

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: P960854

Luminaire Tested: **NAV-SB1D-730-U-T3R-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P960854  
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-SB1D-730-U-T3R-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 3000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III ROADWAY  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

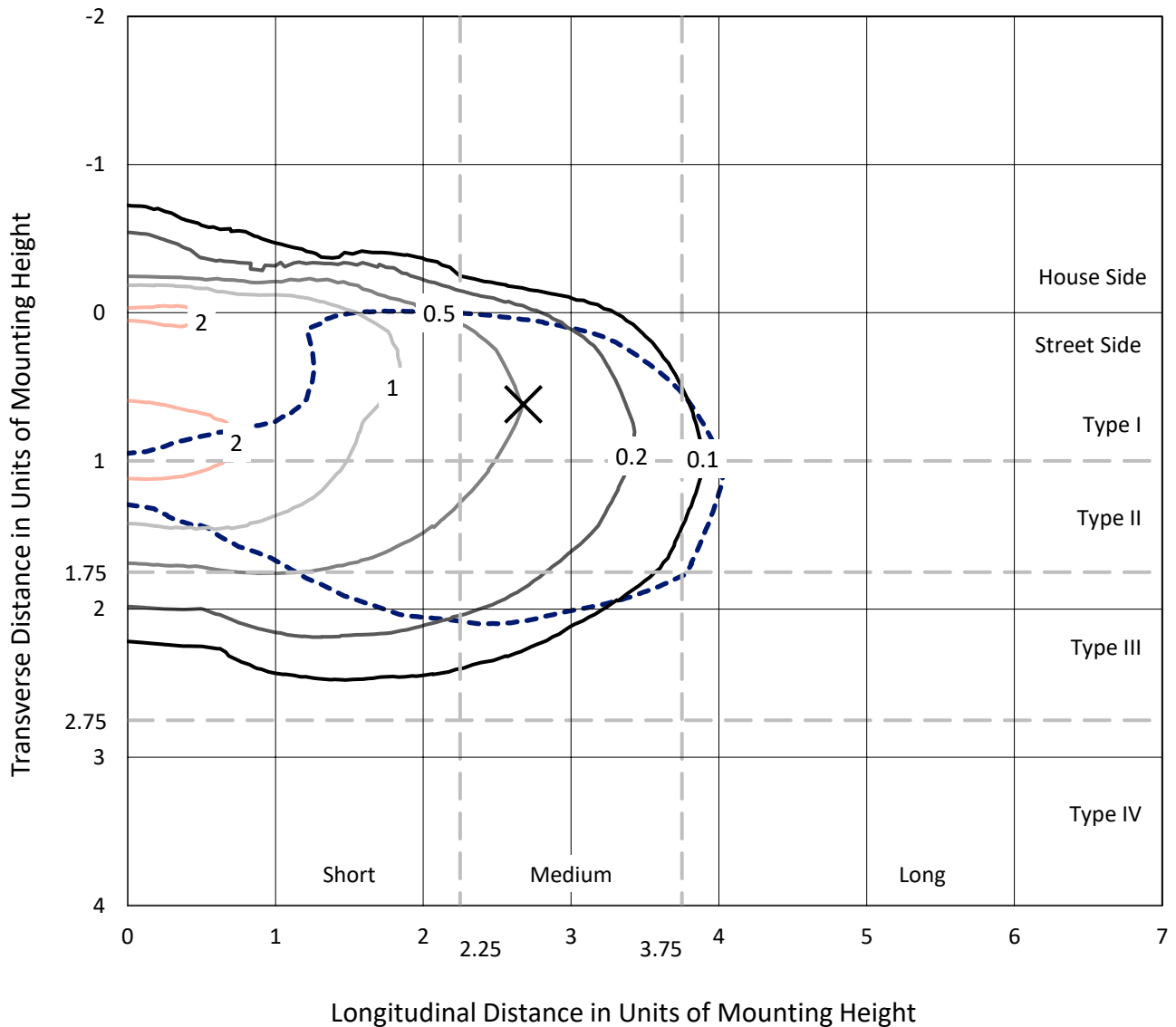
Lumens per Lamp: N/A  
Luminaire Lumens: 8686.9 lumens  
Efficiency: N/A  
Efficacy: 109.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 79.6  
Input Voltage (V): NR  
Input Current (Ain): 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

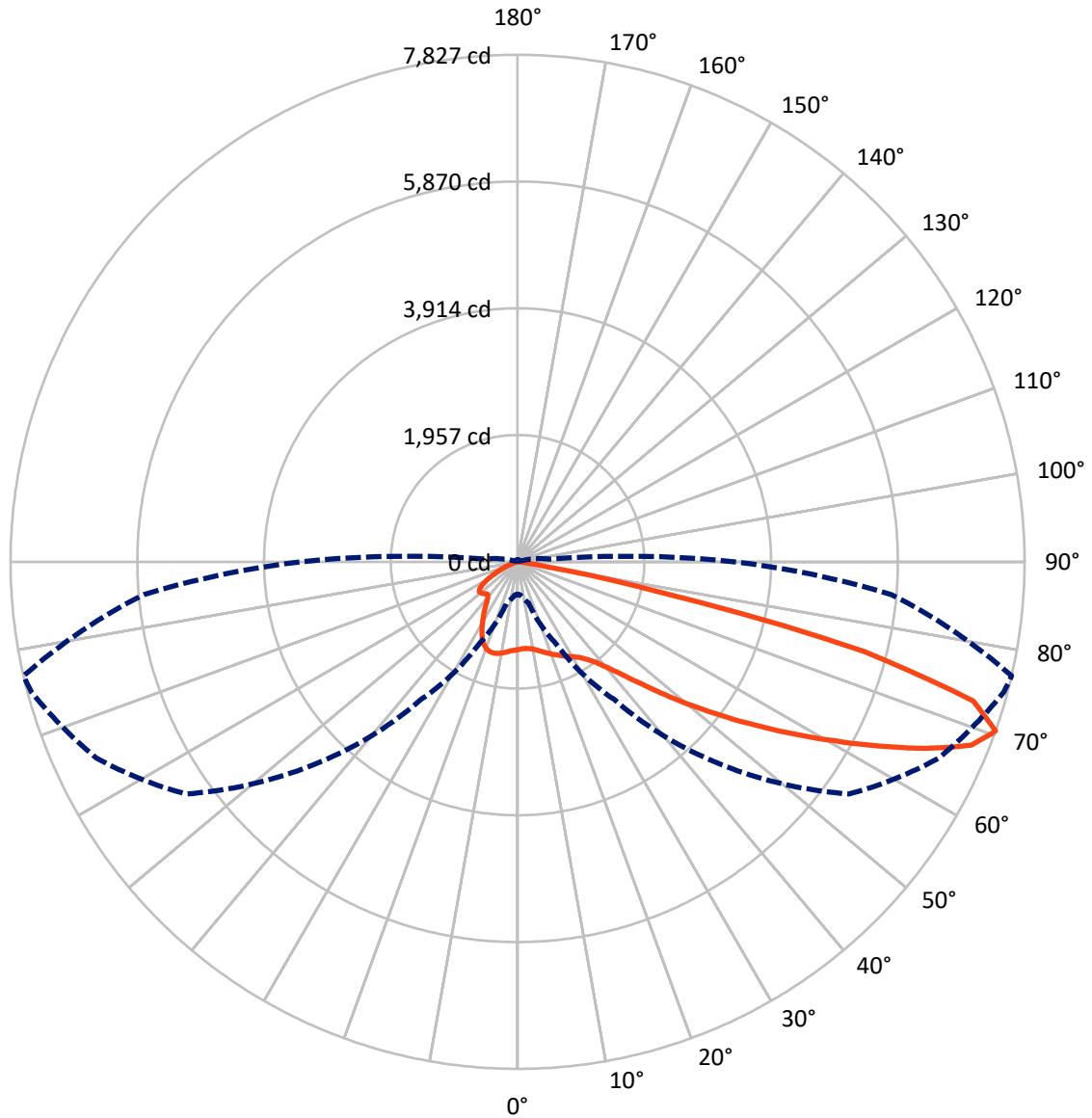
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 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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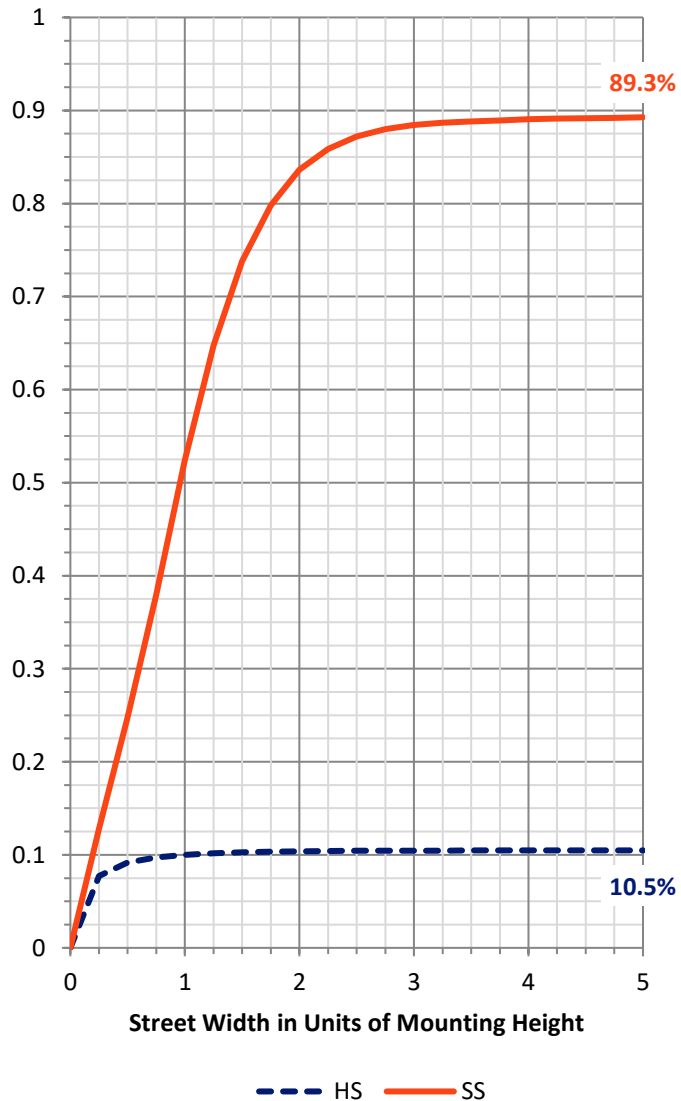
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	915.7	0.0	915.7
	% Fixture	10.5	0.0	10.5
<b>Street Side</b>	Lumens	7771.1	0.0	7771.1
	% Fixture	89.5	0.0	89.5
<b>Total</b>	Lumens	8686.9	0.0	8686.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.8	1.3
10°-20°	277.2	3.2
20°-30°	428.8	4.9
30°-40°	778.0	9.0
40°-50°	1468.7	16.9
50°-60°	2122.1	24.4
60°-70°	2258.9	26.0
70°-80°	1197.1	13.8
80°-90°	39.3	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°	8686.9	100.0
0°-180°	8686.9	100.0

**Coefficient of Utilization**

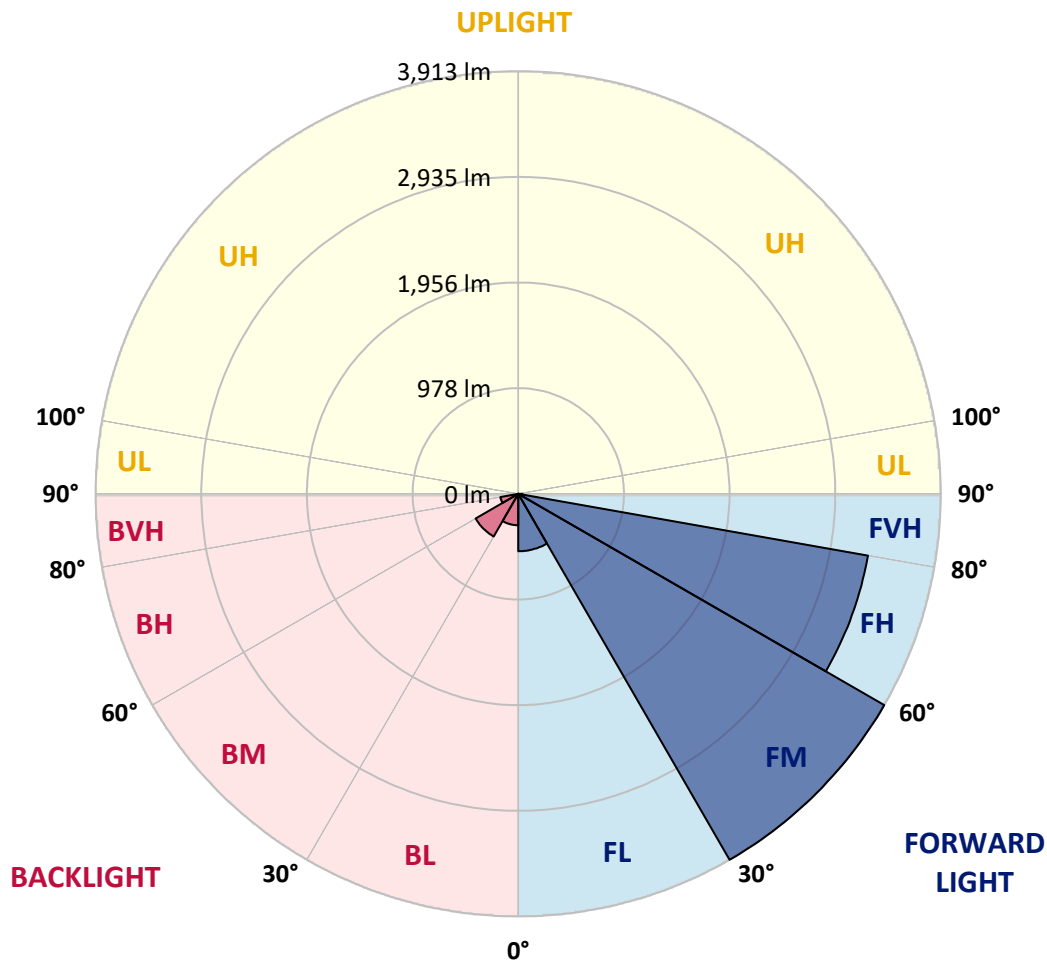


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	531.8	6.1			
FM (30°-60°)	3913.0	45.0			
FH (60°-80°)	3288.1	37.9			G2/5000
FVH (80°-90°)	38.3	0.4			G1/100
BL (0°-30°)	290.9	3.3	B1/500		
BM (30°-60°)	455.8	5.2	B1/1000		
BH (60°-80°)	167.9	1.9	B1/500		G1/500
BVH (80°-90°)	1.1	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°	1354.9	1354.9	1354.9	1354.9	1354.9	1354.9	1354.9	1354.9	1354.9	1354.9	1354.9
2.5°	1272.1	1283.7	1282.1	1289.8	1292.4	1303.4	1314.4	1329.2	1345.6	1345.1	1356.1
5°	1200.3	1211.9	1214.5	1225.0	1238.1	1255.1	1277.7	1307.3	1338.0	1343.0	1364.9
7.5°	1115.3	1127.3	1134.5	1155.3	1179.5	1214.5	1251.3	1294.7	1345.6	1352.8	1395.0
10°	1030.2	1041.2	1050.5	1080.1	1118.6	1170.7	1230.5	1293.0	1361.6	1372.0	1431.8
12.5°	977.5	988.0	998.5	1024.2	1071.9	1135.6	1216.8	1300.7	1388.0	1402.7	1481.7
15°	958.9	968.2	976.5	999.5	1044.0	1116.3	1214.0	1316.6	1421.4	1441.1	1542.1
17.5°	961.7	966.6	972.1	989.6	1033.0	1107.6	1218.9	1344.0	1460.8	1478.5	1602.4
20°	977.5	980.3	980.8	992.9	1031.4	1106.5	1228.9	1370.3	1498.1	1521.7	1662.2
22.5°	997.8	999.0	997.8	1006.1	1041.7	1114.7	1242.0	1402.2	1539.9	1561.8	1722.5
25°	1092.8	1071.9	1045.6	1029.7	1059.3	1130.6	1261.8	1444.9	1585.4	1606.8	1781.2
27.5°	1387.3	1327.6	1233.2	1127.3	1095.5	1153.6	1289.1	1488.3	1631.5	1650.7	1844.3
30°	1865.7	1787.3	1627.1	1388.5	1211.9	1201.9	1324.8	1531.7	1680.3	1701.2	1911.8
32.5°	2345.2	2326.0	2141.1	1810.9	1473.5	1309.4	1384.1	1590.3	1745.1	1761.5	2002.8
35°	2830.1	2791.2	2639.8	2313.3	1876.7	1528.4	1482.8	1667.2	1830.0	1848.7	2135.6
37.5°	3201.5	3177.9	3084.1	2815.4	2355.0	1866.3	1651.8	1786.2	1953.5	1974.4	2305.7
40°	3529.6	3518.6	3486.7	3309.6	2889.9	2308.4	1914.6	1970.5	2124.6	2149.3	2514.1
42.5°	3787.4	3813.2	3831.2	3781.9	3441.2	2813.1	2267.8	2229.5	2363.2	2388.6	2779.7
45°	4051.3	4060.0	4133.0	4204.3	3988.7	3340.9	2666.1	2532.8	2660.1	2691.3	3097.9
47.5°	4220.7	4255.9	4384.2	4509.9	4449.0	3864.2	3094.0	2891.0	3004.1	3062.7	3454.5
50°	4233.4	4299.8	4476.4	4695.3	4784.2	4362.3	3559.2	3299.2	3419.3	3484.1	3835.1
52.5°	4023.3	4126.4	4400.1	4720.5	4965.2	4784.2	4040.3	3707.3	3861.5	3945.9	4230.1
55°	3084.6	3219.6	4113.2	4583.4	4972.4	5104.0	4508.8	4132.5	4354.1	4449.5	4656.9
57.5°	2687.5	2755.5	3233.9	4345.3	4840.2	5232.9	4932.3	4537.3	4890.1	5008.6	5060.1
60°	2236.0	2325.4	2712.1	3955.8	4660.8	5245.5	5306.4	5059.6	5471.0	5604.3	5429.8
62.5°	1519.6	1616.6	2001.2	3286.6	4415.5	5239.5	5613.1	5597.2	6116.7	6259.9	5743.1
65°	941.4	1002.2	1255.7	2683.7	4072.6	5246.1	5934.0	6249.9	6798.0	6943.4	5985.6
67.5°	743.8	771.8	904.0	2060.5	3481.8	5097.9	6254.3	6863.8	7439.3	7554.6	6059.6
70°	499.8	516.8	657.7	1381.3	2590.4	4414.5	6248.3	7172.1	7769.6	7827.2	5789.7
72.5°	263.3	276.4	384.6	639.6	1564.6	3137.9	5267.0	6803.5	7441.0	7354.3	4948.7
75°	131.6	153.6	258.9	324.7	668.2	1750.0	3270.7	5364.0	5856.6	5521.0	3175.1
77.5°	99.8	120.6	213.9	213.9	232.6	589.2	1385.2	2925.6	2698.5	2247.0	932.0
80°	63.7	82.3	187.1	161.8	97.1	149.8	361.0	819.6	573.3	436.1	169.5
82.5°	37.3	53.7	155.8	107.0	54.3	55.5	102.0	174.5	148.6	115.7	52.1
85°	14.9	35.2	107.0	42.2	21.4	13.7	30.7	37.3	30.7	23.1	13.1
87.5°	0.0	8.2	18.7	0.0	1.6	1.1	2.2	2.8	2.8	2.2	4.4
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°	1354.9	1354.9	1354.9	1354.9	1354.9	1354.9	1354.9	1354.9	1354.9	1354.9	1354.9
2.5°	1361.0	1362.1	1365.4	1366.0	1358.3	1348.4	1344.6	1343.0	1336.4	1335.8	1336.9
5°	1377.5	1382.4	1377.5	1363.2	1329.2	1281.5	1245.3	1215.6	1188.8	1180.6	1175.6
7.5°	1410.4	1415.3	1400.6	1344.6	1259.0	1164.1	1078.5	1018.1	963.8	943.5	935.3
10°	1457.6	1464.2	1417.6	1304.5	1153.1	1000.6	855.8	753.8	674.2	641.9	628.1
12.5°	1516.8	1519.6	1426.9	1243.6	1015.5	797.7	592.4	483.3	412.6	386.2	378.0
15°	1582.1	1578.3	1427.9	1160.8	827.8	564.0	386.7	317.6	289.2	280.3	280.3
17.5°	1650.7	1634.8	1406.0	1041.2	622.1	385.6	286.9	270.5	265.5	263.3	262.8
20°	1718.2	1682.5	1366.0	884.9	446.6	288.0	260.6	255.6	252.9	251.8	250.7
22.5°	1779.6	1718.7	1297.4	703.3	324.2	254.5	246.3	241.9	237.0	234.8	234.2
25°	1839.4	1739.5	1200.9	533.8	259.5	238.1	231.5	223.2	216.7	213.9	212.9
27.5°	1897.6	1752.7	1080.1	394.9	231.5	222.7	210.6	199.2	194.2	193.1	192.0
30°	1959.5	1757.1	943.0	294.6	214.5	203.6	185.9	172.8	170.0	170.6	170.6
32.5°	2035.2	1763.7	804.7	241.4	200.2	180.5	159.6	146.0	143.7	146.0	145.3
35°	2125.7	1776.8	671.5	222.2	187.6	156.9	134.4	122.9	120.6	122.3	121.8
37.5°	2248.6	1798.3	546.9	218.3	177.2	137.1	113.1	103.7	103.7	104.2	103.7
40°	2412.1	1855.4	435.5	215.6	171.7	122.3	95.4	91.6	93.3	94.4	94.4
42.5°	2611.3	1976.5	360.4	212.3	165.6	115.7	86.7	85.1	87.7	88.9	88.9
45°	2834.5	2130.2	334.0	206.8	160.2	120.1	82.8	80.7	83.9	84.5	85.1
47.5°	3065.5	2280.4	330.8	200.8	154.7	126.7	81.7	76.8	80.7	81.2	81.7
50°	3299.2	2378.6	334.0	191.5	146.0	126.7	82.3	73.0	76.3	77.9	78.4
52.5°	3534.5	2423.6	331.9	171.2	130.6	119.0	82.3	69.7	73.0	74.1	74.1
55°	3762.7	2414.9	298.4	140.9	110.8	105.4	80.1	66.9	69.1	69.7	69.7
57.5°	3943.2	2292.5	236.5	109.7	90.0	87.7	73.0	63.7	65.3	64.8	64.8
60°	4037.6	2023.8	168.9	84.5	70.7	69.1	64.2	59.2	60.4	57.6	57.1
62.5°	4038.7	1668.2	113.1	66.9	56.5	54.8	54.8	53.2	52.1	46.6	45.0
65°	3952.5	1273.8	75.1	53.2	45.5	42.7	46.1	45.5	41.7	34.0	32.9
67.5°	3757.2	835.0	57.1	41.7	35.2	33.4	36.8	38.4	35.7	28.5	28.0
70°	3355.6	486.1	47.2	32.4	26.3	24.7	29.6	32.9	29.6	23.1	21.9
72.5°	2787.4	262.2	38.4	24.1	18.1	16.5	23.6	26.9	23.6	17.0	16.5
75°	1808.7	140.4	29.6	15.9	9.3	10.5	17.5	19.8	16.5	11.0	9.8
77.5°	607.3	62.0	18.7	7.7	4.4	4.4	10.5	12.1	7.7	3.8	3.3
80°	135.5	25.8	7.7	3.3	1.6	1.6	2.2	2.2	1.1	0.0	0.0
82.5°	44.5	10.5	3.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	17.0	3.8	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.6	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)