

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: P198676

Luminaire Tested: **XNV-AF-01-LED-U-AFL-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198676
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-800
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 800mA LIGHTSQUARE WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5120.9 lumens
Efficiency: N/A
Efficacy: 116.4 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

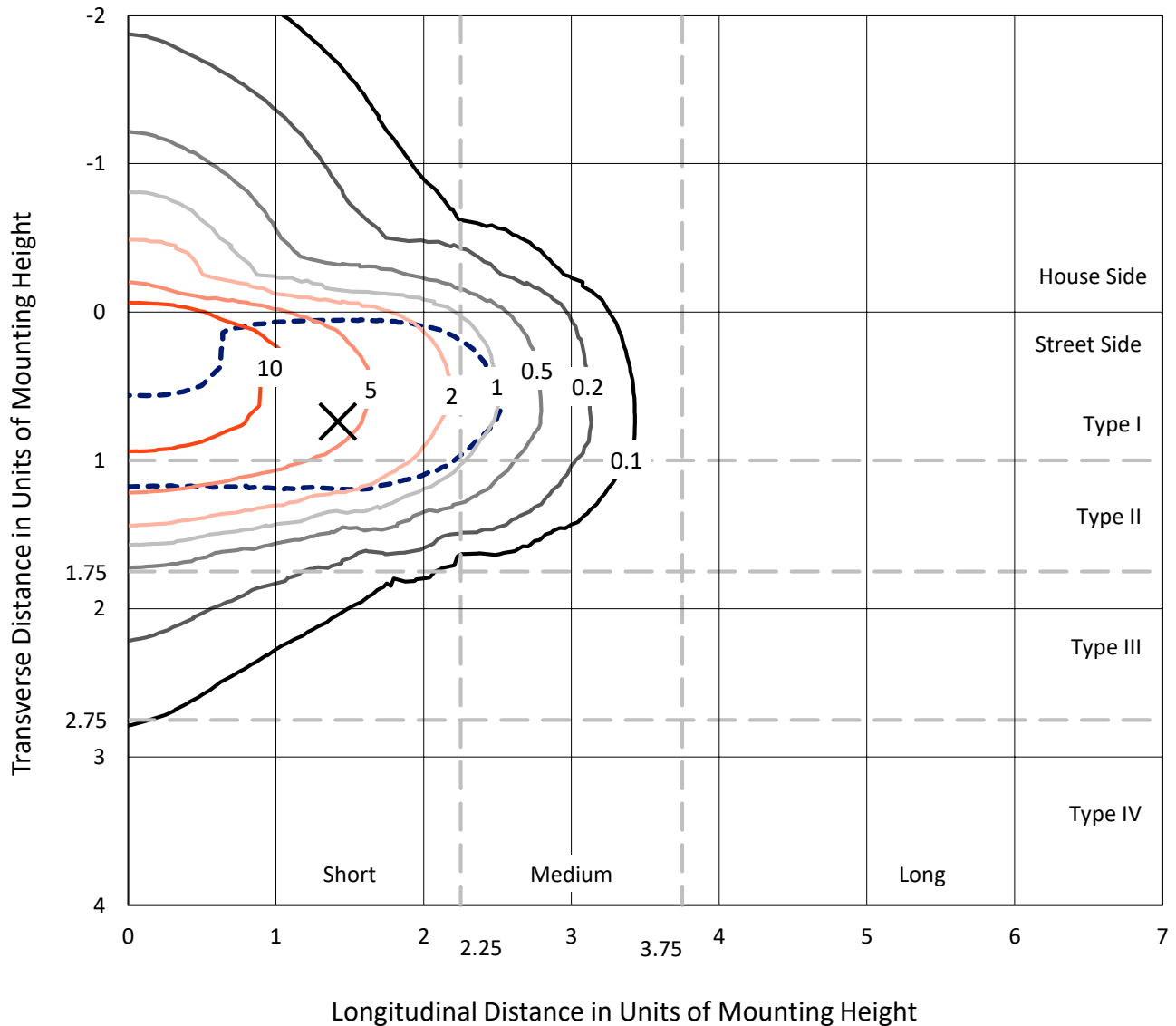
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

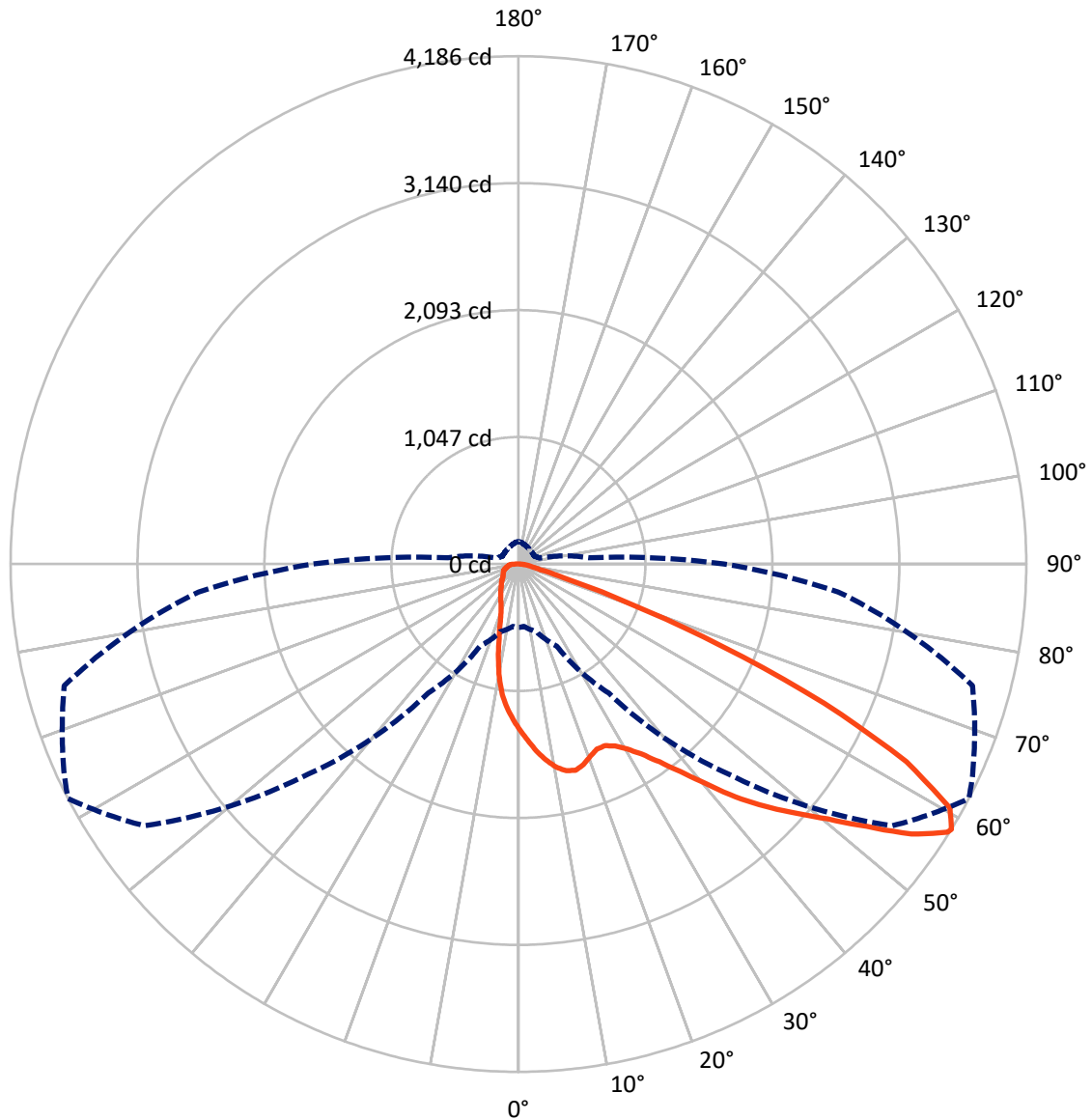
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 16 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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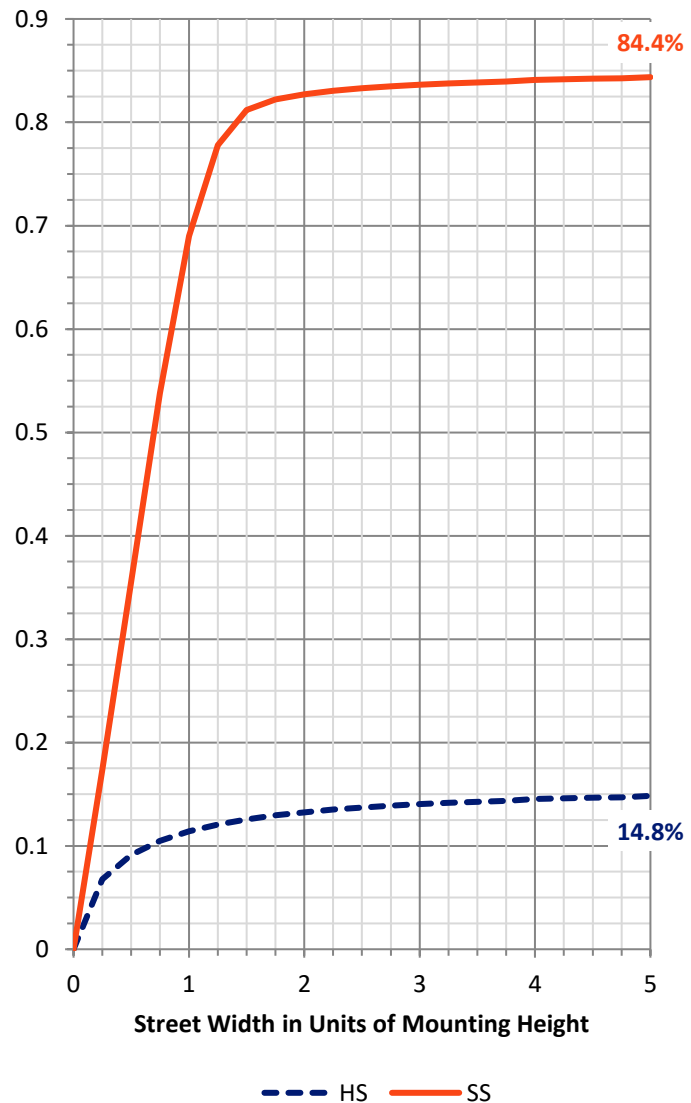
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	786.2	0.0	786.2
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	4334.6	0.0	4334.6
	% Fixture	84.6	0.0	84.6
Total	Lumens	5120.9	0.0	5120.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.2	2.4
10°-20°	308.4	6.0
20°-30°	499.8	9.8
30°-40°	798.0	15.6
40°-50°	1160.8	22.7
50°-60°	1214.6	23.7
60°-70°	740.5	14.5
70°-80°	207.1	4.0
80°-90°	69.4	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°	5120.9	100.0
0°-180°	5120.9	100.0



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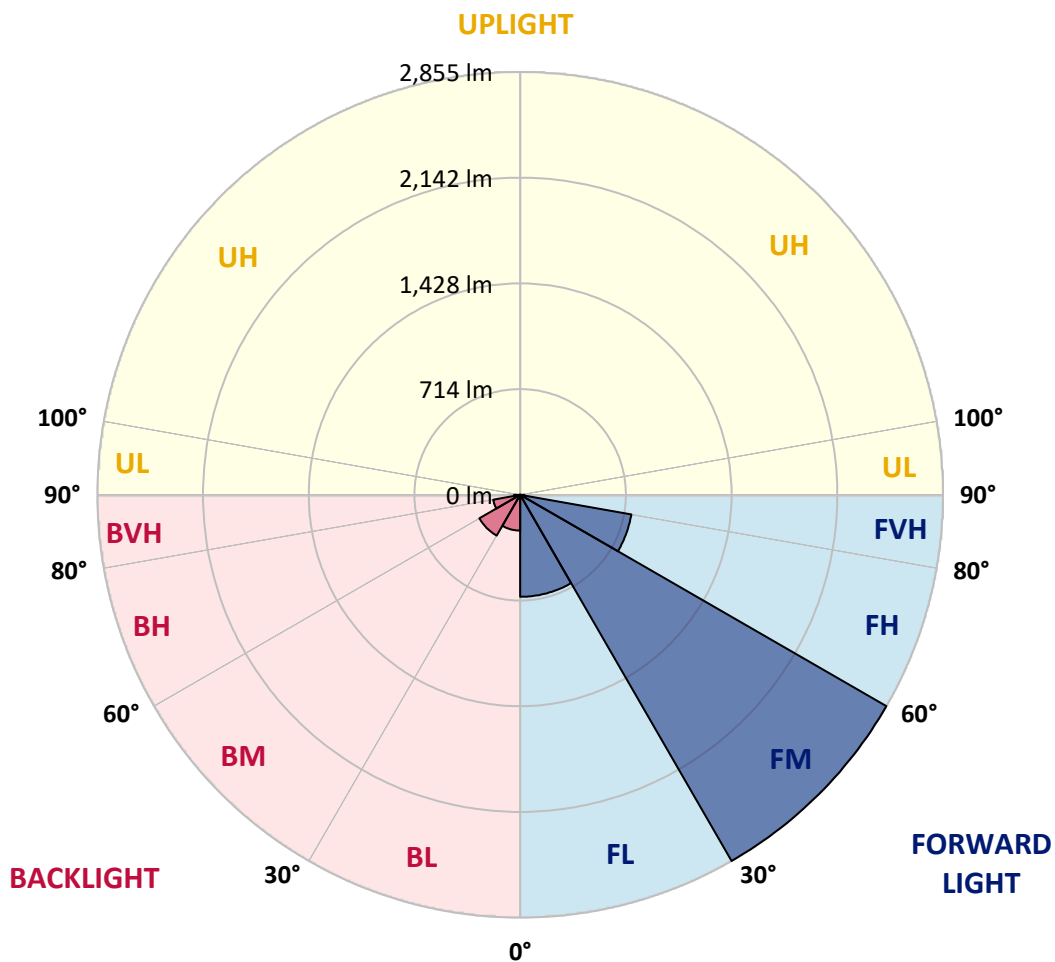
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	688.8	13.5			
FM (30°-60°)	2855.5	55.8			
FH (60°-80°)	762.5	14.9			G1/1800
FVH (80°-90°)	27.9	0.5			G1/100
BL (0°-30°)	241.7	4.7	B1/500		
BM (30°-60°)	318.0	6.2	B1/1000		
BH (60°-80°)	185.1	3.6	B1/500		G1/500
BVH (80°-90°)	41.5	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°	1367.3	1367.3	1367.3	1367.3	1367.3	1367.3	1367.3	1367.3	1367.3	1367.3	1367.3
2.5°	1551.9	1551.0	1537.8	1529.2	1519.0	1495.2	1471.6	1454.0	1445.0	1410.8	1377.5
5°	1680.3	1676.4	1669.0	1659.7	1646.3	1616.6	1579.1	1546.8	1534.0	1473.2	1412.1
7.5°	1612.4	1618.5	1641.2	1666.8	1693.7	1695.6	1669.0	1630.7	1616.6	1535.2	1445.6
10°	1424.6	1422.0	1450.4	1500.4	1589.1	1676.7	1720.6	1701.7	1686.9	1594.2	1479.3
12.5°	1367.6	1367.0	1371.7	1384.6	1440.2	1560.5	1707.4	1748.4	1743.3	1656.6	1515.1
15°	1384.9	1385.5	1385.2	1386.8	1402.2	1459.4	1634.2	1764.1	1780.1	1718.4	1551.6
17.5°	1440.2	1438.0	1430.9	1423.2	1425.5	1445.9	1555.1	1737.2	1785.3	1773.4	1582.3
20°	1525.6	1525.6	1506.8	1485.3	1471.3	1475.7	1522.2	1691.1	1761.5	1820.1	1605.3
22.5°	1632.8	1634.5	1606.6	1567.6	1535.6	1523.4	1541.1	1656.9	1732.8	1863.3	1625.9
25°	1766.0	1765.7	1725.1	1669.0	1618.5	1589.4	1589.1	1658.5	1723.8	1913.8	1647.3
27.5°	1930.8	1915.8	1868.4	1788.7	1717.3	1672.9	1652.7	1698.8	1742.7	1975.9	1676.1
30°	2116.8	2101.4	2039.4	1937.0	1840.3	1775.3	1742.0	1768.6	1800.3	2055.0	1719.6
32.5°	2300.8	2304.3	2231.4	2115.9	1991.7	1900.1	1850.8	1867.2	1889.3	2151.7	1778.5
35°	2570.3	2570.0	2474.6	2330.3	2182.8	2056.0	1993.6	2002.2	2022.4	2288.0	1861.1
37.5°	2771.3	2768.1	2706.6	2579.0	2412.8	2260.8	2170.6	2171.8	2189.1	2459.3	1969.9
40°	2791.7	2791.1	2790.8	2772.6	2659.0	2515.5	2402.6	2379.3	2386.2	2641.1	2085.4
42.5°	2635.2	2658.6	2725.9	2828.9	2860.6	2785.4	2678.5	2626.3	2611.0	2849.7	2207.7
45°	2412.2	2424.1	2541.8	2773.5	2962.1	3038.9	2958.5	2848.4	2822.2	3052.6	2307.3
47.5°	2308.5	2303.4	2371.5	2624.1	2952.1	3240.5	3246.2	3065.8	3021.3	3227.7	2392.1
50°	2086.1	2079.4	2165.5	2404.2	2843.9	3340.7	3541.7	3302.6	3220.4	3394.2	2468.9
52.5°	1642.8	1636.4	1751.9	2059.5	2602.0	3303.2	3790.6	3593.2	3453.0	3554.4	2540.5
55°	1069.0	1069.6	1179.7	1496.9	2105.6	3084.9	3907.5	3928.9	3771.7	3714.8	2598.5
57.5°	588.6	583.1	661.5	856.4	1448.5	2589.2	3810.2	4170.9	4088.9	3852.4	2640.4
58°	523.2	516.9	577.4	745.4	1298.7	2449.4	3761.2	4186.2	4129.6	3875.1	2646.5
60°	372.9	362.0	352.7	420.2	748.3	1766.0	3434.8	4086.7	4141.4	3920.6	2640.7
62.5°	314.3	301.8	268.5	266.0	352.4	863.8	2716.2	3589.0	3742.4	3815.9	2547.9
65°	291.8	279.4	235.6	219.8	239.1	372.9	1679.6	2771.3	2976.2	3452.0	2314.2
67.5°	275.9	261.2	214.1	193.6	197.4	223.1	712.8	1812.5	2049.9	2691.9	1856.6
70°	261.5	245.2	197.1	173.5	170.2	169.6	278.4	946.3	1175.2	1761.5	1243.7
72.5°	245.2	229.1	182.1	156.8	149.8	137.6	167.4	391.1	536.1	863.5	570.0
75°	221.5	208.4	165.5	143.1	130.9	111.7	123.6	187.5	231.1	330.6	264.6
77.5°	194.9	184.3	148.5	131.6	115.2	91.2	94.4	127.1	142.7	186.3	153.3
80°	137.9	141.8	129.6	115.9	101.5	73.7	72.6	93.1	102.4	125.1	103.0
82.5°	95.0	97.9	105.6	91.6	81.9	57.3	53.4	64.7	69.5	75.5	49.9
85°	67.8	66.0	73.2	65.6	60.1	36.5	34.3	40.9	43.9	46.1	24.0
87.5°	41.3	40.9	42.2	34.0	31.4	18.5	17.0	19.5	20.8	20.2	11.6
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°	1367.3	1367.3	1367.3	1367.3	1367.3	1367.3	1367.3	1367.3	1367.3	1367.3	1367.3
2.5°	1365.0	1349.3	1315.1	1287.6	1257.8	1235.1	1212.3	1199.5	1185.5	1177.4	1176.5
5°	1380.1	1348.0	1275.1	1207.2	1137.4	1074.7	1013.2	967.8	930.7	909.6	908.3
7.5°	1396.7	1346.4	1233.8	1116.3	992.2	868.6	759.4	682.3	632.7	609.7	608.0
10°	1409.5	1339.8	1183.6	1000.8	803.9	640.8	541.6	496.0	481.0	477.2	476.6
12.5°	1424.9	1335.0	1120.1	852.6	614.5	487.7	457.7	454.8	458.0	459.9	460.2
15°	1439.3	1325.6	1034.7	688.4	481.0	435.9	436.6	442.6	449.1	451.9	452.2
17.5°	1445.9	1302.9	922.4	542.5	420.8	412.6	419.9	427.9	433.6	435.9	435.9
20°	1445.9	1266.4	792.1	439.5	389.5	391.1	400.1	406.1	407.4	405.5	404.6
22.5°	1439.9	1221.3	665.4	383.4	363.9	370.0	377.1	372.9	357.8	346.3	344.0
25°	1434.5	1167.9	543.4	349.1	341.5	349.5	346.6	318.1	295.1	283.3	281.3
27.5°	1425.5	1103.3	441.7	321.0	319.8	326.1	297.7	270.2	258.6	252.2	250.9
30°	1423.2	1033.1	369.7	296.0	298.3	289.3	256.7	247.8	245.2	241.6	240.1
32.5°	1430.6	963.0	324.5	275.6	277.8	248.4	235.9	237.1	236.8	232.3	230.8
35°	1450.7	894.9	295.7	257.0	250.6	222.4	224.0	227.9	227.9	222.4	220.5
37.5°	1485.9	831.5	277.5	241.3	219.2	209.0	213.2	218.3	218.3	214.4	212.9
40°	1523.4	769.7	263.7	228.8	199.4	199.7	203.9	207.8	209.3	209.9	208.7
42.5°	1557.3	705.7	249.0	215.4	190.5	192.6	194.6	197.4	204.2	208.7	208.1
45°	1577.2	641.4	233.0	198.8	184.3	185.4	184.6	189.8	197.8	204.5	204.5
47.5°	1595.4	588.6	219.8	182.1	178.3	178.3	176.4	181.5	188.8	196.8	197.4
50°	1612.7	554.3	210.6	169.3	170.6	169.6	169.0	173.8	183.7	193.3	194.9
52.5°	1630.3	542.8	202.2	160.0	162.5	161.3	161.9	168.7	179.8	189.8	191.4
55°	1654.9	550.1	193.6	153.6	154.9	154.6	157.1	164.8	174.7	184.6	185.4
57.5°	1685.4	577.0	186.3	148.8	147.5	149.5	153.6	161.0	170.6	182.4	183.4
58°	1691.4	583.5	184.9	147.5	146.0	148.8	153.0	160.0	169.9	182.4	183.4
60°	1700.8	606.2	181.8	145.0	140.5	145.7	150.8	157.7	168.7	184.0	186.0
62.5°	1656.0	610.7	180.9	142.1	134.7	141.2	147.2	155.2	167.4	189.5	193.6
65°	1500.7	564.6	174.1	137.3	129.9	137.6	144.0	153.3	171.2	205.8	207.8
67.5°	1204.6	468.9	157.7	129.9	124.5	133.5	141.5	153.3	172.8	208.4	209.6
70°	828.3	352.4	137.3	121.9	118.0	128.4	140.5	156.8	167.4	197.1	193.3
72.5°	432.7	245.2	120.3	112.6	110.4	123.9	149.8	153.3	161.0	184.0	180.1
75°	218.0	166.7	106.0	102.1	101.8	122.2	167.7	147.5	154.3	173.2	181.5
77.5°	128.7	130.5	94.4	92.2	93.8	119.4	168.1	141.8	146.6	159.4	168.4
80°	88.0	107.8	85.4	84.8	86.1	109.8	154.9	134.7	137.6	150.8	160.3
82.5°	49.6	59.5	74.9	79.1	78.5	89.9	133.8	122.5	126.1	178.3	188.5
85°	24.0	35.8	62.7	74.0	66.9	59.8	108.8	108.8	109.8	127.7	129.3
87.5°	9.0	16.0	42.2	58.6	46.7	35.8	74.0	77.1	85.7	88.4	90.2
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)