

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: P400107

Luminaire Tested: **ARCH-L-PA3-230-827-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400107
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-PA3-230-827-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 2700K, 980mA 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: 16816 lumens
Efficiency: N/A
Efficacy: 73.4 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

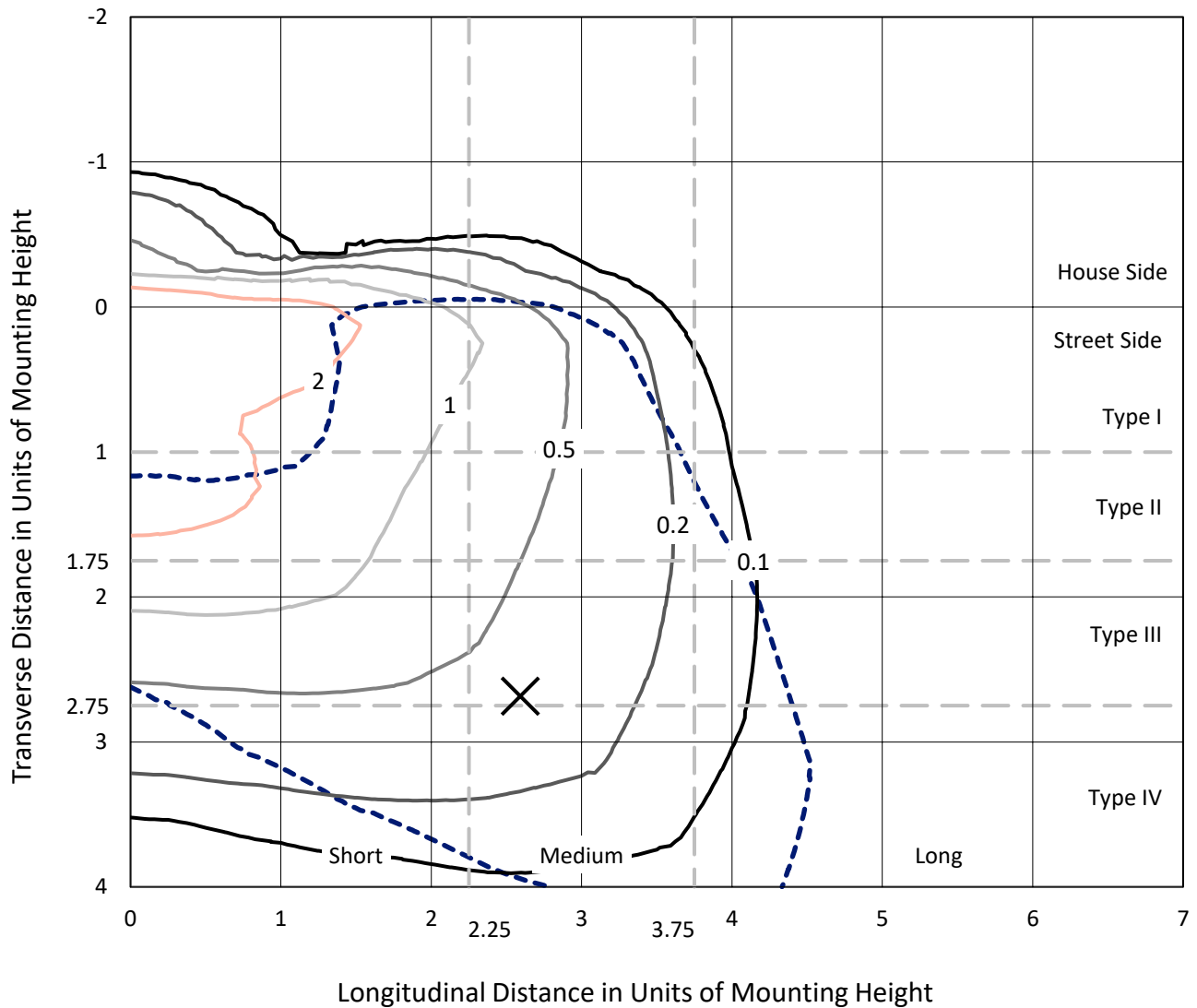
Input Watts (W): 229
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

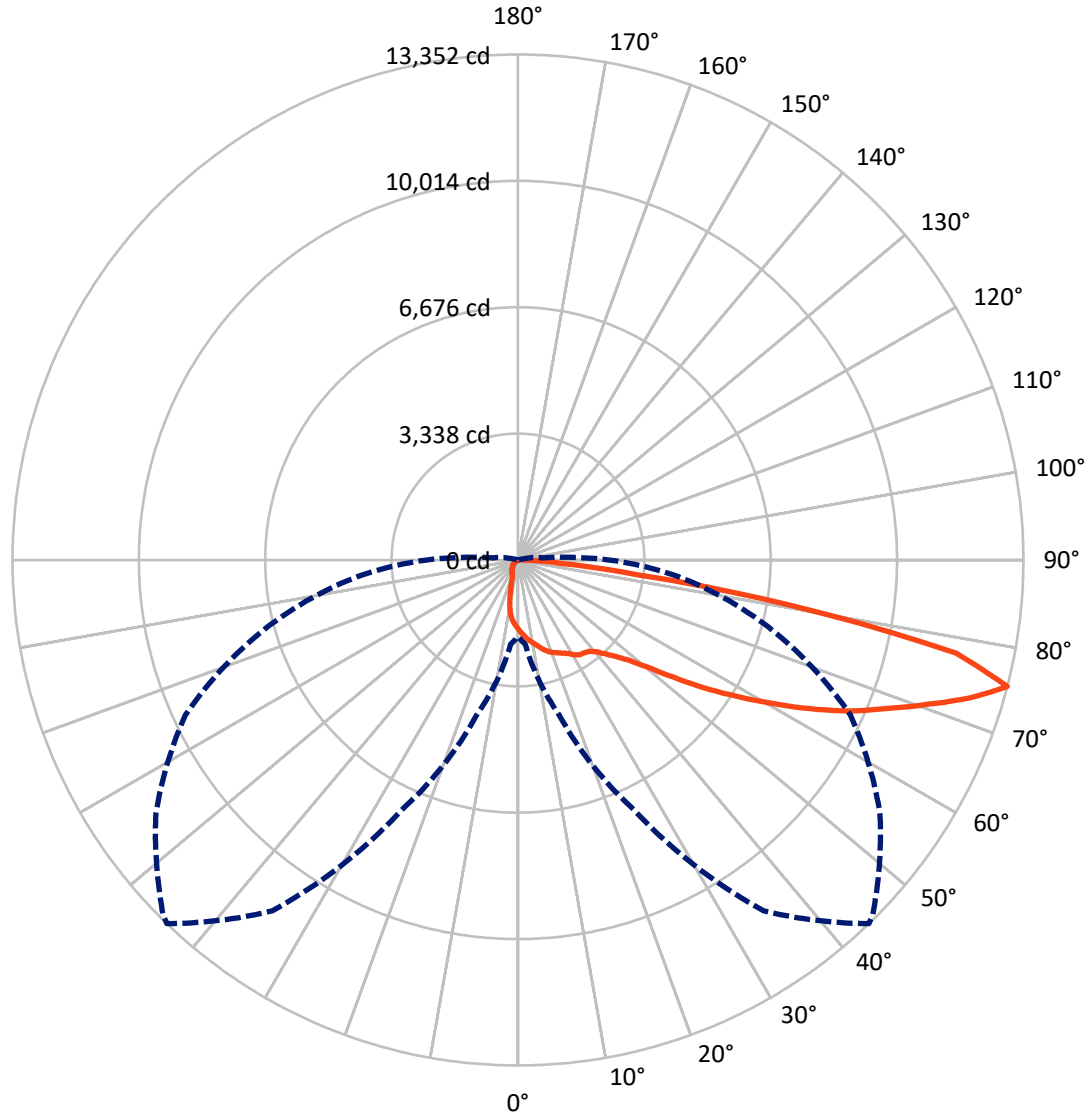
× Max cd
 - - - 1/2 Max cd



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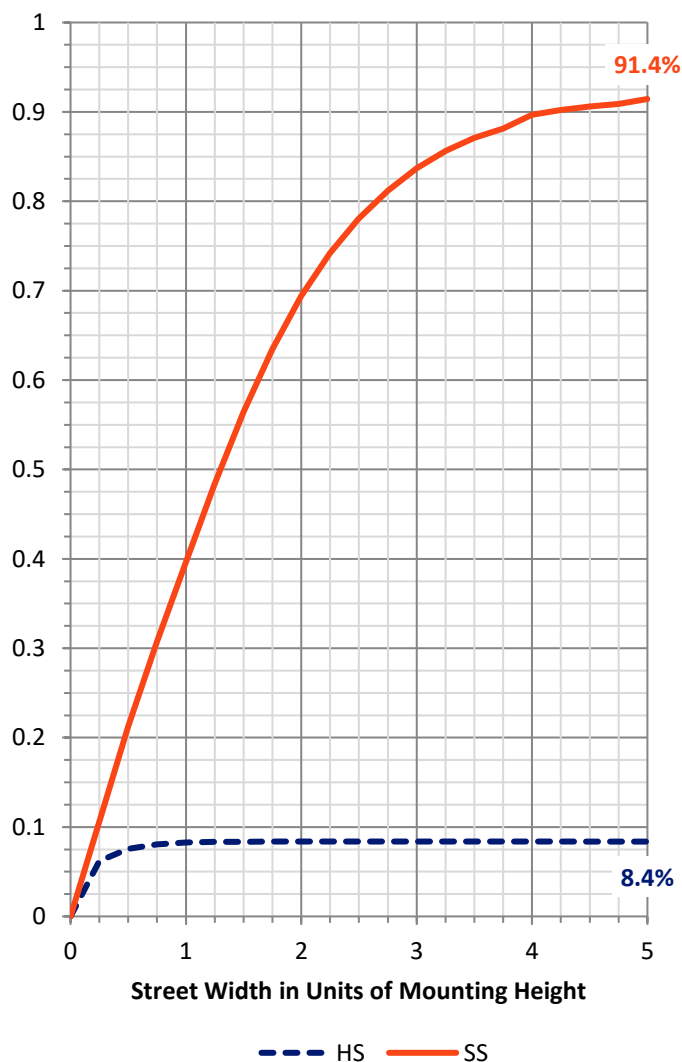
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1418.1	0.0	1418.1
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	15397.9	0.0	15397.9
	% Fixture	91.6	0.0	91.6
Total	Lumens	16816.0	0.0	16816.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.6	1.0
10°-20°	483.7	2.9
20°-30°	798.2	4.7
30°-40°	1158.5	6.9
40°-50°	1883.3	11.2
50°-60°	3320.0	19.7
60°-70°	4771.6	28.4
70°-80°	3821.0	22.7
80°-90°	407.1	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°	16816.0	100.0
0°-180°	16816.0	100.0

Coefficient of Utilization



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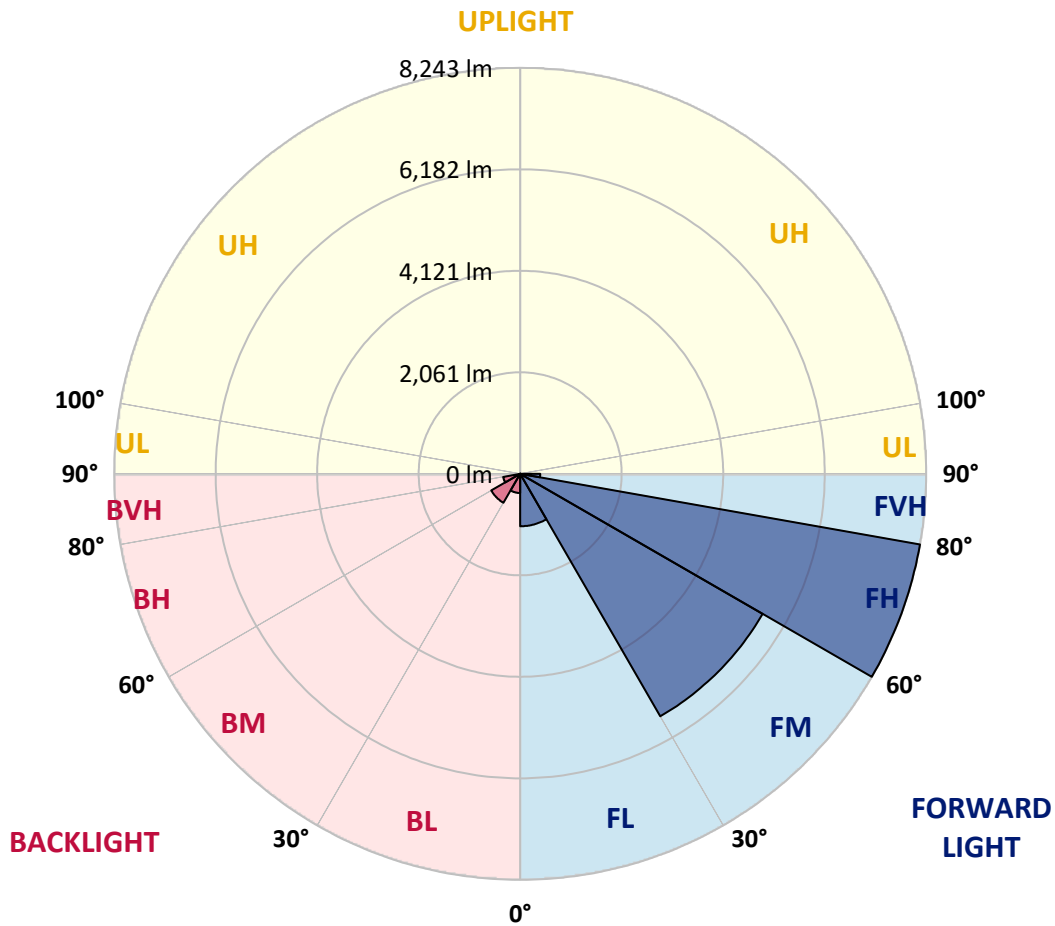
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1064.9	6.3			
FM (30°-60°)	5684.0	33.8			
FH (60°-80°)	8242.9	49.0			G4/12000
FVH (80°-90°)	406.1	2.4			G3/500
BL (0°-30°)	389.6	2.3	B1/500		
BM (30°-60°)	677.9	4.0	B1/1000		
BH (60°-80°)	349.6	2.1	B1/500		G1/500
BVH (80°-90°)	1.0	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°	1830.4	1830.4	1830.4	1830.4	1830.4	1830.4	1830.4	1830.4	1830.4	1830.4	1830.4
2.5°	1994.8	1991.7	1982.4	1966.9	1951.3	1935.8	1932.7	1907.9	1880.0	1858.3	1839.7
5°	2171.6	2168.5	2153.0	2118.9	2084.7	2044.4	2041.3	1982.4	1929.6	1870.7	1821.1
7.5°	2354.6	2348.4	2320.5	2267.8	2208.8	2146.8	2140.6	2053.7	1976.2	1898.6	1827.3
10°	2497.4	2491.1	2450.8	2388.8	2308.1	2230.6	2221.2	2131.3	2053.7	1954.4	1858.3
12.5°	2637.0	2624.5	2571.8	2503.6	2404.3	2329.8	2320.5	2227.5	2134.4	2032.0	1914.1
15°	2767.3	2751.7	2702.1	2615.2	2509.8	2438.4	2432.2	2332.9	2236.8	2118.9	1988.6
17.5°	2857.2	2851.0	2792.1	2695.9	2593.5	2534.6	2528.4	2426.0	2329.8	2205.7	2066.1
20°	2903.8	2903.8	2847.9	2742.4	2649.4	2609.0	2599.7	2503.6	2410.5	2292.6	2146.8
22.5°	2913.1	2922.4	2878.9	2764.2	2695.9	2661.8	2655.6	2571.8	2481.8	2373.3	2236.8
25°	2931.7	2931.7	2910.0	2785.9	2736.2	2726.9	2723.8	2649.4	2568.7	2460.1	2326.7
27.5°	2953.4	2953.4	2937.9	2816.9	2798.3	2795.2	2792.1	2757.9	2692.8	2565.6	2432.2
30°	3009.2	3012.3	2999.9	2878.9	2866.5	2900.7	2906.9	2888.2	2807.6	2649.4	2540.8
32.5°	3148.8	3120.9	3086.8	2922.4	2944.1	2987.5	2990.6	2953.4	2866.5	2739.3	2671.1
35°	3499.4	3335.0	3179.9	2959.6	2968.9	3012.3	3018.5	3015.4	2962.7	2854.1	2820.0
37.5°	3825.1	3592.5	3372.2	3046.5	3015.4	3062.0	3074.4	3127.1	3086.8	3012.3	3021.6
40°	4014.4	3924.4	3769.3	3285.3	3108.5	3179.9	3192.3	3272.9	3257.4	3226.4	3285.3
42.5°	4597.6	4603.8	4436.3	3642.1	3279.1	3393.9	3409.4	3474.6	3496.3	3511.8	3654.5
45°	5273.9	5295.6	5255.3	4284.3	3601.8	3639.0	3660.7	3747.6	3828.2	3927.5	4188.1
47.5°	6086.7	6068.1	5919.2	5069.2	4163.3	3955.4	3970.9	4138.5	4278.1	4495.2	4867.5
50°	6806.4	6853.0	6570.7	5801.3	4954.4	4454.9	4439.4	4603.8	4855.1	5159.1	5627.6
52.5°	7532.4	7464.1	7082.6	6527.2	5891.3	5134.3	5087.8	5177.7	5531.4	5891.3	6372.1
55°	7724.7	7730.9	7600.6	7321.4	6673.1	5959.5	5882.0	5875.8	6316.3	6561.4	7153.9
57.5°	8103.2	8118.7	8149.7	8205.6	7898.5	6784.7	6704.1	6617.2	7045.3	7188.0	7938.8
60°	8487.9	8506.5	8695.8	8996.7	8791.9	7675.1	7588.2	7383.5	7622.4	7814.7	8764.0
62.5°	8438.3	8568.6	9117.7	9716.4	9691.6	8652.3	8543.7	8050.5	8202.5	8370.0	9521.0
65°	7619.3	7758.9	8993.6	9915.0	10594.4	9617.1	9440.3	8739.2	8748.5	8950.1	10250.0
67.5°	6887.1	7039.1	8218.0	9831.2	11190.0	10482.7	10299.6	9431.0	9285.2	9620.2	10640.9
70°	6465.2	6617.2	7600.6	9570.6	11357.5	11441.3	11283.1	10222.1	9924.3	10231.4	10203.5
72.5°	5059.9	5298.7	6812.7	9074.2	11537.5	12468.1	12344.1	11224.1	10467.2	9592.3	7768.2
75°	2016.5	2236.8	4253.3	7302.8	11311.0	13352.3	13256.1	11674.0	9688.5	6849.9	3977.2
77.5°	608.1	651.5	1182.0	3611.1	8292.5	11838.4	11807.4	9815.7	6856.1	3179.9	1085.8
80°	201.6	223.4	363.0	995.8	3784.8	7395.9	7535.5	6254.2	3114.7	729.0	220.3
82.5°	83.8	93.1	183.0	400.2	1340.2	3186.1	3139.5	2801.4	1085.8	452.9	80.7
85°	21.7	27.9	83.8	229.6	490.2	1098.2	1154.1	940.0	614.3	375.4	24.8
87.5°	0.0	0.0	40.3	93.1	220.3	331.9	347.5	285.4	347.5	282.3	12.4
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°	1830.4	1830.4	1830.4	1830.4	1830.4	1830.4	1830.4	1830.4	1830.4	1830.4	1830.4
2.5°	1824.2	1808.6	1780.7	1762.1	1737.3	1731.1	1718.7	1703.2	1700.1	1684.5	1687.7
5°	1793.1	1768.3	1718.7	1684.5	1644.2	1631.8	1610.1	1594.6	1582.2	1560.5	1563.6
7.5°	1786.9	1749.7	1681.4	1616.3	1551.2	1504.6	1439.5	1386.7	1343.3	1296.8	1306.1
10°	1808.6	1762.1	1665.9	1576.0	1458.1	1309.2	1138.5	1026.9	971.0	915.2	921.4
12.5°	1852.1	1796.2	1672.1	1535.6	1296.8	1042.4	806.6	654.6	614.3	589.4	592.5
15°	1917.2	1849.0	1690.8	1458.1	1079.6	753.9	536.7	471.5	487.1	496.4	496.4
17.5°	1985.5	1907.9	1706.3	1318.5	834.5	527.4	437.4	431.2	452.9	474.7	474.7
20°	2069.2	1970.0	1709.4	1141.6	601.8	428.1	412.6	412.6	428.1	452.9	452.9
22.5°	2149.9	2038.2	1681.4	940.0	459.1	397.1	397.1	397.1	406.4	431.2	434.3
25°	2246.1	2122.0	1622.5	725.9	394.0	378.5	378.5	381.6	387.8	409.5	412.6
27.5°	2348.4	2208.8	1523.2	530.5	359.9	356.8	359.9	363.0	366.1	387.8	394.0
30°	2466.3	2305.0	1396.0	397.1	328.8	328.8	338.2	344.4	344.4	363.0	369.2
32.5°	2602.8	2432.2	1244.0	328.8	297.8	294.7	310.2	319.5	319.5	335.0	341.3
35°	2773.5	2562.5	1061.0	291.6	273.0	266.8	273.0	288.5	294.7	307.1	310.2
37.5°	2999.9	2717.6	865.5	269.9	254.4	242.0	242.0	245.1	257.5	269.9	273.0
40°	3288.4	2888.2	673.2	254.4	235.8	223.4	214.1	211.0	207.9	217.2	223.4
42.5°	3651.4	3080.6	502.6	238.9	220.3	201.6	189.2	176.8	161.3	158.2	161.3
45°	4116.8	3316.4	372.3	226.5	211.0	183.0	161.3	139.6	111.7	102.4	105.5
47.5°	4665.9	3561.4	291.6	214.1	204.8	161.3	133.4	96.2	68.3	62.0	65.1
50°	5249.1	3797.2	248.2	198.5	192.3	139.6	96.2	58.9	40.3	40.3	43.4
52.5°	5745.5	3930.6	226.5	186.1	173.7	114.8	62.0	34.1	24.8	24.8	27.9
55°	6226.3	4002.0	211.0	173.7	148.9	80.7	34.1	21.7	15.5	15.5	15.5
57.5°	6722.7	4033.0	192.3	158.2	117.9	49.6	18.6	12.4	9.3	9.3	9.3
60°	7163.2	3974.0	164.4	130.3	77.6	24.8	9.3	9.3	6.2	3.1	3.1
62.5°	7532.4	3862.4	114.8	93.1	46.5	12.4	6.2	3.1	0.0	0.0	0.0
65°	7758.9	3682.4	74.5	62.0	27.9	9.3	3.1	0.0	0.0	0.0	0.0
67.5°	7693.7	3344.3	46.5	40.3	12.4	6.2	3.1	0.0	0.0	0.0	0.0
70°	6943.0	2742.4	34.1	24.8	9.3	3.1	0.0	0.0	0.0	0.0	0.0
72.5°	5004.0	1855.2	24.8	15.5	6.2	0.0	0.0	0.0	0.0	0.0	0.0
75°	2407.4	660.8	15.5	12.4	3.1	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	589.4	145.8	9.3	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	130.3	27.9	6.2	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	43.4	12.4	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.5	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.3	3.1	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)