

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: P959287

Luminaire Tested: **NAV-SB1A-735-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959287
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-735-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4571.5 lumens
Efficiency: N/A
Efficacy: 147.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

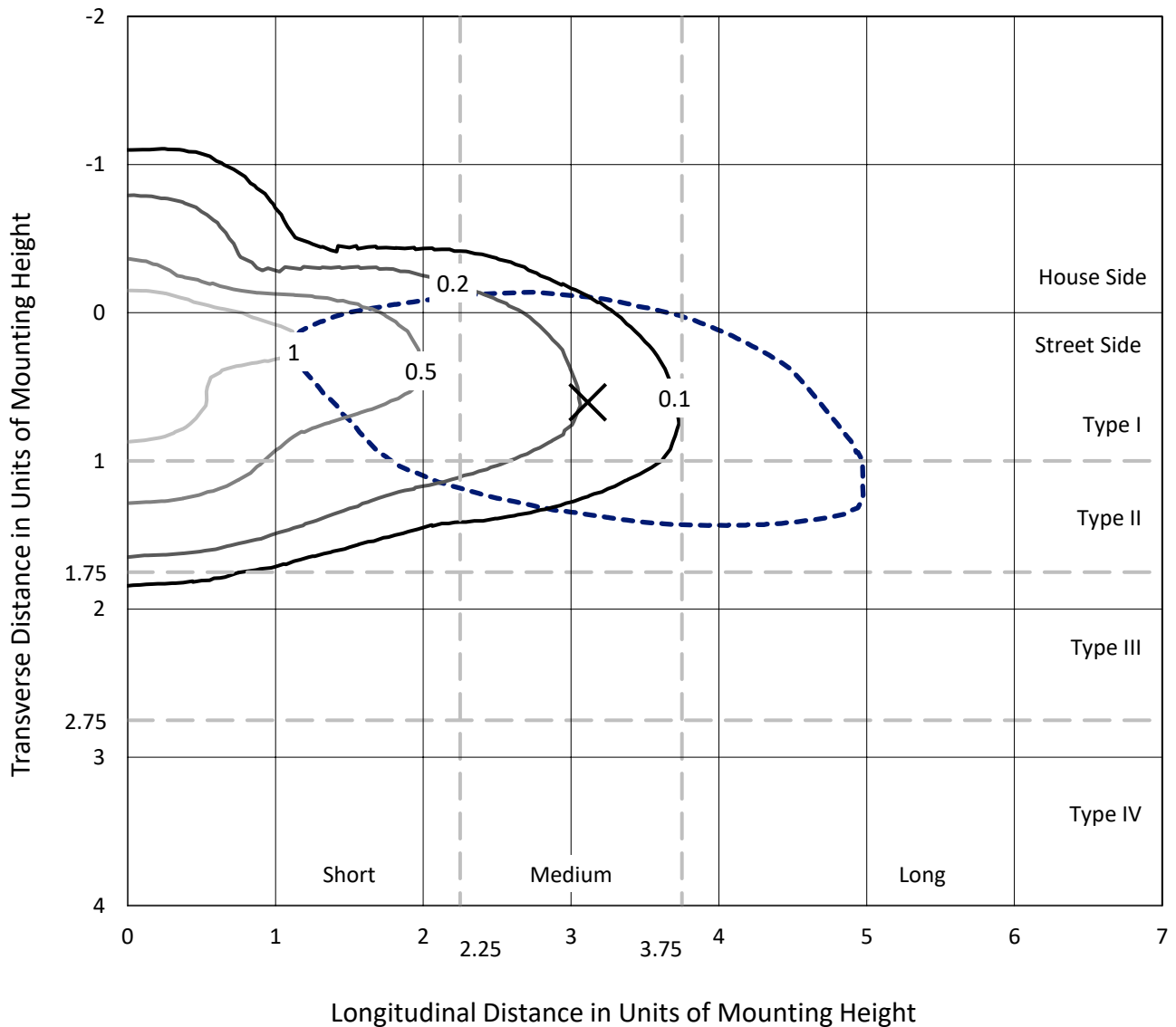
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

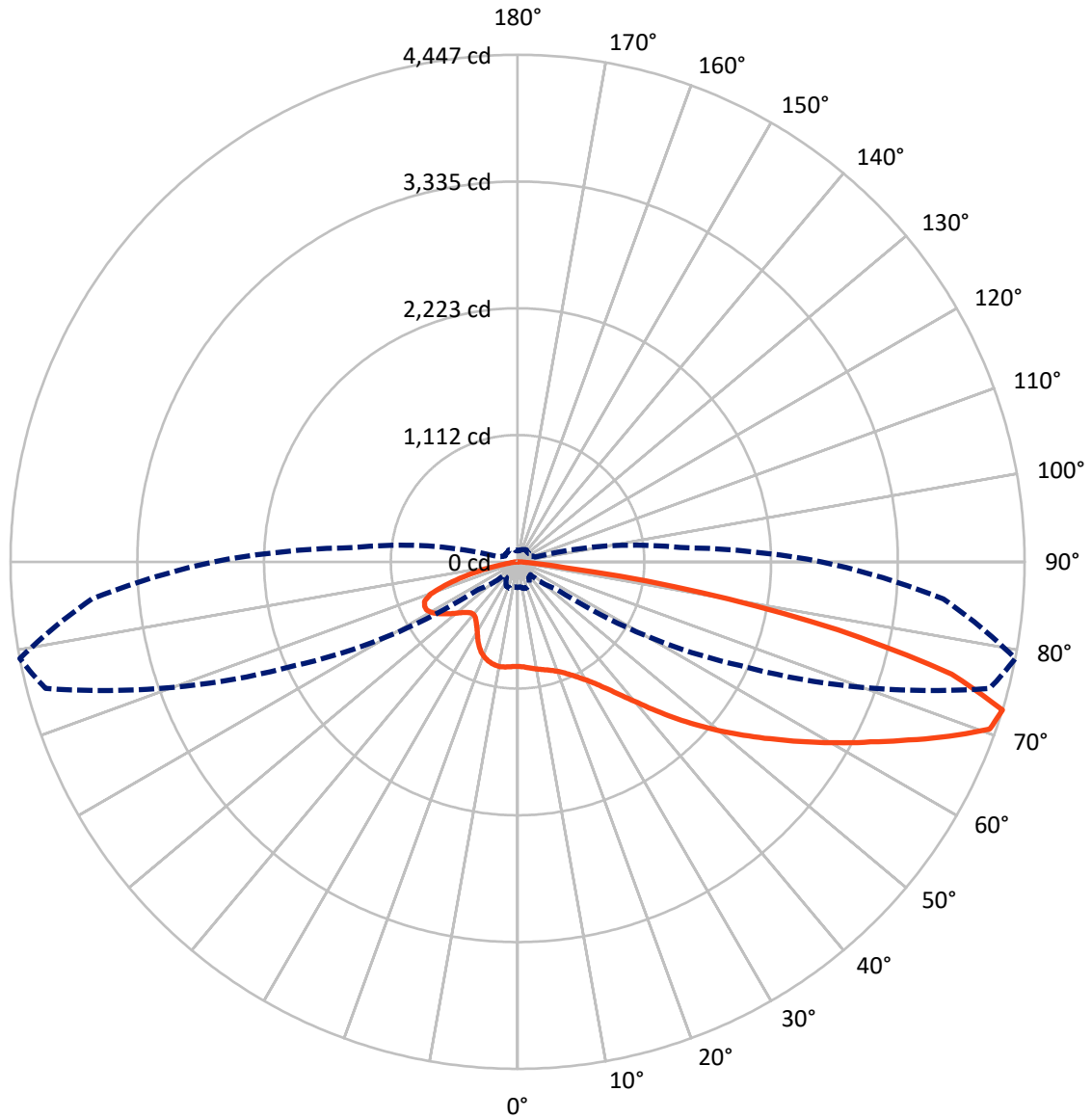
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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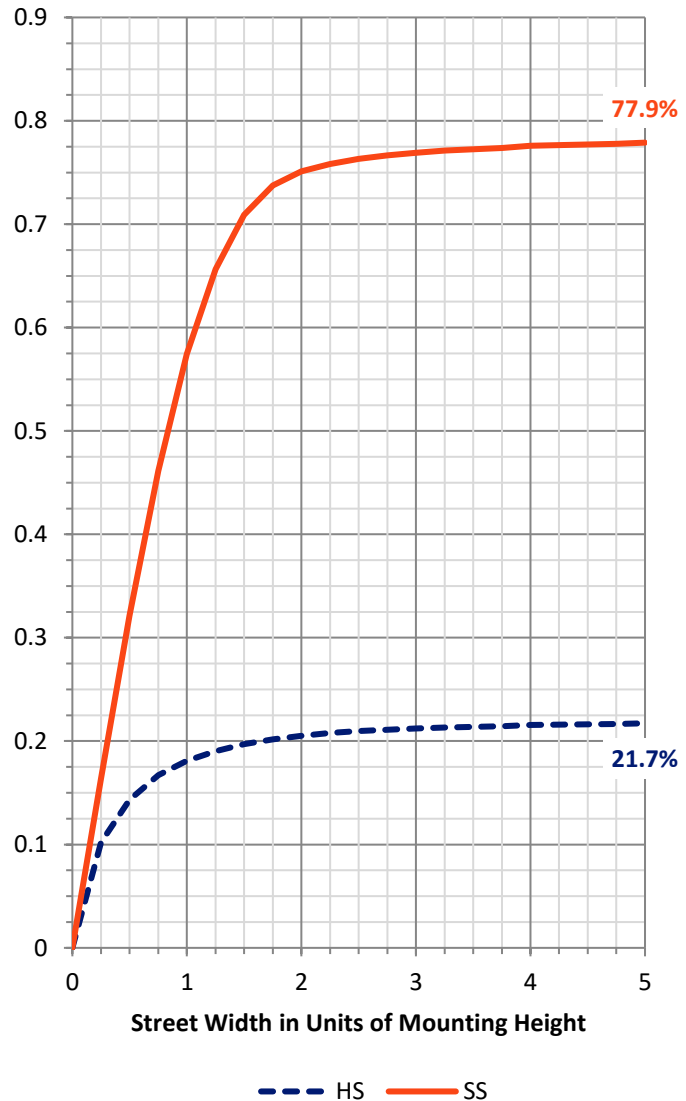
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1006.0	0.0	1006.0
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	3565.5	0.0	3565.5
	% Fixture	78.0	0.0	78.0
Total	Lumens	4571.5	0.0	4571.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.3	1.8
10°-20°	217.8	4.8
20°-30°	351.4	7.7
30°-40°	527.4	11.5
40°-50°	748.2	16.4
50°-60°	944.9	20.7
60°-70°	959.6	21.0
70°-80°	654.0	14.3
80°-90°	84.9	1.9
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°	4571.5	100.0
0°-180°	4571.5	100.0

Coefficient of Utilization

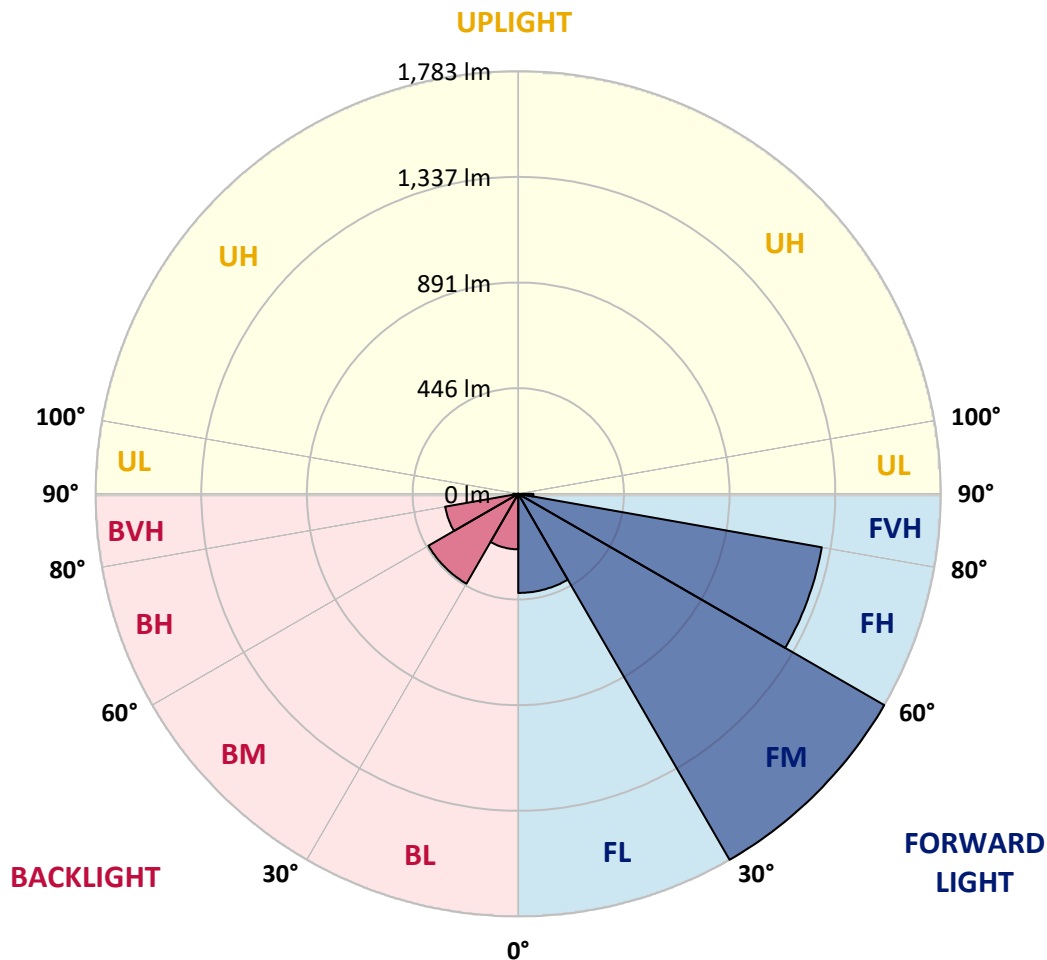


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	418.2	9.1			
FM (30°-60°)	1783.0	39.0			
FH (60°-80°)	1300.4	28.4			G1/1800
FVH (80°-90°)	63.9	1.4			G1/100
BL (0°-30°)	234.3	5.1	B1/500		
BM (30°-60°)	437.5	9.6	B1/1000		
BH (60°-80°)	313.2	6.9	B1/500		G1/500
BVH (80°-90°)	20.9	0.5			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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	917.7	917.7	917.7	917.7	917.7	917.7	917.7	917.7	917.7	917.7	917.7
2.5°	918.2	913.8	916.5	915.5	916.8	918.2	918.6	919.4	921.8	921.6	921.3
5°	916.2	911.8	915.5	914.3	917.5	920.9	923.7	926.4	930.3	931.9	929.6
7.5°	912.1	909.2	912.9	916.5	922.3	927.3	931.4	937.5	943.1	944.0	945.8
10°	888.2	886.0	894.5	903.9	919.8	933.7	942.6	949.6	955.6	956.6	959.0
12.5°	863.3	860.6	870.0	882.8	908.8	933.7	952.5	961.7	967.0	970.2	973.7
15°	859.2	857.0	862.3	873.4	894.9	927.1	959.3	976.2	980.8	984.4	985.8
17.5°	879.0	874.8	877.1	880.9	893.5	921.1	964.6	992.6	999.7	1003.6	1003.6
20°	925.0	919.1	915.7	908.0	905.8	922.0	964.1	1012.5	1021.6	1026.5	1027.7
22.5°	986.2	982.3	975.0	955.4	934.1	933.9	973.3	1037.9	1055.0	1059.6	1056.8
25°	1060.2	1054.3	1045.1	1018.5	977.6	957.4	988.8	1070.3	1099.0	1100.2	1091.8
27.5°	1145.2	1136.5	1123.9	1088.9	1033.7	994.1	1012.5	1107.5	1149.5	1149.1	1131.7
30°	1234.9	1226.2	1213.0	1170.3	1101.0	1043.7	1045.4	1147.7	1209.6	1206.9	1177.1
32.5°	1300.5	1294.0	1291.3	1258.4	1178.3	1102.2	1083.1	1192.2	1283.5	1281.1	1239.5
35°	1350.7	1342.3	1345.4	1328.8	1262.8	1167.7	1129.2	1245.1	1373.5	1373.3	1321.5
37.5°	1400.6	1393.1	1395.7	1384.7	1340.9	1250.9	1185.6	1309.9	1485.0	1490.4	1420.6
40°	1446.1	1438.1	1448.7	1438.3	1401.6	1339.4	1249.7	1383.1	1614.1	1624.3	1540.6
42.5°	1473.3	1467.1	1484.7	1485.0	1454.3	1414.1	1320.1	1463.9	1763.5	1786.3	1688.1
45°	1482.8	1480.6	1507.3	1512.8	1500.9	1457.4	1383.4	1552.0	1924.6	1965.2	1856.2
47.5°	1472.6	1468.5	1505.3	1525.8	1535.2	1477.7	1435.9	1647.3	2089.1	2148.5	2039.4
50°	1421.4	1413.4	1468.0	1511.4	1545.0	1491.1	1488.8	1757.3	2275.9	2341.0	2223.7
52.5°	1329.2	1323.2	1385.4	1460.5	1523.7	1497.5	1548.4	1877.5	2453.4	2537.6	2412.5
55°	1211.4	1203.6	1271.9	1370.1	1470.7	1495.4	1607.8	2011.9	2662.8	2748.2	2607.7
57.5°	1024.8	1008.8	1095.4	1211.4	1384.4	1492.7	1669.7	2145.6	2875.6	2977.9	2815.9
60°	752.6	728.9	835.0	972.6	1215.6	1466.9	1746.4	2295.6	3131.0	3223.1	3043.2
62.5°	438.2	424.4	493.7	622.2	916.2	1314.5	1789.4	2469.8	3382.0	3478.7	3266.7
65°	340.2	336.4	342.5	352.3	509.9	984.2	1656.7	2639.9	3701.2	3768.9	3499.6
67.5°	311.2	308.3	311.0	292.3	258.7	548.2	1310.7	2682.9	4043.1	4084.2	3703.4
70°	276.6	273.3	282.0	266.0	203.6	249.3	846.9	2526.7	4315.1	4392.3	3858.4
72.5°	225.4	221.5	241.8	234.5	171.5	160.1	425.4	2155.6	4286.7	4446.8	3747.4
75°	173.1	171.0	195.2	201.2	139.8	126.0	204.1	1602.3	3772.3	3933.6	3229.7
77.5°	134.5	132.7	145.0	167.1	112.6	97.7	125.5	1016.4	2842.7	2871.0	2225.7
80°	100.9	96.0	107.3	129.4	87.7	71.3	85.1	592.7	1796.9	1628.8	968.7
82.5°	63.1	60.7	70.1	86.3	61.9	49.1	55.4	327.4	720.2	424.1	187.0
85°	36.1	35.1	38.2	49.3	33.6	28.3	31.7	144.6	131.5	90.4	56.4
87.5°	14.6	14.0	17.4	22.0	12.3	10.4	11.2	34.8	29.0	26.9	18.7
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°	917.7	917.7	917.7	917.7	917.7	917.7	917.7	917.7	917.7	917.7	917.7
2.5°	920.3	920.3	917.0	911.6	905.6	901.7	895.4	893.7	887.2	885.3	888.5
5°	931.4	929.6	919.1	904.2	883.6	864.7	843.9	830.9	812.5	806.0	810.8
7.5°	945.5	940.1	922.3	889.4	846.3	804.0	760.0	726.6	694.7	683.4	684.8
10°	958.3	950.8	920.3	862.7	788.3	715.0	644.9	595.8	558.6	543.4	546.7
12.5°	971.1	957.4	907.5	818.6	705.8	606.5	531.8	493.5	470.6	452.2	458.3
15°	983.2	963.9	887.6	759.3	615.4	514.6	459.4	429.0	410.6	398.5	400.7
17.5°	997.2	969.4	857.9	684.1	529.3	451.0	406.0	387.7	384.0	382.5	383.6
20°	1016.8	974.5	818.8	599.9	466.0	400.2	377.0	375.3	375.0	374.3	376.8
22.5°	1037.9	980.5	767.0	523.6	412.0	368.5	364.4	361.0	358.9	358.6	361.3
25°	1062.8	982.5	702.2	460.9	366.1	353.5	348.7	343.6	342.1	342.1	343.6
27.5°	1086.9	976.0	626.8	406.5	340.2	339.8	333.4	331.8	331.5	332.2	334.2
30°	1111.1	963.6	551.9	356.2	325.2	325.2	323.1	324.3	325.2	327.7	329.3
32.5°	1143.8	950.6	489.2	319.0	312.2	309.8	311.9	314.4	315.3	318.5	321.1
35°	1191.7	941.4	439.4	298.7	298.7	295.5	296.7	296.2	294.1	292.6	296.0
37.5°	1255.0	941.0	398.3	289.3	287.3	286.8	287.0	283.9	275.4	265.3	265.5
40°	1331.2	954.0	366.5	282.7	281.3	284.1	282.7	274.2	251.0	233.4	232.9
42.5°	1433.5	991.2	346.2	274.7	279.0	282.7	276.9	247.6	231.9	220.1	219.6
45°	1553.9	1051.6	335.9	266.2	274.9	279.3	251.2	238.4	225.8	211.6	210.6
47.5°	1690.3	1127.8	333.4	258.3	265.8	268.4	240.4	234.5	220.3	204.8	203.6
50°	1838.7	1218.0	340.0	248.9	252.5	243.2	236.8	231.4	216.7	201.4	199.8
52.5°	1992.3	1317.4	353.0	236.1	239.1	229.0	235.2	230.7	214.5	193.9	192.5
55°	2143.2	1417.5	365.6	221.0	225.6	216.2	231.1	227.8	204.6	181.3	180.2
57.5°	2296.5	1517.1	377.9	207.8	212.6	203.9	224.7	220.1	193.4	169.7	169.2
60°	2455.9	1613.9	383.8	194.9	198.3	192.5	214.7	206.7	180.9	158.0	157.1
62.5°	2605.0	1694.4	374.3	182.0	184.3	181.8	201.7	191.1	168.3	144.6	144.3
65°	2754.8	1742.3	345.3	169.5	169.9	168.8	183.3	174.1	153.5	133.0	131.5
67.5°	2890.4	1769.2	299.1	156.0	154.8	154.3	166.2	155.7	139.3	121.4	119.9
70°	2919.2	1700.9	228.5	140.0	140.0	138.8	147.3	136.6	123.6	109.1	108.5
72.5°	2666.2	1430.8	162.3	121.9	123.8	121.4	128.4	119.4	107.6	97.9	95.0
75°	2149.9	1049.2	118.0	103.2	106.6	102.5	109.1	102.8	92.7	92.4	83.2
77.5°	1477.2	648.8	85.6	85.1	87.5	82.2	89.7	86.3	77.2	73.0	68.5
80°	630.4	258.7	62.4	65.8	65.8	61.0	69.6	70.6	62.6	60.7	60.7
82.5°	125.5	73.5	43.8	45.2	42.5	41.1	49.3	54.6	75.4	83.9	84.2
85°	37.7	27.1	26.3	24.7	21.7	22.0	29.0	54.9	67.8	38.6	33.4
87.5°	10.4	6.8	7.0	5.5	4.6	6.0	9.9	41.6	22.8	9.6	8.2
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)