

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: P959242

Luminaire Tested: **NAV-SB1A-727-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959242
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-727-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3551.6 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G1

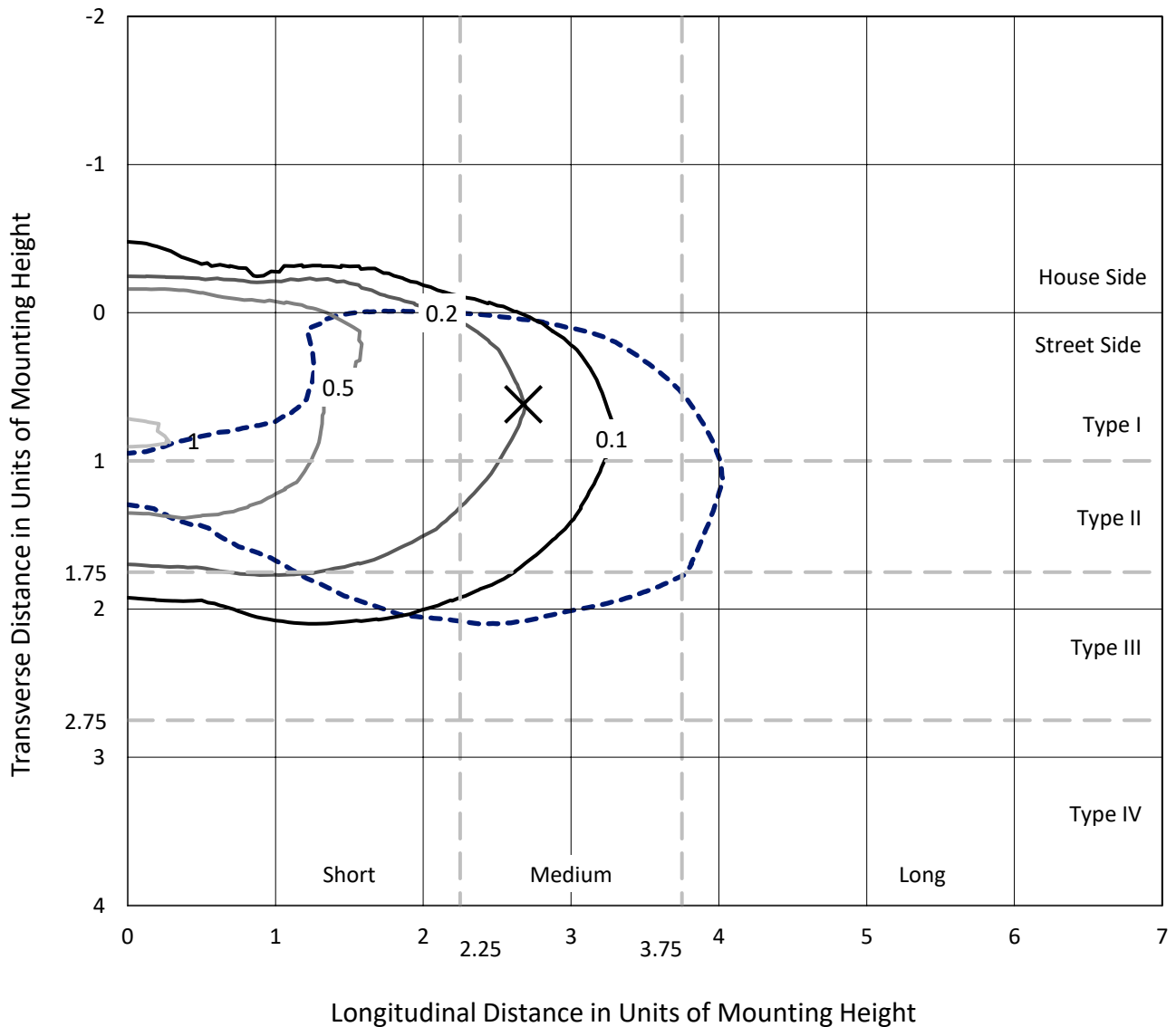
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

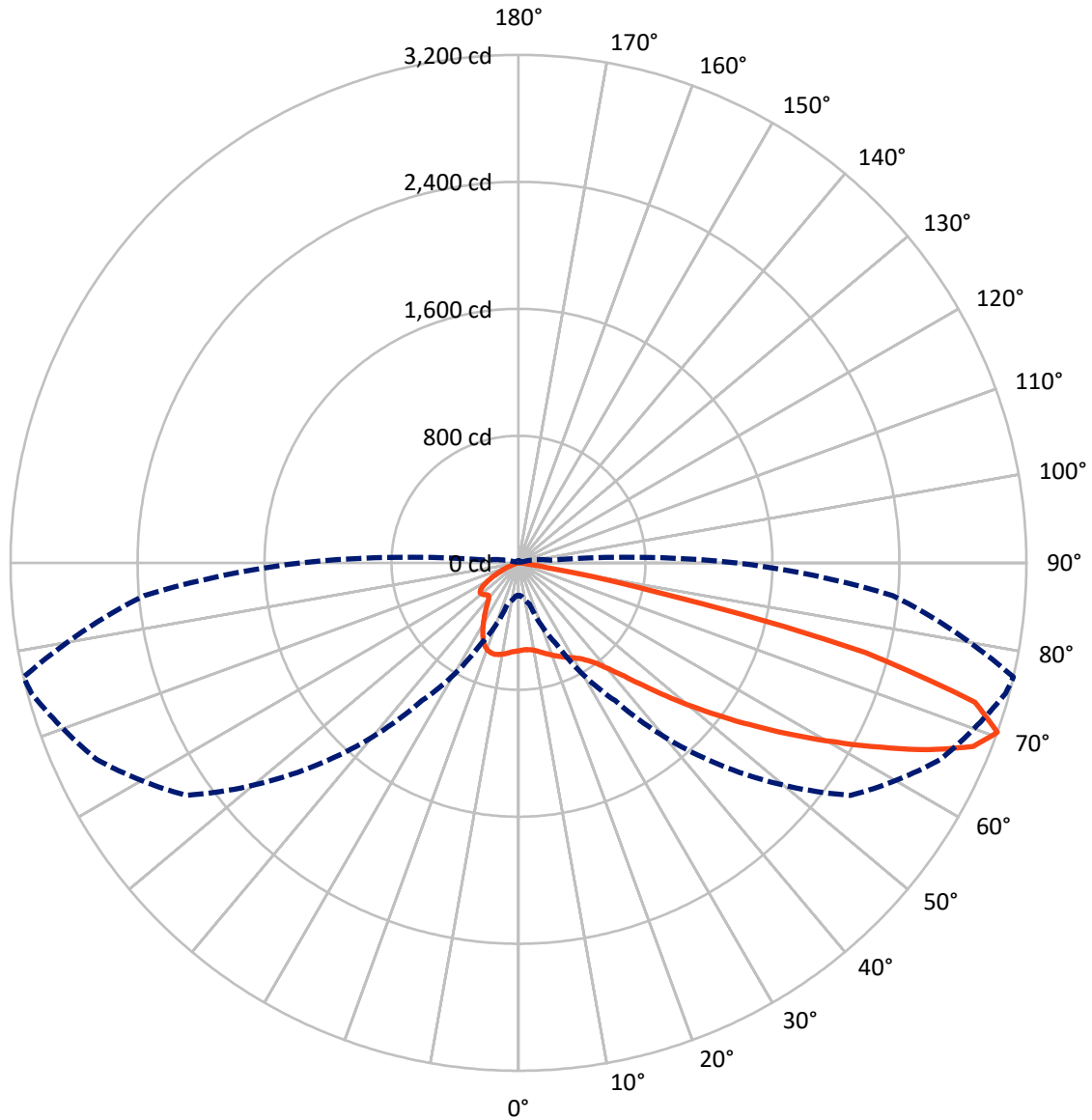
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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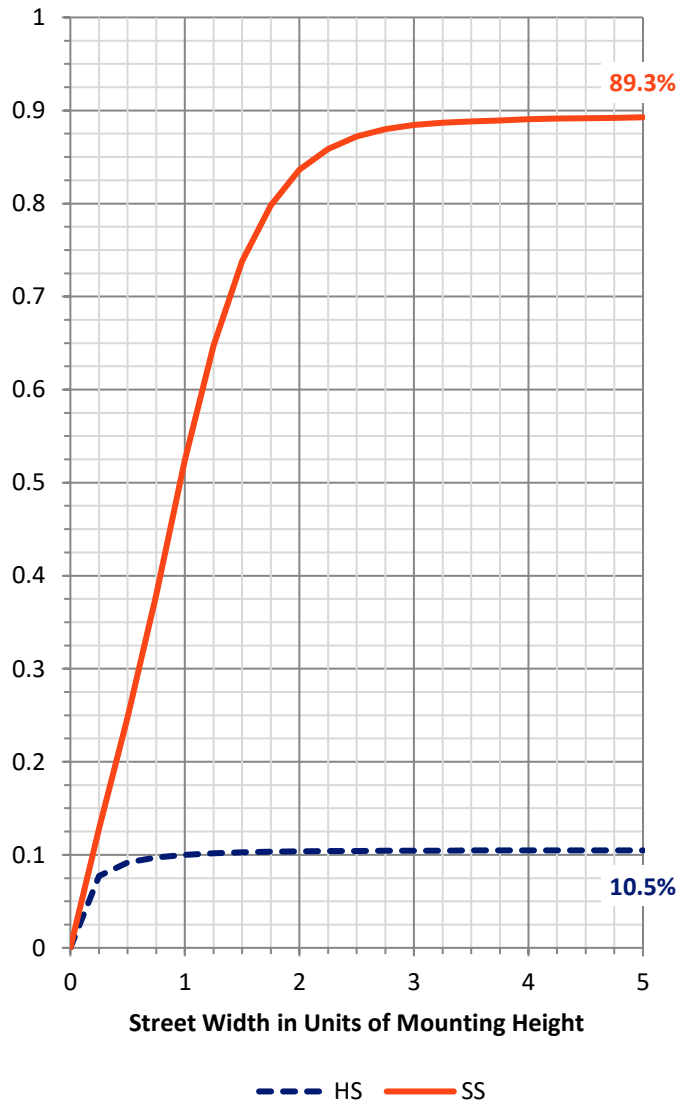
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	374.4	0.0	374.4
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	3177.2	0.0	3177.2
	% Fixture	89.5	0.0	89.5
Total	Lumens	3551.6	0.0	3551.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.7	1.3
10°-20°	113.3	3.2
20°-30°	175.3	4.9
30°-40°	318.1	9.0
40°-50°	600.5	16.9
50°-60°	867.6	24.4
60°-70°	923.6	26.0
70°-80°	489.4	13.8
80°-90°	16.1	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°	3551.6	100.0
0°-180°	3551.6	100.0

Coefficient of Utilization

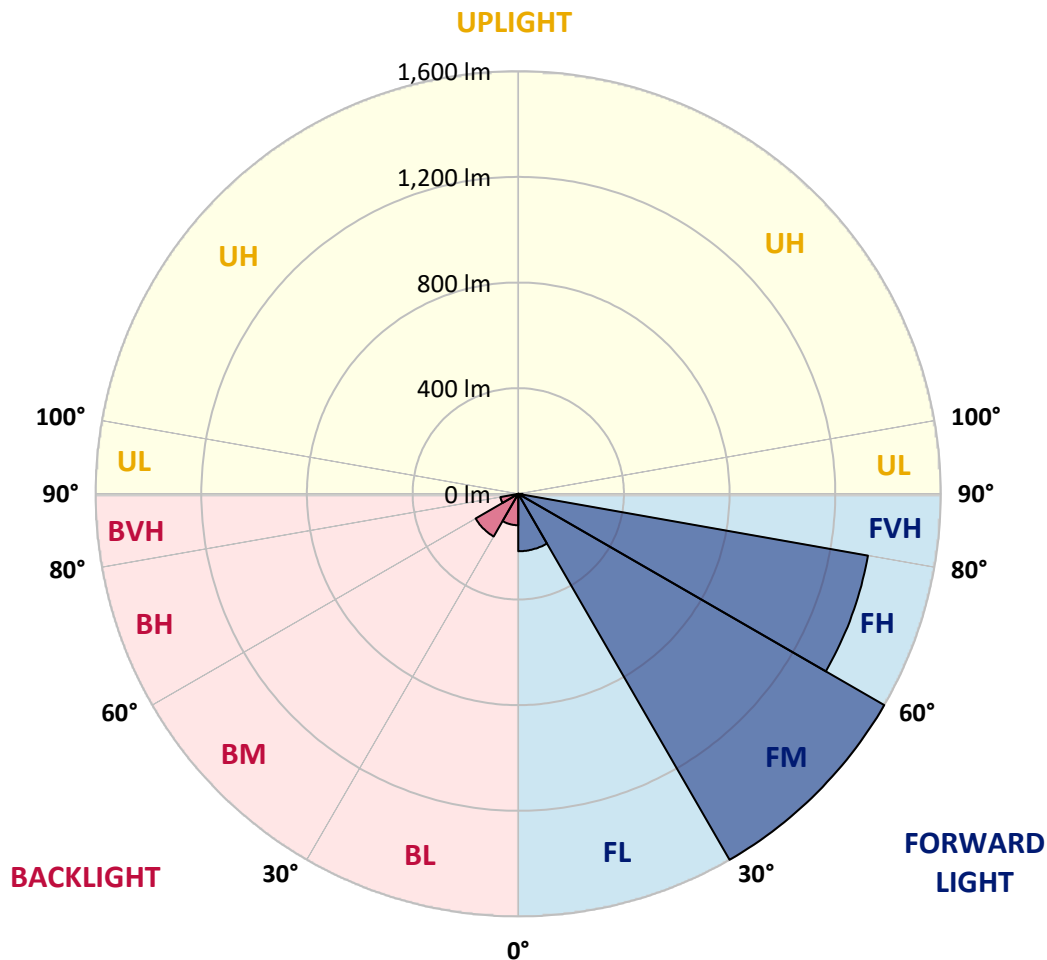


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	217.4	6.1			
FM (30°-60°)	1599.8	45.0			
FH (60°-80°)	1344.3	37.9			G1/1800
FVH (80°-90°)	15.6	0.4			G1/100
BL (0°-30°)	118.9	3.3	B1/500		
BM (30°-60°)	186.4	5.2	B0/220		
BH (60°-80°)	68.6	1.9	B0/110		G0/110
BVH (80°-90°)	0.4	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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	554.0	554.0	554.0	554.0	554.0	554.0	554.0	554.0	554.0	554.0	554.0
2.5°	520.1	524.8	524.2	527.3	528.4	532.9	537.4	543.5	550.2	549.9	554.4
5°	490.8	495.5	496.6	500.8	506.2	513.2	522.3	534.4	547.0	549.1	558.0
7.5°	456.0	460.9	463.8	472.3	482.3	496.6	511.6	529.3	550.2	553.1	570.4
10°	421.2	425.7	429.5	441.7	457.4	478.7	503.1	528.7	556.7	561.0	585.4
12.5°	399.6	404.0	408.2	418.7	438.3	464.3	497.4	531.8	567.4	573.5	605.8
15°	392.1	395.9	399.2	408.7	426.8	456.4	496.3	538.3	581.2	589.2	630.5
17.5°	393.2	395.2	397.4	404.6	422.3	452.8	498.4	549.5	597.3	604.4	655.2
20°	399.6	400.8	401.0	406.0	421.7	452.4	502.4	560.3	612.5	622.2	679.6
22.5°	408.0	408.5	408.0	411.3	425.9	455.7	507.8	573.3	629.6	638.6	704.3
25°	446.8	438.3	427.5	421.0	433.1	462.3	515.9	590.8	648.2	656.9	728.3
27.5°	567.2	542.7	504.2	460.9	447.9	471.7	527.1	608.4	667.1	674.9	754.1
30°	762.8	730.7	665.2	567.6	495.5	491.4	541.6	626.2	687.0	695.6	781.7
32.5°	958.8	951.0	875.4	740.4	602.4	535.4	565.9	650.2	713.5	720.2	818.9
35°	1157.1	1141.1	1079.2	945.9	767.3	624.8	606.3	681.6	748.2	755.8	873.2
37.5°	1308.9	1299.3	1261.0	1151.1	962.9	763.0	675.4	730.3	798.7	807.2	942.7
40°	1443.1	1438.6	1425.6	1353.1	1181.5	943.8	782.8	805.6	868.7	878.7	1027.9
42.5°	1548.5	1559.0	1566.4	1546.2	1406.9	1150.2	927.2	911.5	966.3	976.5	1136.4
45°	1656.4	1660.0	1689.8	1718.9	1630.8	1365.9	1090.0	1035.6	1087.5	1100.3	1266.6
47.5°	1725.7	1740.0	1792.5	1843.9	1819.0	1579.8	1265.0	1182.0	1228.2	1252.2	1412.3
50°	1730.8	1758.0	1830.1	1919.7	1956.0	1783.5	1455.2	1348.9	1398.0	1424.4	1567.9
52.5°	1644.9	1687.0	1799.0	1930.0	2030.0	1956.0	1651.9	1515.8	1578.8	1613.2	1729.5
55°	1261.2	1316.3	1681.7	1873.9	2033.0	2086.8	1843.5	1689.5	1780.1	1819.2	1903.9
57.5°	1098.8	1126.6	1322.1	1776.5	1978.9	2139.5	2016.6	1855.0	1999.3	2047.7	2068.9
60°	914.2	950.8	1108.8	1617.3	1905.6	2144.6	2169.5	2068.6	2236.9	2291.3	2219.9
62.5°	621.3	661.0	818.2	1343.7	1805.3	2142.1	2294.9	2288.4	2500.8	2559.3	2348.1
65°	384.9	409.8	513.4	1097.3	1665.1	2144.8	2426.1	2555.3	2779.4	2838.8	2447.2
67.5°	304.1	315.6	369.6	842.4	1423.5	2084.3	2557.1	2806.2	3041.6	3088.6	2477.5
70°	204.3	211.3	269.0	564.8	1059.1	1804.8	2554.6	2932.3	3176.6	3200.2	2367.1
72.5°	107.6	113.1	157.2	261.5	639.7	1282.9	2153.4	2781.6	3042.2	3006.8	2023.2
75°	53.8	62.8	105.9	132.7	273.2	715.4	1337.2	2193.1	2394.5	2257.3	1298.2
77.5°	40.8	49.3	87.4	87.4	95.1	240.9	566.3	1196.1	1103.3	918.7	381.1
80°	26.0	33.6	76.5	66.2	39.7	61.2	147.6	335.1	234.4	178.4	69.3
82.5°	15.3	21.9	63.7	43.8	22.2	22.7	41.7	71.3	60.8	47.4	21.3
85°	6.0	14.3	43.8	17.2	8.7	5.6	12.6	15.3	12.6	9.4	5.4
87.5°	0.0	3.4	7.6	0.0	0.7	0.4	0.9	1.1	1.1	0.9	1.8
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°	554.0	554.0	554.0	554.0	554.0	554.0	554.0	554.0	554.0	554.0	554.0
2.5°	556.5	556.9	558.2	558.5	555.3	551.3	549.7	549.1	546.3	546.1	546.6
5°	563.1	565.2	563.1	557.4	543.5	524.0	509.1	497.0	486.1	482.7	480.6
7.5°	576.7	578.6	572.6	549.7	514.8	475.9	441.0	416.3	394.1	385.8	382.4
10°	595.9	598.6	579.5	533.3	471.5	409.1	349.9	308.2	275.6	262.4	256.8
12.5°	620.1	621.3	583.3	508.5	415.1	326.2	242.2	197.6	168.7	157.8	154.6
15°	646.9	645.2	583.8	474.6	338.5	230.5	158.2	129.9	118.2	114.6	114.6
17.5°	674.9	668.4	574.8	425.7	254.3	157.6	117.3	110.6	108.5	107.6	107.4
20°	702.4	687.9	558.5	361.8	182.6	117.8	106.5	104.6	103.4	102.9	102.5
22.5°	727.5	702.7	530.4	287.5	132.5	104.0	100.7	98.9	96.9	96.0	95.7
25°	752.0	711.2	491.0	218.2	106.1	97.4	94.6	91.3	88.6	87.4	87.0
27.5°	775.8	716.6	441.7	161.4	94.6	91.0	86.1	81.4	79.4	78.9	78.5
30°	801.1	718.4	385.5	120.4	87.7	83.2	76.1	70.6	69.5	69.8	69.8
32.5°	832.1	721.1	329.0	98.7	81.9	73.8	65.3	59.7	58.7	59.7	59.4
35°	869.1	726.4	274.5	90.8	76.7	64.2	54.9	50.2	49.3	50.0	49.8
37.5°	919.3	735.2	223.7	89.3	72.5	56.1	46.2	42.4	42.4	42.6	42.4
40°	986.2	758.5	178.0	88.1	70.2	50.0	39.1	37.4	38.1	38.5	38.5
42.5°	1067.6	808.1	147.4	86.8	67.8	47.4	35.5	34.7	35.9	36.3	36.3
45°	1158.9	870.9	136.6	84.6	65.5	49.1	33.8	33.0	34.3	34.5	34.7
47.5°	1253.3	932.3	135.2	82.1	63.2	51.8	33.4	31.4	33.0	33.2	33.4
50°	1348.9	972.5	136.6	78.3	59.7	51.8	33.6	29.8	31.2	31.9	32.1
52.5°	1445.0	990.9	135.7	70.0	53.4	48.7	33.6	28.5	29.8	30.2	30.2
55°	1538.4	987.3	122.0	57.6	45.3	43.0	32.7	27.4	28.3	28.5	28.5
57.5°	1612.2	937.3	96.7	44.9	36.8	35.9	29.8	26.0	26.6	26.4	26.4
60°	1650.8	827.4	69.1	34.5	28.9	28.3	26.2	24.2	24.7	23.6	23.4
62.5°	1651.2	682.0	46.2	27.4	23.1	22.4	22.4	21.7	21.3	19.1	18.3
65°	1616.0	520.8	30.7	21.7	18.7	17.5	18.9	18.7	17.0	13.9	13.4
67.5°	1536.2	341.3	23.4	17.0	14.3	13.6	15.1	15.7	14.6	11.7	11.5
70°	1372.0	198.7	19.3	13.2	10.8	10.0	12.1	13.4	12.1	9.4	9.0
72.5°	1139.6	107.2	15.7	9.8	7.4	6.8	9.6	11.0	9.6	7.0	6.8
75°	739.4	57.4	12.1	6.5	3.8	4.3	7.2	8.1	6.8	4.5	4.0
77.5°	248.3	25.3	7.6	3.2	1.8	1.8	4.3	4.9	3.2	1.5	1.3
80°	55.4	10.6	3.2	1.3	0.7	0.7	0.9	0.9	0.4	0.0	0.0
82.5°	18.1	4.3	1.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.0	1.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.7	0.2	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)