

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: P959290

Luminaire Tested: **NAV-SB1A-735-U-SL4-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P959290  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1A-735-U-SL4-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT  
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3210.3 lumens  
Efficiency: N/A  
Efficacy: 103.9 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

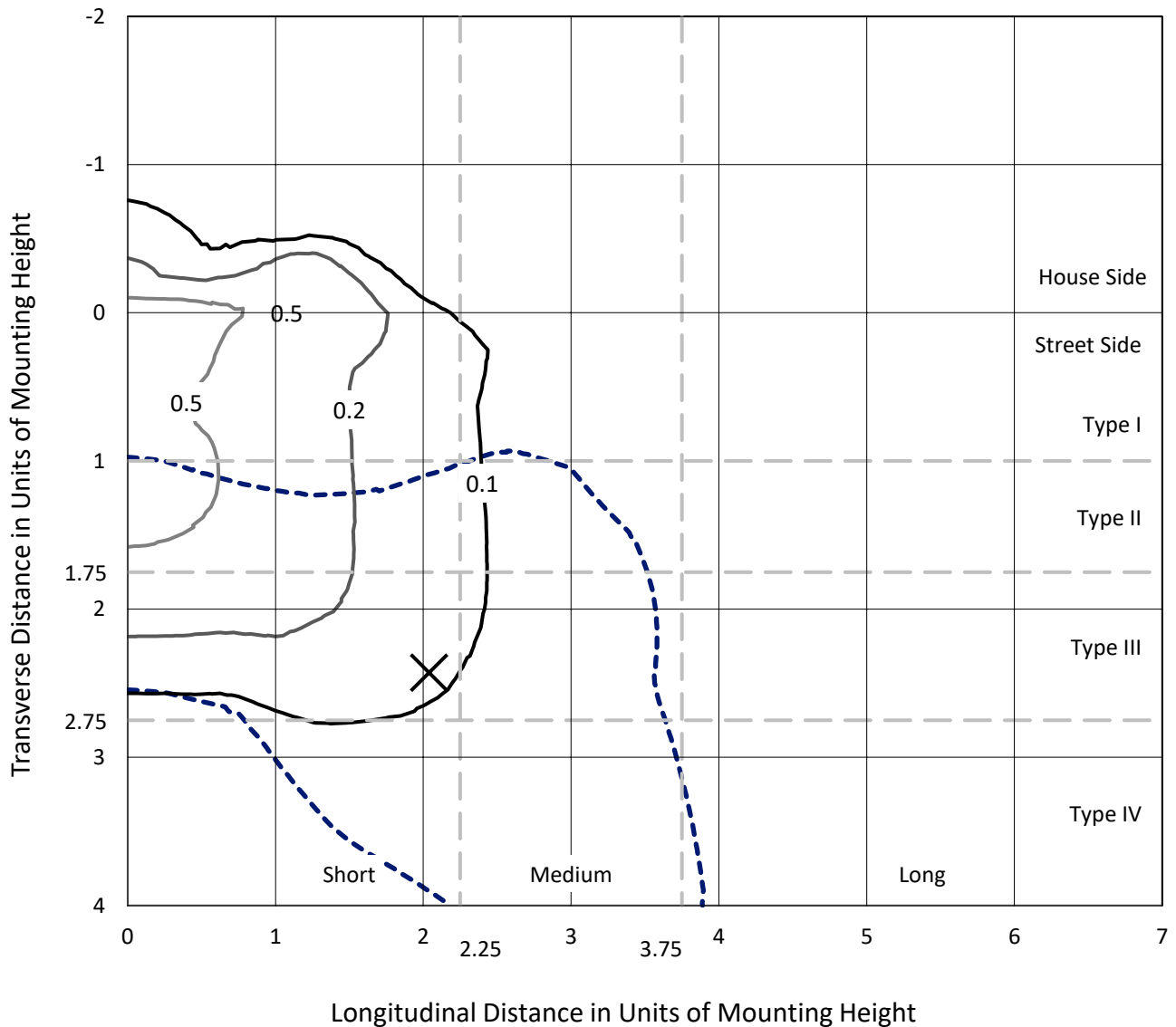
Input Watts (W): 30.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

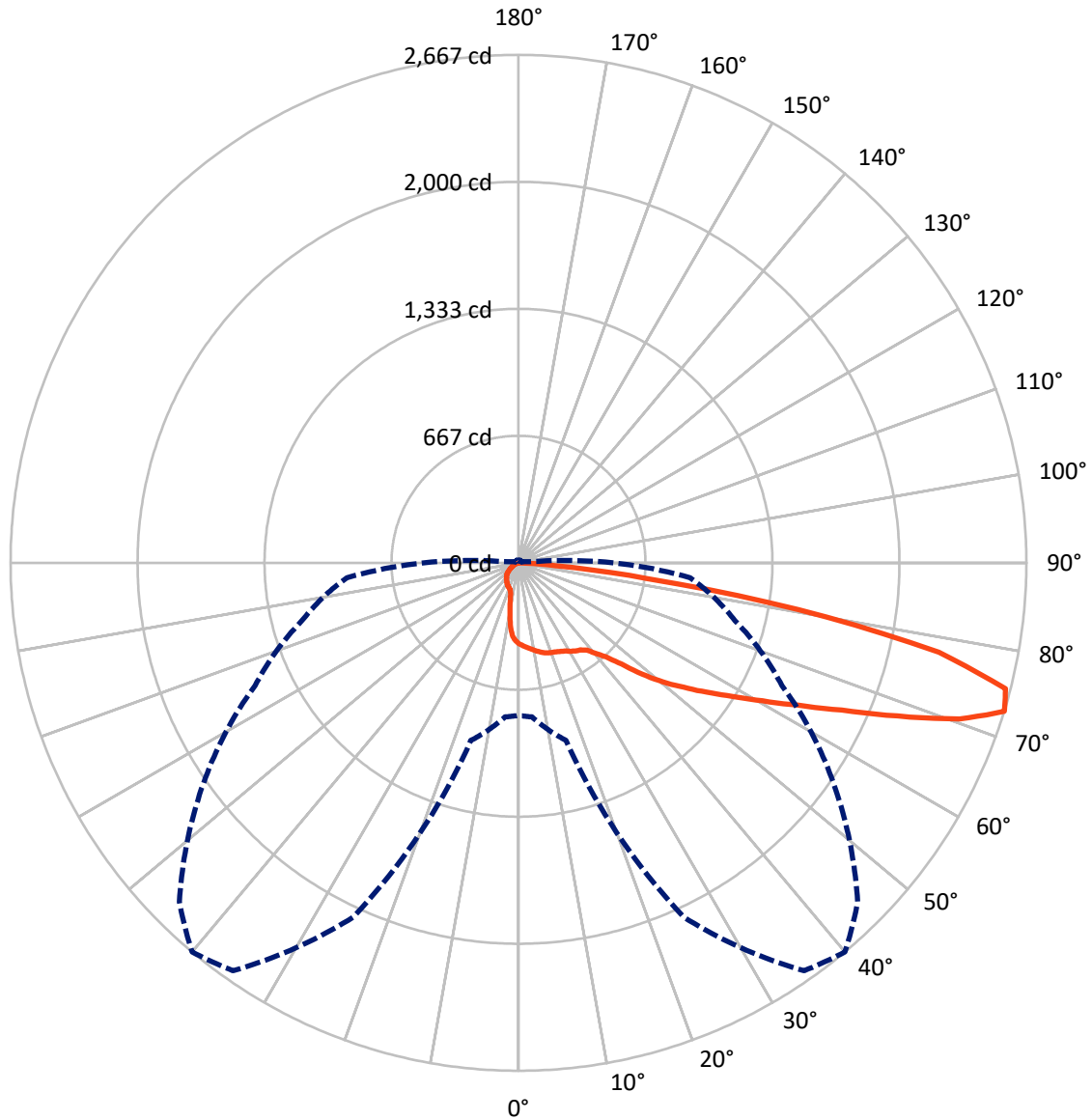
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral      - - - Horizontal Cone Through 72.5-Deg Vertical

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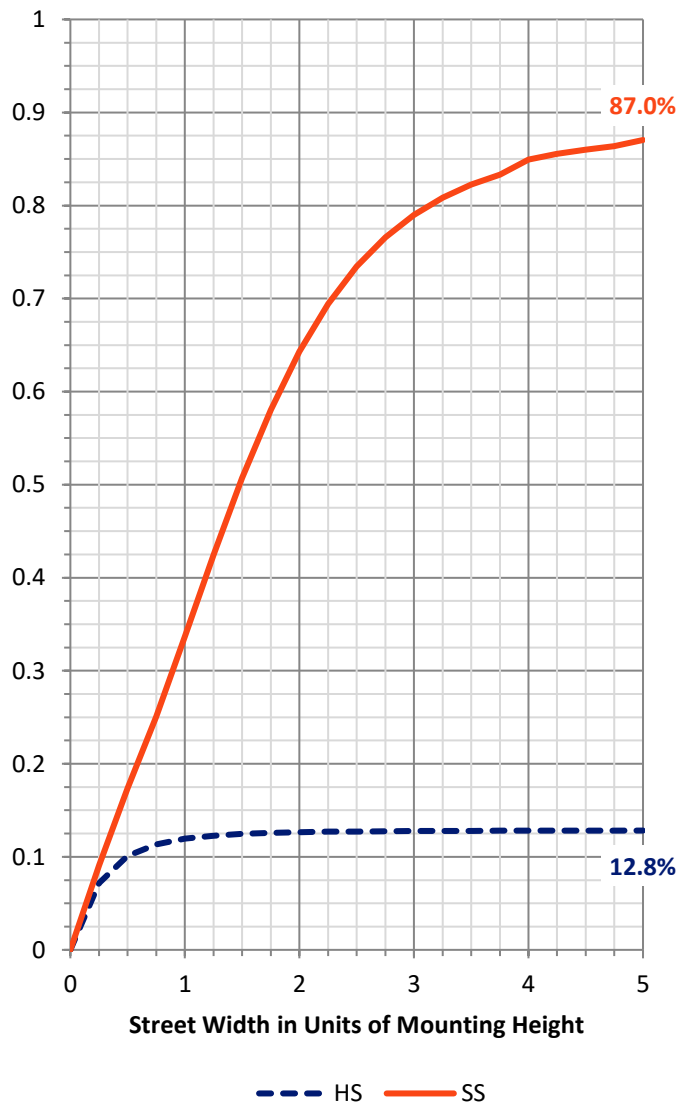
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	414.6	0.0	414.6
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	2795.7	0.0	2795.7
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	3210.3	0.0	3210.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.8	1.2
10°-20°	105.4	3.3
20°-30°	170.6	5.3
30°-40°	251.8	7.8
40°-50°	423.9	13.2
50°-60°	658.1	20.5
60°-70°	823.5	25.7
70°-80°	674.2	21.0
80°-90°	63.9	2.0
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°	3210.3	100.0
0°-180°	3210.3	100.0

**Coefficient of Utilization**



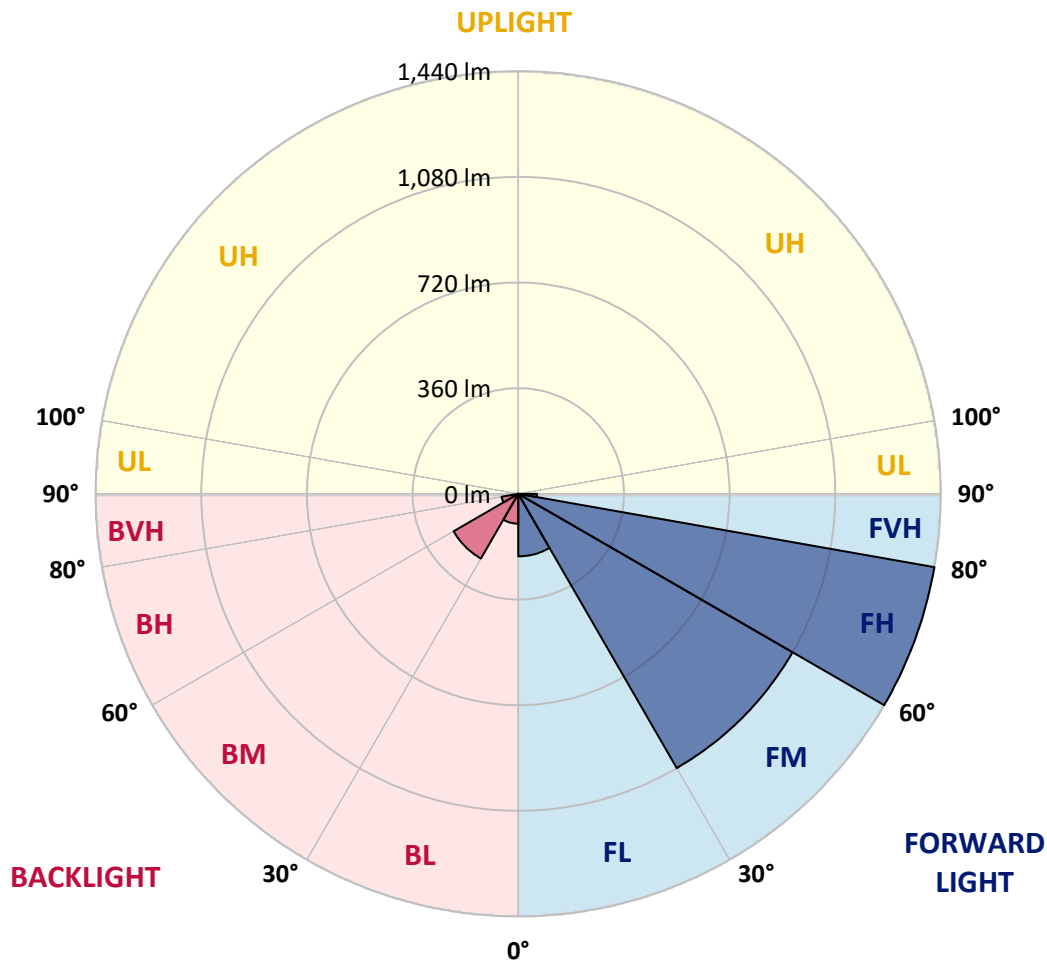
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	213.1	6.6			
FM (30°-60°)	1079.2	33.6			
FH (60°-80°)	1440.0	44.9			G1/1800
FVH (80°-90°)	63.4	2.0			G1/100
BL (0°-30°)	101.8	3.2	B0/110		
BM (30°-60°)	254.6	7.9	B1/1000		
BH (60°-80°)	57.8	1.8	B0/110		G0/110
BVH (80°-90°)	0.5	0.0			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 IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	425.1	425.1	425.1	425.1	425.1	425.1	425.1	425.1	425.1	425.1	425.1
2.5°	437.9	439.6	438.6	436.6	436.2	435.2	434.0	433.6	431.8	430.4	428.7
5°	450.2	451.9	450.7	448.0	446.8	445.7	443.9	442.5	439.1	435.9	432.0
7.5°	463.7	465.2	463.7	459.9	458.0	456.5	454.1	451.9	448.0	443.4	438.6
10°	478.8	480.0	477.8	472.7	469.6	467.4	465.2	462.8	459.2	454.1	448.2
12.5°	492.8	494.3	490.9	484.8	481.1	479.0	476.5	474.7	471.0	466.2	460.1
15°	505.6	507.8	501.9	495.4	491.3	489.6	487.2	486.0	483.6	480.2	474.7
17.5°	515.3	516.7	510.7	503.0	498.4	497.1	495.4	496.2	495.7	493.9	490.4
20°	523.5	524.5	516.5	507.1	501.9	502.2	501.7	504.1	505.1	505.1	504.8
22.5°	533.6	533.9	523.7	511.9	505.8	507.5	508.2	510.9	512.8	514.8	519.2
25°	546.9	546.4	534.3	518.1	512.8	515.3	516.9	517.9	520.1	523.3	533.1
27.5°	566.7	565.3	549.8	528.3	522.0	524.2	527.4	526.8	525.9	528.3	545.0
30°	591.9	590.0	569.4	542.5	536.8	538.7	539.7	535.4	528.3	530.5	555.3
32.5°	631.8	628.4	599.9	558.5	549.6	551.8	550.5	541.6	531.3	533.4	565.8
35°	701.2	693.0	652.6	591.9	564.1	561.7	558.8	550.1	537.3	535.0	574.5
37.5°	848.7	834.1	765.3	656.9	597.0	581.3	572.4	563.6	543.8	535.0	584.5
40°	1015.1	1000.3	920.8	765.8	651.6	625.0	603.7	579.5	550.5	538.2	599.9
42.5°	1188.7	1172.5	1090.7	900.7	729.7	675.1	635.4	592.3	561.7	547.9	620.4
45°	1382.5	1362.2	1255.4	1041.4	843.2	758.3	686.4	618.8	581.1	565.1	648.5
47.5°	1587.1	1560.8	1419.5	1178.0	965.2	873.4	779.8	665.9	609.6	590.7	686.4
50°	1768.4	1742.4	1589.1	1320.9	1079.3	982.9	886.2	731.1	652.3	627.0	737.5
52.5°	1898.8	1878.9	1743.3	1468.4	1198.1	1085.7	982.7	807.1	706.5	673.4	797.7
55°	1986.0	1967.9	1852.6	1608.1	1336.2	1198.8	1077.7	889.6	771.8	729.0	864.2
57.5°	2039.0	2028.7	1931.7	1733.0	1473.0	1322.6	1186.4	980.2	848.7	794.5	938.4
60°	2057.9	2049.4	1980.7	1851.9	1638.4	1471.3	1314.4	1082.5	942.0	869.0	1014.5
62.5°	2007.6	2009.3	2016.1	1992.8	1812.7	1645.4	1467.7	1205.3	1045.5	953.4	1086.1
65°	1770.9	1784.9	1913.6	2149.0	2043.6	1863.4	1662.8	1355.3	1164.0	1049.4	1143.0
67.5°	1466.3	1486.6	1646.6	2240.4	2289.7	2146.7	1934.6	1546.2	1305.2	1147.1	1164.5
70°	1122.4	1144.2	1338.0	2221.4	2520.2	2456.1	2270.7	1789.2	1451.5	1214.7	1109.6
72.5°	801.0	812.2	965.0	2051.3	2614.8	2666.9	2518.2	2019.5	1526.2	1177.3	905.1
75°	562.9	561.0	662.3	1651.9	2467.5	2641.3	2431.5	1894.9	1381.1	935.2	558.0
77.5°	245.2	245.7	330.8	1003.2	1969.4	2255.9	2021.1	1186.9	962.8	495.7	235.5
80°	63.6	65.5	121.4	399.4	1185.7	1488.9	1232.7	521.8	444.8	120.8	45.0
82.5°	22.4	24.0	55.9	125.5	437.4	682.9	548.9	166.9	116.0	34.5	12.1
85°	6.6	7.7	30.0	38.4	90.4	192.9	133.2	32.4	28.5	17.9	3.2
87.5°	0.0	0.9	6.0	5.3	5.3	3.6	6.8	3.6	4.6	2.2	0.9
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°	425.1	425.1	425.1	425.1	425.1	425.1	425.1	425.1	425.1	425.1	425.1
2.5°	427.2	425.6	421.9	418.1	414.4	411.0	410.1	406.4	404.8	405.0	404.8
5°	429.4	426.3	419.2	410.8	402.1	392.2	384.0	372.4	362.4	361.2	360.5
7.5°	435.2	430.2	418.8	402.3	380.6	353.2	327.9	302.7	288.4	280.7	280.2
10°	444.1	437.4	419.9	388.6	342.3	293.6	255.1	223.4	207.3	199.7	198.2
12.5°	454.8	447.3	421.9	365.1	293.0	229.0	187.4	168.0	164.6	164.2	163.9
15°	469.8	461.6	424.1	333.4	239.6	174.4	155.2	155.5	158.2	159.6	159.4
17.5°	486.5	478.3	421.0	294.8	186.9	148.9	148.4	150.7	154.5	156.0	155.7
20°	503.4	495.7	409.8	249.3	151.1	142.0	143.9	146.3	150.2	152.1	152.1
22.5°	520.8	514.0	392.2	200.9	136.3	136.8	139.3	141.7	146.1	148.2	148.2
25°	539.5	533.6	368.7	161.0	130.1	131.5	134.7	137.6	142.2	144.8	144.8
27.5°	558.3	553.9	342.1	134.5	124.2	126.0	129.6	133.5	138.1	141.2	141.4
30°	578.8	576.5	320.8	124.5	118.7	120.1	124.2	128.6	133.7	137.6	138.1
32.5°	599.9	599.4	310.5	131.8	113.7	114.6	118.3	122.6	128.8	133.7	134.2
35°	620.6	621.7	304.4	152.3	111.9	109.3	111.7	115.6	123.1	129.1	130.1
37.5°	647.3	649.6	304.2	174.6	116.0	103.9	105.7	108.3	114.8	121.9	123.1
40°	687.0	699.8	319.7	193.7	123.3	99.1	99.6	100.1	103.5	109.3	111.2
42.5°	739.6	777.2	375.5	206.7	126.2	94.8	93.1	90.4	90.0	93.1	94.8
45°	805.1	870.7	473.7	214.0	123.3	90.0	85.4	78.3	75.6	77.9	77.9
47.5°	882.3	973.2	590.0	215.7	118.5	83.9	75.6	66.5	64.3	65.1	64.8
50°	957.5	1050.1	692.3	201.6	110.5	76.2	65.1	57.3	55.9	56.1	56.1
52.5°	1024.0	1076.5	721.3	168.5	99.8	66.7	55.9	50.5	49.6	49.6	49.3
55°	1067.9	1048.0	643.2	128.8	86.6	57.1	47.9	45.2	44.7	44.5	44.0
57.5°	1077.2	955.1	485.7	93.1	67.8	48.1	42.5	41.1	40.2	39.2	38.6
60°	1044.3	800.3	309.2	65.1	50.7	41.1	37.7	36.8	34.8	32.9	32.2
62.5°	973.2	604.4	171.2	45.2	40.9	35.1	33.4	32.2	28.5	25.4	24.4
65°	877.7	401.9	75.6	35.3	33.4	29.5	28.5	26.9	22.4	18.9	18.1
67.5°	781.7	231.4	34.1	28.3	26.9	24.2	23.5	22.2	19.1	15.7	15.3
70°	672.2	117.3	23.5	22.4	20.8	18.3	19.1	18.9	15.7	12.8	12.3
72.5°	500.5	58.3	17.6	16.9	15.0	13.0	15.7	15.5	12.3	9.6	9.2
75°	283.4	28.8	12.8	11.9	8.9	9.6	12.6	11.9	8.5	6.3	5.8
77.5°	112.4	14.8	8.5	7.3	5.3	6.6	9.2	8.0	4.3	2.7	2.5
80°	25.8	7.3	4.3	3.2	2.5	3.9	4.8	2.9	1.2	0.2	0.0
82.5°	7.3	3.2	1.4	1.2	1.2	1.4	1.2	0.5	0.0	0.0	0.0
85°	2.5	1.4	0.5	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0
87.5°	0.9	0.5	0.0	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)