	604.9	491.0	459.4	462.0	480.7	510.6	512.6	525.7
47.5°	835.7	835.1	816.4	723.1	591.1	525.4	526.3	546.1	598.6	624.5	645.5
50°	924.1	927.1	912.4	851.1	727.5	628.8	626.9	640.1	724.4	766.8	792.9
52.5°	1047.1	1051.3	1009.9	970.5	870.5	757.1	755.6	769.4	875.6	907.4	912.1
55°	1155.6	1148.4	1115.6	1104.3	1045.0	915.6	915.2	927.3	1021.9	1035.4	1044.0
57.5°	1203.5	1200.8	1216.6	1242.6	1227.7	1102.8	1101.9	1092.6	1152.7	1154.2	1180.5
60°	1233.8	1237.2	1285.7	1365.9	1403.0	1304.4	1298.4	1241.7	1277.7	1274.5	1302.7
62.5°	1211.1	1217.8	1305.0	1438.7	1534.2	1480.3	1471.8	1378.2	1384.5	1373.5	1399.7
65°	1090.4	1100.9	1243.7	1425.0	1599.3	1617.7	1609.2	1498.7	1469.3	1451.1	1436.6
67.5°	885.4	891.6	1040.8	1305.5	1569.9	1699.8	1698.0	1604.4	1533.4	1438.0	1325.0
69°	731.7	737.8	881.4	1179.7	1505.4	1717.3	1720.7	1638.3	1521.2	1358.3	1174.0
70°	619.7	626.3	760.0	1071.8	1430.5	1709.2	1715.2	1635.1	1486.3	1265.9	1041.5
72.5°	325.1	330.6	467.9	738.4	1166.2	1569.4	1587.9	1496.9	1259.8	919.4	615.8
75°	102.2	105.4	182.7	386.0	798.4	1220.3	1224.5	1174.2	894.6	505.7	256.5
77.5°	38.9	38.0	60.8	142.2	403.7	768.4	794.3	733.8	469.5	178.8	59.2
80°	21.0	21.1	31.6	58.9	172.7	394.9	416.8	355.6	166.8	55.8	13.6
82.5°	9.1	9.5	17.8	31.2	79.3	145.6	156.6	130.4	63.7	37.5	5.1
85°	2.0	2.2	8.6	16.9	32.3	40.9	42.9	42.2	40.6	29.1	2.0
87.5°	0.0	0.0	3.8	6.1	8.2	9.3	8.2	10.6	22.4	19.6	1.0
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°	220.7	220.7	220.7	220.7	220.7	220.7	220.7	220.7	220.7	220.7	220.7
2.5°	220.9	219.1	215.9	212.4	209.9	207.3	205.2	204.3	203.3	202.6	203.5
5°	220.5	216.9	210.7	204.7	200.4	196.9	194.0	192.8	191.7	190.9	190.8
7.5°	224.1	219.1	209.6	200.8	194.1	189.3	185.4	183.8	182.4	181.8	181.3
10°	231.1	224.6	211.8	200.4	191.7	183.7	175.2	168.7	164.4	162.5	161.8
12.5°	240.0	231.9	216.2	202.6	190.0	174.5	156.5	141.0	131.0	127.7	125.7
15°	250.6	240.5	221.9	205.3	183.5	155.2	124.8	104.5	95.2	93.4	91.3
17.5°	260.7	249.6	228.7	205.9	169.5	124.1	91.4	77.7	74.1	75.3	75.6
20°	269.6	258.5	235.4	201.3	144.0	93.1	70.8	67.3	68.7	71.1	71.5
22.5°	278.6	267.2	241.6	189.3	111.3	70.7	63.7	64.6	65.9	68.3	68.7
25°	289.5	277.7	247.4	167.3	83.6	60.1	60.5	61.8	63.1	65.3	65.5
27.5°	302.1	291.1	251.2	138.7	62.0	55.3	56.6	58.5	59.8	61.9	62.3
30°	318.9	308.6	252.4	109.1	52.0	50.9	51.5	53.8	55.8	57.6	57.9
32.5°	334.6	326.0	248.3	82.3	48.1	46.9	46.9	48.2	50.5	52.3	52.7
35°	349.0	343.4	235.1	60.2	45.2	43.2	42.1	42.1	43.6	45.0	45.4
37.5°	368.1	367.9	213.7	48.0	42.5	40.1	37.9	36.3	35.7	36.0	36.3
40°	400.9	401.2	185.8	43.1	40.1	36.9	33.6	30.6	27.8	26.9	26.8
42.5°	452.0	447.4	156.6	40.7	38.0	33.6	28.6	24.6	20.2	18.9	18.8
45°	533.2	505.6	125.6	38.5	35.8	29.9	23.7	18.2	14.7	13.6	13.6
47.5°	651.5	582.1	97.3	36.2	32.9	25.6	17.9	13.1	10.7	10.2	10.3
50°	773.8	657.1	74.6	33.2	29.4	21.2	13.2	9.5	8.2	8.2	8.3
52.5°	882.2	712.1	58.2	30.0	25.1	16.6	10.0	7.4	6.8	6.7	6.8
55°	983.7	747.5	44.5	26.2	19.9	12.4	7.6	6.1	5.7	5.5	5.4
57.5°	1081.7	765.1	33.4	21.2	14.5	9.0	6.1	5.2	4.8	4.4	4.3
60°	1146.8	750.8	22.9	15.6	10.0	6.5	5.1	4.4	3.9	3.6	3.5
62.5°	1183.6	711.9	14.8	11.3	7.1	4.9	4.0	3.7	3.0	2.7	2.7
65°	1168.7	647.6	10.3	8.1	5.2	3.6	3.0	3.0	2.2	1.8	1.7
67.5°	1035.7	547.1	7.9	6.0	3.7	2.7	2.3	2.6	1.3	0.8	0.8
69°	891.1	453.4	6.7	5.0	3.1	2.2	2.0	2.4	0.9	0.6	0.5
70°	774.5	391.2	6.1	4.3	2.6	1.9	1.8	2.3	0.9	0.5	0.4
72.5°	463.4	218.2	4.6	3.1	1.7	1.4	1.4	2.6	0.9	0.5	0.4
75°	187.3	76.8	3.4	2.2	1.2	1.2	1.8	3.3	0.8	0.4	0.3
77.5°	42.5	16.8	2.0	1.3	0.8	1.2	2.1	2.6	0.5	0.2	0.0
80°	10.3	4.1	1.2	0.8	0.5	0.9	1.5	1.4	0.1	0.0	0.0
82.5°	3.4	1.4	0.5	0.4	0.1	0.3	0.7	0.4	0.0	0.0	0.0
85°	1.4	0.8	0.2	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
87.5°	0.9	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)