

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: P234733

Luminaire Tested: **ARCH-AF24-60-D-U-T3-8027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234733
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-60-D-U-T3-8027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4237 lumens
Efficiency: N/A
Efficacy: 66.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 64
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

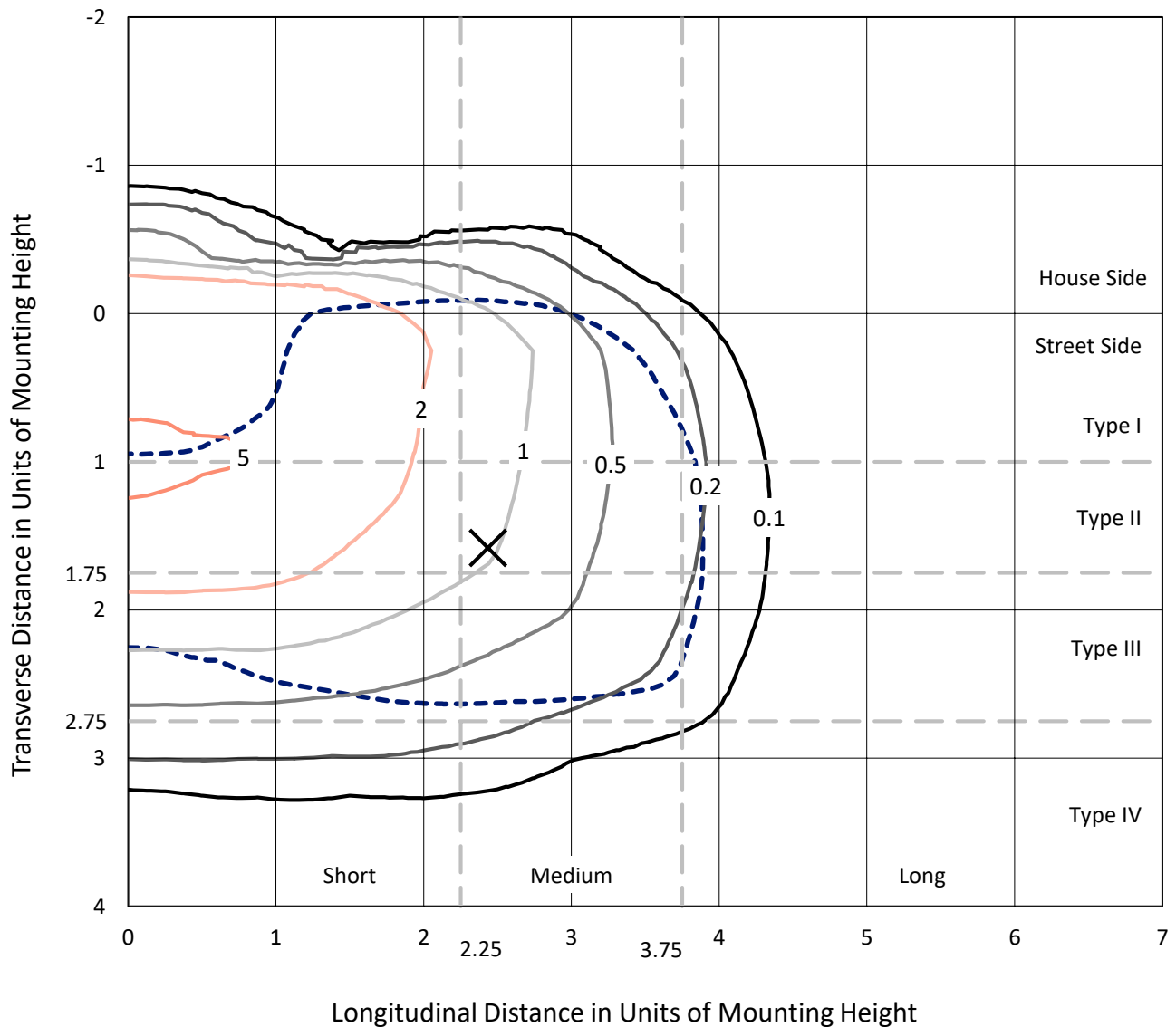


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

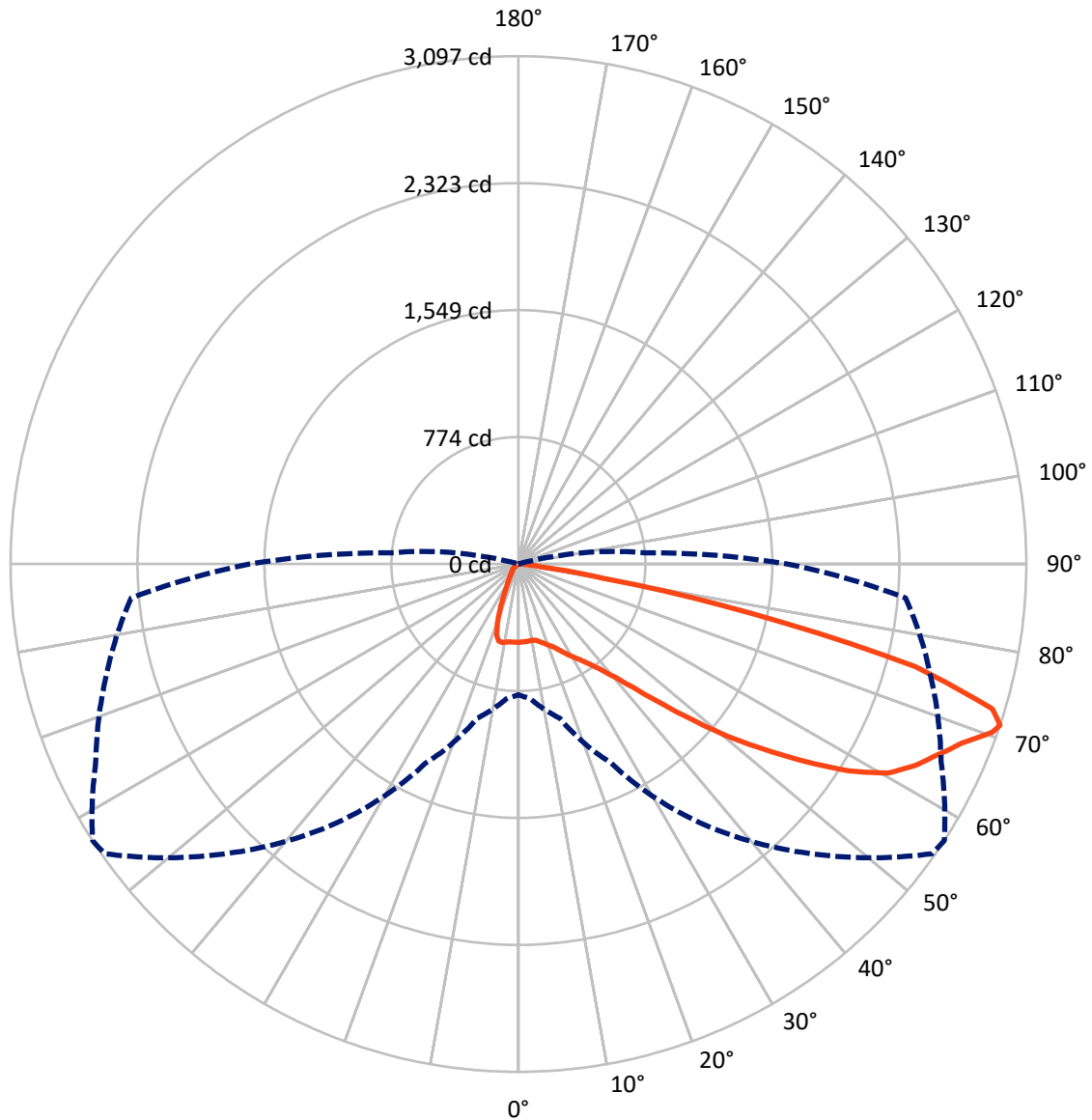


Based on 10 foot mounting height. Maximum calculated value = 6 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical



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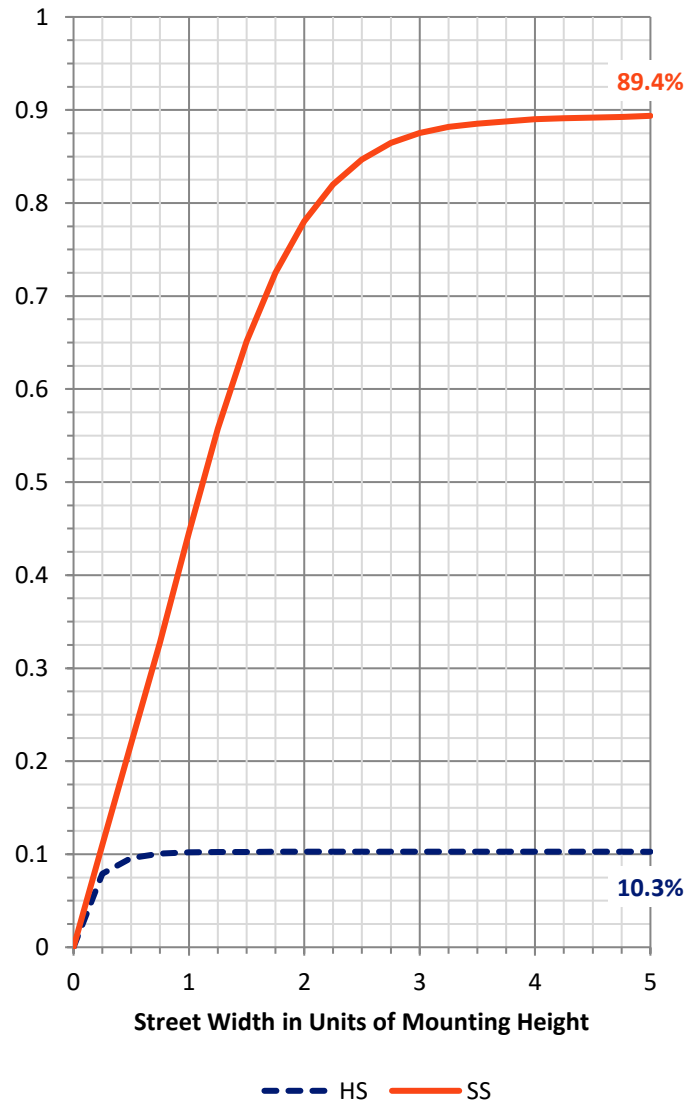
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	439.1	0.0	439.1
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	3797.9	0.0	3797.9
	% Fixture	89.6	0.0	89.6
Total	Lumens	4237.0	0.0	4237.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.0	1.1
10°-20°	120.2	2.8
20°-30°	187.6	4.4
30°-40°	317.0	7.5
40°-50°	615.7	14.5
50°-60°	1034.0	24.4
60°-70°	1234.0	29.1
70°-80°	650.3	15.3
80°-90°	33.0	0.8
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°	4237.0	100.0
0°-180°	4237.0	100.0

Coefficient of Utilization



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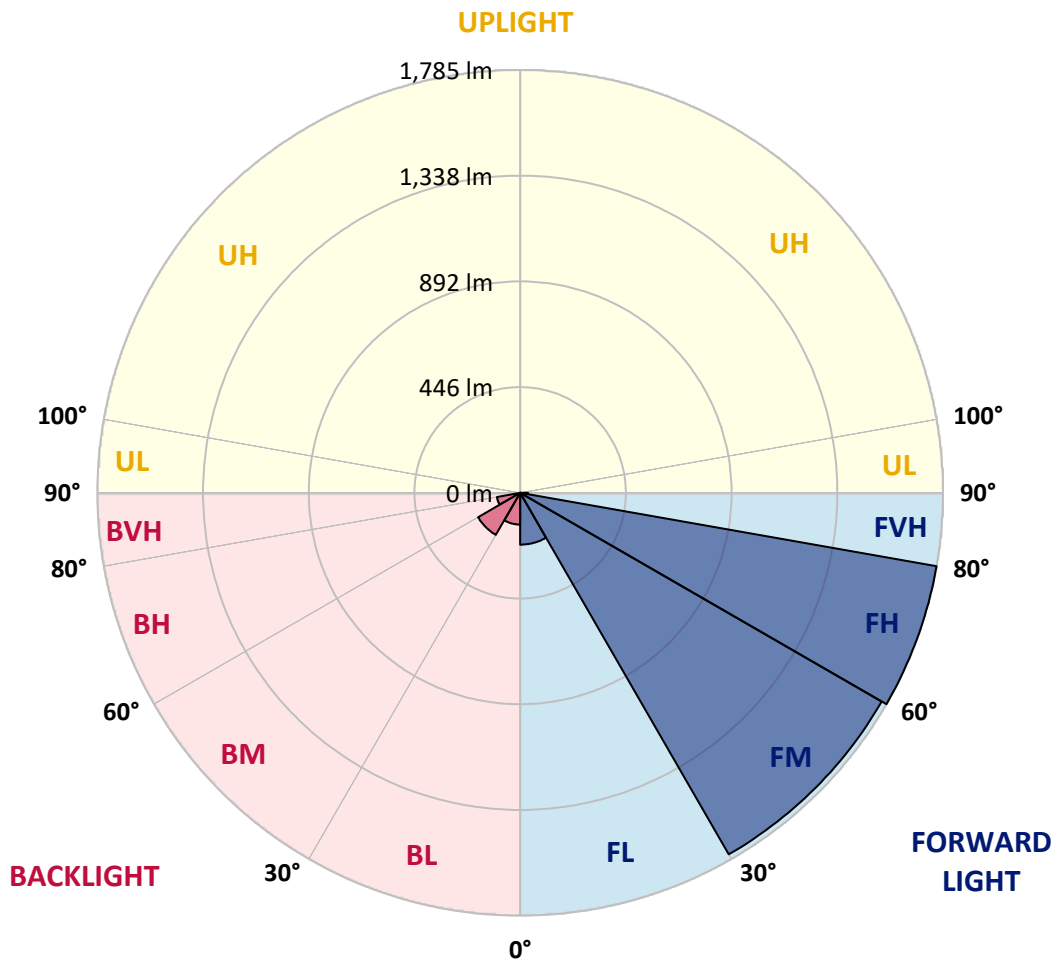
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	218.7	5.2			
FM	(30°-60°)	1761.8	41.6			
FH	(60°-80°)	1784.7	42.1			G1/1800
FVH	(80°-90°)	32.7	0.8			G1/100
BL	(0°-30°)	134.0	3.2	B1/500		
BM	(30°-60°)	205.0	4.8	B0/220		
BH	(60°-80°)	99.7	2.4	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: B1-U0-G1

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	478.8	478.8	478.8	478.8	478.8	478.8	478.8	478.8	478.8	478.8	478.8
2.5°	471.9	471.9	471.9	472.9	473.9	473.9	475.9	474.9	474.9	474.9	476.9
5°	459.1	460.1	461.1	463.0	467.0	470.0	474.9	474.9	475.9	477.9	478.8
7.5°	441.3	442.3	445.3	449.2	457.1	464.0	471.9	473.9	476.9	481.8	483.8
10°	430.5	432.4	436.4	441.3	450.2	459.1	469.0	471.9	480.8	489.7	494.6
12.5°	427.5	428.5	432.4	440.3	451.2	462.1	474.9	477.9	490.7	504.5	512.4
15°	432.4	433.4	435.4	444.3	457.1	470.9	487.7	491.7	507.5	523.3	533.1
17.5°	441.3	441.3	443.3	451.2	465.0	480.8	502.5	508.5	526.2	544.0	554.9
20°	447.3	447.3	450.2	458.1	473.9	494.6	520.3	528.2	548.0	567.7	577.6
22.5°	453.2	454.2	457.1	466.0	483.8	512.4	542.0	549.9	572.6	593.4	603.2
25°	470.0	469.0	470.0	477.9	498.6	534.1	571.7	581.5	605.2	627.9	632.9
27.5°	516.4	514.4	501.6	496.6	512.4	556.8	609.2	619.0	646.7	669.4	669.4
30°	623.0	619.0	587.4	547.0	534.1	577.6	644.7	658.5	694.1	713.8	707.9
32.5°	758.3	749.4	708.9	639.8	588.4	605.2	682.2	698.0	743.4	760.2	747.4
35°	906.4	905.4	855.0	766.2	693.1	662.5	730.6	749.4	806.6	821.4	800.7
37.5°	1063.3	1067.3	1033.7	911.3	825.4	756.3	794.8	816.5	886.6	904.4	884.6
40°	1238.1	1237.1	1224.3	1079.1	984.3	889.6	887.6	907.3	992.2	1019.9	992.2
42.5°	1459.2	1457.3	1410.9	1280.5	1176.9	1063.3	1022.9	1029.8	1124.5	1170.0	1129.5
45°	1684.4	1670.5	1617.2	1504.7	1412.8	1278.6	1201.6	1201.6	1282.5	1344.7	1281.5
47.5°	1809.7	1795.9	1774.2	1712.0	1684.4	1534.3	1420.7	1406.9	1470.1	1533.3	1444.4
50°	1974.6	1974.6	1920.3	1896.6	1944.0	1838.4	1662.6	1648.8	1679.4	1729.8	1613.3
52.5°	2104.9	2081.2	2042.7	2063.5	2198.7	2150.4	1904.5	1877.9	1901.6	1914.4	1760.4
55°	2159.2	2136.5	2133.6	2209.6	2418.9	2351.8	2152.3	2128.6	2126.7	2063.5	1888.7
57.5°	2170.1	2150.4	2187.9	2321.2	2633.2	2516.7	2399.2	2381.4	2326.1	2168.1	2020.0
60°	2078.3	2088.2	2179.0	2382.4	2759.5	2659.8	2607.5	2588.7	2461.4	2257.0	2166.2
62.5°	1889.7	1913.4	2083.2	2388.3	2713.1	2718.1	2723.0	2710.2	2566.0	2337.9	2313.3
65°	1666.6	1673.5	1877.9	2306.4	2632.2	2700.3	2807.9	2806.9	2646.0	2428.8	2479.1
67.5°	1373.3	1385.2	1561.9	2029.9	2470.2	2692.4	2919.5	2916.5	2736.8	2532.4	2577.9
70°	1021.9	1036.7	1179.8	1578.7	2108.9	2593.7	3065.6	3067.6	2832.6	2611.4	2509.7
71°	796.8	823.4	973.5	1340.8	1924.3	2493.9	3079.4	3097.2	2843.5	2600.6	2369.5
72.5°	391.0	422.6	611.1	943.9	1583.6	2270.8	2988.6	3023.1	2775.3	2465.3	2026.0
75°	101.7	107.6	182.7	386.0	849.1	1504.7	2410.0	2497.9	2268.8	1876.9	1238.1
77.5°	64.2	66.1	85.9	150.1	317.9	571.7	1415.8	1459.2	1296.3	950.8	436.4
80°	45.4	46.4	54.3	96.8	185.6	166.9	509.5	528.2	469.0	251.8	78.0
82.5°	27.6	27.6	39.5	62.2	114.5	90.8	134.3	143.2	126.4	70.1	25.7
85°	15.8	16.8	24.7	42.5	54.3	44.4	50.4	53.3	54.3	46.4	10.9
87.5°	12.8	13.8	21.7	35.5	29.6	21.7	21.7	22.7	23.7	27.6	4.9
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°	478.8	478.8	478.8	478.8	478.8	478.8	478.8	478.8	478.8	478.8	478.8
2.5°	476.9	476.9	477.9	476.9	476.9	476.9	477.9	477.9	477.9	479.8	480.8
5°	478.8	478.8	478.8	477.9	476.9	476.9	478.8	479.8	479.8	482.8	482.8
7.5°	483.8	483.8	481.8	479.8	477.9	474.9	475.9	476.9	475.9	476.9	476.9
10°	494.6	494.6	491.7	487.7	481.8	472.9	461.1	446.3	432.4	427.5	425.5
12.5°	512.4	511.4	505.5	498.6	485.8	455.1	410.7	358.4	315.0	303.1	299.2
15°	532.2	530.2	523.3	511.4	476.9	395.9	303.1	236.0	194.5	184.6	182.7
17.5°	552.9	549.9	540.1	516.4	436.4	294.2	195.5	148.1	125.4	123.4	124.4
20°	574.6	570.7	556.8	506.5	352.5	196.5	126.4	114.5	112.6	112.6	113.5
22.5°	599.3	594.4	575.6	470.9	256.7	130.3	108.6	107.6	106.6	105.6	105.6
25°	627.9	622.0	593.4	406.8	176.7	106.6	103.7	100.7	98.7	96.8	95.8
27.5°	662.5	654.6	607.2	327.8	121.4	99.7	97.7	92.8	88.9	84.9	84.9
30°	697.0	687.2	603.2	246.8	98.7	92.8	88.9	82.9	77.0	73.1	72.1
32.5°	733.6	723.7	577.6	165.9	89.8	84.9	80.0	71.1	64.2	59.2	58.3
35°	787.9	780.0	527.2	109.6	81.0	75.0	68.1	59.2	50.4	45.4	44.4
37.5°	868.8	859.0	465.0	83.9	71.1	62.2	56.3	46.4	37.5	32.6	31.6
40°	977.4	947.8	391.0	74.0	62.2	51.3	43.4	33.6	26.7	23.7	23.7
42.5°	1103.8	1033.7	311.0	67.1	55.3	42.5	31.6	22.7	18.8	17.8	17.8
45°	1238.1	1113.7	231.0	62.2	48.4	33.6	22.7	15.8	13.8	12.8	12.8
47.5°	1376.3	1178.8	160.9	56.3	40.5	25.7	15.8	11.8	9.9	8.9	8.9
50°	1505.6	1221.3	113.5	50.4	34.6	18.8	11.8	8.9	6.9	6.9	6.9
52.5°	1595.5	1217.4	81.9	43.4	26.7	12.8	7.9	5.9	5.9	5.9	5.9
55°	1674.5	1202.5	64.2	37.5	20.7	8.9	5.9	4.9	4.9	3.9	3.9
57.5°	1741.6	1178.8	54.3	30.6	14.8	6.9	3.9	3.9	3.0	3.0	3.0
60°	1798.9	1149.2	45.4	25.7	9.9	4.9	3.0	2.0	2.0	1.0	2.0
62.5°	1876.9	1130.5	39.5	19.7	6.9	3.0	2.0	1.0	1.0	0.0	0.0
65°	1934.1	1094.9	33.6	13.8	3.9	2.0	1.0	1.0	0.0	0.0	0.0
67.5°	1936.1	1030.8	24.7	7.9	3.0	2.0	1.0	0.0	0.0	0.0	0.0
70°	1780.1	878.7	15.8	3.9	2.0	1.0	1.0	0.0	0.0	0.0	0.0
71°	1637.0	778.0	12.8	3.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0
72.5°	1348.7	571.7	9.9	3.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
75°	743.4	207.3	4.9	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	237.9	63.2	3.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	40.5	9.9	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	13.8	3.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.9	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.0	1.0	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)