

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: P199137

Luminaire Tested: **XNV2-AF-02-LED-U-5NQ-8030-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199137  
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-8030-1200  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V  
NARROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11098 lumens  
Efficiency: N/A  
Efficacy: 86.7 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): 128  
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

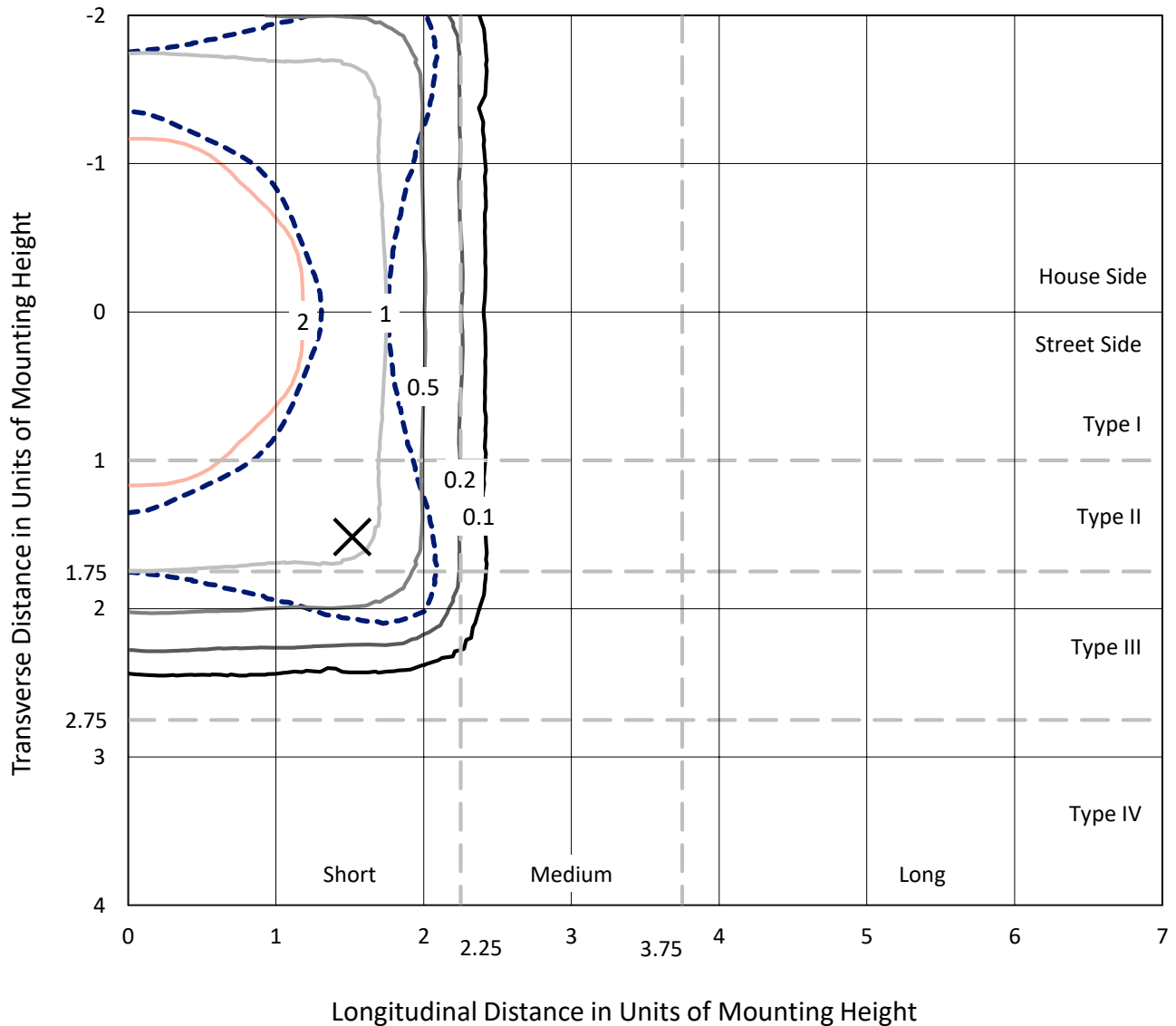


REPORT NUMBER: P199137

CATALOG NUMBER: XNV2-AF-02-LED-U-5NQ-8030-1200

### Iso-Footcandle Lines of Horizontal Illumination

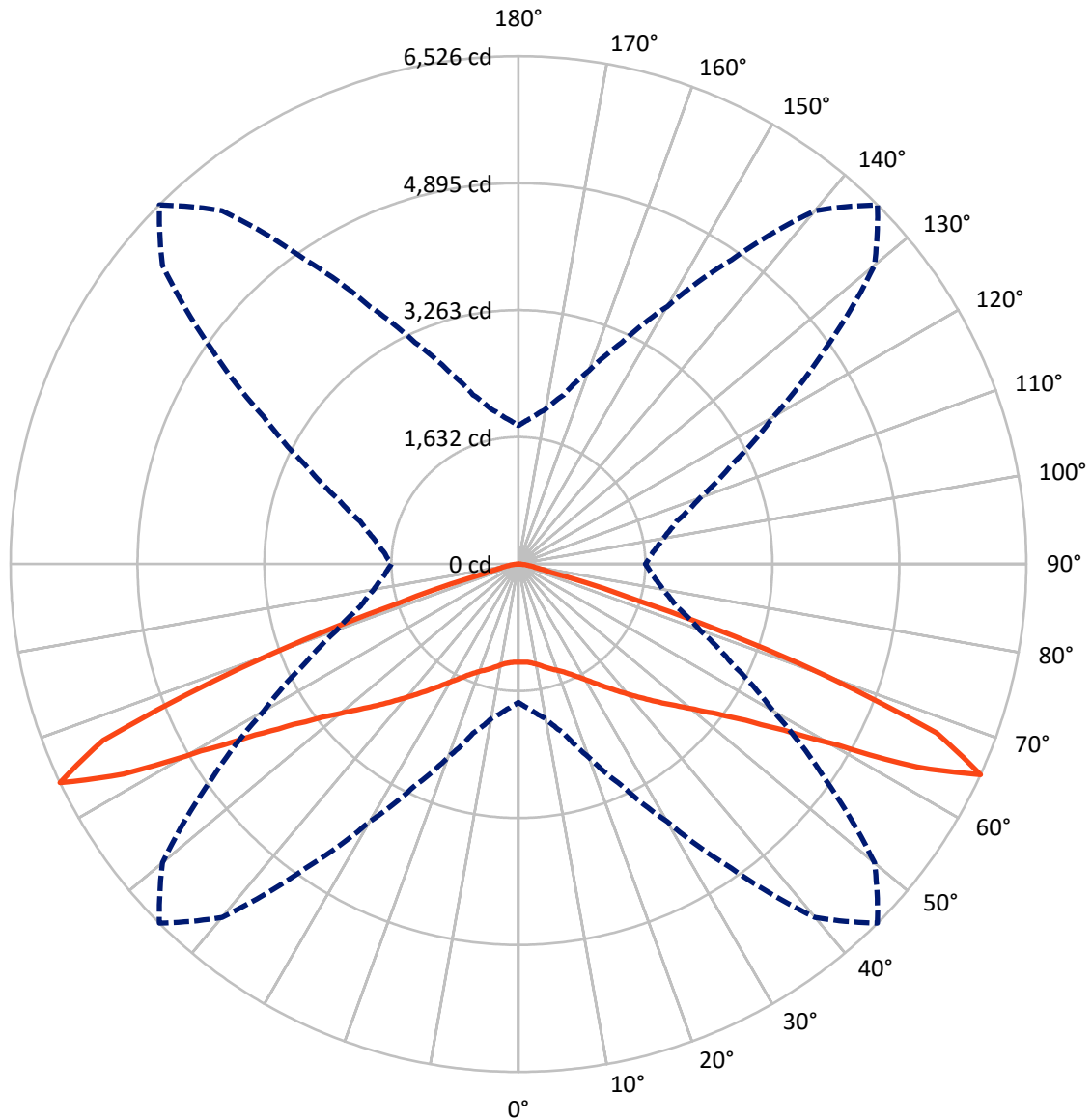
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.2 fc  
 Type V - Short - Full Cutoff

REPORT NUMBER: P199137  
CATALOG NUMBER: XNV2-AF-02-LED-U-5NQ-8030-1200

### Luminous Intensity Polar Plot



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

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CATALOG NUMBER: XNV2-AF-02-LED-U-5NQ-8030-1200

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5549.0	0.0	5549.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	5549.0	0.0	5549.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	11098.0	0.0	11098.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.9	1.1
10°-20°	394.0	3.6
20°-30°	735.0	6.6
30°-40°	1239.3	11.2
40°-50°	2013.0	18.1
50°-60°	3154.1	28.4
60°-70°	2977.3	26.8
70°-80°	401.2	3.6
80°-90°	61.1	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°	11098.0	100.0
0°-180°	11098.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P199137

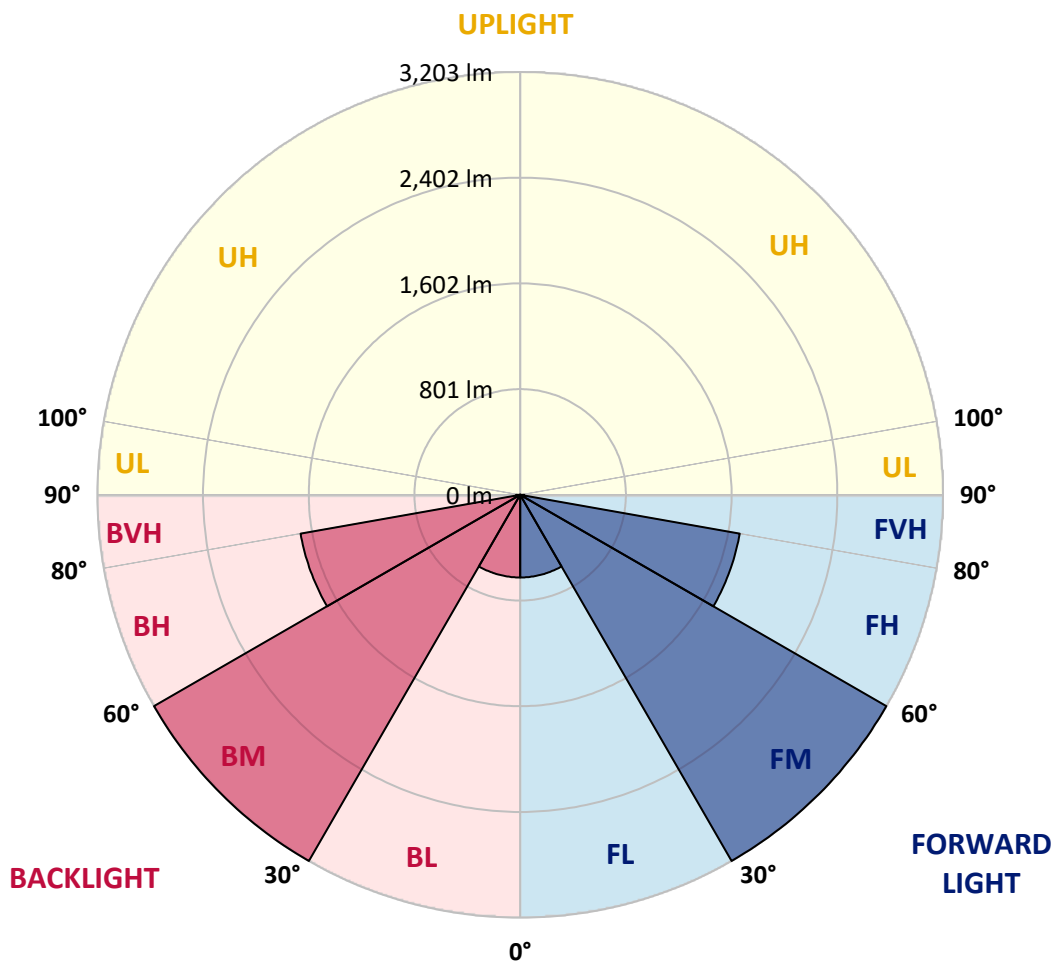
CATALOG NUMBER: XNV2-AF-02-LED-U-5NQ-8030-1200

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	626.0	5.6			
FM	(30°-60°)	3203.2	28.9			
FH	(60°-80°)	1689.3	15.2			G1/1800
FVH	(80°-90°)	30.6	0.3			G1/100
BL	(0°-30°)	626.0	5.6	B2/1000		
BM	(30°-60°)	3203.2	28.9	B3/5000		
BH	(60°-80°)	1689.3	15.2	B3/2500		G1/1800
BVH	(80°-90°)	30.6	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: P199137

CATALOG NUMBER: XNV2-AF-02-LED-U-5NQ-8030-1200

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1262.4	1262.4	1262.4	1262.4	1262.4	1262.4	1262.4	1262.4	1262.4	1262.4	1262.4
2.5°	1272.8	1272.8	1274.8	1274.1	1271.4	1269.3	1267.2	1264.5	1263.1	1261.7	1261.0
5°	1279.7	1279.7	1281.7	1281.1	1279.0	1276.2	1274.8	1272.8	1270.7	1269.3	1270.0
7.5°	1297.0	1297.6	1298.3	1297.6	1295.6	1293.5	1290.7	1290.0	1287.3	1285.2	1286.6
10°	1323.2	1323.2	1323.9	1324.6	1323.2	1318.4	1318.4	1317.0	1314.2	1311.5	1312.2
12.5°	1352.3	1352.3	1352.9	1352.9	1352.9	1350.2	1350.9	1350.2	1346.7	1345.3	1346.7
15°	1380.6	1381.3	1381.3	1382.7	1382.7	1383.4	1386.1	1386.1	1384.8	1384.1	1384.1
17.5°	1413.8	1415.2	1415.9	1417.9	1418.6	1420.0	1422.8	1423.5	1424.2	1422.1	1422.8
20°	1458.0	1458.7	1460.8	1461.5	1464.3	1464.3	1465.6	1464.9	1463.6	1460.8	1460.8
22.5°	1507.8	1509.2	1513.3	1513.3	1516.8	1514.7	1515.4	1513.3	1509.9	1508.5	1507.1
25°	1572.8	1574.9	1578.3	1576.9	1578.3	1574.9	1574.9	1574.9	1572.8	1570.7	1570.0
27.5°	1655.1	1651.6	1655.1	1652.3	1651.6	1648.8	1649.5	1648.2	1646.1	1645.4	1642.6
30°	1740.8	1736.6	1738.7	1739.4	1738.0	1737.3	1734.6	1732.5	1729.0	1729.7	1727.7
32.5°	1839.0	1834.8	1836.9	1837.6	1836.2	1837.6	1836.9	1832.0	1827.9	1830.7	1830.7
35°	1955.8	1953.0	1958.6	1960.6	1956.5	1954.4	1951.6	1946.1	1939.9	1944.0	1944.7
37.5°	2096.1	2092.7	2096.8	2102.4	2094.8	2090.6	2079.5	2071.3	2067.1	2069.2	2071.9
40°	2242.0	2242.7	2254.5	2255.8	2247.5	2242.7	2231.6	2219.2	2207.4	2207.4	2210.9
42.5°	2395.5	2397.6	2411.4	2416.2	2413.5	2404.5	2389.3	2374.1	2358.8	2361.6	2365.8
45°	2569.0	2566.2	2580.8	2592.5	2590.4	2587.7	2573.2	2545.5	2531.7	2531.0	2537.9
47.5°	2751.5	2757.1	2772.3	2792.3	2791.6	2784.7	2766.0	2740.5	2714.9	2717.0	2725.3
50°	2964.5	2972.1	2997.6	3017.7	3020.5	3018.4	2996.3	2966.5	2930.6	2932.7	2943.7
52.5°	3155.3	3166.3	3196.1	3237.5	3263.1	3274.9	3260.4	3232.7	3196.1	3198.1	3209.9
55°	3328.1	3345.4	3389.6	3446.3	3497.5	3545.2	3566.6	3565.9	3539.0	3545.2	3560.4
57.5°	3436.6	3460.8	3527.9	3619.2	3720.8	3816.9	3899.8	3978.0	3995.2	4027.7	4027.7
60°	3290.8	3347.5	3436.6	3592.9	3792.7	4008.4	4242.1	4469.5	4616.1	4731.5	4669.3
62.5°	2748.1	2831.7	2956.9	3162.9	3474.0	3859.1	4328.5	4857.3	5409.0	5746.4	5498.9
65°	1778.1	1883.2	2019.4	2251.0	2643.0	3138.7	3822.4	4773.0	5927.5	6526.2	5973.2
67.5°	704.5	775.7	858.6	1023.2	1363.3	1850.0	2617.4	3789.9	5234.1	5798.9	5178.8
70°	336.7	348.4	364.3	399.6	484.6	654.0	1051.5	1867.3	3209.9	3805.1	3133.1
72.5°	243.4	245.4	253.0	264.8	289.7	324.2	394.1	571.0	1106.8	1609.4	1108.2
75°	184.6	187.4	191.5	197.7	210.9	227.5	253.7	304.2	378.9	436.9	378.2
77.5°	140.3	143.1	146.6	152.8	159.7	171.5	181.1	201.2	233.0	245.4	244.0
80°	102.3	107.2	112.7	118.2	123.1	128.6	129.3	139.0	156.9	168.7	165.2
82.5°	65.0	69.1	83.7	89.9	90.6	91.9	91.3	91.9	101.6	109.9	107.2
85°	41.5	44.2	51.9	58.8	57.4	60.1	60.1	58.8	54.6	47.0	56.0
87.5°	20.7	21.4	24.9	31.1	29.7	26.3	25.6	25.6	18.7	15.9	17.3
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: P199137

CATALOG NUMBER: XNV2-AF-02-LED-U-5NQ-8030-1200

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1262.4	1262.4	1262.4	1262.4	1262.4	1262.4	1262.4	1262.4
2.5°	1258.9	1260.3	1258.2	1258.2	1257.5	1258.9	1256.9	1256.9
5°	1268.6	1270.7	1270.0	1270.0	1271.4	1272.8	1272.1	1271.4
7.5°	1285.9	1287.3	1288.7	1289.3	1290.7	1290.0	1291.4	1290.7
10°	1312.2	1310.8	1312.9	1310.8	1311.5	1310.1	1310.8	1310.8
12.5°	1345.3	1343.3	1341.9	1340.5	1340.5	1337.7	1337.7	1338.4
15°	1383.4	1379.9	1377.1	1375.8	1374.4	1374.4	1372.3	1373.7
17.5°	1420.7	1417.2	1412.4	1412.4	1410.3	1408.9	1407.6	1411.0
20°	1460.1	1456.7	1453.9	1453.2	1449.0	1447.7	1448.4	1452.5
22.5°	1505.7	1503.7	1503.7	1502.3	1499.5	1497.4	1497.4	1502.3
25°	1567.3	1563.1	1563.8	1564.5	1563.1	1563.1	1561.7	1565.2
27.5°	1642.6	1639.2	1641.2	1642.6	1641.2	1643.3	1641.2	1644.0
30°	1731.1	1729.0	1731.1	1733.2	1729.7	1729.7	1728.3	1730.4
32.5°	1836.9	1834.1	1835.5	1835.5	1830.7	1826.5	1821.0	1825.1
35°	1953.0	1949.6	1952.3	1954.4	1948.9	1944.7	1936.4	1939.9
37.5°	2080.9	2082.3	2085.8	2094.8	2093.4	2086.5	2080.2	2083.0
40°	2224.0	2230.9	2246.2	2252.4	2251.0	2244.1	2235.8	2237.2
42.5°	2385.8	2394.8	2410.7	2421.1	2416.2	2406.5	2396.2	2400.3
45°	2562.1	2575.9	2596.7	2607.0	2600.8	2590.4	2575.9	2583.5
47.5°	2748.8	2776.4	2804.1	2817.9	2815.8	2801.3	2782.6	2784.7
50°	2972.1	3008.7	3044.0	3057.8	3047.4	3025.3	2999.0	2998.3
52.5°	3250.0	3289.4	3318.4	3315.0	3289.4	3254.8	3225.1	3223.7
55°	3597.0	3610.2	3606.0	3576.3	3531.4	3477.4	3439.4	3433.2
57.5°	4016.7	3972.4	3907.4	3817.6	3716.6	3614.3	3545.2	3519.6
60°	4529.7	4329.9	4097.6	3852.8	3629.5	3462.2	3356.4	3292.2
62.5°	4953.4	4374.8	3855.6	3430.4	3082.7	2876.0	2731.5	2642.3
65°	4808.3	3779.5	3027.4	2479.1	2099.6	1886.0	1733.2	1631.6
67.5°	3714.6	2525.5	1757.4	1218.1	923.6	781.9	683.0	618.7
70°	1872.8	968.6	586.9	414.1	354.0	329.1	312.5	302.8
72.5°	549.6	367.1	304.9	269.6	248.2	233.0	223.3	218.5
75°	304.2	248.2	219.2	199.1	185.3	174.9	168.7	164.5
77.5°	209.5	180.4	165.9	152.8	141.7	134.1	129.3	125.1
80°	146.6	132.0	125.8	118.9	110.6	104.4	97.5	94.7
82.5°	97.5	91.3	89.9	84.3	79.5	72.6	60.1	56.0
85°	57.4	56.7	56.7	54.6	51.2	44.9	35.9	35.9
87.5°	20.0	20.7	21.4	22.8	22.1	18.7	15.2	14.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)