

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: P959942

Luminaire Tested: **NAV-SB1B-827-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959942
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-827-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4976.4 lumens
Efficiency: N/A
Efficacy: 125.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G2

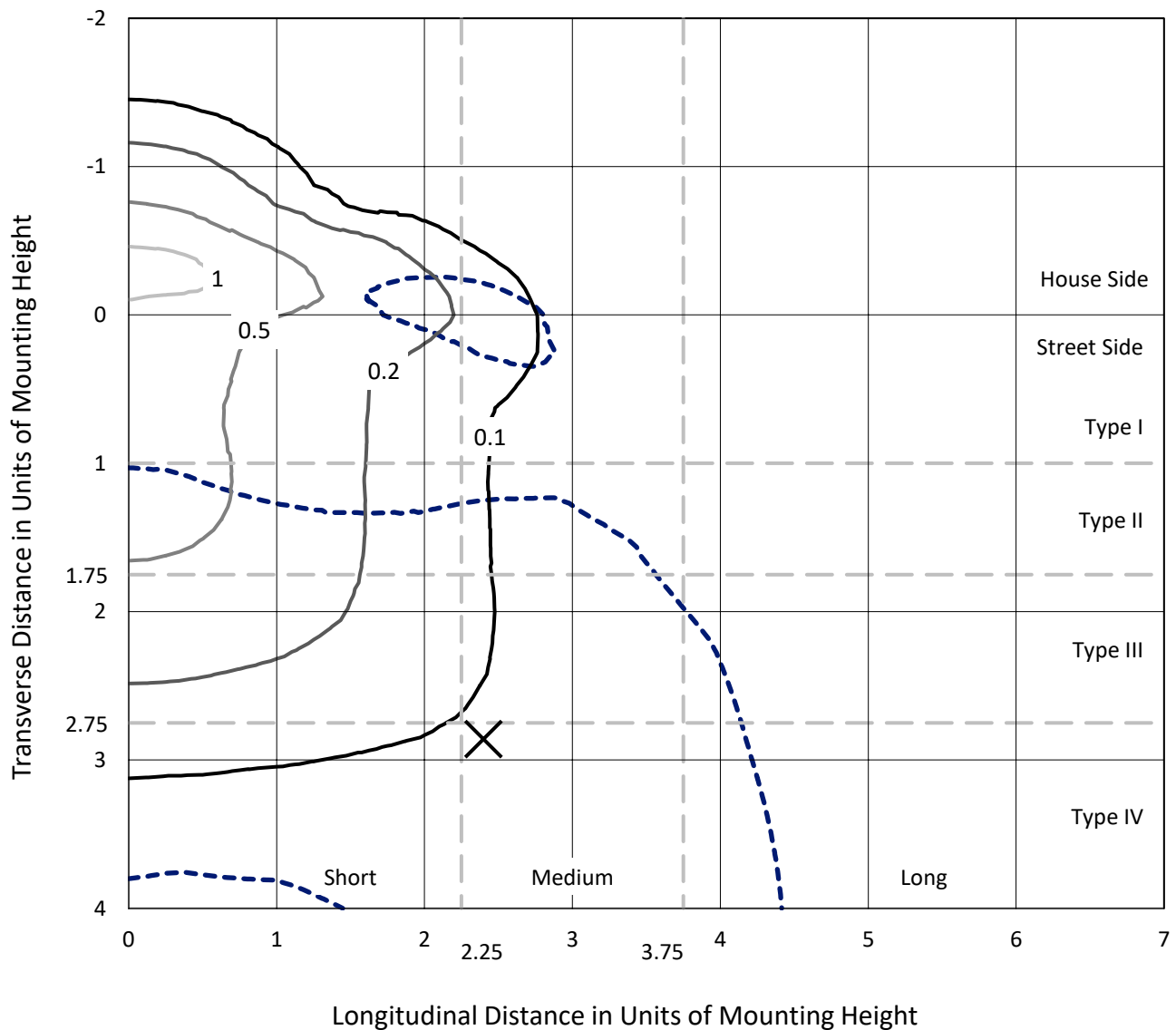
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

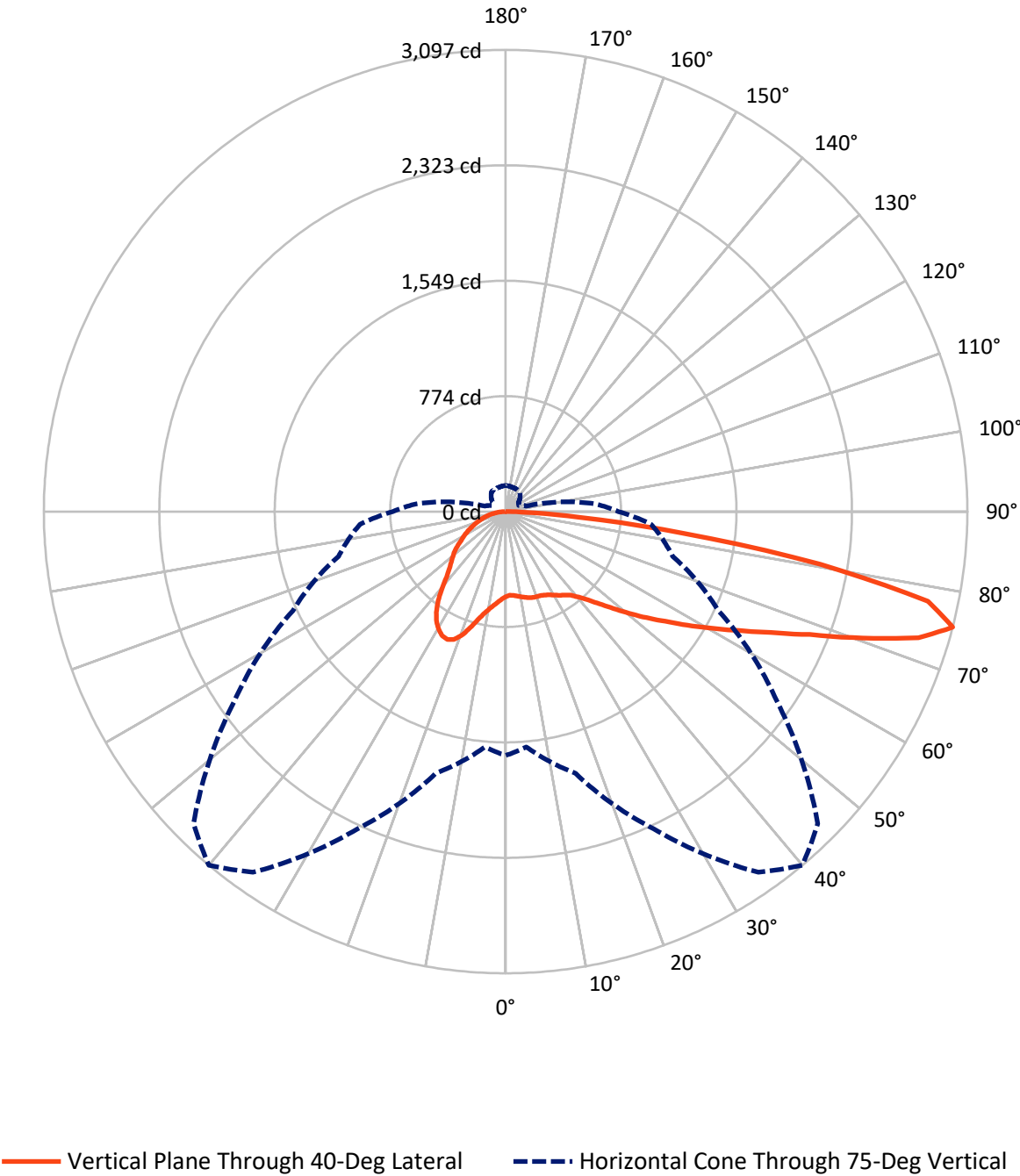
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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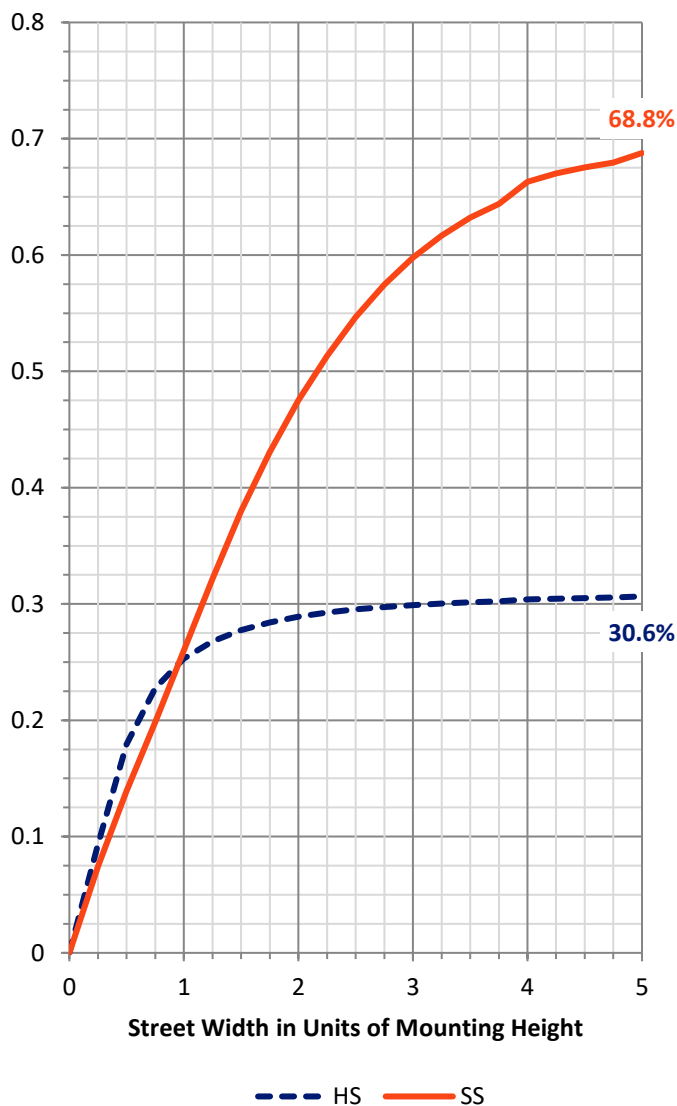
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1541.8	0.0	1541.8
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	3434.5	0.0	3434.5
	% Fixture	69.0	0.0	69.0
Total	Lumens	4976.4	0.0	4976.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.8	1.1
10°-20°	190.7	3.8
20°-30°	348.2	7.0
30°-40°	493.9	9.9
40°-50°	666.9	13.4
50°-60°	897.1	18.0
60°-70°	1138.7	22.9
70°-80°	1033.4	20.8
80°-90°	150.6	3.0
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°	4976.4	100.0
0°-180°	4976.4	100.0

Coefficient of Utilization



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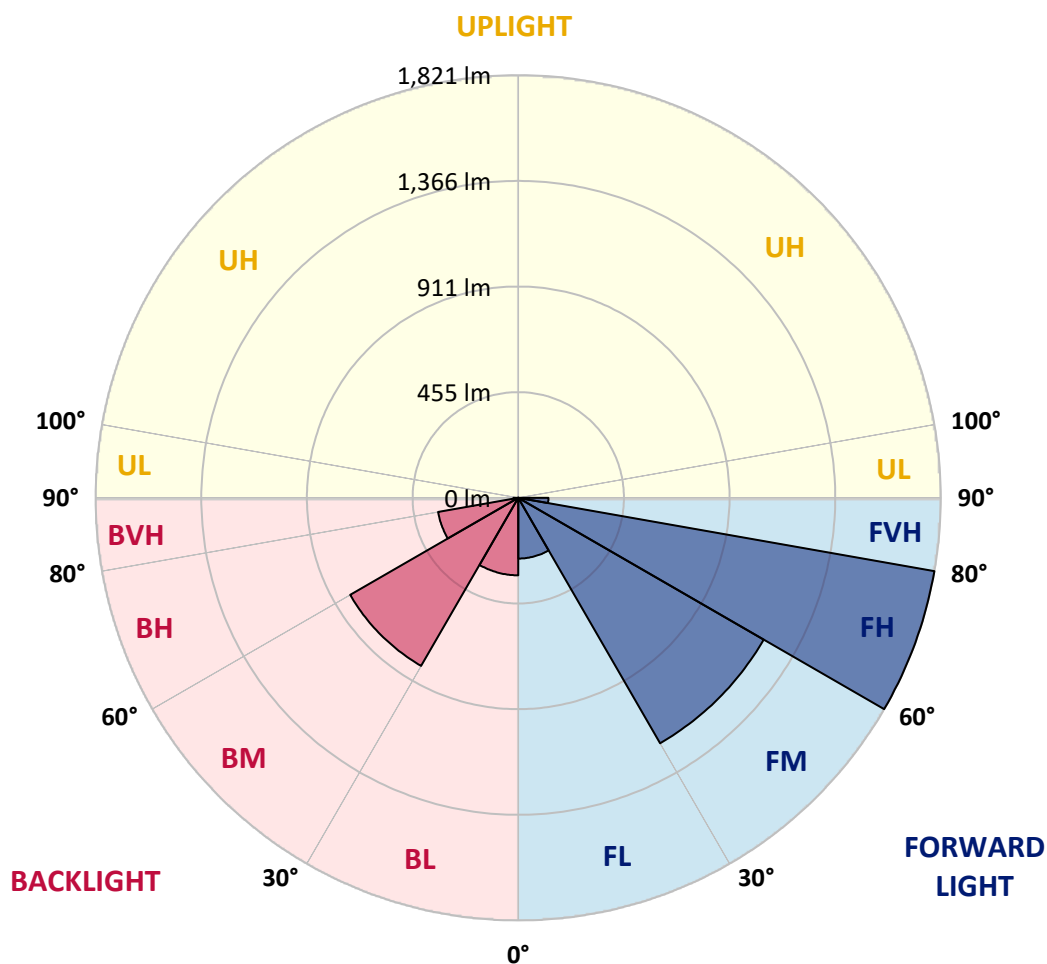
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	261.8	5.3			
FM	(30°-60°)	1221.6	24.5			
FH	(60°-80°)	1821.3	36.6			G2/5000
FVH	(80°-90°)	129.9	2.6			G2/225
BL	(0°-30°)	334.0	6.7	B1/500		
BM	(30°-60°)	836.3	16.8	B1/1000		
BH	(60°-80°)	350.8	7.0	B1/500		G1/500
BVH	(80°-90°)	20.7	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	569.1	569.1	569.1	569.1	569.1	569.1	569.1	569.1	569.1	569.1	569.1
2.5°	560.4	563.5	562.7	561.7	561.7	561.9	561.7	563.5	565.4	567.2	570.1
5°	566.1	569.3	567.7	566.4	565.4	565.1	564.3	564.1	565.1	567.4	571.4
7.5°	577.5	580.7	578.3	575.9	573.8	572.8	571.7	570.1	569.3	570.6	576.2
10°	590.2	593.4	590.4	586.2	582.8	581.5	580.4	578.8	577.8	578.5	584.7
12.5°	602.8	606.0	602.1	596.2	591.7	590.9	589.7	589.1	588.9	588.6	594.7
15°	614.7	617.4	612.3	605.5	600.8	599.4	598.1	598.9	600.2	601.8	608.6
17.5°	623.9	626.6	619.2	610.2	605.8	605.3	604.4	607.1	610.8	614.7	623.2
20°	632.4	635.1	625.6	613.4	608.1	608.1	608.3	614.0	619.2	625.0	636.6
22.5°	644.3	646.4	634.8	618.2	610.5	611.0	613.2	618.7	625.2	633.1	649.3
25°	661.9	663.6	649.3	627.1	618.4	620.0	621.9	624.5	630.8	640.0	661.7
27.5°	690.4	691.8	673.0	643.0	629.8	632.4	635.1	633.1	636.1	644.0	671.7
30°	730.6	731.3	707.7	667.8	649.0	650.4	650.9	643.2	637.7	644.0	678.9
32.5°	778.1	777.9	749.6	697.8	671.0	669.6	665.1	650.1	637.1	642.7	685.2
35°	851.8	848.8	812.4	740.0	695.8	687.6	677.0	657.7	639.8	641.3	690.7
37.5°	973.6	964.7	914.3	809.2	732.7	711.9	696.3	670.1	645.6	640.8	697.3
40°	1111.2	1099.8	1044.4	903.9	788.1	754.6	729.5	687.9	655.1	643.2	707.0
42.5°	1274.3	1258.2	1198.5	1015.7	858.3	809.7	772.0	710.2	669.1	650.9	720.3
45°	1474.7	1453.2	1368.8	1141.5	946.8	882.1	831.7	744.4	690.4	665.6	740.0
47.5°	1677.1	1682.3	1562.3	1285.7	1052.9	971.3	906.4	795.5	721.6	689.4	772.0
50°	1892.2	1895.8	1754.7	1445.4	1173.2	1072.1	990.3	852.8	764.9	723.2	819.8
52.5°	2060.0	2060.6	1929.4	1612.4	1298.6	1183.0	1080.9	918.3	815.1	768.0	883.4
55°	2165.1	2163.8	2051.8	1770.5	1442.7	1299.4	1181.1	992.7	876.3	820.8	963.4
57.5°	2241.4	2237.4	2136.3	1906.4	1596.3	1436.8	1294.7	1077.2	948.6	883.7	1068.7
60°	2270.4	2268.0	2193.6	2023.9	1757.9	1589.0	1425.6	1171.7	1030.6	957.9	1204.1
62.5°	2281.5	2286.0	2249.9	2137.6	1930.7	1757.4	1569.4	1284.6	1123.1	1041.8	1346.8
65°	2320.6	2328.7	2321.3	2286.5	2126.1	1954.5	1760.2	1418.9	1223.8	1131.8	1496.0
67.5°	2397.9	2406.1	2409.3	2464.7	2364.7	2200.2	1998.3	1586.3	1341.8	1225.2	1608.2
70°	2396.0	2393.7	2449.6	2606.4	2663.5	2540.5	2319.3	1792.1	1482.6	1302.8	1622.5
72.5°	2180.9	2161.9	2294.2	2604.8	2912.0	2895.7	2711.2	2057.7	1603.9	1312.3	1407.8
75°	1636.2	1585.5	1819.1	2347.5	2953.5	3097.3	2960.3	2222.4	1575.2	1159.5	979.7
77.5°	699.7	648.7	924.0	1737.8	2643.4	2895.4	2731.8	1938.9	1257.4	766.7	481.1
80°	183.2	182.9	279.2	787.8	1797.7	2138.1	1875.9	1252.1	718.4	274.0	132.7
82.5°	75.7	73.9	102.7	306.5	878.4	1199.9	979.2	558.5	259.4	74.2	44.1
85°	28.3	28.0	49.9	105.9	309.9	494.9	358.1	142.8	64.7	36.2	19.8
87.5°	7.9	7.7	10.9	36.7	75.4	114.6	61.2	23.5	18.2	14.2	5.8
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°	569.1	569.1	569.1	569.1	569.1	569.1	569.1	569.1	569.1	569.1	569.1
2.5°	570.9	572.3	574.6	576.5	578.8	581.5	585.2	587.5	589.9	591.5	590.4
5°	573.3	576.2	582.3	588.3	595.4	602.1	609.7	615.2	619.7	621.0	621.6
7.5°	578.5	583.3	593.6	603.9	615.2	626.1	637.1	646.7	654.3	657.2	657.4
10°	587.8	594.1	608.6	623.2	638.2	654.9	669.1	682.9	693.6	698.1	698.4
12.5°	599.4	607.3	626.4	646.4	667.3	690.2	708.7	725.6	739.0	745.1	745.1
15°	614.5	624.7	649.0	676.0	706.5	738.5	762.0	780.7	795.8	803.2	802.7
17.5°	630.8	644.5	675.2	715.8	759.6	801.6	829.0	842.8	858.3	865.5	865.2
20°	646.7	663.6	707.4	766.5	824.8	869.4	891.5	895.2	896.4	897.2	899.2
22.5°	663.0	685.7	747.7	830.4	892.9	923.8	926.9	911.1	889.0	878.6	881.6
25°	681.0	711.0	800.5	900.9	951.5	955.2	930.9	892.4	850.4	831.2	834.0
27.5°	698.4	740.4	863.9	968.1	993.7	961.2	909.0	854.3	803.7	783.4	785.8
30°	715.8	773.9	933.8	1026.9	1013.0	946.2	874.4	813.4	762.5	741.2	743.5
32.5°	733.5	812.9	1014.3	1069.5	1009.5	914.3	831.4	767.5	722.6	700.3	703.2
35°	753.6	861.0	1090.6	1092.8	986.6	867.4	774.7	712.7	673.5	655.6	659.6
37.5°	779.7	922.0	1157.9	1098.5	946.5	798.4	704.2	647.7	615.5	607.3	613.2
40°	812.1	995.3	1209.4	1089.3	887.1	714.7	627.1	582.0	563.8	565.6	571.9
42.5°	854.3	1077.4	1245.6	1065.5	804.5	628.4	559.5	539.5	548.2	555.6	562.4
45°	909.3	1162.7	1267.9	1025.1	711.0	555.3	519.7	524.5	531.1	531.9	537.1
47.5°	979.5	1249.0	1282.8	964.2	615.8	503.9	494.4	495.4	494.0	488.5	492.8
50°	1067.1	1332.9	1295.9	883.4	534.7	471.7	459.0	455.3	437.1	419.1	421.5
52.5°	1166.9	1410.0	1301.4	783.1	471.7	444.7	424.1	400.9	366.8	361.3	363.2
55°	1277.8	1481.2	1287.2	659.9	418.6	410.2	379.0	351.1	347.4	342.6	343.4
57.5°	1410.2	1558.0	1258.2	522.3	364.3	369.8	339.4	342.6	336.0	328.6	327.3
60°	1555.1	1637.4	1207.2	397.0	308.0	319.4	329.1	328.8	327.0	320.9	318.9
62.5°	1685.5	1689.7	1107.0	304.0	258.7	280.3	307.0	306.7	305.1	301.7	300.3
65°	1763.1	1681.8	939.6	239.4	218.0	248.2	276.9	279.0	279.2	279.0	279.0
67.5°	1749.4	1589.2	710.0	190.5	184.5	215.4	247.0	250.0	252.0	252.6	253.1
70°	1594.2	1385.7	463.0	152.0	154.7	186.7	218.8	221.7	223.6	225.7	226.7
72.5°	1242.6	1018.8	265.0	123.0	128.5	161.7	190.9	194.2	195.4	199.3	200.9
75°	757.3	599.1	143.1	96.9	105.6	138.3	163.1	167.1	168.9	173.6	174.2
77.5°	360.0	259.4	81.6	75.4	85.0	113.0	137.8	142.3	137.2	139.9	137.8
80°	121.7	96.4	51.5	57.5	64.9	88.1	110.3	114.8	104.2	103.7	102.7
82.5°	42.5	39.1	32.7	38.2	41.9	63.0	83.4	89.2	77.6	77.3	73.6
85°	16.6	15.9	18.2	20.8	25.1	38.8	54.9	57.8	47.8	38.5	38.0
87.5°	3.4	3.7	4.5	4.7	7.7	13.4	19.8	24.3	19.3	16.4	15.1
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)