

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: P397536

Luminaire Tested: **ARCH-S-PA1-100-727-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397536
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-100-727-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7638 lumens
Efficiency: N/A
Efficacy: 79.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 96
Input Voltage (V): NR
Input Current (A_{in}): 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

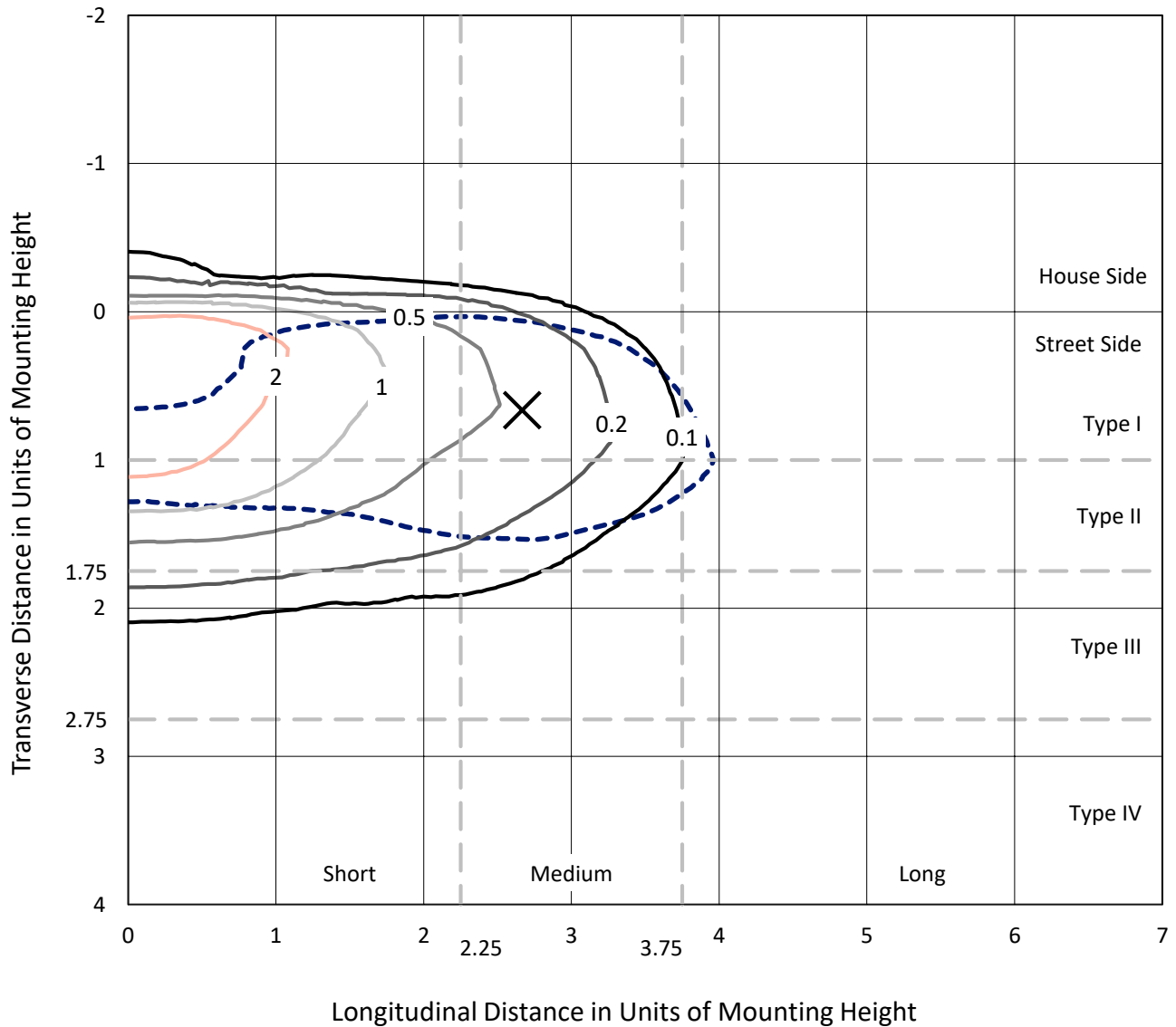


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Iso-Footcandle Lines of Horizontal Illumination

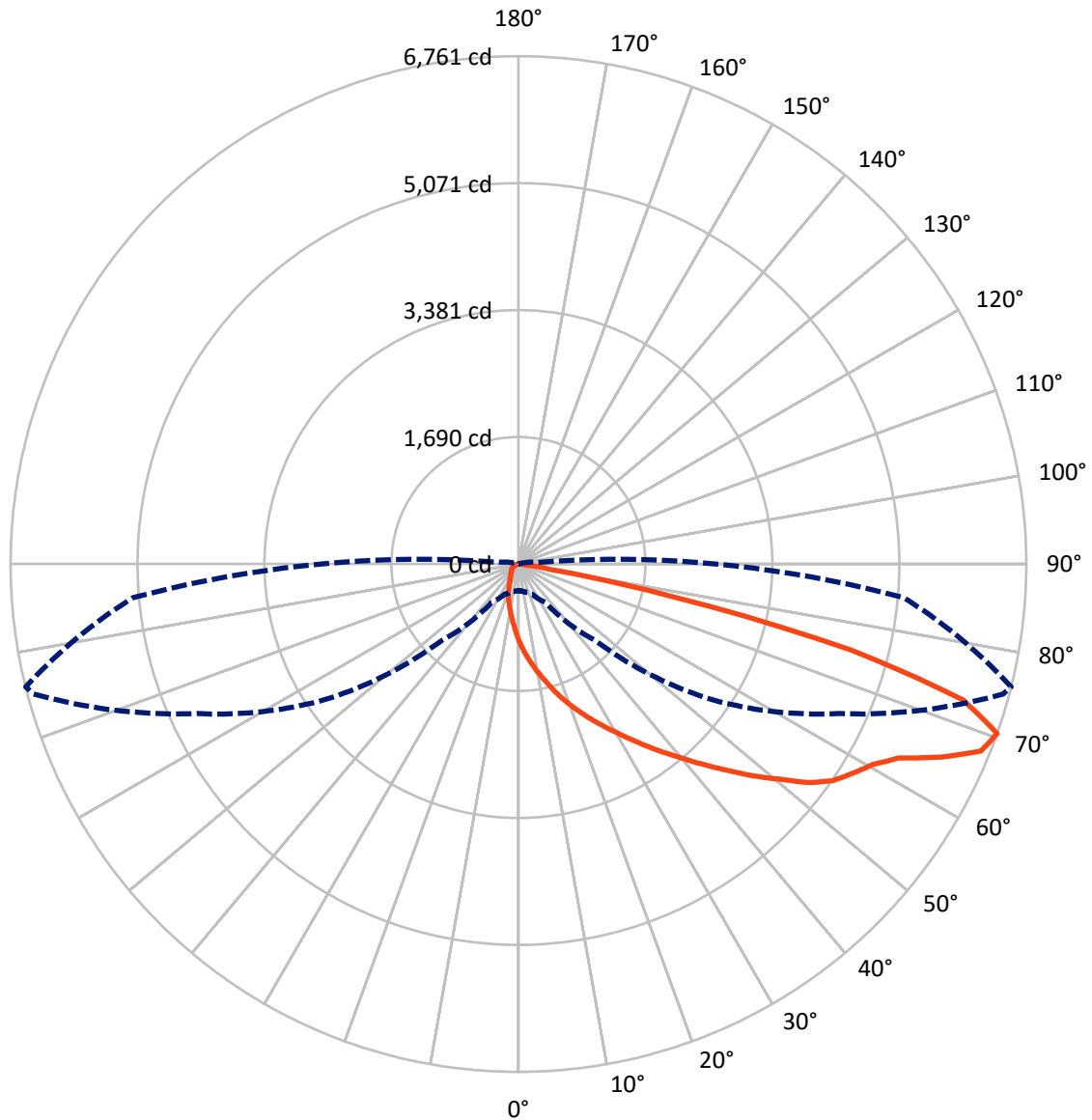
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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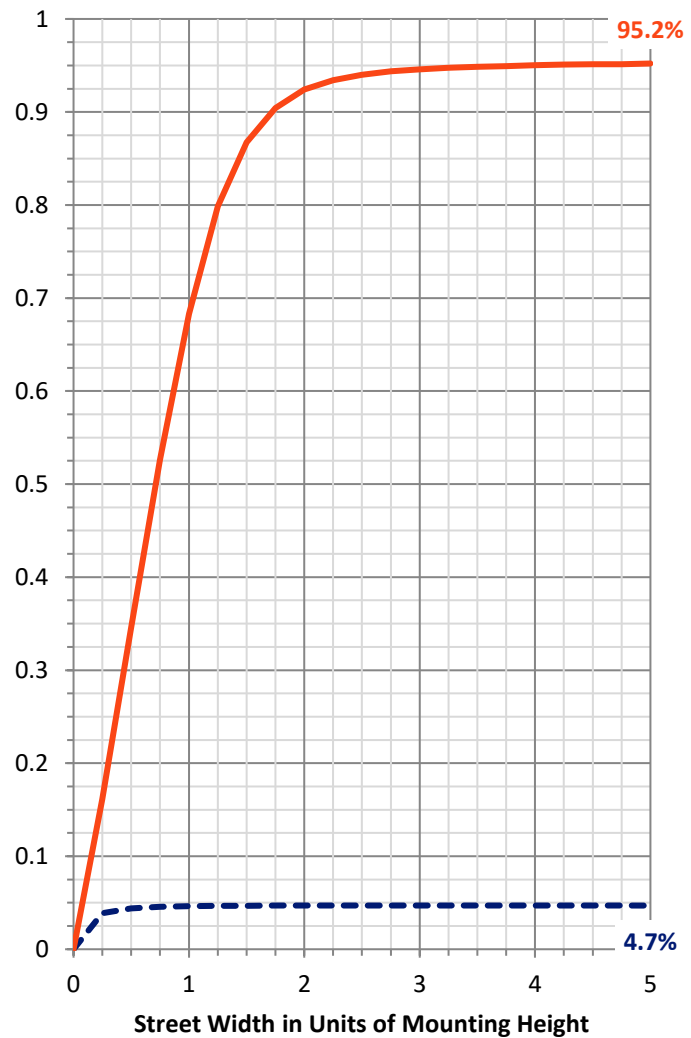
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	360.2	0.0	360.2
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	7277.8	0.0	7277.8
	% Fixture	95.3	0.0	95.3
Total	Lumens	7638.0	0.0	7638.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.3	1.3
10°-20°	310.9	4.1
20°-30°	578.9	7.6
30°-40°	1024.0	13.4
40°-50°	1566.0	20.5
50°-60°	1775.4	23.2
60°-70°	1522.0	19.9
70°-80°	737.2	9.7
80°-90°	27.3	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°	7638.0	100.0
0°-180°	7638.0	100.0

Coefficient of Utilization



--- HS — SS

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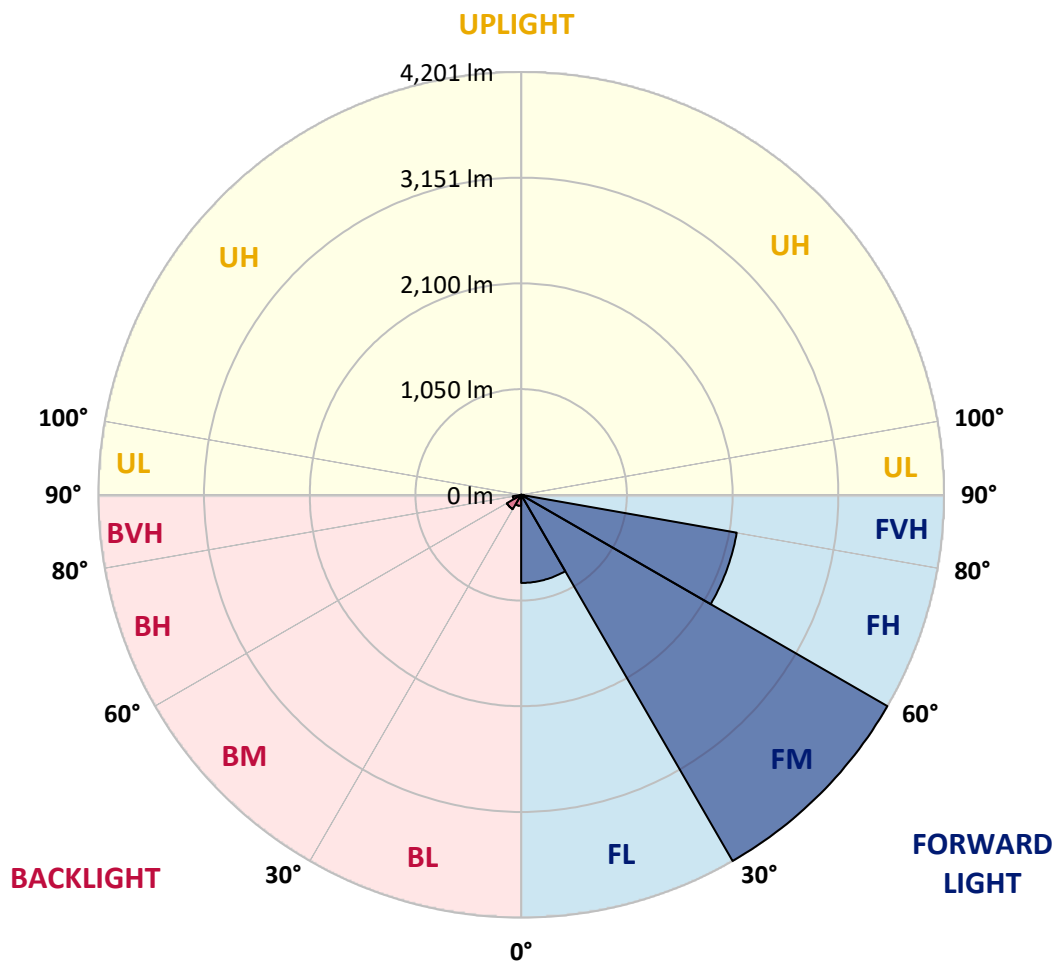
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	875.6	11.5			
FM	(30°-60°)	4201.0	55.0			
FH	(60°-80°)	2174.3	28.5			G2/5000
FVH	(80°-90°)	26.9	0.4			G1/100
BL	(0°-30°)	110.5	1.4	B1/500		
BM	(30°-60°)	164.4	2.2	B0/220		
BH	(60°-80°)	84.8	1.1	B0/110		G0/110
BVH	(80°-90°)	0.5	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 II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1022.4	1022.4	1022.4	1022.4	1022.4	1022.4	1022.4	1022.4	1022.4	1022.4	1022.4
2.5°	1397.5	1389.9	1382.3	1353.0	1326.3	1302.2	1256.4	1196.6	1143.2	1131.8	1069.4
5°	1641.7	1632.8	1621.3	1592.1	1557.8	1517.1	1449.7	1358.1	1264.0	1243.7	1127.9
7.5°	1807.0	1799.4	1782.8	1768.8	1734.5	1695.1	1620.1	1513.2	1383.5	1358.1	1195.3
10°	1920.2	1915.1	1912.5	1901.1	1875.7	1843.9	1768.8	1656.9	1504.3	1475.1	1266.5
12.5°	1960.9	1960.9	1973.6	1992.7	1996.5	1986.3	1917.6	1805.7	1631.5	1601.0	1350.5
15°	1906.2	1912.5	1940.5	2001.6	2065.1	2107.1	2063.9	1959.6	1771.4	1738.3	1449.7
17.5°	1890.9	1897.3	1916.4	1969.8	2055.0	2166.9	2188.5	2108.4	1903.6	1875.7	1551.4
20°	1934.2	1940.5	1957.0	2002.8	2067.7	2180.9	2271.1	2252.1	2043.5	2014.3	1654.4
22.5°	2037.2	2041.0	2041.0	2076.6	2133.8	2217.7	2323.3	2388.1	2187.2	2155.4	1756.1
25°	2258.4	2250.8	2220.3	2202.5	2239.4	2308.0	2389.4	2507.7	2347.4	2304.2	1865.5
27.5°	2548.4	2573.8	2500.0	2414.8	2386.9	2426.3	2482.2	2613.2	2502.6	2456.8	1964.7
30°	2941.3	2931.1	2834.5	2712.4	2591.6	2577.6	2596.7	2703.5	2657.7	2614.5	2075.3
32.5°	3264.3	3283.4	3181.6	3032.9	2852.3	2767.1	2746.7	2811.6	2823.0	2795.1	2206.3
35°	3596.2	3616.5	3517.3	3352.0	3137.1	2994.7	2936.2	2945.1	3027.8	2992.2	2343.6
37.5°	3893.7	3911.6	3813.6	3644.5	3429.6	3255.4	3171.5	3102.8	3226.1	3194.3	2488.6
40°	4120.1	4122.6	4056.5	3905.2	3701.7	3521.2	3425.8	3291.0	3436.0	3414.3	2639.9
42.5°	4280.3	4285.4	4237.1	4107.4	3919.2	3751.3	3673.8	3513.5	3677.6	3658.5	2815.4
45°	4355.4	4364.3	4359.2	4239.6	4083.2	3938.3	3912.8	3750.1	3942.1	3924.3	3017.6
47.5°	4284.1	4284.1	4349.0	4332.5	4188.8	4092.1	4121.4	3996.8	4229.5	4212.9	3223.6
50°	3987.9	3991.7	4123.9	4313.4	4229.5	4207.8	4299.4	4238.4	4490.1	4500.3	3470.3
52.5°	3209.6	3203.3	3649.6	4013.3	4201.5	4260.0	4463.4	4485.1	4803.0	4833.5	3715.7
55°	2398.3	2394.5	2821.8	3481.7	4005.7	4233.3	4555.0	4705.1	5070.0	5089.1	3898.8
57.5°	1898.6	1888.4	2123.6	2806.5	3563.1	4113.7	4558.8	4747.0	5218.8	5251.9	4076.9
60°	1459.8	1450.9	1626.4	2088.0	2936.2	3795.8	4449.5	4749.6	5362.5	5421.0	4315.9
62.5°	1044.0	1054.2	1189.0	1498.0	2258.4	3346.9	4307.0	4785.2	5618.1	5684.2	4655.5
65°	704.5	699.4	811.3	1019.9	1606.1	2742.9	4088.3	4860.2	6078.4	6194.1	5062.4
67.5°	489.6	493.4	544.3	663.8	1019.9	2105.8	3724.6	4902.2	6554.0	6644.3	5347.2
70°	353.5	358.6	386.6	446.3	623.1	1428.0	3148.6	4710.1	6682.4	6761.3	5148.9
72.5°	232.7	242.9	284.8	316.6	398.0	894.0	2319.5	4057.8	6129.3	6187.8	4319.7
75°	125.9	128.4	183.1	236.5	283.6	557.0	1383.5	2736.6	4585.5	4566.4	2848.5
77.5°	97.9	101.7	113.2	169.1	190.7	306.5	546.8	1236.0	2172.0	2113.5	971.5
80°	59.8	62.3	78.8	100.5	133.5	178.0	160.2	335.7	441.3	413.3	142.4
82.5°	35.6	38.1	47.1	83.9	105.5	83.9	56.0	81.4	82.7	81.4	35.6
85°	6.4	6.4	33.1	58.5	56.0	24.2	33.1	26.7	24.2	25.4	7.6
87.5°	0.0	0.0	12.7	17.8	25.4	8.9	12.7	6.4	6.4	6.4	3.8
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°	1022.4	1022.4	1022.4	1022.4	1022.4	1022.4	1022.4	1022.4	1022.4	1022.4	1022.4
2.5°	1031.3	988.1	899.0	821.5	743.9	686.7	643.4	598.9	583.7	564.6	554.4
5°	1049.1	963.9	787.1	646.0	526.5	434.9	376.4	340.8	317.9	301.4	297.6
7.5°	1075.8	944.8	696.9	506.1	375.1	283.6	235.3	211.1	198.4	190.7	188.2
10°	1107.6	928.3	607.8	394.2	264.5	199.6	172.9	162.8	157.7	155.1	153.9
12.5°	1152.1	921.9	532.8	303.9	199.6	164.0	150.1	143.7	139.9	136.1	134.8
15°	1210.6	924.5	464.1	235.3	165.3	146.2	134.8	128.4	123.3	119.5	119.5
17.5°	1271.6	928.3	396.8	190.7	150.1	133.5	120.8	111.9	108.1	104.3	103.0
20°	1328.9	927.0	331.9	162.8	136.1	119.5	106.8	97.9	91.6	87.7	87.7
22.5°	1383.5	919.4	270.9	146.2	124.6	105.5	91.6	82.7	77.6	73.8	73.8
25°	1442.0	904.1	221.3	133.5	110.6	92.8	78.8	69.9	66.1	62.3	62.3
27.5°	1487.8	878.7	180.6	122.1	97.9	80.1	67.4	59.8	56.0	53.4	53.4
30°	1537.4	841.8	150.1	109.4	85.2	68.7	57.2	50.9	47.1	45.8	45.8
32.5°	1592.1	801.1	128.4	96.6	72.5	58.5	48.3	44.5	40.7	39.4	39.4
35°	1655.7	765.5	115.7	83.9	63.6	49.6	42.0	38.1	35.6	35.6	35.6
37.5°	1728.2	728.6	104.3	73.8	54.7	42.0	35.6	34.3	33.1	31.8	31.8
40°	1807.0	689.2	94.1	64.9	47.1	35.6	30.5	30.5	29.2	29.2	29.2
42.5°	1896.0	654.9	85.2	57.2	40.7	30.5	26.7	26.7	25.4	25.4	25.4
45°	1992.7	623.1	77.6	50.9	35.6	26.7	24.2	22.9	21.6	21.6	21.6
47.5°	2107.1	605.3	71.2	44.5	30.5	22.9	20.3	19.1	17.8	16.5	16.5
50°	2253.3	612.9	64.9	36.9	26.7	19.1	16.5	15.3	14.0	12.7	12.7
52.5°	2369.1	609.1	56.0	31.8	21.6	15.3	12.7	11.4	10.2	8.9	8.9
55°	2453.0	593.9	48.3	26.7	16.5	12.7	10.2	7.6	6.4	6.4	6.4
57.5°	2535.6	578.6	40.7	21.6	12.7	8.9	6.4	5.1	5.1	5.1	5.1
60°	2664.1	557.0	35.6	17.8	10.2	6.4	3.8	3.8	2.5	2.5	2.5
62.5°	2820.5	530.3	29.2	15.3	7.6	5.1	2.5	2.5	0.0	0.0	0.0
65°	2992.2	483.2	24.2	11.4	6.4	3.8	2.5	0.0	0.0	0.0	0.0
67.5°	2952.7	387.8	20.3	7.6	5.1	2.5	1.3	0.0	0.0	0.0	0.0
70°	2611.9	262.0	16.5	6.4	3.8	2.5	1.3	0.0	0.0	0.0	0.0
72.5°	2046.1	155.1	11.4	5.1	2.5	1.3	0.0	0.0	0.0	0.0	0.0
75°	1309.8	77.6	7.6	3.8	2.5	1.3	0.0	0.0	0.0	0.0	0.0
77.5°	438.7	38.1	5.1	2.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0
80°	62.3	12.7	2.5	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	14.0	5.1	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.1	2.5	1.3	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)