

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: P198884

Luminaire Tested: **XNV-AF-01-LED-U-SL4-7050-800-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198884  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24285)  
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-SL4-7050-800-HSS  
Description: XNV ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 800mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3982 lumens  
Efficiency: N/A  
Efficacy: 90.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B0 - 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

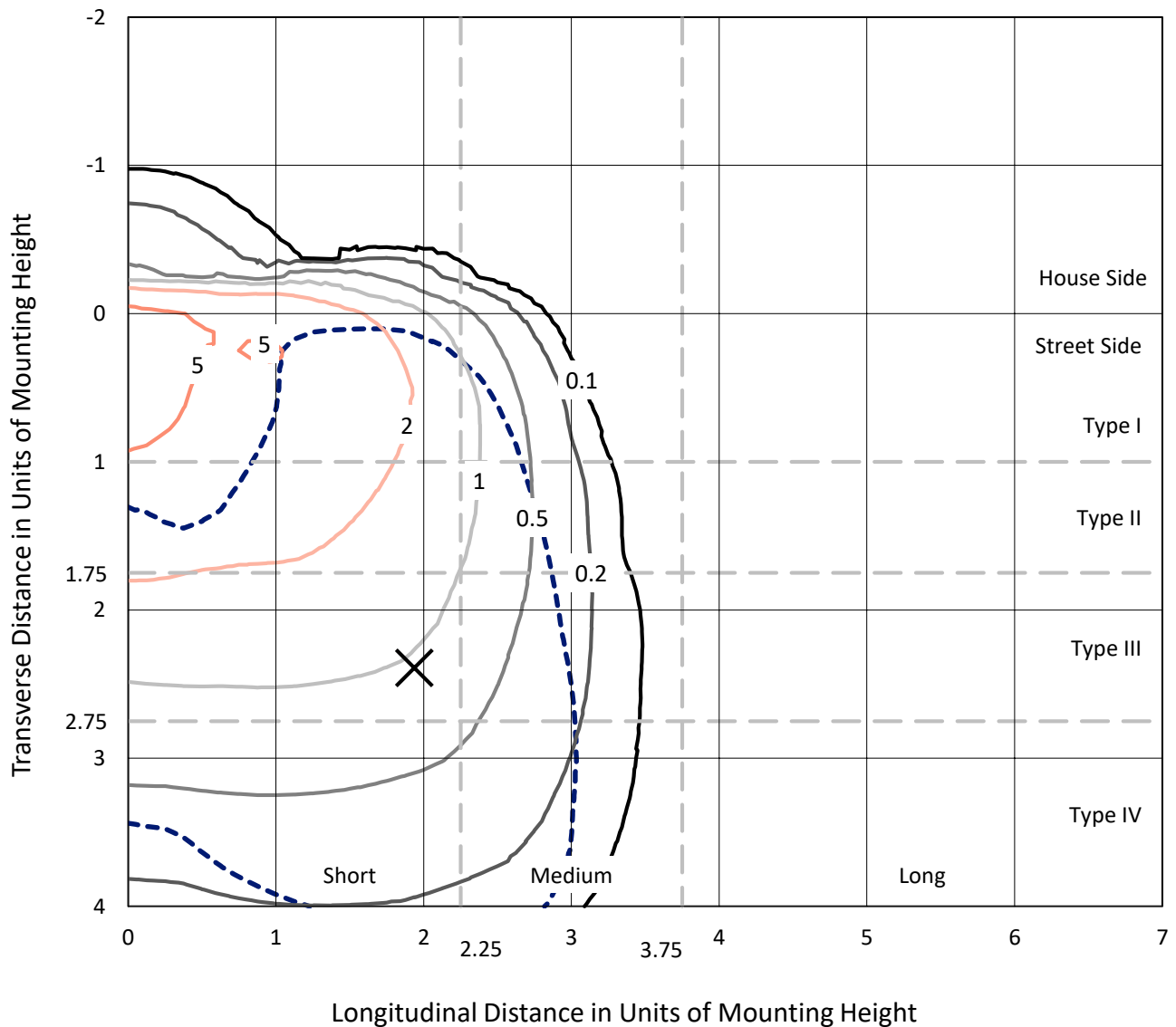


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

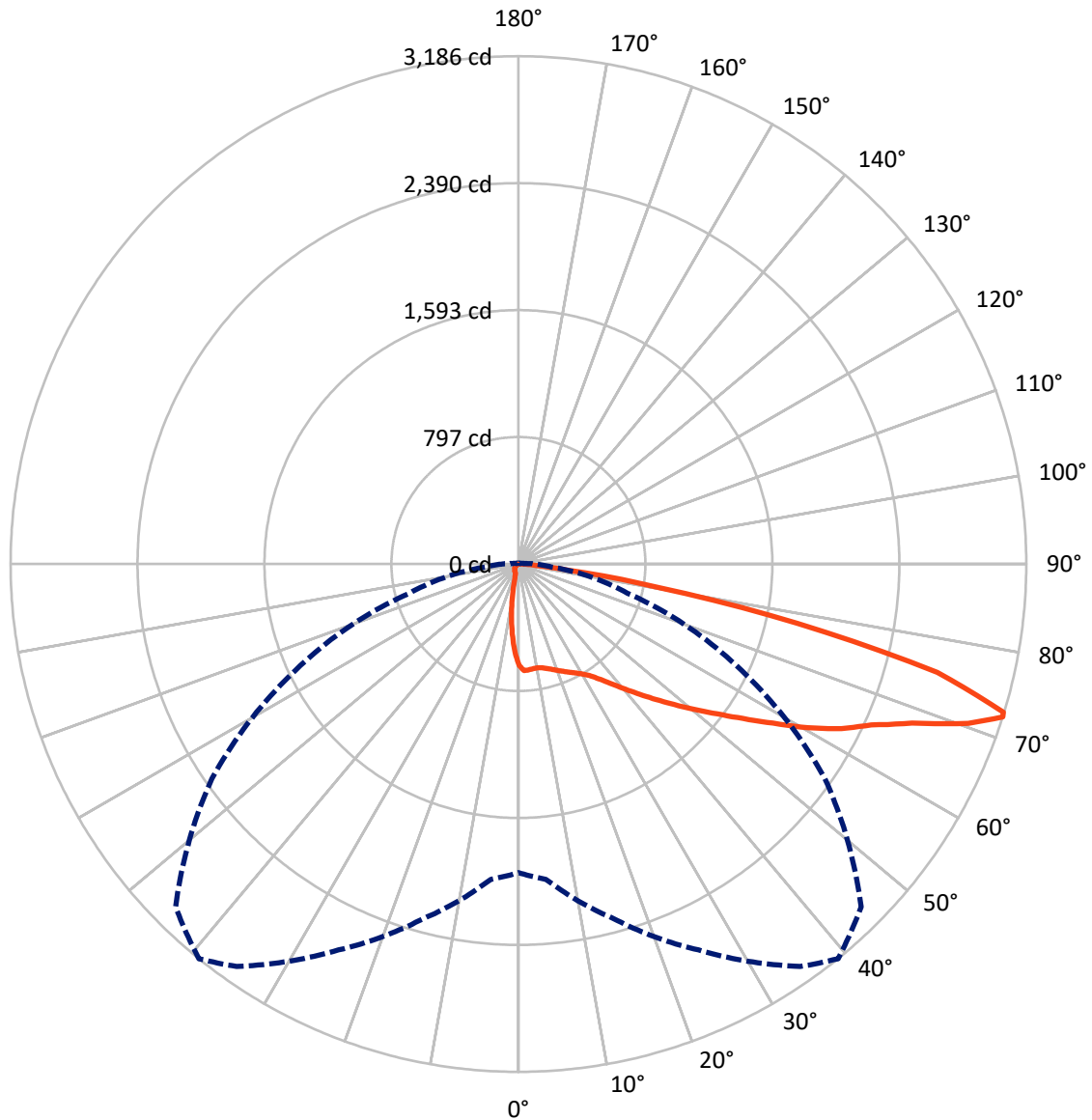


Based on 10 foot mounting height. Maximum calculated value = 6.7 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral    - - - Horizontal Cone Through 72-Deg Vertical

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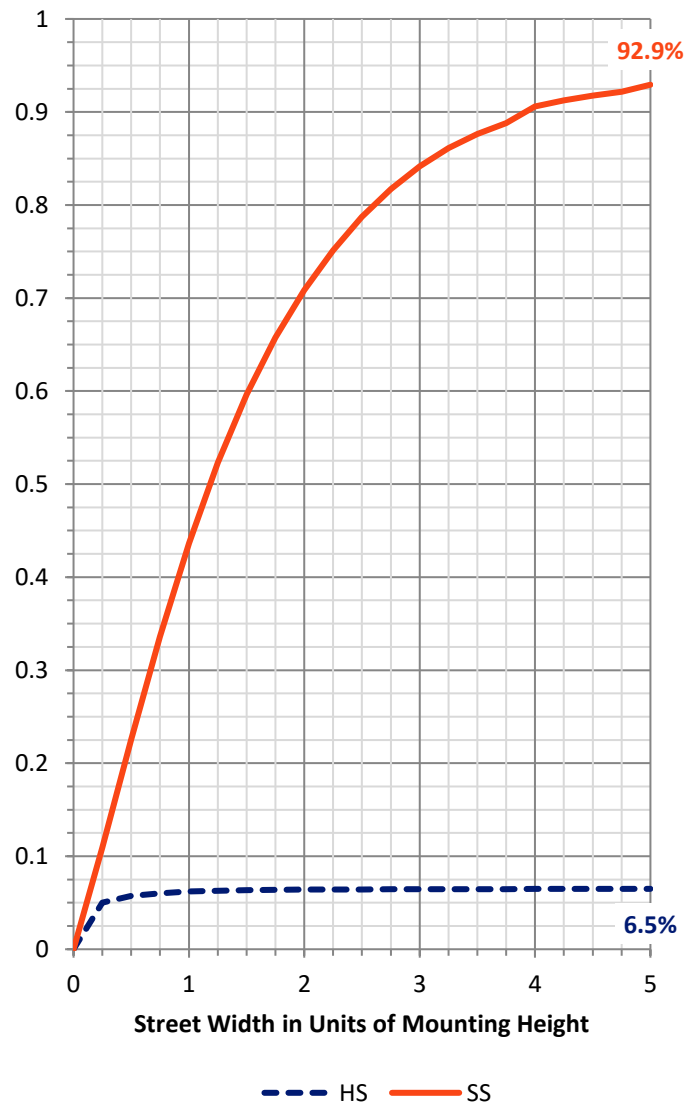
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	261.0	0.0	261.0
	% Fixture	6.6	0.0	6.6
<b>Street Side</b>	Lumens	3721.0	0.0	3721.0
	% Fixture	93.4	0.0	93.4
<b>Total</b>	Lumens	3982.0	0.0	3982.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.8	1.3
10°-20°	125.5	3.2
20°-30°	208.4	5.2
30°-40°	332.2	8.3
40°-50°	548.4	13.8
50°-60°	828.1	20.8
60°-70°	1078.8	27.1
70°-80°	728.9	18.3
80°-90°	79.8	2.0
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°	3982.0	100.0
0°-180°	3982.0	100.0

**Coefficient of Utilization**



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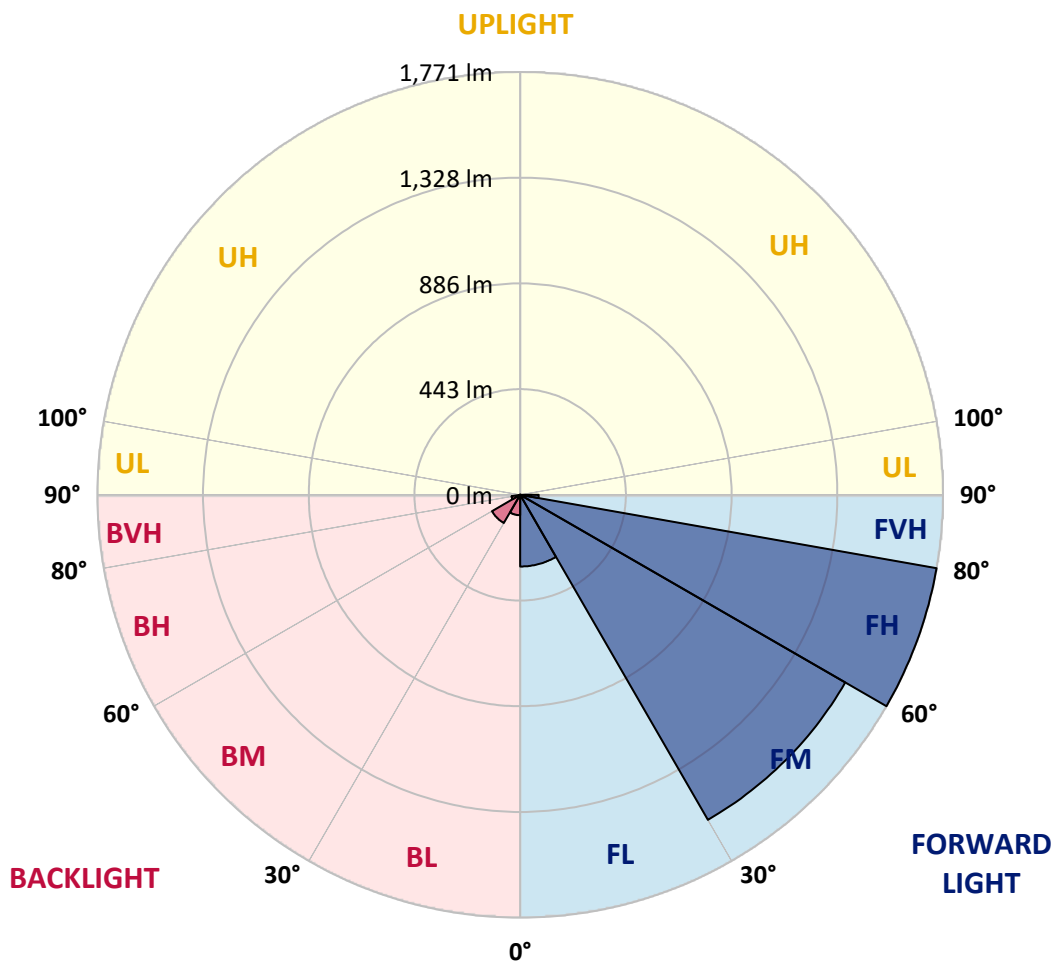
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	300.3	7.5			
FM	(30°-60°)	1572.1	39.5			
FH	(60°-80°)	1771.0	44.5			G1/1800
FVH	(80°-90°)	77.5	1.9			G1/100
BL	(0°-30°)	85.5	2.1	B0/110		
BM	(30°-60°)	136.5	3.4	B0/220		
BH	(60°-80°)	36.7	0.9	B0/110		G0/110
BVH	(80°-90°)	2.3	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G1**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	637.3	637.3	637.3	637.3	637.3	637.3	637.3	637.3	637.3	637.3	637.3
2.5°	678.7	679.9	678.4	675.5	671.5	669.0	665.5	658.0	648.6	640.5	631.1
5°	684.0	684.6	682.7	677.4	671.2	667.7	663.3	655.2	645.5	634.2	617.3
7.5°	685.6	685.2	683.0	676.5	666.8	662.4	654.9	644.9	634.8	624.5	605.4
10°	684.9	684.9	683.4	677.1	666.1	662.1	653.6	643.0	630.5	620.1	599.8
12.5°	682.7	684.0	683.0	679.6	671.5	668.3	660.8	650.2	638.3	627.6	606.0
15°	685.6	687.4	689.3	688.1	683.4	680.5	673.7	662.7	653.0	641.7	618.6
17.5°	696.8	700.9	705.3	705.6	700.6	695.6	687.7	676.5	667.1	656.8	631.7
20°	718.1	721.2	729.4	730.9	720.9	713.7	702.8	689.6	680.2	671.5	643.9
22.5°	749.7	753.2	759.7	757.6	740.6	732.2	718.4	703.4	693.7	688.7	658.0
25°	797.6	798.6	800.1	790.4	762.6	753.2	736.3	719.4	711.5	710.9	678.0
27.5°	854.0	855.2	848.3	826.7	787.0	774.8	755.7	740.3	736.6	741.3	703.4
30°	918.5	918.8	899.7	864.6	815.2	801.7	782.0	765.1	768.5	780.1	736.0
32.5°	984.5	981.4	955.1	909.4	853.7	837.4	820.5	803.6	813.6	837.1	783.5
35°	1044.9	1043.7	1012.7	959.5	903.7	889.3	877.1	859.3	875.6	913.8	848.3
37.5°	1105.3	1104.4	1069.0	1013.6	965.4	955.1	946.0	932.2	958.8	1014.9	935.0
40°	1172.0	1170.4	1126.9	1073.7	1037.1	1031.5	1026.1	1020.2	1065.6	1143.5	1043.0
42.5°	1254.3	1247.5	1188.3	1139.1	1116.0	1117.5	1117.9	1123.8	1194.9	1296.6	1170.4
45°	1348.9	1333.5	1250.0	1209.3	1202.7	1212.1	1221.5	1246.2	1345.4	1472.8	1311.3
47.5°	1440.6	1415.9	1321.0	1284.7	1298.2	1317.6	1340.1	1388.3	1514.5	1657.2	1439.0
50°	1519.5	1494.1	1391.5	1361.4	1404.3	1433.1	1473.2	1546.1	1692.9	1813.1	1519.5
52.5°	1581.5	1561.4	1466.0	1445.9	1522.0	1561.4	1624.4	1720.1	1861.3	1915.8	1575.8
55°	1627.2	1617.2	1537.3	1540.1	1652.8	1709.8	1788.1	1896.4	2003.4	1995.6	1618.1
57.5°	1678.8	1671.0	1612.1	1651.3	1810.3	1883.9	1974.3	2061.4	2106.7	2059.8	1659.4
60°	1731.7	1734.2	1702.9	1785.9	2005.0	2086.4	2165.3	2186.9	2195.3	2124.9	1702.9
62.5°	1771.8	1782.4	1785.3	1931.1	2204.7	2274.2	2308.3	2293.0	2291.1	2212.2	1699.5
65°	1817.8	1845.7	1892.0	2090.5	2386.3	2432.0	2456.4	2478.6	2431.7	2238.2	1532.3
67.5°	1897.3	1941.1	2045.4	2285.8	2596.0	2663.6	2732.8	2709.3	2452.7	1974.3	1167.3
70°	2004.4	2057.9	2242.0	2540.9	2880.6	2993.9	3051.8	2690.9	2082.3	1364.2	615.7
72°	1936.8	1985.3	2302.7	2671.2	3082.2	3186.1	3041.2	2347.2	1509.5	707.2	206.3
72.5°	1871.0	1921.1	2283.3	2669.6	3102.2	3181.7	2972.0	2211.6	1335.7	550.3	142.1
75°	1298.2	1361.4	1957.4	2399.7	2801.4	2714.0	2273.9	1339.2	484.0	94.5	47.0
77.5°	671.2	720.0	1187.4	1695.7	1952.4	1788.1	1343.9	581.0	134.0	50.1	31.0
80°	416.0	440.1	555.3	835.5	1014.2	887.1	592.9	234.8	85.8	29.7	24.7
82.5°	215.4	233.8	349.7	337.1	374.7	311.5	218.8	196.6	52.9	18.5	25.4
85°	70.7	75.1	214.7	224.1	160.3	107.7	97.0	187.5	15.3	11.9	21.6
87.5°	9.4	11.0	75.4	128.3	78.9	48.8	58.2	66.1	5.3	6.6	5.9
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°	637.3	637.3	637.3	637.3	637.3	637.3	637.3	637.3	637.3	637.3	637.3
2.5°	624.8	620.8	607.9	595.1	580.4	566.9	556.3	549.4	552.5	542.2	543.7
5°	607.0	596.6	568.5	538.1	505.2	474.6	450.1	432.0	428.5	412.9	413.5
7.5°	589.8	572.9	527.2	477.1	422.6	378.5	338.4	303.3	290.8	278.0	270.5
10°	580.4	557.2	492.4	419.5	342.8	278.0	221.6	177.5	159.0	145.6	139.0
12.5°	583.2	552.5	466.4	367.2	266.4	184.1	125.2	93.0	81.7	75.4	73.3
15°	592.6	553.5	442.9	316.2	193.8	111.4	73.6	62.9	62.0	61.7	61.4
17.5°	601.3	554.4	418.2	263.0	129.6	71.1	59.2	58.2	58.2	58.2	58.2
20°	610.4	554.7	391.0	207.2	85.1	58.2	55.7	55.1	55.7	55.7	55.7
22.5°	621.1	556.9	364.7	153.1	62.9	54.8	53.2	52.9	53.2	53.2	52.9
25°	634.2	561.6	336.2	109.6	57.0	52.6	51.0	50.7	51.0	50.7	50.7
27.5°	651.7	567.9	303.0	78.6	54.5	50.4	48.8	48.8	48.8	48.5	48.5
30°	674.3	575.4	258.6	62.0	52.0	48.2	47.0	47.0	46.6	46.3	46.3
32.5°	706.5	587.6	210.0	56.0	49.1	45.4	44.1	44.5	44.1	43.8	43.5
35°	752.2	606.7	162.2	52.9	46.3	42.6	41.3	41.3	41.3	40.7	40.7
37.5°	817.0	635.8	121.5	49.8	43.5	39.8	38.2	38.2	37.9	37.3	37.6
40°	897.2	672.4	88.0	47.0	40.7	36.6	35.4	34.7	34.1	33.5	33.5
42.5°	993.6	708.1	66.1	44.1	37.9	34.1	32.6	31.9	30.7	30.1	29.7
45°	1101.6	746.0	54.8	40.7	34.7	31.3	30.1	28.8	27.2	26.3	26.0
47.5°	1192.7	769.1	48.8	37.3	31.6	28.5	27.2	25.4	23.5	22.9	22.9
50°	1247.5	759.4	43.8	33.8	28.5	25.7	24.1	21.6	20.3	19.7	19.4
52.5°	1278.1	730.6	39.8	31.0	25.7	22.5	20.3	18.2	17.5	16.9	16.9
55°	1299.1	689.0	35.4	28.2	23.2	19.7	17.2	15.7	15.0	14.7	14.4
57.5°	1319.1	638.3	31.3	25.7	20.7	17.5	14.7	14.1	12.8	12.5	12.5
60°	1325.1	568.5	27.5	22.9	18.5	15.3	12.8	11.9	10.6	10.3	10.3
62.5°	1249.3	452.3	24.4	19.4	16.3	13.1	11.3	10.0	8.8	8.8	8.8
65°	1044.0	307.1	21.0	16.9	14.4	11.3	9.7	8.1	7.5	7.5	7.5
67.5°	727.2	171.2	17.8	14.4	12.2	9.4	8.1	6.9	6.6	6.9	6.9
70°	327.8	67.9	15.0	11.9	10.0	7.8	6.9	5.9	6.6	6.6	6.6
72°	98.3	36.3	12.5	9.7	8.1	6.9	5.9	5.6	6.3	6.6	6.6
72.5°	72.9	32.6	11.9	9.4	8.1	6.6	5.6	5.6	6.3	6.6	6.6
75°	37.6	22.2	9.1	6.9	5.9	5.3	4.7	5.3	6.3	6.3	6.3
77.5°	29.4	18.2	7.5	5.3	5.0	4.7	4.4	5.0	5.6	5.6	5.6
80°	27.5	11.9	5.9	5.0	4.4	4.1	4.1	4.4	5.0	5.3	5.3
82.5°	27.9	9.7	5.3	4.7	4.1	3.8	3.8	4.1	4.7	5.0	5.0
85°	17.8	6.6	4.7	4.1	3.8	3.4	3.4	3.8	4.4	4.7	4.7
87.5°	5.9	5.0	4.1	3.8	3.1	3.1	3.1	3.1	3.8	4.1	4.4
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)