

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: P271220

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271220
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-HSS
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 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: 4410.8 lumens
Efficiency: N/A
Efficacy: 76.0 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

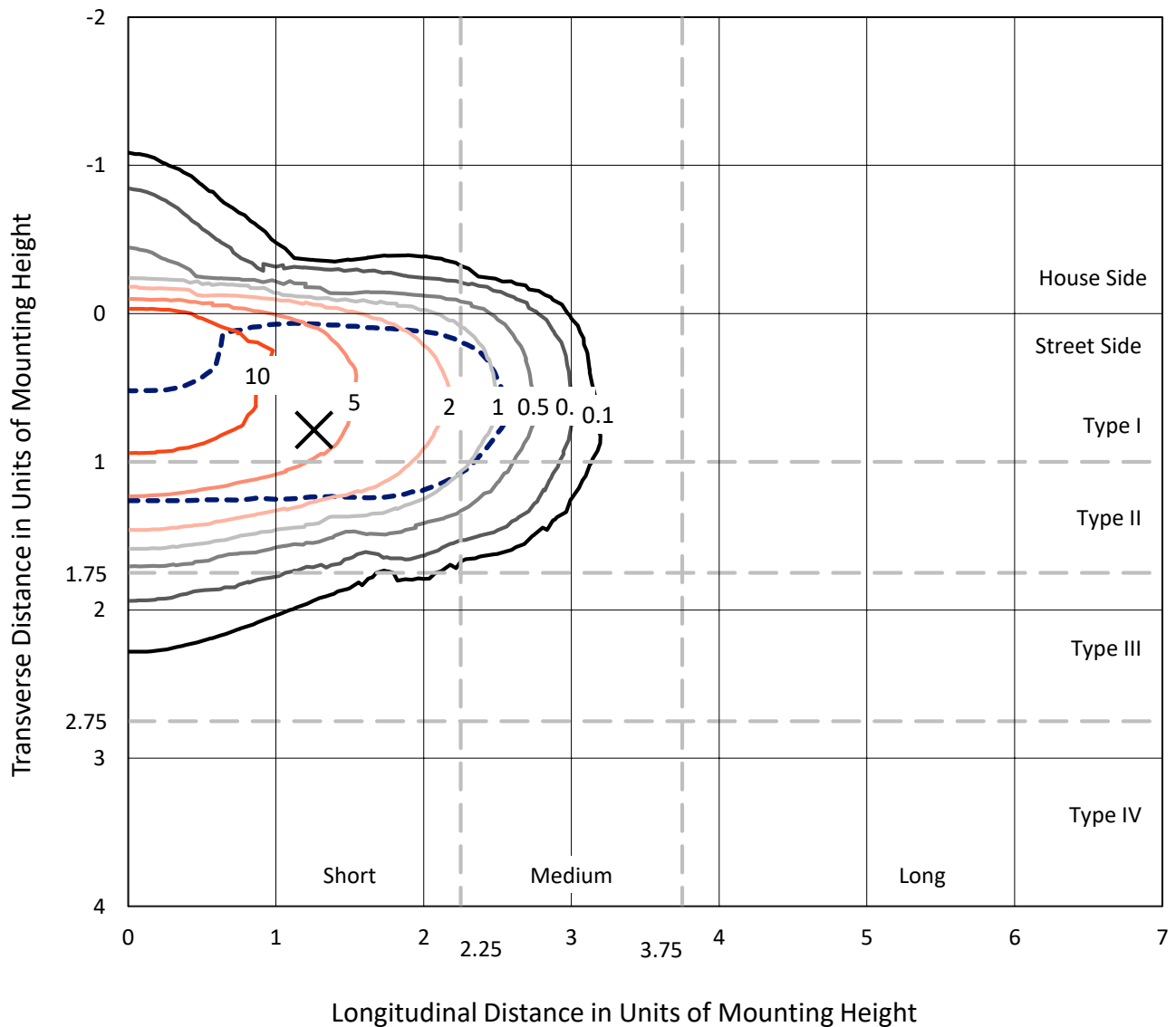
Input Watts (W): 58
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P271220
 CATALOG NUMBER: XNV-AF-01-LED-U-AFL-7027-HSS

Iso-Footcandle Lines of Horizontal Illumination

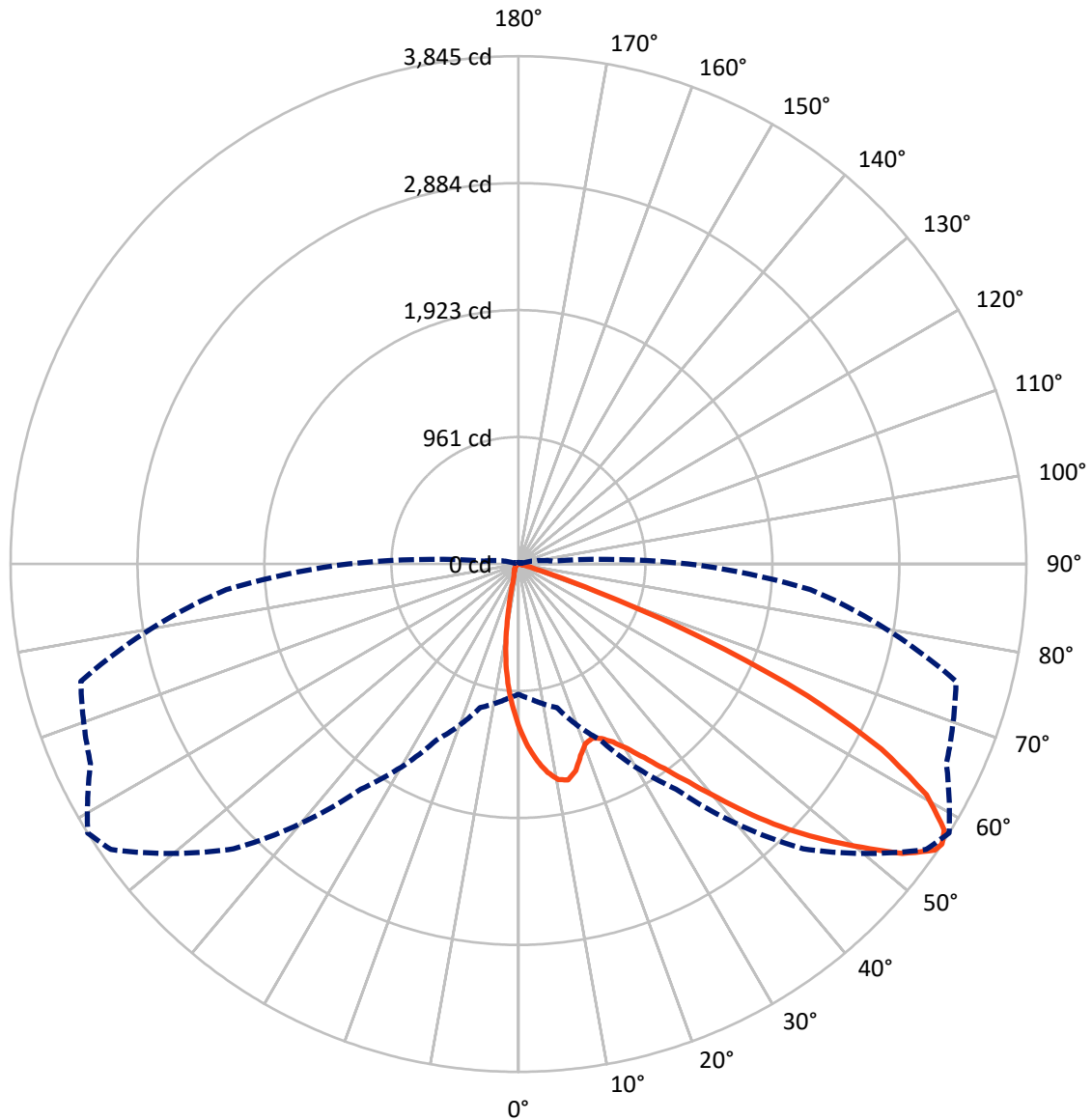
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 15.5 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P271220
CATALOG NUMBER: XNV-AF-01-LED-U-AFL-7027-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P271220

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

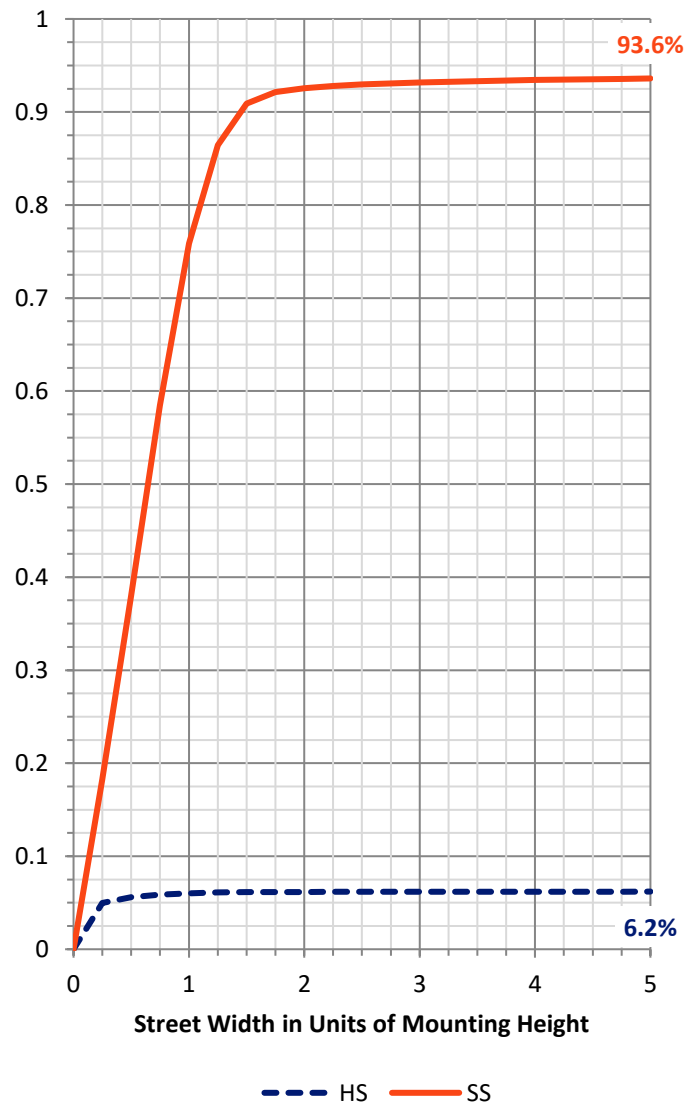
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	275.4	0.0	275.4
	% Fixture	6.2	0.0	6.2
Street Side	Lumens	4135.4	0.0	4135.4
	% Fixture	93.8	0.0	93.8
Total	Lumens	4410.8	0.0	4410.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.5	2.4
10°-20°	247.9	5.6
20°-30°	417.1	9.5
30°-40°	714.3	16.2
40°-50°	1077.8	24.4
50°-60°	1120.4	25.4
60°-70°	628.9	14.3
70°-80°	86.2	2.0
80°-90°	11.7	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°	4410.8	100.0
0°-180°	4410.8	100.0

Coefficient of Utilization



REPORT NUMBER: P271220

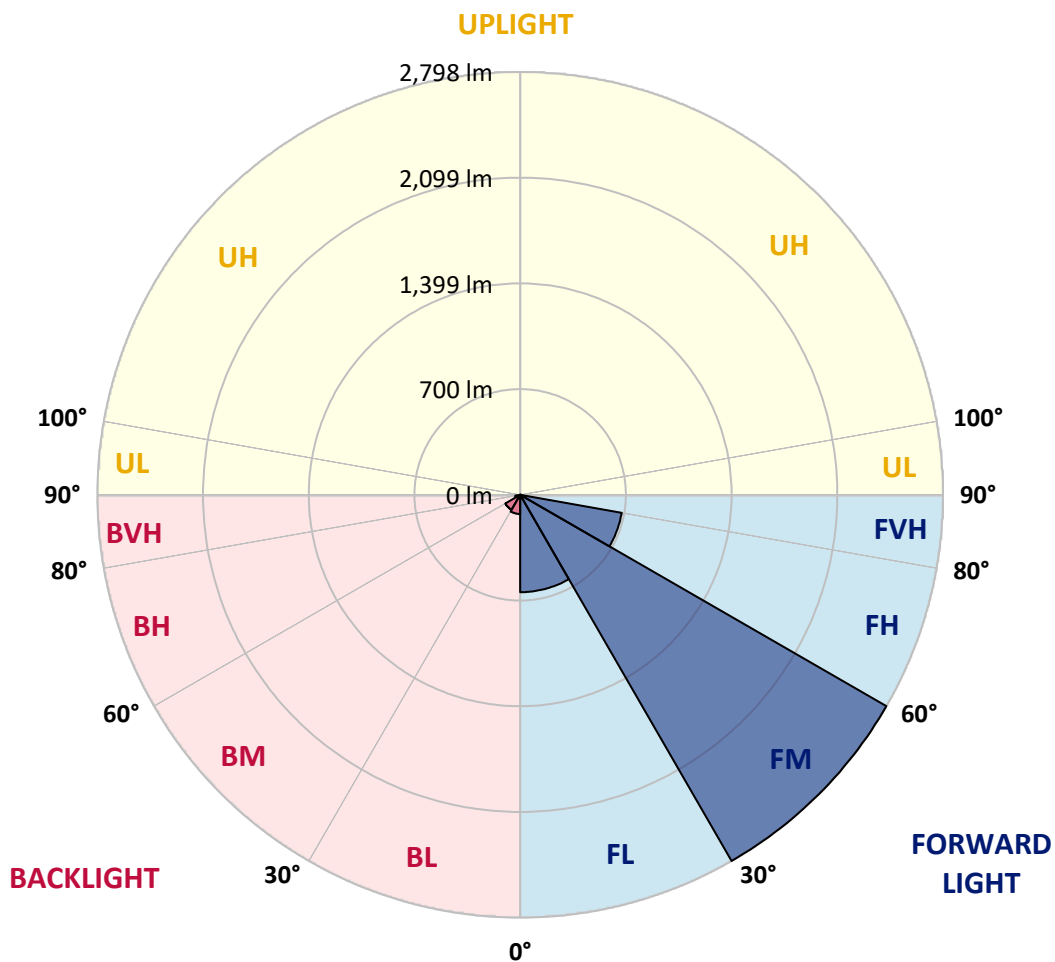
CATALOG NUMBER: XNV-AF-01-LED-U-AFL-7027-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	644.5	14.6			
FM	(30°-60°)	2798.4	63.4			
FH	(60°-80°)	682.5	15.5			G1/1800
FVH	(80°-90°)	10.1	0.2			G1/100
BL	(0°-30°)	127.0	2.9	B1/500		
BM	(30°-60°)	114.1	2.6	B0/220		
BH	(60°-80°)	32.7	0.7	B0/110		G0/110
BVH	(80°-90°)	1.6	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





REPORT NUMBER: P271220
 CATALOG NUMBER: XNV-AF-01-LED-U-AFL-7027-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1248.9	1248.9	1248.9	1248.9	1248.9	1248.9	1248.9	1248.9	1248.9	1248.9	1248.9
2.5°	1502.5	1493.5	1484.1	1466.6	1450.5	1425.5	1391.1	1382.8	1355.8	1311.4	1270.1
5°	1632.1	1630.5	1624.0	1609.9	1592.4	1562.2	1523.4	1497.6	1455.9	1385.7	1306.0
7.5°	1555.3	1569.5	1592.8	1625.8	1647.9	1644.8	1615.3	1592.8	1551.4	1455.9	1341.3
10°	1311.0	1313.9	1345.8	1415.1	1524.8	1627.1	1665.7	1659.7	1621.7	1517.1	1372.3
12.5°	1224.8	1226.6	1234.0	1256.2	1327.5	1470.3	1645.5	1677.2	1674.3	1575.5	1405.3
15°	1231.7	1232.7	1234.7	1241.7	1261.9	1333.7	1543.3	1623.6	1707.9	1631.1	1437.6
17.5°	1284.8	1284.1	1277.7	1271.0	1277.4	1300.9	1438.9	1523.7	1700.9	1677.9	1464.1
20°	1388.5	1391.8	1370.4	1340.4	1324.9	1325.9	1387.4	1451.1	1661.1	1714.2	1484.1
22.5°	1534.1	1536.6	1501.2	1449.3	1404.0	1381.1	1398.2	1431.9	1615.3	1747.9	1500.2
25°	1708.1	1708.1	1658.7	1585.0	1514.7	1464.5	1449.8	1462.5	1597.7	1785.9	1516.3
27.5°	1896.0	1902.7	1838.1	1741.5	1648.6	1575.3	1528.8	1526.5	1611.3	1833.7	1534.6
30°	2100.1	2106.3	2029.5	1911.5	1801.5	1707.5	1636.2	1620.7	1662.8	1897.9	1561.2
32.5°	2303.4	2308.6	2223.8	2103.2	1975.1	1864.6	1770.7	1746.1	1755.3	1991.8	1600.2
35°	2562.0	2563.0	2455.5	2312.2	2175.2	2045.7	1927.0	1902.7	1892.5	2110.3	1656.4
37.5°	2767.6	2759.5	2691.5	2555.9	2398.7	2263.4	2123.8	2092.2	2067.9	2276.9	1743.5
40°	2815.9	2815.9	2805.9	2765.3	2640.4	2510.1	2374.8	2327.7	2274.1	2473.0	1860.6
42.5°	2689.9	2697.9	2764.5	2852.9	2854.1	2770.6	2638.3	2598.5	2504.4	2696.5	1988.5
45°	2407.5	2409.9	2569.6	2808.6	2970.8	3018.6	2921.0	2866.1	2735.6	2928.7	2105.5
47.5°	2305.8	2313.2	2381.1	2673.4	2979.6	3219.4	3192.2	3116.8	2949.6	3140.7	2215.0
50°	2149.6	2158.7	2241.9	2474.1	2900.7	3348.3	3451.6	3370.9	3144.4	3317.4	2269.2
52.5°	1776.2	1790.3	1907.7	2210.5	2704.0	3353.7	3689.2	3640.8	3344.0	3412.0	2262.8
55°	1222.2	1232.7	1369.6	1725.6	2306.8	3189.3	3791.6	3825.0	3522.1	3433.2	2231.7
56°	986.0	1025.1	1125.3	1470.3	2080.7	3049.1	3768.0	3845.0	3574.9	3429.8	2218.4
57.5°	651.8	659.3	768.6	1065.4	1670.8	2745.3	3661.8	3801.9	3642.8	3412.7	2208.7
60°	306.6	309.9	349.4	491.6	904.2	2000.6	3316.1	3548.9	3667.7	3376.5	2208.3
62.5°	200.0	200.5	205.4	234.5	369.8	1089.6	2749.1	3084.2	3461.4	3372.5	2201.8
65°	164.6	166.2	160.4	164.2	193.4	410.9	1939.0	2404.5	2977.3	3277.6	2129.8
67.5°	145.0	145.3	137.6	133.3	141.7	180.4	976.8	1516.7	2226.8	2785.0	1754.3
70°	132.2	132.0	123.2	113.0	113.4	119.8	318.4	630.0	1231.9	1653.7	1007.2
72.5°	117.5	118.0	113.0	99.0	94.2	84.8	119.8	169.9	419.2	531.0	265.4
75°	102.9	101.6	96.6	87.5	78.7	56.9	60.2	72.4	109.4	108.3	57.2
77.5°	78.1	76.7	79.1	74.6	61.5	39.7	33.0	37.6	49.4	46.2	23.3
80°	59.6	58.8	53.9	63.9	56.2	30.0	22.5	23.3	26.9	24.6	11.5
82.5°	43.1	42.7	40.8	39.3	35.7	21.9	17.2	18.1	20.2	17.2	8.4
85°	16.4	16.4	32.0	26.9	24.6	14.8	12.0	13.1	15.5	12.4	5.7
87.5°	2.6	2.6	21.5	17.8	11.0	7.4	7.7	8.4	9.2	7.4	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



REPORT NUMBER: P271220

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

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1248.9	1248.9	1248.9	1248.9	1248.9	1248.9	1248.9	1248.9	1248.9	1248.9	1248.9
2.5°	1245.5	1223.0	1173.5	1125.7	1084.0	1038.3	1014.9	988.0	978.0	957.8	959.7
5°	1258.3	1211.2	1111.8	1007.2	911.3	813.8	744.3	679.1	642.7	606.7	606.7
7.5°	1271.5	1199.3	1045.8	878.6	717.1	549.9	431.5	336.5	283.7	248.3	247.4
10°	1280.4	1184.2	970.9	729.6	491.4	283.3	170.9	134.6	121.5	115.7	115.4
12.5°	1292.2	1169.1	885.4	554.0	272.9	134.6	106.7	101.0	98.6	97.2	97.2
15°	1302.4	1147.6	781.7	372.5	143.4	101.0	91.8	89.8	89.6	89.2	89.6
17.5°	1304.7	1117.0	657.6	218.1	103.9	88.2	84.1	82.5	82.5	82.1	82.1
20°	1299.3	1076.4	520.3	134.6	89.8	81.0	76.7	74.6	74.4	74.4	74.4
22.5°	1288.2	1025.1	384.7	102.0	81.7	74.6	69.0	67.0	67.0	67.4	67.6
25°	1274.3	964.2	264.2	87.9	75.6	68.0	62.3	60.2	60.9	61.5	62.0
27.5°	1256.9	891.5	173.0	76.0	67.6	61.3	56.2	54.8	56.2	57.5	58.2
30°	1239.4	811.7	117.0	65.9	58.6	53.9	50.8	50.5	52.6	55.5	55.9
32.5°	1228.0	730.0	88.6	59.2	51.6	47.4	46.2	46.8	49.8	53.2	53.9
35°	1226.9	650.2	75.4	53.9	46.8	43.1	42.4	44.5	47.8	50.5	51.2
37.5°	1242.7	575.5	68.4	49.8	43.1	39.3	38.4	42.1	45.0	47.8	48.5
40°	1274.8	508.5	63.6	46.2	40.1	35.7	35.0	38.0	41.1	44.0	45.0
42.5°	1314.8	445.9	58.2	42.4	36.7	31.6	30.9	33.2	36.3	40.8	41.4
45°	1349.4	387.7	52.6	38.4	33.0	27.3	26.9	29.6	32.0	36.0	36.7
47.5°	1378.7	339.2	47.2	34.0	28.2	24.3	23.9	25.2	26.6	30.4	30.9
50°	1363.3	298.1	41.7	27.9	22.8	20.9	20.5	20.5	22.2	26.0	26.6
52.5°	1325.2	272.5	36.7	23.3	18.9	17.8	16.8	17.2	18.9	20.5	20.9
55°	1294.5	260.5	32.2	20.5	15.8	14.8	13.8	13.5	13.8	13.1	12.4
56°	1287.2	259.2	31.4	19.9	15.1	13.8	12.4	11.8	11.5	10.2	9.7
57.5°	1283.8	259.2	29.6	18.5	14.2	12.4	10.8	9.4	8.1	7.0	7.0
60°	1281.2	260.8	27.6	16.2	12.0	10.2	7.7	5.7	4.8	4.8	4.8
62.5°	1275.5	260.1	25.2	13.5	10.4	7.7	4.8	3.8	3.4	3.8	4.0
65°	1211.2	241.6	22.2	10.8	8.1	5.4	2.6	2.6	3.1	3.8	4.0
67.5°	975.9	183.1	18.1	8.4	5.7	4.0	2.3	2.3	3.1	3.8	4.0
70°	536.1	96.6	15.5	6.1	4.4	3.4	2.3	2.1	3.1	3.8	4.0
72.5°	131.0	40.3	14.2	4.8	4.0	3.1	2.1	2.1	3.1	3.8	4.0
75°	32.2	30.4	11.5	3.8	3.4	2.6	2.1	2.1	3.1	3.8	4.0
77.5°	15.1	40.1	7.7	3.4	3.1	2.3	2.1	2.1	3.1	3.8	3.8
80°	9.2	30.4	4.8	3.1	2.6	2.3	2.1	2.1	3.1	3.8	4.0
82.5°	5.4	8.8	3.4	3.1	2.6	2.1	2.1	2.1	3.1	3.8	4.0
85°	4.8	4.4	3.4	3.1	2.6	2.3	2.1	2.1	3.4	4.0	4.0
87.5°	3.8	3.4	3.1	2.6	2.6	2.3	2.1	2.1	3.1	3.8	4.0
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)