

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: P271241

Luminaire Tested: **XNV-AF-01-LED-U-SL4-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271241  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24284)  
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-SL4-7027  
Description: XNV ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5013.4 lumens  
Efficiency: N/A  
Efficacy: 86.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G2

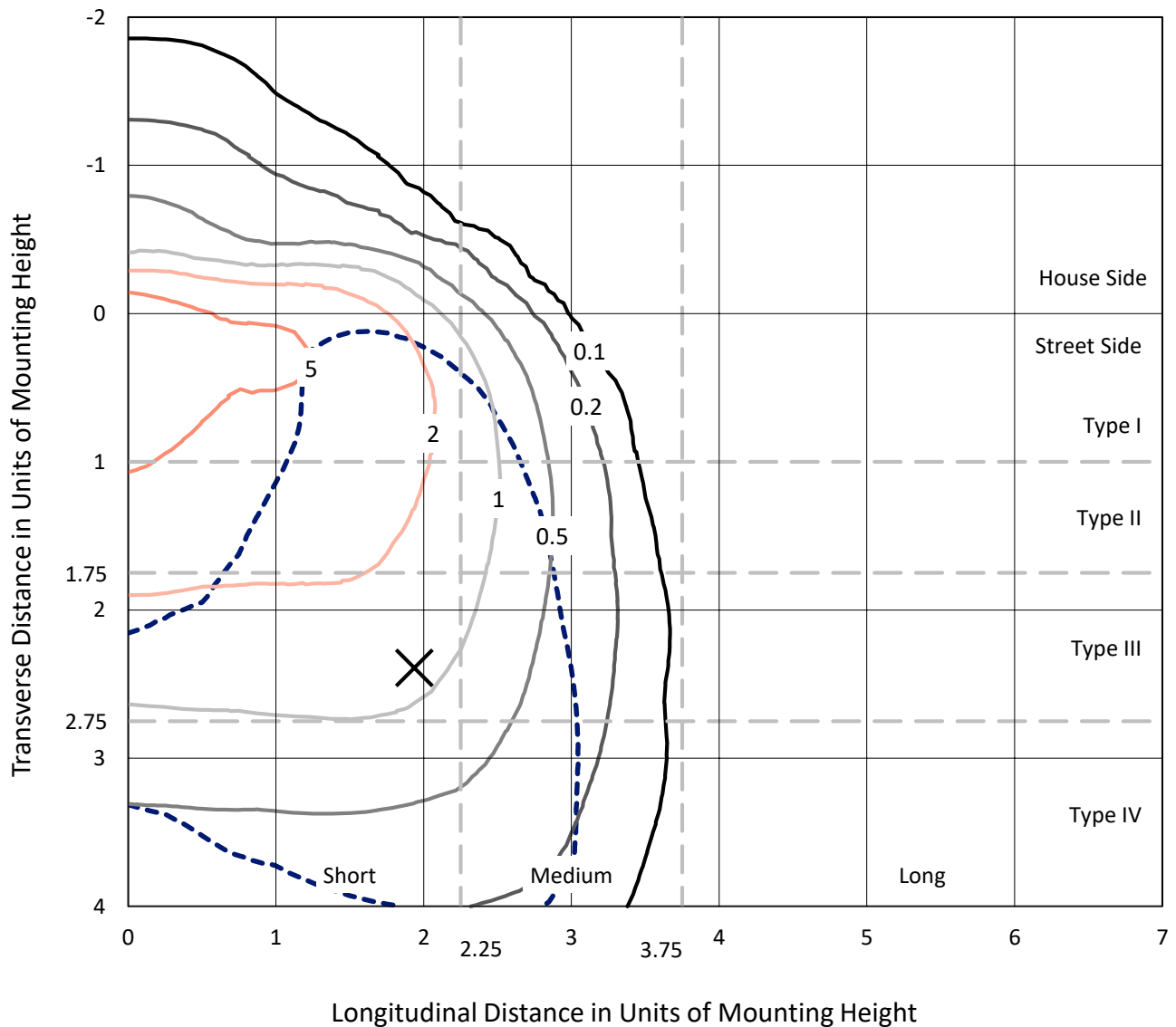
Input Watts (W): 58  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P271241  
 CATALOG NUMBER: XNV-AF-01-LED-U-SL4-7027

### Iso-Footcandle Lines of Horizontal Illumination

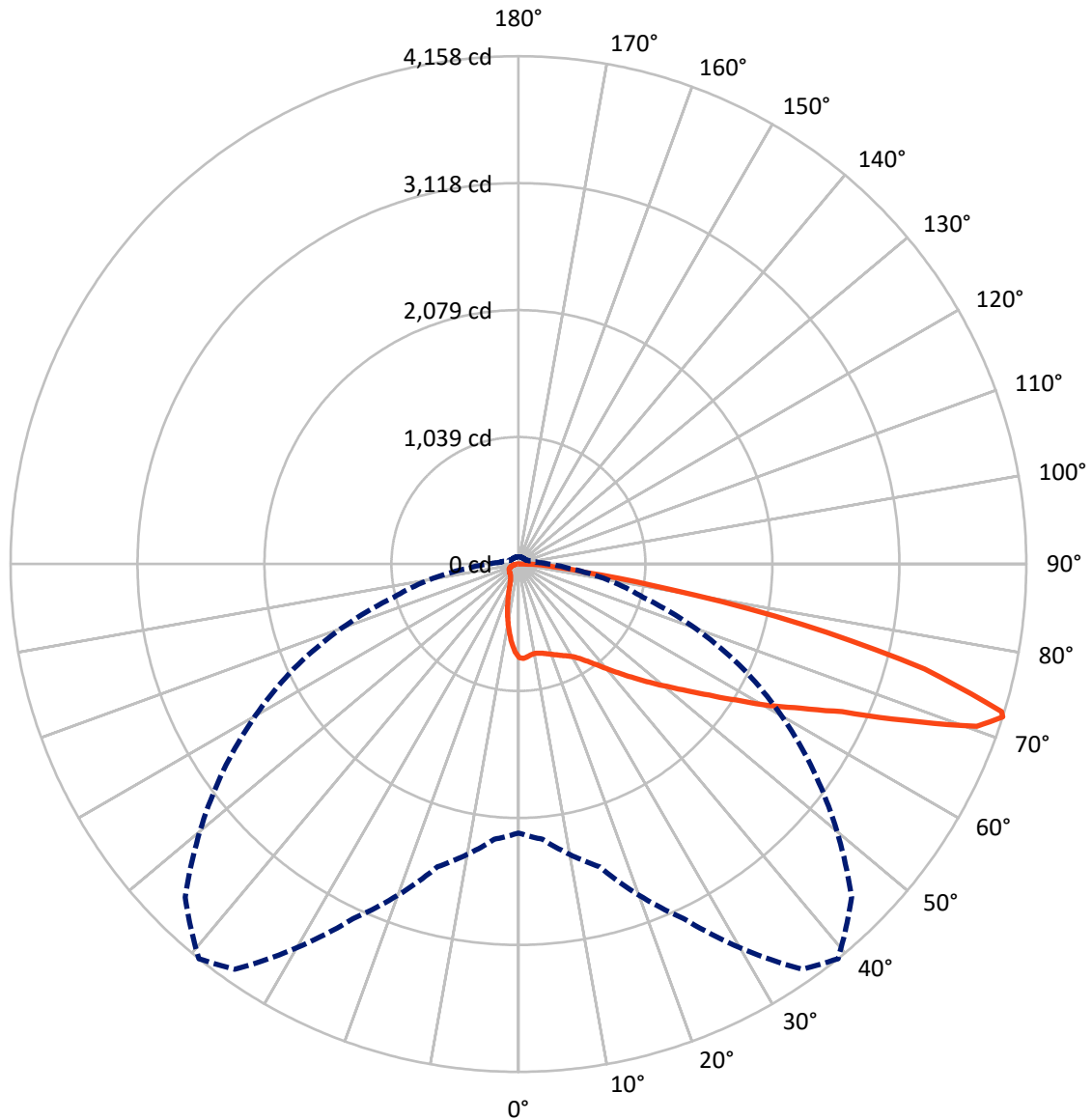
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.7 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P271241  
CATALOG NUMBER: XNV-AF-01-LED-U-SL4-7027

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P271241

CATALOG NUMBER: XNV-AF-01-LED-U-SL4-7027

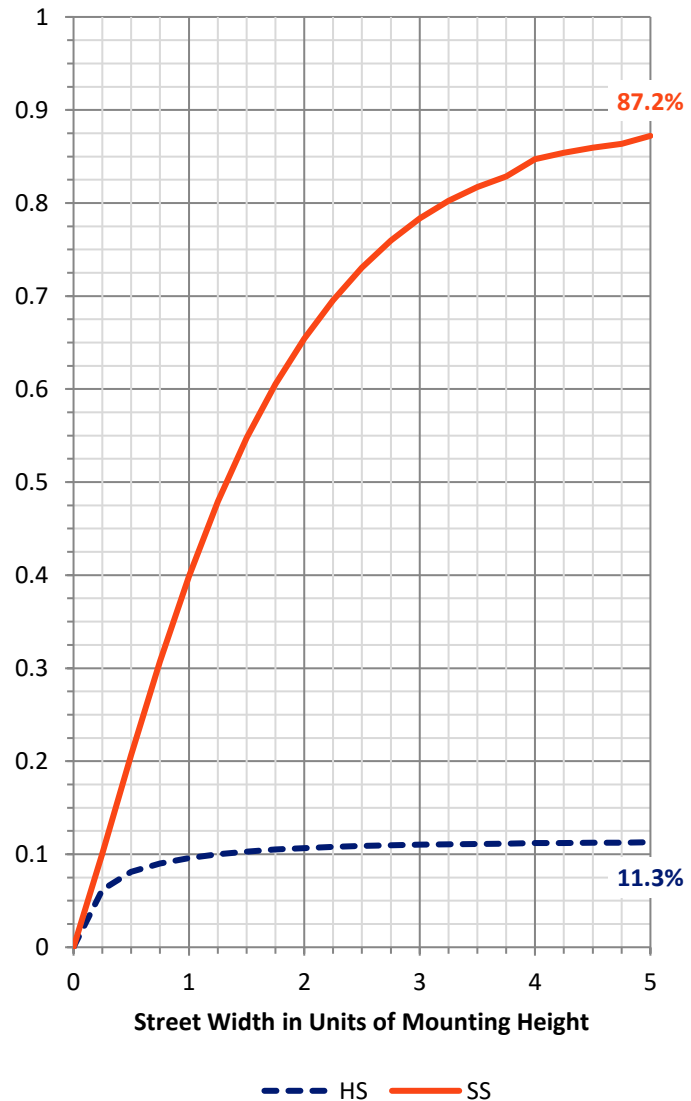
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	574.8	0.0	574.8
	% Fixture	11.5	0.0	11.5
<b>Street Side</b>	Lumens	4438.5	0.0	4438.5
	% Fixture	88.5	0.0	88.5
<b>Total</b>	Lumens	5013.4	0.0	5013.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.8	1.3
10°-20°	165.3	3.3
20°-30°	257.6	5.1
30°-40°	396.7	7.9
40°-50°	646.7	12.9
50°-60°	1004.9	20.0
60°-70°	1345.0	26.8
70°-80°	967.3	19.3
80°-90°	164.0	3.3
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°	5013.4	100.0
0°-180°	5013.4	100.0



REPORT NUMBER: P271241

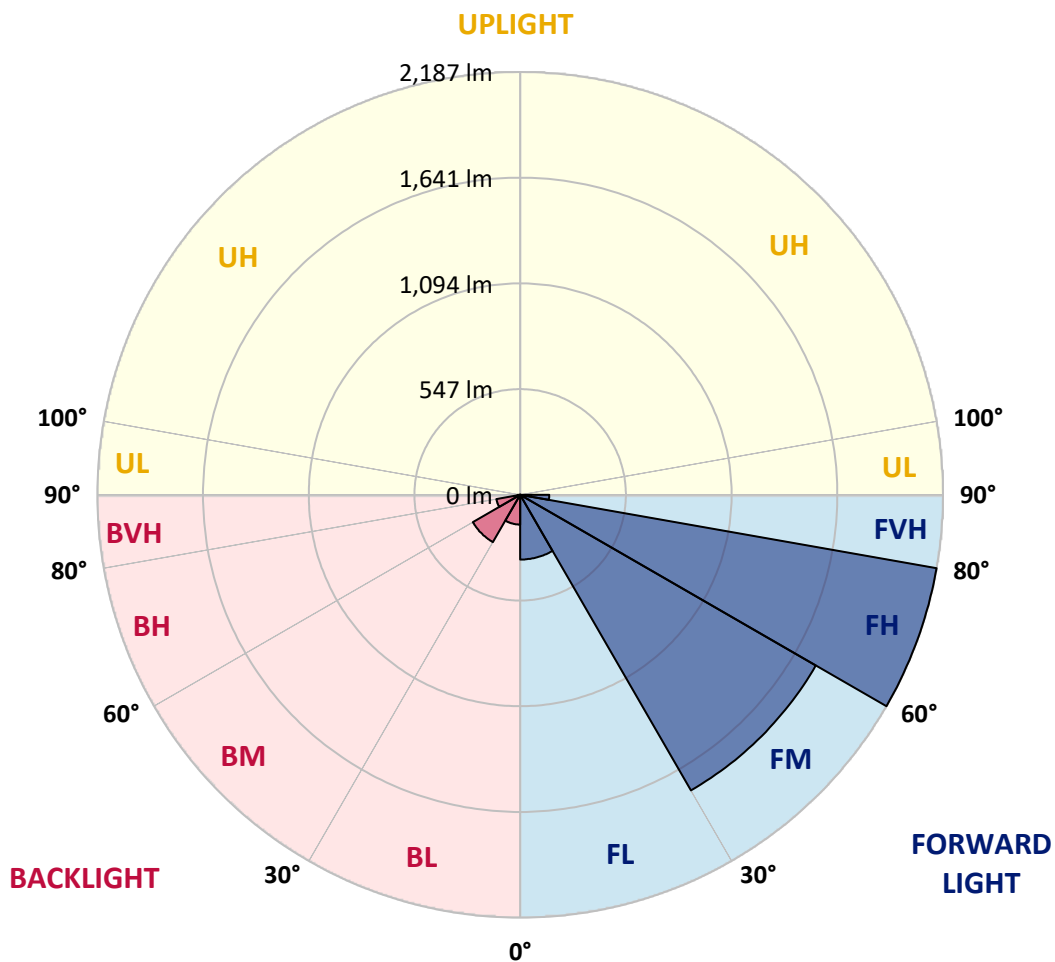
CATALOG NUMBER: XNV-AF-01-LED-U-SL4-7027

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	334.9	6.7			
FM	(30°-60°)	1765.8	35.2			
FH	(60°-80°)	2187.4	43.6			G2/5000
FVH	(80°-90°)	150.4	3.0			G2/225
BL	(0°-30°)	153.9	3.1	B1/500		
BM	(30°-60°)	282.5	5.6	B1/1000		
BH	(60°-80°)	124.9	2.5	B1/500		G1/500
BVH	(80°-90°)	13.6	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type IV Short





REPORT NUMBER: P271241

CATALOG NUMBER: XNV-AF-01-LED-U-SL4-7027

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	765.6	765.6	765.6	765.6	765.6	765.6	765.6	765.6	765.6	765.6	765.6
2.5°	782.2	782.5	781.4	778.4	775.7	774.3	772.1	768.1	762.7	758.9	755.8
5°	774.7	775.7	775.1	769.9	765.3	762.7	758.9	753.1	746.1	743.1	736.0
7.5°	768.9	769.7	767.6	761.9	752.9	749.5	742.8	735.4	729.0	724.7	716.2
10°	764.9	765.6	764.0	758.2	748.2	744.1	736.0	727.9	719.5	714.2	704.7
12.5°	759.2	760.5	760.5	757.9	751.2	748.5	740.5	731.7	723.9	718.1	706.3
15°	758.2	760.0	762.9	762.7	760.5	758.6	752.2	743.4	736.7	730.0	715.5
17.5°	766.7	770.3	776.5	778.4	777.0	772.7	765.3	757.2	749.8	743.4	725.7
20°	787.9	789.9	799.0	802.9	796.3	789.9	780.1	769.7	762.9	757.9	735.1
22.5°	819.9	822.5	829.9	830.3	816.1	808.4	795.9	783.1	776.8	774.7	747.7
25°	870.9	870.3	872.3	863.9	838.3	829.2	814.1	799.3	794.9	799.0	766.7
27.5°	932.3	930.6	924.1	902.3	863.6	851.9	833.5	820.5	820.5	829.9	792.2
30°	1002.9	1001.3	980.3	943.7	893.5	880.1	860.8	847.1	854.2	872.3	826.9
32.5°	1077.5	1071.6	1042.3	993.2	936.3	921.4	902.9	888.9	902.3	933.2	876.7
35°	1147.9	1144.6	1108.6	1050.4	991.5	979.1	966.1	948.7	970.3	1018.4	947.1
37.5°	1220.6	1217.9	1173.8	1111.9	1058.7	1050.4	1039.6	1027.5	1062.2	1125.3	1042.3
40°	1301.7	1296.3	1240.7	1178.9	1137.2	1133.1	1127.5	1124.0	1180.0	1274.2	1162.8
42.5°	1393.6	1383.2	1311.5	1252.6	1222.7	1226.0	1223.0	1236.4	1321.9	1445.8	1306.1
45°	1498.6	1477.7	1381.9	1331.0	1317.3	1330.7	1337.0	1371.4	1489.8	1644.0	1466.4
47.5°	1596.8	1570.0	1458.8	1416.2	1424.0	1447.1	1465.3	1526.0	1674.0	1839.9	1629.9
50°	1687.5	1657.2	1541.4	1504.3	1542.0	1575.0	1612.6	1698.2	1869.8	2041.5	1780.0
52.5°	1754.4	1732.6	1623.9	1600.6	1677.7	1721.4	1781.7	1889.7	2067.7	2233.6	1913.8
55°	1806.2	1794.5	1704.3	1711.0	1831.1	1893.7	1966.7	2091.0	2277.1	2405.9	2021.6
57.5°	1866.0	1857.3	1796.2	1844.3	2021.6	2100.3	2186.6	2324.5	2476.3	2557.7	2106.0
60°	1929.4	1929.4	1898.5	2004.7	2259.9	2350.1	2435.9	2543.2	2674.9	2694.3	2140.4
62.5°	1977.2	1989.7	2000.7	2175.8	2486.1	2598.1	2692.4	2795.3	2880.4	2761.7	2059.6
65°	2046.5	2073.1	2135.7	2373.3	2766.1	2912.8	3040.0	3126.6	3047.1	2708.2	1796.2
67.5°	2165.6	2205.0	2338.3	2667.4	3194.8	3414.5	3538.1	3388.6	3014.4	2371.3	1375.8
70°	2273.0	2328.5	2556.3	3040.7	3752.1	3980.3	3923.4	3327.7	2625.3	1738.2	846.5
72°	2201.7	2262.2	2566.5	3203.3	4050.0	4157.6	3857.9	2949.1	2028.7	1060.8	417.4
72.5°	2154.9	2217.8	2533.8	3199.1	4058.1	4135.1	3766.7	2798.7	1841.5	928.2	337.6
75°	1800.2	1854.0	2178.7	2835.4	3576.2	3434.8	2939.3	1811.3	846.5	299.9	173.6
77.5°	1175.5	1216.7	1502.3	1964.5	2505.0	2368.9	1789.1	848.1	317.3	182.0	130.6
80°	590.6	619.9	804.1	1032.8	1351.9	1243.9	825.9	410.3	212.4	131.6	102.6
82.5°	411.0	437.8	553.6	527.3	565.0	546.9	388.3	342.3	158.8	83.2	53.9
85°	344.6	372.5	458.0	375.9	307.6	280.4	278.4	323.4	105.0	41.1	45.5
87.5°	300.6	343.0	377.9	274.6	211.0	186.0	205.0	296.5	33.2	22.5	13.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P271241

CATALOG NUMBER: XNV-AF-01-LED-U-SL4-7027

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	765.6	765.6	765.6	765.6	765.6	765.6	765.6	765.6	765.6	765.6	765.6
2.5°	750.9	749.8	744.8	737.0	731.3	727.5	720.5	720.3	720.9	714.8	717.1
5°	729.7	725.7	712.4	694.6	680.1	666.4	651.2	646.2	641.7	632.6	633.8
7.5°	707.4	700.4	677.4	648.1	620.3	594.7	569.4	556.9	547.5	535.7	535.7
10°	694.3	683.3	648.1	605.5	561.0	523.6	486.0	463.4	446.9	431.7	430.7
12.5°	693.6	676.9	627.9	569.0	508.3	455.7	404.1	369.6	344.9	327.2	325.5
15°	699.1	675.4	611.1	535.1	458.3	390.0	326.4	282.3	251.0	231.3	229.2
17.5°	703.7	673.8	593.1	499.5	409.8	326.8	256.0	210.4	180.6	164.6	163.0
20°	708.0	670.0	569.7	461.8	356.4	267.5	200.2	163.2	143.6	134.7	133.6
22.5°	714.5	666.7	545.5	419.2	303.8	217.7	165.3	138.7	128.2	123.8	123.2
25°	724.9	667.0	521.9	375.9	255.7	181.4	143.0	126.5	120.8	117.8	117.8
27.5°	740.1	671.0	498.7	331.8	215.1	156.5	130.0	120.2	116.4	114.1	113.5
30°	762.3	678.5	474.1	290.2	182.7	139.3	122.2	116.2	113.0	111.1	110.8
32.5°	794.6	691.5	448.3	252.1	158.2	127.2	116.4	112.7	110.4	108.8	108.3
35°	842.7	714.8	423.0	219.7	140.7	118.4	111.7	108.8	107.3	106.7	106.4
37.5°	913.3	752.2	399.1	194.6	129.3	112.7	107.0	105.3	104.7	104.7	104.7
40°	1002.1	801.3	377.6	176.6	122.9	108.3	103.7	102.2	102.2	102.6	102.6
42.5°	1110.2	862.9	359.1	164.6	119.1	105.3	101.2	100.6	100.3	100.3	100.6
45°	1235.8	935.6	347.6	155.1	116.4	103.7	99.6	99.4	97.9	97.2	97.2
47.5°	1362.0	1013.4	346.9	149.7	113.0	101.7	97.9	97.9	95.2	94.0	94.2
50°	1479.8	1082.9	354.4	148.4	111.1	98.6	96.3	96.6	92.9	91.2	90.9
52.5°	1574.6	1136.1	363.5	150.0	111.1	95.8	93.2	95.0	90.9	88.8	88.6
55°	1648.1	1173.1	366.9	153.8	112.4	93.6	90.5	93.2	90.2	87.6	87.6
57.5°	1700.5	1185.0	352.3	155.4	114.4	93.2	87.9	92.9	91.2	87.9	87.9
60°	1681.4	1116.7	298.4	149.1	114.1	92.5	85.8	93.6	94.6	90.9	90.9
62.5°	1531.6	934.2	239.6	134.7	108.3	90.2	83.5	92.9	96.9	95.6	95.0
65°	1246.8	685.1	185.8	117.5	98.6	85.2	78.4	86.9	91.5	92.9	93.2
67.5°	878.7	433.8	144.4	99.9	86.4	77.8	72.8	76.7	78.4	79.1	80.5
70°	480.7	234.8	114.8	84.1	74.0	70.3	66.7	67.0	66.4	65.7	66.4
72°	241.4	153.5	96.9	73.0	65.7	63.3	61.5	60.5	60.5	59.6	59.8
72.5°	207.7	142.7	93.6	70.3	63.6	61.5	60.2	59.2	58.8	58.2	58.6
75°	138.2	113.0	78.2	58.8	54.2	52.8	53.4	52.6	52.8	52.1	52.6
77.5°	111.7	97.2	66.4	49.8	46.4	44.5	45.8	46.2	46.8	46.2	45.8
80°	93.6	82.9	55.5	41.1	38.6	37.0	37.6	40.1	40.3	38.4	38.0
82.5°	60.5	66.7	43.7	32.0	29.6	28.9	30.6	33.0	33.6	30.9	30.4
85°	50.8	53.4	31.6	21.9	19.6	18.9	22.2	24.6	26.2	23.5	22.8
87.5°	14.2	26.2	15.5	10.4	8.8	8.8	10.8	12.8	15.1	15.5	15.5
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)