

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: P959463

Luminaire Tested: **NAV-SB1A-830-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959463
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-830-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4084.6 lumens
Efficiency: N/A
Efficacy: 132.2 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

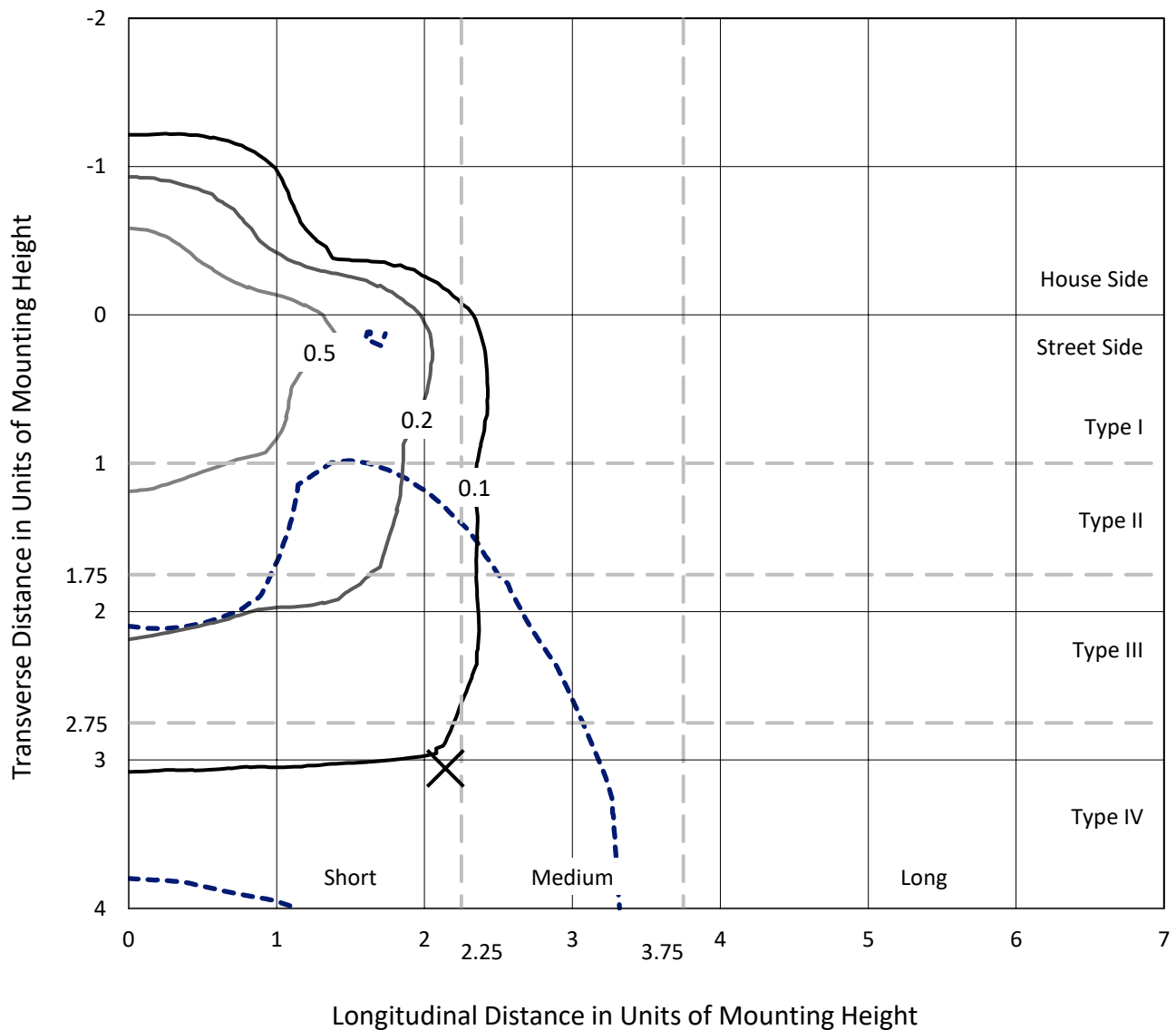


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

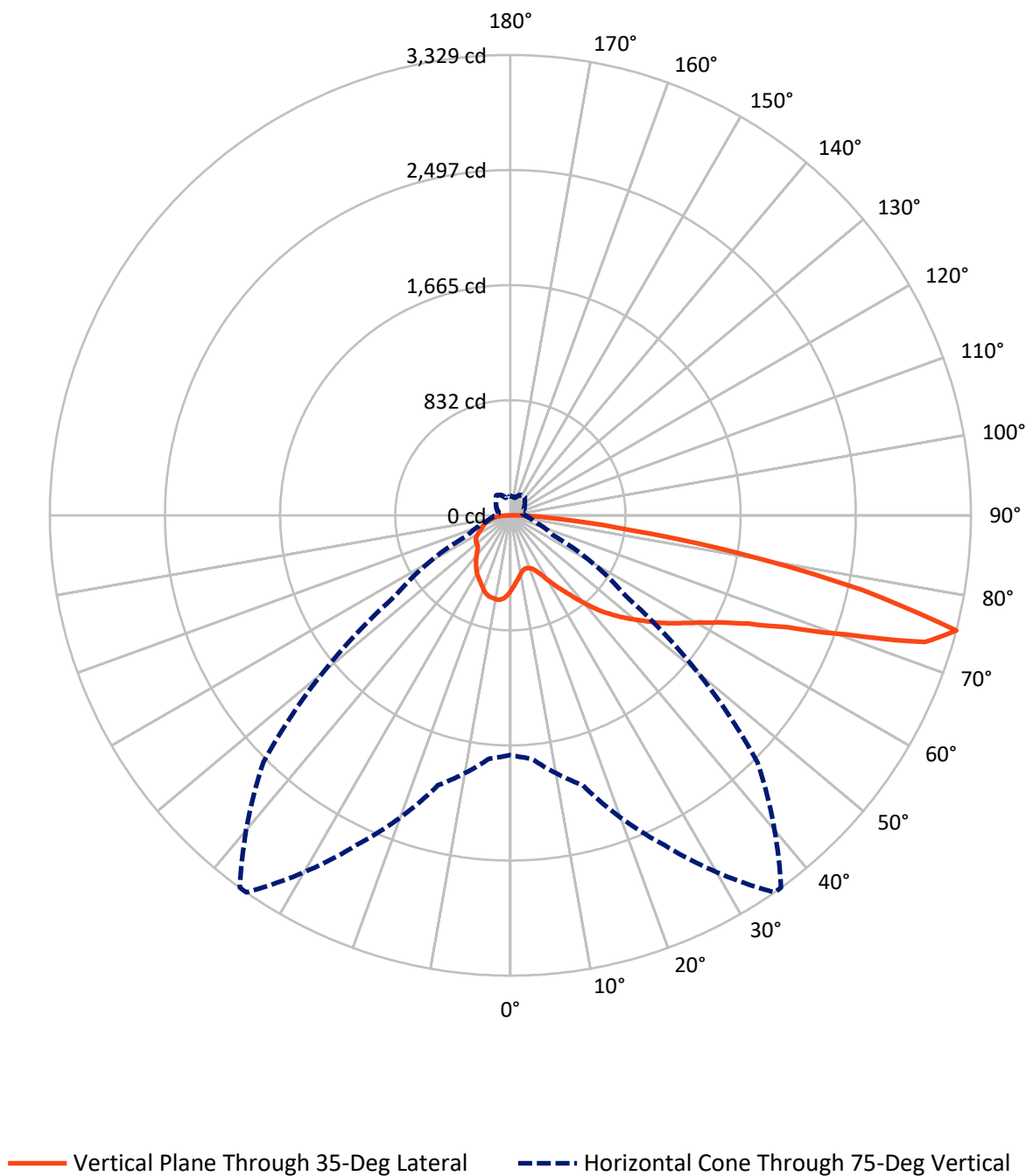


Based on 25 foot mounting height. Maximum calculated value = 1 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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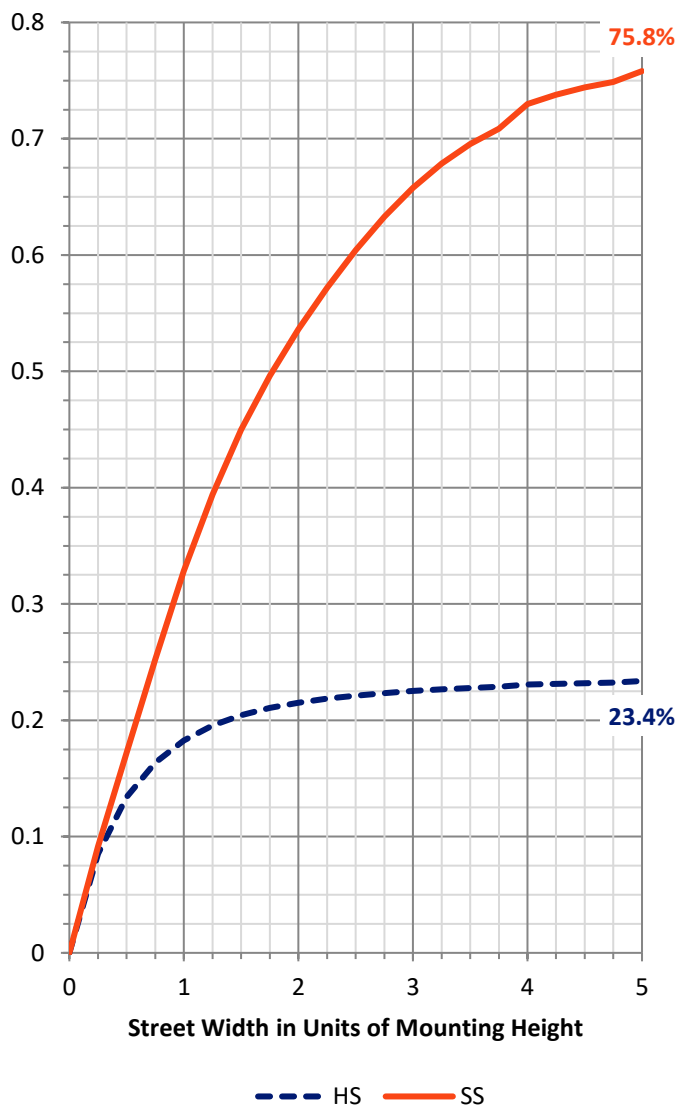
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	972.0	0.0	972.0
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	3112.6	0.0	3112.6
	% Fixture	76.2	0.0	76.2
Total	Lumens	4084.6	0.0	4084.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.5	1.3
10°-20°	148.7	3.6
20°-30°	249.6	6.1
30°-40°	387.9	9.5
40°-50°	575.8	14.1
50°-60°	794.9	19.5
60°-70°	964.4	23.6
70°-80°	797.0	19.5
80°-90°	114.6	2.8
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°	4084.6	100.0
0°-180°	4084.6	100.0

Coefficient of Utilization



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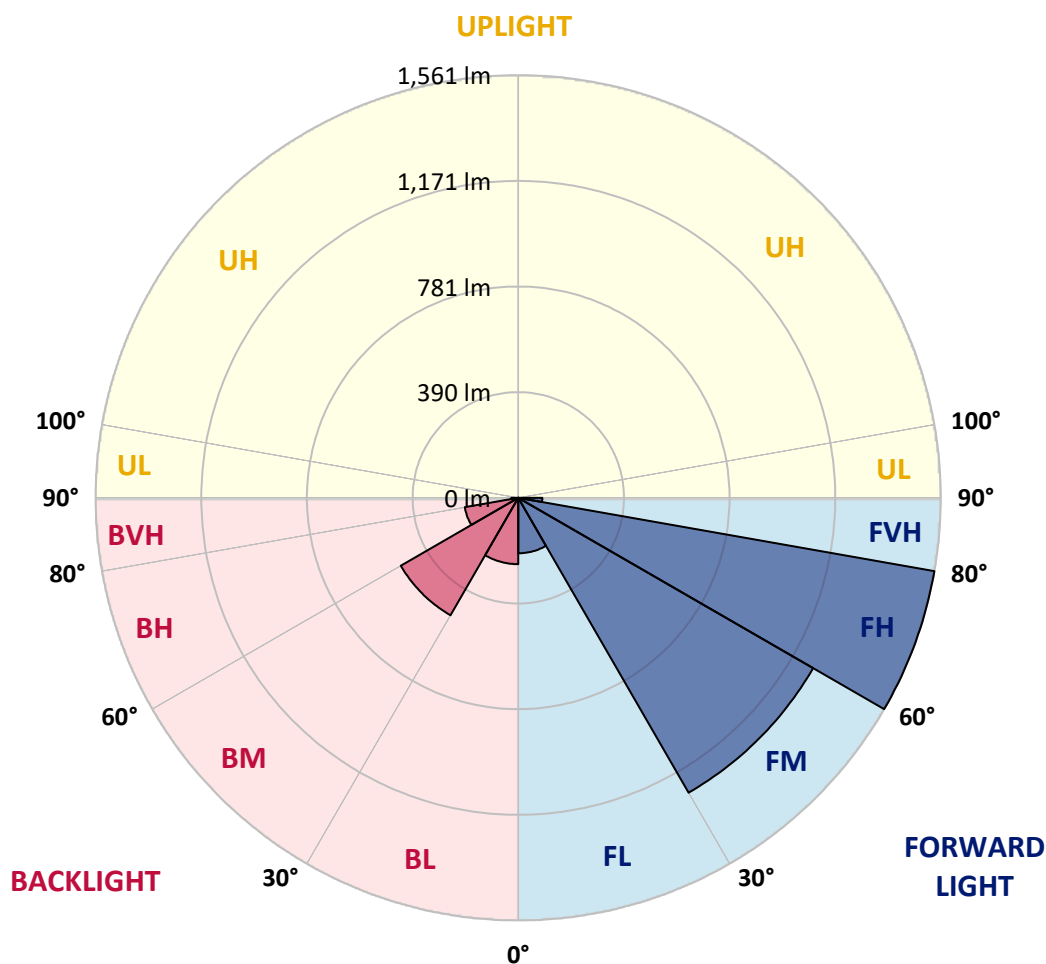
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	204.8	5.0			
FM	(30°-60°)	1257.8	30.8			
FH	(60°-80°)	1561.1	38.2			G1/1800
FVH	(80°-90°)	88.8	2.2			G1/100
BL	(0°-30°)	245.0	6.0	B1/500		
BM	(30°-60°)	500.9	12.3	B1/1000		
BH	(60°-80°)	200.4	4.9	B1/500		G1/500
BVH	(80°-90°)	25.8	0.6			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°	36°	45°	55°	65°	75°	85°
0°	544.3	544.3	544.3	544.3	544.3	544.3	544.3	544.3	544.3	544.3	544.3
2.5°	501.9	505.0	506.4	505.6	509.0	508.5	513.2	519.0	526.8	534.5	545.8
5°	463.3	466.6	469.4	472.1	478.5	480.5	487.8	498.9	513.4	528.2	546.7
7.5°	427.3	430.2	434.6	439.4	450.3	452.2	464.3	481.5	501.9	523.6	549.2
10°	397.9	400.8	405.4	410.9	424.5	426.8	442.3	465.2	491.8	519.2	551.9
12.5°	385.3	386.2	388.9	394.4	406.1	407.6	424.7	450.9	481.9	515.8	555.8
15°	384.7	386.4	386.6	389.5	399.2	399.9	415.5	441.7	475.6	515.2	561.7
17.5°	391.2	392.6	390.6	392.4	400.6	401.7	414.0	437.2	473.7	518.0	571.9
20°	409.0	410.0	404.1	401.7	407.6	408.5	420.7	440.0	475.6	524.0	585.8
22.5°	446.5	447.1	432.6	422.6	423.1	423.5	434.1	451.8	483.4	534.8	603.5
25°	505.0	504.6	481.3	462.2	451.1	448.6	455.7	470.8	496.4	549.2	626.3
27.5°	573.5	570.1	546.9	518.2	494.2	490.7	489.1	495.5	515.0	568.2	654.1
30°	650.8	647.6	622.7	585.2	551.9	546.1	531.5	528.2	542.5	594.0	692.7
32.5°	735.5	733.5	703.8	658.3	613.7	607.0	582.5	573.7	585.0	633.0	746.6
35°	806.7	804.8	780.1	733.3	678.8	670.7	645.6	635.7	641.4	683.2	817.0
37.5°	870.8	870.0	848.8	811.9	755.6	745.7	717.6	714.3	713.2	749.2	902.5
40°	930.5	928.3	906.2	886.8	845.0	836.0	811.3	808.4	800.0	830.5	999.2
42.5°	996.5	990.8	958.8	949.8	938.5	930.9	916.1	916.6	898.0	922.1	1101.7
45°	1050.4	1047.1	1014.2	1008.9	1021.0	1017.9	1030.7	1034.0	998.0	1018.1	1208.1
47.5°	1108.2	1105.2	1077.4	1073.6	1106.5	1107.4	1152.6	1153.7	1095.7	1118.0	1314.8
50°	1179.6	1175.2	1147.6	1152.2	1189.1	1192.4	1275.2	1267.7	1185.5	1219.3	1420.4
52.5°	1226.6	1229.3	1223.3	1230.8	1281.1	1284.2	1395.7	1376.6	1274.5	1319.4	1524.3
55°	1261.3	1266.6	1285.1	1302.4	1378.3	1381.4	1509.5	1480.1	1348.3	1412.1	1621.9
57.5°	1305.8	1298.4	1333.0	1366.6	1470.6	1478.8	1620.1	1579.9	1413.7	1492.0	1688.8
60°	1369.9	1364.6	1391.5	1441.3	1574.0	1587.0	1737.2	1669.8	1461.5	1555.4	1701.8
62.5°	1499.8	1486.6	1490.7	1534.6	1704.3	1721.5	1869.2	1748.1	1485.4	1580.1	1632.0
65°	1693.8	1671.2	1649.9	1680.4	1887.7	1904.8	2018.2	1809.7	1476.6	1532.2	1446.8
67.5°	1938.3	1915.7	1889.7	1918.4	2158.0	2171.5	2202.2	1844.5	1407.0	1347.7	1119.3
70°	2139.9	2131.5	2162.6	2280.7	2589.7	2590.2	2438.0	1815.8	1216.5	955.5	647.6
72.5°	2113.1	2108.1	2272.1	2637.4	3133.7	3122.0	2661.2	1598.5	819.5	431.0	242.7
75°	1733.6	1766.5	2020.7	2631.0	3329.2	3327.7	2524.6	1016.2	339.0	178.7	125.5
77.5°	929.6	981.7	1311.9	1942.5	2599.0	2638.0	1774.9	355.5	145.5	114.4	86.8
80°	303.2	348.7	522.9	989.0	1688.8	1681.5	760.7	139.6	99.6	81.1	60.1
82.5°	128.7	134.1	233.6	467.0	866.7	853.2	242.2	80.2	70.0	55.5	37.1
85°	50.3	56.3	103.1	216.0	375.4	367.3	87.4	39.8	44.8	36.2	22.0
87.5°	16.6	20.1	36.9	74.0	116.8	112.6	21.4	13.7	19.5	16.6	8.0
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°	544.3	544.3	544.3	544.3	544.3	544.3	544.3	544.3	544.3	544.3	544.3
2.5°	549.0	552.5	556.7	562.8	568.2	572.6	577.2	580.0	581.2	584.5	584.2
5°	552.9	560.7	571.0	581.2	591.1	597.1	602.4	605.1	607.4	609.3	609.7
7.5°	559.5	569.5	585.8	599.1	607.4	612.3	615.8	615.0	615.8	616.3	616.9
10°	565.3	579.2	598.6	611.2	617.7	617.9	616.9	613.9	612.3	612.5	612.9
12.5°	572.2	587.6	608.5	619.2	620.9	616.0	612.3	607.0	605.1	604.1	603.7
15°	581.4	599.1	619.4	623.4	618.9	612.7	606.4	597.8	593.4	589.8	590.9
17.5°	592.7	612.1	627.8	624.9	615.4	605.3	594.9	581.9	572.8	569.1	569.3
20°	608.3	625.8	634.2	621.6	607.2	591.7	574.1	558.2	549.8	546.1	545.6
22.5°	627.3	644.1	640.3	615.8	595.5	570.8	548.7	537.0	532.8	530.1	530.6
25°	650.1	664.4	644.7	607.4	576.4	542.9	525.9	522.2	520.2	518.2	518.2
27.5°	679.7	687.4	648.1	595.1	546.3	513.4	507.2	507.9	507.2	503.9	504.6
30°	718.7	717.2	651.2	575.0	511.9	486.7	487.1	489.9	490.5	488.2	489.3
32.5°	770.2	754.5	652.7	549.0	479.0	463.3	463.7	466.8	469.0	465.2	467.0
35°	832.5	798.1	650.3	516.3	453.6	441.0	437.7	438.5	439.2	435.6	438.1
37.5°	905.1	846.9	639.5	480.0	432.6	419.1	412.0	406.1	402.5	399.2	401.4
40°	984.8	900.1	619.6	444.7	409.2	396.0	385.3	374.0	362.1	357.7	359.7
42.5°	1068.3	954.8	595.5	410.9	382.2	371.4	360.2	343.8	326.0	316.8	318.0
45°	1154.9	1010.9	571.9	377.6	354.6	350.0	336.9	317.3	297.9	286.4	285.5
47.5°	1239.6	1063.8	537.2	344.0	328.8	333.8	323.7	305.7	283.9	265.9	263.8
50°	1320.7	1113.6	480.5	310.1	307.8	329.0	319.3	293.3	268.5	245.3	243.3
52.5°	1401.1	1153.7	407.8	279.1	296.5	327.7	313.5	284.8	254.6	230.3	227.7
55°	1469.3	1174.5	337.8	252.6	280.2	316.4	306.7	274.9	234.9	209.1	206.9
57.5°	1508.2	1157.7	279.5	226.5	257.7	297.9	295.0	253.7	211.6	191.7	189.0
60°	1491.4	1089.7	231.9	203.8	236.3	277.8	274.7	232.8	193.6	174.9	172.2
62.5°	1398.8	960.1	194.1	184.0	216.8	257.3	254.4	216.6	180.0	161.8	159.0
65°	1212.5	781.0	164.7	167.4	197.2	232.5	236.7	203.2	169.1	151.5	148.6
67.5°	924.8	565.7	141.8	153.0	177.9	208.2	220.4	193.4	160.1	143.3	140.6
70°	527.1	321.2	122.3	139.1	160.9	185.7	207.8	185.7	150.4	136.4	134.7
72.5°	199.9	147.5	105.8	125.2	144.6	166.7	193.8	173.5	139.1	128.7	127.0
75°	106.7	89.9	89.0	108.9	125.9	148.2	176.4	161.6	130.7	136.0	140.4
77.5°	72.7	63.6	74.4	93.2	105.4	127.6	157.8	143.5	113.3	112.9	104.0
80°	50.3	45.0	60.5	75.0	81.5	107.3	137.8	123.2	92.2	86.1	82.4
82.5°	30.2	29.4	45.3	56.1	57.6	82.8	114.2	103.3	75.5	65.8	66.2
85°	16.6	17.4	28.9	32.9	33.5	57.8	89.4	79.9	58.1	48.8	49.2
87.5°	4.6	5.9	10.6	13.0	16.1	30.0	53.2	47.5	29.1	20.3	20.3
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)