

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: P198793

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198793  
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-1200  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 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: 13639 lumens  
Efficiency: N/A  
Efficacy: 106.6 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

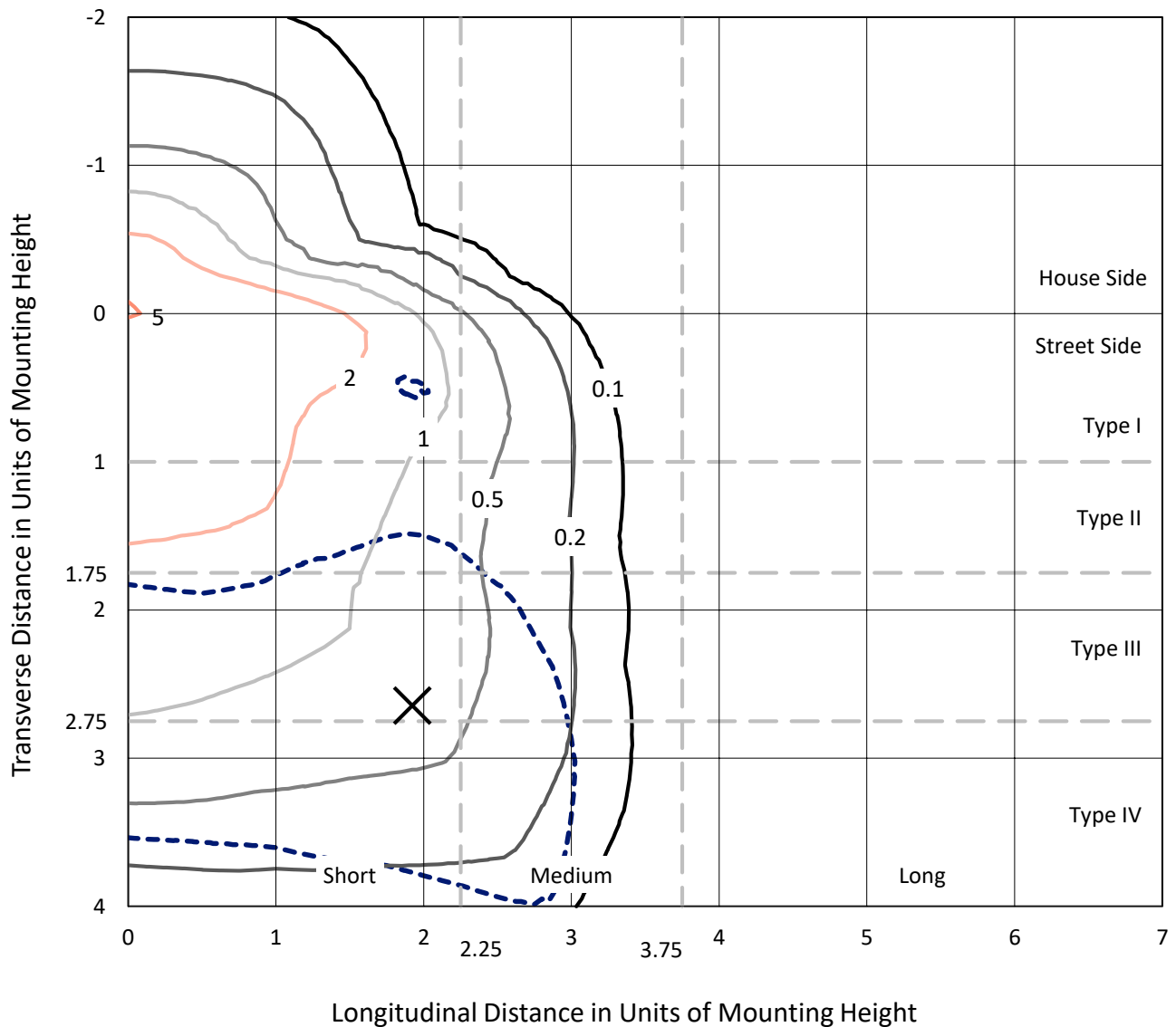


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

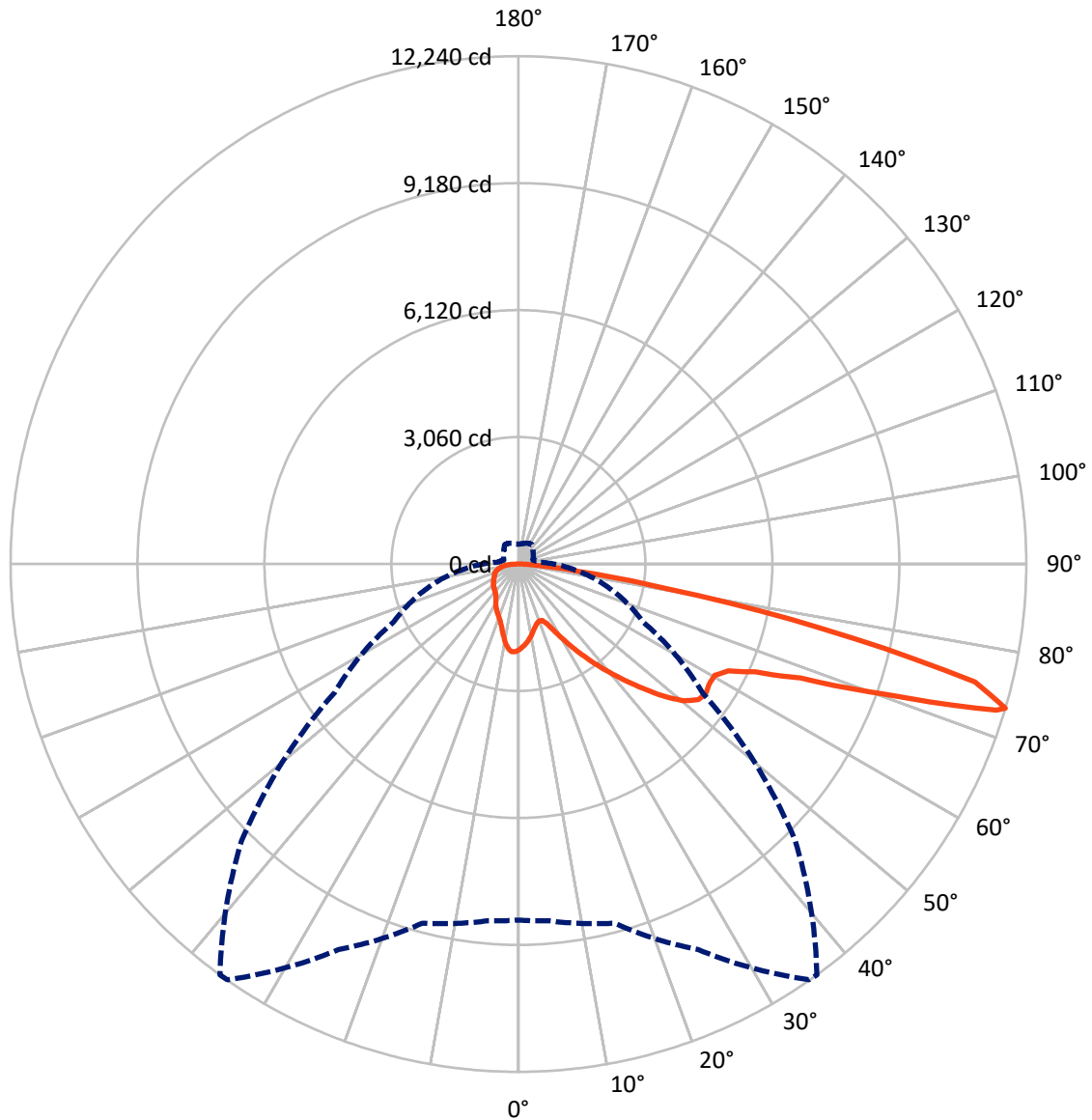


Based on 20 foot mounting height. Maximum calculated value = 5.2 fc  
 Type IV - Short - Non-Cutoff

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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	2630.0	0.0	2630.0
	% Fixture	19.3	0.0	19.3
<b>Street Side</b>	Lumens	11009.0	0.0	11009.0
	% Fixture	80.7	0.0	80.7
<b>Total</b>	Lumens	13639.0	0.0	13639.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	187.6	1.4
10°-20°	471.3	3.5
20°-30°	755.6	5.5
30°-40°	1249.8	9.2
40°-50°	1933.9	14.2
50°-60°	2588.9	19.0
60°-70°	3381.9	24.8
70°-80°	2762.5	20.3
80°-90°	307.5	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°	13639.0	100.0
0°-180°	13639.0	100.0



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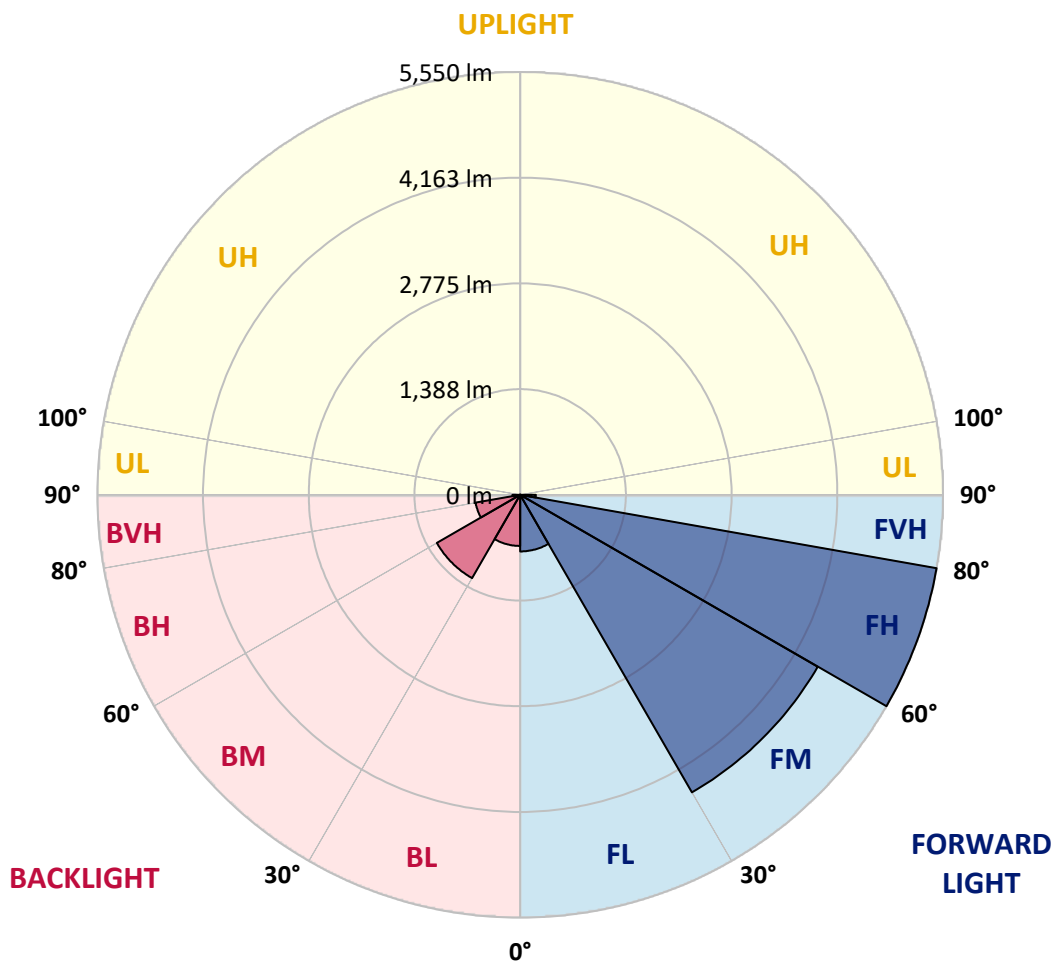
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	743.2	5.4			
FM	(30°-60°)	4509.5	33.1			
FH	(60°-80°)	5550.1	40.7			G3/7500
FVH	(80°-90°)	206.2	1.5			G2/225
BL	(0°-30°)	671.3	4.9	B2/1000		
BM	(30°-60°)	1263.1	9.3	B2/2500		
BH	(60°-80°)	594.3	4.4	B2/1000		G2/1000
BVH	(80°-90°)	101.3	0.7			G2/225
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°	2066.0	2066.0	2066.0	2066.0	2066.0	2066.0	2066.0	2066.0	2066.0	2066.0	2066.0
2.5°	1987.1	1992.3	1993.1	1999.2	1999.2	1998.3	2000.9	2011.3	2016.5	2028.6	2039.0
5°	1889.1	1895.2	1897.8	1908.2	1921.2	1922.0	1931.6	1951.5	1970.6	1997.4	2020.0
7.5°	1779.1	1786.0	1792.9	1814.6	1833.6	1835.4	1853.6	1885.7	1910.8	1943.7	1984.4
10°	1672.5	1674.3	1681.1	1708.8	1734.0	1736.7	1762.6	1799.0	1832.8	1878.8	1924.7
12.5°	1585.0	1590.2	1588.4	1609.2	1630.9	1632.6	1667.3	1713.2	1762.6	1814.6	1869.2
15°	1554.7	1553.8	1535.6	1534.7	1544.2	1546.0	1579.7	1633.4	1689.0	1753.0	1823.3
17.5°	1575.4	1568.5	1520.8	1491.4	1485.3	1487.1	1512.1	1571.0	1630.1	1703.7	1787.7
20°	1689.8	1662.9	1551.2	1480.1	1460.2	1460.2	1474.9	1522.6	1587.5	1673.3	1779.1
22.5°	1961.1	1919.5	1681.1	1554.7	1484.4	1477.6	1466.2	1502.6	1574.5	1677.6	1814.6
25°	2302.5	2282.5	1919.5	1753.0	1608.4	1585.9	1511.3	1524.3	1601.4	1724.5	1911.7
27.5°	2618.8	2584.1	2232.3	2041.6	1837.1	1802.4	1644.8	1591.9	1665.6	1811.1	2052.0
30°	2803.4	2780.0	2553.8	2371.8	2128.4	2084.2	1858.0	1725.3	1779.9	1954.1	2251.3
32.5°	3004.4	2990.6	2876.1	2710.6	2443.7	2392.6	2133.5	1942.9	1955.0	2143.9	2491.4
35°	3199.4	3217.6	3152.6	3031.3	2783.4	2735.8	2503.6	2227.1	2170.8	2357.1	2748.0
37.5°	3433.3	3437.7	3397.0	3318.1	3140.5	3101.5	2910.0	2530.4	2405.6	2584.1	2995.7
40°	3900.4	3832.0	3672.5	3610.2	3504.4	3480.2	3261.8	2808.6	2624.0	2817.2	3229.8
42.5°	4405.6	4299.1	4049.5	3947.3	3904.8	3882.2	3554.7	2994.0	2828.5	3050.3	3459.3
45°	4813.0	4726.3	4482.0	4355.4	4360.6	4324.2	3810.3	3159.5	3050.3	3284.3	3715.9
47.5°	5214.2	5069.4	4795.6	4777.4	4838.0	4784.3	4054.7	3325.0	3281.7	3539.1	3972.4
50°	5240.2	5108.4	4997.5	5143.1	5247.1	5180.4	4276.5	3541.7	3521.7	3847.6	4303.5
52.5°	4923.9	4904.8	5073.8	5319.0	5491.5	5431.7	4457.6	3764.4	3767.0	4233.2	4706.4
55°	4808.6	4784.3	4987.1	5288.7	5521.8	5486.3	4592.8	4015.7	4039.1	4701.2	5138.8
57.5°	5002.7	4942.1	4982.0	5231.5	5450.8	5429.9	4733.2	4294.8	4337.2	5240.2	5538.3
60°	5605.0	5481.1	5269.6	5316.5	5453.4	5441.2	4934.3	4605.8	4676.9	5801.7	5791.3
62.5°	6507.1	6366.7	5936.1	5728.0	5697.7	5674.3	5266.2	4988.0	5023.5	6207.3	5644.0
65°	7496.7	7345.9	6833.8	6493.3	6314.7	6264.4	5801.7	5449.1	5226.4	6206.4	5070.4
67.5°	8607.7	8448.2	7937.8	7612.9	7419.6	7333.8	6670.9	5821.6	5160.5	5681.3	4057.3
70°	9745.4	9593.8	9359.9	9473.3	9558.4	9427.4	8040.1	5945.6	4687.3	4454.2	2724.5
72.5°	9141.5	9129.3	9307.0	10383.3	12020.3	12046.3	9407.6	5595.4	3621.5	2647.4	1452.4
73°	8580.8	8632.0	8961.3	10248.9	12230.8	12239.5	9434.4	5414.4	3325.0	2280.9	1275.6
75°	4445.5	4792.1	6014.0	8310.5	11325.3	11366.0	8316.5	4098.9	1981.9	1266.9	859.7
77.5°	1190.7	1175.1	1937.7	4048.6	7550.5	7496.7	5254.9	1984.4	949.8	794.6	603.1
80°	408.2	413.4	659.5	1480.9	3524.4	3650.0	2280.9	865.7	624.8	553.7	427.2
82.5°	208.0	214.9	344.9	630.0	1474.1	1442.9	734.0	509.5	418.6	336.2	239.2
85°	110.9	114.4	189.8	326.7	540.7	546.8	258.2	272.1	266.1	190.7	117.8
87.5°	54.6	56.4	90.9	143.8	200.2	193.2	90.1	117.8	130.8	107.4	65.0
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°	2066.0	2066.0	2066.0	2066.0	2066.0	2066.0	2066.0	2066.0	2066.0	2066.0	2066.0
2.5°	2052.0	2052.0	2063.3	2082.4	2096.2	2109.2	2117.9	2131.7	2139.6	2138.7	2137.9
5°	2038.2	2046.8	2069.4	2092.8	2108.4	2118.7	2118.7	2124.9	2124.9	2122.2	2118.7
7.5°	2006.1	2020.8	2053.8	2074.5	2078.9	2067.7	2045.1	2027.8	2006.1	1994.9	1990.6
10°	1955.0	1974.1	2015.6	2025.1	2002.6	1962.8	1908.2	1861.4	1819.8	1800.7	1794.7
12.5°	1904.7	1929.9	1968.9	1954.1	1900.4	1822.4	1738.3	1674.3	1627.4	1609.2	1603.2
15°	1863.1	1893.5	1923.8	1877.8	1784.2	1676.0	1583.2	1523.5	1487.9	1474.1	1470.6
17.5°	1835.4	1871.0	1881.3	1795.6	1665.6	1544.2	1461.9	1422.9	1407.3	1401.2	1399.5
20°	1837.1	1877.0	1851.8	1715.8	1551.2	1429.0	1374.4	1363.1	1363.1	1363.1	1362.3
22.5°	1884.8	1919.5	1839.8	1641.3	1441.1	1331.9	1308.6	1318.1	1325.0	1325.0	1324.1
25°	1983.6	2002.6	1848.4	1569.4	1338.0	1247.9	1248.7	1266.9	1273.0	1273.0	1271.2
27.5°	2134.4	2118.7	1864.0	1489.6	1236.6	1171.6	1183.8	1200.2	1204.5	1202.0	1201.0
30°	2323.3	2260.9	1877.0	1396.0	1141.3	1100.6	1110.9	1120.4	1117.1	1110.9	1110.1
32.5°	2534.8	2405.6	1869.2	1291.2	1057.2	1026.9	1033.0	1038.2	1033.0	1018.2	1018.2
35°	2744.5	2536.5	1826.8	1176.8	990.5	955.8	954.9	971.4	970.6	953.2	954.1
37.5°	2928.2	2639.6	1744.4	1072.0	933.3	903.9	907.3	917.7	922.9	899.5	896.9
40°	3088.5	2710.6	1628.3	982.6	887.4	889.1	879.5	863.1	857.0	846.6	845.0
42.5°	3239.3	2760.0	1505.3	908.2	864.0	883.9	851.8	812.8	796.4	805.9	812.0
45°	3387.4	2815.5	1386.5	846.6	834.5	868.3	824.1	780.8	761.7	766.1	772.1
47.5°	3568.6	2892.6	1243.5	780.8	789.4	839.7	806.8	760.0	731.4	714.0	708.9
50°	3806.8	3004.4	1058.0	709.7	741.7	808.5	792.1	729.7	698.5	663.8	655.1
52.5°	4105.0	3110.2	870.9	652.5	702.8	781.6	767.8	703.7	665.5	623.9	617.0
55°	4402.2	3124.9	709.7	603.1	658.6	745.2	738.4	682.8	629.1	595.4	588.4
57.5°	4610.1	2985.4	601.4	561.5	616.1	700.2	711.5	657.8	598.8	572.9	568.5
60°	4613.6	2651.7	535.5	533.8	584.1	661.2	683.7	628.3	579.7	562.4	558.9
62.5°	4247.1	2136.9	493.1	513.0	560.7	629.1	663.0	611.8	575.4	568.5	565.0
65°	3559.9	1578.9	459.3	494.0	539.0	602.3	645.6	606.6	573.7	571.1	568.5
67.5°	2628.4	1082.4	430.7	469.6	514.7	574.5	629.1	598.8	563.2	573.7	570.2
70°	1653.4	722.7	403.9	441.9	482.7	542.5	607.4	584.9	550.2	544.2	533.0
72.5°	933.3	522.5	371.7	406.4	441.1	500.0	578.0	561.5	520.8	496.5	485.3
73°	843.2	494.8	364.0	397.7	431.6	491.3	571.1	554.6	512.2	485.3	474.9
75°	617.0	404.7	328.5	362.2	391.7	451.5	538.2	520.0	474.0	441.9	435.1
77.5°	447.1	312.0	282.5	312.8	338.8	396.0	488.8	468.0	422.9	405.6	398.6
80°	322.3	236.6	233.9	263.4	286.0	344.0	435.9	414.2	370.9	422.1	410.7
82.5°	192.4	151.6	171.5	204.5	227.9	288.6	378.7	353.5	312.0	315.5	268.6
85°	91.9	85.8	106.6	134.3	150.8	197.5	315.5	295.5	249.6	204.5	200.2
87.5°	40.7	39.0	51.1	59.8	80.6	118.8	215.7	191.5	181.2	108.3	84.9
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)