

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: P348884

Luminaire Tested: **ARCH-N-PA1-19-750-U-T4W-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348884  
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-PA1-19-750-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 370mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2136 lumens  
Efficiency: N/A  
Efficacy: 112.4 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): 19  
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

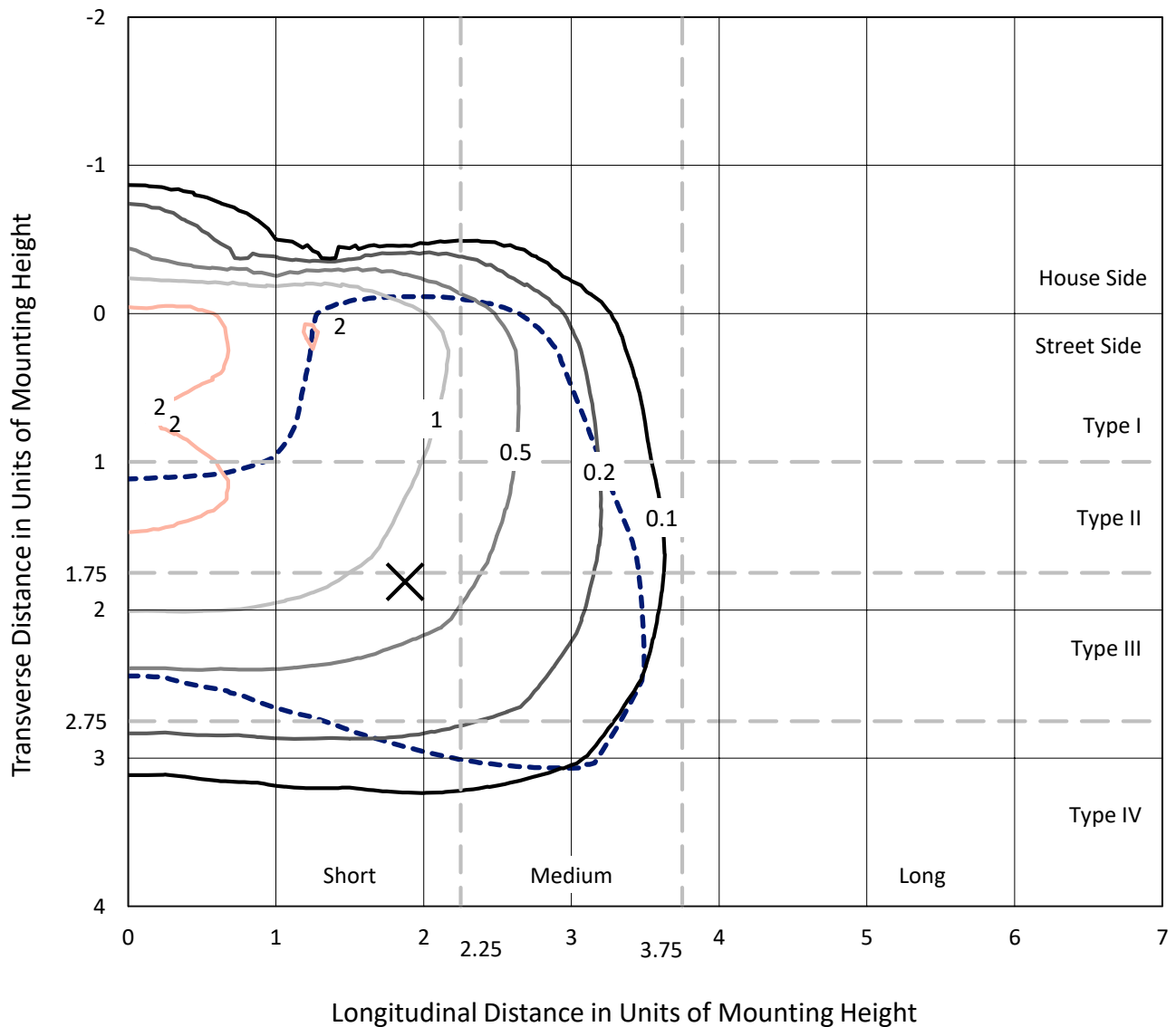


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

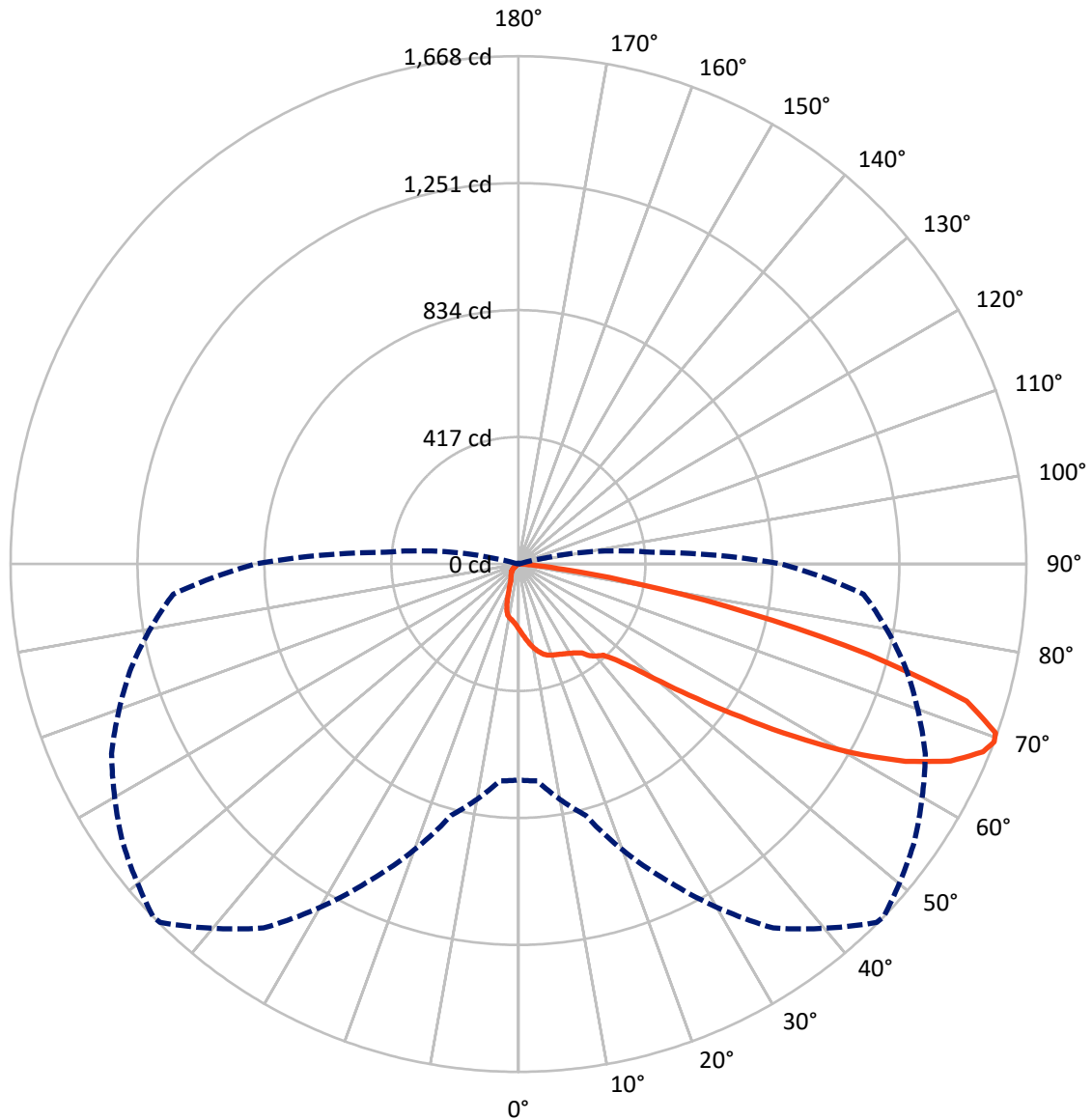


Based on 10 foot mounting height. Maximum calculated value = 3.1 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



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

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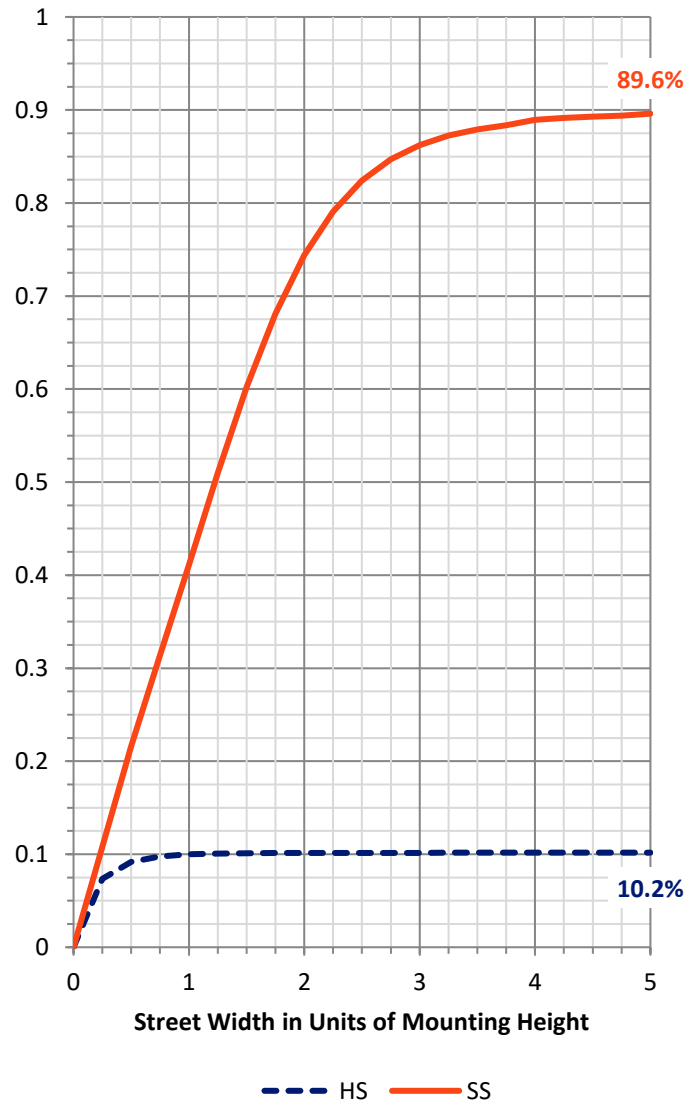
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	219.2	0.0	219.2
	% Fixture	10.3	0.0	10.3
<b>Street Side</b>	Lumens	1916.8	0.0	1916.8
	% Fixture	89.7	0.0	89.7
<b>Total</b>	Lumens	2136.0	0.0	2136.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	21.3	1.0
10°-20°	64.6	3.0
20°-30°	101.6	4.8
30°-40°	145.8	6.8
40°-50°	251.9	11.8
50°-60°	497.7	23.3
60°-70°	695.5	32.6
70°-80°	336.0	15.7
80°-90°	21.6	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°	2136.0	100.0
0°-180°	2136.0	100.0



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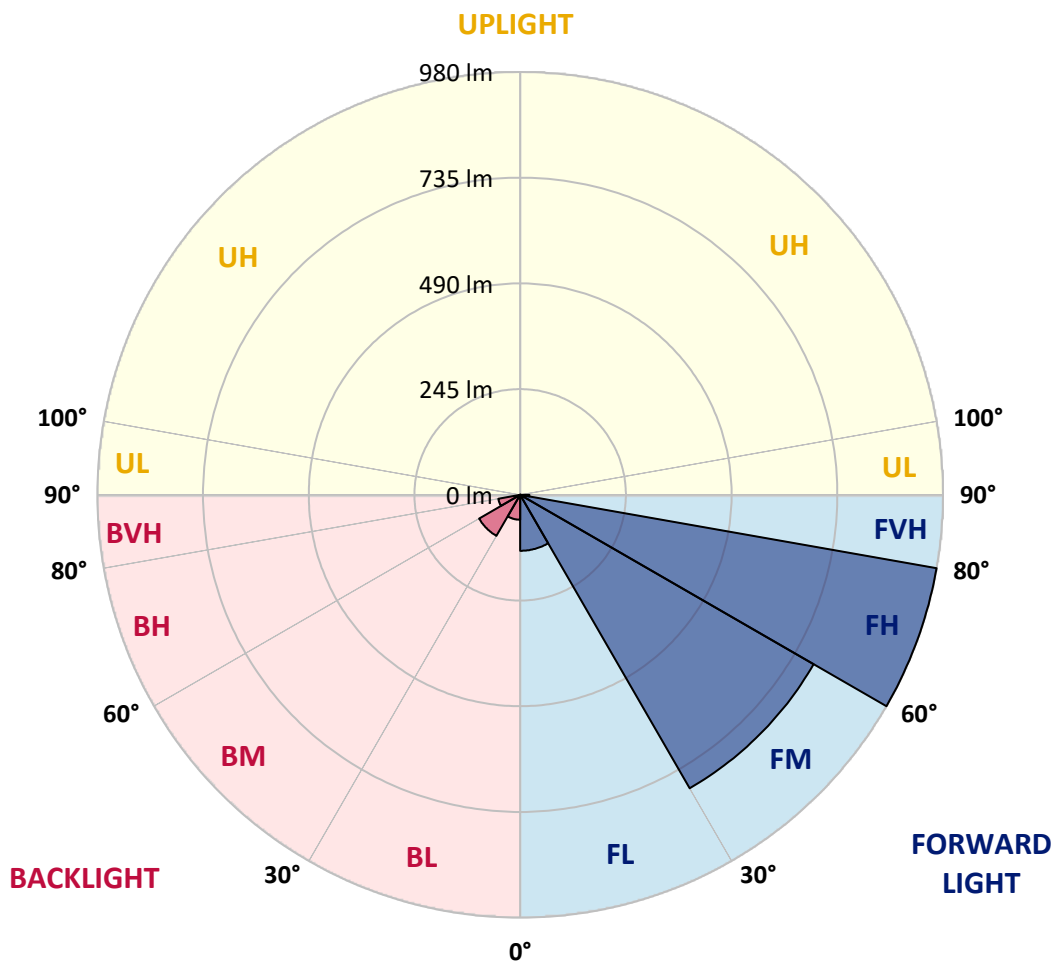
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	129.8	6.1			
FM	(30°-60°)	785.5	36.8			
FH	(60°-80°)	980.1	45.9			G1/1800
FVH	(80°-90°)	21.4	1.0			G1/100
BL	(0°-30°)	57.8	2.7	B0/110		
BM	(30°-60°)	109.8	5.1	B0/220		
BH	(60°-80°)	51.4	2.4	B0/110		G0/110
BVH	(80°-90°)	0.2	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°	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0
2.5°	237.8	237.5	236.1	235.5	232.0	230.0	229.2	226.7	223.1	219.5	215.5
5°	264.8	264.7	262.1	259.6	253.2	247.2	246.1	240.3	232.1	224.5	216.9
7.5°	292.4	291.1	288.5	283.7	274.4	264.8	263.9	255.7	244.2	233.1	222.2
10°	315.9	315.1	311.7	304.4	293.4	282.5	281.4	271.3	258.3	244.8	230.8
12.5°	334.1	333.5	329.0	319.9	308.3	296.9	295.4	286.4	272.5	257.4	241.0
15°	345.2	344.9	339.4	329.7	318.3	308.5	307.2	299.2	286.3	270.5	252.0
17.5°	347.8	347.9	342.2	332.4	323.0	316.0	315.0	309.0	298.1	282.4	263.0
20°	342.0	343.2	338.1	329.6	323.8	320.1	319.3	315.7	306.6	291.7	271.8
22.5°	333.8	334.4	330.9	325.2	322.8	323.5	323.1	321.1	313.4	299.7	280.5
25°	328.8	328.8	326.7	321.9	323.5	327.8	327.9	327.5	321.4	309.6	291.1
27.5°	328.6	328.0	325.6	322.0	326.4	333.0	333.4	336.1	332.3	321.5	304.4
30°	336.6	335.9	330.8	326.1	331.7	338.8	339.8	345.7	343.8	334.4	319.1
32.5°	355.3	352.8	341.5	333.8	338.0	346.5	347.8	357.2	360.2	350.3	333.3
35°	381.0	373.1	356.7	348.4	348.8	357.7	358.9	372.8	381.7	364.9	344.3
37.5°	416.3	412.4	385.9	363.6	365.4	379.0	382.5	397.5	395.0	373.0	356.8
40°	493.8	487.7	459.5	406.3	381.4	396.2	397.3	405.3	405.5	391.1	382.9
42.5°	599.4	596.9	567.1	483.7	412.7	407.7	409.7	423.2	438.4	429.3	428.9
45°	716.3	715.0	683.4	586.5	476.1	445.5	448.0	466.1	495.0	497.0	509.8
47.5°	810.3	809.7	791.6	701.1	573.2	509.5	510.3	529.5	580.4	605.5	625.8
50°	896.0	898.9	884.6	825.2	705.4	609.7	607.8	620.6	702.3	743.5	768.7
52.5°	1015.2	1019.3	979.2	941.0	844.1	734.1	732.6	746.0	849.0	879.8	884.3
55°	1120.5	1113.5	1081.7	1070.7	1013.2	887.7	887.3	899.1	990.8	1003.9	1012.2
57.5°	1166.9	1164.2	1179.6	1204.8	1190.4	1069.3	1068.4	1059.4	1117.7	1119.1	1144.6
60°	1196.3	1199.6	1246.6	1324.4	1360.3	1264.7	1258.9	1203.9	1238.8	1235.7	1263.1
62.5°	1174.3	1180.8	1265.3	1395.0	1487.5	1435.2	1427.0	1336.3	1342.4	1331.7	1357.1
65°	1057.3	1067.4	1205.9	1381.7	1550.6	1568.5	1560.2	1453.2	1424.6	1407.0	1392.9
67.5°	858.5	864.5	1009.1	1265.8	1522.2	1648.1	1646.4	1555.6	1486.7	1394.3	1284.7
69°	709.5	715.4	854.6	1143.8	1459.6	1665.1	1668.4	1588.5	1474.9	1317.0	1138.3
70°	600.9	607.2	736.9	1039.3	1387.0	1657.2	1663.1	1585.4	1441.0	1227.4	1009.8
72.5°	315.2	320.6	453.7	716.0	1130.7	1521.7	1539.6	1451.4	1221.5	891.4	597.1
75°	99.0	102.2	177.2	374.3	774.2	1183.2	1187.3	1138.5	867.4	490.3	248.7
77.5°	37.8	36.9	59.0	137.9	391.4	745.0	770.1	711.5	455.2	173.4	57.4
80°	20.3	20.4	30.6	57.1	167.4	382.9	404.1	344.8	161.7	54.1	13.2
82.5°	8.8	9.2	17.2	30.2	76.9	141.2	151.8	126.4	61.8	36.4	4.9
85°	1.9	2.1	8.3	16.4	31.3	39.7	41.6	41.0	39.4	28.2	1.9
87.5°	0.0	0.0	3.7	5.9	7.9	9.0	7.9	10.3	21.7	19.0	1.0
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°	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0
2.5°	214.2	212.4	209.3	205.9	203.5	201.0	199.0	198.1	197.1	196.4	197.3
5°	213.8	210.3	204.3	198.5	194.3	190.9	188.1	187.0	185.9	185.1	185.0
7.5°	217.3	212.4	203.2	194.7	188.2	183.6	179.8	178.2	176.9	176.3	175.8
10°	224.0	217.7	205.4	194.3	185.9	178.1	169.9	163.5	159.4	157.5	156.8
12.5°	232.7	224.8	209.6	196.4	184.2	169.2	151.7	136.7	127.0	123.8	121.9
15°	243.0	233.1	215.1	199.1	178.0	150.5	121.0	101.4	92.3	90.5	88.5
17.5°	252.8	242.0	221.7	199.6	164.3	120.3	88.6	75.3	71.8	73.0	73.3
20°	261.4	250.7	228.2	195.2	139.6	90.2	68.6	65.3	66.6	68.9	69.3
22.5°	270.1	259.1	234.2	183.6	108.0	68.5	61.8	62.6	63.9	66.2	66.6
25°	280.7	269.3	239.9	162.2	81.0	58.3	58.7	59.9	61.2	63.3	63.5
27.5°	292.9	282.2	243.6	134.5	60.1	53.6	54.9	56.7	58.0	60.0	60.4
30°	309.2	299.2	244.8	105.8	50.4	49.4	50.0	52.2	54.1	55.9	56.2
32.5°	324.4	316.1	240.8	79.8	46.7	45.5	45.5	46.8	49.0	50.7	51.1
35°	338.4	333.0	227.9	58.4	43.9	41.9	40.9	40.9	42.3	43.7	44.1
37.5°	356.9	356.7	207.2	46.6	41.2	38.9	36.8	35.2	34.7	35.0	35.2
40°	388.7	389.0	180.2	41.8	38.9	35.8	32.5	29.6	26.9	26.0	25.9
42.5°	438.3	433.7	151.8	39.5	36.9	32.5	27.7	23.8	19.6	18.3	18.2
45°	517.0	490.2	121.8	37.4	34.8	28.9	22.9	17.6	14.2	13.2	13.2
47.5°	631.6	564.4	94.3	35.1	31.9	24.8	17.3	12.7	10.4	9.9	10.0
50°	750.2	637.2	72.3	32.1	28.5	20.5	12.8	9.2	7.9	7.9	8.0
52.5°	855.4	690.4	56.4	29.0	24.3	16.1	9.7	7.2	6.6	6.5	6.6
55°	953.8	724.8	43.2	25.4	19.3	12.0	7.4	5.9	5.5	5.3	5.2
57.5°	1048.8	741.8	32.3	20.5	14.0	8.7	5.9	5.0	4.6	4.3	4.2
60°	1112.0	728.0	22.2	15.1	9.7	6.3	4.9	4.3	3.8	3.5	3.4
62.5°	1147.6	690.2	14.3	10.9	6.9	4.7	3.9	3.6	2.9	2.6	2.6
65°	1133.2	627.9	10.0	7.8	5.0	3.5	2.9	2.9	2.1	1.7	1.6
67.5°	1004.2	530.5	7.6	5.8	3.6	2.6	2.2	2.5	1.3	0.8	0.8
69°	864.0	439.7	6.5	4.8	3.0	2.1	1.9	2.3	0.9	0.6	0.5
70°	750.9	379.3	5.9	4.2	2.5	1.8	1.7	2.2	0.9	0.5	0.4
72.5°	449.3	211.5	4.5	3.0	1.6	1.4	1.4	2.5	0.9	0.5	0.4
75°	181.6	74.5	3.3	2.1	1.2	1.2	1.7	3.2	0.8	0.4	0.3
77.5°	41.2	16.3	1.9	1.3	0.8	1.2	2.0	2.5	0.5	0.2	0.0
80°	10.0	4.0	1.2	0.8	0.5	0.9	1.5	1.4	0.1	0.0	0.0
82.5°	3.3	1.4	0.5	0.4	0.1	0.3	0.7	0.4	0.0	0.0	0.0
85°	1.4	0.8	0.2	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
87.5°	0.9	0.3	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)