

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: P348897

Luminaire Tested: **ARCH-N-PA1-10-827-U-T4W-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348897  
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-PA1-10-827-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 270mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1171 lumens  
Efficiency: N/A  
Efficacy: 83.6 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): 14  
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

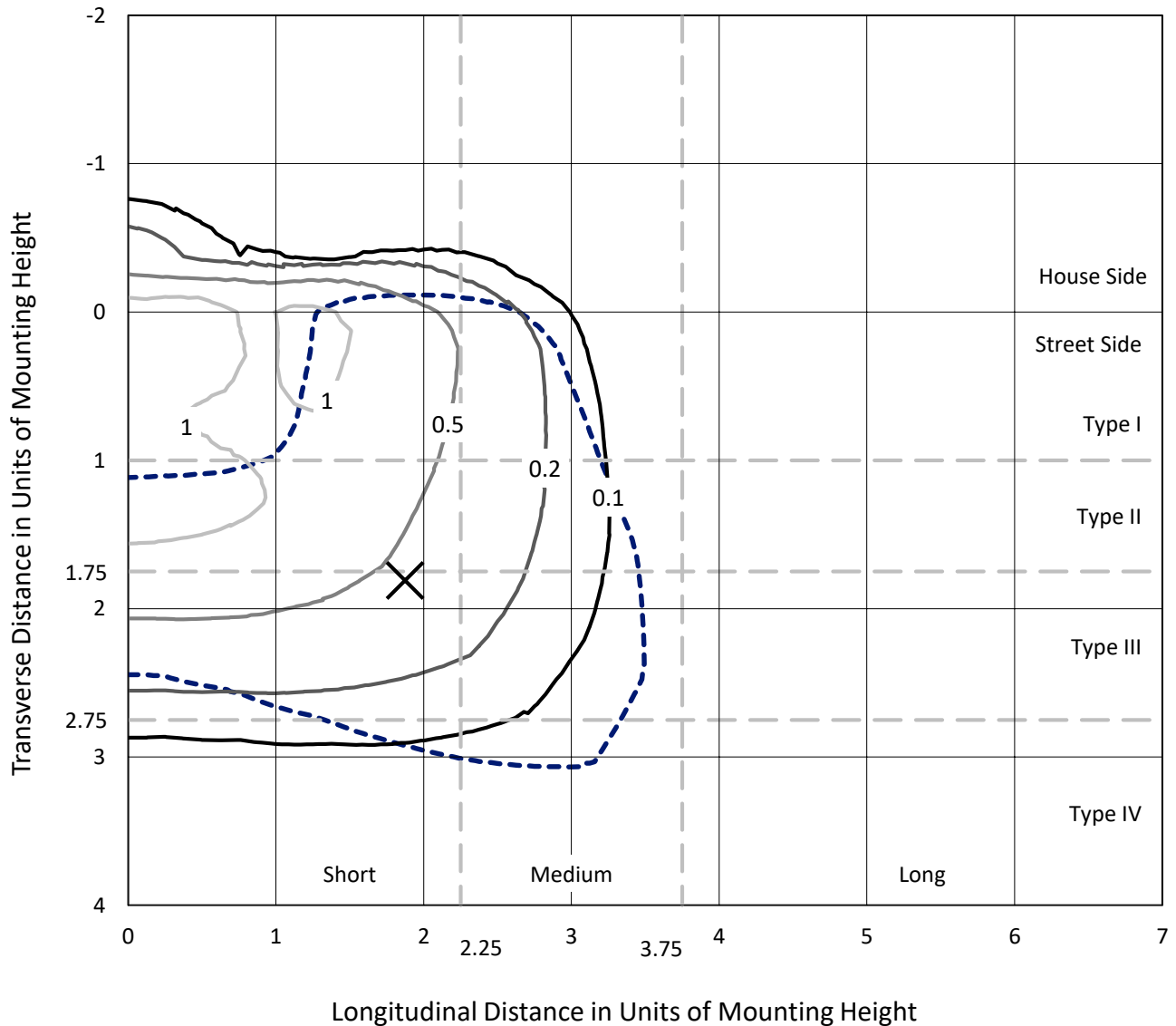


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

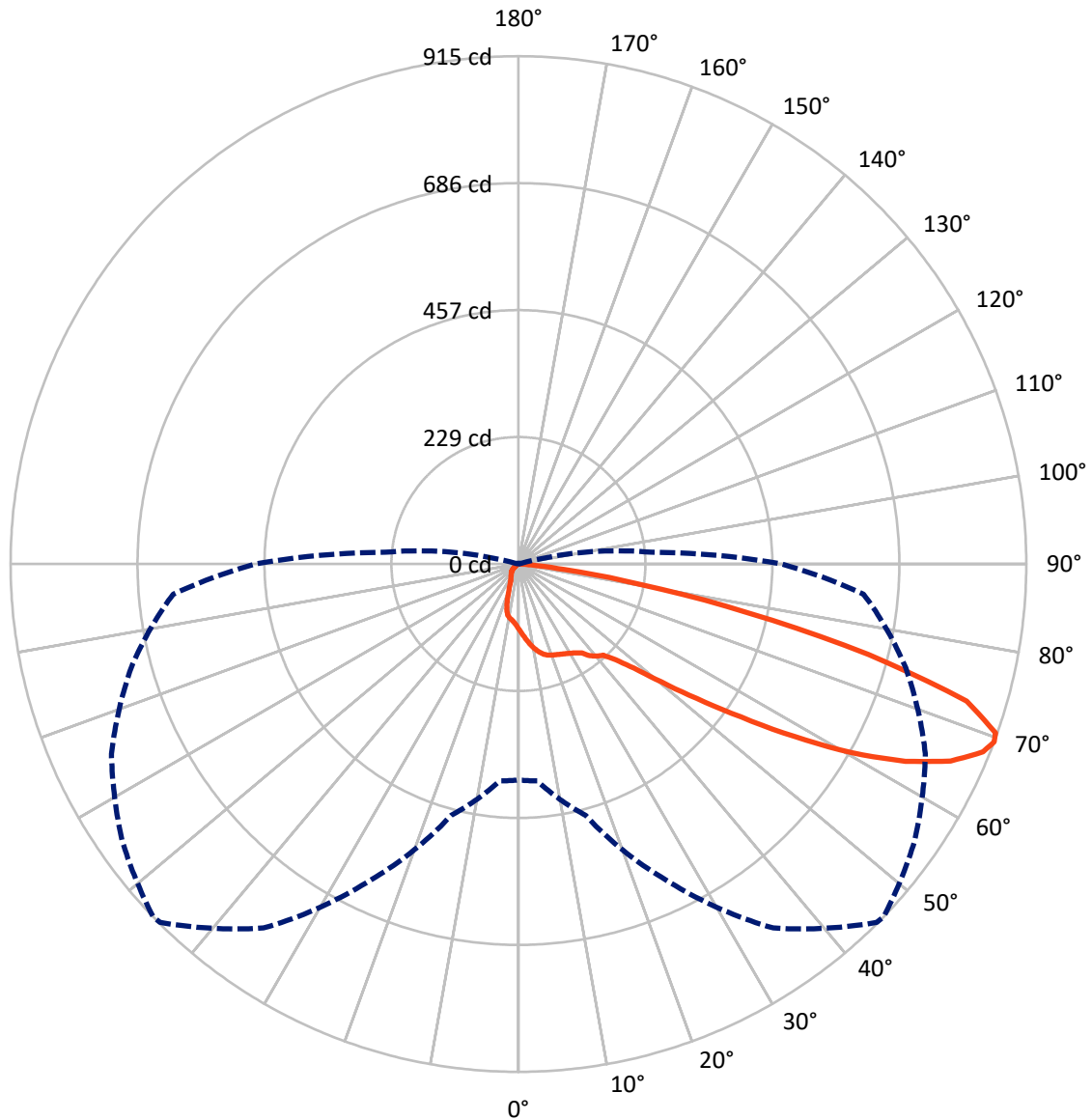


Based on 10 foot mounting height. Maximum calculated value = 1.7 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



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

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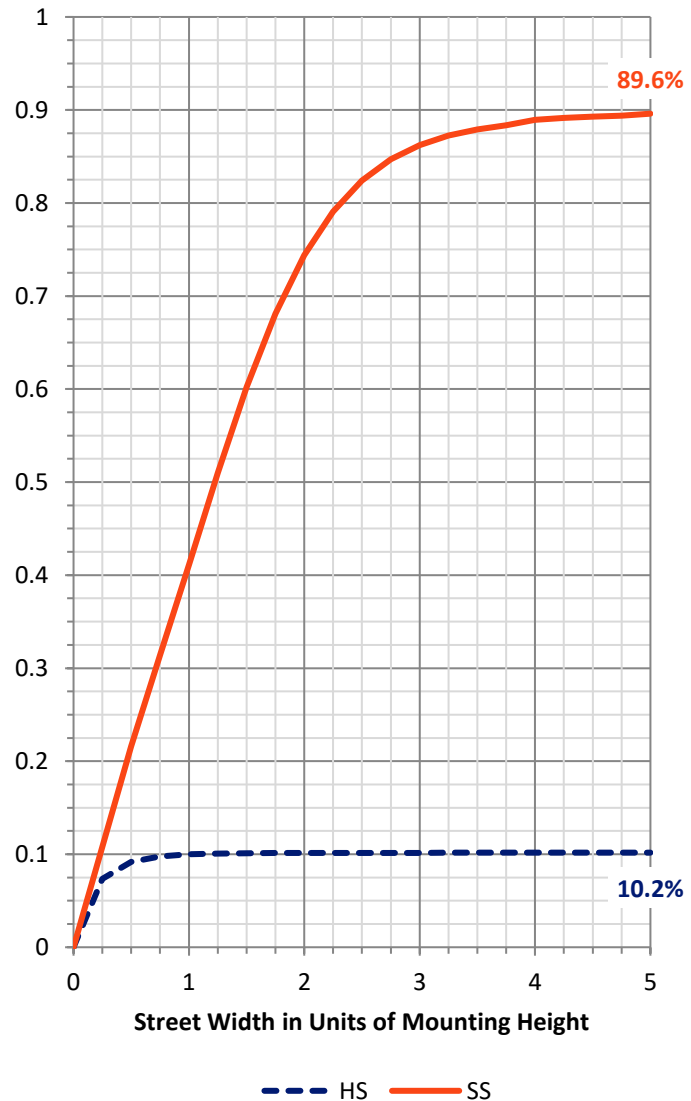
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	120.2	0.0	120.2
	% Fixture	10.3	0.0	10.3
<b>Street Side</b>	Lumens	1050.8	0.0	1050.8
	% Fixture	89.7	0.0	89.7
<b>Total</b>	Lumens	1171.0	0.0	1171.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	11.7	1.0
10°-20°	35.4	3.0
20°-30°	55.7	4.8
30°-40°	79.9	6.8
40°-50°	138.1	11.8
50°-60°	272.8	23.3
60°-70°	381.3	32.6
70°-80°	184.2	15.7
80°-90°	11.8	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°	1171.0	100.0
0°-180°	1171.0	100.0



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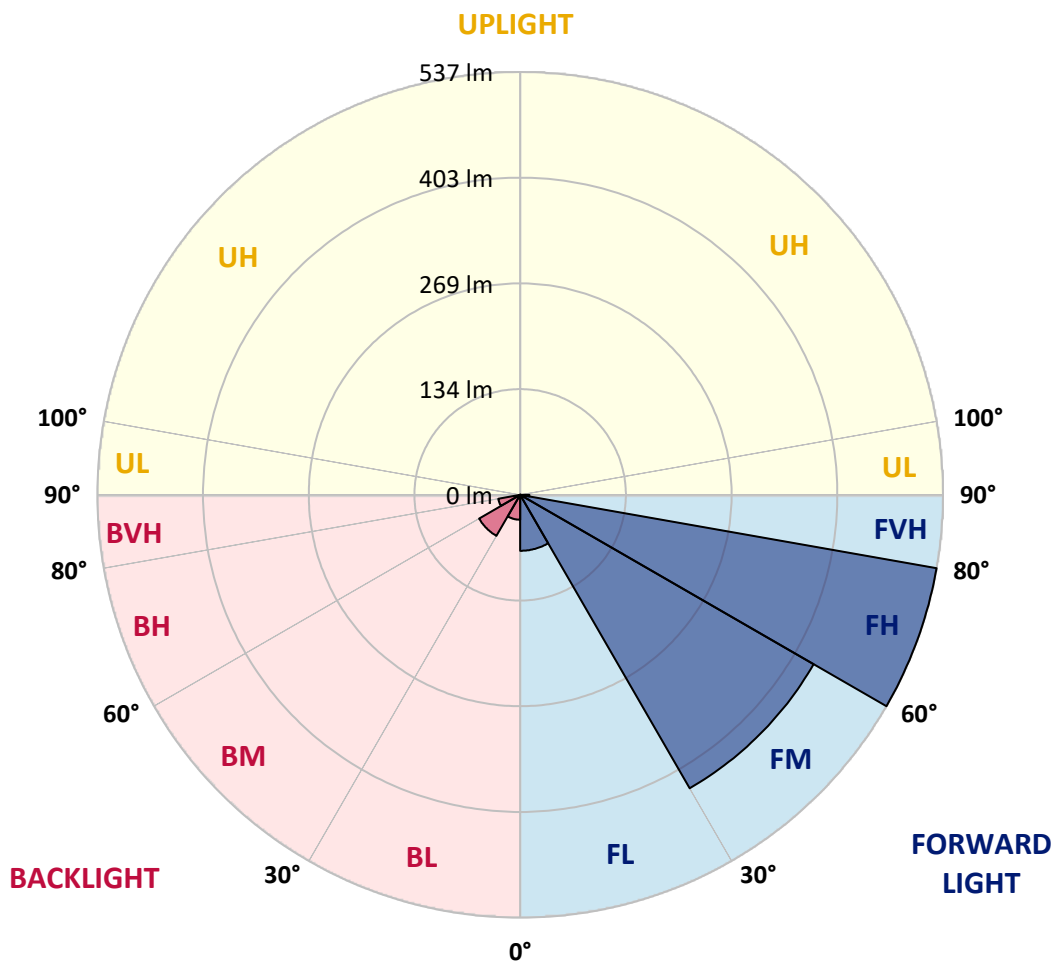
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	71.2	6.1			
FM	(30°-60°)	430.6	36.8			
FH	(60°-80°)	537.3	45.9			G0/660
FVH	(80°-90°)	11.7	1.0			G1/100
BL	(0°-30°)	31.7	2.7	B0/110		
BM	(30°-60°)	60.2	5.1	B0/220		
BH	(60°-80°)	28.2	2.4	B0/110		G0/110
BVH	(80°-90°)	0.1	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°	117.3	117.3	117.3	117.3	117.3	117.3	117.3	117.3	117.3	117.3	117.3
2.5°	130.3	130.2	129.4	129.1	127.2	126.1	125.7	124.3	122.3	120.3	118.2
5°	145.2	145.1	143.7	142.3	138.8	135.5	134.9	131.7	127.3	123.1	118.9
7.5°	160.3	159.6	158.2	155.5	150.4	145.2	144.7	140.2	133.9	127.8	121.8
10°	173.2	172.7	170.9	166.9	160.9	154.9	154.3	148.7	141.6	134.2	126.6
12.5°	183.2	182.8	180.4	175.4	169.0	162.8	162.0	157.0	149.4	141.1	132.1
15°	189.3	189.1	186.1	180.7	174.5	169.1	168.4	164.1	157.0	148.3	138.1
17.5°	190.7	190.7	187.6	182.2	177.1	173.2	172.7	169.4	163.4	154.8	144.2
20°	187.5	188.2	185.4	180.7	177.5	175.5	175.0	173.1	168.1	159.9	149.0
22.5°	183.0	183.3	181.4	178.3	177.0	177.3	177.1	176.0	171.8	164.3	153.8
25°	180.2	180.2	179.1	176.5	177.3	179.7	179.8	179.5	176.2	169.7	159.6
27.5°	180.1	179.8	178.5	176.5	178.9	182.6	182.8	184.3	182.2	176.2	166.9
30°	184.5	184.1	181.3	178.8	181.8	185.7	186.3	189.5	188.5	183.3	174.9
32.5°	194.8	193.4	187.2	183.0	185.3	190.0	190.7	195.8	197.5	192.1	182.7
35°	208.9	204.5	195.6	191.0	191.2	196.1	196.8	204.4	209.2	200.1	188.8
37.5°	228.2	226.1	211.5	199.4	200.3	207.8	209.7	217.9	216.5	204.5	195.6
40°	270.7	267.4	251.9	222.7	209.1	217.2	217.8	222.2	222.3	214.4	209.9
42.5°	328.6	327.2	310.9	265.2	226.3	223.5	224.6	232.0	240.3	235.4	235.2
45°	392.7	392.0	374.7	321.5	261.0	244.2	245.6	255.5	271.4	272.5	279.5
47.5°	444.2	443.9	434.0	384.4	314.2	279.3	279.7	290.3	318.2	331.9	343.1
50°	491.2	492.8	485.0	452.4	386.7	334.3	333.2	340.2	385.0	407.6	421.4
52.5°	556.6	558.8	536.8	515.9	462.7	402.4	401.6	409.0	465.4	482.3	484.8
55°	614.3	610.4	593.0	587.0	555.5	486.7	486.4	492.9	543.2	550.4	554.9
57.5°	639.7	638.3	646.7	660.5	652.6	586.2	585.7	580.8	612.7	613.5	627.5
60°	655.8	657.6	683.4	726.1	745.8	693.3	690.1	660.0	679.2	677.5	692.4
62.5°	643.7	647.3	693.7	764.8	815.5	786.8	782.3	732.6	735.9	730.1	744.0
65°	579.6	585.2	661.1	757.5	850.1	859.9	855.3	796.7	781.0	771.3	763.6
67.5°	470.6	473.9	553.2	693.9	834.5	903.5	902.6	852.8	815.0	764.4	704.3
69°	388.9	392.2	468.5	627.1	800.2	912.8	914.6	870.8	808.6	722.0	624.0
70°	329.4	332.9	404.0	569.7	760.4	908.5	911.7	869.1	790.0	672.9	553.6
72.5°	172.8	175.7	248.7	392.5	619.9	834.2	844.0	795.7	669.7	488.7	327.3
75°	54.3	56.0	97.1	205.2	424.4	648.6	650.9	624.1	475.5	268.8	136.3
77.5°	20.7	20.2	32.3	75.6	214.6	408.4	422.2	390.0	249.5	95.0	31.5
80°	11.1	11.2	16.8	31.3	91.8	209.9	221.5	189.0	88.7	29.6	7.2
82.5°	4.8	5.1	9.4	16.6	42.2	77.4	83.2	69.3	33.9	19.9	2.7
85°	1.0	1.2	4.6	9.0	17.2	21.7	22.8	22.5	21.6	15.5	1.0
87.5°	0.0	0.0	2.0	3.2	4.3	4.9	4.3	5.7	11.9	10.4	0.5
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°	117.3	117.3	117.3	117.3	117.3	117.3	117.3	117.3	117.3	117.3	117.3
2.5°	117.4	116.5	114.7	112.9	111.6	110.2	109.1	108.6	108.1	107.7	108.2
5°	117.2	115.3	112.0	108.8	106.5	104.6	103.1	102.5	101.9	101.5	101.4
7.5°	119.1	116.5	111.4	106.7	103.2	100.6	98.6	97.7	97.0	96.6	96.4
10°	122.8	119.4	112.6	106.5	101.9	97.6	93.1	89.7	87.4	86.4	86.0
12.5°	127.6	123.3	114.9	107.7	101.0	92.7	83.2	74.9	69.6	67.9	66.8
15°	133.2	127.8	117.9	109.1	97.6	82.5	66.3	55.6	50.6	49.6	48.5
17.5°	138.6	132.6	121.6	109.4	90.1	65.9	48.6	41.3	39.4	40.0	40.2
20°	143.3	137.4	125.1	107.0	76.5	49.5	37.6	35.8	36.5	37.8	38.0
22.5°	148.1	142.0	128.4	100.6	59.2	37.6	33.9	34.3	35.0	36.3	36.5
25°	153.9	147.6	131.5	88.9	44.4	32.0	32.2	32.8	33.5	34.7	34.8
27.5°	160.6	154.7	133.5	73.7	32.9	29.4	30.1	31.1	31.8	32.9	33.1
30°	169.5	164.1	134.2	58.0	27.6	27.1	27.4	28.6	29.6	30.6	30.8
32.5°	177.8	173.3	132.0	43.8	25.6	24.9	24.9	25.6	26.8	27.8	28.0
35°	185.5	182.6	125.0	32.0	24.0	22.9	22.4	22.4	23.2	23.9	24.2
37.5°	195.7	195.6	113.6	25.5	22.6	21.3	20.1	19.3	19.0	19.2	19.3
40°	213.1	213.2	98.8	22.9	21.3	19.6	17.8	16.3	14.8	14.3	14.2
42.5°	240.3	237.8	83.2	21.6	20.2	17.8	15.2	13.1	10.8	10.0	10.0
45°	283.4	268.8	66.8	20.5	19.1	15.9	12.6	9.7	7.8	7.2	7.2
47.5°	346.3	309.4	51.7	19.2	17.5	13.6	9.5	7.0	5.7	5.4	5.5
50°	411.3	349.3	39.6	17.6	15.6	11.3	7.0	5.1	4.3	4.3	4.4
52.5°	468.9	378.5	30.9	15.9	13.3	8.8	5.3	4.0	3.6	3.6	3.6
55°	522.9	397.3	23.7	13.9	10.6	6.6	4.1	3.2	3.0	2.9	2.9
57.5°	575.0	406.7	17.7	11.3	7.7	4.8	3.2	2.7	2.5	2.4	2.3
60°	609.6	399.1	12.2	8.3	5.3	3.5	2.7	2.4	2.1	1.9	1.9
62.5°	629.1	378.4	7.9	6.0	3.8	2.6	2.1	2.0	1.6	1.4	1.4
65°	621.2	344.2	5.5	4.3	2.7	1.9	1.6	1.6	1.2	0.9	0.9
67.5°	550.5	290.8	4.2	3.2	2.0	1.4	1.2	1.4	0.7	0.4	0.4
69°	473.7	241.0	3.6	2.6	1.6	1.2	1.0	1.3	0.5	0.3	0.3
70°	411.7	207.9	3.2	2.3	1.4	1.0	0.9	1.2	0.5	0.3	0.2
72.5°	246.3	116.0	2.5	1.6	0.9	0.8	0.8	1.4	0.5	0.3	0.2
75°	99.5	40.8	1.8	1.2	0.7	0.7	0.9	1.8	0.4	0.2	0.2
77.5°	22.6	8.9	1.0	0.7	0.4	0.7	1.1	1.4	0.3	0.1	0.0
80°	5.5	2.2	0.7	0.4	0.3	0.5	0.8	0.8	0.1	0.0	0.0
82.5°	1.8	0.8	0.3	0.2	0.1	0.2	0.4	0.2	0.0	0.0	0.0
85°	0.8	0.4	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
87.5°	0.5	0.2	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)