

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: P397788

Luminaire Tested: **ARCH-S-PA1-40-760-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397788  
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-PA1-40-760-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5700K, 500mA 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: 4728 lumens  
Efficiency: N/A  
Efficacy: 118.2 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 - G1

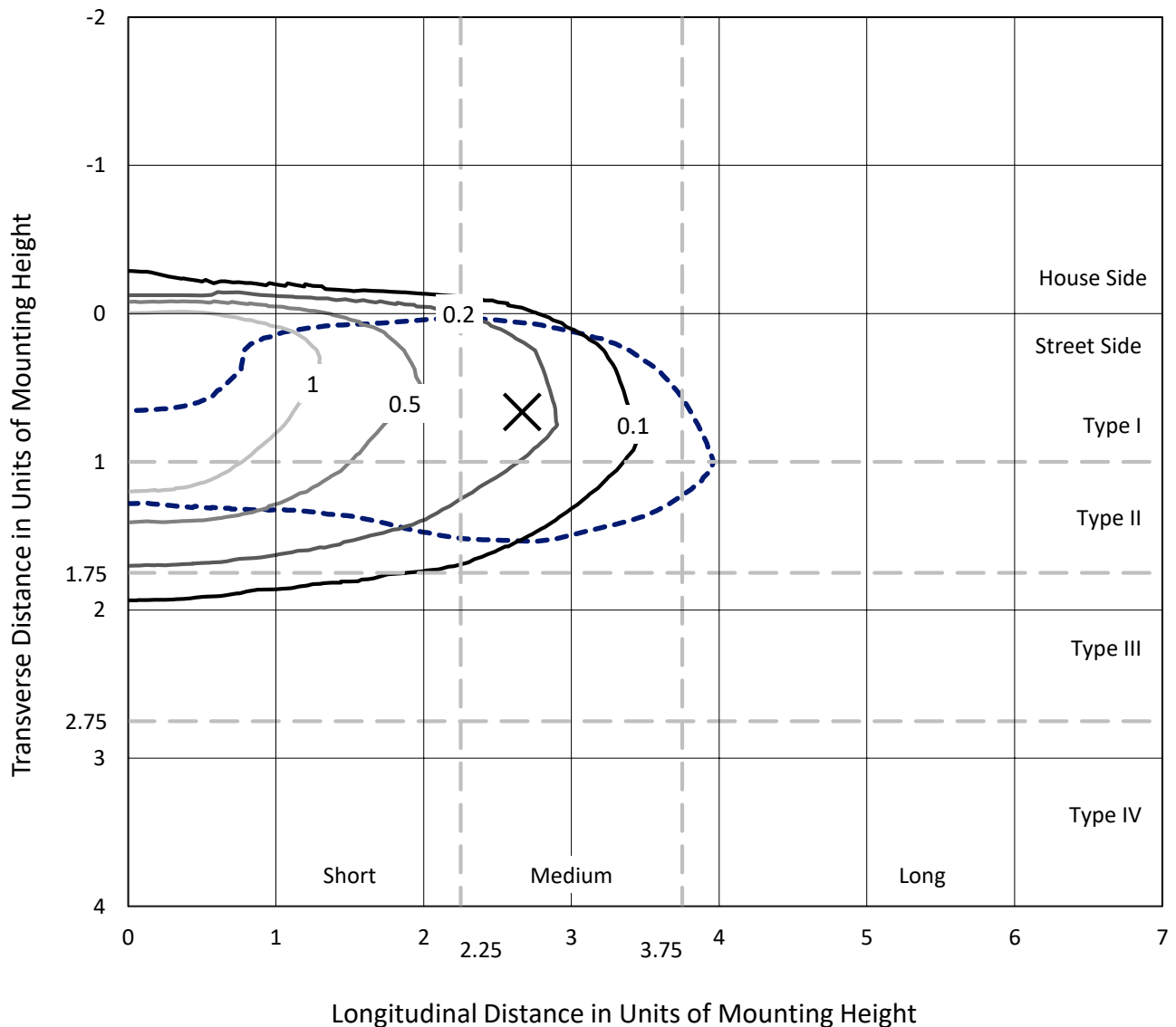
Input Watts (W): 40  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

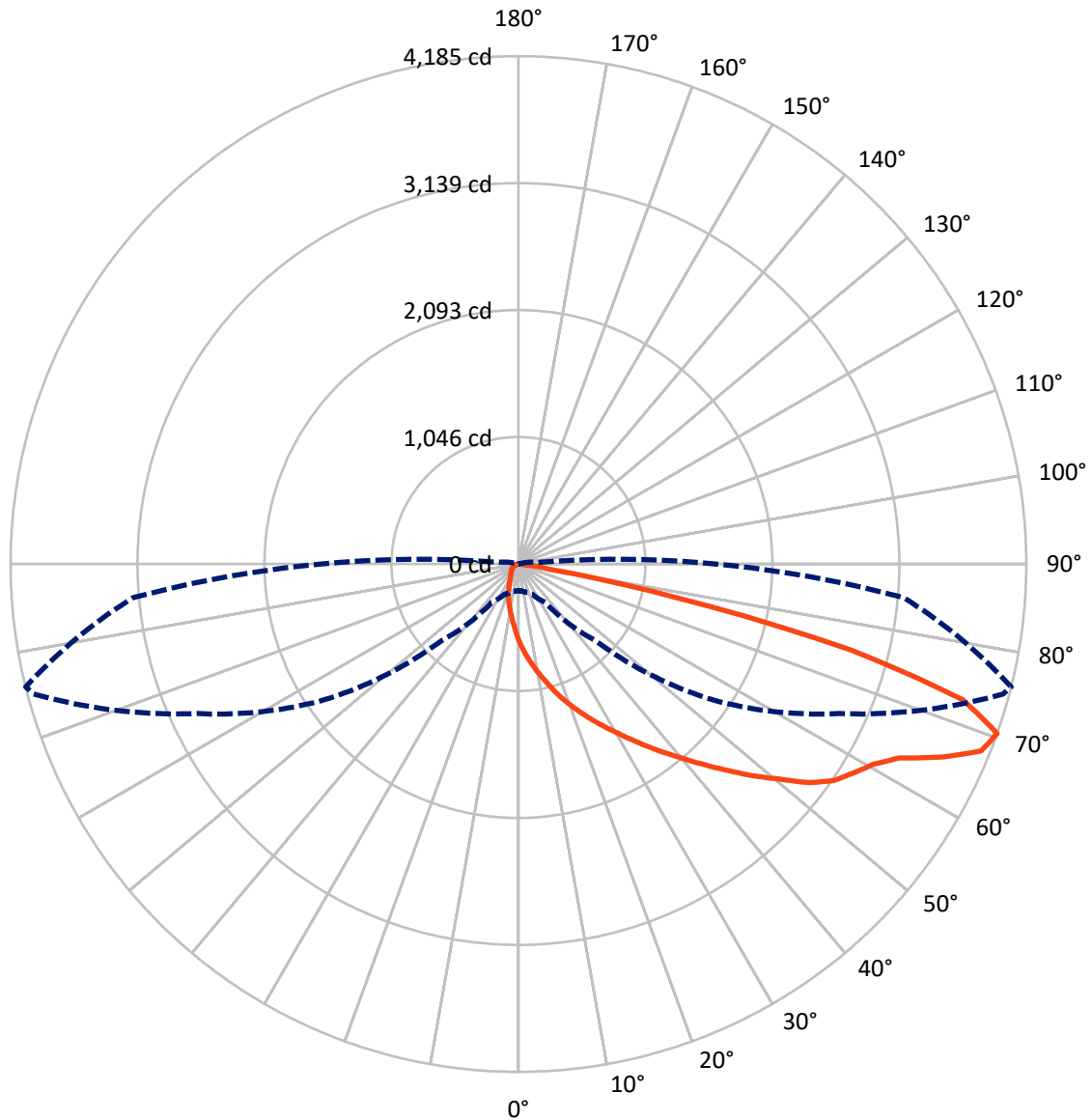
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 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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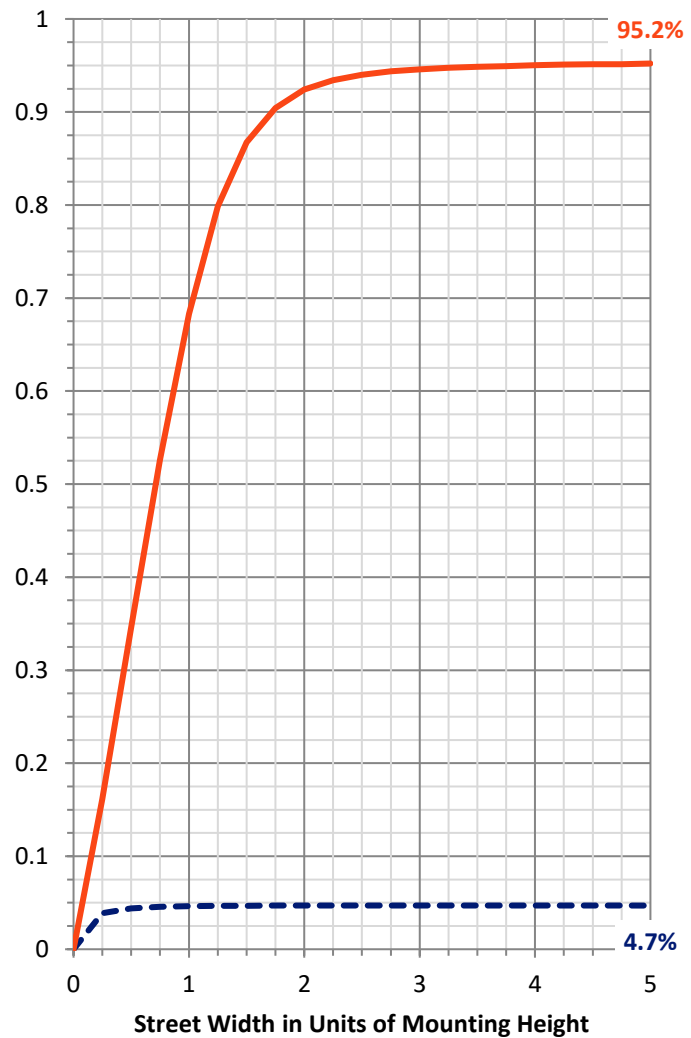
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	223.0	0.0	223.0
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	4505.0	0.0	4505.0
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	4728.0	0.0	4728.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.6	1.3
10°-20°	192.4	4.1
20°-30°	358.4	7.6
30°-40°	633.9	13.4
40°-50°	969.3	20.5
50°-60°	1099.0	23.2
60°-70°	942.1	19.9
70°-80°	456.3	9.7
80°-90°	16.9	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°	4728.0	100.0
0°-180°	4728.0	100.0



--- HS    — SS

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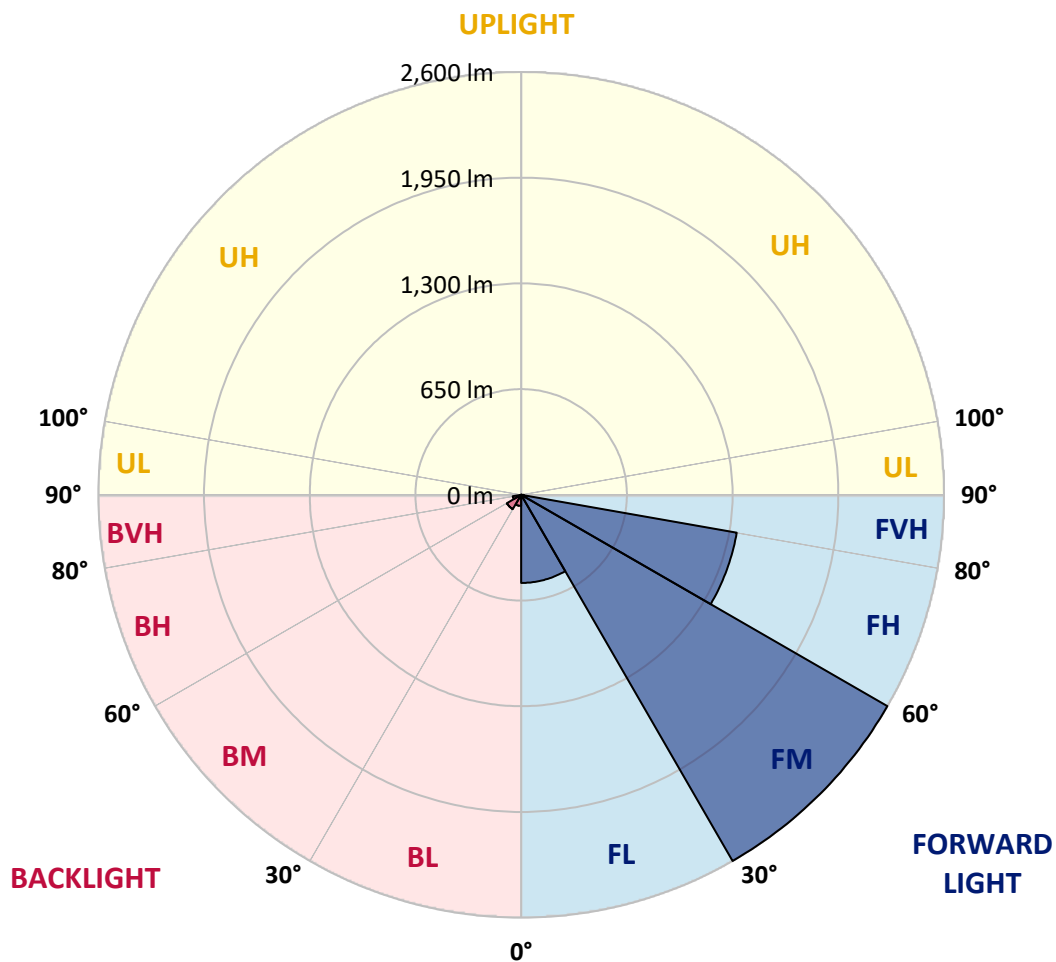
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	542.0	11.5			
FM	(30°-60°)	2600.4	55.0			
FH	(60°-80°)	1345.9	28.5			G1/1800
FVH	(80°-90°)	16.6	0.4			G1/100
BL	(0°-30°)	68.4	1.4	B0/110		
BM	(30°-60°)	101.8	2.2	B0/220		
BH	(60°-80°)	52.5	1.1	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: B0-U0-G1**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	632.9	632.9	632.9	632.9	632.9	632.9	632.9	632.9	632.9	632.9	632.9
2.5°	865.1	860.4	855.6	837.5	821.0	806.0	777.7	740.7	707.7	700.6	662.0
5°	1016.2	1010.7	1003.6	985.5	964.3	939.1	897.4	840.7	782.4	769.8	698.2
7.5°	1118.5	1113.8	1103.6	1094.9	1073.7	1049.3	1002.8	936.7	856.4	840.7	739.9
10°	1188.6	1185.5	1183.9	1176.8	1161.1	1141.4	1094.9	1025.7	931.2	913.1	784.0
12.5°	1213.8	1213.8	1221.7	1233.5	1235.8	1229.5	1187.0	1117.8	1009.9	991.0	836.0
15°	1179.9	1183.9	1201.2	1239.0	1278.3	1304.3	1277.6	1213.0	1096.5	1076.0	897.4
17.5°	1170.5	1174.4	1186.2	1219.3	1272.0	1341.3	1354.7	1305.1	1178.4	1161.1	960.3
20°	1197.3	1201.2	1211.4	1239.8	1279.9	1350.0	1405.9	1394.1	1265.0	1246.9	1024.1
22.5°	1261.0	1263.4	1263.4	1285.4	1320.8	1372.8	1438.1	1478.3	1353.9	1334.2	1087.1
25°	1398.0	1393.3	1374.4	1363.4	1386.2	1428.7	1479.1	1552.3	1453.1	1426.3	1154.8
27.5°	1577.5	1593.2	1547.5	1494.8	1477.5	1501.9	1536.5	1617.6	1549.1	1520.8	1216.2
30°	1820.7	1814.4	1754.6	1679.0	1604.2	1595.6	1607.4	1673.5	1645.2	1618.4	1284.6
32.5°	2020.6	2032.4	1969.5	1877.4	1765.6	1712.9	1700.3	1740.4	1747.5	1730.2	1365.7
35°	2226.1	2238.7	2177.3	2074.9	1941.9	1853.8	1817.5	1823.1	1874.2	1852.2	1450.7
37.5°	2410.3	2421.3	2360.7	2256.0	2123.0	2015.1	1963.2	1920.7	1997.0	1977.3	1540.5
40°	2550.4	2552.0	2511.0	2417.4	2291.4	2179.6	2120.6	2037.2	2126.9	2113.5	1634.1
42.5°	2649.6	2652.7	2622.8	2542.5	2426.0	2322.1	2274.1	2174.9	2276.5	2264.6	1742.8
45°	2696.0	2701.5	2698.4	2624.4	2527.6	2437.8	2422.1	2321.3	2440.2	2429.2	1867.9
47.5°	2651.9	2651.9	2692.1	2681.8	2592.9	2533.1	2551.2	2474.0	2618.1	2607.8	1995.4
50°	2468.5	2470.9	2552.7	2670.0	2618.1	2604.7	2661.4	2623.6	2779.4	2785.7	2148.1
52.5°	1986.8	1982.8	2259.1	2484.3	2600.8	2637.0	2762.9	2776.3	2973.1	2992.0	2300.1
55°	1484.6	1482.2	1746.7	2155.2	2479.5	2620.4	2819.6	2912.5	3138.4	3150.2	2413.4
57.5°	1175.2	1168.9	1314.5	1737.3	2205.6	2546.4	2822.0	2938.5	3230.5	3251.0	2523.6
60°	903.7	898.1	1006.8	1292.5	1817.5	2349.7	2754.3	2940.0	3319.4	3355.6	2671.6
62.5°	646.3	652.6	736.0	927.3	1398.0	2071.8	2666.1	2962.1	3477.7	3518.6	2881.8
65°	436.1	432.9	502.2	631.3	994.2	1697.9	2530.7	3008.5	3762.6	3834.2	3133.7
67.5°	303.1	305.4	336.9	410.9	631.3	1303.5	2305.6	3034.5	4057.0	4112.9	3310.0
70°	218.8	222.0	239.3	276.3	385.7	884.0	1949.0	2915.6	4136.5	4185.3	3187.2
72.5°	144.0	150.3	176.3	196.0	246.4	553.4	1435.8	2511.8	3794.1	3830.3	2674.0
75°	77.9	79.5	113.4	146.4	175.5	344.8	856.4	1694.0	2838.5	2826.7	1763.2
77.5°	60.6	63.0	70.1	104.7	118.1	189.7	338.5	765.1	1344.5	1308.3	601.4
80°	37.0	38.6	48.8	62.2	82.7	110.2	99.2	207.8	273.1	255.8	88.2
82.5°	22.0	23.6	29.1	52.0	65.3	52.0	34.6	50.4	51.2	50.4	22.0
85°	3.9	3.9	20.5	36.2	34.6	15.0	20.5	16.5	15.0	15.7	4.7
87.5°	0.0	0.0	7.9	11.0	15.7	5.5	7.9	3.9	3.9	3.9	2.4
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°	632.9	632.9	632.9	632.9	632.9	632.9	632.9	632.9	632.9	632.9	632.9
2.5°	638.4	611.6	556.5	508.5	460.5	425.1	398.3	370.8	361.3	349.5	343.2
5°	649.4	596.7	487.2	399.9	325.9	269.2	233.0	211.0	196.8	186.6	184.2
7.5°	665.9	584.9	431.4	313.3	232.2	175.5	145.6	130.7	122.8	118.1	116.5
10°	685.6	574.6	376.3	244.0	163.7	123.6	107.1	100.8	97.6	96.0	95.2
12.5°	713.2	570.7	329.8	188.1	123.6	101.5	92.9	88.9	86.6	84.2	83.4
15°	749.4	572.3	287.3	145.6	102.3	90.5	83.4	79.5	76.4	74.0	74.0
17.5°	787.2	574.6	245.6	118.1	92.9	82.7	74.8	69.3	66.9	64.5	63.8
20°	822.6	573.8	205.4	100.8	84.2	74.0	66.1	60.6	56.7	54.3	54.3
22.5°	856.4	569.1	167.7	90.5	77.1	65.3	56.7	51.2	48.0	45.7	45.7
25°	892.6	559.7	137.0	82.7	68.5	57.5	48.8	43.3	40.9	38.6	38.6
27.5°	921.0	543.9	111.8	75.6	60.6	49.6	41.7	37.0	34.6	33.1	33.1
30°	951.7	521.1	92.9	67.7	52.7	42.5	35.4	31.5	29.1	28.3	28.3
32.5°	985.5	495.9	79.5	59.8	44.9	36.2	29.9	27.6	25.2	24.4	24.4
35°	1024.9	473.9	71.6	52.0	39.4	30.7	26.0	23.6	22.0	22.0	22.0
37.5°	1069.7	451.0	64.5	45.7	33.8	26.0	22.0	21.3	20.5	19.7	19.7
40°	1118.5	426.6	58.2	40.1	29.1	22.0	18.9	18.9	18.1	18.1	18.1
42.5°	1173.6	405.4	52.7	35.4	25.2	18.9	16.5	16.5	15.7	15.7	15.7
45°	1233.5	385.7	48.0	31.5	22.0	16.5	15.0	14.2	13.4	13.4	13.4
47.5°	1304.3	374.7	44.1	27.6	18.9	14.2	12.6	11.8	11.0	10.2	10.2
50°	1394.8	379.4	40.1	22.8	16.5	11.8	10.2	9.4	8.7	7.9	7.9
52.5°	1466.5	377.0	34.6	19.7	13.4	9.4	7.9	7.1	6.3	5.5	5.5
55°	1518.4	367.6	29.9	16.5	10.2	7.9	6.3	4.7	3.9	3.9	3.9
57.5°	1569.6	358.2	25.2	13.4	7.9	5.5	3.9	3.1	3.1	3.1	3.1
60°	1649.1	344.8	22.0	11.0	6.3	3.9	2.4	2.4	1.6	1.6	1.6
62.5°	1745.9	328.2	18.1	9.4	4.7	3.1	1.6	1.6	0.0	0.0	0.0
65°	1852.2	299.1	15.0	7.1	3.9	2.4	1.6	0.0	0.0	0.0	0.0
67.5°	1827.8	240.1	12.6	4.7	3.1	1.6	0.8	0.0	0.0	0.0	0.0
70°	1616.8	162.2	10.2	3.9	2.4	1.6	0.8	0.0	0.0	0.0	0.0
72.5°	1266.5	96.0	7.1	3.1	1.6	0.8	0.0	0.0	0.0	0.0	0.0
75°	810.8	48.0	4.7	2.4	1.6	0.8	0.0	0.0	0.0	0.0	0.0
77.5°	271.6	23.6	3.1	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0
80°	38.6	7.9	1.6	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	8.7	3.1	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.1	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.6	0.8	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)