

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: P348850

Luminaire Tested: **ARCH-N-PA1-20-830-U-T3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348850  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-20-830-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 420mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1905 lumens  
Efficiency: N/A  
Efficacy: 79.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type III - Short - Full 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

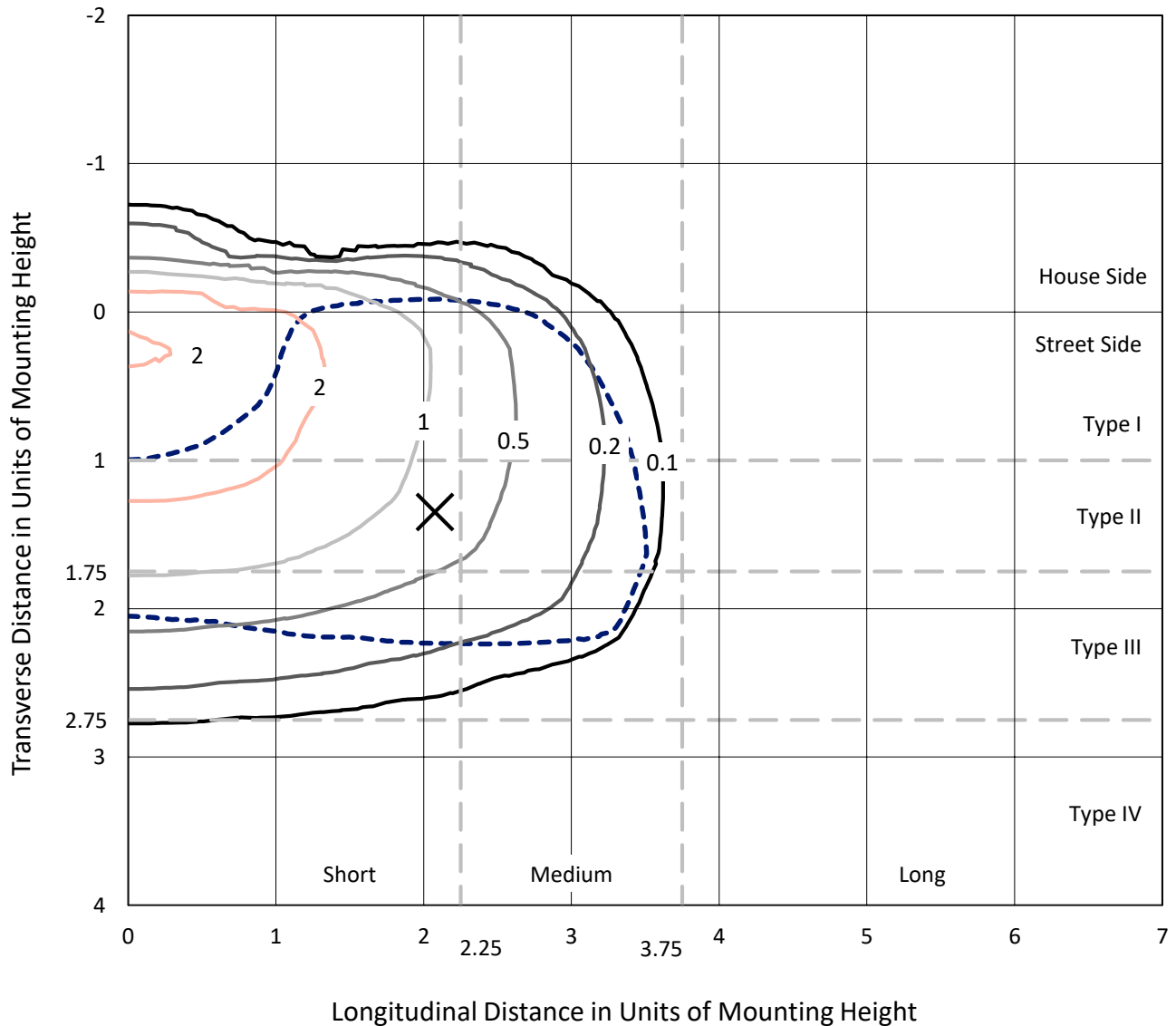


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

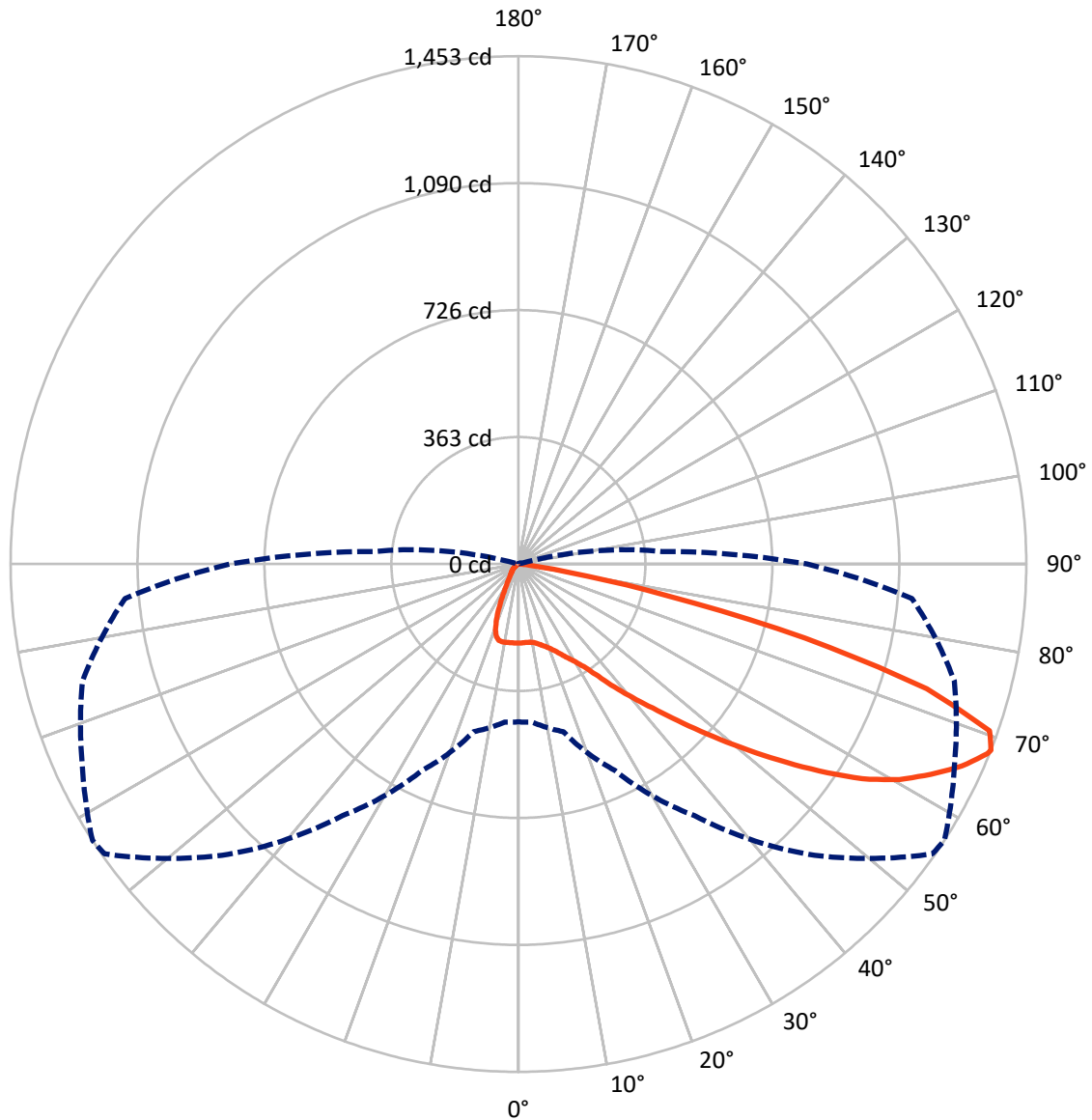


Based on 10 foot mounting height. Maximum calculated value = 2.9 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 68-Deg Vertical



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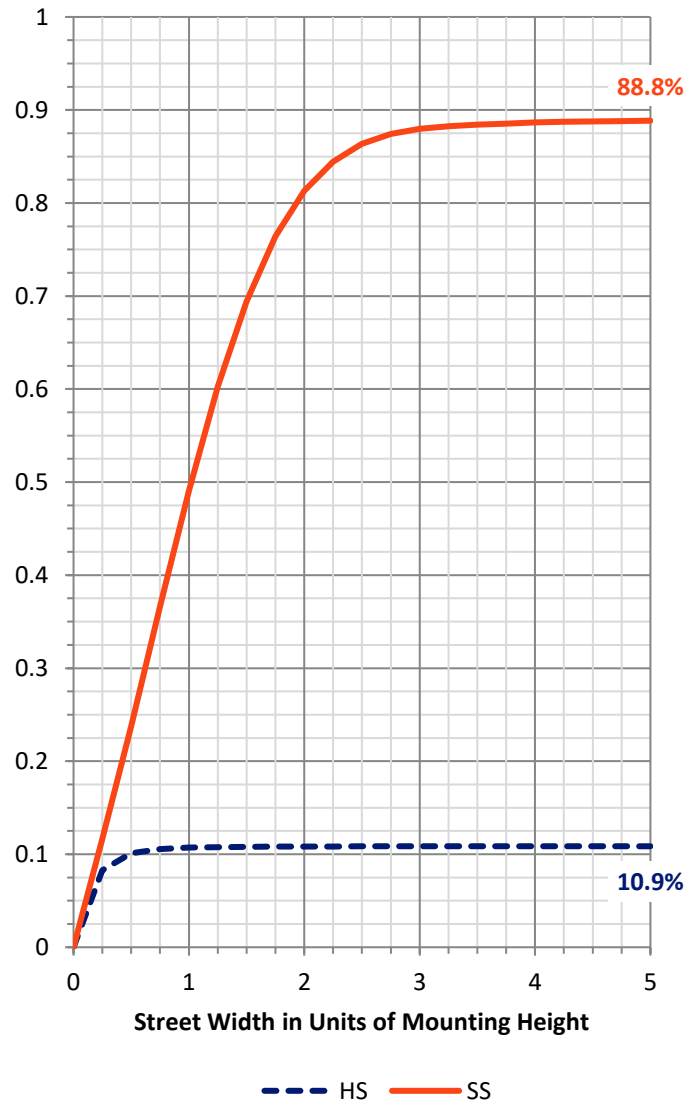
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	208.9	0.0	208.9
	% Fixture	11.0	0.0	11.0
<b>Street Side</b>	Lumens	1696.1	0.0	1696.1
	% Fixture	89.0	0.0	89.0
<b>Total</b>	Lumens	1905.0	0.0	1905.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	21.2	1.1
10°-20°	58.7	3.1
20°-30°	101.3	5.3
30°-40°	174.8	9.2
40°-50°	299.0	15.7
50°-60°	478.3	25.1
60°-70°	552.7	29.0
70°-80°	211.2	11.1
80°-90°	7.9	0.4
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°	1905.0	100.0
0°-180°	1905.0	100.0



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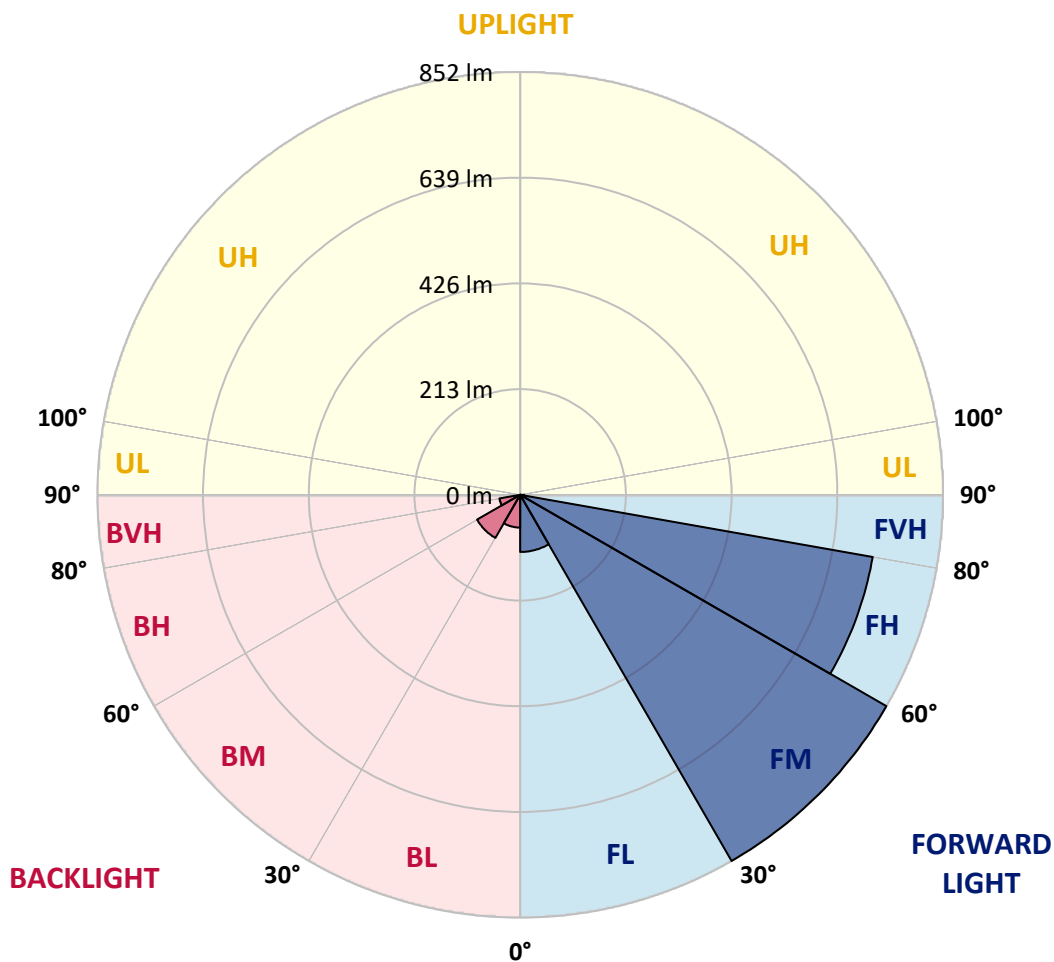
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	115.1	6.0			
FM	(30°-60°)	851.9	44.7			
FH	(60°-80°)	721.3	37.9			G1/1800
FVH	(80°-90°)	7.8	0.4			G0/10
BL	(0°-30°)	66.0	3.5	B0/110		
BM	(30°-60°)	100.2	5.3	B0/220		
BH	(60°-80°)	42.5	2.2	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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	226.4	226.4	226.4	226.4	226.4	226.4	226.4	226.4	226.4	226.4	226.4
2.5°	221.0	222.0	222.8	223.2	223.8	224.9	225.3	225.8	226.1	226.1	226.7
5°	212.3	213.4	214.9	216.2	218.7	222.0	224.3	225.2	226.8	228.3	229.1
7.5°	204.2	205.5	207.3	210.2	214.6	219.8	224.7	225.9	229.1	232.1	233.7
10°	199.0	200.0	202.3	206.5	212.2	219.5	226.4	227.9	233.3	238.4	241.3
12.5°	197.2	198.1	200.5	205.3	212.3	220.9	230.3	232.6	240.5	248.0	252.0
15°	199.8	200.0	202.6	207.1	214.0	224.2	236.9	239.6	249.6	259.3	264.4
17.5°	209.9	209.1	210.4	212.4	217.9	228.6	243.8	247.9	261.2	272.7	277.4
20°	235.1	235.1	232.0	226.6	226.7	235.5	253.2	257.8	274.1	287.3	291.7
22.5°	278.2	277.4	271.3	258.1	245.9	247.3	264.6	270.6	289.6	303.7	305.2
25°	330.1	329.1	319.7	301.0	280.0	266.4	280.1	287.0	308.1	320.6	317.6
27.5°	385.1	384.3	374.9	351.8	321.8	296.8	298.6	305.1	326.9	339.2	329.8
30°	438.3	438.6	429.3	405.5	371.6	335.6	322.0	325.8	345.2	357.7	344.2
32.5°	488.9	489.3	481.3	454.7	423.0	380.8	354.5	353.5	366.4	378.8	363.3
35°	534.1	535.0	529.5	508.8	475.2	431.0	396.5	394.2	396.6	410.6	392.6
37.5°	577.6	578.1	574.0	556.6	528.5	486.2	449.7	446.3	441.1	451.8	431.2
40°	625.2	623.9	619.1	603.3	579.2	547.2	506.8	501.0	491.9	501.5	482.0
42.5°	669.5	668.0	668.8	651.0	630.6	609.9	573.3	563.4	558.1	569.1	544.3
45°	724.9	724.1	726.8	711.3	694.9	679.8	649.6	638.8	636.5	649.4	619.7
47.5°	779.6	781.6	790.0	783.4	776.7	763.5	730.4	725.6	727.0	742.6	699.3
50°	825.2	827.5	850.5	858.1	867.7	860.0	826.8	823.8	829.5	843.6	784.8
52.5°	858.2	862.9	891.5	926.4	961.5	966.7	933.7	930.9	938.6	940.8	851.0
55°	881.0	885.3	917.6	981.4	1052.9	1075.4	1054.9	1044.4	1043.0	1021.7	920.5
57.5°	885.1	884.6	931.1	1017.0	1124.6	1182.7	1169.7	1159.5	1129.9	1096.4	1000.2
60°	862.2	864.8	918.8	1029.3	1169.7	1263.9	1264.9	1251.5	1205.5	1169.1	1077.5
62.5°	791.8	802.4	856.9	997.0	1169.1	1296.6	1334.6	1324.4	1269.4	1228.7	1155.9
65°	677.6	681.3	733.3	886.2	1090.1	1282.9	1397.4	1393.6	1326.9	1286.5	1196.1
67.5°	494.8	486.6	541.2	697.8	922.9	1203.1	1442.4	1447.2	1371.3	1298.4	1153.3
68°	451.6	454.0	496.5	651.3	879.2	1174.9	1445.4	1452.7	1375.8	1290.6	1129.8
70°	269.2	273.8	311.8	448.4	668.8	1015.4	1413.3	1430.0	1349.4	1210.7	977.2
72.5°	68.7	74.3	110.2	200.7	382.0	715.4	1193.1	1221.3	1171.6	982.2	659.7
75°	28.3	29.7	39.4	66.1	142.3	322.3	786.4	846.7	812.2	588.0	298.2
77.5°	19.5	20.5	25.3	36.7	61.6	109.3	385.5	429.1	386.6	200.7	65.0
80°	14.1	14.9	18.1	24.4	35.4	39.0	125.7	145.3	115.4	44.0	16.1
82.5°	8.4	9.0	13.5	17.4	21.5	18.6	31.3	35.5	33.4	21.9	7.2
85°	4.1	4.9	9.1	12.4	11.6	7.8	9.5	10.6	13.2	13.3	3.9
87.5°	0.3	0.5	5.3	7.5	3.2	1.8	2.8	3.4	4.7	6.6	1.6
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°	226.4	226.4	226.4	226.4	226.4	226.4	226.4	226.4	226.4	226.4	226.4
2.5°	227.0	227.1	226.5	226.2	226.4	225.3	224.8	225.0	225.0	225.3	224.8
5°	229.2	229.2	228.2	226.7	225.9	223.8	222.5	222.1	221.9	221.7	221.3
7.5°	234.1	233.6	231.7	228.5	225.8	221.3	217.9	216.1	215.2	214.8	214.6
10°	241.9	241.0	237.8	231.9	225.7	217.7	210.2	204.9	200.5	198.7	197.6
12.5°	252.5	251.0	245.7	236.0	225.1	210.3	194.1	178.5	164.0	158.1	155.1
15°	264.6	262.6	254.2	239.4	221.4	193.7	158.4	131.2	111.1	103.5	100.3
17.5°	277.0	274.3	261.6	241.6	210.3	159.2	111.2	84.0	70.5	66.9	65.7
20°	289.4	285.5	268.0	240.0	185.3	114.8	73.3	61.3	57.5	56.4	56.0
22.5°	301.2	295.1	273.7	233.7	146.7	77.0	58.0	54.2	53.0	52.3	52.2
25°	311.5	302.9	278.8	214.2	103.9	58.2	52.2	51.0	49.4	48.2	48.3
27.5°	321.1	310.8	281.9	182.1	69.3	49.7	48.4	46.7	43.7	42.0	42.0
30°	332.7	321.2	284.1	140.2	51.0	44.0	42.9	40.3	36.2	34.0	34.0
32.5°	350.2	337.1	282.7	98.4	42.2	38.6	36.1	32.5	28.1	25.9	25.9
35°	377.0	361.6	272.4	64.5	37.3	33.6	29.5	25.1	21.3	19.5	19.4
37.5°	413.0	394.4	249.3	46.1	33.4	28.9	24.1	19.2	16.3	15.1	15.0
40°	459.8	432.5	216.4	37.4	29.8	24.4	18.6	14.9	12.9	12.0	12.1
42.5°	515.9	473.3	176.8	32.2	26.3	20.1	14.5	11.7	10.4	9.8	9.6
45°	578.2	513.5	135.4	28.7	22.8	16.2	11.3	9.3	8.3	7.9	7.9
47.5°	646.8	552.7	99.1	25.7	19.0	12.5	9.1	7.6	6.8	6.5	6.4
50°	709.0	579.9	71.4	22.4	15.6	9.9	7.4	6.3	5.8	5.4	5.4
52.5°	760.9	588.5	52.6	18.9	12.6	7.9	6.1	5.4	4.9	4.6	4.6
55°	806.6	585.0	39.1	15.6	10.2	6.5	5.2	4.6	4.1	3.9	3.9
57.5°	850.3	573.6	29.2	12.7	8.2	5.2	4.4	3.9	3.4	3.2	3.2
60°	886.1	554.7	21.7	10.3	6.6	4.2	3.7	3.2	2.8	2.5	2.5
62.5°	915.1	533.8	15.9	8.5	5.2	3.3	2.9	2.6	2.1	1.8	1.8
65°	915.3	499.1	12.0	7.0	4.1	2.6	2.2	2.1	1.4	1.1	1.0
67.5°	849.1	430.3	9.2	6.0	3.2	2.0	1.6	1.7	0.7	0.5	0.4
68°	825.0	412.8	8.6	5.9	3.0	1.9	1.5	1.7	0.6	0.4	0.3
70°	695.6	328.4	6.9	5.8	2.6	1.4	1.3	1.7	0.5	0.3	0.2
72.5°	444.9	190.6	5.1	4.6	2.0	1.1	0.8	1.5	0.5	0.2	0.1
75°	189.3	59.1	3.5	3.2	1.2	0.8	0.5	1.0	0.4	0.1	0.0
77.5°	39.9	13.3	2.1	2.0	0.8	0.5	0.4	0.3	0.1	0.0	0.0
80°	10.3	3.9	1.1	1.0	0.5	0.3	0.2	0.0	0.0	0.0	0.0
82.5°	3.2	1.5	0.6	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.6	0.9	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.9	0.3	0.1	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)