

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: P271213

Luminaire Tested: **XNV-AF-01-LED-U-AFL-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271213
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24160)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: XNV-AF-01-LED-U-AFL-7027
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5383.4 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

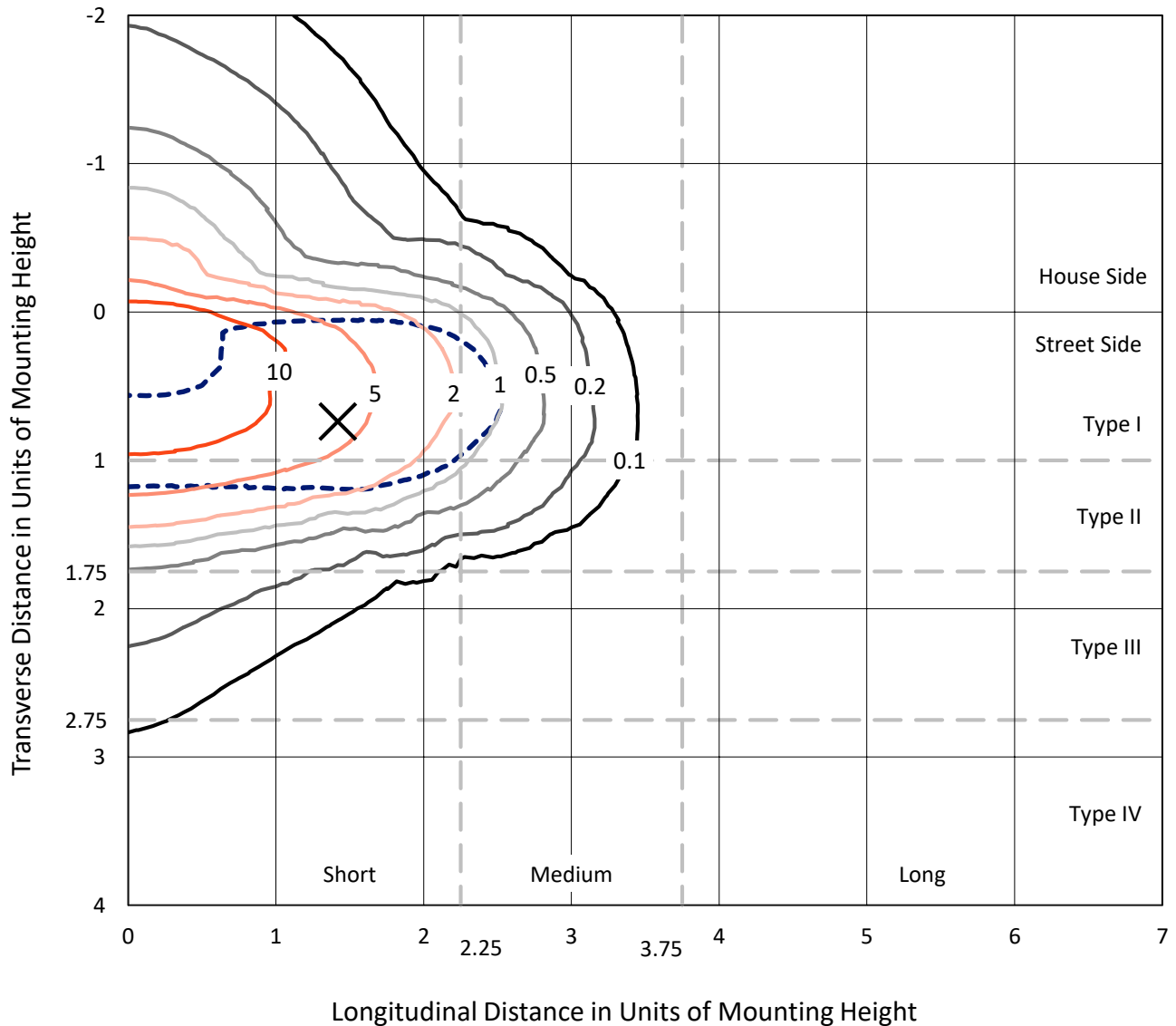
Input Watts (W): 58
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

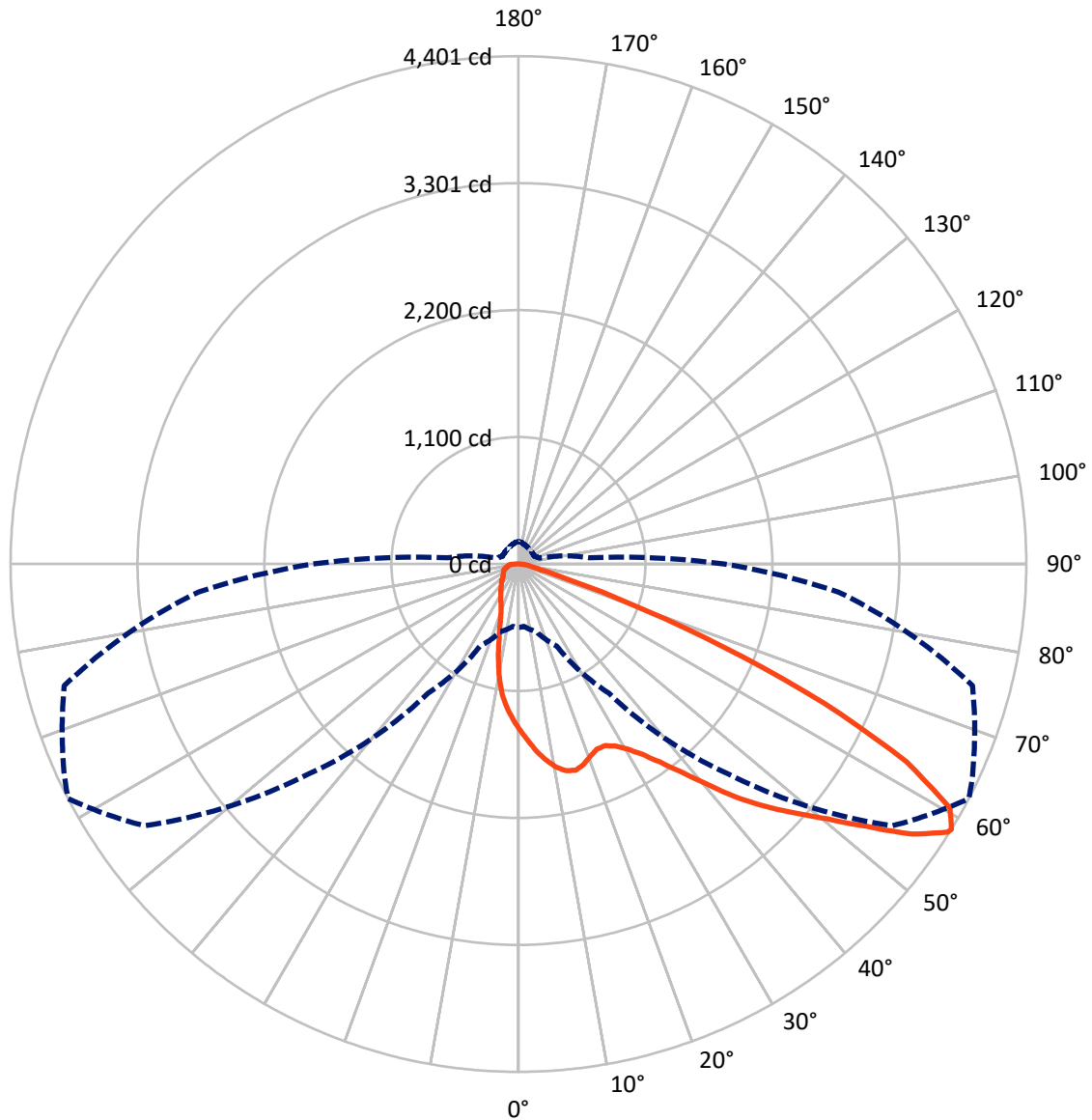
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 16.8 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral - - - Horizontal Cone Through 58-Deg Vertical

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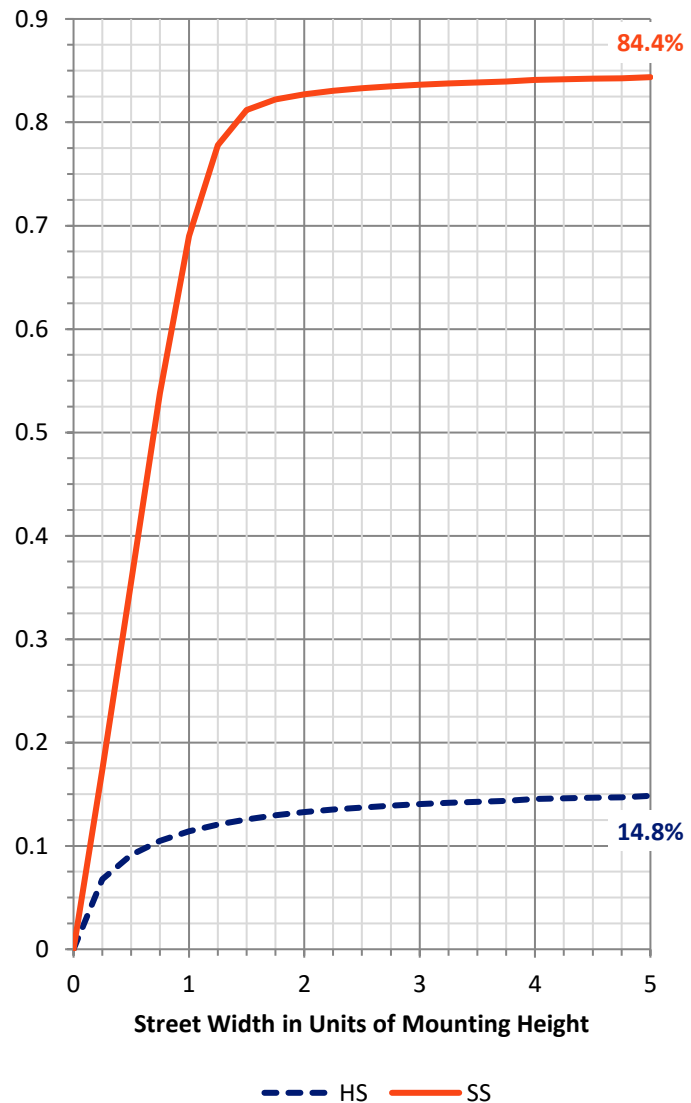
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	826.6	0.0	826.6
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	4556.9	0.0	4556.9
	% Fixture	84.6	0.0	84.6
Total	Lumens	5383.4	0.0	5383.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.5	2.4
10°-20°	324.2	6.0
20°-30°	525.5	9.8
30°-40°	838.9	15.6
40°-50°	1220.3	22.7
50°-60°	1276.9	23.7
60°-70°	778.5	14.5
70°-80°	217.7	4.0
80°-90°	73.0	1.4
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°	5383.4	100.0
0°-180°	5383.4	100.0

Coefficient of Utilization



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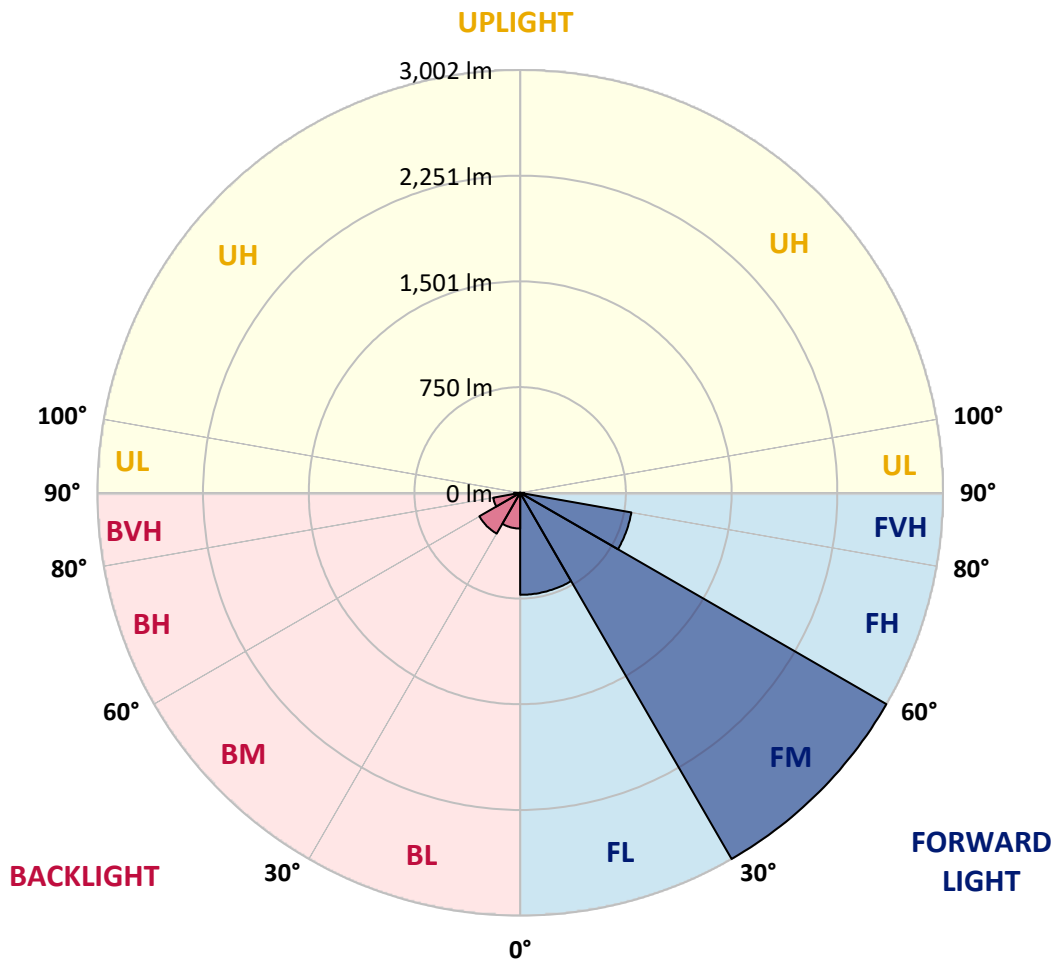
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	724.1	13.5			
FM	(30°-60°)	3001.9	55.8			
FH	(60°-80°)	801.6	14.9			G1/1800
FVH	(80°-90°)	29.4	0.5			G1/100
BL	(0°-30°)	254.1	4.7	B1/500		
BM	(30°-60°)	334.3	6.2	B1/1000		
BH	(60°-80°)	194.6	3.6	B1/500		G1/500
BVH	(80°-90°)	43.6	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	1437.4	1437.4	1437.4	1437.4	1437.4	1437.4	1437.4	1437.4	1437.4	1437.4	1437.4
2.5°	1631.5	1630.5	1616.7	1607.5	1596.7	1571.9	1547.1	1528.6	1519.2	1483.1	1448.1
5°	1766.3	1762.4	1754.6	1744.9	1730.8	1699.5	1660.1	1626.1	1612.6	1548.7	1484.4
7.5°	1695.0	1701.5	1725.4	1752.2	1780.5	1782.5	1754.6	1714.2	1699.5	1614.0	1519.8
10°	1497.6	1494.9	1524.9	1577.3	1670.5	1762.7	1808.7	1789.0	1773.4	1675.9	1555.1
12.5°	1437.6	1437.0	1442.0	1455.6	1514.1	1640.6	1795.1	1838.0	1832.7	1741.5	1592.8
15°	1455.9	1456.5	1456.2	1457.9	1473.9	1534.2	1718.0	1854.6	1871.3	1806.4	1631.1
17.5°	1514.1	1511.7	1504.3	1496.1	1498.6	1520.1	1634.8	1826.3	1876.7	1864.3	1663.4
20°	1603.8	1603.8	1584.0	1561.6	1546.7	1551.5	1600.2	1777.8	1851.9	1913.4	1687.6
22.5°	1716.7	1718.3	1689.1	1648.0	1614.3	1601.5	1620.1	1741.9	1821.6	1958.8	1709.1
25°	1856.5	1856.3	1813.5	1754.6	1701.5	1670.8	1670.5	1743.5	1812.2	2012.1	1731.8
27.5°	2029.8	2014.0	1964.2	1880.4	1805.5	1758.6	1737.4	1785.9	1832.1	2077.3	1762.0
30°	2225.3	2209.2	2143.8	2036.3	1934.6	1866.3	1831.4	1859.2	1892.5	2160.3	1807.7
32.5°	2418.7	2422.5	2345.7	2224.4	2093.8	1997.6	1945.6	1962.8	1986.2	2262.0	1869.7
35°	2702.1	2701.7	2601.5	2449.8	2294.6	2161.4	2095.7	2104.9	2126.1	2405.3	1956.5
37.5°	2913.4	2910.0	2845.4	2711.2	2536.5	2376.7	2281.9	2283.2	2301.4	2585.3	2071.0
40°	2934.9	2934.3	2934.0	2914.7	2795.3	2644.5	2525.8	2501.2	2508.5	2776.4	2192.4
42.5°	2770.4	2794.9	2865.7	2973.8	3007.3	2928.1	2815.7	2761.0	2744.9	2995.8	2321.0
45°	2535.8	2548.3	2672.1	2915.7	3114.0	3194.6	3110.2	2994.5	2966.8	3209.1	2425.6
47.5°	2426.9	2421.6	2493.2	2758.7	3103.5	3406.6	3412.8	3222.8	3176.1	3393.2	2514.6
50°	2193.0	2185.9	2276.5	2527.4	2989.7	3512.0	3723.3	3471.9	3385.4	3568.1	2595.5
52.5°	1727.0	1720.3	1841.7	2165.1	2735.3	3472.6	3985.1	3777.5	3630.1	3736.7	2670.8
55°	1123.8	1124.5	1240.2	1573.7	2213.6	3243.2	4107.8	4130.3	3965.1	3905.2	2731.7
57.5°	618.8	613.1	695.5	900.3	1522.7	2722.0	4005.5	4384.6	4298.6	4049.9	2775.8
58°	550.1	543.4	607.0	783.6	1365.3	2574.9	3954.0	4400.8	4341.2	4073.9	2782.1
60°	392.0	380.5	370.8	441.7	786.6	1856.5	3610.8	4296.2	4353.7	4121.6	2776.1
62.5°	330.3	317.3	282.2	279.6	370.5	908.0	2855.5	3773.1	3934.1	4011.7	2678.6
65°	306.9	293.7	247.7	231.1	251.3	392.0	1765.7	2913.4	3128.6	3629.1	2432.9
67.5°	290.1	274.5	225.0	203.6	207.6	234.5	749.2	1905.3	2155.0	2829.9	1951.7
70°	274.9	257.8	207.2	182.4	179.0	178.4	292.7	995.0	1235.4	1851.9	1307.5
72.5°	257.8	240.8	191.5	164.8	157.5	144.6	176.0	411.2	563.5	907.7	599.2
75°	232.8	219.0	173.9	150.3	137.6	117.4	129.8	197.2	242.9	347.6	278.3
77.5°	205.0	193.9	156.1	138.2	121.1	95.8	99.3	133.6	150.0	195.8	161.2
80°	144.9	149.1	136.3	121.8	106.7	77.3	76.4	97.9	107.6	131.5	108.3
82.5°	99.9	102.9	111.0	96.2	86.1	60.2	56.1	67.9	73.0	79.4	52.6
85°	71.3	69.3	77.1	69.0	63.2	38.4	36.0	43.1	46.2	48.5	25.2
87.5°	43.4	43.1	44.5	35.7	33.0	19.6	17.8	20.5	21.9	21.2	12.0
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°	1437.4	1437.4	1437.4	1437.4	1437.4	1437.4	1437.4	1437.4	1437.4	1437.4	1437.4
2.5°	1435.0	1418.6	1382.5	1353.6	1322.2	1298.4	1274.4	1261.0	1246.2	1237.9	1236.7
5°	1450.9	1417.2	1340.5	1269.1	1195.7	1129.8	1065.2	1017.4	978.4	956.2	954.9
7.5°	1468.3	1415.5	1297.1	1173.5	1043.0	913.1	798.5	717.3	665.1	640.9	639.2
10°	1481.8	1408.5	1244.2	1052.0	845.1	673.5	569.3	521.5	505.7	501.7	501.0
12.5°	1498.0	1403.3	1177.6	896.2	646.1	512.8	481.1	478.1	481.5	483.5	483.8
15°	1513.0	1393.6	1087.8	723.8	505.7	458.2	458.9	465.3	472.1	475.1	475.5
17.5°	1520.1	1369.7	969.7	570.3	442.4	433.7	441.4	449.8	455.9	458.2	458.2
20°	1520.1	1331.4	832.6	462.0	409.4	411.2	420.5	427.0	428.3	426.2	425.3
22.5°	1513.7	1283.9	699.5	403.1	382.6	389.0	396.3	392.0	376.2	364.1	361.7
25°	1508.0	1227.8	571.3	367.0	359.1	367.3	364.4	334.3	310.3	297.8	295.7
27.5°	1498.6	1159.7	464.3	337.5	336.1	342.9	312.9	284.0	271.8	265.1	263.8
30°	1496.1	1086.1	388.5	311.3	313.6	304.2	269.9	260.4	257.8	254.0	252.3
32.5°	1503.9	1012.4	341.1	289.8	292.0	261.0	247.9	249.3	249.0	244.2	242.6
35°	1525.1	940.7	311.0	270.2	263.5	233.7	235.5	239.6	239.6	233.7	231.9
37.5°	1562.2	874.1	291.7	253.7	230.4	219.7	224.0	229.4	229.4	225.5	223.8
40°	1601.5	809.2	277.2	240.6	209.7	209.9	214.3	218.4	220.1	220.8	219.4
42.5°	1637.3	741.9	261.8	226.5	200.2	202.6	204.5	207.6	214.7	219.4	218.6
45°	1658.0	674.3	245.0	208.9	193.9	194.8	194.2	199.6	208.0	215.1	215.1
47.5°	1677.2	618.8	231.1	191.5	187.3	187.3	185.4	190.8	198.5	206.9	207.6
50°	1695.5	582.7	221.4	178.0	179.3	178.4	177.7	182.6	193.1	203.2	205.0
52.5°	1713.8	570.7	212.7	168.3	170.9	169.6	170.3	177.3	189.2	199.6	201.2
55°	1739.7	578.4	203.6	161.4	162.9	162.6	165.2	173.3	183.8	194.2	194.8
57.5°	1771.7	606.6	195.8	156.5	155.0	157.2	161.4	169.2	179.3	191.8	192.7
58°	1778.1	613.4	194.5	155.0	153.4	156.5	160.8	168.3	178.7	191.8	192.7
60°	1787.9	637.3	191.1	152.4	147.7	153.2	158.6	165.8	177.3	193.4	195.6
62.5°	1740.8	642.0	190.1	149.4	141.7	148.4	154.8	163.2	176.0	199.2	203.6
65°	1577.7	593.5	183.1	144.4	136.6	144.6	151.5	161.2	180.0	216.3	218.4
67.5°	1266.4	492.9	165.8	136.6	131.0	140.2	148.7	161.2	181.6	219.0	220.4
70°	870.7	370.5	144.4	128.2	124.1	134.9	147.7	164.8	176.0	207.2	203.2
72.5°	454.9	257.8	126.5	118.4	116.2	130.3	157.5	161.2	169.2	193.4	189.5
75°	229.1	175.3	111.4	107.3	107.0	128.5	176.2	155.0	162.1	182.0	190.8
77.5°	135.3	137.4	99.3	96.8	98.5	125.6	176.6	149.1	154.1	167.5	177.0
80°	92.5	113.4	89.8	89.1	90.5	115.4	162.9	141.7	144.6	158.6	168.5
82.5°	52.1	62.6	78.7	83.2	82.5	94.5	140.7	128.8	132.6	187.3	198.2
85°	25.2	37.6	65.9	77.8	70.2	62.9	114.4	114.4	115.4	134.2	136.0
87.5°	9.4	16.8	44.5	61.5	49.0	37.6	77.8	81.0	90.2	92.9	95.0
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)