

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: P237422

Luminaire Tested: **ARCH-L-AF72-90-D-U-T4W-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P237422
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-AF72-90-D-U-T4W-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 400mA 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: 9116.6 lumens
Efficiency: N/A
Efficacy: 98.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G2

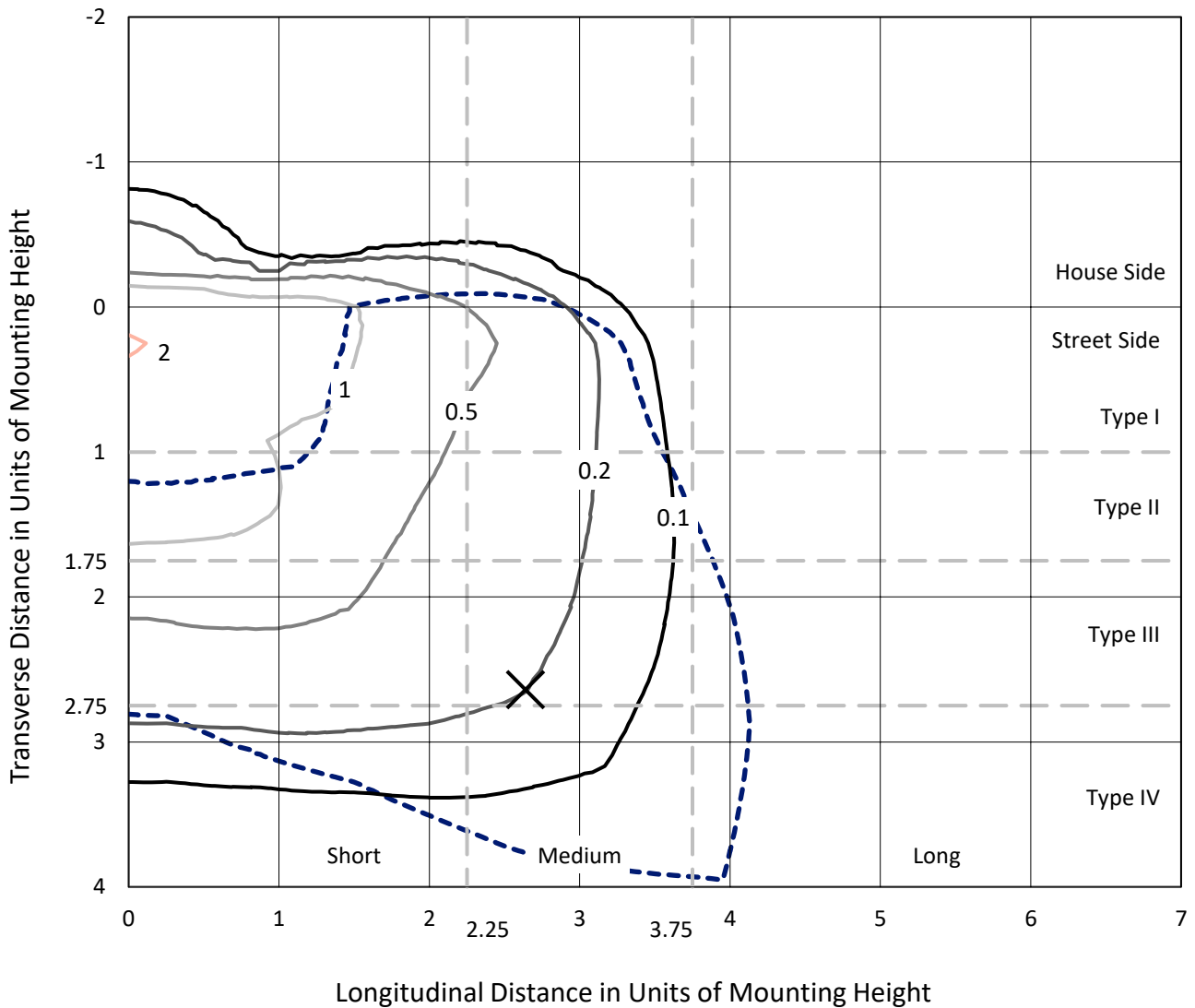
Input Watts (W): 93
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

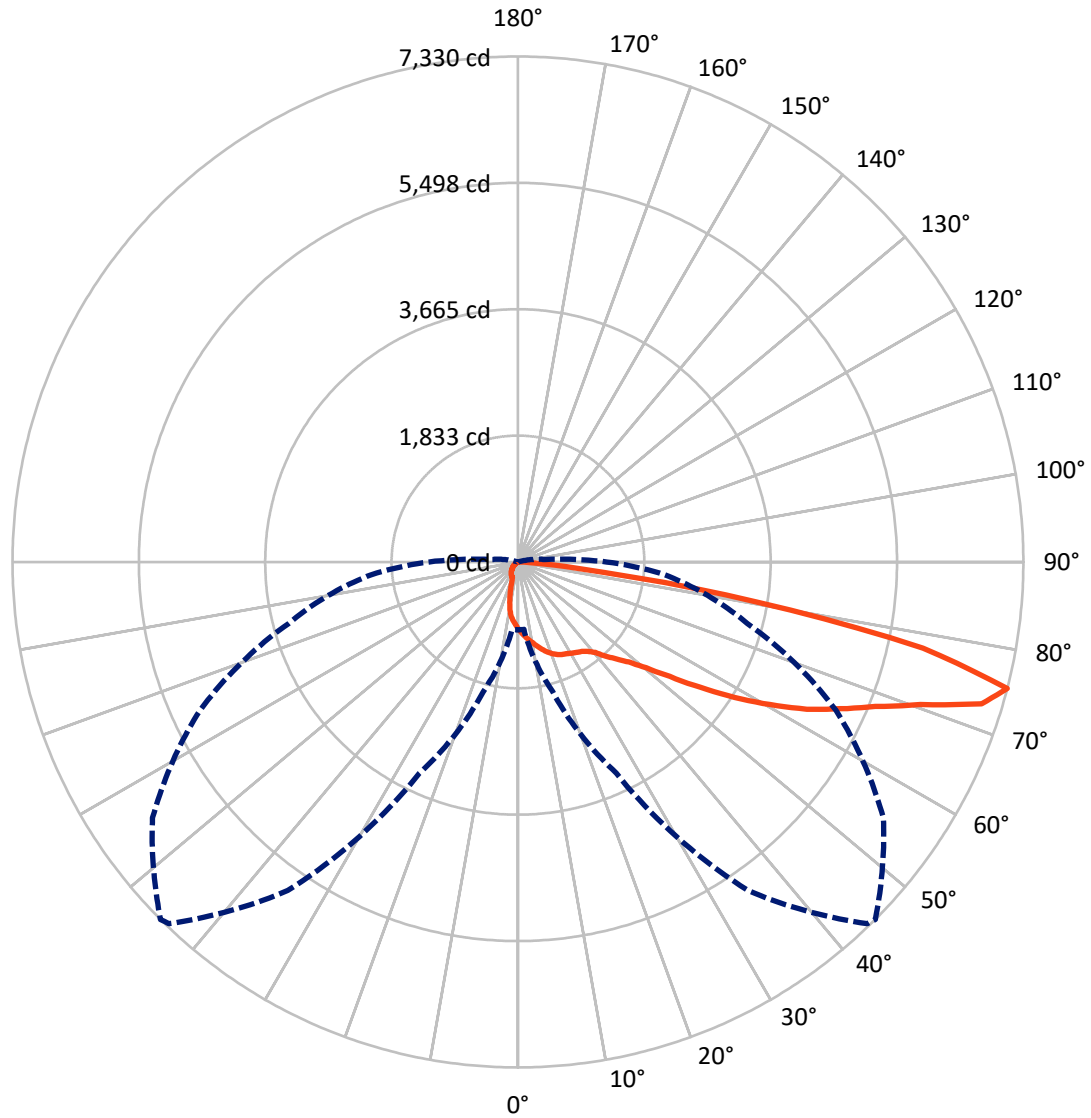
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 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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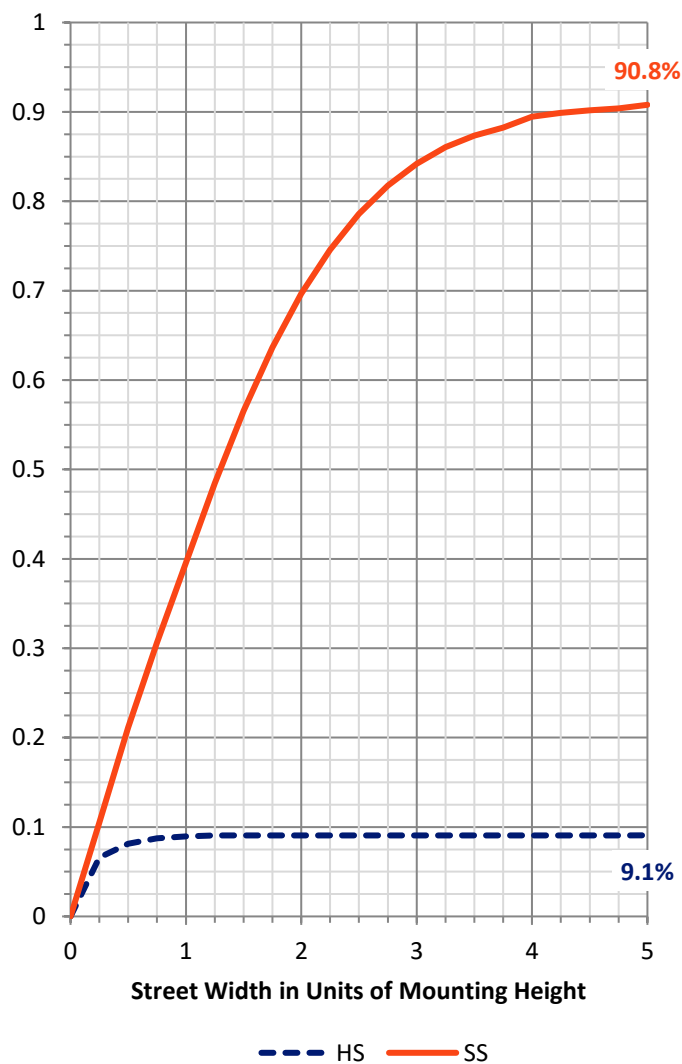
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	833.9	0.0	833.9
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	8282.7	0.0	8282.7
	% Fixture	90.9	0.0	90.9
Total	Lumens	9116.6	0.0	9116.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.0	1.0
10°-20°	260.7	2.9
20°-30°	431.8	4.7
30°-40°	624.9	6.9
40°-50°	1023.2	11.2
50°-60°	1823.1	20.0
60°-70°	2680.2	29.4
70°-80°	2022.0	22.2
80°-90°	158.6	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°	9116.6	100.0
0°-180°	9116.6	100.0

Coefficient of Utilization



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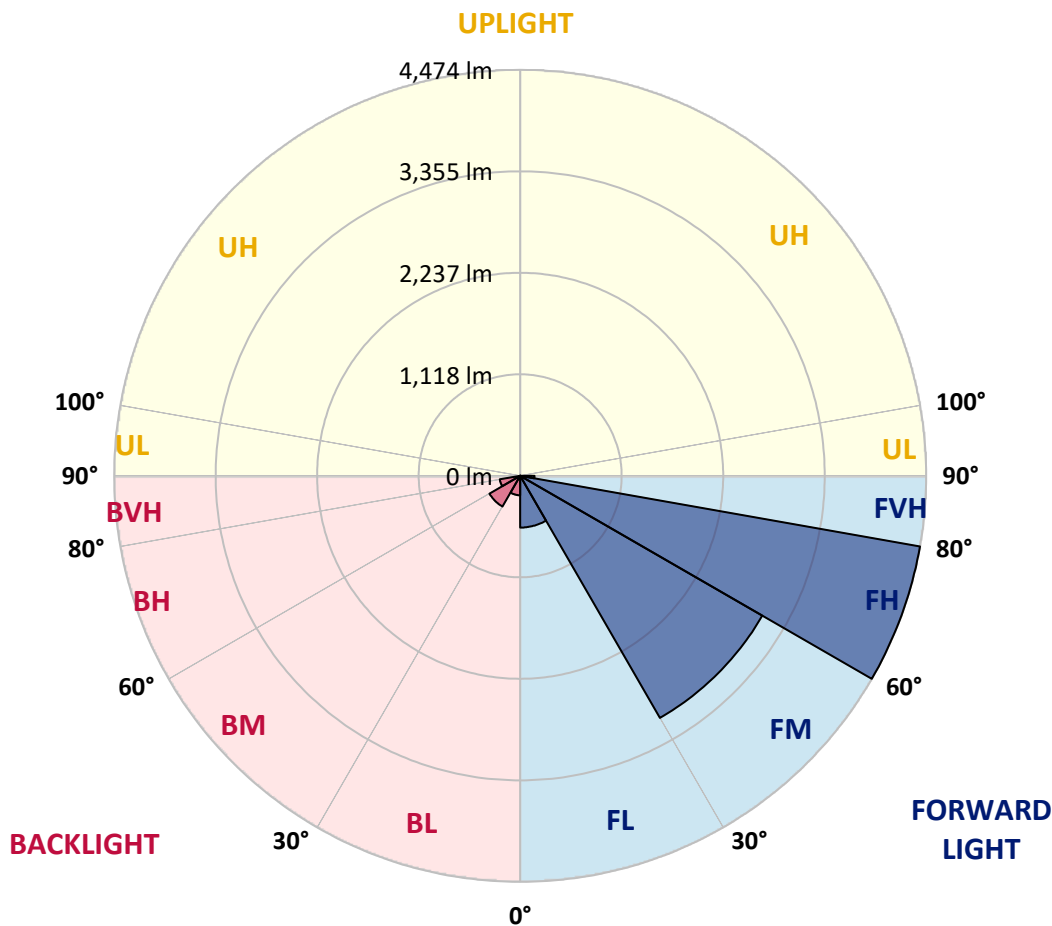
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	570.2	6.3			
FM (30°-60°)	3080.5	33.8			
FH (60°-80°)	4473.8	49.1			G2/5000
FVH (80°-90°)	158.2	1.7			G2/225
BL (0°-30°)	214.3	2.4	B1/500		
BM (30°-60°)	390.8	4.3	B1/1000		
BH (60°-80°)	228.4	2.5	B1/500		G1/500
BVH (80°-90°)	0.4	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 IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	975.0	975.0	975.0	975.0	975.0	975.0	975.0	975.0	975.0	975.0	975.0
2.5°	1059.2	1059.2	1057.1	1054.9	1044.1	1033.3	1031.2	1024.7	1005.3	992.3	979.4
5°	1147.7	1149.9	1145.5	1134.6	1110.9	1087.2	1085.1	1067.8	1031.2	1005.3	977.3
7.5°	1231.8	1236.0	1225.4	1205.9	1177.9	1143.3	1141.2	1108.8	1061.4	1024.7	983.7
10°	1302.9	1302.9	1287.8	1264.1	1234.0	1197.3	1193.0	1156.3	1102.3	1057.1	1003.1
12.5°	1380.6	1378.6	1356.9	1324.5	1290.1	1255.5	1253.3	1208.1	1156.3	1098.0	1031.2
15°	1451.8	1447.4	1419.5	1389.2	1352.6	1315.9	1313.8	1268.5	1214.5	1145.5	1072.2
17.5°	1490.7	1488.4	1462.7	1432.4	1402.3	1374.2	1372.0	1324.5	1266.4	1195.1	1113.2
20°	1497.1	1499.2	1477.7	1451.8	1434.6	1419.5	1419.5	1376.3	1313.8	1238.2	1156.3
22.5°	1499.2	1505.7	1490.7	1456.1	1451.8	1454.0	1458.3	1423.7	1359.0	1287.8	1201.6
25°	1514.4	1523.0	1512.2	1471.2	1467.0	1482.0	1486.4	1471.2	1412.9	1341.8	1253.3
27.5°	1544.6	1553.2	1544.6	1492.8	1486.4	1501.4	1505.7	1514.4	1471.2	1393.6	1307.3
30°	1605.0	1607.1	1587.7	1523.0	1510.1	1529.5	1535.9	1559.6	1525.1	1443.2	1359.0
32.5°	1710.7	1689.1	1630.9	1544.6	1533.8	1555.5	1561.9	1587.7	1574.8	1490.7	1412.9
35°	1926.5	1814.2	1680.5	1574.8	1564.0	1585.6	1594.2	1630.9	1637.4	1557.5	1479.8
37.5°	1924.3	1822.9	1797.0	1633.0	1617.9	1633.0	1643.8	1689.1	1715.1	1646.0	1576.9
40°	2060.2	2017.0	2017.0	1743.0	1693.4	1715.1	1725.7	1771.1	1816.4	1762.5	1691.3
42.5°	2487.3	2459.2	2429.1	1954.4	1799.2	1859.5	1866.0	1894.0	1948.0	1930.7	1846.6
45°	2963.9	2938.2	2821.6	2312.6	1980.4	1991.1	2006.2	2051.6	2129.1	2161.5	2062.3
47.5°	3337.3	3311.3	3212.1	2744.0	2263.0	2168.0	2168.0	2256.4	2377.3	2459.2	2364.4
50°	3637.1	3606.8	3546.4	3203.5	2726.8	2422.6	2409.6	2513.2	2692.2	2819.6	2754.8
52.5°	3928.3	3839.9	3803.2	3678.1	3250.9	2791.5	2756.9	2830.3	3078.4	3235.8	3181.9
55°	4122.5	4109.6	4070.7	4113.8	3801.0	3240.2	3209.9	3225.2	3535.7	3641.4	3574.5
57.5°	4303.7	4301.5	4387.9	4588.5	4400.8	3753.6	3706.1	3682.4	3977.9	3952.0	4010.3
60°	4528.0	4489.3	4689.9	4976.8	4950.9	4254.0	4200.2	4152.7	4316.7	4243.3	4532.3
62.5°	4538.8	4528.0	4935.8	5347.8	5496.7	4763.1	4700.7	4530.2	4612.2	4528.0	5030.7
65°	4126.8	4180.7	5039.2	5544.1	5954.0	5209.7	5134.2	4868.9	4875.3	4819.2	5617.4
67.5°	4034.1	4062.0	4754.5	5755.4	6284.0	5660.6	5589.3	5259.3	5181.6	5186.0	5964.8
70°	3803.2	3846.4	4400.8	5740.4	6545.0	6262.4	6191.2	5833.2	5645.4	5436.2	5697.3
72.5°	2905.8	2979.2	3708.3	5032.8	6473.8	7049.9	7030.4	6560.2	5830.9	4991.8	4310.2
75°	983.7	981.5	1948.0	3380.4	5815.9	7291.4	7330.3	6469.6	5086.8	3443.0	2140.0
77.5°	211.4	213.6	401.2	1369.9	3863.6	5854.7	6003.6	4879.6	3281.2	1533.8	489.7
80°	103.6	105.7	166.1	362.4	1544.6	3283.3	3516.3	2508.8	1212.3	306.4	82.0
82.5°	51.8	54.0	86.4	192.0	571.7	1167.1	1246.8	923.4	347.3	172.6	41.0
85°	19.4	19.4	43.1	114.2	261.0	274.0	336.5	267.4	209.2	140.2	10.8
87.5°	4.3	4.3	23.7	56.0	116.5	86.4	86.4	82.0	127.3	94.9	4.3
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°	975.0	975.0	975.0	975.0	975.0	975.0	975.0	975.0	975.0	975.0	975.0
2.5°	973.0	964.3	949.1	934.0	923.4	910.3	903.9	897.4	895.3	893.0	897.4
5°	962.1	949.1	921.2	897.4	875.8	858.6	845.6	832.7	826.2	821.9	824.1
7.5°	962.1	942.7	901.7	865.0	830.6	793.9	757.1	729.2	707.6	694.7	696.7
10°	973.0	947.1	893.0	843.5	778.8	701.1	621.2	560.8	519.8	496.1	496.1
12.5°	996.7	962.1	895.3	817.6	707.6	571.7	450.9	377.5	347.3	330.1	332.2
15°	1029.0	988.0	906.1	783.1	608.3	425.0	315.0	267.4	267.4	271.8	274.0
17.5°	1065.8	1020.4	914.7	731.3	481.1	304.2	248.1	243.7	250.2	261.0	261.0
20°	1102.3	1052.7	919.0	649.3	360.2	241.6	235.1	235.1	239.5	250.2	252.4
22.5°	1147.7	1093.6	914.7	547.9	269.7	228.7	226.5	226.5	226.5	239.5	239.5
25°	1195.1	1141.2	897.4	440.1	228.7	220.0	217.9	215.7	215.7	226.5	228.7
27.5°	1249.1	1190.8	856.4	336.5	215.7	211.4	209.2	205.0	205.0	213.6	213.6
30°	1302.9	1246.8	793.9	254.6	205.0	202.7	198.5	194.2	189.8	198.5	198.5
32.5°	1361.3	1305.1	712.0	202.7	189.8	189.8	187.7	181.3	176.9	181.3	183.3
35°	1438.8	1372.0	619.2	176.9	170.5	170.5	170.5	168.3	159.6	164.0	164.0
37.5°	1542.4	1464.7	511.3	164.0	155.3	151.0	151.0	151.0	144.5	146.7	146.7
40°	1674.0	1572.6	407.7	153.2	144.5	133.8	129.5	131.5	127.3	127.3	125.1
42.5°	1853.0	1689.1	306.4	144.5	135.9	120.8	112.2	110.1	105.7	103.6	103.6
45°	2109.8	1831.5	220.0	135.9	129.5	105.7	97.0	90.5	79.9	73.3	73.3
47.5°	2442.0	1993.3	164.0	127.3	122.9	92.8	82.0	69.1	54.0	49.6	49.6
50°	2847.6	2174.5	138.1	114.2	112.2	82.0	64.7	45.4	30.1	25.9	28.1
52.5°	3242.3	2344.9	122.9	101.4	99.2	71.2	47.4	23.7	12.9	12.9	12.9
55°	3574.5	2465.8	112.2	90.5	86.4	56.0	25.9	10.8	6.4	6.4	6.4
57.5°	3874.5	2534.7	101.4	79.9	69.1	38.8	10.8	4.3	4.3	2.1	2.1
60°	4148.3	2575.8	88.5	69.1	54.0	21.6	4.3	2.1	2.1	0.0	0.0
62.5°	4418.0	2606.0	75.5	56.0	41.0	8.6	2.1	2.1	0.0	0.0	0.0
65°	4623.0	2595.1	60.4	45.4	25.9	4.3	2.1	0.0	0.0	0.0	0.0
67.5°	4616.5	2448.5	45.4	34.5	12.9	2.1	0.0	0.0	0.0	0.0	0.0
70°	4128.9	2062.3	30.1	21.6	4.3	2.1	0.0	0.0	0.0	0.0	0.0
72.5°	2929.6	1322.4	19.4	12.9	2.1	0.0	0.0	0.0	0.0	0.0	0.0
75°	1290.1	401.2	10.8	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	252.4	92.8	6.4	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	60.4	10.8	2.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	25.9	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.4	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.3	2.1	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)