

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: P959762

Luminaire Tested: **NAV-SB1B-727-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959762
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-SB1B-727-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH
HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3910.4 lumens
Efficiency: N/A
Efficacy: 98.3 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

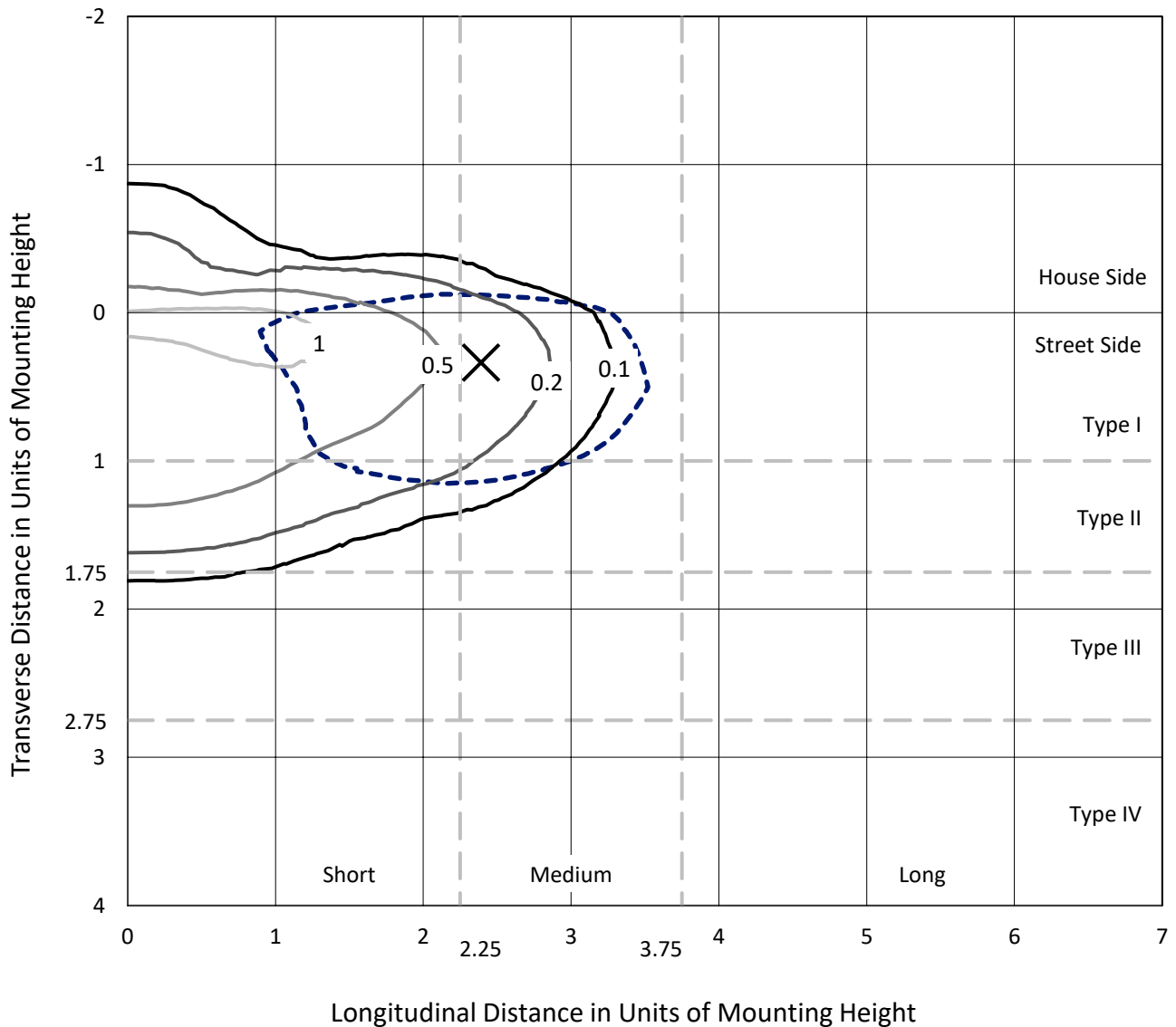
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

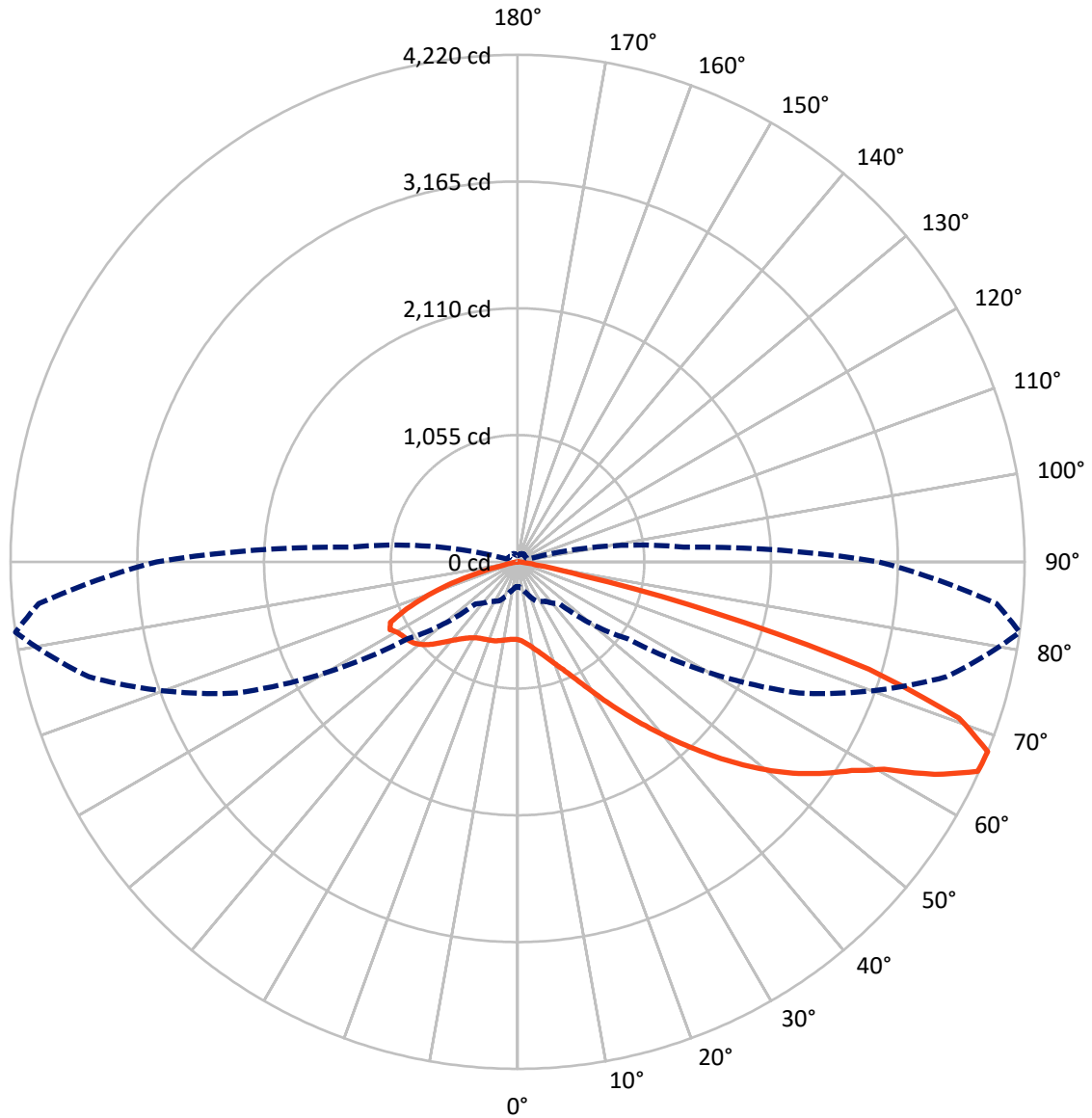
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 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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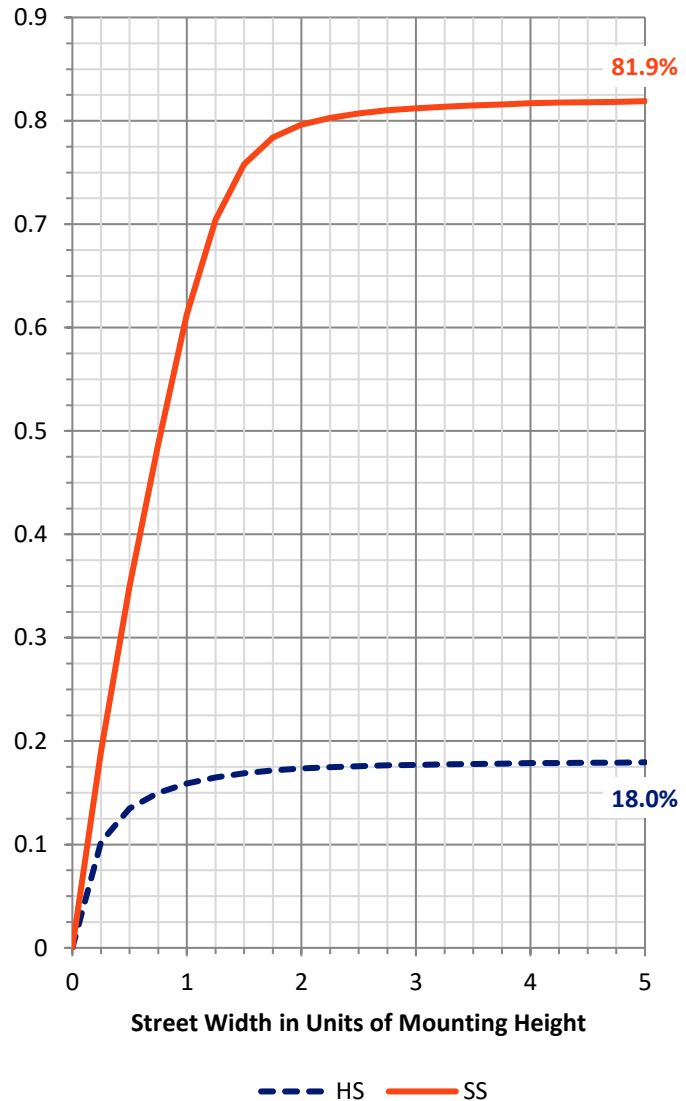
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	708.3	0.0	708.3
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	3202.0	0.0	3202.0
	% Fixture	81.9	0.0	81.9
Total	Lumens	3910.4	0.0	3910.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.7	1.5
10°-20°	150.0	3.8
20°-30°	240.2	6.1
30°-40°	424.8	10.9
40°-50°	744.3	19.0
50°-60°	992.6	25.4
60°-70°	924.1	23.6
70°-80°	354.7	9.1
80°-90°	22.0	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°	3910.4	100.0
0°-180°	3910.4	100.0

Coefficient of Utilization



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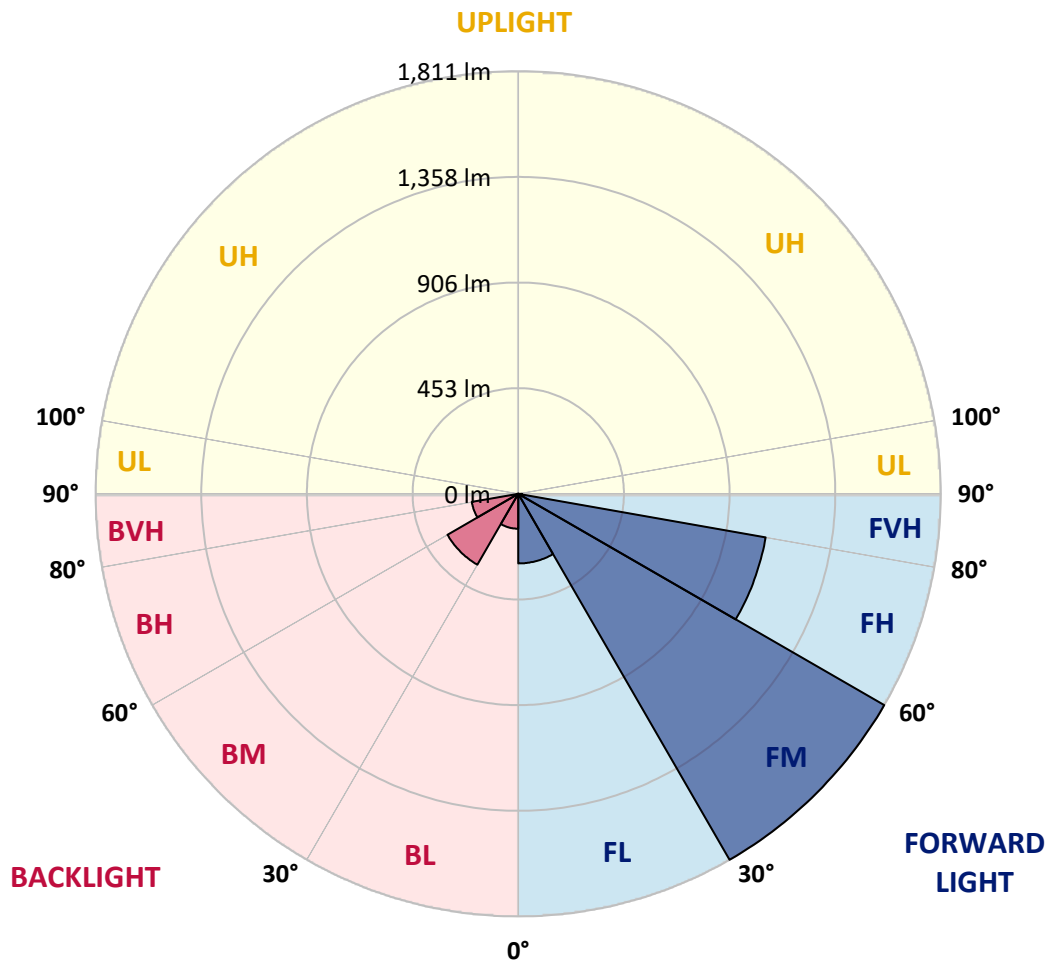
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	298.3	7.6			
FM (30°-60°)	1811.1	46.3			
FH (60°-80°)	1076.6	27.5			G1/1800
FVH (80°-90°)	16.0	0.4			G1/100
BL (0°-30°)	149.6	3.8	B1/500		
BM (30°-60°)	350.5	9.0	B1/1000		
BH (60°-80°)	202.2	5.2	B1/500		G1/500
BVH (80°-90°)	6.0	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°	647.8	647.8	647.8	647.8	647.8	647.8	647.8	647.8	647.8	647.8	647.8
2.5°	684.7	688.6	686.3	685.2	683.3	680.5	678.2	671.2	663.9	659.1	657.4
5°	698.5	702.4	702.1	703.3	704.7	705.5	705.0	697.1	686.6	678.6	673.7
7.5°	686.6	691.2	694.8	700.5	710.3	720.8	725.8	724.2	713.4	702.1	696.3
10°	653.1	657.9	666.7	679.9	700.8	723.2	742.1	750.8	744.2	731.7	723.5
12.5°	591.8	596.6	613.8	642.5	677.4	716.5	752.6	775.9	777.6	765.3	755.6
15°	522.9	527.6	545.9	581.9	635.2	697.9	758.2	802.4	817.3	806.6	795.1
17.5°	480.0	484.2	498.0	527.1	582.5	660.8	756.2	830.6	864.6	856.2	842.3
20°	467.1	470.7	477.2	497.4	543.7	622.2	743.2	857.0	915.5	910.8	895.3
22.5°	480.8	484.2	486.3	495.2	524.2	596.9	726.9	884.1	974.7	975.3	956.4
25°	512.7	516.1	513.8	519.5	532.1	589.0	720.8	915.8	1049.0	1055.2	1033.8
27.5°	565.1	565.3	560.0	559.6	561.7	600.8	727.2	949.9	1142.8	1154.3	1127.8
30°	670.0	665.8	645.2	623.0	612.9	636.3	745.3	990.1	1253.4	1274.0	1240.8
32.5°	832.0	825.7	788.0	734.8	681.3	693.4	777.6	1036.1	1373.9	1411.0	1370.5
35°	1007.6	1005.9	966.5	887.4	794.0	774.8	830.2	1096.3	1505.4	1564.5	1516.4
37.5°	1171.0	1170.0	1147.6	1054.3	940.6	888.3	914.7	1175.2	1646.2	1731.7	1674.8
40°	1320.1	1322.7	1300.1	1216.8	1102.2	1033.8	1029.6	1272.5	1802.7	1913.9	1846.3
42.5°	1449.0	1451.9	1429.1	1367.5	1261.9	1194.8	1170.7	1391.9	1955.6	2109.6	2029.6
45°	1536.7	1554.1	1550.7	1501.4	1425.7	1356.2	1340.1	1541.7	2129.8	2317.0	2223.3
47.5°	1561.4	1577.5	1602.8	1609.6	1563.3	1495.0	1514.1	1722.2	2306.0	2524.8	2418.1
50°	1500.3	1515.3	1567.8	1637.9	1670.0	1648.9	1683.4	1915.6	2486.5	2732.0	2609.2
52.5°	1379.9	1395.0	1461.4	1572.4	1703.3	1769.8	1853.1	2106.2	2661.4	2928.2	2790.4
55°	1205.5	1221.6	1306.9	1432.4	1640.0	1819.6	1994.6	2296.5	2821.5	3104.8	2953.6
57.5°	968.5	980.3	1069.0	1244.7	1480.6	1770.1	2099.1	2504.3	2972.5	3278.3	3115.5
60°	631.2	641.6	744.7	940.6	1216.6	1604.4	2120.0	2735.9	3172.9	3503.8	3333.7
62.5°	419.7	426.8	487.9	631.8	856.7	1286.6	1998.0	2920.9	3466.9	3896.2	3707.8
65°	288.0	295.1	356.2	456.3	553.5	851.1	1647.6	2896.4	3733.2	4207.8	3985.2
67.5°	205.5	211.5	263.2	357.8	400.7	494.4	1116.8	2583.4	3694.9	4219.7	4000.1
70°	147.3	150.6	193.4	278.7	318.5	297.0	621.0	1975.8	3235.1	3896.4	3695.4
72.5°	103.0	104.1	134.3	212.3	256.5	216.8	295.6	1317.3	2446.9	3058.3	2864.9
75°	69.8	71.2	90.4	155.7	205.8	165.5	156.5	706.3	1436.4	1692.9	1517.5
77.5°	42.7	43.4	58.3	106.4	154.0	126.2	100.8	299.3	555.8	545.6	465.1
80°	24.2	24.2	37.2	66.1	105.1	81.4	70.6	127.3	176.0	154.6	136.2
82.5°	13.5	13.8	27.1	41.1	69.5	48.2	38.8	58.8	76.1	67.2	58.5
85°	5.6	6.1	16.6	19.5	33.2	23.9	15.8	24.8	28.2	25.0	18.3
87.5°	0.5	0.8	5.0	3.7	3.9	4.8	2.3	4.8	3.9	3.9	2.8
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°	647.8	647.8	647.8	647.8	647.8	647.8	647.8	647.8	647.8	647.8	647.8
2.5°	652.0	647.8	637.1	624.7	608.4	600.5	589.8	582.5	576.4	576.9	571.2
5°	664.7	654.1	630.1	600.2	563.0	536.6	508.5	489.0	473.2	469.9	462.3
7.5°	682.1	665.2	623.3	569.6	506.8	459.2	416.7	389.4	369.9	363.8	357.5
10°	704.7	680.2	614.6	530.9	440.6	380.1	334.5	313.0	299.8	295.3	291.9
12.5°	730.8	697.4	603.0	484.0	372.5	314.2	285.2	274.5	270.3	268.9	268.0
15°	763.8	718.7	585.6	428.2	314.8	274.0	261.6	260.1	260.7	260.1	259.8
17.5°	803.0	742.1	557.2	370.7	275.9	253.4	248.9	250.0	251.4	251.1	250.6
20°	845.7	765.3	520.8	319.8	249.5	238.7	236.2	237.3	238.4	237.9	237.6
22.5°	894.4	790.0	480.6	280.1	231.8	225.2	222.4	222.7	222.7	221.6	221.0
25°	952.7	817.3	438.4	251.9	218.2	213.1	209.7	208.6	206.9	203.6	203.0
27.5°	1022.2	846.3	397.8	232.3	207.5	202.7	198.7	196.0	191.8	186.1	185.5
30°	1100.5	881.5	363.5	219.9	199.1	194.2	189.7	185.5	179.4	172.3	171.7
32.5°	1192.6	919.2	338.5	211.8	191.5	186.3	181.0	176.0	169.2	162.2	162.5
35°	1302.4	964.8	323.8	206.1	185.5	178.8	172.8	167.3	162.2	156.0	155.4
37.5°	1421.5	1013.2	319.3	203.3	181.6	171.2	164.4	160.5	159.9	156.2	156.0
40°	1551.8	1070.7	322.7	201.6	177.3	163.9	156.5	155.7	157.1	150.6	150.9
42.5°	1689.8	1138.8	328.3	199.6	171.5	156.5	149.4	149.4	148.4	139.4	139.4
45°	1839.0	1217.4	333.9	194.9	164.4	149.2	143.9	141.9	137.1	128.3	128.1
47.5°	1989.3	1297.3	338.1	186.1	156.0	143.0	138.3	133.8	126.7	118.8	118.5
50°	2132.1	1369.1	333.6	173.1	146.4	137.1	132.0	125.9	118.3	112.9	112.0
52.5°	2259.6	1431.3	314.5	158.0	136.2	130.9	126.4	119.9	113.8	108.1	107.5
55°	2370.5	1481.7	280.6	143.6	127.3	125.6	121.1	112.9	104.4	99.6	99.1
57.5°	2476.9	1520.0	238.4	131.7	119.1	119.6	112.9	105.6	97.7	92.7	92.0
60°	2618.6	1571.2	195.7	120.7	110.4	112.0	104.8	99.4	89.5	83.0	82.2
62.5°	2844.9	1651.0	155.4	107.2	100.2	100.8	97.7	91.2	79.4	71.8	71.2
65°	3024.6	1621.7	122.5	92.7	88.7	89.5	89.5	82.5	69.8	61.1	60.3
67.5°	3004.3	1388.6	97.7	78.3	77.7	78.3	80.3	74.3	61.9	54.9	53.8
70°	2767.5	1104.4	78.3	65.0	67.5	66.1	71.8	67.9	55.8	48.7	47.9
72.5°	2258.2	795.6	59.7	53.8	51.8	54.0	64.8	61.1	46.4	38.5	37.7
75°	1319.6	424.6	44.5	42.5	37.4	45.0	57.4	52.1	35.5	28.4	27.6
77.5°	429.6	148.1	32.7	31.3	27.9	36.3	49.0	43.9	29.0	22.5	21.6
80°	115.1	44.8	22.2	20.6	18.0	27.1	38.8	35.0	20.8	14.7	14.3
82.5°	46.1	18.9	12.9	11.6	9.8	18.6	30.6	28.2	15.5	9.3	9.3
85°	15.0	6.1	4.8	3.7	4.5	11.6	18.3	19.2	11.0	4.8	3.7
87.5°	1.9	0.8	0.8	1.1	0.8	1.9	5.6	5.3	3.1	0.5	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)