

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: P798998

Luminaire Tested: **ARCH1-50-730-U-T3-HSS**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P798998
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: ARCH1-50-730-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 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: 4541 lumens
Efficiency: N/A
Efficacy: 85.7 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

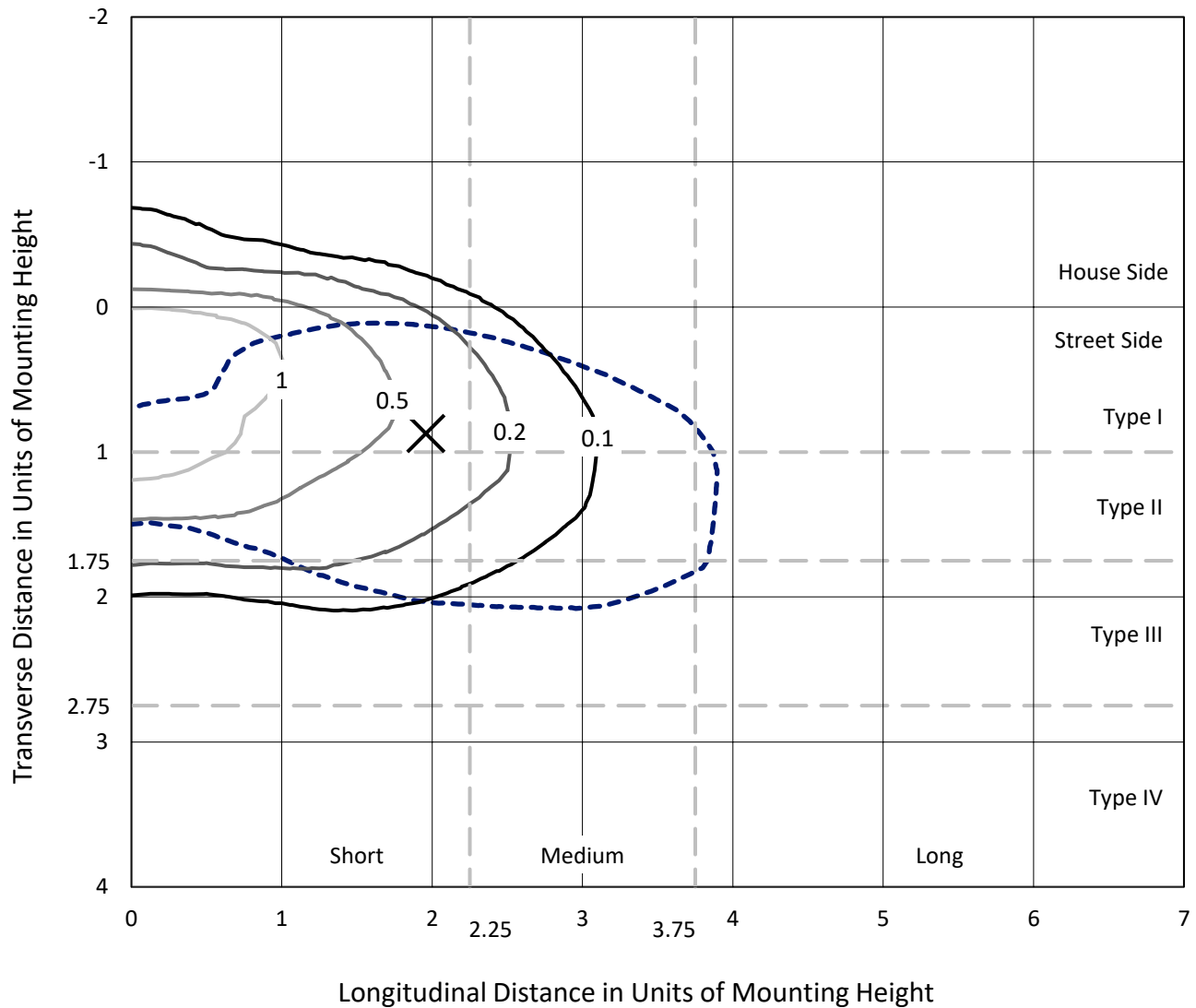


REPORT NUMBER: P798998

CATALOG NUMBER: ARCH1-50-730-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
- - - 1/2 Max cd

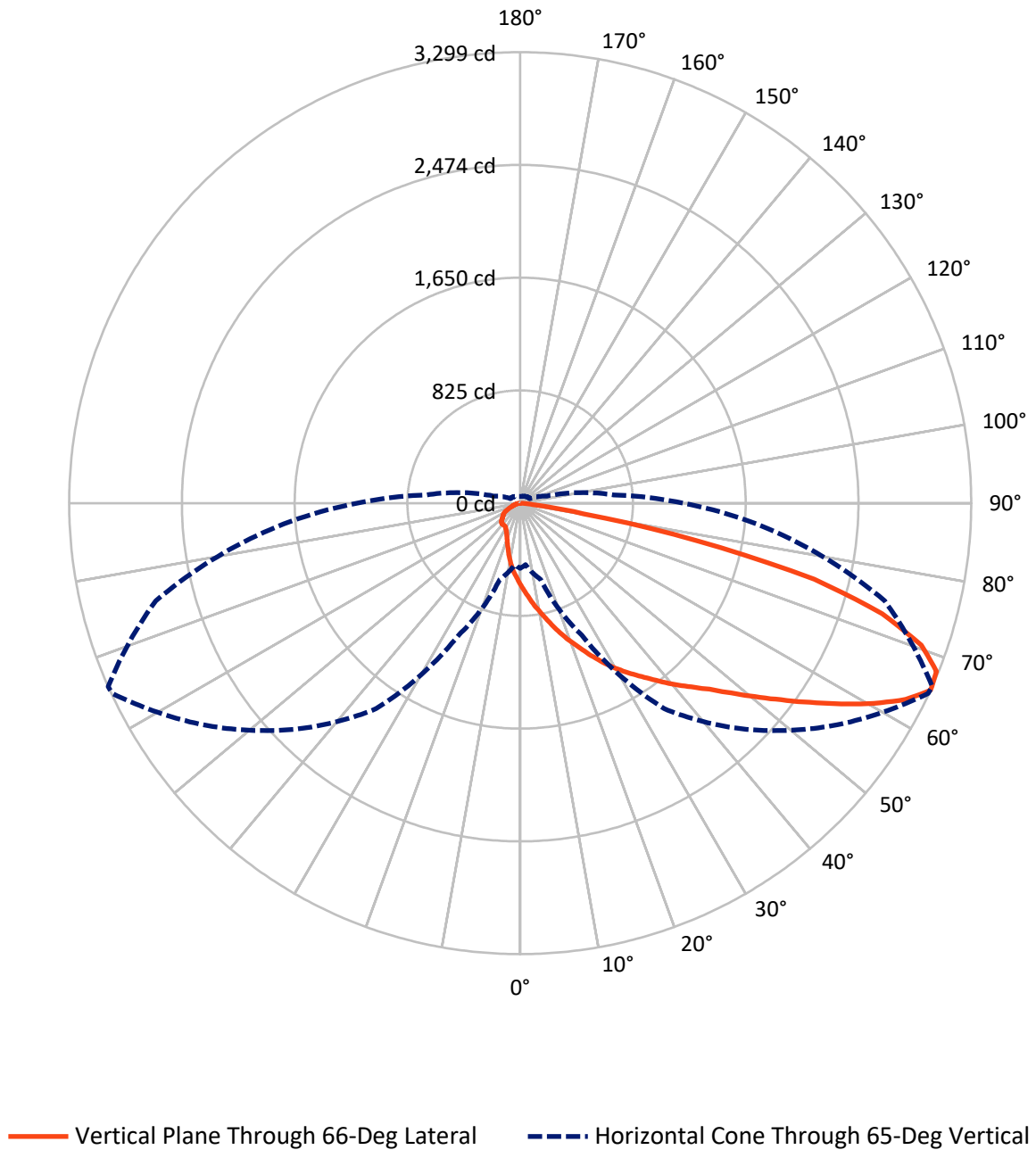


Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
Type III - Short - N/A

REPORT NUMBER: P798998

CATALOG NUMBER: ARCH1-50-730-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P798998

CATALOG NUMBER: ARCH1-50-730-U-T3-HSS

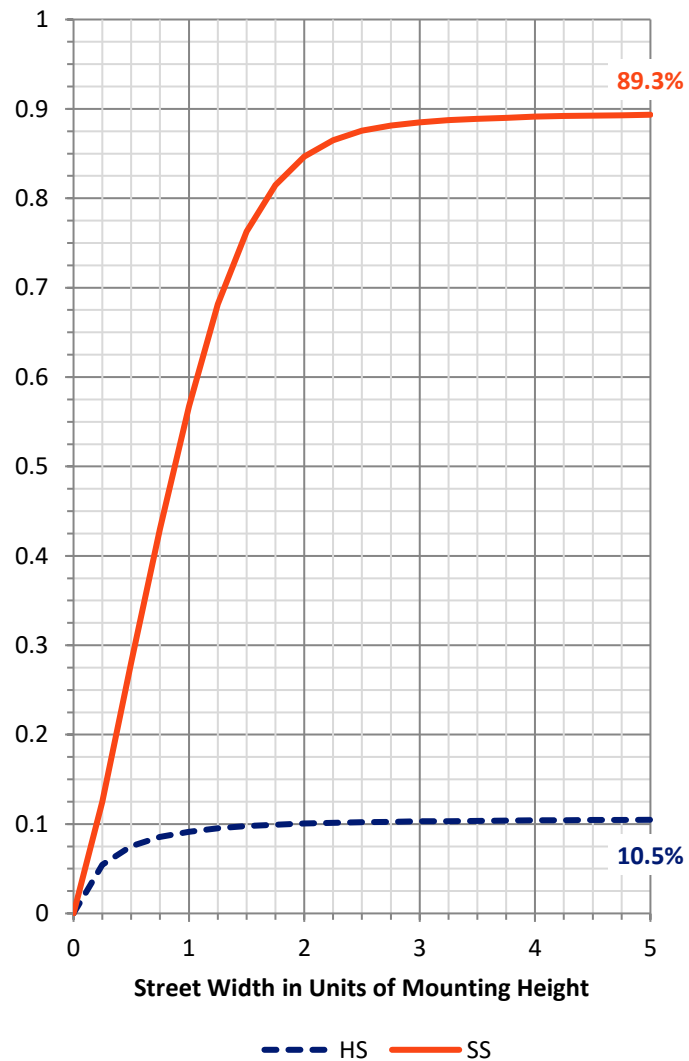
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	480.3	0.0	480.3
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	4060.7	0.0	4060.7
	% Fixture	89.4	0.0	89.4
Total	Lumens	4541.0	0.0	4541.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.3	1.3
10°-20°	193.3	4.3
20°-30°	349.8	7.7
30°-40°	547.0	12.0
40°-50°	829.8	18.3
50°-60°	1054.3	23.2
60°-70°	985.1	21.7
70°-80°	489.6	10.8
80°-90°	32.9	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°	4541.0	100.0
0°-180°	4541.0	100.0

Coefficient of Utilization



REPORT NUMBER: P798998

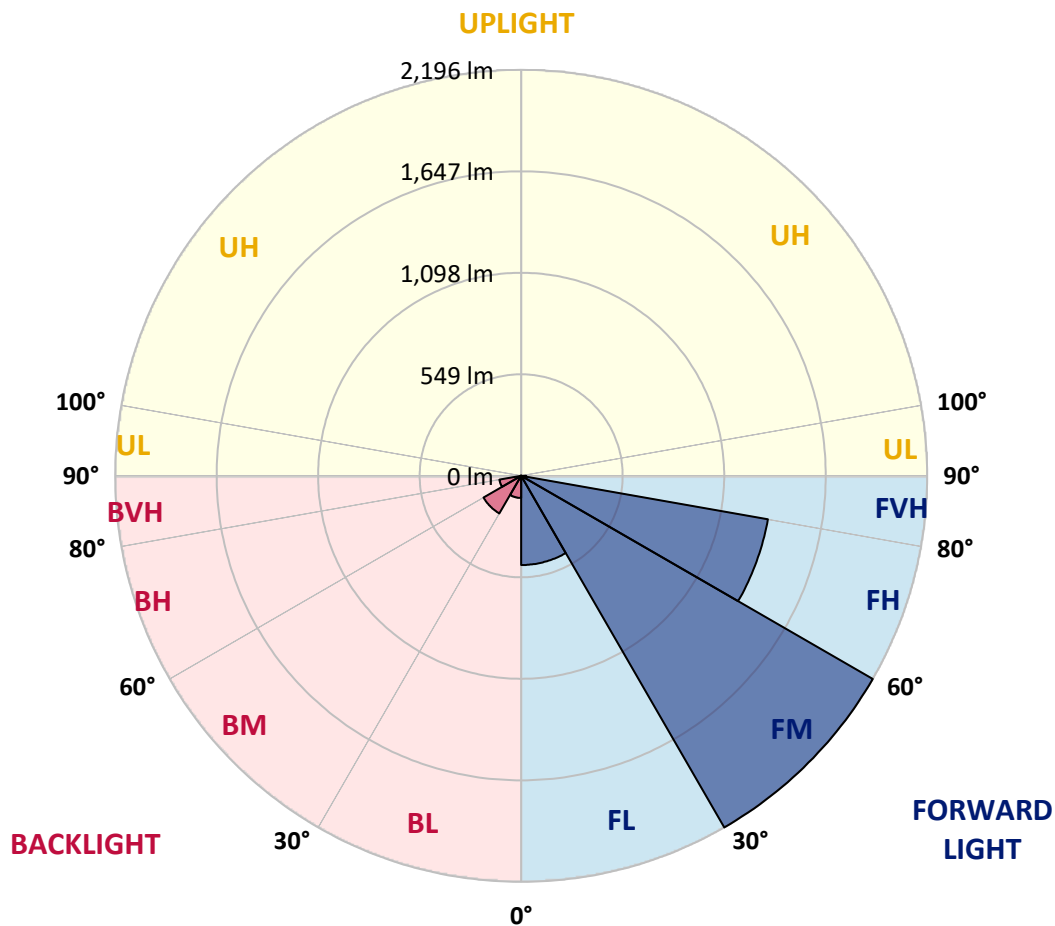
CATALOG NUMBER: ARCH1-50-730-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	482.5	10.6			
FM	(30°-60°)	2196.1	48.4			
FH	(60°-80°)	1355.1	29.8			G1/1800
FVH	(80°-90°)	27.1	0.6			G1/100
BL	(0°-30°)	120.0	2.6	B1/500		
BM	(30°-60°)	234.9	5.2	B1/1000		
BH	(60°-80°)	119.6	2.6	B1/500		G1/500
BVH	(80°-90°)	5.8	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: P798998

CATALOG NUMBER: ARCH1-50-730-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	601.0	601.0	601.0	601.0	601.0	601.0	601.0	601.0	601.0	601.0	601.0
2.5°	701.9	707.6	710.5	711.5	689.6	680.0	670.5	648.6	643.8	631.5	615.3
5°	825.7	833.4	831.5	827.7	801.0	770.5	745.7	704.8	698.1	668.6	632.4
7.5°	947.7	954.3	952.4	938.1	908.6	865.7	824.8	764.8	755.3	707.6	649.5
10°	1049.6	1055.3	1054.3	1040.0	1004.8	952.4	902.9	822.9	811.5	743.8	663.8
12.5°	1133.4	1141.0	1140.0	1130.5	1099.1	1041.9	985.8	889.6	875.3	787.7	683.8
15°	1199.1	1208.6	1208.6	1204.8	1182.9	1135.3	1071.5	962.9	945.8	838.1	708.6
17.5°	1239.1	1246.7	1253.4	1260.1	1244.8	1208.6	1150.5	1036.2	1018.1	887.7	734.3
20°	1260.1	1267.7	1272.4	1286.7	1289.6	1271.5	1225.8	1108.6	1089.6	943.8	763.8
22.5°	1294.3	1301.0	1302.0	1314.3	1320.1	1324.8	1296.2	1180.0	1164.8	1005.8	797.2
25°	1351.5	1359.1	1356.2	1362.0	1362.9	1368.6	1365.8	1262.0	1246.7	1076.2	837.2
27.5°	1424.8	1434.3	1432.4	1426.7	1418.2	1413.4	1425.8	1344.8	1330.5	1146.7	878.1
30°	1503.9	1515.3	1512.4	1501.0	1478.2	1458.2	1475.3	1422.9	1409.6	1219.1	923.8
32.5°	1583.9	1597.2	1596.3	1577.2	1538.2	1503.9	1529.6	1496.3	1486.7	1297.2	973.4
35°	1636.3	1653.4	1651.5	1640.1	1589.6	1560.1	1591.5	1571.5	1564.8	1392.4	1044.8
37.5°	1721.0	1739.1	1722.9	1694.4	1636.3	1621.0	1659.1	1656.3	1651.5	1493.4	1120.0
40°	1926.7	1953.4	1910.6	1793.4	1698.2	1684.8	1739.1	1750.5	1745.8	1593.4	1187.7
42.5°	2142.0	2182.0	2115.3	1953.4	1810.5	1762.0	1826.7	1842.9	1837.2	1679.1	1248.6
45°	2272.5	2289.6	2222.9	2097.2	2009.6	1855.3	1920.1	1946.7	1942.0	1782.0	1326.7
47.5°	2379.1	2372.5	2296.3	2211.5	2227.7	1986.7	2025.8	2078.2	2074.4	1895.3	1412.4
50°	2402.0	2386.8	2356.3	2302.9	2345.8	2120.1	2137.2	2227.7	2223.9	2021.0	1499.1
52.5°	2241.0	2221.0	2303.9	2348.7	2334.4	2217.2	2260.1	2391.5	2389.6	2157.2	1582.0
55°	1839.1	1822.9	2045.8	2277.2	2322.0	2285.8	2396.3	2562.0	2572.5	2302.0	1657.2
57.5°	1446.7	1429.6	1648.6	2098.2	2276.3	2348.7	2555.3	2757.3	2770.6	2459.1	1728.6
60°	1153.4	1127.7	1295.3	1816.3	2190.6	2397.2	2708.7	2971.5	2973.5	2603.0	1772.5
62.5°	783.8	755.3	941.0	1459.1	2046.7	2404.9	2826.8	3156.3	3163.9	2710.6	1780.1
65°	476.2	452.4	578.1	1065.8	1834.4	2340.1	2828.7	3292.5	3299.2	2760.1	1734.4
67.5°	276.2	266.7	330.5	663.8	1482.0	2165.8	2709.6	3271.6	3283.9	2739.2	1630.5
70°	161.0	160.0	183.8	328.6	1045.8	1820.1	2443.9	3095.4	3113.5	2629.6	1471.5
72.5°	118.1	120.0	129.5	176.2	605.7	1310.5	2069.6	2741.1	2768.7	2415.3	1244.8
75°	93.3	94.3	102.9	120.0	318.1	741.0	1550.5	2200.1	2222.0	2033.4	972.4
77.5°	69.5	71.4	78.1	84.8	147.6	340.0	872.4	1355.3	1319.1	1116.2	469.5
80°	50.5	55.2	58.1	61.0	78.1	131.4	261.9	472.4	468.6	487.6	221.9
82.5°	32.4	36.2	39.0	41.0	46.7	62.9	78.1	105.7	114.3	189.5	88.6
85°	14.3	16.2	18.1	21.9	20.0	21.9	32.4	21.0	18.1	28.6	16.2
87.5°	0.0	0.0	2.9	4.8	3.8	1.9	5.7	3.8	2.9	2.9	2.9
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: P798998

CATALOG NUMBER: ARCH1-50-730-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	601.0	601.0	601.0	601.0	601.0	601.0	601.0	601.0	601.0	601.0	601.0
2.5°	606.7	596.2	574.3	553.4	541.0	524.8	510.5	497.2	496.2	492.4	485.7
5°	614.3	594.3	553.4	514.3	484.8	453.4	426.7	405.7	398.1	392.4	384.8
7.5°	621.9	590.5	529.5	472.4	425.7	381.9	350.5	321.9	313.3	305.7	301.0
10°	624.8	583.8	501.9	425.7	364.8	318.1	284.8	263.8	256.2	252.4	249.5
12.5°	633.4	580.0	476.2	381.9	311.4	268.6	244.8	232.4	229.5	226.7	223.8
15°	644.8	580.0	450.5	339.1	269.5	235.2	221.0	212.4	210.5	209.5	207.6
17.5°	657.2	580.0	425.7	302.9	239.1	213.3	202.9	198.1	197.2	196.2	195.2
20°	674.3	581.0	399.1	271.4	217.2	197.2	188.6	182.9	181.9	181.0	181.0
22.5°	691.5	582.9	373.3	247.6	202.9	184.8	174.3	168.6	166.7	166.7	166.7
25°	713.4	588.6	349.5	227.6	190.5	173.3	160.0	155.2	154.3	154.3	153.3
27.5°	739.1	595.3	328.6	212.4	178.1	160.0	146.7	141.9	140.0	140.0	139.1
30°	766.7	601.9	311.4	201.0	165.7	146.7	134.3	128.6	126.7	127.6	126.7
32.5°	797.2	611.5	298.1	193.3	154.3	135.2	123.8	117.1	116.2	116.2	115.2
35°	848.6	638.1	296.2	189.5	144.8	126.7	115.2	108.6	107.6	107.6	106.7
37.5°	903.8	668.6	304.8	187.6	137.1	119.1	108.6	101.9	101.0	101.0	101.0
40°	950.5	691.5	314.3	187.6	132.4	112.4	102.9	97.1	97.1	97.1	97.1
42.5°	981.9	693.4	312.4	187.6	128.6	107.6	99.1	93.3	93.3	94.3	93.3
45°	1028.6	702.9	304.8	184.8	125.7	103.8	95.2	90.5	89.5	90.5	90.5
47.5°	1083.9	720.0	297.2	173.3	124.8	100.0	92.4	86.7	85.7	86.7	85.7
50°	1136.2	735.3	293.3	158.1	122.9	96.2	88.6	82.9	81.9	82.9	81.9
52.5°	1180.0	741.9	286.7	147.6	118.1	92.4	84.8	79.1	77.1	78.1	78.1
55°	1215.3	740.0	277.2	139.1	109.5	88.6	80.0	75.2	72.4	72.4	71.4
57.5°	1247.7	741.0	268.6	130.5	100.0	82.9	76.2	70.5	66.7	65.7	64.8
60°	1260.1	736.2	253.3	119.1	90.5	78.1	71.4	64.8	61.0	60.0	59.0
62.5°	1242.9	719.1	233.3	99.1	81.9	72.4	66.7	60.0	56.2	55.2	54.3
65°	1194.3	686.7	202.9	78.1	74.3	65.7	61.0	56.2	51.4	49.5	48.6
67.5°	1111.5	640.0	164.8	62.9	65.7	60.0	57.1	51.4	45.7	43.8	42.9
70°	993.4	578.1	123.8	53.3	58.1	53.3	51.4	45.7	41.0	39.0	38.1
72.5°	827.7	478.1	86.7	45.7	50.5	46.7	44.8	41.0	36.2	33.3	33.3
75°	625.7	342.9	57.1	39.0	41.9	40.0	37.1	34.3	31.4	29.5	28.6
77.5°	269.5	133.3	35.2	29.5	34.3	33.3	29.5	27.6	26.7	24.8	24.8
80°	116.2	54.3	21.9	21.9	24.8	23.8	22.9	21.0	21.0	20.0	19.0
82.5°	42.9	21.9	13.3	16.2	18.1	16.2	16.2	16.2	16.2	15.2	15.2
85°	10.5	6.7	6.7	9.5	10.5	9.5	10.5	9.5	9.5	9.5	8.6
87.5°	2.9	2.9	3.8	3.8	3.8	3.8	3.8	2.9	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)