

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: P398091

Luminaire Tested: **ARCH-S-PA1-80-827-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398091
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-PA1-80-827-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 1050mA 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: 5634 lumens
Efficiency: N/A
Efficacy: 67.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

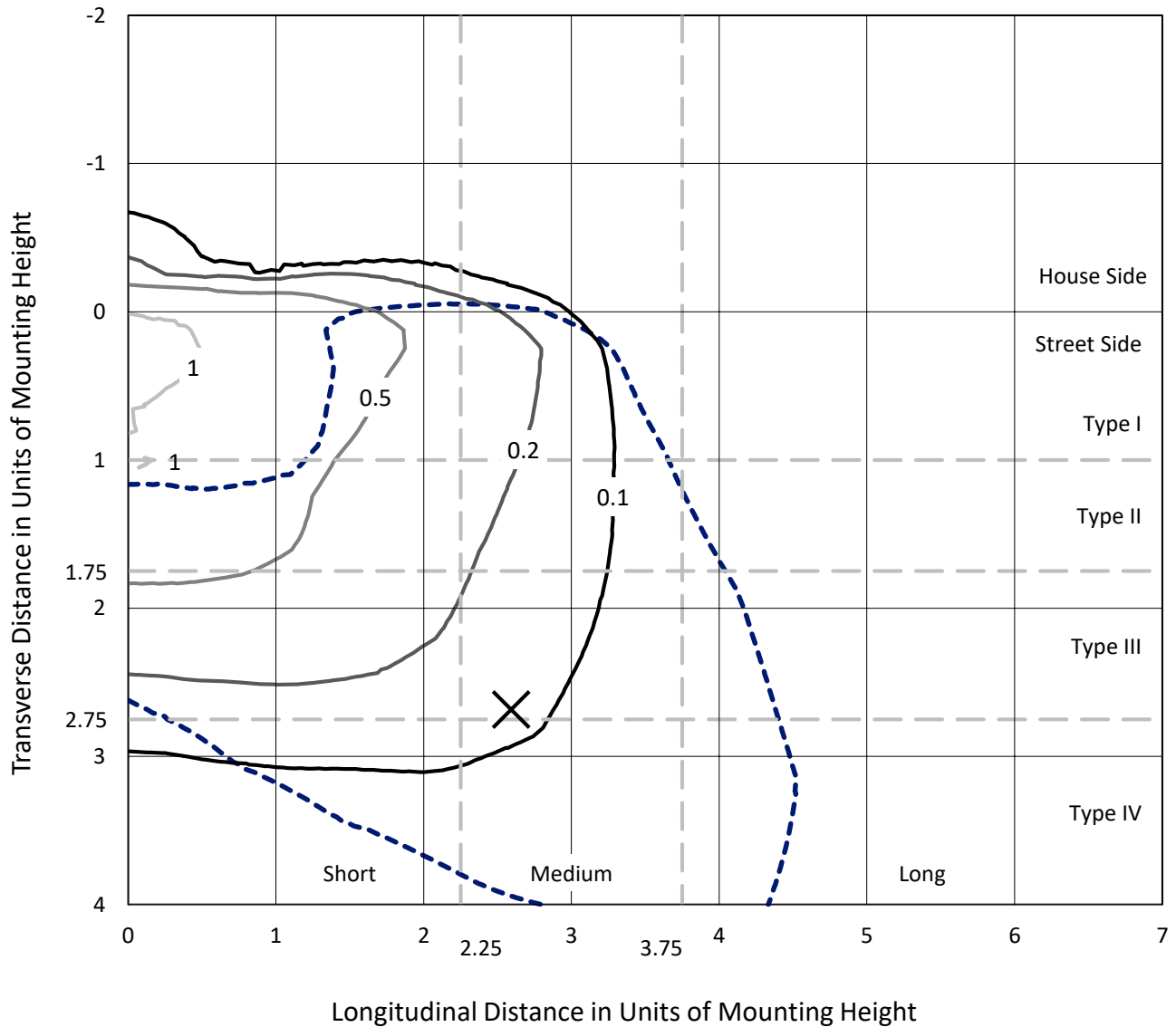
Input Watts (W): 83
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

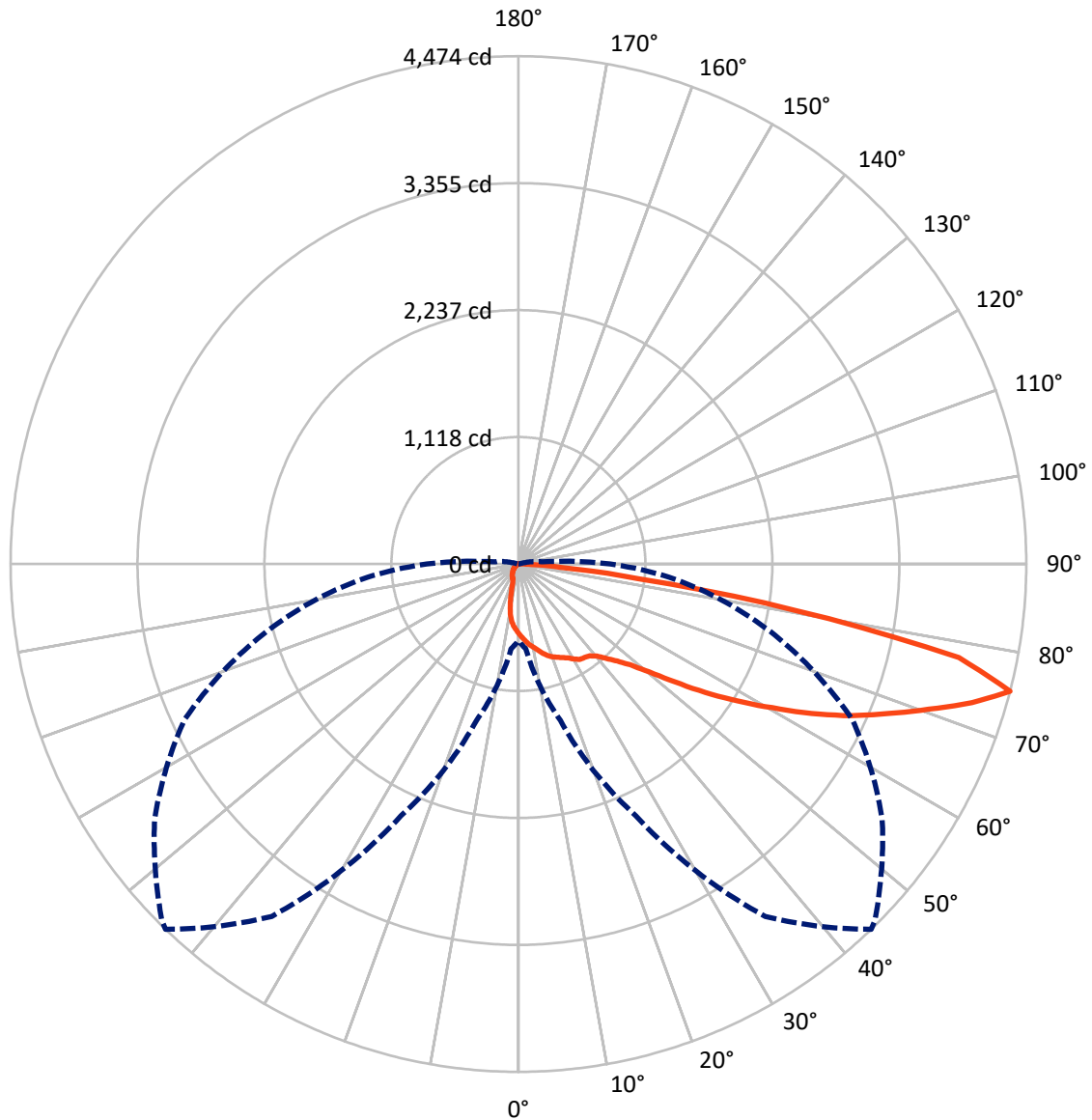
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 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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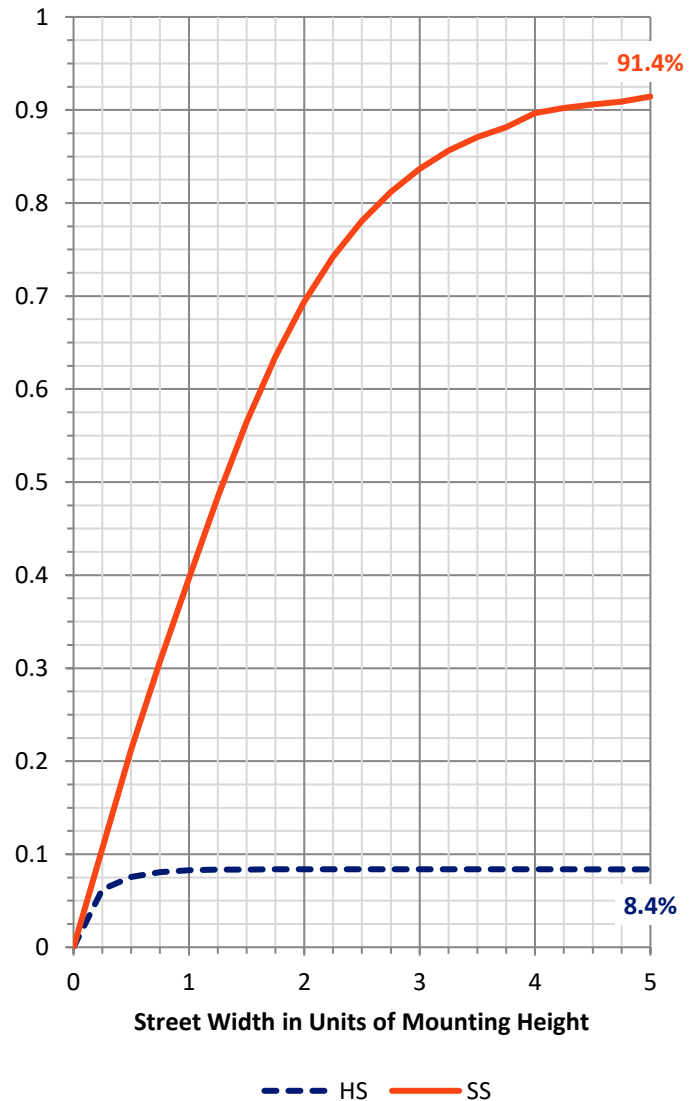
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	475.1	0.0	475.1
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	5158.9	0.0	5158.9
	% Fixture	91.6	0.0	91.6
Total	Lumens	5634.0	0.0	5634.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.8	1.0
10°-20°	162.1	2.9
20°-30°	267.4	4.7
30°-40°	388.2	6.9
40°-50°	631.0	11.2
50°-60°	1112.3	19.7
60°-70°	1598.7	28.4
70°-80°	1280.2	22.7
80°-90°	136.4	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°	5634.0	100.0
0°-180°	5634.0	100.0



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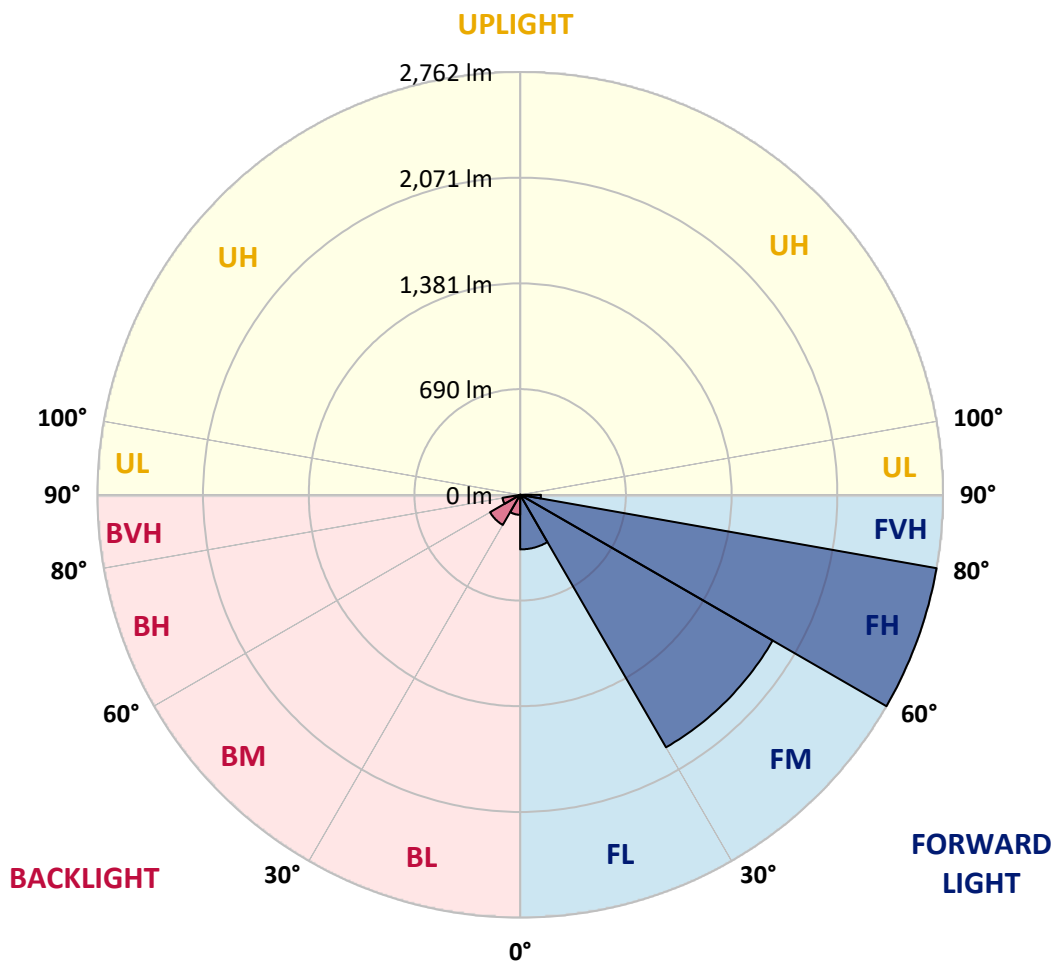
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	356.8	6.3			
FM (30°-60°)	1904.3	33.8			
FH (60°-80°)	2761.7	49.0			G2/5000
FVH (80°-90°)	136.1	2.4			G2/225
BL (0°-30°)	130.5	2.3	B1/500		
BM (30°-60°)	227.1	4.0	B1/1000		
BH (60°-80°)	117.1	2.1	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°	613.2	613.2	613.2	613.2	613.2	613.2	613.2	613.2	613.2	613.2	613.2
2.5°	668.3	667.3	664.2	659.0	653.8	648.6	647.5	639.2	629.9	622.6	616.4
5°	727.6	726.5	721.3	709.9	698.5	685.0	683.9	664.2	646.5	626.8	610.1
7.5°	788.9	786.8	777.5	759.8	740.0	719.3	717.2	688.1	662.1	636.1	612.2
10°	836.7	834.6	821.1	800.3	773.3	747.3	744.2	714.1	688.1	654.8	622.6
12.5°	883.5	879.3	861.7	838.8	805.5	780.6	777.5	746.3	715.1	680.8	641.3
15°	927.1	921.9	905.3	876.2	840.9	817.0	814.9	781.6	749.4	709.9	666.2
17.5°	957.3	955.2	935.5	903.2	868.9	849.2	847.1	812.8	780.6	739.0	692.2
20°	972.9	972.9	954.2	918.8	887.6	874.1	871.0	838.8	807.6	768.1	719.3
22.5°	976.0	979.1	964.6	926.1	903.2	891.8	889.7	861.7	831.5	795.1	749.4
25°	982.2	982.2	974.9	933.4	916.7	913.6	912.6	887.6	860.6	824.2	779.5
27.5°	989.5	989.5	984.3	943.8	937.5	936.5	935.5	924.0	902.2	859.6	814.9
30°	1008.2	1009.2	1005.1	964.6	960.4	971.8	973.9	967.7	940.6	887.6	851.3
32.5°	1055.0	1045.6	1034.2	979.1	986.4	1000.9	1002.0	989.5	960.4	917.8	894.9
35°	1172.4	1117.3	1065.4	991.6	994.7	1009.2	1011.3	1010.3	992.6	956.2	944.8
37.5°	1281.6	1203.6	1129.8	1020.7	1010.3	1025.9	1030.0	1047.7	1034.2	1009.2	1012.4
40°	1345.0	1314.8	1262.9	1100.7	1041.5	1065.4	1069.5	1096.6	1091.4	1081.0	1100.7
42.5°	1540.4	1542.5	1486.3	1220.2	1098.6	1137.1	1142.3	1164.1	1171.4	1176.6	1224.4
45°	1767.0	1774.2	1760.7	1435.4	1206.7	1219.2	1226.5	1255.6	1282.6	1315.9	1403.2
47.5°	2039.3	2033.0	1983.2	1698.4	1394.9	1325.2	1330.4	1386.5	1433.3	1506.1	1630.8
50°	2280.4	2296.0	2201.4	1943.7	1659.9	1492.6	1487.4	1542.5	1626.6	1728.5	1885.5
52.5°	2523.6	2500.8	2372.9	2186.9	1973.8	1720.2	1704.6	1734.7	1853.2	1973.8	2134.9
55°	2588.1	2590.2	2546.5	2453.0	2235.7	1996.7	1970.7	1968.6	2116.2	2198.3	2396.8
57.5°	2714.9	2720.1	2730.5	2749.2	2646.3	2273.1	2246.1	2217.0	2360.5	2408.3	2659.8
60°	2843.8	2850.0	2913.4	3014.2	2945.6	2571.4	2542.3	2473.7	2553.8	2618.2	2936.3
62.5°	2827.1	2870.8	3054.8	3255.4	3247.1	2898.9	2862.5	2697.2	2748.1	2804.3	3189.9
65°	2552.7	2599.5	3013.2	3321.9	3549.5	3222.1	3162.9	2928.0	2931.1	2998.6	3434.1
67.5°	2307.4	2358.4	2753.3	3293.8	3749.1	3512.1	3450.8	3159.7	3110.9	3223.1	3565.1
70°	2166.1	2217.0	2546.5	3206.5	3805.2	3833.3	3780.3	3424.8	3325.0	3427.9	3418.6
72.5°	1695.2	1775.3	2282.5	3040.2	3865.5	4177.3	4135.7	3760.5	3506.9	3213.8	2602.6
75°	675.6	749.4	1425.0	2446.7	3789.6	4473.5	4441.3	3911.2	3246.0	2295.0	1332.5
77.5°	203.7	218.3	396.0	1209.8	2778.3	3966.3	3955.9	3288.6	2297.0	1065.4	363.8
80°	67.6	74.8	121.6	333.6	1268.1	2477.9	2524.7	2095.4	1043.5	244.3	73.8
82.5°	28.1	31.2	61.3	134.1	449.0	1067.5	1051.9	938.6	363.8	151.8	27.0
85°	7.3	9.4	28.1	76.9	164.2	367.9	386.7	314.9	205.8	125.8	8.3
87.5°	0.0	0.0	13.5	31.2	73.8	111.2	116.4	95.6	116.4	94.6	4.2
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°	613.2	613.2	613.2	613.2	613.2	613.2	613.2	613.2	613.2	613.2	613.2
2.5°	611.2	606.0	596.6	590.4	582.1	580.0	575.8	570.6	569.6	564.4	565.4
5°	600.8	592.5	575.8	564.4	550.9	546.7	539.4	534.2	530.1	522.8	523.9
7.5°	598.7	586.2	563.3	541.5	519.7	504.1	482.3	464.6	450.1	434.5	437.6
10°	606.0	590.4	558.2	528.0	488.5	438.6	381.5	344.0	325.3	306.6	308.7
12.5°	620.5	601.8	560.2	514.5	434.5	349.2	270.2	219.3	205.8	197.5	198.5
15°	642.3	619.5	566.5	488.5	361.7	252.6	179.8	158.0	163.2	166.3	166.3
17.5°	665.2	639.2	571.7	441.7	279.6	176.7	146.6	144.5	151.8	159.0	159.0
20°	693.3	660.0	572.7	382.5	201.6	143.4	138.2	138.2	143.4	151.8	151.8
22.5°	720.3	682.9	563.3	314.9	153.8	133.0	133.0	133.0	136.2	144.5	145.5
25°	752.5	710.9	543.6	243.2	132.0	126.8	126.8	127.8	129.9	137.2	138.2
27.5°	786.8	740.0	510.3	177.7	120.6	119.5	120.6	121.6	122.6	129.9	132.0
30°	826.3	772.3	467.7	133.0	110.2	110.2	113.3	115.4	115.4	121.6	123.7
32.5°	872.0	814.9	416.8	110.2	99.8	98.7	103.9	107.1	107.1	112.3	114.3
35°	929.2	858.5	355.5	97.7	91.5	89.4	91.5	96.7	98.7	102.9	103.9
37.5°	1005.1	910.5	290.0	90.4	85.2	81.1	81.1	82.1	86.3	90.4	91.5
40°	1101.8	967.7	225.5	85.2	79.0	74.8	71.7	70.7	69.6	72.8	74.8
42.5°	1223.4	1032.1	168.4	80.0	73.8	67.6	63.4	59.2	54.0	53.0	54.0
45°	1379.3	1111.1	124.7	75.9	70.7	61.3	54.0	46.8	37.4	34.3	35.3
47.5°	1563.2	1193.2	97.7	71.7	68.6	54.0	44.7	32.2	22.9	20.8	21.8
50°	1758.6	1272.2	83.2	66.5	64.4	46.8	32.2	19.7	13.5	13.5	14.6
52.5°	1924.9	1316.9	75.9	62.4	58.2	38.5	20.8	11.4	8.3	8.3	9.4
55°	2086.1	1340.8	70.7	58.2	49.9	27.0	11.4	7.3	5.2	5.2	5.2
57.5°	2252.4	1351.2	64.4	53.0	39.5	16.6	6.2	4.2	3.1	3.1	3.1
60°	2399.9	1331.5	55.1	43.7	26.0	8.3	3.1	3.1	2.1	1.0	1.0
62.5°	2523.6	1294.0	38.5	31.2	15.6	4.2	2.1	1.0	0.0	0.0	0.0
65°	2599.5	1233.8	24.9	20.8	9.4	3.1	1.0	0.0	0.0	0.0	0.0
67.5°	2577.7	1120.5	15.6	13.5	4.2	2.1	1.0	0.0	0.0	0.0	0.0
70°	2326.2	918.8	11.4	8.3	3.1	1.0	0.0	0.0	0.0	0.0	0.0
72.5°	1676.5	621.6	8.3	5.2	2.1	0.0	0.0	0.0	0.0	0.0	0.0
75°	806.6	221.4	5.2	4.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	197.5	48.9	3.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	43.7	9.4	2.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	14.6	4.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.2	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.1	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)