

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: P348605

Luminaire Tested: **ARCH-N-PA1-20-750-U-T3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348605  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-20-750-U-T3  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 420mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3411 lumens  
Efficiency: N/A  
Efficacy: 142.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

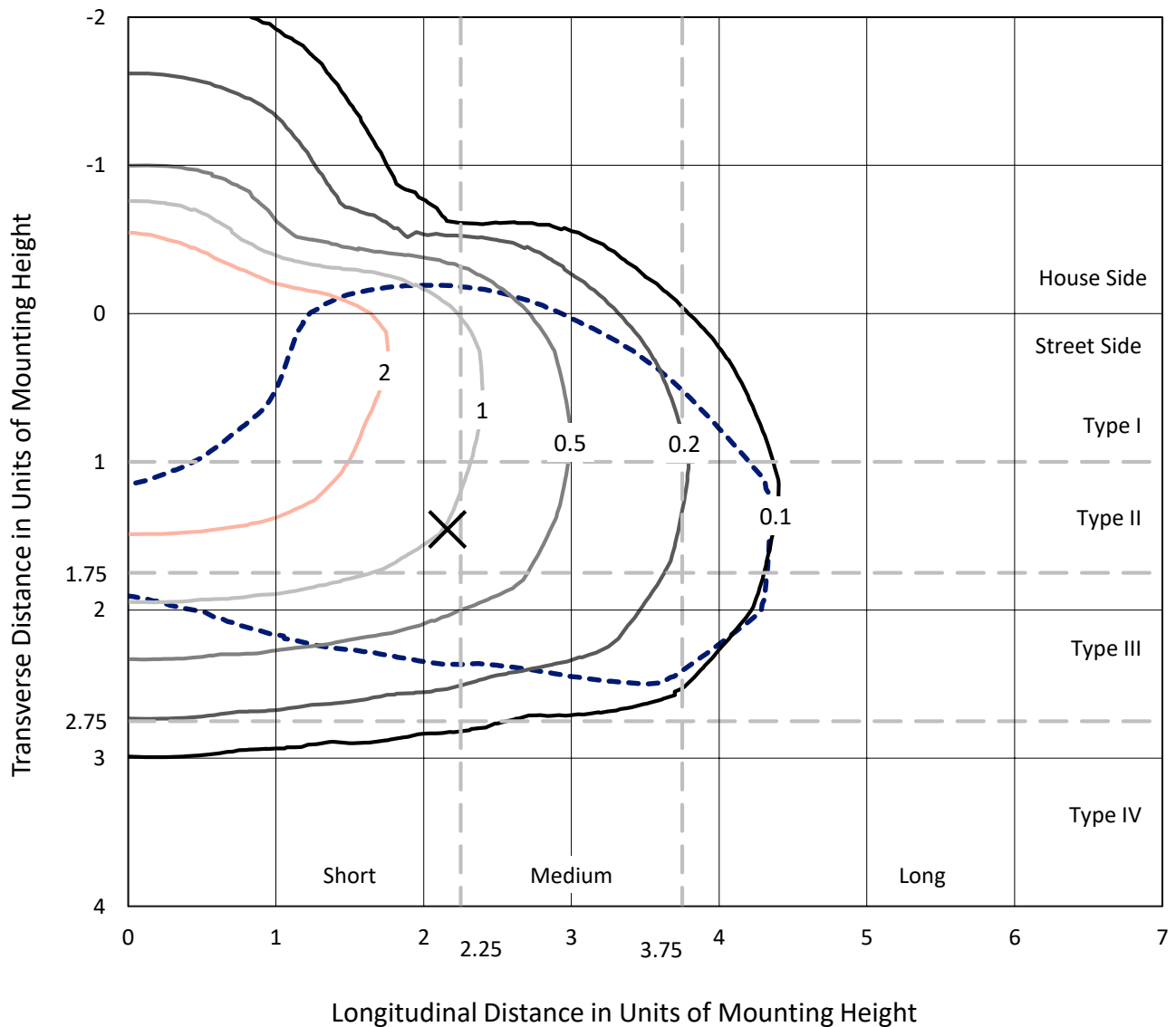
Input Watts (W): 24  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P348605  
 CATALOG NUMBER: ARCH-N-PA1-20-750-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

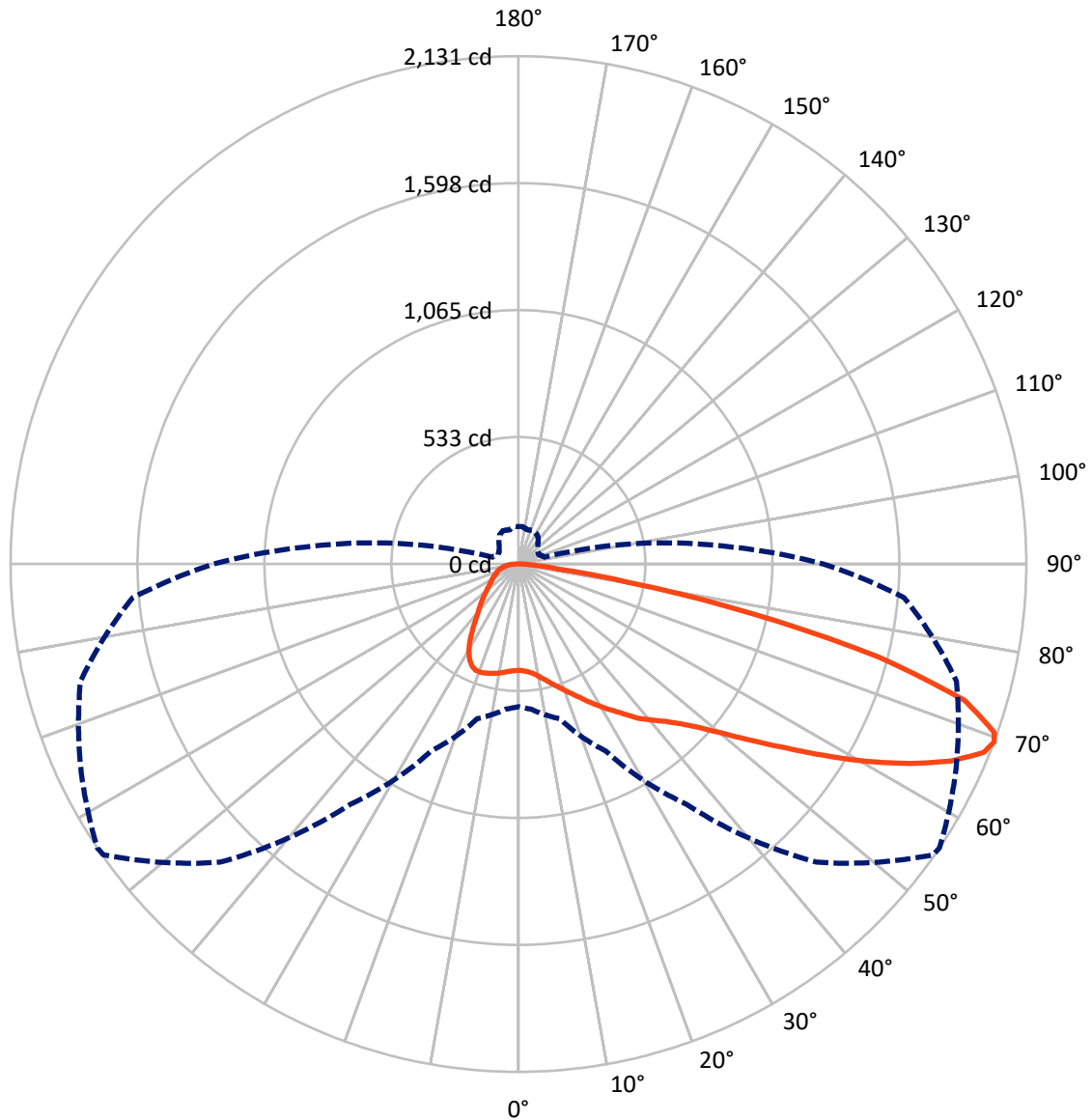


Based on 10 foot mounting height. Maximum calculated value = 4.9 fc  
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P348605

CATALOG NUMBER: ARCH-N-PA1-20-750-U-T3

### Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical



REPORT NUMBER: P348605

CATALOG NUMBER: ARCH-N-PA1-20-750-U-T3

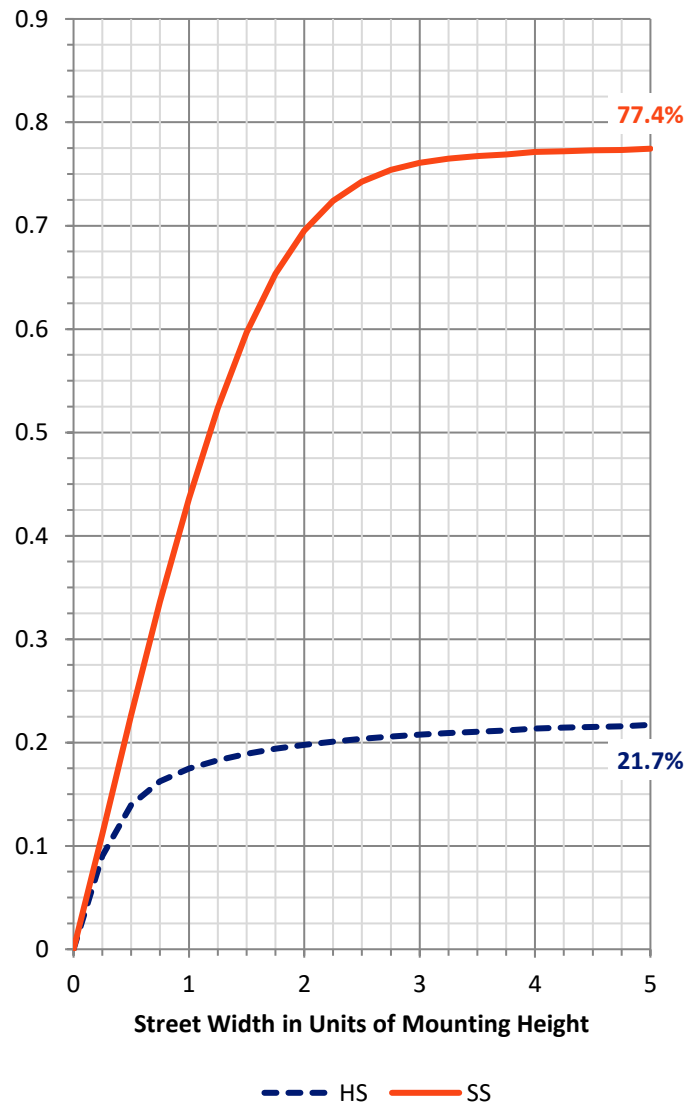
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	759.6	0.0	759.6
	% Fixture	22.3	0.0	22.3
<b>Street Side</b>	Lumens	2651.4	0.0	2651.4
	% Fixture	77.7	0.0	77.7
<b>Total</b>	Lumens	3411.0	0.0	3411.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.8	1.3
10°-20°	140.8	4.1
20°-30°	245.8	7.2
30°-40°	353.1	10.4
40°-50°	488.7	14.3
50°-60°	716.1	21.0
60°-70°	873.0	25.6
70°-80°	482.7	14.2
80°-90°	66.8	2.0
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°	3411.0	100.0
0°-180°	3411.0	100.0



REPORT NUMBER: P348605

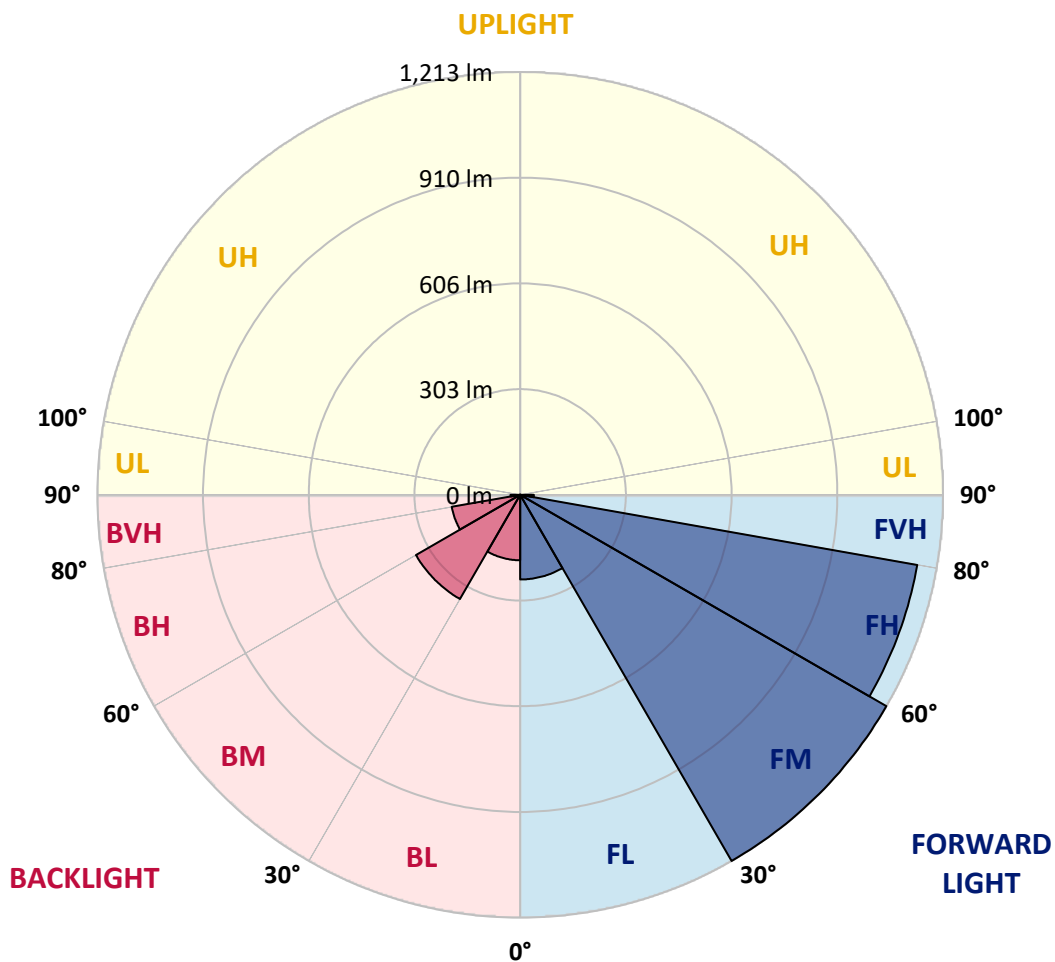
CATALOG NUMBER: ARCH-N-PA1-20-750-U-T3

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	242.8	7.1			
FM	(30°-60°)	1212.7	35.6			
FH	(60°-80°)	1156.5	33.9			G1/1800
FVH	(80°-90°)	39.4	1.2			G1/100
BL	(0°-30°)	187.7	5.5	B1/500		
BM	(30°-60°)	345.2	10.1	B1/1000		
BH	(60°-80°)	199.2	5.8	B1/500		G1/500
BVH	(80°-90°)	27.5	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type III Short





REPORT NUMBER: P348605

CATALOG NUMBER: ARCH-N-PA1-20-750-U-T3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	445.9	445.9	445.9	445.9	445.9	445.9	445.9	445.9	445.9	445.9	445.9
2.5°	448.8	449.2	448.9	449.8	448.8	449.5	448.9	448.9	448.5	447.5	446.3
5°	455.8	456.7	456.2	457.1	455.8	456.0	455.0	455.0	453.9	451.7	449.3
7.5°	466.9	467.9	467.4	468.4	466.6	466.6	465.2	465.1	463.0	459.3	456.6
10°	480.0	481.4	481.0	482.4	481.0	481.4	480.0	480.0	477.2	472.0	468.6
12.5°	499.2	500.9	499.6	499.5	498.9	499.9	498.7	498.5	495.9	488.8	484.1
15°	524.8	526.7	524.0	523.7	520.4	520.1	520.1	519.7	518.1	509.6	501.9
17.5°	554.3	554.9	552.5	548.8	544.5	541.8	541.5	542.4	542.4	532.5	520.2
20°	583.2	584.2	582.4	578.1	572.7	568.7	565.9	567.8	567.7	555.9	538.4
22.5°	614.7	617.1	614.3	608.9	602.6	598.1	593.2	594.8	594.9	580.5	556.3
25°	655.5	653.2	651.5	643.8	634.8	630.2	625.6	627.2	626.8	606.9	574.7
27.5°	691.5	692.0	689.6	681.5	671.1	661.0	660.7	661.8	660.0	634.4	592.1
30°	733.5	733.7	730.4	723.1	711.7	698.7	695.6	697.4	693.6	660.5	610.4
32.5°	775.2	776.4	772.7	763.9	754.7	738.9	732.8	733.9	724.5	687.2	629.4
35°	811.7	813.4	812.2	806.3	796.3	782.7	775.4	774.7	763.1	719.8	654.4
37.5°	849.0	850.5	849.2	844.3	840.3	825.8	822.0	822.0	801.7	753.2	686.2
40°	887.3	889.6	888.1	881.3	877.9	871.3	862.0	859.8	837.9	793.3	738.2
42.5°	922.9	926.0	932.1	928.1	921.1	922.1	903.4	902.2	886.2	852.5	803.4
45°	973.4	977.9	988.2	985.2	983.8	978.6	956.4	955.3	949.2	932.2	884.4
47.5°	1028.5	1034.6	1053.3	1053.9	1069.1	1059.3	1029.1	1025.5	1026.9	1027.6	983.2
50°	1079.3	1086.0	1116.7	1131.1	1166.8	1169.0	1120.7	1117.4	1122.9	1139.1	1098.3
52.5°	1119.8	1128.3	1166.6	1211.3	1272.5	1289.9	1233.3	1230.9	1235.0	1263.0	1228.5
55°	1149.6	1158.7	1200.4	1281.8	1379.5	1410.2	1363.1	1360.7	1363.3	1398.9	1370.1
57.5°	1156.5	1158.7	1219.2	1329.2	1469.9	1543.6	1521.8	1517.1	1504.4	1535.5	1526.4
60°	1123.9	1132.9	1203.7	1345.9	1539.8	1675.1	1687.7	1681.9	1646.3	1671.6	1664.4
62.5°	1057.9	1073.9	1145.8	1320.5	1567.2	1782.5	1850.5	1843.4	1782.1	1798.6	1763.5
65°	950.0	956.9	1032.4	1233.0	1532.4	1851.2	1995.6	1992.1	1914.9	1889.2	1781.9
67.5°	757.1	769.9	834.1	1050.0	1390.1	1843.1	2107.8	2107.5	2001.6	1922.8	1716.9
69°	598.1	611.4	672.5	865.0	1230.1	1768.9	2126.6	2130.7	2026.0	1902.3	1624.1
70°	476.8	492.2	534.2	728.5	1088.0	1671.2	2111.0	2118.4	2021.3	1868.6	1538.4
72.5°	202.9	215.4	245.2	375.6	663.1	1247.9	1930.2	1958.1	1912.4	1710.2	1271.4
75°	88.6	92.5	106.0	153.1	294.4	679.2	1512.1	1563.8	1635.2	1445.6	947.1
77.5°	64.9	66.5	73.9	89.9	132.1	256.5	972.4	1002.4	1179.3	1051.9	581.0
80°	50.2	51.4	57.1	66.0	86.2	103.8	443.5	469.3	663.1	540.3	241.9
82.5°	40.0	40.8	44.8	48.6	59.6	62.9	147.2	163.3	244.8	149.2	64.0
85°	37.1	38.1	39.5	35.5	38.2	36.9	63.7	66.6	73.9	58.6	26.8
87.5°	16.8	19.9	39.1	27.6	20.3	16.2	26.1	27.3	30.7	30.8	11.9
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: P348605

CATALOG NUMBER: ARCH-N-PA1-20-750-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	445.9	445.9	445.9	445.9	445.9	445.9	445.9	445.9	445.9	445.9	445.9
2.5°	447.0	446.6	447.2	445.8	447.6	447.5	446.9	447.1	448.3	448.2	448.3
5°	449.7	449.5	450.2	449.1	451.2	451.9	452.0	453.1	454.4	454.7	454.7
7.5°	456.5	456.5	456.9	455.5	456.9	456.7	456.2	457.2	458.5	458.6	458.5
10°	468.3	468.4	467.8	464.2	463.0	459.8	456.9	457.0	458.6	459.9	460.3
12.5°	483.1	482.6	480.0	473.3	468.4	461.9	458.9	458.7	460.4	461.4	461.8
15°	500.0	498.7	492.0	481.1	472.4	466.0	461.1	459.9	459.0	457.8	457.9
17.5°	516.0	513.0	501.9	486.7	477.5	469.1	459.6	451.9	446.6	443.6	442.6
20°	532.2	526.4	510.3	492.0	480.4	465.0	446.6	431.1	421.5	417.0	416.2
22.5°	547.0	537.7	518.2	497.5	478.1	451.1	422.3	399.8	386.4	380.4	380.8
25°	561.4	548.5	526.4	501.4	466.9	426.7	388.5	360.7	345.2	338.5	338.3
27.5°	574.1	559.4	535.4	498.2	445.8	391.9	348.4	321.4	308.5	302.7	301.8
30°	588.7	573.2	547.2	486.1	415.0	351.7	309.3	290.2	281.1	275.3	274.3
32.5°	606.5	591.9	557.0	464.2	375.7	309.7	278.7	265.4	257.1	250.6	249.5
35°	632.3	616.6	559.4	432.7	332.4	276.6	256.3	242.7	231.4	223.0	222.2
37.5°	664.7	647.5	553.8	391.9	290.5	255.1	237.6	220.8	206.1	194.4	192.5
40°	711.5	685.4	538.2	344.9	259.6	238.5	219.4	200.2	182.0	168.3	165.6
42.5°	767.7	729.9	514.2	298.1	236.9	221.7	201.3	177.6	160.2	150.4	149.0
45°	839.1	776.2	481.0	257.2	214.6	204.9	181.8	159.9	149.1	141.9	140.8
47.5°	920.7	828.2	446.1	224.0	195.6	189.2	166.2	152.1	143.5	137.8	136.8
50°	1020.9	886.8	409.0	196.7	176.6	170.3	158.8	147.7	140.9	136.5	135.5
52.5°	1133.9	953.0	382.4	175.2	160.9	156.3	154.9	145.4	139.8	136.5	135.5
55°	1255.7	1020.3	353.6	157.1	147.2	148.5	152.3	145.6	141.8	137.8	136.3
57.5°	1377.5	1089.9	321.5	141.8	136.4	142.8	150.5	146.1	142.9	139.0	137.6
60°	1473.9	1133.9	271.8	129.0	127.8	136.4	146.3	142.5	138.4	138.5	138.3
62.5°	1518.9	1131.6	216.9	117.6	119.3	127.8	139.5	137.0	133.6	138.2	138.5
65°	1493.6	1075.2	168.9	107.3	110.1	118.9	132.4	134.3	135.5	144.3	145.5
67.5°	1387.6	965.4	130.8	98.2	101.8	112.8	133.1	146.3	147.8	157.1	157.0
69°	1278.0	862.5	113.6	93.5	97.6	114.3	142.3	153.9	148.2	158.0	156.6
70°	1186.1	781.1	104.5	90.4	95.8	117.0	148.4	153.8	146.4	154.9	152.5
72.5°	913.5	561.9	88.6	84.5	89.4	112.0	150.2	150.4	142.3	143.9	140.0
75°	626.5	355.1	77.3	76.5	79.8	100.9	144.5	143.7	131.6	129.3	126.0
77.5°	345.5	180.4	65.7	68.9	71.1	89.4	131.4	130.2	120.2	115.3	114.1
80°	133.3	79.0	55.5	61.2	62.6	77.4	115.2	114.1	105.8	99.4	97.6
82.5°	50.3	41.4	45.8	53.0	52.5	63.9	97.5	96.9	88.8	79.6	76.7
85°	23.3	24.8	36.3	43.7	40.3	47.4	78.0	79.1	69.2	58.2	58.2
87.5°	9.9	13.9	25.7	33.0	27.1	32.0	57.2	54.6	50.2	34.8	32.7
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)