

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: P348862

Luminaire Tested: **ARCH-N-PA1-10-727-U-T4W-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348862  
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-PA1-10-727-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 270mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1332 lumens  
Efficiency: N/A  
Efficacy: 95.1 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



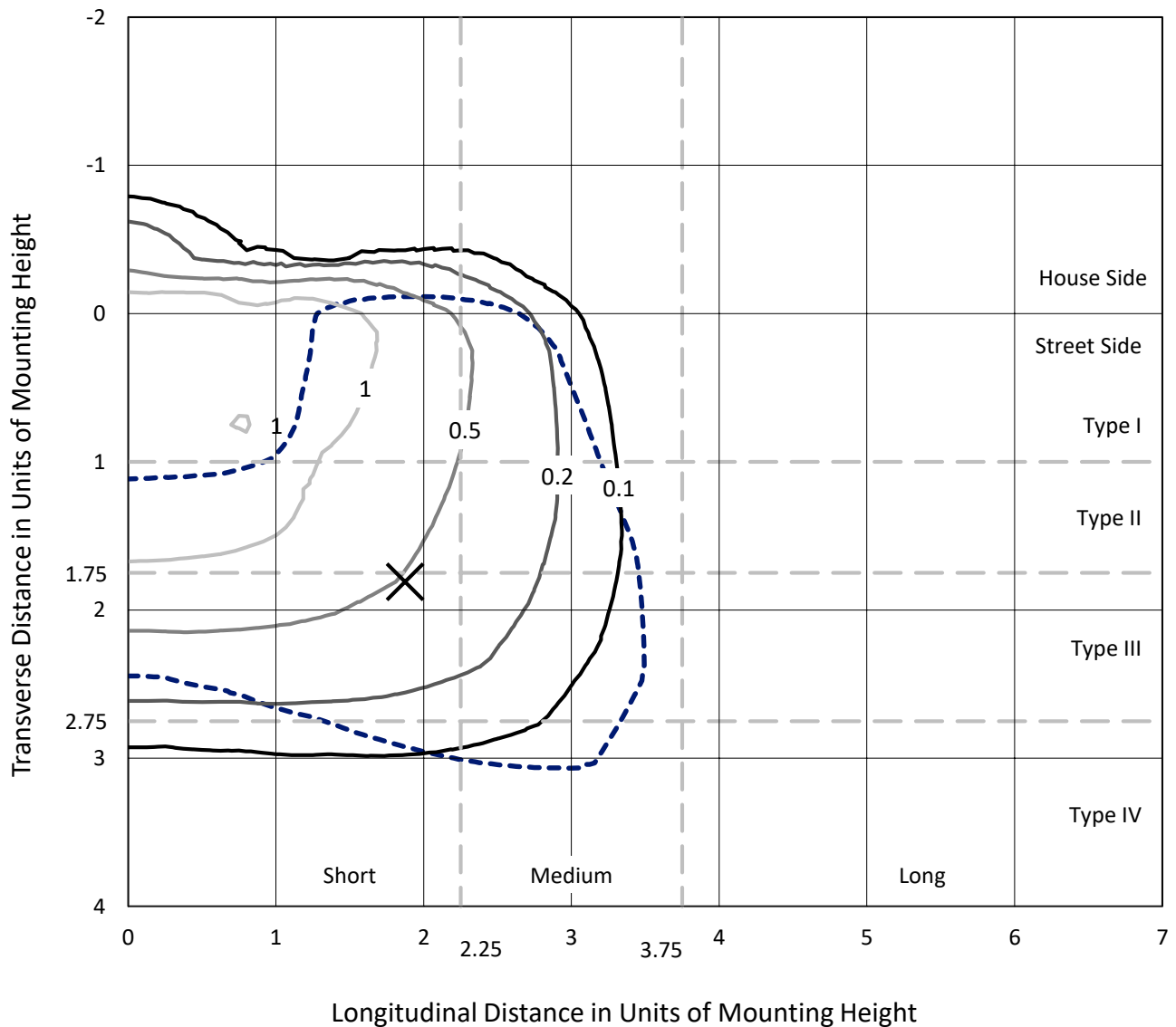


REPORT NUMBER: P348862

CATALOG NUMBER: ARCH-N-PA1-10-727-U-T4W-HSS

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

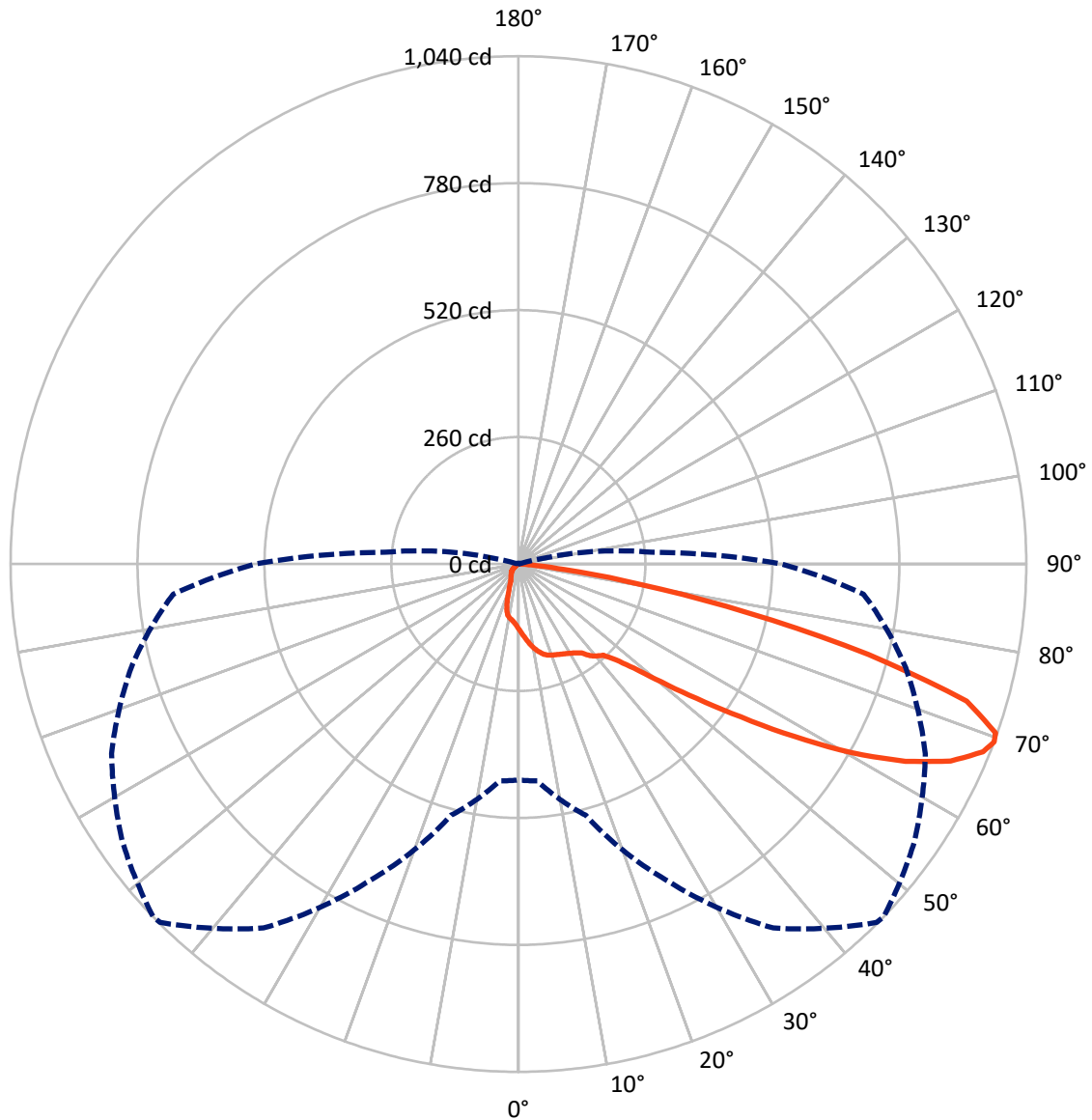


Based on 10 foot mounting height. Maximum calculated value = 1.9 fc  
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P348862

CATALOG NUMBER: ARCH-N-PA1-10-727-U-T4W-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P348862

CATALOG NUMBER: ARCH-N-PA1-10-727-U-T4W-HSS

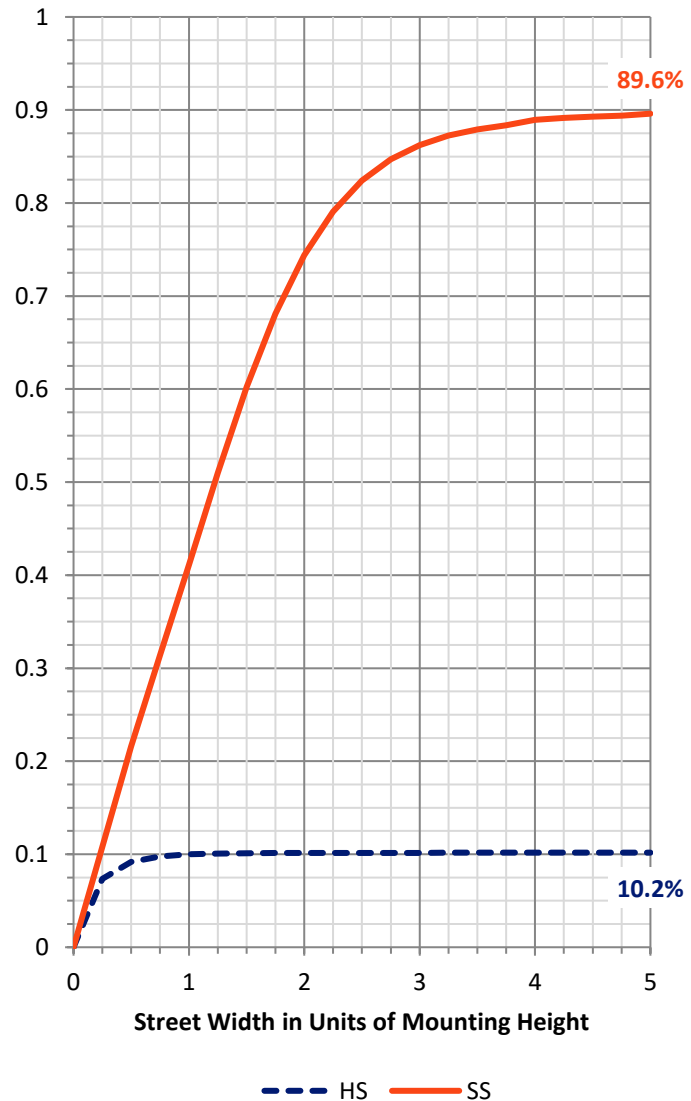
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	136.7	0.0	136.7
	% Fixture	10.3	0.0	10.3
<b>Street Side</b>	Lumens	1195.3	0.0	1195.3
	% Fixture	89.7	0.0	89.7
<b>Total</b>	Lumens	1332.0	0.0	1332.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	13.3	1.0
10°-20°	40.3	3.0
20°-30°	63.4	4.8
30°-40°	90.9	6.8
40°-50°	157.1	11.8
50°-60°	310.3	23.3
60°-70°	433.7	32.6
70°-80°	209.5	15.7
80°-90°	13.5	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°	1332.0	100.0
0°-180°	1332.0	100.0



REPORT NUMBER: P348862

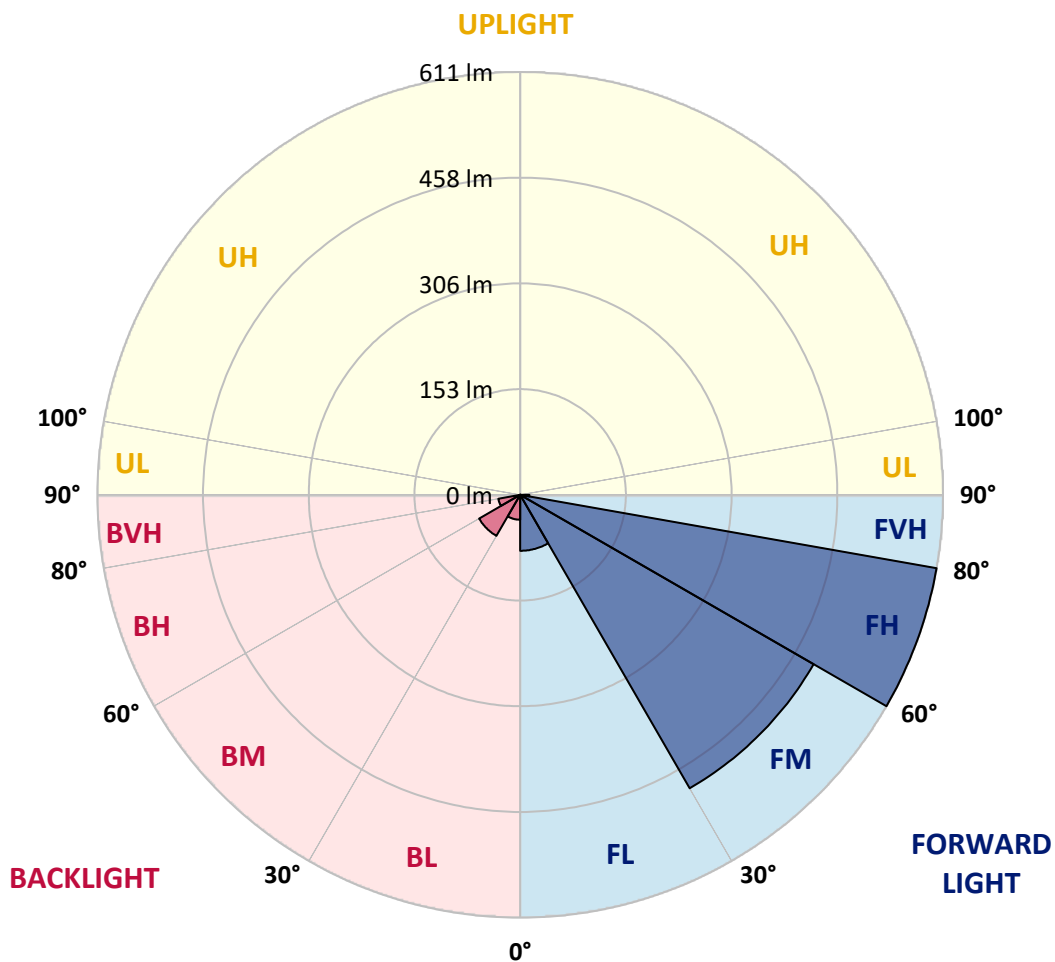
CATALOG NUMBER: ARCH-N-PA1-10-727-U-T4W-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	80.9	6.1			
FM	(30°-60°)	489.8	36.8			
FH	(60°-80°)	611.2	45.9			G0/660
FVH	(80°-90°)	13.4	1.0			G1/100
BL	(0°-30°)	36.0	2.7	B0/110		
BM	(30°-60°)	68.5	5.1	B0/220		
BH	(60°-80°)	32.1	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





REPORT NUMBER: P348862

CATALOG NUMBER: ARCH-N-PA1-10-727-U-T4W-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5
2.5°	148.3	148.1	147.2	146.8	144.7	143.5	143.0	141.4	139.1	136.9	134.4
5°	165.1	165.1	163.4	161.9	157.9	154.1	153.4	149.8	144.8	140.0	135.3
7.5°	182.4	181.6	179.9	176.9	171.1	165.1	164.6	159.4	152.3	145.4	138.6
10°	197.0	196.5	194.4	189.8	183.0	176.2	175.5	169.2	161.1	152.6	144.0
12.5°	208.3	208.0	205.2	199.5	192.2	185.2	184.2	178.6	169.9	160.5	150.3
15°	215.3	215.1	211.7	205.6	198.5	192.4	191.5	186.6	178.6	168.7	157.1
17.5°	216.9	217.0	213.4	207.3	201.4	197.0	196.4	192.7	185.9	176.1	164.0
20°	213.3	214.0	210.8	205.5	201.9	199.6	199.1	196.9	191.2	181.9	169.5
22.5°	208.2	208.5	206.3	202.8	201.3	201.7	201.5	200.2	195.4	186.9	174.9
25°	205.0	205.0	203.7	200.7	201.7	204.4	204.5	204.2	200.4	193.0	181.6
27.5°	204.9	204.5	203.0	200.8	203.5	207.7	207.9	209.6	207.2	200.5	189.8
30°	209.9	209.5	206.3	203.3	206.8	211.3	211.9	215.6	214.4	208.5	199.0
32.5°	221.6	220.0	213.0	208.2	210.8	216.1	216.9	222.8	224.6	218.5	207.8
35°	237.6	232.6	222.5	217.3	217.5	223.1	223.8	232.4	238.0	227.6	214.7
37.5°	259.6	257.2	240.6	226.8	227.9	236.3	238.5	247.9	246.3	232.6	222.5
40°	308.0	304.1	286.5	253.4	237.8	247.1	247.7	252.7	252.9	243.9	238.8
42.5°	373.8	372.2	353.7	301.6	257.4	254.2	255.5	263.9	273.4	267.7	267.5
45°	446.7	445.8	426.2	365.7	296.9	277.8	279.4	290.7	308.7	310.0	317.9
47.5°	505.3	504.9	493.6	437.2	357.4	317.7	318.2	330.2	361.9	377.6	390.3
50°	558.8	560.6	551.6	514.6	439.9	380.2	379.0	387.0	438.0	463.6	479.4
52.5°	633.1	635.6	610.6	586.8	526.4	457.8	456.8	465.2	529.4	548.6	551.5
55°	698.7	694.3	674.6	667.7	631.8	553.6	553.3	560.7	617.8	626.0	631.2
57.5°	727.7	726.0	735.6	751.3	742.3	666.8	666.2	660.6	697.0	697.8	713.8
60°	746.0	748.1	777.3	825.9	848.3	788.7	785.0	750.7	772.5	770.6	787.7
62.5°	732.3	736.3	789.0	869.9	927.6	895.0	889.9	833.3	837.1	830.4	846.3
65°	659.3	665.6	752.0	861.6	967.0	978.1	973.0	906.2	888.4	877.4	868.6
67.5°	535.3	539.1	629.3	789.3	949.2	1027.7	1026.7	970.1	927.1	869.5	801.1
69°	442.4	446.1	532.9	713.3	910.2	1038.3	1040.4	990.6	919.7	821.3	709.8
70°	374.7	378.7	459.5	648.1	864.9	1033.4	1037.1	988.6	898.6	765.4	629.7
72.5°	196.5	199.9	282.9	446.5	705.1	948.9	960.1	905.1	761.7	555.9	372.3
75°	61.8	63.7	110.5	233.4	482.8	737.8	740.4	710.0	540.9	305.8	155.1
77.5°	23.5	23.0	36.8	86.0	244.1	464.6	480.3	443.7	283.8	108.1	35.8
80°	12.7	12.7	19.1	35.6	104.4	238.8	252.0	215.0	100.9	33.7	8.2
82.5°	5.5	5.7	10.7	18.9	48.0	88.1	94.7	78.8	38.5	22.7	3.1
85°	1.2	1.3	5.2	10.2	19.5	24.7	25.9	25.5	24.5	17.6	1.2
87.5°	0.0	0.0	2.3	3.7	4.9	5.6	4.9	6.4	13.6	11.9	0.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P348862

CATALOG NUMBER: ARCH-N-PA1-10-727-U-T4W-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5
2.5°	133.6	132.5	130.5	128.4	126.9	125.3	124.1	123.5	122.9	122.5	123.0
5°	133.3	131.2	127.4	123.8	121.2	119.0	117.3	116.6	115.9	115.4	115.4
7.5°	135.5	132.5	126.7	121.4	117.3	114.5	112.1	111.1	110.3	109.9	109.6
10°	139.7	135.8	128.1	121.2	115.9	111.0	105.9	102.0	99.4	98.2	97.8
12.5°	145.1	140.2	130.7	122.5	114.9	105.5	94.6	85.2	79.2	77.2	76.0
15°	151.5	145.4	134.1	124.2	111.0	93.9	75.4	63.2	57.6	56.5	55.2
17.5°	157.6	150.9	138.3	124.5	102.5	75.0	55.3	47.0	44.8	45.5	45.7
20°	163.0	156.3	142.3	121.7	87.1	56.3	42.8	40.7	41.5	43.0	43.2
22.5°	168.4	161.6	146.1	114.5	67.3	42.7	38.5	39.0	39.8	41.3	41.5
25°	175.1	167.9	149.6	101.2	50.5	36.3	36.6	37.3	38.2	39.5	39.6
27.5°	182.7	176.0	151.9	83.9	37.5	33.4	34.2	35.3	36.2	37.4	37.7
30°	192.8	186.6	152.6	66.0	31.4	30.8	31.2	32.5	33.7	34.8	35.0
32.5°	202.3	197.1	150.1	49.8	29.1	28.4	28.4	29.2	30.5	31.6	31.9
35°	211.0	207.7	142.1	36.4	27.4	26.1	25.5	25.5	26.4	27.2	27.5
37.5°	222.6	222.5	129.2	29.0	25.7	24.2	22.9	21.9	21.6	21.8	21.9
40°	242.4	242.6	112.4	26.0	24.2	22.3	20.3	18.5	16.8	16.2	16.2
42.5°	273.3	270.5	94.7	24.6	23.0	20.3	17.3	14.9	12.2	11.4	11.4
45°	322.4	305.7	75.9	23.3	21.7	18.0	14.3	11.0	8.9	8.2	8.2
47.5°	393.9	352.0	58.8	21.9	19.9	15.5	10.8	7.9	6.5	6.2	6.2
50°	467.8	397.3	45.1	20.0	17.8	12.8	8.0	5.7	4.9	4.9	5.0
52.5°	533.4	430.5	35.2	18.1	15.2	10.1	6.1	4.5	4.1	4.1	4.1
55°	594.8	452.0	26.9	15.9	12.1	7.5	4.6	3.7	3.4	3.3	3.2
57.5°	654.0	462.6	20.2	12.8	8.7	5.4	3.7	3.1	2.9	2.7	2.6
60°	693.4	454.0	13.9	9.4	6.1	3.9	3.1	2.7	2.4	2.2	2.1
62.5°	715.6	430.4	8.9	6.8	4.3	2.9	2.4	2.2	1.8	1.6	1.6
65°	706.7	391.6	6.2	4.9	3.1	2.2	1.8	1.8	1.3	1.1	1.0
67.5°	626.2	330.8	4.7	3.6	2.2	1.6	1.4	1.6	0.8	0.5	0.5
69°	538.8	274.2	4.1	3.0	1.9	1.3	1.2	1.4	0.6	0.4	0.3
70°	468.3	236.5	3.7	2.6	1.6	1.1	1.1	1.4	0.6	0.3	0.2
72.5°	280.2	131.9	2.8	1.9	1.0	0.9	0.9	1.6	0.6	0.3	0.2
75°	113.2	46.5	2.1	1.3	0.7	0.7	1.1	2.0	0.5	0.2	0.2
77.5°	25.7	10.2	1.2	0.8	0.5	0.7	1.2	1.6	0.3	0.1	0.0
80°	6.2	2.5	0.7	0.5	0.3	0.6	0.9	0.9	0.1	0.0	0.0
82.5°	2.1	0.9	0.3	0.2	0.1	0.2	0.4	0.2	0.0	0.0	0.0
85°	0.9	0.5	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
87.5°	0.6	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)