

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: P961343

Luminaire Tested: **NAV-SB2A-727-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961343
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-727-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6227.9 lumens
Efficiency: N/A
Efficacy: 108.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

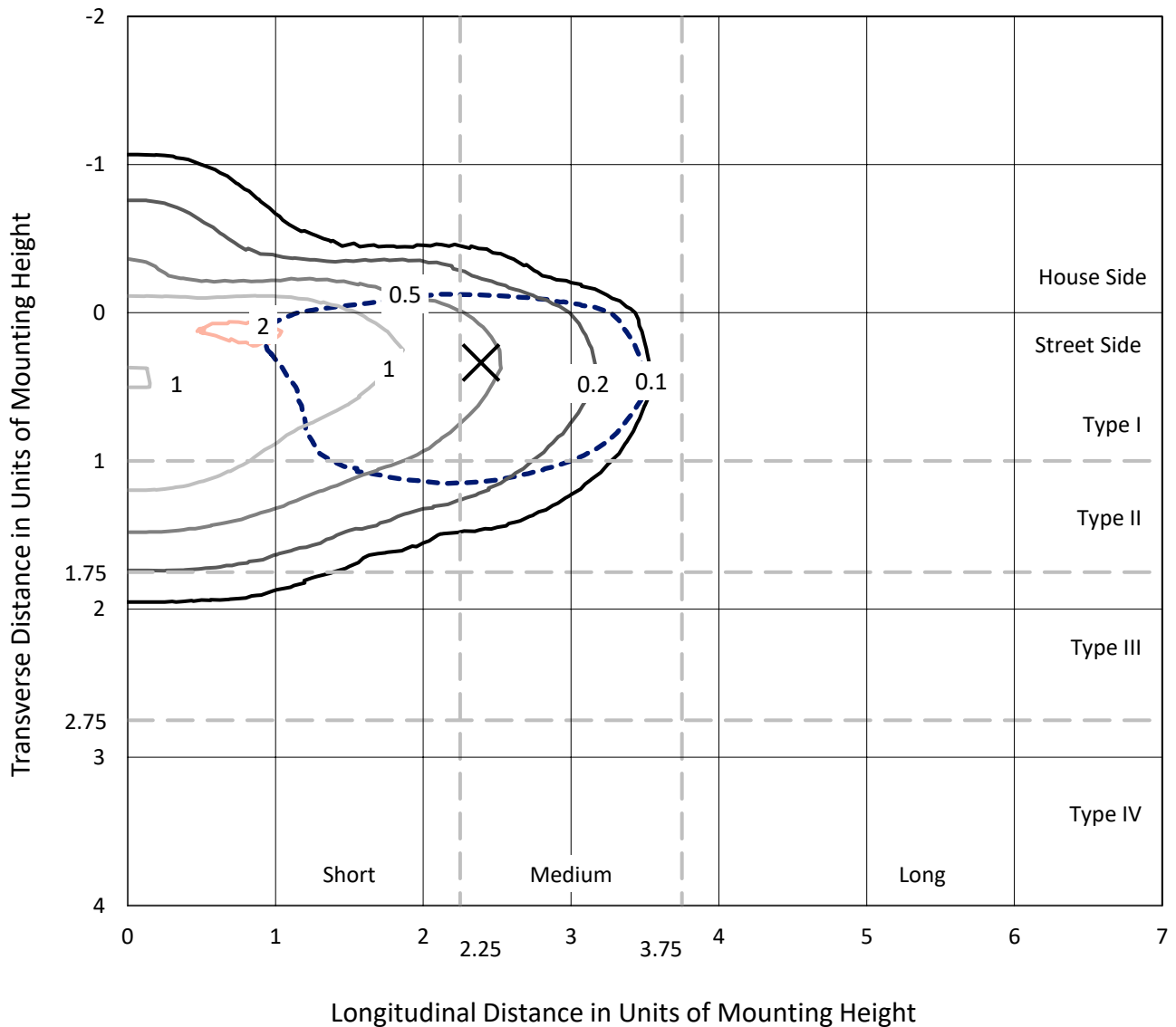
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

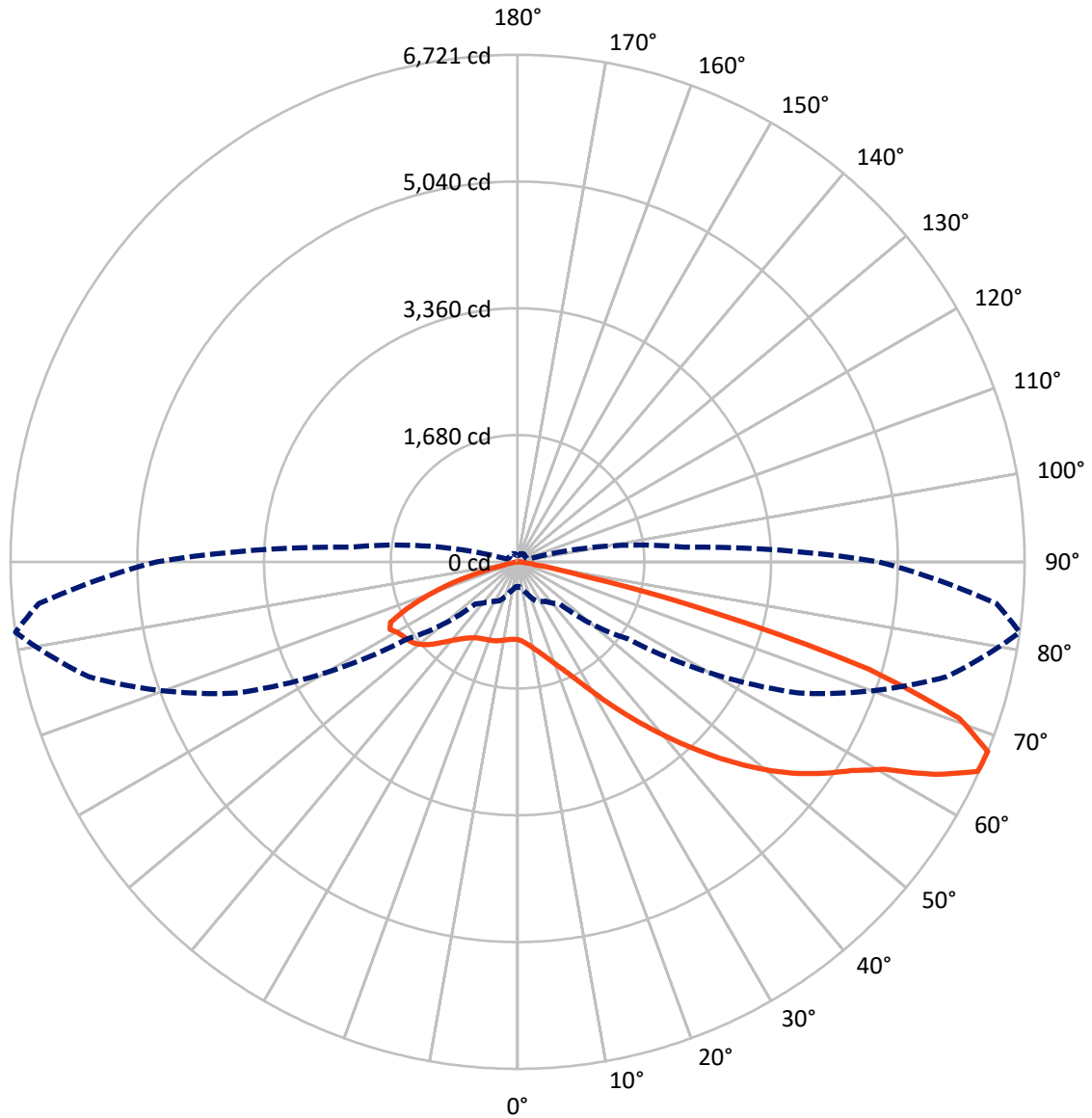
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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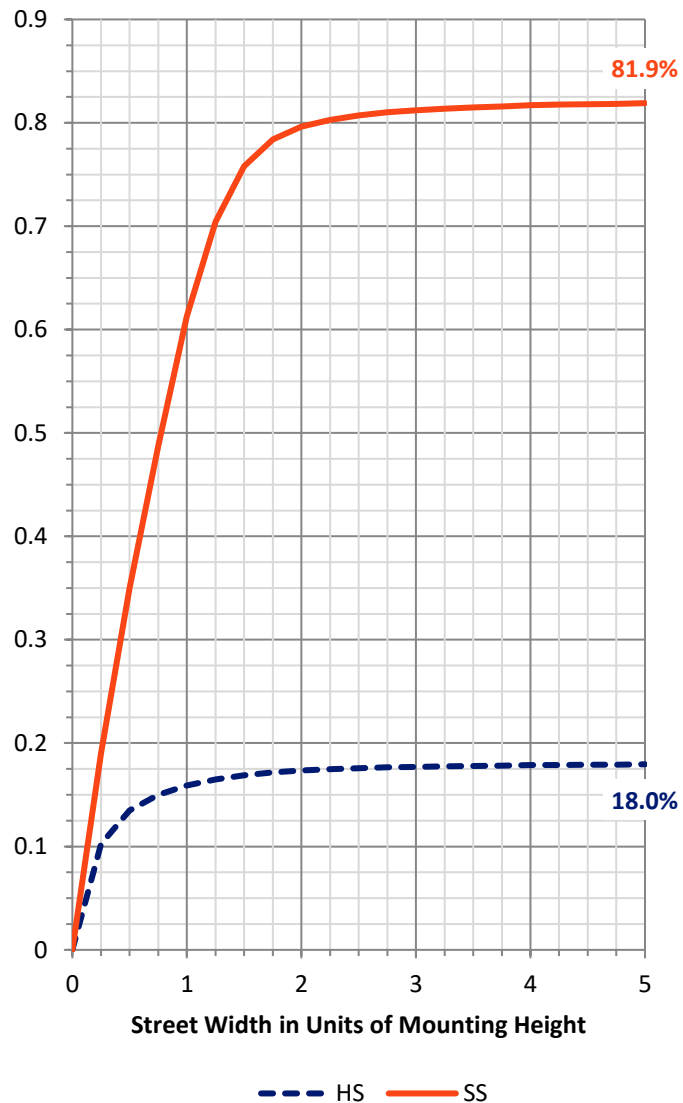
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1128.1	0.0	1128.1
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	5099.8	0.0	5099.8
	% Fixture	81.9	0.0	81.9
Total	Lumens	6227.9	0.0	6227.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.9	1.5
10°-20°	238.9	3.8
20°-30°	382.6	6.1
30°-40°	676.5	10.9
40°-50°	1185.4	19.0
50°-60°	1580.9	25.4
60°-70°	1471.8	23.6
70°-80°	564.9	9.1
80°-90°	35.1	0.6
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°	6227.9	100.0
0°-180°	6227.9	100.0

Coefficient of Utilization



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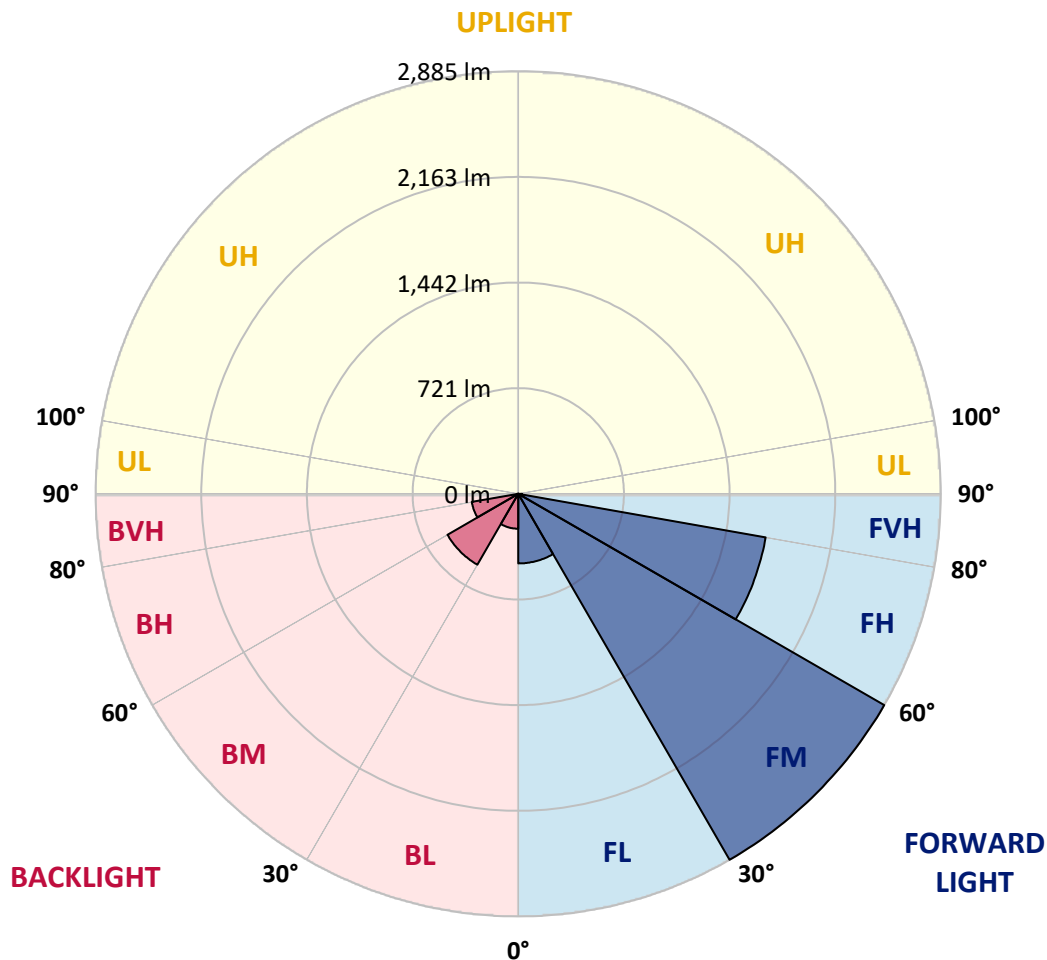
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	475.1	7.6			
FM (30°-60°)	2884.5	46.3			
FH (60°-80°)	1714.6	27.5			G1/1800
FVH (80°-90°)	25.5	0.4			G1/100
BL (0°-30°)	238.3	3.8	B1/500		
BM (30°-60°)	558.3	9.0	B1/1000		
BH (60°-80°)	322.0	5.2	B1/500		G1/500
BVH (80°-90°)	9.6	0.2			G0/10
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°	1031.8	1031.8	1031.8	1031.8	1031.8	1031.8	1031.8	1031.8	1031.8	1031.8	1031.8
2.5°	1090.5	1096.8	1093.2	1091.4	1088.2	1083.7	1080.1	1069.0	1057.3	1049.7	1047.0
5°	1112.4	1118.8	1118.3	1120.1	1122.4	1123.7	1122.8	1110.2	1093.7	1080.7	1073.0
7.5°	1093.7	1100.8	1106.6	1115.6	1131.3	1147.9	1156.0	1153.2	1136.2	1118.3	1108.8
10°	1040.3	1047.9	1061.8	1082.9	1116.0	1151.9	1181.9	1195.9	1185.1	1165.3	1152.4
12.5°	942.5	950.2	977.5	1023.3	1078.8	1141.1	1198.5	1235.7	1238.5	1218.7	1203.5
15°	832.7	840.3	869.4	926.8	1011.6	1111.6	1207.6	1278.0	1301.6	1284.6	1266.3
17.5°	764.5	771.2	793.2	839.4	927.7	1052.4	1204.4	1322.8	1377.0	1363.6	1341.6
20°	743.8	749.7	760.0	792.3	865.8	991.0	1183.8	1364.9	1458.2	1450.6	1425.9
22.5°	765.9	771.2	774.4	788.7	834.9	950.6	1157.7	1407.9	1552.4	1553.2	1523.1
25°	816.5	821.9	818.4	827.3	847.5	938.1	1147.9	1458.6	1670.7	1680.6	1646.5
27.5°	900.0	900.4	891.9	891.4	894.5	956.8	1158.2	1512.9	1820.0	1838.4	1796.3
30°	1067.1	1060.5	1027.8	992.3	976.1	1013.4	1186.8	1577.0	1996.3	2029.0	1976.1
32.5°	1325.0	1315.2	1255.0	1170.3	1085.1	1104.4	1238.5	1650.0	2188.2	2247.3	2182.7
35°	1604.8	1602.1	1539.3	1413.4	1264.4	1234.0	1322.4	1746.1	2397.6	2491.7	2415.0
37.5°	1864.9	1863.6	1827.7	1679.3	1498.0	1414.7	1456.8	1871.5	2621.7	2758.1	2667.5
40°	2102.5	2106.6	2070.7	1938.0	1755.4	1646.5	1639.8	2026.7	2871.0	3048.1	2940.5
42.5°	2307.9	2312.4	2276.0	2177.8	2009.7	1903.0	1864.4	2216.9	3114.6	3359.8	3232.4
45°	2447.3	2475.2	2469.7	2391.3	2270.7	2159.9	2134.4	2455.4	3392.1	3690.3	3541.0
47.5°	2486.8	2512.4	2552.7	2563.4	2489.9	2381.0	2411.4	2742.8	3672.8	4021.2	3851.2
50°	2389.5	2413.3	2497.1	2608.7	2659.9	2626.3	2681.0	3050.9	3960.2	4351.2	4155.7
52.5°	2197.6	2221.8	2327.6	2504.3	2712.8	2818.6	2951.3	3354.4	4238.7	4663.8	4444.0
55°	1920.0	1945.6	2081.5	2281.4	2611.9	2898.0	3176.9	3657.5	4493.8	4944.9	4704.1
57.5°	1542.5	1561.3	1702.5	1982.4	2358.1	2819.1	3343.2	3988.5	4734.2	5221.0	4961.9
60°	1005.3	1021.9	1186.0	1498.0	1937.5	2555.4	3376.4	4357.5	5053.4	5580.2	5309.4
62.5°	668.5	679.8	777.1	1006.2	1364.5	2049.2	3182.2	4652.1	5521.5	6205.3	5905.3
65°	458.7	470.0	567.2	726.8	881.5	1355.5	2624.0	4613.1	5945.7	6701.7	6347.0
67.5°	327.3	336.7	419.2	569.9	638.1	787.4	1778.8	4114.5	5884.7	6720.5	6370.8
70°	234.5	239.8	308.0	443.9	507.2	473.0	989.1	3146.9	5152.5	6205.8	5885.7
72.5°	164.1	165.9	213.9	338.0	408.5	345.2	470.8	2098.1	3896.9	4870.9	4562.9
75°	111.2	113.5	143.9	247.9	327.8	263.6	249.3	1125.0	2287.7	2696.2	2416.8
77.5°	68.2	69.1	92.9	169.5	245.3	200.9	160.5	476.6	885.1	869.0	740.8
80°	38.5	38.5	59.1	105.4	167.3	129.6	112.5	202.6	280.2	246.2	217.0
82.5°	21.5	21.9	43.0	65.5	110.8	76.7	61.9	93.7	121.1	107.2	93.3
85°	8.9	9.8	26.4	31.0	52.9	38.1	25.1	39.5	44.8	39.9	29.1
87.5°	0.9	1.3	8.1	5.8	6.3	7.6	3.6	7.6	6.3	6.3	4.5
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°	1031.8	1031.8	1031.8	1031.8	1031.8	1031.8	1031.8	1031.8	1031.8	1031.8	1031.8
2.5°	1038.4	1031.8	1014.7	995.0	968.9	956.4	939.4	927.7	917.9	918.7	909.8
5°	1058.6	1041.6	1003.5	956.0	896.8	854.6	809.7	778.9	753.8	748.4	736.3
7.5°	1086.5	1059.5	992.7	907.1	807.1	731.3	663.6	620.1	589.2	579.3	569.5
10°	1122.4	1083.3	978.9	845.6	701.7	605.4	532.7	498.7	477.5	470.4	464.9
12.5°	1164.0	1110.7	960.4	770.8	593.3	500.4	454.2	437.2	430.5	428.2	426.9
15°	1216.5	1144.7	932.6	682.0	501.3	436.2	416.6	414.3	415.2	414.3	413.9
17.5°	1278.8	1181.9	887.3	590.5	439.4	403.5	396.4	398.2	400.4	400.0	399.0
20°	1347.0	1218.7	829.5	509.4	397.3	380.3	376.2	378.0	379.8	378.9	378.4
22.5°	1424.5	1258.2	765.4	446.2	369.0	358.7	354.2	354.6	354.6	352.9	352.0
25°	1517.4	1301.6	698.1	401.3	347.5	339.5	334.0	332.3	329.5	324.2	323.3
27.5°	1628.1	1347.9	633.6	369.9	330.5	322.9	316.5	312.1	305.3	296.4	295.5
30°	1752.7	1403.9	578.9	350.2	317.0	309.3	302.2	295.5	285.7	274.4	273.5
32.5°	1899.4	1464.0	538.9	337.2	304.9	296.8	288.3	280.2	269.5	258.3	258.7
35°	2074.3	1536.7	515.7	328.2	295.5	284.7	275.3	266.3	258.3	248.5	247.5
37.5°	2263.9	1613.8	508.5	323.7	289.3	272.6	261.9	255.6	254.7	248.9	248.5
40°	2471.6	1705.2	513.8	321.0	282.5	261.0	249.3	247.9	250.2	239.8	240.4
42.5°	2691.2	1813.7	522.9	318.0	273.1	249.3	238.1	238.1	236.3	221.9	221.9
45°	2928.9	1938.9	531.8	310.3	261.9	237.7	229.1	226.0	218.3	204.5	204.0
47.5°	3168.4	2066.2	538.5	296.4	248.5	227.8	220.2	213.0	201.8	189.2	188.8
50°	3395.7	2180.6	531.4	275.7	233.2	218.3	210.3	200.4	188.3	179.8	178.5
52.5°	3598.8	2279.6	500.8	251.5	217.0	208.5	201.3	191.1	181.1	172.2	171.3
55°	3775.5	2359.9	447.0	228.7	202.6	200.0	192.8	179.8	166.4	158.8	157.8
57.5°	3944.9	2420.8	379.8	209.8	189.6	190.5	179.8	168.1	155.6	147.5	146.6
60°	4170.5	2502.4	311.6	192.4	175.8	178.5	166.8	158.3	142.6	132.2	130.9
62.5°	4531.0	2629.3	247.5	170.9	159.6	160.5	155.6	145.2	126.5	114.4	113.5
65°	4817.1	2582.7	195.1	147.5	141.2	142.6	142.6	131.4	111.2	97.3	95.9
67.5°	4784.8	2211.4	155.6	124.6	123.7	124.6	127.8	118.4	98.6	87.4	85.7
70°	4407.7	1759.0	124.6	103.6	107.6	105.4	114.4	108.0	88.8	77.6	76.3
72.5°	3596.5	1267.2	95.0	85.7	82.5	86.1	103.1	97.3	74.0	61.4	60.1
75°	2101.7	676.2	70.8	67.8	59.7	71.8	91.4	82.9	56.5	45.3	44.0
77.5°	684.3	235.9	52.0	49.8	44.4	57.8	78.0	69.9	46.2	35.9	34.5
80°	183.4	71.3	35.5	32.7	28.7	43.0	61.9	55.6	33.2	23.3	22.9
82.5°	73.5	30.0	20.6	18.3	15.7	29.6	48.9	44.8	24.7	14.8	14.8
85°	23.8	9.8	7.6	5.8	7.2	18.3	29.1	30.4	17.5	7.6	5.8
87.5°	3.2	1.3	1.3	1.7	1.3	3.2	8.9	8.5	4.9	0.9	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)