

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: P398143

Luminaire Tested: **ARCH-S-PA1-90-750-U-T3-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398143
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-90-750-U-T3-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8366 lumens
Efficiency: N/A
Efficacy: 89.0 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

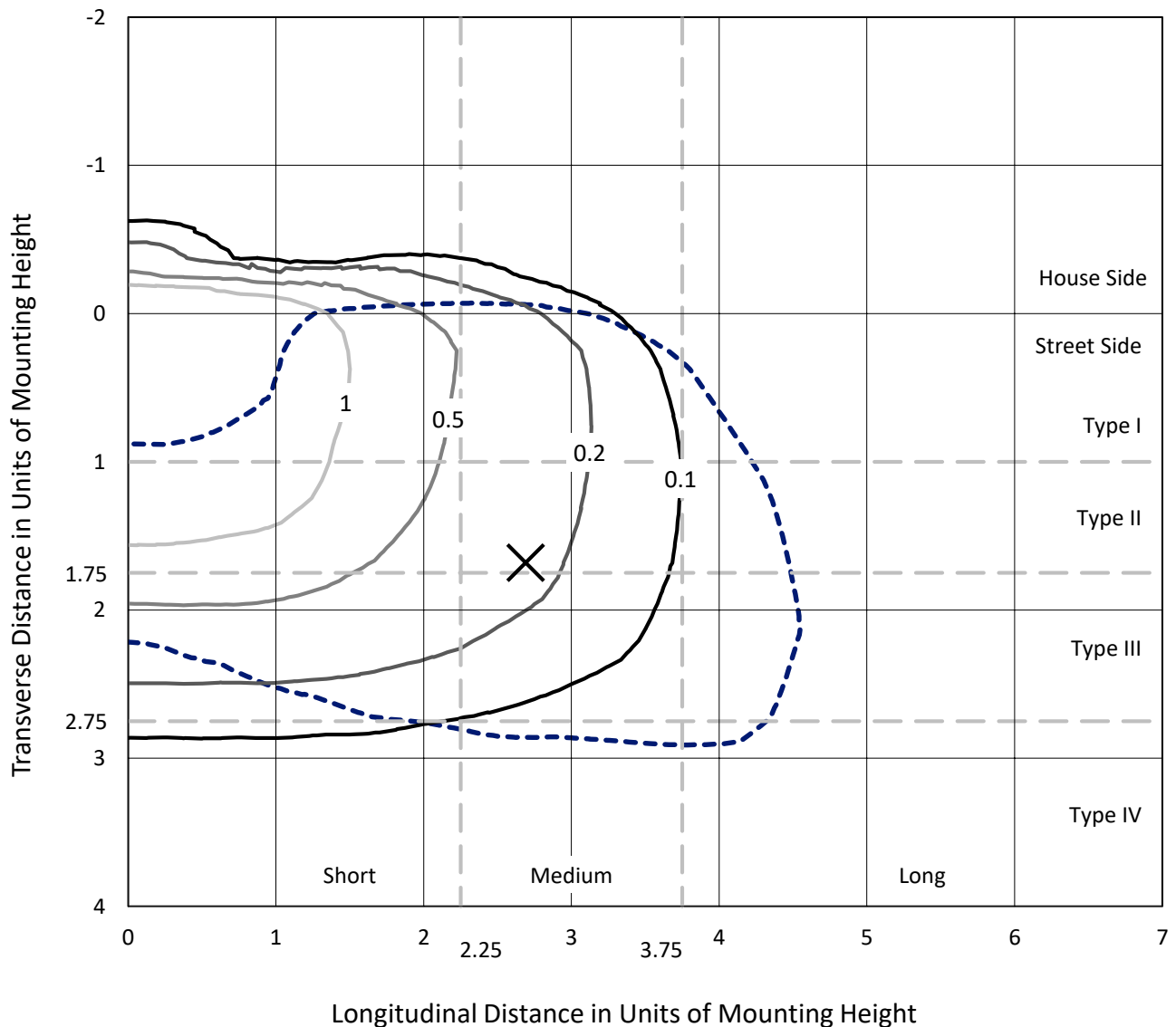
Input Watts (W): 94
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

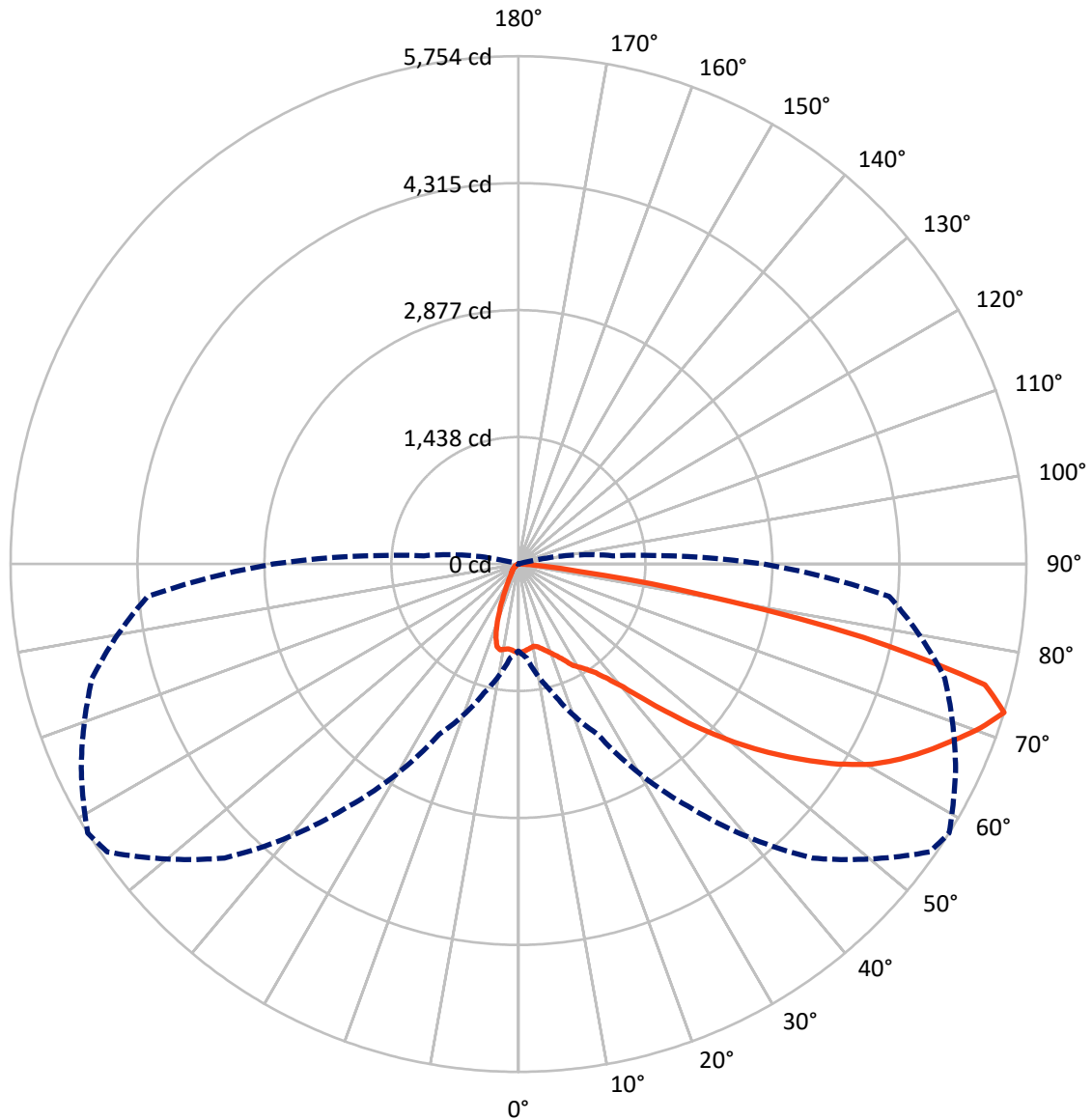


Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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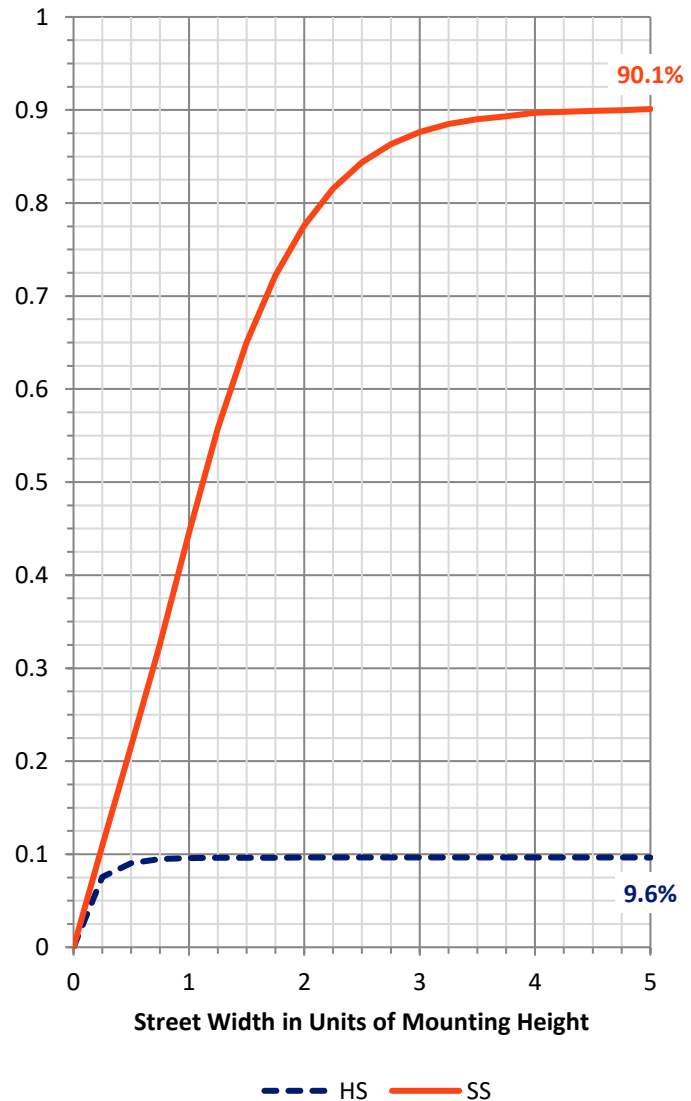
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	813.5	0.0	813.5
	% Fixture	9.7	0.0	9.7
Street Side	Lumens	7552.5	0.0	7552.5
	% Fixture	90.3	0.0	90.3
Total	Lumens	8366.0	0.0	8366.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.1	1.1
10°-20°	240.0	2.9
20°-30°	377.0	4.5
30°-40°	650.1	7.8
40°-50°	1236.9	14.8
50°-60°	1958.8	23.4
60°-70°	2285.7	27.3
70°-80°	1431.5	17.1
80°-90°	94.0	1.1
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°	8366.0	100.0
0°-180°	8366.0	100.0



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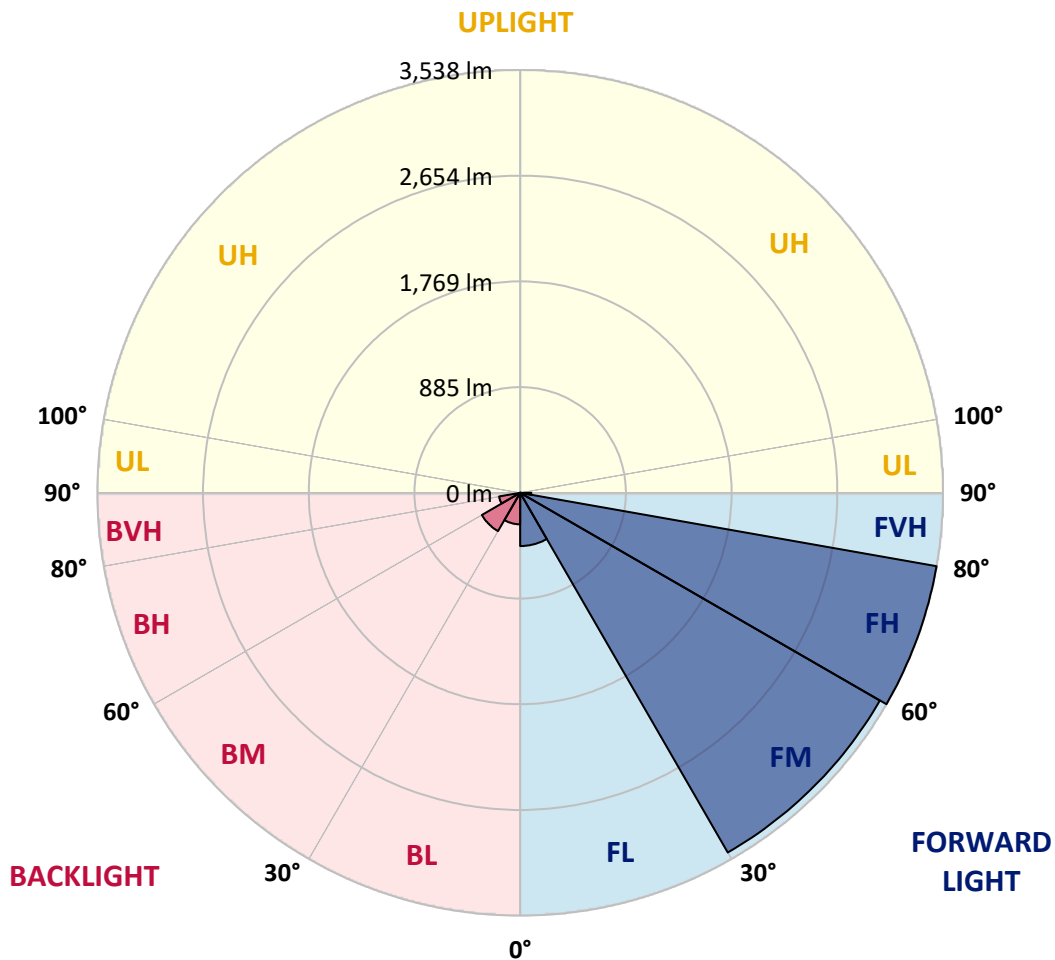
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	445.6	5.3			
FM	(30°-60°)	3475.6	41.5			
FH	(60°-80°)	3538.2	42.3			G2/5000
FVH	(80°-90°)	93.1	1.1			G1/100
BL	(0°-30°)	263.4	3.1	B1/500		
BM	(30°-60°)	370.2	4.4	B1/1000		
BH	(60°-80°)	179.0	2.1	B1/500		G1/500
BVH	(80°-90°)	0.9	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°	45°	55°	58°	65°	75°	85°
0°	1003.9	1003.9	1003.9	1003.9	1003.9	1003.9	1003.9	1003.9	1003.9	1003.9	1003.9
2.5°	999.4	994.9	993.4	991.9	993.4	994.9	990.4	994.9	991.9	993.4	996.4
5°	963.5	959.0	957.5	959.0	963.5	971.0	973.9	978.4	978.4	982.9	984.4
7.5°	923.1	920.1	918.6	921.6	930.6	947.0	956.0	962.0	968.0	976.9	985.9
10°	900.6	899.1	897.6	902.1	911.1	926.1	938.0	947.0	969.5	994.9	1011.3
12.5°	885.7	885.7	888.7	897.6	909.6	921.6	950.0	962.0	996.4	1035.3	1057.7
15°	873.7	873.7	878.2	894.7	911.1	939.5	981.4	994.9	1035.3	1083.2	1113.1
17.5°	864.7	867.7	870.7	887.2	918.6	966.5	1015.8	1035.3	1084.7	1137.0	1169.9
20°	866.2	869.2	870.7	887.2	932.1	997.9	1060.7	1083.2	1140.0	1195.4	1228.3
22.5°	875.2	879.7	881.2	903.6	956.0	1030.8	1111.6	1137.0	1198.4	1256.7	1282.1
25°	912.6	915.6	906.6	926.1	990.4	1081.7	1177.4	1204.3	1265.7	1319.5	1340.5
27.5°	1039.8	1042.8	993.4	971.0	1017.3	1123.6	1258.2	1295.6	1371.9	1407.8	1410.8
30°	1315.1	1318.0	1220.8	1114.6	1081.7	1159.5	1303.1	1355.4	1454.2	1494.6	1476.6
32.5°	1669.6	1666.6	1533.5	1376.4	1234.3	1222.3	1367.4	1422.8	1530.5	1569.4	1555.9
35°	2025.7	2030.2	1916.5	1680.1	1476.6	1340.5	1449.7	1514.0	1644.2	1699.5	1675.6
37.5°	2269.6	2299.5	2250.1	1994.3	1774.3	1558.9	1582.9	1651.7	1814.7	1889.5	1838.7
40°	2613.7	2606.2	2486.5	2298.0	2103.5	1882.1	1798.3	1831.2	2018.2	2118.4	2039.2
42.5°	3075.9	3061.0	2857.5	2673.5	2456.6	2275.5	2105.0	2099.0	2251.6	2368.3	2253.1
45°	3494.8	3472.4	3333.3	3155.2	2917.4	2709.4	2479.0	2426.6	2532.9	2631.6	2497.0
47.5°	3828.5	3791.1	3692.3	3598.1	3539.7	3216.6	2871.0	2791.7	2845.5	2918.9	2728.8
50°	4223.4	4120.2	3976.6	3919.7	4040.9	3791.1	3248.0	3171.7	3168.7	3210.6	2968.2
52.5°	4403.0	4216.0	4135.2	4183.0	4397.0	4325.2	3654.9	3545.7	3502.3	3506.8	3191.1
55°	4186.0	4165.1	4208.5	4358.1	4637.8	4596.0	4045.4	3910.8	3846.4	3765.6	3405.1
57.5°	3939.2	4003.5	4175.6	4461.3	4943.0	4878.7	4429.9	4277.3	4159.1	3973.6	3643.0
60°	3711.8	3777.6	4061.9	4485.2	5110.6	5151.0	4750.1	4604.9	4429.9	4186.0	3904.8
62.5°	3366.2	3417.0	3816.5	4450.8	5037.3	5309.6	4973.0	4863.8	4700.7	4388.0	4205.5
65°	2977.2	3010.1	3405.1	4175.6	4893.7	5291.6	5157.0	5095.6	4937.1	4598.9	4503.2
67.5°	2550.8	2589.7	2918.9	3680.4	4612.4	5207.9	5330.5	5324.5	5143.5	4832.3	4718.6
70°	2060.1	2063.1	2335.4	3052.0	4121.7	5040.3	5546.0	5559.4	5341.0	5007.4	4727.6
72.5°	985.9	1066.7	1514.0	2130.4	3349.7	4711.2	5686.6	5753.9	5465.2	5001.4	4217.4
75°	225.9	233.4	441.3	1012.8	1964.4	3616.0	5335.0	5460.7	5163.0	4325.2	2971.2
77.5°	82.3	86.8	124.2	296.2	755.5	1868.6	3818.0	4002.0	3816.5	2796.2	1404.8
80°	55.4	53.9	64.3	131.7	347.1	529.6	1952.4	2061.6	1882.1	954.5	336.6
82.5°	28.4	29.9	44.9	73.3	233.4	184.0	652.3	709.1	583.5	191.5	62.8
85°	13.5	13.5	25.4	46.4	98.7	64.3	145.1	175.0	157.1	83.8	20.9
87.5°	13.5	13.5	23.9	29.9	50.9	26.9	35.9	44.9	41.9	44.9	7.5
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°	1003.9	1003.9	1003.9	1003.9	1003.9	1003.9	1003.9	1003.9	1003.9	1003.9	1003.9
2.5°	996.4	994.9	993.4	996.4	994.9	997.9	997.9	1000.9	1000.9	997.9	996.4
5°	982.9	979.9	976.9	976.9	975.4	978.4	987.4	994.9	996.4	991.9	990.4
7.5°	984.4	984.4	981.4	975.4	965.0	965.0	965.0	973.9	978.4	975.4	973.9
10°	1011.3	1012.8	1005.4	991.9	973.9	957.5	926.1	879.7	836.3	824.3	819.9
12.5°	1057.7	1059.2	1044.3	1020.3	982.9	885.7	766.0	655.3	570.0	546.1	541.6
15°	1113.1	1114.6	1087.6	1048.8	935.0	709.1	531.1	405.4	330.6	312.7	311.2
17.5°	1169.9	1166.9	1126.5	1051.7	792.9	502.7	323.2	258.8	239.4	234.9	236.4
20°	1225.3	1216.3	1161.0	996.4	610.4	329.1	236.4	221.4	216.9	213.9	213.9
22.5°	1276.2	1258.2	1189.4	887.2	427.9	236.4	210.9	208.0	202.0	197.5	196.0
25°	1327.0	1301.6	1207.3	745.0	287.2	206.5	199.0	193.0	185.5	179.5	178.0
27.5°	1388.4	1352.5	1198.4	565.5	215.4	191.5	185.5	176.5	166.1	157.1	154.1
30°	1446.7	1406.3	1147.5	390.5	184.0	176.5	167.6	154.1	140.6	130.2	127.2
32.5°	1520.0	1473.6	1056.2	255.8	160.1	154.1	145.1	128.7	110.7	98.7	95.7
35°	1624.7	1572.4	939.5	179.5	140.6	130.2	118.2	100.2	80.8	71.8	70.3
37.5°	1771.4	1701.0	792.9	145.1	124.2	109.2	91.3	73.3	59.8	52.4	50.9
40°	1950.9	1843.2	629.8	128.7	110.7	91.3	68.8	52.4	43.4	37.4	37.4
42.5°	2145.4	1976.3	463.8	118.2	97.2	74.8	50.9	37.4	31.4	28.4	26.9
45°	2345.9	2094.5	312.7	109.2	85.3	56.9	35.9	25.4	20.9	20.9	19.4
47.5°	2553.8	2173.8	202.0	98.7	71.8	41.9	23.9	18.0	15.0	15.0	15.0
50°	2760.3	2215.7	143.6	89.8	58.3	28.4	18.0	13.5	12.0	12.0	12.0
52.5°	2909.9	2188.8	115.2	77.8	44.9	20.9	13.5	10.5	9.0	9.0	9.0
55°	3040.0	2142.4	100.2	67.3	32.9	15.0	10.5	9.0	7.5	7.5	7.5
57.5°	3173.2	2082.5	89.8	56.9	23.9	10.5	7.5	6.0	6.0	6.0	6.0
60°	3294.4	1980.8	77.8	44.9	16.5	7.5	6.0	4.5	4.5	4.5	4.5
62.5°	3412.6	1894.0	67.3	34.4	12.0	6.0	3.0	3.0	1.5	1.5	1.5
65°	3479.9	1777.3	53.9	22.4	7.5	4.5	1.5	1.5	0.0	0.0	0.0
67.5°	3458.9	1638.2	37.4	13.5	4.5	3.0	1.5	0.0	0.0	0.0	0.0
70°	3313.8	1451.2	22.4	7.5	4.5	3.0	1.5	0.0	0.0	0.0	0.0
72.5°	2775.2	1074.2	13.5	6.0	3.0	1.5	0.0	0.0	0.0	0.0	0.0
75°	1853.6	493.7	7.5	4.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
77.5°	848.3	148.1	4.5	3.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	170.6	38.9	3.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	35.9	7.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.0	1.5	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)