

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: P237471

Luminaire Tested: **ARCH-L-AF72-180-D-U-T4W-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237471
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-180-D-U-T4W-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 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: 16225 lumens
Efficiency: N/A
Efficacy: 89.6 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

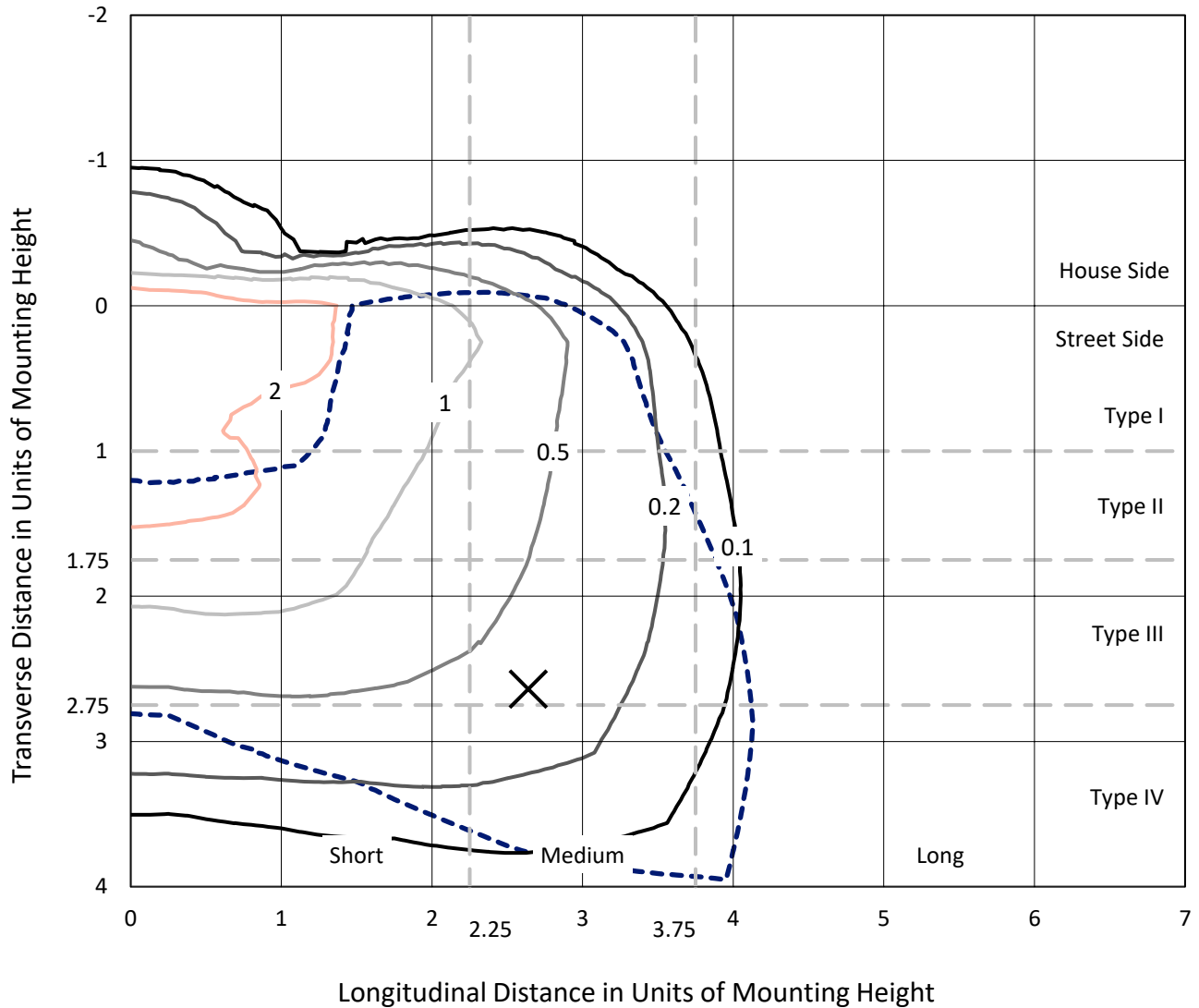
Input Watts (W): 181
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

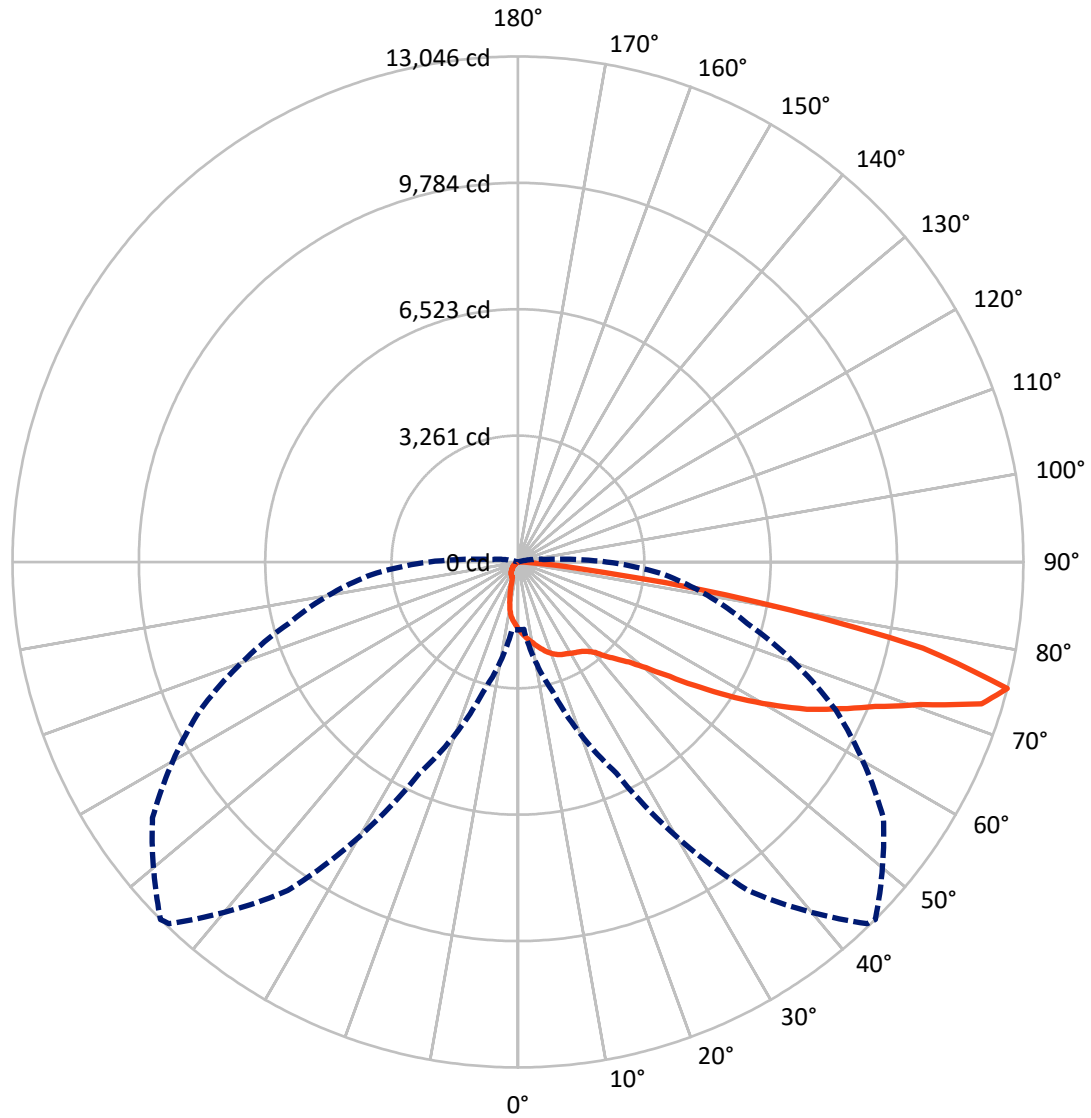
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 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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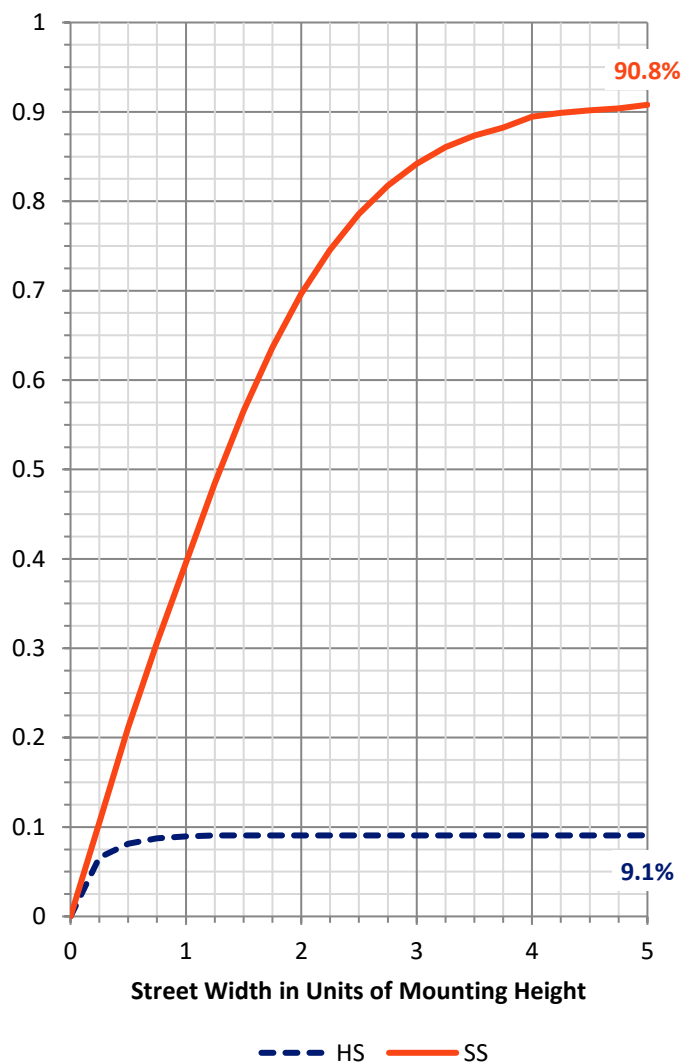
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1484.1	0.0	1484.1
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	14740.9	0.0	14740.9
	% Fixture	90.9	0.0	90.9
Total	Lumens	16225.0	0.0	16225.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.8	1.0
10°-20°	464.0	2.9
20°-30°	768.4	4.7
30°-40°	1112.1	6.9
40°-50°	1821.0	11.2
50°-60°	3244.7	20.0
60°-70°	4770.1	29.4
70°-80°	3598.6	22.2
80°-90°	282.3	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°	16225.0	100.0
0°-180°	16225.0	100.0

Coefficient of Utilization



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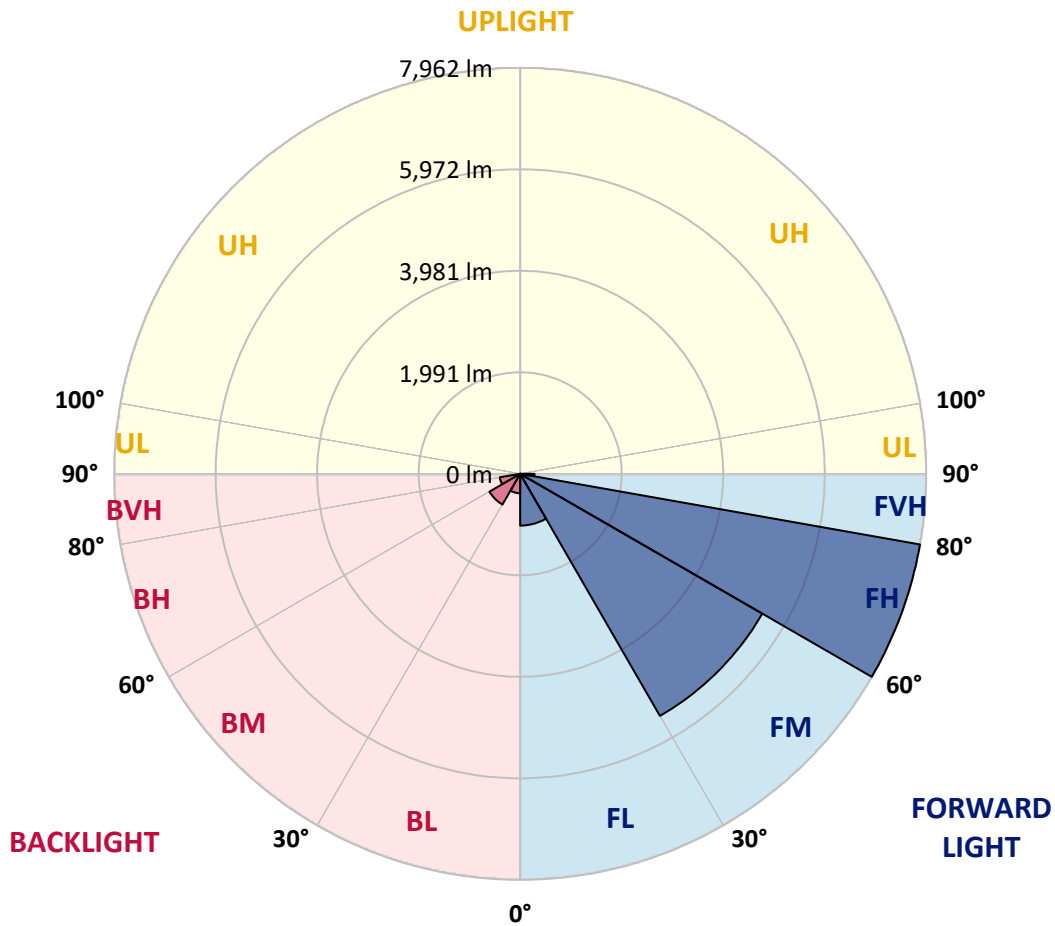
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1014.8	6.3			
FM (30°-60°)	5482.3	33.8			
FH (60°-80°)	7962.2	49.1			G4/12000
FVH (80°-90°)	281.5	1.7			G3/500
BL (0°-30°)	381.4	2.4	B1/500		
BM (30°-60°)	695.5	4.3	B1/1000		
BH (60°-80°)	406.5	2.5	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-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1735.4	1735.4	1735.4	1735.4	1735.4	1735.4	1735.4	1735.4	1735.4	1735.4	1735.4
2.5°	1885.1	1885.1	1881.2	1877.4	1858.2	1839.0	1835.2	1823.7	1789.1	1766.1	1743.0
5°	2042.5	2046.3	2038.7	2019.5	1977.2	1935.0	1931.2	1900.4	1835.2	1789.1	1739.2
7.5°	2192.2	2199.9	2180.7	2146.2	2096.2	2034.8	2031.0	1973.4	1888.9	1823.7	1750.7
10°	2318.9	2318.9	2292.0	2249.8	2196.1	2130.8	2123.1	2057.9	1961.9	1881.2	1785.3
12.5°	2457.1	2453.3	2414.9	2357.3	2295.9	2234.5	2230.6	2150.0	2057.9	1954.2	1835.2
15°	2583.8	2576.2	2526.2	2472.5	2407.2	2342.0	2338.1	2257.5	2161.5	2038.7	1908.1
17.5°	2652.9	2649.1	2603.0	2549.3	2495.5	2445.6	2441.8	2357.3	2253.7	2127.0	1981.1
20°	2664.5	2668.3	2629.9	2583.8	2553.1	2526.2	2526.2	2449.5	2338.1	2203.7	2057.9
22.5°	2668.3	2679.8	2652.9	2591.5	2583.8	2587.7	2595.3	2533.9	2418.7	2292.0	2138.5
25°	2695.2	2710.5	2691.3	2618.4	2610.7	2637.6	2645.3	2618.4	2514.7	2388.0	2230.6
27.5°	2748.9	2764.3	2748.9	2656.8	2645.3	2672.1	2679.8	2695.2	2618.4	2480.2	2326.6
30°	2856.4	2860.3	2825.7	2710.5	2687.5	2722.0	2733.6	2775.8	2714.4	2568.5	2418.7
32.5°	3044.5	3006.2	2902.5	2748.9	2729.7	2768.1	2779.6	2825.7	2802.7	2652.9	2514.7
35°	3428.5	3228.8	2990.8	2802.7	2783.5	2821.9	2837.2	2902.5	2914.0	2772.0	2633.7
37.5°	3424.6	3244.2	3198.1	2906.3	2879.5	2906.3	2925.5	3006.2	3052.2	2929.4	2806.5
40°	3666.5	3589.7	3589.7	3102.1	3013.8	3052.2	3071.4	3152.0	3232.7	3136.7	3010.0
42.5°	4426.7	4376.8	4323.0	3478.4	3202.0	3309.5	3321.0	3370.9	3466.9	3436.1	3286.4
45°	5275.2	5229.1	5021.8	4115.7	3524.5	3543.6	3570.5	3651.1	3789.4	3847.0	3670.3
47.5°	5939.4	5893.3	5716.7	4883.6	4027.4	3858.5	3858.5	4015.9	4230.9	4376.8	4207.8
50°	6473.0	6419.3	6311.8	5701.3	4852.8	4311.5	4288.5	4472.8	4791.4	5017.9	4902.8
52.5°	6991.3	6833.9	6768.6	6546.0	5785.8	4968.0	4906.6	5037.1	5478.6	5758.9	5662.9
55°	7336.9	7313.8	7244.7	7321.5	6764.8	5766.6	5712.8	5739.7	6292.6	6480.7	6361.7
57.5°	7659.4	7655.5	7809.1	8166.1	7832.1	6680.3	6595.9	6553.6	7079.6	7033.5	7137.2
60°	8058.6	7989.5	8346.6	8857.2	8811.1	7571.0	7475.1	7390.6	7682.4	7551.9	8066.3
62.5°	8077.8	8058.6	8784.3	9517.6	9782.5	8477.1	8365.8	8062.5	8208.4	8058.6	8953.2
65°	7344.5	7440.5	8968.5	9866.9	10596.4	9271.8	9137.5	8665.2	8676.8	8576.9	9997.5
67.5°	7179.4	7229.4	8461.8	10243.2	11183.8	10074.3	9947.6	9360.1	9221.9	9229.6	10615.6
70°	6768.6	6845.4	7832.1	10216.3	11648.4	11145.4	11018.7	10381.4	10047.4	9675.0	10139.5
72.5°	5171.5	5302.0	6599.7	8957.0	11521.7	12546.7	12512.2	11675.2	10377.6	8884.1	7670.9
75°	1750.7	1746.9	3466.9	6016.1	10350.7	12976.7	13045.9	11514.0	9053.0	6127.5	3808.6
77.5°	376.2	380.1	714.1	2437.9	6876.1	10419.8	10684.7	8684.4	5839.5	2729.7	871.5
80°	184.3	188.1	295.6	645.0	2748.9	5843.4	6258.0	4465.1	2157.7	545.2	145.9
82.5°	92.1	96.0	153.6	341.7	1017.4	2077.0	2219.1	1643.2	618.1	307.1	72.9
85°	34.6	34.6	76.8	203.5	464.6	487.6	598.9	476.1	372.4	249.6	19.2
87.5°	7.7	7.7	42.2	99.8	207.3	153.6	153.6	145.9	226.5	168.9	7.7
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°	1735.4	1735.4	1735.4	1735.4	1735.4	1735.4	1735.4	1735.4	1735.4	1735.4	1735.4
2.5°	1731.5	1716.2	1689.3	1662.4	1643.2	1620.2	1608.7	1597.1	1593.3	1589.5	1597.1
5°	1712.3	1689.3	1639.4	1597.1	1558.7	1528.0	1505.0	1482.0	1470.4	1462.8	1466.6
7.5°	1712.3	1677.8	1604.8	1539.5	1478.1	1412.9	1347.6	1297.7	1259.3	1236.2	1240.1
10°	1731.5	1685.4	1589.5	1501.2	1386.0	1247.8	1105.7	998.2	925.3	883.0	883.0
12.5°	1773.7	1712.3	1593.3	1455.1	1259.3	1017.4	802.4	671.9	618.1	587.4	591.2
15°	1831.3	1758.4	1612.5	1393.7	1082.7	756.3	560.5	476.1	476.1	483.7	487.6
17.5°	1896.6	1816.0	1627.9	1301.5	856.2	541.3	441.5	433.8	445.4	464.6	464.6
20°	1961.9	1873.6	1635.5	1155.6	641.2	430.0	418.5	418.5	426.2	445.4	449.2
22.5°	2042.5	1946.5	1627.9	975.2	479.9	407.0	403.1	403.1	403.1	426.2	426.2
25°	2127.0	2031.0	1597.1	783.2	407.0	391.6	387.8	383.9	383.9	403.1	407.0
27.5°	2222.9	2119.3	1524.2	598.9	383.9	376.2	372.4	364.7	364.7	380.1	380.1
30°	2318.9	2219.1	1412.9	453.0	364.7	360.9	353.2	345.5	337.9	353.2	353.2
32.5°	2422.6	2322.8	1267.0	360.9	337.9	337.9	334.0	322.5	314.8	322.5	326.3
35°	2560.8	2441.8	1101.9	314.8	303.3	303.3	303.3	299.5	284.1	291.8	291.8
37.5°	2745.1	2606.9	909.9	291.8	276.4	268.7	268.7	268.7	257.2	261.1	261.1
40°	2979.3	2798.8	725.6	272.6	257.2	238.0	230.4	234.2	226.5	226.5	222.7
42.5°	3297.9	3006.2	545.2	257.2	241.9	215.0	199.6	195.8	188.1	184.3	184.3
45°	3754.8	3259.5	391.6	241.9	230.4	188.1	172.8	161.2	142.1	130.5	130.5
47.5°	4346.1	3547.5	291.8	226.5	218.8	165.1	145.9	122.9	96.0	88.3	88.3
50°	5067.8	3870.0	245.7	203.5	199.6	145.9	115.2	80.6	53.7	46.1	49.9
52.5°	5770.4	4173.3	218.8	180.4	176.6	126.7	84.5	42.2	23.0	23.0	23.0
55°	6361.7	4388.3	199.6	161.2	153.6	99.8	46.1	19.2	11.5	11.5	11.5
57.5°	6895.3	4511.1	180.4	142.1	122.9	69.1	19.2	7.7	7.7	3.8	3.8
60°	7382.9	4584.1	157.4	122.9	96.0	38.4	7.7	3.8	3.8	0.0	0.0
62.5°	7862.8	4637.8	134.4	99.8	72.9	15.4	3.8	3.8	0.0	0.0	0.0
65°	8227.6	4618.6	107.5	80.6	46.1	7.7	3.8	0.0	0.0	0.0	0.0
67.5°	8216.0	4357.6	80.6	61.4	23.0	3.8	0.0	0.0	0.0	0.0	0.0
70°	7348.4	3670.3	53.7	38.4	7.7	3.8	0.0	0.0	0.0	0.0	0.0
72.5°	5213.7	2353.5	34.6	23.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0
75°	2295.9	714.1	19.2	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	449.2	165.1	11.5	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	107.5	19.2	3.8	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	46.1	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.5	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.7	3.8	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)