

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: P198953

Luminaire Tested: **XNV2-AF-02-LED-U-T4FT-7050-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198953  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24256)  
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-T4FT-7050-1200  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13333 lumens  
Efficiency: N/A  
Efficacy: 104.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G3

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

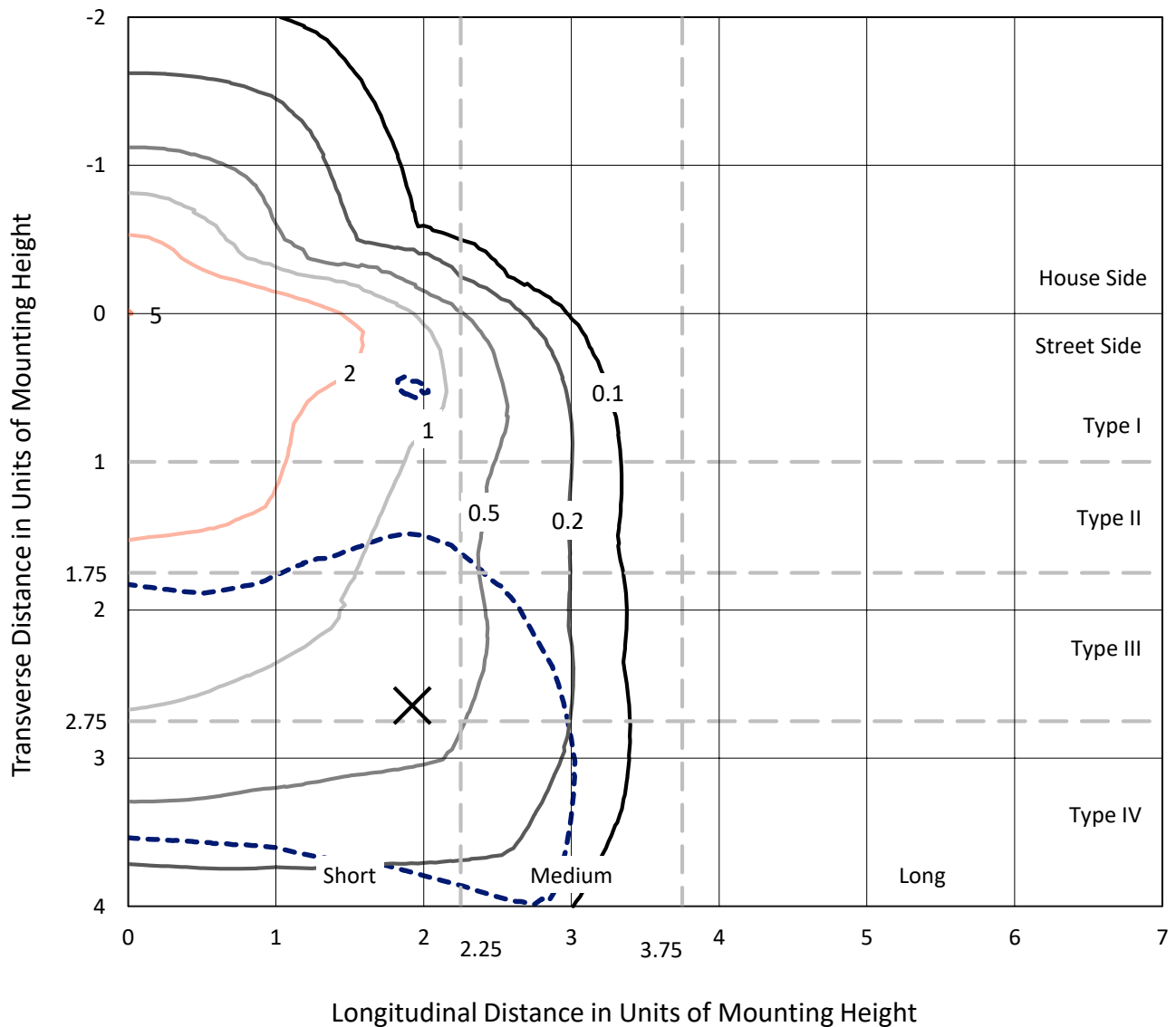


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

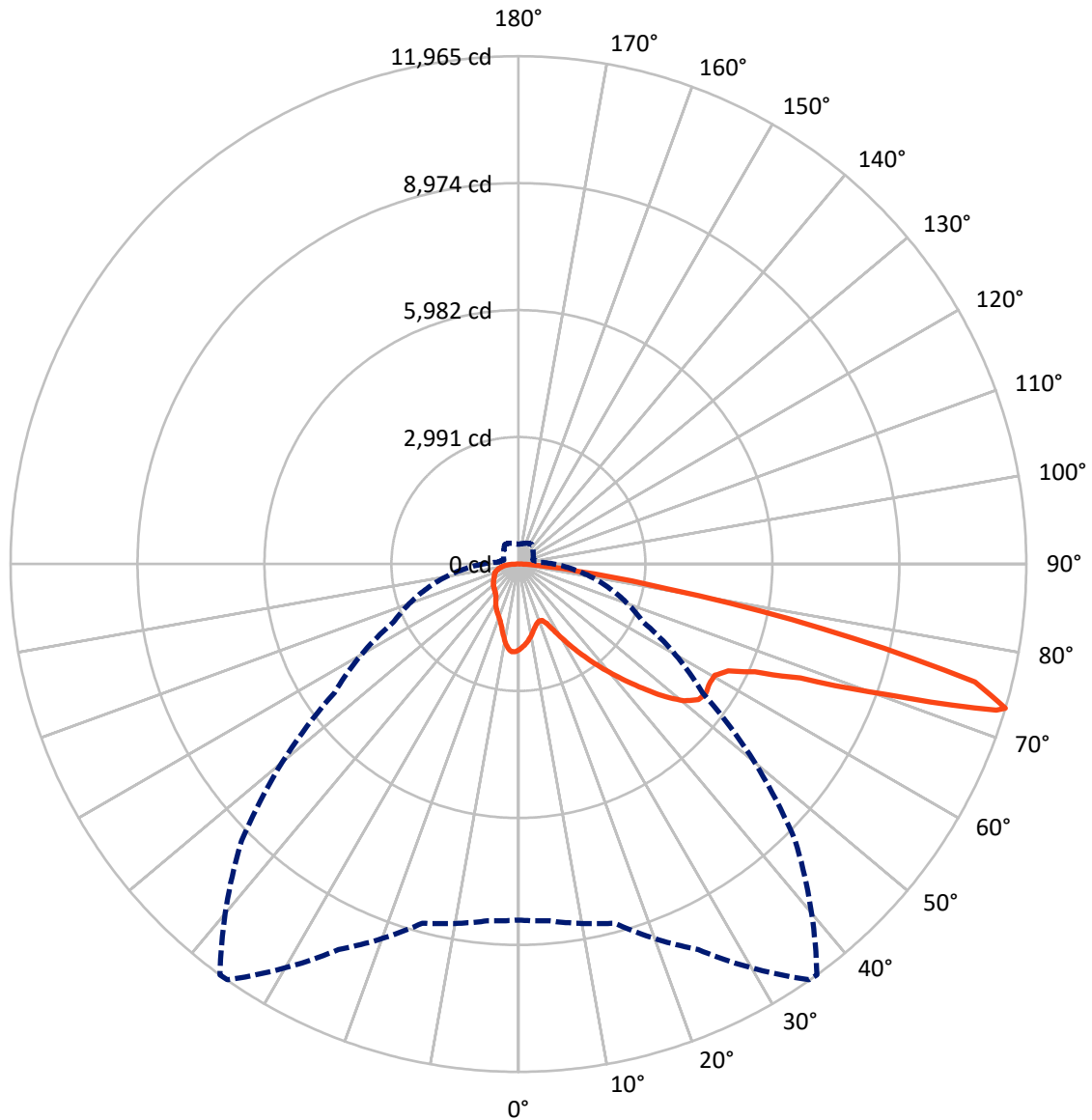


Based on 20 foot mounting height. Maximum calculated value = 5 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral    - - - Horizontal Cone Through 73-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2571.0	0.0	2571.0
	% Fixture	19.3	0.0	19.3
<b>Street Side</b>	Lumens	10762.0	0.0	10762.0
	% Fixture	80.7	0.0	80.7
<b>Total</b>	Lumens	13333.0	0.0	13333.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	183.4	1.4
10°-20°	460.7	3.5
20°-30°	738.6	5.5
30°-40°	1221.7	9.2
40°-50°	1890.5	14.2
50°-60°	2530.8	19.0
60°-70°	3306.1	24.8
70°-80°	2700.5	20.3
80°-90°	300.6	2.3
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°	13333.0	100.0
0°-180°	13333.0	100.0



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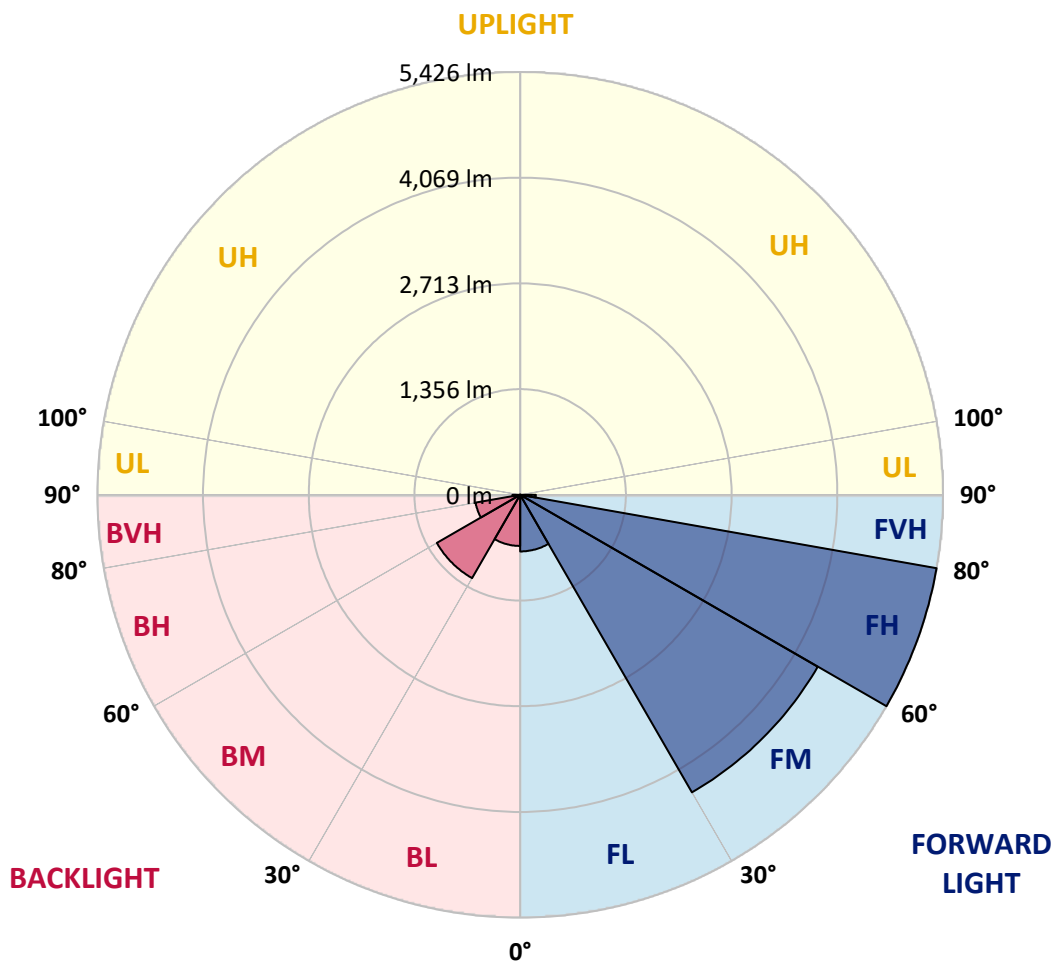
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	726.5	5.4			
FM (30°-60°)	4408.4	33.1			
FH (60°-80°)	5425.6	40.7			G3/7500
FVH (80°-90°)	201.6	1.5			G2/225
BL (0°-30°)	656.3	4.9	B2/1000		
BM (30°-60°)	1234.7	9.3	B2/2500		
BH (60°-80°)	581.0	4.4	B2/1000		G2/1000
BVH (80°-90°)	99.0	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	2019.6	2019.6	2019.6	2019.6	2019.6	2019.6	2019.6	2019.6	2019.6	2019.6	2019.6
2.5°	1942.5	1947.6	1948.4	1954.3	1954.3	1953.5	1956.0	1966.2	1971.3	1983.1	1993.3
5°	1846.7	1852.7	1855.2	1865.4	1878.1	1878.9	1888.3	1907.7	1926.4	1952.6	1974.7
7.5°	1739.2	1745.9	1752.7	1773.9	1792.5	1794.2	1812.0	1843.4	1867.9	1900.1	1939.9
10°	1635.0	1636.7	1643.4	1670.5	1695.1	1697.7	1723.1	1758.6	1791.7	1836.6	1881.5
12.5°	1549.4	1554.5	1552.8	1573.1	1594.3	1596.0	1629.9	1674.8	1723.1	1773.9	1827.3
15°	1519.8	1518.9	1501.1	1500.3	1509.6	1511.3	1544.3	1596.8	1651.1	1713.7	1782.4
17.5°	1540.1	1533.3	1486.7	1457.9	1452.0	1453.7	1478.2	1535.8	1593.5	1665.5	1747.6
20°	1651.9	1625.6	1516.4	1446.9	1427.4	1427.4	1441.8	1488.4	1551.9	1635.8	1739.2
22.5°	1917.1	1876.4	1643.4	1519.8	1451.1	1444.4	1433.3	1468.9	1539.2	1640.0	1773.9
25°	2250.8	2231.3	1876.4	1713.7	1572.3	1550.3	1477.4	1490.1	1565.5	1685.8	1868.8
27.5°	2560.0	2526.1	2182.2	1995.8	1795.9	1762.0	1607.9	1556.2	1628.2	1770.5	2006.0
30°	2740.5	2717.6	2496.5	2318.6	2080.6	2037.4	1816.3	1686.6	1740.0	1910.3	2200.8
32.5°	2937.0	2923.5	2811.6	2649.8	2388.9	2338.9	2085.6	1899.3	1911.1	2095.8	2435.5
35°	3127.6	3145.4	3081.9	2963.3	2721.0	2674.4	2447.4	2177.1	2122.1	2304.2	2686.3
37.5°	3356.3	3360.6	3320.8	3243.7	3070.0	3031.9	2844.7	2473.6	2351.6	2526.1	2928.5
40°	3812.9	3746.0	3590.1	3529.2	3425.8	3402.1	3188.6	2745.6	2565.1	2754.0	3157.3
42.5°	4306.8	4202.6	3958.6	3858.7	3817.2	3795.1	3474.9	2926.8	2765.0	2981.9	3381.7
45°	4705.0	4620.3	4381.4	4257.7	4262.8	4227.2	3724.8	3088.6	2981.9	3210.6	3632.5
47.5°	5097.2	4955.7	4688.0	4670.2	4729.5	4677.0	3963.7	3250.4	3208.1	3459.7	3883.3
50°	5122.6	4993.8	4885.4	5027.7	5129.4	5064.2	4180.6	3462.2	3442.7	3761.3	4206.9
52.5°	4813.4	4794.8	4960.0	5199.7	5368.3	5309.8	4357.6	3679.9	3682.5	4138.2	4600.8
55°	4700.7	4677.0	4875.2	5170.0	5397.9	5363.2	4489.8	3925.6	3948.5	4595.7	5023.5
57.5°	4890.5	4831.2	4870.2	5114.1	5328.5	5308.1	4627.0	4198.4	4239.9	5122.6	5414.0
60°	5479.2	5358.1	5151.4	5197.2	5331.0	5319.1	4823.6	4502.5	4572.0	5671.5	5661.4
62.5°	6361.1	6223.9	5802.9	5599.5	5569.9	5547.0	5148.0	4876.1	4910.8	6068.0	5517.4
65°	7328.5	7181.1	6680.5	6347.6	6173.0	6123.9	5671.5	5326.8	5109.1	6067.2	4956.6
67.5°	8414.6	8258.7	7759.7	7442.1	7253.1	7169.3	6521.2	5691.0	5044.7	5553.8	3966.3
70°	9526.8	9378.6	9149.9	9260.8	9343.9	9215.9	7859.7	5812.2	4582.1	4354.3	2663.4
72.5°	8936.4	8924.5	9098.2	10150.3	11750.6	11776.0	9196.5	5469.9	3540.2	2588.0	1419.8
73°	8388.3	8438.3	8760.2	10019.0	11956.4	11964.9	9222.7	5292.9	3250.4	2229.7	1247.0
75°	4345.8	4684.6	5879.1	8124.0	11071.2	11111.0	8129.9	4006.9	1937.4	1238.5	840.4
77.5°	1164.0	1148.7	1894.2	3957.8	7381.1	7328.5	5137.0	1939.9	928.5	776.8	589.6
80°	399.0	404.1	644.7	1447.7	3445.3	3568.1	2229.7	846.3	610.8	541.3	417.6
82.5°	203.3	210.1	337.2	615.9	1441.0	1410.5	717.5	498.1	409.2	328.7	233.8
85°	108.4	111.8	185.5	319.4	528.6	534.5	252.4	266.0	260.1	186.4	115.2
87.5°	53.4	55.1	88.9	140.6	195.7	188.9	88.1	115.2	127.9	105.0	63.5
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°	2019.6	2019.6	2019.6	2019.6	2019.6	2019.6	2019.6	2019.6	2019.6	2019.6	2019.6
2.5°	2006.0	2006.0	2017.0	2035.7	2049.2	2061.9	2070.4	2083.9	2091.6	2090.7	2089.9
5°	1992.5	2000.9	2023.0	2045.8	2061.1	2071.2	2071.2	2077.2	2077.2	2074.6	2071.2
7.5°	1961.1	1975.5	2007.7	2028.0	2032.3	2021.3	1999.2	1982.3	1961.1	1950.1	1945.9
10°	1911.1	1929.8	1970.4	1979.7	1957.7	1918.8	1865.4	1819.6	1779.0	1760.3	1754.4
12.5°	1862.0	1886.6	1924.7	1910.3	1857.8	1781.5	1699.3	1636.7	1590.9	1573.1	1567.2
15°	1821.3	1851.0	1880.6	1835.7	1744.2	1638.4	1547.7	1489.3	1454.5	1441.0	1437.6
17.5°	1794.2	1829.0	1839.1	1755.3	1628.2	1509.6	1429.1	1391.0	1375.7	1369.8	1368.1
20°	1795.9	1834.9	1810.3	1677.3	1516.4	1396.9	1343.6	1332.5	1332.5	1332.5	1331.7
22.5°	1842.5	1876.4	1798.5	1604.5	1408.8	1302.0	1279.2	1288.5	1295.3	1295.3	1294.4
25°	1939.1	1957.7	1806.9	1534.2	1308.0	1219.9	1220.7	1238.5	1244.4	1244.4	1242.7
27.5°	2086.5	2071.2	1822.2	1456.2	1208.9	1145.3	1157.2	1173.3	1177.5	1175.0	1174.1
30°	2271.2	2210.2	1834.9	1364.7	1115.7	1075.9	1086.0	1095.3	1092.0	1086.0	1085.2
32.5°	2477.9	2351.6	1827.3	1262.2	1033.5	1003.9	1009.8	1014.9	1009.8	995.4	995.4
35°	2682.9	2479.6	1785.8	1150.4	968.3	934.4	933.5	949.6	948.8	931.8	932.7
37.5°	2862.5	2580.4	1705.3	1047.9	912.4	883.6	886.9	897.1	902.2	879.3	876.8
40°	3019.2	2649.8	1591.8	960.6	867.5	869.2	859.8	843.7	837.8	827.6	826.0
42.5°	3166.6	2698.1	1471.5	887.8	844.6	864.1	832.7	794.6	778.5	787.8	793.8
45°	3311.4	2752.3	1355.4	827.6	815.8	848.8	805.6	763.3	744.6	748.9	754.8
47.5°	3488.5	2827.7	1215.6	763.3	771.7	820.9	788.7	742.9	715.0	698.0	693.0
50°	3721.4	2937.0	1034.3	693.8	725.1	790.4	774.3	713.3	682.8	648.9	640.4
52.5°	4012.9	3040.4	851.4	637.9	687.0	764.1	750.6	687.9	650.6	609.9	603.2
55°	4303.4	3054.8	693.8	589.6	643.8	728.5	721.8	667.5	615.0	582.0	575.2
57.5°	4506.7	2918.4	587.9	548.9	602.3	684.5	695.5	643.0	585.4	560.0	555.7
60°	4510.1	2592.2	523.5	521.8	571.0	646.4	668.4	614.2	566.7	549.8	546.4
62.5°	4151.8	2089.0	482.0	501.5	548.1	615.0	648.1	598.1	562.5	555.7	552.3
65°	3480.0	1543.5	449.0	482.9	526.9	588.8	631.1	593.0	560.8	558.3	555.7
67.5°	2569.4	1058.1	421.0	459.1	503.2	561.6	615.0	585.4	550.6	560.8	557.4
70°	1616.3	706.5	394.8	432.0	471.9	530.3	593.8	571.8	537.9	532.0	521.0
72.5°	912.4	510.8	363.4	397.3	431.2	488.8	565.0	548.9	509.1	485.4	474.4
73°	824.3	483.7	355.8	388.8	421.9	480.3	558.3	542.2	500.7	474.4	464.2
75°	603.2	395.6	321.1	354.1	382.9	441.4	526.1	508.3	463.4	432.0	425.3
77.5°	437.1	305.0	276.2	305.8	331.2	387.1	477.8	457.5	413.4	396.5	389.7
80°	315.1	231.3	228.7	257.5	279.6	336.3	426.1	404.9	362.6	412.6	401.5
82.5°	188.1	148.2	167.7	199.9	222.8	282.1	370.2	345.6	305.0	308.4	262.6
85°	89.8	83.9	104.2	131.3	147.4	193.1	308.4	288.9	244.0	199.9	195.7
87.5°	39.8	38.1	50.0	58.5	78.8	116.1	210.9	187.2	177.1	105.9	83.0
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)