

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: P348542

Luminaire Tested: **ARCH-N-PA1-20-740-U-T2R**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348542  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-20-740-U-T2R  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 420mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3444 lumens  
Efficiency: N/A  
Efficacy: 143.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

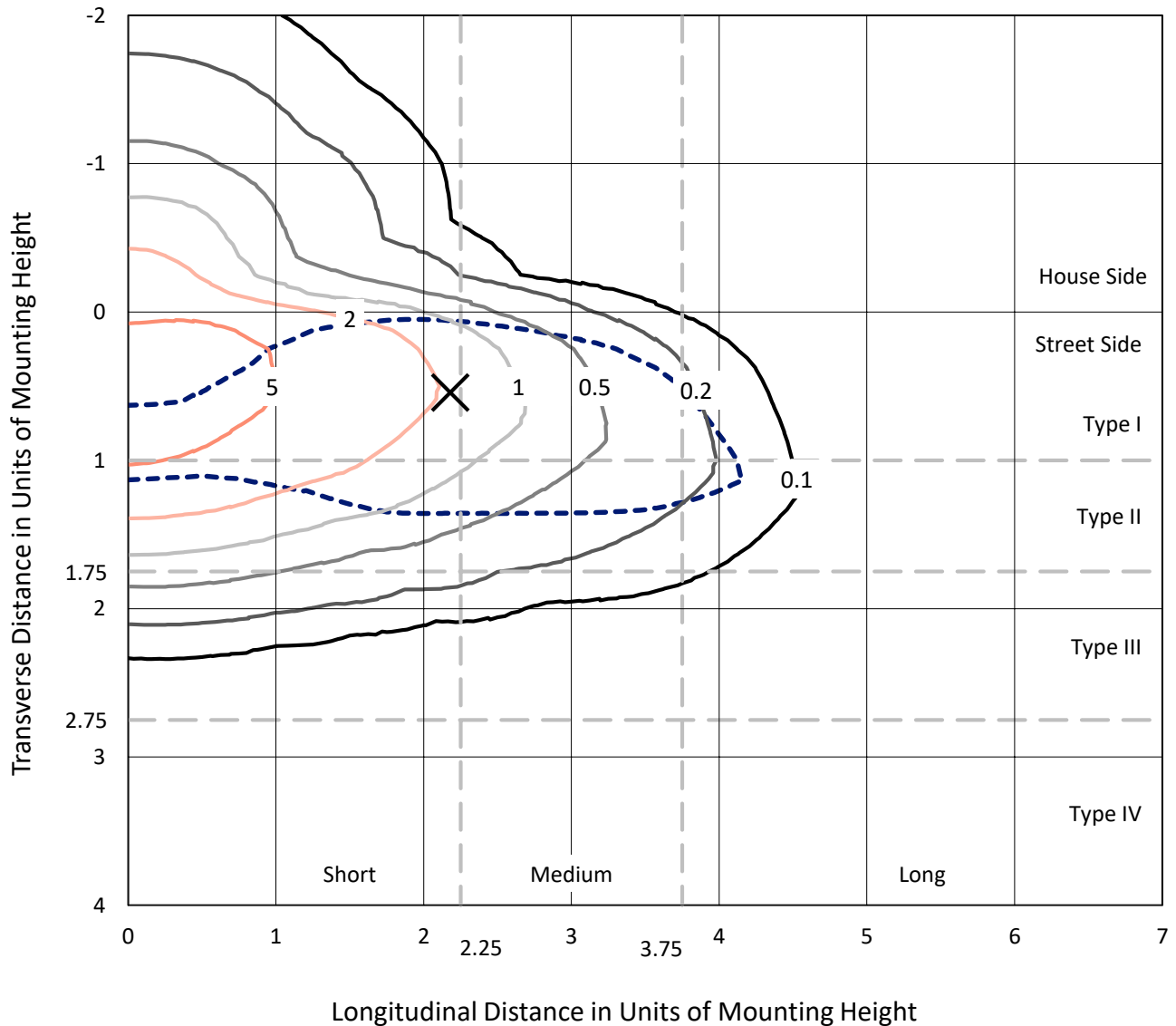
Input Watts (W): 24  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

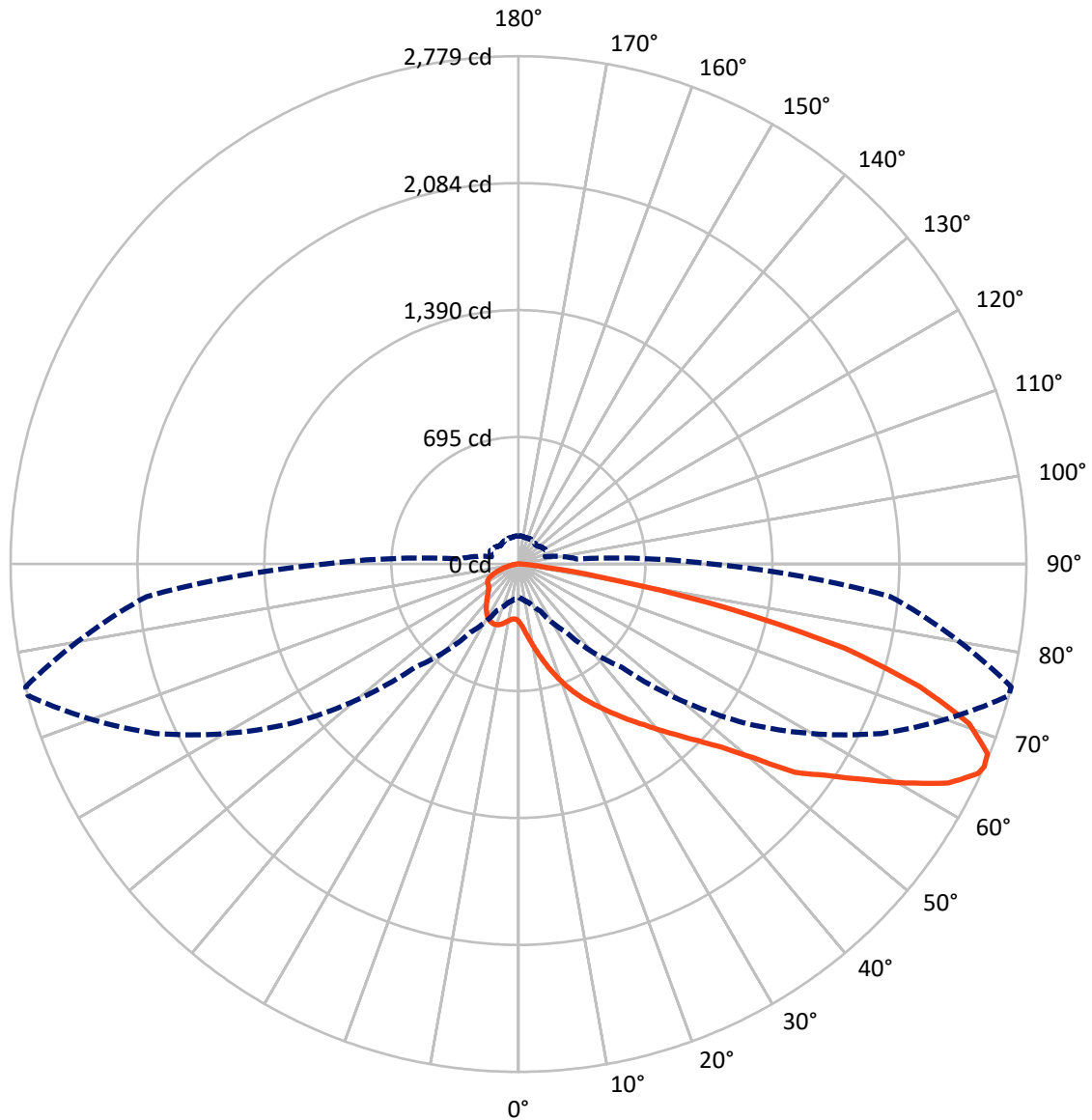
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.3 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 66-Deg Vertical



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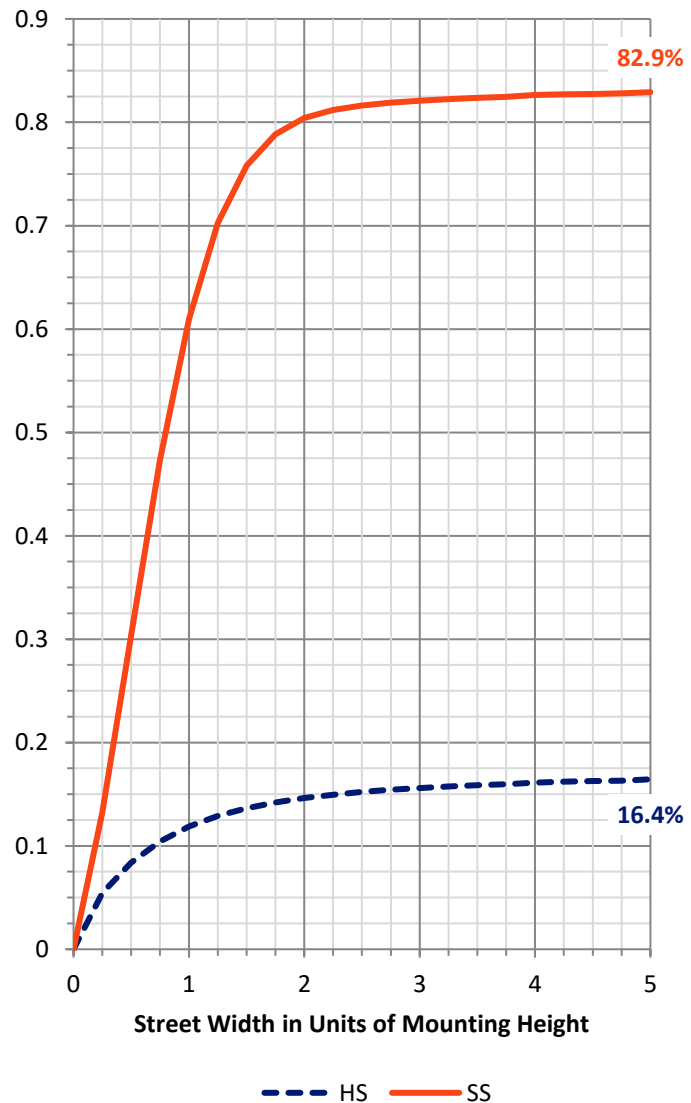
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	579.5	0.0	579.5
	% Fixture	16.8	0.0	16.8
<b>Street Side</b>	Lumens	2864.5	0.0	2864.5
	% Fixture	83.2	0.0	83.2
<b>Total</b>	Lumens	3444.0	0.0	3444.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.0	1.1
10°-20°	150.2	4.4
20°-30°	291.9	8.5
30°-40°	476.4	13.8
40°-50°	650.8	18.9
50°-60°	758.1	22.0
60°-70°	679.7	19.7
70°-80°	343.5	10.0
80°-90°	55.5	1.6
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°	3444.0	100.0
0°-180°	3444.0	100.0

**Coefficient of Utilization**



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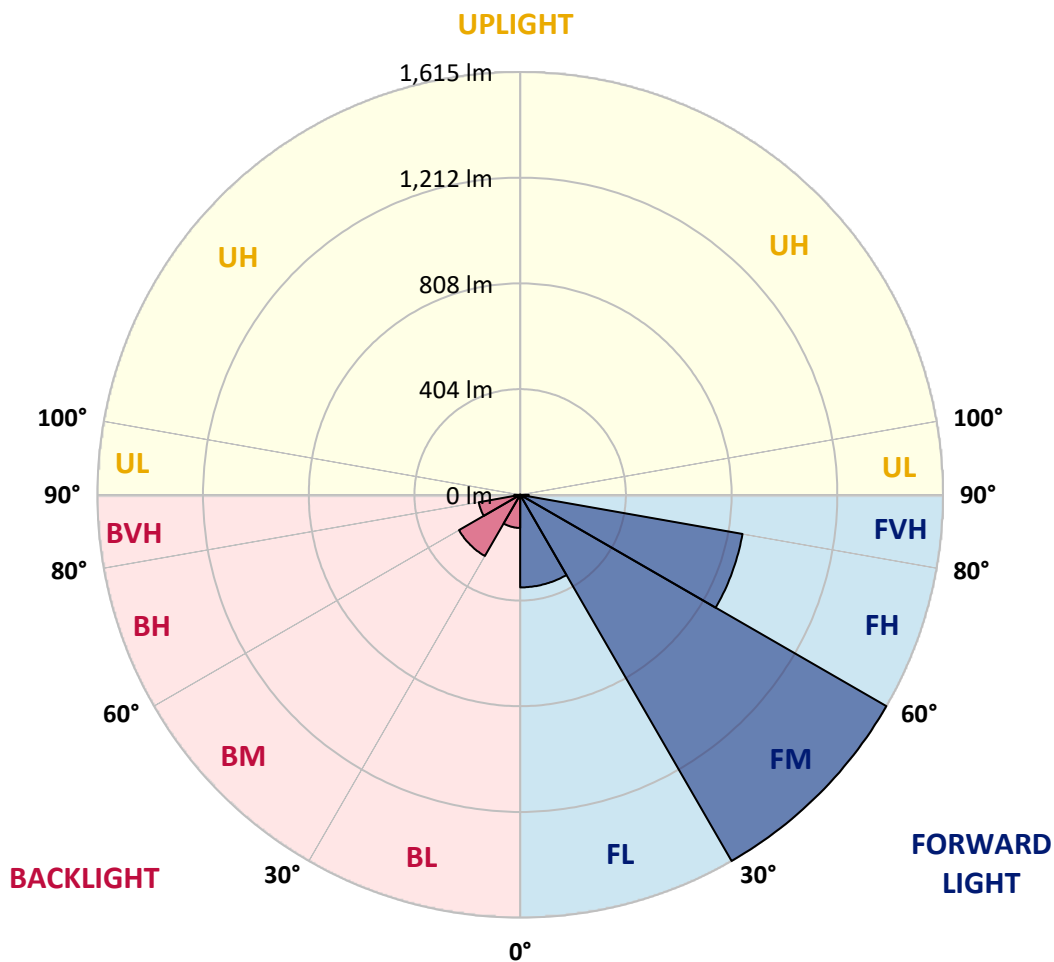
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	353.7	10.3			
FM	(30°-60°)	1615.5	46.9			
FH	(60°-80°)	862.6	25.0			G1/1800
FVH	(80°-90°)	32.8	1.0			G1/100
BL	(0°-30°)	126.4	3.7	B1/500		
BM	(30°-60°)	269.8	7.8	B1/1000		
BH	(60°-80°)	160.6	4.7	B1/500		G1/500
BVH	(80°-90°)	22.7	0.7			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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	314.5	314.5	314.5	314.5	314.5	314.5	314.5	314.5	314.5	314.5	314.5
2.5°	417.5	411.2	410.6	401.4	399.3	381.6	368.6	355.1	339.7	336.6	324.5
5°	536.3	535.7	527.7	512.6	500.8	470.6	440.8	409.2	374.6	369.0	341.6
7.5°	643.2	642.2	636.0	619.8	602.7	565.7	523.1	474.7	418.6	410.3	364.9
10°	724.3	724.0	721.9	709.9	695.4	659.9	612.9	546.8	469.7	458.3	394.0
12.5°	787.0	787.7	789.1	784.9	778.0	747.7	699.5	623.3	524.2	512.9	426.4
15°	829.4	831.5	838.8	844.7	848.4	829.8	783.1	701.5	585.2	571.7	462.3
17.5°	850.8	853.2	865.7	883.7	900.3	898.4	861.3	776.1	643.8	630.8	500.9
20°	869.3	871.1	885.1	906.7	936.1	949.0	928.2	847.9	708.0	692.5	541.8
22.5°	922.8	925.1	929.3	941.6	967.5	991.4	981.3	915.8	766.8	752.4	580.6
25°	1026.2	1028.9	1019.8	1009.4	1014.3	1030.9	1032.8	977.8	826.4	810.1	622.4
27.5°	1150.7	1154.6	1139.0	1112.3	1088.9	1082.4	1080.2	1028.5	883.3	864.5	663.6
30°	1272.7	1279.3	1259.1	1224.4	1181.5	1151.3	1129.0	1078.2	939.5	921.4	702.6
32.5°	1391.8	1389.1	1359.8	1325.9	1275.6	1237.8	1183.8	1131.6	1002.6	981.9	741.3
35°	1473.4	1474.4	1447.1	1406.9	1359.0	1330.0	1257.2	1189.1	1067.0	1048.0	785.2
37.5°	1542.9	1538.6	1507.7	1470.2	1428.9	1416.5	1343.2	1252.4	1136.8	1116.0	832.0
40°	1566.0	1561.0	1540.8	1513.8	1480.7	1479.6	1438.0	1324.2	1215.7	1195.2	884.7
42.5°	1552.0	1545.6	1537.3	1529.9	1519.7	1524.4	1527.1	1408.4	1302.5	1279.5	945.8
45°	1500.2	1490.5	1496.3	1512.4	1534.5	1560.9	1607.5	1501.6	1399.6	1380.4	1017.4
47.5°	1420.6	1411.8	1430.0	1464.3	1524.4	1591.3	1683.6	1604.5	1515.6	1496.5	1119.5
50°	1308.6	1311.1	1337.2	1399.5	1490.4	1605.3	1777.4	1740.7	1684.2	1666.3	1258.8
52.5°	1124.8	1125.2	1198.7	1301.0	1430.0	1598.1	1829.4	1914.8	1914.4	1892.8	1391.3
55°	954.1	964.5	1022.6	1158.6	1332.3	1569.1	1865.8	1999.4	2065.6	2040.3	1514.9
57.5°	787.3	793.4	848.5	985.1	1192.8	1491.8	1903.1	2101.1	2239.8	2223.8	1668.6
60°	597.7	607.0	664.0	790.1	1014.4	1354.6	1906.6	2207.1	2448.1	2431.9	1840.1
62.5°	387.9	404.1	457.4	575.6	798.6	1157.4	1825.2	2276.4	2645.4	2639.7	1992.3
65°	223.0	235.1	272.2	363.4	550.9	909.8	1631.7	2249.8	2766.9	2763.6	2049.3
66°	182.2	189.8	218.2	284.0	454.6	798.9	1519.3	2193.5	2779.0	2779.1	2042.7
67.5°	145.7	149.1	161.8	203.3	335.4	633.2	1318.3	2069.5	2764.0	2768.1	2000.5
70°	120.5	122.3	126.3	136.3	183.1	381.9	935.7	1747.1	2613.7	2616.9	1835.8
72.5°	108.2	109.2	110.7	112.1	129.2	213.4	571.5	1397.7	2291.6	2295.7	1584.7
75°	98.0	98.6	98.3	98.4	108.4	136.0	295.3	1043.5	1852.9	1844.8	1214.0
77.5°	86.1	86.6	85.5	85.7	95.9	104.5	147.0	730.5	1250.5	1192.7	684.0
80°	72.7	73.2	72.7	73.5	83.5	78.9	85.5	411.0	552.9	523.0	243.2
82.5°	55.0	56.9	58.3	61.6	68.7	56.1	57.2	160.1	168.4	160.3	74.6
85°	24.1	29.3	44.0	47.1	51.7	33.7	37.5	65.2	68.5	66.4	27.1
87.5°	6.3	6.9	21.7	27.4	28.6	15.2	19.5	29.7	31.3	29.7	9.0
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°	314.5	314.5	314.5	314.5	314.5	314.5	314.5	314.5	314.5	314.5	314.5
2.5°	318.0	312.3	302.0	292.9	286.0	281.3	276.6	274.3	272.9	271.5	271.7
5°	328.2	316.6	299.0	286.5	279.4	275.0	272.7	271.7	271.1	269.7	269.7
7.5°	343.5	327.1	302.8	290.0	284.5	281.1	279.7	279.2	278.5	276.9	277.1
10°	362.8	339.9	310.9	298.4	293.4	289.6	287.6	286.9	285.6	283.8	284.0
12.5°	385.5	355.7	321.5	308.4	302.4	297.3	294.1	292.1	289.8	287.4	287.5
15°	410.3	372.9	333.0	317.4	309.1	302.1	296.9	293.5	290.0	286.9	286.8
17.5°	435.4	389.5	341.8	322.3	311.1	301.9	294.8	289.5	285.2	281.4	281.1
20°	462.5	404.4	346.7	321.9	307.4	296.4	286.9	280.4	275.6	271.8	271.3
22.5°	490.1	418.5	347.5	317.1	299.1	285.6	275.7	268.4	263.5	259.7	258.3
25°	515.4	429.3	344.1	307.9	287.5	273.0	263.3	255.9	252.0	247.4	246.0
27.5°	538.4	436.9	337.3	296.0	274.5	260.3	251.1	244.8	240.5	237.0	235.8
30°	559.1	441.0	326.2	282.0	261.2	248.2	240.5	236.2	232.4	228.0	227.2
32.5°	578.8	441.0	311.9	266.7	248.0	237.6	233.0	230.3	226.1	221.8	220.6
35°	598.4	438.3	295.1	250.7	235.8	230.0	229.7	226.6	220.2	214.3	212.8
37.5°	619.1	432.8	276.2	235.7	225.9	226.6	228.6	221.6	212.4	204.1	201.9
40°	642.5	425.2	256.5	222.7	217.6	225.1	225.4	214.3	196.5	188.9	187.0
42.5°	670.0	417.6	238.3	211.3	211.0	220.5	219.5	198.6	188.0	184.1	183.1
45°	706.1	413.3	221.0	200.4	205.9	213.1	209.3	190.0	185.6	183.3	182.4
47.5°	763.0	415.5	205.1	191.7	200.8	205.8	190.3	186.5	183.3	180.6	179.7
50°	834.3	414.2	192.2	185.8	194.9	198.1	181.8	181.9	180.3	177.3	175.8
52.5°	888.0	404.2	183.9	182.4	189.8	184.4	176.4	177.5	176.7	172.2	170.7
55°	939.8	395.5	179.7	181.1	186.0	167.3	170.1	172.7	171.9	167.5	166.8
57.5°	1004.2	393.9	177.1	181.5	182.9	158.8	164.0	167.4	166.8	165.0	164.6
60°	1083.1	394.4	174.8	182.0	179.4	152.5	158.3	162.6	163.0	162.6	162.4
62.5°	1126.5	381.6	168.9	180.4	173.2	147.0	152.3	158.7	158.8	159.5	159.4
65°	1089.7	343.5	158.1	174.7	162.8	142.4	147.2	154.1	152.3	155.5	155.5
66°	1053.9	321.5	152.7	170.9	158.3	140.7	145.6	151.8	149.5	153.9	153.9
67.5°	980.8	284.5	143.0	163.0	152.0	138.2	143.7	147.9	144.9	151.3	150.8
70°	847.3	220.0	123.5	145.0	141.6	134.6	141.1	140.2	135.7	145.6	143.7
72.5°	714.4	167.2	99.1	121.4	125.8	130.0	137.5	130.4	124.8	131.7	127.6
75°	554.3	125.7	78.3	94.4	106.3	122.9	133.2	119.0	111.0	110.3	108.0
77.5°	299.7	86.3	62.1	72.0	84.4	114.0	130.2	106.9	94.7	91.9	90.1
80°	118.7	56.1	45.1	54.6	59.0	101.1	123.2	92.7	78.1	75.3	72.6
82.5°	49.0	33.2	29.1	36.6	38.5	86.5	110.6	76.0	60.3	83.5	88.6
85°	21.0	18.2	17.3	18.9	21.7	60.7	88.0	58.0	65.1	58.1	46.2
87.5°	6.3	7.7	7.4	7.2	8.0	14.5	46.9	32.3	47.8	18.1	13.6
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)