

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: P798982

Luminaire Tested: **ARCH1-50-727-U-T3-HSS**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P798982
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH1-50-727-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1470mA LIGHTSQUARE WITH 10 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4382 lumens
Efficiency: N/A
Efficacy: 82.7 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 53
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: 24 FT

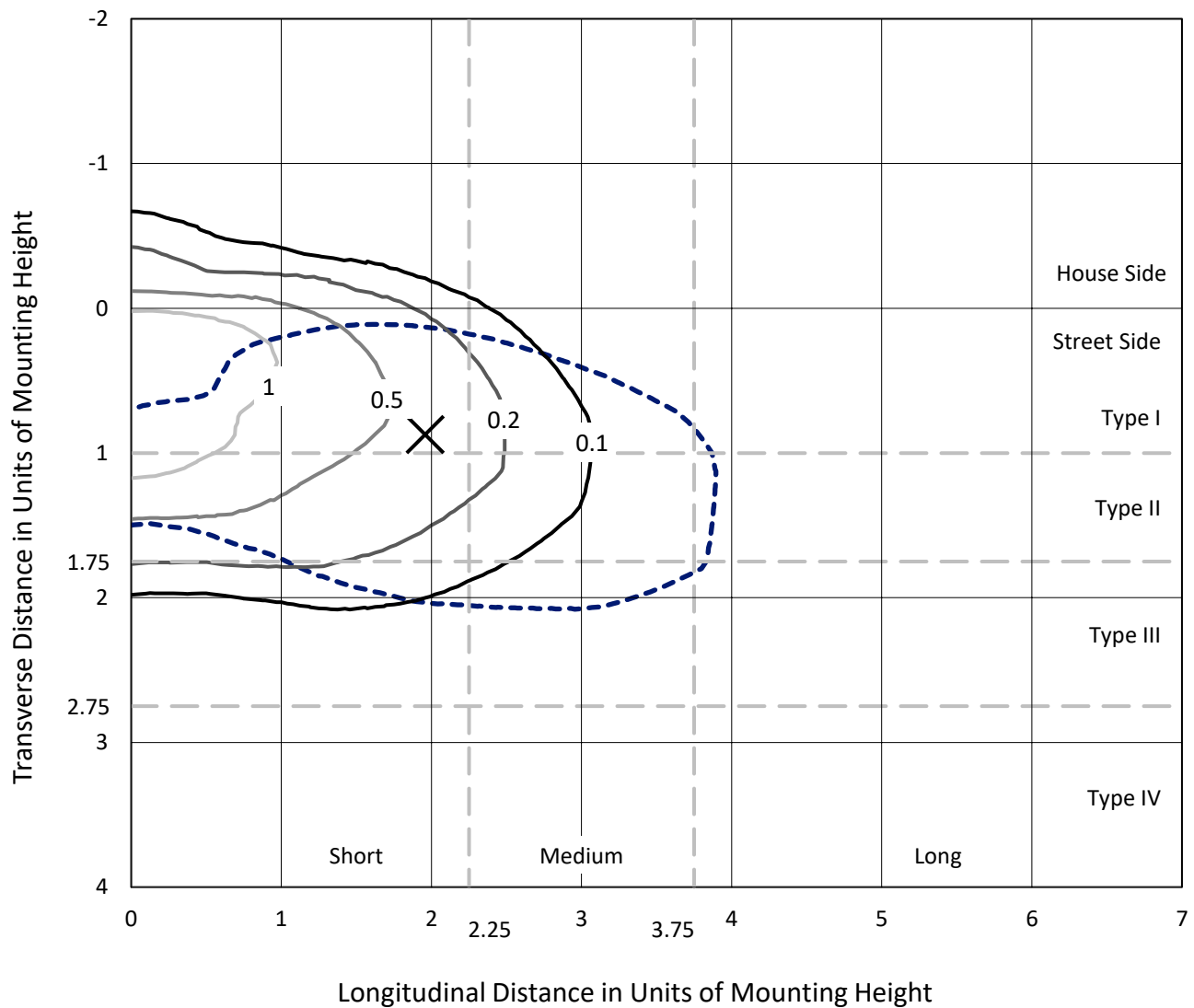


REPORT NUMBER: P798982

CATALOG NUMBER: ARCH1-50-727-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
- - - 1/2 Max cd

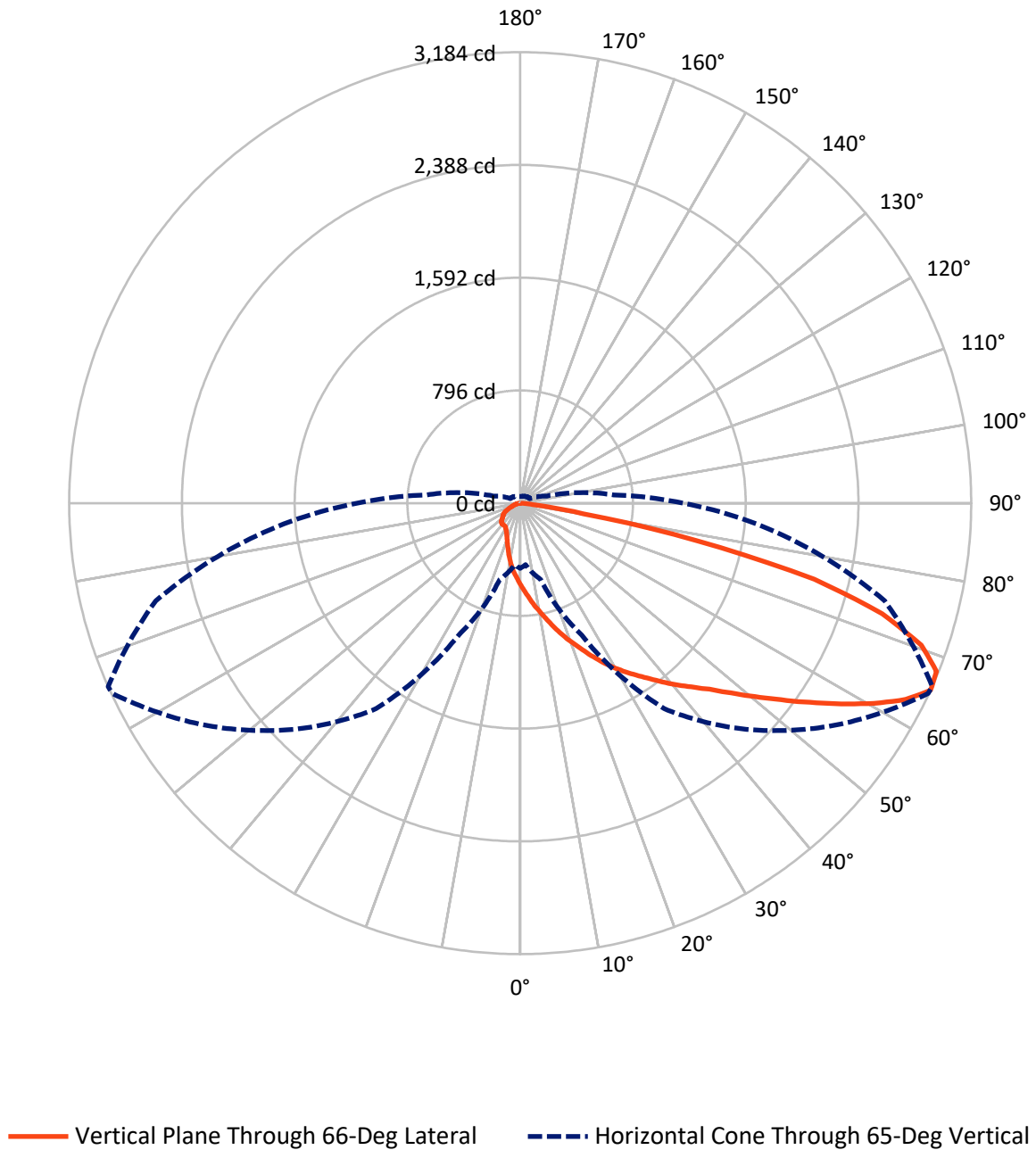


Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
Type III - Short - N/A

REPORT NUMBER: P798982

CATALOG NUMBER: ARCH1-50-727-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P798982

CATALOG NUMBER: ARCH1-50-727-U-T3-HSS

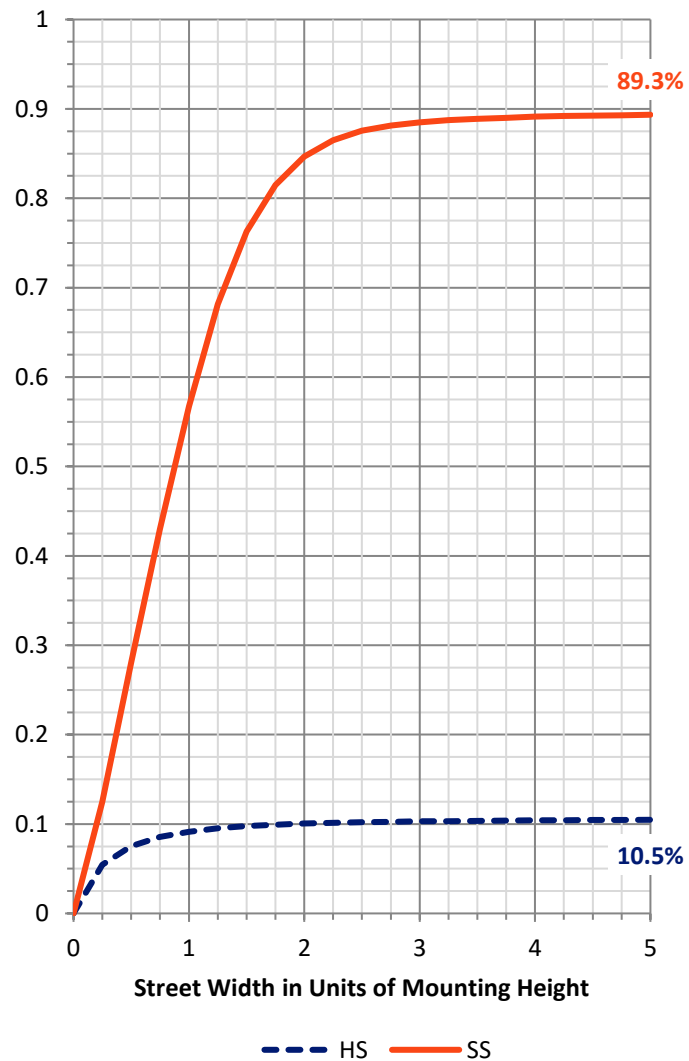
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	463.5	0.0	463.5
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	3918.5	0.0	3918.5
	% Fixture	89.4	0.0	89.4
Total	Lumens	4382.0	0.0	4382.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.2	1.3
10°-20°	186.6	4.3
20°-30°	337.5	7.7
30°-40°	527.8	12.0
40°-50°	800.7	18.3
50°-60°	1017.3	23.2
60°-70°	950.6	21.7
70°-80°	472.4	10.8
80°-90°	31.7	0.7
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°	4382.0	100.0
0°-180°	4382.0	100.0

Coefficient of Utilization



REPORT NUMBER: P798982

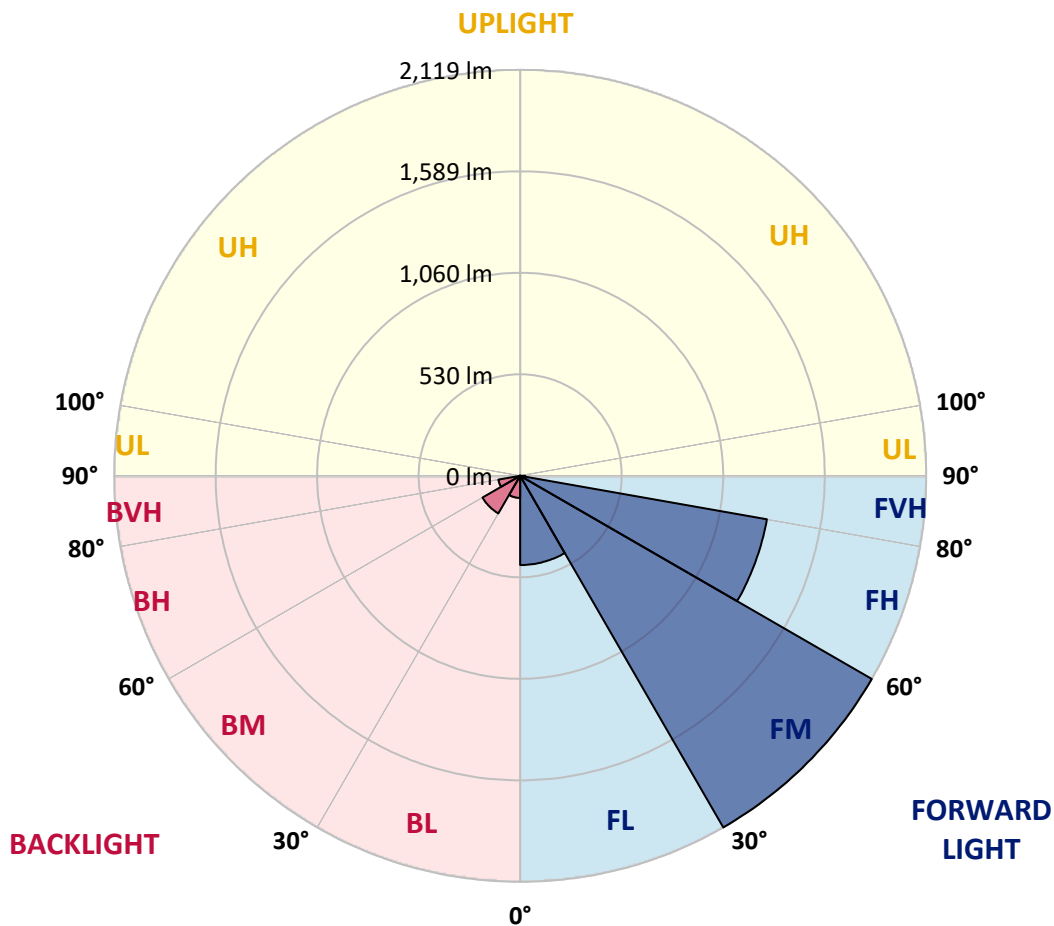
CATALOG NUMBER: ARCH1-50-727-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	465.6	10.6			
FM	(30°-60°)	2119.2	48.4			
FH	(60°-80°)	1307.6	29.8			G1/1800
FVH	(80°-90°)	26.1	0.6			G1/100
BL	(0°-30°)	115.8	2.6	B1/500		
BM	(30°-60°)	226.7	5.2	B1/1000		
BH	(60°-80°)	115.4	2.6	B1/500		G1/500
BVH	(80°-90°)	5.6	0.1			G0/10
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: P798982

CATALOG NUMBER: ARCH1-50-727-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	579.9	579.9	579.9	579.9	579.9	579.9	579.9	579.9	579.9	579.9	579.9
2.5°	677.4	682.9	685.6	686.5	665.4	656.2	647.0	625.9	621.3	609.3	593.7
5°	796.8	804.2	802.3	798.7	772.9	743.5	719.6	680.1	673.7	645.2	610.3
7.5°	914.5	920.9	919.1	905.3	876.8	835.4	795.9	738.0	728.8	682.9	626.8
10°	1012.8	1018.3	1017.4	1003.6	969.6	919.1	871.3	794.1	783.0	717.8	640.6
12.5°	1093.7	1101.0	1100.1	1090.9	1060.6	1005.5	951.2	858.4	844.6	760.1	659.9
15°	1157.1	1166.3	1166.3	1162.6	1141.5	1095.5	1034.0	929.2	912.6	808.8	683.8
17.5°	1195.7	1203.1	1209.5	1215.9	1201.2	1166.3	1110.2	999.9	982.5	856.6	708.6
20°	1215.9	1223.3	1227.9	1241.7	1244.4	1227.0	1182.8	1069.8	1051.4	910.8	737.1
22.5°	1249.0	1255.5	1256.4	1268.3	1273.8	1278.4	1250.9	1138.7	1124.0	970.5	769.3
25°	1304.2	1311.5	1308.8	1314.3	1315.2	1320.7	1317.9	1217.8	1203.1	1038.5	807.9
27.5°	1374.9	1384.1	1382.3	1376.8	1368.5	1363.9	1375.8	1297.7	1283.9	1106.6	847.4
30°	1451.2	1462.2	1459.5	1448.5	1426.4	1407.1	1423.6	1373.1	1360.2	1176.4	891.5
32.5°	1528.4	1541.3	1540.4	1522.0	1484.3	1451.2	1476.0	1443.9	1434.7	1251.8	939.3
35°	1579.0	1595.5	1593.7	1582.6	1533.9	1505.4	1535.8	1516.5	1510.0	1343.7	1008.2
37.5°	1660.8	1678.2	1662.6	1635.0	1579.0	1564.3	1601.0	1598.3	1593.7	1441.1	1080.8
40°	1859.3	1885.0	1843.7	1730.6	1638.7	1625.8	1678.2	1689.3	1684.7	1537.6	1146.1
42.5°	2067.0	2105.6	2041.3	1885.0	1747.2	1700.3	1762.8	1778.4	1772.9	1620.3	1204.9
45°	2192.9	2209.4	2145.1	2023.8	1939.2	1790.3	1852.8	1878.6	1874.0	1719.6	1280.3
47.5°	2295.8	2289.4	2215.9	2134.1	2149.7	1917.2	1954.9	2005.4	2001.7	1829.0	1363.0
50°	2317.9	2303.2	2273.8	2222.3	2263.7	2045.9	2062.4	2149.7	2146.0	1950.3	1446.6
52.5°	2162.6	2143.3	2223.2	2266.4	2252.6	2139.6	2181.0	2307.8	2305.9	2081.7	1526.6
55°	1774.7	1759.1	1974.2	2197.5	2240.7	2205.8	2312.4	2472.3	2482.4	2221.4	1599.2
57.5°	1396.1	1379.5	1590.9	2024.7	2196.6	2266.4	2465.9	2660.7	2673.6	2373.0	1668.1
60°	1113.0	1088.2	1249.9	1752.7	2113.9	2313.3	2613.8	2867.5	2869.3	2511.8	1710.4
62.5°	756.4	728.8	908.0	1408.0	1975.1	2320.7	2727.8	3045.8	3053.2	2615.7	1717.7
65°	459.5	436.6	557.9	1028.4	1770.1	2258.2	2729.6	3177.2	3183.7	2663.5	1673.6
67.5°	266.5	257.3	318.9	640.6	1430.1	2090.0	2614.8	3157.0	3169.0	2643.2	1573.4
70°	155.3	154.4	177.4	317.1	1009.1	1756.3	2358.3	2987.0	3004.4	2537.6	1420.0
72.5°	114.0	115.8	125.0	170.0	584.5	1264.6	1997.1	2645.1	2671.7	2330.8	1201.2
75°	90.1	91.0	99.3	115.8	307.0	715.0	1496.2	2123.1	2144.2	1962.2	938.4
77.5°	67.1	68.9	75.4	81.8	142.5	328.1	841.9	1307.8	1272.9	1077.2	453.1
80°	48.7	53.3	56.1	58.8	75.4	126.8	252.7	455.9	452.2	470.6	214.1
82.5°	31.2	34.9	37.7	39.5	45.0	60.7	75.4	102.0	110.3	182.9	85.5
85°	13.8	15.6	17.5	21.1	19.3	21.1	31.2	20.2	17.5	27.6	15.6
87.5°	0.0	0.0	2.8	4.6	3.7	1.8	5.5	3.7	2.8	2.8	2.8
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: P798982

CATALOG NUMBER: ARCH1-50-727-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	579.9	579.9	579.9	579.9	579.9	579.9	579.9	579.9	579.9	579.9	579.9
2.5°	585.4	575.3	554.2	534.0	522.0	506.4	492.6	479.8	478.8	475.2	468.7
5°	592.8	573.5	534.0	496.3	467.8	437.5	411.7	391.5	384.2	378.7	371.3
7.5°	600.2	569.8	511.0	455.9	410.8	368.5	338.2	310.6	302.4	295.0	290.4
10°	602.9	563.4	484.4	410.8	352.0	307.0	274.8	254.6	247.2	243.6	240.8
12.5°	611.2	559.7	459.5	368.5	300.5	259.2	236.2	224.3	221.5	218.7	216.0
15°	622.2	559.7	434.7	327.2	260.1	227.0	213.2	205.0	203.1	202.2	200.4
17.5°	634.2	559.7	410.8	292.3	230.7	205.9	195.8	191.2	190.2	189.3	188.4
20°	650.7	560.6	385.1	261.9	209.5	190.2	182.0	176.5	175.5	174.6	174.6
22.5°	667.2	562.5	360.3	239.0	195.8	178.3	168.2	162.7	160.8	160.8	160.8
25°	688.4	568.0	337.3	219.7	183.8	167.3	154.4	149.8	148.9	148.9	148.0
27.5°	713.2	574.4	317.1	205.0	171.9	154.4	141.5	136.9	135.1	135.1	134.2
30°	739.9	580.9	300.5	193.9	159.9	141.5	129.6	124.1	122.2	123.2	122.2
32.5°	769.3	590.0	287.7	186.6	148.9	130.5	119.5	113.0	112.1	112.1	111.2
35°	818.9	615.8	285.8	182.9	139.7	122.2	111.2	104.8	103.9	103.9	102.9
37.5°	872.2	645.2	294.1	181.1	132.3	114.9	104.8	98.3	97.4	97.4	97.4
40°	917.2	667.2	303.3	181.1	127.8	108.5	99.3	93.7	93.7	93.7	93.7
42.5°	947.6	669.1	301.5	181.1	124.1	103.9	95.6	90.1	90.1	91.0	90.1
45°	992.6	678.3	294.1	178.3	121.3	100.2	91.9	87.3	86.4	87.3	87.3
47.5°	1045.9	694.8	286.8	167.3	120.4	96.5	89.1	83.6	82.7	83.6	82.7
50°	1096.5	709.5	283.1	152.6	118.6	92.8	85.5	80.0	79.0	80.0	79.0
52.5°	1138.7	716.0	276.6	142.5	114.0	89.1	81.8	76.3	74.4	75.4	75.4
55°	1172.7	714.1	267.4	134.2	105.7	85.5	77.2	72.6	69.8	69.8	68.9
57.5°	1204.0	715.0	259.2	125.9	96.5	80.0	73.5	68.0	64.3	63.4	62.5
60°	1215.9	710.4	244.5	114.9	87.3	75.4	68.9	62.5	58.8	57.9	57.0
62.5°	1199.4	693.9	225.2	95.6	79.0	69.8	64.3	57.9	54.2	53.3	52.4
65°	1152.5	662.7	195.8	75.4	71.7	63.4	58.8	54.2	49.6	47.8	46.9
67.5°	1072.6	617.6	159.0	60.7	63.4	57.9	55.1	49.6	44.1	42.3	41.4
70°	958.6	557.9	119.5	51.5	56.1	51.5	49.6	44.1	39.5	37.7	36.8
72.5°	798.7	461.4	83.6	44.1	48.7	45.0	43.2	39.5	34.9	32.2	32.2
75°	603.8	330.9	55.1	37.7	40.4	38.6	35.8	33.1	30.3	28.5	27.6
77.5°	260.1	128.7	34.0	28.5	33.1	32.2	28.5	26.7	25.7	23.9	23.9
80°	112.1	52.4	21.1	21.1	23.9	23.0	22.1	20.2	20.2	19.3	18.4
82.5°	41.4	21.1	12.9	15.6	17.5	15.6	15.6	15.6	15.6	14.7	14.7
85°	10.1	6.4	6.4	9.2	10.1	9.2	10.1	9.2	9.2	9.2	8.3
87.5°	2.8	2.8	3.7	3.7	3.7	3.7	3.7	2.8	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)