

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: P959246

Luminaire Tested: **NAV-SB1A-727-U-T4FT**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P959246  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1A-727-U-T4FT  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD  
THROW OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4216.9 lumens  
Efficiency: N/A  
Efficacy: 136.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G1

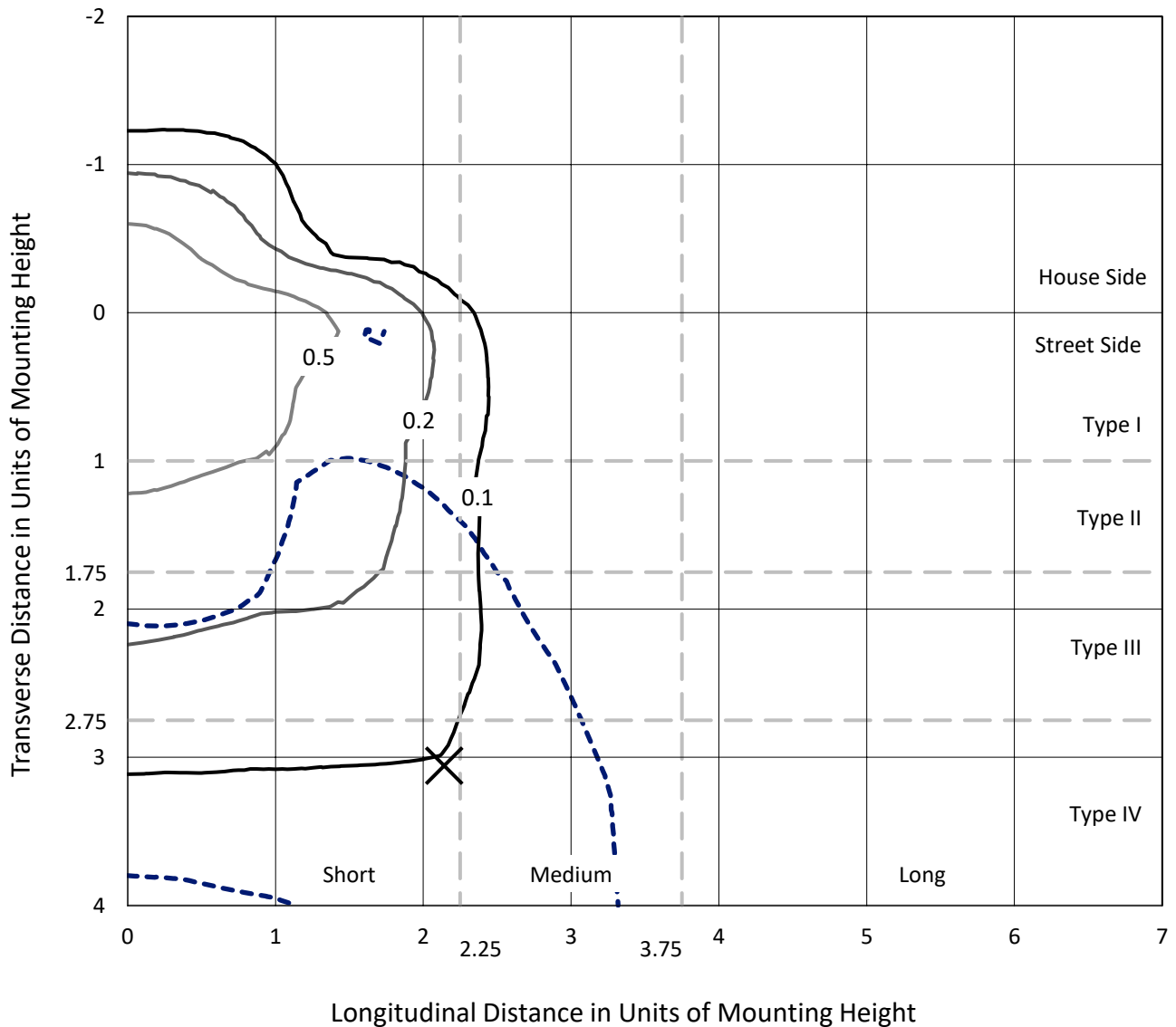
Input Watts (W): 30.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

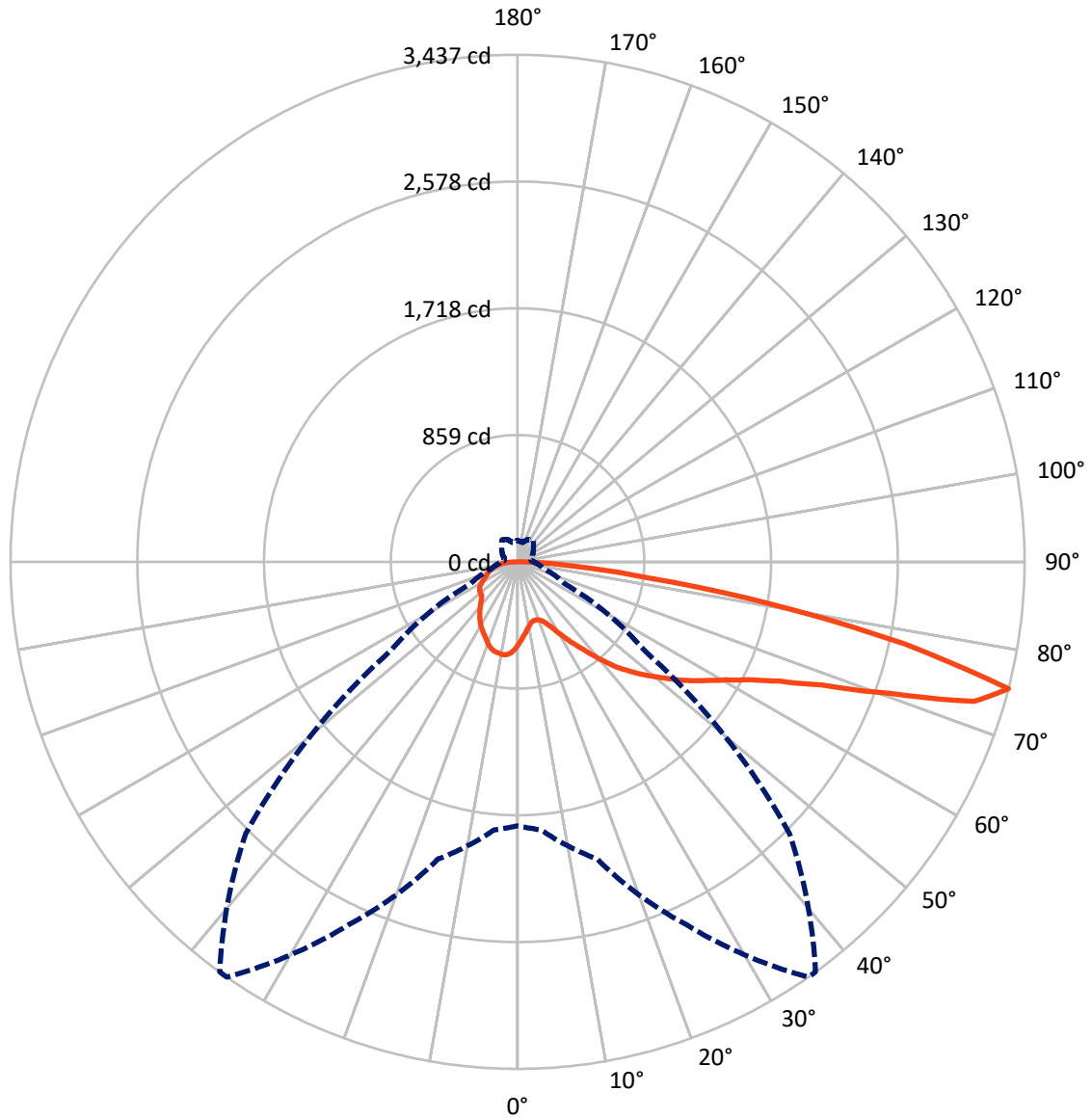
× Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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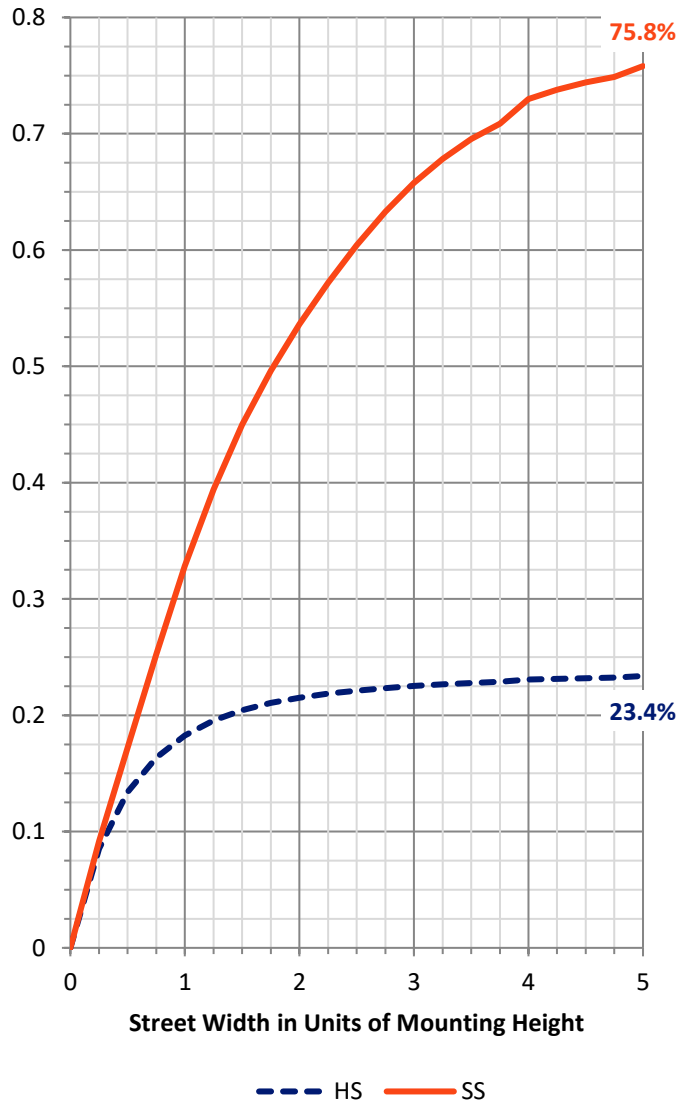
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1003.5	0.0	1003.5
	% Fixture	23.8	0.0	23.8
<b>Street Side</b>	Lumens	3213.3	0.0	3213.3
	% Fixture	76.2	0.0	76.2
<b>Total</b>	Lumens	4216.9	0.0	4216.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.2	1.3
10°-20°	153.5	3.6
20°-30°	257.7	6.1
30°-40°	400.5	9.5
40°-50°	594.5	14.1
50°-60°	820.7	19.5
60°-70°	995.7	23.6
70°-80°	822.8	19.5
80°-90°	118.3	2.8
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°	4216.9	100.0
0°-180°	4216.9	100.0

**Coefficient of Utilization**



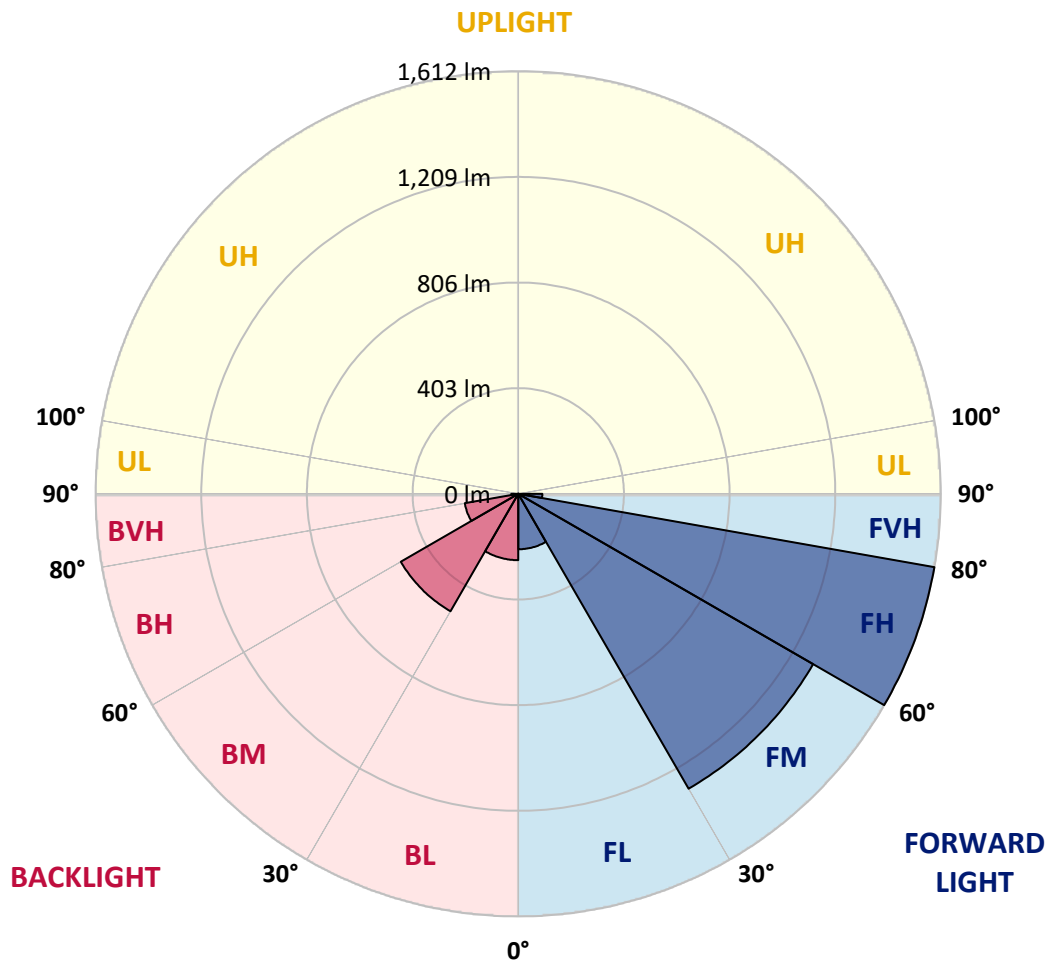
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	211.5	5.0			
FM (30°-60°)	1298.6	30.8			
FH (60°-80°)	1611.6	38.2			G1/1800
FVH (80°-90°)	91.7	2.2			G1/100
BL (0°-30°)	252.9	6.0	B1/500		
BM (30°-60°)	517.1	12.3	B1/1000		
BH (60°-80°)	206.9	4.9	B1/500		G1/500
BVH (80°-90°)	26.6	0.6			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 IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	561.9	561.9	561.9	561.9	561.9	561.9	561.9	561.9	561.9	561.9	561.9
2.5°	518.1	521.3	522.8	522.0	525.4	525.0	529.8	535.7	543.9	551.9	563.5
5°	478.3	481.6	484.6	487.4	493.9	496.0	503.6	515.0	530.0	545.3	564.5
7.5°	441.1	444.0	448.6	453.7	464.8	466.9	479.4	497.2	518.1	540.5	566.9
10°	410.8	413.8	418.5	424.2	438.2	440.6	456.6	480.3	507.7	536.0	569.7
12.5°	397.8	398.7	401.4	407.1	419.2	420.9	438.4	465.5	497.4	532.5	573.8
15°	397.1	398.9	399.1	402.1	412.2	412.9	429.1	455.9	491.1	531.9	579.9
17.5°	404.0	405.3	403.2	405.1	413.5	414.6	427.4	451.4	489.0	534.8	590.4
20°	422.2	423.3	417.2	414.6	420.9	421.7	434.3	454.3	491.1	541.0	604.8
22.5°	460.9	461.7	446.6	436.3	436.8	437.3	448.1	466.4	499.0	552.2	623.0
25°	521.3	520.9	496.9	477.1	465.8	463.2	470.5	486.1	512.5	566.9	646.5
27.5°	592.0	588.6	564.7	535.0	510.1	506.6	504.9	511.6	531.6	586.5	675.3
30°	671.8	668.6	642.9	604.1	569.7	563.8	548.7	545.3	560.1	613.3	715.1
32.5°	759.3	757.3	726.5	679.6	633.6	626.7	601.4	592.2	603.8	653.5	770.7
35°	832.7	831.0	805.3	757.1	700.8	692.3	666.6	656.3	662.3	705.3	843.5
37.5°	899.0	898.2	876.3	838.2	780.1	769.8	740.9	737.5	736.4	773.5	931.7
40°	960.6	958.4	935.5	915.5	872.4	863.0	837.5	834.6	825.9	857.3	1031.6
42.5°	1028.8	1022.8	989.8	980.4	968.8	961.0	945.8	946.3	927.1	951.9	1137.3
45°	1084.4	1081.0	1047.0	1041.5	1054.1	1050.9	1064.2	1067.5	1030.4	1051.1	1247.2
47.5°	1144.1	1140.9	1112.2	1108.3	1142.4	1143.2	1189.9	1191.0	1131.2	1154.1	1357.3
50°	1217.8	1213.2	1184.7	1189.5	1227.5	1231.0	1316.5	1308.7	1224.0	1258.8	1466.5
52.5°	1266.3	1269.1	1262.9	1270.7	1322.7	1325.8	1440.9	1421.1	1315.8	1362.0	1573.6
55°	1302.2	1307.6	1326.8	1344.5	1422.9	1426.1	1558.3	1528.1	1391.9	1457.9	1674.3
57.5°	1348.2	1340.4	1376.2	1410.8	1518.2	1526.6	1672.6	1631.1	1459.4	1540.4	1743.4
60°	1414.3	1408.8	1436.6	1487.9	1624.9	1638.4	1793.3	1723.8	1508.9	1605.8	1756.8
62.5°	1548.3	1534.6	1538.9	1584.3	1759.4	1777.1	1929.7	1804.7	1533.5	1631.3	1684.9
65°	1748.6	1725.2	1703.3	1734.8	1948.8	1966.4	2083.5	1868.4	1524.4	1581.8	1493.6
67.5°	2001.0	1977.8	1950.9	1980.5	2227.8	2241.8	2273.4	1904.1	1452.5	1391.2	1155.6
70°	2209.2	2200.5	2232.7	2354.6	2673.5	2674.0	2516.9	1874.5	1255.8	986.4	668.6
72.5°	2181.6	2176.4	2345.7	2722.8	3235.2	3223.1	2747.4	1650.2	845.9	445.0	250.5
75°	1789.8	1823.7	2086.1	2716.1	3436.9	3435.4	2606.3	1049.1	349.9	184.4	129.5
77.5°	959.7	1013.5	1354.3	2005.4	2683.1	2723.4	1832.4	367.1	150.3	118.1	89.6
80°	313.0	360.0	539.8	1021.0	1743.4	1735.9	785.4	144.1	102.8	83.6	62.0
82.5°	132.9	138.4	241.2	482.2	894.7	880.9	250.1	82.7	72.3	57.2	38.3
85°	52.0	58.1	106.5	222.9	387.6	379.1	90.3	41.0	46.2	37.4	22.8
87.5°	17.1	20.7	38.0	76.4	120.6	116.2	22.1	14.1	20.1	17.1	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

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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	561.9	561.9	561.9	561.9	561.9	561.9	561.9	561.9	561.9	561.9	561.9
2.5°	566.7	570.3	574.7	581.1	586.5	591.1	595.9	598.8	600.0	603.4	603.2
5°	570.8	578.8	589.5	600.0	610.3	616.4	621.9	624.6	627.1	628.9	629.3
7.5°	577.7	587.9	604.8	618.5	627.1	632.1	635.8	634.9	635.8	636.2	636.9
10°	583.5	598.0	618.0	631.0	637.7	637.9	636.9	633.8	632.1	632.3	632.8
12.5°	590.6	606.6	628.2	639.2	641.0	636.0	632.1	626.7	624.6	623.7	623.2
15°	600.2	618.5	639.4	643.5	639.0	632.6	626.0	617.0	612.5	608.8	610.0
17.5°	611.8	631.9	648.1	645.1	635.3	624.8	614.1	600.6	591.3	587.4	587.6
20°	628.0	646.1	654.7	641.8	626.9	610.9	592.7	576.3	567.6	563.8	563.3
22.5°	647.6	664.9	661.1	635.8	614.8	589.3	566.5	554.4	550.1	547.3	547.8
25°	671.1	685.9	665.6	627.1	595.0	560.6	543.0	539.2	537.1	535.0	535.0
27.5°	701.7	709.6	669.0	614.4	564.0	530.0	523.7	524.3	523.7	520.2	520.9
30°	742.0	740.5	672.3	593.6	528.4	502.5	502.9	505.8	506.4	504.0	505.1
32.5°	795.1	778.9	673.8	566.7	494.5	478.3	478.7	482.0	484.2	480.3	482.2
35°	859.5	823.9	671.4	533.0	468.2	455.2	451.8	452.7	453.5	449.8	452.2
37.5°	934.4	874.2	660.2	495.6	446.6	432.7	425.4	419.2	415.5	412.2	414.4
40°	1016.7	929.2	639.7	459.1	422.4	408.8	397.8	386.1	373.8	369.3	371.4
42.5°	1102.9	985.7	614.8	424.2	394.6	383.5	371.8	355.0	336.5	327.1	328.3
45°	1192.3	1043.7	590.4	389.8	366.1	361.3	347.9	327.6	307.5	295.7	294.8
47.5°	1279.8	1098.3	554.6	355.2	339.5	344.7	334.2	315.5	293.2	274.5	272.4
50°	1363.5	1149.6	496.0	320.1	317.8	339.7	329.6	302.7	277.2	253.3	251.2
52.5°	1446.4	1191.0	421.1	288.1	306.2	338.2	323.7	294.1	262.8	237.8	235.0
55°	1516.9	1212.6	348.8	260.8	289.3	326.7	316.6	283.8	242.5	215.9	213.6
57.5°	1557.0	1195.1	288.6	233.9	266.0	307.5	304.5	261.9	218.4	197.8	195.2
60°	1539.7	1124.9	239.3	210.4	244.0	286.8	283.6	240.3	199.9	180.5	177.8
62.5°	1444.1	991.2	200.4	189.9	223.9	265.6	262.6	223.7	185.8	167.1	164.1
65°	1251.7	806.3	170.0	172.8	203.6	240.1	244.4	209.7	174.7	156.4	153.4
67.5°	954.7	584.0	146.4	158.0	183.8	214.9	227.6	199.7	165.2	147.9	145.2
70°	544.2	331.7	126.3	143.6	166.2	191.7	214.5	191.7	155.3	140.8	139.1
72.5°	206.3	152.3	109.2	129.3	149.3	172.1	200.2	179.2	143.6	132.9	131.1
75°	110.1	92.8	91.8	112.3	130.0	152.9	182.1	166.9	135.0	140.4	144.9
77.5°	75.0	65.7	76.8	96.2	108.8	131.7	163.0	148.2	117.0	116.4	107.4
80°	52.0	46.5	62.4	77.5	84.2	110.8	142.3	127.2	95.3	88.9	85.1
82.5°	31.3	30.3	46.7	57.9	59.4	85.5	117.9	106.7	78.0	68.0	68.4
85°	17.1	18.0	29.8	33.9	34.6	59.8	92.4	82.5	60.0	50.4	50.8
87.5°	4.8	6.1	11.0	13.4	16.6	31.0	54.9	49.0	30.1	21.0	21.0
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)