

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: P398157

Luminaire Tested: **ARCH-S-PA1-90-827-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398157
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-PA1-90-827-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 1180mA 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: 6645 lumens
Efficiency: N/A
Efficacy: 70.7 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

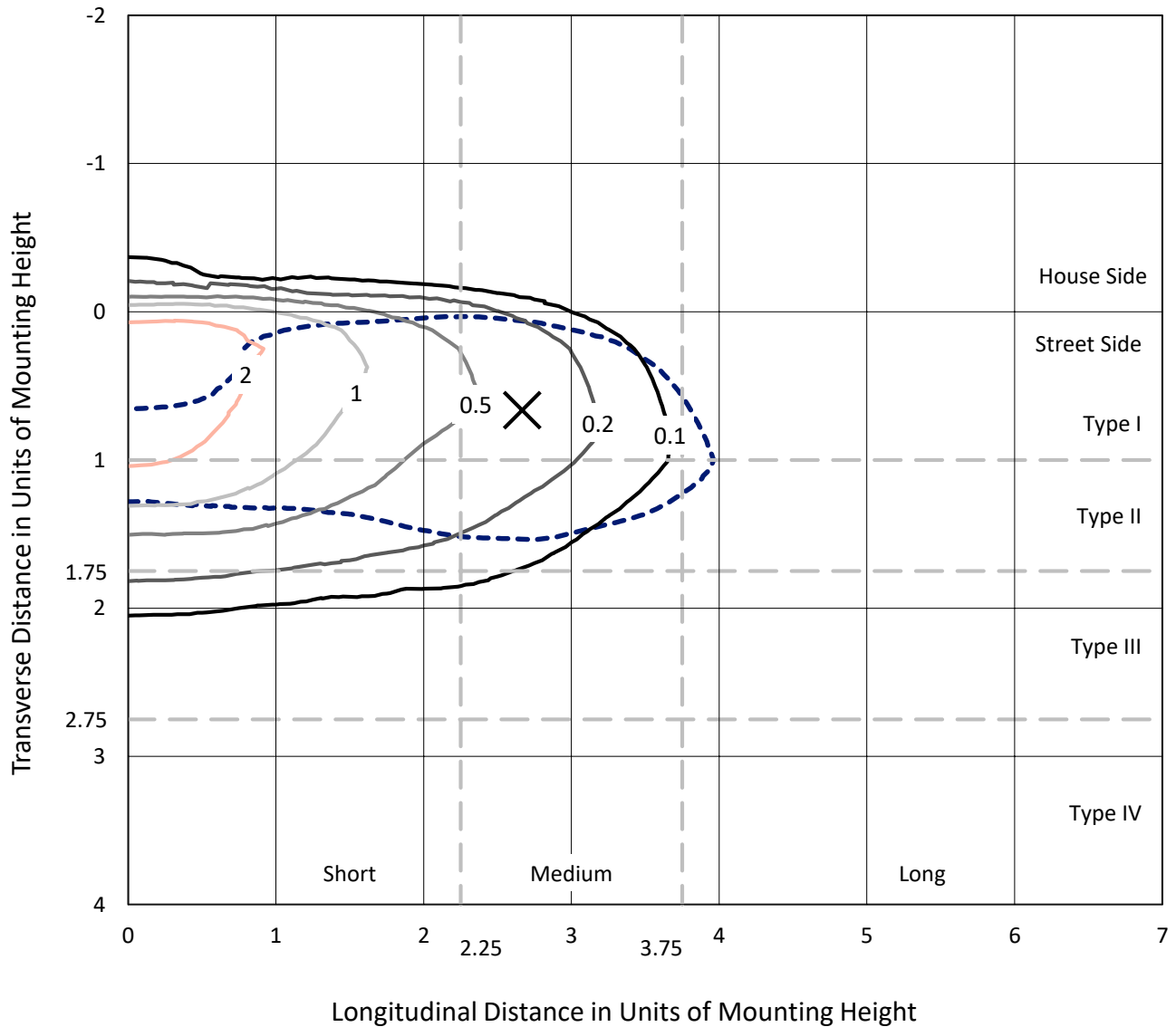
Input Watts (W): 94
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

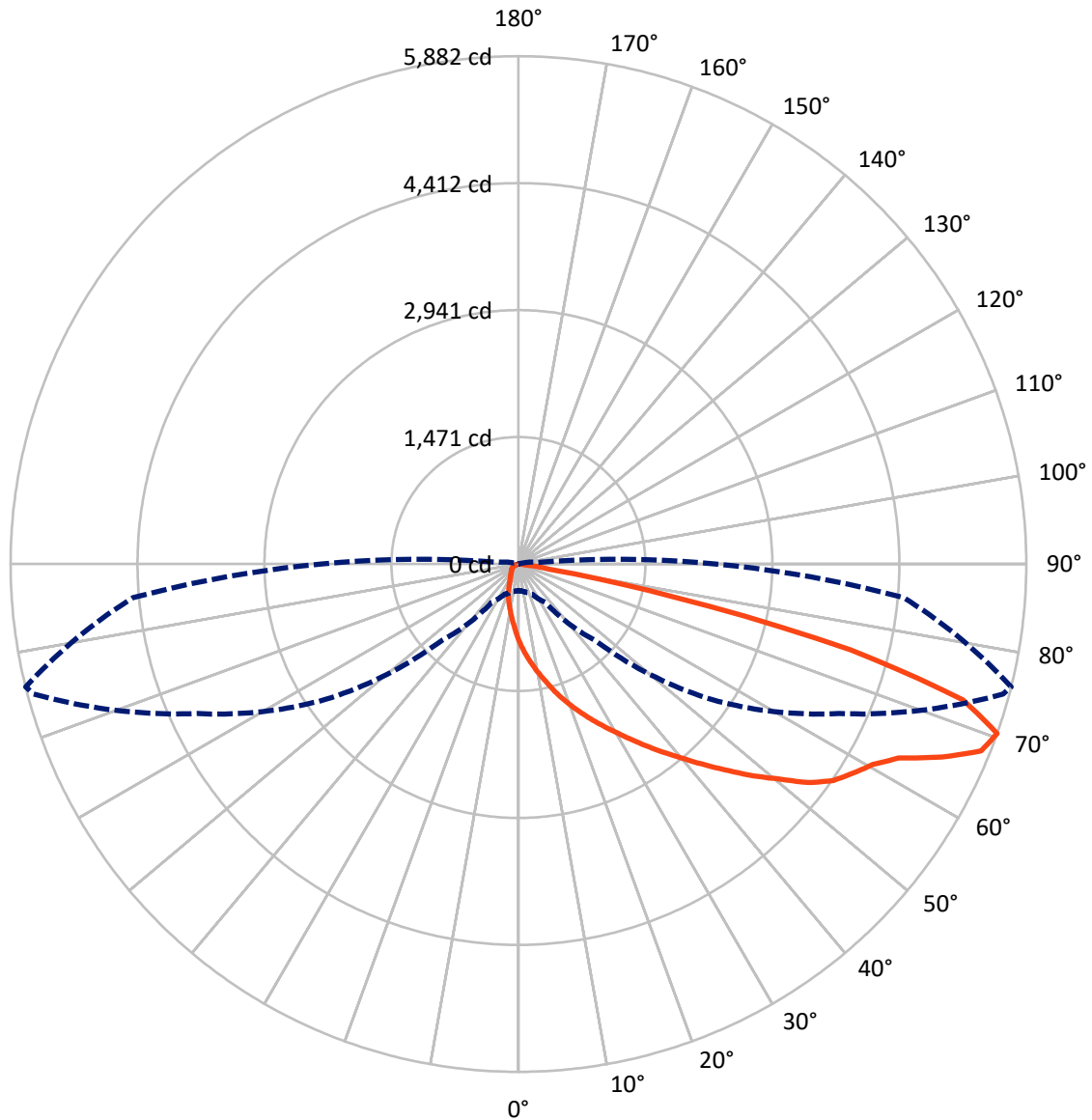
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 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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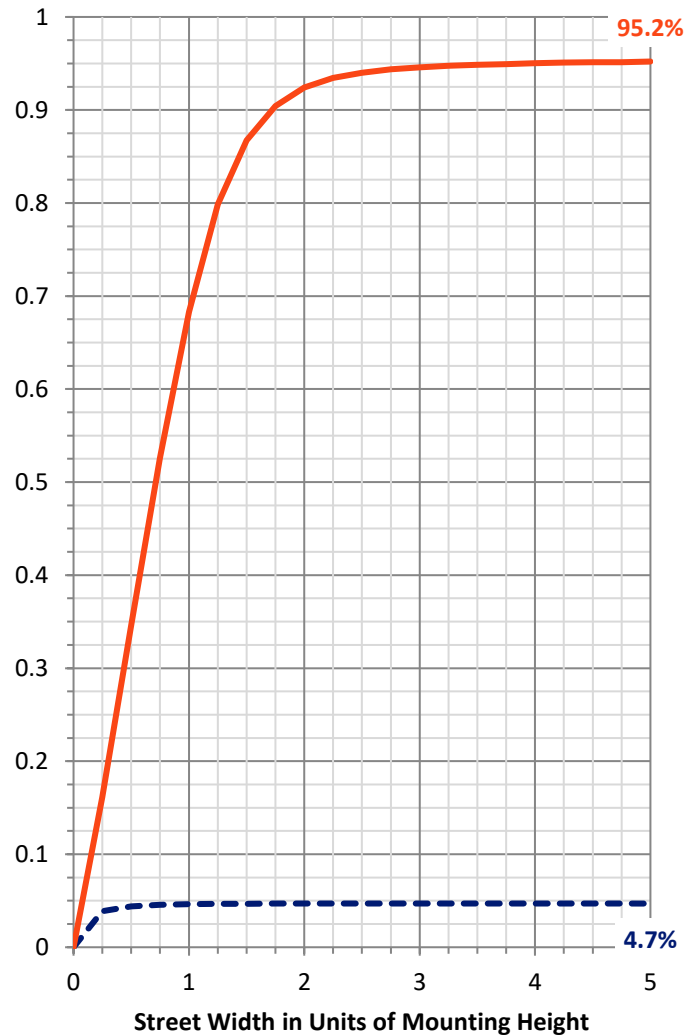
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	313.4	0.0	313.4
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	6331.6	0.0	6331.6
	% Fixture	95.3	0.0	95.3
Total	Lumens	6645.0	0.0	6645.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.8	1.3
10°-20°	270.4	4.1
20°-30°	503.7	7.6
30°-40°	890.9	13.4
40°-50°	1362.4	20.5
50°-60°	1544.6	23.2
60°-70°	1324.1	19.9
70°-80°	641.3	9.7
80°-90°	23.8	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°	6645.0	100.0
0°-180°	6645.0	100.0



--- HS — SS

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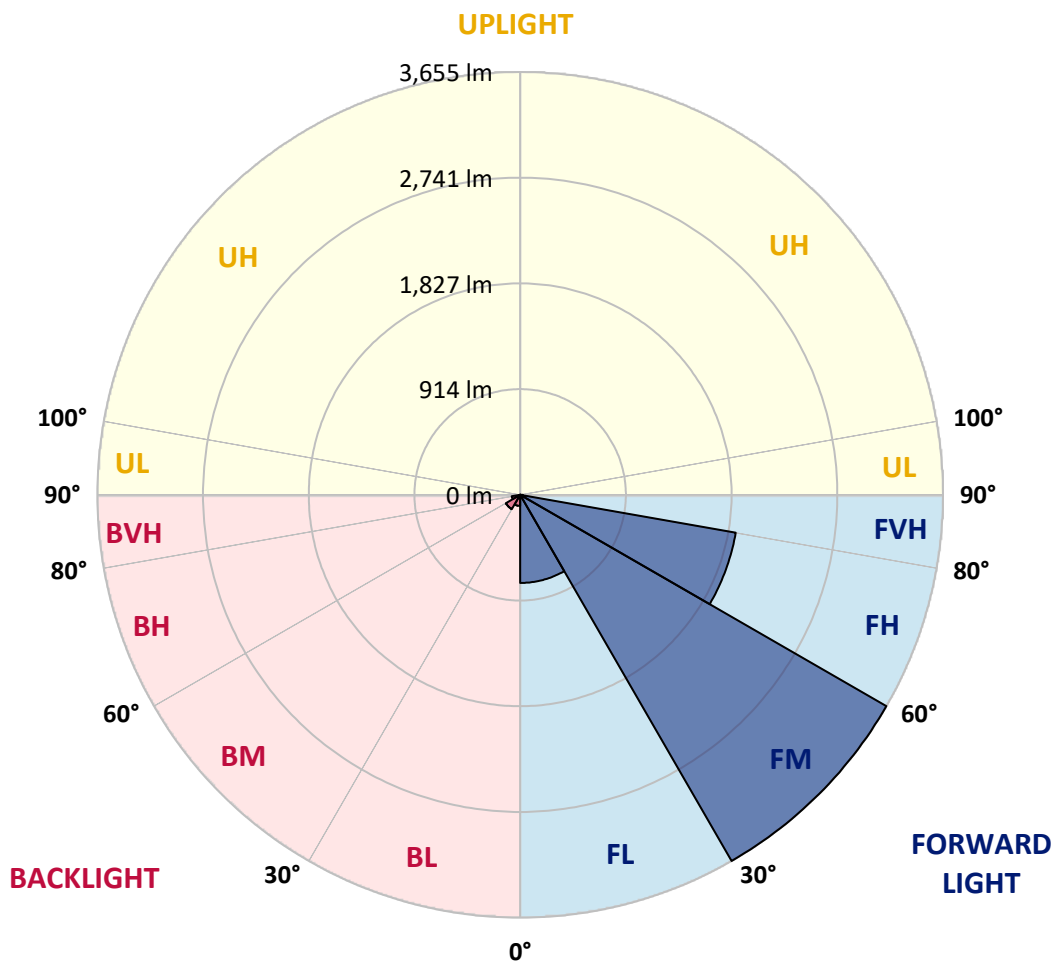
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	761.8	11.5			
FM	(30°-60°)	3654.8	55.0			
FH	(60°-80°)	1891.6	28.5			G2/5000
FVH	(80°-90°)	23.4	0.4			G1/100
BL	(0°-30°)	96.1	1.4	B0/110		
BM	(30°-60°)	143.1	2.2	B0/220		
BH	(60°-80°)	73.8	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°	889.5	889.5	889.5	889.5	889.5	889.5	889.5	889.5	889.5	889.5	889.5
2.5°	1215.8	1209.2	1202.6	1177.1	1153.9	1132.9	1093.0	1041.0	994.6	984.6	930.4
5°	1428.3	1420.5	1410.5	1385.1	1355.2	1319.8	1261.2	1181.5	1099.7	1082.0	981.3
7.5°	1572.1	1565.4	1551.1	1538.9	1509.0	1474.7	1409.4	1316.5	1203.7	1181.5	1039.9
10°	1670.5	1666.1	1663.9	1653.9	1631.8	1604.2	1538.9	1441.5	1308.8	1283.3	1101.9
12.5°	1705.9	1705.9	1717.0	1733.6	1736.9	1728.1	1668.3	1571.0	1419.4	1392.8	1174.9
15°	1658.4	1663.9	1688.2	1741.3	1796.7	1833.2	1795.5	1704.8	1541.1	1512.3	1261.2
17.5°	1645.1	1650.6	1667.2	1713.7	1787.8	1885.2	1904.0	1834.3	1656.2	1631.8	1349.7
20°	1682.7	1688.2	1702.6	1742.4	1798.9	1897.3	1975.9	1959.3	1777.8	1752.4	1439.3
22.5°	1772.3	1775.6	1775.6	1806.6	1856.4	1929.4	2021.2	2077.7	1902.9	1875.2	1527.8
25°	1964.8	1958.2	1931.6	1916.1	1948.2	2008.0	2078.8	2181.6	2042.3	2004.6	1623.0
27.5°	2217.1	2239.2	2175.0	2100.9	2076.6	2110.8	2159.5	2273.5	2177.2	2137.4	1709.3
30°	2558.9	2550.1	2466.0	2359.8	2254.7	2242.5	2259.1	2352.0	2312.2	2274.6	1805.5
32.5°	2839.9	2856.5	2768.0	2638.6	2481.5	2407.3	2389.6	2446.1	2456.0	2431.7	1919.5
35°	3128.7	3146.4	3060.1	2916.2	2729.3	2605.4	2554.5	2562.2	2634.1	2603.2	2038.9
37.5°	3387.5	3403.0	3317.8	3170.7	2983.7	2832.2	2759.1	2699.4	2806.7	2779.1	2165.1
40°	3584.5	3586.7	3529.1	3397.5	3220.5	3063.4	2980.4	2863.1	2989.3	2970.5	2296.7
42.5°	3723.9	3728.3	3686.2	3573.4	3409.7	3263.6	3196.1	3056.7	3199.5	3182.9	2449.4
45°	3789.1	3796.9	3792.4	3688.4	3552.4	3426.3	3404.1	3262.5	3429.6	3414.1	2625.3
47.5°	3727.2	3727.2	3783.6	3769.2	3644.2	3560.1	3585.6	3477.1	3679.6	3665.2	2804.5
50°	3469.4	3472.7	3587.8	3752.6	3679.6	3660.8	3740.4	3687.3	3906.4	3915.2	3019.1
52.5°	2792.3	2786.8	3175.1	3491.5	3655.3	3706.1	3883.2	3902.0	4178.5	4205.1	3232.6
55°	2086.5	2083.2	2454.9	3029.1	3484.9	3682.9	3962.8	4093.4	4410.9	4427.5	3392.0
57.5°	1651.7	1642.9	1847.5	2441.6	3099.9	3578.9	3966.1	4129.9	4540.3	4569.1	3546.8
60°	1270.0	1262.3	1415.0	1816.6	2554.5	3302.3	3871.0	4132.1	4665.3	4716.2	3754.8
62.5°	908.3	917.1	1034.4	1303.2	1964.8	2911.8	3747.1	4163.1	4887.7	4945.2	4050.2
65°	612.9	608.5	705.8	887.3	1397.3	2386.3	3556.8	4228.3	5288.2	5388.9	4404.2
67.5°	425.9	429.2	473.5	577.5	887.3	1832.1	3240.4	4264.8	5701.9	5780.5	4652.0
70°	307.6	312.0	336.3	388.3	542.1	1242.4	2739.2	4097.8	5813.7	5882.3	4479.5
72.5°	202.5	211.3	247.8	275.5	346.3	777.7	2017.9	3530.2	5332.4	5383.3	3758.1
75°	109.5	111.7	159.3	205.8	246.7	484.6	1203.7	2380.8	3989.4	3972.8	2478.1
77.5°	85.2	88.5	98.5	147.1	165.9	266.6	475.7	1075.3	1889.6	1838.7	845.2
80°	52.0	54.2	68.6	87.4	116.2	154.9	139.4	292.1	383.9	359.6	123.9
82.5°	31.0	33.2	40.9	73.0	91.8	73.0	48.7	70.8	71.9	70.8	31.0
85°	5.5	5.5	28.8	50.9	48.7	21.0	28.8	23.2	21.0	22.1	6.6
87.5°	0.0	0.0	11.1	15.5	22.1	7.7	11.1	5.5	5.5	5.5	3.3
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°	889.5	889.5	889.5	889.5	889.5	889.5	889.5	889.5	889.5	889.5	889.5
2.5°	897.2	859.6	782.2	714.7	647.2	597.4	559.8	521.1	507.8	491.2	482.4
5°	912.7	838.6	684.8	562.0	458.0	378.4	327.5	296.5	276.6	262.2	258.9
7.5°	935.9	822.0	606.3	440.3	326.4	246.7	204.7	183.6	172.6	165.9	163.7
10°	963.6	807.6	528.8	343.0	230.1	173.7	150.5	141.6	137.2	135.0	133.9
12.5°	1002.3	802.1	463.5	264.4	173.7	142.7	130.5	125.0	121.7	118.4	117.3
15°	1053.2	804.3	403.8	204.7	143.8	127.2	117.3	111.7	107.3	104.0	104.0
17.5°	1106.3	807.6	345.2	165.9	130.5	116.2	105.1	97.4	94.0	90.7	89.6
20°	1156.1	806.5	288.7	141.6	118.4	104.0	92.9	85.2	79.7	76.3	76.3
22.5°	1203.7	799.9	235.6	127.2	108.4	91.8	79.7	71.9	67.5	64.2	64.2
25°	1254.6	786.6	192.5	116.2	96.2	80.8	68.6	60.8	57.5	54.2	54.2
27.5°	1294.4	764.5	157.1	106.2	85.2	69.7	58.6	52.0	48.7	46.5	46.5
30°	1337.5	732.4	130.5	95.1	74.1	59.7	49.8	44.3	40.9	39.8	39.8
32.5°	1385.1	697.0	111.7	84.1	63.1	50.9	42.0	38.7	35.4	34.3	34.3
35°	1440.4	666.0	100.7	73.0	55.3	43.1	36.5	33.2	31.0	31.0	31.0
37.5°	1503.5	633.9	90.7	64.2	47.6	36.5	31.0	29.9	28.8	27.7	27.7
40°	1572.1	599.6	81.9	56.4	40.9	31.0	26.6	26.6	25.4	25.4	25.4
42.5°	1649.5	569.8	74.1	49.8	35.4	26.6	23.2	23.2	22.1	22.1	22.1
45°	1733.6	542.1	67.5	44.3	31.0	23.2	21.0	19.9	18.8	18.8	18.8
47.5°	1833.2	526.6	62.0	38.7	26.6	19.9	17.7	16.6	15.5	14.4	14.4
50°	1960.4	533.2	56.4	32.1	23.2	16.6	14.4	13.3	12.2	11.1	11.1
52.5°	2061.1	529.9	48.7	27.7	18.8	13.3	11.1	10.0	8.9	7.7	7.7
55°	2134.1	516.6	42.0	23.2	14.4	11.1	8.9	6.6	5.5	5.5	5.5
57.5°	2206.0	503.4	35.4	18.8	11.1	7.7	5.5	4.4	4.4	4.4	4.4
60°	2317.7	484.6	31.0	15.5	8.9	5.5	3.3	3.3	2.2	2.2	2.2
62.5°	2453.8	461.3	25.4	13.3	6.6	4.4	2.2	2.2	0.0	0.0	0.0
65°	2603.2	420.4	21.0	10.0	5.5	3.3	2.2	0.0	0.0	0.0	0.0
67.5°	2568.9	337.4	17.7	6.6	4.4	2.2	1.1	0.0	0.0	0.0	0.0
70°	2272.4	227.9	14.4	5.5	3.3	2.2	1.1	0.0	0.0	0.0	0.0
72.5°	1780.1	135.0	10.0	4.4	2.2	1.1	0.0	0.0	0.0	0.0	0.0
75°	1139.5	67.5	6.6	3.3	2.2	1.1	0.0	0.0	0.0	0.0	0.0
77.5°	381.7	33.2	4.4	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	54.2	11.1	2.2	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	12.2	4.4	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.4	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.2	1.1	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)