

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: P398016

Luminaire Tested: **ARCH-S-PA1-70-827-U-T2U**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398016
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-70-827-U-T2U
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7418 lumens
Efficiency: N/A
Efficacy: 100.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

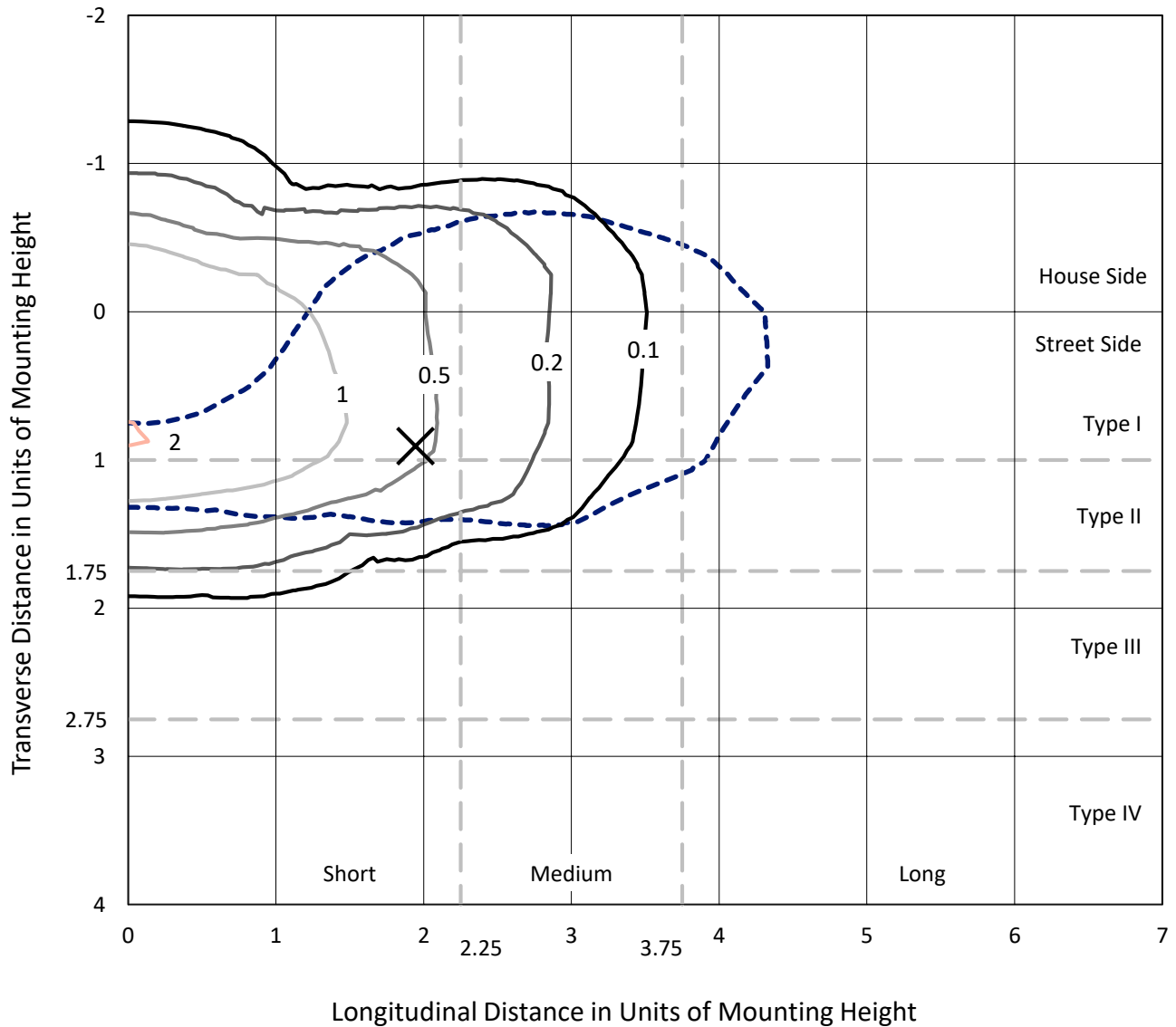
Input Watts (W): 74
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

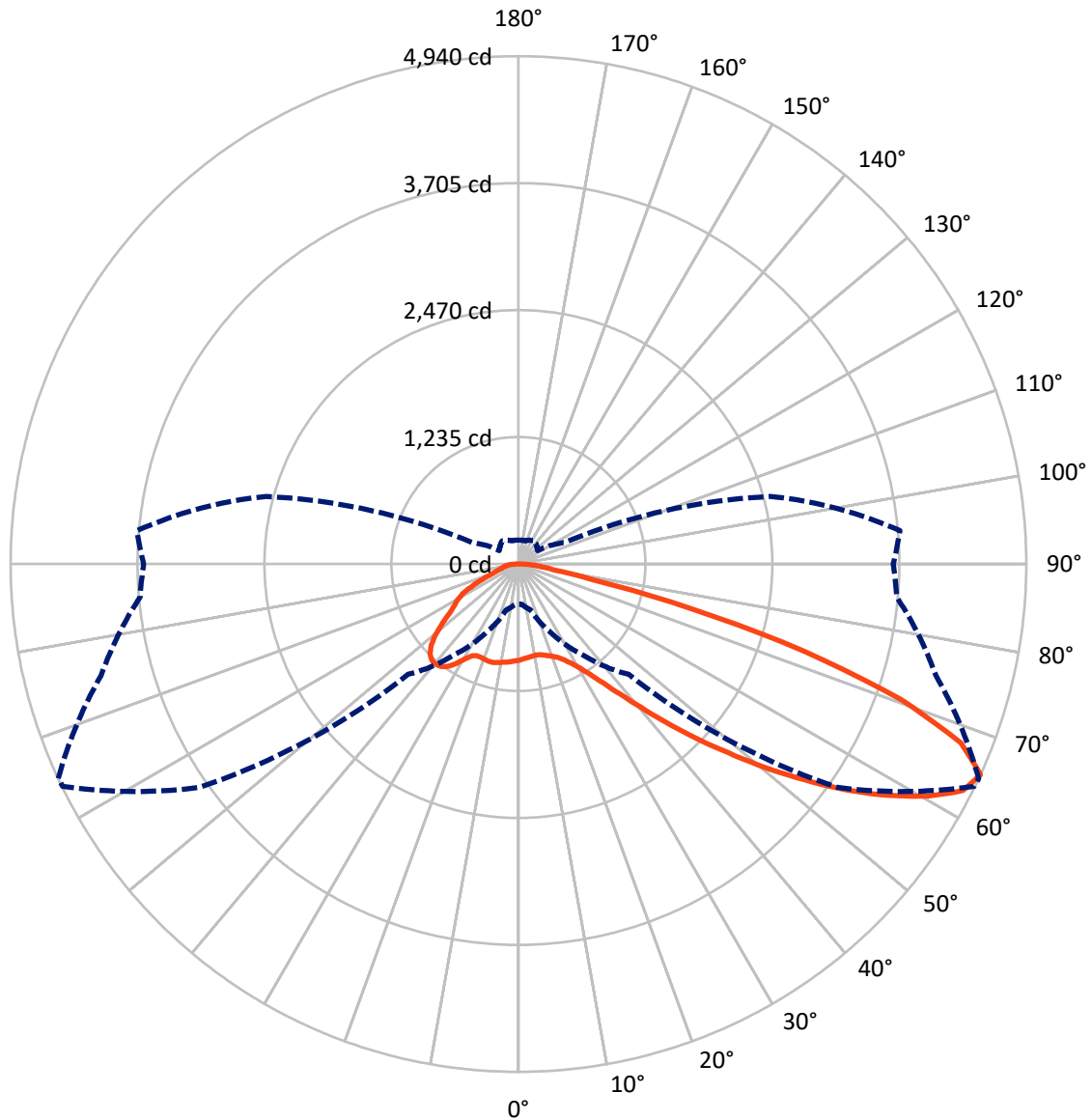
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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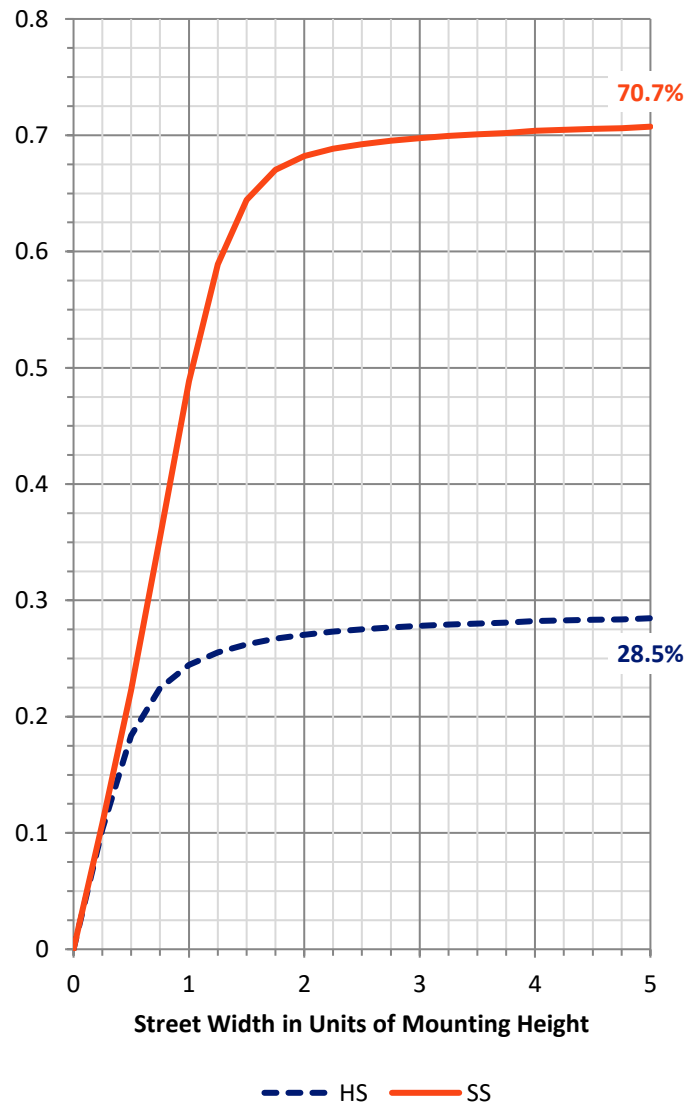
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2144.7	0.0	2144.7
	% Fixture	28.9	0.0	28.9
Street Side	Lumens	5273.3	0.0	5273.3
	% Fixture	71.1	0.0	71.1
Total	Lumens	7418.0	0.0	7418.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.3	1.2
10°-20°	266.6	3.6
20°-30°	473.6	6.4
30°-40°	801.2	10.8
40°-50°	1394.7	18.8
50°-60°	1802.4	24.3
60°-70°	1577.2	21.3
70°-80°	857.9	11.6
80°-90°	155.0	2.1
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°	7418.0	100.0
0°-180°	7418.0	100.0



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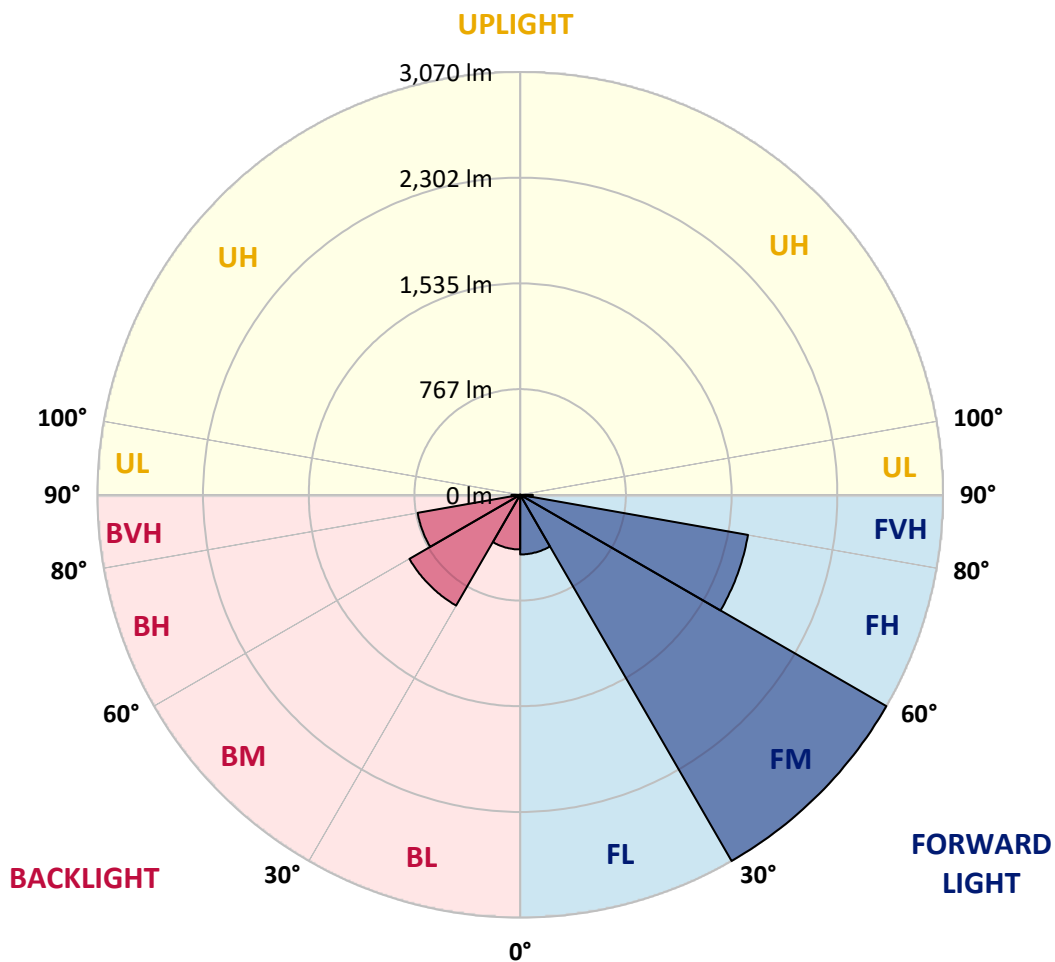
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	432.8	5.8			
FM	(30°-60°)	3069.8	41.4			
FH	(60°-80°)	1679.5	22.6			G1/1800
FVH	(80°-90°)	91.2	1.2			G1/100
BL	(0°-30°)	396.7	5.3	B1/500		
BM	(30°-60°)	928.6	12.5	B1/1000		
BH	(60°-80°)	755.6	10.2	B2/1000		G2/1000
BVH	(80°-90°)	63.8	0.9			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	937.3	937.3	937.3	937.3	937.3	937.3	937.3	937.3	937.3	937.3	937.3
2.5°	920.7	919.8	917.8	919.8	920.7	922.7	921.7	923.7	922.7	925.6	930.5
5°	897.3	895.4	894.4	899.3	902.2	907.1	909.0	915.9	914.9	919.8	927.6
7.5°	870.9	870.9	870.0	875.8	879.7	888.5	895.4	907.1	908.0	916.8	925.6
10°	850.4	851.4	850.4	855.3	861.2	871.9	883.6	900.2	901.2	913.9	922.7
12.5°	842.6	842.6	842.6	849.5	857.3	871.9	885.6	903.2	905.1	918.8	926.6
15°	853.4	854.3	852.4	859.2	868.0	885.6	898.3	916.8	918.8	931.5	936.4
17.5°	891.4	895.4	890.5	894.4	892.4	906.1	917.8	936.4	937.3	948.1	950.0
20°	966.6	970.5	962.7	957.8	940.3	939.3	944.2	958.8	958.8	965.7	960.8
22.5°	1082.8	1086.7	1073.1	1054.5	1012.5	992.0	981.3	988.1	987.1	990.1	977.4
25°	1237.1	1236.1	1219.5	1185.3	1118.0	1068.2	1041.8	1031.1	1031.1	1025.2	1009.6
27.5°	1428.5	1413.8	1384.5	1343.5	1249.8	1180.5	1123.8	1096.5	1091.6	1074.0	1044.7
30°	1632.5	1621.8	1579.8	1520.2	1411.9	1323.0	1229.3	1174.6	1171.7	1133.6	1089.7
32.5°	1872.7	1855.1	1808.3	1737.0	1607.1	1482.2	1365.0	1282.0	1277.1	1216.6	1156.0
35°	2181.3	2166.6	2075.8	2004.5	1837.6	1673.5	1534.9	1424.6	1420.6	1346.4	1269.3
37.5°	2551.3	2513.2	2425.4	2291.6	2115.8	1921.5	1745.8	1607.1	1602.3	1520.2	1422.6
40°	2881.3	2847.2	2769.0	2646.0	2457.6	2241.8	2003.6	1835.6	1830.7	1731.1	1608.1
42.5°	3125.4	3102.0	3051.2	2979.9	2845.2	2714.4	2332.6	2111.9	2103.1	1974.3	1821.0
45°	3267.0	3248.5	3219.2	3236.7	3234.8	3210.4	2725.1	2441.0	2412.7	2245.7	2058.2
47.5°	3232.8	3216.2	3228.0	3364.6	3553.1	3694.7	3182.1	2777.8	2739.8	2522.0	2311.1
50°	2985.8	2992.6	3054.2	3315.8	3738.6	4053.0	3688.8	3161.6	3110.8	2800.3	2551.3
52.5°	2535.7	2552.3	2701.7	3067.8	3718.1	4285.4	4146.7	3558.0	3490.6	3071.7	2770.0
55°	2014.3	2056.3	2249.6	2634.3	3450.6	4302.0	4492.4	3956.3	3882.1	3326.6	2960.4
57.5°	1490.0	1552.5	1776.1	2129.5	2938.0	4039.3	4665.2	4337.1	4247.3	3579.5	3161.6
60°	945.1	983.2	1241.0	1657.9	2248.6	3396.9	4642.7	4661.3	4583.2	3831.4	3371.5
62.5°	603.4	622.0	751.8	1182.4	1572.0	2515.2	4397.7	4906.4	4853.6	4060.8	3570.7
65°	387.6	395.4	461.8	727.4	1070.1	1518.3	3787.4	4932.7	4939.6	4204.3	3693.7
67.5°	315.4	319.3	343.7	449.1	756.7	838.7	2638.2	4557.8	4640.8	4167.2	3651.7
70°	287.1	291.9	317.3	358.3	585.8	579.0	1277.1	3813.8	3949.5	3953.4	3465.2
72.5°	242.1	249.0	283.2	338.8	453.0	457.0	540.9	2716.3	2916.5	3533.6	3185.0
75°	202.1	206.0	235.3	298.8	383.7	365.2	379.8	1440.2	1729.2	2833.5	2887.2
77.5°	164.0	167.9	189.4	238.2	340.8	284.1	298.8	596.6	737.2	1923.5	2359.9
80°	117.2	121.1	145.5	185.5	257.8	255.8	221.6	329.0	357.4	1039.9	1532.9
82.5°	84.0	86.9	110.3	132.8	178.7	256.8	167.0	223.6	234.3	460.9	618.1
85°	56.6	56.6	76.2	87.9	115.2	162.1	134.7	151.3	158.2	218.7	167.0
87.5°	24.4	24.4	41.0	44.9	60.5	75.2	100.6	76.2	78.1	118.1	68.3
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°	937.3	937.3	937.3	937.3	937.3	937.3	937.3	937.3	937.3	937.3	937.3
2.5°	933.4	934.4	936.4	942.2	946.1	952.0	954.9	958.8	958.8	956.9	957.8
5°	931.5	934.4	941.2	952.0	958.8	969.6	977.4	983.2	985.2	983.2	984.2
7.5°	930.5	935.4	947.1	962.7	972.5	986.2	996.9	1003.7	1008.6	1006.7	1007.6
10°	927.6	935.4	950.0	969.6	984.2	997.9	1007.6	1010.6	1013.5	1011.5	1010.6
12.5°	931.5	940.3	955.9	979.3	995.9	1006.7	1009.6	1004.7	997.9	994.0	993.0
15°	939.3	948.1	963.7	988.1	1002.8	1006.7	999.8	984.2	968.6	959.8	958.8
17.5°	950.0	955.9	968.6	990.1	1001.8	996.9	983.2	964.7	953.0	946.1	947.1
20°	956.9	956.9	966.6	983.2	993.0	989.1	972.5	952.0	933.4	924.6	921.7
22.5°	966.6	961.7	962.7	977.4	991.0	985.2	950.0	913.9	887.5	877.8	876.8
25°	993.0	979.3	970.5	979.3	1011.5	963.7	893.4	851.4	827.0	818.2	819.2
27.5°	1025.2	1006.7	988.1	1002.8	1028.1	914.9	821.1	773.3	758.7	751.8	754.8
30°	1057.4	1033.0	1008.6	1061.3	1016.4	838.7	728.4	681.5	668.8	663.9	667.9
32.5°	1117.0	1077.0	1047.7	1139.4	980.3	751.8	627.8	584.9	573.1	567.3	565.3
35°	1216.6	1165.8	1136.5	1207.8	929.5	655.2	536.0	505.8	493.1	480.4	478.4
37.5°	1360.1	1298.6	1272.2	1246.9	858.2	559.5	465.7	445.2	426.7	407.2	406.2
40°	1532.0	1451.9	1432.4	1264.4	759.6	469.6	416.9	397.4	374.0	355.4	356.4
42.5°	1730.2	1627.6	1585.7	1259.5	637.6	421.8	381.8	360.3	339.8	323.2	322.2
45°	1942.0	1825.9	1729.2	1225.4	516.5	388.6	360.3	334.9	314.4	295.8	293.9
47.5°	2176.4	2046.5	1862.0	1159.0	426.7	365.2	347.6	311.5	292.9	281.2	281.2
50°	2412.7	2257.4	1984.0	1058.4	374.0	347.6	329.0	298.8	284.1	274.4	274.4
52.5°	2614.8	2477.1	2084.6	938.3	340.8	332.9	316.4	292.9	277.3	268.5	267.5
55°	2811.0	2681.2	2174.4	819.2	313.4	313.4	313.4	288.0	270.5	262.6	261.7
57.5°	3006.3	2896.0	2268.2	741.1	289.0	296.8	307.6	282.2	264.6	257.8	256.8
60°	3227.0	3153.7	2376.5	686.4	267.5	279.2	299.8	275.3	254.8	249.0	248.0
62.5°	3461.3	3461.3	2475.2	609.3	248.0	264.6	288.0	266.6	246.1	241.2	240.2
65°	3644.9	3724.0	2538.6	494.1	228.5	250.0	274.4	254.8	234.3	233.4	231.4
67.5°	3666.3	3790.4	2498.6	373.0	210.9	234.3	260.7	242.1	222.6	222.6	219.7
70°	3512.1	3638.0	2373.6	279.2	198.2	218.7	243.1	226.5	208.0	209.9	205.0
72.5°	3254.3	3285.6	2063.1	220.7	183.6	202.1	221.6	208.9	192.3	192.3	185.5
75°	2914.5	2740.7	1498.8	184.5	166.0	182.6	200.2	189.4	174.8	169.9	166.0
77.5°	2319.9	1986.0	870.9	159.2	151.3	164.0	175.8	167.9	155.2	144.5	144.5
80°	1413.8	1163.9	384.7	137.7	133.8	143.5	151.3	142.6	131.8	121.1	118.1
82.5°	538.0	449.1	186.5	118.1	117.2	123.0	128.9	120.1	112.3	107.4	92.8
85°	147.4	135.7	127.9	98.6	96.7	95.7	102.5	98.6	87.9	72.3	64.4
87.5°	55.7	63.5	69.3	60.5	64.4	59.6	68.3	62.5	55.7	36.1	32.2
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)