

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: P959432

Luminaire Tested: **NAV-SB1A-827-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959432
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-827-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3953.4 lumens
Efficiency: N/A
Efficacy: 127.9 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



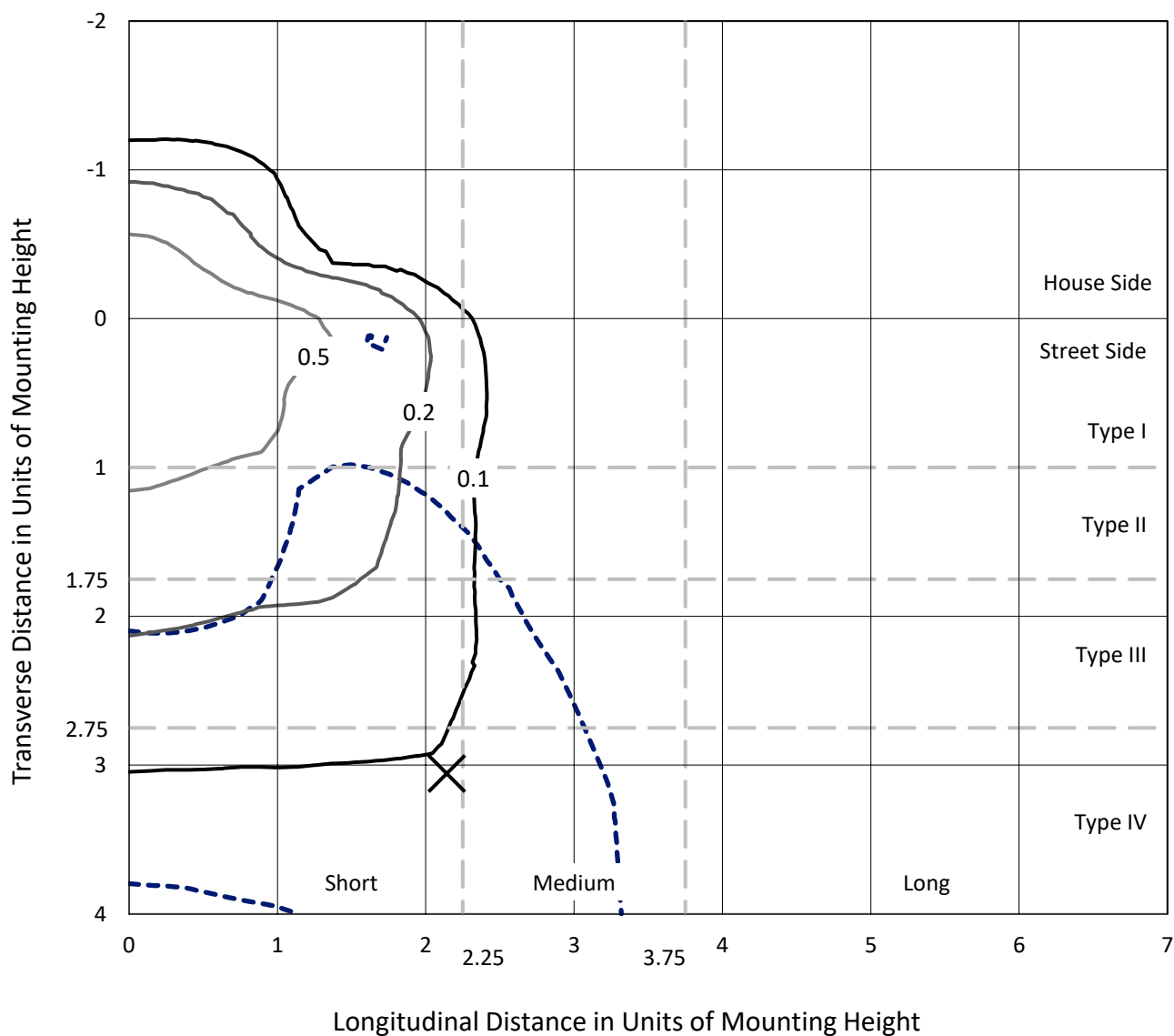
REPORT NUMBER: P959432

CATALOG NUMBER: NAV-SB1A-827-U-T4FT

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

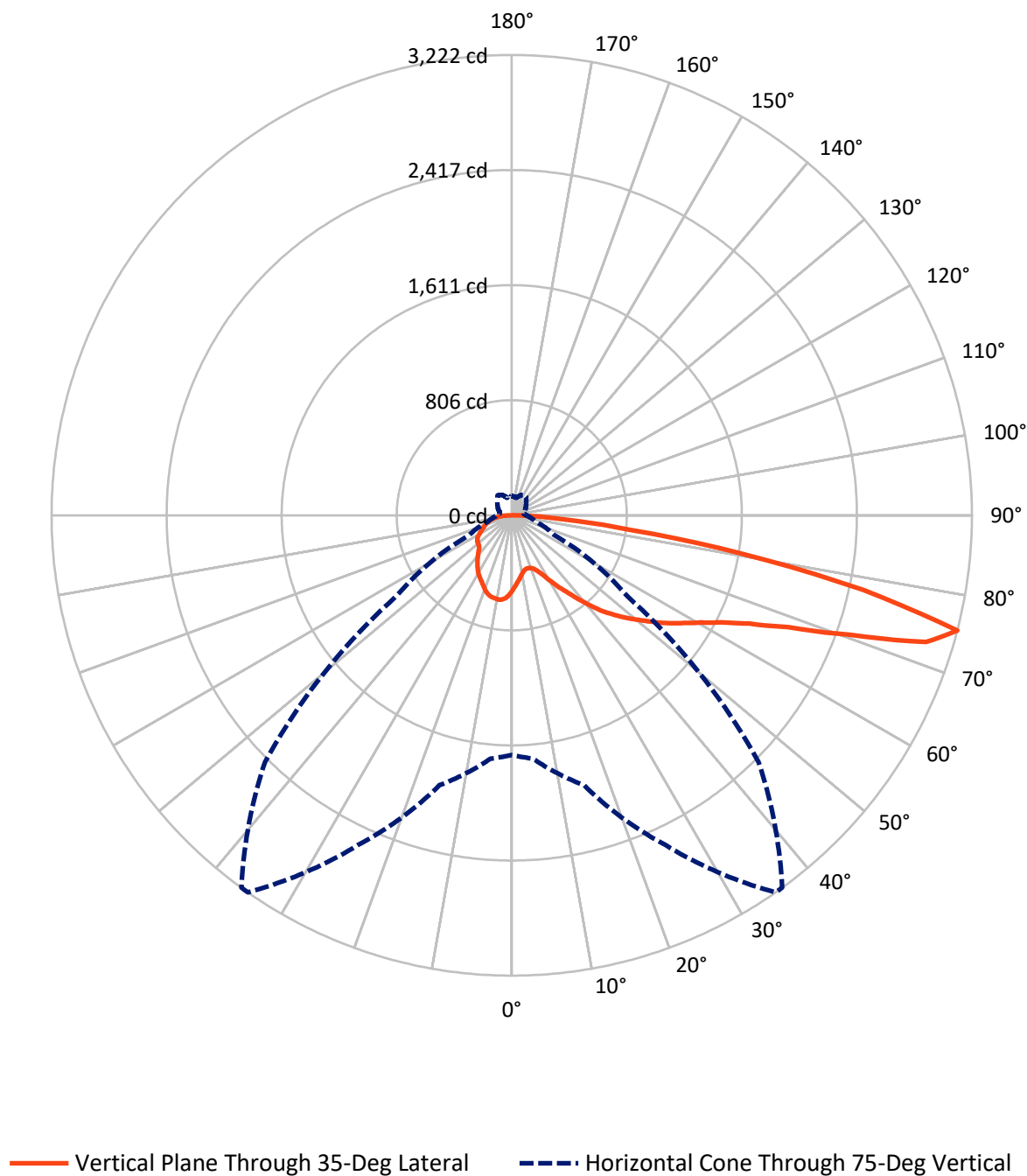


Based on 25 foot mounting height. Maximum calculated value = 0.9 fc

Type IV - Short - N/A

REPORT NUMBER: P959432
CATALOG NUMBER: NAV-SB1A-827-U-T4FT

Luminous Intensity Polar Plot



REPORT NUMBER: P959432

CATALOG NUMBER: NAV-SB1A-827-U-T4FT

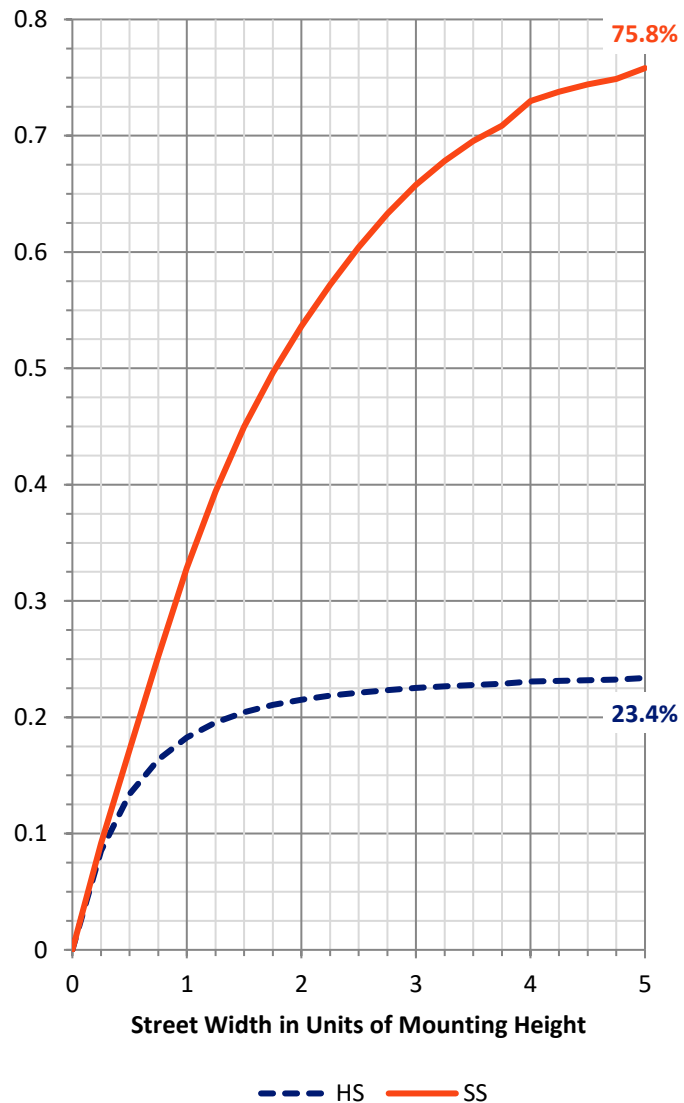
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	940.8	0.0	940.8
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	3012.6	0.0	3012.6
	% Fixture	76.2	0.0	76.2
Total	Lumens	3953.4	0.0	3953.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.9	1.3
10°-20°	143.9	3.6
20°-30°	241.6	6.1
30°-40°	375.5	9.5
40°-50°	557.3	14.1
50°-60°	769.4	19.5
60°-70°	933.5	23.6
70°-80°	771.4	19.5
80°-90°	111.0	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°	3953.4	100.0
0°-180°	3953.4	100.0

Coefficient of Utilization



REPORT NUMBER: P959432

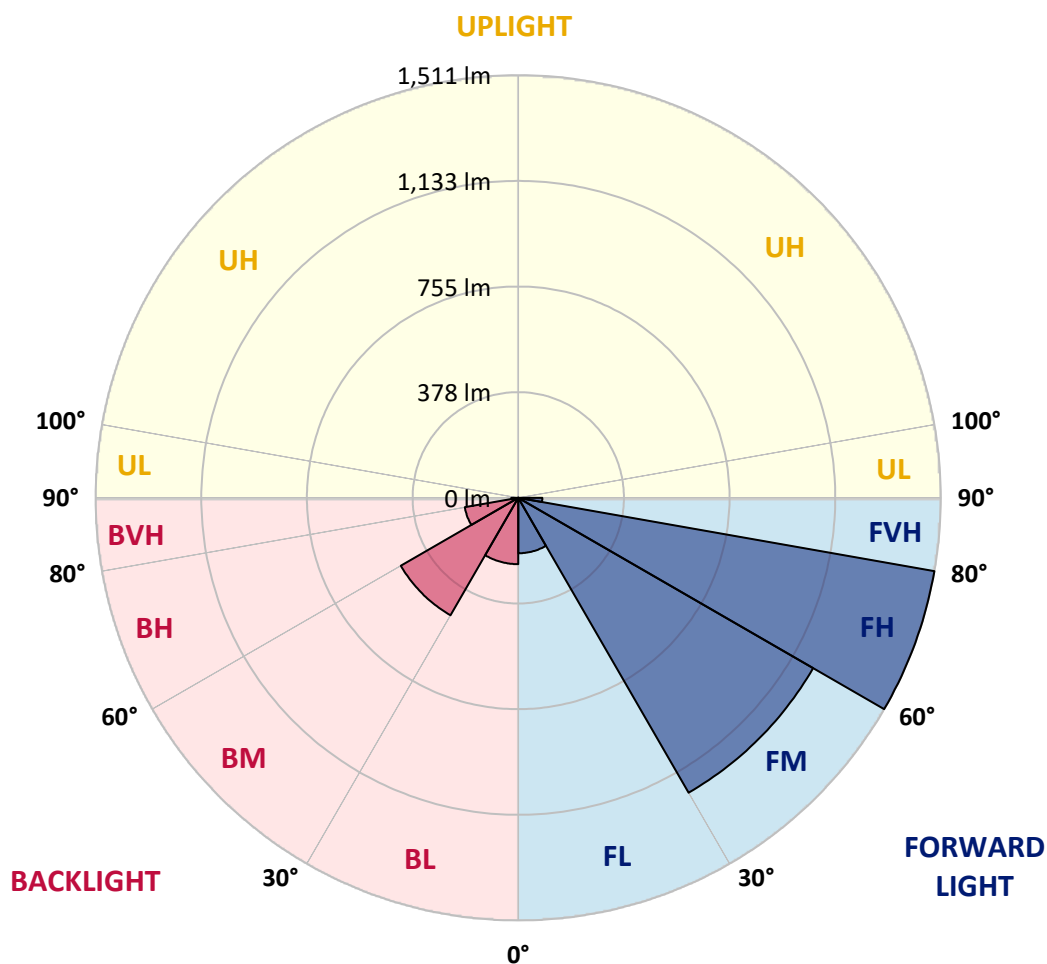
CATALOG NUMBER: NAV-SB1A-827-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	198.3	5.0			
FM	(30°-60°)	1217.4	30.8			
FH	(60°-80°)	1510.9	38.2			G1/1800
FVH	(80°-90°)	86.0	2.2			G1/100
BL	(0°-30°)	237.1	6.0	B1/500		
BM	(30°-60°)	484.8	12.3	B1/1000		
BH	(60°-80°)	194.0	4.9	B1/500		G1/500
BVH	(80°-90°)	25.0	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



REPORT NUMBER: P959432

CATALOG NUMBER: NAV-SB1A-827-U-T4FT

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8
2.5°	485.7	488.8	490.1	489.4	492.6	492.2	496.7	502.2	509.9	517.4	528.3
5°	448.3	451.6	454.4	456.9	463.1	465.0	472.1	482.8	496.9	511.3	529.2
7.5°	413.6	416.4	420.6	425.3	435.7	437.7	449.5	466.2	485.7	506.8	531.6
10°	385.1	387.9	392.4	397.7	410.8	413.1	428.0	450.3	475.9	502.5	534.1
12.5°	372.9	373.8	376.4	381.7	393.0	394.5	411.0	436.4	466.4	499.3	537.9
15°	372.3	374.0	374.2	377.0	386.4	387.0	402.2	427.4	460.3	498.6	543.7
17.5°	378.7	380.0	378.1	379.8	387.7	388.8	400.8	423.1	458.4	501.4	553.5
20°	395.9	396.9	391.1	388.8	394.5	395.3	407.1	426.0	460.3	507.2	567.0
22.5°	432.1	432.8	418.7	409.1	409.5	409.9	420.1	437.3	467.8	517.6	584.1
25°	488.8	488.3	465.9	447.3	436.6	434.3	441.2	455.6	480.4	531.6	606.1
27.5°	555.0	551.9	529.4	501.6	478.3	474.9	473.3	479.6	498.4	549.9	633.0
30°	629.9	626.9	602.7	566.3	534.1	528.5	514.4	511.3	525.1	574.9	670.5
32.5°	711.9	710.0	681.1	637.1	593.9	587.5	563.8	555.2	566.1	612.7	722.6
35°	780.7	779.0	755.1	709.8	657.0	649.0	624.9	615.3	620.8	661.2	790.8
37.5°	843.0	842.0	821.5	785.9	731.3	721.7	694.5	691.4	690.3	725.2	873.5
40°	900.7	898.5	877.1	858.3	817.9	809.1	785.3	782.4	774.3	803.8	967.1
42.5°	964.5	959.0	927.9	919.2	908.4	901.1	886.7	887.1	869.2	892.5	1066.2
45°	1016.7	1013.4	981.6	976.5	988.2	985.2	997.6	1000.8	966.1	985.4	1169.2
47.5°	1072.7	1069.7	1042.7	1039.1	1070.9	1071.8	1115.6	1116.7	1060.5	1082.1	1272.5
50°	1141.6	1137.4	1110.7	1115.2	1150.9	1154.0	1234.2	1226.9	1147.5	1180.2	1374.8
52.5°	1187.3	1189.8	1184.0	1191.3	1240.0	1243.0	1350.9	1332.3	1233.6	1276.9	1475.3
55°	1220.8	1225.9	1243.8	1260.5	1334.0	1337.0	1461.0	1432.5	1304.9	1366.7	1569.8
57.5°	1263.9	1256.6	1290.3	1322.8	1423.4	1431.3	1568.0	1529.2	1368.3	1444.1	1634.6
60°	1325.9	1320.8	1346.8	1394.9	1523.4	1536.0	1681.3	1616.1	1414.6	1505.4	1647.2
62.5°	1451.6	1438.8	1442.8	1485.3	1649.5	1666.1	1809.1	1692.1	1437.7	1529.4	1579.6
65°	1639.5	1617.4	1596.9	1626.4	1827.1	1843.6	1953.4	1751.6	1429.2	1483.0	1400.3
67.5°	1876.1	1854.2	1829.0	1856.8	2088.6	2101.8	2131.4	1785.2	1361.8	1304.3	1083.3
70°	2071.1	2063.0	2093.2	2207.5	2506.5	2506.9	2359.7	1757.5	1177.4	924.8	626.9
72.5°	2045.3	2040.4	2199.1	2552.7	3033.1	3021.8	2575.7	1547.1	793.1	417.2	234.8
75°	1677.9	1709.8	1955.8	2546.5	3222.3	3220.8	2443.5	983.6	328.1	172.9	121.4
77.5°	899.7	950.2	1269.7	1880.1	2515.5	2553.3	1717.9	344.1	140.8	110.7	83.9
80°	293.5	337.4	506.0	957.2	1634.6	1627.5	736.3	135.1	96.4	78.4	58.1
82.5°	124.6	129.8	226.1	452.0	838.9	825.8	234.4	77.6	67.8	53.6	35.9
85°	48.7	54.5	99.8	209.0	363.4	355.4	84.7	38.4	43.4	35.1	21.4
87.5°	16.0	19.5	35.7	71.6	113.1	109.0	20.7	13.2	18.8	16.0	7.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P959432

CATALOG NUMBER: NAV-SB1A-827-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8
2.5°	531.4	534.7	538.7	544.8	549.9	554.2	558.6	561.4	562.5	565.7	565.5
5°	535.2	542.6	552.7	562.5	572.2	577.9	583.0	585.6	587.9	589.7	590.1
7.5°	541.6	551.1	567.0	579.8	587.9	592.7	596.0	595.2	596.0	596.4	597.2
10°	547.1	560.6	579.4	591.5	597.8	598.0	597.2	594.2	592.7	592.9	593.3
12.5°	553.7	568.7	589.0	599.3	601.0	596.2	592.7	587.5	585.6	584.8	584.4
15°	562.7	579.8	599.5	603.3	599.0	593.1	586.9	578.5	574.3	570.8	571.9
17.5°	573.6	592.4	607.6	604.9	595.6	585.8	575.7	563.1	554.4	550.7	550.9
20°	588.8	605.7	613.8	601.6	587.7	572.8	555.7	540.3	532.2	528.5	528.1
22.5°	607.2	623.4	619.8	596.0	576.4	552.5	531.1	519.8	515.7	513.1	513.5
25°	629.1	643.1	624.0	587.9	557.8	525.5	509.1	505.4	503.5	501.6	501.6
27.5°	657.8	665.3	627.3	575.9	528.7	496.9	490.9	491.6	490.9	487.7	488.3
30°	695.7	694.1	630.3	556.6	495.4	471.1	471.5	474.3	474.7	472.5	473.7
32.5°	745.5	730.3	631.7	531.4	463.6	448.3	448.8	451.8	454.0	450.3	452.0
35°	805.8	772.3	629.5	499.7	439.0	426.8	423.6	424.5	425.1	421.7	424.0
37.5°	876.1	819.6	618.9	464.6	418.7	405.6	398.8	393.0	389.6	386.4	388.6
40°	953.1	871.1	599.7	430.4	396.1	383.2	372.9	362.0	350.5	346.2	348.2
42.5°	1034.0	924.1	576.4	397.7	369.9	359.5	348.6	332.7	315.5	306.7	307.8
45°	1117.8	978.4	553.5	365.4	343.3	338.8	326.2	307.1	288.3	277.2	276.3
47.5°	1199.9	1029.7	520.0	333.0	318.3	323.2	313.3	295.8	274.8	257.3	255.4
50°	1278.3	1077.8	465.0	300.0	298.0	318.5	309.0	283.8	259.8	237.5	235.5
52.5°	1356.1	1116.7	394.7	270.2	287.0	317.1	303.5	275.7	246.4	222.9	220.4
55°	1422.1	1136.8	327.0	244.5	271.2	306.3	296.8	266.1	227.4	202.4	200.3
57.5°	1459.7	1120.5	270.6	219.2	249.4	288.3	285.6	245.6	204.8	185.5	183.0
60°	1443.5	1054.7	224.4	197.3	228.7	268.9	265.9	225.3	187.5	169.2	166.7
62.5°	1353.9	929.3	187.9	178.0	209.9	249.0	246.2	209.6	174.1	156.6	153.9
65°	1173.5	755.9	159.4	162.0	190.9	225.1	229.1	196.6	163.7	146.6	143.8
67.5°	895.0	547.6	137.2	148.1	172.3	201.5	213.3	187.3	155.0	138.7	136.1
70°	510.1	311.0	118.4	134.7	155.8	179.8	201.1	179.8	145.5	132.1	130.4
72.5°	193.4	142.8	102.4	121.2	140.0	161.3	187.7	168.0	134.7	124.6	122.9
75°	103.2	87.0	86.1	105.4	121.8	143.4	170.8	156.4	126.5	131.6	135.9
77.5°	70.3	61.6	72.1	90.2	102.0	123.5	152.8	138.9	109.7	109.2	100.7
80°	48.7	43.6	58.5	72.7	78.8	103.8	133.4	119.2	89.4	83.3	79.7
82.5°	29.3	28.4	43.8	54.3	55.8	80.2	110.5	100.0	73.1	63.7	64.2
85°	16.0	16.9	28.0	31.9	32.5	56.0	86.5	77.4	56.2	47.3	47.7
87.5°	4.5	5.7	10.2	12.6	15.6	29.1	51.6	45.9	28.2	19.7	19.7
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)