

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: P397785

Luminaire Tested: **ARCH-S-PA1-40-750-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397785  
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-PA1-40-750-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 500mA 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: 4298 lumens  
Efficiency: N/A  
Efficacy: 107.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B0 - U0 - G2

Input Watts (W): 40  
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

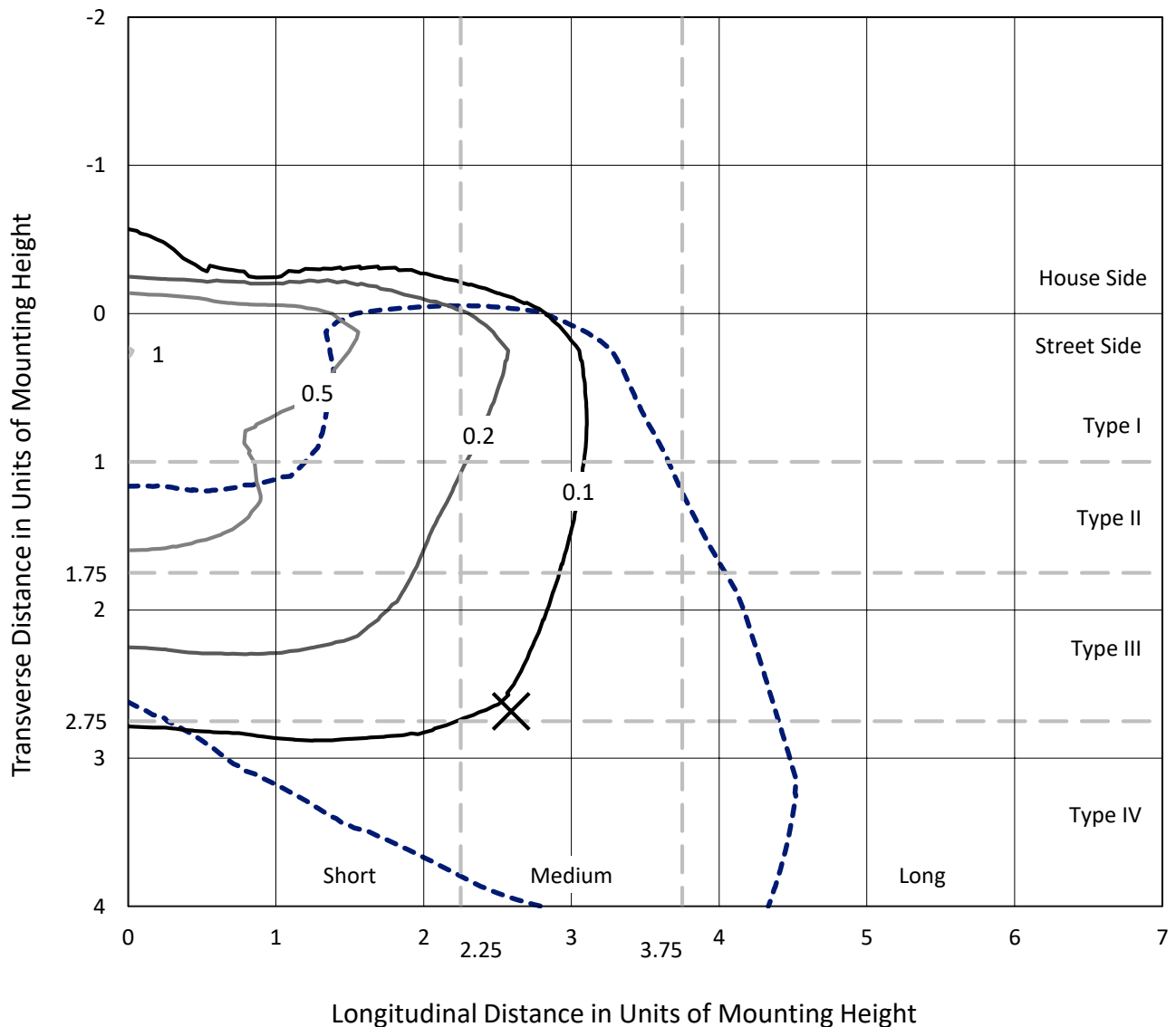


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

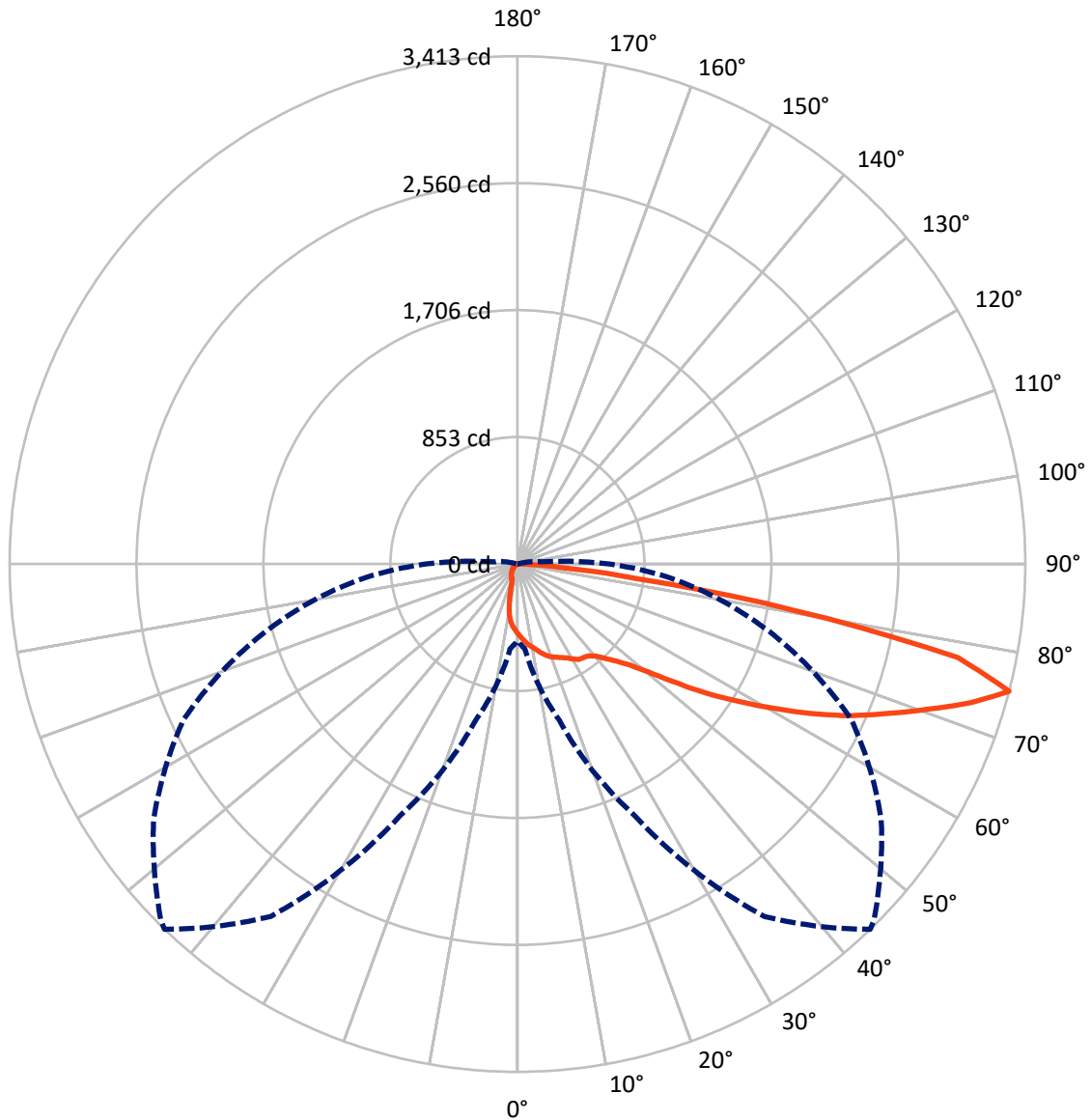


Based on 25 foot mounting height. Maximum calculated value = 1 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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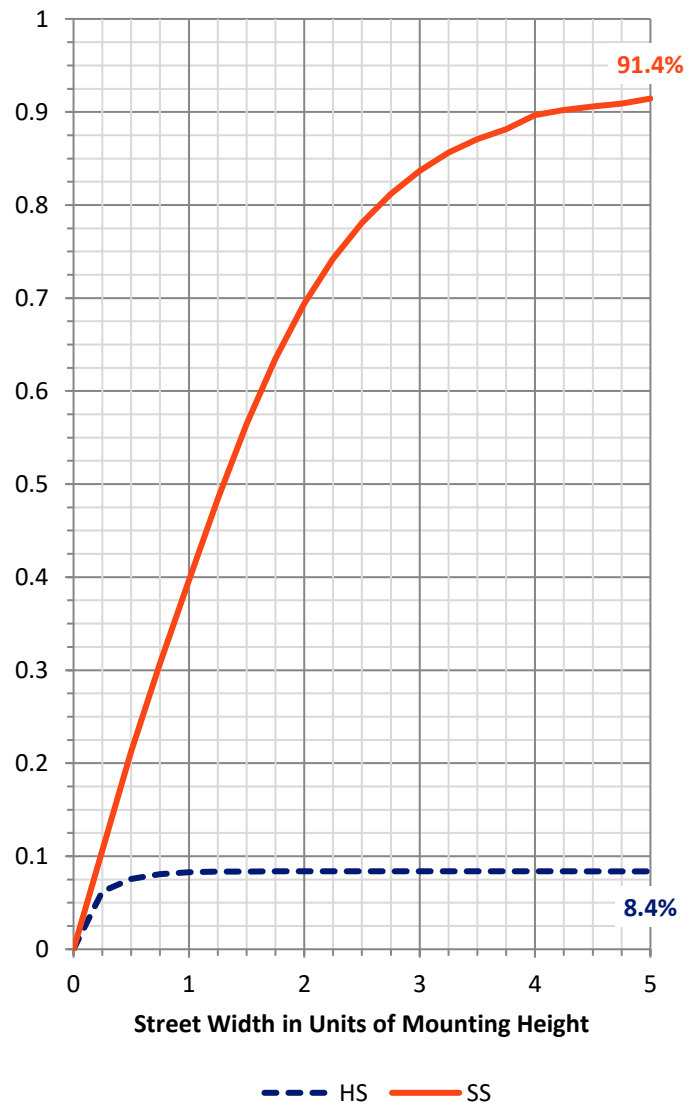
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	362.5	0.0	362.5
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	3935.5	0.0	3935.5
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	4298.0	0.0	4298.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.1	1.0
10°-20°	123.6	2.9
20°-30°	204.0	4.7
30°-40°	296.1	6.9
40°-50°	481.3	11.2
50°-60°	848.6	19.7
60°-70°	1219.6	28.4
70°-80°	976.6	22.7
80°-90°	104.0	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°	4298.0	100.0
0°-180°	4298.0	100.0



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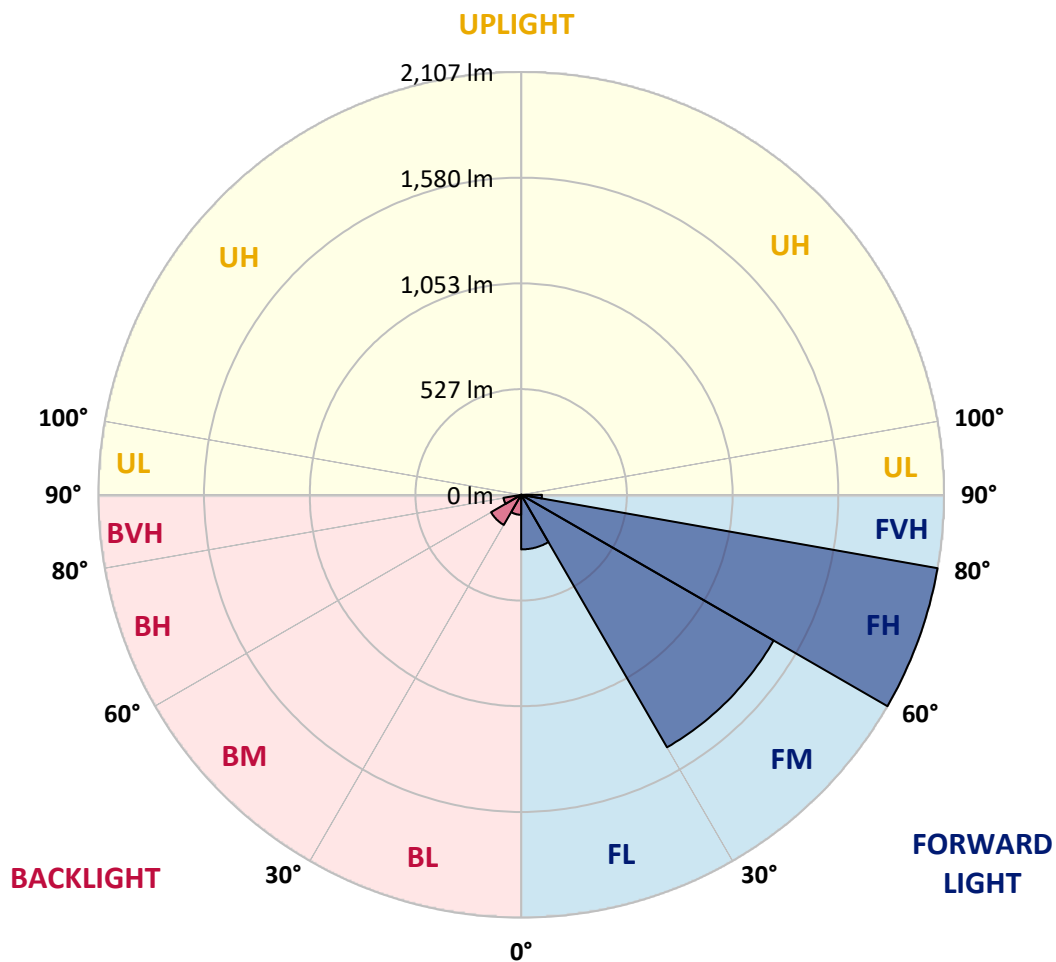
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	272.2	6.3			
FM	(30°-60°)	1452.8	33.8			
FH	(60°-80°)	2106.8	49.0			G2/5000
FVH	(80°-90°)	103.8	2.4			G2/225
BL	(0°-30°)	99.6	2.3	B0/110		
BM	(30°-60°)	173.3	4.0	B0/220		
BH	(60°-80°)	89.4	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: B0-U0-G2**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	467.8	467.8	467.8	467.8	467.8	467.8	467.8	467.8	467.8	467.8	467.8
2.5°	509.8	509.1	506.7	502.7	498.7	494.8	494.0	487.6	480.5	475.0	470.2
5°	555.0	554.2	550.3	541.6	532.8	522.5	521.7	506.7	493.2	478.1	465.4
7.5°	601.8	600.2	593.1	579.6	564.6	548.7	547.1	524.9	505.1	485.3	467.0
10°	638.3	636.7	626.4	610.5	589.9	570.1	567.7	544.7	524.9	499.5	475.0
12.5°	674.0	670.8	657.3	639.9	614.5	595.5	593.1	569.3	545.5	519.4	489.2
15°	707.3	703.3	690.6	668.4	641.5	623.2	621.6	596.3	571.7	541.6	508.3
17.5°	730.3	728.7	713.6	689.0	662.9	647.8	646.2	620.1	595.5	563.8	528.1
20°	742.2	742.2	727.9	700.9	677.2	666.8	664.5	639.9	616.1	586.0	548.7
22.5°	744.5	746.9	735.8	706.5	689.0	680.3	678.7	657.3	634.3	606.6	571.7
25°	749.3	749.3	743.8	712.0	699.4	697.0	696.2	677.2	656.5	628.8	594.7
27.5°	754.9	754.9	750.9	720.0	715.2	714.4	713.6	704.9	688.3	655.7	621.6
30°	769.1	769.9	766.8	735.8	732.7	741.4	743.0	738.2	717.6	677.2	649.4
32.5°	804.8	797.7	789.0	746.9	752.5	763.6	764.4	754.9	732.7	700.1	682.7
35°	894.4	852.4	812.7	756.4	758.8	769.9	771.5	770.7	757.2	729.5	720.8
37.5°	977.7	918.2	861.9	778.6	770.7	782.6	785.8	799.3	789.0	769.9	772.3
40°	1026.0	1003.0	963.4	839.7	794.5	812.7	815.9	836.5	832.6	824.6	839.7
42.5°	1175.1	1176.7	1133.9	930.9	838.1	867.5	871.4	888.1	893.6	897.6	934.1
45°	1348.0	1353.5	1343.2	1095.0	920.6	930.1	935.6	957.8	978.5	1003.8	1070.4
47.5°	1555.7	1550.9	1512.9	1295.6	1064.1	1011.0	1014.9	1057.8	1093.4	1148.9	1244.1
50°	1739.7	1751.6	1679.4	1482.8	1266.3	1138.6	1134.7	1176.7	1240.9	1318.6	1438.4
52.5°	1925.2	1907.8	1810.2	1668.3	1505.7	1312.3	1300.4	1323.4	1413.8	1505.7	1628.7
55°	1974.4	1975.9	1942.6	1871.3	1705.6	1523.2	1503.4	1501.8	1614.4	1677.0	1828.5
57.5°	2071.1	2075.1	2083.0	2097.3	2018.8	1734.1	1713.5	1691.3	1800.7	1837.2	2029.1
60°	2169.4	2174.2	2222.5	2299.5	2247.1	1961.7	1939.5	1887.1	1948.2	1997.4	2240.0
62.5°	2156.7	2190.0	2330.4	2483.4	2477.1	2211.4	2183.7	2057.6	2096.5	2139.3	2433.5
65°	1947.4	1983.1	2298.7	2534.2	2707.8	2458.0	2412.8	2233.6	2236.0	2287.6	2619.8
67.5°	1760.3	1799.1	2100.4	2512.8	2860.1	2679.3	2632.5	2410.5	2373.2	2458.8	2719.7
70°	1652.4	1691.3	1942.6	2446.1	2902.9	2924.3	2883.8	2612.7	2536.5	2615.0	2607.9
72.5°	1293.2	1354.3	1741.2	2319.3	2948.9	3186.7	3155.0	2868.8	2675.3	2451.7	1985.5
75°	515.4	571.7	1087.1	1866.5	2891.0	3412.7	3388.1	2983.7	2476.3	1750.8	1016.5
77.5°	155.4	166.5	302.1	923.0	2119.5	3025.8	3017.8	2508.8	1752.3	812.7	277.5
80°	51.5	57.1	92.8	254.5	967.4	1890.3	1926.0	1598.5	796.1	186.3	56.3
82.5°	21.4	23.8	46.8	102.3	342.5	814.3	802.4	716.0	277.5	115.8	20.6
85°	5.6	7.1	21.4	58.7	125.3	280.7	295.0	240.3	157.0	95.9	6.3
87.5°	0.0	0.0	10.3	23.8	56.3	84.8	88.8	72.9	88.8	72.2	3.2
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°	467.8	467.8	467.8	467.8	467.8	467.8	467.8	467.8	467.8	467.8	467.8
2.5°	466.2	462.3	455.1	450.4	444.0	442.4	439.3	435.3	434.5	430.6	431.3
5°	458.3	452.0	439.3	430.6	420.2	417.1	411.5	407.6	404.4	398.8	399.6
7.5°	456.7	447.2	429.8	413.1	396.5	384.6	367.9	354.4	343.3	331.4	333.8
10°	462.3	450.4	425.8	402.8	372.7	334.6	291.0	262.5	248.2	233.9	235.5
12.5°	473.4	459.1	427.4	392.5	331.4	266.4	206.2	167.3	157.0	150.7	151.4
15°	490.0	472.6	432.1	372.7	275.9	192.7	137.2	120.5	124.5	126.9	126.9
17.5°	507.5	487.6	436.1	337.0	213.3	134.8	111.8	110.2	115.8	121.3	121.3
20°	528.9	503.5	436.9	291.8	153.8	109.4	105.5	105.5	109.4	115.8	115.8
22.5°	549.5	520.9	429.8	240.3	117.4	101.5	101.5	101.5	103.9	110.2	111.0
25°	574.1	542.4	414.7	185.5	100.7	96.7	96.7	97.5	99.1	104.7	105.5
27.5°	600.2	564.6	389.3	135.6	92.0	91.2	92.0	92.8	93.6	99.1	100.7
30°	630.4	589.1	356.8	101.5	84.0	84.0	86.4	88.0	88.0	92.8	94.4
32.5°	665.3	621.6	318.0	84.0	76.1	75.3	79.3	81.7	81.7	85.6	87.2
35°	708.9	654.9	271.2	74.5	69.8	68.2	69.8	73.7	75.3	78.5	79.3
37.5°	766.8	694.6	221.2	69.0	65.0	61.8	61.8	62.6	65.8	69.0	69.8
40°	840.5	738.2	172.1	65.0	60.3	57.1	54.7	53.9	53.1	55.5	57.1
42.5°	933.3	787.4	128.5	61.1	56.3	51.5	48.4	45.2	41.2	40.4	41.2
45°	1052.2	847.6	95.2	57.9	53.9	46.8	41.2	35.7	28.5	26.2	27.0
47.5°	1192.5	910.3	74.5	54.7	52.3	41.2	34.1	24.6	17.4	15.9	16.7
50°	1341.6	970.5	63.4	50.7	49.2	35.7	24.6	15.1	10.3	10.3	11.1
52.5°	1468.5	1004.6	57.9	47.6	44.4	29.3	15.9	8.7	6.3	6.3	7.1
55°	1591.4	1022.9	53.9	44.4	38.1	20.6	8.7	5.6	4.0	4.0	4.0
57.5°	1718.3	1030.8	49.2	40.4	30.1	12.7	4.8	3.2	2.4	2.4	2.4
60°	1830.8	1015.7	42.0	33.3	19.8	6.3	2.4	2.4	1.6	0.8	0.8
62.5°	1925.2	987.2	29.3	23.8	11.9	3.2	1.6	0.8	0.0	0.0	0.0
65°	1983.1	941.2	19.0	15.9	7.1	2.4	0.8	0.0	0.0	0.0	0.0
67.5°	1966.4	854.8	11.9	10.3	3.2	1.6	0.8	0.0	0.0	0.0	0.0
70°	1774.5	700.9	8.7	6.3	2.4	0.8	0.0	0.0	0.0	0.0	0.0
72.5°	1279.0	474.2	6.3	4.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0
75°	615.3	168.9	4.0	3.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	150.7	37.3	2.4	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	33.3	7.1	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	11.1	3.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.4	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)