

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: P348868

Luminaire Tested: **ARCH-N-PA1-60-727-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348868
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-19)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-60-727-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1160mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4526 lumens
Efficiency: N/A
Efficacy: 73.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 62
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

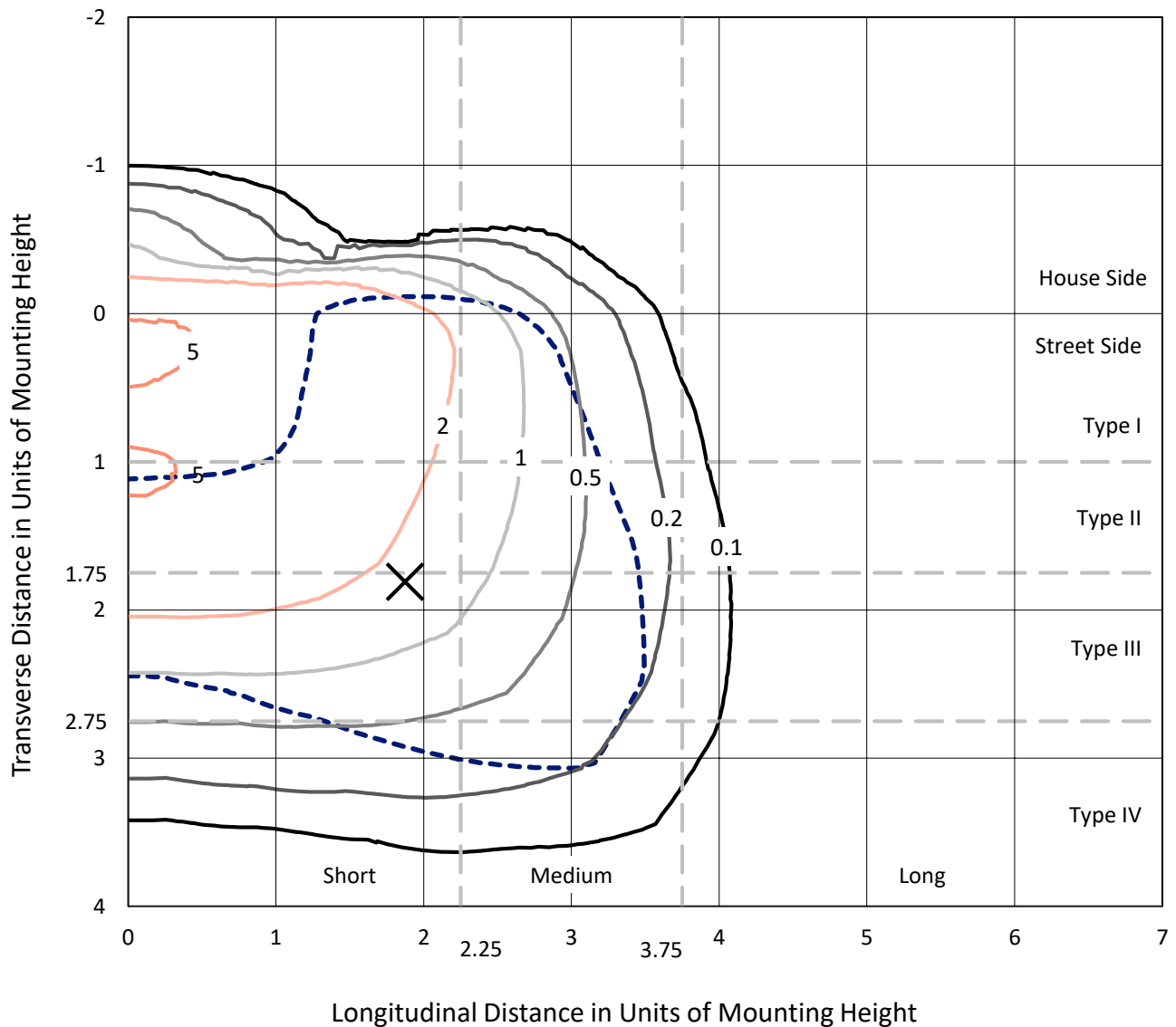


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

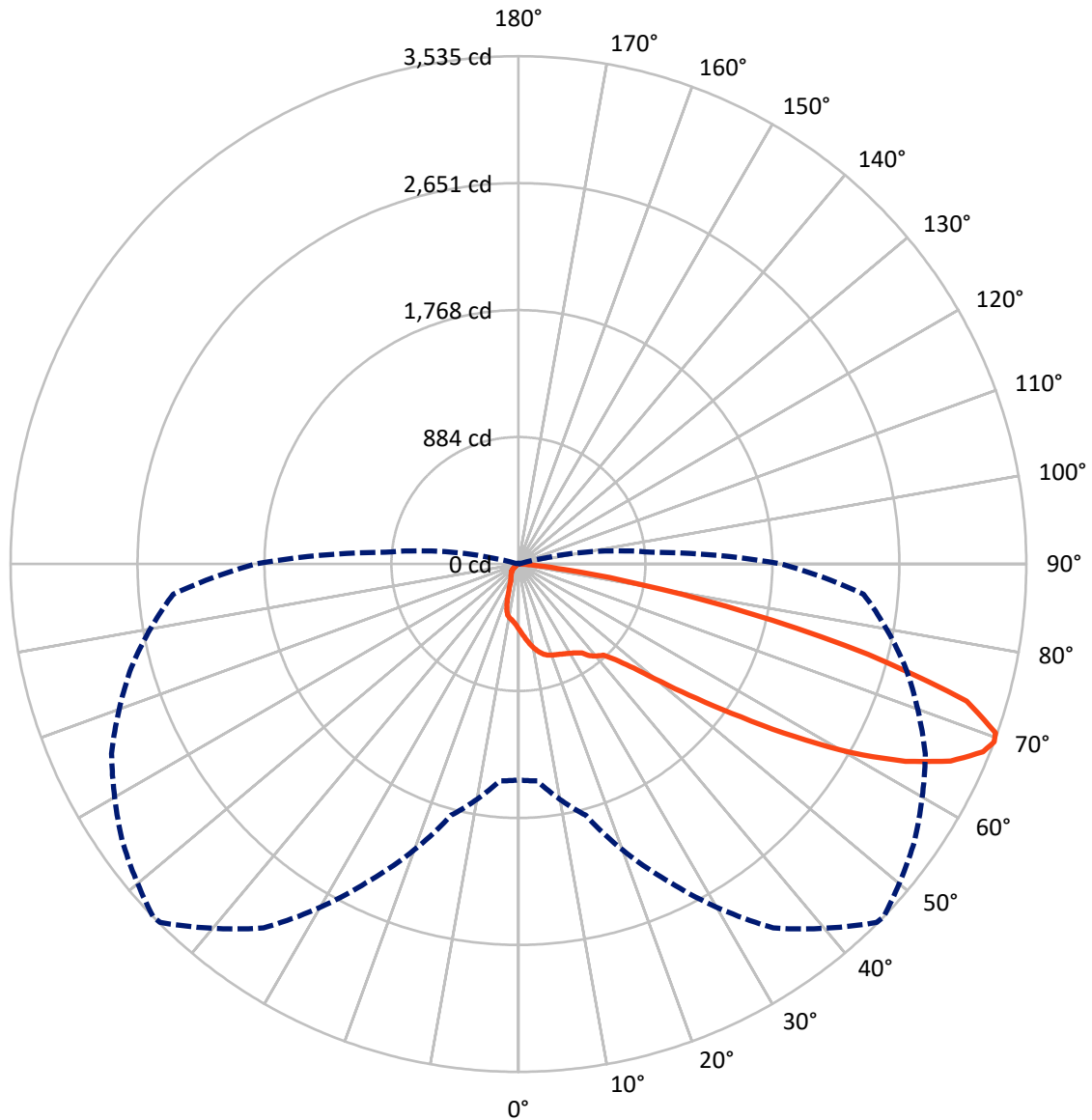


Based on 10 foot mounting height. Maximum calculated value = 6.6 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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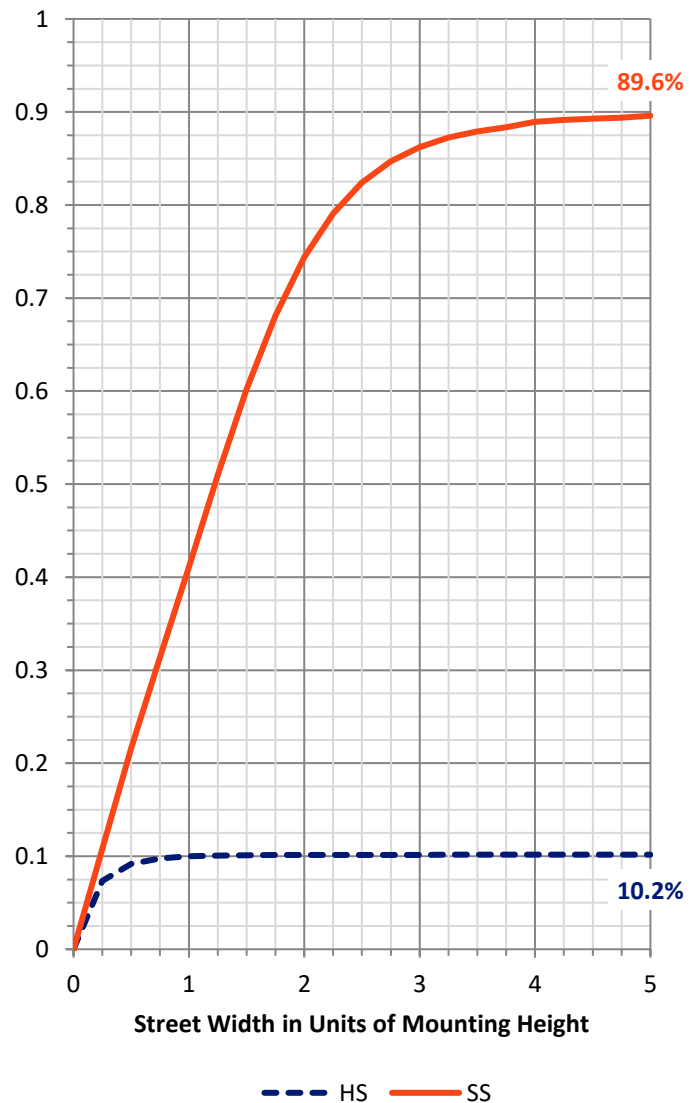
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	464.5	0.0	464.5
	% Fixture	10.3	0.0	10.3
Street Side	Lumens	4061.5	0.0	4061.5
	% Fixture	89.7	0.0	89.7
Total	Lumens	4526.0	0.0	4526.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.1	1.0
10°-20°	136.9	3.0
20°-30°	215.4	4.8
30°-40°	308.8	6.8
40°-50°	533.8	11.8
50°-60°	1054.5	23.3
60°-70°	1473.7	32.6
70°-80°	712.0	15.7
80°-90°	45.8	1.0
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°	4526.0	100.0
0°-180°	4526.0	100.0



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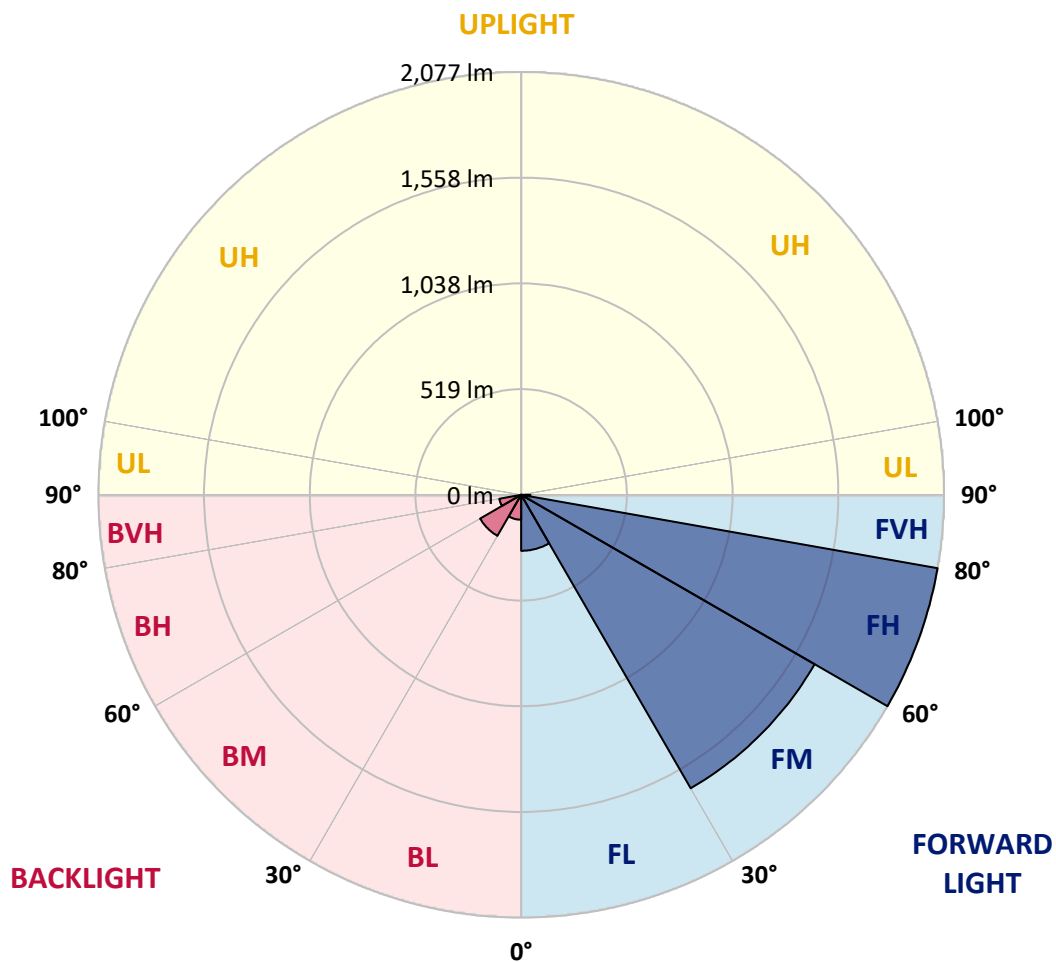
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	275.0	6.1			
FM	(30°-60°)	1664.3	36.8			
FH	(60°-80°)	2076.8	45.9			G2/5000
FVH	(80°-90°)	45.4	1.0			G1/100
BL	(0°-30°)	122.4	2.7	B1/500		
BM	(30°-60°)	232.8	5.1	B1/1000		
BH	(60°-80°)	108.9	2.4	B0/110		G0/110
BVH	(80°-90°)	0.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	453.5	453.5	453.5	453.5	453.5	453.5	453.5	453.5	453.5	453.5	453.5
2.5°	503.8	503.1	500.2	498.9	491.7	487.4	485.7	480.4	472.8	465.2	456.7
5°	561.1	560.9	555.3	550.0	536.5	523.7	521.4	509.1	491.9	475.8	459.6
7.5°	619.6	616.9	611.4	601.2	581.4	561.1	559.2	541.8	517.4	494.0	470.9
10°	669.3	667.6	660.4	644.9	621.8	598.6	596.3	574.9	547.3	518.6	489.1
12.5°	707.9	706.7	697.1	677.8	653.2	629.2	626.0	606.9	577.4	545.4	510.6
15°	731.5	730.8	719.2	698.6	674.4	653.6	650.8	634.1	606.7	573.2	533.9
17.5°	737.0	737.2	725.1	704.3	684.4	669.5	667.4	654.7	631.7	598.4	557.3
20°	724.7	727.2	716.4	698.4	686.1	678.2	676.5	668.9	649.6	618.2	575.9
22.5°	707.3	708.6	701.1	689.0	683.9	685.4	684.6	680.3	664.0	635.1	594.4
25°	696.7	696.7	692.2	682.0	685.4	694.6	694.8	693.9	681.0	655.9	616.9
27.5°	696.3	695.0	689.9	682.2	691.6	705.6	706.4	712.2	704.1	681.2	644.9
30°	713.2	711.7	700.9	690.9	702.8	717.9	720.0	732.5	728.5	708.6	676.1
32.5°	752.9	747.6	723.6	707.3	716.2	734.2	737.0	756.9	763.3	742.3	706.2
35°	807.2	790.5	755.9	738.3	739.1	758.0	760.6	789.8	808.7	773.3	729.6
37.5°	882.1	873.9	817.6	770.5	774.3	803.0	810.4	842.3	836.9	790.3	756.1
40°	1046.4	1033.5	973.6	860.9	808.1	839.5	841.8	858.8	859.2	828.7	811.3
42.5°	1270.1	1264.8	1201.7	1025.0	874.5	863.9	868.1	896.8	928.8	909.7	908.9
45°	1517.7	1515.0	1448.1	1242.7	1008.8	943.9	949.2	987.6	1048.9	1053.2	1080.1
47.5°	1717.0	1715.7	1677.3	1485.7	1214.5	1079.5	1081.2	1121.9	1229.7	1283.0	1326.1
50°	1898.6	1904.8	1874.4	1748.6	1494.6	1291.9	1287.9	1315.1	1488.2	1575.4	1628.9
52.5°	2151.2	2159.9	2074.8	1993.9	1788.5	1555.5	1552.3	1580.7	1798.9	1864.2	1873.8
55°	2374.2	2359.3	2292.1	2268.7	2146.9	1881.0	1880.2	1905.2	2099.4	2127.2	2144.8
57.5°	2472.6	2466.9	2499.4	2552.9	2522.3	2265.7	2263.8	2244.7	2368.2	2371.2	2425.3
60°	2534.8	2541.8	2641.4	2806.2	2882.4	2679.8	2667.5	2551.0	2625.0	2618.4	2676.4
62.5°	2488.1	2501.9	2681.0	2955.8	3151.9	3041.2	3023.8	2831.5	2844.4	2821.7	2875.6
65°	2240.3	2261.7	2555.2	2927.6	3285.6	3323.6	3306.0	3079.1	3018.7	2981.3	2951.4
67.5°	1819.0	1831.8	2138.2	2682.1	3225.3	3492.1	3488.5	3296.2	3150.2	2954.4	2722.2
69°	1503.3	1515.8	1810.8	2423.6	3092.7	3528.2	3535.2	3365.8	3125.2	2790.5	2412.0
70°	1273.2	1286.6	1561.4	2202.1	2938.9	3511.4	3523.9	3359.3	3053.5	2600.8	2139.7
72.5°	667.8	679.3	961.3	1517.1	2395.8	3224.3	3262.3	3075.3	2588.3	1888.9	1265.2
75°	209.9	216.5	375.4	793.0	1640.4	2507.0	2515.7	2412.4	1837.9	1039.0	526.9
77.5°	80.0	78.1	125.0	292.2	829.3	1578.6	1631.9	1507.5	964.5	367.3	121.6
80°	43.1	43.3	64.9	121.0	354.8	811.3	856.3	730.6	342.7	114.6	28.0
82.5°	18.7	19.5	36.5	64.1	163.0	299.2	321.7	267.8	130.9	77.0	10.4
85°	4.0	4.5	17.6	34.8	66.4	84.0	88.1	86.8	83.4	59.8	4.0
87.5°	0.0	0.0	7.9	12.5	16.8	19.1	16.8	21.9	46.0	40.3	2.1
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°	453.5	453.5	453.5	453.5	453.5	453.5	453.5	453.5	453.5	453.5	453.5
2.5°	453.9	450.1	443.5	436.3	431.2	425.9	421.7	419.7	417.6	416.1	418.0
5°	453.1	445.6	432.9	420.6	411.7	404.5	398.5	396.2	393.9	392.2	391.9
7.5°	460.5	450.1	430.6	412.5	398.7	389.0	380.9	377.5	374.8	373.5	372.4
10°	474.7	461.3	435.2	411.7	393.9	377.3	359.9	346.5	337.8	333.8	332.3
12.5°	493.2	476.4	444.2	416.1	390.3	358.4	321.5	289.7	269.1	262.3	258.3
15°	514.8	494.0	455.8	421.9	377.1	318.9	256.3	214.8	195.7	191.8	187.6
17.5°	535.6	512.7	469.8	422.9	348.2	254.9	187.8	159.6	152.2	154.7	155.3
20°	553.9	531.2	483.6	413.6	295.8	191.2	145.4	138.4	141.1	146.0	146.8
22.5°	572.3	549.0	496.4	389.0	228.8	145.2	130.9	132.6	135.4	140.3	141.1
25°	594.8	570.6	508.2	343.8	171.7	123.5	124.4	126.9	129.7	134.1	134.5
27.5°	620.7	598.0	516.1	285.0	127.3	113.5	116.3	120.1	122.9	127.1	128.0
30°	655.1	634.1	518.6	224.1	106.7	104.6	105.9	110.6	114.6	118.4	119.0
32.5°	687.3	669.7	510.1	169.1	98.9	96.3	96.3	99.1	103.8	107.4	108.2
35°	717.1	705.6	483.0	123.7	92.9	88.7	86.6	86.6	89.6	92.5	93.4
37.5°	756.3	755.9	439.1	98.7	87.2	82.3	77.9	74.5	73.4	74.1	74.5
40°	823.6	824.2	381.8	88.5	82.3	75.8	69.0	62.8	57.1	55.2	55.0
42.5°	928.6	919.1	321.7	83.6	78.1	69.0	58.8	50.5	41.6	38.8	38.6
45°	1095.4	1038.8	258.0	79.2	73.6	61.3	48.6	37.3	30.1	28.0	28.0
47.5°	1338.4	1196.0	199.9	74.3	67.7	52.6	36.7	27.0	22.1	21.0	21.2
50°	1589.6	1350.1	153.2	68.1	60.5	43.5	27.2	19.5	16.8	16.8	17.0
52.5°	1812.5	1463.0	119.5	61.5	51.6	34.2	20.6	15.3	14.0	13.8	14.0
55°	2021.1	1535.7	91.5	53.9	41.0	25.5	15.7	12.5	11.7	11.2	11.0
57.5°	2222.2	1571.8	68.5	43.5	29.7	18.5	12.5	10.6	9.8	9.1	8.9
60°	2356.1	1542.5	47.1	32.0	20.6	13.4	10.4	9.1	8.1	7.4	7.2
62.5°	2431.7	1462.5	30.3	23.1	14.6	10.0	8.3	7.6	6.2	5.5	5.5
65°	2401.1	1330.5	21.2	16.6	10.6	7.4	6.2	6.2	4.5	3.6	3.4
67.5°	2127.8	1124.1	16.1	12.3	7.6	5.5	4.7	5.3	2.8	1.7	1.7
69°	1830.7	931.6	13.8	10.2	6.4	4.5	4.0	4.9	1.9	1.3	1.1
70°	1591.1	803.6	12.5	8.9	5.3	3.8	3.6	4.7	1.9	1.1	0.8
72.5°	952.0	448.2	9.5	6.4	3.4	3.0	3.0	5.3	1.9	1.1	0.8
75°	384.7	157.9	7.0	4.5	2.5	2.5	3.6	6.8	1.7	0.8	0.6
77.5°	87.2	34.6	4.0	2.8	1.7	2.5	4.2	5.3	1.1	0.4	0.0
80°	21.2	8.5	2.5	1.7	1.1	1.9	3.2	3.0	0.2	0.0	0.0
82.5°	7.0	3.0	1.1	0.8	0.2	0.6	1.5	0.8	0.0	0.0	0.0
85°	3.0	1.7	0.4	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0
87.5°	1.9	0.6	0.0	0.0	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)