

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: P959765

Luminaire Tested: **NAV-SB1B-727-U-T2U-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P959765  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1B-727-U-T2U-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2700K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4092.8 lumens  
Efficiency: N/A  
Efficacy: 102.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

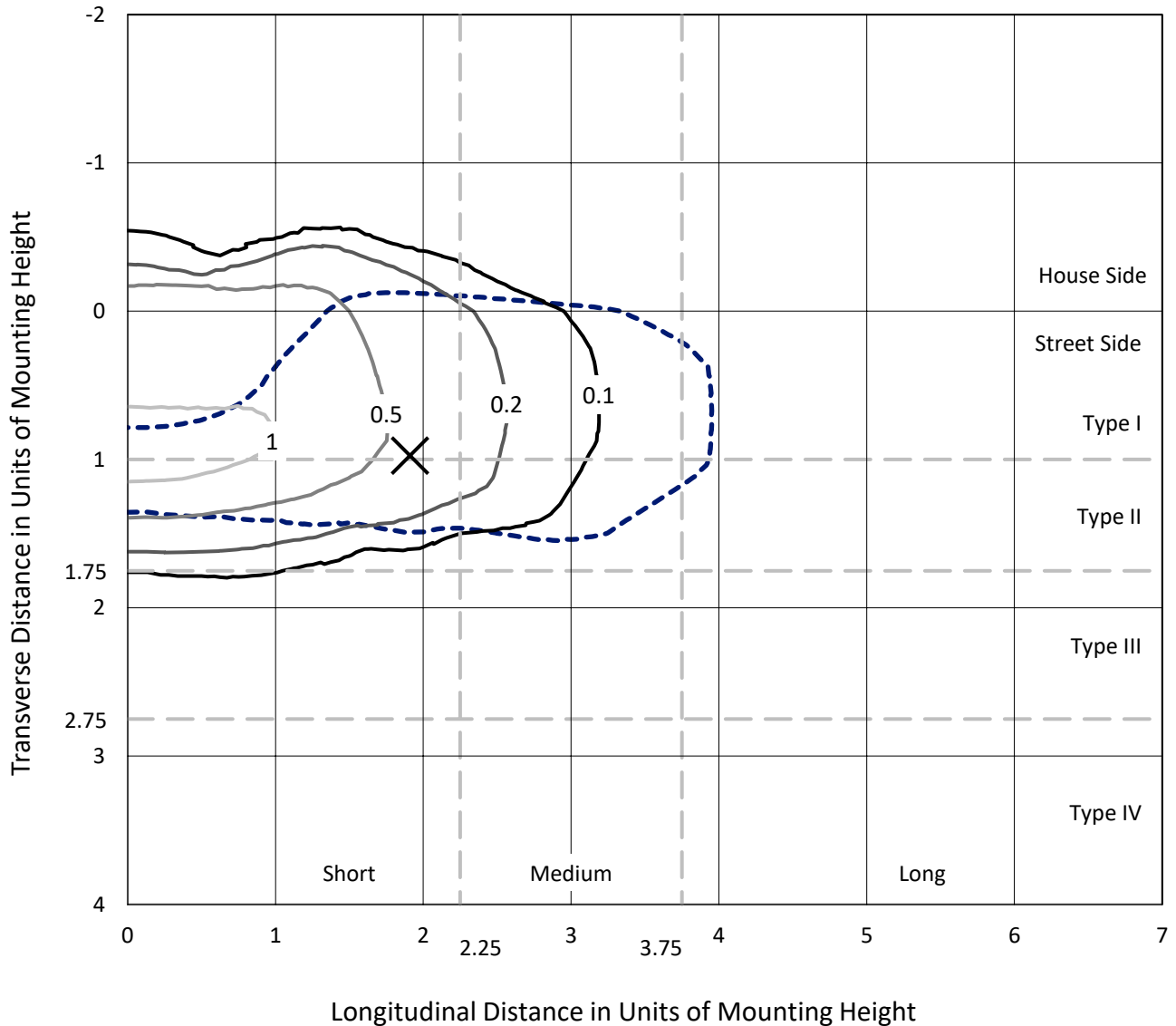
Input Watts (W): 39.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

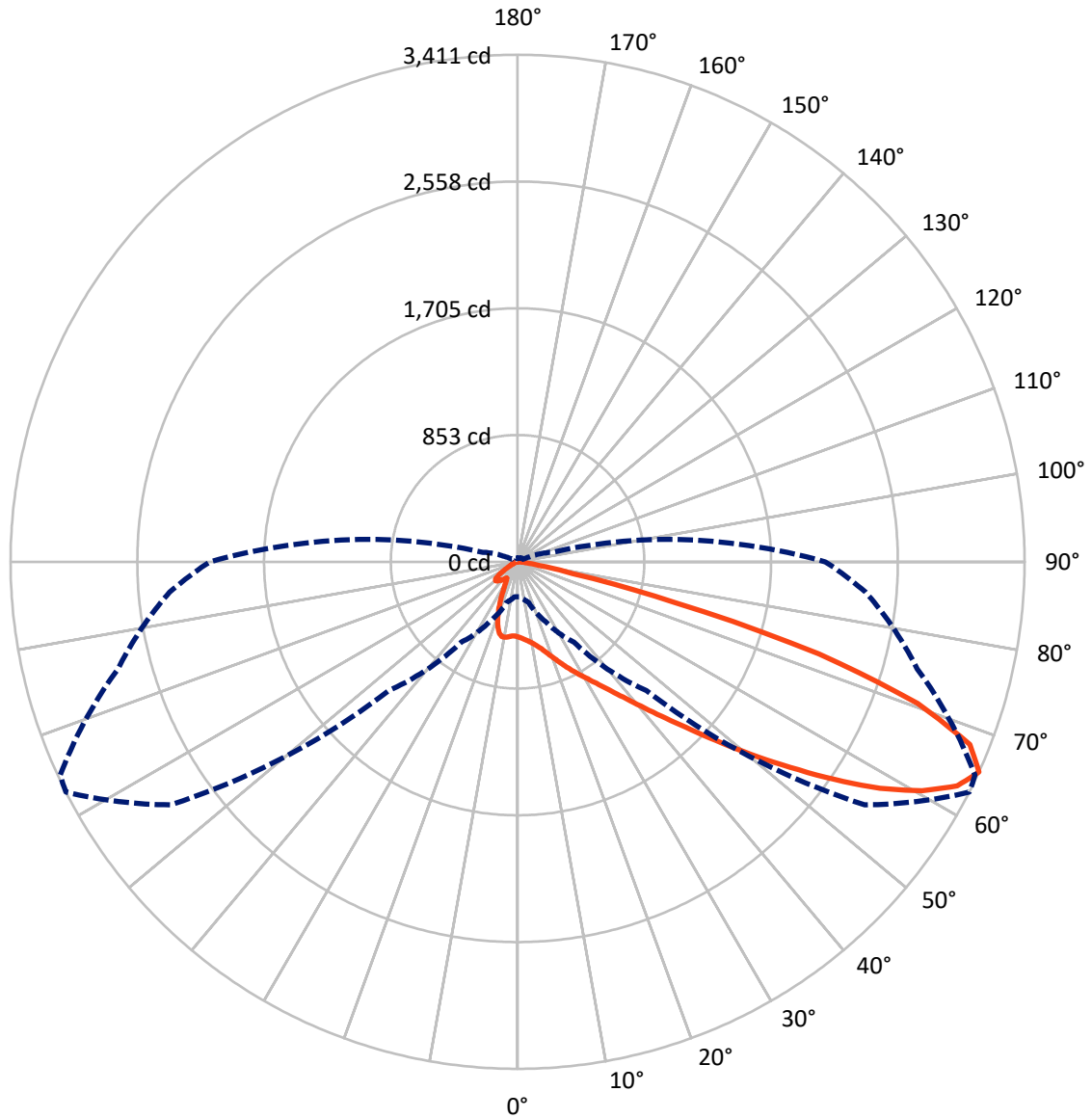
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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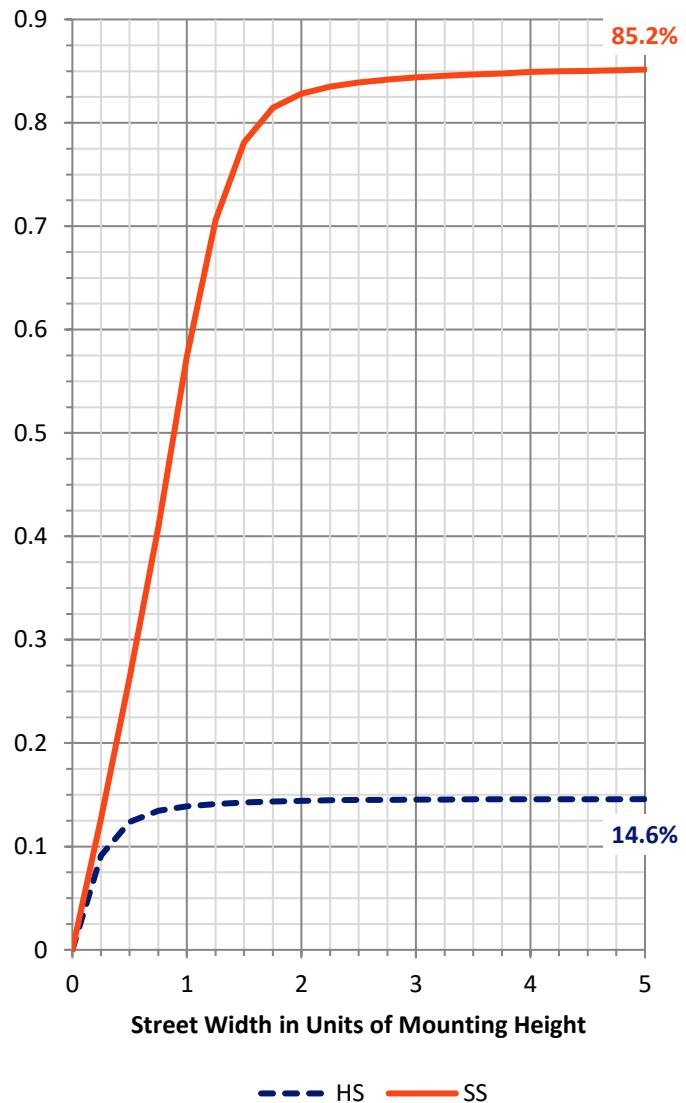
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	601.6	0.0	601.6
	% Fixture	14.7	0.0	14.7
<b>Street Side</b>	Lumens	3491.2	0.0	3491.2
	% Fixture	85.3	0.0	85.3
<b>Total</b>	Lumens	4092.8	0.0	4092.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.6	1.2
10°-20°	132.1	3.2
20°-30°	229.9	5.6
30°-40°	414.4	10.1
40°-50°	822.0	20.1
50°-60°	1119.7	27.4
60°-70°	893.7	21.8
70°-80°	404.4	9.9
80°-90°	29.1	0.7
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°	4092.8	100.0
0°-180°	4092.8	100.0

**Coefficient of Utilization**



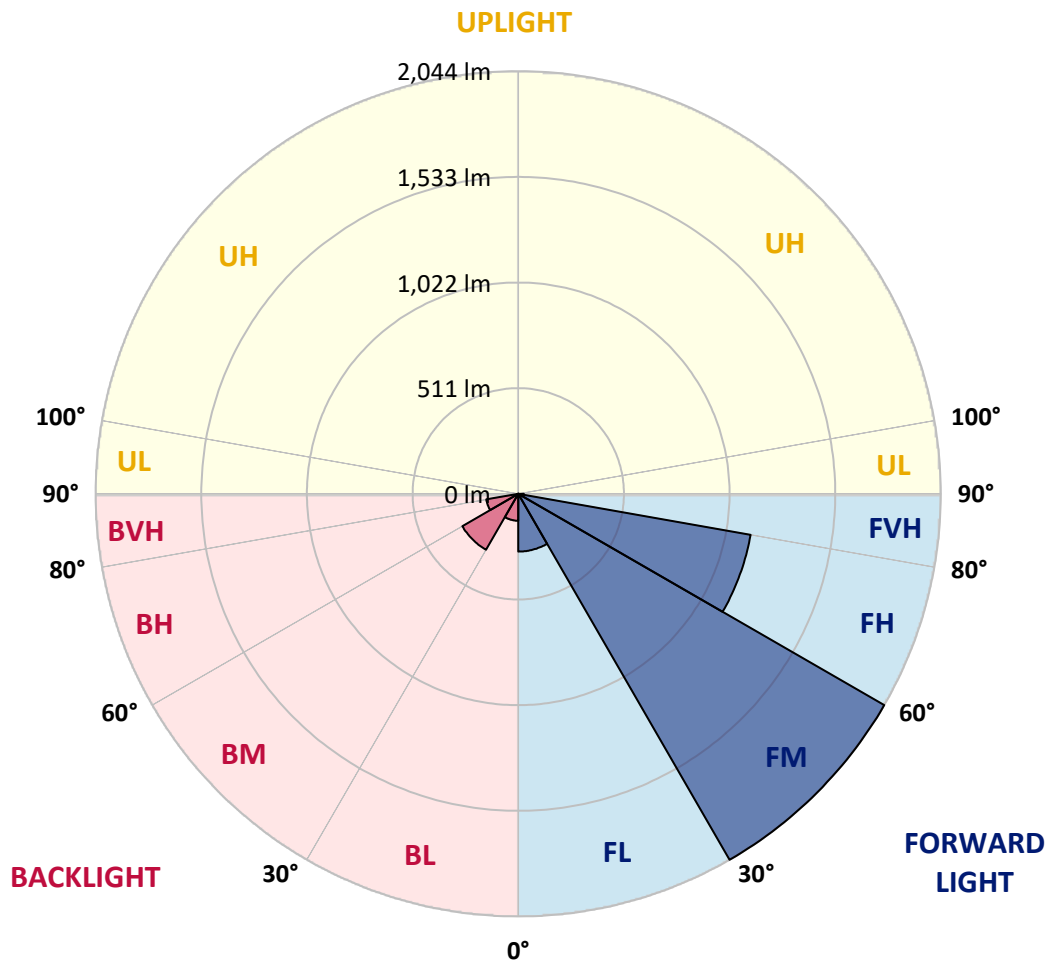
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	279.4	6.8			
FM (30°-60°)	2043.9	49.9			
FH (60°-80°)	1141.1	27.9			G1/1800
FVH (80°-90°)	26.9	0.7			G1/100
BL (0°-30°)	130.2	3.2	B1/500		
BM (30°-60°)	312.2	7.6	B1/1000		
BH (60°-80°)	157.1	3.8	B1/500		G1/500
BVH (80°-90°)	2.2	0.1			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 II Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1
2.5°	516.9	515.6	517.5	516.7	516.1	515.0	514.4	513.8	512.7	511.9	508.5
5°	518.3	517.5	519.5	521.2	522.9	524.6	525.4	526.5	525.4	523.2	519.8
7.5°	506.6	505.9	510.2	515.3	522.9	529.3	536.4	540.3	540.6	539.8	536.1
10°	505.7	504.3	508.5	514.8	524.6	536.1	548.5	557.0	558.1	561.7	557.8
12.5°	519.0	517.5	523.5	530.2	540.3	552.5	567.6	579.4	581.2	586.2	583.4
15°	541.2	539.3	545.9	554.7	567.6	581.5	597.5	608.2	609.6	615.8	610.7
17.5°	567.0	565.1	573.0	582.3	596.3	615.2	633.8	645.6	647.3	651.3	642.0
20°	600.3	597.8	603.9	612.4	627.3	649.8	672.1	689.0	688.7	688.7	673.5
22.5°	638.9	634.9	640.3	647.1	661.1	688.4	718.0	738.0	738.0	730.1	705.0
25°	680.3	676.3	682.2	688.4	700.8	731.7	766.4	791.2	792.3	778.8	738.8
27.5°	732.1	727.0	731.5	738.8	746.2	777.7	818.8	847.5	848.1	827.3	770.9
30°	831.8	817.4	803.3	795.4	798.8	830.0	874.0	905.8	908.7	879.9	805.9
32.5°	1014.2	1011.4	961.9	897.1	863.3	886.4	935.6	974.0	975.6	938.7	851.2
35°	1297.8	1294.4	1214.7	1091.3	981.2	961.9	1010.5	1055.9	1054.7	1013.1	910.0
37.5°	1636.2	1633.1	1528.1	1363.0	1184.8	1075.8	1107.1	1154.7	1161.7	1107.1	986.0
40°	1925.4	1913.8	1847.4	1688.3	1455.1	1265.1	1244.6	1276.0	1283.4	1218.6	1082.6
42.5°	2144.4	2134.6	2100.7	2001.4	1782.4	1545.0	1406.4	1418.5	1426.7	1349.0	1193.6
45°	2257.9	2255.6	2269.1	2259.8	2115.7	1888.5	1637.8	1587.5	1590.6	1493.4	1319.4
47.5°	2274.0	2272.8	2334.4	2421.8	2402.3	2275.9	1934.9	1798.1	1787.1	1656.5	1456.2
50°	2179.4	2177.1	2295.4	2459.0	2593.8	2601.4	2272.2	2035.4	2011.3	1825.1	1599.0
52.5°	1877.2	1876.7	2070.9	2343.3	2661.1	2886.3	2605.7	2296.2	2255.6	2003.7	1750.0
55°	1444.4	1454.9	1677.6	1999.4	2538.3	3023.4	2905.0	2585.7	2523.4	2183.2	1889.1
57.5°	1023.3	1038.4	1258.6	1545.3	2157.6	2942.4	3107.4	2875.6	2808.6	2362.3	2030.1
60°	549.6	563.1	783.6	1125.8	1605.3	2640.0	3214.1	3127.4	3064.0	2532.5	2157.4
62.5°	327.5	332.0	423.2	726.7	1085.7	2016.9	3168.8	3319.2	3267.0	2675.1	2268.0
65°	235.1	236.0	281.9	443.7	659.2	1225.4	2850.8	3410.9	3394.9	2782.8	2349.9
67.5°	197.9	197.4	216.5	294.8	449.1	613.8	2185.0	3281.1	3349.3	2850.8	2396.4
70°	169.7	170.7	193.1	216.0	337.6	347.5	1086.3	2856.8	3002.1	2868.9	2393.6
72.5°	126.4	129.3	150.1	196.8	254.8	239.0	375.0	2118.3	2381.0	2703.0	2269.5
75°	89.3	90.7	105.6	165.5	190.0	174.0	191.5	1095.0	1431.7	2072.3	1857.5
77.5°	68.7	71.2	79.9	115.7	187.3	122.2	117.2	378.9	582.3	1251.8	1273.6
80°	37.2	41.7	57.7	83.6	131.5	86.4	58.0	150.9	197.4	585.4	491.1
82.5°	19.2	21.4	40.3	60.3	74.9	75.4	28.7	62.8	81.4	180.8	67.3
85°	7.6	9.3	27.1	33.2	38.5	37.2	12.9	25.3	29.3	50.1	20.6
87.5°	1.6	2.8	9.8	7.6	7.3	7.9	3.1	5.9	5.6	5.9	3.7
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°	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1
2.5°	508.2	507.1	504.0	500.6	496.7	494.5	493.0	492.7	490.8	489.3	490.8
5°	516.7	515.6	509.6	502.6	495.0	489.1	483.5	478.4	471.1	469.7	469.1
7.5°	533.6	530.4	520.9	511.4	496.9	479.8	459.0	435.0	413.6	407.1	404.1
10°	554.4	550.2	538.1	521.2	489.3	442.6	392.3	345.5	308.3	297.9	294.0
12.5°	578.1	574.4	558.3	527.1	457.6	372.8	295.6	237.6	201.6	192.6	190.0
15°	606.2	600.9	578.6	518.0	400.7	283.2	203.1	168.6	155.7	154.1	152.3
17.5°	636.0	627.3	596.7	485.7	324.1	201.3	156.8	147.0	141.3	139.7	138.8
20°	663.4	652.1	607.3	436.8	242.1	156.8	140.5	134.1	128.9	127.0	125.9
22.5°	690.6	674.7	607.3	370.0	181.6	139.1	128.9	123.0	117.2	114.6	113.2
25°	719.1	697.7	596.7	295.6	146.2	127.5	118.0	111.5	106.4	103.3	102.2
27.5°	746.7	717.2	572.2	225.3	130.1	117.4	107.8	101.7	96.9	94.6	94.6
30°	773.0	736.3	537.8	170.9	119.6	107.5	98.5	93.2	88.5	86.2	86.4
32.5°	808.4	760.6	501.2	140.2	110.7	98.3	90.1	85.1	80.8	79.1	79.1
35°	857.6	796.3	469.7	137.7	103.0	90.7	82.5	77.7	73.5	72.1	72.1
37.5°	927.5	854.0	453.0	154.6	96.9	83.9	76.3	71.2	67.3	66.2	65.9
40°	1013.6	932.2	462.1	171.5	92.7	78.0	70.6	65.6	62.2	60.8	60.6
42.5°	1115.8	1028.9	511.9	184.4	89.8	72.9	65.3	59.7	57.4	56.9	56.9
45°	1233.3	1135.0	588.1	198.2	85.3	68.2	60.0	55.8	54.0	53.8	53.5
47.5°	1366.7	1251.5	676.6	215.4	80.8	63.7	55.8	52.9	51.6	50.9	50.9
50°	1499.1	1369.0	767.5	225.0	77.2	59.4	52.4	50.1	49.0	48.7	48.7
52.5°	1637.6	1489.7	841.0	216.0	74.0	56.1	49.5	47.9	46.7	46.4	46.4
55°	1769.7	1587.5	853.7	183.3	67.9	52.7	46.4	45.6	44.2	44.2	44.0
57.5°	1883.4	1636.5	764.1	134.6	61.7	47.6	43.4	42.5	41.4	41.1	40.8
60°	1987.9	1622.4	589.9	90.7	54.9	42.5	39.5	38.8	37.7	36.3	36.1
62.5°	2046.7	1560.5	403.4	59.1	48.2	37.2	35.0	34.6	32.1	29.3	28.7
65°	2069.0	1433.2	251.7	43.0	40.3	31.8	30.1	29.5	25.9	22.9	22.5
67.5°	2049.5	1223.6	127.0	34.0	31.8	26.4	24.8	24.8	22.2	19.5	19.2
70°	1971.8	917.4	53.5	27.3	24.5	20.3	20.3	21.4	18.9	15.8	15.5
72.5°	1803.2	617.2	28.4	20.8	18.3	14.3	16.6	17.4	15.0	11.8	11.8
75°	1433.5	376.5	19.7	15.5	11.6	10.1	12.7	13.2	10.1	7.9	7.6
77.5°	980.4	216.3	13.2	9.8	7.3	5.9	8.7	8.2	5.3	3.7	3.9
80°	430.5	90.1	7.6	4.5	2.8	2.3	3.1	2.3	1.6	1.1	1.1
82.5°	50.4	21.1	2.8	1.6	1.1	0.5	0.3	0.0	0.0	0.0	0.0
85°	10.5	2.6	1.4	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.9	0.5	0.3	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)