

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: P198670

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198670
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24283)
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-HSS
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5193.5 lumens
Efficiency: N/A
Efficacy: 89.5 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

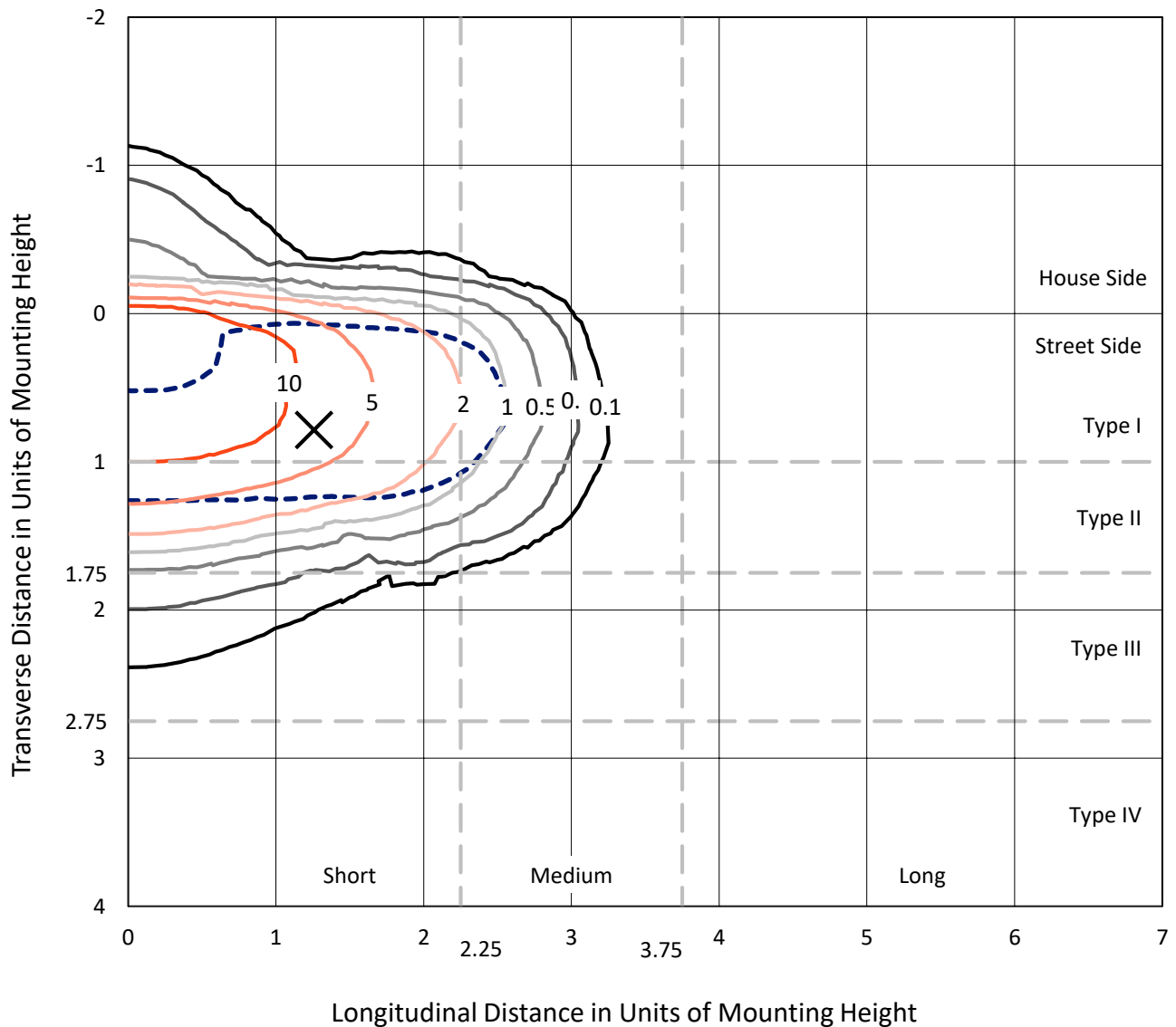
Input Watts (W): 58
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

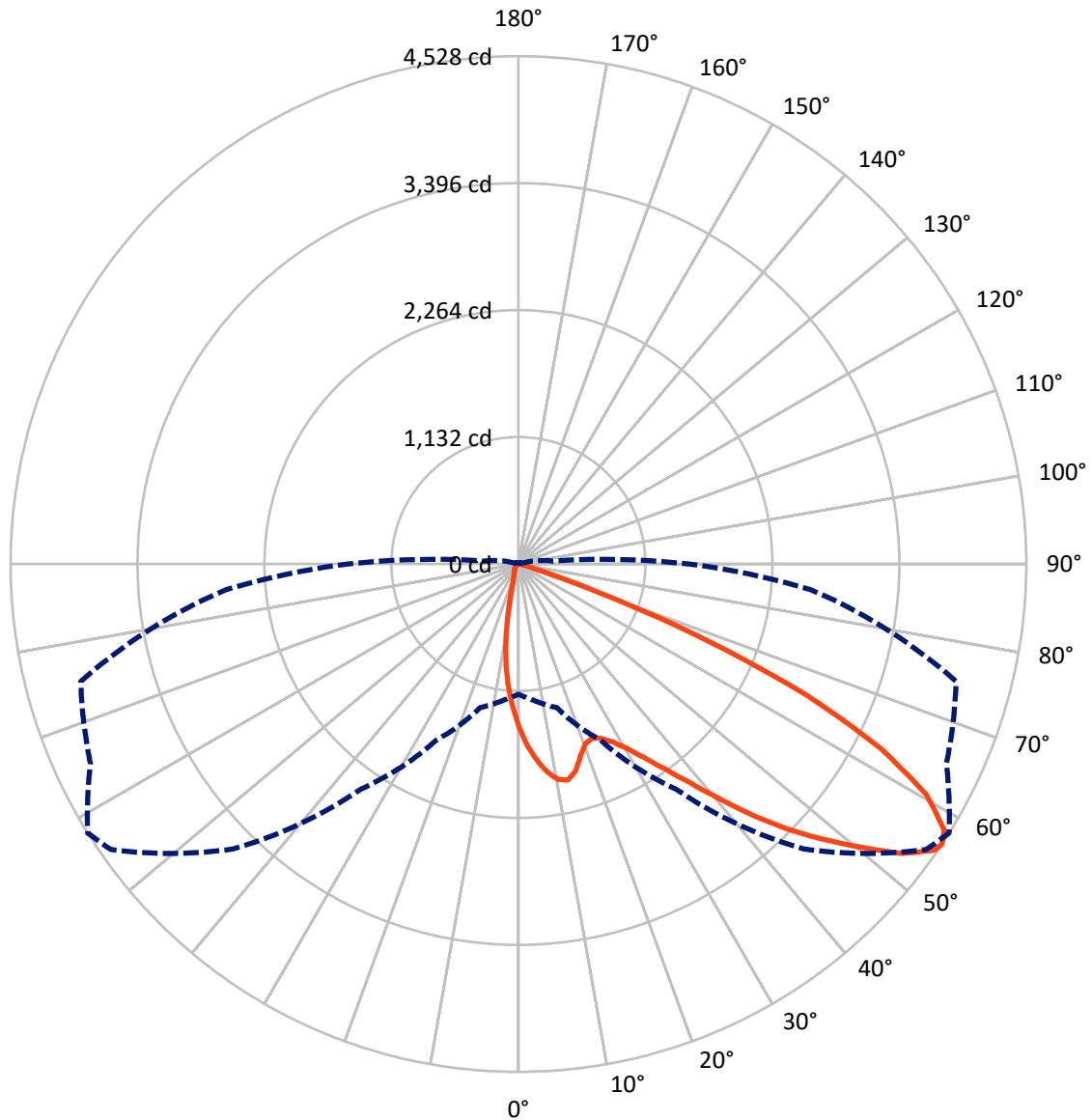
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 18.3 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 56-Deg Vertical

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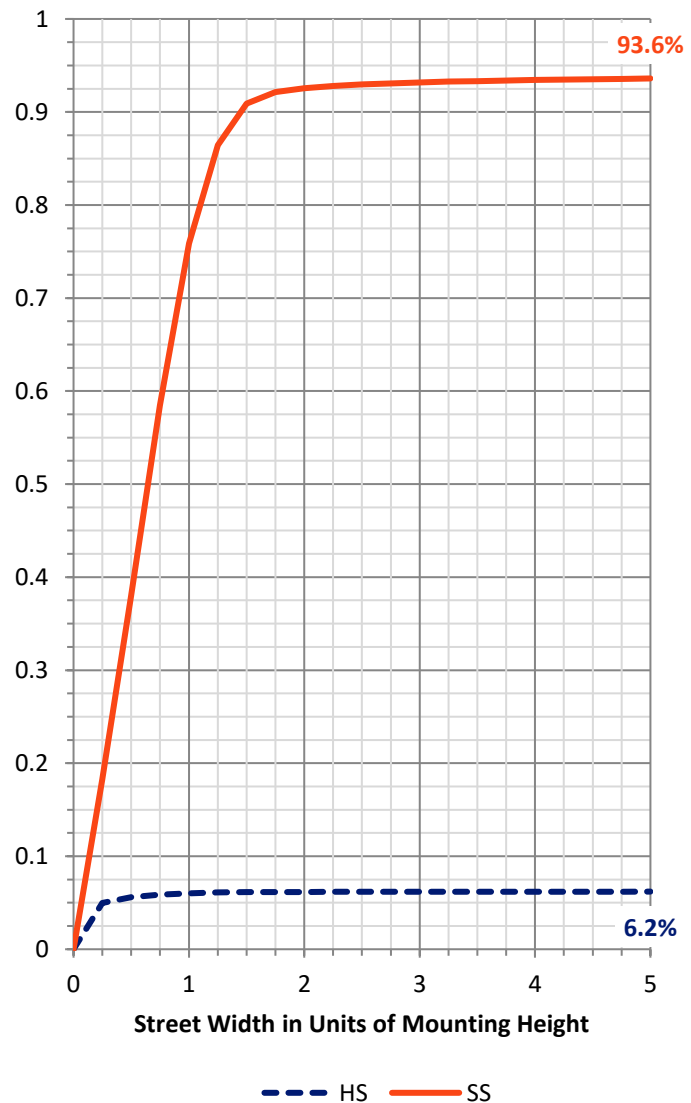
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	324.2	0.0	324.2
	% Fixture	6.2	0.0	6.2
Street Side	Lumens	4869.3	0.0	4869.3
	% Fixture	93.8	0.0	93.8
Total	Lumens	5193.5	0.0	5193.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.4	2.4
10°-20°	291.9	5.6
20°-30°	491.1	9.5
30°-40°	841.0	16.2
40°-50°	1269.1	24.4
50°-60°	1319.2	25.4
60°-70°	740.6	14.3
70°-80°	101.5	2.0
80°-90°	13.8	0.3
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°	5193.5	100.0
0°-180°	5193.5	100.0

Coefficient of Utilization



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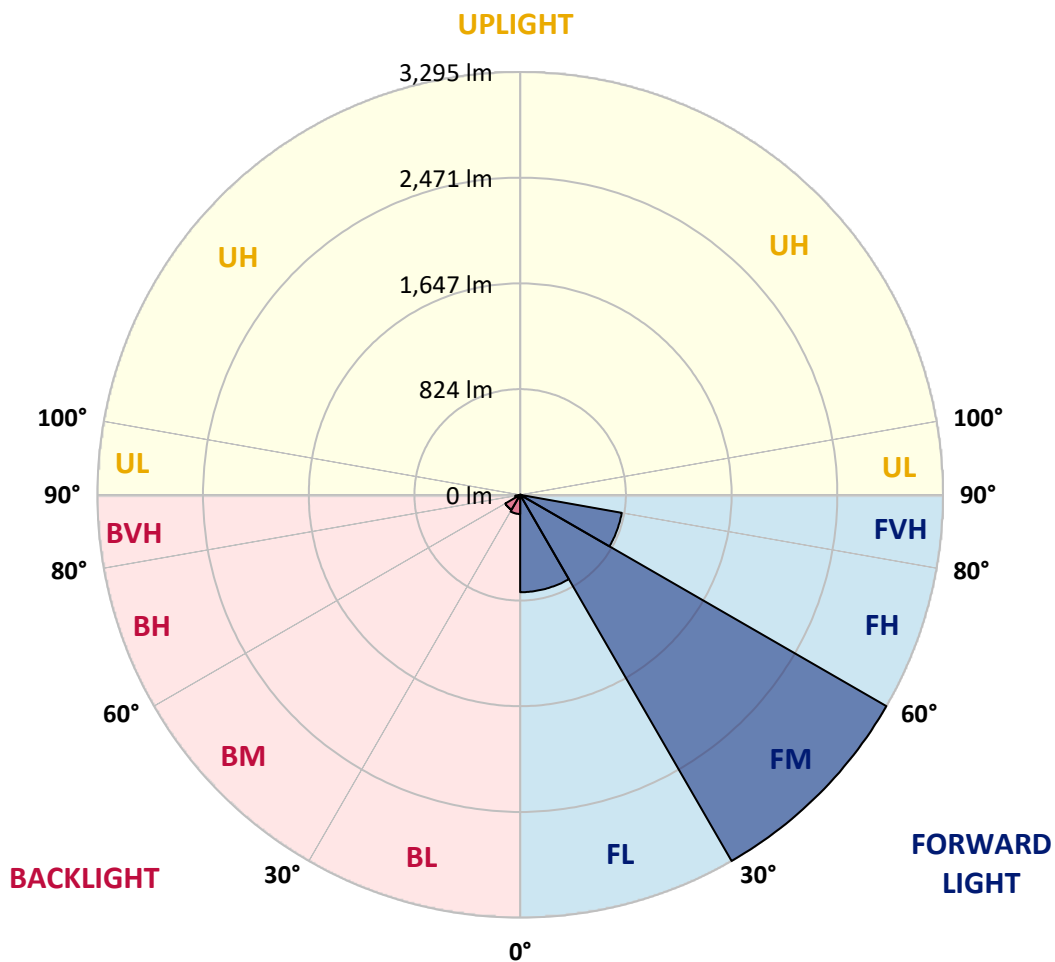
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	758.9	14.6			
FM	(30°-60°)	3295.0	63.4			
FH	(60°-80°)	803.6	15.5			G1/1800
FVH	(80°-90°)	11.9	0.2			G1/100
BL	(0°-30°)	149.5	2.9	B1/500		
BM	(30°-60°)	134.3	2.6	B0/220		
BH	(60°-80°)	38.5	0.7	B0/110		G0/110
BVH	(80°-90°)	1.9	0.0			G0/10
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°	58°	65°	75°	85°
0°	1470.5	1470.5	1470.5	1470.5	1470.5	1470.5	1470.5	1470.5	1470.5	1470.5	1470.5
2.5°	1769.2	1758.6	1747.4	1726.8	1707.8	1678.5	1638.1	1628.1	1596.4	1544.1	1495.5
5°	1921.7	1919.8	1912.2	1895.6	1875.0	1839.4	1793.7	1763.3	1714.2	1631.7	1537.8
7.5°	1831.4	1848.1	1875.4	1914.2	1940.3	1936.9	1902.0	1875.4	1826.7	1714.2	1579.4
10°	1543.7	1546.9	1584.6	1666.2	1795.4	1915.8	1961.4	1954.2	1909.4	1786.3	1615.9
12.5°	1442.4	1444.3	1453.0	1479.2	1563.2	1731.1	1937.6	1974.8	1971.3	1855.2	1654.7
15°	1450.2	1451.5	1453.8	1462.1	1485.9	1570.3	1817.2	1911.9	2010.9	1920.6	1692.8
17.5°	1512.8	1512.0	1504.6	1496.6	1504.1	1531.9	1694.3	1794.2	2002.6	1975.6	1724.1
20°	1634.9	1638.9	1613.5	1578.2	1560.0	1561.2	1633.7	1708.5	1955.9	2018.5	1747.4
22.5°	1806.4	1809.2	1767.7	1706.6	1653.1	1626.2	1646.3	1686.0	1902.0	2058.1	1766.4
25°	2011.3	2011.3	1953.0	1866.3	1783.5	1724.4	1707.0	1722.0	1881.3	2102.9	1785.5
27.5°	2232.4	2240.4	2164.3	2050.5	1941.2	1854.8	1800.1	1797.3	1897.2	2159.1	1806.8
30°	2472.9	2480.0	2389.7	2250.6	2121.1	2010.5	1926.5	1908.3	1957.8	2234.7	1838.1
32.5°	2712.3	2718.2	2618.3	2476.5	2325.6	2195.6	2085.0	2056.1	2066.8	2345.3	1884.1
35°	3016.6	3017.8	2891.4	2722.6	2561.3	2408.7	2268.9	2240.4	2228.5	2484.8	1950.3
37.5°	3258.7	3249.2	3169.1	3009.4	2824.4	2665.1	2500.7	2463.4	2434.9	2680.9	2053.0
40°	3315.7	3315.7	3303.8	3255.8	3108.8	2955.5	2796.2	2740.8	2677.8	2911.9	2190.9
42.5°	3167.2	3176.7	3255.1	3359.3	3360.5	3262.2	3106.5	3059.7	2948.9	3175.0	2341.3
45°	2834.7	2837.5	3025.7	3307.0	3498.0	3554.2	3439.4	3374.8	3221.1	3448.5	2479.2
47.5°	2715.0	2723.7	2803.8	3147.7	3508.3	3790.9	3758.7	3669.9	3473.0	3698.1	2608.0
50°	2531.2	2541.8	2639.7	2913.2	3415.5	3942.6	4064.2	3969.2	3702.5	3906.1	2671.8
52.5°	2091.3	2108.0	2246.3	2602.9	3183.7	3948.9	4344.0	4286.9	3937.4	4017.4	2664.3
55°	1439.2	1451.5	1612.7	2031.9	2716.2	3755.2	4464.5	4503.6	4147.0	4042.4	2627.9
56°	1160.9	1207.0	1325.0	1731.1	2450.0	3590.4	4436.6	4527.5	4209.2	4038.5	2612.0
57.5°	767.5	776.2	905.0	1254.4	1967.3	3232.5	4311.4	4476.7	4289.3	4018.3	2600.5
60°	361.0	364.9	411.3	578.9	1064.7	2355.7	3904.5	4178.8	4318.6	3975.9	2600.1
62.5°	235.4	236.2	241.7	276.2	435.5	1283.0	3236.9	3631.6	4075.7	3971.1	2592.6
65°	193.7	195.8	189.0	193.3	227.8	483.9	2283.1	2831.1	3505.6	3859.4	2507.8
67.5°	170.7	171.1	162.0	156.9	166.8	212.4	1150.3	1785.9	2621.9	3279.3	2065.6
70°	155.7	155.3	145.1	133.1	133.5	141.1	374.8	741.7	1450.6	1947.1	1185.9
72.5°	138.3	139.1	133.1	116.5	111.0	99.8	141.1	200.1	493.7	625.2	312.6
75°	121.2	119.7	113.8	103.0	92.7	67.0	70.9	85.2	128.8	127.6	67.3
77.5°	92.0	90.3	93.1	88.0	72.5	46.7	38.9	44.4	58.2	54.3	27.3
80°	70.2	69.4	63.4	75.3	66.2	35.3	26.6	27.3	31.7	28.9	13.5
82.5°	50.7	50.3	48.0	46.3	42.0	25.8	20.3	21.4	23.7	20.3	9.9
85°	19.4	19.4	37.6	31.7	28.9	17.4	14.2	15.4	18.2	14.6	6.8
87.5°	3.2	3.2	25.4	21.0	13.1	8.7	9.1	9.9	10.7	8.7	5.1
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°	1470.5	1470.5	1470.5	1470.5	1470.5	1470.5	1470.5	1470.5	1470.5	1470.5	1470.5
2.5°	1466.5	1439.9	1381.7	1325.4	1276.3	1222.4	1195.0	1163.4	1151.4	1127.7	1130.1
5°	1481.5	1426.1	1309.2	1185.9	1073.0	958.1	876.5	799.6	756.8	714.4	714.4
7.5°	1497.0	1412.2	1231.5	1034.6	844.3	647.4	508.0	396.2	334.0	292.5	291.2
10°	1507.7	1394.4	1143.1	859.1	578.5	333.6	201.3	158.5	143.0	136.3	136.0
12.5°	1521.5	1376.6	1042.5	652.2	321.3	158.5	125.6	118.9	116.1	114.5	114.5
15°	1533.4	1351.2	920.5	438.6	168.8	118.9	108.1	105.8	105.4	105.0	105.4
17.5°	1536.3	1315.1	774.3	256.8	122.4	103.8	99.0	97.1	97.1	96.7	96.7
20°	1529.9	1267.5	612.5	158.5	105.8	95.5	90.3	88.0	87.6	87.6	87.6
22.5°	1516.8	1207.0	452.9	120.1	96.3	88.0	81.2	78.9	78.9	79.3	79.7
25°	1500.6	1135.3	311.1	103.4	89.2	80.0	73.3	70.9	71.7	72.5	72.9
27.5°	1479.9	1049.6	203.7	89.5	79.7	72.1	66.2	64.5	66.2	67.7	68.5
30°	1459.3	955.7	137.9	77.6	68.9	63.4	59.8	59.4	61.8	65.4	65.8
32.5°	1445.8	859.5	104.2	69.8	60.7	55.9	54.3	55.0	58.6	62.6	63.4
35°	1444.7	765.6	88.8	63.4	55.0	50.7	49.9	52.3	56.3	59.4	60.3
37.5°	1463.3	677.6	80.4	58.6	50.7	46.3	45.2	49.5	53.1	56.3	57.1
40°	1501.0	598.7	74.9	54.3	47.2	42.0	41.2	44.8	48.4	51.9	53.1
42.5°	1548.1	525.0	68.5	49.9	43.2	37.2	36.4	39.2	42.8	48.0	48.7
45°	1588.9	456.4	61.8	45.2	38.9	32.1	31.7	34.9	37.6	42.4	43.2
47.5°	1623.4	399.4	55.4	40.0	33.2	28.5	28.1	29.8	31.3	35.7	36.4
50°	1605.2	351.1	49.1	32.8	26.9	24.6	24.1	24.1	26.2	30.5	31.3
52.5°	1560.4	321.0	43.2	27.3	22.2	21.0	19.8	20.3	22.2	24.1	24.6
55°	1524.3	306.7	38.1	24.1	18.6	17.4	16.3	15.9	16.3	15.4	14.6
56°	1515.6	305.1	36.8	23.4	17.8	16.3	14.6	13.9	13.5	11.9	11.5
57.5°	1511.6	305.1	34.9	21.8	16.7	14.6	12.7	11.0	9.5	8.3	8.3
60°	1508.4	307.1	32.5	19.0	14.2	11.9	9.1	6.8	5.5	5.5	5.5
62.5°	1501.8	306.3	29.8	15.9	12.3	9.1	5.5	4.4	4.0	4.4	4.7
65°	1426.1	284.5	26.2	12.7	9.5	6.3	3.2	3.2	3.6	4.4	4.7
67.5°	1149.1	215.5	21.4	9.9	6.8	4.7	2.8	2.8	3.6	4.4	4.7
70°	631.2	113.8	18.2	7.2	5.1	4.0	2.8	2.4	3.6	4.4	4.7
72.5°	154.2	47.6	16.7	5.5	4.7	3.6	2.4	2.4	3.6	4.4	4.7
75°	38.1	35.7	13.5	4.4	4.0	3.2	2.4	2.4	3.6	4.4	4.7
77.5°	17.8	47.2	9.1	4.0	3.6	2.8	2.4	2.4	3.6	4.4	4.4
80°	10.7	35.7	5.5	3.6	3.2	2.8	2.4	2.4	3.6	4.4	4.7
82.5°	6.3	10.3	4.0	3.6	3.2	2.4	2.4	2.4	3.6	4.4	4.7
85°	5.5	5.1	4.0	3.6	3.2	2.8	2.4	2.4	4.0	4.7	4.7
87.5°	4.4	4.0	3.6	3.2	3.2	2.8	2.4	2.4	3.6	4.4	4.7
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)