

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: P959248

Luminaire Tested: **NAV-SB1A-727-U-T4W**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P959248  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1A-727-U-T4W  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4257.9 lumens  
Efficiency: N/A  
Efficacy: 137.8 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

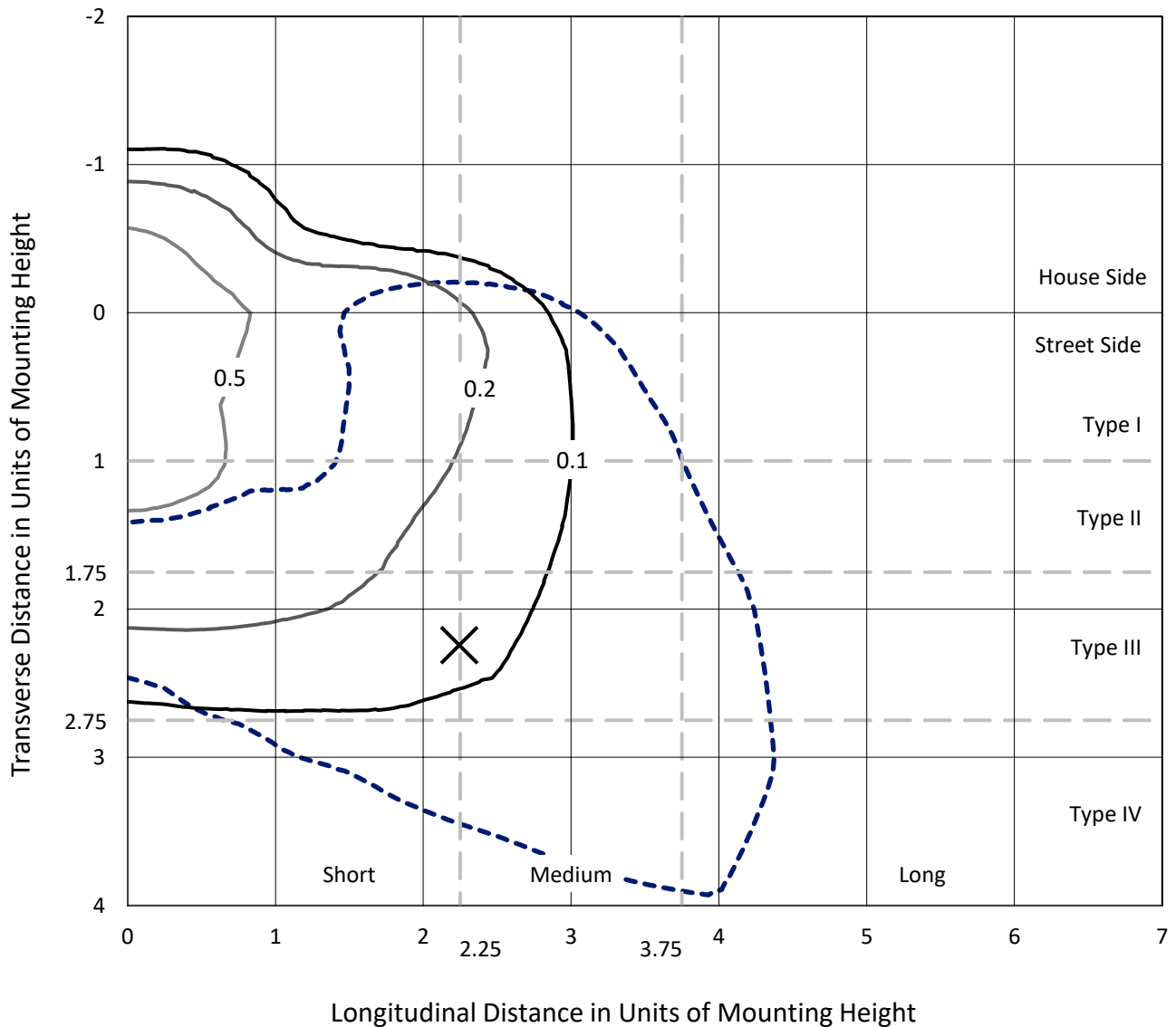
Input Watts (W): 30.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

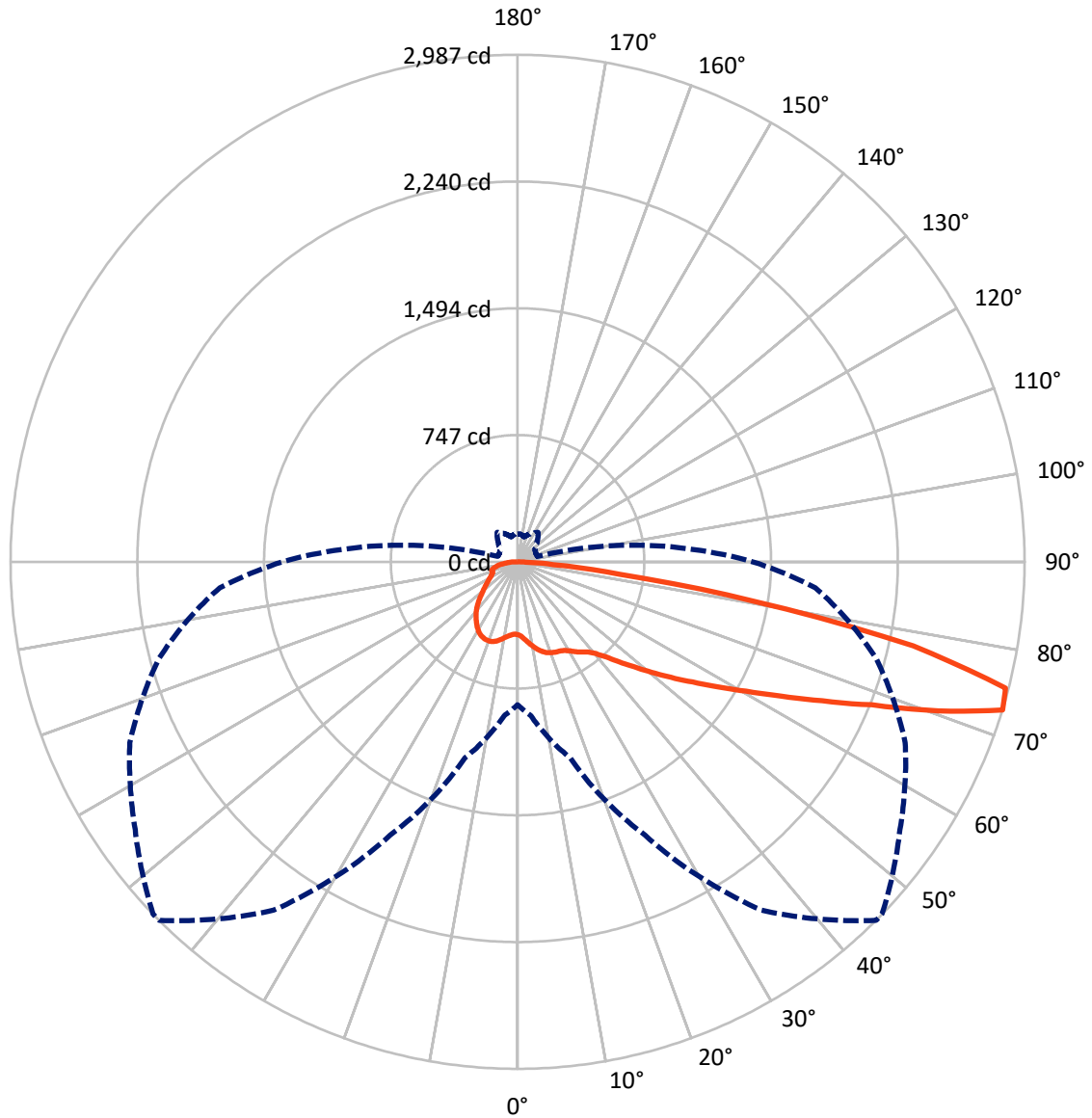
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 72.5-Deg Vertical

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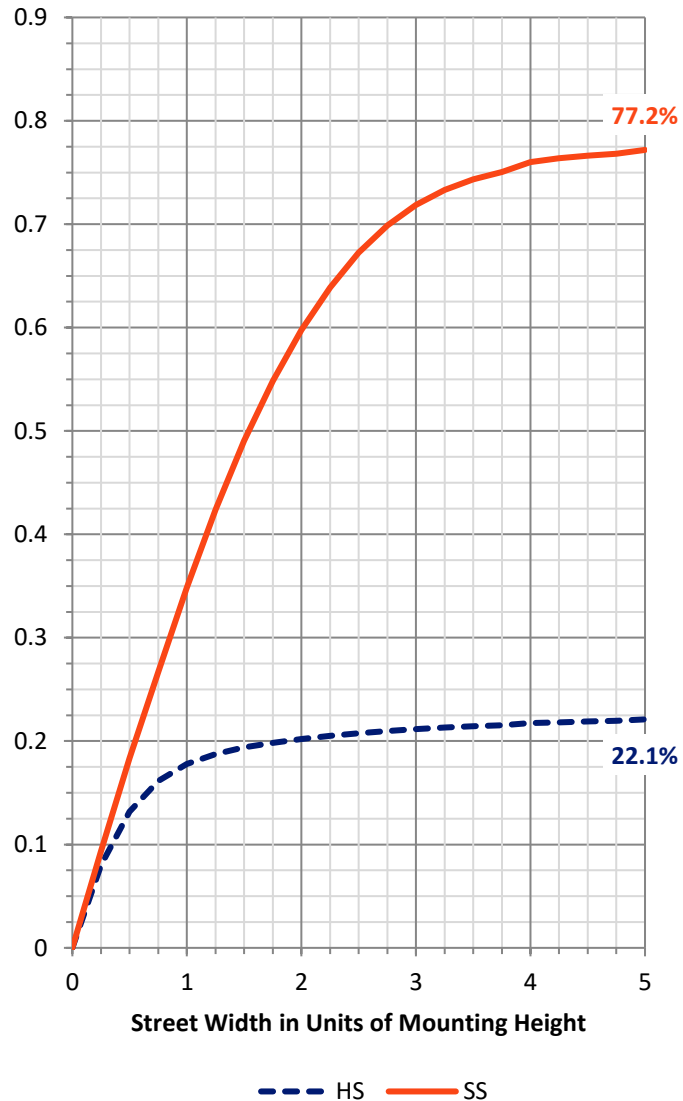
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	962.6	0.0	962.6
	% Fixture	22.6	0.0	22.6
<b>Street Side</b>	Lumens	3295.3	0.0	3295.3
	% Fixture	77.4	0.0	77.4
<b>Total</b>	Lumens	4257.9	0.0	4257.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.7	1.0
10°-20°	145.8	3.4
20°-30°	253.6	6.0
30°-40°	363.5	8.5
40°-50°	511.8	12.0
50°-60°	784.0	18.4
60°-70°	1135.7	26.7
70°-80°	906.9	21.3
80°-90°	113.0	2.7
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°	4257.9	100.0
0°-180°	4257.9	100.0

**Coefficient of Utilization**



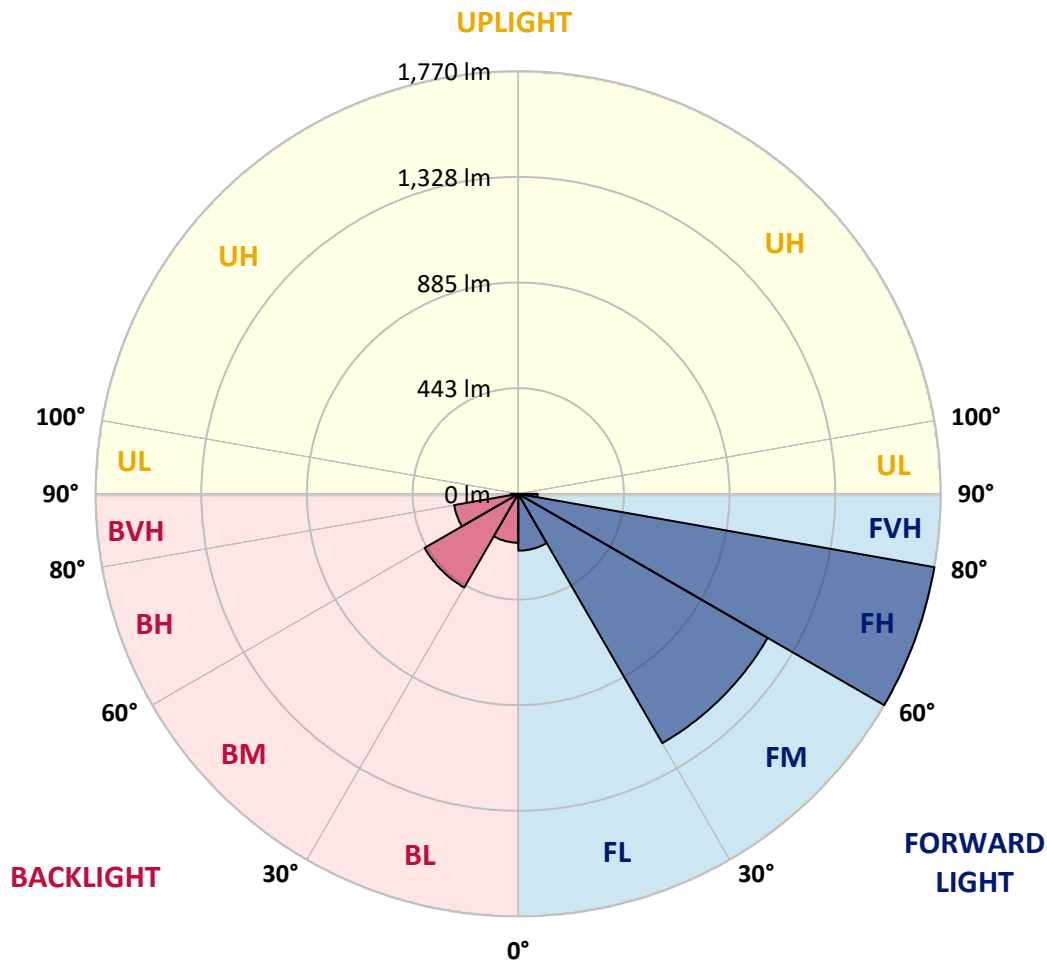
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	238.1	5.6			
FM (30°-60°)	1206.0	28.3			
FH (60°-80°)	1770.1	41.6			G1/1800
FVH (80°-90°)	81.0	1.9			G1/100
BL (0°-30°)	204.9	4.8	B1/500		
BM (30°-60°)	453.2	10.6	B1/1000		
BH (60°-80°)	272.5	6.4	B1/500		G1/500
BVH (80°-90°)	31.9	0.7			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°	45°	46°	55°	65°	75°	85°
0°	429.6	429.6	429.6	429.6	429.6	429.6	429.6	429.6	429.6	429.6	429.6
2.5°	446.4	449.3	446.6	444.1	443.0	440.0	439.8	438.1	437.0	433.8	432.9
5°	477.5	481.3	476.8	471.9	467.4	460.2	459.4	454.2	448.3	441.7	437.9
7.5°	512.7	516.1	511.0	503.6	495.7	483.8	483.6	474.2	464.9	453.6	447.0
10°	543.5	548.0	541.0	530.9	521.0	507.6	506.0	495.3	483.6	468.8	458.9
12.5°	570.6	573.8	567.0	554.7	543.2	529.8	527.8	515.9	502.9	486.1	473.4
15°	592.1	596.1	587.2	574.0	561.9	548.7	546.8	536.1	523.1	505.3	489.2
17.5°	606.3	609.7	600.4	585.7	574.0	563.0	561.6	552.7	541.2	523.3	506.0
20°	611.6	615.2	605.6	590.6	579.8	571.3	570.6	564.2	556.3	539.9	522.4
22.5°	617.0	620.4	607.8	592.1	582.7	577.4	577.1	572.9	569.7	556.3	539.3
25°	638.8	639.7	622.9	600.2	586.8	582.1	581.8	581.6	582.9	572.5	557.4
27.5°	657.6	657.4	643.1	621.8	600.9	591.0	590.8	593.1	597.3	588.6	576.3
30°	685.2	682.8	665.7	643.5	624.4	609.2	607.8	605.9	609.2	602.3	595.1
32.5°	743.7	735.9	708.4	668.8	644.0	632.3	630.5	618.0	619.3	615.0	611.4
35°	827.7	817.3	780.5	716.9	668.2	651.6	650.7	634.8	632.1	628.2	629.7
37.5°	927.5	914.7	871.9	786.4	709.9	674.0	672.7	658.4	647.3	643.3	650.9
40°	1027.8	1011.6	976.1	871.1	771.4	711.5	707.2	685.4	672.9	666.1	682.3
42.5°	1125.0	1111.6	1081.4	966.3	847.2	766.2	756.8	719.6	710.1	703.9	733.0
45°	1211.2	1199.1	1176.9	1067.8	936.0	840.7	831.5	770.7	767.8	767.8	810.0
47.5°	1281.2	1278.5	1254.9	1171.5	1040.8	925.5	909.6	841.8	849.6	861.7	919.2
50°	1358.8	1351.4	1326.2	1273.6	1163.9	1022.5	1009.5	929.1	958.5	991.6	1077.1
52.5°	1430.2	1434.2	1406.1	1379.9	1303.0	1130.9	1108.0	1032.0	1095.5	1150.5	1262.2
55°	1503.5	1503.7	1495.9	1492.3	1448.7	1250.7	1225.6	1155.8	1256.8	1324.9	1477.9
57.5°	1572.4	1572.8	1584.4	1616.1	1617.9	1388.9	1360.4	1307.9	1435.9	1505.5	1700.4
60°	1633.8	1636.9	1668.8	1742.8	1766.6	1547.2	1520.3	1487.6	1621.2	1691.2	1934.4
62.5°	1654.5	1665.8	1736.8	1841.9	1913.5	1741.5	1715.0	1695.5	1815.9	1881.0	2130.0
65°	1619.4	1645.6	1782.8	1923.8	2064.7	1972.3	1946.1	1924.7	2018.2	2079.5	2290.6
67.5°	1533.5	1567.4	1780.0	2009.7	2248.1	2250.0	2225.5	2175.5	2235.1	2258.7	2342.8
70°	1307.2	1357.9	1623.3	2041.8	2458.8	2629.7	2606.2	2477.4	2451.6	2337.6	2195.7
72.5°	842.2	910.4	1195.3	1777.8	2505.6	2987.0	2985.6	2749.9	2520.0	2184.3	1761.0
75°	307.3	349.0	555.3	1115.9	2103.3	2968.8	2977.6	2703.2	2300.4	1687.2	1097.1
77.5°	111.9	122.5	181.2	428.9	1293.6	2382.1	2400.2	2161.1	1637.4	846.8	434.7
80°	58.7	64.6	92.9	166.5	554.2	1414.7	1443.1	1284.3	769.6	255.0	130.3
82.5°	32.5	35.3	52.1	90.4	249.7	605.0	622.0	507.4	270.7	108.1	53.8
85°	17.5	18.7	24.5	49.3	122.0	209.7	214.4	151.6	107.9	63.4	26.0
87.5°	5.1	6.3	8.1	15.7	47.8	47.2	48.2	30.0	42.6	32.1	8.5
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°	429.6	429.6	429.6	429.6	429.6	429.6	429.6	429.6	429.6	429.6	429.6
2.5°	431.5	430.9	428.4	427.3	426.0	425.7	426.8	427.1	427.3	427.5	428.4
5°	435.6	433.4	431.1	429.8	430.2	430.4	432.7	434.3	435.3	436.2	436.8
7.5°	443.4	441.7	437.9	437.6	438.3	440.3	443.2	446.8	448.8	450.4	450.8
10°	455.1	451.7	447.2	447.9	449.3	452.2	458.3	461.1	464.5	467.4	466.8
12.5°	467.0	464.1	458.9	459.4	461.7	466.8	472.6	476.2	478.5	480.7	481.5
15°	482.5	477.3	471.7	471.7	475.7	481.3	484.0	487.0	488.3	490.8	491.7
17.5°	498.4	491.7	484.3	483.8	488.7	491.5	493.0	493.4	493.9	496.6	497.5
20°	514.3	507.0	496.4	495.5	496.6	496.1	495.9	495.5	496.1	499.5	500.8
22.5°	530.0	521.5	507.0	502.9	499.8	495.5	495.3	495.1	495.5	498.9	501.1
25°	548.4	538.1	518.5	506.5	495.9	490.1	490.8	491.0	491.5	494.2	497.7
27.5°	568.4	557.0	529.3	505.3	486.3	482.3	481.1	481.7	483.4	487.6	491.9
30°	588.3	574.9	539.3	500.8	474.2	468.5	464.9	466.6	471.5	475.7	480.4
32.5°	606.5	593.1	547.0	491.0	458.7	450.0	445.3	447.2	452.2	453.8	459.4
35°	627.8	612.5	550.4	475.3	441.9	428.4	422.1	419.2	421.7	420.1	425.1
37.5°	651.6	635.7	550.0	454.7	422.1	406.6	397.9	386.9	381.7	376.4	379.8
40°	686.9	663.9	544.6	429.8	397.7	383.6	367.9	349.2	337.5	327.1	327.7
42.5°	734.8	703.2	534.7	402.4	370.1	356.9	335.6	313.8	295.4	277.9	276.3
45°	806.4	754.5	522.4	373.2	340.3	327.3	304.1	279.7	258.8	236.4	233.7
47.5°	909.6	823.6	510.8	340.0	308.8	296.9	276.1	253.5	228.8	207.0	204.6
50°	1051.3	922.8	500.0	307.7	277.9	269.0	252.4	229.2	204.4	186.9	185.7
52.5°	1231.6	1057.6	495.5	276.5	249.0	245.6	232.4	210.8	187.3	172.5	171.4
55°	1438.7	1218.8	495.5	246.7	223.7	224.8	215.6	195.6	175.2	162.0	160.6
57.5°	1649.9	1382.1	486.5	219.1	202.1	206.8	201.0	183.5	165.1	151.4	149.1
60°	1844.7	1518.9	450.2	194.0	183.1	190.4	186.7	171.6	149.1	137.8	135.9
62.5°	1994.2	1596.1	380.2	174.0	167.3	175.9	173.8	155.9	146.3	141.6	139.9
65°	2069.2	1583.5	290.7	156.3	154.1	167.3	163.1	162.4	154.8	149.3	147.6
67.5°	2023.1	1475.5	210.8	143.3	146.5	159.5	175.9	178.6	164.4	153.9	152.1
70°	1821.5	1279.8	157.0	131.0	136.8	159.7	200.5	186.9	161.2	148.9	146.9
72.5°	1385.7	954.4	121.8	118.0	124.2	160.8	211.6	183.1	152.3	164.6	163.3
75°	792.4	524.0	97.8	102.1	108.5	150.3	205.9	173.1	145.3	151.2	151.2
77.5°	302.2	201.4	80.8	86.3	87.2	131.2	196.9	172.5	138.4	135.0	123.1
80°	104.8	78.7	66.8	68.7	67.5	116.6	188.9	150.1	113.3	101.4	98.0
82.5°	42.8	39.3	52.9	50.7	48.0	90.6	152.5	122.7	92.7	81.9	81.0
85°	18.7	24.9	35.0	30.7	27.8	62.8	122.3	103.8	78.3	67.5	67.2
87.5°	3.8	9.4	14.8	13.9	14.3	41.9	86.8	73.8	55.5	41.5	32.5
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)