

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: P798978

Luminaire Tested: **ARCH1-50-727-U-T2R-HSS**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P798978
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH1-50-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1470mA LIGHTSQUARE WITH 10 LEDS AND TYPE II ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4478 lumens
Efficiency: N/A
Efficacy: 84.5 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
IES Classification: Type II - 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

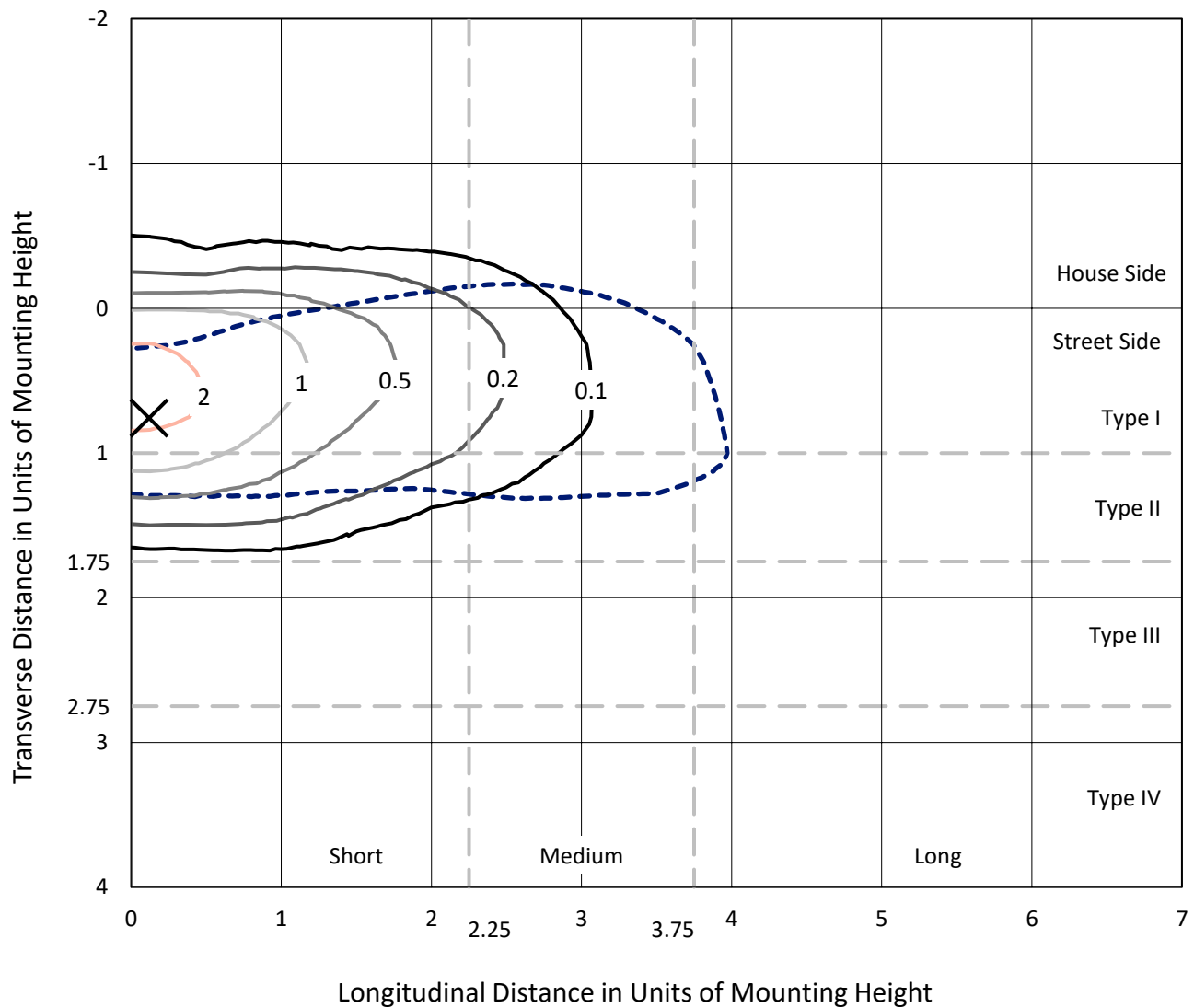


REPORT NUMBER: P798978

CATALOG NUMBER: ARCH1-50-727-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
- - - 1/2 Max cd

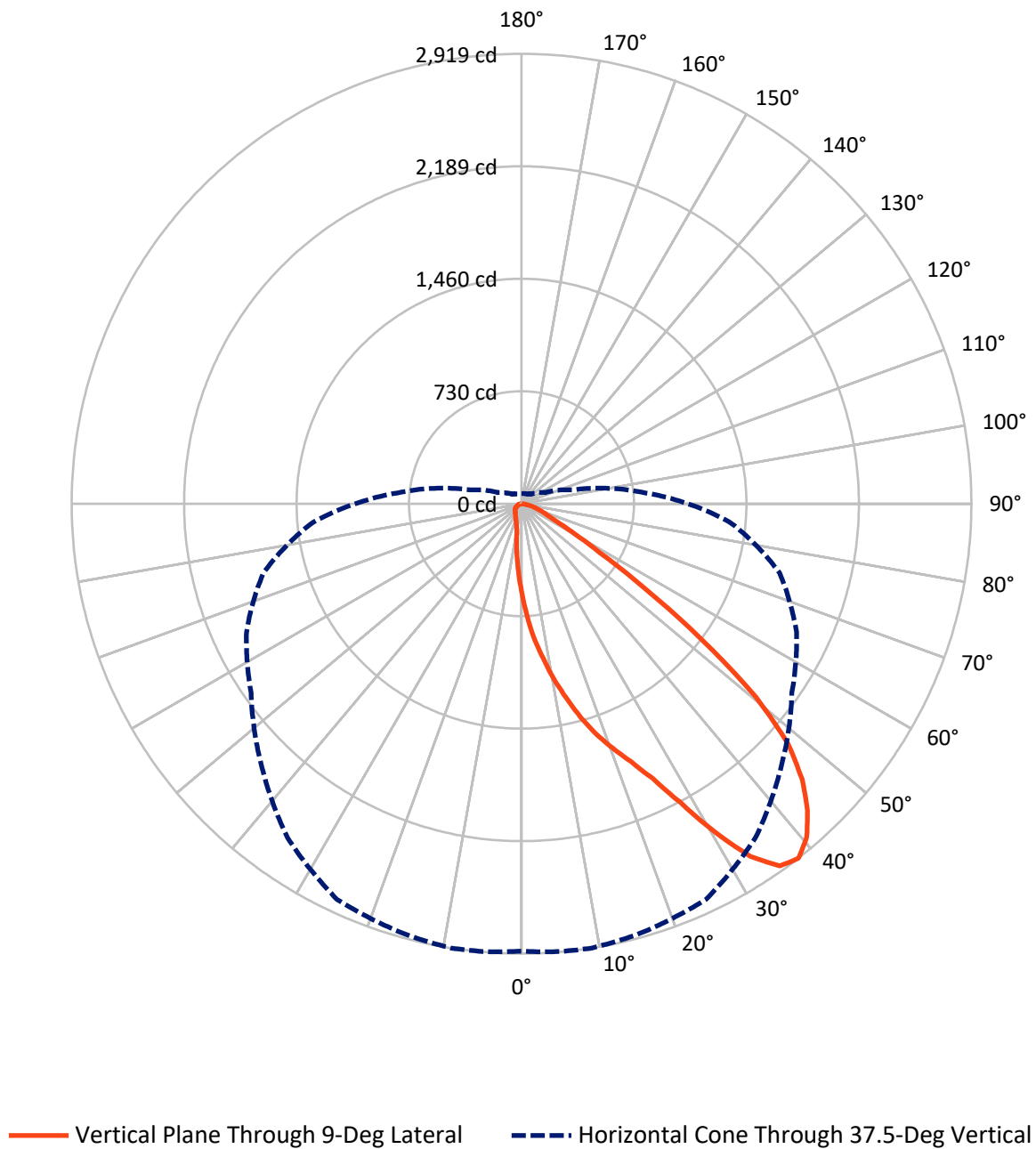


Based on 25 foot mounting height. Maximum calculated value = 2.6 fc
Type II - Short - N/A

REPORT NUMBER: P798978

CATALOG NUMBER: ARCH1-50-727-U-T2R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P798978

CATALOG NUMBER: ARCH1-50-727-U-T2R-HSS

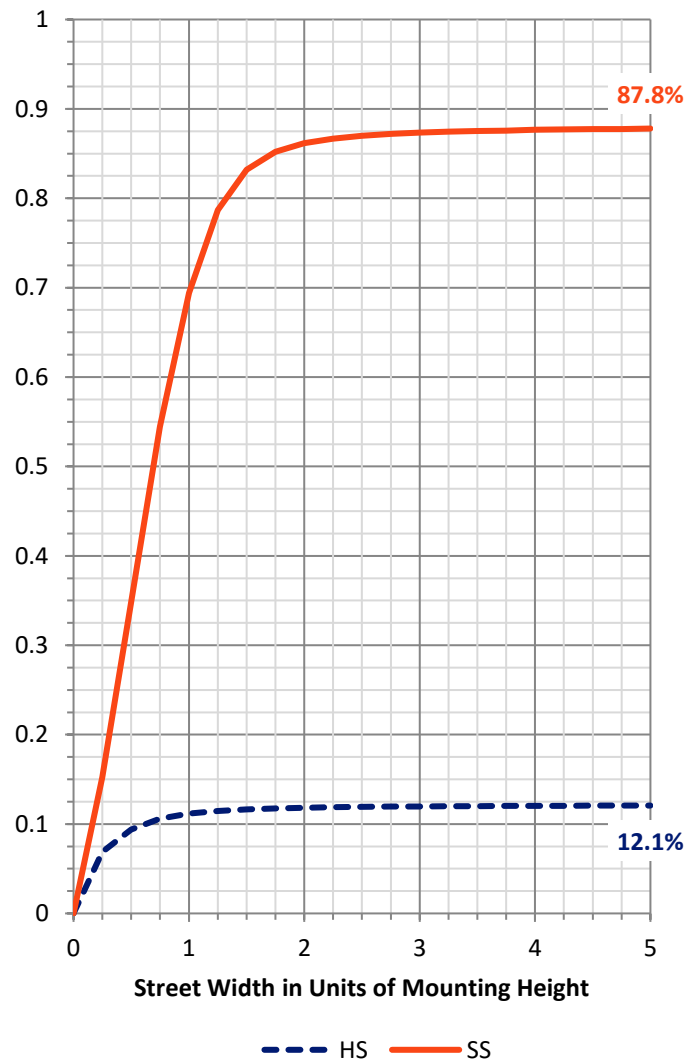
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	544.6	0.0	544.6
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	3933.4	0.0	3933.4
	% Fixture	87.8	0.0	87.8
Total	Lumens	4478.0	0.0	4478.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.5	1.3
10°-20°	206.8	4.6
20°-30°	424.9	9.5
30°-40°	751.1	16.8
40°-50°	997.7	22.3
50°-60°	946.3	21.1
60°-70°	721.9	16.1
70°-80°	350.0	7.8
80°-90°	19.7	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°	4478.0	100.0
0°-180°	4478.0	100.0

Coefficient of Utilization



REPORT NUMBER: P798978

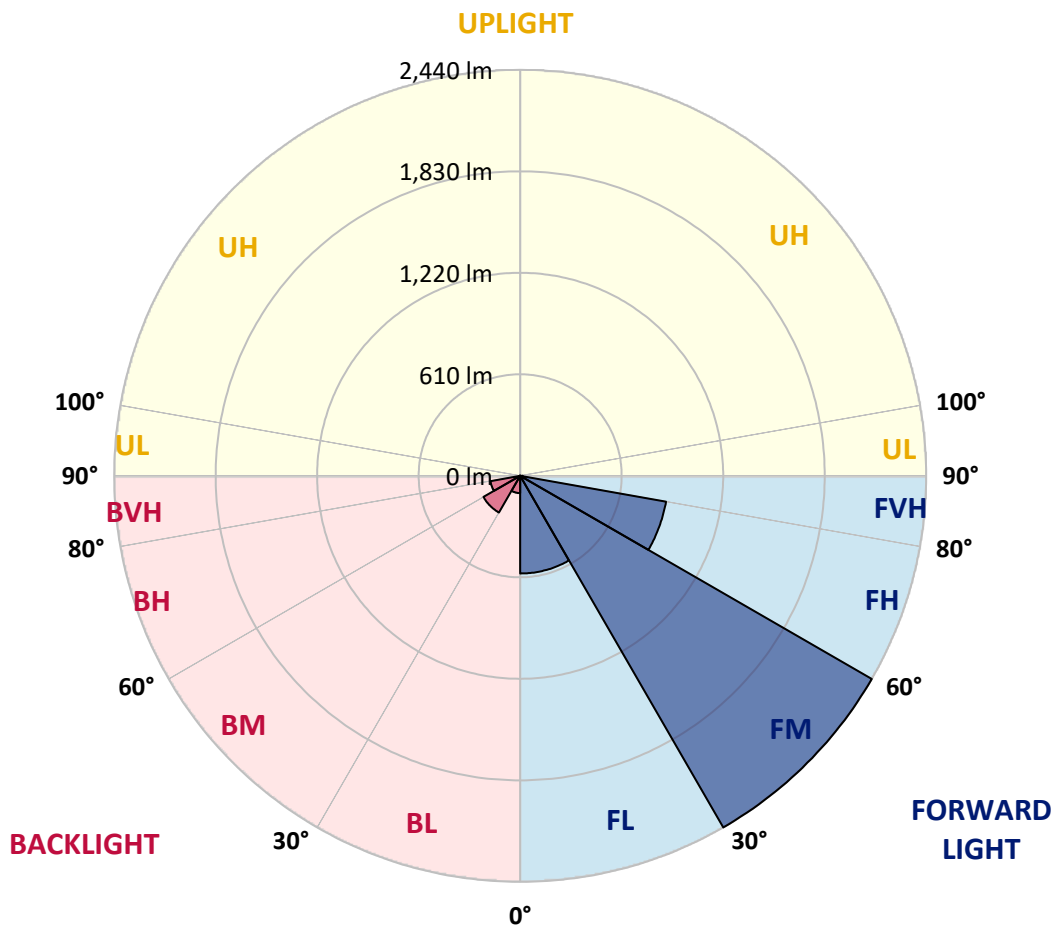
CATALOG NUMBER: ARCH1-50-727-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	587.3	13.1			
FM	(30°-60°)	2440.3	54.5			
FH	(60°-80°)	890.2	19.9			G1/1800
FVH	(80°-90°)	15.6	0.3			G1/100
BL	(0°-30°)	103.9	2.3	B0/110		
BM	(30°-60°)	254.8	5.7	B1/1000		
BH	(60°-80°)	181.7	4.1	B1/500		G1/500
BVH	(80°-90°)	4.1	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 II Short



REPORT NUMBER: P798978

CATALOG NUMBER: ARCH1-50-727-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9
2.5°	733.5	720.6	735.3	733.5	720.6	712.3	686.6	678.3	648.0	625.9	606.6
5°	884.2	871.4	884.2	880.6	862.2	841.9	799.7	772.1	717.9	670.1	626.9
7.5°	1009.2	1009.2	1014.7	1015.7	993.6	962.4	910.0	868.6	792.3	718.8	649.8
10°	1144.4	1145.3	1157.2	1148.9	1119.5	1077.3	1011.1	958.7	866.8	770.3	671.9
12.5°	1288.7	1289.6	1293.3	1289.6	1254.6	1200.4	1120.5	1051.5	945.8	829.1	702.2
15°	1433.0	1433.9	1438.5	1432.0	1393.4	1330.0	1239.0	1154.5	1029.5	895.3	739.0
17.5°	1568.1	1569.9	1573.6	1565.3	1524.9	1449.5	1356.7	1254.6	1118.6	966.0	780.4
20°	1689.4	1691.2	1694.0	1683.0	1642.5	1567.2	1467.0	1360.4	1209.6	1038.6	825.4
22.5°	1811.7	1813.5	1818.1	1803.4	1758.3	1671.9	1573.6	1463.3	1306.1	1118.6	877.8
25°	1967.9	1969.8	1973.4	1952.3	1890.7	1789.6	1685.7	1572.7	1410.9	1208.7	942.1
27.5°	2196.8	2194.9	2194.9	2156.3	2050.6	1919.2	1798.8	1683.9	1524.0	1305.2	1012.9
30°	2479.9	2475.3	2472.5	2420.1	2269.4	2065.3	1914.6	1787.8	1632.4	1407.2	1089.2
32.5°	2733.6	2733.6	2728.1	2672.9	2513.0	2262.0	2037.8	1888.9	1737.2	1510.2	1168.2
35°	2883.4	2889.8	2887.1	2845.7	2729.0	2473.5	2204.1	2010.2	1847.5	1617.7	1262.9
37.5°	2903.6	2916.5	2919.2	2894.4	2832.8	2646.3	2388.9	2141.6	1968.8	1733.5	1354.8
40°	2821.8	2849.4	2849.4	2845.7	2823.7	2728.1	2544.2	2294.2	2093.8	1853.9	1447.7
42.5°	2695.9	2724.4	2720.7	2734.5	2729.0	2708.8	2631.5	2436.7	2218.8	1978.0	1532.2
45°	2531.4	2560.8	2553.4	2578.2	2589.3	2611.3	2622.4	2536.0	2342.0	2113.1	1626.9
47.5°	2267.6	2317.2	2328.2	2372.3	2418.3	2487.2	2539.6	2571.8	2456.9	2258.4	1729.9
50°	1877.8	1947.7	1969.8	2062.6	2188.5	2331.0	2415.5	2527.7	2537.8	2407.3	1841.1
52.5°	1344.7	1425.6	1459.6	1612.2	1871.4	2119.6	2272.2	2430.3	2569.0	2549.7	1961.5
55°	869.5	938.5	971.5	1114.9	1459.6	1849.3	2103.0	2304.3	2551.6	2680.3	2099.4
57.5°	535.9	575.4	597.5	720.6	1037.7	1502.8	1881.5	2188.5	2498.3	2793.3	2242.7
60°	361.2	384.2	395.2	453.1	705.0	1123.2	1577.3	2067.2	2428.4	2869.6	2373.3
62.5°	239.9	247.3	258.3	294.1	465.1	788.6	1211.4	1850.3	2376.0	2874.2	2469.8
65°	185.7	189.3	193.9	209.6	286.8	551.5	852.1	1499.1	2297.9	2776.8	2500.1
67.5°	146.1	149.8	155.3	163.6	207.7	374.1	580.0	1098.4	2138.0	2624.2	2450.5
70°	114.9	117.7	121.3	128.7	161.8	271.2	383.3	729.8	1815.3	2479.0	2294.2
72.5°	91.0	93.8	97.4	104.8	131.4	198.5	262.9	455.0	1399.9	2301.6	1993.7
75°	71.7	73.5	76.3	83.6	105.7	154.4	178.3	272.1	951.3	1977.1	1553.4
77.5°	35.8	44.1	50.6	57.9	77.2	106.6	118.6	150.7	401.7	1014.7	740.8
80°	21.1	25.7	27.6	32.2	50.6	64.3	64.3	60.7	126.8	389.7	302.4
82.5°	11.9	16.5	17.5	18.4	30.3	36.8	29.4	22.1	25.7	130.5	88.2
85°	3.7	5.5	6.4	7.4	10.1	11.0	10.1	9.2	7.4	12.9	8.3
87.5°	0.0	0.0	0.0	0.0	0.9	1.8	1.8	1.8	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: P798978

CATALOG NUMBER: ARCH1-50-727-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9
2.5°	595.6	583.7	560.7	539.5	519.3	504.6	490.8	478.0	468.8	461.4	460.5
5°	603.9	580.0	535.9	494.5	456.8	425.6	398.9	377.8	362.1	351.1	350.2
7.5°	614.9	578.2	511.1	449.5	393.4	348.4	309.8	281.3	261.0	252.8	246.3
10°	624.1	576.3	486.2	404.4	330.9	273.9	228.0	199.5	184.8	179.2	176.5
12.5°	639.7	578.2	465.1	363.1	276.7	209.6	174.6	159.0	152.6	148.0	147.1
15°	662.7	586.4	444.9	322.6	221.5	169.1	148.9	138.8	132.4	131.4	130.5
17.5°	685.7	593.8	426.5	281.3	183.8	147.1	133.3	125.0	120.4	119.5	119.5
20°	712.3	603.0	406.3	241.7	157.2	132.4	121.3	114.9	109.4	108.5	108.5
22.5°	743.6	615.8	387.0	206.8	139.7	121.3	112.1	104.8	100.2	99.3	99.3
25°	785.9	635.1	371.3	181.1	127.8	112.1	103.9	97.4	93.8	91.9	91.9
27.5°	832.8	661.8	360.3	165.4	119.5	104.8	96.5	91.0	87.3	85.5	85.5
30°	885.1	691.2	353.0	159.0	114.9	98.3	91.0	85.5	80.9	80.0	80.0
32.5°	943.1	725.2	348.4	159.9	114.0	93.8	85.5	80.0	76.3	74.5	74.5
35°	1007.4	762.9	345.6	165.4	115.8	90.1	80.9	75.4	71.7	69.9	69.9
37.5°	1079.1	807.0	345.6	171.0	120.4	89.2	76.3	70.8	68.0	66.2	66.2
40°	1146.2	853.9	349.3	177.4	125.0	89.2	72.6	68.0	64.3	62.5	62.5
42.5°	1198.6	880.6	352.0	183.8	127.8	88.2	68.9	64.3	61.6	59.7	59.7
45°	1258.3	909.0	346.5	186.6	127.8	86.4	66.2	61.6	58.8	57.0	57.0
47.5°	1324.5	944.0	345.6	188.4	125.0	82.7	63.4	58.8	57.0	55.1	55.1
50°	1391.6	982.6	347.4	187.5	121.3	77.2	59.7	57.0	54.2	52.4	52.4
52.5°	1467.9	1023.0	351.1	185.7	113.1	70.8	57.0	54.2	51.5	49.6	48.7
55°	1552.5	1067.1	358.5	182.0	102.0	64.3	54.2	51.5	47.8	46.0	45.0
57.5°	1649.9	1121.4	366.7	174.6	90.1	58.8	51.5	47.8	42.3	39.5	38.6
60°	1742.7	1183.0	375.9	157.2	78.1	53.3	48.7	43.2	37.7	35.8	34.9
62.5°	1830.0	1243.6	380.5	125.9	66.2	48.7	46.0	39.5	34.0	32.2	31.3
65°	1886.1	1309.8	370.4	85.5	54.2	45.0	42.3	36.8	31.3	28.5	28.5
67.5°	1889.8	1341.1	335.5	56.1	44.1	40.4	38.6	33.1	27.6	25.7	24.8
70°	1797.0	1294.2	256.4	44.1	36.8	34.9	34.9	29.4	23.9	22.1	21.1
72.5°	1583.7	1146.2	163.6	35.8	31.3	29.4	29.4	24.8	21.1	18.4	17.5
75°	1250.1	884.2	87.3	29.4	25.7	24.8	23.0	20.2	17.5	15.6	14.7
77.5°	574.5	389.7	40.4	21.1	19.3	19.3	17.5	14.7	13.8	11.9	11.9
80°	227.0	132.4	20.2	13.8	12.9	12.9	12.9	10.1	10.1	8.3	7.4
82.5°	62.5	27.6	10.1	8.3	8.3	8.3	7.4	6.4	6.4	5.5	5.5
85°	6.4	4.6	4.6	4.6	4.6	3.7	3.7	2.8	1.8	1.8	1.8
87.5°	2.8	2.8	2.8	2.8	2.8	1.8	0.9	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)