

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: P198653

Luminaire Tested: **XNV2-AF-02-LED-U-5NQ-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198653  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24130)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: XNV2-AF-02-LED-U-5NQ-800  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10245.9 lumens  
Efficiency: N/A  
Efficacy: 120.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B3 - U0 - G1

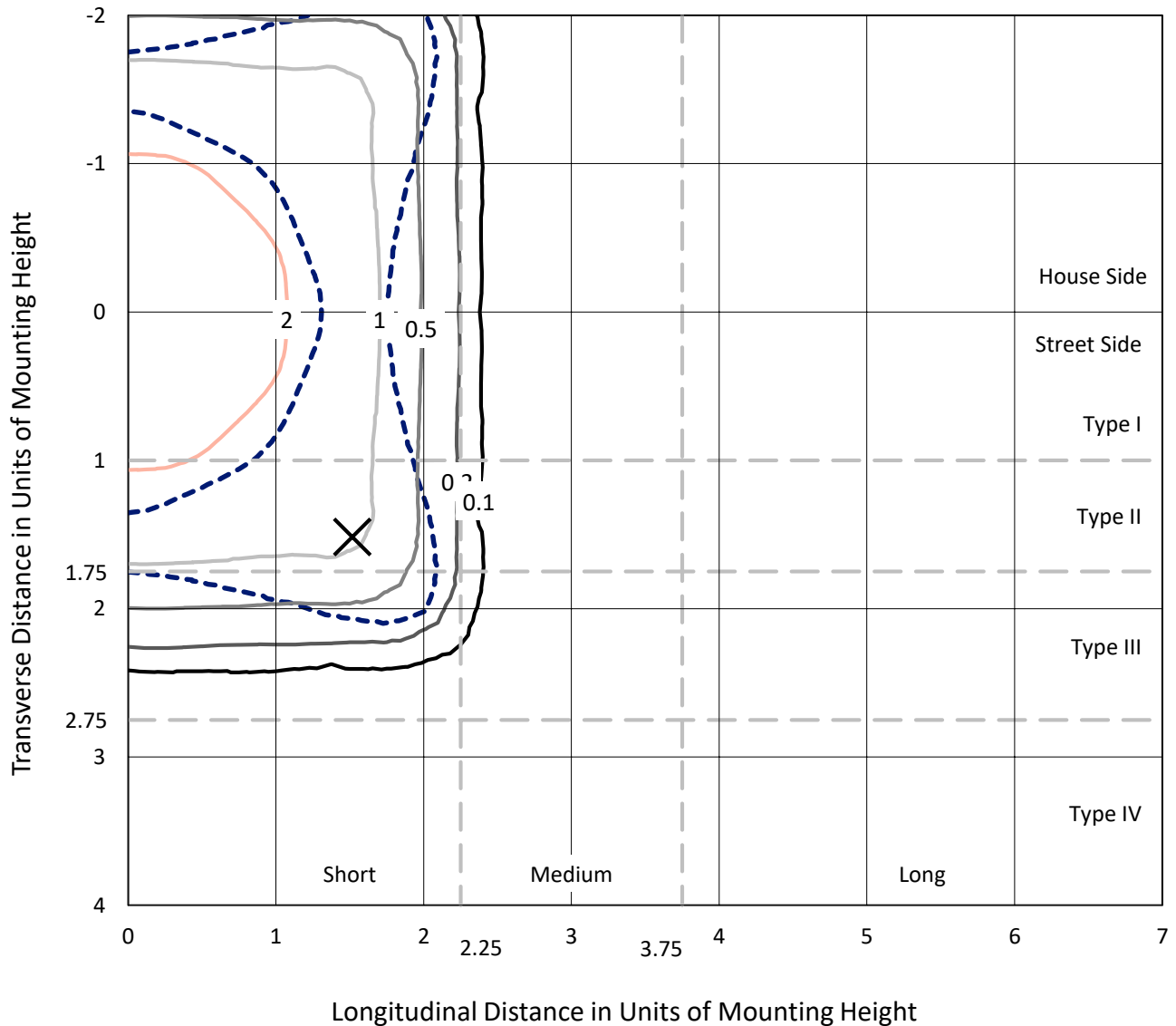
Input Watts (W): 85  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P198653  
 CATALOG NUMBER: XNV2-AF-02-LED-U-5NQ-800

### Iso-Footcandle Lines of Horizontal Illumination

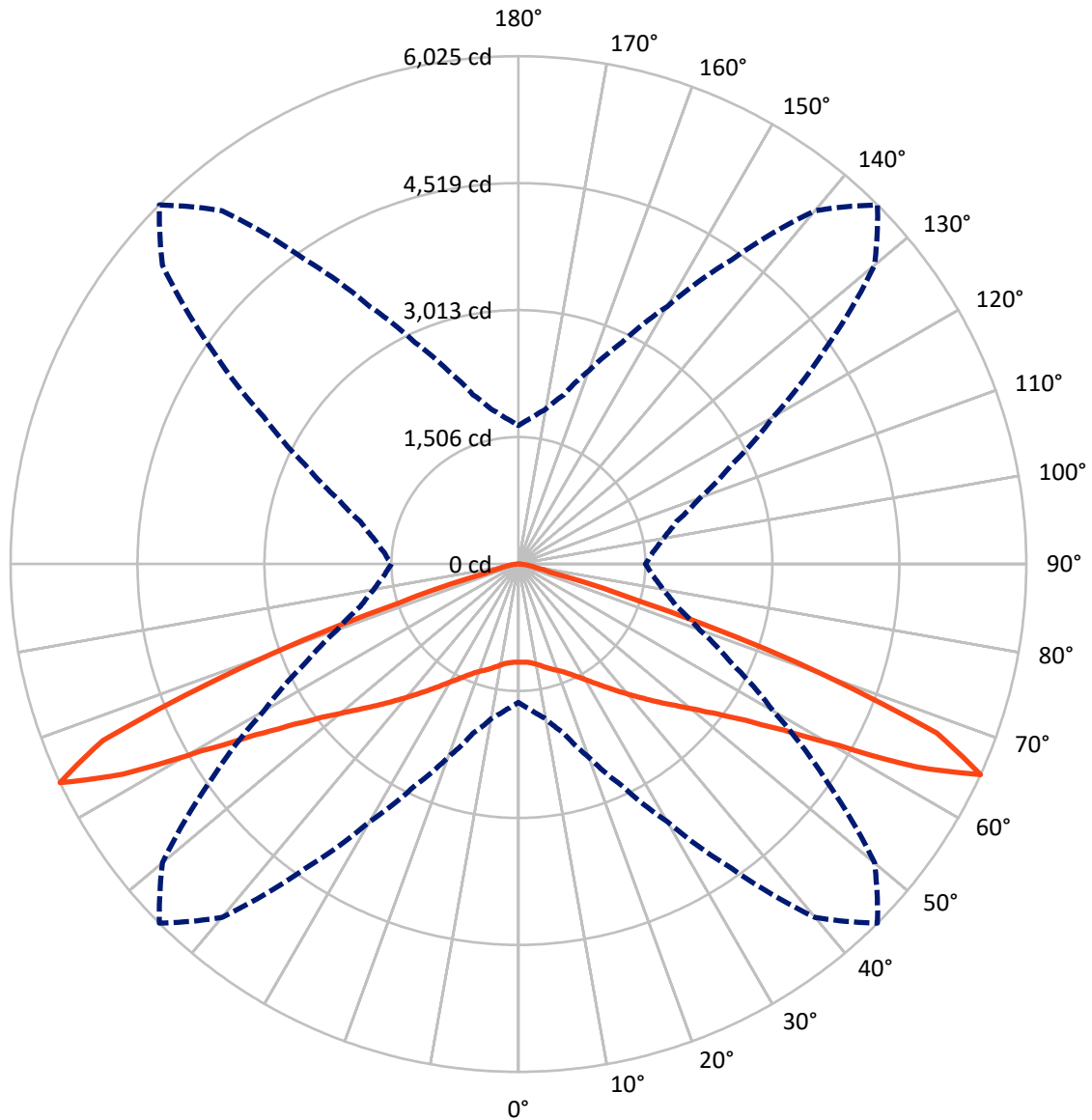
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.9 fc  
 Type V - Short - Full Cutoff

REPORT NUMBER: P198653  
CATALOG NUMBER: XNV2-AF-02-LED-U-5NQ-800

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P198653

CATALOG NUMBER: XNV2-AF-02-LED-U-5NQ-800

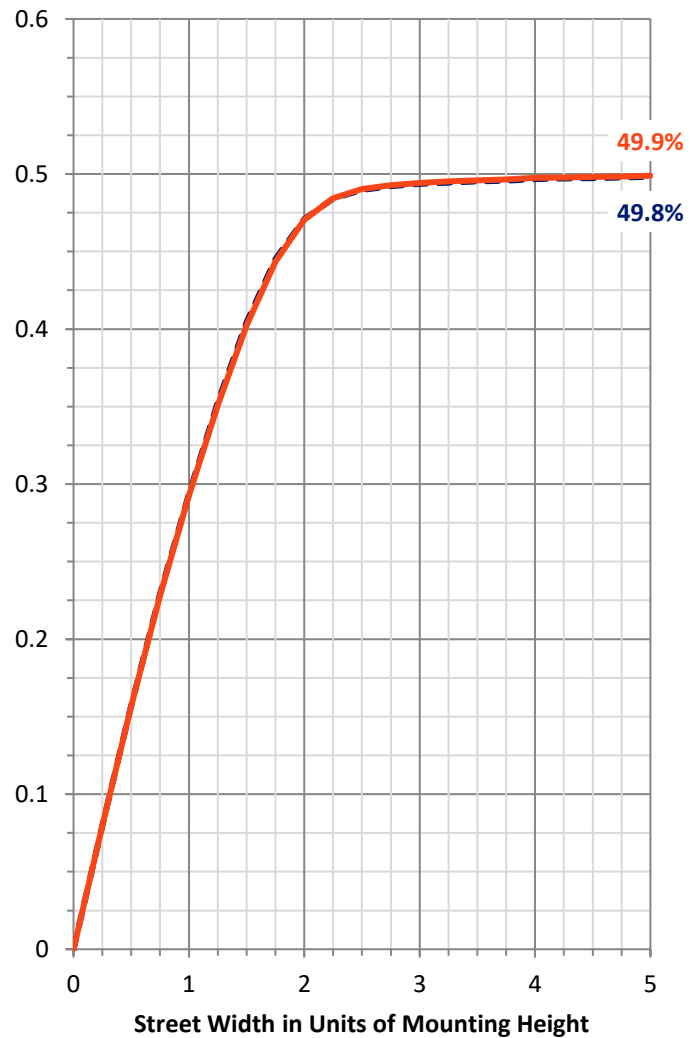
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5122.9	0.0	5122.9
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	5122.9	0.0	5122.9
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	10245.9	0.0	10245.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.5	1.1
10°-20°	363.8	3.6
20°-30°	678.6	6.6
30°-40°	1144.2	11.2
40°-50°	1858.5	18.1
50°-60°	2911.9	28.4
60°-70°	2748.7	26.8
70°-80°	370.4	3.6
80°-90°	56.4	0.6
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°	10245.9	100.0
0°-180°	10245.9	100.0



REPORT NUMBER: P198653

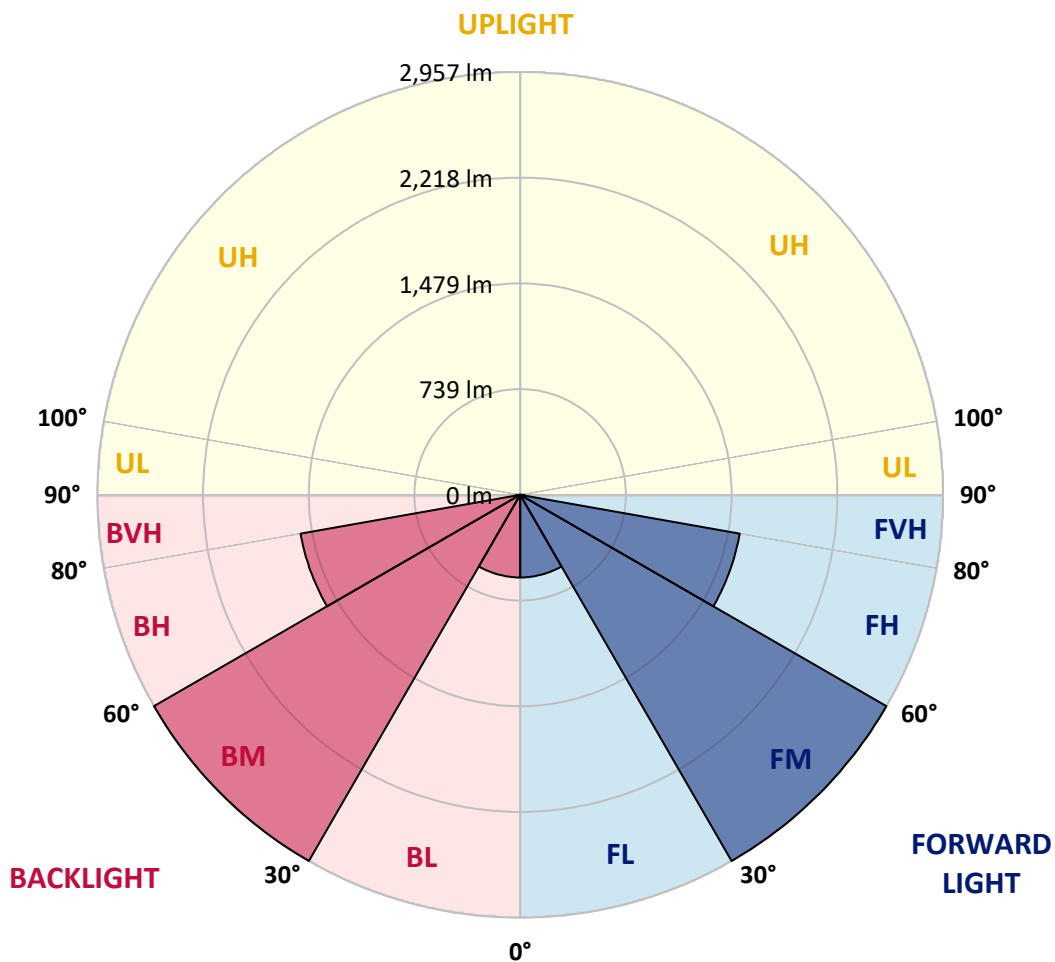
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	577.9	5.6			
FM	(30°-60°)	2957.3	28.9			
FH	(60°-80°)	1559.6	15.2			G1/1800
FVH	(80°-90°)	28.2	0.3			G1/100
BL	(0°-30°)	577.9	5.6	B2/1000		
BM	(30°-60°)	2957.3	28.9	B3/5000		
BH	(60°-80°)	1559.6	15.2	B3/2500		G1/1800
BVH	(80°-90°)	28.2	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G1**

Type V Short





REPORT NUMBER: P198653

CATALOG NUMBER: XNV2-AF-02-LED-U-5NQ-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1165.4	1165.4	1165.4	1165.4	1165.4	1165.4	1165.4	1165.4	1165.4	1165.4	1165.4
2.5°	1175.1	1175.1	1176.9	1176.3	1173.7	1171.8	1169.9	1167.4	1166.1	1164.8	1164.2
5°	1181.4	1181.4	1183.3	1182.7	1180.8	1178.2	1176.9	1175.1	1173.1	1171.8	1172.5
7.5°	1197.4	1198.0	1198.7	1198.0	1196.1	1194.2	1191.6	1191.0	1188.5	1186.5	1187.7
10°	1221.6	1221.6	1222.2	1222.9	1221.6	1217.1	1217.1	1215.9	1213.3	1210.8	1211.4
12.5°	1248.4	1248.4	1249.0	1249.0	1249.0	1246.5	1247.2	1246.5	1243.3	1242.1	1243.3
15°	1274.6	1275.2	1275.2	1276.5	1276.5	1277.2	1279.7	1279.7	1278.4	1277.8	1277.8
17.5°	1305.3	1306.5	1307.1	1309.1	1309.7	1311.0	1313.6	1314.2	1314.8	1312.9	1313.6
20°	1346.1	1346.7	1348.7	1349.3	1351.8	1351.8	1353.1	1352.4	1351.2	1348.7	1348.7
22.5°	1392.0	1393.4	1397.1	1397.1	1400.3	1398.4	1399.1	1397.1	1394.0	1392.6	1391.4
25°	1452.1	1453.9	1457.1	1455.9	1457.1	1453.9	1453.9	1453.9	1452.1	1450.1	1449.5
27.5°	1528.0	1524.8	1528.0	1525.4	1524.8	1522.3	1522.9	1521.6	1519.7	1519.1	1516.5
30°	1607.2	1603.3	1605.2	1605.8	1604.6	1604.0	1601.4	1599.5	1596.3	1596.9	1595.0
32.5°	1697.8	1693.9	1695.8	1696.5	1695.2	1696.5	1695.8	1691.3	1687.6	1690.1	1690.1
35°	1805.6	1803.1	1808.2	1810.1	1806.2	1804.4	1801.8	1796.7	1791.0	1794.8	1795.4
37.5°	1935.2	1932.0	1935.8	1940.9	1933.9	1930.1	1919.9	1912.2	1908.4	1910.3	1912.8
40°	2069.8	2070.5	2081.4	2082.6	2075.0	2070.5	2060.3	2048.8	2037.9	2037.9	2041.1
42.5°	2211.5	2213.5	2226.2	2230.7	2228.2	2219.9	2205.8	2191.8	2177.8	2180.3	2184.1
45°	2371.7	2369.3	2382.7	2393.5	2391.6	2389.0	2375.6	2350.0	2337.3	2336.6	2343.1
47.5°	2540.3	2545.4	2559.4	2577.9	2577.3	2570.9	2553.7	2530.1	2506.4	2508.4	2516.0
50°	2736.8	2743.9	2767.5	2786.0	2788.6	2786.6	2766.2	2738.7	2705.6	2707.4	2717.7
52.5°	2913.0	2923.2	2950.7	2989.0	3012.6	3023.4	3010.0	2984.5	2950.7	2952.5	2963.4
55°	3072.5	3088.5	3129.4	3181.7	3228.9	3272.9	3292.8	3292.2	3267.2	3272.9	3287.0
57.5°	3172.8	3195.1	3257.0	3341.3	3435.1	3523.9	3600.4	3672.5	3688.5	3718.5	3718.5
60°	3038.1	3090.4	3172.8	3317.0	3501.5	3700.6	3916.4	4126.3	4261.6	4368.2	4310.8
62.5°	2537.0	2614.3	2729.8	2920.0	3207.3	3562.7	3996.2	4484.4	4993.7	5305.2	5076.7
65°	1641.6	1738.6	1864.3	2078.1	2440.0	2897.7	3528.9	4406.6	5472.4	6025.2	5514.5
67.5°	650.4	716.2	792.7	944.6	1258.6	1708.0	2416.4	3498.9	4832.2	5353.7	4781.2
70°	310.9	321.7	336.3	368.9	447.4	603.7	970.8	1724.0	2963.4	3512.9	2892.6
72.5°	224.6	226.6	233.6	244.5	267.4	299.3	363.8	527.2	1021.8	1485.8	1023.2
75°	170.4	173.0	176.8	182.5	194.7	210.0	234.3	280.8	349.7	403.3	349.1
77.5°	129.6	132.2	135.3	141.1	147.4	158.3	167.3	185.8	215.1	226.6	225.3
80°	94.4	98.9	104.0	109.1	113.6	118.8	119.4	128.3	144.8	155.7	152.5
82.5°	60.0	63.8	77.2	83.0	83.6	84.9	84.3	84.9	93.8	101.5	98.9
85°	38.3	40.8	47.9	54.2	53.0	55.5	55.5	54.2	50.4	43.4	51.7
87.5°	19.1	19.7	23.0	28.7	27.4	24.2	23.6	23.6	17.2	14.7	16.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P198653

CATALOG NUMBER: XNV2-AF-02-LED-U-5NQ-800

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1165.4	1165.4	1165.4	1165.4	1165.4	1165.4	1165.4	1165.4
2.5°	1162.3	1163.5	1161.7	1161.7	1160.9	1162.3	1160.3	1160.3
5°	1171.2	1173.1	1172.5	1172.5	1173.7	1175.1	1174.3	1173.7
7.5°	1187.1	1188.5	1189.7	1190.3	1191.6	1191.0	1192.2	1191.6
10°	1211.4	1210.2	1212.1	1210.2	1210.8	1209.5	1210.2	1210.2
12.5°	1242.1	1240.1	1238.9	1237.6	1237.6	1235.0	1235.0	1235.6
15°	1277.2	1274.0	1271.4	1270.1	1268.9	1268.9	1266.9	1268.3
17.5°	1311.6	1308.5	1304.0	1304.0	1302.0	1300.8	1299.5	1302.7
20°	1348.0	1344.8	1342.2	1341.6	1337.8	1336.5	1337.1	1341.0
22.5°	1390.1	1388.2	1388.2	1386.9	1384.4	1382.4	1382.4	1386.9
25°	1447.0	1443.1	1443.7	1444.4	1443.1	1443.1	1441.8	1445.0
27.5°	1516.5	1513.4	1515.2	1516.5	1515.2	1517.1	1515.2	1517.8
30°	1598.2	1596.3	1598.2	1600.1	1596.9	1596.9	1595.6	1597.5
32.5°	1695.8	1693.3	1694.6	1694.6	1690.1	1686.2	1681.1	1685.0
35°	1803.1	1799.9	1802.4	1804.4	1799.3	1795.4	1787.7	1791.0
37.5°	1921.1	1922.4	1925.6	1933.9	1932.7	1926.2	1920.5	1923.0
40°	2053.3	2059.6	2073.7	2079.5	2078.1	2071.8	2064.1	2065.4
42.5°	2202.6	2210.9	2225.6	2235.1	2230.7	2221.7	2212.2	2216.0
45°	2365.4	2378.2	2397.3	2406.9	2401.1	2391.6	2378.2	2385.2
47.5°	2537.7	2563.2	2588.8	2601.6	2599.6	2586.2	2568.9	2570.9
50°	2743.9	2777.7	2810.3	2823.0	2813.4	2793.0	2768.7	2768.1
52.5°	3000.4	3036.8	3063.6	3060.5	3036.8	3004.9	2977.5	2976.2
55°	3320.8	3333.0	3329.2	3301.7	3260.2	3210.4	3175.3	3169.6
57.5°	3708.3	3667.4	3607.4	3524.5	3431.3	3336.8	3272.9	3249.4
60°	4181.8	3997.4	3783.0	3557.0	3350.9	3196.4	3098.7	3039.4
62.5°	4573.1	4038.9	3559.6	3167.1	2846.0	2655.2	2521.8	2439.4
65°	4439.1	3489.4	2794.9	2288.8	1938.4	1741.2	1600.1	1506.3
67.5°	3429.3	2331.5	1622.4	1124.6	852.7	721.9	630.5	571.2
70°	1729.0	894.2	541.9	382.3	326.8	303.8	288.5	279.6
72.5°	507.4	338.9	281.5	248.9	229.1	215.1	206.1	201.7
75°	280.8	229.1	202.3	183.8	171.0	161.5	155.7	151.9
77.5°	193.4	166.5	153.1	141.1	130.8	123.8	119.4	115.5
80°	135.3	121.9	116.2	109.8	102.1	96.4	90.0	87.5
82.5°	90.0	84.3	83.0	77.8	73.4	67.0	55.5	51.7
85°	53.0	52.4	52.4	50.4	47.3	41.5	33.1	33.1
87.5°	18.5	19.1	19.7	21.1	20.5	17.2	14.0	13.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)