

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: P237465

Luminaire Tested: **ARCH-L-AF72-120-D-U-T4W-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237465
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-AF72-120-D-U-T4W-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 530mA 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: 11958 lumens
Efficiency: N/A
Efficacy: 97.2 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

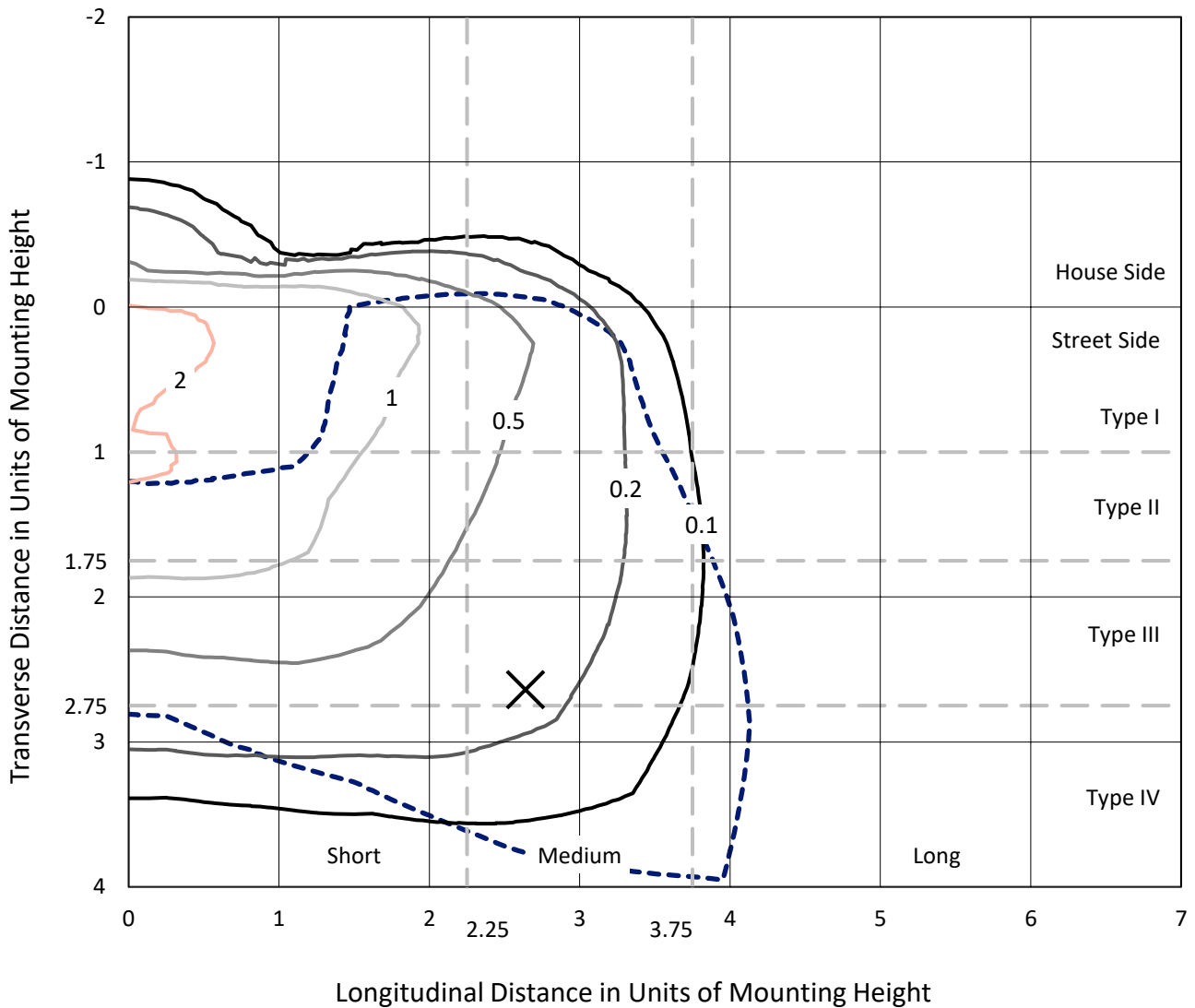
Input Watts (W): 123
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

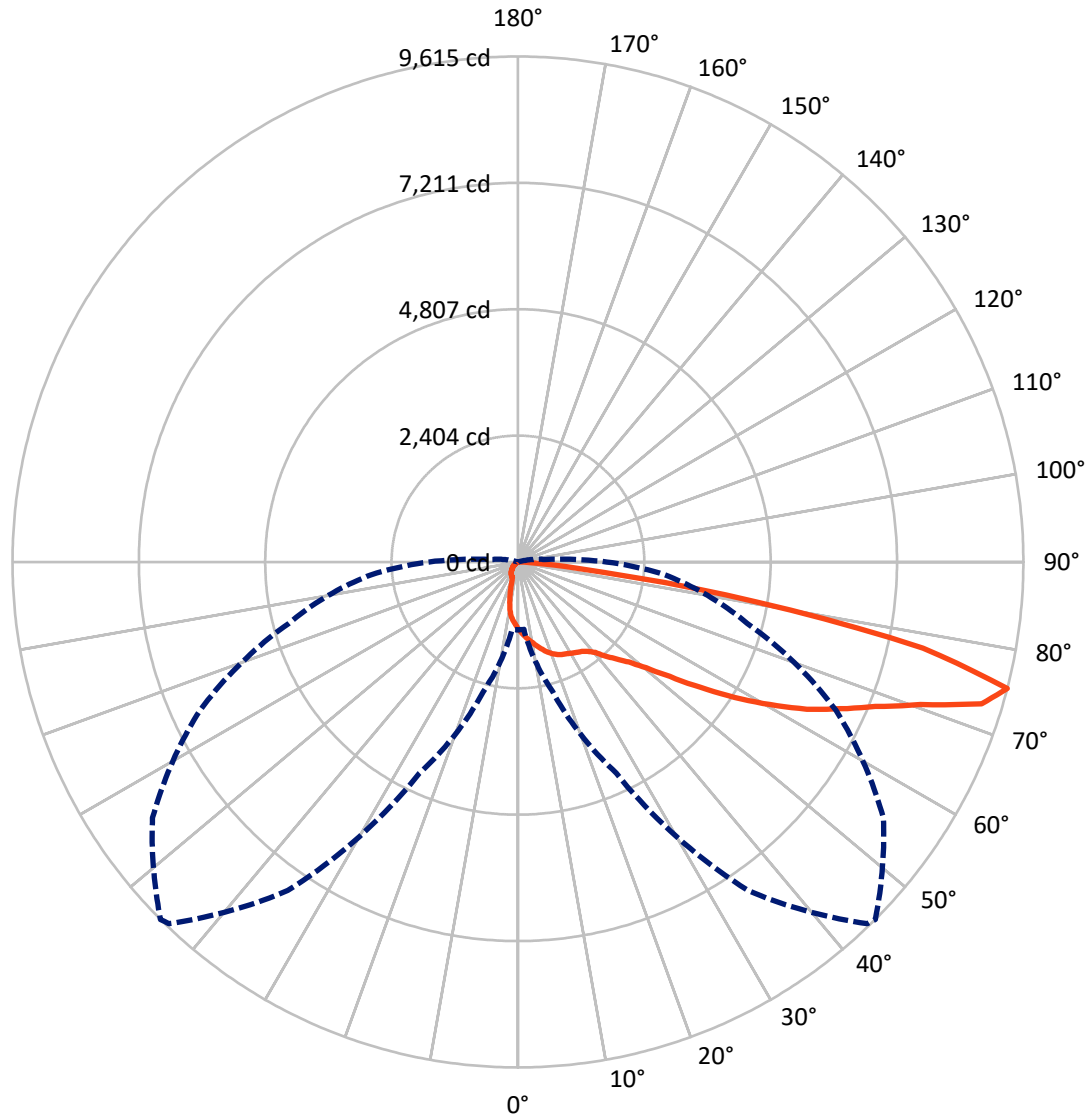
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 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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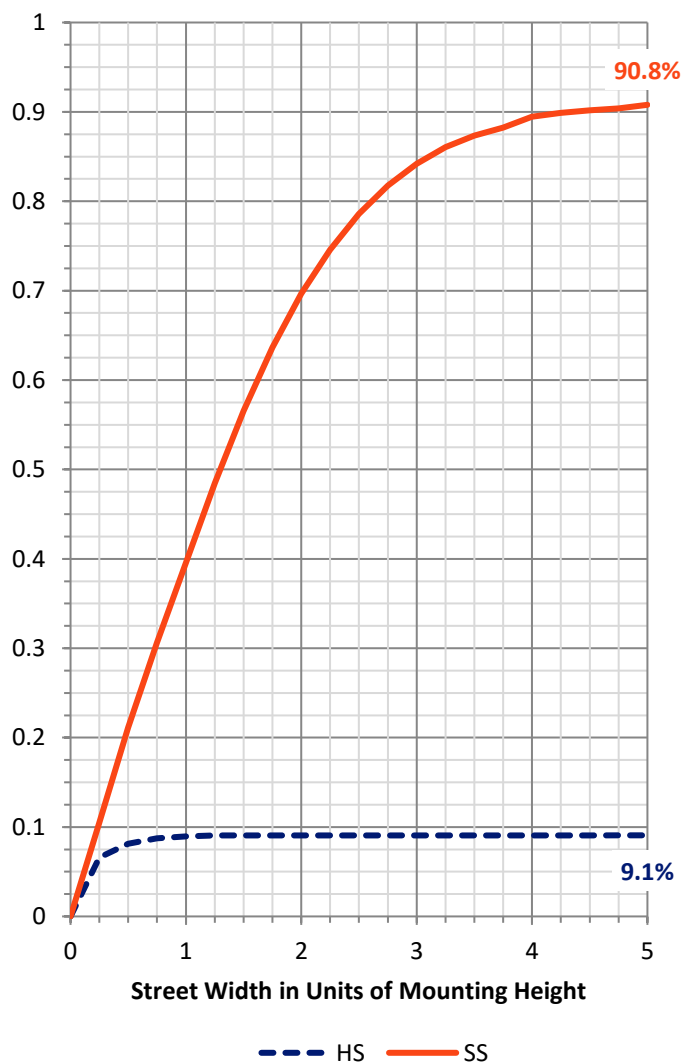
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1093.8	0.0	1093.8
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	10864.2	0.0	10864.2
	% Fixture	90.9	0.0	90.9
Total	Lumens	11958.0	0.0	11958.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.7	1.0
10°-20°	342.0	2.9
20°-30°	566.3	4.7
30°-40°	819.6	6.9
40°-50°	1342.1	11.2
50°-60°	2391.4	20.0
60°-70°	3515.6	29.4
70°-80°	2652.2	22.2
80°-90°	208.1	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°	11958.0	100.0
0°-180°	11958.0	100.0

Coefficient of Utilization



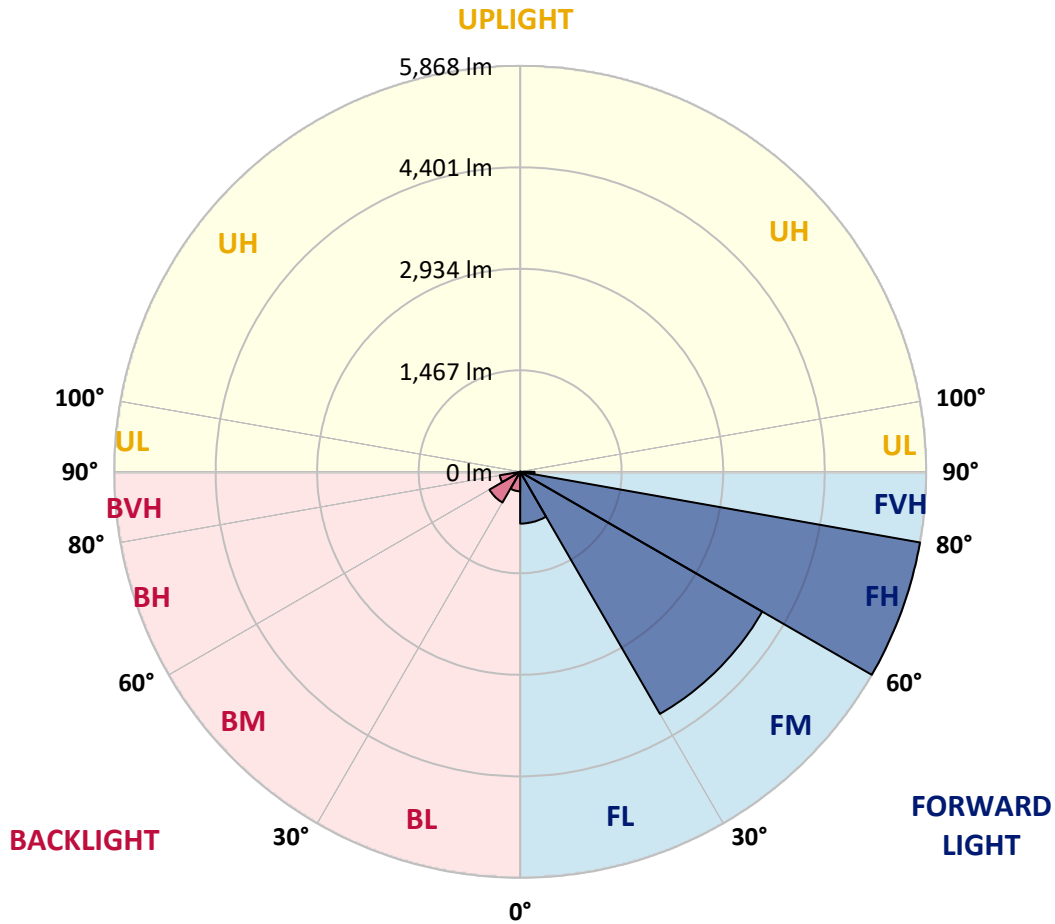
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	747.9	6.3			
FM (30°-60°)	4040.5	33.8			
FH (60°-80°)	5868.2	49.1			G3/7500
FVH (80°-90°)	207.5	1.7			G2/225
BL (0°-30°)	281.1	2.4	B1/500		
BM (30°-60°)	512.6	4.3	B1/1000		
BH (60°-80°)	299.6	2.5	B1/500		G1/500
BVH (80°-90°)	0.6	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°	1279.0	1279.0	1279.0	1279.0	1279.0	1279.0	1279.0	1279.0	1279.0	1279.0	1279.0
2.5°	1389.3	1389.3	1386.5	1383.7	1369.5	1355.4	1352.5	1344.1	1318.6	1301.6	1284.6
5°	1505.3	1508.2	1502.5	1488.4	1457.2	1426.1	1423.3	1400.6	1352.5	1318.6	1281.8
7.5°	1615.7	1621.4	1607.2	1581.7	1545.0	1499.7	1496.9	1454.4	1392.2	1344.1	1290.3
10°	1709.1	1709.1	1689.3	1658.1	1618.5	1570.4	1564.8	1516.7	1445.9	1386.5	1315.8
12.5°	1810.9	1808.1	1779.8	1737.4	1692.1	1646.8	1644.0	1584.6	1516.7	1440.3	1352.5
15°	1904.3	1898.7	1861.9	1822.3	1774.2	1726.0	1723.2	1663.8	1593.1	1502.5	1406.3
17.5°	1955.2	1952.4	1918.5	1878.8	1839.2	1802.4	1799.6	1737.4	1661.0	1567.6	1460.1
20°	1963.7	1966.6	1938.3	1904.3	1881.7	1861.9	1861.9	1805.3	1723.2	1624.2	1516.7
22.5°	1966.6	1975.1	1955.2	1910.0	1904.3	1907.1	1912.8	1867.5	1782.6	1689.3	1576.1
25°	1986.4	1997.7	1983.5	1929.8	1924.1	1943.9	1949.6	1929.8	1853.4	1760.0	1644.0
27.5°	2026.0	2037.3	2026.0	1958.1	1949.6	1969.4	1975.1	1986.4	1929.8	1827.9	1714.7
30°	2105.2	2108.0	2082.6	1997.7	1980.7	2006.2	2014.7	2045.8	2000.5	1893.0	1782.6
32.5°	2243.9	2215.6	2139.2	2026.0	2011.8	2040.1	2048.6	2082.6	2065.6	1955.2	1853.4
35°	2526.8	2379.7	2204.2	2065.6	2051.4	2079.7	2091.1	2139.2	2147.7	2043.0	1941.1
37.5°	2524.0	2391.0	2357.0	2142.0	2122.2	2142.0	2156.1	2215.6	2249.5	2159.0	2068.4
40°	2702.3	2645.7	2645.7	2286.3	2221.2	2249.5	2263.7	2323.1	2382.5	2311.8	2218.4
42.5°	3262.5	3225.7	3186.1	2563.6	2359.9	2439.1	2447.6	2484.4	2555.1	2532.5	2422.1
45°	3887.9	3853.9	3701.1	3033.3	2597.6	2611.7	2631.5	2690.9	2792.8	2835.2	2705.1
47.5°	4377.4	4343.4	4213.3	3599.2	2968.2	2843.7	2843.7	2959.7	3118.2	3225.7	3101.2
50°	4770.7	4731.1	4651.8	4201.9	3576.6	3177.6	3160.6	3296.5	3531.3	3698.3	3613.4
52.5°	5152.7	5036.7	4988.6	4824.4	4264.2	3661.5	3616.2	3712.4	4037.8	4244.4	4173.6
55°	5407.3	5390.4	5339.4	5396.0	4985.7	4250.0	4210.4	4230.2	4637.7	4776.3	4688.6
57.5°	5645.0	5642.2	5755.4	6018.5	5772.4	4923.5	4861.2	4830.1	5217.8	5183.8	5260.2
60°	5939.3	5888.4	6151.5	6527.9	6493.9	5579.9	5509.2	5447.0	5662.0	5565.8	5945.0
62.5°	5953.4	5939.3	6474.1	7014.5	7209.8	6247.7	6165.7	5942.1	6049.7	5939.3	6598.6
65°	5413.0	5483.7	6609.9	7272.0	7809.7	6833.5	6734.4	6386.4	6394.9	6321.3	7368.2
67.5°	5291.3	5328.1	6236.4	7549.3	8242.6	7424.8	7331.5	6898.5	6796.7	6802.3	7823.8
70°	4988.6	5045.2	5772.4	7529.5	8585.0	8214.3	8120.9	7651.2	7405.0	7130.6	7472.9
72.5°	3811.5	3907.7	4864.1	6601.4	8491.6	9247.1	9221.6	8604.8	7648.4	6547.7	5653.5
75°	1290.3	1287.5	2555.1	4434.0	7628.6	9564.0	9614.9	8485.9	6672.2	4516.0	2806.9
77.5°	277.3	280.1	526.3	1796.8	5067.8	7679.5	7874.7	6400.5	4303.8	2011.8	642.3
80°	135.8	138.6	217.9	475.4	2026.0	4306.6	4612.2	3290.8	1590.2	401.8	107.5
82.5°	67.9	70.7	113.2	251.8	749.8	1530.8	1635.5	1211.1	455.6	226.4	53.8
85°	25.5	25.5	56.6	150.0	342.4	359.4	441.4	350.9	274.5	183.9	14.1
87.5°	5.7	5.7	31.1	73.6	152.8	113.2	113.2	107.5	166.9	124.5	5.7
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°	1279.0	1279.0	1279.0	1279.0	1279.0	1279.0	1279.0	1279.0	1279.0	1279.0	1279.0
2.5°	1276.1	1264.8	1245.0	1225.2	1211.1	1194.1	1185.6	1177.1	1174.3	1171.4	1177.1
5°	1262.0	1245.0	1208.2	1177.1	1148.8	1126.2	1109.2	1092.2	1083.7	1078.1	1080.9
7.5°	1262.0	1236.5	1182.8	1134.7	1089.4	1041.3	993.2	956.4	928.1	911.1	914.0
10°	1276.1	1242.2	1171.4	1106.4	1021.5	919.6	814.9	735.7	681.9	650.8	650.8
12.5°	1307.3	1262.0	1174.3	1072.4	928.1	749.8	591.4	495.2	455.6	432.9	435.8
15°	1349.7	1296.0	1188.4	1027.1	797.9	557.4	413.1	350.9	350.9	356.5	359.4
17.5°	1397.8	1338.4	1199.7	959.2	631.0	399.0	325.4	319.7	328.2	342.4	342.4
20°	1445.9	1380.8	1205.4	851.7	472.5	316.9	308.4	308.4	314.1	328.2	331.1
22.5°	1505.3	1434.6	1199.7	718.7	353.7	299.9	297.1	297.1	297.1	314.1	314.1
25°	1567.6	1496.9	1177.1	577.2	299.9	288.6	285.8	283.0	283.0	297.1	299.9
27.5°	1638.3	1561.9	1123.3	441.4	283.0	277.3	274.5	268.8	268.8	280.1	280.1
30°	1709.1	1635.5	1041.3	333.9	268.8	266.0	260.3	254.7	249.0	260.3	260.3
32.5°	1785.5	1711.9	933.8	266.0	249.0	249.0	246.2	237.7	232.0	237.7	240.5
35°	1887.3	1799.6	812.1	232.0	223.5	223.5	223.5	220.7	209.4	215.0	215.0
37.5°	2023.2	1921.3	670.6	215.0	203.7	198.1	198.1	198.1	189.6	192.4	192.4
40°	2195.8	2062.8	534.8	200.9	189.6	175.4	169.8	172.6	166.9	166.9	164.1
42.5°	2430.6	2215.6	401.8	189.6	178.3	158.5	147.1	144.3	138.6	135.8	135.8
45°	2767.3	2402.3	288.6	178.3	169.8	138.6	127.3	118.8	104.7	96.2	96.2
47.5°	3203.1	2614.5	215.0	166.9	161.3	121.7	107.5	90.5	70.7	65.1	65.1
50°	3735.1	2852.2	181.1	150.0	147.1	107.5	84.9	59.4	39.6	34.0	36.8
52.5°	4252.9	3075.8	161.3	133.0	130.2	93.4	62.3	31.1	17.0	17.0	17.0
55°	4688.6	3234.2	147.1	118.8	113.2	73.6	34.0	14.1	8.5	8.5	8.5
57.5°	5081.9	3324.8	133.0	104.7	90.5	50.9	14.1	5.7	5.7	2.8	2.8
60°	5441.3	3378.5	116.0	90.5	70.7	28.3	5.7	2.8	2.8	0.0	0.0
62.5°	5795.0	3418.1	99.0	73.6	53.8	11.3	2.8	2.8	0.0	0.0	0.0
65°	6063.8	3404.0	79.2	59.4	34.0	5.7	2.8	0.0	0.0	0.0	0.0
67.5°	6055.3	3211.6	59.4	45.3	17.0	2.8	0.0	0.0	0.0	0.0	0.0
70°	5415.8	2705.1	39.6	28.3	5.7	2.8	0.0	0.0	0.0	0.0	0.0
72.5°	3842.6	1734.5	25.5	17.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0
75°	1692.1	526.3	14.1	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	331.1	121.7	8.5	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	79.2	14.1	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	34.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.5	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.7	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)