

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: P573274

Luminaire Tested: **ARCH-S-PA2-50-830-U-T2R-HSS**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573274
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-14)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-50-830-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 3000K, 520mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4900 lumens
Efficiency: N/A
Efficacy: 91.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B0 - U0 - G1

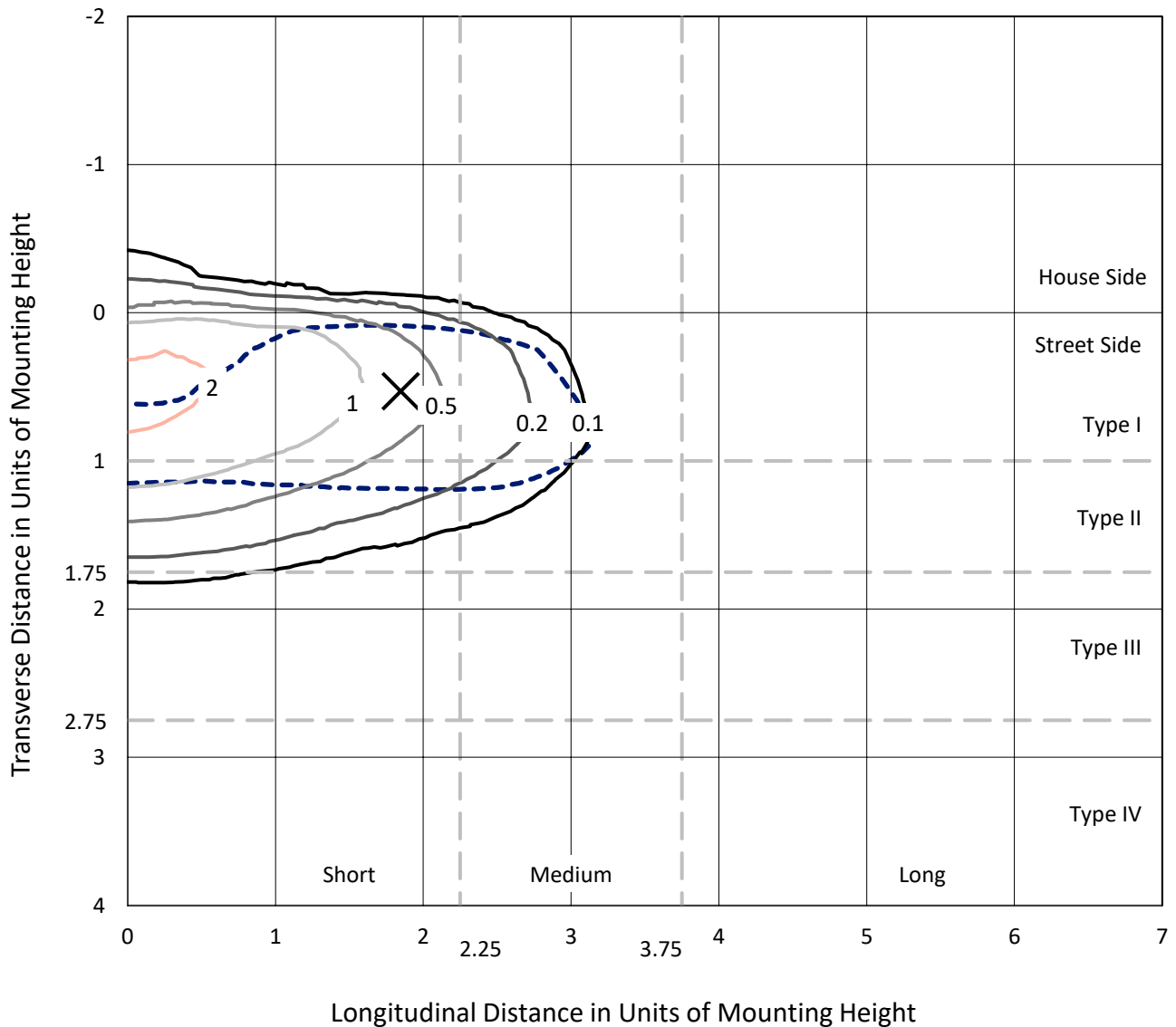
Input Watts (W): 53.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

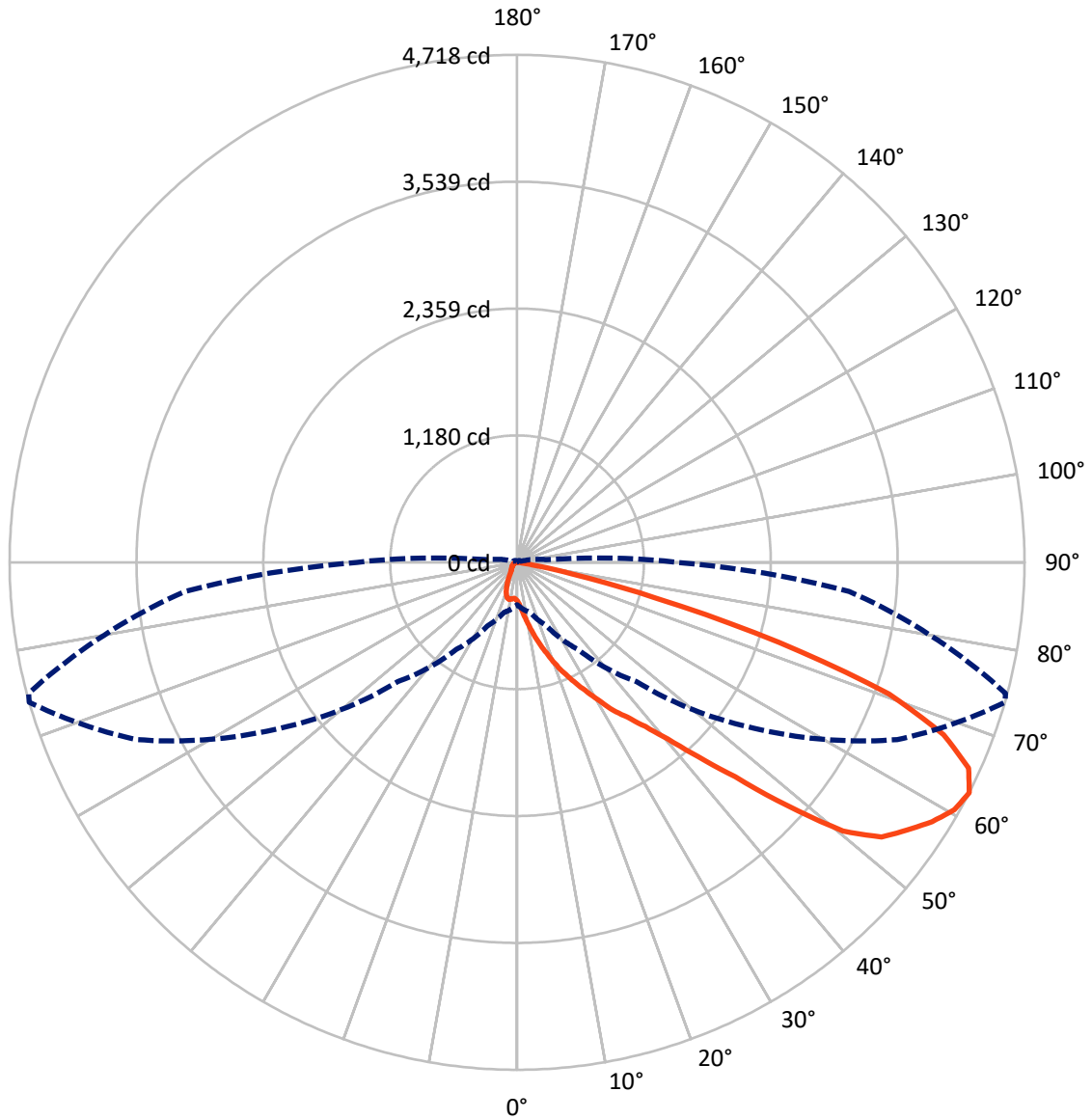
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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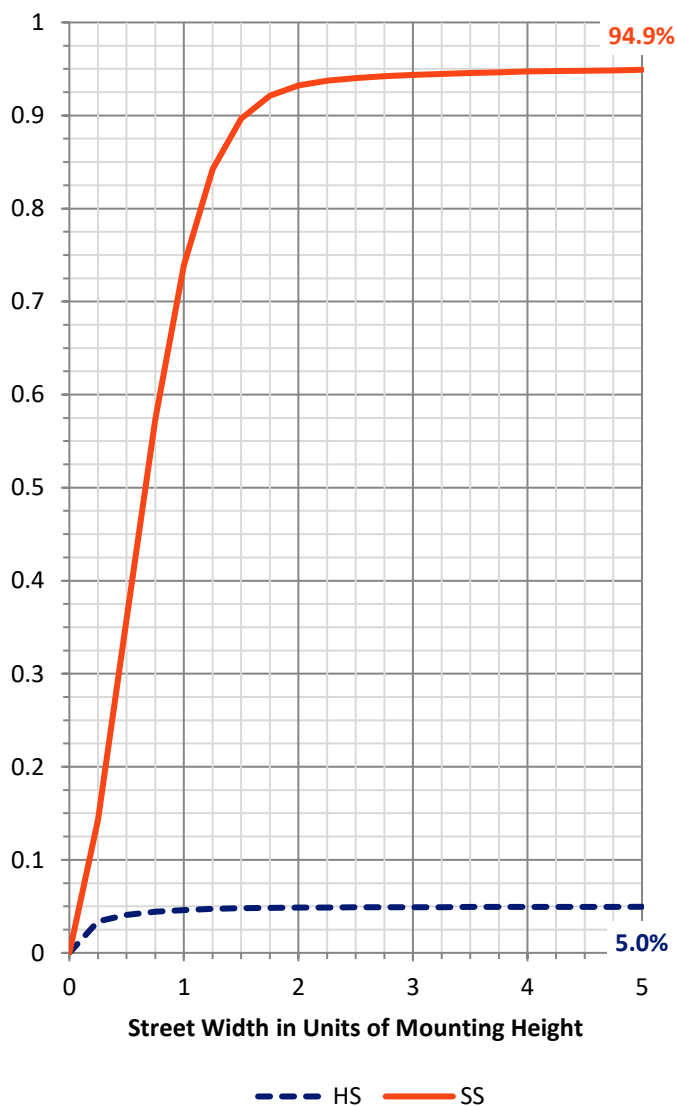
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	244.4	0.0	244.4
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	4655.6	0.0	4655.6
	% Fixture	95.0	0.0	95.0
Total	Lumens	4900.0	0.0	4900.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.9	0.9
10°-20°	188.4	3.8
20°-30°	404.4	8.3
30°-40°	709.2	14.5
40°-50°	1099.5	22.4
50°-60°	1267.5	25.9
60°-70°	890.4	18.2
70°-80°	277.4	5.7
80°-90°	18.3	0.4
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°	4900.0	100.0
0°-180°	4900.0	100.0

Coefficient of Utilization



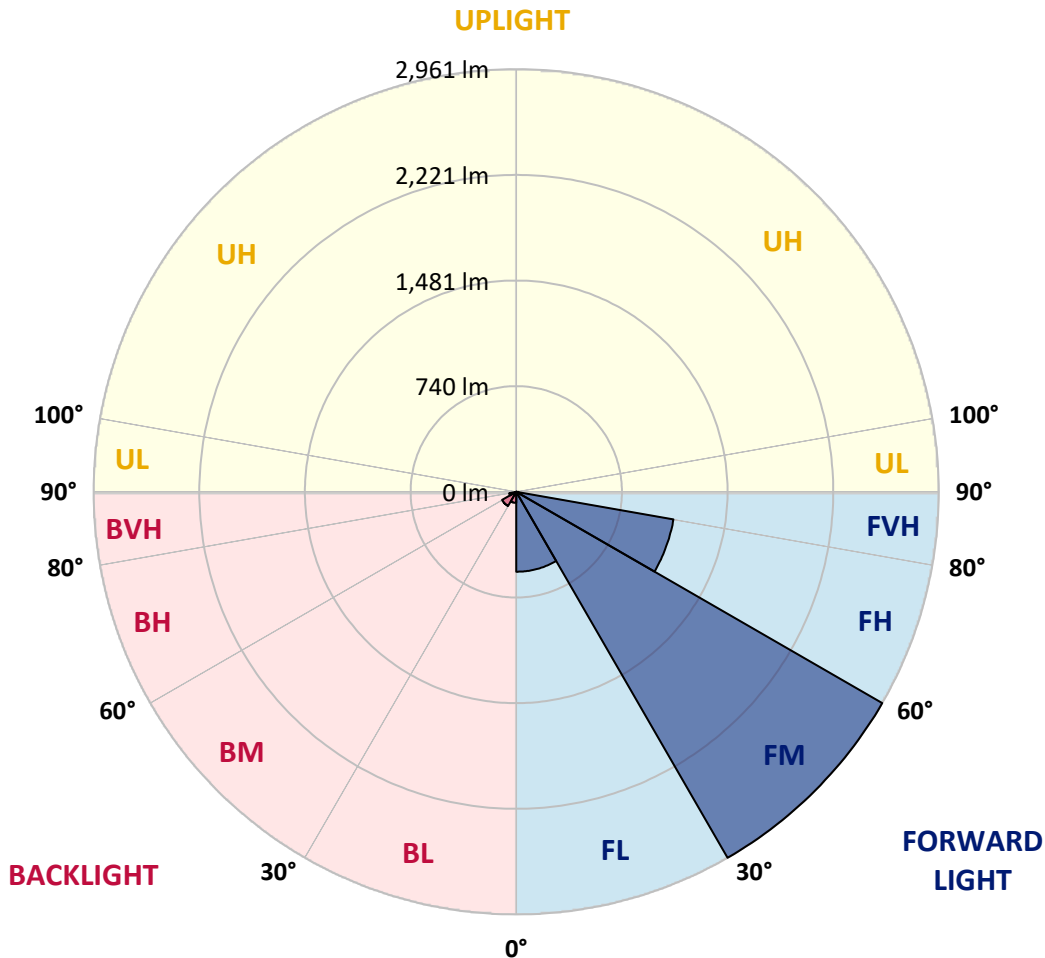
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	560.1	11.4			
FM (30°-60°)	2961.3	60.4			
FH (60°-80°)	1118.4	22.8			G1/1800
FVH (80°-90°)	15.8	0.3			G1/100
BL (0°-30°)	77.6	1.6	B0/110		
BM (30°-60°)	114.8	2.3	B0/220		
BH (60°-80°)	49.5	1.0	B0/110		G0/110
BVH (80°-90°)	2.5	0.1			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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	358.7	358.7	358.7	358.7	358.7	358.7	358.7	358.7	358.7	358.7	358.7
2.5°	498.4	489.8	479.4	470.8	453.5	441.5	426.0	408.7	389.7	388.0	372.5
5°	698.4	672.6	672.6	650.1	624.3	577.7	534.6	481.1	441.5	438.0	396.6
7.5°	903.6	882.9	870.9	836.4	795.0	743.3	674.3	584.6	512.2	500.1	432.8
10°	1095.1	1079.5	1057.1	1029.5	993.3	908.8	822.6	705.3	589.8	581.2	476.0
12.5°	1243.4	1224.4	1214.0	1202.0	1155.4	1088.2	976.1	827.8	689.8	670.8	519.1
15°	1355.5	1346.8	1336.5	1336.5	1312.3	1246.8	1131.3	958.8	786.4	764.0	574.3
17.5°	1445.1	1434.8	1433.1	1443.4	1436.5	1389.9	1281.3	1084.7	886.4	869.1	631.2
20°	1545.1	1531.4	1531.4	1540.0	1538.2	1512.4	1417.5	1229.6	1003.7	972.6	696.7
22.5°	1686.6	1677.9	1671.0	1657.2	1646.9	1622.8	1540.0	1371.0	1115.7	1086.4	764.0
25°	1876.3	1865.9	1834.9	1810.7	1765.9	1729.7	1659.0	1496.9	1229.6	1196.8	829.5
27.5°	2060.8	2040.1	2010.8	1979.7	1929.7	1867.6	1779.7	1615.9	1348.6	1314.1	896.7
30°	2255.6	2240.1	2203.9	2153.9	2091.8	2022.8	1917.6	1759.0	1484.8	1446.9	969.2
32.5°	2410.8	2386.7	2353.9	2305.7	2241.8	2193.6	2079.7	1915.9	1641.7	1591.7	1045.0
35°	2535.0	2516.0	2472.9	2426.4	2378.1	2364.3	2240.1	2043.5	1767.6	1721.0	1126.1
37.5°	2614.3	2595.4	2559.2	2512.6	2493.6	2517.8	2436.7	2217.7	1936.6	1878.0	1219.2
40°	2676.4	2654.0	2624.7	2604.0	2597.1	2664.3	2655.7	2443.6	2159.1	2124.6	1346.8
42.5°	2721.3	2698.8	2679.9	2678.1	2723.0	2854.0	2950.6	2759.2	2469.5	2398.8	1510.7
45°	2664.3	2645.4	2655.7	2716.1	2824.7	3031.7	3307.6	3205.8	2843.7	2793.7	1772.8
47.5°	2505.7	2493.6	2540.2	2650.5	2852.3	3140.3	3652.5	3695.6	3378.3	3302.4	2112.5
50°	2257.4	2255.6	2329.8	2479.8	2766.1	3181.7	3826.7	4166.4	3926.7	3849.1	2388.4
52.5°	1921.1	1914.2	2022.8	2231.5	2562.6	3104.1	3859.4	4354.4	4244.0	4152.6	2562.6
55°	1540.0	1524.5	1653.8	1883.1	2262.5	2878.2	3771.5	4395.7	4395.7	4313.0	2691.9
57.5°	1083.0	1107.1	1214.0	1490.0	1891.8	2540.2	3554.2	4357.8	4549.2	4478.5	2866.1
60°	682.9	693.2	810.5	1033.0	1434.8	2088.4	3166.2	4194.0	4671.7	4630.3	3005.8
62.5°	393.2	426.0	484.6	653.6	989.9	1569.3	2686.8	3899.1	4718.2	4701.0	3097.2
65°	239.7	243.2	270.7	369.0	608.7	1070.9	2150.4	3488.7	4613.0	4628.5	3079.9
67.5°	179.3	179.3	188.0	232.8	346.6	681.2	1586.5	2990.3	4276.7	4326.8	2917.8
70°	155.2	155.2	156.9	170.7	213.8	403.5	1048.5	2410.8	3666.3	3661.1	2410.8
72.5°	122.4	127.6	138.0	144.9	162.1	236.3	613.9	1684.8	2547.1	2607.4	1552.0
75°	98.3	100.0	113.8	125.9	136.2	160.4	289.7	936.4	1336.5	1336.5	682.9
77.5°	75.9	79.3	87.9	100.0	113.8	113.8	120.7	362.1	517.3	500.1	201.8
80°	48.3	50.0	63.8	79.3	94.8	81.1	65.5	120.7	141.4	136.2	55.2
82.5°	29.3	31.0	41.4	63.8	63.8	44.8	41.4	50.0	44.8	41.4	22.4
85°	8.6	10.3	29.3	41.4	36.2	17.2	20.7	22.4	20.7	19.0	12.1
87.5°	1.7	1.7	8.6	10.3	8.6	8.6	6.9	8.6	8.6	8.6	5.2
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°	358.7	358.7	358.7	358.7	358.7	358.7	358.7	358.7	358.7	358.7	358.7
2.5°	363.9	357.0	343.2	332.8	324.2	315.6	308.7	307.0	303.5	303.5	301.8
5°	379.4	363.9	338.0	320.8	307.0	294.9	284.5	274.2	270.7	267.3	269.0
7.5°	403.5	379.4	343.2	317.3	293.2	265.6	243.2	224.2	210.4	206.9	201.8
10°	434.6	398.4	351.8	310.4	265.6	217.3	186.2	167.3	160.4	151.8	153.5
12.5°	465.6	420.8	358.7	291.4	219.0	170.7	144.9	132.8	127.6	125.9	127.6
15°	501.8	444.9	355.2	256.9	175.9	138.0	122.4	117.3	113.8	113.8	112.1
17.5°	538.0	465.6	343.2	212.1	141.4	117.3	110.4	105.2	101.7	100.0	100.0
20°	577.7	484.6	315.6	169.0	117.3	106.9	100.0	93.1	89.7	89.7	89.7
22.5°	619.1	498.4	279.4	134.5	105.2	94.8	87.9	82.8	79.3	79.3	79.3
25°	655.3	505.3	236.3	112.1	96.6	86.2	79.3	74.2	72.4	70.7	70.7
27.5°	689.8	503.6	191.4	98.3	86.2	77.6	70.7	67.3	63.8	63.8	63.8
30°	724.3	493.2	151.8	89.7	79.3	69.0	63.8	60.4	58.6	56.9	56.9
32.5°	753.6	476.0	119.0	82.8	72.4	62.1	56.9	53.5	53.5	51.7	51.7
35°	782.9	450.1	100.0	77.6	65.5	56.9	51.7	50.0	48.3	48.3	48.3
37.5°	814.0	417.3	87.9	70.7	58.6	51.7	48.3	46.6	44.8	43.1	43.1
40°	851.9	384.6	82.8	65.5	53.5	46.6	43.1	41.4	39.7	39.7	39.7
42.5°	912.3	357.0	77.6	58.6	48.3	43.1	39.7	36.2	36.2	34.5	34.5
45°	1026.1	346.6	72.4	53.5	44.8	37.9	36.2	32.8	31.0	31.0	31.0
47.5°	1174.4	348.3	67.3	48.3	41.4	34.5	32.8	31.0	27.6	27.6	27.6
50°	1296.8	339.7	62.1	44.8	36.2	32.8	29.3	27.6	25.9	25.9	25.9
52.5°	1345.1	324.2	56.9	41.4	34.5	29.3	27.6	25.9	24.1	24.1	24.1
55°	1393.4	317.3	51.7	36.2	31.0	29.3	25.9	24.1	22.4	20.7	20.7
57.5°	1481.3	320.8	46.6	34.5	29.3	27.6	24.1	20.7	17.2	15.5	15.5
60°	1527.9	308.7	43.1	31.0	27.6	25.9	20.7	15.5	12.1	10.3	10.3
62.5°	1488.2	274.2	39.7	29.3	25.9	22.4	15.5	12.1	8.6	5.2	5.2
65°	1377.9	225.9	36.2	27.6	22.4	17.2	13.8	8.6	5.2	3.4	3.4
67.5°	1238.2	177.6	32.8	25.9	20.7	15.5	12.1	6.9	3.4	1.7	1.7
70°	1000.2	127.6	31.0	24.1	19.0	13.8	10.3	6.9	3.4	1.7	1.7
72.5°	645.0	82.8	27.6	22.4	17.2	13.8	8.6	5.2	3.4	1.7	1.7
75°	298.3	55.2	25.9	20.7	17.2	12.1	8.6	6.9	3.4	1.7	1.7
77.5°	87.9	39.7	24.1	19.0	15.5	12.1	8.6	6.9	3.4	1.7	1.7
80°	36.2	27.6	19.0	17.2	15.5	12.1	8.6	6.9	3.4	1.7	1.7
82.5°	17.2	12.1	8.6	6.9	8.6	8.6	6.9	6.9	3.4	1.7	1.7
85°	8.6	5.2	3.4	3.4	3.4	1.7	1.7	3.4	3.4	1.7	1.7
87.5°	5.2	3.4	3.4	3.4	1.7	1.7	1.7	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)