

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: P348619

Luminaire Tested: **ARCH-N-PA1-20-827-U-T3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348619  
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-PA1-20-827-U-T3  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 420mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2508 lumens  
Efficiency: N/A  
Efficacy: 104.5 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

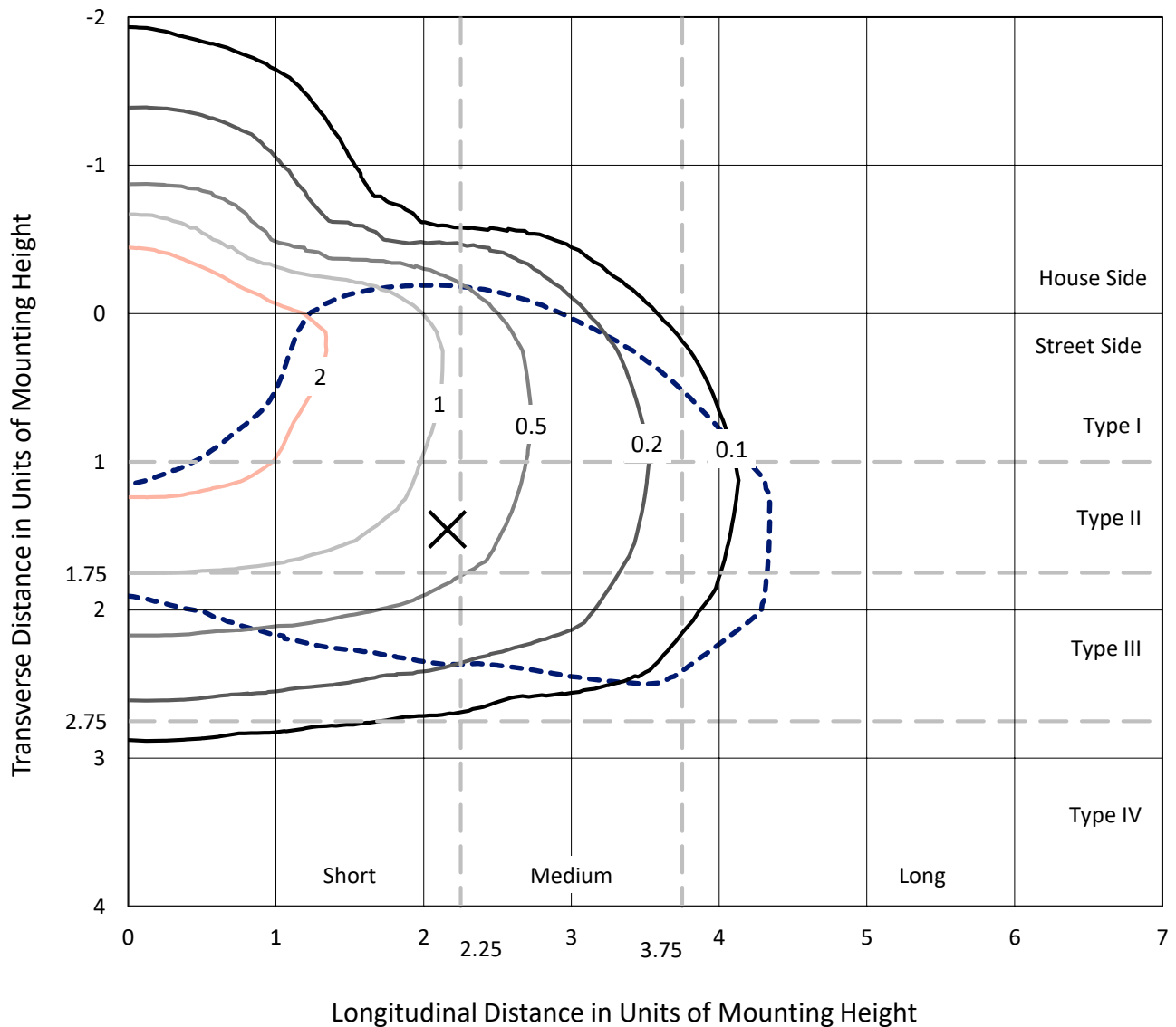
Input Watts (W): 24  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

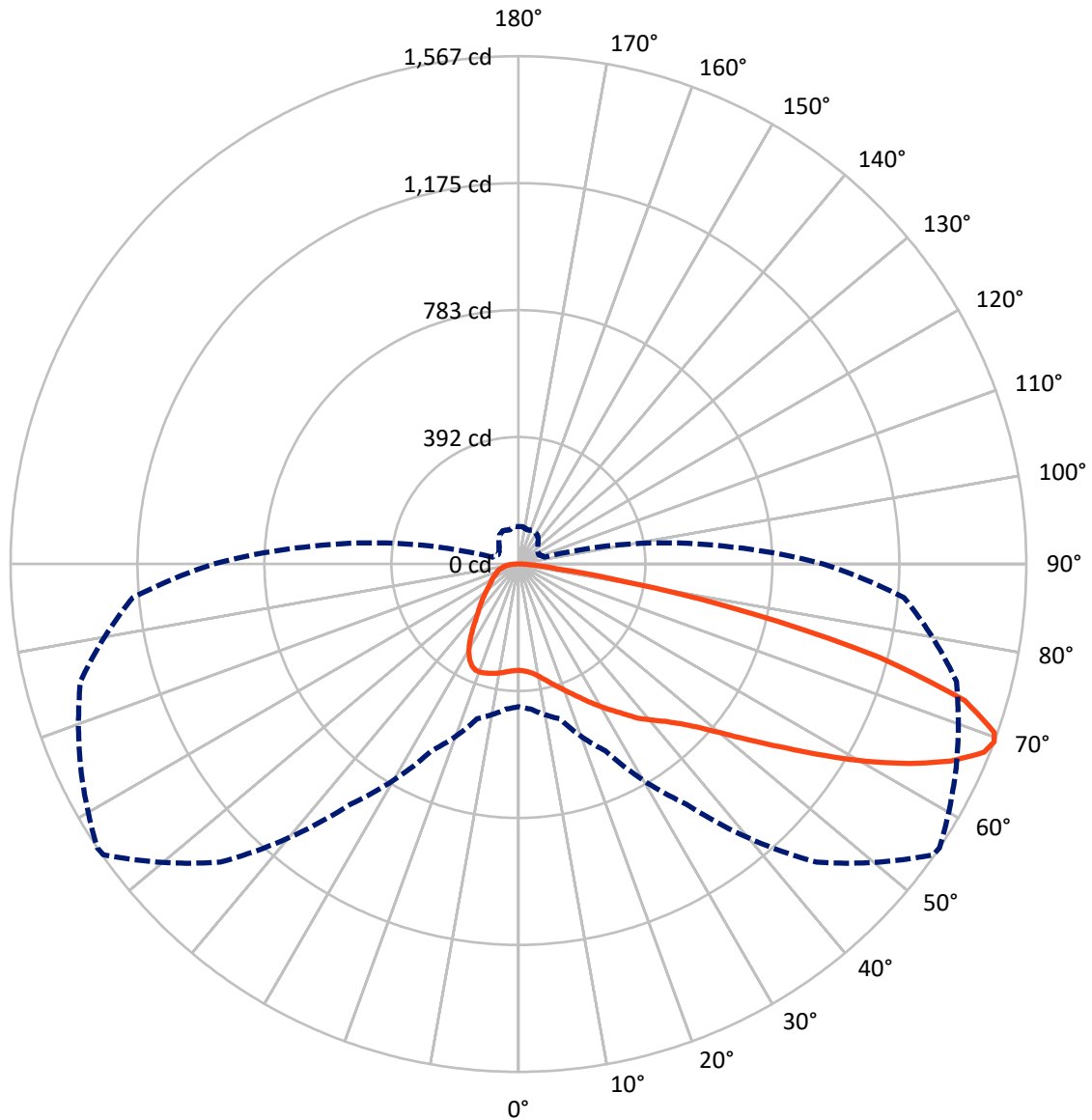


Based on 10 foot mounting height. Maximum calculated value = 3.6 fc  
 Type III - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



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



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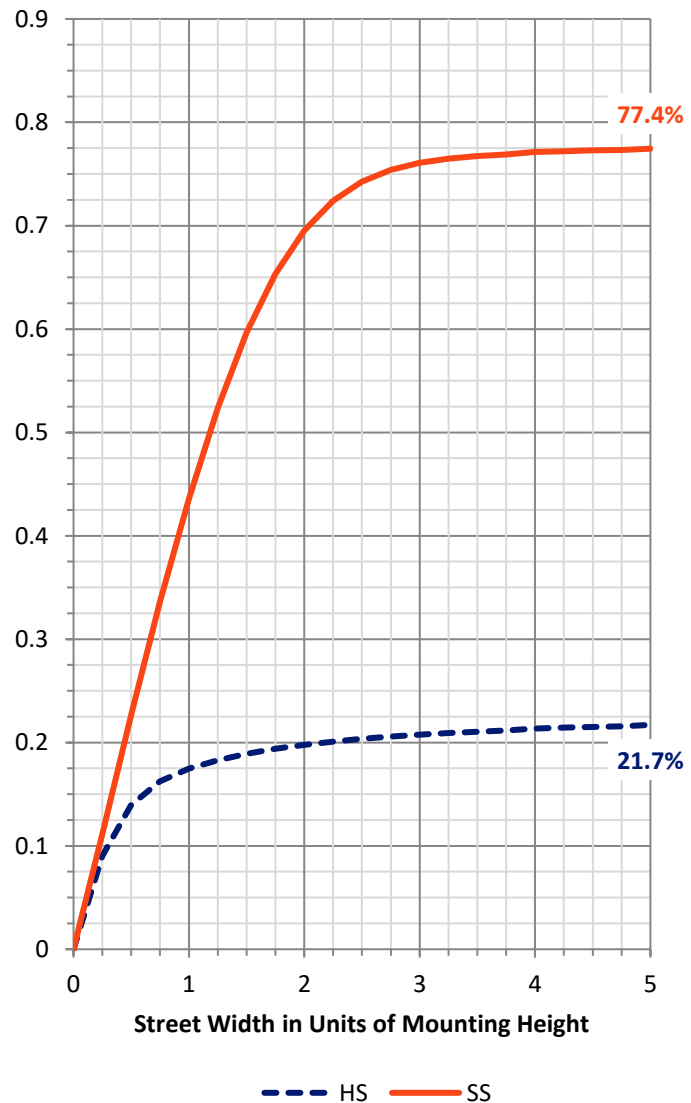
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	558.5	0.0	558.5
	% Fixture	22.3	0.0	22.3
<b>Street Side</b>	Lumens	1949.5	0.0	1949.5
	% Fixture	77.7	0.0	77.7
<b>Total</b>	Lumens	2508.0	0.0	2508.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.2	1.3
10°-20°	103.6	4.1
20°-30°	180.8	7.2
30°-40°	259.7	10.4
40°-50°	359.4	14.3
50°-60°	526.5	21.0
60°-70°	641.9	25.6
70°-80°	354.9	14.2
80°-90°	49.2	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°	2508.0	100.0
0°-180°	2508.0	100.0



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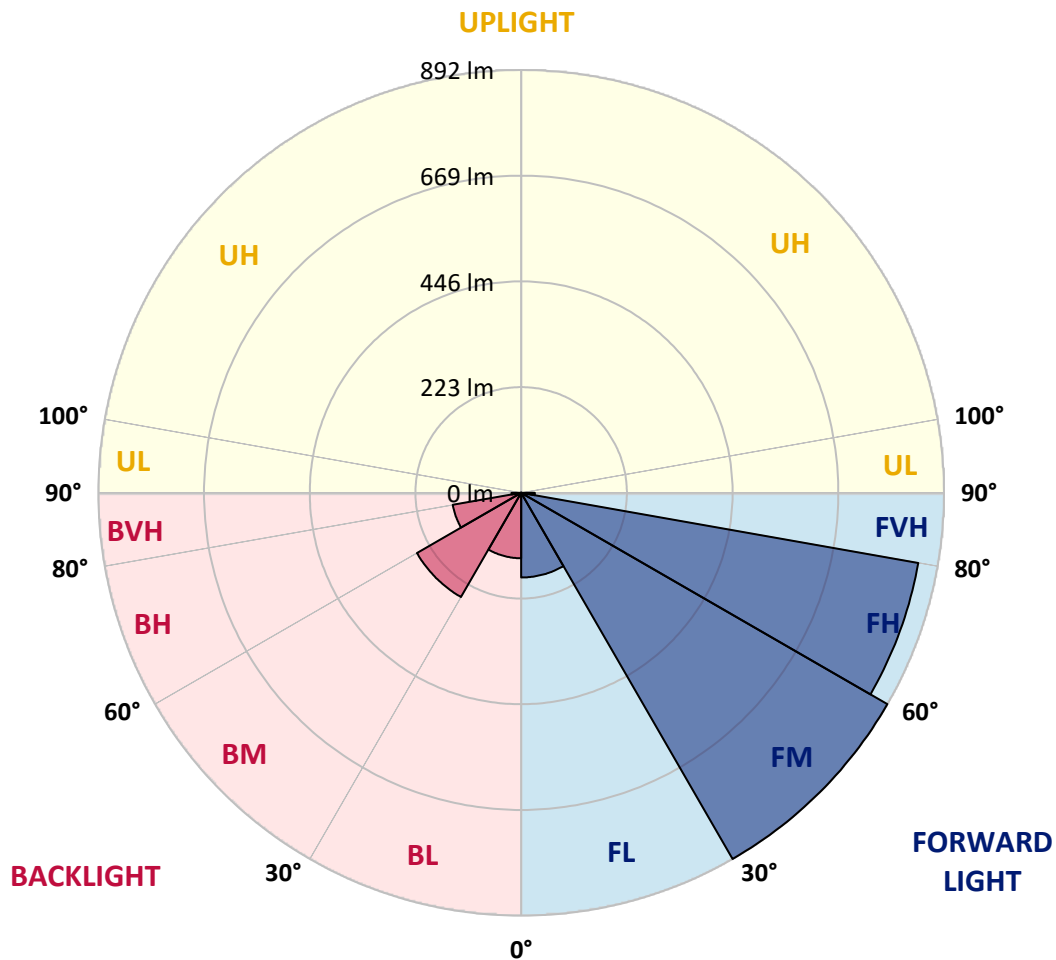
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	178.5	7.1			
FM	(30°-60°)	891.7	35.6			
FH	(60°-80°)	850.3	33.9			G1/1800
FVH	(80°-90°)	29.0	1.2			G1/100
BL	(0°-30°)	138.0	5.5	B1/500		
BM	(30°-60°)	253.8	10.1	B1/1000		
BH	(60°-80°)	146.5	5.8	B1/500		G1/500
BVH	(80°-90°)	20.2	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	327.9	327.9	327.9	327.9	327.9	327.9	327.9	327.9	327.9	327.9	327.9
2.5°	330.0	330.3	330.0	330.7	330.0	330.5	330.0	330.0	329.8	329.0	328.1
5°	335.1	335.8	335.4	336.1	335.1	335.3	334.5	334.5	333.8	332.1	330.4
7.5°	343.3	344.0	343.7	344.4	343.1	343.1	342.1	342.0	340.4	337.7	335.7
10°	352.9	354.0	353.6	354.7	353.6	354.0	352.9	352.9	350.9	347.1	344.6
12.5°	367.0	368.3	367.4	367.3	366.8	367.5	366.7	366.5	364.6	359.4	356.0
15°	385.9	387.2	385.3	385.1	382.7	382.4	382.4	382.1	380.9	374.7	369.0
17.5°	407.5	408.0	406.2	403.5	400.4	398.4	398.1	398.8	398.8	391.6	382.5
20°	428.8	429.6	428.2	425.1	421.1	418.2	416.1	417.5	417.4	408.8	395.9
22.5°	452.0	453.8	451.7	447.7	443.1	439.8	436.1	437.4	437.4	426.8	409.0
25°	481.9	480.3	479.0	473.4	466.7	463.4	460.0	461.2	460.9	446.2	422.6
27.5°	508.5	508.8	507.1	501.1	493.4	486.0	485.8	486.6	485.3	466.5	435.4
30°	539.3	539.5	537.1	531.7	523.3	513.7	511.5	512.8	510.0	485.6	448.8
32.5°	570.0	570.8	568.2	561.7	554.9	543.3	538.8	539.6	532.7	505.3	462.8
35°	596.8	598.1	597.2	592.9	585.5	575.5	570.1	569.6	561.1	529.3	481.2
37.5°	624.2	625.4	624.4	620.8	617.8	607.2	604.4	604.4	589.5	553.8	504.6
40°	652.4	654.1	653.0	648.0	645.5	640.6	633.8	632.2	616.1	583.3	542.8
42.5°	678.6	680.8	685.3	682.4	677.3	678.0	664.2	663.4	651.6	626.8	590.7
45°	715.7	719.0	726.6	724.4	723.3	719.5	703.2	702.4	697.9	685.4	650.2
47.5°	756.2	760.7	774.5	774.9	786.1	778.9	756.7	754.0	755.0	755.6	722.9
50°	793.6	798.5	821.0	831.7	857.9	859.5	824.0	821.6	825.6	837.5	807.6
52.5°	823.4	829.6	857.8	890.6	935.6	948.4	906.8	905.0	908.1	928.6	903.3
55°	845.2	852.0	882.6	942.4	1014.3	1036.9	1002.2	1000.5	1002.4	1028.6	1007.4
57.5°	850.3	852.0	896.5	977.3	1080.8	1134.9	1119.0	1115.5	1106.2	1129.0	1122.3
60°	826.4	833.0	885.1	989.6	1132.2	1231.6	1240.9	1236.6	1210.4	1229.1	1223.8
62.5°	777.8	789.6	842.5	970.9	1152.3	1310.6	1360.6	1355.4	1310.3	1322.4	1296.7
65°	698.5	703.5	759.1	906.6	1126.7	1361.1	1467.3	1464.7	1408.0	1389.0	1310.2
67.5°	556.7	566.1	613.3	772.1	1022.1	1355.2	1549.8	1549.6	1471.7	1413.7	1262.4
69°	439.8	449.5	494.5	636.0	904.4	1300.6	1563.6	1566.7	1489.7	1398.7	1194.1
70°	350.6	361.9	392.8	535.7	800.0	1228.8	1552.2	1557.6	1486.2	1373.9	1131.1
72.5°	149.2	158.4	180.3	276.1	487.5	917.6	1419.2	1439.7	1406.1	1257.4	934.8
75°	65.1	68.0	77.9	112.6	216.4	499.4	1111.8	1149.8	1202.3	1062.9	696.4
77.5°	47.7	48.9	54.3	66.1	97.1	188.6	714.9	737.1	867.1	773.4	427.2
80°	36.9	37.8	42.0	48.6	63.4	76.3	326.1	345.1	487.5	397.3	177.9
82.5°	29.4	30.0	32.9	35.8	43.8	46.2	108.3	120.1	180.0	109.7	47.1
85°	27.3	28.0	29.0	26.1	28.1	27.1	46.8	49.0	54.3	43.1	19.7
87.5°	12.4	14.6	28.8	20.3	14.9	11.9	19.2	20.0	22.6	22.6	8.7
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°	327.9	327.9	327.9	327.9	327.9	327.9	327.9	327.9	327.9	327.9	327.9
2.5°	328.7	328.4	328.8	327.8	329.1	329.0	328.6	328.7	329.6	329.5	329.6
5°	330.6	330.5	331.0	330.2	331.8	332.3	332.4	333.2	334.1	334.4	334.4
7.5°	335.7	335.7	335.9	334.9	335.9	335.8	335.4	336.2	337.1	337.2	337.1
10°	344.3	344.4	344.0	341.3	340.4	338.1	335.9	336.0	337.2	338.2	338.4
12.5°	355.2	354.8	352.9	348.0	344.4	339.6	337.4	337.3	338.5	339.3	339.5
15°	367.6	366.7	361.8	353.7	347.3	342.7	339.0	338.2	337.5	336.6	336.7
17.5°	379.4	377.2	369.0	357.9	351.1	344.9	337.9	332.3	328.4	326.2	325.5
20°	391.3	387.1	375.2	361.8	353.2	341.9	328.4	317.0	309.9	306.6	306.0
22.5°	402.2	395.4	381.0	365.8	351.6	331.7	310.5	293.9	284.1	279.7	280.0
25°	412.8	403.3	387.1	368.7	343.3	313.7	285.6	265.2	253.8	248.9	248.7
27.5°	422.1	411.3	393.6	366.3	327.8	288.1	256.2	236.3	226.8	222.6	221.9
30°	432.9	421.5	402.4	357.4	305.2	258.6	227.4	213.4	206.7	202.4	201.7
32.5°	445.9	435.2	409.5	341.3	276.2	227.7	204.9	195.2	189.0	184.3	183.4
35°	464.9	453.3	411.3	318.1	244.4	203.4	188.4	178.4	170.1	164.0	163.4
37.5°	488.8	476.1	407.2	288.1	213.6	187.6	174.7	162.3	151.5	142.9	141.5
40°	523.1	504.0	395.7	253.6	190.9	175.4	161.3	147.2	133.8	123.7	121.7
42.5°	564.4	536.7	378.1	219.2	174.2	163.0	148.0	130.5	117.8	110.6	109.6
45°	617.0	570.8	353.6	189.1	157.8	150.7	133.7	117.6	109.6	104.4	103.5
47.5°	676.9	608.9	328.0	164.7	143.9	139.1	122.2	111.8	105.5	101.3	100.6
50°	750.6	652.1	300.8	144.6	129.9	125.2	116.7	108.6	103.6	100.4	99.6
52.5°	833.7	700.7	281.1	128.8	118.3	114.9	113.9	106.9	102.8	100.4	99.6
55°	923.3	750.2	260.0	115.5	108.3	109.2	112.0	107.0	104.3	101.3	100.2
57.5°	1012.9	801.3	236.4	104.3	100.3	105.0	110.7	107.4	105.1	102.2	101.2
60°	1083.7	833.7	199.8	94.9	94.0	100.3	107.6	104.8	101.8	101.9	101.7
62.5°	1116.8	832.0	159.5	86.5	87.7	94.0	102.6	100.7	98.2	101.6	101.9
65°	1098.2	790.5	124.2	78.9	81.0	87.4	97.4	98.8	99.6	106.1	107.0
67.5°	1020.3	709.9	96.2	72.2	74.8	82.9	97.9	107.6	108.7	115.5	115.4
69°	939.7	634.2	83.5	68.8	71.8	84.1	104.6	113.2	108.9	116.2	115.2
70°	872.1	574.3	76.8	66.4	70.4	86.1	109.1	113.1	107.7	113.9	112.1
72.5°	671.7	413.2	65.1	62.1	65.7	82.3	110.4	110.6	104.6	105.8	102.9
75°	460.7	261.1	56.9	56.2	58.7	74.2	106.3	105.7	96.8	95.0	92.6
77.5°	254.0	132.6	48.3	50.6	52.3	65.7	96.6	95.7	88.4	84.8	83.9
80°	98.0	58.1	40.8	45.0	46.1	56.9	84.7	83.9	77.8	73.1	71.8
82.5°	37.0	30.4	33.7	39.0	38.6	47.0	71.7	71.3	65.3	58.5	56.4
85°	17.1	18.2	26.7	32.1	29.6	34.8	57.4	58.1	50.9	42.8	42.8
87.5°	7.3	10.2	18.9	24.3	20.0	23.5	42.1	40.2	36.9	25.6	24.0
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)