

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: P961412

Luminaire Tested: **NAV-SB2A-735-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961412
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-735-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7654.7 lumens
Efficiency: N/A
Efficacy: 133.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

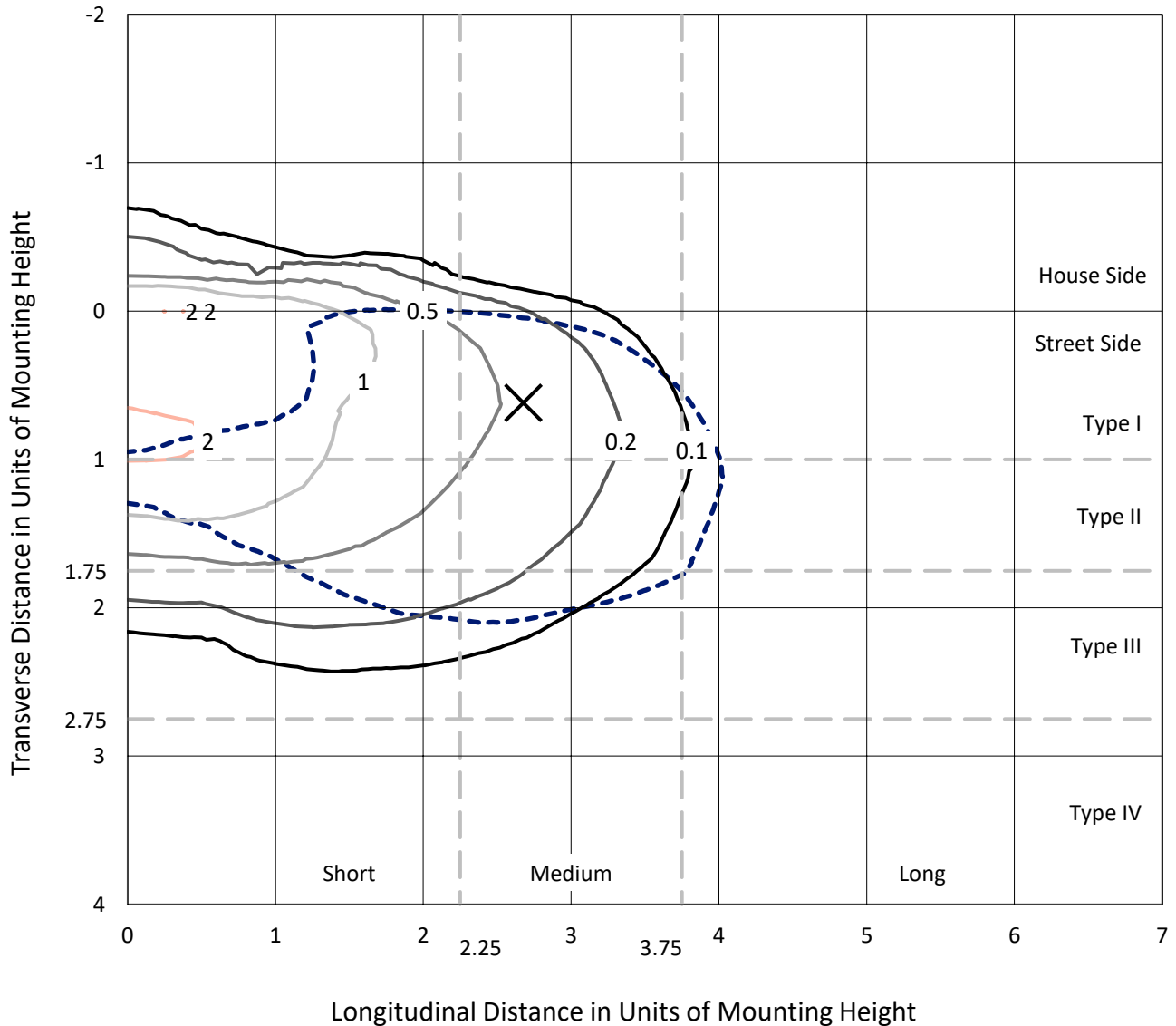
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

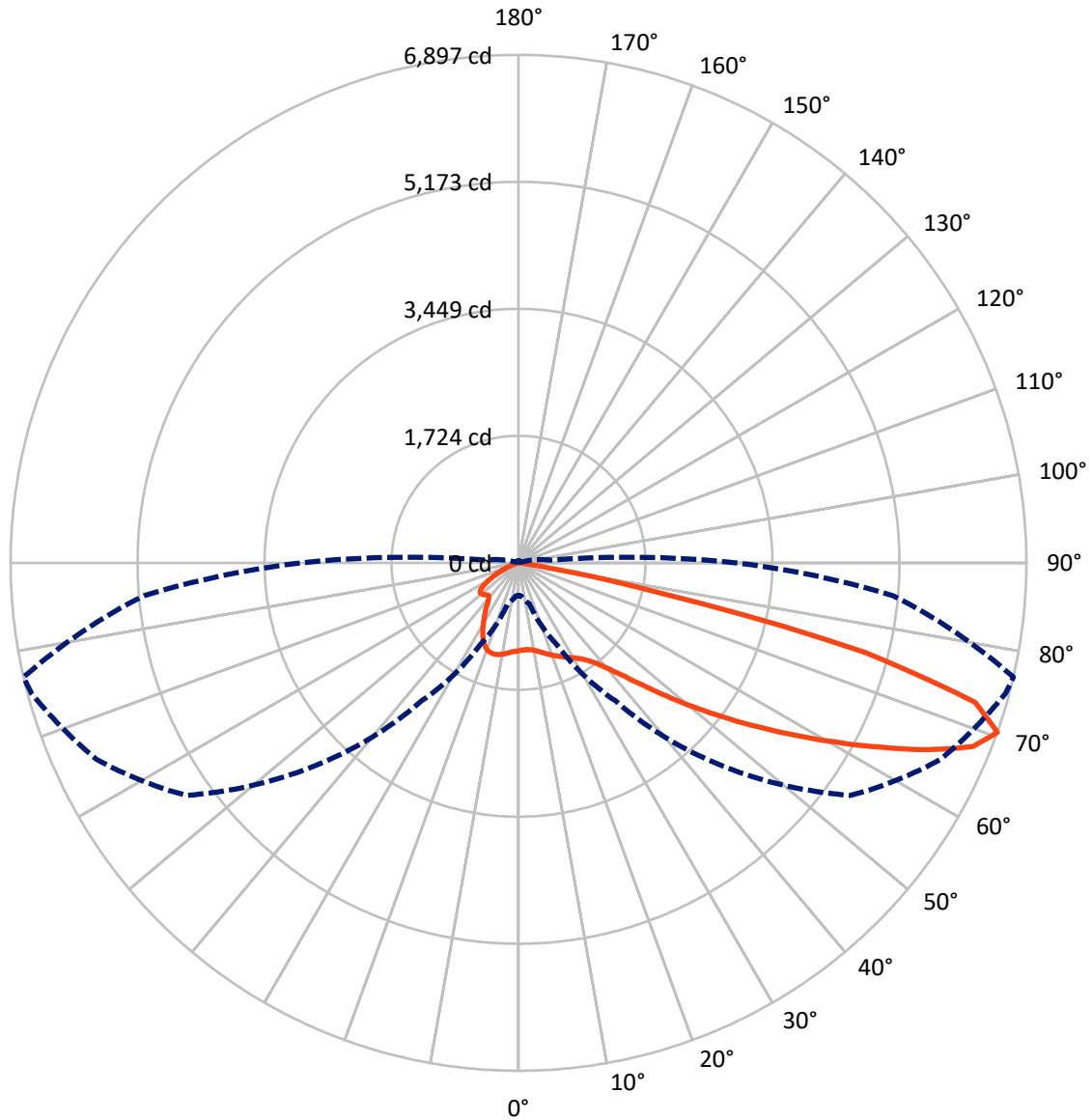
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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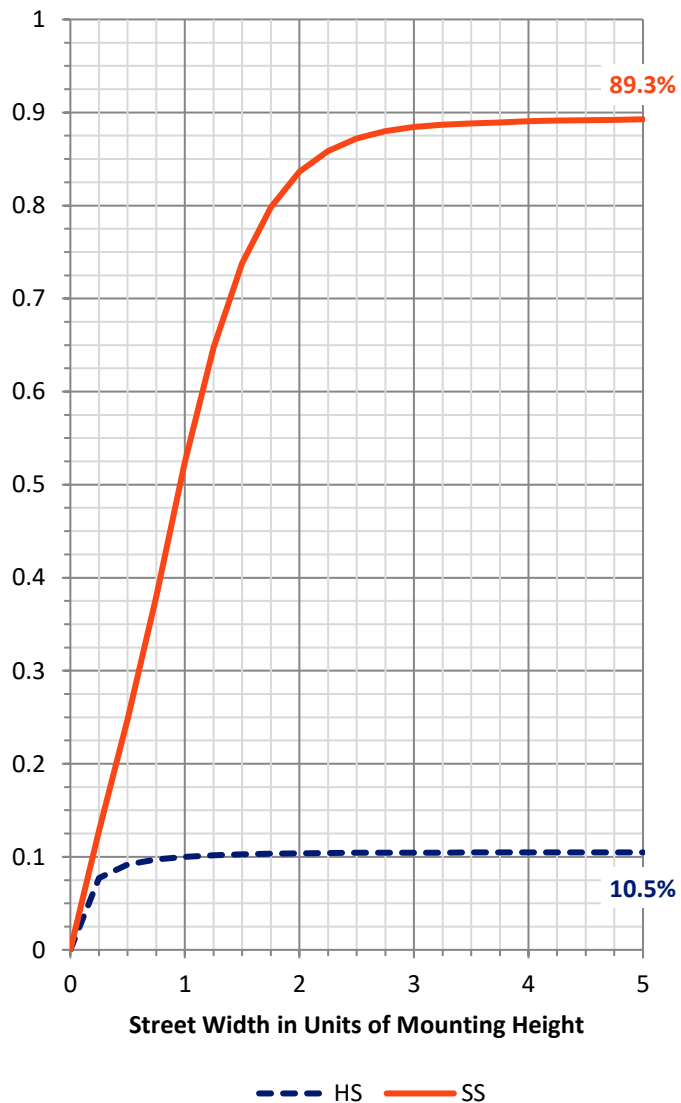
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	806.9	0.0	806.9
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	6847.8	0.0	6847.8
	% Fixture	89.5	0.0	89.5
Total	Lumens	7654.7	0.0	7654.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.9	1.3
10°-20°	244.3	3.2
20°-30°	377.8	4.9
30°-40°	685.6	9.0
40°-50°	1294.2	16.9
50°-60°	1869.9	24.4
60°-70°	1990.5	26.0
70°-80°	1054.8	13.8
80°-90°	34.6	0.5
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°	7654.7	100.0
0°-180°	7654.7	100.0

Coefficient of Utilization

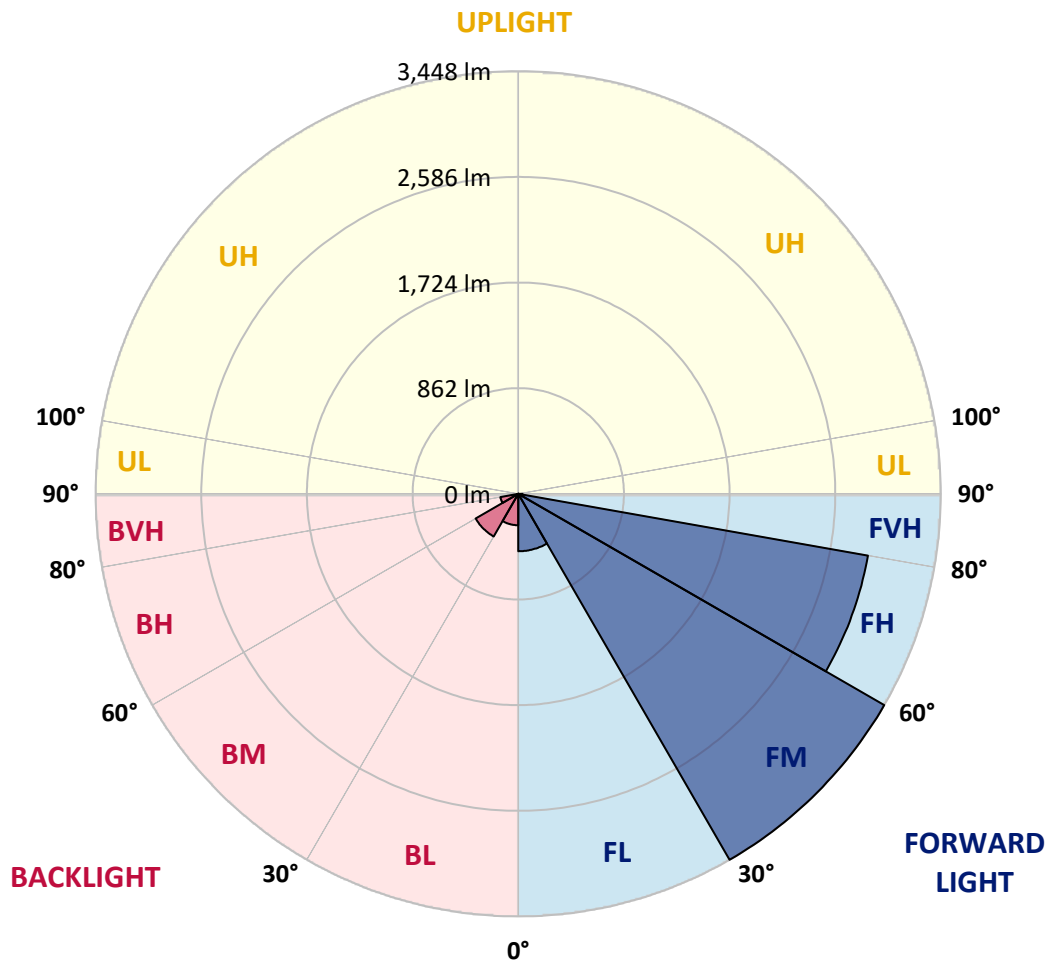


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	468.6	6.1			
FM (30°-60°)	3448.0	45.0			
FH (60°-80°)	2897.4	37.9			G2/5000
FVH (80°-90°)	33.7	0.4			G1/100
BL (0°-30°)	256.4	3.3	B1/500		
BM (30°-60°)	401.7	5.2	B1/1000		
BH (60°-80°)	147.9	1.9	B1/500		G1/500
BVH (80°-90°)	0.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
 Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1194.0	1194.0	1194.0	1194.0	1194.0	1194.0	1194.0	1194.0	1194.0	1194.0	1194.0
2.5°	1121.0	1131.2	1129.7	1136.5	1138.9	1148.5	1158.2	1171.3	1185.8	1185.3	1194.9
5°	1057.7	1067.8	1070.2	1079.4	1091.0	1106.0	1125.9	1151.9	1179.1	1183.4	1202.7
7.5°	982.8	993.4	999.7	1018.0	1039.4	1070.2	1102.6	1140.8	1185.8	1192.1	1229.3
10°	907.8	917.5	925.7	951.8	985.6	1031.6	1084.2	1139.4	1199.8	1209.0	1261.7
12.5°	861.4	870.6	879.8	902.5	944.5	1000.6	1072.1	1146.2	1223.0	1236.0	1305.6
15°	845.0	853.2	860.5	880.8	919.9	983.7	1069.8	1160.2	1252.4	1269.9	1358.8
17.5°	847.4	851.8	856.6	872.1	910.2	976.0	1074.1	1184.3	1287.3	1302.8	1412.0
20°	861.4	863.9	864.3	874.9	908.8	975.0	1082.8	1207.6	1320.2	1340.9	1464.7
22.5°	879.3	880.3	879.3	886.5	918.0	982.3	1094.4	1235.5	1356.9	1376.3	1517.9
25°	962.9	944.5	921.4	907.3	933.5	996.3	1111.8	1273.3	1397.0	1415.8	1569.6
27.5°	1222.5	1169.8	1086.7	993.4	965.3	1016.6	1136.0	1311.5	1437.7	1454.6	1625.1
30°	1644.0	1574.9	1433.8	1223.4	1067.8	1059.1	1167.4	1349.6	1480.6	1499.1	1684.7
32.5°	2066.5	2049.6	1886.7	1595.7	1298.4	1153.8	1219.6	1401.4	1537.7	1552.2	1764.8
35°	2493.8	2459.5	2326.1	2038.5	1653.7	1346.7	1306.7	1469.0	1612.6	1629.0	1881.9
37.5°	2821.1	2800.3	2717.7	2480.8	2075.2	1644.5	1455.5	1574.0	1721.4	1739.7	2031.8
40°	3110.2	3100.5	3072.4	2916.3	2546.5	2034.1	1687.0	1736.4	1872.2	1894.0	2215.4
42.5°	3337.4	3360.2	3376.0	3332.6	3032.4	2478.9	1998.3	1964.5	2082.5	2104.7	2449.3
45°	3569.9	3577.7	3641.9	3704.8	3514.8	2943.9	2349.3	2231.8	2344.0	2371.5	2729.8
47.5°	3719.3	3750.2	3863.3	3974.0	3920.3	3405.0	2726.4	2547.5	2647.1	2698.8	3043.9
50°	3730.4	3788.9	3944.5	4137.4	4215.7	3844.0	3136.3	2907.2	3013.0	3070.1	3379.4
52.5°	3545.3	3636.1	3877.4	4159.7	4375.2	4215.7	3560.2	3266.8	3402.7	3477.1	3727.5
55°	2718.2	2837.1	3624.5	4038.8	4381.6	4497.5	3973.1	3641.4	3836.8	3920.8	4103.6
57.5°	2368.2	2428.1	2849.6	3829.0	4265.0	4611.2	4346.2	3998.2	4309.0	4413.4	4458.9
60°	1970.4	2049.1	2389.9	3485.8	4107.0	4622.2	4675.9	4458.3	4821.0	4938.4	4784.7
62.5°	1339.1	1424.5	1763.4	2896.0	3890.9	4616.9	4946.1	4932.1	5389.9	5516.0	5060.7
65°	829.5	883.1	1106.5	2364.8	3588.7	4622.8	5228.9	5507.3	5990.3	6118.3	5274.3
67.5°	655.5	680.2	796.6	1815.7	3068.1	4492.3	5511.2	6048.3	6555.4	6656.9	5339.6
70°	440.3	455.4	579.6	1217.2	2282.6	3889.9	5505.9	6319.9	6846.4	6897.1	5101.8
72.5°	232.1	243.6	338.9	563.6	1378.6	2765.0	4641.1	5995.1	6556.8	6480.5	4360.8
75°	116.0	135.4	228.2	286.2	588.8	1542.0	2882.0	4726.7	5160.8	4865.0	2797.9
77.5°	87.9	106.4	188.5	188.5	205.0	519.2	1220.6	2578.0	2377.8	1980.0	821.3
80°	56.1	72.5	164.8	142.6	85.6	131.9	318.1	722.2	505.1	384.3	149.3
82.5°	32.9	47.4	137.2	94.3	47.9	48.8	89.9	153.8	131.0	102.0	45.9
85°	13.0	31.0	94.3	37.2	18.9	12.1	27.1	32.9	27.1	20.3	11.6
87.5°	0.0	7.3	16.4	0.0	1.4	0.9	1.9	2.5	2.5	1.9	3.9
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°	1194.0	1194.0	1194.0	1194.0	1194.0	1194.0	1194.0	1194.0	1194.0	1194.0	1194.0
2.5°	1199.4	1200.3	1203.1	1203.7	1196.9	1188.2	1184.8	1183.4	1177.5	1177.1	1178.0
5°	1213.8	1218.2	1213.8	1201.2	1171.3	1129.2	1097.4	1071.2	1047.6	1040.3	1036.0
7.5°	1242.8	1247.2	1234.1	1184.8	1109.4	1025.8	950.4	897.2	849.3	831.5	824.2
10°	1284.4	1290.2	1249.1	1149.5	1016.1	881.7	754.1	664.2	594.1	565.6	553.5
12.5°	1336.6	1339.1	1257.4	1095.8	894.7	702.8	522.0	425.9	363.5	340.3	333.0
15°	1394.1	1390.7	1258.3	1022.8	729.5	496.9	340.8	279.9	254.7	247.0	247.0
17.5°	1454.6	1440.5	1238.9	917.5	548.2	339.8	252.9	238.3	234.0	232.1	231.5
20°	1514.0	1482.6	1203.7	779.7	393.5	253.8	229.6	225.3	222.8	221.9	220.9
22.5°	1568.1	1514.4	1143.3	619.7	285.7	224.3	217.1	213.2	208.8	206.8	206.4
25°	1620.8	1532.9	1058.2	470.4	228.7	209.8	204.0	196.7	191.0	188.5	187.6
27.5°	1672.1	1544.5	951.8	348.1	204.0	196.3	185.6	175.5	171.1	170.1	169.2
30°	1726.7	1548.4	831.0	259.6	189.0	179.4	163.9	152.3	149.9	150.4	150.4
32.5°	1793.4	1554.1	709.1	212.7	176.4	159.1	140.6	128.5	126.7	128.5	128.1
35°	1873.2	1565.7	591.6	195.8	165.3	138.3	118.4	108.2	106.4	107.8	107.3
37.5°	1981.4	1584.5	482.0	192.4	156.1	120.8	99.6	91.3	91.3	91.8	91.3
40°	2125.5	1634.9	383.9	189.9	151.3	107.8	84.2	80.8	82.2	83.1	83.1
42.5°	2301.0	1741.7	317.5	187.1	146.0	102.0	76.4	74.9	77.4	78.3	78.3
45°	2497.7	1877.1	294.4	182.2	141.1	105.9	73.0	71.0	74.0	74.4	74.9
47.5°	2701.2	2009.5	291.5	176.9	136.3	111.6	72.1	67.6	71.0	71.5	72.1
50°	2907.2	2096.0	294.4	168.7	128.5	111.6	72.5	64.3	67.2	68.7	69.1
52.5°	3114.6	2135.7	292.4	150.8	115.0	104.9	72.5	61.4	64.3	65.3	65.3
55°	3315.7	2127.9	263.0	124.2	97.7	92.8	70.6	58.9	60.9	61.4	61.4
57.5°	3474.6	2020.2	208.4	96.7	79.2	77.4	64.3	56.1	57.5	57.0	57.0
60°	3557.8	1783.3	148.9	74.4	62.3	60.9	56.6	52.2	53.2	50.7	50.2
62.5°	3558.8	1470.1	99.6	58.9	49.8	48.4	48.4	46.8	45.9	41.1	39.7
65°	3482.8	1122.5	66.2	46.8	40.1	37.7	40.6	40.1	36.7	29.9	29.0
67.5°	3310.7	735.7	50.2	36.7	31.0	29.5	32.4	33.8	31.5	25.1	24.7
70°	2956.9	428.2	41.6	28.5	23.2	21.7	26.1	29.0	26.1	20.3	19.4
72.5°	2456.1	231.0	33.8	21.3	16.0	14.5	20.8	23.7	20.8	15.0	14.5
75°	1593.8	123.7	26.1	14.0	8.2	9.2	15.5	17.4	14.5	9.6	8.7
77.5°	535.2	54.6	16.4	6.8	3.9	3.9	9.2	10.7	6.8	3.4	2.9
80°	119.4	22.8	6.8	2.9	1.4	1.4	1.9	1.9	0.9	0.0	0.0
82.5°	39.2	9.2	2.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.0	3.4	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.8	0.5	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)