

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: P265624

Luminaire Tested: **ARCH-L-AF72-140-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265624
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-AF72-140-D-U-T4W-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 620mA 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: 11847.5 lumens
Efficiency: N/A
Efficacy: 82.8 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 - G3

Input Watts (W): 143
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

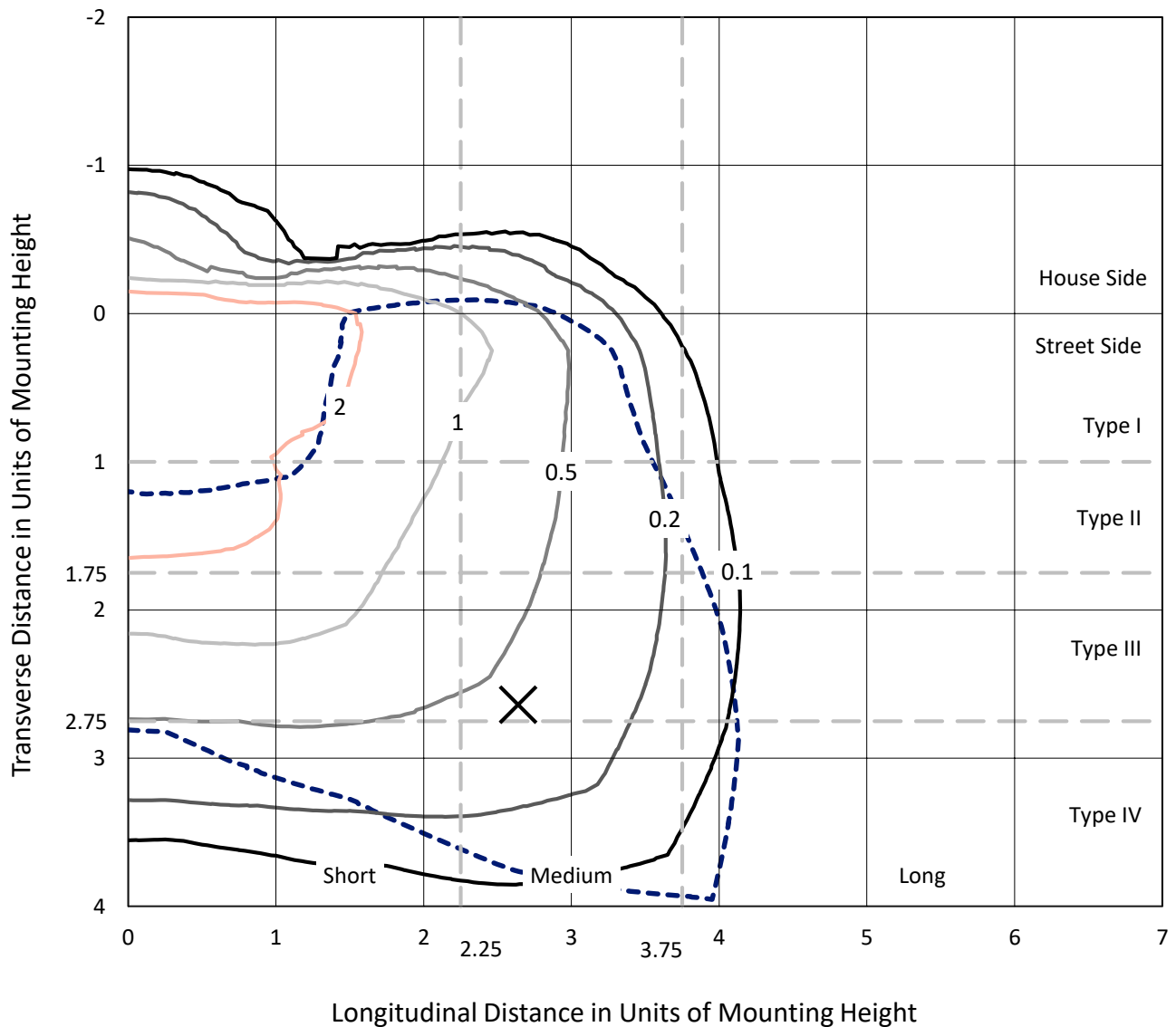


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

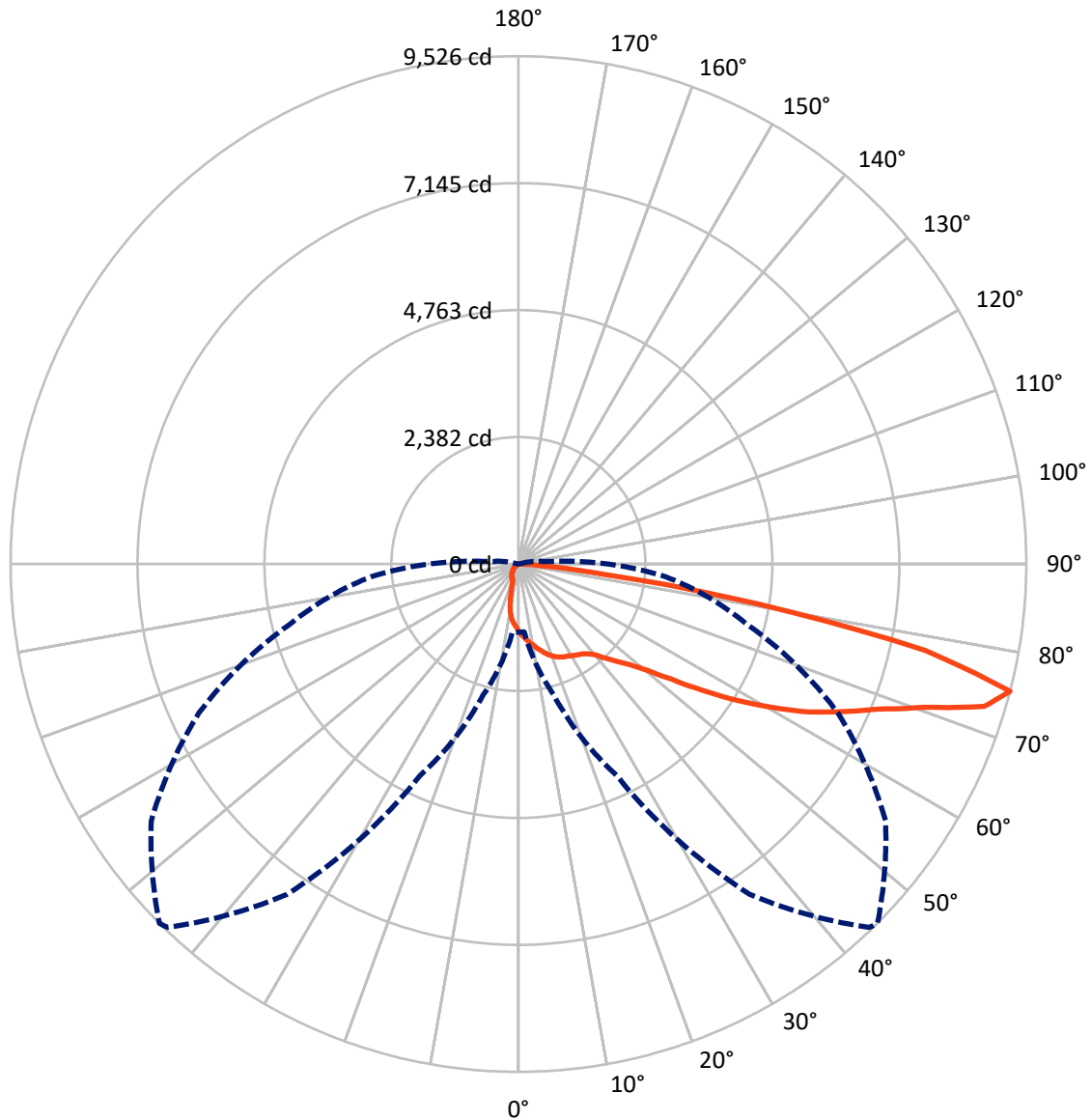


Based on 20 foot mounting height. Maximum calculated value = 4.2 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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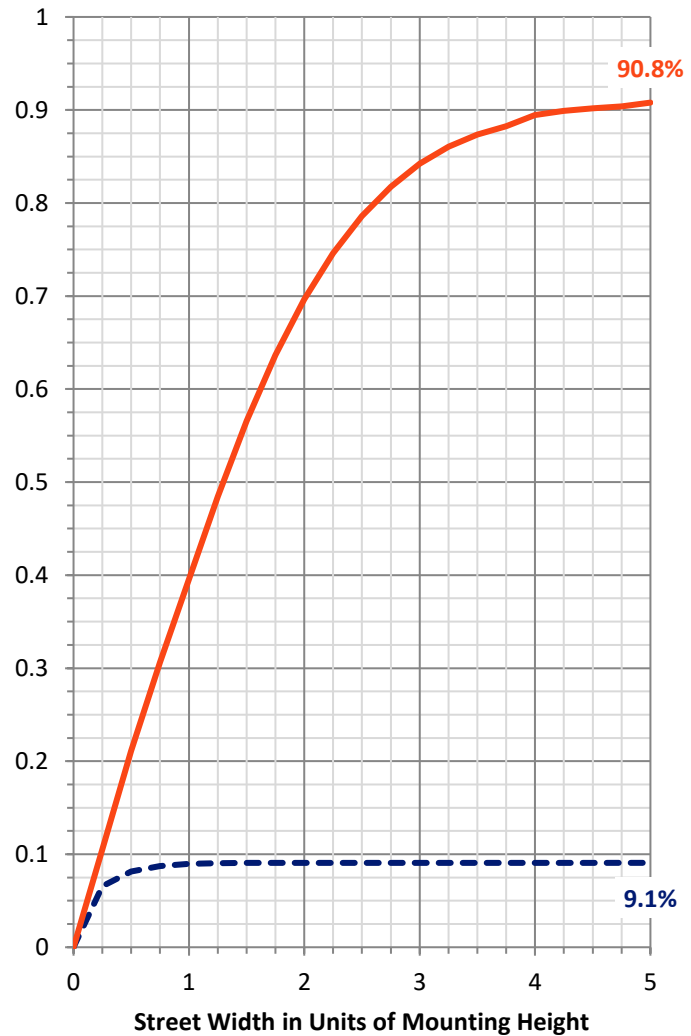
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1083.7	0.0	1083.7
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	10763.8	0.0	10763.8
	% Fixture	90.9	0.0	90.9
Total	Lumens	11847.5	0.0	11847.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.6	1.0
10°-20°	338.8	2.9
20°-30°	561.1	4.7
30°-40°	812.1	6.9
40°-50°	1329.7	11.2
50°-60°	2369.3	20.0
60°-70°	3483.1	29.4
70°-80°	2627.7	22.2
80°-90°	206.2	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°	11847.5	100.0
0°-180°	11847.5	100.0



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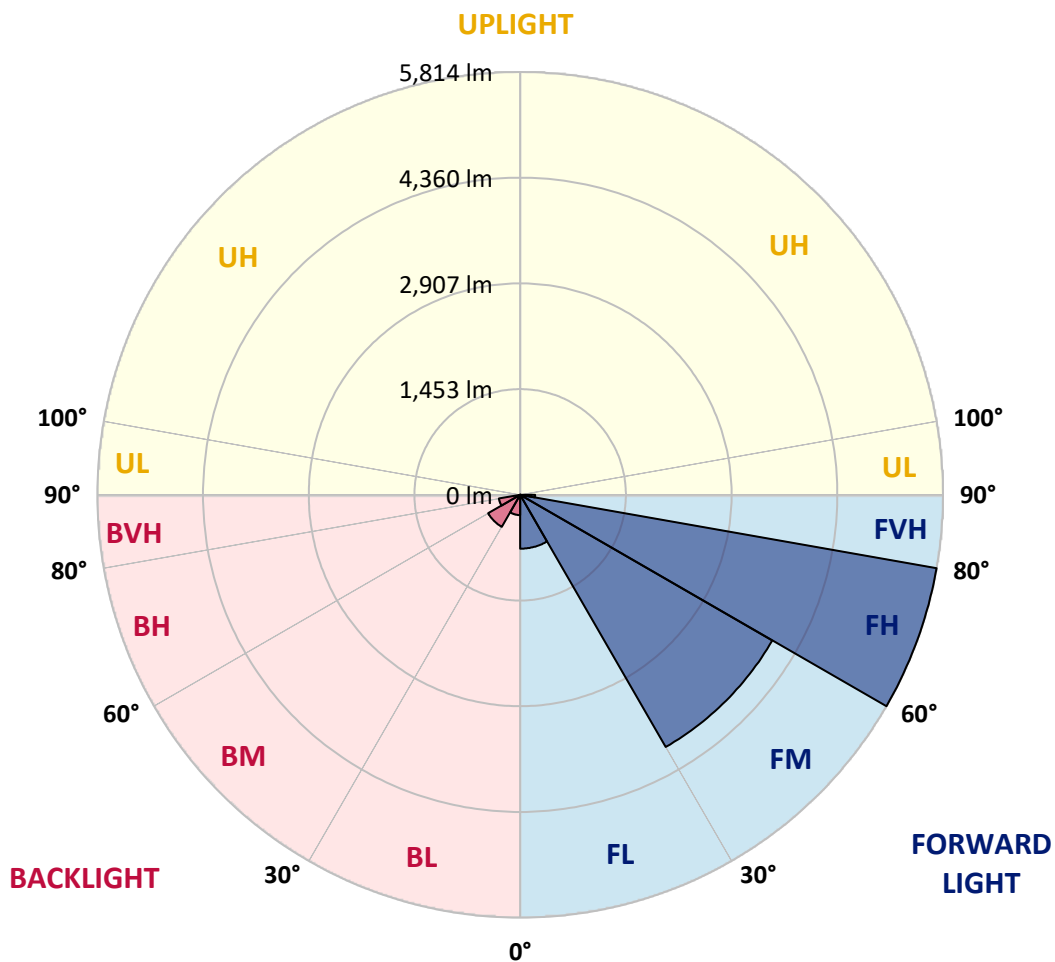
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	741.0	6.3			
FM	(30°-60°)	4003.2	33.8			
FH	(60°-80°)	5814.0	49.1			G3/7500
FVH	(80°-90°)	205.6	1.7			G2/225
BL	(0°-30°)	278.5	2.4	B1/500		
BM	(30°-60°)	507.8	4.3	B1/1000		
BH	(60°-80°)	296.8	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°	1267.1	1267.1	1267.1	1267.1	1267.1	1267.1	1267.1	1267.1	1267.1	1267.1	1267.1
2.5°	1376.6	1376.6	1373.7	1370.9	1356.9	1342.8	1340.0	1331.6	1306.3	1289.5	1272.8
5°	1491.5	1494.2	1488.6	1474.6	1443.8	1412.9	1410.1	1387.7	1340.0	1306.3	1269.9
7.5°	1600.8	1606.3	1592.3	1567.2	1530.7	1485.8	1483.0	1441.1	1379.3	1331.6	1278.4
10°	1693.2	1693.2	1673.6	1642.8	1603.6	1556.0	1550.2	1502.7	1432.5	1373.7	1303.6
12.5°	1794.2	1791.4	1763.4	1721.3	1676.4	1631.6	1628.7	1569.9	1502.7	1427.0	1340.0
15°	1886.7	1881.1	1844.7	1805.5	1757.8	1710.2	1707.3	1648.4	1578.3	1488.6	1393.4
17.5°	1937.1	1934.4	1900.8	1861.5	1822.2	1785.8	1783.0	1721.3	1645.7	1553.1	1446.6
20°	1945.5	1948.3	1920.3	1886.7	1864.3	1844.7	1844.7	1788.5	1707.3	1609.1	1502.7
22.5°	1948.3	1956.8	1937.1	1892.3	1886.7	1889.6	1895.2	1850.2	1766.2	1673.6	1561.6
25°	1967.9	1979.2	1965.2	1912.0	1906.4	1926.0	1931.5	1912.0	1836.2	1743.7	1628.7
27.5°	2007.3	2018.5	2007.3	1940.0	1931.5	1951.2	1956.8	1967.9	1912.0	1811.1	1698.9
30°	2085.8	2088.6	2063.3	1979.2	1962.3	1987.6	1996.0	2026.8	1982.0	1875.5	1766.2
32.5°	2223.1	2195.1	2119.5	2007.3	1993.2	2021.2	2029.7	2063.3	2046.5	1937.1	1836.2
35°	2503.4	2357.7	2183.9	2046.5	2032.4	2060.5	2071.8	2119.5	2127.8	2024.2	1923.1
37.5°	2500.6	2368.9	2335.2	2122.2	2102.6	2122.2	2136.2	2195.1	2228.8	2139.0	2049.4
40°	2677.3	2621.3	2621.3	2265.2	2200.7	2228.8	2242.8	2301.5	2360.4	2290.4	2198.0
42.5°	3232.3	3195.9	3156.6	2539.9	2338.1	2416.6	2425.0	2461.4	2531.6	2509.1	2399.7
45°	3851.9	3818.2	3666.9	3005.3	2573.6	2587.6	2607.2	2666.1	2767.0	2809.0	2680.1
47.5°	4336.8	4303.3	4174.3	3565.9	2940.8	2817.4	2817.4	2932.3	3089.5	3195.9	3072.6
50°	4726.6	4687.4	4608.8	4163.0	3543.5	3148.3	3131.4	3266.0	3498.7	3664.0	3579.9
52.5°	5105.1	4990.2	4942.5	4779.8	4224.8	3627.6	3582.8	3678.1	4000.5	4205.1	4135.1
55°	5357.3	5340.6	5290.1	5346.2	4939.6	4210.7	4171.5	4191.1	4594.8	4732.2	4645.2
57.5°	5592.8	5590.1	5702.3	5962.9	5719.0	4877.9	4816.4	4785.5	5169.6	5135.9	5211.5
60°	5884.3	5834.0	6094.7	6467.4	6433.9	5528.3	5458.3	5396.6	5609.6	5514.3	5889.9
62.5°	5898.5	5884.3	6414.3	6949.6	7143.1	6190.0	6108.7	5887.2	5993.8	5884.3	6537.5
65°	5362.9	5433.0	6548.9	7204.9	7737.6	6770.3	6672.3	6327.3	6335.7	6262.9	7300.2
67.5°	5242.4	5278.9	6178.7	7479.6	8166.4	7356.2	7263.6	6834.8	6733.9	6739.4	7751.5
70°	4942.5	4998.4	5719.0	7460.0	8505.6	8138.4	8045.8	7580.4	7336.5	7064.6	7403.9
72.5°	3776.3	3871.5	4819.0	6540.4	8413.0	9161.6	9136.4	8525.3	7577.7	6487.1	5601.2
75°	1278.4	1275.6	2531.6	4393.0	7558.1	9475.6	9526.0	8407.4	6610.4	4474.3	2781.1
77.5°	274.7	277.5	521.5	1780.3	5020.9	7608.6	7802.0	6341.3	4264.1	1993.2	636.4
80°	134.6	137.4	215.9	471.0	2007.3	4266.8	4569.6	3260.4	1575.5	398.0	106.4
82.5°	67.4	70.1	112.2	249.5	742.9	1516.7	1620.5	1199.9	451.4	224.2	53.3
85°	25.2	25.2	56.1	148.6	339.2	356.1	437.4	347.6	271.9	182.3	14.1
87.5°	5.6	5.6	30.8	72.9	151.4	112.2	112.2	106.4	165.4	123.3	5.6
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°	1267.1	1267.1	1267.1	1267.1	1267.1	1267.1	1267.1	1267.1	1267.1	1267.1	1267.1
2.5°	1264.4	1253.1	1233.6	1213.9	1199.9	1183.1	1174.7	1166.2	1163.5	1160.6	1166.2
5°	1250.4	1233.6	1197.1	1166.2	1138.2	1115.8	1098.9	1082.1	1073.7	1068.2	1070.9
7.5°	1250.4	1225.1	1171.7	1124.1	1079.4	1031.7	984.1	947.5	919.5	902.6	905.5
10°	1264.4	1230.7	1160.6	1096.1	1012.0	911.2	807.3	728.9	675.6	644.9	644.9
12.5°	1295.1	1250.4	1163.5	1062.4	919.5	742.9	586.0	490.7	451.4	428.9	431.7
15°	1337.2	1283.9	1177.5	1017.6	790.6	552.3	409.3	347.6	347.6	353.3	356.1
17.5°	1384.8	1326.0	1188.6	950.3	625.2	395.3	322.4	316.8	325.1	339.2	339.2
20°	1432.5	1368.1	1194.2	843.9	468.1	314.0	305.6	305.6	311.3	325.1	328.1
22.5°	1491.5	1421.4	1188.6	712.0	350.3	297.2	294.4	294.4	294.4	311.3	311.3
25°	1553.1	1483.0	1166.2	572.0	297.2	285.9	283.1	280.4	280.4	294.4	297.2
27.5°	1623.1	1547.5	1113.0	437.4	280.4	274.7	271.9	266.3	266.3	277.5	277.5
30°	1693.2	1620.5	1031.7	330.8	266.3	263.6	258.0	252.3	246.8	258.0	258.0
32.5°	1768.9	1696.1	925.2	263.6	246.8	246.8	243.9	235.4	229.8	235.4	238.3
35°	1869.9	1783.0	804.6	229.8	221.4	221.4	221.4	218.6	207.5	213.1	213.1
37.5°	2004.5	1903.5	664.3	213.1	201.8	196.2	196.2	196.2	187.8	190.6	190.6
40°	2175.4	2043.7	529.8	199.1	187.8	173.8	168.3	170.9	165.4	165.4	162.7
42.5°	2408.1	2195.1	398.0	187.8	176.5	157.1	145.7	143.0	137.4	134.6	134.6
45°	2741.7	2380.1	285.9	176.5	168.3	137.4	126.1	117.8	103.8	95.3	95.3
47.5°	3173.5	2590.4	213.1	165.4	159.8	120.6	106.4	89.7	70.1	64.5	64.5
50°	3700.5	2825.9	179.4	148.6	145.7	106.4	84.1	58.8	39.3	33.6	36.4
52.5°	4213.6	3047.3	159.8	131.7	128.9	92.5	61.7	30.8	16.8	16.8	16.8
55°	4645.2	3204.3	145.7	117.8	112.2	72.9	33.6	14.1	8.4	8.4	8.4
57.5°	5035.0	3294.1	131.7	103.8	89.7	50.5	14.1	5.6	5.6	2.9	2.9
60°	5391.0	3347.4	115.0	89.7	70.1	28.0	5.6	2.9	2.9	0.0	0.0
62.5°	5741.4	3386.5	98.2	72.9	53.3	11.1	2.9	2.9	0.0	0.0	0.0
65°	6007.8	3372.5	78.5	58.8	33.6	5.6	2.9	0.0	0.0	0.0	0.0
67.5°	5999.3	3181.8	58.8	44.8	16.8	2.9	0.0	0.0	0.0	0.0	0.0
70°	5365.8	2680.1	39.3	28.0	5.6	2.9	0.0	0.0	0.0	0.0	0.0
72.5°	3807.0	1718.5	25.2	16.8	2.9	0.0	0.0	0.0	0.0	0.0	0.0
75°	1676.4	521.5	14.1	8.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	328.1	120.6	8.4	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	78.5	14.1	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	33.6	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.4	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.6	2.9	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)