

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: P258088

Luminaire Tested: **ARCH-L-AF72-120-D-U-T2U-7050-HSS**

Issue Date: 8/21/2018

Test Information

Test Method: LM-79-08
Report Number: P258088
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 8/21/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-120-D-U-T2U-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 530mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11461 lumens
Efficiency: N/A
Efficacy: 93.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

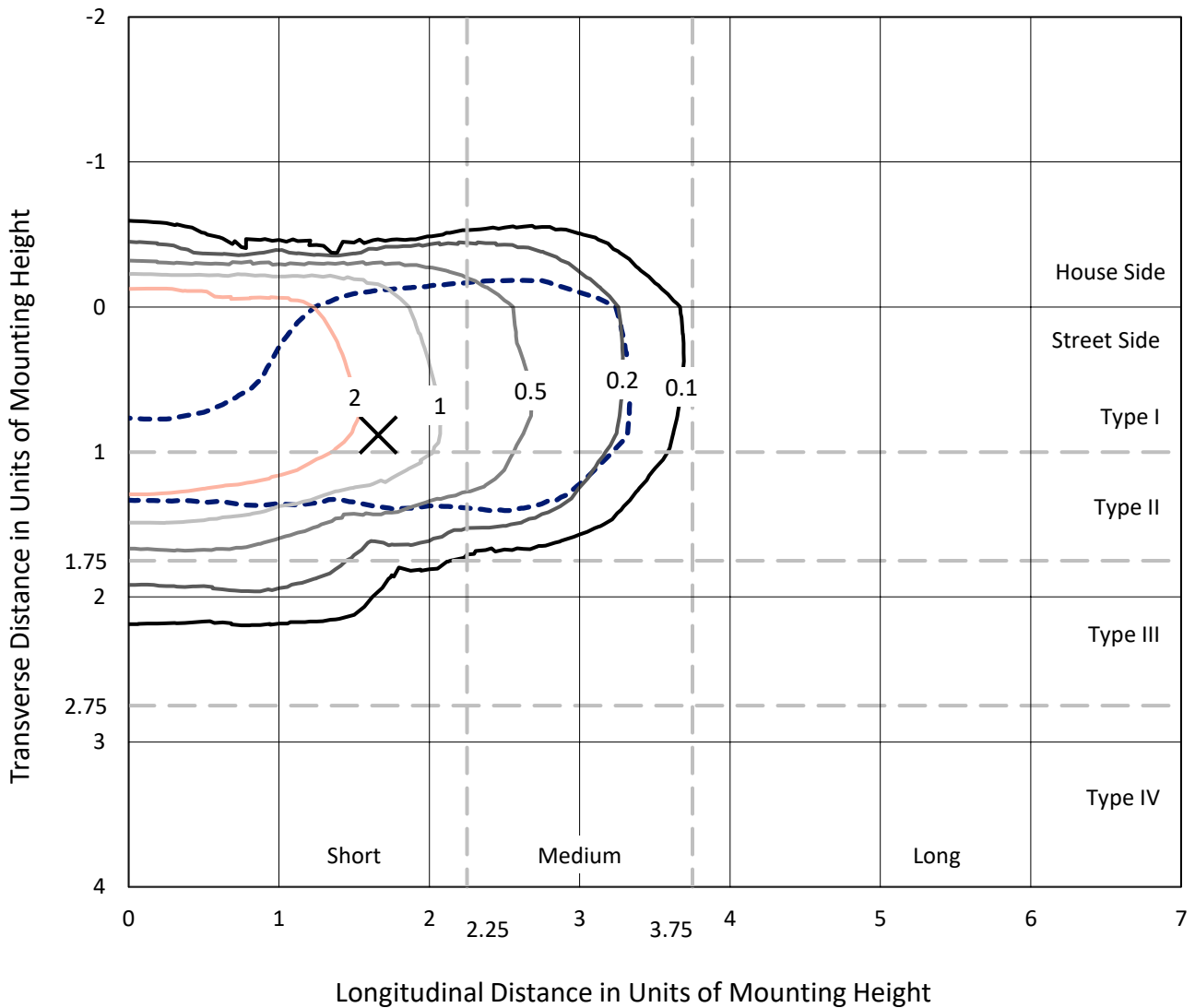
Input Watts (W): 123
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

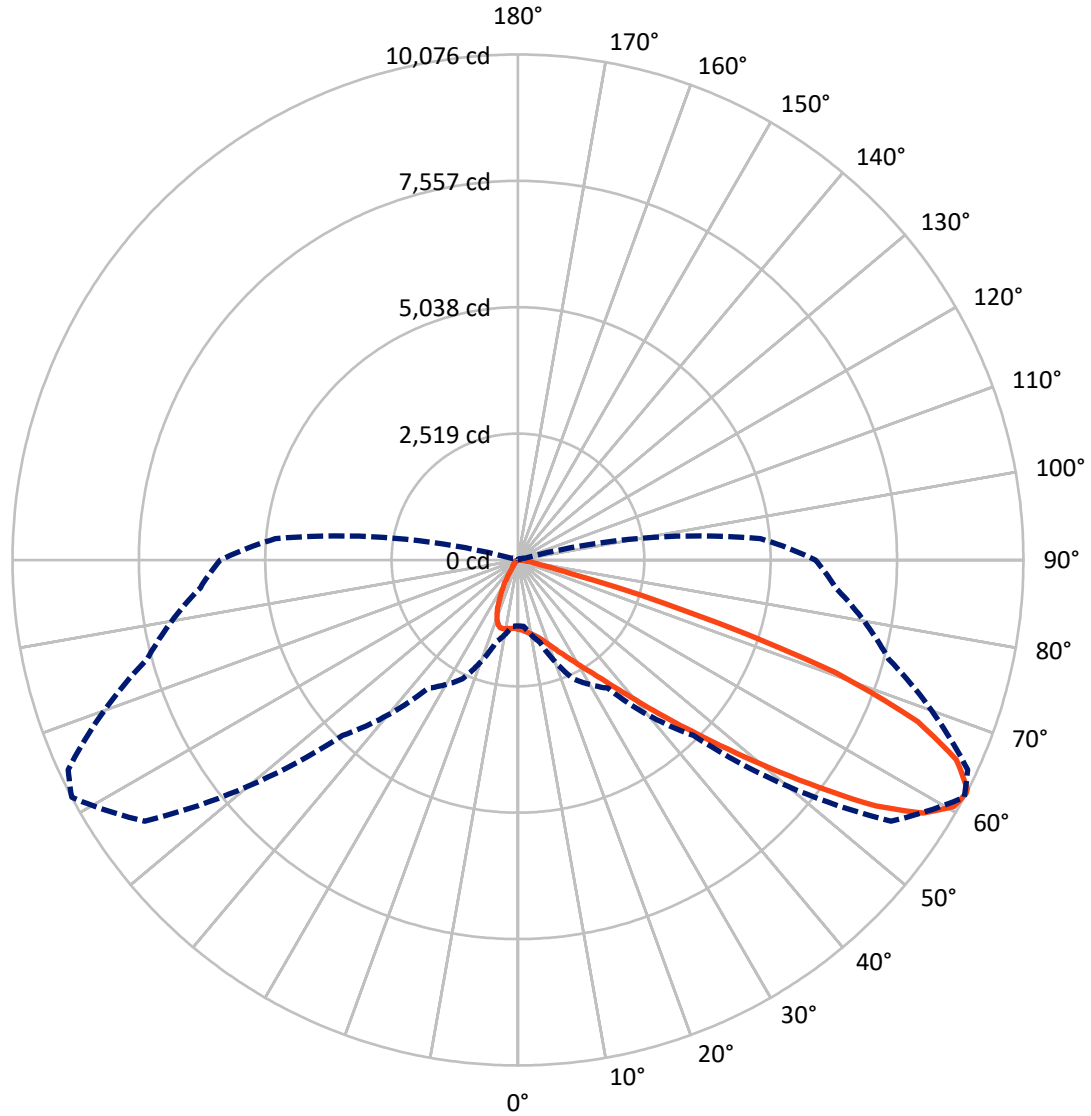
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

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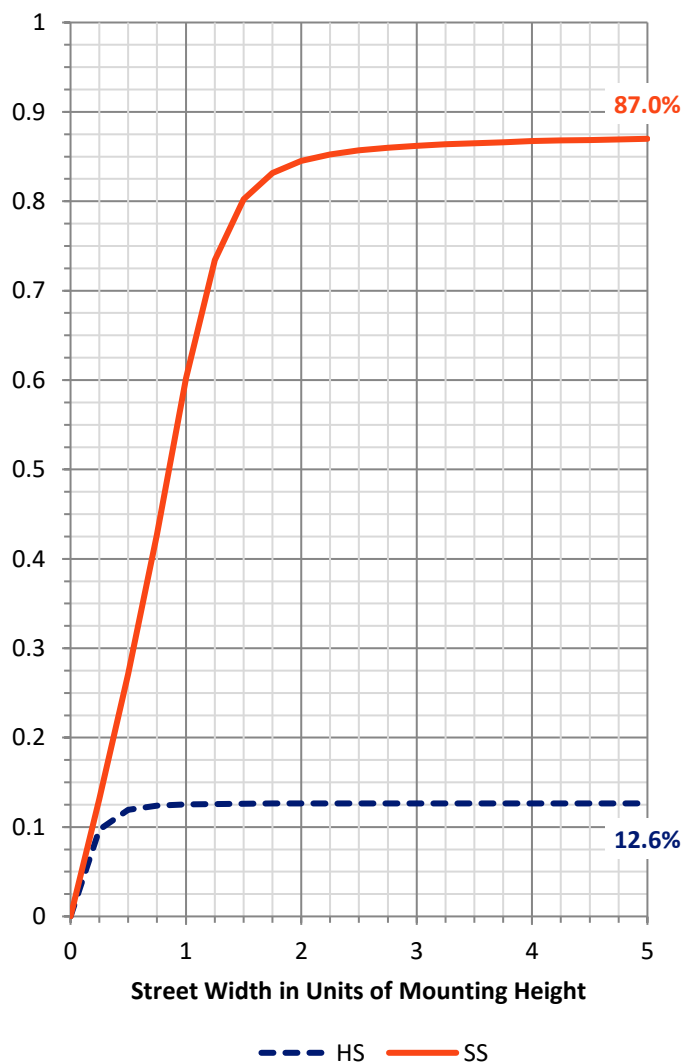
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1465.4	0.0	1465.4
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	9995.6	0.0	9995.6
	% Fixture	87.2	0.0	87.2
Total	Lumens	11461.0	0.0	11461.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.9	1.2
10°-20°	371.0	3.2
20°-30°	623.1	5.4
30°-40°	1194.5	10.4
40°-50°	2439.8	21.3
50°-60°	3228.6	28.2
60°-70°	2508.1	21.9
70°-80°	905.3	7.9
80°-90°	57.7	0.5
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°	11461.0	100.0
0°-180°	11461.0	100.0

Coefficient of Utilization



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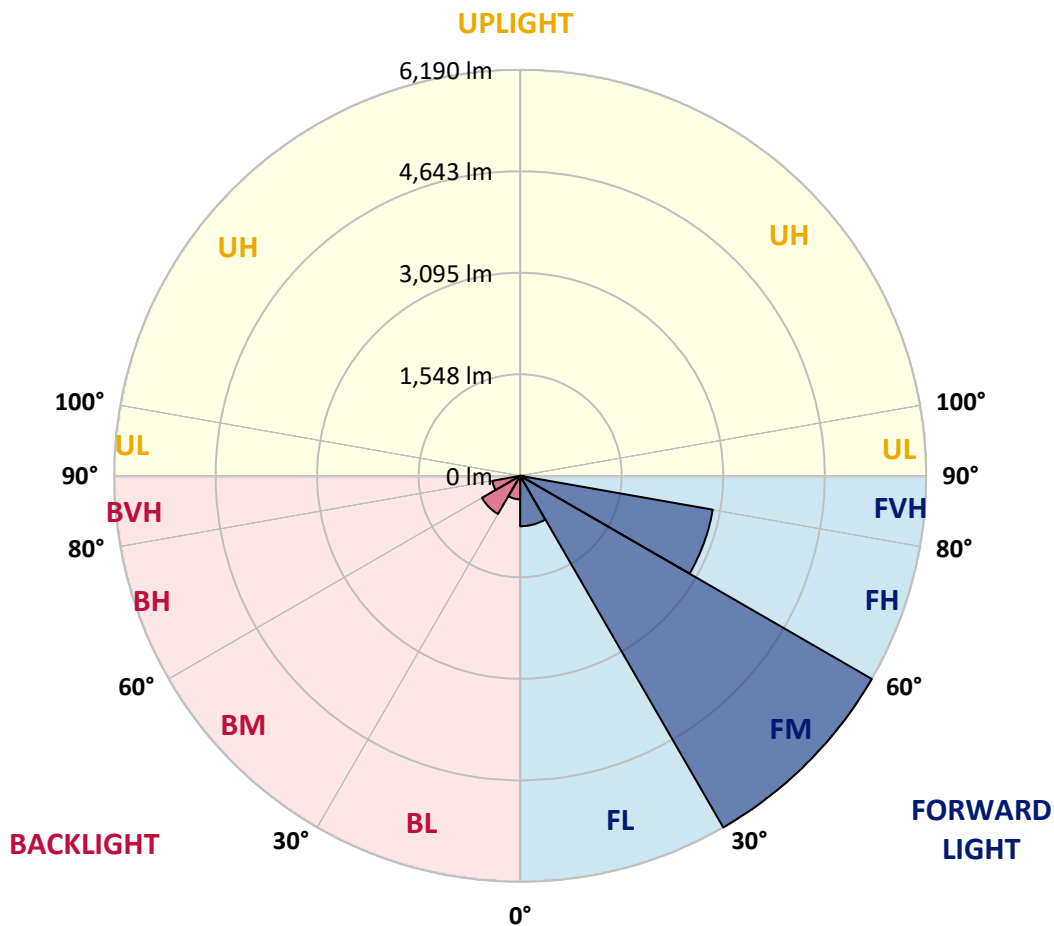
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	768.4	6.7			
FM (30°-60°)	6190.1	54.0			
FH (60°-80°)	2981.9	26.0			G2/5000
FVH (80°-90°)	55.2	0.5			G1/100
BL (0°-30°)	358.7	3.1	B1/500		
BM (30°-60°)	672.7	5.9	B1/1000		
BH (60°-80°)	431.5	3.8	B1/500		G1/500
BVH (80°-90°)	2.5	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-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	1380.6	1380.6	1380.6	1380.6	1380.6	1380.6	1380.6	1380.6	1380.6	1380.6	1380.6
2.5°	1417.3	1414.4	1411.6	1408.8	1408.8	1406.0	1403.2	1397.5	1391.9	1386.3	1383.4
5°	1442.6	1439.8	1437.0	1439.8	1437.0	1437.0	1434.2	1428.5	1422.9	1414.4	1406.0
7.5°	1462.3	1459.5	1456.7	1459.5	1462.3	1465.2	1468.0	1462.3	1459.5	1448.2	1439.8
10°	1487.7	1484.9	1482.1	1487.7	1487.7	1501.8	1504.6	1501.8	1499.0	1490.5	1476.4
12.5°	1524.3	1527.1	1527.1	1532.8	1538.4	1555.3	1561.0	1552.5	1552.5	1541.2	1524.3
15°	1591.9	1591.9	1591.9	1597.6	1600.4	1622.9	1628.6	1620.1	1625.8	1606.0	1589.1
17.5°	1656.8	1659.6	1665.2	1676.5	1676.5	1696.2	1707.5	1707.5	1718.7	1693.4	1670.8
20°	1721.6	1724.4	1732.8	1758.2	1758.2	1783.5	1803.3	1811.7	1823.0	1797.6	1758.2
22.5°	1792.0	1792.0	1806.1	1845.5	1837.1	1887.8	1924.4	1938.5	1949.8	1916.0	1854.0
25°	1899.1	1887.8	1899.1	1935.7	1930.1	2000.5	2068.1	2082.2	2096.3	2056.9	1963.9
27.5°	2101.9	2085.0	2045.6	2048.4	2048.4	2130.1	2225.9	2245.6	2254.1	2220.3	2104.8
30°	2507.7	2507.7	2361.2	2262.5	2197.7	2271.0	2406.2	2440.0	2451.3	2400.6	2248.4
32.5°	3214.9	3214.9	2944.4	2693.6	2448.5	2448.5	2603.5	2665.5	2676.7	2617.6	2440.0
35°	4116.5	4110.9	3705.2	3361.4	2882.4	2702.1	2834.5	2938.8	2972.6	2893.7	2688.0
37.5°	5074.5	5037.9	4601.2	4206.7	3550.2	3107.8	3147.3	3285.3	3316.3	3251.5	3009.2
40°	5852.2	5809.9	5457.7	5128.0	4412.4	3755.9	3598.1	3724.9	3761.5	3671.3	3392.4
42.5°	6556.6	6452.3	6210.0	5973.3	5404.2	4877.3	4198.2	4248.9	4288.4	4192.6	3823.5
45°	7066.6	6906.0	6782.0	6708.7	6407.2	6108.6	4975.9	4874.5	4888.5	4770.2	4294.0
47.5°	7080.6	6967.9	6979.2	7170.8	7294.8	7283.5	5987.4	5626.8	5573.2	5376.0	4795.6
50°	6404.4	6469.2	6674.9	7221.5	7892.1	8297.8	7190.5	6517.1	6356.5	6001.5	5294.3
52.5°	5277.4	5378.8	5764.8	6686.2	7979.5	8965.6	8438.7	7534.3	7246.9	6621.4	5677.5
55°	4133.4	4139.1	4544.8	5483.1	7396.2	9086.8	9436.2	8652.9	8213.3	7091.9	5931.1
57.5°	2843.0	2997.9	3513.6	4144.7	6080.4	8483.8	9810.9	9520.7	8954.4	7382.1	6108.6
60°	1862.4	1870.9	2471.0	3200.8	4139.1	6903.1	9582.7	9980.0	9554.5	7554.0	6229.7
62°	1313.0	1327.1	1699.0	2614.7	3119.1	4947.7	9078.3	10075.8	9892.6	7655.4	6356.5
62.5°	1217.2	1228.5	1541.2	2468.2	2930.3	4437.7	8898.0	10053.2	9943.3	7689.2	6401.6
65°	893.2	893.2	1008.7	1696.2	2147.0	2397.8	7539.9	9605.2	9875.7	7959.7	6570.7
67.5°	690.3	695.9	735.4	1045.3	1620.1	1453.9	4812.5	8596.5	9171.3	8359.8	6666.5
70°	594.5	591.7	619.9	693.1	1169.3	966.4	2118.8	6708.7	7680.8	8258.4	6579.1
72.5°	439.5	442.4	507.2	608.6	814.3	628.3	958.0	3561.5	4981.5	6463.6	5638.0
75°	281.8	284.6	357.8	479.0	586.1	411.4	552.3	1062.2	2039.9	3584.0	3448.7
77.5°	188.8	194.4	233.9	335.3	512.8	256.4	346.6	445.2	614.2	1344.0	1236.9
80°	126.8	126.8	149.3	225.4	324.0	214.1	186.0	295.8	318.4	417.0	208.5
82.5°	84.5	84.5	98.6	149.3	211.3	191.6	112.7	160.6	186.0	208.5	73.3
85°	50.7	50.7	67.6	93.0	138.1	107.1	73.3	90.2	95.8	132.4	39.4
87.5°	31.0	28.2	45.1	64.8	73.3	64.8	47.9	47.9	50.7	73.3	19.7
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°	1380.6	1380.6	1380.6	1380.6	1380.6	1380.6	1380.6	1380.6	1380.6	1380.6	1380.6
2.5°	1377.8	1375.0	1372.2	1366.5	1358.1	1352.5	1346.8	1341.2	1335.5	1335.5	1344.0
5°	1403.2	1394.7	1383.4	1372.2	1355.3	1344.0	1335.5	1324.3	1318.6	1318.6	1321.5
7.5°	1434.2	1425.7	1406.0	1386.3	1360.9	1341.2	1321.5	1296.1	1276.4	1267.9	1276.4
10°	1468.0	1456.7	1428.5	1397.5	1369.4	1318.6	1253.8	1174.9	1107.3	1076.3	1090.4
12.5°	1510.2	1496.1	1462.3	1420.1	1355.3	1231.3	1070.7	887.5	772.0	718.5	729.8
15°	1572.2	1552.5	1504.6	1439.8	1296.1	1028.4	766.4	555.1	448.0	402.9	408.6
17.5°	1645.5	1620.1	1555.3	1434.2	1143.9	741.0	456.5	324.0	278.9	267.7	267.7
20°	1724.4	1690.6	1606.0	1391.9	912.9	464.9	284.6	247.9	231.0	222.6	222.6
22.5°	1806.1	1761.0	1648.3	1293.3	650.9	290.2	233.9	208.5	188.8	180.3	180.3
25°	1904.7	1845.5	1690.6	1121.4	414.2	233.9	200.1	174.7	155.0	143.7	146.5
27.5°	2020.2	1944.1	1727.2	907.3	267.7	202.9	166.2	140.9	124.0	118.3	118.3
30°	2141.4	2051.2	1735.6	679.0	217.0	174.7	138.1	115.5	104.3	98.6	98.6
32.5°	2307.6	2189.3	1710.3	450.8	183.1	146.5	115.5	95.8	87.3	84.5	84.5
35°	2527.4	2369.6	1651.1	278.9	155.0	121.2	95.8	84.5	76.1	73.3	73.3
37.5°	2806.3	2620.4	1546.9	191.6	132.4	98.6	81.7	73.3	67.6	64.8	64.8
40°	3178.3	2924.7	1411.6	166.2	112.7	84.5	70.4	64.8	59.2	59.2	59.2
42.5°	3572.7	3293.8	1236.9	146.5	95.8	73.3	62.0	56.4	53.5	50.7	50.7
45°	4003.8	3671.3	1020.0	129.6	81.7	64.8	56.4	47.9	45.1	45.1	45.1
47.5°	4432.1	4060.2	783.3	112.7	70.4	56.4	47.9	42.3	39.4	36.6	36.6
50°	4871.6	4412.4	574.8	98.6	62.0	50.7	42.3	36.6	31.0	28.2	28.2
52.5°	5190.0	4623.7	419.8	84.5	53.5	42.3	33.8	28.2	22.5	19.7	19.7
55°	5423.9	4753.3	307.1	70.4	47.9	36.6	28.2	22.5	16.9	16.9	14.1
57.5°	5607.0	4815.3	231.0	62.0	42.3	31.0	22.5	16.9	14.1	11.3	11.3
60°	5747.9	4818.1	171.9	50.7	36.6	25.4	16.9	11.3	8.5	8.5	8.5
62°	5933.9	4854.7	140.9	42.3	33.8	22.5	14.1	8.5	5.6	2.8	2.8
62.5°	5987.4	4868.8	135.2	42.3	31.0	19.7	11.3	8.5	5.6	2.8	2.8
65°	6235.4	4894.2	104.3	33.8	25.4	16.9	8.5	5.6	0.0	0.0	0.0
67.5°	6460.8	4854.7	76.1	25.4	19.7	11.3	8.5	2.8	0.0	0.0	0.0
70°	6438.2	4584.2	53.5	16.9	14.1	8.5	5.6	0.0	0.0	0.0	0.0
72.5°	5305.6	3431.8	36.6	14.1	8.5	5.6	2.8	0.0	0.0	0.0	0.0
75°	3203.6	1501.8	25.4	8.5	8.5	5.6	2.8	0.0	0.0	0.0	0.0
77.5°	1051.0	543.8	16.9	5.6	5.6	2.8	2.8	0.0	0.0	0.0	0.0
80°	171.9	90.2	8.5	5.6	5.6	2.8	2.8	0.0	0.0	0.0	0.0
82.5°	53.5	22.5	5.6	5.6	2.8	2.8	0.0	0.0	0.0	0.0	0.0
85°	19.7	8.5	5.6	5.6	2.8	2.8	0.0	0.0	0.0	0.0	0.0
87.5°	8.5	5.6	5.6	5.6	2.8	2.8	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)