

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: P397977

Luminaire Tested: **ARCH-S-PA1-70-730-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397977
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-70-730-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7107 lumens
Efficiency: N/A
Efficacy: 96.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B0 - U0 - G2

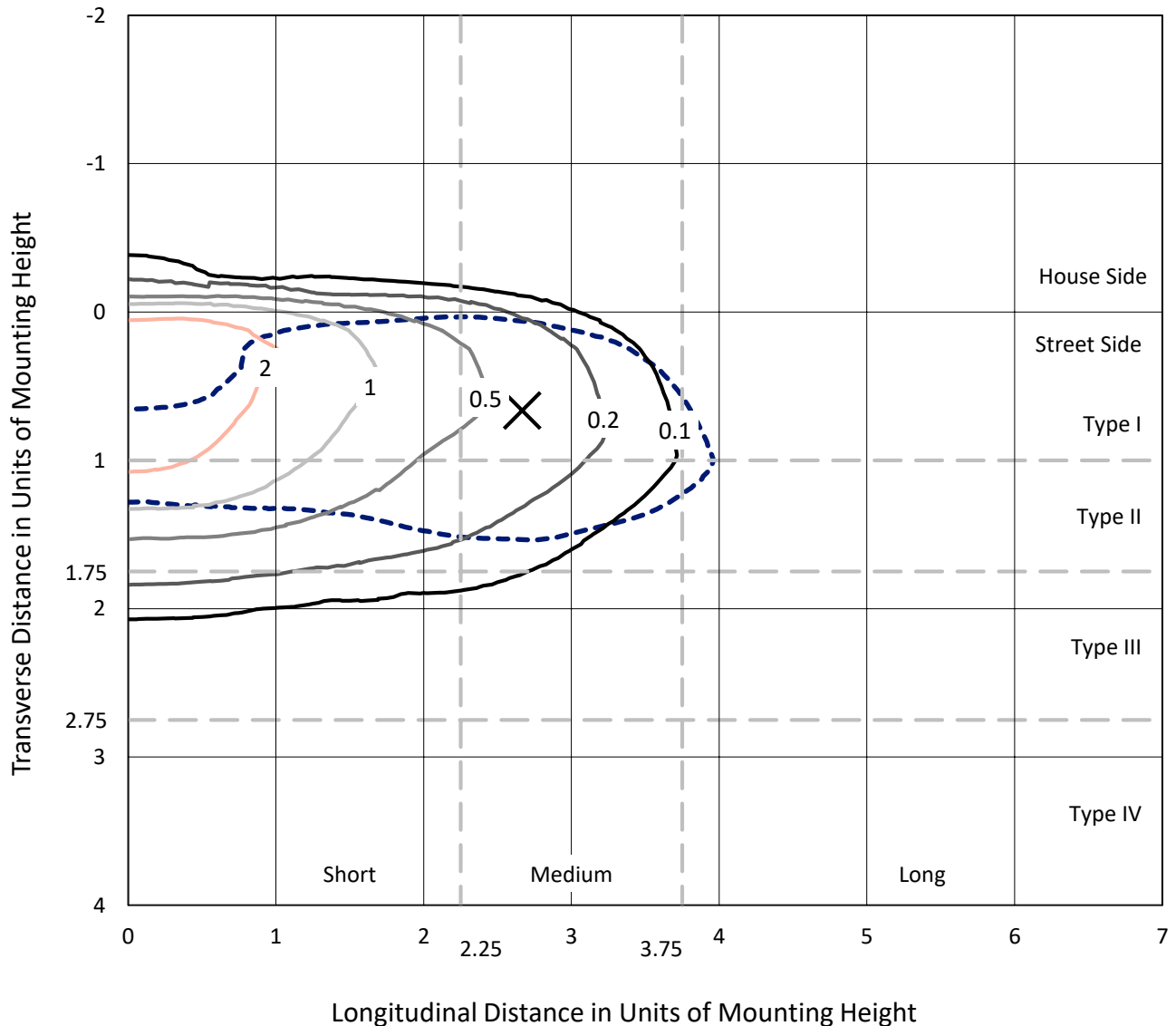
Input Watts (W): 74
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

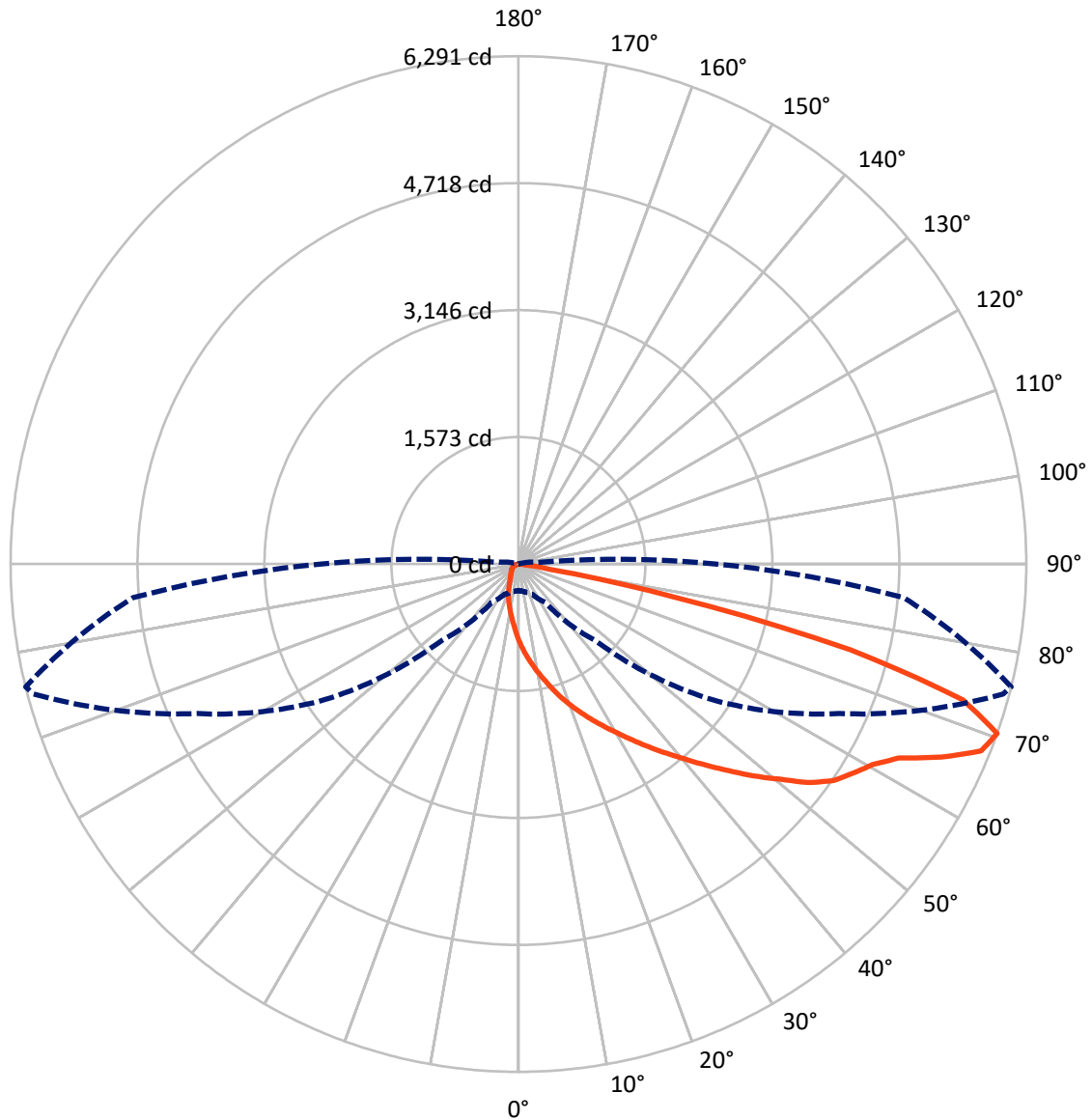
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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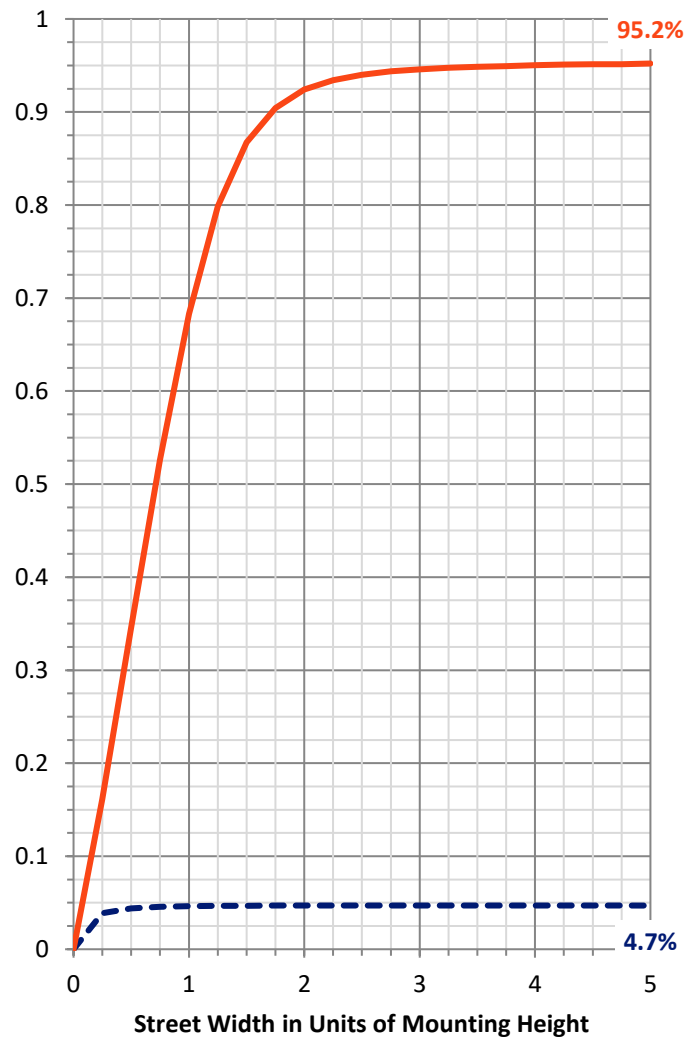
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	335.2	0.0	335.2
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	6771.8	0.0	6771.8
	% Fixture	95.3	0.0	95.3
Total	Lumens	7107.0	0.0	7107.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.6	1.3
10°-20°	289.3	4.1
20°-30°	538.7	7.6
30°-40°	952.8	13.4
40°-50°	1457.1	20.5
50°-60°	1652.0	23.2
60°-70°	1416.2	19.9
70°-80°	685.9	9.7
80°-90°	25.4	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°	7107.0	100.0
0°-180°	7107.0	100.0



--- HS — SS

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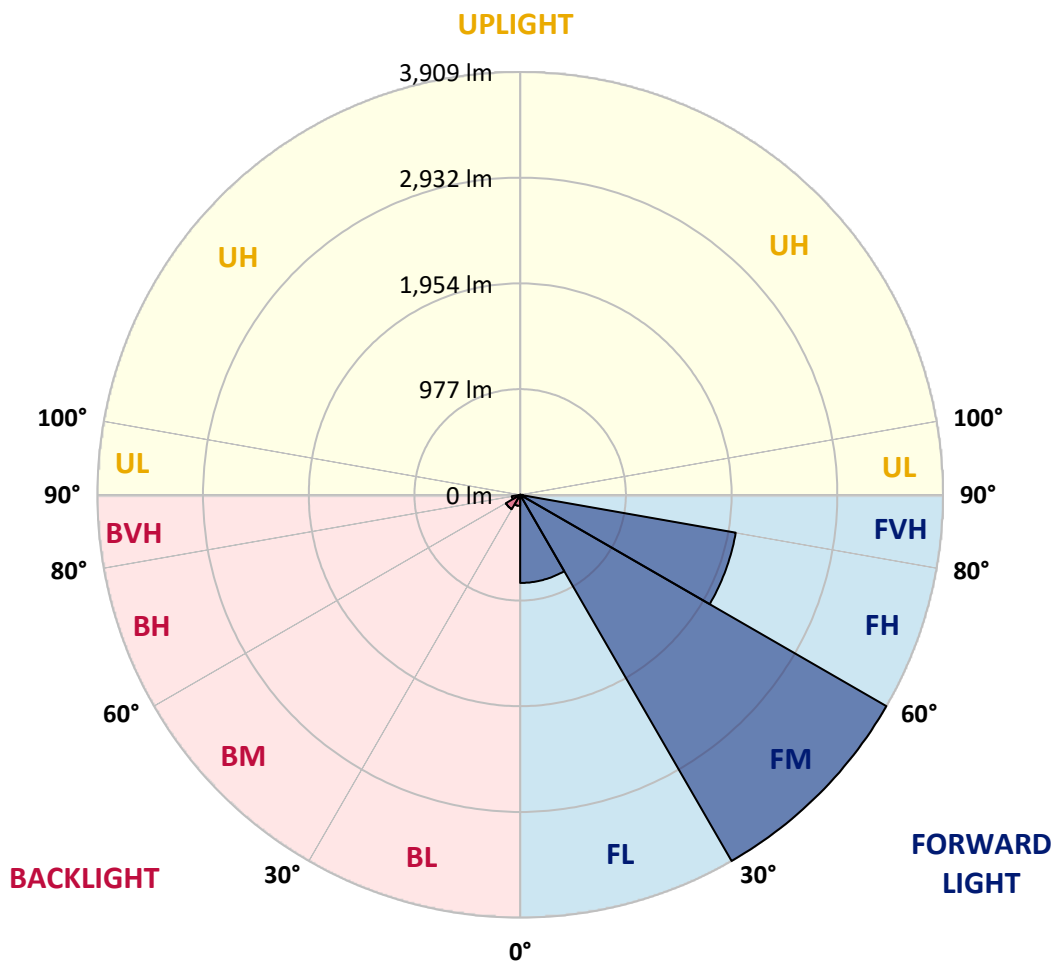
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	814.7	11.5			
FM (30°-60°)	3908.9	55.0			
FH (60°-80°)	2023.2	28.5			G2/5000
FVH (80°-90°)	25.0	0.4			G1/100
BL (0°-30°)	102.8	1.4	B0/110		
BM (30°-60°)	153.0	2.2	B0/220		
BH (60°-80°)	78.9	1.1	B0/110		G0/110
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: B0-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	951.3	951.3	951.3	951.3	951.3	951.3	951.3	951.3	951.3	951.3	951.3
2.5°	1300.4	1293.3	1286.2	1259.0	1234.1	1211.6	1169.0	1113.4	1063.7	1053.1	995.1
5°	1527.6	1519.3	1508.6	1481.4	1449.5	1411.6	1348.9	1263.7	1176.1	1157.2	1049.5
7.5°	1681.4	1674.3	1658.9	1645.9	1613.9	1577.2	1507.4	1408.0	1287.4	1263.7	1112.2
10°	1786.7	1781.9	1779.6	1768.9	1745.3	1715.7	1645.9	1541.7	1399.8	1372.5	1178.5
12.5°	1824.5	1824.5	1836.4	1854.1	1857.7	1848.2	1784.3	1680.2	1518.1	1489.7	1256.6
15°	1773.7	1779.6	1805.6	1862.4	1921.6	1960.6	1920.4	1823.4	1648.2	1617.5	1348.9
17.5°	1759.5	1765.4	1783.1	1832.8	1912.1	2016.2	2036.3	1961.8	1771.3	1745.3	1443.5
20°	1799.7	1805.6	1821.0	1863.6	1923.9	2029.2	2113.3	2095.5	1901.5	1874.2	1539.4
22.5°	1895.5	1899.1	1899.1	1932.2	1985.5	2063.6	2161.8	2222.1	2035.2	2005.6	1634.0
25°	2101.4	2094.3	2065.9	2049.4	2083.7	2147.6	2223.3	2333.3	2184.2	2144.0	1735.8
27.5°	2371.2	2394.9	2326.2	2247.0	2220.9	2257.6	2309.7	2431.5	2328.6	2286.0	1828.1
30°	2736.8	2727.3	2637.4	2523.8	2411.4	2398.4	2416.2	2515.5	2473.0	2432.7	1931.0
32.5°	3037.4	3055.1	2960.4	2822.0	2654.0	2574.7	2555.8	2616.1	2626.8	2600.7	2052.9
35°	3346.2	3365.1	3272.8	3119.0	2919.0	2786.5	2732.1	2740.4	2817.3	2784.1	2180.7
37.5°	3623.1	3639.6	3548.5	3391.1	3191.2	3029.1	2951.0	2887.1	3001.9	2972.3	2315.6
40°	3833.7	3836.0	3774.5	3633.7	3444.4	3276.4	3187.6	3062.2	3197.1	3177.0	2456.4
42.5°	3982.8	3987.5	3942.5	3821.8	3646.7	3490.5	3418.4	3269.3	3421.9	3404.2	2619.7
45°	4052.6	4060.8	4056.1	3944.9	3799.4	3664.5	3640.8	3489.3	3668.0	3651.5	2807.8
47.5°	3986.3	3986.3	4046.6	4031.3	3897.6	3807.6	3834.9	3718.9	3935.4	3920.0	2999.5
50°	3710.6	3714.2	3837.2	4013.5	3935.4	3915.3	4000.5	3943.7	4178.0	4187.5	3229.0
52.5°	2986.5	2980.6	3395.9	3734.3	3909.4	3963.8	4153.1	4173.3	4469.1	4497.5	3457.4
55°	2231.6	2228.0	2625.6	3239.7	3727.2	3939.0	4238.3	4378.0	4717.5	4735.3	3627.8
57.5°	1766.6	1757.1	1976.0	2611.4	3315.4	3827.8	4241.9	4417.0	4856.0	4886.7	3793.4
60°	1358.3	1350.1	1513.4	1942.9	2732.1	3531.9	4140.1	4419.4	4989.7	5044.1	4015.9
62.5°	971.4	980.9	1106.3	1393.8	2101.4	3114.3	4007.6	4452.5	5227.5	5289.0	4331.8
65°	655.5	650.8	754.9	949.0	1494.4	2552.2	3804.1	4522.3	5655.8	5763.5	4710.4
67.5°	455.5	459.1	506.4	617.6	949.0	1959.4	3465.7	4561.4	6098.4	6182.4	4975.5
70°	328.9	333.7	359.7	415.3	579.8	1328.8	2929.7	4382.7	6217.9	6291.2	4790.9
72.5°	216.5	226.0	265.0	294.6	370.4	831.8	2158.2	3775.7	5703.2	5757.6	4019.4
75°	117.1	119.5	170.4	220.1	263.9	518.3	1287.4	2546.3	4266.7	4249.0	2650.4
77.5°	91.1	94.7	105.3	157.4	177.5	285.2	508.8	1150.1	2021.0	1966.5	904.0
80°	55.6	58.0	73.4	93.5	124.2	165.7	149.1	312.4	410.6	384.6	132.5
82.5°	33.1	35.5	43.8	78.1	98.2	78.1	52.1	75.7	76.9	75.7	33.1
85°	5.9	5.9	30.8	54.4	52.1	22.5	30.8	24.8	22.5	23.7	7.1
87.5°	0.0	0.0	11.8	16.6	23.7	8.3	11.8	5.9	5.9	5.9	3.5
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°	951.3	951.3	951.3	951.3	951.3	951.3	951.3	951.3	951.3	951.3	951.3
2.5°	959.6	919.4	836.5	764.4	692.2	638.9	598.7	557.3	543.1	525.4	515.9
5°	976.2	896.9	732.4	601.1	489.9	404.7	350.2	317.1	295.8	280.4	276.9
7.5°	1001.0	879.1	648.4	470.9	349.1	263.9	218.9	196.4	184.6	177.5	175.1
10°	1030.6	863.8	565.6	366.8	246.1	185.8	160.9	151.5	146.7	144.4	143.2
12.5°	1072.0	857.8	495.8	282.8	185.8	152.6	139.6	133.7	130.2	126.6	125.4
15°	1126.4	860.2	431.9	218.9	153.8	136.1	125.4	119.5	114.8	111.2	111.2
17.5°	1183.2	863.8	369.2	177.5	139.6	124.2	112.4	104.1	100.6	97.0	95.8
20°	1236.5	862.6	308.8	151.5	126.6	111.2	99.4	91.1	85.2	81.6	81.6
22.5°	1287.4	855.5	252.0	136.1	116.0	98.2	85.2	76.9	72.2	68.6	68.6
25°	1341.8	841.3	205.9	124.2	102.9	86.4	73.4	65.1	61.5	58.0	58.0
27.5°	1384.4	817.6	168.0	113.6	91.1	74.5	62.7	55.6	52.1	49.7	49.7
30°	1430.5	783.3	139.6	101.8	79.3	63.9	53.2	47.3	43.8	42.6	42.6
32.5°	1481.4	745.4	119.5	89.9	67.4	54.4	45.0	41.4	37.9	36.7	36.7
35°	1540.6	712.3	107.7	78.1	59.2	46.1	39.0	35.5	33.1	33.1	33.1
37.5°	1608.0	678.0	97.0	68.6	50.9	39.0	33.1	31.9	30.8	29.6	29.6
40°	1681.4	641.3	87.6	60.3	43.8	33.1	28.4	28.4	27.2	27.2	27.2
42.5°	1764.2	609.4	79.3	53.2	37.9	28.4	24.8	24.8	23.7	23.7	23.7
45°	1854.1	579.8	72.2	47.3	33.1	24.8	22.5	21.3	20.1	20.1	20.1
47.5°	1960.6	563.2	66.3	41.4	28.4	21.3	18.9	17.7	16.6	15.4	15.4
50°	2096.7	570.3	60.3	34.3	24.8	17.7	15.4	14.2	13.0	11.8	11.8
52.5°	2204.4	566.8	52.1	29.6	20.1	14.2	11.8	10.6	9.5	8.3	8.3
55°	2282.5	552.6	45.0	24.8	15.4	11.8	9.5	7.1	5.9	5.9	5.9
57.5°	2359.4	538.4	37.9	20.1	11.8	8.3	5.9	4.7	4.7	4.7	4.7
60°	2478.9	518.3	33.1	16.6	9.5	5.9	3.5	3.5	2.4	2.4	2.4
62.5°	2624.4	493.4	27.2	14.2	7.1	4.7	2.4	2.4	0.0	0.0	0.0
65°	2784.1	449.6	22.5	10.6	5.9	3.5	2.4	0.0	0.0	0.0	0.0
67.5°	2747.5	360.9	18.9	7.1	4.7	2.4	1.2	0.0	0.0	0.0	0.0
70°	2430.4	243.7	15.4	5.9	3.5	2.4	1.2	0.0	0.0	0.0	0.0
72.5°	1903.8	144.4	10.6	4.7	2.4	1.2	0.0	0.0	0.0	0.0	0.0
75°	1218.7	72.2	7.1	3.5	2.4	1.2	0.0	0.0	0.0	0.0	0.0
77.5°	408.2	35.5	4.7	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	58.0	11.8	2.4	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	13.0	4.7	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.7	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.4	1.2	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)