

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: P397590

Luminaire Tested: **ARCH-S-PA1-100-830-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397590
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-PA1-100-830-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 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: 7257 lumens
Efficiency: N/A
Efficacy: 75.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B0 - U0 - G2

Input Watts (W): 96
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

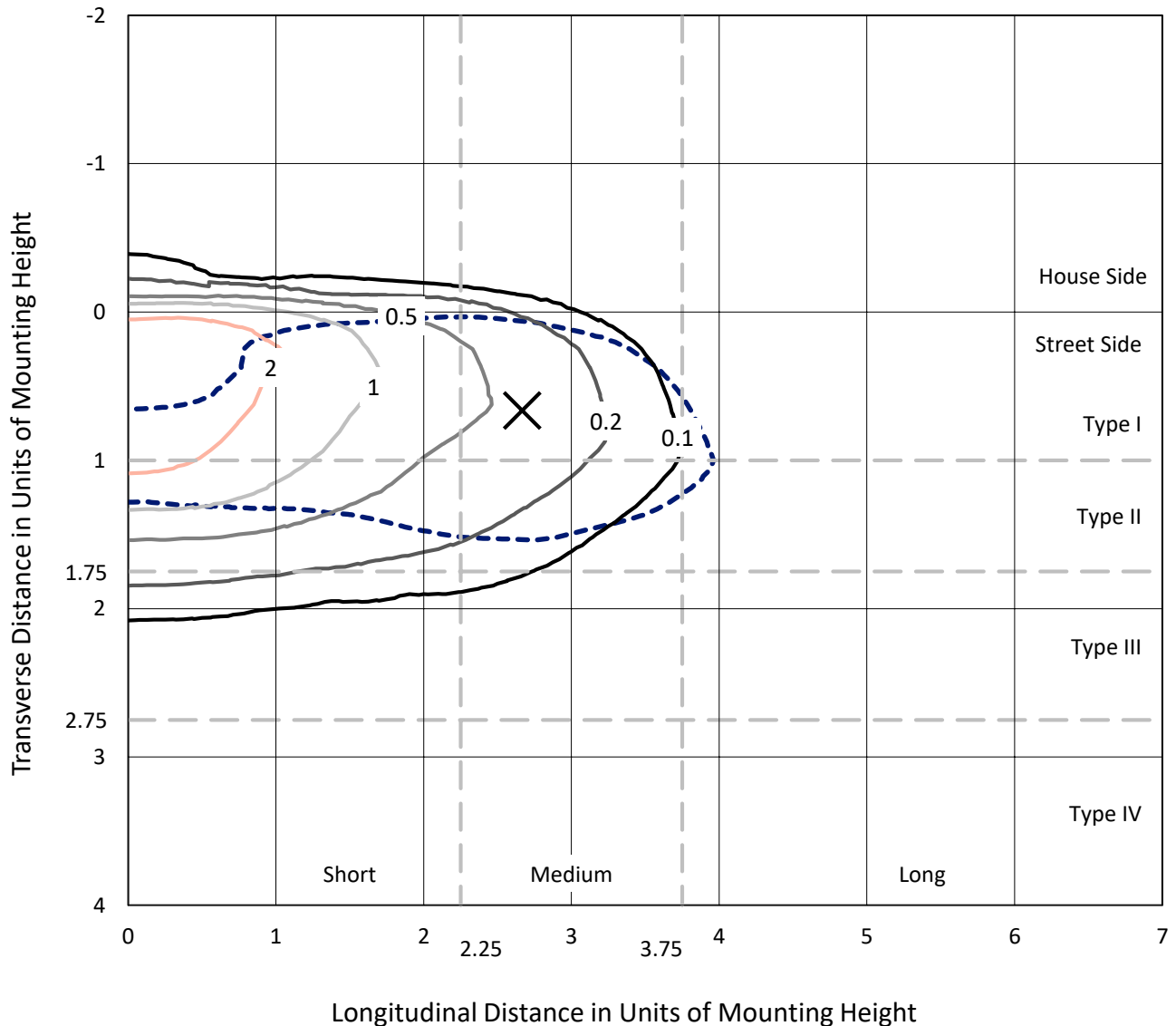


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Iso-Footcandle Lines of Horizontal Illumination

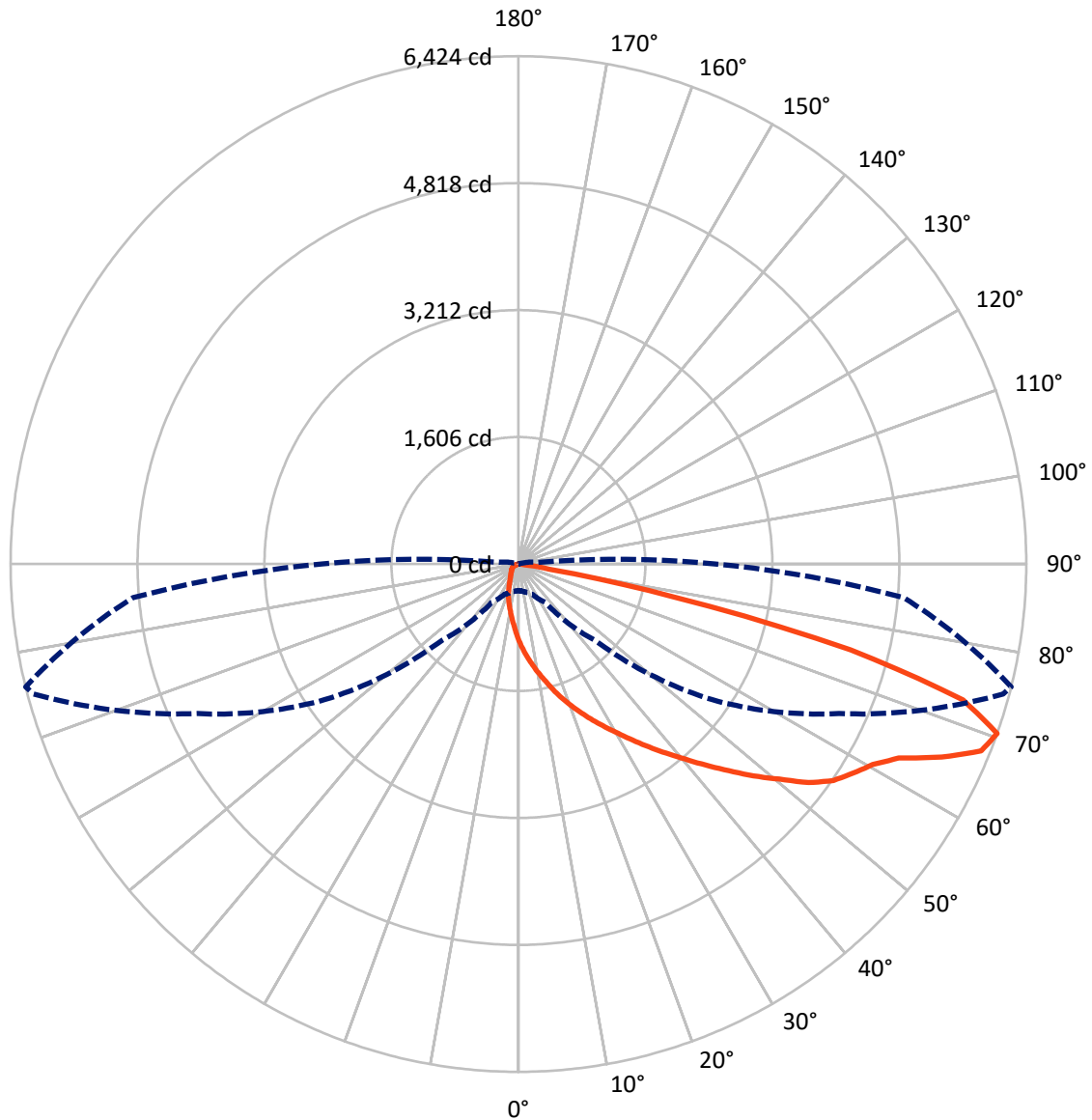
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 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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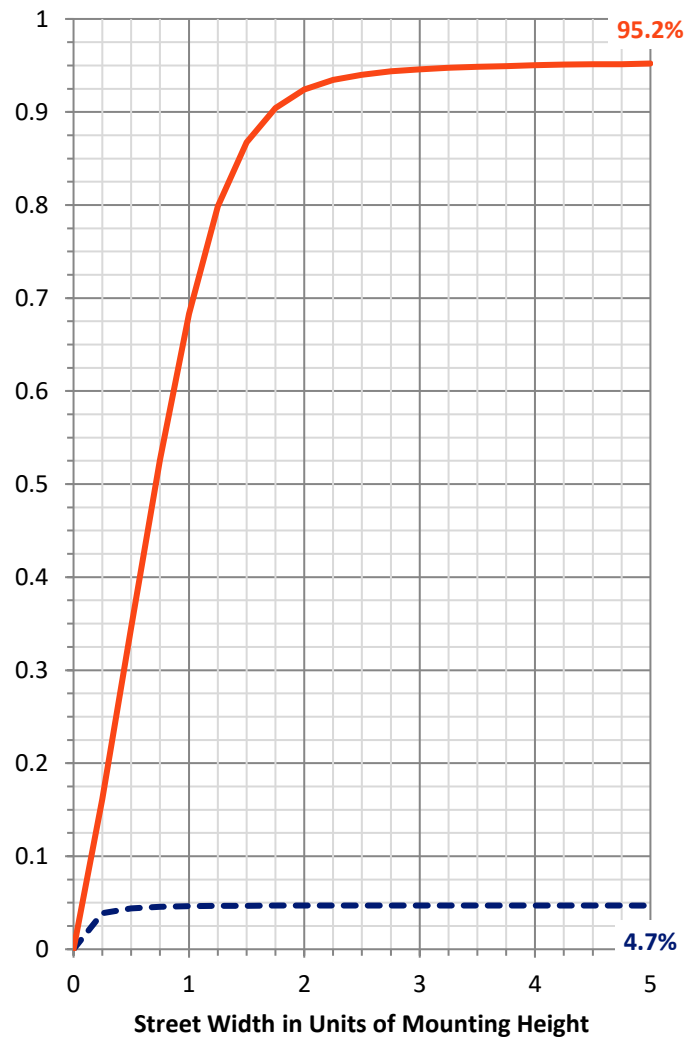
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	342.2	0.0	342.2
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	6914.7	0.0	6914.7
	% Fixture	95.3	0.0	95.3
Total	Lumens	7257.0	0.0	7257.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.5	1.3
10°-20°	295.4	4.1
20°-30°	550.1	7.6
30°-40°	972.9	13.4
40°-50°	1487.8	20.5
50°-60°	1686.9	23.2
60°-70°	1446.1	19.9
70°-80°	700.4	9.7
80°-90°	26.0	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°	7257.0	100.0
0°-180°	7257.0	100.0

Coefficient of Utilization



--- HS — SS

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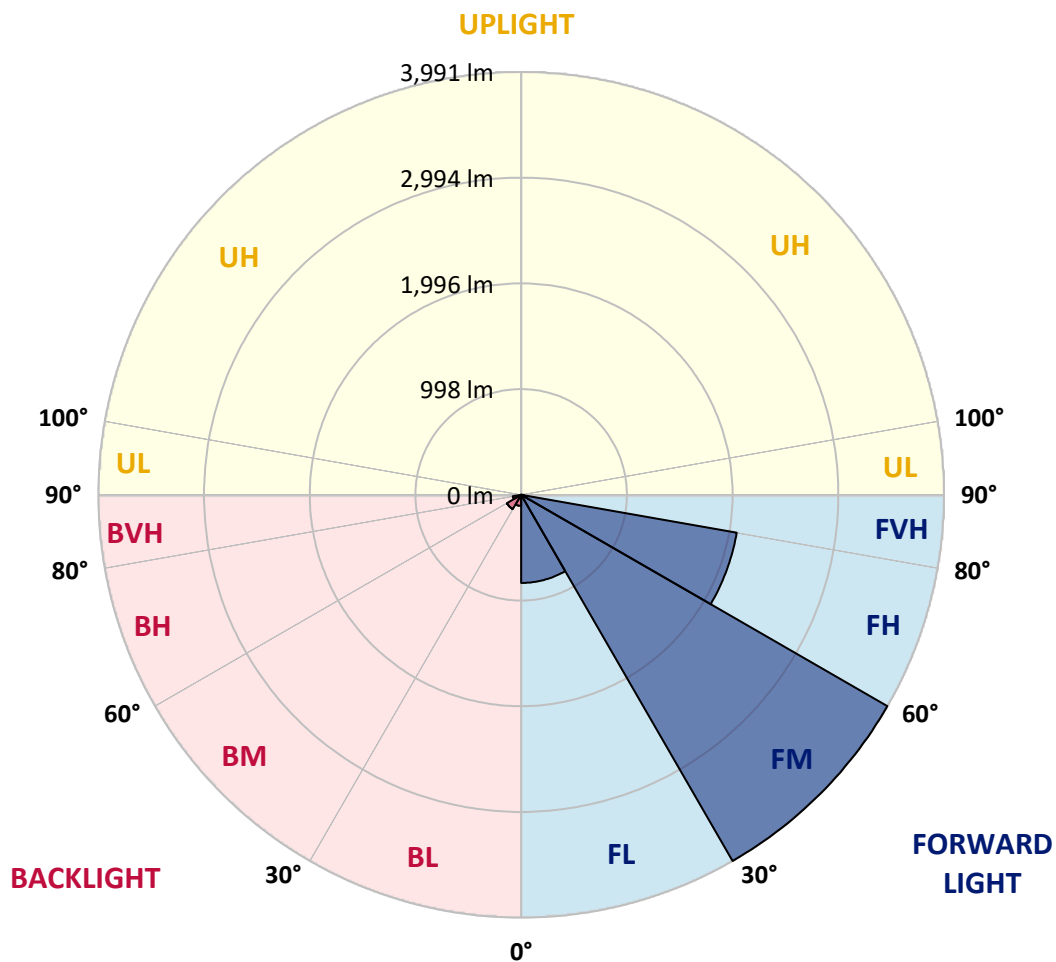
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	831.9	11.5			
FM	(30°-60°)	3991.4	55.0			
FH	(60°-80°)	2065.9	28.5			G2/5000
FVH	(80°-90°)	25.5	0.4			G1/100
BL	(0°-30°)	105.0	1.4	B0/110		
BM	(30°-60°)	156.2	2.2	B0/220		
BH	(60°-80°)	80.6	1.1	B0/110		G0/110
BVH	(80°-90°)	0.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	971.4	971.4	971.4	971.4	971.4	971.4	971.4	971.4	971.4	971.4	971.4
2.5°	1327.8	1320.6	1313.3	1285.5	1260.2	1237.2	1193.7	1136.9	1086.2	1075.3	1016.1
5°	1559.8	1551.3	1540.5	1512.7	1480.0	1441.4	1377.4	1290.4	1201.0	1181.6	1071.7
7.5°	1716.9	1709.6	1693.9	1680.6	1648.0	1610.5	1539.3	1437.8	1314.5	1290.4	1135.7
10°	1824.4	1819.6	1817.1	1806.3	1782.1	1751.9	1680.6	1574.3	1429.3	1401.5	1203.4
12.5°	1863.1	1863.1	1875.1	1893.3	1896.9	1887.2	1822.0	1715.6	1550.1	1521.1	1283.1
15°	1811.1	1817.1	1843.7	1901.7	1962.1	2002.0	1960.9	1861.8	1683.0	1651.6	1377.4
17.5°	1796.6	1802.6	1820.8	1871.5	1952.5	2058.8	2079.3	2003.2	1808.7	1782.1	1474.0
20°	1837.7	1843.7	1859.4	1902.9	1964.5	2072.1	2157.9	2139.7	1941.6	1913.8	1571.9
22.5°	1935.5	1939.2	1939.2	1973.0	2027.4	2107.1	2207.4	2269.0	2078.1	2047.9	1668.5
25°	2145.8	2138.5	2109.5	2092.6	2127.6	2192.9	2270.2	2382.6	2230.3	2189.3	1772.4
27.5°	2421.2	2445.4	2375.3	2294.4	2267.8	2305.3	2358.4	2482.9	2377.7	2334.3	1866.7
30°	2794.6	2784.9	2693.1	2577.1	2462.3	2449.0	2467.2	2568.6	2525.1	2484.1	1971.8
32.5°	3101.5	3119.6	3022.9	2881.6	2710.0	2629.1	2609.7	2671.3	2682.2	2655.6	2096.2
35°	3416.8	3436.1	3341.9	3184.8	2980.6	2845.3	2789.7	2798.2	2876.7	2842.9	2226.7
37.5°	3699.5	3716.4	3623.4	3462.7	3258.5	3093.0	3013.3	2948.0	3065.2	3035.0	2364.5
40°	3914.6	3917.0	3854.2	3710.4	3517.1	3345.5	3254.9	3126.8	3264.6	3244.0	2508.2
42.5°	4066.8	4071.6	4025.7	3902.5	3723.7	3564.2	3490.5	3338.3	3494.1	3476.0	2675.0
45°	4138.1	4146.6	4141.7	4028.2	3879.5	3741.8	3717.6	3563.0	3745.4	3728.5	2867.1
47.5°	4070.4	4070.4	4132.1	4116.4	3979.8	3888.0	3915.8	3797.4	4018.5	4002.8	3062.8
50°	3788.9	3792.6	3918.2	4098.2	4018.5	3997.9	4084.9	4026.9	4266.2	4275.8	3297.2
52.5°	3049.5	3043.5	3467.5	3813.1	3991.9	4047.5	4240.8	4261.3	4563.4	4592.4	3530.4
55°	2278.7	2275.0	2681.0	3308.1	3805.8	4022.1	4327.8	4470.4	4817.1	4835.2	3704.4
57.5°	1803.8	1794.2	2017.7	2666.5	3385.4	3908.5	4331.4	4510.2	4958.5	4989.9	3873.5
60°	1387.0	1378.6	1545.3	1983.9	2789.7	3606.5	4227.5	4512.6	5095.0	5150.6	4100.6
62.5°	991.9	1001.6	1129.7	1423.3	2145.8	3180.0	4092.2	4546.5	5337.8	5400.7	4423.2
65°	669.3	664.5	770.8	969.0	1526.0	2606.1	3884.4	4617.8	5775.2	5885.2	4809.9
67.5°	465.2	468.8	517.1	630.7	969.0	2000.8	3538.8	4657.6	6227.1	6312.9	5080.5
70°	335.9	340.7	367.3	424.1	592.0	1356.8	2991.5	4475.2	6349.1	6424.0	4892.0
72.5°	221.1	230.8	270.6	300.8	378.2	849.4	2203.8	3855.4	5823.5	5879.1	4104.3
75°	119.6	122.0	174.0	224.7	269.4	529.2	1314.5	2600.1	4356.8	4338.7	2706.4
77.5°	93.0	96.7	107.5	160.7	181.2	291.2	519.5	1174.4	2063.6	2008.0	923.1
80°	56.8	59.2	74.9	95.4	126.9	169.1	152.2	319.0	419.2	392.7	135.3
82.5°	33.8	36.2	44.7	79.7	100.3	79.7	53.2	77.3	78.5	77.3	33.8
85°	6.0	6.0	31.4	55.6	53.2	23.0	31.4	25.4	23.0	24.2	7.2
87.5°	0.0	0.0	12.1	16.9	24.2	8.5	12.1	6.0	6.0	6.0	3.6
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°	971.4	971.4	971.4	971.4	971.4	971.4	971.4	971.4	971.4	971.4	971.4
2.5°	979.9	938.8	854.2	780.5	706.8	652.4	611.4	569.1	554.6	536.4	526.8
5°	996.8	915.8	747.9	613.8	500.2	413.2	357.6	323.8	302.1	286.3	282.7
7.5°	1022.1	897.7	662.1	480.9	356.4	269.4	223.5	200.6	188.5	181.2	178.8
10°	1052.3	882.0	577.5	374.5	251.3	189.7	164.3	154.7	149.8	147.4	146.2
12.5°	1094.6	875.9	506.2	288.8	189.7	155.9	142.6	136.5	132.9	129.3	128.1
15°	1150.2	878.4	441.0	223.5	157.1	138.9	128.1	122.0	117.2	113.6	113.6
17.5°	1208.2	882.0	377.0	181.2	142.6	126.9	114.8	106.3	102.7	99.1	97.9
20°	1262.6	880.8	315.3	154.7	129.3	113.6	101.5	93.0	87.0	83.4	83.4
22.5°	1314.5	873.5	257.3	138.9	118.4	100.3	87.0	78.5	73.7	70.1	70.1
25°	1370.1	859.0	210.2	126.9	105.1	88.2	74.9	66.5	62.8	59.2	59.2
27.5°	1413.6	834.9	171.6	116.0	93.0	76.1	64.0	56.8	53.2	50.7	50.7
30°	1460.7	799.8	142.6	103.9	80.9	65.2	54.4	48.3	44.7	43.5	43.5
32.5°	1512.7	761.2	122.0	91.8	68.9	55.6	45.9	42.3	38.7	37.5	37.5
35°	1573.1	727.3	109.9	79.7	60.4	47.1	39.9	36.2	33.8	33.8	33.8
37.5°	1641.9	692.3	99.1	70.1	52.0	39.9	33.8	32.6	31.4	30.2	30.2
40°	1716.9	654.8	89.4	61.6	44.7	33.8	29.0	29.0	27.8	27.8	27.8
42.5°	1801.4	622.2	80.9	54.4	38.7	29.0	25.4	25.4	24.2	24.2	24.2
45°	1893.3	592.0	73.7	48.3	33.8	25.4	23.0	21.7	20.5	20.5	20.5
47.5°	2002.0	575.1	67.7	42.3	29.0	21.7	19.3	18.1	16.9	15.7	15.7
50°	2140.9	582.4	61.6	35.0	25.4	18.1	15.7	14.5	13.3	12.1	12.1
52.5°	2250.9	578.7	53.2	30.2	20.5	14.5	12.1	10.9	9.7	8.5	8.5
55°	2330.6	564.2	45.9	25.4	15.7	12.1	9.7	7.2	6.0	6.0	6.0
57.5°	2409.2	549.7	38.7	20.5	12.1	8.5	6.0	4.8	4.8	4.8	4.8
60°	2531.2	529.2	33.8	16.9	9.7	6.0	3.6	3.6	2.4	2.4	2.4
62.5°	2679.8	503.8	27.8	14.5	7.2	4.8	2.4	2.4	0.0	0.0	0.0
65°	2842.9	459.1	23.0	10.9	6.0	3.6	2.4	0.0	0.0	0.0	0.0
67.5°	2805.4	368.5	19.3	7.2	4.8	2.4	1.2	0.0	0.0	0.0	0.0
70°	2481.7	248.9	15.7	6.0	3.6	2.4	1.2	0.0	0.0	0.0	0.0
72.5°	1944.0	147.4	10.9	4.8	2.4	1.2	0.0	0.0	0.0	0.0	0.0
75°	1244.5	73.7	7.2	3.6	2.4	1.2	0.0	0.0	0.0	0.0	0.0
77.5°	416.8	36.2	4.8	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	59.2	12.1	2.4	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	13.3	4.8	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.8	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.4	1.2	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)