

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: P959333

Luminaire Tested: **NAV-SB1A-740-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959333
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-740-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4821.6 lumens
Efficiency: N/A
Efficacy: 156.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

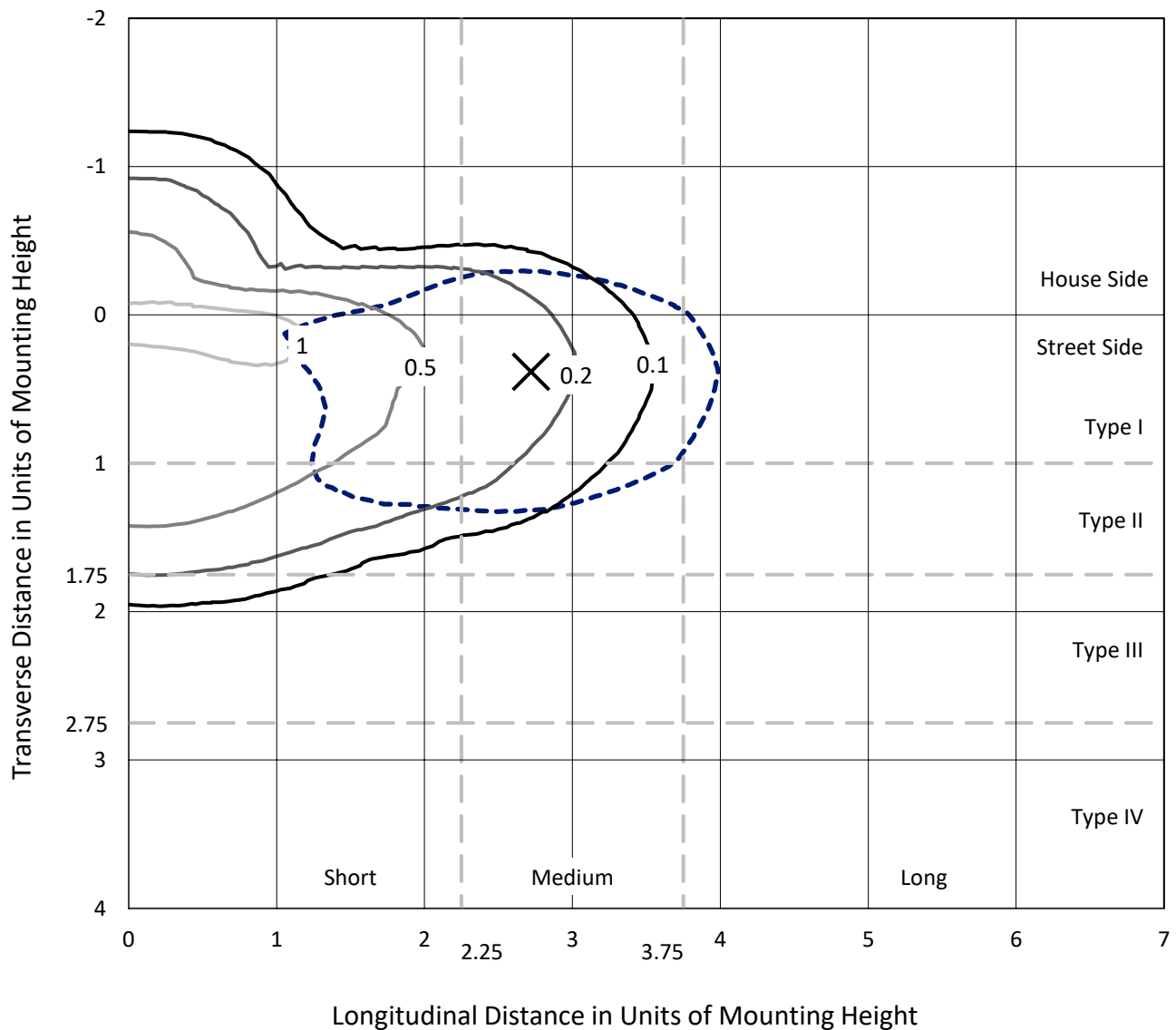
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

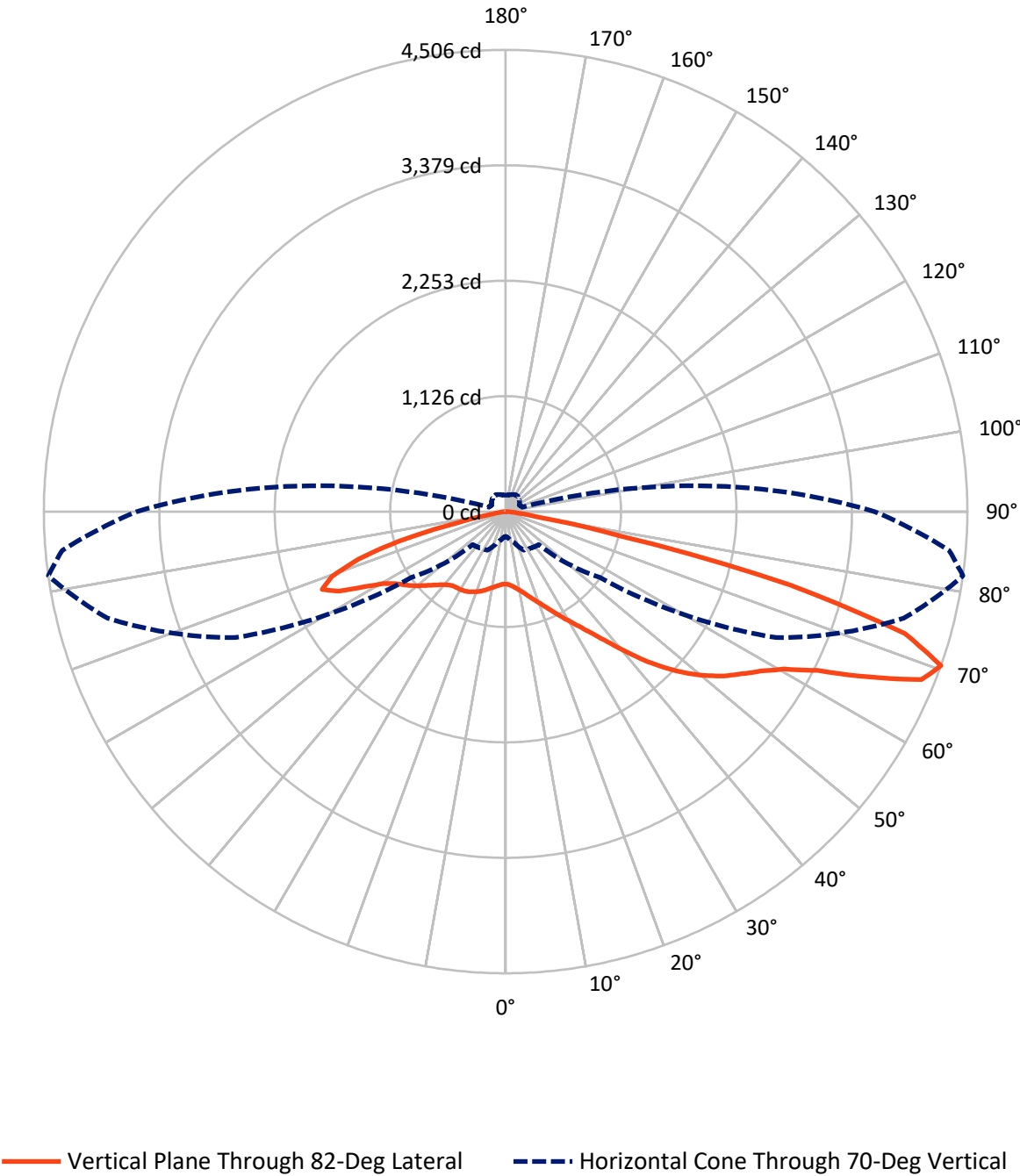
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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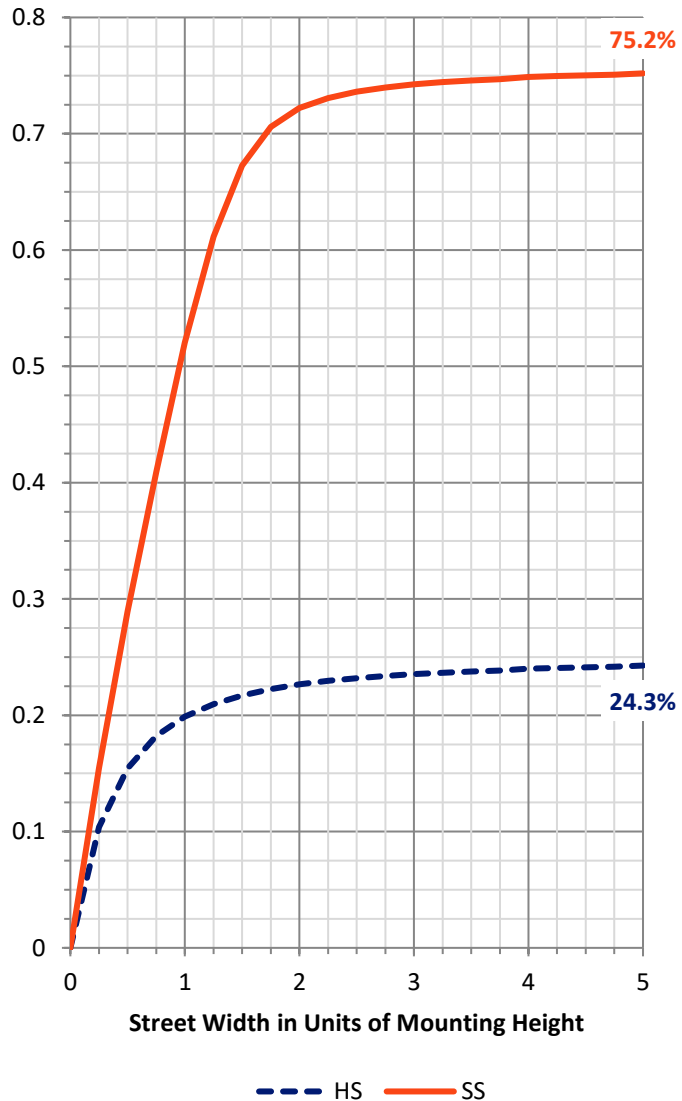
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1188.6	0.0	1188.6
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	3632.9	0.0	3632.9
	% Fixture	75.3	0.0	75.3
Total	Lumens	4821.6	0.0	4821.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.7	1.4
10°-20°	191.8	4.0
20°-30°	320.8	6.7
30°-40°	501.2	10.4
40°-50°	798.2	16.6
50°-60°	1110.7	23.0
60°-70°	1161.9	24.1
70°-80°	607.3	12.6
80°-90°	63.1	1.3
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°	4821.6	100.0
0°-180°	4821.6	100.0

Coefficient of Utilization



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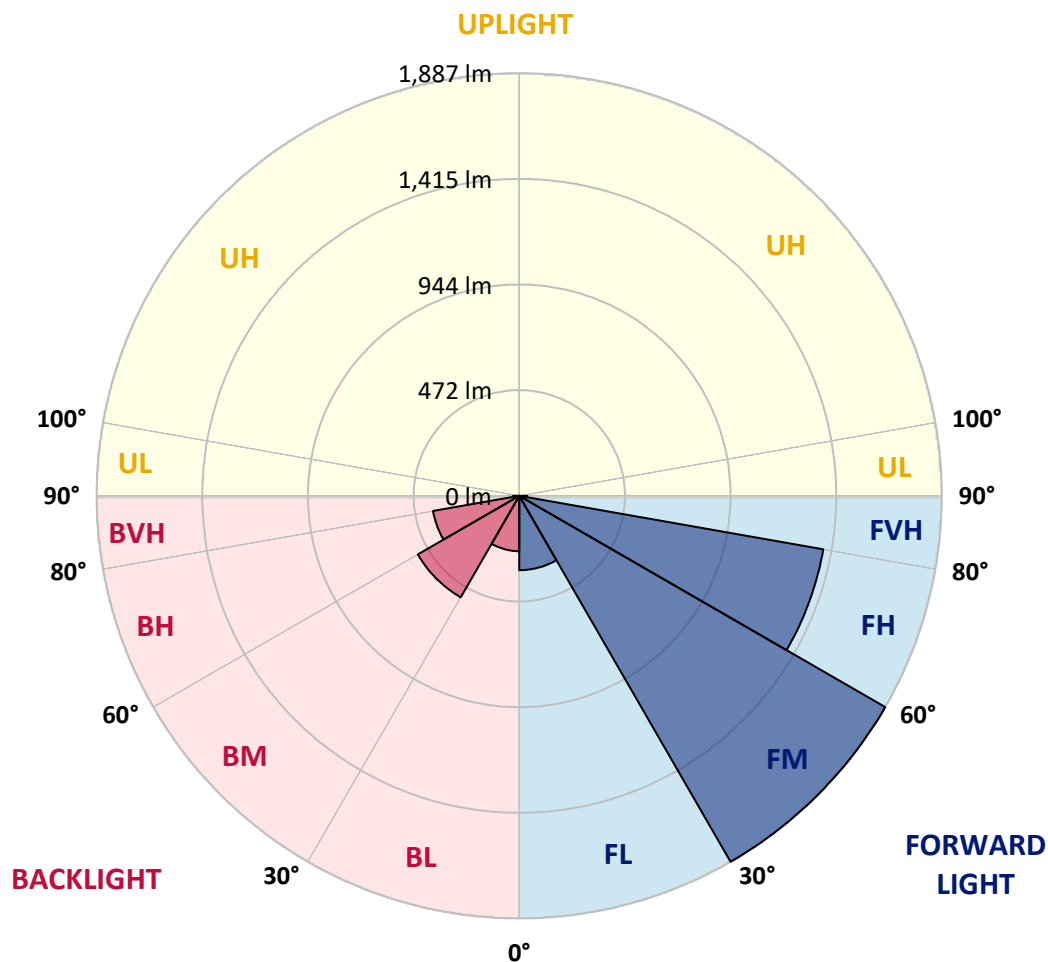
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	332.0	6.9			
FM	(30°-60°)	1887.1	39.1			
FH	(60°-80°)	1378.5	28.6			G1/1800
FVH	(80°-90°)	35.3	0.7			G1/100
BL	(0°-30°)	247.3	5.1	B1/500		
BM	(30°-60°)	523.0	10.8	B1/1000		
BH	(60°-80°)	390.6	8.1	B1/500		G1/500
BVH	(80°-90°)	27.8	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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	706.9	706.9	706.9	706.9	706.9	706.9	706.9	706.9	706.9	706.9	706.9
2.5°	723.8	727.9	726.6	725.3	725.3	723.5	723.2	720.7	718.6	715.3	714.6
5°	733.0	737.4	736.9	737.9	741.2	742.0	742.7	741.2	737.1	733.0	731.2
7.5°	724.8	729.7	731.2	737.4	747.6	756.8	763.7	766.5	762.7	756.8	754.0
10°	697.2	702.5	708.0	722.5	740.7	762.4	780.8	791.8	791.1	785.5	780.6
12.5°	641.1	646.8	658.3	686.6	720.0	758.3	792.6	815.6	823.6	819.5	811.1
15°	596.3	601.3	610.0	639.1	682.3	740.7	796.9	841.7	861.9	859.7	849.4
17.5°	595.1	597.2	602.5	616.3	649.6	713.1	792.3	867.4	906.0	905.7	892.9
20°	617.7	618.4	621.5	624.2	643.2	692.1	780.6	888.6	955.3	955.3	941.6
22.5°	648.8	648.3	651.4	648.8	658.0	690.2	773.2	907.2	1010.3	1014.4	997.0
25°	695.7	693.1	692.3	686.4	688.2	706.9	781.4	928.4	1075.5	1084.0	1062.3
27.5°	758.1	754.0	751.1	737.6	733.0	741.2	806.5	954.1	1148.2	1162.9	1135.2
30°	839.5	832.0	827.9	804.4	787.7	789.0	844.3	988.1	1224.3	1247.7	1212.7
32.5°	950.5	939.0	927.9	889.3	858.8	848.9	893.2	1035.1	1306.6	1344.2	1299.2
35°	1074.8	1065.6	1053.8	994.2	947.4	924.3	959.2	1101.0	1403.0	1462.7	1404.0
37.5°	1194.5	1186.6	1192.3	1111.9	1051.5	1018.0	1045.6	1189.2	1522.0	1610.1	1535.6
40°	1318.4	1312.2	1313.0	1236.3	1165.9	1128.3	1150.6	1300.0	1658.4	1785.3	1693.7
42.5°	1452.9	1448.3	1433.1	1365.0	1285.9	1250.8	1271.3	1427.9	1804.7	1984.9	1867.1
45°	1603.6	1600.8	1586.5	1508.5	1417.9	1378.5	1406.1	1569.1	1951.9	2172.7	2041.4
47.5°	1733.9	1736.1	1734.4	1668.6	1574.7	1516.9	1549.9	1716.5	2088.7	2349.2	2208.5
50°	1796.5	1808.6	1826.2	1805.7	1747.4	1688.6	1694.9	1858.7	2219.2	2514.7	2368.7
52.5°	1763.8	1786.6	1834.6	1867.4	1889.9	1877.7	1860.5	2000.0	2342.0	2664.2	2520.1
55°	1641.7	1673.7	1753.6	1832.6	1947.5	2036.8	2059.3	2156.5	2461.7	2795.7	2663.4
57.5°	1419.4	1471.4	1543.0	1702.9	1896.4	2113.9	2291.1	2373.8	2588.6	2936.1	2813.3
60°	1038.2	1107.8	1196.9	1434.8	1717.3	2072.7	2488.4	2707.3	2769.0	3118.0	3008.5
62.5°	664.4	707.5	789.2	1013.4	1338.0	1861.5	2548.8	3124.4	3074.8	3416.3	3301.2
65°	454.9	482.6	557.5	683.4	865.0	1385.7	2387.0	3437.0	3560.3	3889.2	3801.6
67.5°	330.6	351.6	415.5	525.7	563.6	820.0	1852.4	3422.7	4032.5	4376.2	4240.1
70°	241.0	255.8	309.5	415.5	433.7	456.1	1122.2	2909.5	4022.2	4505.7	4342.7
72.5°	178.6	188.8	224.9	322.4	351.1	308.0	555.4	2114.6	3456.2	4075.4	3944.6
75°	129.3	136.8	163.5	246.6	281.0	234.6	277.1	1235.7	2410.9	2866.8	2889.8
77.5°	98.7	104.7	122.1	180.6	224.9	176.0	171.9	568.5	1143.1	1148.7	1213.2
80°	79.3	83.1	92.7	127.2	172.4	131.7	112.0	229.5	361.2	305.8	320.8
82.5°	58.3	64.8	78.3	89.3	123.3	90.8	68.3	115.9	137.4	118.2	119.2
85°	33.2	37.6	47.4	64.0	78.8	55.6	39.2	51.5	64.0	52.5	46.8
87.5°	11.8	15.4	16.6	25.1	34.2	23.1	15.1	14.9	21.0	15.6	13.0
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°	706.9	706.9	706.9	706.9	706.9	706.9	706.9	706.9	706.9	706.9	706.9
2.5°	712.1	710.7	705.6	698.7	691.6	684.6	682.3	677.5	674.1	672.4	674.4
5°	726.3	722.2	710.2	694.8	678.8	661.3	649.1	637.9	629.7	622.0	625.0
7.5°	746.8	739.6	718.9	692.1	663.4	634.5	613.1	596.7	585.7	578.5	580.0
10°	770.6	759.6	727.9	687.7	643.5	602.0	576.7	562.6	555.7	551.9	552.9
12.5°	798.0	782.4	737.1	677.7	613.1	565.7	548.3	544.2	544.5	544.7	545.2
15°	831.8	810.1	744.6	656.0	573.4	537.8	534.7	541.4	548.3	551.7	551.3
17.5°	869.9	839.2	745.8	620.1	534.4	519.9	529.6	544.0	554.4	559.0	560.1
20°	910.8	868.9	736.6	569.5	502.5	505.3	522.6	541.1	552.7	558.5	560.1
22.5°	957.7	900.6	714.6	516.3	476.4	489.4	509.9	527.8	539.9	545.7	547.2
25°	1011.1	936.1	680.1	471.5	453.9	471.5	492.0	506.9	516.6	521.9	523.5
27.5°	1070.5	973.2	634.0	435.9	434.2	453.2	470.0	481.5	486.7	490.7	492.2
30°	1130.1	1007.1	578.2	409.1	417.1	434.9	447.0	452.1	453.7	454.4	456.1
32.5°	1194.5	1036.2	519.7	386.8	400.7	417.3	424.5	426.7	419.6	414.7	416.3
35°	1272.5	1067.4	462.3	369.2	384.6	398.8	401.2	399.1	390.7	380.7	381.2
37.5°	1369.0	1106.3	416.6	356.7	369.4	378.9	376.1	375.6	376.4	364.6	365.3
40°	1487.3	1156.9	383.0	347.0	357.2	359.2	351.3	355.7	359.5	341.5	342.0
42.5°	1618.5	1218.1	361.7	340.3	347.0	342.0	329.7	334.7	334.2	310.6	310.4
45°	1752.3	1284.6	354.3	335.4	337.4	327.7	314.2	315.5	304.7	283.5	284.2
47.5°	1885.4	1356.0	359.0	331.3	325.7	314.7	304.2	298.6	282.7	266.8	266.8
50°	2015.9	1431.0	375.9	323.2	309.5	303.2	295.5	285.6	268.7	255.1	254.1
52.5°	2136.8	1506.4	394.7	309.5	289.4	293.3	288.3	276.9	260.2	246.4	246.6
55°	2251.4	1581.9	402.2	290.9	270.4	284.5	281.7	260.5	240.5	229.2	228.2
57.5°	2376.4	1672.7	394.0	267.1	255.1	274.5	263.7	240.3	228.7	220.3	219.6
60°	2549.3	1815.3	376.4	237.7	240.5	259.7	241.3	231.5	219.0	209.5	209.0
62.5°	2836.6	2081.1	348.0	208.5	223.3	237.7	230.5	220.8	208.0	198.7	198.7
65°	3261.2	2450.5	294.5	185.7	204.2	216.2	219.0	209.3	196.0	186.2	186.8
67.5°	3619.5	2682.3	222.8	166.8	184.5	198.7	206.7	197.2	183.2	173.7	173.9
70°	3599.8	2513.9	170.1	148.1	167.1	181.6	191.9	184.5	169.3	160.4	161.2
72.5°	3197.3	2103.1	137.7	129.3	149.4	163.7	176.0	170.4	155.1	146.4	146.4
75°	2348.9	1492.9	110.0	110.0	127.4	145.0	158.7	155.1	140.9	134.8	133.0
77.5°	990.1	626.3	86.2	91.3	105.9	124.6	141.4	142.8	130.5	138.2	125.4
80°	263.2	172.7	65.7	71.9	83.1	102.8	123.1	122.6	109.3	102.1	94.9
82.5°	100.2	68.1	46.8	50.6	60.2	78.8	97.5	100.6	87.2	75.4	75.4
85°	38.6	29.2	28.9	30.4	35.1	52.2	73.7	76.3	65.7	55.8	57.6
87.5°	9.9	8.7	10.8	10.2	16.1	27.9	42.2	43.8	40.2	23.3	33.2
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)