

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: P348909

Luminaire Tested: **ARCH-N-PA1-50-830-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348909
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-PA1-50-830-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 980mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3823 lumens
Efficiency: N/A
Efficacy: 73.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G1

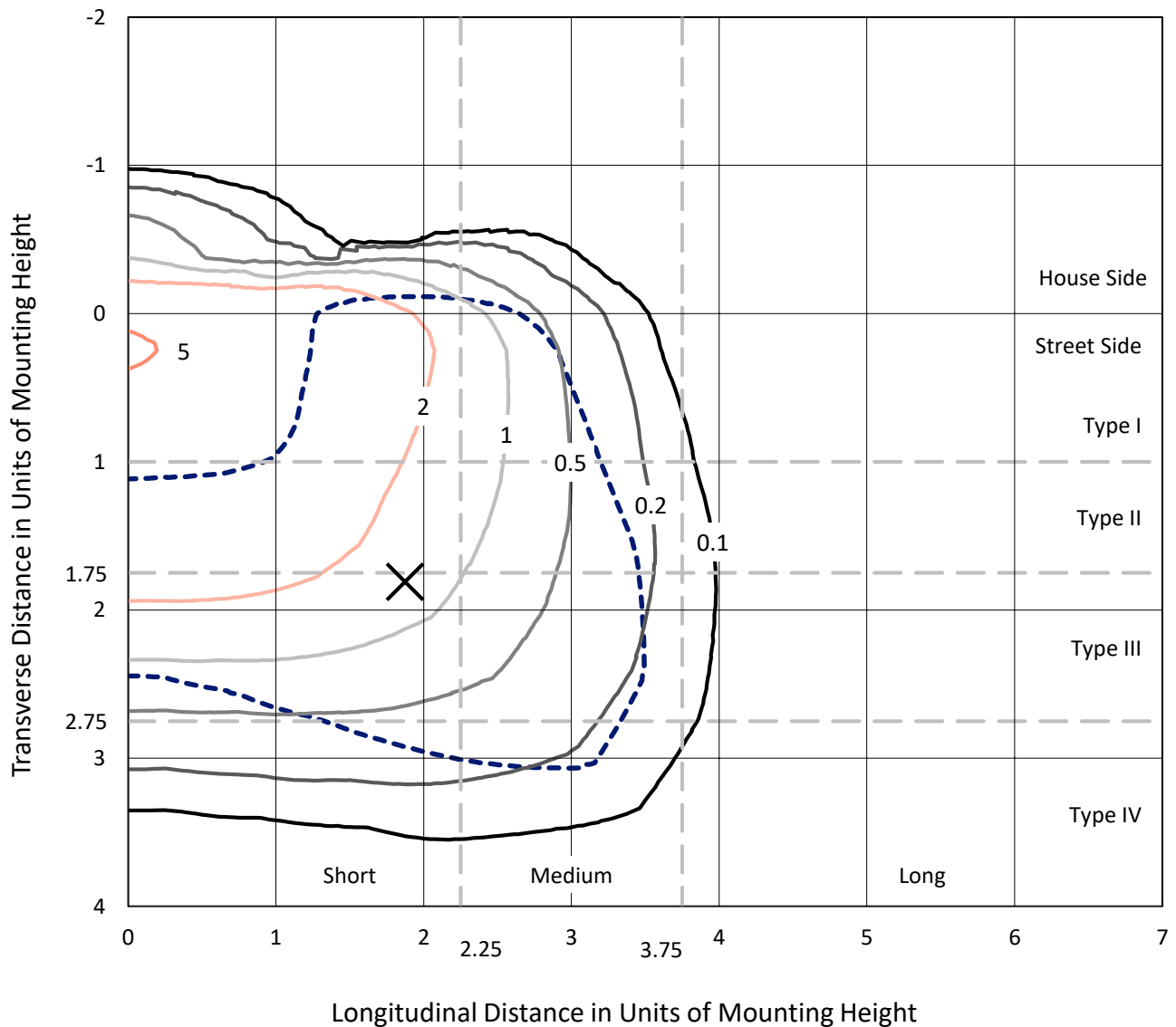
Input Watts (W): 52
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

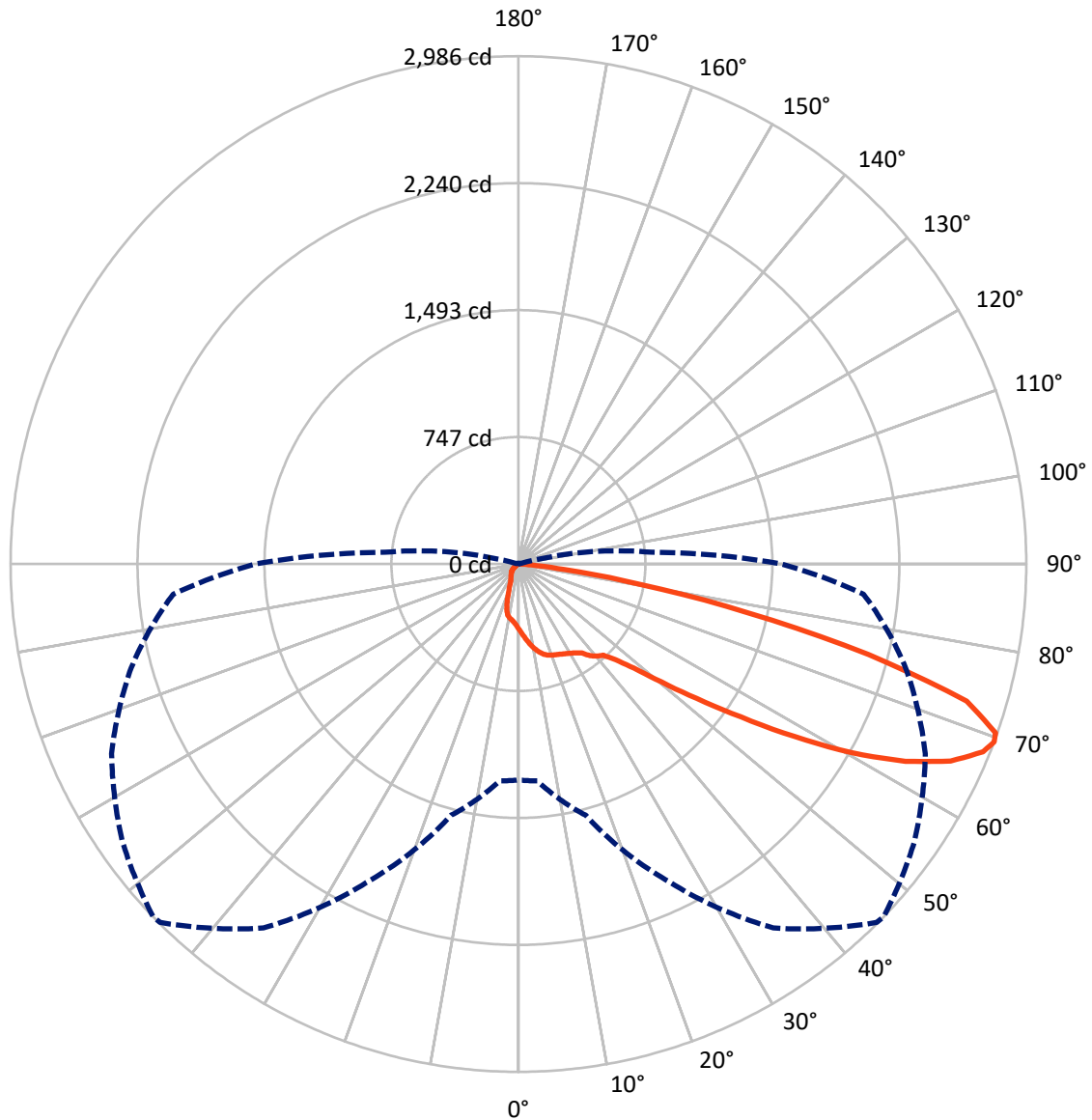


Based on 10 foot mounting height. Maximum calculated value = 5.6 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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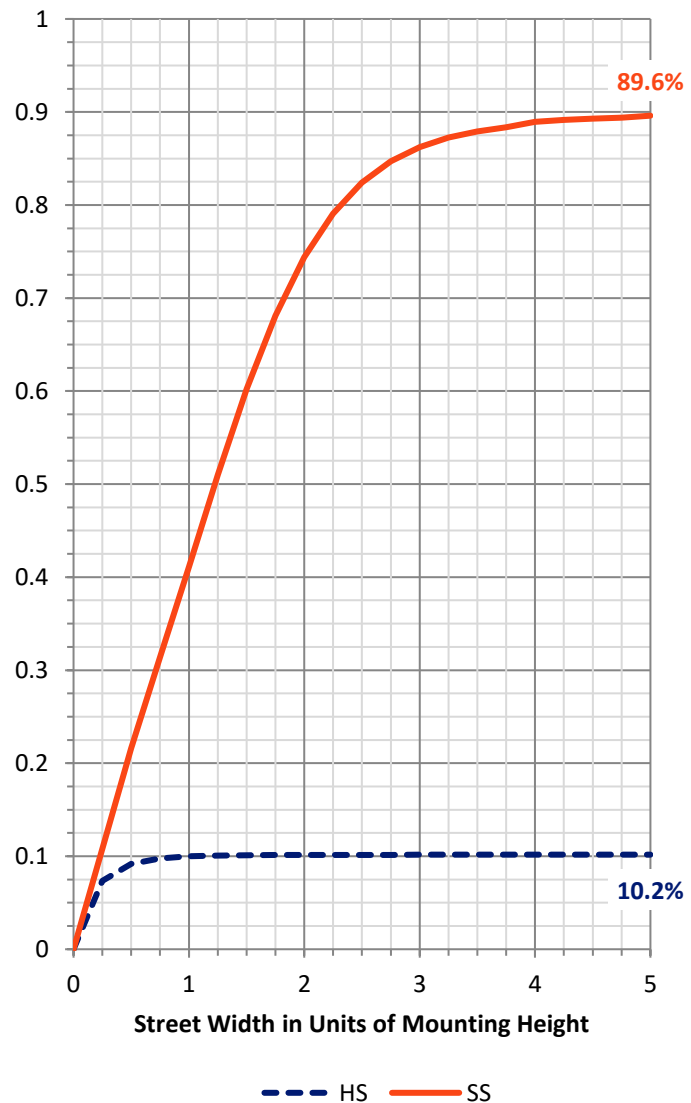
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	392.4	0.0	392.4
	% Fixture	10.3	0.0	10.3
Street Side	Lumens	3430.7	0.0	3430.7
	% Fixture	89.7	0.0	89.7
Total	Lumens	3823.0	0.0	3823.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.1	1.0
10°-20°	115.7	3.0
20°-30°	181.9	4.8
30°-40°	260.9	6.8
40°-50°	450.9	11.8
50°-60°	890.7	23.3
60°-70°	1244.8	32.6
70°-80°	601.4	15.7
80°-90°	38.7	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°	3823.0	100.0
0°-180°	3823.0	100.0



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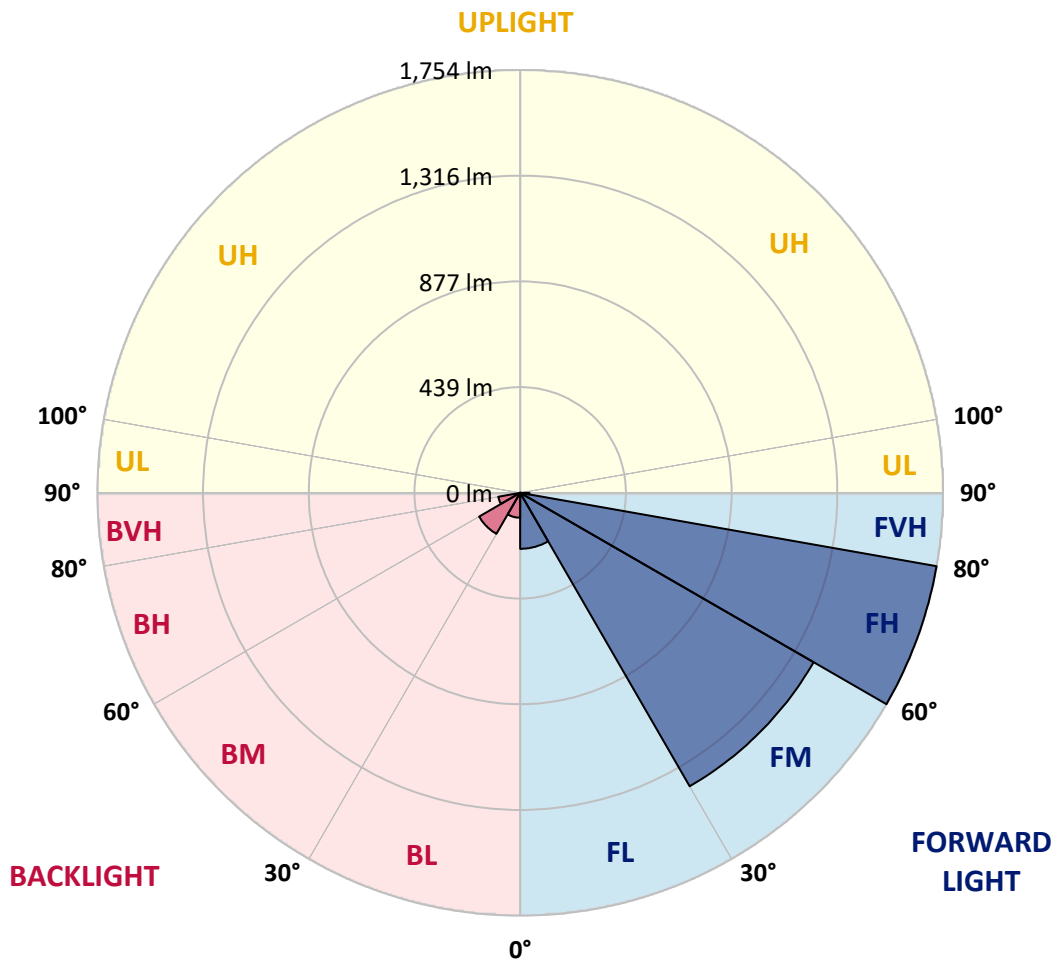
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	232.3	6.1			
FM	(30°-60°)	1405.8	36.8			
FH	(60°-80°)	1754.2	45.9			G1/1800
FVH	(80°-90°)	38.3	1.0			G1/100
BL	(0°-30°)	103.4	2.7	B0/110		
BM	(30°-60°)	196.6	5.1	B0/220		
BH	(60°-80°)	92.0	2.4	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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	383.1	383.1	383.1	383.1	383.1	383.1	383.1	383.1	383.1	383.1	383.1
2.5°	425.5	425.0	422.5	421.4	415.3	411.7	410.3	405.8	399.4	392.9	385.7
5°	473.9	473.7	469.1	464.6	453.1	442.4	440.4	430.0	415.5	401.9	388.2
7.5°	523.4	521.1	516.4	507.8	491.1	473.9	472.3	457.6	437.0	417.3	397.7
10°	565.3	563.9	557.8	544.7	525.2	505.7	503.7	485.6	462.3	438.1	413.2
12.5°	598.0	596.9	588.8	572.5	551.7	531.5	528.8	512.6	487.7	460.7	431.3
15°	617.9	617.3	607.5	590.1	569.6	552.1	549.7	535.6	512.5	484.1	451.0
17.5°	622.5	622.7	612.5	594.9	578.1	565.5	563.7	553.0	533.6	505.5	470.7
20°	612.1	614.3	605.1	589.9	579.5	572.9	571.4	565.0	548.7	522.1	486.5
22.5°	597.4	598.5	592.2	582.0	577.7	579.0	578.3	574.7	560.9	536.5	502.1
25°	588.5	588.5	584.7	576.1	579.0	586.7	586.9	586.1	575.2	554.1	521.1
27.5°	588.1	587.0	582.7	576.3	584.2	596.0	596.7	601.6	594.7	575.4	544.7
30°	602.4	601.2	592.1	583.6	593.7	606.4	608.2	618.8	615.4	598.5	571.1
32.5°	636.0	631.5	611.2	597.4	605.0	620.2	622.5	639.4	644.8	627.0	596.5
35°	681.9	667.7	638.5	623.6	624.3	640.3	642.4	667.2	683.1	653.2	616.3
37.5°	745.1	738.1	690.6	650.8	654.1	678.3	684.5	711.4	706.9	667.5	638.7
40°	883.9	872.9	822.4	727.2	682.6	709.1	711.1	725.4	725.8	700.0	685.3
42.5°	1072.8	1068.3	1015.1	865.8	738.7	729.7	733.3	757.5	784.6	768.4	767.7
45°	1282.0	1279.6	1223.2	1049.7	852.1	797.3	801.8	834.2	886.0	889.6	912.4
47.5°	1450.3	1449.2	1416.8	1254.9	1025.8	911.8	913.3	947.7	1038.7	1083.7	1120.1
50°	1603.7	1608.9	1583.3	1477.0	1262.4	1091.3	1087.8	1110.8	1257.1	1330.7	1375.9
52.5°	1817.0	1824.4	1752.5	1684.2	1510.7	1313.9	1311.2	1335.2	1519.5	1574.7	1582.7
55°	2005.4	1992.9	1936.0	1916.3	1813.4	1588.8	1588.1	1609.3	1773.3	1796.8	1811.6
57.5°	2088.6	2083.7	2111.2	2156.3	2130.5	1913.8	1912.2	1896.1	2000.4	2002.9	2048.6
60°	2141.1	2147.0	2231.1	2370.4	2434.7	2263.5	2253.1	2154.7	2217.3	2211.7	2260.7
62.5°	2101.7	2113.3	2264.6	2496.7	2662.4	2568.8	2554.1	2391.7	2402.6	2383.4	2429.0
65°	1892.3	1910.4	2158.3	2472.9	2775.3	2807.4	2792.5	2600.9	2549.8	2518.2	2493.0
67.5°	1536.5	1547.3	1806.1	2265.5	2724.4	2949.7	2946.6	2784.2	2660.9	2495.5	2299.4
69°	1269.8	1280.4	1529.5	2047.2	2612.3	2980.2	2986.1	2843.0	2639.8	2357.1	2037.3
70°	1075.5	1086.8	1318.9	1860.0	2482.4	2966.0	2976.6	2837.5	2579.2	2196.8	1807.3
72.5°	564.1	573.8	812.0	1281.4	2023.7	2723.5	2755.6	2597.6	2186.3	1595.5	1068.7
75°	177.3	182.8	317.1	669.8	1385.6	2117.6	2125.0	2037.7	1552.5	877.6	445.1
77.5°	67.6	66.0	105.6	246.8	700.5	1333.4	1378.4	1273.4	814.7	310.3	102.7
80°	36.4	36.6	54.8	102.2	299.7	685.3	723.3	617.1	289.5	96.8	23.7
82.5°	15.8	16.5	30.8	54.1	137.7	252.7	271.7	226.2	110.6	65.1	8.8
85°	3.4	3.8	14.9	29.4	56.1	71.0	74.4	73.3	70.4	50.5	3.4
87.5°	0.0	0.0	6.6	10.6	14.2	16.1	14.2	18.5	38.9	34.1	1.8
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°	383.1	383.1	383.1	383.1	383.1	383.1	383.1	383.1	383.1	383.1	383.1
2.5°	383.4	380.2	374.6	368.5	364.2	359.7	356.2	354.6	352.8	351.5	353.1
5°	382.7	376.4	365.7	355.3	347.7	341.6	336.6	334.7	332.7	331.2	331.1
7.5°	389.0	380.2	363.7	348.5	336.8	328.6	321.7	318.9	316.5	315.5	314.6
10°	401.0	389.7	367.6	347.7	332.7	318.7	304.0	292.7	285.4	282.0	280.7
12.5°	416.6	402.4	375.2	351.5	329.6	302.7	271.6	244.7	227.3	221.5	218.1
15°	434.9	417.3	385.0	356.3	318.5	269.4	216.5	181.4	165.3	162.0	158.5
17.5°	452.4	433.1	396.9	357.2	294.1	215.3	158.6	134.8	128.5	130.7	131.2
20°	467.8	448.7	408.5	349.4	249.9	161.5	122.8	116.9	119.2	123.3	124.0
22.5°	483.4	463.7	419.3	328.6	193.2	122.6	110.6	112.0	114.4	118.5	119.2
25°	502.4	482.0	429.3	290.4	145.0	104.3	105.0	107.2	109.5	113.3	113.6
27.5°	524.3	505.1	435.9	240.7	107.5	95.9	98.2	101.5	103.8	107.4	108.1
30°	553.3	535.6	438.1	189.3	90.2	88.4	89.4	93.4	96.8	100.0	100.6
32.5°	580.6	565.7	430.9	142.9	83.5	81.4	81.4	83.7	87.7	90.7	91.4
35°	605.7	596.0	408.0	104.5	78.5	74.9	73.1	73.1	75.6	78.2	78.9
37.5°	638.8	638.5	370.9	83.3	73.7	69.5	65.8	62.9	62.0	62.6	62.9
40°	695.7	696.2	322.5	74.7	69.5	64.0	58.3	53.1	48.2	46.6	46.4
42.5°	784.4	776.3	271.7	70.6	66.0	58.3	49.7	42.7	35.1	32.8	32.6
45°	925.3	877.4	218.0	66.9	62.2	51.8	41.0	31.5	25.5	23.7	23.7
47.5°	1130.5	1010.2	168.9	62.7	57.2	44.5	31.0	22.8	18.6	17.7	17.9
50°	1342.7	1140.4	129.4	57.5	51.1	36.7	22.9	16.5	14.2	14.2	14.3
52.5°	1530.9	1235.7	100.9	52.0	43.6	28.9	17.4	12.9	11.8	11.7	11.8
55°	1707.1	1297.2	77.3	45.5	34.6	21.5	13.3	10.6	9.9	9.5	9.3
57.5°	1877.1	1327.7	57.9	36.7	25.1	15.6	10.6	9.0	8.2	7.7	7.5
60°	1990.2	1302.9	39.8	27.1	17.4	11.3	8.8	7.7	6.8	6.3	6.1
62.5°	2054.0	1235.4	25.6	19.5	12.4	8.4	7.0	6.5	5.2	4.7	4.7
65°	2028.2	1123.9	17.9	14.0	9.0	6.3	5.2	5.2	3.8	3.0	2.9
67.5°	1797.3	949.5	13.6	10.4	6.5	4.7	3.9	4.5	2.3	1.4	1.4
69°	1546.4	786.9	11.7	8.6	5.4	3.8	3.4	4.1	1.6	1.1	0.9
70°	1344.0	678.8	10.6	7.5	4.5	3.2	3.0	3.9	1.6	0.9	0.7
72.5°	804.1	378.6	8.1	5.4	2.9	2.5	2.5	4.5	1.6	0.9	0.7
75°	325.0	133.4	5.9	3.8	2.2	2.2	3.0	5.7	1.4	0.7	0.5
77.5°	73.7	29.2	3.4	2.3	1.4	2.2	3.6	4.5	0.9	0.4	0.0
80°	17.9	7.2	2.2	1.4	0.9	1.6	2.7	2.5	0.2	0.0	0.0
82.5°	5.9	2.5	0.9	0.7	0.2	0.5	1.3	0.7	0.0	0.0	0.0
85°	2.5	1.4	0.4	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0
87.5°	1.6	0.5	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)