

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: P399756

Luminaire Tested: **ARCH-L-PA3-180-830-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399756
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-PA3-180-830-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 775mA 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: 15320 lumens
Efficiency: N/A
Efficacy: 84.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G4

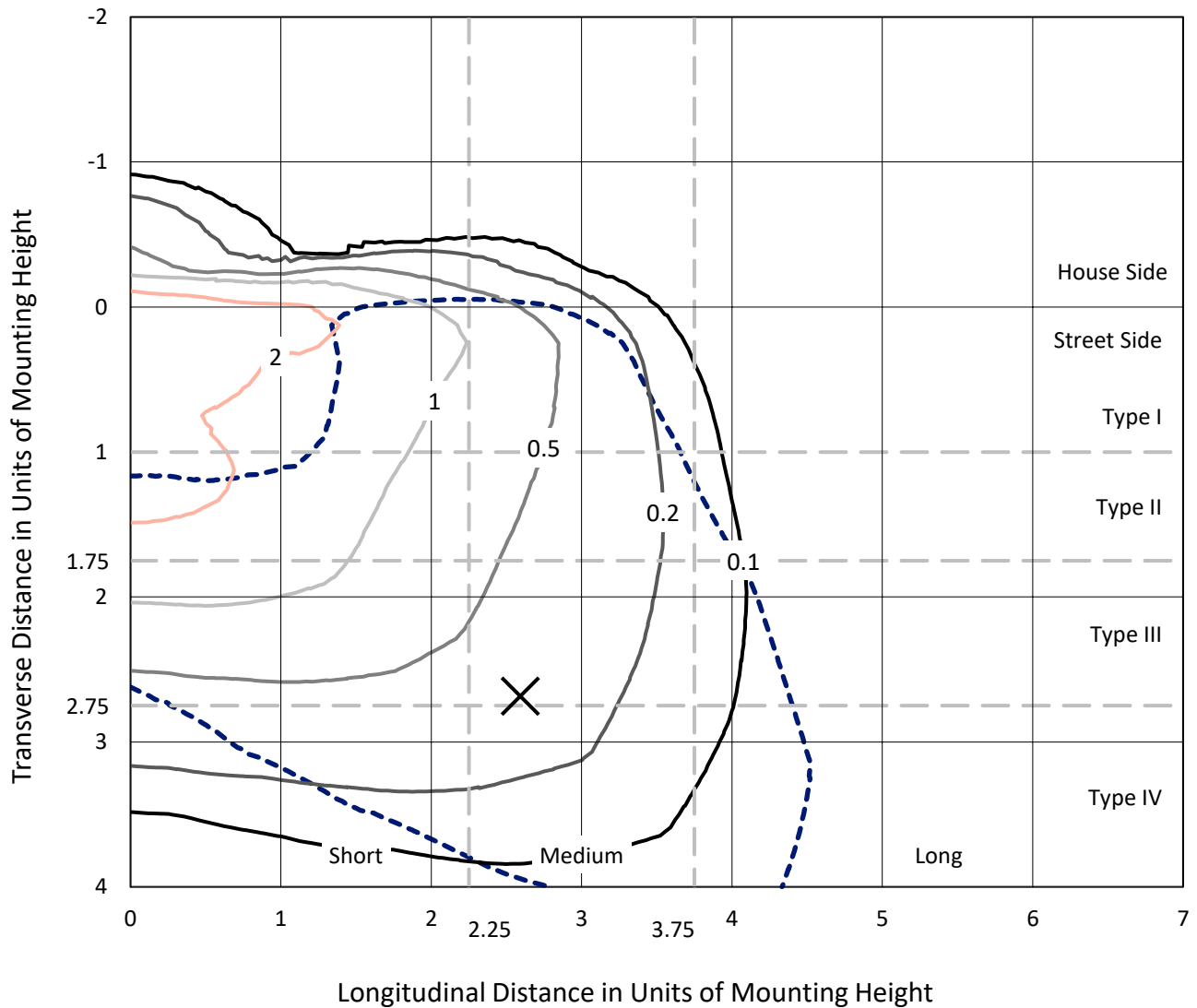
Input Watts (W): 181
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

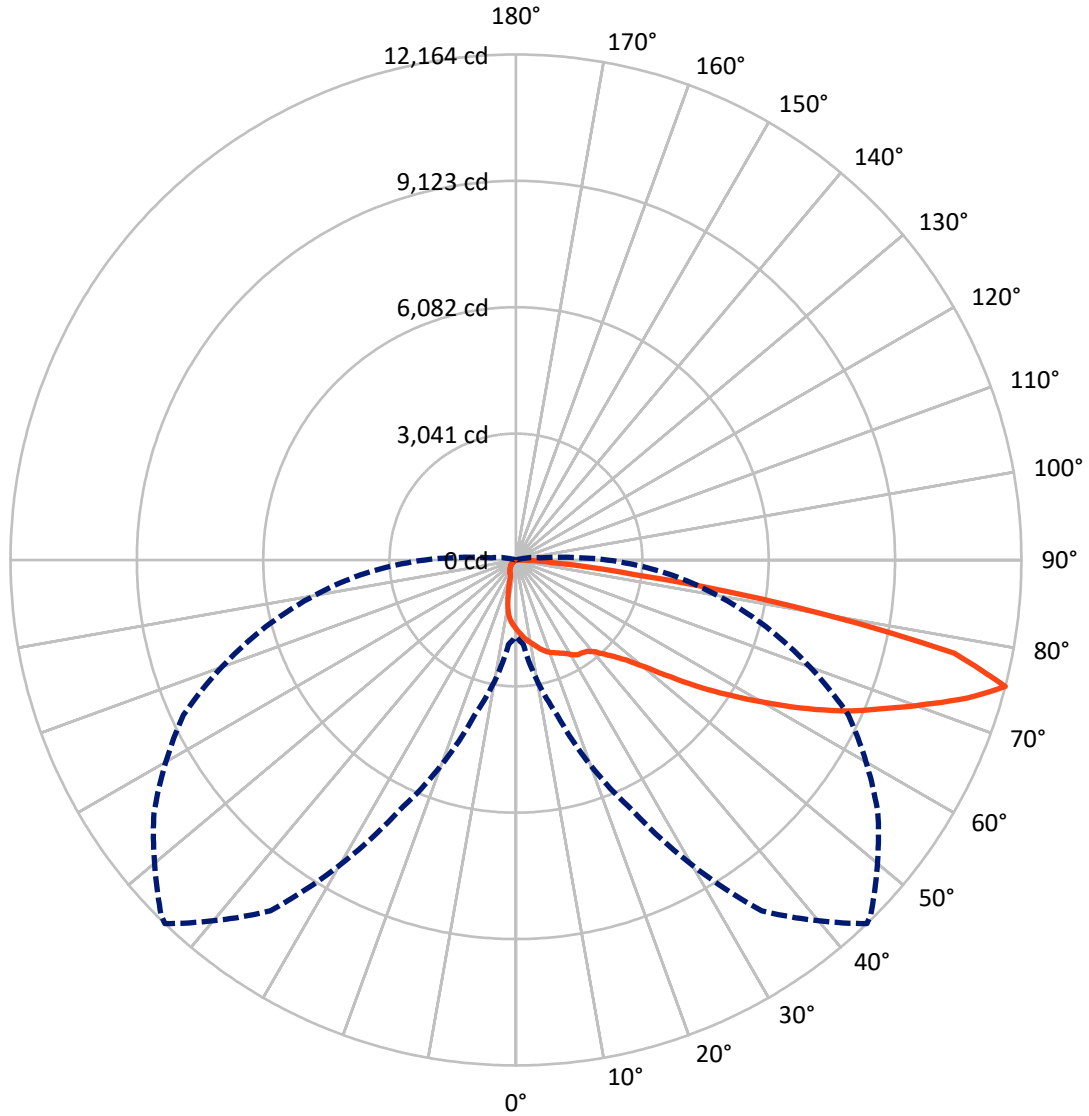
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 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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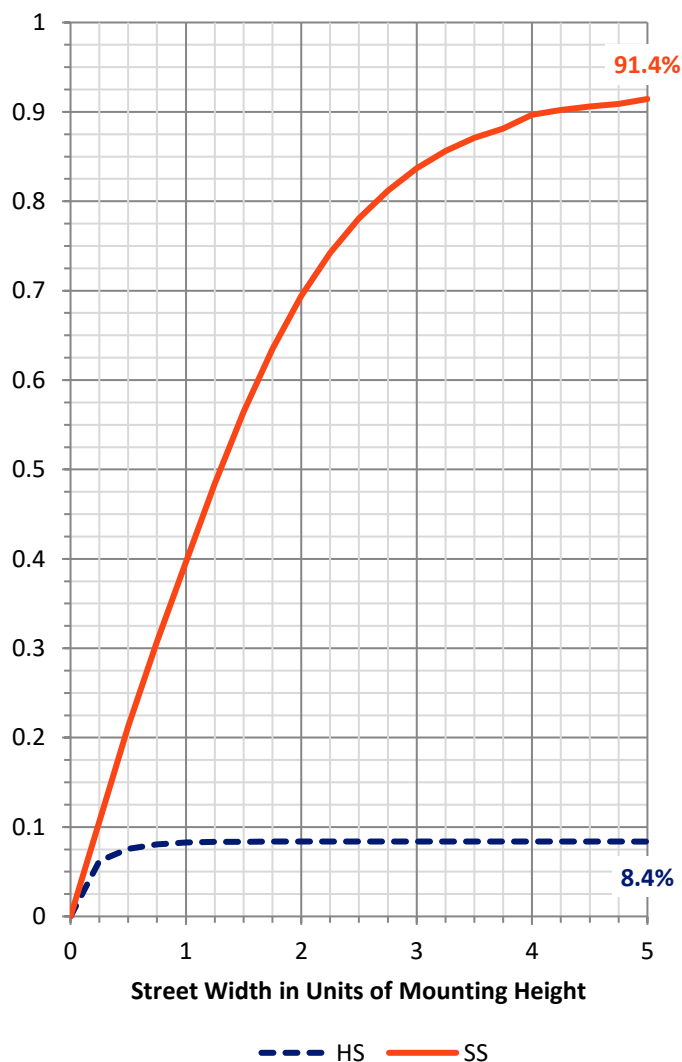
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1292.0	0.0	1292.0
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	14028.0	0.0	14028.0
	% Fixture	91.6	0.0	91.6
Total	Lumens	15320.0	0.0	15320.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.3	1.0
10°-20°	440.7	2.9
20°-30°	727.2	4.7
30°-40°	1055.5	6.9
40°-50°	1715.7	11.2
50°-60°	3024.7	19.7
60°-70°	4347.1	28.4
70°-80°	3481.0	22.7
80°-90°	370.9	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°	15320.0	100.0
0°-180°	15320.0	100.0

Coefficient of Utilization



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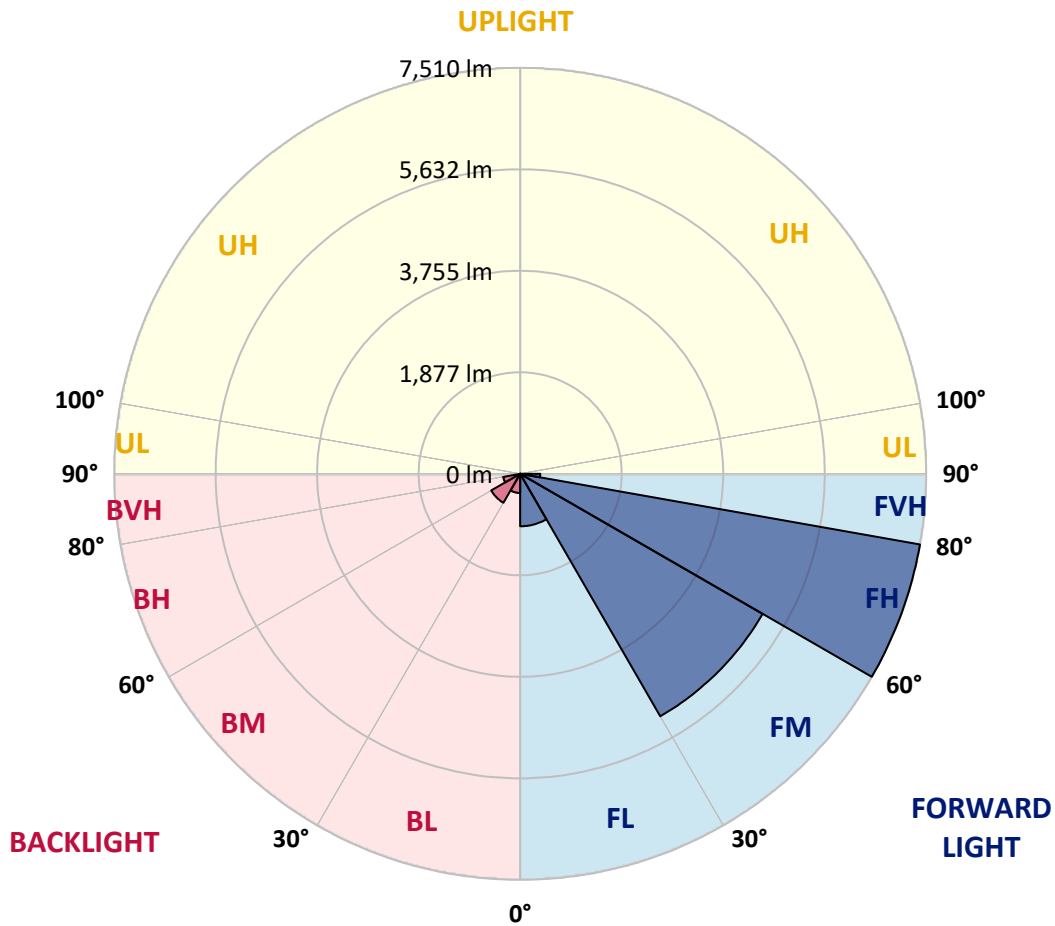
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	970.2	6.3			
FM (30°-60°)	5178.3	33.8			
FH (60°-80°)	7509.6	49.0			G4/12000
FVH (80°-90°)	369.9	2.4			G3/500
BL (0°-30°)	355.0	2.3	B1/500		
BM (30°-60°)	617.6	4.0	B1/1000		
BH (60°-80°)	318.5	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-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1667.5	1667.5	1667.5	1667.5	1667.5	1667.5	1667.5	1667.5	1667.5	1667.5	1667.5
2.5°	1817.3	1814.5	1806.0	1791.9	1777.8	1763.6	1760.8	1738.2	1712.7	1693.0	1676.0
5°	1978.4	1975.6	1961.5	1930.4	1899.3	1862.5	1859.7	1806.0	1758.0	1704.3	1659.0
7.5°	2145.2	2139.5	2114.1	2066.0	2012.3	1955.8	1950.2	1871.0	1800.4	1729.7	1664.7
10°	2275.2	2269.5	2232.8	2176.3	2102.8	2032.1	2023.6	1941.7	1871.0	1780.6	1693.0
12.5°	2402.4	2391.1	2343.0	2280.8	2190.4	2122.6	2114.1	2029.3	1944.5	1851.2	1743.8
15°	2521.1	2506.9	2461.7	2382.6	2286.5	2221.5	2215.8	2125.4	2037.8	1930.4	1811.7
17.5°	2603.0	2597.4	2543.7	2456.1	2362.8	2309.1	2303.4	2210.2	2122.6	2009.5	1882.3
20°	2645.4	2645.4	2594.6	2498.5	2413.7	2376.9	2368.4	2280.8	2196.0	2088.6	1955.8
22.5°	2653.9	2662.4	2622.8	2518.2	2456.1	2425.0	2419.3	2343.0	2261.0	2162.1	2037.8
25°	2670.9	2670.9	2651.1	2538.0	2492.8	2484.3	2481.5	2413.7	2340.2	2241.3	2119.7
27.5°	2690.6	2690.6	2676.5	2566.3	2549.3	2546.5	2543.7	2512.6	2453.2	2337.4	2215.8
30°	2741.5	2744.3	2733.0	2622.8	2611.5	2642.6	2648.3	2631.3	2557.8	2413.7	2314.7
32.5°	2868.7	2843.3	2812.2	2662.4	2682.2	2721.7	2724.6	2690.6	2611.5	2495.6	2433.5
35°	3188.1	3038.3	2897.0	2696.3	2704.8	2744.3	2750.0	2747.2	2699.1	2600.2	2569.1
37.5°	3484.8	3272.9	3072.2	2775.4	2747.2	2789.6	2800.9	2848.9	2812.2	2744.3	2752.8
40°	3657.2	3575.3	3434.0	2993.1	2832.0	2897.0	2908.3	2981.8	2967.6	2939.4	2993.1
42.5°	4188.6	4194.2	4041.6	3318.1	2987.4	3092.0	3106.1	3165.5	3185.3	3199.4	3329.4
45°	4804.7	4824.5	4787.8	3903.1	3281.3	3315.3	3335.0	3414.2	3487.7	3578.1	3815.5
47.5°	5545.2	5528.3	5392.6	4618.2	3792.9	3603.5	3617.7	3770.3	3897.5	4095.3	4434.5
50°	6200.9	6243.3	5986.1	5285.2	4513.6	4058.6	4044.5	4194.2	4423.2	4700.2	5126.9
52.5°	6862.3	6800.1	6452.5	5946.6	5367.2	4677.5	4635.2	4717.1	5039.3	5367.2	5805.2
55°	7037.5	7043.2	6924.5	6670.1	6079.4	5429.3	5358.7	5353.0	5754.4	5977.6	6517.5
57.5°	7382.3	7396.5	7424.7	7475.6	7195.8	6181.1	6107.7	6028.5	6418.6	6548.6	7232.5
60°	7732.8	7749.7	7922.2	8196.3	8009.8	6992.3	6913.2	6726.6	6944.2	7119.5	7984.3
62.5°	7687.6	7806.3	8306.5	8852.0	8829.4	7882.6	7783.7	7334.3	7472.8	7625.4	8674.0
65°	6941.4	7068.6	8193.5	9032.9	9651.9	8761.6	8600.5	7961.7	7970.2	8153.9	9338.1
67.5°	6274.4	6412.9	7486.9	8956.6	10194.5	9550.1	9383.4	8592.0	8459.2	8764.4	9694.2
70°	5890.0	6028.5	6924.5	8719.2	10347.1	10423.4	10279.3	9312.7	9041.4	9321.2	9295.7
72.5°	4609.7	4827.3	6206.6	8267.0	10511.1	11358.9	11245.9	10225.6	9536.0	8739.0	7077.1
75°	1837.1	2037.8	3874.9	6653.1	10304.7	12164.4	12076.8	10635.4	8826.6	6240.5	3623.3
77.5°	554.0	593.5	1076.8	3289.8	7554.7	10785.2	10756.9	8942.5	6246.1	2897.0	989.2
80°	183.7	203.5	330.7	907.2	3448.1	6737.9	6865.1	5697.8	2837.6	664.2	200.7
82.5°	76.3	84.8	166.8	364.6	1221.0	2902.6	2860.2	2552.2	989.2	412.6	73.5
85°	19.8	25.4	76.3	209.1	446.6	1000.5	1051.4	856.4	559.6	342.0	22.6
87.5°	0.0	0.0	36.7	84.8	200.7	302.4	316.5	260.0	316.5	257.2	11.3
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°	1667.5	1667.5	1667.5	1667.5	1667.5	1667.5	1667.5	1667.5	1667.5	1667.5	1667.5
2.5°	1661.9	1647.7	1622.3	1605.3	1582.7	1577.1	1565.8	1551.6	1548.8	1534.7	1537.5
5°	1633.6	1611.0	1565.8	1534.7	1497.9	1486.6	1466.9	1452.7	1441.4	1421.6	1424.5
7.5°	1628.0	1594.0	1531.9	1472.5	1413.2	1370.8	1311.4	1263.4	1223.8	1181.4	1189.9
10°	1647.7	1605.3	1517.7	1435.8	1328.4	1192.7	1037.3	935.5	884.6	833.8	839.4
12.5°	1687.3	1636.4	1523.4	1399.0	1181.4	949.6	734.8	596.4	559.6	537.0	539.8
15°	1746.7	1684.5	1540.3	1328.4	983.6	686.8	489.0	429.6	443.7	452.2	452.2
17.5°	1808.8	1738.2	1554.5	1201.2	760.3	480.5	398.5	392.9	412.6	432.4	432.4
20°	1885.1	1794.7	1557.3	1040.1	548.3	390.0	375.9	375.9	390.0	412.6	412.6
22.5°	1958.6	1856.9	1531.9	856.4	418.3	361.8	361.8	361.8	370.2	392.9	395.7
25°	2046.2	1933.2	1478.2	661.4	358.9	344.8	344.8	347.6	353.3	373.1	375.9
27.5°	2139.5	2012.3	1387.7	483.3	327.9	325.0	327.9	330.7	333.5	353.3	358.9
30°	2246.9	2099.9	1271.8	361.8	299.6	299.6	308.1	313.7	313.7	330.7	336.3
32.5°	2371.3	2215.8	1133.4	299.6	271.3	268.5	282.6	291.1	291.1	305.2	310.9
35°	2526.7	2334.5	966.6	265.7	248.7	243.1	248.7	262.8	268.5	279.8	282.6
37.5°	2733.0	2475.8	788.5	245.9	231.8	220.5	220.5	223.3	234.6	245.9	248.7
40°	2995.9	2631.3	613.3	231.8	214.8	203.5	195.0	192.2	189.4	197.8	203.5
42.5°	3326.6	2806.5	457.9	217.6	200.7	183.7	172.4	161.1	147.0	144.1	147.0
45°	3750.5	3021.3	339.2	206.3	192.2	166.8	147.0	127.2	101.7	93.3	96.1
47.5°	4250.8	3244.6	265.7	195.0	186.5	147.0	121.5	87.6	62.2	56.5	59.4
50°	4782.1	3459.4	226.1	180.9	175.2	127.2	87.6	53.7	36.7	36.7	39.6
52.5°	5234.3	3580.9	206.3	169.6	158.3	104.6	56.5	31.1	22.6	22.6	25.4
55°	5672.4	3645.9	192.2	158.3	135.7	73.5	31.1	19.8	14.1	14.1	14.1
57.5°	6124.6	3674.2	175.2	144.1	107.4	45.2	17.0	11.3	8.5	8.5	8.5
60°	6526.0	3620.5	149.8	118.7	70.7	22.6	8.5	8.5	5.7	2.8	2.8
62.5°	6862.3	3518.8	104.6	84.8	42.4	11.3	5.7	2.8	0.0	0.0	0.0
65°	7068.6	3354.8	67.8	56.5	25.4	8.5	2.8	0.0	0.0	0.0	0.0
67.5°	7009.3	3046.8	42.4	36.7	11.3	5.7	2.8	0.0	0.0	0.0	0.0
70°	6325.3	2498.5	31.1	22.6	8.5	2.8	0.0	0.0	0.0	0.0	0.0
72.5°	4558.8	1690.1	22.6	14.1	5.7	0.0	0.0	0.0	0.0	0.0	0.0
75°	2193.2	602.0	14.1	11.3	2.8	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	537.0	132.8	8.5	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	118.7	25.4	5.7	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	39.6	11.3	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.1	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.5	2.8	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)