

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: P348979

Luminaire Tested: **ARCH-N-PA1-50-727-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348979
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1908-474-2)
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-T2U-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: 4062 lumens
Efficiency: N/A
Efficacy: 78.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

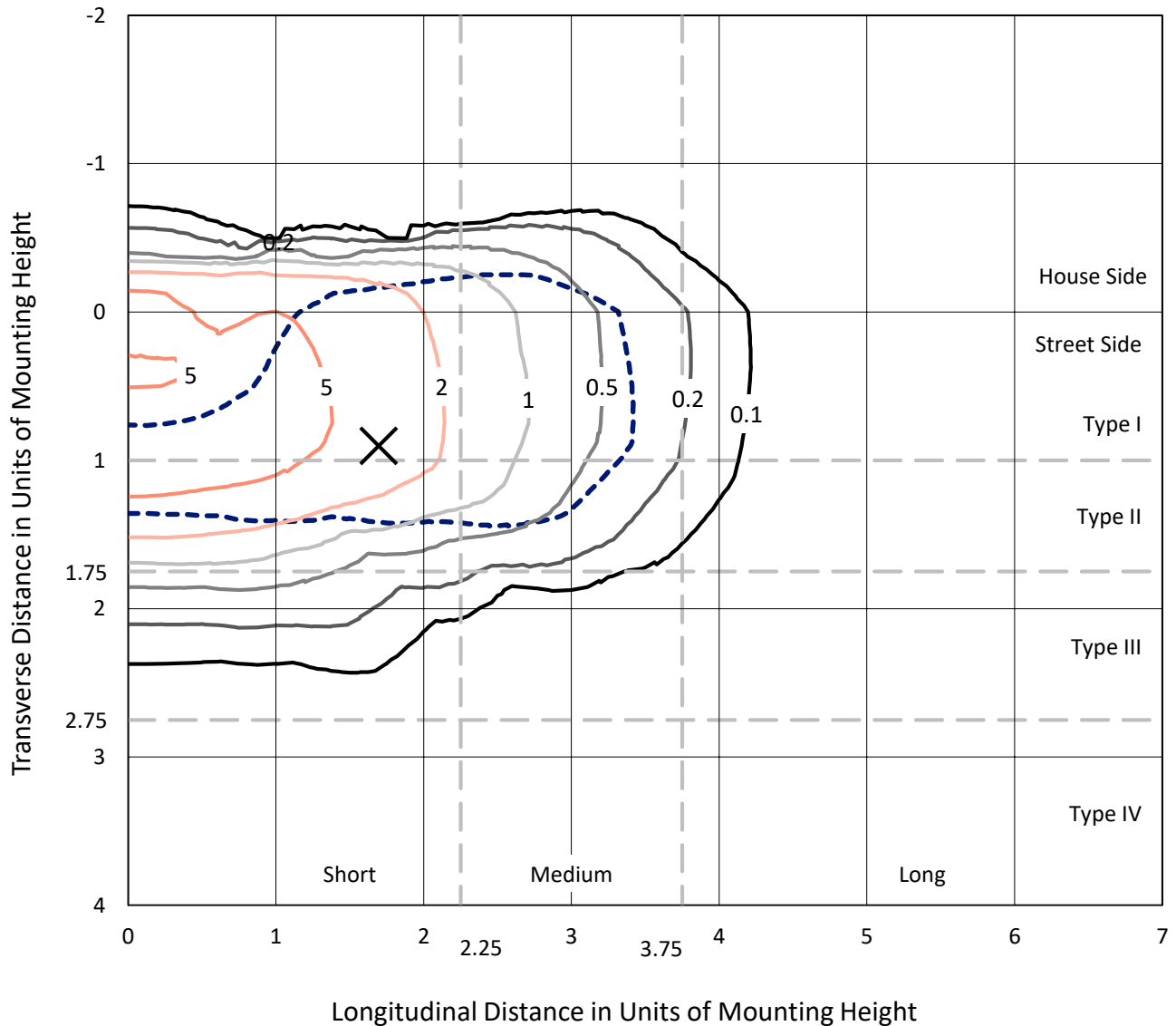
Input Watts (W): 52
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

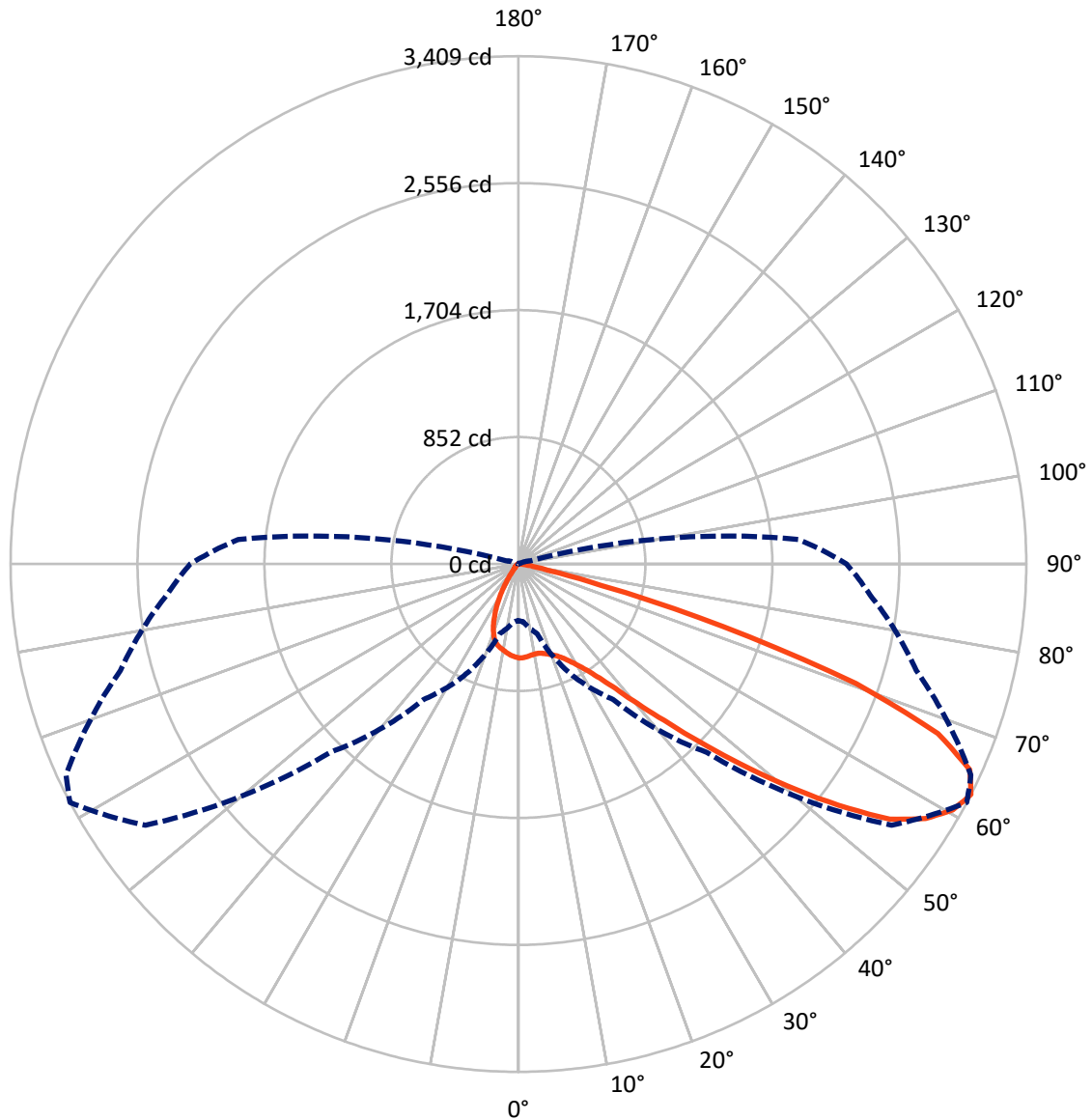
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical



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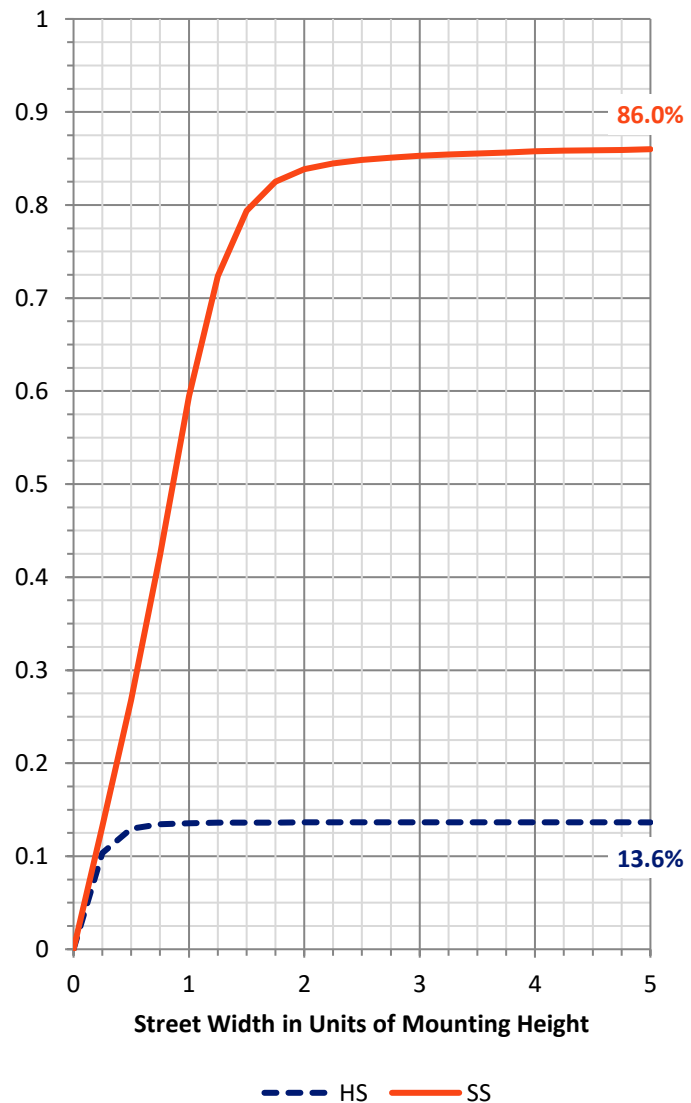
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	560.9	0.0	560.9
	% Fixture	13.8	0.0	13.8
Street Side	Lumens	3501.2	0.0	3501.2
	% Fixture	86.2	0.0	86.2
Total	Lumens	4062.0	0.0	4062.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.5	1.4
10°-20°	144.3	3.6
20°-30°	215.4	5.3
30°-40°	410.4	10.1
40°-50°	855.9	21.1
50°-60°	1137.1	28.0
60°-70°	886.4	21.8
70°-80°	335.0	8.2
80°-90°	20.1	0.5
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°	4062.0	100.0
0°-180°	4062.0	100.0



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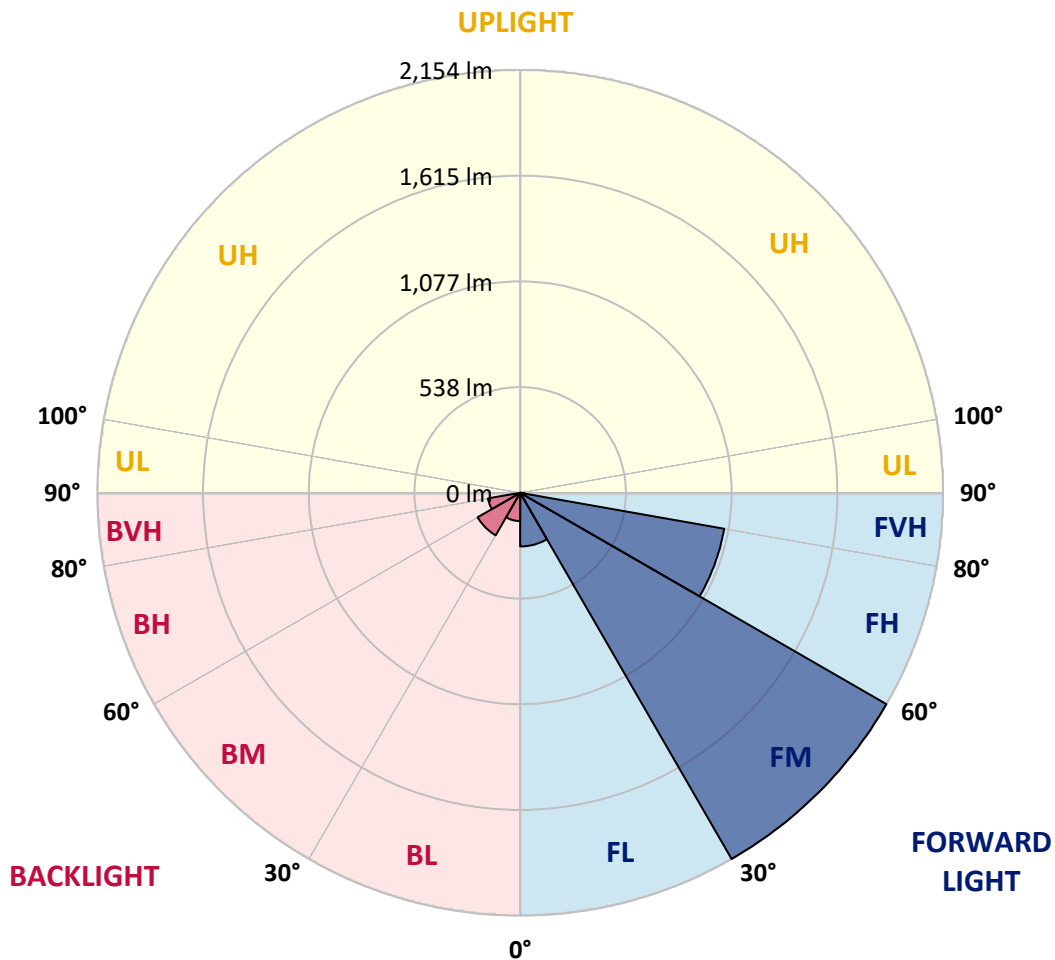
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	273.3	6.7			
FM	(30°-60°)	2153.7	53.0			
FH	(60°-80°)	1055.0	26.0			G1/1800
FVH	(80°-90°)	19.1	0.5			G1/100
BL	(0°-30°)	143.8	3.5	B1/500		
BM	(30°-60°)	249.7	6.1	B1/1000		
BH	(60°-80°)	166.4	4.1	B1/500		G1/500
BVH	(80°-90°)	0.9	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-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	631.1	631.1	631.1	631.1	631.1	631.1	631.1	631.1	631.1	631.1	631.1
2.5°	628.9	627.9	630.5	630.5	630.0	631.1	630.0	629.5	628.9	627.9	626.8
5°	612.5	612.5	616.2	617.8	619.4	622.6	623.6	624.7	624.2	625.2	625.8
7.5°	593.4	594.4	598.7	600.8	603.5	609.8	613.5	617.8	618.3	622.0	624.2
10°	577.5	578.5	582.8	585.4	589.1	597.6	605.6	613.0	614.1	621.0	622.6
12.5°	566.8	567.9	572.2	575.9	583.8	594.4	605.6	614.1	616.7	625.2	625.2
15°	562.6	563.7	569.0	575.3	586.0	599.7	613.5	622.6	627.9	634.8	631.6
17.5°	561.0	563.1	572.2	581.7	593.4	608.2	625.2	634.8	640.1	647.5	640.6
20°	565.8	568.4	580.1	593.4	605.6	621.0	639.6	650.2	655.5	660.3	647.0
22.5°	582.8	587.0	597.1	612.0	621.5	640.1	658.7	670.9	676.7	676.2	658.7
25°	623.6	628.9	633.7	641.7	645.9	668.2	687.9	700.1	704.3	702.7	682.5
27.5°	720.2	727.1	710.1	692.6	683.1	703.8	725.5	738.3	742.0	738.8	708.0
30°	883.2	883.7	845.0	789.8	748.9	746.8	773.3	790.3	790.3	783.9	744.1
32.5°	1120.4	1103.4	1054.6	956.9	864.6	816.3	836.5	852.9	852.9	845.0	799.3
35°	1418.7	1406.0	1325.3	1208.0	1043.5	927.8	923.5	939.4	940.0	937.8	885.8
37.5°	1722.3	1691.0	1623.6	1482.9	1289.7	1099.2	1048.2	1059.4	1067.3	1066.3	1001.5
40°	2004.7	1973.3	1916.5	1781.2	1592.3	1351.8	1229.8	1229.8	1230.3	1225.0	1147.0
42.5°	2226.5	2212.2	2169.7	2075.8	1929.8	1749.4	1474.4	1434.1	1425.6	1420.3	1317.9
45°	2370.3	2355.5	2332.7	2313.0	2265.8	2201.0	1803.0	1697.3	1683.5	1631.5	1506.8
47.5°	2378.3	2355.5	2370.9	2445.2	2551.9	2585.3	2208.5	2004.1	1967.5	1873.6	1696.3
50°	2201.0	2203.2	2263.1	2443.6	2731.8	2922.3	2638.4	2341.7	2283.8	2095.9	1863.5
52.5°	1875.1	1896.4	1989.3	2266.8	2740.3	3137.8	3012.5	2689.9	2575.2	2295.5	1981.3
55°	1468.1	1487.2	1639.0	1939.4	2533.8	3168.6	3284.8	3023.2	2871.4	2434.6	2086.9
57.5°	1038.2	1074.2	1262.7	1538.7	2140.0	2933.5	3359.1	3222.7	3075.7	2569.9	2186.2
60°	631.1	649.1	845.0	1166.1	1613.0	2441.5	3272.1	3350.1	3231.2	2687.2	2279.0
62.5°	379.5	390.1	484.0	803.0	1109.8	1787.6	3056.6	3408.5	3350.1	2765.2	2368.2
65°	224.5	231.4	275.5	485.1	739.3	1096.5	2591.1	3328.3	3375.6	2832.6	2420.2
67.5°	161.9	164.0	179.9	261.1	496.3	587.5	1801.9	3036.4	3213.2	2854.9	2389.4
70°	139.6	142.2	157.6	183.6	351.4	346.6	937.8	2403.2	2723.8	2738.7	2259.4
72.5°	105.6	110.4	135.9	172.5	252.1	246.3	353.5	1433.0	1849.1	2248.3	1947.9
75°	71.7	74.3	100.8	146.5	196.9	183.6	185.2	575.3	904.4	1409.7	1338.6
77.5°	45.1	47.2	61.6	105.1	168.8	129.5	131.1	204.3	326.4	597.6	573.7
80°	30.8	31.8	37.2	67.9	114.1	112.5	84.4	106.7	121.5	184.2	123.7
82.5°	18.6	18.6	24.4	40.3	69.0	89.2	53.1	58.9	64.8	68.5	28.1
85°	6.4	6.9	14.9	24.9	42.5	44.6	30.3	35.0	36.6	39.8	13.3
87.5°	2.7	2.1	8.0	13.8	18.0	20.7	17.5	15.9	17.5	23.4	5.8
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°	631.1	631.1	631.1	631.1	631.1	631.1	631.1	631.1	631.1	631.1	631.1
2.5°	627.3	625.2	625.2	624.7	621.5	619.9	618.3	614.1	616.7	613.5	611.4
5°	624.2	622.6	619.9	617.3	609.8	603.5	600.8	595.5	595.0	590.7	588.6
7.5°	623.6	619.9	615.7	606.6	595.5	585.4	576.4	567.4	563.7	558.9	556.2
10°	621.0	616.2	608.2	593.9	577.5	561.5	541.4	516.4	497.8	487.2	485.6
12.5°	621.5	616.2	604.0	582.8	561.0	526.0	471.8	415.0	368.3	348.7	345.5
15°	625.8	619.9	601.3	572.7	535.5	458.6	359.3	272.3	211.8	190.0	185.2
17.5°	631.1	621.0	595.5	558.4	486.7	355.6	226.1	142.8	108.8	96.6	94.5
20°	634.2	620.4	586.0	536.6	412.4	237.8	123.1	83.9	73.8	71.1	70.1
22.5°	642.2	622.0	578.0	502.6	319.0	143.3	78.0	65.3	59.4	56.3	55.7
25°	658.7	632.7	578.5	458.6	223.4	86.5	63.2	53.1	47.8	44.6	43.5
27.5°	682.5	651.8	588.6	403.9	138.0	65.3	52.5	43.0	37.2	34.5	34.0
30°	712.8	675.1	600.3	332.8	86.0	54.7	42.5	33.4	29.2	27.6	27.1
32.5°	760.6	715.5	610.4	248.9	59.4	45.1	33.4	26.5	23.9	22.3	22.3
35°	839.6	785.0	626.8	166.7	47.2	36.1	27.1	21.8	19.6	18.6	18.6
37.5°	951.1	884.2	634.8	103.5	38.7	28.1	21.8	18.0	16.5	15.4	15.4
40°	1087.0	1004.7	623.6	64.2	32.4	22.8	18.0	15.4	13.8	13.3	13.3
42.5°	1243.6	1143.2	588.6	45.6	27.1	18.6	15.4	13.3	12.2	11.7	11.7
45°	1418.7	1295.0	525.4	38.2	22.8	15.9	13.3	11.1	10.6	10.1	10.1
47.5°	1593.3	1449.0	443.7	32.9	19.1	13.3	11.1	9.6	9.0	8.5	8.5
50°	1745.6	1583.8	357.2	28.7	15.9	11.7	9.6	8.0	7.4	6.9	6.9
52.5°	1832.7	1663.9	276.5	23.9	13.8	10.1	7.4	6.4	5.8	5.3	5.3
55°	1926.6	1730.8	206.5	20.2	11.1	8.5	5.8	4.8	4.2	3.7	3.7
57.5°	2014.2	1790.8	153.4	16.5	9.6	6.4	4.8	3.7	3.2	2.7	2.7
60°	2099.1	1841.7	113.6	13.3	8.0	5.3	3.7	2.7	2.1	1.6	1.6
62.5°	2202.6	1888.4	83.3	10.6	6.9	3.7	2.7	1.6	1.1	0.5	0.5
65°	2279.6	1912.3	62.6	8.0	5.8	2.7	1.6	1.1	0.0	0.0	0.0
67.5°	2279.0	1866.1	45.6	5.8	4.2	2.1	1.1	0.0	0.0	0.0	0.0
70°	2172.4	1726.0	31.8	4.8	3.2	1.6	0.5	0.0	0.0	0.0	0.0
72.5°	1862.9	1365.1	20.7	3.2	2.7	1.1	0.5	0.0	0.0	0.0	0.0
75°	1257.4	693.2	12.2	2.7	2.1	1.1	0.5	0.0	0.0	0.0	0.0
77.5°	537.7	272.3	6.4	1.6	1.6	0.5	0.0	0.0	0.0	0.0	0.0
80°	112.5	65.8	2.7	1.1	1.1	0.5	0.0	0.0	0.0	0.0	0.0
82.5°	19.1	9.6	1.1	1.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.8	2.7	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.1	1.1	0.5	0.5	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)