

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: P348881

Luminaire Tested: **ARCH-N-PA1-50-740-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348881
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-PA1-50-740-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 980mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4811 lumens
Efficiency: N/A
Efficacy: 92.5 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): 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

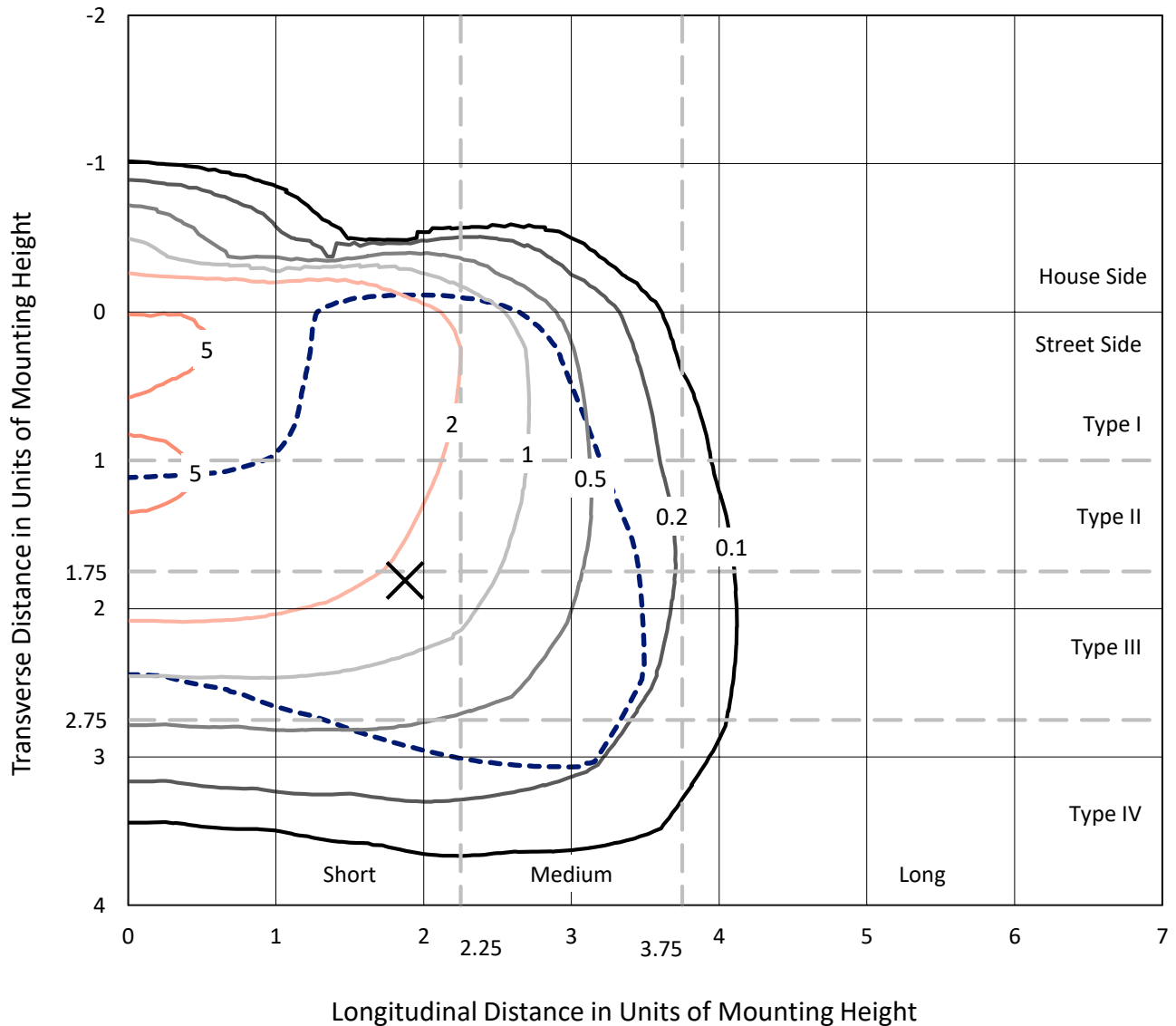


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

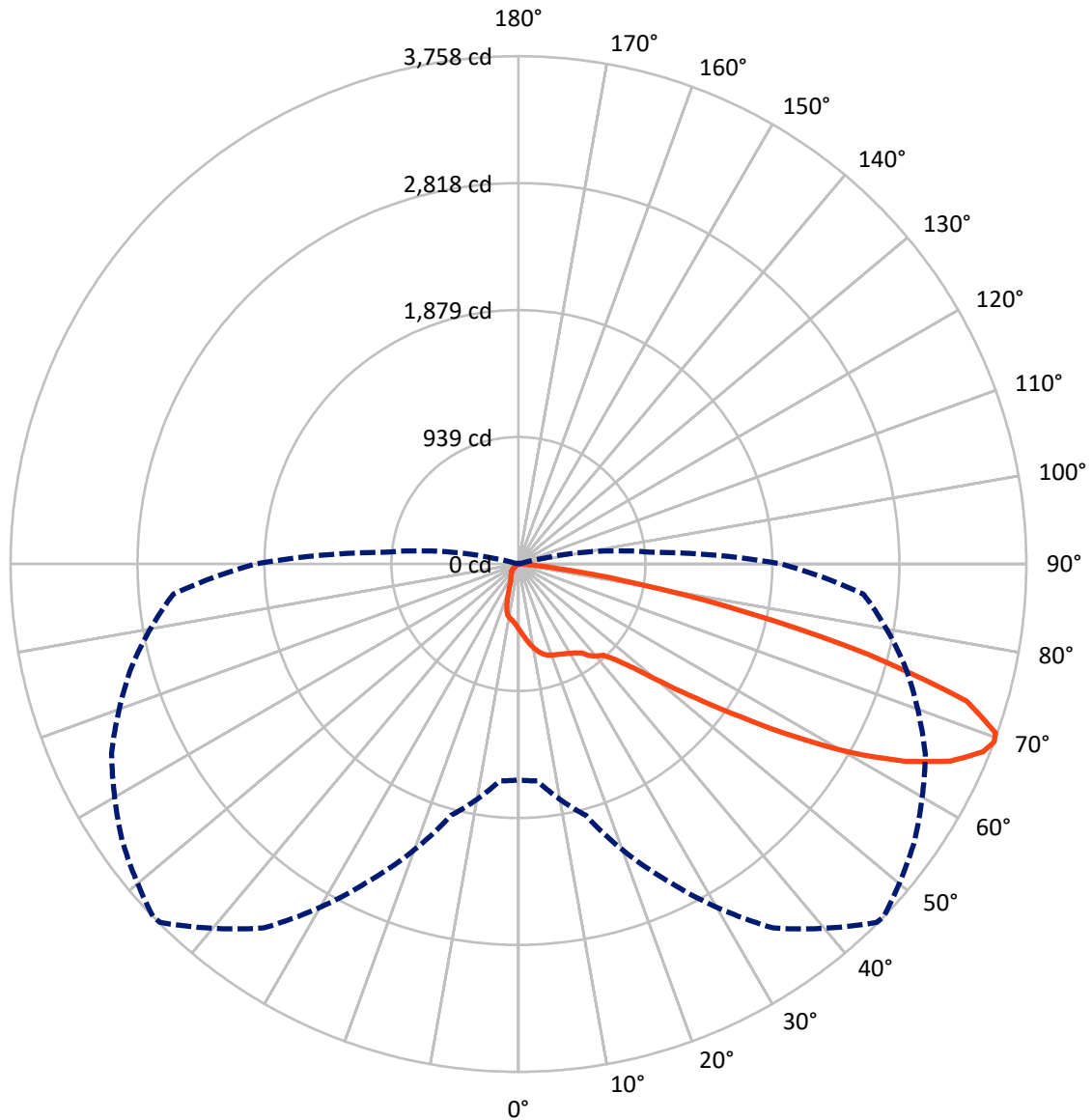


Based on 10 foot mounting height. Maximum calculated value = 7 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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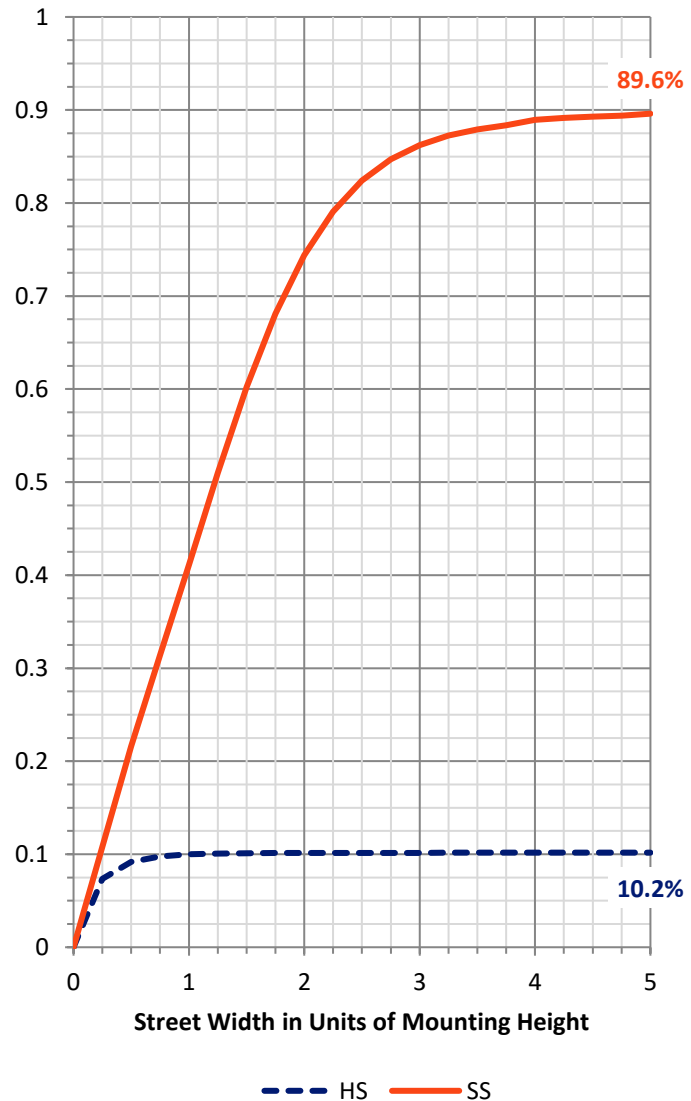
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	493.7	0.0	493.7
	% Fixture	10.3	0.0	10.3
Street Side	Lumens	4317.3	0.0	4317.3
	% Fixture	89.7	0.0	89.7
Total	Lumens	4811.0	0.0	4811.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.0	1.0
10°-20°	145.6	3.0
20°-30°	228.9	4.8
30°-40°	328.3	6.8
40°-50°	567.4	11.8
50°-60°	1120.9	23.3
60°-70°	1566.5	32.6
70°-80°	756.8	15.7
80°-90°	48.6	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°	4811.0	100.0
0°-180°	4811.0	100.0

Coefficient of Utilization



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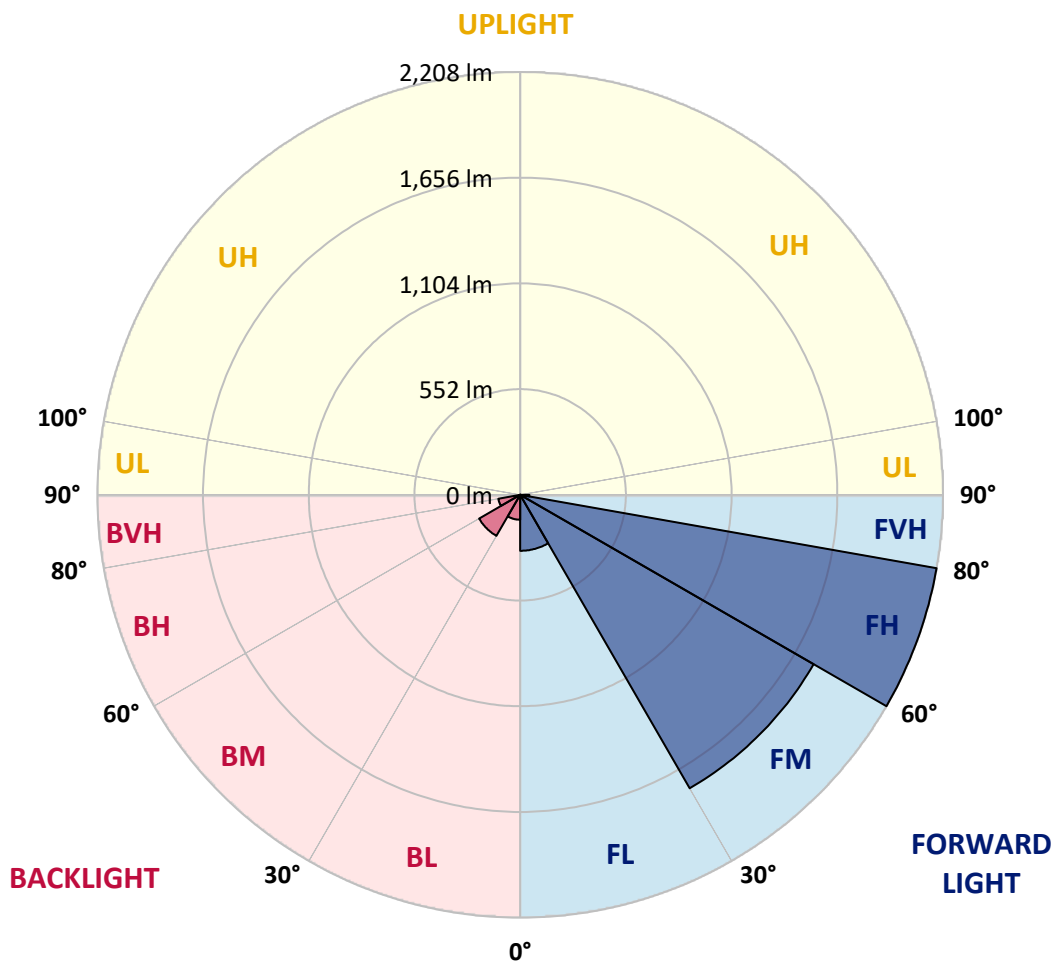
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	292.3	6.1			
FM	(30°-60°)	1769.1	36.8			
FH	(60°-80°)	2207.6	45.9			G2/5000
FVH	(80°-90°)	48.2	1.0			G1/100
BL	(0°-30°)	130.1	2.7	B1/500		
BM	(30°-60°)	247.4	5.1	B1/1000		
BH	(60°-80°)	115.8	2.4	B1/500		G1/500
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°	482.0	482.0	482.0	482.0	482.0	482.0	482.0	482.0	482.0	482.0	482.0
2.5°	535.5	534.8	531.7	530.3	522.6	518.1	516.3	510.7	502.6	494.5	485.4
5°	596.4	596.2	590.3	584.7	570.2	556.7	554.2	541.1	522.9	505.7	488.6
7.5°	658.7	655.7	649.9	639.0	618.1	596.4	594.4	575.9	549.9	525.1	500.5
10°	711.4	709.6	702.0	685.5	660.9	636.3	633.9	611.1	581.7	551.3	519.9
12.5°	752.5	751.1	741.0	720.5	694.3	668.8	665.4	645.1	613.8	579.7	542.7
15°	777.5	776.9	764.5	742.6	716.9	694.8	691.8	674.0	644.9	609.3	567.5
17.5°	783.4	783.6	770.8	748.7	727.5	711.7	709.4	695.9	671.5	636.1	592.3
20°	770.3	773.0	761.5	742.4	729.3	720.9	719.1	711.0	690.5	657.1	612.2
22.5°	751.8	753.2	745.3	732.4	727.0	728.6	727.7	723.2	705.8	675.1	631.8
25°	740.5	740.5	735.8	725.0	728.6	738.3	738.5	737.6	723.9	697.2	655.7
27.5°	740.1	738.7	733.3	725.2	735.1	750.0	750.9	757.0	748.4	724.1	685.5
30°	758.1	756.6	745.1	734.5	747.1	763.1	765.4	778.7	774.4	753.2	718.7
32.5°	800.3	794.7	769.2	751.8	761.3	780.5	783.4	804.6	811.4	789.0	750.7
35°	858.1	840.3	803.5	784.8	785.7	805.7	808.4	839.6	859.6	822.0	775.5
37.5°	937.7	928.9	869.1	819.0	823.1	853.6	861.5	895.3	889.7	840.0	803.7
40°	1112.3	1098.5	1034.9	915.1	859.0	892.4	894.8	912.9	913.3	880.9	862.4
42.5°	1350.0	1344.4	1277.4	1089.5	929.6	918.3	922.8	953.3	987.3	967.0	966.1
45°	1613.3	1610.3	1539.3	1320.9	1072.4	1003.3	1009.0	1049.8	1115.0	1119.5	1148.2
47.5°	1825.1	1823.7	1782.9	1579.2	1290.9	1147.5	1149.3	1192.6	1307.2	1363.8	1409.6
50°	2018.2	2024.7	1992.5	1858.7	1588.7	1373.3	1369.0	1397.9	1581.9	1674.6	1731.5
52.5°	2286.6	2295.9	2205.4	2119.5	1901.1	1653.4	1650.0	1680.3	1912.2	1981.6	1991.8
55°	2523.7	2507.9	2436.4	2411.6	2282.1	1999.5	1998.6	2025.2	2231.6	2261.1	2279.8
57.5°	2628.3	2622.3	2656.8	2713.6	2681.1	2408.4	2406.4	2386.1	2517.4	2520.5	2578.0
60°	2694.4	2701.9	2807.7	2982.9	3063.9	2848.5	2835.4	2711.6	2790.3	2783.3	2844.9
62.5°	2644.8	2659.5	2849.9	3142.0	3350.4	3232.7	3214.2	3009.8	3023.5	2999.4	3056.7
65°	2381.3	2404.1	2716.1	3112.0	3492.5	3532.9	3514.2	3273.0	3208.7	3169.0	3137.2
67.5°	1933.6	1947.1	2272.8	2851.0	3428.4	3712.0	3708.2	3503.8	3348.6	3140.4	2893.6
69°	1597.9	1611.3	1924.8	2576.2	3287.5	3750.3	3757.8	3577.8	3322.0	2966.3	2563.8
70°	1353.4	1367.6	1659.7	2340.7	3123.9	3732.5	3745.8	3570.8	3245.7	2764.6	2274.4
72.5°	709.9	722.1	1021.8	1612.6	2546.7	3427.3	3467.7	3269.0	2751.3	2007.8	1344.9
75°	223.1	230.1	399.0	843.0	1743.7	2664.9	2674.1	2564.3	1953.7	1104.4	560.1
77.5°	85.0	83.0	132.9	310.6	881.5	1678.0	1734.6	1602.5	1025.2	390.5	129.3
80°	45.8	46.0	69.0	128.6	377.2	862.4	910.2	776.6	364.3	121.8	29.8
82.5°	19.9	20.8	38.8	68.1	173.2	318.1	342.0	284.7	139.2	81.9	11.1
85°	4.3	4.7	18.7	37.0	70.6	89.3	93.6	92.3	88.6	63.6	4.3
87.5°	0.0	0.0	8.3	13.3	17.8	20.3	17.8	23.2	48.9	42.9	2.3
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°	482.0	482.0	482.0	482.0	482.0	482.0	482.0	482.0	482.0	482.0	482.0
2.5°	482.5	478.4	471.4	463.8	458.4	452.7	448.2	446.2	443.9	442.3	444.4
5°	481.6	473.7	460.2	447.1	437.6	429.9	423.6	421.1	418.7	416.9	416.6
7.5°	489.5	478.4	457.7	438.5	423.8	413.5	404.9	401.3	398.4	397.0	395.9
10°	504.6	490.4	462.6	437.6	418.7	401.1	382.6	368.4	359.1	354.8	353.2
12.5°	524.2	506.4	472.1	442.3	414.8	381.0	341.7	307.9	286.0	278.8	274.5
15°	547.2	525.1	484.5	448.4	400.8	339.0	272.5	228.3	208.0	203.9	199.4
17.5°	569.3	545.0	499.4	449.6	370.2	270.9	199.6	169.6	161.7	164.4	165.1
20°	588.7	564.6	514.1	439.6	314.4	203.2	154.5	147.1	150.0	155.2	156.1
22.5°	608.4	583.6	527.6	413.5	243.2	154.3	139.2	141.0	143.9	149.1	150.0
25°	632.3	606.6	540.2	365.4	182.5	131.3	132.2	134.9	137.8	142.6	143.0
27.5°	659.8	635.7	548.6	302.9	135.3	120.7	123.6	127.7	130.6	135.1	136.0
30°	696.3	674.0	551.3	238.2	113.5	111.2	112.6	117.5	121.8	125.9	126.5
32.5°	730.6	711.9	542.3	179.8	105.1	102.4	102.4	105.3	110.3	114.1	115.0
35°	762.2	750.0	513.4	131.5	98.8	94.3	92.0	92.0	95.2	98.3	99.3
37.5°	803.9	803.5	466.7	104.9	92.7	87.5	82.8	79.2	78.0	78.7	79.2
40°	875.4	876.1	405.8	94.1	87.5	80.5	73.3	66.8	60.7	58.6	58.4
42.5°	987.1	976.9	342.0	88.9	83.0	73.3	62.5	53.7	44.2	41.3	41.1
45°	1164.4	1104.2	274.3	84.1	78.3	65.2	51.7	39.7	32.0	29.8	29.8
47.5°	1422.7	1271.3	212.5	78.9	72.0	55.9	39.0	28.6	23.5	22.3	22.6
50°	1689.7	1435.1	162.9	72.4	64.3	46.2	28.9	20.8	17.8	17.8	18.0
52.5°	1926.6	1555.1	127.0	65.4	54.8	36.3	21.9	16.2	14.9	14.7	14.9
55°	2148.3	1632.5	97.2	57.3	43.5	27.1	16.7	13.3	12.4	12.0	11.7
57.5°	2362.2	1670.8	72.9	46.2	31.6	19.6	13.3	11.3	10.4	9.7	9.5
60°	2504.5	1639.7	50.1	34.1	21.9	14.2	11.1	9.7	8.6	7.9	7.7
62.5°	2584.8	1554.6	32.3	24.6	15.6	10.6	8.8	8.1	6.5	5.9	5.9
65°	2552.3	1414.3	22.6	17.6	11.3	7.9	6.5	6.5	4.7	3.8	3.6
67.5°	2261.8	1194.8	17.1	13.1	8.1	5.9	5.0	5.6	2.9	1.8	1.8
69°	1946.0	990.3	14.7	10.8	6.8	4.7	4.3	5.2	2.0	1.4	1.1
70°	1691.3	854.2	13.3	9.5	5.6	4.1	3.8	5.0	2.0	1.1	0.9
72.5°	1011.9	476.4	10.2	6.8	3.6	3.2	3.2	5.6	2.0	1.1	0.9
75°	409.0	167.8	7.4	4.7	2.7	2.7	3.8	7.2	1.8	0.9	0.7
77.5°	92.7	36.8	4.3	2.9	1.8	2.7	4.5	5.6	1.1	0.5	0.0
80°	22.6	9.0	2.7	1.8	1.1	2.0	3.4	3.2	0.2	0.0	0.0
82.5°	7.4	3.2	1.1	0.9	0.2	0.7	1.6	0.9	0.0	0.0	0.0
85°	3.2	1.8	0.5	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0
87.5°	2.0	0.7	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)