

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: P214955

Luminaire Tested: **ARCH-AF24-60-D-U-T4W-7050-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214955
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
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-T4W-7050-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 800mA 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: 5354 lumens
Efficiency: N/A
Efficacy: 83.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

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

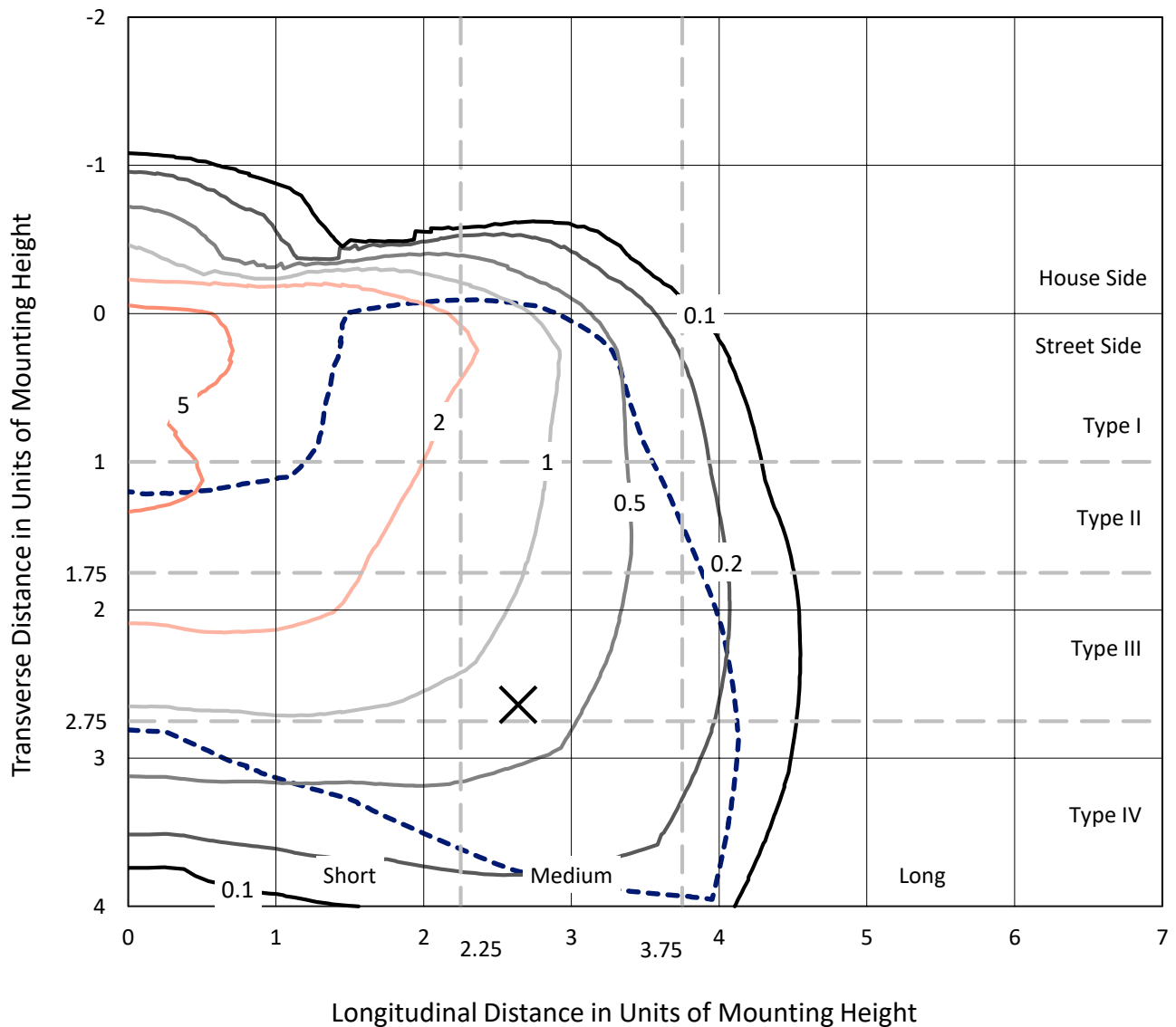


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

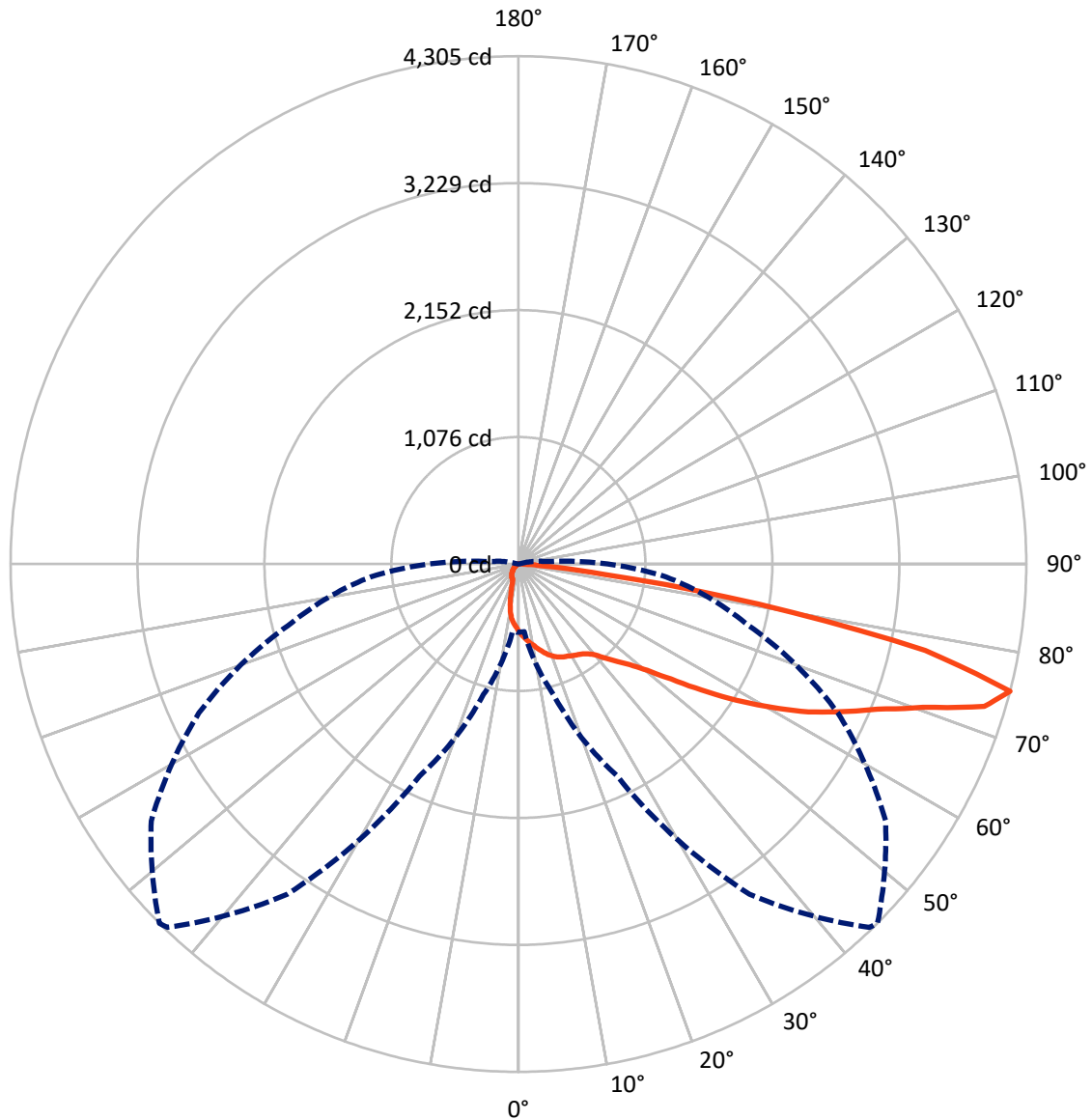


Based on 10 foot mounting height. Maximum calculated value = 7.6 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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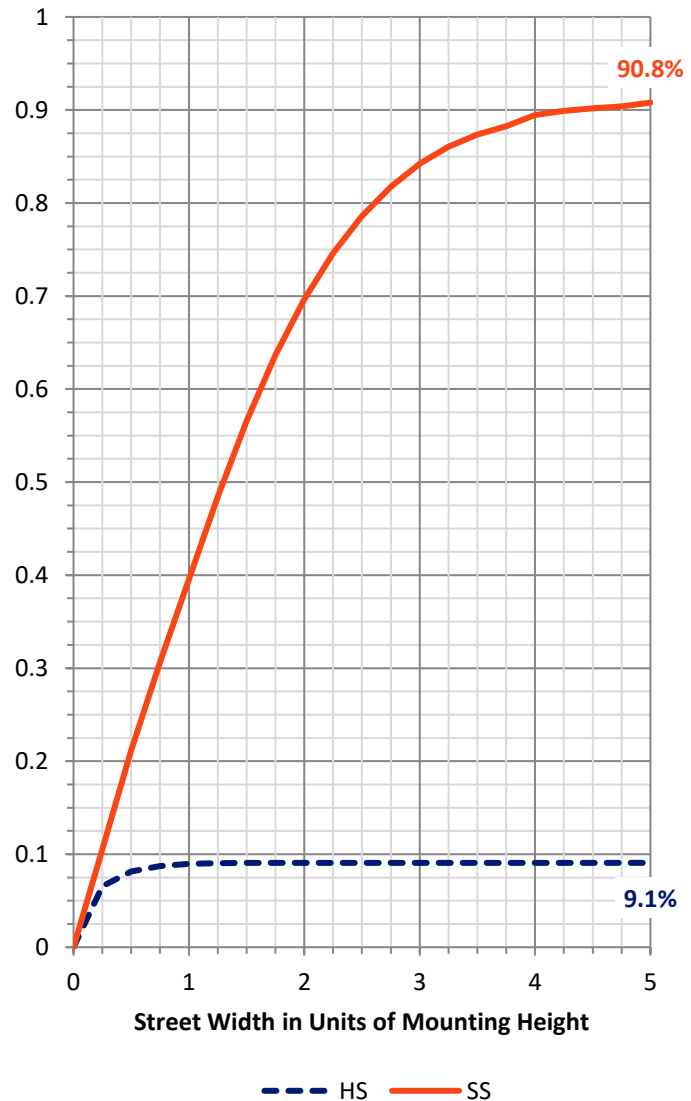
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	489.7	0.0	489.7
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	4864.3	0.0	4864.3
	% Fixture	90.9	0.0	90.9
Total	Lumens	5354.0	0.0	5354.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.0	1.0
10°-20°	153.1	2.9
20°-30°	253.6	4.7
30°-40°	367.0	6.9
40°-50°	600.9	11.2
50°-60°	1070.7	20.0
60°-70°	1574.1	29.4
70°-80°	1187.5	22.2
80°-90°	93.2	1.7
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°	5354.0	100.0
0°-180°	5354.0	100.0



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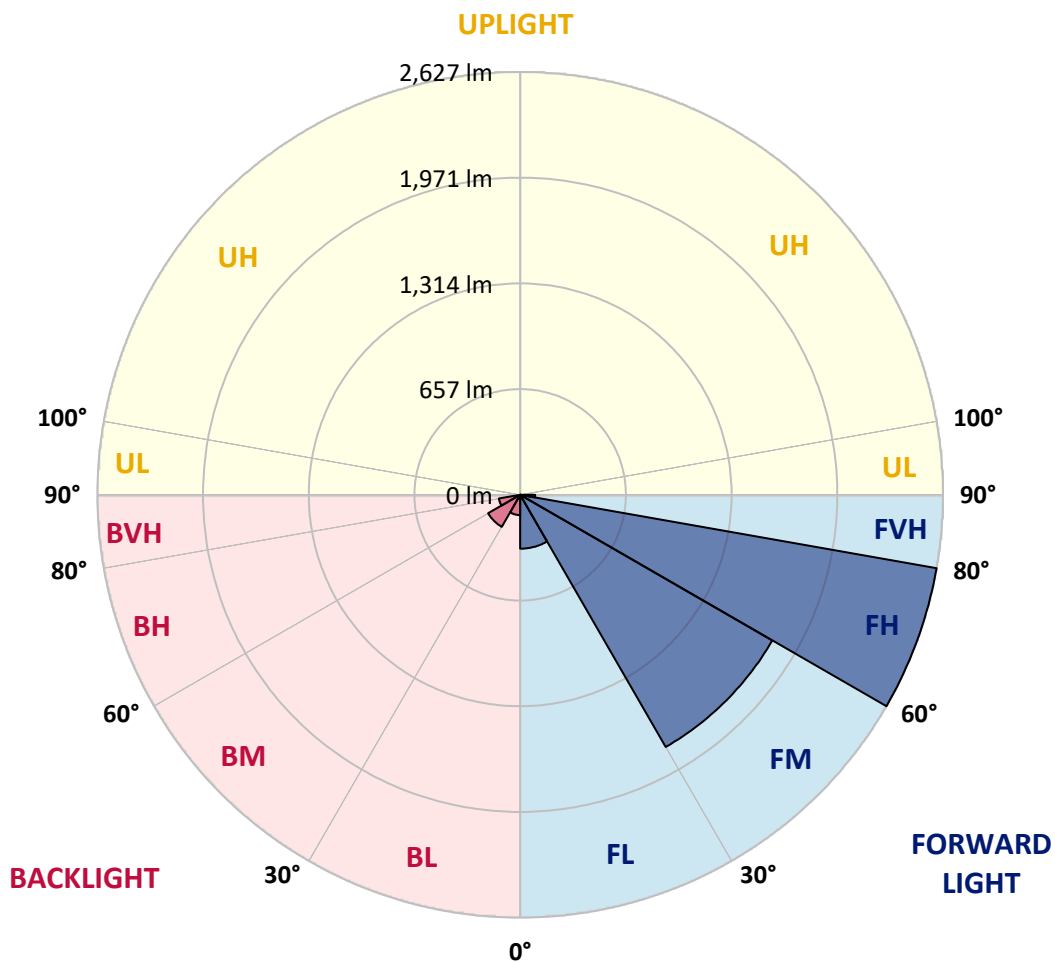
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	334.9	6.3			
FM	(30°-60°)	1809.1	33.8			
FH	(60°-80°)	2627.4	49.1			G2/5000
FVH	(80°-90°)	92.9	1.7			G1/100
BL	(0°-30°)	125.8	2.4	B1/500		
BM	(30°-60°)	229.5	4.3	B1/1000		
BH	(60°-80°)	134.1	2.5	B1/500		G1/500
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-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	572.6	572.6	572.6	572.6	572.6	572.6	572.6	572.6	572.6	572.6	572.6
2.5°	622.0	622.0	620.8	619.5	613.2	606.8	605.6	601.8	590.4	582.8	575.2
5°	674.0	675.3	672.7	666.4	652.5	638.5	637.3	627.1	605.6	590.4	573.9
7.5°	723.4	725.9	719.6	708.2	691.7	671.5	670.2	651.2	623.3	601.8	577.7
10°	765.2	765.2	756.3	742.4	724.7	703.1	700.6	679.1	647.4	620.8	589.1
12.5°	810.8	809.5	796.9	777.9	757.6	737.3	736.1	709.5	679.1	644.9	605.6
15°	852.6	850.1	833.6	815.9	794.3	772.8	771.5	744.9	713.3	672.7	629.6
17.5°	875.4	874.2	859.0	841.2	823.5	807.0	805.7	777.9	743.7	701.9	653.7
20°	879.2	880.5	867.8	852.6	842.5	833.6	833.6	808.3	771.5	727.2	679.1
22.5°	880.5	884.3	875.4	855.2	852.6	853.9	856.4	836.2	798.1	756.3	705.7
25°	889.4	894.4	888.1	864.0	861.5	870.4	872.9	864.0	829.8	788.0	736.1
27.5°	907.1	912.2	907.1	876.7	872.9	881.8	884.3	889.4	864.0	818.4	767.7
30°	942.6	943.8	932.4	894.4	886.8	898.2	902.0	916.0	895.7	847.6	798.1
32.5°	1004.7	992.0	957.8	907.1	900.8	913.4	917.2	932.4	924.8	875.4	829.8
35°	1131.3	1065.5	986.9	924.8	918.5	931.2	936.2	957.8	961.6	914.7	869.1
37.5°	1130.1	1070.5	1055.3	959.0	950.2	959.0	965.4	992.0	1007.2	966.6	926.1
40°	1209.9	1184.6	1184.6	1023.7	994.5	1007.2	1013.5	1040.1	1066.7	1035.1	993.3
42.5°	1460.7	1444.3	1426.5	1147.8	1056.6	1092.1	1095.9	1112.3	1144.0	1133.9	1084.5
45°	1740.7	1725.5	1657.1	1358.1	1163.0	1169.3	1178.2	1204.8	1250.4	1269.4	1211.2
47.5°	1959.9	1944.7	1886.4	1611.5	1329.0	1273.2	1273.2	1325.2	1396.1	1444.3	1388.5
50°	2136.0	2118.3	2082.8	1881.3	1601.4	1422.7	1415.1	1475.9	1581.1	1655.8	1617.8
52.5°	2307.0	2255.1	2233.5	2160.1	1909.2	1639.4	1619.1	1662.2	1807.9	1900.4	1868.7
55°	2421.0	2413.4	2390.6	2416.0	2232.3	1902.9	1885.1	1894.0	2076.5	2138.5	2099.3
57.5°	2527.5	2526.2	2576.9	2694.7	2584.5	2204.4	2176.5	2162.6	2336.2	2321.0	2355.2
60°	2659.2	2636.4	2754.2	2922.7	2907.5	2498.3	2466.7	2438.8	2535.1	2492.0	2661.8
62.5°	2665.6	2659.2	2898.7	3140.6	3228.1	2797.3	2760.6	2660.5	2708.6	2659.2	2954.4
65°	2423.6	2455.3	2959.5	3255.9	3496.6	3059.6	3015.2	2859.4	2863.2	2830.3	3299.0
67.5°	2369.1	2385.6	2792.3	3380.1	3690.5	3324.3	3282.5	3088.7	3043.1	3045.6	3503.0
70°	2233.5	2258.9	2584.5	3371.2	3843.8	3677.8	3636.0	3425.7	3315.5	3192.6	3345.9
72.5°	1706.5	1749.6	2177.8	2955.7	3802.0	4140.2	4128.8	3852.6	3424.4	2931.6	2531.3
75°	577.7	576.4	1144.0	1985.2	3415.6	4282.1	4304.9	3799.4	2987.4	2022.0	1256.8
77.5°	124.2	125.4	235.6	804.5	2269.0	3438.4	3525.8	2865.7	1927.0	900.8	287.6
80°	60.8	62.1	97.6	212.8	907.1	1928.2	2065.0	1473.4	712.0	179.9	48.1
82.5°	30.4	31.7	50.7	112.8	335.7	685.4	732.3	542.2	204.0	101.4	24.1
85°	11.4	11.4	25.3	67.1	153.3	160.9	197.6	157.1	122.9	82.3	6.3
87.5°	2.5	2.5	13.9	32.9	68.4	50.7	50.7	48.1	74.7	55.7	2.5
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°	572.6	572.6	572.6	572.6	572.6	572.6	572.6	572.6	572.6	572.6	572.6
2.5°	571.4	566.3	557.4	548.6	542.2	534.6	530.8	527.0	525.8	524.5	527.0
5°	565.0	557.4	541.0	527.0	514.4	504.2	496.6	489.0	485.2	482.7	484.0
7.5°	565.0	553.6	529.6	508.0	487.8	466.2	444.7	428.2	415.5	407.9	409.2
10°	571.4	556.2	524.5	495.4	457.4	411.7	364.9	329.4	305.3	291.4	291.4
12.5°	585.3	565.0	525.8	480.2	415.5	335.7	264.8	221.7	204.0	193.8	195.1
15°	604.3	580.2	532.1	459.9	357.3	249.6	185.0	157.1	157.1	159.6	160.9
17.5°	625.8	599.2	537.2	429.5	282.5	178.6	145.7	143.2	147.0	153.3	153.3
20°	647.4	618.2	539.7	381.3	211.6	141.9	138.1	138.1	140.6	147.0	148.2
22.5°	674.0	642.3	537.2	321.8	158.4	134.3	133.0	133.0	133.0	140.6	140.6
25°	701.9	670.2	527.0	258.4	134.3	129.2	128.0	126.7	126.7	133.0	134.3
27.5°	733.5	699.3	503.0	197.6	126.7	124.2	122.9	120.4	120.4	125.4	125.4
30°	765.2	732.3	466.2	149.5	120.4	119.1	116.6	114.0	111.5	116.6	116.6
32.5°	799.4	766.5	418.1	119.1	111.5	111.5	110.2	106.4	103.9	106.4	107.7
35°	845.0	805.7	363.6	103.9	100.1	100.1	100.1	98.8	93.8	96.3	96.3
37.5°	905.8	860.2	300.3	96.3	91.2	88.7	88.7	88.7	84.9	86.1	86.1
40°	983.1	923.6	239.4	89.9	84.9	78.5	76.0	77.3	74.7	74.7	73.5
42.5°	1088.3	992.0	179.9	84.9	79.8	70.9	65.9	64.6	62.1	60.8	60.8
45°	1239.0	1075.6	129.2	79.8	76.0	62.1	57.0	53.2	46.9	43.1	43.1
47.5°	1434.1	1170.6	96.3	74.7	72.2	54.5	48.1	40.5	31.7	29.1	29.1
50°	1672.3	1277.0	81.1	67.1	65.9	48.1	38.0	26.6	17.7	15.2	16.5
52.5°	1904.2	1377.1	72.2	59.5	58.3	41.8	27.9	13.9	7.6	7.6	7.6
55°	2099.3	1448.1	65.9	53.2	50.7	32.9	15.2	6.3	3.8	3.8	3.8
57.5°	2275.4	1488.6	59.5	46.9	40.5	22.8	6.3	2.5	2.5	1.3	1.3
60°	2436.3	1512.7	51.9	40.5	31.7	12.7	2.5	1.3	1.3	0.0	0.0
62.5°	2594.6	1530.4	44.3	32.9	24.1	5.1	1.3	1.3	0.0	0.0	0.0
65°	2715.0	1524.1	35.5	26.6	15.2	2.5	1.3	0.0	0.0	0.0	0.0
67.5°	2711.2	1437.9	26.6	20.3	7.6	1.3	0.0	0.0	0.0	0.0	0.0
70°	2424.8	1211.2	17.7	12.7	2.5	1.3	0.0	0.0	0.0	0.0	0.0
72.5°	1720.5	776.6	11.4	7.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0
75°	757.6	235.6	6.3	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	148.2	54.5	3.8	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	35.5	6.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	15.2	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.8	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	1.3	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)