

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: LUMARK

Report Number: P959298

Luminaire Tested: **NAV-SB1A-735-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959298
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-735-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3894 lumens
Efficiency: N/A
Efficacy: 126.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B0 - U0 - G1

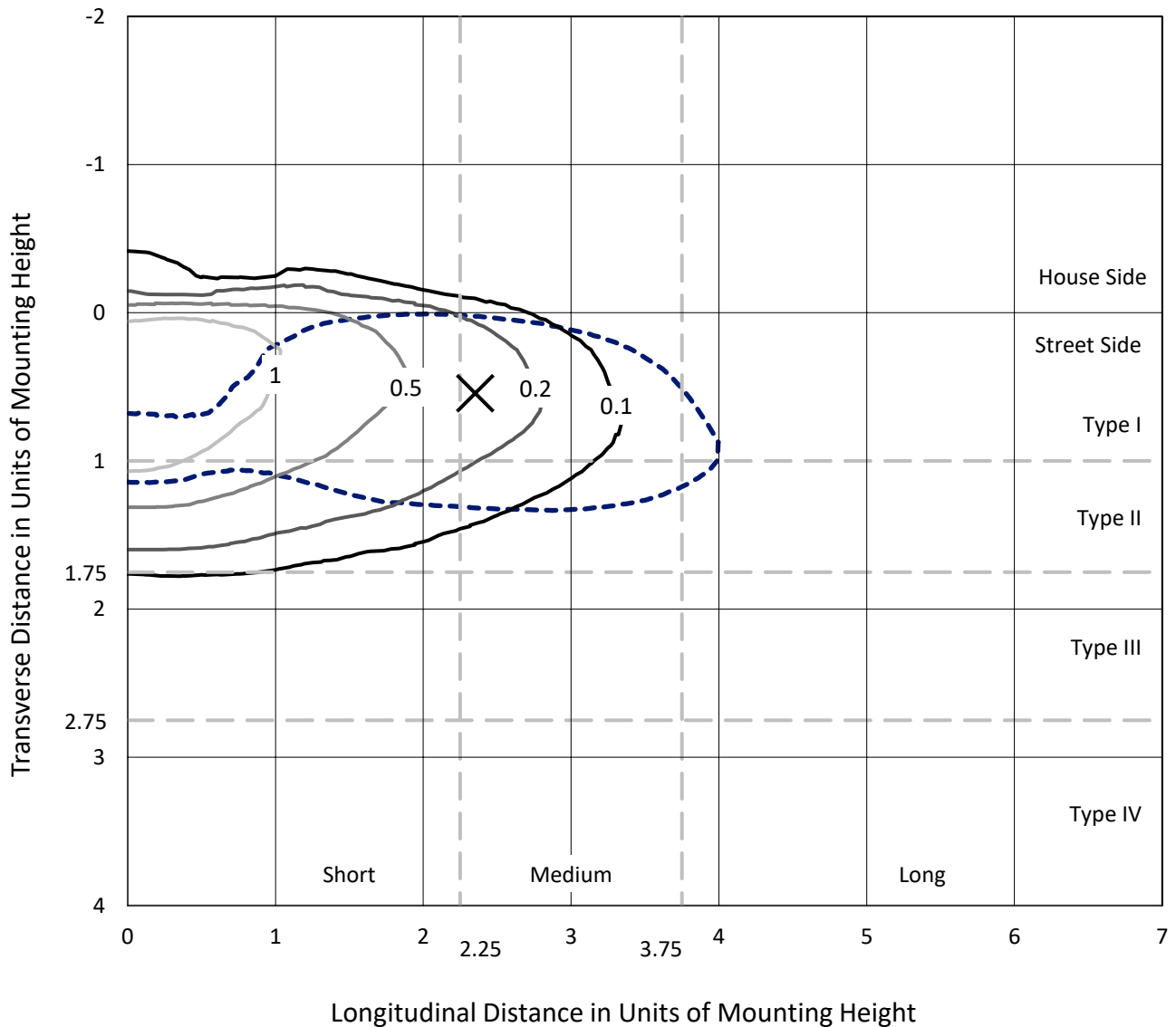
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

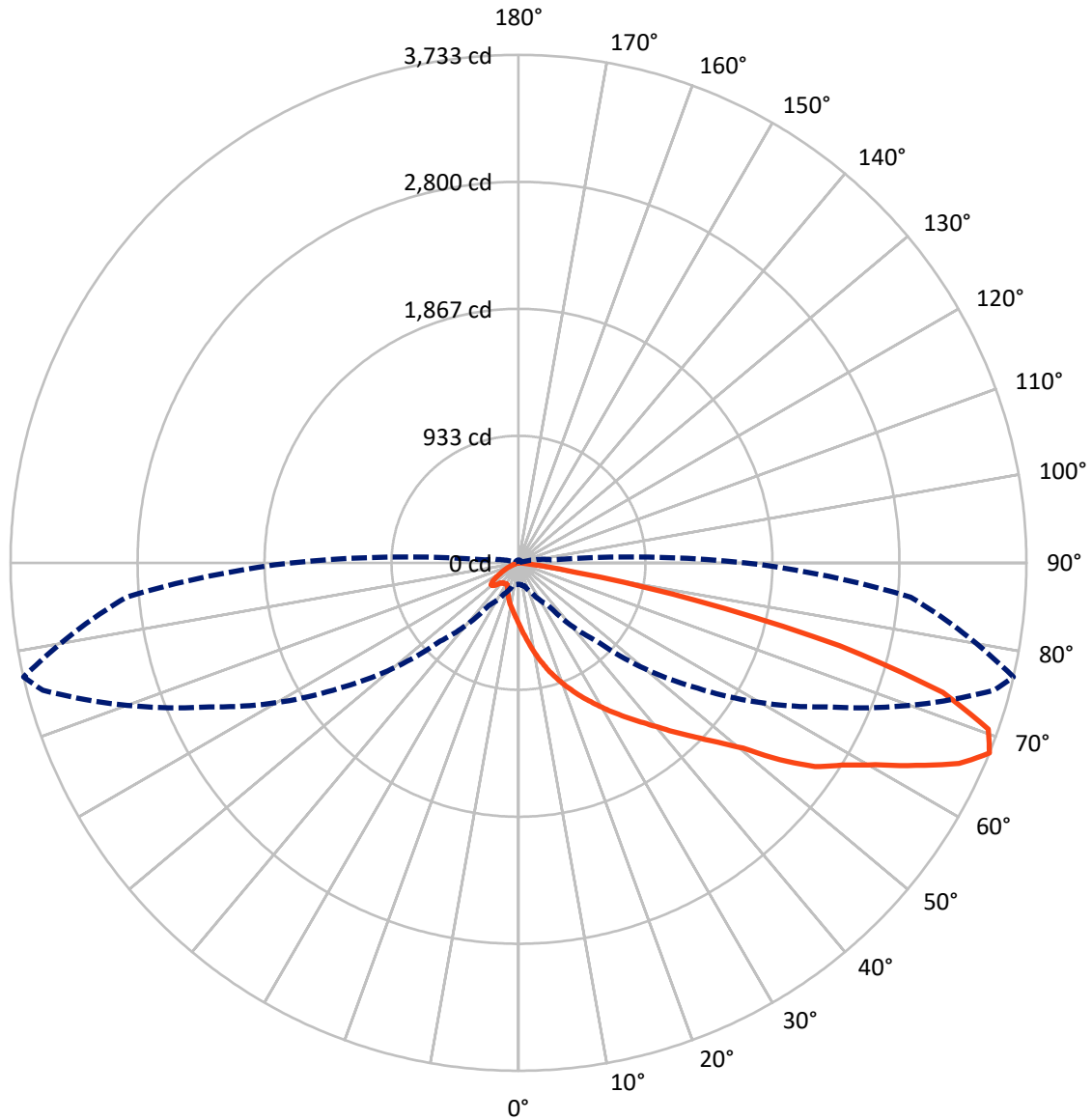
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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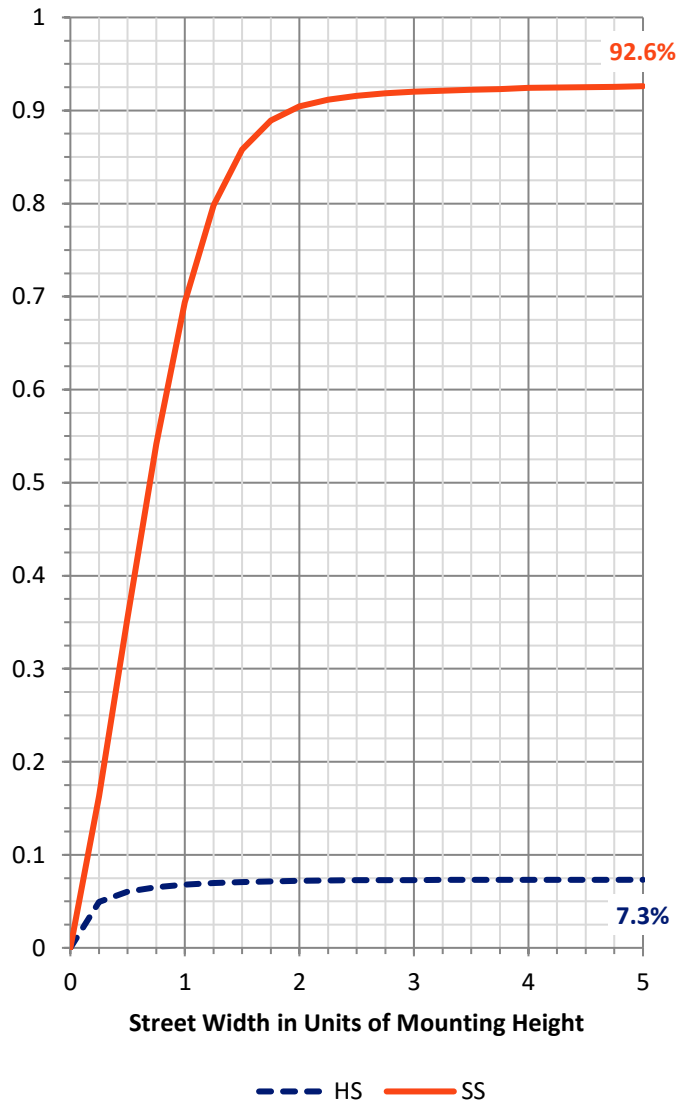
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	286.5	0.0	286.5
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	3607.5	0.0	3607.5
	% Fixture	92.6	0.0	92.6
Total	Lumens	3894.0	0.0	3894.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.8	1.2
10°-20°	160.5	4.1
20°-30°	309.7	8.0
30°-40°	537.7	13.8
40°-50°	780.7	20.0
50°-60°	896.5	23.0
60°-70°	778.3	20.0
70°-80°	366.6	9.4
80°-90°	18.1	0.5
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°	3894.0	100.0
0°-180°	3894.0	100.0

Coefficient of Utilization

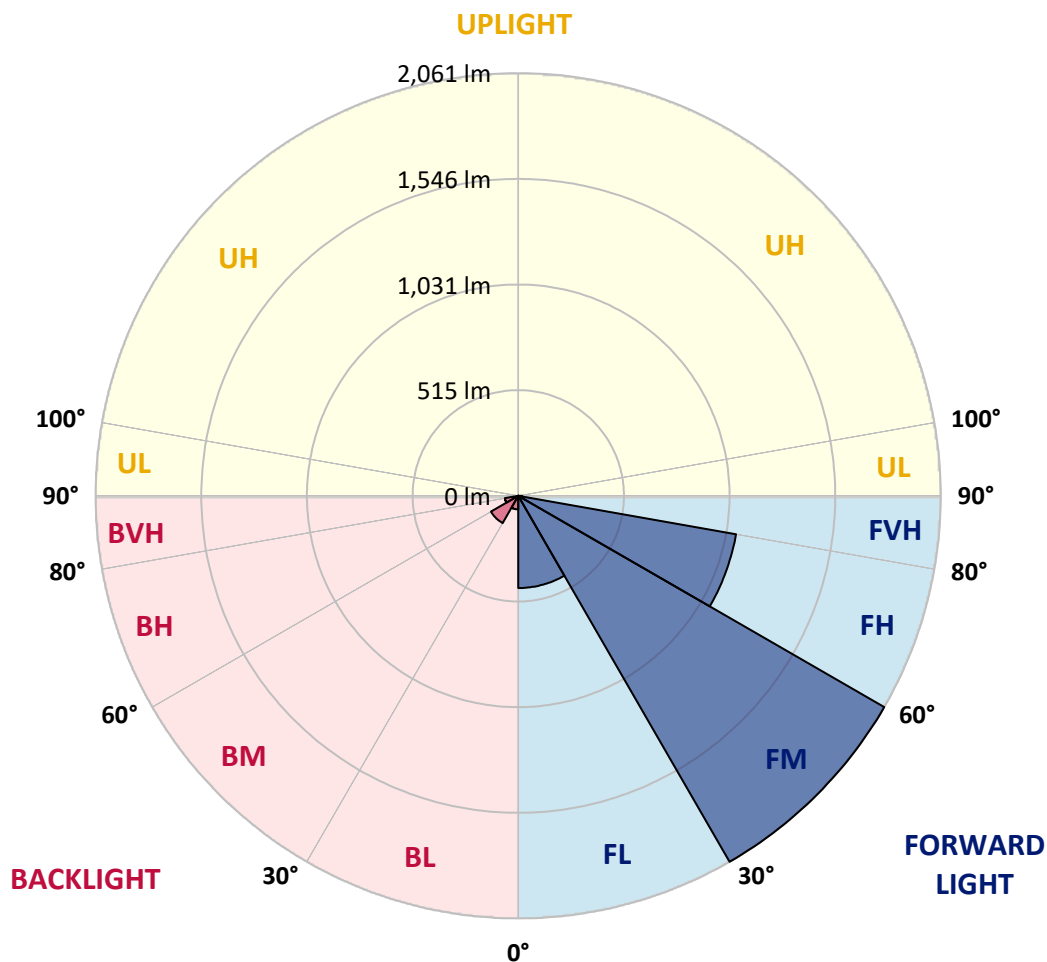


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	449.7	11.5			
FM (30°-60°)	2061.4	52.9			
FH (60°-80°)	1078.6	27.7			G1/1800
FVH (80°-90°)	17.8	0.5			G1/100
BL (0°-30°)	66.3	1.7	B0/110		
BM (30°-60°)	153.5	3.9	B0/220		
BH (60°-80°)	66.3	1.7	B0/110		G0/110
BVH (80°-90°)	0.3	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-G1
 Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	449.1	449.1	449.1	449.1	449.1	449.1	449.1	449.1	449.1	449.1	449.1
2.5°	621.7	625.6	620.0	609.4	593.4	583.0	557.6	533.6	507.1	498.6	472.0
5°	757.8	761.2	754.9	743.3	722.0	701.7	668.3	618.3	566.3	549.6	502.5
7.5°	858.6	860.6	858.1	847.6	827.2	804.2	767.0	707.8	630.6	612.2	540.0
10°	931.2	937.5	936.7	932.6	919.1	900.5	860.8	793.3	702.6	679.0	582.3
12.5°	979.3	986.4	990.5	999.6	998.9	987.1	952.2	880.9	774.5	746.7	629.9
15°	993.3	1000.8	1016.6	1037.8	1056.7	1062.7	1038.3	966.8	853.6	818.1	678.8
17.5°	985.3	996.9	1015.8	1049.4	1090.8	1118.1	1115.4	1049.7	925.4	884.8	726.6
20°	1003.0	1014.1	1028.9	1057.2	1105.3	1154.9	1174.6	1129.0	996.7	954.2	776.9
22.5°	1100.7	1098.8	1100.2	1104.8	1133.5	1182.6	1223.5	1201.1	1067.3	1023.8	830.1
25°	1255.4	1246.7	1231.9	1207.1	1199.9	1223.5	1266.1	1264.8	1141.8	1095.1	884.6
27.5°	1432.9	1431.5	1396.9	1336.9	1303.1	1293.9	1314.3	1327.1	1215.5	1165.7	939.2
30°	1602.9	1606.8	1560.2	1493.4	1431.2	1395.2	1376.9	1386.0	1290.5	1241.9	995.5
32.5°	1750.9	1755.0	1704.3	1626.2	1549.3	1505.7	1467.1	1444.3	1372.3	1319.3	1057.4
35°	1876.0	1880.1	1821.7	1735.4	1653.4	1614.1	1570.3	1508.2	1454.5	1405.2	1126.4
37.5°	1987.7	1986.4	1908.3	1821.3	1740.8	1709.6	1686.6	1586.7	1539.1	1491.5	1202.7
40°	2053.7	2058.7	1992.0	1896.0	1817.9	1795.2	1793.7	1684.2	1636.8	1590.6	1286.4
42.5°	2073.0	2082.0	2033.6	1954.8	1884.0	1859.2	1897.2	1789.6	1750.4	1705.5	1381.0
45°	2038.2	2046.9	2024.9	1970.3	1928.8	1913.0	1986.1	1898.9	1871.9	1827.4	1487.6
47.5°	1936.6	1947.5	1952.8	1941.2	1940.7	1956.9	2066.0	2014.0	2016.0	1970.5	1611.2
50°	1740.0	1758.4	1807.3	1848.4	1911.9	1991.8	2143.6	2138.8	2178.4	2139.3	1772.2
52.5°	1382.6	1408.8	1577.1	1689.5	1832.4	1985.2	2229.0	2338.9	2463.5	2406.2	1999.3
55°	1111.1	1111.1	1247.9	1458.4	1677.2	1942.2	2266.2	2469.1	2657.7	2644.2	2159.1
57.5°	905.8	916.7	1004.0	1189.9	1452.5	1839.7	2289.1	2550.8	2814.1	2804.2	2315.3
60°	559.0	582.5	747.4	930.9	1196.9	1657.1	2274.7	2633.5	3004.0	3012.0	2503.5
62.5°	314.9	323.5	397.1	669.8	930.7	1411.6	2163.7	2679.7	3246.7	3280.6	2697.4
65°	217.4	221.7	250.0	416.9	645.1	1123.9	1946.8	2651.0	3490.0	3558.4	2861.8
67.5°	157.8	160.1	177.7	254.6	382.7	814.9	1606.8	2505.8	3618.9	3733.3	2893.2
70°	121.4	122.8	135.6	167.3	226.1	503.0	1167.0	2217.4	3525.5	3662.1	2732.1
72.5°	98.7	100.1	110.0	123.8	150.0	297.5	707.2	1800.7	3113.4	3261.0	2325.9
75°	83.2	85.1	94.1	103.0	117.6	191.1	331.8	1254.0	2341.4	2438.2	1617.4
77.5°	46.2	42.5	76.4	85.4	99.1	121.0	155.3	738.0	1311.3	1338.1	717.7
80°	28.8	29.7	60.7	68.7	76.2	60.9	71.1	284.1	454.6	431.8	139.0
82.5°	1.7	3.9	46.6	49.6	52.3	26.1	26.9	96.5	109.6	100.6	24.7
85°	0.0	0.0	21.3	17.1	18.1	7.5	7.7	22.4	14.8	16.0	4.8
87.5°	0.0	0.0	0.0	0.5	0.0	0.7	1.4	1.9	0.7	0.9	1.7
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°	449.1	449.1	449.1	449.1	449.1	449.1	449.1	449.1	449.1	449.1	449.1
2.5°	455.1	438.2	403.8	370.2	342.9	317.4	299.4	282.2	273.5	273.0	272.5
5°	468.8	433.3	364.6	303.9	255.1	216.0	190.5	172.4	163.2	160.1	159.6
7.5°	488.2	434.8	330.3	245.9	188.4	154.8	140.2	134.5	132.5	130.4	129.9
10°	512.6	438.2	299.6	198.0	148.4	131.5	125.8	123.3	121.9	120.4	119.9
12.5°	540.0	441.3	269.2	164.4	130.6	121.9	117.8	114.9	113.0	111.2	110.7
15°	566.5	443.2	237.5	140.9	121.4	114.4	110.0	106.9	104.2	102.3	102.1
17.5°	592.9	445.9	207.7	127.0	113.9	106.9	102.5	98.7	96.5	94.3	94.1
20°	622.2	445.4	179.7	117.1	106.4	99.4	94.8	91.1	89.0	86.6	86.3
22.5°	649.2	443.0	155.0	108.5	98.7	91.8	86.8	83.2	81.0	79.0	78.8
25°	680.4	441.1	134.5	100.9	91.4	84.7	79.0	75.6	73.3	71.5	71.3
27.5°	710.4	438.2	119.4	93.8	84.4	77.9	72.6	68.7	66.5	65.3	65.3
30°	739.9	437.5	113.9	87.0	78.1	71.5	66.2	62.6	60.9	60.5	60.2
32.5°	775.5	439.3	116.3	84.7	72.3	65.8	60.7	58.0	56.4	56.4	56.4
35°	813.4	438.9	119.9	86.8	68.5	60.0	56.1	54.4	52.7	52.7	52.7
37.5°	861.1	439.6	122.8	90.4	66.9	55.1	53.0	50.7	49.8	49.8	49.8
40°	932.1	463.5	121.4	93.6	66.5	51.8	47.4	46.6	45.9	45.9	45.9
42.5°	1019.3	515.6	123.3	93.8	66.2	49.3	43.6	45.0	43.3	43.0	42.8
45°	1114.5	572.4	135.6	88.8	66.0	48.1	41.6	43.3	40.6	40.6	40.6
47.5°	1209.0	628.7	148.2	81.5	65.3	47.9	39.9	38.9	38.2	38.4	38.4
50°	1339.4	674.7	153.0	71.5	63.6	47.4	36.8	37.0	36.5	37.0	37.0
52.5°	1481.3	684.3	147.3	60.5	58.7	45.9	34.5	35.6	35.3	35.8	35.8
55°	1569.8	673.9	121.7	50.3	51.2	40.2	32.4	34.3	34.3	34.3	34.3
57.5°	1661.2	629.7	86.3	40.9	42.5	32.9	30.4	33.1	32.9	32.6	32.6
60°	1727.0	558.1	56.8	33.6	33.8	27.1	28.3	31.2	31.0	29.7	29.7
62.5°	1776.0	479.0	36.5	28.5	25.8	24.4	25.8	28.3	27.4	24.7	24.2
65°	1770.5	369.5	28.1	24.4	21.3	21.3	22.4	24.7	21.7	17.4	16.9
67.5°	1667.3	250.0	23.2	20.6	17.9	17.6	18.7	20.6	18.7	14.8	14.2
70°	1482.8	163.5	18.7	16.0	14.2	13.0	15.0	17.6	15.7	11.9	11.4
72.5°	1203.5	99.6	14.0	11.6	10.4	8.5	11.9	14.6	12.6	8.7	8.2
75°	778.6	50.7	9.6	7.5	5.5	5.1	8.7	10.9	8.7	5.3	4.6
77.5°	297.9	21.3	5.3	3.4	2.9	2.5	4.8	6.6	3.6	1.2	0.9
80°	57.3	8.9	2.7	1.7	1.4	0.9	0.7	0.5	0.0	0.0	0.0
82.5°	9.9	2.9	0.9	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)