

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: P959237

Luminaire Tested: **NAV-SB1A-727-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959237
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-727-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4345 lumens
Efficiency: N/A
Efficacy: 140.6 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

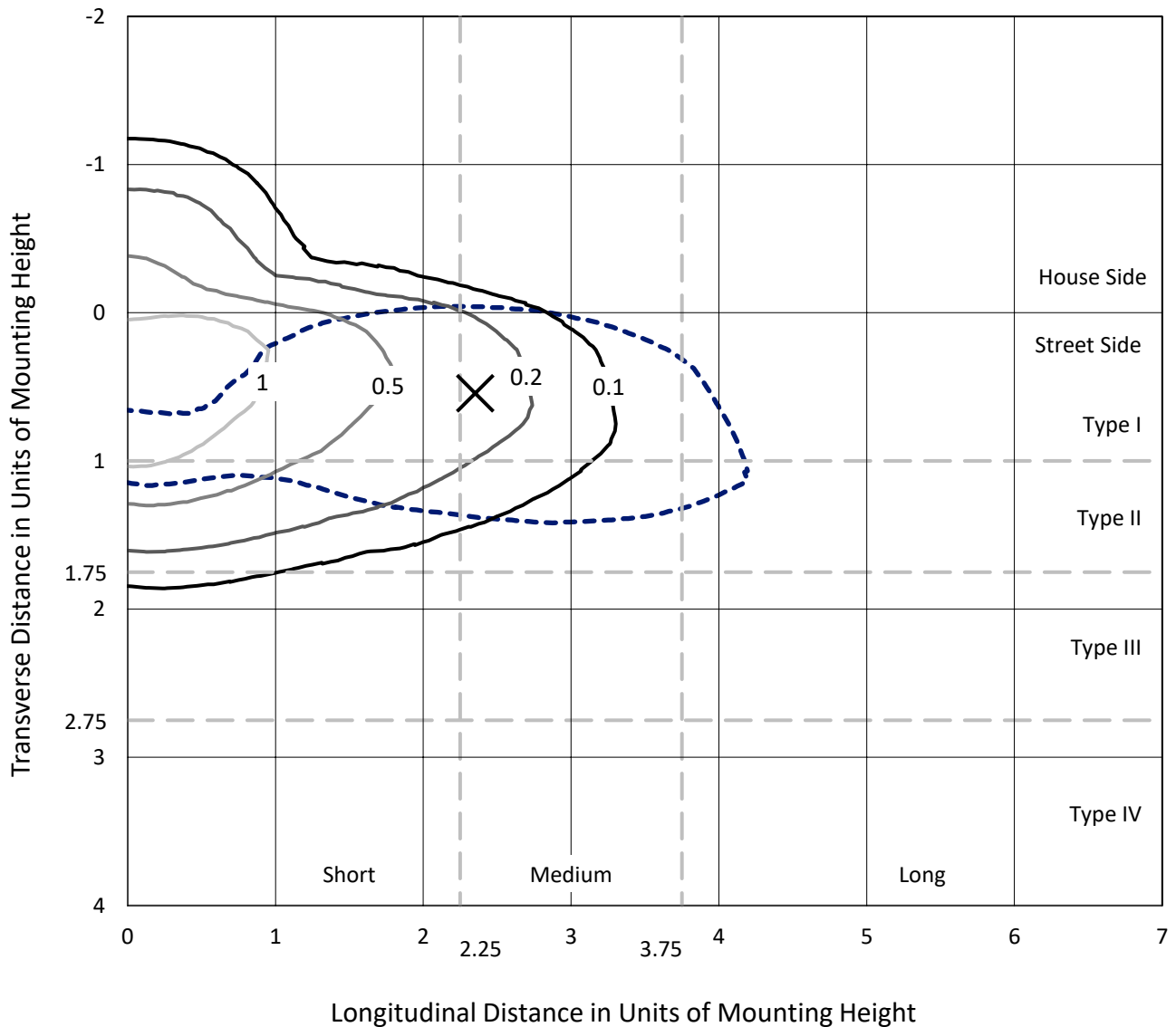
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

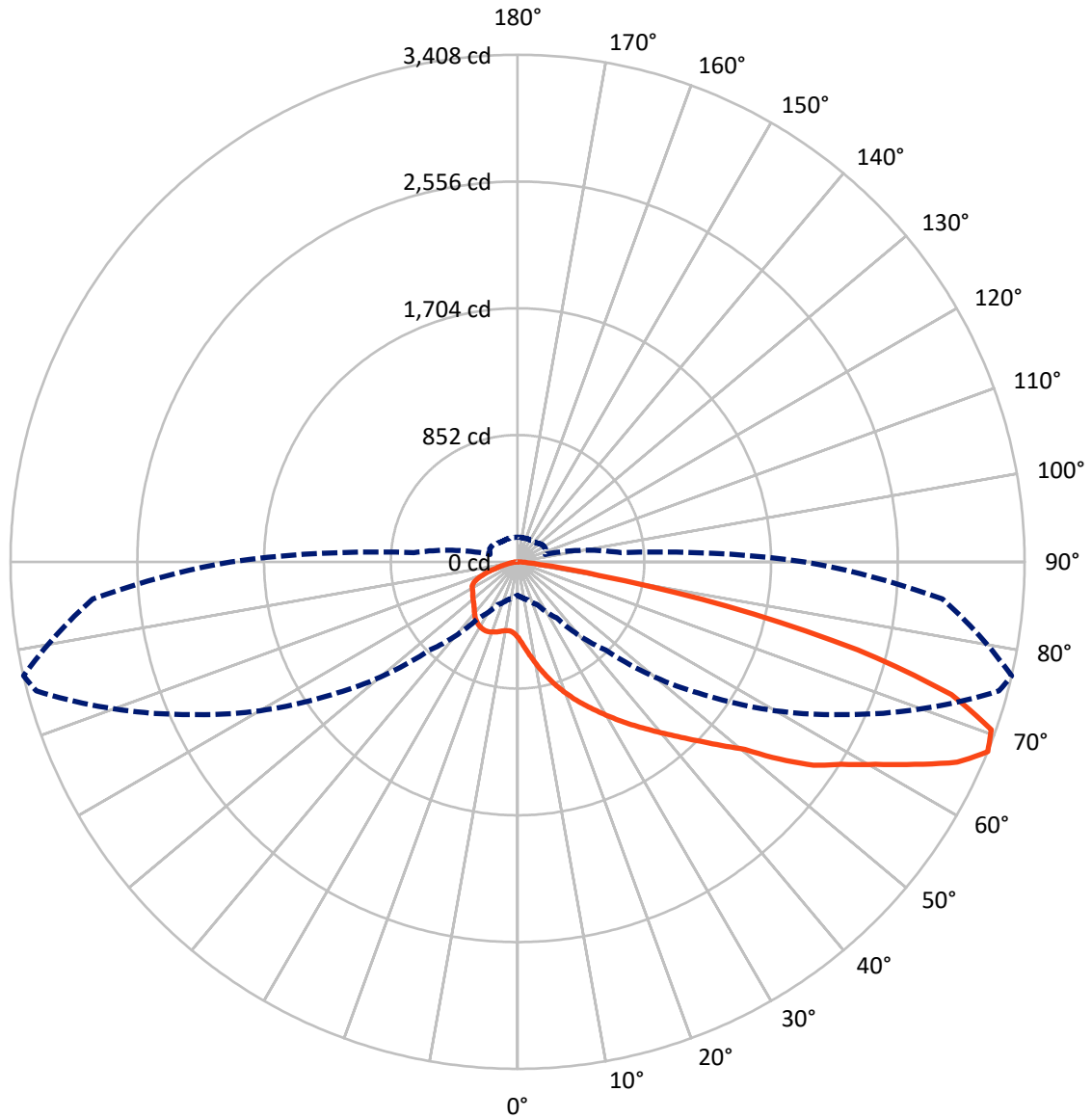
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 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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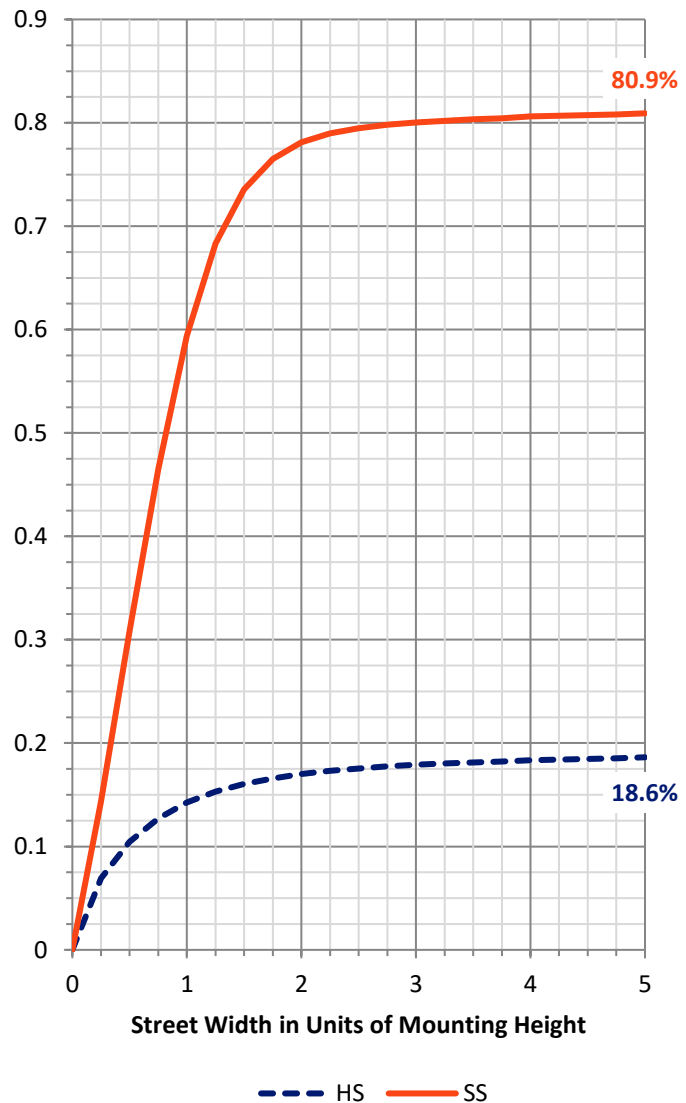
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	821.9	0.0	821.9
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	3523.1	0.0	3523.1
	% Fixture	81.1	0.0	81.1
Total	Lumens	4345.0	0.0	4345.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.6	1.3
10°-20°	196.3	4.5
20°-30°	370.7	8.5
30°-40°	597.1	13.7
40°-50°	816.8	18.8
50°-60°	921.3	21.2
60°-70°	859.9	19.8
70°-80°	471.4	10.8
80°-90°	56.9	1.3
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°	4345.0	100.0
0°-180°	4345.0	100.0

Coefficient of Utilization

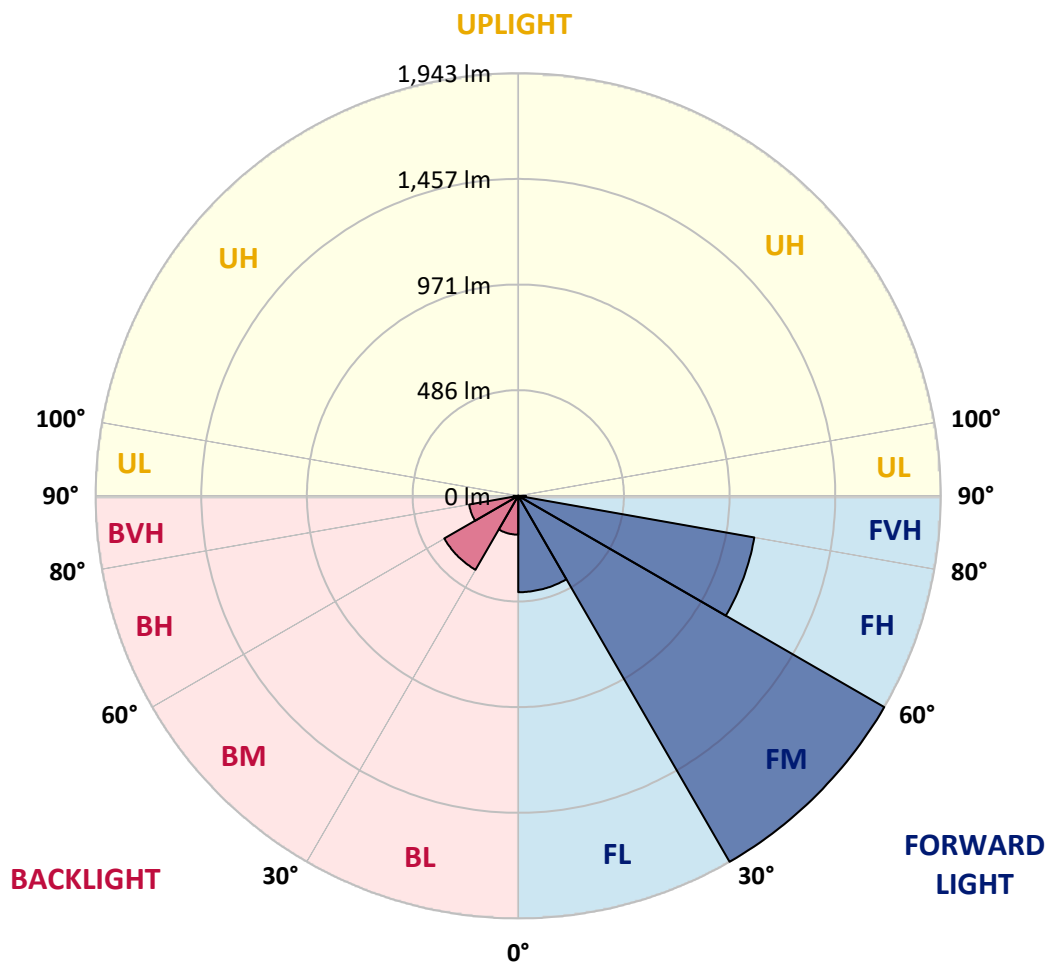


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	442.9	10.2			
FM (30°-60°)	1942.6	44.7			
FH (60°-80°)	1102.0	25.4			G1/1800
FVH (80°-90°)	35.6	0.8			G1/100
BL (0°-30°)	178.7	4.1	B1/500		
BM (30°-60°)	392.6	9.0	B1/1000		
BH (60°-80°)	229.3	5.3	B1/500		G1/500
BVH (80°-90°)	21.3	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°	77°	85°
0°	509.8	509.8	509.8	509.8	509.8	509.8	509.8	509.8	509.8	509.8	509.8
2.5°	638.3	642.8	637.2	637.2	618.4	608.4	589.7	575.3	549.5	545.0	528.0
5°	754.5	760.1	752.2	748.9	726.7	706.2	674.7	643.5	597.5	592.8	552.7
7.5°	844.4	851.6	844.7	841.1	821.3	798.5	761.5	717.9	653.1	643.9	585.8
10°	917.8	918.9	916.7	918.0	902.5	883.7	845.8	795.1	714.1	701.6	626.0
12.5°	959.3	964.4	968.9	977.0	974.3	962.7	928.5	868.0	778.7	762.6	669.7
15°	978.8	987.8	997.8	1016.5	1031.5	1034.4	1008.4	946.3	844.4	824.9	713.9
17.5°	985.7	994.2	1010.1	1037.1	1069.4	1091.1	1079.5	1022.3	909.5	887.0	760.3
20°	1020.9	1023.5	1033.1	1058.6	1093.6	1129.8	1138.5	1095.4	973.9	948.5	808.3
22.5°	1096.3	1091.4	1094.1	1105.8	1130.9	1165.8	1185.8	1160.0	1040.0	1010.9	856.8
25°	1220.8	1206.4	1192.1	1178.6	1191.4	1211.1	1233.8	1224.6	1109.4	1072.4	905.7
27.5°	1378.0	1360.5	1328.9	1284.7	1269.3	1276.2	1286.3	1284.5	1173.4	1136.0	956.1
30°	1532.8	1512.4	1474.7	1410.7	1369.9	1351.6	1343.9	1338.8	1243.2	1203.2	1007.1
32.5°	1656.3	1640.2	1603.2	1531.7	1472.4	1441.0	1415.7	1397.3	1316.1	1276.2	1060.9
35°	1764.4	1749.5	1707.0	1629.0	1564.7	1531.1	1498.0	1458.8	1391.9	1351.6	1118.7
37.5°	1863.1	1848.1	1790.1	1708.9	1644.0	1620.9	1591.3	1524.7	1467.9	1429.8	1180.0
40°	1925.5	1922.1	1867.9	1775.9	1708.6	1697.2	1687.3	1601.2	1552.3	1516.8	1247.2
42.5°	1941.5	1948.8	1905.8	1830.1	1766.0	1756.8	1779.9	1687.8	1647.0	1613.0	1323.5
45°	1903.0	1924.3	1896.1	1844.8	1806.9	1802.0	1862.0	1782.4	1751.6	1720.7	1415.4
47.5°	1805.9	1842.0	1830.3	1823.2	1817.8	1839.2	1934.3	1882.9	1870.3	1843.4	1520.4
50°	1610.0	1678.3	1698.7	1744.0	1796.1	1868.1	2000.0	1992.6	2008.9	1981.7	1648.3
52.5°	1271.0	1365.2	1483.7	1597.2	1729.3	1858.4	2072.1	2150.0	2219.1	2204.3	1851.5
55°	1049.2	1091.6	1182.6	1390.8	1599.6	1817.8	2104.7	2277.1	2427.7	2414.4	2005.5
57.5°	878.7	916.7	972.7	1146.6	1403.5	1725.7	2124.9	2354.7	2570.5	2569.2	2157.6
60°	696.0	736.2	793.6	916.7	1174.5	1566.4	2120.4	2443.2	2752.8	2764.1	2343.1
62.5°	489.6	533.8	597.5	712.4	940.6	1360.1	2028.9	2507.0	2967.5	2998.0	2566.3
65°	321.8	351.0	399.0	498.2	700.9	1094.7	1854.1	2515.4	3197.2	3248.7	2775.8
67.5°	225.6	236.9	265.1	319.0	462.1	839.5	1575.8	2429.5	3350.4	3408.4	2866.6
70°	176.1	181.6	196.0	217.6	290.2	564.6	1207.6	2206.1	3317.6	3378.2	2771.7
72.5°	152.1	157.4	162.9	165.5	194.6	348.5	817.9	1844.5	3009.2	3050.3	2410.0
75°	138.0	139.3	143.8	142.9	148.5	226.1	472.1	1343.9	2374.3	2360.2	1779.0
77.5°	115.9	117.8	125.2	124.0	131.9	154.6	245.2	867.4	1539.2	1443.3	990.3
80°	98.2	99.1	107.2	105.9	114.6	111.9	125.2	442.1	652.9	553.1	285.6
82.5°	34.1	42.1	81.9	84.4	87.4	67.8	72.3	180.3	199.4	152.7	59.9
85°	16.6	17.7	41.7	59.2	58.9	34.1	35.3	64.4	62.8	49.3	20.0
87.5°	2.7	3.4	4.9	23.1	18.3	9.0	12.1	12.6	13.0	11.2	4.5
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°	509.8	509.8	509.8	509.8	509.8	509.8	509.8	509.8	509.8	509.8	509.8
2.5°	515.4	504.2	480.6	458.9	441.9	425.5	416.3	408.5	404.0	403.0	403.0
5°	529.3	506.2	463.4	427.2	403.7	386.2	377.0	371.2	368.3	366.4	366.2
7.5°	549.3	515.4	454.4	413.4	388.7	376.2	371.5	370.5	370.3	370.5	371.2
10°	576.9	530.4	453.5	410.0	389.4	382.4	382.2	382.4	383.3	383.6	383.8
12.5°	606.7	545.9	457.0	412.9	397.9	394.1	393.4	393.2	393.8	394.3	394.5
15°	639.2	566.3	463.2	419.2	407.3	403.2	402.6	401.3	401.0	400.8	400.6
17.5°	672.6	586.5	469.9	425.9	413.4	407.7	405.3	402.1	399.6	399.0	399.6
20°	706.5	606.5	474.6	429.3	413.8	406.0	401.0	395.6	391.3	388.9	389.8
22.5°	742.6	627.3	477.5	428.3	409.8	399.0	390.0	383.8	377.2	373.0	373.2
25°	777.9	645.4	477.2	423.6	401.9	388.3	376.8	368.7	359.8	355.3	355.3
27.5°	811.7	661.8	471.7	415.3	390.7	375.5	361.7	352.1	343.4	339.1	338.9
30°	846.6	675.6	462.9	403.2	377.5	360.7	345.6	337.3	329.4	325.4	325.2
32.5°	881.4	688.1	450.6	388.3	362.2	346.0	331.3	323.6	319.0	319.0	319.2
35°	918.2	696.9	434.2	370.7	346.0	330.6	319.0	314.5	314.0	311.3	310.7
37.5°	957.0	702.4	414.3	352.8	330.2	315.6	312.0	306.6	302.1	296.3	295.4
40°	997.8	708.1	390.2	334.2	313.3	305.2	303.7	296.5	283.7	269.4	267.3
42.5°	1047.4	711.9	365.3	315.6	295.6	292.9	295.2	282.8	262.4	251.6	251.8
45°	1104.8	718.1	342.5	297.1	277.5	277.5	286.9	270.7	253.9	247.1	248.3
47.5°	1179.3	732.8	321.1	277.0	260.7	265.1	268.4	256.1	246.7	238.4	238.2
50°	1287.0	767.7	299.2	256.6	247.8	256.8	252.0	244.9	233.9	227.2	226.5
52.5°	1420.6	788.3	279.7	238.2	236.9	245.8	239.1	232.4	224.1	215.0	213.3
55°	1511.7	792.2	263.3	224.8	229.4	228.6	226.1	220.1	215.6	203.7	203.9
57.5°	1613.6	799.8	249.9	216.7	224.8	214.8	213.9	208.8	203.0	195.0	192.2
60°	1735.3	811.7	238.2	213.5	220.7	205.9	201.4	199.4	193.5	189.5	190.6
62.5°	1868.1	822.5	226.3	213.9	216.0	197.1	190.4	189.7	186.1	184.8	184.8
65°	1958.7	793.0	211.5	213.5	208.6	188.2	179.7	179.5	176.5	176.1	175.9
67.5°	1927.1	700.0	191.6	207.3	201.0	179.2	169.7	168.9	165.0	165.3	165.3
70°	1768.7	567.2	164.0	191.8	191.6	171.2	159.5	156.5	151.4	152.3	153.2
72.5°	1471.8	420.4	126.9	165.9	176.5	163.7	147.6	142.9	136.3	137.2	137.0
75°	1062.9	285.8	92.5	126.3	153.6	155.0	135.9	127.8	120.0	121.4	121.8
77.5°	543.9	162.0	68.0	87.0	120.6	140.8	125.4	114.6	112.9	125.4	123.6
80°	177.4	81.2	47.2	61.0	79.1	115.3	109.9	97.6	97.1	100.0	85.9
82.5°	52.9	34.3	30.2	40.2	43.8	88.4	94.9	73.8	63.4	66.8	69.1
85°	18.1	16.6	17.2	20.0	20.8	51.8	66.4	48.9	46.2	50.9	50.2
87.5°	4.3	5.8	4.9	4.5	4.5	12.6	25.8	20.4	28.3	18.9	18.1
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)