

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: P959495

Luminaire Tested: **NAV-SB1A-835-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959495
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-835-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV WIDE OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3286.1 lumens
Efficiency: N/A
Efficacy: 106.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B0 - U0 - G1

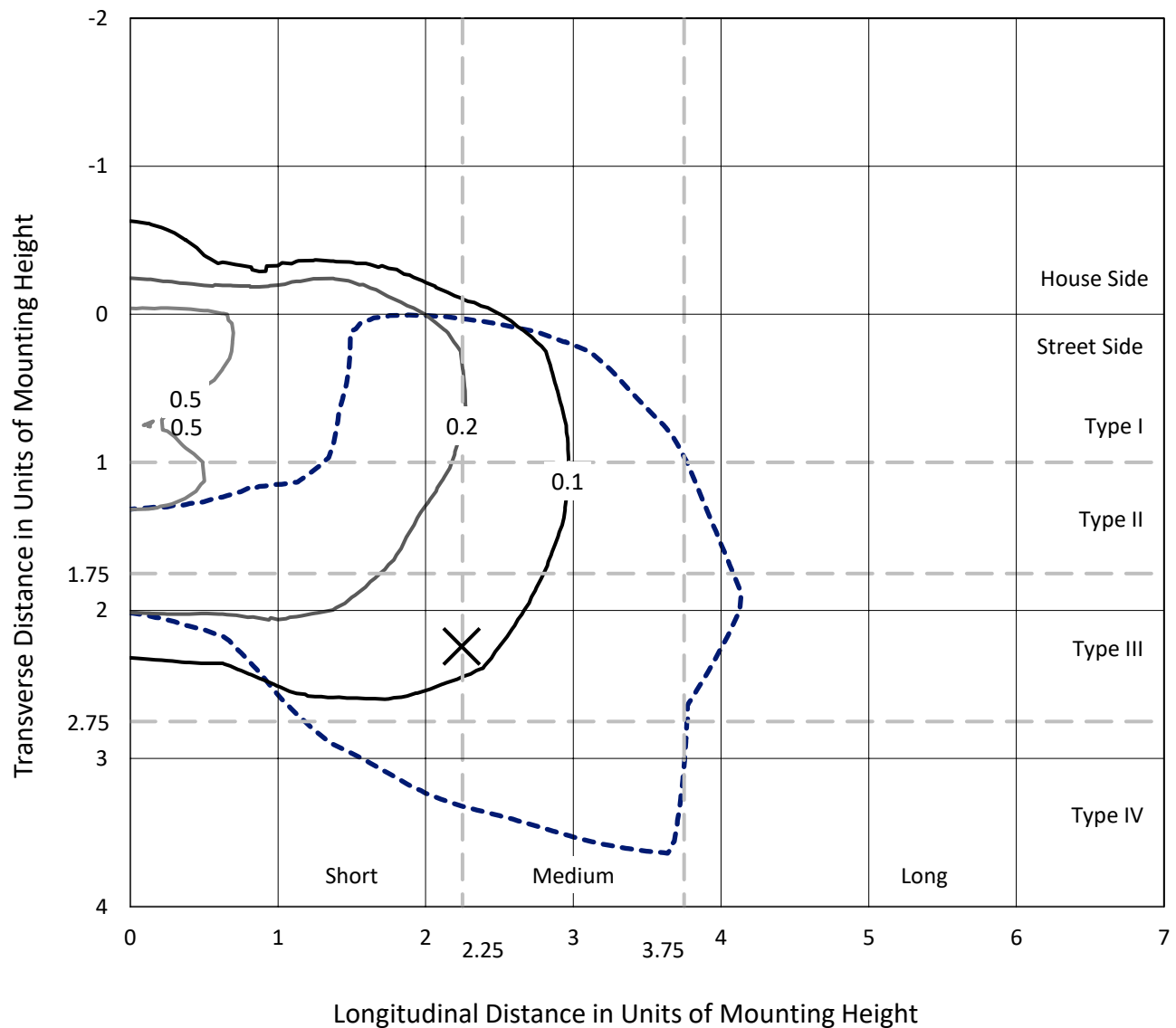
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

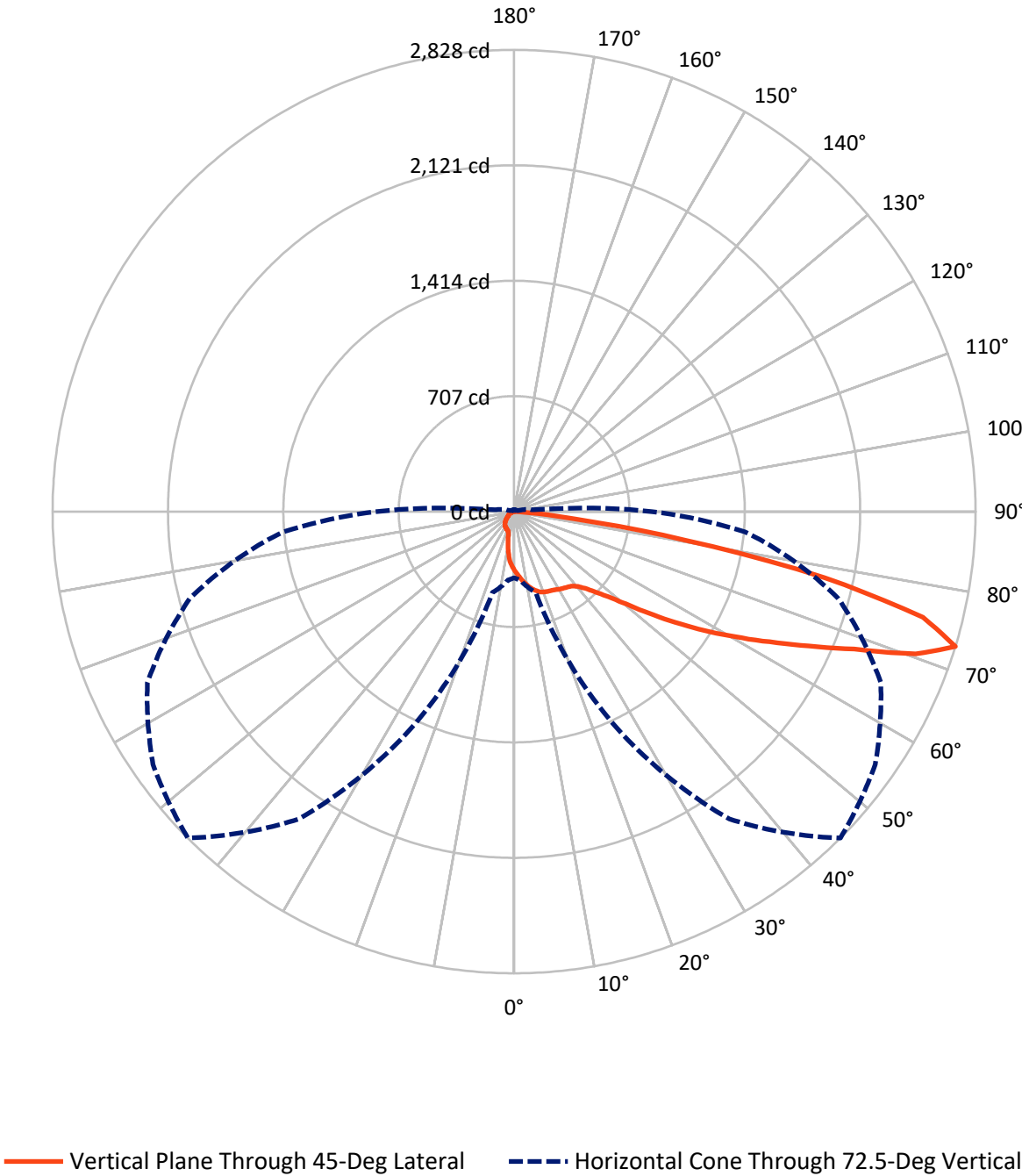
× Max cd
- - - 1/2 Max cd



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



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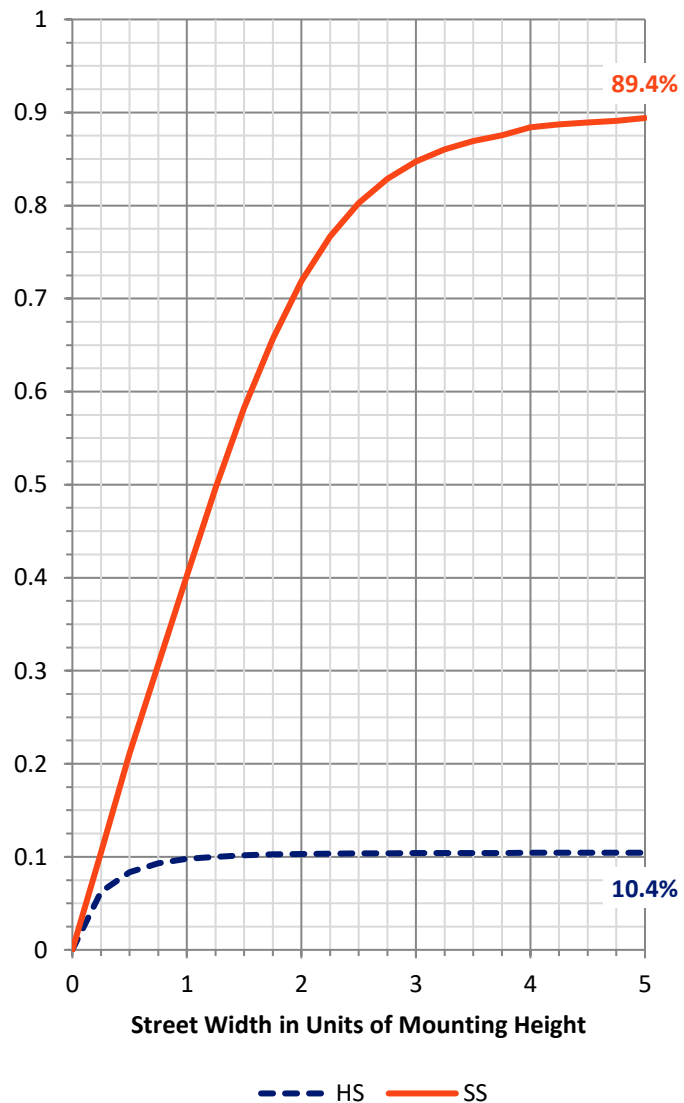
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	345.3	0.0	345.3
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	2940.9	0.0	2940.9
	% Fixture	89.5	0.0	89.5
Total	Lumens	3286.1	0.0	3286.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.9	1.0
10°-20°	99.1	3.0
20°-30°	162.8	5.0
30°-40°	230.9	7.0
40°-50°	381.6	11.6
50°-60°	685.5	20.9
60°-70°	951.9	29.0
70°-80°	690.5	21.0
80°-90°	49.9	1.5
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°	3286.1	100.0
0°-180°	3286.1	100.0

Coefficient of Utilization



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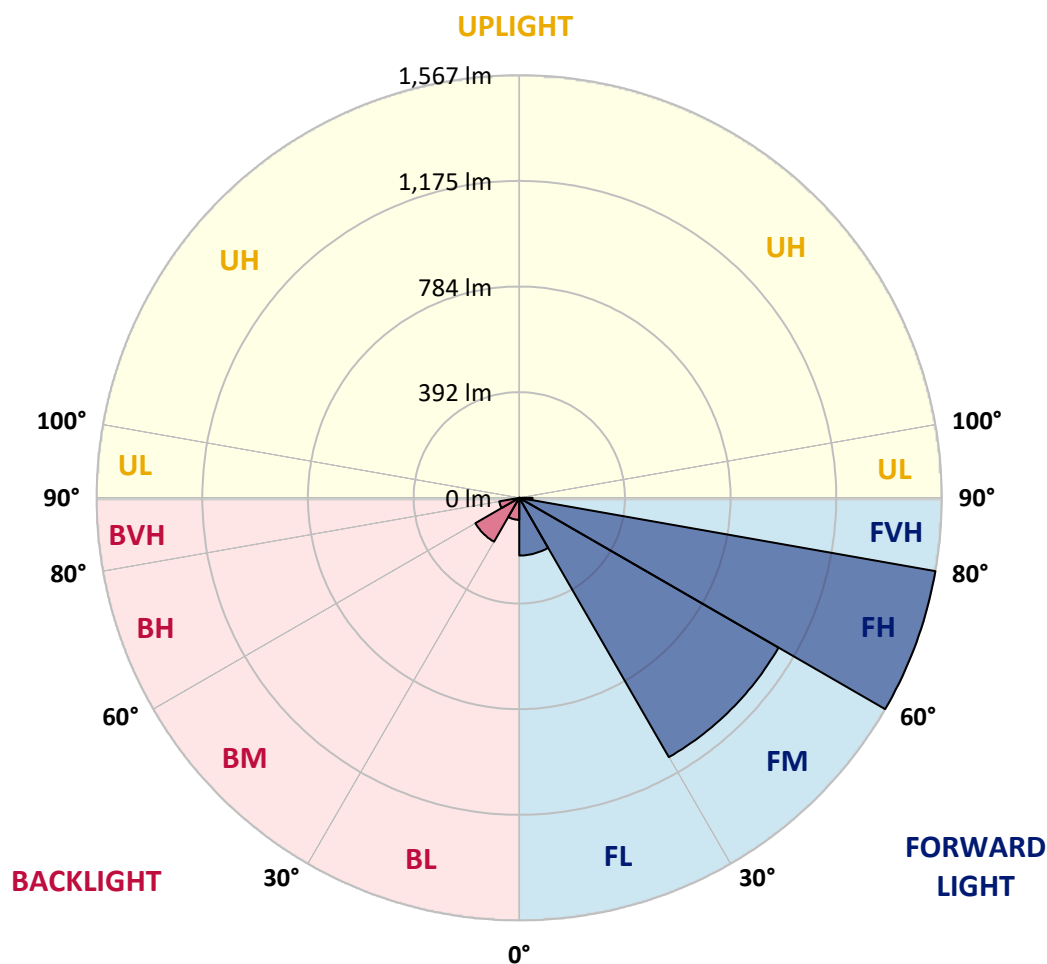
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	214.1	6.5			
FM	(30°-60°)	1110.2	33.8			
FH	(60°-80°)	1567.1	47.7			G1/1800
FVH	(80°-90°)	49.5	1.5			G1/100
BL	(0°-30°)	81.8	2.5	B0/110		
BM	(30°-60°)	187.8	5.7	B0/220		
BH	(60°-80°)	75.3	2.3	B0/110		G0/110
BVH	(80°-90°)	0.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	360.0	360.0	360.0	360.0	360.0	360.0	360.0	360.0	360.0	360.0	360.0
2.5°	393.2	393.9	393.4	390.7	386.2	383.8	382.4	377.9	375.0	369.9	364.5
5°	429.3	432.0	430.4	425.1	416.6	410.5	408.7	399.4	391.1	381.5	370.3
7.5°	467.7	469.0	466.1	459.1	447.7	437.4	435.8	423.0	409.8	395.0	379.8
10°	500.9	502.5	497.9	487.9	474.9	462.1	459.8	445.7	430.0	411.8	392.3
12.5°	528.7	530.2	524.4	512.3	497.9	484.7	482.5	467.7	450.4	430.2	406.0
15°	549.8	552.7	544.8	531.8	516.3	503.1	501.9	487.4	470.6	448.1	422.4
17.5°	562.1	565.0	557.6	541.9	528.7	517.4	516.1	504.0	488.3	466.8	438.3
20°	564.2	566.8	558.9	545.3	534.3	525.3	524.6	515.9	504.5	483.8	455.5
22.5°	558.1	561.4	554.2	543.2	535.7	530.9	530.0	525.1	518.5	501.1	471.7
25°	551.8	554.5	549.1	539.5	535.5	534.9	535.7	534.7	533.4	518.5	490.6
27.5°	551.3	554.2	548.2	539.0	536.8	541.5	542.1	546.4	547.6	534.5	508.7
30°	555.1	557.2	551.3	541.7	540.6	551.3	551.6	559.1	561.0	548.0	526.6
32.5°	563.4	565.7	559.9	545.7	544.2	559.1	559.9	570.0	572.9	562.3	545.5
35°	582.9	585.7	578.9	557.0	551.3	566.6	568.6	580.5	586.3	577.6	565.0
37.5°	631.6	623.8	614.6	579.6	567.7	578.2	581.6	595.5	605.9	595.7	588.3
40°	752.6	727.9	699.2	618.2	596.4	603.1	605.9	619.7	633.9	624.0	620.4
42.5°	934.0	904.9	858.6	707.0	639.7	643.1	645.1	657.2	677.2	669.3	670.2
45°	1095.7	1085.2	1038.1	858.6	720.7	704.1	706.5	712.8	742.2	739.3	745.2
47.5°	1220.0	1213.9	1177.6	1032.7	857.5	778.8	785.8	788.6	831.1	841.3	857.1
50°	1315.5	1313.3	1280.7	1187.5	1036.3	888.9	891.3	885.1	948.5	974.2	1004.0
52.5°	1405.7	1413.4	1389.3	1331.3	1227.1	1033.1	1032.7	1003.1	1088.8	1127.3	1178.2
55°	1487.2	1489.8	1492.3	1477.9	1419.1	1197.3	1193.1	1144.6	1251.4	1291.3	1346.4
57.5°	1563.6	1564.8	1586.7	1616.1	1619.0	1373.6	1365.8	1307.7	1429.1	1457.6	1491.4
60°	1615.0	1620.1	1666.5	1748.2	1783.9	1555.5	1551.2	1492.1	1609.9	1623.1	1616.7
62.5°	1541.0	1572.4	1689.4	1851.4	1939.5	1757.2	1755.2	1699.6	1800.0	1789.2	1735.4
65°	1247.3	1300.5	1506.4	1921.2	2092.3	1982.4	1985.3	1926.1	1995.4	1960.4	1831.9
67.5°	872.6	928.6	1172.2	1926.8	2263.0	2246.8	2263.6	2170.7	2202.8	2124.4	1854.7
70°	603.4	632.3	790.9	1806.0	2396.0	2611.1	2610.7	2471.4	2409.3	2199.0	1738.1
72.5°	405.8	420.8	513.6	1432.8	2298.2	2827.6	2814.5	2701.1	2478.8	2056.7	1420.0
75°	171.2	182.1	237.8	805.2	1818.1	2586.9	2551.6	2387.0	2202.4	1619.5	886.0
77.5°	54.3	59.0	93.8	288.2	1001.5	1944.4	1907.2	1490.8	1476.1	812.4	323.9
80°	25.8	30.0	52.7	115.7	394.1	1057.6	1052.5	676.3	635.0	219.4	65.1
82.5°	11.2	13.2	29.1	61.9	176.3	377.3	384.9	230.1	190.4	83.2	20.0
85°	3.6	4.7	13.4	28.5	74.5	93.8	92.7	54.7	76.7	45.3	7.0
87.5°	0.0	0.0	4.5	6.5	7.6	5.4	6.0	4.7	21.3	12.6	2.5
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°	360.0	360.0	360.0	360.0	360.0	360.0	360.0	360.0	360.0	360.0	360.0
2.5°	361.8	358.2	351.9	346.1	340.9	335.8	332.6	328.2	327.7	327.7	328.8
5°	364.3	358.4	347.3	335.4	321.6	308.6	295.6	283.1	279.0	276.1	277.5
7.5°	371.5	362.2	344.5	321.8	295.8	267.3	247.4	225.9	217.6	213.1	213.7
10°	381.8	369.2	342.2	302.6	260.5	221.6	193.1	169.8	160.8	157.0	157.0
12.5°	393.2	377.7	338.2	278.6	221.6	175.2	147.4	136.6	135.3	135.3	135.3
15°	406.9	388.1	331.3	250.3	181.0	138.6	128.7	129.1	130.6	131.4	131.4
17.5°	421.0	399.0	320.3	218.7	145.1	124.7	124.9	125.6	126.7	127.6	127.6
20°	436.2	410.0	305.8	185.0	124.5	120.6	121.4	122.0	122.9	123.4	123.6
22.5°	452.6	420.4	288.4	152.1	117.6	117.3	117.6	118.2	119.3	119.3	119.8
25°	470.2	431.8	268.8	128.1	114.0	114.0	114.4	114.8	115.7	115.7	115.9
27.5°	488.1	442.3	247.8	115.5	110.8	110.6	110.6	111.2	111.7	111.9	112.1
30°	507.8	454.7	227.0	112.9	108.3	107.2	106.5	107.0	107.4	107.6	108.1
32.5°	528.0	466.6	208.4	114.0	105.9	103.8	101.6	101.2	101.2	102.1	102.7
35°	550.4	479.6	194.0	117.8	104.6	98.9	95.3	93.3	93.6	94.9	95.5
37.5°	577.4	495.3	183.5	121.2	103.6	93.3	87.4	85.0	83.4	85.0	84.6
40°	612.5	518.3	175.9	123.8	102.5	86.8	78.9	74.9	72.0	72.9	72.5
42.5°	664.4	554.7	172.9	124.0	100.0	79.1	70.2	64.8	60.6	60.8	59.9
45°	737.1	612.1	188.0	121.2	94.6	70.9	61.0	53.8	51.1	50.4	49.6
47.5°	836.6	695.8	222.7	115.1	86.8	62.8	52.1	46.0	44.0	42.8	42.1
50°	970.1	803.2	261.3	108.3	78.9	55.1	44.6	40.8	39.5	38.3	38.1
52.5°	1124.8	912.2	292.9	101.6	71.1	48.5	40.0	37.7	36.6	35.7	35.5
55°	1266.9	987.4	291.1	94.4	63.4	43.0	36.6	35.3	33.8	33.0	32.5
57.5°	1355.3	997.9	240.0	86.6	54.7	38.8	33.4	32.5	31.0	29.8	29.6
60°	1395.8	937.8	168.2	76.3	46.0	34.7	30.0	29.6	27.6	26.0	25.5
62.5°	1403.2	826.2	112.1	63.4	38.3	31.0	26.6	26.0	23.4	20.6	19.3
65°	1373.2	666.4	77.6	49.6	32.7	27.0	22.9	21.5	18.7	15.9	15.1
67.5°	1278.1	467.9	54.0	35.7	27.8	21.3	18.1	17.7	15.5	13.2	12.6
70°	1103.8	266.7	36.1	26.6	21.9	14.6	14.3	14.8	12.6	10.8	9.8
72.5°	846.3	122.0	22.4	19.5	15.1	9.8	11.5	11.7	9.6	8.1	7.2
75°	498.2	52.3	14.1	12.6	7.6	6.5	8.3	8.5	6.5	5.1	4.5
77.5°	169.5	19.8	9.0	7.4	3.8	3.6	5.4	5.4	3.6	2.0	1.5
80°	38.5	7.4	4.5	2.9	1.8	1.5	1.8	1.5	0.9	0.2	0.0
82.5°	11.0	2.9	1.8	1.1	0.7	0.7	0.2	0.0	0.0	0.0	0.0
85°	3.2	1.3	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.3	0.2	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)