

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: P963454

Luminaire Tested: **NAV-SB3A-727-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963454
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-727-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9779.5 lumens
Efficiency: N/A
Efficacy: 115.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

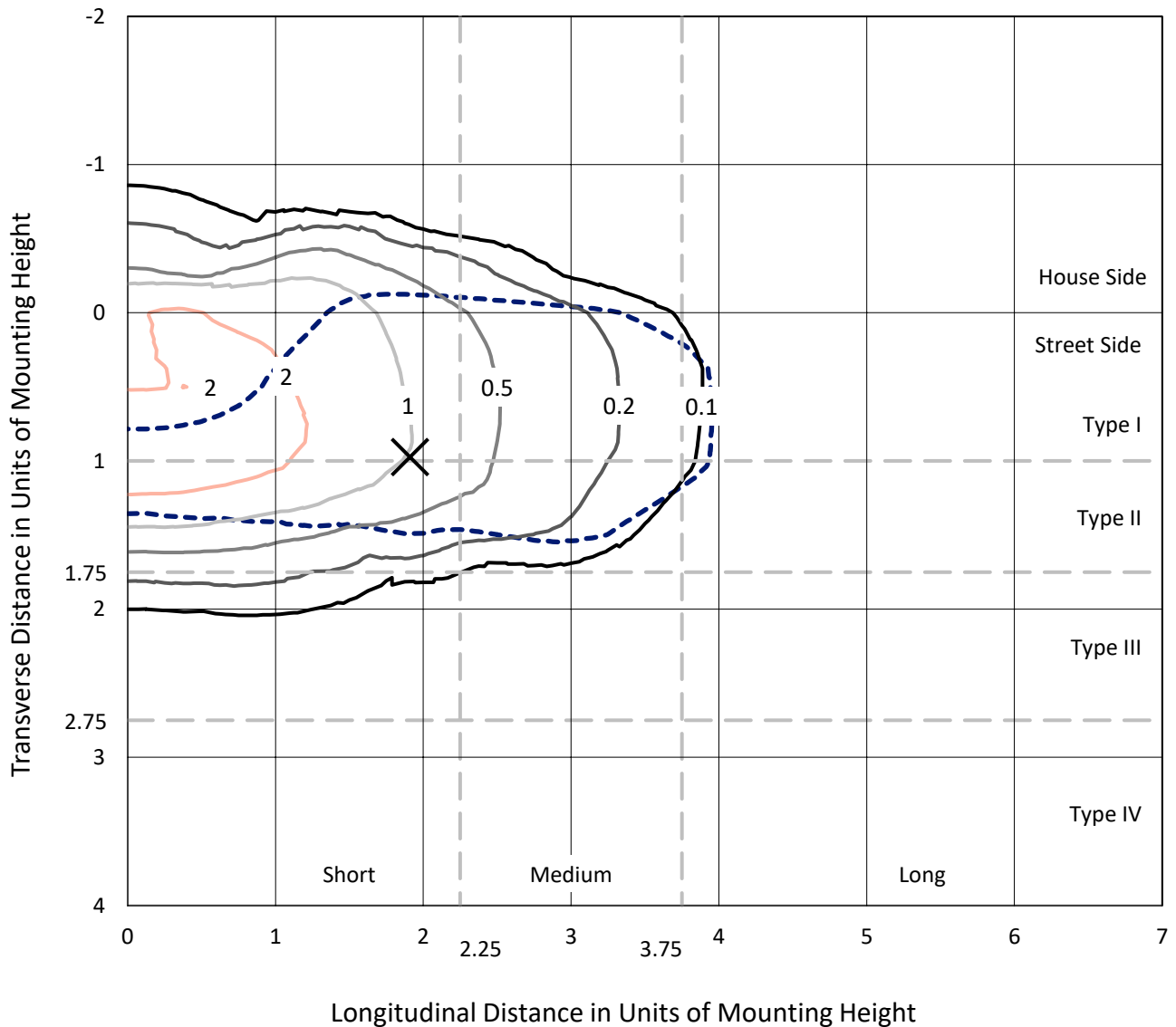
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

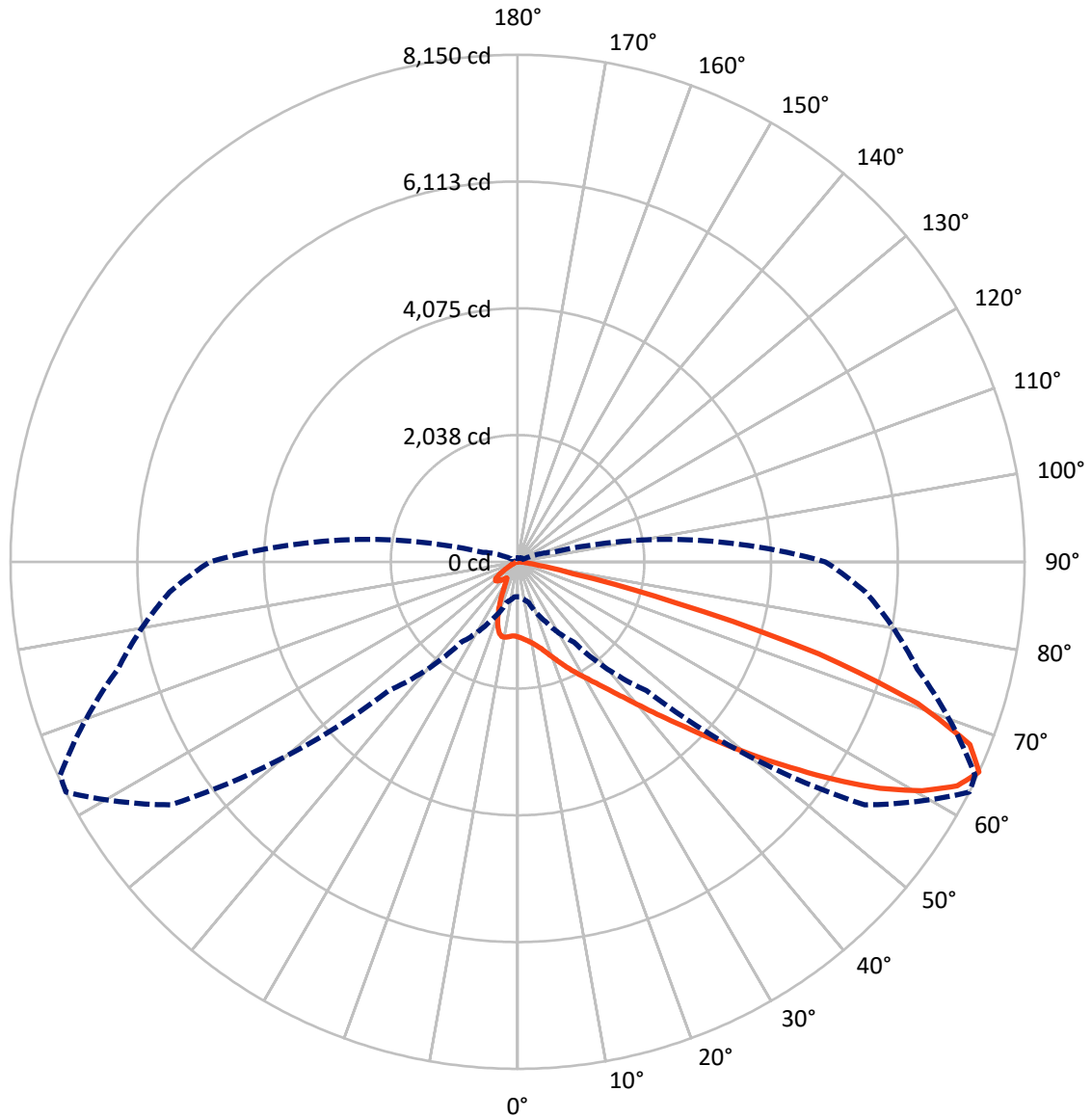
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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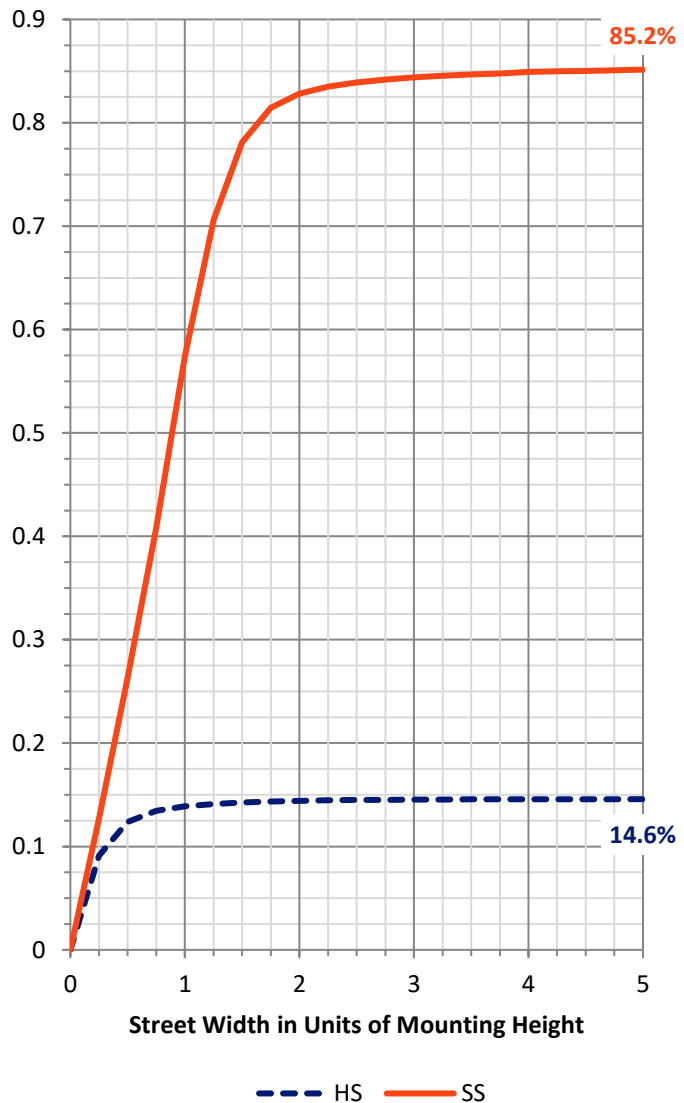
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1437.5	0.0	1437.5
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	8342.0	0.0	8342.0
	% Fixture	85.3	0.0	85.3
Total	Lumens	9779.5	0.0	9779.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.7	1.2
10°-20°	315.5	3.2
20°-30°	549.4	5.6
30°-40°	990.3	10.1
40°-50°	1964.0	20.1
50°-60°	2675.3	27.4
60°-70°	2135.4	21.8
70°-80°	966.3	9.9
80°-90°	69.5	0.7
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°	9779.5	100.0
0°-180°	9779.5	100.0

Coefficient of Utilization

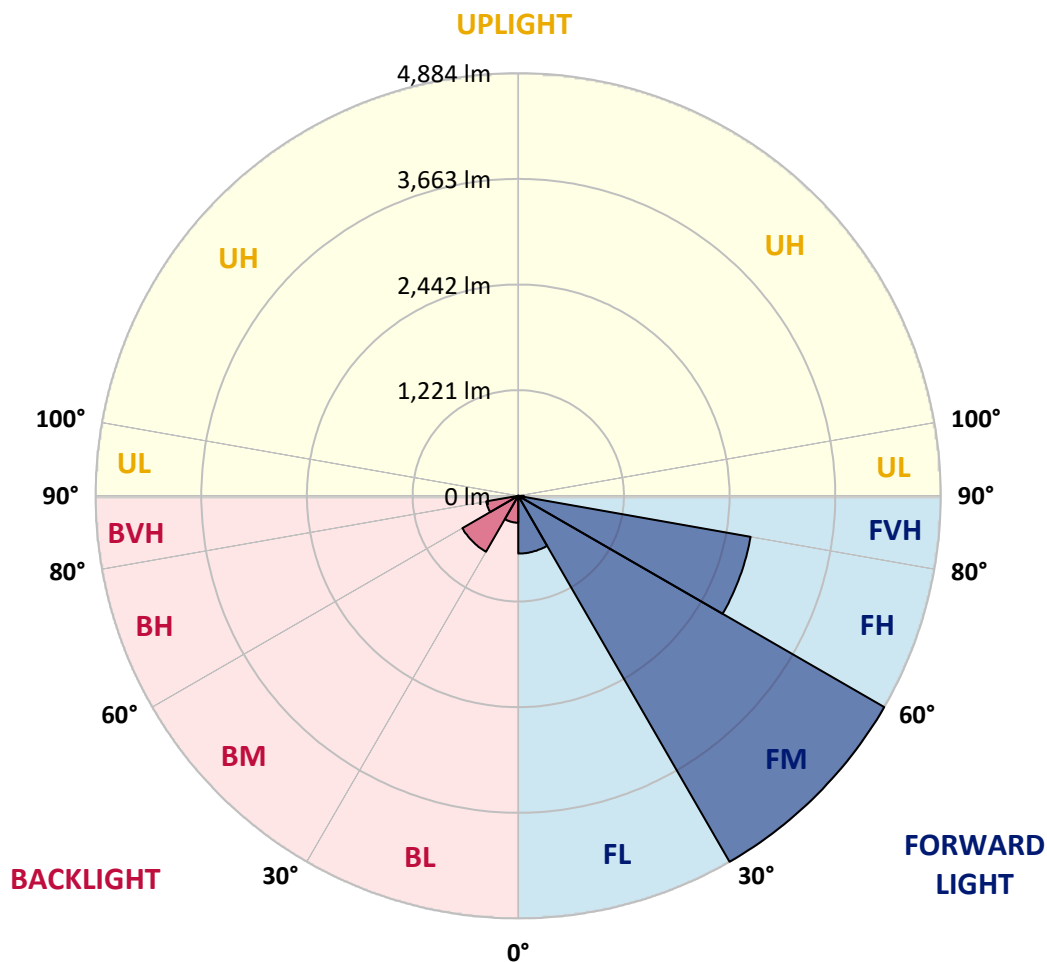


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	667.6	6.8			
FM (30°-60°)	4883.7	49.9			
FH (60°-80°)	2726.5	27.9			G2/5000
FVH (80°-90°)	64.3	0.7			G1/100
BL (0°-30°)	311.1	3.2	B1/500		
BM (30°-60°)	746.0	7.6	B1/1000		
BH (60°-80°)	375.3	3.8	B1/500		G1/500
BVH (80°-90°)	5.2	0.1			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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1206.9	1206.9	1206.9	1206.9	1206.9	1206.9	1206.9	1206.9	1206.9	1206.9	1206.9
2.5°	1235.2	1231.8	1236.6	1234.6	1233.2	1230.5	1229.2	1227.8	1225.2	1223.1	1215.0
5°	1238.6	1236.6	1241.3	1245.4	1249.4	1253.4	1255.4	1258.1	1255.4	1250.0	1242.0
7.5°	1210.3	1209.0	1219.1	1231.2	1249.4	1264.8	1281.7	1291.1	1291.7	1289.8	1280.9
10°	1208.4	1205.0	1215.0	1229.9	1253.4	1280.9	1310.6	1330.8	1333.4	1342.2	1332.8
12.5°	1239.9	1236.6	1250.7	1266.9	1291.1	1320.0	1356.4	1384.6	1388.7	1400.8	1394.0
15°	1293.1	1288.4	1304.5	1325.4	1356.4	1389.3	1427.6	1453.2	1456.6	1471.4	1459.3
17.5°	1354.9	1350.2	1369.1	1391.3	1425.0	1470.1	1514.4	1542.7	1546.7	1556.2	1533.9
20°	1434.4	1428.3	1443.1	1463.3	1499.0	1552.8	1606.0	1646.4	1645.6	1645.6	1609.4
22.5°	1526.5	1517.1	1529.9	1546.1	1579.7	1644.9	1715.6	1763.4	1763.4	1744.6	1684.7
25°	1625.4	1616.0	1630.2	1644.9	1674.5	1748.5	1831.4	1890.5	1893.2	1860.9	1765.4
27.5°	1749.3	1737.2	1747.9	1765.4	1782.9	1858.2	1956.4	2025.1	2026.4	1976.6	1842.1
30°	1987.4	1953.1	1919.4	1900.7	1908.7	1983.4	2088.3	2164.4	2171.1	2102.5	1925.5
32.5°	2423.4	2416.6	2298.3	2143.5	2062.8	2118.0	2235.6	2327.2	2331.2	2243.1	2033.8
35°	3100.8	3092.8	2902.4	2607.7	2344.7	2298.3	2414.6	2522.9	2520.3	2420.6	2174.4
37.5°	3909.6	3902.2	3651.3	3256.9	2831.0	2570.7	2645.4	2759.1	2775.9	2645.4	2356.1
40°	4600.5	4572.9	4414.2	4034.0	3477.0	3022.8	2973.7	3049.1	3066.6	2911.8	2586.9
42.5°	5124.0	5100.4	5019.6	4782.1	4258.8	3691.5	3360.6	3389.5	3409.0	3223.3	2852.0
45°	5395.1	5389.7	5421.9	5399.8	5055.3	4512.4	3913.6	3793.2	3800.6	3568.4	3152.7
47.5°	5433.4	5430.8	5578.0	5786.6	5740.2	5438.1	4623.4	4296.4	4270.2	3958.0	3479.7
50°	5207.4	5202.0	5484.6	5875.4	6197.7	6215.9	5429.4	4863.5	4805.7	4361.0	3820.8
52.5°	4485.5	4484.2	4948.4	5599.0	6358.5	6896.7	6226.0	5486.6	5389.7	4787.6	4181.4
55°	3451.4	3476.3	4008.5	4777.4	6065.1	7224.4	6941.1	6178.2	6029.5	5216.7	4513.7
57.5°	2444.9	2481.2	3007.4	3692.3	5155.5	7030.6	7424.9	6871.2	6711.1	5644.7	4850.8
60°	1313.2	1345.6	1872.4	2689.8	3835.6	6308.1	7679.8	7472.7	7321.3	6051.1	5154.9
62.5°	782.5	793.2	1011.2	1736.5	2594.3	4819.1	7571.6	7930.8	7806.3	6392.1	5419.3
65°	561.8	563.8	673.4	1060.3	1575.0	2928.0	6811.9	8150.1	8111.7	6649.2	5615.1
67.5°	472.9	471.6	517.4	704.4	1073.1	1466.7	5220.8	7840.0	8002.8	6811.9	5726.1
70°	405.7	407.7	461.6	516.0	806.7	830.2	2595.6	6826.1	7173.3	6855.0	5719.4
72.5°	302.1	308.8	358.5	470.3	608.8	571.2	896.2	5061.3	5689.1	6458.7	5422.7
75°	213.3	216.7	252.3	395.5	454.2	415.7	457.5	2616.4	3421.1	4951.7	4438.4
77.5°	164.2	170.3	191.1	276.5	447.4	292.0	279.9	905.6	1391.3	2991.3	3043.0
80°	88.8	99.5	138.0	199.8	314.2	206.5	138.6	360.6	471.6	1398.7	1173.3
82.5°	45.7	51.1	96.2	144.0	179.0	180.3	68.7	150.1	194.4	431.9	160.8
85°	18.1	22.2	64.6	79.4	92.1	88.8	31.0	60.6	70.0	119.7	49.1
87.5°	4.0	6.8	23.6	18.1	17.5	18.9	7.4	14.1	13.4	14.1	8.7
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°	1206.9	1206.9	1206.9	1206.9	1206.9	1206.9	1206.9	1206.9	1206.9	1206.9	1206.9
2.5°	1214.4	1211.7	1204.3	1196.2	1186.7	1181.4	1178.0	1177.4	1172.7	1169.3	1172.7
5°	1234.6	1231.8	1217.7	1200.9	1182.7	1168.6	1155.2	1143.1	1125.6	1122.2	1120.8
7.5°	1274.9	1267.5	1244.7	1221.8	1187.5	1146.5	1096.6	1039.5	988.3	972.8	965.4
10°	1324.7	1314.7	1285.7	1245.4	1169.3	1057.6	937.2	825.5	736.7	711.8	702.4
12.5°	1381.2	1372.5	1334.1	1259.4	1093.3	890.7	706.4	567.8	481.7	460.2	454.2
15°	1448.5	1435.7	1382.6	1237.9	957.4	676.8	485.0	403.0	372.1	368.0	364.0
17.5°	1519.9	1499.0	1425.7	1160.5	774.4	481.0	374.7	351.2	337.7	333.7	331.7
20°	1585.1	1558.2	1451.2	1043.4	578.6	374.7	335.7	320.2	308.1	303.4	300.7
22.5°	1650.4	1612.0	1451.2	884.1	434.0	332.4	308.1	294.0	279.9	273.8	270.5
25°	1718.3	1667.2	1425.7	706.4	349.2	304.7	281.9	266.4	254.3	246.9	244.3
27.5°	1784.2	1713.6	1367.1	538.2	310.8	280.5	257.7	242.9	231.4	226.0	226.0
30°	1846.8	1759.3	1285.0	408.4	286.0	257.0	235.4	222.7	211.3	205.9	206.5
32.5°	1931.6	1817.2	1197.6	335.1	264.4	234.8	215.2	203.2	193.1	189.0	189.0
35°	2049.3	1902.6	1122.2	329.0	246.2	216.7	197.1	185.7	175.6	172.2	172.2
37.5°	2216.2	2040.6	1082.5	369.4	231.4	200.5	182.3	170.3	160.8	158.1	157.4
40°	2422.1	2227.6	1104.0	409.7	221.3	186.3	168.9	156.7	148.7	145.3	144.6
42.5°	2666.2	2458.4	1223.1	440.6	214.6	174.2	156.1	142.7	137.2	135.9	135.9
45°	2946.8	2712.0	1405.5	473.7	203.9	162.8	143.3	133.2	129.1	128.5	127.8
47.5°	3265.8	2990.5	1616.7	514.7	193.1	152.0	133.2	126.5	123.1	121.8	121.8
50°	3581.9	3271.1	1834.0	537.5	184.3	142.0	125.2	119.7	117.1	116.4	116.4
52.5°	3912.9	3559.7	2009.6	516.0	176.9	133.9	118.4	114.4	111.7	111.0	111.0
55°	4228.4	3793.2	2039.9	438.0	162.2	125.8	111.0	109.0	105.7	105.7	105.0
57.5°	4500.3	3910.3	1825.9	321.5	147.3	113.7	103.6	101.6	98.9	98.2	97.6
60°	4749.8	3876.6	1409.5	216.7	131.2	101.6	94.2	92.9	90.2	86.8	86.1
62.5°	4890.5	3728.5	964.1	141.2	115.0	88.8	83.4	82.7	76.7	70.0	68.7
65°	4943.7	3424.5	601.5	102.9	96.2	76.1	72.0	70.6	61.9	54.5	53.8
67.5°	4897.2	2923.9	303.4	81.4	76.1	63.2	59.2	59.2	53.2	46.4	45.7
70°	4711.5	2192.0	127.8	65.3	58.5	48.5	48.5	51.1	45.1	37.7	37.0
72.5°	4308.5	1474.8	68.0	49.8	43.8	34.3	39.7	41.7	35.7	28.3	28.3
75°	3425.1	899.5	47.0	37.0	27.6	24.2	30.2	31.6	24.2	18.9	18.1
77.5°	2342.6	516.7	31.6	23.6	17.5	14.1	20.8	19.5	12.8	8.7	9.4
80°	1028.7	215.2	18.1	10.8	6.8	5.4	7.4	5.4	4.0	2.7	2.7
82.5°	120.4	50.4	6.8	4.0	2.7	1.3	0.7	0.0	0.0	0.0	0.0
85°	24.9	6.0	3.4	1.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.7	1.3	0.7	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)