

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: P271216

Luminaire Tested: **XNV-AF-01-LED-U-AFL-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271216  
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-7027-800  
Description: XNV ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 800mA LIGHTSQUARE WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4348.9 lumens  
Efficiency: N/A  
Efficacy: 98.8 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

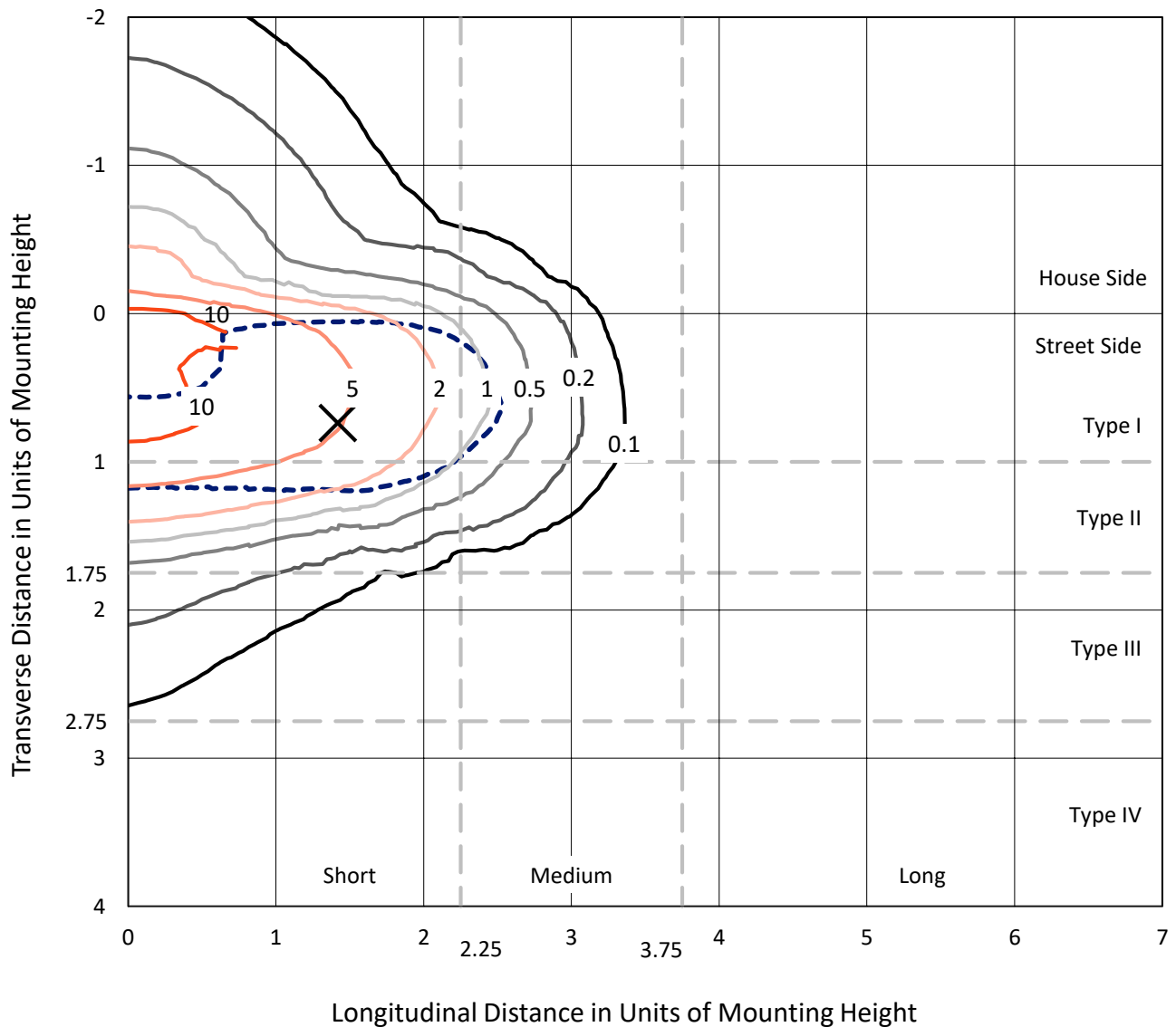
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P271216  
 CATALOG NUMBER: XNV-AF-01-LED-U-AFL-7027-800

### Iso-Footcandle Lines of Horizontal Illumination

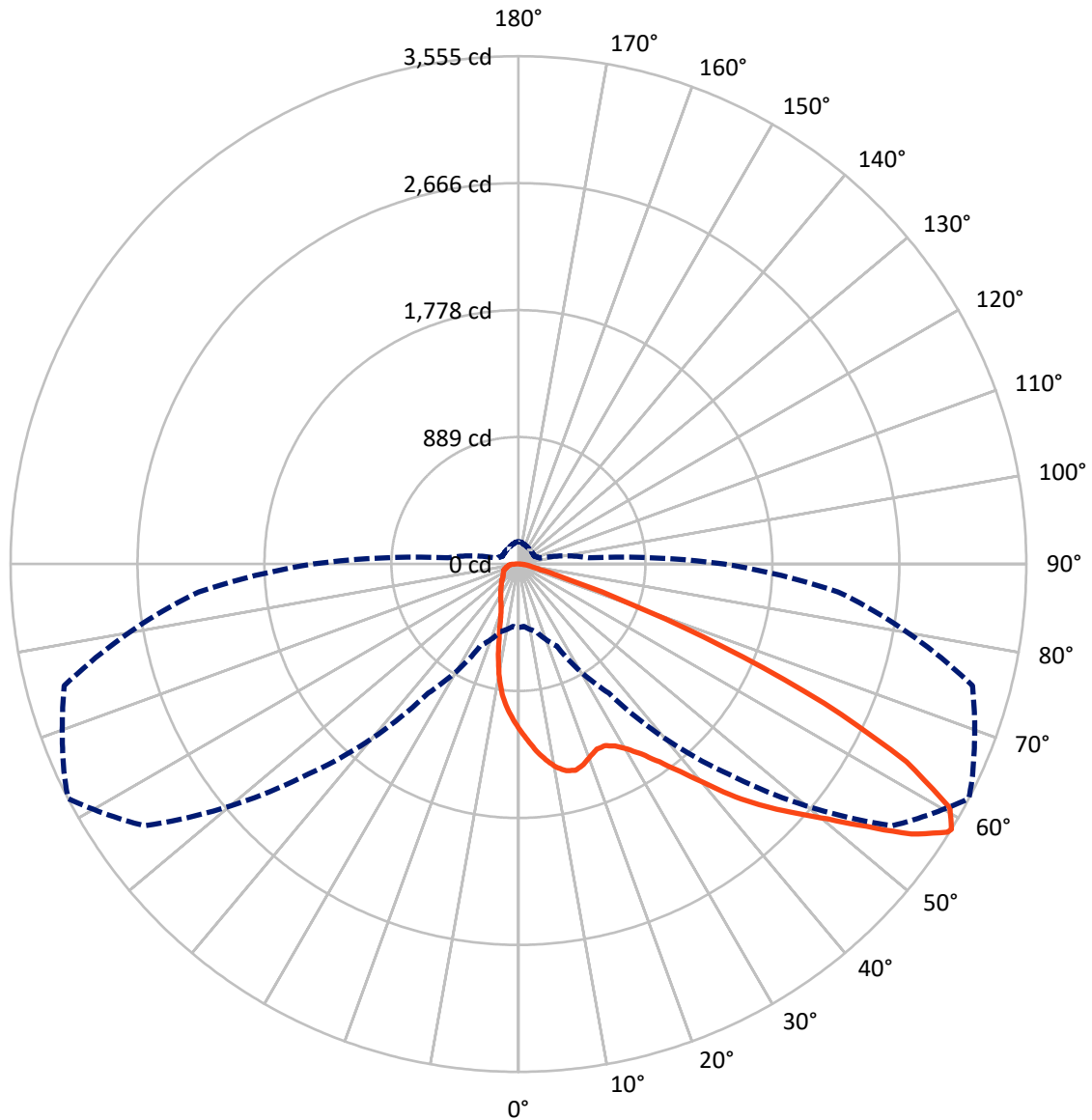
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.6 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P271216  
CATALOG NUMBER: XNV-AF-01-LED-U-AFL-7027-800

### Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral    - - - Horizontal Cone Through 58-Deg Vertical

REPORT NUMBER: P271216

CATALOG NUMBER: XNV-AF-01-LED-U-AFL-7027-800

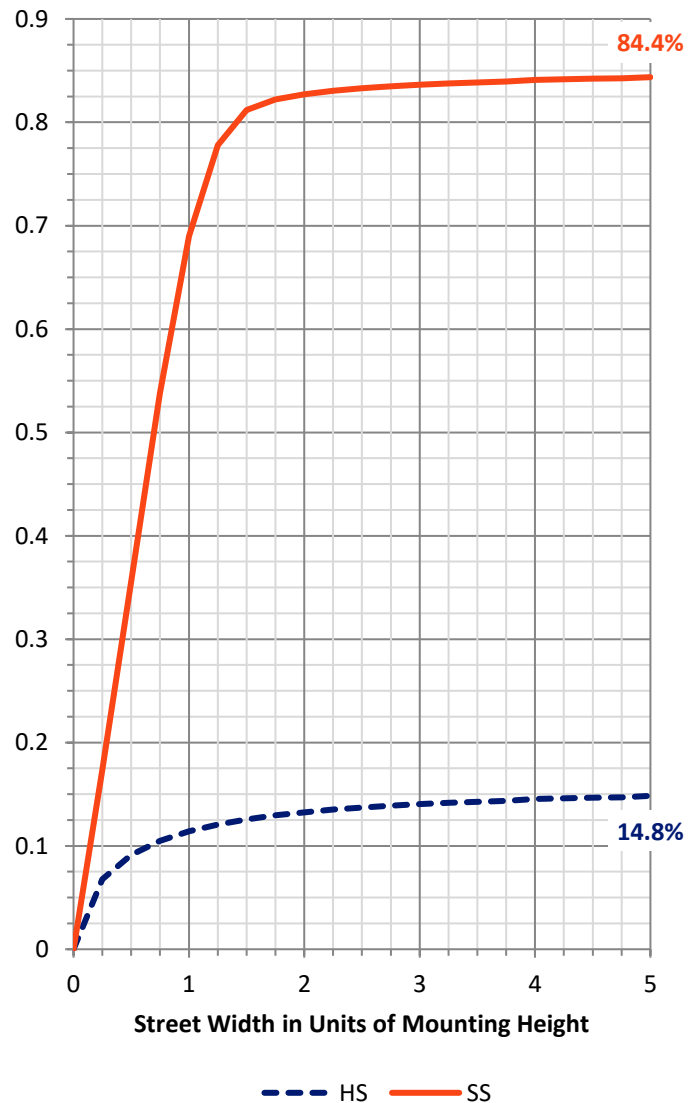
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	667.7	0.0	667.7
	% Fixture	15.4	0.0	15.4
<b>Street Side</b>	Lumens	3681.2	0.0	3681.2
	% Fixture	84.6	0.0	84.6
<b>Total</b>	Lumens	4348.9	0.0	4348.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.8	2.4
10°-20°	261.9	6.0
20°-30°	424.5	9.8
30°-40°	677.7	15.6
40°-50°	985.8	22.7
50°-60°	1031.5	23.7
60°-70°	628.9	14.5
70°-80°	175.9	4.0
80°-90°	59.0	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°	4348.9	100.0
0°-180°	4348.9	100.0



REPORT NUMBER: P271216

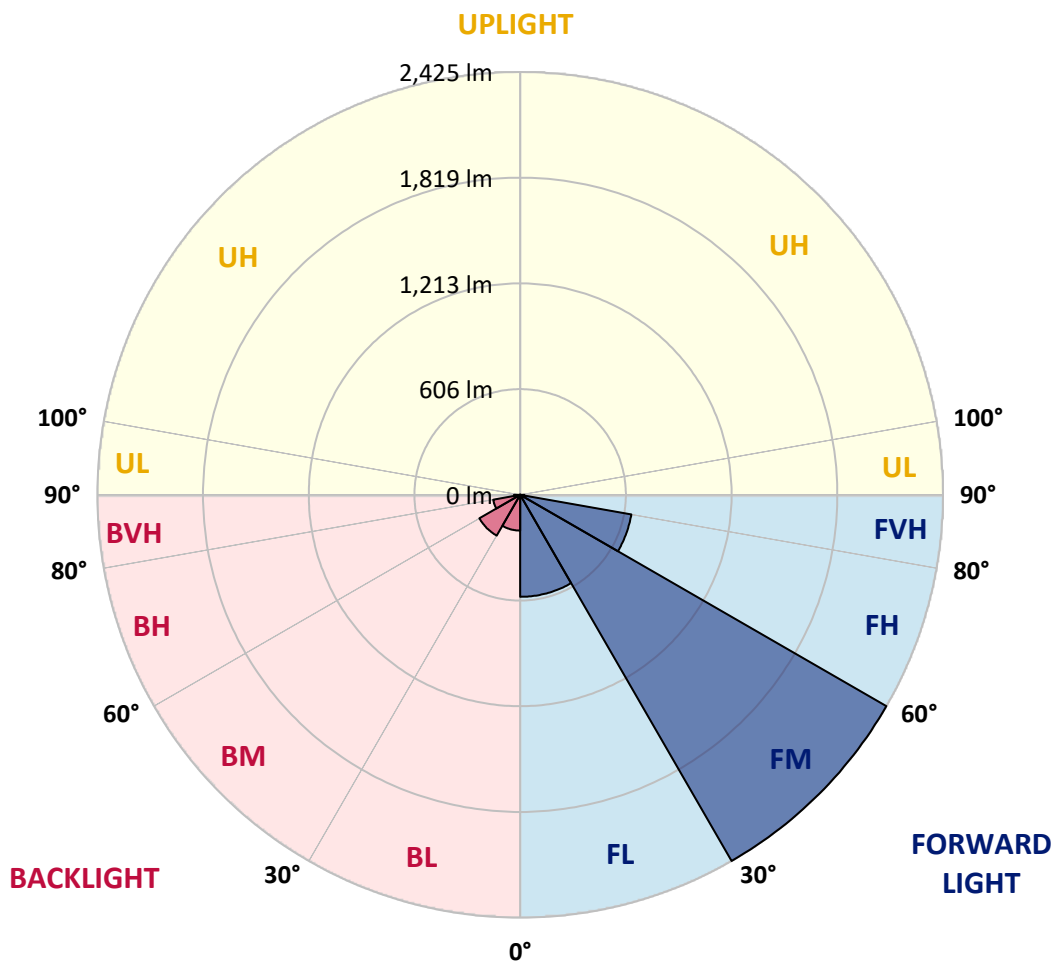
CATALOG NUMBER: XNV-AF-01-LED-U-AFL-7027-800

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	584.9	13.5			
FM	(30°-60°)	2425.0	55.8			
FH	(60°-80°)	647.5	14.9			G0/660
FVH	(80°-90°)	23.7	0.5			G1/100
BL	(0°-30°)	205.3	4.7	B1/500		
BM	(30°-60°)	270.0	6.2	B1/1000		
BH	(60°-80°)	157.2	3.6	B1/500		G1/500
BVH	(80°-90°)	35.2	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





REPORT NUMBER: P271216

CATALOG NUMBER: XNV-AF-01-LED-U-AFL-7027-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1
2.5°	1318.0	1317.2	1306.0	1298.7	1290.0	1269.8	1249.7	1234.8	1227.2	1198.1	1169.9
5°	1427.0	1423.8	1417.4	1409.6	1398.1	1372.9	1341.1	1313.6	1302.7	1251.1	1199.1
7.5°	1369.3	1374.4	1393.8	1415.5	1438.4	1440.1	1417.4	1384.8	1372.9	1303.8	1227.8
10°	1209.7	1207.6	1231.8	1274.2	1349.6	1424.0	1461.3	1445.2	1432.6	1353.8	1256.3
12.5°	1161.4	1160.9	1164.9	1175.8	1223.1	1325.3	1450.0	1484.9	1480.4	1406.8	1286.7
15°	1176.2	1176.6	1176.4	1177.7	1190.8	1239.4	1387.8	1498.2	1511.8	1459.2	1317.8
17.5°	1223.1	1221.2	1215.2	1208.7	1210.6	1228.1	1320.7	1475.3	1516.1	1506.1	1343.8
20°	1295.6	1295.6	1279.6	1261.4	1249.5	1253.2	1292.8	1436.2	1495.9	1545.8	1363.4
22.5°	1386.8	1388.2	1364.4	1331.3	1304.1	1293.7	1308.7	1407.1	1471.6	1582.5	1380.8
25°	1499.8	1499.5	1465.0	1417.4	1374.4	1349.8	1349.6	1408.5	1463.9	1625.4	1399.0
27.5°	1639.8	1627.0	1586.8	1519.2	1458.5	1420.7	1403.6	1442.7	1480.0	1678.2	1423.5
30°	1797.7	1784.7	1731.9	1644.9	1563.0	1507.6	1479.4	1502.0	1528.8	1745.2	1460.4
32.5°	1954.1	1957.0	1895.1	1796.9	1691.4	1613.6	1571.9	1585.7	1604.5	1827.3	1510.4
35°	2182.8	2182.6	2101.6	1979.0	1853.7	1746.0	1693.0	1700.4	1717.5	1943.2	1580.6
37.5°	2353.5	2350.9	2298.7	2190.2	2049.2	1919.9	1843.3	1844.5	1859.1	2088.5	1673.0
40°	2370.9	2370.4	2370.1	2354.6	2258.1	2136.3	2040.4	2020.6	2026.5	2242.9	1771.1
42.5°	2237.9	2257.9	2314.9	2402.4	2429.3	2365.4	2274.7	2230.4	2217.3	2420.2	1874.9
45°	2048.6	2058.6	2158.6	2355.4	2515.6	2580.8	2512.5	2419.0	2396.8	2592.5	1959.5
47.5°	1960.6	1956.1	2014.1	2228.5	2507.1	2752.0	2756.9	2603.6	2565.7	2741.1	2031.4
50°	1771.5	1765.9	1839.0	2041.8	2415.3	2837.0	3007.7	2804.7	2734.9	2882.4	2096.6
52.5°	1395.2	1389.7	1487.9	1749.0	2209.7	2805.2	3219.3	3051.5	2932.4	3018.7	2157.5
55°	907.7	908.4	1001.9	1271.2	1788.2	2619.8	3318.3	3336.7	3203.1	3154.8	2206.7
57.5°	499.8	495.2	561.8	727.4	1230.1	2199.0	3235.9	3542.1	3472.6	3271.6	2242.3
58°	444.4	438.9	490.4	633.0	1102.9	2080.1	3194.3	3555.2	3507.1	3291.0	2247.5
60°	316.7	307.4	299.6	356.8	635.6	1499.8	2916.9	3470.6	3517.1	3329.6	2242.7
62.5°	266.8	256.2	228.0	225.8	299.2	733.6	2306.8	3047.9	3178.3	3240.6	2163.7
65°	247.9	237.3	200.1	186.8	203.0	316.7	1426.4	2353.5	2527.6	2931.7	1965.4
67.5°	234.3	221.8	181.8	164.4	167.8	189.5	605.3	1539.2	1740.8	2286.1	1576.7
70°	222.2	208.1	167.4	147.3	144.5	144.1	236.4	803.8	998.0	1495.9	1056.2
72.5°	208.1	194.7	154.7	133.2	127.2	116.9	142.1	332.2	455.4	733.3	484.0
75°	188.0	177.0	140.6	121.5	111.2	94.9	104.9	159.3	196.2	280.8	224.8
77.5°	165.6	156.6	126.1	111.7	97.8	77.4	80.2	107.8	121.2	158.2	130.2
80°	117.1	120.5	110.1	98.4	86.1	62.5	61.8	79.1	87.0	106.3	87.6
82.5°	80.7	83.2	89.7	77.8	69.6	48.7	45.4	54.8	59.0	64.1	42.4
85°	57.6	56.0	62.3	55.8	51.2	31.0	29.0	34.8	37.2	39.2	20.4
87.5°	35.0	34.8	35.9	28.8	26.6	15.8	14.5	16.6	17.6	17.1	9.8
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: P271216  
 CATALOG NUMBER: XNV-AF-01-LED-U-AFL-7027-800

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1
2.5°	1159.3	1145.9	1116.9	1093.4	1068.2	1049.0	1029.5	1018.7	1006.8	1000.0	999.2
5°	1172.0	1144.8	1082.8	1025.2	965.9	912.7	860.5	821.9	790.4	772.5	771.4
7.5°	1186.1	1143.5	1047.9	948.0	842.6	737.7	645.1	579.4	537.4	517.9	516.4
10°	1197.0	1137.8	1005.2	849.9	682.7	544.2	459.9	421.2	408.5	405.2	404.6
12.5°	1210.0	1133.8	951.3	724.0	521.8	414.2	388.6	386.2	389.0	390.6	390.9
15°	1222.4	1125.8	878.7	584.6	408.5	370.2	370.7	375.9	381.3	383.8	384.0
17.5°	1228.1	1106.5	783.3	460.7	357.4	350.3	356.5	363.5	368.2	370.2	370.2
20°	1228.1	1075.5	672.7	373.2	330.8	332.2	339.7	344.9	345.9	344.4	343.5
22.5°	1222.9	1037.3	565.0	325.6	309.0	314.1	320.2	316.7	303.8	294.0	292.2
25°	1218.2	991.8	461.5	296.5	290.1	296.8	294.4	270.2	250.5	240.6	238.9
27.5°	1210.6	936.9	375.1	272.6	271.6	276.9	252.8	229.3	219.6	214.2	213.1
30°	1208.7	877.4	314.0	251.4	253.3	245.6	218.0	210.4	208.1	205.3	203.8
32.5°	1215.0	817.8	275.6	234.0	236.0	210.9	200.3	201.4	201.1	197.4	196.0
35°	1232.0	760.0	251.2	218.3	212.8	189.0	190.4	193.6	193.6	189.0	187.2
37.5°	1261.9	706.2	235.6	205.0	186.2	177.4	181.0	185.4	185.4	182.0	180.7
40°	1293.7	653.6	223.9	194.4	169.3	169.6	173.2	176.3	177.8	178.4	177.2
42.5°	1322.6	599.3	211.6	183.0	161.8	163.6	165.3	167.8	173.5	177.2	176.6
45°	1339.5	544.7	197.8	168.8	156.6	157.4	156.8	161.2	168.0	173.7	173.7
47.5°	1355.0	499.8	186.8	154.7	151.5	151.5	149.7	154.1	160.3	167.2	167.8
50°	1369.6	470.7	178.9	143.8	144.8	144.1	143.5	147.6	156.0	164.2	165.6
52.5°	1384.6	461.0	171.8	136.0	138.1	137.0	137.5	143.2	152.7	161.2	162.6
55°	1405.5	467.2	164.4	130.4	131.5	131.3	133.5	140.0	148.4	156.8	157.4
57.5°	1431.3	490.0	158.2	126.4	125.4	126.9	130.4	136.7	144.8	155.0	155.8
58°	1436.5	495.4	157.2	125.4	124.0	126.4	130.0	136.0	144.4	155.0	155.8
60°	1444.4	514.8	154.4	123.1	119.4	123.6	128.0	133.9	143.2	156.2	157.9
62.5°	1406.2	518.6	153.6	120.7	114.4	119.8	125.0	131.8	142.1	160.8	164.4
65°	1274.4	479.4	148.0	116.6	110.3	116.9	122.3	130.2	145.4	174.8	176.3
67.5°	1023.1	398.2	133.9	110.3	105.7	113.4	120.2	130.2	146.8	177.0	178.0
70°	703.5	299.2	116.6	103.6	100.3	109.0	119.4	133.2	142.1	167.4	164.2
72.5°	367.4	208.1	102.1	95.7	93.8	105.2	127.2	130.2	136.7	156.2	153.0
75°	185.1	141.7	90.0	86.6	86.4	103.8	142.4	125.4	131.1	147.1	154.1
77.5°	109.2	110.9	80.2	78.3	79.6	101.4	142.7	120.5	124.4	135.4	143.0
80°	74.7	91.5	72.6	72.0	73.1	93.2	131.5	114.4	116.9	128.0	136.2
82.5°	42.1	50.6	63.6	67.2	66.6	76.4	113.6	104.2	107.1	151.5	160.1
85°	20.4	30.5	53.3	62.8	56.9	50.8	92.4	92.4	93.2	108.4	109.9
87.5°	7.6	13.6	35.9	49.8	39.6	30.5	62.8	65.4	72.9	75.0	76.6
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)