

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: P959238

Luminaire Tested: **NAV-SB1A-727-U-T2U-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P959238  
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-SB1A-727-U-T2U-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

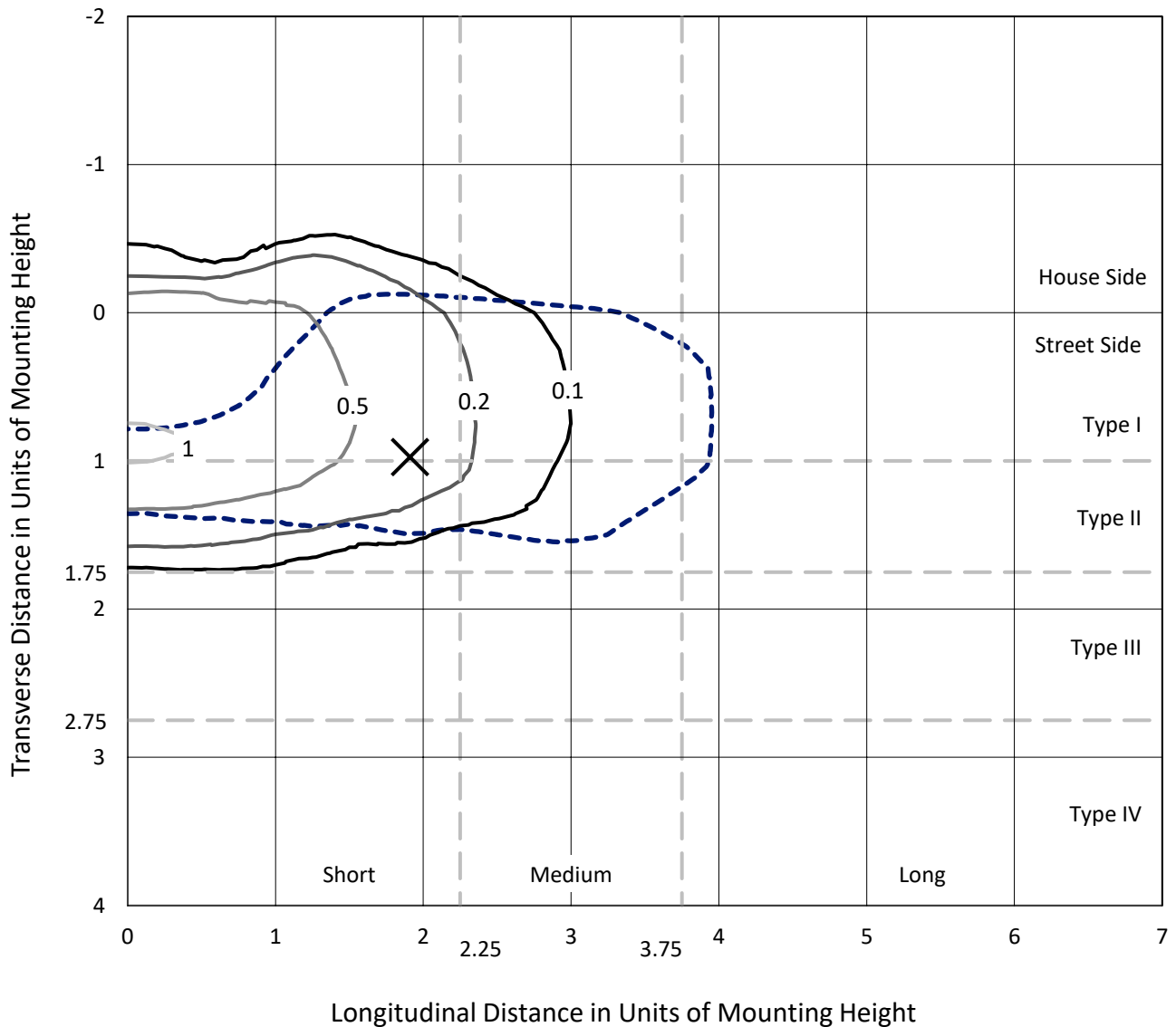
Lumens per Lamp: N/A  
Luminaire Lumens: 3260.5 lumens  
Efficiency: N/A  
Efficacy: 105.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 30.9  
Input Voltage (V): NR  
Input Current (Ain): 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

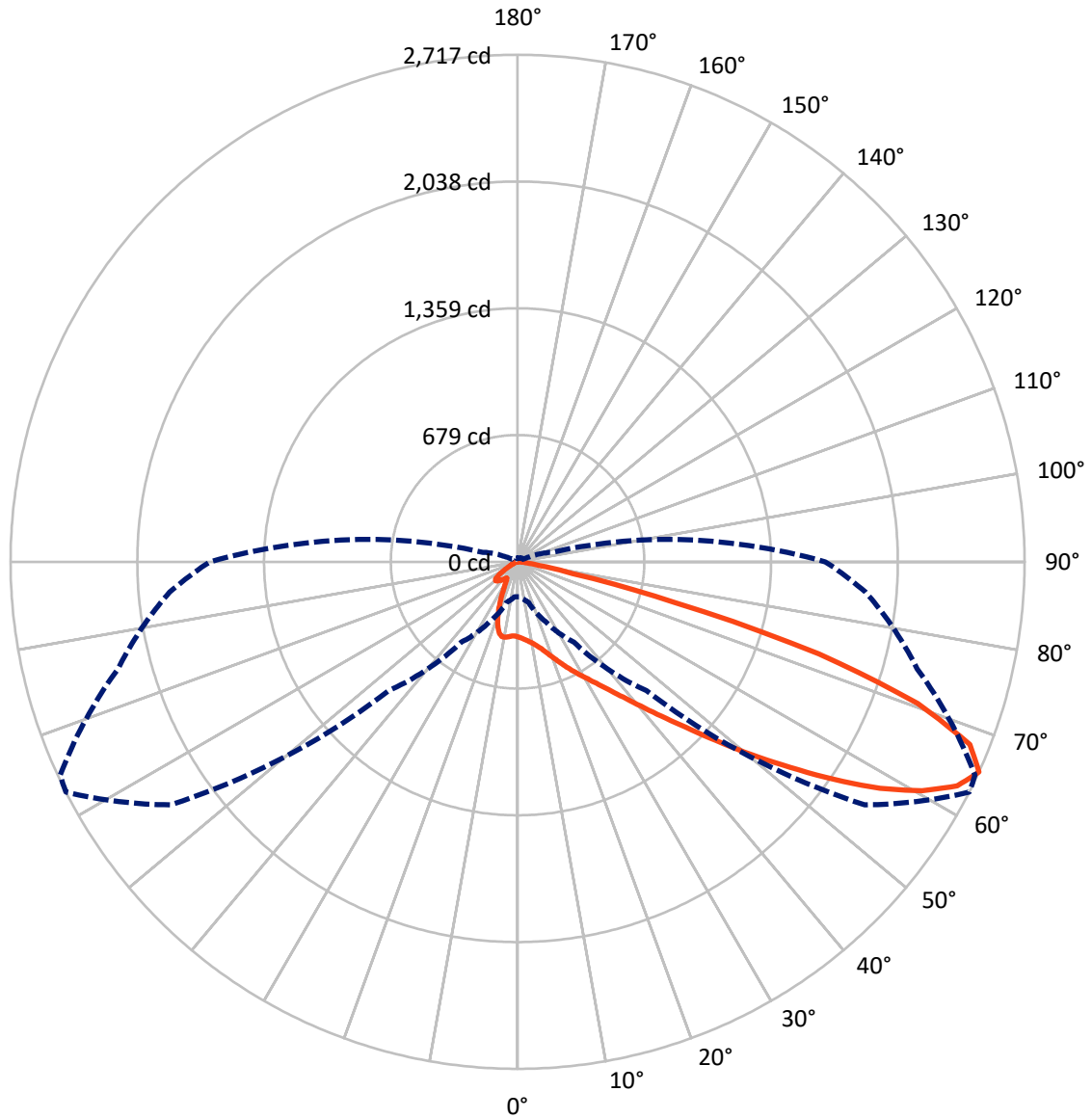
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 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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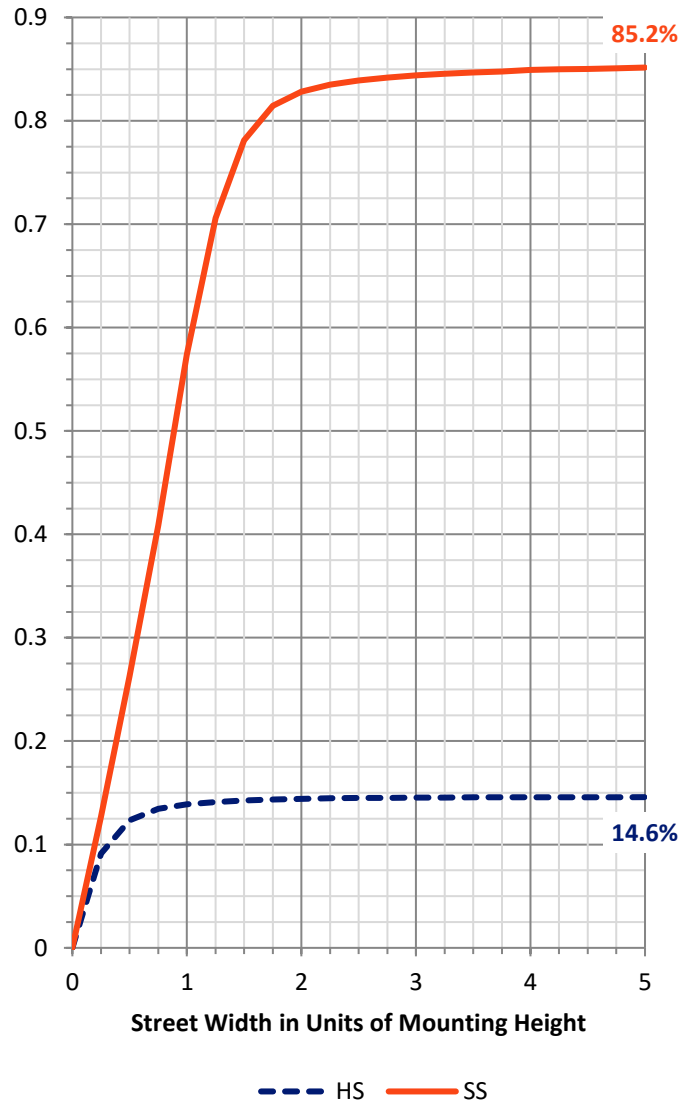
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	479.3	0.0	479.3
	% Fixture	14.7	0.0	14.7
<b>Street Side</b>	Lumens	2781.3	0.0	2781.3
	% Fixture	85.3	0.0	85.3
<b>Total</b>	Lumens	3260.5	0.0	3260.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	37.9	1.2
10°-20°	105.2	3.2
20°-30°	183.2	5.6
30°-40°	330.2	10.1
40°-50°	654.8	20.1
50°-60°	892.0	27.4
60°-70°	712.0	21.8
70°-80°	322.2	9.9
80°-90°	23.2	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°	3260.5	100.0
0°-180°	3260.5	100.0

**Coefficient of Utilization**



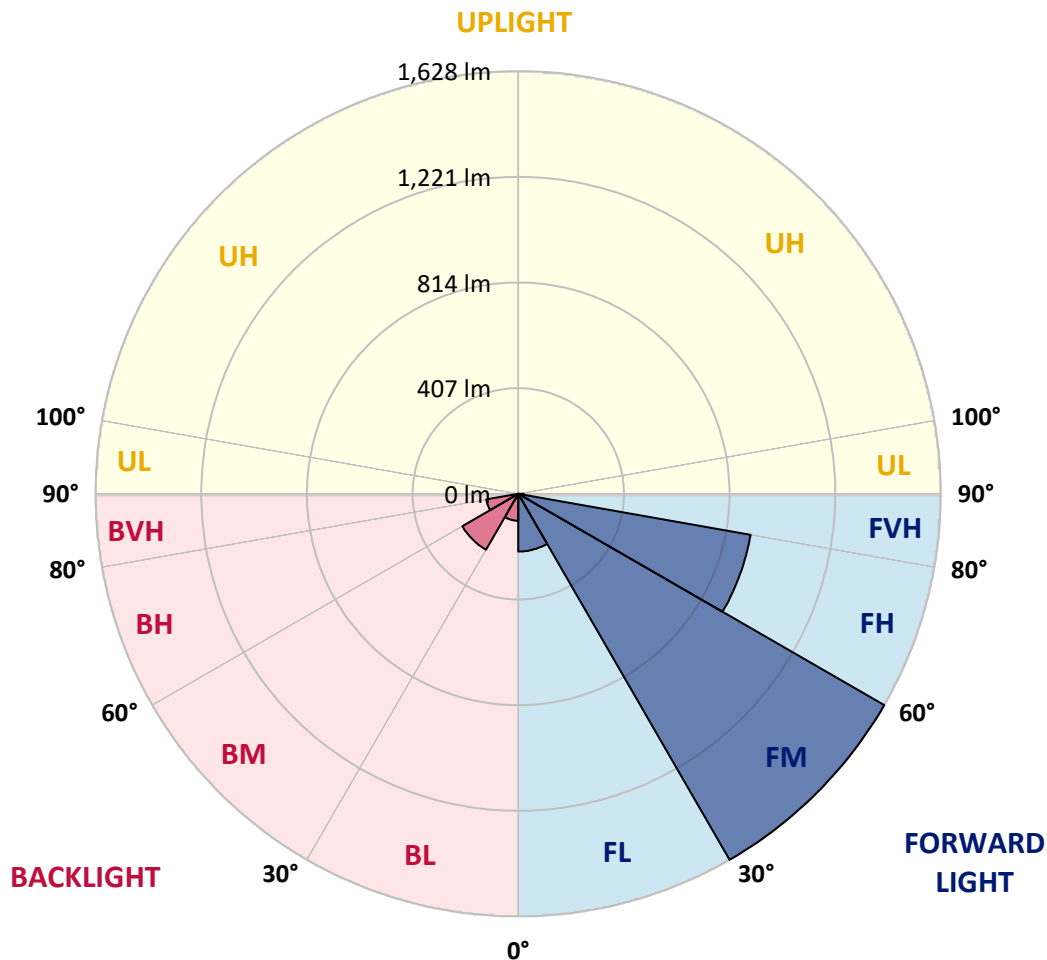
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	222.6	6.8			
FM (30°-60°)	1628.2	49.9			
FH (60°-80°)	909.0	27.9			G1/1800
FVH (80°-90°)	21.4	0.7			G1/100
BL (0°-30°)	103.7	3.2	B0/110		
BM (30°-60°)	248.7	7.6	B1/1000		
BH (60°-80°)	125.1	3.8	B1/500		G1/500
BVH (80°-90°)	1.7	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°	402.4	402.4	402.4	402.4	402.4	402.4	402.4	402.4	402.4	402.4	402.4
2.5°	411.8	410.7	412.3	411.6	411.1	410.3	409.8	409.4	408.5	407.7	405.1
5°	413.0	412.3	413.9	415.2	416.6	417.9	418.6	419.4	418.6	416.8	414.1
7.5°	403.5	403.1	406.4	410.5	416.6	421.7	427.3	430.5	430.7	430.0	427.1
10°	402.8	401.7	405.1	410.0	417.9	427.1	437.0	443.7	444.5	447.5	444.3
12.5°	413.4	412.3	417.0	422.4	430.5	440.1	452.2	461.7	463.0	467.0	464.7
15°	431.1	429.6	434.9	441.9	452.2	463.2	476.0	484.5	485.6	490.6	486.6
17.5°	451.7	450.2	456.4	463.9	475.1	490.2	504.9	514.3	515.7	518.9	511.5
20°	478.3	476.2	481.1	487.9	499.8	517.7	535.5	548.9	548.7	548.7	536.6
22.5°	508.9	505.8	510.0	515.5	526.6	548.5	571.9	587.9	587.9	581.6	561.7
25°	541.9	538.7	543.5	548.5	558.3	583.0	610.6	630.3	631.2	620.4	588.6
27.5°	583.2	579.1	582.7	588.6	594.4	619.5	652.3	675.2	675.6	659.0	614.2
30°	662.6	651.2	639.9	633.7	636.3	661.2	696.3	721.6	723.9	701.0	642.0
32.5°	808.0	805.8	766.3	714.6	687.8	706.1	745.4	775.9	777.3	747.8	678.0
35°	1033.8	1031.1	967.7	869.4	781.8	766.3	805.0	841.1	840.3	807.1	725.0
37.5°	1303.5	1301.0	1217.3	1085.9	943.9	857.1	882.0	919.9	925.5	882.0	785.6
40°	1533.8	1524.6	1471.7	1345.0	1159.3	1007.8	991.5	1016.6	1022.4	970.8	862.4
42.5°	1708.4	1700.5	1673.6	1594.4	1419.8	1230.8	1120.4	1130.1	1136.6	1074.7	950.9
45°	1798.8	1796.9	1807.7	1800.3	1685.4	1504.4	1304.8	1264.6	1267.1	1189.7	1051.1
47.5°	1811.5	1810.7	1859.8	1929.3	1913.8	1813.1	1541.5	1432.4	1423.7	1319.6	1160.1
50°	1736.1	1734.4	1828.6	1958.9	2066.3	2072.3	1810.2	1621.6	1602.3	1454.0	1273.9
52.5°	1495.5	1495.1	1649.8	1866.7	2119.9	2299.4	2075.7	1829.2	1796.9	1596.2	1394.1
55°	1150.7	1159.0	1336.4	1592.8	2022.1	2408.6	2314.2	2059.8	2010.2	1739.3	1504.9
57.5°	815.2	827.3	1002.7	1231.0	1718.9	2344.1	2475.5	2290.9	2237.5	1882.0	1617.2
60°	437.9	448.6	624.2	896.8	1278.8	2103.1	2560.4	2491.4	2440.9	2017.4	1718.6
62.5°	260.9	264.4	337.1	578.9	864.9	1606.7	2524.4	2644.2	2602.7	2131.2	1806.8
65°	187.3	188.0	224.6	353.5	525.1	976.2	2271.1	2717.3	2704.5	2216.9	1872.1
67.5°	157.6	157.2	172.5	234.8	357.7	489.0	1740.7	2613.9	2668.2	2271.1	1909.1
70°	135.3	135.9	153.9	172.0	269.0	276.8	865.4	2275.8	2391.6	2285.4	1906.8
72.5°	100.8	102.9	119.5	156.8	203.0	190.4	298.8	1687.5	1896.8	2153.3	1807.9
75°	71.1	72.3	84.2	131.9	151.4	138.6	152.5	872.4	1140.6	1650.9	1479.8
77.5°	54.7	56.8	63.8	92.1	149.1	97.4	93.3	302.0	463.9	997.3	1014.5
80°	29.6	33.2	46.0	66.6	104.8	68.9	46.2	120.2	157.2	466.4	391.2
82.5°	15.3	17.0	32.1	48.0	59.7	60.1	22.9	50.0	64.8	144.0	53.6
85°	6.0	7.4	21.5	26.4	30.7	29.6	10.4	20.2	23.4	40.0	16.4
87.5°	1.3	2.3	7.9	6.0	5.8	6.3	2.5	4.7	4.5	4.7	2.9
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°	402.4	402.4	402.4	402.4	402.4	402.4	402.4	402.4	402.4	402.4	402.4
2.5°	404.9	404.0	401.5	398.8	395.6	393.9	392.8	392.6	390.9	389.8	390.9
5°	411.6	410.7	406.0	400.4	394.3	389.6	385.1	381.1	375.3	374.1	373.7
7.5°	425.1	422.6	415.0	407.3	395.9	382.2	365.6	346.6	329.5	324.3	321.8
10°	441.7	438.3	428.7	415.2	389.8	352.6	312.4	275.2	245.6	237.3	234.2
12.5°	460.5	457.6	444.8	419.9	364.5	296.9	235.5	189.3	160.6	153.4	151.4
15°	483.0	478.7	460.9	412.8	319.2	225.7	161.7	134.4	124.0	122.7	121.4
17.5°	506.8	499.8	475.3	386.9	258.2	160.4	124.9	117.1	112.6	111.2	110.6
20°	528.5	519.5	483.8	347.9	192.9	124.9	111.9	106.8	102.7	101.2	100.2
22.5°	550.2	537.4	483.8	294.8	144.7	110.8	102.7	98.0	93.3	91.3	90.2
25°	572.9	555.9	475.3	235.5	116.4	101.6	94.0	88.9	84.8	82.3	81.4
27.5°	594.9	571.3	455.8	179.5	103.6	93.6	85.9	81.0	77.2	75.3	75.3
30°	615.7	586.6	428.4	136.1	95.3	85.7	78.5	74.2	70.4	68.7	68.9
32.5°	644.0	605.9	399.2	111.7	88.1	78.3	71.8	67.8	64.4	63.0	63.0
35°	683.3	634.4	374.1	109.7	82.1	72.3	65.7	61.9	58.5	57.4	57.4
37.5°	738.9	680.3	360.9	123.1	77.2	66.8	60.8	56.8	53.6	52.7	52.5
40°	807.5	742.7	368.1	136.6	73.8	62.1	56.3	52.3	49.6	48.5	48.3
42.5°	889.0	819.6	407.7	146.9	71.5	58.1	52.1	47.6	45.7	45.3	45.3
45°	982.5	904.2	468.6	158.0	68.0	54.3	47.8	44.4	43.0	42.8	42.6
47.5°	1088.8	997.0	539.0	171.6	64.4	50.7	44.4	42.1	41.0	40.6	40.6
50°	1194.2	1090.6	611.5	179.3	61.5	47.4	41.7	40.0	39.1	38.8	38.8
52.5°	1304.6	1186.8	670.0	172.0	59.0	44.6	39.5	38.1	37.2	37.0	37.0
55°	1409.8	1264.6	680.1	146.1	54.0	41.9	37.0	36.4	35.3	35.3	35.0
57.5°	1500.4	1303.7	608.7	107.2	49.1	37.9	34.5	33.8	33.0	32.8	32.5
60°	1583.6	1292.4	470.0	72.3	43.8	33.8	31.4	31.0	30.0	28.9	28.7
62.5°	1630.5	1243.1	321.4	47.2	38.3	29.6	27.8	27.6	25.5	23.4	22.9
65°	1648.2	1141.7	200.5	34.3	32.1	25.3	24.0	23.6	20.6	18.1	17.9
67.5°	1632.7	974.9	101.2	27.2	25.3	21.1	19.8	19.8	17.7	15.5	15.3
70°	1570.8	730.8	42.6	21.7	19.5	16.2	16.2	17.0	15.1	12.6	12.3
72.5°	1436.4	491.7	22.7	16.6	14.6	11.5	13.2	13.9	11.9	9.4	9.4
75°	1142.0	299.9	15.7	12.3	9.2	8.1	10.0	10.6	8.1	6.3	6.0
77.5°	781.0	172.3	10.6	7.9	5.8	4.7	7.0	6.5	4.3	2.9	3.2
80°	343.0	71.8	6.0	3.6	2.3	1.8	2.5	1.8	1.3	0.9	0.9
82.5°	40.2	16.8	2.3	1.3	0.9	0.4	0.2	0.0	0.0	0.0	0.0
85°	8.3	2.0	1.1	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.5	0.4	0.2	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)