

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: P397839

Luminaire Tested: **ARCH-S-PA1-50-730-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397839
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-50-730-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5047 lumens
Efficiency: N/A
Efficacy: 93.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 54
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

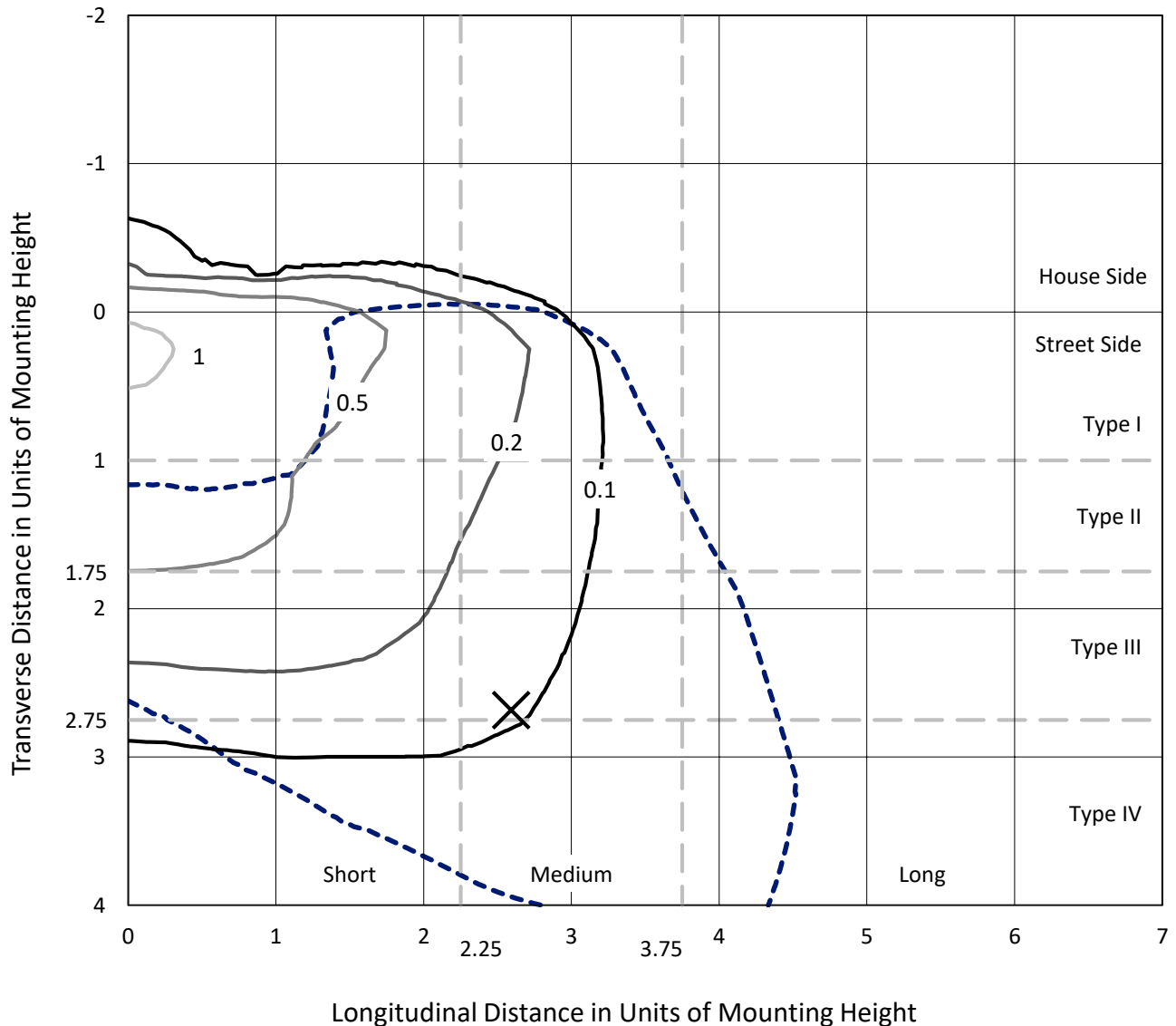


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

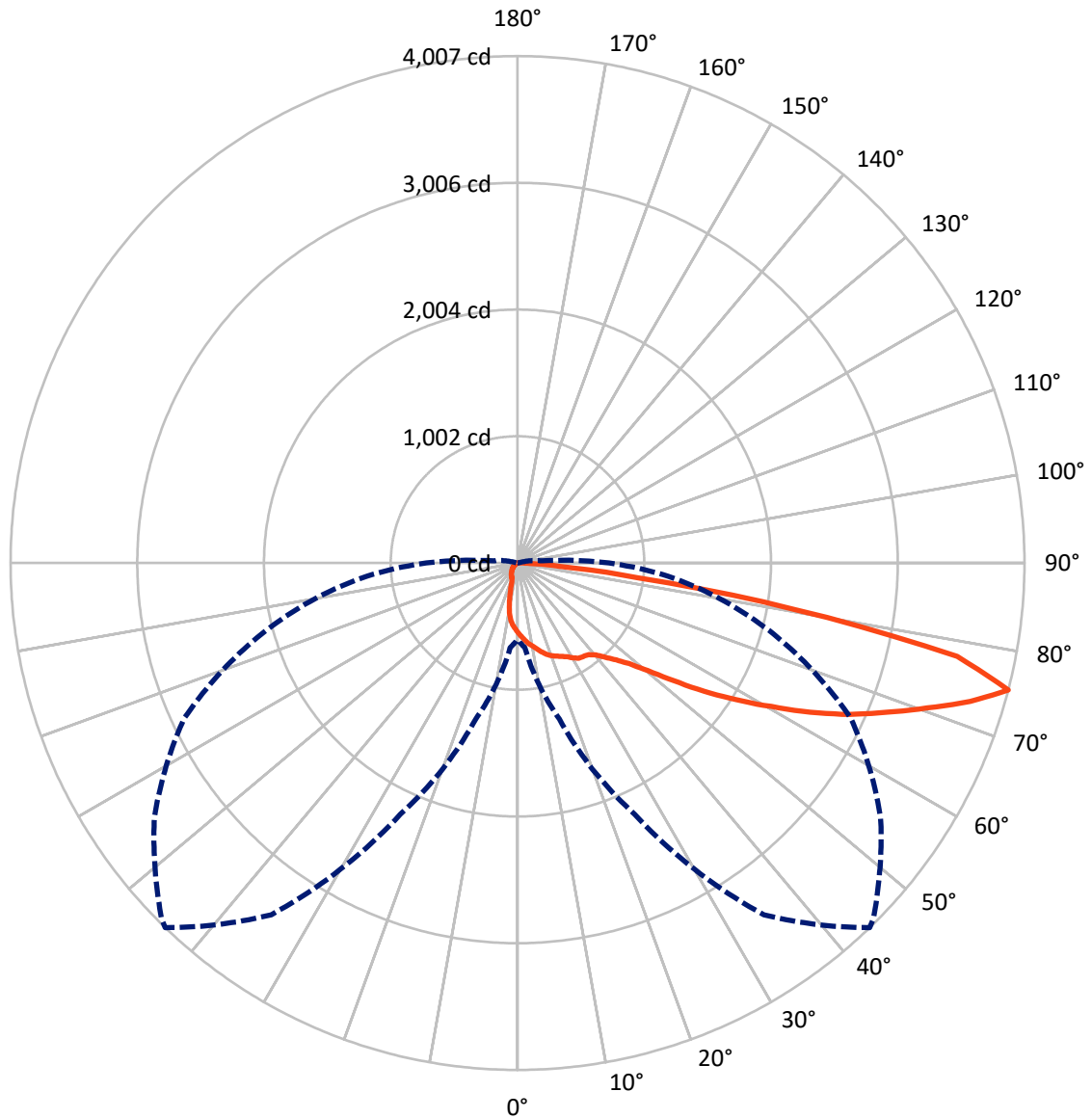


Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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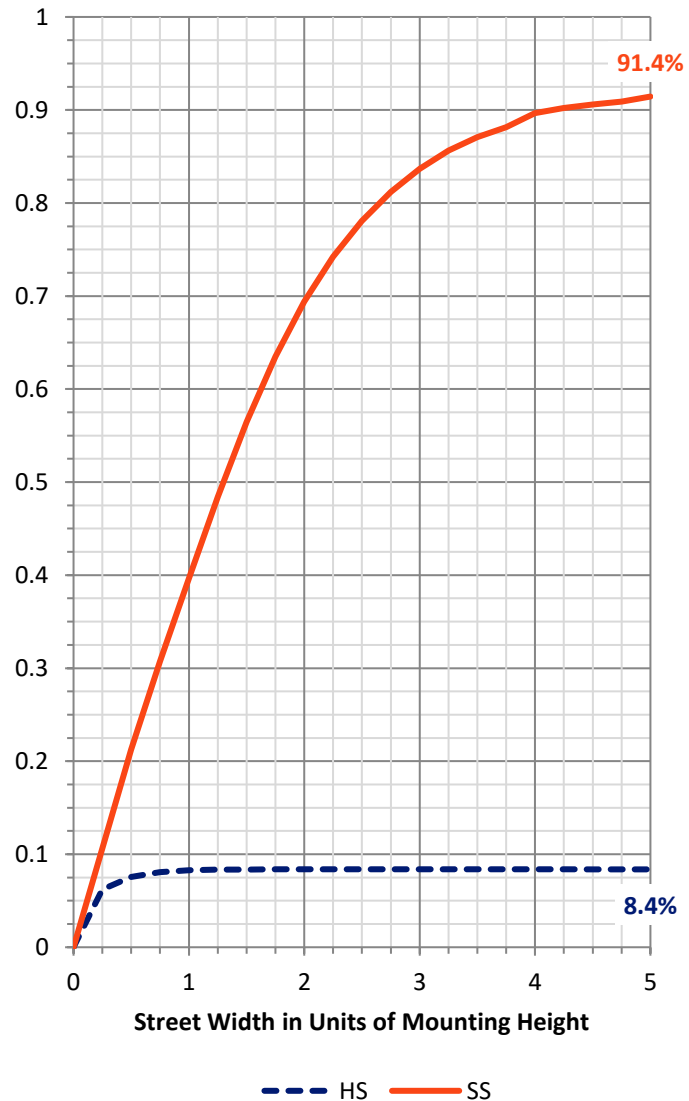
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	425.6	0.0	425.6
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	4621.4	0.0	4621.4
	% Fixture	91.6	0.0	91.6
Total	Lumens	5047.0	0.0	5047.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.8	1.0
10°-20°	145.2	2.9
20°-30°	239.6	4.7
30°-40°	347.7	6.9
40°-50°	565.2	11.2
50°-60°	996.4	19.7
60°-70°	1432.1	28.4
70°-80°	1146.8	22.7
80°-90°	122.2	2.4
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°	5047.0	100.0
0°-180°	5047.0	100.0



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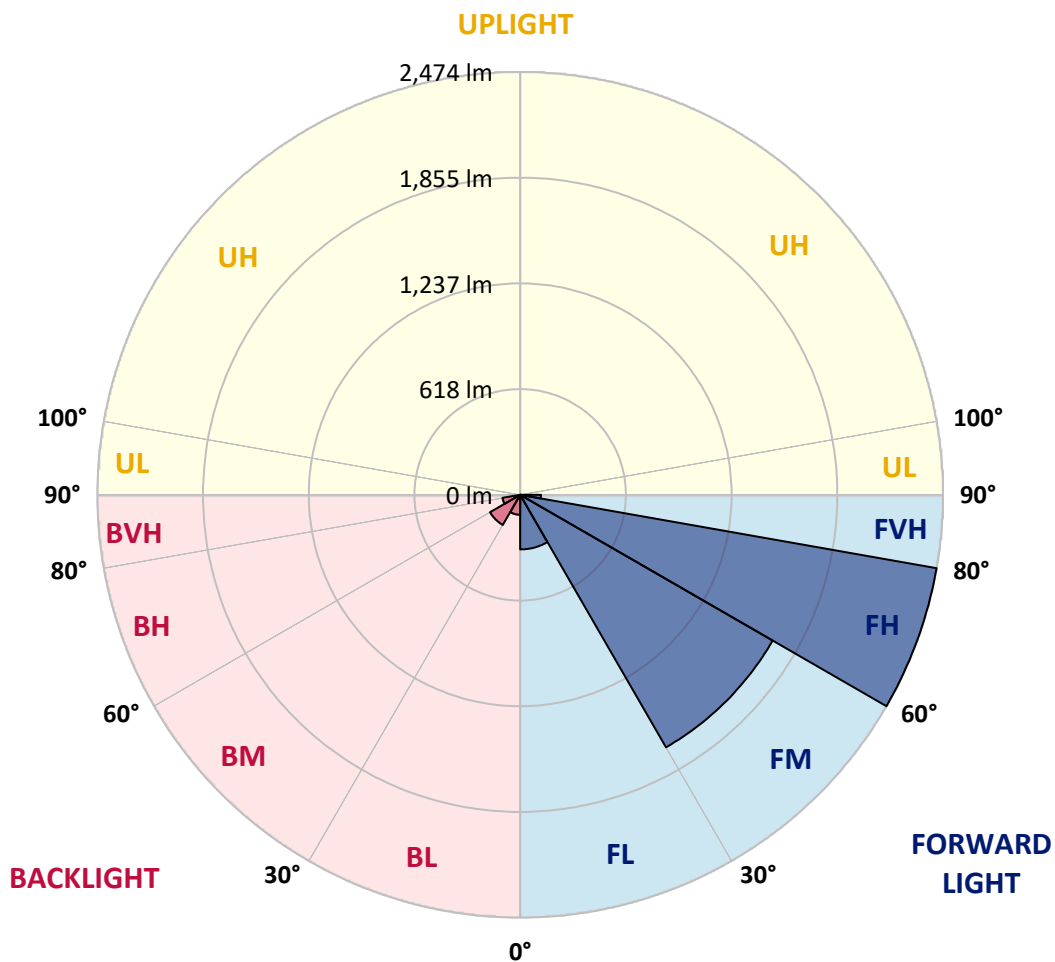
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	319.6	6.3			
FM	(30°-60°)	1705.9	33.8			
FH	(60°-80°)	2473.9	49.0			G2/5000
FVH	(80°-90°)	121.9	2.4			G2/225
BL	(0°-30°)	116.9	2.3	B1/500		
BM	(30°-60°)	203.5	4.0	B0/220		
BH	(60°-80°)	104.9	2.1	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: B1-U0-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	549.3	549.3	549.3	549.3	549.3	549.3	549.3	549.3	549.3	549.3	549.3
2.5°	598.7	597.8	595.0	590.3	585.7	581.0	580.1	572.6	564.2	557.7	552.1
5°	651.8	650.8	646.2	635.9	625.7	613.6	612.7	595.0	579.1	561.5	546.6
7.5°	706.7	704.8	696.5	680.6	662.9	644.3	642.5	616.4	593.1	569.8	548.4
10°	749.5	747.7	735.6	716.9	692.7	669.5	666.7	639.7	616.4	586.6	557.7
12.5°	791.4	787.7	771.9	751.4	721.6	699.3	696.5	668.5	640.6	609.9	574.5
15°	830.5	825.9	811.0	784.9	753.3	731.8	730.0	700.2	671.3	635.9	596.8
17.5°	857.5	855.7	838.0	809.1	778.4	760.7	758.8	728.1	699.3	662.0	620.1
20°	871.5	871.5	854.7	823.1	795.2	783.1	780.3	751.4	723.5	688.1	644.3
22.5°	874.3	877.1	864.1	829.6	809.1	798.9	797.0	771.9	744.9	712.3	671.3
25°	879.9	879.9	873.4	836.1	821.2	818.4	817.5	795.2	770.9	738.4	698.3
27.5°	886.4	886.4	881.7	845.4	839.8	838.9	838.0	827.7	808.2	770.0	730.0
30°	903.2	904.1	900.4	864.1	860.3	870.6	872.4	866.9	842.6	795.2	762.6
32.5°	945.1	936.7	926.4	877.1	883.6	896.6	897.6	886.4	860.3	822.2	801.7
35°	1050.3	1000.9	954.4	888.3	891.1	904.1	906.0	905.0	889.2	856.6	846.4
37.5°	1148.0	1078.2	1012.1	914.3	905.0	919.0	922.7	938.5	926.4	904.1	906.9
40°	1204.8	1177.8	1131.3	986.0	933.0	954.4	958.1	982.3	977.7	968.3	986.0
42.5°	1379.9	1381.7	1331.5	1093.1	984.2	1018.6	1023.3	1042.8	1049.3	1054.0	1096.8
45°	1582.9	1589.4	1577.3	1285.8	1081.0	1092.2	1098.7	1124.8	1149.0	1178.8	1257.0
47.5°	1826.8	1821.2	1776.5	1521.4	1249.5	1187.1	1191.8	1242.1	1284.0	1349.2	1460.9
50°	2042.8	2056.8	1972.1	1741.2	1487.0	1337.1	1332.4	1381.7	1457.2	1548.4	1689.0
52.5°	2260.7	2240.2	2125.7	1959.0	1768.2	1541.0	1527.0	1554.0	1660.1	1768.2	1912.5
55°	2318.4	2320.3	2281.2	2197.4	2002.8	1788.6	1765.4	1763.5	1895.7	1969.3	2147.1
57.5°	2432.0	2436.7	2446.0	2462.7	2370.6	2036.3	2012.1	1986.0	2114.5	2157.4	2382.7
60°	2547.5	2553.1	2609.9	2700.2	2638.7	2303.5	2277.5	2216.0	2287.7	2345.4	2630.3
62.5°	2532.6	2571.7	2736.5	2916.2	2908.7	2596.8	2564.2	2416.2	2461.8	2512.1	2857.5
65°	2286.8	2328.7	2699.2	2975.8	3179.7	2886.4	2833.3	2622.9	2625.7	2686.2	3076.3
67.5°	2067.0	2112.7	2466.5	2950.6	3358.5	3146.2	3091.2	2830.5	2786.8	2887.3	3193.7
70°	1940.4	1986.0	2281.2	2872.4	3408.7	3433.9	3386.4	3068.0	2978.6	3070.8	3062.4
72.5°	1518.6	1590.3	2044.7	2723.5	3462.7	3742.1	3704.8	3368.7	3141.5	2878.9	2331.5
75°	605.2	671.3	1276.5	2191.8	3394.8	4007.4	3978.6	3503.7	2907.8	2055.9	1193.7
77.5°	182.5	195.5	354.7	1083.8	2488.8	3553.1	3543.8	2946.0	2057.7	954.4	325.9
80°	60.5	67.0	108.9	298.9	1135.9	2219.7	2261.6	1877.1	934.8	218.8	66.1
82.5°	25.1	27.9	54.9	120.1	402.2	956.2	942.3	840.8	325.9	135.9	24.2
85°	6.5	8.4	25.1	68.9	147.1	329.6	346.4	282.1	184.4	112.7	7.4
87.5°	0.0	0.0	12.1	27.9	66.1	99.6	104.3	85.7	104.3	84.7	3.7
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°	549.3	549.3	549.3	549.3	549.3	549.3	549.3	549.3	549.3	549.3	549.3
2.5°	547.5	542.8	534.4	528.9	521.4	519.6	515.8	511.2	510.2	505.6	506.5
5°	538.2	530.7	515.8	505.6	493.5	489.8	483.2	478.6	474.9	468.3	469.3
7.5°	536.3	525.1	504.7	485.1	465.5	451.6	432.0	416.2	403.2	389.2	392.0
10°	542.8	528.9	500.0	473.0	437.6	392.9	341.7	308.2	291.4	274.7	276.5
12.5°	555.9	539.1	501.9	460.9	389.2	312.8	242.1	196.5	184.4	176.9	177.8
15°	575.4	554.9	507.4	437.6	324.0	226.3	161.1	141.5	146.2	149.0	149.0
17.5°	595.9	572.6	512.1	395.7	250.5	158.3	131.3	129.4	135.9	142.5	142.5
20°	621.0	591.2	513.0	342.6	180.6	128.5	123.8	123.8	128.5	135.9	135.9
22.5°	645.2	611.7	504.7	282.1	137.8	119.2	119.2	119.2	122.0	129.4	130.4
25°	674.1	636.9	487.0	217.9	118.2	113.6	113.6	114.5	116.4	122.9	123.8
27.5°	704.8	662.9	457.2	159.2	108.0	107.1	108.0	108.9	109.9	116.4	118.2
30°	740.2	691.8	419.0	119.2	98.7	98.7	101.5	103.4	103.4	108.9	110.8
32.5°	781.2	730.0	373.4	98.7	89.4	88.5	93.1	95.9	95.9	100.6	102.4
35°	832.4	769.1	318.4	87.5	81.9	80.1	81.9	86.6	88.5	92.2	93.1
37.5°	900.4	815.6	259.8	81.0	76.3	72.6	72.6	73.6	77.3	81.0	81.9
40°	987.0	866.9	202.0	76.3	70.8	67.0	64.2	63.3	62.4	65.2	67.0
42.5°	1095.9	924.6	150.8	71.7	66.1	60.5	56.8	53.1	48.4	47.5	48.4
45°	1235.6	995.3	111.7	68.0	63.3	54.9	48.4	41.9	33.5	30.7	31.7
47.5°	1400.4	1068.9	87.5	64.2	61.5	48.4	40.0	28.9	20.5	18.6	19.6
50°	1575.4	1139.7	74.5	59.6	57.7	41.9	28.9	17.7	12.1	12.1	13.0
52.5°	1724.4	1179.7	68.0	55.9	52.1	34.5	18.6	10.2	7.4	7.4	8.4
55°	1868.7	1201.1	63.3	52.1	44.7	24.2	10.2	6.5	4.7	4.7	4.7
57.5°	2017.7	1210.4	57.7	47.5	35.4	14.9	5.6	3.7	2.8	2.8	2.8
60°	2149.9	1192.7	49.3	39.1	23.3	7.4	2.8	2.8	1.9	0.9	0.9
62.5°	2260.7	1159.2	34.5	27.9	14.0	3.7	1.9	0.9	0.0	0.0	0.0
65°	2328.7	1105.2	22.3	18.6	8.4	2.8	0.9	0.0	0.0	0.0	0.0
67.5°	2309.1	1003.7	14.0	12.1	3.7	1.9	0.9	0.0	0.0	0.0	0.0
70°	2083.8	823.1	10.2	7.4	2.8	0.9	0.0	0.0	0.0	0.0	0.0
72.5°	1501.9	556.8	7.4	4.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0
75°	722.5	198.3	4.7	3.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	176.9	43.8	2.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	39.1	8.4	1.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	13.0	3.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.8	0.9	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)