

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: P237429

Luminaire Tested: **ARCH-L-AF72-160-D-U-T4W-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P237429
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-160-D-U-T4W-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 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: 14624.4 lumens
Efficiency: N/A
Efficacy: 90.3 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

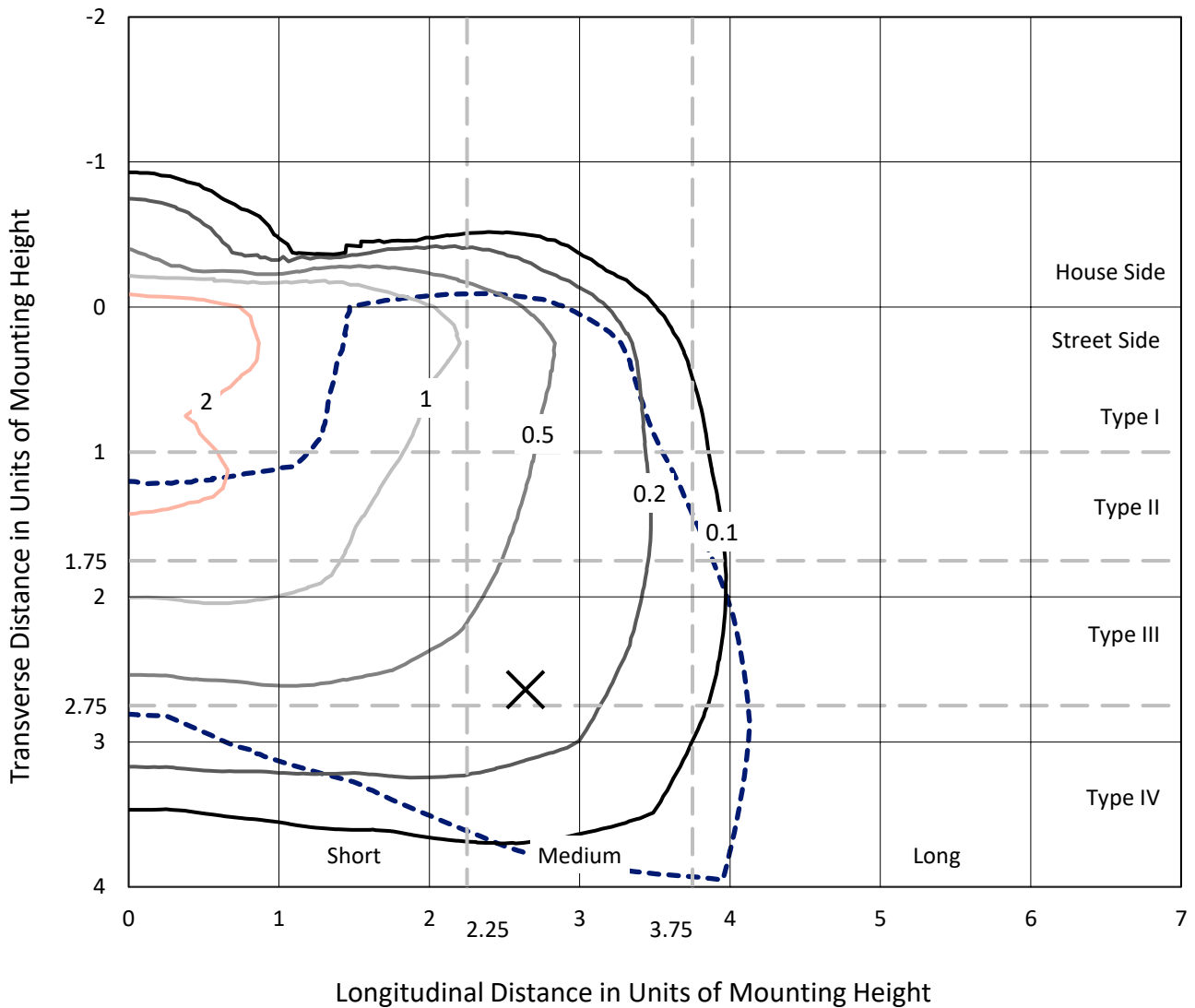
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

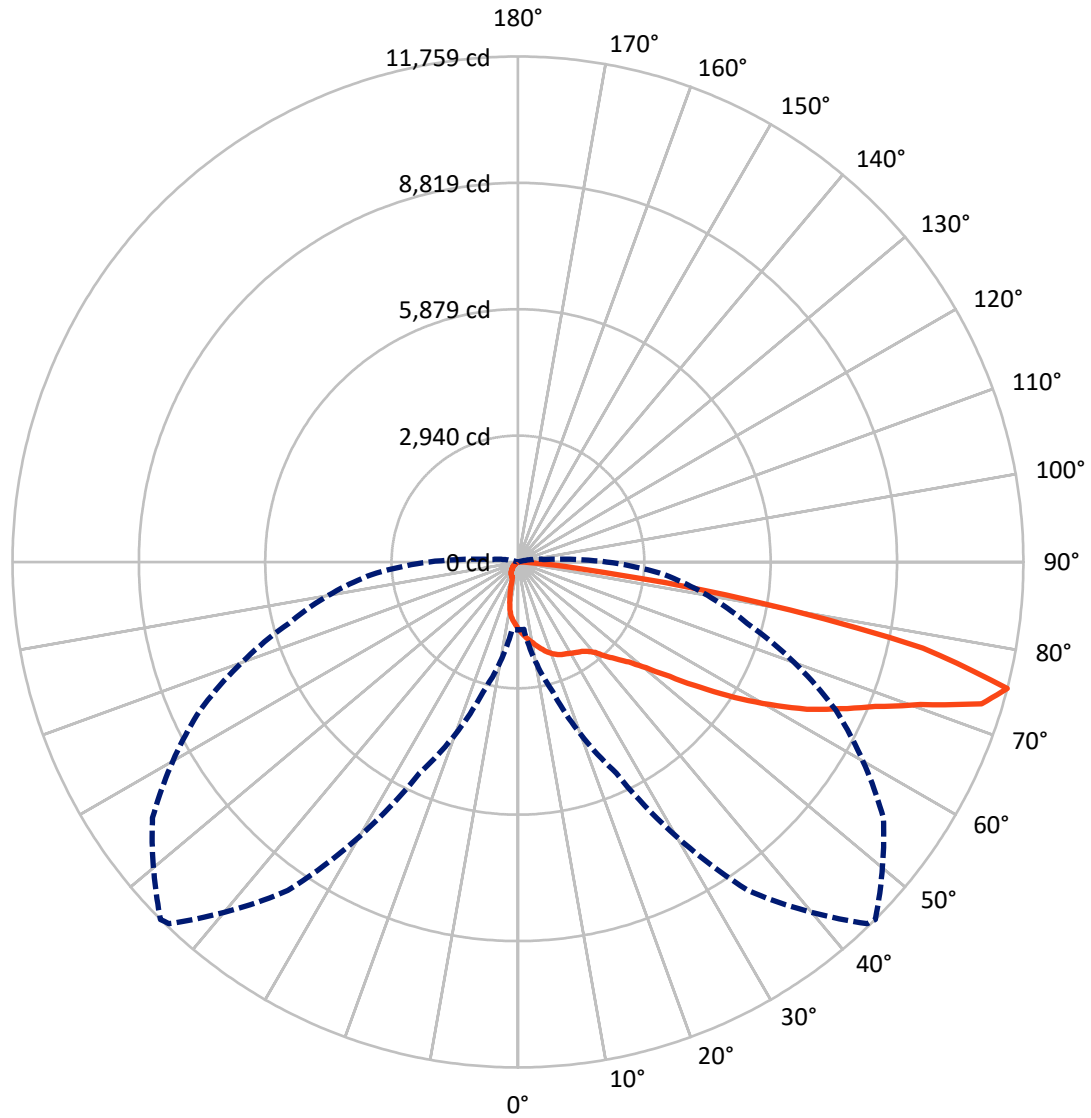
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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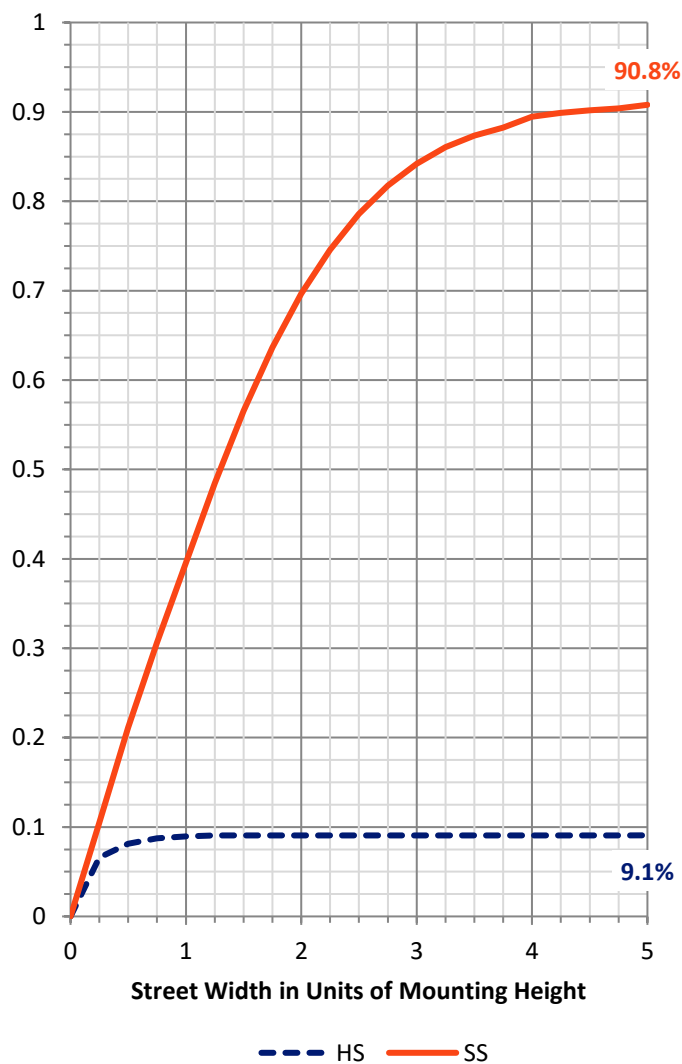
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1337.7	0.0	1337.7
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	13286.7	0.0	13286.7
	% Fixture	90.9	0.0	90.9
Total	Lumens	14624.4	0.0	14624.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.6	1.0
10°-20°	418.2	2.9
20°-30°	692.6	4.7
30°-40°	1002.4	6.9
40°-50°	1641.4	11.2
50°-60°	2924.6	20.0
60°-70°	4299.5	29.4
70°-80°	3243.6	22.2
80°-90°	254.5	1.7
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°	14624.4	100.0
0°-180°	14624.4	100.0

Coefficient of Utilization



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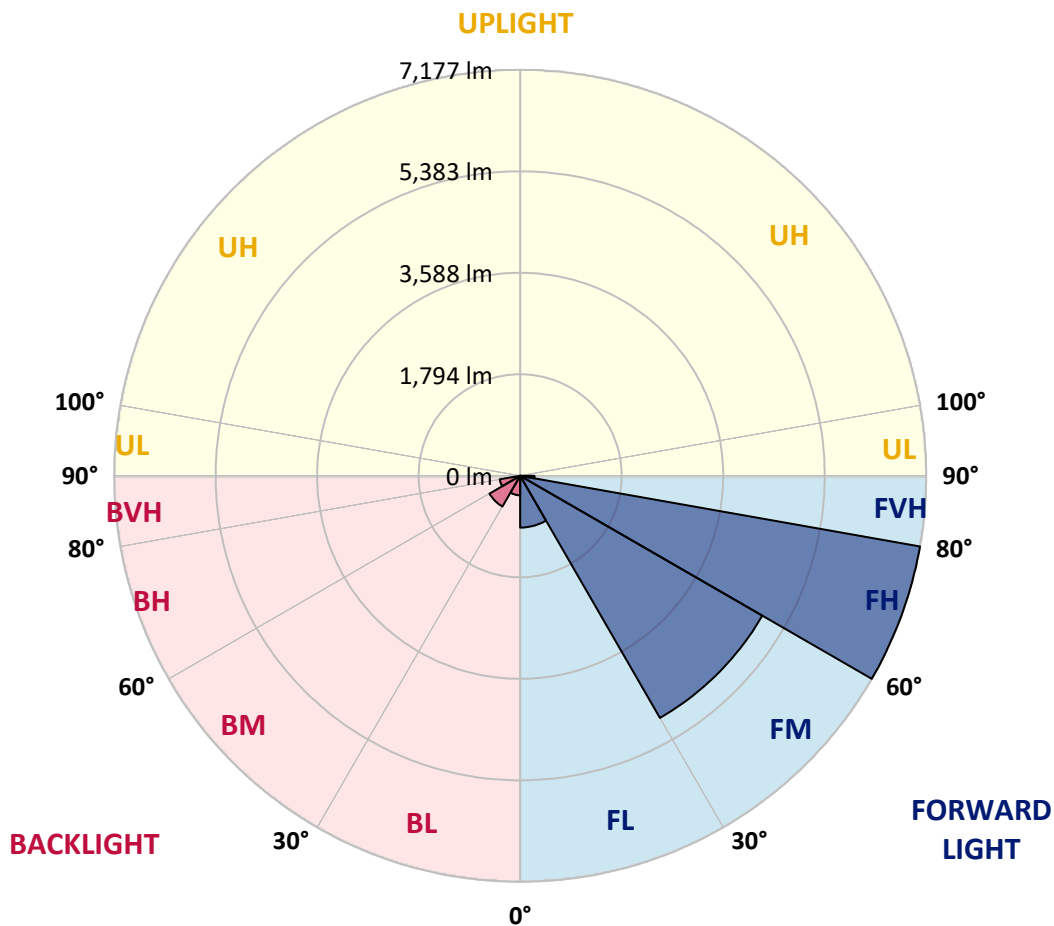
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	914.7	6.3			
FM (30°-60°)	4941.5	33.8			
FH (60°-80°)	7176.7	49.1			G3/7500
FVH (80°-90°)	253.8	1.7			G3/500
BL (0°-30°)	343.7	2.4	B1/500		
BM (30°-60°)	626.8	4.3	B1/1000		
BH (60°-80°)	366.4	2.5	B1/500		G1/500
BVH (80°-90°)	0.7	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°	1564.1	1564.1	1564.1	1564.1	1564.1	1564.1	1564.1	1564.1	1564.1	1564.1	1564.1
2.5°	1699.1	1699.1	1695.7	1692.2	1675.0	1657.6	1654.0	1643.7	1612.5	1591.8	1571.0
5°	1841.0	1844.4	1837.5	1820.3	1782.1	1744.1	1740.6	1712.9	1654.0	1612.5	1567.7
7.5°	1976.0	1982.8	1965.6	1934.4	1889.4	1834.0	1830.6	1778.7	1702.6	1643.7	1578.0
10°	2090.1	2090.1	2065.9	2027.9	1979.4	1920.6	1913.6	1854.7	1768.4	1695.7	1609.2
12.5°	2214.6	2211.3	2176.7	2124.8	2069.4	2013.9	2010.6	1937.9	1854.7	1761.4	1654.0
15°	2329.0	2322.0	2277.1	2228.6	2169.8	2110.9	2107.5	2034.7	1948.3	1837.5	1719.8
17.5°	2391.2	2387.8	2346.3	2297.8	2249.3	2204.3	2200.9	2124.8	2031.3	1917.2	1785.7
20°	2401.6	2405.1	2370.5	2329.0	2301.2	2277.1	2277.1	2207.8	2107.5	1986.4	1854.7
22.5°	2405.1	2415.4	2391.2	2335.9	2329.0	2332.3	2339.3	2283.9	2180.2	2065.9	1927.6
25°	2429.3	2443.1	2425.8	2360.1	2353.1	2377.4	2384.2	2360.1	2266.7	2152.4	2010.6
27.5°	2477.8	2491.5	2477.8	2394.6	2384.2	2408.5	2415.4	2429.3	2360.1	2235.5	2097.1
30°	2574.5	2578.1	2547.0	2443.1	2422.4	2453.5	2463.9	2501.9	2446.6	2315.1	2180.2
32.5°	2744.1	2709.6	2616.1	2477.8	2460.4	2495.1	2505.5	2547.0	2526.2	2391.2	2266.7
35°	3090.3	2910.3	2695.8	2526.2	2508.9	2543.4	2557.3	2616.1	2626.5	2498.5	2373.8
37.5°	3086.8	2924.1	2882.6	2619.6	2595.4	2619.6	2636.9	2709.6	2751.1	2640.4	2529.7
40°	3304.8	3235.6	3235.6	2796.1	2716.5	2751.1	2768.4	2841.1	2913.7	2827.2	2713.0
42.5°	3989.9	3945.1	3896.5	3135.2	2886.1	2983.0	2993.3	3038.3	3124.9	3097.2	2962.2
45°	4754.8	4713.2	4526.4	3709.7	3176.7	3194.0	3218.2	3291.0	3415.6	3467.5	3308.3
47.5°	5353.3	5311.8	5152.6	4401.7	3630.0	3477.8	3477.8	3619.6	3813.4	3945.1	3792.7
50°	5834.5	5786.0	5689.1	5138.9	4374.0	3886.2	3865.4	4031.4	4318.7	4522.9	4419.1
52.5°	6301.6	6159.7	6100.9	5900.2	5215.1	4477.9	4422.5	4540.2	4938.2	5190.8	5104.3
55°	6613.0	6592.2	6530.0	6599.3	6097.4	5197.7	5149.3	5173.4	5671.7	5841.3	5734.0
57.5°	6903.8	6900.3	7038.7	7360.5	7059.5	6021.3	5945.2	5907.1	6381.2	6339.7	6433.0
60°	7263.7	7201.4	7523.1	7983.5	7941.8	6824.2	6737.6	6661.5	6924.6	6806.9	7270.5
62.5°	7280.9	7263.7	7917.7	8578.6	8817.4	7640.8	7540.4	7267.1	7398.6	7263.7	8069.9
65°	6620.0	6706.5	8083.8	8893.4	9551.0	8357.1	8236.1	7810.4	7820.8	7730.7	9011.1
67.5°	6471.2	6516.1	7627.0	9232.6	10080.5	9080.4	8966.3	8436.8	8312.1	8319.1	9568.4
70°	6100.9	6170.1	7059.5	9208.5	10499.2	10045.9	9931.6	9357.3	9056.2	8720.5	9139.2
72.5°	4661.3	4779.0	5948.6	8073.3	10385.0	11309.0	11277.8	10523.5	9353.8	8007.6	6914.2
75°	1578.0	1574.5	3124.9	5422.6	9329.5	11696.5	11758.8	10378.1	8159.9	5522.9	3432.8
77.5°	339.1	342.6	643.6	2197.4	6197.7	9391.8	9630.6	7827.7	5263.4	2460.4	785.6
80°	166.1	169.6	266.5	581.4	2477.8	5267.0	5640.6	4024.6	1944.9	491.3	131.5
82.5°	83.0	86.6	138.4	308.0	917.0	1872.1	2000.2	1481.1	557.1	276.9	65.8
85°	31.1	31.1	69.2	183.4	418.7	439.4	539.8	429.1	335.7	225.0	17.3
87.5°	6.9	6.9	38.0	89.9	186.9	138.4	138.4	131.5	204.2	152.3	6.9
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°	1564.1	1564.1	1564.1	1564.1	1564.1	1564.1	1564.1	1564.1	1564.1	1564.1	1564.1
2.5°	1560.7	1546.9	1522.6	1498.4	1481.1	1460.4	1450.0	1439.6	1436.1	1432.6	1439.6
5°	1543.4	1522.6	1477.6	1439.6	1405.0	1377.3	1356.6	1335.8	1325.5	1318.4	1321.9
7.5°	1543.4	1512.2	1446.5	1387.7	1332.3	1273.4	1214.6	1169.6	1135.1	1114.3	1117.7
10°	1560.7	1519.1	1432.6	1353.0	1249.3	1124.8	996.7	899.7	833.9	796.0	796.0
12.5°	1598.8	1543.4	1436.1	1311.5	1135.1	917.0	723.3	605.7	557.1	529.5	532.9
15°	1650.7	1585.0	1453.3	1256.2	975.9	681.7	505.3	429.1	429.1	436.1	439.4
17.5°	1709.5	1636.8	1467.3	1173.1	771.7	488.0	397.9	391.0	401.4	418.7	418.7
20°	1768.4	1688.7	1474.1	1041.6	577.9	387.6	377.2	377.2	384.1	401.4	405.0
22.5°	1841.0	1754.4	1467.3	879.0	432.5	366.8	363.4	363.4	363.4	384.1	384.1
25°	1917.2	1830.6	1439.6	706.0	366.8	353.0	349.5	346.1	346.1	363.4	366.8
27.5°	2003.6	1910.2	1373.8	539.8	346.1	339.1	335.7	328.8	328.8	342.6	342.6
30°	2090.1	2000.2	1273.4	408.3	328.8	325.3	318.4	311.5	304.5	318.4	318.4
32.5°	2183.5	2093.6	1142.0	325.3	304.5	304.5	301.1	290.6	283.7	290.6	294.1
35°	2308.2	2200.9	993.1	283.7	273.3	273.3	273.3	269.9	256.1	263.0	263.0
37.5°	2474.2	2349.7	820.1	263.0	249.1	242.2	242.2	242.2	231.8	235.4	235.4
40°	2685.4	2522.7	654.0	245.8	231.8	214.5	207.6	211.1	204.2	204.2	200.7
42.5°	2972.6	2709.6	491.3	231.8	218.0	193.8	180.0	176.5	169.6	166.1	166.1
45°	3384.5	2938.0	353.0	218.0	207.6	169.6	155.7	145.4	128.1	117.7	117.7
47.5°	3917.3	3197.5	263.0	204.2	197.2	148.8	131.5	110.8	86.6	79.5	79.5
50°	4567.9	3488.2	221.5	183.4	180.0	131.5	103.8	72.6	48.4	41.5	45.1
52.5°	5201.2	3761.6	197.2	162.7	159.2	114.1	76.2	38.0	20.8	20.8	20.8
55°	5734.0	3955.4	180.0	145.4	138.4	89.9	41.5	17.3	10.4	10.4	10.4
57.5°	6215.1	4066.1	162.7	128.1	110.8	62.3	17.3	6.9	6.9	3.5	3.5
60°	6654.6	4131.8	141.9	110.8	86.6	34.6	6.9	3.5	3.5	0.0	0.0
62.5°	7087.1	4180.3	121.2	89.9	65.8	13.8	3.5	3.5	0.0	0.0	0.0
65°	7415.9	4163.0	96.9	72.6	41.5	6.9	3.5	0.0	0.0	0.0	0.0
67.5°	7405.5	3927.7	72.6	55.4	20.8	3.5	0.0	0.0	0.0	0.0	0.0
70°	6623.4	3308.3	48.4	34.6	6.9	3.5	0.0	0.0	0.0	0.0	0.0
72.5°	4699.3	2121.3	31.1	20.8	3.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	2069.4	643.6	17.3	10.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	405.0	148.8	10.4	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	96.9	17.3	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	41.5	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.4	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.9	3.5	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)