

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: P399612

Luminaire Tested: **ARCH-L-PA3-160-830-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399612
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-L-PA3-160-830-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 705mA LIGHT ENGINES 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: 14278 lumens
Efficiency: N/A
Efficacy: 88.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G3

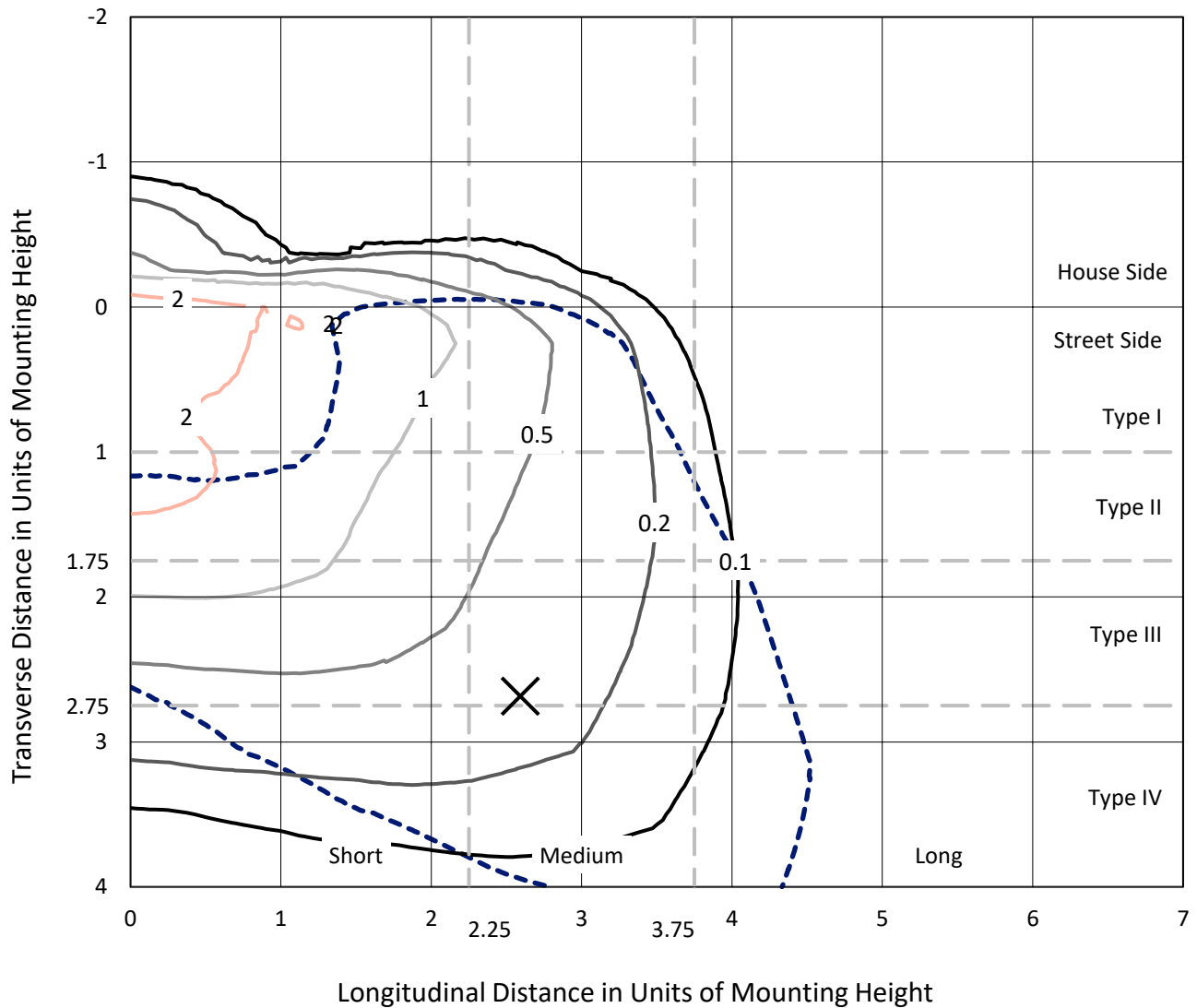
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

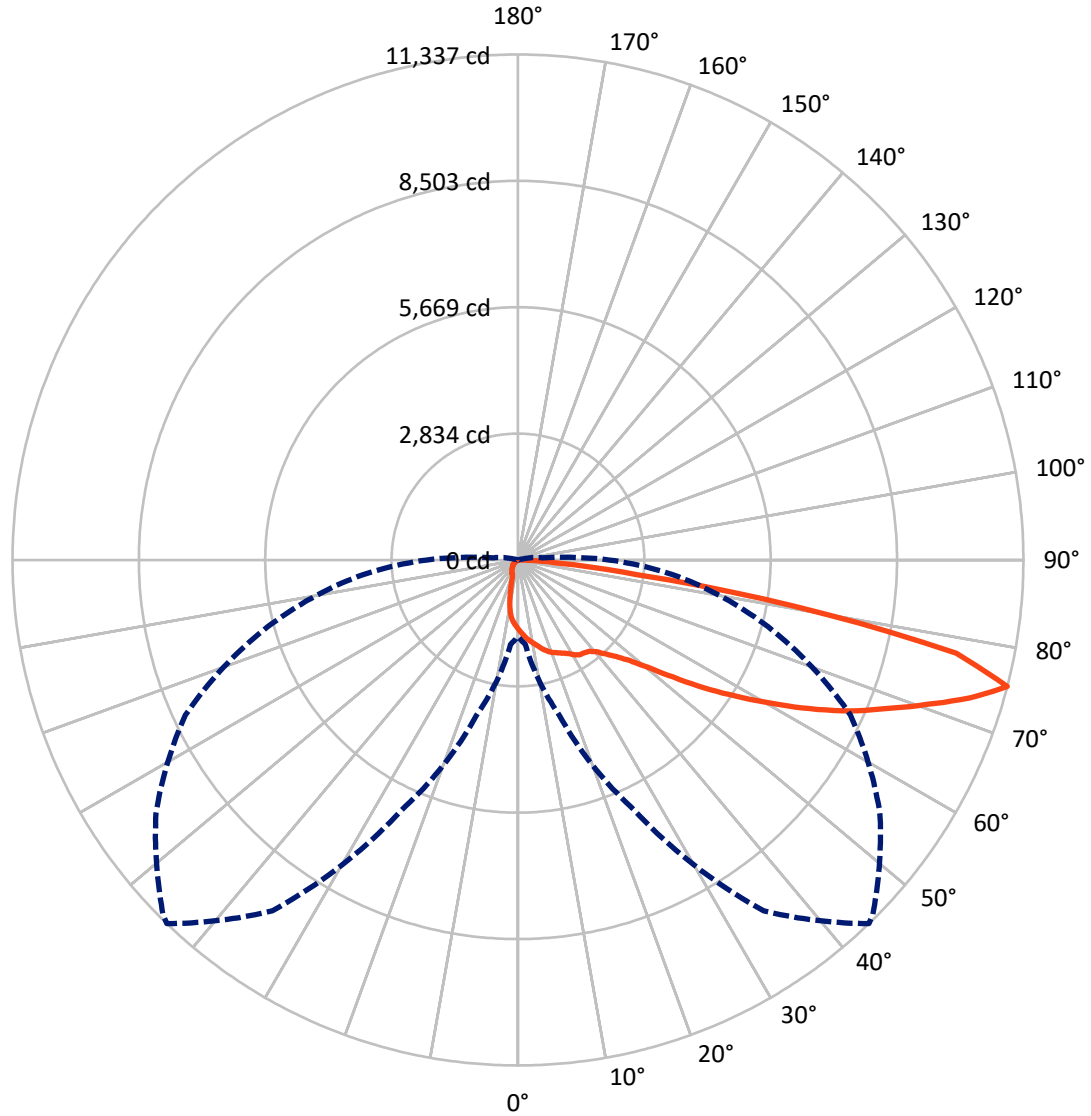
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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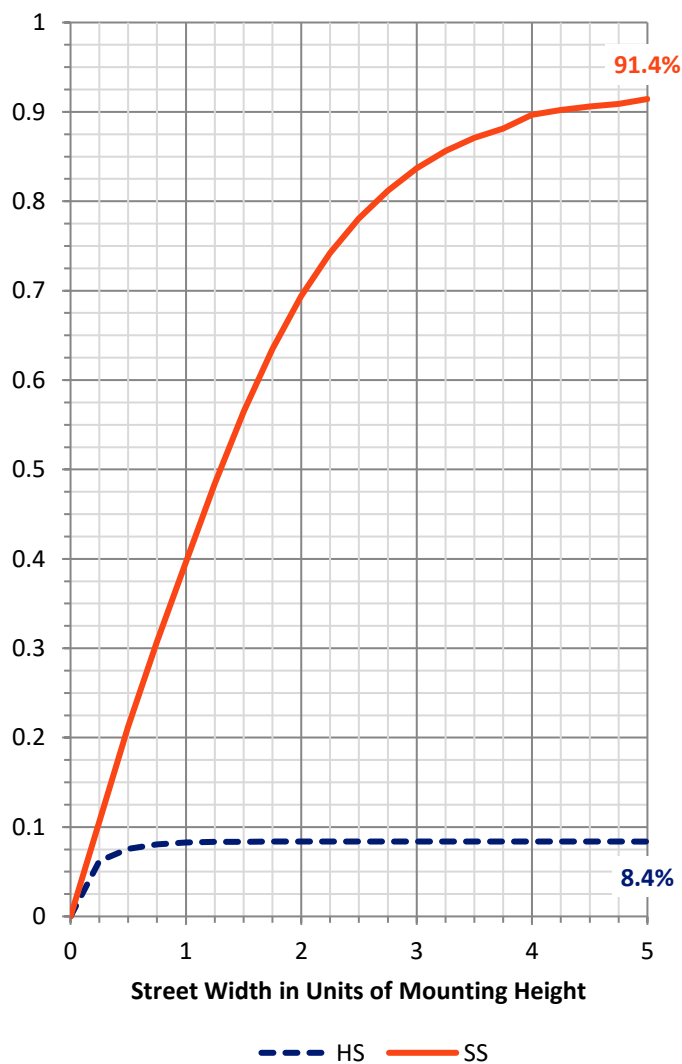
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1204.1	0.0	1204.1
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	13073.9	0.0	13073.9
	% Fixture	91.6	0.0	91.6
Total	Lumens	14278.0	0.0	14278.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.6	1.0
10°-20°	410.7	2.9
20°-30°	677.8	4.7
30°-40°	983.7	6.9
40°-50°	1599.0	11.2
50°-60°	2818.9	19.7
60°-70°	4051.4	28.4
70°-80°	3244.3	22.7
80°-90°	345.6	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°	14278.0	100.0
0°-180°	14278.0	100.0

Coefficient of Utilization



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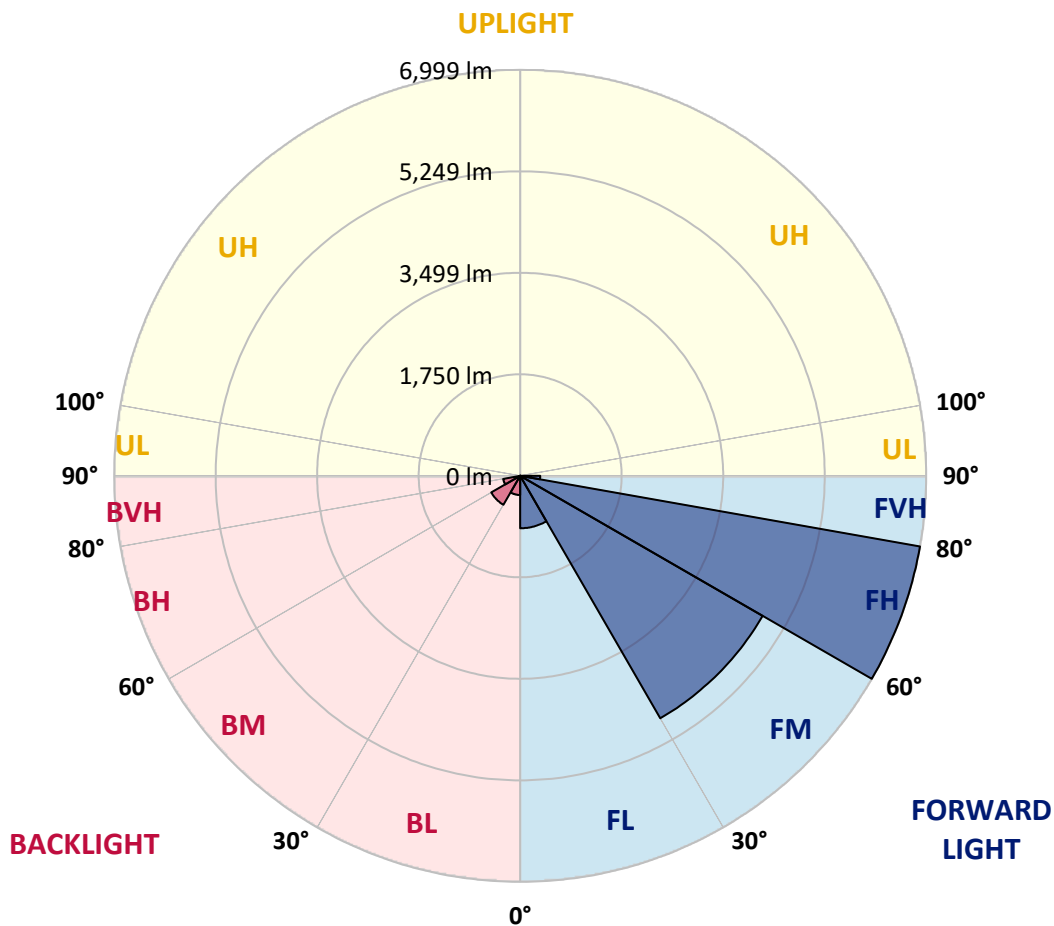
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	904.2	6.3			
FM (30°-60°)	4826.1	33.8			
FH (60°-80°)	6998.8	49.0			G3/7500
FVH (80°-90°)	344.8	2.4			G3/500
BL (0°-30°)	330.8	2.3	B1/500		
BM (30°-60°)	575.6	4.0	B1/1000		
BH (60°-80°)	296.8	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-G3

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1554.1	1554.1	1554.1	1554.1	1554.1	1554.1	1554.1	1554.1	1554.1	1554.1	1554.1
2.5°	1693.7	1691.1	1683.2	1670.0	1656.8	1643.7	1641.0	1620.0	1596.3	1577.8	1562.0
5°	1843.9	1841.2	1828.1	1799.1	1770.1	1735.9	1733.2	1683.2	1638.4	1588.3	1546.2
7.5°	1999.3	1994.0	1970.3	1925.5	1875.5	1822.8	1817.5	1743.8	1677.9	1612.1	1551.5
10°	2120.4	2115.2	2080.9	2028.2	1959.8	1893.9	1886.0	1809.6	1743.8	1659.5	1577.8
12.5°	2239.0	2228.4	2183.7	2125.7	2041.4	1978.2	1970.3	1891.3	1812.2	1725.3	1625.2
15°	2349.6	2336.4	2294.3	2220.5	2131.0	2070.4	2065.1	1980.8	1899.2	1799.1	1688.4
17.5°	2426.0	2420.7	2370.7	2289.0	2202.1	2152.0	2146.8	2059.8	1978.2	1872.8	1754.3
20°	2465.5	2465.5	2418.1	2328.5	2249.5	2215.3	2207.4	2125.7	2046.7	1946.6	1822.8
22.5°	2473.4	2481.3	2444.4	2347.0	2289.0	2260.0	2254.8	2183.7	2107.3	2015.1	1899.2
25°	2489.2	2489.2	2470.8	2365.4	2323.3	2315.4	2312.7	2249.5	2181.0	2088.8	1975.6
27.5°	2507.6	2507.6	2494.5	2391.7	2375.9	2373.3	2370.7	2341.7	2286.4	2178.4	2065.1
30°	2555.1	2557.7	2547.2	2444.4	2433.9	2462.9	2468.1	2452.3	2383.8	2249.5	2157.3
32.5°	2673.6	2649.9	2620.9	2481.3	2499.7	2536.6	2539.3	2507.6	2433.9	2325.9	2267.9
35°	2971.2	2831.6	2699.9	2512.9	2520.8	2557.7	2563.0	2560.3	2515.5	2423.4	2394.4
37.5°	3247.8	3050.3	2863.2	2586.7	2560.3	2599.8	2610.4	2655.2	2620.9	2557.7	2565.6
40°	3408.5	3332.1	3200.4	2789.5	2639.3	2699.9	2710.5	2779.0	2765.8	2739.4	2789.5
42.5°	3903.7	3909.0	3766.7	3092.4	2784.2	2881.7	2894.9	2950.2	2968.6	2981.8	3102.9
45°	4477.9	4496.4	4462.1	3637.7	3058.2	3089.8	3108.2	3182.0	3250.5	3334.7	3556.0
47.5°	5168.1	5152.3	5025.8	4304.1	3534.9	3358.4	3371.6	3513.9	3632.4	3816.8	4132.9
50°	5779.2	5818.7	5579.0	4925.7	4206.6	3782.5	3769.4	3909.0	4122.3	4380.5	4778.2
52.5°	6395.5	6337.6	6013.6	5542.1	5002.1	4359.4	4319.9	4396.3	4696.6	5002.1	5410.4
55°	6558.9	6564.1	6453.5	6216.4	5665.9	5060.1	4994.2	4988.9	5363.0	5571.1	6074.2
57.5°	6880.2	6893.4	6919.7	6967.1	6706.4	5760.7	5692.2	5618.5	5982.0	6103.2	6740.6
60°	7206.8	7222.6	7383.3	7638.8	7465.0	6516.7	6443.0	6269.1	6471.9	6635.2	7441.3
62.5°	7164.7	7275.3	7741.6	8249.9	8228.9	7346.4	7254.3	6835.4	6964.5	7106.7	8084.0
65°	6469.3	6587.8	7636.2	8418.5	8995.4	8165.6	8015.5	7420.2	7428.1	7599.3	8703.0
67.5°	5847.7	5976.7	6977.7	8347.4	9501.1	8900.6	8745.1	8007.6	7883.8	8168.3	9034.9
70°	5489.4	5618.5	6453.5	8126.1	9643.4	9714.5	9580.1	8679.3	8426.4	8687.2	8663.5
72.5°	4296.2	4499.0	5784.4	7704.7	9796.1	10586.4	10481.0	9530.1	8887.4	8144.6	6595.7
75°	1712.2	1899.2	3611.3	6200.6	9603.8	11337.1	11255.4	9912.0	8226.2	5816.0	3376.9
77.5°	516.3	553.2	1003.6	3066.1	7040.9	10051.6	10025.3	8334.2	5821.3	2699.9	921.9
80°	171.2	189.7	308.2	845.5	3213.6	6279.6	6398.2	5310.3	2644.6	619.0	187.0
82.5°	71.1	79.0	155.4	339.8	1137.9	2705.2	2665.7	2378.6	921.9	384.6	68.5
85°	18.4	23.7	71.1	194.9	416.2	932.5	979.9	798.1	521.5	318.7	21.1
87.5°	0.0	0.0	34.2	79.0	187.0	281.8	295.0	242.3	295.0	239.7	10.5
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°	1554.1	1554.1	1554.1	1554.1	1554.1	1554.1	1554.1	1554.1	1554.1	1554.1	1554.1
2.5°	1548.8	1535.7	1512.0	1496.2	1475.1	1469.8	1459.3	1446.1	1443.5	1430.3	1432.9
5°	1522.5	1501.4	1459.3	1430.3	1396.1	1385.5	1367.1	1353.9	1343.4	1324.9	1327.6
7.5°	1517.2	1485.6	1427.7	1372.4	1317.0	1277.5	1222.2	1177.4	1140.6	1101.0	1108.9
10°	1535.7	1496.2	1414.5	1338.1	1238.0	1111.6	966.7	871.9	824.5	777.1	782.3
12.5°	1572.5	1525.1	1419.8	1303.9	1101.0	885.1	684.9	555.8	521.5	500.5	503.1
15°	1627.9	1569.9	1435.6	1238.0	916.7	640.1	455.7	400.4	413.6	421.5	421.5
17.5°	1685.8	1620.0	1448.7	1119.5	708.6	447.8	371.4	366.1	384.6	403.0	403.0
20°	1756.9	1672.6	1451.4	969.3	511.0	363.5	350.3	350.3	363.5	384.6	384.6
22.5°	1825.4	1730.6	1427.7	798.1	389.8	337.2	337.2	337.2	345.1	366.1	368.8
25°	1907.1	1801.7	1377.6	616.4	334.5	321.4	321.4	324.0	329.3	347.7	350.3
27.5°	1994.0	1875.5	1293.3	450.4	305.6	302.9	305.6	308.2	310.8	329.3	334.5
30°	2094.1	1957.1	1185.3	337.2	279.2	279.2	287.1	292.4	292.4	308.2	313.5
32.5°	2210.0	2065.1	1056.3	279.2	252.9	250.2	263.4	271.3	271.3	284.5	289.7
35°	2354.9	2175.7	900.9	247.6	231.8	226.5	231.8	245.0	250.2	260.8	263.4
37.5°	2547.2	2307.5	734.9	229.2	216.0	205.5	205.5	208.1	218.6	229.2	231.8
40°	2792.1	2452.3	571.6	216.0	200.2	189.7	181.8	179.1	176.5	184.4	189.7
42.5°	3100.3	2615.6	426.7	202.8	187.0	171.2	160.7	150.1	137.0	134.3	137.0
45°	3495.4	2815.8	316.1	192.3	179.1	155.4	137.0	118.5	94.8	86.9	89.6
47.5°	3961.7	3023.9	247.6	181.8	173.8	137.0	113.3	81.7	57.9	52.7	55.3
50°	4456.9	3224.1	210.7	168.6	163.3	118.5	81.7	50.0	34.2	34.2	36.9
52.5°	4878.3	3337.4	192.3	158.0	147.5	97.5	52.7	29.0	21.1	21.1	23.7
55°	5286.6	3398.0	179.1	147.5	126.4	68.5	29.0	18.4	13.2	13.2	13.2
57.5°	5708.0	3424.3	163.3	134.3	100.1	42.1	15.8	10.5	7.9	7.9	7.9
60°	6082.1	3374.3	139.6	110.6	65.9	21.1	7.9	7.9	5.3	2.6	2.6
62.5°	6395.5	3279.4	97.5	79.0	39.5	10.5	5.3	2.6	0.0	0.0	0.0
65°	6587.8	3126.7	63.2	52.7	23.7	7.9	2.6	0.0	0.0	0.0	0.0
67.5°	6532.5	2839.5	39.5	34.2	10.5	5.3	2.6	0.0	0.0	0.0	0.0
70°	5895.1	2328.5	29.0	21.1	7.9	2.6	0.0	0.0	0.0	0.0	0.0
72.5°	4248.8	1575.2	21.1	13.2	5.3	0.0	0.0	0.0	0.0	0.0	0.0
75°	2044.0	561.1	13.2	10.5	2.6	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	500.5	123.8	7.9	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	110.6	23.7	5.3	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	36.9	10.5	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.2	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.9	2.6	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)