

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: P397758

Luminaire Tested: **ARCH-S-PA1-40-727-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397758  
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-PA1-40-727-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 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: 3594 lumens  
Efficiency: N/A  
Efficacy: 89.9 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 - G1

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

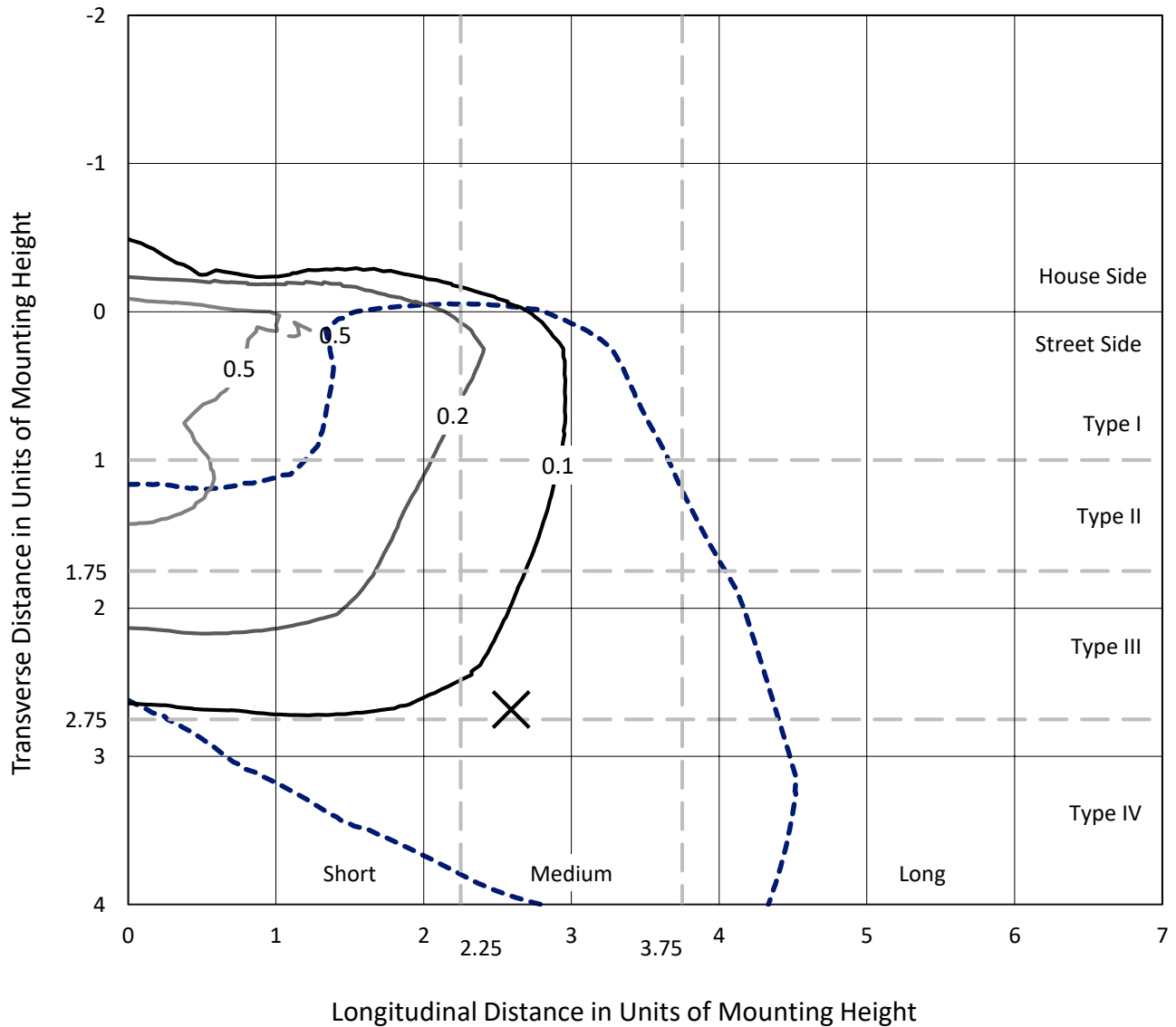


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

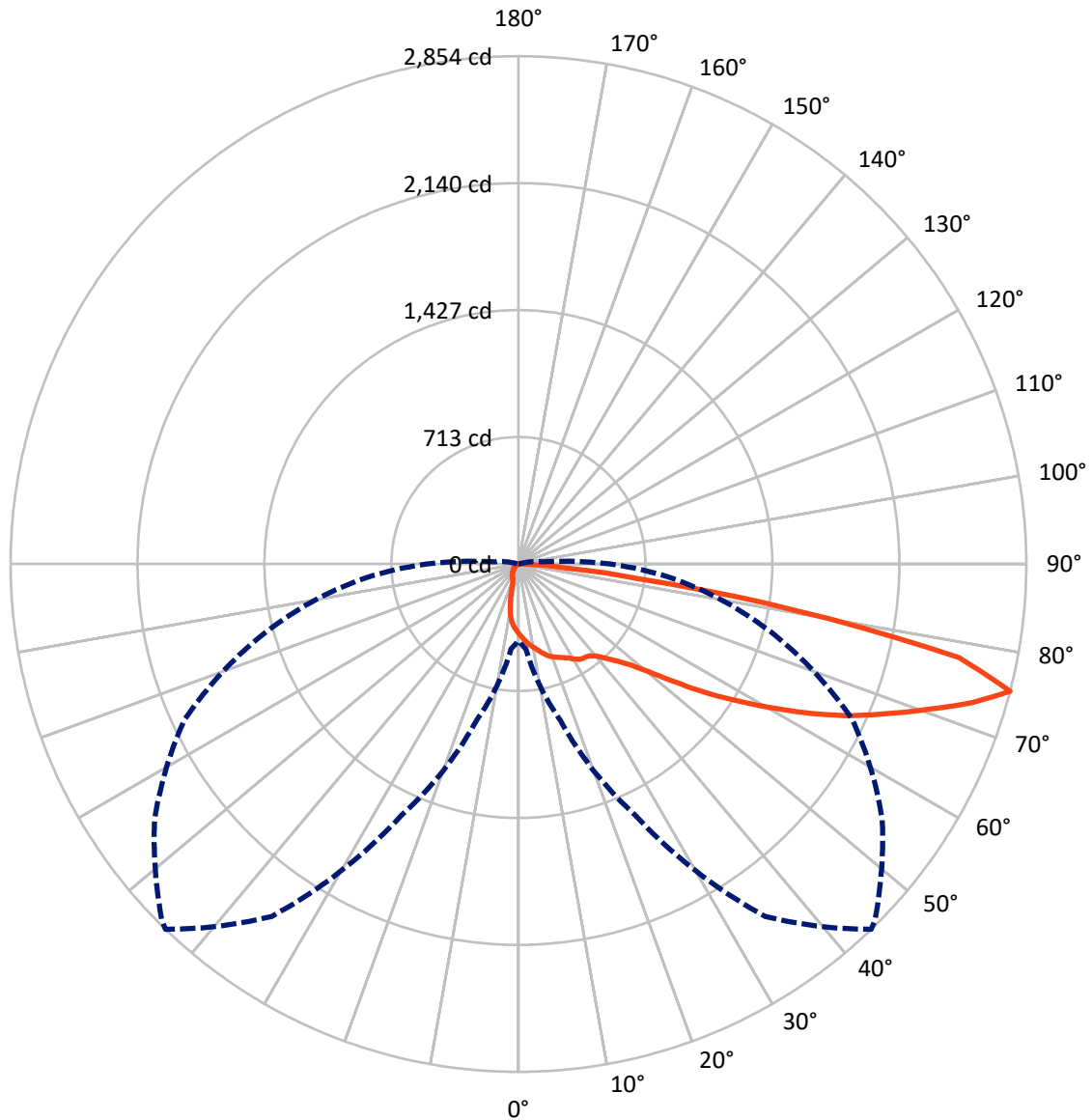


Based on 25 foot mounting height. Maximum calculated value = 0.8 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



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



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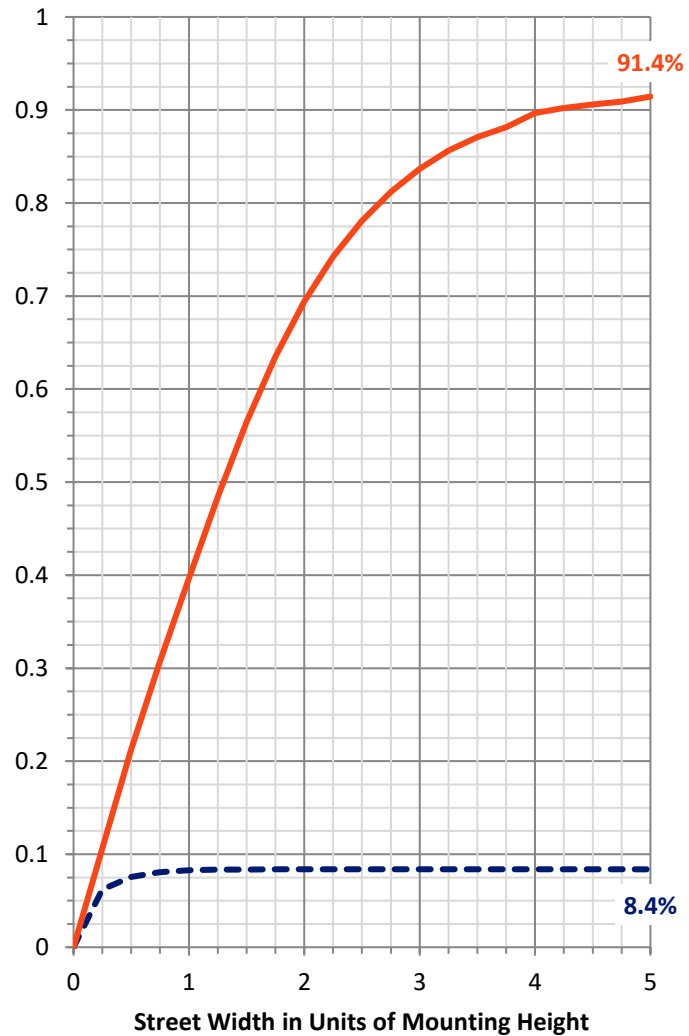
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	303.1	0.0	303.1
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	3290.9	0.0	3290.9
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	3594.0	0.0	3594.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.9	1.0
10°-20°	103.4	2.9
20°-30°	170.6	4.7
30°-40°	247.6	6.9
40°-50°	402.5	11.2
50°-60°	709.6	19.7
60°-70°	1019.8	28.4
70°-80°	816.6	22.7
80°-90°	87.0	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°	3594.0	100.0
0°-180°	3594.0	100.0



--- HS    — SS

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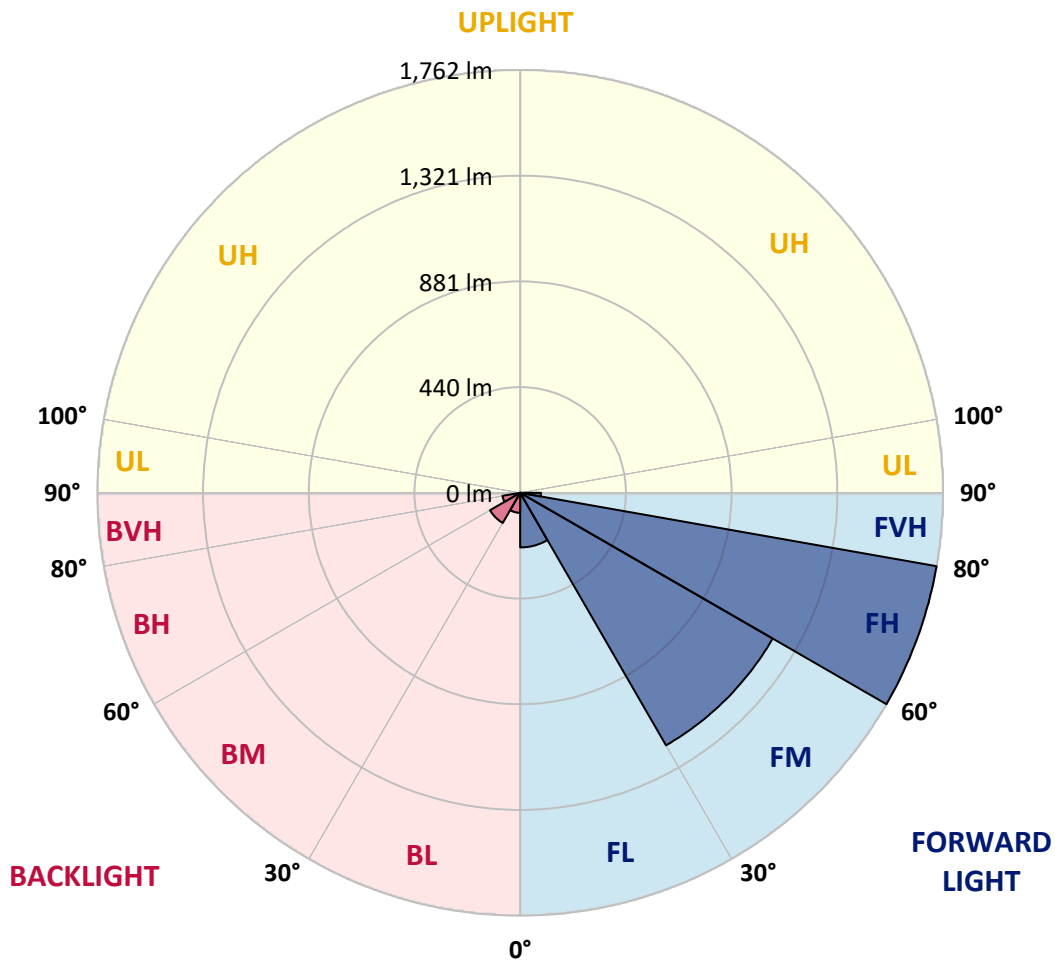
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	227.6	6.3			
FM	(30°-60°)	1214.8	33.8			
FH	(60°-80°)	1761.7	49.0			G1/1800
FVH	(80°-90°)	86.8	2.4			G1/100
BL	(0°-30°)	83.3	2.3	B0/110		
BM	(30°-60°)	144.9	4.0	B0/220		
BH	(60°-80°)	74.7	2.1	B0/110		G0/110
BVH	(80°-90°)	0.2	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 IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	391.2	391.2	391.2	391.2	391.2	391.2	391.2	391.2	391.2	391.2	391.2
2.5°	426.3	425.7	423.7	420.4	417.1	413.7	413.1	407.8	401.8	397.2	393.2
5°	464.1	463.5	460.1	452.9	445.6	436.9	436.3	423.7	412.4	399.8	389.2
7.5°	503.2	501.9	496.0	484.7	472.1	458.8	457.5	438.9	422.4	405.8	390.5
10°	533.7	532.4	523.8	510.5	493.3	476.7	474.7	455.5	438.9	417.7	397.2
12.5°	563.6	560.9	549.7	535.1	513.9	497.9	496.0	476.1	456.2	434.3	409.1
15°	591.4	588.1	577.5	558.9	536.4	521.1	519.8	498.6	478.1	452.9	425.0
17.5°	610.7	609.3	596.7	576.2	554.3	541.7	540.4	518.5	497.9	471.4	441.6
20°	620.6	620.6	608.7	586.1	566.2	557.6	555.6	535.1	515.2	490.0	458.8
22.5°	622.6	624.6	615.3	590.8	576.2	568.9	567.6	549.7	530.4	507.2	478.1
25°	626.6	626.6	621.9	595.4	584.8	582.8	582.1	566.2	549.0	525.8	497.3
27.5°	631.2	631.2	627.9	602.0	598.1	597.4	596.7	589.4	575.5	548.3	519.8
30°	643.1	643.8	641.2	615.3	612.6	619.9	621.3	617.3	600.1	566.2	543.0
32.5°	673.0	667.0	659.7	624.6	629.2	638.5	639.2	631.2	612.6	585.5	570.9
35°	747.9	712.8	679.6	632.5	634.5	643.8	645.1	644.5	633.2	610.0	602.7
37.5°	817.5	767.8	720.7	651.1	644.5	654.4	657.1	668.3	659.7	643.8	645.8
40°	858.0	838.7	805.6	702.2	664.4	679.6	682.3	699.5	696.2	689.6	702.2
42.5°	982.6	984.0	948.1	778.4	700.8	725.4	728.7	742.6	747.2	750.6	781.1
45°	1127.2	1131.8	1123.2	915.7	769.8	777.7	782.4	801.0	818.2	839.4	895.1
47.5°	1300.9	1296.9	1265.1	1083.4	889.8	845.4	848.7	884.5	914.3	960.7	1040.3
50°	1454.7	1464.7	1404.3	1239.9	1058.9	952.1	948.8	984.0	1037.7	1102.6	1202.8
52.5°	1609.9	1595.3	1513.7	1395.0	1259.1	1097.3	1087.4	1106.6	1182.2	1259.1	1361.9
55°	1651.0	1652.3	1624.4	1564.8	1426.2	1273.7	1257.1	1255.8	1349.9	1402.3	1529.0
57.5°	1731.9	1735.2	1741.8	1753.7	1688.1	1450.1	1432.8	1414.3	1505.8	1536.3	1696.7
60°	1814.1	1818.1	1858.5	1922.8	1879.1	1640.4	1621.8	1578.0	1629.1	1670.2	1873.1
62.5°	1803.5	1831.3	1948.7	2076.6	2071.3	1849.2	1826.0	1720.6	1753.1	1788.9	2034.9
65°	1628.4	1658.3	1922.2	2119.1	2264.3	2055.4	2017.6	1867.8	1869.8	1912.9	2190.7
67.5°	1471.9	1504.4	1756.4	2101.2	2391.6	2240.4	2201.3	2015.6	1984.5	2056.1	2274.2
70°	1381.8	1414.3	1624.4	2045.5	2427.4	2445.3	2411.5	2184.7	2121.1	2186.7	2180.7
72.5°	1081.4	1132.5	1456.0	1939.4	2465.8	2664.8	2638.2	2398.9	2237.1	2050.1	1660.3
75°	431.0	478.1	909.0	1560.8	2417.4	2853.7	2833.2	2495.0	2070.7	1464.0	850.0
77.5°	130.0	139.2	252.6	771.8	1772.3	2530.2	2523.5	2097.9	1465.3	679.6	232.1
80°	43.1	47.7	77.6	212.8	808.9	1580.7	1610.5	1336.7	665.7	155.8	47.1
82.5°	17.9	19.9	39.1	85.5	286.4	680.9	671.0	598.7	232.1	96.8	17.2
85°	4.6	6.0	17.9	49.1	104.8	234.7	246.7	200.9	131.3	80.2	5.3
87.5°	0.0	0.0	8.6	19.9	47.1	70.9	74.3	61.0	74.3	60.3	2.7
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°	391.2	391.2	391.2	391.2	391.2	391.2	391.2	391.2	391.2	391.2	391.2
2.5°	389.9	386.6	380.6	376.6	371.3	370.0	367.3	364.0	363.3	360.0	360.7
5°	383.2	377.9	367.3	360.0	351.4	348.8	344.1	340.8	338.2	333.5	334.2
7.5°	381.9	374.0	359.4	345.4	331.5	321.6	307.7	296.4	287.1	277.2	279.1
10°	386.6	376.6	356.1	336.8	311.6	279.8	243.3	219.5	207.5	195.6	196.9
12.5°	395.8	383.9	357.4	328.2	277.2	222.8	172.4	139.9	131.3	126.0	126.6
15°	409.8	395.2	361.4	311.6	230.7	161.1	114.7	100.8	104.1	106.1	106.1
17.5°	424.3	407.8	364.7	281.8	178.4	112.7	93.5	92.2	96.8	101.4	101.4
20°	442.2	421.0	365.3	244.0	128.6	91.5	88.2	88.2	91.5	96.8	96.8
22.5°	459.5	435.6	359.4	200.9	98.1	84.9	84.9	84.9	86.9	92.2	92.8
25°	480.0	453.5	346.8	155.2	84.2	80.9	80.9	81.6	82.9	87.5	88.2
27.5°	501.9	472.1	325.6	113.4	76.9	76.2	76.9	77.6	78.2	82.9	84.2
30°	527.1	492.6	298.4	84.9	70.3	70.3	72.3	73.6	73.6	77.6	78.9
32.5°	556.3	519.8	265.9	70.3	63.7	63.0	66.3	68.3	68.3	71.6	72.9
35°	592.8	547.7	226.8	62.3	58.3	57.0	58.3	61.7	63.0	65.6	66.3
37.5°	641.2	580.8	185.0	57.7	54.4	51.7	51.7	52.4	55.0	57.7	58.3
40°	702.8	617.3	143.9	54.4	50.4	47.7	45.7	45.1	44.4	46.4	47.7
42.5°	780.4	658.4	107.4	51.1	47.1	43.1	40.4	37.8	34.5	33.8	34.5
45°	879.9	708.8	79.6	48.4	45.1	39.1	34.5	29.8	23.9	21.9	22.5
47.5°	997.2	761.2	62.3	45.7	43.8	34.5	28.5	20.6	14.6	13.3	13.9
50°	1121.9	811.6	53.0	42.4	41.1	29.8	20.6	12.6	8.6	8.6	9.3
52.5°	1227.9	840.1	48.4	39.8	37.1	24.5	13.3	7.3	5.3	5.3	6.0
55°	1330.7	855.3	45.1	37.1	31.8	17.2	7.3	4.6	3.3	3.3	3.3
57.5°	1436.8	862.0	41.1	33.8	25.2	10.6	4.0	2.7	2.0	2.0	2.0
60°	1531.0	849.4	35.1	27.8	16.6	5.3	2.0	2.0	1.3	0.7	0.7
62.5°	1609.9	825.5	24.5	19.9	9.9	2.7	1.3	0.7	0.0	0.0	0.0
65°	1658.3	787.0	15.9	13.3	6.0	2.0	0.7	0.0	0.0	0.0	0.0
67.5°	1644.3	714.8	9.9	8.6	2.7	1.3	0.7	0.0	0.0	0.0	0.0
70°	1483.9	586.1	7.3	5.3	2.0	0.7	0.0	0.0	0.0	0.0	0.0
72.5°	1069.5	396.5	5.3	3.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0
75°	514.5	141.2	3.3	2.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	126.0	31.2	2.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	27.8	6.0	1.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	9.3	2.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.0	0.7	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)