

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: P348775

Luminaire Tested: **ARCH-N-PA1-40-750-U-T2R-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348775  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-40-750-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 740mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4391 lumens  
Efficiency: N/A  
Efficacy: 107.1 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

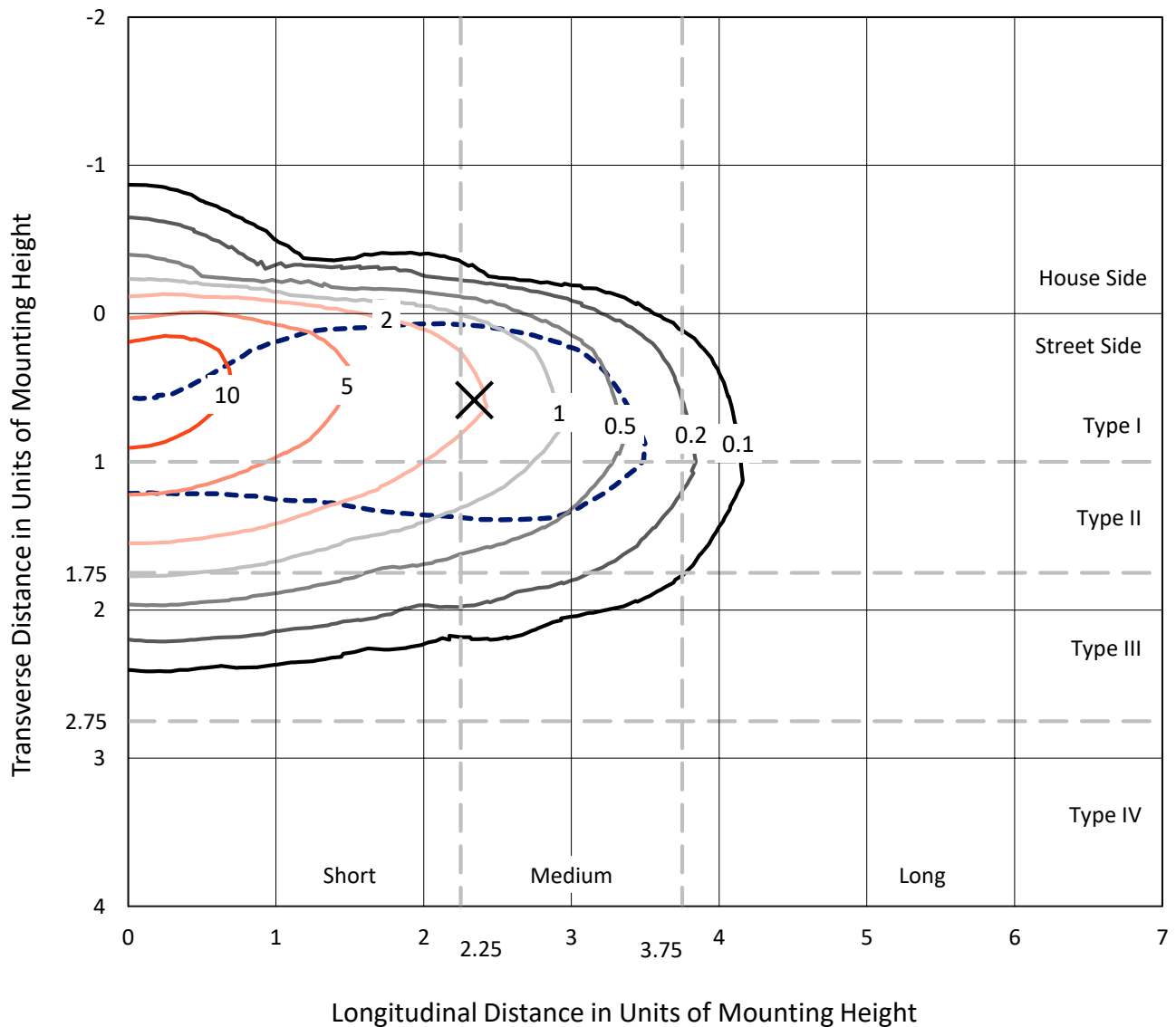
Input Watts (W): 41  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

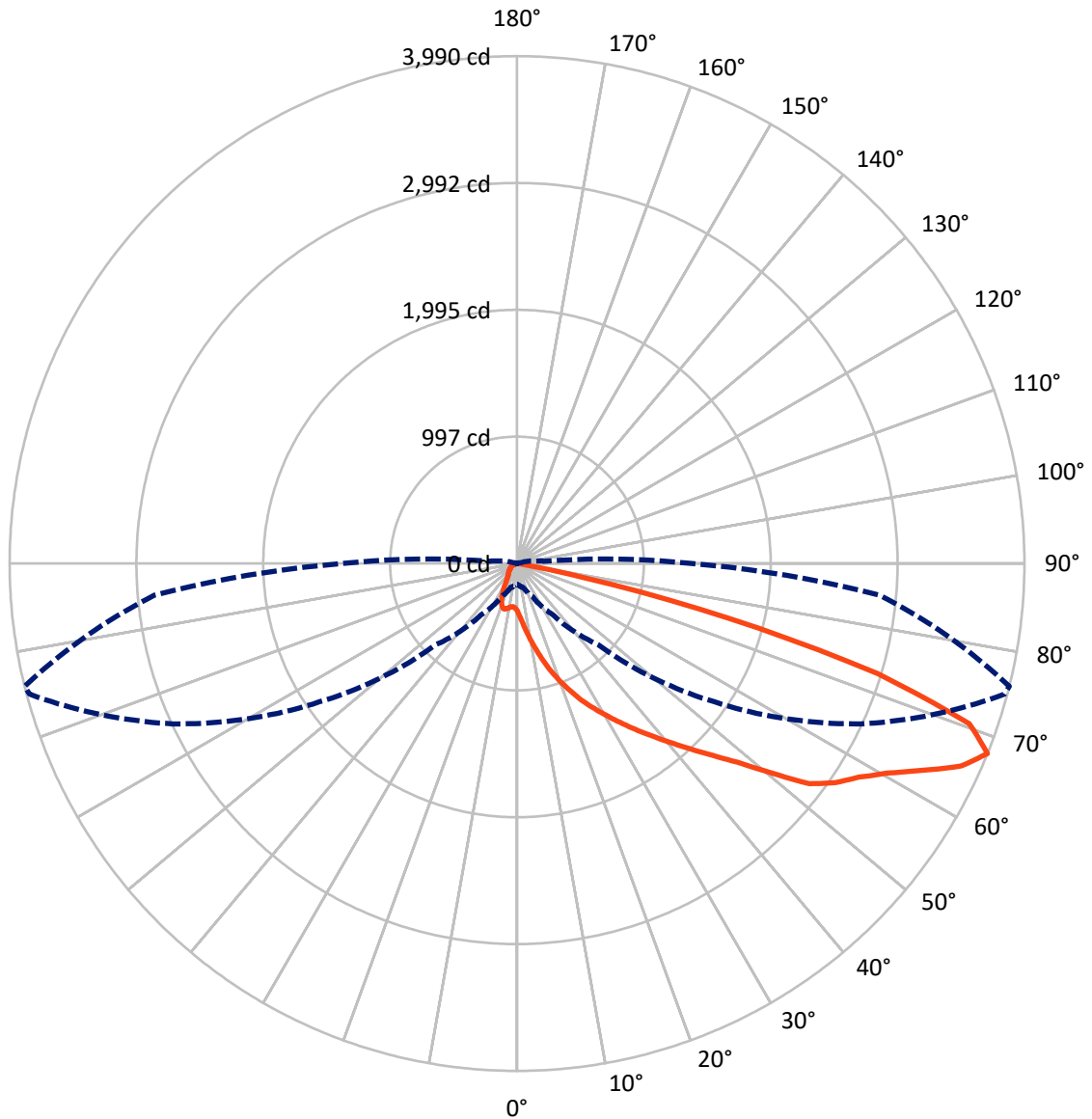
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.1 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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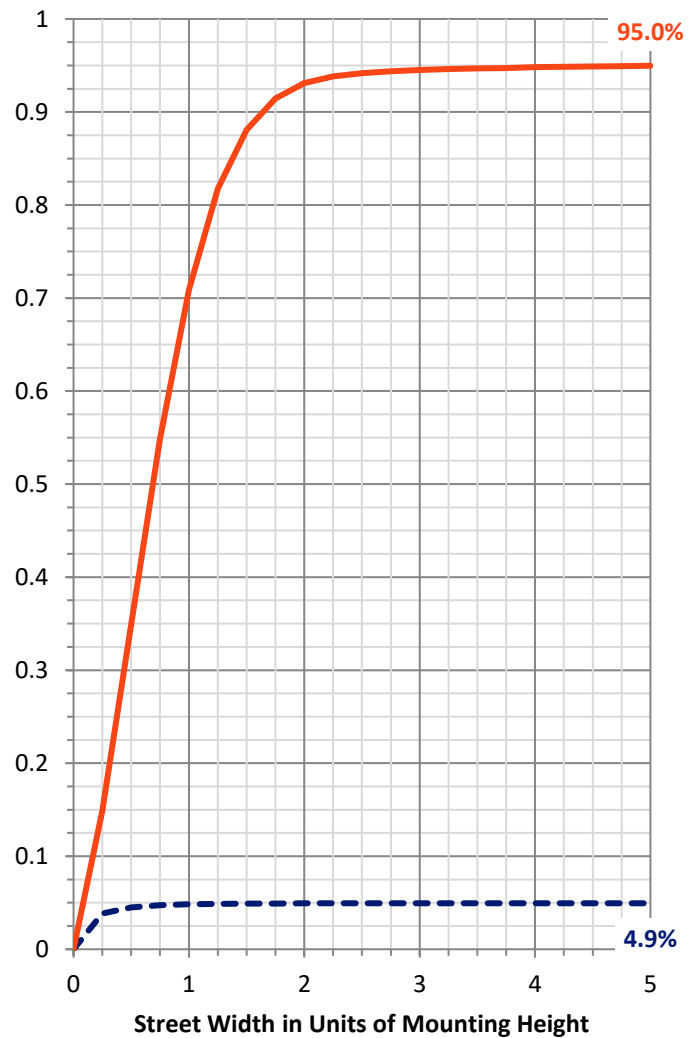
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	218.0	0.0	218.0
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	4173.0	0.0	4173.0
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	4391.0	0.0	4391.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.3	1.1
10°-20°	183.6	4.2
20°-30°	373.6	8.5
30°-40°	648.4	14.8
40°-50°	916.1	20.9
50°-60°	1038.9	23.7
60°-70°	861.7	19.6
70°-80°	312.1	7.1
80°-90°	10.1	0.2
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°	4391.0	100.0
0°-180°	4391.0	100.0



--- HS    — SS

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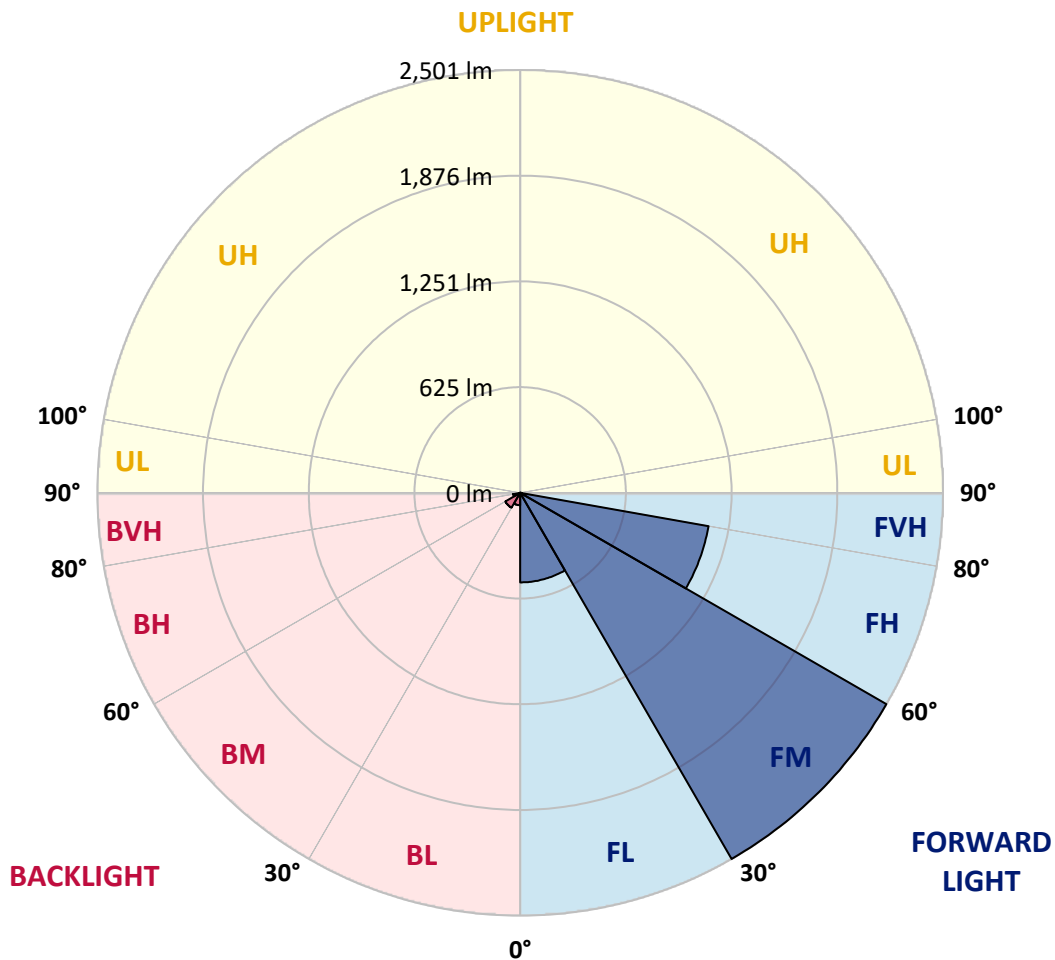
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	530.0	12.1			
FM	(30°-60°)	2501.5	57.0			
FH	(60°-80°)	1131.7	25.8			G1/1800
FVH	(80°-90°)	9.8	0.2			G0/10
BL	(0°-30°)	73.5	1.7	B0/110		
BM	(30°-60°)	102.1	2.3	B0/220		
BH	(60°-80°)	42.1	1.0	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°	372.5	372.5	372.5	372.5	372.5	372.5	372.5	372.5	372.5	372.5	372.5
2.5°	556.0	543.5	546.4	538.3	523.7	493.7	468.1	443.9	415.6	414.6	391.3
5°	749.8	739.2	737.8	721.5	694.9	644.0	594.3	537.8	474.6	470.0	420.6
7.5°	925.6	917.2	914.1	894.7	845.2	795.6	730.9	647.8	549.1	540.6	460.0
10°	1060.7	1056.7	1057.4	1043.6	1001.2	955.1	870.2	764.2	633.6	620.5	507.4
12.5°	1163.1	1164.0	1170.9	1162.5	1138.8	1104.6	1013.9	888.3	727.1	709.2	561.4
15°	1238.3	1243.1	1255.8	1266.4	1264.6	1235.0	1151.9	1014.3	826.4	806.5	621.6
17.5°	1287.0	1292.3	1310.8	1334.3	1355.8	1348.9	1285.0	1135.9	926.8	903.9	686.1
20°	1329.7	1336.0	1355.8	1386.8	1427.0	1435.7	1393.7	1253.9	1027.0	999.1	752.7
22.5°	1422.2	1422.0	1434.1	1452.2	1490.5	1512.8	1486.3	1363.3	1126.1	1097.1	820.6
25°	1589.6	1583.2	1579.0	1564.8	1573.2	1587.1	1572.3	1465.7	1225.8	1196.3	889.5
27.5°	1788.5	1792.4	1758.1	1719.9	1690.2	1676.0	1651.7	1560.5	1321.6	1289.3	956.8
30°	1998.4	1999.6	1959.2	1910.3	1845.1	1791.0	1749.1	1651.2	1420.1	1384.9	1022.2
32.5°	2187.8	2180.3	2140.2	2073.7	1991.3	1930.5	1843.4	1752.4	1524.4	1490.3	1094.9
35°	2337.8	2329.0	2280.3	2219.7	2134.3	2073.1	1968.2	1853.4	1634.0	1600.8	1167.9
37.5°	2447.5	2437.1	2387.1	2324.8	2251.1	2215.5	2113.1	1963.2	1753.7	1717.9	1244.6
40°	2485.6	2476.6	2445.2	2399.6	2340.3	2332.3	2266.8	2089.6	1884.0	1845.9	1331.6
42.5°	2462.9	2454.0	2442.9	2427.5	2402.9	2410.6	2411.9	2233.7	2028.7	1991.1	1427.6
45°	2372.9	2365.0	2376.5	2399.0	2429.6	2467.7	2544.3	2388.6	2190.3	2150.2	1538.6
47.5°	2240.3	2234.5	2266.5	2322.6	2412.1	2517.2	2665.3	2551.4	2371.7	2334.6	1677.1
50°	2051.7	2050.8	2114.7	2217.2	2354.8	2541.0	2790.4	2736.5	2623.7	2584.7	1869.7
52.5°	1758.1	1760.1	1885.7	2049.8	2254.1	2524.8	2870.8	2974.3	2917.0	2876.4	2036.5
55°	1478.6	1490.1	1579.2	1815.9	2099.8	2464.8	2898.5	3085.3	3078.8	3040.3	2129.3
57.5°	1204.8	1225.8	1311.6	1532.6	1874.5	2326.5	2883.3	3133.4	3199.2	3169.8	2251.6
60°	908.1	917.7	1016.6	1223.3	1585.4	2074.1	2773.0	3159.6	3363.9	3343.5	2429.2
62.5°	577.8	601.8	689.6	888.9	1234.4	1723.5	2587.2	3159.2	3570.0	3581.1	2658.4
65°	304.4	332.5	379.0	550.8	848.3	1332.0	2307.6	3129.6	3822.8	3838.4	2837.5
67.5°	164.1	172.2	196.8	285.9	492.0	902.4	1896.9	2983.3	3969.2	3989.8	2862.5
70°	120.1	124.5	133.7	158.2	247.6	524.1	1384.1	2651.8	3780.4	3772.7	2543.3
72.5°	92.2	99.1	106.0	115.8	142.4	279.7	861.8	2076.6	3016.4	2965.6	1901.1
75°	72.7	73.9	83.7	92.5	106.8	159.3	382.7	1209.4	1841.1	1720.8	985.9
77.5°	58.1	58.9	64.6	72.3	85.8	104.7	118.5	475.8	587.8	524.5	213.9
80°	34.4	36.4	48.1	55.8	71.2	66.0	43.3	103.3	91.8	83.1	36.0
82.5°	19.2	20.8	27.1	44.1	49.6	31.6	21.5	27.9	21.5	21.0	10.2
85°	0.0	1.0	17.5	27.3	20.2	6.9	9.0	9.2	6.3	6.0	4.0
87.5°	0.0	0.0	5.4	5.2	0.8	1.2	2.1	3.1	2.5	2.5	2.1
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°	372.5	372.5	372.5	372.5	372.5	372.5	372.5	372.5	372.5	372.5	372.5
2.5°	379.8	369.4	349.8	330.5	314.4	301.1	289.2	284.4	280.5	279.9	276.9
5°	396.7	375.8	338.2	307.5	286.9	272.2	259.7	252.0	246.1	243.8	241.7
7.5°	422.3	390.6	336.7	301.3	276.7	252.0	229.0	203.9	188.4	182.4	178.9
10°	453.5	410.2	342.5	299.6	256.5	204.5	166.2	134.5	121.6	117.4	116.2
12.5°	489.8	434.6	352.5	288.8	213.4	145.3	114.7	103.9	101.0	99.7	99.7
15°	531.6	461.4	359.6	257.6	157.8	109.9	99.3	94.3	91.2	89.5	89.7
17.5°	574.3	487.5	356.1	212.4	116.4	97.7	89.9	84.5	80.2	78.5	78.1
20°	617.4	511.8	336.9	158.2	98.5	88.7	79.8	73.9	69.6	67.9	67.5
22.5°	662.0	532.4	303.0	116.0	88.5	78.7	70.0	64.1	60.0	58.5	57.7
25°	705.5	549.1	255.7	93.9	79.1	69.3	61.0	55.4	51.8	50.2	50.0
27.5°	746.1	559.7	200.9	82.9	70.8	60.8	53.3	48.3	45.2	44.1	43.9
30°	782.7	560.6	148.5	74.8	63.5	53.5	46.6	42.1	39.4	38.3	37.9
32.5°	819.6	552.6	108.1	67.5	56.8	47.1	40.4	36.9	35.0	34.1	34.1
35°	854.4	533.9	84.3	61.2	50.2	41.0	35.6	33.1	31.9	31.0	31.0
37.5°	888.5	507.2	71.6	55.6	44.1	35.8	31.4	29.8	28.9	27.9	27.9
40°	923.1	473.5	65.0	50.4	39.1	31.7	27.9	26.6	25.6	24.8	24.6
42.5°	965.6	434.6	60.8	45.6	34.6	28.1	24.6	23.1	22.3	21.5	21.2
45°	1014.9	401.2	57.3	40.8	31.0	25.0	21.4	19.8	18.7	17.7	17.5
47.5°	1085.9	376.9	52.7	35.6	27.5	21.7	18.5	16.7	15.0	14.0	13.9
50°	1176.5	356.9	46.8	31.0	24.0	18.5	15.4	13.3	11.7	10.8	10.8
52.5°	1221.5	330.7	41.4	26.9	20.2	15.6	12.5	10.0	9.2	8.3	8.3
55°	1239.6	310.7	36.0	22.9	16.7	12.9	9.8	7.7	7.1	6.5	6.3
57.5°	1290.4	305.0	31.4	19.4	13.9	10.2	7.5	5.8	5.4	4.6	4.6
60°	1372.2	307.8	27.1	16.5	11.2	7.9	5.6	4.4	4.0	3.3	3.3
62.5°	1460.5	304.2	22.9	14.2	8.7	5.8	3.8	3.3	3.3	1.9	1.7
65°	1477.4	270.9	19.6	11.7	6.7	4.2	2.5	2.1	2.9	0.4	0.0
67.5°	1371.2	210.1	16.9	9.0	5.0	3.3	1.9	1.0	2.5	0.0	0.0
70°	1096.5	133.5	13.7	6.5	3.8	2.7	1.5	0.4	1.9	0.0	0.0
72.5°	775.4	77.5	10.8	4.6	3.3	2.1	1.2	0.0	1.2	0.0	0.0
75°	392.1	41.4	6.7	3.5	2.5	1.5	0.8	0.0	0.2	0.0	0.0
77.5°	84.8	19.2	4.2	2.5	1.7	1.0	0.4	0.0	0.0	0.0	0.0
80°	18.5	8.5	2.7	1.5	1.0	0.6	0.0	0.0	0.0	0.0	0.0
82.5°	6.7	4.4	1.3	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.7	2.3	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.9	0.8	0.2	0.2	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)