

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: P800306

Luminaire Tested: **ARCH2-90-740-U-T2R-HSS**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P800306
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH2-90-740-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 695mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8860 lumens
Efficiency: N/A
Efficacy: 94.6 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 93.7
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: 24 FT

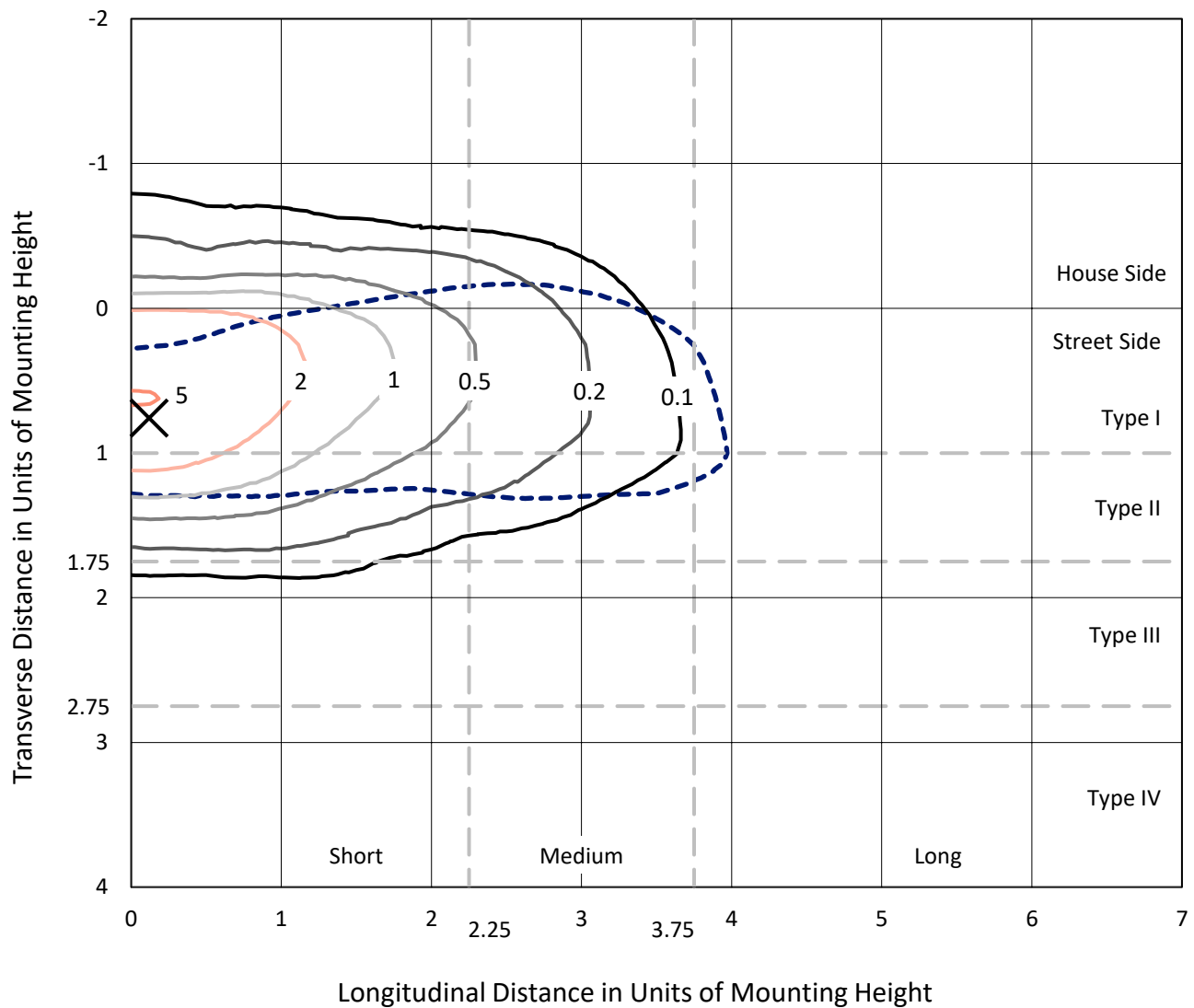


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Iso-Footcandle Lines of Horizontal Illumination

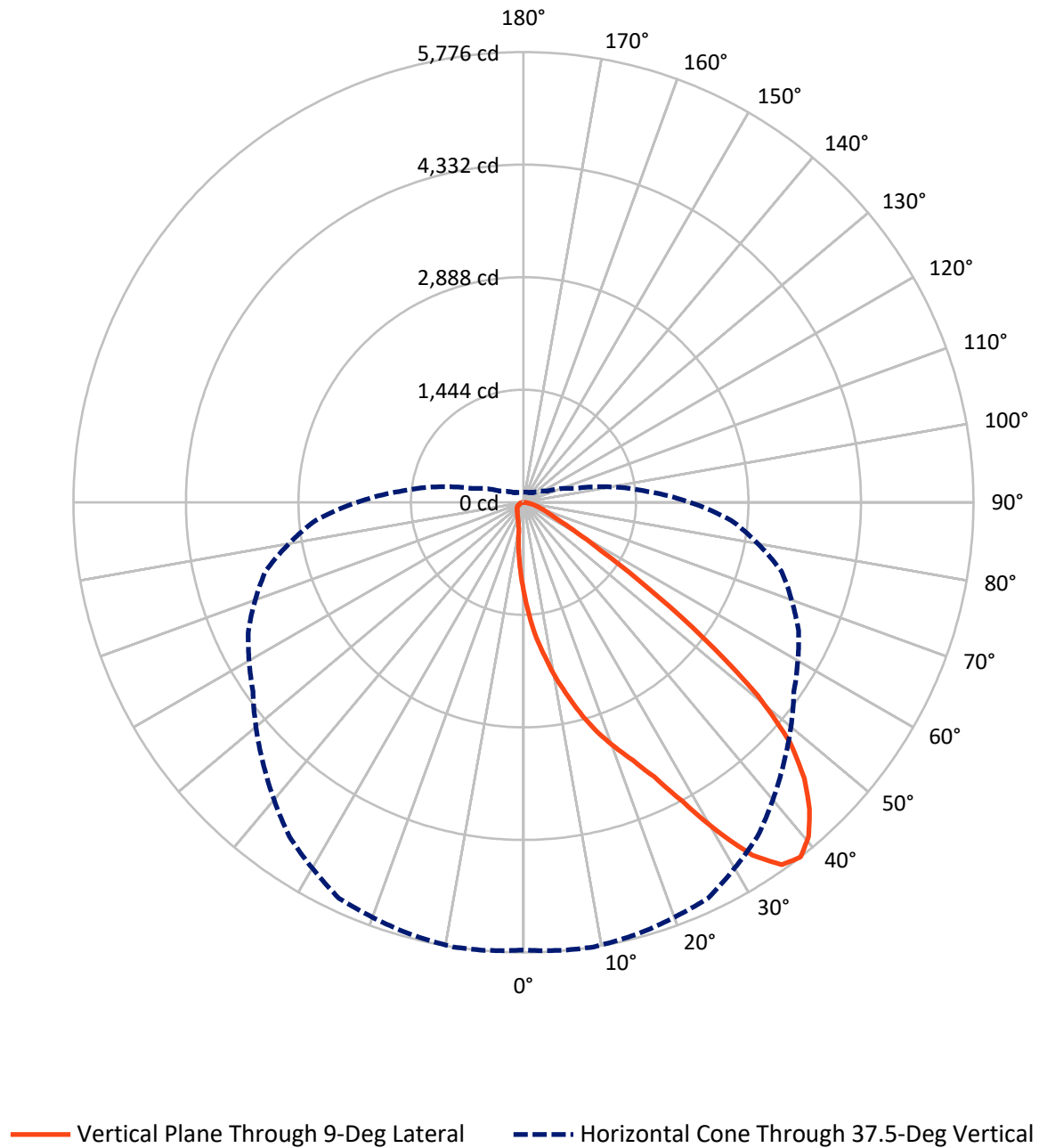
✕ Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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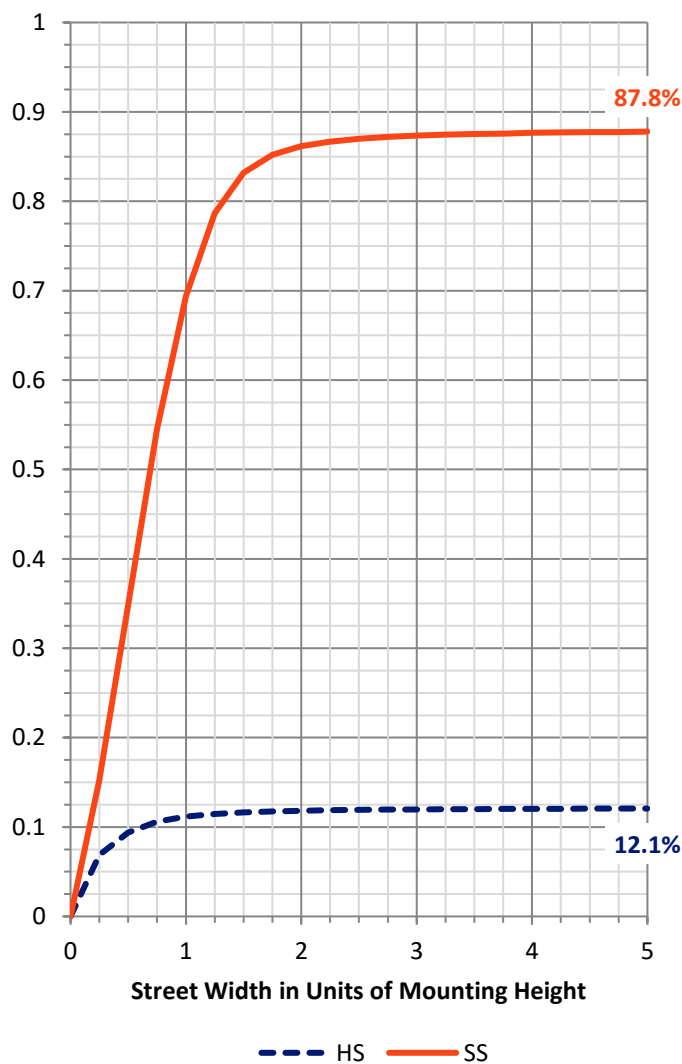
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1077.5	0.0	1077.5
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	7782.5	0.0	7782.5
	% Fixture	87.8	0.0	87.8
Total	Lumens	8860.0	0.0	8860.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.7	1.3
10°-20°	409.2	4.6
20°-30°	840.7	9.5
30°-40°	1486.1	16.8
40°-50°	1974.1	22.3
50°-60°	1872.3	21.1
60°-70°	1428.4	16.1
70°-80°	692.5	7.8
80°-90°	39.0	0.4
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°	8860.0	100.0
0°-180°	8860.0	100.0

Coefficient of Utilization



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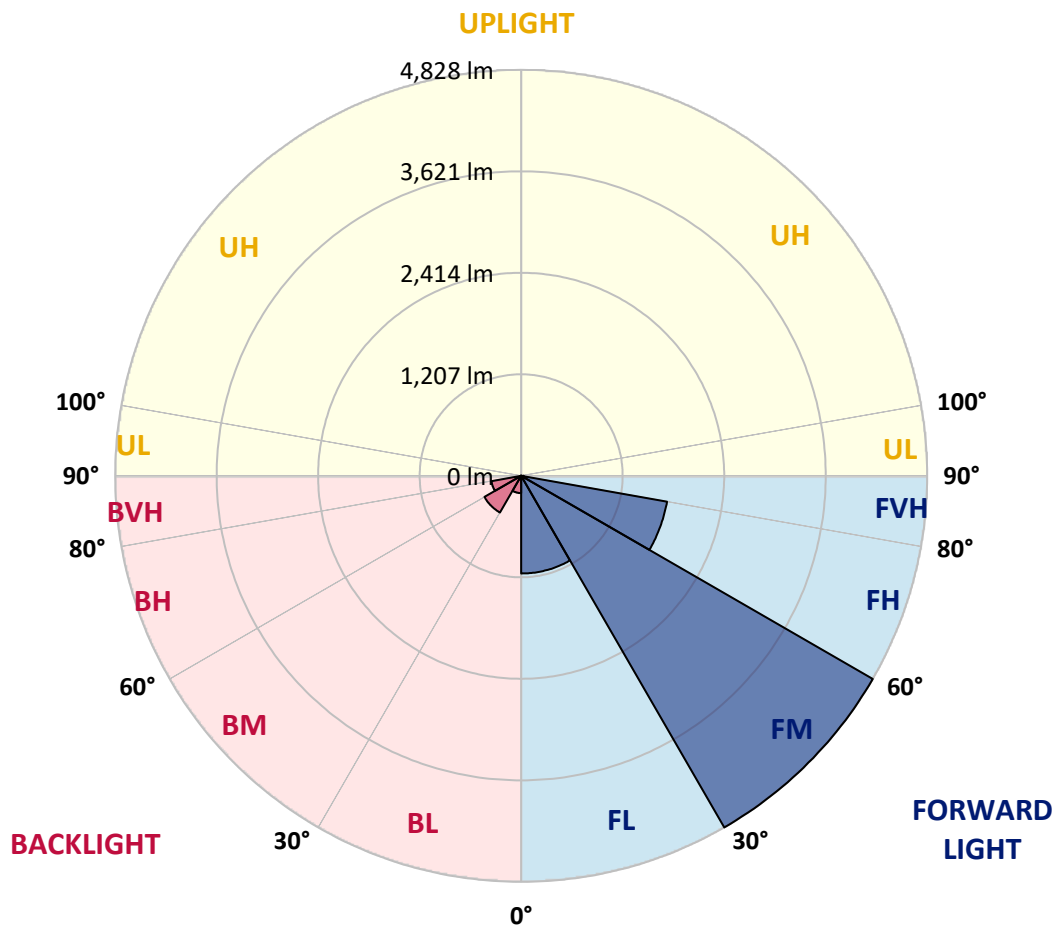
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1162.0	13.1			
FM	(30°-60°)	4828.3	54.5			
FH	(60°-80°)	1761.3	19.9			G1/1800
FVH	(80°-90°)	30.9	0.3			G1/100
BL	(0°-30°)	205.6	2.3	B1/500		
BM	(30°-60°)	504.2	5.7	B1/1000		
BH	(60°-80°)	359.6	4.1	B1/500		G1/500
BVH	(80°-90°)	8.1	0.1			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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2
2.5°	1451.3	1425.8	1454.9	1451.3	1425.8	1409.4	1358.5	1342.1	1282.1	1238.5	1200.3
5°	1749.5	1724.0	1749.5	1742.2	1705.9	1665.8	1582.2	1527.6	1420.3	1325.8	1240.3
7.5°	1996.8	1996.8	2007.7	2009.6	1965.9	1904.1	1800.4	1718.6	1567.6	1422.2	1285.8
10°	2264.2	2266.0	2289.6	2273.3	2215.1	2131.4	2000.5	1896.8	1714.9	1524.0	1329.4
12.5°	2549.7	2551.5	2558.8	2551.5	2482.4	2375.1	2216.9	2080.5	1871.3	1640.4	1389.4
15°	2835.2	2837.0	2846.1	2833.4	2757.0	2631.5	2451.5	2284.2	2036.8	1771.3	1462.2
17.5°	3102.5	3106.2	3113.5	3097.1	3017.1	2867.9	2684.3	2482.4	2213.2	1911.4	1544.0
20°	3342.6	3346.2	3351.7	3329.9	3249.9	3100.7	2902.5	2691.5	2393.3	2055.0	1633.1
22.5°	3584.5	3588.1	3597.2	3568.1	3479.0	3308.1	3113.5	2895.2	2584.2	2213.2	1736.8
25°	3893.6	3897.3	3904.6	3862.7	3740.9	3540.8	3335.3	3111.6	2791.6	2391.5	1864.1
27.5°	4346.5	4342.8	4342.8	4266.5	4057.3	3797.3	3559.0	3331.7	3015.3	2582.4	2004.1
30°	4906.6	4897.5	4892.1	4788.4	4490.1	4086.4	3788.2	3537.2	3229.9	2784.3	2155.1
32.5°	5408.5	5408.5	5397.6	5288.5	4972.1	4475.6	4031.9	3737.2	3437.2	2988.0	2311.5
35°	5705.0	5717.7	5712.3	5630.4	5399.5	4893.9	4361.0	3977.3	3655.4	3200.8	2498.8
37.5°	5745.0	5770.4	5775.9	5726.8	5605.0	5235.8	4726.6	4237.4	3895.5	3429.9	2680.6
40°	5583.1	5637.7	5637.7	5630.4	5586.8	5397.6	5033.9	4539.3	4142.8	3668.1	2864.3
42.5°	5334.0	5390.4	5383.1	5410.4	5399.5	5359.4	5206.7	4821.1	4390.1	3913.6	3031.6
45°	5008.5	5066.6	5052.1	5101.2	5123.0	5166.7	5188.5	5017.5	4633.8	4181.0	3218.9
47.5°	4486.5	4584.7	4606.5	4693.8	4784.8	4921.2	5024.8	5088.5	4861.1	4468.3	3422.6
50°	3715.4	3853.6	3897.3	4081.0	4330.1	4612.0	4779.3	5001.2	5021.2	4762.9	3642.7
52.5°	2660.6	2820.7	2888.0	3189.8	3702.7	4193.7	4495.6	4808.4	5083.0	5044.8	3880.9
55°	1720.4	1856.8	1922.3	2206.0	2888.0	3659.0	4161.0	4559.3	5048.5	5303.1	4153.7
57.5°	1060.2	1138.4	1182.1	1425.8	2053.2	2973.4	3722.7	4330.1	4943.0	5526.8	4437.4
60°	714.7	760.2	782.0	896.6	1394.9	2222.3	3120.7	4090.1	4804.8	5677.7	4695.7
62.5°	474.7	489.2	511.0	582.0	920.2	1560.4	2396.9	3660.9	4701.1	5686.8	4886.6
65°	367.4	374.6	383.7	414.6	567.4	1091.2	1685.9	2966.2	4546.5	5494.0	4946.6
67.5°	289.2	296.4	307.3	323.7	411.0	740.2	1147.5	2173.2	4230.1	5192.1	4848.4
70°	227.3	232.8	240.1	254.6	320.1	536.5	758.4	1444.0	3591.8	4904.8	4539.3
72.5°	180.0	185.5	192.8	207.3	260.1	392.8	520.1	900.2	2769.7	4553.8	3944.6
75°	141.9	145.5	150.9	165.5	209.1	305.5	352.8	538.3	1882.3	3911.8	3073.5
77.5°	70.9	87.3	100.0	114.6	152.8	211.0	234.6	298.3	794.7	2007.7	1465.8
80°	41.8	50.9	54.6	63.7	100.0	127.3	127.3	120.0	251.0	771.1	598.3
82.5°	23.6	32.7	34.6	36.4	60.0	72.7	58.2	43.6	50.9	258.2	174.6
85°	7.3	10.9	12.7	14.5	20.0	21.8	20.0	18.2	14.5	25.5	16.4
87.5°	0.0	0.0	0.0	0.0	1.8	3.6	3.6	3.6	5.5	5.5	5.5
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°	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2
2.5°	1178.5	1154.8	1109.4	1067.5	1027.5	998.4	971.1	945.7	927.5	912.9	911.1
5°	1194.8	1147.5	1060.2	978.4	903.8	842.0	789.3	747.4	716.5	694.7	692.9
7.5°	1216.7	1143.9	1011.1	889.3	778.4	689.3	612.9	556.5	516.5	500.1	487.4
10°	1234.8	1140.3	962.0	800.2	654.7	541.9	451.0	394.6	365.5	354.6	349.2
12.5°	1265.8	1143.9	920.2	718.4	547.4	414.6	345.5	314.6	301.9	292.8	291.0
15°	1311.2	1160.3	880.2	638.3	438.3	334.6	294.6	274.6	261.9	260.1	258.2
17.5°	1356.7	1174.8	843.8	556.5	363.7	291.0	263.7	247.3	238.2	236.4	236.4
20°	1409.4	1193.0	803.8	478.3	311.0	261.9	240.1	227.3	216.4	214.6	214.6
22.5°	1471.3	1218.5	765.6	409.2	276.4	240.1	221.9	207.3	198.2	196.4	196.4
25°	1554.9	1256.7	734.7	358.3	252.8	221.9	205.5	192.8	185.5	181.9	181.9
27.5°	1647.7	1309.4	712.9	327.3	236.4	207.3	191.0	180.0	172.8	169.1	169.1
30°	1751.3	1367.6	698.3	314.6	227.3	194.6	180.0	169.1	160.0	158.2	158.2
32.5°	1865.9	1434.9	689.3	316.4	225.5	185.5	169.1	158.2	150.9	147.3	147.3
35°	1993.2	1509.4	683.8	327.3	229.1	178.2	160.0	149.1	141.9	138.2	138.2
37.5°	2135.0	1596.7	683.8	338.3	238.2	176.4	150.9	140.0	134.6	130.9	130.9
40°	2267.8	1689.5	691.1	351.0	247.3	176.4	143.7	134.6	127.3	123.7	123.7
42.5°	2371.5	1742.2	696.5	363.7	252.8	174.6	136.4	127.3	121.8	118.2	118.2
45°	2489.7	1798.6	685.6	369.2	252.8	170.9	130.9	121.8	116.4	112.8	112.8
47.5°	2620.6	1867.7	683.8	372.8	247.3	163.7	125.5	116.4	112.8	109.1	109.1
50°	2753.4	1944.1	687.4	371.0	240.1	152.8	118.2	112.8	107.3	103.7	103.7
52.5°	2904.3	2024.1	694.7	367.4	223.7	140.0	112.8	107.3	101.8	98.2	96.4
55°	3071.6	2111.4	709.3	360.1	201.9	127.3	107.3	101.8	94.6	90.9	89.1
57.5°	3264.4	2218.7	725.6	345.5	178.2	116.4	101.8	94.6	83.7	78.2	76.4
60°	3448.1	2340.6	743.8	311.0	154.6	105.5	96.4	85.5	74.6	70.9	69.1
62.5°	3620.9	2460.6	752.9	249.1	130.9	96.4	90.9	78.2	67.3	63.7	61.8
65°	3731.8	2591.5	732.9	169.1	107.3	89.1	83.7	72.7	61.8	56.4	56.4
67.5°	3739.1	2653.4	663.8	110.9	87.3	80.0	76.4	65.5	54.6	50.9	49.1
70°	3555.4	2560.6	507.4	87.3	72.7	69.1	69.1	58.2	47.3	43.6	41.8
72.5°	3133.5	2267.8	323.7	70.9	61.8	58.2	58.2	49.1	41.8	36.4	34.6
75°	2473.3	1749.5	172.8	58.2	50.9	49.1	45.5	40.0	34.6	30.9	29.1
77.5°	1136.6	771.1	80.0	41.8	38.2	38.2	34.6	29.1	27.3	23.6	23.6
80°	449.2	261.9	40.0	27.3	25.5	25.5	25.5	20.0	20.0	16.4	14.5
82.5°	123.7	54.6	20.0	16.4	16.4	16.4	14.5	12.7	12.7	10.9	10.9
85°	12.7	9.1	9.1	9.1	9.1	7.3	7.3	5.5	3.6	3.6	3.6
87.5°	5.5	5.5	5.5	5.5	5.5	3.6	1.8	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)