

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: P348755

Luminaire Tested: **ARCH-N-PA1-50-727-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348755
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-9)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-50-727-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 980mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4497 lumens
Efficiency: N/A
Efficacy: 86.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B0 - U0 - G1

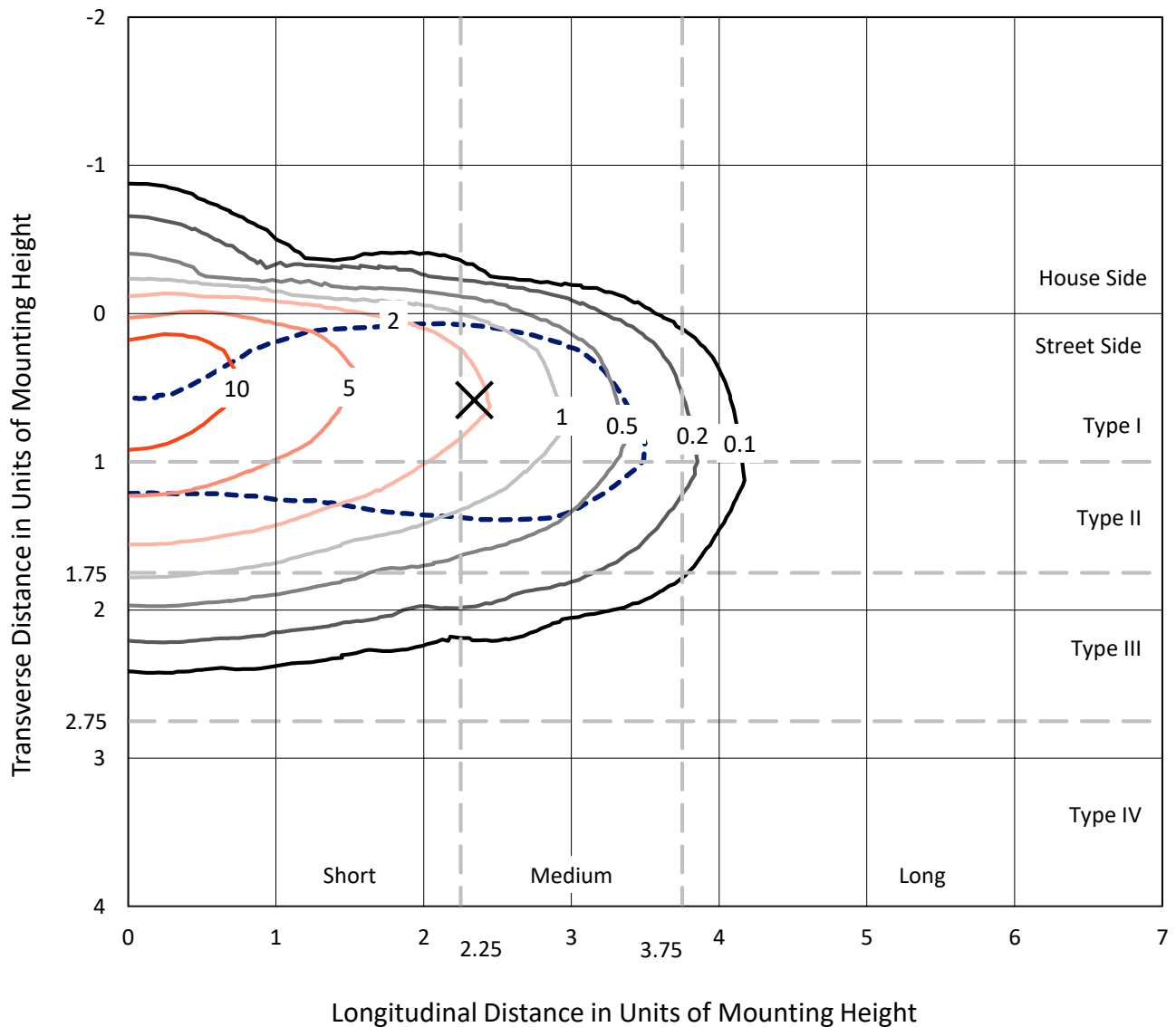
Input Watts (W): 52
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P348755
 CATALOG NUMBER: ARCH-N-PA1-50-727-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

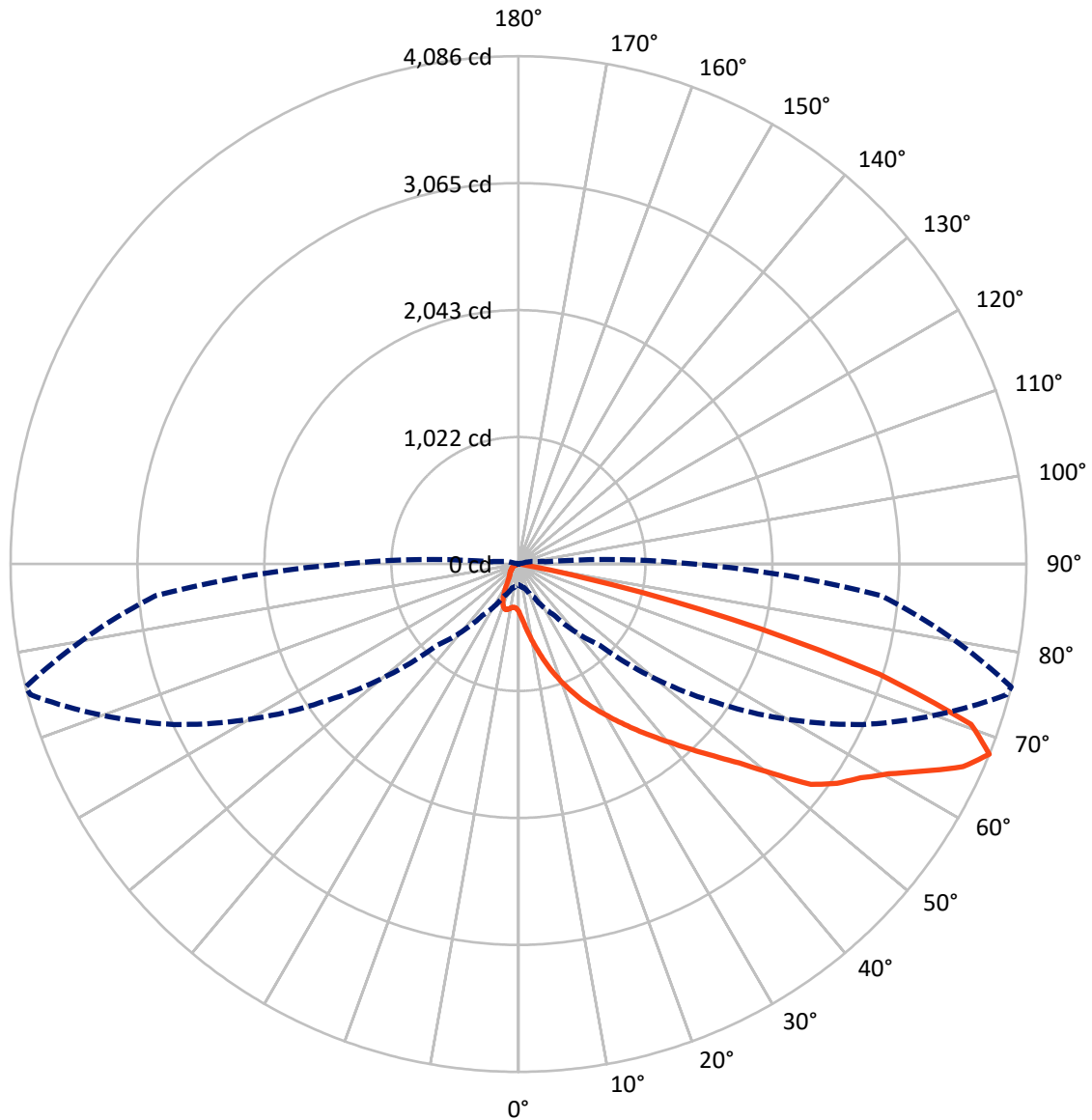
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.4 fc
 Type II - Medium - Full Cutoff

REPORT NUMBER: P348755
CATALOG NUMBER: ARCH-N-PA1-50-727-U-T2R-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P348755

CATALOG NUMBER: ARCH-N-PA1-50-727-U-T2R-HSS

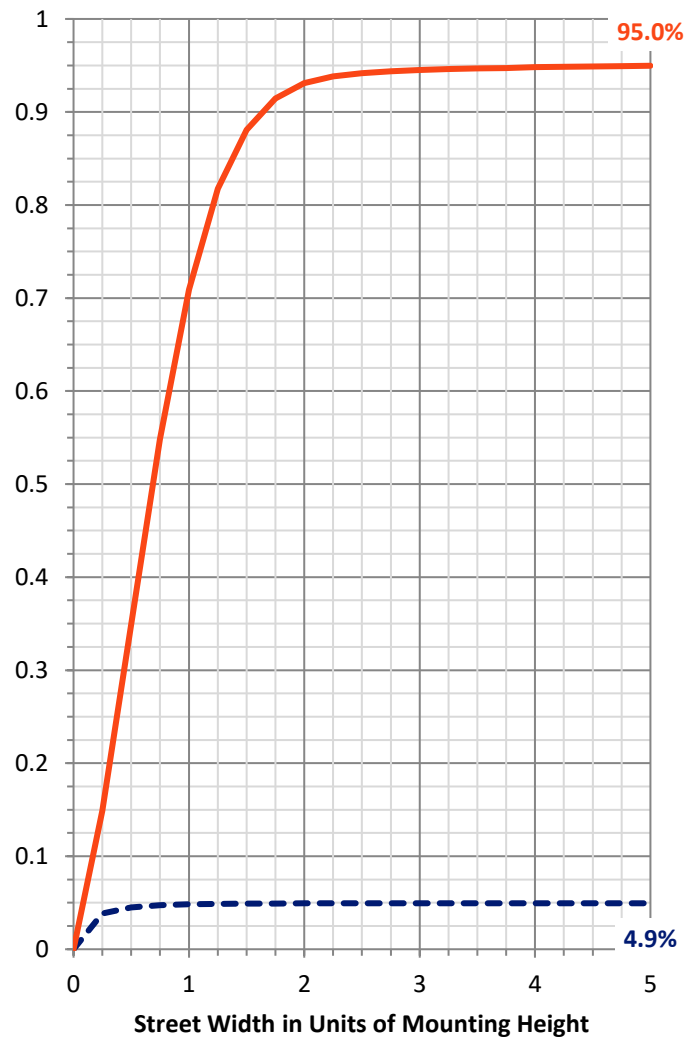
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	223.3	0.0	223.3
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	4273.7	0.0	4273.7
	% Fixture	95.0	0.0	95.0
Total	Lumens	4497.0	0.0	4497.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.4	1.1
10°-20°	188.0	4.2
20°-30°	382.6	8.5
30°-40°	664.1	14.8
40°-50°	938.3	20.9
50°-60°	1064.0	23.7
60°-70°	882.5	19.6
70°-80°	319.7	7.1
80°-90°	10.4	0.2
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°	4497.0	100.0
0°-180°	4497.0	100.0

Coefficient of Utilization



REPORT NUMBER: P348755

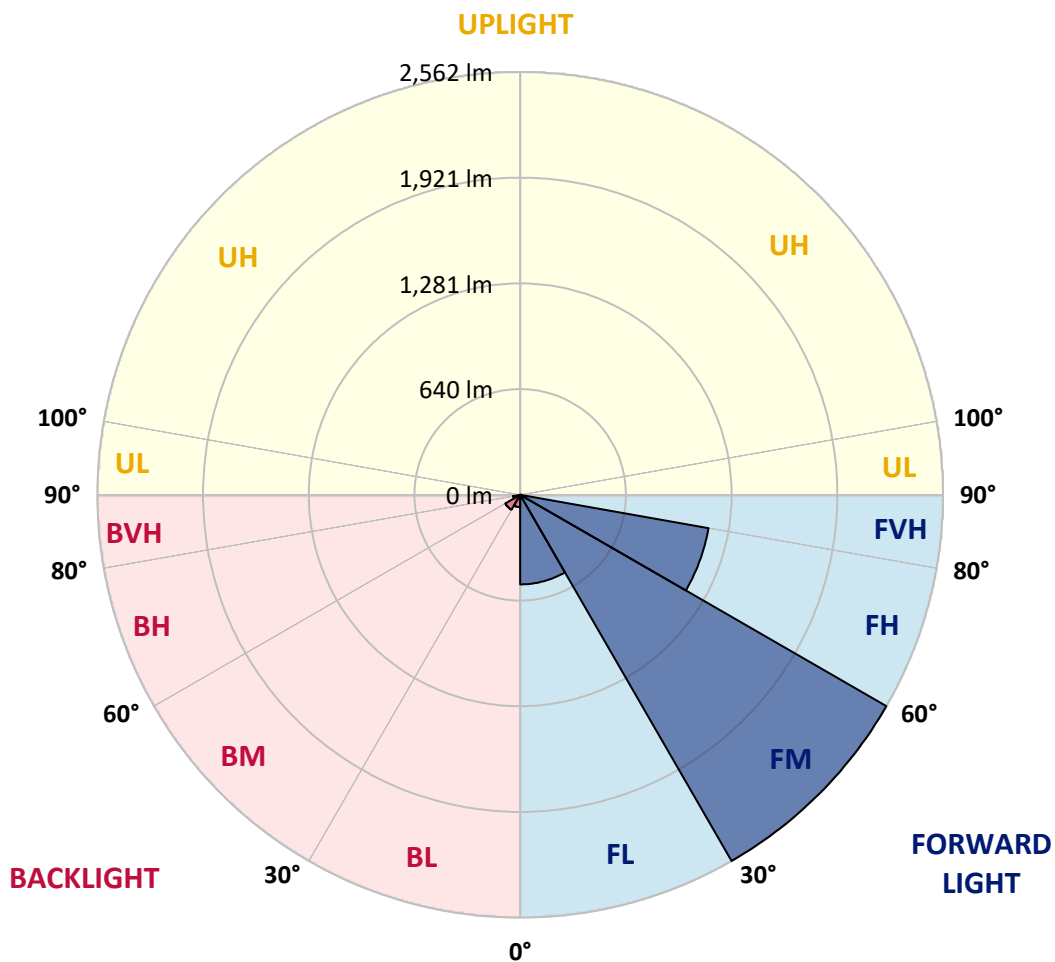
CATALOG NUMBER: ARCH-N-PA1-50-727-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	542.8	12.1			
FM (30°-60°)	2561.9	57.0			
FH (60°-80°)	1159.0	25.8			G1/1800
FVH (80°-90°)	10.0	0.2			G1/100
BL (0°-30°)	75.3	1.7	B0/110		
BM (30°-60°)	104.5	2.3	B0/220		
BH (60°-80°)	43.2	1.0	B0/110		G0/110
BVH (80°-90°)	0.3	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 II Medium





REPORT NUMBER: P348755

CATALOG NUMBER: ARCH-N-PA1-50-727-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	381.5	381.5	381.5	381.5	381.5	381.5	381.5	381.5	381.5	381.5	381.5
2.5°	569.5	556.6	559.6	551.3	536.4	505.6	479.4	454.6	425.6	424.6	400.8
5°	767.9	757.0	755.7	738.9	711.7	659.5	608.7	550.7	486.1	481.4	430.7
7.5°	948.0	939.3	936.2	916.3	865.6	814.8	748.6	663.4	562.4	553.7	471.1
10°	1086.3	1082.2	1083.0	1068.8	1025.4	978.1	891.2	782.7	648.9	635.5	519.6
12.5°	1191.1	1192.1	1199.2	1190.5	1166.3	1131.2	1038.4	909.7	744.6	726.3	575.0
15°	1268.2	1273.1	1286.1	1296.9	1295.2	1264.8	1179.7	1038.8	846.3	826.0	636.6
17.5°	1318.0	1323.5	1342.5	1366.5	1388.6	1381.5	1316.1	1163.3	949.2	925.7	702.7
20°	1361.8	1368.3	1388.6	1420.3	1461.5	1470.3	1427.4	1284.1	1051.8	1023.2	770.8
22.5°	1456.5	1456.3	1468.8	1487.3	1526.5	1549.4	1522.2	1396.2	1153.3	1123.5	840.4
25°	1628.0	1621.5	1617.1	1602.6	1611.2	1625.4	1610.2	1501.1	1255.4	1225.2	910.9
27.5°	1831.7	1835.7	1800.6	1761.4	1731.0	1716.4	1691.6	1598.2	1353.5	1320.4	979.9
30°	2046.7	2047.9	2006.5	1956.4	1889.6	1834.3	1791.3	1691.0	1454.4	1418.3	1046.9
32.5°	2240.6	2232.9	2191.9	2123.7	2039.4	1977.1	1887.9	1794.7	1561.2	1526.3	1121.4
35°	2394.3	2385.2	2335.4	2273.3	2185.8	2123.1	2015.8	1898.1	1673.5	1639.4	1196.1
37.5°	2506.6	2495.9	2444.7	2380.9	2305.4	2269.0	2164.1	2010.6	1796.0	1759.4	1274.7
40°	2545.6	2536.3	2504.2	2457.5	2396.8	2388.6	2321.6	2140.1	1929.4	1890.4	1363.7
42.5°	2522.4	2513.3	2501.9	2486.1	2460.9	2468.8	2470.1	2287.7	2077.6	2039.2	1462.1
45°	2430.1	2422.1	2433.9	2456.9	2488.3	2527.3	2605.7	2446.3	2243.1	2202.2	1575.8
47.5°	2294.4	2288.5	2321.2	2378.7	2470.3	2577.9	2729.6	2613.0	2429.0	2390.9	1717.6
50°	2101.3	2100.3	2165.7	2270.7	2411.6	2602.4	2857.7	2802.5	2687.1	2647.1	1914.9
52.5°	1800.6	1802.6	1931.2	2099.3	2308.6	2585.8	2940.1	3046.1	2987.4	2945.8	2085.7
55°	1514.3	1526.1	1617.3	1859.7	2150.5	2524.3	2968.5	3159.8	3153.1	3113.7	2180.7
57.5°	1233.9	1255.4	1343.2	1569.6	1919.8	2382.6	2952.9	3209.0	3276.4	3246.3	2306.0
60°	930.0	939.9	1041.2	1252.8	1623.6	2124.1	2840.0	3235.8	3445.1	3424.2	2487.9
62.5°	591.7	616.4	706.2	910.3	1264.2	1765.1	2649.6	3235.5	3656.1	3667.6	2722.5
65°	311.7	340.5	388.2	564.1	868.8	1364.1	2363.3	3205.1	3915.1	3931.0	2906.0
67.5°	168.1	176.4	201.6	292.8	503.8	924.1	1942.6	3055.4	4065.0	4086.1	2931.6
70°	123.0	127.5	136.9	162.0	253.6	536.7	1417.5	2715.8	3871.7	3863.8	2604.7
72.5°	94.4	101.5	108.6	118.6	145.8	286.5	882.6	2126.7	3089.2	3037.2	1947.0
75°	74.5	75.7	85.7	94.8	109.4	163.2	391.9	1238.6	1885.5	1762.4	1009.6
77.5°	59.5	60.3	66.2	74.1	87.9	107.2	121.4	487.3	602.0	537.1	219.1
80°	35.3	37.2	49.3	57.1	72.9	67.6	44.3	105.8	94.0	85.1	36.8
82.5°	19.7	21.3	27.8	45.1	50.8	32.3	22.1	28.6	22.1	21.5	10.4
85°	0.0	1.0	17.9	28.0	20.7	7.1	9.3	9.5	6.5	6.1	4.1
87.5°	0.0	0.0	5.5	5.3	0.8	1.2	2.2	3.2	2.6	2.6	2.2
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: P348755

CATALOG NUMBER: ARCH-N-PA1-50-727-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	381.5	381.5	381.5	381.5	381.5	381.5	381.5	381.5	381.5	381.5	381.5
2.5°	389.0	378.3	358.2	338.5	322.0	308.4	296.2	291.2	287.3	286.7	283.5
5°	406.3	384.8	346.4	314.9	293.8	278.8	266.0	258.1	252.0	249.7	247.5
7.5°	432.5	400.0	344.8	308.6	283.3	258.1	234.5	208.9	192.9	186.8	183.3
10°	464.4	420.1	350.7	306.8	262.7	209.5	170.2	137.7	124.5	120.2	119.0
12.5°	501.7	445.1	361.0	295.8	218.5	148.8	117.4	106.4	103.4	102.1	102.1
15°	544.4	472.5	368.3	263.8	161.6	112.5	101.7	96.6	93.4	91.6	91.8
17.5°	588.2	499.3	364.7	217.5	119.2	100.1	92.0	86.5	82.2	80.4	80.0
20°	632.3	524.1	345.0	162.0	100.9	90.8	81.8	75.7	71.3	69.6	69.2
22.5°	678.0	545.2	310.3	118.8	90.6	80.6	71.7	65.6	61.5	59.9	59.1
25°	722.6	562.4	261.9	96.2	81.0	70.9	62.5	56.7	53.0	51.4	51.2
27.5°	764.1	573.2	205.7	84.9	72.5	62.3	54.6	49.5	46.3	45.1	44.9
30°	801.6	574.2	152.1	76.6	65.0	54.8	47.7	43.2	40.4	39.2	38.8
32.5°	839.4	565.9	110.7	69.2	58.1	48.3	41.4	37.8	35.9	34.9	34.9
35°	875.1	546.8	86.3	62.7	51.4	42.0	36.5	33.9	32.7	31.7	31.7
37.5°	909.9	519.4	73.3	56.9	45.1	36.7	32.1	30.5	29.6	28.6	28.6
40°	945.4	484.9	66.6	51.6	40.0	32.5	28.6	27.2	26.2	25.4	25.2
42.5°	989.0	445.1	62.3	46.7	35.5	28.8	25.2	23.6	22.9	22.1	21.7
45°	1039.4	410.8	58.7	41.8	31.7	25.6	21.9	20.3	19.1	18.1	17.9
47.5°	1112.1	386.0	54.0	36.5	28.2	22.3	18.9	17.1	15.4	14.4	14.2
50°	1204.9	365.5	47.9	31.7	24.6	18.9	15.8	13.6	12.0	11.0	11.0
52.5°	1251.0	338.7	42.4	27.6	20.7	16.0	12.8	10.2	9.5	8.5	8.5
55°	1269.6	318.2	36.8	23.4	17.1	13.2	10.0	7.9	7.3	6.7	6.5
57.5°	1321.6	312.3	32.1	19.9	14.2	10.4	7.7	5.9	5.5	4.7	4.7
60°	1405.3	315.3	27.8	16.9	11.4	8.1	5.7	4.5	4.1	3.3	3.3
62.5°	1495.8	311.5	23.4	14.6	8.9	5.9	3.9	3.3	3.3	2.0	1.8
65°	1513.1	277.4	20.1	12.0	6.9	4.3	2.6	2.2	3.0	0.4	0.0
67.5°	1404.3	215.2	17.3	9.3	5.1	3.3	2.0	1.0	2.6	0.0	0.0
70°	1122.9	136.7	14.0	6.7	3.9	2.8	1.6	0.4	2.0	0.0	0.0
72.5°	794.1	79.4	11.0	4.7	3.3	2.2	1.2	0.0	1.2	0.0	0.0
75°	401.6	42.4	6.9	3.5	2.6	1.6	0.8	0.0	0.2	0.0	0.0
77.5°	86.9	19.7	4.3	2.6	1.8	1.0	0.4	0.0	0.0	0.0	0.0
80°	18.9	8.7	2.8	1.6	1.0	0.6	0.0	0.0	0.0	0.0	0.0
82.5°	6.9	4.5	1.4	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.7	2.4	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.0	0.8	0.2	0.2	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)