

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: P399603

Luminaire Tested: **ARCH-L-PA3-160-827-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399603
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-PA3-160-827-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 2700K, 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: 13209 lumens
Efficiency: N/A
Efficacy: 81.5 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

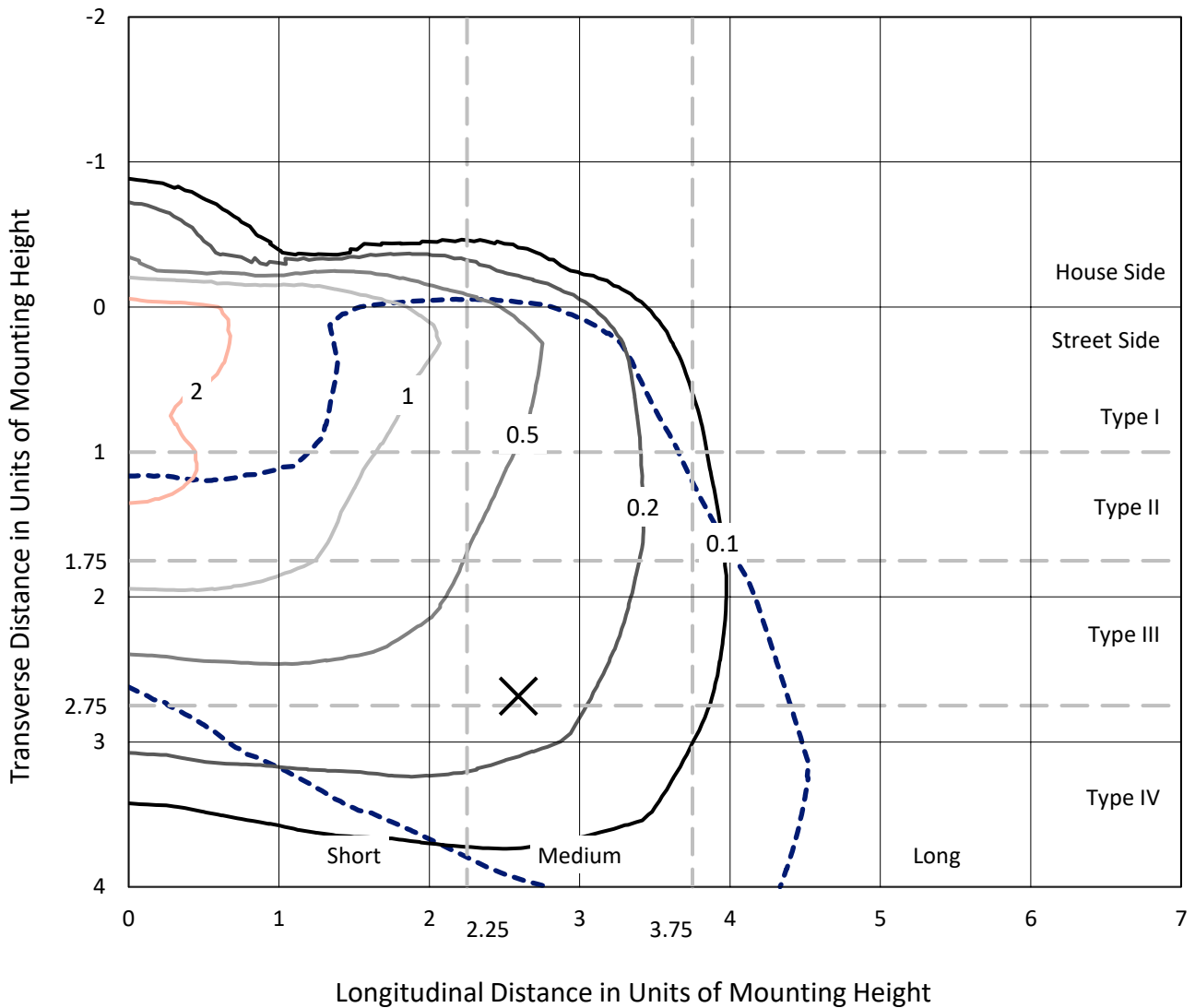
Input Watts (W): 162
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

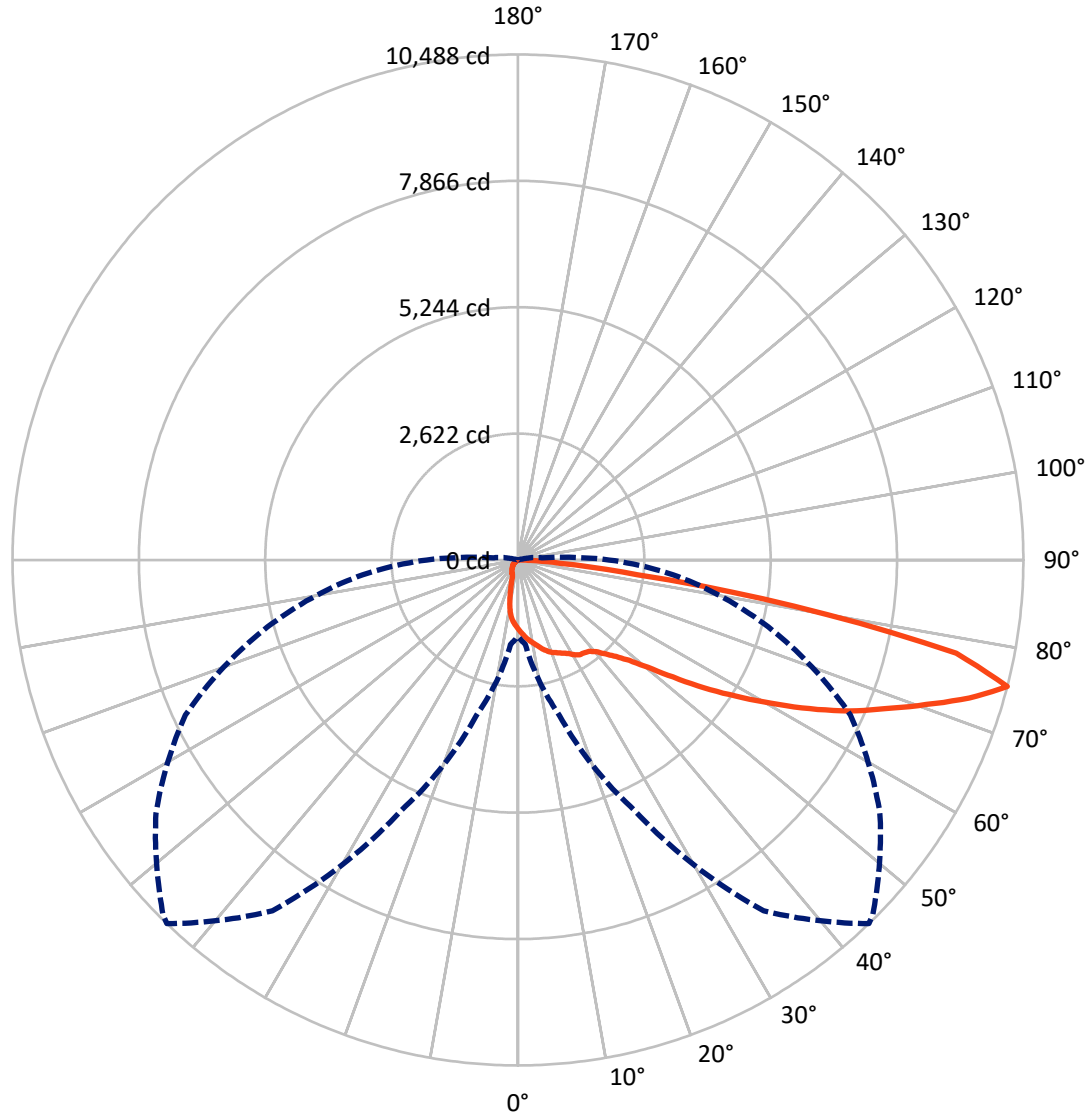
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 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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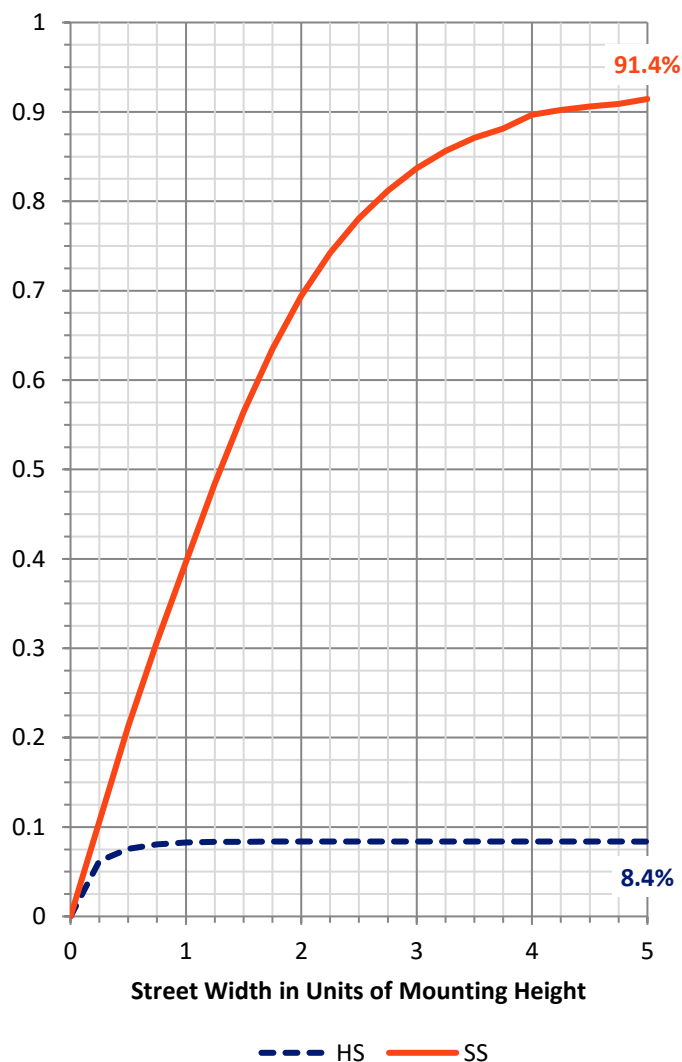
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1113.9	0.0	1113.9
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	12095.1	0.0	12095.1
	% Fixture	91.6	0.0	91.6
Total	Lumens	13209.0	0.0	13209.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.6	1.0
10°-20°	379.9	2.9
20°-30°	627.0	4.7
30°-40°	910.0	6.9
40°-50°	1479.3	11.2
50°-60°	2607.9	19.7
60°-70°	3748.1	28.4
70°-80°	3001.4	22.7
80°-90°	319.8	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°	13209.0	100.0
0°-180°	13209.0	100.0

Coefficient of Utilization



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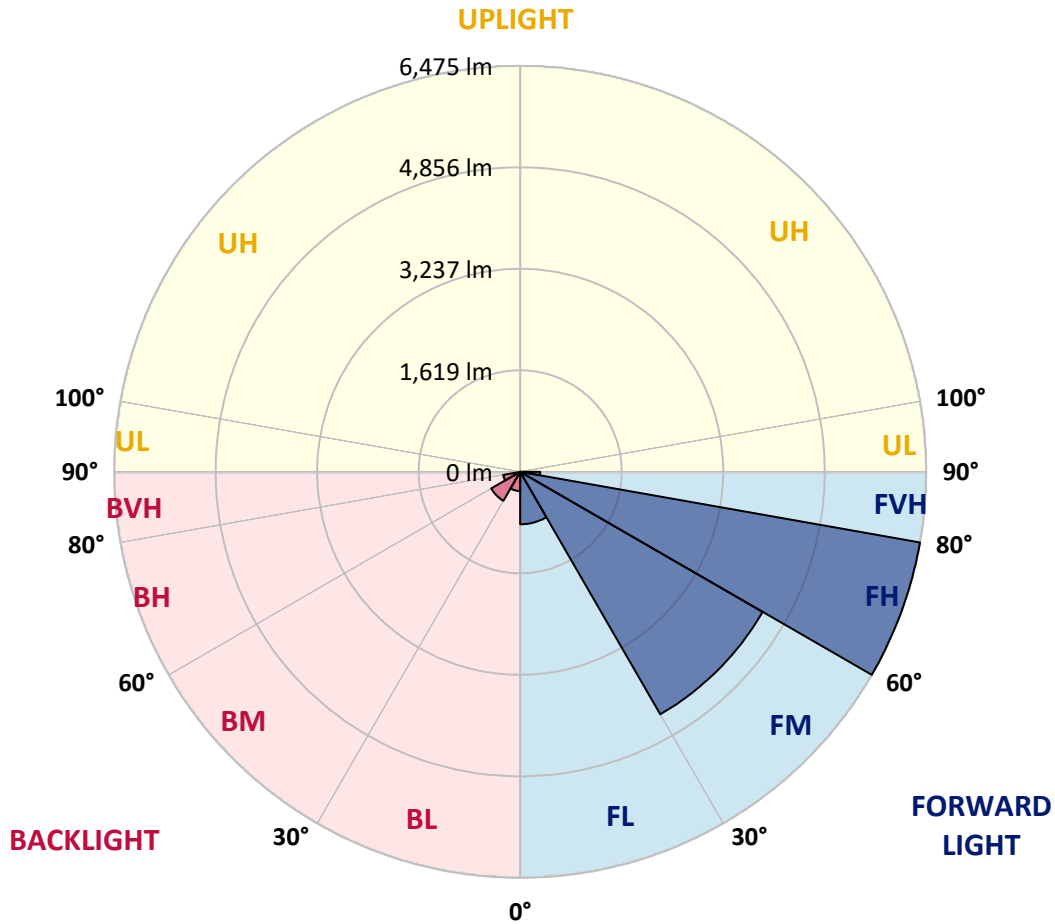
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	836.5	6.3			
FM (30°-60°)	4464.8	33.8			
FH (60°-80°)	6474.8	49.0			G3/7500
FVH (80°-90°)	319.0	2.4			G3/500
BL (0°-30°)	306.0	2.3	B1/500		
BM (30°-60°)	532.5	4.0	B1/1000		
BH (60°-80°)	274.6	2.1	B1/500		G1/500
BVH (80°-90°)	0.8	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°	1437.7	1437.7	1437.7	1437.7	1437.7	1437.7	1437.7	1437.7	1437.7	1437.7	1437.7
2.5°	1566.9	1564.5	1557.2	1545.0	1532.8	1520.6	1518.2	1498.7	1476.7	1459.7	1445.1
5°	1705.8	1703.4	1691.2	1664.4	1637.6	1605.9	1603.5	1557.2	1515.7	1469.4	1430.4
7.5°	1849.6	1844.7	1822.8	1781.3	1735.0	1686.3	1681.4	1613.2	1552.3	1491.4	1435.3
10°	1961.7	1956.8	1925.1	1876.4	1813.0	1752.1	1744.8	1674.1	1613.2	1535.2	1459.7
12.5°	2071.3	2061.6	2020.2	1966.5	1888.6	1830.1	1822.8	1749.7	1676.6	1596.1	1503.5
15°	2173.7	2161.5	2122.5	2054.3	1971.4	1915.4	1910.5	1832.5	1757.0	1664.4	1562.0
17.5°	2244.4	2239.5	2193.2	2117.6	2037.2	1990.9	1986.0	1905.6	1830.1	1732.6	1623.0
20°	2280.9	2280.9	2237.0	2154.2	2081.1	2049.4	2042.1	1966.5	1893.4	1800.8	1686.3
22.5°	2288.2	2295.5	2261.4	2171.2	2117.6	2090.8	2086.0	2020.2	1949.5	1864.2	1757.0
25°	2302.8	2302.8	2285.8	2188.3	2149.3	2142.0	2139.6	2081.1	2017.7	1932.4	1827.6
27.5°	2319.9	2319.9	2307.7	2212.7	2198.1	2195.6	2193.2	2166.4	2115.2	2015.3	1910.5
30°	2363.8	2366.2	2356.4	2261.4	2251.7	2278.5	2283.3	2268.7	2205.4	2081.1	1995.8
32.5°	2473.4	2451.5	2424.7	2295.5	2312.6	2346.7	2349.1	2319.9	2251.7	2151.8	2098.1
35°	2748.8	2619.6	2497.8	2324.8	2332.1	2366.2	2371.1	2368.6	2327.2	2241.9	2215.1
37.5°	3004.7	2821.9	2648.9	2393.0	2368.6	2405.2	2414.9	2456.4	2424.7	2366.2	2373.5
40°	3153.3	3082.6	2960.8	2580.6	2441.7	2497.8	2507.5	2570.9	2558.7	2534.3	2580.6
42.5°	3611.4	3616.3	3484.7	2860.9	2575.8	2665.9	2678.1	2729.3	2746.3	2758.5	2870.6
45°	4142.7	4159.7	4128.0	3365.3	2829.2	2858.4	2875.5	2943.7	3007.1	3085.1	3289.8
47.5°	4781.1	4766.5	4649.5	3981.8	3270.3	3107.0	3119.2	3250.8	3360.4	3531.0	3823.4
50°	5346.5	5383.0	5161.3	4556.9	3891.7	3499.3	3487.2	3616.3	3813.7	4052.5	4420.5
52.5°	5916.7	5863.1	5563.4	5127.2	4627.6	4033.0	3996.5	4067.1	4344.9	4627.6	5005.3
55°	6067.8	6072.7	5970.3	5751.0	5241.7	4681.2	4620.3	4615.4	4961.5	5154.0	5619.4
57.5°	6365.1	6377.3	6401.6	6445.5	6204.3	5329.4	5266.1	5197.8	5534.1	5646.2	6235.9
60°	6667.3	6681.9	6830.5	7066.9	6906.1	6028.8	5960.6	5799.7	5987.4	6138.5	6884.1
62.5°	6628.3	6730.6	7161.9	7632.3	7612.8	6796.4	6711.1	6323.7	6443.1	6574.7	7478.7
65°	5984.9	6094.6	7064.5	7788.2	8321.9	7554.3	7415.4	6864.6	6872.0	7030.4	8051.4
67.5°	5409.8	5529.2	6455.3	7722.4	8789.8	8234.2	8090.4	7408.1	7293.5	7556.7	8358.4
70°	5078.4	5197.8	5970.3	7517.7	8921.4	8987.2	8862.9	8029.5	7795.5	8036.8	8014.8
72.5°	3974.5	4162.2	5351.4	7127.8	9062.7	9793.8	9696.3	8816.6	8222.0	7534.8	6101.9
75°	1584.0	1757.0	3340.9	5736.4	8884.8	10488.3	10412.7	9169.9	7610.3	5380.6	3124.1
77.5°	477.6	511.7	928.4	2836.5	6513.7	9299.1	9274.7	7710.2	5385.5	2497.8	852.9
80°	158.4	175.5	285.1	782.2	2973.0	5809.5	5919.1	4912.7	2446.6	572.7	173.0
82.5°	65.8	73.1	143.8	314.4	1052.7	2502.7	2466.1	2200.5	852.9	355.8	63.4
85°	17.1	21.9	65.8	180.3	385.0	862.6	906.5	738.4	482.5	294.9	19.5
87.5°	0.0	0.0	31.7	73.1	173.0	260.7	272.9	224.2	272.9	221.8	9.7
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°	1437.7	1437.7	1437.7	1437.7	1437.7	1437.7	1437.7	1437.7	1437.7	1437.7	1437.7
2.5°	1432.9	1420.7	1398.8	1384.1	1364.6	1359.8	1350.0	1337.8	1335.4	1323.2	1325.7
5°	1408.5	1389.0	1350.0	1323.2	1291.5	1281.8	1264.7	1252.5	1242.8	1225.7	1228.2
7.5°	1403.6	1374.4	1320.8	1269.6	1218.4	1181.9	1130.7	1089.3	1055.2	1018.6	1025.9
10°	1420.7	1384.1	1308.6	1237.9	1145.3	1028.4	894.3	806.6	762.7	718.9	723.7
12.5°	1454.8	1410.9	1313.5	1206.2	1018.6	818.8	633.6	514.2	482.5	463.0	465.4
15°	1506.0	1452.4	1328.1	1145.3	848.0	592.2	421.6	370.4	382.6	389.9	389.9
17.5°	1559.6	1498.7	1340.3	1035.7	655.5	414.3	343.6	338.7	355.8	372.8	372.8
20°	1625.4	1547.4	1342.7	896.8	472.8	336.3	324.1	324.1	336.3	355.8	355.8
22.5°	1688.7	1601.0	1320.8	738.4	360.7	311.9	311.9	311.9	319.2	338.7	341.2
25°	1764.3	1666.8	1274.5	570.2	309.5	297.3	297.3	299.7	304.6	321.7	324.1
27.5°	1844.7	1735.0	1196.5	416.7	282.7	280.2	282.7	285.1	287.5	304.6	309.5
30°	1937.3	1810.6	1096.6	311.9	258.3	258.3	265.6	270.5	270.5	285.1	290.0
32.5°	2044.5	1910.5	977.2	258.3	233.9	231.5	243.7	251.0	251.0	263.2	268.1
35°	2178.6	2012.8	833.4	229.1	214.4	209.6	214.4	226.6	231.5	241.2	243.7
37.5°	2356.4	2134.7	679.9	212.0	199.8	190.1	190.1	192.5	202.3	212.0	214.4
40°	2583.1	2268.7	528.8	199.8	185.2	175.5	168.1	165.7	163.3	170.6	175.5
42.5°	2868.2	2419.8	394.8	187.6	173.0	158.4	148.6	138.9	126.7	124.3	126.7
45°	3233.7	2605.0	292.4	177.9	165.7	143.8	126.7	109.7	87.7	80.4	82.9
47.5°	3665.0	2797.5	229.1	168.1	160.8	126.7	104.8	75.5	53.6	48.7	51.2
50°	4123.2	2982.7	194.9	156.0	151.1	109.7	75.5	46.3	31.7	31.7	34.1
52.5°	4513.1	3087.5	177.9	146.2	136.5	90.2	48.7	26.8	19.5	19.5	21.9
55°	4890.8	3143.6	165.7	136.5	117.0	63.4	26.8	17.1	12.2	12.2	12.2
57.5°	5280.7	3167.9	151.1	124.3	92.6	39.0	14.6	9.7	7.3	7.3	7.3
60°	5626.7	3121.6	129.2	102.3	60.9	19.5	7.3	7.3	4.9	2.4	2.4
62.5°	5916.7	3033.9	90.2	73.1	36.6	9.7	4.9	2.4	0.0	0.0	0.0
65°	6094.6	2892.6	58.5	48.7	21.9	7.3	2.4	0.0	0.0	0.0	0.0
67.5°	6043.4	2626.9	36.6	31.7	9.7	4.9	2.4	0.0	0.0	0.0	0.0
70°	5453.7	2154.2	26.8	19.5	7.3	2.4	0.0	0.0	0.0	0.0	0.0
72.5°	3930.7	1457.2	19.5	12.2	4.9	0.0	0.0	0.0	0.0	0.0	0.0
75°	1891.0	519.1	12.2	9.7	2.4	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	463.0	114.5	7.3	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	102.3	21.9	4.9	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	34.1	9.7	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.2	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.3	2.4	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)