

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: P237442

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237442
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-90-D-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 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: 9642.3 lumens
Efficiency: N/A
Efficacy: 103.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
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: 28.75 FT

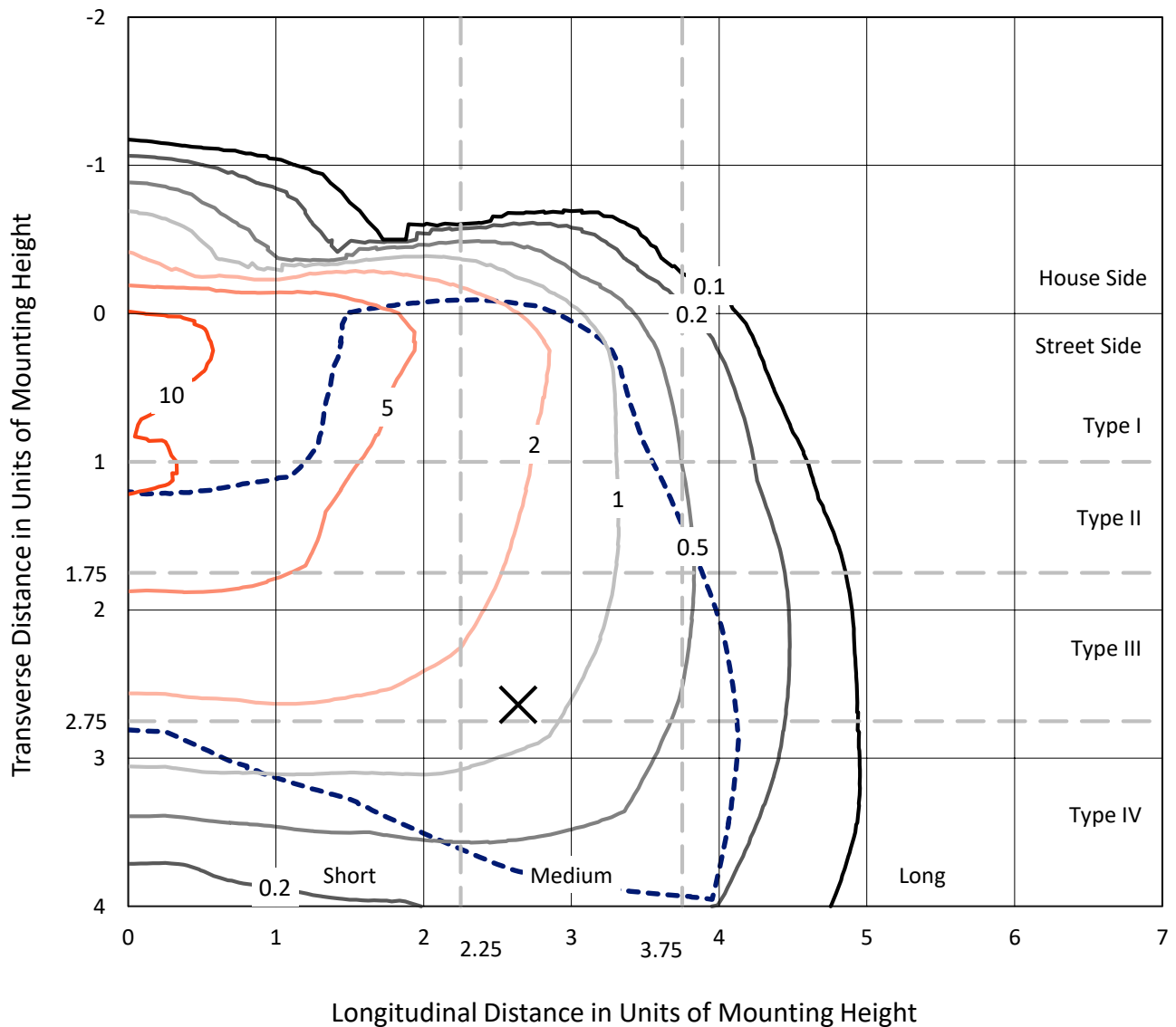


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

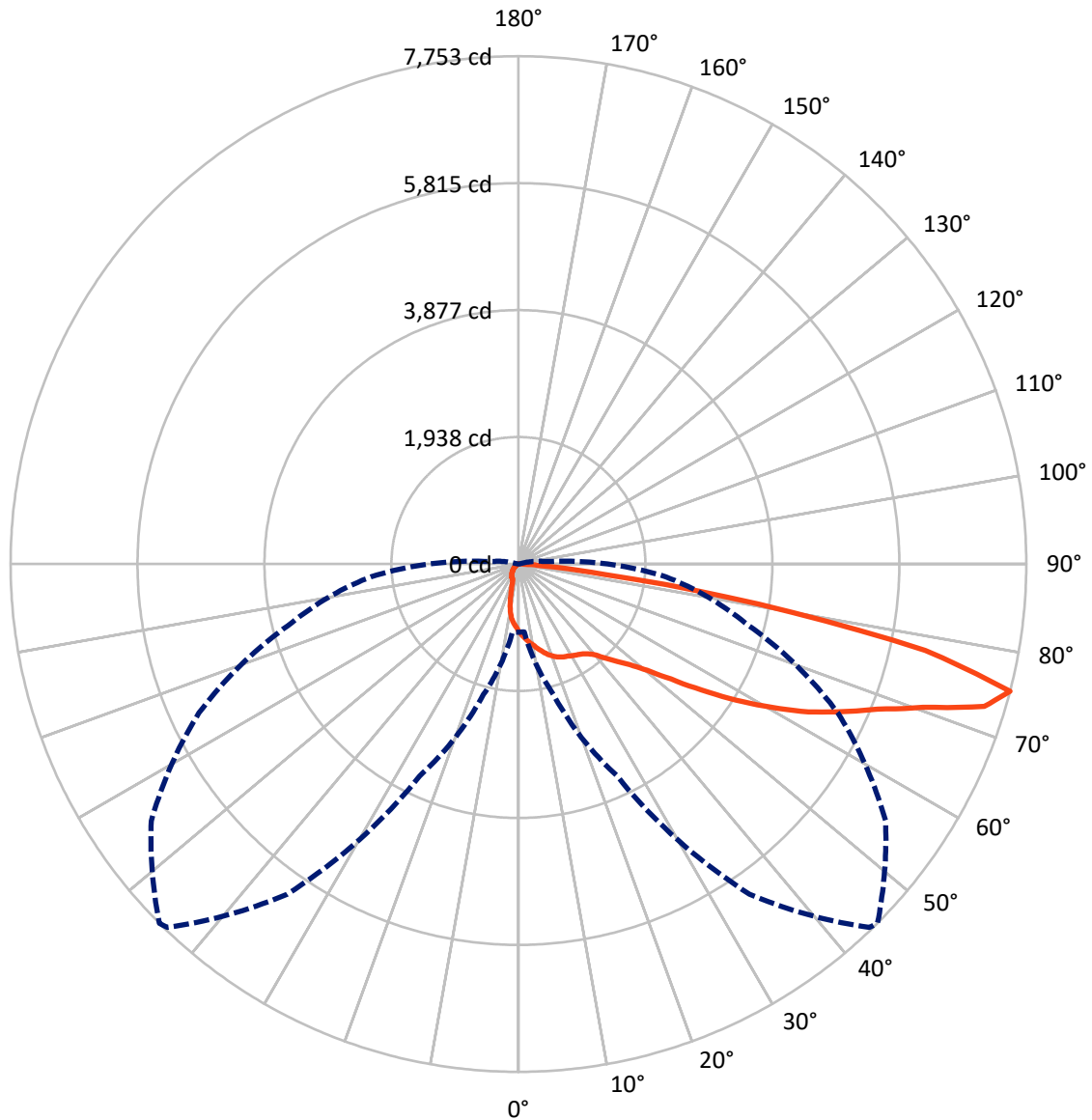


Based on 10 foot mounting height. Maximum calculated value = 13.8 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical



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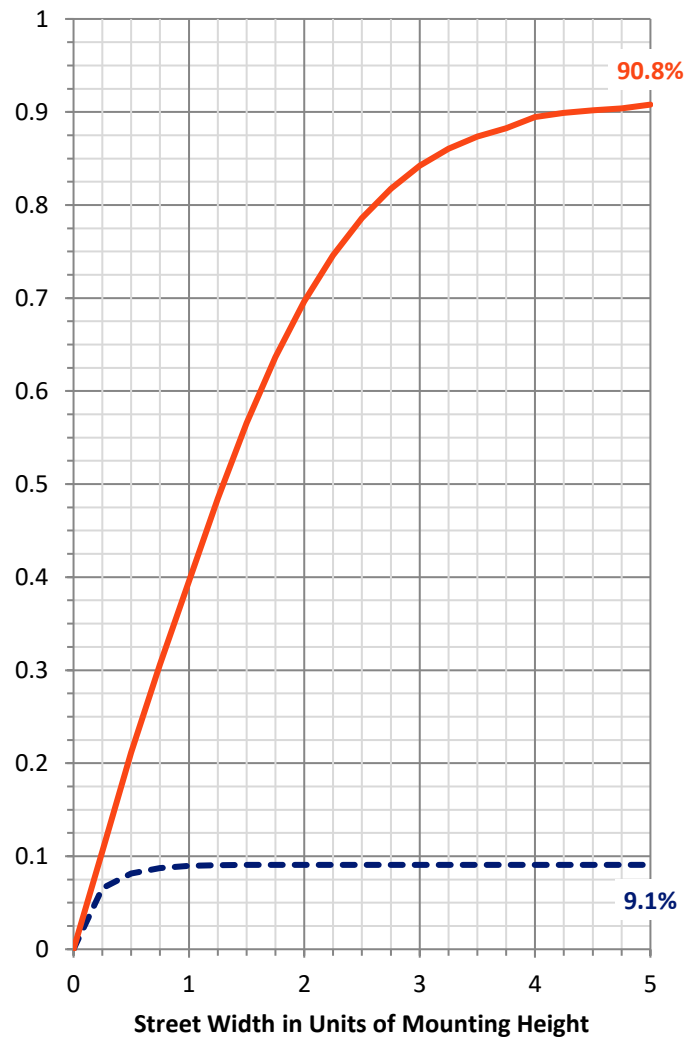
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	882.0	0.0	882.0
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	8760.3	0.0	8760.3
	% Fixture	90.9	0.0	90.9
Total	Lumens	9642.3	0.0	9642.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.3	1.0
10°-20°	275.7	2.9
20°-30°	456.7	4.7
30°-40°	660.9	6.9
40°-50°	1082.2	11.2
50°-60°	1928.3	20.0
60°-70°	2834.8	29.4
70°-80°	2138.6	22.2
80°-90°	167.8	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°	9642.3	100.0
0°-180°	9642.3	100.0



--- HS — SS

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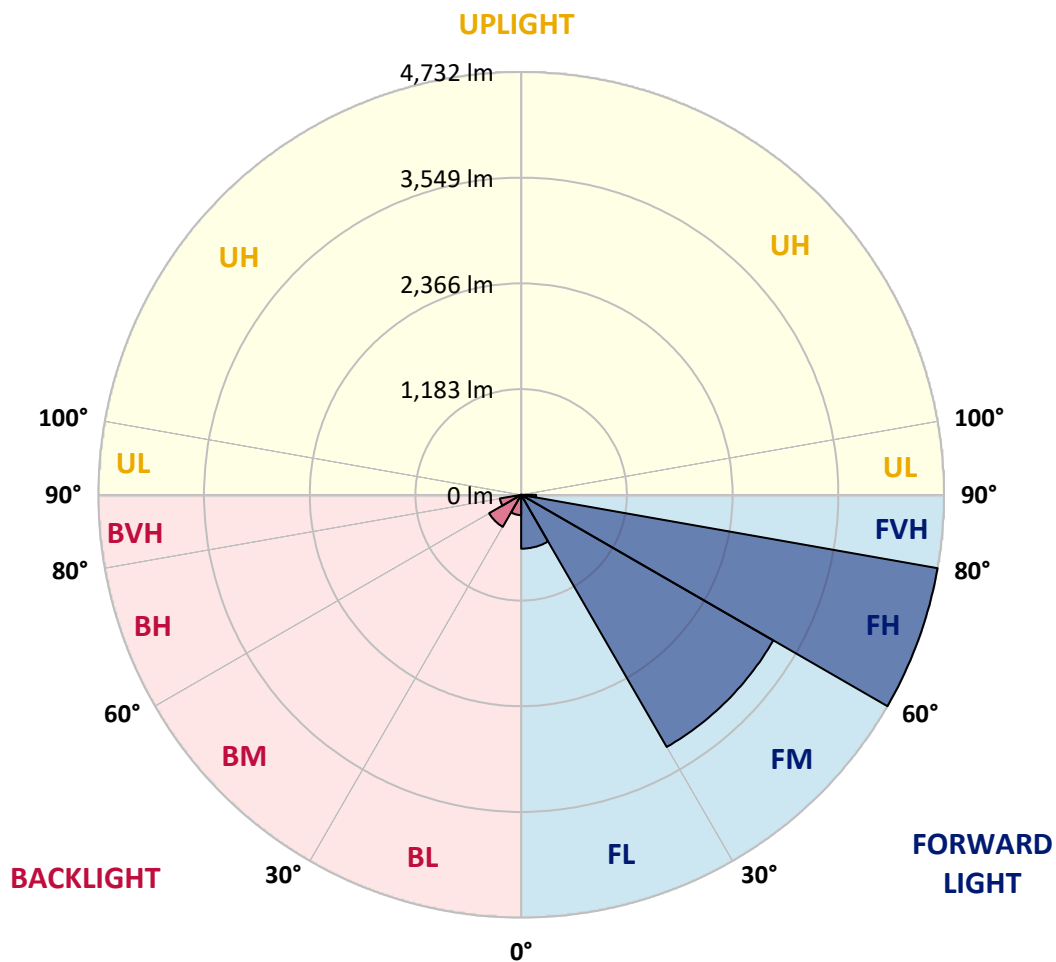
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	603.1	6.3			
FM	(30°-60°)	3258.1	33.8			
FH	(60°-80°)	4731.8	49.1			G2/5000
FVH	(80°-90°)	167.3	1.7			G2/225
BL	(0°-30°)	226.6	2.4	B1/500		
BM	(30°-60°)	413.3	4.3	B1/1000		
BH	(60°-80°)	241.6	2.5	B1/500		G1/500
BVH	(80°-90°)	0.5	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 IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1031.3	1031.3	1031.3	1031.3	1031.3	1031.3	1031.3	1031.3	1031.3	1031.3	1031.3
2.5°	1120.2	1120.2	1118.0	1115.7	1104.3	1092.9	1090.7	1083.8	1063.3	1049.5	1035.8
5°	1213.8	1216.1	1211.6	1200.1	1175.1	1149.9	1147.6	1129.4	1090.7	1063.3	1033.6
7.5°	1302.8	1307.3	1296.0	1275.4	1245.7	1209.2	1207.0	1172.7	1122.6	1083.8	1040.4
10°	1378.1	1378.1	1362.2	1337.0	1305.1	1266.3	1261.7	1222.9	1166.0	1118.0	1061.0
12.5°	1460.3	1458.0	1435.2	1400.9	1364.4	1327.9	1325.6	1277.7	1222.9	1161.4	1090.7
15°	1535.6	1530.9	1501.3	1469.4	1430.6	1391.8	1389.5	1341.6	1284.5	1211.6	1133.9
17.5°	1576.6	1574.3	1546.9	1515.0	1483.1	1453.4	1451.2	1400.9	1339.3	1264.1	1177.3
20°	1583.4	1585.8	1563.0	1535.6	1517.2	1501.3	1501.3	1455.7	1389.5	1309.7	1222.9
22.5°	1585.8	1592.6	1576.6	1540.2	1535.6	1537.8	1542.4	1505.9	1437.5	1362.2	1270.9
25°	1601.7	1610.8	1599.4	1556.1	1551.5	1567.5	1572.1	1556.1	1494.4	1419.1	1325.6
27.5°	1633.7	1642.8	1633.7	1578.9	1572.1	1588.0	1592.6	1601.7	1556.1	1474.0	1382.7
30°	1697.6	1699.8	1679.3	1610.8	1597.1	1617.7	1624.5	1649.6	1613.1	1526.4	1437.5
32.5°	1809.3	1786.5	1724.9	1633.7	1622.2	1645.1	1651.9	1679.3	1665.6	1576.6	1494.4
35°	2037.5	1918.9	1777.4	1665.6	1654.2	1677.0	1686.1	1724.9	1731.8	1647.4	1565.2
37.5°	2035.3	1928.0	1900.6	1727.2	1711.2	1727.2	1738.6	1786.5	1813.9	1740.9	1667.9
40°	2179.0	2133.4	2133.4	1843.6	1791.1	1813.9	1825.4	1873.2	1921.1	1864.1	1788.8
42.5°	2630.7	2601.1	2569.1	2067.2	1902.9	1966.7	1973.6	2003.2	2060.3	2042.0	1953.1
45°	3134.9	3107.6	2984.4	2445.9	2094.5	2105.9	2121.9	2169.9	2252.0	2286.2	2181.2
47.5°	3529.7	3502.3	3397.3	2902.2	2393.4	2293.0	2293.0	2386.5	2514.4	2601.1	2500.7
50°	3846.8	3814.9	3751.1	3388.2	2884.0	2562.3	2548.6	2658.1	2847.5	2982.1	2913.7
52.5°	4154.8	4061.3	4022.5	3890.2	3438.4	2952.4	2915.9	2993.5	3255.8	3422.5	3365.4
55°	4360.2	4346.5	4305.5	4351.1	4020.2	3427.0	3395.1	3411.0	3739.6	3851.4	3780.6
57.5°	4551.8	4549.6	4640.8	4853.1	4654.5	3970.1	3919.8	3894.8	4207.3	4180.0	4241.6
60°	4789.1	4748.1	4960.3	5263.7	5236.4	4499.3	4442.4	4392.1	4565.5	4488.0	4793.8
62.5°	4800.6	4789.1	5220.4	5656.2	5813.6	5037.8	4971.6	4791.4	4878.1	4789.1	5320.8
65°	4364.7	4421.8	5329.9	5863.8	6297.3	5510.1	5430.3	5149.6	5156.5	5097.2	5941.4
67.5°	4266.6	4296.3	5028.7	6087.4	6646.4	5987.0	5911.7	5562.6	5480.5	5485.1	6308.7
70°	4022.5	4068.2	4654.5	6071.4	6922.5	6623.6	6548.3	6169.5	5971.1	5749.7	6025.8
72.5°	3073.4	3150.9	3922.1	5323.0	6847.2	7456.4	7435.8	6938.5	6167.3	5279.8	4558.7
75°	1040.4	1038.2	2060.3	3575.3	6151.3	7711.9	7753.0	6842.6	5380.1	3641.5	2263.4
77.5°	223.6	225.9	424.4	1448.8	4086.4	6192.3	6349.8	5161.1	3470.4	1622.2	517.9
80°	109.6	111.8	175.6	383.3	1633.7	3472.6	3719.0	2653.5	1282.3	324.0	86.7
82.5°	54.7	57.1	91.2	203.1	604.7	1234.4	1318.8	976.5	367.3	182.5	43.4
85°	20.6	20.6	45.6	120.9	276.1	289.8	355.9	282.9	221.4	148.3	11.5
87.5°	4.6	4.6	25.1	59.3	123.2	91.2	91.2	86.7	134.6	100.4	4.6
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°	1031.3	1031.3	1031.3	1031.3	1031.3	1031.3	1031.3	1031.3	1031.3	1031.3	1031.3
2.5°	1029.0	1019.9	1003.9	988.0	976.5	962.8	956.0	949.2	946.8	944.6	949.2
5°	1017.6	1003.9	974.3	949.2	926.4	908.1	894.4	880.8	873.9	869.3	871.6
7.5°	1017.6	997.1	953.7	914.9	878.4	839.6	800.9	771.2	748.4	734.7	736.9
10°	1029.0	1001.7	944.6	892.1	823.7	741.5	657.1	593.2	549.8	524.8	524.8
12.5°	1054.2	1017.6	946.8	864.7	748.4	604.7	476.9	399.3	367.3	349.1	351.4
15°	1088.3	1044.9	958.3	828.3	643.4	449.5	333.1	282.9	282.9	287.4	289.8
17.5°	1127.1	1079.2	967.4	773.5	508.8	321.7	262.4	257.8	264.6	276.1	276.1
20°	1166.0	1113.5	972.0	686.8	381.0	255.5	248.7	248.7	253.3	264.6	267.0
22.5°	1213.8	1156.8	967.4	579.5	285.2	241.8	239.6	239.6	239.6	253.3	253.3
25°	1264.1	1207.0	949.2	465.4	241.8	232.7	230.5	228.1	228.1	239.6	241.8
27.5°	1321.0	1259.5	905.8	355.9	228.1	223.6	221.4	216.8	216.8	225.9	225.9
30°	1378.1	1318.8	839.6	269.2	216.8	214.5	209.9	205.3	200.8	209.9	209.9
32.5°	1439.7	1380.4	752.9	214.5	200.8	200.8	198.5	191.7	187.1	191.7	194.0
35°	1521.8	1451.2	654.8	187.1	180.2	180.2	180.2	178.0	168.9	173.4	173.4
37.5°	1631.4	1549.3	540.7	173.4	164.3	159.7	159.7	159.7	152.8	155.2	155.2
40°	1770.5	1663.3	431.3	162.0	152.8	141.5	136.9	139.2	134.6	134.6	132.4
42.5°	1960.0	1786.5	324.0	152.8	143.7	127.8	118.7	116.4	111.8	109.6	109.6
45°	2231.5	1937.1	232.7	143.7	136.9	111.8	102.7	95.9	84.4	77.5	77.5
47.5°	2582.8	2108.2	173.4	134.6	130.0	98.1	86.7	73.0	57.1	52.5	52.5
50°	3011.8	2299.9	146.0	120.9	118.7	86.7	68.4	47.9	31.9	27.4	29.7
52.5°	3429.3	2480.1	130.0	107.2	105.0	75.3	50.2	25.1	13.7	13.7	13.7
55°	3780.6	2607.9	118.7	95.9	91.2	59.3	27.4	11.5	6.9	6.9	6.9
57.5°	4097.8	2680.9	107.2	84.4	73.0	41.0	11.5	4.6	4.6	2.3	2.3
60°	4387.5	2724.3	93.5	73.0	57.1	22.8	4.6	2.3	2.3	0.0	0.0
62.5°	4672.8	2756.2	79.9	59.3	43.4	9.1	2.3	2.3	0.0	0.0	0.0
65°	4889.5	2744.8	63.9	47.9	27.4	4.6	2.3	0.0	0.0	0.0	0.0
67.5°	4882.7	2589.7	47.9	36.5	13.7	2.3	0.0	0.0	0.0	0.0	0.0
70°	4367.1	2181.2	31.9	22.8	4.6	2.3	0.0	0.0	0.0	0.0	0.0
72.5°	3098.4	1398.7	20.6	13.7	2.3	0.0	0.0	0.0	0.0	0.0	0.0
75°	1364.4	424.4	11.5	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	267.0	98.1	6.9	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	63.9	11.5	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	27.4	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.9	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.6	2.3	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)