

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: P271215

Luminaire Tested: **XNV-AF-01-LED-U-AFL-7027-600-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271215  
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-7027-600-HSS  
Description: XNV ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 615mA 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: 2906.1 lumens  
Efficiency: N/A  
Efficacy: 85.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B0 - U0 - G0

Input Watts (W): 34  
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

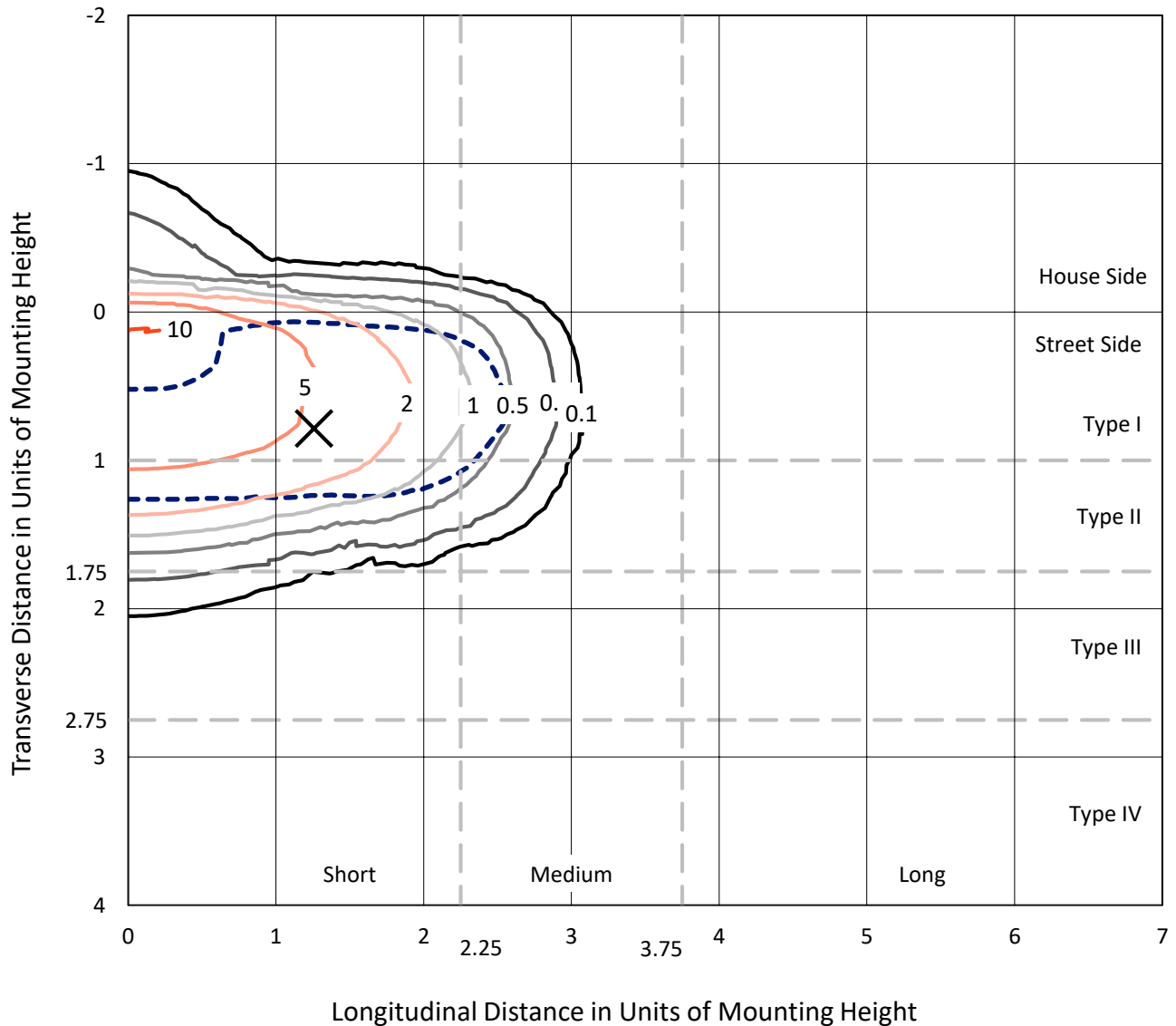


REPORT NUMBER: P271215

CATALOG NUMBER: XNV-AF-01-LED-U-AFL-7027-600-HSS

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

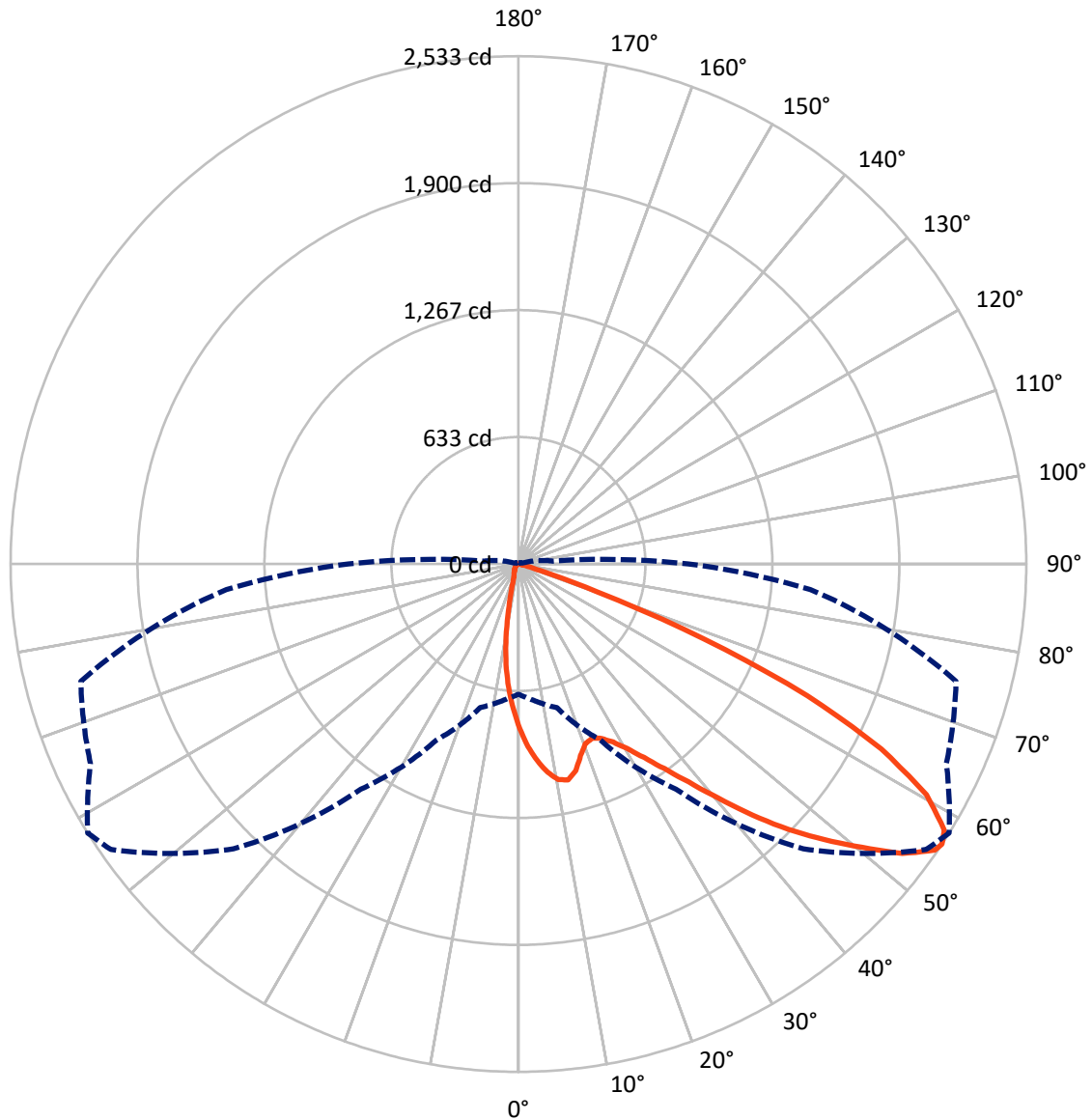


Based on 10 foot mounting height. Maximum calculated value = 10.2 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P271215

CATALOG NUMBER: XNV-AF-01-LED-U-AFL-7027-600-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P271215

CATALOG NUMBER: XNV-AF-01-LED-U-AFL-7027-600-HSS

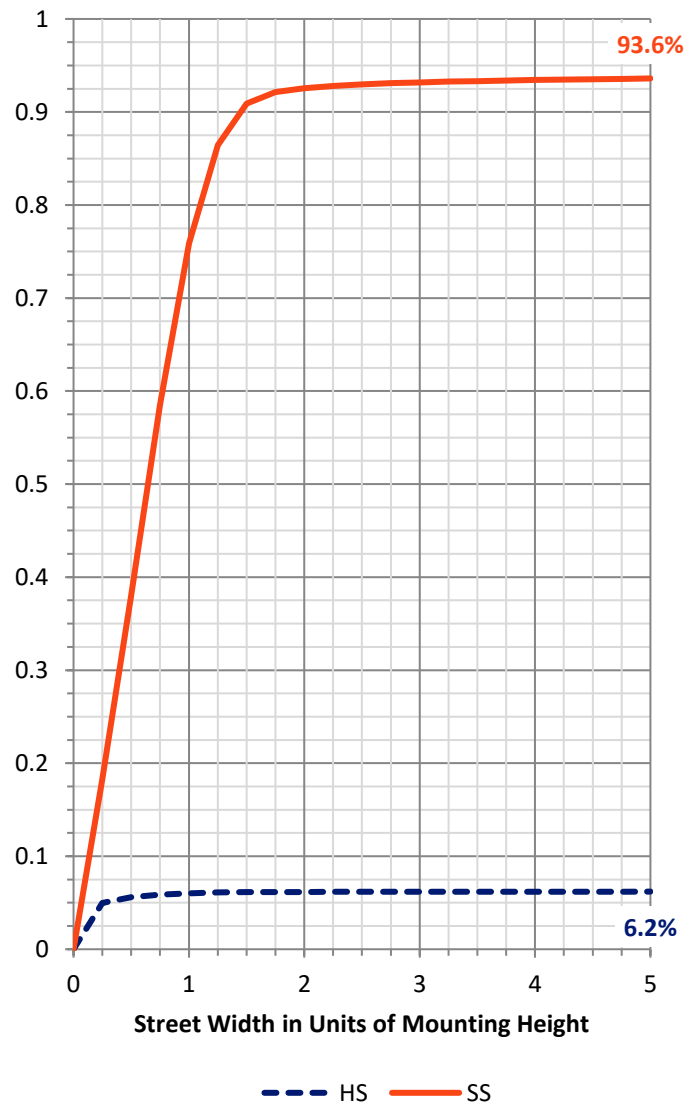
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	181.3	0.0	181.3
	% Fixture	6.2	0.0	6.2
<b>Street Side</b>	Lumens	2724.8	0.0	2724.8
	% Fixture	93.8	0.0	93.8
<b>Total</b>	Lumens	2906.1	0.0	2906.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.2	2.4
10°-20°	163.3	5.6
20°-30°	274.8	9.5
30°-40°	470.6	16.2
40°-50°	710.1	24.4
50°-60°	738.2	25.4
60°-70°	414.4	14.3
70°-80°	56.8	2.0
80°-90°	7.7	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°	2906.1	100.0
0°-180°	2906.1	100.0

**Coefficient of Utilization**



REPORT NUMBER: P271215

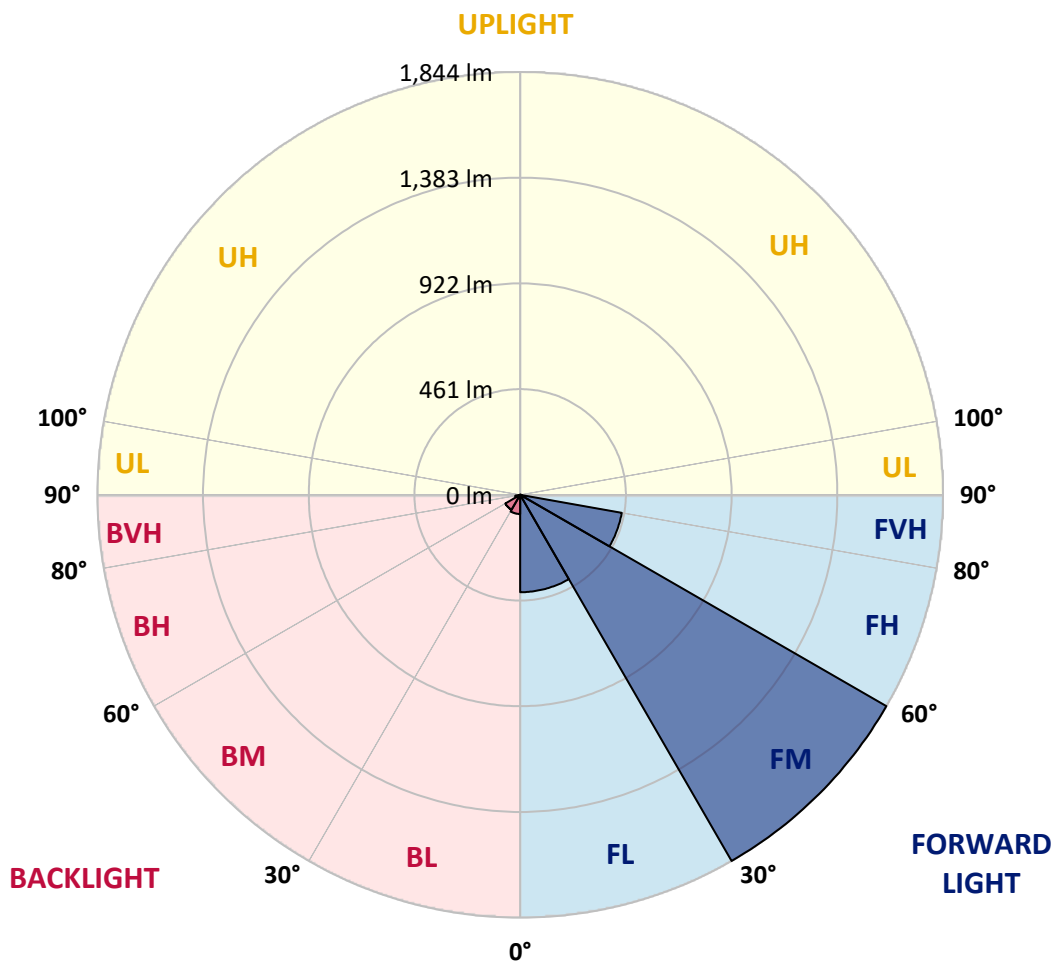
CATALOG NUMBER: XNV-AF-01-LED-U-AFL-7027-600-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	424.7	14.6			
FM	(30°-60°)	1843.8	63.4			
FH	(60°-80°)	449.7	15.5			G0/660
FVH	(80°-90°)	6.6	0.2			G0/10
BL	(0°-30°)	83.7	2.9	B0/110		
BM	(30°-60°)	75.1	2.6	B0/220		
BH	(60°-80°)	21.5	0.7	B0/110		G0/110
BVH	(80°-90°)	1.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G0**

Type II Short





REPORT NUMBER: P271215

CATALOG NUMBER: XNV-AF-01-LED-U-AFL-7027-600-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	822.8	822.8	822.8	822.8	822.8	822.8	822.8	822.8	822.8	822.8	822.8
2.5°	990.0	984.1	977.8	966.2	955.6	939.3	916.6	911.2	893.4	864.1	836.9
5°	1075.5	1074.3	1070.1	1060.7	1049.2	1029.3	1003.8	986.7	959.2	913.0	860.5
7.5°	1024.8	1034.0	1049.4	1071.1	1085.8	1083.7	1064.3	1049.4	1022.1	959.2	883.8
10°	863.8	865.5	886.6	932.4	1004.7	1072.0	1097.5	1093.5	1068.5	999.5	904.2
12.5°	807.0	808.1	813.1	827.7	874.7	968.7	1084.3	1105.0	1103.1	1038.1	926.0
15°	811.4	812.2	813.5	818.1	831.6	878.7	1016.8	1069.8	1125.2	1074.7	947.3
17.5°	846.6	846.2	841.9	837.5	841.7	857.3	948.2	1003.9	1120.5	1105.5	964.7
20°	914.8	917.1	902.8	883.2	873.0	873.6	914.1	956.1	1094.5	1129.4	977.8
22.5°	1010.9	1012.4	989.2	955.0	925.1	910.0	921.3	943.4	1064.3	1151.6	988.5
25°	1125.4	1125.4	1092.9	1044.3	997.9	965.0	955.2	963.6	1052.8	1176.7	999.0
27.5°	1249.3	1253.7	1211.0	1147.5	1086.2	1037.9	1007.3	1005.7	1061.6	1208.2	1011.0
30°	1383.7	1387.8	1337.2	1259.5	1186.9	1125.0	1078.1	1067.8	1095.6	1250.5	1028.6
32.5°	1517.6	1521.0	1465.1	1385.7	1301.4	1228.6	1166.7	1150.5	1156.5	1312.5	1054.3
35°	1687.9	1688.6	1617.9	1523.4	1433.2	1347.8	1269.7	1253.7	1246.9	1390.4	1091.4
37.5°	1823.5	1818.2	1773.3	1684.1	1580.5	1491.4	1399.3	1378.4	1362.5	1500.2	1148.8
40°	1855.4	1855.4	1848.7	1821.9	1739.7	1653.9	1564.7	1533.6	1498.5	1629.4	1225.9
42.5°	1772.3	1777.6	1821.5	1879.9	1880.4	1825.4	1738.3	1712.2	1650.0	1776.7	1310.2
45°	1586.2	1587.8	1693.0	1850.5	1957.3	1988.8	1924.6	1888.4	1802.4	1929.6	1387.3
47.5°	1519.3	1524.2	1568.9	1761.3	1963.2	2121.3	2103.3	2053.6	1943.5	2069.3	1459.3
50°	1416.4	1422.3	1477.2	1630.2	1911.2	2206.1	2274.1	2221.0	2071.9	2185.8	1495.0
52.5°	1170.2	1179.6	1257.0	1456.5	1781.6	2209.7	2430.8	2398.8	2203.4	2248.1	1490.8
55°	805.3	812.2	902.4	1137.1	1519.9	2101.2	2498.1	2520.1	2320.6	2262.0	1470.4
56°	649.7	675.3	741.5	968.7	1371.0	2009.1	2482.6	2533.4	2355.4	2259.9	1461.6
57.5°	429.5	434.4	506.5	701.9	1100.9	1808.8	2412.6	2505.1	2400.2	2248.5	1455.2
60°	201.9	204.3	230.1	324.0	595.8	1318.2	2184.9	2338.3	2416.6	2224.8	1455.0
62.5°	131.7	132.1	135.3	154.6	243.7	717.9	1811.3	2032.1	2280.6	2222.1	1450.8
65°	108.4	109.6	105.8	108.2	127.5	270.7	1277.6	1584.3	1961.5	2159.6	1403.3
67.5°	95.6	95.8	90.6	87.9	93.3	118.8	643.6	999.4	1467.1	1835.0	1155.8
70°	87.1	87.0	81.1	74.5	74.6	79.0	209.8	415.0	811.8	1089.6	663.6
72.5°	77.3	77.9	74.5	65.1	62.2	55.9	79.0	112.0	276.3	349.9	174.9
75°	67.8	67.0	63.6	57.6	51.9	37.5	39.6	47.7	72.0	71.3	37.6
77.5°	51.5	50.6	52.1	49.2	40.6	26.2	21.6	24.9	32.6	30.4	15.4
80°	39.3	38.7	35.5	42.1	37.0	19.8	14.8	15.4	17.7	16.2	7.5
82.5°	28.3	28.1	26.8	26.0	23.4	14.5	11.3	11.9	13.4	11.3	5.5
85°	10.9	10.9	21.1	17.7	16.2	9.7	7.9	8.7	10.2	8.3	3.8
87.5°	1.7	1.7	14.3	11.8	7.4	4.9	5.1	5.5	6.0	4.9	2.9
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: P271215

CATALOG NUMBER: XNV-AF-01-LED-U-AFL-7027-600-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	822.8	822.8	822.8	822.8	822.8	822.8	822.8	822.8	822.8	822.8	822.8
2.5°	820.6	805.8	773.1	741.7	714.2	684.0	668.7	651.0	644.4	631.0	632.3
5°	829.0	798.0	732.6	663.6	600.4	536.1	490.5	447.4	423.6	399.7	399.7
7.5°	837.7	790.1	689.1	578.9	472.5	362.2	284.3	221.7	186.8	163.6	163.0
10°	843.7	780.3	639.7	480.8	323.7	186.7	112.6	88.8	80.0	76.3	76.0
12.5°	851.5	770.2	583.4	364.9	179.8	88.8	70.2	66.6	64.9	64.0	64.0
15°	858.2	756.2	515.1	245.4	94.4	66.6	60.5	59.2	59.0	58.7	59.0
17.5°	859.6	735.9	433.3	143.6	68.5	58.1	55.4	54.3	54.3	54.1	54.1
20°	856.1	709.3	342.9	88.8	59.2	53.4	50.6	49.2	49.0	49.0	49.0
22.5°	848.8	675.3	253.4	67.3	53.9	49.2	45.5	44.1	44.1	44.3	44.6
25°	839.6	635.2	174.0	57.9	49.9	44.7	41.1	39.6	40.2	40.6	40.9
27.5°	828.1	587.3	113.9	50.1	44.6	40.3	37.0	36.1	37.0	37.9	38.4
30°	816.6	534.9	77.2	43.5	38.5	35.5	33.4	33.2	34.6	36.7	36.8
32.5°	809.1	481.0	58.3	39.0	34.0	31.4	30.4	30.8	32.8	35.0	35.5
35°	808.5	428.4	49.6	35.5	30.8	28.3	27.9	29.3	31.5	33.2	33.6
37.5°	818.9	379.2	45.0	32.8	28.3	26.0	25.3	27.7	29.7	31.5	31.9
40°	839.8	335.0	42.0	30.4	26.4	23.4	23.0	25.1	27.0	29.0	29.7
42.5°	866.2	293.7	38.4	27.9	24.2	20.8	20.4	22.0	24.0	26.8	27.3
45°	889.1	255.4	34.6	25.3	21.6	18.0	17.7	19.6	21.1	23.7	24.2
47.5°	908.4	223.5	31.0	22.4	18.7	16.0	15.7	16.6	17.4	19.9	20.4
50°	898.2	196.5	27.5	18.4	15.1	13.7	13.6	13.6	14.6	17.1	17.4
52.5°	873.2	179.7	24.2	15.4	12.4	11.8	11.0	11.3	12.4	13.6	13.7
55°	853.0	171.7	21.3	13.6	10.4	9.7	9.2	8.9	9.2	8.7	8.3
56°	848.1	170.8	20.7	13.0	10.1	9.2	8.3	7.7	7.5	6.6	6.5
57.5°	845.8	170.8	19.6	12.1	9.3	8.3	7.0	6.2	5.3	4.6	4.6
60°	844.0	171.8	18.1	10.6	7.9	6.6	5.1	3.8	3.1	3.1	3.1
62.5°	840.4	171.3	16.6	8.9	6.8	5.1	3.1	2.4	2.2	2.4	2.6
65°	798.0	159.2	14.6	7.0	5.3	3.6	1.7	1.7	1.9	2.4	2.6
67.5°	642.9	120.6	11.9	5.5	3.8	2.6	1.5	1.5	1.9	2.4	2.6
70°	353.3	63.6	10.2	4.0	2.9	2.2	1.5	1.3	1.9	2.4	2.6
72.5°	86.2	26.6	9.3	3.1	2.6	1.9	1.3	1.3	1.9	2.4	2.6
75°	21.3	19.9	7.5	2.4	2.2	1.7	1.3	1.3	1.9	2.4	2.6
77.5°	10.1	26.4	5.1	2.2	1.9	1.5	1.3	1.3	1.9	2.4	2.4
80°	6.0	19.9	3.1	1.9	1.7	1.5	1.3	1.3	1.9	2.4	2.6
82.5°	3.6	5.7	2.2	1.9	1.7	1.3	1.3	1.3	1.9	2.4	2.6
85°	3.1	2.9	2.2	1.9	1.7	1.5	1.3	1.3	2.2	2.6	2.6
87.5°	2.4	2.2	1.9	1.7	1.7	1.5	1.3	1.3	1.9	2.4	2.6
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)