

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: P265840

Luminaire Tested: **ARCH-M-AF48-130-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265840
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-M-AF48-130-D-U-T4W-7027-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 845mA 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: 10419.4 lumens
Efficiency: N/A
Efficacy: 79.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G3

Input Watts (W): 131
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

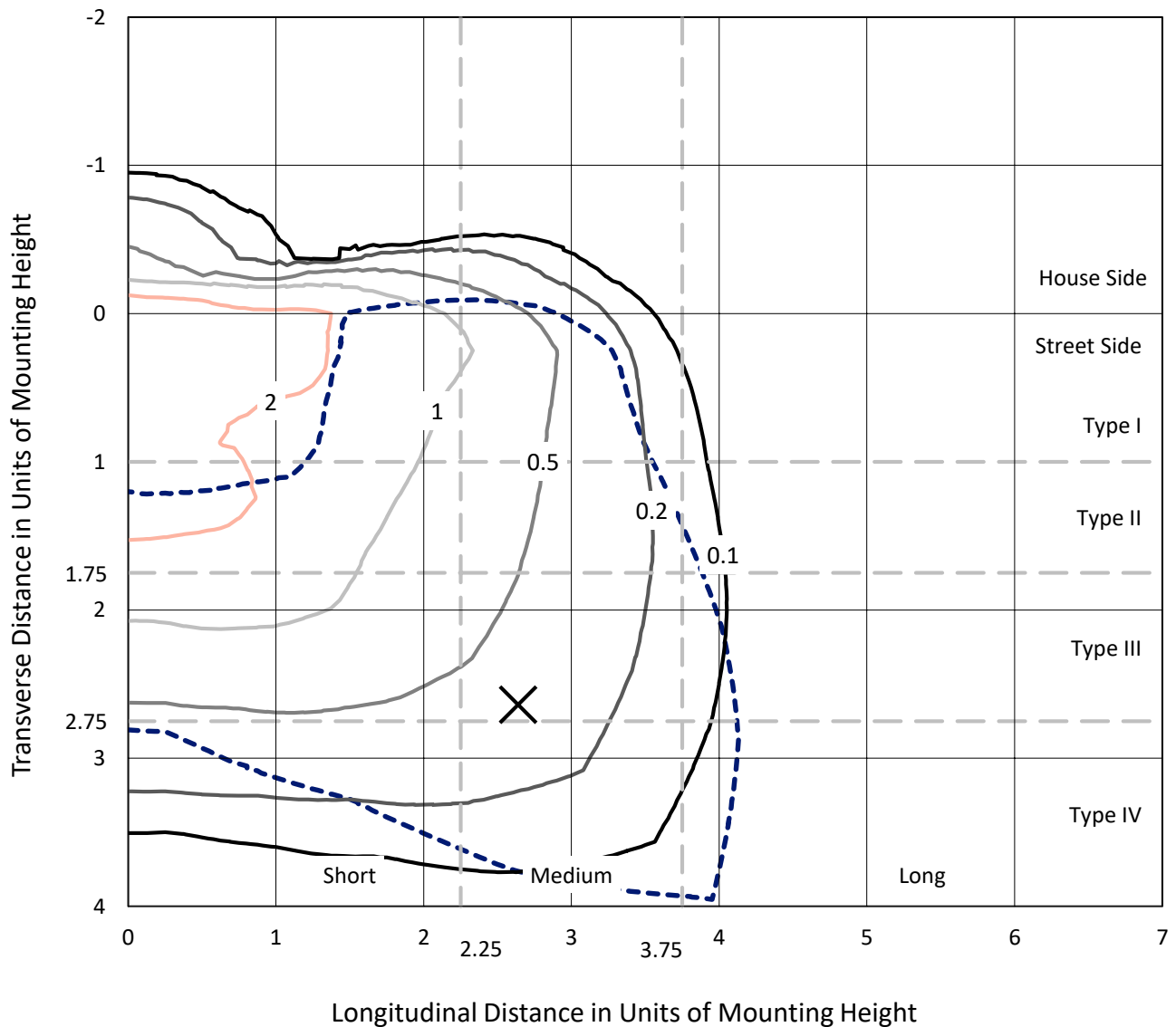


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

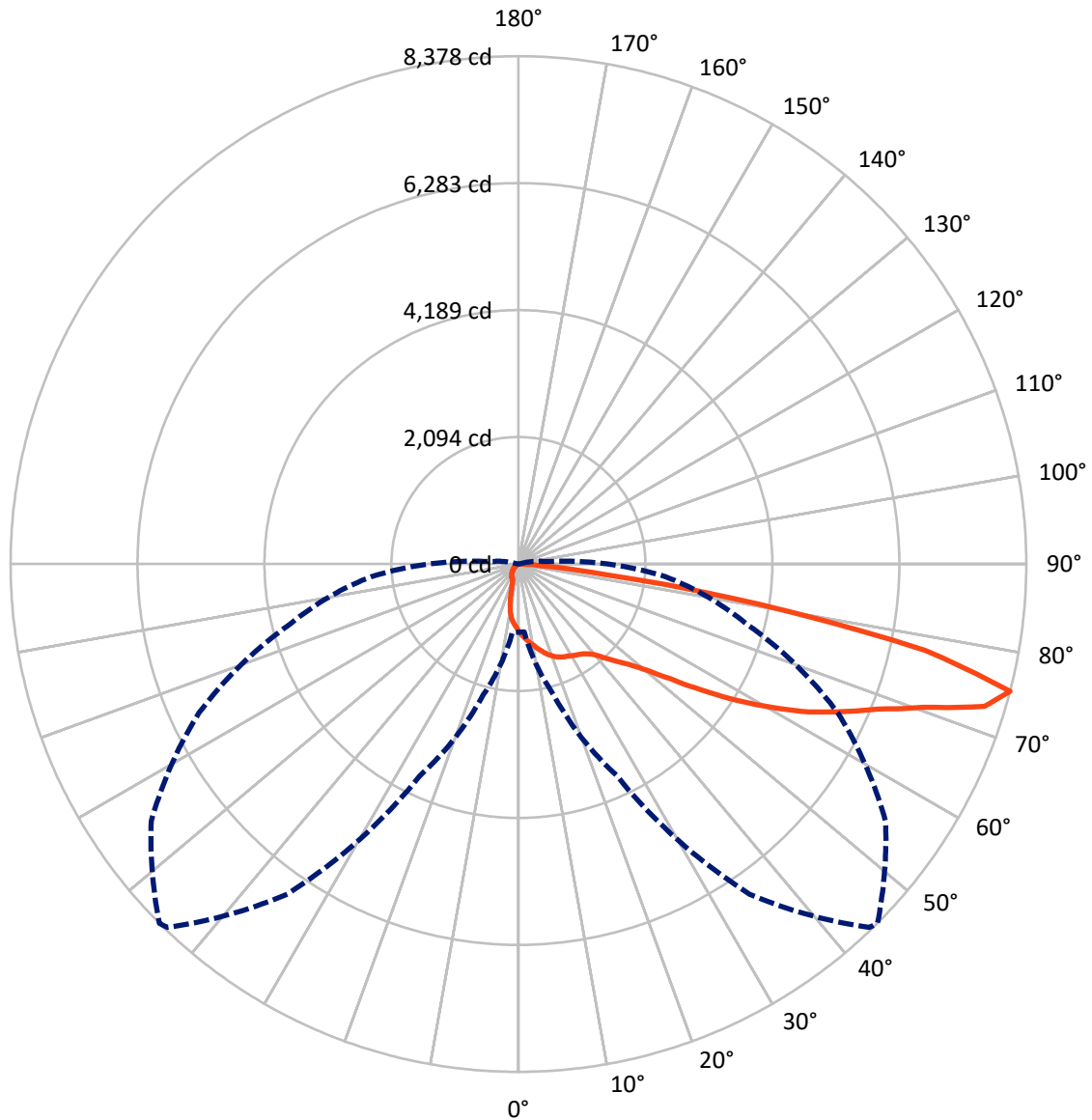


Based on 20 foot mounting height. Maximum calculated value = 3.7 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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



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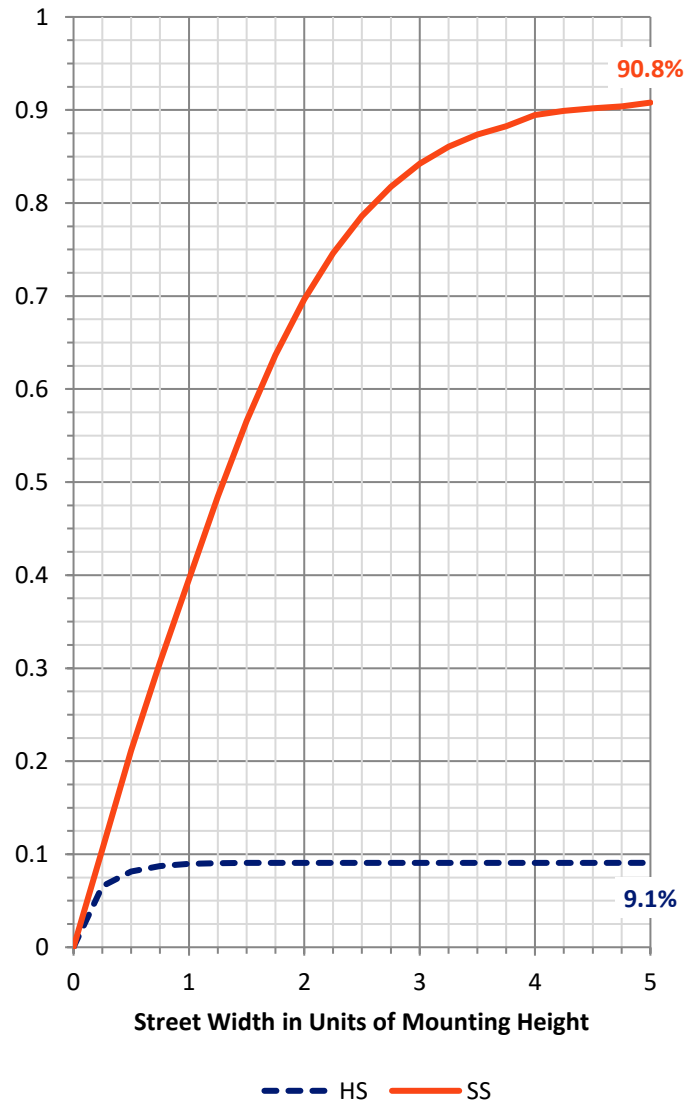
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	953.1	0.0	953.1
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	9466.3	0.0	9466.3
	% Fixture	90.9	0.0	90.9
Total	Lumens	10419.4	0.0	10419.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.2	1.0
10°-20°	298.0	2.9
20°-30°	493.5	4.7
30°-40°	714.2	6.9
40°-50°	1169.4	11.2
50°-60°	2083.7	20.0
60°-70°	3063.3	29.4
70°-80°	2310.9	22.2
80°-90°	181.3	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°	10419.4	100.0
0°-180°	10419.4	100.0



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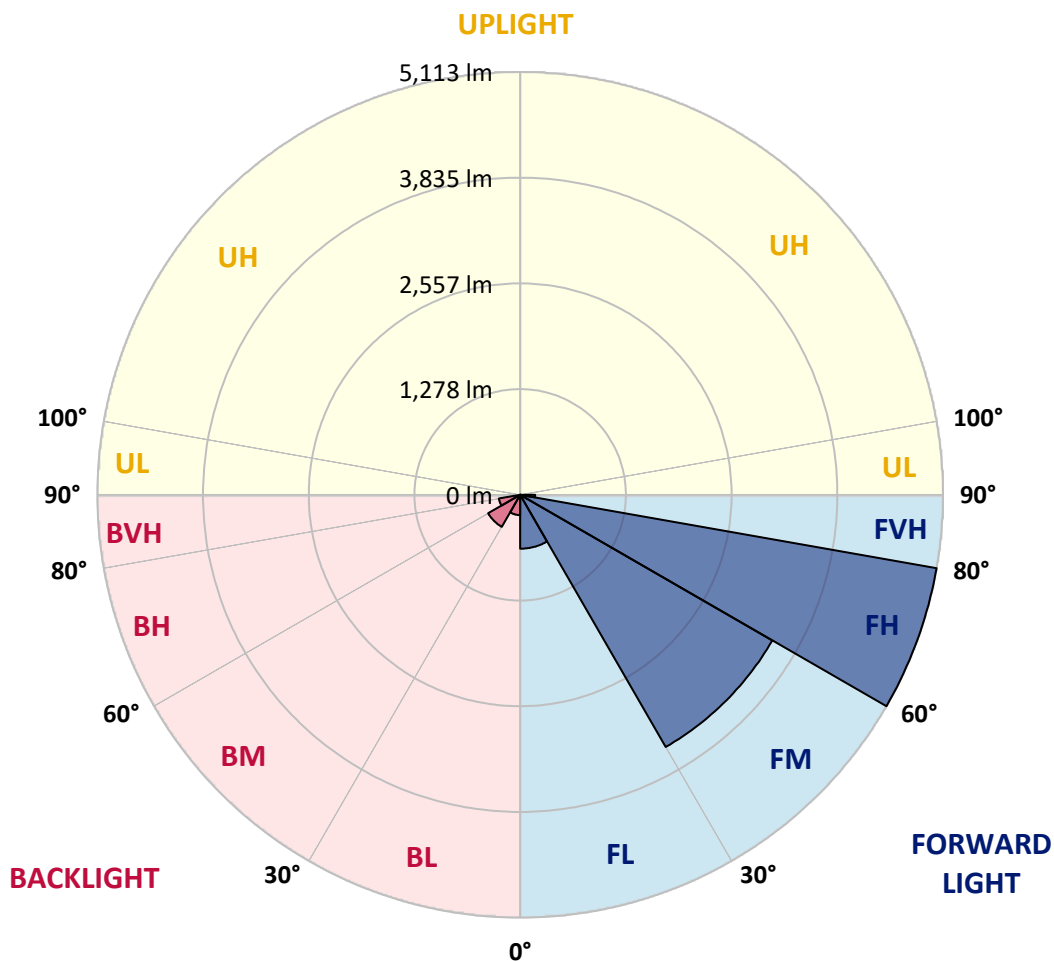
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	651.7	6.3			
FM	(30°-60°)	3520.7	33.8			
FH	(60°-80°)	5113.2	49.1			G3/7500
FVH	(80°-90°)	180.8	1.7			G2/225
BL	(0°-30°)	244.9	2.4	B1/500		
BM	(30°-60°)	446.6	4.3	B1/1000		
BH	(60°-80°)	261.0	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-G3

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1114.3	1114.3	1114.3	1114.3	1114.3	1114.3	1114.3	1114.3	1114.3	1114.3	1114.3
2.5°	1210.6	1210.6	1208.1	1205.6	1193.3	1181.0	1178.5	1171.1	1148.9	1134.1	1119.4
5°	1311.6	1314.1	1309.2	1296.9	1269.8	1242.6	1240.2	1220.4	1178.5	1148.9	1117.0
7.5°	1407.9	1412.8	1400.4	1378.2	1346.2	1306.8	1304.2	1267.2	1213.0	1171.1	1124.3
10°	1489.2	1489.2	1472.0	1444.8	1410.2	1368.4	1363.4	1321.4	1259.9	1208.1	1146.4
12.5°	1578.0	1575.4	1550.8	1513.9	1474.4	1435.0	1432.4	1380.7	1321.4	1254.9	1178.5
15°	1659.3	1654.4	1622.2	1587.8	1545.9	1503.9	1501.4	1449.8	1388.2	1309.2	1225.4
17.5°	1703.6	1701.2	1671.7	1637.2	1602.5	1570.5	1568.1	1513.9	1447.3	1366.0	1272.2
20°	1711.1	1713.5	1688.9	1659.3	1639.5	1622.2	1622.2	1573.0	1501.4	1415.2	1321.4
22.5°	1713.5	1721.0	1703.6	1664.2	1659.3	1661.8	1666.6	1627.2	1553.3	1472.0	1373.2
25°	1730.8	1740.6	1728.2	1681.4	1676.5	1693.8	1698.8	1681.4	1615.0	1533.5	1432.4
27.5°	1765.3	1775.2	1765.3	1706.2	1698.8	1716.0	1721.0	1730.8	1681.4	1592.8	1494.2
30°	1834.3	1836.9	1814.7	1740.6	1725.9	1748.0	1755.5	1782.5	1743.2	1649.4	1553.3
32.5°	1955.2	1930.5	1864.0	1765.3	1753.0	1777.7	1785.0	1814.7	1799.8	1703.6	1615.0
35°	2201.7	2073.5	1920.7	1799.8	1787.4	1812.2	1822.0	1864.0	1871.3	1780.1	1691.4
37.5°	2199.2	2083.3	2053.7	1866.4	1849.2	1866.4	1878.7	1930.5	1960.1	1881.2	1802.3
40°	2354.5	2305.3	2305.3	1992.1	1935.4	1960.1	1972.4	2024.2	2076.0	2014.3	1933.0
42.5°	2842.7	2810.6	2776.1	2233.7	2056.2	2125.3	2132.7	2164.7	2226.4	2206.6	2110.5
45°	3387.6	3358.0	3224.8	2643.1	2263.3	2275.6	2293.0	2344.7	2433.5	2470.5	2357.1
47.5°	3814.2	3784.6	3671.2	3136.2	2586.3	2477.9	2477.9	2578.9	2717.1	2810.6	2702.2
50°	4156.8	4122.3	4053.3	3661.3	3116.4	2768.8	2753.9	2872.3	3077.0	3222.4	3148.5
52.5°	4489.6	4388.6	4346.7	4203.7	3715.5	3190.4	3151.0	3234.7	3518.3	3698.2	3636.6
55°	4711.6	4696.8	4652.4	4701.6	4344.3	3703.3	3668.7	3685.9	4040.9	4161.8	4085.3
57.5°	4918.7	4916.2	5014.9	5244.1	5029.6	4289.9	4235.8	4208.6	4546.4	4516.8	4583.4
60°	5175.1	5130.7	5360.0	5688.0	5658.3	4861.9	4800.4	4746.1	4933.5	4849.7	5180.0
62.5°	5187.4	5175.1	5641.0	6112.0	6282.1	5443.9	5372.4	5177.7	5271.3	5175.1	5749.6
65°	4716.6	4778.2	5759.5	6336.4	6804.8	5954.2	5867.9	5564.7	5572.0	5508.0	6420.1
67.5°	4610.6	4642.6	5433.9	6578.0	7182.0	6469.6	6388.1	6010.9	5922.2	5927.0	6817.1
70°	4346.7	4396.0	5029.6	6560.7	7480.4	7157.3	7075.9	6666.7	6452.3	6213.0	6511.5
72.5°	3321.0	3404.8	4238.3	5752.0	7399.0	8057.3	8035.1	7497.7	6664.3	5705.1	4926.0
75°	1124.3	1121.9	2226.4	3863.5	6647.0	8333.4	8377.9	7394.0	5813.7	3934.9	2445.7
77.5°	241.6	244.1	458.6	1565.6	4415.8	6691.5	6861.6	5576.9	3750.1	1753.0	559.6
80°	118.3	120.8	189.8	414.2	1765.3	3752.5	4018.7	2867.4	1385.6	350.1	93.8
82.5°	59.2	61.7	98.6	219.5	653.3	1333.9	1425.2	1055.1	397.0	197.3	46.8
85°	22.2	22.2	49.2	130.7	298.3	313.1	384.7	305.8	239.2	160.3	12.3
87.5°	4.9	4.9	27.0	64.0	133.0	98.6	98.6	93.8	145.4	108.4	4.9
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°	1114.3	1114.3	1114.3	1114.3	1114.3	1114.3	1114.3	1114.3	1114.3	1114.3	1114.3
2.5°	1111.9	1102.1	1084.9	1067.5	1055.1	1040.4	1033.1	1025.7	1023.2	1020.7	1025.7
5°	1099.6	1084.9	1052.8	1025.7	1001.0	981.3	966.4	951.7	944.3	939.4	941.9
7.5°	1099.6	1077.4	1030.5	988.7	949.1	907.3	865.3	833.4	808.7	793.9	796.3
10°	1111.9	1082.4	1020.7	964.1	890.0	801.3	710.1	641.0	594.1	567.1	567.1
12.5°	1139.1	1099.6	1023.2	934.4	808.7	653.3	515.3	431.5	397.0	377.2	379.8
15°	1176.1	1129.2	1035.6	895.0	695.3	485.8	360.0	305.8	305.8	310.6	313.1
17.5°	1217.9	1166.2	1045.4	835.9	549.9	347.6	283.5	278.7	286.0	298.3	298.3
20°	1259.9	1203.2	1050.3	742.1	411.8	276.0	268.8	268.8	273.7	286.0	288.4
22.5°	1311.6	1250.0	1045.4	626.3	308.2	261.3	258.9	258.9	258.9	273.7	273.7
25°	1366.0	1304.2	1025.7	503.1	261.3	251.4	249.0	246.6	246.6	258.9	261.3
27.5°	1427.5	1360.9	978.9	384.7	246.6	241.6	239.2	234.2	234.2	244.1	244.1
30°	1489.2	1425.2	907.3	291.0	234.2	231.8	226.8	221.9	217.0	226.8	226.8
32.5°	1555.8	1491.6	813.7	231.8	217.0	217.0	214.4	207.1	202.2	207.1	209.6
35°	1644.4	1568.1	707.7	202.2	194.8	194.8	194.8	192.2	182.4	187.3	187.3
37.5°	1762.8	1674.1	584.3	187.3	177.5	172.6	172.6	172.6	165.2	167.7	167.7
40°	1913.2	1797.4	466.0	175.1	165.2	152.8	148.0	150.3	145.4	145.4	143.0
42.5°	2117.8	1930.5	350.1	165.2	155.3	138.1	128.2	125.8	120.8	118.3	118.3
45°	2411.3	2093.2	251.4	155.3	148.0	120.8	110.9	103.6	91.2	83.8	83.8
47.5°	2790.9	2278.1	187.3	145.4	140.6	106.0	93.8	79.0	61.7	56.8	56.8
50°	3254.5	2485.3	157.8	130.7	128.2	93.8	74.0	51.8	34.6	29.6	32.1
52.5°	3705.7	2680.1	140.6	115.9	113.5	81.3	54.3	27.0	14.8	14.8	14.8
55°	4085.3	2818.2	128.2	103.6	98.6	64.0	29.6	12.3	7.4	7.4	7.4
57.5°	4428.0	2896.9	115.9	91.2	79.0	44.3	12.3	4.9	4.9	2.4	2.4
60°	4741.2	2943.8	101.1	79.0	61.7	24.7	4.9	2.4	2.4	0.0	0.0
62.5°	5049.4	2978.3	86.2	64.0	46.8	9.8	2.4	2.4	0.0	0.0	0.0
65°	5283.7	2966.1	69.0	51.8	29.6	4.9	2.4	0.0	0.0	0.0	0.0
67.5°	5276.1	2798.4	51.8	39.4	14.8	2.4	0.0	0.0	0.0	0.0	0.0
70°	4718.9	2357.1	34.6	24.7	4.9	2.4	0.0	0.0	0.0	0.0	0.0
72.5°	3348.2	1511.4	22.2	14.8	2.4	0.0	0.0	0.0	0.0	0.0	0.0
75°	1474.4	458.6	12.3	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	288.4	106.0	7.4	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	69.0	12.3	2.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	29.6	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.9	2.4	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)